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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GPRS/EDGE 850	Data	824.20 - 848.80 MHz
GPRS/EDGE 1900	Data	1850.20 - 1909.80 MHz
UMTS 850	Data	826.40 - 846.60 MHz
UMTS 1750	Data	1712.4 - 1752.6 MHz
UMTS 1900	Data	1852.4 - 1907.6 MHz
LTE Band 71	Data	665.5 - 695.5 MHz
LTE Band 12	Data	699.7 - 715.3 MHz
LTE Band 17	Data	706.5 - 713.5 MHz
LTE Band 13	Data	779.5 - 784.5 MHz
LTE Band 14	Data	790.5 - 795.5 MHz
LTE Band 26 (Cell)	Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Data	824.7 - 848.3 MHz
LTE Band 4 (AWS)	Data	1710.7 - 1754.3 MHz
LTE Band 66 (AWS)	Data	1710.7 - 1779.3 MHz
LTE Band 2 (PCS)	Data	1850.7 - 1909.3 MHz
LTE Band 25 (PCS)	Data	1850.7 - 1914.3 MHz
LTE Band 30	Data	2307.5 - 2312.5 MHz
LTE Band 7	Data	2502.5 - 2567.5 MHz
LTE Band 41	Data	2498.5 - 2687.5 MHz
LTE Band 48	Data	3552.5 - 3697.5 MHz
NR Band n71	Data	665.5 - 695.5 MHz
NR Band n12	Data	701.5 - 713.5 MHz
NR Band n5 (Cell)	Data	826.5 - 846.5 MHz
NR Band n66 (AWS)	Data	1712.5 - 1777.5 MHz
NR Band n25 (PCS)	Data	1852.5 - 1912.5 MHz
NR Band n2 (PCS)	Data	1852.5 - 1907.5 MHz
NR Band n41	Data	2506.02 - 2679.99 MHz
NR Band n77	Data	3710.01 - 3969.99 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2472 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
Bluetooth	Data	2402 - 2480 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz

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1.2 Time-Averaging Algorithm for RF Exposure Compliance

This device is enabled with the Qualcomm® Smart Transmit feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature (report SN could be found in Section 1.10 – Bibliography).

Note that WLAN operations are not enabled with Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR design_target or PD_design_target, below the predefined time-averaged power limit (i.e., Plimit for sub-6 radio, and input.power.limit for 5G mmW NR), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN could be found in Section 1.10 - Bibliography).

Exposure Scenario:	Ant 3 Body	Ant 3 Maximum Tune-up Output Power*	Ant 1 Body	Ant 1 Maximum Tune-up Output Power*	Ant 4a/4b Body	Ant 4a/4b Maximum Tune-up Output Power*	Ant 2a/2b Body	Ant 2a/2b Maximum Tune-up Output Power*
Averaging Volume:	1g		1g		1g		1g	
Spacing:	0 mm		0 mm		0 mm		0 mm	
DSI:	1		1		1		1	
Technology/Band	Plimit corresponding to 0.8mW/g (SAR_design_tar get)	Pmax	Plimit corresponding to 0.8mW/g (SAR_design_tar get)	Pmax	Plimit corresponding to 0.8mW/g (SAR_design_tar get)	Pmax	Plimit corresponding to 0.8mW/g (SAR_design_tar get)	Pmax
GPRS/EDGE 850 MHz	17.51	24.81	18.31	23.31	N/A	N/A	N/A	N/A
GPRS/EDGE 1900 MHz	14.91	22.81	13.71	19.81	11.81	22.81	13.71	19.81
UMTS B5	18.00	24.70	17.90	22.90	N/A	N/A	N/A	N/A
UMTS B4	15.00	24.70	14.50	21.20	13.10	24.20	14.00	21.20
UMTS B2	15.20	24.70	14.20	21.20	11.50	24.20	14.00	21.20
LTE FDD B71	19.70	24.70	19.10	22.90	N/A	N/A	N/A	N/A
LTE FDD B12	18.80	24.70	19.50	22.90	N/A	N/A	N/A	N/A
LTE FDD B17	18.80	24.70	19.50	22.90	N/A	N/A	N/A	N/A
LTE FDD B13	18.90	24.70	19.50	22.90	N/A	N/A	N/A	N/A
LTE FDD B14	18.90	24.70	19.50	22.90	N/A	N/A	N/A	N/A
LTE FDD B26	18.00	24.70	17.90	22.90	N/A	N/A	N/A	N/A
LTE FDD B5	18.00	24.70	17.90	22.90	N/A	N/A	N/A	N/A
LTE FDD B66/4	15.00	24.70	14.50	21.20	13.10	24.20	14.00	21.20
LTE FDD B25/2	15.20	24.70	14.20	21.20	11.50	24.20	14.00	21.20
LTE FDD B30	17.20	22.70	14.50	17.90	11.40	22.00	11.60	18.90
LTE FDD B7	14.70	24.70	13.40	19.90	11.50	24.20	11.80	20.90
LTE TDD B48	10.01	20.01	11.01	16.71	9.61	16.31	10.41	16.61
LTE TDD B48 ULCA	10.01	20.01	11.01	18.71	9.61	16.31	10.41	16.61
LTE TDD B41 PC3	14.11	22.71	15.51	17.91	11.81	22.21	10.61	18.91
LTE TDD B41 ULCA PC3	14.11	22.71	15.51	17.91	11.81	22.21	10.61	18.91
LTE TDD B41 PC2	14.11	23.06	15.51	18.26	11.81	22.56	10.61	19.26
LTE TDD B41 ULCA PC2	14.11	23.36	15.51	18.56	11.81	22.86	10.61	19.56
NR FDD n71	19.70	24.70	19.10	22.90	N/A	N/A	N/A	N/A
NR FDD n12	18.80	24.70	19.50	22.90	N/A	N/A	N/A	N/A
NR FDD n5	18.00	24.70	17.90	22.90	N/A	N/A	N/A	N/A
NR FDD n66	15.00	24.70	14.50	21.20	13.10	24.20	14.00	21.20
NR FDD n25/n2	15.20	24.70	14.20	21.20	11.50	24.20	14.00	21.20
NR TDD n41 PC3	14.10	21.20	13.00	24.70	11.80	21.20	10.60	24.20
NR TDD n41 PC2	14.10	19.49	13.00	22.99	11.80	19.49	10.60	22.49
NR TDD n77 PC3	10.00	24.70	9.10	20.70	8.50	24.70	8.80	21.70
NR TDD n77 PC2	10.00	22.99	9.10	18.99	8.50	22.99	8.80	19.99

Smart Transmit allows the device to transmit at higher power instantaneously, as high as P_{max} , when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit} . Below table shows P_{limit} EFS settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (Device State Index DSI). Note that the device uncertainty for sub-6GHz WWAN is +1.0/-1.0 dB for this EUT.

*Maximum tune up output power Pmax is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1.0dB device design uncertainty.

*Note all P_{limit} EFS and maximum tune up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD modulation schemes (for e.g., GSM & LTE TDD).

The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G WWAN technology, band, and DSI = minimum of " P_{limit} EFS" and "Maximum tune up output power P_{max} " +1.0/-1.0 dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.

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The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

1.3 Power Reduction for SAR

This device additionally utilizes a power reduction mechanism for Bluetooth and WLAN operations. When WLAN/Bluetooth is operating simultaneously with certain combinations of 2G/3G/4G and 5 GHz WLAN antennas, the output power of is permanently reduced. SAR evaluations were additionally performed at the maximum allowed output power for these scenarios to evaluate simultaneous transmission compliance.

Additionally, this device uses an independent mechanism that limits WIFI powers to a time-averaged output power. For the purposes of this test report, all SAR measurements were performed with the algorithm disabled at the maximum time-averaged output power level. Appendix J includes verification data for this time-averaged SAR mechanism.

1.4 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

1.4.1 2G/3G/4G/5G Output Power for Portable Use Conditions

**Table 1-1
GPRS/EDGE 850**

Mode/Band	Antenna		Data - Burst Average GMSK (in dBm)		Data - Burst Average 8-PSK (in dBm)	
			1 TX Slots	2 TX Slots	1 TX Slots	2 TX Slots
GPRS/EDGE 850	Ant 1	Max allowed power	28.50	25.50	25.00	24.00
		Nominal	27.50	24.50	24.00	23.00
	Ant 3	Max allowed power	27.70	24.70	26.50	24.70
		Nominal	26.70	23.70	25.50	23.70

**Table 1-2
GPRS/EDGE 1900**

Mode/Band	Antenna		Data - Burst Average GMSK (in dBm)		Data - Burst Average 8-PSK (in dBm)	
			1 TX Slots	2 TX Slots	1 TX Slots	2 TX Slots
GPRS/EDGE 1900	Ant 1	Max allowed power	23.90	20.90	22.00	20.90
		Nominal	22.90	19.90	21.00	19.90
	Ant 2b	Max allowed power	23.90	20.90	22.00	20.90
		Nominal	22.90	19.90	21.00	19.90
	Ant 3	Max allowed power	25.10	22.10	24.20	22.10
		Nominal	24.10	21.10	23.20	21.10
	Ant 4b	Max allowed power	22.00	19.00	21.80	19.00
		Nominal	21.00	18.00	20.80	18.00

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Table 1-3
UMTS B5 (850 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 5 (850 MHz)	Ant 1	Max allowed power	18.90	18.90	18.90	18.90
		Nominal	17.90	17.90	17.90	17.90
	Ant 3	Max allowed power	19.00	19.00	19.00	19.00
		Nominal	18.00	18.00	18.00	18.00

Table 1-4
UMTS B4 (1750 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 4 (1750 MHz)	Ant 1	Max allowed power	15.50	15.50	15.50	15.50
		Nominal	14.50	14.50	14.50	14.50
	Ant 2b	Max allowed power	15.00	15.00	15.00	15.00
		Nominal	14.00	14.00	14.00	14.00
	Ant 3	Max allowed power	16.00	16.00	16.00	16.00
		Nominal	15.00	15.00	15.00	15.00
	Ant 4b	Max allowed power	14.10	14.10	14.10	14.10
		Nominal	13.10	13.10	13.10	13.10

Table 1-5
UMTS B2 (1900 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 2 (1900 MHz)	Ant 1	Max allowed power	15.20	15.20	15.20	15.20
		Nominal	14.20	14.20	14.20	14.20
	Ant 2b	Max allowed power	15.00	15.00	15.00	15.00
		Nominal	14.00	14.00	14.00	14.00
	Ant 3	Max allowed power	16.20	16.20	16.20	16.20
		Nominal	15.20	15.20	15.20	15.20
	Ant 4b	Max allowed power	12.50	12.50	12.50	12.50
		Nominal	11.50	11.50	11.50	11.50

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Table 1-6
LTE Bands

Mode / Band		Modulated Average Output Power (in dBm)					
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4a	Ant 4b
LTE FDD Band 71	Max allowed power	20.10			20.70		
	Nominal	19.10			19.70		
LTE FDD Band 12	Max allowed power	20.50			19.80		
	Nominal	19.50			18.80		
LTE FDD Band 17	Max allowed power	20.50			19.80		
	Nominal	19.50			18.80		
LTE FDD Band 13	Max allowed power	20.50			19.90		
	Nominal	19.50			18.90		
LTE FDD Band 14	Max allowed power	20.50			19.90		
	Nominal	19.50			18.90		
LTE FDD Band 26	Max allowed power	18.90			19.00		
	Nominal	17.90			18.00		
LTE FDD Band 5	Max allowed power	18.90			19.00		
	Nominal	17.90			18.00		
LTE FDD Band 5 Intra-band ULCA	Max allowed power	18.90			19.00		
	Nominal	17.90			18.00		
LTE FDD Band 4	Max allowed power	15.50		15.00	16.00		14.10
	Nominal	14.50		14.00	15.00		13.10
LTE FDD Band 66	Max allowed power	15.50		15.00	16.00		14.10
	Nominal	14.50		14.00	15.00		13.10
LTE FDD Band 2	Max allowed power	15.20		15.00	16.20		12.50
	Nominal	14.20		14.00	15.20		11.50
LTE FDD Band 25	Max allowed power	15.20		15.00	16.20		12.50
	Nominal	14.20		14.00	15.20		11.50
LTE FDD Band 30	Max allowed power	15.50		12.60	18.20		12.40
	Nominal	14.50		11.60	17.20		11.40
LTE FDD Band 7	Max allowed power	14.40		12.80	15.70		12.50
	Nominal	13.40		11.80	14.70		11.50
LTE FDD Band 7 Intra-band ULCA	Max allowed power	14.40		12.80	15.70		12.50
	Nominal	13.40		11.80	14.70		11.50
LTE TDD Band 41 (PC3)	Max allowed power	18.50		13.60	17.10		14.80
	Nominal	17.50		12.60	16.10		13.80
LTE TDD Band 41 (PC3) Intra-band ULCA	Max allowed power	18.50		13.60	17.10		14.80
	Nominal	17.50		12.60	16.10		13.80
LTE TDD Band 41 (PC2)	Max allowed power	20.15		15.25	18.75		16.45
	Nominal	19.15		14.25	17.75		15.45
LTE TDD Band 41 (PC2) Intra-band ULCA	Max allowed power	20.15		15.25	18.75		16.45
	Nominal	19.15		14.25	17.75		15.45
LTE TDD Band 48	Max allowed power	14.00	13.40		13.00	12.60	
	Nominal	13.00	12.40		12.00	11.60	
LTE TDD Band 48 Intra-band ULCA	Max allowed power	14.00	13.40		13.00	12.60	
	Nominal	13.00	12.40		12.00	11.60	

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**Table 1-7
NR Bands**

Mode / Band		Modulated Average Output Power (in dBm)					
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4a	Ant 4b
NR FDD Band n71	Max allowed power	20.10			20.70		
	Nominal	19.10			19.70		
NR FDD Band n12	Max allowed power	20.50			19.80		
	Nominal	19.50			18.80		
NR FDD Band n5	Max allowed power	18.90			19.00		
	Nominal	17.90			18.00		
NR FDD Band n66	Max allowed power	15.50		15.00	16.00		14.10
	Nominal	14.50		14.00	15.00		13.10
NR FDD Band n2	Max allowed power	15.20		15.00	16.20		12.50
	Nominal	14.20		14.00	15.20		11.50
NR FDD Band n25	Max allowed power	15.20		15.00	16.20		12.50
	Nominal	14.20		14.00	15.20		11.50
NR TDD Band n41 (PC3)	Max allowed power	14.00		11.60	15.10		12.80
	Nominal	13.00		10.60	14.10		11.80
NR TDD Band n41 (PC2)	Max allowed power	17.00		14.60	18.10		15.80
	Nominal	16.00		13.60	17.10		14.80
NR TDD Band n77 (PC3)	Max allowed power	10.10	9.80		11.00	9.50	
	Nominal	9.10	8.80		10.00	8.50	
NR TDD Band n77 (PC2)	Max allowed power	13.10	12.80		14.00	12.50	
	Nominal	12.10	11.80		13.00	11.50	

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1.4.2 Maximum WLAN Time-Averaged Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H.

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		2	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		3	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		4	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		5	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		6	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		7	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		8	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		9	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		10	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		11	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		12	12.00	10.50	12.00	10.50	12.00	10.50	11.50	10.00
		13	12.00	10.50	9.50	8.00	9.50	8.00	N/A	N/A

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	12.00	10.50	12.00	10.50	12.00	10.50
		2	12.00	10.50	12.00	10.50	12.00	10.50
		3	12.00	10.50	12.00	10.50	12.00	10.50
		4	12.00	10.50	12.00	10.50	12.00	10.50
		5	12.00	10.50	12.00	10.50	12.00	10.50
		6	12.00	10.50	12.00	10.50	12.00	10.50
		7	12.00	10.50	12.00	10.50	12.00	10.50
		8	12.00	10.50	12.00	10.50	12.00	10.50
		9	12.00	10.50	12.00	10.50	12.00	10.50
		10	12.00	10.50	12.00	10.50	12.00	10.50
		11	12.00	10.50	12.00	10.50	12.00	10.50
		12	11.75	10.25	11.75	10.25	11.25	9.75
		13	9.00	7.50	9.00	7.50	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

Mode/ Band		Channel	IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		2	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		3	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		4	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		5	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		6	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		7	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		8	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		9	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		10	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		11	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		12	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		13	11.50	10.00	9.50	8.00	9.50	8.00	N/A	N/A

FCC ID: BCGA2301	 PCTEST Proud to be part of element		SAR EVALUATION REPORT	Approved by: Quality Manager
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Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	11.50	10.00	11.50	10.00	11.50	10.00
		2	11.50	10.00	11.50	10.00	11.50	10.00
		3	11.50	10.00	11.50	10.00	11.50	10.00
		4	11.50	10.00	11.50	10.00	11.50	10.00
		5	11.50	10.00	11.50	10.00	11.50	10.00
		6	11.50	10.00	11.50	10.00	11.50	10.00
		7	11.50	10.00	11.50	10.00	11.50	10.00
		8	11.50	10.00	11.50	10.00	11.50	10.00
		9	11.50	10.00	11.50	10.00	11.50	10.00
		10	11.50	10.00	11.50	10.00	11.50	10.00
		11	11.50	10.00	11.50	10.00	11.50	10.00
		12	11.50	10.00	11.50	10.00	11.25	9.75
		13	9.00	7.50	9.00	7.50	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

FCC ID: BCGA2301	 SAR EVALUATION REPORT		Approved by: Quality Manager
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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 5b	20 MHz Bandwidth	36	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		40	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		44	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		48	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		52	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		56	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		60	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		64	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		100	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		104	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		108	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		112	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		116	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		120	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		124	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		128	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		132	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		136	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		140	16.50	15.00	16.50	15.00	16.50	15.00	15.00	13.50
		144	17.00	15.50	17.00	15.50	17.00	15.50	17.00	15.50
		149	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		153	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		157	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		161	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		165	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
	40 MHz Bandwidth	38			14.50	13.00	14.50	13.00	14.00	12.50
		46			16.00	14.50	16.00	14.50	16.00	14.50
		54			17.00	15.50	17.00	15.50	17.00	15.50
		62			16.00	14.50	16.00	14.50	15.00	13.50
		102			15.50	14.00	15.50	14.00	14.50	13.00
		110			17.00	15.50	17.00	15.50	17.00	15.50
		118			17.00	15.50	17.00	15.50	17.00	15.50
		126			17.00	15.50	17.00	15.50	17.00	15.50
		134			17.00	15.50	17.00	15.50	17.00	15.50
		142			17.00	15.50	17.00	15.50	17.00	15.50
		151			17.75	16.25	17.75	16.25	17.75	16.25
		159			17.75	16.25	17.75	16.25	17.75	16.25
	80 MHz Bandwidth	42					14.00	12.50	13.00	11.50
		58					16.00	14.50	15.00	13.50
		106					16.50	15.00	15.00	13.50
		122					17.00	15.50	17.00	15.50
		138					17.00	15.50	17.00	15.50
		155					17.75	16.25	17.50	16.00

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 5b	20 MHz Bandwidth	36	15.25	13.75	15.25	13.75	15.25	13.75	15.25	13.75
		40	15.25	13.75	15.25	13.75	15.25	13.75	15.25	13.75
		44	15.25	13.75	15.25	13.75	15.25	13.75	15.25	13.75
		48	15.25	13.75	15.25	13.75	15.25	13.75	15.25	13.75
		52	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		56	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		60	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		64	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		100	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		104	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		108	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		112	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		116	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		120	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		124	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		128	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		132	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		136	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		140	15.75	14.25	15.75	14.25	15.75	14.25	14.00	12.50
		144	15.75	14.25	15.75	14.25	15.75	14.25	15.75	14.25
		149	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		153	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		157	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		161	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
		165	17.75	16.25	17.75	16.25	17.75	16.25	17.75	16.25
	40 MHz Bandwidth	38			14.00	12.50	14.00	12.50	13.50	12.00
		46			16.00	14.50	16.00	14.50	16.00	14.50
		54			17.00	15.50	17.00	15.50	17.00	15.50
		62			15.50	14.00	15.50	14.00	14.50	13.00
		102			15.00	13.50	15.00	13.50	13.50	12.00
		110			17.00	15.50	17.00	15.50	17.00	15.50
		118			17.00	15.50	17.00	15.50	17.00	15.50
		126			17.00	15.50	17.00	15.50	17.00	15.50
		134			17.00	15.50	17.00	15.50	16.50	15.00
		142			17.00	15.50	17.00	15.50	17.00	15.50
		151			17.75	16.25	17.75	16.25	17.75	16.25
		159			17.75	16.25	17.75	16.25	17.75	16.25
	80 MHz Bandwidth	42					13.00	11.50	12.50	11.00
		58					14.50	13.00	14.50	13.00
		106					14.50	13.00	14.00	12.50
		122					17.00	15.50	17.00	15.50
		138					17.00	15.50	17.00	15.50
		155					17.75	16.25	17.00	15.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 5b	20 MHz Bandwidth	36	16.00	14.50	16.00	14.50	16.00	14.50
		40	16.00	14.50	16.00	14.50	16.00	14.50
		44	16.00	14.50	16.00	14.50	16.00	14.50
		48	16.00	14.50	16.00	14.50	16.00	14.50
		52	17.00	15.50	17.00	15.50	17.00	15.50
		56	17.00	15.50	17.00	15.50	17.00	15.50
		60	17.00	15.50	17.00	15.50	17.00	15.50
		64	17.00	15.50	17.00	15.50	17.00	15.50
		100	16.50	15.00	16.50	15.00	17.00	15.50
		104	17.00	15.50	17.00	15.50	17.00	15.50
		108	17.00	15.50	17.00	15.50	17.00	15.50
		112	17.00	15.50	17.00	15.50	17.00	15.50
		116	17.00	15.50	17.00	15.50	17.00	15.50
		120	17.00	15.50	17.00	15.50	17.00	15.50
		124	17.00	15.50	17.00	15.50	17.00	15.50
		128	17.00	15.50	17.00	15.50	17.00	15.50
		132	17.00	15.50	17.00	15.50	17.00	15.50
		136	17.00	15.50	17.00	15.50	17.00	15.50
		140	16.00	14.50	16.00	14.50	14.00	12.50
		144	17.00	15.50	17.00	15.50	17.00	15.50
		149	17.75	16.25	17.75	16.25	17.75	16.25
		153	17.75	16.25	17.75	16.25	17.75	16.25
		157	17.75	16.25	17.75	16.25	17.75	16.25
		161	17.75	16.25	17.75	16.25	17.75	16.25
		165	17.75	16.25	17.75	16.25	17.75	16.25
	40 MHz Bandwidth	38	14.00	12.50	14.00	12.50	13.50	12.00
		46	16.00	14.50	16.00	14.50	16.00	14.50
		54	17.00	15.50	17.00	15.50	17.00	15.50
		62	15.50	14.00	15.50	14.00	14.50	13.00
		102	15.00	13.50	15.00	13.50	13.50	12.00
		110	17.00	15.50	17.00	15.50	17.00	15.50
		118	17.00	15.50	17.00	15.50	17.00	15.50
		126	17.00	15.50	17.00	15.50	17.00	15.50
		134	17.00	15.50	17.00	15.50	16.50	15.00
		142	17.00	15.50	17.00	15.50	17.00	15.50
		151	17.75	16.25	17.75	16.25	17.75	16.25
		159	17.75	16.25	17.75	16.25	17.75	16.25
	80 MHz Bandwidth	42			13.00	11.50	12.50	11.00
		58			14.50	13.00	14.50	13.00
		106			14.50	13.00	14.00	12.50
		122			17.00	15.50	17.00	15.50
		138			17.00	15.50	17.00	15.50
		155			17.75	16.25	17.00	15.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 4b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		104	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		108	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		112	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		116	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		120	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		149	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
	40 MHz Bandwidth	153	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		157	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		161	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		165	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		38			10.50	9.00	10.50	9.00	10.50	9.00
		46			10.50	9.00	10.50	9.00	10.50	9.00
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			9.00	7.50	9.00	7.50	9.00	7.50
		110			9.00	7.50	9.00	7.50	9.00	7.50
	80 MHz Bandwidth	118			9.00	7.50	9.00	7.50	9.00	7.50
		126			9.00	7.50	9.00	7.50	9.00	7.50
		134			9.00	7.50	9.00	7.50	9.00	7.50
		142			9.00	7.50	9.00	7.50	9.00	7.50
		151			11.50	10.00	11.50	10.00	11.50	10.00
		159			11.50	10.00	11.50	10.00	11.50	10.00
		42			10.50	9.00	10.50	9.00	10.50	9.00
		58			10.50	9.00	10.50	9.00	10.50	9.00
		106			9.00	7.50	9.00	7.50	9.00	7.50
		122			9.00	7.50	9.00	7.50	9.00	7.50
		138			9.00	7.50	9.00	7.50	9.00	7.50
		155			11.50	10.00	11.50	10.00	11.50	10.00

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 4b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		104	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		108	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		112	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		116	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		120	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		149	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		153	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		157	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		161	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		165	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
	40 MHz Bandwidth	38			10.50	9.00	10.50	9.00	10.50	9.00
		46			10.50	9.00	10.50	9.00	10.50	9.00
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			9.00	7.50	9.00	7.50	9.00	7.50
		110			9.00	7.50	9.00	7.50	9.00	7.50
		118			9.00	7.50	9.00	7.50	9.00	7.50
		126			9.00	7.50	9.00	7.50	9.00	7.50
		134			9.00	7.50	9.00	7.50	9.00	7.50
		142			9.00	7.50	9.00	7.50	9.00	7.50
		151			11.50	10.00	11.50	10.00	11.50	10.00
		159			11.50	10.00	11.50	10.00	11.50	10.00
	80 MHz Bandwidth	42					10.50	9.00	10.50	9.00
		58					10.50	9.00	10.50	9.00
		106					9.00	7.50	9.00	7.50
		122					9.00	7.50	9.00	7.50
		138					9.00	7.50	9.00	7.50
		155					11.50	10.00	11.50	10.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band		Channel	IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 4b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00
		100	9.00	7.50	9.00	7.50	9.00	7.50
		104	9.00	7.50	9.00	7.50	9.00	7.50
		108	9.00	7.50	9.00	7.50	9.00	7.50
		112	9.00	7.50	9.00	7.50	9.00	7.50
		116	9.00	7.50	9.00	7.50	9.00	7.50
		120	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50
		149	11.50	10.00	11.50	10.00	11.50	10.00
		153	11.50	10.00	11.50	10.00	11.50	10.00
		157	11.50	10.00	11.50	10.00	11.50	10.00
		161	11.50	10.00	11.50	10.00	11.50	10.00
		165	11.50	10.00	11.50	10.00	11.50	10.00
	40 MHz Bandwidth	38	10.50	9.00	10.50	9.00	10.50	9.00
		46	10.50	9.00	10.50	9.00	10.50	9.00
		54	10.50	9.00	10.50	9.00	10.50	9.00
		62	10.50	9.00	10.50	9.00	10.50	9.00
		102	9.00	7.50	9.00	7.50	9.00	7.50
		110	9.00	7.50	9.00	7.50	9.00	7.50
		118	9.00	7.50	9.00	7.50	9.00	7.50
		126	9.00	7.50	9.00	7.50	9.00	7.50
		134	9.00	7.50	9.00	7.50	9.00	7.50
		142	9.00	7.50	9.00	7.50	9.00	7.50
	80 MHz Bandwidth	151	11.50	10.00	11.50	10.00	11.50	10.00
		159	11.50	10.00	11.50	10.00	11.50	10.00
		42			10.50	9.00	10.50	9.00
		58			10.50	9.00	10.50	9.00
		106			9.00	7.50	9.00	7.50
		122			9.00	7.50	9.00	7.50
		138			9.00	7.50	9.00	7.50
		155			11.50	10.00	11.50	10.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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1.4.3 Reduced WLAN Time-Averaged Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H.

Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 4a/4b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
Modulated Average - Single Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		2	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		3	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		4	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		5	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		6	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		7	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		8	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		9	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		10	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		11	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		12	9.00	7.50	9.00	7.50	9.00	7.50	9.00
		13	9.00	7.50	9.00	7.50	9.00	7.50	N/A

Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 4a/4b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	9.00	7.50	9.00	7.50	9.00	7.50
		2	9.00	7.50	9.00	7.50	9.00	7.50
		3	9.00	7.50	9.00	7.50	9.00	7.50
		4	9.00	7.50	9.00	7.50	9.00	7.50
		5	9.00	7.50	9.00	7.50	9.00	7.50
		6	9.00	7.50	9.00	7.50	9.00	7.50
		7	9.00	7.50	9.00	7.50	9.00	7.50
		8	9.00	7.50	9.00	7.50	9.00	7.50
		9	9.00	7.50	9.00	7.50	9.00	7.50
		10	9.00	7.50	9.00	7.50	9.00	7.50
		11	9.00	7.50	9.00	7.50	9.00	7.50
		12	9.00	7.50	9.00	7.50	9.00	7.50
		13	9.00	7.50	9.00	7.50	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 2a/2b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
Modulated Average - Single Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		2	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		3	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		4	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		5	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		6	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		7	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		8	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		9	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		10	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		11	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		12	8.50	7.00	8.50	7.00	8.50	7.00	8.50
		13	8.50	7.00	8.50	7.00	8.50	7.00	N/A

Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 2a/2b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum
Modulated Average - 2 Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	8.50	7.00	8.50	7.00	8.50
		2	8.50	7.00	8.50	7.00	8.50
		3	8.50	7.00	8.50	7.00	8.50
		4	8.50	7.00	8.50	7.00	8.50
		5	8.50	7.00	8.50	7.00	8.50
		6	8.50	7.00	8.50	7.00	8.50
		7	8.50	7.00	8.50	7.00	8.50
		8	8.50	7.00	8.50	7.00	8.50
		9	8.50	7.00	8.50	7.00	8.50
		10	8.50	7.00	8.50	7.00	8.50
		11	8.50	7.00	8.50	7.00	8.50
		12	8.50	7.00	8.50	7.00	8.50
		13	8.50	7.00	8.50	7.00	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 2a/2b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 5b	20 MHz Bandwidth	36	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		40	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		44	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		48	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		52	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		56	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		60	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		64	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		100	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		104	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		108	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		112	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		116	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		120	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		124	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		128	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		132	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		136	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		140	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		144	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		149	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
	40 MHz Bandwidth	153	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		157	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		161	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		165	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		38			12.00	10.50	12.00	10.50	12.00	10.50
		46			12.00	10.50	12.00	10.50	12.00	10.50
		54			13.00	11.50	13.00	11.50	13.00	11.50
		62			13.00	11.50	13.00	11.50	13.00	11.50
		102			13.00	11.50	13.00	11.50	13.00	11.50
		110			13.00	11.50	13.00	11.50	13.00	11.50
		118			13.00	11.50	13.00	11.50	13.00	11.50
		126			13.00	11.50	13.00	11.50	13.00	11.50
		134			13.00	11.50	13.00	11.50	13.00	11.50
		142			13.00	11.50	13.00	11.50	13.00	11.50
		151			13.75	12.25	13.75	12.25	13.75	12.25
		159			13.75	12.25	13.75	12.25	13.75	12.25
	80 MHz Bandwidth	42					12.00	10.50	12.00	10.50
		58					13.00	11.50	13.00	11.50
		106					13.00	11.50	13.00	11.50
		122					13.00	11.50	13.00	11.50
		138					13.00	11.50	13.00	11.50
		155					13.75	12.25	13.75	12.25

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 2a/2b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 5b	20 MHz Bandwidth	36	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		40	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		44	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		48	12.00	10.50	12.00	10.50	12.00	10.50	12.00	10.50
		52	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		56	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		60	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		64	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		100	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		104	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		108	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		112	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		116	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		120	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		124	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		128	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		132	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		136	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		140	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		144	13.00	11.50	13.00	11.50	13.00	11.50	13.00	11.50
		149	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
	40 MHz Bandwidth	153	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		157	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		161	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		165	13.75	12.25	13.75	12.25	13.75	12.25	13.75	12.25
		38			12.00	10.50	12.00	10.50	12.00	10.50
		46			12.00	10.50	12.00	10.50	12.00	10.50
		54			13.00	11.50	13.00	11.50	13.00	11.50
		62			13.00	11.50	13.00	11.50	13.00	11.50
		102			13.00	11.50	13.00	11.50	13.00	11.50
		110			13.00	11.50	13.00	11.50	13.00	11.50
		118			13.00	11.50	13.00	11.50	13.00	11.50
		126			13.00	11.50	13.00	11.50	13.00	11.50
		134			13.00	11.50	13.00	11.50	13.00	11.50
		142			13.00	11.50	13.00	11.50	13.00	11.50
		151			13.75	12.25	13.75	12.25	13.75	12.25
		159			13.75	12.25	13.75	12.25	13.75	12.25
	80 MHz Bandwidth	42					12.00	10.50	12.00	10.50
		58					13.00	11.50	13.00	11.50
		106					13.00	11.50	13.00	11.50
		122					13.00	11.50	13.00	11.50
		138					13.00	11.50	13.00	11.50
		155					13.75	12.25	13.75	12.25

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 2a/2b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 5b	20 MHz Bandwidth	36	12.00	10.50	12.00	10.50	12.00	10.50
		40	12.00	10.50	12.00	10.50	12.00	10.50
		44	12.00	10.50	12.00	10.50	12.00	10.50
		48	12.00	10.50	12.00	10.50	12.00	10.50
		52	13.00	11.50	13.00	11.50	13.00	11.50
		56	13.00	11.50	13.00	11.50	13.00	11.50
		60	13.00	11.50	13.00	11.50	13.00	11.50
		64	13.00	11.50	13.00	11.50	13.00	11.50
		100	13.00	11.50	13.00	11.50	13.00	11.50
		104	13.00	11.50	13.00	11.50	13.00	11.50
		108	13.00	11.50	13.00	11.50	13.00	11.50
		112	13.00	11.50	13.00	11.50	13.00	11.50
		116	13.00	11.50	13.00	11.50	13.00	11.50
		120	13.00	11.50	13.00	11.50	13.00	11.50
		124	13.00	11.50	13.00	11.50	13.00	11.50
		128	13.00	11.50	13.00	11.50	13.00	11.50
		132	13.00	11.50	13.00	11.50	13.00	11.50
		136	13.00	11.50	13.00	11.50	13.00	11.50
		140	13.00	11.50	13.00	11.50	13.00	11.50
		144	13.00	11.50	13.00	11.50	13.00	11.50
		149	13.75	12.25	13.75	12.25	13.75	12.25
		153	13.75	12.25	13.75	12.25	13.75	12.25
		157	13.75	12.25	13.75	12.25	13.75	12.25
		161	13.75	12.25	13.75	12.25	13.75	12.25
		165	13.75	12.25	13.75	12.25	13.75	12.25
	40 MHz Bandwidth	38	12.00	10.50	12.00	10.50	12.00	10.50
		46	12.00	10.50	12.00	10.50	12.00	10.50
		54	13.00	11.50	13.00	11.50	13.00	11.50
		62	13.00	11.50	13.00	11.50	13.00	11.50
		102	13.00	11.50	13.00	11.50	13.00	11.50
		110	13.00	11.50	13.00	11.50	13.00	11.50
		118	13.00	11.50	13.00	11.50	13.00	11.50
		126	13.00	11.50	13.00	11.50	13.00	11.50
		134	13.00	11.50	13.00	11.50	13.00	11.50
		142	13.00	11.50	13.00	11.50	13.00	11.50
	80 MHz Bandwidth	151	13.75	12.25	13.75	12.25	13.75	12.25
		159	13.75	12.25	13.75	12.25	13.75	12.25
		42			12.00	10.50	12.00	10.50
		58			13.00	11.50	13.00	11.50
		106			13.00	11.50	13.00	11.50
		122			13.00	11.50	13.00	11.50
		138			13.00	11.50	13.00	11.50
		155			13.75	12.25	13.75	12.25

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 4a/4b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 4b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		40	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		44	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		48	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		104	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		108	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		112	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		116	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		120	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		124	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		128	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		132	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		136	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		140	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		144	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		149	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
	40 MHz Bandwidth	153	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		157	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		161	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		165	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		38			4.50	3.00	4.50	3.00	4.50	3.00
		46			4.50	3.00	4.50	3.00	4.50	3.00
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			3.00	1.50	3.00	1.50	3.00	1.50
		110			3.00	1.50	3.00	1.50	3.00	1.50
		118			3.00	1.50	3.00	1.50	3.00	1.50
	80 MHz Bandwidth	126			3.00	1.50	3.00	1.50	3.00	1.50
		134			3.00	1.50	3.00	1.50	3.00	1.50
		142			3.00	1.50	3.00	1.50	3.00	1.50
		151			5.50	4.00	5.50	4.00	5.50	4.00
		159			5.50	4.00	5.50	4.00	5.50	4.00
		42					4.50	3.00	4.50	3.00
		58					4.50	3.00	4.50	3.00
		106					3.00	1.50	3.00	1.50
		122					3.00	1.50	3.00	1.50
		138					3.00	1.50	3.00	1.50
		155					5.50	4.00	5.50	4.00

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 4a/4b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band		Channel	IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 4b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		40	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		44	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		48	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		104	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		108	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		112	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		116	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		120	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		124	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		128	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		132	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		136	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		140	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		144	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50
		149	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		153	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		157	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		161	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
		165	5.50	4.00	5.50	4.00	5.50	4.00	5.50	4.00
	40 MHz Bandwidth	38			4.50	3.00	4.50	3.00	4.50	3.00
		46			4.50	3.00	4.50	3.00	4.50	3.00
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			3.00	1.50	3.00	1.50	3.00	1.50
		110			3.00	1.50	3.00	1.50	3.00	1.50
		118			3.00	1.50	3.00	1.50	3.00	1.50
		126			3.00	1.50	3.00	1.50	3.00	1.50
		134			3.00	1.50	3.00	1.50	3.00	1.50
		142			3.00	1.50	3.00	1.50	3.00	1.50
		151			5.50	4.00	5.50	4.00	5.50	4.00
		159			5.50	4.00	5.50	4.00	5.50	4.00
	80 MHz Bandwidth	42					4.50	3.00	4.50	3.00
		58					4.50	3.00	4.50	3.00
		106					3.00	1.50	3.00	1.50
		122					3.00	1.50	3.00	1.50
		138					3.00	1.50	3.00	1.50
		155					5.50	4.00	5.50	4.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

-Simultaneous conditions with Licensed Bands Antenna 4a/4b active

-Simultaneous conditions with mmW/Inter-band ULCA active

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)		
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 4b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00	
		40	4.50	3.00	4.50	3.00	4.50	3.00	
		44	4.50	3.00	4.50	3.00	4.50	3.00	
		48	4.50	3.00	4.50	3.00	4.50	3.00	
		52	4.50	3.00	4.50	3.00	4.50	3.00	
		56	4.50	3.00	4.50	3.00	4.50	3.00	
		60	4.50	3.00	4.50	3.00	4.50	3.00	
		64	4.50	3.00	4.50	3.00	4.50	3.00	
		100	3.00	1.50	3.00	1.50	3.00	1.50	
		104	3.00	1.50	3.00	1.50	3.00	1.50	
		108	3.00	1.50	3.00	1.50	3.00	1.50	
		112	3.00	1.50	3.00	1.50	3.00	1.50	
		116	3.00	1.50	3.00	1.50	3.00	1.50	
		120	3.00	1.50	3.00	1.50	3.00	1.50	
		124	3.00	1.50	3.00	1.50	3.00	1.50	
		128	3.00	1.50	3.00	1.50	3.00	1.50	
		132	3.00	1.50	3.00	1.50	3.00	1.50	
		136	3.00	1.50	3.00	1.50	3.00	1.50	
		140	3.00	1.50	3.00	1.50	3.00	1.50	
		144	3.00	1.50	3.00	1.50	3.00	1.50	
		149	5.50	4.00	5.50	4.00	5.50	4.00	
		153	5.50	4.00	5.50	4.00	5.50	4.00	
		157	5.50	4.00	5.50	4.00	5.50	4.00	
		161	5.50	4.00	5.50	4.00	5.50	4.00	
		165	5.50	4.00	5.50	4.00	5.50	4.00	
	40 MHz Bandwidth	38	4.50	3.00	4.50	3.00	4.50	3.00	
		46	4.50	3.00	4.50	3.00	4.50	3.00	
		54	4.50	3.00	4.50	3.00	4.50	3.00	
		62	4.50	3.00	4.50	3.00	4.50	3.00	
		102	3.00	1.50	3.00	1.50	3.00	1.50	
		110	3.00	1.50	3.00	1.50	3.00	1.50	
		118	3.00	1.50	3.00	1.50	3.00	1.50	
		126	3.00	1.50	3.00	1.50	3.00	1.50	
		134	3.00	1.50	3.00	1.50	3.00	1.50	
		142	3.00	1.50	3.00	1.50	3.00	1.50	
		151	5.50	4.00	5.50	4.00	5.50	4.00	
	159	5.50	4.00	5.50	4.00	5.50	4.00		
	80 MHz Bandwidth	42				4.50	3.00	4.50	3.00
		58				4.50	3.00	4.50	3.00
		106				3.00	1.50	3.00	1.50
		122				3.00	1.50	3.00	1.50
		138				3.00	1.50	3.00	1.50
		155				5.50	4.00	5.50	4.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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1.4.4 Bluetooth Maximum and Reduced Output Power

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE	Maximum	12.75
	Nominal	11.25
Bluetooth EDR	Maximum	12.75
	Nominal	11.25
Bluetooth HDR	Maximum	10.00
	Nominal	8.50
Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR	Maximum	12.75
	Nominal	11.25
Bluetooth EDR	Maximum	12.00
	Nominal	10.50
Bluetooth HDR	Maximum	10.00
	Nominal	8.50
Bluetooth LE	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE	Maximum	14.00
	Nominal	12.50
Bluetooth EDR	Maximum	13.00
	Nominal	11.50
Bluetooth HDR	Maximum	10.00
	Nominal	8.50
Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR	Maximum	14.00
	Nominal	12.50
Bluetooth EDR	Maximum	12.00
	Nominal	10.50
Bluetooth HDR	Maximum	10.00
	Nominal	8.50
Bluetooth LE	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 1 and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with Licensed Bands Antenna 2a/2b and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	10.75
	Nominal	9.25
Bluetooth EDR Reduced	Maximum	10.75
	Nominal	9.25
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50

Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 1 and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with Licensed Bands Antenna 2a/2b and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	10.75
	Nominal	9.25
Bluetooth EDR Reduced	Maximum	10.75
	Nominal	9.25
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth LE Reduced	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 4a/4b active
- Simultaneous conditions with Licensed Bands Antenna 3 active
- Simultaneous conditions with 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	9.75
	Nominal	8.25
Bluetooth EDR Reduced	Maximum	9.75
	Nominal	8.25
Bluetooth HDR Reduced	Maximum	9.75
	Nominal	8.25

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Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 4a/4b active
- Simultaneous conditions with Licensed Bands Antenna 3 active
- Simultaneous conditions with 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	9.75
	Nominal	8.25
Bluetooth EDR Reduced	Maximum	9.75
	Nominal	8.25
Bluetooth HDR Reduced	Maximum	9.75
	Nominal	8.25
Bluetooth LE Reduced	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 3 active and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with Licensed Bands Antenna 4a/4b and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	5.75
	Nominal	4.25
Bluetooth EDR Reduced	Maximum	5.75
	Nominal	4.25
Bluetooth HDR Reduced	Maximum	5.75
	Nominal	4.25

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Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 3 active and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with Licensed Bands Antenna 4a/4b and 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	5.75
	Nominal	4.25
Bluetooth EDR Reduced	Maximum	5.75
	Nominal	4.25
Bluetooth HDR Reduced	Maximum	5.75
	Nominal	4.25
Bluetooth LE Reduced	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:

- Simultaneous conditions with 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 4a/4b active
- Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 3 active
- Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE Reduced	Maximum	11.00
	Nominal	9.50
Bluetooth EDR Reduced	Maximum	11.00
	Nominal	9.50
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50

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Below table is applicable in the following conditions:

- Simultaneous conditions with 5GHz WLAN Antenna 4b/5b active
- Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 4a/4b active
- Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 3 active
- Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR Reduced	Maximum	11.00
	Nominal	9.50
Bluetooth EDR Reduced	Maximum	11.00
	Nominal	9.50
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth LE Reduced	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 1 active
- Simultaneous conditions with Licensed Bands Antenna 2a/2b active
- Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth EDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50

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Below table is applicable in the following conditions:

- Simultaneous conditions with Licensed Bands Antenna 1 active
- Simultaneous conditions with Licensed Bands Antenna 2a/2b active
- Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth EDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth HDR Reduced	Maximum	10.00
	Nominal	8.50
Bluetooth LE Reduced	Maximum	5.50
	Nominal	4.00

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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1.5 DUT Antenna Locations

The overall diagonal dimension of the device is > 200 mm. A diagram showing the location of the device antennas can be found in Appendix E. Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filings.

Table 1-8
Device Edges/Sides for SAR Testing

Device Sides/Edges for SAR Testing						
Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850 Ant 1	Yes	No	No	Yes	No	Yes
GPRS 1900 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 850 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 1750 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 1900 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 71 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 12 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 13 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 14 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 26 (Cell) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 5 (Cell) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 66 (AWS) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 25 (PCS) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 30 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 7 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 41 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 48 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n71 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n12 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n5 (Cell) Ant 1	Yes	No	No	Yes	No	Yes
NR Band n66 (AWS) Ant 1	Yes	No	No	Yes	No	Yes
NR Band n25 (PCS) Ant 1	Yes	No	No	Yes	No	Yes
NR Band n41 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n77 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 48 Ant 2a	Yes	No	No	Yes	Yes	No
NR Band n77 Ant 2a	Yes	No	No	Yes	Yes	No
GPRS 1900 Ant 2b	Yes	No	No	Yes	No	No
UMTS 1750 Ant 2b	Yes	No	No	Yes	No	No
UMTS 1900 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 66 (AWS) Ant 2b	Yes	No	No	Yes	No	No
LTE Band 25 (PCS) Ant 2b	Yes	No	No	Yes	No	No
LTE Band 30 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 7 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 41 Ant 2b	Yes	No	No	Yes	No	No
NR Band n66 (AWS) Ant 2b	Yes	No	No	Yes	No	No
NR Band n25 (PCS) Ant 2b	Yes	No	No	Yes	No	No
NR Band n41 Ant 2b	Yes	No	No	Yes	No	No
GPRS 850 Ant 3	Yes	No	Yes	No	Yes	No
GPRS 1900 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 850 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 1750 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 1900 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 71 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 12 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 13 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 14 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 26 (Cell) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 5 (Cell) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 66 (AWS) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 25 (PCS) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 30 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 7 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 41 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 48 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n71 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n12 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n5 (Cell) Ant 3	Yes	No	Yes	No	Yes	No
NR Band n66 (AWS) Ant 3	Yes	No	Yes	No	Yes	No
NR Band n25 (PCS) Ant 3	Yes	No	Yes	No	Yes	No
NR Band n41 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n77 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 48 Ant 4a	Yes	No	Yes	No	No	Yes
NR Band n77 Ant 4a	Yes	No	Yes	No	No	Yes
GPRS 1900 Ant 4b	Yes	No	Yes	No	No	No
UMTS 1750 Ant 4b	Yes	No	Yes	No	No	No
UMTS 1900 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 66 (AWS) Ant 4b	Yes	No	Yes	No	No	No
LTE Band 25 (PCS) Ant 4b	Yes	No	Yes	No	No	No
LTE Band 30 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 7 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 41 Ant 4b	Yes	No	Yes	No	No	No
NR Band n66 (AWS) Ant 4b	Yes	No	Yes	No	No	No
NR Band n25 (PCS) Ant 4b	Yes	No	Yes	No	No	No
NR Band n41 Ant 4b	Yes	No	Yes	No	No	No
2.4 GHz WLAN Ant 4a	Yes	No	Yes	No	No	Yes
2.4 GHz WLAN Ant 2a	Yes	No	No	Yes	Yes	No
5 GHz WLAN Ant 5b	Yes	No	No	No	Yes	No
5 GHz WLAN Ant 4b	Yes	No	Yes	No	No	No
Bluetooth Ant 4a	Yes	No	Yes	No	No	Yes
Bluetooth Ant 2a	Yes	No	No	Yes	Yes	No

Note: Per FCC KDB Publication 616217 D04v01r01, particular edges were not required to be evaluated for SAR based on the SAR exclusion threshold in KDB 447498 D01V06. Additional edges may have been evaluated for simultaneous transmission analysis.

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1.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

Table 1-9
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Body
1	Cellular Band + 2.4 GHz WI-FI	Yes
2	Cellular Band + 5 GHz WI-FI	Yes
3	Cellular Band + 2.4 GHz Bluetooth	Yes
4	Cellular Band + 2.4 GHz WI-FI MIMO	Yes
5	Cellular Band + 5 GHz WI-FI MIMO	Yes
6	Cellular Band + 2.4 GHz Bluetooth (TXBF)	Yes
7	Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
8	Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
9	Cellular Band + 2.4 GHz Bluetooth (TXBF) + 5 GHz WI-FI	Yes
10	Cellular Band + 2.4 GHz Bluetooth (TXBF) + 5 GHz WI-FI MIMO	Yes
11	2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
12	2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
13	2.4 GHz Bluetooth (TXBF) + 5 GHz WI-FI	Yes
14	2.4 GHz Bluetooth (TXBF) + 5 GHz WI-FI MIMO	Yes

Table 1-10
Simultaneous Transmission Scenarios of Inter-band ULCA

No.	Capable Transmit Configuration	Body	Notes
1	Cellular Ant 1 LB + Cellular Ant 3 MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B12/13/5 LTE Bands transmitting from Ant 3 MB/HB: LTE B4/66/2/7
2	Cellular Ant 1 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B12/13/5 LTE Bands transmitting from Ant 2b MB/HB: LTE B4/66/2/7
3	Cellular Ant 1 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B12/13/5 LTE Bands transmitting from Ant 4b MB/HB: LTE B4/66/2/7
4	Cellular Ant 3 LB + Cellular Ant 1 MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 1 MB/HB: LTE B4/66/2/7
5	Cellular Ant 3 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 2b MB/HB: LTE B4/66/2/7
6	Cellular Ant 3 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 4b MB/HB: LTE B4/66/2/7

Note: The technical description includes all the possible Inter-band ULCA combinations.

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Table 1-11
Simultaneous Transmission Scenarios with Inter-band ULCA Active

No.	Capable Transmit Configuration	Body
1	LTE Inter-Band ULCA + 2.4 GHz WI-FI	Yes
2	LTE Inter-Band ULCA + 5 GHz WI-FI	Yes
3	LTE Inter-Band ULCA + 2.4 GHz Bluetooth	Yes
4	LTE Inter-Band ULCA+ 2.4 GHz WI-FI MIMO	Yes
5	LTE Inter-Band ULCA + 5 GHz WI-FI MIMO	Yes
6	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF)	Yes
7	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
8	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI	Yes
9	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
10	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI MIMO	Yes

Note: LTE inter-band ULCA can operate in any of the combinations in Table 1-10.

1. There are no limitations in the above listed simultaneous transmission scenarios between cellular antennas and BT/WI-FI antennas.
2. 2.4 GHz WLAN and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
3. For licensed bands, Ant 2a and Ant 2b cannot transmit simultaneously, and Ant 4a and Ant 4b cannot transmit simultaneously.
4. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.
5. While 5 GHz MIMO is active, 5 GHz Ant 4b and Ant 5b can be transmitting together.
6. EN-DC operation is supported with LTE + 5G NR FR1 scenarios. The LTE anchor bands are shown in the NR FR1 checklist.
7. 5G NR FR2 n260 and n261 cannot transmit simultaneously.
8. LTE + 5G NR FR2 n260 and n261 operations are possible only with LTE Anchors shown in the NR FR2 Checklist.
9. This device supports VoWIFI.

1.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

Since U-NII-1 has lower or the same maximum output power as U-NII-2A and the highest reported SAR for UNII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

The WLAN/Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report. WLAN/Bluetooth SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN/Bluetooth configurations.

This device supports channel 1-13 for 2.4 GHz WLAN. However, because channel 12/13 targets are not higher than that of channels 1-11, channels 1, 6, and 11 were considered for SAR testing per FCC KDB 248227 D01V02r02

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This device supports IEEE 802.11ac with the following features:

- a) Up to 80 MHz Bandwidth only
- b) No aggregate channel configurations
- c) 2 Tx antenna output
- d) 256 QAM is supported
- e) TDWR and Band gap channels are supported

This device supports IEEE 802.11ax with the following features:

- a) Up to 80 MHz Bandwidth only for 5 GHz
- b) Up to 20 MHz Bandwidth only for 2.4 GHz
- c) No aggregate channel configurations
- d) 2 Tx antenna output
- e) Up to 1024 QAM is supported
- f) TDWR and Band gap channels are supported for 5 GHz
- g) MU-MIMO UL Operations are not supported

Per April 2019 TCB Workshop Notes, SAR testing was not required for 802.11ax when applying the initial test configuration procedures of KDB 248227, with 802.11ax considered a higher order 802.11 mode.

(B) Licensed Transmitter(s)

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive. The downlink carrier aggregation exclusion analysis can be found in Appendix F.

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

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This device supports LTE/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE/NR Band falls completely within an LTE/NR band with a larger transmission frequency range, both LTE/NR bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE/NR bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41/48 and NR Band n41/77. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class 2 condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 13.1).

This device supports LTE Carrier Aggregation (CA) for LTE Band 41, LTE Band 48, LTE Band 5 and LTE Band 7 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device supports 5G NR for Bands n260, and n261. RF Exposure assessment and simultaneous transmission analysis for these bands can be found in the Near Field mmW Report (report SN can be found in Section 1.10 – Bibliography).

This device supports inter-band LTE Carrier Aggregation (CA) for LTE Bands 2/4/5/7/12/13/14/66 with two component carriers in the uplink

1.8 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02 (2G/3G/4G)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 616217 D04v01r02 (Tablet)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- April 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax)
- October 2018 TCB Workshop Notes (Inter-band Uplink Carrier Aggregation)

1.9 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 10.

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1.10 Bibliography

Report Type	Report Serial Number
SAR Part 0 Test Report	1C2101020002-34.BCG
Power Density Part 0 Test Report	1C2101020002-18.BCG
Power Density Part 1 Test Report	1C2101020002-19.BCG
RF Exposure Part 2 Test Report	1C2101020002-20.BCG
RF Exposure Compliance Summary Report	1C2101020002-21.BCG

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LTE Information				
Form Factor	Tablet Device			
Frequency Range of each LTE transmission band	LTE Band 71 (865.5 - 895.5 MHz)			
	LTE Band 12 (698.7 - 715.3 MHz)			
	LTE Band 17 (705.5 - 713.5 MHz)			
	LTE Band 13 (779.5 - 784.5 MHz)			
	LTE Band 14 (790.5 - 795.5 MHz)			
	LTE Band 26 (Cell) (814.7 - 848.3 MHz)			
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)			
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)			
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)			
	LTE Band 2 (PCS) (1850.7 - 1908.3 MHz)			
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)			
	LTE Band 41 (2498.5 - 2687.5 MHz)			
	LTE Band 48 (3552.5 - 3697.5 MHz)			
	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz			
Channel Bandwidths	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz			
	LTE Band 17: 5 MHz, 10 MHz			
	LTE Band 13: 5 MHz, 10 MHz			
	LTE Band 14: 5 MHz, 10 MHz			
	LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz			
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz			
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz			
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz			
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High
	High			
LTE Band 71: 5 MHz	665.5 (133147)	680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)	680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)	680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)	680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)	707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)	707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)	707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)	707.5 (23095)	711 (23130)	
LTE Band 17: 5 MHz	706.5 (23755)	710 (23790)	713.5 (23825)	
LTE Band 17: 10 MHz	709 (23780)	710 (23790)	711 (23800)	
LTE Band 13: 5 MHz	779.5 (23205)	782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	N/A	782 (23230)	N/A	
LTE Band 14: 5 MHz	790.5 (23305)	793 (23330)	795.5 (23355)	
LTE Band 14: 10 MHz	N/A	793 (23330)	N/A	
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)	831.5 (26865)	848.3 (27033)	
LTE Band 26 (Cell): 3 MHz	815.5 (26705)	831.5 (26865)	847.5 (27025)	
LTE Band 26 (Cell): 5 MHz	816.5 (26715)	831.5 (26865)	846.5 (27015)	
LTE Band 26 (Cell): 10 MHz	819 (26740)	831.5 (26865)	844 (26990)	
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)	836.5 (20525)	848.3 (20643)	
LTE Band 5 (Cell): 3 MHz	825.5 (20415)	836.5 (20525)	847.5 (20635)	
LTE Band 5 (Cell): 5 MHz	826.5 (20425)	836.5 (20525)	846.5 (20625)	
LTE Band 5 (Cell): 10 MHz	829 (20450)	836.5 (20525)	844 (20600)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19857)	1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19865)	1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19875)	1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)	1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)	1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)	1732.5 (20175)	1745 (20300)	
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)	1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)	1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)	1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)	1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)	1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)	1745 (132322)	1770 (132572)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)	1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)	1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)	1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)	1880 (18900)	1906 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)	1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 20 MHz	1860 (18700)	1880 (18900)	1900 (19100)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)	1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)	1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)	1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)	1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)	1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)	1882.5 (26365)	1905 (26590)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	N/A	3649.2 (56223)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	N/A	3648.3 (56232)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	N/A	3647.5 (56215)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	N/A	3646.7 (56207)
UE Category	DL UE Cat 19 (QPSK, 16QAM, 64QAM, 256QAM) UL UE Cat 16 (QPSK, 16QAM, 64QAM, 256QAM)			
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM			
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3-6.2.57 (manufacturer attestation to be provided)	YES			
A-MPR (Additional MPR) disabled for SAR Testing?	YES			
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations			
LTE Additional Information	This device does not support full CA features on 3GPP Release 15. It supports carrier aggregation and downlink MIMO features as shown in Section 8 and Appendix F. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 15 Features are not supported: Relay, HetNet, Enhanced MIMO, eCIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.			

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NR Information					
Form Factor	Tablet Device				
Frequency Range of each NR transmission band	NR Band n71 (665.5 - 695.5 MHz)				
	NR Band n12 (701.5 - 713.5 MHz)				
	NR Band n5 (Cell) (826.5 - 846.5 MHz)				
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)				
	NR Band n25 (PCS) (1852.5 - 1912.5 MHz)				
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)				
	NR Band n41 (2506.02 - 2679.99 MHz)				
	NR Band n77 (3710.01 - 3909.99 MHz)				
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n12: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n41: 20 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz				
	NR Band n77: 20 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
NR Band n71: 5 MHz	665.5 (133147)		680.5 (136100)		695.5 (133447)
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)		693 (136600)
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)		690.5 (138100)
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)		688 (137600)
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142200)
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)		711 (142200)
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)		708.5 (141700)
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)		844 (168800)
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)		839 (167800)
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)		1777.5 (355500)
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)		1775 (355000)
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)		1770 (354000)
NR Band n25 (PCS): 5 MHz	1852.5 (370500)		1882.5 (376500)		1912.5 (382500)
NR Band n25 (PCS): 10 MHz	1855 (371000)		1882.5 (376500)		1910 (382000)
NR Band n25 (PCS): 15 MHz	1857.5 (371500)		1882.5 (376500)		1907.5 (381500)
NR Band n25 (PCS): 20 MHz	1860 (372000)		1882.5 (376500)		1905 (381000)
NR Band n2 (PCS): 5 MHz	1852.5 (370500)		1880 (376000)		1907.5 (381500)
NR Band n2 (PCS): 10 MHz	1855 (371000)		1880 (376000)		1905 (381000)
NR Band n2 (PCS): 15 MHz	1857.5 (371500)		1880 (376000)		1902.5 (380500)
NR Band n2 (PCS): 20 MHz	1860 (372000)		1880 (376000)		1900 (380000)
NR Band n41: 20 MHz	2506.02 (501204)	2649.49 (509896)	2592.99 (518596)	2636.49 (527298)	2679.99 (535996)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A	2618.67 (523734)	2670 (534000)
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518596)	2664.99 (532998)	
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518596)	2659.98 (531996)	
NR Band n41: 80 MHz	2536.02 (507204)		N/A	2649.99 (529996)	
NR Band n41: 90 MHz	2541 (508200)		N/A	2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518596)	2640 (528000)	
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	3866.01 (657734)	3918 (661200)
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660600)
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652196)	3840 (656000)	3897.51 (659834)	3954.99 (663666)
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	N/A	N/A	3876.66 (658444)
NR Band n77: 80 MHz	3740.01 (649334)	N/A	3840 (656000)	N/A	3939.99 (662666)
NR Band n77: 90 MHz	3745.02 (649668)	N/A	3840 (656000)	N/A	3934.98 (662332)
NR Band n77: 100 MHz	3750 (650000)	N/A	N/A	N/A	3930 (662000)
SCS for NR Band n71/n12/n5/n66/n25/n2	15 kHz				
SCS for NR Band n41/n77	30 kHz				
Modulations Supported in UL	DFT-s-OFDM: $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Anchor Bands for NR Band n71	LTE Band 66/2/7				
LTE Anchor Bands for NR Band n12	LTE Band 66/2				
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 66/2/30/7/48				
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 71/12/13/14/5/48				
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12				
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 12/13/14/5				
LTE Anchor Bands for NR Band n41	LTE Band 66/2/25/26				
LTE Anchor Bands for NR Band n77	LTE Band 12/13/14/66/2/30/7/41				

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3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

Equation 3-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt} \left(\frac{dU}{dm} \right) = \frac{d}{dt} \left(\frac{dU}{\rho dv} \right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

- σ = conductivity of the tissue-simulating material (S/m)
- ρ = mass density of the tissue-simulating material (kg/m³)
- E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

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4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):
 - a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).
 - b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.
 - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

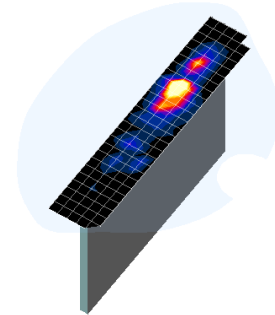


Figure 4-1 point
Sample SAR Area Scan

Table 4-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) ($\Delta x_{\text{area}}, \Delta y_{\text{area}}$)	Maximum Zoom Scan Resolution (mm) ($\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}}$)	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
				$\Delta z_{\text{zoom}}(n)$	$\Delta z_{\text{zoom}}(1)^*$	
≤2 GHz	≤15	≤8	≤5	≤4	$\leq 1.5^* \Delta z_{\text{zoom}}(n-1)$	≥30
2-3 GHz	≤12	≤5	≤5	≤4	$\leq 1.5^* \Delta z_{\text{zoom}}(n-1)$	≥30
3-4 GHz	≤12	≤5	≤4	≤3	$\leq 1.5^* \Delta z_{\text{zoom}}(n-1)$	≥28
4-5 GHz	≤10	≤4	≤3	≤2.5	$\leq 1.5^* \Delta z_{\text{zoom}}(n-1)$	≥25
5-6 GHz	≤10	≤4	≤2	≤2	$\leq 1.5^* \Delta z_{\text{zoom}}(n-1)$	≥22

*Also compliant to IEEE 1528-2013 Table 6

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5 TEST CONFIGURATION POSITIONS

5.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon = 3$ and loss tangent $\delta = 0.02$.

5.2 SAR Testing for Tablet per KDB Publication 616217 D04v01r02

Per FCC KDB Publication 616217 D04v01r02, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. The SAR Exclusion Threshold in KDB 447498 D01v06 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

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6 RF EXPOSURE LIMITS

6.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

6.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 6-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT <i>General Population</i> (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT <i>Occupational</i> (W/kg) or (mW/g)
Peak Spatial Average SAR Head	1.6	8.0
Whole Body SAR	0.08	0.4
Peak Spatial Average SAR Hands, Feet, Ankle, Wrists, etc.	4.0	20

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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7 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

7.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

7.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

7.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

7.4 SAR Measurement Conditions for UMTS

7.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DmmWCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

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7.4.2 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all “1s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DmmWCH_n configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DmmWCH_n, for the highest reported SAR configuration in 12.2 kbps RMC.

7.4.3 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

7.4.4 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

7.4.5 SAR Measurement Conditions for DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

7.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

7.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

7.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

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7.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

7.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

- a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
 - i. The required channel and offset combination with the highest maximum output power is required for SAR.
 - ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
 - iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
- b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
- c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
- d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to $\frac{1}{2}$ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is < 1.45 W/kg.

7.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

7.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

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7.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

7.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

7.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

7.6.4 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

- 1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

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2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.5 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop guidance, 802.11ax was considered the highest order 802.11 mode. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

7.6.6 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 7.6.5). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.7 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.8 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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8 RF CONDUCTED POWERS

All conducted power measurements for 2G/3G/4G/5G Sub6 WWAN technologies and bands in this section were performed by setting Reserve_power_margin (Qualcomm® Smart Transmit EFS entry) to 0dB, so that the EUT transmits continuously at minimum (P_{limit}, maximum tune up output power P_{max}).

8.1 GSM P_{limit} Conducted Powers

Table 8-1
Measured P_{limit} Ant 1

Maximum Burst-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm]	GPRS [dBm]	EDGE [dBm]	EDGE [dBm]
		1 Tx Slot	2 Tx Slot	1 Tx Slot	2 Tx Slot
GSM 850	128	26.83	24.30	23.81	22.39
	190	26.84	24.33	23.84	22.60
	251	26.71	24.09	23.60	22.37
GSM 1900	512	21.98	19.00	21.05	19.12
	661	22.38	18.90	21.03	19.13
	810	21.93	18.91	20.59	19.00

Calculated Maximum Frame-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm]	GPRS [dBm]	EDGE [dBm]	EDGE [dBm]
		1 Tx Slot	2 Tx Slot	1 Tx Slot	2 Tx Slot
GSM 850	128	17.63	18.11	14.61	16.20
	190	17.64	18.14	14.64	16.41
	251	17.51	17.90	14.40	16.18
GSM 1900	512	12.78	12.81	11.85	12.93
	661	13.18	12.71	11.83	12.94
	810	12.73	12.72	11.39	12.81

GSM 850	Frame	18.30	18.31	14.80	16.81
GSM 1900	Avg.Targets:	13.70	13.71	11.80	13.71

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Table 8-2
Measured P_{limit} Ant 2b

Maximum Burst-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 1900	512	21.99	18.99	21.01	18.92
	661	21.97	18.92	21.12	18.95
	810	21.94	18.94	20.98	18.90

Calculated Maximum Frame-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 1900	512	12.79	12.80	11.81	12.73
	661	12.77	12.73	11.92	12.76
	810	12.74	12.75	11.78	12.71

GSM 1900	Frame Avg.Targets:	13.70	13.71	11.80	13.71
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Table 8-3
Measured P_{limit} Ant 3

Maximum Burst-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
Band	Channel	GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 850	128	25.78	22.84	25.33	23.55
	190	25.81	23.06	25.48	23.52
	251	25.71	22.73	25.28	23.20
GSM 1900	512	23.14	20.18	23.45	20.26
	661	23.11	20.10	23.30	20.12
	810	23.10	20.12	23.35	20.11

Calculated Maximum Frame-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
Band	Channel	GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 850	128	16.58	16.65	16.13	17.36
	190	16.61	16.87	16.28	17.33
	251	16.51	16.54	16.08	17.01
GSM 1900	512	13.94	13.99	14.25	14.07
	661	13.91	13.91	14.10	13.93
	810	13.90	13.93	14.15	13.92

GSM 850	Frame	17.50	17.51	16.30	17.51
GSM 1900	Avg.Targets:	14.90	14.91	14.00	14.91

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Table 8-4
Measured P_{limit} Ant 4b

Maximum Burst-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 1900	512	20.99	17.86	20.84	17.76
	661	20.87	17.72	20.93	17.73
	810	20.88	17.85	20.94	17.88

Calculated Maximum Frame-Averaged Output Power					
Band	Channel	GPRS/EDGE Data (GMSK)		EDGE Data (8-PSK)	
		GPRS [dBm] 1 Tx Slot	GPRS [dBm] 2 Tx Slot	EDGE [dBm] 1 Tx Slot	EDGE [dBm] 2 Tx Slot
GSM 1900	512	11.79	11.67	11.64	11.57
	661	11.67	11.53	11.73	11.54
	810	11.68	11.66	11.74	11.69

GSM 1900	Frame Avg.Targets:	11.80	11.81	11.60	11.81
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Note:

- Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.
- EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8-PSK modulation do not have an impact on output power.

GSM Class: C
GPRS Multislot class: 10 (Max 2 Tx uplink slots)
EDGE Multislot class: 10 (Max 2 Tx uplink slots)
DTM Multislot Class: N/A



Figure 8-1
Power Measurement Setup

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8.2 UMTS Plimit Conducted Powers

Table 8-5
Measured P_{limit} Ant 1

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	17.85	17.89	17.89	15.25	15.28	15.23	14.43	14.27	14.28	-
6	HSDPA	Subtest 1	17.89	17.82	17.80	15.25	15.28	15.24	14.24	14.19	14.26	0
6		Subtest 2	17.87	17.77	17.75	15.03	15.30	15.21	14.24	14.18	14.23	0
6		Subtest 3	17.32	17.25	17.24	14.72	14.81	14.78	13.76	13.68	13.76	0.5
6		Subtest 4	17.31	17.25	17.23	14.78	14.72	14.85	13.74	13.71	13.75	0.5
6	HSUPA	Subtest 1	17.83	17.76	17.75	15.27	15.32	15.25	14.21	14.22	14.28	0
6		Subtest 2	15.83	15.76	15.75	13.30	13.35	13.28	12.14	12.17	12.16	2
6		Subtest 3	16.85	16.75	16.74	14.24	14.32	14.28	13.15	13.17	13.20	1
6		Subtest 4	15.81	15.74	15.74	13.39	13.35	13.26	12.23	12.20	12.28	2
6		Subtest 5	17.82	17.75	17.75	15.29	15.35	15.24	14.25	14.19	14.24	0
8	DC-HSDPA	Subtest 1	17.86	17.81	17.75	15.25	15.32	15.26	14.29	14.30	14.29	0
8		Subtest 2	17.89	17.78	17.79	15.22	15.25	15.21	14.27	14.27	14.28	0
8		Subtest 3	17.37	17.27	17.29	14.72	14.83	14.76	13.80	13.76	13.79	0.5
8		Subtest 4	17.34	17.25	17.29	14.71	14.82	14.75	13.76	13.75	13.78	0.5

Table 8-6
Measured P_{limit} Ant 2b

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	14.99	14.82	14.94	13.80	13.70	13.72	-
6	HSDPA	Subtest 1	13.87	13.83	13.91	13.84	13.72	13.70	0
6		Subtest 2	13.85	13.83	13.90	13.80	13.67	13.66	0
6		Subtest 3	13.39	13.36	13.42	13.30	13.18	13.16	0.5
6		Subtest 4	13.37	13.38	13.40	13.30	13.20	13.15	0.5
6	HSUPA	Subtest 1	13.90	13.86	13.90	13.82	13.73	13.71	0
6		Subtest 2	11.90	11.88	11.90	11.86	11.77	11.73	2
6		Subtest 3	12.92	12.90	12.80	12.83	12.77	12.85	1
6		Subtest 4	11.94	11.90	11.87	11.88	11.74	11.74	2
6		Subtest 5	13.94	13.90	13.89	13.83	13.75	13.72	0
8	DC-HSDPA	Subtest 1	13.94	13.91	13.91	13.89	13.78	13.80	0
8		Subtest 2	13.91	13.92	13.87	13.87	13.75	13.74	0
8		Subtest 3	13.45	13.42	13.37	13.39	13.24	13.24	0.5
8		Subtest 4	13.45	13.45	13.34	13.35	13.26	13.23	0.5

Table 8-7
Measured P_{limit} Ant 3

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	17.95	17.97	17.90	15.08	15.12	15.10	15.26	15.16	15.18	-
6	HSDPA	Subtest 1	18.20	18.14	18.08	15.20	15.29	15.25	15.36	15.28	15.22	0
6		Subtest 2	18.18	18.13	18.10	15.19	15.25	15.27	15.34	15.17	15.18	0
6		Subtest 3	17.70	17.67	17.56	14.70	14.73	14.71	14.85	14.67	14.62	0.5
6		Subtest 4	17.68	17.63	17.54	14.71	14.69	14.74	14.79	14.70	14.67	0.5
6	HSUPA	Subtest 1	18.00	17.98	17.91	14.89	14.95	14.94	15.06	14.81	14.92	0
6		Subtest 2	16.05	16.01	15.91	12.90	12.96	12.95	13.07	12.92	12.91	2
6		Subtest 3	17.04	17.00	16.93	13.92	14.00	13.97	14.05	13.92	13.91	1
6		Subtest 4	16.05	16.01	15.91	12.94	13.00	12.98	12.98	12.82	12.80	2
6		Subtest 5	18.01	18.00	17.90	14.92	14.94	14.96	15.04	14.91	14.92	0
8	DC-HSDPA	Subtest 1	18.01	17.91	17.85	14.91	14.99	14.94	15.07	14.95	14.94	0
8		Subtest 2	17.90	17.94	17.87	14.96	14.93	14.95	14.90	14.92	14.90	0
8		Subtest 3	17.40	17.52	17.39	14.45	14.51	14.48	14.42	14.40	14.41	0.5
8		Subtest 4	17.38	17.44	17.39	14.47	14.50	14.48	14.39	14.43	14.44	0.5

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Table 8-8
Measured P_{limit} Ant 4b

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	13.68	13.67	13.66	11.59	11.43	11.52	-
6	HSDPA	Subtest 1	12.91	12.90	12.84	11.54	11.47	11.55	0
6		Subtest 2	12.89	12.89	12.85	11.51	11.48	11.55	0
6		Subtest 3	12.42	12.42	12.34	11.02	11.00	11.07	0.5
6		Subtest 4	12.43	12.44	12.37	11.01	11.00	11.06	0.5
6	HSUPA	Subtest 1	12.92	12.94	12.86	11.54	11.43	11.50	0
6		Subtest 2	10.94	10.95	10.88	9.51	9.47	9.51	2
6		Subtest 3	11.94	11.94	11.88	10.49	10.43	10.50	1
6		Subtest 4	10.96	10.95	10.87	9.54	9.50	9.58	2
6		Subtest 5	12.96	12.93	12.87	11.56	11.51	11.47	0
8	DC-HSDPA	Subtest 1	12.95	12.97	12.88	11.53	11.53	11.52	0
8		Subtest 2	12.92	12.93	12.92	11.52	11.51	11.48	0
8		Subtest 3	12.48	12.48	12.39	11.01	11.01	10.98	0.5
8		Subtest 4	12.47	12.47	12.37	11.02	11.00	11.01	0.5

DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA



Figure 8-2
Power Measurement Setup

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8.3 LTE Plimit Conducted Powers

Note: Per FCC KDB Publication 941225 D05v02r05, LTE SAR for the lower bandwidths was not required for testing since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg. Lower bandwidth conducted powers for all LTE bands can be found in appendix I.

8.3.1 LTE Band 71

Table 8-9
LTE Band 71 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			133297 (680.5 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	19.75	0	0
	1	50	19.88		0
	1	99	19.63		0
	50	0	19.82	0-1	0
	50	25	19.89		0
	50	50	19.76		0
16QAM	100	0	19.79	0-1	0
	1	0	19.75		0
	1	50	19.72		0
	1	99	19.50	0-2	0
	50	0	19.74		0
	50	25	19.78		0
64QAM	50	50	19.67	0-2	0
	100	0	19.77		0
	1	0	19.98	0-2	0
	1	50	19.98		0
	1	99	19.81		0
	50	0	19.78	0-3	0
256QAM	50	25	19.80		0
	50	50	19.71		0
	100	0	19.80	0-5	0
	1	0	17.74		2
	1	50	17.73		2
	1	99	17.65		2
	50	0	17.62		2
	50	25	17.67		2
	50	50	17.62		2
	100	0	17.55		2

Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-10
LTE Band 71 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			133297 (680.5 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	19.64	0	0
	1	50	19.49		0
	1	99	19.43		0
	50	0	19.64	0-1	0
	50	25	19.66		0
	50	50	19.55		0
	100	0	19.63		0
16QAM	1	0	19.80	0-1	0
	1	50	19.58		0
	1	99	19.56		0
	50	0	19.34	0-2	0
	50	25	19.36		0
	50	50	19.28		0
	100	0	19.38		0
64QAM	1	0	19.76	0-2	0
	1	50	19.69		0
	1	99	19.58		0
	50	0	19.73	0-3	0
	50	25	19.75		0
	50	50	19.63		0
	100	0	19.69		0
256QAM	1	0	19.74	0-5	0
	1	50	19.69		0
	1	99	19.67		0
	50	0	19.66		0
	50	25	19.68		0
	50	50	19.57		0
	100	0	19.63		0

Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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LTE Band 12

Table 8-11
LTE Band 12 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	19.83	0	0
	1	25	19.48		0
	1	49	19.47		0
	25	0	19.80	0-1	0
	25	12	19.71		0
	25	25	19.64		0
	50	0	19.63		0
16QAM	1	0	19.98	0-1	0
	1	25	19.84		0
	1	49	19.80		0
	25	0	19.57	0-2	0
	25	12	19.51		0
	25	25	19.47		0
	50	0	19.47		0
64QAM	1	0	19.61	0-2	0
	1	25	19.48		0
	1	49	19.50		0
	25	0	19.74	0-3	0
	25	12	19.71		0
	25	25	19.63		0
	50	0	19.65		0
256QAM	1	0	18.46	0-5	2
	1	25	18.45		2
	1	49	18.47		2
	25	0	18.26		2
	25	12	18.22		2
	25	25	18.17		2
	50	0	18.19		2

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-12
LTE Band 12 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	18.84	0	0
	1	25	18.83		0
	1	49	18.80		0
	25	0	19.03	0-1	0
	25	12	18.95		0
	25	25	18.94		0
	50	0	18.83		0
16QAM	1	0	18.98	0-1	0
	1	25	18.87		0
	1	49	18.79		0
	25	0	18.52	0-2	0
	25	12	18.51		0
	25	25	18.50		0
	50	0	18.45		0
64QAM	1	0	18.62	0-2	0
	1	25	18.70		0
	1	49	18.61		0
	25	0	18.77	0-3	0
	25	12	18.75		0
	25	25	18.69		0
	50	0	18.66		0
256QAM	1	0	19.01	0-5	0
	1	25	19.00		0
	1	49	18.98		0
	25	0	18.54		0
	25	12	18.51		0
	25	25	18.53		0
	50	0	18.55		0

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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LTE Band 13

Table 8-13
LTE Band 13 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23230 (782.0 MHz) Conducted Power [dBm]		
QPSK	1	0	19.22	0	0
	1	25	19.08		0
	1	49	19.14		0
	25	0	19.28	0-1	0
	25	12	19.30		0
	25	25	19.24		0
	50	0	19.20		0
	50	0	19.20		0
16QAM	1	0	19.69	0-1	0
	1	25	19.55		0
	1	49	19.41		0
	25	0	19.42	0-2	0
	25	12	19.48		0
	25	25	19.43		0
	50	0	19.37		0
	50	0	19.37		0
64QAM	1	0	19.57	0-2	0
	1	25	19.54		0
	1	49	19.48		0
	25	0	19.41	0-3	0
	25	12	19.48		0
	25	25	19.41		0
	50	0	19.42		0
	50	0	19.42		0
256QAM	1	0	17.72	0-5	2
	1	25	17.70		2
	1	49	17.74		2
	25	0	18.06		2
	25	12	18.02		2
	25	25	18.05		2
	50	0	18.07		2
	50	0	18.07		2

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Table 8-14
LTE Band 13 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23230 (782.0 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	18.56	0	0
	1	25	18.54		0
	1	49	18.44		0
	25	0	18.72	0-1	0
	25	12	18.70		0
	25	25	18.61		0
	50	0	18.55		0
16QAM	1	0	18.90	0-1	0
	1	25	18.81		0
	1	49	18.76		0
	25	0	18.60	0-2	0
	25	12	18.54		0
	25	25	18.50		0
	50	0	18.49		0
64QAM	1	0	18.68	0-2	0
	1	25	18.65		0
	1	49	18.62		0
	25	0	18.62	0-3	0
	25	12	18.63		0
	25	25	18.54		0
	50	0	18.58		0
256QAM	1	0	18.60	0-5	0
	1	25	18.33		0
	1	49	18.36		0
	25	0	18.67		0
	25	12	18.63		0
	25	25	18.52		0
	50	0	18.48		0

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LTE Band 14

Table 8-15
LTE Band 14 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	19.20	0	0
	1	25	19.02		0
	1	49	18.99		0
	25	0	19.22	0-1	0
	25	12	19.29		0
	25	25	19.27		0
	50	0	19.19		0
16QAM	1	0	19.27	0-1	0
	1	25	19.24		0
	1	49	19.18		0
	25	0	19.26	0-2	0
	25	12	19.34		0
	25	25	19.29		0
	50	0	19.27		0
64QAM	1	0	19.16	0-2	0
	1	25	19.18		0
	1	49	19.15		0
	25	0	19.31	0-3	0
	25	12	19.34		0
	25	25	19.38		0
	50	0	19.36		0
256QAM	1	0	17.90	0-5	2
	1	25	17.96		2
	1	49	17.97		2
	25	0	17.89		2
	25	12	17.97		2
	25	25	17.91		2
	50	0	17.92		2

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Table 8-16
LTE Band 14 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23330 (793.0 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	18.68	0	0
	1	25	18.52		0
	1	49	18.66		0
	25	0	18.67	0-1	0
	25	12	18.63		0
	25	25	18.57		0
	50	0	18.64		0
16QAM	1	0	18.75	0-1	0
	1	25	18.51		0
	1	49	18.53		0
	25	0	18.24	0-2	0
	25	12	18.21		0
	25	25	18.23		0
	50	0	18.21		0
64QAM	1	0	18.61	0-2	0
	1	25	18.41		0
	1	49	18.52		0
	25	0	18.49	0-3	0
	25	12	18.50		0
	25	25	18.47		0
	50	0	18.46		0
256QAM	1	0	18.74	0-5	0
	1	25	18.71		0
	1	49	18.83		0
	25	0	18.24		0
	25	12	18.22		0
	25	25	18.21		0
	50	0	18.22		0

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LTE Band 26

Table 8-17
LTE Band 26 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26740 (819.0 MHz)	26865 (831.5 MHz)	26990 (844.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	18.03	18.08	18.11	0	0
	1	25	17.86	18.00	18.03		0
	1	49	17.92	17.95	18.01		0
	25	0	18.15	18.06	18.13	0-1	0
	25	12	18.13	18.13	18.09		0
	25	25	18.04	18.03	18.06		0
	50	0	18.02	18.05	18.10		0
16QAM	1	0	18.18	18.11	18.12	0-1	0
	1	25	18.05	18.12	18.04		0
	1	49	18.07	18.07	17.92		0
	25	0	17.63	17.69	17.60	0-2	0
	25	12	17.69	17.72	17.60		0
	25	25	17.56	17.58	17.57		0
	50	0	17.62	17.61	17.55		0
64QAM	1	0	18.20	18.26	18.11	0-2	0
	1	25	18.25	18.15	18.14		0
	1	49	18.23	18.27	18.02		0
	25	0	17.57	17.63	17.52	0-3	0
	25	12	17.58	17.64	17.55		0
	25	25	17.48	17.57	17.53		0
	50	0	17.56	17.60	17.52		0
256QAM	1	0	17.74	17.79	17.86	0-5	0
	1	25	17.81	17.88	18.01		0
	1	49	17.90	17.93	17.48		0
	25	0	17.62	17.60	17.56		0
	25	12	17.58	17.67	17.52		0
	25	25	17.47	17.57	17.48		0
	50	0	17.62	17.61	17.53		0

Table 8-18
LTE Band 26 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26740 (819.0 MHz)	26865 (831.5 MHz)	26990 (844.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	18.16	18.07	17.94	0	0
	1	25	18.01	18.06	17.86		0
	1	49	17.97	17.99	17.80		0
	25	0	18.22	18.09	18.08	0-1	0
	25	12	18.23	18.17	18.09		0
	25	25	18.09	18.06	18.07		0
	50	0	18.12	18.09	18.04		0
16QAM	1	0	17.85	18.06	18.09	0-1	0
	1	25	17.77	18.07	17.94		0
	1	49	17.68	17.99	17.88		0
	25	0	17.79	17.69	17.68	0-2	0
	25	12	17.75	17.75	17.67		0
	25	25	17.66	17.71	17.64		0
	50	0	17.70	17.66	17.58		0
64QAM	1	0	17.68	17.78	17.63	0-2	0
	1	25	17.59	17.75	17.58		0
	1	49	17.59	17.88	17.59		0
	25	0	17.82	17.70	17.65	0-3	0
	25	12	17.80	17.81	17.68		0
	25	25	17.73	17.73	17.65		0
	50	0	17.72	17.72	17.59		0
256QAM	1	0	17.78	17.56	18.16	0-5	0
	1	25	17.50	17.58	18.14		0
	1	49	17.57	17.45	18.12		0
	25	0	17.78	17.72	17.66		0
	25	12	17.77	17.80	17.67		0
	25	25	17.63	17.68	17.63		0
	50	0	17.69	17.66	17.63		0

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LTE Band 5

Table 8-19
LTE Band 5 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20525 (836.5 MHz) Conducted Power [dBm]		
QPSK	1	0	18.10	0	0
	1	25	17.76		0
	1	49	17.98		0
	25	0	18.11	0-1	0
	25	12	18.10		0
	25	25	18.05		0
16QAM	50	0	18.07	0-1	0
	1	0	18.20		0
	1	25	18.05		0
	1	49	18.00	0-2	0
	25	0	17.60		0
	25	12	17.66		0
64QAM	25	25	17.62	0-2	0
	50	0	17.54		0
	1	0	17.69		0
	1	25	17.67	0-3	0
	1	49	17.68		0
	25	0	17.77		0
256QAM	25	12	17.86	0-5	0
	25	25	17.79		0
	50	0	17.79		0
	1	0	18.10	0-5	0
	1	25	18.03		0
	1	49	18.11		0
256QAM	25	0	17.64	0-5	0
	25	12	17.69		0
	25	25	17.63		0
	50	0	17.68		0
	1	0	18.10	0-5	0
	1	25	18.03		0
	1	49	18.11		0

Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-20
LTE Band 5 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	17.96	0	0
	1	25	18.01		0
	1	49	17.86		0
	25	0	18.12	0-1	0
	25	12	18.16		0
	25	25	18.18		0
	50	0	18.00		0
16QAM	1	0	18.02	0-1	0
	1	25	17.98		0
	1	49	17.95		0
	25	0	17.73	0-2	0
	25	12	17.76		0
	25	25	17.80		0
	50	0	17.66		0
64QAM	1	0	17.95	0-2	0
	1	25	17.81		0
	1	49	17.89		0
	25	0	17.75	0-3	0
	25	12	17.76		0
	25	25	17.79		0
	50	0	17.72		0
256QAM	1	0	17.51	0-5	0
	1	25	17.57		0
	1	49	17.63		0
	25	0	17.77		0
	25	12	17.74		0
	25	25	17.75		0
	50	0	17.66		0

Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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LTE Band 66

Table 8-21
LTE Band 66 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	15.50	15.47	15.26	0	0
	1	50	15.42	15.32	15.16		0
	1	99	15.37	15.22	15.09		0
	50	0	15.49	15.42	15.23	0-1	0
	50	25	15.48	15.47	15.20		0
	50	50	15.48	15.37	15.20		0
	100	0	15.48	15.43	15.21		0
16QAM	1	0	15.44	15.23	15.39	0-1	0
	1	50	15.30	15.05	15.23		0
	1	99	15.33	15.00	15.01		0
	50	0	14.97	14.97	14.68	0-2	0
	50	25	15.02	15.00	14.66		0
	50	50	14.97	14.91	14.71		0
	100	0	15.02	14.96	14.73		0
64QAM	1	0	15.32	15.16	15.15	0-2	0
	1	50	15.26	15.06	15.12		0
	1	99	15.17	15.03	15.02		0
	50	0	15.26	15.22	14.98	0-3	0
	50	25	15.32	15.25	14.95		0
	50	50	15.26	15.13	14.98		0
	100	0	15.30	15.24	14.97		0
256QAM	1	0	15.30	15.35	15.22	0-5	0
	1	50	15.20	15.34	15.16		0
	1	99	15.17	15.28	15.13		0
	50	0	15.27	15.27	15.05		0
	50	25	15.33	15.30	15.02		0
	50	50	15.30	15.21	15.07		0
	100	0	15.33	15.25	15.04		0

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Table 8-22
LTE Band 66 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	14.66	14.52	14.71	0	0
	1	50	14.59	14.44	14.62		0
	1	99	14.58	14.43	14.61		0
	50	0	14.75	14.64	14.70	0-1	0
	50	25	14.74	14.74	14.78		0
	50	50	14.64	14.70	14.72		0
	100	0	14.67	14.70	14.66		0
16QAM	1	0	14.73	14.89	14.84	0-1	0
	1	50	14.60	14.83	14.80		0
	1	99	14.58	14.90	14.71		0
	50	0	14.50	14.43	14.41	0-2	0
	50	25	14.55	14.52	14.55		0
	50	50	14.53	14.47	14.50		0
	100	0	14.52	14.53	14.47		0
64QAM	1	0	14.70	14.42	14.51	0-2	0
	1	50	14.65	14.40	14.50		0
	1	99	14.64	14.46	14.48		0
	50	0	14.50	14.55	14.50	0-3	0
	50	25	14.59	14.61	14.59		0
	50	50	14.52	14.54	14.56		0
	100	0	14.53	14.56	14.57		0
256QAM	1	0	14.66	14.44	14.64	0-5	0
	1	50	14.60	14.43	14.63		0
	1	99	14.61	14.47	14.64		0
	50	0	14.51	14.50	14.50		0
	50	25	14.56	14.57	14.53		0
	50	50	14.50	14.51	14.51		0
	100	0	14.54	14.56	14.51		0

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Table 8-23
LTE Band 66 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	14.88	14.97	14.61	0	0
	1	50	14.84	14.90	14.60		0
	1	99	14.82	14.82	14.51		0
	50	0	14.83	14.89	14.86	0-1	0
	50	25	14.93	15.01	14.88		0
	50	50	14.87	14.91	14.87		0
	100	0	14.85	14.96	14.85		0
16QAM	1	0	14.40	14.95	14.50	0-1	0
	1	50	14.38	14.96	14.47		0
	1	99	14.26	14.89	14.38		0
	50	0	14.65	14.78	14.68	0-2	0
	50	25	14.73	14.87	14.77		0
	50	50	14.70	14.82	14.72		0
	100	0	14.74	14.84	14.79		0
64QAM	1	0	14.99	14.72	15.35	0-2	0
	1	50	14.97	14.76	15.36		0
	1	99	14.93	14.69	15.24		0
	50	0	14.95	15.02	14.93	0-3	0
	50	25	15.04	15.09	14.99		0
	50	50	14.99	15.03	14.96		0
	100	0	15.00	15.06	14.94		0
256QAM	1	0	14.75	15.14	15.21	0-5	0
	1	50	14.77	15.16	15.14		0
	1	99	14.73	15.12	15.09		0
	50	0	14.90	15.02	14.95		0
	50	25	14.99	15.09	15.02		0
	50	50	14.97	15.02	14.99		0
	100	0	15.00	15.03	14.97		0

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Table 8-24
LTE Band 66 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	13.20	13.17	13.07	0	0
	1	50	13.12	13.00	12.93		0
	1	99	13.09	12.96	12.87		0
	50	0	13.29	13.21	13.13	0-1	0
	50	25	13.24	13.19	13.10		0
	50	50	13.15	13.11	13.12		0
	100	0	13.15	13.19	13.08		0
16QAM	1	0	13.15	12.84	12.75	0-1	0
	1	50	13.04	12.68	12.63		0
	1	99	13.04	12.62	12.56		0
	50	0	12.83	12.85	12.57	0-2	0
	50	25	12.71	12.84	12.55		0
	50	50	12.69	12.74	12.56		0
	100	0	12.70	12.75	12.57		0
64QAM	1	0	13.46	13.03	13.13	0-2	0
	1	50	13.19	12.88	13.05		0
	1	99	13.17	12.87	12.96		0
	50	0	12.95	12.85	12.68	0-3	0
	50	25	12.84	12.82	12.64		0
	50	50	12.89	12.75	12.67		0
	100	0	12.85	12.82	12.62		0
256QAM	1	0	13.44	13.12	12.96	0-5	0
	1	50	13.32	13.03	12.83		0
	1	99	13.31	13.00	12.81		0
	50	0	12.92	12.86	12.69		0
	50	25	12.95	12.85	12.74		0
	50	50	12.93	12.81	12.67		0
	100	0	12.90	12.85	12.62		0

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LTE Band 25

Table 8-25
LTE Band 25 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26140 (1860.0 MHz)	26365 (1882.5 MHz)	26590 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	13.98	14.12	14.26	0	0
	1	50	13.93	14.15	14.27		0
	1	99	13.94	14.17	14.31		0
	50	0	14.27	14.24	14.32	0-1	0
	50	25	14.25	14.25	14.39		0
	50	50	14.26	14.26	14.38		0
	100	0	14.26	14.23	14.30		0
16QAM	1	0	13.88	13.96	14.28	0-1	0
	1	50	13.86	13.99	14.29		0
	1	99	13.84	14.10	14.31		0
	50	0	13.76	13.77	13.78	0-2	0
	50	25	13.76	13.75	13.88		0
	50	50	13.77	13.78	13.90		0
	100	0	13.72	13.78	13.84		0
64QAM	1	0	13.88	13.62	13.79	0-2	0
	1	50	13.86	13.70	13.91		0
	1	99	13.84	13.73	13.95		0
	50	0	13.79	13.79	13.86	0-3	0
	50	25	13.77	13.85	13.96		0
	50	50	13.76	13.84	14.00		0
	100	0	13.75	13.82	13.86		0
256QAM	1	0	13.69	13.75	13.90	0-5	0
	1	50	13.70	13.84	13.99		0
	1	99	13.66	13.85	14.06		0
	50	0	13.75	13.75	13.83		0
	50	25	13.81	13.79	13.94		0
	50	50	13.77	13.80	13.90		0
	100	0	13.80	13.77	13.76		0

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Table 8-26
LTE Band 25 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26140 (1860.0 MHz)	26365 (1882.5 MHz)	26590 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	13.85	13.50	13.72	0	0
	1	50	13.74	13.44	13.67		0
	1	99	13.70	13.42	13.71		0
	50	0	13.88	13.70	13.77	0-1	0
	50	25	13.86	13.76	13.84		0
	50	50	13.83	13.77	13.87		0
	100	0	13.83	13.70	13.79		0
16QAM	1	0	13.84	13.41	13.72	0-1	0
	1	50	13.77	13.38	13.74		0
	1	99	13.66	13.43	13.78		0
	50	0	13.37	13.24	13.25	0-2	0
	50	25	13.34	13.34	13.31		0
	50	50	13.33	13.30	13.31		0
	100	0	13.34	13.28	13.24		0
64QAM	1	0	13.58	13.61	13.44	0-2	0
	1	50	13.55	13.57	13.47		0
	1	99	13.50	13.56	13.49		0
	50	0	13.57	13.49	13.52	0-3	0
	50	25	13.62	13.43	13.59		0
	50	50	13.56	13.53	13.62		0
	100	0	13.58	13.41	13.48		0
256QAM	1	0	13.64	13.41	13.60	0-5	0
	1	50	13.63	13.46	13.64		0
	1	99	13.52	13.34	13.65		0
	50	0	13.56	13.49	13.53		0
	50	25	13.57	13.45	13.63		0
	50	50	13.52	13.51	13.59		0
	100	0	13.55	13.42	13.53		0

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Table 8-27
LTE Band 25 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26140 (1860.0 MHz)	26365 (1882.5 MHz)	26590 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	15.36	15.17	15.10	0	0
	1	50	15.25	15.03	15.11		0
	1	99	15.23	15.06	15.04		0
	50	0	15.41	15.24	15.23	0-1	0
	50	25	15.36	15.22	15.31		0
	50	50	15.35	15.21	15.33		0
	100	0	15.35	15.27	15.19		0
16QAM	1	0	15.45	15.49	15.52	0-1	0
	1	50	15.35	15.35	15.43		0
	1	99	15.33	15.37	15.32		0
	50	0	15.27	15.05	15.02	0-2	0
	50	25	15.23	15.10	15.10		0
	50	50	15.19	15.06	15.04		0
	100	0	15.22	15.08	15.00		0
64QAM	1	0	15.29	15.73	15.29	0-2	0
	1	50	15.25	15.66	15.27		0
	1	99	15.23	15.65	15.33		0
	50	0	15.28	15.05	15.09	0-3	0
	50	25	15.24	15.07	15.16		0
	50	50	15.19	15.02	15.22		0
	100	0	15.25	15.03	15.06		0
256QAM	1	0	15.27	15.46	15.48	0-5	0
	1	50	15.21	15.46	15.49		0
	1	99	15.12	15.37	15.54		0
	50	0	15.21	15.01	15.04		0
	50	25	15.20	15.07	15.11		0
	50	50	15.09	15.04	15.08		0
	100	0	15.20	15.08	15.06		0

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Table 8-28
LTE Band 25 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26140 (1860.0 MHz)	26365 (1882.5 MHz)	26590 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	11.56	11.41	11.30	0	0
	1	50	11.47	11.51	11.46		0
	1	99	11.43	11.49	11.38		0
	50	0	11.50	11.47	11.65	0-1	0
	50	25	11.59	11.52	11.72		0
	50	50	11.53	11.61	11.75		0
	100	0	11.54	11.50	11.55		0
16QAM	1	0	12.01	11.87	11.38	0-1	0
	1	50	11.91	12.00	11.48		0
	1	99	11.92	11.98	11.39		0
	50	0	11.48	11.53	11.66	0-2	0
	50	25	11.54	11.54	11.73		0
	50	50	11.53	11.62	11.79		0
	100	0	11.59	11.52	11.68		0
64QAM	1	0	11.90	11.43	12.01	0-2	0
	1	50	11.94	11.59	11.86		0
	1	99	11.85	11.51	11.95		0
	50	0	11.36	11.43	11.57	0-3	0
	50	25	11.45	11.44	11.61		0
	50	50	11.39	11.50	11.69		0
	100	0	11.43	11.42	11.56		0
256QAM	1	0	11.43	11.05	11.61	0-5	0
	1	50	11.46	11.19	11.77		0
	1	99	11.35	11.10	11.70		0
	50	0	11.35	11.26	11.53		0
	50	25	11.40	11.32	11.57		0
	50	50	11.30	11.38	11.61		0
	100	0	11.37	11.35	11.50		0

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LTE Band 30

Table 8-29
LTE Band 30 Measured P_{limit} Ant 1 - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	13.86	0	0
	1	25	13.84		0
	1	49	13.85		0
	25	0	13.89	0-1	0
	25	12	13.88		0
	25	25	13.88		0
	50	0	13.85		0
	50	0	13.85		0
16QAM	1	0	13.57	0-1	0
	1	25	13.52		0
	1	49	13.52		0
	25	0	13.53	0-2	0
	25	12	13.57		0
	25	25	13.58		0
	50	0	13.56		0
	50	0	13.56		0
64QAM	1	0	13.57	0-2	0
	1	25	13.53		0
	1	49	13.60		0
	25	0	13.55	0-3	0
	25	12	13.57		0
	25	25	13.53		0
	50	0	13.54		0
	50	0	13.54		0
256QAM	1	0	11.89	0-5	2
	1	25	11.91		2
	1	49	11.85		2
	25	0	11.54		2
	25	12	11.65		2
	25	25	11.63		2
	50	0	11.53		2
	50	0	11.53		2

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Table 8-30
LTE Band 30 Measured P_{limit} Ant 2b - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			27710 (2310.0 MHz) Conducted Power [dBm]		
QPSK	1	0	11.20	0	0
	1	25	11.11		0
	1	49	11.03		0
	25	0	11.13	0-1	0
	25	12	11.24		0
	25	25	11.25		0
16QAM	50	0	11.19	0-1	0
	1	0	11.47		0
	1	25	11.38		0
	1	49	11.44	0-2	0
	25	0	11.02		0
	25	12	11.10		0
64QAM	25	25	11.12	0-2	0
	50	0	11.07		0
	1	0	11.18	0-2	0
	1	25	11.24		0
	1	49	11.16		0
	25	0	11.19	0-3	0
256QAM	25	12	11.33		0
	25	25	11.29		0
	50	0	11.28	0-5	0
	1	0	11.22		0
	1	25	11.29		0
	1	49	11.27		0
	25	0	10.69		0
	25	12	10.82		0
	25	25	10.79		0
	50	0	10.87		0

Table 8-31
LTE Band 30 Measured P_{limit} Ant 3 - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			27710 (2310.0 MHz) Conducted Power [dBm]		
QPSK	1	0	17.88	0	0
	1	25	17.86		0
	1	49	17.85		0
	25	0	17.82	0-1	0
	25	12	17.92		0
	25	25	17.97		0
16QAM	50	0	17.87	0-1	0
	1	0	17.88		0
	1	25	17.93		0
	1	49	17.90	0-2	0
	25	0	17.37		0
	25	12	17.47		0
64QAM	25	25	17.48	0-2	0
	50	0	17.36		0
	1	0	17.68	0-2	0
	1	25	17.81		0
	1	49	17.68		0
	25	0	17.51	0-3	0
256QAM	25	12	17.63		0
	25	25	17.67		0
	50	0	17.57	0-5	0
	1	0	17.64		0
	1	25	17.78		0
	1	49	17.79		0
	25	0	17.40		0
	25	12	17.53		0
	25	25	17.51		0
	50	0	17.37		0

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Table 8-32
LTE Band 30 Measured P_{limit} Ant 4b - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			27710 (2310.0 MHz) Conducted Power [dBm]		
QPSK	1	0	11.07	0	0
	1	25	11.12		0
	1	49	11.26		0
	25	0	11.24	0-1	0
	25	12	11.40		0
	25	25	11.38		0
	50	0	11.25		0
16QAM	1	0	11.41	0-1	0
	1	25	11.36		0
	1	49	11.32		0
	25	0	11.11	0-2	0
	25	12	11.19		0
	25	25	11.25		0
	50	0	11.07		0
64QAM	1	0	11.29	0-2	0
	1	25	11.38		0
	1	49	11.28		0
	25	0	11.07	0-3	0
	25	12	11.21		0
	25	25	11.27		0
	50	0	11.15		0
256QAM	1	0	11.16	0-5	0
	1	25	11.32		0
	1	49	11.27		0
	25	0	11.61		0
	25	12	11.66		0
	25	25	11.71		0
	50	0	11.64		0

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LTE Band 7

Table 8-33
LTE Band 7 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20850 (2510.0 MHz)	21100 (2535.0 MHz)	21350 (2560.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	13.90	13.91	13.83	0	0
	1	50	13.83	13.79	13.77		0
	1	99	13.79	13.81	13.78		0
	50	0	14.05	13.93	13.84	0-1	0
	50	25	14.02	13.95	13.92		0
	50	50	13.98	13.89	13.84		0
	100	0	13.86	13.89	13.85		0
16QAM	1	0	13.76	13.75	13.76	0-1	0
	1	50	13.71	13.77	13.86		0
	1	99	13.60	13.71	13.79		0
	50	0	13.61	13.48	13.31	0-2	0
	50	25	13.56	13.44	13.38		0
	50	50	13.52	13.40	13.36		0
	100	0	13.54	13.44	13.43		0
64QAM	1	0	13.74	13.45	13.44	0-2	0
	1	50	13.71	13.44	13.54		0
	1	99	13.69	13.38	13.48		0
	50	0	13.59	13.58	13.46	0-3	0
	50	25	13.61	13.60	13.56		0
	50	50	13.57	13.55	13.52		0
	100	0	13.58	13.55	13.55		0
256QAM	1	0	13.53	13.51	13.57	0-5	0
	1	50	13.58	13.60	13.62		0
	1	99	13.55	13.65	13.61		0
	50	0	13.63	13.59	13.48		0
	50	25	13.65	13.60	13.59		0
	50	50	13.61	13.53	13.52		0
	100	0	13.65	13.54	13.51		0

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Table 8-34
LTE Band 7 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20850 (2510.0 MHz)	21100 (2535.0 MHz)	21350 (2560.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	11.61	11.58	11.66	0	0
	1	50	11.55	11.54	11.61		0
	1	99	11.52	11.49	11.56		0
	50	0	11.70	11.74	11.70	0-1	0
	50	25	11.78	11.73	11.69		0
	50	50	11.77	11.70	11.72		0
	100	0	11.65	11.64	11.64		0
16QAM	1	0	11.81	12.03	12.09	0-1	0
	1	50	11.80	11.95	11.91		0
	1	99	11.82	12.03	11.96		0
	50	0	11.59	11.52	11.57	0-2	0
	50	25	11.68	11.61	11.57		0
	50	50	11.62	11.57	11.61		0
	100	0	11.58	11.60	11.58		0
64QAM	1	0	11.95	11.56	11.54	0-2	0
	1	50	11.95	11.51	11.49		0
	1	99	11.96	11.68	11.46		0
	50	0	11.26	11.32	11.32	0-3	0
	50	25	11.35	11.42	11.29		0
	50	50	11.28	11.34	11.33		0
	100	0	11.36	11.37	11.34		0
256QAM	1	0	11.76	11.60	11.72	0-5	0
	1	50	11.83	11.61	11.73		0
	1	99	11.79	11.59	11.77		0
	50	0	11.57	11.62	11.60		0
	50	25	11.70	11.64	11.56		0
	50	50	11.66	11.64	11.63		0
	100	0	11.72	11.66	11.61		0

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Table 8-35
LTE Band 7 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20850 (2510.0 MHz)	21100 (2535.0 MHz)	21350 (2560.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	14.65	14.51	14.57	0	0
	1	50	14.64	14.44	14.47		0
	1	99	14.57	14.42	14.44		0
	50	0	14.84	14.67	14.76	0-1	0
	50	25	14.80	14.79	14.74		0
	50	50	14.74	14.72	14.68		0
	100	0	14.64	14.60	14.54		0
16QAM	1	0	14.61	14.21	14.05	0-1	0
	1	50	14.49	14.20	13.99		0
	1	99	14.55	14.08	14.00		0
	50	0	14.20	14.09	14.08	0-2	0
	50	25	14.30	14.19	14.13		0
	50	50	14.23	14.12	14.10		0
	100	0	14.29	14.15	14.03		0
64QAM	1	0	14.94	14.61	14.74	0-2	0
	1	50	14.90	14.59	14.73		0
	1	99	14.86	14.54	14.68		0
	50	0	14.50	14.44	14.39	0-3	0
	50	25	14.60	14.47	14.45		0
	50	50	14.56	14.42	14.41		0
	100	0	14.57	14.51	14.38		0
256QAM	1	0	14.79	14.88	14.53	0-5	0
	1	50	14.78	14.92	14.57		0
	1	99	14.80	14.82	14.53		0
	50	0	14.52	14.47	14.36		0
	50	25	14.56	14.52	14.48		0
	50	50	14.57	14.50	14.41		0
	100	0	14.56	14.51	14.36		0

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Table 8-36
LTE Band 7 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 7							
20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			20850	21100	21350		
			(2510.0 MHz)	(2535.0 MHz)	(2560.0 MHz)		
Conducted Power [dBm]							
QPSK	1	0	11.35	11.27	11.34	0	0
	1	50	11.34	11.17	11.29		0
	1	99	11.29	11.10	11.23		0
	50	0	11.52	11.46	11.34	0-1	0
	50	25	11.50	11.45	11.40		0
	50	50	11.45	11.41	11.35		0
	100	0	11.34	11.33	11.33		0
16QAM	1	0	11.38	11.67	11.43	0-1	0
	1	50	11.26	11.61	11.31		0
	1	99	11.23	11.57	11.24		0
	50	0	11.45	11.34	11.22	0-2	0
	50	25	11.43	11.37	11.21		0
	50	50	11.44	11.32	11.25		0
	100	0	11.38	11.38	11.26		0
64QAM	1	0	11.36	11.58	11.58	0-2	0
	1	50	11.34	11.59	11.56		0
	1	99	11.29	11.46	11.51		0
	50	0	11.27	11.23	11.15	0-3	0
	50	25	11.25	11.24	11.08		0
	50	50	11.23	11.18	11.18		0
	100	0	11.26	11.23	11.11		0
256QAM	1	0	11.36	11.41	11.61	0-5	0
	1	50	11.38	11.40	11.60		0
	1	99	11.32	11.34	11.53		0
	50	0	11.29	11.14	11.17		0
	50	25	11.32	11.21	11.09		0
	50	50	11.21	11.12	11.22		0
	100	0	11.32	11.19	11.13		0

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LTE Band 41 PC3

Table 8-37
LTE Band 41 PC3 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth										
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]	
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)			
Conducted Power [dBm]										
QPSK	1	0	17.15	17.31	17.52	17.58	17.69	0	0	
	1	50	17.14	17.34	17.41	17.44	17.46		0	
	1	99	17.02	17.28	17.45	17.48	17.42		0	
	50	0	17.31	17.46	17.60	17.56	17.55		0	
	50	25	17.29	17.54	17.61	17.63	17.67		0	
	50	50	17.27	17.47	17.58	17.61	17.58		0	
16QAM	100	0	17.29	17.53	17.56	17.58	17.55	0-1	0	
	1	0	17.13	17.38	17.63	17.65	17.53		0	
	1	50	17.18	17.34	17.60	17.62	17.37		0	
	1	99	17.10	17.31	17.64	17.63	17.43		0	
	50	0	17.26	17.33	17.36	17.37	17.33		0	
	50	25	17.29	17.34	17.37	17.35	17.34		0	
64QAM	50	50	17.25	17.32	17.37	17.33	17.31	0-2	0	
	100	0	17.28	17.33	17.39	17.34	17.33		0	
	1	0	17.21	17.47	17.39	17.36	17.58		0	
	1	50	17.27	17.50	17.40	17.34	17.53		0	
	1	99	17.22	17.42	17.41	17.33	17.52		0	
	50	0	17.00	17.20	17.31	17.31	17.23		1	
256QAM	50	25	16.99	17.22	17.35	17.30	17.30	0-3	1	
	50	50	16.98	17.23	17.32	17.32	17.25		1	
	100	0	17.00	17.22	17.36	17.29	17.27		1	
	1	0	14.96	15.22	15.31	15.28	15.30		3	
	1	50	14.97	15.20	15.36	15.29	15.29		3	
	1	99	14.98	15.25	15.36	15.27	15.30		3	
256QAM	50	0	14.99	15.20	15.35	15.30	15.26	0-5	3	
	50	25	15.01	15.23	15.32	15.21	15.30		3	
	50	50	14.97	15.23	15.34	15.31	15.30		3	
	100	0	14.96	15.22	15.28	15.32	15.29		3	

Table 8-38
LTE Band 41 PC3 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
Conducted Power [dBm]									
QPSK	1	0	12.57	12.44	12.62	12.48	12.60	0	0
	1	50	12.52	12.59	12.48	12.36	12.53		0
	1	99	12.44	12.43	12.50	12.49	12.76		0
	50	0	12.69	12.68	12.64	12.56	12.68	0-1	0
	50	25	12.69	12.71	12.70	12.62	12.66		0
	50	50	12.73	12.68	12.69	12.57	12.75		0
	100	0	12.74	12.71	12.68	12.63	12.68		0
16QAM	1	0	12.87	12.77	12.80	12.26	12.73	0-1	0
	1	50	12.32	12.77	12.72	12.22	12.67		0
	1	99	12.34	12.77	12.78	12.28	12.76		0
	50	0	12.80	12.78	12.72	12.67	12.78	0-2	0
	50	25	12.87	12.84	12.79	12.78	12.71		0
	50	50	12.82	12.79	12.77	12.69	12.82		0
	100	0	12.86	12.82	12.75	12.74	12.79		0
64QAM	1	0	12.78	12.66	12.21	12.94	12.46	0-2	0
	1	50	12.86	12.68	12.23	12.90	12.73		0
	1	99	12.90	12.62	12.27	12.89	12.87		0
	50	0	12.74	12.78	12.72	12.74	12.87	0-3	0
	50	25	12.79	12.82	12.78	12.83	12.88		0
	50	50	12.82	12.81	12.77	12.80	12.86		0
	100	0	12.79	12.85	12.79	12.78	12.87		0
256QAM	1	0	12.76	12.51	12.53	12.57	12.55	0-5	0
	1	50	12.66	12.49	12.43	12.60	12.47		0
	1	99	12.75	12.62	12.58	12.70	12.54		0
	50	0	12.66	12.60	12.52	12.55	12.51		0
	50	25	12.63	12.62	12.53	12.57	12.50		0
	50	50	12.63	12.55	12.50	12.61	12.57		0
	100	0	12.71	12.58	12.55	12.55	12.51		0

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Table 8-39
LTE Band 41 PC3 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	16.79	16.95	16.94	16.87	16.58	0	0
	1	50	16.83	16.69	16.68	16.70	16.56		0
	1	99	16.80	16.67	16.72	16.73	16.68		0
	50	0	17.00	17.05	16.91	17.00	16.75	0-1	0
	50	25	16.98	17.00	16.94	16.96	16.76		0
	50	50	16.94	16.94	16.89	16.87	16.73		0
16QAM	100	0	16.86	16.88	16.85	16.86	16.73	0-1	0
	1	0	17.02	16.54	16.91	17.06	16.36		0
	1	50	17.01	16.46	16.82	16.90	16.19		0
	1	99	16.97	16.37	16.85	16.95	16.25	0-2	0
	50	0	17.02	16.94	16.71	16.99	16.75		0
	50	25	17.10	17.10	16.98	17.01	16.69		0
64QAM	50	50	17.07	16.89	16.92	16.94	16.72	0-2	0
	100	0	17.05	16.93	17.00	16.96	16.70		0
	1	0	16.48	16.92	17.01	16.41	16.73		0-2
	1	50	16.44	16.80	16.95	16.29	16.48	0	
	1	99	16.45	17.01	16.96	16.24	16.50	0	
	50	0	16.98	16.99	16.88	16.92	16.80	0-3	0
256QAM	50	25	17.06	17.03	16.91	16.93	16.75		0
	50	50	17.00	16.95	16.92	16.89	16.75		0
	100	0	17.02	16.98	16.90	16.89	16.77	0-5	0
	1	0	16.97	16.94	17.02	16.94	16.68		0
	1	50	16.84	16.78	16.91	16.83	16.58		0
	1	99	16.91	16.80	16.93	16.74	16.75	0	
50	0	16.94	16.89	16.81	16.94	16.76	0		
256QAM	50	25	16.99	16.94	16.94	16.95	16.73	0	
	50	50	16.97	16.88	16.90	16.91	16.68	0	
	100	0	17.03	16.92	16.95	16.92	16.71	0	

Table 8-40
LTE Band 41 PC3 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	14.35	14.28	14.57	14.52	14.67	0	0
	1	50	14.30	14.16	14.45	14.41	14.47		0
	1	99	14.24	14.17	14.55	14.43	14.53		0
	50	0	14.46	14.35	14.57	14.53	14.77	0-1	0
	50	25	14.49	14.40	14.65	14.56	14.67		0
	50	50	14.44	14.36	14.58	14.60	14.72		0
16QAM	100	0	14.46	14.39	14.60	14.57	14.64	0-1	0
	1	0	14.04	14.36	14.47	14.27	14.77		0
	1	50	14.00	14.18	14.34	14.18	14.66		0
	1	99	13.93	14.25	14.40	14.27	14.74	0-2	0
	50	0	14.06	14.02	14.18	14.20	14.33		0
	50	25	14.12	14.09	14.16	14.16	14.42		0
64QAM	50	50	14.05	13.99	14.17	14.22	14.45	0-2	0
	100	0	14.06	14.10	14.23	14.13	14.42		0
	1	0	14.80	13.87	14.59	14.49	14.16		0-2
	1	50	14.28	13.84	14.58	14.43	14.21	0	
	1	99	14.30	13.76	14.65	14.55	14.26	0-3	
	50	0	14.43	14.35	14.49	14.57	14.74		0
256QAM	50	25	14.47	14.34	14.52	14.55	14.76		0-3
	50	50	14.43	14.37	14.51	14.63	14.79	0	
	100	0	14.52	14.42	14.45	14.51	14.79	0	
	1	0	14.42	14.43	14.36	14.47	14.59	0-5	0
	1	50	14.37	14.31	14.36	14.41	14.67		0
	1	99	14.44	14.31	14.44	14.47	14.75		0
256QAM	50	0	14.39	14.35	14.44	14.43	14.60	0-5	0
	50	25	14.51	14.40	14.47	14.45	14.67		0
	50	50	14.42	14.35	14.54	14.48	14.69		0
	100	0	14.39	14.39	14.55	14.42	14.71		0

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LTE Band 41 PC2

Table 8-41
LTE Band 41 PC2 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
Conducted Power [dBm]									
QPSK	1	0	19.73	19.85	19.75	20.03	20.10	0	0
	1	50	19.78	19.84	19.74	19.98	20.02		0
	1	99	19.63	19.75	19.75	19.92	20.01		0
	50	0	19.15	19.08	19.14	19.25	19.20	0-1	0
	50	25	19.23	19.12	19.19	19.23	19.26		0
	50	50	19.16	19.10	19.18	19.25	19.21		0
	100	0	19.20	19.15	19.20	19.19	19.17		0

Table 8-42
LTE Band 41 PC2 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
Conducted Power [dBm]									
QPSK	1	0	14.73	14.65	14.56	14.82	14.91	0	0
	1	50	14.76	14.67	14.57	14.74	14.85		0
	1	99	14.66	14.61	14.59	14.75	14.83		0
	50	0	14.92	14.94	14.80	14.85	14.84	0-1	0
	50	25	14.93	14.95	14.83	14.90	14.86		0
	50	50	14.89	14.88	14.79	14.91	14.79		0
	100	0	14.90	14.90	14.79	14.88	14.83		0

Table 8-43
LTE Band 41 PC2 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
Conducted Power [dBm]									
QPSK	1	0	18.62	18.65	18.69	18.72	18.57	0	0
	1	50	18.57	18.60	18.52	18.58	18.40		0
	1	99	18.59	18.57	18.57	18.60	18.44		0
	50	0	18.70	18.63	18.61	18.66	18.58	0-1	0
	50	25	18.75	18.70	18.74	18.62	18.59		0
	50	50	18.73	18.67	18.70	18.60	18.59		0
	100	0	18.68	18.67	18.67	18.63	18.57		0

Table 8-44
LTE Band 41 PC2 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
Conducted Power [dBm]									
QPSK	1	0	15.92	15.77	15.70	16.03	16.16	0	0
	1	50	15.94	15.76	15.72	15.94	16.00		0
	1	99	15.91	15.70	15.81	15.99	16.08		0
	50	0	15.95	15.89	15.92	15.98	16.10	0-1	0
	50	25	16.04	15.96	16.10	16.09	16.12		0
	50	50	16.01	15.93	16.04	16.04	16.15		0
	100	0	16.03	15.92	16.07	16.03	16.04		0

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LTE Band 48

Table 8-45
LTE Band 48 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	13.74	13.65	13.81	13.77	0	0
	1	50	13.61	13.54	13.78	13.61		0
	1	99	13.69	13.61	13.78	13.62		0
	50	0	13.70	13.72	13.77	13.77	0-1	0
	50	25	13.77	13.80	13.80	13.73		0
	50	50	13.76	13.79	13.82	13.75		0
	100	0	13.78	13.78	13.79	13.80		0
16QAM	1	0	13.87	13.69	13.99	13.86	0-1	0
	1	50	13.73	13.60	13.94	13.73		0
	1	99	13.85	13.71	13.99	13.72		0
	50	0	13.53	13.62	13.68	13.62	0-2	0
	50	25	13.60	13.68	13.66	13.63		0
	50	50	13.56	13.66	13.67	13.55		0
	100	0	13.65	13.65	13.62	13.64		0
64QAM	1	0	13.79	13.53	13.62	13.89	0-2	0
	1	50	13.78	13.55	13.49	13.72		0
	1	99	13.84	13.49	13.61	13.71		0
	50	0	13.65	13.63	13.78	13.67	0-3	0
	50	25	13.70	13.73	13.70	13.72		0
	50	50	13.69	13.71	13.82	13.63		0
	100	0	13.70	13.73	13.73	13.68		0
256QAM	1	0	13.70	13.74	13.72	13.90	0-5	0
	1	50	13.64	13.67	13.63	13.78		0
	1	99	13.76	13.81	13.75	13.71		0
	50	0	13.55	13.62	13.71	13.67		0
	50	25	13.69	13.71	13.73	13.74		0
	50	50	13.67	13.68	13.72	13.60		0
	100	0	13.69	13.77	13.71	13.75		0

Table 8-46
LTE Band 48 Measured P_{limit} Ant 2a - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	12.99	12.85	12.95	12.98	0	0
	1	50	12.90	12.70	12.84	12.86		0
	1	99	12.95	12.73	12.86	12.87		0
	50	0	13.01	12.94	12.96	12.98	0-1	0
	50	25	12.99	12.99	12.92	12.95		0
	50	50	13.00	12.98	12.98	12.97		0
16QAM	100	0	12.95	12.98	12.91	12.94	0-1	0
	1	0	12.78	12.50	12.89	12.79		0
	1	50	12.60	12.36	12.87	12.61		0
	1	99	12.71	12.40	12.74	12.69	0-2	0
	50	0	12.47	12.42	12.44	12.43		0
	50	25	12.49	12.46	12.43	12.40		0
64QAM	50	50	12.47	12.42	12.44	12.43	0-2	0
	100	0	12.51	12.43	12.50	12.43		0
	1	0	12.70	12.60	12.59	12.69		0
	1	50	12.66	12.58	12.51	12.61	0-3	0
	1	99	12.69	12.54	12.58	12.60		0
	50	0	12.51	12.62	12.62	12.57		0
256QAM	50	25	12.60	12.60	12.60	12.60	0-5	0
	50	50	12.55	12.63	12.63	12.58		0
	100	0	12.55	12.46	12.48	12.45		0
	1	0	12.66	12.75	12.64	12.77	0-5	0
	1	50	12.61	12.64	12.61	12.66		0
	1	99	12.67	12.65	12.58	12.72		0
50	0	12.60	12.56	12.59	12.50	0		
50	25	12.67	12.56	12.53	12.67	0		
50	50	12.59	12.57	12.59	12.63	0		
100	0	12.68	12.63	12.57	12.64	0		

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Table 8-47
LTE Band 48 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	12.54	12.63	12.78	12.90	0	0
	1	50	12.50	12.54	12.69	12.77		0
	1	99	12.60	12.65	12.76	12.81		0
	50	0	12.72	12.70	12.84	12.99	0-1	0
	50	25	12.75	12.74	12.85	12.93		0
	50	50	12.76	12.73	12.87	12.95		0
16QAM	100	0	12.44	12.49	12.55	12.56	0-1	0
	1	0	12.94	12.88	12.84	12.99		0
	1	50	12.84	12.77	12.79	12.84		0
	1	99	13.00	12.92	12.88	12.99	0-2	0
	50	0	12.57	12.59	12.80	12.62		0
	50	25	12.63	12.62	12.82	12.61		0
50	50	12.65	12.61	12.90	12.62	0		
64QAM	100	0	12.63	12.64	12.76	12.59	0-2	0
	1	0	12.65	12.44	12.88	12.42		0
	1	50	12.62	12.40	12.88	12.32		0
	1	99	12.75	12.56	12.99	12.43	0-3	0
	50	0	12.87	12.99	12.78	12.90		0
	50	25	12.88	13.00	12.77	12.96		0
256QAM	50	50	12.86	12.99	12.87	12.94	0-5	0
	100	0	12.85	12.95	12.77	12.99		0
	1	0	12.50	12.37	12.58	12.83		0
	1	50	12.45	12.38	12.54	12.75	0-5	0
	1	99	12.57	12.52	12.60	12.76		0
	50	0	12.44	12.45	12.62	12.67		0
50	25	12.43	12.50	12.60	12.70	0		
50	50	12.40	12.46	12.68	12.75	0		
100	0	12.48	12.48	12.58	12.73	0		

Table 8-48
LTE Band 48 Measured P_{limit} Ant 4a - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	11.26	11.29	11.51	11.27	0	0
	1	50	11.21	11.21	11.35	11.15		0
	1	99	11.29	11.33	11.42	11.23		0
	50	0	11.36	11.34	11.46	11.35	0-1	0
	50	25	11.39	11.40	11.45	11.37		0
	50	50	11.44	11.41	11.53	11.38		0
	100	0	11.49	11.44	11.50	11.36		0
16QAM	1	0	11.67	11.45	11.51	11.56	0-1	0
	1	50	11.47	11.40	11.45	11.41		0
	1	99	11.58	11.50	11.48	11.39		0
	50	0	11.42	11.48	11.51	11.50	0-2	0
	50	25	11.49	11.53	11.51	11.47		0
	50	50	11.48	11.47	11.55	11.52		0
	100	0	11.52	11.58	11.52	11.44		0
64QAM	1	0	11.51	11.70	11.61	11.48	0-2	0
	1	50	11.55	11.70	11.63	11.45		0
	1	99	11.49	11.78	11.59	11.41		0
	50	0	11.71	11.65	11.77	11.67	0-3	0
	50	25	11.80	11.73	11.74	11.70		0
	50	50	11.75	11.69	11.79	11.72		0
	100	0	11.83	11.74	11.70	11.69		0
256QAM	1	0	11.72	11.68	11.98	11.59	0-5	0
	1	50	11.65	11.63	11.88	11.58		0
	1	99	11.77	11.74	11.94	11.64		0
	50	0	11.76	11.63	11.87	11.67		0
	50	25	11.85	11.75	11.90	11.64		0
	50	50	11.79	11.73	11.89	11.68		0
	100	0	11.82	11.72	11.86	11.62		0

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8.3.14 LTE Uplink Carrier Aggregation Conducted Powers

Table 8-49
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 1

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	1	24	18.61	18.10
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	1	99	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	1	0	13.42	13.79
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)		LTE Single Carrier Tx Power (dBm)			
CA_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	17.30		17.02			
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)		LTE Single Carrier Tx Power (dBm)			
CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	19.45		19.63			
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)		LTE Single Carrier Tx Power (dBm)			
CA_48C	LTE B48	20	56640	3690.0	QPSK	50	0	LTE B48	20	56442	3670.2	QPSK	50	50	13.90		13.77			

Table 8-50
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 2a

Combination	PCC							SCC							Power	
	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55340	3560.0	QPSK	50	50	LTE B48	20	55538	3579.8	QPSK	50	0	13.24	13.00

Table 8-51
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 2b

PCC										SCC										Power			
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)			
CA_7C	LTE B7	20		21350	2560.0	3350	2680.0		QPSK	1	0	LTE B7	20	21152	2540.2	3152	2660.2		QPSK	1	99	11.99	11.66
Combination	PCC									SCC							Power		LTE Single Carrier Tx Power (dBm)				
	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)								
CA_41C	LTE B41	20		41490	2680.0	50	0	QPSK		LTE B41	20	41292	2660.2	50	50	12.59	12.68						
Combination	PCC									SCC							Power		LTE Single Carrier Tx Power (dBm)				
	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)								
CA_41C	LTE B41 PC2	20		41490	2680.0	50	0	QPSK		LTE B41 PC2	20	41292	2660.2	50	50	14.71	14.84						

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Table 8-52
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 3

PCC										SCC										Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	50	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	25	0	17.77	18.00	
PCC										SCC										Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA_7C	LTE B7	20	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	14.67	14.76	
PCC										SCC										Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)					
CA_41C	LTE B41	20	40620	2593.0	QPSK	1	0	LTE B41	20	40422	2573.2	QPSK	1	99	16.40	16.85					
PCC										SCC										Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)					
CA_41C	LTE B41 PC2	20	40620	2593.0	QPSK	1	0	LTE B41 PC2	20	40422	2573.2	QPSK	1	99	18.75	18.69					
PCC										SCC										Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)					
CA_48C	LTE B48	20	56640	3690.0	QPSK	100	0	LTE B48	20	56442	3670.2	QPSK	100	0	12.65	12.56					

Table 8-53
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 4a

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55340	3560.0	QPSK	1	99	LTE B48	20	55538	3579.8	QPSK	1	0	11.95	11.29

Table 8-54
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 4b

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	11.60	11.34
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)		LTE Single Carrier Tx Power (dBm)			
CA_41C	LTE B41	20	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	13.98		14.67			
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)		LTE Single Carrier Tx Power (dBm)			
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	16.39		16.16			

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Notes:

1. This device supports uplink carrier aggregation for LTE CA_7C, LTE CA_5B, LTE CA_41C and LTE CA_48C with a maximum of two component carriers. For intra-band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.



Figure 8-3
Power Measurement Setup

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8.4 NR Plimit Conducted Powers

Note: Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures (FCC KDB Publication 941225 D05v02r05). Therefore, NR SAR for the lower bandwidths was not required for testing based on the measured output power and the reported NR SAR for the highest bandwidth. Lower bandwidth conducted powers for all NR bands can be found in appendix I.

8.4.1 NR Band n71

Table 8-55
NR Band n71 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	19.55	0	0.0
	1	53	19.60		0.0
	1	104	19.33		0.0
	50	0	19.61	0-0.5	0.0
	50	28	19.60	0	0.0
	50	56	19.47	0-0.5	0.0
	100	0	19.54		0.0
DFT-s-OFDM QPSK	1	1	19.72	0	0.0
	1	53	19.64		0.0
	1	104	19.48		0.0
	50	0	19.62	0-1	0.0
	50	28	19.61	0	0.0
	50	56	19.48	0-1	0.0
	100	0	19.57		0.0
DFT-s-OFDM 16QAM	1	1	19.73	0-1	0.0
CP-OFDM QPSK	1	1	19.64	0-1.5	0.0

Note: NR Band n71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-56
NR Band n71 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	19.87	0	0.0
	1	53	19.80		0.0
	1	104	19.57		0.0
	50	0	19.77	0-0.5	0.0
	50	28	19.74	0	0.0
	50	56	19.62	0-0.5	0.0
	100	0	19.72		0.0
DFT-s-OFDM QPSK	1	1	19.92	0	0.0
	1	53	19.70		0.0
	1	104	19.56		0.0
	50	0	19.74	0-1	0.0
	50	28	19.70	0	0.0
	50	56	19.62	0-1	0.0
	100	0	19.73		0.0
DFT-s-OFDM 16QAM	1	1	20.15	0-1	0.0
CP-OFDM QPSK	1	1	19.90	0-1.5	0.0

Note: NR Band n71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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8.4.2

NR Band n12

Table 8-57
NR Band n12 Measured P_{limit} Ant 1 - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	18.78	0	0.0
	1	40	18.73		0.0
	1	77	18.57		0.0
	36	0	18.70	0-0.5	0.0
	36	22	18.68	0	0.0
	36	43	18.64	0-0.5	0.0
	75	0	18.71		0.0
DFT-s-OFDM QPSK	1	1	18.80	0	0.0
	1	40	18.83		0.0
	1	77	18.70		0.0
	36	0	18.71	0-1	0.0
	36	22	18.73	0	0.0
	36	43	18.70	0-1	0.0
	75	0	18.70		0.0
DFT-s-OFDM 16QAM	1	1	18.62	0-1	0.0
CP-OFDM QPSK	1	1	18.77	0-1.5	0.0

Note: NR Band n12 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-58
NR Band n12 Measured P_{limit} Ant 3 - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	18.64	0	0.0
	1	40	18.75		0.0
	1	77	18.46		0.0
	36	0	18.65	0-0.5	0.0
	36	22	18.57	0	0.0
	36	43	18.53	0-0.5	0.0
	75	0	18.64		0.0
DFT-s-OFDM QPSK	1	1	18.65	0	0.0
	1	40	18.75		0.0
	1	77	18.45		0.0
	36	0	18.61	0-1	0.0
	36	22	18.65	0	0.0
	36	43	18.58	0-1	0.0
	75	0	18.64		0.0
DFT-s-OFDM 16QAM	1	1	18.39	0-1	0.0
CP-OFDM QPSK	1	1	18.89	0-1.5	0.0

Note: NR Band n12 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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8.4.3

NR Band n5

Table 8-59
NR Band n5 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	17.92	0	0.0
	1	53	17.83		0.0
	1	104	17.71		0.0
	50	0	17.88	0-0.5	0.0
	50	28	17.81	0	0.0
	50	56	17.73	0-0.5	0.0
	100	0	17.83		0.0
DFT-s-OFDM QPSK	1	1	17.99	0	0.0
	1	53	17.86		0.0
	1	104	17.70		0.0
	50	0	17.91	0-1	0.0
	50	28	17.81	0	0.0
	50	56	17.78	0-1	0.0
	100	0	17.83		0.0
DFT-s-OFDM 16QAM	1	1	17.89	0-1	0.0
CP-OFDM QPSK	1	1	18.00	0-1.5	0.0

Note: NR Band n5 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-60
NR Band n5 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	18.07	0	0.0
	1	53	17.98		0.0
	1	104	17.93		0.0
	50	0	17.94	0-0.5	0.0
	50	28	17.91	0	0.0
	50	56	17.93	0-0.5	0.0
	100	0	17.92		0.0
DFT-s-OFDM QPSK	1	1	18.06	0	0.0
	1	53	17.95		0.0
	1	104	17.83		0.0
	50	0	18.00	0-1	0.0
	50	28	17.91	0	0.0
	50	56	17.93	0-1	0.0
	100	0	17.90		0.0
DFT-s-OFDM 16QAM	1	1	18.13	0-1	0.0
CP-OFDM QPSK	1	1	18.11	0-1.5	0.0

Note: NR Band n5 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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8.4.4

NR Band n66

Table 8-61
NR Band n66 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n66							
20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	14.58	14.33	14.21	0	0.0
	1	53	14.43	14.10	14.09		0.0
	1	104	14.50	14.28	14.19		0.0
	50	0	14.51	14.26	14.23	0-0.5	0.0
	50	28	14.64	14.24	14.19	0	0.0
	50	56	14.60	14.32	14.24	0-0.5	0.0
	100	0	14.57	14.25	14.21		0.0
DFT-s-OFDM QPSK	1	1	14.55	14.56	14.50	0	0.0
	1	53	14.30	14.31	14.24		0.0
	1	104	14.42	14.41	14.33		0.0
	50	0	14.48	14.51	14.23	0-1	0.0
	50	28	14.50	14.33	14.22	0	0.0
	50	56	14.49	14.45	14.22	0-1	0.0
	100	0	14.50	14.21	14.22		0.0
DFT-s-OFDM 16QAM	1	1	14.62	14.33	14.21	0-1	0.0
CP-OFDM QPSK	1	1	14.28	14.50	14.31	0-1.5	0.0

Table 8-62
NR Band n66 Conducted Powers Ant 2b - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	14.15	13.99	14.12	0	0.0
	1	53	13.98	14.02	14.09		0.0
	1	104	14.02	13.95	14.17		0.0
	50	0	14.02	14.07	13.98	0-0.5	0.0
	50	28	13.95	14.00	13.99	0	0.0
	50	56	13.99	13.99	14.00	0-0.5	0.0
	100	0	14.05	14.02	13.96		0.0
DFT-s-OFDM QPSK	1	1	14.10	14.05	14.05	0	0.0
	1	53	13.99	14.12	14.01		0.0
	1	104	14.04	13.92	14.11		0.0
	50	0	13.97	14.03	14.02	0-1	0.0
	50	28	13.97	14.00	14.03	0	0.0
	50	56	14.02	14.09	13.96	0-1	0.0
	100	0	14.08	14.05	13.99		0.0
DFT-s-OFDM 16QAM	1	1	13.96	13.90	13.87	0-1	0.0
CP-OFDM QPSK	1	1	14.39	14.40	14.28	0-1.5	0.0

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Table 8-63
NR Band n66 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	15.19	15.09	14.96	0	0.0
	1	53	14.99	15.01	14.91		0.0
	1	104	15.17	15.14	14.89		0.0
	50	0	15.12	15.08	15.02	0-0.5	0.0
	50	28	15.10	15.08	14.97	0	0.0
	50	56	15.18	15.09	14.95	0-0.5	0.0
	100	0	15.10	15.04	14.98		0.0
DFT-s-OFDM QPSK	1	1	15.26	15.19	14.93	0	0.0
	1	53	15.12	15.15	14.92		0.0
	1	104	15.18	15.27	14.92		0.0
	50	0	15.16	15.19	14.94	0-1	0.0
	50	28	15.13	15.13	14.98	0	0.0
	50	56	15.18	15.14	15.05	0-1	0.0
	100	0	15.09	15.15	15.00		0.0
DFT-s-OFDM 16QAM	1	1	15.17	15.32	15.27	0-1	0.0
CP-OFDM QPSK	1	1	15.48	15.16	15.04	0-1.5	0.0

Table 8-64
NR Band n66 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	13.09	13.16	13.05	0	0.0
	1	53	13.04	13.04	12.97		0.0
	1	104	13.13	13.08	13.05		0.0
	50	0	13.09	13.19	12.97	0-0.5	0.0
	50	28	13.05	13.09	12.97	0	0.0
	50	56	13.09	13.06	12.92	0-0.5	0.0
	100	0	13.06	13.12	12.86		0.0
DFT-s-OFDM QPSK	1	1	13.33	13.34	13.24	0	0.0
	1	53	13.19	13.12	13.19		0.0
	1	104	13.14	13.13	13.12		0.0
	50	0	13.17	13.26	13.10	0-1	0.0
	50	28	13.12	13.20	12.98	0	0.0
	50	56	13.25	13.15	12.94	0-1	0.0
	100	0	13.22	13.20	13.00		0.0
DFT-s-OFDM 16QAM	1	1	13.28	13.30	13.27	0-1	0.0
CP-OFDM QPSK	1	1	13.25	13.30	13.18	0-1.5	0.0

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8.4.5

NR Band n25

Table 8-65
NR Band n25 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	14.27	14.36	14.29	0	0.0
	1	53	14.31	14.42	14.27		0.0
	1	104	14.28	14.33	14.25		0.0
	50	0	14.37	14.37	14.29	0-0.5	0.0
	50	28	14.35	14.33	14.25	0	0.0
	50	56	14.31	14.29	14.22	0-0.5	0.0
	100	0	14.30	14.31	14.31		0.0
DFT-s-OFDM QPSK	1	1	14.45	14.42	14.40	0	0.0
	1	53	14.43	14.44	14.44		0.0
	1	104	14.44	14.43	14.42		0.0
	50	0	14.49	14.47	14.48	0-1	0.0
	50	28	14.50	14.51	14.47	0	0.0
	50	56	14.42	14.46	14.47	0-1	0.0
	100	0	14.44	14.42	14.43		0.0
DFT-s-OFDM 16QAM	1	1	14.34	14.40	14.36	0-1	0.0
CP-OFDM QPSK	1	1	14.60	14.61	14.53	0-1.5	0.0

Table 8-66
NR Band n25 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	13.70	13.64	13.57	0	0.0
	1	53	13.59	13.57	13.51		0.0
	1	104	13.60	13.51	13.54		0.0
	50	0	13.62	13.52	13.52	0-0.5	0.0
	50	28	13.61	13.55	13.47	0	0.0
	50	56	13.49	13.60	13.42	0-0.5	0.0
	100	0	13.55	13.55	13.43		0.0
DFT-s-OFDM QPSK	1	1	13.71	13.64	13.67	0	0.0
	1	53	13.67	13.59	13.59		0.0
	1	104	13.60	13.70	13.56		0.0
	50	0	13.69	13.68	13.61	0-1	0.0
	50	28	13.65	13.66	13.62	0	0.0
	50	56	13.63	13.65	13.55	0-1	0.0
	100	0	13.65	13.61	13.65		0.0
DFT-s-OFDM 16QAM	1	1	13.72	13.64	13.70	0-1	0.0
CP-OFDM QPSK	1	1	13.75	13.72	13.78	0-1.5	0.0

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Table 8-67
NR Band n25 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	15.30	15.25	15.26	0	0.0
	1	53	15.23	15.20	15.27		0.0
	1	104	15.22	15.18	15.15		0.0
	50	0	15.20	15.16	15.26	0-0.5	0.0
	50	28	15.19	15.15	15.19	0	0.0
	50	56	15.12	15.17	15.18	0-0.5	0.0
	100	0	15.14	15.25	15.16		0.0
DFT-s-OFDM QPSK	1	1	15.36	15.25	15.43	0	0.0
	1	53	15.31	15.31	15.34		0.0
	1	104	15.25	15.27	15.25		0.0
	50	0	15.23	15.19	15.33	0-1	0.0
	50	28	15.22	15.23	15.32	0	0.0
	50	56	15.17	15.26	15.21	0-1	0.0
	100	0	15.20	15.31	15.25		0.0
DFT-s-OFDM 16QAM	1	1	15.18	15.30	15.32	0-1	0.0
CP-OFDM QPSK	1	1	15.38	15.31	15.35	0-1.5	0.0

Table 8-68
NR Band n25 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	10.63	10.78	10.70	0	0.0
	1	53	10.66	10.75	10.69		0.0
	1	104	10.65	10.74	10.66		0.0
	50	0	10.74	10.69	10.68	0-0.5	0.0
	50	28	10.67	10.77	10.64	0	0.0
	50	56	10.63	10.73	10.60	0-0.5	0.0
100	0	10.70	10.74	10.67	0.0		
DFT-s-OFDM QPSK	1	1	10.74	10.79	10.80	0	0.0
	1	53	10.68	10.70	10.62		0.0
	1	104	10.62	10.71	10.55		0.0
	50	0	10.67	10.73	10.65	0-1	0.0
	50	28	10.69	10.75	10.64	0	0.0
	50	56	10.61	10.72	10.56	0-1	0.0
100	0	10.66	10.73	10.55	0.0		
DFT-s-OFDM 16QAM	1	1	10.71	10.69	10.67	0-1	0.0
CP-OFDM QPSK	1	1	10.67	10.77	10.61	0-1.5	0.0

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NR Band n41 PC3

Table 8-69
NR Band n41 PC3 Measured P_{limit} Ant 1 - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	12.90	0	0.0
	1	137	12.97		0.0
	1	271	12.98		0.0
	135	0	12.86	0-0.5	0.0
	135	69	12.95	0	0.0
	135	138	12.90	0-0.5	0.0
	270	0	12.91		0.0
DFT-s-OFDM QPSK	1	1	12.74	0	0.0
	1	137	12.63		0.0
	1	271	12.05		0.0
	135	0	12.67	0-1	0.0
	135	69	12.66	0	0.0
	135	138	12.65	0-1	0.0
	270	0	12.62		0.0
DFT-s-OFDM 16QAM	1	1	12.45	0-1	0.0
CP-OFDM QPSK	1	1	12.80	0-1.5	0.0

Note: LTE Band 41 PC3 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-70
NR Band n41 PC3 Measured P_{limit} Ant 2b – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	10.85	0	0.0
	1	137	10.86		0.0
	1	271	10.79		0.0
	135	0	10.76	0-0.5	0.0
	135	69	10.84	0	0.0
	135	138	10.96	0-0.5	0.0
	270	0	10.83		0.0
DFT-s-OFDM QPSK	1	1	10.62	0	0.0
	1	137	10.81		0.0
	1	271	10.75		0.0
	135	0	10.70	0-1	0.0
	135	69	10.74	0	0.0
	135	138	10.80	0-1	0.0
	270	0	10.79		0.0
DFT-s-OFDM 16QAM	1	1	10.53	0-1	0.0
CP-OFDM QPSK	1	1	10.53	0-1.5	0.0

Note: LTE Band 41 PC3 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-71
NR Band n41 PC3 Measured P_{limit} Ant 3 – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	14.50	0	0.0
	1	137	14.36		0.0
	1	271	14.27		0.0
	135	0	14.28	0-0.5	0.0
	135	69	14.31	0	0.0
	135	138	14.41	0-0.5	0.0
	270	0	14.35		0.0
DFT-s-OFDM QPSK	1	1	14.25	0	0.0
	1	137	14.23		0.0
	1	271	14.15		0.0
	135	0	14.09	0-1	0.0
	135	69	14.12	0	0.0
	135	138	14.14	0-1	0.0
	270	0	14.13		0.0
DFT-s-OFDM 16QAM	1	1	14.22	0-1	0.0
CP-OFDM QPSK	1	1	14.19	0-1.5	0.0

Note: LTE Band 41 PC3 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-72
NR Band n41 PC3 Measured P_{limit} Ant 4b - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	11.92	0	0.0
	1	137	11.88		0.0
	1	271	11.96		0.0
	135	0	11.89	0-0.5	0.0
	135	69	11.98	0	0.0
	135	138	11.99	0-0.5	0.0
	270	0	12.00		0.0
DFT-s-OFDM QPSK	1	1	12.00	0	0.0
	1	137	12.16		0.0
	1	271	12.08		0.0
	135	0	12.04	0-1	0.0
	135	69	12.02	0	0.0
	135	138	12.12	0-1	0.0
	270	0	11.99		0.0
DFT-s-OFDM 16QAM	1	1	11.97	0-1	0.0
CP-OFDM QPSK	1	1	11.92	0-1.5	0.0

Note: LTE Band 41 PC3 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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NR Band n41 PC2

Table 8-73
NR Band n41 PC2 Measured P_{limit} Ant 1 - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	16.31	0	0.0
	1	137	16.34		0.0
	1	271	16.38		0.0
	135	0	16.74	0-0.5	0.0
	135	69	16.78	0	0.0
	135	138	16.77	0-0.5	0.0
	270	0	16.72		0.0
DFT-s-OFDM QPSK	1	1	16.32	0	0.0
	1	137	16.42		0.0
	1	271	16.40		0.0
	135	0	16.39	0-1	0.0
	135	69	16.18	0	0.0
	135	138	16.24	0-1	0.0
	270	0	16.10		0.0
DFT-s-OFDM 16QAM	1	1	15.83	0-1	0.0
CP-OFDM QPSK	1	1	16.73	0-1.5	0.0

Note: LTE Band 41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-74
NR Band n41 PC2 Measured P_{limit} Ant 2b – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	13.77	0	0.0
	1	137	13.80		0.0
	1	271	13.78		0.0
	135	0	13.66	0-0.5	0.0
	135	69	13.66	0	0.0
	135	138	13.53	0-0.5	0.0
	270	0	13.54		0.0
DFT-s-OFDM QPSK	1	1	13.78	0	0.0
	1	137	13.85		0.0
	1	271	13.89		0.0
	135	0	13.73	0-1	0.0
	135	69	13.87	0	0.0
	135	138	13.71	0-1	0.0
	270	0	13.76		0.0
DFT-s-OFDM 16QAM	1	1	13.27	0-1	0.0
CP-OFDM QPSK	1	1	14.07	0-1.5	0.0

Note: LTE Band 41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 8-75
NR Band n41 PC2 Measured P_{limit} Ant 3 – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	16.96	0	0.0
	1	137	16.90		0.0
	1	271	17.06		0.0
	135	0	16.69	0-0.5	0.0
	135	69	16.83	0	0.0
	135	138	17.01	0-0.5	0.0
DFT-s-OFDM QPSK	1	1	16.37	0	0.0
	1	137	16.52		0.0
	1	271	16.73		0.0
	135	0	16.88	0-1	0.0
	135	69	16.87	0	0.0
	135	138	16.90	0-1	0.0
DFT-s-OFDM 16QAM	1	1	16.35	0-1	0.0
CP-OFDM QPSK	1	1	16.20	0-1.5	0.0

Note: LTE Band 41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-76
NR Band n41 PC2 Measured P_{limit} Ant 4b - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
Modulation	RB Size	RB Offset	Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	14.56	0	0.0
	1	137	14.77		0.0
	1	271	14.95		0.0
	135	0	14.50	0-0.5	0.0
	135	69	14.48	0	0.0
	135	138	14.53	0-0.5	0.0
DFT-s-OFDM QPSK	1	1	14.41	0	0.0
	1	137	14.90		0.0
	1	271	14.91		0.0
	135	0	15.03	0-1	0.0
	135	69	14.73	0	0.0
	135	138	15.01	0	0.0
DFT-s-OFDM 16QAM	1	1	14.51	0-1	0.0
CP-OFDM QPSK	1	1	15.32	0-1.5	0.0

Note: LTE Band 41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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NR Band n77 PC3

Table 8-77
NR Band n77 PC3 Measured P_{limit} Ant 1 - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	9.24	9.12	0	0.0
	1	137	9.30	8.90		0.0
	1	271	9.24	9.38		0.0
	135	0	9.28	8.80	0-0.5	0.0
	135	69	9.16	8.76	0	0.0
	135	138	9.26	8.95	0-0.5	0.0
	270	0	9.25	8.90		0.0
DFT-s-OFDM QPSK	1	1	8.59	9.08	0	0.0
	1	137	9.09	9.30		0.0
	1	271	9.05	9.35		0.0
	135	0	8.93	9.31	0-1	0.0
	135	69	9.02	9.28	0	0.0
	135	138	9.05	9.43	0-1	0.0
	270	0	9.04	9.27		0.0
DFT-s-OFDM 16QAM	1	1	9.13	8.94	0-1	0.0
CP-OFDM QPSK	1	1	8.52	8.94	0-1.5	0.0

Table 8-78
NR Band n77 PC3 Measured P_{limit} Ant 2a – 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	8.79	8.89	0	0.0
	1	137	9.02	8.76		0.0
	1	271	8.91	8.75		0.0
	135	0	8.73	8.67	0-0.5	0.0
	135	69	8.78	8.65	0	0.0
	135	138	8.86	8.68	0-0.5	0.0
	270	0	8.77	8.71		0.0
DFT-s-OFDM QPSK	1	1	8.30	8.62	0	0.0
	1	137	9.04	9.01		0.0
	1	271	9.06	9.53		0.0
	135	0	8.64	8.92	0-1	0.0
	135	69	8.89	8.98	0	0.0
	135	138	9.12	9.15	0-1	0.0
	270	0	8.84	9.01		0.0
DFT-s-OFDM 16QAM	1	1	8.80	8.73	0-1	0.0
CP-OFDM QPSK	1	1	8.24	8.53	0-1.5	0.0

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Table 8-79
NR Band n77 PC3 Measured P_{limit} Ant 3 – 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	9.54	9.99	0	0.0
	1	137	10.23	10.01		0.0
	1	271	10.21	10.37		0.0
	135	0	9.68	10.07	0-0.5	0.0
	135	69	9.97	10.03	0	0.0
	135	138	10.23	9.97	0-0.5	0.0
	270	0	9.97	10.05		0.0
DFT-s-OFDM QPSK	1	1	9.43	10.00	0	0.0
	1	137	10.18	9.98		0.0
	1	271	10.24	10.33		0.0
	135	0	9.65	9.98	0-1	0.0
	135	69	9.92	9.93	0	0.0
	135	138	10.14	10.00	0-1	0.0
	270	0	10.06	10.04		0.0
DFT-s-OFDM 16QAM	1	1	9.48	9.99	0-1	0.5
CP-OFDM QPSK	1	1	9.60	9.94	0-1.5	0.0

Table 8-80
NR Band n77 PC3 Measured P_{limit} Ant 4a - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	8.25	8.72	0	0.0
	1	137	8.85	8.91		0.0
	1	271	8.90	8.86		0.0
	135	0	8.43	8.68	0-0.5	0.0
	135	69	8.63	8.82	0	0.0
	135	138	8.91	8.86	0-0.5	0.0
	270	0	8.59	8.82		0.0
DFT-s-OFDM QPSK	1	1	8.32	8.73	0	0.0
	1	137	8.84	8.90		0.0
	1	271	8.82	8.88		0.0
	135	0	8.40	8.67	0-1	0.0
	135	69	8.63	8.77	0	0.0
	135	138	8.78	8.84	0-1	0.0
	270	0	8.52	8.74		0.0
DFT-s-OFDM 16QAM	1	1	8.04	8.35	0-1	0.0
CP-OFDM QPSK	1	1	8.40	8.63	0-1.5	0.0

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NR Band n77 PC2

Table 8-81
NR Band n77 PC2 Measured P_{limit} Ant 1 - 100 MHz Bandwidth

NR Band n77						
100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	12.17	12.24	0	0.0
	1	137	12.00	12.52		0.0
	1	271	12.34	12.46		0.0
	135	0	12.17	12.40	0-0.5	0.0
	135	69	12.27	12.61	0	0.0
	135	138	12.36	12.70	0-0.5	0.0
	270	0	12.42	12.43		0.0
DFT-s-OFDM QPSK	1	1	12.20	12.55	0	0.0
	1	137	12.04	12.50		0.0
	1	271	12.47	12.70		0.0
	135	0	12.12	12.52	0-1	0.0
	135	69	12.01	12.56	0	0.0
	135	138	12.31	12.70	0-1	0.0
	270	0	12.20	12.55		0.0
DFT-s-OFDM 16QAM	1	1	12.60	12.81	0-1	0.0
CP-OFDM QPSK	1	1	12.09	12.73	0-1.5	0.0

Table 8-82
NR Band n77 PC2 Measured P_{limit} Ant 2a – 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM $\pi/2$ BPSK	1	1	12.24	12.43	0	0.0
	1	137	12.57	12.49		0.0
	1	271	12.54	12.45		0.0
	135	0	12.20	12.11	0-0.5	0.0
	135	69	12.30	12.30	0	0.0
	135	138	12.22	12.28	0-0.5	0.0
	270	0	12.35	12.15		0.0
DFT-s-OFDM QPSK	1	1	12.35	12.25	0	0.0
	1	137	12.61	12.24		0.0
	1	271	12.80	12.20		0.0
	135	0	12.22	12.05	0-1	0.0
	135	69	12.15	12.16	0	0.0
	135	138	12.56	12.27	0-1	0.0
	270	0	12.23	12.30		0.0
DFT-s-OFDM 16QAM	1	1	12.80	12.40	0-1	0.0
CP-OFDM QPSK	1	1	12.76	12.34	0-1.5	0.0

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Table 8-83
NR Band n77 PC2 Measured P_{limit} Ant 3 – 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
Channel					MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted	Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	12.82	12.66	0	0.0
	1	137	12.68	12.41		0.0
	1	271	13.07	12.74		0.0
	135	0	12.54	12.92	0-0.5	0.0
	135	69	13.00	12.87	0	0.0
	135	138	13.30	13.00	0-0.5	0.0
	270	0	13.02	12.92		0.0
DFT-s-OFDM QPSK	1	1	12.65	13.13	0	0.0
	1	137	13.21	12.86		0.0
	1	271	13.53	13.26		0.0
	135	0	12.76	13.00	0-1	0.0
	135	69	13.01	12.85	0	0.0
	135	138	13.35	13.03	0-1	0.0
	270	0	13.00	12.90		0.0
DFT-s-OFDM 16QAM	1	1	12.81	12.99	0-1	0.0
CP-OFDM QPSK	1	1	12.90	12.96	0-1.5	0.0

Table 8-84
NR Band n77 PC2 Measured P_{limit} Ant 4a - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted	Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	11.53	11.77	0	0.0
	1	137	12.02	11.74		0.0
	1	271	11.86	12.18		0.0
	135	0	11.45	12.00	0-0.5	0.0
	135	69	11.77	11.89	0	0.0
	135	138	12.08	11.94	0-0.5	0.0
	270	0	11.86	12.04		0.0
DFT-s-OFDM QPSK	1	1	11.47	11.93	0	0.0
	1	137	12.05	12.06		0.0
	1	271	11.73	12.00		0.0
	135	0	11.68	11.92	0-1	0.0
	135	69	11.78	11.76	0	0.0
	135	138	12.07	12.08	0-1	0.0
	270	0	11.82	11.91		0.0
DFT-s-OFDM 16QAM	1	1	11.91	11.84	0-1	0.0
CP-OFDM QPSK	1	1	11.83	11.87	0-1.5	0.0

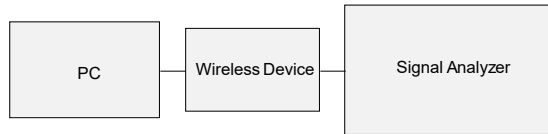


Figure 8-4
Power Measurement Setup

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8.5 WLAN Maximum Time-Averaged Conducted Powers

Table 8-85
2.4 GHz WLAN Maximum Average RF Power – Ant 4a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	10.93	11.08	10.98	11.03
2437	6	10.98	11.07	10.97	10.90
2462	11	10.92	11.06	11.04	10.96

Table 8-86
2.4 GHz WLAN Maximum Average RF Power – Ant 4a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	11.00	11.00	11.05	11.07
2437	6	11.06	11.09	11.06	11.08
2462	11	10.96	11.03	11.05	11.02

Table 8-87
2.4 GHz WLAN Maximum Average RF Power – Ant 2a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	10.33	10.37	10.44	10.59
2437	6	10.39	10.55	10.63	10.56
2462	11	10.45	10.41	10.43	10.43

Table 8-88
2.4 GHz WLAN Maximum Average RF Power – Ant 2a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	10.65	10.96	10.93	10.95
2437	6	10.77	10.98	10.97	11.12
2462	11	10.72	10.87	10.89	11.04

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Table 8-89
5 GHz WLAN Maximum Average RF Power – Ant 5b, Variant 1

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax (SU)
		Average	Average	Average
5190	38	13.62	13.65	13.17
5230	46	14.09	13.92	14.06
5270	54	16.00	15.87	16.03
5310	62	14.90	14.89	13.95

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5530	106	14.51	14.07
5610	122	15.48	16.10
5690	138	15.49	16.03
5775	155	16.75	16.79

Table 8-90
5 GHz WLAN Maximum Average RF Power – Ant 5b, Variant 2

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax (SU)
		Average	Average	Average
5190	38	13.52	13.51	13.08
5230	46	14.15	13.91	14.06
5270	54	15.94	16.03	15.93
5310	62	14.90	14.93	13.96

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5530	106	14.52	14.09
5610	122	15.29	15.99
5690	138	15.30	15.95
5775	155	16.95	16.66

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Table 8-91
5 GHz WLAN Maximum Average RF Power – Ant 4b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.42	9.62
5290	58	9.48	9.45
5530	106	8.05	8.03
5610	122	8.08	7.98
5690	138	8.10	7.96
5775	155	11.15	10.55

Table 8-92
5 GHz WLAN Maximum Average RF Power – Ant 4b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.48	9.43
5290	58	9.55	9.45
5530	106	8.15	7.91
5610	122	8.07	8.10
5690	138	8.24	7.97
5775	155	10.90	10.64

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8.6 WLAN Reduced Time-Averaged Conducted Powers

Table 8-93
2.4 GHz WLAN 3dB Reduced Average RF Power – Ant 4a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	8.15	8.12	8.11	7.90
2437	6	8.14	7.92	7.85	8.04
2462	11	8.10	8.06	8.07	8.03

Table 8-94
2.4 GHz WLAN 3dB Reduced Average RF Power – Ant 4a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	8.08	8.01	8.14	7.94
2437	6	7.98	8.16	8.19	8.07
2462	11	8.05	8.06	7.98	8.06

Table 8-95
2.4 GHz WLAN 3dB Reduced Average RF Power – Ant 2a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	7.62	7.53	7.55	7.57
2437	6	7.47	7.57	7.41	7.52
2462	11	7.50	7.53	7.43	7.48

Table 8-96
2.4 GHz WLAN 3dB Reduced Average RF Power – Ant 2a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	7.47	7.57	7.52	7.47
2437	6	7.33	7.64	7.62	7.59
2462	11	7.55	7.65	7.42	7.54

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Table 8-97
5 GHz WLAN 4dB Reduced Average RF Power – Ant 5b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	10.95	10.89
5290	58	12.05	12.05
5530	106	12.10	12.03
5610	122	12.08	12.07
5690	138	12.03	12.11
5775	155	12.73	12.75

Table 8-98
5 GHz WLAN 4dB Reduced Average RF Power – Ant 5b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	10.95	10.94
5290	58	12.18	12.02
5530	106	12.04	12.05
5610	122	12.05	12.02
5690	138	12.01	12.04
5775	155	12.70	12.76

Table 8-99
5 GHz WLAN 6dB Reduced Average RF Power – Ant 4b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.54	3.57
5290	58	3.68	3.62
5530	106	2.34	2.67
5610	122	2.50	2.18
5690	138	2.36	2.23
5775	155	4.50	4.16

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Table 8-100
5 GHz WLAN 6dB Reduced Average RF Power – Ant 4b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.60	3.51
5290	58	3.75	3.59
5530	106	2.75	2.82
5610	122	2.78	2.79
5690	138	2.50	2.73
5775	155	4.51	4.61

8.7 WLAN Power Reduction Verification Summary

Table 8-101
WLAN Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm]	Reduced Target Power [dBm]	Maximum Measured Power	Reduced Measured Power	Verdict
					(Tolerance [dB])	(Tolerance [dB])			
Ant 4A	2.4 GHz WLAN	Main Band 4A/4B ON	12.00	9.00	10.50 (+1.5/-1.5)	7.50 (+1.5/-1.5)	10.97	8.92	PASS
	2.4 GHz WLAN	ULCA ON	12.00	9.00	10.50 (+1.5/-1.5)	7.50 (+1.5/-1.5)	10.97	9.19	PASS
Ant 2A	2.4 GHz WLAN	Main Band 2A/2B ON	11.50	8.50	10.00 (+1.5/-1.5)	7.00 (+1.5/-1.5)	10.50	7.49	PASS
	2.4 GHz WLAN	ULCA ON	11.50	8.50	10.00 (+1.5/-1.5)	7.00 (+1.5/-1.5)	10.50	7.49	PASS
Ant 5B	5 GHz WLAN	Main Band 2A/2B ON	17.75	13.75	16.25 (+1.5/-1.5)	12.25 (+1.5/-1.5)	17.50	13.27	PASS
	5 GHz WLAN	ULCA ON	17.75	13.75	16.25 (+1.5/-1.5)	12.25 (+1.5/-1.5)	17.50	13.47	PASS
Ant 4B	5 GHz WLAN	Main Band 4A/4B ON	11.50	5.50	10.00 (+1.5/-1.5)	4.00 (+1.5/-1.5)	10.38	4.37	PASS
	5 GHz WLAN	ULCA ON	11.50	5.50	10.00 (+1.5/-1.5)	4.00 (+1.5/-1.5)	10.38	4.08	PASS

Conducted powers were measured for each Mode/Band and applied condition. All conducted power measurements were verified to be within tolerance.

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8.8 Notes for WLAN

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.
- The WLAN chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report.
- WLAN SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN configurations.

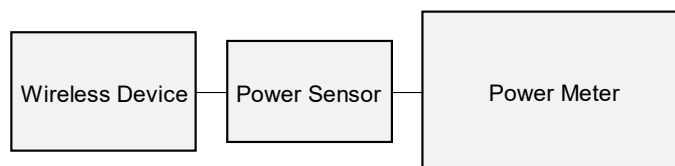


Figure 8-5
Power Measurement Setup

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8.9 Bluetooth Maximum Conducted Powers

Table 8-102
Bluetooth Maximum Average RF Power – Ant 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	11.76	14.997
2441	GFSK	1.0	39	11.75	14.962
2480	GFSK	1.0	78	11.40	13.804

Table 8-103
Bluetooth Maximum Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	11.74	14.928
2441	GFSK	1.0	39	11.85	15.311
2480	GFSK	1.0	78	11.66	14.655

Table 8-104
Bluetooth Maximum Average RF Power – Ant 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.95	19.724
2441	GFSK	1.0	39	12.73	18.750
2480	GFSK	1.0	78	12.45	17.579

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Table 8-105
Bluetooth Maximum Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.84	19.231
2441	GFSK	1.0	39	12.57	18.072
2480	GFSK	1.0	78	12.51	17.824

8.10 Bluetooth Reduced Conducted Powers

Table 8-106
Bluetooth 2dB Reduced Average RF Power – Ant 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.76	9.462
2441	GFSK	1.0	39	9.86	9.683
2480	GFSK	1.0	78	10.09	10.209

Table 8-107
Bluetooth 2dB Reduced Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.30	8.511
2441	GFSK	1.0	39	9.55	9.016
2480	GFSK	1.0	78	9.92	9.817

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Table 8-108
Bluetooth 3dB Reduced Average RF Power – Ant 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.60	7.244
2441	GFSK	1.0	39	8.47	7.031
2480	GFSK	1.0	78	8.82	7.621

Table 8-109
Bluetooth 3dB Reduced Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.96	7.870
2441	GFSK	1.0	39	8.72	7.447
2480	GFSK	1.0	78	8.76	7.516

Table 8-110
Bluetooth 7dB Reduced Average RF Power – Ant 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	4.80	3.020
2441	GFSK	1.0	39	4.54	2.844
2480	GFSK	1.0	78	5.50	3.548

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Table 8-111
Bluetooth 7dB Reduced Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	4.70	2.951
2441	GFSK	1.0	39	4.64	2.911
2480	GFSK	1.0	78	5.10	3.236

Table 8-112
Bluetooth 3dB Reduced Average RF Power – Ant 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.13	10.304
2441	GFSK	1.0	39	9.86	9.683
2480	GFSK	1.0	78	10.12	10.280

Table 8-113
Bluetooth 3dB Reduced Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.38	10.914
2441	GFSK	1.0	39	10.07	10.162
2480	GFSK	1.0	78	10.18	10.423

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Table 8-114
Bluetooth 4dB Reduced Average RF Power – Ant 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.13	8.185
2441	GFSK	1.0	39	8.96	7.870
2480	GFSK	1.0	78	8.90	7.762

Table 8-115
Bluetooth 4dB Reduced Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.32	8.551
2441	GFSK	1.0	39	8.95	7.852
2480	GFSK	1.0	78	9.24	8.395

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8.11 Bluetooth Duty Cycle Plots

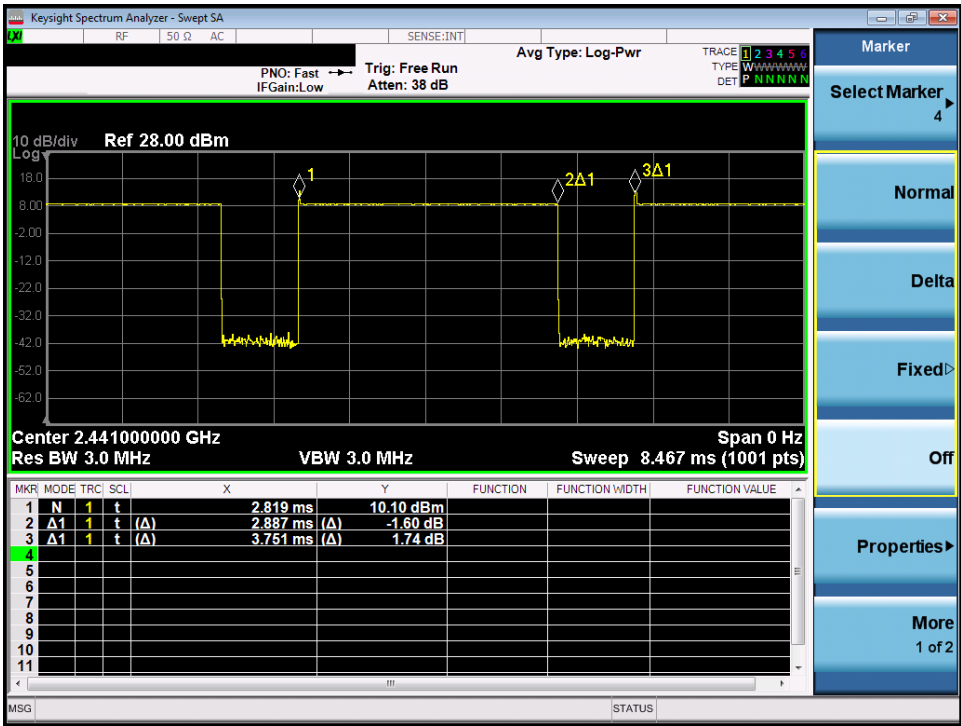


Figure 8-6
Bluetooth Transmission Plot – Ant 4a, Variant 1

Equation 8-1
Bluetooth Duty Cycle Calculation – Ant 4a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.887ms}{3.751ms} * 100\% = 77.0\%$$

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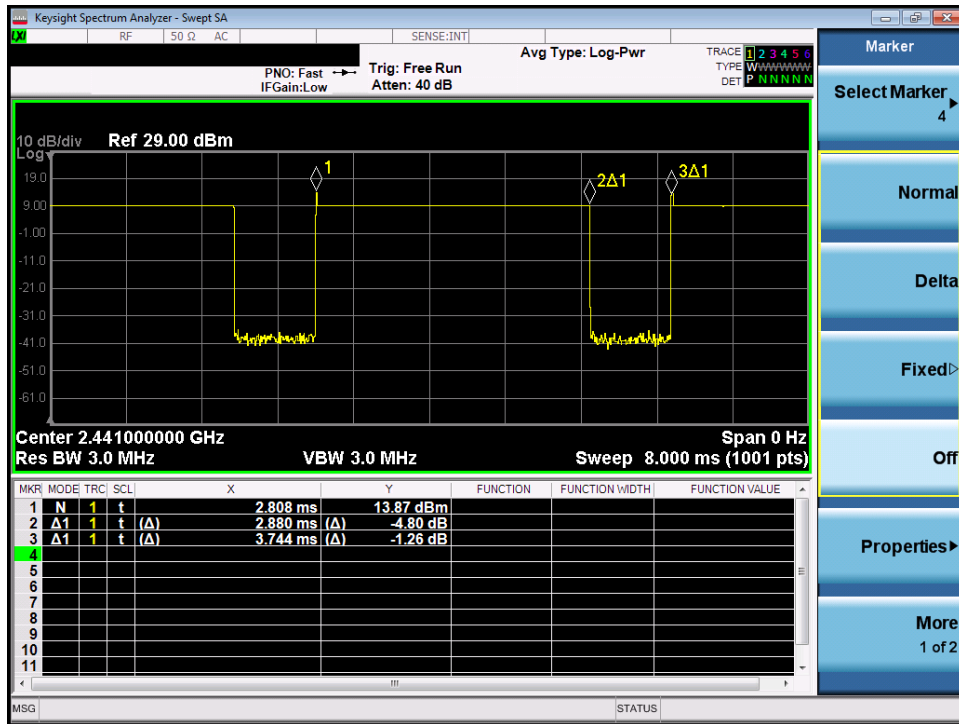


Figure 8-7
Bluetooth Transmission Plot – Ant 4a, Variant 2

Equation 8-2
Bluetooth Duty Cycle Calculation – Ant 4a, Variant 2

$$\text{Duty Cycle} = \frac{\text{Pulse Width}}{\text{Period}} * 100\% = \frac{2.880\text{ms}}{3.744\text{ms}} * 100\% = 76.9\%$$

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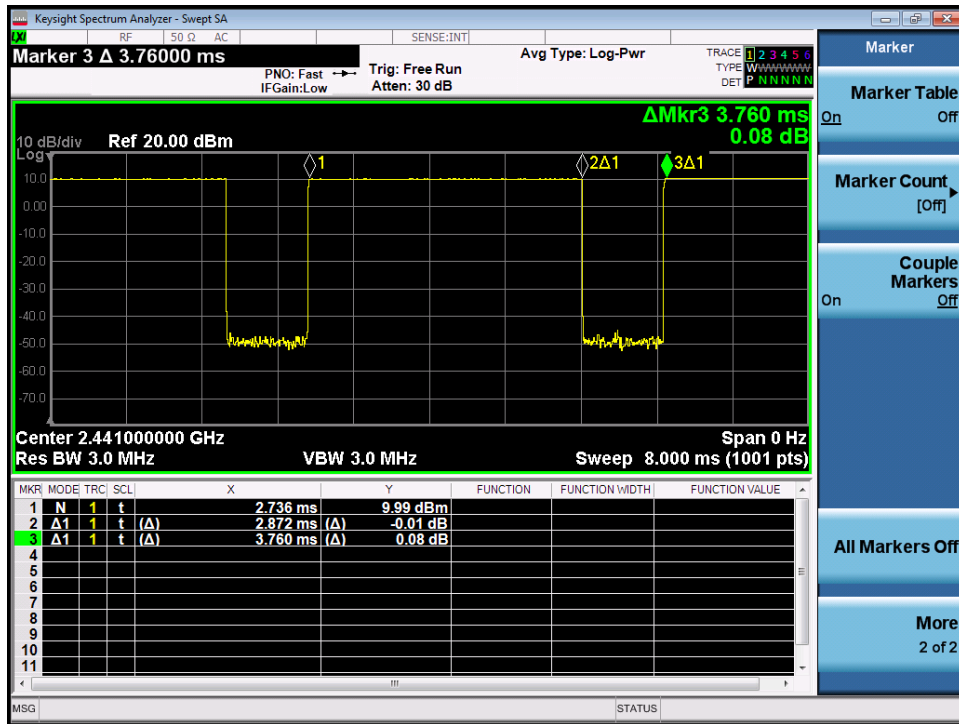


Figure 8-8
Bluetooth Transmission Plot – Ant 2a, Variant 1

Equation 8-3
Bluetooth Duty Cycle Calculation – Ant 2a, Variant 1

$$\text{Duty Cycle} = \frac{\text{Pulse Width}}{\text{Period}} * 100\% = \frac{2.872\text{ms}}{3.760\text{ms}} * 100\% = 76.4\%$$

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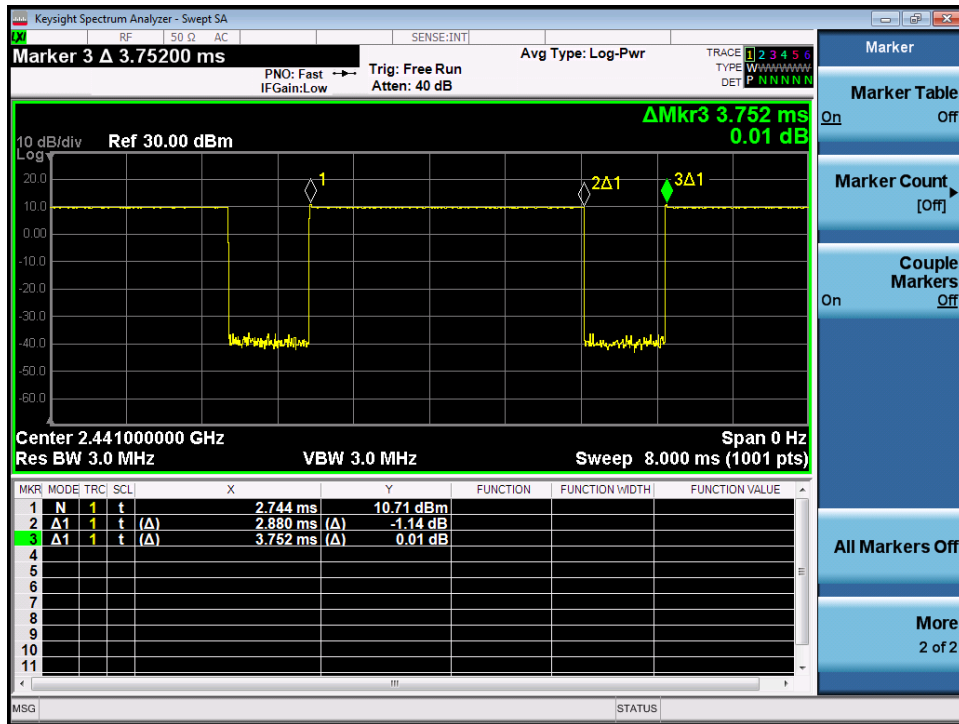


Figure 8-9
Bluetooth Transmission Plot – Ant 2a, Variant 2

Equation 8-4
Bluetooth Duty Cycle Calculation – Ant 2a, Variant 2

$$\text{Duty Cycle} = \frac{\text{Pulse Width}}{\text{Period}} * 100\% = \frac{2.880\text{ms}}{3.752\text{ms}} * 100\% = 76.8\%$$

8.12 Bluetooth Power Reduction Verification Summary

Table 8-116
Bluetooth Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm]	Reduced Target Power [dBm]	Maximum Measured Power	Reduced Measured Power	Verdict
Ant 4A	2.4 GHz Bluetooth	Main Band 4A/4B ON	12.75	9.75	(Tolerance [dB])	(Tolerance [dB])	[dBm]	[dBm]	PASS
	2.4 GHz Bluetooth	Main Band 3 ON	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.54	8.60	PASS
	2.4 GHz Bluetooth	5GHz WLAN Ant 4B/5B ON	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.54	8.79	PASS
	2.4 GHz Bluetooth	ULCA ON	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.49	8.71	PASS
	2.4 GHz Bluetooth	Main Band 1 ON and 5GHz WLAN Ant 4B/5B ON	12.75	10.75	11.25 (+1.5/-2)	9.25 (+1.5/-2)	11.54	9.70	PASS
	2.4 GHz Bluetooth	Ant 2A/2B ON and 5GHz WLAN Ant 4B/5B ON	12.75	10.75	11.25 (+1.5/-2)	9.25 (+1.5/-2)	11.54	9.72	PASS
	2.4 GHz Bluetooth	Main Band 3 ON and 5GHz WLAN Ant 4B/5B ON	12.75	5.75	11.25 (+1.5/-2)	4.25 (+1.5/-2)	11.54	4.63	PASS
	2.4 GHz Bluetooth	Main Band 4A/4B ON and 5GHz WLAN Ant 4B/5B ON	12.75	5.75	11.25 (+1.5/-2)	4.25 (+1.5/-2)	11.54	4.73	PASS
Ant 2A	2.4 GHz Bluetooth	ULCA ON and 5GHz WLAN Ant 4B/5B ON	12.75	5.75	11.25 (+1.5/-2)	4.25 (+1.5/-2)	11.54	4.66	PASS
	2.4 GHz Bluetooth	Main Band 1 ON	14	10	12.50 (+1.5/-2)	8.50 (+1.5/-2)	13.12	8.58	PASS
	2.4 GHz Bluetooth	Main Band 2A/2B ON	14	10	12.50 (+1.5/-2)	8.50 (+1.5/-2)	13.12	8.57	PASS
	2.4 GHz Bluetooth	Main Band 1 on and 5 GHz WLAN 4B/5B on	14	10	12.50 (+1.5/-2)	8.50 (+1.5/-2)	13.12	8.51	PASS
	2.4 GHz Bluetooth	Ant 2A/2B ON and 5GHz WLAN Ant 4B/5B ON	14	10	12.50 (+1.5/-2)	8.50 (+1.5/-2)	13.12	8.57	PASS
	2.4 GHz Bluetooth	Main Band 3 ON and 5GHz WLAN Ant 4B/5B ON	14	11	12.50 (+1.5/-2)	9.50 (+1.5/-2)	13.12	9.99	PASS
	2.4 GHz Bluetooth	Main Band 4A/4B ON and 5GHz WLAN Ant 4B/5B ON	14	11	12.50 (+1.5/-2)	9.50 (+1.5/-2)	13.12	9.98	PASS
	2.4 GHz Bluetooth	ULCA ON and 5GHz WLAN Ant 4B/5B ON	14	10	12.50 (+1.5/-2)	8.50 (+1.5/-2)	13.12	9.90	PASS
	2.4 GHz Bluetooth	5GHz WLAN Ant 4B/5B ON	14	11	12.50 (+1.5/-2)	9.50 (+1.5/-2)	13.12	9.77	PASS
	2.4 GHz Bluetooth	ULCA ON	14	11	12.50 (+1.5/-2)	9.50 (+1.5/-2)	13.12	9.93	PASS

Conducted powers were measured for each Mode/Band and applied condition. All conducted power measurements were verified to be within tolerance.

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8.1 Notes for Bluetooth

- The Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report.
- Bluetooth SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining Bluetooth configurations.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

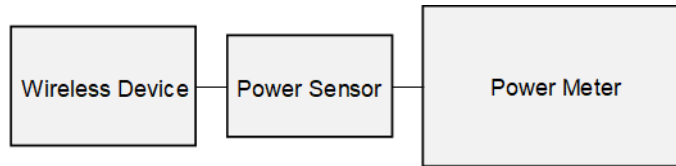


Figure 8-10
Power Measurement Setup

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9 SYSTEM VERIFICATION

9.1 Tissue Verification

Table 9-1
Measured Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ϵ	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ϵ	% dev σ	% dev ϵ
1/6/2021	750B	21.2	680	0.946	53.980	0.958	55.804	-1.25%	-3.27%
			695	0.951	53.947	0.959	55.745	-0.83%	-3.23%
			700	0.953	53.936	0.959	55.726	-0.63%	-3.21%
			710	0.956	53.912	0.960	55.687	-0.42%	-3.19%
			720	0.960	53.888	0.961	55.648	-0.10%	-3.16%
			725	0.961	53.875	0.961	55.629	0.00%	-3.15%
			740	0.966	53.840	0.963	55.570	0.31%	-3.11%
			755	0.972	53.808	0.964	55.512	0.83%	-3.07%
			770	0.978	53.778	0.965	55.453	1.35%	-3.02%
			785	0.984	53.745	0.966	55.395	1.86%	-2.98%
			800	0.991	53.710	0.967	55.336	2.48%	-2.94%
1/18/2021	750B	21.2	680	0.939	54.406	0.958	55.804	-1.98%	-2.51%
			695	0.944	54.373	0.959	55.745	-1.56%	-2.46%
			700	0.946	54.363	0.959	55.726	-1.36%	-2.45%
			710	0.949	54.344	0.960	55.687	-1.15%	-2.41%
			720	0.953	54.322	0.961	55.648	-0.83%	-2.38%
			725	0.954	54.311	0.961	55.629	-0.73%	-2.37%
			740	0.960	54.275	0.963	55.570	-0.31%	-2.33%
			755	0.966	54.240	0.964	55.512	0.21%	-2.29%
			770	0.971	54.208	0.965	55.453	0.62%	-2.25%
			785	0.977	54.182	0.966	55.395	1.14%	-2.19%
			800	0.983	54.159	0.967	55.336	1.65%	-2.13%
1/20/2021	750B	21.5	680	0.966	54.069	0.958	55.804	0.84%	-3.11%
			695	0.972	54.036	0.959	55.745	1.36%	-3.07%
			700	0.974	54.023	0.959	55.726	1.56%	-3.06%
			710	0.978	53.994	0.960	55.687	1.88%	-3.04%
			720	0.982	53.962	0.961	55.648	2.19%	-3.03%
			725	0.984	53.940	0.961	55.629	2.39%	-3.04%
			740	0.989	53.881	0.963	55.570	2.70%	-3.04%
			755	0.994	53.833	0.964	55.512	3.11%	-3.02%
			770	1.000	53.795	0.965	55.453	3.63%	-2.99%
			785	1.006	53.772	0.966	55.395	4.14%	-2.93%
			800	1.012	53.747	0.967	55.336	4.65%	-2.87%
1/24/2021	750B	20.4	680	0.922	54.457	0.958	55.804	-3.76%	-2.41%
			695	0.927	54.424	0.959	55.745	-3.34%	-2.37%
			700	0.929	54.413	0.959	55.726	-3.13%	-2.36%
			710	0.932	54.391	0.960	55.687	-2.92%	-2.33%
			720	0.936	54.367	0.961	55.648	-2.60%	-2.30%
			725	0.938	54.355	0.961	55.629	-2.39%	-2.29%
			740	0.944	54.311	0.963	55.570	-1.97%	-2.27%
			755	0.950	54.271	0.964	55.512	-1.45%	-2.24%
			770	0.955	54.235	0.965	55.453	-1.04%	-2.20%
			785	0.961	54.206	0.966	55.395	-0.52%	-2.15%
			800	0.967	54.182	0.967	55.336	0.00%	-2.09%
2/11/2021	750B	21.7	680	0.944	53.722	0.958	55.804	-1.46%	-3.73%
			695	0.949	53.688	0.959	55.745	-1.04%	-3.69%
			700	0.951	53.675	0.959	55.726	-0.83%	-3.68%
			710	0.955	53.653	0.960	55.687	-0.52%	-3.65%
			720	0.958	53.629	0.961	55.648	-0.31%	-3.63%
			725	0.960	53.618	0.961	55.629	-0.10%	-3.62%
			740	0.966	53.584	0.963	55.570	0.31%	-3.57%
			755	0.971	53.547	0.964	55.512	0.73%	-3.54%
			770	0.977	53.515	0.965	55.453	1.24%	-3.49%
			785	0.983	53.482	0.966	55.395	1.76%	-3.45%
			800	0.988	53.454	0.967	55.336	2.17%	-3.40%
1/6/2021	835B	19.9	800	0.957	53.601	0.967	55.336	-1.03%	-3.14%
			820	0.977	53.393	0.969	55.258	0.83%	-3.38%
			835	0.993	53.220	0.970	55.200	2.37%	-3.59%
			850	1.008	53.044	0.988	55.154	2.02%	-3.83%
1/15/2021	835B	21.5	820	0.981	53.438	0.969	55.258	1.24%	-3.29%
			835	0.996	53.283	0.970	55.200	2.68%	-3.47%
			850	1.011	53.129	0.988	55.154	2.33%	-3.67%
			870	0.978	54.809	0.969	55.258	0.93%	-0.81%
1/20/2021	835B	20.8	835	0.993	54.654	0.970	55.200	2.37%	-0.99%
			850	1.009	54.497	0.988	55.154	2.13%	-1.19%
			870	0.986	53.994	0.969	55.258	1.75%	-2.29%
			885	1.002	53.826	0.970	55.200	3.30%	-2.49%
1/22/2021	835B	21.9	850	1.017	53.657	0.988	55.154	2.94%	-2.71%
			870	0.974	52.850	0.967	55.336	0.72%	-4.49%
			885	0.982	52.815	0.969	55.258	1.34%	-4.42%
			900	0.987	52.756	0.970	55.200	1.75%	-4.43%
2/3/2021	835B	20.8	850	0.994	52.715	0.988	55.154	0.61%	-4.42%

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Table 9-2
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ϵ	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ϵ	% dev σ	% dev ϵ
1/10/2021	1750B	21.3	1710	1.478	50.896	1.463	53.537	1.03%	-4.93%
			1750	1.506	50.846	1.488	53.432	1.21%	-4.84%
			1790	1.532	50.764	1.514	53.326	1.19%	-4.80%
1/14/2021	1750B	22.1	1710	1.491	51.531	1.463	53.537	1.91%	-3.75%
			1750	1.517	51.500	1.488	53.432	1.95%	-3.62%
			1790	1.544	51.443	1.514	53.326	1.98%	-3.53%
2/24/2021	1750B	23.0	1710	1.437	51.407	1.463	53.537	-1.78%	-3.98%
			1750	1.462	51.330	1.488	53.432	-1.75%	-3.93%
			1790	1.486	51.240	1.514	53.326	-1.85%	-3.91%
1/12/2021	1900B	22.4	1850	1.472	51.821	1.520	53.300	-3.16%	-2.77%
			1880	1.505	51.701	1.520	53.300	-0.99%	-3.00%
			1910	1.538	51.595	1.520	53.300	1.18%	-3.20%
1/18/2021	1900B	21.5	1850	1.522	52.338	1.520	53.300	0.13%	-1.80%
			1880	1.558	52.203	1.520	53.300	2.50%	-2.06%
			1910	1.593	52.091	1.520	53.300	4.80%	-2.27%
1/22/2021	1900B	21.7	1850	1.490	52.565	1.520	53.300	-1.97%	-1.38%
			1880	1.524	52.437	1.520	53.300	0.26%	-1.62%
			1910	1.558	52.320	1.520	53.300	2.50%	-1.84%
3/1/2021	1900B	22.8	1850	1.548	52.263	1.520	53.300	1.84%	-1.95%
			1880	1.568	52.230	1.520	53.300	3.16%	-2.01%
			1910	1.589	52.194	1.520	53.300	4.54%	-2.08%
1/6/2021	2300B	21.8	2300	1.889	51.697	1.809	52.900	4.42%	-2.27%
			2310	1.898	51.685	1.816	52.887	4.52%	-2.27%
			2320	1.906	51.675	1.826	52.873	4.38%	-2.27%
1/15/2021	2450B-2600B	21.9	2400	1.984	51.624	1.902	52.767	4.31%	-2.17%
			2450	2.024	51.560	1.950	52.700	3.79%	-2.16%
			2500	2.074	51.462	2.021	52.636	2.62%	-2.23%
			2550	2.116	51.412	2.092	52.573	1.15%	-2.21%
			2600	2.167	51.303	2.163	52.509	0.18%	-2.30%
			2650	2.213	51.264	2.234	52.445	-0.94%	-2.25%
			2700	2.262	51.141	2.305	52.382	-1.87%	-2.37%
1/15/2021	2450B-2600B	23.6	2400	1.964	52.001	1.902	52.767	3.26%	-1.45%
			2450	2.008	51.929	1.950	52.700	2.97%	-1.46%
			2500	2.054	51.847	2.021	52.636	1.63%	-1.50%
			2550	2.098	51.781	2.092	52.573	0.29%	-1.51%
			2600	2.147	51.685	2.163	52.509	-0.74%	-1.57%
			2650	2.191	51.641	2.234	52.445	-1.92%	-1.53%
			2700	2.237	51.533	2.305	52.382	-2.95%	-1.62%
1/17/2021	2450B	22.1	2400	1.964	51.151	1.902	52.767	3.26%	-3.06%
			2450	2.031	50.945	1.950	52.700	4.15%	-3.33%
			2500	2.099	50.745	2.021	52.636	3.86%	-3.59%
1/23/2021	2450B	22.8	2400	1.944	51.807	1.902	52.767	2.21%	-1.82%
			2450	2.015	51.635	1.950	52.700	3.33%	-2.02%
			2500	2.083	51.441	2.021	52.636	3.07%	-2.27%
1/31/2021	2450B-2600B	22.5	2400	1.987	50.376	1.902	52.767	4.47%	-4.53%
			2450	2.033	50.317	1.950	52.700	4.26%	-4.52%
			2500	2.078	50.231	2.021	52.636	2.82%	-4.57%
			2550	2.127	50.158	2.092	52.573	1.67%	-4.59%
			2600	2.173	50.065	2.163	52.509	0.46%	-4.65%
			2650	2.221	49.988	2.234	52.445	-0.58%	-4.68%
			2700	2.266	49.886	2.305	52.382	-1.69%	-4.76%
2/21/2021	2450B-2600B	23.4	2400	1.970	52.277	1.902	52.767	3.58%	-0.93%
			2450	2.012	52.219	1.950	52.700	3.18%	-0.91%
			2500	2.060	52.150	2.021	52.636	1.93%	-0.92%
			2550	2.104	52.091	2.092	52.573	0.57%	-0.92%
			2600	2.152	52.008	2.163	52.509	-0.51%	-0.95%
			2650	2.200	51.943	2.234	52.445	-1.52%	-0.96%
			2700	2.248	51.850	2.305	52.382	-2.47%	-1.02%
2/22/2021	2450B-2600B	22.4	2400	1.994	50.414	1.902	52.767	4.84%	-4.46%
			2450	2.039	50.351	1.950	52.700	4.56%	-4.46%
			2500	2.086	50.264	2.021	52.636	3.22%	-4.51%
			2550	2.131	50.195	2.092	52.573	1.86%	-4.52%
			2600	2.179	50.101	2.163	52.509	0.74%	-4.59%
			2650	2.225	50.019	2.234	52.445	-0.40%	-4.63%
			2700	2.271	49.918	2.305	52.382	-1.48%	-4.70%
3/15/2021	2450B	22.1	2750	2.318	49.845	2.375	52.320	-2.40%	-4.73%
			2400	1.993	50.901	1.902	52.767	4.78%	-3.54%
			2450	2.036	50.838	1.950	52.700	4.41%	-3.53%
			2500	2.081	50.761	2.021	52.636	2.97%	-3.56%

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Table 9-3
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ϵ	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ϵ	% dev σ	% dev ϵ
1/13/2021	3500B-3700B	21.5	3500	3.363	49.549	3.314	51.321	1.48%	-3.45%
			3550	3.412	49.480	3.372	51.254	1.19%	-3.46%
			3600	3.469	49.398	3.431	51.186	1.11%	-3.49%
			3645	3.514	49.347	3.483	51.125	0.89%	-3.48%
			3685	3.560	49.279	3.530	51.070	0.85%	-3.51%
			3725	3.604	49.228	3.577	51.016	0.75%	-3.50%
3/15/2021	3500B-3700B	20.8	3500	3.407	50.614	3.314	51.321	2.81%	-1.38%
			3550	3.459	50.544	3.372	51.254	2.58%	-1.39%
			3590	3.471	50.527	3.384	51.240	2.57%	-1.39%
			3600	3.522	50.471	3.431	51.186	2.65%	-1.40%
			3650	3.570	50.391	3.489	51.118	2.32%	-1.42%
			3690	3.621	50.330	3.536	51.063	2.40%	-1.44%
2/8/2021	3700B-3900B	19.5	3700	3.632	50.322	3.548	51.050	2.37%	-1.43%
			3750	3.688	50.238	3.606	50.982	2.27%	-1.46%
			3500	3.227	50.583	3.314	51.321	-2.63%	-1.44%
			3550	3.286	50.493	3.372	51.254	-2.55%	-1.48%
			3560	3.298	50.474	3.384	51.240	-2.54%	-1.49%
			3600	3.350	50.416	3.431	51.186	-2.36%	-1.50%
01/21/2021	5200B-5800B	22.0	3650	3.407	50.331	3.489	51.118	-2.35%	-1.54%
			3690	3.459	50.253	3.536	51.063	-2.18%	-1.59%
			3700	3.471	50.241	3.548	51.050	-2.17%	-1.58%
			3750	3.533	50.149	3.606	50.982	-2.02%	-1.63%
			3900	3.723	49.893	3.781	50.779	-1.53%	-1.74%
			3930	3.764	49.852	3.816	50.738	-1.36%	-1.75%
2/18/2021	5200B-5800B	22.5	5180	5.433	47.870	5.276	49.041	2.98%	-2.39%
			5200	5.460	47.821	5.299	49.014	3.04%	-2.43%
			5220	5.491	47.786	5.323	48.987	3.16%	-2.45%
			5240	5.518	47.772	5.346	48.960	3.22%	-2.43%
			5260	5.543	47.735	5.369	48.933	3.24%	-2.45%
			5280	5.569	47.679	5.393	48.906	3.26%	-2.51%
			5300	5.595	47.640	5.416	48.879	3.31%	-2.53%
			5320	5.623	47.614	5.439	48.851	3.38%	-2.53%
			5500	5.862	47.316	5.660	48.607	3.75%	-2.66%
			5520	5.890	47.290	5.673	48.580	3.83%	-2.72%
			5540	5.917	47.239	5.696	48.553	3.88%	-2.71%
			5560	5.948	47.189	5.720	48.526	3.99%	-2.76%
			5580	5.981	47.159	5.743	48.499	4.14%	-2.76%
			5600	6.003	47.124	5.766	48.471	4.11%	-2.78%
			5620	6.030	47.096	5.790	48.444	4.15%	-2.78%
			5640	6.058	47.063	5.813	48.417	4.21%	-2.80%
			5660	6.089	47.014	5.837	48.390	4.32%	-2.84%
			5680	6.117	46.971	5.860	48.363	4.39%	-2.88%
			5700	6.146	46.946	5.883	48.336	4.47%	-2.88%
			5745	6.212	46.879	5.936	48.275	4.65%	-2.89%
			5765	6.234	46.829	5.959	48.248	4.61%	-2.94%
			5785	6.267	46.769	5.982	48.220	4.76%	-3.01%
			5800	6.289	46.756	6.000	48.200	4.82%	-3.00%
			5805	6.295	46.756	6.006	48.193	4.81%	-2.98%
			5825	6.326	46.738	6.029	48.166	4.93%	-2.96%
			5180	5.347	47.786	5.276	49.041	1.35%	-2.66%
			5200	5.383	47.749	5.299	49.014	1.59%	-2.68%
			5220	5.403	47.737	5.323	48.987	1.50%	-2.55%
			5240	5.422	47.710	5.346	48.960	1.42%	-2.55%
			5260	5.447	47.663	5.369	48.933	1.45%	-2.60%
			5280	5.475	47.608	5.393	48.906	1.52%	-2.65%
			5300	5.504	47.565	5.416	48.879	1.62%	-2.69%
			5320	5.530	47.540	5.439	48.851	1.67%	-2.68%
			5500	5.752	47.218	5.650	48.607	1.81%	-2.86%
			5520	5.788	47.194	5.673	48.580	2.03%	-2.85%
			5540	5.815	47.182	5.696	48.553	2.09%	-2.82%
			5560	5.844	47.155	5.720	48.526	2.17%	-2.83%
			5580	5.870	47.090	5.743	48.499	2.21%	-2.91%
			5600	5.893	47.060	5.766	48.471	2.20%	-2.91%
			5620	5.922	47.020	5.790	48.444	2.28%	-2.94%
			5640	5.953	46.989	5.813	48.417	2.41%	-2.95%
			5660	5.982	46.979	5.837	48.390	2.48%	-2.92%
			5680	6.008	46.944	5.860	48.363	2.53%	-2.93%
			5700	6.034	46.897	5.883	48.336	2.57%	-2.98%
			5745	6.095	46.819	5.936	48.275	2.68%	-3.02%
			5765	6.130	46.795	5.959	48.248	2.87%	-3.01%
			5785	6.163	46.747	5.982	48.220	3.03%	-3.05%
			5800	6.178	46.733	6.000	48.200	2.97%	-3.04%
			5805	6.183	46.727	6.006	48.193	2.95%	-3.04%
			5825	6.202	46.683	6.029	48.166	2.87%	-3.08%

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

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9.2 Test System Verification

Prior to SAR assessment, the system is verified to $\pm 10\%$ of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix D.

Table 9-4
System Verification Results – 1g

System Verification												
TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR _{1g} (W/kg)	1 W Target SAR _{1g} (W/kg)	1 W Normalized SAR _{1g} (W/kg)	Deviation (%)
AM1	750	BODY	01/06/2021	22.6	21.0	0.200	1034	7427	1.720	8.570	8.600	0.35%
AM6	750	BODY	01/18/2021	22.3	20.9	0.200	1034	7558	1.770	8.570	8.850	3.27%
AM6	750	BODY	01/20/2021	21.3	21.1	0.200	1034	7558	1.740	8.570	8.700	1.52%
AM6	750	BODY	01/24/2021	20.9	20.3	0.200	1034	7558	1.710	8.570	8.550	-0.23%
AM6	750	BODY	02/11/2021	23.1	20.6	0.200	1057	7546	1.730	8.640	8.650	0.12%
AM6	835	BODY	01/06/2021	22.1	19.6	0.200	40940	7546	2.030	9.530	10.150	6.51%
AM4	850	BODY	01/15/2021	23.1	21.4	0.200	1010	7421	2.140	9.970	10.700	7.32%
AM4	850	BODY	01/20/2021	22.2	20.4	0.200	1010	7421	2.150	9.970	10.750	7.82%
AM4	850	BODY	01/22/2021	23.1	21.4	0.200	1010	7421	2.100	9.970	10.500	5.32%
AM6	835	BODY	02/03/2021	23.8	20.7	0.200	40940	7546	2.010	9.530	10.050	5.46%
AM6	1750	BODY	01/10/2021	22.7	21.1	0.100	1092	7558	3.650	36.400	36.500	0.27%
AM6	1750	BODY	01/14/2021	22.3	21.5	0.100	1092	7558	3.780	36.400	37.800	3.85%
AM6	1750	BODY	02/24/2021	22.5	22.8	0.100	1092	7558	3.850	36.400	38.900	6.87%
AM7	1900	BODY	01/12/2021	23.4	22.4	0.100	54180	7420	3.890	39.000	38.900	-0.26%
AM7	1900	BODY	01/18/2021	22.1	21.0	0.100	54026	7420	4.020	39.900	40.200	0.75%
AM7	1900	BODY	01/22/2021	22.5	21.7	0.100	54180	7420	3.970	39.000	39.700	1.79%
AM6	1900	BODY	03/01/2021	23.6	22.8	0.100	54026	7558	4.060	39.900	40.600	1.75%
AM5	2300	BODY	01/06/2021	22.3	20.4	0.100	1064	3949	4.890	48.400	48.900	1.03%
AM6	2450	BODY	01/15/2021	24.4	21.0	0.100	945	7546	5.280	49.400	52.800	6.88%
AM5	2450	BODY	01/15/2021	23.1	21.6	0.100	945	3949	5.250	49.400	52.500	6.28%
AM1	2450	BODY	01/17/2021	23.8	21.5	0.100	945	7427	4.970	49.400	49.700	0.61%
AM1	2450	BODY	01/23/2021	23.6	22.4	0.100	921	7427	5.330	50.800	53.300	4.92%
AM6	2450	BODY	01/31/2021	22.1	22.0	0.100	921	7546	5.140	50.800	51.400	1.18%
AM6	2450	BODY	02/21/2021	22.1	23.0	0.100	945	7558	5.100	49.400	51.000	3.24%
AM7	2450	BODY	02/22/2021	22.5	22.4	0.100	945	7420	5.140	49.400	51.400	4.05%
AM6	2450	BODY	03/15/2021	23.8	21.3	0.100	921	7546	5.330	50.800	53.300	4.92%
AM6	2600	BODY	01/15/2021	24.4	21.0	0.100	1009	7546	5.690	55.500	56.900	2.52%
AM5	2600	BODY	01/15/2021	23.1	21.6	0.100	1009	3949	5.620	55.500	56.200	4.86%
AM6	2600	BODY	01/31/2021	22.1	22.0	0.100	1009	7546	5.250	55.500	52.500	-5.41%
AM6	2600	BODY	02/21/2021	22.1	23.0	0.100	1009	7558	5.250	55.500	52.500	-5.41%
AM7	2600	BODY	02/22/2021	22.5	22.4	0.100	1009	7420	5.370	55.500	53.700	-3.24%
AM4	3500	BODY	01/13/2021	22.2	20.4	0.100	1055	7421	6.350	65.000	63.500	-2.31%
AM1	3500	BODY	03/15/2021	20.6	20.4	0.100	1055	3837	6.300	65.000	63.000	-3.08%
AM4	3700	BODY	01/13/2021	22.2	20.4	0.100	1002	7421	6.200	64.700	62.000	-4.17%
AM1	3700	BODY	02/08/2021	22.6	21.0	0.100	1002	3837	6.720	64.700	67.200	3.86%
AM1	3700	BODY	03/15/2021	20.6	20.4	0.100	1002	3837	6.620	64.700	66.200	5.41%
AM1	3900	BODY	02/08/2021	22.6	21.0	0.100	1062	3837	6.690	66.300	66.500	0.30%
AM2	5250	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.620	77.700	72.400	-6.82%
AM2	5250	BODY	02/18/2021	22.8	21.0	0.050	1123	7416	3.460	74.000	69.200	-6.49%
AM2	5600	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.880	80.100	77.600	-3.12%
AM2	5600	BODY	02/18/2021	22.8	21.0	0.050	1123	7416	3.830	77.800	76.600	-1.29%
AM2	5750	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.740	77.800	74.800	-3.86%
AM2	5750	BODY	02/18/2021	22.8	21.0	0.050	1123	7416	3.890	74.700	77.800	4.15%

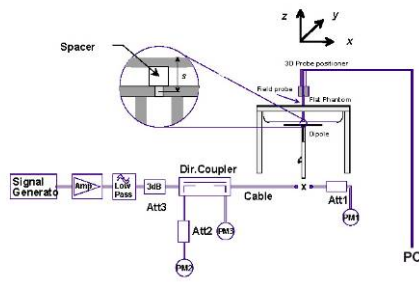


Figure 9-1
System Verification Setup Diagram



Figure 9-2
System Verification Setup Photo

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10 SAR DATA SUMMARY

10.1 Standalone SAR Data

Table 10-1
GPRS 850 MHz Ant 1 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
Mhz	Ch.																		
824.20	128	GSM 850	GPRS	25.50	24.30	-0.02	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	back	0.608	1.318	0.801	0.240	0.316	A1
836.60	190	GSM 850	GPRS	25.50	24.33	0.04	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	back	0.559	1.309	0.732	0.227	0.297	
848.80	251	GSM 850	GPRS	25.50	24.09	0.03	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	back	0.489	1.384	0.677	0.224	0.310	
836.60	190	GSM 850	GPRS	25.50	24.33	0.20	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	top	0.010	1.309	0.013	0.004	0.005	
836.60	190	GSM 850	GPRS	25.50	24.33	-0.08	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	bottom	0.367	1.309	0.480	0.154	0.202	
836.60	190	GSM 850	GPRS	25.50	24.33	0.21	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	right	0.019	1.309	0.025	0.008	0.010	
836.60	190	GSM 850	GPRS	25.50	24.33	0.02	Body	0 mm	Ant 1	NRWNT4PNEV	2	1:4.15	left	0.245	1.309	0.321	0.110	0.144	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT													Body						
Spatial Peak													1.6 W/kg (mW/g)						
Uncontrolled Exposure/General Population													averaged over 1 gram						

Table 10-2
GPRS 850 MHz Ant 3 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
Mhz	Ch.													(W/kg)		(W/kg)	(W/kg)		
824.20	128	GSM 850	GPRS	24.70	22.84	0.21	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	back	0.516	1.535	0.792	0.279	0.428	
836.60	190	GSM 850	GPRS	24.70	23.06	0.10	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	back	0.529	1.459	0.772	0.273	0.398	
848.80	251	GSM 850	GPRS	24.70	22.73	0.01	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	back	0.407	1.574	0.641	0.217	0.342	
836.60	190	GSM 850	GPRS	24.70	23.06	-0.11	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	top	0.475	1.459	0.693	0.199	0.290	
836.60	190	GSM 850	GPRS	24.70	23.06	0.20	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	bottom	0.008	1.459	0.012	0.002	0.003	
836.60	190	GSM 850	GPRS	24.70	23.06	-0.05	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	right	0.138	1.459	0.201	0.068	0.099	
836.60	190	GSM 850	GPRS	24.70	23.06	0.00	Body	0 mm	Ant 3	NRWNT4PNEV	2	1:4.15	left	0.017	1.459	0.025	0.007	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT														Body					
Spatial Peak														1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population														averaged over 1 gram					

Table 10-3
GPRS 1900 MHz Ant 1 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																		
1880.00	661	GSM 1900	GPRS	20.90	18.90	-0.02	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	back	0.340	1.585	0.539	0.167	0.265	
1880.00	661	GSM 1900	GPRS	20.90	18.90	0.20	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	top	0.011	1.585	0.017	0.007	0.011	
1880.00	661	GSM 1900	GPRS	20.90	18.90	0.03	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	bottom	0.125	1.585	0.198	0.059	0.094	
1880.00	661	GSM 1900	GPRS	20.90	18.90	0.19	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	right	0.004	1.585	0.006	0.002	0.003	
1850.20	512	GSM 1900	GPRS	20.90	19.00	0.03	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	left	0.354	1.549	0.548	0.150	0.232	
1880.00	661	GSM 1900	GPRS	20.90	18.90	0.05	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	left	0.429	1.585	0.680	0.177	0.281	
1909.80	810	GSM 1900	GPRS	20.90	18.91	-0.02	Body	0 mm	Ant 1	P7W7QRC22F	2	1:4.15	left	0.404	1.581	0.639	0.167	0.264	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT														Body					
Spatial Peak														1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population														averaged over 1.0 gm					

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Table 10-4
GPRS 1900 MHz Ant 2b Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)					
1880.00	661	GSM 1900	GPRS	20.90	18.92	-0.01	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	back	0.468	1.578	0.739	0.215	0.339	
1880.00	661	GSM 1900	GPRS	20.90	18.92	0.20	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	top	0.015	1.578	0.024	0.008	0.013	
1850.20	512	GSM 1900	GPRS	20.90	18.99	-0.05	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	bottom	0.401	1.552	0.622	0.158	0.245	
1880.00	661	GSM 1900	GPRS	20.90	18.92	0.20	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	bottom	0.504	1.578	0.795	0.198	0.312	
1909.80	810	GSM 1900	GPRS	20.90	18.94	-0.02	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	bottom	0.428	1.570	0.672	0.167	0.262	
1880.00	661	GSM 1900	GPRS	20.90	18.92	-0.14	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	right	0.019	1.578	0.030	0.009	0.014	
1880.00	661	GSM 1900	GPRS	20.90	18.92	-0.16	Body	0 mm	Ant 2b	WWC090VTRF	1:4:15	left	0.005	1.578	0.008	0.001	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 10-5
GPRS 1900 MHz Ant 3 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1850.20	512	GSM 1900	GPRS	22.10	20.18	-0.04	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	back	0.302	1.556	0.470	0.150	0.233	
1880.00	661	GSM 1900	GPRS	22.10	20.10	0.00	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	back	0.379	1.585	0.601	0.200	0.317	
1909.80	810	GSM 1900	GPRS	22.10	20.12	-0.02	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	back	0.293	1.578	0.462	0.146	0.230	
1880.00	661	GSM 1900	GPRS	22.10	20.10	-0.04	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	top	0.237	1.585	0.376	0.097	0.154	
1880.00	661	GSM 1900	GPRS	22.10	20.10	0.01	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	bottom	0.014	1.585	0.022	0.008	0.013	
1880.00	661	GSM 1900	GPRS	22.10	20.10	-0.03	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	right	0.355	1.585	0.563	0.157	0.249	
1880.00	661	GSM 1900	GPRS	22.10	20.10	-0.20	Body	0 mm	Ant 3	K6PKG4309Q	2	1:4:15	left	0.001	1.585	0.002	0.000	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak														Body 1.6 W/kg (mW/g) averaged over 1 gram					
Uncontrolled Exposure/General Population																			

Table 10-6
GPRS 1900 MHz Ant 4b Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1850.20	512	GSM 1900	GPRS	19.00	17.86	-0.02	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	back	0.490	1.300	0.637	0.215	0.280	
1880.00	661	GSM 1900	GPRS	19.00	17.72	0.20	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	back	0.539	1.343	0.724	0.231	0.310	
1909.80	810	GSM 1900	GPRS	19.00	17.85	-0.02	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	back	0.611	1.303	0.796	0.248	0.323	A2
1880.00	661	GSM 1900	GPRS	19.00	17.72	0.00	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	top	0.442	1.343	0.594	0.177	0.238	
1880.00	661	GSM 1900	GPRS	19.00	17.72	-0.20	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	bottom	0.003	1.343	0.004	0.001	0.001	
1880.00	661	GSM 1900	GPRS	19.00	17.72	-0.19	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	right	0.004	1.343	0.005	0.002	0.003	
1880.00	661	GSM 1900	GPRS	19.00	17.72	0.14	Body	0 mm	Ant 4b	NRWNT4PNEV	2	1:4:15	left	0.021	1.343	0.028	0.010	0.013	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body									
Spatial Peak										1.6 W/kg (mW/g)									
Uncontrolled Exposure/General Population										averaged over 1 gram									

Table 10-7
UMTS 850 MHz Ant 1 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
826.40	4132	UMTS 850	RMC	18.90	17.85	0.20	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.606	1.274	0.772	0.291	0.371	
836.60	4183	UMTS 850	RMC	18.90	17.89	0.19	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.567	1.262	0.716	0.270	0.341	
846.60	4233	UMTS 850	RMC	18.90	17.89	0.12	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.521	1.262	0.658	0.250	0.316	
836.60	4183	UMTS 850	RMC	18.90	17.89	-0.13	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	top	0.022	1.262	0.028	0.013	0.016	
836.60	4183	UMTS 850	RMC	18.90	17.89	-0.09	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	bottom	0.385	1.262	0.486	0.167	0.211	
836.60	4183	UMTS 850	RMC	18.90	17.89	-0.20	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	right	0.026	1.262	0.033	0.015	0.019	
836.60	4183	UMTS 850	RMC	18.90	17.89	0.13	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	left	0.205	1.262	0.259	0.105	0.133	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram					

FCC ID: BCGA2301	 Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 128 of 211

Table 10-8
UMTS 850 MHz Ant 3 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
826.40	4132	UMTS 850	RMC	19.00	17.95	-0.01	Body	0 mm	Ant 3	P7W7QRC22F	1:1	back	0.624	1.274	0.795	0.330	0.420	
836.60	4183	UMTS 850	RMC	19.00	17.97	-0.02	Body	0 mm	Ant 3	P7W7QRC22F	1:1	back	0.655	1.268	0.831	0.331	0.420	A3
846.60	4233	UMTS 850	RMC	19.00	17.90	0.00	Body	0 mm	Ant 3	P7W7QRC22F	1:1	back	0.594	1.288	0.765	0.310	0.399	
836.60	4183	UMTS 850	RMC	19.00	17.97	-0.10	Body	0 mm	Ant 3	P7W7QRC22F	1:1	top	0.515	1.268	0.653	0.216	0.274	
836.60	4183	UMTS 850	RMC	19.00	17.97	0.20	Body	0 mm	Ant 3	P7W7QRC22F	1:1	bottom	0.011	1.268	0.014	0.006	0.008	
836.60	4183	UMTS 850	RMC	19.00	17.97	0.07	Body	0 mm	Ant 3	P7W7QRC22F	1:1	right	0.307	1.268	0.389	0.125	0.159	
836.60	4183	UMTS 850	RMC	19.00	17.97	0.10	Body	0 mm	Ant 3	P7W7QRC22F	1:1	left	0.022	1.268	0.028	0.011	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 10-9
UMTS 1750 MHz Ant 1 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)		(W/kg)	
1712.40	1312	UMTS 1750	RMC	15.50	15.25	-0.02	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.875	1.059	0.927	0.422	0.447	
1732.40	1412	UMTS 1750	RMC	15.50	15.28	-0.05	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.860	1.052	0.905	0.427	0.449	
1752.60	1513	UMTS 1750	RMC	15.50	15.23	-0.03	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	back	0.835	1.064	0.888	0.411	0.437	
1732.40	1412	UMTS 1750	RMC	15.50	15.28	0.06	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	top	0.032	1.052	0.034	0.015	0.016	
1732.40	1412	UMTS 1750	RMC	15.50	15.28	0.03	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	bottom	0.226	1.052	0.238	0.108	0.114	
1732.40	1412	UMTS 1750	RMC	15.50	15.28	0.00	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	right	0.000	1.052	0.000	0.000	0.000	
1712.40	1312	UMTS 1750	RMC	15.50	15.25	0.01	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	left	0.882	1.059	0.934	0.353	0.374	
1732.40	1412	UMTS 1750	RMC	15.50	15.28	0.00	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	left	0.870	1.052	0.915	0.349	0.367	
1752.60	1513	UMTS 1750	RMC	15.50	15.23	-0.02	Body	0 mm	Ant 1	NRWNT4PNEV	1:1	left	0.860	1.064	0.915	0.341	0.363	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT												Body						
Spatial Peak												1.6 W/kg (mW/g)						
Uncontrolled Exposure/General Population												averaged over 1 gram						

Table 10-10
UMTS 1750 MHz Ant 2b Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
1732.40	1412	UMTS 1750	RMC	15.00	14.82	-0.03	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	back	0.696	1.042	0.725	0.277	0.289	
1732.40	1412	UMTS 1750	RMC	15.00	14.82	0.20	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	top	0.001	1.042	0.001	0.000	0.000	
1712.40	1312	UMTS 1750	RMC	15.00	14.99	-0.02	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	bottom	0.761	1.002	0.763	0.297	0.298	
1732.40	1412	UMTS 1750	RMC	15.00	14.82	-0.04	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	bottom	0.770	1.042	0.802	0.300	0.313	
1752.60	1513	UMTS 1750	RMC	15.00	14.94	-0.05	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	bottom	0.839	1.014	0.851	0.318	0.322	
1732.40	1412	UMTS 1750	RMC	15.00	14.82	0.08	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	right	0.040	1.042	0.042	0.018	0.019	
1732.40	1412	UMTS 1750	RMC	15.00	14.82	0.21	Body	0 mm	Ant 2b	V9NL2W43VC	1:1	left	0.001	1.042	0.001	0.000	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 10-11
UMTS 1750 MHz Ant 3 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)					
1732.40	1412	UMTS 1750	RMC	16.00	15.12	-0.08	Body	0 mm	Ant 3	V9NL2W43VC	1:1	back	0.492	1.225	0.603	0.258	0.316	
1732.40	1412	UMTS 1750	RMC	16.00	15.12	0.01	Body	0 mm	Ant 3	V9NL2W43VC	1:1	top	0.169	1.225	0.207	0.069	0.085	
1732.40	1412	UMTS 1750	RMC	16.00	15.12	0.02	Body	0 mm	Ant 3	V9NL2W43VC	1:1	bottom	0.033	1.225	0.040	0.016	0.020	
1712.40	1312	UMTS 1750	RMC	16.00	15.08	-0.05	Body	0 mm	Ant 3	V9NL2W43VC	1:1	right	0.765	1.236	0.946	0.321	0.397	
1732.40	1412	UMTS 1750	RMC	16.00	15.12	-0.01	Body	0 mm	Ant 3	V9NL2W43VC	1:1	right	0.703	1.225	0.861	0.296	0.363	
1752.60	1513	UMTS 1750	RMC	16.00	15.10	-0.04	Body	0 mm	Ant 3	V9NL2W43VC	1:1	right	0.703	1.230	0.865	0.296	0.364	
1732.40	1412	UMTS 1750	RMC	16.00	15.12	0.20	Body	0 mm	Ant 3	V9NL2W43VC	1:1	left	0.005	1.225	0.006	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram					

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 129 of 211

Table 10-12
UMTS 1750 MHz Ant 4b Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
1712.40	1312	UMTS 1750	RMC	14.10	13.68	0.15	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	back	0.837	1.102	0.922	0.331	0.365	
1732.40	1412	UMTS 1750	RMC	14.10	13.67	-0.12	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	back	0.854	1.104	0.943	0.332	0.367	
1752.60	1513	UMTS 1750	RMC	14.10	13.66	0.10	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	back	0.902	1.107	0.999	0.349	0.386	A4
1732.40	1412	UMTS 1750	RMC	14.10	13.67	-0.02	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	top	0.694	1.104	0.766	0.274	0.302	
1732.40	1412	UMTS 1750	RMC	14.10	13.67	0.13	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	bottom	0.005	1.104	0.006	0.001	0.001	
1732.40	1412	UMTS 1750	RMC	14.10	13.67	0.21	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	right	0.002	1.104	0.002	0.001	0.001	
1732.40	1412	UMTS 1750	RMC	14.10	13.67	0.21	Body	0 mm	Ant 4b	V9NL2W43VC	1:1	left	0.051	1.104	0.056	0.022	0.024	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 10-13
UMTS 1900 MHz Ant 1 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
1852.40	9262	UMTS 1900	RMC	15.20	14.43	0.00	Body	0 mm	Ant 1	K6PKG4309Q	1:1	back	0.647	1.194	0.773	0.300	0.358	
1880.00	9400	UMTS 1900	RMC	15.20	14.27	0.02	Body	0 mm	Ant 1	K6PKG4309Q	1:1	back	0.660	1.239	0.818	0.303	0.375	
1907.60	9538	UMTS 1900	RMC	15.20	14.28	0.01	Body	0 mm	Ant 1	K6PKG4309Q	1:1	back	0.655	1.236	0.810	0.299	0.370	
1880.00	9400	UMTS 1900	RMC	15.20	14.27	0.20	Body	0 mm	Ant 1	K6PKG4309Q	1:1	top	0.013	1.239	0.016	0.005	0.006	
1880.00	9400	UMTS 1900	RMC	15.20	14.27	-0.12	Body	0 mm	Ant 1	K6PKG4309Q	1:1	bottom	0.205	1.239	0.254	0.102	0.126	
1880.00	9400	UMTS 1900	RMC	15.20	14.27	0.20	Body	0 mm	Ant 1	K6PKG4309Q	1:1	right	0.000	1.239	0.000	0.000	0.000	
1852.40	9262	UMTS 1900	RMC	15.20	14.43	0.01	Body	0 mm	Ant 1	K6PKG4309Q	1:1	left	0.638	1.194	0.762	0.260	0.310	
1880.00	9400	UMTS 1900	RMC	15.20	14.27	0.02	Body	0 mm	Ant 1	K6PKG4309Q	1:1	left	0.665	1.239	0.824	0.268	0.332	
1907.60	9538	UMTS 1900	RMC	15.20	14.28	0.04	Body	0 mm	Ant 1	K6PKG4309Q	1:1	left	0.668	1.236	0.826	0.272	0.336	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 10-14
UMTS 1900 MHz Ant 2b Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
1880.00	9400	UMTS 1900	RMC	15.00	13.70	-0.01	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	back	0.534	1.349	0.720	0.252	0.340	
1880.00	9400	UMTS 1900	RMC	15.00	13.70	0.13	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	top	0.004	1.349	0.005	0.002	0.003	
1852.40	9262	UMTS 1900	RMC	15.00	13.80	-0.05	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	bottom	0.622	1.318	0.820	0.241	0.318	
1880.00	9400	UMTS 1900	RMC	15.00	13.70	0.00	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	bottom	0.678	1.349	0.915	0.255	0.344	
1907.60	9538	UMTS 1900	RMC	15.00	13.72	-0.03	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	bottom	0.627	1.343	0.842	0.244	0.328	
1880.00	9400	UMTS 1900	RMC	15.00	13.70	0.00	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	right	0.032	1.349	0.043	0.016	0.022	
1880.00	9400	UMTS 1900	RMC	15.00	13.70	-0.15	Body	0 mm	Ant 2b	NRWNT4PNEV	1:1	left	0.009	1.349	0.012	0.005	0.007	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 10-15
UMTS 1900 MHz Ant 3 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)		
1852.40	9262	UMTS 1900	RMC	16.20	15.26	-0.04	0 mm	Ant 3	K6PKG4309Q	0	1:1	back	0.679	1.242	0.843	0.340	0.422	
1880.00	9400	UMTS 1900	RMC	16.20	15.16	-0.07	0 mm	Ant 3	K6PKG4309Q	0	1:1	back	0.721	1.271	0.916	0.361	0.459	
1907.60	9538	UMTS 1900	RMC	16.20	15.18	-0.07	0 mm	Ant 3	K6PKG4309Q	0	1:1	back	0.620	1.265	0.784	0.312	0.395	
1880.00	9400	UMTS 1900	RMC	16.20	15.16	-0.05	0 mm	Ant 3	K6PKG4309Q	0	1:1	top	0.366	1.271	0.465	0.155	0.197	
1880.00	9400	UMTS 1900	RMC	16.20	15.16	0.13	0 mm	Ant 3	K6PKG4309Q	0	1:1	bottom	0.028	1.271	0.036	0.015	0.019	
1880.00	9400	UMTS 1900	RMC	16.20	15.16	-0.01	0 mm	Ant 3	K6PKG4309Q	0	1:1	right	0.533	1.271	0.677	0.224	0.285	
1880.00	9400	UMTS 1900	RMC	16.20	15.16	-0.21	0 mm	Ant 3	K6PKG4309Q	0	1:1	left	0.003	1.271	0.004	0.002	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT													Body					
Spatial Peak													1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population													averaged over 1 gram					

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 130 of 211

Table 10-16
UMTS 1900 MHz Ant 4b Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Position	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Pass/Fail
MHz	Ch.													(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1852.40	9262	UMTS 1900	RMC	12.50	11.59	0.01	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	back	0.610	1.233	0.752	0.250	0.308	
1880.00	9400	UMTS 1900	RMC	12.50	11.43	0.03	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	back	0.659	1.279	0.843	0.268	0.343	
1907.60	9538	UMTS 1900	RMC	12.50	11.52	-0.20	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	back	0.723	1.253	0.906	0.288	0.361	AS
1980.00	9400	UMTS 1900	RMC	12.50	11.43	-0.04	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	top	0.484	1.279	0.619	0.192	0.246	
1980.00	9400	UMTS 1900	RMC	12.50	11.43	0.19	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	bottom	0.001	1.279	0.001	0.001	0.001	
1980.00	9400	UMTS 1900	RMC	12.50	11.43	0.16	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	right	0.004	1.279	0.005	0.002	0.003	
1980.00	9400	UMTS 1900	RMC	12.50	11.43	0.04	Body	0 mm	Ant 4b	K6PKG4309Q	0	1:1	left	0.022	1.279	0.028	0.012	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT																			
Spatial Peak							Body												
Uncontrolled Exposure/General Population							1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-17
LTE Band 71 Ant 1 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPE [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (0.01g) (W/kg)	Reported SAR (0.01g) (W/kg)	Plot #
MHz	Ch.																				
680.50	133297	Md	LTE Band 71	20	20.10	19.88	-0.06	0	Ant 1	PW70RC22F	QPSK	1	50	0 mm	back	1:1	0.594	1.052	0.625	0.292	0.307
680.50	133297	Md	LTE Band 71	20	20.10	19.89	-0.02	0	Ant 1	PW70RC22F	QPSK	50	25	0 mm	back	1:1	0.596	1.050	0.626	0.288	0.302
680.50	133297	Md	LTE Band 71	20	20.10	19.88	0.20	0	Ant 1	PW70RC22F	QPSK	1	50	0 mm	top	1:1	0.021	1.052	0.022	0.010	0.011
680.50	133297	Md	LTE Band 71	20	20.10	19.89	0.20	0	Ant 1	PW70RC22F	QPSK	50	25	0 mm	top	1:1	0.023	1.050	0.024	0.012	0.013
680.50	133297	Md	LTE Band 71	20	20.10	19.88	0.09	0	Ant 1	PW70RC22F	QPSK	1	50	0 mm	bottom	1:1	0.529	1.052	0.557	0.204	0.215
680.50	133297	Md	LTE Band 71	20	20.10	19.89	0.00	0	Ant 1	PW70RC22F	QPSK	50	25	0 mm	bottom	1:1	0.507	1.050	0.532	0.195	0.205
680.50	133297	Md	LTE Band 71	20	20.10	19.88	-0.20	0	Ant 1	PW70RC22F	QPSK	1	50	0 mm	right	1:1	0.048	1.052	0.050	0.022	0.023
680.50	133297	Md	LTE Band 71	20	20.10	19.89	0.19	0	Ant 1	PW70RC22F	QPSK	50	25	0 mm	right	1:1	0.051	1.050	0.054	0.024	0.025
680.50	133297	Md	LTE Band 71	20	20.10	19.88	-0.06	0	Ant 1	PW70RC22F	QPSK	1	50	0 mm	left	1:1	0.489	1.052	0.493	0.175	0.184
680.50	133297	Md	LTE Band 71	20	20.10	19.89	0.01	0	Ant 1	PW70RC22F	QPSK	50	25	0 mm	left	1:1	0.505	1.050	0.530	0.194	0.204
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body 1.6 W/kg (mW/g) Spatial Peak Uncontrolled Exposure/General Population											

Table 10-18
LTE Band 71 Ant 3 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPE [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g) [W/kg]	SAR (10g) [W/kg]	Reported SAR (10g) [W/kg]	Plot #	
MHz	Ch.																					
680.50	133297	Md	LTE Band 71	20	20.70	19.64	-0.01	0	Ant 3	NRWNT4PNEV	QPSK	1	0	0 mm	back	1:1	0.746	1.276	0.952	0.375	0.479	A6
680.50	133297	Md	LTE Band 71	20	20.70	19.65	-0.03	0	Ant 3	NRWNT4PNEV	QPSK	50	25	0 mm	back	1:1	0.648	1.271	0.824	0.332	0.422	
680.50	133297	Md	LTE Band 71	20	20.70	19.63	-0.02	0	Ant 3	NRWNT4PNEV	QPSK	100	0	0 mm	back	1:1	0.659	1.279	0.843	0.337	0.431	
680.50	133297	Md	LTE Band 71	20	20.70	19.64	-0.09	0	Ant 3	NRWNT4PNEV	QPSK	1	0	0 mm	top	1:1	0.549	1.276	0.701	0.233	0.297	
680.50	133297	Md	LTE Band 71	20	20.70	19.66	-0.07	0	Ant 3	NRWNT4PNEV	QPSK	50	25	0 mm	top	1:1	0.533	1.271	0.677	0.224	0.285	
680.50	133297	Md	LTE Band 71	20	20.70	19.64	0.21	0	Ant 3	NRWNT4PNEV	QPSK	1	0	0 mm	bottom	1:1	0.009	1.276	0.011	0.005	0.006	
680.50	133297	Md	LTE Band 71	20	20.70	19.66	-0.01	0	Ant 3	NRWNT4PNEV	QPSK	50	25	0 mm	bottom	1:1	0.010	1.271	0.013	0.005	0.006	
680.50	133297	Md	LTE Band 71	20	20.70	19.64	-0.01	0	Ant 3	NRWNT4PNEV	QPSK	1	0	0 mm	right	1:1	0.229	1.276	0.252	0.103	0.131	
680.50	133297	Md	LTE Band 71	20	20.70	19.66	-0.02	0	Ant 3	NRWNT4PNEV	QPSK	50	25	0 mm	right	1:1	0.201	1.271	0.255	0.091	0.116	
680.50	133297	Md	LTE Band 71	20	20.70	19.64	0.08	0	Ant 3	NRWNT4PNEV	QPSK	1	0	0 mm	left	1:1	0.025	1.276	0.032	0.012	0.015	
680.50	133297	Md	LTE Band 71	20	20.70	19.66	0.08	0	Ant 3	NRWNT4PNEV	QPSK	50	25	0 mm	left	1:1	0.023	1.271	0.029	0.011	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body 1.6 W/kg (mW/g) Spatial Peak Uncontrolled Exposure/General Population averaged over 1 gram												

Table 10-19
LTE Band 12 Ant 1 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (Tg) (W/kg)	Scaling Factor	Reported SAR (Tg) (W/kg)	SAR (Tg) (W/kg)	Reported SAR (Tg) (W/kg)	Plot #	
MHz	Ch.																					
707.50	23095	Md	LTE Band 12	10	20.50	19.83	-0.02	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	back	1:1	0.856	1.167	0.999	0.366	0.427	A7
707.50	23095	Md	LTE Band 12	10	20.50	19.80	-0.01	0	Ant 1	PW70RC22F	QPSK	25	0	0 mm	back	1:1	0.700	1.175	0.823	0.357	0.419	
707.50	23095	Md	LTE Band 12	10	20.50	19.63	-0.05	0	Ant 1	PW70RC22F	QPSK	50	0	0 mm	back	1:1	0.683	1.222	0.835	0.348	0.425	
707.50	23095	Md	LTE Band 12	10	20.50	19.83	-0.20	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	top	1:1	0.026	1.167	0.030	0.014	0.016	
707.50	23095	Md	LTE Band 12	10	20.50	19.80	0.20	0	Ant 1	PW70RC22F	QPSK	25	0	0 mm	top	1:1	0.035	1.175	0.041	0.018	0.021	
707.50	23095	Md	LTE Band 12	10	20.50	19.83	0.03	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	bottom	1:1	0.628	1.167	0.814	0.204	0.238	
707.50	23095	Md	LTE Band 12	10	20.50	19.90	-0.02	0	Ant 1	PW70RC22F	QPSK	25	0	0 mm	bottom	1:1	0.549	1.175	0.645	0.207	0.243	
707.50	23095	Md	LTE Band 12	10	20.50	19.83	0.19	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	right	1:1	0.031	1.167	0.036	0.015	0.018	
707.50	23095	Md	LTE Band 12	10	20.50	19.80	0.18	0	Ant 1	PW70RC22F	QPSK	25	0	0 mm	right	1:1	0.038	1.175	0.045	0.018	0.021	
707.50	23095	Md	LTE Band 12	10	20.50	19.83	-0.01	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	left	1:1	0.423	1.167	0.494	0.171	0.200	
707.50	23095	Md	LTE Band 12	10	20.50	19.80	-0.03	0	Ant 1	PW70RC22F	QPSK	25	0	0 mm	left	1:1	0.437	1.175	0.513	0.176	0.207	
707.50	23095	Md	LTE Band 12	10	20.50	19.83	-0.02	0	Ant 1	PW70RC22F	QPSK	1	0	0 mm	back	1:1	0.721	1.167	0.841	0.348	0.406	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body 1.6 W/kg (mW/g) Spatial Peak Uncontrolled Exposure/General Population averaged over 1 gram												

Note: Blue entry represents variability measurement.

FCC ID: BCGA2301	 Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 131 of 211

Table 10-24
LTE Band 14 Ant 3 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dens (dB)	MPR (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	(W/kg)		
759.00	23300	Md	LTE Band 14	10	19.90	18.68	-0.02	0	Ant 3	KSPKG4309G	QPSK	1	0	0 mm	back	1:1	0.555	1.324	0.735	0.275	0.364
759.00	23300	Md	LTE Band 14	10	19.90	18.67	-0.01	0	Ant 3	KSPKG4309G	QPSK	25	0	0 mm	back	1:1	0.544	1.327	0.722	0.270	0.358
759.00	23300	Md	LTE Band 14	10	19.90	18.68	-0.05	0	Ant 3	KSPKG4309G	QPSK	1	0	0 mm	top	1:1	0.440	1.324	0.583	0.186	0.246
759.00	23300	Md	LTE Band 14	10	19.90	18.67	-0.01	0	Ant 3	KSPKG4309G	QPSK	25	0	0 mm	top	1:1	0.445	1.327	0.591	0.187	0.248
759.00	23300	Md	LTE Band 14	10	19.90	18.68	0.16	0	Ant 3	KSPKG4309G	QPSK	1	0	0 mm	bottom	1:1	0.012	1.324	0.016	0.007	0.009
759.00	23300	Md	LTE Band 14	10	19.90	18.67	0.03	0	Ant 3	KSPKG4309G	QPSK	25	0	0 mm	bottom	1:1	0.012	1.327	0.016	0.007	0.009
759.00	23300	Md	LTE Band 14	10	19.90	18.68	0.01	0	Ant 3	KSPKG4309G	QPSK	1	0	0 mm	right	1:1	0.173	1.324	0.229	0.080	0.106
759.00	23300	Md	LTE Band 14	10	19.90	18.67	-0.01	0	Ant 3	KSPKG4309G	QPSK	25	0	0 mm	right	1:1	0.169	1.327	0.224	0.078	0.104
759.00	23300	Md	LTE Band 14	10	19.90	18.68	0.06	0	Ant 3	KSPKG4309G	QPSK	1	0	0 mm	left	1:1	0.020	1.324	0.026	0.010	0.013
759.00	23300	Md	LTE Band 14	10	19.90	18.67	0.21	0	Ant 3	KSPKG4309G	QPSK	25	0	0 mm	left	1:1	0.021	1.327	0.028	0.011	0.015
ANSI / IEEE C63.1 1992 - SAFETY LIMIT												Body									
Spatial Peak												1.6 W/kg (mW/g)									
Uncontrolled Exposure/General Population												averaged over 1 gram									

Table 10-25
LTE Band 26 (Cell) Ant 1 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dens (dB)	MPR (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																				
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.03	-0.21	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	back	1:1	0.721	1.222	0.881	0.278	0.340
831.50	26865	Md	LTE Band 26 (Cell)	10	19.90	18.08	-0.07	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	back	1:1	0.660	1.208	0.797	0.259	0.313
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.11	-0.10	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	back	1:1	0.587	1.199	0.704	0.234	0.281
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.15	-0.08	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	back	1:1	0.730	1.189	0.888	0.284	0.338
831.50	26865	Md	LTE Band 26 (Cell)	10	19.90	18.13	-0.11	0	Ant 1	KSPKG4309G	QPSK	25	12	0 mm	back	1:1	0.646	1.194	0.771	0.255	0.304
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.13	-0.07	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	back	1:1	0.588	1.194	0.702	0.235	0.281
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.10	-0.08	0	Ant 1	KSPKG4309G	QPSK	50	0	0 mm	back	1:1	0.582	1.202	0.700	0.229	0.275
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.11	-0.19	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	top	1:1	0.004	1.199	0.005	0.003	0.004
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.15	-0.15	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	top	1:1	0.003	1.189	0.004	0.003	0.004
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.11	-0.06	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	bottom	1:1	0.399	1.199	0.478	0.163	0.195
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.15	-0.03	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	bottom	1:1	0.459	1.189	0.546	0.184	0.219
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.11	-0.10	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	right	1:1	0.012	1.199	0.014	0.007	0.008
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.15	-0.20	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	right	1:1	0.013	1.189	0.015	0.008	0.010
844.00	26990	High	LTE Band 26 (Cell)	10	19.90	18.11	-0.02	0	Ant 1	KSPKG4309G	QPSK	1	0	0 mm	left	1:1	0.291	1.199	0.349	0.130	0.156
819.00	26740	Low	LTE Band 26 (Cell)	10	19.90	18.15	-0.03	0	Ant 1	KSPKG4309G	QPSK	25	0	0 mm	left	1:1	0.239	1.189	0.284	0.105	0.125
ANSI / IEEE C63.1 1992 - SAFETY LIMIT Spatial Peak										Body 1.6 W/kg (mW/g) averaged over 1 gram											
Uncontrolled Exposure/General Population																					

Table 10-26
LTE Band 26 (Cell) Ant 3 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dens (dB)	MPR (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	(W/kg)		
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.16	-0.20	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	back	1:1	0.686	1.213	0.832	0.360	0.437
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.00	18.07	-0.20	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	back	1:1	0.690	1.239	0.855	0.360	0.446
844.00	26990	High	LTE Band 26 (Cell)	10	19.00	17.94	-0.16	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	back	1:1	0.662	1.276	0.845	0.343	0.438
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.23	-0.18	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	back	1:1	0.703	1.194	0.839	0.366	0.437
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.00	18.17	-0.20	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	back	1:1	0.687	1.211	0.832	0.368	0.446
844.00	26990	High	LTE Band 26 (Cell)	10	19.00	18.09	-0.20	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	back	1:1	0.673	1.233	0.830	0.357	0.440
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.12	-0.11	0	Ant 3	PFWTORC22F	QPSK	50	0	0 mm	back	1:1	0.724	1.225	0.887	0.365	0.447
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.16	-0.04	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	top	1:1	0.596	1.213	0.723	0.244	0.296
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.23	-0.11	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	top	1:1	0.598	1.194	0.714	0.242	0.289
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.16	0.01	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	bottom	1:1	0.012	1.213	0.015	0.007	0.008
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.23	-0.08	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	bottom	1:1	0.013	1.194	0.016	0.007	0.008
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.16	-0.07	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	right	1:1	0.225	1.213	0.273	0.107	0.130
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.23	-0.08	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	right	1:1	0.227	1.194	0.271	0.108	0.129
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.16	0.20	0	Ant 3	PFWTORC22F	QPSK	1	0	0 mm	left	1:1	0.015	1.213	0.018	0.008	0.010
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.23	-0.03	0	Ant 3	PFWTORC22F	QPSK	25	12	0 mm	left	1:1	0.020	1.194	0.024	0.010	0.012
ANSI / IEEE C63.1 1992 - SAFETY LIMIT											Body 1.6 W/kg (mW/g) averaged over 1 gram										
Uncontrolled Exposure/General Population																					

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Table 10-27
LTE Band 5 (Cell) Ant 1 Body SAR

MEASUREMENT RESULTS																							
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spk (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (Tg) (W/kg)	Scaling Factor	Reported SAR (Tg) (W/kg)	SAR (Tg) (W/kg)	Reported SAR (Tg) (W/kg)	Pass #
		MHz	Ch																				
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.10	-0.20	0	Ant 1	NRWNT4PMV	QPSK	1	0	0 mm	back	1:1	0.702	1.252	0.844	0.287	0.345
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.11	-0.19	0	Ant 1	NRWNT4PMV	QPSK	25	0	0 mm	back	1:1	0.620	1.199	0.754	0.279	0.335
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.07	-0.21	0	Ant 1	NRWNT4PMV	QPSK	50	0	0 mm	back	1:1	0.645	1.211	0.779	0.283	0.343
2 CC UpLink	PCC	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.01	-0.02	0	Ant 1	NRWNT4PMV	QPSK	1	0	0 mm	back	1:1	0.757	1.069	0.809	0.359	0.384
2 CC UpLink	SCC	826.30	20483	Md	LTE Band 5 (C40)	5	18.90	18.10	0.10	0	Ant 1	NRWNT4PMV	QPSK	1	24	0 mm	back	1:1	0.001	1.252	0.001	0.001	0.001
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.11	0.08	0	Ant 1	NRWNT4PMV	QPSK	25	0	0 mm	top	1:1	0.019	1.199	0.012	0.006	0.007
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.10	-0.11	0	Ant 1	NRWNT4PMV	QPSK	1	0	0 mm	bottom	1:1	0.474	1.252	0.570	0.193	0.232
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.11	-0.11	0	Ant 1	NRWNT4PMV	QPSK	25	0	0 mm	bottom	1:1	0.468	1.199	0.561	0.193	0.231
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.10	0.09	0	Ant 1	NRWNT4PMV	QPSK	1	0	0 mm	right	1:1	0.018	1.252	0.022	0.011	0.013
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.11	0.12	0	Ant 1	NRWNT4PMV	QPSK	25	0	0 mm	right	1:1	0.015	1.199	0.018	0.009	0.011
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.10	0.10	0	Ant 1	NRWNT4PMV	QPSK	1	0	0 mm	left	1:1	0.260	1.252	0.313	0.116	0.139
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	18.90	18.11	-0.02	0	Ant 1	NRWNT4PMV	QPSK	25	0	0 mm	left	1:1	0.258	1.199	0.321	0.121	0.145
ANSI / IEEE C64.1 1992 - SAFETY LIMIT										Body										1.6 W/kg (mW/g)			
Spatial Peak										averaged over 1 gram													
Uncontrolled Exposure/General Population																							

Table 10-28
LTE Band 5 (Cell) Ant 3 Body SAR

MEASUREMENT RESULTS																							
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spk (dB)	MPE (dB)	Antenna Config.	Device Serial #	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (Tg) (W/kg)	Scaling Factor	Reported SAR (Tg) (W/kg)	SAR (Tg) (W/kg)	Reported SAR (Tg) (W/kg)	Pass #
		MHz	Ch																				
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.01	-0.09	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	back	1:1	0.693	1.256	0.870	0.360	0.452
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.19	0.00	0	Ant 3	P7W7GRC22F	QPSK	25	25	0 mm	back	1:1	0.708	1.258	0.855	0.365	0.441
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.00	0.00	0	Ant 3	P7W7GRC22F	QPSK	50	0	0 mm	back	1:1	0.738	1.259	0.929	0.371	0.467
2 CC UpLink	PCC	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	17.77	0.00	0	Ant 3	P7W7GRC22F	QPSK	50	0	0 mm	back	1:1	0.667	1.327	0.885	0.357	0.474
2 CC UpLink	SCC	826.30	20483	Md																			
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.01	-0.06	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	top	1:1	0.567	1.256	0.712	0.297	0.298
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.18	-0.04	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	top	1:1	0.583	1.258	0.704	0.282	0.292
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.01	-0.20	0	Ant 3	P7W7GRC22F	QPSK	25	25	0 mm	bottom	1:1	0.015	1.256	0.019	0.008	0.010
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.19	0.04	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	bottom	1:1	0.015	1.258	0.018	0.007	0.008
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.01	0.04	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	right	1:1	0.216	1.256	0.271	0.105	0.132
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.19	0.05	0	Ant 3	P7W7GRC22F	QPSK	25	25	0 mm	right	1:1	0.220	1.258	0.266	0.108	0.130
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.01	0.20	0	Ant 3	P7W7GRC22F	QPSK	1	25	0 mm	left	1:1	0.029	1.256	0.036	0.014	0.018
1 CC UpLink	N/A	836.50	25525	Md	LTE Band 5 (C40)	10	19.00	18.18	0.21	0	Ant 3	P7W7GRC22F	QPSK	25	25	0 mm	left	1:1	0.025	1.258	0.030	0.013	0.016
ANSI / IEEE C64.1 1992 - SAFETY LIMIT												Body											
Spatial Peak												1.6 W/kg (mW/g)											
Uncontrolled Exposure/General Population												averaged over 1 gram											

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Table 10-29
LTE Band 66 (AWS) Ant 1 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Reported SAR (10g) (W/kg)	Pass/Fail	
MHz	Ch.																				
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.50	-0.08	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	back	1:1	0.945	1.000	0.945	0.455	0.455
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.50	15.47	0.01	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	back	1:1	0.946	1.007	0.953	0.448	0.451
1770.00	132572	High	LTE Band 66 (AWS)	20	15.50	15.26	-0.00	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	back	1:1	0.900	1.057	0.951	0.425	0.449
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.49	-0.01	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	back	1:1	0.954	1.002	0.956	0.463	0.464
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.50	15.47	0.03	0	Ant 1	V9ML2W43VC	QPSK	50	25	0 mm	back	1:1	0.946	1.007	0.953	0.450	0.453
1770.00	132572	High	LTE Band 66 (AWS)	20	15.50	15.23	-0.01	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	back	1:1	0.892	1.064	0.949	0.422	0.449
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.48	-0.03	0	Ant 1	V9ML2W43VC	QPSK	100	0	0 mm	back	1:1	0.987	1.005	0.992	0.479	0.481
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.50	-0.14	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	top	1:1	0.018	1.000	0.018	0.009	0.009
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.49	0.02	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	top	1:1	0.021	1.002	0.021	0.010	0.010
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.50	0.05	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	bottom	1:1	0.240	1.000	0.240	0.116	0.116
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.49	0.02	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	bottom	1:1	0.242	1.002	0.242	0.117	0.117
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.50	-0.13	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	right	1:1	0.000	1.000	0.000	0.000	0.000
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.49	0.14	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	right	1:1	0.001	1.002	0.001	0.000	0.000
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.50	-0.02	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	left	1:1	0.903	1.000	0.903	0.366	0.366
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.50	15.47	-0.01	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	left	1:1	0.899	1.007	0.895	0.358	0.361
1770.00	132572	High	LTE Band 66 (AWS)	20	15.50	15.26	-0.03	0	Ant 1	V9ML2W43VC	QPSK	1	0	0 mm	left	1:1	0.877	1.057	0.927	0.353	0.373
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.49	-0.01	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	left	1:1	0.903	1.002	0.905	0.365	0.366
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.50	15.47	0.01	0	Ant 1	V9ML2W43VC	QPSK	50	25	0 mm	left	1:1	0.906	1.007	0.912	0.365	0.368
1770.00	132572	High	LTE Band 66 (AWS)	20	15.50	15.23	-0.00	0	Ant 1	V9ML2W43VC	QPSK	50	0	0 mm	left	1:1	0.873	1.064	0.929	0.351	0.373
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.48	-0.03	0	Ant 1	V9ML2W43VC	QPSK	100	0	0 mm	left	1:1	0.937	1.005	0.942	0.375	0.377
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.50	15.48	-0.03	0	Ant 1	V9ML2W43VC	QPSK	100	0	0 mm	back	1:1	0.984	1.005	0.989	0.470	0.472
ANSI / IEEE C63.1 1992 - SAFETY LIMIT																					
Spatial Peak																					
Uncontrolled Exposure/General Population																					
Body																					
1.6 W/kg (mW/g)																					
averaged over 1 gram																					

Note: Blue entry represents variability measurement.

Table 10-30
LTE Band 66 (AWS) Ant 2b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPE [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Pass/Fail
MHz	Ch.																				
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.00	14.66	-0.03	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	back	1:1	0.659	1.081	0.712	0.269	0.291
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.52	-0.01	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	back	1:1	0.737	1.117	0.823	0.295	0.330
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.71	-0.10	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	back	1:1	0.797	1.069	0.852	0.323	0.345
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.00	14.75	-0.01	0	Ant 2b	NRWNT4PNEV	QPSK	50	0	0 mm	back	1:1	0.699	1.059	0.740	0.282	0.299
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.74	-0.04	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	back	1:1	0.773	1.062	0.821	0.312	0.331
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.78	0.14	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	back	1:1	0.877	1.052	0.923	0.347	0.365
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.70	-0.03	0	Ant 2b	NRWNT4PNEV	QPSK	100	0	0 mm	back	1:1	0.769	1.072	0.824	0.310	0.332
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.71	0.00	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	top	1:1	0.000	1.069	0.000	0.000	0.000
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.78	0.00	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	top	1:1	0.002	1.052	0.002	0.000	0.000
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.00	14.66	-0.02	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	bottom	1:1	0.834	1.081	0.902	0.324	0.350
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.52	-0.03	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	bottom	1:1	0.830	1.117	0.927	0.321	0.359
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.71	-0.13	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	bottom	1:1	0.855	1.069	0.914	0.330	0.353
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.00	14.75	0.00	0	Ant 2b	NRWNT4PNEV	QPSK	50	0	0 mm	bottom	1:1	0.842	1.059	0.892	0.329	0.348
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.74	-0.03	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	bottom	1:1	0.872	1.062	0.926	0.332	0.353
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.78	-0.05	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	bottom	1:1	0.934	1.052	0.983	0.347	0.365
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.00	14.70	-0.08	0	Ant 2b	NRWNT4PNEV	QPSK	100	0	0 mm	bottom	1:1	0.866	1.072	0.928	0.331	0.355
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.71	0.09	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	right	1:1	0.056	1.069	0.060	0.023	0.025
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.78	0.02	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	right	1:1	0.054	1.052	0.057	0.024	0.025
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.71	-0.19	0	Ant 2b	NRWNT4PNEV	QPSK	1	0	0 mm	left	1:1	0.004	1.069	0.004	0.001	0.001
1770.00	132572	High	LTE Band 66 (AWS)	20	15.00	14.78	0.21	0	Ant 2b	NRWNT4PNEV	QPSK	50	25	0 mm	left	1:1	0.006	1.052	0.006	0.001	0.001
ANSI / IEEE C63.1 1992 - SAFETY LIMIT																					
Spatial Peak																					
Uncontrolled Exposure/General Population																					
																	Body				
																	1.6 W/kg (mW/g)				
																	averaged over 1 gram				

FCC ID: BCGA2301	 Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 135 of 211

LTE Band 25 (PCS) Ant 2b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Spill [dB]	MPE [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Idle Cycles	SAR (lg) (W/kg)	Reading Factor	Reported SAR (lg) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Pass/Fail	
MHz	Ch.																				
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.85	0.02	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	back	1:1	0.466	1.303	0.607	0.204	0.266
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.88	0.03	0	Ant 2b	P7W7GRC22F	QPSK	50	0	0 mm	back	1:1	0.485	1.294	0.628	0.213	0.276
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.85	0.11	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	top	1:1	0.001	1.303	0.001	0.000	0.000
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.88	0.20	0	Ant 2b	P7W7GRC22F	QPSK	50	0	0 mm	top	1:1	0.000	1.294	0.000	0.000	0.000
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.85	-0.04	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	bottom	1:1	0.616	1.303	0.805	0.234	0.305
1862.0	26305	Mid	LTE Band 25 (PCS)	20	15.00	13.90	-0.04	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	bottom	1:1	0.589	1.413	0.832	0.227	0.321
1862.0	26305	High	LTE Band 25 (PCS)	20	15.00	13.72	-0.04	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	bottom	1:1	0.601	1.343	0.807	0.231	0.310
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.88	-0.01	0	Ant 2b	P7W7GRC22F	QPSK	50	0	0 mm	bottom	1:1	0.609	1.294	0.758	0.234	0.303
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.83	-0.02	0	Ant 2b	P7W7GRC22F	QPSK	100	0	0 mm	bottom	1:1	0.590	1.309	0.733	0.220	0.288
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.85	0.12	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	right	1:1	0.036	1.303	0.047	0.017	0.022
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.88	-0.02	0	Ant 2b	P7W7GRC22F	QPSK	50	0	0 mm	right	1:1	0.036	1.294	0.047	0.017	0.022
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.85	-0.12	0	Ant 2b	P7W7GRC22F	QPSK	1	0	0 mm	left	1:1	0.008	1.303	0.010	0.004	0.005
1860.0	25140	Low	LTE Band 25 (PCS)	20	15.00	13.88	0.20	0	Ant 2b	P7W7GRC22F	QPSK	50	0	0 mm	left	1:1	0.008	1.294	0.010	0.004	0.005
ANSI / IEEE C62.1.1 1992 - SAFETY LIMIT												Body									
Spatial Peak												1.6 W/kg (mW/g)									
Uncontrolled Exposure/General Population												averaged over 1 gram									

LTE Band 25 (PCS) Ant 3 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth [MHz]	Maximum allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot	
MHz	Ch.																					
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	16.36	-0.02	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	back	1-1	0.569	1.213	0.690	0.270	0.328	
1800.0	20140	Mid	LTE Band 25 (PCB)	20	16.20	15.17	-0.20	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	back	1-1	0.507	1.268	0.643	0.245	0.311	
1800.0	20590	High	LTE Band 25 (PCB)	20	16.20	15.11	-0.20	0	Ant 3	FW7HQR22F	QPSK	1	80	0 mm	back	1-1	0.457	1.285	0.587	0.219	0.281	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	15.41	0.01	0	Ant 3	FW7HQR22F	QPSK	50	0	0 mm	back	1-1	0.529	1.199	0.634	0.255	0.306	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	16.36	-0.04	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	top	1-1	0.516	1.213	0.383	0.138	0.164	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	15.41	0.01	0	Ant 3	FW7HQR22F	QPSK	50	0	0 mm	top	1-1	0.323	1.199	0.387	0.137	0.164	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	16.36	0.00	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	bottom	1-1	0.021	1.213	0.025	0.011	0.013	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	15.41	0.08	0	Ant 3	FW7HQR22F	QPSK	50	0	0 mm	bottom	1-1	0.022	1.199	0.026	0.011	0.013	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	16.36	-0.01	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	right	1-1	0.415	1.213	0.903	0.881	0.220	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	15.41	0.03	0	Ant 3	FW7HQR22F	QPSK	50	0	0 mm	right	1-1	0.428	1.199	0.913	0.186	0.223	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	16.36	0.21	0	Ant 3	FW7HQR22F	QPSK	1	0	0 mm	left	1-1	0.002	1.213	0.002	0.002	0.002	
1800.0	20140	Low	LTE Band 25 (PCB)	20	16.20	15.41	0.19	0	Ant 3	FW7HQR22F	QPSK	50	0	0 mm	left	1-1	0.002	1.199	0.002	0.002	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body												
Uncontrolled Exposure/General Population										1.6 W/kg (mW/g)												
										averaged over 1 gram												

LTE Band 25 (PCS) Ant 4b Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm)	MPF (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	State	Duty Cycle	BAR (dB)	Scaling Factor	Reported SAR (W/kg)	SAR (10g) (W/kg)	Reported SAR (W/kg)	SAR (10g) (W/kg)	Pass/Fail
MHz	Ch.															BAR (dB)	Reported SAR (W/kg)	SAR (10g) (W/kg)	Reported SAR (W/kg)	SAR (10g) (W/kg)		
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.56	-0.02	0	Ant 4b	KSPKG4309Q	QPSK	1	0	0 mm	back	1.1	0.568	1.242	0.705	0.250	0.311	
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.59	-0.01	0	Ant 4b	KSPKG4309Q	QPSK	50	25	0 mm	back	1.1	0.608	1.233	0.750	0.267	0.329	
1860.0	28065	Mid	LTE Band 25 (PCS)	20	12.50	11.61	0.00	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	back	1.1	0.647	1.227	0.794	0.282	0.346	
1905.0	28950	High	LTE Band 25 (PCS)	20	12.50	11.75	-0.02	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	back	1.1	0.658	1.189	0.782	0.285	0.338	
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.56	-0.04	0	Ant 4b	KSPKG4309Q	QPSK	1	0	0 mm	top	1.1	0.507	1.242	0.630	0.204	0.253	
1905.0	28950	High	LTE Band 25 (PCS)	20	12.50	11.75	-0.02	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	top	1.1	0.626	1.189	0.628	0.206	0.245	
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.56	0.20	0	Ant 4b	KSPKG4309Q	QPSK	1	0	0 mm	bottom	1.1	0.000	1.242	0.000	0.000	0.000	
1905.0	28950	High	LTE Band 25 (PCS)	20	12.50	11.75	0.20	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	bottom	1.1	0.000	1.189	0.000	0.000	0.000	
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.56	0.20	0	Ant 4b	KSPKG4309Q	QPSK	1	0	0 mm	right	1.1	0.002	1.242	0.002	0.001	0.001	
1905.0	28950	High	LTE Band 25 (PCS)	20	12.50	11.75	0.09	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	right	1.1	0.002	1.189	0.002	0.000	0.000	
1860.0	28140	Low	LTE Band 25 (PCS)	20	12.50	11.56	-0.01	0	Ant 4b	KSPKG4309Q	QPSK	1	0	0 mm	left	1.1	0.014	1.242	0.017	0.006	0.007	
1905.0	28950	High	LTE Band 25 (PCS)	20	12.50	11.75	-0.10	0	Ant 4b	KSPKG4309Q	QPSK	50	50	0 mm	left	1.1	0.020	1.189	0.024	0.009	0.011	
ANSI / IEEE C83.1-1992 - SAFETY LIMIT																						
Spatial Peak																						
Uncontrolled Exposure/General Population																						
																	Body					
																	1.6 W/kg (mW/g)					
																	averages per 1.0 gm					

FCC ID: BCGA2301	 PCTEST Proud to be part of element		Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 137 of 211

Table 10-37
LTE Band 30 Ant 1 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Dht [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Pass	
Mhz	Ch															(W/kg)	(W/kg)	(W/kg)				
2310.00	27710	Md	LTE Band 30	10	15.50	13.86	-0.02	0	Ant 1	PW7QRC22F	QPSK	1	0	0 mm	back	1:1	0.481	1.459	0.702	0.201	0.253	
2310.00	27710	Md	LTE Band 30	10	15.50	13.89	-0.20	0	Ant 1	PW7QRC22F	QPSK	25	0	0 mm	back	1:1	0.488	1.449	0.707	0.203	0.254	
2310.00	27710	Md	LTE Band 30	10	15.50	13.86	0.20	0	Ant 1	PW7QRC22F	QPSK	1	0	0 mm	top	1:1	0.010	1.459	0.015	0.003	0.004	
2310.00	27710	Md	LTE Band 30	10	15.50	13.89	0.19	0	Ant 1	PW7QRC22F	QPSK	25	0	0 mm	top	1:1	0.010	1.449	0.014	0.003	0.004	
2310.00	27710	Md	LTE Band 30	10	15.50	13.86	-0.08	0	Ant 1	PW7QRC22F	QPSK	1	0	0 mm	bottom	1:1	0.137	1.459	0.200	0.047	0.069	
2310.00	27710	Md	LTE Band 30	10	15.50	13.89	-0.12	0	Ant 1	PW7QRC22F	QPSK	25	0	0 mm	bottom	1:1	0.140	1.449	0.203	0.048	0.070	
2310.00	27710	Md	LTE Band 30	10	15.50	13.86	0.20	0	Ant 1	PW7QRC22F	QPSK	1	0	0 mm	right	1:1	0.000	1.459	0.000	0.000	0.000	
2310.00	27710	Md	LTE Band 30	10	15.50	13.89	0.21	0	Ant 1	PW7QRC22F	QPSK	25	0	0 mm	right	1:1	0.000	1.449	0.000	0.000	0.000	
2310.00	27710	Md	LTE Band 30	10	15.50	13.86	-0.02	0	Ant 1	PW7QRC22F	QPSK	1	0	0 mm	left	1:1	0.408	1.459	0.595	0.163	0.238	
2310.00	27710	Md	LTE Band 30	10	15.50	13.89	-0.14	0	Ant 1	PW7QRC22F	QPSK	25	0	0 mm	left	1:1	0.408	1.449	0.591	0.163	0.236	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-38
LTE Band 30 Ant 2b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Dnt [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Pilot #
MHz	Ch																				
2310.00	27710	Md	LTE Band 30	10	12.60	11.20	0.09	0	Ant 2b	V9NL2W43VC	QPSK	1	0	0 mm	back	1:1	0.581	1.380	0.802	0.237	0.327
2310.00	27710	Md	LTE Band 30	10	12.60	11.25	0.02	0	Ant 2b	V9NL2W43VC	QPSK	25	25	0 mm	back	1:1	0.550	1.365	0.751	0.227	0.310
2310.00	27710	Md	LTE Band 30	10	12.60	11.19	0.20	0	Ant 2b	V9NL2W43VC	QPSK	50	0	0 mm	back	1:1	0.622	1.384	0.861	0.254	0.352
2310.00	27710	Md	LTE Band 30	10	12.60	11.20	0.20	0	Ant 2b	V9NL2W43VC	QPSK	1	0	0 mm	top	1:1	0.001	1.360	0.001	0.000	0.000
2310.00	27710	Md	LTE Band 30	10	12.60	11.25	0.13	0	Ant 2b	V9NL2W43VC	QPSK	25	25	0 mm	top	1:1	0.001	1.365	0.001	0.000	0.000
2310.00	27710	Md	LTE Band 30	10	12.60	11.20	0.04	0	Ant 2b	V9NL2W43VC	QPSK	1	0	0 mm	bottom	1:1	0.334	1.360	0.461	0.120	0.166
2310.00	27710	Md	LTE Band 30	10	12.60	11.25	0.04	0	Ant 2b	V9NL2W43VC	QPSK	25	25	0 mm	bottom	1:1	0.321	1.365	0.438	0.115	0.157
2310.00	27710	Md	LTE Band 30	10	12.60	11.20	0.12	0	Ant 2b	V9NL2W43VC	QPSK	1	0	0 mm	right	1:1	0.033	1.360	0.048	0.014	0.019
2310.00	27710	Md	LTE Band 30	10	12.60	11.25	0.03	0	Ant 2b	V9NL2W43VC	QPSK	25	25	0 mm	right	1:1	0.032	1.365	0.044	0.013	0.018
2310.00	27710	Md	LTE Band 30	10	12.60	11.20	0.20	0	Ant 2b	V9NL2W43VC	QPSK	1	0	0 mm	left	1:1	0.016	1.360	0.022	0.007	0.010
2310.00	27710	Md	LTE Band 30	10	12.60	11.25	0.10	0	Ant 2b	V9NL2W43VC	QPSK	25	25	0 mm	left	1:1	0.017	1.365	0.023	0.007	0.010
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 10-39
LTE Band 30 Ant 3 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dnt (dB)	MPR (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Pilot #	
MHz	Ch																					
2310.00	27710	Md	LTE Band 30	10	18.20	17.88	-0.08	0	Ant 3	K9PKG4309G	QPSK	1	0	0 mm	back	1:1	0.885	1.076	0.952	0.425	0.457	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	-0.06	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	back	1:1	0.917	1.054	0.967	0.440	0.464	A14
2310.00	27710	Md	LTE Band 30	10	18.20	17.87	-0.02	0	Ant 3	K9PKG4309G	QPSK	50	0	0 mm	back	1:1	0.915	1.079	0.987	0.439	0.474	
2310.00	27710	Md	LTE Band 30	10	18.20	17.88	0.00	0	Ant 3	K9PKG4309G	QPSK	1	0	0 mm	top	1:1	0.557	1.076	0.599	0.197	0.212	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	-0.05	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	top	1:1	0.602	1.054	0.635	0.212	0.223	
2310.00	27710	Md	LTE Band 30	10	18.20	17.88	0.15	0	Ant 3	K9PKG4309G	QPSK	1	0	0 mm	bottom	1:1	0.015	1.076	0.016	0.006	0.006	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	0.10	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	bottom	1:1	0.014	1.054	0.015	0.006	0.006	
2310.00	27710	Md	LTE Band 30	10	18.20	17.88	0.04	0	Ant 3	K9PKG4309G	QPSK	1	0	0 mm	right	1:1	0.627	1.076	0.675	0.251	0.270	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	-0.03	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	right	1:1	0.621	1.054	0.655	0.249	0.262	
2310.00	27710	Md	LTE Band 30	10	18.20	17.88	0.21	0	Ant 3	K9PKG4309G	QPSK	1	0	0 mm	left	1:1	0.000	1.076	0.000	0.000	0.000	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	0.18	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	left	1:1	0.000	1.054	0.000	0.000	0.000	
2310.00	27710	Md	LTE Band 30	10	18.20	17.97	-0.02	0	Ant 3	K9PKG4309G	QPSK	25	25	0 mm	back	1:1	0.881	1.054	0.929	0.425	0.448	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: Blue entry represents variability measurement.

Table 10-40
LTE Band 30 Ant 4b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Dht [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) [W/kg]	Scaling Factor	Reported SAR (1g) [W/kg]	SAR (10g) [W/kg]	Reported SAR (10g) [W/kg]	Pilot #
Mhz	Ch																				
2310.00	27710	Md	LTE Band 30	10	12.40	11.26	0.00	0	Ant 4b	V9NL2W43VC	QPSK	1	49	0 mm	back	1:1	0.674	1.300	0.876	0.263	0.329
2310.00	27710	Md	LTE Band 30	10	12.40	11.40	0.01	0	Ant 4b	V9NL2W43VC	QPSK	25	12	0 mm	back	1:1	0.707	1.259	0.890	0.266	0.330
2310.00	27710	Md	LTE Band 30	10	12.40	11.25	-0.04	0	Ant 4b	V9NL2W43VC	QPSK	50	0	0 mm	back	1:1	0.689	1.303	0.898	0.258	0.336
2310.00	27710	Md	LTE Band 30	10	12.40	11.26	-0.05	0	Ant 4b	V9NL2W43VC	QPSK	1	49	0 mm	top	1:1	0.634	1.300	0.824	0.217	0.282
2310.00	27710	Md	LTE Band 30	10	12.40	11.40	0.00	0	Ant 4b	V9NL2W43VC	QPSK	25	12	0 mm	top	1:1	0.681	1.259	0.832	0.228	0.295
2310.00	27710	Md	LTE Band 30	10	12.40	11.25	-0.01	0	Ant 4b	V9NL2W43VC	QPSK	50	0	0 mm	top	1:1	0.649	1.303	0.846	0.222	0.289
2310.00	27710	Md	LTE Band 30	10	12.40	11.26	0.00	0	Ant 4b	V9NL2W43VC	QPSK	1	49	0 mm	bottom	1:1	0.000	1.300	0.000	0.000	0.000
2310.00	27710	Md	LTE Band 30	10	12.40	11.40	0.00	0	Ant 4b	V9NL2W43VC	QPSK	25	12	0 mm	bottom	1:1	0.000	1.259	0.000	0.000	0.000
2310.00	27710	Md	LTE Band 30	10	12.40	11.26	0.21	0	Ant 4b	V9NL2W43VC	QPSK	1	49	0 mm	right	1:1	0.013	1.300	0.017	0.004	0.005
2310.00	27710	Md	LTE Band 30	10	12.40	11.40	0.14	0	Ant 4b	V9NL2W43VC	QPSK	25	12	0 mm	right	1:1	0.012	1.259	0.015	0.004	0.005
2310.00	27710	Md	LTE Band 30	10	12.40	11.26	0.04	0	Ant 4b	V9NL2W43VC	QPSK	1	49	0 mm	left	1:1	0.042	1.300	0.055	0.016	0.021
2310.00	27710	Md	LTE Band 30	10	12.40	11.40	0.15	0	Ant 4b	V9NL2W43VC	QPSK	25	12	0 mm	left	1:1	0.044	1.259	0.055	0.017	0.021
ANSI / IEEE C63.1 1992 - SAFETY LIMIT											Body 1.6 W/kg (W/kg) 1.6 W/kg (W/kg) 1.6 W/kg (W/kg)										
Uncontrolled Exposure/General Population																					

Table 10-41
LTE Band 7 Ant 1 Body SAR

MEASUREMENT RESULTS																							
1 CC (Link 1) 2 CC (Link 2)	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass #
		MHz	Ch																				
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.91	-0.20	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	back	1:1	0.452	1.119	0.508	0.183	0.205
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	14.05	0.01	0	Ant 1	K8P6G4300G	QPSK	50	0	0 mm	back	1:1	0.486	1.084	0.527	0.196	0.212
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.91	-0.07	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	top	1:1	0.509	1.119	0.532	0.008	0.009
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	14.05	0.00	0	Ant 1	K8P6G4300G	QPSK	50	0	0 mm	top	1:1	0.538	1.084	0.539	0.008	0.009
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.91	-0.04	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	bottom	1:1	0.198	1.119	0.222	0.073	0.082
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	14.05	-0.13	0	Ant 1	K8P6G4300G	QPSK	50	0	0 mm	bottom	1:1	0.193	1.084	0.209	0.072	0.078
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.91	0.20	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	right	1:1	0.000	1.119	0.000	0.000	0.000
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	14.05	0.21	0	Ant 1	K8P6G4300G	QPSK	50	0	0 mm	right	1:1	0.000	1.084	0.000	0.000	0.000
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	13.90	0.03	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	left	1:1	0.889	1.122	0.897	0.312	0.350
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	13.79	-0.09	0	Ant 1	K8P6G4300G	QPSK	1	89	0 mm	left	1:1	0.885	1.151	0.898	0.303	0.349
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.91	-0.02	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	left	1:1	0.822	1.119	0.830	0.286	0.320
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	14.40	13.82	0.02	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	left	1:1	0.722	1.140	0.824	0.252	0.287
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	14.40	14.05	0.03	0	Ant 1	K8P6G4300G	QPSK	50	0	0 mm	left	1:1	0.588	1.084	0.580	0.300	0.335
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.95	-0.03	0	Ant 1	K8P6G4300G	QPSK	50	25	0 mm	left	1:1	0.825	1.109	0.915	0.298	0.317
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	14.40	13.92	0.04	0	Ant 1	K8P6G4300G	QPSK	50	25	0 mm	left	1:1	0.877	1.117	0.756	0.235	0.262
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	14.40	13.89	0.03	0	Ant 1	K8P6G4300G	QPSK	100	0	0 mm	left	1:1	0.824	1.125	0.927	0.285	0.321
2 CC UpLink	PCC	2510.0	20850	Low	LTE Band 7	20	14.40	13.42	-0.14	0	Ant 1	K8P6G4300G	QPSK	1	89	0 mm	left	1:1	0.796	1.253	0.897	0.277	0.347
2 CC UpLink	SCC	2510.0	21048	Low	LTE Band 7	20	14.40	13.42	-0.14	0	Ant 1	K8P6G4300G	QPSK	1	0	0 mm	left	1:1	0.796	1.253	0.897	0.277	0.347
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body										1.6 W/kg (mW/g)			
Spatial Peak										averaged over 1 gram													
Uncontrolled Exposure/General Population																							

Table 10-42
LTE Band 7 Ant 2b Body SAR

MEASUREMENT RESULTS																								
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass #	
		MHz	Ch																					
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.61	-0.03	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	back	1:1	0.807	1.315	0.768	0.258	0.337	
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	12.80	11.58	-0.06	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	back	1:1	0.585	1.324	0.778	0.248	0.328	
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	12.80	11.65	-0.01	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	back	1:1	0.597	1.320	0.885	0.294	0.369	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.75	-0.01	0	Ant 2b	FWTORC22F	QPSK	50	25	0 mm	back	1:1	0.626	1.265	0.762	0.263	0.333	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.65	-0.06	0	Ant 2b	FWTORC22F	QPSK	100	0	0 mm	back	1:1	0.602	1.303	0.784	0.255	0.332	
2 CC UpLink	PCC	2510.0	21350	High	LTE Band 7	20	12.80	11.59	-0.20	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	back	1:1	0.778	1.205	0.837	0.317	0.382	
2 CC UpLink	SCC	2510.0	21152	High	LTE Band 7	20	12.80	11.59	-0.20	0	Ant 2b	FWTORC22F	QPSK	1	89	0 mm	back	1:1	0.778	1.205	0.837	0.317	0.382	
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	12.80	11.68	0.30	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	top	1:1	0.008	1.300	0.008	0.001	0.001	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.75	0.00	0	Ant 2b	FWTORC22F	QPSK	50	25	0 mm	top	1:1	0.010	1.265	0.013	0.002	0.003	
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	12.80	11.68	-0.01	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	bottom	1:1	0.272	1.300	0.354	0.066	0.126	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.75	0.04	0	Ant 2b	FWTORC22F	QPSK	50	25	0 mm	bottom	1:1	0.286	1.265	0.362	0.101	0.128	
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	12.80	11.65	0.15	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	right	1:1	0.023	1.300	0.030	0.008	0.010	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.75	0.20	0	Ant 2b	FWTORC22F	QPSK	50	25	0 mm	right	1:1	0.025	1.265	0.032	0.009	0.011	
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	12.80	11.65	-0.05	0	Ant 2b	FWTORC22F	QPSK	1	0	0 mm	left	1:1	0.011	1.300	0.014	0.004	0.005	
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	12.80	11.75	0.16	0	Ant 2b	FWTORC22F	QPSK	50	25	0 mm	left	1:1	0.010	1.265	0.013	0.003	0.004	
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body										1.6 W/kg (mW/g)				
Spatial Peak										averaged over 1 gram														
Uncontrolled Exposure/General Population																								

Table 10-43
LTE Band 7 Ant 3 Body SAR

MEASUREMENT RESULTS																							
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass #
		MHz	Ch																				
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.66	-0.11	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	back	1:1	0.417	1.274	0.531	0.173	0.220
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	-0.19	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	back	1:1	0.423	1.219	0.516	0.175	0.213
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.66	-0.03	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	top	1:1	0.762	1.274	0.871	0.269	0.343
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	15.70	14.51	0.03	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	top	1:1	0.741	1.315	0.874	0.267	0.351
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	15.70	14.57	0.06	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	top	1:1	0.732	1.297	0.875	0.265	0.344
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	0.01	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	top	1:1	0.728	1.219	0.887	0.264	0.322
1 CC UpLink	N/A	2510.0	21100	Mid	LTE Band 7	20	15.70	14.79	0.00	0	Ant 3	FWTORC22F	QPSK	50	25	0 mm	top	1:1	0.738	1.233	0.910	0.266	0.328
1 CC UpLink	N/A	2510.0	21350	High	LTE Band 7	20	15.70	14.76	0.10	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	top	1:1	0.737	1.242	0.960	0.270	0.335
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	0.02	0	Ant 3	FWTORC22F	QPSK	100	0	0 mm	top	1:1	0.734	1.276	0.937	0.267	0.341
2 CC UpLink	POC	2560.0	21350	High	LTE Band 7	20							50	0									
2 CC UpLink	SOC	2540.25	21152	High	LTE Band 7	20	15.70	14.27	-0.21	0	Ant 3	FWTORC22F	QPSK	50	50	0 mm	top	1:1	0.775	1.268	0.983	0.266	0.337
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.66	-0.16	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	bottom	1:1	0.601	1.274	0.801	0.002	0.000
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	-0.12	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	bottom	1:1	0.692	1.219	0.802	0.001	0.001
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.66	-0.09	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	right	1:1	0.156	1.274	0.159	0.001	0.078
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	-0.08	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	right	1:1	0.156	1.219	0.193	0.001	0.074
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.66	-0.19	0	Ant 3	FWTORC22F	QPSK	1	0	0 mm	left	1:1	0.008	1.274	0.016	0.002	0.003
1 CC UpLink	N/A	2510.0	20850	Low	LTE Band 7	20	15.70	14.84	-0.17	0	Ant 3	FWTORC22F	QPSK	50	0	0 mm	left	1:1	0.010	1.219	0.012	0.002	0.002
ANSI / IEEE C63.1-1992 - SAFETY LIMIT												Body 1.6 W/kg (avg) 0.08 W/kg (any 1g)											
Spatial Peak												Spatial Peak											
Uncontrolled Exposure/General Population												Uncontrolled Exposure/General Population											

Table 10-44
LTE Band 7 Ant 4b Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink / 2 CC Uplink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spk (dB)	MFR (Hz)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	SAR (W/kg)	Point #
		MHz	Ch																					
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.35	0.03	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	back	1.1	0.663	1.303	0.864	0.239	0.311	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.50	11.27	0.01	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	back	1.1	0.675	1.327	0.886	0.239	0.316	
1 CC Uplink	N/A	2550.00	21350	High	LTE Band 7	20	12.50	11.34	0.01	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	back	1.1	0.657	1.305	0.859	0.230	0.300	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.52	0.03	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	back	1.1	0.716	1.263	0.897	0.253	0.317	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.50	11.46	0.02	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	back	1.1	0.672	1.271	0.854	0.237	0.301	
1 CC Uplink	N/A	2550.00	21350	High	LTE Band 7	20	12.50	11.40	-0.05	0	Ant 4b	KSPK04300Q	QPSK	50	25	0 mm	back	1.1	0.671	1.288	0.864	0.234	0.301	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.34	0.03	0	Ant 4b	KSPK04300Q	QPSK	100	0	0 mm	back	1.1	0.707	1.306	0.923	0.290	0.327	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.35	-0.02	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	top	1.1	0.688	1.303	0.866	0.229	0.298	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.50	11.27	-0.05	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	top	1.1	0.711	1.327	0.943	0.234	0.311	
1 CC Uplink	N/A	2550.00	21350	High	LTE Band 7	20	12.50	11.34	-0.05	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	top	1.1	0.737	1.306	0.963	0.243	0.317	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.52	-0.18	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	top	1.1	0.724	1.253	0.907	0.240	0.301	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.50	11.45	-0.03	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	top	1.1	0.721	1.271	0.916	0.237	0.301	
1 CC Uplink	N/A	2550.00	21350	High	LTE Band 7	20	12.50	11.34	-0.07	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	top	1.1	0.758	1.306	0.987	0.252	0.329	
1 CC Uplink	N/A	2550.00	21350	High	LTE Band 7	20	12.50	11.40	-0.05	0	Ant 4b	KSPK04300Q	QPSK	50	25	0 mm	top	1.1	0.776	1.288	0.999	0.253	0.324	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.34	-0.05	0	Ant 4b	KSPK04300Q	QPSK	100	0	0 mm	top	1.1	0.722	1.306	0.943	0.239	0.312	
2 CC Uplink	PCC	2580.00	21350	High	LTE Band 7	20	12.50	11.60	-0.09	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	top	1.1	0.796	1.230	0.979	0.264	0.325	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20	12.50	11.60	-0.09	0	Ant 4b	KSPK04300Q	QPSK	50	50	0 mm	top	1.1	0.796	1.230	0.979	0.264	0.325	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.35	0.00	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	bottom	1.1	0.000	1.303	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.52	0.00	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	bottom	1.1	0.000	1.253	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.35	0.20	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	right	1.1	0.008	1.303	0.010	0.002	0.003	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.52	0.16	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	right	1.1	0.007	1.253	0.009	0.002	0.003	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.35	0.20	0	Ant 4b	KSPK04300Q	QPSK	1	0	0 mm	left	1.1	0.004	1.303	0.044	0.012	0.016	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.50	11.52	0.14	0	Ant 4b	KSPK04300Q	QPSK	50	0	0 mm	left	1.1	0.037	1.253	0.046	0.013	0.016	
ANSI / IEEE C63.1-1992 - SAFETY LIMIT																			Body					
Spatial Peak																			1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population																			averaged over 1 gram					

Table 10-45
LTE Band 41 Ant 1 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink / 2 CC Uplink / Power Class	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spk (dBm)	MFR (Hz)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Point #	
		MHz	Ch																					
1 CC Uplink - Power Class 3	N/A	2500.00	30750	Low	LTE Band 41	20	18.50	17.15	-0.16	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.158	0.593	1.365	0.809	0.239	0.326	
1 CC Uplink - Power Class 3	N/A	2500.00	30750	Low	LTE Band 41	20	18.50	17.02	-0.12	0	Ant 1	VNL2W43VC	QPSK	1	99	0 mm	back	1.158	0.594	1.406	0.779	0.221	0.311	
1 CC Uplink - Power Class 3	N/A	2540.00	40185	Low-Mid	LTE Band 41	20	18.50	17.34	-0.18	0	Ant 1	VNL2W43VC	QPSK	1	50	0 mm	back	1.158	0.592	1.306	0.734	0.227	0.296	
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	18.50	17.52	-0.15	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.158	0.548	1.253	0.687	0.221	0.277	
1 CC Uplink - Power Class 3	N/A	2638.00	41055	Mid-High	LTE Band 41	20	18.50	17.58	-0.14	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.158	0.530	1.236	0.664	0.210	0.260	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.59	-0.09	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.158	0.507	1.233	0.660	0.203	0.250	
1 CC Uplink - Power Class 3	N/A	2500.00	30750	Low	LTE Band 41	20	18.50	17.31	-0.17	0	Ant 1	VNL2W43VC	QPSK	50	0	0 mm	back	1.158	0.476	1.315	0.629	0.193	0.254	
1 CC Uplink - Power Class 3	N/A	2540.00	40185	Low-Mid	LTE Band 41	20	18.50	17.34	-0.12	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	back	1.158	0.597	1.247	0.732	0.237	0.296	
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	18.50	17.51	-0.10	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	back	1.158	0.596	1.227	0.692	0.223	0.274	
1 CC Uplink - Power Class 3	N/A	2638.00	41055	Mid-High	LTE Band 41	20	18.50	17.63	-0.14	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	back	1.158	0.543	1.222	0.664	0.213	0.260	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.67	-0.14	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	back	1.158	0.536	1.211	0.637	0.202	0.245	
1 CC Uplink - Power Class 3	N/A	2638.00	41055	Mid-High	LTE Band 41	20	18.50	17.58	-0.13	0	Ant 1	VNL2W43VC	QPSK	100	0	0 mm	back	1.158	0.536	1.236	0.682	0.211	0.261	
1 CC Uplink - Power Class 3	N/A	2500.00	30750	Low	LTE Band 41	20	20.15	19.73	-0.20	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.231	0.704	1.162	0.778	0.285	0.314	
1 CC Uplink - Power Class 3	N/A	2500.00	30750	Low	LTE Band 41	20	20.15	19.69	-0.20	0	Ant 1	VNL2W43VC	QPSK	1	99	0 mm	back	1.231	0.677	1.157	0.763	0.275	0.310	
2 CC Uplink - Power Class 3	PCC	2506.00	30750	Low	LTE Band 41	20	18.50	17.30	-0.15	0	Ant 1	VNL2W43VC	QPSK	1	99	0 mm	back	1.158	0.575	1.318	0.758	0.231	0.304	
2 CC Uplink - Power Class 3	SCC	2525.80	35948	Low	LTE Band 41	20	18.50	17.30	-0.15	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.158	0.575	1.318	0.758	0.231	0.304	
2 CC Uplink - Power Class 3	PCC	2506.00	30750	Low	LTE Band 41	20	20.15	19.45	-0.13	0	Ant 1	VNL2W43VC	QPSK	1	99	0 mm	back	1.231	0.650	1.175	0.764	0.263	0.309	
2 CC Uplink - Power Class 3	SCC	2525.80	35948	Low	LTE Band 41	20	20.15	19.45	-0.13	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	back	1.231	0.650	1.175	0.764	0.263	0.309	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.59	0.20	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	top	1.158	0.016	1.233	0.020	0.005	0.006	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.67	0.18	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	top	1.158	0.016	1.211	0.019	0.005	0.006	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.59	-0.15	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	bottom	1.158	0.235	1.233	0.290	0.102	0.126	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.67	-0.14	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	bottom	1.158	0.233	1.211	0.270	0.088	0.119	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.59	0.17	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	right	1.158	0.001	1.233	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.67	0.19	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	right	1.158	0.000	1.211	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.59	-0.03	0	Ant 1	VNL2W43VC	QPSK	1	0	0 mm	left	1.158	0.220	1.233	0.271	0.080	0.099	
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	18.50	17.67	0.02	0	Ant 1	VNL2W43VC	QPSK	50	25	0 mm	left	1.158	0.186	1.211	0.225	0.068	0.082	
ANSI / IEEE C802.15.2 - SAFETY LIMIT												Body												
Spatial Peak												1.5 W/kg (avg/1g)												
Uncontrolled Exposure/General Population												averaged over 1 year												

Table 10-46
LTE Band 41 Ant 2b Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink / 2 CC Uplink, Power Class	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spect (dBm)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Prior #	
		MHz	Ch																					
1 CC Uplink - Power Class 3	N/A	2550.00	39750	Low	LTE Band 41	20	13.60	12.57	-0.17	0	Ant 2b	FWTQRC22F	QPSK	1	0	0 mm	back	1:1.58	0.551	1.268	0.699	0.230	0.262	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.60	12.59	-0.15	0	Ant 2b	FWTQRC22F	QPSK	1	50	0 mm	back	1:1.58	0.565	1.262	0.713	0.233	0.294	
1 CC Uplink - Power Class 3	N/A	2550.00	40200	Mid	LTE Band 41	20	13.60	12.62	-0.13	0	Ant 2b	FWTQRC22F	QPSK	1	0	0 mm	back	1:1.58	0.514	1.253	0.769	0.251	0.315	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.60	12.49	-0.15	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	back	1:1.58	0.609	1.259	0.786	0.249	0.321	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.76	-0.17	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	back	1:1.58	0.654	1.213	0.793	0.263	0.319	
1 CC Uplink - Power Class 3	N/A	2556.00	39750	Low	LTE Band 41	20	13.60	12.73	-0.20	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	back	1:1.58	0.576	1.222	0.734	0.238	0.291	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.60	12.71	-0.18	0	Ant 2b	FWTQRC22F	QPSK	50	25	0 mm	back	1:1.58	0.596	1.227	0.731	0.245	0.301	
1 CC Uplink - Power Class 3	N/A	2550.00	40200	Mid	LTE Band 41	20	13.60	12.70	-0.15	0	Ant 2b	FWTQRC22F	QPSK	50	25	0 mm	back	1:1.58	0.621	1.230	0.764	0.263	0.311	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.60	12.62	-0.16	0	Ant 2b	FWTQRC22F	QPSK	50	25	0 mm	back	1:1.58	0.634	1.203	0.794	0.267	0.332	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.68	-0.14	0	Ant 2b	FWTQRC22F	QPSK	50	0	0 mm	back	1:1.58	0.684	1.238	0.845	0.272	0.336	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.75	-0.16	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	back	1:1.58	0.665	1.216	0.809	0.267	0.335	
1 CC Uplink - Power Class 3	N/A	2556.00	39750	Low	LTE Band 41	20	13.60	12.74	-0.16	0	Ant 2b	FWTQRC22F	QPSK	100	0	0 mm	back	1:1.58	0.580	1.219	0.707	0.259	0.301	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	15.25	14.94	-0.38	0	Ant 2b	FWTQRC22F	QPSK	50	0	0 mm	back	1:2.31	0.747	1.099	0.821	0.297	0.325	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	15.25	14.79	-0.39	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	back	1:2.31	0.656	1.112	0.729	0.265	0.295	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	13.60	12.59	-0.16	0	Ant 2b	FWTQRC22F	QPSK	50	0	0 mm	back	1:1.58	0.549	1.262	0.819	0.257	0.324	
2 CC Uplink - Power Class 3	SCC	2680.20	41202	High	LTE Band 41	20								50	50									
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20		15.25	14.71	0.00	0	Ant 2b	FWTQRC22F	QPSK	50	0	0 mm	back	1:2.31	0.662	1.132	0.749	0.266	0.301
2 CC Uplink - Power Class 3	SCC	2680.20	41202	High	LTE Band 41	20								50	50									
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.76	0.12	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	top	1:1.58	0.907	1.213	0.608	0.002	0.002	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.75	0.20	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	top	1:1.58	0.907	1.216	0.609	0.002	0.002	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.76	0.03	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	bottom	1:1.58	0.197	1.213	0.239	0.072	0.087	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.75	-0.01	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	bottom	1:1.58	0.201	1.216	0.244	0.074	0.090	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.76	-0.05	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	right	1:1.58	0.009	1.213	0.011	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.75	0.20	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	right	1:1.58	0.009	1.216	0.011	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.76	0.20	0	Ant 2b	FWTQRC22F	QPSK	1	90	0 mm	left	1:1.58	0.007	1.213	0.008	0.002	0.002	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.60	12.75	0.19	0	Ant 2b	FWTQRC22F	QPSK	50	50	0 mm	left	1:1.58	0.007	1.216	0.009	0.002	0.002	
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body														
Spatial Peak										1.6 W/kg (mW/g) averaged over 1 gram														
Uncontrolled Exposure/General Population																								

Table 10-47
LTE Band 41 Ant 3 Body SAR

MEASUREMENT RESULTS																							
1 CC (Uplink / 2 CC Uplink, Power Class 3)	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dens. (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg) (MHz)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass
		MHz	Ch																				
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.95	0.02	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	back	1:1.58	0.421	1.035	0.436	0.174	0.180
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Mid	LTE Band 41	20	17.10	17.06	0.00	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	back	1:1.58	0.438	1.012	0.433	0.176	0.178
1 CC Uplink - Power Class 3	N/A	2556.00	39750	Low	LTE Band 41	20	17.10	16.83	0.00	0	Ant 3	VNL2W43VC	QPSK	1	90	0 mm	top	1:1.58	0.819	1.094	0.879	0.273	0.290
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.95	0.05	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:1.58	0.847	1.035	0.877	0.279	0.289
1 CC Uplink - Power Class 3	N/A	2550.00	40200	Mid	LTE Band 41	20	17.10	16.94	0.03	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:1.58	0.937	1.038	0.973	0.305	0.317
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	17.10	16.97	0.04	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:1.58	0.877	1.054	0.924	0.281	0.296
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.10	16.88	0.03	0	Ant 3	VNL2W43VC	QPSK	1	90	0 mm	top	1:1.58	0.799	1.102	0.880	0.254	0.280
1 CC Uplink - Power Class 3	N/A	2556.00	39750	Low	LTE Band 41	20	17.10	17.00	0.09	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	top	1:1.58	0.868	1.023	0.888	0.287	0.294
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	17.05	0.08	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	top	1:1.58	0.876	1.012	0.887	0.280	0.289
1 CC Uplink - Power Class 3	N/A	2550.00	40200	Mid	LTE Band 41	20	17.10	16.94	0.03	0	Ant 3	VNL2W43VC	QPSK	50	25	0 mm	top	1:1.58	0.915	1.038	0.950	0.295	0.306
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	17.10	17.00	0.03	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	top	1:1.58	0.898	1.023	0.919	0.287	0.294
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.10	16.76	0.04	0	Ant 3	VNL2W43VC	QPSK	50	25	0 mm	top	1:1.58	0.825	1.081	0.892	0.261	0.282
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.88	-0.01	0	Ant 3	VNL2W43VC	QPSK	100	0	0 mm	top	1:1.58	0.906	1.062	0.953	0.296	0.311
1 CC Uplink - Power Class 3	N/A	2550.00	40200	Mid	LTE Band 41	20	18.75	18.69	-0.10	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:2.31	0.916	1.014	0.929	0.303	0.307
2 CC Uplink - Power Class 3	PCC	2593.00	40260	Mid	LTE Band 41	20	17.10	16.40	-0.03	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:1.58	0.026	1.175	0.971	0.267	0.314
2 CC Uplink - Power Class 3	SCC	2573.20	40422	Mid	LTE Band 41	20				1	99	0 mm	top	1:1.58	0.026	1.175	0.971	0.267	0.314				
2 CC Uplink - Power Class 3	PCC	2593.00	40260	Mid	LTE Band 41	20	18.75	18.75	-0.02	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	top	1:2.31	0.974	1.000	0.974	0.319	0.319
2 CC Uplink - Power Class 3	SCC	2573.20	40422	Mid	LTE Band 41	20				1	99	0 mm	top	1:2.31	0.974	1.000	0.974	0.319	0.319				
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.95	0.13	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	bottom	1:1.58	0.911	1.035	0.911	0.005	0.005
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	17.05	0.12	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	bottom	1:1.58	0.919	1.012	0.919	0.004	0.004
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.95	-0.07	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	right	1:1.58	0.194	1.035	0.190	0.007	0.009
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	17.05	-0.04	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	right	1:1.58	0.188	1.012	0.190	0.008	0.009
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	16.95	0.16	0	Ant 3	VNL2W43VC	QPSK	1	0	0 mm	left	1:1.58	0.005	1.035	0.005	0.002	0.002
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.10	17.05	0.18	0	Ant 3	VNL2W43VC	QPSK	50	0	0 mm	left	1:1.58	0.006	1.012	0.006	0.002	0.002
ANSI / IEEE C63.1982 - SAFETY LIMIT												Body 1.5 W/kg (avg) over 1 gram											
Spatial Peak												Spatial Peak											
Uncontrolled Exposure/General Population												Uncontrolled Exposure/General Population											

Table 10-48
LTE Band 41 Ant 4b Body SAR

MEASUREMENT RESULTS																							
1 CC Uplink / 2 CC Uplink - Power Class	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass #
		MHz	Ch																				
1 CC Uplink - Power Class 3	N/A	2550.00	38750	Low	LTE Band 41	20	14.80	14.35	-0.02	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	back	1:15.8	0.758	1.109	0.841	0.271	0.301
1 CC Uplink - Power Class 3	N/A	2548.50	40185	Low-Mid	LTE Band 41	20	14.80	14.28	-0.02	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	back	1:15.8	0.731	1.127	0.824	0.258	0.291
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	14.80	14.57	-0.01	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	back	1:15.8	0.770	1.054	0.812	0.267	0.281
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	14.52	-0.05	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	back	1:15.8	0.820	1.067	0.875	0.283	0.302
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.67	-0.00	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	back	1:15.8	0.874	1.030	0.900	0.299	0.308
1 CC Uplink - Power Class 3	N/A	2550.00	38750	Low	LTE Band 41	20	14.80	14.49	-0.01	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	back	1:15.8	0.788	1.074	0.848	0.279	0.300
1 CC Uplink - Power Class 3	N/A	2548.50	40185	Low-Mid	LTE Band 41	20	14.80	14.40	-0.01	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	back	1:15.8	0.768	1.096	0.840	0.267	0.293
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	14.80	14.65	-0.02	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	back	1:15.8	0.794	1.035	0.811	0.271	0.280
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	14.68	-0.01	0	Ant 4b	FWTQRC22F	QPSK	50	50	0 mm	back	1:15.8	0.807	1.047	0.845	0.278	0.291
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.77	-0.02	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	back	1:15.8	0.844	1.007	0.850	0.290	0.292
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.64	-0.03	0	Ant 4b	FWTQRC22F	QPSK	100	0	0 mm	back	1:15.8	0.826	1.038	0.857	0.284	0.295
1 CC Uplink - Power Class 3	N/A	2550.00	38750	Low	LTE Band 41	20	14.80	14.35	-0.06	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.742	1.109	0.823	0.240	0.275
1 CC Uplink - Power Class 3	N/A	2548.50	40185	Low-Mid	LTE Band 41	20	14.80	14.28	-0.06	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.771	1.127	0.869	0.256	0.289
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	14.80	14.57	-0.01	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.860	1.054	0.906	0.284	0.299
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	14.52	-0.00	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.935	1.007	0.988	0.308	0.323
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.67	-0.02	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.969	1.030	0.980	0.316	0.325
1 CC Uplink - Power Class 3	N/A	2550.00	38750	Low	LTE Band 41	20	14.80	14.49	-0.08	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	top	1:15.8	0.771	1.074	0.828	0.257	0.276
1 CC Uplink - Power Class 3	N/A	2548.50	40185	Low-Mid	LTE Band 41	20	14.80	14.48	-0.07	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	top	1:15.8	0.820	1.098	0.899	0.269	0.295
1 CC Uplink - Power Class 3	N/A	2550.00	40500	Mid	LTE Band 41	20	14.80	14.65	-0.03	0	Ant 4b	FWTQRC22F	QPSK	50	25	0 mm	top	1:15.8	0.866	1.035	0.908	0.294	0.304
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	14.60	-0.10	0	Ant 4b	FWTQRC22F	QPSK	50	50	0 mm	top	1:15.8	0.950	1.047	0.938	0.311	0.326
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.77	-0.03	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	top	1:15.8	0.979	1.007	0.988	0.319	0.321
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.64	-0.05	0	Ant 4b	FWTQRC22F	QPSK	100	0	0 mm	top	1:15.8	0.961	1.036	0.988	0.315	0.325
2 CC Uplink - Power Class 2	N/A	2680.00	41480	High	LTE Band 41	20	15.45	16.16	-0.01	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:2.31	0.982	1.089	0.921	0.277	0.296
2 CC Uplink - Power Class 3	PCC	2680.00	41480	High	LTE Band 41	20	14.80	13.98	-0.05	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:15.8	0.824	1.208	0.993	0.270	0.328
2 CC Uplink - Power Class 3	SCC	2680.00	41502	High	LTE Band 41	20	18.45	16.39	-0.01	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	top	1:2.31	0.908	1.074	0.921	0.298	0.302
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.67	-0.13	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	bottom	1:15.8	0.900	1.030	0.900	0.000	0.000
1 CC Uplink - Power Class 3	SCC	2680.00	41502	High	LTE Band 41	20	14.80	14.77	-0.14	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	bottom	1:15.8	0.900	1.007	0.900	0.000	0.000
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.67	-0.20	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	right	1:15.8	0.919	1.030	0.920	0.008	0.008
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.77	-0.19	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	right	1:15.8	0.920	1.007	0.920	0.008	0.008
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.67	-0.05	0	Ant 4b	FWTQRC22F	QPSK	1	0	0 mm	left	1:15.8	0.926	1.030	0.927	0.011	0.011
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.77	-0.11	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	left	1:15.8	0.928	1.007	0.928	0.012	0.012
1 CC Uplink - Power Class 3	N/A	2680.00	41480	High	LTE Band 41	20	14.80	14.77	-0.07	0	Ant 4b	FWTQRC22F	QPSK	50	0	0 mm	top	1:15.8	0.950	1.007	0.957	0.310	0.312
ANSI / IEEE C63.1-1992 - SAFETY LIMIT										Body													
Spatial Peak										1.6 W/kg (mW/g)													
Uncontrolled Exposure/General Population										averaged over 1 gram													

Note: Blue entry represents variability measurement.

Table 10-49
LTE Band 48 Ant 1 Body SAR

MEASUREMENT RESULTS																							
1 CC Uplink / 2 CC Uplink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Pass #
		MHz	Channel																				
1 CC Uplink	N/A	3550.00	53340	Low	LTE Band 48	20	14.00	13.74	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	back	1:15.8	0.605	1.062	0.943	0.138	0.136
1 CC Uplink	N/A	3600.00	53340	Low-Mid	LTE Band 48	20	14.00	13.68	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	back	1:15.8	0.602	1.084	0.918	0.143	0.155
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.81	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	back	1:15.8	0.622	1.045	0.859	0.179	0.187
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	back	1:15.8	0.605	1.054	0.943	0.185	0.195
1 CC Uplink	N/A	3550.00	53340	Low	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	25	0 mm	back	1:15.8	0.597	1.054	0.819	0.123	0.130
1 CC Uplink	N/A	3600.00	53340	Low-Mid	LTE Band 48	20	14.00	13.80	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	25	0 mm	back	1:15.8	0.603	1.047	0.715	0.146	0.155
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.92	-0.18	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	back	1:15.8	0.677	1.042	0.914	0.198	0.194
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	0	0 mm	back	1:15.8	0.923	1.054	0.873	0.192	0.202
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.80	-0.20	0	Ant 1	VNL2W49VC	QPSK	100	0	0 mm	back	1:15.8	0.916	1.047	0.959	0.195	0.204
2 CC Uplink	PCC	3690.00	55640	High	LTE Band 48	20							50	0									
2 CC Uplink	SCC	3670.20	55442	High	LTE Band 48	20	14.00	13.90	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	back	1:15.8	0.944	1.023	0.968	0.194	0.198
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.81	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	top	1:15.8	0.590	1.045	0.590	0.000	0.000
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.82	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	top	1:15.8	0.600	1.042	0.590	0.000	0.000
1 CC Uplink	N/A	3550.00	53340	Low	LTE Band 48	20	14.00	13.74	-0.15	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	bottom	1:15.8	0.433	1.062	0.490	0.106	0.113
1 CC Uplink	N/A	3600.00	53340	Low-Mid	LTE Band 48	20	14.00	13.68	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	bottom	1:15.8	0.477	1.084	0.517	0.120	0.127
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.81	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	bottom	1:15.8	0.594	1.045	0.810	0.143	0.149
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	bottom	1:15.8	0.606	1.054	0.872	0.156	0.164
1 CC Uplink	N/A	3550.00	53340	Low	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	25	0 mm	bottom	1:15.8	0.467	1.054	0.492	0.115	0.121
1 CC Uplink	N/A	3600.00	53340	Low-Mid	LTE Band 48	20	14.00	13.80	-0.10	0	Ant 1	VNL2W49VC	QPSK	50	25	0 mm	bottom	1:15.8	0.499	1.047	0.522	0.125	0.131
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.92	-0.21	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	bottom	1:15.8	0.602	1.042	0.627	0.160	0.165
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.77	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	0	0 mm	bottom	1:15.8	0.842	1.054	0.677	0.167	0.165
1 CC Uplink	N/A	3690.00	55640	High	LTE Band 48	20	14.00	13.80	-0.21	0	Ant 1	VNL2W49VC	QPSK	100	0	0 mm	bottom	1:15.8	0.853	1.047	0.684	0.167	0.164
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.81	-0.20	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	right	1:15.8	0.600	1.045	0.590	0.000	0.000
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.82	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	right	1:15.8	0.600	1.042	0.590	0.000	0.000
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.81	-0.19	0	Ant 1	VNL2W49VC	QPSK	1	0	0 mm	left	1:15.8	0.513	1.045	0.327	0.072	0.075
1 CC Uplink	N/A	3648.70	53207	Mid-High	LTE Band 48	20	14.00	13.82	-0.18	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	left	1:15.8	0.328	1.042	0.337	0.076	0.079
2 CC Uplink	PCC	3690.00	55640	High	LTE Band 48	20							50	0									
2 CC Uplink	SCC	3670.20	55442	High	LTE Band 48	20	14.00	13.90	-0.20	0	Ant 1	VNL2W49VC	QPSK	50	50	0 mm	back	1:15.8	0.955	1.023	0.995	0.193	0.197
ANSI / IEEE C63.1-1992 - SAFETY LIMIT												Body											
Spatial Peak												1.9 W/kg (mW/g)											
Uncontrolled Exposure / General Population												FCC Part 15.247											

Table 10-50
LTE Band 48 Ant 2a Body SAR

MEASUREMENT RESULTS																							
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Slot (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Plot #
		MHz	Channel																				
1 CC UpLink	N/A	3550.00	55340	Low	LTE Band 48	20	13.40	12.99	-0.02	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.734	1.000	0.807	0.216	0.237
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.85	-0.02	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.738	1.135	0.838	0.222	0.252
1 CC UpLink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	12.95	-0.02	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.753	1.109	0.835	0.224	0.248
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.98	-0.06	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.701	1.102	0.773	0.207	0.229
1 CC UpLink	N/A	3590.00	55340	Low	LTE Band 48	20	13.40	13.01	-0.16	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	back	1:1.58	0.742	1.094	0.812	0.221	0.242
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.99	0.03	0	Ant 2a	KPPKG4300G	QPSK	50	25	0 mm	back	1:1.58	0.732	1.089	0.804	0.221	0.243
1 CC UpLink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	12.98	-0.04	0	Ant 2a	KSPKG4300G	QPSK	50	50	0 mm	back	1:1.58	0.729	1.102	0.803	0.219	0.241
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.98	-0.06	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	back	1:1.58	0.685	1.102	0.795	0.201	0.222
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.99	-0.06	0	Ant 2a	KPPKG4300G	QPSK	100	0	0 mm	back	1:1.58	0.729	1.102	0.803	0.219	0.241
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	12.98	-0.12	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	top	1:1.58	0.601	1.089	0.801	0.000	0.000
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	13.01	0.12	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	top	1:1.58	0.603	1.094	0.803	0.001	0.001
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	12.99	0.15	0	Ant 2a	KPPKG4300G	QPSK	1	0	0 mm	bottom	1:1.58	0.182	1.089	0.211	0.047	0.052
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	13.01	-0.09	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	bottom	1:1.58	0.196	1.094	0.214	0.050	0.055
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	12.99	0.03	0	Ant 2a	KPPKG4300G	QPSK	1	0	0 mm	right	1:1.58	0.765	1.089	0.841	0.203	0.223
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.85	0.03	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	right	1:1.58	0.790	1.135	0.885	0.208	0.236
1 CC UpLink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	12.99	-0.03	0	Ant 2a	KPPKG4300G	QPSK	1	0	0 mm	right	1:1.58	0.756	1.109	0.838	0.198	0.220
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.98	-0.01	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	right	1:1.58	0.692	1.102	0.763	0.171	0.188
1 CC UpLink	N/A	3590.00	55340	Low	LTE Band 48	20	13.40	13.01	0.02	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	right	1:1.58	0.828	1.094	0.906	0.215	0.235
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	13.00	0.01	0	Ant 2a	KPPKG4300G	QPSK	50	50	0 mm	right	1:1.58	0.909	1.086	0.996	0.240	0.263
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.99	0.02	0	Ant 2a	KSPKG4300G	QPSK	50	25	0 mm	right	1:1.58	0.791	1.089	0.869	0.207	0.227
1 CC UpLink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	12.98	-0.01	0	Ant 2a	KPPKG4300G	QPSK	50	50	0 mm	right	1:1.58	0.775	1.102	0.854	0.194	0.214
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.98	0.05	0	Ant 2a	KSPKG4300G	QPSK	50	0	0 mm	right	1:1.58	0.694	1.102	0.765	0.172	0.190
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	12.98	0.06	0	Ant 2a	KPPKG4300G	QPSK	100	0	0 mm	right	1:1.58	0.794	1.102	0.875	0.203	0.224
2 CC UpLink	PCC	3690.00	56340	Low	LTE Band 48	20	13.40	13.24	-0.01	0	Ant 2a	KPPKG4300G	QPSK	50	50	0 mm	right	1:1.58	0.905	1.038	0.961	0.240	0.249
2 CC UpLink	SCC	3679.80	55538	Low	LTE Band 48	20																	
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	12.99	0.00	0	Ant 2a	KSPKG4300G	QPSK	1	0	0 mm	left	1:1.58	0.000	1.089	0.000	0.000	0.000
1 CC UpLink	N/A	3690.00	56340	Low	LTE Band 48	20	13.40	13.01	0.00	0	Ant 2a	KPPKG4300G	QPSK	50	0	0 mm	left	1:1.58	0.000	1.094	0.000	0.000	0.000
2 CC UpLink	PCC	3690.00	56340	Low	LTE Band 48	20																	
2 CC UpLink	SCC	3679.80	55538	Low	LTE Band 48	20	13.40	13.24	0.01	0	Ant 2a	KPPKG4300G	QPSK	50	50	0 mm	right	1:1.58	0.807	1.038	0.880	0.236	0.245
ANSI / IEEE C63.11-1987 - SAFETY LIMIT										Body										1.6 W/kg (mW/g)			
Spatial Peak										averaged over 1 gram													
Uncontrolled Exposure/General Population																							

Note: Blue entry represents variability measurement.

Table 10-51
LTE Band 48 Ant 3 Body SAR

MEASUREMENT RESULTS																							
1 CC Uplink / 2 CC Uplink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Slot (dB)	MPE (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Plot #
		MHz	Ch																				
1 CC Uplink	N/A	3550.00	55340	Low	LTE Band 48	20	13.00	12.80	-0.20	0	Ant 3	NRWNT4PMV	QPSK	1	90	0 mm	back	1:1.58	0.607	1.096	0.887	0.146	0.159
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.00	12.65	0.12	0	Ant 3	NRWNT4PMV	QPSK	1	90	0 mm	back	1:1.58	0.633	1.094	0.888	0.142	0.154
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.00	12.78	0.12	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	back	1:1.58	0.664	1.052	0.889	0.149	0.157
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.90	0.14	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	back	1:1.58	0.772	1.023	0.790	0.173	0.177
1 CC Uplink	N/A	3690.00	56340	Low	LTE Band 48	20	13.00	12.78	0.15	0	Ant 3	NRWNT4PMV	QPSK	50	50	0 mm	back	1:1.58	0.687	1.057	0.728	0.154	0.163
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.00	12.74	0.13	0	Ant 3	NRWNT4PMV	QPSK	50	25	0 mm	back	1:1.58	0.644	1.062	0.884	0.146	0.154
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.00	12.87	0.14	0	Ant 3	NRWNT4PMV	QPSK	50	50	0 mm	back	1:1.58	0.698	1.030	0.719	0.154	0.160
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.98	0.17	0	Ant 3	NRWNT4PMV	QPSK	50	0	0 mm	back	1:1.58	0.788	1.002	0.800	0.178	0.178
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	-0.04	0	Ant 3	NRWNT4PMV	QPSK	100	0	0 mm	back	1:1.58	0.843	1.107	0.933	0.198	0.206
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.00	12.65	0.20	0	Ant 3	NRWNT4PMV	QPSK	100	0	0 mm	back	1:1.58	0.893	1.084	0.968	0.198	0.215
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20																	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.90	-0.13	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	top	1:1.58	0.509	1.023	0.521	0.126	0.129
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	0.13	0	Ant 3	NRWNT4PMV	QPSK	50	0	0 mm	top	1:1.58	0.514	1.002	0.515	0.127	0.127
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	0.00	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	bottom	1:1.58	0.001	1.023	0.001	0.000	0.000
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	0.00	0	Ant 3	NRWNT4PMV	QPSK	50	0	0 mm	bottom	1:1.58	0.000	1.002	0.000	0.000	0.000
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.90	0.20	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	right	1:1.58	0.913	1.023	0.913	0.003	0.003
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	-0.18	0	Ant 3	NRWNT4PMV	QPSK	50	0	0 mm	right	1:1.58	0.916	1.002	0.916	0.004	0.004
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	0.08	0	Ant 3	NRWNT4PMV	QPSK	1	0	0 mm	left	1:1.58	0.004	1.023	0.004	0.000	0.000
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.00	12.99	-0.26	0	Ant 3	NRWNT4PMV	QPSK	50	0	0 mm	left	1:1.58	0.007	1.002	0.007	0.000	0.000
ANSI / IEEE C63.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																							
																		Body (15 W/kg (avg)) averaged over 1 gram					

Table 10-52
LTE Band 48 Ant 4a Body SAR

MEASUREMENT RESULTS																								
1 CC UpLink / 2 CC UpLink	Component Carrier	FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Spectral Density (dBm/100kHz)	MFR (dB)	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Plot #	
		MHz	Ch																					
1 CC UpLink	N/A	3550.00	55340	Low	LTE Band 48	20	12.60	11.29	0.04	0	Ant 4a	KSPKG4300G	QPSK	1	50	0 mm	back	1:1.58	0.640	1.352	0.885	0.194	0.262	
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.60	11.33	0.01	0	Ant 4a	KSPKG4300G	QPSK	1	50	0 mm	back	1:1.58	0.624	1.340	0.836	0.182	0.244	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.51	0.03	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.610	1.285	0.784	0.176	0.226	
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	12.60	11.27	0.04	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	back	1:1.58	0.587	1.358	0.797	0.169	0.229	
1 CC UpLink	N/A	3590.00	55340	Low	LTE Band 48	20	12.60	11.44	0.03	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	back	1:1.58	0.602	1.306	0.852	0.200	0.261	
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.60	11.41	0.01	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	back	1:1.58	0.636	1.315	0.836	0.188	0.247	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.53	-0.02	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	back	1:1.58	0.599	1.279	0.766	0.173	0.221	
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	12.60	11.38	0.03	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	back	1:1.58	0.613	1.324	0.812	0.174	0.230	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.50	0.00	0	Ant 4a	KSPKG4300G	QPSK	100	0	0 mm	back	1:1.58	0.598	1.288	0.770	0.176	0.227	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.51	0.04	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	top	1:1.58	0.220	1.285	0.283	0.050	0.064	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.53	0.07	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	top	1:1.58	0.209	1.279	0.267	0.048	0.061	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.51	0.14	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	bottom	1:1.58	0.001	1.285	0.001	0.000	0.000	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.50	0.20	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	bottom	1:1.58	0.000	1.279	0.000	0.000	0.000	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.51	0.00	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	right	1:1.58	0.000	1.285	0.000	0.000	0.000	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.53	0.00	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	right	1:1.58	0.000	1.279	0.000	0.000	0.000	
1 CC UpLink	N/A	3590.00	55340	Low	LTE Band 48	20	12.60	11.29	-0.01	0	Ant 4a	KSPKG4300G	QPSK	1	99	0 mm	left	1:1.58	0.606	1.352	0.887	0.170	0.230	
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.60	11.33	-0.04	0	Ant 4a	KSPKG4300G	QPSK	1	99	0 mm	left	1:1.58	0.617	1.340	0.827	0.180	0.201	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.51	0.06	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	left	1:1.58	0.610	1.285	0.784	0.149	0.191	
1 CC UpLink	N/A	3690.00	56640	High	LTE Band 48	20	12.60	11.27	0.11	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	left	1:1.58	0.629	1.358	0.854	0.152	0.206	
1 CC UpLink	N/A	3590.00	55340	Low	LTE Band 48	20	12.60	11.44	0.00	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	left	1:1.58	0.604	1.300	0.867	0.186	0.217	
1 CC UpLink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.60	11.41	0.00	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	left	1:1.58	0.608	1.315	0.800	0.151	0.199	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.50	0.09	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	left	1:1.58	0.626	1.279	0.801	0.151	0.193	
1 CC UpLink	N/A	3590.00	55640	High	LTE Band 48	20	12.60	11.38	0.12	0	Ant 4a	KSPKG4300G	QPSK	50	50	0 mm	left	1:1.58	0.637	1.324	0.843	0.155	0.205	
1 CC UpLink	N/A	3645.70	56207	Mid-High	LTE Band 48	20	12.60	11.50	-0.11	0	Ant 4a	KSPKG4300G	QPSK	100	0	0 mm	left	1:1.58	0.608	1.288	0.809	0.163	0.197	
2 CC UpLink	PCC	3590.00	55340	Low	LTE Band 48	20	12.60	11.95	0.02	0	Ant 4a	KSPKG4300G	QPSK	1	99	0	0 mm	left	1:1.58	0.701	1.161	0.884	0.195	0.226
2 CC UpLink	SCC	3570.80	55538	Low	LTE Band 48	20	12.60	11.95	0.02	0	Ant 4a	KSPKG4300G	QPSK	1	0	0 mm	left	1:1.58	0.701	1.161	0.884	0.195	0.226	
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body														
Spatial Peak										1.6 W/kg (mW/g)														
Uncontrolled Exposure/General Population										averaged over 1 gram														

Table 10-53
NR Band n71 Ant 1 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config.	Power Dens [dB]	MFR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (W/kg)	Scaling Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Plot #
MHz	Ch																SAR (W/kg)		SAR (W/kg)	SAR (W/kg)		
680.50	130100	M4	NR Band n71	20	20.10	19.72	Ant 1	0.03	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.348	1.091	0.380	0.172	0.188
680.50	130100	M4	NR Band n71	20	20.10	19.62	Ant 1	0.07	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.436	1.117	0.487	0.183	0.204
680.50	130100	M4	NR Band n71	20	20.10	19.64	Ant 1	-0.12	0.0	FWTQRC22F	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.361	1.112	0.401	0.172	0.191
680.50	130100	M4	NR Band n71	20	20.10	19.72	Ant 1	0.20	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.005	1.091	0.005	0.002	0.002
680.50	130100	M4	NR Band n71	20	20.10	19.62	Ant 1	0.20	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.005	1.117	0.006	0.002	0.002
680.50	130100	M4	NR Band n71	20	20.10	19.72	Ant 1	-0.01	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.352	1.091	0.384	0.131	0.143
680.50	130100	M4	NR Band n71	20	20.10	19.62	Ant 1	0.06	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.325	1.117	0.363	0.122	0.136
680.50	130100	M4	NR Band n71	20	20.10	19.72	Ant 1	-0.06	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.025	1.091	0.027	0.011	0.012
680.50	130100	M4	NR Band n71	20	20.10	19.62	Ant 1	0.20	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.018	1.117	0.020	0.008	0.009
680.50	130100	M4	NR Band n71	20	20.10	19.72	Ant 1	0.01	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.238	1.091	0.260	0.095	0.104
680.50	130100	M4	NR Band n71	20	20.10	19.62	Ant 1	0.20	0.0	FWTQRC22F	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.215	1.117	0.240	0.089	0.099
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body												
Spatial Peak										1.6 W/kg (mW/g)												
Uncontrolled Exposure/General Population										averaged over 1 gram												

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 144 of 211

Table 10-58
NR Band n5 Ant 3 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Dens [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) [W/kg]	Scaling Factor	Reported SAR (1g) [W/kg]	SAR (10g) [W/kg]	Reported SAR (10g) [W/kg]	Pilot #	
MHz	Ch.																						
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	-0.04	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.740	1.242	0.919	0.378	0.469	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	-0.16	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.732	1.259	0.922	0.376	0.476	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	17.90	Ant 3	-0.17	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.729	1.268	0.939	0.366	0.471	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.11	Ant 3	-0.17	0	KG16L7YJYJ	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.751	1.227	0.958	0.397	0.487	
A20	836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	-0.19	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.594	1.242	0.725	0.244	0.303
	836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.00	Ant 3	-0.20	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.588	1.259	0.740	0.248	0.312
	836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	0.10	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.913	1.242	0.916	0.607	0.609
	836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.00	Ant 3	0.18	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.913	1.259	0.916	0.607	0.609
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	0.01	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.269	1.242	0.330	0.134	0.154	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.00	Ant 3	0.01	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.266	1.259	0.335	0.126	0.159	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.06	Ant 3	0.08	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.030	1.242	0.037	0.015	0.019	
836.50	167300	Md	NR Band n5 (Cat)	20	19.00	18.00	Ant 3	0.21	0	KG16L7YJYJ	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.031	1.259	0.039	0.015	0.019	
ANSI / IEEE C63.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram													

Table 10-59
NR Band n66 Ant 1 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Dens [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	MPR [dB]	Duty Cycle	SAR (1g) [W/kg]	Scaling Factor	Reported SAR (1g) [W/kg]	SAR (10g) [W/kg]	Reported SAR (10g) [W/kg]	Pilot #
MHz	Ch.																					
1720.00	344000	Low	NR Band n66 (AWG)	20	15.50	14.55	Ant 1	0.04	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.547	1.245	0.681	0.264	0.329
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.56	Ant 1	0.00	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.586	1.242	0.728	0.279	0.347
1770.00	354000	High	NR Band n66 (AWG)	20	15.50	14.50	Ant 1	-0.01	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.654	1.259	0.823	0.302	0.380
1720.00	344000	Low	NR Band n66 (AWG)	20	15.50	14.50	Ant 1	-0.04	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.607	1.259	0.791	0.260	0.327
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.51	Ant 1	-0.03	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.570	1.256	0.716	0.274	0.344
1770.00	354000	High	NR Band n66 (AWG)	20	15.50	14.23	Ant 1	-0.08	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.616	1.340	0.826	0.292	0.391
1720.00	344000	Low	NR Band n66 (AWG)	20	15.50	14.50	Ant 1	0.01	0	JMA36FN2W6	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.556	1.259	0.700	0.261	0.329
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.50	Ant 1	0.01	0	JMA36FN2W6	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.570	1.259	0.718	0.272	0.342
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.56	Ant 1	0.20	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.001	1.242	0.001	0.000	0.000
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.51	Ant 1	0.21	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.000	1.256	0.000	0.000	0.000
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.56	Ant 1	0.03	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.444	1.242	0.551	0.169	0.247
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.51	Ant 1	0.08	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.392	1.256	0.462	0.185	0.232
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.56	Ant 1	-0.07	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.003	1.242	0.004	0.001	0.001
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.51	Ant 1	0.16	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.002	1.256	0.003	0.001	0.001
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.56	Ant 1	0.01	0	JMA36FN2W6	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.008	1.242	0.084	0.026	0.032
1745.00	349000	MA	NR Band n66 (AWG)	20	15.50	14.51	Ant 1	-0.06	0	JMA36FN2W6	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.074	1.256	0.083	0.029	0.036
ANSI / IEEE C63.1 1992 - SAFETY LIMIT										Body												
Uncontrolled Exposure/General Population										1.6 W/kg (mW/g) averaged over 1 gram												

FCC ID: BCGA2301	 Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 146 of 211

Table 10-66
NR Band n25 Ant 4b Body SAR

MEASUREMENT RESULTS																							
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed power [dBm]	Conducted Power [dBm]	Antenna Config	Power Dens [dB]	MPE [dB]	Antenna State	Serial Number	Waveform	Modulation	RF Size	RF Offset	Spacing	Side	Body Cycle	SAR (kg) (W/kg)	Scaling Factor	Reported SAR (kg) (W/kg)	SAR (kg) (W/kg)	Reported SAR (kg) (W/kg)	Pass #
Min.	Ch.																						
1880.00	375000	Low	NR Band n25 (PC3)	20	12.50	10.74	Ant 4b	0.03	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.507	1.500	0.761	0.219	0.329
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.76	Ant 4b	-0.01	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.518	1.483	0.758	0.219	0.325
1905.00	381000	High	NR Band n25 (PC3)	20	12.50	10.80	Ant 4b	0.10	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.550	1.479	0.825	0.228	0.324
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.75	Ant 4b	0.02	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	50	20	0 mm	back	1:1	0.488	1.496	0.745	0.219	0.319
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.73	Ant 4b	-0.06	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.484	1.503	0.727	0.210	0.316
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.77	Ant 4b	-0.01	0.0	Ant 4b	KG18L7Y3JY	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.480	1.489	0.724	0.211	0.314
1905.00	381000	High	NR Band n25 (PC3)	20	12.50	10.80	Ant 4b	-0.01	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.364	1.479	0.585	0.152	0.225
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.75	Ant 4b	-0.04	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	50	20	0 mm	top	1:1	0.336	1.496	0.550	0.136	0.203
1905.00	381000	High	NR Band n25 (PC3)	20	12.50	10.80	Ant 4b	0.00	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.000	1.479	0.000	0.000	0.000
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.75	Ant 4b	0.00	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	50	20	0 mm	bottom	1:1	0.000	1.496	0.000	0.000	0.000
1905.00	381000	High	NR Band n25 (PC3)	20	12.50	10.80	Ant 4b	0.20	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.002	1.479	0.000	0.000	0.000
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.75	Ant 4b	0.21	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	50	20	0 mm	right	1:1	0.001	1.496	0.000	0.000	0.000
1905.00	381000	High	NR Band n25 (PC3)	20	12.50	10.80	Ant 4b	0.20	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.018	1.479	0.027	0.006	0.009
1880.50	375000	Mid	NR Band n25 (PC3)	20	12.50	10.75	Ant 4b	0.21	0.0	Ant 4b	KG18L7Y3JY	DFT-S-OFDM	QPSK	50	20	0 mm	left	1:1	0.015	1.496	0.022	0.006	0.009
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body													
Spatial Peak										1.6 W/kg (mW/g)													
Uncontrolled Exposure/General Population										averaged over 1 gram													

Table 10-67
NR Band n41 Ant 1 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Dens [dB]	MPE [dB]	Power Class	Serial Number	Waveform	Modulation	RF Size	RF Offset	Spacing	MPE [dB]	Body Cycle	SAR (kg) (W/kg)	Scaling Factor	Reported SAR (kg) (W/kg)	SAR (kg) (W/kg)	Reported SAR (kg) (W/kg)	Pass #
Min	Ch																						
2502.99	518598	Mid	NR Band n41	100	14.00	12.74	Ant 1	-0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.375	1.337	0.501	0.152	0.203
2502.99	518598	Mid	NR Band n41	100	14.00	12.67	Ant 1	-0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.361	1.358	0.480	0.146	0.198
2502.99	518598	Mid	NR Band n41	100	14.00	12.74	Ant 1	0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.013	1.337	0.017	0.008	0.008
2502.99	518598	Mid	NR Band n41	100	14.00	12.67	Ant 1	0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	135	0	0 mm	top	1:1	0.011	1.358	0.015	0.005	0.007
2502.99	518598	Mid	NR Band n41	100	14.00	12.74	Ant 1	-0.12	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.268	1.337	0.275	0.075	0.100
2502.99	518598	Mid	NR Band n41	100	14.00	12.67	Ant 1	-0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.261	1.358	0.273	0.074	0.100
2502.99	518598	Mid	NR Band n41	100	14.00	12.74	Ant 1	0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.001	1.337	0.001	0.001	0.001
2502.99	518598	Mid	NR Band n41	100	14.00	12.67	Ant 1	0.19	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.001	1.358	0.001	0.000	0.000
2502.99	518598	Mid	NR Band n41	100	14.00	12.74	Ant 1	-0.20	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.746	1.337	0.987	0.261	0.340
2502.99	518598	Mid	NR Band n41	100	14.00	12.67	Ant 1	0.02	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.053	1.358	0.019	0.211	0.287
2502.99	518598	Mid	NR Band n41	100	14.00	12.62	Ant 1	-0.02	0	PC3	V9KL2W43VC	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.430	1.374	0.603	0.152	0.209
2502.99	518598	Mid	NR Band n41	100	14.00	12.80	Ant 1	-0.01	0	PC3	V9KL2W43VC	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.758	1.318	0.899	0.269	0.363
2502.99	518598	Mid	NR Band n41	100	17.00	16.73	Ant 1	0.02	0	PC2	V9KL2W43VC	CP-OFDM	QPSK	1	1	0 mm	left	1:2	0.802	1.084	0.949	0.311	0.331
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body										1.6 W/kg (mW/g)			
Spatial Peak										averaged over 1 gram													
Uncontrolled Exposure/General Population																							

FCC ID: BCGA2301	 PCTEST Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 149 of 211

NR Band n77 Ant 1 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY		Mode	Reactions (dB)	Maximum Allowed (dB)	Conducted Power (W)	Antenna Gain	Power Out (dB)	MFR (dB)	Power Class	Serial Number	Waveform	Modulation	RIS Size	RIS Offset	Spacing	MFR 1 (dB)	Duty Cycle	EMF 1 (V/m)	Scanning Factor	Reported SAR (W/kg)	EMF 2 (V/m)	Reported SAR (W/kg)	Plus
3750	100000	Low	NR-Band-r77	100	10.10	9.09	Ant 1	0.14	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	137	0 mm	back	1.1	0.405	2.012	0.110	0.134	
33000	600000	High	NR-Band-r77	100	10.10	9.09	Ant 1	-0.20	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	271	0 mm	back	1.1	0.403	1.189	0.051	0.097	0.115
37500	600000	Low	NR-Band-r77	100	10.10	9.05	Ant 1	-0.20	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	back	1.1	0.207	1.074	0.046	0.081	0.110
30000	600000	High	NR-Band-r77	100	10.10	9.43	Ant 1	0.19	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	back	1.1	0.491	1.167	0.075	0.101	0.119
30000	600000	High	NR-Band-r77	100	10.10	9.27	Ant 1	0.15	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	270	0	0 mm	back	1.1	0.453	1.211	0.488	0.080	0.097
30000	600000	Low	NR-Band-r77	100	10.10	9.44	Ant 1	0.16	0.0	PC3	MPKMG4390Q	CP-OFDM	QPSK	1	1	0 mm	back	1.1	0.374	1.306	0.488	0.079	0.103
37500	600000	Low	NR-Band-r77	100	13.10	12.04	Ant 1	-0.20	0.0	PC2	MPKMG4390Q	DFT-S-OFDM	QPSK	1	137	0 mm	top	1.2	0.498	1.276	0.635	0.107	0.137
30000	600000	High	NR-Band-r77	100	10.10	9.35	Ant 1	0.00	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	271	0 mm	top	1.1	0.509	1.189	0.000	0.000	0.000
30000	600000	High	NR-Band-r77	100	10.10	9.43	Ant 1	0.00	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	top	1.1	0.509	1.167	0.000	0.000	0.000
37500	600000	Low	NR-Band-r77	100	10.10	9.09	Ant 1	-0.17	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1.1	0.373	1.262	0.473	0.096	0.121
30000	600000	Low	NR-Band-r77	100	10.10	9.35	Ant 1	-0.13	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1.1	0.369	1.189	0.436	0.061	0.108
37500	600000	Low	NR-Band-r77	100	10.10	9.05	Ant 1	0.20	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	bottom	1.1	0.207	1.274	0.078	0.077	0.109
30000	600000	High	NR-Band-r77	100	10.10	9.43	Ant 1	0.00	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	bottom	1.1	0.342	1.167	0.399	0.085	0.092
30000	600000	High	NR-Band-r77	100	10.10	9.27	Ant 1	0.11	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1.1	0.308	1.211	0.373	0.076	0.099
30000	600000	High	NR-Band-r77	100	10.10	9.35	Ant 1	0.20	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	271	0 mm	right	1.1	0.001	1.169	0.001	0.000	0.000
30000	600000	High	NR-Band-r77	100	10.10	9.43	Ant 1	-0.36	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	right	1.1	0.003	1.167	0.004	0.000	0.000
30000	600000	High	NR-Band-r77	100	10.10	9.35	Ant 1	0.05	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	1	271	0 mm	left	1.1	0.252	1.189	0.300	0.002	0.074
30000	600000	High	NR-Band-r77	100	10.10	9.43	Ant 1	0.13	0.0	PC3	MPKMG4390Q	DFT-S-OFDM	QPSK	136	138	0 mm	left	1.1	0.207	1.167	0.265	0.006	0.065
ANSI / IEEE C63.11-1982 - SAFETY LIMIT												Body											
Uncontrolled Exposure/General Population												15 W/kg (avg/pt)											
												averaged over 1 gram											

NR Band n77 Ant 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Mode	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Calculated Power (dBm)	Antenna Gain (dBi)	Power (dBm)	MPE (dB)	Power Class	Serial Number	Waveform	Modulation	RF Size	RF Offset	Spacing	MPE (dB)	Duty Cycle	SAR (W/kg)	Swing Factor	Reported SAR (W/kg)	SAR (W/kg)	Reported SAR (W/kg)	Notes	Plot
3750.00	6020000	Low	NR Band7-n7	100	9.8	9.08	9.04	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1.1	0.496	1.166	0.376	0.139	0.164	
3750.00	6020000	High	NR Band7-n7	100	9.8	9.53	9.04	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1.1	0.669	1.064	0.701	0.180	0.152	
3750.00	6020000	Low	NR Band7-n7	100	9.8	9.12	9.12	9.10	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	126	138	0 mm	back	1.1	0.496	1.166	0.366	0.139	0.161	
3750.00	6020000	High	NR Band7-n7	100	9.8	9.15	9.12	9.10	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	126	138	0 mm	back	1.1	0.496	1.167	0.334	0.150	0.181	
3800.00	6020000	High	NR Band7-n7	100	9.8	9.01	9.01	9.21	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	270	0	0 mm	back	1.1	0.528	1.028	0.033	0.151	0.181	
3800.00	6020000	High	NR Band7-n7	100	9.8	9.53	9.01	9.20	0.0	PC3	KDHL7932V	OF-QPSK	QPSK	1	1	0 mm	back	1.1	0.807	1.340	0.479	0.146	0.198	
3800.00	6020000	High	NR Band7-n7	100	12.80	12.30	9.01	9.20	0.0	PC2	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1.2	0.862	1.148	0.688	0.183	0.187	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.53	9.01	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	top	1.1	0.601	1.064	0.001	0.600	0.000	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.15	9.10	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	136	138	0 mm	top	1.1	0.601	1.161	0.001	0.600	0.000	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.53	9.01	9.10	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1.1	0.111	1.064	0.139	0.032	0.034	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.15	9.01	-0.15	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	136	138	0 mm	bottom	1.1	0.139	1.161	0.161	0.034	0.039	
3760.00	6020000	Low	NR Band7-n7	100	9.80	9.00	9.00	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	right	1.1	0.430	1.166	0.116	0.113	0.134	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.53	9.01	9.04	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	right	1.1	0.604	1.064	0.089	0.141	0.150	
3760.00	6050000	Low	NR Band7-n7	100	9.80	9.12	9.01	9.20	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	136	138	0 mm	right	1.1	0.446	1.169	0.521	0.114	0.133	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.15	9.01	-0.09	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	136	138	0 mm	right	1.1	0.565	1.161	0.656	0.144	0.167	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.01	9.01	9.21	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	270	0	0 mm	right	1.1	0.003	1.036	0.003	0.129	0.155	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.53	9.01	9.21	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	1	271	0 mm	left	1.1	0.000	1.034	0.000	0.000	0.000	
3800.00	6020000	High	NR Band7-n7	100	9.80	9.15	9.10	9.21	0.0	PC3	KDHL7932V	DFT-S-OFDM	QPSK	136	138	0 mm	left	1.1	0.000	1.161	0.000	0.000	0.000	
Ansi/IEEE C63.11982 - SAFETY LIMIT																			Body 1.6 W/kg (avg)					
Uncontrolled Exposure/General Population																			averaged over 1 gram					

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Table 10-75
2.4 GHz WLAN Ant 4a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dn (dB)	Spacing	Antenna Config	Variant	Device Serial Number	Date Rate (Month)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot
MHz	Ch																				
2412	1	802.11b	DSSS	22	12.00	10.93	-0.18	0 mm	Ant 4a	V1	JQCHWJYJUD	1	back	100.0	0.784	1.279	1.000	1.003	0.296	0.379	A25
2437	6	802.11b	DSSS	22	12.00	10.96	-0.14	0 mm	Ant 4a	V1	JQCHWJYJUD	1	back	100.0	0.823	1.265	1.000	1.041	0.310	0.392	
2437	6	802.11b	DSSS	22	12.00	11.06	0.09	0 mm	Ant 4a	V2	QLQOTXYG7	1	back	100.0	0.823	1.242	1.000	1.022	0.307	0.381	
2462	11	802.11b	DSSS	22	12.00	10.92	-0.12	0 mm	Ant 4a	V1	JQCHWJYJUD	1	back	100.0	0.735	1.282	1.000	0.942	0.274	0.351	
2437	6	802.11b	DSSS	22	12.00	10.96	-0.12	0 mm	Ant 4a	V1	JQCHWJYJUD	1	top	100.0	0.249	1.265	1.000	0.315	0.077	0.097	
2437	6	802.11b	DSSS	22	12.00	10.96	0.16	0 mm	Ant 4a	V1	JQCHWJYJUD	1	bottom	100.0	0.005	1.265	1.000	0.006	0.002	0.003	
2437	6	802.11b	DSSS	22	12.00	10.96	0.19	0 mm	Ant 4a	V1	JQCHWJYJUD	1	right	100.0	0.001	1.265	1.000	0.001	0.001	0.001	
2412	1	802.11b	DSSS	22	12.00	10.93	-0.01	0 mm	Ant 4a	V1	JQCHWJYJUD	1	left	100.0	0.611	1.279	1.000	0.781	0.215	0.275	
2437	6	802.11b	DSSS	22	12.00	10.96	-0.01	0 mm	Ant 4a	V1	JQCHWJYJUD	1	left	100.0	0.710	1.265	1.000	0.896	0.247	0.312	
2462	11	802.11b	DSSS	22	12.00	10.92	0.06	0 mm	Ant 4a	V1	JQCHWJYJUD	1	left	100.0	0.624	1.282	1.000	0.800	0.216	0.277	
2412	1	802.11b	DSSS	22	9.00	8.15	-0.01	0 mm	Ant 4a	V1	JQCHWJYJUD	1	back	100.0	0.363	1.216	1.000	0.474	0.149	0.181	
2412	1	802.11b	DSSS	22	9.00	8.15	-0.12	0 mm	Ant 4a	V1	JQCHWJYJUD	1	top	100.0	0.135	1.216	1.000	0.164	0.042	0.051	
2412	1	802.11b	DSSS	22	9.00	8.15	-0.01	0 mm	Ant 4a	V1	JQCHWJYJUD	1	left	100.0	0.339	1.216	1.000	0.412	0.118	0.143	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT									Body												
Spatial Peak									1.6 W/kg (mW/g)												
Uncontrolled Exposure/General Population									averaged over 1 gram												

Table 10-76
2.4 GHz WLAN Ant 2a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth (MHz)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Dn (dB)	Spacing	Antenna Config	Variant	Device Serial Number	Date Rate (Month)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot
MHz	Ch																				
2412	1	802.11b	DSSS	22	11.50	10.33	-0.16	0 mm	Ant 2a	V1	JQCHWJYJUD	1	back	100.0	0.800	1.309	1.000	1.647	0.306	0.401	
2412	1	802.11b	DSSS	22	11.50	10.65	-0.14	0 mm	Ant 2a	V2	QLQOTXYG7	1	back	100.0	0.791	1.216	1.000	0.962	0.300	0.365	
2437	6	802.11b	DSSS	22	11.50	10.39	-0.12	0 mm	Ant 2a	V1	JQCHWJYJUD	1	back	100.0	0.724	1.291	1.000	0.935	0.279	0.360	
2462	11	802.11b	DSSS	22	11.50	10.45	-0.18	0 mm	Ant 2a	V1	JQCHWJYJUD	1	back	100.0	0.729	1.274	1.000	0.929	0.273	0.348	
2462	11	802.11b	DSSS	22	11.50	10.45	0.10	0 mm	Ant 2a	V1	JQCHWJYJUD	1	top	100.0	0.000	1.274	1.000	0.000	0.000	0.000	
2462	11	802.11b	DSSS	22	11.50	10.45	-0.20	0 mm	Ant 2a	V1	JQCHWJYJUD	1	bottom	100.0	0.227	1.274	1.000	0.289	0.069	0.088	
2462	11	802.11b	DSSS	22	11.50	10.45	0.05	0 mm	Ant 2a	V1	JQCHWJYJUD	1	right	100.0	0.625	1.274	1.000	0.796	0.211	0.269	
2462	11	802.11b	DSSS	22	11.50	10.45	0.18	0 mm	Ant 2a	V1	JQCHWJYJUD	1	left	100.0	0.000	1.274	1.000	0.000	0.000	0.000	
2412	1	802.11b	DSSS	22	8.50	7.62	-0.20	0 mm	Ant 2a	V1	JQCHWJYJUD	1	back	100.0	0.338	1.225	1.000	0.414	0.133	0.163	
2412	1	802.11b	DSSS	22	8.50	7.62	-0.17	0 mm	Ant 2a	V1	JQCHWJYJUD	1	bottom	100.0	0.125	1.225	1.000	0.153	0.039	0.048	
2412	1	802.11b	DSSS	22	8.50	7.62	0.09	0 mm	Ant 2a	V1	JQCHWJYJUD	1	right	100.0	0.291	1.225	1.000	0.366	0.101	0.124	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT												Body									
Spatial Peak												1.6 W/kg (mW/g)									
Uncontrolled Exposure/General Population												averaged over 1 gram									

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
Document S/N: 1C2101020002-01.BCG (Rev 1)	Test Dates: 01/06/2021-03/15/2021	DUT Type: Tablet Device	Page 153 of 211

Table 10-77
5 GHz WLAN Ant 5b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY	Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Dn [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Date Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot	
MHz	Ch.																				
5270	54	802.11n	OFDM	40	17.00	15.94	0.20	0 mm	Ant 5b	V2	VCG19419TY	13.5	back	98.0	0.096	1.276	1.020	0.125	0.039	0.051	
5270	54	802.11n	OFDM	40	17.00	15.94	0.00	0 mm	Ant 5b	V2	VCG19419TY	13.5	top	98.0	0.000	1.276	1.020	0.000	0.000	0.000	
5270	54	802.11n	OFDM	40	17.00	15.94	-0.20	0 mm	Ant 5b	V2	VCG19419TY	13.5	bottom	98.0	0.028	1.276	1.020	0.036	0.008	0.010	
5270	54	802.11n	OFDM	40	17.00	15.94	-0.07	0 mm	Ant 5b	V2	VCG19419TY	13.5	right	98.0	0.809	1.276	1.020	1.053	0.242	0.315	
5270	54	802.11n	OFDM	40	17.00	16.00	0.02	0 mm	Ant 5b	V1	JQCHWJY6JD	13.5	right	98.0	0.735	1.259	1.020	0.944	0.231	0.297	
5310	62	802.11n	OFDM	40	16.00	14.90	-0.07	0 mm	Ant 5b	V2	VCG19419TY	13.5	right	98.0	0.612	1.288	1.020	0.804	0.182	0.239	
5270	54	802.11n	OFDM	40	17.00	15.94	0.20	0 mm	Ant 5b	V2	VCG19419TY	13.5	left	98.0	0.007	1.276	1.020	0.009	0.003	0.004	
5290	56	802.11ac	OFDM	80	13.00	12.18	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	back	96.1	0.044	1.208	1.041	0.055	0.018	0.023	
5290	56	802.11ac	OFDM	80	13.00	12.18	-0.06	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.381	1.208	1.041	0.479	0.150	0.189	
5680	138	802.11ac	OFDM	80	17.00	15.30	-0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	back	96.1	0.079	1.479	1.041	0.122	0.031	0.048	
5680	138	802.11ac	OFDM	80	17.00	15.30	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	top	96.1	0.000	1.479	1.041	0.000	0.000	0.000	
5680	138	802.11ac	OFDM	80	17.00	15.30	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	bottom	96.1	0.023	1.479	1.041	0.035	0.006	0.009	
5530	106	802.11ac	OFDM	80	16.50	14.52	0.09	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.606	1.578	1.041	0.995	0.188	0.309	
5610	122	802.11ac	OFDM	80	17.00	15.29	-0.09	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.692	1.483	1.041	1.008	0.217	0.335	
5610	122	802.11ac	OFDM	80	17.00	15.48	-0.05	0 mm	Ant 5b	V1	JNP9WFWX1	29.3	right	95.8	0.618	1.419	1.044	0.916	0.198	0.293	
5680	138	802.11ac	OFDM	80	17.00	15.30	-0.21	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.891	1.479	1.041	1.064	0.209	0.322	
5680	138	802.11ac	OFDM	80	17.00	15.30	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	left	96.1	0.010	1.479	1.041	0.015	0.004	0.006	
5610	122	802.11ac	OFDM	80	13.00	12.05	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	back	96.1	0.038	1.245	1.041	0.049	0.015	0.019	
5610	122	802.11ac	OFDM	80	13.00	12.05	-0.13	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.285	1.245	1.041	0.389	0.087	0.113	
5775	155	802.11ac	OFDM	80	17.75	16.95	0.21	0 mm	Ant 5b	V2	VCG19419TY	29.3	back	96.1	0.129	1.202	1.041	0.161	0.050	0.063	
5775	155	802.11ac	OFDM	80	17.75	16.95	0.00	0 mm	Ant 5b	V2	VCG19419TY	29.3	top	96.1	0.000	1.202	1.041	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	17.75	16.95	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	bottom	96.1	0.019	1.202	1.041	0.024	0.005	0.006	
5775	155	802.11ac	OFDM	80	17.75	16.95	-0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.942	1.202	1.041	1.179	0.308	0.385	
5775	155	802.11ac	OFDM	80	17.75	16.75	-0.11	0 mm	Ant 5b	V1	JNP9WFWX1	29.3	right	95.8	0.870	1.259	1.044	1.144	0.285	0.375	
5775	155	802.11ac	OFDM	80	17.75	16.95	0.20	0 mm	Ant 5b	V2	VCG19419TY	29.3	left	96.1	0.019	1.202	1.041	0.024	0.008	0.010	
5775	155	802.11ac	OFDM	80	13.75	12.70	0.03	0 mm	Ant 5b	V2	VCG19419TY	29.3	back	96.1	0.090	1.274	1.041	0.096	0.020	0.027	
5775	155	802.11ac	OFDM	80	13.75	12.70	-0.16	0 mm	Ant 5b	V2	VCG19419TY	29.3	right	96.1	0.375	1.274	1.041	0.497	0.118	0.156	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT											Body										
Spatial Peak											1.6 W/kg (mW/g)										
Uncontrolled Exposure/General Population											averaged over 1 gram										

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Table 10-78
5 GHz WLAN Ant 4b Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate [Mbps]	Side	Duty Cycle (%)	SAR (1g) [W/kg]	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) [W/kg]	SAR (10g) [W/kg]	Reported SAR (10g) [W/kg]	Ptest #
MHz	Ch.																				
5290	56	802.11ac	OFDM	80	10.50	9.55	-0.20	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	back	95.8	0.833	1.245	1.044	1.083	0.230	0.299	
5290	56	802.11ac	OFDM	80	10.50	9.48	-0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.784	1.265	1.041	1.032	0.214	0.282	
5290	56	802.11ac	OFDM	80	10.50	9.55	-0.13	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	top	95.8	0.541	1.245	1.044	0.703	0.129	0.168	
5290	56	802.11ac	OFDM	80	10.50	9.55	0.10	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	bottom	95.8	0.001	1.245	1.044	0.001	0.000	0.000	
5290	56	802.11ac	OFDM	80	10.50	9.55	0.15	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	right	95.8	0.011	1.245	1.044	0.014	0.002	0.003	
5290	56	802.11ac	OFDM	80	10.50	9.55	0.13	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	left	95.8	0.025	1.245	1.044	0.032	0.004	0.005	
5290	56	802.11ac	OFDM	80	4.50	3.75	-0.20	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	back	95.8	0.171	1.189	1.044	0.212	0.045	0.056	
5290	56	802.11ac	OFDM	80	4.50	3.75	0.21	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	top	95.8	0.163	1.189	1.044	0.202	0.037	0.046	
5530	106	802.11ac	OFDM	80	9.00	8.05	-0.15	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.751	1.245	1.041	0.973	0.209	0.271	
5610	122	802.11ac	OFDM	80	9.00	8.08	-0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.844	1.236	1.041	1.086	0.229	0.295	
5690	138	802.11ac	OFDM	80	9.00	8.10	-0.19	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.854	1.230	1.041	1.093	0.223	0.286	
5690	138	802.11ac	OFDM	80	9.00	8.24	-0.20	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	back	95.8	0.846	1.191	1.044	1.052	0.225	0.280	
5690	138	802.11ac	OFDM	80	9.00	8.10	0.12	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	top	96.1	0.512	1.230	1.041	0.656	0.118	0.151	
5690	138	802.11ac	OFDM	80	9.00	8.10	0.21	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	bottom	96.1	0.000	1.230	1.041	0.000	0.000	0.000	
5690	138	802.11ac	OFDM	80	9.00	8.10	0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	right	96.1	0.009	1.230	1.041	0.012	0.001	0.001	
5690	138	802.11ac	OFDM	80	9.00	8.10	0.11	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	left	96.1	0.022	1.230	1.041	0.028	0.003	0.004	
5610	122	802.11ac	OFDM	80	3.00	2.50	0.06	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.229	1.122	1.041	0.267	0.060	0.070	
5610	122	802.11ac	OFDM	80	3.00	2.50	0.08	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	top	96.1	0.141	1.122	1.041	0.185	0.033	0.039	
5775	155	802.11ac	OFDM	80	11.50	11.15	-0.14	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.961	1.084	1.041	1.084	0.284	0.298	A06
5775	155	802.11ac	OFDM	80	11.50	10.90	-0.13	0 mm	Ant 4b	V2	VQ019419TY	29.3	back	95.8	0.901	1.148	1.044	1.080	0.251	0.301	
5775	155	802.11ac	OFDM	80	11.50	11.15	-0.02	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	top	96.1	0.625	1.084	1.041	0.705	0.146	0.165	
5775	155	802.11ac	OFDM	80	11.50	11.15	0.19	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	bottom	96.1	0.000	1.084	1.041	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	11.50	11.15	-0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	right	96.1	0.013	1.084	1.041	0.015	0.002	0.002	
5775	155	802.11ac	OFDM	80	11.50	11.15	0.07	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	left	96.1	0.039	1.084	1.041	0.044	0.005	0.006	
5775	155	802.11ac	OFDM	80	5.50	4.50	0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.216	1.259	1.041	0.283	0.056	0.073	
5775	155	802.11ac	OFDM	80	5.50	4.50	0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	top	96.1	0.134	1.259	1.041	0.176	0.030	0.039	
5290	56	802.11ac	OFDM	80	10.50	9.55	-0.20	0 mm	Ant 4b	V2	QLQ0TX9G7	29.3	back	95.8	0.825	1.245	1.044	1.078	0.232	0.302	
5610	122	802.11ac	OFDM	80	9.00	8.08	0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.835	1.236	1.041	1.074	0.232	0.299	
5775	155	802.11ac	OFDM	80	11.50	11.15	0.20	0 mm	Ant 4b	V1	JNP9WFWX1	29.3	back	96.1	0.936	1.084	1.041	1.058	0.252	0.284	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT												Body									
Spatial Peak												1.6 W/kg (mW/g)									
Uncontrolled Exposure/General Population												averaged over 1 gram									

Note: Blue entry represents variability measurement.

Table 10-79
Bluetooth Ant 4a Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Drift (dB)	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Gnd Power)	Scaling Factor (Dry Cycle)	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Ptest #
MHz	Ch.																			
2402	0	Bluetooth	FHSS	12.75	11.76	-0.09	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.939	1.256	1.006	1.186	0.354	0.447	A27
2402	0	Bluetooth	FHSS	12.75	11.74	0.20	0 mm	Ant 4a	V2	J609J22GCM	1	back	77	0.893	1.262	1.006	1.136	0.332	0.422	
2441	39	Bluetooth	FHSS	12.75	11.75	-0.14	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.935	1.259	1.006	1.184	0.353	0.447	
2480	78	Bluetooth	FHSS	12.75	11.40	-0.15	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.833	1.365	1.006	0.869	0.237	0.325	
2402	0	Bluetooth	FHSS	12.75	11.76	-0.03	0 mm	Ant 4a	V1	RV40MWX20Q	1	top	77	0.284	1.256	1.006	0.359	0.088	0.111	
2402	0	Bluetooth	FHSS	12.75	11.76	-0.21	0 mm	Ant 4a	V1	RV40MWX20Q	1	bottom	77	0.006	1.256	1.006	0.008	0.002	0.003	
2402	0	Bluetooth	FHSS	12.75	11.76	0.21	0 mm	Ant 4a	V1	RV40MWX20Q	1	right	77	0.001	1.256	1.006	0.001	0.000	0.000	
2402	0	Bluetooth	FHSS	12.75	11.76	0.01	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	77	0.702	1.256	1.006	0.887	0.253	0.320	
2441	39	Bluetooth	FHSS	12.75	11.75	0.20	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	77	0.847	1.259	1.006	0.819	0.224	0.284	
2480	78	Bluetooth	FHSS	12.75	11.40	0.03	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	76.9	0.630	1.365	1.008	0.865	0.215	0.295	
2480	78	Bluetooth	FHSS	10.75	10.09	0.06	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.355	1.164	1.006	0.416	0.134	0.157	
2480	78	Bluetooth	FHSS	10.75	10.09	0.19	0 mm	Ant 4a	V1	RV40MWX20Q	1	top	77	0.118	1.164	1.006	0.138	0.035	0.041	
2480	78	Bluetooth	FHSS	10.75	10.09	-0.14	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	77	0.328	1.164	1.006	0.384	0.113	0.132	
2480	78	Bluetooth	FHSS	9.75	8.82	-0.15	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.302	1.239	1.006	0.376	0.115	0.143	
2480	78	Bluetooth	FHSS	9.75	8.82	-0.10	0 mm	Ant 4a	V1	RV40MWX20Q	1	top	77	0.094	1.239	1.006	0.117	0.029	0.036	
2480	78	Bluetooth	FHSS	9.75	8.82	-0.01	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	77	0.302	1.239	1.006	0.376	0.104	0.130	
2480	78	Bluetooth	FHSS	5.75	5.50	0.04	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	77	0.127	1.059	1.006	0.135	0.051	0.054	
2480	78	Bluetooth	FHSS	5.75	5.50	-0.02	0 mm	Ant 4a	V1	RV40MWX20Q	1	top	77	0.052	1.059	1.006	0.055	0.016	0.017	
2480	78	Bluetooth	FHSS	5.75	5.50	-0.06	0 mm	Ant 4a	V1	RV40MWX20Q	1	left	77	0.141	1.059	1.006	0.150	0.049	0.052	
2402	0	Bluetooth	FHSS	12.75	11.76	-0.12	0 mm	Ant 4a	V1	RV40MWX20Q	1	back	76.8	0.889	1.256	1.009	1.122	0.355	0.449	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body										
Spatial Peak										1.6 W/kg (mW/g)										
Uncontrolled Exposure/General Population										averaged over 1 gram										

Note: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.

Note: Blue entry represents variability measurement.

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Table 10-80
Bluetooth Ant 2a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Service	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Power Diff (dB)	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot
	MHz	Ch.																			
2402	0		Bluetooth	FHSS	14.00	12.84	-0.11	0 mm	Ant 2a	V2	VCG19419TY	1	back	77	0.707	1.306	1.006	0.932	0.268	0.353	
2441	39		Bluetooth	FHSS	14.00	12.57	-0.20	0 mm	Ant 2a	V2	VCG19419TY	1	back	77	0.720	1.390	1.006	1.010	0.277	0.388	
2441	39		Bluetooth	FHSS	14.00	12.73	-0.20	0 mm	Ant 2a	V1	JQCHWJY6JD	1	back	77	0.694	1.340	1.006	0.943	0.273	0.371	
2480	78		Bluetooth	FHSS	14.00	12.51	-0.17	0 mm	Ant 2a	V2	VCG19419TY	1	back	77	0.592	1.409	1.006	0.842	0.236	0.336	
2402	0		Bluetooth	FHSS	14.00	12.84	0.20	0 mm	Ant 2a	V2	VCG19419TY	1	top	77	0.015	1.306	1.006	0.020	0.006	0.008	
2402	0		Bluetooth	FHSS	14.00	12.84	-0.19	0 mm	Ant 2a	V2	VCG19419TY	1	bottom	77	0.166	1.306	1.006	0.219	0.052	0.069	
2402	0		Bluetooth	FHSS	14.00	12.84	-0.09	0 mm	Ant 2a	V2	VCG19419TY	1	right	77	0.612	1.306	1.006	0.806	0.209	0.275	
2441	39		Bluetooth	FHSS	14.00	12.57	-0.06	0 mm	Ant 2a	V2	VCG19419TY	1	right	77	0.549	1.390	1.006	0.770	0.186	0.261	
2480	78		Bluetooth	FHSS	14.00	12.51	-0.20	0 mm	Ant 2a	V2	VCG19419TY	1	right	77	0.620	1.409	1.006	0.881	0.207	0.294	
2402	0		Bluetooth	FHSS	14.00	12.84	0.20	0 mm	Ant 2a	V2	VCG19419TY	1	left	78.8	0.000	1.306	1.009	0.000	0.000	0.000	
2402	0		Bluetooth	FHSS	11.00	10.38	-0.20	0 mm	Ant 2a	V2	VCG19419TY	1	back	78.8	0.300	1.153	1.009	0.349	0.126	0.147	
2402	0		Bluetooth	FHSS	11.00	10.38	-0.04	0 mm	Ant 2a	V2	VCG19419TY	1	bottom	78.8	0.146	1.153	1.009	0.170	0.046	0.054	
2402	0		Bluetooth	FHSS	11.00	10.38	0.20	0 mm	Ant 2a	V2	VCG19419TY	1	right	78.8	0.289	1.153	1.009	0.313	0.094	0.109	
2402	0		Bluetooth	FHSS	10.00	9.32	-0.21	0 mm	Ant 2a	V2	VCG19419TY	1	back	78.8	0.252	1.169	1.009	0.297	0.105	0.124	
2402	0		Bluetooth	FHSS	10.00	9.32	-0.09	0 mm	Ant 2a	V2	VCG19419TY	1	bottom	78.8	0.111	1.169	1.009	0.131	0.035	0.041	
2402	0		Bluetooth	FHSS	10.00	9.32	0.00	0 mm	Ant 2a	V2	VCG19419TY	1	right	78.8	0.245	1.169	1.009	0.289	0.085	0.100	
ANSI / IEEE C63.1 1992 - SAFETY LIMIT													Body								
Spatial Peak													1.6 W/kg (mW/g)								
Uncontrolled Exposure/General Population													averaged over 1 gram								

Note: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.

10.2 SAR Test Notes

General Notes:

- The test data reported are the worst-case SAR values according to test procedures specified in FCC KDB Publication 616217 D04v01r02, and FCC KDB Publication 447498 D01v06.
- Batteries are fully charged at the beginning of the SAR measurements.
- Liquid tissue depth was at least 15.0 cm for all frequencies.
- The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
- SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
- Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 12 for variability analysis.
- FCC KDB Publication 616217 D04v01r02 Section 4.3, SAR tests are required for the back surface and edges of the tablet with the tablet touching the phantom. The SAR Exclusion Threshold in FCC KDB 447498 D01v06 was applied to determine SAR test exclusion for adjacent edge configurations.
- This device uses Smart Transmit for 2G/3G/4G/5G operations to control and manage transmitting power in real time to ensure RF Exposure compliance. Per FCC Guidance, compliance for was assessed at the minimum of the time averaged power and the maximum output power for each band/mode/exposure condition (DSI).
- The orange highlights throughout the report represents the highest scaled SAR per Equipment Class.

GSM Test Notes:

- Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
- Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power

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variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel was used.

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel was used.

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 7.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported LTE Band 41 and LTE Band 48 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not > 0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 13 for linearity results.
8. For LTE Band 5, LTE Band 7, LTE Band 41, and LTE Band 48, per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
9. This device supports LTE Band 41 ULCA active with Power Class 2. Highest SAR test configuration for each exposure condition in Power Class 3 with ULCA active was repeated with Power Class 2 with ULCA active.
10. This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO

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mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

NR Notes:

1. NR implementation supports SA and NSA modes. NR implementation in EN-DC mode operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Per FCC KDB Publication 447498 D01v06, when the reported SAR measured at the highest output power channel in a given a test configuration was > 0.4 W/kg for NR n77 1g evaluations and was > 0.6 W/kg for NR n41 1g evaluations, testing at the other channels was required for such test configurations.
3. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
4. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
5. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
6. Per FCC Guidance, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
7. This device supports Power Class 2 and Power Class 3 operations for NR Band n41 and NR Band n77. The highest available duty cycle for Power Class 2 operations is 50.0 %. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 13 for linearity results.

WLAN Notes:

1. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.6.4 for more information.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 7.6.5 for more information.
3. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Section 11 for complete analysis.
4. When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
6. The time-averaged mechanism for WLAN operations was disabled for the above SAR measurements. The SAR was scaled to the maximum time-averaged output power

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Bluetooth Notes

1. Bluetooth SAR was evaluated with a test mode with hopping disabled with DH5 operation. The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is limited to 77.5% per the manufacturer. See Section 8.11 for the time domain plot and calculation for the duty factor of the device.

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11 MULTI-TX AND ANTENNA SAR CONSIDERATIONS

11.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is ≤ 1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

Note:

SAR Summations for some scenarios when the output power levels are reduced, SAR values at the maximum output power level were used as the most conservative evaluation for simultaneous transmission analysis.

For each position, the highest SAR value across all modes for the applicable cellular band antenna was considered for summation to determine simultaneous SAR test exclusion.

*The SAR distributions for at least one of the antennas are spatially separated from the other antennas per FCC KDB Publication 248227 Section 6.1 procedures. Therefore, the simultaneous transmission were treated independently for this configuration. See section 11.4 for more information about the Spatial Separation Analysis.

Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G (including scenarios with inter-band ULCA active) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR and during inter-band ULCA active conditions to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G operations (including scenarios with inter-band ULCA active) is demonstrated in the Part 2 Report during algorithm validation.

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11.3 Body SAR Simultaneous Transmission Analysis

Table 11-1
Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.047	1.041	1.047*	1.041*	1.047*
	Top	0.041	0.000	0.315	0.041	0.356	0.356
	Bottom	0.737	0.289	0.006	1.026	0.743	1.032
	Right	0.055	0.796	0.001	0.851	0.056	0.852
	Left	0.999	0.000	0.898	0.999	0.999*	0.999*

Table 11-2
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 2a 3dB Backoff SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.838	0.414	1.041	1.252	1.041*	1.252*
	Top	0.003	0.000	0.315	0.003	0.318	0.318
	Bottom	0.214	0.153	0.006	0.367	0.220	0.373
	Right	0.996	0.356	0.001	1.352	0.997	1.353
	Left	0.000	0.000	0.898	0.000	0.898	0.898

Table 11-3
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 2a 3dB Backoff SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.937	0.414	1.041	1.351	1.041*	1.351*
	Top	0.024	0.000	0.315	0.024	0.339	0.339
	Bottom	0.983	0.153	0.006	1.136	0.989	1.142
	Right	0.060	0.356	0.001	0.416	0.061	0.417
	Left	0.023	0.000	0.898	0.023	0.921	0.921

Table 11-4
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.047	1.041	1.047*	1.041*	1.047*
	Top	0.990	0.000	0.315	0.990	1.305	1.305
	Bottom	0.047	0.289	0.006	0.336	0.053	0.342
	Right	0.961	0.796	0.001	0.961*	0.962	0.961*
	Left	0.042	0.000	0.898	0.042	0.940	0.940

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Table 11-5
Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a 3dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.865	1.047	0.478	1.047*	1.343	1.343*
	Top	0.283	0.000	0.164	0.283	0.447	0.447
	Bottom	0.003	0.289	0.006	0.292	0.009	0.298
	Right	0.000	0.796	0.001	0.796	0.001	0.797
	Left	0.887	0.000	0.412	0.887	1.299	1.299

Table 11-6
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a 3dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.047	0.478	1.047*	1.477	1.477*
	Top	0.999	0.000	0.164	0.999	1.163	1.163
	Bottom	0.006	0.289	0.006	0.295	0.012	0.301
	Right	0.021	0.796	0.001	0.817	0.022	0.818
	Left	0.058	0.000	0.412	0.058	0.470	0.470

Table 11-7
Cellular Band Ant 1 Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.093	0.161	1.093*	1.160	1.160*
	Top	0.041	0.705	0.000	0.746	0.041	0.746
	Bottom	0.737	0.001	0.036	0.738	0.773	0.774
	Right	0.055	0.015	1.179	0.070	1.234	1.249
	Left	0.999	0.044	0.024	1.043	1.023	1.067

Table 11-8
Cellular Band Ant 2a Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b 4dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.838	1.093	0.066	1.093*	0.904	1.093*
	Top	0.003	0.705	0.000	0.708	0.003	0.708
	Bottom	0.214	0.001	0.036	0.215	0.250	0.251
	Right	0.996	0.015	0.497	1.011	1.493	1.508
	Left	0.000	0.044	0.024	0.044	0.024	0.068

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Table 11-9
Cellular Band Ant 2b Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b 4dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.937	1.093	0.066	1.093*	1.003	1.093*
	Top	0.024	0.705	0.000	0.729	0.024	0.729
	Bottom	0.983	0.001	0.036	0.984	1.019	1.020
	Right	0.060	0.015	0.497	0.075	0.557	0.572
	Left	0.023	0.044	0.024	0.067	0.047	0.091

Table 11-10
Cellular Band Ant 3 Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	GPRS 850 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.792	1.093	0.161	1.093*	0.953	1.093*
	Top	0.693	0.705	0.000	1.398	0.693	1.398
	Bottom	0.012	0.001	0.036	0.013	0.048	0.049
	Right	0.201	0.015	1.179	0.216	1.380	1.395
	Left	0.025	0.044	0.024	0.069	0.049	0.093
Simult Tx	Configuration	GPRS 1900 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.601	1.093	0.161	1.093*	0.762	1.093*
	Top	0.376	0.705	0.000	1.081	0.376	1.081
	Bottom	0.022	0.001	0.036	0.023	0.058	0.059
	Right	0.563	0.015	1.179	0.578	1.179*	1.194*
	Left	0.002	0.044	0.024	0.046	0.026	0.070
Simult Tx	Configuration	UMTS 850 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.831	1.093	0.161	1.093*	0.992	1.093*
	Top	0.653	0.705	0.000	1.358	0.653	1.358
	Bottom	0.014	0.001	0.036	0.015	0.050	0.051
	Right	0.389	0.015	1.179	0.404	1.568	1.583
	Left	0.028	0.044	0.024	0.072	0.052	0.096
Simult Tx	Configuration	UMTS 1750 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.603	1.093	0.161	1.093*	0.764	1.093*
	Top	0.207	0.705	0.000	0.912	0.207	0.912
	Bottom	0.040	0.001	0.036	0.041	0.076	0.077
	Right	0.946	0.015	1.179	0.961	1.179*	1.194*
	Left	0.006	0.044	0.024	0.050	0.030	0.074

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Simult Tx	Configuration	UMTS 1900 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.916	1.093	0.161	1.093*	1.077	1.093*
	Top	0.465	0.705	0.000	1.170	0.465	1.170
	Bottom	0.036	0.001	0.036	0.037	0.072	0.073
	Right	0.677	0.015	1.179	0.692	1.179*	1.194*
	Left	0.004	0.044	0.024	0.048	0.028	0.072
Simult Tx	Configuration	LTE Band 71 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.952	1.093	0.161	1.093*	1.113	1.113*
	Top	0.701	0.705	0.000	1.406	0.701	1.406
	Bottom	0.013	0.001	0.036	0.014	0.049	0.050
	Right	0.292	0.015	1.179	0.307	1.471	1.486
	Left	0.032	0.044	0.024	0.076	0.056	0.100
Simult Tx	Configuration	LTE Band 12 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.093	0.161	1.093*	1.160	1.160*
	Top	0.721	0.705	0.000	1.426	0.721	1.426
	Bottom	0.020	0.001	0.036	0.021	0.056	0.057
	Right	0.284	0.015	1.179	0.299	1.463	1.478
	Left	0.032	0.044	0.024	0.076	0.056	0.100
Simult Tx	Configuration	LTE Band 13 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.804	1.093	0.161	1.093*	0.965	1.093*
	Top	0.678	0.705	0.000	1.383	0.678	1.383
	Bottom	0.014	0.001	0.036	0.015	0.050	0.051
	Right	0.261	0.015	1.179	0.276	1.440	1.455
	Left	0.030	0.044	0.024	0.074	0.054	0.098
Simult Tx	Configuration	LTE Band 14 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.735	1.093	0.161	1.093*	0.896	1.093*
	Top	0.591	0.705	0.000	1.296	0.591	1.296
	Bottom	0.016	0.001	0.036	0.017	0.052	0.053
	Right	0.229	0.015	1.179	0.244	1.408	1.423
	Left	0.028	0.044	0.024	0.072	0.052	0.096
Simult Tx	Configuration	LTE Band 26 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.887	1.093	0.161	1.093*	1.048	1.093*
	Top	0.723	0.705	0.000	1.428	0.723	1.428
	Bottom	0.016	0.001	0.036	0.017	0.052	0.053
	Right	0.273	0.015	1.179	0.288	1.452	1.467
	Left	0.024	0.044	0.024	0.068	0.048	0.092

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Simult Tx	Configuration	LTE Band 5 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.929	1.093	0.161	1.093*	1.090	1.093*
	Top	0.712	0.705	0.000	1.417	0.712	1.417
	Bottom	0.019	0.001	0.036	0.020	0.055	0.056
	Right	0.271	0.015	1.179	0.286	1.450	1.465
	Left	0.036	0.044	0.024	0.080	0.060	0.104
Simult Tx	Configuration	LTE Band 66 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.543	1.093	0.161	1.093*	0.704	1.093*
	Top	0.193	0.705	0.000	0.898	0.193	0.898
	Bottom	0.047	0.001	0.036	0.048	0.083	0.084
	Right	0.894	0.015	1.179	0.909	1.179*	1.194*
	Left	0.003	0.044	0.024	0.047	0.027	0.071
Simult Tx	Configuration	LTE Band 25 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.690	1.093	0.161	1.093*	0.851	1.093*
	Top	0.387	0.705	0.000	1.092	0.387	1.092
	Bottom	0.026	0.001	0.036	0.027	0.062	0.063
	Right	0.513	0.015	1.179	0.528	1.179*	1.194*
	Left	0.002	0.044	0.024	0.046	0.026	0.070
Simult Tx	Configuration	LTE Band 30 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.987	1.093	0.161	1.093*	1.148	1.148*
	Top	0.635	0.705	0.000	1.340	0.635	1.340
	Bottom	0.016	0.001	0.036	0.017	0.052	0.053
	Right	0.675	0.015	1.179	0.690	1.179*	1.194*
	Left	0.000	0.044	0.024	0.044	0.024	0.068
Simult Tx	Configuration	LTE Band 7 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.531	1.093	0.161	1.093*	0.692	1.093*
	Top	0.990	0.705	0.000	See Note 1	0.990	See Note 1
	Bottom	0.002	0.001	0.036	0.003	0.038	0.039
	Right	0.199	0.015	1.179	0.214	1.378	1.393
	Left	0.012	0.044	0.024	0.056	0.036	0.080
Simult Tx	Configuration	LTE Band 7 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)		5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1		2	1+2		
Body SAR	Top	0.836		0.000	0.836		

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Simult Tx	Configuration	LTE Band 41 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.436	1.093	0.161	1.529	0.597	1.093*
	Top	0.974	0.705	0.000	See Note 1	0.974	See Note 1
	Bottom	0.011	0.001	0.036	0.012	0.047	0.048
	Right	0.190	0.015	1.179	0.205	1.369	1.384
	Left	0.006	0.044	0.024	0.050	0.030	0.074

Simult Tx	Configuration	LTE Band 41 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body SAR	Top	0.866	0.000	0.866

Simult Tx	Configuration	LTE Band 48 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.968	1.093	0.161	1.093*	1.129	1.129*
	Top	0.521	0.705	0.000	1.226	0.521	1.226
	Bottom	0.001	0.001	0.036	0.002	0.037	0.038
	Right	0.016	0.015	1.179	0.031	1.195	1.210
	Left	0.007	0.044	0.024	0.051	0.031	0.075

Simult Tx	Configuration	NR Band n71 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.841	1.093	0.161	1.093*	1.002	1.093*
	Top	0.619	0.705	0.000	1.324	0.619	1.324
	Bottom	0.012	0.001	0.036	0.013	0.048	0.049
	Right	0.339	0.015	1.179	0.354	1.518	1.533
	Left	0.042	0.044	0.024	0.086	0.066	0.110

Simult Tx	Configuration	NR Band n12 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.906	1.093	0.161	1.093*	1.067	1.093*
	Top	0.623	0.705	0.000	1.328	0.623	1.328
	Bottom	0.020	0.001	0.036	0.021	0.056	0.057
	Right	0.390	0.015	1.179	0.405	1.569	1.584
	Left	0.025	0.044	0.024	0.069	0.049	0.093

Simult Tx	Configuration	NR Band n5 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.958	1.093	0.161	1.093*	1.119	1.119*
	Top	0.740	0.705	0.000	1.445	0.740	1.445
	Bottom	0.016	0.001	0.036	0.017	0.052	0.053
	Right	0.335	0.015	1.179	0.350	1.514	1.529
	Left	0.039	0.044	0.024	0.083	0.063	0.107

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Simult Tx	Configuration	NR Band n66 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.568	1.093	0.161	1.093*	0.729	1.093*
	Top	0.169	0.705	0.000	0.874	0.169	0.874
	Bottom	0.034	0.001	0.036	0.035	0.070	0.071
	Right	0.961	0.015	1.179	0.976	1.179*	1.194*
	Left	0.005	0.044	0.024	0.049	0.029	0.073
Simult Tx	Configuration	NR Band n25 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.712	1.093	0.161	1.093*	0.873	1.093*
	Top	0.340	0.705	0.000	1.045	0.340	1.045
	Bottom	0.015	0.001	0.036	0.016	0.051	0.052
	Right	0.484	0.015	1.179	0.499	1.179*	1.194*
	Left	0.000	0.044	0.024	0.044	0.024	0.068
Simult Tx	Configuration	NR Band n41 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.515	1.093	0.161	1.093*	0.676	1.093*
	Top	0.983	0.705	0.000	See Note 1	0.983	See Note 1
	Bottom	0.004	0.001	0.036	0.005	0.040	0.041
	Right	0.204	0.015	1.179	0.219	1.383	1.398
	Left	0.010	0.044	0.024	0.054	0.034	0.078

Simult Tx	Configuration	NR Band n41 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body SAR	Top	0.904	0.000	0.904

Simult Tx	Configuration	NR Band n77 Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.930	1.093	0.161	1.093*	1.091	1.093*
	Top	0.522	0.705	0.000	1.227	0.522	1.227
	Bottom	0.000	0.001	0.036	0.001	0.036	0.037
	Right	0.414	0.015	1.179	0.429	1.593	1.593*
	Left	0.013	0.044	0.024	0.057	0.037	0.081

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Table 11-11
Cellular Band Ant 4a Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	5 GHz WLAN Ant 4b 6dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.865	0.283	0.161	1.148	1.026	1.309
	Top	0.283	0.202	0.000	0.485	0.283	0.485
	Bottom	0.003	0.001	0.036	0.004	0.039	0.040
	Right	0.000	0.015	1.179	0.015	1.179	1.194
	Left	0.887	0.044	0.024	0.931	0.911	0.955

Table 11-12
Cellular Band Ant 4b Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	5 GHz WLAN Ant 4b 6dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	0.283	0.161	1.282	1.160	1.443
	Top	0.999	0.202	0.000	1.201	0.999	1.201
	Bottom	0.006	0.001	0.036	0.007	0.042	0.043
	Right	0.021	0.015	1.179	0.036	1.200	1.215
	Left	0.058	0.044	0.024	0.102	0.082	0.126

Table 11-13
Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	0.297	1.186	1.296	1.186*	1.186*
	Top	0.041	0.020	0.359	0.061	0.400	0.420
	Bottom	0.737	0.131	0.008	0.868	0.745	0.876
	Right	0.055	0.289	0.001	0.344	0.056	0.345
	Left	0.999	0.000	0.887	0.999	0.999*	0.999*

Table 11-14
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.838	0.297	1.186	1.135	1.186*	1.186*
	Top	0.003	0.020	0.359	0.023	0.362	0.382
	Bottom	0.214	0.131	0.008	0.345	0.222	0.353
	Right	0.996	0.289	0.001	1.285	0.997	1.286
	Left	0.000	0.000	0.887	0.000	0.887	0.887

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Table 11-15
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.937	0.297	1.186	1.234	1.186*	1.234*
	Top	0.024	0.020	0.359	0.044	0.383	0.403
	Bottom	0.983	0.131	0.008	1.114	0.991	1.122
	Right	0.060	0.289	0.001	0.349	0.061	0.350
	Left	0.023	0.000	0.887	0.023	0.910	0.910

Table 11-16
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a 3dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.010	0.376	1.010*	1.375	1.010*
	Top	0.990	0.020	0.117	1.010	1.107	1.127
	Bottom	0.047	0.219	0.008	0.266	0.055	0.274
	Right	0.961	0.881	0.001	0.961*	0.962	0.962*
	Left	0.042	0.000	0.376	0.042	0.418	0.418

Table 11-17
Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a 3dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.865	1.010	0.376	1.010*	1.241	1.241*
	Top	0.283	0.020	0.117	0.303	0.400	0.420
	Bottom	0.003	0.219	0.008	0.222	0.011	0.230
	Right	0.000	0.881	0.001	0.881	0.001	0.882
	Left	0.887	0.000	0.376	0.887	1.263	1.263

Table 11-18
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a 3dB Backoff SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.010	0.376	1.010*	1.375	1.375*
	Top	0.999	0.020	0.117	1.019	1.116	1.136
	Bottom	0.006	0.219	0.008	0.225	0.014	0.233
	Right	0.021	0.881	0.001	0.902	0.022	0.903
	Left	0.058	0.000	0.376	0.058	0.434	0.434

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Table 11-19

Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a 2dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.297	0.416	1.093	0.161	1.509*
	Top	0.041	0.020	0.138	0.705	0.000	0.904
	Bottom	0.737	0.131	0.008	0.001	0.036	0.913
	Right	0.055	0.289	0.001	0.015	1.179	1.539
	Left	0.999	0.000	0.384	0.044	0.024	1.451

Table 11-20

Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	LTE Band 48 Ant 2a SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a 2dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b 4dB Backoff SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.838	0.297	0.416	1.093	0.066	1.509*
	Top	0.003	0.020	0.138	0.705	0.000	0.866
	Bottom	0.214	0.131	0.008	0.001	0.036	0.390
	Right	0.996	0.289	0.001	0.015	0.497	See Note 2
	Left	0.000	0.000	0.384	0.044	0.024	0.452
Simult Tx	Configuration	NR Band n77 Ant 2a SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a 2dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b 4dB Backoff SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.701	0.297	0.416	1.093	0.066	1.509*
	Top	0.001	0.020	0.138	0.705	0.000	0.864
	Bottom	0.161	0.131	0.008	0.001	0.036	0.337
	Right	0.656	0.289	0.001	0.015	0.497	1.458
	Left	0.000	0.000	0.384	0.044	0.024	0.452

Table 11-21

Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a 4dB Backoff SAR (W/kg)	Bluetooth Ant 4a 2dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b 4dB Backoff SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.937	0.297	0.416	1.093	0.066	1.509*
	Top	0.024	0.020	0.138	0.705	0.000	0.887
	Bottom	0.983	0.131	0.008	0.001	0.036	1.159
	Right	0.060	0.289	0.001	0.015	0.497	0.862
	Left	0.023	0.000	0.384	0.044	0.024	0.475

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Table 11-22

Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	GPRS 850 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.792	0.349	0.135	1.093	0.161	1.228*
	Top	0.693	0.020	0.055	0.705	0.000	1.473
	Bottom	0.012	0.170	0.008	0.001	0.036	0.227
	Right	0.201	0.313	0.001	0.015	1.179	1.508*
	Left	0.025	0.000	0.150	0.044	0.024	0.243
Simult Tx	Configuration	GPRS 1900 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.601	0.349	0.135	1.093	0.161	1.228*
	Top	0.376	0.020	0.055	0.705	0.000	1.156
	Bottom	0.022	0.170	0.008	0.001	0.036	0.237
	Right	0.563	0.313	0.001	0.015	1.179	1.508*
	Left	0.002	0.000	0.150	0.044	0.024	0.220
Simult Tx	Configuration	UMTS 850 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.831	0.349	0.135	1.093	0.161	1.228*
	Top	0.653	0.020	0.055	0.705	0.000	1.433
	Bottom	0.014	0.170	0.008	0.001	0.036	0.229
	Right	0.389	0.313	0.001	0.015	1.179	1.508*
	Left	0.028	0.000	0.150	0.044	0.024	0.246
Simult Tx	Configuration	UMTS 1750 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.603	0.349	0.135	1.093	0.161	1.228*
	Top	0.207	0.020	0.055	0.705	0.000	0.987
	Bottom	0.040	0.170	0.008	0.001	0.036	0.255
	Right	0.946	0.313	0.001	0.015	1.179	1.508*
	Left	0.006	0.000	0.150	0.044	0.024	0.224
Simult Tx	Configuration	UMTS 1900 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.916	0.349	0.135	1.093	0.161	1.228*
	Top	0.465	0.020	0.055	0.705	0.000	1.245
	Bottom	0.036	0.170	0.008	0.001	0.036	0.251
	Right	0.677	0.313	0.001	0.015	1.179	1.508*
	Left	0.004	0.000	0.150	0.044	0.024	0.222
Simult Tx	Configuration	LTE Band 71 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.952	0.349	0.135	1.093	0.161	1.228*
	Top	0.701	0.020	0.055	0.705	0.000	1.481
	Bottom	0.013	0.170	0.008	0.001	0.036	0.228
	Right	0.292	0.313	0.001	0.015	1.179	1.508*
	Left	0.032	0.000	0.150	0.044	0.024	0.250

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Simult Tx	Configuration	LTE Band 12 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.349	0.135	1.093	0.161	1.228*
	Top	0.721	0.020	0.055	0.705	0.000	1.501
	Bottom	0.020	0.170	0.008	0.001	0.036	0.235
	Right	0.284	0.313	0.001	0.015	1.179	1.508*
	Left	0.032	0.000	0.150	0.044	0.024	0.250
Simult Tx	Configuration	LTE Band 13 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.804	0.349	0.135	1.093	0.161	1.228*
	Top	0.678	0.020	0.055	0.705	0.000	1.458
	Bottom	0.014	0.170	0.008	0.001	0.036	0.229
	Right	0.261	0.313	0.001	0.015	1.179	1.508*
	Left	0.030	0.000	0.150	0.044	0.024	0.248
Simult Tx	Configuration	LTE Band 14 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.735	0.349	0.135	1.093	0.161	1.228*
	Top	0.591	0.020	0.055	0.705	0.000	1.371
	Bottom	0.016	0.170	0.008	0.001	0.036	0.231
	Right	0.229	0.313	0.001	0.015	1.179	1.508*
	Left	0.028	0.000	0.150	0.044	0.024	0.246
Simult Tx	Configuration	LTE Band 26 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.887	0.349	0.135	1.093	0.161	1.228*
	Top	0.723	0.020	0.055	0.705	0.000	1.503
	Bottom	0.016	0.170	0.008	0.001	0.036	0.231
	Right	0.273	0.313	0.001	0.015	1.179	1.508*
	Left	0.024	0.000	0.150	0.044	0.024	0.242
Simult Tx	Configuration	LTE Band 5 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.929	0.349	0.135	1.093	0.161	1.228*
	Top	0.712	0.020	0.055	0.705	0.000	1.492
	Bottom	0.019	0.170	0.008	0.001	0.036	0.234
	Right	0.271	0.313	0.001	0.015	1.179	1.508*
	Left	0.036	0.000	0.150	0.044	0.024	0.254
Simult Tx	Configuration	LTE Band 66 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.543	0.349	0.135	1.093	0.161	1.228*
	Top	0.193	0.020	0.055	0.705	0.000	0.973
	Bottom	0.047	0.170	0.008	0.001	0.036	0.262
	Right	0.894	0.313	0.001	0.015	1.179	1.508*
	Left	0.003	0.000	0.150	0.044	0.024	0.221

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Simult Tx	Configuration	LTE Band 25 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.690	0.349	0.135	1.093	0.161	1.228*
	Top	0.387	0.020	0.055	0.705	0.000	1.167
	Bottom	0.026	0.170	0.008	0.001	0.036	0.241
	Right	0.513	0.313	0.001	0.015	1.179	1.508*
	Left	0.002	0.000	0.150	0.044	0.024	0.220
Simult Tx	Configuration	LTE Band 30 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.987	0.349	0.135	1.093	0.161	1.228*
	Top	0.635	0.020	0.055	0.705	0.000	1.415
	Bottom	0.016	0.170	0.008	0.001	0.036	0.231
	Right	0.675	0.313	0.001	0.015	1.179	1.508*
	Left	0.000	0.000	0.150	0.044	0.024	0.218
Simult Tx	Configuration	LTE Band 7 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.531	0.349	0.135	1.093	0.161	1.228*
	Top	0.990	0.020	0.055	0.705	0.000	See Note 1
	Bottom	0.002	0.170	0.008	0.001	0.036	0.217
	Right	0.199	0.313	0.001	0.015	1.179	1.508*
	Left	0.012	0.000	0.150	0.044	0.024	0.230

Simult Tx	Configuration	LTE Band 7 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Top	0.836	0.020	0.055	0.000	0.911

Simult Tx	Configuration	LTE Band 41 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.436	0.349	0.135	1.093	0.161	1.228*
	Top	0.974	0.020	0.055	0.705	0.000	See Note 1
	Bottom	0.011	0.170	0.008	0.001	0.036	0.226
	Right	0.190	0.313	0.001	0.015	1.179	1.508*
	Left	0.006	0.000	0.150	0.044	0.024	0.224

Simult Tx	Configuration	LTE Band 41 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Top	0.866	0.020	0.055	0.000	0.941

Simult Tx	Configuration	LTE Band 48 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.968	0.349	0.135	1.093	0.161	1.228*
	Top	0.521	0.020	0.055	0.705	0.000	1.301
	Bottom	0.001	0.170	0.008	0.001	0.036	0.216
	Right	0.016	0.313	0.001	0.015	1.179	1.524
	Left	0.007	0.000	0.150	0.044	0.024	0.225

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Simult Tx	Configuration	NR Band n71 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.841	0.349	0.135	1.093	0.161	1.228*
	Top	0.619	0.020	0.055	0.705	0.000	1.399
	Bottom	0.012	0.170	0.008	0.001	0.036	0.227
	Right	0.339	0.313	0.001	0.015	1.179	1.508*
	Left	0.042	0.000	0.150	0.044	0.024	0.260
Simult Tx	Configuration	NR Band n12 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.906	0.349	0.135	1.093	0.161	1.228*
	Top	0.623	0.020	0.055	0.705	0.000	1.403
	Bottom	0.020	0.170	0.008	0.001	0.036	0.235
	Right	0.390	0.313	0.001	0.015	1.179	1.508*
	Left	0.025	0.000	0.150	0.044	0.024	0.243
Simult Tx	Configuration	NR Band n5 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.958	0.349	0.135	1.093	0.161	1.228*
	Top	0.740	0.020	0.055	0.705	0.000	1.520
	Bottom	0.016	0.170	0.008	0.001	0.036	0.231
	Right	0.335	0.313	0.001	0.015	1.179	1.508*
	Left	0.039	0.000	0.150	0.044	0.024	0.257
Simult Tx	Configuration	NR Band n66 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.568	0.349	0.135	1.093	0.161	1.228*
	Top	0.169	0.020	0.055	0.705	0.000	0.949
	Bottom	0.034	0.170	0.008	0.001	0.036	0.249
	Right	0.961	0.313	0.001	0.015	1.179	1.508*
	Left	0.005	0.000	0.150	0.044	0.024	0.223
Simult Tx	Configuration	NR Band n25 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.712	0.349	0.135	1.093	0.161	1.228*
	Top	0.340	0.020	0.055	0.705	0.000	1.120
	Bottom	0.015	0.170	0.008	0.001	0.036	0.230
	Right	0.484	0.313	0.001	0.015	1.179	1.508*
	Left	0.000	0.000	0.150	0.044	0.024	0.218

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Simult Tx	Configuration	NR Band n41 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.515	0.349	0.135	1.093	0.161	1.228*
	Top	0.983	0.020	0.055	0.705	0.000	See Note 1
	Bottom	0.004	0.170	0.008	0.001	0.036	0.219
	Right	0.204	0.313	0.001	0.015	1.179	1.508*
	Left	0.010	0.000	0.150	0.044	0.024	0.228

Simult Tx	Configuration	NR Band n41 Ant 3 & 5 GHz WLAN Ant 4b SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Top	0.904	0.020	0.055	0.000	0.979

Simult Tx	Configuration	NR Band n77 Ant 3 SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.930	0.349	0.135	1.093	0.161	1.228*
	Top	0.522	0.020	0.055	0.705	0.000	1.302
	Bottom	0.000	0.170	0.008	0.001	0.036	0.215
	Right	0.414	0.313	0.001	0.015	1.179	1.508*
	Left	0.013	0.000	0.150	0.044	0.024	0.231

Table 11-23

Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b 6dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.865	0.349	0.135	0.283	0.161	1.283*
	Top	0.283	0.020	0.055	0.202	0.000	0.560
	Bottom	0.003	0.170	0.008	0.001	0.036	0.218
	Right	0.000	0.313	0.001	0.015	1.179	1.508
	Left	0.887	0.000	0.150	0.044	0.024	1.105

Table 11-24

Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 7dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b 6dB Backoff SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.349	0.135	0.283	0.161	1.417*
	Top	0.999	0.020	0.055	0.202	0.000	1.276
	Bottom	0.006	0.170	0.008	0.001	0.036	0.221
	Right	0.021	0.313	0.001	0.015	1.179	1.529
	Left	0.058	0.000	0.150	0.044	0.024	0.276

Table 11-25

2.4 GHz BT Simultaneous Transmission Scenario with 5GHz WLAN MIMO

Simult Tx	Configuration	Bluetooth Ant 2a 3dB Backoff SAR (W/kg)	Bluetooth Ant 4a 3dB Backoff SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.349	0.376	1.093	0.161	1.469*
	Top	0.020	0.117	0.705	0.000	0.842
	Bottom	0.170	0.008	0.001	0.036	0.215
	Right	0.313	0.001	0.015	1.179	1.508
	Left	0.000	0.376	0.044	0.024	0.444

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Table 11-26
Simultaneous Transmission Scenario with 2.4 GHz Bluetooth

Simult Tx	Configuration	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body SAR	Back	1.010	1.186	1.186*
	Top	0.020	0.359	0.379
	Bottom	0.219	0.008	0.227
	Right	0.881	0.001	0.882
	Left	0.000	0.887	0.887

Notes:

1. Please see section 11.5 for detailed simultaneous transmission analysis.
2. No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 11.6 for detailed simultaneous transmission and SPLS ratio analysis.

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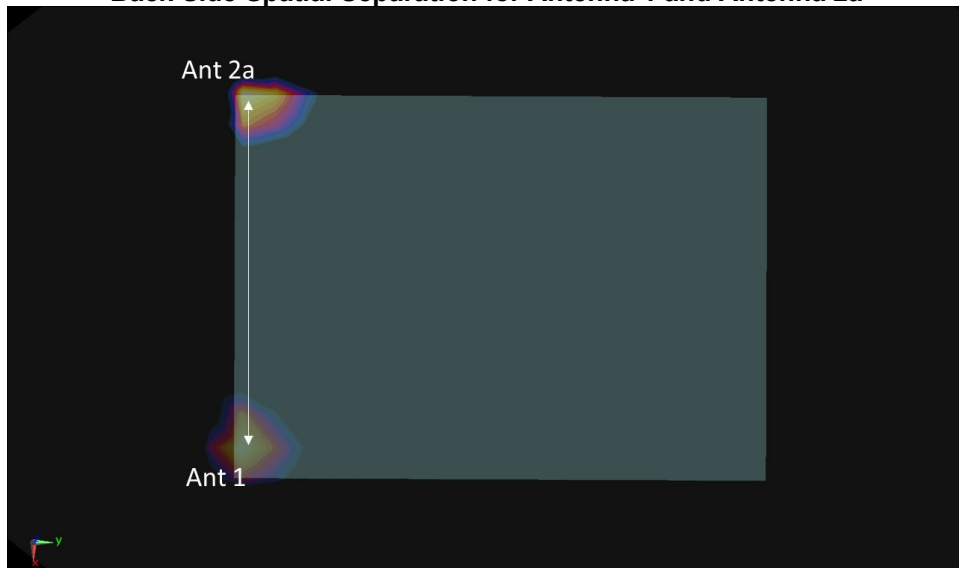
11.4 Spatial Separation Analysis

Per FCC KDB Publication 248227, antennas may be considered spatially separated when the aggregate SAR from multiple antennas at any location in the combined SAR distribution is either ≤ 1.2 W/kg where at least 90% of the SAR is attributed to a single SAR distribution or ≤ 0.4 W/kg where no more than one SAR distribution is contributing > 0.1 W/kg.

Spatial separation was determined by inspection of the area scan SAR distributions to confirm that at all locations, SAR was < 1.2 W/kg, where at least 90% of the SAR is attributed to a single SAR distribution. See below for illustrations of the spatial separated antennas considered.

11.4.1 Back Side Spatial Separation Analysis

Figure 11-1
Back Side Spatial Separation for Antenna 1 and Antenna 2a



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Figure 11-2
Back Side Spatial Separation for Antenna 1 and Antenna 4a

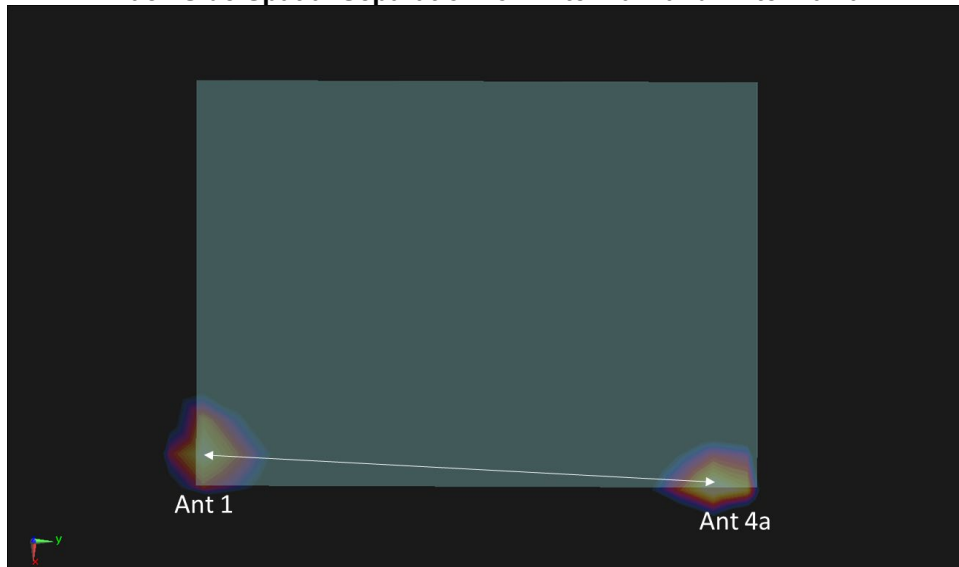
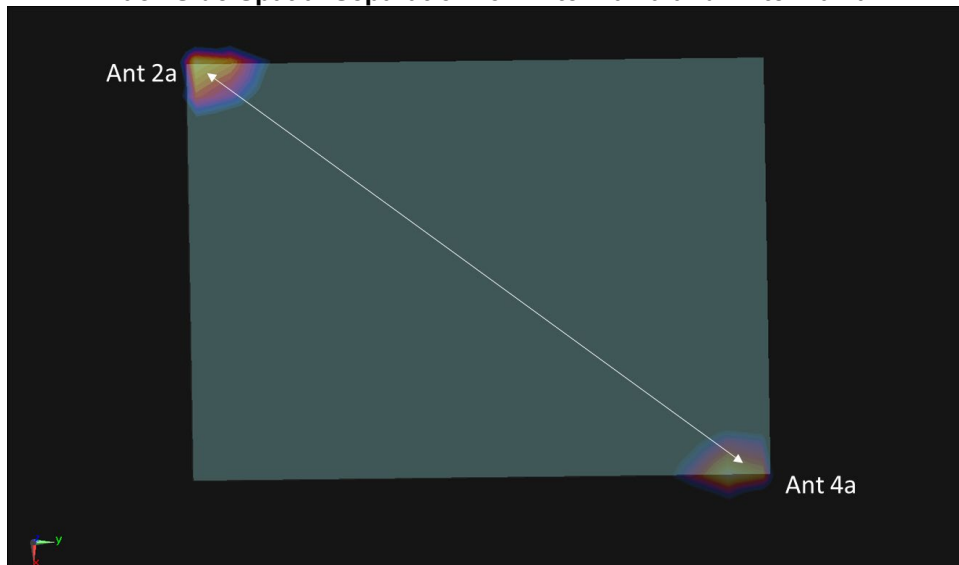


Figure 11-3
Back Side Spatial Separation for Antenna 2a and Antenna 4a



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Figure 11-4
Back Side Spatial Separation for Antenna 2b and Antenna 4a

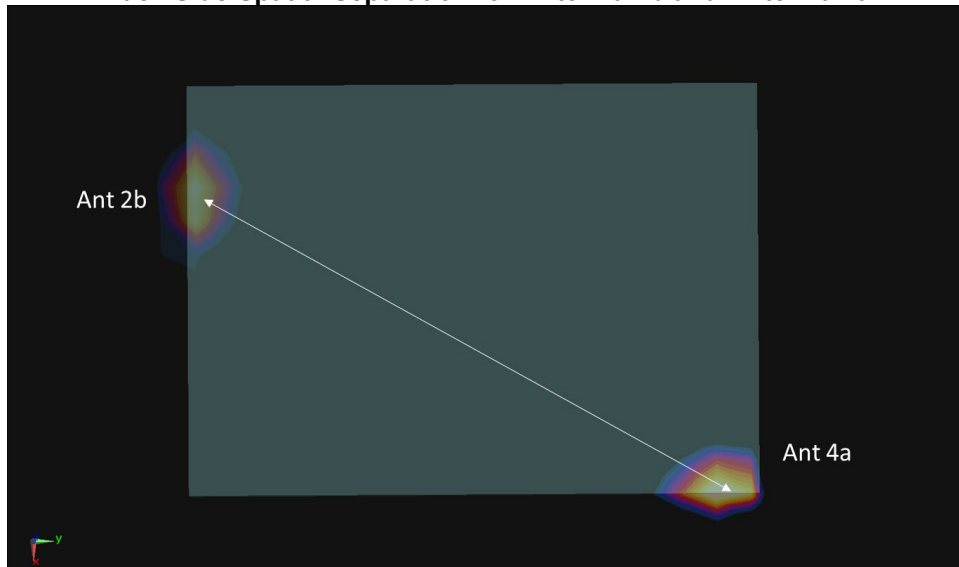
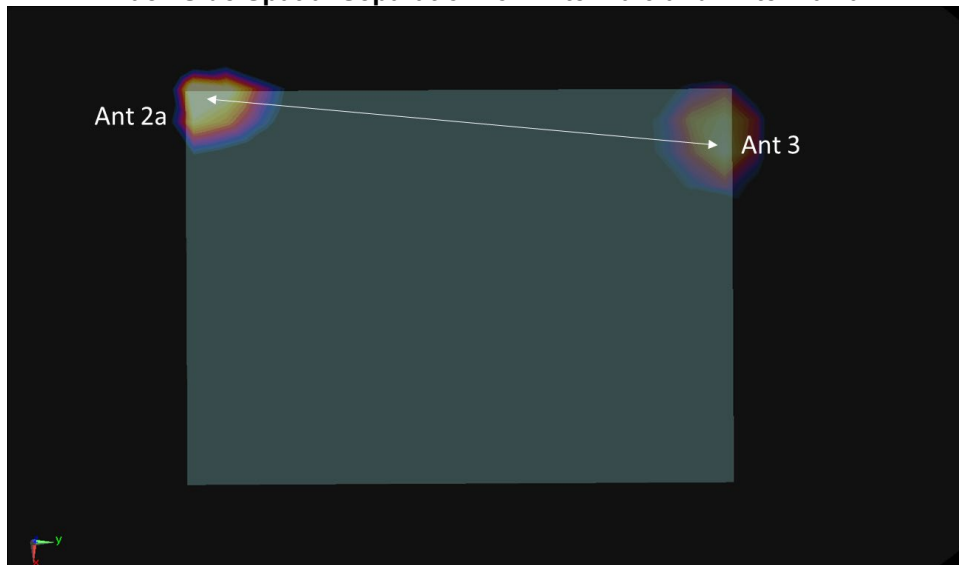


Figure 11-5
Back Side Spatial Separation for Antenna 3 and Antenna 2a



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Figure 11-6
Back Side Spatial Separation for Antenna 3 and Antenna 4a

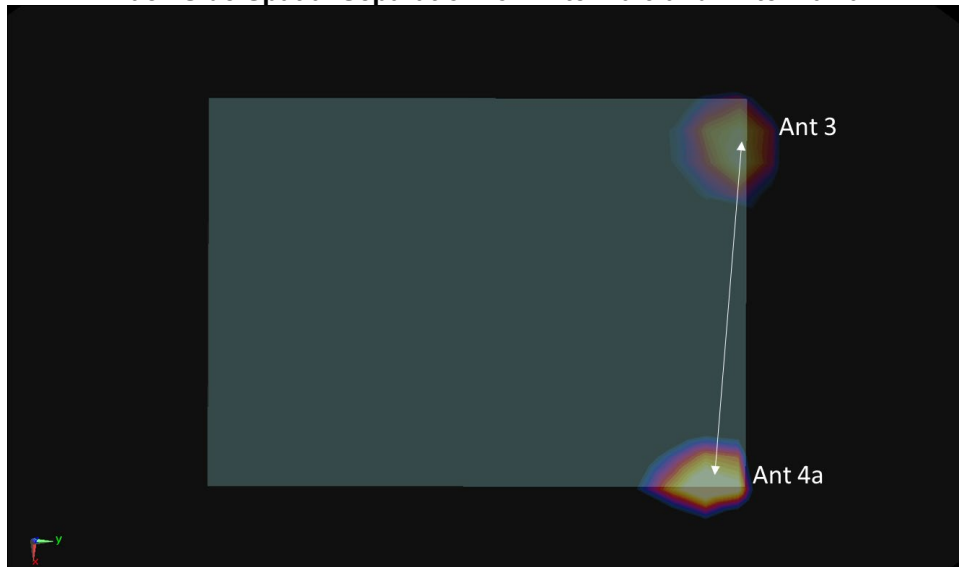
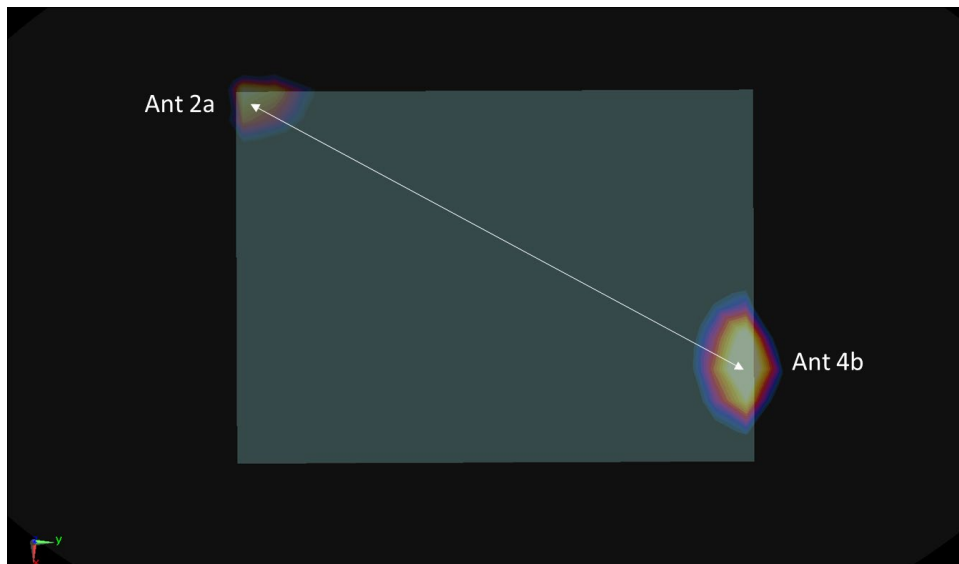


Figure 11-7
Back Side Spatial Separation for Antenna 4b and Antenna 2a



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Figure 11-8
Back Side Spatial Separation for Antenna 4b and Antenna 1

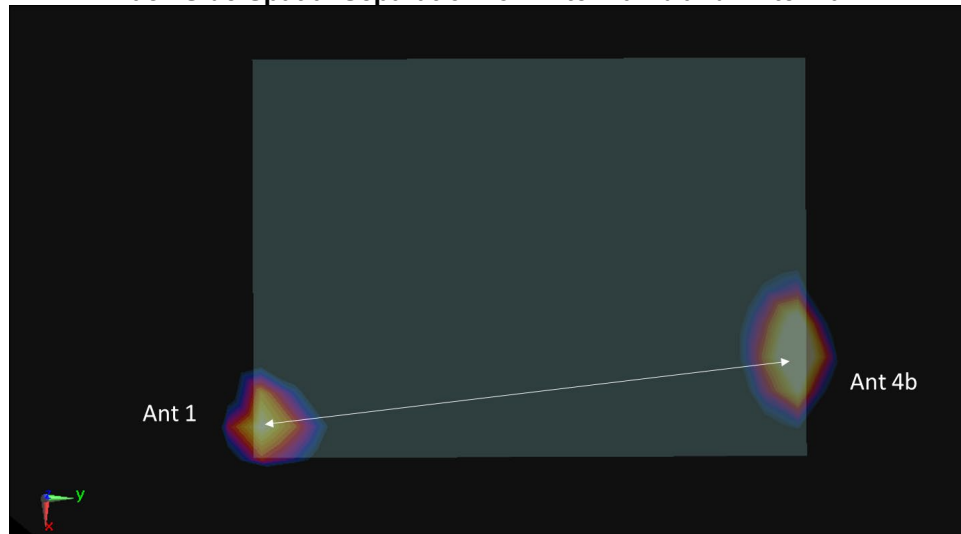
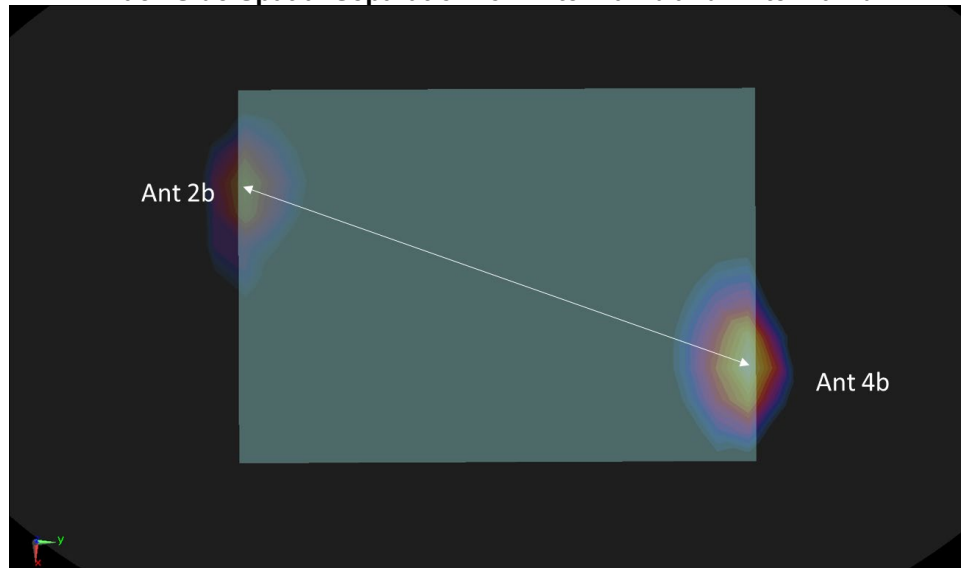


Figure 11-9
Back Side Spatial Separation for Antenna 4b and Antenna 2b



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Figure 11-10
Back Side Spatial Separation for Antenna 4b and Antenna 3

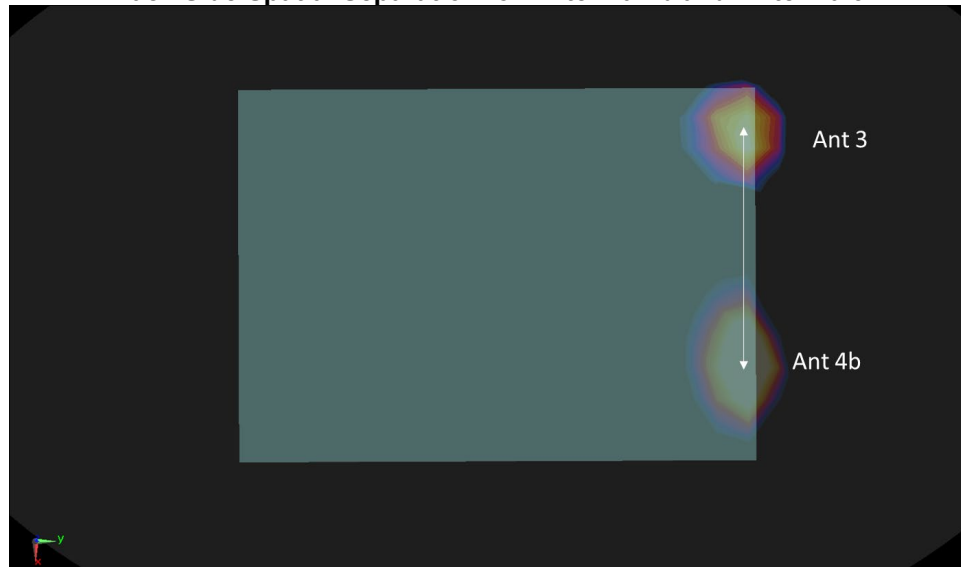
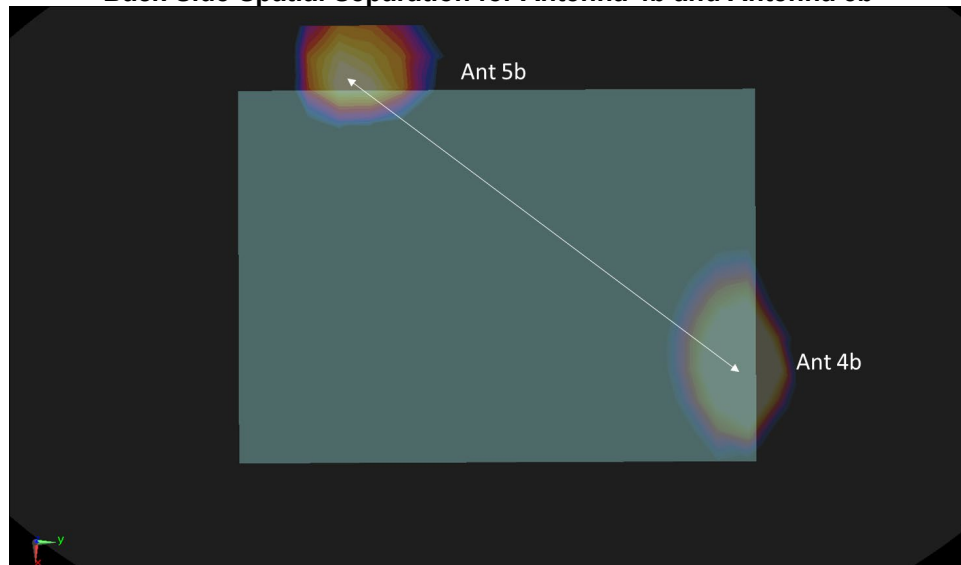
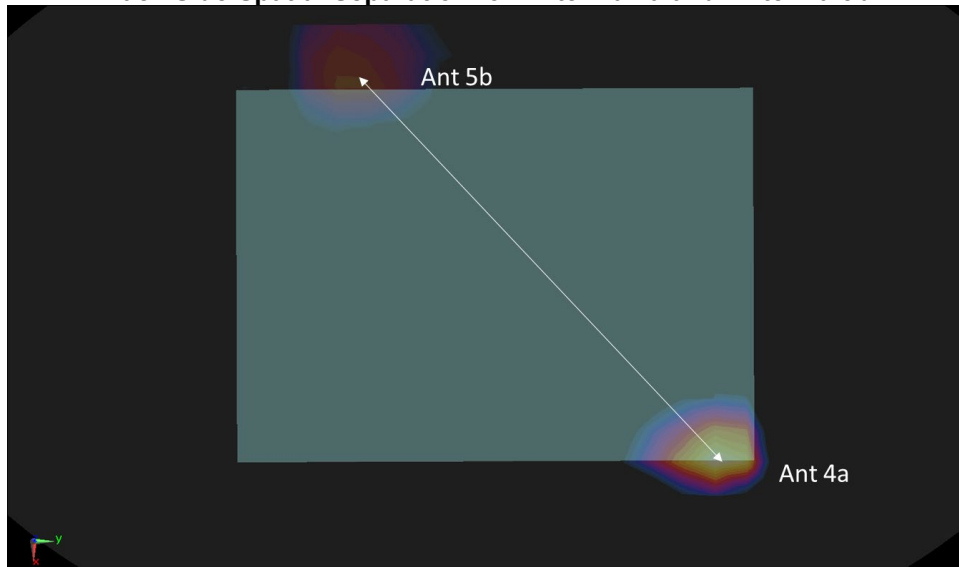


Figure 11-11
Back Side Spatial Separation for Antenna 4b and Antenna 5b



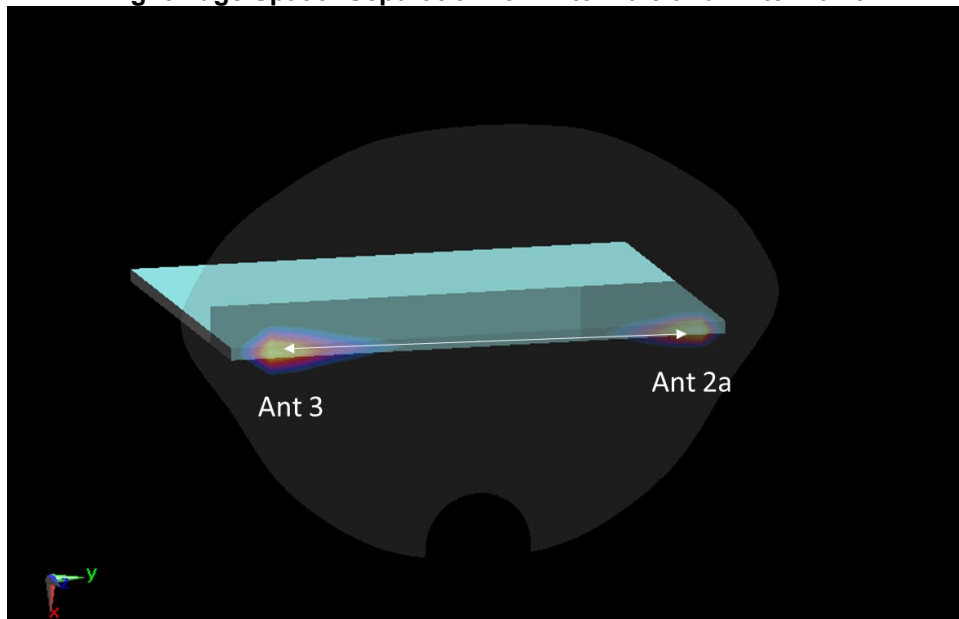
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Figure 11-12
Back Side Spatial Separation for Antenna 4a and Antenna 5b



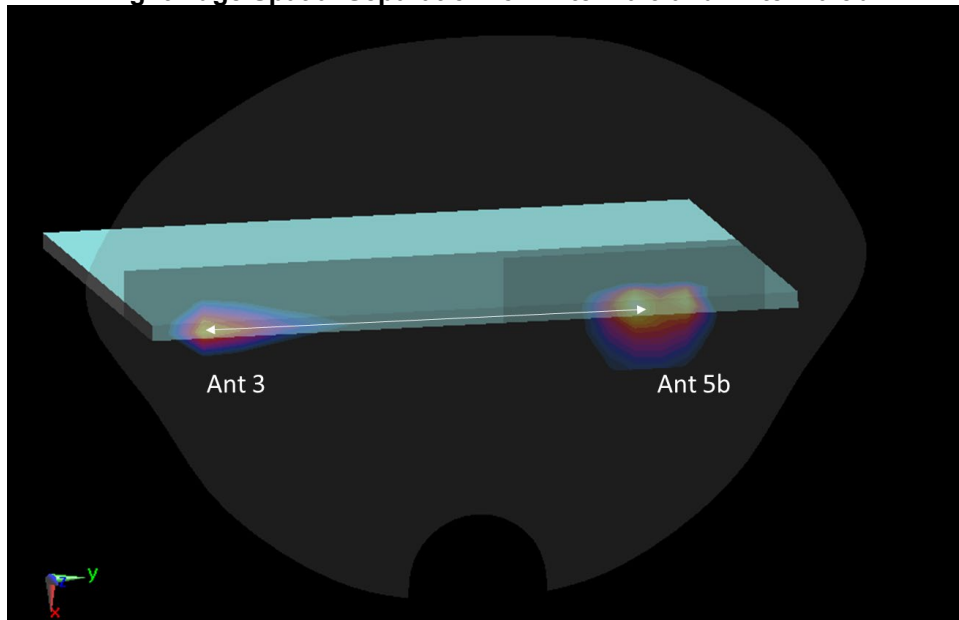
11.4.2 Right Edge Spatial Separation Analysis

Figure 11-13
Right Edge Spatial Separation for Antenna 3 and Antenna 2a



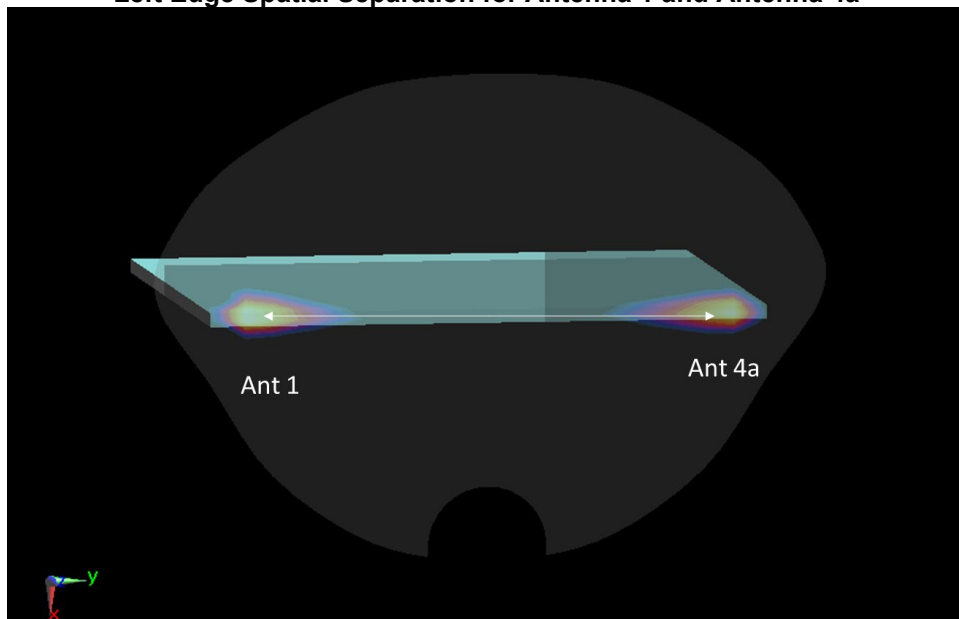
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Figure 11-14
Right Edge Spatial Separation for Antenna 3 and Antenna 5b



11.4.3 Left Edge Spatial Separation Analysis

Figure 11-15
Left Edge Spatial Separation for Antenna 1 and Antenna 4a



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11.5 Additional Simultaneous SAR Evaluation and Analysis for Main Band and 5 GHz WLAN Operations

Per KDB Publication 865664, when the sum of the transmitters potentially operating simultaneously is greater than the 1.6 W/kg and the sum to peak SAR location separation ratio between any pair of transmitters is more than 0.04 for 1g or 0.10 for 10g, SAR tests are required for simultaneous transmission to determine the aggregate 1g SAR. When required, each transmitter is tested for simultaneous transmission in the configuration, channel, and operating mode that resulted in the highest SAR during the stand-alone evaluation. Full volumetric scans were performed for the cell and 5GHz WLAN to determine the aggregate distributions from the simultaneous transmission (volumetric) SAR evaluation.

11.5.1 Body Top Edge Volumetric SAR Evaluation and Analysis for Main Band and 5 GHz WLAN Simultaneous Transmission

Table 11-27
Simultaneous Transmission SAR Analysis

Band/Mode	Configuration	Frequency [MHz]	Measured Standalone 1g SAR [W/kg]	Conducted Power [dBm]	Maximum Allowed Power [dBm]	Duty Cycle [%]	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Volumetric 1g SAR [W/kg]	Scaled Volumetric 1g SAR [W/kg]	Volumetric SAR Plot Number
LTE Band 7 Ant 3	Top Edge, QPSK, 50 RB, 0 RB Offset, 20 MHz, Ch 21350, 0 mm	2560.00	0.797	14.76	15.7	100	1.242	N/A	0.712	0.884	A28
LTE Band 41 Ant 3	Top Edge, Power Class 2 ULCA, QPSK, 20 MHz, 0 mm PCC: Ch 40620, 1 RB, 0 RB Offset; SCC: Ch 40422, 1 RB, 99 RB Offset	PCC: 2593.00 SCC: 2573.20	0.974	18.75	18.75	43.3	1.000	N/A	0.859	0.859	A29
NR Band n41 Ant 3	Top Edge, DFT-S-OFDM QPSK, 135 RB, 138 RB Offset, 100 MHz, Ch 518598, 0 mm	2592.99	0.788	14.14	15.1	100	1.247	N/A	0.636	0.793	A30
5GHz WLAN Ant 4b	Top Edge, UNII-3, 802.11ac, 80 MHz, Ch 155, 0 mm	5775.00	0.625	11.15	11.5	96.1	1.084	1.041	0.629	0.727	A31
Simultaneous Transmission Bands/Modes					Scaled Multi-Band SAR (W/kg)		Simultaneous SAR Plot Number				
5GHz WLAN Ant 4b		LTE Band 7 Ant 3			0.836		A32				
5GHz WLAN Ant 4b		LTE Band 41 Ant 3			0.866		A33				
5GHz WLAN Ant 4b		NR Band n41 Ant 3			0.904		A34				

Note:

1. All volumetric zoom scans were performed with DASY52 SAR system version 52.10. Post processor SEMCAD X Versions 14.6.14 (7483) multiband combiner requires enlarged zoom scans to overlap but does not require measurement point resolutions within the volumes to be identical for interpolation and superposition.
2. Each antenna was evaluated independently using the channel/configuration that produced the highest measured SAR when the standalone SAR was tested.
3. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v05. The simultaneous transmission SAR results of the individual transmitters were scaled using SEMCAD X during processing.
4. The LTE/NR and 5GHz WLAN SAR values above represent the aggregate distributions from the simultaneous transmission (volumetric) SAR evaluation.

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11.6 Additional Simultaneous SAR Evaluation and Analysis for Main Band, Bluetooth, and 5 GHz WLAN Operations

Per FCC KDB Publication 447498 D01v06, when the sum of the standalone transmitters is more than 1.6 W/kg for 1g, the SAR sum to peak locations can be analyzed to determine SAR distribution overlaps. When the SAR peak to location ratio (shown below) for each pair of antennas is ≤ 0.04 for 1g, simultaneous SAR evaluation is not required. The distance between the transmitters was calculated using the following formula.

$$\text{Distance}_{\text{Tx1} - \text{Tx2}} = R_i = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2} \text{ (Body)}$$

$$\text{SPLS Ratio} = \frac{(SAR_1 + SAR_2)^{1.5}}{R_i}$$

Per KDB Publication 865664, when the sum of the transmitters potentially operating simultaneously is greater than the 1.6 W/kg and the sum to peak SAR location separation ratio between any pair of transmitters is more than 0.04 for 1g or 0.10 for 10g, SAR tests are required for simultaneous transmission to determine the aggregate 1g SAR. When required, each transmitter is tested for simultaneous transmission in the configuration, channel, and operating mode that resulted in the highest SAR during the stand-alone evaluation. The Bluetooth and LTE B48 transmitters are co-located antenna pair and spatially separated from other BT/WIFI antennas. Per November 2019 TCB Workshop Notes, enlarged volumetric scans on co-located antenna pair were performed for the Bluetooth and LTE B48. The SPLSR procedure for the spatially separated BT/WIFI antenna and aggregated SAR distribution of the co-located Bluetooth/LTE B48 antenna pair was applied according to KDB Publication 447498.

11.6.1 Body Right Edge Volumetric SAR Evaluation and Analysis for Main Band and Bluetooth Simultaneous Transmission

Table 11-28
Simultaneous Transmission SAR Analysis

Band/Mode	Configuration	Frequency [MHz]	Measured Standalone 1g SAR [W/kg]	Conducted Power [dBm]	Maximum Allowed Power [dBm]	Duty Cycle [%]	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Volumetric 1g SAR [W/kg]	Scaled Volumetric 1g SAR [W/kg]	Volumetric SAR Plot Number
LTE Band 48 Ant 2a	Right Edge, QPSK, 50 RB, 50 RB Offset, 20 MHz, Ch 55340, 0 mm	3560.00	0.909	13	13.4	63.3	1.096	N/A	0.91	0.997	A35
4dB Reduced Bluetooth Ant 2a	Right Edge, Ch 0, V2, 1 Mbps, 0 mm	2402.00	0.245	9.32	10	76.8	1.169	1.009	0.246	0.29	A36
Simultaneous Transmission Bands/Modes					Scaled Multi-Band SAR (W/kg)		Simultaneous SAR Plot Number				
LTE Band 48 Ant 2a			4dB Reduced Bluetooth Ant 2a		1.170		A37				

Note:

1. All volumetric zoom scans were performed with DASY52 SAR system version 52.10. Post processor SEMCAD X Versions 14.6.14 (7483) multiband combiner requires enlarged zoom scans to overlap but does not require measurement point resolutions within the volumes to be identical for interpolation and superposition.
2. Each antenna was evaluated independently using the channel/configuration that produced the highest measured SAR when the standalone SAR was tested.
3. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v05. The simultaneous transmission SAR results of the individual transmitters were scaled using SEMCAD X during processing.
4. The LTE and Bluetooth SAR values above represent the aggregate distributions from the simultaneous transmission (volumetric) SAR evaluation.

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11.6.2 Body Right Edge SPLSR SAR Evaluation and Analysis for Main Band, Bluetooth and 5 GHz WLAN Simultaneous Transmission

Table 11-29
Peak SAR Locations for Body Right Edge

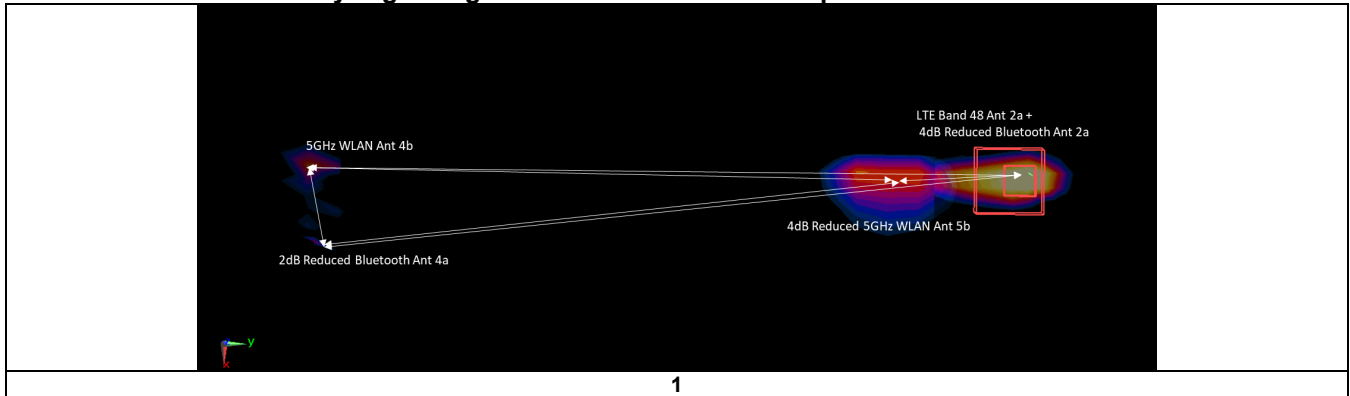
Mode/Band	x (mm)	y (mm)	Reported SAR (W/kg)
4dB Reduced 5 GHz WLAN Ant 5b	-27.00	58.00	0.497
5 GHz WLAN Ant 4b	-27.50	-114.00	0.015
2dB Reduced Bluetooth Ant 4a	-2.50	-123.00	0.001
LTE Band 48 Ant 2a and 4dB Reduced Bluetooth Ant 2a	-27.50	110.00	1.170

Table 11-30
Body Right Edge SAR to Peak Location Separation Ratio Calculations

Antenna Pair		Standalone SAR (W/kg)		Standalone SAR Sum (W/kg)	Peak SAR Separation Distance (mm)	SPLS Ratio	Plot Number
Ant "a"	Ant "b"	a	b	a+b	D_{a-b}	$(a+b)^{1.2}/D_{a-b}$	
4dB Reduced 5 GHz WLAN Ant 5b	LTE Band 48 Ant 2a and 4dB Reduced Bluetooth Ant 2a	0.497	1.170	1.667	52.00	0.04	1
4dB Reduced 5 GHz WLAN Ant 5b	2dB Reduced Bluetooth Ant 4a	0.497	0.001	0.498	182.65	0.00	
4dB Reduced 5 GHz WLAN Ant 5b	5 GHz WLAN Ant 4b	0.497	0.015	0.512	172.00	0.00	
LTE Band 48 Ant 2a and 4dB Reduced Bluetooth Ant 2a	2dB Reduced Bluetooth Ant 4a	1.170	0.001	1.171	234.34	0.01	
LTE Band 48 Ant 2a and 4dB Reduced Bluetooth Ant 2a	5 GHz WLAN Ant 4b	1.170	0.015	1.185	224.00	0.01	
2dB Reduced Bluetooth Ant 4a	5 GHz WLAN Ant 4b	0.001	0.015	0.016	26.57	0.00	

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Table 11-31
Body Right Edge SAR to Peak Location Separation Ratio Plots



11.7 Simultaneous Transmission Conclusion

The above numerical summed SAR results, SPLSR, Volumetric and spatial analysis are sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06.

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12 SAR MEASUREMENT VARIABILITY

12.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
- 2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1g SAR limit).
- 3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .
- 4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

Table 12-1
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS																
Band	FREQUENCY		Mode	Antenna	Service	# of Time Slots	Data Rate (Mbps)	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.								(W/kg)	(W/kg)		(W/kg)		(W/kg)	
750	707.50	23095	LTE Band 12, 10 MHz Bandwidth	Ant 1	QPSK, 1 RB, 0 RB Offset	N/A	N/A	back	0 mm	0.856	0.721	1.19	N/A	N/A	N/A	N/A
1750	1720.00	132072	LTE Band 66 (AWS), 20 MHz Bandwidth	Ant 1	QPSK, 100 RB, 0 RB Offset	N/A	N/A	back	0 mm	0.987	0.984	1.00	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	Ant 3	QPSK, 25 RB, 25 RB Offset	N/A	N/A	back	0 mm	0.917	0.881	1.04	N/A	N/A	N/A	N/A
2450	2402.00	0	Bluetooth	Ant 4a	FHSS	N/A	1	back	0 mm	0.939	0.888	1.06	N/A	N/A	N/A	N/A
2600	2680.00	41490	LTE Band 41, 20 MHz Bandwidth	Ant 4b	QPSK, 50 RB, 0 RB Offset	N/A	N/A	top	0 mm	0.979	0.950	1.03	N/A	N/A	N/A	N/A
3500	3560.00	PCC: 55340	LTE Band 48 ULCA, 20 MHz Bandwidth	Ant 2a	QPSK, 50 RB, 50 RB Offset	N/A	N/A	right	0 mm	0.926	0.857	1.08	N/A	N/A	N/A	N/A
	3579.80	SCC: 55538			QPSK, 50 RB, 0 RB Offset	N/A	N/A									
3700	3690.00	PCC: 56640	LTE Band 48 ULCA, 20 MHz Bandwidth	Ant 1	QPSK, 50 RB, 0 RB Offset	N/A	N/A	back	0 mm	0.944	0.885	1.07	N/A	N/A	N/A	N/A
	3670.20	SCC: 56442			QPSK, 50 RB, 50 RB Offset	N/A	N/A									
5250	5290.00	58	802.11ac, 80 MHz Bandwidth	Ant 4b	OFDM	N/A	29.3	back	0 mm	0.833	0.829	1.00	N/A	N/A	N/A	N/A
5600	5610.00	122	802.11ac, 80 MHz Bandwidth	Ant 4b	OFDM	N/A	29.3	back	0 mm	0.844	0.835	1.01	N/A	N/A	N/A	N/A
5750	5775.00	155	802.11ac, 80 MHz Bandwidth	Ant 4b	OFDM	N/A	29.3	back	0 mm	0.961	0.938	1.02	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT										Body						
Spatial Peak										1.6 W/kg (mW/g)						
Uncontrolled Exposure/General Population										averaged over 1 gram						

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12.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

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13 ADDITIONAL TESTING PER FCC GUIDANCE

13.1 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. When ULCA is active, the linearity between the Power Class 2 with ULCA active and Power Class 3 with ULCA active SAR results and the respective frame averaged powers was calculated to determine that the results were linear. Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

Table 13-1
LTE Band 41 Body Linearity Data – Ant 1

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	18.5	20.15
Measured Output Power (dBm)	17.15	19.73
Measured SAR (W/kg)	0.593	0.704
Measured Power (mW)	51.88	93.97
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	32.84	40.69
% deviation from expected linearity		-4.18%

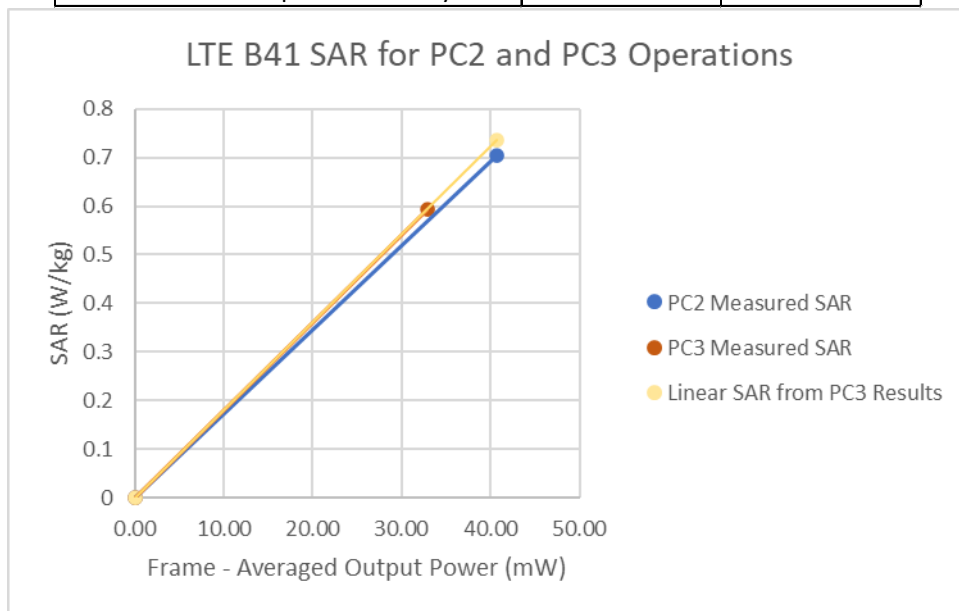


Figure 13-1
LTE Band 41 Body Linearity – Ant 1

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Table 13-2
LTE Band 41 ULCA Body Linearity Data – Ant 1

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	18.5	20.15
Measured Output Power (dBm)	17.3	19.45
Measured SAR (W/kg)	0.575	0.650
Measured Power (mW)	53.70	88.10
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	33.99	38.15
% deviation from expected linearity		0.73%

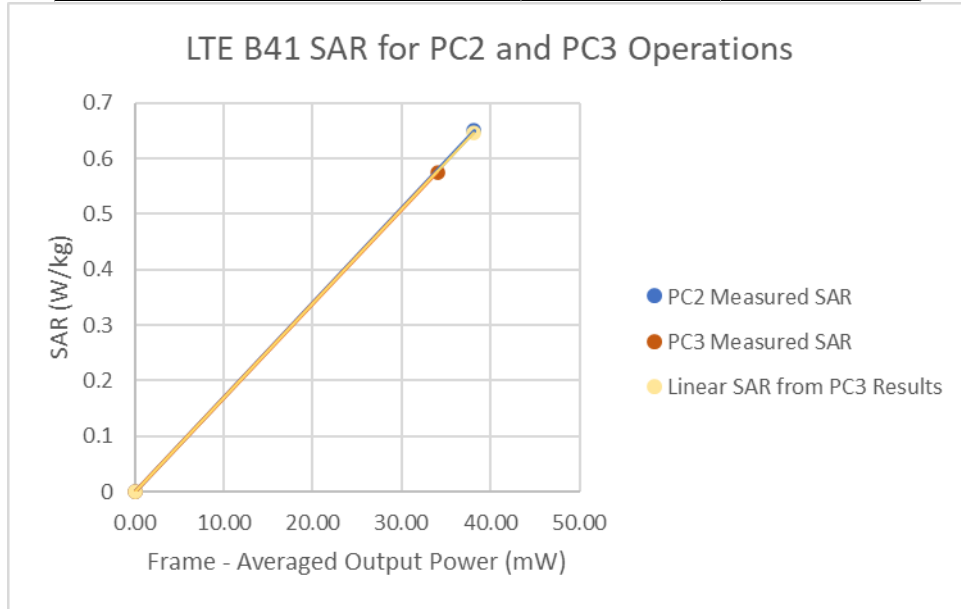


Figure 13-2
LTE Band 41 ULCA Body Linearity – Ant 1

FCC ID: BCGA2301	 Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-3
LTE Band 41 Body Linearity Data – Ant 2b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	13.6	15.25
Measured Output Power (dBm)	12.75	14.79
Measured SAR (W/kg)	0.665	0.656
Measured Power (mW)	18.84	30.13
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	11.92	13.05
% deviation from expected linearity		-9.84%

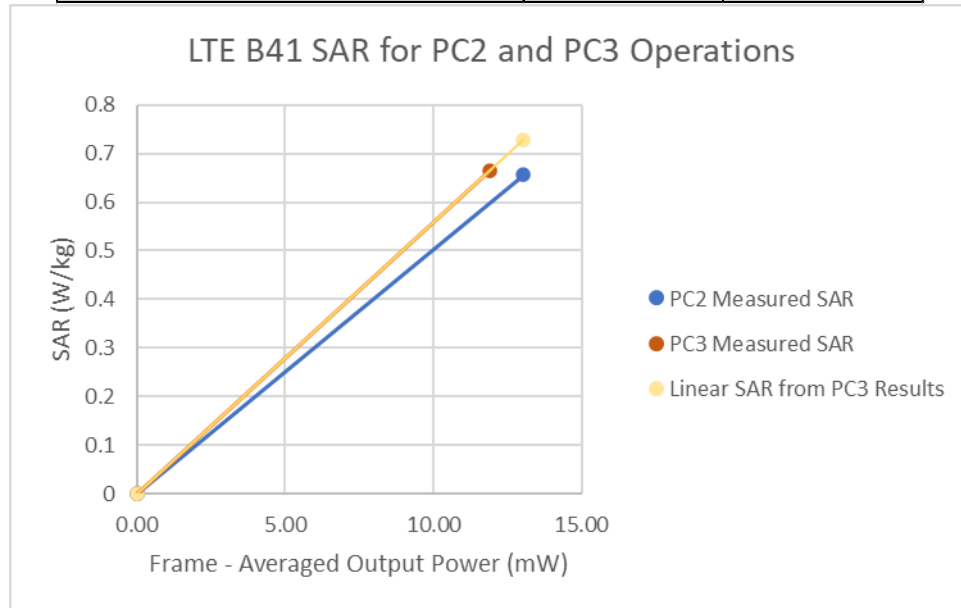


Figure 13-3
LTE Band 41 Body Linearity – Ant 2b

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-4
LTE Band 41 ULCA Body Linearity Data – Ant 2b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	13.6	15.25
Measured Output Power (dBm)	12.59	14.71
Measured SAR (W/kg)	0.649	0.662
Measured Power (mW)	18.16	29.58
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	11.49	12.81
% deviation from expected linearity		-8.48%

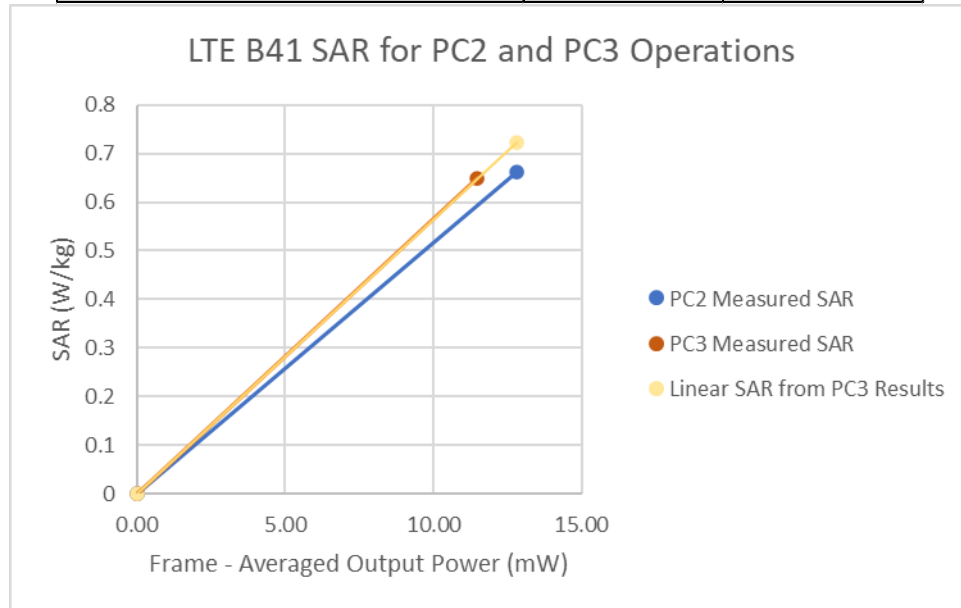


Figure 13-4
LTE Band 41 ULCA Body Linearity – Ant 2b

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-5
LTE Band 41 Body Linearity Data – Ant 3

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	17.1	18.75
Measured Output Power (dBm)	16.94	18.69
Measured SAR (W/kg)	0.937	0.916
Measured Power (mW)	49.43	73.96
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	31.29	32.02
% deviation from expected linearity		-4.48%

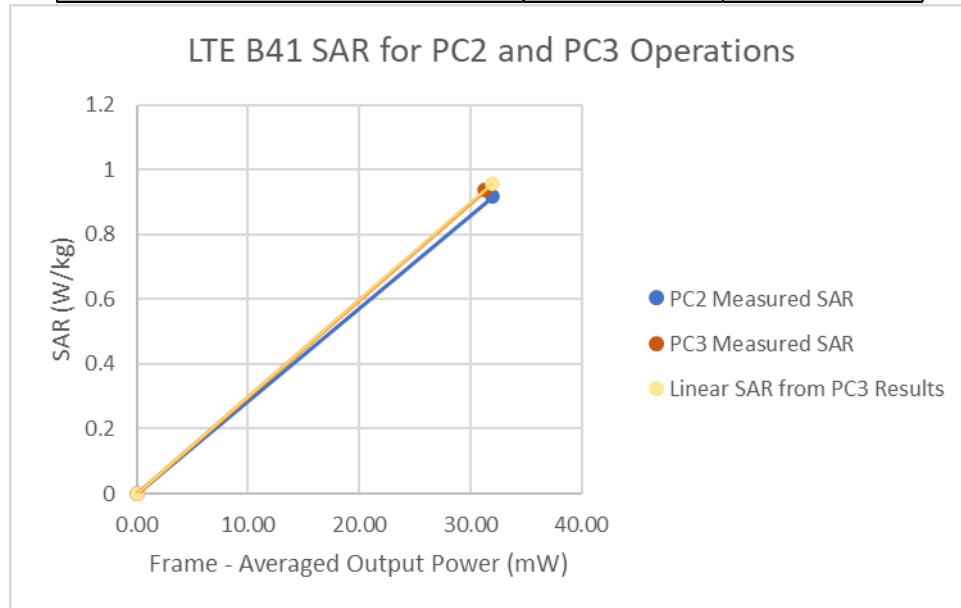


Figure 13-5
LTE Band 41 Body Linearity – Ant 3

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-6
LTE Band 41 ULCA Body Linearity Data – Ant 3

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	17.1	18.75
Measured Output Power (dBm)	16.4	18.75
Measured SAR (W/kg)	0.826	0.974
Measured Power (mW)	43.65	74.99
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	27.63	32.47
% deviation from expected linearity		0.34%

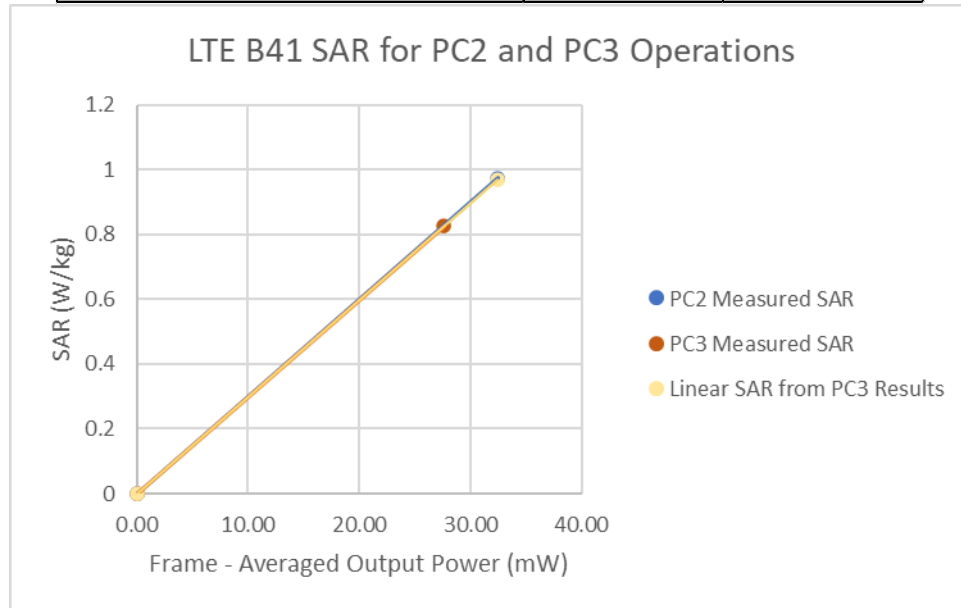


Figure 13-6
LTE Band 41 ULCA Body Linearity – Ant 3

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-7
LTE Band 41 Body Linearity Data – Ant 4b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.8	16.45
Measured Output Power (dBm)	14.67	16.16
Measured SAR (W/kg)	0.969	0.862
Measured Power (mW)	29.31	41.30
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	18.55	17.88
% deviation from expected linearity		-7.72%

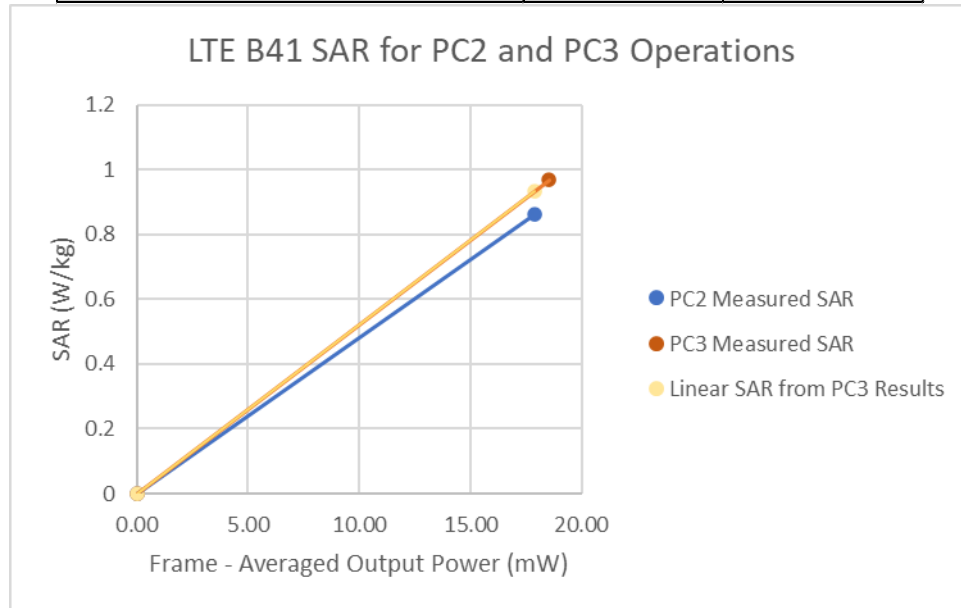


Figure 13-7
LTE Band 41 Body Linearity – Ant 4b

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-8
LTE Band 41 ULCA Body Linearity Data – Ant 4b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.8	16.45
Measured Output Power (dBm)	13.98	16.39
Measured SAR (W/kg)	0.824	0.908
Measured Power (mW)	25.00	43.55
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	15.83	18.86
% deviation from expected linearity		-7.51%

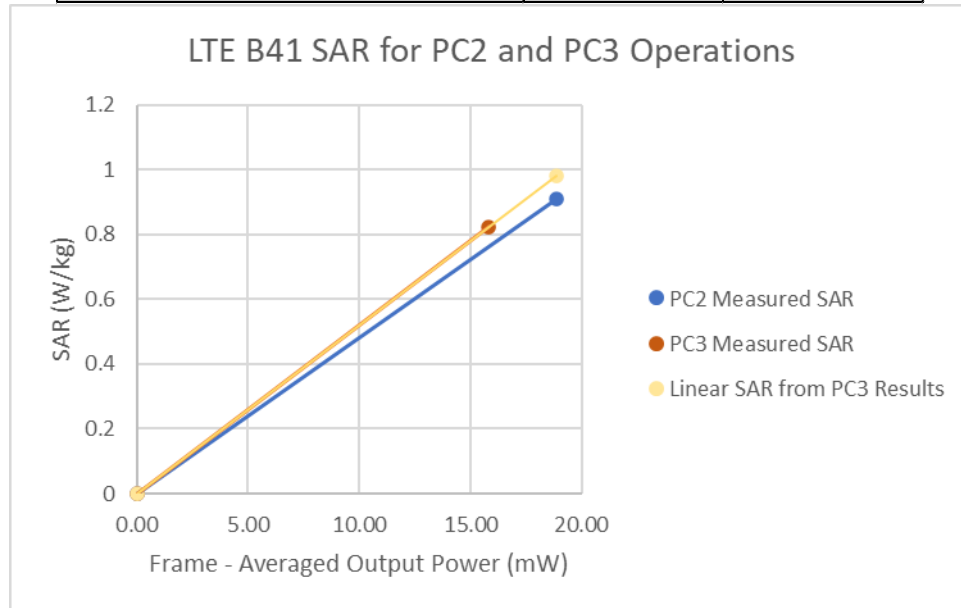


Figure 13-8
LTE Band 41 ULCA Body Linearity – Ant 4b

FCC ID: BCGA2301	 Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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13.2 NR Band n41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for NR Band n41. The highest available duty cycle for Power Class 2 operations is 50%. Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures. Therefore, based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. No additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

Table 13-9
NR Band n41 Body Linearity Data – Ant 1

	NR Band n41 PC3	NR Band n41 PC2
Maximum Allowed Output Power (dBm)	14	17
Measured Output Power (dBm)	12.8	16.73
Measured SAR (W/kg)	0.758	0.892
Measured Power (mW)	19.05	47.10
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	19.05	23.55
% deviation from expected linearity		-4.78%

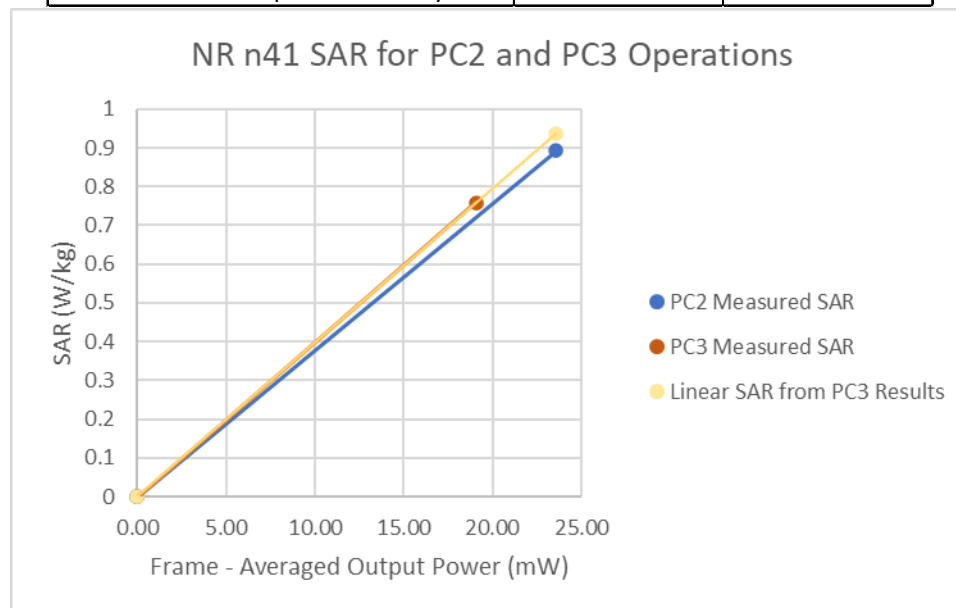


Figure 13-9
NR Band n41 Body Linearity – Ant 1

FCC ID: BCGA2301	 PCTEST Proud to be part of 	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-10
NR Band n41 Body Linearity Data – Ant 2b

	NR Band n41 PC3	NR Band n41 PC2
Maximum Allowed Output Power (dBm)	11.6	14.6
Measured Output Power (dBm)	10.53	14.07
Measured SAR (W/kg)	0.626	0.638
Measured Power (mW)	11.30	25.53
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	11.30	12.76
% deviation from expected linearity		-9.79%

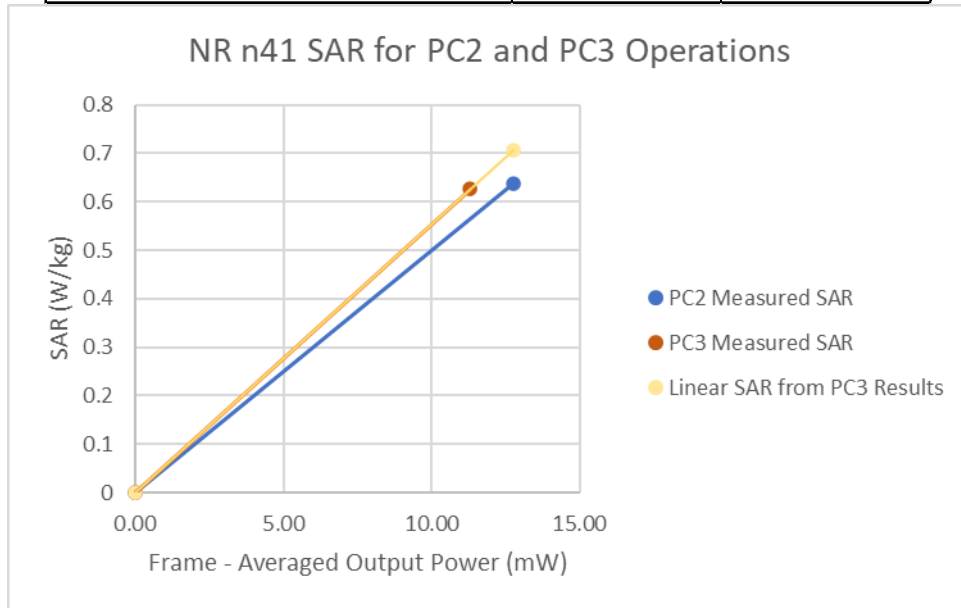


Figure 13-10
NR Band n41 Body Linearity – Ant 2b

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-11
NR Band n41 Body Linearity Data – Ant 3

	NR Band n41 PC3	NR Band n41 PC2
Maximum Allowed Output Power (dBm)	15.1	18.1
Measured Output Power (dBm)	14.14	16.9
Measured SAR (W/kg)	0.788	0.744
Measured Power (mW)	25.94	48.98
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	25.94	24.49
% deviation from expected linearity		0.02%

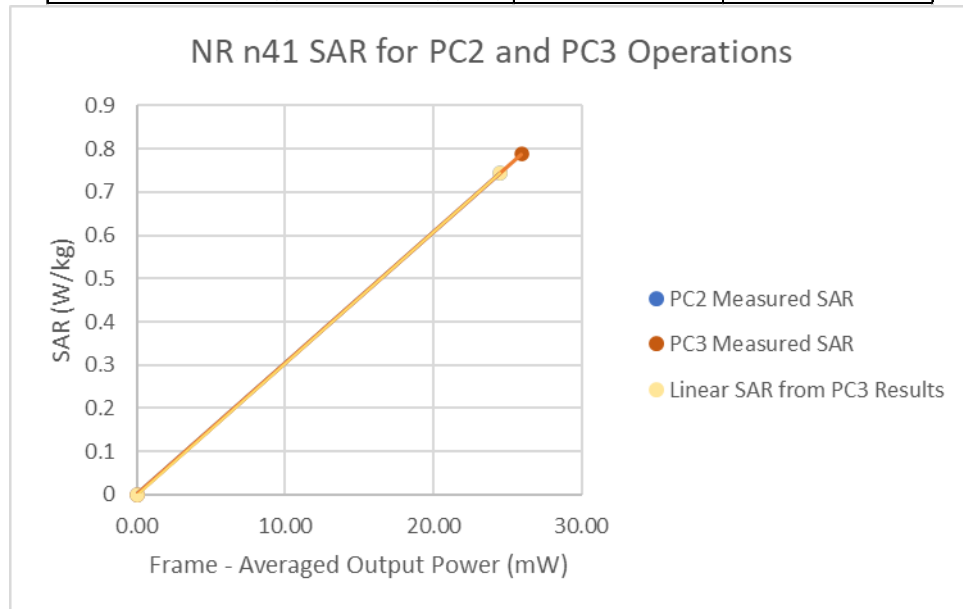


Figure 13-11
NR Band n41 Body Linearity – Ant 3

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-12
NR Band n41 Body Linearity Data – Ant 4b

	NR Band n41 PC3	NR Band n41 PC2
Maximum Allowed Output Power (dBm)	12.8	15.8
Measured Output Power (dBm)	11.99	15
Measured SAR (W/kg)	0.827	0.825
Measured Power (mW)	15.81	31.62
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	15.81	15.81
% deviation from expected linearity		-0.23%

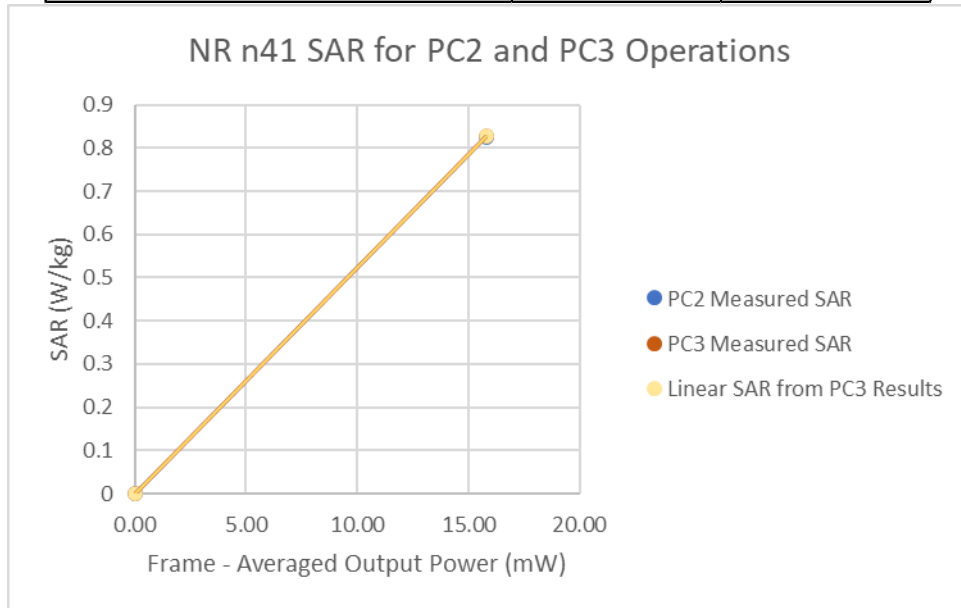


Figure 13-12
NR Band n41 Body Linearity – Ant 4b

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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13.3 NR Band n77 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for NR Band n77. The highest available duty cycle for Power Class 2 operations is 50%. Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures. Therefore, based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. No additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

Table 13-13
NR Band n77 Body Linearity Data – Ant 1

	NR Band n77 PC3	NR Band n77 PC2
Maximum Allowed Output Power (dBm)	10.1	13.1
Measured Output Power (dBm)	9.09	12.04
Measured SAR (W/kg)	0.485	0.498
Measured Power (mW)	8.11	16.00
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	8.11	8.00
% deviation from expected linearity		4.12%

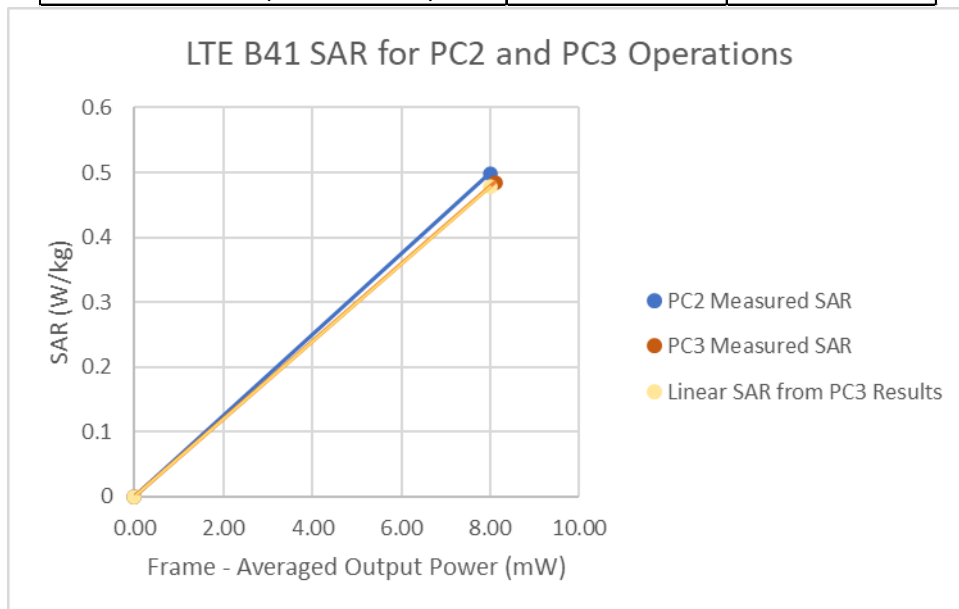


Figure 13-13
NR Band n77 Body Linearity – Ant 1

FCC ID: BCGA2301	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	Approved by: Quality Manager
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Table 13-14
NR Band n77 Body Linearity Data – Ant 2a

	NR Band n77 PC3	NR Band n77 PC2
Maximum Allowed Output Power (dBm)	9.8	12.8
Measured Output Power (dBm)	9.53	12.2
Measured SAR (W/kg)	0.659	0.582
Measured Power (mW)	8.97	16.60
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	8.97	8.30
% deviation from expected linearity		-4.49%

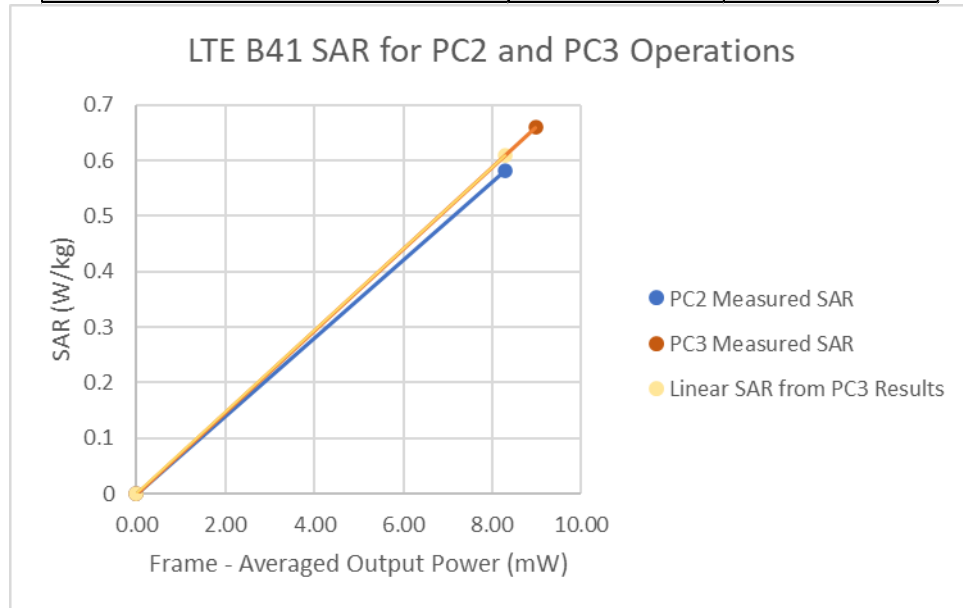


Figure 13-14
NR Band n77 Body Linearity – Ant 2a

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Table 13-15
NR Band n77 Body Linearity Data – Ant 3

	NR Band n77 PC3	NR Band n77 PC2
Maximum Allowed Output Power (dBm)	11	14
Measured Output Power (dBm)	9.94	12.96
Measured SAR (W/kg)	0.729	0.731
Measured Power (mW)	9.86	19.77
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	9.86	9.88
% deviation from expected linearity		0.05%

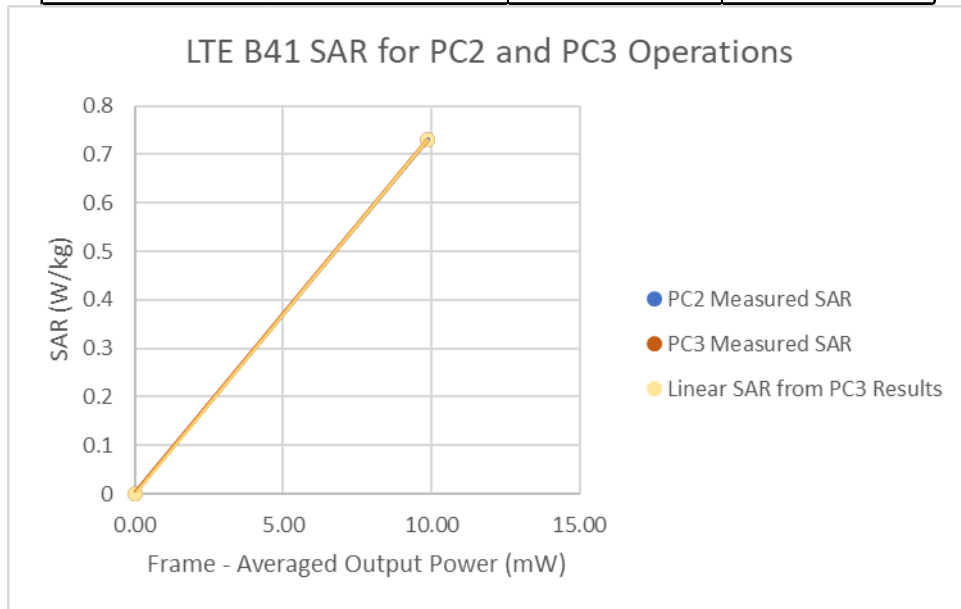


Figure 13-15
NR Band n77 Body Linearity – Ant 3

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Table 13-16
NR Band n77 Body Linearity Data – Ant 4a

	NR Band n77 PC3	NR Band n77 PC2
Maximum Allowed Output Power (dBm)	9.5	12.5
Measured Output Power (dBm)	8.63	11.87
Measured SAR (W/kg)	0.701	0.709
Measured Power (mW)	7.29	15.38
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	7.29	7.69
% deviation from expected linearity		-4.07%

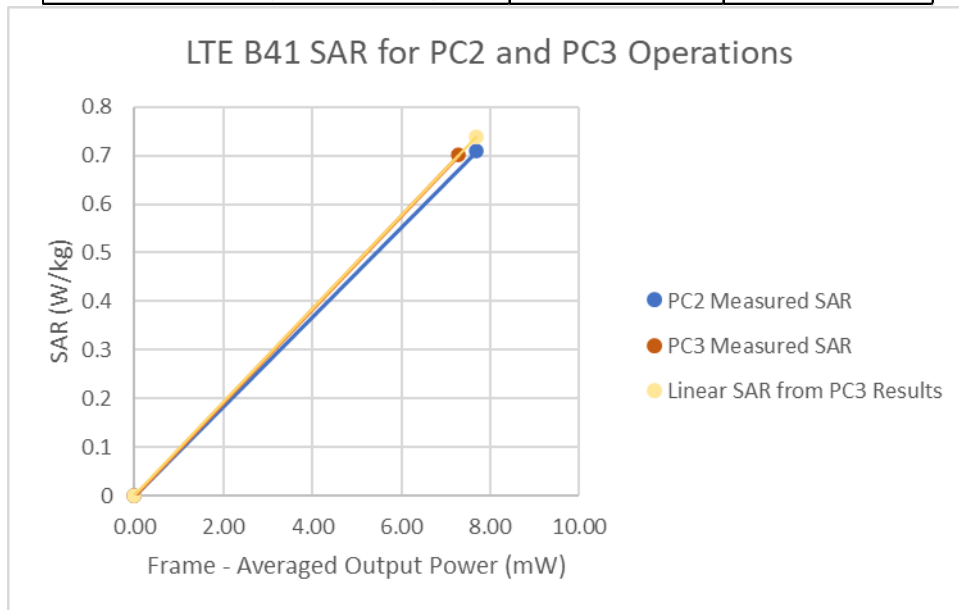


Figure 13-16
NR Band n77 Body Linearity – Ant 4a

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14 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	S-Parameter Network Analyzer	9/16/2020	Annual	9/16/2021	MY40000670
Agilent	E4438C	ESG Vector Signal Generator	12/2/2020	Annual	12/2/2021	MY42081752
Agilent	E5515C	Wireless Communications Test Set	12/15/2020	Annual	12/15/2021	GB42361078
Agilent	N5182A	MXG Vector Signal Generator	9/25/2020	Annual	9/25/2021	US46240505
Agilent	N5182A	MXG Vector Signal Generator	12/1/2020	Annual	12/1/2021	MY47420837
Agilent	N9020A	MXA Signal Analyzer	12/21/2020	Annual	12/21/2021	MY50200571
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1244515
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1248508
Anritsu	MA24106A	USB Power Sensor	6/8/2020	Annual	6/8/2021	2018534
Anritsu	MA24106A	USB Power Sensor	6/3/2020	Annual	6/3/2021	2018527
Anritsu	MA2411B	Pulse Power Sensor	12/18/2020	Annual	12/18/2021	1126066
Anritsu	ML2495A	Power Meter	11/3/2020	Annual	11/3/2021	1039008
Anritsu	MT8820C	Radio Communication Analyzer	9/30/2020	Annual	9/30/2021	6201240328
Anritsu	MT8821C	Radio Communication Analyzer	5/21/2020	Annual	5/21/2021	6201144419
Control Company	4040	Therm/Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291470
Control Company	4040	Therm/Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291455
Control Company	4040	Therm/Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291460
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670646
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670653
Insight	1106-150	Digital Caliper	1/17/2020	Biennial	1/17/2022	409193536
KEYSIGHT	E4438C	VECTOR SIGNAL GENERATOR	6/22/2020	Annual	6/22/2021	MY45092078
MCL	BW-N10W5+	10dB Attenuator	CBT	N/A	CBT	1611
MCL	BW-N3W5+	3dB Attenuator	CBT	N/A	CBT	1812
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1311
Mini-Circuits	NLP-1000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	ZHDC-16-63-S+	50-6000MHz Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	5/13/2020	Annual	5/13/2021	167284
Rohde & Schwarz	CMW500	Radio Communication Tester	4/28/2020	Annual	4/28/2021	167285
Rohde & Schwarz	CMW500	Radio Communication Tester	10/16/2020	Annual	10/16/2021	101699
Rohde & Schwarz	CMW500	Radio Communication Tester	10/16/2020	Annual	10/16/2021	106578
Rohde & Schwarz	CMW500	Radio Communication Tester	10/27/2020	Annual	10/27/2021	108843
Rohde & Schwarz	FSP-7	Spectrum Analyzer	1/9/2020	Biennial	1/9/2022	100990
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	9/17/2020	Annual	9/17/2021	145663
Rosenberger	32W1006-016	Torque Wrench	12/1/2020	Annual	12/1/2021	N/A
SPEAG	DAKS-3.5	Portable DAK	9/9/2020	Annual	9/9/2021	1045
SPEAG	D750V3	750 MHz SAR Dipole	5/18/2018	Triennial	5/18/2021	1034
SPEAG	D750V3	750 MHz SAR Dipole	6/20/2019	Biennial	6/20/2021	1057
SPEAG	D835V2	835 MHz SAR Dipole	6/20/2019	Biennial	6/20/2021	44040
SPEAG	D850V2	850 MHz SAR Dipole	9/8/2020	Annual	9/8/2021	1010
SPEAG	D1750V2	1750 MHz SAR Dipole	5/15/2018	Triennial	5/15/2021	1092
SPEAG	D1900V2	1900 MHz SAR Dipole	8/10/2020	Annual	8/10/2021	5d180
SPEAG	D1900V2	1900 MHz SAR Dipole	5/14/2018	Triennial	5/14/2021	5d026
SPEAG	D2300V2	2300 MHz SAR Dipole	11/10/2020	Annual	11/10/2021	1064
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2018	Triennial	11/12/2021	921
SPEAG	D2450V2	2450 MHz SAR Dipole	5/16/2018	Triennial	5/16/2021	945
SPEAG	D2600V2	2600 MHz SAR Dipole	6/19/2018	Triennial	6/19/2021	1009
SPEAG	D3500V2	3500 MHz SAR Dipole	8/16/2019	Biennial	8/16/2021	1055
SPEAG	D3700V2	3700 MHz SAR Dipole	10/17/2019	Biennial	10/17/2021	1002
SPEAG	D3900V2	3900 MHz SAR Dipole	11/13/2020	Annual	11/13/2021	1062
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/13/2018	Triennial	9/13/2021	1163
SPEAG	D5GHzV2	5 GHz SAR Dipole	3/13/2018	Triennial	3/13/2021	1123
SPEAG	EX3DV4	SAR Probe	2/19/2020	Annual	2/19/2021	7427
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7558
SPEAG	EX3DV4	SAR Probe	7/16/2020	Annual	7/16/2021	7546
SPEAG	EX3DV4	SAR Probe	3/20/2020	Annual	3/20/2021	7421
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7420
SPEAG	EX3DV4	SAR Probe	8/19/2020	Annual	8/19/2021	3949
SPEAG	EX3DV4	SAR Probe	6/22/2020	Annual	6/22/2021	7416
SPEAG	EX3DV4	SAR Probe	1/18/2021	Annual	1/18/2022	3837
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/13/2020	Annual	2/13/2021	1403
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/14/2020	Annual	4/14/2021	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/19/2020	Annual	3/19/2021	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1213
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/13/2020	Annual	9/13/2021	1408
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/11/2020	Annual	6/11/2021	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2021	Annual	1/13/2022	793

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements. Each equipment item was used solely within its respective calibration period.

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15 MEASUREMENT UNCERTAINTIES

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c _i 1gm	c _i 10 gms	1gm u _i (± %)	10gms u _i (± %)	v _i
Measurement System									
Probe Calibration	E.2.1	6.55	N	1	1	1	6.6	6.6	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.732	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.732	1	1	0.1	0.1	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.732	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.732	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.732	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.732	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.732	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.732	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Uncertainty	E.3.4	0.6	R	1.732	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)							RSS	11.6	11.4
Expanded Uncertainty (95% CONFIDENCE LEVEL)							k=2	23.2	22.8

The above measurement uncertainties are according to IEEE Std. 1528-2013

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16 CONCLUSION

16.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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17 REFERENCES

- [1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.
- [2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.
- [3] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.
- [4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.
- [5] IEEE Standards Coordinating Committee 39 –Standards Coordinating Committee 34 – IEEE Std. 1528-2013, IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.
- [6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for RadioFrequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.
- [7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.
- [8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 1 -124.
- [9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.
- [10] Schmid & Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.
- [11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.
- [12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [13] G. Hartsgrrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectromagnetics, Canada: 1987, pp. 29-36.
- [14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.
- [15] W. Gander, Computermathematick, Birkhaeuser, Basel, 1992.
- [16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recipes in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.
- [17] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

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- [18] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10kHz-300GHz, Jan. 1995.
- [19] Prof. Dr. Niels Kuster, ETH, Eidgenössische Technische Hochschule Zürich, Dosimetric Evaluation of the Cellular Phone.
- [20] IEC 62209-1, Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz), July 2016.
- [21] Innovation, Science, Economic Development Canada RSS-102 Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) Issue 5, March 2015.
- [22] Health Canada Safety Code 6 Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz – 300 GHz, 2015
- [23] FCC SAR Test Procedures for 2G-3G Devices, Mobile Hotspot and UMPC Devices KDB Publications 941225, D01-D07
- [24] SAR Measurement Guidance for IEEE 802.11 Transmitters, KDB Publication 248227 D01
- [25] FCC SAR Considerations for Handsets with Multiple Transmitters and Antennas, KDB Publications 648474 D03-D04
- [26] FCC SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers, FCC KDB Publication 616217 D04
- [27] FCC SAR Measurement and Reporting Requirements for 100MHz – 6 GHz, KDB Publications 865664 D01-D02
- [28] FCC General RF Exposure Guidance and SAR Procedures for Dongles, KDB Publication 447498, D01-D02
- [29] Anexo à Resolução No. 533, de 10 de Setembro de 2009.
- [30] IEC 62209-2, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), Mar. 2010.

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