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RF Exposure Part 1 Test Report

Applicant Name:
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052 USA

Date of Testing:
04/23/2025 – 06/24/2025
Test Site/Location:
Element, Columbia, MD, USA
Document Serial No.:
1M2504010035-03.C3K (Rev1)

FCC ID (Licensed):	**C3K2119**
FCC ID (Unlicensed):	**C3K00002102A**
APPLICANT:	**MICROSOFT CORPORATION**
DUT Type:	Modular Approval - Host Integration (Portable Computing Device)
Application Type:	Class II Permissive Change
FCC Rule Part(s):	CFR §2.1093
Model(s):	2114, HWB-Q94
Host Device Model Name:	2119
Permissive Change(s):	Please see change document

Equipment Class	Band & Mode	Tx Frequency	SAR 1g Body (W/kg)
PCB	UMTS 850	826.40 - 846.60 MHz	0.76
PCB	UMTS 1750	1712.4 - 1752.6 MHz	1.19
PCB	UMTS 1900	1852.4 - 1907.6 MHz	1.19
PCB	LTE Band 71	665.5 - 695.5 MHz	0.88
PCB	LTE Band 12	699.7 - 715.3 MHz	0.81
PCB	LTE Band 13	779.5 - 784.5 MHz	0.79
PCB	LTE Band 14	790.5 - 795.5 MHz	0.76
PCB	LTE Band 26	814.7 - 848.3 MHz	0.96
PCB	LTE Band 5	824.7 - 848.3 MHz	1.01
PCB	LTE Band 66	1710.7 - 1779.3 MHz	1.02
PCB	LTE Band 4	1710.7 - 1754.3 MHz	N/A
PCB	LTE Band 25	1850.7 - 1914.3 MHz	1.10
PCB	LTE Band 2	1850.7 - 1909.3 MHz	1.18
PCB	LTE Band 30	2307.5 - 2312.5 MHz	0.90
PCB	LTE Band 41	2498.5 - 2687.5 MHz	1.19
CBE	LTE Band 48	3552.5 - 3697.5 MHz	1.16
PCB	NR Band n71	665.5 - 695.5 MHz	0.66
PCB	NR Band n12	701.5 - 713.5 MHz	0.99
PCB	NR Band n14	790.5 - 795.5 MHz	0.83
PCB	NR Band n26	816.5 - 846.5 MHz	0.99
PCB	NR Band n5	826.5 - 846.5 MHz	0.97
PCB	NR Band n66	1712.5 - 1777.5 MHz	1.15
PCB	NR Band n25	1852.5 - 1912.5 MHz	0.76
PCB	NR Band n2	1852.5 - 1907.5 MHz	N/A
PCB	NR Band n30	2307.5 - 2312.5 MHz	1.07
PCB	NR Band n41	2501.01 - 2685 MHz	1.16
CBE	NR Band n48	3555 - 3694.98 MHz	**1.18**
PCB	NR Band n77	3455.01 - 3544.98 MHz; 3705 - 3975 MHz	**1.20**
DTS	2.4 GHz WIFI	2412 - 2472 MHz	**1.06**
NII	5 GHz WIFI	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz	**1.17**
6CD	6 GHz WIFI	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	**0.96**
DSS	2.4 GHz Bluetooth	2402 - 2480 MHz	**0.24**

Simultaneous SAR per KDB 690783 D01v01r03: **1.37**

Equipment Class	Band & Mode	Tx Frequency	APD (W/m^2) Body	Reported PD (W/m^2)
6CD	6 GHz WIFI	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	4.62	7.53

Note: This revised Test Report supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.9 of this report for North American frequency bands only.
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

RJ Ortanez
Executive Vice President

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

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1 TEST LABORATORY INFORMATION

1.1 Introduction

This test report for device subject to testing at an accredited testing laboratory has been generated by the testing laboratory that tested the device. Detailed location and accredited information regarding the testing laboratories are provided below.

1.2 Test Laboratories Information

1.2.1 Testing Laboratory

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY WASHINGTON DC LLC
Test Lab Location	7185 Oakland Mills Road, Columbia, MD 21046, United States Tel. +1.410.290.6652 / Fax +1.410.290.6654
Accreditation Info.	Lab Code. (ISED): 2451B
	CAB Identifier (NIST): US0110
	ISO/IEC 17025 (A2LA): CERT #2041.01
	ilac-MRA A2LA ACCREDITED CERT #2041.01
Measurement System No.	E,C,F,G,J,H,L,P,S,R

2 DEVICE UNDER TEST

2.1 Equipment Description

The equipment under test (EUT), Model 2119, is a portable computing device that incorporates two previously certified transmitter modules. The first is a WLAN/Bluetooth module authorized under FCC ID: C3K00002102A, and the second is a cellular module authorized under FCC ID: C3K2119. No hardware or software modifications have been made to either module for the purposes of this host integration. This report evaluates the host device for compliance with the applicable FCC rules, including assessment of co-location and simultaneous transmission conditions involving the integrated modules.

2.2 Device Overview

Band & Mode	Operating Modes	Tx Frequency
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 13	Data	779.5 - 784.5 MHz
LTE Band 14	Data	790.5 - 795.5 MHz
LTE Band 26	Data	814.7 - 848.3 MHz
LTE Band 5	Data	824.7 - 848.3 MHz
LTE Band 66	Data	1710.7 - 1779.3 MHz
LTE Band 4	Data	1710.7 - 1754.3 MHz
LTE Band 25	Data	1850.7 - 1914.3 MHz
LTE Band 2	Data	1850.7 - 1909.3 MHz
LTE Band 30	Data	2307.5 - 2312.5 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 n14	Data	790.5 - 795.5 MHz
NR Band n26	Data	816.5 - 846.5 MHz
NR Band n5	Data	826.5 - 846.5 MHz
NR Band n66	Data	1712.5 - 1777.5 MHz
NR Band n25	Data	1852.5 - 1912.5 MHz
NR Band n2	Data	1852.5 - 1907.5 MHz
NR Band n30	Data	2307.5 - 2312.5 MHz
NR Band n41	Data	2501.01 - 2685 MHz
NR Band n48	Data	3555 - 3694.98 MHz
NR Band n77	Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
2.4 GHz WIFI	Data	2412 - 2472 MHz
5 GHz WIFI	Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz

2.3 Time-Averaging Algorithm for RF Exposure Compliance

This Device is enabled with the Qualcomm® Smart Transmit feature for 2G/3G/4G/5G modes and with the Qualcomm® FastConnect TAS feature for WLAN technologies. 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 and Qualcomm® FastConnect TAS features (report SN could be found in Section 1.10 – Bibliography).

Note that Bluetooth operation is 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, below the predefined time-averaged power limit (i.e., Plimit for WWAN), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN can be found in Section 1.10 - Bibliography).

The FastConnect TAS algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit (i.e., Plimit for WLAN), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN can be found in Section 1.10 - Bibliography).

Smart Transmit and FastConnect TAS allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS for WWAN and Plimit BDF for WLAN settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI). Note that the device uncertainty for WWAN and WLAN is 1.0dB for this EUT.

Exposure Scenario		Maximum Tune-Up Output Power*	Body No Motion	Body Motion
Averaging Volume			1g	1g
Spacing			25mm	0mm
DSI			3	6
Technology/Band	Antenna	P_{max}	P_{limit}	P_{limit}
UMTS 850	5	24.0	32.0	21.2
UMTS 1750	1	24.0	26.7	17.2
UMTS 1900	1	24.0	29.9	16.4
LTE Band 71	2	24.0	33.6	21.0
LTE Band 71	5	24.0	32.8	20.7
LTE Band 12	2	24.0	32.6	20.5
LTE Band 12	5	24.0	32.7	20.2
LTE Band 13	2	24.0	32.4	20.4
LTE Band 13	5	24.0	32.2	20.9
LTE Band 14	2	24.0	33.1	20.4
LTE Band 14	5	24.0	34.1	20.9
LTE Band 26	2	24.0	34.4	21.1
LTE Band 26	5	24.0	31.9	21.2
LTE Band 5	2	24.0	33.7	21.1
LTE Band 5	5	24.0	31.7	21.2
LTE Band 66/4	1	24.5	27.9	17.2
LTE Band 25	1	24.5	29.9	16.4
LTE Band 2	1	24.5	27.7	16.4
LTE Band 30	1	21.3	26.5	15.0
LTE Band 41 PC2	1	22.4	26.0	16.5
LTE Band 41 PC3	1	22.5	26.0	16.5
LTE Band 41 PC2	6	22.4	22.9	16.4
LTE Band 41 PC3	6	22.5	22.9	16.4
LTE Band 48	1	18.0	28.1	15.8
LTE Band 48	6	18.0	26.6	14.5
NR Band n71	2	24.0	34.0	20.0
NR Band n71	5	24.0	33.5	19.9
NR Band n12	2	24.0	31.0	19.5
NR Band n12	5	24.0	33.4	19.2
NR Band n14	2	24.0	32.8	20.4
NR Band n14	5	24.0	35.7	20.9
NR Band n26	2	24.0	30.4	21.1
NR Band n26	5	24.0	31.6	21.2
NR Band n5	2	24.0	31.0	21.1
NR Band n5	5	24.0	31.8	21.2
NR Band n66	1	24.5	26.5	17.2
NR Band n25/n2	1	24.5	28.9	15.4
NR Band n30	1	21.3	25.5	15.0
NR Band n41 PC2	1	26.0	27.8	16.5
NR Band n41 PC3	1	24.5	27.8	16.5
NR Band n41 PC2	6	26.0	28.4	16.5
NR Band n41 PC3	6	24.5	28.4	16.5
NR Band n48 PC3	1	20.0	26.6	15.8
NR Band n48 PC3	3	20.0	28.5	13.5
NR Band n48 PC3	4	20.0	28.4	13.0
NR Band n48 PC3	6	20.0	24.4	14.5
NR Band n77 PC2	1	26.0	27.7	15.8
NR Band n77 PC3	1	24.0	27.7	15.8
NR Band n77 PC2	3	26.0	28.0	13.5
NR Band n77 PC3	3	24.0	28.0	13.5
NR Band n77 PC2	4	26.0	27.9	13.0
NR Band n77 PC3	4	24.0	27.9	13.0
NR Band n77 PC2	6	26.0	27.9	14.5
NR Band n77 PC3	6	24.0	27.9	14.5
NR Band n41 PC1.5 UL-MIMO	1	26.0	27.8	16.5
NR Band n41 PC1.5 UL-MIMO	6	26.0	28.4	16.5
NR Band n48 PC3 UL-MIMO	1	17.0	26.6	15.8
NR Band n48 PC3 UL-MIMO	6	17.0	24.4	14.5
NR Band n77 PC1.5 UL-MIMO	1	26.0	27.7	15.8
NR Band n77 PC1.5 UL-MIMO	6	26.0	27.9	14.5

*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 (e.g. LTE TDD).

*Maximum tune up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.

The maximum time-averaged output power (dBm) for any Sub6 WWAN/WLAN technology, band, and DSI = minimum of "P_{limit} EFS" and "Maximum tune up output power P_{max}" + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.

Exposure Scenario			Maximum Tune-Up Output Power*	Body Motion
Averaging Volume				1g
Spacing				0mm
DSI				1
Technology/Band	Antenna	Antenna Group	P_{max}	P_{limit}
2.4 GHz WIFI	Chain 0	AG0	20.0	19.25
2.4 GHz WIFI	Chain 1	AG1	20.0	20.00
5 GHz WIFI - UNII-1	Chain 0	AG0	16.0	14.75
5 GHz WIFI - UNII-1	Chain 1	AG1	16.0	15.50
5 GHz WIFI - UNII-2C	Chain 0	AG0	16.0	13.25
5 GHz WIFI - UNII-2C	Chain 1	AG1	16.0	13.00
5 GHz WIFI - UNII-3	Chain 0	AG0	20.5	13.25
5 GHz WIFI - UNII-3	Chain 1	AG1	20.5	12.00
5 GHz WIFI - UNII-4	Chain 0	AG0	17.0	13.25
5 GHz WIFI - UNII-4	Chain 1	AG1	17.0	12.00
6 GHz WIFI	Chain 0	AG0	17.0	8.50
6 GHz WIFI	Chain 1	AG1	17.0	8.50

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.

2.4 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 D04v01.

Note: Targets for 802.11ax/be RU operations can be found in 802.11ax/be RU SAR Exclusion Appendix.

2.4.1 Licensed Output Power

UMTS Band 5 (850 MHz)					
Antenna 5					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 3 (No Motion)	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 6 (Motion)	Max Allowed Power	22.2	22.2	22.2	22.2
	Nominal	21.2	21.2	21.2	21.2
UMTS Band 4 (1750 MHz)					
Antenna 1					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 3 (No Motion)	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 6 (Motion)	Max Allowed Power	18.2	18.2	18.2	18.2
	Nominal	17.2	17.2	17.2	17.2
UMTS Band 2 (1900 MHz)					
Antenna 1					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 3 (No Motion)	Max Allowed Power	25.0	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0	24.0
DSI = 6 (Motion)	Max Allowed Power	17.4	17.4	17.4	17.4
	Nominal	16.4	16.4	16.4	16.4

Mode / Band	Antenna		Modulated Average Output Power (in dBm)		
			Pmax	DSI = 3 (No Motion)	DSI = 6 (Motion)
LTE Band 71	2	Max Allowed Power	25.0	25.0	22.0
		Nominal	24.0	24.0	21.0
LTE Band 71	5	Max Allowed Power	25.0	25.0	21.7
		Nominal	24.0	24.0	20.7
LTE Band 12	2	Max Allowed Power	25.0	25.0	21.5
		Nominal	24.0	24.0	20.5
LTE Band 12	5	Max Allowed Power	25.0	25.0	21.2
		Nominal	24.0	24.0	20.2
LTE Band 13	2	Max Allowed Power	25.0	25.0	21.4
		Nominal	24.0	24.0	20.4
LTE Band 13	5	Max Allowed Power	25.0	25.0	21.9
		Nominal	24.0	24.0	20.9
LTE Band 14	2	Max Allowed Power	25.0	25.0	21.4
		Nominal	24.0	24.0	20.4
LTE Band 14	5	Max Allowed Power	25.0	25.0	21.9
		Nominal	24.0	24.0	20.9
LTE Band 26	2	Max Allowed Power	25.0	25.0	22.1
		Nominal	24.0	24.0	21.1
LTE Band 26	5	Max Allowed Power	25.0	25.0	22.2
		Nominal	24.0	24.0	21.2
LTE Band 5	2	Max Allowed Power	25.0	25.0	22.1
		Nominal	24.0	24.0	21.1
LTE Band 5	5	Max Allowed Power	25.0	25.0	22.2
		Nominal	24.0	24.0	21.2
LTE Band 66/4	1	Max Allowed Power	25.5	25.5	18.2
		Nominal	24.5	24.5	17.2
LTE Band 25	1	Max Allowed Power	25.5	25.5	17.4
		Nominal	24.5	24.5	16.4
LTE Band 2	1	Max Allowed Power	25.5	25.5	17.4
		Nominal	24.5	24.5	16.4
LTE Band 30	1	Max Allowed Power	22.3	22.3	16.0
		Nominal	21.3	21.3	15.0
LTE Band 41 PC2	1	Max Allowed Power	27.0	27.0	21.1
		Nominal	26.0	26.0	20.1
LTE Band 41 PC3	1	Max Allowed Power	25.5	25.5	19.5
		Nominal	24.5	24.5	18.5
LTE Band 41 PC2	6	Max Allowed Power	27.0	27.0	21.0
		Nominal	26.0	26.0	20.0
LTE Band 41 PC3	6	Max Allowed Power	25.5	25.5	19.4
		Nominal	24.5	24.5	18.4
LTE Band 48	1	Max Allowed Power	21.0	21.0	18.8
		Nominal	20.0	20.0	17.8
LTE Band 48	6	Max Allowed Power	21.0	21.0	17.5
		Nominal	20.0	20.0	16.5

Mode / Band	Antenna		Modulated Average Output Power (in dBm)		
			Pmax	DSI = 3 (No Motion)	DSI = 6 (Motion)
NR Band n71	2	Max Allowed Power	25.0	25.0	21.0
		Nominal	24.0	24.0	20.0
NR Band n71	5	Max Allowed Power	25.0	25.0	20.9
		Nominal	24.0	24.0	19.9
NR Band n12	2	Max Allowed Power	25.0	25.0	20.5
		Nominal	24.0	24.0	19.5
NR Band n12	5	Max Allowed Power	25.0	25.0	20.2
		Nominal	24.0	24.0	19.2
NR Band n14	2	Max Allowed Power	25.0	25.0	21.4
		Nominal	24.0	24.0	20.4
NR Band n14	5	Max Allowed Power	25.0	25.0	21.9
		Nominal	24.0	24.0	20.9
NR Band n26	2	Max Allowed Power	25.0	25.0	22.1
		Nominal	24.0	24.0	21.1
NR Band n26	5	Max Allowed Power	25.0	25.0	22.2
		Nominal	24.0	24.0	21.2
NR Band n5	2	Max Allowed Power	25.0	25.0	22.1
		Nominal	24.0	24.0	21.1
NR Band n5	5	Max Allowed Power	25.0	25.0	22.2
		Nominal	24.0	24.0	21.2
NR Band n66	1	Max Allowed Power	25.5	25.5	18.2
		Nominal	24.5	24.5	17.2
NR Band n25/n2	1	Max Allowed Power	25.5	25.5	16.4
		Nominal	24.5	24.5	15.4
NR Band n30	1	Max Allowed Power	22.3	22.3	16.0
		Nominal	21.3	21.3	15.0
NR Band n41 PC2	1	Max Allowed Power	27.0	27.0	17.5
		Nominal	26.0	26.0	16.5
NR Band n41 PC3	1	Max Allowed Power	25.5	25.5	17.5
		Nominal	24.5	24.5	16.5
NR Band n41 PC2	6	Max Allowed Power	27.0	27.0	17.5
		Nominal	26.0	26.0	16.5
NR Band n41 PC3	6	Max Allowed Power	25.5	25.5	17.5
		Nominal	24.5	24.5	16.5
NR Band n48 PC3	1	Max Allowed Power	21.0	21.0	16.8
		Nominal	20.0	20.0	15.8
NR Band n48 PC3	3	Max Allowed Power	21.0	21.0	14.5
		Nominal	20.0	20.0	13.5
NR Band n48 PC3	4	Max Allowed Power	21.0	21.0	14.0
		Nominal	20.0	20.0	13.0
NR Band n48 PC3	6	Max Allowed Power	21.0	21.0	15.5
		Nominal	20.0	20.0	14.5
NR Band n77 PC2	1	Max Allowed Power	27.0	27.0	16.8
		Nominal	26.0	26.0	15.8
NR Band n77 PC3	1	Max Allowed Power	25.0	25.0	16.8
		Nominal	24.0	24.0	15.8
NR Band n77 PC2	3	Max Allowed Power	27.0	27.0	14.5
		Nominal	26.0	26.0	13.5
NR Band n77 PC3	3	Max Allowed Power	25.0	25.0	14.5
		Nominal	24.0	24.0	13.5
NR Band n77 PC2	4	Max Allowed Power	27.0	27.0	14.0
		Nominal	26.0	26.0	13.0
NR Band n77 PC3	4	Max Allowed Power	25.0	25.0	14.0
		Nominal	24.0	24.0	13.0
NR Band n77 PC2	6	Max Allowed Power	27.0	27.0	15.5
		Nominal	26.0	26.0	14.5
NR Band n77 PC3	6	Max Allowed Power	25.0	25.0	15.5
		Nominal	24.0	24.0	14.5
NR Band n41 PC1.5 UL-MIMO	1	Max Allowed Power	27.0	27.0	17.5
		Nominal	26.0	26.0	16.5
NR Band n41 PC1.5 UL-MIMO	6	Max Allowed Power	27.0	27.0	17.5
		Nominal	26.0	26.0	16.5
NR Band n48 PC3 UL-MIMO	1	Max Allowed Power	18.0	18.0	16.8
		Nominal	17.0	17.0	15.8
NR Band n48 PC3 UL-MIMO	6	Max Allowed Power	18.0	18.0	15.5
		Nominal	17.0	17.0	14.5
NR Band n77 PC1.5 UL-MIMO	1	Max Allowed Power	27.0	27.0	16.8
		Nominal	26.0	26.0	15.8
NR Band n77 PC1.5 UL-MIMO	6	Max Allowed Power	27.0	27.0	15.5
		Nominal	26.0	26.0	14.5

For LTE TDD and NR TDD, the above powers listed are TDD burst average values.

2.4.2 2.4 GHz SISO/MIMO WLAN Output Power

The below table is applicable in the following conditions:

- Pmax (No Motion)

Band	IEEE 802.11 Modulated Output Power (in dBm)																													
	SISO/SISO in MIMO Chain 0														SISO/SISO in MIMO Chain 1															
	b		g		n		ac		ax (SU)		be (SU)				b		g		n		ac		ax (SU)		be (SU)					
Maximum / Nominal Power	Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.	
2.4 GHz WLAN (20 MHz)	21.0		20.0		19.5		18.5		19.5		18.5		19.5		18.5		19.5		18.5		19.5		18.5		19.5		18.5		19.5		18.5	
	ch. 1:	20.0	19.0		ch. 1:	16.0	15.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0	
					ch. 2:	18.0	17.0		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5	
					ch. 3:	19.0	18.0																									
					ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5	
					ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5	
	ch. 12:	16.5	15.5		ch. 12:	13.0	12.0		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5	
	ch. 13:	9.0	8.0		ch. 13:	-7.0	-8.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0	

Band	IEEE 802.11 Modulated Output Power (in dBm)																													
	SISO/SISO in MIMO Chain 0														SISO/SISO in MIMO Chain 1															
	n				ac				ax (SU)				be (SU)				n				ac				ax (SU)				be (SU)			
Maximum / Nominal Power	Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.	
2.4 GHz WLAN (40 MHz)	16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0	
	ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0	
	ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0	
	ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0	
	ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0	
	ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5	

The below table is applicable in the following conditions:

- DSI=1 (Motion)

Band	IEEE 802.11 Modulated Output Power (in dBm)																													
	SISO/SISO in MIMO Chain 0														SISO/SISO in MIMO Chain 1															
	b		g		n		ac		ax (SU)		be (SU)				b		g		n		ac		ax (SU)		be (SU)					
Maximum / Nominal Power	Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.	
2.4 GHz WLAN (20 MHz)	20.25		19.25		19.5		18.5		19.5		18.5		19.5		18.5		21.0		20.00		19.5		18.5		19.5		18.5		19.5		18.5	
	ch. 1:	20.0	19.0		ch. 1:	16.0	15.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0		ch. 1:	16.0	15.0		ch. 1:	15.0	14.0		ch. 1:	15.0	14.0	
					ch. 2:	18.0	17.0		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5						ch. 2:	18.0	17.0		ch. 2:	16.5	15.5		ch. 2:	16.5	15.5	
					ch. 3:	19.0	18.0														ch. 3:	19.0	18.0								
					ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5						ch. 10:	15.5	14.5		ch. 10:	15.5	14.5		ch. 10:	15.5	14.5	
					ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5						ch. 11:	14.5	13.5		ch. 11:	14.5	13.5		ch. 11:	14.5	13.5	
	ch. 12:	16.5	15.5		ch. 12:	13.0	12.0		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5		ch. 12:	16.5	15.5		ch. 12:	13.0	12.0		ch. 12:	12.5	11.5		ch. 12:	12.5	11.5	
	ch. 13:	9.0	8.0		ch. 13:	-7.0	-8.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0		ch. 13:	9.0	8.0		ch. 13:	-7.0	-8.0		ch. 13:	-9.0	-10.0		ch. 13:	-9.0	-10.0	

Band	IEEE 802.11 Modulated Output Power (in dBm)																													
	SISO/SISO in MIMO Chain 0														SISO/SISO in MIMO Chain 1															
	n				ac				ax (SU)				be (SU)				n				ac				ax (SU)				be (SU)			
Maximum / Nominal Power	Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.		Max		Nom.	
2.4 GHz WLAN (40MHz)	16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0		16.0		15.0	
	ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0		ch. 3:	14.0	13.0	
	ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0		ch. 4:	14.0	13.0	
	ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0		ch. 9:	14.0	13.0	
	ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0		ch. 10:	7.0	6.0	
	ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5		ch. 11:	-8.5	-9.5	

2.4.3 5 GHz SISO/MIMO WLAN Output Power

The below table is applicable in the following conditions:

- Pmax (No Motion)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																			
		SISO/SISO in MIMO Chain 0										SISO/SISO in MIMO Chain 1									
		a		n		ac		ax (SU)		be (SU)		a		n		ac		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	UNII-1	17.0 ch. 36: 15.5	16.0 14.5	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.5	16.0 14.5	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0	17.0 ch. 36: 15.0	16.0 14.0
	UNII-2A	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5	17.5 ch. 64: 15.5	16.5 14.5
	UNII-2C	15.5 ch. 140: 15.0 ch. 144: 16.5	14.5 14.0 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 140: 15.0 ch. 144: 16.5	14.5 14.0 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5	15.5 ch. 100: 14.5 ch. 140: 14.5 ch. 144: 16.5	14.5 13.5 13.5 15.5
	UNII-3	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0	21.5 ch. 149: 16.0	20.5 15.0
	UNII-4	15.0 ch. 173: 14.5 ch. 177: 14.5	14.0 13.5 13.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 173: 14.5 ch. 177: 14.5	14.0 13.5 13.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5	15.0 ch. 177: 9.5	14.0 8.5
5 GHz WIFI (40MHz BW)	UNII-1			16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0			16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0
	UNII-2A			16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0			16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0	16.5 ch. 62: 14.0	15.5 13.0
	UNII-2C			16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5			16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5	16.0 ch. 102: 12.0 ch. 110: 15.5 ch. 118: 15.5 ch. 126: 15.5 ch. 134: 15.5	15.0 11.0 14.5 14.5 14.5 14.5
	UNII-3			17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0			17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0	17.0 ch. 151: 16.0	16.0 15.0
	UNII-4			18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5			18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5	18.0 ch. 167: 17.5	17.0 16.5
5 GHz WIFI (80MHz BW)	UNII-1					13.0	12.0	13.0	12.0	13.0	12.0					13.0	12.0	13.0	12.0	13.0	12.0
	UNII-2A					14.0	13.0	14.0	13.0	14.0	13.0					14.0	13.0	14.0	13.0	14.0	13.0
	UNII-2C					17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5	17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5	17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5					17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5	17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5	17.0 ch. 106: 13.5 ch. 122: 15.5	16.0 12.5 14.5
	UNII-3					15.5	14.5	15.5	14.5	15.5	14.5					15.5	14.5	15.5	14.5	15.5	14.5
	UNII-4					18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0
5 GHz WIFI (160MHz BW)	UNII-1/2A					12.0	11.0	12.0	11.0	12.0	11.0					12.0	11.0	12.0	11.0	12.0	11.0
	UNII-2C					8.5	7.5	8.5	7.5	8.5	7.5					8.5	7.5	8.5	7.5	8.5	7.5
	UNII-3/4					12.5	11.5	12.5	11.5	12.5	11.5					12.5	11.5	12.5	11.5	12.5	11.5

The below table is applicable in the following conditions:

- DSI=1 (Motion)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																			
		SISO/SISO in MIMO Chain 0										SISO/SISO in MIMO Chain 1									
		a		n		ac		ax (SU)		be (SU)		a		n		ac		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	UNII-1	15.75 ch. 36: 15.5	14.75 14.5	15.75 ch. 36: 15.0	14.75 14.0	15.75 ch. 36: 15.0	14.75 14.0	15.75 ch. 36: 15.0	14.75 14.0	15.75 ch. 36: 15.0	14.75 14.0	16.5 ch. 36: 15.5	15.5 14.5	16.5 ch. 36: 15.0	15.5 14.0	16.5 ch. 36: 15.0	15.5 14.0	16.5 ch. 36: 15.0	15.5 14.0	16.5 ch. 36: 15.0	15.5 14.0
	UNII-2A	15.5	14.5	15.5	14.5	15.5	14.5	15.5	14.5	15.5	14.5	16.25 ch. 64: 15.5	15.25 14.5	16.25 ch. 64: 15.5	15.25 14.5	16.25 ch. 64: 15.5	15.25 14.5	16.25 ch. 64: 15.5	15.25 14.5	16.25 ch. 64: 15.5	15.25 14.5
	UNII-2C	14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0
	UNII-3	14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
	UNII-4	14.25	13.25	14.25 ch. 177: 9.5	13.25 8.5	14.25 ch. 177: 9.5	13.25 8.5	14.25 ch. 177: 9.5	13.25 8.5	14.25 ch. 177: 9.5	13.25 8.5	13.0	12.0	13.0 ch. 177: 9.5	12.0 8.5	13.0 ch. 177: 9.5	12.0 8.5	13.0 ch. 177: 9.5	12.0 8.5	13.0 ch. 177: 9.5	12.0 8.5
5 GHz WIFI (40MHz BW)	UNII-1			15.75 ch. 38: 13.0	14.75 12.0	15.75 ch. 38: 13.0	14.75 12.0	15.75 ch. 38: 13.0	14.75 12.0	15.75 ch. 38: 13.0	14.75 12.0			16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0	16.0 ch. 38: 13.0	15.0 12.0
	UNII-2A			15.5 ch. 62: 14.0	14.5 13.0	15.5 ch. 62: 14.0	14.5 13.0	15.5 ch. 62: 14.0	14.5 13.0	15.5 ch. 62: 14.0	14.5 13.0			16.25 ch. 62: 14.0	15.25 13.0	16.25 ch. 62: 14.0	15.25 13.0	16.25 ch. 62: 14.0	15.25 13.0	16.25 ch. 62: 14.0	15.25 13.0
	UNII-2C			14.25 ch. 102: 12.0	13.25 11.0	14.25 ch. 102: 12.0	13.25 11.0	14.25 ch. 102: 12.0	13.25 11.0	14.25 ch. 102: 12.0	13.25 11.0			14.0 ch. 102: 12.0	13.0 11.0	14.0 ch. 102: 12.0	13.0 11.0	14.0 ch. 102: 12.0	13.0 11.0	14.0 ch. 102: 12.0	13.0 11.0
	UNII-3			14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25			13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
	UNII-4			14.25	13.25	14.25	13.25	14.25	13.25	14.25	13.25			13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
5 GHz WIFI (80MHz BW)	UNII-1					13.0	12.0	13.0	12.0	13.0	12.0					13.0	12.0	13.0	12.0	13.0	12.0
	UNII-2A					14.0	13.0	14.0	13.0	14.0	13.0					14.0	13.0	14.0	13.0	14.0	13.0
	UNII-2C					14.25 ch. 106: 13.5	13.25 12.5	14.25 ch. 106: 13.5	13.25 12.5	14.25 ch. 106: 13.5	13.25 12.5					14.0 ch. 106: 13.5	13.0 12.5	14.0 ch. 106: 13.5	13.0 12.5	14.0 ch. 106: 13.5	13.0 12.5
	UNII-3					14.25	13.25	14.25	13.25	14.25	13.25					13.0	12.0	13.0	12.0	13.0	12.0
	UNII-4					14.25	13.25	14.25	13.25	14.25	13.25					13.0	12.0	13.0	12.0	13.0	12.0
5 GHz WIFI (160MHz BW)	UNII-1/2A					12.0	11.0	12.0	11.0	12.0	11.0					12.0	11.0	12.0	11.0	12.0	11.0
	UNII-2C					8.5	7.5	8.5	7.5	8.5	7.5					8.5	7.5	8.5	7.5	8.5	7.5
	UNII-3/4					12.5	11.5	12.5	11.5	12.5	11.5					12.5	11.5	12.5	11.5	12.5	11.5

2.4.4 6 GHz SISO/MIMO WLAN Output Power

The below table is applicable in the following conditions:

- Pmax (No Motion)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)											
		SISO/SISO in MIMO						SISO/SISO in MIMO					
		Chain 0						Chain 1					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - SP	UNII-5	15.0 ch. 45: 15.5	14.0 14.5	15.0 ch. 45: 15.5	14.0 14.5	15.0 ch. 45: 15.5	14.0 14.5	15.0 ch. 45: 15.5	14.0 14.5	15.0 ch. 45: 15.5	14.0 14.5	15.0 ch. 45: 15.5	14.0 14.5
	UNII-7	17.0 ch. 181: 14.5	16.0 13.5	17.0 ch. 181: 14.5	16.0 13.5	17.0 ch. 181: 14.5	16.0 13.5	17.0 ch. 181: 14.5	16.0 13.5	17.0 ch. 181: 14.5	16.0 13.5	17.0 ch. 181: 14.5	16.0 13.5
6 GHz WIFI (40MHz BW) - SP	UNII-5			18.0 ch. 3: 17.5	17.0 16.5	18.0 ch. 3: 17.5	17.0 16.5			18.0 ch. 3: 17.5	17.0 16.5	18.0 ch. 3: 17.5	17.0 16.5
	UNII-7			17.5	16.5	17.5	16.5			17.5	16.5	17.5	16.5
6 GHz WIFI (80MHz BW) - SP	UNII-5			18.0 ch. 7: 16.0 ch. 23: 16.5 ch. 39: 16.5 ch. 55: 16.0 ch. 71: 16.0	17.0 15.0 15.5 15.5 15.0 15.0	18.0 ch. 7: 16.0 ch. 23: 16.5 ch. 39: 16.5 ch. 55: 16.0 ch. 71: 16.0	17.0 15.0 15.5 15.5 15.0 15.0			18.0 ch. 7: 16.0 ch. 23: 16.5 ch. 39: 16.5 ch. 55: 16.0 ch. 71: 16.0	17.0 15.0 15.5 15.5 15.0 15.0	18.0 ch. 7: 16.0 ch. 23: 16.5 ch. 39: 16.5 ch. 55: 16.0 ch. 71: 16.0	17.0 15.0 15.5 15.5 15.0 15.0
	UNII-7			18.0 ch. 135: 16.0	17.0 15.0	18.0 ch. 135: 16.0	17.0 15.0			18.0 ch. 135: 16.0	17.0 15.0	18.0 ch. 135: 16.0	17.0 15.0
6 GHz WIFI (160MHz BW) - SP	UNII-5			18.0 ch. 15: 16.0 ch. 47: 14.0	17.0 15.0 13.0	18.0 ch. 15: 16.0 ch. 47: 14.0	17.0 15.0 13.0			18.0 ch. 15: 16.0 ch. 47: 14.0	17.0 15.0 13.0	18.0 ch. 15: 16.0 ch. 47: 14.0	17.0 15.0 13.0
	UNII-7			17.0	16.0	17.0	16.0			17.0	16.0	17.0	16.0
6 GHz WIFI (320MHz BW) - SP	UNII-5					18.0 ch. 63: 17.0	17.0 16.0					18.0 ch. 63: 17.0	17.0 16.0

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)											
		SISO/SISO in MIMO						SISO/SISO in MIMO					
		Chain 0						Chain 1					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0
	UNII-6	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0
	UNII-7	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0
	UNII-8	0.0 ch. 233: -3.5	-1.0 -4.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -3.5	-1.0 -4.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5
6 GHz WIFI (40MHz BW) - LPI	UNII-5			2.5	1.5	2.5	1.5			2.5	1.5	2.5	1.5
	UNII-6			3.5 ch. 115: 1.5	2.5 0.5	3.5 ch. 115: 1.5	2.5 0.5			3.5 ch. 115: 1.5	2.5 0.5	3.5 ch. 115: 1.5	2.5 0.5
	UNII-7			3.5	2.5	3.5	2.5			3.5	2.5	3.5	2.5
	UNII-8			3.5	2.5	3.5	2.5			3.5	2.5	3.5	2.5
6 GHz WIFI (80MHz BW) - LPI	UNII-5			6.0 ch. 87: 5.5	5.0 4.5	6.0 ch. 87: 5.5	5.0 4.5			6.0 ch. 87: 5.5	5.0 4.5	6.0 ch. 87: 5.5	5.0 4.5
	UNII-6			6.0	5.0	6.0	5.0			6.0	5.0	6.0	5.0
	UNII-7			7.0 ch. 119: 6.0	6.0 5.0	7.0 ch. 119: 6.0	6.0 5.0			7.0 ch. 119: 6.0	6.0 5.0	7.0 ch. 119: 6.0	6.0 5.0
	UNII-8			7.0	6.0	7.0	6.0			7.0	6.0	7.0	6.0
6 GHz WIFI (160MHz BW) - LPI	UNII-5			8.0	7.0	8.0	7.0			8.0	7.0	8.0	7.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
	UNII-8			6.5	5.5	6.5	5.5			6.5	5.5	6.5	5.5
6 GHz WIFI (320MHz BW) - LPI	UNII-5					11.0	10.0					11.0	10.0
	UNII-6					9.0	8.0					9.0	8.0
	UNII-7					12.0 ch. 127: 11.5	11.0 10.5					12.0 ch. 127: 11.5	11.0 10.5
	UNII-8					12.0	11.0					12.0	11.0

The below table is applicable in the following conditions:

- DSI=1 (Motion)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)											
		SISO/SISO in MIMO Chain 0						SISO/SISO in MIMO Chain 1					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - SP	UNII-5	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5
	UNII-7	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5	9.5	8.5
6 GHz WIFI (40MHz BW) - SP	UNII-5			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
	UNII-7			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
6 GHz WIFI (80MHz BW) - SP	UNII-5			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
	UNII-7			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
6 GHz WIFI (160MHz BW) - SP	UNII-5			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
	UNII-7			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
6 GHz WIFI (320MHz BW) - SP	UNII-5					9.5	8.5					9.5	8.5

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)											
		SISO/SISO in MIMO Chain 0						SISO/SISO in MIMO Chain 1					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0	-2.0	-3.0
	UNII-6	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0
	UNII-7	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0	0.0	-1.0
	UNII-8	0.0 ch. 233: -3.5	-1.0 -4.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5	0.0 ch. 233: -5.5	-1.0 -6.5
6 GHz WIFI (40MHz BW) - LPI	UNII-5			2.5	1.5	2.5	1.5			2.5	1.5	2.5	1.5
	UNII-6			3.5 ch. 115: 1.5	2.5 0.5	3.5 ch. 115: 1.5	2.5 0.5			3.5 ch. 115: 1.5	2.5 0.5	3.5 ch. 115: 1.5	2.5 0.5
	UNII-7			3.5	2.5	3.5	2.5			3.5	2.5	3.5	2.5
	UNII-8			3.5	2.5	3.5	2.5			3.5	2.5	3.5	2.5
6 GHz WIFI (80MHz BW) - LPI	UNII-5			6.0 ch. 87: 5.5	5.0 4.5	6.0 ch. 87: 5.5	5.0 4.5			6.0 ch. 87: 5.5	5.0 4.5	6.0 ch. 87: 5.5	5.0 4.5
	UNII-6			6.0	5.0	6.0	5.0			6.0	5.0	6.0	5.0
	UNII-7			7.0 ch. 119: 6.0	6.0 5.0	7.0 ch. 119: 6.0	6.0 5.0			7.0 ch. 119: 6.0	6.0 5.0	7.0 ch. 119: 6.0	6.0 5.0
	UNII-8			7.0	6.0	7.0	6.0			7.0	6.0	7.0	6.0
6 GHz WIFI (160MHz BW) - LPI	UNII-5			8.0	7.0	8.0	7.0			8.0	7.0	8.0	7.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.5	8.5	9.5	8.5			9.5	8.5	9.5	8.5
	UNII-8			6.5	5.5	6.5	5.5			6.5	5.5	6.5	5.5
6 GHz WIFI (320MHz BW) - LPI	UNII-5					9.5	8.5					9.5	8.5
	UNII-6					9.0	8.0					9.0	8.0
	UNII-7					9.5	8.5					9.5	8.5
	UNII-8					9.5	8.5					9.5	8.5

2.4.5 2.4 GHz Bluetooth Output Power

Mode	Data Rate	Modulated Output Power (in dBm)					
		Single Antenna				Each Chain in Dual Mode	
		Chain 0		Chain 1		Beam Forming	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.
Bluetooth	1Mbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth EDR	2Mbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth EDR	3Mbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth LE	1Mbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth LE	2Mbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth LE	125kbps	15.25	13.25	15.25	13.25	12.25	10.25
Bluetooth LE	500kbps	15.25	13.25	15.25	13.25	12.25	10.25

2.5 DUT Antenna Locations

The overall dimensions of this device is > 200 mm. A diagram showing the location of the device antennas can be found in the DUT Antenna Diagram and SAR Test Setup Photographs Appendix. Exact dimensions and separation distances are shown in the Technical Descriptions in the FCC filings.

Table 2-1
Device Edges/Sides for SAR Testing

Antenna	Back	Front	Top	Bottom	Right	Left
1	No	No	Yes	Yes	No	Yes
2	No	Yes	Yes	Yes	No	Yes
3	No	Yes	Yes	Yes	No	No
4	No	Yes	Yes	Yes	No	No
5	No	Yes	Yes	Yes	Yes	No
6	No	No	Yes	Yes	Yes	No
Chain 0	No	No	No	Yes	No	No
Chain 1	No	No	No	Yes	No	No

Note: 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 D04v01. Additional edges may have been evaluated for simultaneous transmission analysis.

2.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D04v01, 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 D04v01 4.3.2 procedures.

Table 2-2
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Body
1	2.4 GHz WLAN MIMO	Yes
2	5 GHz WLAN MIMO	Yes
3	6 GHz WLAN MIMO	Yes
4	2.4 GHz Bluetooth Beam Forming	Yes
5	2.4 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
6	2.4 GHz Bluetooth Chain 0 + 2.4 GHz WLAN Chain 1	Yes
7	5 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
8	6 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
9	2.4 GHz Bluetooth Chain 0 + 5 GHz WLAN Chain 1	Yes
10	2.4 GHz Bluetooth Chain 0 + 6 GHz WLAN Chain 1	Yes
11	5 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 0	Yes
12	6 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 0	Yes
13	5 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 1	Yes
14	6 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 1	Yes
15	2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes
16	2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes
17	5 GHz WLAN MIMO + 2.4 GHz WLAN Chain 0	Yes
18	6 GHz WLAN MIMO + 2.4 GHz WLAN Chain 0	Yes
19	5 GHz WLAN MIMO + 2.4 GHz WLAN Chain 1	Yes
20	6 GHz WLAN MIMO + 2.4 GHz WLAN Chain 1	Yes
21	2.4 GHz Bluetooth Chain 0 + 2.4 GHz WLAN Chain 1 + 5 GHz WLAN Chain 1	Yes
22	2.4 GHz Bluetooth Chain 0 + 2.4 GHz WLAN Chain 1 + 6 GHz WLAN Chain 1	Yes
23	2.4 GHz WLAN Chain 0 + 5 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
24	2.4 GHz WLAN Chain 0 + 6 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
25	5 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 0 + 2.4 GHz WLAN Chain 1	Yes
26	6 GHz WLAN MIMO + 2.4 GHz Bluetooth Chain 0 + 2.4 GHz WLAN Chain 1	Yes
27	5 GHz WLAN MIMO + 2.4 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
28	6 GHz WLAN MIMO + 2.4 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 1	Yes
29	2.4 GHz WLAN Chain 0 + 5 GHz WLAN Chain 1	Yes
30	2.4 GHz WLAN Chain 0 + 6 GHz WLAN Chain 1	Yes
31	5 GHz WLAN Chain 0 + 2.4 GHz WLAN Chain 1	Yes
32	6 GHz WLAN Chain 0 + 2.4 GHz WLAN Chain 1	Yes
33	5 GHz WLAN Chain 1 + 2.4 GHz Bluetooth Chain 1	Yes
34	6 GHz WLAN Chain 1 + 2.4 GHz Bluetooth Chain 1	Yes
35	5 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 0	Yes
36	6 GHz WLAN Chain 0 + 2.4 GHz Bluetooth Chain 0	Yes
37	2.4 GHz WLAN MIMO + 5 GHz WLAN Chain 0	Yes
38	2.4 GHz WLAN MIMO + 6 GHz WLAN Chain 0	Yes
39	2.4 GHz WLAN MIMO + 5 GHz WLAN Chain 1	Yes
40	2.4 GHz WLAN MIMO + 6 GHz WLAN Chain 1	Yes
41	2.4 GHz WLAN Chain 1 + 5 GHz WLAN Chain 1	Yes
42	2.4 GHz WLAN Chain 1 + 6 GHz WLAN Chain 1	Yes
43	2.4 GHz WLAN Chain 0 + 5 GHz WLAN Chain 0	Yes
44	2.4 GHz WLAN Chain 0 + 6 GHz WLAN Chain 0	Yes
45	5 GHz WLAN MIMO + 2.4 GHz Bluetooth Beam Forming	Yes
46	6 GHz WLAN MIMO + 2.4 GHz Bluetooth Beam Forming	Yes
47	2.4 GHz WLAN Chain 0 + WWAN	Yes
48	2.4 GHz WLAN Chain 1 + WWAN	Yes
49	2.4 GHz Bluetooth Chain 0 + WWAN	Yes
50	2.4 GHz Bluetooth Chain 1 + WWAN	Yes
51	5 GHz WLAN Chain 0 + WWAN	Yes
52	5 GHz WLAN Chain 1 + WWAN	Yes
53	6 GHz WLAN Chain 0 + WWAN	Yes
54	6 GHz WLAN Chain 1 + WWAN	Yes
55	LTE + NR	Yes

1. This device supports 2x2 MIMO Tx for WLAN 802.11b/a/g/n/ac/ax/be. 802.11b/a/g/n/ac/ax/be supports CDD and STBC and 802.11n/ac/ax/be additionally supports SDM.
2. This device supports Bluetooth Tethering.
3. For simultaneous scenarios 1-46, these WLAN simultaneous TX modes can also transmit simultaneously with the WWAN transmission modes.
4. 2.4 GHz WLAN Chain 0 and 2.4 GHz Bluetooth Chain 0 share the same antenna path and cannot transmit simultaneously.
5. 2.4 GHz WLAN Chain 1 and 2.4 GHz Bluetooth Chain 1 share the same antenna path and cannot transmit simultaneously.
6. 5 GHz WLAN and 6 GHz WLAN share the same antenna path and cannot transmit simultaneously.
7. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.

2.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

This device supports IEEE 802.11ac with the following features:

a) Up to 160 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/be with the following features:

a) Up to 320 MHz Bandwidth only for 5/6 GHz
b) Up to 40 MHz Bandwidth only for 2.4 GHz
c) 2 Tx antenna output
d) Up to 1024 QAM is supported
e) TDWR and Band gap channels are supported for 5/6 GHz
f) MU-MIMO UL Operations are not supported

Per FCC Guidance, 802.11ax/be RU was considered a higher order 802.11 mode when compared to a/b/g/n/ac/be to apply KDB Publication 248227 D01v02r02 for OFDM mode selection. Therefore, SAR tests were not required for 802.11ax/be RU based on the maximum allowed output powers of OFDM modes and the reported SAR values. Per FCC Guidance, maximum conducted powers were performed for each RU size to demonstrate that the output powers would not be higher than the other OFDM 802.11 modes. Please see Measurement Reports for 802.11ax/be RU output powers.

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.

Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors. FCC KDB 648474 and FCC KDB 248227 were followed for test positions, distances, and modes. Per TCB workshop October 2020 notes, 5 channels were tested. Absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements. Incident power density is evaluated at 2mm ensuring that the resolution is sufficient such that integrated power density (iPD) between d=2mm and d=λ/5mm is ≥ -1dB per equipment manufacturer guidance. Power density results are scaled up for uncertainty above 30%.

(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.

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.

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.

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. 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 12)

This device supports LTE Carrier Aggregation (CA) for LTE Band 5, LTE Band 66, LTE Band 2, LTE Band 41, and LTE Band 48 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

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.

This device can transmit with antenna switching for bands/modes on antennas 1, 2, 5, and 6. SAR tests were performed for each antenna where switching is used per band/mode to ensure compliance. Antennas and indicated band/modes are included in section 2.4.1 of this report.

Per FCC Guidance, C-Band for NR n77 (3705 – 3975 MHz) was fully tested according to FCC procedures. For each exposure condition and antenna, the worst-case position was additionally evaluated for the NR n77 DoD (3455.01 – 3544.98 MHz).

SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

2.8 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r05, D05Av01r02, D06v02r01 (3G/4G)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D04v01 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- November 2017, April 2018, October 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax/be)
- FCC KDB 648474 D04 (Accessories)
- FCC KDB Publication 616217 D04v01r02
- IEC 62479:2010
- SPEAG DASY6 System Handbook
- IEC/IEEE 63195-1:2022
- SPEAG DASY6 Application Note (Interim Procedures for Devices Operating at 6-10 GHz) (Nov 2021)

2.9 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 11 and Section 12.

2.10 Bibliography

Report Type	Report Serial Number
RF Exposure Part 2 WLAN Test Report	1M2504010035-12.C3K
RF Exposure Part 2 WWAN Test Report	1M2504010035-06.C3K
RF Exposure Compliance Summary Report	1M2504010035-05.C3K
RF Exposure Part 0 Test Report	1M2504010035-04.C3K

3 LTE AND NR INFORMATION

LTE Information					
Frequency Range of each LTE transmission band	LTE Band 71: 665.5 - 695.5 MHz				
	LTE Band 12: 699.7 - 715.3 MHz				
	LTE Band 13: 779.5 - 784.5 MHz				
	LTE Band 14: 790.5 - 795.5 MHz				
	LTE Band 26: 814.7 - 848.3 MHz				
	LTE Band 5: 824.7 - 848.3 MHz				
	LTE Band 66: 1710.7 - 1779.3 MHz				
	LTE Band 4: 1710.7 - 1754.3 MHz				
	LTE Band 25: 1850.7 - 1914.3 MHz				
	LTE Band 2: 1850.7 - 1909.3 MHz				
	LTE Band 30: 2307.5 - 2312.5 MHz				
	LTE Band 48: 3552.5 - 3697.5 MHz				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 14: 5 MHz, 10 MHz				
	LTE Band 26: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz				
	LTE Band 5: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 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 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: 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26: 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26: 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26: 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 26: 15 MHz	821.5 (26765)		831.5 (26865)	841.5 (26965)	
LTE Band 5: 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5: 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5: 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5: 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 66: 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66: 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66: 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66: 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66: 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66: 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4: 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4: 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4: 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4: 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4: 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4: 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25: 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25: 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25: 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25: 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25: 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25: 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2: 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2: 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2: 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2: 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2: 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2: 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	(N/A)		2310 (27710)	(N/A)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	(N/A)	3649.2 (56232)	3697.5 (56715)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	(N/A)	3648.3 (56223)	3695 (56690)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	(N/A)	3647.5 (56215)	3692.5 (56665)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	(N/A)	3646.7 (56207)	3690 (56640)
UE Category	UL UE Cat 18 , DL UE Cat 19				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (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, downlink MIMO features as shown in the RF Conducted Powers section of this report. 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, eICIC, eMBMS, Wifi Offloading, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

NR Information								
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 n14: 790.5 - 795.5 MHz							
	NR Band n26: 816.5 - 846.5 MHz							
	NR Band n5: 826.5 - 846.5 MHz							
	NR Band n66: 1712.5 - 1777.5 MHz							
	NR Band n25: 1852.5 - 1912.5 MHz							
	NR Band n2: 1852.5 - 1907.5 MHz							
	NR Band n30: 2307.5 - 2312.5 MHz							
	NR Band n41: 2501.01 - 2685 MHz							
	NR Band n48: 3555 - 3694.98 MHz							
	NR Band n77: 3455.01 - 3544.98 MHz; 3705 - 3975 MHz							
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz							
	NR Band n12: 5 MHz, 10 MHz, 15 MHz							
	NR Band n14: 5 MHz, 10 MHz							
	NR Band n26: 5 MHz, 10 MHz, 15 MHz, 20 MHz							
	NR Band n5: 5 MHz, 10 MHz, 15 MHz, 20 MHz							
	NR Band n66: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz							
	NR Band n25: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz							
	NR Band n2: 5 MHz, 10 MHz, 15 MHz, 20 MHz							
	NR Band n30: 5 MHz, 10 MHz							
	NR Band n41: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz							
	NR Band n48: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz							
	NR Band n77: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz							
Channel Numbers and Frequencies (MHz)								
NR Band n71: 5 MHz	665.5 (133100)		680.5 (136100)			695.5 (139100)		
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)			693 (138600)		
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 (142700)		
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 n14: 5 MHz	790.5 (158100)		793 (158600)			795.5 (159100)		
NR Band n14: 10 MHz	793 (158600)		793 (158600)			793 (158600)		
NR Band n26: 5 MHz	816.5 (163300)		831.5 (166300)			846.5 (169300)		
NR Band n26: 10 MHz	819 (163800)		831.5 (166300)			844 (168800)		
NR Band n26: 15 MHz	821.5 (164300)		831.5 (166300)			841.5 (168300)		
NR Band n26: 20 MHz	824 (164800)		831.5 (166300)			839 (167800)		
NR Band n5: 5 MHz	826.5 (165300)		836.5 (167300)			846.5 (169300)		
NR Band n5: 10 MHz	829 (165800)		836.5 (167300)			844 (168800)		
NR Band n5: 15 MHz	831.5 (166300)		836.5 (167300)			841.5 (168300)		
NR Band n5: 20 MHz	834 (166800)		836.5 (167300)			839 (167800)		
NR Band n66: 5 MHz	1712.5 (342500)		1745 (349000)			1777.5 (355500)		
NR Band n66: 10 MHz	1715 (343000)		1745 (349000)			1775 (355000)		
NR Band n66: 15 MHz	1717.5 (343500)		1745 (349000)			1772.5 (354500)		
NR Band n66: 20 MHz	1720 (344000)		1745 (349000)			1770 (354000)		
NR Band n66: 25 MHz	1722.5 (344500)		1745 (349000)			1767.5 (353500)		
NR Band n66: 30 MHz	1725 (345000)		1745 (349000)			1765 (353000)		
NR Band n66: 40 MHz	1730 (346000)		1745 (349000)			1760 (352000)		
NR Band n25: 5 MHz	1852.5 (370500)		1882.5 (376500)			1912.5 (382500)		
NR Band n25: 10 MHz	1855 (371000)		1882.5 (376500)			1910 (382000)		
NR Band n25: 15 MHz	1857.5 (371500)		1882.5 (376500)			1907.5 (381500)		
NR Band n25: 20 MHz	1860 (372000)		1882.5 (376500)			1905 (381000)		
NR Band n25: 25 MHz	1862.5 (372500)		1882.5 (376500)			1902.5 (380500)		
NR Band n25: 30 MHz	1865 (373000)		1882.5 (376500)			1900 (380000)		
NR Band n25: 40 MHz	1870 (374000)		1882.5 (376500)			1895 (379000)		
NR Band n2: 5 MHz	1852.5 (370500)		1880 (376000)			1907.5 (381500)		
NR Band n2: 10 MHz	1855 (371000)		1880 (376000)			1905 (381000)		
NR Band n2: 15 MHz	1857.5 (371500)		1880 (376000)			1902.5 (380500)		
NR Band n2: 20 MHz	1860 (372000)		1880 (376000)			1900 (380000)		
NR Band n30: 5 MHz	2307.5 (461500)		2310 (462000)			2312.5 (462500)		
NR Band n30: 10 MHz	2310 (462000)		2310 (462000)			2310 (462000)		
NR Band n41: 10 MHz	2501.01 (500202)	2547 (509400)	2592.99 (518598)			2639.01 (527802)	2685 (537000)	
NR Band n41: 15 MHz	2503.5 (500700)	2548.26 (509652)	2592.99 (518598)			2637.75 (527550)	2682.51 (536502)	
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)			2636.49 (527298)	2679.99 (535998)	
NR Band n41: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)			2634 (526800)	2674.98 (534996)	
NR Band n41: 40 MHz	2616.01 (523202)	2567.34 (513468)	(N/A)			2618.67 (523734)	2670 (534000)	
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)			2664.99 (532998)		
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)			2659.98 (531996)		
NR Band n41: 70 MHz	2531.01 (506202)		(N/A)			2655 (531000)		
NR Band n41: 80 MHz	2536.02 (507204)		(N/A)			2649.99 (529998)		
NR Band n41: 90 MHz	2541 (508200)		(N/A)			2644.98 (528996)		
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)			2640 (528000)		
NR Band n48: 10 MHz	3555 (637000)	3601.68 (640112)	(N/A)			3648.33 (643222)	3694.98 (646332)	
NR Band n48: 15 MHz	3557.52 (637168)	3602.49 (640166)	(N/A)			3647.49 (643166)	3692.49 (646166)	
NR Band n48: 20 MHz	3560.01 (637334)	3603.33 (640222)	(N/A)			3646.68 (643112)	3690 (646000)	
NR Band n48: 30 MHz	3565.02 (637668)	3605.01 (640334)	(N/A)			3645 (643000)	3684.99 (645666)	
NR Band n48: 40 MHz	3570 (638000)	(N/A)	3624.99 (641666)			(N/A)	3679.98 (645332)	
NR Band n77 DoD: 10 MHz	3455.01 (630334)		3500.01 (633334)			3544.98 (636332)		
NR Band n77 DoD: 15 MHz	3457.5 (630500)		3500.01 (633334)			3542.49 (636166)		
NR Band n77 DoD: 20 MHz	3460.02 (630668)		3500.01 (633334)			3540 (636000)		
NR Band n77 DoD: 30 MHz	3465 (631000)		3500.01 (633334)			3534.99 (635666)		
NR Band n77 DoD: 40 MHz	3470.01 (631334)		(N/A)			3529.98 (635332)		
NR Band n77 DoD: 50 MHz	3475.02 (631668)		(N/A)			3525 (635000)		
NR Band n77 DoD: 60 MHz	(N/A)		3500.01 (633334)			(N/A)		
NR Band n77 DoD: 70 MHz	(N/A)		3500.01 (633334)			(N/A)		
NR Band n77 DoD: 80 MHz	(N/A)		3500.01 (633334)			(N/A)		
NR Band n77 DoD: 90 MHz	(N/A)		3500.01 (633334)			(N/A)		
NR Band n77 DoD: 100 MHz	(N/A)		3500.01 (633334)			(N/A)		
NR Band n77: 10 MHz	3705 (647000)	3759 (650600)	3813 (654200)	(N/A)	3867 (657800)	3921 (661400)	3975 (665000)	
NR Band n77: 15 MHz	3707.52 (647168)	3760.5 (650700)	3813.51 (654234)	(N/A)	3866.49 (657766)	3919.5 (661300)	3972.48 (664832)	
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	(N/A)	3866.01 (657734)	3918 (661200)	3969.99 (664666)	
NR Band n77: 30 MHz	3715.02 (647668)	3765 (651000)	3815.01 (654334)	(N/A)	3864.99 (657666)	3915 (661000)	3964.98 (664332)	
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	(N/A)	3864 (657600)	3912 (660800)	3960 (664000)	
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652166)	(N/A)	3840 (656000)	(N/A)	3897.51 (659834)	3954.99 (663666)	
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	(N/A)	(N/A)	(N/A)	3876.66 (658444)	3949.98 (663332)	
NR Band n77: 70 MHz	3735 (649000)	3804.99 (653666)	(N/A)	(N/A)	(N/A)	3875.01 (658334)	3945 (663000)	
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, n14, n26, n5, n66, n25, n2, n30	15 kHz							
SCS for NR Band n41, n48, n77, n77 DoD	30 kHz							
Modulations Supported in UL	DFT-s-OFDM: QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM							
A-MPR (Additional MPR) disabled for SAR Testing?	YES							
EN-DC and NR Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations							
LTE Anchor Bands for NR Band n71	2/48/66							
LTE Anchor Bands for NR Band n12	2/48/66							
LTE Anchor Bands for NR Band n14	N/A							
LTE Anchor Bands for NR Band n26	N/A							
LTE Anchor Bands for NR Band n5	2/30/48/66							
LTE Anchor Bands for NR Band n66	5/12/13/14/48/71							
LTE Anchor Bands for NR Band n25	12/13/26/48							
LTE Anchor Bands for NR Band n2	5/12/13/14/48/71							
LTE Anchor Bands for NR Band n30	5/12/14							
LTE Anchor Bands for NR Band n41	2/4/12/25/26/71/66							
LTE Anchor Bands for NR Band n48	2/5/13/66							
LTE Anchor Bands for NR Band n77	2/5/12/13/14/25/30/41/66/71							

4 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.

4.1 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 4-1).

Equation 4-1
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/m^3)
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]

5 DOSIMETRIC ASSESSMENT

5.1 Measurement Procedure

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

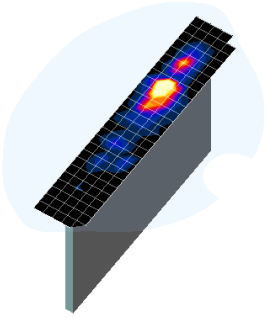

Figure 5-1
Sample SAR Area Scan

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 5-1) 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 5-1) 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 5-1. 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.

Table 5-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

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

*Also compliant to IEEE 1528-2013 Table 6

6 TEST CONFIGURATION POSITIONS

6.1 Device Holder

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

6.2 SAR Testing per KDB Publication 616217 D04v01r02

Per FCC KDB Publication 616217 D04v01r02, When antennas are incorporated in the keyboard section of a device, SAR is required for the bottom surface of the keyboard. The SAR Exclusion Threshold in KDB 447498 D04v01 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent 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. Please see the exact antenna locations shown in the Technical Descriptions document.

7 RF EXPOSURE LIMITS

7.1 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.

7.2 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.

7.3 RF Exposure Limits for Frequencies Below 6 GHz

Table 7-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (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.

7.4 RF Exposure Limits for Frequencies Above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m^2 or mW/cm^2.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 7-2
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits		
Frequency Range [MHz]	**Power Density** [mW/cm^2]	**Average Time** [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5.0	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1.0	30

Note: 1.0 mW/cm^2 is 10 W/m^2

8 FCC MEASUREMENT PROCEDURES

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

8.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D04v01, 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.

8.2 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.

8.3 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.

8.4 SAR Measurement Conditions for UMTS

8.4.1 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, DPDCHn 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.

8.4.2 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 $DPDCH_n$ 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 $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

8.4.3 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.

8.4.4 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.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

8.4.5 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.

8.5 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).

8.5.1 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.

8.5.2 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.

8.5.3 A-MPR

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

8.5.4 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 ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.

8.5.5 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.

8.5.6 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.

8.6 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.

8.6.1 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.

8.6.2 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.

8.6.3 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.

8.6.4 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.

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.

8.6.5 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.

8.6.6 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.

8.6.7 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D04v01 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.

9 RF CONDUCTED POWERS

All conducted power measurements for Sub6 WWAN technologies and bands in this section were performed such that the EUT transmitted continuously at the maximum time- averaged transmit power limit (Plimit) or the maximum tune-up power (Pmax), whichever is lower.

9.1 UMTS Conducted Powers

9.1.1 UMTS Band 5 Antenna 5

Table 9-1
UMTS Band 5 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion)

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	
99	WCDMA	12.2 kbps RMC	24.42	**24.49**	24.39	-
6	HSDPA	Subtest 1	23.82	23.85	23.73	0
6		Subtest 2	23.83	23.80	23.77	0
6		Subtest 3	23.33	23.32	23.23	0.5
6		Subtest 4	23.35	23.28	23.20	0.5
6	HSUPA	Subtest 1	23.81	23.77	23.67	0
6		Subtest 2	21.80	21.77	21.67	2
6		Subtest 3	23.01	22.87	22.65	1
6		Subtest 4	21.56	21.65	21.55	2
6		Subtest 5	23.87	23.76	23.71	0
8	DC-HSDPA	Subtest 1	23.77	23.67	23.71	0
8		Subtest 2	23.78	23.76	23.71	0
8		Subtest 3	23.33	23.30	23.28	0.5
8		Subtest 4	23.29	23.33	23.32	0.5

Table 9-2
UMTS Band 5 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion)

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	
99	WCDMA	12.2 kbps RMC	21.27	**21.34**	21.15	-
6	HSDPA	Subtest 1	21.28	21.25	21.15	0
6		Subtest 2	21.28	21.34	21.13	0
6		Subtest 3	20.79	20.77	20.63	0.5
6		Subtest 4	20.78	20.70	20.64	0.5
6	HSUPA	Subtest 1	21.26	21.27	21.16	0
6		Subtest 2	19.27	19.22	19.12	2
6		Subtest 3	20.23	20.19	20.11	1
6		Subtest 4	19.27	19.27	19.16	2
6		Subtest 5	21.27	21.26	21.17	0
8	DC-HSDPA	Subtest 1	21.26	21.33	21.13	0
8		Subtest 2	21.29	21.34	21.12	0
8		Subtest 3	20.77	20.76	20.76	0.5
8		Subtest 4	20.71	20.72	20.74	0.5

9.1.2 UMTS 1750 and UMTS 1900

Table 9-3
UMTS 1750 & UMTS 1900 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion)

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	23.89	**23.86**	23.81	24.00	**24.12**	23.94	-
6	HSDPA	Subtest 1	23.70	23.77	23.79	23.83	23.89	23.97	0
6		Subtest 2	23.66	23.68	23.77	23.77	23.80	24.00	0
6		Subtest 3	23.25	23.32	23.27	23.33	23.30	23.47	0.5
6		Subtest 4	23.30	23.33	23.26	23.25	23.41	23.46	0.5
6	HSUPA	Subtest 1	23.69	23.71	23.74	23.82	23.81	23.79	0
6		Subtest 2	21.55	21.49	21.53	21.77	21.65	21.66	2
6		Subtest 3	22.66	22.57	22.50	23.01	22.98	22.77	1
6		Subtest 4	21.49	21.55	21.53	21.70	21.68	21.67	2
6		Subtest 5	23.77	23.66	23.71	23.82	23.87	23.82	0
8	DC-HSDPA	Subtest 1	23.74	23.90	23.79	23.63	23.73	23.78	0
8		Subtest 2	23.75	23.89	23.77	23.55	23.72	23.74	0
8		Subtest 3	23.22	23.30	23.29	23.21	23.27	23.32	0.5
8		Subtest 4	23.24	23.25	23.33	23.22	23.34	23.34	0.5

Table 9-4
UMTS 1750 & UMTS 1900 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion)

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	16.93	**17.10**	17.08	16.65	**16.81**	16.80	-
6	HSDPA	Subtest 1	17.14	17.29	17.40	16.41	16.54	16.62	0
6		Subtest 2	17.12	17.27	17.30	16.55	16.47	16.62	0
6		Subtest 3	16.76	16.76	16.87	16.00	16.02	16.12	0.5
6		Subtest 4	16.63	16.78	16.74	15.98	15.89	15.97	0.5
6	HSUPA	Subtest 1	17.16	17.25	17.24	16.66	16.84	16.94	0
6		Subtest 2	15.13	15.28	15.23	14.66	14.77	14.87	2
6		Subtest 3	16.12	16.24	16.18	15.68	15.88	15.90	1
6		Subtest 4	15.12	15.15	15.19	14.65	14.82	14.91	2
6		Subtest 5	17.17	17.23	17.27	16.68	16.92	16.93	0
8	DC-HSDPA	Subtest 1	17.00	17.11	17.13	16.60	16.55	16.69	0
8		Subtest 2	16.99	17.14	17.11	16.67	16.53	16.62	0
8		Subtest 3	16.50	16.44	16.22	16.15	16.10	16.14	0.5
8		Subtest 4	16.30	16.30	16.34	16.10	16.12	16.11	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 9-1
Power Measurement Setup

9.2 LTE 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 the LTE and NR Lower Bandwidth Conducted Power Appendix.

Note: Some bands do 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.

LTE Carrier Aggregation Notes:

1. This device supports uplink carrier aggregation for LTE CA_5B, LTE CA_66B, LTE CA_66C, LTE CA_2C, LTE CA_48C, and LTE CA_41C with a maximum of two component carriers. For intraband 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.

9.2.1 LTE Band 71

Table 9-5
LTE Band 71 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.42**	0	0
	1	50	23.40		0
	1	99	23.23		0
	50	0	22.49	0-1	1
	50	25	22.56		1
	50	50	22.42		1
	100	0	22.51		1
16QAM	1	0	22.58	0-1	1
	1	50	22.61		1
	1	99	22.65		1
	50	0	21.47	0-2	2
	50	25	21.46		2
	50	50	21.52		2
	100	0	21.50		2
64QAM	1	0	21.58	0-2	2
	1	50	21.66		2
	1	99	21.43		2
	50	0	20.48	0-3	3
	50	25	20.47		3
	50	50	20.50		3
	100	0	20.57		3
256QAM	1	0	18.61	0-5	5
	1	50	18.76		5
	1	99	18.76		5
	50	0	18.60		5
	50	25	18.57		5
	50	50	18.58		5
	100	0	18.55		5

Table 9-6
LTE Band 71 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**20.74**	0	0
	1	50	20.59		0
	1	99	20.51		0
	50	0	**20.74**	0-1	0
	50	25	20.71		0
	50	50	20.67		0
	100	0	20.73		0
16QAM	1	0	20.81	0-1	0
	1	50	20.71		0
	1	99	20.91		0
	50	0	20.79	0-2	0
	50	25	20.77		0
	50	50	20.74		0
	100	0	20.78		0
64QAM	1	0	20.97	0-2	0
	1	50	20.86		0
	1	99	20.78		0
	50	0	20.61	0-3	0
	50	25	20.70		0
	50	50	20.65		0
	100	0	20.72		0
256QAM	1	0	18.82	0-5	2
	1	50	19.04		2
	1	99	18.99		2
	50	0	18.82		2
	50	25	18.85		2
	50	50	18.81		2
	100	0	18.53		2

Table 9-7
LTE Band 71 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.56	0	0
	1	50	**23.57**		0
	1	99	23.53		0
	50	0	22.64	0-1	1
	50	25	22.78		1
	50	50	22.73		1
	100	0	22.68		1
16QAM	1	0	22.85	0-1	1
	1	50	23.04		1
	1	99	22.76		1
	50	0	21.65	0-2	2
	50	25	21.70		2
	50	50	21.70		2
	100	0	21.72		2
64QAM	1	0	21.66	0-2	2
	1	50	21.85		2
	1	99	21.72		2
	50	0	20.63	0-3	3
	50	25	20.68		3
	50	50	20.75		3
	100	0	20.71		3
256QAM	1	0	18.89	0-5	5
	1	50	18.72		5
	1	99	18.83		5
	50	0	18.82		5
	50	25	18.78		5
	50	50	18.84		5
	100	0	18.79		5

Table 9-8
LTE Band 71 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.20	0	0
	1	50	**20.40**		0
	1	99	20.16		0
	50	0	**20.41**	0-1	0
	50	25	20.37		0
	50	50	20.37		0
	100	0	20.39		0
16QAM	1	0	20.56	0-1	0
	1	50	20.60		0
	1	99	20.61		0
	50	0	20.47	0-2	0
	50	25	20.32		0
	50	50	20.32		0
	100	0	20.36		0
64QAM	1	0	20.61	0-2	0
	1	50	20.40		0
	1	99	20.36		0
	50	0	20.49	0-3	0
	50	25	20.46		0
	50	50	20.51		0
	100	0	20.35		0
256QAM	1	0	18.96	0-5	1.7
	1	50	18.84		1.7
	1	99	18.89		1.7
	50	0	18.83		1.7
	50	25	18.74		1.7
	50	50	18.81		1.7
	100	0	18.78		1.7

9.2.2 LTE Band 12

Table 9-9
LTE Band 12 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.80	0	0
	1	25	23.84		0
	1	49	**23.89**		0
	25	0	22.86	0-1	1
	25	12	22.87		1
	25	25	22.86		1
	50	0	22.82		1
16QAM	1	0	23.18	0-1	1
	1	25	23.05		1
	1	49	22.83		1
	25	0	21.84	0-2	2
	25	12	21.83		2
	25	25	21.94		2
	50	0	21.90		2
64QAM	1	0	21.93	0-2	2
	1	25	21.88		2
	1	49	22.03		2
	25	0	20.81	0-3	3
	25	12	20.88		3
	25	25	20.93		3
	50	0	20.86		3
256QAM	1	0	18.95	0-5	5
	1	25	18.93		5
	1	49	18.94		5
	25	0	18.92		5
	25	12	18.90		5
	25	25	18.91		5
	50	0	18.83		5

Table 9-10
LTE Band 12 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.45	0	0
	1	25	20.42		0
	1	49	**20.68**		0
	25	0	20.51	0-1	0
	25	12	20.50		0
	25	25	**20.73**		0
	50	0	20.60		0
16QAM	1	0	20.64	0-1	0
	1	25	20.77		0
	1	49	20.72		0
	25	0	20.50	0-2	0
	25	12	20.52		0
	25	25	20.52		0
	50	0	20.44		0
64QAM	1	0	20.52	0-2	0
	1	25	20.71		0
	1	49	20.44		0
	25	0	20.41	0-3	0
	25	12	20.42		0
	25	25	20.43		0
	50	0	20.38		0
256QAM	1	0	19.13	0-5	1.5
	1	25	19.29		1.5
	1	49	19.14		1.5
	25	0	19.07		1.5
	25	12	19.01		1.5
	25	25	19.00		1.5
	50	0	19.02		1.5

Table 9-11
LTE Band 12 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.93	0	0
	1	25	24.10		0
	1	49	**24.12**		0
	25	0	23.02	0-1	1
	25	12	23.03		1
	25	25	23.08		1
	50	0	23.05		1
16QAM	1	0	23.00	0-1	1
	1	25	23.20		1
	1	49	23.40		1
	25	0	22.14	0-2	2
	25	12	22.07		2
	25	25	22.14		2
	50	0	22.04		2
64QAM	1	0	22.14	0-2	2
	1	25	22.25		2
	1	49	22.19		2
	25	0	21.05	0-3	3
	25	12	21.03		3
	25	25	21.10		3
	50	0	21.03		3
256QAM	1	0	19.11	0-5	5
	1	25	19.06		5
	1	49	19.15		5
	25	0	19.11		5
	25	12	19.19		5
	25	25	19.08		5
	50	0	19.04		5

Table 9-12
LTE Band 12 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.76	0	0
	1	25	**20.79**		0
	1	49	20.74		0
	25	0	20.77	0-1	0
	25	12	**20.80**		0
	25	25	20.79		0
	50	0	20.78		0
16QAM	1	0	20.92	0-1	0
	1	25	20.94		0
	1	49	20.80		0
	25	0	20.83	0-2	0
	25	12	20.75		0
	25	25	20.79		0
	50	0	20.79		0
64QAM	1	0	21.02	0-2	0
	1	25	21.03		0
	1	49	20.89		0
	25	0	20.87	0-3	0
	25	12	20.85		0
	25	25	20.87		0
	50	0	20.56		0
256QAM	1	0	19.57	0-5	1.2
	1	25	19.62		1.2
	1	49	19.77		1.2
	25	0	19.74		1.2
	25	12	19.71		1.2
	25	25	19.78		1.2
	50	0	19.71		1.2

9.2.3 LTE Band 13

Table 9-13
LTE Band 13 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.42	0	0
	1	25	23.53		0
	1	49	**23.64**		0
	25	0	22.49	0-1	1
	25	12	22.67		1
	25	25	22.61		1
	50	0	22.56		1
16QAM	1	0	22.76	0-1	1
	1	25	22.71		1
	1	49	22.73		1
	25	0	21.64	0-2	2
	25	12	21.64		2
	25	25	21.63		2
	50	0	21.62		2
64QAM	1	0	21.70	0-2	2
	1	25	21.71		2
	1	49	21.72		2
	25	0	20.61	0-3	3
	25	12	20.61		3
	25	25	20.64		3
	50	0	20.58		3
256QAM	1	0	18.63	0-5	5
	1	25	18.69		5
	1	49	18.64		5
	25	0	18.66		5
	25	12	18.54		5
	25	25	18.63		5
	50	0	18.55		5

Table 9-14
LTE Band 13 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	19.86	0	0
	1	25	19.86		0
	1	49	**19.91**		0
	25	0	19.88	0-1	0
	25	12	19.90		0
	25	25	**19.94**		0
	50	0	19.90		0
16QAM	1	0	20.23	0-1	0
	1	25	20.21		0
	1	49	20.15		0
	25	0	19.96	0-2	0
	25	12	19.93		0
	25	25	20.03		0
	50	0	19.95		0
64QAM	1	0	19.90	0-2	0
	1	25	20.08		0
	1	49	20.00		0
	25	0	19.90	0-3	0
	25	12	19.92		0
	25	25	19.98		0
	50	0	19.79		0
256QAM	1	0	18.71	0-5	1.4
	1	25	18.74		1.4
	1	49	18.77		1.4
	25	0	18.64		1.4
	25	12	18.65		1.4
	25	25	18.61		1.4
	50	0	18.64		1.4

Table 9-15
LTE Band 13 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.78	0	0
	1	25	**23.79**		0
	1	49	23.77		0
	25	0	22.84	0-1	1
	25	12	22.81		1
	25	25	22.83		1
	50	0	22.82		1
16QAM	1	0	23.20	0-1	1
	1	25	22.98		1
	1	49	23.27		1
	25	0	21.92	0-2	2
	25	12	21.88		2
	25	25	21.92		2
	50	0	21.78		2
64QAM	1	0	21.86	0-2	2
	1	25	21.98		2
	1	49	21.99		2
	25	0	20.88	0-3	3
	25	12	20.79		3
	25	25	20.90		3
	50	0	20.83		3
256QAM	1	0	18.81	0-5	5
	1	25	19.00		5
	1	49	19.01		5
	25	0	18.82		5
	25	12	18.83		5
	25	25	18.93		5
	50	0	18.91		5

Table 9-16
LTE Band 13 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.53	0	0
	1	25	**20.64**		0
	1	49	20.56		0
	25	0	20.65	0-1	0
	25	12	**20.69**		0
	25	25	20.67		0
	50	0	20.63		0
16QAM	1	0	20.81	0-1	0
	1	25	20.89		0
	1	49	20.84		0
	25	0	20.73	0-2	0
	25	12	20.69		0
	25	25	20.75		0
	50	0	20.63		0
64QAM	1	0	20.78	0-2	0
	1	25	20.84		0
	1	49	20.76		0
	25	0	20.62	0-3	0
	25	12	20.70		0
	25	25	20.66		0
	50	0	20.75		0
256QAM	1	0	18.94	0-5	1.9
	1	25	19.12		1.9
	1	49	18.90		1.9
	25	0	18.87		1.9
	25	12	18.84		1.9
	25	25	18.88		1.9
	50	0	18.90		1.9

9.2.4 LTE Band 14

Table 9-17
LTE Band 14 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	Design MPR [dB]	MPR [dB]
QPSK	1	0	**23.64**	0	0
	1	25	23.63		0
	1	49	23.62		0
	25	0	21.72	0-2	2
	25	12	21.77		2
	25	25	21.76		2
	50	0	21.68		2
16QAM	1	0	22.97	0-1	1
	1	25	22.83		1
	1	49	23.04		1
	25	0	21.63	0-2	2
	25	12	21.66		2
	25	25	21.66		2
	50	0	21.62		2
64QAM	1	0	21.66	0-2	2
	1	25	21.92		2
	1	49	21.70		2
	25	0	20.70	0-3	3
	25	12	20.68		3
	25	25	20.77		3
	50	0	20.67		3
256QAM	1	0	18.62	0-5	5
	1	25	18.83		5
	1	49	18.63		5
	25	0	18.62		5
	25	12	18.71		5
	25	25	18.72		5
	50	0	18.62		5

Table 9-18
LTE Band 14 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**19.96**	0	0
	1	25	19.95		0
	1	49	19.94		0
	25	0	**20.10**	0-1	0
	25	12	19.94		0
	25	25	20.07		0
	50	0	19.93		0
16QAM	1	0	20.03	0-1	0
	1	25	20.15		0
	1	49	20.06		0
	25	0	20.03	0-2	0
	25	12	20.04		0
	25	25	20.05		0
	50	0	20.01		0
64QAM	1	0	20.22	0-2	0
	1	25	20.18		0
	1	49	20.11		0
	25	0	19.99	0-3	0
	25	12	20.02		0
	25	25	20.02		0
	50	0	19.98		0
256QAM	1	0	18.56	0-5	1.4
	1	25	18.82		1.4
	1	49	18.82		1.4
	25	0	18.66		1.4
	25	12	18.78		1.4
	25	25	18.72		1.4
	50	0	18.65		1.4

Table 9-19
LTE Band 14 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	Design MPR [dB]	MPR [dB]
QPSK	1	0	**23.88**	0	0
	1	25	23.85		0
	1	49	23.83		0
	25	0	21.94	0-2	2
	25	12	21.89		2
	25	25	21.97		2
	50	0	21.91		2
16QAM	1	0	23.13	0-1	1
	1	25	23.10		1
	1	49	23.11		1
	25	0	21.97	0-2	2
	25	12	21.95		2
	25	25	21.94		2
	50	0	21.90		2
64QAM	1	0	21.98	0-2	2
	1	25	22.17		2
	1	49	21.98		2
	25	0	20.87	0-3	3
	25	12	20.92		3
	25	25	21.08		3
	50	0	20.93		3
256QAM	1	0	18.89	0-5	5
	1	25	18.93		5
	1	49	19.09		5
	25	0	18.90		5
	25	12	18.99		5
	25	25	18.91		5
	50	0	18.87		5

Table 9-20
LTE Band 14 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**20.74**	0	0
	1	25	20.70		0
	1	49	20.68		0
	25	0	20.76	0-1	0
	25	12	20.77		0
	25	25	**20.81**		0
	50	0	20.73		0
16QAM	1	0	20.74	0-1	0
	1	25	20.88		0
	1	49	20.65		0
	25	0	20.81	0-2	0
	25	12	20.75		0
	25	25	20.80		0
	50	0	20.71		0
64QAM	1	0	21.00	0-2	0
	1	25	21.01		0
	1	49	20.83		0
	25	0	20.79	0-3	0
	25	12	20.76		0
	25	25	20.73		0
	50	0	20.68		0
256QAM	1	0	18.97	0-5	1.9
	1	25	19.02		1.9
	1	49	18.99		1.9
	25	0	18.90		1.9
	25	12	18.98		1.9
	25	25	18.93		1.9
	50	0	18.89		1.9

9.2.5 LTE Band 26

Table 9-21
LTE Band 26 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.51**	0	0
	1	36	23.42		0
	1	74	23.44		0
	36	0	22.58	0-1	1
	36	18	22.54		1
	36	37	22.61		1
	75	0	22.58		1
16QAM	1	0	23.34	0-1	1
	1	36	23.12		1
	1	74	23.00		1
	36	0	21.66	0-2	2
	36	18	21.59		2
	36	37	21.70		2
	75	0	21.59		2
64QAM	1	0	21.63	0-2	2
	1	36	21.80		2
	1	74	21.68		2
	36	0	20.65	0-3	3
	36	18	20.63		3
	36	37	20.69		3
	75	0	20.63		3
256QAM	1	0	18.69	0-5	5
	1	36	18.72		5
	1	74	18.76		5
	36	0	18.56		5
	36	18	18.66		5
	36	37	18.59		5
	75	0	18.52		5

Table 9-22
LTE Band 26 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.63	0	0
	1	36	**20.95**		0
	1	74	20.59		0
	36	0	20.70	0-1	0
	36	18	20.73		0
	36	37	**20.98**		0
	75	0	20.90		0
16QAM	1	0	21.05	0-1	0
	1	36	20.89		0
	1	74	20.85		0
	36	0	20.73	0-2	0
	36	18	20.78		0
	36	37	20.89		0
	75	0	20.78		0
64QAM	1	0	20.81	0-2	0
	1	36	20.96		0
	1	74	20.81		0
	36	0	20.67	0-3	0.1
	36	18	20.66		0.1
	36	37	20.70		0.1
	75	0	20.64		0.1
256QAM	1	0	18.74	0-5	2.1
	1	36	18.77		2.1
	1	74	18.85		2.1
	36	0	18.70		2.1
	36	18	18.65		2.1
	36	37	18.71		2.1
	75	0	18.62		2.1

Table 9-23
LTE Band 26 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.91**	0	0
	1	36	23.90		0
	1	74	23.78		0
	36	0	22.91	0-1	1
	36	18	23.02		1
	36	37	23.03		1
	75	0	23.01		1
16QAM	1	0	23.24	0-1	1
	1	36	23.40		1
	1	74	22.99		1
	36	0	21.98	0-2	2
	36	18	22.02		2
	36	37	22.12		2
	75	0	21.99		2
64QAM	1	0	22.10	0-2	2
	1	36	22.09		2
	1	74	22.00		2
	36	0	21.06	0-3	3
	36	18	21.00		3
	36	37	21.10		3
	75	0	20.99		3
256QAM	1	0	18.99	0-5	5
	1	36	19.14		5
	1	74	19.28		5
	36	0	19.06		5
	36	18	19.03		5
	36	37	19.02		5
	75	0	19.00		5

Table 9-24
LTE Band 26 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**21.20**	0	0
	1	36	21.00		0
	1	74	21.06		0
	36	0	21.10	0-1	0
	36	18	21.14		0
	36	37	**21.23**		0
	75	0	21.12		0
16QAM	1	0	21.39	0-1	0
	1	36	21.27		0
	1	74	21.17		0
	36	0	21.12	0-2	0
	36	18	21.20		0
	36	37	21.22		0
	75	0	21.15		0
64QAM	1	0	21.20	0-2	0
	1	36	21.50		0
	1	74	21.44		0
	36	0	21.08	0-3	0.2
	36	18	21.05		0.2
	36	37	21.09		0.2
	75	0	20.95		0.2
256QAM	1	0	19.18	0-5	2.2
	1	36	19.19		2.2
	1	74	19.19		2.2
	36	0	19.11		2.2
	36	18	19.01		2.2
	36	37	19.14		2.2
	75	0	19.02		2.2

9.2.6 LTE Band 5

Table 9-25
LTE Band 5 (Cell) Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
			Mid Channel		
Modulation	RB Size	RB Offset	20525 (836.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	**23.71**	0	0
	1	25	23.64		0
	1	49	23.59		0
	25	0	22.70	0-1	1
	25	12	22.72		1
	25	25	22.69		1
	50	0	22.70		1
16QAM	1	0	22.81	0-1	1
	1	25	22.79		1
	1	49	22.90		1
	25	0	21.68	0-2	2
	25	12	21.74		2
	25	25	21.75		2
	50	0	21.69		2
64QAM	1	0	21.89	0-2	2
	1	25	21.87		2
	1	49	21.95		2
	25	0	20.67	0-3	3
	25	12	20.72		3
	25	25	20.73		3
	50	0	20.66		3
256QAM	1	0	18.68	0-5	5
	1	25	18.92		5
	1	49	18.77		5
	25	0	18.73		5
	25	12	18.72		5
	25	25	18.71		5
	50	0	18.59		5

Table 9-26
LTE Band 5 (Cell) Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
			Mid Channel		
Modulation	RB Size	RB Offset	20525 (836.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
QPSK	1	0	20.87	0	0
	1	25	**20.95**		0
	1	49	20.74		0
	25	0	20.70	0-1	0
	25	12	20.81		0
	25	25	**21.08**		0
	50	0	20.83		0
16QAM	1	0	21.18	0-1	0
	1	25	21.05		0
	1	49	20.88		0
	25	0	20.85	0-2	0
	25	12	20.79		0
	25	25	20.89		0
	50	0	20.77		0
64QAM	1	0	21.13	0-2	0
	1	25	21.05		0
	1	49	20.91		0
	25	0	20.80	0-3	0.1
	25	12	20.80		0.1
	25	25	20.82		0.1
	50	0	20.74		0.1
256QAM	1	0	18.77	0-5	2.1
	1	25	18.92		2.1
	1	49	18.88		2.1
	25	0	18.63		2.1
	25	12	18.77		2.1
	25	25	18.70		2.1
	50	0	18.67		2.1

Table 9-27
LTE Band 5 (Cell) Antenna 2 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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	20.80	20.83

Table 9-28
LTE Band 5 (Cell) Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.12**	0	0
	1	25	24.06		0
	1	49	24.01		0
	25	0	23.12	0-1	1
	25	12	23.07		1
	25	25	23.17		1
	50	0	23.13		1
16QAM	1	0	23.16	0-1	1
	1	25	23.32		1
	1	49	23.53		1
	25	0	22.12	0-2	2
	25	12	22.22		2
	25	25	22.21		2
	50	0	22.04		2
64QAM	1	0	22.22	0-2	2
	1	25	22.33		2
	1	49	22.32		2
	25	0	21.22	0-3	3
	25	12	21.10		3
	25	25	21.20		3
	50	0	21.03		3
256QAM	1	0	19.31	0-5	5
	1	25	19.24		5
	1	49	19.14		5
	25	0	19.08		5
	25	12	19.11		5
	25	25	19.16		5
	50	0	19.08		5

Table 9-29
LTE Band 5 (Cell) Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.25	0	0
	1	25	**21.40**		0
	1	49	21.18		0
	25	0	21.23	0-1	0
	25	12	21.25		0
	25	25	**21.26**		0
	50	0	21.21		0
16QAM	1	0	21.42	0-1	0
	1	25	21.36		0
	1	49	21.46		0
	25	0	21.22	0-2	0
	25	12	21.22		0
	25	25	21.26		0
	50	0	21.22		0
64QAM	1	0	21.41	0-2	0
	1	25	21.52		0
	1	49	21.46		0
	25	0	21.19	0-3	0.2
	25	12	21.15		0.2
	25	25	21.19		0.2
	50	0	21.20		0.2
256QAM	1	0	19.13	0-5	2.2
	1	25	19.36		2.2
	1	49	19.22		2.2
	25	0	19.15		2.2
	25	12	19.19		2.2
	25	25	19.22		2.2
	50	0	19.15		2.2

Table 9-30
LTE Band 5 (Cell) Antenna 5 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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	25	25	LTE B5	5	20597	843.7	2597	888.7	QPSK	12	0	21.30	21.26
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	21.10	21.21

9.2.7 LTE Band 66

Table 9-31
LTE Band 66 (AWS) Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**24.08**	23.95	23.88	0	0
	1	50	23.94	24.00	23.88		0
	1	99	24.05	23.96	24.00		0
	50	0	23.02	23.02	22.95	0-1	1
	50	25	23.15	22.97	23.13		1
	50	50	23.17	23.05	23.10		1
	100	0	23.11	22.99	23.06		1
16QAM	1	0	23.18	23.05	23.30	0-1	1
	1	50	23.69	23.94	23.59		1
	1	99	23.55	23.26	23.39		1
	50	0	22.04	22.01	22.02	0-2	2
	50	25	22.18	22.05	22.09		2
	50	50	22.17	22.13	22.14		2
	100	0	22.13	22.00	22.10		2
64QAM	1	0	22.43	22.01	22.10	0-2	2
	1	50	22.42	22.37	22.58		2
	1	99	22.16	22.20	22.22		2
	50	0	21.03	20.95	21.05	0-3	3
	50	25	21.21	20.97	21.10		3
	50	50	21.19	21.09	21.13		3
	100	0	21.16	21.00	21.16		3
256QAM	1	0	19.15	18.98	19.01	0-5	5
	1	50	19.08	19.18	19.12		5
	1	99	19.18	19.23	19.19		5
	50	0	19.06	18.94	18.98		5
	50	25	19.16	18.98	19.10		5
	50	50	19.13	19.07	19.11		5
	100	0	19.12	18.95	19.11		5

Table 9-32
LTE Band 66 (AWS) Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.45	17.74	17.74	0	0
	1	50	17.70	**17.78**	17.76		0
	1	99	17.75	17.69	17.71		0
	50	0	17.68	17.74	17.73	0-1	0
	50	25	17.71	**17.76**	17.75		0
	50	50	17.70	17.69	17.70		0
	100	0	17.67	17.74	17.71		0
16QAM	1	0	17.60	17.81	17.73	0-1	0
	1	50	17.68	17.73	17.50		0
	1	99	17.74	17.77	17.79		0
	50	0	17.88	17.92	17.91	0-2	0
	50	25	17.79	17.90	17.95		0
	50	50	17.93	17.80	17.74		0
	100	0	17.95	17.99	17.98		0
64QAM	1	0	17.83	17.93	17.86	0-2	0
	1	50	17.90	17.88	17.84		0
	1	99	17.78	17.79	17.74		0
	50	0	17.99	17.76	17.96	0-3	0
	50	25	17.90	17.98	17.97		0
	50	50	17.89	17.90	17.91		0
	100	0	17.90	17.90	17.88		0
256QAM	1	0	17.88	17.76	17.92	0-5	0
	1	50	17.69	17.69	17.89		0
	1	99	17.79	17.71	17.86		0
	50	0	17.90	17.97	17.95		0
	50	25	17.69	17.99	17.97		0
	50	50	17.80	17.70	17.78		0
	100	0	17.88	17.93	17.93		0

Table 9-33
LTE Band 66 (AWS) Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.84	17.67	17.83	0	0
	1	25	17.91	17.76	17.93		0
	1	49	17.80	17.75	17.88		0
	25	0	17.79	17.83	17.76	0-1	0
	25	12	17.87	17.84	17.79		0
	25	25	17.80	17.88	17.85		0
	50	0	17.83	17.86	17.73		0
16QAM	1	0	17.91	17.75	17.82	0-1	0
	1	25	17.87	17.72	17.79		0
	1	49	17.89	17.85	17.73		0
	25	0	17.62	17.63	17.53	0-2	0
	25	12	17.75	17.60	17.58		0
	25	25	17.67	17.68	17.71		0
	50	0	17.71	17.59	17.58		0
64QAM	1	0	17.61	17.68	17.88	0-2	0
	1	25	17.65	17.76	17.79		0
	1	49	17.74	17.84	17.67		0
	25	0	17.62	17.50	17.65	0-3	0
	25	12	17.77	17.59	17.59		0
	25	25	17.70	17.75	17.75		0
	50	0	17.77	17.68	17.62		0
256QAM	1	0	17.78	17.65	17.68	0-5	0
	1	25	17.81	17.74	17.81		0
	1	49	17.80	17.77	17.72		0
	25	0	17.63	17.66	17.62		0
	25	12	17.75	17.61	17.59		0
	25	25	17.66	17.74	17.69		0
	50	0	17.66	17.68	17.60		0

Table 9-34
LTE Band 66 (AWS) Antenna 1 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	50	50	LTE B66	20	132520	1764.8	66984	2164.8	QPSK	50	0	17.65	17.69
CA_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	50	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	50	50	17.71	17.73
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	25	25	LTE B66	10	132421	1754.9	66885	2154.9	QPSK	25	0	17.72	17.88
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	25	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	25	25	17.65	17.76

9.2.8 LTE Band 25

Table 9-35
LTE Band 25 (PCS) Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.30	24.32	24.18	0	0
	1	50	**24.35**	24.18	24.04		0
	1	99	24.18	24.17	23.96		0
	50	0	23.28	23.31	23.14	0-1	1
	50	25	23.30	23.31	23.15		1
	50	50	23.36	23.35	23.18		1
	100	0	23.35	23.30	23.14		1
16QAM	1	0	23.62	23.58	23.44	0-1	1
	1	50	23.51	23.51	23.30		1
	1	99	23.48	23.49	23.46		1
	50	0	22.28	22.30	22.17	0-2	2
	50	25	22.39	22.31	22.12		2
	50	50	22.40	22.40	22.16		2
	100	0	22.31	22.29	22.15		2
64QAM	1	0	22.39	22.36	22.20	0-2	2
	1	50	22.43	22.77	22.51		2
	1	99	22.44	22.51	22.19		2
	50	0	21.28	21.32	21.16	0-3	3
	50	25	21.42	21.35	21.15		3
	50	50	21.38	21.34	21.16		3
	100	0	21.38	21.34	21.11		3
256QAM	1	0	19.42	19.34	19.20	0-5	5
	1	50	19.31	19.33	19.19		5
	1	99	19.47	19.37	19.30		5
	50	0	19.26	19.28	19.11		5
	50	25	19.37	19.32	19.11		5
	50	50	19.39	19.33	19.17		5
	100	0	19.40	19.25	19.11		5

Table 9-36
LTE Band 25 (PCS) Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	16.44	16.80	**16.94**	0	0
	1	50	16.57	16.49	16.50		0
	1	99	16.55	16.67	16.51		0
	50	0	16.62	16.65	**16.74**	0-1	0
	50	25	16.69	16.64	16.73		0
	50	50	16.70	16.73	16.55		0
	100	0	16.68	16.64	16.69		0
16QAM	1	0	16.67	16.70	16.96	0-1	0
	1	50	16.86	16.86	16.84		0
	1	99	16.80	16.99	17.00		0
	50	0	16.67	16.70	16.59	0-2	0
	50	25	16.74	16.70	16.61		0
	50	50	16.83	16.78	16.64		0
	100	0	16.74	16.65	16.54		0
64QAM	1	0	16.86	16.75	16.80	0-2	0
	1	50	16.90	16.71	16.65		0
	1	99	16.64	16.74	16.72		0
	50	0	16.57	16.68	16.52	0-3	0
	50	25	16.68	16.64	16.48		0
	50	50	16.74	16.72	16.67		0
	100	0	16.69	16.60	16.57		0
256QAM	1	0	16.79	16.77	16.64	0-5	0
	1	50	16.67	16.71	16.68		0
	1	99	16.89	16.79	16.53		0
	50	0	16.51	16.60	16.54		0
	50	25	16.71	16.63	16.59		0
	50	50	16.62	16.73	16.62		0
	100	0	16.60	16.72	16.49		0

9.2.1 LTE Band 2

Table 9-37
LTE Band 2 (PCS) Antenna 1 Measured P_{Max} for DSI = 3 (No Motion)

LTE Band 2 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18700 (1860.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19100 (1900.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.00	24.18	24.16	0	0
	1	50	24.10	24.22	24.13		0
	1	99	24.16	24.28	24.10		0
	50	0	23.23	23.31	23.24	0-1	1
	50	25	23.37	23.31	23.18		1
	50	50	23.36	23.42	23.32		1
	100	0	23.29	23.29	23.25		1
16QAM	1	0	23.59	23.34	23.49	0-1	1
	1	50	23.87	23.60	23.56		1
	1	99	23.48	23.42	23.38		1
	50	0	22.28	22.36	22.25	0-2	2
	50	25	22.38	22.31	22.26		2
	50	50	22.41	22.43	22.34		2
	100	0	22.37	22.27	22.22		2
64QAM	1	0	22.30	22.51	22.29	0-2	2
	1	50	22.35	22.84	22.50		2
	1	99	22.38	22.45	22.23		2
	50	0	21.28	21.33	21.31	0-3	3
	50	25	21.39	21.32	21.24		3
	50	50	21.39	21.41	21.34		3
	100	0	21.34	21.34	21.23		3
256QAM	1	0	19.26	19.39	19.33	0-5	5
	1	50	19.33	19.35	19.36		5
	1	99	19.42	19.43	19.31		5
	50	0	19.27	19.35	19.25		5
	50	25	19.36	19.33	19.24		5
	50	50	19.40	19.38	19.32		5
	100	0	19.39	19.32	19.21		5

Table 9-38
LTE Band 2 (PCS) Antenna 1 Uplink Carrier Aggregation Measured P_{Max} for DSI = 3 (No Motion)

	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_2C	LTE B2	20	18900	1880.0	900	1960.0	QPSK	1	99	LTE B2	20	19098	1899.8	1098	1979.8	QPSK	1	0	24.28	24.28

Table 9-39
LTE Band 2 (PCS) Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 2 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18700 (1860.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19100 (1900.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**16.81**	16.75	16.66	0	0
	1	50	16.63	16.54	16.40		0
	1	99	16.50	16.48	16.38		0
	50	0	16.57	16.53	16.37	0-1	0
	50	25	**16.80**	16.58	16.41		0
	50	50	16.72	16.61	16.78		0
	100	0	16.64	16.57	16.79		0
16QAM	1	0	17.00	16.86	17.03	0-1	0
	1	50	16.98	16.99	16.89		0
	1	99	17.03	17.04	16.87		0
	50	0	16.78	16.89	16.81	0-2	0
	50	25	16.91	16.95	16.77		0
	50	50	16.86	17.02	16.93		0
	100	0	16.84	16.84	16.83		0
64QAM	1	0	16.80	16.79	16.91	0-2	0
	1	50	17.28	16.97	16.96		0
	1	99	16.91	16.88	16.88		0
	50	0	16.80	16.83	16.83	0-3	0
	50	25	16.93	16.83	16.87		0
	50	50	16.95	16.97	16.96		0
	100	0	16.94	16.91	16.87		0
256QAM	1	0	16.86	16.97	16.75	0-5	0
	1	50	16.80	16.93	16.95		0
	1	99	16.88	17.03	16.84		0
	50	0	16.77	16.85	16.78		0
	50	25	16.95	16.86	16.87		0
	50	50	16.86	16.92	16.85		0
	100	0	16.90	16.90	16.86		0

Table 9-40
LTE Band 2 (PCS) Antenna 1 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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_2C	LTE B2	20	18700	1860.0	600	1940.0	QPSK	50	50	LTE B2	20	18898	1879.8	898	1959.8	QPSK	50	0	16.60	16.72
CA_2C	LTE B2	20	19100	1900.0	1100	1980.0	QPSK	50	0	LTE B2	20	18902	1880.2	902	1960.2	QPSK	50	50	16.35	16.37

9.2.2 LTE Band 30

Table 9-41
LTE Band 30 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.80	0	0
	1	25	20.85		0
	1	49	**20.87**		0
	25	0	19.90	0-1	1
	25	12	19.93		1
	25	25	19.91		1
	50	0	19.91		1
16QAM	1	0	19.95	0-1	1
	1	25	20.07		1
	1	49	20.03		1
	25	0	18.90	0-2	2
	25	12	18.95		2
	25	25	18.92		2
	50	0	18.89		2
64QAM	1	0	19.07	0-2	2
	1	25	19.15		2
	1	49	18.99		2
	25	0	17.89	0-3	3
	25	12	17.89		3
	25	25	17.87		3
	50	0	17.90		3
256QAM	1	0	15.95	0-5	5
	1	25	16.01		5
	1	49	15.93		5
	25	0	15.86		5
	25	12	15.90		5
	25	25	15.86		5
	50	0	15.86		5

Table 9-42
LTE Band 30 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	14.60	0	0
	1	25	14.63		0
	1	49	**14.65**		0
	25	0	14.59	0-1	0
	25	12	**14.73**		0
	25	25	14.67		0
	50	0	14.60		0
16QAM	1	0	14.81	0-1	0
	1	25	15.00		0
	1	49	14.98		0
	25	0	14.74	0-2	0
	25	12	14.78		0
	25	25	14.72		0
	50	0	14.72		0
64QAM	1	0	14.82	0-2	0
	1	25	14.83		0
	1	49	14.75		0
	25	0	14.58	0-3	0
	25	12	14.77		0
	25	25	14.67		0
	50	0	14.72		0
256QAM	1	0	14.68	0-5	0
	1	25	14.95		0
	1	49	14.69		0
	25	0	14.69		0
	25	12	14.75		0
	25	25	14.65		0
	50	0	14.73		0

9.2.3 LTE Band 41

Table 9-43
LTE Band 41 PC3 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 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	23.72	24.27	24.01	23.95	23.79	0	0
	1	50	23.79	23.93	23.94	23.87	23.78		0
	1	99	23.93	23.86	24.01	23.88	23.68		0
	50	0	22.94	23.07	23.04	22.98	22.85	0-1	1
	50	25	22.87	23.19	23.11	23.04	22.86		1
	50	50	22.97	23.07	23.09	23.04	22.84		1
	100	0	22.67	23.10	23.07	23.05	22.84		1
16QAM	1	0	22.73	23.00	22.99	22.87	22.82	0-1	1
	1	50	22.45	23.00	23.06	22.81	22.68		1
	1	99	22.41	22.90	22.95	22.94	22.72		1
	50	0	21.53	22.04	22.03	21.98	21.88	0-2	2
	50	25	21.84	22.14	22.12	22.04	21.80		2
	50	50	21.87	22.09	22.12	22.03	21.86		2
	100	0	21.97	22.09	22.09	22.07	21.82		2
64QAM	1	0	22.00	22.18	22.03	22.10	22.13	0-2	2
	1	50	21.87	22.05	22.09	21.94	21.97		2
	1	99	21.88	21.87	22.14	22.06	21.80		2
	50	0	20.83	21.05	21.02	20.98	20.87	0-3	3
	50	25	21.03	21.12	21.10	21.11	20.83		3
	50	50	21.00	21.09	21.14	21.03	20.80		3
	100	0	20.98	21.11	21.12	21.04	20.81		3
256QAM	1	0	18.81	19.03	18.93	18.86	18.75	0-5	5
	1	50	18.85	19.02	19.00	18.86	18.65		5
	1	99	18.93	18.91	19.04	18.94	18.67		5
	50	0	18.83	19.08	19.03	18.97	18.85		5
	50	25	18.95	19.13	19.06	19.04	18.82		5
	50	50	18.98	19.06	19.11	18.99	18.79		5
	100	0	18.97	19.13	19.07	19.07	18.80		5

Table 9-44
LTE Band 41 PC2 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 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	25.80	25.75	26.10	**26.11**	26.01	0	0
	1	50	25.74	25.92	25.94	25.83	25.89		0
	1	99	25.88	25.95	26.06	26.02	25.85		0
	50	0	24.83	25.09	25.02	25.02	24.83	0-1	1
	50	25	25.00	25.06	25.06	25.05	24.83		1
	50	50	24.98	25.06	25.13	25.06	24.86		1
	100	0	24.97	25.20	25.10	25.04	24.84		1

Table 9-45
LTE Band 41 PC3 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 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	18.25	18.28	18.37	18.34	18.34	0	0
	1	50	18.34	18.37	18.38	**18.54**	18.27		0
	1	99	18.30	18.34	18.28	18.34	18.17		0
	50	0	18.30	18.31	18.38	18.39	18.34	0-1	0
	50	25	18.31	18.25	18.37	18.39	18.32		0
	50	50	18.32	18.38	18.38	**18.56**	18.34		0
	100	0	18.33	18.23	18.29	18.34	18.26		0
16QAM	1	0	18.27	18.42	18.53	18.36	18.32	0-1	0
	1	50	18.35	18.58	18.54	18.38	18.26		0
	1	99	18.39	18.43	18.58	18.43	18.21		0
	50	0	18.42	18.49	18.54	18.53	18.35	0-2	0
	50	25	18.49	18.40	18.36	18.59	18.32		0
	50	50	18.55	18.37	18.62	18.58	18.32		0
	100	0	18.46	18.38	18.54	18.55	18.29		0
64QAM	1	0	18.42	18.50	18.70	18.51	18.45	0-2	0
	1	50	18.52	18.48	18.73	18.48	18.41		0
	1	99	18.56	18.51	18.65	18.58	18.30		0
	50	0	18.35	18.47	18.54	18.51	18.41	0-3	0
	50	25	18.46	18.45	18.54	18.57	18.32		0
	50	50	18.51	18.42	18.62	18.57	18.37		0
	100	0	18.44	18.45	18.52	18.52	18.34		0
256QAM	1	0	18.27	18.54	18.60	18.35	18.36	0-5	0
	1	50	18.31	18.62	18.41	18.48	18.19		0
	1	99	18.59	18.68	18.50	18.43	18.30		0
	50	0	18.37	18.63	18.53	18.51	18.33		0
	50	25	18.45	18.70	18.57	18.58	18.31		0
	50	50	18.52	18.64	18.60	18.57	18.33		0
	100	0	18.46	18.69	18.51	18.55	18.30		0

Table 9-46
LTE Band 41 PC2 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 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	19.95	20.00	20.10	19.91	**19.96**	0	0
	1	50	20.04	19.98	20.13	19.88	19.81		0
	1	99	20.00	20.01	20.05	19.98	19.70		0
	50	0	20.03	19.97	19.94	19.91	19.81	0-1	0
	50	25	20.08	19.95	20.10	19.97	19.72		0
	50	50	19.82	19.92	20.02	**19.97**	19.77		0
	100	0	20.03	19.95	19.92	19.92	19.74		0

Table 9-47
LTE Band 41 PC3 Antenna 1 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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	18.45	18.34
CA_41C	LTE B41	20	41055	2636.5	QPSK	50	50	LTE B41	20	41253	2656.3	QPSK	50	0	18.68	18.56

Table 9-48
LTE Band 41 PC3 Antenna 6 Measured P_{Max} for DSI = 3 (No Motion) - 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	23.84	23.89	24.08	24.05	23.92	0	0
	1	50	23.72	23.90	24.10	23.97	23.79		0
	1	99	24.00	23.79	24.12	23.82	23.59		0
	50	0	22.83	22.92	22.98	22.98	22.78	0-1	1
	50	25	22.94	23.06	23.11	23.00	22.79		1
	50	50	22.89	23.04	23.05	22.93	22.74		1
	100	0	22.89	23.03	23.04	23.04	22.82		1
16QAM	1	0	23.13	22.94	22.96	23.16	22.93	0-1	1
	1	50	23.06	23.03	23.08	23.07	22.87		1
	1	99	23.18	23.05	23.01	22.81	22.63		1
	50	0	21.94	21.93	21.88	22.02	21.89	0-2	2
	50	25	22.13	22.03	22.05	22.07	21.82		2
	50	50	22.12	22.02	22.06	21.96	21.82		2
	100	0	21.98	21.98	22.00	22.00	21.83		2
64QAM	1	0	22.39	22.12	22.27	22.44	22.25	0-2	2
	1	50	22.66	22.30	22.63	22.45	22.20		2
	1	99	22.67	22.19	22.49	22.24	22.10		2
	50	0	20.96	21.07	21.10	21.12	20.97	0-3	3
	50	25	21.05	21.14	21.16	21.19	21.05		3
	50	50	21.09	21.14	21.22	21.08	20.89		3
	100	0	21.05	21.07	21.16	21.17	20.92		3
256QAM	1	0	19.13	19.29	18.88	18.75	18.74	0-5	5
	1	50	19.39	19.56	19.15	18.58	18.66		5
	1	99	19.39	19.03	18.75	18.53	18.50		5
	50	0	19.41	19.56	19.16	18.66	18.79		5
	50	25	19.56	19.64	19.15	18.75	18.74		5
	50	50	19.47	19.43	19.07	18.53	18.60		5
	100	0	19.50	19.53	18.91	18.65	18.53		5

Table 9-49
LTE Band 41 PC2 Antenna 6 Measured P_{Max} for DSI = 3 (No Motion) - 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	25.60	25.72	25.78	25.66	25.56	0	0
	1	50	25.40	25.40	25.94	25.69	25.54		0
	1	99	25.35	25.71	26.15	25.75	25.63		0
	50	0	25.18	25.10	25.10	24.83	24.71	0-1	1
	50	25	25.26	25.23	25.19	25.13	24.92		1
	50	50	25.24	25.15	25.19	25.00	24.82		1
	100	0	25.21	25.13	25.11	25.10	24.88		1

Table 9-50
LTE Band 41 PC3 Antenna 6 Measured P_{Limit} for DSI = 6 (Motion) - 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	18.89	18.80	18.92	18.94	18.85	0	0
	1	50	18.97	18.93	18.95	18.99	18.90		0
	1	99	**19.02**	18.95	18.98	18.86	18.82		0
	50	0	18.94	18.94	18.89	19.02	18.93	0-1	0
	50	25	19.05	19.02	19.04	19.05	19.00		0
	50	50	**19.10**	19.02	19.04	18.95	18.93		0
	100	0	18.99	19.01	19.00	18.99	18.94		0
16QAM	1	0	18.84	18.89	18.82	18.85	18.72	0-1	0
	1	50	18.99	18.80	19.01	19.24	18.89		0
	1	99	18.90	18.79	18.91	18.65	19.15		0
	50	0	19.01	18.97	19.01	19.03	18.99	0-2	0
	50	25	19.15	19.06	19.10	19.05	18.98		0
	50	50	19.13	19.06	19.17	18.96	19.01		0
	100	0	19.14	19.03	19.08	19.02	18.99		0
64QAM	1	0	19.00	19.09	19.15	19.18	18.63	0-2	0
	1	50	18.98	19.15	18.98	19.15	18.98		0
	1	99	19.05	19.07	19.09	18.78	19.23		0
	50	0	18.98	18.99	19.02	19.06	18.97	0-3	0
	50	25	19.12	19.09	19.14	19.10	18.99		0
	50	50	19.13	19.07	19.17	18.98	18.98		0
	100	0	19.07	19.02	19.03	18.98	18.91		0
256QAM	1	0	18.66	18.98	18.62	18.32	18.37	0-5	0
	1	50	19.00	18.86	18.41	18.28	18.38		0
	1	99	18.95	18.66	18.22	18.26	18.29		0
	50	0	18.96	18.96	18.58	18.33	18.26		0
	50	25	19.10	18.89	18.43	18.26	18.26		0
	50	50	19.03	18.78	18.37	18.29	18.42		0
	100	0	19.01	18.94	18.40	18.32	18.44		0

Table 9-51
LTE Band 41 PC2 Antenna 6 Measured P_{Limit} for DSI = 6 (Motion) - 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	20.57	20.61	20.65	20.68	20.72	0	0
	1	50	20.62	20.66	20.57	20.75	20.71		0
	1	99	**20.96**	20.60	20.58	20.57	20.69		0
	50	0	20.62	20.57	20.63	20.34	20.83	0-1	0
	50	25	20.77	20.69	20.70	20.38	**20.95**		0
	50	50	20.66	20.76	20.69	20.67	20.64		0
	100	0	20.70	20.60	20.67	20.61	20.65		0

9.2.4 LTE Band 48

Table 9-52
LTE Band 48 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	**19.40**	19.21	19.24	19.17	0	0
	1	50	19.20	19.16	19.06	19.17		0
	1	99	19.25	19.26	19.13	19.21		0
	50	0	18.31	18.09	18.14	18.09	0-1	1
	50	25	18.33	18.27	18.20	18.12		1
	50	50	18.34	18.22	18.21	18.15		1
	100	0	18.28	18.16	18.13	18.10		1
16QAM	1	0	18.40	18.18	18.15	18.25	0-1	1
	1	50	18.27	18.45	18.24	18.15		1
	1	99	18.33	18.44	18.29	18.19		1
	50	0	17.28	17.06	17.11	17.11	0-2	2
	50	25	17.32	17.25	17.16	17.13		2
	50	50	17.27	17.19	17.15	17.15		2
	100	0	17.34	17.21	17.12	17.07		2
64QAM	1	0	17.40	17.20	17.51	17.25	0-2	2
	1	50	17.27	17.39	17.37	17.34		2
	1	99	17.09	17.65	17.48	17.30		2
	50	0	16.33	16.09	16.15	16.10	0-3	3
	50	25	16.30	16.23	16.14	16.16		3
	50	50	16.35	16.18	16.17	16.12		3
	100	0	16.30	16.23	16.13	16.16		3
256QAM	1	0	14.50	14.22	14.42	14.37	0-5	5
	1	50	14.27	14.17	14.61	14.72		5
	1	99	14.58	14.15	14.38	14.95		5
	50	0	14.45	14.19	14.64	14.63		5
	50	25	14.47	14.09	14.63	14.86		5
	50	50	14.53	14.05	14.54	14.98		5
	100	0	14.52	14.08	14.58	14.82		5

Table 9-53
LTE Band 48 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	**17.65**	17.58	17.60	17.46	0	0
	1	50	17.54	17.43	17.56	17.41		0
	1	99	17.58	17.56	17.25	17.45		0
	50	0	17.64	17.40	17.48	17.33	0-1	0
	50	25	**17.65**	17.55	17.49	17.45		0
	50	50	17.61	17.52	17.41	17.40		0
	100	0	17.63	17.51	17.38	17.38		0
16QAM	1	0	17.71	17.39	17.36	17.33	0-1	0
	1	50	17.61	17.67	17.20	17.48		0
	1	99	17.48	17.57	17.18	17.11		0
	50	0	17.06	16.93	16.95	16.88	0-2	0
	50	25	17.06	17.07	16.93	16.85		0
	50	50	17.17	17.06	16.98	16.92		0
	100	0	17.09	17.07	16.98	16.90		0
64QAM	1	0	17.29	17.53	17.31	17.21	0-2	0
	1	50	17.66	17.34	17.10	17.01		0
	1	99	17.16	17.29	17.13	17.22		0
	50	0	16.09	16.07	16.10	16.05	0-3	0.8
	50	25	16.08	16.03	16.04	16.08		0.8
	50	50	16.06	16.03	16.09	16.17		0.8
	100	0	16.11	16.03	16.00	16.08		0.8
256QAM	1	0	14.52	14.40	14.06	14.25	0-5	2.8
	1	50	14.20	14.50	14.16	14.15		2.8
	1	99	14.35	14.48	14.28	14.58		2.8
	50	0	14.38	14.64	14.02	14.35		2.8
	50	25	14.49	14.70	14.25	14.44		2.8
	50	50	14.37	14.69	14.27	14.36		2.8
	100	0	14.85	14.68	14.18	14.21		2.8

Table 9-54
LTE Band 48 Antenna 6 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	19.60	19.29	19.39	19.44	0	0
	1	50	19.64	19.38	19.48	19.64		0
	1	99	19.48	**19.30**	19.43	19.68		0
	50	0	18.74	18.46	18.60	18.68	0-1	1
	50	25	18.74	18.46	18.63	18.77		1
	50	50	18.76	18.48	18.66	18.75		1
	100	0	18.74	18.43	18.64	18.71		1
16QAM	1	0	18.52	18.30	18.39	18.50	0-1	1
	1	50	18.63	18.40	18.42	18.70		1
	1	99	18.51	18.44	18.42	18.86		1
	50	0	17.75	17.50	17.57	17.67	0-2	2
	50	25	17.76	17.43	17.60	17.77		2
	50	50	17.69	17.48	17.64	17.76		2
	100	0	17.75	17.43	17.61	17.78		2
64QAM	1	0	17.77	17.43	17.53	17.52	0-2	2
	1	50	17.84	17.54	17.63	17.77		2
	1	99	17.67	17.50	17.59	17.72		2
	50	0	16.73	16.46	16.62	16.67	0-3	3
	50	25	16.78	16.45	16.61	16.80		3
	50	50	16.70	16.50	16.64	16.76		3
	100	0	16.74	16.43	16.61	16.76		3
256QAM	1	0	14.64	14.39	14.49	14.53	0-5	5
	1	50	14.67	14.47	14.61	14.61		5
	1	99	14.65	14.53	14.54	14.86		5
	50	0	14.75	14.47	14.60	14.71		5
	50	25	14.77	14.46	14.63	14.76		5
	50	50	14.73	14.49	14.65	14.76		5
	100	0	14.72	14.43	14.61	14.77		5

Table 9-55
LTE Band 48 Antenna 6 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	16.15	16.14	16.10	16.09	0	0
	1	50	16.17	16.17	16.14	15.99		0
	1	99	16.15	**16.20**	16.07	15.98		0
	50	0	16.30	16.28	16.33	16.11	0-1	0
	50	25	16.31	16.32	16.32	16.07		0
	50	50	16.33	**16.34**	16.26	16.09		0
	100	0	16.16	16.19	16.18	16.09		0
16QAM	1	0	16.12	15.83	15.83	15.98	0-1	0
	1	50	16.36	15.81	15.93	16.13		0
	1	99	15.99	15.80	15.95	16.17		0
	50	0	16.25	15.95	16.04	16.16	0-2	0
	50	25	16.22	15.94	16.13	16.27		0
	50	50	16.20	15.98	16.13	16.21		0
	100	0	16.21	15.90	16.09	16.23		0
64QAM	1	0	16.20	15.90	15.99	16.00	0-2	0
	1	50	16.16	15.97	16.05	16.15		0
	1	99	16.13	16.06	15.97	16.24		0
	50	0	16.19	15.94	16.02	16.12	0-3	0
	50	25	16.21	15.91	16.08	16.19		0
	50	50	16.17	15.94	16.12	16.21		0
	100	0	16.20	15.82	16.09	16.20		0
256QAM	1	0	14.52	14.07	14.31	14.25	0-5	1.5
	1	50	14.43	14.23	14.34	14.50		1.5
	1	99	14.47	14.19	14.38	14.53		1.5
	50	0	14.54	14.26	14.35	14.46		1.5
	50	25	14.53	14.25	14.38	14.59		1.5
	50	50	14.50	14.25	14.41	14.54		1.5
	100	0	14.52	14.22	14.42	14.53		1.5

Table 9-56
LTE Band 48 Antenna 6 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 6 (Motion)

	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	16.20	16.15

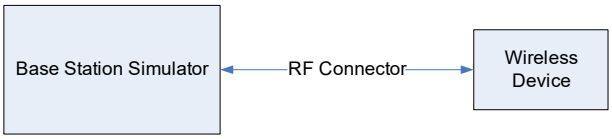

Figure 9-2
Power Measurement Setup

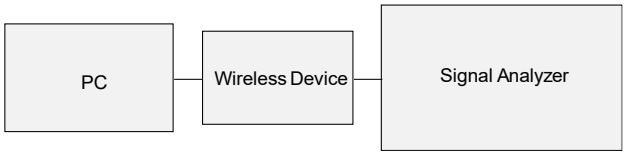

Figure 9-3
Power Measurement Setup – LTE FTM

9.3 NR Conducted Powers

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 the LTE and NR Lower Bandwidth Conducted Powers Appendix.

Note: Some bands do not support non-overlapping channels. Per FCC Guidance, 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.

9.3.1 NR Band n71

Table 9-57
NR Band n71 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.37	0	0.0
	1	53	**23.40**		0.0
	1	104	23.30		0.0
	50	0	22.40	0-1	1.0
	50	28	23.44	0	0.0
	50	56	22.34	0-1	1.0
	100	0	22.51		1.0
DFT-s-OFDM 16QAM	1	1	22.40	0-1	1.0
CP-OFDM QPSK	1	1	21.94	0-1.5	1.5

Table 9-58
NR Band n71 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.30	0	0.0
	1	53	**20.34**		0.0
	1	104	20.32		0.0
	50	0	20.40	0-1	0.0
	50	28	20.39	0	0.0
	50	56	**20.46**	0-1	0.0
	100	0	20.30		0.0
DFT-s-OFDM 16QAM	1	1	20.34	0-1	0.0
CP-OFDM QPSK	1	1	20.70	0-1.5	0.0

Table 9-59
NR Band n71 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.86	0	0.0
	1	53	23.83		0.0
	1	104	23.74		0.0
	50	0	22.89	0-1	1.0
	50	28	**23.92**	0	0.0
	50	56	22.80	0-1	1.0
	100	0	22.90		1.0
DFT-s-OFDM 16QAM	1	1	22.83	0-1	1.0
CP-OFDM QPSK	1	1	22.43	0-1.5	1.5

Table 9-60
NR Band n71 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**20.46**	0	0.0
	1	53	20.32		0.0
	1	104	20.27		0.0
	50	0	**20.45**	0-1	0.0
	50	28	20.41	0	0.0
	50	56	20.41	0-1	0.0
	100	0	20.38		0.0
DFT-s-OFDM 16QAM	1	1	20.67	0-1	0.0
CP-OFDM QPSK	1	1	20.23	0-1.5	0.0

9.3.1 NR Band n12

Table 9-61
NR Band n12 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) – 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**23.66**	0	0.0
	1	40	23.50		0.0
	1	77	23.40		0.0
	36	0	22.61	0-1	1.0
	36	22	23.60	0	0.0
	36	43	22.52	0-1	1.0
	75	0	22.67		1.0
DFT-s-OFDM 16QAM	1	1	22.63	0-1	1.0
CP-OFDM QPSK	1	1	22.10	0-1.5	1.5

Table 9-62
NR Band n12 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**20.35**	0	0.0
	1	40	20.30		0.0
	1	77	20.30		0.0
	36	0	**20.38**	0-1	0.0
	36	22	20.30	0	0.0
	36	43	20.30	0-1	0.0
	75	0	20.25		0.0
DFT-s-OFDM 16QAM	1	1	20.47	0-1	0.0
CP-OFDM QPSK	1	1	20.25	0-1.5	0.0

Table 9-63
NR Band n12 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) – 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**24.20**	0	0.0
	1	40	24.17		0.0
	1	77	24.06		0.0
	36	0	23.21	0-1	1.0
	36	22	24.19	0	0.0
	36	43	23.13	0-1	1.0
	75	0	23.21		1.0
DFT-s-OFDM 16QAM	1	1	23.19	0-1	1.0
CP-OFDM QPSK	1	1	22.71	0-1.5	1.5

Table 9-64
NR Band n12 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	19.06	0	0.0
	1	40	**19.23**		0.0
	1	77	19.05		0.0
	36	0	19.09	0-1	0.0
	36	22	19.21	0	0.0
	36	43	**19.22**	0-1	0.0
	75	0	19.14		0.0
DFT-s-OFDM 16QAM	1	1	19.11	0-1	0.0
CP-OFDM QPSK	1	1	19.17	0-1.5	0.0

9.3.1 NR Band n14

Table 9-65
NR Band n14 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) – 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.53	0	0.0
	1	26	**23.60**		0.0
	1	50	23.58		0.0
	25	0	22.64	0-1	1.0
	25	14	23.54	0	0.0
	25	27	22.66	0-1	1.0
	50	0	22.65		1.0
DFT-s-OFDM 16QAM	1	1	22.63	0-1	1.0
CP-OFDM QPSK	1	1	22.00	0-1.5	1.5

Table 9-66
NR Band n14 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	19.87	0	0.0
	1	26	19.90		0.0
	1	50	**19.92**		0.0
	25	0	19.89	0-1	0.0
	25	14	19.93	0	0.0
	25	27	**19.94**	0-1	0.0
	50	0	19.90		0.0
DFT-s-OFDM 16QAM	1	1	19.86	0-1	0.0
CP-OFDM QPSK	1	1	19.79	0-1.5	0.0

Table 9-67
NR Band n14 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) – 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.95	0	0.0
	1	26	**24.00**		0.0
	1	50	23.91		0.0
	25	0	22.95	0-1	1.0
	25	14	23.98	0	0.0
	25	27	22.98	0-1	1.0
	50	0	22.89		1.0
DFT-s-OFDM 16QAM	1	1	22.90	0-1	1.0
CP-OFDM QPSK	1	1	22.40	0-1.5	1.5

Table 9-68
NR Band n14 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.37	0	0.0
	1	26	**20.54**		0.0
	1	50	20.28		0.0
	25	0	20.41	0-1	0.0
	25	14	20.48	0	0.0
	25	27	**20.52**	0-1	0.0
	50	0	20.49		0.0
DFT-s-OFDM 16QAM	1	1	20.50	0-1	0.0
CP-OFDM QPSK	1	1	20.31	0-1.5	0.0

9.3.1 NR Band n26

Table 9-69
NR Band n26 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.33	0	0.0
	1	53	**23.40**		0.0
	1	104	23.21		0.0
	50	0	22.36	0-1	1.0
	50	28	23.30	0	0.0
	50	56	22.23	0-1	1.0
	100	0	22.44		1.0
DFT-s-OFDM 16QAM	1	1	22.27	0-1	1.0
CP-OFDM QPSK	1	1	21.78	0-1.5	1.5

Table 9-70
NR Band n26 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**20.96**	0	0.0
	1	53	20.78		0.0
	1	104	20.78		0.0
	50	0	20.82	0-1	0.0
	50	28	20.80	0	0.0
	50	56	**20.88**	0-1	0.0
	100	0	20.80		0.0
DFT-s-OFDM 16QAM	1	1	21.37	0-1	0.0
CP-OFDM QPSK	1	1	20.91	0-1.5	0.0

Table 9-71
NR Band n26 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**24.20**	0	0.0
	1	53	24.19		0.0
	1	104	24.19		0.0
	50	0	23.22	0-1	1.0
	50	28	24.17	0	0.0
	50	56	23.20	0-1	1.0
	100	0	23.32		1.0
DFT-s-OFDM 16QAM	1	1	23.15	0-1	1.0
CP-OFDM QPSK	1	1	22.69	0-1.5	1.5

Table 9-72
NR Band n26 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.39**	0	0.0
	1	53	21.32		0.0
	1	104	21.21		0.0
	50	0	**21.46**	0-1	0.0
	50	28	21.39	0	0.0
	50	56	21.28	0-1	0.0
	100	0	21.37		0.0
DFT-s-OFDM 16QAM	1	1	21.58	0-1	0.0
CP-OFDM QPSK	1	1	21.28	0-1.5	0.0

9.3.2 NR Band n5

Table 9-73
NR Band n5 Antenna 2 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**23.79**	0	0.0
	1	53	23.69		0.0
	1	104	23.60		0.0
	50	0	22.75	0-1	1.0
	50	28	23.73	0	0.0
	50	56	22.60	0-1	1.0
	100	0	22.79		1.0
DFT-s-OFDM 16QAM	1	1	22.60	0-1	1.0
CP-OFDM QPSK	1	1	22.37	0-1.5	1.5

Table 9-74
NR Band n5 Antenna 2 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.02**	0	0.0
	1	53	20.87		0.0
	1	104	20.81		0.0
	50	0	20.95	0-1	0.0
	50	28	**21.05**	0	0.0
	50	56	20.99	0-1	0.0
	100	0	21.00		0.0
DFT-s-OFDM 16QAM	1	1	21.50	0-1	0.0
CP-OFDM QPSK	1	1	20.97	0-1.5	0.0

Table 9-75
NR Band n5 Antenna 5 Measured P_{Max} for DSI = 3 (No Motion) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**24.27**	0	0.0
	1	53	24.16		0.0
	1	104	24.07		0.0
	50	0	23.21	0-1	1.0
	50	28	24.24	0	0.0
	50	56	23.16	0-1	1.0
	100	0	23.28		1.0
DFT-s-OFDM 16QAM	1	1	23.25	0-1	1.0
CP-OFDM QPSK	1	1	22.75	0-1.5	1.5

Table 9-76
NR Band n5 Antenna 5 Measured P_{Limit} for DSI = 6 (Motion) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.42**	0	0.0
	1	53	21.39		0.0
	1	104	21.34		0.0
	50	0	**21.53**	0-1	0.0
	50	28	21.52	0	0.0
	50	56	21.43	0-1	0.0
	100	0	21.40		0.0
DFT-s-OFDM 16QAM	1	1	21.50	0-1	0.0
CP-OFDM QPSK	1	1	21.29	0-1.5	0.0

9.3.3 NR Band n66

Table 9-77
NR Band n66 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	24.12	0	0.0
	1	108	24.16		0.0
	1	214	**24.24**		0.0
	108	0	23.19	0-1	1.0
	108	54	24.15	0	0.0
	108	108	23.29	0-1	1.0
	216	0	23.13		1.0
DFT-s-OFDM 16QAM	1	1	22.94	0-1	1.0
CP-OFDM QPSK	1	1	22.54	0-1.5	1.5

Table 9-78
NR Band n66 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	16.79	0	0.0
	1	108	16.85		0.0
	1	214	**16.93**		0.0
	108	0	16.80	0-1	0.0
	108	54	16.95	0	0.0
	108	108	**17.07**	0-1	0.0
	216	0	16.91		0.0
DFT-s-OFDM 16QAM	1	1	16.69	0-1	0.0
CP-OFDM QPSK	1	1	16.90	0-1.5	0.0

9.3.1 NR Band n25

Table 9-79
NR Band n25 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.56	0	0.0
	1	108	23.57		0.0
	1	214	**24.03**		0.0
	108	0	23.28	0-1	1.0
	108	54	24.01	0	0.0
	108	108	23.31	0-1	1.0
	216	0	23.29		1.0
DFT-s-OFDM 16QAM	1	1	23.15	0-1	1.0
CP-OFDM QPSK	1	1	22.54	0-1.5	1.5

Table 9-80
NR Band n25 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	15.98	0	0.0
	1	108	16.11		0.0
	1	214	**16.19**		0.0
	108	0	16.13	0-1	0.0
	108	54	16.16	0	0.0
	108	108	**16.21**	0-1	0.0
	216	0	16.18		0.0
DFT-s-OFDM 16QAM	1	1	15.86	0-1	0.0
CP-OFDM QPSK	1	1	15.96	0-1.5	0.0

9.3.1 NR Band n30

Table 9-81
NR Band n30 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.83	0	0.0
	1	26	**20.98**		0.0
	1	50	20.96		0.0
	25	0	19.89	0-1	1.0
	25	14	20.91	0	0.0
	25	27	19.94	0-1	1.0
	50	0	19.92		1.0
DFT-s-OFDM 16QAM	1	1	19.77	0-1	1.0
CP-OFDM QPSK	1	1	19.30	0-1.5	1.5

Table 9-82
NR Band n30 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	14.38	0	0.0
	1	26	14.50		0.0
	1	50	**14.59**		0.0
	25	0	14.41	0-1	0.0
	25	14	14.49	0	0.0
	25	27	**14.50**	0-1	0.0
	50	0	14.47		0.0
DFT-s-OFDM 16QAM	1	1	14.36	0-1	0.0
CP-OFDM QPSK	1	1	14.33	0-1.5	0.0

9.3.1 NR Band n41

Table 9-83
NR Band n41 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**26.35**	0	0.0
	1	137	26.18		0.0
	1	271	26.28		0.0
	135	0	25.44	0-1	1.0
	135	69	25.48	0	0.0
	135	138	25.43	0-1	1.0
	270	0	25.31		1.0
DFT-s-OFDM 16QAM	1	1	25.40	0-1	1.0
CP-OFDM QPSK	1	1	24.95	0-1.5	1.5

Table 9-84
NR Band n41 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**16.53**	0	0.0
	1	137	16.40		0.0
	1	271	16.48		0.0
	135	0	**16.48**	0-1	0.0
	135	69	16.44	0	0.0
	135	138	16.44	0-1	0.0
	270	0	16.45		0.0
DFT-s-OFDM 16QAM	1	1	16.41	0-1	0.0
CP-OFDM QPSK	1	1	16.40	0-1.5	0.0

Table 9-85
NR Band n41 Antenna 6 Measured P_{Max} for DSI = 3 (No Motion) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	26.00	0	0.0
	1	137	26.09		0.0
	1	271	**26.17**		0.0
	135	0	25.48	0-1	1.0
	135	69	26.13	0	0.0
	135	138	25.40	0-1	1.0
	270	0	25.32		1.0
DFT-s-OFDM 16QAM	1	1	25.11	0-1	1.0
CP-OFDM QPSK	1	1	25.43	0-1.5	1.5

Table 9-86
NR Band n41 Antenna 6 Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	16.22	0	0.0
	1	137	16.41		0.0
	1	271	**16.57**		0.0
	135	0	16.50	0-1	0.0
	135	69	**16.57**	0	0.0
	135	138	16.54	0-1	0.0
	270	0	16.50		0.0
DFT-s-OFDM 16QAM	1	1	16.56	0-1	0.0
CP-OFDM QPSK	1	1	16.46	0-1.5	0.0

9.3.1 NR Band n48

Table 9-87
NR Band n48 Antenna 1 Measured P_{Max} for DSI = 3 (No Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	19.45	19.08	19.05	0	0.0
	1	53	19.32	19.16	19.03		0.0
	1	104	**19.51**	19.07	19.12		0.0
	50	0	18.46	18.22	18.12	0-1	1.0
	50	28	19.21	19.19	19.01	0	0.0
	50	56	18.30	18.13	18.12	0-1	1.0
	100	0	18.34	18.15	18.18		1.0
DFT-s-OFDM 16QAM	1	1	18.82	18.53	18.08	0-1	1.0
CP-OFDM QPSK	1	1	17.87	17.69	17.72	0-1.5	1.5

Table 9-88
NR Band n48 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	15.30	14.92	14.81	0	0.0
	1	53	15.46	14.86	14.80		0.0
	1	104	**15.50**	14.87	14.82		0.0
	50	0	15.30	14.84	14.81	0-1	0.0
	50	28	15.35	14.81	14.83	0	0.0
	50	56	**15.36**	14.80	14.80	0-1	0.0
	100	0	15.32	14.81	14.89		0.0
DFT-s-OFDM 16QAM	1	1	15.36	15.01	14.92	0-1	0.0
CP-OFDM QPSK	1	1	15.30	14.96	14.82	0-1.5	0.0

Table 9-89
NR Band n48 Antennas 6 Measured P_{Max} for DSI = 3 (No Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	**19.55**	19.07	19.14	0	0.0
	1	53	19.53	19.10	19.08		0.0
	1	104	19.51	19.41	19.02		0.0
	50	0	18.51	18.10	18.13	0-1	1.0
	50	28	19.40	19.04	19.07	0	0.0
	50	56	18.45	18.22	18.05	0-1	1.0
	100	0	18.48	18.16	18.15		1.0
DFT-s-OFDM 16QAM	1	1	18.32	18.08	18.16	0-1	1.0
CP-OFDM QPSK	1	1	18.01	17.56	17.75	0-1.5	1.5

Table 9-90
NR Band n48 Antennas 6 Measured P_{Limit} for DSI = 6 (Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	14.19	14.07	13.96	0	0.0
	1	53	**14.28**	14.05	13.86		0.0
	1	104	14.18	14.13	13.78		0.0
	50	0	**14.21**	14.00	13.96	0-1	0.0
	50	28	14.15	13.95	13.80	0	0.0
	50	56	14.12	13.90	13.69	0-1	0.0
	100	0	14.16	13.96	13.75		0.0
DFT-s-OFDM 16QAM	1	1	14.36	14.40	14.14	0-1	0.0
CP-OFDM QPSK	1	1	14.32	14.05	14.11	0-1.5	0.0

Table 9-91
NR Band n48 SRS Antenna 3 & 4 Measured P_{Max} for DSI = 3 (No Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth			
	Channel		
Antenna	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)
	Conducted Power [dBm]		
SRS #2 Ant 3	**20.66**	20.48	20.63
SRS #3 Ant 4	**20.15**	20.06	19.97

Table 9-92
NR Band n48 SRS Antenna 3 & 4 Measured P_{Limit} for DSI = 6 (Motion) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth			
	Channel		
Antenna	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)
	Conducted Power [dBm]		
SRS #2 Ant 3	**14.20**	13.77	13.84
SRS #3 Ant 4	**12.66**	12.51	12.00

9.3.1 NR Band n77

Table 9-93
NR Band n77 Antenna 1 DoD Measured P_{Max} for DSI = 3 (No Motion) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	25.02	0	0.0
	1	137	25.26		0.0
	1	271	**25.31**		0.0
	135	0	24.15	0-1	1.0
	135	69	25.17	0	0.0
	135	138	24.16	0-1	1.0
	270	0	24.21		1.0
DFT-s-OFDM 16QAM	1	1	24.07	0-1	1.0
CP-OFDM QPSK	1	1	23.57	0-1.5	1.5

Table 9-94
NR Band n77 Antenna 1 Measured P_{Limit} for DSI = 6 (Motion) - 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 QPSK	1	1	**14.92**	14.80	0	0.0
	1	137	14.84	14.91		0.0
	1	271	14.83	14.80		0.0
	135	0	**15.00**	14.89	0-1	0.0
	135	69	14.81	14.83	0	0.0
	135	138	14.80	14.82	0-1	0.0
	270	0	14.80	14.90		0.0
DFT-s-OFDM 16QAM	1	1	14.85	14.40	0-1	0.0
CP-OFDM QPSK	1	1	14.85	14.85	0-1.5	0.0

Table 9-95
NR Band n77 Antenna 1 DoD Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	14.90	0	0.0
	1	137	15.04		0.0
	1	271	**15.37**		0.0
	135	0	14.95	0-1	0.0
	135	69	15.00	0	0.0
	135	138	15.11	0-1	0.0
	270	0	14.99		0.0
DFT-s-OFDM 16QAM	1	1	15.07	0-1	0.0
CP-OFDM QPSK	1	1	14.83	0-1.5	0.0

Table 9-96
NR Band n77 Antenna 6 Measured P_{Max} for DSI = 3 (No Motion) - 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 QPSK	1	1	25.09	25.06	0	0.0
	1	137	25.21	25.27		0.0
	1	271	**25.28**	25.01		0.0
	135	0	24.27	24.19	0-1	1.0
	135	69	25.13	25.12	0	0.0
	135	138	24.24	24.13	0-1	1.0
	270	0	24.28	24.13		1.0
DFT-s-OFDM 16QAM	1	1	24.31	24.03	0-1	1.0
CP-OFDM QPSK	1	1	24.14	23.55	0-1.5	1.5

Table 9-97
NR Band n77 Antenna 6 Measured P_{Limit} for DSI = 6 (Motion) - 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 QPSK	1	1	14.17	14.00	0	0.0
	1	137	14.03	**14.35**		0.0
	1	271	13.90	13.97		0.0
	135	0	14.23	**14.35**	0-1	0.0
	135	69	14.07	14.01	0	0.0
	135	138	13.90	14.02	0-1	0.0
	270	0	14.03	14.33		0.0
DFT-s-OFDM 16QAM	1	1	14.33	13.88	0-1	0.0
CP-OFDM QPSK	1	1	14.14	14.34	0-1.5	0.0

Table 9-98
NR Band n77 Antenna 6 DoD Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	14.43	0	0.0
	1	137	14.54		0.0
	1	271	14.52		0.0
	135	0	**14.56**	0-1	0.0
	135	69	14.50	0	0.0
	135	138	14.56	0-1	0.0
	270	0	14.49		0.0
DFT-s-OFDM 16QAM	1	1	14.65	0-1	0.0
CP-OFDM QPSK	1	1	14.21	0-1.5	0.0

Table 9-99
NR Band n77 SRS Antennas 3 & 4 Measured P_{Max} for DSI = 3 (No Motion) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant 3	25.68	**25.29**
SRS #3 Ant 4	**25.85**	25.92

Table 9-100
NR Band n77 SRS Antennas 3 & 4 Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant 3	**12.51**	12.50
SRS #3 Ant 4	**13.57**	13.50

Table 9-101
NR Band n77 SRS DoD Antennas 3 & 4 Measured P_{Limit} for DSI = 6 (Motion) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS #2 Ant 3	**12.80**
SRS #3 Ant 4	**13.98**

Figure 9-4
Power Measurement Setup – NR Online

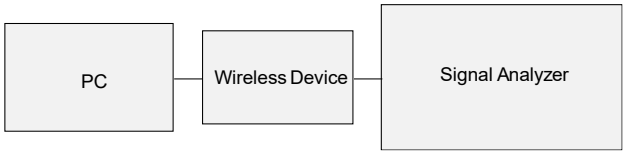

Figure 9-5
Power Measurement Setup – NR FTM

9.4 WLAN Conducted Powers

Table 9-102
2.4 GHz WLAN Measured P_{max} (No Motion) Average RF Power - Chain 0

2.4GHz WIFI (20MHz 802.11b SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	19.33
2417	2		20.23
2437	6		20.24
2462	11		20.11

2.4GHz WIFI (20MHz 802.11ac SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.52
2417	2		15.61
2422	3		18.84
2437	6		18.59
2452	9		18.60
2457	10		14.86
2462	11		13.82

2.4GHz WIFI (20MHz 802.11g SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	15.08
2417	2		17.18
2422	3		18.23
2427	4		18.62
2437	6		18.56
2457	10		18.50
2462	11		13.82

2.4GHz WIFI (20MHz 802.11ax SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.08
2417	2		15.72
2422	3		18.97
2437	6		18.70
2452	9		18.70
2457	10		14.94
2462	11		13.90

2.4GHz WIFI (20MHz 802.11n SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.50
2417	2		15.62
2422	3		18.84
2437	6		18.59
2452	9		18.60
2457	10		14.87
2462	11		13.83

2.4GHz WIFI (20MHz 802.11be SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.11
2417	2		15.70
2422	3		18.90
2437	6		18.70
2452	9		18.58
2457	10		14.96
2462	11		13.89

Table 9-103
2.4 GHz WLAN Measured P_{limit} Average RF Power for DSI = 1 (Motion) - Chain 0

2.4GHz WIFI (20MHz 802.11b SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	19.33
2417	2		19.34
2437	6		19.35
2462	11		19.29

2.4GHz WIFI (20MHz 802.11g SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	15.08
2417	2		17.18
2422	3		18.23
2437	6		18.56
2457	10		18.50
2462	11		13.82

2.4GHz WIFI (20MHz 802.11n SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.50
2417	2		15.62
2422	3		18.84
2437	6		18.59
2452	9		18.60
2457	10		14.87
2462	11		13.83

2.4GHz WIFI (20MHz 802.11ac SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.52
2417	2		15.61
2422	3		18.84
2437	6		18.59
2452	9		18.60
2457	10		14.86
2462	11		13.82

2.4GHz WIFI (20MHz 802.11ax SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.08
2417	2		15.72
2422	3		18.97
2437	6		18.70
2452	9		18.70
2457	10		14.94
2462	11		13.90

2.4GHz WIFI (20MHz 802.11be SISO Chain 0)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.11
2417	2		15.70
2422	3		18.90
2437	6		18.70
2452	9		18.58
2457	10		14.96
2462	11		13.89

Table 9-104
2.4 GHz WLAN Measured Pmax Average RF Power for Pmax (No Motion) & DSI = 1 (Motion) - Chain 1

2.4GHz WIFI (20MHz 802.11b SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	19.25
2417	2		20.41
2437	6		20.42
2462	11		20.33

2.4GHz WIFI (20MHz 802.11g SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	15.44
2417	2		17.09
2422	3		18.15
2437	6		18.86
2457	10		18.88
2462	11		13.75

2.4GHz WIFI (20MHz 802.11n SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.41
2417	2		15.90
2422	3		18.54
2437	6		18.72
2452	9		18.90
2457	10		14.81

2.4GHz WIFI (20MHz 802.11ac SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.46
2417	2		15.94
2422	3		18.95
2437	6		18.90
2452	9		18.92
2457	10		14.81

2.4GHz WIFI (20MHz 802.11ax SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.03
2417	2		15.54
2422	3		18.66
2437	6		18.61
2452	9		18.53
2457	10		14.92

2.4GHz WIFI (20MHz 802.11be SISO Chain 1)			
Freq. [MHz]	Channel	Detector	Conducted Power [dBm]
2412	1	Average	14.02
2417	2		15.52
2422	3		18.65
2437	6		18.50
2452	9		18.52
2457	10		14.89

Table 9-105
5 GHz WLAN Measured P_{max} (No Motion) Average RF Power - Chain 0

5GHz WIFI (20MHz 802.11a SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	14.55
	5785	157	20.40
	5825	165	20.36

5GHz WIFI (20MHz 802.11n SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.47
	5785	157	20.57
	5825	165	20.63

5GHz WIFI (20MHz 802.11ax SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.40
	5785	157	20.58
	5825	165	20.69

5GHz WIFI (20MHz 802.11ac SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.44
	5785	157	20.59
	5825	165	20.67

5GHz WIFI (20MHz 802.11be SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.50
	5785	157	20.58
	5825	165	20.67

Table 9-106
5 GHz WLAN Measured P_{limit} Average RF Power for DSI = 1 (Motion) - Chain 0

5GHz WIFI (40MHz 802.11n SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5190	38	11.39
	5230	46	15.03

5GHz WIFI (40MHz 802.11ax SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5190	38	12.38
	5230	46	14.87

5GHz WIFI (40MHz 802.11ac SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5190	38	12.42
	5230	46	14.91

5GHz WIFI (40MHz 802.11be SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5190	38	12.39
	5230	46	14.85

5GHz WIFI (80MHz 802.11ax SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-2C	5530	106	12.93
	5610	122	13.57
	5690	138	13.35
UNII-3	5775	155	13.45
UNII-4	5885	171	13.25

5GHz WIFI (80MHz 802.11ac SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-2C	5530	106	12.28
	5610	122	13.44
	5690	138	13.51
UNII-3	5775	155	13.46
UNII-4	5885	171	13.60

5GHz WIFI (80MHz 802.11be SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-2C	5530	106	12.94
	5610	122	13.61
	5690	138	13.35
UNII-3	5775	155	13.44
UNII-4	5885	171	13.27

Table 9-107
5 GHz WLAN Measured P_{max} (No Motion) Average RF Power - Chain 1

5GHz WIFI (20MHz 802.11a SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	14.64
	5785	157	20.45
	5825	165	20.53

5GHz WIFI (20MHz 802.11n SISO Chain 1)				5GHz WIFI (20MHz 802.11ax SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]	Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.17	UNII-3	5745	149	15.18
	5785	157	20.54		5785	157	20.56
	5825	165	20.61		5825	165	20.58
5GHz WIFI (20MHz 802.11ac SISO Chain 1)				5GHz WIFI (20MHz 802.11be SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]	Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-3	5745	149	15.17	UNII-3	5745	149	15.22
	5785	157	20.55		5785	157	20.50
	5825	165	20.61		5825	165	20.61

Table 9-108
5 GHz WLAN Measured P_{limit} Average RF Power for DSI = 1 (Motion) - Chain 1

5GHz WIFI (20MHz 802.11a SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5180	36	13.89
	5200	40	16.12
	5220	44	16.23
	5240	48	16.30

5GHz WIFI (20MHz 802.11n SISO Chain 1)				5GHz WIFI (20MHz 802.11ax SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]	Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5180	36	14.16	UNII-1	5180	36	14.12
	5200	40	15.70		5200	40	15.74
	5220	44	15.59		5220	44	15.60
	5240	48	15.63		5240	48	15.58
5GHz WIFI (20MHz 802.11ac SISO Chain 1)				5GHz WIFI (20MHz 802.11be SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]	Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5180	36	14.18	UNII-1	5180	36	14.13
	5200	40	15.79		5200	40	15.69
	5220	44	15.61		5220	44	15.54
	5240	48	15.50		5240	48	15.61

5GHz WIFI (80MHz 802.11ac SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-2C	5530	106	12.14
	5610	122	13.19
	5690	138	13.48
UNII-3	5775	155	12.21
UNII-4	5885	171	12.14

5GHz WIFI (80MHz 802.11ax SISO Chain 1)				5GHz WIFI (80MHz 802.11be SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]	Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-2C	5530	106	13.03	UNII-2C	5530	106	12.99
	5610	122	13.28		5610	122	13.19
	5690	138	13.02		5690	138	13.02
UNII-3	5775	155	12.15	UNII-3	5775	155	12.17
UNII-4	5885	171	12.35	UNII-4	5885	171	12.34

Table 9-109
6 GHz WLAN Measured P_{max} (No Motion) Average RF Power - Chain 0

6GHz WIFI (320MHz 802.11be SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	6105	31	17.20

Table 9-110
6 GHz WLAN Measured P_{limit} Average RF Power for DSI = 1 (Motion) - Chain 0

6GHz WIFI (320MHz 802.11be SISO Chain 0)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	6105	31	9.38
	6265	63	9.06
UNII-7	6585	127	9.18
	6745	159	9.39
UNII-8	6905	191	9.41

Table 9-111
6 GHz WLAN Measured P_{max} (No Motion) Average RF Power - Chain 1

6GHz WIFI (320MHz 802.11be SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	6105	31	17.33

Table 9-112
6 GHz WLAN Measured P_{limit} Average RF Power for DSI = 1 (Motion) - Chain 1

6GHz WIFI (320MHz 802.11be SISO Chain 1)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	6105	31	8.93
	6265	63	9.35
UNII-7	6585	127	9.00
	6745	159	9.17
UNII-8	6905	191	9.21

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.

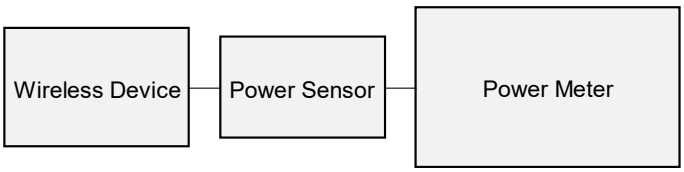

Figure 9-6
Power Measurement Setup

9.5 Bluetooth Conducted Powers

Table 9-113
Bluetooth Average RF Power - Chain 0

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	13.28	21.281
2441	1.0	GFSK	ePA	39	13.72	23.550
2480	1.0	GFSK	ePA	78	13.29	21.335

Table 9-114
Bluetooth Average RF Power - Chain 1

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	13.70	23.442
2441	1.0	GFSK	ePA	39	14.03	25.293
2480	1.0	GFSK	ePA	78	13.81	24.044

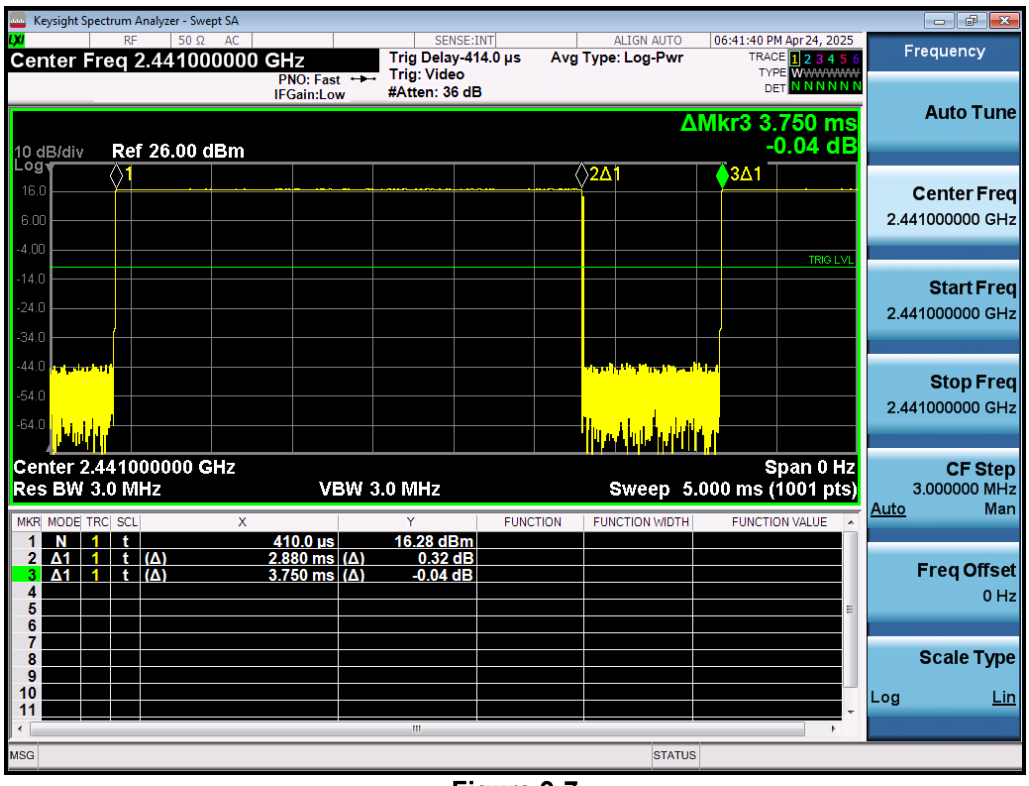

Figure 9-7
Bluetooth Transmission Plot – Chain 0

Equation 9-1
Bluetooth Chain 0 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.750ms} * 100\% = 76.80\%$$

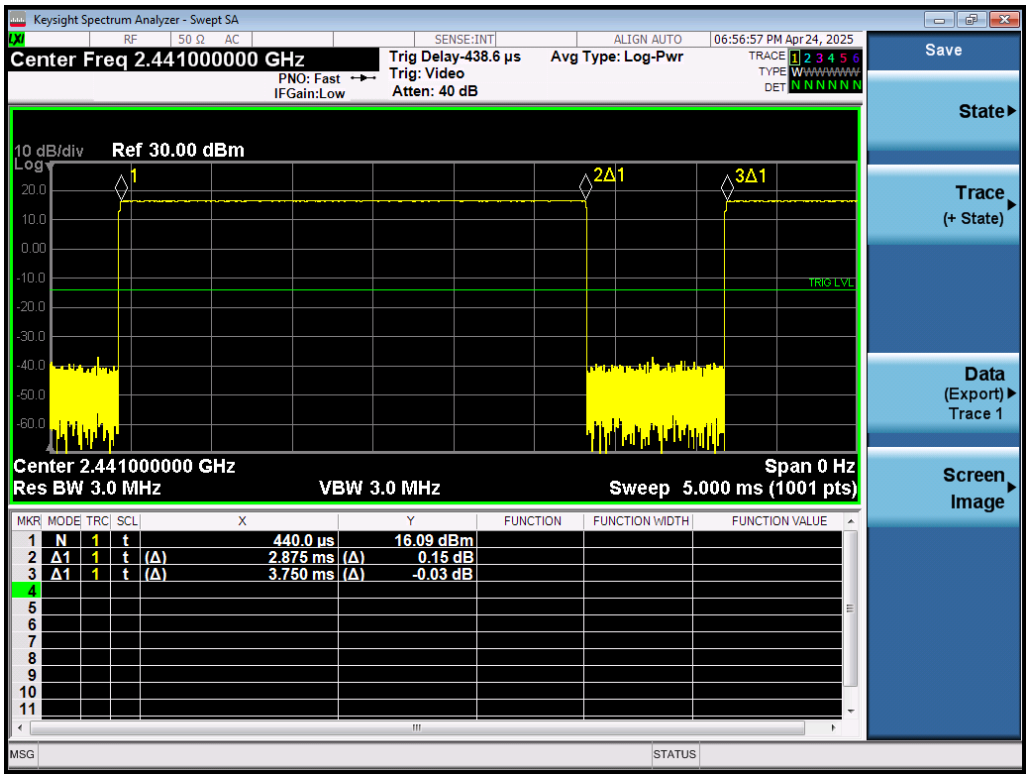

Figure 9-8
Bluetooth Transmission Plot – Chain 1

Equation 9-2
Bluetooth Chain 1 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.875ms}{3.750ms} * 100\% = 76.67\%$$

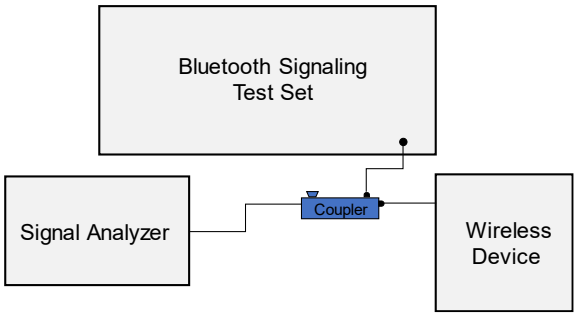

Figure 9-9
Power Measurement Setup

10 SYSTEM VERIFICATION

10.1 Tissue Verification

Table 10-1
Measured Head 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
5/5/2025	750 Head	20.7	680	0.870	40.971	0.888	42.305	-2.03%	-3.15%
			695	0.874	40.929	0.889	42.227	-1.69%	-3.07%
			700	0.876	40.915	0.889	42.201	-1.46%	-3.05%
			710	0.879	40.885	0.890	42.149	-1.24%	-3.00%
			725	0.884	40.835	0.891	42.071	-0.79%	-2.94%
			750	0.893	40.751	0.894	41.942	-0.11%	-2.84%
			770	0.901	40.697	0.895	41.838	0.67%	-2.73%
			785	0.906	40.657	0.896	41.760	1.12%	-2.64%
			800	0.912	40.608	0.897	41.682	1.67%	-2.58%
5/9/2025	750 Head	22	680	0.890	42.183	0.888	42.305	0.23%	-0.29%
			695	0.894	42.133	0.889	42.227	0.56%	-0.22%
			700	0.896	42.118	0.889	42.201	0.79%	-0.20%
			710	0.900	42.088	0.890	42.149	1.12%	-0.14%
			725	0.905	42.038	0.891	42.071	1.57%	-0.08%
			750	0.914	41.949	0.894	41.942	2.24%	0.02%
			770	0.921	41.879	0.895	41.838	2.91%	0.10%
			785	0.926	41.830	0.896	41.760	3.35%	0.17%
			800	0.931	41.782	0.897	41.682	3.79%	0.24%
5/14/2025	750 Head	22.9	680	0.856	42.137	0.888	42.305	-3.60%	-0.40%
			695	0.861	42.089	0.889	42.227	-3.15%	-0.33%
			700	0.862	42.075	0.889	42.201	-3.04%	-0.30%
			710	0.865	42.047	0.890	42.149	-2.81%	-0.24%
			725	0.870	42.015	0.891	42.071	-2.36%	-0.13%
			750	0.878	41.943	0.894	41.942	-1.79%	0.00%
			770	0.885	41.899	0.895	41.838	-1.12%	0.15%
			785	0.890	41.859	0.896	41.760	-0.67%	0.24%
			800	0.895	41.834	0.897	41.682	-0.22%	0.36%
5/21/2025	750 Head	21.8	680	0.853	43.191	0.888	42.305	-3.94%	2.09%
			695	0.858	43.177	0.889	42.227	-3.49%	2.25%
			700	0.860	43.165	0.889	42.201	-3.26%	2.28%
			710	0.863	43.133	0.890	42.149	-3.03%	2.33%
			725	0.867	43.087	0.891	42.071	-2.69%	2.41%
			750	0.876	42.992	0.894	41.942	-2.01%	2.50%
			770	0.883	42.930	0.895	41.838	-1.34%	2.61%
			785	0.888	42.889	0.896	41.760	-0.89%	2.70%
			800	0.892	42.859	0.897	41.682	-0.56%	2.82%
5/29/2025	750 Head	22.2	680	0.851	43.077	0.888	42.305	-4.17%	1.82%
			695	0.856	43.042	0.889	42.227	-3.71%	1.93%
			700	0.857	43.030	0.889	42.201	-3.60%	1.96%
			710	0.861	42.997	0.890	42.149	-3.26%	2.01%
			725	0.866	42.945	0.891	42.071	-2.81%	2.08%
			750	0.874	42.868	0.894	41.942	-2.24%	2.21%
			770	0.880	42.815	0.895	41.838	-1.68%	2.34%
			785	0.885	42.772	0.896	41.760	-1.23%	2.42%
			800	0.890	42.737	0.897	41.682	-0.78%	2.53%
5/29/2025	750 Head	22	680	0.856	42.005	0.888	42.305	-3.60%	-0.71%
			695	0.861	41.972	0.889	42.227	-3.15%	-0.60%
			700	0.863	41.960	0.889	42.201	-2.92%	-0.57%
			710	0.866	41.929	0.890	42.149	-2.70%	-0.52%
			725	0.871	41.875	0.891	42.071	-2.24%	-0.47%
			750	0.878	41.795	0.894	41.942	-1.79%	-0.35%
			770	0.885	41.754	0.895	41.838	-1.12%	-0.20%
			785	0.891	41.717	0.896	41.760	-0.56%	-0.10%
			800	0.895	41.682	0.897	41.682	-0.22%	0.00%
6/4/2025	750 Head	24	680	0.865	40.642	0.888	42.305	-2.59%	-3.93%
			695	0.869	40.600	0.889	42.227	-2.25%	-3.85%
			700	0.871	40.586	0.889	42.201	-2.02%	-3.83%
			710	0.874	40.563	0.890	42.149	-1.80%	-3.76%
			725	0.879	40.523	0.891	42.071	-1.35%	-3.68%
			750	0.888	40.442	0.894	41.942	-0.67%	-3.58%
			770	0.895	40.368	0.895	41.838	0.00%	-3.51%
			785	0.900	40.328	0.896	41.760	0.45%	-3.43%
			800	0.905	40.288	0.897	41.682	0.89%	-3.34%
6/6/2025	750 Head	22.9	680	0.859	42.806	0.888	42.305	-3.27%	1.18%
			695	0.865	42.765	0.889	42.227	-2.70%	1.27%
			700	0.867	42.751	0.889	42.201	-2.47%	1.30%
			710	0.870	42.721	0.890	42.149	-2.25%	1.36%
			725	0.875	42.667	0.891	42.071	-1.80%	1.42%
			750	0.883	42.600	0.894	41.942	-1.23%	1.57%
			770	0.889	42.544	0.895	41.838	-0.67%	1.69%
			785	0.894	42.505	0.896	41.760	-0.22%	1.78%
			800	0.900	42.457	0.897	41.682	0.33%	1.86%
6/9/2025	750 Head	24.2	680	0.865	41.883	0.888	42.305	-2.59%	-1.00%
			695	0.870	41.856	0.889	42.227	-2.14%	-0.88%
			700	0.871	41.846	0.889	42.201	-2.02%	-0.84%
			710	0.874	41.820	0.890	42.149	-1.80%	-0.78%
			725	0.879	41.776	0.891	42.071	-1.35%	-0.70%
			750	0.887	41.689	0.894	41.942	-0.78%	-0.60%
			770	0.893	41.637	0.895	41.838	-0.22%	-0.48%
			785	0.898	41.608	0.896	41.760	0.22%	-0.36%
			800	0.903	41.581	0.897	41.682	0.67%	-0.24%

Table 10-2
Measured Head 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
5/14/2025	835 Head	22.9	815	0.900	41.796	0.898	41.594	0.22%	0.49%
			820	0.902	41.783	0.899	41.578	0.33%	0.49%
			835	0.906	41.740	0.900	41.500	0.67%	0.58%
			850	0.911	41.698	0.916	41.500	-0.55%	0.48%
5/21/2025	835 Head	21.8	815	0.897	42.832	0.898	41.594	-0.11%	2.98%
			820	0.899	42.821	0.899	41.578	0.00%	2.99%
			835	0.905	42.780	0.900	41.500	0.56%	3.08%
			850	0.911	42.753	0.916	41.500	-0.55%	3.02%
5/21/2025	835 Head	21.2	815	0.892	41.591	0.898	41.594	-0.67%	-0.01%
			820	0.893	41.584	0.899	41.578	-0.67%	0.01%
			835	0.899	41.548	0.900	41.500	-0.11%	0.12%
			850	0.904	41.518	0.916	41.500	-1.31%	0.04%
6/2/2025	835 Head	24.2	815	0.919	40.721	0.898	41.594	2.34%	-2.10%
			820	0.920	40.706	0.899	41.578	2.34%	-2.10%
			835	0.925	40.656	0.900	41.500	2.78%	-2.03%
			850	0.930	40.598	0.916	41.500	1.53%	-2.17%
6/4/2025	835 Head	23.2	815	0.891	40.273	0.898	41.594	-0.78%	-3.18%
			820	0.893	40.260	0.899	41.578	-0.67%	-3.17%
			835	0.898	40.223	0.900	41.500	-0.22%	-3.08%
			850	0.903	40.179	0.916	41.500	-1.42%	-3.18%
6/6/2025	835 Head	22.9	815	0.905	42.402	0.898	41.594	0.78%	1.94%
			820	0.906	42.387	0.899	41.578	0.78%	1.95%
			835	0.910	42.344	0.900	41.500	1.11%	2.03%
			850	0.915	42.325	0.916	41.500	-0.11%	1.99%
4/28/2025	1750 Head	20.7	1700	1.292	39.876	1.343	40.145	-3.80%	-0.67%
			1705	1.295	39.868	1.345	40.141	-3.72%	-0.68%
			1710	1.297	39.861	1.348	40.136	-3.78%	-0.69%
			1720	1.304	39.843	1.354	40.126	-3.69%	-0.71%
			1745	1.320	39.810	1.368	40.087	-3.51%	-0.69%
			1750	1.324	39.805	1.371	40.079	-3.43%	-0.68%
			1770	1.336	39.785	1.383	40.047	-3.40%	-0.65%
			1790	1.348	39.753	1.394	40.016	-3.30%	-0.66%
4/30/2025	1750 Head	20.5	1700	1.314	38.848	1.343	40.145	-2.16%	-3.23%
			1705	1.317	38.838	1.345	40.141	-2.08%	-3.25%
			1710	1.320	38.829	1.348	40.136	-2.08%	-3.26%
			1720	1.326	38.810	1.354	40.126	-2.07%	-3.28%
			1745	1.343	38.765	1.368	40.087	-1.83%	-3.30%
			1750	1.347	38.758	1.371	40.079	-1.75%	-3.30%
			1770	1.359	38.732	1.383	40.047	-1.74%	-3.28%
			1790	1.370	38.697	1.394	40.016	-1.72%	-3.30%
5/9/2025	1750 Head	24.4	1700	1.286	39.755	1.343	40.145	-4.24%	-0.97%
			1705	1.288	39.752	1.345	40.141	-4.24%	-0.97%
			1710	1.290	39.746	1.348	40.136	-4.30%	-0.97%
			1720	1.295	39.736	1.354	40.126	-4.36%	-0.97%
			1745	1.308	39.705	1.368	40.087	-4.39%	-0.95%
			1750	1.311	39.698	1.371	40.079	-4.38%	-0.95%
			1770	1.322	39.674	1.383	40.047	-4.41%	-0.93%
			1790	1.332	39.646	1.394	40.016	-4.45%	-0.92%
5/27/2025	1750 Head	23.6	1700	1.282	41.938	1.343	40.145	-4.54%	4.47%
			1705	1.285	41.932	1.345	40.141	-4.46%	4.46%
			1710	1.287	41.927	1.348	40.136	-4.53%	4.46%
			1720	1.293	41.915	1.354	40.126	-4.51%	4.46%
			1745	1.308	41.886	1.368	40.087	-4.39%	4.49%
			1750	1.311	41.879	1.371	40.079	-4.38%	4.49%
			1770	1.322	41.848	1.383	40.047	-4.41%	4.50%
			1790	1.333	41.815	1.394	40.016	-4.38%	4.50%
4/23/2025	1900 Head	20.9	1850	1.419	38.530	1.400	40.000	1.36%	-3.68%
			1860	1.425	38.520	1.400	40.000	1.79%	-3.70%
			1880	1.437	38.493	1.400	40.000	2.64%	-3.77%
			1900	1.450	38.458	1.400	40.000	3.57%	-3.86%
			1905	1.453	38.448	1.400	40.000	3.79%	-3.88%
			1910	1.456	38.439	1.400	40.000	4.00%	-3.90%
			1920	1.463	38.421	1.400	40.000	4.50%	-3.95%
5/27/2025	1900 Head	23.6	1850	1.363	41.724	1.400	40.000	-2.64%	4.31%
			1860	1.369	41.712	1.400	40.000	-2.21%	4.28%
			1880	1.379	41.691	1.400	40.000	-1.50%	4.23%
			1900	1.389	41.675	1.400	40.000	-0.79%	4.19%
			1905	1.392	41.673	1.400	40.000	-0.57%	4.18%
			1910	1.395	41.670	1.400	40.000	-0.36%	4.18%
			1920	1.401	41.664	1.400	40.000	0.07%	4.16%
6/6/2025	1900 Head	22.3	1850	1.414	39.281	1.400	40.000	1.00%	-1.80%
			1860	1.421	39.276	1.400	40.000	1.50%	-1.81%
			1880	1.432	39.258	1.400	40.000	2.29%	-1.85%
			1900	1.442	39.222	1.400	40.000	3.00%	-1.95%
			1905	1.446	39.210	1.400	40.000	3.29%	-1.98%
			1910	1.448	39.201	1.400	40.000	3.43%	-2.00%
			1920	1.454	39.182	1.400	40.000	3.86%	-2.04%
6/9/2025	1900 Head	20.8	1850	1.405	39.902	1.400	40.000	0.36%	-0.24%
			1860	1.411	39.890	1.400	40.000	0.79%	-0.27%
			1880	1.423	39.858	1.400	40.000	1.64%	-0.36%
			1900	1.433	39.830	1.400	40.000	2.36%	-0.43%
			1905	1.436	39.823	1.400	40.000	2.57%	-0.44%
			1910	1.438	39.816	1.400	40.000	2.71%	-0.46%
			1920	1.444	39.803	1.400	40.000	3.14%	-0.49%
6/9/2025	1900 Head	22.8	1850	1.373	41.808	1.400	40.000	-1.93%	4.52%
			1860	1.380	41.797	1.400	40.000	-1.43%	4.49%
			1880	1.391	41.773	1.400	40.000	-0.64%	4.43%
			1900	1.400	41.752	1.400	40.000	0.00%	4.38%
			1905	1.402	41.745	1.400	40.000	0.14%	4.36%
			1910	1.405	41.738	1.400	40.000	0.36%	4.35%
			1920	1.410	41.722	1.400	40.000	0.71%	4.31%
6/24/2025	1900 Head	21	1850	1.334	40.094	1.400	40.000	-4.71%	0.24%
			1860	1.339	40.074	1.400	40.000	-4.36%	0.18%
			1880	1.350	40.029	1.400	40.000	-3.57%	0.07%
			1900	1.363	40.007	1.400	40.000	-2.64%	0.02%
			1905	1.365	40.005	1.400	40.000	-2.50%	0.01%
			1910	1.368	40.003	1.400	40.000	-2.29%	0.01%
			1920	1.374	39.997	1.400	40.000	-1.86%	-0.01%

Table 10-3
Measured Head 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
4/23/2025	2450 Head	22	2300	1.721	38.154	1.670	39.500	3.05%	-3.41%
			2310	1.728	38.137	1.679	39.480	2.92%	-3.40%
			2320	1.735	38.116	1.687	39.460	2.85%	-3.41%
			2400	1.794	38.004	1.756	39.289	2.16%	-3.27%
			2450	1.833	37.921	1.800	39.200	1.83%	-3.26%
			2480	1.855	37.885	1.833	39.162	1.20%	-3.26%
			2500	1.869	37.851	1.855	39.136	0.75%	-3.28%
			2510	1.877	37.835	1.866	39.123	0.59%	-3.29%
			2535	1.899	37.792	1.893	39.092	0.32%	-3.33%
			2550	1.912	37.768	1.909	39.073	0.16%	-3.34%
			2560	1.921	37.755	1.920	39.060	0.05%	-3.34%
			2600	1.951	37.685	1.964	39.009	-0.66%	-3.39%
			2650	1.993	37.594	2.018	38.945	-1.24%	-3.47%
			2680	2.017	37.539	2.051	38.907	-1.66%	-3.52%
			2700	2.032	37.501	2.073	38.882	-1.98%	-3.55%
4/28/2025	2450 Head	20	2300	1.738	40.986	1.670	39.500	4.07%	3.76%
			2310	1.746	40.969	1.679	39.480	3.99%	3.77%
			2320	1.755	40.955	1.687	39.460	4.03%	3.79%
			2400	1.820	40.831	1.756	39.289	3.64%	3.92%
			2450	1.862	40.755	1.800	39.200	3.44%	3.97%
			2480	1.885	40.702	1.833	39.162	2.84%	3.93%
			2500	1.902	40.657	1.855	39.136	2.53%	3.89%
			2510	1.911	40.640	1.866	39.123	2.41%	3.88%
			2535	1.934	40.598	1.893	39.092	2.17%	3.85%
			2550	1.947	40.580	1.909	39.073	1.99%	3.86%
			2560	1.955	40.564	1.920	39.060	1.82%	3.85%
			2600	1.989	40.479	1.964	39.009	1.27%	3.77%
			2650	2.034	40.392	2.018	38.945	0.79%	3.72%
			2680	2.059	40.339	2.051	38.907	0.39%	3.68%
			2700	2.076	40.292	2.073	38.882	0.14%	3.63%
5/2/2025	2450 Head	19.1	2300	1.712	38.271	1.670	39.500	2.51%	-3.11%
			2310	1.719	38.254	1.679	39.480	2.38%	-3.11%
			2320	1.727	38.237	1.687	39.460	2.37%	-3.10%
			2400	1.790	38.110	1.756	39.289	1.94%	-3.00%
			2450	1.829	38.034	1.800	39.200	1.61%	-2.97%
			2480	1.851	37.977	1.833	39.162	0.98%	-3.03%
			2500	1.868	37.936	1.855	39.136	0.70%	-3.07%
			2510	1.877	37.916	1.866	39.123	0.59%	-3.09%
			2535	1.898	37.872	1.893	39.092	0.26%	-3.12%
			2550	1.909	37.846	1.909	39.073	0.00%	-3.14%
			2560	1.917	37.828	1.920	39.060	-0.16%	-3.15%
			2600	1.950	37.739	1.964	39.009	-0.71%	-3.26%
			2650	1.992	37.642	2.018	38.945	-1.29%	-3.35%
			2680	2.015	37.585	2.051	38.907	-1.76%	-3.40%
			2700	2.031	37.546	2.073	38.882	-2.03%	-3.44%
5/17/2025	2450 Head	22.1	2300	1.659	40.849	1.670	39.500	-0.66%	3.42%
			2310	1.666	40.830	1.679	39.480	-0.77%	3.42%
			2320	1.674	40.813	1.687	39.460	-0.77%	3.43%
			2400	1.735	40.709	1.756	39.289	-1.20%	3.61%
			2450	1.772	40.631	1.800	39.200	-1.56%	3.65%
			2480	1.794	40.590	1.833	39.162	-2.13%	3.65%
			2500	1.809	40.550	1.855	39.136	-2.48%	3.61%
			2510	1.817	40.531	1.866	39.123	-2.63%	3.60%
			2535	1.836	40.496	1.893	39.092	-3.01%	3.59%
			2550	1.847	40.479	1.909	39.073	-3.25%	3.60%
			2560	1.855	40.466	1.920	39.060	-3.39%	3.60%
			2600	1.888	40.400	1.964	39.009	-3.87%	3.57%
			2650	1.927	40.318	2.018	38.945	-4.51%	3.53%
			2680	1.952	40.275	2.051	38.907	-4.83%	3.52%
			2700	1.970	40.243	2.073	38.882	-4.97%	3.50%
5/19/2025	2450 Head	21.3	2300	1.661	40.780	1.670	39.500	-0.54%	3.24%
			2310	1.668	40.765	1.679	39.480	-0.66%	3.25%
			2320	1.674	40.748	1.687	39.460	-0.77%	3.26%
			2400	1.737	40.647	1.756	39.289	-1.08%	3.46%
			2450	1.773	40.572	1.800	39.200	-1.50%	3.50%
			2480	1.796	40.533	1.833	39.162	-2.02%	3.50%
			2500	1.812	40.512	1.855	39.136	-2.32%	3.52%
			2510	1.819	40.502	1.866	39.123	-2.52%	3.52%
			2535	1.837	40.469	1.893	39.092	-2.96%	3.52%
			2550	1.849	40.444	1.909	39.073	-3.14%	3.51%
			2560	1.857	40.426	1.920	39.060	-3.28%	3.50%
			2600	1.891	40.363	1.964	39.009	-3.72%	3.47%
			2650	1.932	40.274	2.018	38.945	-4.26%	3.41%
			2680	1.957	40.216	2.051	38.907	-4.58%	3.36%
			2700	1.975	40.177	2.073	38.882	-4.73%	3.33%
5/27/2025	2450 Head	20.5	2300	1.668	40.390	1.670	39.500	-0.10%	2.25%
			2310	1.675	40.379	1.679	39.480	-0.22%	2.28%
			2320	1.682	40.364	1.687	39.460	-0.28%	2.29%
			2400	1.746	40.253	1.756	39.289	-0.59%	2.45%
			2450	1.783	40.182	1.800	39.200	-0.96%	2.51%
			2480	1.808	40.140	1.833	39.162	-1.37%	2.50%
			2500	1.824	40.107	1.855	39.136	-1.69%	2.48%
			2510	1.831	40.091	1.866	39.123	-1.90%	2.47%
			2535	1.847	40.051	1.893	39.092	-2.41%	2.45%
			2550	1.859	40.031	1.909	39.073	-2.60%	2.45%
			2560	1.868	40.016	1.920	39.060	-2.72%	2.45%
			2600	1.902	39.942	1.964	39.009	-3.18%	2.39%
			2650	1.939	39.844	2.018	38.945	-3.89%	2.31%
			2680	1.965	39.802	2.051	38.907	-4.18%	2.30%
			2700	1.981	39.777	2.073	38.882	-4.42%	2.30%
6/5/2025	2450 Head	22.9	2300	1.700	39.600	1.670	39.500	1.80%	0.25%
			2310	1.708	39.589	1.679	39.480	1.73%	0.28%
			2320	1.715	39.579	1.687	39.460	1.66%	0.30%
			2400	1.774	39.483	1.756	39.289	1.03%	0.49%
			2450	1.812	39.414	1.800	39.200	0.67%	0.55%
			2480	1.834	39.374	1.833	39.162	0.05%	0.54%
			2500	1.850	39.334	1.855	39.136	-0.27%	0.51%
			2510	1.857	39.313	1.866	39.123	-0.48%	0.49%
			2535	1.877	39.274	1.893	39.092	-0.85%	0.47%
			2550	1.888	39.255	1.909	39.073	-1.10%	0.47%
			2560	1.895	39.244	1.920	39.060	-1.30%	0.47%
			2600	1.927	39.177	1.964	39.009	-1.88%	0.43%
			2650	1.966	39.096	2.018	38.945	-2.58%	0.39%
			2680	1.989	39.048	2.051	38.907	-3.02%	0.36%
			2700	2.005	39.013	2.073	38.882	-3.28%	0.34%
6/6/2025	2450 Head	20.8	2300	1.703	38.135	1.670	39.500	1.98%	-3.46%
			2310	1.709	38.114	1.679	39.480	1.79%	-3.46%
			2320	1.717	38.094	1.687	39.460	1.78%	-3.46%
			2400	1.773	37.959	1.756	39.289	0.97%	-3.39%
			2450	1.812	37.885	1.800	39.200	0.67%	-3.35%
			2480	1.832	37.845	1.833	39.162	-0.05%	-3.36%
			2500	1.846	37.801	1.855	39.136	-0.49%	-3.41%
			2510	1.853	37.782	1.866	39.123	-0.70%	-3.43%
			2535	1.874	37.741	1.893	39.092	-1.00%	-3.46%
			2550	1.887	37.725	1.909	39.073	-1.15%	-3.45%
			2560	1.893	37.713	1.920	39.060	-1.41%	-3.45%
			2600	1.922	37.632	1.964	39.009	-2.14%	-3.53%
			2650	1.962	37.548	2.018	38.945	-2.78%	-3.59%
			2680	1.981	37.507	2.051	38.907	-3.41%	-3.60%
			2700	1.997	37.469	2.073	38.882	-3.67%	-3.63%

Table 10-4
Measured Head 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
5/2/2025	3600 Head	19.2	3300	2.607	38.101	2.708	38.157	-3.73%	-0.15%
			3350	2.652	37.984	2.759	38.100	-3.88%	-0.30%
			3450	2.740	37.794	2.861	37.986	-4.23%	-0.51%
			3500	2.785	37.715	2.913	37.929	-4.39%	-0.56%
			3550	2.836	37.629	2.964	37.871	-4.32%	-0.64%
			3560	2.847	37.604	2.974	37.860	-4.27%	-0.68%
			3600	2.886	37.519	3.015	37.814	-4.28%	-0.78%
			3650	2.939	37.441	3.066	37.757	-4.14%	-0.84%
			3690	2.978	37.374	3.107	37.711	-4.15%	-0.89%
			3700	2.988	37.356	3.117	37.700	-4.14%	-0.91%
			3750	3.040	37.290	3.169	37.643	-4.07%	-0.94%
			3900	3.181	37.020	3.323	37.471	-4.27%	-1.20%
			3930	3.206	36.952	3.353	37.437	-4.38%	-1.30%
			4100	3.384	36.668	3.528	37.243	-4.08%	-1.54%
			4150	3.439	36.600	3.579	37.186	-3.91%	-1.58%
5/6/2025	3600 Head	19	3300	2.598	39.027	2.708	38.157	-4.06%	2.28%
			3350	2.642	38.927	2.759	38.100	-4.24%	2.17%
			3450	2.735	38.750	2.861	37.986	-4.40%	2.01%
			3500	2.783	38.670	2.913	37.929	-4.46%	1.95%
			3550	2.831	38.583	2.964	37.871	-4.49%	1.88%
			3560	2.840	38.565	2.974	37.860	-4.51%	1.86%
			3600	2.877	38.491	3.015	37.814	-4.58%	1.79%
			3650	2.926	38.432	3.066	37.757	-4.57%	1.79%
			3690	2.967	38.340	3.107	37.711	-4.51%	1.67%
			3700	2.978	38.322	3.117	37.700	-4.46%	1.65%
			3750	3.025	38.261	3.169	37.643	-4.54%	1.64%
			3900	3.177	37.987	3.323	37.471	-4.39%	1.38%
			3930	3.212	37.945	3.353	37.437	-4.21%	1.36%
			4100	3.390	37.672	3.528	37.243	-3.91%	1.15%
			4150	3.443	37.597	3.579	37.186	-3.80%	1.11%
5/27/2025	3600 Head	19.1	3300	2.634	39.184	2.708	38.157	-2.73%	2.69%
			3350	2.677	39.091	2.759	38.100	-2.97%	2.60%
			3450	2.770	38.922	2.861	37.986	-3.18%	2.46%
			3500	2.809	38.861	2.913	37.929	-3.57%	2.46%
			3550	2.863	38.708	2.964	37.871	-3.41%	2.21%
			3560	2.872	38.700	2.974	37.860	-3.43%	2.22%
			3600	2.906	38.664	3.015	37.814	-3.62%	2.25%
			3650	2.968	38.517	3.066	37.757	-3.20%	2.01%
			3690	2.993	38.493	3.107	37.711	-3.67%	2.07%
			3700	3.003	38.478	3.117	37.700	-3.66%	2.06%
			3750	3.060	38.399	3.169	37.643	-3.44%	2.01%
			3900	3.211	38.125	3.323	37.471	-3.37%	1.75%
			3930	3.244	38.076	3.353	37.437	-3.25%	1.71%
			4100	3.417	37.799	3.528	37.243	-3.15%	1.49%
			4150	3.481	37.736	3.579	37.186	-2.74%	1.48%
6/2/2025	3600 Head	19	3300	2.632	39.566	2.708	38.157	-2.81%	3.69%
			3350	2.686	39.469	2.759	38.100	-2.65%	3.59%
			3450	2.778	39.287	2.861	37.986	-2.90%	3.42%
			3500	2.821	39.206	2.913	37.929	-3.16%	3.37%
			3550	2.875	39.102	2.964	37.871	-3.00%	3.25%
			3560	2.884	39.088	2.974	37.860	-3.03%	3.24%
			3600	2.919	38.990	3.015	37.814	-3.18%	3.11%
			3650	2.967	38.926	3.066	37.757	-3.23%	3.10%
			3690	3.011	38.812	3.107	37.711	-3.09%	2.92%
			3700	3.022	38.798	3.117	37.700	-3.05%	2.91%
			3750	3.067	38.738	3.169	37.643	-3.22%	2.91%
			3900	3.231	38.444	3.323	37.471	-2.77%	2.60%
			3930	3.266	38.435	3.353	37.437	-2.59%	2.67%
			4100	3.450	38.111	3.528	37.243	-2.21%	2.33%
			4150	3.496	38.092	3.579	37.186	-2.32%	2.44%

Table 10-5
Measured Head 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
5/19/2025	5200-5800 Head	21.8	5150	4.461	36.353	4.608	36.050	-3.19%	0.84%
			5160	4.475	36.336	4.618	36.040	-3.10%	0.82%
			5170	4.489	36.329	4.629	36.030	-3.02%	0.83%
			5180	4.500	36.306	4.635	36.009	-2.91%	0.82%
			5190	4.507	36.289	4.645	35.998	-2.97%	0.81%
			5200	4.514	36.280	4.655	35.986	-3.03%	0.82%
			5210	4.529	36.256	4.666	35.975	-2.94%	0.78%
			5220	4.544	36.234	4.676	35.963	-2.82%	0.75%
			5240	4.566	36.178	4.696	35.940	-2.77%	0.66%
			5250	4.577	36.153	4.706	35.929	-2.74%	0.62%
			5260	4.590	36.151	4.717	35.917	-2.69%	0.65%
			5270	4.605	36.148	4.727	35.906	-2.58%	0.67%
			5280	4.614	36.132	4.737	35.894	-2.60%	0.66%
			5290	4.622	36.114	4.748	35.883	-2.65%	0.64%
			5300	4.632	36.078	4.758	35.871	-2.65%	0.58%
			5310	4.646	36.060	4.768	35.860	-2.56%	0.56%
			5320	4.657	36.046	4.778	35.849	-2.53%	0.55%
			5500	4.851	35.763	4.963	35.643	-2.26%	0.34%
			5510	4.860	35.720	4.973	35.632	-2.27%	0.25%
			5520	4.874	35.691	4.983	35.620	-2.19%	0.20%
			5530	4.890	35.681	4.994	35.609	-2.08%	0.20%
			5540	4.904	35.678	5.004	35.597	-2.00%	0.23%
			5550	4.916	35.660	5.014	35.586	-1.95%	0.21%
			5560	4.928	35.626	5.024	35.574	-1.91%	0.15%
			5580	4.948	35.580	5.045	35.551	-1.92%	0.08%
			5600	4.969	35.577	5.065	35.529	-1.90%	0.14%
			5610	4.982	35.542	5.076	35.518	-1.85%	0.07%
			5620	4.996	35.513	5.086	35.506	-1.77%	0.02%
			5640	5.025	35.487	5.106	35.483	-1.59%	0.01%
			5660	5.043	35.443	5.127	35.460	-1.64%	-0.05%
			5670	5.052	35.426	5.137	35.449	-1.65%	-0.06%
			5680	5.064	35.419	5.147	35.437	-1.61%	-0.05%
			5690	5.076	35.414	5.158	35.426	-1.59%	-0.03%
			5700	5.089	35.395	5.168	35.414	-1.53%	-0.05%
			5710	5.099	35.365	5.178	35.403	-1.53%	-0.11%
			5720	5.110	35.339	5.188	35.391	-1.50%	-0.15%
			5745	5.145	35.306	5.214	35.363	-1.32%	-0.16%
			5750	5.151	35.299	5.219	35.357	-1.30%	-0.16%
			5755	5.155	35.286	5.224	35.351	-1.32%	-0.18%
			5765	5.162	35.269	5.234	35.340	-1.38%	-0.20%
			5775	5.172	35.261	5.245	35.329	-1.39%	-0.19%
			5785	5.185	35.250	5.255	35.317	-1.33%	-0.19%
			5795	5.198	35.218	5.265	35.305	-1.27%	-0.25%
			5800	5.204	35.205	5.270	35.300	-1.25%	-0.27%
			5800	5.204	35.205	5.270	35.300	-1.25%	-0.27%
			5805	5.208	35.195	5.275	35.294	-1.27%	-0.28%
			5825	5.229	35.165	5.296	35.271	-1.27%	-0.30%
			5835	5.242	35.151	5.305	35.230	-1.19%	-0.22%
			5845	5.258	35.133	5.315	35.210	-1.07%	-0.22%
			5850	5.264	35.130	5.320	35.200	-1.05%	-0.20%
			5855	5.270	35.130	5.325	35.197	-1.03%	-0.19%
			5865	5.279	35.118	5.336	35.190	-1.07%	-0.20%
			5865	5.279	35.118	5.336	35.190	-1.07%	-0.20%
			5865	5.279	35.118	5.336	35.190	-1.07%	-0.20%
			5865	5.279	35.118	5.336	35.190	-1.07%	-0.20%
			5875	5.291	35.099	5.347	35.183	-1.05%	-0.24%
			5885	5.300	35.073	5.357	35.177	-1.06%	-0.30%
			5905	5.317	35.035	5.379	35.163	-1.15%	-0.36%
5/27/2025	6000 Head	21.3	6000	5.523	34.811	5.480	35.100	0.78%	-0.82%
			6025	5.605	34.679	5.510	35.070	1.72%	-1.11%
			6065	5.643	34.723	5.557	35.022	1.55%	-0.85%
			6075	5.648	34.699	5.569	35.010	1.42%	-0.89%
			6085	5.652	34.655	5.580	34.998	1.29%	-0.98%
			6185	5.775	34.473	5.698	34.878	1.35%	-1.16%
			6275	5.889	34.321	5.805	34.770	1.45%	-1.29%
			6285	5.898	34.298	5.816	34.758	1.41%	-1.32%
			6305	5.921	34.195	5.840	34.734	1.39%	-1.55%
			6345	6.000	34.122	5.887	34.686	1.92%	-1.63%
			6475	6.125	33.970	6.041	34.530	1.39%	-1.62%
			6485	6.131	33.953	6.052	34.518	1.31%	-1.64%
			6500	6.145	33.888	6.070	34.500	1.24%	-1.77%
			6505	6.151	33.858	6.076	34.494	1.23%	-1.84%
			6545	6.234	33.741	6.122	34.446	1.83%	-2.05%
			6665	6.384	33.597	6.265	34.302	1.90%	-2.06%
			6675	6.384	33.600	6.273	34.290	1.77%	-2.01%
			6685	6.383	33.583	6.285	34.278	1.56%	-2.03%
			6715	6.411	33.438	6.319	34.242	1.46%	-2.35%
			6785	6.500	33.395	6.400	34.158	1.56%	-2.23%
			6825	6.534	33.211	6.447	34.110	1.35%	-2.64%
			6985	6.739	33.022	6.633	33.918	1.60%	-2.64%
			6995	6.742	32.992	6.644	33.906	1.48%	-2.70%
			7000	6.744	32.971	6.650	33.900	1.41%	-2.74%
			7005	6.748	32.949	6.656	33.894	1.38%	-2.79%
			7025	6.762	32.874	6.680	33.870	1.23%	-2.94%
			7500	7.322	32.039	7.240	33.300	1.13%	-3.79%
			7980	7.907	31.267	7.816	32.724	1.16%	-4.45%
			8000	7.948	31.413	7.840	32.700	1.38%	-3.94%

10.2 Test System Verification

Prior to SAR assessment, the system is verified to ±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 the SAR System Validation Appendix.

Table 10-6
System Verification Results – 1g

SAR System	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp. (C)	Liquid Temp. (C)	Input Power (W)	Source SN	Probe SN	DAE	Measured SAR 1g (W/kg)	1W Target SAR 1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation 1g (%)	Measured SAR 10g (W/kg)	1W Target SAR 10g (W/kg)	1W Normalized SAR 10g (W/kg)	Deviation 10g (%)	Measured 4cm2 APD (W/m2)	1W Target 4cm2 APD (W/m2)	1W Normalized 4cm2 APD (W/m2)	Deviation 4cm2 APD (%)
C	750	HEAD	05/05/2025	21.9	20.7	0.20	1054	7713	1530	1.81	8.68	9.05	4.26%	1.20	5.61	6.00	6.95%	N/A	N/A	N/A	N/A
E	750	HEAD	05/09/2025	24.8	22.0	0.20	1054	7409	1334	1.81	8.68	9.05	4.26%	1.18	5.61	5.90	5.17%	N/A	N/A	N/A	N/A
C	750	HEAD	05/14/2025	21.9	22.9	0.20	1054	7713	1530	1.64	8.68	8.20	-5.53%	1.09	5.61	5.45	-2.85%	N/A	N/A	N/A	N/A
F	750	HEAD	05/21/2025	21.1	21.8	0.20	1161	7670	1450	1.73	8.36	8.65	3.47%	1.16	5.41	5.80	7.21%	N/A	N/A	N/A	N/A
C	750	HEAD	05/29/2025	21.7	22.0	0.20	1054	7713	1530	1.77	8.68	8.85	1.96%	1.18	5.61	5.90	5.17%	N/A	N/A	N/A	N/A
F	750	HEAD	05/29/2025	22.5	22.2	0.20	1161	7670	1450	1.67	8.36	8.35	-0.12%	1.11	5.41	5.55	2.59%	N/A	N/A	N/A	N/A
C	750	HEAD	06/04/2025	22.1	23.0	0.20	1054	7713	1530	1.84	8.68	9.20	5.99%	1.23	5.61	6.15	9.63%	N/A	N/A	N/A	N/A
G	750	HEAD	06/06/2025	23.8	22.9	0.20	1054	7488	1415	1.65	8.68	8.25	-4.95%	1.08	5.61	5.40	-3.74%	N/A	N/A	N/A	N/A
C	750	HEAD	06/09/2025	22.6	23.5	0.20	1054	7713	1530	1.84	8.68	9.20	5.99%	1.23	5.61	6.15	9.63%	N/A	N/A	N/A	N/A
C	835	HEAD	05/14/2025	21.9	22.9	0.20	4d133	7713	1530	1.95	9.94	9.75	-1.91%	1.21	6.49	6.05	-6.78%	N/A	N/A	N/A	N/A
F	835	HEAD	05/21/2025	21.1	21.8	0.20	4d133	7670	1450	2.05	9.94	10.25	3.12%	1.36	6.49	6.80	4.78%	N/A	N/A	N/A	N/A
C	835	HEAD	05/21/2025	23.6	21.2	0.20	4d132	7713	1530	1.97	9.84	9.85	0.10%	1.30	6.40	6.50	1.56%	N/A	N/A	N/A	N/A
C	835	HEAD	06/02/2025	22.3	24.2	0.20	4d132	7713	1530	2.06	9.84	10.30	4.67%	1.36	6.40	6.80	6.25%	N/A	N/A	N/A	N/A
G	835	HEAD	06/04/2025	24.1	23.2	0.20	4d132	7488	1415	1.96	9.84	9.80	-0.41%	1.28	6.40	6.40	0.00%	N/A	N/A	N/A	N/A
G	835	HEAD	06/06/2025	23.8	22.9	0.20	4d132	7488	1415	1.92	9.84	9.60	-2.44%	1.25	6.40	6.25	-2.34%	N/A	N/A	N/A	N/A
C	1750	HEAD	04/28/2025	20.7	21.7	0.10	1148	7713	1530	3.70	36.90	37.00	0.27%	2.00	19.60	20.00	2.04%	N/A	N/A	N/A	N/A
J	1750	HEAD	04/30/2025	21.4	21.0	0.10	1150	7406	1677	3.68	36.40	36.80	1.10%	1.96	19.40	19.60	1.03%	N/A	N/A	N/A	N/A
G	1750	HEAD	05/09/2025	23.3	23.4	0.10	1148	7488	1415	3.62	36.90	36.20	-1.90%	1.95	19.60	19.50	-0.51%	N/A	N/A	N/A	N/A
C	1750	HEAD	05/27/2025	21.7	23.6	0.10	1150	7713	1530	3.66	36.40	36.60	0.55%	1.99	19.40	19.90	2.58%	N/A	N/A	N/A	N/A
L	1900	HEAD	04/23/2025	21.5	20.9	0.10	5d148	7660	1678	4.28	39.60	42.80	8.08%	2.20	20.90	22.00	5.26%	N/A	N/A	N/A	N/A
C	1900	HEAD	05/27/2025	21.7	23.6	0.10	5d148	7713	1530	4.13	39.60	41.30	4.29%	2.17	20.90	21.70	3.83%	N/A	N/A	N/A	N/A
H	1900	HEAD	06/06/2025	23.0	22.3	0.10	5d080	7417	665	4.11	39.60	41.10	3.79%	2.13	20.70	21.30	2.90%	N/A	N/A	N/A	N/A
G	1900	HEAD	06/09/2025	22.5	22.8	0.10	5d149	7488	1415	4.05	39.10	40.50	3.58%	2.13	20.70	21.30	2.90%	N/A	N/A	N/A	N/A
L	1900	HEAD	06/09/2025	22.6	20.8	0.10	5d080	7659	1272	4.14	39.60	41.40	4.55%	2.15	20.70	21.50	3.86%	N/A	N/A	N/A	N/A
G	1900	HEAD	06/24/2025	22.0	21.0	0.10	5d149	7488	1415	4.21	39.10	42.10	7.67%	2.23	20.70	22.30	7.73%	N/A	N/A	N/A	N/A
E	2300	HEAD	04/23/2025	22.9	22.0	0.10	1116	7409	1334	5.07	49.20	50.70	3.05%	2.43	23.90	24.30	1.67%	N/A	N/A	N/A	N/A
E	2300	HEAD	04/28/2025	22.7	20.0	0.10	1116	7409	1334	5.05	49.20	50.50	2.64%	2.42	23.90	24.20	1.26%	N/A	N/A	N/A	N/A
H	2300	HEAD	06/05/2025	24.3	22.9	0.10	1116	7417	665	5.02	49.20	50.20	2.03%	2.41	23.90	24.10	0.84%	N/A	N/A	N/A	N/A
E	2450	HEAD	04/23/2025	22.9	22.0	0.10	797	7409	1334	5.37	52.00	53.70	3.27%	2.50	24.40	25.00	2.46%	N/A	N/A	N/A	N/A
P	2450	HEAD	05/02/2025	20.8	19.1	0.10	719	7571	859	5.15	52.20	51.50	-1.34%	2.42	24.60	24.20	-1.63%	N/A	N/A	N/A	N/A
C	2450	HEAD	05/19/2025	22.8	21.3	0.10	719	7713	1530	5.32	52.20	53.20	1.92%	2.51	24.60	25.10	2.03%	N/A	N/A	N/A	N/A
C	2600	HEAD	05/19/2025	22.8	21.3	0.10	1071	7713	1530	5.33	56.50	53.30	-5.66%	2.44	25.40	24.40	-3.94%	N/A	N/A	N/A	N/A
J	2600	HEAD	06/06/2025	23.3	20.8	0.10	1071	7406	1677	5.33	56.50	53.30	-5.66%	2.40	25.40	24.00	-5.51%	N/A	N/A	N/A	N/A
E	3500	HEAD	05/02/2025	24.9	21.1	0.10	1097	7409	1334	6.51	65.40	65.10	-0.46%	2.54	24.70	25.40	2.83%	N/A	N/A	N/A	N/A
E	3500	HEAD	05/06/2025	22.7	20.9	0.10	1097	7409	1334	6.63	65.40	66.30	1.38%	2.58	24.70	25.80	4.45%	N/A	N/A	N/A	N/A
H	3500	HEAD	05/27/2025	22.3	19.1	0.10	1097	7417	665	7.02	65.40	70.20	7.34%	2.70	24.70	27.00	9.31%	N/A	N/A	N/A	N/A
H	3500	HEAD	06/02/2025	21.9	19.0	0.10	1059	7417	665	6.09	64.90	60.90	-6.16%	2.40	24.70	24.00	-2.83%	N/A	N/A	N/A	N/A
E	3700	HEAD	05/02/2025	24.9	21.1	0.10	1067	7409	1334	6.73	66.90	67.30	0.60%	2.54	24.30	25.40	4.53%	N/A	N/A	N/A	N/A
E	3700	HEAD	05/06/2025	22.7	20.9	0.10	1067	7409	1334	6.81	66.90	68.10	1.79%	2.56	24.30	25.60	5.35%	N/A	N/A	N/A	N/A
H	3700	HEAD	05/27/2025	22.3	19.1	0.10	1067	7417	665	6.63	66.90	66.30	-0.90%	2.49	24.30	24.90	2.47%	N/A	N/A	N/A	N/A
H	3700	HEAD	06/02/2025	21.9	19.0	0.10	1018	7417	665	6.33	65.10	63.30	-2.76%	2.39	23.90	23.90	0.00%	N/A	N/A	N/A	N/A
E	3900	HEAD	05/02/2025	24.9	21.1	0.10	1056	7409	1334	6.86	68.20	68.60	0.59%	2.50	23.80	25.00	5.04%	N/A	N/A	N/A	N/A
H	3900	HEAD	06/02/2025	21.9	19.0	0.10	1073	7417	665	7.12	69.50	71.20	2.45%	2.51	24.30	25.10	3.29%	N/A	N/A	N/A	N/A
S	5250	HEAD	05/19/2025	22.8	21.8	0.05	1057	7803	1583	3.62	79.40	72.40	-8.82%	1.05	22.70	21.00	-7.49%	N/A	N/A	N/A	N/A
S	5600	HEAD	05/19/2025	22.8	21.8	0.05	1191	7803	1583	3.91	83.00	78.20	-5.78%	1.13	23.90	22.60	-5.44%	N/A	N/A	N/A	N/A
S	5750	HEAD	05/19/2025	22.8	21.8	0.05	1191	7803	1583	3.85	78.90	77.00	-2.41%	1.11	22.40	22.20	-0.89%	N/A	N/A	N/A	N/A
S	5850	HEAD	05/19/2025	22.8	21.8	0.05	1191	7803	1583	3.88	78.80	77.60	-1.52%	1.11	22.50	22.20	-1.33%	N/A	N/A	N/A	N/A
R	6500	HEAD	05/27/2025	21.3	21.3	0.03	1111	7570	1638	7.74	298.00	309.60	3.89%	1.42	55.20	56.80	2.90%	34.30	1350.00	1372.00	1.63%

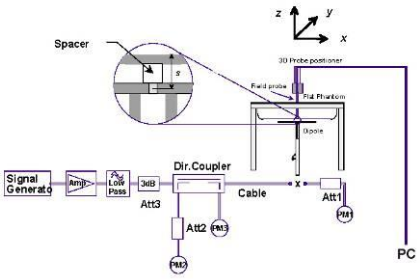

Figure 10-1
System Verification Setup Diagram

Figure 10-2
System Verification Setup Photo

10.3 Power Density Test System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

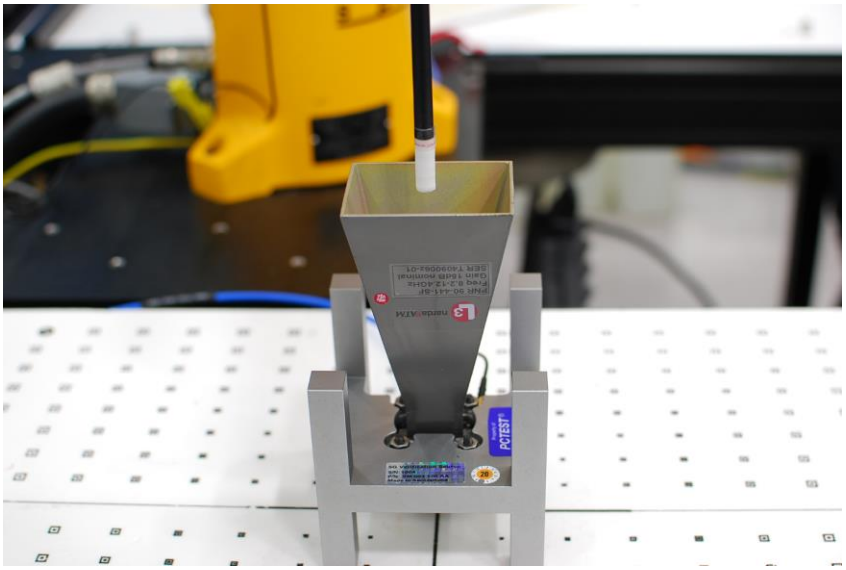

Figure 10-3
System Verification Setup Photo

Table 10-7
10 GHz Verifications

System	Frequency (GHz)	Date	Source S/N	Probe S/N	Prad (mW)	Normal psPD (W/m² over 4 cm²)		Deviation (dB)	Total psPD (W/m² over 4 cm²)		Deviation (dB)
						Measured	Target		Measured	Target	
Q	10	06/03/2025	1002	9389	93.3	47.10	53.80	-0.58	47.30	54.00	-0.58

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element.

11 SAR DATA SUMMARY

11.1 UMTS 850 Standalone SAR

Table 11-1
UMTS 850 - No Motion, Plot A1

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 850	RMC	5	3494W	1:1	0.00	836.60	4183	25.00	24.49	Top	25	0.176	1.125	0.198	0.992	Plot	32.0	32.0	32.0
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 11-2
UMTS 850 - Motion, Plot A2

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 850	RMC	5	34943	1:1	-0.02	836.60	4183	22.20	21.34	Bottom	0	0.619	1.219	0.755	0.755	Plot	23.4	23.4	21.2
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.2 UMTS 1750 Standalone SAR

Table 11-3
UMTS 1750 - No Motion, Plot A3

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 1750	RMC	1	348YG	1:1	0.04	1732.40	1412	25.00	23.86	Left	25	0.509	1.300	0.662	0.979	Plot	26.7	26.7	26.7
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 11-4
UMTS 1750 – Motion, Plot A4

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 1750	RMC	1	348YG	1:1	0.01	1712.40	1312	18.20	16.93	Bottom	0	0.812	1.340	1.088	1.088		17.8	17.4	17.2
Body	UMTS 1750	RMC	1	348YG	1:1	-0.02	1732.40	1412	18.20	17.10	Bottom	0	0.725	1.288	0.934	0.934		18.4		
Body	UMTS 1750	RMC	1	348YG	1:1	0.00	1752.60	1513	18.20	17.08	Bottom	0	0.921	1.294	1.192	1.192	Plot	17.4		
Body	UMTS 1750	RMC	1	348Y8	1:1	-0.02	1752.60	1513	18.20	17.08	Bottom	0	0.781	1.294	1.011	1.011		18.1		
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

11.3 UMTS 1900 Standalone SAR

Table 11-5
UMTS 1900 - No Motion, Plot A5

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 1900	RMC	1	3493C	1:1	-0.01	1880.00	9400	25.00	24.12	Top	25	0.263	1.225	0.322	0.995	Plot	29.9	29.9	29.9
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 11-6
UMTS 1900 – Motion, Plot A6

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 1900	RMC	1	348YG	1:1	-0.02	1852.40	9262	17.40	16.65	Bottom	0	0.969	1.189	1.152	1.152		16.7	16.6	16.4
Body	UMTS 1900	RMC	1	348YG	1:1	0.01	1880.00	9400	17.40	16.81	Bottom	0	1.020	1.146	1.169	1.169		16.7		
Body	UMTS 1900	RMC	1	348YG	1:1	-0.01	1907.60	9538	17.40	16.80	Bottom	0	1.040	1.148	1.194	1.194	Plot	16.6		
Body	UMTS 1900	RMC	1	3494W	1:1	0.02	1907.60	9538	17.40	16.80	Bottom	0	0.977	1.148	1.122	1.122		16.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.4 LTE Band 71 Standalone SAR

Table 11-7
LTE Band 71 - No Motion, Plot A7

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 71	20	QPSK	2	3494Y	1:1	-0.05	680.50	133297	0.0	25.00	23.42	1	0	Front	25	0.095	1.439	0.137	0.990		33.6	33.6	33.6
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 71	20	QPSK	5	348YG	1:1	-0.07	680.50	133297	0.0	25.00	23.57	1	50	Front	25	0.119	1.390	0.165	0.997	Plot	32.8	32.8	32.8
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 11-8
LTE Band 71 – Motion, Plot A8

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 71	20	QPSK	2	348Y8	1:1	0.03	680.50	133297	0.0	22.00	20.74	1	0	Bottom	0	0.450	1.337	0.602	0.602		24.2	24.2	21.0
Body	LTE Band 71	20	QPSK	2	348Y8	1:1	-0.01	680.50	133297	0.0	22.00	20.74	50	0	Bottom	0	0.427	1.337	0.571	0.571		24.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 71	20	QPSK	5	348YG	1:1	0.03	680.50	133297	0.0	21.70	20.40	1	50	Bottom	0	0.632	1.349	0.853	0.853		22.3	22.2	20.7
Body	LTE Band 71	20	QPSK	5	348YG	1:1	0.03	680.50	133297	0.0	21.70	20.41	50	0	Bottom	0	0.657	1.346	0.884	0.884	Plot	22.2		
Body	LTE Band 71	20	QPSK	5	348YG	1:1	-0.01	680.50	133297	0.0	21.70	20.39	100	0	Bottom	0	0.530	1.352	0.717	0.717		23.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.5 LTE Band 12 Standalone SAR

Table 11-9
LTE Band 12 - No Motion, Plot A9

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	2	34968	1:1	-0.01	707.50	23095	0.0	25.00	23.89	1	49	Front	25	0.134	1.291	0.173	0.996		32.6	32.6	32.6
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	5	348YG	1:1	-0.01	707.50	23095	0.0	25.00	24.12	1	49	Front	25	0.136	1.225	0.167	0.981	Plot	32.7	32.7	32.7
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 11-10
LTE Band 12 – Motion, Plot A10

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	2	348Y8	1:1	-0.01	707.50	23095	0.0	21.50	20.68	1	49	Bottom	0	0.662	1.208	0.800	0.800		22.4		
Body	LTE Band 12	10	QPSK	2	348Y8	1:1	0.01	707.50	23095	0.0	21.50	20.73	25	25	Bottom	0	0.670	1.194	0.800	0.800	Plot	22.4	22.4	20.5
Body	LTE Band 12	10	QPSK	2	348Y8	1:1	-0.02	707.50	23095	0.0	21.50	20.60	50	0	Bottom	0	0.657	1.230	0.808	0.808		22.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	5	348YG	1:1	0.08	707.50	23095	0.0	21.20	20.79	1	25	Bottom	0	0.539	1.099	0.592	0.592		23.4		
Body	LTE Band 12	10	QPSK	5	348YG	1:1	0.02	707.50	23095	0.0	21.20	20.80	25	12	Bottom	0	0.539	1.096	0.591	0.591		23.4	23.4	20.2
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.6 LTE Band 13 Standalone SAR

Table 11-11
LTE Band 13 - No Motion, Plot A11

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	2	348YG	1:1	-0.01	782.00	23230	0.0	25.00	23.64	1	49	Front	25	0.131	1.368	0.179	0.985		32.4	32.4	32.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	5	348YG	1:1	0.06	782.00	23230	0.0	25.00	23.79	1	25	Front	25	0.142	1.321	0.188	0.985	Plot	32.2	32.2	32.2
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 11-12
LTE Band 13 – Motion, Plot A12

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	2	348Y8	1:1	0.02	782.00	23230	0.0	21.40	19.91	1	49	Bottom	0	0.546	1.409	0.769	0.769		22.5		
Body	LTE Band 13	10	QPSK	2	348Y8	1:1	0.02	782.00	23230	0.0	21.40	19.94	25	25	Bottom	0	0.566	1.400	0.792	0.792	Plot	22.4	22.4	20.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	5	348YG	1:1	-0.01	782.00	23230	0.0	21.90	20.64	1	25	Bottom	0	0.485	1.337	0.648	0.648		23.7		
Body	LTE Band 13	10	QPSK	5	348YG	1:1	-0.01	782.00	23230	0.0	21.90	20.69	25	12	Bottom	0	0.495	1.321	0.654	0.654		23.7	23.7	20.9
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.7 LTE Band 14 Standalone SAR

LTE Band 14 - No Motion, Plot A13

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 14	10	QPSK	2	3494Y	1:1	-0.01	793.00	23330	0.0	25.00	23.64	1	0	Front	25	0.112	1.368	0.153	0.989	Plot	33.1	33.1	33.1
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 14	10	QPSK	5	3494Y	1:1	-0.10	793.00	23330	0.0	25.00	23.88	1	0	Front	25	0.093	1.294	0.120	0.978		34.1	34.1	34.1
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 11-13
LTE Band 14 – Motion, Plot A14

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 14	10	QPSK	2	348Y8	1:1	0.01	793.00	23330	0.0	21.40	19.96	1	0	Bottom	0	0.543	1.393	0.756	0.756		22.6	22.6	20.4
Body	LTE Band 14	10	QPSK	2	348Y8	1:1	0.03	793.00	23330	0.0	21.40	20.10	25	0	Bottom	0	0.545	1.349	0.735	0.735	Plot	22.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 14	10	QPSK	5	348YG	1:1	-0.03	793.00	23330	0.0	21.90	20.74	1	0	Bottom	0	0.469	1.306	0.613	0.613		24.0	24.0	20.9
Body	LTE Band 14	10	QPSK	5	348YG	1:1	-0.01	793.00	23330	0.0	21.90	20.81	25	25	Bottom	0	0.443	1.285	0.569	0.569		24.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.8 LTE Band 26 (Cell) Standalone SAR

LTE Band 26 - No Motion, Plot A15

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 26	15	QPSK	2	348YG	1:1	-0.06	831.50	26865	0.0	25.00	23.51	1	0	Front	25	0.080	1.409	0.113	0.982		34.4	34.4	34.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 26	15	QPSK	5	3494W	1:1	0.13	831.50	26865	0.0	25.00	23.91	1	0	Top	25	0.158	1.285	0.203	0.995	Plot	31.9	31.9	31.9
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 11-14
LTE Band 26 – Motion, Plot A16

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 26	15	QPSK	2	348Y8	1:1	0.00	831.50	26865	0.0	22.10	20.95	1	36	Bottom	0	0.688	1.303	0.896	0.896		22.5		
Body	LTE Band 26	15	QPSK	2	348Y8	1:1	0.05	831.50	26865	0.0	22.10	20.98	36	37	Bottom	0	0.722	1.294	0.934	0.934		22.3	22.2	21.1
Body	LTE Band 26	15	QPSK	2	348Y8	1:1	-0.01	831.50	26865	0.0	22.10	20.90	75	0	Bottom	0	0.727	1.318	0.958	0.958		22.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 26	15	QPSK	5	348YG	1:1	0.02	831.50	26865	0.0	22.20	21.20	1	0	Bottom	0	0.734	1.259	0.924	0.924		22.5		
Body	LTE Band 26	15	QPSK	5	348YG	1:1	0.02	831.50	26865	0.0	22.20	21.23	36	37	Bottom	0	0.753	1.250	0.941	0.941	Plot	22.4	22.3	21.2
Body	LTE Band 26	15	QPSK	5	348YG	1:1	0.00	831.50	26865	0.0	22.20	21.12	75	0	Bottom	0	0.751	1.282	0.963	0.963		22.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.9 LTE Band 5 (Cell) Standalone SAR

LTE Band 5 - No Motion, Plot A17

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	2	348YG	1:1	0.05	836.50	20525	0.0	25.00	23.71	1	0	Front	25	0.100	1.346	0.135	0.998		33.7	33.7	33.7
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	5	3494W	1:1	0.04	836.50	20525	0.0	25.00	24.12	1	0	Top	25	0.174	1.225	0.213	0.997	Plot	31.7	31.7	31.7
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 11-15
LTE Band 5 – Motion, Plot A18

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	2	348Y8	1:1	0.00	836.50	20525	0.0	22.10	20.95	1	25	Bottom	0	N/A	0.711	1.303	0.926	0.926		22.4		
Body	LTE Band 5	10	QPSK	2	348Y8	1:1	0.01	836.50	20525	0.0	22.10	21.08	25	25	Bottom	0	N/A	0.694	1.265	0.878	0.878		22.6		
Body	LTE Band 5	10	QPSK	2	348Y8	1:1	0.00	836.50	20525	0.0	22.10	20.83	50	0	Bottom	0	N/A	0.752	1.340	1.008	1.008		22.0	22.0	21.1
Body	LTE Band 5	10	QPSK	2	348Y8	1:1	0.00	836.50	20525	0.0	22.10	20.80	50	0	Bottom	0	ULCA SB	0.741	1.349	1.000	1.000		22.1		
		5						829.30	20453				25	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	5	348YG	1:1	-0.01	836.50	20525	0.0	22.20	21.40	1	25	Bottom	0	N/A	0.747	1.202	0.898	0.898		22.6		
Body	LTE Band 5	10	QPSK	5	348YG	1:1	0.01	836.50	20525	0.0	22.20	21.26	25	25	Bottom	0	N/A	0.749	1.242	0.930	0.930		22.5		
Body	LTE Band 5	10	QPSK	5	348YG	1:1	0.00	836.50	20525	0.0	22.20	21.21	50	0	Bottom	0	N/A	0.767	1.256	0.963	0.963	Plot	22.3	22.3	21.2
Body	LTE Band 5	10	QPSK	5	348YG	1:1	0.00	836.50	20525	0.0	22.20	21.10	50	0	Bottom	0	ULCA SB	0.753	1.288	0.970	0.970		22.3		
		5						829.30	20453				25	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

11.10 LTE Band 66 (AWS) Standalone SAR

Table 11-16
LTE Band 66 - No Motion, Plot A19

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	1	348YG	1:1	-0.01	1720.00	132072	0.0	25.50	24.08	1	0	Left	25	0.410	1.387	0.569	0.988	Plot	27.9	27.9	27.9
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 11-17
LTE Band 66 - Motion, Plot A20

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	-0.02	1720.00	132072	0.0	18.20	17.75	1	99	Bottom	0	N/A	0.809	1.109	0.897	0.897		18.6		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.02	1745.00	132322	0.0	18.20	17.78	1	50	Bottom	0	N/A	0.787	1.102	0.867	0.867		18.8		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	-0.14	1770.00	132572	0.0	18.20	17.76	1	50	Bottom	0	N/A	0.878	1.107	0.972	0.972		18.3		
Body	LTE Band 66	10	QPSK	1	348Y8	1:1	0.00	1775.00	132622	0.0	18.20	17.76	25	0	Bottom	0	N/A	0.786	1.107	0.870	0.870		18.8		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.00	1720.00	132072	0.0	18.20	17.71	50	25	Bottom	0	N/A	0.855	1.119	0.957	0.957		18.3		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	-0.02	1745.00	132322	0.0	18.20	17.76	50	25	Bottom	0	N/A	0.821	1.107	0.909	0.909		18.6		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.06	1770.00	132572	0.0	18.20	17.75	50	25	Bottom	0	N/A	0.918	1.109	1.018	1.018	Plot	18.1	18.1	17.2
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.04	1770.00	132572	0.0	18.20	17.73	50	0	Bottom	0	N/A	0.879	1.114	0.979	0.979		18.2		
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.04	1745.00	132322	0.0	18.20	17.74	100	0	Bottom	0	N/A	0.814	1.112	0.905	0.905		18.6		
Body	LTE Band 66	10	QPSK	1	348Y8	1:1	0.00	1775.00	132622	0.0	18.20	17.65	25	0	Bottom	0	ULCA 66B	0.772	1.135	0.876	0.876		18.7		
		10						1765.10	132523				25	25											
Body	LTE Band 66	20	QPSK	1	348Y8	1:1	0.01	1770.00	132572	0.0	18.20	17.71	50	0	Bottom	0	ULCA 66C	0.868	1.119	0.971	0.971		18.3		
		20						1750.20	132374				50	50											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

11.11 LTE Band 25 (PCS) Standalone SAR

Table 11-18
LTE Band 25 - No Motion, Plot A21

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	1	3493C	1:1	-0.06	1860.00	26140	0.0	25.50	24.35	1	50	Top	25	0.277	1.303	0.361	0.994	Plot	29.9	29.9	29.9
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 11-19
LTE Band 25 - Motion, Plot A22

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	1	348YG	1:1	0.01	1860.00	26140	0.0	17.40	16.57	1	50	Bottom	0	0.809	1.211	0.980	0.980		17.4		
Body	LTE Band 25	20	QPSK	1	348YG	1:1	-0.01	1882.50	26365	0.0	17.40	16.80	1	0	Bottom	0	0.837	1.148	0.961	0.961		17.5		
Body	LTE Band 25	20	QPSK	1	348YG	1:1	-0.01	1905.00	26590	0.0	17.40	16.94	1	0	Bottom	0	0.920	1.112	1.023	1.023		17.3		
Body	LTE Band 25	20	QPSK	1	348YG	1:1	-0.01	1860.00	26140	0.0	17.40	16.70	50	50	Bottom	0	0.841	1.175	0.988	0.988		17.4	17.0	16.4
Body	LTE Band 25	20	QPSK	1	348YG	1:1	-0.05	1882.50	26365	0.0	17.40	16.73	50	50	Bottom	0	0.899	1.167	1.049	1.049		17.1		
Body	LTE Band 25	20	QPSK	1	348YG	1:1	0.00	1905.00	26590	0.0	17.40	16.74	50	0	Bottom	0	0.922	1.164	1.073	1.073		17.0		
Body	LTE Band 25	20	QPSK	1	348YG	1:1	-0.03	1905.00	26590	0.0	17.40	16.69	100	0	Bottom	0	0.930	1.178	1.096	1.096	Plot	17.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

11.12 LTE Band 2 (PCS) Standalone SAR

Table 11-20
LTE Band 2 - No Motion, Plot A23

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 2	20	QPSK	1	3493C	1:1	0.01	1880.00	18900	0.0	25.5	24.28	1	99	Top	25	ULCA 2C	0.451	1.324	1.000	0.597	0.991	Plot	27.7	27.7	27.7
		20						1899.80	19098				1	0												
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 11-21
LTE Band 2 - Motion, Plot A24

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 2	20	QPSK	1	3494W	1:1	-0.01	1860.00	18700	0.0	17.40	16.81	1	0	Bottom	0	N/A	0.874	1.146	1.002	1.002		17.3		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	0.08	1880.00	18900	0.0	17.40	16.75	1	0	Bottom	0	N/A	0.867	1.161	1.007	1.007		17.3		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	0.03	1900.00	19100	0.0	17.40	16.66	1	0	Bottom	0	N/A	0.944	1.186	1.120	1.120		16.9		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	-0.01	1860.00	18700	0.0	17.40	16.80	50	25	Bottom	0	N/A	0.893	1.148	1.025	1.025		17.2		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	0.01	1880.00	18900	0.0	17.40	16.61	50	50	Bottom	0	N/A	0.928	1.199	1.113	1.113		16.9		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	-0.01	1900.00	19100	0.0	17.40	16.78	50	50	Bottom	0	N/A	0.998	1.153	1.151	1.151	Plot	16.7	16.6	16.4
Body	LTE Band 2	20	QPSK	1	3494W	1:1	0.02	1900.00	19100	0.0	17.40	16.37	50	0	Bottom	0	N/A	0.929	1.268	1.178	1.178		16.6		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	-0.01	1900.00	19100	0.0	17.40	16.79	100	0	Bottom	0	N/A	0.979	1.151	1.127	1.127		16.8		
Body	LTE Band 2	20	QPSK	1	3494W	1:1	-0.09	1900.00	19100	0.0	17.40	16.35	50	0	Bottom	0	ULCA 2C	0.920	1.274	1.172	1.172		16.7		
		20						1880.20	18902				50	50												
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.13 LTE Band 30 Standalone SAR

Table 11-22
LTE Band 30 - No Motion, Plot A25

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 30	10	QPSK	1	3493C	1:1	0.01	2310.00	27710	0.0	22.30	20.87	1	49	Top	25	0.273	1.390	0.379	0.998	Plot	26.5	26.5	26.5
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 11-23
LTE Band 30 - Motion, Plot A26

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 30	10	QPSK	1	3494D	1:1	0.02	2310.00	27710	0.0	16.00	14.65	1	49	Bottom	0	0.658	1.365	0.898	0.898	Plot	16.4		
Body	LTE Band 30	10	QPSK	1	3494D	1:1	-0.01	2310.00	27710	0.0	16.00	14.73	25	12	Bottom	0	0.647	1.340	0.867	0.867		16.6	16.4	15.0
Body	LTE Band 30	10	QPSK	1	3494D	1:1	0.06	2310.00	27710	0.0	16.00	14.60	50	0	Bottom	0	0.640	1.380	0.883	0.883		16.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.14 LTE Band 41 Standalone SAR

Table 11-24
LTE Band 41 - No Motion, Plot A27

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	1	3493C	1:2.31	-0.02	2636.50	41055	0.0	27.00	26.11	1	0	Top	25	0.440	1.227	0.540	0.983		26.0	26.0	26.0
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: Green entry represents HPUE measurement

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	6	3494W	1:2.31	-0.03	2593.00	40620	0.0	27.00	26.15	1	99	Top	25	0.910	1.216	1.083	1.198	1.198	Plot	22.9	22.9	22.9
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: Green entry represents HPUE measurement

Table 11-25
LTE Band 41 - Motion , Plot A28

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.00	2506.00	39750	0.0	19.50	18.34	1	50	Bottom	0	N/A	0.870	1.306	1.136	1.136		16.9		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.01	2549.50	40185	0.0	19.50	18.37	1	50	Bottom	0	N/A	0.682	1.297	0.885	0.885		18.0		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.01	2593.00	40620	0.0	19.50	18.38	1	50	Bottom	0	N/A	0.713	1.294	0.923	0.923		17.8		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.02	2636.50	41055	0.0	19.50	18.54	1	50	Bottom	0	N/A	0.867	1.247	1.081	1.081		17.1		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.01	2680.00	41490	0.0	19.50	18.34	1	0	Bottom	0	N/A	0.902	1.306	1.178	1.178		16.8		
Body	LTE Band 41	20	QPSK	1	3494D	1:2.31	-0.03	2680.00	41490	0.0	21.10	19.96	1	0	Bottom	0	N/A	0.913	1.300	1.187	1.187		16.7		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.02	2506.00	39750	0.0	19.50	18.32	50	50	Bottom	0	N/A	0.828	1.312	1.086	1.086		17.1		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.00	2549.50	40185	0.0	19.50	18.38	50	50	Bottom	0	N/A	0.681	1.294	0.881	0.881		18.0	16.7	16.5
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.01	2593.00	40620	0.0	19.50	18.38	50	0	Bottom	0	N/A	0.686	1.294	0.888	0.888		18.0		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.00	2636.50	41055	0.0	19.50	18.56	50	50	Bottom	0	N/A	0.887	1.242	1.102	1.102		17.0		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.02	2680.00	41490	0.0	19.50	18.34	50	0	Bottom	0	N/A	0.888	1.306	1.160	1.160		16.8		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.01	2636.50	41055	0.0	19.50	18.34	100	0	Bottom	0	N/A	0.869	1.306	1.135	1.135		16.9		
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	0.05	2680.00	41490	0.0	19.50	18.45	1	0	Bottom	0	ULCA 41C	0.928	1.274	1.182	1.182		16.7		
		20						2660.20	41292				1	99											
Body	LTE Band 41	20	QPSK	1	3494D	1:1.58	-0.01	2680.00	41490	0.0	19.50	18.45	1	0	Bottom	0	ULCA 41C	0.900	1.274	1.147	1.147		16.9		
		20						2660.20	41292				1	99											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	-0.02	2506.00	39750	0.0	19.40	19.02	1	99	Bottom	0	0.994	1.091	1.055	1.144	1.144		17.0		
Body	LTE Band 41	20	QPSK	6	348YG	1:2.31	0.01	2506.00	39750	0.0	21.00	20.96	1	99	Bottom	0	1.070	1.009	1.083	1.169	1.169	Plot	17.0		
Body	LTE Band 41	20	QPSK	6	348YG	1:2.31	0.01	2506.00	39750	0.0	21.00	20.96	1	99	Bottom	0	1.060	1.009	1.083	1.158	1.158		17.0		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.01	2549.50	40185	0.0	19.40	18.95	1	99	Bottom	0	0.732	1.109	1.055	0.856	0.856		18.3		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.00	2593.00	40620	0.0	19.40	18.98	1	99	Bottom	0	0.669	1.102	1.055	0.778	0.778		18.7		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	-0.03	2636.50	41055	0.0	19.40	18.99	1	50	Bottom	0	0.731	1.099	1.055	0.848	0.848		18.3		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.00	2680.00	41490	0.0	19.40	18.90	1	50	Bottom	0	0.854	1.122	1.055	1.011	1.011		17.6	16.7	16.4
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	-0.04	2506.00	39750	0.0	19.40	19.10	50	50	Bottom	0	0.964	1.072	1.055	1.090	1.090		17.2		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.01	2549.50	40185	0.0	19.40	19.02	50	50	Bottom	0	0.762	1.091	1.055	0.877	0.877		18.2		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	-0.01	2593.00	40620	0.0	19.40	19.04	50	50	Bottom	0	0.682	1.086	1.055	0.781	0.781		18.7		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.00	2636.50	41055	0.0	19.40	19.05	50	25	Bottom	0	0.743	1.084	1.055	0.850	0.850		18.3		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	-0.03	2680.00	41490	0.0	19.40	19.00	50	25	Bottom	0	0.890	1.096	1.055	1.029	1.029		17.5		
Body	LTE Band 41	20	QPSK	6	348YG	1:1.58	0.00	2549.50	40185	0.0	19.40	19.01	100	0	Bottom	0	0.761	1.094	1.055	0.878	0.878		18.2		
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

Note: Green entry represents HPUE measurement

11.15 LTE Band 48 Standalone SAR

Table 11-26
LTE Band 48 - No Motion, Plot A29

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	0.07	3560.00	55340	0.0	21.00	19.40	1	0	Top	25	0.085	1.445	0.130	1.054		28.1	28.1	28.1
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 48	20	QPSK	6	3493C	1:1.58	-0.03	3603.30	55773	0.0	21.00	19.30	1	99	Top	25	0.117	1.479	0.173	0.996	Plot	26.6	26.6	26.6
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 11-27
LTE Band 48 – Motion, Plot A30

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.07	3560.00	55340	0.0	18.80	17.65	1	0	Bottom	0	0.640	1.303	1.055	0.880	0.880		17.6		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.08	3603.30	55773	0.0	18.80	17.58	1	0	Bottom	0	0.707	1.324	1.055	0.988	0.988		17.1		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.05	3646.70	56207	0.0	18.80	17.60	1	0	Bottom	0	0.700	1.318	1.055	0.973	0.973		17.1		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.02	3690.00	56640	0.0	18.80	17.46	1	0	Bottom	0	0.662	1.361	1.055	0.951	0.951		17.2		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.01	3560.00	55340	0.0	18.80	17.65	50	25	Bottom	0	0.770	1.303	1.055	1.058	1.058		16.8	16.7	15.8
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.05	3603.30	55773	0.0	18.80	17.55	50	25	Bottom	0	0.760	1.334	1.055	1.070	1.070		16.7		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	0.02	3646.70	56207	0.0	18.80	17.49	50	25	Bottom	0	0.724	1.352	1.055	1.033	1.033		16.9		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.05	3690.00	56640	0.0	18.80	17.45	50	25	Bottom	0	0.659	1.365	1.055	0.949	0.949		17.2		
Body	LTE Band 48	20	QPSK	1	3493C	1:1.58	-0.05	3560.00	55340	0.0	18.80	17.63	100	0	Bottom	0	0.766	1.309	1.055	1.058	1.058		16.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.00	3560.00	55340	0.0	17.50	16.15	1	99	Bottom	0	N/A	0.815	1.365	1.112	1.112		15.0		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.01	3603.30	55773	0.0	17.50	16.20	1	99	Bottom	0	N/A	0.791	1.349	1.067	1.067		15.2		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.08	3646.70	56207	0.0	17.50	16.14	1	50	Bottom	0	N/A	0.679	1.368	0.929	0.929		15.8		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.02	3690.00	56640	0.0	17.50	16.09	1	0	Bottom	0	N/A	0.566	1.384	0.783	0.783		16.5		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.01	3560.00	55340	0.0	17.50	16.33	50	50	Bottom	0	N/A	0.814	1.309	1.066	1.066		15.2		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	0.00	3603.30	55773	0.0	17.50	16.34	50	50	Bottom	0	N/A	0.818	1.306	1.068	1.068		15.2	14.8	14.5
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	-0.01	3646.70	56207	0.0	17.50	16.33	50	0	Bottom	0	N/A	0.836	1.309	1.094	1.094		15.1		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	-0.08	3690.00	56640	0.0	17.50	16.11	50	0	Bottom	0	N/A	0.531	1.377	0.731	0.731		16.8		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	-0.03	3603.30	55773	0.0	17.50	16.19	100	0	Bottom	0	N/A	0.815	1.352	1.102	1.102		15.0		
Body	LTE Band 48	20	QPSK	6	348YG	1:1.58	-0.02	3560.00	55340	0.0	17.50	16.20	1	99	Bottom	0	ULCA 48C	0.856	1.349	1.155	1.155	Plot	14.8		
		20						3579.80	55538				1	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

11.16 NR Band n71 Standalone SAR

Table 11-28
NR Band n71 - No Motion, Plot A31

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n71	20	QPSK	2	34943	1:1	-0.02	680.50	136100	DFT-s-OFDM	0.0	25.00	23.40	1	53	Front	25	0.087	1.445	0.126	0.999		34.0	34.0	34.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n71	20	QPSK	5	3494W	1:1	0.01	680.50	136100	DFT-s-OFDM	0.0	25.00	23.92	50	28	Front	25	0.109	1.282	0.140	0.990	Plot	33.5	33.5	33.5
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 11-29
NR Band n71 - Motion, Plot A32

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n71	20	QPSK	2	34943	1:1	-0.02	680.50	136100	DFT-s-OFDM	0.0	21.00	20.34	1	53	Bottom	0	0.463	1.164	0.539	0.539		23.6		
Body	NR Band n71	20	QPSK	2	34943	1:1	-0.03	680.50	136100	DFT-s-OFDM	0.0	21.00	20.46	50	56	Bottom	0	0.438	1.132	0.496	0.496		24.0	23.5	20.0
Body	NR Band n71	20	QPSK	2	34943	1:1	-0.05	680.50	136100	CP-OFDM	0.0	21.00	20.70	1	1	Bottom	0	0.521	1.072	0.559	0.559		23.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n71	20	QPSK	5	3494W	1:1	-0.07	680.50	136100	DFT-s-OFDM	0.0	20.90	20.46	1	1	Bottom	0	0.594	1.107	0.658	0.658	Plot	22.7		
Body	NR Band n71	20	QPSK	5	3494W	1:1	-0.02	680.50	136100	DFT-s-OFDM	0.0	20.90	20.45	50	0	Bottom	0	0.582	1.109	0.645	0.645		22.8	22.7	19.9
Body	NR Band n71	20	QPSK	5	3494W	1:1	-0.01	680.50	136100	CP-OFDM	0.0	20.90	20.23	1	1	Bottom	0	0.547	1.167	0.638	0.638		22.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

11.17 NR Band n12 Standalone SAR

Table 11-30
NR Band n12 - No Motion, Plot A33

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n12	15	QPSK	2	3494W	1:1	-0.01	707.50	141500	DFT-s-OFDM	0.0	25.00	23.66	1	1	Top	25	0.181	1.361	0.246	0.981	Plot	31.0	31.0	31.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n12	15	QPSK	5	3494W	1:1	-0.02	707.50	141500	DFT-s-OFDM	0.0	25.00	24.20	1	1	Front	25	0.120	1.202	0.144	0.998		33.4	33.4	33.4
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 11-31
NR Band n12 - Motion, Plot A34

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n12	15	QPSK	2	34943	1:1	-0.02	707.50	141500	DFT-s-OFDM	0.0	20.50	20.35	1	1	Bottom	0	0.668	1.035	0.691	0.691		22.1		
Body	NR Band n12	15	QPSK	2	34943	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	20.50	20.38	36	0	Bottom	0	0.682	1.028	0.701	0.701		22.0	22.1	19.5
Body	NR Band n12	15	QPSK	2	34943	1:1	-0.05	707.50	141500	CP-OFDM	0.0	20.50	20.25	1	1	Bottom	0	0.651	1.059	0.689	0.689		22.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n12	15	QPSK	5	3494W	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	20.20	19.23	1	40	Bottom	0	0.759	1.250	0.949	0.949		20.4		
Body	NR Band n12	15	QPSK	5	3494W	1:1	-0.02	707.50	141500	DFT-s-OFDM	0.0	20.20	19.22	36	43	Bottom	0	0.743	1.253	0.931	0.931		20.5	20.2	19.2
Body	NR Band n12	15	QPSK	5	3494W	1:1	0.00	707.50	141500	DFT-s-OFDM	0.0	20.20	19.14	75	0	Bottom	0	0.764	1.276	0.975	0.975		20.3		
Body	NR Band n12	15	QPSK	5	3494W	1:1	0.00	707.50	141500	CP-OFDM	0.0	20.20	19.17	1	1	Bottom	0	0.777	1.268	0.985	0.985	Plot	20.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							

11.18 NR Band n14 Standalone SAR

Table 11-32
NR Band n14 - No Motion, Plot A35

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n14	10	QPSK	2	3494W	1:1	-0.09	793.00	158600	DFT-s-OFDM	0.0	25.00	23.60	1	26	Front	25	0.118	1.380	0.163	0.982	Plot	32.8	32.8	32.8
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n14	10	QPSK	5	3494W	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	25.00	24.00	1	26	Front	25	0.067	1.259	0.084	0.991		35.7	35.7	35.7
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 11-33
NR Band n14 - Motion, Plot A36

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n14	10	QPSK	2	3494Y	1:1	-0.07	793.00	158600	DFT-s-OFDM	0.0	21.40	19.92	1	50	Bottom	0	0.502	1.406	0.706	0.706		22.9		
Body	NR Band n14	10	QPSK	2	3494Y	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	21.40	19.94	25	27	Bottom	0	0.537	1.400	0.752	0.752		22.6	22.1	20.4
Body	NR Band n14	10	QPSK	2	3494Y	1:1	-0.01	793.00	158600	CP-OFDM	0.0	21.40	19.79	1	1	Bottom	0	0.575	1.449	0.833	0.833	Plot	22.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n14	10	QPSK	5	3494W	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	21.90	20.54	1	26	Bottom	0	0.462	1.368	0.632	0.632		23.8		
Body	NR Band n14	10	QPSK	5	3494W	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	21.90	20.52	25	27	Bottom	0	0.457	1.374	0.628	0.628		23.9	23.5	20.9
Body	NR Band n14	10	QPSK	5	3494W	1:1	-0.01	793.00	158600	CP-OFDM	0.0	21.90	20.31	1	1	Bottom	0	0.476	1.442	0.686	0.686		23.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							

11.19 NR Band n26 Standalone SAR

Table 11-34
NR Band n26 - No Motion, Plot A37

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n26	20	QPSK	2	3494W	1:1	0.07	831.50	166300	DFT-s-OFDM	0.0	25.00	23.40	1	53	Top	25	0.198	1.445	0.286	0.992	Plot	30.4	30.4	30.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n26	20	QPSK	5	3494W	1:1	0.00	831.50	166300	DFT-s-OFDM	0.0	25.00	24.20	1	1	Top	25	0.179	1.202	0.215	0.984		31.6	31.6	31.6
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 11-35
NR Band n26 - Motion, Plot A38

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n26	20	QPSK	2	3494D	1:1	0.00	831.50	166300	DFT-s-OFDM	0.0	22.10	20.96	1	1	Bottom	0	0.699	1.300	0.909	0.909		22.5		
Body	NR Band n26	20	QPSK	2	3494D	1:1	0.05	831.50	166300	DFT-s-OFDM	0.0	22.10	20.88	50	56	Bottom	0	0.684	1.324	0.906	0.906		22.5	22.2	21.1
Body	NR Band n26	20	QPSK	2	3494D	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	22.10	20.80	100	0	Bottom	0	0.723	1.349	0.975	0.975		22.2		
Body	NR Band n26	20	QPSK	2	3494D	1:1	-0.02	831.50	166300	CP-OFDM	0.0	22.10	20.91	1	1	Bottom	0	0.698	1.315	0.918	0.918		22.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n26	20	QPSK	5	3494W	1:1	-0.10	831.50	166300	DFT-s-OFDM	0.0	22.20	21.39	1	1	Bottom	0	0.798	1.205	0.962	0.962		22.3		
Body	NR Band n26	20	QPSK	5	3494W	1:1	0.00	831.50	166300	DFT-s-OFDM	0.0	22.20	21.46	50	0	Bottom	0	0.808	1.186	0.958	0.958	Plot	22.3	22.2	21.2
Body	NR Band n26	20	QPSK	5	3494W	1:1	0.00	831.50	166300	DFT-s-OFDM	0.0	22.20	21.37	100	0	Bottom	0	0.792	1.211	0.959	0.959		22.3		
Body	NR Band n26	20	QPSK	5	3494W	1:1	0.02	831.50	166300	CP-OFDM	0.0	22.20	21.28	1	1	Bottom	0	0.797	1.236	0.985	0.985		22.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							

11.1 NR Band n5 Standalone SAR

Table 11-36
NR Band n5 - No Motion, Plot A39

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	2	3494W	1:1	0.06	836.50	167300	DFT-s-OFDM	0.0	25.00	23.79	1	1	Top	25	0.188	1.321	0.248	0.989	Plot	31.0	31.0	31.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	5	3494W	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	25.00	24.27	1	1	Top	25	0.174	1.183	0.206	0.985		31.8	31.8	31.8
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 11-37
NR Band n5 - Motion, Plot A40

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	2	3494D	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	22.10	21.02	1	1	Bottom	0	0.738	1.282	0.946	0.946		22.3		
Body	NR Band n5	20	QPSK	2	3494D	1:1	0.06	836.50	167300	DFT-s-OFDM	0.0	22.10	21.05	50	28	Bottom	0	0.710	1.274	0.905	0.905		22.5	22.2	21.1
Body	NR Band n5	20	QPSK	2	3494D	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.10	21.00	100	0	Bottom	0	0.711	1.288	0.916	0.916		22.4		
Body	NR Band n5	20	QPSK	2	3494D	1:1	0.00	836.50	167300	CP-OFDM	0.0	22.10	20.97	1	1	Bottom	0	0.738	1.297	0.957	0.957		22.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram							
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	5	3494W	1:1	-0.02	836.50	167300	DFT-s-OFDM	0.0	22.20	21.42	1	1	Bottom	0	0.793	1.197	0.949	0.949		22.4		
Body	NR Band n5	20	QPSK	5	3494W	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	22.20	21.53	50	0	Bottom	0	0.814	1.167	0.950	0.950		22.4		
Body	NR Band n5	20	QPSK	5	3494W	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.20	21.53	50	0	Bottom	0	0.818	1.167	0.955	0.955	Plot	22.4	22.3	21.2
Body	NR Band n5	20	QPSK	5	3494W	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.20	21.40	100	0	Bottom	0	0.797	1.202	0.958	0.958		22.3		
Body	NR Band n5	20	QPSK	5	3494W	1:1	0.05	836.50	167300	CP-OFDM	0.0	22.20	21.29	1	1	Bottom	0	0.787	1.233	0.970	0.970		22.3		
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

11.2 NR Band n66 Standalone SAR

Table 11-38
NR Band n66 - No Motion, Plot A41

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n66	40	QPSK	1	348YG	1:1	0.04	1745.00	349000	DFT-s-OFDM	0.0	25.50	24.24	1	214	Left	25	0.587	1.337	0.785	0.988	Plot	26.5	26.5	26.5
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 11-39
NR Band n66 - Motion, Plot A42

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n66	40	QPSK	1	34943	1:1	-0.09	1745.00	349000	DFT-s-OFDM	0.0	18.20	16.93	1	214	Bottom	0	0.747	1.340	1.001	1.001		18.1	17.6	17.2
Body	NR Band n66	40	QPSK	1	34943	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	18.20	17.07	108	108	Bottom	0	0.812	1.297	1.053	1.053		17.9		
Body	NR Band n66	40	QPSK	1	34943	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	18.20	16.91	216	0	Bottom	0	0.829	1.346	1.116	1.116		17.7		
Body	NR Band n66	40	QPSK	1	34943	1:1	0.00	1745.00	349000	CP-OFDM	0.0	18.20	16.90	1	1	Bottom	0	0.849	1.349	1.145	1.145	Plot	17.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.3 NR Band n25 Standalone SAR

Table 11-40
NR Band n25 - No Motion, Plot A43

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n25	40	QPSK	1	348YG	1:1	0.03	1882.50	376500	DFT-s-OFDM	0.0	25.50	24.03	1	214	Top	0	0.319	1.403	0.448	0.979	Plot	28.9	28.9	28.9
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 11-41
NR Band n25 – Motion, Plot A44

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n25	40	QPSK	1	348YG	1:1	0.00	1882.50	376500	DFT-s-OFDM	0.0	16.40	16.19	1	214	Bottom	0	0.727	1.050	0.763	0.763	Plot	17.5		
Body	NR Band n25	40	QPSK	1	348YG	1:1	0.00	1882.50	376500	DFT-s-OFDM	0.0	16.40	16.21	108	108	Bottom	0	0.716	1.045	0.748	0.748		17.6	17.5	15.4
Body	NR Band n25	40	QPSK	1	348YG	1:1	0.02	1882.50	376500	CP-OFDM	0.0	16.40	15.96	1	1	Bottom	0	0.679	1.107	0.752	0.752		17.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.4 NR Band n30 Standalone SAR

Table 11-42
NR Band n30 - No Motion, Plot A45

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n30	10	QPSK	1	3493C	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	22.30	20.98	1	26	Top	25	0.351	1.355	0.476	0.994	Plot	25.5	25.5	25.5
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 11-43
NR Band n30 - Motion, Plot A46

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n30	10	QPSK	1	348YG	1:1	0.03	2310.00	462000	DFT-s-OFDM	0.0	16.00	14.59	1	50	Bottom	0	0.746	1.384	1.032	1.032	Plot	15.8		
Body	NR Band n30	10	QPSK	1	348YG	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	16.00	14.50	25	27	Bottom	0	0.746	1.413	1.054	1.054		15.7	15.7	15.0
Body	NR Band n30	10	QPSK	1	348YG	1:1	-0.03	2310.00	462000	DFT-s-OFDM	0.0	16.00	14.47	50	0	Bottom	0	0.732	1.422	1.041	1.041		15.8		
Body	NR Band n30	10	QPSK	1	348YG	1:1	0.01	2310.00	462000	CP-OFDM	0.0	16.00	14.33	1	1	Bottom	0	0.727	1.469	1.068	1.068		15.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.5 NR Band n41 Standalone SAR

Table 11-44
NR Band n41 - No Motion, Plot A47

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	1	34963	1:1	0.07	2592.99	518598	DFT-s-OFDM	0.0	27.00	26.35	1	1	Left	25	0.706	1.161	0.820	0.986	Plot	27.8	27.8	27.8
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	6	34963	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	27.00	26.17	1	271	Right	25	0.591	1.211	0.716	0.988		28.4	28.4	28.4
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 11-45
NR Band n41 - Motion, Plot A48

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	1	348YG	1:1	0.02	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.53	1	1	Bottom	0	0.732	1.250	0.915	0.915		17.8		
Body	NR Band n41	100	QPSK	1	348YG	1:1	0.06	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.48	135	0	Bottom	0	0.654	1.265	0.827	0.827		18.3	17.7	16.5
Body	NR Band n41	100	QPSK	1	348YG	1:1	-0.04	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.45	270	0	Bottom	0	0.726	1.274	0.925	0.925		17.8		
Body	NR Band n41	100	QPSK	1	348YG	1:1	0.01	2592.99	518598	CP-OFDM	0.0	17.50	16.40	1	1	Bottom	0	0.735	1.288	0.947	0.947		17.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	6	348YG	1:1	-0.02	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.57	1	271	Bottom	0	0.829	1.239	1.027	1.027		17.3		
Body	NR Band n41	100	QPSK	6	348YG	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.57	135	69	Bottom	0	0.740	1.239	0.917	0.917		17.8	16.8	16.5
Body	NR Band n41	100	QPSK	6	348YG	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	17.50	16.50	270	0	Bottom	0	0.776	1.259	0.977	0.977		17.6		
Body	NR Band n41	100	QPSK	6	348YG	1:1	0.02	2592.99	518598	CP-OFDM	0.0	17.50	16.46	1	1	Bottom	0	0.909	1.271	1.155	1.155	Plot	16.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

11.6 NR Band n48 Standalone SAR

Table 11-46
NR Band n48 - No Motion, Plot A49

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	QPSK	1	3493C	1:1	-0.05	3570.00	638000	DFT-s-OFDM	0.0	21.00	19.51	1	104	Left	25	0.195	1.409	0.275	0.998		26.6	26.6	26.6
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	3	3493C	1:1	0.05	3570.00	638000	CW/SRS	21.00	20.66	Top	25	0.164	1.081	0.177	0.997		28.5	28.5	28.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	4	3493C	1:1	0.05	3570.00	638000	CW/SRS	21.00	20.15	Top	25	0.147	1.216	0.179	0.982		28.4	28.4	28.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	QPSK	6	3493C	1:1	-0.01	3570.00	638000	DFT-s-OFDM	0.0	21.00	19.55	1	1	Right	25	0.325	1.396	0.454	0.993	Plot	24.4	24.4	24.4
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 11-47
NR Band n48 - Motion, Plot A50

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	QPSK	1	348YG	1:1	-0.03	3570.00	638000	DFT-s-OFDM	0.0	16.80	15.50	1	104	Bottom	0	0.713	1.349	0.962	0.962		16.9	16.8	15.8
Body	NR Band n48	40	QPSK	1	348YG	1:1	0.10	3624.99	641666	DFT-s-OFDM	0.0	16.80	14.92	1	1	Bottom	0	0.531	1.542	0.819	0.819		17.6		
Body	NR Band n48	40	QPSK	1	348YG	1:1	-0.16	3679.98	645332	DFT-s-OFDM	0.0	16.80	14.82	1	104	Bottom	0	0.536	1.578	0.846	0.846		17.5		
Body	NR Band n48	40	QPSK	1	348YG	1:1	-0.01	3570.00	638000	DFT-s-OFDM	0.0	16.80	15.36	50	56	Bottom	0	0.689	1.393	0.960	0.960		16.9		
Body	NR Band n48	40	QPSK	1	348YG	1:1	-0.01	3624.99	641666	DFT-s-OFDM	0.0	16.80	14.84	50	0	Bottom	0	0.525	1.570	0.824	0.824		17.6		
Body	NR Band n48	40	QPSK	1	348YG	1:1	0.12	3679.98	645332	DFT-s-OFDM	0.0	16.80	14.83	50	28	Bottom	0	0.533	1.574	0.839	0.839		17.5		
Body	NR Band n48	40	QPSK	1	348YG	1:1	0.04	3570.00	638000	DFT-s-OFDM	0.0	16.80	15.32	100	0	Bottom	0	0.684	1.406	0.962	0.962		16.9		
Body	NR Band n48	40	QPSK	1	348YG	1:1	0.00	3570.00	638000	CP-OFDM	0.0	16.80	15.30	1	1	Bottom	0	0.692	1.413	0.978	0.978		16.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	3	3494Y	1:1	-0.01	3570.00	638000	CW/SRS	14.50	14.20	Bottom	0	0.532	1.072	0.570	0.570		16.9	16.0	13.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	4	3494Y	1:1	0.02	3570.00	638000	CW/SRS	14.00	12.66	Bottom	0	0.301	1.361	0.410	0.410		17.8	14.8	13.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.01	3570.00	638000	DFT-s-OFDM	0.0	15.50	14.28	1	53	Bottom	0	0.883	1.324	1.169	1.169	Plot	14.8		
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.00	3570.00	638000	DFT-s-OFDM	0.0	15.50	14.28	1	53	Bottom	0	0.861	1.324	1.140	1.140		14.9		
Body	NR Band n48	40	QPSK	6	348YG	1:1	-0.03	3624.99	641666	DFT-s-OFDM	0.0	15.50	14.13	1	104	Bottom	0	0.732	1.371	1.004	1.004		15.4		
Body	NR Band n48	40	QPSK	6	348YG	1:1	-0.02	3679.98	645332	DFT-s-OFDM	0.0	15.50	13.96	1	1	Bottom	0	0.688	1.426	0.981	0.981		15.5		
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.00	3570.00	638000	DFT-s-OFDM	0.0	15.50	14.21	50	0	Bottom	0	0.862	1.346	1.160	1.160		14.8	14.7	14.5
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.01	3624.99	641666	DFT-s-OFDM	0.0	15.50	14.00	50	0	Bottom	0	0.730	1.413	1.031	1.031		15.3		
Body	NR Band n48	40	QPSK	6	348YG	1:1	-0.05	3679.98	645332	DFT-s-OFDM	0.0	15.50	13.96	50	0	Bottom	0	0.695	1.426	0.991	0.991		15.5		
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.01	3570.00	638000	DFT-s-OFDM	0.0	15.50	14.16	100	0	Bottom	0	0.866	1.361	1.179	1.179		14.7		
Body	NR Band n48	40	QPSK	6	348YG	1:1	0.00	3570.00	638000	CP-OFDM	0.0	15.50	14.32	1	1	Bottom	0	0.853	1.312	1.119	1.119		15.0		
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

11.7 NR Band n77 Standalone SAR

Table 11-48
NR Band n77 - No Motion, Plot A51

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77 DoD	100	QPSK	1	3493C	1:1	-0.01	3500.01	633334	DFT-s-OFDM	0.0	27.00	25.31	1	271	Top	25	0.565	1.476	0.834	0.980		27.7	27.7	27.7
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77	100	3	3493C	1:1	0.12	3930.00	662000	CW/SRS	27.00	25.29	Top	25	0.531	1.483	0.787	0.991		28.0	28.0	28.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77	100	4	3493C	1:1	0.09	3750.00	650000	CW/SRS	27.00	25.85	Top	25	0.615	1.303	0.801	0.986	Plot	27.9	27.9	27.9
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77	100	QPSK	6	3493C	1:1	0.01	3750.00	650000	DFT-s-OFDM	0.0	27.00	25.28	1	271	Top	25	0.543	1.486	0.807	0.993		27.9	27.9	27.9
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 11-49
NR Band n77 – Motion, Plot A52

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77 DoD	100	QPSK	1	3493C	1:1	0.00	3500.01	633334	DFT-s-OFDM	0.0	16.80	15.37	1	271	Bottom	0	0.638	1.390	0.887	0.887		17.3		
Body	NR Band n77	100	QPSK	1	3493C	1:1	0.03	3750.00	650000	DFT-s-OFDM	0.0	16.80	14.92	1	1	Bottom	0	0.639	1.542	0.985	0.985		16.8		
Body	NR Band n77	100	QPSK	1	3493C	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	16.80	14.91	1	137	Bottom	0	0.775	1.545	1.197	1.197		16.0		
Body	NR Band n77	100	QPSK	1	3493C	1:1	-0.08	3750.00	650000	DFT-s-OFDM	0.0	16.80	15.00	135	0	Bottom	0	0.574	1.514	0.869	0.869		17.4	16.0	15.8
Body	NR Band n77	100	QPSK	1	3493C	1:1	0.01	3930.00	662000	DFT-s-OFDM	0.0	16.80	14.89	135	0	Bottom	0	0.763	1.552	1.184	1.184		16.0		
Body	NR Band n77	100	QPSK	1	3493C	1:1	0.03	3930.00	662000	DFT-s-OFDM	0.0	16.80	14.90	270	0	Bottom	0	0.772	1.549	1.196	1.196		16.0		
Body	NR Band n77	100	QPSK	1	3493C	1:1	-0.05	3750.00	650000	CP-OFDM	0.0	16.80	14.85	1	1	Bottom	0	0.586	1.567	0.918	0.918		17.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77 DoD	100	3	3494Y	1:1	-0.11	3500.01	633334	CW/SRS	14.50	12.80	Bottom	0	0.366	1.479	0.541	0.541		17.1		
Body	NR Band n77	100	3	3494Y	1:1	0.00	3750.00	650000	CW/SRS	14.50	12.51	Bottom	0	0.377	1.581	0.596	0.596		16.7	16.3	13.5
Body	NR Band n77	100	3	3494Y	1:1	0.02	3930.00	662000	CW/SRS	14.50	12.50	Bottom	0	0.408	1.585	0.647	0.647		16.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77 DoD	100	4	3494Y	1:1	-0.03	3500.01	633334	CW/SRS	14.00	13.98	Bottom	0	0.510	1.005	0.513	0.513		16.9		
Body	NR Band n77	100	4	3494Y	1:1	0.03	3750.00	650000	CW/SRS	14.00	13.57	Bottom	0	0.501	1.104	0.553	0.553		16.5	14.8	13.0
Body	NR Band n77	100	4	3494Y	1:1	0.04	3930.00	662000	CW/SRS	14.00	13.50	Bottom	0	0.737	1.122	0.827	0.827		14.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n77	100	QPSK	6	348YG	1:1	-0.03	3750.00	650000	DFT-s-OFDM	0.0	15.50	14.17	1	1	Bottom	0	0.506	1.358	0.687	0.687		17.1		
Body	NR Band n77	100	QPSK	6	348YG	1:1	0.01	3930.00	662000	DFT-s-OFDM	0.0	15.50	14.35	1	137	Bottom	0	0.787	1.303	1.025	1.025		15.3		
Body	NR Band n77 DoD	100	QPSK	6	348YG	1:1	0.02	3500.01	633334	DFT-s-OFDM	0.0	15.50	14.56	135	0	Bottom	0	0.659	1.242	0.818	0.818		16.3		
Body	NR Band n77	100	QPSK	6	348YG	1:1	-0.02	3750.00	650000	DFT-s-OFDM	0.0	15.50	14.23	135	0	Bottom	0	0.506	1.340	0.678	0.678		17.1	15.3	14.5
Body	NR Band n77	100	QPSK	6	348YG	1:1	-0.04	3930.00	662000	DFT-s-OFDM	0.0	15.50	14.35	135	0	Bottom	0	0.788	1.303	1.027	1.027	Plot	15.3		
Body	NR Band n77	100	QPSK	6	348YG	1:1	-0.01	3930.00	662000	DFT-s-OFDM	0.0	15.50	14.33	270	0	Bottom	0	0.781	1.309	1.022	1.022		15.4		
Body	NR Band n77	100	QPSK	6	348YG	1:1	0.00	3930.00	662000	CP-OFDM	0.0	15.50	14.34	1	1	Bottom	0	0.781	1.306	1.020	1.020		15.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.8 2.4 GHz WLAN SISO Standalone SAR

Table 11-50
2.4 GHz WLAN - No Motion, Plot A53

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 0	348YG	98.19	0.02	2437.00	6	1.0	21.00	20.24	Bottom	25	0.032	1.191	1.018	0.039	Plot	35.1	35.1
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 1	348YG	98.07	-0.15	2417.00	2	1.0	21.00	20.41	Bottom	25	0.022	1.146	1.020	0.026		36.9	36.9
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 11-51
2.4 GHz WLAN - Motion, Plot A54

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 0	348Y8	98.19	0.02	2437.00	6	1.0	20.25	19.35	Bottom	0	0.543	1.230	1.018	0.680		21.9	21.9
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 1	348Y8	98.07	0.00	2417.00	2	1.0	21.00	20.41	Bottom	0	0.907	1.146	1.020	1.060	Plot	20.7	
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 1	348Y8	98.07	0.02	2437.00	6	1.0	21.00	20.42	Bottom	0	0.809	1.143	1.020	0.943		21.2	20.7
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	Chain 1	348Y8	98.07	-0.19	2462.00	11	1.0	21.00	20.33	Bottom	0	0.738	1.167	1.020	0.878		21.5	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

11.9 5 GHz WLAN SISO Standalone SAR

Table 11-52
5 GHz WLAN - No Motion, Plot A55

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 0	34943	99.10	0.01	5785.00	157	U-NII-3	6.0	21.50	20.40	Bottom	25	0.650	1.288	1.009	0.845		22.2
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	34943	99.15	0.04	5825.00	165	U-NII-3	6.0	21.50	20.53	Bottom	25	0.818	1.250	1.009	1.032	Plot	21.3
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 11-53
5 GHz WLAN - Motion, Plot A56

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]
Body	5 GHz WIFI/ IEEE 802.11n	40	OFDM	Chain 0	3494W	99.61	0.01	5190.00	38	U-NII-1	13.5	13.00	11.39	Bottom	0	0.382	1.449	1.004	0.556		15.5
Body	5 GHz WIFI/ IEEE 802.11n	40	OFDM	Chain 0	3494W	99.61	-0.07	5230.00	46	U-NII-1	13.5	15.75	15.03	Bottom	0	0.948	1.180	1.004	1.123		15.2
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	-0.07	5530.00	106	U-NII-2C	29.3	13.50	12.28	Bottom	0	0.664	1.324	1.007	0.885		14.0
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	34936	99.34	-0.05	5610.00	122	U-NII-2C	29.3	14.25	13.44	Bottom	0	0.886	1.205	1.007	1.075		13.9
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	0.09	5610.00	122	U-NII-2C	29.3	14.25	13.44	Bottom	0	0.841	1.205	1.007	1.020		14.1
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	-0.02	5690.00	138	U-NII-2C	29.3	14.25	13.51	Bottom	0	0.859	1.186	1.007	1.026		14.1
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	0.00	5775.00	155	U-NII-3	29.3	14.25	13.46	Bottom	0	0.903	1.199	1.007	1.090		13.8
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	0.07	5855.00	171	U-NII-4	29.3	14.25	13.60	Bottom	0	0.919	1.161	1.007	1.074		13.9
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 0	3494W	99.34	-0.04	5855.00	171	U-NII-4	29.3	14.25	13.60	Bottom	0	0.919	1.161	1.007	1.070		13.9
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

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	3496J	99.15	0.01	5180.00	36	U-NII-1	6.0	15.50	13.89	Bottom	0	0.657	1.449	1.009	0.961		15.6
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	3496J	99.15	0.09	5200.00	40	U-NII-1	6.0	16.50	16.12	Bottom	0	0.962	1.091	1.009	1.059		16.2
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	3496J	99.15	0.06	5220.00	44	U-NII-1	6.0	16.50	16.23	Bottom	0	0.777	1.064	1.009	0.834		17.2
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	3496J	99.15	0.03	5240.00	48	U-NII-1	6.0	16.50	16.30	Bottom	0	0.971	1.047	1.009	1.026		16.3
Body	5 GHz WIFI/ IEEE 802.11a	20	OFDM	Chain 1	3496J	99.15	0.03	5240.00	48	U-NII-1	6.0	16.50	16.30	Bottom	0	0.970	1.047	1.009	1.025		16.3
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	3496J	99.34	0.07	5530.00	106	U-NII-2C	29.3	13.50	12.14	Bottom	0	0.552	1.368	1.007	0.760		14.6
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	3496J	99.34	0.03	5610.00	122	U-NII-2C	29.3	14.00	13.19	Bottom	0	0.736	1.205	1.007	0.893		14.4
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	34943	99.34	0.03	5690.00	138	U-NII-2C	29.3	14.00	13.48	Bottom	0	1.030	1.127	1.007	1.169	Plot	13.3
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	3496J	99.34	0.05	5690.00	138	U-NII-2C	29.3	14.00	13.48	Bottom	0	0.994	1.127	1.007	1.128		13.4
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	3494W	99.34	-0.01	5775.00	155	U-NII-3	29.3	13.00	12.21	Bottom	0	0.788	1.199	1.007	0.951		13.2
Body	5 GHz WIFI/ IEEE 802.11ac	80	OFDM	Chain 1	3494W	99.34	0.00	5855.00	171	U-NII-4	29.3	13.00	12.14	Bottom	0	0.781	1.219	1.007	0.959		13.1
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

11.1 6 GHz SISO Standalone SAR and APD

Table 11-54
6 GHz WLAN - Motion, Plot A57

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.00	6105.00	31	144.1	18.0	17.20	Bottom	25	0.395	1.202	1.020	0.484	Plot	21.1	21.1
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.00	6105.00	31	144.1	18.0	17.20	Bottom	25	3.770	1.202	1.020	4.622	Plot	22.3	22.3

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	-0.05	6105.00	31	144.1	18.0	17.33	Bottom	25	0.253	1.167	1.019	0.301		23.2	23.2
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	-0.05	6105.00	31	144.1	18.0	17.33	Bottom	25	2.470	1.167	1.019	2.937		24.3	24.3

Table 11-55
6 GHz WLAN - No Motion, Plot A58

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.11	6105.0	31	144.1	9.5	9.38	Bottom	0	0.442	1.028	1.020	0.463		12.8	12.3
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.09	6265.0	63	144.1	9.5	9.06	Bottom	0	0.417	1.107	1.020	0.471		12.7	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.09	6585.0	127	144.1	9.5	9.18	Bottom	0	0.376	1.076	1.020	0.413		13.3	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	-0.16	6745.0	159	144.1	9.5	9.39	Bottom	0	0.342	1.026	1.020	0.358		13.9	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.03	6905.0	191	144.1	9.5	9.41	Bottom	0	0.351	1.021	1.020	0.366		13.8	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.11	6105.0	31	144.1	9.5	9.38	Bottom	0	3.550	1.028	1.020	3.722		14.7	14.4
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.09	6265.0	63	144.1	9.5	9.06	Bottom	0	3.350	1.107	1.020	3.783		14.7	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.09	6585.0	127	144.1	9.5	9.18	Bottom	0	3.000	1.076	1.020	3.293		15.3	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	-0.16	6745.0	159	144.1	9.5	9.39	Bottom	0	2.760	1.026	1.020	2.888		15.9	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 0	3494D	98.06	0.03	6905.0	191	144.1	9.5	9.41	Bottom	0	2.870	1.021	1.020	2.989		15.7	

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	-0.03	6105.00	31	144.1	9.5	8.93	Bottom	0	0.478	1.140	1.019	0.555	Plot	12.0	12.0
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.01	6265.00	63	144.1	9.5	9.35	Bottom	0	0.449	1.035	1.019	0.474		12.7	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.02	6585.00	127	144.1	9.5	9.00	Bottom	0	0.445	1.122	1.019	0.509		12.4	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.01	6745.00	159	144.1	9.5	9.17	Bottom	0	0.435	1.079	1.019	0.478		12.7	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.09	6905.00	191	144.1	9.5	9.21	Bottom	0	0.414	1.069	1.019	0.451		12.9	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	-0.03	6105.00	31	144.1	9.5	8.93	Bottom	0	3.680	1.140	1.019	4.275	Plot	14.1	14.1
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.01	6265.00	63	144.1	9.5	9.35	Bottom	0	3.430	1.035	1.019	3.618		14.9	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.02	6585.00	127	144.1	9.5	9.00	Bottom	0	3.360	1.122	1.019	3.842		14.6	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.01	6745.00	159	144.1	9.5	9.17	Bottom	0	3.330	1.079	1.019	3.661		14.8	
Body	6 GHz WIFI/ IEEE 802.11be	320	DSSS	Chain 1	3494D	98.12	0.09	6905.00	191	144.1	9.5	9.21	Bottom	0	3.190	1.069	1.019	3.475		15.0	

11.2 Bluetooth SISO Standalone SAR

Table 11-56
Bluetooth - Plot A59

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #
Body	2.4 GHz Bluetooth	FHSS	Chain 0	348Y8	76.80	0.00	2441.00	39	1	15.25	13.72	Bottom	0	0.168	1.422	1.016	0.243	Plot
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram						

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Plot #
Body	2.4 GHz Bluetooth	FHSS	Chain 1	348Y8	76.67	0.01	2441.00	39	1	15.25	14.03	Bottom	0	0.081	1.324	1.017	0.109	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram						

11.3 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Publication 447498 D04v01, and FCC KDB Publication 616217 D04v01r02.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. 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.

5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D04v01.
6. 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 13 for variability analysis.
7. This device uses Qualcomm Smart Transmit for 3G/4G/5G and FastConnect for WLAN 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).
8. The orange highlights throughout the report represent the highest scaled SAR per Equipment Class.
9. This device is equipped with a motion sensor for power reduction. Testing was performed at 25 mm on the worst case configuration based on the 0mm testing for all applicable antennas at max power to determine compliance for higher powers levels when the motion sensor is not tripped.
10. This device uses Qualcomm FastConnect TAS for WLAN 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).

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 D04v01, if the reported (scaled) SAR measured at the 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).

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 8.5.4.
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 D04v01, when the reported LTE Band 41 or 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 14 for linearity results.
8. For LTE Band 5, LTE Band 66, LTE Band 2, LTE Band 48, and LTE Band 41, 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.

NR Notes:

1. 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.
2. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
3. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. 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.
6. Per FCC KDB Publication 447498 D04v01, when the reported NR Band n77 C-Band SAR measured at the highest output power channel in a given a test configuration was > 0.4 W/kg for 1g evaluations and > 1 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
7. Per FCC KDB Publication 447498 D04v01, when the reported NR Band n41 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations and > 1 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
8. SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

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 8.6.4 for more information.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI 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 8.6.5 for more information.
3. 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.
4. 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.
5. Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors. Per October 2020 TCB Workshop notes, 5 channels were tested.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 78% transmission duty factor for Bluetooth to determine compliance. See RF Conducted Power Section for the time domain plot and calculation for the duty factor of the device.

12 POWER DENSITY DATA SUMMARY

12.1 6 GHz WIFI Power Density Results

Table 11-1
6 GHz WLAN IPD

MEASUREMENT RESULTS																								
Frequency (MHz)	Channel	Mode	Service	Bandwidth (MHz)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift (dB)	Spacing (mm)	Antenna Config.	DUT Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Grid Step (λ)	iPD (W/m²)	Scaling Factor for Measurement Uncertainty per IEC 62479	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Normal psPD (W/m²)	Scaled Normal psPD (W/m²)	Total psPD (W/m²)	Scaled Total psPD (W/m²)	Plot #
6265.00	63	802.11be	OFDM	320	9.50	9.06	N/A	N/A	-0.20	2	Chain 0	3494D	144.1	Bottom	98.06	0.05	1.800	1.554	1.107	1.020	3.320	5.826	3.920	6.878	
6105.00	31	802.11be	OFDM	320	N/A	N/A	9.50	8.93	-0.03	2	Chain 1	3494D	144.1	Bottom	98.12	0.05	1.720	1.554	1.140	1.019	3.530	6.372	4.170	7.528	Plot
6105.00	31	802.11be	OFDM	320	N/A	N/A	9.50	8.93	0.20	9.52	Chain 1	3494D	144.1	Bottom	98.12	0.05	2.340	1.554	1.140	1.019	1.740	3.141	1.910	3.448	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population												Power Density 10 W/m² averaged over 4 cm²												

Power Density General Notes

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
4. 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.
5. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
6. Per equipment manufacturer guidance, power density was measured at d=2mm and d=λ/5mm using the same grid size and grid step size for some frequencies and surfaces. The integrated Power Density (iPD) was calculated based on these measurements. Since iPD ratio between the two distances is ≥ -1dB, the grid step was sufficient for determining compliance at d=2mm.
7. PTP-PR algorithm was used during psPD measurement and calculations.
8. PD results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D04.
9. IPD testing was conducted using the same worst-case position and configuration as identified in the SAR evaluation, in accordance with the October 2022 TCB Workshop guidance and FCC KDB Publication 388624 D02.

13 SAR MEASUREMENT VARIABILITY

13.1 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 (~ 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 13-1
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Test Position	Antenna Config	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)	
835	836.50	167300	NR Band n5, 20MHz Bandwidth	DFT-s-OFDM, QPSK, 50 RB, 0 RB Offset	Bottom	0	5	0.818	0.814	1.00	N/A	N/A	N/A	N/A
1750	1752.60	1513	UMTS 1750	RMC	Bottom	0	1	0.921	0.781	1.18	N/A	N/A	N/A	N/A
1900	1900.00	9538	UMTS 1900	RMC	Bottom	0	1	1.040	0.977	1.06	N/A	N/A	N/A	N/A
2450	2506.00	39750	LTE Band 41 HPUE, 20 MHz Bandwidth	QPSK, 1 RB, 99 RB Offset	Bottom	0	6	1.070	1.060	1.01	N/A	N/A	N/A	N/A
2600	2680.00	41490	LTE Band 41, ULCA 41C, 20 MHz Bandwidth	QPSK, PCC: 1RB, 0 RB Offset, SCC: 1 RB, 99 RB Offset	Bottom	0	1	0.928	0.900	1.03	N/A	N/A	N/A	N/A
3500	3570.00	368000	NR Band n48, 40 MHz Bandwidth	DFT-s-OFDM, QPSK, 1 RB, 53 RB Offset	Bottom	0	6	0.883	0.861	1.03	N/A	N/A	N/A	N/A
5250	5240.00	48	5 GHz WIFI/IEEE 802.11a 20 MHz Bandwidth	OFDM	Bottom	0	Chain 1	0.971	0.970	1.00	N/A	N/A	N/A	N/A
5600	5610.00	122	5 GHz WIFI/IEEE 802.11ac 80 MHz Bandwidth	OFDM	Bottom	0	Chain 0	0.886	0.841	1.05	N/A	N/A	N/A	N/A
5750	5690.00	138	5 GHz WIFI/IEEE 802.11ac 80 MHz Bandwidth	OFDM	Bottom	0	Chain 1	1.030	0.994	1.04	N/A	N/A	N/A	N/A
5850	5855.00	171	5 GHz WIFI/IEEE 802.11ac 80 MHz Bandwidth	OFDM	Bottom	0	Chain 0	0.919	0.915	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					Body 1.6 W/kg (mW/g) averaged over 1 gram									

13.2 Measurement Uncertainty

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

14 ADDITIONAL TESTING PER FCC GUIDANCE

14.1 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.
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 14-1
LTE Band 41 Body Linearity Data – Antenna 1

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.50	21.10
Measured Output Power (dBm)	18.34	19.96
Measured SAR (W/kg)	0.902	0.913
Measured Power (mW)	68.23	99.08
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	43.19	42.90
% deviation from expected linearity		1.90%

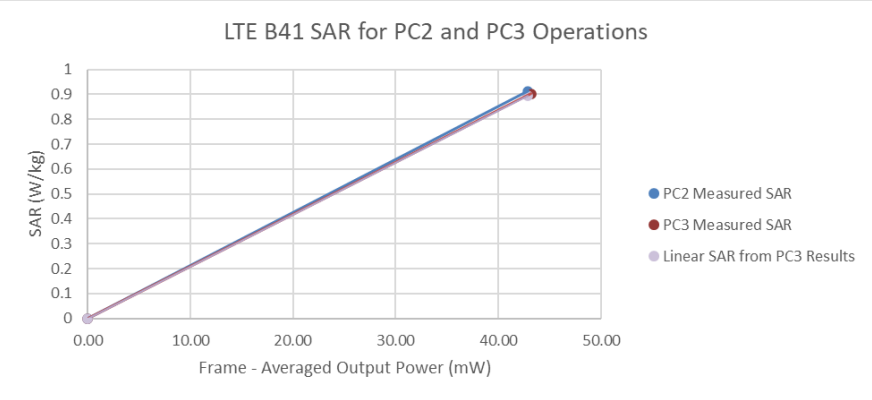

Figure 14-1
LTE Band 41 Body Linearity – Antenna 1

Table 14-2
LTE Band 41 Body Linearity Data – Antenna 6

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.40	21.00
Measured Output Power (dBm)	19.02	20.96
Measured SAR (W/kg)	0.994	1.070
Measured Power (mW)	79.80	124.74
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	50.51	54.01
% deviation from expected linearity		0.67%

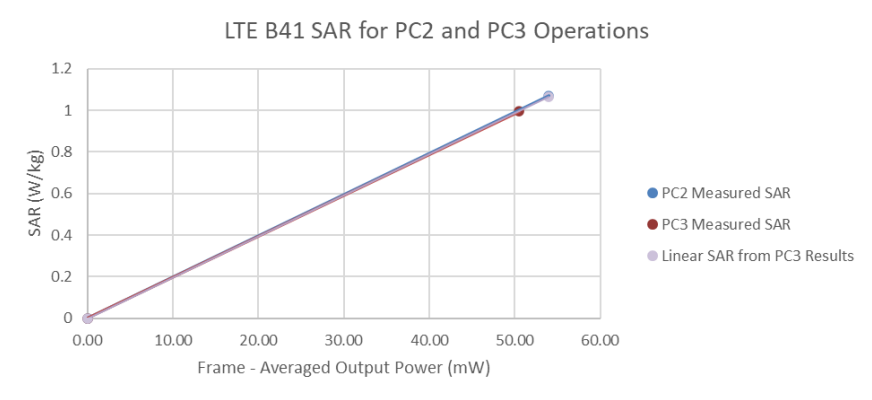

Figure 14-2
LTE Band 41 Body Linearity – Antenna 6

15 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	10/23/2024	Annual	10/23/2025	MY45093852
Agilent	E4438C	ESG Vector Signal Generator	11/15/2024	Annual	11/15/2025	MY45092078
Agilent	N5182A	MXG Vector Signal Generator	7/9/2024	Annual	7/9/2025	MY48180366
Agilent	8753ES	S-Parameter Vector Network Analyzer	1/6/2025	Annual	1/6/2026	MY40001472
Agilent	8753ES	S-Parameter Vector Network Analyzer	9/25/2024	Annual	9/25/2025	MY40003841
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB46310798
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB41450275
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433973
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Anritsu	MN8110B	I/O Adaptor	CBT	N/A	CBT	6261747881
Anritsu	ML2496A	Power Meter	7/15/2024	Annual	7/15/2025	1138001
Anritsu	ML2496A	Power Meter	6/24/2024	Annual	6/24/2025	1840005
Anritsu	MA2411B	Pulse Power Sensor	9/5/2024	Annual	9/5/2025	1726262
Anritsu	MA2411B	Pulse Power Sensor	10/21/2024	Annual	10/21/2025	1027293
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	CBT	N/A	CBT	6200901190
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	CBT	N/A	CBT	6201144419
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/14/2025	Annual	3/14/2026	6262044715
Anritsu	MT8000A	Radio Communication Test Station	CBT	N/A	CBT	626196-7072
Anritsu	MT8000A	Radio Communication Test Station	CBT	N/A	CBT	6272337408
Anritsu	MT8000A	Radio Communication Test Station	CBT	N/A	CBT	6262036828
Anritsu	MT8000A	Radio Communication Test Station	4/11/2025	Annual	4/11/2026	6261987983
Anritsu	MT8000A	Radio Communication Test Station	3/11/2025	Annual	3/11/2026	6272337439
Anritsu	MT8000A	Radio Communication Test Station	11/12/2024	Annual	11/12/2025	6272337405
Anritsu	MA24106A	USB Power Sensor	7/10/2024	Annual	7/10/2025	1827530
Anritsu	MA24106A	USB Power Sensor	10/29/2024	Annual	10/29/2025	1248508
Mini-Circuits	PWR-4GHS	USB Power Sensor	6/12/2024	Annual	6/12/2025	12001070013
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240174346
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171096
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171059
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310280
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310282
Control Company	S66279	Therm./ Clock/ Humidity Monitor	2/16/2024	Biennial	2/16/2026	240140051
Keysight Technologies	N9020A	MXA Signal Analyzer	7/8/2024	Annual	7/8/2025	MY48010233
Agilent	N9020A	MXA Signal Analyzer	6/14/2024	Annual	6/14/2025	MY56470202
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/10/2024	Annual	7/10/2025	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench	CBT	N/A	CBT	22217
Seekonk	NC-100	Torque Wrench	4/2/2024	Biennial	4/2/2026	1262
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	6/10/2024	Annual	6/10/2025	168543
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/7/2025	Annual	4/7/2026	167284
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/28/2025	Annual	1/28/2026	135400
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/25/2025	Annual	1/25/2026	122206
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	12/10/2024	Annual	12/10/2025	167286
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/6/2025	Annual	1/6/2026	131454
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/9/2025	Annual	4/9/2026	145663
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	9/26/2024	Biennial	9/26/2026	110553
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	10/2/2024	Annual	10/2/2025	171000
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/3/2025	Annual	4/3/2026	167285
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/22/2025	Annual	2/22/2026	168527
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/6/2025	Annual	1/6/2026	150117
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	12/10/2024	Annual	12/10/2025	161616
SPEAG	DAK-3.5	Dielectric Assessment Kit	11/5/2024	Annual	11/5/2025	1277
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/7/2024	Annual	8/7/2025	1041
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1331
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1390
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	3/10/2025	Annual	3/10/2026	1102
SPEAG	D750V3	750 MHz SAR Dipole	3/4/2025	Annual	3/4/2026	1054
SPEAG	D750V3	750 MHz SAR Dipole	10/7/2024	Annual	10/7/2025	1161
SPEAG	D835V2	835 MHz SAR Dipole	3/11/2024	Biennial	3/11/2026	4d133
SPEAG	D835V2	835 MHz SAR Dipole	1/18/2024	Biennial	1/18/2026	4d132
SPEAG	D1750V2	1750 MHz SAR Dipole	11/7/2024	Annual	11/7/2025	1150
SPEAG	D1750V2	1750 MHz SAR Dipole	1/13/2025	Annual	1/13/2026	1148
SPEAG	D1900V2	1900 MHz SAR Dipole	2/7/2025	Annual	2/7/2026	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	8/8/2022	Triennial	8/8/2025	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	7/10/2024	Annual	7/10/2025	5d149
SPEAG	D2300V2	2300 MHz SAR Dipole	6/4/2024	Annual	6/4/2025	1116
SPEAG	D2450V2	2450 MHz SAR Dipole	11/15/2022	Triennial	11/15/2025	797
SPEAG	D2450V2	2450 MHz SAR Dipole	8/7/2024	Annual	8/7/2025	719
SPEAG	D2600V2	2600 MHz SAR Dipole	11/15/2022	Triennial	11/15/2025	1071
SPEAG	D3500V2	3500 MHz SAR Dipole	1/10/2023	Triennial	1/10/2026	1097
SPEAG	D3500V2	3500 MHz SAR Dipole	1/12/2024	Biennial	1/12/2026	1059
SPEAG	D3700V2	3700 MHz SAR Dipole	1/13/2023	Triennial	1/13/2026	1067
SPEAG	D3700V2	3700 MHz SAR Dipole	1/9/2024	Biennial	1/9/2026	1018
SPEAG	D3900V2	3900 MHz SAR Dipole	10/19/2023	Biennial	10/19/2025	1056
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2024	Annual	6/10/2025	1073
SPEAG	D5GHzV2	5 GHz SAR Dipole	2/21/2024	Biennial	2/21/2026	1057
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/17/2024	Biennial	1/17/2026	1191
SPEAG	D6.5GHzV2	6.5 GHz SAR Dipole	2/4/2025	Annual	2/4/2026	1111
SPEAG	5G Verification Source 10GHz	10GHz System Verification Antenna	3/4/2025	Annual	3/4/2026	1002
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2025	Annual	1/13/2026	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/10/2024	Annual	12/10/2025	1450
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/11/2024	Annual	6/11/2025	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/11/2025	Annual	3/11/2026	1415
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1677
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1678
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2025	Annual	1/13/2026	859
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/6/2025	Annual	2/6/2026	665
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/3/2024	Annual	12/3/2025	1278
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	2/7/2025	Annual	2/7/2026	1638
SPEAG	EX3DV4	SAR Probe	1/7/2025	Annual	1/7/2026	7713
SPEAG	EX3DV4	SAR Probe	9/9/2024	Annual	9/9/2025	7670
SPEAG	EX3DV4	SAR Probe	6/17/2024	Annual	6/17/2025	7409
SPEAG	EX3DV4	SAR Probe	3/7/2025	Annual	3/7/2026	7488
SPEAG	EX3DV4	SAR Probe	7/5/2024	Annual	7/5/2025	7406
SPEAG	EX3DV4	SAR Probe	5/8/2024	Annual	5/8/2025	7660
SPEAG	EX3DV4	SAR Probe	1/8/2025	Annual	1/8/2026	7571
SPEAG	EX3DV4	SAR Probe	2/12/2025	Annual	2/12/2026	7417
SPEAG	EX3DV4	SAR Probe	6/28/2024	Annual	6/28/2025	7803
SPEAG	EX3DV4	SAR Probe	2/10/2025	Annual	2/10/2026	7570
SPEAG	EX3DV4	SAR Probe	4/7/2025	Annual	4/7/2026	7659
SPEAG	EUmmWV4	EUmmWV3 Probe	1/8/2025	Annual	1/8/2026	9389

Note: 1) All equipment was used solely within its respective calibration period. 2) 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.

16 MEASUREMENT UNCERTAINTIES

Applicable for SAR Measurements < 6 GHz:

				f(d,k)			c x f/e	c x g/e	
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	7	N	1	1	1	7.0	7.0	∞
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	1.73	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	1.73	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.73	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.73	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.73	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	1.73	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.73	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	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.73	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				12.2	12.0	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				24.4	24.0	

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

Applicable for SAR Measurements > 6 GHz:

Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	f(d,k) Div.	c_i 1gm	c_i 10 gms	c x f/e 1gm u_i (± %)	c x g/e 10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	9.3	N	1	1	1	9.3	9.3	∞
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	1.73	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	1.73	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.73	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.73	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.73	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	1.73	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.73	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	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.73	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				13.8	13.6	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				27.6	27.1	

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

Applicable for Power Density Measurements:

a	b	c	d	e	f = c x f/e	g
Uncertainty Component	Unc. (± dB)	Prob. Dist.	Div.	c_i	u_i (± dB)	v_i
Measurement System						
Calibration	0.49	N	1	1	0.49	∞
Probe Correction	0.00	R	1.73	1	0.00	∞
Frequency Response	0.20	R	1.73	1	0.12	∞
Sensor Cross Coupling	0.00	R	1.73	1	0.00	∞
Isotropy	0.50	R	1.73	1	0.29	∞
Linearity	0.20	R	1.73	1	0.12	∞
Probe Scattering	0.00	R	1.73	1	0.00	∞
Probe Positioning offset	0.30	R	1.73	1	0.17	∞
Probe Positioning Repeatability	0.04	R	1.73	1	0.02	∞
Sensor MechanicalOffset	0.00	R	1.73	1	0.00	∞
Probe Spatial Resolution	0.00	R	1.73	1	0.00	∞
Field Impedence Dependance	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Drift	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Noise	0.04	R	1.73	1	0.02	∞
Measurement Area Truncation	0.00	R	1.73	1	0.00	∞
Data Acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.73	1	0.00	∞
Field Reconstruction	2.00	R	1.73	1	1.15	∞
Forward Transformation	0.00	R	1.73	1	0.00	∞
Power Density Scaling	0.00	R	1.73	1	0.00	∞
Spatial Averaging	0.10	R	1.73	1	0.06	∞
System Detection Limit	0.04	R	1.73	1	0.02	∞
Test Sample Related						
Probe Coupling with DUT	0.00	R	1.73	1	0.00	∞
Modulation Response	0.40	R	1.73	1	0.23	∞
Integration Time	0.00	R	1.73	1	0.00	∞
Response Time	0.00	R	1.73	1	0.00	∞
Device Holder Influence	0.10	R	1.73	1	0.06	∞
DUT alignment	0.00	R	1.73	1	0.00	∞
RF Ambient Conditions	0.04	R	1.73	1	0.02	∞
Ambient Reflections	0.04	R	1.73	1	0.02	∞
Immunity/Secondary Reception	0.00	R	1.73	1	0.00	∞
Drift of DUT	0.21	R	1.73	1	0.12	∞
Combined Standard Uncertainty (k=1)		RSS			1.34	∞
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2				

17 CONCLUSION

17.1 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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