



<n77(HPUE)_Main> (3450MHz ~ 3550MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		14.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		13.67		
100	PI/2 BPSK	1	137		13.42		14.0
100	PI/2 BPSK	1	271		13.65		
100	PI/2 BPSK	135	0		13.45		
100	PI/2 BPSK	135	69		13.60		14.0
100	PI/2 BPSK	135	138		13.49		14.0
100	PI/2 BPSK	270	0		13.63		
100	QPSK	1	1		13.46		
100	QPSK	1	137		13.64		14.0
100	QPSK	1	271		13.54		
100	QPSK	135	0		13.56		
100	QPSK	135	69		13.63		14.0
100	QPSK	135	138		13.50		
100	QPSK	270	0		13.60		
100	16QAM	1	1		13.48		14.0
100	64QAM	1	1		13.57		14.0
100	256QAM	1	1		13.55		14.0
Channel				632668	633332	634000	14.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	13.44	13.54	13.41	
Channel				632000	633332	634666	14.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	13.42	13.61	13.52	
Channel				631668	633332	635000	14.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	13.38	13.43	13.39	
Channel				631334	633332	635332	14.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	13.35	13.44	13.41	
Channel				630668	633332	636000	14.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	13.21	13.29	13.22	
Channel				630500	633332	636166	14.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	13.30	13.35	13.31	
Channel				630334	633332	636332	14.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	13.31	13.37	13.32	



<n77(HPUE)_MIMO2> (3700 MHz ~ 3980 MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	16.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	15.53	15.16	15.43	
100	PI/2 BPSK	1	137	15.28	15.15	15.20	16.0
100	PI/2 BPSK	1	271	14.67	14.46	14.70	
100	PI/2 BPSK	135	0	14.99	14.84	14.94	
100	PI/2 BPSK	135	69	14.36	14.35	14.49	16.0
100	PI/2 BPSK	135	138	15.02	14.87	14.98	16.0
100	PI/2 BPSK	270	0	14.31	14.37	14.45	
100	QPSK	1	1	15.05	14.93	15.02	
100	QPSK	1	137	14.40	14.31	14.47	16.0
100	QPSK	1	271	15.05	14.92	14.99	
100	QPSK	135	0	14.35	14.34	14.48	
100	QPSK	135	69	15.03	14.96	15.03	16.0
100	QPSK	135	138	14.45	14.24	14.42	16.0
100	QPSK	270	0	14.98	14.90	14.92	
100	16QAM	1	1	14.42	14.26	14.36	
100	64QAM	1	1	14.99	14.83	14.95	16.0
100	256QAM	1	1	14.42	14.37	14.49	16.0
Channel				649334	656000	662666	16.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	14.65	14.45	14.73	
Channel				648668	656000	663332	16.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	14.65	14.45	14.75	
Channel				648334	656000	663666	16.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	14.67	14.47	14.74	
Channel				648000	656000	664000	16.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	14.63	14.52	14.76	
Channel				647334	656000	664666	16.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	14.65	14.53	14.77	
Channel				647168	656000	664832	16.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	14.65	14.47	14.76	
Channel				647000	656000	665000	16.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	14.64	14.44	14.70	



<n77(HPUE)_MIMO2> (3450MHz ~ 3550MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		16.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.55		16.0
100	PI/2 BPSK	1	137		15.30		
100	PI/2 BPSK	1	271		14.69		
100	PI/2 BPSK	135	0		15.01		16.0
100	PI/2 BPSK	135	69		14.38		16.0
100	PI/2 BPSK	135	138		15.04		16.0
100	PI/2 BPSK	270	0		14.33		
100	QPSK	1	1		15.07		16.0
100	QPSK	1	137		14.42		
100	QPSK	1	271		15.07		
100	QPSK	135	0		14.37		15.0
100	QPSK	135	69		15.05		
100	QPSK	135	138		14.47		
100	QPSK	270	0		15.00		16.0
100	16QAM	1	1		14.44		16.0
100	64QAM	1	1		15.01		16.0
100	256QAM	1	1		14.44		16.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.69	14.73	14.55	16.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.62	14.71	14.68	16.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.49	14.72	14.65	16.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.63	14.66	14.58	16.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.62	14.66	14.61	16.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.58	14.69	14.60	16.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.56	14.61	14.59	16.0



<n78_Main> (3700 MHz ~ 3800 MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		11.0
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		10.51		11.0
100	PI/2 BPSK	1	137		10.35		
100	PI/2 BPSK	1	271		10.44		
100	PI/2 BPSK	135	0		10.45		11.0
100	PI/2 BPSK	135	69		10.47		11.0
100	PI/2 BPSK	135	138		10.45		11.0
100	PI/2 BPSK	270	0		10.50		
100	QPSK	1	1		10.39		11.0
100	QPSK	1	137		10.50		
100	QPSK	1	271		10.46		
100	QPSK	135	0		10.46		11.0
100	QPSK	135	69		10.42		11.0
100	QPSK	135	138		10.37		11.0
100	QPSK	270	0		10.48		
100	16QAM	1	1		10.44		11.0
100	64QAM	1	1		10.47		11.0
100	256QAM	1	1		10.45		11.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	10.36	10.30	10.35	11.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	10.31	10.31	10.36	11.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	10.36	10.36	10.29	11.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	10.33	10.38	10.30	11.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	10.37	10.36	10.38	11.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	10.28	10.28	10.38	11.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	10.34	10.32	10.37	11.0



<n78_Main> (3450MHz ~ 3550MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		11.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		10.56		11.0
100	PI/2 BPSK	1	137		10.31		
100	PI/2 BPSK	1	271		10.54		
100	PI/2 BPSK	135	0		10.34		11.0
100	PI/2 BPSK	135	69		10.49		11.0
100	PI/2 BPSK	135	138		10.38		11.0
100	PI/2 BPSK	270	0		10.52		
100	QPSK	1	1		10.35		11.0
100	QPSK	1	137		10.53		
100	QPSK	1	271		10.43		
100	QPSK	135	0		10.45		11.0
100	QPSK	135	69		10.52		
100	QPSK	135	138		10.39		
100	QPSK	270	0		10.49		11.0
100	16QAM	1	1		10.37		11.0
100	64QAM	1	1		10.46		11.0
100	256QAM	1	1		10.44		11.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	10.33	10.43	10.41	11.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	10.35	10.51	10.29	11.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	10.34	10.42	10.25	11.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	10.25	10.38	10.25	11.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	10.15	10.28	10.22	11.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	10.22	10.24	10.19	11.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	10.25	10.26	10.18	11.0

**<n78_MIMO2> (3700 MHz ~ 3800 MHz)**

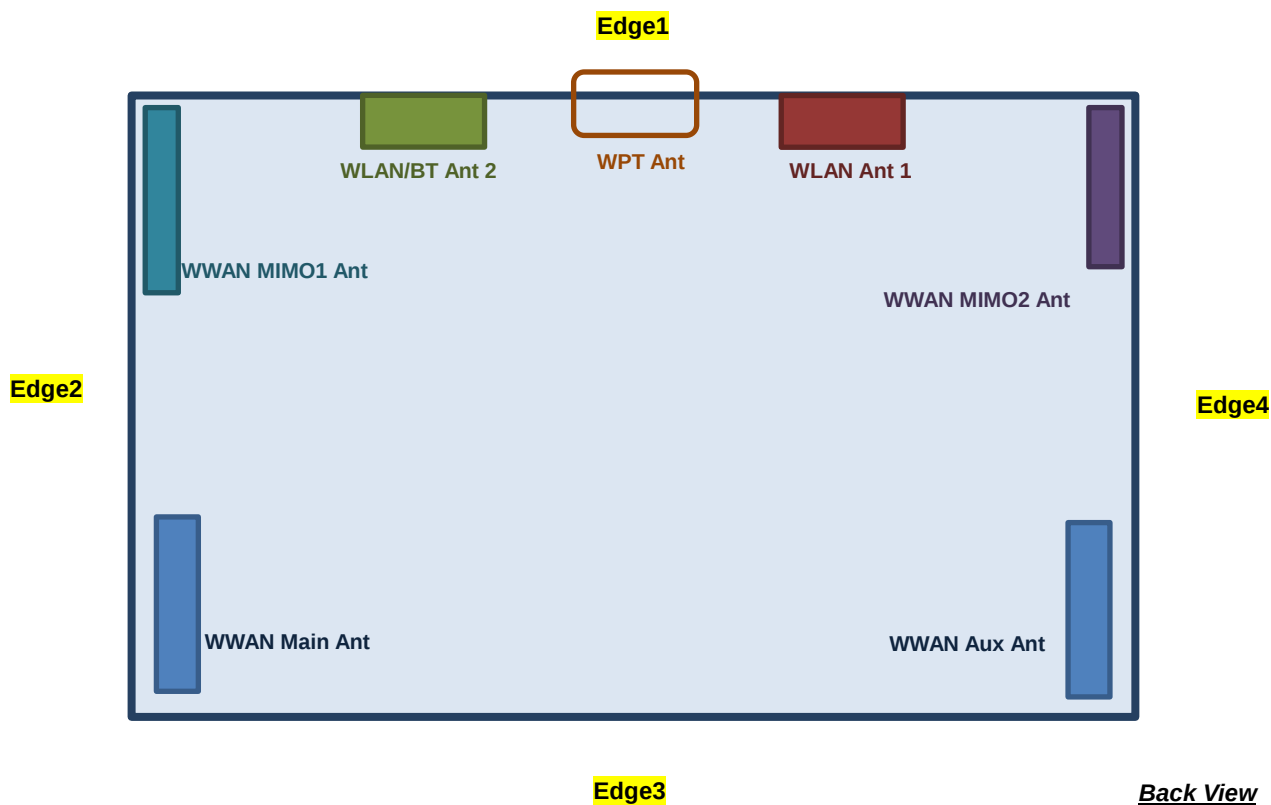
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	650000	650000	13.0
Frequency (MHz)				3750	3750	3750	
100	PI/2 BPSK	1	1		12.39		
100	PI/2 BPSK	1	137		12.38		13.0
100	PI/2 BPSK	1	271		11.72		
100	PI/2 BPSK	135	0		12.06		
100	PI/2 BPSK	135	69		11.45		13.0
100	PI/2 BPSK	135	138		12.08		13.0
100	PI/2 BPSK	270	0		11.50		
100	QPSK	1	1		12.07		
100	QPSK	1	137		11.44		13.0
100	QPSK	1	271		12.06		
100	QPSK	135	0		11.42		
100	QPSK	135	69		12.06		12.0
100	QPSK	135	138		11.44		13.0
100	QPSK	270	0		12.11		
100	16QAM	1	1		11.42		
100	64QAM	1	1		12.05		10.5
100	256QAM	1	1		11.46		13.0
Channel				649334	650000	650666	13.0
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	11.70	11.63	11.68	
Channel				648668	650000	651332	13.0
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	11.64	11.59	11.70	
Channel				648334	650000	651666	13.0
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	11.66	11.65	11.72	
Channel				648000	650000	652000	13.0
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	11.74	11.63	11.65	
Channel				647334	650000	652666	13.0
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	11.69	11.63	11.75	
Channel				647168	650000	652832	13.0
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	11.65	11.66	11.76	
Channel				647000	650000	653000	13.0
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	11.72	11.64	11.73	



<n78_MIMO2> (3450MHz ~ 3550MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		13.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		12.31		13.0
100	PI/2 BPSK	1	137		12.23		
100	PI/2 BPSK	1	271		11.50		
100	PI/2 BPSK	135	0		11.96		13.0
100	PI/2 BPSK	135	69		11.15		13.0
100	PI/2 BPSK	135	138		12.00		13.0
100	PI/2 BPSK	270	0		11.17		
100	QPSK	1	1		12.00		13.0
100	QPSK	1	137		11.24		
100	QPSK	1	271		11.89		
100	QPSK	135	0		11.20		12.0
100	QPSK	135	69		11.93		
100	QPSK	135	138		11.27		
100	QPSK	270	0		11.89		13.0
100	16QAM	1	1		11.36		13.0
100	64QAM	1	1		11.92		13.0
100	256QAM	1	1		11.39		13.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	11.70	11.75	11.59	13.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	11.57	11.80	11.59	13.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	11.70	11.74	11.76	13.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	11.58	11.69	11.77	13.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				11.56	11.76	11.69	
20	PI/2 BPSK	1	1	11.68	11.65	11.87	13.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	11.51	11.78	11.74	13.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	11.59	11.79	11.64	13.0

13. Antenna Location



The separation distance for antenna to edge :

Antenna	To Edge1 (mm)	To Edge2 (mm)	To Edge3 (mm)	To Edge4 (mm)
WWAN Main Antenna	146	5	5	289
WWAN MIMO2 Antenna	5	289	172	5
WWAN MIMO1 Antenna	5	5	146	289
WWAN Aux Antenna	146	289	5	5
WLAN Antenna 1	5	180	190	65
WLAN/BT Antenna 2	5	65	190	180



<SAR test exclusion table>

General Note:

- The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
- Maximum power is the source-based time-average power and represents the maximum RF output power among production units
- Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
- Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison
- Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

<Main Antenna>

Exposure Position	Wireless Interface	WCDMA Band V	WCDMA Band IV	WCDMA Band II	LTE Band 71/n71	LTE Band 12	LTE Band 13	LTE Band 14	LTE Band 17	LTE Band 5/n5	LTE Band 26	LTE Band 4	LTE Band 66/n66	LTE Band 2/n2	LTE Band 25/n25	LTE Band 30/n30	LTE Band 7/n7	LTE Band 38/n38	LTE Band 41/n41	LTE Band n77/n78
	Calculated Frequency (MHz)	846	1750	1907	695	715	784	795	713	848	848	1754	1779	1909	1914	2312	2567	2617	2687	3975
	Maximum power (dBm)	24.5	24.5	24.5	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.0	24.0	24.0	24.0	27.0
	Maximum rated power(mW)	281.84	281.84	281.84	251.19	251.19	251.19	251.19	251.19	251.19	251.19	251.19	251.19	251.19	251.19	199.53	251.19	251.19	251.19	501.19
Bottom Face	Separation distance(mm)	5.0																		
	exclusion threshold	51.9	74.6	77.8	41.9	42.5	44.5	44.8	42.4	46.3	46.3	66.5	67.0	69.4	69.5	60.7	80.5	81.3	82.4	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 1	Separation distance(mm)	146.0																		
	exclusion threshold	705.0	1073.0	1069.0	625.0	635.0	671.0	677.0	634.0	706.0	706.0	1073.0	1072.0	1069.0	1068.0	1059.0	1054.0	1053.0	1052.0	1035.0
	Testing required?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Edge 2	Separation distance(mm)	5.0																		
	exclusion threshold	51.9	74.6	77.8	41.9	42.5	44.5	44.8	42.4	46.3	46.3	66.5	67.0	69.4	69.5	60.7	80.5	81.3	82.4	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 3	Separation distance(mm)	5.0																		
	exclusion threshold	51.9	74.6	77.8	41.9	42.5	44.5	44.8	42.4	46.3	46.3	66.5	67.0	69.4	69.5	60.7	80.5	81.3	82.4	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 4	Separation distance(mm)	289.0																		
	exclusion threshold	1511.0	2503.0	2499.0	1287.0	1317.0	1419.0	1435.0	1314.0	1514.0	1514.0	2503.0	2502.0	2499.0	2498.0	2489.0	2484.0	2483.0	2482.0	2465.0
	Testing required?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

<MIMO2 Antenna>

Exposure Position	Wireless Interface	LTE Band 4	LTE Band 66/n66	LTE Band 2/n2	LTE Band 25	LTE Band 30	LTE Band 7	LTE Band 41/n41	LTE Band 48	LTE Band n77/n78
	Calculated Frequency (MHz)	1754	1779	1909	1914	2312	2567	2687	3697	3975
	Maximum power (dBm)	24.0	24.0	24.0	24.0	23.0	24.0	24.0	22.0	27.0
	Maximum rated power(mW)	251.19	251.19	251.19	251.19	199.53	251.19	251.19	158.49	501.19
Bottom Face	Separation distance(mm)	5.0								
	exclusion threshold	66.5	67.0	69.4	69.5	60.7	80.5	82.4	61.0	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 1	Separation distance(mm)	5.0								
	exclusion threshold	66.5	67.0	69.4	69.5	60.7	80.5	82.4	61.0	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Edge 2	Separation distance(mm)	289.0								
	exclusion threshold	2503.0	2502.0	2499.0	2498.0	2489.0	2484.0	2482.0	2468.0	2465.0
	Testing required?	No	No	No	No	No	No	No	No	No
Edge 3	Separation distance(mm)	172.0								
	exclusion threshold	1333.0	1332.0	1329.0	1328.0	1319.0	1314.0	1312.0	1298.0	1295.0
	Testing required?	No	No	No	No	No	No	No	No	No
Edge 4	Separation distance(mm)	5.0								
	exclusion threshold	66.5	67.0	69.4	69.5	60.7	80.5	82.4	61.0	199.9
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<MIMO1 Antenna>

Exposure Position	Wireless Interface	LTE Band n41	LTE Band n77/n78
	Calculated Frequency (MHz)	2687	3975
	Maximum power (dBm)	15.5	15.0
	Maximum rated power(mW)	35.48	31.62
Bottom Face	Separation distance(mm)	5.0	
	exclusion threshold	11.6	12.6
	Testing required?	Yes	Yes
Edge 1	Separation distance(mm)	5.0	
	exclusion threshold	11.6	12.6
	Testing required?	Yes	Yes
Edge 2	Separation distance(mm)	5.0	
	exclusion threshold	11.6	12.6
	Testing required?	Yes	Yes
Edge 3	Separation distance(mm)	146.0	
	exclusion threshold	1052.0	1035.0
	Testing required?	No	No
Edge 4	Separation distance(mm)	289.0	
	exclusion threshold	2482.0	2465.0
	Testing required?	No	No

<Aux Antenna>

Exposure Position	Wireless Interface	LTE Band n41	LTE Band n77/n78
	Calculated Frequency (MHz)	2687	3975
	Maximum power (dBm)	14.5	15.0
	Maximum rated power(mW)	28.18	31.62
Bottom Face	Separation distance(mm)	5.0	
	exclusion threshold	9.2	12.6
	Testing required?	Yes	Yes
Edge 1	Separation distance(mm)	146.0	
	exclusion threshold	1052.0	1035.0
	Testing required?	No	No
Edge 2	Separation distance(mm)	289.0	
	exclusion threshold	2482.0	2465.0
	Testing required?	No	No
Edge 3	Separation distance(mm)	5.0	
	exclusion threshold	9.2	12.6
	Testing required?	Yes	Yes
Edge 4	Separation distance(mm)	5.0	
	exclusion threshold	9.2	12.6
	Testing required?	Yes	Yes

14. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. For the exposure positions that proximity sensor power reduction is applied for SAR compliance, additional SAR testing with EUT transmitting full power in sensor trigger distance was performed according to section 4. The test results just verification the sensor trigger distance to meet KDB 616217 requirement, when in normal usage will not operate at trigger distance, therefore, these results were not using performed Sim-Tx analysis

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, 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.
7. LTE band 2/4/5/17 SAR test was covered by Band 25/66/26/12; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n41/n66/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. The NR n2/38 SAR test was covered by NR n25/41; due to SAR test for overlapping NR bands can be reduced if the maximum power including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.
 - g. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission.



14.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	9538	1907.6	16.78	17.00	1.052	-0.15	0.821	0.864
	WCDMA II_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	9262	1852.4	16.70	17.00	1.072	-0.07	0.842	0.902
01	WCDMA II_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	9400	1880	16.62	17.00	1.091	-0.01	0.916	1.000
	WCDMA II_Main	RMC 12.2Kbps	Edge 2	0mm	Speed	ON	9538	1907.6	16.78	17.00	1.052	0.09	0.313	0.329
	WCDMA II_Main	RMC 12.2Kbps	Edge 3	0mm	Speed	ON	9538	1907.6	16.78	17.00	1.052	0.13	0.213	0.224
	WCDMA II_Main	RMC 12.2Kbps	Bottom Face	16mm	Speed	OFF	9538	1907.6	23.56	24.50	1.242	-0.11	0.249	0.309
	WCDMA II_Main	RMC 12.2Kbps	Edge 2	22mm	Speed	OFF	9538	1907.6	23.56	24.50	1.242	-0.02	0.252	0.313
	WCDMA II_Main	RMC 12.2Kbps	Edge 3	7mm	Speed	OFF	9538	1907.6	23.56	24.50	1.242	-0.19	0.600	0.745
	WCDMA II_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	9400	1880	16.62	17.00	1.091	-0.1	0.761	0.831
02	WCDMA IV_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	1312	1712.4	17.26	17.50	1.057	0.04	0.883	0.933
	WCDMA IV_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	1413	1732.6	17.22	17.50	1.067	-0.12	0.655	0.699
	WCDMA IV_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	1513	1752.6	17.24	17.50	1.062	-0.06	0.815	0.865
	WCDMA IV_Main	RMC 12.2Kbps	Edge 2	0mm	Speed	ON	1312	1712.4	17.26	17.50	1.057	-0.03	0.273	0.289
	WCDMA IV_Main	RMC 12.2Kbps	Edge 3	0mm	Speed	ON	1312	1712.4	17.26	17.50	1.057	-0.17	0.386	0.408
	WCDMA IV_Main	RMC 12.2Kbps	Bottom Face	16mm	Speed	OFF	1312	1712.4	24.04	24.50	1.112	-0.08	0.234	0.260
	WCDMA IV_Main	RMC 12.2Kbps	Edge 2	22mm	Speed	OFF	1312	1712.4	24.04	24.50	1.112	-0.11	0.159	0.177
	WCDMA IV_Main	RMC 12.2Kbps	Edge 3	7mm	Speed	OFF	1312	1712.4	24.04	24.50	1.112	0.14	0.546	0.607
	WCDMA IV_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	1312	1712.4	17.26	17.50	1.057	0.05	0.788	0.833
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	4132	826.4	21.00	21.50	1.122	0.1	0.899	1.009
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	4182	836.4	21.00	21.50	1.122	0.1	0.841	0.944
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	Speed	ON	4233	846.6	20.93	21.50	1.140	0.03	0.802	0.914
	WCDMA V_Main	RMC 12.2Kbps	Edge 1	0mm	Speed	OFF	4132	826.4	23.75	24.50	1.189	0.05	0.001	0.001
	WCDMA V_Main	RMC 12.2Kbps	Edge 2	0mm	Speed	ON	4132	826.4	21.00	21.50	1.122	-0.01	0.711	0.798
	WCDMA V_Main	RMC 12.2Kbps	Edge 3	0mm	Speed	ON	4132	826.4	21.00	21.50	1.122	-0.14	0.305	0.342
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	16mm	Speed	OFF	4132	826.4	23.75	24.50	1.189	-0.17	0.203	0.241
	WCDMA V_Main	RMC 12.2Kbps	Edge 2	22mm	Speed	OFF	4132	826.4	23.75	24.50	1.189	-0.07	0.135	0.160
	WCDMA V_Main	RMC 12.2Kbps	Edge 3	7mm	Speed	OFF	4132	826.4	23.75	24.50	1.189	0.01	0.209	0.248
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	4132	826.4	21.00	21.50	1.122	0.07	0.906	1.017
	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	4182	836.4	21.00	21.50	1.122	-0.01	0.907	1.018
03	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	4233	846.6	20.93	21.50	1.140	0.1	0.993	1.132



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	21350	2560	15.53	16.00	1.114	0.08	0.820	0.914
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	20850	2510	15.40	16.00	1.148	0.13	0.789	0.906
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	21100	2535	15.25	16.00	1.189	-0.16	0.768	0.913
	LTE Band 7_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	21350	2560	15.37	16.00	1.156	0.01	0.392	0.453
	LTE Band 7_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	20850	2510	15.22	16.00	1.197	0.06	0.355	0.425
	LTE Band 7_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	21100	2535	15.15	16.00	1.216	-0.03	0.342	0.416
	LTE Band 7_Main	20M	QPSK	100	0	Bottom Face	0mm	Speed	ON	21350	2560	15.37	16.00	1.156	0.01	0.311	0.360
	LTE Band 7_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	21350	2560	15.53	16.00	1.114	0.08	0.049	0.055
	LTE Band 7_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	21350	2560	15.37	16.00	1.156	0.04	0.032	0.037
	LTE Band 7_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	21350	2560	15.53	16.00	1.114	-0.07	0.070	0.078
	LTE Band 7_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	21350	2560	15.37	16.00	1.156	0.07	0.052	0.060
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	21350	2560	23.47	24.00	1.130	0.17	0.197	0.223
	LTE Band 7_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	21350	2560	22.40	23.00	1.148	0.12	0.136	0.156
	LTE Band 7_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	21350	2560	23.47	24.00	1.130	0.04	0.088	0.099
	LTE Band 7_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	21350	2560	22.40	23.00	1.148	-0.13	0.079	0.091
	LTE Band 7_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	21350	2560	23.47	24.00	1.130	0.16	0.784	0.886
	LTE Band 7_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	20850	2510	23.30	24.00	1.175	-0.03	0.708	0.832
	LTE Band 7_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	21100	2535	23.20	24.00	1.202	0.14	0.574	0.690
	LTE Band 7_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	21350	2560	22.40	23.00	1.148	-0.18	0.763	0.876
	LTE Band 7_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	20850	2510	22.25	23.00	1.189	0.17	0.755	0.897
	LTE Band 7_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	21100	2535	22.32	23.00	1.169	-0.12	0.716	0.837
	LTE Band 7_Main	20M	QPSK	100	0	Edge 3	7mm	Speed	OFF	21350	2560	22.35	23.00	1.161	0.13	0.756	0.878
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	20850	2510	15.10	16.00	1.230	0.01	0.526	0.647
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	21350	2560	15.53	16.00	1.114	0.01	0.829	0.924
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	20850	2510	15.40	16.00	1.148	-0.04	0.823	0.945
	LTE Band 7_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	21100	2535	15.25	16.00	1.189	0.01	0.843	1.002
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	21350	2560	16.75	17.00	1.059	-0.12	0.634	0.672
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	21350	2560	16.47	17.00	1.130	0.11	0.564	0.637
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Edge 1	0mm	Speed	ON	21350	2560	16.75	17.00	1.059	0.09	0.065	0.069
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Edge 1	0mm	Speed	ON	21350	2560	16.47	17.00	1.130	0.07	0.057	0.064
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Edge 4	0mm	Speed	ON	21350	2560	16.75	17.00	1.059	-0.1	0.373	0.395
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Edge 4	0mm	Speed	ON	21350	2560	16.47	17.00	1.130	-0.06	0.331	0.374
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	21350	2560	23.12	24.00	1.225	-0.07	0.317	0.388
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Bottom Face	11mm	Speed	OFF	21350	2560	22.01	23.00	1.256	0.1	0.244	0.306
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Edge 1	8mm	Speed	OFF	21350	2560	23.12	24.00	1.225	-0.06	0.085	0.104
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Edge 1	8mm	Speed	OFF	21350	2560	22.01	23.00	1.256	0.17	0.073	0.092
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Edge 4	25mm	Speed	OFF	21350	2560	23.12	24.00	1.225	-0.1	0.071	0.087
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Edge 4	25mm	Speed	OFF	21350	2560	22.01	23.00	1.256	0.08	0.066	0.083
	LTE Band 7C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	21350	2560	15.90	17.00	1.288	0.12	0.452	0.582
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	21350	2560	16.75	17.00	1.059	0.05	0.897	0.950
04	LTE Band 7_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	20850	2510	16.60	17.00	1.096	0.11	0.941	1.032
	LTE Band 7_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	21100	2535	16.57	17.00	1.104	-0.06	0.908	1.003
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	21350	2560	16.47	17.00	1.130	0.06	0.813	0.919
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	20850	2510	16.37	17.00	1.156	-0.14	0.822	0.950
	LTE Band 7_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	21100	2535	16.36	17.00	1.159	0.13	0.816	0.946
	LTE Band 7_MIMO 2	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	21350	2560	16.51	17.00	1.119	-0.11	0.784	0.878



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 12_Main	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	23095	707.5	19.00	19.50	1.122	0.06	0.604	0.678
	LTE Band 12_Main	10M	QPSK	25	0	Bottom Face	0mm	Speed	ON	23095	707.5	18.67	19.50	1.211	0.03	0.512	0.620
	LTE Band 12_Main	10M	QPSK	1	0	Edge 1	0mm	Speed	OFF	23095	707.5	23.72	24.00	1.067	-0.12	0.001	0.001
	LTE Band 12_Main	10M	QPSK	25	0	Edge 1	0mm	Speed	OFF	23095	707.5	22.55	23.00	1.109	0.01	0.001	0.001
	LTE Band 12_Main	10M	QPSK	1	0	Edge 2	0mm	Speed	ON	23095	707.5	19.00	19.50	1.122	-0.06	0.495	0.555
	LTE Band 12_Main	10M	QPSK	25	0	Edge 2	0mm	Speed	ON	23095	707.5	18.67	19.50	1.211	0.04	0.401	0.485
	LTE Band 12_Main	10M	QPSK	1	0	Edge 3	0mm	Speed	ON	23095	707.5	19.00	19.50	1.122	0.13	0.418	0.469
	LTE Band 12_Main	10M	QPSK	25	0	Edge 3	0mm	Speed	ON	23095	707.5	18.67	19.50	1.211	-0.03	0.378	0.458
	LTE Band 12_Main	10M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	23095	707.5	23.72	24.00	1.067	-0.05	0.169	0.180
	LTE Band 12_Main	10M	QPSK	25	0	Bottom Face	16mm	Speed	OFF	23095	707.5	22.55	23.00	1.109	0.06	0.149	0.165
	LTE Band 12_Main	10M	QPSK	1	0	Edge 2	22mm	Speed	OFF	23095	707.5	23.72	24.00	1.067	-0.06	0.113	0.121
	LTE Band 12_Main	10M	QPSK	25	0	Edge 2	22mm	Speed	OFF	23095	707.5	22.55	23.00	1.109	0.15	0.103	0.114
	LTE Band 12_Main	10M	QPSK	1	0	Edge 3	7mm	Speed	OFF	23095	707.5	23.72	24.00	1.067	-0.02	0.174	0.186
	LTE Band 12_Main	10M	QPSK	25	0	Edge 3	7mm	Speed	OFF	23095	707.5	22.55	23.00	1.109	0.09	0.166	0.184
05	LTE Band 12_Main	10M	QPSK	1	0	Bottom Face	0mm	WNC	ON	23095	707.5	19.00	19.50	1.122	-0.07	0.827	0.928
	LTE Band 12_Main	10M	QPSK	25	0	Bottom Face	0mm	WNC	ON	23095	707.5	18.67	19.50	1.211	0.03	0.678	0.821
	LTE Band 12_Main	10M	QPSK	50	0	Bottom Face	0mm	WNC	ON	23095	707.5	18.73	19.50	1.194	-0.11	0.643	0.768
	LTE Band 13_Main	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	23230	782	19.67	20.00	1.079	-0.09	0.653	0.705
	LTE Band 13_Main	10M	QPSK	25	0	Bottom Face	0mm	Speed	ON	23230	782	19.28	20.00	1.180	0.04	0.612	0.722
	LTE Band 13_Main	10M	QPSK	1	0	Edge 1	0mm	Speed	OFF	23230	782	23.57	24.00	1.104	-0.09	0.001	0.001
	LTE Band 13_Main	10M	QPSK	25	0	Edge 1	0mm	Speed	OFF	23230	782	22.32	23.00	1.169	0.11	0.001	0.001
	LTE Band 13_Main	10M	QPSK	1	0	Edge 2	0mm	Speed	ON	23230	782	19.67	20.00	1.079	-0.14	0.582	0.628
	LTE Band 13_Main	10M	QPSK	25	0	Edge 2	0mm	Speed	ON	23230	782	19.28	20.00	1.180	0.16	0.501	0.591
	LTE Band 13_Main	10M	QPSK	1	0	Edge 3	0mm	Speed	ON	23230	782	19.67	20.00	1.079	0.17	0.481	0.519
	LTE Band 13_Main	10M	QPSK	25	0	Edge 3	0mm	Speed	ON	23230	782	19.28	20.00	1.180	0.03	0.423	0.499
	LTE Band 13_Main	10M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	23230	782	23.57	24.00	1.104	-0.1	0.192	0.212
	LTE Band 13_Main	10M	QPSK	25	0	Bottom Face	16mm	Speed	OFF	23230	782	22.32	23.00	1.169	0.05	0.169	0.198
	LTE Band 13_Main	10M	QPSK	1	0	Edge 2	22mm	Speed	OFF	23230	782	23.57	24.00	1.104	-0.03	0.128	0.141
	LTE Band 13_Main	10M	QPSK	25	0	Edge 2	22mm	Speed	OFF	23230	782	22.32	23.00	1.169	-0.19	0.117	0.137
	LTE Band 13_Main	10M	QPSK	1	0	Edge 3	7mm	Speed	OFF	23230	782	23.57	24.00	1.104	-0.03	0.198	0.219
	LTE Band 13_Main	10M	QPSK	25	0	Edge 3	7mm	Speed	OFF	23230	782	22.32	23.00	1.169	0.07	0.189	0.221
	LTE Band 13_Main	10M	QPSK	25	0	Bottom Face	0mm	WNC	ON	23230	782	19.28	20.00	1.180	0.01	0.810	0.956
06	LTE Band 13_Main	10M	QPSK	1	0	Bottom Face	0mm	WNC	ON	23230	782	19.67	20.00	1.079	-0.03	0.940	1.014
	LTE Band 13_Main	10M	QPSK	50	0	Bottom Face	0mm	WNC	ON	23230	782	19.23	20.00	1.194	0.01	0.790	0.943
	LTE Band 14_Main	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	23330	793	19.51	20.00	1.119	-0.09	0.795	0.890
	LTE Band 14_Main	10M	QPSK	25	0	Bottom Face	0mm	Speed	ON	23330	793	19.16	20.00	1.213	-0.09	0.672	0.815
	LTE Band 14_Main	10M	QPSK	50	0	Bottom Face	0mm	Speed	ON	23330	793	19.10	20.00	1.230	0.01	0.578	0.711
	LTE Band 14_Main	10M	QPSK	1	0	Edge 1	0mm	Speed	OFF	23330	793	23.45	24.00	1.135	0.18	0.001	0.001
	LTE Band 14_Main	10M	QPSK	25	0	Edge 1	0mm	Speed	OFF	23330	793	22.42	23.00	1.143	-0.05	0.001	0.001
	LTE Band 14_Main	10M	QPSK	1	0	Edge 2	0mm	Speed	ON	23330	793	19.51	20.00	1.119	-0.14	0.690	0.772
	LTE Band 14_Main	10M	QPSK	25	0	Edge 2	0mm	Speed	ON	23330	793	19.16	20.00	1.213	0.02	0.510	0.619
	LTE Band 14_Main	10M	QPSK	1	0	Edge 3	0mm	Speed	ON	23330	793	19.51	20.00	1.119	0.16	0.399	0.447
	LTE Band 14_Main	10M	QPSK	25	0	Edge 3	0mm	Speed	ON	23330	793	19.16	20.00	1.213	0.1	0.342	0.415
	LTE Band 14_Main	10M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	23330	793	23.45	24.00	1.135	-0.03	0.193	0.219
	LTE Band 14_Main	10M	QPSK	25	0	Bottom Face	16mm	Speed	OFF	23330	793	22.42	23.00	1.143	-0.07	0.170	0.194
	LTE Band 14_Main	10M	QPSK	1	0	Edge 2	22mm	Speed	OFF	23330	793	23.45	24.00	1.135	-0.17	0.129	0.146
	LTE Band 14_Main	10M	QPSK	25	0	Edge 2	22mm	Speed	OFF	23330	793	22.42	23.00	1.143	0.08	0.117	0.134
	LTE Band 14_Main	10M	QPSK	1	0	Edge 3	7mm	Speed	OFF	23330	793	23.45	24.00	1.135	0.02	0.199	0.226
	LTE Band 14_Main	10M	QPSK	25	0	Edge 3	7mm	Speed	OFF	23330	793	22.42	23.00	1.143	-0.03	0.190	0.217
07	LTE Band 14_Main	10M	QPSK	1	0	Bottom Face	0mm	WNC	ON	23330	793	19.51	20.00	1.119	-0.05	0.946	1.059
	LTE Band 14_Main	10M	QPSK	25	0	Bottom Face	0mm	WNC	ON	23330	793	19.16	20.00	1.213	-0.11	0.823	0.999
	LTE Band 14_Main	10M	QPSK	50	0	Bottom Face	0mm	WNC	ON	23330	793	19.10	20.00	1.230	0.01	0.701	0.862



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	26590	1905	16.82	17.00	1.042	-0.16	0.600	0.625
	LTE Band 25_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	26590	1905	16.45	17.00	1.135	-0.11	0.489	0.555
	LTE Band 25_Main	20M	QPSK	1	0	Edge 1	0mm	Speed	OFF	26590	1905	23.29	24.00	1.178	0.11	0.001	0.001
	LTE Band 25_Main	20M	QPSK	50	0	Edge 1	0mm	Speed	OFF	26590	1905	22.28	23.00	1.180	-0.15	0.001	0.001
	LTE Band 25_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	26590	1905	16.82	17.00	1.178	-0.02	0.194	0.228
	LTE Band 25_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	26590	1905	16.45	17.00	1.135	-0.09	0.178	0.202
	LTE Band 25_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	26590	1905	16.82	17.00	1.042	-0.01	0.221	0.230
	LTE Band 25_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	26590	1905	16.45	17.00	1.135	0.02	0.201	0.228
	LTE Band 25_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	26590	1905	23.29	24.00	1.178	0.18	0.234	0.276
	LTE Band 25_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	26590	1905	22.28	23.00	1.180	-0.1	0.209	0.247
	LTE Band 25_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	26590	1905	23.29	24.00	1.178	0.11	0.236	0.278
	LTE Band 25_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	26590	1905	22.28	23.00	1.180	-0.15	0.218	0.257
	LTE Band 25_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	26590	1905	23.29	24.00	1.178	-0.02	0.563	0.663
	LTE Band 25_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	26590	1905	22.28	23.00	1.180	0.04	0.516	0.609
	LTE Band 25_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26590	1905	16.82	17.00	1.042	-0.16	0.802	0.836
	LTE Band 25_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26140	1860	16.81	17.00	1.045	-0.11	0.815	0.851
	LTE Band 25_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26340	1880	16.73	17.00	1.064	0.02	0.859	0.914
	LTE Band 25_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	26590	1905	16.45	17.00	1.135	-0.02	0.763	0.866
	LTE Band 25_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	26140	1860	16.44	17.00	1.138	-0.12	0.785	0.893
	LTE Band 25_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	26340	1880	16.40	17.00	1.148	-0.14	0.792	0.909
	LTE Band 25_Main	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	26590	1905	16.42	17.00	1.143	-0.08	0.774	0.885
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	26140	1860	17.42	18.00	1.143	0.01	0.754	0.862
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	26590	1905	17.28	18.00	1.180	-0.12	0.749	0.884
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	26340	1880	17.26	18.00	1.186	0.06	0.747	0.886
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	26140	1860	16.93	18.00	1.279	-0.09	0.586	0.750
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	26590	1905	16.86	18.00	1.300	0.06	0.651	0.846
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	26340	1880	16.74	18.00	1.337	0.19	0.649	0.867
	LTE Band 25_MIMO 2	20M	QPSK	100	0	Bottom Face	0mm	Speed	ON	26140	1860	16.96	18.00	1.271	0.14	0.588	0.747
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Edge 1	0mm	Speed	ON	26140	1860	17.42	18.00	1.143	0.13	0.067	0.077
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Edge 1	0mm	Speed	ON	26140	1860	16.93	18.00	1.279	-0.1	0.058	0.074
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Edge 4	0mm	Speed	ON	26140	1860	17.42	18.00	1.143	0.1	0.289	0.330
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Edge 4	0mm	Speed	ON	26140	1860	16.93	18.00	1.279	-0.03	0.251	0.321
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	26140	1860	22.98	24.00	1.265	0.19	0.401	0.507
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Bottom Face	11mm	Speed	OFF	26140	1860	21.75	23.00	1.334	0.1	0.332	0.443
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Edge 1	8mm	Speed	OFF	26140	1860	22.98	24.00	1.265	-0.08	0.040	0.051
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Edge 1	8mm	Speed	OFF	26140	1860	21.75	23.00	1.334	0.09	0.039	0.052
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Edge 4	25mm	Speed	OFF	26140	1860	22.98	24.00	1.265	-0.06	0.189	0.239
	LTE Band 25_MIMO 2	20M	QPSK	50	0	Edge 4	25mm	Speed	OFF	26140	1860	21.75	23.00	1.334	-0.05	0.123	0.164
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26340	1880	17.26	18.00	1.186	0.06	0.911	1.080
08	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26590	1905	17.28	18.00	1.180	0.08	0.926	1.093
	LTE Band 25_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26140	1860	17.42	18.00	1.143	-0.08	0.825	0.943



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Main	15M	QPSK	1	0	Bottom Face	0mm	Speed	ON	26865	831.5	20.40	21.00	1.148	-0.01	0.701	0.805
	LTE Band 26_Main	15M	QPSK	36	0	Bottom Face	0mm	Speed	ON	26865	831.5	20.13	21.00	1.222	0.02	0.611	0.747
	LTE Band 26_Main	15M	QPSK	75	0	Bottom Face	0mm	Speed	ON	26865	831.5	20.09	21.00	1.233	-0.03	0.578	0.713
	LTE Band 26_Main	15M	QPSK	1	0	Edge 2	0mm	Speed	ON	26865	831.5	20.40	21.00	1.148	0.03	0.601	0.690
	LTE Band 26_Main	15M	QPSK	36	0	Edge 2	0mm	Speed	ON	26865	831.5	20.13	21.00	1.222	-0.16	0.520	0.635
	LTE Band 26_Main	15M	QPSK	1	0	Edge 3	0mm	Speed	ON	26865	831.5	20.40	21.00	1.148	0.03	0.227	0.261
	LTE Band 26_Main	15M	QPSK	36	0	Edge 3	0mm	Speed	ON	26865	831.5	20.13	21.00	1.222	-0.01	0.149	0.182
	LTE Band 26_Main	15M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	26865	831.5	23.34	24.00	1.164	0.06	0.189	0.220
	LTE Band 26_Main	15M	QPSK	36	0	Bottom Face	16mm	Speed	OFF	26865	831.5	22.35	23.00	1.161	-0.12	0.166	0.193
	LTE Band 26_Main	15M	QPSK	1	0	Edge 2	22mm	Speed	OFF	26865	831.5	23.34	24.00	1.164	0.04	0.126	0.147
	LTE Band 26_Main	15M	QPSK	36	0	Edge 2	22mm	Speed	OFF	26865	831.5	22.35	23.00	1.161	-0.08	0.115	0.134
	LTE Band 26_Main	15M	QPSK	1	0	Edge 3	7mm	Speed	OFF	26865	831.5	23.34	24.00	1.164	-0.05	0.195	0.227
	LTE Band 26_Main	15M	QPSK	36	0	Edge 3	7mm	Speed	OFF	26865	831.5	22.35	23.00	1.161	0.09	0.186	0.216
	LTE Band 5B_Main	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	20575	841.5	19.78	21.00	1.324	0.01	0.523	0.693
09	LTE Band 26_Main	15M	QPSK	1	0	Bottom Face	0mm	WNC	ON	26865	831.5	20.40	21.00	1.148	-0.08	0.923	1.060
	LTE Band 26_Main	15M	QPSK	36	0	Bottom Face	0mm	WNC	ON	26865	831.5	20.13	21.00	1.222	-0.09	0.721	0.881
	LTE Band 26_Main	15M	QPSK	75	0	Bottom Face	0mm	WNC	ON	26865	831.5	20.09	21.00	1.233	0.12	0.775	0.956
	LTE Band 30_Main	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	27710	2310	14.97	15.50	1.130	-0.1	0.657	0.742
	LTE Band 30_Main	10M	QPSK	25	0	Bottom Face	0mm	Speed	ON	27710	2310	14.55	15.50	1.245	-0.13	0.582	0.724
	LTE Band 30_Main	10M	QPSK	1	0	Edge 2	0mm	Speed	ON	27710	2310	14.97	15.50	1.130	0.15	0.078	0.088
	LTE Band 30_Main	10M	QPSK	25	0	Edge 2	0mm	Speed	ON	27710	2310	14.55	15.50	1.245	0.14	0.073	0.091
	LTE Band 30_Main	10M	QPSK	1	0	Edge 3	0mm	Speed	ON	27710	2310	14.97	15.50	1.130	-0.05	0.098	0.111
	LTE Band 30_Main	10M	QPSK	25	0	Edge 3	0mm	Speed	ON	27710	2310	14.55	15.50	1.245	0.19	0.076	0.095
	LTE Band 30_Main	10M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	27710	2310	21.67	23.00	1.358	-0.07	0.210	0.285
	LTE Band 30_Main	10M	QPSK	25	0	Bottom Face	16mm	Speed	OFF	27710	2310	20.77	22.00	1.327	0.19	0.190	0.252
	LTE Band 30_Main	10M	QPSK	1	0	Edge 2	22mm	Speed	OFF	27710	2310	21.67	23.00	1.358	0.14	0.076	0.103
	LTE Band 30_Main	10M	QPSK	25	0	Edge 2	22mm	Speed	OFF	27710	2310	20.77	22.00	1.327	-0.12	0.068	0.090
	LTE Band 30_Main	10M	QPSK	1	0	Edge 3	7mm	Speed	OFF	27710	2310	21.67	23.00	1.358	-0.01	0.525	0.713
	LTE Band 30_Main	10M	QPSK	25	0	Edge 3	7mm	Speed	OFF	27710	2310	20.77	22.00	1.327	-0.06	0.507	0.673
10	LTE Band 30_Main	10M	QPSK	1	0	Bottom Face	0mm	WNC	ON	27710	2310	14.97	15.50	1.130	-0.12	1.020	1.152
	LTE Band 30_Main	10M	QPSK	25	0	Bottom Face	0mm	WNC	ON	27710	2310	14.55	15.50	1.245	-0.11	0.878	1.093
	LTE Band 30_Main	10M	QPSK	50	0	Bottom Face	0mm	WNC	ON	27710	2310	14.52	15.50	1.253	-0.08	0.796	0.998
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Bottom Face	0mm	Speed	ON	27710	2310	16.77	17.00	1.054	0.01	1.020	1.075
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Bottom Face	0mm	Speed	ON	27710	2310	16.45	17.00	1.135	-0.06	0.826	0.938
	LTE Band 30_MIMO 2	10M	QPSK	50	0	Bottom Face	0mm	Speed	ON	27710	2310	16.52	17.00	1.117	-0.17	0.712	0.795
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Edge 1	0mm	Speed	ON	27710	2310	16.77	17.00	1.054	-0.06	0.109	0.115
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Edge 1	0mm	Speed	ON	27710	2310	16.45	17.00	1.135	0.08	0.088	0.100
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Edge 4	0mm	Speed	ON	27710	2310	16.77	17.00	1.054	0.09	0.498	0.525
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Edge 4	0mm	Speed	ON	27710	2310	16.45	17.00	1.135	0.15	0.403	0.457
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	27710	2310	21.48	23.00	1.419	-0.19	0.301	0.427
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Bottom Face	11mm	Speed	OFF	27710	2310	20.39	22.00	1.449	-0.19	0.279	0.404
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Edge 1	8mm	Speed	OFF	27710	2310	21.48	23.00	1.419	0.16	0.100	0.142
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Edge 1	8mm	Speed	OFF	27710	2310	20.39	22.00	1.449	-0.06	0.072	0.104
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Edge 4	25mm	Speed	OFF	27710	2310	21.48	23.00	1.419	-0.08	0.061	0.087
	LTE Band 30_MIMO 2	10M	QPSK	25	0	Edge 4	25mm	Speed	OFF	27710	2310	20.39	22.00	1.449	-0.01	0.052	0.075
	LTE Band 30_MIMO 2	10M	QPSK	1	0	Bottom Face	0mm	WNC	ON	27710	2310	16.77	17.00	1.054	-0.14	1.080	1.139



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132072	1720	17.62	18.00	1.091	-0.13	0.688	0.751
	LTE Band 66_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	132072	1720	17.52	18.00	1.117	-0.01	0.623	0.696
	LTE Band 66_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	132072	1720	17.62	18.00	1.091	0.08	0.249	0.272
	LTE Band 66_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	132072	1720	17.52	18.00	1.117	0.13	0.210	0.235
	LTE Band 66_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	132072	1720	17.62	18.00	1.091	-0.16	0.365	0.398
	LTE Band 66_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	132072	1720	17.52	18.00	1.117	-0.11	0.323	0.361
	LTE Band 66_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	132072	1720	23.58	24.00	1.102	-0.04	0.261	0.288
	LTE Band 66_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	132072	1720	22.59	23.00	1.099	-0.03	0.233	0.256
	LTE Band 66_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	132072	1720	23.58	24.00	1.102	0.14	0.178	0.196
	LTE Band 66_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	132072	1720	22.59	23.00	1.099	-0.11	0.153	0.168
	LTE Band 66_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	132072	1720	23.58	24.00	1.102	-0.18	0.607	0.669
	LTE Band 66_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	132072	1720	22.59	23.00	1.099	0.17	0.579	0.636
	LTE Band 66B_Main	15M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132047	1717.5	16.58	18.00	1.387	0.05	0.493	0.684
	LTE Band 66C_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132572	1770	16.87	18.00	1.297	-0.08	0.491	0.637
	LTE Band 66_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	132072	1720	17.62	18.00	1.091	0.02	0.983	1.073
	LTE Band 66_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	132572	1770	17.50	18.00	1.122	-0.01	0.854	0.958
	LTE Band 66_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	132322	1745	17.45	18.00	1.135	0.15	0.885	1.004
	LTE Band 66_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	132072	1720	17.52	18.00	1.117	0.12	0.821	0.917
	LTE Band 66_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	132572	1770	17.44	18.00	1.138	0	0.803	0.914
	LTE Band 66_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	132322	1745	17.42	18.00	1.143	0.01	0.799	0.913
	LTE Band 66_Main	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	132072	1720	17.55	18.00	1.109	-0.03	0.811	0.900
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132322	1745	17.97	18.00	1.007	0.14	1.070	1.077
11	LTE Band 66_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132072	1720	17.83	18.00	1.040	0.14	1.150	1.196
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132572	1770	17.91	18.00	1.021	-0.13	0.977	0.997
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	132322	1745	17.61	18.00	1.094	0.19	0.898	0.982
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	132072	1720	17.45	18.00	1.135	0.03	0.966	1.096
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	132572	1770	17.57	18.00	1.104	-0.17	0.820	0.905
	LTE Band 66_MIMO 2	20M	QPSK	100	0	Bottom Face	0mm	Speed	ON	132572	1770	17.55	18.00	1.109	0.04	0.782	0.867
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Edge 1	0mm	Speed	ON	132322	1745	17.97	18.00	1.007	0.05	0.123	0.124
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Edge 1	0mm	Speed	ON	132322	1745	17.61	18.00	1.094	0.14	0.103	0.113
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Edge 4	0mm	Speed	ON	132322	1745	17.97	18.00	1.007	-0.02	0.969	0.976
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Edge 4	0mm	Speed	ON	132322	1745	17.61	18.00	1.094	-0.07	0.813	0.889
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	132322	1745	23.16	24.00	1.213	-0.04	0.543	0.659
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Bottom Face	11mm	Speed	OFF	132322	1745	22.17	23.00	1.211	0.11	0.480	0.581
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Edge 1	8mm	Speed	OFF	132322	1745	23.16	24.00	1.213	0.14	0.056	0.068
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Edge 1	8mm	Speed	OFF	132322	1745	22.17	23.00	1.211	0.05	0.041	0.050
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Edge 4	25mm	Speed	OFF	132322	1745	23.16	24.00	1.213	0.13	0.201	0.244
	LTE Band 66_MIMO 2	20M	QPSK	50	0	Edge 4	25mm	Speed	OFF	132322	1745	22.17	23.00	1.211	0.11	0.154	0.186
	LTE Band 66B_MIMO 2	15M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132047	1717.5	16.77	18.00	1.327	0.08	0.608	0.807
	LTE Band 66B_MIMO 2	15M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132322	1745	16.67	18.00	1.358	0.02	0.621	0.844
	LTE Band 66B_MIMO 2	15M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132597	1772.5	16.69	18.00	1.352	0.03	0.613	0.829
	LTE Band 66C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132572	1770	16.89	18.00	1.291	0.13	0.630	0.813
	LTE Band 66C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132322	1745	16.66	18.00	1.361	-0.02	0.612	0.833
	LTE Band 66C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	132072	1720	16.75	18.00	1.334	0.01	0.623	0.831
	LTE Band 66_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	132072	1720	17.83	18.00	1.040	0.08	1.030	1.071



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 71_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	133322	683	19.75	20.00	1.059	-0.02	0.718	0.761
	LTE Band 71_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	133322	683	19.41	20.00	1.146	-0.1	0.501	0.574
	LTE Band 71_Main	20M	QPSK	1	0	Edge 1	0mm	Speed	OFF	133322	683	23.75	24.00	1.059	-0.13	0.001	0.001
	LTE Band 71_Main	20M	QPSK	50	0	Edge 1	0mm	Speed	OFF	133322	683	22.98	23.00	1.005	-0.07	0.001	0.001
	LTE Band 71_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	133322	683	19.75	20.00	1.059	-0.17	0.724	0.767
	LTE Band 71_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	133322	683	19.41	20.00	1.146	0.01	0.644	0.738
	LTE Band 71_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	133322	683	19.75	20.00	1.059	-0.01	0.522	0.553
	LTE Band 71_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	133322	683	19.41	20.00	1.146	0.05	0.498	0.570
	LTE Band 71_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	133322	683	23.75	24.00	1.059	-0.15	0.153	0.162
	LTE Band 71_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	133322	683	22.98	23.00	1.005	0.08	0.141	0.142
	LTE Band 71_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	133322	683	23.75	24.00	1.059	0.16	0.001	0.001
	LTE Band 71_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	133322	683	22.98	23.00	1.005	0.1	0.001	0.001
	LTE Band 71_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	133322	683	23.75	24.00	1.059	0.01	0.126	0.133
	LTE Band 71_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	133322	683	22.98	23.00	1.005	-0.05	0.107	0.107
12	LTE Band 71_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	133322	683	19.75	20.00	1.059	-0.07	0.914	0.968
	LTE Band 71_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	133322	683	19.41	20.00	1.146	0.01	0.824	0.944
	LTE Band 71_Main	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	133322	683	19.49	20.00	1.125	0.16	0.860	0.967

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 38_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	37850	2580	13.86	14.50	1.159	62.9	1.006	-0.06	0.608	0.709
	LTE Band 38_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	37850	2580	13.37	14.50	1.297	62.9	1.006	0.11	0.522	0.681
	LTE Band 38_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	37850	2580	13.86	14.50	1.159	62.9	1.006	0.08	0.042	0.049
	LTE Band 38_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	37850	2580	13.37	14.50	1.297	62.9	1.006	0.08	0.037	0.048
	LTE Band 38_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	37850	2580	13.86	14.50	1.159	62.9	1.006	0.02	0.095	0.111
	LTE Band 38_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	37850	2580	13.37	14.50	1.297	62.9	1.006	0.13	0.085	0.111
	LTE Band 38_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	37850	2580	23.38	24.00	1.153	62.9	1.006	-0.13	0.227	0.263
	LTE Band 38_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	37850	2580	22.44	23.00	1.138	62.9	1.006	0.1	0.216	0.247
	LTE Band 38_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	37850	2580	23.38	24.00	1.153	62.9	1.006	0.1	0.066	0.077
	LTE Band 38_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	37850	2580	22.44	23.00	1.138	62.9	1.006	0.09	0.048	0.055
	LTE Band 38_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	37850	2580	23.38	24.00	1.153	62.9	1.006	-0.11	0.587	0.681
	LTE Band 38_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	37850	2580	22.44	23.00	1.138	62.9	1.006	-0.14	0.541	0.619
	LTE Band 38C_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	37901	2585.1	13.41	14.50	1.285	62.9	1.006	0.04	0.501	0.648
	LTE Band 38_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	37850	2580	13.86	14.50	1.159	62.9	1.006	-0.09	0.737	0.859
13	LTE Band 38_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	38000	2595	13.62	14.50	1.225	62.9	1.006	-0.04	0.875	1.078
	LTE Band 38_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	38150	2610	13.66	14.50	1.213	62.9	1.006	0.16	0.828	1.011
	LTE Band 38_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	37850	2580	13.37	14.50	1.297	62.9	1.006	-0.01	0.686	0.895
	LTE Band 38_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	38000	2595	13.25	14.50	1.334	62.9	1.006	0.06	0.703	0.943
	LTE Band 38_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	38150	2610	13.26	14.50	1.330	62.9	1.006	0.15	0.711	0.952
	LTE Band 38_Main	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	37850	2580	13.43	14.50	1.279	62.9	1.006	-0.14	0.709	0.913



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	39750	2506	14.37	14.50	1.030	62.9	1.006	0.19	0.560	0.580
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	39750	2506	13.91	14.50	1.146	62.9	1.006	0.07	0.478	0.551
	LTE Band 41_Main	20M	QPSK	1	0	Edge 2	0mm	Speed	ON	39750	2506	14.37	14.50	1.030	62.9	1.006	-0.09	0.009	0.009
	LTE Band 41_Main	20M	QPSK	50	0	Edge 2	0mm	Speed	ON	39750	2506	13.91	14.50	1.146	62.9	1.006	-0.11	0.007	0.008
	LTE Band 41_Main	20M	QPSK	1	0	Edge 3	0mm	Speed	ON	39750	2506	14.37	14.50	1.030	62.9	1.006	0	0.198	0.205
	LTE Band 41_Main	20M	QPSK	50	0	Edge 3	0mm	Speed	ON	39750	2506	13.91	14.50	1.146	62.9	1.006	-0.13	0.172	0.198
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	16mm	Speed	OFF	39750	2506	23.92	24.00	1.019	62.9	1.006	-0.18	0.114	0.117
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	16mm	Speed	OFF	39750	2506	22.63	23.00	1.089	62.9	1.006	0.14	0.108	0.118
	LTE Band 41_Main	20M	QPSK	1	0	Edge 2	22mm	Speed	OFF	39750	2506	23.92	24.00	1.019	62.9	1.006	-0.13	0.033	0.034
	LTE Band 41_Main	20M	QPSK	50	0	Edge 2	22mm	Speed	OFF	39750	2506	22.63	23.00	1.089	62.9	1.006	0.01	0.024	0.026
	LTE Band 41_Main	20M	QPSK	1	0	Edge 3	7mm	Speed	OFF	39750	2506	23.92	24.00	1.019	62.9	1.006	-0.12	0.358	0.367
	LTE Band 41_Main	20M	QPSK	50	0	Edge 3	7mm	Speed	OFF	39750	2506	22.63	23.00	1.089	62.9	1.006	0.13	0.349	0.382
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	41490	2680	13.61	14.50	1.227	62.9	1.006	0.08	0.413	0.510
14	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	39750	2506	14.37	14.50	1.030	62.9	1.006	-0.04	0.809	0.839
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	40185	2549.5	12.90	14.50	1.445	62.9	1.006	0.01	0.534	0.776
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	40620	2593	13.00	14.50	1.413	62.9	1.006	-0.14	0.551	0.783
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	41055	2636.5	13.35	14.50	1.303	62.9	1.006	0.06	0.588	0.771
	LTE Band 41_Main	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	41490	2680	13.71	14.50	1.199	62.9	1.006	0.04	0.604	0.729
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	39750	2506	13.91	14.50	1.146	62.9	1.006	0.15	0.701	0.808
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	40185	2549.5	12.60	14.50	1.549	62.9	1.006	0.08	0.521	0.812
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	40620	2593	12.66	14.50	1.528	62.9	1.006	-0.09	0.541	0.831
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	41055	2636.5	13.17	14.50	1.358	62.9	1.006	0.17	0.569	0.778
	LTE Band 41_Main	20M	QPSK	50	0	Bottom Face	0mm	WNC	ON	41490	2680	13.40	14.50	1.288	62.9	1.006	0.06	0.588	0.762
	LTE Band 41_Main	20M	QPSK	100	0	Bottom Face	0mm	WNC	ON	39750	2506	13.91	14.50	1.146	62.9	1.006	0.03	0.692	0.797
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	41490	2680	17.46	17.50	1.009	62.9	1.006	-0.15	0.603	0.612
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	39750	2506	17.36	17.50	1.033	62.9	1.006	0.19	0.498	0.517
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	40185	2549.5	17.07	17.50	1.104	62.9	1.006	0.06	0.520	0.578
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	40620	2593	17.19	17.50	1.074	62.9	1.006	-0.15	0.484	0.523
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	41055	2636.5	17.45	17.50	1.012	62.9	1.006	0.11	0.519	0.528
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	41490	2680	16.87	17.50	1.156	62.9	1.006	0	0.522	0.607
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	39750	2506	16.80	17.50	1.175	62.9	1.006	0.16	0.458	0.541
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	40185	2549.5	16.80	17.50	1.175	62.9	1.006	-0.11	0.466	0.551
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	40620	2593	16.80	17.50	1.175	62.9	1.006	-0.11	0.439	0.519
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	41055	2636.5	16.83	17.50	1.167	62.9	1.006	0.16	0.471	0.553
	LTE Band 41_MIMO 2	20M	QPSK	100	0	Bottom Face	0mm	Speed	ON	41490	2680	16.87	17.50	1.156	62.9	1.006	0.06	0.474	0.551
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Edge 1	0mm	Speed	ON	41490	2680	17.46	17.50	1.009	62.9	1.006	0.05	0.020	0.020
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Edge 1	0mm	Speed	ON	41490	2680	16.87	17.50	1.156	62.9	1.006	0.06	0.016	0.019
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Edge 4	0mm	Speed	ON	41490	2680	17.46	17.50	1.009	62.9	1.006	0.06	0.068	0.069
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Edge 4	0mm	Speed	ON	41490	2680	16.87	17.50	1.156	62.9	1.006	0.1	0.054	0.063
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	41055	2636.5	23.36	24.00	1.159	62.9	1.006	0.07	0.297	0.346
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Bottom Face	11mm	Speed	OFF	41055	2636.5	22.39	23.00	1.151	62.9	1.006	-0.01	0.232	0.269
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Edge 1	8mm	Speed	OFF	41055	2636.5	23.36	24.00	1.159	62.9	1.006	0.1	0.071	0.083
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Edge 1	8mm	Speed	OFF	41055	2636.5	22.39	23.00	1.151	62.9	1.006	0.18	0.082	0.095
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Edge 4	25mm	Speed	OFF	41055	2636.5	23.36	24.00	1.159	62.9	1.006	0.02	0.076	0.089
	LTE Band 41_MIMO 2	20M	QPSK	50	0	Edge 4	25mm	Speed	OFF	41055	2636.5	22.39	23.00	1.151	62.9	1.006	0.13	0.052	0.060
	LTE Band 41C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	40620	2593	16.71	17.50	1.199	62.9	1.006	0.11	0.423	0.510
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	41490	2680	17.46	17.50	1.009	62.9	1.006	-0.08	0.625	0.635
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	39750	2506	17.36	17.50	1.033	62.9	1.006	0.15	0.608	0.632
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	40185	2549.5	17.07	17.50	1.104	62.9	1.006	0.13	0.635	0.705
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	40620	2593	17.19	17.50	1.074	62.9	1.006	0.05	0.591	0.639
	LTE Band 41_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	41055	2636.5	17.45	17.50	1.012	62.9	1.006	0.13	0.633	0.644



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	56640	3690	17.44	18.00	1.138	62.9	1.006	0.08	0.701	0.802
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	55340	3560	17.08	18.00	1.236	62.9	1.006	0.16	0.681	0.847
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	55830	3609	17.43	18.00	1.140	62.9	1.006	0.05	0.619	0.710
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	56150	3641	17.33	18.00	1.167	62.9	1.006	-0.02	0.726	0.852
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	56640	3690	16.91	18.00	1.285	62.9	1.006	0.08	0.573	0.741
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	55340	3560	16.75	18.00	1.334	62.9	1.006	0.16	0.565	0.758
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	55830	3609	16.84	18.00	1.306	62.9	1.006	0.05	0.489	0.643
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Bottom Face	0mm	Speed	ON	56150	3641	16.90	18.00	1.288	62.9	1.006	-0.02	0.569	0.737
	LTE Band 48_MIMO 2	20M	QPSK	100	0	Bottom Face	0mm	Speed	ON	56640	3690	16.87	18.00	1.297	62.9	1.006	0.07	0.516	0.673
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Edge 1	0mm	Speed	ON	56640	3690	17.44	18.00	1.138	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Edge 1	0mm	Speed	ON	56640	3690	16.91	18.00	1.285	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Edge 4	0mm	Speed	ON	56640	3690	17.44	18.00	1.138	62.9	1.006	0.05	0.045	0.052
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Edge 4	0mm	Speed	ON	56640	3690	16.91	18.00	1.285	62.9	1.006	0.05	0.033	0.043
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	11mm	Speed	OFF	55830	3609	20.89	22.00	1.291	62.9	1.006	0.19	0.392	0.509
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Bottom Face	11mm	Speed	OFF	55830	3609	19.98	21.00	1.265	62.9	1.006	0.1	0.338	0.430
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Edge 1	8mm	Speed	OFF	55830	3609	20.89	22.00	1.291	62.9	1.006	-0.12	0.070	0.091
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Edge 1	8mm	Speed	OFF	55830	3609	19.98	21.00	1.265	62.9	1.006	0.1	0.062	0.079
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Edge 4	25mm	Speed	OFF	55830	3609	20.89	22.00	1.291	62.9	1.006	0.16	0.254	0.330
	LTE Band 48_MIMO 2	20M	QPSK	50	0	Edge 4	25mm	Speed	OFF	55830	3609	19.98	21.00	1.265	62.9	1.006	-0.04	0.201	0.256
	LTE Band 48C_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	Speed	ON	55340	3560	16.52	18.00	1.406	62.9	1.006	-0.08	0.293	0.414
15	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	56150	3641	17.33	18.00	1.167	62.9	1.006	0.08	0.773	0.907
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	56640	3690	17.44	18.00	1.138	62.9	1.006	0.03	0.715	0.818
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	55340	3560	17.08	18.00	1.236	62.9	1.006	0.07	0.702	0.873
	LTE Band 48_MIMO 2	20M	QPSK	1	0	Bottom Face	0mm	WNC	ON	55830	3609	17.43	18.00	1.140	62.9	1.006	-0.07	0.741	0.850



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	Speed	ON	372000	1860	16.00	16.00	1.000	-0.13	0.857	0.857
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	Speed	ON	376000	1880	15.89	16.00	1.026	-0.01	0.912	0.935
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	Speed	ON	380000	1900	15.80	16.00	1.047	-0.06	0.927	0.971
	FR1 n2_MIMO 2	20M	BPSK	50	28	Bottom Face	0mm	Speed	ON	372000	1860	15.67	16.00	1.079	-0.07	0.686	0.740
	FR1 n2_MIMO 2	20M	BPSK	50	28	Bottom Face	0mm	Speed	ON	376000	1880	15.66	16.00	1.081	0.06	0.730	0.789
	FR1 n2_MIMO 2	20M	BPSK	50	28	Bottom Face	0mm	Speed	ON	380000	1900	15.43	16.00	1.140	-0.01	0.742	0.846
	FR1 n2_MIMO 2	20M	BPSK	100	0	Bottom Face	0mm	Speed	ON	372000	1860	15.64	16.00	1.086	-0.01	0.650	0.706
	FR1 n2_MIMO 2	20M	BPSK	1	53	Edge 1	0mm	Speed	ON	372000	1860	16.00	16.00	1.000	0.1	0.099	0.099
	FR1 n2_MIMO 2	20M	BPSK	50	28	Edge 1	0mm	Speed	ON	372000	1860	15.67	16.00	1.079	0.07	0.068	0.073
	FR1 n2_MIMO 2	20M	BPSK	1	53	Edge 4	0mm	Speed	ON	372000	1860	16.00	16.00	1.000	-0.04	0.576	0.576
	FR1 n2_MIMO 2	20M	BPSK	50	28	Edge 4	0mm	Speed	ON	372000	1860	15.67	16.00	1.079	0.01	0.498	0.537
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	11mm	Speed	OFF	372000	1860	22.99	24.00	1.262	0.06	0.573	0.723
	FR1 n2_MIMO 2	20M	BPSK	50	28	Bottom Face	11mm	Speed	OFF	372000	1860	23.01	24.00	1.256	-0.12	0.503	0.632
	FR1 n2_MIMO 2	20M	BPSK	1	53	Edge 1	8mm	Speed	OFF	372000	1860	22.99	24.00	1.262	0.13	0.088	0.111
	FR1 n2_MIMO 2	20M	BPSK	50	28	Edge 1	8mm	Speed	OFF	372000	1860	23.01	24.00	1.256	-0.03	0.071	0.089
	FR1 n2_MIMO 2	20M	BPSK	1	53	Edge 4	25mm	Speed	OFF	372000	1860	22.99	24.00	1.262	0.12	0.190	0.240
	FR1 n2_MIMO 2	20M	BPSK	50	28	Edge 4	25mm	Speed	OFF	372000	1860	23.01	24.00	1.256	0.02	0.163	0.205
16	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	WNC	ON	380000	1900	15.80	16.00	1.047	-0.04	0.929	0.973
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	WNC	ON	376000	1880	15.89	16.00	1.026	-0.01	0.912	0.935
	FR1 n2_MIMO 2	20M	BPSK	1	53	Bottom Face	0mm	WNC	ON	372000	1860	16.00	16.00	1.000	-0.11	0.906	0.906
	FR1 n5_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	167300	836.5	18.57	19.00	1.104	0.08	0.624	0.689
	FR1 n5_Main	20M	BPSK	50	0	Bottom Face	0mm	Speed	ON	167300	836.5	18.23	19.00	1.194	0.02	0.501	0.598
	FR1 n5_Main	20M	BPSK	1	1	Edge 1	22mm	Speed	OFF	167300	836.5	23.49	24.00	1.125	-0.06	0.001	0.001
	FR1 n5_Main	20M	BPSK	50	28	Edge 1	22mm	Speed	OFF	167300	836.5	23.31	24.00	1.172	0.15	0.001	0.001
	FR1 n5_Main	20M	BPSK	1	1	Edge 2	0mm	Speed	ON	167300	836.5	18.57	19.00	1.104	0.02	0.810	0.894
	FR1 n5_Main	20M	BPSK	50	0	Edge 2	0mm	Speed	ON	167300	836.5	18.23	19.00	1.194	0.11	0.729	0.870
	FR1 n5_Main	20M	BPSK	100	0	Edge 2	0mm	Speed	ON	167300	836.5	18.22	19.00	1.197	0.09	0.702	0.840
	FR1 n5_Main	20M	BPSK	1	1	Edge 3	0mm	Speed	ON	167300	836.5	18.57	19.00	1.104	0.09	0.255	0.282
	FR1 n5_Main	20M	BPSK	50	0	Edge 3	0mm	Speed	ON	167300	836.5	18.23	19.00	1.194	0.04	0.203	0.242
	FR1 n5_Main	20M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	167300	836.5	23.49	24.00	1.125	0.09	0.184	0.207
	FR1 n5_Main	20M	BPSK	50	28	Bottom Face	16mm	Speed	OFF	167300	836.5	23.31	24.00	1.172	0.15	0.162	0.190
	FR1 n5_Main	20M	BPSK	1	1	Edge 2	22mm	Speed	OFF	167300	836.5	23.49	24.00	1.125	-0.06	0.123	0.138
	FR1 n5_Main	20M	BPSK	50	28	Edge 2	22mm	Speed	OFF	167300	836.5	23.31	24.00	1.172	0.15	0.112	0.131
	FR1 n5_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	167300	836.5	23.49	24.00	1.125	0	0.190	0.214
	FR1 n5_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	167300	836.5	23.31	24.00	1.172	0.17	0.181	0.212
17	FR1 n5_Main	20M	BPSK	1	1	Edge 2	0mm	WNC	ON	167300	836.5	18.57	19.00	1.104	-0.05	0.897	0.990
	FR1 n5_Main	20M	BPSK	50	0	Edge 2	0mm	WNC	ON	167300	836.5	18.23	19.00	1.194	0.17	0.808	0.965
	FR1 n5_Main	20M	BPSK	100	0	Edge 2	0mm	WNC	ON	167300	836.5	18.22	19.00	1.197	0.09	0.799	0.956



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	512000	2560	13.41	14.00	1.146	-0.04	0.780	0.894
	FR1 n7_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	502000	2510	13.13	14.00	1.222	-0.06	0.807	0.986
18	FR1 n7_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	507000	2535	13.28	14.00	1.180	-0.05	0.896	1.058
	FR1 n7_Main	20M	BPSK	50	0	Bottom Face	0mm	Speed	ON	512000	2560	13.09	14.00	1.233	-0.03	0.702	0.866
	FR1 n7_Main	20M	BPSK	50	0	Bottom Face	0mm	Speed	ON	502000	2510	12.93	14.00	1.279	0.09	0.726	0.929
	FR1 n7_Main	20M	BPSK	50	0	Bottom Face	0mm	Speed	ON	507000	2535	12.94	14.00	1.276	0.04	0.806	1.029
	FR1 n7_Main	20M	BPSK	100	0	Bottom Face	0mm	Speed	ON	512000	2560	12.92	14.00	1.282	-0.17	0.691	0.886
	FR1 n7_Main	20M	BPSK	1	1	Edge 2	0mm	Speed	ON	512000	2560	13.41	14.00	1.146	0.14	0.096	0.110
	FR1 n7_Main	20M	BPSK	50	0	Edge 2	0mm	Speed	ON	512000	2560	13.09	14.00	1.233	0.08	0.069	0.085
	FR1 n7_Main	20M	BPSK	1	1	Edge 3	0mm	Speed	ON	512000	2560	13.41	14.00	1.146	0.01	0.147	0.168
	FR1 n7_Main	20M	BPSK	50	0	Edge 3	0mm	Speed	ON	512000	2560	13.09	14.00	1.233	-0.07	0.112	0.138
	FR1 n7_Main	20M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	512000	2560	23.40	24.00	1.148	0.06	0.210	0.241
	FR1 n7_Main	20M	BPSK	50	28	Bottom Face	16mm	Speed	OFF	512000	2560	23.39	24.00	1.151	-0.12	0.145	0.167
	FR1 n7_Main	20M	BPSK	1	1	Edge 2	22mm	Speed	OFF	512000	2560	23.40	24.00	1.148	0.01	0.094	0.108
	FR1 n7_Main	20M	BPSK	50	28	Edge 2	22mm	Speed	OFF	512000	2560	23.39	24.00	1.151	-0.15	0.084	0.097
	FR1 n7_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	512000	2560	23.40	24.00	1.148	0.05	0.834	0.958
	FR1 n7_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	502000	2510	23.11	24.00	1.227	-0.1	0.753	0.924
	FR1 n7_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	507000	2535	22.23	24.00	1.503	0.14	0.611	0.918
	FR1 n7_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	512000	2560	23.39	24.00	1.151	0.04	0.811	0.933
	FR1 n7_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	502000	2510	23.27	24.00	1.183	0.04	0.803	0.950
	FR1 n7_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	507000	2535	23.22	24.00	1.197	0.14	0.762	0.912
	FR1 n7_Main	20M	BPSK	100	0	Edge 3	7mm	Speed	OFF	512000	2560	22.85	23.50	1.161	-0.14	0.804	0.934
	FR1 n7_Main	20M	BPSK	1	1	Bottom Face	0mm	WNC	ON	507000	2535	13.28	14.00	1.180	0.07	0.677	0.799
	FR1 n25_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	376500	1882.5	14.38	15.00	1.153	-0.01	0.524	0.604
	FR1 n25_Main	20M	BPSK	50	28	Bottom Face	0mm	Speed	ON	376500	1882.5	14.14	15.00	1.219	0.1	0.472	0.575
	FR1 n25_Main	20M	BPSK	1	1	Edge 2	0mm	Speed	ON	376500	1882.5	14.38	15.00	1.153	-0.19	0.166	0.191
	FR1 n25_Main	20M	BPSK	50	28	Edge 2	0mm	Speed	ON	376500	1882.5	14.14	15.00	1.219	0.09	0.123	0.150
	FR1 n25_Main	20M	BPSK	1	1	Edge 3	0mm	Speed	ON	376500	1882.5	14.38	15.00	1.153	-0.14	0.279	0.322
	FR1 n25_Main	20M	BPSK	50	28	Edge 3	0mm	Speed	ON	376500	1882.5	14.14	15.00	1.219	-0.07	0.224	0.273
	FR1 n25_Main	20M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	376500	1882.5	23.18	24.00	1.208	0.17	0.246	0.297
	FR1 n25_Main	20M	BPSK	50	28	Bottom Face	16mm	Speed	OFF	376500	1882.5	23.17	24.00	1.211	-0.01	0.220	0.266
	FR1 n25_Main	20M	BPSK	1	1	Edge 2	22mm	Speed	OFF	376500	1882.5	23.18	24.00	1.208	-0.03	0.249	0.301
	FR1 n25_Main	20M	BPSK	50	28	Edge 2	22mm	Speed	OFF	376500	1882.5	23.17	24.00	1.211	0.03	0.230	0.278
	FR1 n25_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	376500	1882.5	23.18	24.00	1.208	-0.01	0.452	0.546
	FR1 n25_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	376500	1882.5	23.17	24.00	1.211	0.17	0.436	0.528
	FR1 n25_Main	20M	BPSK	1	1	Bottom Face	0mm	WNC	ON	376500	1882.5	14.38	15.00	1.153	0.09	0.851	0.982
	FR1 n25_Main	20M	BPSK	1	1	Bottom Face	0mm	WNC	ON	372000	1860	14.28	15.00	1.180	0.06	0.867	1.023
19	FR1 n25_Main	20M	BPSK	1	1	Bottom Face	0mm	WNC	ON	381000	1905	14.38	15.00	1.153	-0.08	0.903	1.042
	FR1 n25_Main	20M	BPSK	50	28	Bottom Face	0mm	WNC	ON	376500	1882.5	14.14	15.00	1.219	0	0.763	0.930
	FR1 n25_Main	20M	BPSK	50	28	Bottom Face	0mm	WNC	ON	372000	1860	13.79	15.00	1.321	0.11	0.786	1.039
	FR1 n25_Main	20M	BPSK	50	28	Bottom Face	0mm	WNC	ON	381000	1905	13.99	15.00	1.262	0.05	0.796	1.004
	FR1 n25_Main	20M	BPSK	100	0	Bottom Face	0mm	WNC	ON	376500	1882.5	14.14	15.00	1.219	-0.08	0.800	0.975



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n30_Main	10M	BPSK	1	1	Bottom Face	0mm	Speed	ON	462000	2310	13.22	14.00	1.197	-0.06	0.524	0.627
	FR1 n30_Main	10M	BPSK	25	14	Bottom Face	0mm	Speed	ON	462000	2310	12.83	14.00	1.309	0.19	0.438	0.573
	FR1 n30_Main	10M	BPSK	1	1	Edge 2	0mm	Speed	ON	462000	2310	13.22	14.00	1.197	-0.07	0.084	0.101
	FR1 n30_Main	10M	BPSK	25	14	Edge 2	0mm	Speed	ON	462000	2310	12.83	14.00	1.309	0.03	0.062	0.081
	FR1 n30_Main	10M	BPSK	1	1	Edge 3	0mm	Speed	ON	462000	2310	13.22	14.00	1.197	-0.19	0.145	0.174
	FR1 n30_Main	10M	BPSK	25	14	Edge 3	0mm	Speed	ON	462000	2310	12.83	14.00	1.309	0.09	0.101	0.132
	FR1 n30_Main	10M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	462000	2310	22.12	23.00	1.225	0.14	0.190	0.233
	FR1 n30_Main	10M	BPSK	25	14	Bottom Face	16mm	Speed	OFF	462000	2310	22.00	23.00	1.259	-0.03	0.172	0.217
	FR1 n30_Main	10M	BPSK	1	1	Edge 2	22mm	Speed	OFF	462000	2310	22.12	23.00	1.225	-0.11	0.069	0.084
	FR1 n30_Main	10M	BPSK	25	14	Edge 2	22mm	Speed	OFF	462000	2310	22.00	23.00	1.259	0.12	0.061	0.077
	FR1 n30_Main	10M	BPSK	1	1	Edge 3	7mm	Speed	OFF	462000	2310	22.12	23.00	1.225	0.19	0.488	0.598
	FR1 n30_Main	10M	BPSK	25	14	Edge 3	7mm	Speed	OFF	462000	2310	22.00	23.00	1.259	0.07	0.435	0.548
20	FR1 n30_Main	10M	BPSK	1	1	Bottom Face	0mm	WNC	ON	462000	2310	13.22	14.00	1.197	-0.11	0.921	1.102
	FR1 n30_Main	10M	BPSK	25	14	Bottom Face	0mm	WNC	ON	462000	2310	12.83	14.00	1.309	0.01	0.769	1.007
	FR1 n30_Main	10M	BPSK	50	0	Bottom Face	0mm	WNC	ON	462000	2310	12.82	14.00	1.312	-0.15	0.803	1.054
	FR1 n66_Main	40M	BPSK	1	1	Bottom Face	0mm	Speed	ON	349000	1745	16.08	16.50	1.102	-0.01	0.669	0.737
	FR1 n66_Main	40M	BPSK	108	108	Bottom Face	0mm	Speed	ON	349000	1745	15.33	16.50	1.309	0.14	0.510	0.668
	FR1 n66_Main	40M	BPSK	216	0	Bottom Face	0mm	Speed	ON	349000	1745	15.39	16.50	1.291	-0.1	0.502	0.648
	FR1 n66_Main	40M	BPSK	1	1	Edge 2	0mm	Speed	ON	349000	1745	16.08	16.50	1.102	-0.01	0.303	0.334
	FR1 n66_Main	40M	BPSK	108	108	Edge 2	0mm	Speed	ON	349000	1745	15.33	16.50	1.309	0.03	0.243	0.318
	FR1 n66_Main	40M	BPSK	1	1	Edge 3	0mm	Speed	ON	349000	1745	16.08	16.50	1.102	-0.02	0.371	0.409
	FR1 n66_Main	40M	BPSK	108	108	Edge 3	0mm	Speed	ON	349000	1745	15.33	16.50	1.309	0.11	0.301	0.394
	FR1 n66_Main	40M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	349000	1745	23.02	24.00	1.253	0.17	0.263	0.330
	FR1 n66_Main	40M	BPSK	108	54	Bottom Face	16mm	Speed	OFF	349000	1745	23.06	24.00	1.242	-0.02	0.235	0.292
	FR1 n66_Main	40M	BPSK	1	1	Edge 2	22mm	Speed	OFF	349000	1745	23.02	24.00	1.253	0.12	0.179	0.224
	FR1 n66_Main	40M	BPSK	108	54	Edge 2	22mm	Speed	OFF	349000	1745	23.06	24.00	1.242	-0.01	0.154	0.191
	FR1 n66_Main	40M	BPSK	1	1	Edge 3	7mm	Speed	OFF	349000	1745	23.02	24.00	1.253	-0.14	0.572	0.717
	FR1 n66_Main	40M	BPSK	108	54	Edge 3	7mm	Speed	OFF	349000	1745	23.06	24.00	1.242	0.14	0.562	0.698
	FR1 n66_Main	40M	BPSK	1	1	Bottom Face	0mm	WNC	ON	349000	1745	16.08	16.50	1.102	-0.09	0.988	1.088
	FR1 n66_Main	40M	BPSK	108	108	Bottom Face	0mm	WNC	ON	349000	1745	15.33	16.50	1.309	0.17	0.735	0.962
	FR1 n66_Main	40M	BPSK	216	0	Bottom Face	0mm	WNC	ON	349000	1745	15.39	16.50	1.291	0.1	0.795	1.027
	FR1 n66_MIMO 2	40M	BPSK	1	108	Bottom Face	0mm	Speed	ON	349000	1745	16.48	17.00	1.127	0.18	0.754	0.850
	FR1 n66_MIMO 2	40M	BPSK	108	0	Bottom Face	0mm	Speed	ON	349000	1745	16.24	17.00	1.191	0.07	0.639	0.761
	FR1 n66_MIMO 2	40M	BPSK	216	0	Bottom Face	0mm	Speed	ON	349000	1745	16.04	17.00	1.247	0.06	0.611	0.762
	FR1 n66_MIMO 2	40M	BPSK	1	108	Edge 1	0mm	Speed	ON	349000	1745	16.48	17.00	1.127	-0.19	0.112	0.126
	FR1 n66_MIMO 2	40M	BPSK	108	0	Edge 1	0mm	Speed	ON	349000	1745	16.24	17.00	1.191	0.01	0.092	0.110
	FR1 n66_MIMO 2	40M	BPSK	1	108	Edge 4	0mm	Speed	ON	349000	1745	16.48	17.00	1.127	0	0.795	0.896
	FR1 n66_MIMO 2	40M	BPSK	108	0	Edge 4	0mm	Speed	ON	349000	1745	16.24	17.00	1.191	-0.11	0.636	0.758
	FR1 n66_MIMO 2	40M	BPSK	216	0	Edge 4	0mm	Speed	ON	349000	1745	16.04	17.00	1.247	-0.02	0.600	0.748
	FR1 n66_MIMO 2	40M	BPSK	1	108	Bottom Face	11mm	Speed	OFF	349000	1745	23.39	24.00	1.151	-0.15	0.507	0.583
	FR1 n66_MIMO 2	40M	BPSK	108	54	Bottom Face	11mm	Speed	OFF	349000	1745	23.48	24.00	1.127	0.15	0.439	0.495
	FR1 n66_MIMO 2	40M	BPSK	1	108	Edge 1	8mm	Speed	OFF	349000	1745	23.39	24.00	1.151	-0.06	0.050	0.058
	FR1 n66_MIMO 2	40M	BPSK	108	54	Edge 1	8mm	Speed	OFF	349000	1745	23.48	24.00	1.127	-0.02	0.039	0.044
	FR1 n66_MIMO 2	40M	BPSK	1	108	Edge 4	25mm	Speed	OFF	349000	1745	23.39	24.00	1.151	0.01	0.217	0.250
	FR1 n66_MIMO 2	40M	BPSK	108	54	Edge 4	25mm	Speed	OFF	349000	1745	23.48	24.00	1.127	0.03	0.179	0.202
21	FR1 n66_MIMO 2	40M	BPSK	1	108	Edge 4	0mm	WNC	ON	349000	1745	16.48	17.00	1.127	-0.16	1.020	1.150



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
22	FR1 n71_Main	20M	BPSK	1	1	Bottom Face	0mm	Speed	ON	136100	680.5	18.71	19.00	1.069	-0.03	0.952	1.018
	FR1 n71_Main	20M	BPSK	50	0	Bottom Face	0mm	Speed	ON	136100	680.5	18.35	19.00	1.161	0.07	0.727	0.844
	FR1 n71_Main	20M	BPSK	100	0	Bottom Face	0mm	Speed	ON	136100	680.5	18.37	19.00	1.156	-0.09	0.648	0.749
	FR1 n71_Main	20M	BPSK	1	1	Edge 1	0mm	Speed	OFF	136100	680.5	23.67	24.00	1.079	0.09	0.001	0.001
	FR1 n71_Main	20M	BPSK	50	28	Edge 1	0mm	Speed	OFF	136100	680.5	23.60	24.00	1.096	0.12	0.001	0.001
	FR1 n71_Main	20M	BPSK	1	1	Edge 2	0mm	Speed	ON	136100	680.5	18.71	19.00	1.069	-0.09	0.751	0.803
	FR1 n71_Main	20M	BPSK	50	0	Edge 2	0mm	Speed	ON	136100	680.5	18.35	19.00	1.161	0.12	0.701	0.814
	FR1 n71_Main	20M	BPSK	100	0	Edge 2	0mm	Speed	ON	136100	680.5	18.37	19.00	1.156	0.01	0.684	0.791
	FR1 n71_Main	20M	BPSK	1	1	Edge 3	0mm	Speed	ON	136100	680.5	18.71	19.00	1.069	-0.02	0.836	0.894
	FR1 n71_Main	20M	BPSK	50	0	Edge 3	0mm	Speed	ON	136100	680.5	18.35	19.00	1.161	0.11	0.721	0.837
	FR1 n71_Main	20M	BPSK	100	0	Edge 3	0mm	Speed	ON	136100	680.5	18.37	19.00	1.156	0.04	0.718	0.830
	FR1 n71_Main	20M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	136100	680.5	23.67	24.00	1.079	0	0.161	0.174
	FR1 n71_Main	20M	BPSK	50	28	Bottom Face	16mm	Speed	OFF	136100	680.5	23.60	24.00	1.096	0	0.148	0.162
	FR1 n71_Main	20M	BPSK	1	1	Edge 2	22mm	Speed	OFF	136100	680.5	23.67	24.00	1.079	0.09	0.001	0.001
	FR1 n71_Main	20M	BPSK	50	28	Edge 2	22mm	Speed	OFF	136100	680.5	23.60	24.00	1.096	0.12	0.001	0.001
	FR1 n71_Main	20M	BPSK	1	1	Edge 3	7mm	Speed	OFF	136100	680.5	23.67	24.00	1.079	-0.14	0.132	0.142
	FR1 n71_Main	20M	BPSK	50	28	Edge 3	7mm	Speed	OFF	136100	680.5	23.60	24.00	1.096	0.15	0.112	0.123
	FR1 n71_Main	20M	BPSK	1	1	Bottom Face	0mm	WNC	ON	136100	680.5	18.71	19.00	1.069	0.11	0.800	0.855



FCC SAR TEST REPORT

Report No. : FA211211

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Main	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	518598	2592.99	13.20	14.00	1.202	-0.12	0.846	1.017
	FR1 n41_Main	100M	BPSK	135	0	Bottom Face	0mm	Speed	ON	518598	2592.99	12.89	14.00	1.291	0	0.614	0.793
	FR1 n41_Main	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	518598	2592.99	13.03	14.00	1.250	-0.19	0.496	0.620
	FR1 n41_Main	100M	BPSK	1	1	Edge 2	0mm	Speed	ON	518598	2592.99	13.20	14.00	1.202	-0.19	0.046	0.055
	FR1 n41_Main	100M	BPSK	135	0	Edge 2	0mm	Speed	ON	518598	2592.99	12.89	14.00	1.291	0.06	0.021	0.027
	FR1 n41_Main	100M	BPSK	1	1	Edge 3	0mm	Speed	ON	518598	2592.99	13.20	14.00	1.202	-0.1	0.084	0.101
	FR1 n41_Main	100M	BPSK	135	0	Edge 3	0mm	Speed	ON	518598	2592.99	12.89	14.00	1.291	0.12	0.043	0.056
	FR1 n41_Main	100M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	518598	2592.99	23.41	24.00	1.146	0	0.232	0.266
	FR1 n41_Main	100M	BPSK	135	0	Bottom Face	16mm	Speed	OFF	518598	2592.99	23.40	23.50	1.023	-0.08	0.221	0.226
	FR1 n41_Main	100M	BPSK	1	1	Edge 2	22mm	Speed	OFF	518598	2592.99	23.41	24.00	1.146	0.04	0.068	0.078
	FR1 n41_Main	100M	BPSK	135	0	Edge 2	22mm	Speed	OFF	518598	2592.99	23.40	23.50	1.023	-0.05	0.049	0.050
	FR1 n41_Main	100M	BPSK	1	1	Edge 3	7mm	Speed	OFF	518598	2592.99	23.41	24.00	1.146	-0.11	0.728	0.834
	FR1 n41_Main	100M	BPSK	135	0	Edge 3	7mm	Speed	OFF	518598	2592.99	23.40	23.50	1.023	-0.04	0.711	0.728
	FR1 n41_Main	100M	BPSK	270	0	Edge 3	7mm	Speed	OFF	518598	2592.99	23.50	23.50	1.000	-0.05	0.715	0.715
	FR1 n41_Main	100M	BPSK	1	1	Bottom Face	0mm	WNC	ON	518598	2592.99	13.20	14.00	1.202	0.15	0.674	0.810
	FR1 n41_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	518598	2592.99	14.39	15.50	1.291	0.03	0.691	0.892
	FR1 n41_MIMO 2	100M	BPSK	135	138	Bottom Face	0mm	Speed	ON	518598	2592.99	14.03	15.50	1.403	0	0.553	0.776
	FR1 n41_MIMO 2	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	518598	2592.99	13.93	15.50	1.435	-0.11	0.458	0.657
	FR1 n41_MIMO 2	100M	BPSK	1	1	Edge 1	0mm	Speed	ON	518598	2592.99	14.39	15.50	1.291	0.14	0.098	0.127
	FR1 n41_MIMO 2	100M	BPSK	135	138	Edge 1	0mm	Speed	ON	518598	2592.99	14.03	15.50	1.403	0.06	0.080	0.112
	FR1 n41_MIMO 2	100M	BPSK	1	1	Edge 4	0mm	Speed	ON	518598	2592.99	14.39	15.50	1.291	-0.14	0.539	0.696
	FR1 n41_MIMO 2	100M	BPSK	135	138	Edge 4	0mm	Speed	ON	518598	2592.99	14.03	15.50	1.403	0.12	0.472	0.662
	FR1 n41_MIMO 2	100M	BPSK	1	1	Bottom Face	11mm	Speed	OFF	518598	2592.99	22.31	24.00	1.476	-0.09	0.397	0.586
	FR1 n41_MIMO 2	100M	BPSK	135	69	Bottom Face	11mm	Speed	OFF	518598	2592.99	22.09	24.00	1.552	0.12	0.324	0.503
	FR1 n41_MIMO 2	100M	BPSK	1	1	Edge 1	8mm	Speed	OFF	518598	2592.99	22.31	24.00	1.476	0.09	0.105	0.155
	FR1 n41_MIMO 2	100M	BPSK	135	69	Edge 1	8mm	Speed	OFF	518598	2592.99	22.09	24.00	1.552	0.13	0.093	0.144
	FR1 n41_MIMO 2	100M	BPSK	1	1	Edge 4	25mm	Speed	OFF	518598	2592.99	22.31	24.00	1.476	-0.05	0.082	0.121
	FR1 n41_MIMO 2	100M	BPSK	135	69	Edge 4	25mm	Speed	OFF	518598	2592.99	22.09	24.00	1.552	0.02	0.073	0.113
23	FR1 n41_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	WNC	ON	518598	2592.99	14.39	15.50	1.291	-0.12	0.825	1.065
	FR1 n41_MIMO 1	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	518598	2592.99	14.39	15.50	1.291	-0.03	0.634	0.819
	FR1 n41_MIMO 1	100M	BPSK	135	138	Bottom Face	0mm	Speed	OFF	518598	2592.99	14.03	15.50	1.403	-0.11	0.574	0.805
	FR1 n41_MIMO 1	100M	BPSK	270	0	Bottom Face	0mm	Speed	OFF	518598	2592.99	13.93	15.50	1.435	0.08	0.490	0.703
	FR1 n41_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	Speed	OFF	518598	2592.99	14.39	15.50	1.291	-0.13	0.473	0.611
	FR1 n41_MIMO 1	100M	BPSK	135	138	Edge 1	0mm	Speed	OFF	518598	2592.99	14.03	15.50	1.403	0.04	0.401	0.563
	FR1 n41_MIMO 1	100M	BPSK	1	1	Edge 2	0mm	Speed	OFF	518598	2592.99	14.39	15.50	1.291	0.16	0.243	0.314
	FR1 n41_MIMO 1	100M	BPSK	135	138	Edge 2	0mm	Speed	OFF	518598	2592.99	14.03	15.50	1.403	0.11	0.204	0.286
	FR1 n41_MIMO 1	100M	BPSK	1	1	Bottom Face	0mm	WNC	OFF	518598	2592.99	14.39	15.50	1.291	0.05	0.631	0.815
	FR1 n41_AUX	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	518598	2592.99	13.39	14.50	1.291	-0.11	0.811	1.047
	FR1 n41_AUX	100M	BPSK	135	138	Bottom Face	0mm	Speed	OFF	518598	2592.99	13.02	14.50	1.406	0.16	0.704	0.990
	FR1 n41_AUX	100M	BPSK	270	0	Bottom Face	0mm	Speed	OFF	518598	2592.99	12.85	14.50	1.462	-0.1	0.674	0.986
	FR1 n41_AUX	100M	BPSK	1	1	Edge 3	0mm	Speed	OFF	518598	2592.99	13.39	14.50	1.291	0.13	0.036	0.046
	FR1 n41_AUX	100M	BPSK	135	138	Edge 3	0mm	Speed	OFF	518598	2592.99	13.02	14.50	1.406	0.12	0.022	0.031
	FR1 n41_AUX	100M	BPSK	1	1	Edge 4	0mm	Speed	OFF	518598	2592.99	13.39	14.50	1.291	0.1	0.204	0.263
	FR1 n41_AUX	100M	BPSK	135	138	Edge 4	0mm	Speed	OFF	518598	2592.99	13.02	14.50	1.406	0.07	0.179	0.252
	FR1 n41_AUX	100M	BPSK	1	1	Bottom Face	0mm	WNC	OFF	518598	2592.99	13.39	14.50	1.291	0.01	0.795	1.027



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Main	100M	BPSK	1	271	Bottom Face	0mm	Speed	ON	656000	3840	10.67	11.00	1.079	-0.04	0.870	0.939
	FR1 n77_Main	100M	BPSK	135	69	Bottom Face	0mm	Speed	ON	656000	3840	10.68	11.00	1.076	0.19	0.818	0.881
	FR1 n77_Main	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	656000	3840	10.64	11.00	1.086	0.07	0.833	0.905
	FR1 n77_Main	100M	BPSK	1	271	Edge 2	0mm	Speed	ON	656000	3840	10.67	11.00	1.079	-0.01	0.147	0.159
	FR1 n77_Main	100M	BPSK	135	69	Edge 2	0mm	Speed	ON	656000	3840	10.68	11.00	1.076	0.06	0.109	0.117
	FR1 n77_Main	100M	BPSK	1	271	Edge 3	0mm	Speed	ON	656000	3840	10.67	11.00	1.079	-0.04	0.133	0.143
	FR1 n77_Main	100M	BPSK	135	69	Edge 3	0mm	Speed	ON	656000	3840	10.68	11.00	1.076	0.03	0.108	0.116
	FR1 n77_Main	100M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	656000	3840	23.69	24.00	1.074	0.06	0.402	0.432
	FR1 n77_Main	100M	BPSK	135	69	Bottom Face	16mm	Speed	OFF	656000	3840	23.72	24.00	1.067	-0.05	0.362	0.386
	FR1 n77_Main	100M	BPSK	1	1	Edge 2	22mm	Speed	OFF	656000	3840	23.69	24.00	1.074	0.16	0.111	0.119
	FR1 n77_Main	100M	BPSK	135	69	Edge 2	22mm	Speed	OFF	656000	3840	23.72	24.00	1.067	-0.12	0.100	0.107
	FR1 n77_Main	100M	BPSK	1	1	Edge 3	7mm	Speed	OFF	656000	3840	23.69	24.00	1.074	-0.05	0.577	0.620
	FR1 n77_Main	100M	BPSK	135	69	Edge 3	7mm	Speed	OFF	656000	3840	23.72	24.00	1.067	0.09	0.521	0.556
	FR1 n77_HPUE_Main	100M	BPSK	1	271	Bottom Face	0mm	Speed	ON	656000	3840	13.60	14.00	1.096	0.01	0.838	0.919
	FR1 n77_HPUE_Main	100M	BPSK	135	69	Bottom Face	0mm	Speed	ON	656000	3840	13.59	14.00	1.099	0.04	0.794	0.873
	FR1 n77_HPUE_Main	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	656000	3840	13.57	14.00	1.104	0.01	0.801	0.884
	FR1 n77_Main	100M	BPSK	1	271	Bottom Face	0mm	WNC	ON	656000	3840	10.67	11.00	1.079	0.04	0.640	0.691
	FR1 n77_Main	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	633332	3499.98	10.56	11.00	1.107	-0.04	0.731	0.809
	FR1 n77_Main	100M	BPSK	135	69	Bottom Face	0mm	Speed	ON	633332	3499.98	10.49	11.00	1.125	0.15	0.687	0.773
	FR1 n77_Main	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	633332	3499.98	10.52	11.00	1.117	0.14	0.683	0.763
	FR1 n77_Main	100M	BPSK	1	1	Edge 2	0mm	Speed	ON	633332	3499.98	10.56	11.00	1.107	0.07	0.120	0.133
	FR1 n77_Main	100M	BPSK	135	69	Edge 2	0mm	Speed	ON	633332	3499.98	10.49	11.00	1.125	0.13	0.089	0.100
	FR1 n77_Main	100M	BPSK	1	1	Edge 3	0mm	Speed	ON	633332	3499.98	10.56	11.00	1.107	-0.01	0.109	0.121
	FR1 n77_Main	100M	BPSK	135	69	Edge 3	0mm	Speed	ON	633332	3499.98	10.49	11.00	1.125	0.18	0.088	0.099
	FR1 n77_Main	100M	BPSK	1	1	Bottom Face	16mm	Speed	OFF	633332	3499.98	23.91	24.00	1.021	0.06	0.329	0.336
	FR1 n77_Main	100M	BPSK	135	69	Bottom Face	16mm	Speed	OFF	633332	3499.98	23.90	24.00	1.023	-0.18	0.296	0.303
	FR1 n77_Main	100M	BPSK	1	1	Edge 2	22mm	Speed	OFF	633332	3499.98	23.91	24.00	1.021	-0.18	0.091	0.093
	FR1 n77_Main	100M	BPSK	135	69	Edge 2	22mm	Speed	OFF	633332	3499.98	23.90	24.00	1.023	-0.19	0.082	0.084
	FR1 n77_Main	100M	BPSK	1	1	Edge 3	7mm	Speed	OFF	633332	3499.98	23.91	24.00	1.021	0.14	0.473	0.483
	FR1 n77_Main	100M	BPSK	135	69	Edge 3	7mm	Speed	OFF	633332	3499.98	23.90	24.00	1.023	-0.03	0.427	0.437
	FR1 n77_HPUE_Main	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	633332	3499.98	13.67	14.00	1.079	-0.02	0.719	0.776
	FR1 n77_HPUE_Main	100M	BPSK	135	69	Bottom Face	0mm	Speed	ON	633332	3499.98	13.60	14.00	1.096	0.05	0.670	0.735
	FR1 n77_Main	100M	BPSK	1	1	Bottom Face	0mm	WNC	ON	633332	3499.98	10.56	11.00	1.107	-0.12	0.524	0.580



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	656000	3840	12.25	13.00	1.189	-0.16	0.889	1.057
	FR1 n77_MIMO 2	100M	BPSK	135	0	Bottom Face	0mm	Speed	ON	656000	3840	11.94	13.00	1.276	-0.15	0.710	0.906
	FR1 n77_MIMO 2	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	656000	3840	11.39	13.00	1.449	0.12	0.689	0.998
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 1	0mm	Speed	ON	656000	3840	12.25	13.00	1.189	0.11	0.150	0.178
	FR1 n77_MIMO 2	100M	BPSK	135	0	Edge 1	0mm	Speed	ON	656000	3840	11.94	13.00	1.276	0.04	0.112	0.143
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 4	0mm	Speed	ON	656000	3840	12.25	13.00	1.189	0.09	0.483	0.574
	FR1 n77_MIMO 2	100M	BPSK	135	0	Edge 4	0mm	Speed	ON	656000	3840	11.94	13.00	1.276	0.03	0.427	0.545
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	11mm	Speed	OFF	656000	3840	23.23	24.00	1.194	0.03	0.484	0.578
	FR1 n77_MIMO 2	100M	BPSK	135	138	Bottom Face	11mm	Speed	OFF	656000	3840	22.54	23.50	1.247	-0.09	0.448	0.559
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 1	8mm	Speed	OFF	656000	3840	23.23	24.00	1.194	-0.07	0.083	0.099
	FR1 n77_MIMO 2	100M	BPSK	135	138	Edge 1	8mm	Speed	OFF	656000	3840	22.54	23.50	1.247	0.09	0.071	0.089
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 4	25mm	Speed	OFF	656000	3840	23.23	24.00	1.194	-0.02	0.276	0.330
	FR1 n77_MIMO 2	100M	BPSK	135	138	Edge 4	25mm	Speed	OFF	656000	3840	22.54	23.50	1.247	-0.11	0.248	0.309
	FR1 n77_HPUE_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	656000	3840	15.16	16.00	1.213	0.02	0.861	1.045
	FR1 n77_HPUE_MIMO 2	100M	BPSK	135	138	Bottom Face	0mm	Speed	ON	656000	3840	14.87	16.00	1.297	0.04	0.801	1.039
	FR1 n77_HPUE_MIMO 2	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	656000	3840	14.37	16.00	1.455	0.09	0.710	1.033
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	WNC	ON	656000	3840	12.25	13.00	1.189	0.13	0.755	0.897
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	633332	3499.98	12.41	13.00	1.146	0.14	0.922	1.056
	FR1 n77_MIMO 2	100M	BPSK	135	0	Bottom Face	0mm	Speed	ON	633332	3499.98	11.87	13.00	1.297	-0.08	0.739	0.959
	FR1 n77_MIMO 2	100M	BPSK	270	0	Bottom Face	0mm	Speed	ON	633332	3499.98	11.19	13.00	1.517	-0.05	0.618	0.938
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 1	0mm	Speed	ON	633332	3499.98	12.41	13.00	1.146	-0.13	0.134	0.153
	FR1 n77_MIMO 2	100M	BPSK	135	0	Edge 1	0mm	Speed	ON	633332	3499.98	11.87	13.00	1.297	-0.1	0.100	0.130
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 4	0mm	Speed	ON	633332	3499.98	12.41	13.00	1.146	-0.11	0.433	0.496
	FR1 n77_MIMO 2	100M	BPSK	135	0	Edge 4	0mm	Speed	ON	633332	3499.98	11.87	13.00	1.297	-0.18	0.383	0.497
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	11mm	Speed	OFF	633332	3499.98	23.32	24.00	1.169	0.17	0.434	0.508
	FR1 n77_MIMO 2	100M	BPSK	135	69	Bottom Face	11mm	Speed	OFF	633332	3499.98	22.41	23.50	1.285	-0.12	0.401	0.515
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 1	8mm	Speed	OFF	633332	3499.98	23.32	24.00	1.169	-0.07	0.074	0.087
	FR1 n77_MIMO 2	100M	BPSK	135	69	Edge 1	8mm	Speed	OFF	633332	3499.98	22.41	23.50	1.285	-0.16	0.063	0.081
	FR1 n77_MIMO 2	100M	BPSK	1	1	Edge 4	25mm	Speed	OFF	633332	3499.98	23.32	24.00	1.169	-0.14	0.247	0.289
	FR1 n77_MIMO 2	100M	BPSK	135	69	Edge 4	25mm	Speed	OFF	633332	3499.98	22.41	23.50	1.285	-0.04	0.222	0.285
	FR1 n77_HPUE_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	Speed	ON	633332	3499.98	15.55	16.00	1.109	0	0.891	0.988
	FR1 n77_HPUE_MIMO 2	100M	BPSK	135	138	Bottom Face	0mm	Speed	ON	633332	3499.98	15.04	16.00	1.247	0.04	0.778	0.970
	FR1 n77_HPUE_MIMO 2	100M	BPSK	270	1	Bottom Face	0mm	Speed	ON	633332	3499.98	14.33	16.00	1.469	-0.09	0.652	0.958
	FR1 n77_MIMO 2	100M	BPSK	1	1	Bottom Face	0mm	WNC	ON	633332	3499.98	12.41	13.00	1.146	-0.17	0.677	0.776



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_MIMO 1	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	-0.17	0.636	0.765
	FR1 n77_MIMO 1	100M	BPSK	135	0	Bottom Face	0mm	Speed	OFF	656000	3840	10.85	12.00	1.303	0.07	0.543	0.708
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	-0.03	0.931	1.119
	FR1 n77_MIMO 1	100M	BPSK	135	0	Edge 1	0mm	Speed	OFF	656000	3840	10.85	12.00	1.303	0.18	0.744	0.970
	FR1 n77_MIMO 1	100M	BPSK	270	0	Edge 1	0mm	Speed	OFF	656000	3840	10.31	12.00	1.476	0.19	0.612	0.903
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 2	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	-0.06	0.216	0.260
	FR1 n77_MIMO 1	100M	BPSK	135	0	Edge 2	0mm	Speed	OFF	656000	3840	10.85	12.00	1.303	0.07	0.184	0.240
	FR1 n77_HPUE_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	Speed	OFF	656000	3840	14.25	15.00	1.189	0.08	0.902	1.072
	FR1 n77_HPUE_MIMO 1	100M	BPSK	135	0	Edge 1	0mm	Speed	OFF	656000	3840	13.85	15.00	1.303	0.01	0.802	1.045
	FR1 n77_HPUE_MIMO 1	100M	BPSK	270	0	Edge 1	0mm	Speed	OFF	656000	3840	13.27	15.00	1.489	-0.05	0.701	1.044
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	WNC	OFF	656000	3840	11.20	12.00	1.202	0.1	0.767	0.922
	FR1 n77_MIMO 1	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	633332	3499.98	11.49	12.00	1.125	0.01	0.551	0.620
	FR1 n77_MIMO 1	100M	BPSK	135	0	Bottom Face	0mm	Speed	OFF	633332	3499.98	11.09	12.00	1.233	-0.05	0.470	0.580
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	Speed	OFF	633332	3499.98	11.49	12.00	1.125	-0.08	0.807	0.908
	FR1 n77_MIMO 1	100M	BPSK	135	0	Edge 1	0mm	Speed	OFF	633332	3499.98	11.09	12.00	1.233	0.07	0.644	0.794
	FR1 n77_MIMO 1	100M	BPSK	270	0	Edge 1	0mm	Speed	OFF	633332	3499.98	10.51	12.00	1.409	-0.06	0.530	0.747
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 2	0mm	Speed	OFF	633332	3499.98	11.49	12.00	1.125	0.01	0.187	0.210
	FR1 n77_MIMO 1	100M	BPSK	135	0	Edge 2	0mm	Speed	OFF	633332	3499.98	11.09	12.00	1.233	-0.1	0.159	0.196
	FR1 n77_HPUE_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	Speed	OFF	633332	3499.98	14.52	15.00	1.117	-0.19	0.781	0.872
	FR1 n77_HPUE_MIMO 1	100M	BPSK	135	0	Edge 1	0mm	Speed	OFF	633332	3499.98	14.07	15.00	1.239	0.12	0.685	0.849
	FR1 n77_MIMO 1	100M	BPSK	1	1	Edge 1	0mm	WNC	OFF	633332	3499.98	11.49	12.00	1.125	0.17	0.664	0.747
24	FR1 n77_AUX	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	0.03	0.974	1.171
	FR1 n77_AUX	100M	BPSK	135	138	Bottom Face	0mm	Speed	OFF	656000	3840	10.87	12.00	1.297	0.18	0.779	1.011
	FR1 n77_AUX	100M	BPSK	270	0	Bottom Face	0mm	Speed	OFF	656000	3840	10.31	12.00	1.476	0.14	0.602	0.888
	FR1 n77_AUX	100M	BPSK	1	1	Edge 3	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	0.02	0.072	0.087
	FR1 n77_AUX	100M	BPSK	135	138	Edge 3	0mm	Speed	OFF	656000	3840	10.87	12.00	1.297	0.01	0.049	0.064
	FR1 n77_AUX	100M	BPSK	1	1	Edge 4	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	-0.08	0.122	0.147
	FR1 n77_AUX	100M	BPSK	135	138	Edge 4	0mm	Speed	OFF	656000	3840	10.87	12.00	1.297	0.07	0.098	0.127
	FR1 n77_HPUE_AUX	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	656000	3840	14.27	15.00	1.183	0.07	0.912	1.079
	FR1 n77_HPUE_AUX	100M	BPSK	135	138	Bottom Face	0mm	Speed	OFF	656000	3840	14.27	15.00	1.183	0.09	0.842	0.996
	FR1 n77_HPUE_AUX	100M	BPSK	270	0	Bottom Face	0mm	Speed	OFF	656000	3840	14.27	15.00	1.183	-0.1	0.822	0.972
	FR1 n77_AUX	100M	BPSK	1	1	Bottom Face	0mm	WNC	OFF	656000	3840	11.20	12.00	1.202	-0.01	0.725	0.872
	FR1 n77_AUX	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	633332	3499.98	11.68	12.00	1.076	-0.16	0.661	0.712
	FR1 n77_AUX	100M	BPSK	135	138	Bottom Face	0mm	Speed	OFF	633332	3499.98	11.25	12.00	1.189	0.1	0.528	0.628
	FR1 n77_AUX	100M	BPSK	270	0	Bottom Face	0mm	Speed	OFF	633332	3499.98	10.68	12.00	1.355	0.06	0.408	0.553
	FR1 n77_AUX	100M	BPSK	1	1	Edge 3	0mm	Speed	OFF	633332	3499.98	11.68	12.00	1.076	-0.09	0.048	0.052
	FR1 n77_AUX	100M	BPSK	135	138	Edge 3	0mm	Speed	OFF	633332	3499.98	11.25	12.00	1.189	0.18	0.033	0.039
	FR1 n77_AUX	100M	BPSK	1	1	Edge 4	0mm	Speed	OFF	633332	3499.98	11.68	12.00	1.076	0.09	0.082	0.088
	FR1 n77_AUX	100M	BPSK	135	138	Edge 4	0mm	Speed	OFF	633332	3499.98	11.25	12.00	1.189	-0.09	0.066	0.078
	FR1 n77_HPUE_AUX	100M	BPSK	1	1	Bottom Face	0mm	Speed	OFF	633332	3499.98	14.52	15.00	1.117	-0.16	0.608	0.679
	FR1 n77_HPUE_AUX	100M	BPSK	135	0	Bottom Face	0mm	Speed	OFF	633332	3499.98	14.12	15.00	1.225	0.05	0.543	0.665
	FR1 n77_AUX	100M	BPSK	1	1	Bottom Face	0mm	WNC	OFF	633332	3499.98	11.68	12.00	1.076	-0.19	0.492	0.530

14.2 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	4233	846.6	20.93	21.50	1.140	0.1	0.993	-	1.132
2nd	WCDMA V_Main	RMC 12.2Kbps	Bottom Face	0mm	WNC	ON	4233	846.6	20.93	21.50	1.140	0.12	0.985	1.008	1.123
1st	LTE Band 7_MIMO 2	20M_QPSK_1_0	Bottom Face	0mm	WNC	ON	20850	2510	16.60	17.00	1.096	0.11	0.941	-	1.032
2nd	LTE Band 7_MIMO 2	20M_QPSK_1_0	Bottom Face	0mm	WNC	ON	20850	2510	16.60	17.00	1.096	0.13	0.932	1.010	1.022
1st	LTE Band 30_MIMO 2	10M_QPSK_1_0	Bottom Face	0mm	WNC	ON	27710	2310	16.77	17.00	1.054	-0.14	1.080	-	1.139
2nd	LTE Band 30_MIMO 2	10M_QPSK_1_0	Bottom Face	0mm	WNC	ON	27710	2310	16.77	17.00	1.054	-0.11	1.040	1.038	1.097
1st	LTE Band 66_MIMO 2	20M_QPSK_1_0	Bottom Face	0mm	Speed	ON	132072	1720	17.83	18.00	1.040	0.14	1.150	-	1.196
2nd	LTE Band 66_MIMO 2	20M_QPSK_1_0	Bottom Face	0mm	Speed	ON	132072	1720	17.83	18.00	1.040	0.11	1.090	1.055	1.134
1st	FR1 n2_MIMO 2	20M_BPSK_1_53	Bottom Face	0mm	WNC	ON	380000	1900	15.80	16.00	1.047	-0.04	0.929	-	0.973
2nd	FR1 n2_MIMO 2	20M_BPSK_1_53	Bottom Face	0mm	WNC	ON	380000	1900	15.80	16.00	1.047	0.02	0.911	1.020	0.954
1st	FR1 n71_Main	20M_BPSK_1_1	Bottom Face	0mm	Speed	ON	136100	680.5	18.71	19.00	1.069	-0.03	0.952	-	1.018
2nd	FR1 n71_Main	20M_BPSK_1_1	Bottom Face	0mm	Speed	ON	136100	680.5	18.71	19.00	1.069	0.05	0.932	1.021	0.996
1st	FR1 n77_MIMO 2	100M_BPSK_1_1	Bottom Face	0mm	Speed	ON	633332	3499.98	12.41	13.00	1.146	0.14	0.922	-	1.056
2nd	FR1 n77_MIMO 2	100M_BPSK_1_1	Bottom Face	0mm	Speed	ON	633332	3499.98	12.41	13.00	1.146	0.06	0.906	1.018	1.038
1st	FR1 n77_AUX	100M_BPSK_1_1	Bottom Face	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	0.03	0.974	-	1.171
2nd	FR1 n77_AUX	100M_BPSK_1_1	Bottom Face	0mm	Speed	OFF	656000	3840	11.20	12.00	1.202	0.09	0.960	1.015	1.154

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

14.3 FR1 n77 Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for FR1 n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required.

Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<Main Ant>

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	11	14
Reported 1g SAR (W/kg)	0.939	0.919
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	12.59	12.56
Linearity SAR(W/kg)	0.94	
% deviation from expected linearity		-1.90%

<MIMO 2 Ant>

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	13	16
Reported 1g SAR (W/kg)	1.057	1.039
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	19.95	19.91
Linearity SAR(W/kg)	1.05	
% deviation from expected linearity		-1.47%

<MIMO 1 Ant>

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	12	15
Reported 1g SAR (W/kg)	1.119	1.045
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	15.85	15.81
Linearity SAR(W/kg)	1.12	
% deviation from expected linearity		-6.39%

<AUX Ant>

	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	12	15
Reported 1g SAR (W/kg)	1.171	1.079
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	15.85	15.81
Linearity SAR(W/kg)	1.17	
% deviation from expected linearity		-7.64%

15. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2 + WPT	Yes
2.	WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2 + WPT	Yes
3.	WWAN Main + WWAN MIMO 2 + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2 + WPT	Yes
4.	WWAN MIMO 1 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2 + WPT	Yes
5.	WWAN MIMO 1 + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2 + WPT	Yes
6.	WWAN MIMO 1 + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2 + WPT	Yes
7.	WWAN Aux+ 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2 + WPT	Yes
8.	WWAN Aux + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2 + WPT	Yes
9.	WWAN Aux + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2 + WPT	Yes

General Note:

- The Intel AX211D2W WLAN/BT module is integrated into DELL T05J host, the WLAN/BT maximum output power is referenced from Sporton FCC SAR report, report no.: FA211211-01 (FCC ID: E2KAX211D2).
- The WPT module is also integrated into host in the same time, when the WPT pen is connect to device, charging is start, the WPT SAR refer to the FCC ID: E2K-DWRFID2004, Sporton Report No.: FA211211-02
- Since the SAR test results of WPT have no contribution to other transmission antennas, therefore, the WPT test results was not included in the SPLSR analysis.
- The worst case SAR from each WWAN transmit antenna is used for Sim-Tx analysis. Therefore, the following summations represent the absolute worst cases for simultaneous transmission for this device and it is conservative.
- The Sim-Tx analysis for EN-DC active is choose the worst case standalone SAR from the WWAN main and MIMO2 antenna within the exposure positions, regardless of whether the EN-DC combinations. Therefore, the following summations represent the absolute worst cases for simultaneous transmission for this device and it is conservative.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation $< 1.6\text{W/kg}$.
 - $\text{SPLSR} = (\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR $< 1.6\text{W/kg}$.
 - The SPLSR calculated results please refer to section 15.2.

15.1 Body Exposure Conditions

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	1	2	3	4	5	6	7	8	1+2+3+4+8 Summed 1g SAR (W/kg)	1+2+3+7+8 Summed 1g SAR (W/kg)	1+2+5+6+7+8 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main	Maximum WWAN MIMO 2	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2	WPT					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom Face at 0mm	1.152	1.196	1.174	1.055	1.073	1.123	0.317	0.000	4.577	3.839	4.861	0.04	Case1
Edge 1 at 0mm	0.001	0.178	0.233	0.213	0.297	0.374	0.199	0.000	0.625	0.611	1.049		
Edge 2 at 0mm	0.990								0.990	0.990	0.990		
Edge 3 at 0mm	0.894								0.894	0.894	0.894		
Edge 4 at 0mm		1.150							1.150	1.150	1.150		

<WWAN MIMO 1 + WLAN + Bluetooth>

Exposure Position	1	2	3	4	5	6	7	1+2+3+7 Summed 1g SAR (W/kg)	1+2+6+7 Summed 1g SAR (W/kg)	1+4+5+6+7 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO 1	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2	WPT					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom Face at 0mm	0.819	1.174	1.055	1.073	1.123	0.317	0.000	3.048	2.310	3.332	0.04	Case 2
Edge 1 at 0mm	1.119	0.233	0.213	0.297	0.374	0.199	0.000	1.565	1.551	1.989	0.03	Case 3
Edge 2 at 0mm	0.314							0.314	0.314	0.314		

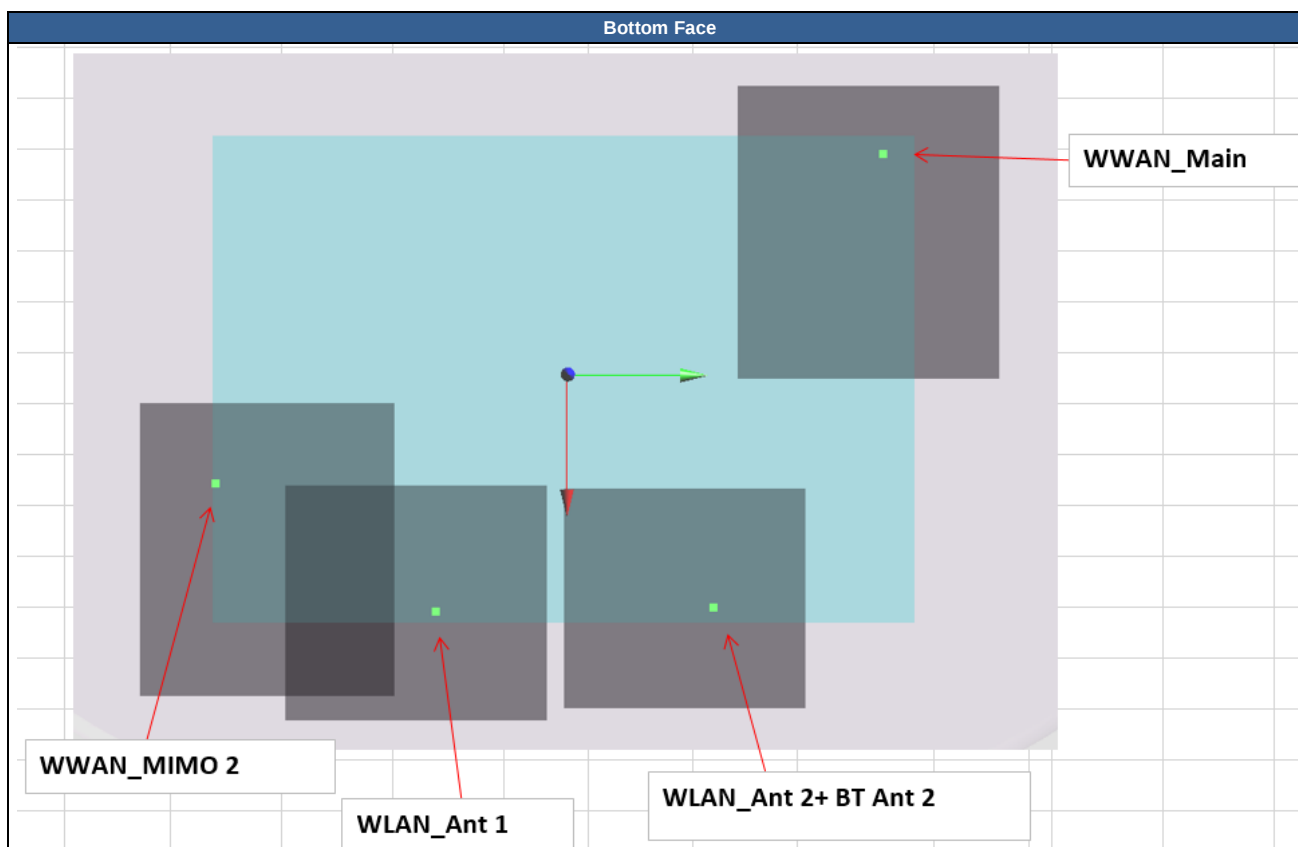
<WWAN Aux + WLAN + Bluetooth>

Exposure Position	1	2	3	4	5	6	7	1+2+3+7 Summed 1g SAR (W/kg)	1+2+6+7 Summed 1g SAR (W/kg)	1+4+5+6+7 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN AUX	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2	WPT					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom Face at 0mm	1.196	1.174	1.055	1.073	1.123	0.317	0.000	3.425	2.687	3.709	0.04	Case 4
Edge 1 at 0mm		0.233	0.213	0.297	0.374	0.199	0.000	0.446	0.432	0.870		
Edge 3 at 0mm	0.087							0.087	0.087	0.087		
Edge 4 at 0mm	0.263							0.263	0.263	0.263		

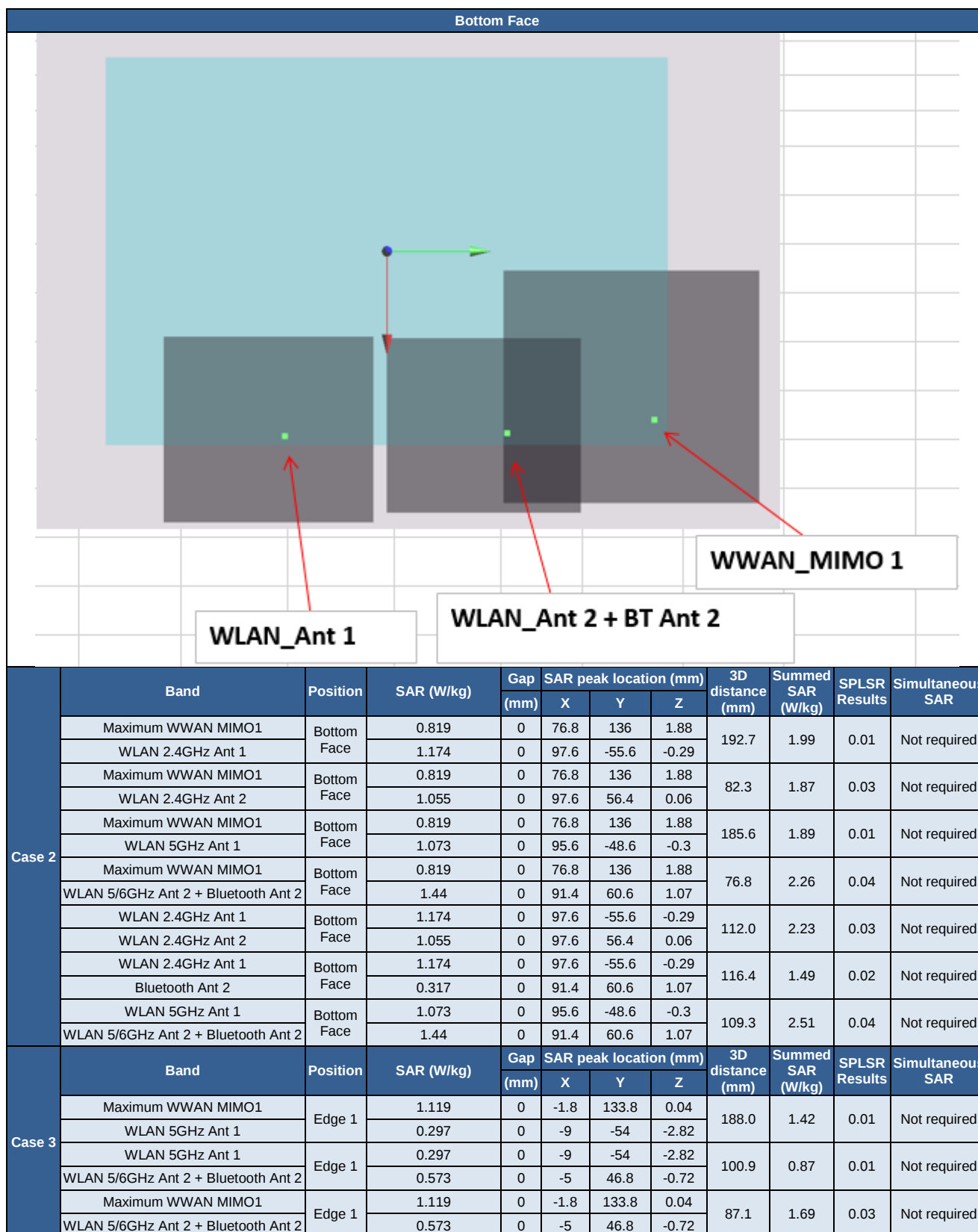
15.2 SPLSR Evaluation and Analysis

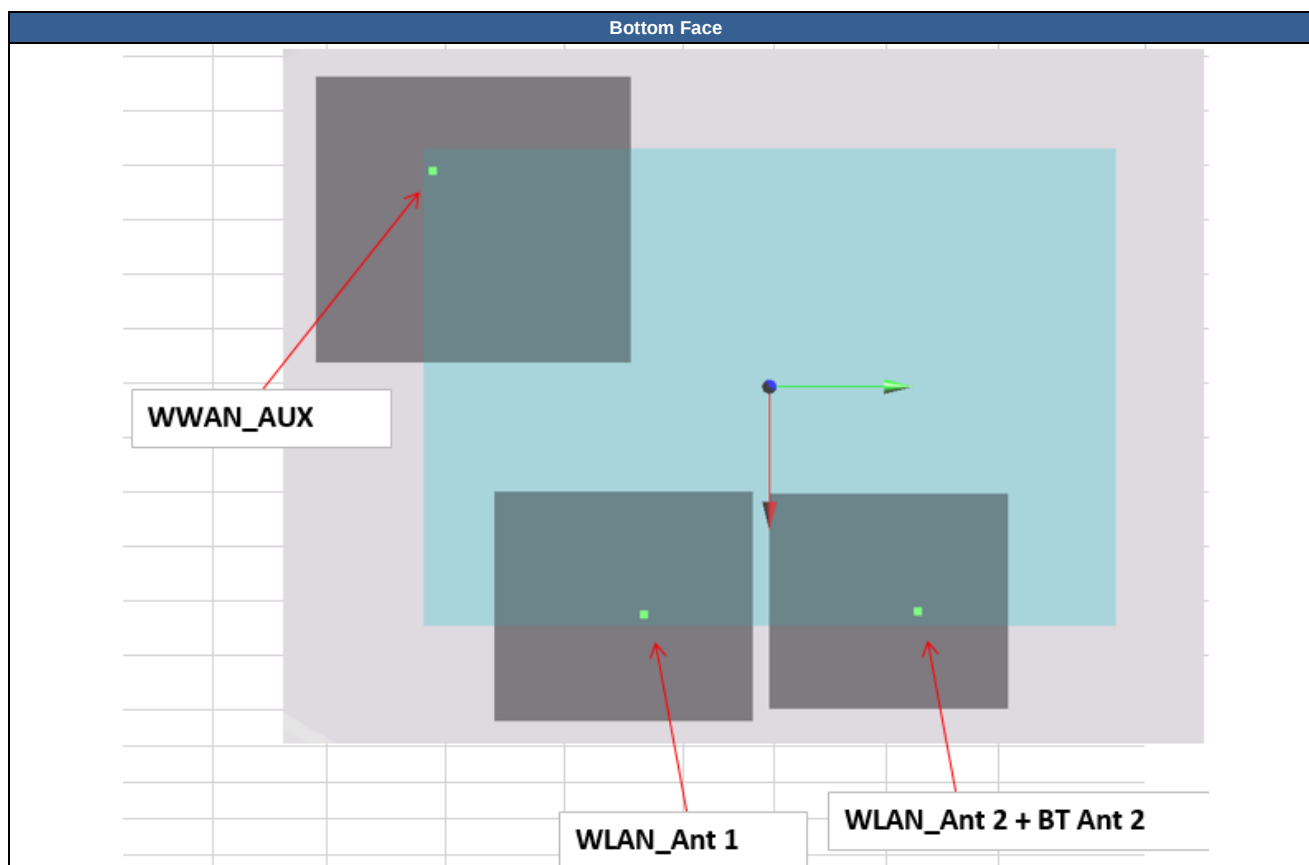
General Note:

- Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneously transmitting antenna. When the sum of 1-g or 10-g SAR of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration. Therefore, the adjacent transmit antennas will be summed first, and then the SPLSR calculation will be evaluated with the farther transmitted antennas.
- $SPLSR = (SAR_1 + SAR_2)^{1.5} / (min. \text{ separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary
- The detail hotspot point for each transmitter in each exposure condition are showing as below figure and the minimum 3D distance for each sum combination is used for SPLSR analysis.



	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 1	Maximum WWAN Main	Bottom Face	1.152	0	-90.4	132	0.42	306.8	2.35	0.01	Not required
	Maximum WWAN MIMO2		1.196	0	44.6	-143.5	0.81				
	Maximum WWAN Main	Bottom Face	1.152	0	-90.4	132	0.42	265.6	2.33	0.01	Not required
	WLAN 2.4GHz Ant 1		1.174	0	97.6	-55.6	-0.29				
	Maximum WWAN Main	Bottom Face	1.152	0	-90.4	132	0.42	202.6	2.21	0.02	Not required
	WLAN 2.4GHz Ant 2		1.055	0	97.6	56.4	0.06				
	Maximum WWAN MIMO2	Bottom Face	1.196	0	44.6	-143.5	0.81	102.6	2.37	0.04	Not required
	WLAN 2.4GHz Ant 1		1.174	0	97.6	-55.6	-0.29				
	Maximum WWAN MIMO2	Bottom Face	1.196	0	44.6	-143.5	0.81	206.8	2.25	0.02	Not required
	WLAN 2.4GHz Ant 2		1.055	0	97.6	56.4	0.06				
	WLAN 2.4GHz Ant 1	Bottom Face	1.174	0	97.6	-55.6	-0.29	112.0	2.23	0.03	Not required
	WLAN 2.4GHz Ant 2		1.055	0	97.6	56.4	0.06				
	WLAN 2.4GHz Ant 1	Bottom Face	1.174	0	97.6	-55.6	-0.29	116.4	1.49	0.02	Not required
	Bluetooth Ant 2		0.317	0	91.4	60.6	1.07				
	Maximum WWAN Main	Bottom Face	1.152	0	-90.4	132	0.42	195.3	2.59	0.02	Not required
	WLAN 5/6GHz Ant 2 + Bluetooth Ant 2		1.44	0	91.4	60.6	1.07				
	Maximum WWAN MIMO2	Bottom Face	1.196	0	44.6	-143.5	0.81	209.4	2.64	0.02	Not required
	WLAN 5/6GHz Ant 2 + Bluetooth Ant 2		1.44	0	91.4	60.6	1.07				
	Maximum WWAN Main	Bottom Face	1.152	0	-90.4	132	0.42	259.3	2.23	0.01	Not required
	WLAN 5/6GHz Ant 1		1.073	0	95.6	-48.6	-0.3				
	Maximum WWAN MIMO2	Bottom Face	1.196	0	44.6	-143.5	0.81	107.7	2.27	0.03	Not required
	WLAN 5/6GHz Ant 1		1.073	0	95.6	-48.6	-0.3				
	WLAN 5/6GHz Ant 1	Bottom Face	1.073	0	95.6	-48.6	-0.3	109.3	2.51	0.04	Not required
	WLAN 5/6GHz Ant 2 + Bluetooth Ant 2		1.44	0	91.4	60.6	1.07				





	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 4	Maximum WWAN AUX	Bottom Face	1.196	0	-90.4	-140.8	2.25	206.4	2.37	0.02	Not required
	WLAN 2.4GHz Ant 1		1.174	0	97.6	-55.6	-0.29				
	Maximum WWAN AUX	Bottom Face	1.196	0	-90.4	-140.8	2.25	272.5	2.25	0.01	Not required
	WLAN 2.4GHz Ant 2		1.055	0	97.6	56.4	0.06				
	WLAN 2.4GHz Ant 1	Bottom Face	1.174	0	97.6	-55.6	-0.29	112.0	2.23	0.03	Not required
	WLAN 2.4GHz Ant 2		1.055	0	97.6	56.4	0.06				
	WLAN 2.4GHz Ant 1	Bottom Face	1.174	0	97.6	-55.6	-0.29	116.4	1.49	0.02	Not required
	Bluetooth Ant 2		0.317	0	91.4	60.6	1.07				
	Maximum WWAN AUX	Bottom Face	1.196	0	-90.4	-140.8	2.25	207.6	2.27	0.02	Not required
	WLAN 5/6GHz Ant 1		1.073	0	95.6	-48.6	-0.3				
	WLAN 5/6GHz Ant 1	Bottom Face	1.073	0	95.6	-48.6	-0.3	109.3	2.51	0.04	Not required
	WLAN 5/6GHz Ant 2 + Bluetooth Ant 2		1.44	0	91.4	60.6	1.07				
	Maximum WWAN AUX	Bottom Face	1.196	0	-90.4	-140.8	2.25	271.3	2.64	0.02	Not required
	WLAN 5/6GHz Ant 2 + Bluetooth Ant 2		1.44	0	91.4	60.6	1.07				

Test Engineer : Bevis Chang, Carter Jhuang and Mood Huang

16. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg. Therefore, the measurement uncertainty table is not required in this report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

17. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [6] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [7] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [8] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.