APPENDIX A2. RF CONDUCTED POWERS AND SAR DATA SUMMARY

1 RF CONDUCTED POWERS

1.1 GSM Conducted Powers

Table 1-1
Measured P_{limit} for DSI = 5 (Read Configuration)

Maximum Burst-Averaged Output Power				
		Voice	*GPRS Data (GMSK)*	
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**
GSM 850	128	30.50	30.59	**27.20**
	190	29.74	29.89	**26.75**
	251	29.63	29.78	**26.40**
GSM 1900	512	24.15	24.73	**21.60**
	661	24.30	24.88	**21.93**
	810	24.61	24.86	**21.81**

Calculated Maximum Frame-Averaged Output Power				
		Voice	*GPRS Data (GMSK)*	
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**
GSM 850	128	21.30	21.39	**21.01**
	190	20.54	20.69	**20.56**
	251	20.43	20.58	**20.21**
GSM 1900	512	14.95	15.53	**15.41**
	661	15.10	15.68	**15.74**
	810	15.41	15.66	**15.62**

GSM 850	**Frame Avg.Targets:**	21.20	21.20	**21.21**
GSM 1900		15.80	15.80	**15.81**

Table 1-2
Measured P_{limit} for DSI = 6 (Flat Configuration)

Maximum Burst-Averaged Output Power				
		Voice	*GPRS Data (GMSK)*	
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**
GSM 850	128	24.64	24.72	**21.68**
	190	24.90	25.01	**21.90**
	251	24.88	25.00	**22.01**
GSM 1900	512	19.39	19.45	**16.30**
	661	19.62	19.70	**16.50**
	810	19.44	19.49	**16.47**

Calculated Maximum Frame-Averaged Output Power				
		Voice	*GPRS Data (GMSK)*	
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**
GSM 850	128	15.44	15.52	**15.49**
	190	15.70	15.81	**15.71**
	251	15.68	15.80	**15.82**
GSM 1900	512	10.19	10.25	**10.11**
	661	10.42	10.50	**10.31**
	810	10.24	10.29	**10.28**

GSM 850	**Frame Avg.Targets:**	15.70	15.70	**15.71**
GSM 1900		10.90	10.90	**10.91**

Note:

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

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

Figure 1-1
Power Measurement Setup

1.2 UMTS Conducted Powers

Table 1-3
Measured P_{limit} for DSI = 5 (Read Configuration)

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	21.20	21.35	21.41	15.58	15.77	15.73	-
99		12.2 kbps AMR	21.22	21.37	21.42	15.61	15.75	15.70	-
6	HSDPA	Subtest 1	20.57	20.66	20.52	14.56	14.50	14.48	0
6		Subtest 2	20.58	20.64	20.52	14.57	14.52	14.50	0
6		Subtest 3	20.08	20.16	20.00	14.07	14.04	14.00	0.5
6		Subtest 4	20.08	20.16	19.97	14.10	14.04	14.01	0.5
6	HSUPA	Subtest 1	20.59	20.68	20.52	14.64	14.57	14.54	0
6		Subtest 2	18.60	18.71	18.55	12.60	12.57	12.54	2
6		Subtest 3	19.57	19.68	19.51	13.56	13.56	13.55	1
6		Subtest 4	18.61	18.68	18.53	12.61	12.55	12.54	2
6		Subtest 5	20.58	20.70	20.55	14.63	14.57	14.51	0
8	DC-HSDPA	Subtest 1	20.60	20.70	20.52	14.58	14.56	14.54	0
8		Subtest 2	20.59	20.68	20.54	14.60	14.58	14.54	0
8		Subtest 3	20.09	20.20	20.00	14.11	14.08	14.03	0.5
8		Subtest 4	20.09	20.18	20.03	14.10	14.07	14.03	0.5

Table 1-4
Measured P_{limit} for DSI = 6 (Flat Configuration)

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	15.66	15.83	15.90	10.75	10.89	10.85	-
99		12.2 kbps AMR	15.65	15.82	15.89	10.77	10.88	10.81	-
6	HSDPA	Subtest 1	16.07	16.21	16.09	10.08	10.13	10.17	0
6		Subtest 2	16.06	16.25	16.13	10.04	10.04	10.07	0
6		Subtest 3	15.62	15.75	15.61	9.54	9.58	9.53	0.5
6		Subtest 4	15.59	15.73	15.63	9.54	9.63	9.66	0.5
6	HSUPA	Subtest 1	16.07	16.23	16.07	9.99	10.02	10.05	0
6		Subtest 2	14.09	14.22	14.08	8.01	8.04	8.05	2
6		Subtest 3	15.09	15.21	15.08	9.01	9.02	9.05	1
6		Subtest 4	14.07	14.24	14.11	8.00	8.04	8.06	2
6		Subtest 5	16.09	16.22	16.07	10.07	10.09	10.12	0
8	DC-HSDPA	Subtest 1	16.09	16.23	16.07	10.06	10.11	10.11	0
8		Subtest 2	16.08	16.22	16.10	10.04	10.02	10.06	0
8		Subtest 3	15.58	15.74	15.63	9.53	9.53	9.53	0.5
8		Subtest 4	15.59	15.73	15.60	9.50	9.62	9.60	0.5

DC-HSDPA considerations

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

Figure 1-2
Power Measurement Setup

1.3 LTE Conducted Powers

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

1.3.1 LTE Band 71

Table 1-5
LTE Band 71 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.23**	0	0
	1	50	23.07		0
	1	99	23.00		0
	50	0	**23.21**	0-1	0.5
	50	25	23.14		0.5
	50	50	23.00		0.5
	100	0	23.14		0.5
16QAM	1	0	23.40	0-1	0.5
	1	50	23.36		0.5
	1	99	23.29		0.5
	50	0	22.25	0-2	1.5
	50	25	22.20		1.5
	50	50	22.11		1.5
	100	0	22.19		1.5
64QAM	1	0	22.33	0-2	1.5
	1	50	22.24		1.5
	1	99	22.00		1.5
	50	0	21.33	0-3	2.5
	50	25	21.25		2.5
	50	50	21.18		2.5
	100	0	21.23		2.5

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

Table 1-6
LTE Band 71 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	16.58	0	0
	1	50	**16.67**		0
	1	99	16.32		0
	50	0	16.68	0-1	0
	50	25	**16.75**		0
	50	50	16.52		0
	100	0	16.48		0
16QAM	1	0	16.92	0-1	0
	1	50	16.73		0
	1	99	16.55		0
	50	0	16.81	0-2	0
	50	25	16.75		0
	50	50	16.64		0
	100	0	16.68		0
64QAM	1	0	16.97	0-2	0
	1	50	16.76		0
	1	99	16.50		0
	50	0	16.88	0-3	0
	50	25	16.80		0
	50	50	16.61		0
	100	0	16.72		0

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

Table 1-7
LTE Band 71 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.80**	0	0
	1	50	22.59		0
	1	99	22.49		0
	50	0	**22.78**	0-1	0
	50	25	22.69		0
	50	50	22.57		0
	100	0	22.72		0
16QAM	1	0	23.01	0-1	0
	1	50	22.89		0
	1	99	22.68		0
	50	0	22.55	0-2	0.7
	50	25	22.42		0.7
	50	50	22.30		0.7
	100	0	22.41		0.7
64QAM	1	0	22.67	0-2	0.7
	1	50	22.50		0.7
	1	99	22.37		0.7
	50	0	21.43	0-3	1.7
	50	25	21.34		1.7
	50	50	21.22		1.7
	100	0	21.29		1.7

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

Table 1-8
LTE Band 71 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**18.21**	0	0
	1	50	17.96		0
	1	99	17.75		0
	50	0	**18.18**	0-1	0
	50	25	18.10		0
	50	50	17.95		0
	100	0	18.08		0
16QAM	1	0	18.49	0-1	0
	1	50	18.43		0
	1	99	18.18		0
	50	0	18.17	0-2	0
	50	25	18.12		0
	50	50	17.99		0
	100	0	18.09		0
64QAM	1	0	17.97	0-2	0
	1	50	17.76		0
	1	99	17.59		0
	50	0	18.16	0-3	0
	50	25	18.15		0
	50	50	18.05		0
	100	0	18.14		0

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

1.3.2 LTE Band 12

Table 1-9
LTE Band 12 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.27**	0	0
	1	25	23.20		0
	1	49	23.25		0
	25	0	23.29	0-1	0.2
	25	12	23.30		0.2
	25	25	**23.34**		0.2
	50	0	23.26		0.2
16QAM	1	0	23.18	0-1	0.2
	1	25	23.22		0.2
	1	49	23.27		0.2
	25	0	22.64	0-2	1.2
	25	12	22.63		1.2
	25	25	22.65		1.2
	50	0	22.57		1.2
64QAM	1	0	22.54	0-2	1.2
	1	25	22.58		1.2
	1	49	22.64		1.2
	25	0	21.65	0-3	2.2
	25	12	21.64		2.2
	25	25	21.66		2.2
	50	0	21.61		2.2

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

Table 1-10
LTE Band 12 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**17.26**	0	0
	1	25	17.03		0
	1	49	17.01		0
	25	0	**17.45**	0-1	0
	25	12	17.38		0
	25	25	17.30		0
	50	0	17.25		0
16QAM	1	0	17.63	0-1	0
	1	25	17.42		0
	1	49	17.26		0
	25	0	17.48	0-2	0
	25	12	17.46		0
	25	25	17.32		0
	50	0	17.41		0
64QAM	1	0	17.44	0-2	0
	1	25	17.34		0
	1	49	17.11		0
	25	0	17.60	0-3	0
	25	12	17.57		0
	25	25	17.47		0
	50	0	17.45		0

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

Table 1-11
LTE Band 12 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.59**	0	0
	1	25	22.53		0
	1	49	22.58		0
	25	0	**22.63**	0-1	0
	25	12	22.61		0
	25	25	22.62		0
	50	0	22.50		0
16QAM	1	0	23.05	0-1	0
	1	25	23.06		0
	1	49	23.09		0
	25	0	22.77	0-2	0.5
	25	12	22.75		0.5
	25	25	22.78		0.5
	50	0	22.69		0.5
64QAM	1	0	22.65	0-2	0.5
	1	25	22.76		0.5
	1	49	22.77		0.5
	25	0	21.75	0-3	1.5
	25	12	21.74		1.5
	25	25	21.74		1.5
	50	0	21.75		1.5

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

Table 1-12
LTE Band 12 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**17.25**	0	0
	1	25	16.93		0
	1	49	16.99		0
	25	0	**17.28**	0-1	0
	25	12	17.24		0
	25	25	17.13		0
	50	0	17.24		0
16QAM	1	0	17.55	0-1	0
	1	25	17.41		0
	1	49	17.36		0
	25	0	17.43	0-2	0
	25	12	17.34		0
	25	25	17.32		0
	50	0	17.23		0
64QAM	1	0	17.54	0-2	0
	1	25	17.45		0
	1	49	17.37		0
	25	0	17.35	0-3	0
	25	12	17.36		0
	25	25	17.27		0
	50	0	17.33		0

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

1.3.3 LTE Band 13

Table 1-13
LTE Band 13 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.22	0	0
	1	25	**21.27**		0
	1	49	21.22		0
	25	0	21.51	0-1	0
	25	12	**21.53**		0
	25	25	21.52		0
	50	0	21.26		0
16QAM	1	0	21.49	0-1	0
	1	25	21.34		0
	1	49	21.40		0
	25	0	21.61	0-2	0
	25	12	21.60		0
	25	25	21.60		0
	50	0	21.53		0
64QAM	1	0	21.00	0-2	0
	1	25	21.70		0
	1	49	21.64		0
	25	0	20.73	0-3	0
	25	12	20.83		0
	25	25	21.13		0
	50	0	20.79		0

Table 1-14
LTE Band 13 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**16.05**	0	0
	1	25	15.87		0
	1	49	15.76		0
	25	0	**16.20**	0-1	0
	25	12	16.12		0
	25	25	16.06		0
	50	0	16.03		0
16QAM	1	0	15.86	0-1	0
	1	25	15.72		0
	1	49	15.60		0
	25	0	16.24	0-2	0
	25	12	16.14		0
	25	25	16.10		0
	50	0	16.16		0
64QAM	1	0	16.00	0-2	0
	1	25	15.75		0
	1	49	15.66		0
	25	0	16.31	0-3	0
	25	12	16.25		0
	25	25	16.20		0
	50	0	16.19		0

Table 1-15
LTE Band 13 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.06**	0	0
	1	25	22.04		0
	1	49	21.97		0
	25	0	**22.15**	0-1	0
	25	12	22.07		0
	25	25	22.02		0
	50	0	22.00		0
16QAM	1	0	22.35	0-1	0
	1	25	22.27		0
	1	49	22.12		0
	25	0	22.12	0-2	0
	25	12	22.10		0
	25	25	22.09		0
	50	0	22.10		0
64QAM	1	0	22.31	0-2	0
	1	25	22.13		0
	1	49	22.10		0
	25	0	21.74	0-3	0.7
	25	12	21.74		0.7
	25	25	21.67		0.7
	50	0	21.77		0.7

Table 1-16
LTE Band 13 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**17.59**	0	0
	1	25	17.54		0
	1	49	17.47		0
	25	0	**17.78**	0-1	0
	25	12	17.75		0
	25	25	17.67		0
	50	0	17.58		0
16QAM	1	0	18.37	0-1	0
	1	25	18.16		0
	1	49	18.02		0
	25	0	17.92	0-2	0
	25	12	17.81		0
	25	25	17.77		0
	50	0	17.78		0
64QAM	1	0	17.80	0-2	0
	1	25	17.68		0
	1	49	17.58		0
	25	0	17.89	0-3	0
	25	12	17.80		0
	25	25	17.76		0
	50	0	17.74		0

1.3.4 LTE Band 14

Table 1-17
LTE Band 14 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**21.18**	0	0
	1	25	20.97		0
	1	49	21.10		0
	25	0	**21.19**	0-1	0
	25	12	21.10		0
	25	25	21.15		0
	50	0	21.14		0
16QAM	1	0	21.31	0-1	0
	1	25	21.28		0
	1	49	21.20		0
	25	0	21.16	0-2	0
	25	12	21.09		0
	25	25	21.14		0
	50	0	21.09		0
64QAM	1	0	21.06	0-2	0
	1	25	21.07		0
	1	49	20.98		0
	25	0	21.16	0-3	0.4
	25	12	21.14		0.4
	25	25	21.22		0.4
	50	0	21.13		0.4

Table 1-18
LTE Band 14 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**16.35**	0	0
	1	25	16.14		0
	1	49	15.83		0
	25	0	**16.26**	0-1	0
	25	12	16.10		0
	25	25	16.07		0
	50	0	16.23		0
16QAM	1	0	16.81	0-1	0
	1	25	16.46		0
	1	49	16.32		0
	25	0	16.25	0-2	0
	25	12	16.19		0
	25	25	16.07		0
	50	0	16.19		0
64QAM	1	0	16.41	0-2	0
	1	25	16.32		0
	1	49	15.98		0
	25	0	16.24	0-3	0
	25	12	16.17		0
	25	25	16.12		0
	50	0	16.21		0

Table 1-19
LTE Band 14 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.46**	0	0
	1	25	22.33		0
	1	49	22.36		0
	25	0	**22.45**	0-1	0
	25	12	22.42		0
	25	25	22.44		0
	50	0	22.43		0
16QAM	1	0	22.65	0-1	0
	1	25	22.62		0
	1	49	22.54		0
	25	0	22.51	0-2	0.3
	25	12	22.48		0.3
	25	25	22.51		0.3
	50	0	22.41		0.3
64QAM	1	0	22.15	0-2	0.3
	1	25	22.42		0.3
	1	49	22.37		0.3
	25	0	21.52	0-3	1.3
	25	12	21.69		1.3
	25	25	21.56		1.3
	50	0	21.45		1.3

Table 1-20
LTE Band 14 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**17.09**	0	0
	1	25	16.85		0
	1	49	16.75		0
	25	0	**17.02**	0-1	0
	25	12	16.86		0
	25	25	16.85		0
	50	0	16.95		0
16QAM	1	0	17.31	0-1	0
	1	25	17.21		0
	1	49	17.18		0
	25	0	16.95	0-2	0
	25	12	16.92		0
	25	25	16.85		0
	50	0	17.01		0
64QAM	1	0	17.18	0-2	0
	1	25	17.18		0
	1	49	16.80		0
	25	0	17.07	0-3	0
	25	12	17.01		0
	25	25	16.89		0
	50	0	16.99		0

1.3.5 LTE Band 26

Table 1-21
LTE Band 26 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.14	0	0
	1	36	**21.41**		0
	1	74	21.35		0
	36	0	21.31	0-1	0
	36	18	21.31		0
	36	37	**21.47**		0
	75	0	21.39		0
16QAM	1	0	21.59	0-1	0
	1	36	21.29		0
	1	74	21.77		0
	36	0	21.37	0-2	0
	36	18	21.35		0
	36	37	21.51		0
	75	0	21.40		0
64QAM	1	0	21.52	0-2	0
	1	36	21.51		0
	1	74	21.61		0
	36	0	21.32	0-3	0
	36	18	21.46		0
	36	37	21.34		0
	75	0	21.41		0

Note: LTE Band 26 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-22
LTE Band 26 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	15.38	0	0
	1	36	15.47		0
	1	74	**15.58**		0
	36	0	15.55	0-1	0
	36	18	15.62		0
	36	37	**15.79**		0
	75	0	15.57		0
16QAM	1	0	15.76	0-1	0
	1	36	15.85		0
	1	74	15.80		0
	36	0	15.54	0-2	0
	36	18	15.58		0
	36	37	15.70		0
	75	0	15.57		0
64QAM	1	0	15.65	0-2	0
	1	36	15.63		0
	1	74	15.85		0
	36	0	15.51	0-3	0
	36	18	15.66		0
	36	37	15.77		0
	75	0	15.64		0

Note: LTE Band 26 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-23
LTE Band 26 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.30	0	0
	1	36	**21.46**		0
	1	74	21.44		0
	36	0	21.57	0-1	0
	36	18	21.60		0
	36	37	**21.76**		0
	75	0	21.45		0
16QAM	1	0	21.93	0-1	0
	1	36	21.93		0
	1	74	21.95		0
	36	0	21.62	0-2	0
	36	18	21.54		0
	36	37	21.75		0
	75	0	21.66		0
64QAM	1	0	21.62	0-2	0
	1	36	21.61		0
	1	74	21.84		0
	36	0	21.64	0-3	0.4
	36	18	21.59		0.4
	36	37	21.73		0.4
	75	0	21.60		0.4

Note: LTE Band 26 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-24
LTE Band 26 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	15.90	0	0
	1	36	15.79		0
	1	74	**15.92**		0
	36	0	15.89	0-1	0
	36	18	15.95		0
	36	37	**15.98**		0
	75	0	15.91		0
16QAM	1	0	15.97	0-1	0
	1	36	16.11		0
	1	74	16.18		0
	36	0	15.90	0-2	0
	36	18	15.67		0
	36	37	15.71		0
	75	0	15.68		0
64QAM	1	0	15.81	0-2	0
	1	36	15.98		0
	1	74	15.91		0
	36	0	15.91	0-3	0
	36	18	15.99		0
	36	37	16.00		0
	75	0	15.97		0

Note: LTE Band 26 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

1.3.6 LTE Band 5

Table 1-25
LTE Band 5 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.53	0	0
	1	25	**21.57**		0
	1	49	21.49		0
	25	0	21.57	0-1	0
	25	12	**21.64**		0
	25	25	21.52		0
	50	0	21.54		0
16QAM	1	0	21.63	0-1	0
	1	25	21.87		0
	1	49	21.55		0
	25	0	21.57	0-2	0
	25	12	21.57		0
	25	25	21.72		0
	50	0	21.48		0
64QAM	1	0	21.66	0-2	0
	1	25	21.67		0
	1	49	21.90		0
	25	0	21.56	0-3	0
	25	12	21.66		0
	25	25	21.65		0
	50	0	21.56		0

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

Table 1-26
LTE Band 5 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	15.65	0	0
	1	25	15.67		0
	1	49	**15.74**		0
	25	0	15.79	0-1	0
	25	12	15.77		0
	25	25	**15.91**		0
	50	0	15.73		0
16QAM	1	0	16.01	0-1	0
	1	25	16.10		0
	1	49	16.14		0
	25	0	15.82	0-2	0
	25	12	15.78		0
	25	25	15.92		0
	50	0	15.76		0
64QAM	1	0	15.73	0-2	0
	1	25	15.97		0
	1	49	16.07		0
	25	0	15.77	0-3	0
	25	12	15.86		0
	25	25	15.91		0
	50	0	15.83		0

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

Table 1-27
LTE Band 5 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.48	0	0
	1	25	**21.51**		0
	1	49	21.39		0
	25	0	21.56	0-1	0
	25	12	21.55		0
	25	25	**21.61**		0
	50	0	21.50		0
16QAM	1	0	21.76	0-1	0
	1	25	21.94		0
	1	49	21.76		0
	25	0	21.56	0-2	0
	25	12	21.57		0
	25	25	21.58		0
	50	0	21.57		0
64QAM	1	0	21.63	0-2	0
	1	25	21.67		0
	1	49	21.68		0
	25	0	21.64	0-3	0.4
	25	12	21.59		0.4
	25	25	21.57		0.4
	50	0	21.59		0.4

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

Table 1-28
LTE Band 5 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	15.85	0	0
	1	25	**15.95**		0
	1	49	15.85		0
	25	0	16.02	0-1	0
	25	12	16.06		0
	25	25	**16.11**		0
	50	0	15.93		0
16QAM	1	0	16.25	0-1	0
	1	25	16.12		0
	1	49	16.05		0
	25	0	15.73	0-2	0
	25	12	16.14		0
	25	25	16.10		0
	50	0	15.95		0
64QAM	1	0	15.88	0-2	0
	1	25	16.05		0
	1	49	15.95		0
	25	0	16.05	0-3	0
	25	12	16.13		0
	25	25	16.23		0
	50	0	16.32		0

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

1.3.7 LTE Band 66

Table 1-29
LTE Band 66 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	14.47	**14.64**	14.60	0	0
	1	50	14.41	14.58	14.49		0
	1	99	14.42	14.54	14.42		0
	50	0	14.63	14.67	14.60	0-1	0
	50	25	14.66	**14.68**	14.61		0
	50	50	14.63	14.67	14.53		0
	100	0	14.61	14.63	14.58		0
16QAM	1	0	15.02	15.00	14.90	0-1	0
	1	50	14.85	14.99	14.75		0
	1	99	14.87	14.95	14.77		0
	50	0	14.64	14.70	14.60	0-2	0
	50	25	14.72	14.68	14.59		0
	50	50	14.62	14.70	14.54		0
	100	0	14.68	14.66	14.59		0
64QAM	1	0	14.87	14.72	14.54	0-2	0
	1	50	14.81	14.71	14.45		0
	1	99	14.83	14.68	14.47		0
	50	0	14.66	14.72	14.67	0-3	0
	50	25	14.75	14.71	14.65		0
	50	50	14.67	14.74	14.63		0
	100	0	14.67	14.70	14.64		0

Table 1-30
LTE Band 66 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**9.74**	9.70	9.58	0	0
	1	50	9.69	9.56	9.52		0
	1	99	9.62	9.59	9.54		0
	50	0	9.83	9.74	9.66	0-1	0
	50	25	**9.91**	9.74	9.80		0
	50	50	9.80	9.77	9.76		0
	100	0	9.73	9.71	9.72		0
16QAM	1	0	10.17	10.17	9.85	0-1	0
	1	50	9.96	9.95	9.91		0
	1	99	10.00	9.92	9.87		0
	50	0	9.79	9.73	9.67	0-2	0
	50	25	9.93	9.76	9.77		0
	50	50	9.89	9.71	9.72		0
	100	0	9.87	9.66	9.81		0
64QAM	1	0	9.97	9.85	9.73	0-2	0
	1	50	9.96	9.93	9.89		0
	1	99	9.96	9.87	9.99		0
	50	0	9.86	9.79	9.79	0-3	0
	50	25	9.88	9.74	9.78		0
	50	50	9.84	9.74	9.76		0
	100	0	9.84	9.66	9.79		0

Table 1-31
LTE Band 66 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	14.19	14.17	14.14	0	0
	1	50	14.13	14.15	14.10		0
	1	99	14.12	**14.20**	14.16		0
	50	0	14.15	14.22	14.25	0-1	0
	50	25	14.24	**14.30**	14.23		0
	50	50	14.14	14.18	14.21		0
	100	0	14.18	14.19	14.18		0
16QAM	1	0	14.54	14.49	14.44	0-1	0
	1	50	14.25	14.37	14.38		0
	1	99	14.26	14.33	14.39		0
	50	0	14.52	14.40	14.28	0-2	0
	50	25	14.56	14.35	14.36		0
	50	50	14.51	14.44	14.41		0
	100	0	14.55	14.31	14.42		0
64QAM	1	0	14.55	14.50	14.31	0-2	0
	1	50	14.68	14.45	14.36		0
	1	99	14.65	14.42	14.47		0
	50	0	14.48	14.41	14.25	0-3	0
	50	25	14.60	14.34	14.35		0
	50	50	14.55	14.40	14.29		0
	100	0	14.63	14.30	14.35		0

Table 1-32
LTE Band 66 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**11.06**	10.92	10.85	0	0
	1	50	10.93	10.71	10.65		0
	1	99	10.92	10.82	10.78		0
	50	0	**11.14**	10.96	10.88	0-1	0
	50	25	11.11	10.93	10.87		0
	50	50	11.09	10.92	10.98		0
	100	0	11.05	10.96	10.90		0
16QAM	1	0	11.30	11.31	11.07	0-1	0
	1	50	11.33	11.19	11.22		0
	1	99	11.26	11.10	11.02		0
	50	0	11.17	10.97	10.85	0-2	0
	50	25	11.19	10.92	10.96		0
	50	50	11.11	11.01	10.96		0
	100	0	11.15	10.96	10.78		0
64QAM	1	0	11.13	11.09	11.05	0-2	0
	1	50	11.17	11.06	11.02		0
	1	99	11.15	11.10	11.03		0
	50	0	11.23	11.02	10.96	0-3	0
	50	25	11.23	10.96	10.92		0
	50	50	11.16	11.00	11.04		0
	100	0	11.13	10.98	10.94		0

1.3.8 LTE Band 25

Table 1-33
LTE Band 25 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	15.11	15.10	14.85	0	0
	1	50	**15.13**	15.04	14.90		0
	1	99	15.07	15.00	14.88		0
	50	0	15.20	15.12	14.99	0-1	0
	50	25	**15.24**	15.08	15.01		0
	50	50	15.19	15.07	15.06		0
	100	0	15.12	15.08	14.97		0
16QAM	1	0	15.48	15.37	15.30	0-1	0
	1	50	15.45	15.34	15.21		0
	1	99	15.47	15.29	15.33		0
	50	0	15.17	15.17	15.02	0-2	0
	50	25	15.25	15.10	14.99		0
	50	50	15.27	15.09	15.06		0
	100	0	15.24	15.09	14.98		0
64QAM	1	0	15.22	15.07	15.13	0-2	0
	1	50	15.23	15.11	15.15		0
	1	99	15.26	15.04	15.25		0
	50	0	15.22	15.21	15.01	0-3	0
	50	25	15.30	15.18	15.00		0
	50	50	15.29	15.13	15.13		0
	100	0	15.27	15.13	14.99		0

Table 1-34
LTE Band 25 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	10.03	10.25	10.06	0	0
	1	50	10.01	10.13	10.02		0
	1	99	10.11	**10.26**	10.14		0
	50	0	10.12	10.25	10.23	0-1	0
	50	25	10.18	10.21	10.12		0
	50	50	10.20	**10.26**	10.22		0
	100	0	10.21	10.22	10.15		0
16QAM	1	0	10.30	10.53	10.45	0-1	0
	1	50	10.43	10.50	10.32		0
	1	99	10.42	10.46	10.52		0
	50	0	10.13	10.25	10.14	0-2	0
	50	25	10.21	10.17	10.12		0
	50	50	10.23	10.22	10.22		0
	100	0	10.18	10.23	10.07		0
64QAM	1	0	10.22	10.30	10.21	0-2	0
	1	50	10.15	10.36	10.21		0
	1	99	10.21	10.31	10.34		0
	50	0	10.16	10.26	10.21	0-3	0
	50	25	10.24	10.25	10.21		0
	50	50	10.27	10.23	10.26		0
	100	0	10.24	10.25	10.19		0

Table 1-35
LTE Band 25 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	14.01	14.12	14.17	0	0
	1	50	14.09	14.16	14.18		0
	1	99	**14.25**	14.15	14.14		0
	50	0	14.08	14.25	14.19	0-1	0
	50	25	14.20	14.22	14.22		0
	50	50	**14.26**	14.21	14.19		0
	100	0	14.24	14.20	14.17		0
16QAM	1	0	14.19	14.65	14.40	0-1	0
	1	50	14.30	14.66	14.28		0
	1	99	14.35	14.62	14.38		0
	50	0	14.06	14.29	14.22	0-2	0
	50	25	14.17	14.26	14.27		0
	50	50	14.22	14.32	14.24		0
	100	0	14.16	14.24	14.29		0
64QAM	1	0	14.33	14.21	14.16	0-2	0
	1	50	14.48	14.25	14.10		0
	1	99	14.61	14.30	14.01		0
	50	0	13.90	14.10	14.06	0-3	0
	50	25	14.04	14.08	14.08		0
	50	50	14.11	14.17	13.95		0
	100	0	14.00	14.06	14.05		0

Table 1-36
LTE Band 25 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	11.04	11.13	11.04	0	0
	1	50	10.97	11.04	11.04		0
	1	99	11.10	**11.50**	10.90		0
	50	0	11.13	11.19	11.17	0-1	0
	50	25	11.21	**11.27**	11.18		0
	50	50	11.26	11.26	11.16		0
	100	0	11.23	11.24	11.18		0
16QAM	1	0	11.41	11.40	11.40	0-1	0
	1	50	11.39	11.47	11.30		0
	1	99	11.45	11.44	11.20		0
	50	0	11.15	11.29	11.24	0-2	0
	50	25	11.27	11.22	11.17		0
	50	50	11.27	11.25	11.15		0
	100	0	11.18	11.20	11.18		0
64QAM	1	0	11.19	11.36	11.33	0-2	0
	1	50	11.34	11.41	11.29		0
	1	99	11.40	11.45	11.06		0
	50	0	11.15	11.27	11.21	0-3	0
	50	25	11.27	11.24	11.18		0
	50	50	11.33	11.23	11.15		0
	100	0	11.24	11.14	11.20		0

1.3.9 LTE Band 30

Table 1-37
LTE Band 30 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	17.73	0	0
	1	25	17.65		0
	1	49	**17.75**		0
	25	0	17.67	0-1	0
	25	12	17.75		0
	25	25	**17.80**		0
	50	0	17.71		0
16QAM	1	0	18.12	0-1	0
	1	25	18.13		0
	1	49	18.10		0
	25	0	17.71	0-2	0
	25	12	17.74		0
	25	25	17.75		0
	50	0	17.68		0
64QAM	1	0	18.02	0-2	0
	1	25	17.96		0
	1	49	18.00		0
	25	0	17.78	0-3	0
	25	12	17.84		0
	25	25	17.84		0
	50	0	17.88		0

Table 1-38
LTE Band 30 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	9.57	0	0
	1	25	9.48		0
	1	49	**9.73**		0
	25	0	9.53	0-1	0
	25	12	**9.68**		0
	25	25	9.61		0
	50	0	9.67		0
16QAM	1	0	9.70	0-1	0
	1	25	9.77		0
	1	49	9.93		0
	25	0	9.53	0-2	0
	25	12	9.81		0
	25	25	9.63		0
	50	0	9.66		0
64QAM	1	0	9.71	0-2	0
	1	25	9.78		0
	1	49	9.70		0
	25	0	9.41	0-3	0
	25	12	9.75		0
	25	25	9.65		0
	50	0	9.75		0

Table 1-39
LTE Band 30 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**17.30**	0	0
	1	25	17.07		0
	1	49	17.04		0
	25	0	**17.25**	0-1	0
	25	12	17.16		0
	25	25	17.17		0
	50	0	17.17		0
16QAM	1	0	17.55	0-1	0
	1	25	17.51		0
	1	49	17.55		0
	25	0	17.05	0-2	0
	25	12	17.25		0
	25	25	17.17		0
	50	0	17.14		0
64QAM	1	0	17.36	0-2	0
	1	25	17.54		0
	1	49	17.35		0
	25	0	17.11	0-3	0
	25	12	17.18		0
	25	25	17.26		0
	50	0	17.20		0

Table 1-40
LTE Band 30 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**12.06**	0	0
	1	25	11.65		0
	1	49	11.95		0
	25	0	11.89	0-1	0
	25	12	**12.09**		0
	25	25	12.05		0
	50	0	12.05		0
16QAM	1	0	12.41	0-1	0
	1	25	12.47		0
	1	49	12.34		0
	25	0	11.98	0-2	0
	25	12	12.06		0
	25	25	12.02		0
	50	0	11.96		0
64QAM	1	0	11.98	0-2	0
	1	25	12.25		0
	1	49	12.12		0
	25	0	11.97	0-3	0
	25	12	12.02		0
	25	25	12.13		0
	50	0	12.01		0

1.3.10 LTE Band 7

Table 1-41
LTE Band 7 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	14.82	**15.03**	14.87	0	0
	1	50	14.72	14.89	14.90		0
	1	99	14.77	14.92	14.95		0
	50	0	14.94	14.99	14.91	0-1	0
	50	25	15.03	15.01	14.89		0
	50	50	15.02	**15.04**	14.92		0
	100	0	15.00	15.02	14.89		0
16QAM	1	0	15.09	15.35	15.45	0-1	0
	1	50	15.33	15.30	15.39		0
	1	99	15.21	15.27	15.43		0
	50	0	14.95	15.05	14.94	0-2	0
	50	25	15.07	15.07	14.96		0
	50	50	15.06	15.14	14.98		0
	100	0	15.06	15.07	14.95		0
64QAM	1	0	15.08	15.09	14.92	0-2	0
	1	50	15.14	15.10	14.81		0
	1	99	15.22	15.13	14.88		0
	50	0	15.00	15.11	15.00	0-3	0
	50	25	15.06	15.12	15.02		0
	50	50	15.09	15.17	15.06		0
	100	0	15.40	15.08	14.98		0

Table 1-42
LTE Band 7 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**8.41**	8.29	8.20	0	0
	1	50	8.30	8.36	8.00		0
	1	99	8.30	8.23	8.28		0
	50	0	8.43	8.24	8.10	0-1	0
	50	25	**8.45**	8.17	8.05		0
	50	50	8.44	8.13	8.15		0
	100	0	8.40	8.21	8.20		0
16QAM	1	0	8.60	8.58	8.16	0-1	0
	1	50	8.67	8.60	8.21		0
	1	99	8.55	8.51	8.27		0
	50	0	8.44	8.29	8.13	0-2	0
	50	25	8.50	8.10	8.09		0
	50	50	8.36	8.27	8.17		0
	100	0	8.47	8.22	8.11		0
64QAM	1	0	8.45	8.32	8.37	0-2	0
	1	50	8.78	8.57	8.40		0
	1	99	8.80	8.52	8.72		0
	50	0	8.49	8.37	8.16	0-3	0
	50	25	8.57	8.35	8.16		0
	50	50	8.51	8.27	8.19		0
	100	0	8.48	8.30	8.09		0

Table 1-43
LTE Band 7 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**16.11**	15.84	16.04	0	0
	1	50	15.79	15.99	16.06		0
	1	99	15.93	15.89	15.74		0
	50	0	16.06	16.06	16.02	0-1	0
	50	25	**16.15**	16.02	16.08		0
	50	50	16.12	16.04	16.04		0
	100	0	16.09	16.07	16.09		0
16QAM	1	0	16.37	16.35	16.37	0-1	0
	1	50	16.23	16.25	16.21		0
	1	99	16.45	16.24	16.10		0
	50	0	16.01	15.99	16.06	0-2	0
	50	25	16.18	16.04	16.10		0
	50	50	16.12	16.10	16.08		0
	100	0	16.07	16.06	16.12		0
64QAM	1	0	16.15	16.14	16.21	0-2	0
	1	50	16.20	16.19	15.92		0
	1	99	16.17	16.13	16.17		0
	50	0	16.02	16.16	16.05	0-3	0
	50	25	16.16	16.10	16.15		0
	50	50	16.11	16.16	16.10		0
	100	0	16.13	16.08	16.08		0

Table 1-44
LTE Band 7 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**9.53**	9.51	9.26	0	0
	1	50	9.29	9.42	9.07		0
	1	99	9.35	9.23	9.08		0
	50	0	9.37	9.43	9.31	0-1	0
	50	25	9.45	9.40	9.27		0
	50	50	**9.46**	9.32	9.34		0
	100	0	9.42	9.45	9.22		0
16QAM	1	0	9.49	9.61	9.48	0-1	0
	1	50	9.50	9.69	9.41		0
	1	99	9.60	9.69	9.05		0
	50	0	9.32	9.19	8.95	0-2	0
	50	25	9.42	9.39	9.20		0
	50	50	9.02	9.36	9.37		0
	100	0	9.36	9.30	9.13		0
64QAM	1	0	9.30	9.76	9.81	0-2	0
	1	50	9.45	9.55	9.39		0
	1	99	9.75	9.94	9.68		0
	50	0	9.37	9.45	9.36	0-3	0
	50	25	9.56	9.46	9.26		0
	50	50	9.56	9.42	9.33		0
	100	0	9.39	9.47	9.24		0

1.3.11 LTE Band 41

Table 1-45
LTE Band 41 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	17.51	17.42	17.82	17.73	17.76	0	0
	1	50	17.47	17.38	17.77	17.60	17.67		0
	1	99	17.48	17.42	**17.83**	17.65	17.82		0
	50	0	17.70	17.58	17.85	17.79	17.69	0-1	0
	50	25	17.69	17.65	17.88	17.81	17.69		0
	50	50	17.68	17.63	**17.95**	17.80	17.70		0
	100	0	17.70	17.66	17.82	17.70	17.70		0
16QAM	1	0	17.43	17.29	17.64	17.66	17.60	0-1	0
	1	50	17.44	17.33	17.66	17.55	17.52		0
	1	99	17.41	17.27	17.69	17.57	17.50		0
	50	0	17.76	17.60	17.91	17.81	17.70	0-2	0
	50	25	17.75	17.67	17.90	17.86	17.77		0
	50	50	17.74	17.66	17.97	17.88	17.79		0
	100	0	17.67	17.59	17.85	17.80	17.65		0
64QAM	1	0	17.77	17.68	17.99	18.00	17.60	0-2	0
	1	50	17.75	17.71	18.00	17.92	17.49		0
	1	99	17.79	17.70	18.08	17.95	17.50		0
	50	0	17.72	17.56	17.89	17.78	17.74	0-3	0
	50	25	17.70	17.63	17.90	17.86	17.70		0
	50	50	17.68	17.61	17.93	17.82	17.79		0
	100	0	17.70	17.66	17.90	17.88	17.75		0

Table 1-46
LTE Band 41 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	10.30	10.13	**10.50**	10.30	10.41	0	0
	1	50	10.37	10.10	10.39	10.22	10.27		0
	1	99	10.34	10.12	10.44	10.26	10.33		0
	50	0	10.23	10.22	10.51	10.36	10.42	0-1	0
	50	25	10.26	10.28	10.53	10.42	10.45		0
	50	50	10.24	10.29	**10.58**	10.38	10.41		0
	100	0	10.27	10.31	10.49	10.43	10.48		0
16QAM	1	0	10.01	9.94	10.33	10.20	10.23	0-1	0
	1	50	10.03	9.98	10.30	10.13	10.12		0
	1	99	10.07	9.99	10.31	10.15	10.15		0
	50	0	10.32	10.26	10.53	10.39	10.44	0-2	0
	50	25	10.31	10.33	10.54	10.46	10.50		0
	50	50	10.33	10.31	10.59	10.41	10.46		0
	100	0	10.25	10.21	10.39	10.32	10.36		0
64QAM	1	0	9.80	10.33	10.68	10.54	10.62	0-2	0
	1	50	9.91	10.39	10.73	10.55	10.56		0
	1	99	9.90	10.40	10.70	10.58	10.66		0
	50	0	10.31	10.14	10.40	10.28	10.35	0-3	0
	50	25	10.29	10.23	10.43	10.37	10.43		0
	50	50	10.28	10.24	10.49	10.32	10.39		0
	100	0	10.25	10.25	10.46	10.38	10.43		0

Table 1-47
LTE Band 41 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	17.42	17.36	17.81	17.59	**17.91**	0	0
	1	50	17.41	17.39	17.67	17.37	17.72		0
	1	99	17.25	17.23	17.62	17.57	17.70		0
	50	0	17.63	17.53	17.84	17.72	17.89	0-1	0
	50	25	17.61	17.61	17.84	17.71	**17.90**		0
	50	50	17.61	17.55	17.77	17.74	17.83		0
	100	0	17.63	17.56	17.83	17.76	17.89		0
16QAM	1	0	17.59	17.60	17.92	17.75	18.05	0-1	0
	1	50	17.54	17.49	17.91	17.82	17.90		0
	1	99	17.61	17.42	17.87	17.82	17.86		0
	50	0	17.69	17.58	17.93	17.76	17.93	0-2	0
	50	25	17.66	17.62	17.92	17.78	17.95		0
	50	50	17.63	17.57	17.83	17.71	17.92		0
	100	0	17.65	17.59	17.88	17.81	17.93		0
64QAM	1	0	17.18	17.41	17.46	17.41	17.62	0-2	0
	1	50	17.17	17.12	17.54	17.45	17.48		0
	1	99	17.28	17.00	17.42	17.54	17.41		0
	50	0	17.67	17.58	17.93	17.78	17.93	0-3	0
	50	25	17.67	17.63	17.88	17.85	17.99		0
	50	50	17.65	17.59	17.86	17.78	17.94		0
	100	0	17.68	17.61	17.91	17.80	17.97		0

Table 1-48
LTE Band 41 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	10.66	10.63	10.87	11.20	**11.21**	0	0
	1	50	10.53	10.58	10.80	10.86	11.00		0
	1	99	10.56	10.53	10.81	10.92	11.03		0
	50	0	10.65	10.83	10.81	10.95	11.07	0-1	0
	50	25	10.70	10.76	10.83	11.09	**11.10**		0
	50	50	10.64	10.73	10.81	10.96	11.09		0
	100	0	10.66	10.78	10.84	11.00	11.09		0
16QAM	1	0	10.62	10.70	10.83	11.02	11.09	0-1	0
	1	50	10.55	10.66	10.70	10.85	11.01		0
	1	99	10.60	10.62	10.82	10.93	11.04		0
	50	0	10.70	10.84	10.83	10.98	11.10	0-2	0
	50	25	10.71	10.82	10.87	11.04	11.15		0
	50	50	10.75	10.77	10.89	10.98	11.11		0
	100	0	10.67	10.79	10.89	11.00	11.14		0
64QAM	1	0	10.41	10.58	10.67	10.84	11.04	0-2	0
	1	50	10.38	10.56	10.59	10.68	10.91		0
	1	99	10.41	10.44	10.71	10.84	10.96		0
	50	0	10.66	10.83	10.81	10.91	11.07	0-3	0
	50	25	10.70	10.82	10.89	11.00	11.16		0
	50	50	10.70	10.79	10.87	10.98	11.11		0
	100	0	10.73	10.83	10.87	10.99	11.15		0

Table 1-49
LTE Band 41 PC2 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	19.41	19.39	19.43	19.21	19.54	0	0
	1	50	19.38	19.35	19.47	19.24	**19.67**		0
	1	99	19.41	19.39	19.49	19.40	19.55		0
	50	0	19.59	19.45	19.59	19.25	19.51	0-1	0
	50	25	19.56	19.50	19.61	19.24	**19.69**		0
	50	50	19.56	19.46	19.56	19.31	19.43		0
	100	0	19.52	19.46	19.54	19.28	19.63		0

Table 1-50
LTE Band 41 PC2 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	11.70	11.52	11.92	**12.15**	12.07	0	0
	1	50	11.71	11.58	11.90	11.99	11.92		0
	1	99	11.73	11.60	11.97	12.06	11.95		0
	50	0	11.89	11.82	12.15	12.07	12.07	0-1	0
	50	25	11.90	11.87	12.16	12.15	12.10		0
	50	50	11.84	11.88	**12.19**	12.09	12.08		0
	100	0	11.89	11.90	12.14	12.12	12.07		0

Table 1-51
LTE Band 41 PC2 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	19.14	19.10	19.55	19.23	**19.65**	0	0
	1	50	19.09	18.98	19.39	19.10	19.42		0
	1	99	19.05	19.00	19.45	19.26	19.34		0
	50	0	19.33	19.21	19.57	19.44	19.55	0-1	0
	50	25	19.34	19.30	19.55	19.46	**19.64**		0
	50	50	19.32	19.17	19.48	19.36	19.52		0
	100	0	19.37	19.27	19.48	19.53	19.63		0

Table 1-52
LTE Band 41 PC2 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	12.48	12.49	12.78	12.62	**12.85**	0	0
	1	50	12.64	12.52	12.76	12.63	12.58		0
	1	99	12.33	12.35	12.74	12.66	12.60		0
	50	0	12.66	12.45	12.76	12.56	12.74	0-1	0
	50	25	12.54	12.42	12.76	12.65	12.70		0
	50	50	12.52	12.37	12.61	12.66	**12.78**		0
	100	0	12.55	12.46	12.73	12.66	12.75		0

1.3.12 LTE Band 48

Table 1-53
LTE Band 48 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	15.32	15.34	15.40	**15.59**	0	0
	1	50	15.25	15.25	15.43	15.33		0
	1	99	15.31	15.31	15.34	15.37		0
	50	0	15.40	15.40	15.48	**15.65**	0-1	0
	50	25	15.49	15.49	15.44	15.60		0
	50	50	15.48	15.48	15.59	15.57		0
	100	0	15.52	15.47	15.53	15.58		0
16QAM	1	0	15.31	15.53	15.61	15.56	0-1	0
	1	50	15.43	15.56	15.62	15.52		0
	1	99	15.58	15.62	15.63	15.48		0
	50	0	15.70	15.72	15.80	15.68	0-2	0
	50	25	15.79	15.73	15.77	15.65		0
	50	50	15.83	15.76	15.80	15.64		0
	100	0	15.83	15.78	15.79	15.66		0
64QAM	1	0	15.55	15.33	15.40	15.32	0-2	0
	1	50	15.70	15.30	15.48	15.34		0
	1	99	15.88	15.40	15.43	15.50		0
	50	0	15.74	15.79	15.84	15.64	0-3	0
	50	25	15.85	15.82	15.86	15.51		0
	50	50	15.88	15.81	15.85	15.64		0
	100	0	15.85	15.80	15.80	15.32		0

Table 1-54
LTE Band 48 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	10.60	10.67	10.88	10.59	0	0
	1	50	10.64	10.72	10.88	10.49		0
	1	99	10.70	10.76	**11.03**	10.48		0
	50	0	10.81	10.83	10.97	10.64	0-1	0
	50	25	10.89	10.88	**11.19**	10.65		0
	50	50	10.88	10.86	11.10	10.62		0
	100	0	10.87	10.85	10.98	10.69		0
16QAM	1	0	10.84	10.68	10.92	10.79	0-1	0
	1	50	10.84	10.99	10.87	10.70		0
	1	99	10.91	11.05	10.88	10.62		0
	50	0	10.83	10.76	10.89	10.68	0-2	0
	50	25	10.95	10.83	10.89	10.73		0
	50	50	10.95	10.81	10.87	10.66		0
	100	0	10.86	10.87	10.83	10.73		0
64QAM	1	0	10.32	11.03	11.03	10.80	0-2	0
	1	50	10.39	11.00	11.05	10.84		0
	1	99	10.47	11.04	11.08	10.75		0
	50	0	10.83	10.78	10.81	9.93	0-3	0
	50	25	10.90	10.82	10.83	10.02		0
	50	50	10.93	10.79	10.86	10.01		0
	100	0	10.95	10.86	10.79	9.97		0

1.3.13 LTE Uplink Carrier Aggregation Conducted Powers

Table 1-55
LTE Uplink Carrier Aggregation South Antenna Measured P_{limit} for DSI = 5 (Read Configuration)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	25	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	12	13	21.64	21.57

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	1	99	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	1	0	14.17	14.42

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	21100	2535.0	2525	2655.0	QPSK	50	50	LTE B7	20	21298	2554.8	3298	2674.8	QPSK	50	0	15.00	15.04

	PCC								SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	40185	2549.5	QPSK	1	99	LTE B41	20	40383	2569.3	QPSK	1	0	17.55	17.42

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56640	3690.0	QPSK	50	0	LTE B48	20	56442	3670.2	QPSK	50	50	15.55	15.65

Table 1-56
LTE Uplink Carrier Aggregation South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	49	LTE B5	5	20597	843.7	2597	888.7	QPSK	1	0	15.51	15.74

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	1	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	1	99	9.50	9.58

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	20850	2510.0	2525	2630.0	QPSK	50	50	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	50	0	8.40	8.44

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41055	2636.5	QPSK	1	0	LTE B41	20	40857	2616.7	QPSK	1	99	10.10	10.30

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56207	3646.7	QPSK	50	50	LTE B48	20	56405	3666.5	QPSK	50	0	10.83	11.10

Table 1-57
LTE Uplink Carrier Aggregation North Antenna Measured P_{limit} for DSI = 5 (Read Configuration)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	25	25	LTE B5	5	20597	843.7	2597	888.7	QPSK	12	0	21.67	21.61

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	99	LTE B66	20	132520	1764.8	66984	2164.8	QPSK	1	0	15.20	14.20

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	20850	2510.0	2525	2630.0	QPSK	50	50	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	50	0	17.01	16.12
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)				LTE Single Carrier Tx Power (dBm)	
CA_41C	LTE B41	20	41490	2680.0	QPSK	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	18.70				17.89	

Table 1-58
LTE Uplink Carrier Aggregation North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	1	24	15.91	15.85
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	50	50	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	50	0	11.80	11.09
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	20850	2510.0	2525	2630.0	QPSK	50	50	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	50	0	9.80	9.46
	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)				LTE Single Carrier Tx Power (dBm)	
CA_41C	LTE B41	20	41490	2680.0	QPSK	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	12.30				11.07	

Notes:

1. This device supports uplink carrier aggregation for LTE CA_5B, LTE CA_66C, LTE CA_7C, LTE CA_ 48C, and LTE CA_41C with a maximum of two component carriers. For intraband contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

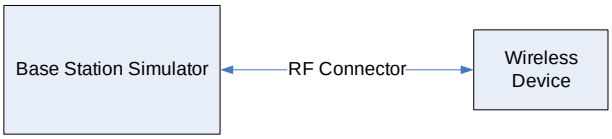

Figure 1-3
Power Measurement Setup

1.4 NR Conducted Powers

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

1.4.1 NR Band n71

Table 1-59
NR Band n71 South Antenna Measured Pmax for DSI =2 (Head), DSI = 4 (Flip/Closed Body/Extremity), and DSI = 5 (UMPC Body) – 20 MHz Bandwidth

Note these powers can be found in the main body of the report in Section 9.

Table 1-60
NR Band n71 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	17.40	0	0.0
	1	53	17.09		0.0
	1	104	16.94		0.0
	50	0	17.18	0-0.5	0.0
	50	28	17.16	0	0.0
	50	56	17.07	0-0.5	0.0
	100	0	17.18		0.0
DFT-s-OFDM QPSK	1	1	**17.51**	0	0.0
	1	53	17.24		0.0
	1	104	17.05		0.0
	50	0	17.16	0-1	0.0
	50	28	**17.18**	0	0.0
	50	56	17.10	0-1	0.0
	100	0	17.17		0.0
DFT-s-OFDM 16QAM	1	1	17.58	0-1	0.0
CP-OFDM QPSK	1	1	17.33	0-1.5	0.0

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

Table 1-61
NR Band n71 North Antenna Measured Pmax for DSI = 4 (Flip/Closed Body/Extremity), and DSI = 5 (UMPC Body) - 20 MHz Bandwidth

Note these powers can be found in the main body of the report in Section 9.

Table 1-62
NR Band n71 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	18.22	0	0.0
	1	53	18.40		0.0
	1	104	18.34		0.0
	50	0	18.23	0-0.5	0.0
	50	28	18.35	0	0.0
	50	56	18.26	0-0.5	0.0
	100	0	18.36		0.0
DFT-s-OFDM QPSK	1	1	18.35	0	0.0
	1	53	**18.41**		0.0
	1	104	18.21		0.0
	50	0	18.26	0-1	0.0
	50	28	**18.41**	0	0.0
	50	56	18.24	0-1	0.0
	100	0	18.40		0.0
DFT-s-OFDM 16QAM	1	1	18.36	0-1	0.0
CP-OFDM QPSK	1	1	18.19	0-1.5	0.0

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

1.4.2 NR Band n5

Table 1-63
NR Band n5 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	21.06	0	0.0
	1	53	21.15		0.0
	1	104	21.13		0.0
	50	0	21.14	0-0.5	0.0
	50	28	21.15	0	0.0
	50	56	21.13	0-0.5	0.0
	100	0	21.07		0.0
DFT-s-OFDM QPSK	1	1	21.11	0	0.0
	1	53	21.21		0.0
	1	104	**21.22**		0.0
	50	0	21.15	0-1	0.0
	50	28	**21.18**	0	0.0
	50	56	21.14	0-1	0.0
	100	0	21.06		0.0
DFT-s-OFDM 16QAM	1	1	21.38	0-1	0.0
CP-OFDM QPSK	1	1	20.76	0-1.5	0.2

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

Table 1-64
NR Band n5 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.88	0	0.0
	1	53	16.13		0.0
	1	104	16.20		0.0
	50	0	15.97	0-0.5	0.0
	50	28	16.03	0	0.0
	50	56	16.01	0-0.5	0.0
	100	0	15.94		0.0
DFT-s-OFDM QPSK	1	1	15.81	0	0.0
	1	53	15.91		0.0
	1	104	**16.15**		0.0
	50	0	15.91	0-1	0.0
	50	28	15.94	0	0.0
	50	56	**16.00**	0-1	0.0
	100	0	15.96		0.0
DFT-s-OFDM 16QAM	1	1	15.53	0-1	0.0
CP-OFDM QPSK	1	1	15.78	0-1.5	0.0

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

Table 1-65
NR Band n5 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	22.28	0	0.0
	1	53	22.24		0.0
	1	104	22.19		0.0
	50	0	22.16	0-0.5	0.0
	50	28	22.16	0	0.0
	50	56	22.07	0-0.5	0.0
	100	0	22.13		0.0
DFT-s-OFDM QPSK	1	1	22.23	0	0.0
	1	53	22.07		0.0
	1	104	**22.25**		0.0
	50	0	22.14	0-1	0.2
	50	28	**22.15**	0	0.0
	50	56	22.08	0-1	0.2
	100	0	22.11		0.2
DFT-s-OFDM 16QAM	1	1	22.00	0-1	0.2
CP-OFDM QPSK	1	1	21.77	0-1.5	0.7

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

Table 1-66
NR Band n5 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	16.54	0	0.0
	1	53	16.64		0.0
	1	104	16.96		0.0
	50	0	16.66	0-0.5	0.0
	50	28	16.68	0	0.0
	50	56	16.67	0-0.5	0.0
	100	0	16.68		0.0
DFT-s-OFDM QPSK	1	1	16.52	0	0.0
	1	53	16.75		0.0
	1	104	**16.88**		0.0
	50	0	16.68	0-1	0.0
	50	28	16.69	0	0.0
	50	56	**16.73**	0-1	0.0
	100	0	16.72		0.0
DFT-s-OFDM 16QAM	1	1	16.20	0-1	0.0
CP-OFDM QPSK	1	1	16.73	0-1.5	0.0

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

1.4.3 NR Band n66

Table 1-67
NR Band n66 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.25	0	0.0
	1	108	15.43		0.0
	1	214	15.44		0.0
	108	0	15.35	0-0.5	0.0
	108	54	15.48	0	0.0
	108	108	15.41	0-0.5	0.0
	216	0	15.40		0.0
DFT-s-OFDM QPSK	1	1	15.30	0	0.0
	1	108	**15.47**		0.0
	1	214	15.40		0.0
	108	0	15.39	0-1	0.0
	108	54	**15.50**	0	0.0
	108	108	15.49	0-1	0.0
	216	0	15.46		0.0
DFT-s-OFDM 16QAM	1	1	15.47	0-1	0.0
CP-OFDM QPSK	1	1	15.26	0-1.5	0.0

Note: NR Band n66 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-68
NR Band n66 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	10.62	0	0.0
	1	108	10.77		0.0
	1	214	10.86		0.0
	108	0	10.77	0-0.5	0.0
	108	54	10.88	0	0.0
	108	108	10.85	0-0.5	0.0
	216	0	10.80		0.0
DFT-s-OFDM QPSK	1	1	10.59	0	0.0
	1	108	**10.82**		0.0
	1	214	10.81		0.0
	108	0	10.71	0-1	0.0
	108	54	**10.80**	0	0.0
	108	108	10.51	0-1	0.0
	216	0	10.72		0.0
DFT-s-OFDM 16QAM	1	1	10.81	0-1	0.0
CP-OFDM QPSK	1	1	10.45	0-1.5	0.0

Note: NR Band n66 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-69
NR Band n66 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.15	0	0.0
	1	108	15.37		0.0
	1	214	15.15		0.0
	108	0	15.26	0-0.5	0.0
	108	54	15.37	0	0.0
	108	108	15.30	0-0.5	0.0
	216	0	15.28		0.0
DFT-s-OFDM QPSK	1	1	15.15	0	0.0
	1	108	**15.32**		0.0
	1	214	15.18		0.0
	108	0	15.27	0-1	0.0
	108	54	**15.37**	0	0.0
	108	108	15.34	0-1	0.0
	216	0	15.31		0.0
DFT-s-OFDM 16QAM	1	1	15.39	0-1	0.0
CP-OFDM QPSK	1	1	15.23	0-1.5	0.0

Note: NR Band n66 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-70
NR Band n66 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	11.02	0	0.0
	1	108	11.33		0.0
	1	214	11.08		0.0
	108	0	11.15	0-0.5	0.0
	108	54	11.20	0	0.0
	108	108	11.18	0-0.5	0.0
	216	0	11.09		0.0
DFT-s-OFDM QPSK	1	1	11.05	0	0.0
	1	108	**11.19**		0.0
	1	214	11.08		0.0
	108	0	11.18	0-1	0.0
	108	54	**11.21**	0	0.0
	108	108	11.20	0-1	0.0
	216	0	11.13		0.0
DFT-s-OFDM 16QAM	1	1	10.83	0-1	0.0
CP-OFDM QPSK	1	1	10.92	0-1.5	0.0

Note: NR Band n66 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

1.4.4 NR Band n25

Table 1-71
NR Band n25 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.30	0	0.0
	1	108	15.03		0.0
	1	214	15.21		0.0
	108	0	15.12	0-0.5	0.0
	108	54	15.07	0	0.0
	108	108	15.11	0-0.5	0.0
	216	0	15.13		0.0
DFT-s-OFDM QPSK	1	1	15.35	0	0.0
	1	108	15.13		0.0
	1	214	**15.36**		0.0
	108	0	**15.31**	0-1	0.0
	108	54	15.22	0	0.0
	108	108	15.31	0-1	0.0
	216	0	15.30		0.0
DFT-s-OFDM 16QAM	1	1	15.77	0-1	0.0
CP-OFDM QPSK	1	1	15.46	0-1.5	0.0

Note: NR Band n25 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-72
NR Band n25 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	11.25	0	0.0
	1	108	11.09		0.0
	1	214	11.12		0.0
	108	0	11.18	0-0.5	0.0
	108	54	11.16	0	0.0
	108	108	11.15	0-0.5	0.0
	216	0	11.18		0.0
DFT-s-OFDM QPSK	1	1	**11.19**	0	0.0
	1	108	11.15		0.0
	1	214	11.02		0.0
	108	0	**11.20**	0-1	0.0
	108	54	11.09	0	0.0
	108	108	11.10	0-1	0.0
	216	0	11.13		0.0
DFT-s-OFDM 16QAM	1	1	11.27	0-1	0.0
CP-OFDM QPSK	1	1	11.23	0-1.5	0.0

Note: NR Band n25 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-73
NR Band n25 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.30	0	0.0
	1	108	14.95		0.0
	1	214	14.97		0.0
	108	0	15.06	0-0.5	0.0
	108	54	14.93	0	0.0
	108	108	14.96	0-0.5	0.0
	216	0	14.98		0.0
DFT-s-OFDM QPSK	1	1	**15.32**	0	0.0
	1	108	14.94		0.0
	1	214	14.74		0.0
	108	0	**15.11**	0-1	0.0
	108	54	15.05	0	0.0
	108	108	15.00	0-1	0.0
	216	0	15.05		0.0
DFT-s-OFDM 16QAM	1	1	15.38	0-1	0.0
CP-OFDM QPSK	1	1	15.15	0-1.5	0.0

Note: NR Band n25 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-74
NR Band n25 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	11.42	0	0.0
	1	108	11.31		0.0
	1	214	11.09		0.0
	108	0	11.16	0-0.5	0.0
	108	54	11.07	0	0.0
	108	108	11.06	0-0.5	0.0
	216	0	11.10		0.0
DFT-s-OFDM QPSK	1	1	**11.42**	0	0.0
	1	108	11.05		0.0
	1	214	11.19		0.0
	108	0	**11.19**	0-1	0.0
	108	54	11.06	0	0.0
	108	108	11.08	0-1	0.0
	216	0	11.09		0.0
DFT-s-OFDM 16QAM	1	1	11.51	0-1	0.0
CP-OFDM QPSK	1	1	11.63	0-1.5	0.0

Note: NR Band n25 at 40 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

1.4.5 NR Band n41

Table 1-75
NR Band n41 South Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	14.98	0	0.0
	1	137	15.39		0.0
	1	271	15.10		0.0
	135	0	15.21	0-0.5	0.0
	135	69	15.20	0	0.0
	135	138	15.26	0-0.5	0.0
	270	0	15.18		0.0
DFT-s-OFDM QPSK	1	1	15.02	0	0.0
	1	137	**15.35**		0.0
	1	271	15.03		0.0
	135	0	15.23	0-1	0.0
	135	69	15.23	0	0.0
	135	138	**15.31**	0-1	0.0
	270	0	15.28		0.0
DFT-s-OFDM 16QAM	1	1	15.22	0-1	0.0
CP-OFDM QPSK	1	1	15.10	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-76
NR Band n41 South Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	7.37	0	0.0
	1	137	7.57		0.0
	1	271	7.43		0.0
	135	0	7.57	0-0.5	0.0
	135	69	7.58	0	0.0
	135	138	7.63	0-0.5	0.0
	270	0	7.60		0.0
DFT-s-OFDM QPSK	1	1	7.46	0	0.0
	1	137	**7.61**		0.0
	1	271	7.47		0.0
	135	0	7.54	0-1	0.0
	135	69	7.56	0	0.0
	135	138	**7.62**	0-1	0.0
	270	0	7.60		0.0
DFT-s-OFDM 16QAM	1	1	7.79	0-1	0.0
CP-OFDM QPSK	1	1	7.21	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-77
NR Band n41 North Antenna Measured P_{limit} for DSI = 5 (Read Configuration) – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.32	0	0.0
	1	137	15.87		0.0
	1	271	15.54		0.0
	135	0	15.58	0-0.5	0.0
	135	69	15.71	0	0.0
	135	138	15.62	0-0.5	0.0
	270	0	15.59		0.0
DFT-s-OFDM QPSK	1	1	15.35	0	0.0
	1	137	**15.82**		0.0
	1	271	15.43		0.0
	135	0	15.57	0-1	0.0
	135	69	**15.68**	0	0.0
	135	138	15.60	0-1	0.0
	270	0	15.63		0.0
DFT-s-OFDM 16QAM	1	1	16.07	0-1	0.0
CP-OFDM QPSK	1	1	15.65	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 1-78
NR Band n41 North Antenna Measured P_{limit} for DSI = 6 (Flat Configuration) – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	8.95	0	0.0
	1	137	9.28		0.0
	1	271	8.90		0.0
	135	0	9.13	0-0.5	0.0
	135	69	9.15	0	0.0
	135	138	9.09	0-0.5	0.0
	270	0	9.09		0.0
DFT-s-OFDM QPSK	1	1	8.82	0	0.0
	1	137	**9.26**		0.0
	1	271	8.89		0.0
	135	0	9.11	0-1	0.0
	135	69	**9.25**	0	0.0
	135	138	9.17	0-1	0.0
	270	0	9.14		0.0
DFT-s-OFDM 16QAM	1	1	9.47	0-1	0.0
CP-OFDM QPSK	1	1	8.87	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

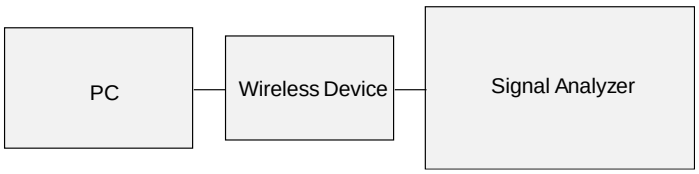

Figure 1-4
Power Measurement Setup

1.5 WLAN Conducted Powers

Table 1-79
2.4 GHz WLAN Average RF Power for Body/Extremity Conditions – Ant 1

Note these powers can be found in the main body of the report in Section 9.

Table 1-80
2.4 GHz WLAN Average RF Power for Body/Extremity Conditions – Ant 2

Note these powers can be found in the main body of the report in Section 9.

Table 1-81
5 GHz WLAN Average RF Power for Body/Extremity Conditions – Ant 1

Note these powers can be found in the main body of the report in Section 9.

Table 1-82
5 GHz WLAN Average RF Power for Body/Extremity Conditions – Ant 2

Note these powers can be found in the main body of the report in Section 9.

Table 1-83
2.4 GHz WLAN Average RF Power for UMPC Body with WWAN/Body Conditions – Ant 1

2.4GHz (20 MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11b
		Average
2412	1	6.64
2437	6	6.66
2462	11	6.74

2.4GHz (40 MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax
		Average	Average
2412	1	6.99	6.99
2437	6	6.99	6.93
2462	11	6.99	6.98

Table 1-84
2.4 GHz WLAN Average RF Power for UMPC Body with WWAN/Body Conditions – Ant 2

2.4GHz (20 MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11b
		Average
2412	1	6.75
2437	6	6.67
2462	11	6.78

2.4GHz (40 MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax
		Average	Average
2412	1	6.69	6.62
2437	6	6.99	6.93
2462	11	6.56	6.57

Table 1-85
5 GHz WLAN Average RF Power for UMPC Body with WWAN/Body Conditions – Ant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	6.28	6.46
5290	58	6.58	6.79
5530	106	6.79	6.23
5610	122	6.68	6.79
5690	138	6.79	6.79
5775	155	6.73	6.62

Table 1-86
5 GHz WLAN Average RF Power for UMPC Body with WWAN/Body Conditions – Ant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	7.47	7.43
5290	58	6.10	6.17
5530	106	6.70	6.79
5610	122	6.80	6.80
5690	138	6.68	6.75
5775	155	6.39	6.48

Table 1-87
2.4 GHz WLAN Average RF Power for Body with WWAN Conditions – Ant 1

2.4GHz (20 MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11b
		Average
2412	1	3.85
2437	6	3.81
2462	11	3.99

2.4GHz (40 MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax
		Average	Average
2412	1	4.64	4.64
2437	6	4.35	4.31
2462	11	4.48	4.46

Table 1-88
2.4 GHz WLAN Average RF Power for Body with WWAN Conditions – Ant 2

2.4GHz (20 MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11b
		Average
2412	1	3.99
2437	6	3.70
2462	11	3.78

2.4GHz (40 MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax
		Average	Average
2412	1	4.35	4.28
2437	6	4.41	4.48
2462	11	4.52	4.45

Table 1-89
5 GHz WLAN Average RF Power for Body with WWAN Conditions – Ant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	1.30	1.47
5290	58	1.70	1.87
5530	106	1.91	0.80
5610	122	0.71	1.02
5690	138	1.44	1.26
5775	155	1.47	1.60

Table 1-90
5 GHz WLAN Average RF Power for Body with WWAN Conditions – Ant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	1.10	1.33
5290	58	1.45	1.25
5530	106	1.36	1.49
5610	122	1.42	1.75
5690	138	1.40	1.23
5775	155	1.49	1.10

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

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

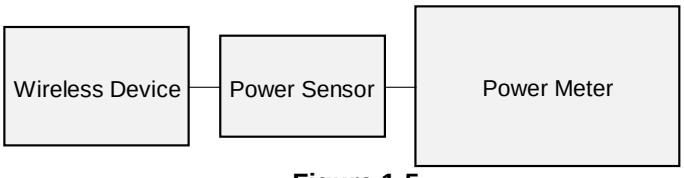

Figure 1-5
Power Measurement Setup

1.1 Bluetooth Conducted Powers

Table 1-91
Bluetooth Maximum Average RF Power - Ant 1
Note these powers can be found in the main body of the report in Section 9.

Table 1-92
Bluetooth Maximum Average RF Power - Ant 2
Note these powers can be found in the main body of the report in Section 9.

Figure 1-6
Bluetooth Transmission Plot Ant 1
Note this information can be found in the main body of the report in Section 9.

Equation 1-1
Bluetooth Duty Cycle Calculation Ant 1
Note this information can be found in the main body of the report in Section 9.

$$\boldsymbol{Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%}$$

Figure 1-7
Bluetooth Transmission Plot Ant 2
Note this information can be found in the main body of the report in Section 9.

Equation 1-2
Bluetooth Duty Cycle Calculation Ant 2
Note this information can be found in the main body of the report in Section 9.

$$\boldsymbol{Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%}$$

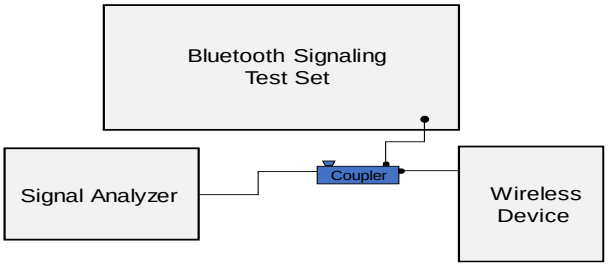

Figure 1-8
Power Measurement Setup

2 SAR DATA SUMMARY

2.1 Standalone UMPC Body (Read) SAR Data

Table 2-1
GSM 850 UMPC Body SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
824.20	128	GSM 850	GPRS	28.4	27.20	-0.01	5 mm	S	HT211	2	1:4.15	back	0.454	1.318	0.598	B2-1
824.20	128	GSM 850	GPRS	28.4	27.20	0.03	5 mm	S	HT211	2	1:4.15	bottom	0.206	1.318	0.272	
824.20	128	GSM 850	GPRS	28.4	27.20	0.07	5 mm	S	HT211	2	1:4.15	right	0.232	1.318	0.306	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 2-2
GSM 1900 UMPC Body SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1850.20	512	GSM 1900	GPRS	23.0	21.60	0.03	5 mm	S	LT211	2	1:4.15	back	0.482	1.380	0.665	
1880.00	661	GSM 1900	GPRS	23.0	21.93	0.00	5 mm	S	LT211	2	1:4.15	back	0.531	1.279	0.679	
1909.80	810	GSM 1900	GPRS	23.0	21.81	0.14	5 mm	S	LT211	2	1:4.15	back	0.604	1.315	0.794	B2-2
1880.00	661	GSM 1900	GPRS	23.0	21.93	0.17	5 mm	S	LT211	2	1:4.15	bottom	0.146	1.279	0.187	
1880.00	661	GSM 1900	GPRS	23.0	21.93	-0.18	5 mm	S	LT211	2	1:4.15	right	0.332	1.279	0.425	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 2-3
UMTS 850 UMPC Body SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
826.40	4132	UMTS 850	RMC	22.2	21.20	0.01	5 mm	S	LA211	1:1	back	0.403	1.259	0.507	
836.60	4183	UMTS 850	RMC	22.2	21.35	0.01	5 mm	S	LA211	1:1	back	0.447	1.216	0.544	
846.60	4233	UMTS 850	RMC	22.2	21.41	-0.03	5 mm	S	LA211	1:1	back	0.520	1.199	0.623	B2-3
846.60	4233	UMTS 850	RMC	22.2	21.41	-0.04	5 mm	S	LA211	1:1	bottom	0.259	1.199	0.311	
846.60	4233	UMTS 850	RMC	22.2	21.41	0.04	5 mm	S	LA211	1:1	right	0.204	1.199	0.245	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 2-4
UMTS 1900 UMPC Body SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1852.40	9262	UMTS 1900	RMC	16.0	15.58	0.00	5 mm	S	HT211	1:1	back	0.750	1.102	0.827	
1880.00	9400	UMTS 1900	RMC	16.0	15.77	0.04	5 mm	S	HT211	1:1	back	0.897	1.054	0.945	B2-4
1907.60	9538	UMTS 1900	RMC	16.0	15.73	-0.02	5 mm	S	HT211	1:1	back	0.789	1.064	0.839	
1880.00	9400	UMTS 1900	RMC	16.0	15.77	-0.03	5 mm	S	HT211	1:1	bottom	0.184	1.054	0.194	
1880.00	9400	UMTS 1900	RMC	16.0	15.77	-0.03	5 mm	S	HT211	1:1	right	0.427	1.054	0.450	
1880.00	9400	UMTS 1900	RMC	16.0	15.77	0.02	5 mm	S	HT211	1:1	back	0.833	1.054	0.878	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram			

Note: Blue entry represents variability measurement.

Table 2-5
LTE Band 71 UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	24.8	23.23	-0.17	0	S	YM212	QPSK	1	0	5 mm	back	1:1	0.673	1.435	0.966	
680.50	133297	Mid	LTE Band 71	20	24.3	23.21	-0.19	0.5	S	YM212	QPSK	50	0	5 mm	back	1:1	0.725	1.285	0.932	
680.50	133297	Mid	LTE Band 71	20	24.3	23.14	-0.12	0.5	S	YM212	QPSK	100	0	5 mm	back	1:1	0.737	1.306	0.963	B2-5
680.50	133297	Mid	LTE Band 71	20	24.8	23.23	0.13	0	S	YM212	QPSK	1	0	5 mm	bottom	1:1	0.122	1.435	0.175	
680.50	133297	Mid	LTE Band 71	20	24.3	23.21	0.12	0.5	S	YM212	QPSK	50	0	5 mm	bottom	1:1	0.133	1.285	0.171	
680.50	133297	Mid	LTE Band 71	20	24.8	23.23	0.01	0	S	YM212	QPSK	1	0	5 mm	right	1:1	0.378	1.435	0.542	
680.50	133297	Mid	LTE Band 71	20	24.3	23.21	-0.08	0.5	S	YM212	QPSK	50	0	5 mm	right	1:1	0.397	1.285	0.510	
680.50	133297	Mid	LTE Band 71	20	24.0	22.80	-0.03	0	N	YM212	QPSK	1	0	5 mm	back	1:1	0.307	1.318	0.405	
680.50	133297	Mid	LTE Band 71	20	24.0	22.78	-0.02	0	N	YM212	QPSK	50	0	5 mm	back	1:1	0.313	1.324	0.414	
680.50	133297	Mid	LTE Band 71	20	24.0	22.80	0.02	0	N	YM212	QPSK	1	0	5 mm	top	1:1	0.152	1.318	0.200	
680.50	133297	Mid	LTE Band 71	20	24.0	22.78	-0.07	0	N	YM212	QPSK	50	0	5 mm	top	1:1	0.157	1.324	0.208	
680.50	133297	Mid	LTE Band 71	20	24.0	22.80	0.10	0	N	YM212	QPSK	1	0	5 mm	right	1:1	0.352	1.318	0.464	
680.50	133297	Mid	LTE Band 71	20	24.0	22.78	0.00	0	N	YM212	QPSK	50	0	5 mm	right	1:1	0.359	1.324	0.475	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram				

Table 2-6
LTE Band 12 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	24.5	23.27	-0.05	0	S	YM212	QPSK	1	0	5 mm	back	1:1	0.659	1.327	0.874	B2-6
707.50	23095	Mid	LTE Band 12	10	24.3	23.34	-0.09	0.2	S	YM212	QPSK	25	25	5 mm	back	1:1	0.631	1.247	0.787	
707.50	23095	Mid	LTE Band 12	10	24.3	23.26	-0.07	0.2	S	YM212	QPSK	50	0	5 mm	back	1:1	0.654	1.271	0.831	
707.50	23095	Mid	LTE Band 12	10	24.5	23.27	0.03	0	S	YM212	QPSK	1	0	5 mm	bottom	1:1	0.182	1.327	0.242	
707.50	23095	Mid	LTE Band 12	10	24.3	23.34	0.09	0.2	S	YM212	QPSK	25	25	5 mm	bottom	1:1	0.206	1.247	0.257	
707.50	23095	Mid	LTE Band 12	10	24.5	23.27	-0.10	0	S	YM212	QPSK	1	0	5 mm	right	1:1	0.431	1.327	0.572	
707.50	23095	Mid	LTE Band 12	10	24.3	23.34	-0.13	0.2	S	YM212	QPSK	25	25	5 mm	right	1:1	0.434	1.247	0.541	
707.50	23095	Mid	LTE Band 12	10	23.8	22.59	-0.05	0	N	YM212	QPSK	1	0	5 mm	back	1:1	0.296	1.321	0.391	
707.50	23095	Mid	LTE Band 12	10	23.8	22.63	0.03	0	N	YM212	QPSK	25	0	5 mm	back	1:1	0.307	1.309	0.402	
707.50	23095	Mid	LTE Band 12	10	23.8	22.59	0.01	0	N	YM212	QPSK	1	0	5 mm	top	1:1	0.156	1.321	0.206	
707.50	23095	Mid	LTE Band 12	10	23.8	22.63	-0.09	0	N	YM212	QPSK	25	0	5 mm	top	1:1	0.164	1.309	0.215	
707.50	23095	Mid	LTE Band 12	10	23.8	22.59	0.12	0	N	YM212	QPSK	1	0	5 mm	right	1:1	0.178	1.321	0.235	
707.50	23095	Mid	LTE Band 12	10	23.8	22.63	0.07	0	N	YM212	QPSK	25	0	5 mm	right	1:1	0.182	1.309	0.238	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-7
LTE Band 13 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	22.2	21.27	-0.13	0	S	YM212	QPSK	1	25	5 mm	back	1:1	0.732	1.239	0.907	
782.00	23230	Mid	LTE Band 13	10	22.2	21.53	-0.14	0	S	YM212	QPSK	25	12	5 mm	back	1:1	0.757	1.167	0.883	
782.00	23230	Mid	LTE Band 13	10	22.2	21.26	-0.11	0	S	YM212	QPSK	50	0	5 mm	back	1:1	0.770	1.242	0.956	B2-7
782.00	23230	Mid	LTE Band 13	10	22.2	21.27	-0.01	0	S	YM212	QPSK	1	25	5 mm	bottom	1:1	0.249	1.239	0.309	
782.00	23230	Mid	LTE Band 13	10	22.2	21.53	0.01	0	S	YM212	QPSK	25	12	5 mm	bottom	1:1	0.262	1.167	0.306	
782.00	23230	Mid	LTE Band 13	10	22.2	21.27	-0.04	0	S	YM212	QPSK	1	25	5 mm	right	1:1	0.226	1.239	0.280	
782.00	23230	Mid	LTE Band 13	10	22.2	21.53	-0.01	0	S	YM212	QPSK	25	12	5 mm	right	1:1	0.235	1.167	0.274	
782.00	23230	Mid	LTE Band 13	10	23.0	22.06	0.00	0	N	YM212	QPSK	1	0	5 mm	back	1:1	0.653	1.242	0.811	
782.00	23230	Mid	LTE Band 13	10	23.0	22.15	0.19	0	N	YM212	QPSK	25	0	5 mm	back	1:1	0.711	1.216	0.865	
782.00	23230	Mid	LTE Band 13	10	23.0	22.00	-0.01	0	N	YM212	QPSK	50	0	5 mm	back	1:1	0.749	1.259	0.943	
782.00	23230	Mid	LTE Band 13	10	23.0	22.06	-0.10	0	N	YM212	QPSK	1	0	5 mm	top	1:1	0.264	1.242	0.328	
782.00	23230	Mid	LTE Band 13	10	23.0	22.15	0.08	0	N	YM212	QPSK	25	0	5 mm	top	1:1	0.284	1.216	0.345	
782.00	23230	Mid	LTE Band 13	10	23.0	22.06	0.13	0	N	YM212	QPSK	1	0	5 mm	right	1:1	0.301	1.242	0.374	
782.00	23230	Mid	LTE Band 13	10	23.0	22.15	-0.02	0	N	YM212	QPSK	25	0	5 mm	right	1:1	0.315	1.216	0.383	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-8
LTE Band 14 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	22.7	21.18	-0.05	0	S	YM212	QPSK	1	0	5 mm	back	1:1	0.683	1.419	0.969	
793.00	23330	Mid	LTE Band 14	10	22.7	21.19	-0.07	0	S	YM212	QPSK	25	0	5 mm	back	1:1	0.685	1.416	0.970	B2-8
793.00	23330	Mid	LTE Band 14	10	22.7	21.14	-0.05	0	S	YM212	QPSK	50	0	5 mm	back	1:1	0.685	1.432	0.981	
793.00	23330	Mid	LTE Band 14	10	22.7	21.18	-0.07	0	S	YM212	QPSK	1	0	5 mm	bottom	1:1	0.250	1.419	0.355	
793.00	23330	Mid	LTE Band 14	10	22.7	21.19	-0.05	0	S	YM212	QPSK	25	0	5 mm	bottom	1:1	0.245	1.416	0.347	
793.00	23330	Mid	LTE Band 14	10	22.7	21.18	0.03	0	S	YM212	QPSK	1	0	5 mm	right	1:1	0.384	1.419	0.545	
793.00	23330	Mid	LTE Band 14	10	22.7	21.19	0.00	0	S	YM212	QPSK	25	0	5 mm	right	1:1	0.353	1.416	0.500	
793.00	23330	Mid	LTE Band 14	10	23.6	22.46	0.00	0	N	YM212	QPSK	1	0	5 mm	back	1:1	0.654	1.300	0.850	
793.00	23330	Mid	LTE Band 14	10	23.6	22.45	-0.05	0	N	YM212	QPSK	25	0	5 mm	back	1:1	0.672	1.303	0.876	
793.00	23330	Mid	LTE Band 14	10	23.6	22.43	0.01	0	N	YM212	QPSK	50	0	5 mm	back	1:1	0.663	1.309	0.868	
793.00	23330	Mid	LTE Band 14	10	23.6	22.46	-0.16	0	N	YM212	QPSK	1	0	5 mm	top	1:1	0.326	1.300	0.424	
793.00	23330	Mid	LTE Band 14	10	23.6	22.45	-0.02	0	N	YM212	QPSK	25	0	5 mm	top	1:1	0.330	1.303	0.430	
793.00	23330	Mid	LTE Band 14	10	23.6	22.46	-0.02	0	N	YM212	QPSK	1	0	5 mm	right	1:1	0.291	1.300	0.378	
793.00	23330	Mid	LTE Band 14	10	23.6	22.45	0.01	0	N	YM212	QPSK	25	0	5 mm	right	1:1	0.269	1.303	0.351	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 2-9
LTE Band 26 (Cell) UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.41	0.06	0	S	HT211	QPSK	1	36	5 mm	back	1:1	0.390	1.199	0.468	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.47	0.00	0	S	HT211	QPSK	36	37	5 mm	back	1:1	0.405	1.183	0.479	B2-9
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.41	0.10	0	S	HT211	QPSK	1	36	5 mm	bottom	1:1	0.269	1.199	0.323	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.47	0.05	0	S	HT211	QPSK	36	37	5 mm	bottom	1:1	0.285	1.183	0.337	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.41	0.01	0	S	HT211	QPSK	1	36	5 mm	right	1:1	0.294	1.199	0.353	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.2	21.47	0.03	0	S	HT211	QPSK	36	37	5 mm	right	1:1	0.310	1.183	0.367	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.46	0.02	0	N	HT211	QPSK	1	36	5 mm	back	1:1	0.365	1.330	0.485	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.76	0.04	0	N	HT211	QPSK	36	37	5 mm	back	1:1	0.393	1.242	0.488	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.46	0.04	0	N	HT211	QPSK	1	36	5 mm	top	1:1	0.312	1.330	0.415	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.76	0.05	0	N	HT211	QPSK	36	37	5 mm	top	1:1	0.324	1.242	0.402	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.46	-0.04	0	N	HT211	QPSK	1	36	5 mm	right	1:1	0.144	1.330	0.192	
831.50	26865	Mid	LTE Band 26 (Cell)	15	22.7	21.76	0.03	0	N	HT211	QPSK	36	37	5 mm	right	1:1	0.168	1.242	0.209	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 2-10
LTE Band 5 (Cell) UMPC Body SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.57	0.00	0	S	KF211	QPSK	1	25	5 mm	back	1:1	0.390	1.156	0.451	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.57	-0.01	0	S	KF211	QPSK	25	0	5 mm	back	1:1	0.409	1.156	0.473	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.64	0.00	0	S	KF211	QPSK	25	12	5 mm	back	1:1	0.411	1.138	0.468	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.64	0.00	0	S	KF211	QPSK	25	0	5 mm	back	1:1	0.407	1.138	0.463	
	SCC	829.30	20453			5								12	13							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.57	0.03	0	S	KF211	QPSK	1	25	5 mm	bottom	1:1	0.161	1.156	0.186	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.64	-0.10	0	S	KF211	QPSK	25	12	5 mm	bottom	1:1	0.170	1.138	0.193	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.57	0.02	0	S	KF211	QPSK	1	25	5 mm	right	1:1	0.061	1.156	0.071	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.2	21.64	0.02	0	S	KF211	QPSK	25	12	5 mm	right	1:1	0.063	1.138	0.072	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.51	-0.02	0	N	HT211	QPSK	1	25	5 mm	back	1:1	0.449	1.315	0.590	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.61	-0.04	0	N	HT211	QPSK	25	25	5 mm	back	1:1	0.470	1.285	0.604	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.67	-0.03	0	N	HT211	QPSK	25	25	5 mm	back	1:1	0.499	1.268	0.633	B2-10
	SCC	843.70	20597			5								12	0							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.51	0.04	0	N	HT211	QPSK	1	25	5 mm	top	1:1	0.312	1.315	0.410	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.61	0.05	0	N	HT211	QPSK	25	25	5 mm	top	1:1	0.315	1.285	0.405	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.51	0.04	0	N	HT211	QPSK	1	25	5 mm	right	1:1	0.206	1.315	0.271	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	22.7	21.61	0.00	0	N	HT211	QPSK	25	25	5 mm	right	1:1	0.231	1.285	0.297	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 2-11
LTE Band 66 (AWS) UMPC Body SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.2	14.19	0.01	0	N	HT211	QPSK	1	0	5 mm	back	1:1	0.542	1.262	0.684	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.20	0.01	0	N	HT211	QPSK	1	99	5 mm	back	1:1	0.777	1.259	0.978	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.2	14.16	0.06	0	N	HT211	QPSK	1	99	5 mm	back	1:1	0.720	1.271	0.915	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.2	14.24	-0.04	0	N	HT211	QPSK	50	25	5 mm	back	1:1	0.620	1.247	0.773	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.30	0.00	0	N	HT211	QPSK	50	25	5 mm	back	1:1	0.754	1.230	0.927	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.2	14.25	0.04	0	N	HT211	QPSK	50	0	5 mm	back	1:1	0.733	1.245	0.913	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.19	0.01	0	N	HT211	QPSK	100	0	5 mm	back	1:1	0.771	1.262	0.973	
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	15.20	0.07	0	N	HT211	QPSK	1	99	5 mm	back	1:1	0.999	1.000	**0.999**	B2-11
	SCC	1764.80	132520												0							
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.20	-0.02	0	N	HT211	QPSK	1	99	5 mm	top	1:1	0.375	1.259	0.472	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.30	-0.02	0	N	HT211	QPSK	50	25	5 mm	top	1:1	0.379	1.230	0.466	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.20	-0.03	0	N	HT211	QPSK	1	99	5 mm	right	1:1	0.241	1.259	0.303	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	14.30	-0.02	0	N	HT211	QPSK	50	25	5 mm	right	1:1	0.248	1.230	0.305	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.5	14.47	0.00	0	S	HT211	QPSK	1	0	5 mm	back	1:1	0.769	1.268	0.975	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.5	14.42	0.01	0	S	HT211	QPSK	1	99	5 mm	back	1:1	0.682	1.282	0.874	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.64	-0.07	0	S	HT211	QPSK	1	0	5 mm	back	1:1	0.761	1.219	0.928	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.5	14.60	0.07	0	S	HT211	QPSK	1	0	5 mm	back	1:1	0.707	1.230	0.870	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.5	14.66	0.00	0	S	HT211	QPSK	50	25	5 mm	back	1:1	0.778	1.213	0.944	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.68	0.03	0	S	HT211	QPSK	50	25	5 mm	back	1:1	0.758	1.208	0.916	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.5	14.61	0.00	0	S	HT211	QPSK	50	25	5 mm	back	1:1	0.697	1.227	0.855	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.63	0.00	0	S	HT211	QPSK	100	0	5 mm	back	1:1	0.748	1.222	0.914	
2 CC Uplink	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.5	14.17	0.00	0	S	HT211	QPSK	1	99	5 mm	back	1:1	0.641	1.358	0.870	
	SCC	1739.80	132270												0							
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.64	0.17	0	S	HT211	QPSK	1	0	5 mm	bottom	1:1	0.276	1.219	0.336	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.68	0.14	0	S	HT211	QPSK	50	25	5 mm	bottom	1:1	0.267	1.208	0.323	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.64	-0.10	0	S	HT211	QPSK	1	0	5 mm	right	1:1	0.388	1.219	0.473	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.5	14.68	-0.17	0	S	HT211	QPSK	50	25	5 mm	right	1:1	0.388	1.208	0.469	
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.2	15.20	-0.01	0	N	HT211	QPSK	1	99	5 mm	back	1:1	0.962	1.000	0.962	
	SCC	1764.80	132520												0							

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Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Note: Blue entry represents variability measurement.

Table 2-12
LTE Band 25 (PCS) UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.13	0.04	0	S	YM212	QPSK	1	50	5 mm	back	1:1	0.484	1.469	0.711	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.24	-0.01	0	S	YM212	QPSK	50	25	5 mm	back	1:1	0.508	1.432	0.727	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	16.8	15.12	0.05	0	S	YM212	QPSK	50	0	5 mm	back	1:1	0.541	1.472	0.796	B2-12
1905.00	26590	High	LTE Band 25 (PCS)	20	16.8	15.06	-0.02	0	S	YM212	QPSK	50	50	5 mm	back	1:1	0.490	1.493	0.732	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.13	-0.04	0	S	YM212	QPSK	1	50	5 mm	bottom	1:1	0.141	1.469	0.207	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.24	-0.04	0	S	YM212	QPSK	50	25	5 mm	bottom	1:1	0.147	1.432	0.211	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.13	0.01	0	S	YM212	QPSK	1	50	5 mm	right	1:1	0.332	1.469	0.488	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.8	15.24	0.01	0	S	YM212	QPSK	50	25	5 mm	right	1:1	0.345	1.432	0.494	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.25	-0.07	0	N	X2211	QPSK	1	99	5 mm	back	1:1	0.455	1.462	0.665	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.26	0.03	0	N	X2211	QPSK	50	50	5 mm	back	1:1	0.488	1.459	0.712	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.9	14.25	-0.01	0	N	X2211	QPSK	50	0	5 mm	back	1:1	0.357	1.462	0.522	
1905.00	26590	High	LTE Band 25 (PCS)	20	15.9	14.22	-0.13	0	N	X2211	QPSK	50	25	5 mm	back	1:1	0.468	1.472	0.689	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.25	-0.07	0	N	X2211	QPSK	1	99	5 mm	top	1:1	0.138	1.462	0.202	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.26	0.00	0	N	X2211	QPSK	50	50	5 mm	top	1:1	0.140	1.459	0.204	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.25	-0.14	0	N	X2211	QPSK	1	99	5 mm	right	1:1	0.092	1.462	0.135	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.9	14.26	-0.04	0	N	X2211	QPSK	50	50	5 mm	right	1:1	0.095	1.459	0.139	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram

Table 2-13
LTE Band 30 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.75	-0.02	0	S	LT211	QPSK	1	49	5 mm	back	1:1	0.436	1.365	0.595	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.80	-0.06	0	S	LT211	QPSK	25	25	5 mm	back	1:1	0.450	1.349	0.607	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.75	-0.03	0	S	LT211	QPSK	1	49	5 mm	bottom	1:1	0.362	1.365	0.494	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.80	-0.05	0	S	LT211	QPSK	25	25	5 mm	bottom	1:1	0.373	1.349	0.503	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.75	-0.16	0	S	LT211	QPSK	1	49	5 mm	right	1:1	0.161	1.365	0.220	
2310.00	27710	Mid	LTE Band 30	10	19.1	17.80	-0.03	0	S	LT211	QPSK	25	25	5 mm	right	1:1	0.168	1.349	0.227	
2310.00	27710	Mid	LTE Band 30	10	18.7	17.30	-0.03	0	N	LT211	QPSK	1	0	5 mm	back	1:1	0.447	1.380	0.617	
2310.00	27710	Mid	LTE Band 30	10	18.7	17.25	-0.01	0	N	LT211	QPSK	25	0	5 mm	back	1:1	0.462	1.396	0.645	B2-13
2310.00	27710	Mid	LTE Band 30	10	18.7	17.30	-0.05	0	N	LT211	QPSK	1	0	5 mm	top	1:1	0.367	1.380	0.506	
2310.00	27710	Mid	LTE Band 30	10	18.7	17.25	0.00	0	N	LT211	QPSK	25	0	5 mm	top	1:1	0.383	1.396	0.535	
2310.00	27710	Mid	LTE Band 30	10	18.7	17.30	0.00	0	N	LT211	QPSK	1	0	5 mm	right	1:1	0.227	1.380	0.313	
2310.00	27710	Mid	LTE Band 30	10	18.7	17.25	-0.07	0	N	LT211	QPSK	25	0	5 mm	right	1:1	0.222	1.396	0.310	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram

Table 2-14
LTE Band 7 UMPC Body SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	16.2	14.82	0.05	0	S	HT211	QPSK	1	0	5 mm	back	1:1	0.542	1.374	0.745	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.03	-0.01	0	S	HT211	QPSK	1	0	5 mm	back	1:1	0.631	1.309	0.826	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.2	14.95	0.04	0	S	HT211	QPSK	1	99	5 mm	back	1:1	0.481	1.334	0.642	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	16.2	15.03	-0.02	0	S	HT211	QPSK	50	25	5 mm	back	1:1	0.604	1.309	0.791	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.04	0.04	0	S	HT211	QPSK	50	50	5 mm	back	1:1	0.658	1.306	0.859	B2-14
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.2	14.92	-0.01	0	S	HT211	QPSK	50	50	5 mm	back	1:1	0.473	1.343	0.635	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.02	-0.01	0	S	HT211	QPSK	100	0	5 mm	back	1:1	0.655	1.312	0.859	
2 CC Uplink	PCC	2535.00	21100	Mid	LTE Band 7	20	16.2	15.00	0.00	0	S	HT211	QPSK	50	50	5 mm	back	1:1	0.638	1.318	0.841	
	SCC	2554.80	21298												0							
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.03	-0.08	0	S	HT211	QPSK	1	0	5 mm	bottom	1:1	0.419	1.309	0.548	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.04	-0.04	0	S	HT211	QPSK	50	50	5 mm	bottom	1:1	0.476	1.306	0.622	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.03	0.07	0	S	HT211	QPSK	1	0	5 mm	right	1:1	0.069	1.309	0.090	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.2	15.04	-0.05	0	S	HT211	QPSK	50	50	5 mm	right	1:1	0.071	1.306	0.093	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.11	-0.07	0	N	YM212	QPSK	1	0	5 mm	back	1:1	0.278	1.285	0.357	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.15	0.05	0	N	YM212	QPSK	50	25	5 mm	back	1:1	0.309	1.274	0.394	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.12	0.01	0	N	YM212	QPSK	50	50	5 mm	back	1:1	0.309	1.282	0.396	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	17.2	17.01	0.05	0	N	YM212	QPSK	50	50	5 mm	back	1:1	0.397	1.045	0.415	
	SCC	2529.80	21048												0							
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.11	0.04	0	N	YM212	QPSK	1	0	5 mm	top	1:1	0.254	1.285	0.326	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.15	0.09	0	N	YM212	QPSK	50	25	5 mm	top	1:1	0.272	1.274	0.347	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.11	0.08	0	N	YM212	QPSK	1	0	5 mm	right	1:1	0.129	1.285	0.166	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	17.2	16.15	0.07	0	N	YM212	QPSK	50	25	5 mm	right	1:1	0.132	1.274	0.168	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram

Table 2-15
LTE Band 41 UMPC Body SAR

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.7	17.51	-0.04	0	S	LR211	QPSK	1	0	5 mm	back	1:1.58	0.615	1.315	0.809	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.7	17.42	0.10	0	S	LR211	QPSK	1	99	5 mm	back	1:1.58	0.673	1.343	0.904	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.83	-0.03	0	S	LR211	QPSK	1	99	5 mm	back	1:1.58	0.658	1.222	0.804	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.7	17.73	-0.01	0	S	LR211	QPSK	1	0	5 mm	back	1:1.58	0.619	1.250	0.774	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.7	17.82	-0.08	0	S	LR211	QPSK	1	99	5 mm	back	1:1.58	0.582	1.225	0.713	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.7	17.70	-0.01	0	S	LR211	QPSK	50	0	5 mm	back	1:1.58	0.641	1.259	0.807	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.7	17.65	-0.02	0	S	LR211	QPSK	50	25	5 mm	back	1:1.58	0.686	1.274	0.874	B2-15
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.95	-0.01	0	S	LR211	QPSK	50	50	5 mm	back	1:1.58	0.655	1.189	0.779	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.7	17.81	-0.05	0	S	LR211	QPSK	50	25	5 mm	back	1:1.58	0.655	1.227	0.804	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.7	17.70	-0.02	0	S	LR211	QPSK	50	50	5 mm	back	1:1.58	0.608	1.259	0.765	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.82	0.01	0	S	LR211	QPSK	100	0	5 mm	back	1:1.58	0.649	1.225	0.795	
1 CC Uplink - Power Class 2	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	20.3	19.39	-0.01	0	S	LR211	QPSK	1	99	5 mm	back	1:2.31	0.675	1.233	0.832	
2 CC Uplink - Power Class 3	PCC	2549.50	40185	Low-Mid	LTE Band 41	20	18.7	17.55	0.00	0	S	LR211	QPSK	1	99	5 mm	back	1:1.58	0.679	1.303	0.885	
	SCC	2569.30	40383												0							
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.7	17.51	0.04	0	S	LR211	QPSK	1	0	5 mm	bottom	1:1.58	0.431	1.315	0.567	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.7	17.42	-0.02	0	S	LR211	QPSK	1	99	5 mm	bottom	1:1.58	0.455	1.343	0.611	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.83	-0.05	0	S	LR211	QPSK	1	99	5 mm	bottom	1:1.58	0.507	1.222	0.620	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.7	17.73	0.02	0	S	LR211	QPSK	1	0	5 mm	bottom	1:1.58	0.522	1.250	0.653	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.7	17.82	-0.04	0	S	LR211	QPSK	1	99	5 mm	bottom	1:1.58	0.424	1.225	0.519	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.7	17.70	0.01	0	S	LR211	QPSK	50	0	5 mm	bottom	1:1.58	0.440	1.259	0.554	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.7	17.65	0.00	0	S	LR211	QPSK	50	25	5 mm	bottom	1:1.58	0.469	1.274	0.598	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.95	-0.02	0	S	LR211	QPSK	50	50	5 mm	bottom	1:1.58	0.512	1.189	0.609	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.7	17.81	0.00	0	S	LR211	QPSK	50	25	5 mm	bottom	1:1.58	0.535	1.227	0.656	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.7	17.70	-0.02	0	S	LR211	QPSK	50	50	5 mm	bottom	1:1.58	0.440	1.259	0.554	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.82	0.00	0	S	LR211	QPSK	100	0	5 mm	bottom	1:1.58	0.515	1.225	0.631	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.83	0.01	0	S	LR211	QPSK	1	99	5 mm	right	1:1.58	0.084	1.222	0.103	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.7	17.95	-0.01	0	S	LR211	QPSK	50	50	5 mm	right	1:1.58	0.086	1.189	0.102	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.8	17.42	0.00	0	N	LM211	QPSK	1	0	5 mm	back	1:1.58	0.388	1.374	0.533	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.8	17.39	0.01	0	N	LM211	QPSK	1	50	5 mm	back	1:1.58	0.400	1.384	0.554	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.8	17.81	0.03	0	N	LM211	QPSK	1	0	5 mm	back	1:1.58	0.484	1.256	0.608	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.8	17.59	-0.02	0	N	LM211	QPSK	1	0	5 mm	back	1:1.58	0.419	1.321	0.553	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.91	0.04	0	N	LM211	QPSK	1	0	5 mm	back	1:1.58	0.527	1.227	0.647	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.8	17.63	-0.03	0	N	LM211	QPSK	50	0	5 mm	back	1:1.58	0.425	1.309	0.556	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.8	17.61	-0.01	0	N	LM211	QPSK	50	25	5 mm	back	1:1.58	0.415	1.315	0.546	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.8	17.84	0.00	0	N	LM211	QPSK	50	0	5 mm	back	1:1.58	0.474	1.247	0.591	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.8	17.74	0.03	0	N	LM211	QPSK	50	50	5 mm	back	1:1.58	0.495	1.276	0.632	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.89	0.02	0	N	LM211	QPSK	50	0	5 mm	back	1:1.58	0.527	1.233	0.650	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.90	0.02	0	N	LM211	QPSK	50	25	5 mm	back	1:1.58	0.547	1.230	0.673	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.89	-0.01	0	N	LM211	QPSK	100	0	5 mm	back	1:1.58	0.540	1.233	0.666	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	20.4	19.64	0.03	0	N	LM211	QPSK	50	25	5 mm	back	1:2.31	0.550	1.191	0.655	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	18.8	18.70	-0.10	0	N	LM211	QPSK	50	0	5 mm	back	1:1.58	0.618	1.023	0.632	
	SCC	2660.20	41292												50							
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.8	17.42	0.01	0	N	LM211	QPSK	1	0	5 mm	top	1:1.58	0.375	1.374	0.515	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.8	17.39	-0.01	0	N	LM211	QPSK	1	50	5 mm	top	1:1.58	0.372	1.384	0.515	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.8	17.81	-0.01	0	N	LM211	QPSK	1	0	5 mm	top	1:1.58	0.429	1.256	0.539	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.8	17.59	-0.01	0	N	LM211	QPSK	1	0	5 mm	top	1:1.58	0.404	1.321	0.534	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.91	0.03	0	N	LM211	QPSK	1	0	5 mm	top	1:1.58	0.497	1.227	0.610	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	18.8	17.63	0.04	0	N	LM211	QPSK	50	0	5 mm	top	1:1.58	0.386	1.309	0.505	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	18.8	17.61	-0.02	0	N	LM211	QPSK	50	25	5 mm	top	1:1.58	0.381	1.315	0.501	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	18.8	17.84	-0.11	0	N	LM211	QPSK	50	0	5 mm	top	1:1.58	0.416	1.247	0.519	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	18.8	17.74	-0.01	0	N	LM211	QPSK	50	50	5 mm	top	1:1.58	0.424	1.276	0.541	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.90	0.02	0	N	LM211	QPSK	50	25	5 mm	top	1:1.58	0.508	1.230	0.625	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.89	0.00	0	N	LM211	QPSK	100	0	5 mm	top	1:1.58	0.529	1.233	0.652	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.91	-0.06	0	N	LM211	QPSK	1	0	5 mm	right	1:1.58	0.089	1.227	0.109	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	18.8	17.90	0.07	0	N	LM211	QPSK	50	25	5 mm	right	1:1.58	0.083	1.230	0.102	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT
Spatial Peak
Uncontrolled Exposure/General Population

UMPC Body
1.6 W/kg (mW/g)
averaged over 1 gram

Table 2-16
LTE Band 48 UMPC Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.59	-0.03	0	S	X9211	QPSK	1	0	5 mm	back	1:1.58	0.446	1.291	0.576	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.65	0.01	0	S	X9211	QPSK	50	0	5 mm	back	1:1.58	0.459	1.274	**0.585**	B2-16
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	16.7	15.55	0.02	0	S	X9211	QPSK	50	0	5 mm	back	1:1.58	0.448	1.303	0.584	
	SCC	3670.20	56442												50							
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.59	-0.03	0	S	X9211	QPSK	1	0	5 mm	bottom	1:1.58	0.130	1.291	0.168	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.65	-0.06	0	S	X9211	QPSK	50	0	5 mm	bottom	1:1.58	0.131	1.274	0.167	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.59	-0.08	0	S	X9211	QPSK	1	0	5 mm	right	1:1.58	0.044	1.291	0.057	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	16.7	15.65	0.10	0	S	X9211	QPSK	50	0	5 mm	right	1:1.58	0.038	1.274	0.048	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	UMPC Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 2-17
NR Band n71 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	23.5	22.93	S	-0.03	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	back	1:1	0.489	1.140	0.557	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	S	-0.10	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	back	1:1	0.519	1.189	0.617	B2-17
680.50	136100	Mid	NR Band n71	20	22.0	21.47	S	-0.06	1.5	J2211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.366	1.130	0.414	
680.50	136100	Mid	NR Band n71	20	23.5	22.93	S	0.10	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	bottom	1:1	0.115	1.140	0.131	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	S	0.12	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	bottom	1:1	0.125	1.189	0.149	
680.50	136100	Mid	NR Band n71	20	23.5	22.93	S	-0.04	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	right	1:1	0.401	1.140	0.457	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	S	-0.01	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	right	1:1	0.360	1.189	0.428	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	N	0.00	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	back	1:1	0.257	1.189	0.306	
680.50	136100	Mid	NR Band n71	20	23.5	22.61	N	-0.03	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	back	1:1	0.260	1.227	0.319	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	N	0.01	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	top	1:1	0.152	1.189	0.181	
680.50	136100	Mid	NR Band n71	20	23.5	22.61	N	0.13	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	top	1:1	0.172	1.227	0.211	
680.50	136100	Mid	NR Band n71	20	23.5	22.75	N	-0.04	0.0	J2211	DFT-S-OFDM	QPSK	1	1	5 mm	right	1:1	0.341	1.189	0.405	
680.50	136100	Mid	NR Band n71	20	23.5	22.61	N	0.14	0.0	J2211	DFT-S-OFDM	QPSK	50	28	5 mm	right	1:1	0.316	1.227	0.388	
680.50	136100	Mid	NR Band n71	20	22.0	21.49	N	0.14	1.5	J2211	CP-OFDM	QPSK	1	1	5 mm	right	1:1	0.272	1.125	0.306	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	UMPC Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 2-18
NR Band n5 (Cell) UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.22	S	0.00	0.0	KF211	DFT-S-OFDM	QPSK	1	104	5 mm	back	1:1	0.414	1.253	0.519	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.18	S	-0.01	0.0	KF211	DFT-S-OFDM	QPSK	50	28	5 mm	back	1:1	0.405	1.265	0.512	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.0	20.76	S	0.00	0.2	KF211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.407	1.330	0.541	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.22	S	0.05	0.0	KF211	DFT-S-OFDM	QPSK	1	104	5 mm	bottom	1:1	0.181	1.253	0.227	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.18	S	0.09	0.0	KF211	DFT-S-OFDM	QPSK	50	28	5 mm	bottom	1:1	0.182	1.265	0.230	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.22	S	0.03	0.0	KF211	DFT-S-OFDM	QPSK	1	104	5 mm	right	1:1	0.311	1.253	0.390	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.2	21.18	S	0.01	0.0	KF211	DFT-S-OFDM	QPSK	50	28	5 mm	right	1:1	0.331	1.265	0.419	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.25	N	0.02	0.0	JW211	DFT-S-OFDM	QPSK	1	104	5 mm	back	1:1	0.502	1.109	0.557	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.15	N	0.03	0.0	JW211	DFT-S-OFDM	QPSK	50	28	5 mm	back	1:1	0.565	1.135	0.641	B2-18
836.50	167300	Mid	NR Band n5 (Cell)	20	22.0	21.77	N	0.00	0.7	JW211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.492	1.054	0.519	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.25	N	0.00	0.0	JW211	DFT-S-OFDM	QPSK	1	104	5 mm	top	1:1	0.389	1.109	0.431	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.15	N	0.09	0.0	JW211	DFT-S-OFDM	QPSK	50	28	5 mm	top	1:1	0.407	1.135	0.462	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.25	N	0.03	0.0	JW211	DFT-S-OFDM	QPSK	1	104	5 mm	right	1:1	0.338	1.109	0.375	
836.50	167300	Mid	NR Band n5 (Cell)	20	22.7	22.15	N	-0.01	0.0	JW211	DFT-S-OFDM	QPSK	50	28	5 mm	right	1:1	0.304	1.135	0.345	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-19
NR Band n66 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.47	S	-0.11	0	KQ211	DFT-S-OFDM	QPSK	1	108	5 mm	back	1:1	0.833	1.007	0.839	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.50	S	-0.17	0	KQ211	DFT-S-OFDM	QPSK	108	54	5 mm	back	1:1	0.837	1.000	0.837	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.46	S	-0.19	0	KQ211	DFT-S-OFDM	QPSK	216	0	5 mm	back	1:1	0.845	1.009	0.853	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.26	S	0.08	0	KQ211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.942	1.057	0.996	B2-19
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.47	S	-0.04	0	KQ211	DFT-S-OFDM	QPSK	1	108	5 mm	bottom	1:1	0.355	1.007	0.357	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.50	S	-0.05	0	KQ211	DFT-S-OFDM	QPSK	108	54	5 mm	bottom	1:1	0.348	1.000	0.348	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.47	S	-0.01	0	KQ211	DFT-S-OFDM	QPSK	1	108	5 mm	right	1:1	0.473	1.007	0.476	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.5	15.50	S	-0.02	0	KQ211	DFT-S-OFDM	QPSK	108	54	5 mm	right	1:1	0.481	1.000	0.481	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.32	N	0.10	0	H7211	DFT-S-OFDM	QPSK	1	108	5 mm	back	1:1	0.509	1.197	0.609	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.37	N	-0.02	0	H7211	DFT-S-OFDM	QPSK	108	54	5 mm	back	1:1	0.526	1.183	0.622	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.23	N	0.02	0	H7211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.471	1.222	0.576	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.32	N	-0.06	0	H7211	DFT-S-OFDM	QPSK	1	108	5 mm	top	1:1	0.371	1.197	0.444	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.37	N	-0.05	0	H7211	DFT-S-OFDM	QPSK	108	54	5 mm	top	1:1	0.372	1.183	0.440	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.32	N	-0.01	0	H7211	DFT-S-OFDM	QPSK	1	108	5 mm	right	1:1	0.292	1.197	0.350	
1745.00	349000	Mid	NR Band n66 (AWS)	40	16.1	15.37	N	0.00	0	H7211	DFT-S-OFDM	QPSK	108	54	5 mm	right	1:1	0.292	1.183	0.345	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 2-20
NR Band n25 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.36	S	-0.03	0	J6211	DFT-S-OFDM	QPSK	1	214	5 mm	back	1:1	0.646	1.393	0.900	B2-20
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.31	S	0.04	0	J6211	DFT-S-OFDM	QPSK	108	0	5 mm	back	1:1	0.622	1.409	0.876	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.30	S	-0.02	0	J6211	DFT-S-OFDM	QPSK	216	0	5 mm	back	1:1	0.641	1.413	0.906	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.46	S	-0.09	0	J6211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.608	1.361	0.827	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.36	S	-0.14	0	J6211	DFT-S-OFDM	QPSK	1	214	5 mm	bottom	1:1	0.138	1.393	0.192	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.31	S	-0.13	0	J6211	DFT-S-OFDM	QPSK	108	0	5 mm	bottom	1:1	0.141	1.409	0.199	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.36	S	0.04	0	J6211	DFT-S-OFDM	QPSK	1	214	5 mm	right	1:1	0.345	1.393	0.481	
1882.50	376500	Mid	NR Band n25 (PCS)	40	16.8	15.31	S	-0.01	0	J6211	DFT-S-OFDM	QPSK	108	0	5 mm	right	1:1	0.365	1.409	0.514	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.32	N	-0.11	0	KQ211	DFT-S-OFDM	QPSK	1	1	5 mm	back	1:1	0.524	1.143	0.599	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.11	N	-0.09	0	KQ211	DFT-S-OFDM	QPSK	108	0	5 mm	back	1:1	0.550	1.199	0.659	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.15	N	-0.13	0	KQ211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.508	1.189	0.604	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.32	N	-0.05	0	KQ211	DFT-S-OFDM	QPSK	1	1	5 mm	top	1:1	0.253	1.143	0.289	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.11	N	-0.08	0	KQ211	DFT-S-OFDM	QPSK	108	0	5 mm	top	1:1	0.258	1.199	0.309	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.32	N	-0.08	0	KQ211	DFT-S-OFDM	QPSK	1	1	5 mm	right	1:1	0.258	1.143	0.295	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.9	15.11	N	-0.06	0	KQ211	DFT-S-OFDM	QPSK	108	0	5 mm	right	1:1	0.266	1.199	0.319	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 2-21
NR Band n41 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	16.1	15.35	S	0.07	0	LT211	DFT-S-OFDM	QPSK	1	137	5 mm	back	1:1	0.614	1.189	0.730	
2592.99	518598	Mid	NR Band n41	100	16.1	15.31	S	0.03	0	LT211	DFT-S-OFDM	QPSK	135	138	5 mm	back	1:1	0.740	1.199	0.887	B2-21
2592.99	518598	Mid	NR Band n41	100	16.1	15.28	S	-0.02	0	LT211	DFT-S-OFDM	QPSK	270	0	5 mm	back	1:1	0.607	1.208	0.733	
2592.99	518598	Mid	NR Band n41	100	16.1	15.10	S	0.01	0	LT211	CP-OFDM	QPSK	1	1	5 mm	back	1:1	0.578	1.259	0.728	
2592.99	518598	Mid	NR Band n41	100	16.1	15.35	S	-0.02	0	LT211	DFT-S-OFDM	QPSK	1	137	5 mm	bottom	1:1	0.481	1.189	0.572	
2592.99	518598	Mid	NR Band n41	100	16.1	15.31	S	0.00	0	LT211	DFT-S-OFDM	QPSK	135	138	5 mm	bottom	1:1	0.558	1.199	0.669	
2592.99	518598	Mid	NR Band n41	100	16.1	15.28	S	0.00	0	LT211	DFT-S-OFDM	QPSK	270	0	5 mm	bottom	1:1	0.463	1.208	0.559	
2592.99	518598	Mid	NR Band n41	100	16.1	15.35	S	-0.03	0	LT211	DFT-S-OFDM	QPSK	1	137	5 mm	right	1:1	0.077	1.189	0.092	
2592.99	518598	Mid	NR Band n41	100	16.1	15.31	S	0.04	0	LT211	DFT-S-OFDM	QPSK	135	138	5 mm	right	1:1	0.071	1.199	0.085	
2592.99	518598	Mid	NR Band n41	100	16.8	15.82	N	-0.12	0	M1211	DFT-S-OFDM	QPSK	1	137	5 mm	back	1:1	0.305	1.253	0.382	
2592.99	518598	Mid	NR Band n41	100	16.8	15.68	N	-0.13	0	M1211	DFT-S-OFDM	QPSK	135	69	5 mm	back	1:1	0.404	1.294	0.523	
2592.99	518598	Mid	NR Band n41	100	16.8	15.82	N	-0.04	0	M1211	DFT-S-OFDM	QPSK	1	137	5 mm	top	1:1	0.433	1.253	0.543	
2592.99	518598	Mid	NR Band n41	100	16.8	15.68	N	0.06	0	M1211	DFT-S-OFDM	QPSK	135	69	5 mm	top	1:1	0.532	1.294	0.688	
2592.99	518598	Mid	NR Band n41	100	16.8	15.63	N	0.00	0	M1211	DFT-S-OFDM	QPSK	270	0	5 mm	top	1:1	0.452	1.309	0.592	
2592.99	518598	Mid	NR Band n41	100	16.8	15.65	N	-0.03	0	M1211	CP-OFDM	QPSK	1	1	5 mm	top	1:1	0.518	1.303	0.675	
2592.99	518598	Mid	NR Band n41	100	16.8	15.82	N	-0.06	0	M1211	DFT-S-OFDM	QPSK	1	137	5 mm	right	1:1	0.072	1.253	0.090	
2592.99	518598	Mid	NR Band n41	100	16.8	15.68	N	-0.03	0	M1211	DFT-S-OFDM	QPSK	135	69	5 mm	right	1:1	0.081	1.294	0.105	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 2-22
WLAN UMPC Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	13.0	12.99	0.10	5 mm	1	M3211	1	back	98.2	0.292	1.002	1.018	**0.298**	B2-22
2462	11	802.11b	DSSS	22	13.0	12.99	0.18	5 mm	1	M3211	1	bottom	98.2	0.148	1.002	1.018	0.151	
2412	1	802.11b	DSSS	22	13.0	12.95	0.13	5 mm	2	M3211	1	back	98.2	0.117	1.012	1.018	0.121	
2412	1	802.11b	DSSS	22	13.0	12.95	0.15	5 mm	2	M3211	1	top	98.2	0.153	1.012	1.018	0.158	
5290	58	802.11ac	OFDM	80	13.0	12.99	-0.12	5 mm	1	GV211	29.3	back	99.4	0.488	1.002	1.006	0.492	
5290	58	802.11ac	OFDM	80	13.0	12.99	-0.03	5 mm	1	GV211	29.3	bottom	99.4	0.665	1.002	1.006	0.670	
5290	58	802.11ac	OFDM	80	13.0	12.89	0.11	5 mm	2	GV211	29.3	back	99.6	0.197	1.026	1.004	0.203	
5290	58	802.11ac	OFDM	80	13.0	12.89	0.05	5 mm	2	GV211	29.3	top	99.6	0.209	1.026	1.004	0.215	
5530	106	802.11ac	OFDM	80	13.0	12.96	0.13	5 mm	1	GV211	29.3	back	99.4	0.706	1.009	1.006	0.717	
5610	122	802.11ac	OFDM	80	13.0	12.81	0.08	5 mm	1	GV211	29.3	back	99.4	0.662	1.045	1.006	0.696	
5530	106	802.11ac	OFDM	80	13.0	12.96	0.17	5 mm	1	GV211	29.3	bottom	99.4	0.993	1.009	1.006	1.008	
5610	122	802.11ac	OFDM	80	13.0	12.81	0.16	5 mm	1	GV211	29.3	bottom	99.4	1.090	1.045	1.006	**1.146**	B2-23
5690	138	802.11ac	OFDM	80	13.0	12.80	-0.15	5 mm	1	GV211	29.3	bottom	99.4	0.822	1.047	1.006	0.866	
5690	138	802.11ac	OFDM	80	13.0	12.89	0.13	5 mm	2	GV211	29.3	back	99.6	0.356	1.026	1.004	0.367	
5690	138	802.11ac	OFDM	80	13.0	12.89	0.00	5 mm	2	GV211	29.3	top	99.6	0.258	1.026	1.004	0.266	
5775	155	802.11ac	OFDM	80	13.0	12.95	0.19	5 mm	1	GV211	29.3	back	99.4	0.416	1.012	1.006	0.424	
5775	155	802.11ac	OFDM	80	13.0	12.95	0.05	5 mm	1	GV211	29.3	bottom	99.4	0.798	1.012	1.006	0.812	
5775	155	802.11ac	OFDM	80	13.0	12.59	-0.05	5 mm	2	GV211	29.3	back	99.6	0.273	1.099	1.004	0.301	
5775	155	802.11ac	OFDM	80	13.0	12.59	-0.13	5 mm	2	GV211	29.3	top	99.6	0.198	1.099	1.004	0.218	
5610	122	802.11ac	OFDM	80	13.0	12.81	0.16	5 mm	1	GV211	29.3	bottom	99.4	1.030	1.045	1.006	1.083	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**													**UMPC Body** **1.6 W/kg (mW/g)** averaged over 1 gram					

Note: Blue entry represents variability measurement.

Table 2-23
WLAN UMPC Body SAR for conditions with WWAN active

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	7.0	6.74	0.10	5 mm	1	KN211	1	back	98.2	0.051	1.062	1.018	0.055	
2462	11	802.11b	DSSS	22	7.0	6.74	0.12	5 mm	1	KN211	1	bottom	98.2	0.029	1.062	1.018	0.031	
2462	11	802.11b	DSSS	22	7.0	6.78	0.15	5 mm	2	KN211	1	back	98.2	0.031	1.052	1.018	0.033	
2462	11	802.11b	DSSS	22	7.0	6.78	0.10	5 mm	2	KN211	1	top	98.2	0.048	1.052	1.018	0.051	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.17	5 mm	1	GV211	29.3	back	99.4	0.094	1.102	1.006	0.104	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.07	5 mm	1	GV211	29.3	bottom	99.4	0.103	1.102	1.006	0.114	
5290	58	802.11ac	OFDM	80	7.0	6.10	0.11	5 mm	2	GV211	29.3	back	99.6	0.045	1.230	1.004	0.056	
5290	58	802.11ac	OFDM	80	7.0	6.10	-0.16	5 mm	2	GV211	29.3	top	99.6	0.051	1.230	1.004	0.063	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.03	5 mm	1	GV211	29.3	back	99.4	0.092	1.050	1.006	0.097	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.00	5 mm	1	GV211	29.3	bottom	99.4	0.165	1.050	1.006	0.174	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.00	5 mm	2	GV211	29.3	back	99.6	0.045	1.047	1.004	0.047	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.17	5 mm	2	GV211	29.3	top	99.6	0.050	1.047	1.004	0.053	
5775	155	802.11ac	OFDM	80	7.0	6.73	-0.09	5 mm	1	GV211	29.3	back	99.4	0.082	1.064	1.006	0.088	
5775	155	802.11ac	OFDM	80	7.0	6.73	-0.15	5 mm	1	GV211	29.3	bottom	99.4	0.150	1.064	1.006	0.161	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.16	5 mm	2	GV211	29.3	back	99.6	0.031	1.151	1.004	0.036	
5775	155	802.11ac	OFDM	80	7.0	6.39	-0.18	5 mm	2	GV211	29.3	top	99.6	0.028	1.151	1.004	0.032	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-24
DSS UMPC Body SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2402	0	Bluetooth	FHSS	8.5	7.03	0.17	5 mm	1	KN211	1	back	76.80	0.022	1.403	1.302	**0.040**	B2-24
2402	0	Bluetooth	FHSS	8.5	7.03	0.06	5 mm	1	KN211	1	bottom	76.80	0.009	1.403	1.302	0.016	
2441	39	Bluetooth	FHSS	7.0	5.28	-0.07	5 mm	2	KN211	1	back	76.80	0.002	1.486	1.302	0.004	
2441	39	Bluetooth	FHSS	7.0	5.28	0.06	5 mm	2	KN211	1	top	76.80	0.008	1.486	1.302	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram									

2.2 Standalone Body (Flat) SAR

Table 2-25
GSM 850 Body SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
848.80	251	GSM 850	GPRS	22.9	22.01	0.04	0 mm	S	GW211	2	1:4.15	back	0.421	1.227	0.517	B2-25
848.80	251	GSM 850	GPRS	22.9	22.01	0.01	0 mm	S	GW211	2	1:4.15	bottom	0.240	1.227	0.294	
848.80	251	GSM 850	GPRS	22.9	22.01	-0.13	0 mm	S	GW211	2	1:4.15	right	0.309	1.227	0.379	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 2-26
GSM 1900 Body SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	661	GSM 1900	GPRS	18.1	16.50	0.00	0 mm	S	GW211	2	1:4.15	back	0.379	1.445	0.548	B2-26
1880.00	661	GSM 1900	GPRS	18.1	16.50	-0.21	0 mm	S	GW211	2	1:4.15	bottom	0.140	1.445	0.202	
1880.00	661	GSM 1900	GPRS	18.1	16.50	-0.11	0 mm	S	GW211	2	1:4.15	right	0.273	1.445	0.394	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 2-27
UMTS 850 Body SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
826.40	4132	UMTS 850	RMC	16.7	15.66	-0.02	0 mm	S	LA211	1:1	back	0.526	1.271	0.669	
836.60	4183	UMTS 850	RMC	16.7	15.83	-0.10	0 mm	S	LA211	1:1	back	0.571	1.222	0.698	
846.60	4233	UMTS 850	RMC	16.7	15.90	-0.01	0 mm	S	LA211	1:1	back	0.584	1.202	0.702	B2-27
846.60	4233	UMTS 850	RMC	16.7	15.90	0.00	0 mm	S	LA211	1:1	bottom	0.302	1.202	0.363	
846.60	4233	UMTS 850	RMC	16.7	15.90	-0.11	0 mm	S	LA211	1:1	right	0.416	1.202	0.500	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 2-28
UMTS 1900 Body SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1852.40	9262	UMTS 1900	RMC	11.9	10.75	0.02	0 mm	S	HR211	1:1	back	0.514	1.303	0.670	
1880.00	9400	UMTS 1900	RMC	11.9	10.89	0.02	0 mm	S	HR211	1:1	back	0.535	1.262	0.675	
1907.60	9538	UMTS 1900	RMC	11.9	10.85	0.01	0 mm	S	HR211	1:1	back	0.564	1.274	0.719	B2-28
1880.00	9400	UMTS 1900	RMC	11.9	10.89	-0.04	0 mm	S	HR211	1:1	bottom	0.151	1.262	0.191	
1880.00	9400	UMTS 1900	RMC	11.9	10.89	-0.01	0 mm	S	HR211	1:1	right	0.396	1.262	0.500	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 2-29
LTE Band 71 Body SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	18.1	16.67	0.10	0	S	KF211	QPSK	1	50	0 mm	back	1:1	0.270	1.390	0.375	
680.50	133297	Mid	LTE Band 71	20	18.1	16.75	0.17	0	S	KF211	QPSK	50	25	0 mm	back	1:1	0.272	1.365	0.371	
680.50	133297	Mid	LTE Band 71	20	18.1	16.67	0.08	0	S	KF211	QPSK	1	50	0 mm	bottom	1:1	0.151	1.390	0.210	
680.50	133297	Mid	LTE Band 71	20	18.1	16.75	0.11	0	S	KF211	QPSK	50	25	0 mm	bottom	1:1	0.153	1.365	0.209	
680.50	133297	Mid	LTE Band 71	20	18.1	16.67	-0.15	0	S	KF211	QPSK	1	50	0 mm	right	1:1	0.375	1.390	0.521	
680.50	133297	Mid	LTE Band 71	20	18.1	16.75	-0.14	0	S	KF211	QPSK	50	25	0 mm	right	1:1	0.416	1.365	0.568	
680.50	133297	Mid	LTE Band 71	20	19.1	18.21	-0.13	0	N	KF211	QPSK	1	0	0 mm	back	1:1	0.318	1.227	0.390	
680.50	133297	Mid	LTE Band 71	20	19.1	18.18	-0.07	0	N	KF211	QPSK	50	0	0 mm	back	1:1	0.323	1.236	0.399	
680.50	133297	Mid	LTE Band 71	20	19.1	18.21	0.00	0	N	KF211	QPSK	1	0	0 mm	top	1:1	0.360	1.227	0.442	
680.50	133297	Mid	LTE Band 71	20	19.1	18.18	-0.04	0	N	KF211	QPSK	50	0	0 mm	top	1:1	0.438	1.236	0.541	B2-29
680.50	133297	Mid	LTE Band 71	20	19.1	18.21	-0.19	0	N	KF211	QPSK	1	0	0 mm	right	1:1	0.373	1.227	0.458	
680.50	133297	Mid	LTE Band 71	20	19.1	18.18	-0.13	0	N	KF211	QPSK	50	0	0 mm	right	1:1	0.374	1.236	0.462	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-30
LTE Band 12 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	18.7	17.26	0.05	0	S	KF211	QPSK	1	0	0 mm	back	1:1	0.347	1.393	0.483	
707.50	23095	Mid	LTE Band 12	10	18.7	17.45	0.04	0	S	KF211	QPSK	25	0	0 mm	back	1:1	0.356	1.334	0.475	
707.50	23095	Mid	LTE Band 12	10	18.7	17.26	0.01	0	S	KF211	QPSK	1	0	0 mm	bottom	1:1	0.236	1.393	0.329	
707.50	23095	Mid	LTE Band 12	10	18.7	17.45	-0.01	0	S	KF211	QPSK	25	0	0 mm	bottom	1:1	0.242	1.334	0.323	
707.50	23095	Mid	LTE Band 12	10	18.7	17.26	-0.19	0	S	KF211	QPSK	1	0	0 mm	right	1:1	0.379	1.393	0.528	
707.50	23095	Mid	LTE Band 12	10	18.7	17.45	-0.14	0	S	KF211	QPSK	25	0	0 mm	right	1:1	0.442	1.334	0.590	B2-30
707.50	23095	Mid	LTE Band 12	10	18.5	17.25	-0.12	0	N	KF211	QPSK	1	0	0 mm	back	1:1	0.348	1.334	0.464	
707.50	23095	Mid	LTE Band 12	10	18.5	17.28	-0.01	0	N	KF211	QPSK	25	0	0 mm	back	1:1	0.343	1.324	0.454	
707.50	23095	Mid	LTE Band 12	10	18.5	17.25	-0.02	0	N	KF211	QPSK	1	0	0 mm	top	1:1	0.378	1.334	0.504	
707.50	23095	Mid	LTE Band 12	10	18.5	17.28	-0.01	0	N	KF211	QPSK	25	0	0 mm	top	1:1	0.436	1.324	0.577	
707.50	23095	Mid	LTE Band 12	10	18.5	17.25	0.09	0	N	KF211	QPSK	1	0	0 mm	right	1:1	0.317	1.334	0.423	
707.50	23095	Mid	LTE Band 12	10	18.5	17.28	0.04	0	N	KF211	QPSK	25	0	0 mm	right	1:1	0.351	1.324	0.465	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-31
LTE Band 13 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	17.4	16.05	0.10	0	S	KF211	QPSK	1	0	0 mm	back	1:1	0.325	1.365	0.444	
782.00	23230	Mid	LTE Band 13	10	17.4	16.20	0.09	0	S	KF211	QPSK	25	0	0 mm	back	1:1	0.341	1.318	0.449	
782.00	23230	Mid	LTE Band 13	10	17.4	16.05	0.04	0	S	KF211	QPSK	1	0	0 mm	bottom	1:1	0.279	1.365	0.381	
782.00	23230	Mid	LTE Band 13	10	17.4	16.20	0.08	0	S	KF211	QPSK	25	0	0 mm	bottom	1:1	0.284	1.318	0.374	
782.00	23230	Mid	LTE Band 13	10	17.4	16.05	-0.14	0	S	KF211	QPSK	1	0	0 mm	right	1:1	0.373	1.365	0.509	
782.00	23230	Mid	LTE Band 13	10	17.4	16.20	-0.18	0	S	KF211	QPSK	25	0	0 mm	right	1:1	0.444	1.318	0.585	
782.00	23230	Mid	LTE Band 13	10	18.6	17.59	-0.05	0	N	M1211	QPSK	1	0	0 mm	back	1:1	0.462	1.262	0.583	
782.00	23230	Mid	LTE Band 13	10	18.6	17.78	-0.02	0	N	M1211	QPSK	25	0	0 mm	back	1:1	0.542	1.208	0.655	B2-31
782.00	23230	Mid	LTE Band 13	10	18.6	17.59	-0.06	0	N	M1211	QPSK	1	0	0 mm	top	1:1	0.437	1.262	0.551	
782.00	23230	Mid	LTE Band 13	10	18.6	17.78	-0.03	0	N	M1211	QPSK	25	0	0 mm	top	1:1	0.463	1.208	0.559	
782.00	23230	Mid	LTE Band 13	10	18.6	17.59	0.02	0	N	M1211	QPSK	1	0	0 mm	right	1:1	0.388	1.262	0.490	
782.00	23230	Mid	LTE Band 13	10	18.6	17.78	0.05	0	N	M1211	QPSK	25	0	0 mm	right	1:1	0.442	1.208	0.534	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-32
LTE Band 14 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	17.6	16.35	0.07	0	S	KF211	QPSK	1	0	0 mm	back	1:1	0.407	1.334	0.543	
793.00	23330	Mid	LTE Band 14	10	17.6	16.26	0.05	0	S	KF211	QPSK	25	0	0 mm	back	1:1	0.405	1.361	0.551	
793.00	23330	Mid	LTE Band 14	10	17.6	16.35	-0.07	0	S	KF211	QPSK	1	0	0 mm	bottom	1:1	0.271	1.334	0.362	
793.00	23330	Mid	LTE Band 14	10	17.6	16.26	-0.03	0	S	KF211	QPSK	25	0	0 mm	bottom	1:1	0.270	1.361	0.367	
793.00	23330	Mid	LTE Band 14	10	17.6	16.35	-0.13	0	S	KF211	QPSK	1	0	0 mm	right	1:1	0.302	1.334	0.403	
793.00	23330	Mid	LTE Band 14	10	17.6	16.26	-0.17	0	S	KF211	QPSK	25	0	0 mm	right	1:1	0.313	1.361	0.426	
793.00	23330	Mid	LTE Band 14	10	17.7	17.09	0.01	0	N	M1211	QPSK	1	0	0 mm	back	1:1	0.397	1.151	0.457	
793.00	23330	Mid	LTE Band 14	10	17.7	17.02	0.04	0	N	M1211	QPSK	25	0	0 mm	back	1:1	0.379	1.169	0.443	
793.00	23330	Mid	LTE Band 14	10	17.7	17.09	-0.12	0	N	M1211	QPSK	1	0	0 mm	top	1:1	0.453	1.151	0.521	
793.00	23330	Mid	LTE Band 14	10	17.7	17.02	-0.07	0	N	M1211	QPSK	25	0	0 mm	top	1:1	0.461	1.169	0.539	B2-32
793.00	23330	Mid	LTE Band 14	10	17.7	17.09	-0.02	0	N	M1211	QPSK	1	0	0 mm	right	1:1	0.259	1.151	0.298	
793.00	23330	Mid	LTE Band 14	10	17.7	17.02	0.02	0	N	M1211	QPSK	25	0	0 mm	right	1:1	0.276	1.169	0.323	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 2-33
LTE Band 26 (Cell) Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.58	0.01	0	S	LT211	QPSK	1	74	0 mm	back	1:1	0.510	1.294	0.660	
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.79	0.00	0	S	LT211	QPSK	36	37	0 mm	back	1:1	0.542	1.233	0.668	B2-33
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.58	0.01	0	S	LT211	QPSK	1	74	0 mm	bottom	1:1	0.311	1.294	0.402	
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.79	0.04	0	S	LT211	QPSK	36	37	0 mm	bottom	1:1	0.324	1.233	0.399	
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.58	0.07	0	S	LT211	QPSK	1	74	0 mm	right	1:1	0.340	1.294	0.440	
831.50	26865	Mid	LTE Band 26 (Cell)	15	16.7	15.79	0.07	0	S	LT211	QPSK	36	37	0 mm	right	1:1	0.374	1.233	0.461	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.92	-0.16	0	N	X5212	QPSK	1	74	0 mm	back	1:1	0.150	1.374	0.206	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.98	-0.15	0	N	X5212	QPSK	36	37	0 mm	back	1:1	0.165	1.355	0.224	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.92	-0.06	0	N	X5212	QPSK	1	74	0 mm	top	1:1	0.151	1.374	0.207	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.98	-0.11	0	N	X5212	QPSK	36	37	0 mm	top	1:1	0.162	1.355	0.220	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.92	-0.08	0	N	X5212	QPSK	1	74	0 mm	right	1:1	0.097	1.374	0.133	
831.50	26865	Mid	LTE Band 26 (Cell)	15	17.3	15.98	0.00	0	N	X5212	QPSK	36	37	0 mm	right	1:1	0.100	1.355	0.136	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 2-34
LTE Band 5 (Cell) Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.74	0.01	0	S	X5212	QPSK	1	49	0 mm	back	1:1	0.493	1.247	0.615	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.91	-0.17	0	S	X5212	QPSK	25	25	0 mm	back	1:1	0.512	1.199	0.614	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.51	0.01	0	S	X5212	QPSK	1	49	0 mm	back	1:1	0.487	1.315	0.640	
	SCC	843.70	20597			5								1	0							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.74	0.05	0	S	X5212	QPSK	1	49	0 mm	bottom	1:1	0.259	1.247	0.323	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.91	0.08	0	S	X5212	QPSK	25	25	0 mm	bottom	1:1	0.275	1.199	0.330	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.74	-0.07	0	S	X5212	QPSK	1	49	0 mm	right	1:1	0.275	1.247	0.343	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.7	15.91	-0.06	0	S	X5212	QPSK	25	25	0 mm	right	1:1	0.292	1.199	0.350	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	15.85	0.13	0	N	X5212	QPSK	1	0	0 mm	back	1:1	0.499	1.396	0.697	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	15.95	0.09	0	N	X5212	QPSK	1	25	0 mm	back	1:1	0.505	1.365	0.689	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	16.11	0.11	0	N	X5212	QPSK	25	25	0 mm	back	1:1	0.506	1.315	0.665	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	15.91	-0.19	0	N	X5212	QPSK	1	0	0 mm	back	1:1	0.530	1.377	0.730	B2-34
	SCC	829.30	20453			5									24							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	15.95	-0.02	0	N	X5212	QPSK	1	25	0 mm	top	1:1	0.328	1.365	0.448	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	16.11	-0.04	0	N	X5212	QPSK	25	25	0 mm	top	1:1	0.331	1.315	0.435	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	15.95	0.02	0	N	X5212	QPSK	1	25	0 mm	right	1:1	0.299	1.365	0.408	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.3	16.11	0.03	0	N	X5212	QPSK	25	25	0 mm	right	1:1	0.295	1.315	0.388	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 2-35
LTE Band 66 (AWS) Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.74	-0.18	0	S	LT211	QPSK	1	0	0 mm	back	1:1	0.424	1.500	0.636	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	11.5	9.70	-0.17	0	S	LT211	QPSK	1	0	0 mm	back	1:1	0.454	1.514	0.687	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	11.5	9.58	-0.16	0	S	LT211	QPSK	1	0	0 mm	back	1:1	0.472	1.556	0.734	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.91	-0.14	0	S	LT211	QPSK	50	25	0 mm	back	1:1	0.440	1.442	0.634	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	11.5	9.50	-0.18	0	S	LT211	QPSK	1	0	0 mm	back	1:1	0.458	1.585	0.726	
	SCC	1750.20	132374												99							
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.74	-0.02	0	S	LT211	QPSK	1	0	0 mm	bottom	1:1	0.190	1.500	0.285	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.91	-0.01	0	S	LT211	QPSK	50	25	0 mm	bottom	1:1	0.204	1.442	0.294	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.74	0.03	0	S	LT211	QPSK	1	0	0 mm	right	1:1	0.286	1.500	0.429	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	11.5	9.91	-0.02	0	S	LT211	QPSK	50	25	0 mm	right	1:1	0.286	1.442	0.412	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.06	-0.17	0	N	LT211	QPSK	1	0	0 mm	back	1:1	0.464	1.271	0.590	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.14	-0.19	0	N	LT211	QPSK	50	0	0 mm	back	1:1	0.474	1.247	0.591	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.09	-0.02	0	N	LT211	QPSK	50	50	0 mm	back	1:1	0.423	1.262	0.534	
2 CC Uplink	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.80	0.06	0	N	LT211	QPSK	50	50	0 mm	back	1:1	0.522	1.072	0.560	B2-35
	SCC	1739.80	132270												0							
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.06	-0.06	0	N	LT211	QPSK	1	0	0 mm	top	1:1	0.310	1.271	0.394	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.14	-0.06	0	N	LT211	QPSK	50	0	0 mm	top	1:1	0.310	1.247	0.387	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.06	-0.03	0	N	LT211	QPSK	1	0	0 mm	right	1:1	0.308	1.271	0.391	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.1	11.14	-0.08	0	N	LT211	QPSK	50	0	0 mm	right	1:1	0.306	1.247	0.382	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 2-36
LTE Band 25 (PCS) Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	0.01	0	S	X5212	QPSK	1	99	0 mm	back	1:1	0.498	1.459	0.727	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.9	10.20	0.00	0	S	X5212	QPSK	50	50	0 mm	back	1:1	0.513	1.479	**0.759**	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	0.01	0	S	X5212	QPSK	50	50	0 mm	back	1:1	0.512	1.459	0.747	
1905.00	26590	High	LTE Band 25 (PCS)	20	11.9	10.23	-0.02	0	S	X5212	QPSK	50	0	0 mm	back	1:1	0.519	1.469	**0.762**	B2-36
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	0.01	0	S	X5212	QPSK	1	99	0 mm	bottom	1:1	0.134	1.459	0.196	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	0.00	0	S	X5212	QPSK	50	50	0 mm	bottom	1:1	0.140	1.459	0.204	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	-0.02	0	S	X5212	QPSK	1	99	0 mm	right	1:1	0.350	1.459	0.511	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.9	10.26	0.01	0	S	X5212	QPSK	50	50	0 mm	right	1:1	0.374	1.459	0.546	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.50	0.04	0	N	M1211	QPSK	1	99	0 mm	back	1:1	0.442	1.122	0.496	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.27	0.15	0	N	M1211	QPSK	50	25	0 mm	back	1:1	0.444	1.183	0.525	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.50	-0.09	0	N	M1211	QPSK	1	99	0 mm	top	1:1	0.360	1.122	0.404	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.27	-0.05	0	N	M1211	QPSK	50	25	0 mm	top	1:1	0.357	1.183	0.422	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.50	-0.14	0	N	M1211	QPSK	1	99	0 mm	right	1:1	0.314	1.122	0.352	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.0	11.27	-0.06	0	N	M1211	QPSK	50	25	0 mm	right	1:1	0.310	1.183	0.367	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**														**Body** **1.6 W/kg (mW/g)** averaged over 1 gram							

Table 2-37
LTE Band 30 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	10.8	9.73	0.16	0	S	LT211	QPSK	1	49	0 mm	back	1:1	0.506	1.279	0.647	B2-37
2310.00	27710	Mid	LTE Band 30	10	10.8	9.68	-0.01	0	S	LT211	QPSK	25	12	0 mm	back	1:1	0.493	1.294	0.638	
2310.00	27710	Mid	LTE Band 30	10	10.8	9.73	0.02	0	S	LT211	QPSK	1	49	0 mm	bottom	1:1	0.272	1.279	0.348	
2310.00	27710	Mid	LTE Band 30	10	10.8	9.68	0.01	0	S	LT211	QPSK	25	12	0 mm	bottom	1:1	0.277	1.294	0.358	
2310.00	27710	Mid	LTE Band 30	10	10.8	9.73	0.01	0	S	LT211	QPSK	1	49	0 mm	right	1:1	0.141	1.279	0.180	
2310.00	27710	Mid	LTE Band 30	10	10.8	9.68	-0.05	0	S	LT211	QPSK	25	12	0 mm	right	1:1	0.144	1.294	0.186	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.06	0.06	0	N	M1211	QPSK	1	0	0 mm	back	1:1	0.415	1.186	0.492	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.09	0.02	0	N	M1211	QPSK	25	12	0 mm	back	1:1	0.450	1.178	0.530	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.06	-0.03	0	N	M1211	QPSK	1	0	0 mm	top	1:1	0.446	1.186	0.529	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.09	0.00	0	N	M1211	QPSK	25	12	0 mm	top	1:1	0.420	1.178	0.495	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.06	-0.02	0	N	M1211	QPSK	1	0	0 mm	right	1:1	0.225	1.186	0.267	
2310.00	27710	Mid	LTE Band 30	10	12.8	12.09	0.02	0	N	M1211	QPSK	25	12	0 mm	right	1:1	0.208	1.178	0.245	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**														**Body** **1.6 W/kg (mW/g)** averaged over 1 gram							

Table 2-38
LTE Band 7 Body SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.41	-0.11	0	S	LT211	QPSK	1	0	0 mm	back	1:1	0.526	1.346	0.708	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.45	0.02	0	S	LT211	QPSK	50	25	0 mm	back	1:1	0.542	1.334	0.723	B2-38
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.44	0.01	0	S	LT211	QPSK	50	50	0 mm	back	1:1	0.508	1.337	0.679	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	9.7	8.24	0.03	0	S	LT211	QPSK	50	0	0 mm	back	1:1	0.490	1.400	0.686	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	9.7	8.15	0.04	0	S	LT211	QPSK	50	50	0 mm	back	1:1	0.489	1.429	0.699	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	9.7	8.40	0.00	0	S	LT211	QPSK	50	50	0 mm	back	1:1	0.511	1.349	0.689	
	SCC	2529.80	21048												0							
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.41	-0.06	0	S	LT211	QPSK	1	0	0 mm	bottom	1:1	0.382	1.346	0.514	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.45	-0.05	0	S	LT211	QPSK	50	25	0 mm	bottom	1:1	0.416	1.334	0.555	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.41	-0.08	0	S	LT211	QPSK	1	0	0 mm	right	1:1	0.083	1.346	0.112	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	9.7	8.45	-0.03	0	S	LT211	QPSK	50	25	0 mm	right	1:1	0.084	1.334	0.112	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.53	-0.03	0	N	M1211	QPSK	1	0	0 mm	back	1:1	0.277	1.194	0.331	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.46	-0.12	0	N	M1211	QPSK	50	50	0 mm	back	1:1	0.294	1.213	0.357	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	10.3	9.80	0.00	0	N	M1211	QPSK	50	50	0 mm	back	1:1	0.330	1.122	0.370	
	SCC	2529.80	21048												0							
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.53	0.01	0	N	M1211	QPSK	1	0	0 mm	top	1:1	0.253	1.194	0.302	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.46	-0.03	0	N	M1211	QPSK	50	50	0 mm	top	1:1	0.271	1.213	0.329	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.53	-0.10	0	N	M1211	QPSK	1	0	0 mm	right	1:1	0.113	1.194	0.135	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	10.3	9.46	0.06	0	N	M1211	QPSK	50	50	0 mm	right	1:1	0.120	1.213	0.146	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	Body 1.6 W/kg (mW/g) averaged over 1 gram

Table 2-39
LTE Band 41 Body SAR

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	11.1	10.37	0.04	0	S	HR211	QPSK	1	50	0 mm	back	1:1.58	0.524	1.183	0.620	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	11.1	10.13	0.01	0	S	HR211	QPSK	1	0	0 mm	back	1:1.58	0.543	1.250	0.679	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.50	0.01	0	S	HR211	QPSK	1	0	0 mm	back	1:1.58	0.586	1.148	0.673	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	11.1	10.30	0.02	0	S	HR211	QPSK	1	0	0 mm	back	1:1.58	0.583	1.202	0.701	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	11.1	10.41	0.03	0	S	HR211	QPSK	1	0	0 mm	back	1:1.58	0.558	1.172	0.654	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	11.1	10.26	0.01	0	S	HR211	QPSK	50	25	0 mm	back	1:1.58	0.542	1.213	0.657	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	11.1	10.29	-0.01	0	S	HR211	QPSK	50	50	0 mm	back	1:1.58	0.522	1.205	0.629	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.58	0.00	0	S	HR211	QPSK	50	50	0 mm	back	1:1.58	0.611	1.127	0.689	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	11.1	10.42	0.00	0	S	HR211	QPSK	50	25	0 mm	back	1:1.58	0.558	1.169	0.652	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	11.1	10.45	0.00	0	S	HR211	QPSK	50	25	0 mm	back	1:1.58	0.579	1.161	0.672	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.49	0.01	0	S	HR211	QPSK	100	0	0 mm	back	1:1.58	0.560	1.151	0.645	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	12.7	12.15	0.00	0	S	HR211	QPSK	1	0	0 mm	back	1:2.31	0.558	1.135	0.633	
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	LTE Band 41	20	11.1	10.10	0.01	0	S	HR211	QPSK	1	0	0 mm	back	1:1.58	0.553	1.259	0.696	
	SCC	2616.70	40857												99							
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.50	-0.02	0	S	HR211	QPSK	1	0	0 mm	bottom	1:1.58	0.437	1.148	0.502	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.58	0.00	0	S	HR211	QPSK	50	50	0 mm	bottom	1:1.58	0.444	1.127	0.500	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.50	0.06	0	S	HR211	QPSK	1	0	0 mm	right	1:1.58	0.084	1.148	0.096	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	11.1	10.58	-0.15	0	S	HR211	QPSK	50	50	0 mm	right	1:1.58	0.085	1.127	0.096	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	12.3	10.66	0.02	0	N	X5212	QPSK	1	0	0 mm	back	1:1.58	0.392	1.459	0.572	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	12.3	10.63	0.03	0	N	X5212	QPSK	1	0	0 mm	back	1:1.58	0.366	1.469	0.538	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	12.3	10.87	-0.12	0	N	X5212	QPSK	1	0	0 mm	back	1:1.58	0.383	1.390	0.532	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	12.3	11.20	-0.18	0	N	X5212	QPSK	1	0	0 mm	back	1:1.58	0.546	1.288	0.703	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.21	-0.01	0	N	X5212	QPSK	1	0	0 mm	back	1:1.58	0.543	1.285	0.698	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	12.3	10.70	-0.01	0	N	X5212	QPSK	50	25	0 mm	back	1:1.58	0.401	1.445	0.579	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	12.3	10.83	-0.02	0	N	X5212	QPSK	50	0	0 mm	back	1:1.58	0.374	1.403	0.525	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	12.3	10.83	0.01	0	N	X5212	QPSK	50	25	0 mm	back	1:1.58	0.384	1.403	0.539	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	12.3	11.09	-0.04	0	N	X5212	QPSK	50	25	0 mm	back	1:1.58	0.530	1.321	0.700	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.07	0.00	0	N	X5212	QPSK	50	0	0 mm	back	1:1.58	0.512	1.327	0.679	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.10	0.01	0	N	X5212	QPSK	50	25	0 mm	back	1:1.58	0.535	1.318	0.705	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.09	-0.01	0	N	X5212	QPSK	100	0	0 mm	back	1:1.58	0.531	1.321	0.701	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	13.9	12.70	-0.16	0	N	X5212	QPSK	50	25	0 mm	back	1:2.31	0.520	1.318	0.685	
1 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	12.3	12.30	-0.02	0	N	X5212	QPSK	50	0	0 mm	back	1:1.58	0.666	1.000	0.666	B2-39
	SCC	2660.20	41292												50							
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.21	-0.02	0	N	X5212	QPSK	1	0	0 mm	top	1:1.58	0.438	1.285	0.563	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.10	-0.01	0	N	X5212	QPSK	50	25	0 mm	top	1:1.58	0.428	1.318	0.564	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.21	-0.15	0	N	X5212	QPSK	1	0	0 mm	right	1:1.58	0.066	1.285	0.085	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	12.3	11.10	0.00	0	N	X5212	QPSK	50	25	0 mm	right	1:1.58	0.064	1.318	0.084	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 2-40
LTE Band 48 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.03	-0.04	0	S	LB211	QPSK	1	99	0 mm	back	1:1.58	0.480	1.194	0.573	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.19	-0.04	0	S	LB211	QPSK	50	25	0 mm	back	1:1.58	0.519	1.151	0.597	B2-40
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.10	-0.05	0	S	LB211	QPSK	50	50	0 mm	back	1:1.58	0.507	1.175	0.596	
2 CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	11.8	10.83	0.07	0	S	LB211	QPSK	50	50	0 mm	back	1:1.58	0.484	1.250	**0.605**	
	SCC	3666.50	56405												0							
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.03	-0.03	0	S	LB211	QPSK	1	99	0 mm	bottom	1:1.58	0.388	1.194	0.463	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.19	-0.01	0	S	LB211	QPSK	50	25	0 mm	bottom	1:1.58	0.407	1.151	0.468	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.03	0.01	0	S	LB211	QPSK	1	99	0 mm	right	1:1.58	0.178	1.194	0.213	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	11.8	11.19	0.01	0	S	LB211	QPSK	50	25	0 mm	right	1:1.58	0.171	1.151	0.197	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 2-41
NR Band n71 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	18.1	17.51	S	0.15	0.0	LT211	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.527	1.146	0.604	B2-41
680.50	136100	Mid	NR Band n71	20	18.1	17.18	S	0.13	0.0	LT211	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.495	1.236	0.612	
680.50	136100	Mid	NR Band n71	20	18.1	17.33	S	0.14	0.0	LT211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.508	1.194	0.607	
680.50	136100	Mid	NR Band n71	20	18.1	17.51	S	0.16	0.0	LT211	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.217	1.146	0.249	
680.50	136100	Mid	NR Band n71	20	18.1	17.18	S	0.16	0.0	LT211	DFT-S-OFDM	QPSK	50	28	0 mm	bottom	1:1	0.227	1.236	0.281	
680.50	136100	Mid	NR Band n71	20	18.1	17.51	S	-0.03	0.0	LT211	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.354	1.146	0.406	
680.50	136100	Mid	NR Band n71	20	18.1	17.18	S	-0.03	0.0	LT211	DFT-S-OFDM	QPSK	50	28	0 mm	right	1:1	0.404	1.236	0.499	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	-0.04	0.0	M6211	DFT-S-OFDM	QPSK	1	53	0 mm	back	1:1	0.401	1.172	0.470	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	0.04	0.0	M6211	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.332	1.172	0.389	
680.50	136100	Mid	NR Band n71	20	19.1	18.19	N	0.00	0.0	M6211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.324	1.233	0.399	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	0.00	0.0	M6211	DFT-S-OFDM	QPSK	1	53	0 mm	top	1:1	0.330	1.172	0.387	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	-0.04	0.0	M6211	DFT-S-OFDM	QPSK	50	28	0 mm	top	1:1	0.339	1.172	0.397	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	0.05	0.0	M6211	DFT-S-OFDM	QPSK	1	53	0 mm	right	1:1	0.300	1.172	0.352	
680.50	136100	Mid	NR Band n71	20	19.1	18.41	N	0.04	0.0	M6211	DFT-S-OFDM	QPSK	50	28	0 mm	right	1:1	0.303	1.172	0.355	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 2-42
NR Band n5 (Cell) Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.15	S	0.00	0.0	GL211	DFT-S-OFDM	QPSK	1	104	0 mm	back	1:1	0.512	1.135	0.581	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.00	S	0.13	0.0	GL211	DFT-S-OFDM	QPSK	50	56	0 mm	back	1:1	0.543	1.175	0.638	B2-42
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	15.78	S	0.01	0.0	GL211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.517	1.236	0.639	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.15	S	0.00	0.0	GL211	DFT-S-OFDM	QPSK	1	104	0 mm	bottom	1:1	0.280	1.135	0.318	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.00	S	-0.03	0.0	GL211	DFT-S-OFDM	QPSK	50	56	0 mm	bottom	1:1	0.287	1.175	0.337	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.15	S	-0.08	0.0	GL211	DFT-S-OFDM	QPSK	1	104	0 mm	right	1:1	0.268	1.135	0.304	
836.50	167300	Mid	NR Band n5 (Cell)	20	16.7	16.00	S	-0.15	0.0	GL211	DFT-S-OFDM	QPSK	50	56	0 mm	right	1:1	0.235	1.175	0.276	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.88	N	0.11	0.0	L8211	DFT-S-OFDM	QPSK	1	104	0 mm	back	1:1	0.433	1.102	0.477	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.73	N	0.02	0.0	L8211	DFT-S-OFDM	QPSK	50	56	0 mm	back	1:1	0.407	1.140	0.464	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.73	N	0.10	0.0	L8211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.471	1.140	0.537	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.88	N	0.08	0.0	L8211	DFT-S-OFDM	QPSK	1	104	0 mm	top	1:1	0.230	1.102	0.253	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.73	N	-0.04	0.0	L8211	DFT-S-OFDM	QPSK	50	56	0 mm	top	1:1	0.259	1.140	0.295	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.88	N	-0.01	0.0	L8211	DFT-S-OFDM	QPSK	1	104	0 mm	right	1:1	0.240	1.102	0.264	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.3	16.73	N	0.15	0.0	L8211	DFT-S-OFDM	QPSK	50	56	0 mm	right	1:1	0.250	1.140	0.285	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-43
NR Band n66 (AWS) Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.82	S	-0.15	0	KQ211	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.540	1.169	0.631	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.80	S	-0.19	0	KQ211	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.580	1.175	0.682	B2-43
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.45	S	-0.17	0	KQ211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.496	1.274	0.632	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.82	S	-0.15	0	KQ211	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.276	1.169	0.323	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.80	S	-0.12	0	KQ211	DFT-S-OFDM	QPSK	108	54	0 mm	bottom	1:1	0.280	1.175	0.329	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.82	S	-0.14	0	KQ211	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.329	1.169	0.385	
1745.00	349000	Mid	NR Band n66 (AWS)	40	11.5	10.80	S	-0.08	0	KQ211	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.332	1.175	0.390	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.19	N	0.02	0	H7211	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.487	1.233	0.600	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.21	N	0.01	0	H7211	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.454	1.227	0.557	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	10.92	N	0.02	0	H7211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.389	1.312	0.510	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.19	N	-0.02	0	H7211	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.346	1.233	0.427	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.21	N	-0.04	0	H7211	DFT-S-OFDM	QPSK	108	54	0 mm	top	1:1	0.345	1.227	0.423	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.19	N	-0.09	0	H7211	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.335	1.233	0.413	
1745.00	349000	Mid	NR Band n66 (AWS)	40	12.1	11.21	N	-0.08	0	H7211	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.337	1.227	0.413	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-44
NR Band n25 (PCS) Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.19	S	0.03	0	J6211	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.521	1.178	0.614	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.20	S	0.00	0	J6211	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.568	1.175	0.667	B2-44
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.23	S	0.00	0	J6211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.538	1.167	0.628	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.19	S	-0.16	0	J6211	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.153	1.178	0.180	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.20	S	-0.18	0	J6211	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.149	1.175	0.175	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.19	S	-0.14	0	J6211	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.388	1.178	0.457	
1882.50	376500	Mid	NR Band n25 (PCS)	40	11.9	11.20	S	-0.15	0	J6211	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.368	1.175	0.432	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.42	N	-0.01	0	M6211	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.474	1.143	0.542	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.19	N	-0.02	0	M6211	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.453	1.205	0.546	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.63	N	-0.18	0	M6211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.421	1.089	0.458	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.42	N	-0.02	0	M6211	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.271	1.143	0.310	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.19	N	0.16	0	M6211	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.288	1.205	0.347	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.42	N	0.05	0	M6211	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.247	1.143	0.282	
1882.50	376500	Mid	NR Band n25 (PCS)	40	12.0	11.19	N	0.00	0	M6211	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.246	1.205	0.296	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 2-45
NR Band n41 Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	9.1	7.61	S	0.03	0	LT211	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.443	1.409	0.624	
2592.99	518598	Mid	NR Band n41	100	9.1	7.62	S	0.03	0	LT211	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.477	1.406	0.671	B2-45
2592.99	518598	Mid	NR Band n41	100	9.1	7.60	S	0.00	0	LT211	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.446	1.413	0.630	
2592.99	518598	Mid	NR Band n41	100	9.1	7.21	S	-0.06	0	LT211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.421	1.545	0.650	
2592.99	518598	Mid	NR Band n41	100	9.1	7.61	S	-0.06	0	LT211	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.350	1.409	0.493	
2592.99	518598	Mid	NR Band n41	100	9.1	7.62	S	-0.04	0	LT211	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.380	1.406	0.534	
2592.99	518598	Mid	NR Band n41	100	9.1	7.61	S	-0.03	0	LT211	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.093	1.409	0.131	
2592.99	518598	Mid	NR Band n41	100	9.1	7.62	S	-0.11	0	LT211	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.085	1.406	0.120	
2592.99	518598	Mid	NR Band n41	100	10.3	9.26	N	-0.06	0	M1211	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.353	1.271	0.449	
2592.99	518598	Mid	NR Band n41	100	10.3	9.25	N	-0.14	0	M1211	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.306	1.274	0.390	
2592.99	518598	Mid	NR Band n41	100	10.3	8.87	N	-0.08	0	M1211	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.433	1.390	0.602	
2592.99	518598	Mid	NR Band n41	100	10.3	9.26	N	0.00	0	M1211	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.344	1.271	0.437	
2592.99	518598	Mid	NR Band n41	100	10.3	9.25	N	0.01	0	M1211	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.349	1.274	0.445	
2592.99	518598	Mid	NR Band n41	100	10.3	9.26	N	0.00	0	M1211	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.057	1.271	0.072	
2592.99	518598	Mid	NR Band n41	100	10.3	9.25	N	-0.06	0	M1211	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.063	1.274	0.080	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 2-46
WLAN Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	7.0	6.74	0.12	0 mm	1	KN211	1	back	98.2	0.239	1.062	1.018	0.258	
2462	11	802.11b	DSSS	22	7.0	6.74	0.16	0 mm	1	KN211	1	bottom	98.2	0.143	1.062	1.018	0.155	
2462	11	802.11b	DSSS	22	7.0	6.78	-0.18	0 mm	2	KN211	1	back	98.2	0.119	1.052	1.018	0.127	
2462	11	802.11b	DSSS	22	7.0	6.78	0.20	0 mm	2	KN211	1	top	98.2	0.284	1.052	1.018	**0.304**	B2-46
5290	58	802.11ac	OFDM	80	7.0	6.58	0.06	0 mm	1	GV211	29.3	back	99.4	0.350	1.102	1.006	0.388	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.102	1.006	0.000	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.05	0 mm	1	GV211	29.3	bottom	99.4	0.507	1.102	1.006	0.562	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.102	1.006	0.000	
5290	58	802.11ac	OFDM	80	7.0	6.58	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.102	1.006	0.000	
5290	58	802.11ac	OFDM	80	7.0	6.10	0.08	0 mm	2	GV211	29.3	back	99.6	0.454	1.230	1.004	0.561	
5290	58	802.11ac	OFDM	80	7.0	6.10	-0.21	0 mm	2	GV211	29.3	top	99.6	0.242	1.230	1.004	0.299	
5290	58	802.11ac	OFDM	80	7.0	6.10	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.230	1.004	0.000	
5290	58	802.11ac	OFDM	80	7.0	6.10	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.230	1.004	0.000	
5290	58	802.11ac	OFDM	80	7.0	6.10	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.230	1.004	0.000	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.02	0 mm	1	GV211	29.3	back	99.4	0.539	1.050	1.006	0.569	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.050	1.006	0.000	
5530	106	802.11ac	OFDM	80	7.0	6.79	0.02	0 mm	1	GV211	29.3	bottom	99.4	0.967	1.050	1.006	**1.021**	B2-47
5610	122	802.11ac	OFDM	80	7.0	6.68	0.05	0 mm	1	GV211	29.3	bottom	99.4	0.902	1.076	1.006	0.976	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.14	0 mm	1	GV211	29.3	bottom	99.4	0.915	1.050	1.006	0.967	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.050	1.006	0.000	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.050	1.006	0.000	
5610	122	802.11ac	OFDM	80	7.0	6.80	-0.18	0 mm	2	GV211	29.3	back	99.6	0.444	1.047	1.004	0.467	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.19	0 mm	2	GV211	29.3	top	99.6	0.320	1.047	1.004	0.336	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.047	1.004	0.000	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.047	1.004	0.000	
5610	122	802.11ac	OFDM	80	7.0	6.80	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.047	1.004	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.73	-0.05	0 mm	1	GV211	29.3	back	99.4	0.601	1.064	1.006	0.643	
5775	155	802.11ac	OFDM	80	7.0	6.73	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.064	1.006	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.73	-0.09	0 mm	1	GV211	29.3	bottom	99.4	0.841	1.064	1.006	0.900	
5775	155	802.11ac	OFDM	80	7.0	6.73	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.064	1.006	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.73	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.064	1.006	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.03	0 mm	2	GV211	29.3	back	99.6	0.431	1.151	1.004	0.498	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.06	0 mm	2	GV211	29.3	top	99.6	0.229	1.151	1.004	0.265	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.151	1.004	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.151	1.004	0.000	
5775	155	802.11ac	OFDM	80	7.0	6.39	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.151	1.004	0.000	
5690	138	802.11ac	OFDM	80	7.0	6.79	0.01	0 mm	1	GV211	29.3	bottom	99.4	0.933	1.050	1.006	0.986	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**								**Body** **1.6 W/kg (mW/g)** averaged over 1 gram										

Table 2-47
WLAN Body SAR for conditions with WWAN active

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	5.0	3.99	0.06	0 mm	1	M3211	1	back	98.2	0.088	1.262	1.018	0.113	
2462	11	802.11b	DSSS	22	5.0	3.99	0.02	0 mm	1	M3211	1	bottom	98.2	0.070	1.262	1.018	0.090	
2412	1	802.11b	DSSS	22	5.0	3.99	0.03	0 mm	2	M3211	1	back	98.2	0.033	1.262	1.018	0.042	
2412	1	802.11b	DSSS	22	5.0	3.99	-0.05	0 mm	2	M3211	1	top	98.2	0.093	1.262	1.018	0.119	
5290	58	802.11ac	OFDM	80	2.5	1.70	0.08	0 mm	1	GV211	29.3	back	99.4	0.103	1.202	1.006	0.125	
5290	58	802.11ac	OFDM	80	2.5	1.70	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.202	1.006	0.000	
5290	58	802.11ac	OFDM	80	2.5	1.70	-0.16	0 mm	1	GV211	29.3	bottom	99.4	0.111	1.202	1.006	0.134	
5290	58	802.11ac	OFDM	80	2.5	1.70	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.202	1.006	0.000	
5290	58	802.11ac	OFDM	80	2.5	1.70	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.202	1.006	0.000	
5290	58	802.11ac	OFDM	80	2.5	1.45	0.04	0 mm	2	GV211	29.3	back	99.6	0.090	1.274	1.004	0.115	
5290	58	802.11ac	OFDM	80	2.5	1.45	0.03	0 mm	2	GV211	29.3	top	99.6	0.064	1.274	1.004	0.082	
5290	58	802.11ac	OFDM	80	2.5	1.45	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.274	1.004	0.000	
5290	58	802.11ac	OFDM	80	2.5	1.45	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.274	1.004	0.000	
5290	58	802.11ac	OFDM	80	2.5	1.45	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.274	1.004	0.000	
5530	106	802.11ac	OFDM	80	2.5	1.91	0.09	0 mm	1	GV211	29.3	back	99.4	0.205	1.146	1.006	0.236	
5530	106	802.11ac	OFDM	80	2.5	1.91	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.146	1.006	0.000	
5530	106	802.11ac	OFDM	80	2.5	1.91	-0.08	0 mm	1	GV211	29.3	bottom	99.4	0.322	1.146	1.006	0.371	
5530	106	802.11ac	OFDM	80	2.5	1.91	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.146	1.006	0.000	
5530	106	802.11ac	OFDM	80	2.5	1.91	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.146	1.006	0.000	
5610	122	802.11ac	OFDM	80	2.5	1.42	-0.03	0 mm	2	GV211	29.3	back	99.6	0.107	1.282	1.004	0.138	
5610	122	802.11ac	OFDM	80	2.5	1.42	-0.08	0 mm	2	GV211	29.3	top	99.6	0.080	1.282	1.004	0.103	
5610	122	802.11ac	OFDM	80	2.5	1.42	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.282	1.004	0.000	
5610	122	802.11ac	OFDM	80	2.5	1.42	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.282	1.004	0.000	
5610	122	802.11ac	OFDM	80	2.5	1.42	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.282	1.004	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.47	0.06	0 mm	1	GV211	29.3	back	99.4	0.228	1.268	1.006	0.291	
5775	155	802.11ac	OFDM	80	2.5	1.47	0.00	0 mm	1	GV211	29.3	top	99.4	0.000	1.268	1.006	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.47	0.15	0 mm	1	GV211	29.3	bottom	99.4	0.263	1.268	1.006	0.335	
5775	155	802.11ac	OFDM	80	2.5	1.47	0.00	0 mm	1	GV211	29.3	right	99.4	0.000	1.268	1.006	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.47	0.00	0 mm	1	GV211	29.3	left	99.4	0.000	1.268	1.006	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.49	0.13	0 mm	2	GV211	29.3	back	99.6	0.120	1.262	1.004	0.152	
5775	155	802.11ac	OFDM	80	2.5	1.49	-0.02	0 mm	2	GV211	29.3	top	99.6	0.038	1.262	1.004	0.048	
5775	155	802.11ac	OFDM	80	2.5	1.49	0.00	0 mm	2	GV211	29.3	bottom	99.6	0.000	1.262	1.004	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.49	0.00	0 mm	2	GV211	29.3	right	99.6	0.000	1.262	1.004	0.000	
5775	155	802.11ac	OFDM	80	2.5	1.49	0.00	0 mm	2	GV211	29.3	left	99.6	0.000	1.262	1.004	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 2-48
DSS Body SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2402	0	Bluetooth	FHSS	8.5	7.03	0.14	0 mm	1	KN211	1	back	76.80	0.108	1.403	1.302	**0.197**	B2-48
2402	0	Bluetooth	FHSS	8.5	7.03	0.12	0 mm	1	KN211	1	bottom	76.80	0.081	1.403	1.302	0.148	
2441	39	Bluetooth	FHSS	7.0	5.28	0.10	0 mm	2	KN211	1	back	76.80	0.024	1.486	1.302	0.046	
2441	39	Bluetooth	FHSS	7.0	5.28	-0.12	0 mm	2	KN211	1	top	76.80	0.000	1.486	1.302	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**									**Body** **1.6 W/kg (mW/g)** averaged over 1 gram								

3 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

3.1 Introduction

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

3.2 Simultaneous Transmission Procedures

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

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("-").

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

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

3.3 UMPC Body (Read) SAR Simultaneous Transmission Analysis

Table 3-1
Simultaneous Transmission Scenario with 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
	1	2	3	1+2+3
UMPC Body SAR	0.298	1.146	0.015	**1.459**

Table 3-2
Simultaneous Transmission Scenario with 5 GHz MIMO, and BT Ant 2

Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
	1	2	3	1+2+3
UMPC Body SAR	1.146	0.367	0.015	**1.528**

Table 3-3
Simultaneous Transmission Scenario with 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Configuration	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
	1	2	3	1+2+3
UMPC Body SAR	0.040	0.158	0.367	**0.565**

Table 3-4
Simultaneous Transmission Scenario with 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
	1	2	3	1+2+3
UMPC Body SAR	1.146	0.040	0.367	**1.553**

Table 3-5
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.298	0.121	0.717	0.367	**1.503**
	Top	-	0.158	-	0.266	0.424
	Bottom	0.151	-	1.146	-	1.297

Table 3-6
Simultaneous Transmission Scenario with 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.298	0.717	0.367	0.004	**1.386**
	Top	-	-	0.266	0.015	0.281
	Bottom	0.151	1.146	-	-	1.297

Table 3-7
Simultaneous Transmission Scenario with 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.717	0.040	0.121	0.367	**1.245**
	Top	-	-	0.158	0.266	0.424
	Bottom	1.146	0.016	-	-	1.162

Table 3-8
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.996	0.055	0.104	0.004	**1.159**
	Top	-	-	-	0.015	0.015
	Bottom	0.669	0.031	0.174	-	0.874
	Right	0.572	-	-	-	0.572

Table 3-9
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.996	0.104	0.056	0.004	**1.160**
	Top	-	-	0.063	0.015	0.078
	Bottom	0.669	0.174	-	-	0.843
	Right	0.572	-	-	-	0.572

Table 3-10
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.996	0.040	0.033	0.056	**1.125**
	Top	-	-	0.051	0.063	0.114
	Bottom	0.669	0.016	-	-	0.685
	Right	0.572	-	-	-	0.572

Table 3-11
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.996	0.104	0.040	0.056	**1.196**
	Top	-	-	-	0.063	0.063
	Bottom	0.669	0.174	0.016	-	0.859
	Right	0.572	-	-	-	0.572

Table 3-12
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.996	0.055	0.033	0.104	0.056	**1.244**
	Top	-	-	0.051	-	0.063	0.114
	Bottom	0.669	0.031	-	0.174	-	0.874
	Right	0.572	-	-	-	-	0.572

Table 3-13
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.996	0.055	0.104	0.056	0.004	**1.215**
	Top	-	-	-	0.063	0.015	0.078
	Bottom	0.669	0.031	0.174	-	-	0.874
	Right	0.572	-	-	-	-	0.572

Table 3-14
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.996	0.104	0.040	0.033	0.056	**1.229**
	Top	-	-	-	0.051	0.063	0.114
	Bottom	0.669	0.174	0.016	-	-	0.859
	Right	0.572	-	-	-	-	0.572

Table 3-15
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.999	0.055	0.104	0.004	**1.162**
	Top	0.688	-	-	0.015	0.703
	Bottom	-	0.031	0.174	-	0.205
	Right	0.475	-	-	-	0.475

Table 3-16
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.999	0.104	0.056	0.004	**1.163**
	Top	0.688	-	0.063	0.015	0.766
	Bottom	-	0.174	-	-	0.174
	Right	0.475	-	-	-	0.475

Table 3-17
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.999	0.040	0.033	0.056	**1.128**
	Top	0.688	-	0.051	0.063	0.802
	Bottom	-	0.016	-	-	0.016
	Right	0.475	-	-	-	0.475

Table 3-18
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
UMPC Body SAR	Back	0.999	0.104	0.040	0.056	**1.199**
	Top	0.688	-	-	0.063	0.751
	Bottom	-	0.174	0.016	-	0.190
	Right	0.475	-	-	-	0.475

Table 3-19
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.999	0.055	0.033	0.104	0.056	**1.247**
	Top	0.688	-	0.051	-	0.063	0.802
	Bottom	-	0.031	-	0.174	-	0.205
	Right	0.475	-	-	-	-	0.475

Table 3-20
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.999	0.055	0.104	0.056	0.004	**1.218**
	Top	0.688	-	-	0.063	0.015	0.766
	Bottom	-	0.031	0.174	-	-	0.205
	Right	0.475	-	-	-	-	0.475

Table 3-21
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 7 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 7 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
UMPC Body SAR	Back	0.999	0.104	0.040	0.033	0.056	**1.232**
	Top	0.688	-	-	0.051	0.063	0.802
	Bottom	-	0.174	0.016	-	-	0.190
	Right	0.475	-	-	-	-	0.475

3.4 Body (Flat) SAR Simultaneous Transmission Analysis

Table 3-22
Simultaneous Transmission Scenario with 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.258	0.643	0.046	0.947
	Top	0.400	0.000	0.000	0.400
	Bottom	0.155	1.021	0.400	**1.576**
	Right	0.400	0.000	0.400	0.800
	Left	0.400	0.000	0.400	0.800

Table 3-23
Simultaneous Transmission Scenario with 5 GHz MIMO, and BT Ant 2

Simult Tx	Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.643	0.561	0.046	1.250
	Top	0.000	0.336	0.000	0.336
	Bottom	1.021	0.000	0.400	**1.421**
	Right	0.000	0.000	0.400	0.400
	Left	0.000	0.000	0.400	0.400

Table 3-24
Simultaneous Transmission Scenario with 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Configuration	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
	1	2	3	1+2+3
Body SAR	0.400	0.400	0.561	**1.361**

Table 3-25
Simultaneous Transmission Scenario with 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Simult Tx	Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3+4
Body SAR	Back	0.643	0.561	0.197	**1.401**
	Top	0.000	0.336	0.400	0.736
	Bottom	1.021	0.000	0.148	1.169
	Right	0.000	0.000	0.400	0.400
	Left	0.000	0.000	0.400	0.400

Table 3-26
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.258	0.127	0.643	0.561	**1.589**
	Top	0.400	0.304	0.000	0.336	1.040
	Bottom	0.155	0.400	1.021	0.000	1.576
	Right	0.400	0.400	0.000	0.000	0.800
	Left	0.400	0.400	0.000	0.000	0.800

Table 3-27
Simultaneous Transmission Scenario with 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2.4 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.258	0.643	0.561	0.046	1.508
	Top	0.400	0.000	0.336	0.000	0.736
	Bottom	0.155	1.021	0.000	0.400	**1.576**
	Right	0.400	0.000	0.000	0.400	0.800
	Left	0.400	0.000	0.000	0.400	0.800

Table 3-28
Simultaneous Transmission Scenario with 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	5 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.643	0.197	0.127	0.561	1.528
	Top	0.000	0.400	0.304	0.336	1.040
	Bottom	1.021	0.148	0.400	0.000	**1.569**
	Right	0.000	0.400	0.400	0.000	0.800
	Left	0.000	0.400	0.400	0.000	0.800

Table 3-29
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.762	0.113	0.291	0.046	1.212
	Top	0.400	0.400	0.000	0.000	0.800
	Bottom	0.555	0.090	0.371	0.400	**1.416**
	Right	0.590	0.400	0.000	0.400	1.390
	Left	0.400	0.400	0.000	0.400	1.200

Table 3-30
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.762	0.291	0.152	0.046	1.251
	Top	0.400	0.000	0.103	0.000	0.503
	Bottom	0.555	0.371	0.000	0.400	**1.326**
	Right	0.590	0.000	0.000	0.400	0.990
	Left	0.400	0.000	0.000	0.400	0.800

Table 3-31
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.762	0.197	0.042	0.152	1.153
	Top	0.400	0.400	0.119	0.103	1.022
	Bottom	0.555	0.148	0.400	0.000	1.103
	Right	0.590	0.400	0.400	0.000	**1.390**
	Left	0.400	0.400	0.400	0.000	1.200

Table 3-32
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.762	0.291	0.197	0.152	**1.402**
	Top	0.400	0.000	0.400	0.103	0.903
	Bottom	0.555	0.371	0.148	0.000	1.074
	Right	0.590	0.000	0.400	0.000	0.990
	Left	0.400	0.000	0.400	0.000	0.800

Table 3-33
Simultaneous Transmission Scenario with Licensed South Antenna and 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.762	0.113	0.042	0.291	0.152	1.360
	Top	0.400	0.400	0.119	0.000	0.103	1.022
	Bottom	0.555	0.090	0.400	0.371	0.000	**1.416**
	Right	0.590	0.400	0.400	0.000	0.000	1.390
	Left	0.400	0.400	0.400	0.000	0.000	1.200

Table 3-34
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.762	0.113	0.291	0.152	0.046	1.364
	Top	0.400	0.400	0.000	0.103	0.000	0.903
	Bottom	0.555	0.090	0.371	0.000	0.400	**1.416**
	Right	0.590	0.400	0.000	0.000	0.400	1.390
	Left	0.400	0.400	0.000	0.000	0.400	1.200

Table 3-35
Simultaneous Transmission Scenario with Licensed South Antenna and 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G South Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.762	0.291	0.197	0.042	0.152	1.444
	Top	0.400	0.000	0.400	0.119	0.103	1.022
	Bottom	0.555	0.371	0.148	0.400	0.000	**1.474**
	Right	0.590	0.000	0.400	0.400	0.000	1.390
	Left	0.400	0.000	0.400	0.400	0.000	1.200

Table 3-36
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.730	0.113	0.291	0.046	1.180
	Top	0.577	0.400	0.000	0.000	0.977
	Bottom	0.400	0.090	0.371	0.400	1.261
	Right	0.534	0.400	0.000	0.400	**1.334**
	Left	0.400	0.400	0.000	0.400	1.200

Table 3-37
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.730	0.291	0.152	0.046	**1.219**
	Top	0.577	0.000	0.103	0.000	0.680
	Bottom	0.400	0.371	0.000	0.400	1.171
	Right	0.534	0.000	0.000	0.400	0.934
	Left	0.400	0.000	0.000	0.400	0.800

Table 3-38
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz BT Ant 1, 2.4 GHz WLAN Ant 2, and 5 GHz WLAN Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.730	0.197	0.042	0.152	1.121
	Top	0.577	0.400	0.119	0.103	1.199
	Bottom	0.400	0.148	0.400	0.000	0.948
	Right	0.534	0.400	0.400	0.000	**1.334**
	Left	0.400	0.400	0.400	0.000	1.200

Table 3-39
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz WLAN MIMO and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.730	0.291	0.197	0.152	**1.370**
	Top	0.577	0.000	0.400	0.103	1.080
	Bottom	0.400	0.371	0.148	0.000	0.919
	Right	0.534	0.000	0.400	0.000	0.934
	Left	0.400	0.000	0.400	0.000	0.800

Table 3-40
Simultaneous Transmission Scenario with Licensed North Antenna and 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.730	0.113	0.042	0.291	0.152	1.328
	Top	0.577	0.400	0.119	0.000	0.103	1.199
	Bottom	0.400	0.090	0.400	0.371	0.000	1.261
	Right	0.534	0.400	0.400	0.000	0.000	**1.334**
	Left	0.400	0.400	0.400	0.000	0.000	1.200

Table 3-41
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, 2.4 GHz WLAN Ant 1, and BT Ant 2

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	2.4 GHz WLAN Ant 1 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.730	0.113	0.291	0.152	0.046	1.332
	Top	0.577	0.400	0.000	0.103	0.000	1.080
	Bottom	0.400	0.090	0.371	0.000	0.400	1.261
	Right	0.534	0.400	0.000	0.000	0.400	**1.334**
	Left	0.400	0.400	0.000	0.000	0.400	1.200

Table 3-42
Simultaneous Transmission Scenario with Licensed North Antenna and 5 GHz MIMO, 2.4 GHz Ant 2, and 2.4 GHz BT Ant 1

Simult Tx	Configuration	2G/3G/4G/5G North Antenna SAR (W/kg)	5 GHz WLAN Ant 1 at 2.5 dBm SAR (W/kg)	2.4 GHz Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 5 dBm SAR (W/kg)	5 GHz WLAN Ant 2 at 2.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.730	0.291	0.197	0.042	0.152	**1.412**
	Top	0.577	0.000	0.400	0.119	0.103	1.199
	Bottom	0.400	0.371	0.148	0.400	0.000	1.319
	Right	0.534	0.000	0.400	0.400	0.000	1.334
	Left	0.400	0.000	0.400	0.400	0.000	1.200

3.1 Simultaneous Transmission Conclusion

The above numerical summed SAR results are sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

4 ADDITIONAL TESTING PER FCC GUIDANCE

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

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

Table 4-1
LTE Band 41 South Antenna UMPC Body Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	18.7	20.3
Measured Output Power (dBm)	17.42	19.39
Measured SAR (W/kg)	0.673	0.675
Measured Power (mW)	55.21	86.90
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	34.95	37.63
% deviation from expected linearity		-6.85%

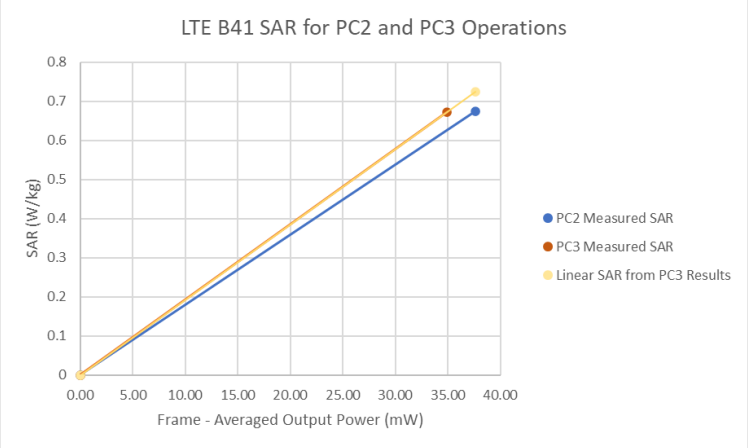

Figure 4-1
LTE Band 41 South Antenna UMPC Body Linearity

Table 4-2
LTE Band 41 North Antenna UMPC Body Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	18.8	20.4
Measured Output Power (dBm)	17.90	19.64
Measured SAR (W/kg)	0.547	0.550
Measured Power (mW)	61.66	92.04
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	39.03	39.86
% deviation from expected linearity		-1.53%

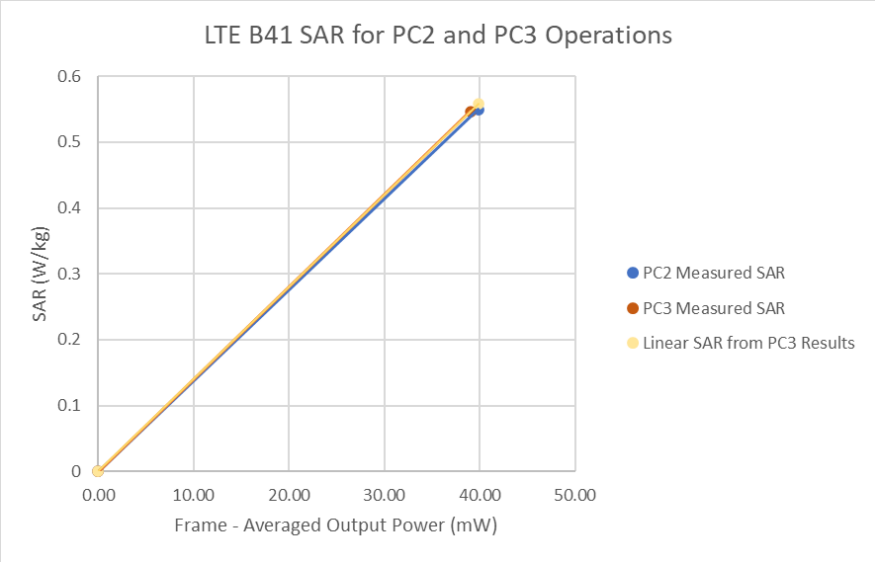

Figure 4-2
LTE Band 41 North Antenna UMPC Body Linearity

Table 4-3
LTE Band 41 South Antenna Body Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	11.1	12.7
Measured Output Power (dBm)	10.30	12.15
Measured SAR (W/kg)	0.583	0.558
Measured Power (mW)	10.72	16.41
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	6.78	7.10
% deviation from expected linearity		-8.61%

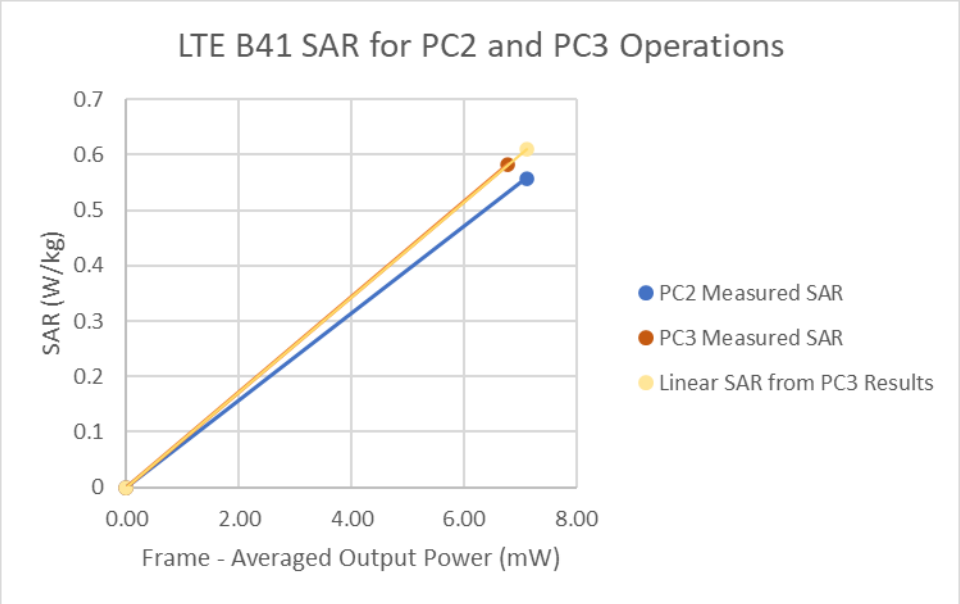

Figure 4-3
LTE Band 41 South Antenna Body Linearity

Table 4-4
LTE Band 41 North Antenna Body Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	12.3	13.9
Measured Output Power (dBm)	11.1	12.7
Measured SAR (W/kg)	0.535	0.520
Measured Power (mW)	12.88	18.62
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	8.15	8.06
% deviation from expected linearity		-1.70%

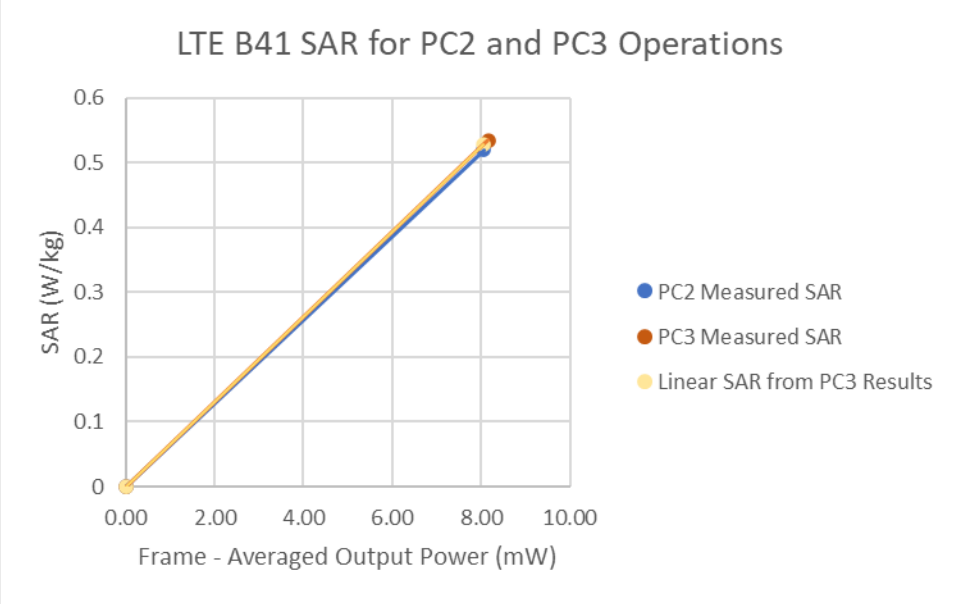

Figure 4-4
LTE Band 41 North Antenna Body Linearity