BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.28		
100	PI/2 BPSK	1	137		15.95		17.0
100	PI/2 BPSK	1	271		15.82		
100	PI/2 BPSK	135	0		15.75		17.0
100	PI/2 BPSK	135	69		15.88		17.0
100	PI/2 BPSK	135	138		15.80		17.0
100	PI/2 BPSK	270	0		15.84		
100	QPSK	1	1		15.26		
100	QPSK	1	137		15.86		17.0
100	QPSK	1	271		15.73		
100	QPSK	135	0		15.79		
100	QPSK	135	69		15.94		17.0
100	QPSK	135	138		15.88		
100	QPSK	270	0		15.82		17.0
100	16QAM	1	1		15.22		17.0
100	64QAM	1	1		14.94		17.0
100	256QAM	1	1		15.40		17.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	15.24	15.20	15.18	17.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	15.28	15.24	15.27	17.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	15.11	15.26	15.20	17.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	15.25	15.24	15.22	17.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	15.13	15.18	15.21	17.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	15.22	15.23	15.24	17.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	15.14	15.21	15.20	17.0

<n77_MIMO 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	17.04	16.95	17.44	18.0
100	PI/2 BPSK	1	137	17.60	17.44	17.95	
100	PI/2 BPSK	1	271	17.28	17.22	17.66	
100	PI/2 BPSK	135	0	17.37	17.22	17.69	18.0
100	PI/2 BPSK	135	69	17.51	17.41	17.91	18.0
100	PI/2 BPSK	135	138	17.40	17.31	17.82	18.0
100	PI/2 BPSK	270	0	17.45	17.30	17.76	
100	QPSK	1	1	16.96	16.86	17.27	18.0
100	QPSK	1	137	17.36	17.30	17.73	
100	QPSK	1	271	17.23	17.09	17.52	
100	QPSK	135	0	17.38	17.25	17.74	18.0
100	QPSK	135	69	17.56	17.42	17.85	
100	QPSK	135	138	17.36	17.30	17.73	
100	QPSK	270	0	17.37	17.29	17.79	18.0
100	16QAM	1	1	16.85	16.79	17.29	18.0
100	64QAM	1	1	16.58	16.50	16.93	18.0
100	256QAM	1	1	17.06	16.97	17.48	18.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	16.95	16.86	17.38	18.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	16.92	16.83	17.44	18.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	16.96	16.92	17.42	18.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	17.03	16.82	17.40	18.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	17.01	16.89	17.26	18.0
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	17.04	16.92	17.27	18.0
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	16.98	16.90	17.34	18.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		16.45		
100	PI/2 BPSK	1	137		16.98		18.0
100	PI/2 BPSK	1	271		16.57		
100	PI/2 BPSK	135	0		16.82		18.0
100	PI/2 BPSK	135	69		16.97		18.0
100	PI/2 BPSK	135	138		16.75		18.0
100	PI/2 BPSK	270	0		16.82		
100	QPSK	1	1		16.42		
100	QPSK	1	137		16.87		18.0
100	QPSK	1	271		16.53		
100	QPSK	135	0		16.84		
100	QPSK	135	69		16.93		18.0
100	QPSK	135	138		16.75		
100	QPSK	270	0		16.81		18.0
100	16QAM	1	1		16.35		18.0
100	64QAM	1	1		16.14		18.0
100	256QAM	1	1		16.60		18.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.28	16.40	16.34	18.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.32	16.26	16.39	18.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.45	16.39	16.35	18.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.36	16.26	16.29	18.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.45	16.29	16.40	18.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.38	16.29	16.26	18.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.34	16.43	16.27	18.0

<n77_HPUE_Main>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	19.50	19.43	19.49	20.0
100	PI/2 BPSK	1	137	19.86	19.67	19.74	
100	PI/2 BPSK	1	271	19.15	18.84	19.09	
100	PI/2 BPSK	135	0	19.74	19.64	19.56	20.0
100	PI/2 BPSK	135	69	19.78	19.68	19.58	20.0
100	PI/2 BPSK	135	138	19.75	19.54	19.41	20.0
100	PI/2 BPSK	270	0	19.72	19.49	19.65	
100	QPSK	1	1	19.63	19.34	19.42	20.0
100	QPSK	1	137	19.69	19.65	19.62	
100	QPSK	1	271	18.99	18.80	18.91	
100	QPSK	135	0	19.63	19.76	19.84	20.0
100	QPSK	135	69	19.64	19.78	19.69	
100	QPSK	135	138	19.52	19.41	19.50	
100	QPSK	270	0	19.74	19.65	19.58	20.0
100	16QAM	1	1	19.48	19.22	19.32	20.0
100	64QAM	1	1	19.30	18.96	18.94	20.0
100	256QAM	1	1	19.59	19.44	19.52	20.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	19.57	19.45	19.31	20.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	19.46	19.17	19.37	20.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	19.48	19.19	19.42	20.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	19.44	19.15	19.42	20.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	19.41	19.27	19.51	20.0
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	19.55	19.14	19.39	20.0
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	19.53	19.18	19.40	20.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				633334	633332	633332	
Frequency (MHz)				3500.01	3499.98	3499.98	
100	PI/2 BPSK	1	1		18.27		
100	PI/2 BPSK	1	137		18.85		20.0
100	PI/2 BPSK	1	271		18.81		
100	PI/2 BPSK	135	0		18.59		20.0
100	PI/2 BPSK	135	69		18.84		20.0
100	PI/2 BPSK	135	138		18.77		20.0
100	PI/2 BPSK	270	0		18.74		
100	QPSK	1	1		18.12		
100	QPSK	1	137		18.75		20.0
100	QPSK	1	271		18.66		
100	QPSK	135	0		18.65		
100	QPSK	135	69		18.82		20.0
100	QPSK	135	138		18.71		
100	QPSK	270	0		18.75		20.0
100	16QAM	1	1		18.09		20.0
100	64QAM	1	1		17.88		20.0
100	256QAM	1	1		18.36		20.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	18.23	18.10	18.05	20.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	18.21	18.22	18.16	20.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	18.00	18.23	18.19	20.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	18.09	18.10	18.16	20.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	18.09	18.02	18.17	20.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	18.02	18.04	18.05	20.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	18.05	18.21	18.14	20.0

<n77_HPUE_MIMO 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	19.86	19.84	20.34	21.0
100	PI/2 BPSK	1	137	20.52	20.42	20.83	
100	PI/2 BPSK	1	271	20.10	20.14	20.59	
100	PI/2 BPSK	135	0	20.35	20.05	20.54	21.0
100	PI/2 BPSK	135	69	20.40	20.41	20.80	21.0
100	PI/2 BPSK	135	138	20.26	20.29	20.66	21.0
100	PI/2 BPSK	270	0	20.44	20.30	20.68	
100	QPSK	1	1	19.92	19.73	20.11	21.0
100	QPSK	1	137	20.17	20.18	20.63	
100	QPSK	1	271	20.08	19.93	20.45	
100	QPSK	135	0	20.31	20.19	20.61	21.0
100	QPSK	135	69	20.54	20.40	20.69	
100	QPSK	135	138	20.20	20.16	20.53	
100	QPSK	270	0	20.18	20.13	20.71	21.0
100	16QAM	1	1	19.69	19.79	20.28	21.0
100	64QAM	1	1	19.52	19.39	19.86	21.0
100	256QAM	1	1	19.88	19.80	20.45	21.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	19.66	19.69	20.30	21.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	19.82	19.78	20.14	21.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	19.74	19.68	20.32	21.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	19.69	19.79	20.27	21.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	19.82	19.77	20.18	21.0
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	19.69	19.81	20.19	21.0
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	19.83	19.67	20.25	21.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		19.32		21.0
100	PI/2 BPSK	1	137		19.83		
100	PI/2 BPSK	1	271		19.38		
100	PI/2 BPSK	135	0		19.75		21.0
100	PI/2 BPSK	135	69		19.80		21.0
100	PI/2 BPSK	135	138		19.69		21.0
100	PI/2 BPSK	270	0		19.78		
100	QPSK	1	1		19.40		21.0
100	QPSK	1	137		19.79		
100	QPSK	1	271		19.46		
100	QPSK	135	0		19.70		21.0
100	QPSK	135	69		19.82		
100	QPSK	135	138		19.72		
100	QPSK	270	0		19.65		21.0
100	16QAM	1	1		19.21		21.0
100	64QAM	1	1		19.02		21.0
100	256QAM	1	1		19.58		21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.31	19.18	19.31	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.15	19.23	19.31	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.22	19.18	19.19	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.19	19.19	19.19	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.20	19.17	19.27	21.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	19.24	19.32	19.13	21.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	19.20	19.17	19.22	21.0

<n78_Main>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		16.39		17.0
100	PI/2 BPSK	1	137		16.45		
100	PI/2 BPSK	1	271		16.00		
100	PI/2 BPSK	135	0		16.13		17.0
100	PI/2 BPSK	135	69		16.44		17.0
100	PI/2 BPSK	135	138		16.35		17.0
100	PI/2 BPSK	270	0		16.30		
100	QPSK	1	1		16.33		17.0
100	QPSK	1	137		16.33		
100	QPSK	1	271		15.90		
100	QPSK	135	0		16.17		17.0
100	QPSK	135	69		16.44		
100	QPSK	135	138		16.30		
100	QPSK	270	0		16.28		17.0
100	16QAM	1	1		15.28		17.0
100	64QAM	1	1		15.03		17.0
100	256QAM	1	1		15.54		17.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	16.25	16.34	16.34	17.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	16.25	16.34	16.37	17.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	16.31	16.28	16.30	17.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	16.26	16.27	16.28	17.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	16.26	16.35	16.33	17.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	16.37	16.35	16.28	17.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	16.23	16.31	16.38	17.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		16.32		17.0
100	PI/2 BPSK	1	137		16.40		
100	PI/2 BPSK	1	271		15.97		
100	PI/2 BPSK	135	0		16.05		17.0
100	PI/2 BPSK	135	69		16.38		17.0
100	PI/2 BPSK	135	138		16.27		17.0
100	PI/2 BPSK	270	0		16.29		
100	QPSK	1	1		16.24		17.0
100	QPSK	1	137		16.24		
100	QPSK	1	271		15.82		
100	QPSK	135	0		16.10		17.0
100	QPSK	135	69		16.40		
100	QPSK	135	138		16.21		
100	QPSK	270	0		16.24		17.0
100	16QAM	1	1		15.22		17.0
100	64QAM	1	1		15.01		17.0
100	256QAM	1	1		15.49		17.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.22	16.31	16.30	17.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.17	16.30	16.31	17.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.24	16.25	16.30	17.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.25	16.27	16.27	17.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.25	16.31	16.32	17.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.30	16.35	16.27	17.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.14	16.26	16.36	17.0

<n78_MIMO 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		16.29		18.0
100	PI/2 BPSK	1	137		16.97		
100	PI/2 BPSK	1	271		16.34		
100	PI/2 BPSK	135	0		16.82		18.0
100	PI/2 BPSK	135	69		16.96		18.0
100	PI/2 BPSK	135	138		16.74		18.0
100	PI/2 BPSK	270	0		16.84		
100	QPSK	1	1		16.32		18.0
100	QPSK	1	137		16.94		
100	QPSK	1	271		16.39		
100	QPSK	135	0		16.80		18.0
100	QPSK	135	69		16.94		
100	QPSK	135	138		16.72		
100	QPSK	270	0		16.84		18.0
100	16QAM	1	1		16.16		18.0
100	64QAM	1	1		16.05		18.0
100	256QAM	1	1		16.38		18.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	16.15	16.27	16.22	18.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	16.28	16.19	16.12	18.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	16.17	16.28	16.26	18.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	16.14	16.25	16.25	18.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	16.27	16.28	16.27	18.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	16.27	16.17	16.21	18.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	16.10	16.09	16.18	18.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		16.25		18.0
100	PI/2 BPSK	1	137		16.92		
100	PI/2 BPSK	1	271		16.29		
100	PI/2 BPSK	135	0		16.76		18.0
100	PI/2 BPSK	135	69		16.88		18.0
100	PI/2 BPSK	135	138		16.69		18.0
100	PI/2 BPSK	270	0		16.82		
100	QPSK	1	1		16.31		18.0
100	QPSK	1	137		16.90		
100	QPSK	1	271		16.36		
100	QPSK	135	0		16.80		18.0
100	QPSK	135	69		16.93		
100	QPSK	135	138		16.69		
100	QPSK	270	0		16.83		18.0
100	16QAM	1	1		16.07		18.0
100	64QAM	1	1		16.05		18.0
100	256QAM	1	1		16.35		18.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.15	16.22	16.15	18.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.19	16.19	16.21	18.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.17	16.23	16.12	18.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.10	16.21	16.19	18.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.22	16.23	16.22	18.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.27	16.16	16.15	18.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.05	16.07	16.10	18.0

<n78_HPUE_Main>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		19.32		20.0
100	PI/2 BPSK	1	137		19.45		
100	PI/2 BPSK	1	271		18.83		
100	PI/2 BPSK	135	0		19.06		20.0
100	PI/2 BPSK	135	69		19.36		20.0
100	PI/2 BPSK	135	138		19.32		20.0
100	PI/2 BPSK	270	0		19.27		
100	QPSK	1	1		19.27		20.0
100	QPSK	1	137		19.23		
100	QPSK	1	271		18.90		
100	QPSK	135	0		19.12		20.0
100	QPSK	135	69		19.27		
100	QPSK	135	138		19.18		
100	QPSK	270	0		19.10		20.0
100	16QAM	1	1		18.11		20.0
100	64QAM	1	1		18.04		20.0
100	256QAM	1	1		18.52		20.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	19.23	19.21	19.18	20.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	19.18	19.34	19.23	20.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	19.21	19.19	19.11	20.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	19.09	19.26	19.15	20.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	19.17	19.23	19.23	20.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	19.30	19.26	19.24	20.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	19.22	19.24	19.22	20.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		19.25		20.0
100	PI/2 BPSK	1	137		19.38		
100	PI/2 BPSK	1	271		18.77		
100	PI/2 BPSK	135	0		19.05		20.0
100	PI/2 BPSK	135	69		19.28		20.0
100	PI/2 BPSK	135	138		19.28		20.0
100	PI/2 BPSK	270	0		19.19		
100	QPSK	1	1		19.23		20.0
100	QPSK	1	137		19.14		
100	QPSK	1	271		18.81		
100	QPSK	135	0		19.12		20.0
100	QPSK	135	69		19.27		
100	QPSK	135	138		19.16		
100	QPSK	270	0		19.01		20.0
100	16QAM	1	1		18.10		20.0
100	64QAM	1	1		18.02		20.0
100	256QAM	1	1		18.47		20.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.17	19.14	19.10	20.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.17	19.26	19.05	20.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.15	19.10	19.03	20.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.07	19.22	19.11	20.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.08	19.16	19.19	20.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	19.26	19.26	19.21	20.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	19.21	19.18	19.17	20.0

<n78_HPUE_MIMO 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		19.25		21.0
100	PI/2 BPSK	1	137		19.94		
100	PI/2 BPSK	1	271		19.34		
100	PI/2 BPSK	135	0		19.62		21.0
100	PI/2 BPSK	135	69		19.92		21.0
100	PI/2 BPSK	135	138		19.62		21.0
100	PI/2 BPSK	270	0		19.84		
100	QPSK	1	1		19.32		21.0
100	QPSK	1	137		19.80		
100	QPSK	1	271		19.25		
100	QPSK	135	0		19.61		21.0
100	QPSK	135	69		19.90		
100	QPSK	135	138		19.67		
100	QPSK	270	0		19.74		21.0
100	16QAM	1	1		19.05		21.0
100	64QAM	1	1		19.08		21.0
100	256QAM	1	1		19.33		21.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	19.05	19.17	19.13	21.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	19.10	19.17	19.05	21.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	19.25	19.18	19.05	21.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	19.09	19.15	19.17	21.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	19.17	19.24	19.19	21.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	19.18	19.23	19.10	21.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	19.15	19.21	19.14	21.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		19.18		21.0
100	PI/2 BPSK	1	137		19.74		
100	PI/2 BPSK	1	271		19.26		
100	PI/2 BPSK	135	0		19.59		21.0
100	PI/2 BPSK	135	69		19.68		21.0
100	PI/2 BPSK	135	138		19.57		21.0
100	PI/2 BPSK	270	0		19.62		
100	QPSK	1	1		19.25		21.0
100	QPSK	1	137		19.71		
100	QPSK	1	271		19.18		
100	QPSK	135	0		19.56		21.0
100	QPSK	135	69		19.58		
100	QPSK	135	138		19.62		
100	QPSK	270	0		19.60		21.0
100	16QAM	1	1		19.04		21.0
100	64QAM	1	1		19.01		21.0
100	256QAM	1	1		19.25		21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.02	19.08	19.04	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.10	19.10	19.05	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.18	19.14	19.03	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.05	19.06	19.09	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.12	19.16	19.18	21.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	19.11	19.14	19.02	21.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	19.09	19.15	19.13	21.0

13. SAR Test Results

General Note:

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

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17 SAR test was covered by Band 25/66/26/12; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
   b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
   a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
   b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
   c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   d. Smaller bandwidth output power for each RB allocation configuration for this device is not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
   e. For 5G FR1 n5/n41/66/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
   f. The NR n2 SAR test was covered by NR n25; due to SAR test for overlapping NR bands can be reduced if the maximum power including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
   g. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

13.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9262	1852.4	20.53	21.50	1.250	-0.01	0.525	0.656
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9400	1880	20.49	21.50	1.262	0.13	0.485	0.612
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9538	1907.6	20.05	21.50	1.396	0	0.521	0.728
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	13mm	AVX	OFF	9538	1907.6	23.41	24.50	1.285	0.01	0.240	0.308
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9538	1907.6	20.05	21.50	1.396	-0.04	0.750	1.047
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9262	1852.4	20.53	21.50	1.250	-0.04	0.883	1.104
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9400	1880	20.49	21.50	1.262	0.06	0.834	1.052
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9538	1907.6	19.75	21.00	1.334	-0.09	0.779	1.039
01	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9262	1852.4	19.62	21.00	1.374	-0.15	0.854	1.173
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	9400	1880	19.67	21.00	1.358	0.01	0.841	1.142
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	13mm	AVX	OFF	9400	1880	23.34	24.50	1.306	0.05	0.520	0.679
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9262	1852.4	19.62	21.00	1.374	0.02	0.804	1.105
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9400	1880	19.67	21.00	1.358	0.05	0.791	1.074
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	9538	1907.6	19.75	21.00	1.334	-0.01	0.733	0.977
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1312	1712.4	20.05	21.00	1.245	-0.16	0.758	0.943
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1413	1732.6	19.96	21.00	1.271	0.11	0.867	1.102
02	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1513	1752.6	19.90	21.00	1.288	-0.18	0.915	1.179
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	13mm	AVX	OFF	1312	1712.4	23.78	24.50	1.180	0.01	0.513	0.606
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1513	1752.6	19.90	21.00	1.288	0.05	0.629	0.810
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1312	1712.4	20.05	21.00	1.245	-0.06	0.521	0.648
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1413	1732.6	19.96	21.00	1.271	0.03	0.596	0.757
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1312	1712.4	20.76	22.00	1.330	0.14	0.684	0.910
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1413	1732.6	20.75	22.00	1.334	-0.01	0.807	1.076
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	ON	1513	1752.6	20.72	22.00	1.343	-0.19	0.855	1.148
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	13mm	AVX	OFF	1413	1732.6	23.68	24.50	1.208	0.03	0.244	0.295
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1513	1752.6	20.72	22.00	1.343	-0.13	0.806	1.082
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1312	1712.4	20.76	22.00	1.330	-0.01	0.644	0.857
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	ON	1413	1732.6	20.75	22.00	1.334	0.09	0.760	1.013
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	OFF	4182	836.4	23.77	24.50	1.183	-0.07	0.608	0.719
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	OFF	4132	826.4	23.70	24.50	1.202	-0.14	0.552	0.664
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	AVX	OFF	4233	846.6	23.66	24.50	1.213	0.16	0.598	0.726
03	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	OFF	4233	846.6	23.66	24.50	1.213	-0.04	0.715	0.868
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	OFF	4132	826.4	23.70	24.50	1.202	0.18	0.619	0.744
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	ICT	OFF	4182	836.4	23.77	24.50	1.183	0	0.671	0.794

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	21.46	21.50	1.009	-0.07	0.868	0.876
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	21.21	21.50	1.069	-0.11	0.801	0.856
04	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	21.05	21.50	1.109	-0.01	0.982	1.089
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	21.36	21.50	1.033	0.01	0.838	0.865
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	21.33	21.50	1.040	-0.08	0.786	0.817
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	21.18	21.50	1.076	-0.17	0.956	1.029
	LTE Band 7_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	21.37	21.50	1.030	-0.17	0.675	0.696
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	20850	2510	23.98	24.00	1.005	-0.05	0.321	0.322
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	20850	2510	23.00	23.00	1.000	0.01	0.270	0.270
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	20.10	21.50	1.380	0.06	0.623	0.860
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	20.09	21.50	1.384	-0.05	0.680	0.941
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	20.04	21.50	1.400	0.09	0.611	0.855
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	21350	2560	21.05	21.50	1.109	0.06	0.720	0.799
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	19.08	19.50	1.102	-0.04	0.741	0.816
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	18.93	19.50	1.140	0.15	0.807	0.920
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	18.84	19.50	1.164	-0.04	0.931	1.084
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	19.18	19.50	1.076	-0.07	0.720	0.775
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	19.05	19.50	1.109	-0.19	0.812	0.901
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	18.94	19.50	1.138	-0.02	0.913	1.039
	LTE Band 7_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	19.15	19.50	1.084	-0.01	0.733	0.795
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	20850	2510	23.89	24.00	1.026	0.09	0.341	0.350
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	20850	2510	22.91	23.00	1.021	0.09	0.273	0.279
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21350	2560	18.54	19.50	1.247	0.01	0.782	0.975
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	20850	2510	18.22	19.50	1.343	0.06	0.682	0.916
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	21100	2535	18.30	19.50	1.318	0.08	0.738	0.973
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	21350	2560	18.84	19.50	1.164	-0.06	0.857	0.998
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	20850	2510	19.08	19.50	1.102	-0.09	0.682	0.751
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	21100	2535	18.93	19.50	1.140	0.05	0.742	0.846
05	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	23095	707.5	24.82	25.00	1.042	0.03	1.060	1.105
	LTE Band 12_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	AVX	OFF	23095	707.5	23.79	24.00	1.050	-0.14	0.837	0.878
	LTE Band 12_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	23095	707.5	23.87	24.00	1.030	0.08	0.841	0.867
	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	23095	707.5	24.82	25.00	1.042	0	1.040	1.084
06	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	23230	782	24.98	25.00	1.005	-0.1	0.855	0.859
	LTE Band 13_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	AVX	OFF	23230	782	23.97	24.00	1.007	0.03	0.677	0.682
	LTE Band 13_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	23230	782	23.98	24.00	1.005	-0.14	0.668	0.671
	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	23230	782	24.98	25.00	1.005	0.13	0.693	0.696
07	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	23330	793	24.91	25.00	1.021	-0.09	0.786	0.802
	LTE Band 14_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	AVX	OFF	23330	793	23.88	24.00	1.028	-0.16	0.620	0.637
	LTE Band 14_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	23330	793	23.92	24.00	1.019	0.03	0.618	0.629
	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	23330	793	24.91	25.00	1.021	-0.02	0.642	0.655

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26590	1905	20.44	21.50	1.276	0.11	0.305	0.389
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26140	1860	20.40	21.50	1.288	-0.14	0.333	0.429
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26340	1880	20.43	21.50	1.279	0.11	0.343	0.439
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	26590	1905	20.57	21.50	1.239	0.05	0.288	0.357
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	26340	1880	23.85	24.00	1.035	0.1	0.242	0.251
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	26340	1880	22.88	23.00	1.028	-0.05	0.194	0.199
08	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	26340	1880	20.43	21.50	1.279	-0.06	0.906	1.159
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	26140	1860	20.40	21.50	1.288	-0.16	0.878	1.131
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	26590	1905	20.44	21.50	1.276	-0.05	0.770	0.983
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	ICT	ON	26340	1880	20.44	21.50	1.276	0.05	0.843	1.076
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	ICT	ON	26140	1860	20.50	21.50	1.259	-0.07	0.812	1.022
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	ICT	ON	26590	1905	20.57	21.50	1.239	0.13	0.755	0.935
	LTE Band 25_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	ICT	ON	26590	1905	20.53	21.50	1.250	0.02	0.786	0.983
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26590	1905	20.69	21.00	1.074	0.15	0.923	0.991
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26140	1860	20.65	21.00	1.084	0.02	1.010	1.095
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26340	1880	20.65	21.00	1.084	0.17	0.902	0.978
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	26590	1905	20.78	21.00	1.052	0.16	0.908	0.955
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	26140	1860	20.70	21.00	1.072	0.06	1.000	1.072
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	26340	1880	20.69	21.00	1.074	0.18	0.888	0.954
	LTE Band 25_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	26590	1905	20.80	21.00	1.047	0.11	0.913	0.956
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	26340	1880	23.63	24.00	1.089	0.15	0.518	0.564
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	26340	1880	22.67	23.00	1.079	0.15	0.418	0.451
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	26140	1860	20.65	21.00	1.084	0.06	0.734	0.796
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	26865	831.5	23.44	24.00	1.138	0.19	0.236	0.268
	LTE Band 26_Main	15M	QPSK	36	0	Bottom of Laptop	0mm	AVX	ON	26865	831.5	22.99	24.00	1.262	-0.09	0.208	0.262
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	26865	831.5	24.91	25.00	1.021	-0.15	0.222	0.227
	LTE Band 26_Main	15M	QPSK	36	0	Bottom of Laptop	13mm	AVX	OFF	26865	831.5	23.89	24.00	1.026	-0.15	0.175	0.179
	LTE Band 5B_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	20575	841.5	22.90	24.00	1.288	0.02	0.191	0.246
09	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	26865	831.5	23.44	24.00	1.138	-0.01	0.577	0.656
10	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	27710	2310	19.77	20.50	1.183	-0.11	0.969	1.146
	LTE Band 30_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	AVX	ON	27710	2310	19.68	20.50	1.208	-0.09	0.944	1.140
	LTE Band 30_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	27710	2310	19.66	20.50	1.213	-0.12	0.939	1.139
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	27710	2310	22.76	23.00	1.057	0.06	0.300	0.317
	LTE Band 30_Main	10M	QPSK	25	0	Bottom of Laptop	13mm	AVX	OFF	27710	2310	21.75	22.00	1.059	0.06	0.238	0.252
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	27710	2310	19.77	20.50	1.183	0.07	0.241	0.285
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	27710	2310	22.39	23.00	1.151	-0.19	0.699	0.804
	LTE Band 30_MIMO2	10M	QPSK	25	0	Bottom of Laptop	0mm	AVX	OFF	27710	2310	21.39	22.00	1.151	-0.01	0.555	0.639
	LTE Band 30_MIMO2	10M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	27710	2310	21.38	22.00	1.153	0.15	0.548	0.632
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	27710	2310	22.39	23.00	1.151	-0.05	0.974	1.121

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	21.71	23.00	1.346	0	0.728	0.980
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132072	1720	21.69	23.00	1.352	-0.02	0.737	0.996
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132572	1770	21.64	23.00	1.368	0.12	0.642	0.878
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	21.79	23.00	1.321	0.1	0.690	0.912
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132072	1720	21.68	23.00	1.355	-0.05	0.709	0.961
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132572	1770	21.74	23.00	1.337	0.07	0.651	0.870
	LTE Band 66_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	21.70	23.00	1.349	0.09	0.693	0.935
	LTE Band 66B_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132047	1717.5	21.60	23.00	1.380	0.05	0.712	0.983
	LTE Band 66B_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	21.52	23.00	1.406	-0.02	0.690	0.970
	LTE Band 66B_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132597	1772.50	21.59	23.00	1.384	0.09	0.645	0.892
	LTE Band 66C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132072	1720.00	21.89	23.00	1.291	0.01	0.719	0.928
	LTE Band 66C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	21.75	23.00	1.334	-0.06	0.672	0.896
	LTE Band 66C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132572	1770.00	21.83	23.00	1.309	-0.03	0.641	0.839
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	132072	1720	23.96	24.00	1.009	0.04	0.542	0.547
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	132072	1720	22.98	23.00	1.005	0.01	0.433	0.435
11	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132072	1720	21.69	23.00	1.352	0.01	0.881	1.191
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132322	1745	21.71	23.00	1.346	-0.09	0.790	1.063
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132572	1770	21.64	23.00	1.368	0.11	0.734	1.004
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	20.88	22.00	1.294	0.02	0.723	0.936
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132072	1720	20.80	22.00	1.318	0.11	0.667	0.879
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132572	1770	20.86	22.00	1.300	-0.07	0.861	1.119
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	20.95	22.00	1.274	0.1	0.721	0.918
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132072	1720	20.89	22.00	1.291	0.07	0.670	0.865
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	132572	1770	20.82	22.00	1.312	-0.07	0.848	1.113
	LTE Band 66_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	20.96	22.00	1.271	0.02	0.836	1.062
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	132322	1745	23.97	24.00	1.007	0.03	0.271	0.273
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	132322	1745	22.99	23.00	1.002	0.03	0.213	0.213
	LTE Band 66B_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132047	1717.5	20.47	22.00	1.422	-0.04	0.651	0.926
	LTE Band 66B_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	20.40	22.00	1.445	-0.06	0.718	1.038
	LTE Band 66B_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132597	1772.50	20.45	22.00	1.429	0.07	0.772	1.103
	LTE Band 66C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132072	1720.00	20.53	22.00	1.403	-0.05	0.653	0.916
	LTE Band 66C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132322	1745	20.50	22.00	1.413	0.02	0.722	1.020
	LTE Band 66C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	132572	1770.00	20.47	22.00	1.422	-0.07	0.775	1.102
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132572	1770	20.86	22.00	1.300	0.03	0.722	0.939
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132072	1720	20.80	22.00	1.318	-0.04	0.559	0.737
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	132322	1745	20.88	22.00	1.294	0.05	0.606	0.784
	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	133322	683	24.82	25.00	1.042	-0.16	0.444	0.463
	LTE Band 71_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	133322	683	23.92	24.00	1.019	0.03	0.361	0.368
12	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	133322	683	24.82	25.00	1.042	-0.02	0.457	0.476

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	22.37	22.50	1.030	62.9	1.006	0.09	1.040	1.078
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38000	2595	22.27	22.50	1.054	62.9	1.006	-0.16	1.050	1.114
13	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	22.16	22.50	1.081	62.9	1.006	0.06	1.040	1.131
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	21.43	22.50	1.279	62.9	1.006	0.01	0.851	1.095
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	38000	2595	21.35	22.50	1.303	62.9	1.006	0.04	0.834	1.093
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	21.28	22.50	1.324	62.9	1.006	-0.14	0.831	1.107
	LTE Band 38_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	21.32	22.50	1.312	62.9	1.006	-0.15	0.825	1.089
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	37850	2580	23.08	24.00	1.236	62.9	1.006	0.09	0.321	0.399
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	37850	2580	22.04	23.00	1.247	62.9	1.006	0.09	0.258	0.324
	LTE Band 38C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	21.81	22.50	1.172	62.9	1.006	-0.06	0.918	1.083
	LTE Band 38C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	21.79	22.50	1.178	62.9	1.006	0.02	0.930	1.102
	LTE Band 38C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37901	2585.1	21.76	22.50	1.186	62.9	1.006	-0.04	0.921	1.099
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	38150	2610	22.16	22.50	1.081	62.9	1.006	-0.09	0.891	0.969
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	37850	2580	22.37	22.50	1.030	62.9	1.006	-0.06	0.887	0.919
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	38000	2595	22.27	22.50	1.054	62.9	1.006	0.04	0.882	0.936
	LTE Band 38_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38000	2595	20.95	21.50	1.135	62.9	1.006	-0.19	0.783	0.894
	LTE Band 38_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	20.92	21.50	1.143	62.9	1.006	0.12	0.773	0.889
	LTE Band 38_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	20.87	21.50	1.156	62.9	1.006	0	0.771	0.897
	LTE Band 38_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	38000	2595	20.86	21.50	1.159	62.9	1.006	-0.01	0.716	0.835
	LTE Band 38_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	20.85	21.50	1.161	62.9	1.006	0.03	0.723	0.845
	LTE Band 38_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	20.80	21.50	1.175	62.9	1.006	0.04	0.718	0.849
	LTE Band 38_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	38000	2595	20.90	21.50	1.148	62.9	1.006	0.03	0.716	0.827
	LTE Band 38_MIMO2	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	37850	2580	23.09	24.00	1.233	62.9	1.006	-0.15	0.311	0.386
	LTE Band 38_MIMO2	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	37850	2580	22.09	23.00	1.233	62.9	1.006	-0.15	0.254	0.315
	LTE Band 38C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37850	2580	20.79	21.50	1.178	62.9	1.006	-0.08	0.742	0.879
	LTE Band 38C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	37901	2585.1	20.63	21.50	1.222	62.9	1.006	0.01	0.703	0.864
	LTE Band 38C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	38150	2610	20.78	21.50	1.180	62.9	1.006	0.05	0.740	0.879
	LTE Band 38_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	38150	2610	20.87	21.50	1.156	62.9	1.006	0.14	0.662	0.770

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	20.46	20.50	1.009	62.9	1.006	-0.1	0.798	0.810
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40185	2549.5	19.75	20.50	1.189	62.9	1.006	-0.01	0.367	0.439
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40620	2593	19.35	20.50	1.303	62.9	1.006	0.09	0.334	0.438
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	19.59	20.50	1.233	62.9	1.006	-0.19	0.665	0.825
14	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41490	2680	19.40	20.50	1.288	62.9	1.006	-0.09	0.731	0.947
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	20.33	20.50	1.040	62.9	1.006	-0.05	0.771	0.807
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	40185	2549.5	19.77	20.50	1.183	62.9	1.006	0.02	0.366	0.436
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	40620	2593	19.34	20.50	1.306	62.9	1.006	0.15	0.329	0.432
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	19.85	20.50	1.161	62.9	1.006	0.19	0.669	0.782
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	41490	2680	19.47	20.50	1.268	62.9	1.006	-0.04	0.724	0.923
	LTE Band 41_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	20.17	20.50	1.079	62.9	1.006	0.17	0.751	0.815
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	39750	2506	21.79	22.00	1.050	62.9	1.006	0.02	0.335	0.354
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	39750	2506	20.84	21.00	1.038	62.9	1.006	0.06	0.274	0.286
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	20.41	20.50	1.021	42.9	1.009	0.07	0.572	0.589
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40185	2549.5	19.62	20.50	1.225	42.9	1.009	-0.09	0.263	0.325
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40620	2593	19.28	20.50	1.324	42.9	1.009	-0.05	0.239	0.319
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	19.48	20.50	1.265	42.9	1.009	0.08	0.477	0.609
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41490	2680	19.33	20.50	1.309	42.9	1.009	0	0.524	0.692
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	19.68	20.50	1.208	62.9	1.006	0.05	0.651	0.791
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40185	2549.5	19.60	20.50	1.230	62.9	1.006	-0.18	0.341	0.422
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40620	2593	19.47	20.50	1.268	62.9	1.006	0.12	0.318	0.406
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	19.76	20.50	1.186	62.9	1.006	0.06	0.642	0.766
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41490	2680	19.72	20.50	1.197	62.9	1.006	0.01	0.699	0.842
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	41490	2680	19.40	20.50	1.288	62.9	1.006	0.06	0.367	0.476
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	18.64	19.00	1.086	62.9	1.006	-0.08	0.290	0.317
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40185	2549.5	18.37	19.00	1.156	62.9	1.006	0.16	0.329	0.383
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	40620	2593	18.37	19.00	1.156	62.9	1.006	-0.19	0.345	0.401
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	18.30	19.00	1.175	62.9	1.006	0.07	0.489	0.578
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41490	2680	18.30	19.00	1.175	62.9	1.006	0.06	0.335	0.396
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	18.62	19.00	1.091	62.9	1.006	-0.08	0.281	0.309
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	13mm	AVX	OFF	39750	2506	22.84	24.00	1.306	62.9	1.006	0.09	0.244	0.321
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	13mm	AVX	OFF	39750	2506	21.89	23.00	1.291	62.9	1.006	0.02	0.196	0.255
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	39750	2506	18.59	19.00	1.099	42.9	1.009	-0.06	0.334	0.370
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	ON	41055	2636.5	18.32	19.00	1.169	62.9	1.006	0.07	0.325	0.382
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	ON	41055	2636.5	18.30	19.00	1.175	62.9	1.006	0.11	0.295	0.349
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	56640	3690	20.00	21.00	1.259	62.9	1.006	-0.1	0.473	0.599
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	55340	3560	19.48	21.00	1.419	62.9	1.006	0.07	0.196	0.280
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	55830	3609	19.31	21.00	1.476	62.9	1.006	0.1	0.247	0.367
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	56150	3641	19.42	21.00	1.439	62.9	1.006	-0.18	0.319	0.462
	LTE Band 48_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	56640	3690	18.85	20.00	1.303	62.9	1.006	0.05	0.363	0.476
	LTE Band 48C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	56640	3690	19.72	21.00	1.343	62.9	1.006	0.07	0.431	0.582
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	56640	3690	20.00	21.00	1.259	62.9	1.006	0.02	0.189	0.239
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	56150	3641	21.31	22.00	1.172	62.9	1.006	-0.01	0.472	0.557
15	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	55340	3560	21.20	22.00	1.202	62.9	1.006	-0.03	0.502	0.607
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	55830	3609	21.17	22.00	1.211	62.9	1.006	0.02	0.439	0.535
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	56640	3690	21.09	22.00	1.233	62.9	1.006	0	0.383	0.475
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	AVX	OFF	56150	3641	20.10	21.00	1.230	62.9	1.006	0.05	0.346	0.428
	LTE Band 48C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	55340	3560	21.16	22.00	1.213	62.9	1.006	0.03	0.452	0.552
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	55340	3560	21.20	22.00	1.202	62.9	1.006	0.02	0.491	0.594

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
16	FR1 n5_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	OFF	167300	836.5	24.45	25.00	1.135	0.15	0.707	0.802
	FR1 n5_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	OFF	167300	836.5	24.44	25.00	1.138	0.05	0.684	0.778
	FR1 n5_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	OFF	167300	836.5	23.94	24.50	1.138	-0.01	0.628	0.714
	FR1 n5_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	OFF	167300	836.5	24.45	25.00	1.135	0.06	0.651	0.739
	FR1 n7_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	507000	2535	20.31	21.00	1.172	-0.16	0.912	1.069
17	FR1 n7_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	502000	2510	20.28	21.00	1.180	-0.06	1.010	1.192
	FR1 n7_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	512000	2560	20.21	21.00	1.199	0.02	0.838	1.005
	FR1 n7_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	507000	2535	20.30	21.00	1.175	-0.04	0.888	1.043
	FR1 n7_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	502000	2510	20.16	21.00	1.213	0.16	0.896	1.087
	FR1 n7_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	512000	2560	20.15	21.00	1.216	0.14	0.813	0.989
	FR1 n7_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	ON	507000	2535	20.25	21.00	1.189	-0.07	0.826	0.982
	FR1 n7_Main	20M	BPSK	1	53	Bottom of Laptop	13mm	AVX	OFF	502000	2510	23.18	24.00	1.208	0.07	0.345	0.417
	FR1 n7_Main	20M	BPSK	50	28	Bottom of Laptop	13mm	AVX	OFF	502000	2510	23.14	24.00	1.219	0.01	0.333	0.406
	FR1 n7_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	502000	2510	20.28	21.00	1.180	-0.12	0.275	0.325
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	512000	2560	19.53	20.00	1.114	-0.03	0.934	1.041
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	502000	2510	19.21	20.00	1.199	0.13	0.797	0.956
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	507000	2535	19.40	20.00	1.148	-0.18	0.884	1.015
	FR1 n7_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	512000	2560	19.42	20.00	1.143	0.11	0.901	1.030
	FR1 n7_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	502000	2510	19.12	20.00	1.225	-0.02	0.763	0.934
	FR1 n7_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	507000	2535	19.38	20.00	1.153	-0.14	0.872	1.006
	FR1 n7_MIMO2	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	ON	512000	2560	19.41	20.00	1.146	0.08	0.854	0.978
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	13mm	AVX	OFF	512000	2560	23.01	24.00	1.256	0.04	0.382	0.480
	FR1 n7_MIMO2	20M	BPSK	50	28	Bottom of Laptop	13mm	AVX	OFF	512000	2560	22.81	24.00	1.315	-0.09	0.348	0.458
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	512000	2560	19.53	20.00	1.114	0.18	0.693	0.772
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	502000	2510	19.21	20.00	1.199	-0.05	0.661	0.793
	FR1 n7_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	507000	2535	19.40	20.00	1.148	0.16	0.666	0.765
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	376500	1882.5	21.19	21.50	1.074	-0.02	0.702	0.754
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	372000	1860	21.14	21.50	1.086	0	0.806	0.876
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	381000	1905	21.18	21.50	1.076	0.07	0.661	0.712
	FR1 n25_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	376500	1882.5	20.97	21.50	1.130	0.19	0.562	0.635
	FR1 n25_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	372000	1860	20.73	21.50	1.194	0.1	0.726	0.867
	FR1 n25_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	381000	1905	20.90	21.50	1.148	-0.13	0.632	0.726
	FR1 n25_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	ON	376500	1882.5	20.82	21.50	1.169	-0.04	0.615	0.719
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	13mm	AVX	OFF	372000	1860	23.35	24.00	1.161	0.05	0.259	0.301
	FR1 n25_Main	20M	BPSK	50	28	Bottom of Laptop	13mm	AVX	OFF	372000	1860	23.25	24.00	1.189	-0.06	0.238	0.283
18	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	372000	1860	21.14	21.50	1.086	-0.04	1.090	1.184
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	376500	1882.5	21.19	21.50	1.074	-0.03	1.060	1.138
	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	381000	1905	21.18	21.50	1.076	0.17	1.010	1.087
	FR1 n25_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	381000	1905	20.76	21.50	1.186	0.19	0.730	0.866
	FR1 n25_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	372000	1860	20.53	21.50	1.250	0.02	0.909	1.136
	FR1 n25_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	376500	1882.5	20.68	21.50	1.208	0.11	0.822	0.993
	FR1 n25_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	381000	1905	20.46	21.50	1.271	0.16	0.696	0.884
	FR1 n25_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	372000	1860	20.20	21.50	1.349	-0.05	0.835	1.126
	FR1 n25_MIMO2	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	376500	1882.5	20.40	21.50	1.288	0.08	0.782	1.007
	FR1 n25_MIMO2	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	ON	381000	1905	20.45	21.50	1.274	0.08	0.793	1.010
	FR1 n25_MIMO2	20M	BPSK	1	53	Bottom of Laptop	13mm	AVX	OFF	372000	1860	23.52	24.00	1.117	0.08	0.561	0.627
	FR1 n25_MIMO2	20M	BPSK	50	28	Bottom of Laptop	13mm	AVX	OFF	372000	1860	23.38	24.00	1.153	0.06	0.525	0.606
	FR1 n25_MIMO2	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	372000	1860	20.53	21.50	1.250	0.01	0.570	0.713

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
19	FR1 n30_Main	10M	BPSK	1	26	Bottom of Laptop	0mm	AVX	ON	462000	2310	19.42	20.50	1.282	-0.09	0.913	1.171
	FR1 n30_Main	10M	BPSK	25	14	Bottom of Laptop	0mm	AVX	ON	462000	2310	19.36	20.50	1.300	0.06	0.886	1.152
	FR1 n30_Main	10M	BPSK	50	0	Bottom of Laptop	0mm	AVX	ON	462000	2310	19.06	20.50	1.393	0.04	0.833	1.160
	FR1 n30_Main	10M	BPSK	1	26	Bottom of Laptop	13mm	AVX	OFF	462000	2310	22.10	23.00	1.230	0.1	0.324	0.399
	FR1 n30_Main	10M	BPSK	25	14	Bottom of Laptop	13mm	AVX	OFF	462000	2310	21.72	23.00	1.343	0.05	0.284	0.381
	FR1 n30_Main	10M	BPSK	1	26	Bottom of Laptop	0mm	ICT	ON	462000	2310	19.42	20.50	1.282	-0.03	0.104	0.133
	FR1 n30_MIMO2	10M	BPSK	1	26	Bottom of Laptop	0mm	AVX	ON	462000	2310	20.03	21.00	1.250	0.11	0.857	1.071
	FR1 n30_MIMO2	10M	BPSK	25	14	Bottom of Laptop	0mm	AVX	ON	462000	2310	19.94	21.00	1.276	0.06	0.821	1.048
	FR1 n30_MIMO2	10M	BPSK	50	0	Bottom of Laptop	0mm	AVX	ON	462000	2310	19.96	21.00	1.271	-0.07	0.816	1.037
	FR1 n30_MIMO2	10M	BPSK	1	26	Bottom of Laptop	13mm	AVX	OFF	462000	2310	22.09	23.00	1.233	0.12	0.324	0.400
	FR1 n30_MIMO2	10M	BPSK	25	14	Bottom of Laptop	13mm	AVX	OFF	462000	2310	21.85	23.00	1.303	0.08	0.291	0.379
	FR1 n30_MIMO2	10M	BPSK	1	26	Bottom of Laptop	0mm	ICT	ON	462000	2310	20.03	21.00	1.250	-0.04	0.907	1.134
	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	349000	1745	20.25	20.50	1.059	-0.07	0.850	0.900
	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	346000	1730	20.14	20.50	1.086	0.03	0.799	0.868
20	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	352000	1760	20.09	20.50	1.099	-0.09	0.998	1.097
	FR1 n66_Main	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	349000	1745	20.24	20.50	1.062	-0.02	0.831	0.882
	FR1 n66_Main	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	346000	1730	20.04	20.50	1.112	-0.08	0.763	0.848
	FR1 n66_Main	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	352000	1760	20.05	20.50	1.109	0.1	0.961	1.066
	FR1 n66_Main	40M	BPSK	216	0	Bottom of Laptop	0mm	AVX	ON	349000	1745	20.11	20.50	1.094	-0.17	0.832	0.910
	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	13mm	AVX	OFF	349000	1745	23.25	24.00	1.189	0.15	0.543	0.645
	FR1 n66_Main	40M	BPSK	108	54	Bottom of Laptop	13mm	AVX	OFF	349000	1745	23.21	24.00	1.199	0.02	0.521	0.625
	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	ICT	ON	352000	1760	20.09	20.50	1.099	-0.1	0.575	0.632
	FR1 n66_MIMO2	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	349000	1745	21.24	22.00	1.191	-0.03	0.810	0.965
	FR1 n66_MIMO2	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	346000	1730	21.03	22.00	1.250	0.02	0.743	0.929
	FR1 n66_MIMO2	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	352000	1760	21.33	22.00	1.167	-0.05	0.919	1.072
	FR1 n66_MIMO2	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	349000	1745	21.23	22.00	1.194	-0.1	0.796	0.950
	FR1 n66_MIMO2	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	346000	1730	20.93	22.00	1.279	0.16	0.704	0.901
	FR1 n66_MIMO2	40M	BPSK	108	54	Bottom of Laptop	0mm	AVX	ON	352000	1760	21.29	22.00	1.178	-0.01	0.883	1.040
	FR1 n66_MIMO2	40M	BPSK	216	0	Bottom of Laptop	0mm	AVX	ON	349000	1745	21.16	22.00	1.213	0.17	0.778	0.944
	FR1 n66_MIMO2	40M	BPSK	1	108	Bottom of Laptop	13mm	AVX	OFF	352000	1760	23.19	24.00	1.205	0.17	0.289	0.348
	FR1 n66_MIMO2	40M	BPSK	108	54	Bottom of Laptop	13mm	AVX	OFF	352000	1760	23.04	24.00	1.247	0.08	0.253	0.316
	FR1 n66_MIMO2	40M	BPSK	1	108	Bottom of Laptop	0mm	ICT	ON	352000	1760	21.33	22.00	1.167	-0.04	0.662	0.772
21	FR1 n71_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	AVX	ON	136100	680.5	23.88	24.50	1.153	-0.1	0.992	1.144
	FR1 n71_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	AVX	ON	136100	680.5	23.82	24.50	1.169	-0.09	0.971	1.136
	FR1 n71_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	AVX	ON	136100	680.5	23.80	24.50	1.175	0.03	0.956	1.123
	FR1 n71_Main	20M	BPSK	1	53	Bottom of Laptop	13mm	AVX	OFF	136100	680.5	24.85	25.00	1.035	0.03	0.298	0.308
	FR1 n71_Main	20M	BPSK	50	28	Bottom of Laptop	13mm	AVX	OFF	136100	680.5	24.82	25.00	1.042	-0.03	0.278	0.290
	FR1 n71_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	136100	680.5	23.88	24.50	1.153	-0.12	0.620	0.715
22	FR1 n38_Main	20M	BPSK	1	26	Bottom of Laptop	0mm	AVX	ON	519000	2595	20.83	21.00	1.040	0.01	1.080	1.123
	FR1 n38_Main	20M	BPSK	25	13	Bottom of Laptop	0mm	AVX	ON	519000	2595	20.78	21.00	1.052	0.05	1.020	1.073
	FR1 n38_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	AVX	ON	519000	2595	20.76	21.00	1.057	0.05	1.020	1.078
	FR1 n38_Main	20M	BPSK	1	26	Bottom of Laptop	13mm	AVX	OFF	519000	2595	22.74	24.00	1.337	0.05	0.200	0.267
	FR1 n38_Main	20M	BPSK	25	13	Bottom of Laptop	13mm	AVX	OFF	519000	2595	22.72	23.50	1.197	-0.03	0.185	0.221
	FR1 n38_Main	20M	BPSK	1	26	Bottom of Laptop	0mm	ICT	ON	519000	2595	20.83	21.00	1.040	-0.06	0.965	1.004
	FR1 n38_MIMO2	20M	BPSK	1	26	Bottom of Laptop	0mm	AVX	ON	519000	2595	18.45	18.50	1.012	-0.06	0.722	0.730
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	0mm	AVX	ON	519000	2595	18.42	18.50	1.019	0.05	0.700	0.713
	FR1 n38_MIMO2	20M	BPSK	1	26	Bottom of Laptop	13mm	AVX	OFF	519000	2595	23.34	24.00	1.164	-0.09	0.184	0.214
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	13mm	AVX	OFF	519000	2595	23.24	23.50	1.062	0.12	0.174	0.185
	FR1 n38_MIMO2	20M	BPSK	1	26	Bottom of Laptop	0mm	ICT	ON	519000	2595	18.45	18.50	1.012	-0.09	0.661	0.669

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	16.05	17.00	1.245	-0.14	0.446	0.555
	FR1 n41_Main	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	16.00	17.00	1.259	0.03	0.412	0.519
	FR1 n41_Main	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	518598	2592.99	23.52	24.00	1.117	0.01	0.188	0.210
	FR1 n41_Main	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	518598	2592.99	23.43	24.00	1.140	0.01	0.168	0.192
	FR1 n41_HPUE_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	19.04	20.00	1.247	0.03	0.421	0.525
	FR1 n41_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	518598	2592.99	16.05	17.00	1.245	0.09	0.207	0.258
	FR1 n41_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	518598	2592.99	19.35	19.50	1.035	0.02	0.494	0.511
	FR1 n41_MIMO1	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	OFF	518598	2592.99	19.35	19.50	1.035	0.04	0.526	0.544
23	FR1 n41_MIMO1	100M	BPSK	135	69	Bottom of Laptop	0mm	ICT	OFF	518598	2592.99	19.35	19.50	1.035	-0.1	1.130	1.170
	FR1 n41_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	16.00	16.00	1.000	-0.01	0.420	0.420
	FR1 n41_MIMO2	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	15.85	16.00	1.035	0.05	0.395	0.409
	FR1 n41_MIMO2	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	518598	2592.99	23.08	24.00	1.236	0.02	0.179	0.221
	FR1 n41_MIMO2	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	518598	2592.99	23.49	24.00	1.125	0.02	0.186	0.209
	FR1 n41_HPUE_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	518598	2592.99	18.88	19.00	1.028	0.01	0.385	0.396
	FR1 n41_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	518598	2592.99	16.00	16.00	1.000	-0.08	0.343	0.343
	FR1 n41_Aux	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	518598	2592.99	23.32	24.00	1.169	0.06	0.306	0.358
	FR1 n41_Aux	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	OFF	518598	2592.99	23.43	24.00	1.140	-0.11	0.322	0.367
	FR1 n41_Aux	100M	BPSK	135	69	Bottom of Laptop	0mm	ICT	OFF	518598	2592.99	23.43	24.00	1.140	-0.06	0.359	0.409
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	656000	3840	16.71	17.00	1.069	0.12	0.243	0.260
	FR1 n77_Main	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	656000	3840	16.70	17.00	1.072	-0.1	0.210	0.225
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	656000	3840	23.55	24.00	1.109	0.04	0.218	0.242
	FR1 n77_Main	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	656000	3840	23.50	24.00	1.122	0.01	0.215	0.241
	FR1 n77_HPUE_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	656000	3840	19.67	20.00	1.079	0.05	0.214	0.231
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	656000	3840	16.71	17.00	1.069	-0.15	0.234	0.250
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	15.95	17.00	1.274	0.08	0.213	0.271
	FR1 n77_Main	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	15.88	17.00	1.294	-0.03	0.201	0.260
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	633332	3499.98	23.06	24.00	1.242	0.05	0.212	0.263
	FR1 n77_Main	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	633332	3499.98	23.03	24.00	1.250	0.03	0.197	0.246
	FR1 n77_HPUE_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	18.85	20.00	1.303	0.09	0.205	0.267
	FR1 n77_Main	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	633332	3499.98	15.95	17.00	1.274	-0.19	0.178	0.227
24	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	656000	3840	22.29	22.50	1.050	-0.01	1.120	1.175
	FR1 n77_MIMO1	100M	BPSK	135	138	Bottom of Laptop	0mm	AVX	OFF	656000	3840	22.26	22.50	1.057	-0.02	1.010	1.067
	FR1 n77_MIMO1	100M	BPSK	270	0	Bottom of Laptop	0mm	AVX	OFF	656000	3840	21.51	22.50	1.256	-0.12	0.905	1.137
	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	OFF	656000	3840	22.29	22.50	1.050	-0.15	0.689	0.723
	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	633332	3499.98	21.91	22.50	1.146	-0.14	0.826	0.946
	FR1 n77_MIMO1	100M	BPSK	135	138	Bottom of Laptop	0mm	AVX	OFF	633332	3499.98	21.97	22.50	1.130	0.06	0.776	0.877
	FR1 n77_MIMO1	100M	BPSK	270	0	Bottom of Laptop	0mm	AVX	OFF	633332	3499.98	21.66	22.50	1.213	0.1	0.714	0.866
	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	OFF	633332	3499.98	21.91	22.50	1.146	0.04	0.467	0.535
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	656000	3840	17.44	18.00	1.138	-0.17	0.600	0.683
	FR1 n77_MIMO2	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	656000	3840	17.41	18.00	1.146	0.18	0.561	0.643
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	656000	3840	23.40	24.00	1.148	0.07	0.292	0.335
	FR1 n77_MIMO2	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	656000	3840	23.39	24.00	1.151	0.02	0.261	0.300
	FR1 n77_HPUE_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	656000	3840	20.42	21.00	1.143	-0.06	0.576	0.658
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	656000	3840	17.44	18.00	1.138	0.13	0.541	0.615
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	16.98	18.00	1.265	-0.09	0.483	0.611
	FR1 n77_MIMO2	100M	BPSK	135	69	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	16.97	18.00	1.268	-0.03	0.461	0.584
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	13mm	AVX	OFF	633332	3499.98	22.96	24.00	1.271	0.07	0.281	0.357
	FR1 n77_MIMO2	100M	BPSK	135	69	Bottom of Laptop	13mm	AVX	OFF	633332	3499.98	22.89	24.00	1.291	0.07	0.260	0.336
	FR1 n77_HPUE_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	ON	633332	3499.98	19.83	21.00	1.309	-0.01	0.462	0.605
	FR1 n77_MIMO2	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	ON	633332	3499.98	16.98	18.00	1.265	-0.12	0.477	0.603
	FR1 n77_Aux	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	656000	3840	23.39	24.00	1.151	-0.1	0.598	0.688
	FR1 n77_Aux	100M	BPSK	135	138	Bottom of Laptop	0mm	AVX	OFF	656000	3840	23.34	24.00	1.164	-0.14	0.452	0.526
	FR1 n77_Aux	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	OFF	656000	3840	23.39	24.00	1.151	0.17	0.510	0.587
	FR1 n77_Aux	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	633332	3499.98	22.83	24.00	1.309	-0.07	0.599	0.784
	FR1 n77_Aux	100M	BPSK	135	138	Bottom of Laptop	0mm	AVX	OFF	633332	3499.98	22.83	24.00	1.309	0.01	0.578	0.757
	FR1 n77_Aux	100M	BPSK	1	137	Bottom of Laptop	0mm	ICT	OFF	633332	3499.98	22.83	24.00	1.309	0.02	0.596	0.780

13.2 Repeated SAR Measurement

No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna Vendor	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	23095	707.5	24.82	25.00	1.042	0.03	1.060	-	1.105
2nd	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	AVX	OFF	23095	707.5	24.82	25.00	1.042	-0.02	1.020	1.04	1.063
1st	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	27710	2310	22.39	23.00	1.151	-0.05	0.974	-	1.121
2nd	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	ICT	OFF	27710	2310	22.39	23.00	1.151	0.03	0.951	1.02	1.094
1st	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	372000	1860	21.14	21.50	1.086	-0.04	1.090	-	1.184
2nd	FR1 n25_Main	20M	BPSK	1	53	Bottom of Laptop	0mm	ICT	ON	372000	1860	21.14	21.50	1.086	0.03	1.050	1.04	1.141
1st	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	352000	1760	20.09	20.50	1.099	-0.09	0.998	-	1.097
2nd	FR1 n66_Main	40M	BPSK	1	108	Bottom of Laptop	0mm	AVX	ON	352000	1760	20.09	20.50	1.099	-0.12	0.975	1.02	1.072
1st	FR1 n41_MIMO1	80M	BPSK	135	69	Bottom of Laptop	0mm	ICT	OFF	518598	2592.99	19.35	19.50	1.035	-0.1	1.130	-	1.170
2nd	FR1 n41_MIMO1	80M	BPSK	135	69	Bottom of Laptop	0mm	ICT	OFF	518598	2592.99	19.35	19.50	1.035	0.04	1.100	1.03	1.139
1st	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	656000	3840	22.29	22.50	1.050	-0.01	1.120	-	1.175
2nd	FR1 n77_MIMO1	100M	BPSK	1	137	Bottom of Laptop	0mm	AVX	OFF	656000	3840	22.29	22.50	1.050	-0.07	1.070	1.05	1.123

General Note:

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

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

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required
Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<Main>

	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	20.5	20.5
Reported 1g SAR (W/kg)	0.947	0.692
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	71.02	48.58
Linearity SAR(W/kg)	0.65	
% deviation from expected linearity		6.82%

<MIMO 2>

	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	19	19
Reported 1g SAR (W/kg)	0.578	0.37
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	50.28	34.39
Linearity SAR(W/kg)	0.40	
% deviation from expected linearity		-6.42%

13.4 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for FR1 n41/n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required.
Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<Main>

	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17	20
Reported 1g SAR (W/kg)	0.555	0.525
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	50.12	50.00
Linearity SAR(W/kg)	0.55	
% deviation from expected linearity		-5.18%

	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17	20
Reported 1g SAR (W/kg)	0.271	0.267
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	50.12	50.00
Linearity SAR(W/kg)	0.27	
% deviation from expected linearity		-1.24%

<MIMO 2>

	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	16	19
Reported 1g SAR (W/kg)	0.42	0.396
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72
Linearity SAR(W/kg)	0.42	
% deviation from expected linearity		-5.49%

	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18	21
Reported 1g SAR (W/kg)	0.683	0.658
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95
Linearity SAR(W/kg)	0.68	
% deviation from expected linearity		-3.43%

14. Simultaneous Transmission Analysis

	NO.	Simultaneous Transmission Configurations	Body
<AX211D2W>	1.	WWAN Main + WWAN MIMO 2 + WLAN2.4/5/6GHz Main Ant	Yes
	2.	WWAN Main + WWAN MIMO 2 + WLAN2.4/5/6GHz Aux Ant	Yes
	3.	WWAN Main + WWAN MIMO 2 + Bluetooth Aux Ant	Yes
	4.	WWAN MIMO 1 + WLAN2.4/5/6GHz Main Ant	Yes
	5.	WWAN MIMO 1 + WLAN2.4/5/6GHz Aux Ant	Yes
	6.	WWAN MIMO 1 + Bluetooth Aux Ant	Yes
	7.	WWAN Aux + WLAN2.4/5/6GHz Main Ant	Yes
	8.	WWAN Aux + WLAN2.4/5/6GHz Aux Ant	Yes
	9.	WWAN Aux + Bluetooth Aux Ant	Yes

	NO.	Simultaneous Transmission Configurations	Body
<QCNFA725>		Non-DBS	
	1.	WWAN Main + WWAM MIMO 2 + WLAN2.4GHz Main + Aux Ant	Yes
	2.	WWAN Main + WWAM MIMO 2 + WLAN5/6GHz Main + Aux Ant + Bluetooth Aux Ant	Yes
	3.	WWAM MIMO 1 + WLAN5/6GHz Main + Aux Ant + Bluetooth Aux Ant	Yes
	4.	WWAN Aux + WLAN5/6GHz Main + Aux Ant + Bluetooth Aux Ant	Yes
		DBS	
	5.	WWAN Main + WWAM MIMO 2 + WLAN2.4GHz Main + Aux Ant + WLAN5/6GHz Main + Aux Ant	Yes
	6.	WWAM MIMO 1 + WLAN2.4GHz Main + Aux Ant + WLAN5/6GHz Main + Aux Ant	Yes
	7.	WWAN Aux + WLAN2.4GHz Main + Aux Ant + WLAN5/6GHz Main + Aux Ant	Yes

General Note:

1. The Intel AX211D2W WLAN/BT module is integrated into this host. The WLAN 2.4GHz/5GHz and Bluetooth SAR results are referenced from Intel SAR report, report number: 201120-03.TR10 (FCC ID: PD9AX211D2), WLAN 6GHz SAR refers new report No.:201120-03.TR50 (FCC ID: PD9AX211D2).
2. The Qualcomm QCNFA725 WLAN/BT module is also integrated into this host. The WLAN/Bluetooth power and WLAN SAR testing data, which can be referred to FCC ID: A5M-QCNFA725, Sporton SAR Test Report, Report No.: FA211805-02.
3. Referenced from FCC ID: PD9AX211D2, Report No.: 201120-03.TR10 and 201120-03.TR50, WLAN modular SAR tested at 8mm separation does not exceed 0.8 W/kg and integration into this host is qualified according to KDB 616217. WiFi/BT SAR of 1.6 W/kg was used conservatively for the purpose of simultaneous transmission analysis. For the WLAN main and WLAN Aux Sim-Tx analysis include in WLAN modular SAR report. In this report only assessment WWAN to each WLAN antenna.
4. The worst case WLAN reported SAR for each configuration was used for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
5. The Sim-Tx analysis for EN-DC active is choose the worst case standalone SAR from the WWAN Main and MIMO2 antenna within the exposure positions, regardless of whether the EN-DC combinations. Therefore, the following summations represent the absolute worst cases for simultaneous transmission for this device and it is conservative.
6. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
   iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
   v) The SPLSR calculated results please refer to section 14.2.

14.1 Body Exposure Conditions

<AX211D2W>

Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO 2 Ant	WLAN2.4/5/6GHz Main Ant	WLAN2.4/5/6GHz Aux Ant	Bluetooth Aux Ant					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.192	1.173	1.600	1.600	1.600	3.965	3.965	3.965	0.02	Case 1

Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4/5/6GHz Main Ant	WLAN2.4/5/6GHz Aux Ant	Bluetooth Aux Ant					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.175	1.600	1.600	1.600	2.775	2.775	2.775	0.02	Case 2

Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4/5/6GHz Main Ant	WLAN2.4/5/6GHz Aux Ant	Bluetooth Aux Ant					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	0.784	1.600	1.600	1.600	2.384	2.384	2.384	0.02	Case 3

<QCNFA725>

Non-DBS

Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO 2 Ant	WLAN2.4GHz Main + Aux Ant	WLAN5/6GHz Main + Aux Ant	Bluetooth Aux Ant				
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Bottom of Laptop at 0mm	1.192	1.173	0.535	1.198	0.021	2.900	3.584	**0.01**	**Case 4**

Exposure Position	1	2	3	4	1+3+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Main + Aux	WLAN5/6GHz Main + Aux	Bluetooth Aux			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Bottom of Laptop at 0mm	1.175	0.535	1.198	0.021	2.394	**0.01**	**Case 5**

Exposure Position	1	2	3	4	1+3+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4GHz Main + Aux	WLAN5/6GHz Main + Aux	Bluetooth Aux			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Bottom of Laptop at 0mm	0.784	0.535	1.198	0.021	2.003	**0.01**	**Case 6**

DBS

Exposure Position	1	2	3	4	1+2+3+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO 2 Ant	WLAN2.4GHz Main + Aux Ant	WLAN5/6GHz Main + Aux Ant			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Bottom of Laptop at 0mm	1.192	1.173	0.268	0.602	3.235	**0.01**	**Case 7**

Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Main + Aux Ant	WLAN5/6GHz Main + Aux Ant			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Bottom of Laptop at 0mm	1.175	0.268	0.602	2.045	**0.01**	**Case 8**

Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4GHz Main + Aux Ant	WLAN5/6GHz Main + Aux Ant			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Bottom of Laptop at 0mm	0.784	0.268	0.602	1.654	**0.01**	**Case 9**

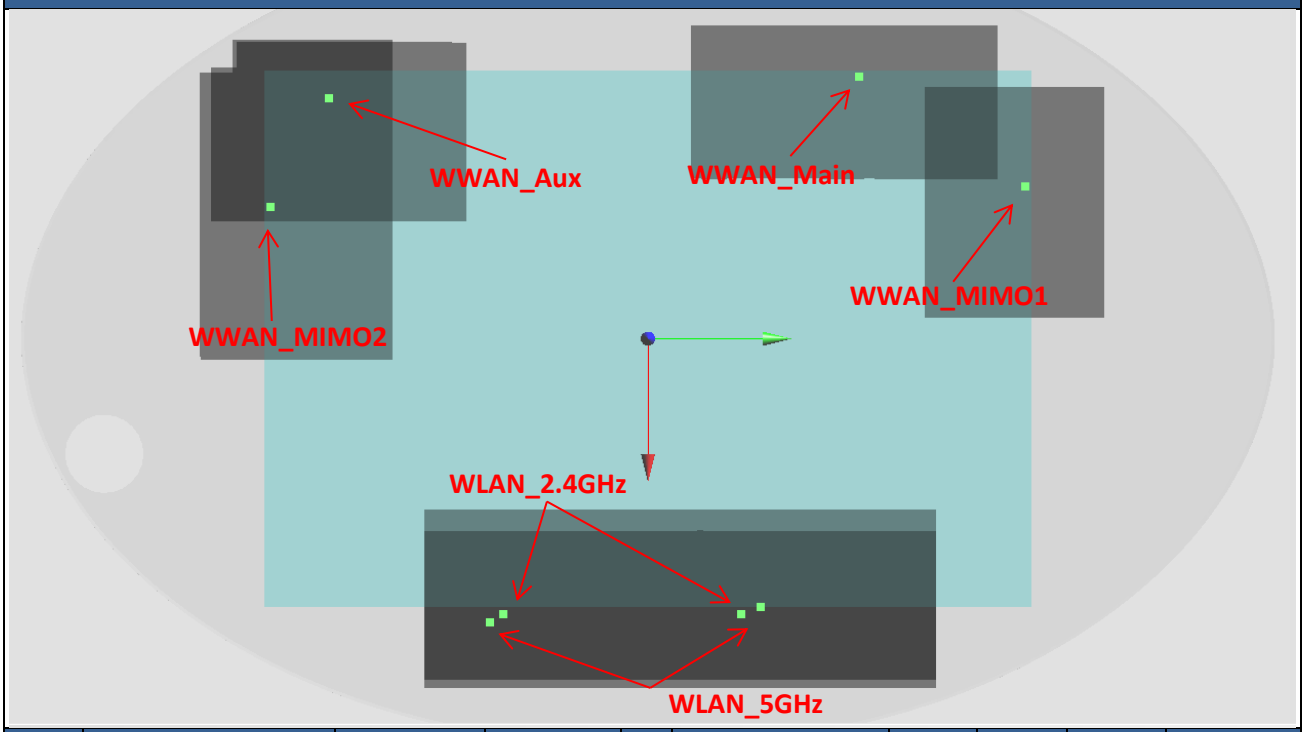
14.2 SPLSR Evaluation and Analysis

General Note:

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

	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	242.9	2.37	0.01	Not required
	Maximum WWAN MIMO 2 Ant		1.173	0mm				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	208.0	2.79	0.02	Not required
	WLAN_Main		1.6	0mm				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	292.5	2.79	0.02	Not required
	WLAN_Aux		1.6	0mm				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	292.5	2.79	0.02	Not required
	Bluetooth_Aux		1.6	0mm				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	263.8	2.77	0.02	Not required
	WLAN_Main		1.6	0mm				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	194.6	2.77	0.02	Not required
	WLAN_Aux		1.6	0mm				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	194.6	2.77	0.02	Not required
	Bluetooth_Aux		1.6	0mm				
Case 2	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN MIMO1 Ant	Bottom of Laptop	1.175	0mm	208.0	2.78	0.02	Not required
	WLAN_Main		1.6	0mm				
	Maximum WWAN MIMO1 Ant	Bottom of Laptop	1.175	0mm	292.5	2.78	0.02	Not required
	WLAN_Aux		1.6	0mm				
	Maximum WWAN MIMO1 Ant	Bottom of Laptop	1.175	0mm	292.5	2.78	0.02	Not required
	Bluetooth_Aux		1.6	0mm				
Case 3	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	263.8	2.38	0.01	Not required
	WLAN_Main		1.6	0mm				
	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	194.6	2.38	0.02	Not required
	WLAN_Aux		1.6	0mm				
	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	194.6	2.38	0.02	Not required
	Bluetooth_Aux		1.6	0mm				

Bottom of laptop hotspot point



	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 4	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	280.2	2.37	0.01	Not required
	Maximum WWAN MIMO 2 Ant		1.173	0mm	-68.39	-176.98	-1.73				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	256.7	1.73	0.01	Not required
	WLAN2.4GHz Main + Aux Ant		0.535	0mm	129.61	42.82	2.2				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	251.8	2.39	0.01	Not required
	WLAN5/6GHz Main + Aux Ant		1.198	0mm	126.8	53.79	2.59				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	300.2	1.21	0.00	Not required
	Bluetooth Aux Ant		0.021	0mm	129.83	-66.78	1.72				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	-68.39	-176.98	-1.73	295.9	1.71	0.01	Not required
	WLAN2.4GHz Main + Aux Ant		0.535	0mm	129.61	42.82	2.2				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	-68.39	-176.98	-1.73	302.3	2.37	0.01	Not required
	WLAN5/6GHz Main + Aux Ant		1.198	0mm	126.8	53.79	2.59				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	-68.39	-176.98	-1.73	226.8	1.19	0.01	Not required
	Bluetooth Aux Ant		0.021	0mm	129.83	-66.78	1.72				
	WLAN5/6GHz Main + Aux Ant	Bottom of Laptop	1.198	0mm	126.8	53.79	2.59	120.6	1.22	0.01	Not required
	Bluetooth Aux Ant		0.021	0mm	129.83	-66.78	1.72				

	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 5	Maximum WWAN MIMO 1 Ant	Bottom of Laptop	1.175	0mm	-93.78	173.8	2.85	251.1	2.37	0.01	Not required
	WLAN5/6GHz Main + Aux		1.198	0mm	126.8	53.79	2.59				
	Maximum WWAN MIMO 1 Ant	Bottom of Laptop	1.175	0mm	-93.78	173.8	2.85	328.5	1.20	0.00	Not required
	Bluetooth Aux		0.021	0mm	129.83	-66.78	1.72				
	WLAN5/6GHz Main + Aux	Bottom of Laptop	1.198	0mm	126.8	53.79	2.59	120.6	1.22	0.01	Not required
	Bluetooth Aux		0.021	0mm	129.83	-66.78	1.72				
	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 6	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	-113.61	-149.81	2.89	315.0	1.98	0.01	Not required
	WLAN5/6GHz Main + Aux		1.198	0mm	126.8	53.79	2.59				
	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	-113.61	-149.81	2.89	257.2	0.81	0.00	Not required
	Bluetooth Aux		0.021	0mm	129.83	-66.78	1.72				
	WLAN5/6GHz Main + Aux	Bottom of Laptop	1.198	0mm	126.8	53.79	2.59	120.6	1.22	0.01	Not required
	Bluetooth Aux		0.021	0mm	129.83	-66.78	1.72				
	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 7	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	280.2	2.37	0.01	Not required
	Maximum WWAN MIMO 2 Ant		1.173	0mm	-68.39	-176.98	-1.73				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	256.7	1.46	0.01	Not required
	WLAN2.4GHz Main + Aux Ant		0.268	0mm	129.61	42.82	2.2				
	Maximum WWAN Main Ant	Bottom of Laptop	1.192	0mm	-120.98	98.2	-1.97	298.5	1.79	0.01	Not required
	WLAN5/6GHz Main + Aux Ant		0.602	0mm	125.01	-70.8	4.41				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	-68.39	-176.98	-1.73	295.9	1.44	0.01	Not required
	WLAN2.4GHz Main + Aux Ant		0.268	0mm	129.61	42.82	2.2				
	Maximum WWAN MIMO 2 Ant	Bottom of Laptop	1.173	0mm	-68.39	-176.98	-1.73	220.7	1.78	0.01	Not required
	WLAN5/6GHz Main + Aux Ant		0.602	0mm	125.01	-70.8	4.41				
	WLAN2.4GHz Main + Aux Ant	Bottom of Laptop	0.268	0mm	129.61	42.82	2.2	113.7	0.87	0.01	Not required
	WLAN5/6GHz Main + Aux Ant		0.602	0mm	125.01	-70.8	4.41				
	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 8	Maximum WWAN MIMO 1 Ant	Bottom of Laptop	1.175	0mm	-93.78	173.8	2.85	259.0	1.44	0.01	Not required
	WLAN2.4GHz Main + Aux		0.268	0mm	129.61	42.82	2.2				
	Maximum WWAN MIMO 1 Ant	Bottom of Laptop	1.175	0mm	-93.78	173.8	2.85	328.2	1.78	0.01	Not required
	WLAN5/6GHz Main + Aux		0.602	0mm	125.01	-70.8	4.41				
	WLAN2.4GHz Main + Aux	Bottom of Laptop	0.268	0mm	129.61	42.82	2.2	113.7	0.87	0.01	Not required
	WLAN5/6GHz Main + Aux		0.602	0mm	125.01	-70.8	4.41				
	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 9	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	-113.61	-149.81	2.89	310.3	1.05	0.00	Not required
	WLAN2.4GHz Main + Aux		0.268	0mm	129.61	42.82	2.2				
	Maximum WWAN Aux Ant	Bottom of Laptop	0.784	0mm	-113.61	-149.81	2.89	251.4	1.39	0.01	Not required
	WLAN5/6GHz Main + Aux		0.602	0mm	125.01	-70.8	4.41				
	WLAN2.4GHz Main + Aux	Bottom of Laptop	0.268	0mm	129.61	42.82	2.2	113.7	0.87	0.01	Not required
	WLAN5/6GHz Main + Aux		0.602	0mm	125.01	-70.8	4.41				

Test Engineer： EN Liu

15. Uncertainty Assessment

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

16. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[6] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015

[7] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015

[8] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015

[9] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015

[10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[11] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.