Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	20.84	21.33	21.18	20.97	20.93	21.8	0
5	QPSK	1	12	20.89	21.43	21.18	21.01	20.88		
5	QPSK	1	24	20.86	21.40	21.12	20.97	20.88		
5	QPSK	12	0	20.97	21.51	21.26	21.05	21.05	21.8	0
5	QPSK	12	7	21.04	21.53	21.36	21.12	21.05		
5	QPSK	12	13	21.01	21.54	21.30	21.16	21.07		
5	QPSK	25	0	20.98	21.52	21.25	21.14	21.06		
5	16QAM	1	0	20.95	21.45	21.26	21.05	21.00	21.8	0
5	16QAM	1	12	20.98	21.50	21.30	21.09	21.00		
5	16QAM	1	24	20.98	21.51	21.27	21.06	20.97		
5	16QAM	12	0	20.95	21.45	21.22	21.00	21.03	21.8	0
5	16QAM	12	7	20.96	21.54	21.31	21.08	21.02		
5	16QAM	12	13	20.93	21.50	21.25	21.12	21.02		
5	16QAM	25	0	21.02	21.56	21.27	21.15	21.06		
5	64QAM	1	0	20.61	21.16	20.96	20.76	20.85	21.8	0
5	64QAM	1	12	20.69	21.20	20.97	20.80	20.86		
5	64QAM	1	24	20.73	21.23	20.99	20.80	20.86		
5	64QAM	12	0	19.96	20.53	20.28	20.11	20.16	21.8	0
5	64QAM	12	7	20.00	20.58	20.34	20.20	20.20		
5	64QAM	12	13	19.99	20.58	20.30	20.14	20.20		
5	64QAM	25	0	20.02	20.59	20.27	20.15	20.17		

<Bottom Antenna--Reduced Power Mode for Handheld On>

<LTE Band 38>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	21.07	20.93	20.95	21.3	0
20	QPSK	1	49	21.08	20.91	20.83		
20	QPSK	1	99	21.10	20.89	20.78		
20	QPSK	50	0	21.03	21.06	20.94	21.3	0
20	QPSK	50	24	21.06	21.05	20.97		
20	QPSK	50	50	21.08	21.07	20.96		
20	QPSK	100	0	21.08	21.06	20.95		
20	16QAM	1	0	21.02	21.04	20.87	21.3	0
20	16QAM	1	49	21.03	21.01	20.91		
20	16QAM	1	99	21.04	21.08	20.78		
20	16QAM	50	0	21.05	21.03	20.94	21.3	0
20	16QAM	50	24	21.07	21.03	20.99		
20	16QAM	50	50	21.03	21.06	20.88		
20	16QAM	100	0	21.05	20.99	20.92		
20	64QAM	1	0	20.89	20.88	20.69	21.3	0
20	64QAM	1	49	20.83	20.78	20.58		
20	64QAM	1	99	20.82	20.61	20.40		
20	64QAM	50	0	20.52	20.40	20.17	21.3	0
20	64QAM	50	24	20.55	20.38	20.16		
20	64QAM	50	50	20.47	20.29	20.08		
20	64QAM	100	0	20.46	20.34	20.10		

Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	20.64	20.71	20.50	21.3	0
15	QPSK	1	37	20.64	20.66	20.46		
15	QPSK	1	74	20.57	20.51	20.29		
15	QPSK	36	0	20.65	20.78	20.60	21.3	0
15	QPSK	36	20	20.80	20.81	20.56		
15	QPSK	36	39	20.72	20.72	20.48		
15	QPSK	75	0	20.68	20.75	20.56		
15	16QAM	1	0	20.64	20.74	20.69	21.3	0
15	16QAM	1	37	20.62	20.65	20.54		
15	16QAM	1	74	20.53	20.49	20.43		
15	16QAM	36	0	20.64	20.75	20.55	21.3	0
15	16QAM	36	20	20.75	20.75	20.55		
15	16QAM	36	39	20.86	20.65	20.46		
15	16QAM	75	0	20.86	20.77	20.53		
15	64QAM	1	0	20.87	20.85	20.61	21.3	0
15	64QAM	1	37	20.89	20.79	20.55		
15	64QAM	1	74	20.80	20.66	20.40		
15	64QAM	36	0	20.27	20.29	20.11	21.3	0
15	64QAM	36	20	20.33	20.31	20.08		
15	64QAM	36	39	20.26	20.24	20.00		
15	64QAM	75	0	20.27	20.25	20.07		
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	20.51	20.42	20.18	21.3	0
10	QPSK	1	25	20.58	20.40	20.19		
10	QPSK	1	49	20.56	20.36	20.11		
10	QPSK	25	0	20.82	20.62	20.38	21.3	0
10	QPSK	25	12	20.81	20.62	20.36		
10	QPSK	25	25	20.79	20.58	20.33		
10	QPSK	50	0	20.66	20.60	20.37		
10	16QAM	1	0	20.62	20.70	20.45	21.3	0
10	16QAM	1	25	20.67	20.65	20.42		
10	16QAM	1	49	20.60	20.58	20.32		
10	16QAM	25	0	20.64	20.65	20.43	21.3	0
10	16QAM	25	12	20.65	20.69	20.42		
10	16QAM	25	25	20.65	20.62	20.39		
10	16QAM	50	0	20.81	20.63	20.39		
10	64QAM	1	0	20.66	20.54	20.30	21.3	0
10	64QAM	1	25	20.71	20.51	20.26		
10	64QAM	1	49	20.68	20.44	20.23		
10	64QAM	25	0	20.12	20.13	19.91	21.3	0
10	64QAM	25	12	20.15	20.16	19.92		
10	64QAM	25	25	20.18	20.14	19.87		
10	64QAM	50	0	20.12	20.12	19.89		

Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	20.35	20.39	20.15	21.3	0
5	QPSK	1	12	20.48	20.47	20.18		
5	QPSK	1	24	20.50	20.45	20.17		
5	QPSK	12	0	20.56	20.55	20.35	21.3	0
5	QPSK	12	7	20.81	20.61	20.42		
5	QPSK	12	13	20.83	20.66	20.40		
5	QPSK	25	0	20.84	20.56	20.38		
5	16QAM	1	0	20.78	20.64	20.39	21.3	0
5	16QAM	1	12	20.84	20.73	20.44		
5	16QAM	1	24	20.86	20.71	20.43		
5	16QAM	12	0	20.74	20.55	20.38	21.3	0
5	16QAM	12	7	20.81	20.62	20.41		
5	16QAM	12	13	20.88	20.64	20.42		
5	16QAM	25	0	20.89	20.60	20.42		
5	64QAM	1	0	20.49	20.51	20.29	21.3	0
5	64QAM	1	12	20.62	20.57	20.33		
5	64QAM	1	24	20.66	20.58	20.33		
5	64QAM	12	0	20.08	20.06	19.89	21.3	0
5	64QAM	12	7	20.23	20.15	19.89		
5	64QAM	12	13	20.22	20.18	19.92		
5	64QAM	25	0	20.23	20.10	19.88		

<LTE Band 41 Power Class 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.37	24.25	24.55	24.05	23.91	24.8	0
20	QPSK	1	49	24.56	24.32	24.53	23.98	23.94		
20	QPSK	1	99	24.56	24.15	24.58	23.96	24.20		
20	QPSK	50	0	24.54	24.52	24.50	24.17	23.95	24.8	0
20	QPSK	50	24	24.36	24.49	24.55	24.28	24.19		
20	QPSK	50	50	24.46	24.54	24.46	24.09	24.16		
20	QPSK	100	0	24.40	24.52	24.54	24.06	24.03		
20	16QAM	1	0	24.48	24.46	24.45	24.29	24.00	24.8	0
20	16QAM	1	49	24.33	24.54	24.50	24.14	24.15		
20	16QAM	1	99	24.43	24.47	24.46	23.90	24.31		
20	16QAM	50	0	24.11	24.15	24.34	23.80	23.69	24.8	0
20	16QAM	50	24	24.24	24.12	24.37	23.82	23.70		
20	16QAM	50	50	24.35	24.07	24.36	23.74	23.78		
20	16QAM	100	0	24.27	24.17	24.35	23.78	23.75		
20	64QAM	1	0	23.41	23.92	23.93	23.54	23.25	24.8	0
20	64QAM	1	49	23.97	23.95	23.90	23.38	23.37		
20	64QAM	1	99	23.42	23.90	23.72	23.14	23.51		
20	64QAM	50	0	22.51	23.19	22.98	22.49	22.36	23.3	1.5
20	64QAM	50	24	23.01	23.23	22.97	22.45	22.43		
20	64QAM	50	50	22.85	23.17	22.93	22.39	22.53		
20	64QAM	100	0	22.90	23.18	22.92	22.42	22.48		

Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.23	24.23	24.23	23.79	23.51	24.8	0
15	QPSK	1	37	24.30	24.27	24.26	23.74	23.67		
15	QPSK	1	74	24.33	24.30	24.12	23.57	23.73		
15	QPSK	36	0	24.36	24.29	24.39	23.86	23.72	24.8	0
15	QPSK	36	20	24.48	24.34	24.37	23.90	23.84		
15	QPSK	36	39	24.49	24.29	24.33	23.75	23.88		
15	QPSK	75	0	24.42	24.34	24.38	23.84	23.81		
15	16QAM	1	0	24.42	24.34	24.53	23.99	23.78	24.8	0
15	16QAM	1	37	24.50	24.33	24.48	23.91	23.88		
15	16QAM	1	74	24.48	24.26	24.32	23.72	23.95		
15	16QAM	36	0	23.84	24.05	23.84	23.31	23.22	24.8	0
15	16QAM	36	20	23.90	24.10	23.88	23.36	23.37		
15	16QAM	36	39	23.95	24.07	23.82	23.24	23.32		
15	16QAM	75	0	23.93	24.13	23.88	23.33	23.33		
15	64QAM	1	0	23.15	23.88	23.93	23.44	23.22	24.8	0
15	64QAM	1	37	23.50	23.95	23.88	23.34	23.33		
15	64QAM	1	74	23.70	23.79	23.76	23.21	23.38		
15	64QAM	36	0	22.22	23.09	22.91	22.41	22.32	23.3	1.5
15	64QAM	36	20	22.41	23.18	22.91	22.42	22.38		
15	64QAM	36	39	22.58	23.11	22.84	22.29	22.40		
15	64QAM	75	0	22.32	23.12	22.90	22.32	22.36		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.95	24.23	24.04	23.48	23.42	24.8	0
10	QPSK	1	25	24.03	24.26	23.96	23.50	23.41		
10	QPSK	1	49	24.01	24.28	23.93	23.44	23.41		
10	QPSK	25	0	24.22	24.20	24.24	23.68	23.65	24.8	0
10	QPSK	25	12	24.25	24.23	24.23	23.70	23.63		
10	QPSK	25	25	24.19	24.20	24.15	23.68	23.63		
10	QPSK	50	0	24.21	24.24	24.20	23.71	23.65		
10	16QAM	1	0	24.28	24.23	24.30	23.77	23.70	24.8	0
10	16QAM	1	25	24.23	24.25	24.25	23.74	23.66		
10	16QAM	1	49	24.26	24.18	24.20	23.65	23.67		
10	16QAM	25	0	23.79	24.02	23.80	23.24	23.20	24.8	0
10	16QAM	25	12	23.79	24.07	23.79	23.21	23.23		
10	16QAM	25	25	23.75	24.02	23.71	23.20	23.17		
10	16QAM	50	0	23.71	24.06	23.75	23.22	23.18		
10	64QAM	1	0	22.97	23.80	23.79	23.14	23.11	24.8	0
10	64QAM	1	25	23.39	23.73	23.65	23.16	23.10		
10	64QAM	1	49	23.62	23.77	23.62	23.08	23.12		
10	64QAM	25	0	21.94	22.89	22.84	22.26	22.24	23.3	1.5
10	64QAM	25	12	22.33	22.90	22.82	22.28	22.25		
10	64QAM	25	25	22.55	22.87	22.75	22.24	22.25		
10	64QAM	50	0	22.23	23.05	22.75	22.20	22.2		

Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.03	24.29	24.04	23.48	23.47	24.8	0
5	QPSK	1	12	24.07	24.31	24.02	23.51	23.50		
5	QPSK	1	24	24.08	24.31	24.04	23.52	23.46		
5	QPSK	12	0	24.25	24.23	24.18	23.63	23.61	24.8	0
5	QPSK	12	7	24.26	24.30	24.30	23.74	23.67		
5	QPSK	12	13	24.25	24.27	24.24	23.67	23.67		
5	QPSK	25	0	24.22	24.23	24.20	23.68	23.67		
5	16QAM	1	0	24.33	24.22	24.29	23.69	23.71	24.8	0
5	16QAM	1	12	24.33	24.29	24.33	23.77	23.74		
5	16QAM	1	24	24.34	24.29	24.30	23.73	23.73		
5	16QAM	12	0	23.81	24.04	23.73	23.16	23.14	24.8	0
5	16QAM	12	7	23.84	24.11	23.80	23.25	23.19		
5	16QAM	12	13	23.80	24.07	23.76	23.18	23.19		
5	16QAM	25	0	23.74	24.08	23.74	23.24	23.23		
5	64QAM	1	0	22.97	23.79	23.74	23.18	23.21	24.8	0
5	64QAM	1	12	23.16	23.85	23.77	23.21	23.18		
5	64QAM	1	24	23.37	23.87	23.74	23.25	23.19		
5	64QAM	12	0	21.95	22.91	22.78	22.19	22.19	23.3	1.5
5	64QAM	12	7	22.20	22.92	22.85	22.29	22.29		
5	64QAM	12	13	22.27	22.91	22.81	22.23	22.25		
5	64QAM	25	0	22.12	22.93	22.78	22.32	22.28		

<LTE Band 41 Power Class 3>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.13	21.11	21.07	20.63	20.54	21.3	0
20	QPSK	1	49	21.13	21.01	21.04	20.58	20.60		
20	QPSK	1	99	21.11	21.06	21.15	20.63	20.71		
20	QPSK	50	0	21.05	21.05	21.08	20.67	20.53	21.3	0
20	QPSK	50	24	21.02	21.04	21.13	20.77	20.66		
20	QPSK	50	50	21.12	21.11	21.12	20.54	20.77		
20	QPSK	100	0	21.09	21.10	21.06	20.66	20.53		
20	16QAM	1	0	21.04	20.91	21.08	20.59	20.42	21.3	0
20	16QAM	1	49	21.11	21.03	21.05	20.52	20.45		
20	16QAM	1	99	20.94	21.01	21.03	20.47	20.59		
20	16QAM	50	0	21.05	21.06	21.06	20.68	20.51	21.3	0
20	16QAM	50	24	20.97	21.05	21.13	20.64	20.56		
20	16QAM	50	50	20.80	21.04	21.06	20.62	20.67		
20	16QAM	100	0	21.05	21.04	21.05	20.62	20.51		
20	64QAM	1	0	20.54	20.70	20.58	20.17	19.94	21.3	0
20	64QAM	1	49	20.65	20.72	20.62	20.05	20.03		
20	64QAM	1	99	20.68	20.69	20.40	19.83	20.21		
20	64QAM	50	0	20.40	20.55	20.45	20.01	19.87	21.3	0
20	64QAM	50	24	20.47	20.56	20.43	19.92	19.91		
20	64QAM	50	50	20.49	20.49	20.39	19.83	20.00		
20	64QAM	100	0	20.46	20.50	20.41	19.92	19.96		

Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	20.74	20.75	20.77	20.28	20.07	21.3	0
15	QPSK	1	37	20.72	20.71	20.75	20.20	20.18		
15	QPSK	1	74	20.82	20.79	20.64	20.02	20.27		
15	QPSK	36	0	20.87	20.76	20.84	20.35	20.22	21.3	0
15	QPSK	36	20	20.93	20.73	20.83	20.35	20.32		
15	QPSK	36	39	20.93	20.73	20.83	20.24	20.34		
15	QPSK	75	0	20.90	20.73	20.87	20.37	20.33		
15	16QAM	1	0	20.87	20.80	20.85	20.33	20.09	21.3	0
15	16QAM	1	37	20.81	20.74	20.83	20.24	20.19		
15	16QAM	1	74	20.86	20.78	20.73	20.06	20.26		
15	16QAM	36	0	20.76	20.80	20.81	20.30	20.18	21.3	0
15	16QAM	36	20	20.87	20.78	20.79	20.30	20.30		
15	16QAM	36	39	20.92	20.79	20.80	20.19	20.28		
15	16QAM	75	0	20.93	20.73	20.87	20.34	20.31		
15	64QAM	1	0	20.51	20.69	20.57	20.07	19.90	21.3	0
15	64QAM	1	37	20.60	20.74	20.59	19.99	19.94		
15	64QAM	1	74	20.60	20.63	20.46	19.82	20.08		
15	64QAM	36	0	20.30	20.43	20.40	19.82	19.77	21.3	0
15	64QAM	36	20	20.40	20.49	20.43	19.84	19.90		
15	64QAM	36	39	20.38	20.47	20.34	19.73	19.88		
15	64QAM	75	0	20.38	20.48	20.37	19.84	19.89		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	20.54	20.70	20.65	20.07	19.93	21.3	0
10	QPSK	1	25	20.52	20.75	20.55	19.99	19.99		
10	QPSK	1	49	20.61	20.75	20.51	20.02	19.89		
10	QPSK	25	0	20.65	20.70	20.73	20.15	20.18	21.3	0
10	QPSK	25	12	20.70	20.72	20.73	20.18	20.18		
10	QPSK	25	25	20.67	20.79	20.63	20.11	20.16		
10	QPSK	50	0	20.67	20.71	20.73	20.18	20.20		
10	16QAM	1	0	20.66	20.77	20.70	20.18	20.04	21.3	0
10	16QAM	1	25	20.62	20.80	20.65	20.08	20.00		
10	16QAM	1	49	20.61	20.71	20.60	20.05	19.94		
10	16QAM	25	0	20.65	20.71	20.74	20.21	20.14	21.3	0
10	16QAM	25	12	20.74	20.73	20.72	20.23	20.15		
10	16QAM	25	25	20.66	20.79	20.63	20.17	20.15		
10	16QAM	50	0	20.69	20.71	20.75	20.24	20.18		
10	64QAM	1	0	20.38	20.51	20.40	19.88	19.78	21.3	0
10	64QAM	1	25	20.32	20.56	20.34	19.79	19.80		
10	64QAM	1	49	20.36	20.52	20.28	19.78	19.80		
10	64QAM	25	0	20.16	20.48	20.30	19.69	19.73	21.3	0
10	64QAM	25	12	20.19	20.42	20.29	19.72	19.80		
10	64QAM	25	25	20.19	20.45	20.20	19.63	19.72		
10	64QAM	50	0	20.15	20.42	20.22	19.66	19.65		

Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	20.54	20.74	20.64	19.99	19.99	21.3	0
5	QPSK	1	12	20.57	20.75	20.61	20.03	20.02		
5	QPSK	1	24	20.56	20.76	20.57	20.00	19.99		
5	QPSK	12	0	20.65	20.78	20.70	20.07	20.14	21.3	0
5	QPSK	12	7	20.72	20.72	20.77	20.16	20.15		
5	QPSK	12	13	20.70	20.75	20.74	20.12	20.09		
5	QPSK	25	0	20.65	20.71	20.68	20.17	20.09		
5	16QAM	1	0	20.64	20.78	20.65	20.07	20.08	21.3	0
5	16QAM	1	12	20.67	20.71	20.70	20.13	20.08		
5	16QAM	1	24	20.68	20.76	20.66	20.11	20.08		
5	16QAM	12	0	20.63	20.75	20.65	20.13	20.10	21.3	0
5	16QAM	12	7	20.68	20.78	20.69	20.21	20.16		
5	16QAM	12	13	20.67	20.79	20.67	20.15	20.07		
5	16QAM	25	0	20.69	20.73	20.69	20.22	20.13		
5	64QAM	1	0	20.40	20.57	20.45	19.85	19.87	21.3	0
5	64QAM	1	12	20.39	20.61	20.48	19.86	19.82		
5	64QAM	1	24	20.44	20.66	20.48	19.89	19.85		
5	64QAM	12	0	20.23	20.43	20.30	19.62	19.73	21.3	0
5	64QAM	12	7	20.16	20.46	20.39	19.72	19.77		
5	64QAM	12	13	20.18	20.47	20.33	19.67	19.77		
5	64QAM	25	0	20.21	20.48	20.29	19.71	19.75		

<LTE Carrier Aggregation>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. All permutations exist. No restrictions on Pcell & Scell combinations. Only LTE Band 29/46 is limited to Scell.
4. CA combinations at following gray table are covered by other subset CA, no need to verify power.

Index	2CC	4X4 MIMO	Restriction	Index	3CC	4X4 MIMO	Restriction
2CC #1	CA_12A-30A			3CC #1	CA_12A-30A-66A		
2CC #2	CA_12A-66A	B66		3CC #2	CA_12A-66A-66A	B66	
2CC #3	CA_13A-66A	B66		3CC #3	CA_12A-66C	B66	
2CC #4	CA_25A-26A			3CC #4	CA_13A-66A-66A	B66	
2CC #5	CA_29A-30A		B29 SCC Only	3CC #5	CA_2A-12A-30A		
2CC #6	CA_2A-12A	B2		3CC #6	CA_2A-12A-66A	B2,B66	
2CC #7	CA_2A-13A	B2		3CC #7	CA_2A-13A-66A	B2,B66	
2CC #8	CA_2A-29A	B2	B29 SCC Only	3CC #8	CA_2A-29A-30A		B29 SCC Only
2CC #9	CA_2A-2A	B2		3CC #9	CA_2A-2A-12A	B2	
2CC #10	CA_2A-30A			3CC #10	CA_2A-2A-13A	B2	
2CC #11	CA_2A-48A	B2		3CC #11	CA_2A-2A-4A	B2,B4	
2CC #12	CA_2A-4A	B2,B4		3CC #12	CA_2A-2A-5A	B2	
2CC #13	CA_2A-5A	B2		3CC #13	CA_2A-2A-66A	B2,B66	
2CC #14	CA_2A-66A	B2,B66		3CC #14	CA_2A-2A-71A	B2	
2CC #15	CA_2A-71A	B2		3CC #15	CA_2A-48A-48A	B2	
2CC #16	CA_2A-7A			3CC #16	CA_2A-48A-66A	B2,B66	
2CC #17	CA_2C	B2		3CC #17	CA_2A-48C	B2	
2CC #18	CA_38C			3CC #18	CA_2A-4A-12A	B2,B4	
2CC #19	CA_41A-41A			3CC #19	CA_2A-4A-13A	B2,B4	
2CC #20	CA_41C			3CC #20	CA_2A-4A-29A	B2,B4	
2CC #21	CA_48A-48A	B48		3CC #21	CA_2A-4A-4A	B2,B4	
2CC #22	CA_48A-66A	B48,B66		3CC #22	CA_2A-4A-5A	B2,B4	
2CC #23	CA_48C	B48		3CC #23	CA_2A-4A-71A	B2,B4	
2CC #24	CA_4A-12A	B4		3CC #24	CA_2A-4A-7A	B2	
2CC #25	CA_4A-13A	B4		3CC #25	CA_2A-5A-30A		
2CC #26	CA_4A-29A	B4	B29 SCC Only	3CC #26	CA_2A-5A-66A	B2,B66	
2CC #27	CA_4A-30A			3CC #27	CA_2A-66A-66A	B2,B66	
2CC #28	CA_4A-4A	B4		3CC #28	CA_2A-66A-71A	B2,B66	
2CC #29	CA_4A-5A	B4		3CC #29	CA_2A-66C	B2,B66	
2CC #30	CA_4A-71A	B4		3CC #30	CA_2A-7A-7A		
2CC #31	CA_4A-7A	B4,B7		3CC #31	CA_2C-66A	B2,B66	
2CC #32	CA_5A-30A			3CC #32	CA_41A-41C	B41	
2CC #33	CA_5A-66A	B66		3CC #33	CA_41D	B41	
2CC #34	CA_5B			3CC #34	CA_48A-48A-66A	B48, B66	
2CC #35	CA_66A-66A	B66		3CC #35	CA_48C-48A	B48	
2CC #36	CA_66A-71A	B66		3CC #36	CA_48C-66A	B48,B66	

2CC #37	CA_66B	B66		3CC #37	CA_48D	B48	
2CC #38	CA_66C	B66		3CC #38	CA_4A-12A-30A		
2CC #39	CA_7A-12A			3CC #39	CA_4A-29A-30A		
2CC #40	CA_7A-7A			3CC #40	CA_4A-4A-12A	B4	
2CC #41	CA_7C			3CC #41	CA_4A-4A-13A	B4	
2CC #42	CA_2A-46A	B2	B46 SCC Only	3CC #42	CA_4A-4A-5A	B4	
2CC #43	CA_4A-46A	B4	B46 SCC Only	3CC #43	CA_4A-4A-71A	B4	
2CC #44	CA_46A-66A	B66	B46 SCC Only	3CC #44	CA_4A-4A-7A		
2CC #45	CA_5A-48A			3CC #45	CA_4A-5A-30A		
2CC #46	CA_25A-41A			3CC #46	CA_4A-7A-12A		
2CC #47	CA_25A-25A	B25		3CC #47	CA_4A-7A-7A		
2CC #48	CA_25A-26A	B25		3CC #48	CA_5A-30A-66A		
2CC #49	CA_25A-46A	B25		3CC #49	CA_5A-66A-66A	B66	
2CC #50	CA_41A-48A	B41,B48		3CC #50	CA_5A-66C	B66	
2CC #51	CA_26A-41A	B41		3CC #51	CA_66A-66A-71A	B66	
2CC #52	CA_30A-66A	B66		3CC #52	CA_66A-66C	B66	
				3CC #53	CA_66C-71A	B66	
				3CC #54	CA_2A-46C	B2	B46 SCC Only
				3CC #55	CA_4A-46C	B4	B46 SCC Only
				3CC #56	CA_46C-66A	B66	B46 SCC Only
				3CC #57	CA_4A-46A-46A	B4	B46 SCC Only
				3CC #58	CA_2A-46A-46A	B2	B46 SCC Only
				3CC #59	CA_2A-46A-66A	B2,B66	B46 SCC Only
				3CC #60	CA_46A-46A-66A	B66	B46 SCC Only
				3CC #61	CA_25A-41C		
				3CC #62	CA_25A-25A-26A	B25	
				3CC #63	CA_25A-46C	B25	B46 SCC Only
				3CC #64	CA_13A-66B	B66	
				3CC #65	CA_13A-66C	B66	
				3CC #66	CA_2A-66B	B2,B66	
				3CC #67	CA_5A-66B	B66	
				3CC #68	CA_2A-2A-46A	B2	B46 SCC Only

Index	4CC	4X4 MIMO	Restriction	Index	5CC	4X4 MIMO	Restriction
4CC #1	CA_2A-66C-71A	B2,B66		5CC #1	CA_2A-46E	B2	B46 SCC Only
4CC #2	CA_2A-66A-66A-71A	B2,B66	-	5CC #2	CA_2A-2A-46D	B2	B46 SCC Only
4CC #3	CA_2A-2A-66A-71A	B2,B66		5CC #3	CA_48E-66A	B66	
4CC #4	CA_48E			5CC #4	CA_46A-46D-66A	B66	B46 SCC Only
4CC #5	CA_48D-66A	B66		5CC #5	CA_4A-46A-46D	B4	B46 SCC Only
4CC #6	CA_2A-2A-46C	B2	B46 SCC Only	5CC #6	CA_2A-46A-46D	B2	B46 SCC Only
4CC #7	CA_2A-4A-7A-7A			5CC #7	CA_2A-46A-46C-66A	B2,B66	B46 SCC Only
4CC #8	CA_2A-46D	B2	B46 SCC Only	5CC #8	CA_2A-46D-66A	B2,B66	B46 SCC Only
4CC #9	CA_4A-46D	B4	B46 SCC Only	5CC #9	CA_41C-41D		
4CC #10	CA_46D-66A	B66	B46 SCC Only	5CC #10	CA_41F		
4CC #11	CA_2A-46A-46A-66A	B2,B66	B46 SCC Only	5CC #11	CA_46E-66A	B66	B46 SCC Only
4CC #12	CA_4A-46A-46C	B4	B46 SCC Only				
4CC #13	CA_2A-46A-46C	B2	B46 SCC Only				
4CC #14	CA_46A-46C-66A	B66	B46 SCC Only				
4CC #15	CA_2A-46C-66A	B2,B66	B46 SCC Only				
4CC #16	CA_2A-2A-66C	B2,B66					
4CC #17	CA_2A-12A-66C	B2,B66					
4CC #18	CA_2C-66A-66A	B2,B66					
4CC #19	CA_2A-2A-5A-66A						
4CC #20	CA_2A-2A-13A-66A						
4CC #21	CA_2A-5A-66A-66A						
4CC #22	CA_2A-5A-66B	B2,B66					
4CC #23	CA_2A-5A-66C	B2,B66					
4CC #24	CA_2A-13A-66A-66A						
4CC #25	CA_2A-13A-66B	B2,B66					
4CC #26	CA_2A-13A-66C	B2,B66					
4CC #27	CA_2A-12A-66A-66A						
4CC #28	CA_2A-2A-66A-66A						
4CC #29	CA_2A-2A-12A-66A						
4CC #30	CA_25A-41D						
4CC #31	CA_41C-41C						
4CC #32	CA_41A-41D	B41					
4CC #33	CA_41E						
4CC #34	CA_25A-46D	B25	B46 SCC Only				
4CC #35	CA_2A-2A-4A-12A	B2,B4					

LTE Carrier Aggregation Conducted Power (Downlink)

i. This device supports downlink 4x4 MIMO operations. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

ii. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.

iii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

iv. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

v. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

vi. For inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band. For SCC DL RB size and offset will base on the PCC corresponding RB allocation.

vii. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.

viii. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lfloor \frac{BW_{Channel(1)} + BW_{Channel(2)} - 0.1\left|BW_{Channel(1)} - BW_{Channel(2)}\right|}{0.6} \right\rfloor 0.3 \ \ [\text{MHz}]$$

<Top Antenna--Full Power Mode>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 30	10M	2355	9820	21.85	21.87
			Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	20.82	21.12
		CA_5A-48A	Band 5	10M	829	20450	QPSK	1	0	Band 48	20M	3560	55340	22.95	22.96
		CA_25A-46A	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	21.75	21.79
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	21.72	21.79
		CA_26A-41A	Band 26	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620	22.91	22.99
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.30	21.68
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.29	21.68
			Band 48	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	23.45	23.53
			Band 48(4*4MIMO)	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	23.42	23.53
Intra-Band	Contiguous	CA_5B	Band 5	10M	829	20450	QPSK	1	0	Band 5	10M	883.9	2549	22.85	22.96
		CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	21.23	21.30
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	21.40	21.47
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	21.31	21.68

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	21.69	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	21.62	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	21.82	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	21.8	21.87
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.82	22.96
	CA_2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	21.67	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	21.62	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	21.84	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	21.81	21.87
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.83	22.91
	CA_2A-4A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	21.69	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	21.65	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	21.83	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	21.78	21.87
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.87	22.95
	CA_2A-4A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	21.72	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	21.71	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	21.82	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	21.78	21.87
	CA_2A-4A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	21.66	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	21.61	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	21.81	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	21.78	21.87
		Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	23.32	23.47
	CA_2A-5A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	21.7	21.72
		Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	22.91	22.96
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 5	10M	881.5	2525	20.99	21.12
	CA_2A-12A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	21.7	21.72
		Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	22.86	22.91
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 12	10M	737.5	5095	20.99	21.12
	CA_2A-29A-30A	Band 2	20M	18700	1860	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	21.7	21.72
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 29	10M	722.5	9715	21	21.12
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	21.86	21.87
		Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 4	20M	2132.5	2175	22.92	22.96
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	20.79	21.12
	CA_4A-7A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 12	5M	737.5	5095	21.73	21.87
		Band 7	20M	2560	21350	QPSK	1	0	Band 12	5M	737.5	5095	Band 4	20M	2132.5	2175	21.26	21.3
		Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	22.87	22.91
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	21.81	21.87
		Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	2355	2355	2355	2132.5	2175	22.83	22.91
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	20.81	21.12
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	21.79	21.87
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	21.03	21.12
	CA_5A-30A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	22.88	22.96
		Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 5	10M	881.5	2525	20.98	21.12
		Band 66	20M	1745	132322	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	23.21	23.47
	CA_12A-30A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	22.88	22.91
		Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	20.83	21.12
		Band 66	20M	1745	132322	QPSK	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	21.89	21.93

Configure			PCC							SCC1				SCC2				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-4A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	21.66	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	21.62	21.72
			Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	21.83	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	21.81	21.87
	CA_2A-4A-4A		Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	21.71	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	21.69	21.72
			Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	21.85	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	21.81	21.87
	CA_2A-2A-71A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 71	20M	637	68786	21.64	21.72
			Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	23.41	23.47
	CA_2A-46A-46A		Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	21.68	21.72
	CA_2A-48A-48A		Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3579.8	55538	21.71	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3579.8	55538	21.69	21.72
	CA_2A-48A-66A		Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	21.68	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	21.62	21.72
			Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	21.91	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	21.88	21.93
	CA_4A-4A-5A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	21.84	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	21.78	21.87
			Band 5	10M	829	20450	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.85	22.96
	CA_4A-4A-7A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	21.86	21.87
			Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2120	2050	Band 4	5M	2152.5	2375	21.26	21.3
	CA_4A-4A-71A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	21.82	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	21.77	21.87
			Band 71	20M	683	133322	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	23.29	23.47
	CA_4A-4A-12A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	21.82	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	21.79	21.87
			Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.86	22.91
	CA_4A-4A-13A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	21.83	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	21.82	21.87
			Band 13	10M	782	23230	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.85	22.95
	CA_4A-46A-46A		Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	21.72	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	21.71	21.87
	CA_2A-48C		Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	21.69	21.72
	CA_4A-46C		Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.82	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.77	21.87
	CA_48A-48A-66A		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	21.87	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	21.82	21.93
	CA_48C-66A		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	21.89	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	21.82	21.93
	CA_48C-48A		Band 48	20M	3609	55830	QPSK	1	99	Band 48	20M	3628.8	56028	Band 48	20M	3560	55340	23.48	23.53
	CA_25A-25A-26A		Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	21.66	21.79
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	21.61	21.79
	CA_25A-46C		Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.2	54142	Band 46	20M	5095	54340	21.76	21.79
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.2	54142	Band 46	20M	5095	54340	21.71	21.79
	CA_2A-2A-46A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	21.71	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	21.68	21.72
Intra-Band	Non-Contiguous	CA_66A-66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	21.82	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	21.81	21.93
			Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	21.87	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	21.85	21.93
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.47	21.68
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.42	21.68
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.44	21.68
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.39	21.68

<Four Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-5A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	21.71	21.72
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	22.93	22.96
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	21.84	21.93
	CA_2A-2A-13A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	21.67	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	21.90	21.93
		Band 13	10M	782	23230	QPSK	1	0	Band 66	5M	2197.5	67311	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.93	22.95
	CA_2A-4A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	21.62	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	21.80	21.87
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	21.23	21.3
	CA_2A-5A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	21.64	21.72
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.93	22.96
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	21.83	21.93
	CA_2A-5A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	21.71	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	21.71	21.72
		Band 5	10M	829	20450	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	22.94	22.96
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.85	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.83	21.93
	CA_2A-13A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	21.7	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	21.64	21.72
		Band 13	10M	782	23230	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	22.89	22.95
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	21.91	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	21.92	21.93
	CA_2A-12A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	21.63	21.72
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.81	22.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	5M	2197.5	67311	21.93	21.93
	CA_2A-13A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	21.72	21.72
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.91	22.95
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	21.88	21.93
	CA_2A-2A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.65	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2174.8	67084	21.92	21.93
	CA_2A-2A-46C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	21.66	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	21.69	21.72
	CA_2A-5A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	21.66	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	21.7	21.72
		Band 5	10M	829	20450	QPSK	1	0	Band 66	20M	2174.8	67084	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.94	22.96
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	21.86	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	21.85	21.93
	CA_2A-12A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.72	21.72
		Band 12	20M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.85	22.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2174.8	67084	21.85	21.93
	CA_2A-13A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.69	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.65	21.72
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.89	22.95
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	21.85	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	21.93	21.93
	CA_2A-66C-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.67	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.7	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.92	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.84	21.93
		Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	23.43	23.47
	CA_2A-66A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.69	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.71	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.87	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.89	21.93
		Band 71	20M	1900	19100	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	23.43	23.47
	CA_2A-2A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	21.66	21.72

		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	21.7	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	21.91	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	21.93	21.93
		Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	23.37	23.47
	CA_CA_4A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.78	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.83	21.87
	CA_2A-2A-12A-66A	Band 2	20M	1900	19100	QPSK	1	0	Band 2	5M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	21.7	21.72
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	22.95	22.95
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.89	21.93
	CA_2A-2A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	21.68	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	21.92	21.93
	CA_2C-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	21.63	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	21.92	21.93
	CA_25A-41D	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.76	21.79
		Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	21.64	21.68
	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.62	21.68
		Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.58	21.68
	CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.61	21.68
	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	21.67	21.68
	CA_4A-46A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.77	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.78	21.87
	CA_2A-46A-46A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	21.62	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	21.68	21.72
		Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	21.89	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	21.85	21.93
	CA_2A-46C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.86	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.92	21.93
		Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	21.64	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	21.64	21.72
	CA_25A-46D	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.79	21.79
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.78	21.79
	CA_48D-66A	Band 48	20M	3609	55830	QPSK	1	0	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	23.5	23.53
		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	21.9	21.93
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	21.9	21.93
	CA_2A-2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	21.68	21.72
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	21.66	21.72
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.82	21.87
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.81	21.87
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	22.9	22.95

<Five Carrier power verification>

Configure			PCC							SCC1				SCC2				SCC3				SCC4				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_2A-46A-46C-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	21.67	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	21.69	21.72
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.9	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.92	21.93
		CA_2A-2A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.62	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.64	21.72
		CA_2A-46E	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.71	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.63	21.72
		CA_2A-46A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.7	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.64	21.72
		CA_4A-46A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.87	21.87
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.78	21.87
		CA_46A-46D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.89	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.89	21.93
		CA_2A-46D-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.71	21.72
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.67	21.72
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.83	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.88	21.93
		CA_48E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	21.9	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	21.88	21.93
			Band 48	20M	3609	55830	QPSK	1	99	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	23.5	23.53
		CA_46E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.85	21.93
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.84	21.93
Intra-Band	Non-Contiguous	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.59	21.68
	Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	21.68	21.68

<Top Antenna--Reduced Power Mode for Receiver On>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 30	10M	2355	9820	18.65	18.69
			Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	15.06	15.12
		CA_5A-48A	Band 5	10M	829	20450	QPSK	1	0	Band 48	20M	3560	55340	19.09	19.14
		CA_25A-46A	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	18.92	18.99
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	18.89	18.99
		CA_26A-41A	Band 26	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620	19.07	19.15
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	17.62	17.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	17.60	17.65
			Band 48	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	16.51	16.56
			Band 48(4*4MIMO)	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	16.46	16.56
Intra-Band	Contiguous	CA_5B	Band 5	10M	829	20450	QPSK	1	0	Band 5	10M	883.9	2549	19.12	19.14
		CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	14.82	14.87
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	17.59	17.65
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	17.62	17.65

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	18.79	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	18.72	18.91
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	18.63	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	18.55	18.69
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	19.12	19.14
	CA_2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.86	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.81	18.91
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	18.56	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	18.52	18.69
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	19.88	19.94
	CA_2A-4A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	18.9	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	18.78	18.91
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	18.62	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	18.6	18.69
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	20.62	20.68
	CA_2A-4A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	18.81	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	18.77	18.91
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	18.62	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	18.6	18.69
	CA_2A-4A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	18.65	18.69
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	18.62	18.69
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	18.62	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	18.55	18.69
		Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.44	22.47
	CA_2A-5A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	18.81	18.91
		Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	19.11	19.14
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 5	10M	881.5	2525	15.08	15.12
	CA_2A-12A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	18.86	18.91
		Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	19.85	19.94
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 12	10M	737.5	5095	15.11	15.12
	CA_2A-29A-30A	Band 2	20M	18700	1860	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	18.85	18.91
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 29	10M	722.5	9715	15.08	15.12
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	18.58	18.69
		Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 4	20M	2132.5	2175	19.1	19.14
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	15.09	15.12
	CA_4A-7A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 12	5M	737.5	5095	15.07	15.12
		Band 7	20M	2560	21350	QPSK	1	0	Band 12	5M	737.5	5095	Band 4	20M	2132.5	2175	14.82	14.87
		Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	19.87	19.94
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	18.66	18.69
		Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	2355	2355	2355	2132.5	2175	19.85	19.94
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	15.09	15.12
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	18.54	18.69
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	15.07	15.12
	CA_5A-30A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	19.12	19.14
		Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 5	10M	881.5	2525	15.08	15.12
		Band 66	20M	1745	132322	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	18.71	18.75
	CA_12A-30A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	19.89	19.94
		Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	15.05	15.12
		Band 66	20M	1745	132322	QPSK	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	18.71	18.75

Configure			PCC							SCC1				SCC2				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_2A-2A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	18.85	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	18.82	18.91
			Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	18.62	18.69
			Band 2(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	18.56	18.69
		CA_2A-4A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	18.88	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	18.82	18.91
			Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	18.65	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	18.62	18.69
		CA_2A-2A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 71	20M	637	68786	18.87	18.91
			Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.46	22.47
		CA_2A-46A-46A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	18.89	18.91
		CA_2A-48A-48A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3579.8	55538	18.88	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3579.8	55538	18.82	18.91
		CA_2A-48A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	18.89	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	18.83	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	18.66	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	18.61	18.75
		CA_4A-4A-5A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	18.62	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	18.56	18.69
			Band 5	10M	829	20450	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.11	19.14
		CA_4A-4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	18.64	18.69
			Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2120	2050	Band 4	5M	2152.5	2375	14.79	14.87
		CA_4A-4A-71A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	18.67	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	18.63	18.69
			Band 71	20M	683	133322	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.42	22.47
		CA_4A-4A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	18.58	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	18.53	18.69
			Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.88	19.94
		CA_4A-4A-13A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	18.66	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	18.61	18.69
			Band 13	10M	782	23230	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	20.59	20.68
		CA_4A-46A-46A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	18.66	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	18.62	18.69
		CA_2A-48C	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	18.85	18.91
		CA_4A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.63	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.61	18.69
		CA_48A-48A-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	18.7	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	18.62	18.75
		CA_48C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	18.72	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	18.69	18.75
		CA_48C-48A	Band 48	20M	3609	55830	QPSK	1	99	Band 48	20M	3628.8	56028	Band 48	20M	3560	55340	16.52	16.56
		CA_25A-25A-26A	Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	18.88	18.99
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	18.81	18.99
		CA_25A-46C	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.2	54142	Band 46	20M	5095	54340	18.92	18.99
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.2	54142	Band 46	20M	5095	54340	18.88	18.99
		CA_2A-2A-46A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	18.84	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	18.82	18.91
Intra-	Non-Contiguous	CA_66A-66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	18.71	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	18.69	18.75
			Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	18.7	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	18.62	18.75
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	17.59	17.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	17.53	17.65
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	17.57	17.65

			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	17.56	17.65

<Four Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-5A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	18.9	18.91
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	19.14	19.17
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	18.65	18.75
	CA_2A-2A-13A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	18.86	18.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	18.66	18.75
		Band 13	10M	782	23230	QPSK	1	0	Band 66	5M	2197.5	67311	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	20.60	20.68
	CA_2A-4A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	18.84	18.91
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	18.69	18.69
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	14.85	14.87
	CA_2A-5A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	18.86	18.91
		Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.11	19.17
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	18.75	18.75
	CA_2A-5A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	18.86	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	18.87	18.91
		Band 5	10M	829	20450	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	19.09	19.17
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	18.72	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	18.74	18.75
	CA_2A-13A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	18.86	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	18.9	18.91
		Band 13	10M	782	23230	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	20.62	20.68
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	18.66	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	18.73	18.75
	CA_2A-12A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	18.89	18.91
		Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.93	19.94
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	5M	2197.5	67311	18.74	18.75
	CA_2A-13A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	18.86	18.91
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	20.61	20.68
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	18.67	18.75
	CA_2A-2A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.83	18.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2174.8	67084	18.73	18.75
	CA_2A-2A-46C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	18.9	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	18.89	18.91
	CA_2A-5A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	18.87	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	18.86	18.91
		Band 5	10M	829	20450	QPSK	1	0	Band 66	20M	2174.8	67084	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	19.16	19.17
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	18.72	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	18.75	18.75
	CA_2A-12A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.84	18.91
		Band 12	20M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.88	19.94
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2174.8	67084	18.75	18.75
	CA_2A-13A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.90	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.90	18.91
		Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	20.62	20.68
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	18.65	18.75

			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	18.67	18.75
		CA_2A-66C-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	18.87	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	18.83	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	18.68	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	18.75	18.75
			Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.39	22.47
		CA_2A-66A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	18.84	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	18.84	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	18.69	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	18.66	18.75
			Band 71	20M	1900	19100	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.42	22.47
		CA_2A-2A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	18.83	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	18.84	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	18.68	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	18.75	18.75
			Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	22.47	22.47
		CA_CA_4A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.67	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.66	18.69
		CA_2A-2A-12A-66A	Band 2	20M	1900	19100	QPSK	1	0	Band 2	5M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	18.83	18.91
			Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	20.6	20.68
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	18.74	18.75
		CA_2A-2A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	18.81	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	18.71	18.75
		CA_2C-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	18.86	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	18.67	18.75
		CA_25A-41D	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	18.89	18.99
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	17.56	17.65
		CA_4A-46A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.69	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.61	18.69
		CA_2A-46A-46A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	18.82	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	18.88	18.91
			Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	18.65	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	18.71	18.75
		CA_2A-46C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.71	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.71	18.75
			Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	18.86	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	18.81	18.91
		CA_25A-46D	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.92	18.99
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.9	18.99
		CA_48D-66A	Band 48	20M	3609	55830	QPSK	1	0	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	16.5	16.56
			Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	18.7	18.75
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	18.69	18.75
		CA_2A-2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.85	18.91
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.82	18.91
			Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	18.66	18.69
			Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	18.63	18.69
			Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	19.92	19.94
Intra-Band	Non-Contiguous	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	17.64	17.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	17.60	17.68
		CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	17.59	17.68

	Contiguous	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	17.65	17.68

<Five Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-46A-46C-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	18.88	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	18.89	18.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.7	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	18.69	18.75
	CA_2A-2A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.81	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.91	18.91
	CA_2A-46E	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	18.83	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	18.81	18.91
	CA_2A-46A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.91	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.83	18.91
	CA_4A-46A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.68	18.69
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.63	18.69
	CA_46A-46D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.68	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.72	18.75
	CA_2A-46D-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.9	18.91
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.91	18.91
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.7	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	18.72	18.75
	CA_46E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.66	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.63	18.75
	CA_48E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	18.7	18.75
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	18.69	18.75
		Band 48	20M	3609	55830	QPSK	1	99	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	16.55	16.56
Intra-Band Non-Contiguous	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	17.65	17.65
Intra-Band Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	17.58	17.65

<Top Antenna--Reduced Power Mode for Hotspot On>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_5A-48A	Band 5	10M	829	20450	QPSK	1	0	Band 48	20M	3560	55340	21.55	21.61
		CA_26A-41A	Band 26	15M	831.5	26865	QPSK	1	0	Band 41	20M	2593	40620	20.69	20.78
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	18.25	18.29
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	18.21	18.29
			Band 48	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	22.39	22.43
			Band 48(4*4MIMO)	20M	3609	55830	QPSK	1	99	Band 41	20M	2593	40620	22.35	22.43
Intra-Band	Contiguous	CA_5B	Band 5	10M	829	20450	QPSK	1	0	Band 5	10M	883.9	2549	21.56	21.61
		CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	16.26	16.35
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	18.13	18.18
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	18.21	18.29

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	21.56	21.61
	CA_2A-4A-12A	Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	20.44	20.46
	CA_2A-4A-13A	Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	20.11	20.12
	CA_2A-4A-71A	Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	22.42	22.47
	CA_2A-5A-30A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	21.6	21.61
	CA_2A-12A-30A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 2	20M	1960	900	20.39	20.46
	CA_4A-5A-30A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 4	20M	2132.5	2175	21.55	21.61
	CA_4A-7A-12A	Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	20.33	20.46
	CA_4A-12A-30A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	2355	2355	2355	2132.5	2175	20.36	20.46
	CA_5A-30A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	21.45	21.61
	CA_12A-30A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 30	10M	2355	9820	Band 66	20M	2155	66886	20.41	20.46

Configure			PCC							SCC1				SCC2				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_2A-2A-71A	Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.41	22.47
		CA_4A-4A-5A	Band 5	10M	829	20450	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	21.53	21.61
		CA_4A-4A-71A	Band 71	20M	683	133322	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.41	22.47
		CA_4A-4A-12A	Band 12	10M	707.5	23095	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	20.4	20.46
		CA_4A-4A-13A	Band 13	10M	782	23230	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	20.06	20.12
Intra-	Non-Contiguous	CA_48C-48A	Band 48	20M	3609	55830	QPSK	1	99	Band 48	20M	3628.8	56028	Band 48	20M	3560	55340	22.41	22.43
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	18.16	18.29
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	18.19	18.29
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	18.22	18.29
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	18.21	18.29

<Four Carrier power verification>

Configure			PCC							SCC1				SCC2				SCC3				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_2A-2A-5A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	19.08	19.17
		CA_2A-2A-13A-66A	Band 13	10M	782	23230	QPSK	1	0	Band 66	5M	2197.5	67311	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	20.63	20.68
		CA_2A-4A-7A-7A	Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	14.80	14.87
		CA_2A-5A-66A-66A	Band 5	10M	829	20450	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.15	19.17
		CA_2A-5A-66B	Band 5	10M	829	20450	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	19.08	19.17
		CA_2A-13A-66B	Band 13	10M	782	23230	QPSK	1	0	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	20.64	20.68
		CA_2A-12A-66A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.89	19.94
		CA_2A-13A-66A-66A	Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	20.68	20.68
		CA_2A-5A-66C	Band 5	10M	829	20450	QPSK	1	0	Band 66	20M	2174.8	67084	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	19.16	19.17
		CA_2A-12A-66C	Band 12	20M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.85	19.94
		CA_2A-13A-66C	Band 13	10M	782	23230	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	20.64	20.68
		CA_2A-66C-71A	Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.39	22.47
		CA_2A-66A-66A-71A	Band 71	20M	1900	19100	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.39	22.47
		CA_2A-2A-66A-71A	Band 71	20M	683	133322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	22.43	22.47
		CA_2A-2A-12A-66A	Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2155	66886	20.68	20.68
		CA_25A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	21.12	21.17
		CA_48D-66A	Band 48	20M	3609	55830	QPSK	1	0	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	16.49	16.56
		CA_2A-2A-4A-12A	Band 12	10M	707.5	23095	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	19.91	19.94
Intra-Band	Non-Contiguous	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.14	21.17
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.15	21.17
		CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.14	21.17
	Contiguous	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	21.16	21.17

<Five Carrier power verification>

Configure			PCC							SCC1				SCC2				SCC3				SCC4				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Intra-Band	Non-Contiguous	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.15	21.17
	Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	21.1	21.17
Inter-Band		CA_48E-66A	Band 48	20M	3609	55830	QPSK	1	99	Band 66	20M	2155	66886	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	22.43	22.43

<Bottom Antenna--Full Power Mode>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 30	10M	2355	9820	22.96	23.12
			Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	22.47	22.68
		CA_25A-41A	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2680	41490	23.03	23.09
		CA_25A-46A	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	22.96	23.09
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	22.93	23.09
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	23.45	23.67
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	23.41	23.67
Intra-Band	Contiguous	CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	23.37	23.45
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	23.42	23.50
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	23.39	23.67

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	22.72	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	22.66	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	23.02	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	23.01	23.12
	CA_2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	22.7	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	22.62	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	22.97	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	22.92	23.12
	CA_2A-4A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	22.73	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	22.71	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	22.92	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	22.89	23.12
	CA_2A-4A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	22.69	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	22.65	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	23.04	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	23.02	23.12
	CA_2A-4A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	22.68	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	22.62	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	23.01	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	22.98	23.12
	CA_2A-5A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	22.72	22.75
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 5	10M	881.5	2525	22.56	22.68
	CA_2A-12A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	22.71	22.75
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 12	10M	737.5	5095	22.63	22.68
	CA_2A-29A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	22.74	22.75
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 29	10M	722.5	9715	22.63	22.68
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	22.96	23.12
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	22.66	22.68
	CA_4A-7A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 12	5M	737.5	5095	23.1	23.12
		Band 7	20M	2560	21350	QPSK	1	0	Band 12	5M	737.5	5095	Band 4	20M	2132.5	2175	23.14	23.45
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	22.99	23.12
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	22.64	22.68
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	22.96	23.12
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	22.63	22.68
	CA_5A-30A-66A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 5	10M	881.5	2525	22.65	22.68
		Band 66	20M	1745	132322	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	23	23.13
	CA_12A-30A-66A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	22.59	22.68
		Band 66	20M	1745	132322	QPSK	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	22.99	23.13

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	22.71	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 4	20M	2132.5	2175	22.71	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.98	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	22.98	23.12
	CA_2A-4A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.73	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	22.71	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	22.94	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	22.92	23.12
	CA_2A-2A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 71	20M	637	68786	22.72	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	20M	1980	1100	Band 71	20M	637	68786	22.69	22.75
	CA_2A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	22.62	22.75
		Band 7	20M	2560	21350	QPSK	1	0	Band 7	5M	2622.5	2775	Band 2	20M	1960	900	23.11	23.45
	CA_2A-46A-46A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	22.69	22.75
	CA_2A-48A-48A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	22.71	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	22.66	22.75
	CA_2A-48A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	22.71	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	22.69	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	22.97	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	22.91	23.13
	CA_25A-41C	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.02	23.09
	CA_4A-4A-5A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	23.05	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	23.01	23.12
	CA_4A-4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	23.01	23.12
		Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	23.31	23.45
	CA_4A-4A-71A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	22.98	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	22.95	23.12
	CA_4A-4A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	23	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	22.95	23.12
	CA_4A-4A-13A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	23.04	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	23.02	23.12
	CA_4A-46A-46A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	23	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	22.95	23.12
	CA_2A-48C	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	22.69	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	22.61	22.75
	CA_4A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.06	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.01	23.12

Inter-Band	CA_48A-48A-66A		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	23.07	23.13
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	23.01	23.13
	CA_48C-66A		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	23.11	23.13
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	23.08	23.13
	CA_25A-25A-26A		Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	22.91	23.09
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	22.89	23.09
	CA_25A-46C		Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	22.92	23.09
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	22.88	23.09
	CA_2A-2A-46A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	22.64	22.75
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	22.61	22.75
Intra-Band	Non-Contiguous	CA_66A-66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	22.89	23.13
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	22.85	23.13
			Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	22.99	23.13
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	22.94	23.13
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	23.49	23.67
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	23.42	23.67
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	23.58	23.67
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	23.55	23.67

<Four Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-5A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	22.65	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	23.06	23.13
	CA_2A-2A-13A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	22.73	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	23.11	23.13
	CA_2A-4A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	22.70	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	23.03	23.12
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	23.37	23.45
	CA_2A-5A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.71	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	23.03	23.13
	CA_2A-5A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	22.68	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	22.71	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	23.11	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	23.12	23.13
	CA_2A-13A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	22.72	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	23.05	23.13
	CA_2A-12A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.72	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	5M	2197.5	67311	23.03	23.13
	CA_2A-13A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.69	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	23.04	23.13
	CA_2A-2A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.66	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2174.8	67084	23.06	23.13
	CA_2A-2A-46C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	22.65	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	22.69	22.75
	CA_2A-5A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	22.66	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	23.1	23.13
	CA_2A-12A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.68	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2174.8	67084	23.09	23.13
	CA_2A-13A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.75	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.69	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	23.04	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	23.07	23.13
	CA_2A-66C-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	22.75	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	22.66	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	23.05	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	23.06	23.13
	CA_2A-66A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	22.7	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	22.72	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	23.07	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	23.08	23.13
	CA_2A-2A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	22.66	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	22.71	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	23.06	23.13

		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	23.05	23.13
	CA_CA_4A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.04	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.04	23.12
	CA_2A-2A-12A-66A	Band 2	20M	1900	19100	QPSK	1	0	Band 2	5M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	22.68	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	23.08	23.13
	CA_2A-2A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.69	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	23.05	23.13
	CA_2C-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.71	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	22.72	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	23.06	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	23.07	23.13
	CA_25A-41D	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.07	23.09
		Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	23.63	23.67
	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.66	23.67
		Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.60	23.67
	CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.67	23.67
	CA_4A-46A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.1	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.06	23.12
	CA_2A-46A-46A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	22.67	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	22.65	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	23.11	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	23.08	23.13
	CA_2A-46C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.12	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.09	23.13
		Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	22.66	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	22.71	22.75
	CA_25A-46D	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.99	23.09
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23	23.09
	CA_48D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	23.1	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	23.11	23.13
	CA_2A-2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	22.74	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	22.72	22.75
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	22.93	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	22.91	23.12
Intra-Band Contiguous	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	23.64	23.67

<Five Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-46A-46C-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	22.74	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	22.66	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.08	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	23.05	23.13
	CA_2A-2A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.71	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.7	22.75
	CA_2A-46E	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	22.7	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	22.66	22.75
	CA_2A-46A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.66	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.68	22.75
	CA_4A-46A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.11	23.12
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.05	23.12
	CA_46A-46D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.1	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.05	23.13
	CA_2A-46D-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.7	22.75
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	22.75	22.75
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.12	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	23.08	23.13
	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	23.58	23.67
	CA_48E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	23.11	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	23.13	23.13
	CA_46E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	22.99	23.13
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	22.96	23.13
Intra-Band Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	23.57	23.67

<Bottom Antenna--Reduced Power Mode for Hotspot On>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 30	10M	2355	9820	20.56	20.67
			Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	21.53	21.60
		CA_25A-41A	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2680	41490	20.11	20.18
		CA_25A-46A	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	20.11	20.18
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	20.09	20.18
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.62	21.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.58	21.65
Intra-Band	Contiguous	CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	21.35	21.43
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	21.51	21.55
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	21.62	21.65

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.93	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.91	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	20.61	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	20.55	20.67
	CA_2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.9	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.85	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	20.62	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	20.59	20.67
	CA_2A-4A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	19.92	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	19.87	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	20.62	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	20.56	20.67
	CA_2A-4A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.89	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.83	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	20.58	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	20.56	20.67
	CA_2A-4A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	19.91	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	19.88	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	20.61	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	20.56	20.67
	CA_2A-5A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	19.93	19.97
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.54	21.6
	CA_2A-12A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	19.94	19.97
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 12	10M	737.5	5095	21.52	21.6
	CA_2A-29A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	19.91	19.97
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 29	10M	722.5	9715	21.54	21.6
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	20.63	20.67
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	21.56	21.6
	CA_4A-7A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 12	5M	737.5	5095	20.63	20.67
		Band 7	20M	2560	21350	QPSK	1	0	Band 12	5M	737.5	5095	Band 4	20M	2132.5	2175	21.37	21.43
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	20.62	20.67
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	21.58	21.6
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	20.62	20.67
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	21.55	21.6
	CA_30A-66A-5A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 5	10M	881.5	2525	21.56	21.6
		Band 66	20M	1745	132322	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	20.74	20.8
	CA_12A-30A-66A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	21.5	21.6
		Band 66	20M	1745	132322	QPSK	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	20.71	20.8

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 4	20M	2132.5	2175	19.89	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 4	20M	2132.5	2175	19.82	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	20.62	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	20.6	20.67
	CA_2A-4A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.61	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.56	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	20.6	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	20.53	20.67
	CA_2A-2A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 71	20M	637	68786	19.59	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 71	20M	637	68786	19.52	19.97
	CA_2A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	19.61	19.97
		Band 7	20M	2560	21350	QPSK	1	0	Band 7	5M	2622.5	2775	Band 2	20M	1960	900	21.36	21.43
	CA_2A-46A-46A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	19.88	19.97
	CA_2A-48A-48A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	19.85	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	19.81	19.97
	CA_2A-48A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	19.84	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	19.81	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	20.71	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	20.66	20.8
	CA_25A-41C	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	20.11	20.18
	CA_4A-4A-5A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	20.62	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	20.58	20.67
	CA_4A-4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	20.57	20.67
		Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	21.34	21.43
	CA_4A-4A-71A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	20.57	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	20.53	20.67
	CA_4A-4A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	20.57	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	20.55	20.67
	CA_4A-4A-13A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	20.57	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	20.54	20.67
	CA_4A-46A-46A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	20.61	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	20.58	20.67
	CA_2A-48C	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	19.91	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	19.88	19.97
	CA_4A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.6	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.58	20.67
	CA_48A-48A-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	20.7	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	20.66	20.8
	CA_48C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	20.77	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	20.75	20.8
	CA_25A-25A-26A	Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	20.09	20.18
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	20.01	20.18

	CA_25A-46C		Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	20.08	20.18
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	20.01	20.18
	CA_2A-2A-46A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	19.91	19.97
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	19.86	19.97
Intra-Band	Non-Contiguous	CA_66A-66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	20.7	20.8
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	20.68	20.8
			Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	20.71	20.8
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	20.69	20.8
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.56	21.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.52	21.65
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.55	21.65
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.51	21.65

<Four Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-5A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	19.89	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	20.7	20.8
	CA_2A-2A-13A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	19.87	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	20.79	20.8
	CA_2A-4A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	19.90	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	20.59	20.67
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	21.38	21.43
	CA_2A-5A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.88	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	20.79	20.8
	CA_2A-5A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.87	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.94	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	20.79	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	20.72	20.8
	CA_2A-13A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.97	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	20.73	20.8
	CA_2A-12A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.92	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	5M	2197.5	67311	20.79	20.8
	CA_2A-13A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.97	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	20.75	20.8
	CA_2A-2A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.89	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2174.8	67084	20.77	20.8
	CA_2A-2A-46C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	19.88	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	19.91	19.97
	CA_2A-5A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	19.87	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	20.77	20.8
	CA_2A-12A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.95	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2174.8	67084	20.76	20.8
	CA_2A-13A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.94	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.87	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	20.74	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	20.8	20.8
	CA_2A-66C-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	19.92	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	19.94	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	20.74	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	20.77	20.8
	CA_2A-66A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	19.96	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	19.89	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	20.73	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	20.71	20.8
	CA_2A-2A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	19.88	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	19.92	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	20.71	20.8

		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	20.76	20.8
	CA_CA_4A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.64	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.62	20.67
	CA_2A-2A-12A-66A	Band 2	20M	1900	19100	QPSK	1	0	Band 2	5M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	19.92	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	20.76	20.8
	CA_2A-2A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.88	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	20.78	20.8
	CA_2C-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.87	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.91	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	20.73	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	20.8	20.8
	CA_25A-41D	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	20.18	20.18
		Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	21.59	21.65
	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.60	21.65
		Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.57	21.65
	CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.64	21.65
	CA_4A-46A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.65	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.65	20.67
	CA_2A-46A-46A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	19.89	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	19.97	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	20.74	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	20.80	20.8
	CA_2A-46C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.71	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.8	20.8
		Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	19.92	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	19.9	19.97
	CA_25A-46D	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.09	20.18
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.09	20.18
	CA_48D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	20.79	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	20.75	20.8
	CA_2A-2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.92	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.89	19.97
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	20.64	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	20.61	20.67
Intra-Band Contiguous	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	21.57	21.65

<Five Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-46A-46C-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	19.95	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	19.97	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.8	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	20.77	20.8
	CA_2A-2A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.96	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.91	19.97
	CA_2A-46E	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	19.89	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	19.94	19.97
	CA_2A-46A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.87	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.89	19.97
	CA_4A-46A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.65	20.67
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.58	20.67
	CA_46A-46D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.74	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.8	20.8
	CA_2A-46D-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.94	19.97
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.97	19.97
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.7	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.73	20.8
	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.58	21.65
	CA_48E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	20.79	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	20.75	20.8
	CA_46E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	20.72	20.8
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	20.71	20.8
Intra-Band Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	21.58	21.65

<Bottom Antenna--Reduced Power Mode for Handheld On>

<Two Carrier power verification>

Configure		CA List	PCC							SCC				Power	
			LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band		CA_4A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 30	10M	2355	9820	21.21	21.23
			Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	19.86	19.98
		CA_25A-41A	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2680	41490	20.01	20.09
		CA_25A-46A	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	20.01	20.09
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5905	54340	19.98	20.09
		CA_41A-48A	Band 41	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.09	21.15
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 48	20M	3560	55340	21.02	21.15
Intra-Band	Contiguous	CA_7C	Band 7	20M	2560	21350	QPSK	1	0	Band 7	20M	2660.2	3152	17.71	17.74
		CA_38C	Band 38	20M	2580	37850	QPSK	1	99	Band 38	20M	2599.8	38048	21.07	21.10
	Non-Contiguous	CA_41A-41A	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	21.12	21.15

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<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-4A-5A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.87	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.85	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	21.17	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 2	20M	1960	900	21.13	21.23
	CA_2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.81	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.84	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	21.13	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 2	20M	1960	900	21.1	21.23
	CA_2A-4A-13A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	19.9	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 13	10M	751	5230	19.88	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	21.2	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 13	10M	751	5230	Band 2	20M	1960	900	21.16	21.23
	CA_2A-4A-29A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.81	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.77	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	21.18	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	21.12	21.23
	CA_2A-4A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	19.85	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 71	20M	637	68786	19.81	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	21.17	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 71	20M	637	68786	21.15	21.23
	CA_2A-5A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	19.9	19.92
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 5	10M	881.5	2525	19.94	19.98
	CA_2A-12A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	19.84	19.92
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 12	10M	737.5	5095	19.92	19.98
	CA_2A-29A-30A	Band 2	20M	1860	18700	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	19.81	19.92
		Band 30	10M	2310	27710	QPSK	1	25	Band 2	20M	1960	900	Band 29	10M	722.5	9715	19.85	19.98
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	21.13	21.23
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.93	19.98
	CA_4A-7A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 7	20M	2655	3100	Band 12	5M	737.5	5095	21.19	21.23
		Band 7	20M	2560	21350	QPSK	1	0	Band 12	5M	737.5	5095	Band 4	20M	2132.5	2175	17.67	17.74
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 12	10M	737.5	5095	Band 30	10M	2355	9820	21.17	21.23
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.89	19.98
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	21.12	21.23
		Band 30	10M	2310	27710	QPSK	1	25	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.97	19.98
	CA_5A-30A-66A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 5	10M	881.5	2525	19.96	19.98
		Band 66	20M	1745	132322	QPSK	1	0	Band 5	10M	881.5	2525	Band 30	10M	2355	9820	21.17	21.26
	CA_12A-30A-66A	Band 30	10M	2310	27710	QPSK	1	25	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	19.94	19.98
		Band 66	20M	1745	132322	QPSK	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	21.13	21.26

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 4	20M	2132.5	2175	19.84	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 4	20M	2132.5	2175	19.82	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	21.17	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	21.13	21.23
	CA_2A-4A-4A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.77	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	19.76	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	21.21	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	21.19	21.23
	CA_2A-2A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 71	20M	637	68786	19.89	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 71	20M	637	68786	19.82	19.92
	CA_2A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	19.86	19.92
		Band 7	20M	2560	21350	QPSK	1	0	Band 7	5M	2622.5	2775	Band 2	20M	1960	900	17.73	17.74
	CA_2A-46A-46A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	19.81	19.92
	CA_2A-48A-48A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	19.86	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	19.82	19.92
	CA_2A-48A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	19.83	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3560	55340	Band 66	5M	2197.5	67311	19.81	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 2	20M	1960	900	21.22	21.26
	CA_25A-41C	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	20	20.09
	CA_4A-4A-5A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	21.12	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	21.1	21.23
	CA_4A-4A-7A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 7	20M	2655	3100	21.15	21.23
		Band 7	20M	2560	21350	QPSK	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2152.5	2375	17.67	17.74
	CA_4A-4A-71A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	21.17	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 71	20M	637	68786	21.15	21.23
	CA_4A-4A-12A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	21.12	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	21.11	21.23
	CA_4A-4A-13A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	21.07	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 4	5M	2152.5	2375	Band 13	10M	751	5230	21.05	21.23
	CA_4A-46A-46A	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	21.13	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5905	54340	21.11	21.23
	CA_2A-48C	Band 2	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	19.88	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 48	20M	3615.1	55891	Band 48	20M	3634.9	56089	19.85	19.92
	CA_4A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.18	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.15	21.23
	CA_48A-48A-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	21.16	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3560	55340	Band 48	20M	3690	56640	21.12	21.26
	CA_48C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	21.21	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3670.2	56442	Band 48	20M	3690	56640	21.18	21.26
	CA_25A-25A-26A	Band 25	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	20.01	20.09
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 25	5M	1992.5	8665	Band 26	5M	876.5	8865	19.98	20.09

	CA_25A-46C		Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	20.03	20.09
			Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	20.01	20.09
	CA_2A-2A-46A		Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	19.85	19.92
			Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 46	20M	5540	50690	19.82	19.92
Intra-Band	Non-Contiguous	CA_66A-66C	Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	21.14	21.26
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2185	67186	Band 66	5M	2196.7	67303	21.12	21.26
			Band 66	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	21.22	21.26
			Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	20M	2178.3	67119	Band 66	5M	2190	67236	21.2	21.26
		CA_41A-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.08	21.15
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	5M	2687.5	41565	Band 41	20M	2675.8	41448	21.01	21.15
			Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.14	21.15
			Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	5M	2687.5	41565	21.13	21.15

<Four Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-2A-5A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	19.9	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	21.17	21.26
	CA_2A-2A-13A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	19.92	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 13	10M	751	5230	21.21	21.26
	CA_2A-4A-7A-7A	Band 2	20M	1860	18700	QPSK	1	0	Band 4	20M	2132.5	2175	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	19.88	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 7	20M	2655	3100	Band 7	5M	2687.5	3425	21.19	21.23
		Band 7	20M	2560	21350	QPSK	1	0	Band 2	20M	1960	900	Band 4	20M	2132.5	2175	Band 7	5M	2622.5	2775	17.68	17.74
	CA_2A-5A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.9	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	Band 66	5M	2197.5	67311	21.2	21.26
	CA_2A-5A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.89	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 5	10M	881.5	2525	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.88	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.26	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 5	10M	881.5	2525	21.18	21.26
	CA_2A-13A-66B	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	15M	2155	66886	Band 66	5M	2164.3	66979	19.83	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 66	5M	2164.3	66979	Band 2	20M	1960	900	Band 13	10M	751	5230	21.19	21.26
	CA_2A-12A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.9	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	5M	2197.5	67311	21.16	21.26
	CA_2A-13A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.91	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	5M	2197.5	67311	21.21	21.26
	CA_2A-2A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.9	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	20M	2174.8	67084	21.22	21.26
	CA_2A-2A-46C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	19.83	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 46	20M	5585.5	54142	Band 46	20M	5605.3	54340	19.82	19.92
	CA_2A-5A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	900	Band 5	10M	881.5	2525	Band 66	20M	2174.8	67084	19.88	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 5	10M	881.5	2525	21.16	21.26
	CA_2A-12A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.92	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2174.8	67084	21.23	21.26
	CA_2A-13A-66C	Band 2	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.90	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 13	10M	751	5230	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.88	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	21.26	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 13	10M	751	5230	Band 66	20M	2174.8	67084	21.21	21.26
	CA_2A-66C-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	19.89	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	19.89	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.2	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	20M	2174.8	67084	Band 71	20M	637	68786	21.16	21.26
	CA_2A-66A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	19.89	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	19.87	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.24	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 66	5M	2197.5	67311	Band 71	20M	637	68786	21.24	21.26
	CA_2A-2A-66A-71A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	19.86	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 71	20M	637	68786	19.9	19.92

		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 71	20M	637	68786	21.17	21.26
	CA_CA_4A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.18	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.2	21.23
	CA_2A-2A-12A-66A	Band 2	20M	1900	19100	QPSK	1	0	Band 2	5M	1960	900	Band 12	10M	737.5	5095	Band 66	20M	2155	66886	19.89	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.24	21.26
	CA_2A-2A-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.85	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 66	5M	2197.5	67311	21.21	21.26
	CA_2C-66A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.85	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1960	900	Band 66	20M	2155	66886	Band 66	5M	2197.5	67311	19.82	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	21.22	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 2	20M	1979.8	1098	Band 66	5M	2197.5	67311	21.21	21.26
	CA_25A-41D	Band 25	20M	1860	26140	QPSK	1	0	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	20.01	20.09
		Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 25	20M	1985	8590	21.13	21.15
	CA_41A-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.05	21.15
		Band 41(4*4MIMO)	20M	2593	40620	QPSK	1	99	Band 41	20M	2462.2	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.05	21.15
	CA_41C-41C	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.08	21.15
	CA_4A-46A-46C	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.14	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.18	21.23
	CA_2A-46A-46A-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	19.84	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 66	20M	2155	66886	19.88	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	21.17	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5540	50690	Band 46	20M	5160	46890	Band 2	20M	1960	900	21.21	21.26
	CA_2A-46C-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.24	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.18	21.26
		Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	19.85	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	Band 66	20M	2155	66886	19.9	19.92
	CA_25A-46D	Band 25	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.03	20.09
		Band 25(4*4MIMO)	20M	1860	26140	QPSK	1	0	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	20.02	20.09
	CA_48D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	21.24	21.26
	CA_2A-2A-4A-12A	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.88	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1987.5	1175	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.87	19.92
		Band 4	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.19	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 2	20M	1960	900	Band 2	5M	1987.5	1175	Band 12	10M	737.5	5095	21.17	21.23
Intra-Band Contiguous	CA_41E	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	21.11	21.15

<Five Carrier power verification>

Configure		PCC							SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx. Power (dBm)	Without CA Tx. Power (dBm)
Inter-Band	CA_2A-46A-46C-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	19.91	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5160	46890	Band 46	20M	5885.2	54142	Band 46	20M	5905	54340	19.89	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.24	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5160	46890	Band 46	20M	5540.2	50692	Band 46	20M	5560	50890	21.24	21.26
	CA_2A-2A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.82	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 2	5M	1932.5	625	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.83	19.92
	CA_2A-46E	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	19.9	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	19.91	19.92
	CA_2A-46A-46D	Band 2	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.86	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.83	19.92
	CA_4A-46A-46D	Band 4	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.16	21.23
		Band 4(4*4MIMO)	20M	1732.5	20175	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.17	21.23
	CA_46A-46D-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5160	46890	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.24	21.26
	CA_2A-46D-66A	Band 2	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.83	19.92
		Band 2(4*4MIMO)	20M	1860	18700	QPSK	1	0	Band 66	20M	2155	66886	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	19.88	19.92
		Band 66	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 2	20M	1960	900	Band 46	20M	5520.2	50492	Band 46	20M	5540	50690	Band 46	20M	5559.8	50888	21.24	21.26
	CA_41C-41D	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2640.4	41094	Band 41	20M	2660.2	41292	Band 41	20M	2680	41490	21.12	21.15
	CA_48E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	21.25	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 48	20M	3609	55830	Band 48	20M	3628.8	56028	Band 48	20M	3648.6	56226	Band 48	20M	3668.4	56424	21.24	21.26
	CA_46E-66A	Band 66	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.17	21.26
		Band 66(4*4MIMO)	20M	1745	132322	QPSK	1	0	Band 46	20M	5520	50490	Band 46	20M	5539.8	50688	Band 46	20M	5559.9	50889	Band 46	20M	5580	50190	21.16	21.26
Intra-Band Contiguous	CA_41F	Band 41	20M	2593	40620	QPSK	1	99	Band 41	20M	2612.8	40818	Band 41	20M	2632.6	41016	Band 41	20M	2652.4	41214	Band 41	20M	2672.2	41412	21.12	21.15

LTE Carrier Aggregation Conducted Power (Uplink)

1. This device supports uplink carrier aggregation for LTE CA_7C, CA_41C with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.36.101 section 6.2.3A.1.3 requirements.
2. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
3. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs
4. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC.

<Power Measurement Setup>

<Top Antenna--Full Power Mode>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	20.95	22.00
21100	20902	QPSK	1	0	0	0	1	0	21.12	22.00
21350	21152	QPSK	1	0	0	0	1	0	21.19	22.00

<LTE Band 41>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	0	0	1	0	21.31	22.00
40185	40383	QPSK	1	99	0	0	1	0	21.42	22.00
40620	40422	QPSK	1	99	0	0	1	0	21.61	22.00
41055	40857	QPSK	1	99	0	0	1	0	21.11	22.00
41490	41292	QPSK	1	99	0	0	1	0	21.08	22.00

<Top Antenna--Reduced Power Mode for Receiver On>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	50	0	14.58	15.50
21100	20902	QPSK	50	0	0	0	50	0	14.62	15.50
21350	21152	QPSK	50	0	0	0	50	0	14.71	15.50

<LTE Band 41>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	50	24	0	0	50	0	17.52	18.00
40185	40383	QPSK	50	24	0	0	50	0	17.54	18.00
40620	40422	QPSK	50	24	0	0	50	0	17.60	18.00
41055	40857	QPSK	50	24	0	0	50	0	17.09	18.00
41490	41292	QPSK	50	24	0	0	50	0	17.18	18.00

<Top Antenna--Reduced Power Mode for Hotspot On>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	16.01	17.00
21100	20902	QPSK	1	0	0	0	1	0	16.19	17.00
21350	21152	QPSK	1	0	0	0	1	0	16.24	17.00

<LTE Band 41>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	50	24	0	0	50	0	18.11	18.50
40185	40383	QPSK	50	24	0	0	50	0	18.29	18.50
40620	40422	QPSK	50	24	0	0	50	0	18.37	18.50
41055	40857	QPSK	50	24	0	0	50	0	17.91	18.50
41490	41292	QPSK	50	24	0	0	50	0	17.77	18.50

<Bottom Antenna--Full Power Mode>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	0	0	0	1	0	23.15	23.80
21100	20902	QPSK	1	0	0	0	1	0	23.12	23.80
21350	21152	QPSK	1	0	0	0	1	0	23.26	23.80

<LTE Band 41>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	0	0	1	0	23.23	23.80
40185	40383	QPSK	1	99	0	0	1	0	23.53	23.80
40620	40422	QPSK	1	99	0	0	1	0	23.54	23.80
41055	40857	QPSK	1	99	0	0	1	0	23.12	23.80
41490	41292	QPSK	1	99	0	0	1	0	23.14	23.80

<Bottom Antenna--Reduced Power Mode for Hotspot On>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	50	0	21.27	21.80
21100	20902	QPSK	50	0	0	0	50	0	21.34	21.80
21350	21152	QPSK	50	0	0	0	50	0	21.35	21.80

<LTE Band 41>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	50	24	0	0	50	0	21.54	21.80
40185	40383	QPSK	50	24	0	0	50	0	21.41	21.80
40620	40422	QPSK	50	24	0	0	50	0	21.59	21.80
41055	40857	QPSK	50	24	0	0	50	0	21.22	21.80
41490	41292	QPSK	50	24	0	0	50	0	21.02	21.80

<Bottom Antenna--Reduced Power Mode for Handheld On>

<LTE Band 7>

CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	50	0	0	0	50	0	17.73	18.30
21100	20902	QPSK	50	0	0	0	50	0	17.79	18.30
21350	21152	QPSK	50	0	0	0	50	0	17.92	18.30

<WLAN Conducted Power>

General Note:

1. For WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode power.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<Full Power>

<2.4GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.66	22.00	99.31
		6	2437	20.71	22.00	
		11	2462	20.76	22.00	
	802.11g 6Mbps	1	2412	20.56	22.00	98.28
		6	2437	20.61	22.00	
		11	2462	20.61	22.00	
	802.11n-HT20 MCS0	1	2412	20.01	21.00	98.16
		6	2437	20.61	22.00	
		11	2462	20.66	22.00	
	802.11n-HT40 MCS0	3	2422	20.16	21.00	94.93
		6	2437	20.16	21.00	
		9	2452	19.16	20.00	
	802.11ac-VHT20 MCS0	1	2412	19.91	21.00	96.68
		6	2437	20.51	22.00	
		11	2462	20.56	22.00	
	802.11ac-VHT40 MCS0	3	2422	20.01	21.00	90.54
		6	2437	20.01	21.00	
		9	2452	19.06	20.00	

<5GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.59	20.00	98.31
		40	5200	18.41	20.00	
		44	5220	18.34	20.00	
		48	5240	18.37	20.00	
	802.11n-HT20 MCS0	36	5180	18.53	20.00	98.16
		40	5200	18.34	20.00	
		44	5220	18.23	20.00	
		48	5240	18.29	20.00	
	802.11n-HT40 MCS0	38	5190	18.54	20.00	96.31
		46	5230	18.24	20.00	
	802.11ac-VHT20 MCS0	36	5180	18.49	20.00	96.47
		40	5200	18.28	20.00	
		44	5220	18.19	20.00	
		48	5240	18.25	20.00	
	802.11ac-VHT40 MCS0	38	5190	18.51	20.00	93.48
		46	5230	18.20	20.00	
	802.11ac-VHT80 MCS0	42	5210	17.43	19.00	87.62

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.10	20.00	98.31
		56	5280	18.12	20.00	
		60	5300	18.14	20.00	
		64	5320	18.37	20.00	
	802.11n-HT20 MCS0	52	5260	18.13	20.00	98.16
		56	5280	18.14	20.00	
		60	5300	18.14	20.00	
		64	5320	18.19	20.00	
	802.11n-HT40 MCS0	54	5270	18.11	20.00	96.31
		62	5310	18.06	20.00	
	802.11ac-VHT20 MCS0	52	5260	18.08	20.00	96.47
		56	5280	18.09	20.00	
		60	5300	18.10	20.00	
		64	5320	18.14	20.00	
	802.11ac-VHT40 MCS0	54	5270	18.07	20.00	93.48
		62	5310	18.05	20.00	
	802.11ac-VHT80 MCS0	58	5290	17.46	19.00	87.62

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.02	20.00	98.31
		116	5580	19.21	20.00	
		124	5620	19.12	20.00	
		132	5660	18.89	20.00	
		140	5700	18.70	20.00	
		144	5720	18.55	20.00	
	802.11n-HT20 MCS0	100	5500	18.80	20.00	98.16
		116	5580	19.12	20.00	
		124	5620	18.99	20.00	
		132	5660	18.65	20.00	
		140	5700	18.54	20.00	
		144	5720	18.43	20.00	
	802.11n-HT40 MCS0	102	5510	18.92	20.00	96.31
		110	5550	19.23	20.00	
		126	5630	18.58	20.00	
		134	5670	18.73	20.00	
		142	5710	18.48	20.00	
	802.11ac-VHT20 MCS0	100	5500	18.75	20.00	96.47
		116	5580	19.09	20.00	
		124	5620	18.81	20.00	
		132	5660	18.63	20.00	
		140	5700	18.51	20.00	
		144	5720	18.41	20.00	
	802.11ac-VHT40 MCS0	102	5510	18.85	20.00	93.48
		110	5550	19.20	20.00	
		126	5630	18.89	20.00	
		134	5670	18.67	20.00	
		142	5710	18.44	20.00	
	802.11ac-VHT80 MCS0	106	5530	17.65	19.00	87.62
		122	5610	17.78	19.00	
		138	5690	17.48	19.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a MCS0	149	5745	17.59	19.00	98.31
		157	5785	17.59	19.00	
		165	5825	17.47	19.00	
	802.11n-HT20 MCS0	149	5745	17.52	19.00	98.16
		157	5785	17.58	19.00	
		165	5825	17.47	19.00	
	802.11n-HT40 MCS0	151	5755	17.43	19.00	96.31
		159	5795	17.36	19.00	
	802.11ac-VHT20 MCS0	149	5745	17.47	19.00	96.47
		157	5785	17.48	19.00	
		165	5825	17.43	19.00	
	802.11ac-VHT40 MCS0	151	5755	17.35	19.00	93.48
		159	5795	17.27	19.00	
	802.11ac-VHT80 MCS0	155	5775	16.76	18.00	87.62

<Reduced Power Mode for Receiver On>

<2.4GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	14.66	16.00	99.31
		6	2437	14.71	16.00	
		11	2462	14.76	16.00	
	802.11g 6Mbps	1	2412	12.82	14.00	98.28
		6	2437	13.72	15.00	
		11	2462	12.71	14.00	
	802.11n-HT20 MCS0	1	2412	12.11	13.00	98.16
		6	2437	13.77	15.00	
		11	2462	12.86	14.00	
	802.11n-HT40 MCS0	3	2422	12.11	13.00	94.93
		6	2437	12.11	13.00	
		9	2452	11.16	12.00	
	802.11ac-VHT20 MCS0	1	2412	11.86	13.00	96.68
		6	2437	13.61	15.00	
		11	2462	12.61	14.00	
	802.11ac-VHT40 MCS0	3	2422	11.91	13.00	90.54
		6	2437	11.91	13.00	
		9	2452	10.96	12.00	

<5GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.56	18.00	98.31
		40	5200	16.39	18.00	
		44	5220	16.35	18.00	
		48	5240	16.37	18.00	
	802.11n-HT20 MCS0	36	5180	16.53	18.00	98.16
		40	5200	16.48	18.00	
		44	5220	16.22	18.00	
		48	5240	16.29	18.00	
	802.11n-HT40 MCS0	38	5190	16.52	18.00	96.31
		46	5230	16.25	18.00	
	802.11ac-VHT20 MCS0	36	5180	16.50	18.00	96.47
		40	5200	16.35	18.00	
		44	5220	16.19	18.00	
		48	5240	16.27	18.00	
	802.11ac-VHT40 MCS0	38	5190	16.49	18.00	93.48
		46	5230	16.21	18.00	
	802.11ac-VHT80 MCS0	42	5210	15.41	17.00	87.62

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	16.10	18.00	98.31
		56	5280	16.11	18.00	
		60	5300	16.16	18.00	
		64	5320	16.35	18.00	
	802.11n-HT20 MCS0	52	5260	16.17	18.00	98.16
		56	5280	16.14	18.00	
		60	5300	16.12	18.00	
		64	5320	16.19	18.00	
	802.11n-HT40 MCS0	54	5270	16.13	18.00	96.31
		62	5310	16.08	18.00	
	802.11ac-VHT20 MCS0	52	5260	16.13	18.00	96.47
		56	5280	16.08	18.00	
		60	5300	16.09	18.00	
		64	5320	16.16	18.00	
	802.11ac-VHT40 MCS0	54	5270	16.09	18.00	93.48
		62	5310	16.05	18.00	
	802.11ac-VHT80 MCS0	58	5290	15.47	17.00	87.62

<Reduced Power Mode for Hotspot On>

<2.4GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.66	19.00	99.31
		6	2437	17.71	19.00	
		11	2462	17.76	19.00	
	802.11g 6Mbps	1	2412	15.82	17.00	98.28
		6	2437	16.72	18.00	
		11	2462	15.71	17.00	
	802.11n-HT20 MCS0	1	2412	15.11	16.00	98.16
		6	2437	16.77	18.00	
		11	2462	15.86	17.00	
	802.11n-HT40 MCS0	3	2422	15.11	16.00	94.93
		6	2437	15.11	16.00	
		9	2452	14.16	15.00	
	802.11ac-VHT20 MCS0	1	2412	14.86	16.00	96.68
		6	2437	16.61	18.00	
		11	2462	15.61	17.00	
	802.11ac-VHT40 MCS0	3	2422	15.01	16.00	90.54
		6	2437	15.01	16.00	
		9	2452	14.01	15.00	

<5GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.59	17.00	98.31
		40	5200	15.41	17.00	
		44	5220	15.34	17.00	
		48	5240	15.37	17.00	
	802.11n-HT20 MCS0	36	5180	15.56	17.00	98.16
		40	5200	15.34	17.00	
		44	5220	15.28	17.00	
		48	5240	15.32	17.00	
	802.11n-HT40 MCS0	38	5190	15.51	17.00	96.31
		46	5230	15.25	17.00	
	802.11ac-VHT20 MCS0	36	5180	15.47	17.00	96.47
		40	5200	15.26	17.00	
		44	5220	15.17	17.00	
		48	5240	15.23	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.48	17.00	93.48
		46	5230	15.12	17.00	
	802.11ac-VHT80 MCS0	42	5210	14.46	16.00	87.62

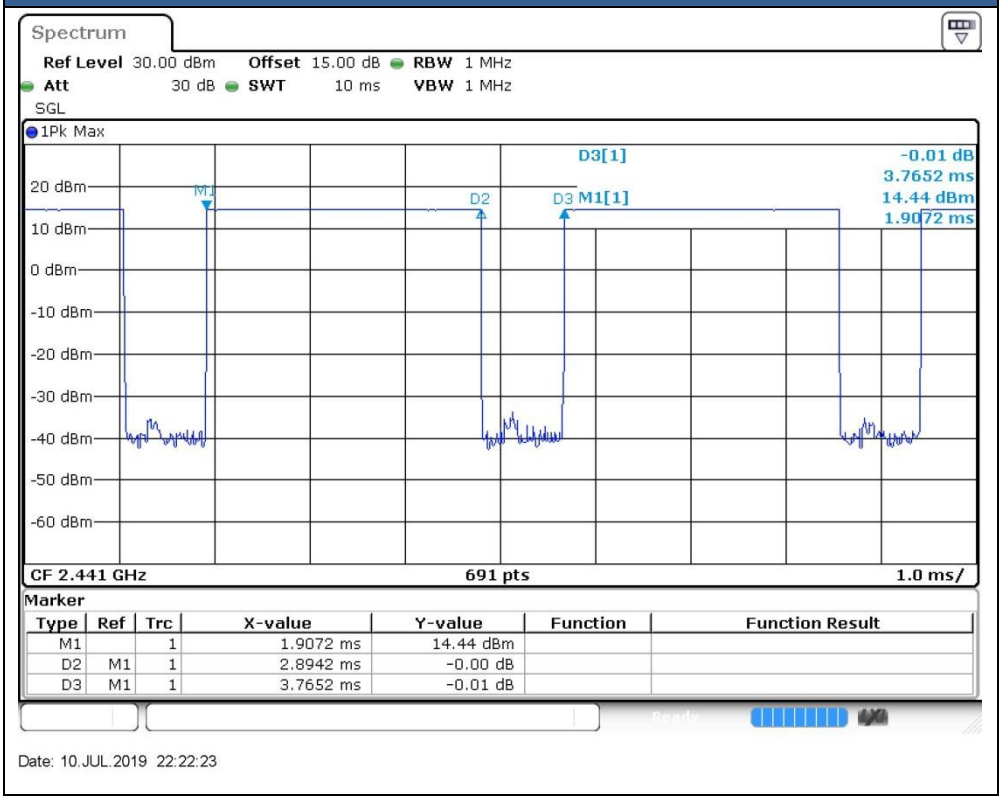
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a MCS0	149	5745	14.56	16.00	98.31
		157	5785	14.61	16.00	
		165	5825	14.51	16.00	
	802.11n-HT20 MCS0	149	5745	14.46	16.00	98.16
		157	5785	14.58	16.00	
		165	5825	14.43	16.00	
	802.11n-HT40 MCS0	151	5755	14.48	16.00	96.31
		159	5795	14.41	16.00	
	802.11ac-VHT20 MCS0	149	5745	14.40	16.00	96.47
		157	5785	14.43	16.00	
		165	5825	14.37	16.00	
	802.11ac-VHT40 MCS0	151	5755	14.34	16.00	93.48
		159	5795	14.23	16.00	
	802.11ac-VHT80 MCS0	155	5775	13.73	15.00	87.62

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.87 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.

Bluetooth time-domain plot

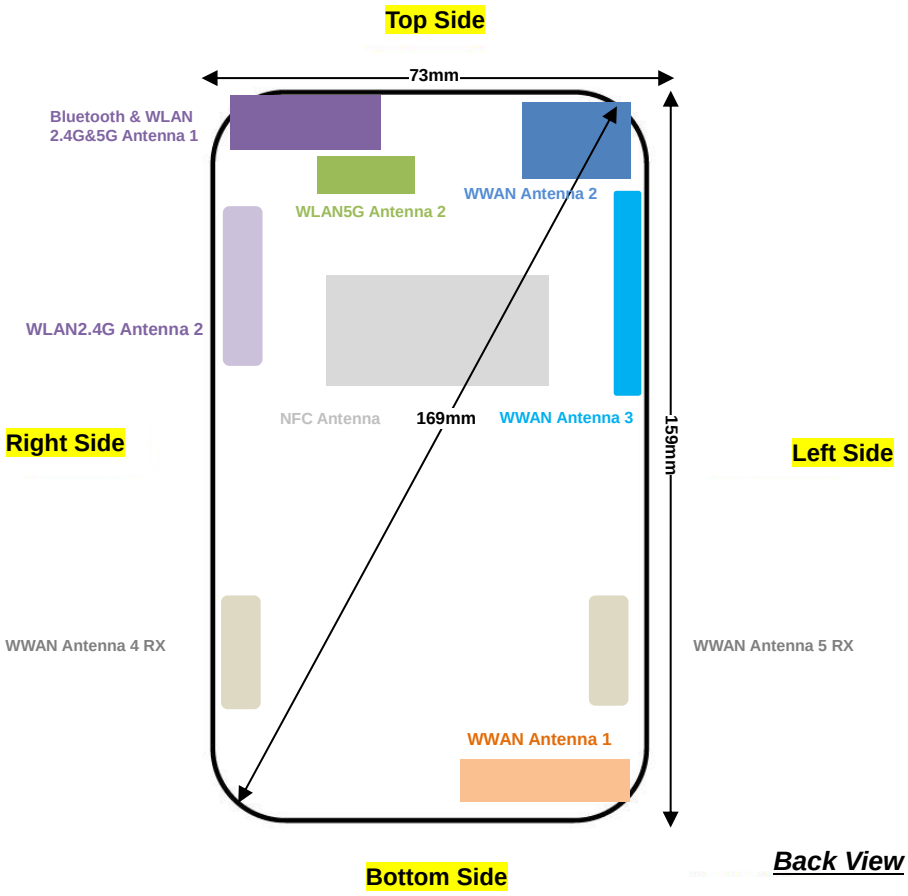


Mode	Channel	Frequency (MHz)	Average power (dBm)
			1Mbps
v3.0 with EDR	CH 00	2402	14.10
	CH 39	2441	14.10
	CH 78	2480	13.40
Tune-up limit (dBm)			15.40

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v4.0/4.1/4.2 with LE	CH 00	2402	11.50
	CH 19	2440	11.30
	CH 39	2480	10.60
Tune-up limit (dBm)			12.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v5.0 with LE	CH 00	2402	11.60
	CH 19	2440	11.30
	CH 39	2480	10.60
Tune-up limit (dBm)			12.00

13. Antenna Location



Antenna	Support Band
WWAN Antenna 1	GSM: 1900 WCDMA: B2 / B4 CDMA: BC1 LTE: B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66
WWAN Antenna 2	GSM: 1900 WCDMA: B2 / B4 CDMA: BC1 LTE: B2 / B4 / B7 / B25 / B30 / B38 / B41 / B48 / B66
WWAN Antenna 3	GSM: 850 WCDMA: B5 CDMA: BC0/BC10 LTE: B5 / B12 / B13 / B17 / B26 / B71
WWAN Antenna 4	LTE B2/4/25/66/41 RX
WWAN Antenna 5	LTEB2/4/25/66/41/48 RX
Bluetooth & WLAN2.4G&5G Antenna 1	Bluetooth WLAN 2.4GHz WLAN 5GHz
WLAN2.4G Antenna 2	WLAN 2.4GHz
WLAN 5G Antenna 2	WLAN 5GHz

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Antenna 1	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm	≤ 25mm
WWAN Antenna 2	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
WWAN Antenna 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
Bluetooth & WLAN2.4G&5G Antenna 1	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WLAN2.4G Antenna 2	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WLAN 5G Antenna 2	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Antenna 1	Yes	Yes	No	Yes	No	Yes
WWAN Antenna 2	Yes	Yes	Yes	No	No	Yes
WWAN Antenna 3	Yes	Yes	Yes	No	No	Yes
Bluetooth & WLAN2.4G&5G Antenna 1	Yes	Yes	Yes	No	Yes	No
WLAN2.4G Antenna 2	Yes	Yes	Yes	No	Yes	No
WLAN 5G Antenna 2	Yes	Yes	Yes	No	Yes	No

General Note:

Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

14. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of BT/WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   e. 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 for 1g SAR and 2.0W/Kg for 10g SAR.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
6. This device has three WWAN transmitter antennas. WWAN antenna 1 is located at the bottom edge of the device, WWAN antenna 2 is located at the left side of top edge of the device, WWAN antenna 3 is located under WWAN antenna 2, and which can refer to antenna location chapter. WWAN antenna 1 frequency bands include GSM1900, WCDMA B2 / B4, CDMA BC1 and LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66, WWAN antenna 2 frequency bands include GSM1900, WCDMA B2 / B4, CDMA BC1 and LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B48 / B66, and WWAN antenna 3 frequency bands include GSM850, WCDMA B5, CDMA BC0/BC10 and LTE B5 / B12 / B13 / B17 / B26 / B71.
7. For WWAN top antenna 2/3, when the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at GSM850, WCDMA B2 / B4 / B5, CDMA BC0/BC1/BC10 and LTE B2 / B4 / B5 / B7 / B12 / B13 / B17 / B25 / B26 / B30 / B38 / B41 / B48 / B66 / B71.
8. For WWAN top antenna 2/3, hotspot mode is enabled, power reduction will be activated to limit the maximum power of GSM850, WCDMA B5, CDMA2000 BC0 / BC10 and LTE B5 / B7 / B12 / B13 / B17 / B26 / B38 / B41 / B48 / B71.
9. For WWAN bottom antenna 1, hotspot mode is enabled, power reduction will be activated to limit the maximum power of WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66.
10. P-sensor can detect handheld state, WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66 for front/back/bottom sides of product specific 10g SAR condition reduced powers will be active.
11. For WLAN, when the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at WLAN2.4/5.2/5.3GHz.
12. For WLAN, hotspot mode is enabled, power reduction will be activated to limit the maximum power of WLAN2.4/5.2/5.8GHz.
13. This device supports HPUE for LTE band 41 with class 2 level, so HPUE SAR has been performed.
14. WLAN 2.4GHz/5GHz can transmit in MIMO antenna mode only, and it has no SISO antenna mode.
15. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
    a. For this device, WWAN transmitter scaled to reduced power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA B2 / B4, CDMA BC0/1/10 and LTE B5 /B7 /B13 / B4 / B26 / B38 / B41 / B48 / B66, therefore product specific SAR is necessary.
    b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
    c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

WCDMA 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 / HSPA+ 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 / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

CDMA2000 Note:

1. Per KDB 941225 D01v03r01, SAR for head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

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/64QAM 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/64QAM 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. Per FCC KDB inquiry guidance, the following applied to intra-band contiguous UL CA only;
   a. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC
   b. UL CA SAR is measured for each exposure condition in each frequency band using the highest SAR configuration tested in standalone LTE mode to establish the UL CA PCC. The SCC and subsequent CC must use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions.
   c. When the SAR configuration tested in step b) has a maximum output power specification more than ¼ dB lower than the highest maximum output power conditions measured in the power measurements in step a) above and the reported SAR in step b) is larger than 1.2 W/kg, SAR measurement is also required for the configuration in step a)
   d. All standalone SAR configurations with SAR > 1.2 W/kg must also be tested by applying the procedures in step b)
7. For LTE B5 / B12 / 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.
8. LTE B17 / B4 / B2 / B38 SAR test was covered by B12 / B66 / B25 / B41; 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.

WLAN Note:

1. For 2.4GHz WLAN each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode.
2. For 5GHz WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode SAR.
3. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
4. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
5. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
6. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
7. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

14.1 Head SAR

<GSM SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	3	GSM850	GPRS(4 Tx slot)	Right Cheek	Reduced	128	824.2	24.29	25.30	1.262	-0.17	0.286	0.361
	3	GSM850	GPRS(4 Tx slot)	Right Tilted	Reduced	128	824.2	24.29	25.30	1.262	0.08	0.052	0.066
	3	GSM850	GPRS(4 Tx slot)	Left Cheek	Reduced	128	824.2	24.29	25.30	1.262	0.04	0.401	0.506
	3	GSM850	GPRS(4 Tx slot)	Left Tilted	Reduced	128	824.2	24.29	25.30	1.262	0.09	0.065	0.082
	3	GSM850	GPRS(4 Tx slot)	Left Cheek	Reduced	189	836.4	24.21	25.30	1.285	-0.05	0.491	0.631
01	3	GSM850	GPRS(4 Tx slot)	Left Cheek	Reduced	251	848.8	24.05	25.30	1.334	0.19	0.581	**0.775**
	2	GSM1900	GPRS(3 Tx slots)	Right Cheek	Full	512	1850.2	24.49	25.10	1.151	0.09	0.613	0.705
	2	GSM1900	GPRS(3 Tx slots)	Right Tilted	Full	512	1850.2	24.49	25.10	1.151	0.06	0.592	0.681
	2	GSM1900	GPRS(3 Tx slots)	Left Cheek	Full	512	1850.2	24.49	25.10	1.151	0.09	0.309	0.356
	2	GSM1900	GPRS(3 Tx slots)	Left Tilted	Full	512	1850.2	24.49	25.10	1.151	0.08	0.469	0.540
02	2	GSM1900	GPRS(3 Tx slots)	Right Cheek	Full	661	1880	24.39	25.10	1.178	-0.14	0.789	**0.929**
	2	GSM1900	GPRS(3 Tx slots)	Right Cheek	Full	810	1909.8	24.32	25.10	1.197	0.02	0.739	0.884
	1	GSM1900	GPRS(3 Tx slots)	Right Cheek	Full	512	1850.2	25.47	26.50	1.268	0.09	0.064	0.081
	1	GSM1900	GPRS(3 Tx slots)	Right Tilted	Full	512	1850.2	25.47	26.50	1.268	0.04	0.059	0.075
	1	GSM1900	GPRS(3 Tx slots)	Left Cheek	Full	512	1850.2	25.47	26.50	1.268	0.03	0.076	0.096
	1	GSM1900	GPRS(3 Tx slots)	Left Tilted	Full	512	1850.2	25.47	26.50	1.268	0.07	0.053	0.067
	1	GSM1900	GPRS(3 Tx slots)	Left Cheek	Full	661	1880	25.45	26.50	1.274	-0.09	0.070	0.089
	1	GSM1900	GPRS(3 Tx slots)	Left Cheek	Full	810	1909.8	25.42	26.50	1.282	0.01	0.074	0.095

<WCDMA SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	3	WCDMA V	RMC 12.2Kbps	Right Cheek	Reduced	4132	826.4	20.88	21.30	1.102	0.05	0.449	0.495
	3	WCDMA V	RMC 12.2Kbps	Right Tilted	Reduced	4132	826.4	20.88	21.30	1.102	0.09	0.085	0.094
	3	WCDMA V	RMC 12.2Kbps	Left Cheek	Reduced	4132	826.4	20.88	21.30	1.102	0.02	0.645	0.710
	3	WCDMA V	RMC 12.2Kbps	Left Tilted	Reduced	4132	826.4	20.88	21.30	1.102	0.14	0.104	0.115
	3	WCDMA V	RMC 12.2Kbps	Left Cheek	Reduced	4182	836.4	20.76	21.30	1.132	0.07	0.640	0.725
03	3	WCDMA V	RMC 12.2Kbps	Left Cheek	Reduced	4233	846.6	20.59	21.30	1.178	-0.06	0.627	**0.738**
	2	WCDMA IV	RMC 12.2Kbps	Right Cheek	Reduced	1413	1732.6	20.26	20.40	1.033	0.05	0.780	0.806
	2	WCDMA IV	RMC 12.2Kbps	Right Tilted	Reduced	1413	1732.6	20.26	20.40	1.033	0.03	0.568	0.587
	2	WCDMA IV	RMC 12.2Kbps	Left Cheek	Reduced	1413	1732.6	20.26	20.40	1.033	0.05	0.325	0.336
	2	WCDMA IV	RMC 12.2Kbps	Left Tilted	Reduced	1413	1732.6	20.26	20.40	1.033	0.01	0.415	0.429
	2	WCDMA IV	RMC 12.2Kbps	Right Cheek	Reduced	1312	1712.4	20.10	20.40	1.072	0.04	0.794	0.851
04	2	WCDMA IV	RMC 12.2Kbps	Right Cheek	Reduced	1513	1752.6	20.21	20.40	1.045	0.03	0.876	**0.915**
	1	WCDMA IV	RMC 12.2Kbps	Right Cheek	Full	1413	1732.6	24.18	24.80	1.153	0.05	0.246	0.284
	1	WCDMA IV	RMC 12.2Kbps	Right Tilted	Full	1413	1732.6	24.18	24.80	1.153	0.01	0.120	0.138
	1	WCDMA IV	RMC 12.2Kbps	Left Cheek	Full	1413	1732.6	24.18	24.80	1.153	-0.06	0.143	0.165
	1	WCDMA IV	RMC 12.2Kbps	Left Tilted	Full	1413	1732.6	24.18	24.80	1.153	0.02	0.114	0.131
	1	WCDMA IV	RMC 12.2Kbps	Right Cheek	Full	1312	1712.4	24.09	24.80	1.178	0.07	0.240	0.283
	1	WCDMA IV	RMC 12.2Kbps	Right Cheek	Full	1513	1752.6	24.17	24.80	1.156	0.06	0.178	0.206
	2	WCDMA II	RMC 12.2Kbps	Right Cheek	Reduced	9400	1880	20.10	20.40	1.072	-0.05	0.747	0.800
	2	WCDMA II	RMC 12.2Kbps	Right Tilted	Reduced	9400	1880	20.10	20.40	1.072	0.01	0.602	0.645
	2	WCDMA II	RMC 12.2Kbps	Left Cheek	Reduced	9400	1880	20.10	20.40	1.072	0.1	0.371	0.398
	2	WCDMA II	RMC 12.2Kbps	Left Tilted	Reduced	9400	1880	20.10	20.40	1.072	0.05	0.544	0.583
05	2	WCDMA II	RMC 12.2Kbps	Right Cheek	Reduced	9262	1852.4	20.01	20.40	1.094	-0.08	0.799	**0.874**
	1	WCDMA II	RMC 12.2Kbps	Right Cheek	Reduced	9538	1907.6	20.00	20.40	1.096	0.06	0.731	0.802
	1	WCDMA II	RMC 12.2Kbps	Right Cheek	Full	9400	1880	24.21	24.80	1.146	-0.04	0.167	0.191
	1	WCDMA II	RMC 12.2Kbps	Right Tilted	Full	9400	1880	24.21	24.80	1.146	0.02	0.124	0.142
	1	WCDMA II	RMC 12.2Kbps	Left Cheek	Full	9400	1880	24.21	24.80	1.146	0.06	0.181	0.207
	1	WCDMA II	RMC 12.2Kbps	Left Tilted	Full	9400	1880	24.21	24.80	1.146	0.11	0.116	0.133
	1	WCDMA II	RMC 12.2Kbps	Left Cheek	Full	9262	1852.4	24.15	24.80	1.161	0.1	0.169	0.196
	1	WCDMA II	RMC 12.2Kbps	Left Cheek	Full	9538	1907.6	24.20	24.80	1.148	0.03	0.182	0.209

<CDMA2000 SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	3	CDMA2000 BC0	RC3+SO55	Right Cheek	Reduced	1013	824.7	21.21	21.80	1.146	0.05	0.517	0.592
	3	CDMA2000 BC0	RC3+SO55	Right Tilted	Reduced	1013	824.7	21.21	21.80	1.146	0.03	0.100	0.115
	3	CDMA2000 BC0	RC3+SO55	Left Cheek	Reduced	1013	824.7	21.21	21.80	1.146	0.08	0.710	0.813
	3	CDMA2000 BC0	RC3+SO55	Left Tilted	Reduced	1013	824.7	21.21	21.80	1.146	0.04	0.127	0.145
	3	CDMA2000 BC0	RC3+SO55	Left Cheek	Reduced	384	836.52	20.96	21.80	1.213	0.11	0.673	0.817
06	3	CDMA2000 BC0	RC3+SO55	Left Cheek	Reduced	777	848.31	20.84	21.80	1.247	0.09	0.660	**0.823**
	3	CDMA2000 BC10	RC3+SO55	Right Cheek	Reduced	580	820.5	21.25	21.80	1.135	0.05	0.538	0.611
	3	CDMA2000 BC10	RC3+SO55	Right Tilted	Reduced	580	820.5	21.25	21.80	1.135	0.02	0.107	0.121
07	3	CDMA2000 BC10	RC3+SO55	Left Cheek	Reduced	580	820.5	21.25	21.80	1.135	0.08	0.737	**0.837**
	3	CDMA2000 BC10	RC3+SO55	Left Tilted	Reduced	580	820.5	21.25	21.80	1.135	0.11	0.136	0.154
	3	CDMA2000 BC10	RC3+SO55	Left Cheek	Reduced	476	817.9	21.23	21.80	1.140	-0.07	0.722	0.823
	3	CDMA2000 BC10	RC3+SO55	Left Cheek	Reduced	684	823.1	21.20	21.80	1.148	0.09	0.707	0.812
	2	CDMA2000 BC1	RC3+SO55	Right Cheek	Reduced	1175	1908.75	20.27	20.90	1.156	0.03	0.711	0.822
	2	CDMA2000 BC1	RC3+SO55	Right Tilted	Reduced	1175	1908.75	20.27	20.90	1.156	0.09	0.429	0.496
	2	CDMA2000 BC1	RC3+SO55	Left Cheek	Reduced	1175	1908.75	20.27	20.90	1.156	0.1	0.424	0.490
	2	CDMA2000 BC1	RC3+SO55	Left Tilted	Reduced	1175	1908.75	20.27	20.90	1.156	0.01	0.601	0.695
	2	CDMA2000 BC1	RC3+SO55	Right Cheek	Reduced	25	1851.25	20.22	20.90	1.169	0.04	0.705	0.824
08	2	CDMA2000 BC1	RC3+SO55	Right Cheek	Reduced	600	1880	20.17	20.90	1.183	0.03	0.706	**0.835**
	1	CDMA2000 BC1	RC3+SO55	Right Cheek	Full	1175	1908.75	23.97	24.80	1.211	-0.06	0.147	0.178
	1	CDMA2000 BC1	RC3+SO55	Right Tilted	Full	1175	1908.75	23.97	24.80	1.211	0.02	0.061	0.074
	1	CDMA2000 BC1	RC3+SO55	Left Cheek	Full	1175	1908.75	23.97	24.80	1.211	0.07	0.151	0.183
	1	CDMA2000 BC1	RC3+SO55	Left Tilted	Full	1175	1908.75	23.97	24.80	1.211	-0.04	0.104	0.126
	1	CDMA2000 BC1	RC3+SO55	Left Cheek	Full	25	1851.25	23.87	24.80	1.239	0.05	0.137	0.170
	1	CDMA2000 BC1	RC3+SO55	Left Cheek	Full	600	1880	23.85	24.80	1.245	0.03	0.161	0.200

<FDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	3	LTE Band 71	20M	QPSK	1	0	Right Cheek	Reduced	133322	683	22.47	22.80	1.079	0.02	0.440	0.475
	3	LTE Band 71	20M	QPSK	1	0	Right Tilted	Reduced	133322	683	22.47	22.80	1.079	0.05	0.092	0.099
09	3	LTE Band 71	20M	QPSK	1	0	Left Cheek	Reduced	133322	683	22.47	22.80	1.079	0.09	0.721	**0.778**
	3	LTE Band 71	20M	QPSK	1	0	Left Tilted	Reduced	133322	683	22.47	22.80	1.079	0.03	0.128	0.138
	3	LTE Band 71	20M	QPSK	50	0	Right Cheek	Reduced	133322	683	22.44	22.80	1.086	0.11	0.411	0.447
	3	LTE Band 71	20M	QPSK	50	0	Right Tilted	Reduced	133322	683	22.44	22.80	1.086	0.02	0.085	0.092
	3	LTE Band 71	20M	QPSK	50	0	Left Cheek	Reduced	133322	683	22.44	22.80	1.086	-0.11	0.634	0.689
	3	LTE Band 71	20M	QPSK	50	0	Left Tilted	Reduced	133322	683	22.44	22.80	1.086	-0.03	0.124	0.135
	3	LTE Band 12	10M	QPSK	1	0	Right Cheek	Reduced	23095	707.5	19.94	20.80	1.219	0.02	0.310	0.378
	3	LTE Band 12	10M	QPSK	1	0	Right Tilted	Reduced	23095	707.5	19.94	20.80	1.219	0.09	0.064	0.078
	3	LTE Band 12	10M	QPSK	1	0	Left Cheek	Reduced	23095	707.5	19.94	20.80	1.219	0.05	0.393	0.479
	3	LTE Band 12	10M	QPSK	1	0	Left Tilted	Reduced	23095	707.5	19.94	20.80	1.219	0.07	0.072	0.088
	3	LTE Band 12	10M	QPSK	25	0	Right Cheek	Reduced	23095	707.5	19.93	20.80	1.222	0.03	0.322	0.393
	3	LTE Band 12	10M	QPSK	25	0	Right Tilted	Reduced	23095	707.5	19.93	20.80	1.222	0.06	0.064	0.078
10	3	LTE Band 12	10M	QPSK	25	0	Left Cheek	Reduced	23095	707.5	19.93	20.80	1.222	0.12	0.442	**0.540**
	3	LTE Band 12	10M	QPSK	25	0	Left Tilted	Reduced	23095	707.5	19.93	20.80	1.222	0.04	0.083	0.101
	3	LTE Band 13	10M	QPSK	1	0	Right Cheek	Reduced	23230	782	20.68	21.30	1.153	0.05	0.501	0.578
	3	LTE Band 13	10M	QPSK	1	0	Right Tilted	Reduced	23230	782	20.68	21.30	1.153	0.09	0.104	0.120
	3	LTE Band 13	10M	QPSK	1	0	Left Cheek	Reduced	23230	782	20.68	21.30	1.153	0.07	0.680	0.784
	3	LTE Band 13	10M	QPSK	1	0	Left Tilted	Reduced	23230	782	20.68	21.30	1.153	0.02	0.137	0.158
	3	LTE Band 13	10M	QPSK	25	0	Right Cheek	Reduced	23230	782	20.66	21.30	1.159	0.03	0.517	0.599
	3	LTE Band 13	10M	QPSK	25	0	Right Tilted	Reduced	23230	782	20.66	21.30	1.159	0.06	0.106	0.123
11	3	LTE Band 13	10M	QPSK	25	0	Left Cheek	Reduced	23230	782	20.66	21.30	1.159	0.08	0.735	**0.852**
	3	LTE Band 13	10M	QPSK	25	0	Left Tilted	Reduced	23230	782	20.66	21.30	1.159	0.11	0.140	0.162
	3	LTE Band 13	10M	QPSK	50	0	Left Cheek	Reduced	23230	782	20.66	21.30	1.159	0.05	0.707	0.819
	3	LTE Band 5	10M	QPSK	1	0	Right Cheek	Reduced	20525	836.5	19.08	19.80	1.180	0.02	0.357	0.421
	3	LTE Band 5	10M	QPSK	1	0	Right Tilted	Reduced	20525	836.5	19.08	19.80	1.180	0.09	0.069	0.081
	3	LTE Band 5	10M	QPSK	1	0	Left Cheek	Reduced	20525	836.5	19.08	19.80	1.180	0.04	0.488	0.576
	3	LTE Band 5	10M	QPSK	1	0	Left Tilted	Reduced	20525	836.5	19.08	19.80	1.180	0.07	0.081	0.096
	3	LTE Band 5	10M	QPSK	25	0	Right Cheek	Reduced	20525	836.5	19.06	19.80	1.186	0.06	0.365	0.433
	3	LTE Band 5	10M	QPSK	25	0	Right Tilted	Reduced	20525	836.5	19.06	19.80	1.186	0.08	0.074	0.088
12	3	LTE Band 5	10M	QPSK	25	0	Left Cheek	Reduced	20525	836.5	19.06	19.80	1.186	0.09	0.501	**0.594**
	3	LTE Band 5	10M	QPSK	25	0	Left Tilted	Reduced	20525	836.5	19.06	19.80	1.186	0.03	0.085	0.101

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	3	LTE Band 26	15M	QPSK	1	0	Right Cheek	Reduced	26865	831.5	19.15	19.80	1.161	0.02	0.364	0.423
	3	LTE Band 26	15M	QPSK	1	0	Right Tilted	Reduced	26865	831.5	19.15	19.80	1.161	0.08	0.070	0.081
	3	LTE Band 26	15M	QPSK	1	0	Left Cheek	Reduced	26865	831.5	19.15	19.80	1.161	0.09	0.521	0.605
	3	LTE Band 26	15M	QPSK	1	0	Left Tilted	Reduced	26865	831.5	19.15	19.80	1.161	0.07	0.086	0.100
	3	LTE Band 26	15M	QPSK	36	0	Right Cheek	Reduced	26865	831.5	19.13	19.80	1.167	0.02	0.377	0.440
	3	LTE Band 26	15M	QPSK	36	0	Right Tilted	Reduced	26865	831.5	19.13	19.80	1.167	0.08	0.072	0.084
	3	LTE Band 26	15M	QPSK	36	0	Left Cheek	Reduced	26865	831.5	19.13	19.80	1.167	0.04	0.524	0.611
	3	LTE Band 26	15M	QPSK	36	0	Left Tilted	Reduced	26865	831.5	19.13	19.80	1.167	0.03	0.087	0.102
	3	LTE Band 26	15M	QPSK	36	0	Left Cheek	Reduced	26765	821.5	19.10	19.80	1.175	0.05	0.546	0.641
13	3	LTE Band 26	15M	QPSK	36	0	Left Cheek	Reduced	26965	841.5	19.00	19.80	1.202	0.04	0.545	**0.655**
	2	LTE Band 66	20M	QPSK	1	0	Right Cheek	Reduced	132322	1745	18.75	18.90	1.035	-0.06	0.867	0.897
	2	LTE Band 66	20M	QPSK	1	0	Right Tilted	Reduced	132322	1745	18.75	18.90	1.035	0.06	0.582	0.602
	2	LTE Band 66	20M	QPSK	1	0	Left Cheek	Reduced	132322	1745	18.75	18.90	1.035	0.01	0.291	0.301
	2	LTE Band 66	20M	QPSK	1	0	Left Tilted	Reduced	132322	1745	18.75	18.90	1.035	0.08	0.384	0.397
	2	LTE Band 66	20M	QPSK	1	0	Right Cheek	Reduced	132072	1720	18.68	18.90	1.052	0.01	0.741	0.780
	2	LTE Band 66	20M	QPSK	1	0	Right Cheek	Reduced	132572	1770	18.62	18.90	1.067	0.01	0.753	0.803
	2	LTE Band 66	20M	QPSK	50	0	Right Cheek	Reduced	132322	1745	18.69	18.90	1.050	0.04	0.889	0.933
	2	LTE Band 66	20M	QPSK	50	0	Right Tilted	Reduced	132322	1745	18.69	18.90	1.050	0.02	0.617	0.648
	2	LTE Band 66	20M	QPSK	50	0	Left Cheek	Reduced	132322	1745	18.69	18.90	1.050	0.06	0.305	0.320
	2	LTE Band 66	20M	QPSK	50	0	Left Tilted	Reduced	132322	1745	18.69	18.90	1.050	0.01	0.411	0.431
	2	LTE Band 66	20M	QPSK	50	0	Right Cheek	Reduced	132072	1720	18.61	18.90	1.069	-0.11	0.771	0.824
	2	LTE Band 66	20M	QPSK	50	0	Right Cheek	Reduced	132572	1770	18.60	18.90	1.072	0.07	0.765	0.820
14	2	LTE Band 66	20M	QPSK	100	0	Right Cheek	Reduced	132322	1745	18.61	18.90	1.069	0.01	0.886	**0.947**
	1	LTE Band 66	20M	QPSK	1	0	Right Cheek	Full	132322	1745	23.13	23.80	1.167	0.03	0.229	0.267
	1	LTE Band 66	20M	QPSK	1	0	Right Tilted	Full	132322	1745	23.13	23.80	1.167	0.05	0.098	0.114
	1	LTE Band 66	20M	QPSK	1	0	Left Cheek	Full	132322	1745	23.13	23.80	1.167	0.09	0.132	0.154
	1	LTE Band 66	20M	QPSK	1	0	Left Tilted	Full	132322	1745	23.13	23.80	1.167	0.12	0.112	0.131
	1	LTE Band 66	20M	QPSK	1	0	Right Cheek	Full	132072	1720	23.04	23.80	1.191	-0.08	0.212	0.253
	1	LTE Band 66	20M	QPSK	1	0	Right Cheek	Full	132572	1770	23.12	23.80	1.169	0.06	0.176	0.206
	1	LTE Band 66	20M	QPSK	50	0	Right Cheek	Full	132322	1745	22.21	22.80	1.146	0.04	0.174	0.199
	1	LTE Band 66	20M	QPSK	50	0	Right Tilted	Full	132322	1745	22.21	22.80	1.146	0.03	0.079	0.090
	1	LTE Band 66	20M	QPSK	50	0	Left Cheek	Full	132322	1745	22.21	22.80	1.146	0.08	0.108	0.124
	1	LTE Band 66	20M	QPSK	50	0	Left Tilted	Full	132322	1745	22.21	22.80	1.146	0.05	0.091	0.104

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	2	LTE Band 25	20M	QPSK	1	0	Right Cheek	Reduced	26140	1860	18.99	19.40	1.099	0.07	0.824	0.906
	2	LTE Band 25	20M	QPSK	1	0	Right Tilted	Reduced	26140	1860	18.99	19.40	1.099	-0.02	0.606	0.666
	2	LTE Band 25	20M	QPSK	1	0	Left Cheek	Reduced	26140	1860	18.99	19.40	1.099	0.06	0.370	0.407
	2	LTE Band 25	20M	QPSK	1	0	Left Tilted	Reduced	26140	1860	18.99	19.40	1.099	0.07	0.510	0.560
	2	LTE Band 25	20M	QPSK	1	0	Right Cheek	Reduced	26340	1880	18.91	19.40	1.119	0.04	0.804	0.900
	2	LTE Band 25	20M	QPSK	1	0	Right Cheek	Reduced	26590	1905	18.93	19.40	1.114	0.01	0.791	0.881
	2	LTE Band 25	20M	QPSK	50	0	Right Cheek	Reduced	26140	1860	18.98	19.40	1.102	0.09	0.910	1.002
	2	LTE Band 25	20M	QPSK	50	0	Right Tilted	Reduced	26140	1860	18.98	19.40	1.102	0.04	0.607	0.669
	2	LTE Band 25	20M	QPSK	50	0	Left Cheek	Reduced	26140	1860	18.98	19.40	1.102	0.11	0.375	0.413
	2	LTE Band 25	20M	QPSK	50	0	Left Tilted	Reduced	26140	1860	18.98	19.40	1.102	-0.03	0.520	0.573
	2	LTE Band 25	20M	QPSK	50	0	Right Cheek	Reduced	26340	1880	18.92	19.40	1.117	0.01	0.814	0.909
	2	LTE Band 25	20M	QPSK	50	0	Right Cheek	Reduced	26590	1905	18.96	19.40	1.107	0.06	0.804	0.890
15	2	LTE Band 25	20M	QPSK	100	0	Right Cheek	Reduced	26140	1860	18.94	19.40	1.112	0.05	0.913	**1.015**
	1	LTE Band 25	20M	QPSK	1	0	Right Cheek	Full	26140	1860	23.09	23.80	1.178	0.1	0.129	0.152
	1	LTE Band 25	20M	QPSK	1	0	Right Tilted	Full	26140	1860	23.09	23.80	1.178	0.06	0.091	0.107
	1	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26140	1860	23.09	23.80	1.178	0.02	0.136	0.160
	1	LTE Band 25	20M	QPSK	1	0	Left Tilted	Full	26140	1860	23.09	23.80	1.178	-0.05	0.097	0.114
	1	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26340	1880	23.08	23.80	1.180	-0.1	0.156	0.184
	1	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26590	1905	22.90	23.80	1.230	-0.04	0.165	0.203
	1	LTE Band 25	20M	QPSK	50	0	Right Cheek	Full	26140	1860	22.12	22.80	1.169	0.11	0.104	0.122
	1	LTE Band 25	20M	QPSK	50	0	Right Tilted	Full	26140	1860	22.12	22.80	1.169	0.07	0.075	0.088
	1	LTE Band 25	20M	QPSK	50	0	Left Cheek	Full	26140	1860	22.12	22.80	1.169	0.03	0.113	0.132
	1	LTE Band 25	20M	QPSK	50	0	Left Tilted	Full	26140	1860	22.12	22.80	1.169	0.08	0.079	0.092
	2	LTE Band 30	10M	QPSK	1	25	Right Cheek	Reduced	27710	2310	15.12	16.00	1.225	0.01	0.511	0.626
	2	LTE Band 30	10M	QPSK	1	25	Right Tilted	Reduced	27710	2310	15.12	16.00	1.225	-0.02	0.582	0.713
	2	LTE Band 30	10M	QPSK	1	25	Left Cheek	Reduced	27710	2310	15.12	16.00	1.225	0.07	0.355	0.435
	2	LTE Band 30	10M	QPSK	1	25	Left Tilted	Reduced	27710	2310	15.12	16.00	1.225	0.03	0.498	0.610
	2	LTE Band 30	10M	QPSK	25	0	Right Cheek	Reduced	27710	2310	14.94	16.00	1.276	0.05	0.574	0.733
16	2	LTE Band 30	10M	QPSK	25	0	Right Tilted	Reduced	27710	2310	14.94	16.00	1.276	0.04	0.657	**0.839**
	2	LTE Band 30	10M	QPSK	25	0	Left Cheek	Reduced	27710	2310	14.94	16.00	1.276	0.06	0.364	0.465
	2	LTE Band 30	10M	QPSK	25	0	Left Tilted	Reduced	27710	2310	14.94	16.00	1.276	-0.02	0.523	0.668
	2	LTE Band 30	10M	QPSK	50	0	Right Tilted	Reduced	27710	2310	14.91	16.00	1.285	0.03	0.580	0.745
	1	LTE Band 30	10M	QPSK	1	25	Right Cheek	Full	27710	2310	22.68	23.80	1.294	0.06	0.130	0.168
	1	LTE Band 30	10M	QPSK	1	25	Right Tilted	Full	27710	2310	22.68	23.80	1.294	0.03	0.125	0.162
	1	LTE Band 30	10M	QPSK	1	25	Left Cheek	Full	27710	2310	22.68	23.80	1.294	-0.04	0.181	0.234
	1	LTE Band 30	10M	QPSK	1	25	Left Tilted	Full	27710	2310	22.68	23.80	1.294	0.07	0.118	0.153
	1	LTE Band 30	10M	QPSK	25	0	Right Cheek	Full	27710	2310	21.78	22.80	1.265	0.16	0.104	0.132
	1	LTE Band 30	10M	QPSK	25	0	Right Tilted	Full	27710	2310	21.78	22.80	1.265	0.12	0.100	0.126
	1	LTE Band 30	10M	QPSK	25	0	Left Cheek	Full	27710	2310	21.78	22.80	1.265	0.06	0.162	0.205
	1	LTE Band 30	10M	QPSK	25	0	Left Tilted	Full	27710	2310	21.78	22.80	1.265	0.1	0.096	0.121

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	2	LTE Band 7	20M	QPSK	1	0	Right Cheek	Reduced	21350	2560	14.87	15.50	1.156	0.03	0.600	0.694
	2	LTE Band 7	20M	QPSK	1	0	Right Tilted	Reduced	21350	2560	14.87	15.50	1.156	-0.02	0.593	0.686
	2	LTE Band 7	20M	QPSK	1	0	Left Cheek	Reduced	21350	2560	14.87	15.50	1.156	-0.07	0.335	0.387
	2	LTE Band 7	20M	QPSK	1	0	Left Tilted	Reduced	21350	2560	14.87	15.50	1.156	0.05	0.455	0.526
	2	LTE Band 7	20M	QPSK	50	0	Right Cheek	Reduced	21350	2560	14.82	15.50	1.169	0.07	0.629	0.736
	2	LTE Band 7	20M	QPSK	50	0	Right Tilted	Reduced	21350	2560	14.82	15.50	1.169	0.16	0.616	0.720
	2	LTE Band 7	20M	QPSK	50	0	Left Cheek	Reduced	21350	2560	14.82	15.50	1.169	0.09	0.405	0.474
	2	LTE Band 7	20M	QPSK	50	0	Left Tilted	Reduced	21350	2560	14.82	15.50	1.169	0.04	0.541	0.633
17	2	LTE Band 7	20M	QPSK	50	0	Right Cheek	Reduced	20850	2510	14.64	15.50	1.219	0.01	0.645	**0.786**
	2	LTE Band 7	20M	QPSK	50	0	Right Cheek	Reduced	21100	2535	14.77	15.50	1.183	-0.06	0.663	0.784
	1	LTE Band 7	20M	QPSK	1	0	Right Cheek	Full	21350	2560	23.45	23.80	1.084	-0.11	0.199	0.216
	1	LTE Band 7	20M	QPSK	1	0	Right Tilted	Full	21350	2560	23.45	23.80	1.084	0.02	0.224	0.243
	1	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	21350	2560	23.45	23.80	1.084	-0.09	0.316	0.343
	1	LTE Band 7	20M	QPSK	1	0	Left Tilted	Full	21350	2560	23.45	23.80	1.084	0.08	0.234	0.254
	1	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	20850	2510	23.25	23.80	1.135	0.07	0.278	0.316
	1	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	21100	2535	23.30	23.80	1.122	0.1	0.294	0.330
	1	LTE Band 7	20M	QPSK	50	0	Right Cheek	Full	21350	2560	22.51	22.80	1.069	0.03	0.157	0.168
	1	LTE Band 7	20M	QPSK	50	0	Right Tilted	Full	21350	2560	22.51	22.80	1.069	0.09	0.172	0.184
	1	LTE Band 7	20M	QPSK	50	0	Left Cheek	Full	21350	2560	22.51	22.80	1.069	0.05	0.247	0.264
	1	LTE Band 7	20M	QPSK	50	0	Left Tilted	Full	21350	2560	22.51	22.80	1.069	0.04	0.175	0.187

<TDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	2	LTE Band 41	20M	QPSK	1	99	Right Cheek	Reduced	40620	2593	17.65	18.00	1.084	62.9	1.006	0.01	0.497	0.542
	2	LTE Band 41	20M	QPSK	1	99	Right Tilted	Reduced	40620	2593	17.65	18.00	1.084	62.9	1.006	0.06	0.453	0.494
	2	LTE Band 41	20M	QPSK	1	99	Left Cheek	Reduced	40620	2593	17.65	18.00	1.084	62.9	1.006	0.08	0.365	0.398
	2	LTE Band 41	20M	QPSK	1	99	Left Tilted	Reduced	40620	2593	17.65	18.00	1.084	62.9	1.006	-0.01	0.496	0.541
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	40620	2593	17.62	18.00	1.091	62.9	1.006	-0.05	0.558	0.613
	2	LTE Band 41	20M	QPSK	50	24	Right Tilted	Reduced	40620	2593	17.62	18.00	1.091	62.9	1.006	0.02	0.473	0.519
	2	LTE Band 41	20M	QPSK	50	24	Left Cheek	Reduced	40620	2593	17.62	18.00	1.091	62.9	1.006	0.07	0.385	0.423
	2	LTE Band 41	20M	QPSK	50	24	Left Tilted	Reduced	40620	2593	17.62	18.00	1.091	62.9	1.006	0.1	0.510	0.560
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	39750	2506	17.59	18.00	1.099	62.9	1.006	0.04	0.579	0.640
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	40185	2549.5	17.59	18.00	1.099	62.9	1.006	0.04	0.542	0.599
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	41055	2636.5	17.25	18.00	1.189	62.9	1.006	-0.11	0.530	0.634
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	41490	2680	17.30	18.00	1.175	62.9	1.006	0.02	0.640	0.756
18	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	41490	2680	19.18	20.00	1.208	42.9	1.009	-0.17	0.622	**0.758**
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	40620	2593	19.65	20.00	1.084	42.9	1.009	0.06	0.606	0.663
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	39750	2506	19.63	20.00	1.089	42.9	1.009	0.02	0.582	0.639
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	40185	2549.5	19.61	20.00	1.094	42.9	1.009	-0.06	0.561	0.619
	2	LTE Band 41	20M	QPSK	50	24	Right Cheek	Reduced	41055	2636.5	19.07	20.00	1.239	42.9	1.009	0.04	0.547	0.684
	2	LTE Band 41	20M	QPSK	100	0	Right Cheek	Reduced	40620	2593	17.60	18.00	1.096	62.9	1.006	0.13	0.521	0.575
	1	LTE Band 41	20M	QPSK	1	99	Right Cheek	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.15	0.142	0.147
	1	LTE Band 41	20M	QPSK	1	99	Right Tilted	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.03	0.116	0.120
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.11	0.229	0.237
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	40620	2593	26.03	26.30	1.064	42.9	1.009	0.01	0.250	0.268
	1	LTE Band 41	20M	QPSK	1	99	Left Tilted	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.05	0.092	0.095
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	39750	2506	23.43	23.80	1.089	62.9	1.006	-0.06	0.180	0.197
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	40185	2549.5	23.60	23.80	1.047	62.9	1.006	0.04	0.184	0.194
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	41055	2636.5	22.99	23.80	1.205	62.9	1.006	-0.02	0.194	0.235
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	41490	2680	23.13	23.80	1.167	62.9	1.006	-0.07	0.198	0.232
	1	LTE Band 41	20M	QPSK	1	99	Left Cheek	Full	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	23.54	23.80	1.062	62.9	1.006	0.06	0.211	0.225
	1	LTE Band 41	20M	QPSK	50	24	Right Cheek	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	0.02	0.096	0.102
	1	LTE Band 41	20M	QPSK	50	24	Right Tilted	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	-0.06	0.090	0.095
	1	LTE Band 41	20M	QPSK	50	24	Left Cheek	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	0.06	0.190	0.201
	1	LTE Band 41	20M	QPSK	50	24	Left Tilted	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	0.01	0.079	0.084

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	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)
	2	LTE Band 48	20M	QPSK	1	99	Right Cheek	Reduced	55830	3609	16.56	16.80	1.057	62.9	1.006	-0.05	0.745	0.792
	2	LTE Band 48	20M	QPSK	1	99	Right Tilted	Reduced	55830	3609	16.56	16.80	1.057	62.9	1.006	0.03	0.732	0.778
	2	LTE Band 48	20M	QPSK	1	99	Left Cheek	Reduced	55830	3609	16.56	16.80	1.057	62.9	1.006	-0.01	0.181	0.192
	2	LTE Band 48	20M	QPSK	1	99	Left Tilted	Reduced	55830	3609	16.56	16.80	1.057	62.9	1.006	0.05	0.326	0.347
	2	LTE Band 48	20M	QPSK	1	99	Right Cheek	Reduced	55340	3560	16.35	16.80	1.109	62.9	1.006	-0.08	0.721	0.805
	2	LTE Band 48	20M	QPSK	1	99	Right Cheek	Reduced	56150	3641	16.36	16.80	1.107	62.9	1.006	0.03	0.744	0.828
	2	LTE Band 48	20M	QPSK	1	99	Right Cheek	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	0.08	0.772	0.830
	2	LTE Band 48	20M	QPSK	1	99	Right Tilted	Reduced	55340	3560	16.35	16.80	1.109	62.9	1.006	0.06	0.694	0.774
	2	LTE Band 48	20M	QPSK	1	99	Right Tilted	Reduced	56150	3641	16.36	16.80	1.107	62.9	1.006	0.01	0.696	0.775
	2	LTE Band 48	20M	QPSK	1	99	Right Tilted	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	-0.01	0.727	0.782
	2	LTE Band 48	20M	QPSK	50	24	Right Cheek	Reduced	55830	3609	16.52	16.80	1.067	62.9	1.006	0.05	0.774	0.830
	2	LTE Band 48	20M	QPSK	50	24	Right Tilted	Reduced	55830	3609	16.52	16.80	1.067	62.9	1.006	0.09	0.751	0.806
	2	LTE Band 48	20M	QPSK	50	24	Left Cheek	Reduced	55830	3609	16.52	16.80	1.067	62.9	1.006	0.04	0.271	0.291
	2	LTE Band 48	20M	QPSK	50	24	Left Tilted	Reduced	55830	3609	16.52	16.80	1.067	62.9	1.006	0.07	0.331	0.355
	2	LTE Band 48	20M	QPSK	50	24	Right Cheek	Reduced	55340	3560	16.31	16.80	1.119	62.9	1.006	-0.08	0.753	0.848
	2	LTE Band 48	20M	QPSK	50	24	Right Cheek	Reduced	56150	3641	16.41	16.80	1.094	62.9	1.006	0.03	0.789	0.868
19	2	LTE Band 48	20M	QPSK	50	24	Right Cheek	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	0.02	0.998	**1.073**
	2	LTE Band 48	20M	QPSK	50	24	Right Tilted	Reduced	55340	3560	16.31	16.80	1.119	62.9	1.006	0.06	0.763	0.859
	2	LTE Band 48	20M	QPSK	50	24	Right Tilted	Reduced	56150	3641	16.41	16.80	1.094	62.9	1.006	0.12	0.770	0.847
	2	LTE Band 48	20M	QPSK	50	24	Right Tilted	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	-0.03	0.834	0.897
	2	LTE Band 48	20M	QPSK	100	0	Right Cheek	Reduced	55830	3609	16.48	16.80	1.076	62.9	1.006	0.08	0.777	0.841
	2	LTE Band 48	20M	QPSK	100	0	Right Tilted	Reduced	55830	3609	16.48	16.80	1.076	62.9	1.006	0.05	0.721	0.781

<WLAN 2.4GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	1+2	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Reduced	11	2462	14.76	16.00	1.330	99.31	1.007	-0.06	0.120	0.161
	1+2	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Reduced	11	2462	14.76	16.00	1.330	99.31	1.007	0.03	0.132	0.177
20	1+2	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Reduced	11	2462	14.76	16.00	1.330	99.31	1.007	-0.04	0.340	**0.455**
	1+2	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Reduced	11	2462	14.76	16.00	1.330	99.31	1.007	0.05	0.227	0.304
	1+2	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Reduced	1	2412	14.66	16.00	1.361	99.31	1.007	0.05	0.243	0.333
	1+2	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Reduced	6	2437	14.71	16.00	1.344	99.31	1.007	-0.02	0.287	0.389

<Bluetooth SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	1	Bluetooth	DH5 1Mbps	Right Cheek	Full	39	2441	14.10	15.40	1.349	76.87	1.084	0.19	0.128	0.187
	1	Bluetooth	DH5 1Mbps	Right Tilted	Full	39	2441	14.10	15.40	1.349	76.87	1.084	-0.04	0.132	0.193
	1	Bluetooth	DH5 1Mbps	Left Cheek	Full	39	2441	14.10	15.40	1.349	76.87	1.084	0.1	0.274	0.401
	1	Bluetooth	DH5 1Mbps	Left Tilted	Full	39	2441	14.10	15.40	1.349	76.87	1.084	0.06	0.207	0.303
	1	Bluetooth	DH5 1Mbps	Left Cheek	Full	0	2402	14.10	15.40	1.349	76.87	1.084	-0.07	0.259	0.379
21	1	Bluetooth	DH5 1Mbps	Left Cheek	Full	78	2480	13.40	15.40	1.585	76.87	1.084	-0.09	0.240	**0.412**

<WLAN 5GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	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)
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	Reduced	54	5270	16.13	18.00	1.540	96.31	1.038	-0.18	0.149	0.238
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	Reduced	54	5270	16.13	18.00	1.540	96.31	1.038	-0.08	0.119	0.190
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Reduced	54	5270	16.13	18.00	1.540	96.31	1.038	-0.06	0.365	0.583
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	Reduced	54	5270	16.13	18.00	1.540	96.31	1.038	0.09	0.326	0.521
22	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Reduced	62	5310	16.08	18.00	1.557	96.31	1.038	0.17	0.380	**0.614**
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.05	0.014	0.017
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.09	0.006	0.007
23	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.03	0.256	**0.317**
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.07	0.191	0.237
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Full	102	5510	18.92	20.00	1.282	96.31	1.038	0.06	0.222	0.295
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Full	126	5630	18.58	20.00	1.387	96.31	1.038	0.04	0.066	0.095
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Full	134	5670	18.73	20.00	1.340	96.31	1.038	0.02	0.073	0.101
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Full	142	5710	18.48	20.00	1.419	96.31	1.038	0.03	0.084	0.123
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Full	151	5755	17.43	19.00	1.435	96.31	1.038	0.05	0.012	0.018
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Full	151	5755	17.43	19.00	1.435	96.31	1.038	-0.05	0.005	0.007
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Full	151	5755	17.43	19.00	1.435	96.31	1.038	0.03	0.035	0.052
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Full	151	5755	17.43	19.00	1.435	96.31	1.038	0.15	0.021	0.031
24	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Full	159	5795	17.36	19.00	1.459	96.31	1.038	0.01	0.096	**0.145**

14.2 Hotspot SAR

<GSM SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	3	GSM850	GPRS(3 Tx slots)	Front	10	Reduced	128	824.2	26.55	27.80	1.334	0.08	0.243	0.324
	3	GSM850	GPRS(3 Tx slots)	Back	10	Reduced	128	824.2	26.55	27.80	1.334	0.04	0.329	0.439
	3	GSM850	GPRS(3 Tx slots)	Left Side	10	Reduced	128	824.2	26.55	27.80	1.334	0.05	0.419	0.559
	3	GSM850	GPRS(3 Tx slots)	Top Side	10	Reduced	128	824.2	26.55	27.80	1.334	0.11	0.029	0.039
	3	GSM850	GPRS(3 Tx slots)	Left Side	10	Reduced	189	836.4	26.45	27.80	1.365	-0.02	0.452	0.617
25	3	GSM850	GPRS(3 Tx slots)	Left Side	10	Reduced	251	848.8	26.35	27.80	1.396	0.07	0.478	**0.667**
	2	GSM1900	GPRS(3 Tx slots)	Front	10	Full	512	1850.2	24.49	25.10	1.151	0.06	0.116	0.133
	2	GSM1900	GPRS(3 Tx slots)	Back	10	Full	512	1850.2	24.49	25.10	1.151	0.09	0.194	0.223
	2	GSM1900	GPRS(3 Tx slots)	Left Side	10	Full	512	1850.2	24.49	25.10	1.151	0.03	0.099	0.114
	2	GSM1900	GPRS(3 Tx slots)	Top Side	10	Full	512	1850.2	24.49	25.10	1.151	0.05	0.330	0.380
	2	GSM1900	GPRS(3 Tx slots)	Top Side	10	Full	661	1880	24.39	25.10	1.178	0.08	0.328	0.386
	2	GSM1900	GPRS(3 Tx slots)	Top Side	10	Full	810	1909.8	24.32	25.10	1.197	-0.01	0.410	0.491
	1	GSM1900	GPRS(3 Tx slots)	Front	10	Full	512	1850.2	25.47	26.50	1.268	0.03	0.267	0.338
	1	GSM1900	GPRS(3 Tx slots)	Back	10	Full	512	1850.2	25.47	26.50	1.268	0.08	0.429	0.544
	1	GSM1900	GPRS(3 Tx slots)	Left Side	10	Full	512	1850.2	25.47	26.50	1.268	0.06	0.148	0.188
	1	GSM1900	GPRS(3 Tx slots)	Right Side	10	Full	512	1850.2	25.47	26.50	1.268	0.13	0.067	0.085
	1	GSM1900	GPRS(3 Tx slots)	Bottom Side	10	Full	512	1850.2	25.47	26.50	1.268	-0.05	0.508	0.644
26	1	GSM1900	GPRS(3 Tx slots)	Bottom Side	10	Full	661	1880	25.45	26.50	1.274	0.07	0.619	**0.788**
	1	GSM1900	GPRS(3 Tx slots)	Bottom Side	10	Full	810	1909.8	25.42	26.50	1.282	0.04	0.597	0.766

<WCDMA SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	3	WCDMA V	RMC 12.2Kbps	Front	10	Reduced	4132	826.4	21.72	22.30	1.143	0.05	0.447	0.511
	3	WCDMA V	RMC 12.2Kbps	Back	10	Reduced	4132	826.4	21.72	22.30	1.143	0.08	0.540	0.617
27	3	WCDMA V	RMC 12.2Kbps	Left Side	10	Reduced	4132	826.4	21.72	22.30	1.143	-0.14	0.641	**0.733**
	3	WCDMA V	RMC 12.2Kbps	Top Side	10	Reduced	4132	826.4	21.72	22.30	1.143	0.09	0.024	0.027
	3	WCDMA V	RMC 12.2Kbps	Left Side	10	Reduced	4182	836.4	21.69	22.30	1.151	0.02	0.609	0.701
	3	WCDMA V	RMC 12.2Kbps	Left Side	10	Reduced	4233	846.6	21.49	22.30	1.205	0.05	0.576	0.694
	2	WCDMA IV	RMC 12.2Kbps	Front	10	Full	1413	1732.6	23.01	23.40	1.094	0.05	0.264	0.289
	2	WCDMA IV	RMC 12.2Kbps	Back	10	Full	1413	1732.6	23.01	23.40	1.094	0.18	0.361	0.395
	2	WCDMA IV	RMC 12.2Kbps	Left Side	10	Full	1413	1732.6	23.01	23.40	1.094	0.06	0.244	0.267
	2	WCDMA IV	RMC 12.2Kbps	Top Side	10	Full	1413	1732.6	23.01	23.40	1.094	0.08	0.469	0.513
	2	WCDMA IV	RMC 12.2Kbps	Top Side	10	Full	1312	1712.4	22.92	23.40	1.117	0.11	0.412	0.460
	2	WCDMA IV	RMC 12.2Kbps	Top Side	10	Full	1513	1752.6	22.96	23.40	1.107	-0.12	0.630	0.697
	1	WCDMA IV	RMC 12.2Kbps	Front	10	Reduced	1413	1732.6	21.79	22.30	1.125	0.09	0.391	0.440
	1	WCDMA IV	RMC 12.2Kbps	Back	10	Reduced	1413	1732.6	21.79	22.30	1.125	0.04	0.496	0.558
	1	WCDMA IV	RMC 12.2Kbps	Left Side	10	Reduced	1413	1732.6	21.79	22.30	1.125	0.01	0.166	0.187
	1	WCDMA IV	RMC 12.2Kbps	Right Side	10	Reduced	1413	1732.6	21.79	22.30	1.125	-0.05	0.121	0.136
	1	WCDMA IV	RMC 12.2Kbps	Bottom Side	10	Reduced	1413	1732.6	21.79	22.30	1.125	0.01	0.602	0.677
	1	WCDMA IV	RMC 12.2Kbps	Bottom Side	10	Reduced	1312	1712.4	21.68	22.30	1.153	0.02	0.593	0.684
28	1	WCDMA IV	RMC 12.2Kbps	Bottom Side	10	Reduced	1513	1752.6	21.76	22.30	1.132	0.08	0.627	**0.710**
	2	WCDMA II	RMC 12.2Kbps	Front	10	Full	9400	1880	22.86	23.40	1.132	0.03	0.262	0.297
	2	WCDMA II	RMC 12.2Kbps	Back	10	Full	9400	1880	22.86	23.40	1.132	0.07	0.461	0.522
	2	WCDMA II	RMC 12.2Kbps	Left Side	10	Full	9400	1880	22.86	23.40	1.132	0.05	0.199	0.225
	2	WCDMA II	RMC 12.2Kbps	Top Side	10	Full	9400	1880	22.86	23.40	1.132	0.09	0.712	0.806
29	2	WCDMA II	RMC 12.2Kbps	Top Side	10	Full	9262	1852.4	22.82	23.40	1.143	-0.02	0.848	**0.969**
	2	WCDMA II	RMC 12.2Kbps	Top Side	10	Full	9538	1907.6	22.74	23.40	1.164	0.07	0.736	0.857
	1	WCDMA II	RMC 12.2Kbps	Front	10	Reduced	9400	1880	20.71	21.30	1.146	0.03	0.250	0.286
	1	WCDMA II	RMC 12.2Kbps	Back	10	Reduced	9400	1880	20.71	21.30	1.146	-0.03	0.474	0.543
	1	WCDMA II	RMC 12.2Kbps	Left Side	10	Reduced	9400	1880	20.71	21.30	1.146	-0.08	0.148	0.170
	1	WCDMA II	RMC 12.2Kbps	Right Side	10	Reduced	9400	1880	20.71	21.30	1.146	0.05	0.077	0.088
	1	WCDMA II	RMC 12.2Kbps	Bottom Side	10	Reduced	9400	1880	20.71	21.30	1.146	-0.01	0.664	0.761
	1	WCDMA II	RMC 12.2Kbps	Bottom Side	10	Reduced	9262	1852.4	20.59	21.30	1.178	0.07	0.650	0.765
	1	WCDMA II	RMC 12.2Kbps	Bottom Side	10	Reduced	9538	1907.6	20.69	21.30	1.151	0.11	0.740	0.852

<CDMA2000 SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	3	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Reduced	1013	824.7	22.22	22.80	1.143	0.05	0.492	0.562
	3	CDMA2000 BC0	RTAP 153.6Kbps	Back	10	Reduced	1013	824.7	22.22	22.80	1.143	0.1	0.561	0.641
	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	10	Reduced	1013	824.7	22.22	22.80	1.143	0.03	0.730	0.834
	3	CDMA2000 BC0	RTAP 153.6Kbps	Top Side	10	Reduced	1013	824.7	22.22	22.80	1.143	-0.05	0.018	0.021
	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	10	Reduced	777	848.31	22.10	22.80	1.175	0.07	0.694	0.815
30	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	10	Reduced	384	836.52	21.95	22.80	1.216	0.04	0.747	**0.908**
	3	CDMA2000 BC10	RTAP 153.6Kbps	Front	10	Reduced	580	820.5	21.68	22.30	1.153	0.06	0.475	0.548
	3	CDMA2000 BC10	RTAP 153.6Kbps	Back	10	Reduced	580	820.5	21.68	22.30	1.153	0.08	0.532	0.614
31	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	10	Reduced	580	820.5	21.68	22.30	1.153	0.03	0.695	**0.802**
	3	CDMA2000 BC10	RTAP 153.6Kbps	Top Side	10	Reduced	580	820.5	21.68	22.30	1.153	0.07	0.021	0.024
	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	10	Reduced	476	817.9	21.63	22.30	1.167	0.01	0.674	0.786
	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	10	Reduced	684	823.1	21.60	22.30	1.175	0.12	0.640	0.752
	2	CDMA2000 BC1	RTAP 153.6Kbps	Front	10	Full	1175	1908.75	22.51	23.40	1.227	0.06	0.231	0.284
	2	CDMA2000 BC1	RTAP 153.6Kbps	Back	10	Full	1175	1908.75	22.51	23.40	1.227	-0.04	0.421	0.517
	2	CDMA2000 BC1	RTAP 153.6Kbps	Left Side	10	Full	1175	1908.75	22.51	23.40	1.227	0.05	0.155	0.190
	2	CDMA2000 BC1	RTAP 153.6Kbps	Top Side	10	Full	1175	1908.75	22.51	23.40	1.227	0.08	0.689	0.846
	2	CDMA2000 BC1	RTAP 153.6Kbps	Top Side	10	Full	25	1851.25	22.45	23.40	1.245	0.09	0.763	0.950
	2	CDMA2000 BC1	RTAP 153.6Kbps	Top Side	10	Full	600	1880	22.50	23.40	1.230	0.02	0.733	0.902
	1	CDMA2000 BC1	RTAP 153.6Kbps	Front	10	Reduced	1175	1908.75	20.37	21.30	1.239	0.05	0.378	0.468
	1	CDMA2000 BC1	RTAP 153.6Kbps	Back	10	Reduced	1175	1908.75	20.37	21.30	1.239	-0.02	0.644	0.798
	1	CDMA2000 BC1	RTAP 153.6Kbps	Left Side	10	Reduced	1175	1908.75	20.37	21.30	1.239	0.03	0.155	0.192
	1	CDMA2000 BC1	RTAP 153.6Kbps	Right Side	10	Reduced	1175	1908.75	20.37	21.30	1.239	-0.11	0.114	0.141
32	1	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	10	Reduced	1175	1908.75	20.37	21.30	1.239	0.01	0.815	**1.010**
	1	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	10	Reduced	25	1851.25	20.36	21.30	1.242	0.07	0.644	0.800
	1	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	10	Reduced	600	1880	20.30	21.30	1.259	0.02	0.682	0.859

<FDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	3	LTE Band 71	20M	QPSK	1	0	Front	10	Reduced	133322	683	22.47	22.80	1.079	0.03	0.429	0.463
	3	LTE Band 71	20M	QPSK	1	0	Back	10	Reduced	133322	683	22.47	22.80	1.079	0.08	0.510	0.550
	3	LTE Band 71	20M	QPSK	1	0	Left Side	10	Reduced	133322	683	22.47	22.80	1.079	0.05	0.662	0.714
	3	LTE Band 71	20M	QPSK	1	0	Top Side	10	Reduced	133322	683	22.47	22.80	1.079	0.14	0.019	0.020
	3	LTE Band 71	20M	QPSK	50	0	Front	10	Reduced	133322	683	22.44	22.80	1.086	-0.06	0.437	0.475
	3	LTE Band 71	20M	QPSK	50	0	Back	10	Reduced	133322	683	22.44	22.80	1.086	0.04	0.535	0.581
33	3	LTE Band 71	20M	QPSK	50	0	Left Side	10	Reduced	133322	683	22.44	22.80	1.086	0.09	0.793	**0.862**
	3	LTE Band 71	20M	QPSK	50	0	Top Side	10	Reduced	133322	683	22.44	22.80	1.086	0.05	0.013	0.014
	3	LTE Band 71	20M	QPSK	100	0	Left Side	10	Reduced	133322	683	22.36	22.80	1.107	0.03	0.659	0.729
	3	LTE Band 12	10M	QPSK	1	0	Front	10	Reduced	23095	707.5	20.46	21.30	1.213	0.09	0.285	0.346
	3	LTE Band 12	10M	QPSK	1	0	Back	10	Reduced	23095	707.5	20.46	21.30	1.213	0.04	0.323	0.392
	3	LTE Band 12	10M	QPSK	1	0	Left Side	10	Reduced	23095	707.5	20.46	21.30	1.213	0.02	0.443	0.538
	3	LTE Band 12	10M	QPSK	1	0	Top Side	10	Reduced	23095	707.5	20.46	21.30	1.213	0.03	0.026	0.032
	3	LTE Band 12	10M	QPSK	25	0	Front	10	Reduced	23095	707.5	20.42	21.30	1.225	0.06	0.297	0.364
	3	LTE Band 12	10M	QPSK	25	0	Back	10	Reduced	23095	707.5	20.42	21.30	1.225	0.01	0.337	0.413
34	3	LTE Band 12	10M	QPSK	25	0	Left Side	10	Reduced	23095	707.5	20.42	21.30	1.225	0.06	0.499	**0.611**
	3	LTE Band 12	10M	QPSK	25	0	Top Side	10	Reduced	23095	707.5	20.42	21.30	1.225	0.05	0.018	0.022
	3	LTE Band 13	10M	QPSK	1	0	Front	10	Reduced	23230	782	20.12	20.80	1.169	-0.05	0.345	0.403
	3	LTE Band 13	10M	QPSK	1	0	Back	10	Reduced	23230	782	20.12	20.80	1.169	0.07	0.415	0.485
	3	LTE Band 13	10M	QPSK	1	0	Left Side	10	Reduced	23230	782	20.12	20.80	1.169	0.01	0.563	0.658
	3	LTE Band 13	10M	QPSK	1	0	Top Side	10	Reduced	23230	782	20.12	20.80	1.169	0.05	0.016	0.019
	3	LTE Band 13	10M	QPSK	25	0	Front	10	Reduced	23230	782	20.10	20.80	1.175	0.11	0.354	0.416
	3	LTE Band 13	10M	QPSK	25	0	Back	10	Reduced	23230	782	20.10	20.80	1.175	0.06	0.437	0.513
35	3	LTE Band 13	10M	QPSK	25	0	Left Side	10	Reduced	23230	782	20.10	20.80	1.175	0.02	0.593	**0.697**
	3	LTE Band 13	10M	QPSK	25	0	Top Side	10	Reduced	23230	782	20.10	20.80	1.175	0.02	0.017	0.020
	3	LTE Band 5	10M	QPSK	1	0	Front	10	Reduced	20525	836.5	21.58	22.30	1.180	0.06	0.477	0.563
	3	LTE Band 5	10M	QPSK	1	0	Back	10	Reduced	20525	836.5	21.58	22.30	1.180	0.08	0.535	0.631
	3	LTE Band 5	10M	QPSK	1	0	Left Side	10	Reduced	20525	836.5	21.58	22.30	1.180	0.05	0.655	0.773
	3	LTE Band 5	10M	QPSK	1	0	Top Side	10	Reduced	20525	836.5	21.58	22.30	1.180	0.02	0.027	0.032
	3	LTE Band 5	10M	QPSK	25	0	Front	10	Reduced	20525	836.5	21.56	22.30	1.186	0.03	0.482	0.572
	3	LTE Band 5	10M	QPSK	25	0	Back	10	Reduced	20525	836.5	21.56	22.30	1.186	0.07	0.542	0.643
36	3	LTE Band 5	10M	QPSK	25	0	Left Side	10	Reduced	20525	836.5	21.56	22.30	1.186	0.02	0.740	**0.877**
	3	LTE Band 5	10M	QPSK	25	0	Top Side	10	Reduced	20525	836.5	21.56	22.30	1.186	0.09	0.029	0.034
	3	LTE Band 5	10M	QPSK	50	0	Left Side	10	Reduced	20525	836.5	21.53	22.30	1.194	0.06	0.684	0.817
	3	LTE Band 26	15M	QPSK	1	0	Front	10	Reduced	26865	831.5	20.78	21.30	1.127	0.08	0.383	0.432
	3	LTE Band 26	15M	QPSK	1	0	Back	10	Reduced	26865	831.5	20.78	21.30	1.127	0.04	0.440	0.496
37	3	LTE Band 26	15M	QPSK	1	0	Left Side	10	Reduced	26865	831.5	20.78	21.30	1.127	0.13	0.673	**0.759**
	3	LTE Band 26	15M	QPSK	1	0	Top Side	10	Reduced	26865	831.5	20.78	21.30	1.127	0.05	0.036	0.041
	3	LTE Band 26	15M	QPSK	1	0	Left Side	10	Reduced	26765	821.5	20.70	21.30	1.148	-0.01	0.660	0.758
	3	LTE Band 26	15M	QPSK	1	0	Left Side	10	Reduced	26965	841.5	20.62	21.30	1.169	0.15	0.608	0.711
	3	LTE Band 26	15M	QPSK	36RB	0	Front	10	Reduced	26865	831.5	20.75	21.30	1.135	0.02	0.386	0.438
	3	LTE Band 26	15M	QPSK	36RB	0	Back	10	Reduced	26865	831.5	20.75	21.30	1.135	0.14	0.472	0.536
	3	LTE Band 26	15M	QPSK	36RB	0	Left Side	10	Reduced	26865	831.5	20.75	21.30	1.135	-0.08	0.567	0.644
	3	LTE Band 26	15M	QPSK	36RB	0	Top Side	10	Reduced	26865	831.5	20.75	21.30	1.135	0.02	0.031	0.035

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 66	20M	QPSK	1	0	Front	10	Full	132322	1745	21.93	22.40	1.114	-0.01	0.262	0.292
	2	LTE Band 66	20M	QPSK	1	0	Back	10	Full	132322	1745	21.93	22.40	1.114	0.06	0.433	0.482
	2	LTE Band 66	20M	QPSK	1	0	Left Side	10	Full	132322	1745	21.93	22.40	1.114	0.05	0.234	0.261
	2	LTE Band 66	20M	QPSK	1	0	Top Side	10	Full	132322	1745	21.93	22.40	1.114	-0.02	0.552	0.615
	2	LTE Band 66	20M	QPSK	1	0	Top Side	10	Full	132072	1720	21.87	22.40	1.130	0.01	0.468	0.529
	2	LTE Band 66	20M	QPSK	1	0	Top Side	10	Full	132572	1770	21.90	22.40	1.122	-0.06	0.595	0.668
	2	LTE Band 66	20M	QPSK	50	0	Front	10	Full	132322	1745	21.04	21.40	1.086	0.04	0.219	0.238
	2	LTE Band 66	20M	QPSK	50	0	Back	10	Full	132322	1745	21.04	21.40	1.086	0.02	0.358	0.389
	2	LTE Band 66	20M	QPSK	50	0	Left Side	10	Full	132322	1745	21.04	21.40	1.086	0.11	0.194	0.211
	2	LTE Band 66	20M	QPSK	50	0	Top Side	10	Full	132322	1745	21.04	21.40	1.086	0.01	0.406	0.441
	1	LTE Band 66	20M	QPSK	1	0	Front	10	Reduced	132322	1745	20.80	21.30	1.122	0.02	0.380	0.426
	1	LTE Band 66	20M	QPSK	1	0	Back	10	Reduced	132322	1745	20.80	21.30	1.122	0.06	0.454	0.509
	1	LTE Band 66	20M	QPSK	1	0	Left Side	10	Reduced	132322	1745	20.80	21.30	1.122	0.07	0.164	0.184
	1	LTE Band 66	20M	QPSK	1	0	Right Side	10	Reduced	132322	1745	20.80	21.30	1.122	0.01	0.110	0.123
	1	LTE Band 66	20M	QPSK	1	0	Bottom Side	10	Reduced	132322	1745	20.80	21.30	1.122	-0.09	0.643	0.721
	1	LTE Band 66	20M	QPSK	50	0	Front	10	Reduced	132322	1745	20.72	21.30	1.143	-0.07	0.398	0.455
	1	LTE Band 66	20M	QPSK	50	0	Back	10	Reduced	132322	1745	20.72	21.30	1.143	0.08	0.513	0.586
	1	LTE Band 66	20M	QPSK	50	0	Left Side	10	Reduced	132322	1745	20.72	21.30	1.143	0.02	0.175	0.200
	1	LTE Band 66	20M	QPSK	50	0	Right Side	10	Reduced	132322	1745	20.72	21.30	1.143	0.05	0.114	0.130
38	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	10	Reduced	132322	1745	20.72	21.30	1.143	0.03	0.671	**0.767**
	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	10	Reduced	132072	1720	20.50	21.30	1.202	0.1	0.601	0.723
	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	10	Reduced	132572	1770	20.59	21.30	1.178	0.06	0.637	0.750

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 25	20M	QPSK	1	0	Front	10	Full	26140	1860	21.79	22.40	1.151	0.11	0.266	0.306
	2	LTE Band 25	20M	QPSK	1	0	Back	10	Full	26140	1860	21.79	22.40	1.151	0.07	0.449	0.517
	2	LTE Band 25	20M	QPSK	1	0	Left Side	10	Full	26140	1860	21.79	22.40	1.151	0.06	0.211	0.243
	2	LTE Band 25	20M	QPSK	1	0	Top Side	10	Full	26140	1860	21.79	22.40	1.151	0.03	0.823	0.947
	2	LTE Band 25	20M	QPSK	1	0	Top Side	10	Full	26340	1880	21.70	22.40	1.175	0.09	0.826	0.970
39	2	LTE Band 25	20M	QPSK	1	0	Top Side	10	Full	26590	1905	21.72	22.40	1.169	0.07	0.856	**1.001**
	2	LTE Band 25	20M	QPSK	50	0	Front	10	Full	26140	1860	20.84	21.40	1.138	0.04	0.216	0.246
	2	LTE Band 25	20M	QPSK	50	0	Back	10	Full	26140	1860	20.84	21.40	1.138	-0.03	0.336	0.382
	2	LTE Band 25	20M	QPSK	50	0	Left Side	10	Full	26140	1860	20.84	21.40	1.138	-0.08	0.166	0.189
	2	LTE Band 25	20M	QPSK	50	0	Top Side	10	Full	26140	1860	20.84	21.40	1.138	0.06	0.667	0.759
	2	LTE Band 25	20M	QPSK	50	0	Top Side	10	Full	26340	1880	20.74	21.40	1.164	0.07	0.645	0.751
	2	LTE Band 25	20M	QPSK	50	0	Top Side	10	Full	26590	1905	20.72	21.40	1.169	0.02	0.630	0.737
	2	LTE Band 25	20M	QPSK	100	0	Top Side	10	Full	26140	1860	20.81	21.40	1.146	0.09	0.660	0.756
	1	LTE Band 25	20M	QPSK	1	0	Front	10	Reduced	26140	1860	20.18	20.80	1.153	0.06	0.316	0.364
	1	LTE Band 25	20M	QPSK	1	0	Back	10	Reduced	26140	1860	20.18	20.80	1.153	0.11	0.475	0.548
	1	LTE Band 25	20M	QPSK	1	0	Left Side	10	Reduced	26140	1860	20.18	20.80	1.153	-0.04	0.144	0.166
	1	LTE Band 25	20M	QPSK	1	0	Right Side	10	Reduced	26140	1860	20.18	20.80	1.153	0.08	0.077	0.089
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	10	Reduced	26140	1860	20.18	20.80	1.153	-0.09	0.713	0.822
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	10	Reduced	26340	1880	20.12	20.80	1.169	0.07	0.696	0.814
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	10	Reduced	26590	1905	20.16	20.80	1.159	0.02	0.651	0.754
	1	LTE Band 25	20M	QPSK	50	0	Front	10	Reduced	26140	1860	20.14	20.80	1.164	0.09	0.324	0.377
	1	LTE Band 25	20M	QPSK	50	0	Back	10	Reduced	26140	1860	20.14	20.80	1.164	-0.12	0.483	0.562
	1	LTE Band 25	20M	QPSK	50	0	Left Side	10	Reduced	26140	1860	20.14	20.80	1.164	0.1	0.152	0.177
	1	LTE Band 25	20M	QPSK	50	0	Right Side	10	Reduced	26140	1860	20.14	20.80	1.164	0.03	0.085	0.099
	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	10	Reduced	26140	1860	20.14	20.80	1.164	0.01	0.705	0.821
	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	10	Reduced	26340	1880	20.12	20.80	1.169	0.05	0.846	0.989
	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	10	Reduced	26590	1905	20.11	20.80	1.172	-0.02	0.776	0.910
	1	LTE Band 25	20M	QPSK	100	0	Bottom Side	10	Reduced	26140	1860	20.12	20.80	1.169	0.03	0.750	0.877

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 30	10M	QPSK	1	25	Front	10	Full	27710	2310	21.12	22.00	1.225	0.05	0.274	0.336
	2	LTE Band 30	10M	QPSK	1	25	Back	10	Full	27710	2310	21.12	22.00	1.225	-0.02	0.389	0.476
	2	LTE Band 30	10M	QPSK	1	25	Left Side	10	Full	27710	2310	21.12	22.00	1.225	0.02	0.259	0.317
	2	LTE Band 30	10M	QPSK	1	25	Top Side	10	Full	27710	2310	21.12	22.00	1.225	0.02	0.657	0.805
	2	LTE Band 30	10M	QPSK	25	0	Front	10	Full	27710	2310	20.25	21.00	1.189	0.09	0.224	0.266
	2	LTE Band 30	10M	QPSK	25	0	Back	10	Full	27710	2310	20.25	21.00	1.189	0.04	0.232	0.276
	2	LTE Band 30	10M	QPSK	25	0	Left Side	10	Full	27710	2310	20.25	21.00	1.189	-0.03	0.210	0.250
	2	LTE Band 30	10M	QPSK	25	0	Top Side	10	Full	27710	2310	20.25	21.00	1.189	0.08	0.498	0.592
	2	LTE Band 30	10M	QPSK	50	0	Top Side	10	Full	27710	2310	20.23	21.00	1.194	0.05	0.495	0.591
	1	LTE Band 30	10M	QPSK	1	25	Front	10	Reduced	27710	2310	21.60	22.80	1.318	0.05	0.602	0.794
	1	LTE Band 30	10M	QPSK	1	25	Back	10	Reduced	27710	2310	21.60	22.80	1.318	0.04	0.439	0.579
	1	LTE Band 30	10M	QPSK	1	25	Left Side	10	Reduced	27710	2310	21.60	22.80	1.318	0.08	0.187	0.247
	1	LTE Band 30	10M	QPSK	1	25	Right Side	10	Reduced	27710	2310	21.60	22.80	1.318	0.02	0.156	0.206
	1	LTE Band 30	10M	QPSK	1	25	Bottom Side	10	Reduced	27710	2310	21.60	22.80	1.318	0.09	0.340	0.448
40	1	LTE Band 30	10M	QPSK	25	0	Front	10	Reduced	27710	2310	21.53	22.80	1.340	-0.08	0.642	**0.860**
	1	LTE Band 30	10M	QPSK	25	0	Back	10	Reduced	27710	2310	21.53	22.80	1.340	0.07	0.464	0.622
	1	LTE Band 30	10M	QPSK	25	0	Left Side	10	Reduced	27710	2310	21.53	22.80	1.340	0.02	0.192	0.257
	1	LTE Band 30	10M	QPSK	25	0	Right Side	10	Reduced	27710	2310	21.53	22.80	1.340	0.11	0.165	0.221
	1	LTE Band 30	10M	QPSK	25	0	Bottom Side	10	Reduced	27710	2310	21.53	22.80	1.340	-0.18	0.362	0.485
	1	LTE Band 30	10M	QPSK	50	0	Front	10	Reduced	27710	2310	21.50	22.80	1.349	-0.03	0.613	0.827

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 7	20M	QPSK	1	0	Front	10	Reduced	21350	2560	16.35	17.00	1.161	0.05	0.176	0.204
	2	LTE Band 7	20M	QPSK	1	0	Back	10	Reduced	21350	2560	16.35	17.00	1.161	0.09	0.277	0.322
	2	LTE Band 7	20M	QPSK	1	0	Left Side	10	Reduced	21350	2560	16.35	17.00	1.161	0.02	0.107	0.124
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	21350	2560	16.35	17.00	1.161	0.07	0.612	0.711
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	20850	2510	16.14	17.00	1.219	0.03	0.688	0.839
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	21100	2535	16.28	17.00	1.180	-0.11	0.773	0.912
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	21350(PCC) + 21152(SCC)	2560(PCC) + 2540.2(SCC)	16.24	17.00	1.191	0.09	0.764	0.910
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	20850(PCC) + 21048(SCC)	2510(PCC) + 2529.8(SCC)	16.01	17.00	1.256	0.14	0.726	0.912
	2	LTE Band 7	20M	QPSK	1	0	Top Side	10	Reduced	21100(PCC)+ 20902(SCC)	2535(PCC) + 2515.2(SCC)	16.19	17.00	1.205	-0.08	0.751	0.905
	2	LTE Band 7	20M	QPSK	50	0	Front	10	Reduced	21350	2560	16.34	17.00	1.164	0.05	0.167	0.194
	2	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	21350	2560	16.34	17.00	1.164	0.08	0.259	0.302
	2	LTE Band 7	20M	QPSK	50	0	Left Side	10	Reduced	21350	2560	16.34	17.00	1.164	0.04	0.112	0.130
	2	LTE Band 7	20M	QPSK	50	0	Top Side	10	Reduced	21350	2560	16.34	17.00	1.164	0.1	0.603	0.702
	2	LTE Band 7	20M	QPSK	100	0	Top Side	10	Reduced	21350	2560	16.27	17.00	1.183	0.03	0.585	0.692
	1	LTE Band 7	20M	QPSK	1	0	Front	10	Reduced	21350	2560	21.43	21.80	1.089	0.04	0.730	0.795
	1	LTE Band 7	20M	QPSK	1	0	Back	10	Reduced	21350	2560	21.43	21.80	1.089	0.09	0.830	0.904
	1	LTE Band 7	20M	QPSK	1	0	Left Side	10	Reduced	21350	2560	21.43	21.80	1.089	0.11	0.227	0.247
	1	LTE Band 7	20M	QPSK	1	0	Right Side	10	Reduced	21350	2560	21.43	21.80	1.089	0.02	0.186	0.203
	1	LTE Band 7	20M	QPSK	1	0	Bottom Side	10	Reduced	21350	2560	21.43	21.80	1.089	-0.06	0.863	0.940
	1	LTE Band 7	20M	QPSK	1	0	Front	10	Reduced	20850	2510	21.23	21.80	1.140	-0.02	0.710	0.810
	1	LTE Band 7	20M	QPSK	1	0	Front	10	Reduced	21100	2535	21.29	21.80	1.125	0.07	0.739	0.831
	1	LTE Band 7	20M	QPSK	1	0	Back	10	Reduced	20850	2510	21.23	21.80	1.140	0.06	0.883	1.007
	1	LTE Band 7	20M	QPSK	1	0	Back	10	Reduced	21100	2535	21.29	21.80	1.125	-0.11	0.876	0.985
	1	LTE Band 7	20M	QPSK	1	0	Bottom Side	10	Reduced	20850	2510	21.23	21.80	1.140	0.03	0.751	0.856
	1	LTE Band 7	20M	QPSK	1	0	Bottom Side	10	Reduced	21100	2535	21.29	21.80	1.125	0.01	0.756	0.850
	1	LTE Band 7	20M	QPSK	50	0	Front	10	Reduced	21350	2560	21.39	21.80	1.099	0.08	0.779	0.856
41	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	21350	2560	21.39	21.80	1.099	-0.18	0.998	**1.097**
	1	LTE Band 7	20M	QPSK	50	0	Left Side	10	Reduced	21350	2560	21.39	21.80	1.099	0.09	0.238	0.262
	1	LTE Band 7	20M	QPSK	50	0	Right Side	10	Reduced	21350	2560	21.39	21.80	1.099	0.02	0.196	0.215
	1	LTE Band 7	20M	QPSK	50	0	Bottom Side	10	Reduced	21350	2560	21.39	21.80	1.099	0.05	0.961	1.056
	1	LTE Band 7	20M	QPSK	50	0	Front	10	Reduced	20850	2510	21.23	21.80	1.140	0.09	0.673	0.767
	1	LTE Band 7	20M	QPSK	50	0	Front	10	Reduced	21100	2535	21.34	21.80	1.112	0.03	0.720	0.800
	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	20850	2510	21.23	21.80	1.140	0.05	0.851	0.970
	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	21100	2535	21.34	21.80	1.112	-0.02	0.899	0.999
	1	LTE Band 7	20M	QPSK	50	0	Bottom Side	10	Reduced	20850	2510	21.23	21.80	1.140	0.16	0.871	0.993
	1	LTE Band 7	20M	QPSK	50	0	Bottom Side	10	Reduced	21100	2535	21.34	21.80	1.112	0.07	0.926	1.029
	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	21350(PCC) + 21152(SCC)	2560(PCC) + 2540.2(SCC)	21.35	21.80	1.109	-0.05	0.939	1.042
	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	20850(PCC) + 21048(SCC)	2510(PCC) + 2529.8(SCC)	21.27	21.80	1.130	0.06	0.872	0.985
	1	LTE Band 7	20M	QPSK	50	0	Back	10	Reduced	21100(PCC) + 20902(SCC)	2535(PCC) + 2515.2(SCC)	21.34	21.80	1.112	0.09	0.962	1.069
	1	LTE Band 7	20M	QPSK	100	0	Front	10	Reduced	21350	2560	21.33	21.80	1.114	-0.05	0.733	0.817
	1	LTE Band 7	20M	QPSK	100	0	Back	10	Reduced	21350	2560	21.33	21.80	1.114	0.09	0.816	0.909
	1	LTE Band 7	20M	QPSK	100	0	Bottom Side	10	Reduced	21350	2560	21.33	21.80	1.114	0.03	0.944	1.052

<TDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 41	20M	QPSK	1	99	Front	10	Reduced	40620	2593	18.29	18.50	1.050	62.9	1.006	0.06	0.138	0.146
	2	LTE Band 41	20M	QPSK	1	99	Back	10	Reduced	40620	2593	18.29	18.50	1.050	62.9	1.006	0.08	0.186	0.196
	2	LTE Band 41	20M	QPSK	1	99	Left Side	10	Reduced	40620	2593	18.29	18.50	1.050	62.9	1.006	0.05	0.067	0.071
	2	LTE Band 41	20M	QPSK	1	99	Top Side	10	Reduced	40620	2593	18.29	18.50	1.050	62.9	1.006	0.02	0.589	0.622
	2	LTE Band 41	20M	QPSK	1	99	Top Side	10	Reduced	39750	2506	18.19	18.50	1.074	62.9	1.006	0.05	0.517	0.559
	2	LTE Band 41	20M	QPSK	1	99	Top Side	10	Reduced	40185	2549.5	18.08	18.50	1.102	62.9	1.006	0.07	0.541	0.600
	2	LTE Band 41	20M	QPSK	1	99	Top Side	10	Reduced	41055	2636.5	17.79	18.50	1.178	62.9	1.006	0.02	0.531	0.629
	2	LTE Band 41	20M	QPSK	1	99	Top Side	10	Reduced	41490	2680	17.84	18.50	1.164	62.9	1.006	0.02	0.533	0.624
	2	LTE Band 41	20M	QPSK	50	24	Front	10	Reduced	40620	2593	18.25	18.50	1.059	62.9	1.006	0.03	0.144	0.153
	2	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	40620	2593	18.25	18.50	1.059	62.9	1.006	0.07	0.274	0.292
	2	LTE Band 41	20M	QPSK	50	24	Left Side	10	Reduced	40620	2593	18.25	18.50	1.059	62.9	1.006	0.04	0.069	0.074
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40620	2593	18.25	18.50	1.059	62.9	1.006	-0.05	0.602	0.641
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	39750	2506	18.19	18.50	1.074	62.9	1.006	0.08	0.616	0.666
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40185	2549.5	18.18	18.50	1.076	62.9	1.006	0.03	0.642	0.695
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41055	2636.5	17.78	18.50	1.180	62.9	1.006	0.06	0.562	0.667
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41490	2680	17.75	18.50	1.189	62.9	1.006	0.12	0.541	0.647
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41490	2680	20.69	21.50	1.205	42.9	1.009	-0.02	0.611	0.743
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40620	2593	21.14	21.50	1.086	42.9	1.009	0.05	0.699	0.766
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	39750	2506	21.13	21.50	1.089	42.9	1.009	0.07	0.622	0.683
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40185	2549.5	21.05	21.50	1.109	42.9	1.009	0.03	0.644	0.721
42	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41055	2636.5	20.76	21.50	1.186	42.9	1.009	0.01	0.727	**0.870**
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	18.37	18.50	1.030	62.9	1.006	-0.06	0.580	0.601
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	18.11	18.50	1.094	62.9	1.006	0.08	0.554	0.610
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	39790(PCC) + 39988(SCC)	2510(PCC) + 2529.8(SCC)	18.14	18.50	1.086	62.9	1.006	0.01	0.543	0.593
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	18.29	18.50	1.050	62.9	1.006	0.04	0.622	0.657
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	17.91	18.50	1.146	62.9	1.006	0.09	0.545	0.628
	2	LTE Band 41	20M	QPSK	50	24	Top Side	10	Reduced	41490(PCC)+ 41292(SCC)	2680(PCC) + 2660.2(SCC)	17.77	18.50	1.183	62.9	1.006	0.02	0.570	0.678
	2	LTE Band 41	20M	QPSK	100	0	Top Side	10	Reduced	40620	2593	18.23	18.50	1.064	62.9	1.006	0.09	0.559	0.598

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	1	LTE Band 41	20M	QPSK	1	99	Front	10	Reduced	40620	2593	21.65	21.80	1.035	62.9	1.006	0.09	0.355	0.370
	1	LTE Band 41	20M	QPSK	1	99	Back	10	Reduced	40620	2593	21.65	21.80	1.035	62.9	1.006	0.19	0.555	0.578
	1	LTE Band 41	20M	QPSK	1	99	Left Side	10	Reduced	40620	2593	21.65	21.80	1.035	62.9	1.006	0.06	0.126	0.131
	1	LTE Band 41	20M	QPSK	1	99	Right Side	10	Reduced	40620	2593	21.65	21.80	1.035	62.9	1.006	0.01	0.108	0.112
	1	LTE Band 41	20M	QPSK	1	99	Bottom Side	10	Reduced	40620	2593	21.65	21.80	1.035	62.9	1.006	0.13	0.635	0.661
	1	LTE Band 41	20M	QPSK	1	99	Bottom Side	10	Reduced	39750	2506	21.55	21.80	1.059	62.9	1.006	-0.08	0.497	0.530
	1	LTE Band 41	20M	QPSK	1	99	Bottom Side	10	Reduced	40185	2549.5	21.55	21.80	1.059	62.9	1.006	0.07	0.562	0.599
	1	LTE Band 41	20M	QPSK	1	99	Bottom Side	10	Reduced	41055	2636.5	20.91	21.80	1.227	62.9	1.006	0.03	0.608	0.751
	1	LTE Band 41	20M	QPSK	1	99	Bottom Side	10	Reduced	41490	2680	21.09	21.80	1.178	62.9	1.006	-0.19	0.618	0.732
	1	LTE Band 41	20M	QPSK	50	24	Front	10	Reduced	40620	2593	21.64	21.80	1.038	62.9	1.006	0.05	0.378	0.395
	1	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	40620	2593	21.64	21.80	1.038	62.9	1.006	-0.06	0.651	0.679
	1	LTE Band 41	20M	QPSK	50	24	Left Side	10	Reduced	40620	2593	21.64	21.80	1.038	62.9	1.006	0.02	0.133	0.139
	1	LTE Band 41	20M	QPSK	50	24	Right Side	10	Reduced	40620	2593	21.64	21.80	1.038	62.9	1.006	0.08	0.117	0.122
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40620	2593	21.64	21.80	1.038	62.9	1.006	0.18	0.658	0.687
	1	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	39750	2506	21.62	21.80	1.042	62.9	1.006	-0.02	0.492	0.516
	1	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	40185	2549.5	21.47	21.80	1.079	62.9	1.006	0.01	0.559	0.607
	1	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	41055	2636.5	21.19	21.80	1.151	62.9	1.006	0.09	0.589	0.682
	1	LTE Band 41	20M	QPSK	50	24	Back	10	Reduced	41490	2680	21.09	21.80	1.178	62.9	1.006	0.04	0.598	0.708
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	39750	2506	21.62	21.80	1.042	62.9	1.006	-0.13	0.501	0.525
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40185	2549.5	21.47	21.80	1.079	62.9	1.006	-0.09	0.573	0.622
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41055	2636.5	21.19	21.80	1.151	62.9	1.006	-0.15	0.603	0.698
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41490	2680	21.09	21.80	1.178	62.9	1.006	-0.05	0.609	0.721
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41490	2680	23.46	24.30	1.213	42.9	1.009	0.03	0.661	0.809
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40620	2593	24.14	24.30	1.038	42.9	1.009	-0.05	0.552	0.578
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	39750	2506	23.99	24.30	1.074	42.9	1.009	-0.02	0.435	0.471
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40185	2549.5	24.02	24.30	1.067	42.9	1.009	0.01	0.508	0.547
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41055	2636.5	23.78	24.30	1.127	42.9	1.009	0.08	0.592	0.673
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	21.59	21.80	1.050	62.9	1.006	-0.05	0.611	0.645
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	21.54	21.80	1.062	62.9	1.006	0.02	0.484	0.517
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	39790(PCC) + 39988(SCC)	2510(PCC) + 2529.8(SCC)	21.56	21.80	1.057	62.9	1.006	0.06	0.496	0.527
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	21.41	21.80	1.094	62.9	1.006	-0.11	0.539	0.593
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.22	21.80	1.143	62.9	1.006	0.07	0.532	0.612
	1	LTE Band 41	20M	QPSK	50	24	Bottom Side	10	Reduced	41490(PCC)+ 41292(SCC)	2680(PCC) + 2660.2(SCC)	21.02	21.80	1.197	62.9	1.006	0.02	0.564	0.679
	1	LTE Band 41	20M	QPSK	100	0	Back	10	Reduced	40620	2593	21.62	21.80	1.042	62.9	1.006	0.05	0.454	0.476
	1	LTE Band 41	20M	QPSK	100	0	Bottom Side	10	Reduced	40620	2593	21.62	21.80	1.042	62.9	1.006	0.06	0.470	0.493

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	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)
	2	LTE Band 48	20M	QPSK	1	99	Front	10	Reduced	55830	3609	22.43	22.80	1.089	62.9	1.006	0.05	0.337	0.369
	2	LTE Band 48	20M	QPSK	1	99	Back	10	Reduced	55830	3609	22.43	22.80	1.089	62.9	1.006	-0.08	0.432	0.473
	2	LTE Band 48	20M	QPSK	1	99	Left Side	10	Reduced	55830	3609	22.43	22.80	1.089	62.9	1.006	0.06	0.228	0.250
	2	LTE Band 48	20M	QPSK	1	99	Top Side	10	Reduced	55830	3609	22.43	22.80	1.089	62.9	1.006	0.07	0.748	0.819
	2	LTE Band 48	20M	QPSK	1	99	Top Side	10	Reduced	55340	3560	22.21	22.80	1.146	62.9	1.006	0.12	0.734	0.846
	2	LTE Band 48	20M	QPSK	1	99	Top Side	10	Reduced	56150	3641	22.26	22.80	1.132	62.9	1.006	0.03	0.810	0.923
43	2	LTE Band 48	20M	QPSK	1	99	Top Side	10	Reduced	56640	3690	22.25	22.80	1.135	62.9	1.006	0.04	0.867	**0.990**
	2	LTE Band 48	20M	QPSK	50	24	Front	10	Reduced	55830	3609	22.38	22.80	1.102	62.9	1.006	0.08	0.257	0.285
	2	LTE Band 48	20M	QPSK	50	24	Back	10	Reduced	55830	3609	22.38	22.80	1.102	62.9	1.006	0.06	0.297	0.329
	2	LTE Band 48	20M	QPSK	50	24	Left Side	10	Reduced	55830	3609	22.38	22.80	1.102	62.9	1.006	0.09	0.183	0.203
	2	LTE Band 48	20M	QPSK	50	24	Top Side	10	Reduced	55830	3609	22.38	22.80	1.102	62.9	1.006	0.02	0.646	0.716
	2	LTE Band 48	20M	QPSK	50	24	Top Side	10	Reduced	55340	3560	22.23	22.80	1.140	62.9	1.006	0.07	0.675	0.774
	2	LTE Band 48	20M	QPSK	50	24	Top Side	10	Reduced	56150	3641	22.37	22.80	1.104	62.9	1.006	0.05	0.706	0.784
	2	LTE Band 48	20M	QPSK	50	24	Top Side	10	Reduced	56640	3690	22.37	22.80	1.104	62.9	1.006	0.01	0.765	0.850
	2	LTE Band 48	20M	QPSK	100	0	Top Side	10	Reduced	55830	3609	22.36	22.80	1.107	62.9	1.006	0.1	0.659	0.734

<WLAN 2.4GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	1+2	WLAN2.4GHz	802.11b 1Mbps	Front	10	Reduced	11	2462	17.76	19.00	1.330	99.31	1.007	0.09	0.099	0.132
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	10	Reduced	11	2462	17.76	19.00	1.330	99.31	1.007	-0.06	0.307	0.411
	1+2	WLAN2.4GHz	802.11b 1Mbps	Right Side	10	Reduced	11	2462	17.76	19.00	1.330	99.31	1.007	0.02	0.118	0.158
	1+2	WLAN2.4GHz	802.11b 1Mbps	Top Side	10	Reduced	11	2462	17.76	19.00	1.330	99.31	1.007	0.15	0.136	0.182
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	10	Reduced	1	2412	17.66	19.00	1.361	99.31	1.007	0.03	0.390	0.535
44	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	10	Reduced	6	2437	17.71	19.00	1.346	99.31	1.007	0.08	0.525	**0.712**

<Bluetooth SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	1	Bluetooth	DH5 1Mbps	Front	10	Full	39	2441	14.10	15.40	1.349	76.87	1.084	0.09	0.057	0.083
45	1	Bluetooth	DH5 1Mbps	Back	10	Full	39	2441	14.10	15.40	1.349	76.87	1.084	-0.19	0.078	**0.114**
	1	Bluetooth	DH5 1Mbps	Right Side	10	Full	39	2441	14.10	15.40	1.349	76.87	1.084	-0.03	0.035	0.051
	1	Bluetooth	DH5 1Mbps	Top Side	10	Full	39	2441	14.10	15.40	1.349	76.87	1.084	0.02	0.075	0.110
	1	Bluetooth	DH5 1Mbps	Back	10	Full	0	2402	14.10	15.40	1.349	76.87	1.084	0.06	0.074	0.108
	1	Bluetooth	DH5 1Mbps	Back	10	Full	78	2480	13.40	15.40	1.585	76.87	1.084	0.01	0.060	0.103

<WLAN 5GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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)
	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10	Reduced	38	5190	15.51	17.00	1.409	96.31	1.038	0.09	0.015	0.021
	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10	Reduced	38	5190	15.51	17.00	1.409	96.31	1.038	0.02	0.515	0.753
	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10	Reduced	38	5190	15.51	17.00	1.409	96.31	1.038	0.09	0.147	0.215
	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10	Reduced	38	5190	15.51	17.00	1.409	96.31	1.038	0.08	0.071	0.103
46	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10	Reduced	46	5230	15.25	17.00	1.496	96.31	1.038	0.05	0.538	**0.836**
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10	Reduced	151	5755	14.48	16.00	1.419	96.31	1.038	-0.03	0.110	0.162
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10	Reduced	151	5755	14.48	16.00	1.419	96.31	1.038	0.06	0.505	0.744
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10	Reduced	151	5755	14.48	16.00	1.419	96.31	1.038	0.05	0.132	0.194
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10	Reduced	151	5755	14.48	16.00	1.419	96.31	1.038	0.11	0.068	0.100
47	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10	Reduced	159	5795	14.41	16.00	1.442	96.31	1.038	-0.08	0.558	**0.835**

14.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	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)
	3	GSM850	GPRS(3 Tx slots)	Front	15	Full	128	824.2	28.75	29.80	1.274	0.05	0.357	0.455
	3	GSM850	GPRS(3 Tx slots)	Back	15	Full	128	824.2	28.75	29.80	1.274	0.08	0.416	0.530
	3	GSM850	GPRS(3 Tx slots)	Back	15	Full	189	836.4	28.48	29.80	1.355	0.06	0.417	0.565
48	3	GSM850	GPRS(3 Tx slots)	Back	15	Full	251	848.8	28.45	29.80	1.365	-0.13	0.433	**0.591**
	2	GSM1900	GPRS(3 Tx slots)	Front	15	Full	512	1850.2	24.49	25.10	1.151	0.06	0.063	0.073
	2	GSM1900	GPRS(3 Tx slots)	Back	15	Full	512	1850.2	24.49	25.10	1.151	-0.07	0.098	0.113
	2	GSM1900	GPRS(3 Tx slots)	Back	15	Full	661	1880	24.39	25.10	1.178	0.03	0.081	0.095
	2	GSM1900	GPRS(3 Tx slots)	Back	15	Full	810	1909.8	24.32	25.10	1.197	0.08	0.083	0.099
	1	GSM1900	GPRS(3 Tx slots)	Front	15	Full	512	1850.2	25.47	26.50	1.268	0.11	0.142	0.180
49	1	GSM1900	GPRS(3 Tx slots)	Back	15	Full	512	1850.2	25.47	26.50	1.268	0.08	0.231	**0.293**
	1	GSM1900	GPRS(3 Tx slots)	Back	15	Full	661	1880	25.45	26.50	1.274	-0.03	0.194	0.247
	1	GSM1900	GPRS(3 Tx slots)	Back	15	Full	810	1909.8	25.42	26.50	1.282	0.05	0.211	0.271

<WCDMA SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	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)
	3	WCDMA Band V	RMC 12.2Kbps	Front	15	Full	4132	826.4	24.20	24.80	1.148	0.08	0.461	0.529
	3	WCDMA Band V	RMC 12.2Kbps	Back	15	Full	4132	826.4	24.20	24.80	1.148	0.02	0.496	0.569
50	3	WCDMA Band V	RMC 12.2Kbps	Back	15	Full	4182	836.4	24.02	24.80	1.197	-0.19	0.569	**0.681**
	3	WCDMA Band V	RMC 12.2Kbps	Back	15	Full	4233	846.6	23.90	24.80	1.230	0.07	0.453	0.557
	2	WCDMA Band IV	RMC 12.2Kbps	Front	15	Full	1413	1732.6	23.01	23.40	1.094	0.02	0.151	0.165
	2	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1413	1732.6	23.01	23.40	1.094	0.09	0.180	0.197
	2	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1312	1712.4	22.92	23.40	1.117	0.1	0.237	0.265
	2	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1513	1752.6	22.96	23.40	1.107	0.04	0.166	0.184
	1	WCDMA Band IV	RMC 12.2Kbps	Front	15	Full	1413	1732.6	24.18	24.80	1.153	0.03	0.344	0.397
	1	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1413	1732.6	24.18	24.80	1.153	0.01	0.389	0.449
51	1	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1312	1712.4	24.09	24.80	1.178	-0.12	0.396	**0.466**
	1	WCDMA Band IV	RMC 12.2Kbps	Back	15	Full	1513	1752.6	24.17	24.80	1.156	0.07	0.384	0.444
	2	WCDMA Band II	RMC 12.2Kbps	Front	15	Full	9400	1880	22.86	23.40	1.132	0.08	0.147	0.166
	2	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9400	1880	22.86	23.40	1.132	0.03	0.197	0.223
	2	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9262	1852.4	22.82	23.40	1.143	0.05	0.199	0.227
	2	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9538	1907.6	22.74	23.40	1.164	-0.12	0.259	0.302
	1	WCDMA Band II	RMC 12.2Kbps	Front	15	Full	9400	1880	24.21	24.80	1.146	0.11	0.340	0.389
	1	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9400	1880	24.21	24.80	1.146	0.09	0.449	0.514
	1	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9262	1852.4	24.15	24.80	1.161	0.02	0.402	0.467
52	1	WCDMA Band II	RMC 12.2Kbps	Back	15	Full	9538	1907.6	24.20	24.80	1.148	0.13	0.611	**0.702**

<CDMA2000 SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	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)
	3	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	15	Full	1013	824.7	23.97	24.80	1.211	0.08	0.285	0.345
53	3	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	15	Full	1013	824.7	23.97	24.80	1.211	-0.02	0.473	**0.573**
	3	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	15	Full	777	848.31	23.84	24.80	1.247	0.05	0.305	0.380
	3	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	15	Full	384	836.52	23.92	24.80	1.225	0.07	0.307	0.376
	3	CDMA2000 BC10	RC3 SO32 (F+SCH)	Front	15	Full	580	820.5	24.07	24.80	1.183	0.04	0.299	0.354
54	3	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	15	Full	580	820.5	24.07	24.80	1.183	-0.03	0.301	**0.356**
	3	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	15	Full	476	817.9	24.06	24.80	1.186	-0.05	0.299	0.355
	3	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	15	Full	684	823.1	24.03	24.80	1.194	0.08	0.285	0.340
	2	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	15	Full	1175	1908.75	22.55	23.40	1.216	0.06	0.083	0.101
	2	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	1175	1908.75	22.55	23.40	1.216	0.03	0.107	0.130
	2	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	600	1880	22.53	23.40	1.222	0.07	0.101	0.123
	2	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	25	1851.25	22.54	23.40	1.219	0.08	0.215	0.262
	1	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	15	Full	1175	1908.75	23.90	24.80	1.230	0.08	0.312	0.384
55	1	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	1175	1908.75	23.90	24.80	1.230	0.11	0.522	**0.642**
	1	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	600	1880	23.81	24.80	1.256	-0.03	0.489	0.614
	1	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	15	Full	25	1851.25	23.79	24.80	1.262	0.05	0.447	0.564

<FDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	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)
	3	LTE Band 71	20M	QPSK	1	0	Front	15	Full	133322	683	23.47	23.80	1.079	0.05	0.254	0.274
56	3	LTE Band 71	20M	QPSK	1	0	Back	15	Full	133322	683	23.47	23.80	1.079	0.16	0.294	**0.317**
	3	LTE Band 71	20M	QPSK	50	0	Front	15	Full	133322	683	22.52	22.80	1.067	0.03	0.252	0.269
	3	LTE Band 71	20M	QPSK	50	0	Back	15	Full	133322	683	22.52	22.80	1.067	0.08	0.289	0.308
	3	LTE Band 12	10M	QPSK	1	0	Front	15	Full	23095	707.5	22.91	23.80	1.227	0.09	0.312	0.383
57	3	LTE Band 12	10M	QPSK	1	0	Back	15	Full	23095	707.5	22.91	23.80	1.227	0.04	0.333	**0.409**
	3	LTE Band 12	10M	QPSK	25	0	Front	15	Full	23095	707.5	21.98	22.80	1.208	0.07	0.268	0.324
	3	LTE Band 12	10M	QPSK	25	0	Back	15	Full	23095	707.5	21.98	22.80	1.208	0.03	0.277	0.335
	3	LTE Band 13	10M	QPSK	1	0	Front	15	Full	23230	782	22.95	23.80	1.216	0.05	0.286	0.348
	3	LTE Band 13	10M	QPSK	1	0	Back	15	Full	23230	782	22.95	23.80	1.216	0.02	0.401	0.488
	3	LTE Band 13	10M	QPSK	25	0	Front	15	Full	23230	782	22.05	22.80	1.189	0.06	0.313	0.372
58	3	LTE Band 13	10M	QPSK	25	0	Back	15	Full	23230	782	22.05	22.80	1.189	-0.08	0.445	**0.529**
	3	LTE Band 5	10M	QPSK	1	0	Front	15	Full	20525	836.5	22.86	23.80	1.242	0.06	0.345	0.428
59	3	LTE Band 5	10M	QPSK	1	0	Back	15	Full	20525	836.5	22.86	23.80	1.242	-0.17	0.526	**0.653**
	3	LTE Band 5	10M	QPSK	25	0	Front	15	Full	20525	836.5	21.94	22.80	1.219	0.05	0.273	0.333
	3	LTE Band 5	10M	QPSK	25	0	Back	15	Full	20525	836.5	21.94	22.80	1.219	0.08	0.361	0.440
	3	LTE Band 26	15M	QPSK	1	0	Front	15	Full	26865	831.5	22.99	23.80	1.205	0.08	0.387	0.466
	3	LTE Band 26	15M	QPSK	1	0	Back	15	Full	26865	831.5	22.99	23.80	1.205	0.02	0.456	0.549
	3	LTE Band 26	15M	QPSK	1	0	Back	15	Full	26765	821.5	22.97	23.80	1.211	0.06	0.467	0.565
60	3	LTE Band 26	15M	QPSK	1	0	Back	15	Full	26965	841.5	22.91	23.80	1.227	-0.09	0.525	**0.644**
	3	LTE Band 26	15M	QPSK	36	0	Front	15	Full	26865	831.5	22.06	22.80	1.186	0.03	0.317	0.376
	3	LTE Band 26	15M	QPSK	36	0	Back	15	Full	26865	831.5	22.06	22.80	1.186	0.09	0.405	0.480

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	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)
	2	LTE Band 66	20M	QPSK	1	0	Front	15	Full	132322	1745	21.93	22.40	1.114	0.03	0.147	0.164
	2	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132322	1745	21.93	22.40	1.114	0.05	0.173	0.193
	2	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132072	1720	21.87	22.40	1.130	0.09	0.248	0.280
	2	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132572	1770	21.90	22.40	1.122	0.07	0.189	0.212
	2	LTE Band 66	20M	QPSK	50	0	Front	15	Full	132322	1745	21.04	21.40	1.086	0.06	0.118	0.128
	2	LTE Band 66	20M	QPSK	50	0	Back	15	Full	132322	1745	21.04	21.40	1.086	0.02	0.143	0.155
	1	LTE Band 66	20M	QPSK	1	0	Front	15	Full	132322	1745	23.13	23.80	1.167	0.06	0.326	0.380
	1	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132322	1745	23.13	23.80	1.167	0.01	0.420	0.490
	1	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132072	1720	23.04	23.80	1.191	0.02	0.386	0.460
61	1	LTE Band 66	20M	QPSK	1	0	Back	15	Full	132572	1770	23.12	23.80	1.169	0.11	0.464	**0.543**
	1	LTE Band 66	20M	QPSK	50	0	Front	15	Full	132322	1745	22.21	22.80	1.146	0.01	0.277	0.317
	1	LTE Band 66	20M	QPSK	50	0	Back	15	Full	132322	1745	22.21	22.80	1.146	0.07	0.324	0.371
	2	LTE Band 25	20M	QPSK	1	0	Front	15	Full	26140	1860	21.79	22.40	1.151	0.05	0.143	0.165
	2	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26140	1860	21.79	22.40	1.151	0.13	0.244	0.281
	2	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26340	1880	21.70	22.40	1.175	0.06	0.180	0.211
	2	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26590	1905	21.72	22.40	1.169	0.07	0.181	0.212
	2	LTE Band 25	20M	QPSK	50	0	Front	15	Full	26140	1860	20.84	21.40	1.138	0.05	0.115	0.131
	2	LTE Band 25	20M	QPSK	50	0	Back	15	Full	26140	1860	20.84	21.40	1.138	0.09	0.153	0.174
	1	LTE Band 25	20M	QPSK	1	0	Front	15	Full	26140	1860	23.09	23.80	1.178	-0.04	0.318	0.374
	1	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26140	1860	23.09	23.80	1.178	-0.09	0.405	0.477
	1	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26340	1880	23.08	23.80	1.180	-0.1	0.424	0.500
62	1	LTE Band 25	20M	QPSK	1	0	Back	15	Full	26590	1905	22.90	23.80	1.230	0.06	0.539	**0.663**
	1	LTE Band 25	20M	QPSK	50	0	Front	15	Full	26140	1860	22.12	22.80	1.169	0.03	0.257	0.301
	1	LTE Band 25	20M	QPSK	50	0	Back	15	Full	26140	1860	22.12	22.80	1.169	0.01	0.327	0.382
	2	LTE Band 30	10M	QPSK	1	25	Front	15	Full	27710	2310	21.12	22.00	1.225	0.05	0.218	0.267
	2	LTE Band 30	10M	QPSK	1	25	Back	15	Full	27710	2310	21.12	22.00	1.225	0.06	0.329	0.403
	2	LTE Band 30	10M	QPSK	25	0	Front	15	Full	27710	2310	20.25	21.00	1.189	0.09	0.181	0.215
	2	LTE Band 30	10M	QPSK	25	0	Back	15	Full	27710	2310	20.25	21.00	1.189	0.03	0.295	0.351
63	1	LTE Band 30	10M	QPSK	1	25	Front	15	Full	27710	2310	22.68	23.80	1.294	0.07	0.425	**0.550**
	1	LTE Band 30	10M	QPSK	1	25	Back	15	Full	27710	2310	22.68	23.80	1.294	0.04	0.320	0.414
	1	LTE Band 30	10M	QPSK	25	0	Front	15	Full	27710	2310	21.78	22.80	1.265	0.02	0.335	0.424
	1	LTE Band 30	10M	QPSK	25	0	Back	15	Full	27710	2310	21.78	22.80	1.265	0.06	0.255	0.323

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	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)
	2	LTE Band 7	20M	QPSK	1	0	Front	15	Full	21350	2560	21.30	22.00	1.175	0.09	0.289	0.340
	2	LTE Band 7	20M	QPSK	1	0	Back	15	Full	21350	2560	21.30	22.00	1.175	0.02	0.362	0.425
	2	LTE Band 7	20M	QPSK	1	0	Back	15	Full	20850	2510	21.00	22.00	1.259	-0.06	0.394	0.496
	2	LTE Band 7	20M	QPSK	1	0	Back	15	Full	21100	2535	21.25	22.00	1.189	0.03	0.390	0.464
	2	LTE Band 7	20M	QPSK	1	0	Back	15	Full	20850(PCC) + 21048(SCC)	2510(PCC) + 2529.8(SCC)	20.95	22.00	1.274	0.06	0.367	0.467
	2	LTE Band 7	20M	QPSK	50	0	Front	15	Full	21350	2560	20.42	21.00	1.143	0.06	0.222	0.254
	2	LTE Band 7	20M	QPSK	50	0	Back	15	Full	21350	2560	20.42	21.00	1.143	0.08	0.275	0.314
64	1	LTE Band 7	20M	QPSK	1	0	Front	15	Full	21350	2560	23.45	23.80	1.084	0.03	0.660	**0.715**
	1	LTE Band 7	20M	QPSK	1	0	Back	15	Full	21350	2560	23.45	23.80	1.084	0.08	0.623	0.675
	1	LTE Band 7	20M	QPSK	1	0	Front	15	Full	20850	2510	23.25	23.80	1.135	-0.05	0.560	0.636
	1	LTE Band 7	20M	QPSK	1	0	Front	15	Full	21100	2535	23.30	23.80	1.122	-0.09	0.554	0.622
	1	LTE Band 7	20M	QPSK	1	0	Front	15	Full	21350(PCC) + 21152(SCC)	2560(PCC) + 2540.2(SCC)	23.26	23.80	1.132	0.09	0.609	0.690
	1	LTE Band 7	20M	QPSK	50	0	Front	15	Full	21350	2560	22.51	22.80	1.069	0.01	0.435	0.465
	1	LTE Band 7	20M	QPSK	50	0	Back	15	Full	21350	2560	22.51	22.80	1.069	-0.06	0.395	0.422

<TDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Class	Power Mode	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)
	2	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	40620	2593	21.68	22.00	1.076	62.9	1.006	0.03	0.155	0.168
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	40620	2593	21.68	22.00	1.076	62.9	1.006	0.09	0.200	0.217
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	39750	2506	21.58	22.00	1.102	62.9	1.006	0.11	0.303	0.336
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	40185	2549.5	21.55	22.00	1.109	62.9	1.006	0.06	0.233	0.260
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	41055	2636.5	21.15	22.00	1.216	62.9	1.006	0.12	0.288	0.352
	2	LTE Band 41	20M	QPSK	1	99	Back	15	2	Full	41055	2636.5	23.28	24.50	1.324	42.9	1.009	0.17	0.298	0.398
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	41490	2680	21.13	22.00	1.222	62.9	1.006	-0.04	0.250	0.307
	2	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.11	22.00	1.227	62.9	1.006	0.02	0.165	0.204
	2	LTE Band 41	20M	QPSK	50	24	Front	15	3	Full	40620	2593	20.78	21.00	1.052	62.9	1.006	0.06	0.133	0.141
	2	LTE Band 41	20M	QPSK	50	24	Back	15	3	Full	40620	2593	20.78	21.00	1.052	62.9	1.006	0.03	0.173	0.183
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.01	0.337	0.349
	1	LTE Band 41	20M	QPSK	1	99	Back	15	3	Full	40620	2593	23.67	23.80	1.030	62.9	1.006	0.15	0.324	0.336
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	39750	2506	23.43	23.80	1.089	62.9	1.006	0.05	0.313	0.343
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	40185	2549.5	23.60	23.80	1.047	62.9	1.006	0.08	0.337	0.355
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	41055	2636.5	22.99	23.80	1.205	62.9	1.006	0.04	0.330	0.400
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	41490	2680	23.13	23.80	1.167	62.9	1.006	0.02	0.383	0.450
65	1	LTE Band 41	20M	QPSK	1	99	Front	15	2	Full	41490	2680	25.52	26.30	1.197	42.9	1.009	-0.02	0.413	**0.499**
	1	LTE Band 41	20M	QPSK	1	99	Front	15	3	Full	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.14	23.80	1.164	62.9	1.006	0.11	0.314	0.368
	1	LTE Band 41	20M	QPSK	50	24	Front	15	3	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	0.06	0.278	0.294
	1	LTE Band 41	20M	QPSK	50	24	Back	15	3	Full	40620	2593	22.58	22.80	1.052	62.9	1.006	0.02	0.267	0.283
	2	LTE Band 48	20M	QPSK	1	99	Front	15	3	Full	55830	3609	23.53	23.80	1.064	62.9	1.006	0.08	0.194	0.208
	2	LTE Band 48	20M	QPSK	1	99	Back	15	3	Full	55830	3609	23.53	23.80	1.064	62.9	1.006	0.03	0.276	0.295
	2	LTE Band 48	20M	QPSK	1	99	Back	15	3	Full	55340	3560	23.39	23.80	1.099	62.9	1.006	0.04	0.223	0.247
	2	LTE Band 48	20M	QPSK	1	99	Back	15	3	Full	56150	3641	23.41	23.80	1.094	62.9	1.006	0.11	0.220	0.242
66	2	LTE Band 48	20M	QPSK	1	99	Back	15	3	Full	56640	3690	23.42	23.80	1.091	62.9	1.006	-0.05	0.301	**0.330**
	2	LTE Band 48	20M	QPSK	50	24	Front	15	3	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.06	0.141	0.148
	2	LTE Band 48	20M	QPSK	50	24	Back	15	3	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.09	0.195	0.205

<WLAN 2.4GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	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)
	1+2	WLAN2.4GHz	802.11b 1Mbps	Front	15	Full	11	2462	20.76	22.00	1.330	99.31	1.007	0.06	0.096	0.128
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	15	Full	11	2462	20.76	22.00	1.330	99.31	1.007	0.08	0.260	0.348
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	15	Full	1	2412	20.66	22.00	1.361	99.31	1.007	-0.07	0.358	0.491
67	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	15	Full	6	2437	20.71	22.00	1.344	99.31	1.007	0.02	0.403	**0.546**

<WLAN 5GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	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)
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Front	15	Full	54	5270	18.11	20.00	1.545	96.31	1.038	0.08	0.034	0.054
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15	Full	54	5270	18.11	20.00	1.545	96.31	1.038	0.06	0.617	0.990
68	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15	Full	62	5310	18.06	20.00	1.563	96.31	1.038	0.09	0.623	**1.011**
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15	Full	110	5550	19.23	20.00	1.194	96.31	1.038	-0.09	0.016	0.020
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.06	0.809	1.003
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15	Full	102	5510	18.92	20.00	1.282	96.31	1.038	0.08	0.756	1.006
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15	Full	126	5630	18.58	20.00	1.387	96.31	1.038	0.07	0.704	1.013
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15	Full	134	5670	18.73	20.00	1.340	96.31	1.038	0.03	0.729	1.014
69	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15	Full	142	5710	18.48	20.00	1.419	96.31	1.038	0.01	0.701	**1.033**
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15	Full	151	5755	17.43	19.00	1.435	96.31	1.038	0.01	0.001	0.001
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15	Full	151	5755	17.43	19.00	1.435	96.31	1.038	0.03	0.613	0.913
70	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15	Full	159	5795	17.36	19.00	1.459	96.31	1.038	-0.03	0.613	**0.928**

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	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)
	Bluetooth	1Mbps	Front	15	39	2441	14.10	15.40	1.349	76.87	1.084	0.09	0.024	0.035
71	Bluetooth	1Mbps	Back	15	39	2441	14.10	15.40	1.349	76.87	1.084	0.05	0.041	**0.060**
	Bluetooth	1Mbps	Back	15	0	2402	14.10	15.40	1.349	76.87	1.084	0.11	0.037	0.054
	Bluetooth	1Mbps	Back	15	78	2480	13.40	15.40	1.585	76.87	1.084	0.14	0.031	0.053

14.4 Product specific 10g SAR

<WCDMA SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	3	WCDMA Band V	RMC 12.2Kbps	Left Side	0	Full	4132	826.4	24.20	24.80	1.148	0.11	1.560	1.791
	3	WCDMA Band V	RMC 12.2Kbps	Left Side	0	Full	4182	836.4	24.02	24.80	1.197	0.05	1.530	1.831
72	3	WCDMA Band V	RMC 12.2Kbps	Left Side	0	Full	4233	846.6	23.90	24.80	1.230	0.06	1.560	**1.919**
	1	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Reduced	1413	1732.6	22.31	22.80	1.119	0.12	1.890	2.116
	1	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Reduced	1312	1712.4	22.14	22.80	1.164	0.05	1.990	2.317
73	1	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Reduced	1513	1752.6	22.29	22.80	1.125	0.01	2.090	**2.350**
74	1	WCDMA Band II	RMC 12.2Kbps	Back	0	Reduced	9400	1880	21.19	21.80	1.151	0.01	2.250	**2.589**
	1	WCDMA Band II	RMC 12.2Kbps	Back	0	Reduced	9262	1852.4	21.05	21.80	1.189	0.05	2.170	2.579
	1	WCDMA Band II	RMC 12.2Kbps	Back	0	Reduced	9538	1907.6	21.18	21.80	1.153	0.09	2.160	2.491
	1	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Reduced	9400	1880	21.19	21.80	1.151	0.03	1.950	2.244
	1	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Reduced	9262	1852.4	21.05	21.80	1.189	0.11	1.920	2.282
	1	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Reduced	9538	1907.6	21.18	21.80	1.153	0.02	2.020	2.330

<CDMA2000 SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
75	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	0	Full	1013	824.7	23.91	24.80	1.227	0.09	1.380	**1.694**
	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	0	Full	777	848.31	23.83	24.80	1.250	0.11	1.200	1.500
	3	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	0	Full	384	836.52	23.90	24.80	1.230	0.06	1.310	1.612
76	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	0	Full	580	820.5	24.06	24.80	1.186	0.08	1.450	**1.719**
	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	0	Full	476	817.9	24.05	24.80	1.189	0.11	1.420	1.688
	3	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	0	Full	684	823.1	24.01	24.80	1.199	0.03	1.410	1.691
77	1	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Reduced	1175	1908.75	19.95	20.80	1.216	0.11	1.700	**2.068**
	1	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Reduced	1175	1908.75	19.95	20.80	1.216	0.03	1.540	1.873
	1	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Reduced	25	1851.25	19.79	20.80	1.262	0.13	1.510	1.905
	1	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Reduced	600	1880	19.88	20.80	1.236	0.05	1.610	1.990

<FDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	3	LTE Band 13	10M	QPSK	1	0	Left Side	0	Full	23230	782	22.95	23.80	1.216	-0.06	1.130	1.374
78	3	LTE Band 13	10M	QPSK	25	0	Left Side	0	Full	23230	782	22.05	22.80	1.189	0.03	1.320	**1.569**
	3	LTE Band 26	15M	QPSK	1	0	Left Side	0	Full	26865	831.5	22.99	23.80	1.205	0.01	1.430	1.723
	3	LTE Band 26	15M	QPSK	1	0	Left Side	0	Full	26765	821.5	22.97	23.80	1.211	0.06	1.370	1.659
79	3	LTE Band 26	15M	QPSK	1	0	Left Side	0	Full	26965	841.5	22.91	23.80	1.227	0.04	1.520	**1.866**
	3	LTE Band 26	15M	QPSK	36	0	Left Side	0	Full	26865	831.5	22.06	22.80	1.186	0.04	1.110	1.316
	1	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Reduced	132322	1745	21.26	21.80	1.132	0.08	2.030	2.299
	1	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Reduced	132072	1720	21.05	21.80	1.189	0.11	2.230	2.650
	1	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Reduced	132572	1770	21.22	21.80	1.143	0.02	2.100	2.400
	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	0	Reduced	132322	1745	21.24	21.80	1.138	-0.03	2.110	2.400
80	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	0	Reduced	132072	1720	21.20	21.80	1.148	0.16	2.320	**2.664**
	1	LTE Band 66	20M	QPSK	50	0	Bottom Side	0	Reduced	132572	1770	21.23	21.80	1.140	0.05	2.260	2.577
	1	LTE Band 66	20M	QPSK	100	0	Bottom Side	0	Reduced	132322	1745	21.19	21.80	1.151	0.06	1.900	2.187
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Reduced	26140	1860	20.09	20.80	1.178	0.01	1.850	2.179
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Reduced	26340	1880	20.04	20.80	1.191	0.19	1.730	2.061
	1	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Reduced	26590	1905	20.03	20.80	1.194	0.16	1.680	2.006
81	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Reduced	26140	1860	20.08	20.80	1.180	0.07	2.030	**2.396**
	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Reduced	26340	1880	20.07	20.80	1.183	0.02	1.890	2.236
	1	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Reduced	26590	1905	20.02	20.80	1.197	0.09	1.760	2.106
	1	LTE Band 25	20M	QPSK	100	0	Bottom Side	0	Reduced	26140	1860	20.08	20.80	1.180	0.09	1.810	2.136
	2	LTE Band 7	20M	QPSK	1	0	Top Side	0	Full	21350	2560	21.30	22.00	1.175	0.08	2.070	2.432
82	2	LTE Band 7	20M	QPSK	1	0	Top Side	0	Full	20850	2510	21.00	22.00	1.259	0.02	2.020	**2.543**
	2	LTE Band 7	20M	QPSK	1	0	Top Side	0	Full	21100	2535	21.25	22.00	1.189	0.03	2.010	2.389
	2	LTE Band 7	20M	QPSK	50	0	Top Side	0	Full	21350	2560	20.42	21.00	1.143	0.09	1.610	1.840
	2	LTE Band 7	20M	QPSK	50	0	Top Side	0	Full	20850	2510	20.18	21.00	1.208	0.04	1.680	2.029
	2	LTE Band 7	20M	QPSK	50	0	Top Side	0	Full	21100	2535	20.33	21.00	1.167	0.07	1.580	1.844
	2	LTE Band 7	20M	QPSK	100	0	Top Side	0	Full	21350	2560	20.41	21.00	1.146	0.06	1.560	1.787
	1	LTE Band 7	20M	QPSK	1	0	Front	0	Reduced	21350	2560	17.74	18.30	1.138	0.06	1.480	1.684
	1	LTE Band 7	20M	QPSK	1	0	Back	0	Reduced	21350	2560	17.74	18.30	1.138	0.05	1.930	2.196
	1	LTE Band 7	20M	QPSK	1	0	Bottom Side	0	Reduced	21350	2560	17.74	18.30	1.138	0.01	1.160	1.320
	1	LTE Band 7	20M	QPSK	1	0	Back	0	Reduced	20850	2510	17.51	18.30	1.199	0.02	1.890	2.267
	1	LTE Band 7	20M	QPSK	1	0	Back	0	Reduced	21100	2535	17.61	18.30	1.172	0.09	1.910	2.239
	1	LTE Band 7	20M	QPSK	50	0	Front	0	Reduced	21350	2560	17.72	18.30	1.143	-0.05	1.520	1.737
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	21350	2560	17.72	18.30	1.143	0.06	1.990	2.274
	1	LTE Band 7	20M	QPSK	50	0	Bottom Side	0	Reduced	21350	2560	17.72	18.30	1.143	0.09	1.200	1.371
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	20850	2510	17.54	18.30	1.191	0.03	1.870	2.228
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	21100	2535	17.67	18.30	1.156	0.11	1.770	2.046
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	21350(PCC) + 21152(SCC)	2560(PCC) + 2540.2(SCC)	17.92	18.30	1.091	0.02	2.060	2.248
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	20850(PCC) + 21048(SCC)	2510(PCC) + 2529.8(SCC)	17.73	18.30	1.140	-0.06	1.750	1.995
	1	LTE Band 7	20M	QPSK	50	0	Back	0	Reduced	21100(PCC) + 20902(SCC)	2535(PCC) + 2515.2(SCC)	17.79	18.30	1.125	0.09	2.020	2.272
	1	LTE Band 7	20M	QPSK	100	0	Back	0	Reduced	21350	2560	17.71	18.30	1.146	0.04	1.620	1.856

<TDD LTE SAR>

Plot No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Class	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	3	Full	40620	2593	21.68	22.00	1.076	62.9	1.006	0.05	1.060	1.148
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	3	Full	39750	2506	21.58	22.00	1.102	62.9	1.006	0.03	0.873	0.967
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	3	Full	40185	2549.5	21.55	22.00	1.109	62.9	1.006	0.12	0.932	1.040
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	3	Full	41055	2636.5	21.15	22.00	1.216	62.9	1.006	0.02	1.260	1.542
83	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	41055	2636.5	23.28	24.50	1.324	42.9	1.009	-0.15	1.510	**2.018**
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	40620	2593	24.17	24.50	1.079	42.9	1.009	0.06	1.350	1.470
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	39750	2506	24.14	24.50	1.086	42.9	1.009	0.09	1.310	1.436
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	40185	2549.5	24.00	24.50	1.122	42.9	1.009	0.03	1.320	1.494
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	41490	2680	23.75	24.50	1.189	42.9	1.009	0.07	1.370	1.643
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	41490	2680	21.13	22.00	1.222	62.9	1.006	0.09	1.200	1.475
	2	LTE Band 41	20M	QPSK	1	99	Top Side	0	2	Full	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.11	22.00	1.227	62.9	1.006	0.12	1.150	1.420
	2	LTE Band 41	20M	QPSK	50	24	Top Side	0	3	Full	40620	2593	20.78	21.00	1.052	62.9	1.006	0.06	0.888	0.940
84	2	LTE Band 48	20M	QPSK	1	99	Top Side	0	-	Full	55830	3609	23.53	23.80	1.064	62.9	1.006	0.05	2.220	**2.377**
	2	LTE Band 48	20M	QPSK	1	99	Top Side	0	-	Full	55340	3660	23.39	23.80	1.099	62.9	1.006	0.07	2.100	2.322
	2	LTE Band 48	20M	QPSK	1	99	Top Side	0	-	Full	56150	3641	23.41	23.80	1.094	62.9	1.006	0.08	2.120	2.333
	2	LTE Band 48	20M	QPSK	1	99	Top Side	0	-	Full	56640	3690	23.42	23.80	1.091	62.9	1.006	0.07	2.090	2.295
	2	LTE Band 48	20M	QPSK	50	24	Top Side	0	-	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.07	2.030	2.134
	2	LTE Band 48	20M	QPSK	50	24	Top Side	0	-	Full	55340	3560	22.34	22.80	1.112	62.9	1.006	-0.02	2.070	2.315
	2	LTE Band 48	20M	QPSK	50	24	Top Side	0	-	Full	56150	3641	22.55	22.80	1.059	62.9	1.006	0.02	1.980	2.110
	2	LTE Band 48	20M	QPSK	50	24	Top Side	0	-	Full	56640	3690	22.50	22.80	1.072	62.9	1.006	-0.05	1.820	1.962
	2	LTE Band 48	20M	QPSK	100	0	Top Side	0	-	Full	55830	3609	22.58	22.80	1.052	62.9	1.006	0.01	2.170	2.296

<WLAN 2.4GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	0	Full	11	2462	20.76	22.00	1.330	99.3	1.007	0.04	1.380	1.849
	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	0	Full	1	2412	20.66	22.00	1.361	99.3	1.007	-0.07	1.350	1.851
85	1+2	WLAN2.4GHz	802.11b 1Mbps	Back	0	Full	6	2437	20.71	22.00	1.344	99.3	1.007	0.03	1.830	**2.477**

<WLAN 5GHz SAR>

Plot No.	Antenna	Band	Mode	Test Position	Gap (mm)	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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Back	0	Full	38	5190	18.54	20.00	1.400	96.3	1.038	0.05	1.330	1.933
86	1+2	WLAN5.2GHz	802.11n-HT40 MCS0	Back	0	Full	46	5230	18.24	20.00	1.501	96.3	1.038	0.09	1.370	**2.134**
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0	Full	54	5270	18.11	20.00	1.545	96.3	1.038	0.09	0.325	0.521
87	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0	Full	54	5270	18.11	20.00	1.545	96.3	1.038	0.01	1.470	**2.358**
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0	Full	54	5270	18.11	20.00	1.545	96.3	1.038	0.09	0.480	0.770
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0	Full	54	5270	18.11	20.00	1.545	96.3	1.038	-0.19	0.395	0.634
	1+2	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0	Full	62	5310	18.06	20.00	1.563	96.3	1.038	0.12	1.300	2.109
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0	Full	110	5550	19.23	20.00	1.194	96.3	1.038	0.06	0.096	0.119
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0	Full	110	5550	19.23	20.00	1.194	96.3	1.038	0.04	1.930	2.392
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0	Full	110	5550	19.23	20.00	1.194	96.3	1.038	0.09	0.758	0.939
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0	Full	110	5550	19.23	20.00	1.194	96.3	1.038	-0.16	0.280	0.347
88	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0	Full	102	5510	18.92	20.00	1.282	96.3	1.038	0.05	1.860	**2.476**
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0	Full	126	5630	18.58	20.00	1.387	96.3	1.038	0.07	1.600	2.303
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0	Full	134	5670	18.73	20.00	1.340	96.3	1.038	0.15	1.540	2.141
	1+2	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0	Full	142	5710	18.48	20.00	1.419	96.3	1.038	0.02	1.360	2.003
	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0	Full	151	5755	17.43	19.00	1.435	96.3	1.038	-0.14	1.230	1.833
89	1+2	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0	Full	159	5795	17.36	19.00	1.459	96.3	1.038	0.06	1.470	**2.226**

14.5 TDD LTE Band 41(HPUE) Linearity Data Analysis

Top Antenna

LTE Band 41(HPUE)-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	20.00
Reported 1g SAR (W/kg)	0.756	0.758
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	39.94	43.30
Linearity SAR (W/kg)	0.820	
% deviation from expected linearity		-7.52%

LTE Band 41(HPUE)-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.50	21.50
Reported 1g SAR (W/kg)	0.695	0.870
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	44.81	61.16
Linearity SAR (W/kg)	0.949	
% deviation from expected linearity		-8.28%

LTE Band 41(HPUE)-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	24.50
Reported 1g SAR (W/kg)	0.352	0.398
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	100.32	122.04
Linearity SAR (W/kg)	0.428	
% deviation from expected linearity		-7.05%

LTE Band 41(HPUE)-Linearity Data for Product specific 10g SAR		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	24.50
Reported 1g SAR (W/kg)	1.542	2.018
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	100.32	122.04
Linearity SAR (W/kg)	1.876	
% deviation from expected linearity		7.59%

Bottom Antenna

LTE Band 41(HPUE)-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	23.80	26.30
Reported 1g SAR (W/kg)	0.237	0.268
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	184.71
Linearity SAR (W/kg)	0.288	
% deviation from expected linearity		-7.04%

LTE Band 41(HPUE)-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	21.80	24.30
Reported 1g SAR (W/kg)	0.721	0.809
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	95.81	116.54
Linearity SAR (W/kg)	0.877	
% deviation from expected linearity		-7.76%

LTE Band 41(HPUE)-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	23.80	26.30
Reported 1g SAR (W/kg)	0.450	0.499
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	184.71
Linearity SAR (W/kg)	0.547	
% deviation from expected linearity		-8.84%

General Note:

1. The device can adjust uplink/downlink configuration automatically according to the transmitting power class level for LTE band 41.
2. According to TCB Workshop May 2017, Rel. 14 has introduced HPUE Power Class 2 for Band 41. HPUE Power Class 2 does not support uplink downlink configurations 0 and 6.
3. Power class 3 is expected to be the dominant use configuration; therefore, SAR should be tested as normally required.
4. Power class 2 is tested using the highest SAR test configuration in power class 3 of each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in power class 2.
5. Separate SAR testing for Power Class 2 is not required when
   – the reported SAR vs. output power can be linearly scaled with < 10%
   – discrepancy between power classes and all *reported* 1g SAR are < 1.4 W/kg (The same procedures should be adapted for measurements according to extremity limits by applying a factor of 2.5 for extremity exposure.)

14.6 Repeated SAR Measurement

<1g SAR>

No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	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)	Ratio	Reported 1g SAR (W/kg)
1st	2	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0	Reduced	132322	1745	18.69	18.90	1.050	-	1.000	0.04	0.889	1	0.933
2nd	2	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0	Reduced	132322	1745	18.69	18.90	1.050	-	1.000	-0.03	0.879	1.011	0.923
1st	2	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0	Reduced	26140	1860	18.94	19.40	1.112	-	1.000	0.05	0.913	1	1.015
2nd	2	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0	Reduced	26140	1860	18.94	19.40	1.112	-	1.000	-0.02	0.908	1.006	1.009
1st	2	LTE Band 48	20M	QPSK	50	24	-	Right Cheek	0	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	0.02	0.998	1	1.073
2nd	2	LTE Band 48	20M	QPSK	50	24	-	Right Cheek	0	Reduced	56640	3690	16.51	16.80	1.069	62.9	1.006	-0.07	0.983	1.015	1.057
1st	1	LTE Band 7	20M	QPSK	50	0	-	Back	10	Reduced	21350	2560	21.39	21.80	1.099	-	1.000	-0.18	0.998	1	1.097
2nd	1	LTE Band 7	20M	QPSK	50	0	-	Back	10	Reduced	21350	2560	21.39	21.80	1.099	-	1.000	0.12	0.988	1.010	1.086
1st	1+2	WLAN5.5GHz	-	-	-	-	802.11n-HT40 MCS0	Back	15	Full	110	5550	19.23	20.00	1.194	96.31	1.038	0.06	0.809	1	1.003
2nd	1+2	WLAN5.5GHz	-	-	-	-	802.11n-HT40 MCS0	Back	15	Full	110	5550	19.23	20.00	1.194	96.31	1.038	-0.11	0.796	1.016	0.987

<10g SAR>

No.	Antenna	Band	BW (MHz)	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	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 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	1	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0	Reduced	9400	1880	21.19	21.80	1.151	-	1.000	0.01	2.250	1	2.589
2nd	1	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0	Reduced	9400	1880	21.19	21.80	1.151	-	1.000	-0.06	2.190	1.027	2.520
1st	1	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0	Reduced	132072	1720	21.20	21.80	1.148	-	1.000	0.16	2.320	1	2.664
2nd	1	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0	Reduced	132072	1720	21.20	21.80	1.148	-	1.000	0.05	2.290	1.013	2.629
1st	2	LTE Band 7	20M	QPSK	1	0	-	Top Side	0	Full	21350	2560	21.30	22.00	1.175	-	1.000	0.08	2.070	1	2.432
2nd	2	LTE Band 7	20M	QPSK	1	0	-	Top Side	0	Full	21350	2560	21.30	22.00	1.175	-	1.000	-0.06	2.010	1.030	2.362
1st	2	LTE Band 48	20M	QPSK	1	99		Top Side	0	Full	55830	3609	23.53	23.80	1.064	62.9	1.006	0.05	2.220	1	2.377
2nd	2	LTE Band 48	20M	QPSK	1	99		Top Side	0	Full	55830	3609	23.53	23.80	1.064	62.9	1.006	0.01	2.170	1.023	2.323

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. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

15. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset				Note
		Head	Body-worn	Hotspot	Product specific 10g SAR	
1.	GSM Voice + WLAN2.4GHz (MIMO)	Yes	Yes		Yes	
2.	GPRS/EDGE + WLAN2.4GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
3.	WCDMA + WLAN2.4GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
4.	CDMA + WLAN2.4GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
5.	LTE + WLAN2.4GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
6.	GSM Voice + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		Yes	
7.	GPRS/EDGE + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		Yes	WWAN VoIP
8.	WCDMA + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		Yes	WWAN VoIP
9.	CDMA + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		Yes	WWAN VoIP
10.	LTE + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		Yes	WWAN VoIP
11.	GSM Voice + WLAN5.2/5.8GHz (MIMO)	Yes	Yes		Yes	
12.	GPRS/EDGE + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
13.	WCDMA + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
14.	CDMA + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
15.	LTE + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	Yes	WWAN VoIP
16.	GSM Voice + Bluetooth	Yes	Yes		Yes	
17.	GPRS/EDGE + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
18.	WCDMA + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
19.	CDMA + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
20.	LTE + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
21.	GSM Voice + WLAN5.2/5.8GHz (MIMO) + Bluetooth	Yes	Yes		Yes	
22.	GPRS/EDGE + WLAN5.2/5.8GHz (MIMO) + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
23.	WCDMA + WLAN5.2/5.8GHz (MIMO) + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
24.	CDMA + WLAN5.2/5.8GHz (MIMO) + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
25.	LTE + WLAN5.2/5.8GHz (MIMO) + Bluetooth	Yes	Yes	Yes	Yes	WWAN VoIP
26.	GSM Voice + WLAN5.3/5.5GHz (MIMO) + Bluetooth	Yes	Yes	Yes	Yes	
27.	GPRS/EDGE + WLAN5.3/5.5GHz (MIMO) + Bluetooth	Yes	Yes		Yes	
28.	WCDMA + WLAN5.3/5.5GHz (MIMO) + Bluetooth	Yes	Yes		Yes	WWAN VoIP
29.	CDMA + WLAN5.3/5.5GHz (MIMO) + Bluetooth	Yes	Yes		Yes	WWAN VoIP
30.	LTE + WLAN5.3/5.5GHz (MIMO) + Bluetooth	Yes	Yes		Yes	WWAN VoIP

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. EUT will choose each GSM, CDMA, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. For 2.4GHz/5GHz WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode SAR.
4. According to the character of EUT, WLAN 2.4GHz MIMO Antenna and Bluetooth can't transmit simultaneously.
5. This device 2.4GHz WLAN/ 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
6. EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment though they have independent antenna.
7. The worst case 5 GHz WLAN reported SAR for each configuration was used for SAR summation, regardless of whether the WLAN channel has WiFi Direct and Hotspot capability. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with 5 GHz WLAN.
8. This device has three WWAN transmitter antennas. WWAN antenna 1,WWAN antenna 2 and WWAN antenna 3. All of them couldn't transmit simultaneously.
9. For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in the follow section would not additional to evaluate 2Tx combination of simultaneously transmission.
10. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/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 for 1g SAR, SPLSR ≤ 0.10 for 10g SAR simultaneously transmission SAR measurement is not

necessary.

iv) The SPLSR calculated results please refer to section 15.5.

15.1 Head Exposure Conditions

<WWAN Top Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR	1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850	Right Cheek	0.361	0.161	0.238	0.187	0.52	0.79		
		Right Tilted	0.066	0.177	0.190	0.193	0.24	0.45		
		Left Cheek	0.775	0.455	0.614	0.412	1.23	**1.80**	**#01**	**0.03**
		Left Tilted	0.082	0.304	0.521	0.303	0.39	0.91		
	GSM1900	Right Cheek	0.929	0.161	0.238	0.187	1.09	1.35		
		Right Tilted	0.681	0.177	0.190	0.193	0.86	1.06		
		Left Cheek	0.356	0.455	0.614	0.412	0.81	1.38		
		Left Tilted	0.540	0.304	0.521	0.303	0.84	1.36		
WCDMA	Band V	Right Cheek	0.495	0.161	0.238	0.187	0.66	0.92		
		Right Tilted	0.094	0.177	0.190	0.193	0.27	0.48		
		Left Cheek	0.738	0.455	0.614	0.412	1.19	**1.76**	**#02**	**0.03**
		Left Tilted	0.115	0.304	0.521	0.303	0.42	0.94		
	Band IV	Right Cheek	0.915	0.161	0.238	0.187	1.08	1.34		
		Right Tilted	0.587	0.177	0.190	0.193	0.76	0.97		
		Left Cheek	0.336	0.455	0.614	0.412	0.79	1.36		
		Left Tilted	0.429	0.304	0.521	0.303	0.73	1.25		
	Band II	Right Cheek	0.874	0.161	0.238	0.187	1.04	1.30		
		Right Tilted	0.645	0.177	0.190	0.193	0.82	1.03		
		Left Cheek	0.398	0.455	0.614	0.412	0.85	1.42		
		Left Tilted	0.583	0.304	0.521	0.303	0.89	1.41		
CDMA2000	BC0	Right Cheek	0.592	0.161	0.238	0.187	0.75	1.02		
		Right Tilted	0.115	0.177	0.190	0.193	0.29	0.50		
		Left Cheek	0.823	0.455	0.614	0.412	1.28	**1.85**	**#03**	**0.03**
		Left Tilted	0.145	0.304	0.521	0.303	0.45	0.97		
	BC10	Right Cheek	0.611	0.161	0.238	0.187	0.77	1.04		
		Right Tilted	0.121	0.177	0.190	0.193	0.30	0.50		
		Left Cheek	0.837	0.455	0.614	0.412	1.29	**1.86**	**#04**	**0.03**
		Left Tilted	0.154	0.304	0.521	0.303	0.46	0.98		
	BC1	Right Cheek	0.835	0.161	0.238	0.187	1.00	1.26		
		Right Tilted	0.496	0.177	0.190	0.193	0.67	0.88		
		Left Cheek	0.490	0.455	0.614	0.412	0.95	1.52		
		Left Tilted	0.695	0.304	0.521	0.303	1.00	1.52		

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR	1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE	Band 71	Right Cheek	0.475	0.161	0.238	0.187	0.64	0.90		
		Right Tilted	0.099	0.177	0.190	0.193	0.28	0.48		
		Left Cheek	0.778	0.455	0.614	0.412	1.23	**1.80**	**#05**	**0.03**
		Left Tilted	0.138	0.304	0.521	0.303	0.44	0.96		
	Band 12	Right Cheek	0.393	0.161	0.238	0.187	0.55	0.82		
		Right Tilted	0.078	0.177	0.190	0.193	0.26	0.46		
		Left Cheek	0.540	0.455	0.614	0.412	1.00	1.57		
		Left Tilted	0.101	0.304	0.521	0.303	0.41	0.93		
	Band 13	Right Cheek	0.599	0.161	0.238	0.187	0.76	1.02		
		Right Tilted	0.123	0.177	0.190	0.193	0.30	0.51		
		Left Cheek	0.852	0.455	0.614	0.412	1.31	**1.88**	**#06**	**0.03**
		Left Tilted	0.162	0.304	0.521	0.303	0.47	0.99		
	Band 5	Right Cheek	0.433	0.161	0.238	0.187	0.59	0.86		
		Right Tilted	0.088	0.177	0.190	0.193	0.27	0.47		
		Left Cheek	0.594	0.455	0.614	0.412	1.05	**1.62**	**#07**	**0.02**
		Left Tilted	0.101	0.304	0.521	0.303	0.41	0.93		
	Band 26	Right Cheek	0.440	0.161	0.238	0.187	0.60	0.87		
		Right Tilted	0.084	0.177	0.190	0.193	0.26	0.47		
		Left Cheek	0.655	0.455	0.614	0.412	1.11	**1.68**	**#08**	**0.02**
		Left Tilted	0.102	0.304	0.521	0.303	0.41	0.93		
	Band 66	Right Cheek	0.947	0.161	0.238	0.187	1.11	1.37		
		Right Tilted	0.648	0.177	0.190	0.193	0.83	1.03		
		Left Cheek	0.320	0.455	0.614	0.412	0.78	1.35		
		Left Tilted	0.431	0.304	0.521	0.303	0.74	1.26		
	Band 25	Right Cheek	1.015	0.161	0.238	0.187	1.18	1.44		
		Right Tilted	0.669	0.177	0.190	0.193	0.85	1.05		
		Left Cheek	0.413	0.455	0.614	0.412	0.87	1.44		
		Left Tilted	0.573	0.304	0.521	0.303	0.88	1.40		
	Band 30	Right Cheek	0.733	0.161	0.238	0.187	0.89	1.16		
		Right Tilted	0.839	0.177	0.190	0.193	1.02	1.22		
		Left Cheek	0.465	0.455	0.614	0.412	0.92	1.49		
		Left Tilted	0.668	0.304	0.521	0.303	0.97	1.49		
	Band 7	Right Cheek	0.786	0.161	0.238	0.187	0.95	1.21		
		Right Tilted	0.720	0.177	0.190	0.193	0.90	1.10		
		Left Cheek	0.474	0.455	0.614	0.412	0.93	1.50		
		Left Tilted	0.633	0.304	0.521	0.303	0.94	1.46		
	Band 41	Right Cheek	0.758	0.161	0.238	0.187	0.92	1.18		
		Right Tilted	0.519	0.177	0.190	0.193	0.70	0.90		
		Left Cheek	0.423	0.455	0.614	0.412	0.88	1.45		
		Left Tilted	0.560	0.304	0.521	0.303	0.86	1.38		
	Band 48	Right Cheek	1.073	0.161	0.238	0.187	1.23	1.50		
		Right Tilted	0.897	0.177	0.190	0.193	1.07	1.28		
		Left Cheek	0.291	0.455	0.614	0.412	0.75	1.32		
		Left Tilted	0.355	0.304	0.521	0.303	0.66	1.18		

<WWAN Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR	1+3+4 Summed 1g SAR
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM	GSM1900	Right Cheek	0.081	0.161	0.238	0.187	0.24	0.51
		Right Tilted	0.075	0.177	0.190	0.193	0.25	0.46
		Left Cheek	0.096	0.455	0.614	0.412	0.55	1.12
		Left Tilted	0.067	0.304	0.521	0.303	0.37	0.89
WCDMA	Band IV	Right Cheek	0.284	0.161	0.238	0.187	0.45	0.71
		Right Tilted	0.138	0.177	0.190	0.193	0.32	0.52
		Left Cheek	0.165	0.455	0.614	0.412	0.62	1.19
		Left Tilted	0.131	0.304	0.521	0.303	0.44	0.96
	Band II	Right Cheek	0.191	0.161	0.238	0.187	0.35	0.62
		Right Tilted	0.142	0.177	0.190	0.193	0.32	0.53
		Left Cheek	0.209	0.455	0.614	0.412	0.66	1.24
		Left Tilted	0.133	0.304	0.521	0.303	0.44	0.96
CDMA2000	BC1	Right Cheek	0.178	0.161	0.238	0.187	0.34	0.60
		Right Tilted	0.074	0.177	0.190	0.193	0.25	0.46
		Left Cheek	0.200	0.455	0.614	0.412	0.66	1.23
		Left Tilted	0.126	0.304	0.521	0.303	0.43	0.95
LTE	Band 66	Right Cheek	0.267	0.161	0.238	0.187	0.43	0.69
		Right Tilted	0.114	0.177	0.190	0.193	0.29	0.50
		Left Cheek	0.154	0.455	0.614	0.412	0.61	1.18
		Left Tilted	0.131	0.304	0.521	0.303	0.44	0.96
	Band 25	Right Cheek	0.152	0.161	0.238	0.187	0.31	0.58
		Right Tilted	0.107	0.177	0.190	0.193	0.28	0.49
		Left Cheek	0.203	0.455	0.614	0.412	0.66	1.23
		Left Tilted	0.114	0.304	0.521	0.303	0.42	0.94
	Band 30	Right Cheek	0.168	0.161	0.238	0.187	0.33	0.59
		Right Tilted	0.162	0.177	0.190	0.193	0.34	0.55
		Left Cheek	0.234	0.455	0.614	0.412	0.69	1.26
		Left Tilted	0.153	0.304	0.521	0.303	0.46	0.98
	Band 7	Right Cheek	0.216	0.161	0.238	0.187	0.38	0.64
		Right Tilted	0.243	0.177	0.190	0.193	0.42	0.63
		Left Cheek	0.343	0.455	0.614	0.412	0.80	1.37
		Left Tilted	0.254	0.304	0.521	0.303	0.56	1.08
	Band 41	Right Cheek	0.147	0.161	0.238	0.187	0.31	0.57
		Right Tilted	0.120	0.177	0.190	0.193	0.30	0.50
		Left Cheek	0.268	0.455	0.614	0.412	0.72	1.29
		Left Tilted	0.095	0.304	0.521	0.303	0.40	0.92

15.2 Hotspot Exposure Conditions

<WWAN Top Antenna>

WWAN Band		Exposure Position	1 WWAN 1g SAR (W/kg)	2 2.4GHz WLAN Ant.1+2 1g SAR (W/kg)	3 5GHz WLAN Ant.1+2 1g SAR (W/kg)	4 Bluetooth 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
GSM	GSM850	Front	0.324	0.132	0.162	0.083	0.46	0.57
		Back	0.439	0.712	0.836	0.114	1.15	1.39
		Left Side	0.667				0.67	0.67
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.039	0.182	0.103	0.110	0.22	0.25
	GSM1900	Front	0.133	0.132	0.162	0.083	0.27	0.38
		Back	0.223	0.712	0.836	0.114	0.94	1.17
		Left Side	0.114				0.11	0.11
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.491	0.182	0.103	0.110	0.67	0.70
WCDMA	Band V	Front	0.511	0.132	0.162	0.083	0.64	0.76
		Back	0.617	0.712	0.836	0.114	1.33	1.57
		Left Side	0.733				0.73	0.73
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.027	0.182	0.103	0.110	0.21	0.24
	Band IV	Front	0.289	0.132	0.162	0.083	0.42	0.53
		Back	0.395	0.712	0.836	0.114	1.11	1.35
		Left Side	0.267				0.27	0.27
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.697	0.182	0.103	0.110	0.88	0.91
	Band II	Front	0.297	0.132	0.162	0.083	0.43	0.54
		Back	0.522	0.712	0.836	0.114	1.23	1.47
		Left Side	0.225				0.23	0.23
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.969	0.182	0.103	0.110	1.15	1.18
CDMA2000	BC0	Front	0.562	0.132	0.162	0.083	0.69	0.81
		Back	0.641	0.712	0.836	0.114	1.35	1.59
		Left Side	0.908				0.91	0.91
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.021	0.182	0.103	0.110	0.20	0.23
	BC10	Front	0.548	0.132	0.162	0.083	0.68	0.79
		Back	0.614	0.712	0.836	0.114	1.33	1.56
		Left Side	0.802				0.80	0.80
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.024	0.182	0.103	0.110	0.21	0.24
	BC1	Front	0.284	0.132	0.162	0.083	0.42	0.53
		Back	0.517	0.712	0.836	0.114	1.23	1.47
		Left Side	0.190				0.19	0.19
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.950	0.182	0.103	0.110	1.13	1.16

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE	Band 71	Front	0.475	0.132	0.162	0.083	0.61	0.72
		Back	0.581	0.712	0.836	0.114	1.29	1.53
		Left Side	0.862				0.86	0.86
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.020	0.182	0.103	0.110	0.20	0.23
	Band 12	Front	0.364	0.132	0.162	0.083	0.50	0.61
		Back	0.413	0.712	0.836	0.114	1.13	1.36
		Left Side	0.611				0.61	0.61
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.032	0.182	0.103	0.110	0.21	0.25
	Band 13	Front	0.416	0.132	0.162	0.083	0.55	0.66
		Back	0.513	0.712	0.836	0.114	1.23	1.46
		Left Side	0.697				0.70	0.70
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.020	0.182	0.103	0.110	0.20	0.23
	Band 5	Front	0.572	0.132	0.162	0.083	0.70	0.82
		Back	0.643	0.712	0.836	0.114	1.36	1.59
		Left Side	0.877				0.88	0.88
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.034	0.182	0.103	0.110	0.22	0.25
	Band 26	Front	0.438	0.132	0.162	0.083	0.57	0.68
		Back	0.536	0.712	0.836	0.114	1.25	1.49
		Left Side	0.759				0.76	0.76
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.041	0.182	0.103	0.110	0.22	0.25
	Band 66	Front	0.292	0.132	0.162	0.083	0.42	0.54
		Back	0.482	0.712	0.836	0.114	1.19	1.43
		Left Side	0.261				0.26	0.26
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.668	0.182	0.103	0.110	0.85	0.88
	Band 25	Front	0.306	0.132	0.162	0.083	0.44	0.55
		Back	0.517	0.712	0.836	0.114	1.23	1.47
		Left Side	0.243				0.24	0.24
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	1.001	0.182	0.103	0.110	1.18	1.21
	Band 30	Front	0.336	0.132	0.162	0.083	0.47	0.58
		Back	0.476	0.712	0.836	0.114	1.19	1.43
		Left Side	0.317				0.32	0.32
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.805	0.182	0.103	0.110	0.99	1.02
	Band 7	Front	0.204	0.132	0.162	0.083	0.34	0.45
		Back	0.322	0.712	0.836	0.114	1.03	1.27
		Left Side	0.130				0.13	0.13
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.912	0.182	0.103	0.110	1.09	1.13

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE	Band 41	Front	0.153	0.132	0.162	0.083	0.29	0.40
		Back	0.292	0.712	0.836	0.114	1.00	1.24
		Left Side	0.074				0.07	0.07
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.870	0.182	0.103	0.110	1.05	1.08
	Band 48	Front	0.369	0.132	0.162	0.083	0.50	0.61
		Back	0.473	0.712	0.836	0.114	1.19	1.42
		Left Side	0.250				0.25	0.25
		Right Side		0.158	0.215	0.051	0.16	0.27
		Top Side	0.990	0.182	0.103	0.110	1.17	1.20

<WWAN Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth	Summed 1g SAR	Case No	SPLSR	Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)						
GSM	GSM1900	Front	0.338	0.132	0.162	0.083	0.47			0.58		
		Back	0.544	0.712	0.836	0.114	1.26			1.49		
		Left Side	0.188				0.19			0.19		
		Right Side	0.085	0.158	0.215	0.051	0.24			0.35		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.788				0.79			0.79		
WCDMA	Band IV	Front	0.440	0.132	0.162	0.083	0.57			0.69		
		Back	0.558	0.712	0.836	0.114	1.27			1.51		
		Left Side	0.187				0.19			0.19		
		Right Side	0.136	0.158	0.215	0.051	0.29			0.40		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.710				0.71			0.71		
	Band II	Front	0.286	0.132	0.162	0.083	0.42			0.53		
		Back	0.543	0.712	0.836	0.114	1.26			1.49		
		Left Side	0.170				0.17			0.17		
		Right Side	0.088	0.158	0.215	0.051	0.25			0.35		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.852				0.85			0.85		
CDMA2000	BC1	Front	0.468	0.132	0.162	0.083	0.60			0.71		
		Back	0.798	0.712	0.836	0.114	**1.51**			**1.75**	**#09**	**0.02**
		Left Side	0.192				0.19			0.19		
		Right Side	0.141	0.158	0.215	0.051	0.30			0.41		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	1.010				1.01			1.01		

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth	Summed 1g SAR	Case No	SPLSR	Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)						
LTE	Band 66	Front	0.455	0.132	0.162	0.083	0.59			0.70		
		Back	0.586	0.712	0.836	0.114	1.30			1.54		
		Left Side	0.200				0.20			0.20		
		Right Side	0.130	0.158	0.215	0.051	0.29			0.40		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.767				0.77			0.77		
	Band 25	Front	0.377	0.132	0.162	0.083	0.51			0.62		
		Back	0.562	0.712	0.836	0.114	1.27			1.51		
		Left Side	0.177				0.18			0.18		
		Right Side	0.099	0.158	0.215	0.051	0.26			0.37		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.989				0.99			0.99		
	Band 30	Front	0.860	0.132	0.162	0.083	0.99			1.11		
		Back	0.622	0.712	0.836	0.114	1.33			1.57		
		Left Side	0.257				0.26			0.26		
		Right Side	0.221	0.158	0.215	0.051	0.38			0.49		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.485				0.49			0.49		
	Band 7	Front	0.856	0.132	0.162	0.083	0.99			1.10		
		Back	1.097	0.712	0.836	0.114	**1.81**	**#10**	**0.02**	**2.05**	**#11**	**0.02**
		Left Side	0.262				0.26			0.26		
		Right Side	0.215	0.158	0.215	0.051	0.37			0.48		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	1.056				1.06			1.06		
	Band 41	Front	0.395	0.132	0.162	0.083	0.53			0.64		
		Back	0.708	0.712	0.836	0.114	1.42			**1.66**	**#12**	**0.02**
		Left Side	0.139				0.14			0.14		
		Right Side	0.122	0.158	0.215	0.051	0.28			0.39		
		Top side		0.182	0.103	0.110	0.18			0.21		
		Bottom side	0.809				0.81			0.81		

15.3 Body-Worn Accessory Exposure Conditions

<WWAN Top Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850	Front	0.455	0.128	0.054	0.035	0.58	0.54		
		Back	0.591	0.546	1.033	0.060	1.14	**1.68**	**#13**	**0.02**
	GSM1900	Front	0.073	0.128	0.054	0.035	0.20	0.16		
		Back	0.113	0.546	1.033	0.060	0.66	1.21		
WCDMA	Band V	Front	0.529	0.128	0.054	0.035	0.66	0.62		
		Back	0.681	0.546	1.033	0.060	1.23	**1.77**	**#14**	**0.04**
	Band IV	Front	0.165	0.128	0.054	0.035	0.29	0.25		
		Back	0.265	0.546	1.033	0.060	0.81	1.36		
	Band II	Front	0.166	0.128	0.054	0.035	0.29	0.26		
		Back	0.302	0.546	1.033	0.060	0.85	1.40		
CDMA2000	BC0	Front	0.345	0.128	0.054	0.035	0.47	0.43		
		Back	0.573	0.546	1.033	0.060	1.12	**1.67**	**#15**	**0.02**
	BC10	Front	0.354	0.128	0.054	0.035	0.48	0.44		
		Back	0.356	0.546	1.033	0.060	0.90	1.45		
	BC1	Front	0.101	0.128	0.054	0.035	0.23	0.19		
		Back	0.262	0.546	1.033	0.060	0.81	1.36		
LTE	Band 71	Front	0.274	0.128	0.054	0.035	0.40	0.36		
		Back	0.317	0.546	1.033	0.060	0.86	1.41		
	Band 12	Front	0.383	0.128	0.054	0.035	0.51	0.47		
		Back	0.409	0.546	1.033	0.060	0.96	1.50		
	Band 13	Front	0.372	0.128	0.054	0.035	0.50	0.46		
		Back	0.529	0.546	1.033	0.060	1.08	**1.62**	**#16**	**0.02**
	Band 5	Front	0.428	0.128	0.054	0.035	0.56	0.52		
		Back	0.653	0.546	1.033	0.060	1.20	**1.75**	**#17**	**0.03**
	Band 26	Front	0.466	0.128	0.054	0.035	0.59	0.56		
		Back	0.644	0.546	1.033	0.060	1.19	**1.74**	**#18**	**0.03**
	Band 66	Front	0.164	0.128	0.054	0.035	0.29	0.25		
		Back	0.280	0.546	1.033	0.060	0.83	1.37		
	Band 25	Front	0.165	0.128	0.054	0.035	0.29	0.25		
		Back	0.281	0.546	1.033	0.060	0.83	1.37		
	Band 30	Front	0.267	0.128	0.054	0.035	0.40	0.36		
		Back	0.403	0.546	1.033	0.060	0.95	1.50		
	Band 7	Front	0.340	0.128	0.054	0.035	0.47	0.43		
		Back	0.496	0.546	1.033	0.060	1.04	**1.59**		
	Band 41	Front	0.168	0.128	0.054	0.035	0.30	0.26		
		Back	0.398	0.546	1.033	0.060	0.94	1.49		
	Band 48	Front	0.208	0.128	0.054	0.035	0.34	0.30		
		Back	0.330	0.546	1.033	0.060	0.88	1.42		

<WWAN Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+4		
			WWAN	2.4GHz WLAN Ant.1+2	5GHz WLAN Ant.1+2	Bluetooth		Summed 1g SAR	Case No	SPLSR
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM1900	Front	0.180	0.128	0.054	0.035	0.31	0.27		
		Back	0.293	0.546	1.033	0.060	0.84	1.39		
WCDMA	Band IV	Front	0.397	0.128	0.054	0.035	0.53	0.49		
		Back	0.466	0.546	1.033	0.060	1.01	1.56		
	Band II	Front	0.389	0.128	0.054	0.035	0.52	0.48		
		Back	0.702	0.546	1.033	0.060	1.25	**1.80**	**#19**	**0.02**
CDMA2000	BC1	Front	0.384	0.128	0.054	0.035	0.51	0.47		
		Back	0.642	0.546	1.033	0.060	1.19	**1.74**	**#20**	**0.01**
LTE	Band 66	Front	0.380	0.128	0.054	0.035	0.51	0.47		
		Back	0.543	0.546	1.033	0.060	1.09	**1.64**	**#21**	**0.01**
	Band 25	Front	0.374	0.128	0.054	0.035	0.50	0.46		
		Back	0.663	0.546	1.033	0.060	1.21	**1.76**	**#22**	**0.02**
	Band 30	Front	0.550	0.128	0.054	0.035	0.68	0.64		
		Back	0.414	0.546	1.033	0.060	0.96	1.51		
	Band 7	Front	0.715	0.128	0.054	0.035	0.84	0.80		
		Back	0.675	0.546	1.033	0.060	1.22	**1.77**	**#23**	**0.02**
	Band 41	Front	0.499	0.128	0.054	0.035	0.63	0.59		
		Back	0.336	0.546	1.033	0.060	0.88	1.43		

15.4 Product specific 10g SAR Exposure Conditions

<WWAN Top Antenna>

WWAN Band		Exposure Position	1 WWAN 10g SAR (W/kg)	2 2.4GHz WLAN Ant.1+2 10g SAR (W/kg)	3 5GHz WLAN Ant.1+2 10g SAR (W/kg)	1+2 Summed 10g SAR (W/kg)	1+3 Summed 10g SAR (W/kg)
WCDMA	Band V	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Left side	1.919			1.92	1.92
		Right side			0.939		0.94
		Top side			0.634		0.63
CDMA2000	BC0	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Left side	1.694			1.69	1.69
		Right side			0.939		0.94
		Top side			0.634		0.63
	BC10	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Left side	1.719			1.72	1.72
		Right side			0.939		0.94
		Top side			0.634		0.63
LTE	Band 13	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Left side	1.569			1.57	1.57
		Right side			0.939		0.94
		Top side			0.634		0.63
	Band 26	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Left side	1.866			1.87	1.87
		Right side			0.939		0.94
		Top side			0.634		0.63
	Band 7	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Right side			0.939		0.94
		Top side	2.543		0.634	2.54	**3.18**
	Band 41	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Right side			0.939		0.94
		Top side	2.018		0.634	2.02	2.65
	Band 48	Front			0.521		0.52
		Back		2.477	2.476	2.48	2.48
		Right side			0.939		0.94
		Top side	2.377		0.634	2.38	3.01

<WWAN Bottom Antenna>

WWAN Band		Exposure Position	1 WWAN 10g SAR (W/kg)	2 2.4GHz WLAN Ant.1+2 10g SAR (W/kg)	3 5GHz WLAN Ant.1+2 10g SAR (W/kg)	1+2 Summed 10g SAR (W/kg)	1+2 Case No	1+2 SPLSR	1+3 Summed 10g SAR (W/kg)	1+3 Case No	1+3 SPLSR
WCDMA	Band IV	Front			0.521				0.52		
		Back		2.477	2.476	2.48			2.48		
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	2.350			2.35			2.35		
	Band II	Front			0.521				0.52		
		Back	2.589	2.477	2.476	**5.07**	**#24**	**0.08**	**5.07**	**#27**	**0.09**
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	2.330			2.33			2.33		
CDMA	BC1	Front			0.521				0.52		
		Back	2.068	2.477	2.476	**4.55**	**#25**	**0.08**	**4.54**	**#28**	**0.07**
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	1.873			1.87			1.87		
LTE	Band 66	Front			0.521				0.52		
		Back		2.477	2.476	2.48			2.48		
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	2.664			**2.66**			2.66		
	Band 25	Front			0.521				0.52		
		Back		2.477	2.476	2.48			2.48		
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	2.396			2.40			2.40		
	Band 7	Front	1.737		0.521	1.74			2.26		
		Back	2.274	2.477	2.476	**4.75**	**#26**	**0.07**	**4.75**	**#29**	**0.08**
		Right side			0.939				0.94		
		Top side			0.634				0.63		
		Bottom side	1.371			1.37			1.37		

Remark:

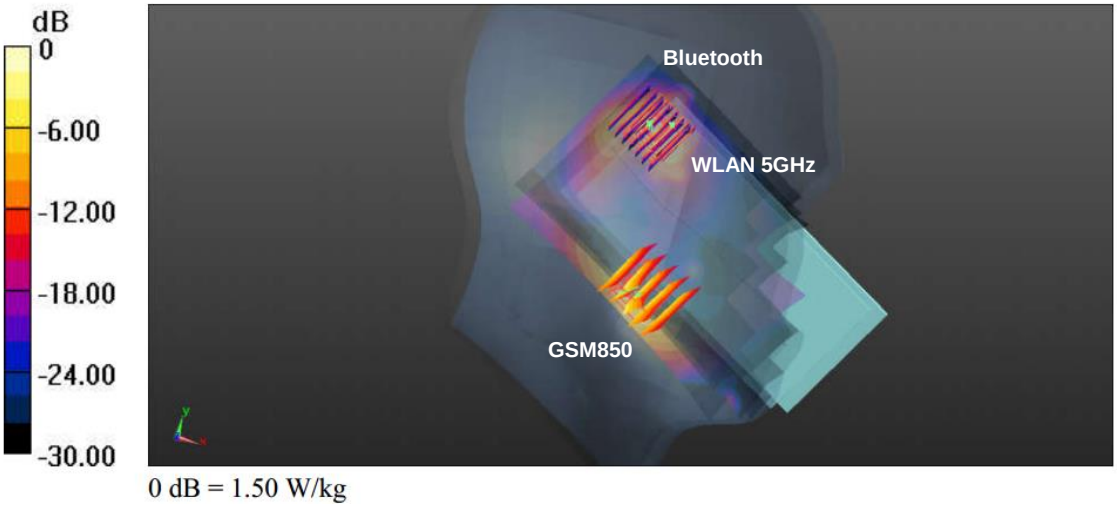
1. For Bluetooth/WLAN 2.4GHz Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.
2. SPLSR ≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.

15.5 SPLSR Evaluation and Analysis

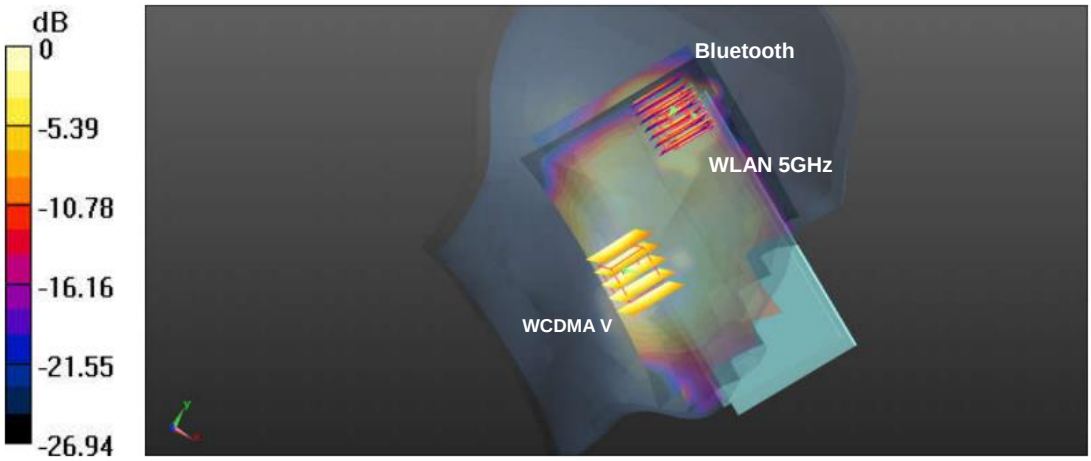
General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of [(x1−x2)2 + (y1−y2)2 + (z1−z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. SPLSR = $(SAR_1 + SAR_2)^{1.5}$ / (*min. separation distance, mm*). If SPLSR ≤ 0.04 for 1g SAR and SPLSR ≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #01	GSM850	Left Cheek	0.775	0	0.0315	0.235	-0.173	90.5	1.80	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	GSM850		0.775	0	0.0315	0.235	-0.173	89.3	1.80	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

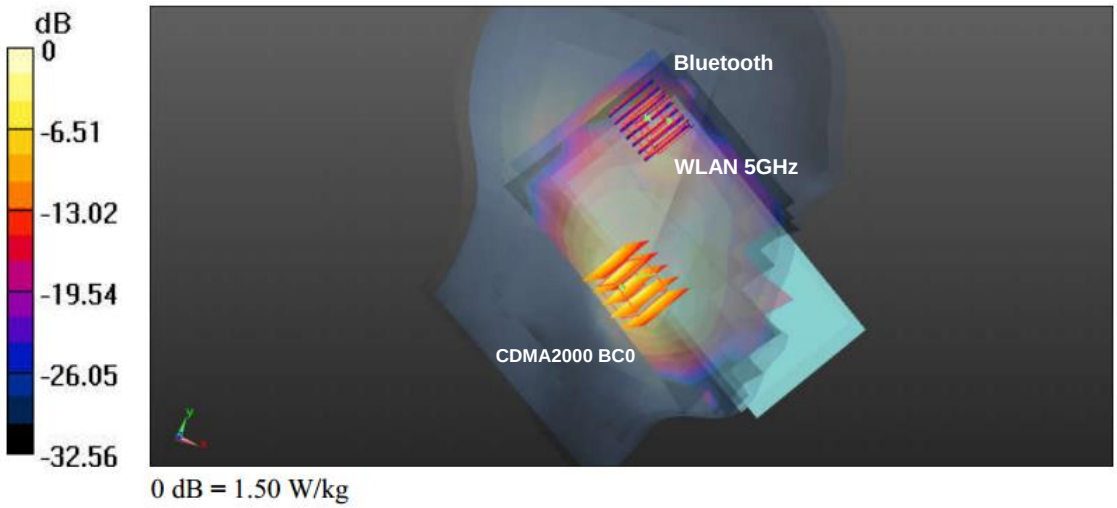


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #02	WCDMA V	Left Cheek	0.738	0	0.0418	0.237	-0.17	90.2	1.76	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	WCDMA V		0.738	0	0.0418	0.237	-0.17	88.8	1.76	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

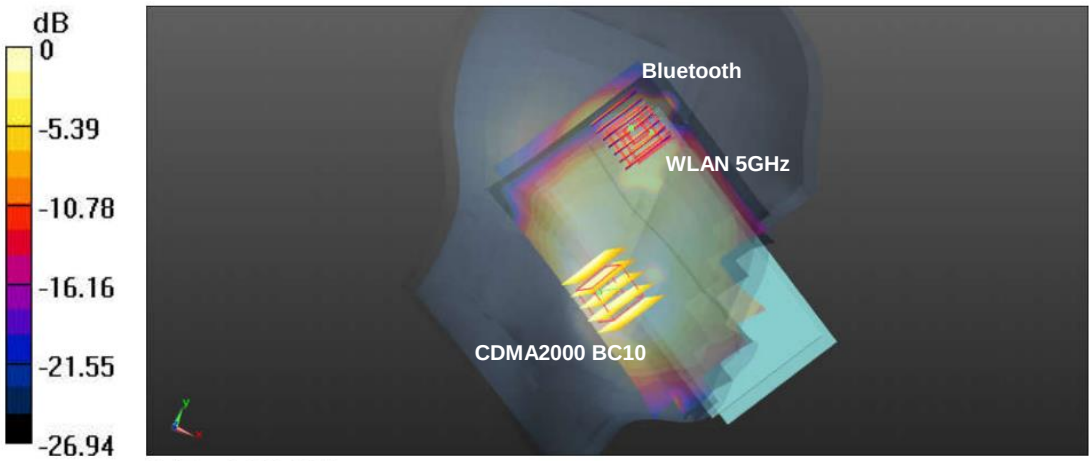


0 dB = 0.362 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #03	CDMA2000 BC0	Left Cheek	0.823	0	0.0457	0.243	-0.173	85.2	1.85	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	CDMA2000 BC0		0.823	0	0.0457	0.243	-0.173	83.7	1.85	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

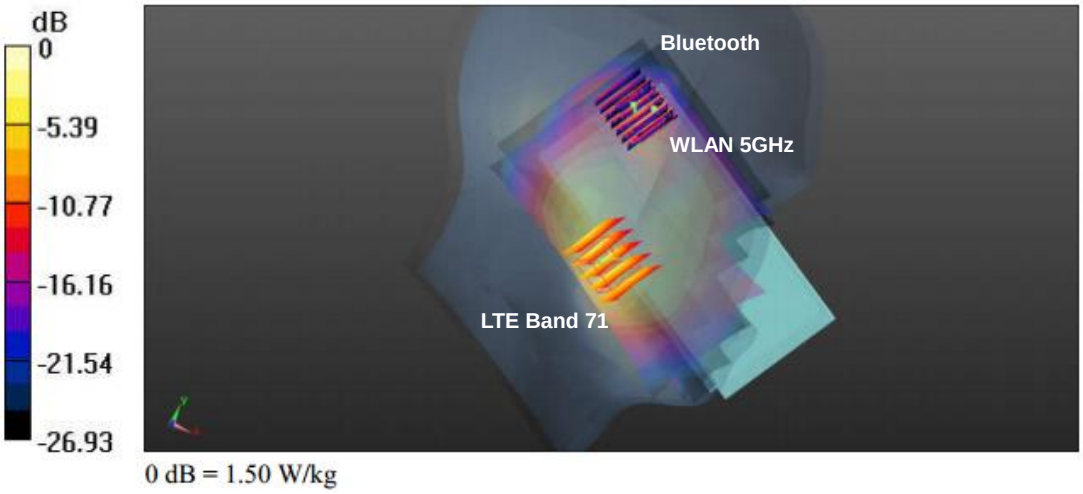


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #04	CDMA2000 BC10	Left Cheek	0.837	0	0.0418	0.237	-0.17	90.2	1.86	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	CDMA2000 BC10		0.837	0	0.0418	0.237	-0.17	88.8	1.86	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

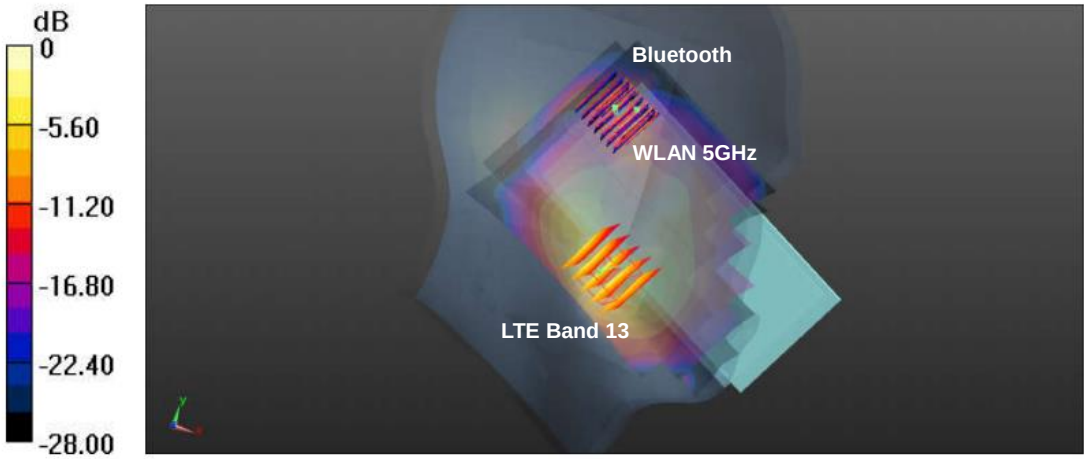


0 dB = 0.362 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #05	LTE Band 71	Left Cheek	0.778	0	0.04	0.24	-0.17	86.9	1.80	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	LTE Band 71		0.778	0	0.04	0.24	-0.17	85.5	1.80	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

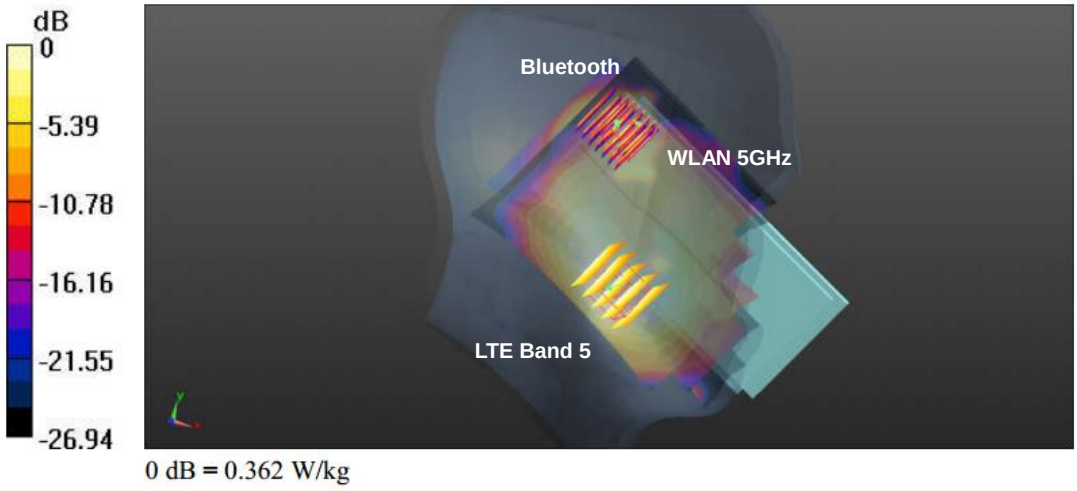


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #06	LTE Band 13	Left Cheek	0.852	0	0.0408	0.238	-0.17	89.0	1.88	0.03	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	LTE Band 13		0.852	0	0.0408	0.238	-0.17	87.6	1.88	0.03	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

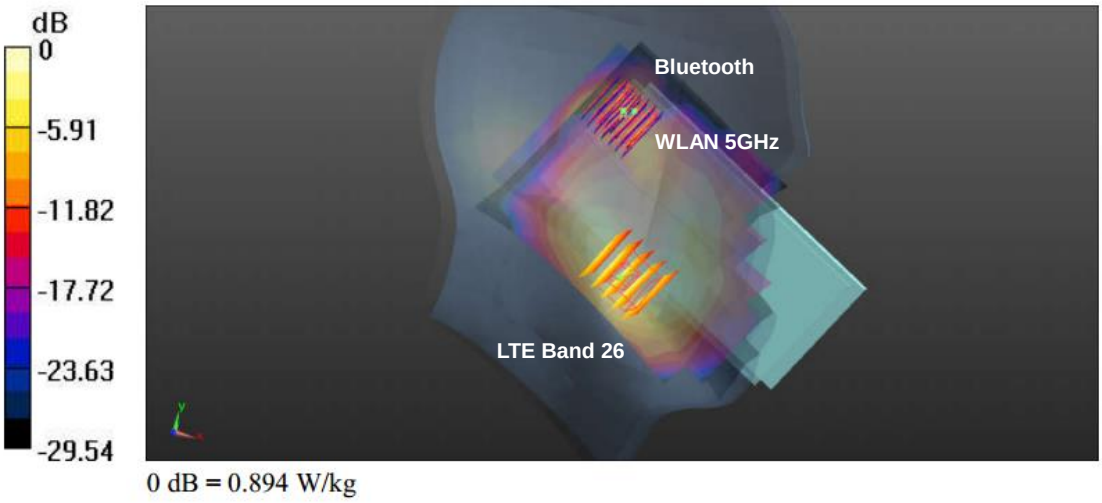


0 dB = 1.50 W/kg

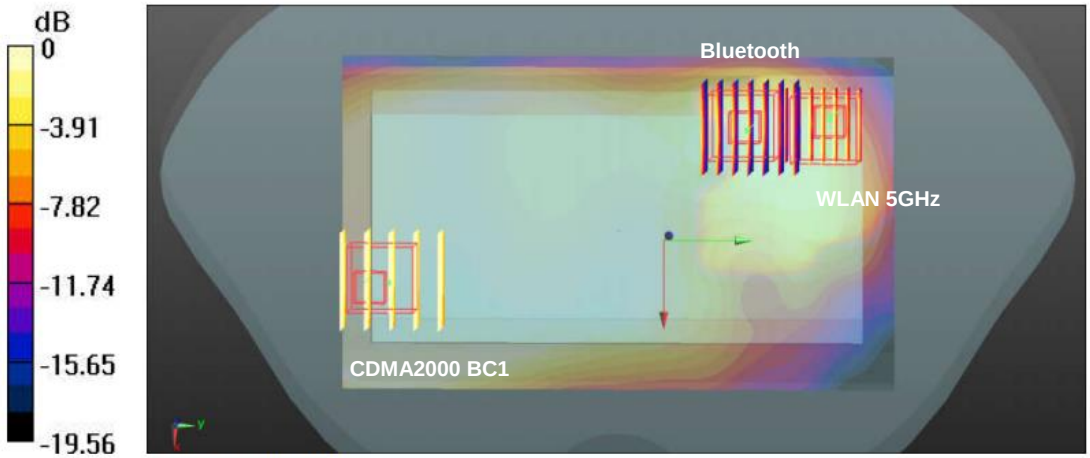
	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #07	LTE Band 5	Left Cheek	0.594	0	0.042	0.237	-0.17	90.2	1.62	0.02	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	LTE Band 5		0.594	0	0.042	0.237	-0.17	88.8	1.62	0.02	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				



	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #08	LTE Band 26	Left Cheek	0.655	0	0.0408	0.238	-0.17	89.0	1.68	0.02	Not required
	Bluetooth		0.412	0	0.0229	0.325	-0.176				
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	LTE Band 26		0.655	0	0.0408	0.238	-0.17	87.6	1.68	0.02	Not required
	WLAN5GHz		0.614	0	0.0247	0.324	-0.175				
	Bluetooth		0.412	0	0.0229	0.325	-0.176				

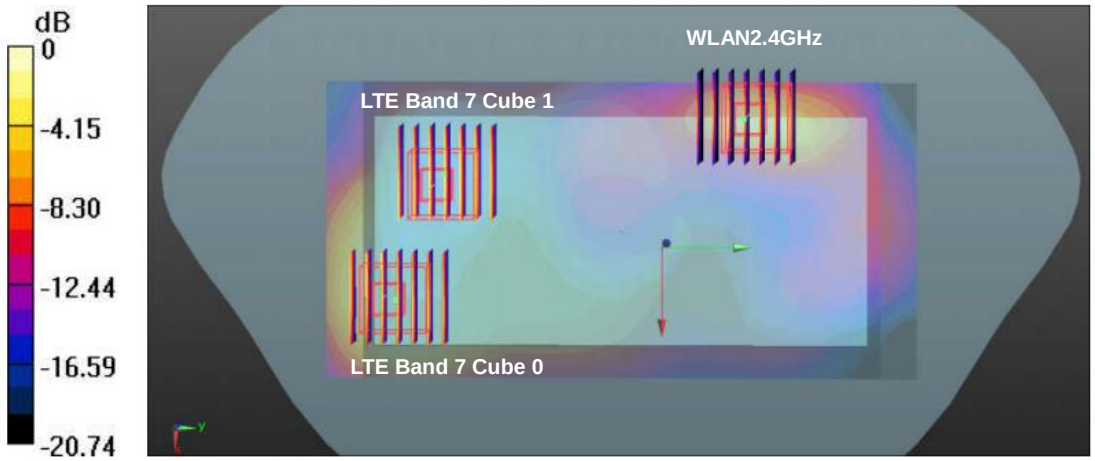


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #09	CDMA2000 BC1	Back	0.798	10	0.001	-0.083	-0.206	162.6	1.75	0.01	Not required
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	CDMA2000 BC1		0.798	10	0.001	-0.083	-0.206	134.6	1.75	0.02	Not required
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				



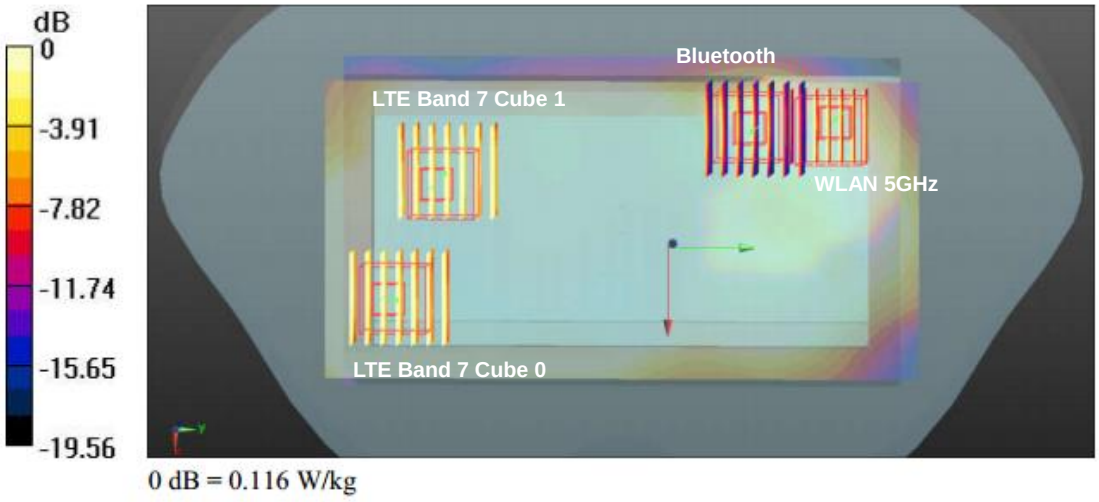
0 dB = 0.116 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #10	LTE Band 7 Cube0	Back	1.097	10	0.0058	-0.0782	-0.206	131.7	1.81	0.02	Not required
	WLAN2.4GHz		0.712	10	-0.053	0.0396	-0.204				
	LTE Band 7 Cube1		0.85	10	-0.03	-0.0626	-0.206	104.8	1.56	0.02	Not required
	WLAN2.4GHz		0.712	10	-0.053	0.0396	-0.204				

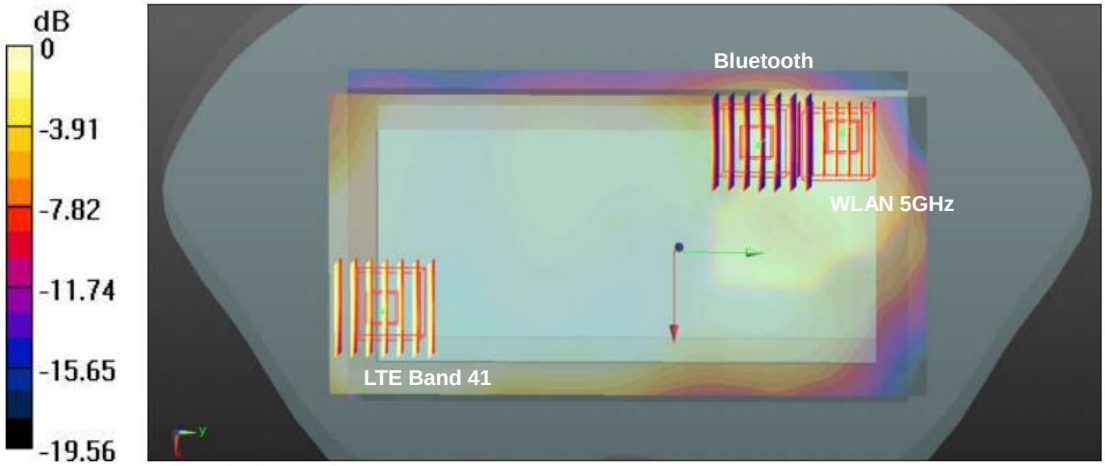


0 dB = 1.11 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #11	LTE Band 7 Cube0	Back	1.097	10	0.0058	-0.0782	-0.206	159.8	2.05	0.02	Not required
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	LTE Band 7 Cube0		1.097	10	0.0058	-0.0782	-0.206	132.1	2.05	0.02	Not required
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				
	LTE Band 7 Cube1		0.85	10	-0.03	-0.0626	-0.206	134.8	1.80	0.02	Not required
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	LTE Band 7 Cube1		0.85	10	-0.03	-0.0626	-0.206	106.3	1.80	0.02	Not required
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				

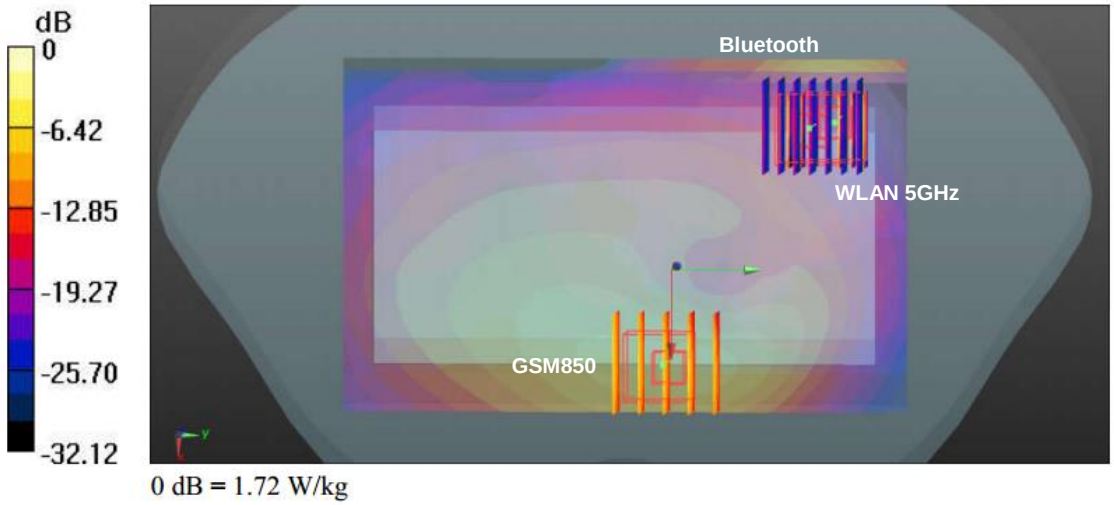


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #12	LTE Band 41	Back	0.708	10	0.0046	-0.0792	-0.206	160.3	1.66	0.01	Not required
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	LTE Band 41		0.708	10	0.0046	-0.0792	-0.206	132.5	1.66	0.02	Not required
	Bluetooth		0.114	10	-0.049	0.042	-0.208				
	WLAN5GHz		0.836	10	-0.054	0.07	-0.207				

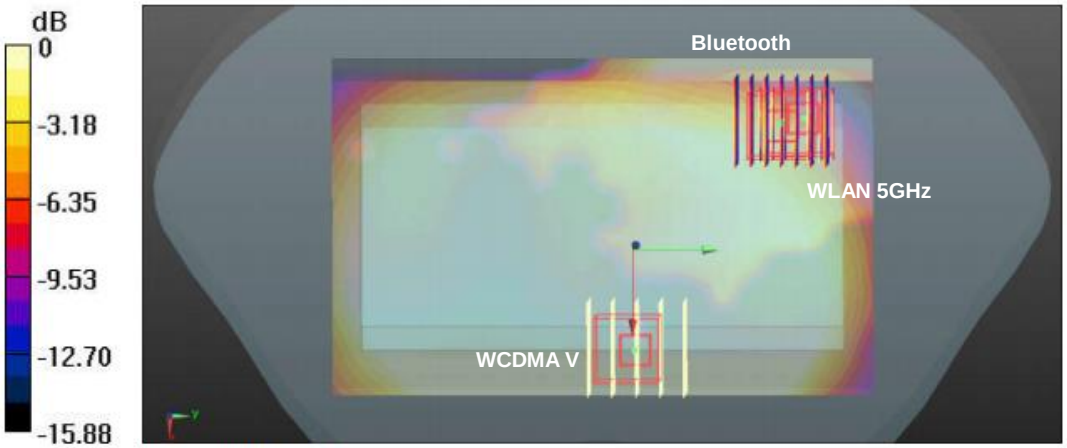


0 dB = 0.116 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #13	GSM850	Back	0.591	15	0.0205	0.012	-0.206	96.4	1.68	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	GSM850		0.591	15	0.0205	0.012	-0.206	88.9	1.68	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				

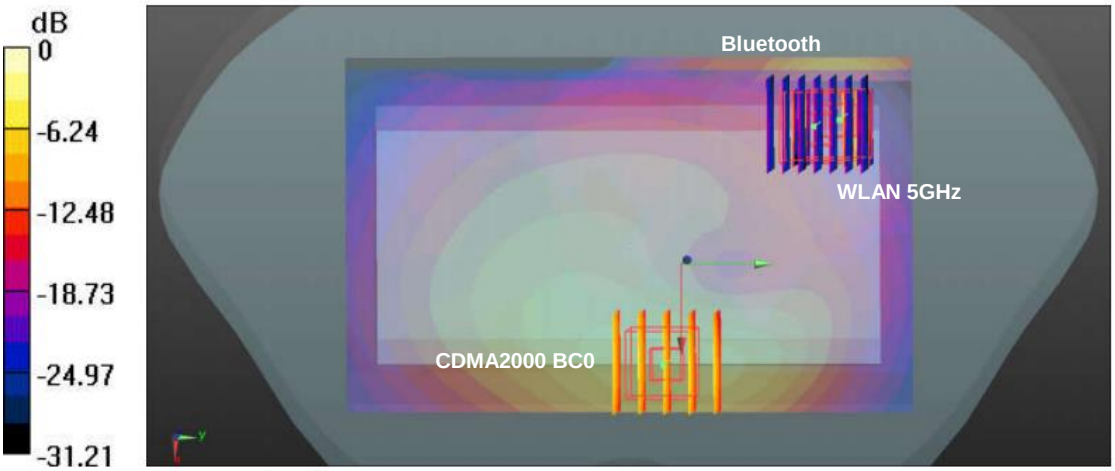


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #14	WCDMA V	Back	0.681	15	0.0205	0.0105	-0.206	89.7	1.77	0.04	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WCDMA V		0.681	15	0.0205	0.0105	-0.206	97.3	1.77	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



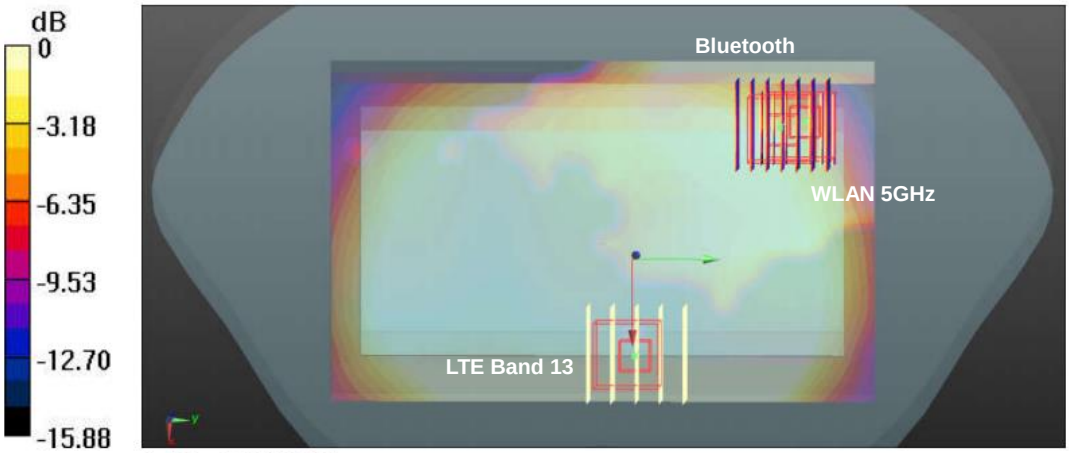
0 dB = 0.0582 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #15	CDMA2000 BC0	Back	0.573	15	0.0205	0.0105	-0.206	97.3	1.67	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	CDMA2000 BC0		0.573	15	0.0205	0.0105	-0.206	89.7	1.67	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



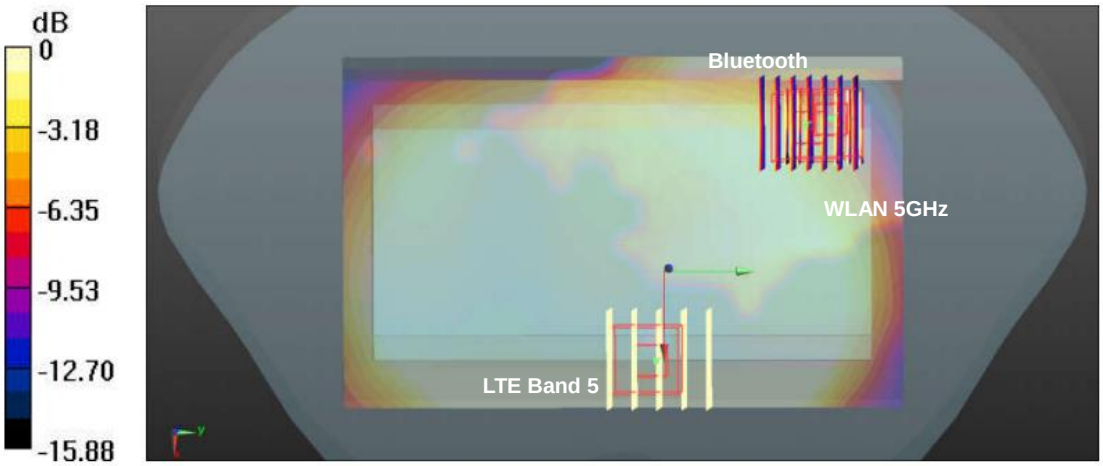
0 dB = 1.72 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #16	LTE Band 13	Back	0.529	15	0.0205	0.0105	-0.206	97.3	1.62	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 13		0.529	15	0.0205	0.0105	-0.206	89.7	1.62	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



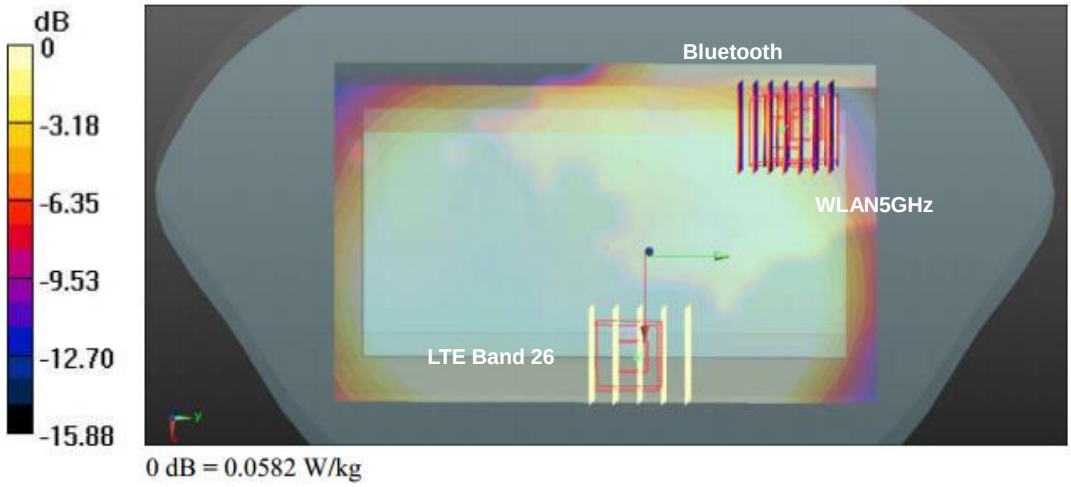
0 dB = 0.0582 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #17	LTE Band 5	Back	0.653	15	0.0205	0.0105	-0.206	97.3	1.75	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 5		0.653	15	0.0205	0.0105	-0.206	89.7	1.75	0.03	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				

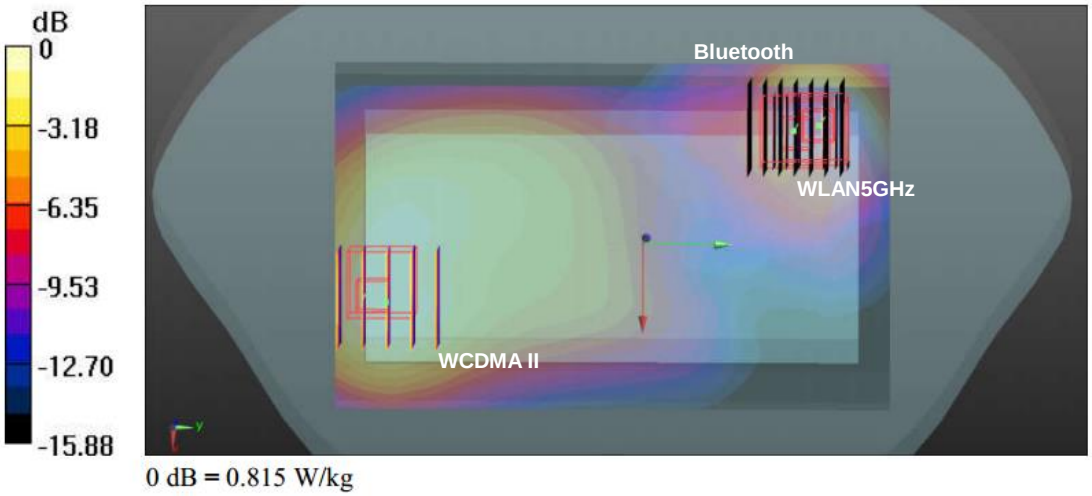


0 dB = 0.0582 W/kg

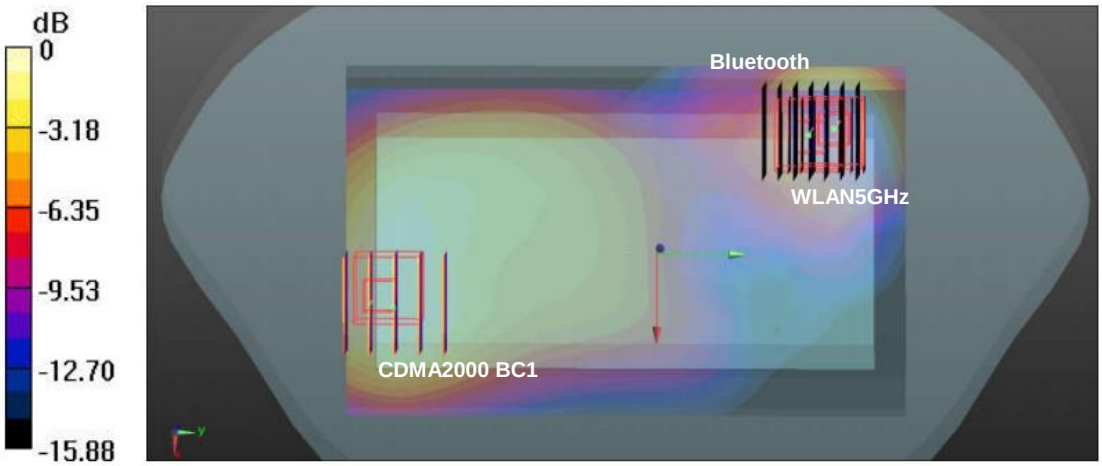
	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #18	LTE Band 26	Back	0.644	15	0.0205	0.0105	-0.206	97.3	1.74	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 26		0.644	15	0.0205	0.0105	-0.206	89.7	1.74	0.03	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #19	WCDMA II	Back	0.702	15	0.001	-0.0815	-0.206	160.7	1.80	0.01	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WCDMA II		0.702	15	0.001	-0.0815	-0.206	151.1	1.80	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				

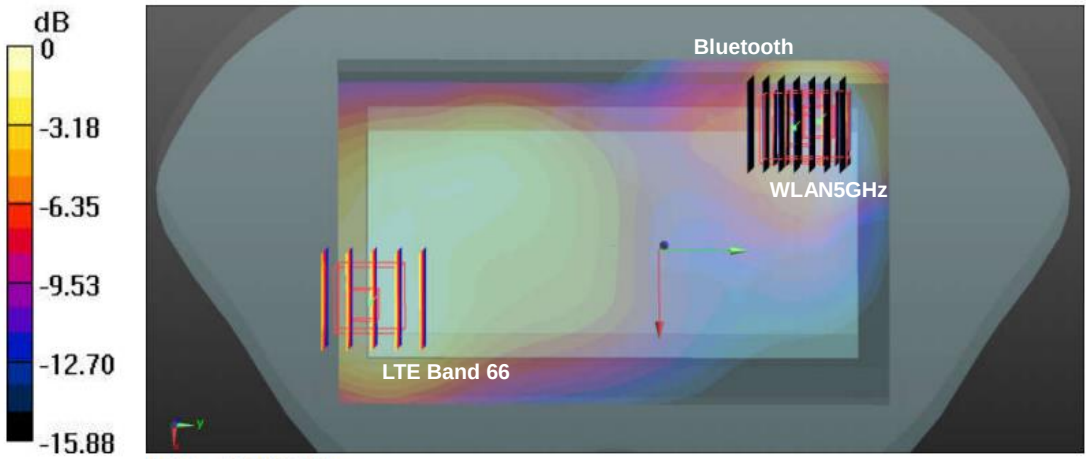


	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #20	CDMA2000 BC1	Back	0.642	15	0.001	-0.083	-0.206	162.1	1.74	0.01	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	CDMA2000 BC1		0.642	15	0.001	-0.083	-0.206	152.5	1.74	0.01	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



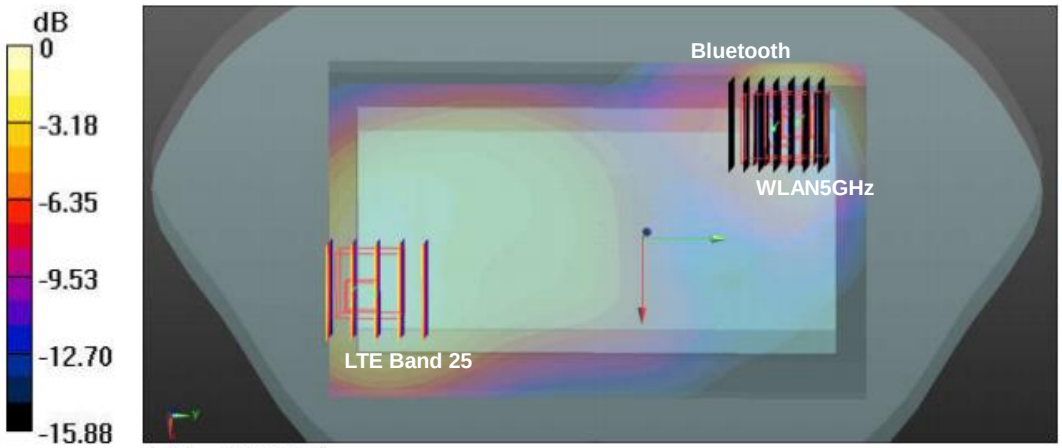
0 dB = 0.694 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #21	LTE Band 66	Back	0.543	15	0.0025	-0.0795	-0.206	159.4	1.64	0.01	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 66		0.543	15	0.0025	-0.0795	-0.206	149.8	1.64	0.01	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



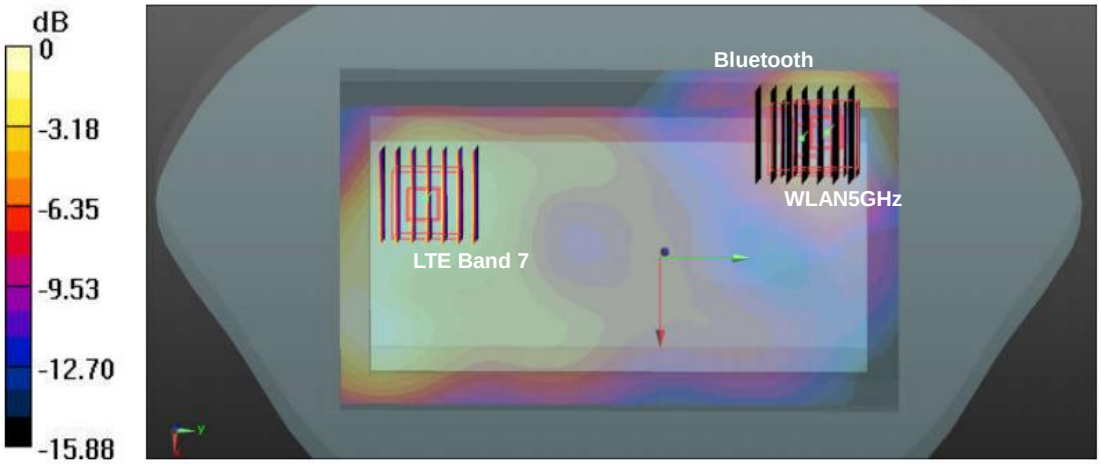
0 dB = 0.598 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #22	LTE Band 25	Back	0.663	15	0.001	-0.083	-0.206	162.1	1.76	0.01	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 25		0.663	15	0.001	-0.083	-0.206	152.5	1.76	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



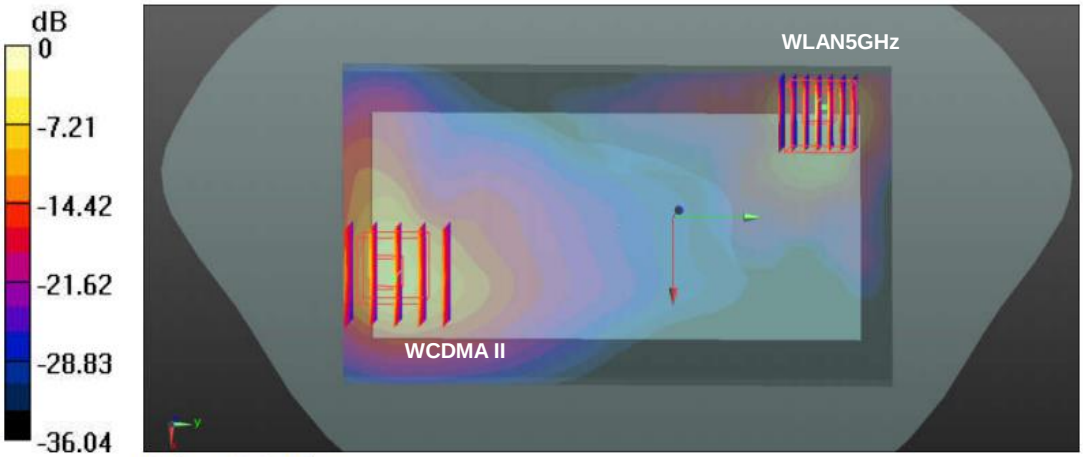
0 dB = 0.719 W/kg

	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 1g SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case #23	LTE Band 7	Back	0.675	15	-0.035	-0.0624	-0.206	132.4	1.77	0.02	Not required
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	LTE Band 7		0.675	15	-0.035	-0.0624	-0.206	122.9	1.77	0.02	Not required
	Bluetooth		0.06	15	-0.055	0.0588	-0.208				
	WLAN5GHz		1.033	15	-0.058	0.068	-0.207				



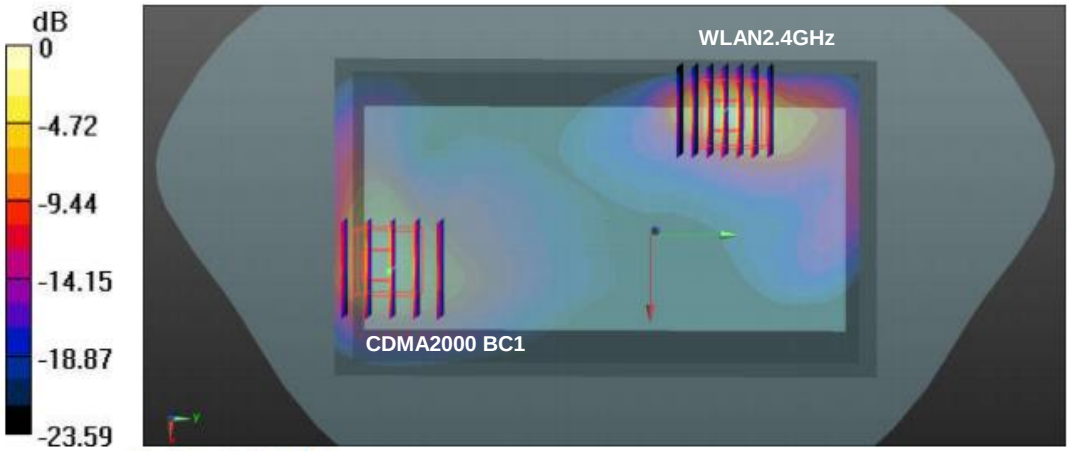
0 dB = 0.862 W/kg

Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#24	WCDMA II	Back	2.589	0	0.001	-0.0735	-0.206	150.2	5.07	0.08	Not required
	WLAN5GHz		2.476	0	-0.057	0.065	-0.207				



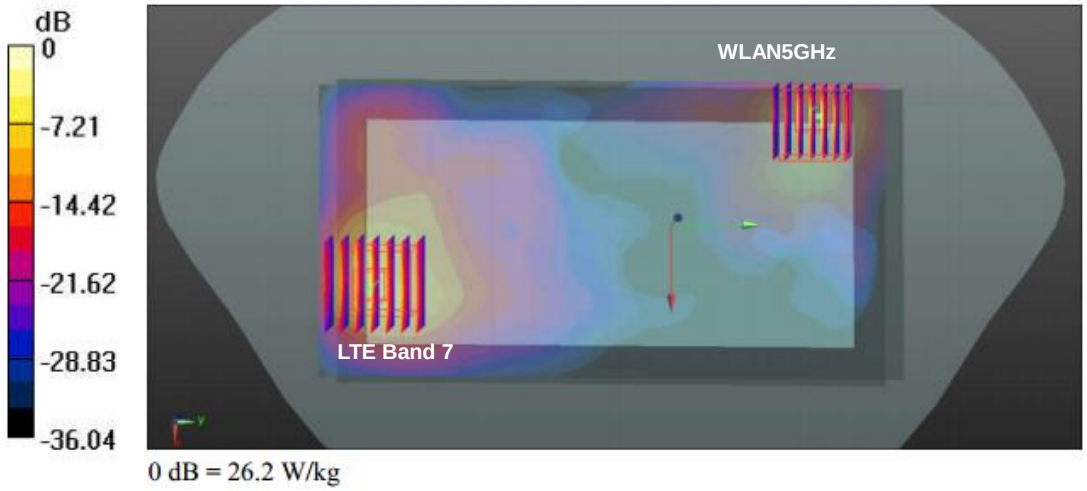
0 dB = 26.2 W/kg

Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#25	CDMA2000 BC1	Back	2.068	0	0.001	-0.072	-0.206	122.4	4.55	0.08	Not required
	WLAN2.4GHz		2.477	0	-0.0518	0.0384	-0.204				

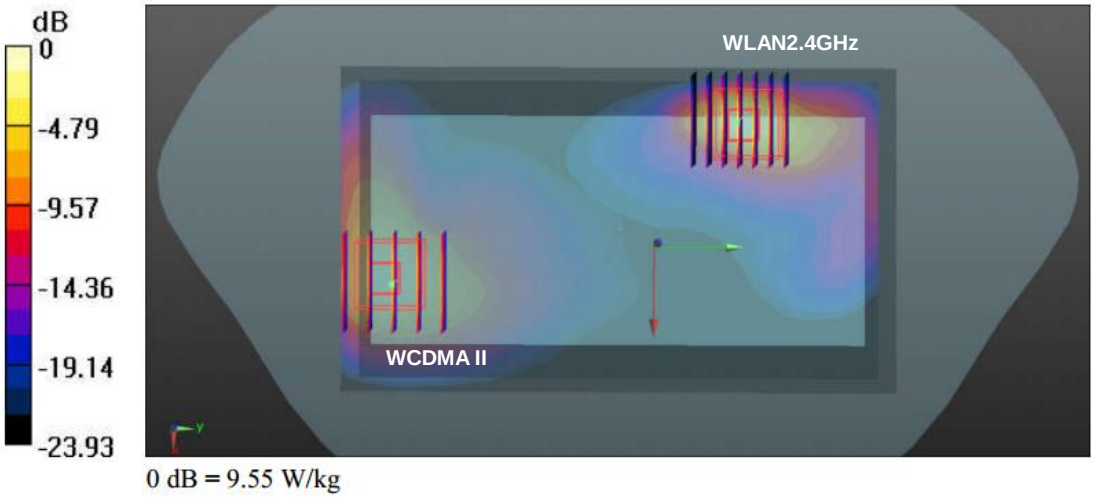


0 dB = 9.55 W/kg

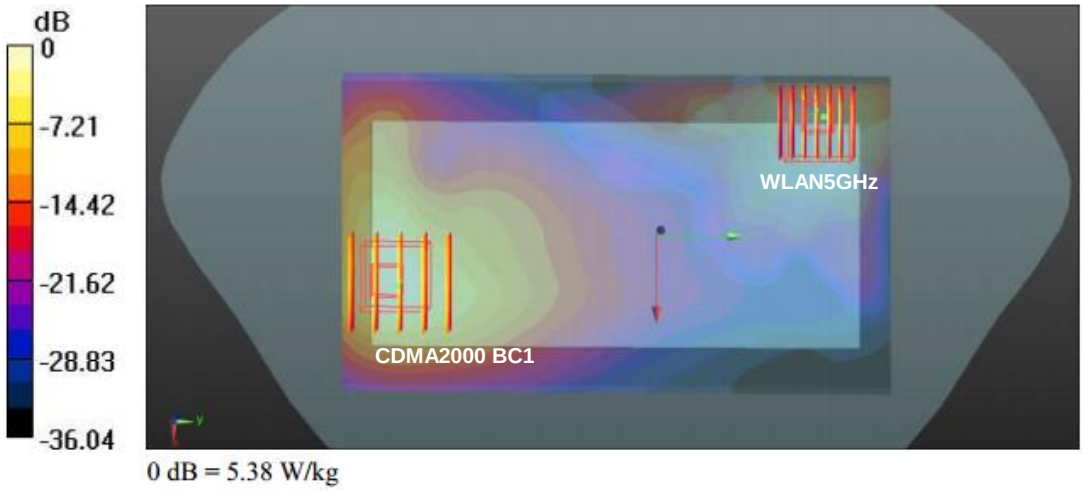
Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#26	LTE Band 7	Back	2.274	0	0.0022	-0.0792	-0.206	155.9	4.75	0.07	Not required
	WLAN5GHz		2.476	0	-0.057	0.065	-0.207				



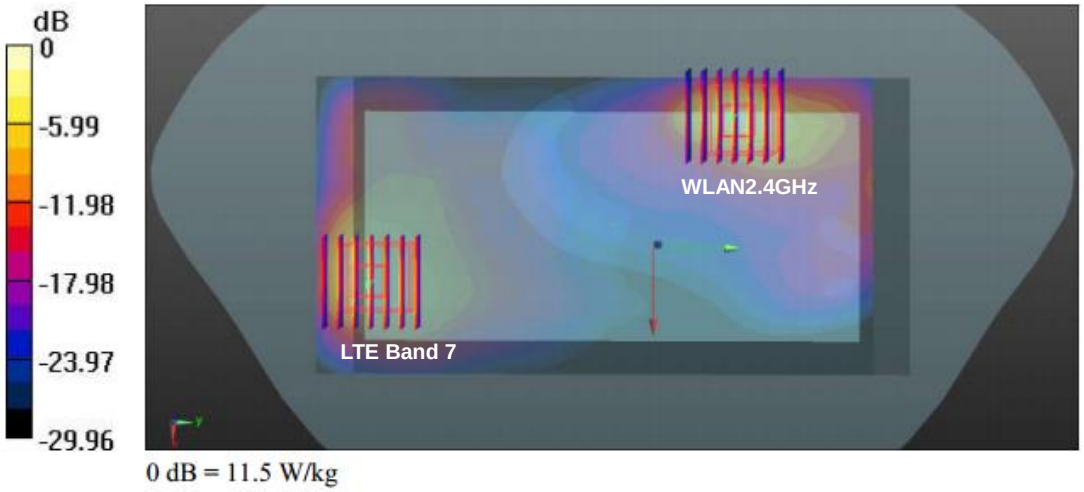
Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#27	WCDMA II	Back	2.589	0	0.001	-0.0735	-0.206	123.7	5.07	0.09	Not required
	WLAN2.4GHz		2.477	0	-0.0518	0.0384	-0.204				



Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#28	CDMA2000 BC1	Back	2.068	0	0.001	-0.072	-0.206	148.8	4.54	0.07	Not required
	WLAN5GHz		2.476	0	-0.057	0.065	-0.207				



Case	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (m) X	Y	Z	3D distance (mm)	Summed 10g SAR (W/kg)	SPLSR Results	Simultaneous SAR
#29	LTE Band 7	Back	2.274	0	0.0022	-0.0792	-0.206	129.4	4.75	0.08	Not required
	WLAN2.4GHz		2.477	0	-0.0518	0.0384	-0.204				



16. Supplemental Tuner Tests Results

General Note:

1. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.
2. To evaluate all of the tuner states, the 112 tuner states for each WWAN antenna 1, each WWAN antenna 2 and each WWAN antenna 3 are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single pointtime-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination. The bands which are dynamically tuned are split into three separate antennas, so each antenna system will have its own test plan to cover the corresponding 112 tuner states for each WWAN antenna 1, each WWAN antenna 2 and each WWAN antenna 3.
3. For WWAN Antenna 2, only LTE band 7/38/41 supports dynamic antenna tune.
4. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.
5. This device supports both LTE B4/17/38/2 and B66/12/41/25. Since the supported frequency span for LTE B4/17/38/2 falls completely within the supports frequency span for LTE B66/12/41/25, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/12/41/25.

16.1 Supplemental Head & Body SAR Results

Please refer to Appendix D.

Test Engineer： Changlin Huang, Bin He, Mengming Dai

17. 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 and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

18. 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 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

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

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

[8] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.

[9] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

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

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

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

[13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

Appendix A. Plots of System Performance Check

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019.07.28

System Check_Head_750MHz

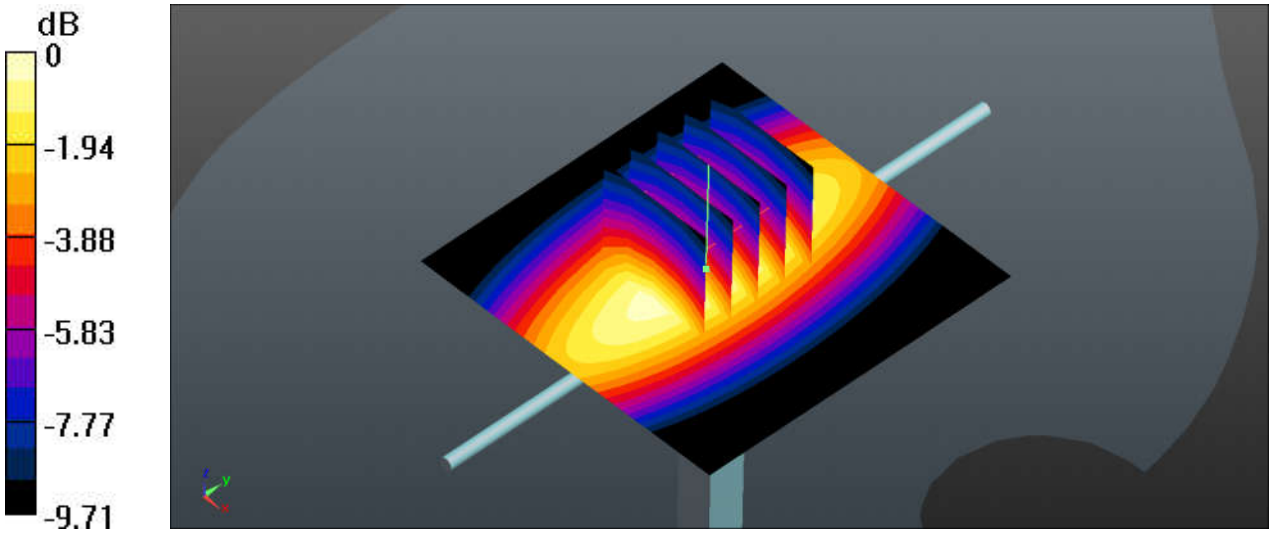
DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750_190728 Medium parameters used: f = 750 MHz; σ = 0.88 S/m; ε_r = 40.797; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(10, 10, 10); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.57 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 55.14 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 2.99 W/kg
SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 2.61 W/kg



0 dB = 2.61 W/kg

System Check_Head_750MHz

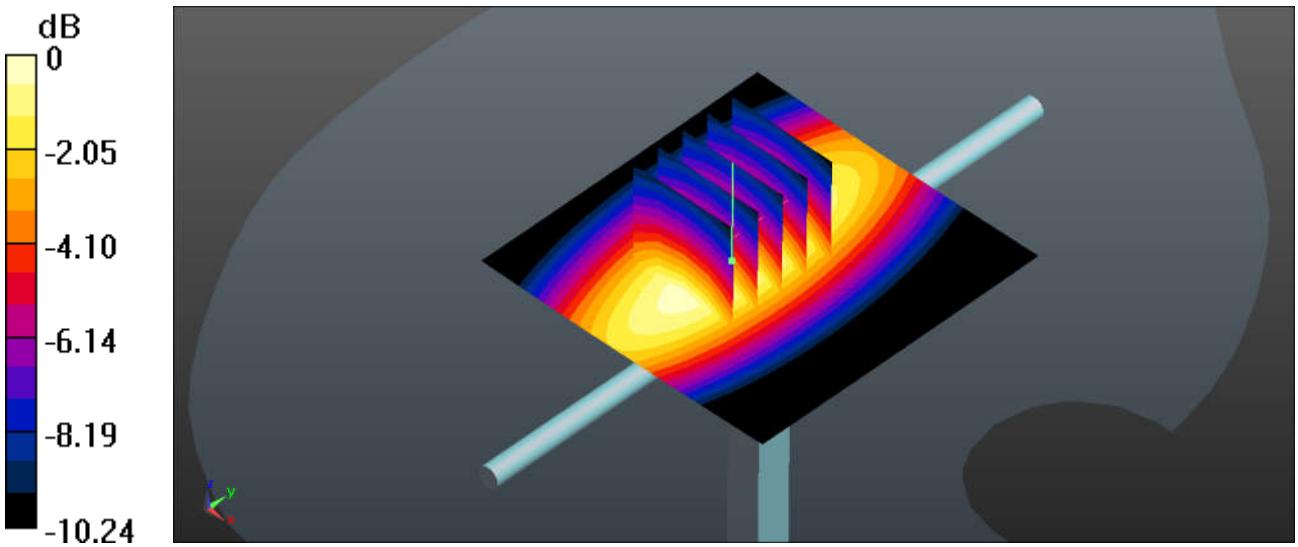
DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750_190805 Medium parameters used: f = 750 MHz; σ = 0.889 S/m; ε_r = 40.877; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃； Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3191; ConvF(6.59, 6.59, 6.59); Calibrated: 2019.01.29;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2018.10.15
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.60 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 53.20 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.26 W/kg
SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 2.74 W/kg



0 dB = 2.60 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019.07.19

System Check_Head_835MHz

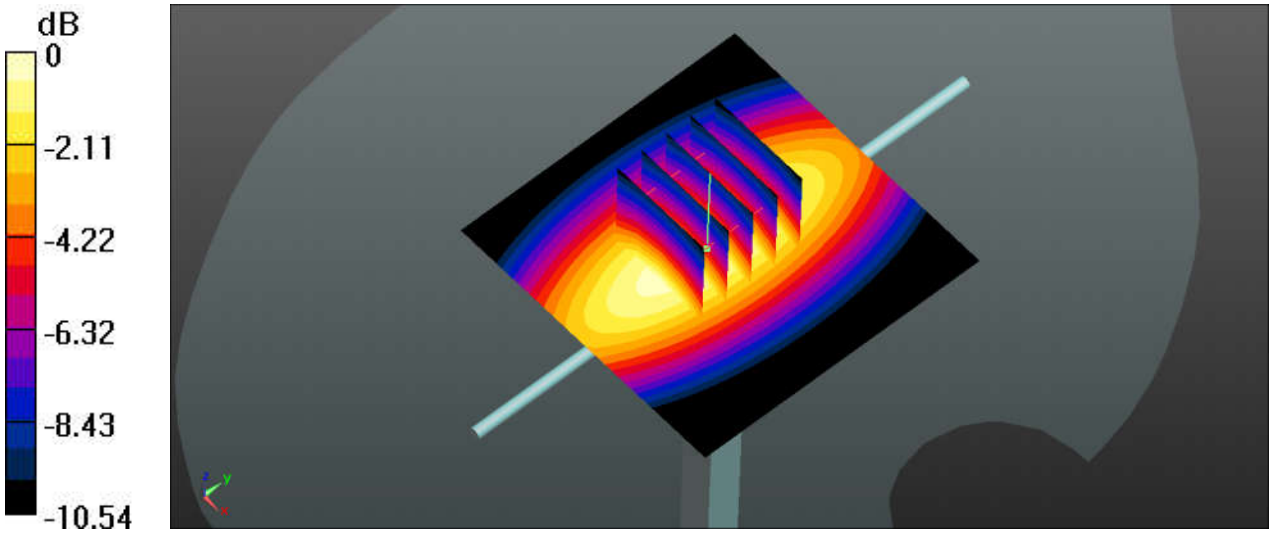
DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835_190719 Medium parameters used: f = 835 MHz; σ = 0.927 S/m; ε_r = 42.674; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.9 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(9.57, 9.57, 9.57); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.21 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 59.91 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.85 W/kg
SAR(1 g) = 2.59 W/kg; SAR(10 g) = 1.7 W/kg
Maximum value of SAR (measured) = 3.29 W/kg



0 dB = 3.29 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019.07.29

System Check_Head_835MHz

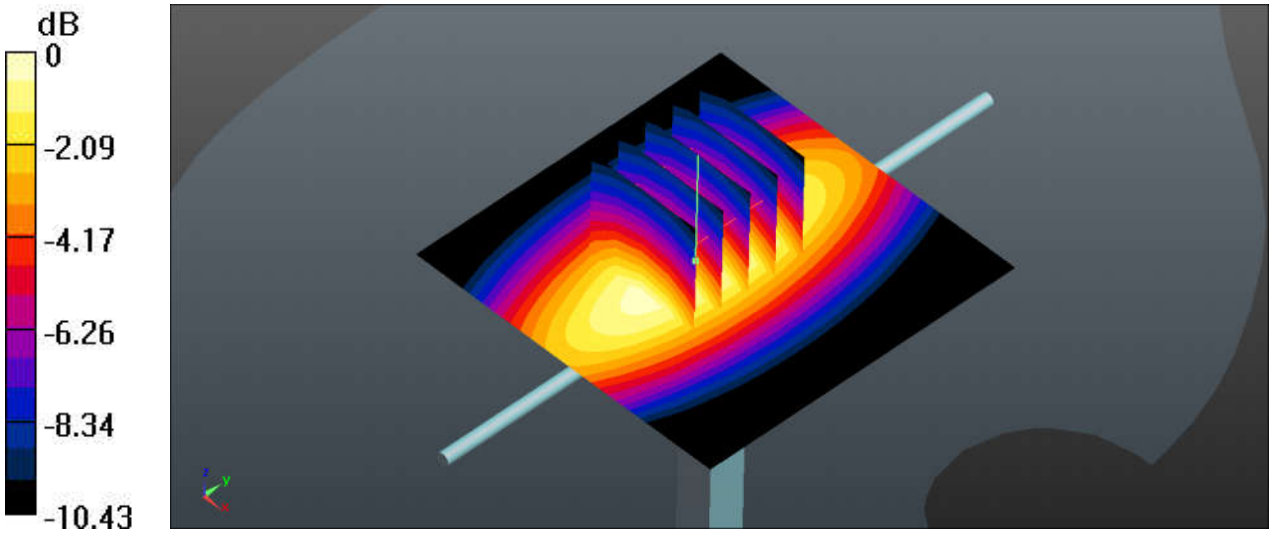
DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835_190729 Medium parameters used: f = 835 MHz; σ = 0.897 S/m; ε_r = 40.781; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃； Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(9.57, 9.57, 9.57); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.12 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 60.13 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.67 W/kg
SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.66 W/kg
Maximum value of SAR (measured) = 3.16 W/kg



0 dB = 3.16 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019.07.26

System Check_Head_1750MHz

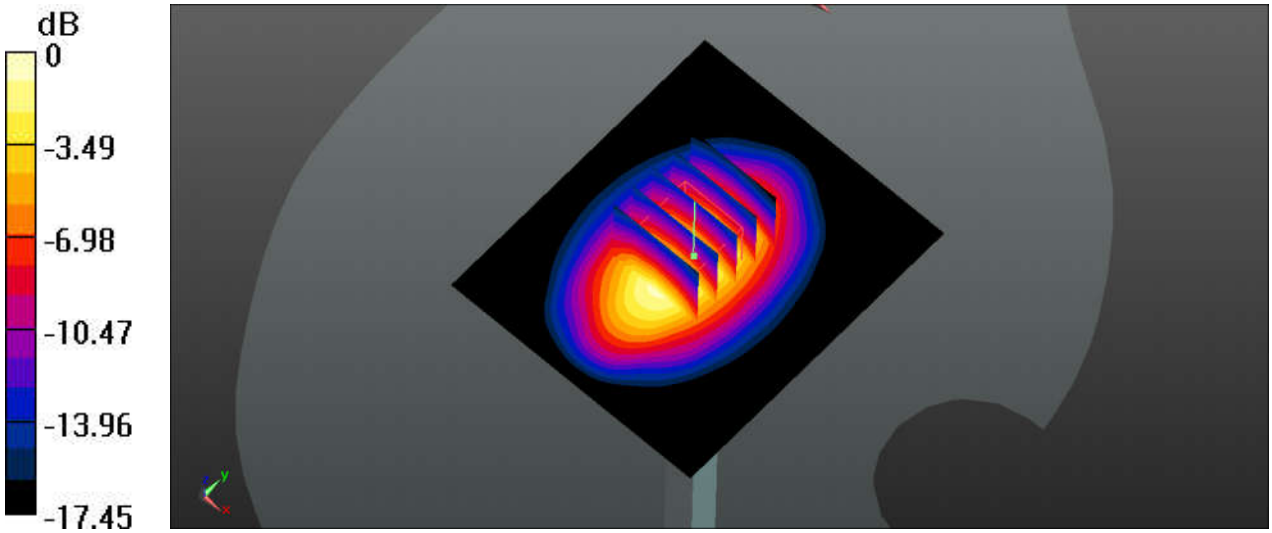
DUT: D1750V2-SN:1137

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750_190726 Medium parameters used: f = 1750 MHz; σ = 1.392 S/m; ε_r = 39.95; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃； Liquid Temperature：22.9 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(8.54, 8.54, 8.54); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.5 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 95.50 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 16.4 W/kg
SAR(1 g) = 9.14 W/kg; SAR(10 g) = 4.86 W/kg
Maximum value of SAR (measured) = 12.7 W/kg



0 dB = 13.5 W/kg

System Check_Head_1750MHz

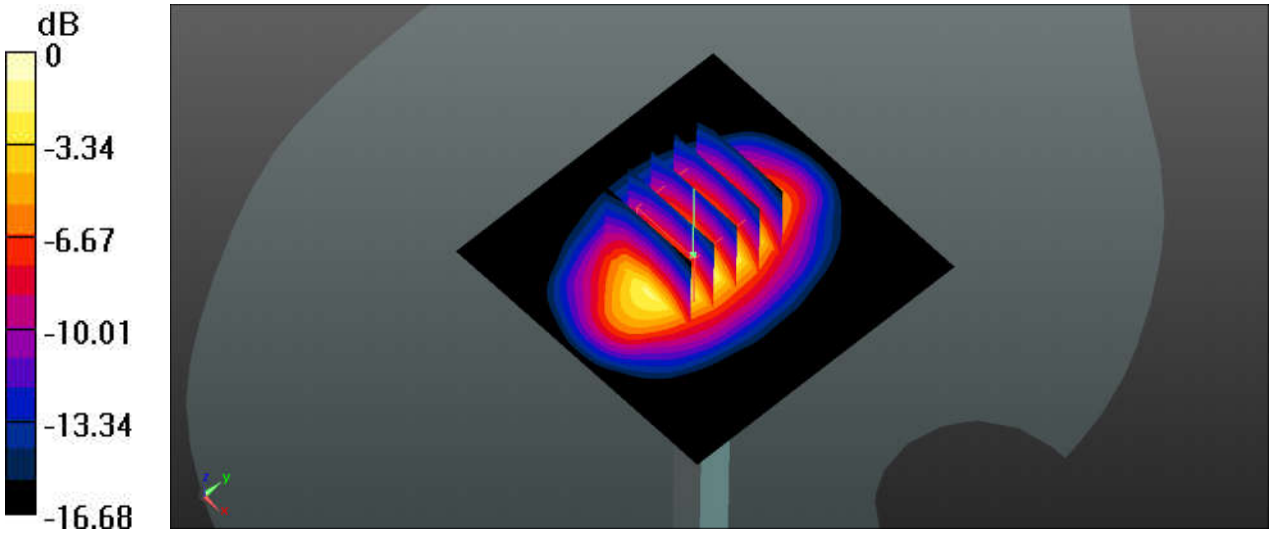
DUT: D1750V2-SN:1090

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750_190807 Medium parameters used: f = 1750 MHz; σ = 1.383 S/m; ε_r = 39.897; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃； Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(8.54, 8.54, 8.54); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.9 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.04 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 15.2 W/kg
SAR(1 g) = 8.54 W/kg; SAR(10 g) = 4.56 W/kg
Maximum value of SAR (measured) = 12.1 W/kg



0 dB = 12.1 W/kg

System Check_Head_1900MHz

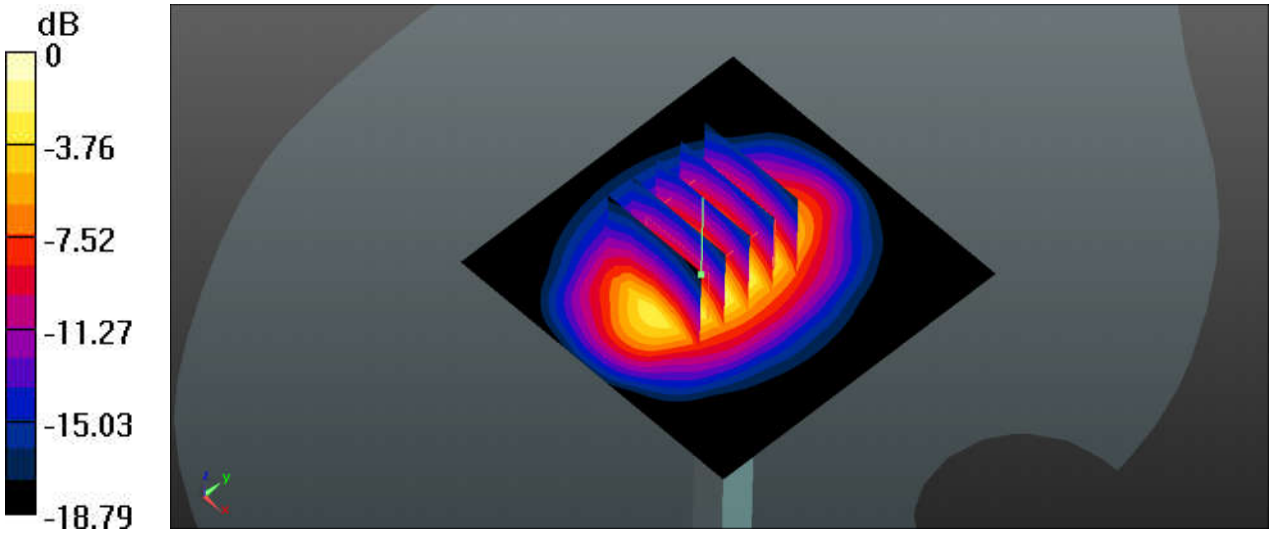
DUT: D1900V2-SN:5d182

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900_190725 Medium parameters used: f = 1900 MHz; σ = 1.448 S/m; ε_r = 39; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃； Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(8.27, 8.27, 8.27); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 15.3 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 99.46 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 19.6 W/kg
SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.29 W/kg
Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg