



Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Inter-band	CA_2A-66A-66A	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	22.34	22.36
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 2	10M	1960	900	22.83	22.85
	CA_2A-66C	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	22.35	22.36
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 2	10M	1960	900	22.66	22.85
	CA_12A-66A-66A	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	23.12	23.13
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 12	10M	737.5	5095	22.78	22.85
	CA_12A-66C	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	23.08	23.13
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 12	10M	737.5	5095	22.51	22.85
	CA_5A-66A-66A	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	23.07	23.18
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 5	10M	881.5	2525	22.47	22.85
	CA_5A-66C	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	23.06	23.18
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 5	10M	881.5	2525	22.82	22.85
	CA_2A-12B	Band 2	20M	1900	19100	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	22.35	22.36
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 2	20M	1960	900	23.11	23.13
	CA_4A-12B	Band 4	20M	1732.5	20175	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	22.33	22.84
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 4	20M	2132.5	2175	23.03	23.13
	CA_4A-4A-7A	Band 7	20M	2560	21350	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	22.35	22.37
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 7	20M	2655	3100	22.8	22.84
	CA_2C-12A	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	Band 12	10M	737.5	5095	22.34	22.36
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 2	20M	1960.2	902	23.08	23.13
Intra-Band	CA_66A-66C	Band 66	20M	1745	132322	1	0	Band 66	5M	1712.5	131997	Band 66	20M	1724.2	132114	22.56	22.85
Non-Contiguous		Band 66	20M	1745	132322	1	0	Band 66	20M	1764.8	132520	Band 66	5M	1712.5	131997	22.61	22.85



<Reduced Power Level 1 for WWAN Only for Two Carrier power verification>

Configure	PCC						SCC				Power	
	LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power(dBm)	LTE Rel 8 Tx.Power(dBm)
Inter-Band	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	19.60	19.78
	Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	20.43	20.54
	Band 2	20M	1900	19100	1	0	Band 5	10M	881.5	2525	19.73	19.78
	Band 5	10M	836.5	20525	1	0	Band 2	20M	1960	900	21.85	21.91
	Band 2	20M	1900	19100	1	0	Band 12	10M	737.5	5095	19.72	19.78
	Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	21.74	21.79
	Band 2	20M	1900	19100	1	0	Band 7	20M	2655	3100	19.40	19.78
	Band 7	20M	2560	21350	1	0	Band 2	20M	1960	900	13.67	16.19
	Band 2	10M	1880	18900	1	0	Band 17	10M	740	5790	19.37	19.59
	Band 17	10M	709	23780	1	0	Band 2	10M	1960	900	21.62	21.83
	Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	19.63	19.78
	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	19.70	19.78
	Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	17.84	17.89
	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	19.61	19.78
	Band 66	20M	1745	132322	1	0	Band 2	20M	1960	900	20.04	20.13
	Band 4	20M	1732.5	20175	1	0	Band 5	10M	881.5	2525	20.39	20.54
	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	21.70	21.91
	Band 4	20M	1732.5	20175	1	0	Band 7	20M	2655	3100	20.42	20.54
	Band 7	20M	2560	21350	1	0	Band 4	10M	2132.5	2175	13.62	16.19
	Band 4	20M	1732.5	20175	1	0	Band 12	10M	737.5	5095	20.41	20.54
	Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	21.68	21.79
	Band 4	10M	1732.5	20175	1	0	Band 17	10M	740	5790	20.11	20.25
	Band 17	10M	709	23780	1	0	Band 4	10M	2132.5	2175	21.78	21.83
	Band 4	20M	1732.5	20175	1	0	Band 29	10M	722.5	9715	20.42	20.54
	Band 4	20M	1732.5	20175	1	0	Band 30	10M	2355	9820	20.46	20.54
	Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	17.80	17.89
	Band 5	10M	836.5	20525	1	0	Band 7	20M	2655	3100	21.64	21.91
	Band 7	20M	2560	21350	1	0	Band 5	10M	881.5	2525	13.70	16.19
	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	21.70	21.91
	Band 66	20M	1745	132322	1	0	Band 5	10M	881.5	2525	20.08	20.13
	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	21.70	21.79
	Band 66	20M	1745	132322	1	0	Band 12	10M	737.5	5095	20.10	20.13
Band 25	20M	1905	26590	1	0	Band 26	15M	876.5	8865	19.62	19.69	
Band 26	15M	831.5	26865	1	37	Band 25	20M	1962.5	8365	21.07	21.19	
Band 5	10M	836.5	20525	1	0	Band 30	10M	2355	9820	21.59	21.91	
Band 30	10M	2310	27710	1	0	Band 5	10M	881.5	2525	17.23	17.89	
Band 7	20M	2560	21350	1	0	Band 12	10M	737.5	5095	16.01	16.19	
Band 12	10M	704	23060	1	0	Band 7	20M	2655	3100	21.66	21.79	
Band 12	10M	704	23060	1	0	Band 30	10M	2355	9820	21.74	21.79	
Band 30	10M	2310	27710	1	0	Band 12	10M	737.5	5095	17.19	17.89	



Configure		PCC					SCC				Power		
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power (dBm)	LTE Rel 8 Tx.Power (dBm)
Intra-Band	Contiguous	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	19.77	19.78
		Band 7	20M	2560	21350	1	0	Band 7	20M	2660.2	3152	15.77	16.19
		Band 7	15M	2562.5	21375	1	74	Band 7	5M	2687	3420	16.09	16.12
		Band 12	5M	701.5	23035	1	12	Band 12	10M	708.7	5107	21.66	21.73
		Band 12	5M	701.5	23035	1	12	Band 12	5M	706.3	5083	21.65	21.73
		Band 38	20M	2580	37850	1	0	Band 38	20M	2598.8	38084	19.50	19.59
		Band 41	20M	2549.5	40185	1	0	Band 41	20M	2569.3	40383	18.12	18.19
		Band 66	20M	1745	132322	1	0	Band 66	20M	2163.8	66984	20.03	20.13
	Non-Contiguous	Band 66	15M	1745	132322	1	0	Band 66	5M	2161.9	66955	20.5	20.10
		Band 2	20M	1900	19100	1	0	Band 2	5M	1932.5	625	19.72	19.78
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	20.52	20.54
		Band 7	20M	2560	21350	1	0	Band 7	5M	2622.5	2775	16.08	16.19
		Band 25	20M	1905	26590	1	0	Band 25	5M	1932.5	8065	19.67	19.69
		Band 41	20M	2549.5	40185	1	0	Band 41	5M	2687.5	41565	18.15	18.19
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	20.05	20.13



<Reduced Power Level 1 for WWAN Only for Three Carrier power verification>

Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Inter-band	CA_2A-4A-4A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	19.68	19.78
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 2	20M	1960	900	20.41	20.5
	CA_2A-4A-12A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	19.72	19.78
		Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	20.41	20.5
		Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 2	20M	1960	900	21.66	21.79
	CA_2A-29A-30A	Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	19.71	19.78
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 29	10M	722.5	9715	17.02	17.89
		Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 29	10M	722.5	9715	19.68	19.78
		Band 30	10M	2310	27710	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	17.05	17.89
	CA_4A-4A-12A	Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	21.72	21.79
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 12	10M	737.5	5095	20.33	20.5
	CA_2A-12A-30A	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	19.66	19.78
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	17.77	17.89
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 30	10M	2355	9820	21.72	21.79
	CA_4A-29A-30A	Band 4	20M	1732.5	20175	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	20.33	20.5
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	17.15	17.89
		Band 4	20M	1732.5	20175	1	0	Band 30	10M	2355	9820	Band 29	10M	722.5	9715	20.48	20.5
		Band 30	10M	2310	27710	1	0	Band 29	10M	722.5	9715	Band 4	20M	2132.5	2175	17.09	17.89
	CA_2A-4A-29A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	19.72	19.78
		Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	Band 29	10M	722.5	9715	20.44	20.5
		Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	Band 4	20M	2132.5	2175	19.71	19.78
		Band 4	20M	1732.5	20175	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	20.48	20.5
	CA_4A-12A-30A	Band 4	20M	1732.5	20175	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	20.46	20.5
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	17.81	17.89
		Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 30	10M	2355	9820	21.7	21.79
	CA_2A-5A-30A	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 5	10M	881.5	2525	19.63	19.78
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	17.76	17.89
		Band 5	10M	836.5	20525	1	0	Band 2	20M	1960	900	Band 30	10M	2355	9820	21.88	21.91
	CA_4A-5A-30A	Band 4	20M	1732.5	20175	1	0	Band 30	10M	2355	9820	Band 5	10M	881.5	2525	20.43	20.5
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	17.68	17.89
		Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 30	10M	2355	9820	21.88	21.91
	CA_2A-2A-12A	Band 2	20M	1900	19100	1	0	Band 2	5M	1932.5	625	Band 12	10M	737.5	5095	19.73	19.78
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 2	5M	1932.5	625	21.69	21.79
	CA_2A-4A-5A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	19.77	19.78



**FCC SAR Test Report**

**Report No. : FA712206**

CA_4A-4A-5A	Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	20.34	20.5
	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 2	20M	1960	900	21.88	21.91
	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	21.87	21.91
	Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 5	10M	881.5	2525	20.44	20.5
	Band 7	20M	2560	21350	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	16.08	16.19
	Band 4	20M	1732.5	20175	1	0	Band 7	20M	2655	3100	Band 12	10M	737.5	5095	20.36	20.5
	Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 2	20M	1960	900	21.6	21.79
	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	19.7	19.78
	Band 66	20M	1745	132322	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	20.08	20.13
	Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	21.67	21.79



Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Inter-band	CA_2A-66A-66A	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	19.71	19.78
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 2	10M	1960	900	20.03	20.13
	CA_2A-66C	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	19.66	19.78
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 2	10M	1960	900	19.94	20.13
	CA_12A-66A-66A	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	21.66	21.79
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 12	10M	737.5	5095	20.08	20.13
	CA_12A-66C	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.66	21.79
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 12	10M	737.5	5095	20.12	20.13
	CA_5A-66A-66A	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	21.88	21.91
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 5	10M	881.5	2525	20.08	20.13
	CA_5A-66C	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.87	21.91
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 5	10M	881.5	2525	20.03	20.13
	CA_2A-12B	Band 2	20M	1900	19100	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	19.73	19.78
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 2	20M	1960	900	22.25	21.79
	CA_4A-12B	Band 4	20M	1732.5	20175	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	20.36	20.54
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 4	20M	2132.5	2175	21.78	21.79
	CA_4A-4A-7A	Band 7	20M	2560	21350	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	16.09	16.19
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 7	20M	2655	3100	20.44	20.5
	CA_2C-12A	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	Band 12	10M	737.5	5095	19.5	19.78
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 2	20M	1960.2	902	21.77	21.79
Intra-Band	CA_66A-66C	Band 66	20M	1745	132322	1	0	Band 66	5M	1712.5	131997	Band 66	20M	1724.2	132114	19.89	20.13
Non-Contiguous		Band 66	20M	1745	132322	1	0	Band 66	20M	1764.8	132520	Band 66	5M	1712.5	131997	20.1	20.13



<Reduced Power Level 2 for WWAN + WLAN for Two Carrier power verification>

Configure	PCC						SCC				Power	
	LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power(dBm)	LTE Rel 8 Tx.Power(dBm)
Inter-Band	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	18.40	18.79
	Band 4	20M	1720	20050	1	0	Band 2	20M	1960	900	19.80	19.99
	Band 2	20M	1900	19100	1	0	Band 5	10M	881.5	2525	18.54	18.79
	Band 5	10M	836.5	20525	1	0	Band 2	20M	1960	900	20.98	21.35
	Band 2	20M	1900	19100	1	0	Band 12	10M	737.5	5095	18.66	18.79
	Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	21.15	21.39
	Band 2	10M	1880	18900	1	0	Band 17	10M	740	5790	18.28	18.57
	Band 17	10M	709	23780	1	0	Band 2	20M	1960	900	21.16	21.36
	Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	18.63	18.79
	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	18.41	18.79
	Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	15.90	16.19
	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	18.43	18.79
	Band 66	20M	1745	132322	1	0	Band 2	20M	1960	900	18.70	18.77
	Band 4	20M	1720	20050	1	0	Band 5	10M	881.5	2525	18.53	19.99
	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	21.06	21.35
	Band 4	20M	1720	20050	1	0	Band 12	10M	737.5	5095	18.54	19.99
	Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	21.21	21.39
	Band 4	10M	1715	20000	1	25	Band 17	10M	740	5790	19.56	19.73
	Band 17	10M	709	23780	1	0	Band 4	10M	2132.5	2175	21.22	21.36
	Band 4	20M	1720	20050	1	0	Band 29	10M	722.5	9715	19.71	19.99
	Band 4	20M	1720	20050	1	0	Band 30	10M	2355	9820	19.74	19.99
	Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	15.85	16.19
	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	21.07	21.35
	Band 66	20M	1745	132322	1	0	Band 5	10M	881.5	2525	18.66	18.77
	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	21.22	21.39
	Band 66	20M	1745	132322	1	0	Band 12	10M	737.5	5095	18.71	18.77
	Band 5	10M	836.5	20525	1	0	Band 30	10M	2355	9820	21.08	21.35
	Band 30	10M	2310	27710	1	0	Band 5	10M	881.5	2525	16.17	16.19
Band 12	10M	704	23060	1	0	Band 30	10M	2355	9820	21.25	21.39	
Band 30	10M	2310	27710	1	0	Band 12	10M	737.5	5095	16.18	16.19	



Configure		PCC						SCC				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power (dBm)	LTE Rel 8 Tx.Power (dBm)
Intra-Band	Contiguous	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	18.41	18.79
		Band 12	5M	701.5	23035	1	0	Band 12	10M	708.7	5107	21.36	21.32
		Band 12	5M	701.5	23035	1	0	Band 12	5M	706.3	5083	21.32	21.32
		Band 66	20M	1745	132322	1	0	Band 66	20M	2163.8	66984	18.72	18.77
	Band 66	15M	1717.5	132047	1	0	Band 66	5M	2197.5	67311	18.56	18.74	
	Non-Contiguous	Band 2	20M	1900	19100	1	0	Band 2	5M	1932.5	625	18.33	18.79
		Band 4	20M	1720	20050	1	0	Band 4	5M	2152.5	2375	19.87	19.99
		Band 25	20M	1905	26590	1	0	Band 25	5M	1932.5	8065	18.25	18.79
Band 66		20M	1745	132322	1	0	Band 66	5M	2112.5	66461	18.63	18.77	





<Reduced Power Level 2 for WWAN + WLAN for Three Carrier power verification>

Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Inter-band	CA_2A-4A-4A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	18.67	18.79
		Band 4	20M	1720	20050	1	0	Band 4	5M	2152.5	2375	Band 2	20M	1960	900	19.88	19.99
	CA_2A-4A-12A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	18.75	18.79
		Band 4	20M	1720	20050	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	19.88	19.99
		Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 2	20M	1960	900	21.17	21.39
	CA_2A-29A-30A	Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	18.63	18.79
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 29	10M	722.5	9715	16.07	16.19
		Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 29	10M	722.5	9715	18.72	18.79
		Band 30	10M	2310	27710	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	16.05	16.19
	CA_4A-4A-12A	Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	21.11	21.39
		Band 4	20M	1720	20050	1	0	Band 4	5M	2152.5	2375	Band 12	10M	737.5	5095	19.91	19.99
	CA_2A-12A-30A	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	18.66	18.79
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	16.09	16.19
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 30	10M	2355	9820	21.17	21.39
	CA_4A-29A-30A	Band 4	20M	1720	20050	1	0	Band 29	10M	722.5	9715	Band 30	10M	2355	9820	19.88	19.99
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	16.03	16.19
		Band 4	20M	1720	20050	1	0	Band 30	10M	2355	9820	Band 29	10M	722.5	9715	19.90	19.99
		Band 30	10M	2310	27710	1	0	Band 29	10M	722.5	9715	Band 4	20M	2132.5	2175	16.05	16.19
	CA_2A-4A-29A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 29	10M	722.5	9715	18.71	18.79
		Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	Band 29	10M	722.5	9715	19.91	19.99
		Band 2	20M	1900	19100	1	0	Band 29	10M	722.5	9715	Band 4	20M	2132.5	2175	18.66	18.79
		Band 4	20M	1732.5	20175	1	0	Band 29	10M	722.5	9715	Band 2	20M	1960	900	19.87	19.99
	CA_4A-12A-30A	Band 4	20M	1720	20050	1	0	Band 30	10M	2355	9820	Band 12	10M	737.5	5095	19.98	19.99
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 12	10M	737.5	5095	16.11	16.19
		Band 12	10M	704	23060	1	0	Band 4	20M	2132.5	2175	Band 30	10M	2355	9820	21.18	21.39
	CA_2A-5A-30A	Band 2	20M	1900	19100	1	0	Band 30	10M	2355	9820	Band 5	10M	881.5	2525	18.73	18.79
		Band 30	10M	2310	27710	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	16.18	16.19
		Band 5	10M	836.5	20525	1	0	Band 2	20M	1960	900	Band 30	10M	2355	9820	21.17	21.35
	CA_4A-5A-30A	Band 4	20M	1720	20050	1	0	Band 30	10M	2355	9820	Band 5	10M	881.5	2525	19.98	19.99
		Band 30	10M	2310	27710	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	16.16	16.19
Band 5		10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 30	10M	2355	9820	21.21	21.35	
CA_2A-2A-12A	Band 2	20M	1900	19100	1	0	Band 2	5M	1932.5	625	Band 12	10M	737.5	5095	18.61	18.79	
	Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 2	5M	1932.5	625	21.19	21.39	
CA_2A-4A-5A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 5	10M	881.5	2525	18.66	18.79	
	Band 4	20M	1720	20050	1	0	Band 2	20M	1960	900	Band 5	10M	881.5	2525	19.67	19.99	



**FCC SAR Test Report**

**Report No. : FA712206**

CA_4A-4A-5A	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 2	20M	1960	900	21.17	21.35
	Band 5	10M	836.5	20525	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	21.3	21.35
	Band 4	20M	1720	20050	1	0	Band 4	5M	2152.5	2375	Band 5	10M	881.5	2525	19.87	19.99
	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 12	10M	737.5	5095	18.75	18.79
	Band 66	20M	1745	132322	1	0	Band 2	20M	1960	900	Band 12	10M	737.5	5095	18.72	18.77
	Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 66	20M	2155	66886	21.17	21.39



Configure		PCC						SCC1				SCC2				Power		
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)	
Inter-band	CA_2A-66A-66A	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	18.67	18.79	
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 2	10M	1960	900	18.7	18.77	
	CA_2A-66C	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.67	18.79	
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 2	10M	1960	900	18.73	18.77	
	CA_12A-66A-66A	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	21.18	21.39	
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 12	10M	737.5	5095	18.66	18.77	
	CA_12A-66C	Band 12	10M	704	23060	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.12	21.39	
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 12	10M	737.5	5095	18.67	18.77	
	CA_5A-66A-66A	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	21.18	21.35	
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 5	10M	881.5	2525	18.72	18.77	
	CA_5A-66C	Band 5	10M	836.5	20525	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	21.18	21.35	
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 5	10M	881.5	2525	18.69	18.77	
	CA_2A-12B	Band 2	20M	1900	19100	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	18.67	18.79	
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 2	20M	1960	900	21.08	21.39	
	CA_4A-12B	Band 4	20M	1720	20050	1	0	Band 12	10M	737.5	5095	Band 12	5M	731.5	5035	19.88	19.99	
		Band 12	10M	704	23060	1	0	Band 12	5M	731.5	5035	Band 4	20M	2132.5	2175	21.17	21.39	
	CA_2C-12A	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	Band 12	10M	737.5	5095	18.65	18.79	
		Band 12	10M	704	23060	1	0	Band 2	20M	1960	900	Band 2	20M	1960.2	902	21.18	21.39	
	Intra-Band	CA_66A-66C	Band 66	20M	1745	132322	1	0	Band 66	5M	1712.5	131997	Band 66	20M	1724.2	132114	18.39	18.77
	Non-Contiguous		Band 66	20M	1745	132322	1	0	Band 66	20M	1764.8	132520	Band 66	5M	1712.5	131997	18.51	18.77



**<Reduced Power Level 3 for Hotspot On for Two Carrier power verification>**

Configure	PCC						SCC				Power	
	LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power(dBm)	LTE Rel 8 Tx.Power(dBm)
Inter-Band	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	18.67	18.78
	Band 4	20M	1732.5	20175	1	0	Band 2	20M	1960	900	19.98	20.03
	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	18.72	18.78
	Band 66	20M	1745	132322	1	0	Band 2	20M	1960	900	18.57	18.67

Configure		PCC						SCC				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx.Power (dBm)	LTE Rel 8 Tx.Power (dBm)
Intra-Band	Contiguous	Band 2	20M	1900	19100	1	0	Band 2	20M	1960.2	902	18.66	18.78
		Band 66	20M	1745	132322	1	0	Band 66	20M	2163.8	66984	18.56	18.67
		Band 66	15M	1745	132322	1	37	Band 66	5M	2161.9	66955	18.55	18.56
	Non-Contiguous	Band 2	20M	1900	19100	1	0	Band 2	5M	1932.5	625	18.67	18.78
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	19.56	20.03
		Band 25	20M	1905	26590	1	0	Band 25	5M	1932.5	8065	18.66	18.89
	Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	18.51	18.67	

**<Reduced Power Level 3 for Hotspot On for Three Carrier power verification>**

Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Inter-band	CA_2A-4A-4A	Band 2	20M	1900	19100	1	0	Band 4	20M	2132.5	2175	Band 4	5M	2112.5	1975	18.67	18.78
		Band 4	20M	1732.5	20175	1	0	Band 4	5M	2112.5	1975	Band 2	20M	1960	900	19.77	20.03
	CA_2A-66A-66A	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	5M	2112.5	66461	18.71	18.78
		Band 66	20M	1745	132322	1	0	Band 66	5M	2112.5	66461	Band 2	10M	1960	900	18.60	18.67
	CA_2A-66C	Band 2	20M	1900	19100	1	0	Band 66	20M	2155	66886	Band 66	20M	2174.8	67084	18.71	18.78
		Band 66	20M	1745	132322	1	0	Band 66	20M	2174.8	67084	Band 2	10M	1960	900	18.56	18.67

Configure		PCC						SCC1				SCC2				Power	
		LTE Band	BW (MHz)	Freq. (MHz)	Channel	UL# RB	UL RB Offset	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Band	BW (MHz)	Freq. (MHz)	Channel	LTE Rel 10 Tx. Power (dBm)	LTE Rel 8 Tx. Power (dBm)
Intra-Band	CA_66A-66C	Band 66	20M	1745	132322	1	0	Band 66	5M	1712.5	131997	Band 66	20M	1724.2	132114	18.35	18.67
Non-Contiguous		Band 66	20M	1745	132322	1	0	Band 66	20M	1764.8	132520	Band 66	5M	1712.5	131997	18.56	18.67



**LTE Carrier Aggregation Conducted Power (Uplink)**

**<Largest Aggregation Bandwidth>**

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 36.521 section 6.2.3A.1.3 requirements.

The Max. tune up power of "non-contiguously allocated RB configurations" would be not higher than the LTE non-CA operation, and LTE CA contiguous RB configurations.

According to FCC guidance,

- a. For largest aggregation bandwidth: To measure various combinations of RB allocation in largest aggregation bandwidth to verify MPR level trend for non-contiguously and contiguously allocated transmissions resource blocks.
- b. For smaller aggregation bandwidth: select the RB configuration of the highest TX power which is identified in the measurements for largest aggregation bandwidth.

For the LTE band 7/41 uplink carrier aggregations supports Power Class 3 only.



<Full Power>

CA_7C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)		
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	0	0	1	99	1	0	22.04		
			1	0	0	0	1	0	22.29		
			100	0	0	0	100	0-1	21.33		
			100	0	100	0	200	0-2	21.94		
			1	0	1	99	2	0-8.5	15.1		
			1	0	1	0	2	0-4.5	17.14		
			1	99	1	0	2	0	22.31		
			100	0	1	99	101	0-3.5	17.77		
		16QAM	0	0	1	99	1	0-1	22.05		
			1	0	0	0	1	0-1	22.01		
			100	0	0	0	100	0-2	21.16		
			100	0	100	0	200	0-3	20.96		
			1	0	1	99	2	0-8.5	15.49		
			1	0	1	0	2	0-4.5	17.48		
			1	99	1	0	2	0-1	22.09		
			100	0	1	99	101	0-3.5	17.54		
		64QAM	0	0	1	99	1	0-2	21.04		
			1	0	0	0	1	0-2	21.5		
			100	0	0	0	100	0-3	20.2		
			100	0	100	0	200	0-3	20.53		
			1	0	1	99	2	0-8.5	15.37		
			1	0	1	0	2	0-4.5	18.15		
			1	99	1	0	2	0-3	20.55		
			100	0	1	99	101	0-3.5	17.59		
		21001	21199	QPSK	0	0	1	99	1	0	22.02
					1	0	0	0	1	0	22.26
					100	0	0	0	100	0-1	21.27
					100	0	100	0	200	0-2	21.88
1	0				1	99	2	0-8.5	14.96		
1	0				1	0	2	0-4.5	17.94		
1	99				1	0	2	0	22.29		
100	0				1	99	101	0-3.5	17.52		
16QAM	0			0	1	99	1	0-1	21.93		
	1			0	0	0	1	0-1	22.09		
	100			0	0	0	100	0-2	21.29		
	100			0	100	0	200	0-3	20.95		



			1	0	1	99	2	0-8.5	15.41
			1	0	1	0	2	0-4.5	18.21
			1	99	1	0	2	0-1	22.11
			100	0	1	99	101	0-3.5	17.52
		64QAM	0	0	1	99	1	0-2	21.02
			1	0	0	0	1	0-2	21.68
			100	0	0	0	100	0-3	20.32
			100	0	100	0	200	0-3	20.44
			1	0	1	99	2	0-8.5	15.3
			1	0	1	0	2	0-4.5	18.29
			1	99	1	0	2	0-3	20.66
100	0	1	99	101	0-3.5	17.52			
21152	21350	QPSK	0	0	1	99	1	0	22.08
			1	0	0	0	1	0	22.25
			100	0	0	0	100	0-1	21.26
			100	0	100	0	200	0-2	21.87
			1	0	1	99	2	0-8.5	15.02
			1	0	1	0	2	0-4.5	17.88
			1	99	1	0	2	0	22.33
			100	0	1	99	101	0-3.5	17.56
		16QAM	0	0	1	99	1	0-1	21.91
			1	0	0	0	1	0-1	22
			100	0	0	0	100	0-2	21.17
			100	0	100	0	200	0-3	20.9
			1	0	1	99	2	0-8.5	15.31
			1	0	1	0	2	0-4.5	18.1
			1	99	1	0	2	0-1	22.04
		100	0	1	99	101	0-3.5	17.53	
		64QAM	0	0	1	99	1	0-2	20.85
1	0		0	0	1	0-2	21.57		
100	0		0	0	100	0-3	20.25		
100	0		100	0	200	0-3	20.44		
1	0		1	99	2	0-8.5	15.28		
1	0		1	0	2	0-4.5	18.11		
1	99		1	0	2	0-3	20.67		
100	0	1	99	101	0-3.5	17.59			



CA_41C									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39948	QPSK	0	0	1	99	1	0	22.28
			1	0	0	0	1	0	22.32
			100	0	0	0	100	0-1	21.12
			100	0	100	0	200	0-2	21.86
			1	0	1	99	2	0-8.5	15.34
			1	0	1	0	2	0-4.5	19.32
			1	99	1	0	2	0	22.35
			100	0	1	99	101	0-3.5	20.29
		16QAM	0	0	1	99	1	0-1	22.2
			1	0	0	0	1	0-1	22.07
			100	0	0	0	100	0-2	21.03
			100	0	100	0	200	0-3	20.81
			1	0	1	99	2	0-8.5	15.62
			1	0	1	0	2	0-4.5	19.58
			1	99	1	0	2	0-1	22.24
			100	0	1	99	101	0-3.5	20.4
		64QAM	0	0	1	99	1	0-2	20.77
			1	0	0	0	1	0-2	20.92
			100	0	0	0	100	0-3	19.97
			100	0	100	0	200	0-3	20.8
			1	0	1	99	2	0-8.5	15.31
			1	0	1	0	2	0-4.5	19.34
			1	99	1	0	2	0-3	20.95
			100	0	1	99	101	0-3.5	20.27





40185	40383	QPSK	0	0	1	99	1	0	22.23
			1	0	0	0	1	0	22.3
			100	0	0	0	100	0-1	21.43
			100	0	100	0	200	0-2	21.2
			1	0	1	99	2	0-8.5	14.76
			1	0	1	0	2	0~4.5	18.71
			1	99	1	0	2	0	22.32
			100	0	1	99	101	0-3.5	19.99
		16QAM	0	0	1	99	1	0-1	21.26
			1	0	0	0	1	0-1	21.98
			100	0	0	0	100	0-2	20.53
			100	0	100	0	200	0-3	20.26
			1	0	1	99	2	0~8.5	15.26
			1	0	1	0	2	0-4.5	19.22
			1	99	1	0	2	0-1	22.31
			100	0	1	99	101	0-3.5	19.72
		64QAM	0	0	1	99	1	0-2	20.14
			1	0	0	0	1	0-2	21.45
			100	0	0	0	100	0-3	20.58
			100	0	100	0	200	0-3	20.25
			1	0	1	99	2	0-8.5	14.72
			1	0	1	0	2	0-4.5	18.96
			1	99	1	0	2	0-3	20.07
			100	0	1	99	101	0-3.5	19.67



40620	40818	QPSK	0	0	1	99	1	0	22.21
			1	0	0	0	1	0	22.23
			100	0	0	0	100	0-1	21.15
			100	0	100	0	200	0-2	21.7
			1	0	1	99	2	0-8.5	15.3
			1	0	1	0	2	0-4.5	19.39
			1	99	1	0	2	0	22.31
			100	0	1	99	101	0-3.5	20.2
		16QAM	0	0	1	99	1	0-1	21.92
			1	0	0	0	1	0-1	22.11
			100	0	0	0	100	0-2	20.93
			100	0	100	0	200	0-3	20.71
			1	0	1	99	2	0-8.5	15.55
			1	0	1	0	2	0-4.5	19.55
			1	99	1	0	2	0-1	22.3
			100	0	1	99	101	0-3.5	20.32
		64QAM	0	0	1	99	1	0-2	20.56
			1	0	0	0	1	0-2	20.75
			100	0	0	0	100	0-3	20
			100	0	100	0	200	0-3	20.73
			1	0	1	99	2	0-8.5	15.14
			1	0	1	0	2	0-4.5	19.05
			1	99	1	0	2	0-3	20.55
			100	0	1	99	101	0~3.5	20.19



41055	41253	QPSK	0	0	1	99	1	0	21.73
			1	0	0	0	1	0	22.11
			100	0	0	0	100	0-1	21.35
			100	0	100	0	200	0-2	21.04
			1	0	1	99	2	0-8.5	14.57
			1	0	1	0	2	0-4.5	18.54
			1	99	1	0	2	0	22.33
			100	0	1	99	101	0-3.5	19.48
		16QAM	0	0	1	99	1	0-1	21.28
			1	0	0	0	1	0-1	21.61
			100	0	0	0	100	0-2	20.32
			100	0	100	0	200	0-3	20.16
			1	0	1	99	2	0-8.5	15.02
			1	0	1	0	2	0-4.5	19.04
			1	99	1	0	2	0-1	22.3
			100	0	1	99	101	0-3.5	19.57
		64QAM	0	0	1	99	1	0-2	20.02
			1	0	0	0	1	0-2	21.32
			100	0	0	0	100	0-3	20.35
			100	0	100	0	200	0-3	20.06
			1	0	1	99	2	0-8.5	14.54
			1	0	1	0	2	0-4.5	18.53
			1	99	1	0	2	0-3	20.08
			100	0	1	99	101	0-3.5	19.59



41292	41490	QPSK	0	0	1	99	1	0	22.15
			1	0	0	0	1	0	22.22
			100	0	0	0	100	0-1	20.99
			100	0	100	0	200	0-2	21.49
			1	0	1	99	2	0-8.5	15.02
			1	0	1	0	2	0-4.5	19.11
			1	99	1	0	2	0	22.27
			100	0	1	99	101	0-3.5	19.96
		16QAM	0	0	1	99	1	0-1	21.23
			1	0	0	0	1	0-1	21.88
			100	0	0	0	100	0-2	20.77
			100	0	100	0	200	0-3	20.48
			1	0	1	99	2	0-8.5	15.23
			1	0	1	0	2	0-4.5	19.31
			1	99	1	0	2	0-1	22.18
			100	0	1	99	101	0-3.5	20.09
		64QAM	0	0	1	99	1	0-2	20
			1	0	0	0	1	0-2	20.55
			100	0	0	0	100	0-3	19.75
			100	0	100	0	200	0-3	20.03
			1	0	1	99	2	0-8.5	14.85
			1	0	1	0	2	0-4.5	18.89
			1	99	1	0	2	0-3	20.36
			100	0	1	99	101	0-3.5	20



<Smaller Aggregation Bandwidth>

CA_7C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20850	21021	QPSK	1	99	1	0	2	0	22.3
		16QAM	1	99	1	0	2	0-1	22.22
		64QAM	1	99	1	0	2	0-3	20.06
21026	21197	QPSK	1	99	1	0	2	0	22.32
		16QAM	1	99	1	0	2	0-1	22.23
		64QAM	1	99	1	0	2	0-3	19.77
21201	21372	QPSK	1	0	0	0	1	0	22.1
		16QAM	1	99	1	0	2	0-1	21.91
		64QAM	1	99	1	0	2	0-3	19.92
Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20828	20999	QPSK	1	74	1	0	2	0	22.23
		16QAM	1	74	1	0	2	0-1	22
		64QAM	1	74	1	0	2	0-3	20.12
21003	21174	QPSK	1	74	1	0	2	0	22.26
		16QAM	1	74	1	0	2	0-1	21.82
		64QAM	1	74	1	0	2	0-3	19.96
21179	21350	QPSK	1	74	1	0	2	0	22.13
		16QAM	1	74	1	0	2	0-1	21.78
		64QAM	1	74	1	0	2	0-3	19.68



Combination 20MHz+10MHz (100RB+50RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20850	20994	QPSK	1	99	1	0	2	0	22.25
		16QAM	1	99	1	0	2	0-1	21.87
		64QAM	1	99	1	0	2	0-3	20.02
21051	21195	QPSK	1	99	1	0	2	0	22.27
		16QAM	1	99	1	0	2	0-1	21.88
		64QAM	1	99	1	0	2	0-3	19.88
21251	21395	QPSK	1	0	0	0	1	0	22.25
		16QAM	1	99	1	0	2	0-1	21.92
		64QAM	1	99	1	0	2	0-3	19.93
Combination 10MHz+20MHz (50RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20805	20949	QPSK	1	49	1	0	2	0	22.13
		16QAM	1	49	1	0	2	0-1	21.75
		64QAM	1	49	1	0	2	0-3	19.76
21006	21150	QPSK	1	49	1	0	2	0	22.23
		16QAM	1	49	1	0	2	0-1	21.88
		64QAM	1	49	1	0	2	0-3	19.89
21206	21350	QPSK	1	49	0	0	2	0	22.27
		16QAM	1	49	1	0	2	0-1	21.7
		64QAM	1	49	1	0	2	0-3	19.9
Combination 15MHz+15MHz (75RB+75RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20825	20975	QPSK	1	0	0	0	1	0	22.33
		16QAM	1	0	0	0	1	0-1	22.03
		64QAM	1	0	0	0	1	0-3	20.12
21025	21175	QPSK	1	0	0	0	1	0	22.21
		16QAM	1	0	0	0	1	0-1	21.88
		64QAM	1	0	0	0	1	0-3	20.05
21225	21375	QPSK	1	0	0	0	1	0	22.19
		16QAM	1	0	0	0	1	0-1	21.89
		64QAM	1	0	0	0	1	0-3	20.11



CA_41C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39921	QPSK	1	99	0	0	1	0	22.21
		16QAM	1	99	0	0	1	0~1	22.09
		64QAM	1	99	0	0	1	0~3	20.92
40185	40356	QPSK	1	99	0	0	1	0	22.28
		16QAM	1	99	0	0	1	0~1	22.03
		64QAM	1	99	0	0	1	0~3	20.16
40620	40791	QPSK	1	99	1	0	2	0	22.31
		16QAM	1	99	0	0	1	0~1	22.23
		64QAM	1	99	0	0	1	0~3	20.93
41055	41226	QPSK	1	99	1	0	2	0	22.26
		16QAM	1	99	0	0	1	0~1	21.98
		64QAM	1	99	0	0	1	0~3	20.5
41344	41515	QPSK	1	99	1	0	2	0	22.28
		16QAM	1	99	0	0	1	0~1	22.21
		64QAM	1	99	0	0	1	0~3	21
Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39725	39896	QPSK	1	74	1	0	2	0	22.2
		16QAM	1	74	1	0	2	0~1	22.01
		64QAM	1	74	1	0	2	0~3	20.45
40173	40344	QPSK	1	74	1	0	2	0	22.13
		16QAM	1	74	1	0	2	0~1	21.83
		64QAM	1	74	1	0	2	0~3	20.18
40620	40791	QPSK	1	74	1	0	2	0	22.16
		16QAM	1	74	1	0	2	0~1	21.88
		64QAM	1	74	1	0	2	0~3	20.22
41068	41239	QPSK	1	74	1	0	2	0	21.96
		16QAM	1	74	1	0	2	0~1	21.67
		64QAM	1	74	1	0	2	0~3	20.03
41319	41490	QPSK	1	74	1	0	2	0	21.93
		16QAM	1	74	1	0	2	0~1	21.71
		64QAM	1	74	1	0	2	0~3	20.11



Combination 20MHz+10MHz (100RB+50RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39750	39894	QPSK	1	99	1	0	2	0	22.32
		16QAM	1	99	1	0	2	0~1	22.23
		64QAM	1	99	1	0	2	0~3	21.05
40185	40329	QPSK	1	99	1	0	2	0	22.26
		16QAM	1	99	1	0	2	0~1	22.18
		64QAM	1	99	1	0	2	0~3	21.03
40620	40764	QPSK	1	0	0	0	1	0	22.26
		16QAM	1	99	1	0	2	0~1	22.18
		64QAM	1	99	1	0	2	0~3	21.03
41055	41199	QPSK	1	0	0	0	1	0	22.33
		16QAM	1	99	1	0	2	0~1	22.25
		64QAM	1	99	1	0	2	0~3	21.11
41396	41540	QPSK	1	99	1	0	2	0	22.21
		16QAM	1	99	1	0	2	0~1	22.15
		64QAM	1	99	1	0	2	0~3	20.95
Combination 10MHz+20MHz (50RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39700	39844	QPSK	1	49	1	0	2	0	22.2
		16QAM	1	49	1	0	2	0~1	21.97
		64QAM	1	49	1	0	2	0~3	21.12
40160	40304	QPSK	1	49	1	0	2	0	22.16
		16QAM	1	49	1	0	2	0~1	21.92
		64QAM	1	49	1	0	2	0~3	21.03
40620	40764	QPSK	1	49	1	0	2	0	22.11
		16QAM	1	49	1	0	2	0~1	21.82
		64QAM	1	49	1	0	2	0~3	20.88
41080	41224	QPSK	1	49	1	0	2	0	22.08
		16QAM	1	49	1	0	2	0~1	21.85
		64QAM	1	49	1	0	2	0~3	20.93
41346	41490	QPSK	1	49	1	0	2	0	22.18
		16QAM	1	49	1	0	2	0~1	21.92
		64QAM	1	49	1	0	2	0~3	20.97





Combination 20MHz+5MHz (100RB+25RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39750	39867	QPSK	1	99	1	0	2	0	22.22
		16QAM	1	99	1	0	2	0~1	22.16
		64QAM	1	99	1	0	2	0~3	21.03
40185	40302	QPSK	1	99	1	0	2	0	22.32
		16QAM	1	99	1	0	2	0~1	22.22
		64QAM	1	99	1	0	2	0~3	21.15
40620	40737	QPSK	1	99	1	0	2	0	22.25
		16QAM	1	99	1	0	2	0~1	22.12
		64QAM	1	99	1	0	2	0~3	20.98
41055	41172	QPSK	1	99	1	0	2	0	22.19
		16QAM	1	99	1	0	2	0~1	22.08
		64QAM	1	99	1	0	2	0~3	21
41448	41565	QPSK	1	99	1	0	2	0	22.18
		16QAM	1	99	1	0	2	0~1	22.07
		64QAM	1	99	1	0	2	0~3	20.92
Combination 5MHz+20MHz (25RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39675	39792	QPSK	1	24	1	0	2	0	22.24
		16QAM	1	24	1	0	2	0~1	22.12
		64QAM	1	24	1	0	2	0~3	21.12
40148	40265	QPSK	1	24	1	0	2	0	22.2
		16QAM	1	24	1	0	2	0~1	22.03
		64QAM	1	24	1	0	2	0~3	20.77
40620	40737	QPSK	1	24	1	0	2	0	22.24
		16QAM	1	24	1	0	2	0~1	22.07
		64QAM	1	24	1	0	2	0~3	20.86
41093	41210	QPSK	1	24	1	0	2	0	22.22
		16QAM	1	24	1	0	2	0~1	21.99
		64QAM	1	24	1	0	2	0~3	21
41373	41490	QPSK	1	24	1	0	2	0	22.15
		16QAM	1	24	1	0	2	0~1	21.87
		64QAM	1	24	1	0	2	0~3	20.79



Combination 15MHz+15MHz (75RB+75RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39725	39875	QPSK	1	74	1	0	2	0	22.18
		16QAM	1	74	1	0	2	0~1	22.11
		64QAM	1	74	1	0	2	0~3	20.88
40173	40323	QPSK	1	74	1	0	2	0	22.27
		16QAM	1	74	1	0	2	0~1	22.08
		64QAM	1	74	1	0	2	0~3	21.01
40620	40770	QPSK	1	74	1	0	2	0	22.34
		16QAM	1	74	1	0	2	0~1	22.23
		64QAM	1	74	1	0	2	0~3	21.12
41068	41218	QPSK	1	74	1	0	2	0	22.21
		16QAM	1	74	1	0	2	0~1	22.05
		64QAM	1	74	1	0	2	0~3	21.03
41169	41319	QPSK	1	74	1	0	2	0	22.28
		16QAM	1	74	1	0	2	0~1	22.12
		64QAM	1	74	1	0	2	0~3	20.95



**<Reduced Power Level 1 for WWAN Only>**

CA_7C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)		
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	0	0	1	99	1	0	15.59		
			1	0	0	0	1	0	15.88		
			100	0	0	0	100	0~1	15.72		
			100	0	100	0	200	0~2	16.09		
			1	0	1	99	2	0~8.5	14.16		
			1	0	1	0	2	0~4.5	15.93		
			1	99	1	0	2	0	16.05		
			100	0	1	99	101	0~3.5	15.39		
		16QAM	0	0	1	99	1	0~1	15.83		
			1	0	0	0	1	0~1	16.15		
			100	0	0	0	100	0~2	15.72		
			100	0	100	0	200	0~3	16.05		
			1	0	1	99	2	0~8.5	14.67		
			1	0	1	0	2	0~4.5	16.12		
			1	99	1	0	2	0~1	16.01		
			100	0	1	99	101	0~3.5	15.28		
		64QAM	0	0	1	99	1	0~2	15.72		
			1	0	0	0	1	0~2	16.14		
			100	0	0	0	100	0~3	15.69		
			100	0	100	0	200	0~3	16.14		
			1	0	1	99	2	0~8.5	14.62		
			1	0	1	0	2	0~4.5	16.07		
			1	99	1	0	2	0~3	16.03		
			100	0	1	99	101	0~3.5	15.35		
		21001	21199	QPSK	0	0	1	99	1	0	15.52
					1	0	0	0	1	0	15.93
					100	0	0	0	100	0~1	15.93
					100	0	100	0	200	0~2	16.15
1	0				1	99	2	0~8.5	14.19		
1	0				1	0	2	0~4.5	16.12		
1	99				1	0	2	0	16.07		
100	0				1	99	101	0~3.5	15.42		
16QAM	0			0	1	99	1	0~1	15.96		
	1			0	0	0	1	0~1	16.16		
	100			0	0	0	100	0~2	15.97		
	100			0	100	0	200	0~3	16.02		



			1	0	1	99	2	0~8.5	14.6
			1	0	1	0	2	0~4.5	16.12
			1	99	1	0	2	0~1	16.12
			100	0	1	99	101	0~3.5	15.22
		64QAM	0	0	1	99	1	0~2	15.71
			1	0	0	0	1	0~2	16.1
			100	0	0	0	100	0~3	15.95
			100	0	100	0	200	0~3	16.07
			1	0	1	99	2	0~8.5	14.56
			1	0	1	0	2	0~4.5	16.12
			1	99	1	0	2	0~3	16.06
			100	0	1	99	101	0~3.5	15.36
21152	21350	QPSK	0	0	1	99	1	0	15.62
			1	0	0	0	1	0	16.01
			100	0	0	0	100	0~1	16.07
			100	0	100	0	200	0~2	16.16
			1	0	1	99	2	0~8.5	14.36
			1	0	1	0	2	0~4.5	16.12
			1	99	1	0	2	0	16.12
			100	0	1	99	101	0~3.5	15.33
		16QAM	0	0	1	99	1	0~1	15.99
			1	0	0	0	1	0~1	16.13
			100	0	0	0	100	0~2	16.03
			100	0	100	0	200	0~3	16.15
64QAM	1	0	1	99	2	0~8.5	14.67		
	1	0	1	0	2	0~4.5	16.15		
	1	99	1	0	2	0~1	16.05		
	100	0	1	99	101	0~3.5	15.39		
	0	0	1	99	1	0~2	15.94		
	1	0	0	0	1	0~2	16.02		
	100	0	0	0	100	0~3	16.07		
	100	0	100	0	200	0~3	16.07		
1	0	1	99	2	0~8.5	14.63			
1	0	1	0	2	0~4.5	16.11			
1	99	1	0	2	0~3	16			
100	0	1	99	101	0~3.5	15.64			



CA_41C									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39948	QPSK	0	0	1	99	1	0	17.88
			1	0	0	0	1	0	17.79
			100	0	0	0	100	0~1	17.8
			100	0	100	0	200	0~2	18.16
			1	0	1	99	2	0~8.5	14.66
			1	0	1	0	2	0~4.5	18.18
			1	99	1	0	2	0	18.17
			100	0	1	99	101	0~3.5	18.14
		16QAM	0	0	1	99	1	0~1	18.08
			1	0	0	0	1	0~1	18.14
			100	0	0	0	100	0~2	17.79
			100	0	100	0	200	0~3	18.34
			1	0	1	99	2	0~8.5	15.07
			1	0	1	0	2	0~4.5	18.15
			1	99	1	0	2	0~1	18.06
			100	0	1	99	101	0~3.5	18.43
		64QAM	0	0	1	99	1	0~2	17.95
			1	0	0	0	1	0~2	17.91
			100	0	0	0	100	0~3	17.67
			100	0	100	0	200	0~3	18.14
			1	0	1	99	2	0~8.5	14.76
			1	0	1	0	2	0~4.5	18.16
			1	99	1	0	2	0~3	18.13
			100	0	1	99	101	0~3.5	18.09



40185	40383	QPSK	0	0	1	99	1	0	17.42
			1	0	0	0	1	0	17.97
			100	0	0	0	100	0~1	18.01
			100	0	100	0	200	0~2	18.23
			1	0	1	99	2	0~8.5	14.72
			1	0	1	0	2	0~4.5	18.27
			1	99	1	0	2	0	18.18
			100	0	1	99	101	0~3.5	18.21
		16QAM	0	0	1	99	1	0~1	17.92
			1	0	0	0	1	0~1	18.04
			100	0	0	0	100	0~2	18.02
			100	0	100	0	200	0~3	18.28
			1	0	1	99	2	0~8.5	15.18
			1	0	1	0	2	0~4.5	18.24
			1	99	1	0	2	0~1	18.08
			100	0	1	99	101	0~3.5	18.12
		64QAM	0	0	1	99	1	0~2	17.89
			1	0	0	0	1	0~2	18.12
			100	0	0	0	100	0~3	18.02
			100	0	100	0	200	0~3	18.1
			1	0	1	99	2	0~8.5	14.69
			1	0	1	0	2	0~4.5	18.28
			1	99	1	0	2	0~3	18.04
			100	0	1	99	101	0~3.5	17.97



40620	40818	QPSK	0	0	1	99	1	0	17.69
			1	0	0	0	1	0	17.86
			100	0	0	0	100	0~1	17.81
			100	0	100	0	200	0~2	18.11
			1	0	1	99	2	0~8.5	14.75
			1	0	1	0	2	0~4.5	18.13
			1	99	1	0	2	0	18.08
			100	0	1	99	101	0~3.5	18.09
		16QAM	0	0	1	99	1	0~1	18.07
			1	0	0	0	1	0~1	18.32
			100	0	0	0	100	0~2	17.73
			100	0	100	0	200	0~3	18.45
			1	0	1	99	2	0~8.5	15.09
			1	0	1	0	2	0~4.5	18.45
			1	99	1	0	2	0~1	18.43
			100	0	1	99	101	0~3.5	18.41
		64QAM	0	0	1	99	1	0~2	17.71
			1	0	0	0	1	0~2	17.93
			100	0	0	0	100	0~3	17.66
			100	0	100	0	200	0~3	18.04
			1	0	1	99	2	0~8.5	14.74
			1	0	1	0	2	0~4.5	18.08
			1	99	1	0	2	0~3	18.16
			100	0	1	99	101	0~3.5	17.93



41055	41253	QPSK	0	0	1	99	1	0	17.3
			1	0	0	0	1	0	17.65
			100	0	0	0	100	0~1	17.8
			100	0	100	0	200	0~2	18.05
			1	0	1	99	2	0~8.5	14.45
			1	0	1	0	2	0~4.5	18.06
			1	99	1	0	2	0	18.04
			100	0	1	99	101	0~3.5	18.06
		16QAM	0	0	1	99	1	0~1	17.84
			1	0	0	0	1	0~1	18.23
			100	0	0	0	100	0~2	17.87
			100	0	100	0	200	0~3	18.07
			1	0	1	99	2	0~8.5	14.93
			1	0	1	0	2	0~4.5	18.21
			1	99	1	0	2	0~1	18.18
			100	0	1	99	101	0~3.5	18.07
		64QAM	0	0	1	99	1	0~2	17.55
			1	0	0	0	1	0~2	17.93
			100	0	0	0	100	0~3	17.81
			100	0	100	0	200	0~3	18.18
			1	0	1	99	2	0~8.5	14.66
			1	0	1	0	2	0~4.5	18.18
			1	99	1	0	2	0~3	18.17
			100	0	1	99	101	0~3.5	18





41292	41490	QPSK	0	0	1	99	1	0	17.02
			1	0	0	0	1	0	17.61
			100	0	0	0	100	0~1	17.67
			100	0	100	0	200	0~2	18.07
			1	0	1	99	2	0~8.5	14.36
			1	0	1	0	2	0~4.5	18.08
			1	99	1	0	2	0	18
			100	0	1	99	101	0~3.5	18.06
		16QAM	0	0	1	99	1	0~1	17.58
			1	0	0	0	1	0~1	18.18
			100	0	0	0	100	0~2	17.69
			100	0	100	0	200	0~3	18.38
			1	0	1	99	2	0~8.5	14.85
			1	0	1	0	2	0~4.5	18.49
			1	99	1	0	2	0~1	18.35
			100	0	1	99	101	0~3.5	18.41
		64QAM	0	0	1	99	1	0~2	17.13
			1	0	0	0	1	0~2	17.77
			100	0	0	0	100	0~3	17.66
			100	0	100	0	200	0~3	18.05
			1	0	1	99	2	0~8.5	14.41
			1	0	1	0	2	0~4.5	18.04
			1	99	1	0	2	0~3	18.02
			100	0	1	99	101	0~3.5	17.88



<Smaller Aggregation Bandwidth>

CA_7C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20850	21021	QPSK	1	99	1	0	2	0	16.07
		16QAM	1	99	1	0	2	0~1	16.05
		64QAM	1	99	1	0	2	0~3	16.07
21026	21197	QPSK	1	99	1	0	2	0	16.14
		16QAM	1	99	1	0	2	0~1	16.13
		64QAM	1	99	1	0	2	0~3	16.05
21201	21372	QPSK	1	0	0	0	1	0	16.15
		16QAM	1	99	1	0	2	0~1	16.11
		64QAM	1	99	1	0	2	0~3	16.08
Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
20828	20999	QPSK	1	74	1	0	2	0	16.09
		16QAM	1	74	1	0	2	0~1	16.12
		64QAM	1	74	1	0	2	0~3	16.03
21003	21174	QPSK	1	74	1	0	2	0	16.08
		16QAM	1	74	1	0	2	0~1	16.11
		64QAM	1	74	1	0	2	0~3	16.03
21179	21350	QPSK	1	74	1	0	2	0	16.13
		16QAM	1	74	1	0	2	0~1	16.05
		64QAM	1	74	1	0	2	0~3	16.06



Combination 20MHz+10MHz (100RB+50RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20850	20994	QPSK	1	99	1	0	2	0	16.14
		16QAM	1	99	1	0	2	0~1	16.11
		64QAM	1	99	1	0	2	0~3	16.08
21051	21195	QPSK	1	99	1	0	2	0	16.16
		16QAM	1	99	1	0	2	0~1	16.13
		64QAM	1	99	1	0	2	0~3	16.07
21251	21395	QPSK	1	0	0	0	1	0	16.15
		16QAM	1	99	1	0	2	0~1	16.1
		64QAM	1	99	1	0	2	0~3	16.12
Combination 10MHz+20MHz (50RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20805	20949	QPSK	1	49	1	0	2	0	16.16
		16QAM	1	49	1	0	2	0~1	16.11
		64QAM	1	49	1	0	2	0~3	16.14
21006	21150	QPSK	1	49	1	0	2	0	16.1
		16QAM	1	49	1	0	2	0~1	16.07
		64QAM	1	49	1	0	2	0~3	15.97
21206	21350	QPSK	1	49	0	0	2	0	16.13
		16QAM	1	49	1	0	2	0~1	16.13
		64QAM	1	49	1	0	2	0~3	16.08
Combination 15MHz+15MHz (75RB+75RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
20825	20975	QPSK	1	0	0	0	1	0	16.12
		16QAM	1	0	0	0	1	0~1	16.12
		64QAM	1	0	0	0	1	0~3	16.08
21025	21175	QPSK	1	0	0	0	1	0	16.16
		16QAM	1	0	0	0	1	0~1	16.12
		64QAM	1	0	0	0	1	0~3	16.08
21225	21375	QPSK	1	0	0	0	1	0	16.13
		16QAM	1	0	0	0	1	0~1	16.09
		64QAM	1	0	0	0	1	0~3	15.89



CA_41C									
Combination 20MHz+15MHz (100RB+75RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39750	39921	QPSK	1	99	0	0	1	0	18.16
		16QAM	1	99	0	0	1	0~1	18.32
		64QAM	1	99	0	0	1	0~3	18.15
40185	40356	QPSK	1	99	0	0	1	0	18.14
		16QAM	1	99	0	0	1	0~1	18.23
		64QAM	1	99	0	0	1	0~3	18.08
40620	40791	QPSK	1	99	1	0	2	0	18.16
		16QAM	1	99	0	0	1	0~1	18.27
		64QAM	1	99	0	0	1	0~3	18.11
41055	41226	QPSK	1	99	1	0	2	0	18.12
		16QAM	1	99	0	0	1	0~1	18.23
		64QAM	1	99	0	0	1	0~3	18.03
41344	41515	QPSK	1	99	1	0	2	0	18.09
		16QAM	1	99	0	0	1	0~1	18.32
		64QAM	1	99	0	0	1	0~3	18.05
Combination 15MHz+20MHz (75RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset			
39725	39896	QPSK	1	74	1	0	2	0	18.07
		16QAM	1	74	1	0	2	0~1	18.3
		64QAM	1	74	1	0	2	0~3	18.11
40173	40344	QPSK	1	74	1	0	2	0	18.11
		16QAM	1	74	1	0	2	0~1	18.25
		64QAM	1	74	1	0	2	0~3	18.15
40620	40791	QPSK	1	74	1	0	2	0	18.21
		16QAM	1	74	1	0	2	0~1	18.28
		64QAM	1	74	1	0	2	0~3	18.09
41068	41239	QPSK	1	74	1	0	2	0	18.1
		16QAM	1	74	1	0	2	0~1	18.21
		64QAM	1	74	1	0	2	0~3	18.06
41319	41490	QPSK	1	74	1	0	2	0	17.92
		16QAM	1	74	1	0	2	0~1	18.11
		64QAM	1	74	1	0	2	0~3	17.88



Combination 20MHz+10MHz (100RB+50RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39750	39894	QPSK	1	99	1	0	2	0	18.14
		16QAM	1	99	1	0	2	0~1	18.34
		64QAM	1	99	1	0	2	0~3	18.08
40185	40329	QPSK	1	99	1	0	2	0	18.16
		16QAM	1	99	1	0	2	0~1	18.3
		64QAM	1	99	1	0	2	0~3	18.11
40620	40764	QPSK	1	0	0	0	1	0	18.14
		16QAM	1	99	1	0	2	0~1	18.27
		64QAM	1	99	1	0	2	0~3	18.1
41055	41199	QPSK	1	0	0	0	1	0	18.12
		16QAM	1	99	1	0	2	0~1	18.32
		64QAM	1	99	1	0	2	0~3	18.1
41396	41540	QPSK	1	99	1	0	2	0	18.12
		16QAM	1	99	1	0	2	0~1	18.31
		64QAM	1	99	1	0	2	0~3	18.04
Combination 10MHz+20MHz (50RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39700	39844	QPSK	1	49	1	0	2	0	18.17
		16QAM	1	49	1	0	2	0~1	18.22
		64QAM	1	49	1	0	2	0~3	18.08
40160	40304	QPSK	1	49	1	0	2	0	18.18
		16QAM	1	49	1	0	2	0~1	18.18
		64QAM	1	49	1	0	2	0~3	18.1
40620	40764	QPSK	1	49	1	0	2	0	18.07
		16QAM	1	49	1	0	2	0~1	18.22
		64QAM	1	49	1	0	2	0~3	18.03
41080	41224	QPSK	1	49	1	0	2	0	18.15
		16QAM	1	49	1	0	2	0~1	18.32
		64QAM	1	49	1	0	2	0~3	18.11
41346	41490	QPSK	1	49	1	0	2	0	18.11
		16QAM	1	49	1	0	2	0~1	18.29
		64QAM	1	49	1	0	2	0~3	18.05



Combination 20MHz+5MHz (100RB+25RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39750	39867	QPSK	1	99	1	0	2	0	18.1
		16QAM	1	99	1	0	2	0~1	18.26
		64QAM	1	99	1	0	2	0~3	18.08
40185	40302	QPSK	1	99	1	0	2	0	18.08
		16QAM	1	99	1	0	2	0~1	18.28
		64QAM	1	99	1	0	2	0~3	18.06
40620	40737	QPSK	1	99	1	0	2	0	18.09
		16QAM	1	99	1	0	2	0~1	18.22
		64QAM	1	99	1	0	2	0~3	18.09
41055	41172	QPSK	1	99	1	0	2	0	18.13
		16QAM	1	99	1	0	2	0~1	18.3
		64QAM	1	99	1	0	2	0~3	18.11
41448	41565	QPSK	1	99	1	0	2	0	18.16
		16QAM	1	99	1	0	2	0~1	18.23
		64QAM	1	99	1	0	2	0~3	18.09
Combination 5MHz+20MHz (25RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39675	39792	QPSK	1	24	1	0	2	0	18.12
		16QAM	1	24	1	0	2	0~1	18.21
		64QAM	1	24	1	0	2	0~3	18.03
40148	40265	QPSK	1	24	1	0	2	0	18.15
		16QAM	1	24	1	0	2	0~1	18.25
		64QAM	1	24	1	0	2	0~3	18.07
40620	40737	QPSK	1	24	1	0	2	0	18.09
		16QAM	1	24	1	0	2	0~1	18.22
		64QAM	1	24	1	0	2	0~3	18.08
41093	41210	QPSK	1	24	1	0	2	0	18.13
		16QAM	1	24	1	0	2	0~1	18.26
		64QAM	1	24	1	0	2	0~3	18.04
41373	41490	QPSK	1	24	1	0	2	0	18.12
		16QAM	1	24	1	0	2	0~1	18.22
		64QAM	1	24	1	0	2	0~3	18.05



Combination 15MHz+15MHz (75RB+75RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Allowed MPR Level (dB)	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset			
39725	39875	QPSK	1	74	1	0	2	0	18.11
		16QAM	1	74	1	0	2	0~1	18.27
		64QAM	1	74	1	0	2	0~3	18.04
40173	40323	QPSK	1	74	1	0	2	0	18.16
		16QAM	1	74	1	0	2	0~1	18.3
		64QAM	1	74	1	0	2	0~3	18.09
40620	40770	QPSK	1	74	1	0	2	0	18.07
		16QAM	1	74	1	0	2	0~1	18.22
		64QAM	1	74	1	0	2	0~3	18.07
41068	41218	QPSK	1	74	1	0	2	0	18.15
		16QAM	1	74	1	0	2	0~1	18.28
		64QAM	1	74	1	0	2	0~3	18.09
41169	41319	QPSK	1	74	1	0	2	0	17.98
		16QAM	1	74	1	0	2	0~1	18.24
		64QAM	1	74	1	0	2	0~3	17.97

Remark : LTE Uplink CA CA\_7C and CA\_41C: reduced power level 2 is the same as the reduced power level 1 configuration.



**<WLAN Conducted Power>**

**General 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 power.
3. 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.
4. 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).
5. 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.
6. 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  $\leq 0.4$  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  $\leq 0.8$  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  $\leq 1.2$  W/kg or all required channels are tested.





<Full Power>

<2.4GHz WLAN Ant.1>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN Ant.1	802.11b 1Mbps	1	2412	18.47	18.50	98.96
		6	2437	18.06	18.50	
		11	2462	17.44	18.50	
	802.11g 6Mbps	1	2412	17.03	17.50	94.68
		6	2437	16.46	16.50	
		11	2462	16.06	16.50	
	802.11n-HT20 MCS0	1	2412	17.86	18.00	94.33
		6	2437	17.37	17.50	
		11	2462	16.60	17.00	
	802.11n-HT40 MCS0	3	2422	17.42	17.50	90.12
		6	2437	16.99	17.00	
		9	2452	16.88	17.00	
	802.11ac-VHT20 MCS0	1	2412	17.83	18.00	93.99
		6	2437	17.30	17.50	
		11	2462	16.56	17.00	
	802.11ac-VHT40 MCS0	3	2422	17.41	17.50	89.02
		6	2437	16.97	17.00	
		9	2452	16.85	17.00	



<2.4GHz WLAN Ant.2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN Ant.2	802.11b 1Mbps	1	2412	15.72	16.00	99.31
		6	2437	15.68	16.00	
		11	2462	15.60	16.00	
	802.11g 6Mbps	1	2412	14.22	14.50	94.68
		6	2437	14.09	14.50	
		11	2462	13.62	14.00	
	802.11n-HT20 MCS0	1	2412	14.06	14.50	94.37
		6	2437	13.92	14.00	
		11	2462	13.40	13.50	
	802.11n-HT40 MCS0	3	2422	14.96	15.00	88.99
		6	2437	14.47	14.50	
		9	2452	13.41	13.50	
	802.11ac-VHT20 MCS0	1	2412	14.05	14.50	94.35
		6	2437	13.89	14.00	
		11	2462	13.39	13.50	
	802.11ac-VHT40 MCS0	3	2422	14.91	15.00	89.75
		6	2437	14.44	14.50	
		9	2452	13.37	13.50	



<2.4GHz WLAN ANT.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN Ant. 1+2	802.11b 1Mbps	1	2412	18.14	18.50	98.96
		6	2437	18.10	18.50	
		11	2462	17.57	18.50	
	802.11g 6Mbps	1	2412	17.63	18.00	94.68
		6	2437	17.42	18.00	
		11	2462	17.03	18.00	
	802.11n-HT20 MCS0	1	2412	17.49	18.00	94.31
		6	2437	17.33	18.00	
		11	2462	16.82	18.00	
	802.11n-HT40 MCS0	3	2422	12.22	12.50	89.71
		6	2437	16.08	16.50	
		9	2452	13.63	14.00	
	802.11ac-VHT20 MCS0	1	2412	17.43	18.00	90.51
		6	2437	17.27	18.00	
		11	2462	16.78	18.00	
	802.11ac-VHT40 MCS0	3	2422	12.17	12.50	81.90
		6	2437	16.00	16.50	
		9	2452	13.60	14.00	



<5GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN Ant. 1+2	802.11a 6Mbps	36	5180	18.19	18.50	94.88
		40	5200	18.16	18.50	
		44	5220	18.31	18.50	
		48	5240	18.30	18.50	
	802.11n-HT20 MCS0	36	5180	18.12	18.50	94.66
		40	5200	18.03	18.50	
		44	5220	18.18	18.50	
		48	5240	18.20	18.50	
	802.11n-HT40 MCS0	38	5190	18.16	18.40	89.74
		46	5230	18.16	18.40	
	802.11ac-VHT20 MCS0	36	5180	18.03	18.50	94.89
		40	5200	18.04	18.50	
		44	5220	18.11	18.50	
		48	5240	18.14	18.50	
	802.11ac-VHT40 MCS0	38	5190	17.87	18.00	90.12
		46	5230	17.92	18.00	
802.11ac-VHT80 MCS0	42	5210	17.15	17.50	82.10	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN Ant. 1+2	802.11a 6Mbps	52	5260	18.15	18.50	94.88
		56	5280	18.07	18.50	
		60	5300	17.95	18.50	
		64	5320	17.88	18.50	
	802.11n-HT20 MCS0	52	5260	18.05	18.50	94.66
		56	5280	17.92	18.50	
		60	5300	17.94	18.50	
		64	5320	17.91	18.50	
	802.11n-HT40 MCS0	54	5270	18.14	18.40	89.74
		62	5310	17.85	18.00	
	802.11ac-VHT20 MCS0	52	5260	17.98	18.50	94.89
		56	5280	17.94	18.50	
		60	5300	17.78	18.00	
		64	5320	17.76	18.00	
	802.11ac-VHT40 MCS0	54	5270	17.85	18.00	90.12
		62	5310	17.61	18.00	
802.11ac-VHT80 MCS0	58	5290	16.96	17.50	82.10	



	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN Ant.1+2	802.11a 6Mbps	100	5500	18.19	18.50	94.88
		116	5580	18.00	18.50	
		124	5620	17.88	18.00	
		132	5660	18.12	18.50	
		140	5700	17.94	18.00	
	802.11n-HT20 MCS0	100	5500	18.13	18.50	94.66
		116	5580	17.90	18.50	
		124	5620	17.71	18.00	
		132	5660	18.04	18.50	
		140	5700	17.91	18.50	
	802.11n-HT40 MCS0	102	5510	18.15	18.40	89.74
		110	5550	18.16	18.40	
		126	5630	17.88	18.00	
		134	5670	17.86	18.00	
	802.11ac-VHT20 MCS0	100	5500	18.10	18.50	94.89
		116	5580	17.87	18.50	
		124	5620	17.72	18.00	
		132	5660	17.94	18.50	
		140	5700	17.88	18.50	
	802.11ac-VHT40 MCS0	102	5510	17.89	18.00	90.12
		110	5550	17.92	18.00	
		126	5630	17.61	18.00	
		134	5670	17.62	18.00	
	802.11ac-VHT80 MCS0	106	5530	17.26	17.50	82.10
122		5610	16.81	17.50		



	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN Ant. 1+2	802.11a 6Mbps	149	5745	18.17	18.50	94.88
		157	5785	18.40	18.50	
		165	5825	18.36	18.50	
	802.11n-HT20 MCS0	149	5745	18.09	18.50	94.66
		157	5785	18.32	18.50	
		165	5825	18.26	18.50	
	802.11n-HT40 MCS0	151	5755	18.08	18.40	89.74
		159	5795	18.24	18.40	
	802.11ac-VHT20 MCS0	149	5745	18.04	18.50	94.89
		157	5785	18.23	18.50	
		165	5825	18.14	18.50	
	802.11ac-VHT40 MCS0	151	5755	17.81	18.00	90.12
		159	5795	17.98	18.00	
	802.11ac-VHT80 MCS0	155	5775	17.13	17.50	82.10

**<Reduced Power>**

**<2.4GHz WLAN Ant.1>**

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN Ant. 1	802.11b 1Mbps	1	2412	15.18	15.50	98.96
		6	2437	14.67	15.00	
		11	2462	14.81	15.00	
	802.11g 6Mbps	1	2412	14.92	15.20	94.68
		6	2437	15.12	15.20	
		11	2462	15.10	15.20	
	802.11n-HT20 MCS0	1	2412	15.06	15.20	94.33
		6	2437	14.61	15.20	
		11	2462	14.45	15.20	
	802.11n-HT40 MCS0	3	2422	14.98	15.20	93.99
		6	2437	14.59	15.20	
		9	2452	14.44	15.20	
	802.11ac-VHT20 MCS0	1	2412	15.05	15.20	90.12
		6	2437	14.76	15.20	
		11	2462	14.73	15.20	
	802.11ac-VHT40 MCS0	3	2422	15.08	15.20	89.02
		6	2437	14.80	15.20	
		9	2452	14.76	15.20	





<5GHz WLAN Ant.1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN Ant.1+2	802.11a 6Mbps	36	5180	14.26	14.50	94.88
		40	5200	14.96	15.00	
		44	5220	14.41	14.50	
		48	5240	14.53	15.00	
	802.11n-HT20 MCS0	36	5180	14.14	14.50	94.66
		40	5200	14.33	14.50	
		44	5220	14.05	14.50	
		48	5240	14.21	14.50	
	802.11n-HT40 MCS0	38	5190	14.62	14.90	89.74
		46	5230	14.85	14.90	
	802.11ac-VHT20 MCS0	36	5180	13.85	14.00	94.89
		40	5200	14.11	14.50	
		44	5220	13.97	14.50	
		48	5240	14.16	14.50	
	802.11ac-VHT40 MCS0	38	5190	14.42	14.50	90.12
		46	5230	14.62	14.90	
802.11ac-VHT80 MCS0	42	5210	14.19	14.50	82.10	



	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN Ant.1+2	802.11a 6Mbps	52	5260	14.34	14.50	94.88
		56	5280	14.85	15.00	
		60	5300	14.41	14.50	
		64	5320	14.43	14.50	
	802.11n-HT20 MCS0	52	5260	14.19	14.50	94.66
		56	5280	14.21	14.50	
		60	5300	13.76	14.00	
		64	5320	13.78	14.00	
	802.11n-HT40 MCS0	54	5270	14.75	14.90	89.74
		62	5310	14.39	14.50	
	802.11ac-VHT20 MCS0	52	5260	14.04	14.50	94.89
		56	5280	14.12	14.50	
		60	5300	13.68	14.00	
		64	5320	13.71	14.00	
	802.11ac-VHT40 MCS0	54	5270	14.59	14.90	90.12
		62	5310	14.16	14.50	
802.11ac-VHT80 MCS0	58	5290	13.95	14.50	82.10	



	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN Ant. 1+2	802.11a 6Mbps	100	5500	13.87	14.00	94.88
		116	5580	12.00	12.50	
		124	5620	14.63	15.00	
		132	5660	14.93	15.50	
		140	5700	12.00	12.50	
	802.11n-HT20 MCS0	100	5500	13.96	14.50	94.66
		116	5580	13.64	14.00	
		124	5620	14.13	14.50	
		132	5660	14.16	14.50	
		140	5700	13.47	14.00	
	802.11n-HT40 MCS0	102	5510	14.45	14.50	89.74
		110	5550	14.84	15.00	
		126	5630	14.77	15.00	
		134	5670	14.38	14.50	
	802.11ac-VHT20 MCS0	100	5500	13.53	14.00	94.89
		116	5580	13.54	14.00	
		124	5620	14.11	14.50	
		132	5660	14.15	14.50	
		140	5700	13.27	13.50	
	802.11ac-VHT40 MCS0	102	5510	14.26	14.50	90.12
		110	5550	14.65	15.00	
		126	5630	14.66	15.00	
		134	5670	14.20	14.50	
	802.11ac-VHT80 MCS0	106	5530	14.31	14.50	82.10
122		5610	13.93	14.50		

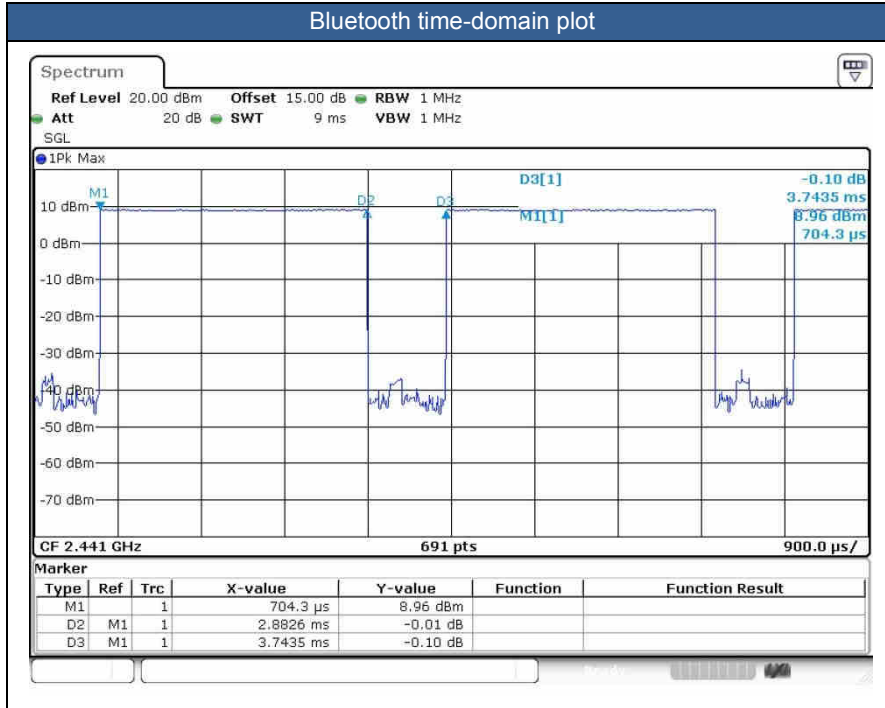


	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN Ant. 1+2	802.11a 6Mbps	149	5745	15.20	15.50	94.88
		157	5785	14.86	15.00	
		165	5825	15.47	16.00	
	802.11n-HT20 MCS0	149	5745	15.04	15.50	94.66
		157	5785	14.77	15.00	
		165	5825	15.25	15.50	
	802.11n-HT40 MCS0	151	5755	15.39	15.50	89.74
		159	5795	15.39	15.50	
	802.11ac-VHT20 MCS0	149	5745	14.98	15.50	94.89
		157	5785	14.64	15.00	
		165	5825	15.08	15.50	
	802.11ac-VHT40 MCS0	151	5755	15.43	15.50	90.12
		159	5795	15.13	15.50	
	802.11ac-VHT80 MCS0	155	5775	14.93	15.50	82.10

<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 77.00 % 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.



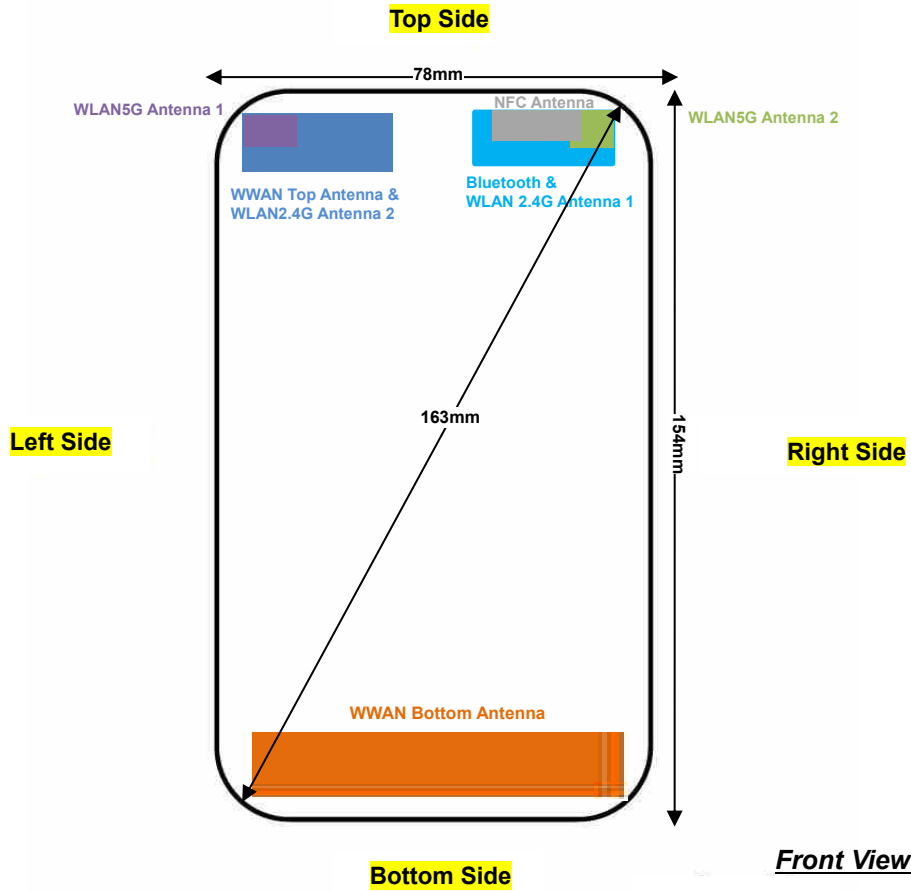


Mode	Channel	Frequency (MHz)	Average power (dBm)
			1Mbps
v3.0 with EDR	CH 00	2402	10.38
	CH 39	2441	10.18
	CH 78	2480	9.89
Tune-up limit (dBm)			11.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v4.0/4.1/4.2 with LE	CH 00	2402	0.69
	CH 19	2440	-0.06
	CH 39	2480	0.15
Tune-up limit (dBm)			1.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v5.0with LE	CH 00	2402	0.57
	CH 19	2440	-0.56
	CH 39	2480	-0.65
Tune-up limit (dBm)			1.00

### 13. Antenna Location



Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Top Antenna & WLAN 2.4G Antenna 2	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
WWAN Bottom Antenna	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
Bluetooth & WLAN2.4G Antenna 1	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WLAN 5G Antenna 1	≤ 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 Top Antenna & WLAN 2.4G Antenna 2	Yes	Yes	Yes	No	No	Yes
WWAN Bottom Antenna	Yes	Yes	No	Yes	Yes	Yes
Bluetooth & WLAN2.4G Antenna 1	Yes	Yes	Yes	No	Yes	No
WLAN 5G Antenna 1	Yes	Yes	Yes	No	Yes	No
WLAN 5G Antenna 2	Yes	Yes	Yes	No	No	Yes

**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.
- WLAN 5GHz can transmit in MIMO antenna mode only, and it has no SISO antenna mode. So the positions for WLAN 5GHz MIMO hotspot mode SAR tests is equal to WLAN 5G antenna 1 plus WLAN 5G antenna 2.



## **14. SAR Test Results**

### **General Note:**

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
  - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
  - d. For 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:
  - $\leq 0.8$  W/kg or  $2.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  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
  - $\leq 0.4$  W/kg or  $1.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is  $\leq 1.2$  W/kg, SAR testing with a headset connected to the handset is not required.
5. This device has two antennas. The primary cellular antenna is located on the bottom edge of the device and the secondary cellular antenna is located on the top edge of the device.
6. The device is capable of switching between the top antenna and bottom antenna based on signal strength.
7. For WLAN transmitter  
Head exposure conditions:  
Power reduction for WLAN 2.4GHz Ant.1, WLAN 5GHz MIMO mode: While the device WLAN is transmitting simultaneously with the WWAN Top antenna, and the audio is actively routed through the earpiece receiver, and the proximity sensor is triggered which indicating the next-to-head condition and the LCD display is off
8. For WWAN transmitter (3 sets of power reduction levels).
  - a) Head exposure conditions:  
Reduced power level 1 – GSM 850/1900, WCDMA Band 2/4/5, CDMA BC0, LTE Band 2/4/5/7/12/17/25/26/30/38/41/66, LTE Uplink CA CA\_7C and CA\_41C. While the device WWAN is transmitting at the WWAN Top antenna, and the audio is actively routed through the earpiece receiver, and the proximity sensor is triggered which indicating the next-to-head condition and the LCD display is off, power reduction enabled for those bands.  
  
Reduced power level 2 – GSM 850/1900, WCDMA Band 2/4/5, CDMA BC0, LTE Band 2/4/5/7/12/17/25/26/30/38/41/66, LTE Uplink CA CA\_7C and CA\_41C.  
While the device WLAN is transmitting simultaneously with the WWAN Top antenna, and the audio is actively routed through the earpiece receiver, and the proximity sensor is triggered which indicating the next-to-head condition and the LCD display is off, power reduction enabled for those bands.  
GSM1900, LTE B7/26/38/41, LTE Uplink CA CA\_7C and CA\_41C: reduced power level 2 is the same as the reduced power level 1 configuration.
  - b) Hotspot exposure condition  
Reduced power level 3 – GSM 1900, WCDMA Band 2/4, LTE Band 2/4/25/66  
While the device WWAN is transmitting at the WWAN Bottom antenna, and hotspot mode is enabled, power reduction enabled for those bands
9. 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. When hotspot is not worked, GSM1900, WCDMA Band II/IV, LTE Band 4/25/66 product specific 10g SAR is required.
  - 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. Therefore, the GPRS (3Tx slots) for GSM850/GSM1900 is considered as the primary mode.
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  $\leq 1/4$  dB higher than the primary mode, SAR measurement is not required for the secondary mode.
3. GSM900/GSM1800 GPRS (3Tx slots) is selected to be tested when EUT operating without power back-off and with power back-off due to its highest frame-average power.
4. Power reduction which is triggered by hotspot mode is implemented in GSM1900 band, for hotspot mode SAR testing EUT was set in reduced mode and GPRS (3Tx slots) due to its highest frame-average power.

**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  $\leq 1/4$  dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA / HSPA+ to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  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  $1/4$  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  $\leq 0.8$  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  $1/2$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  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  $1/2$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 17 / 2 SAR test was covered by Band 12 / 25; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - c. the maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion
  - a. 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  $\leq 1.2$  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  $\leq 1.2$  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  $\leq 0.8$  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  $\leq 1.2$  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.	Band	Mode	Test Position	Antenna	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)
	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	251	848.8	26.55	27	1.109	0.01	0.977	1.084
	GSM850	GPRS (3 Tx slots)	Right Tilted	Top	Reduced Level 1	251	848.8	26.55	27	1.109	0.05	0.715	0.793
	GSM850	GPRS (3 Tx slots)	Left Cheek	Top	Reduced Level 1	251	848.8	26.55	27	1.109	0.09	0.711	0.789
	GSM850	GPRS (3 Tx slots)	Left Tilted	Top	Reduced Level 1	251	848.8	26.55	27	1.109	-0.05	0.615	0.682
	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	128	824.2	26.45	27	1.135	-0.01	1.040	1.180
#01	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	189	836.4	26.52	27	1.117	0.13	1.090	1.217
	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 2	251	848.8	25.95	26.5	1.135	0.09	0.855	0.970
	GSM850	GPRS (3 Tx slots)	Right Tilted	Top	Reduced Level 2	251	848.8	25.95	26.5	1.135	0.11	0.654	0.742
	GSM850	GPRS (3 Tx slots)	Left Cheek	Top	Reduced Level 2	251	848.8	25.95	26.5	1.135	-0.08	0.605	0.687
	GSM850	GPRS (3 Tx slots)	Left Tilted	Top	Reduced Level 2	251	848.8	25.95	26.5	1.135	0.06	0.579	0.657
	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 2	128	824.2	25.81	26.5	1.172	-0.07	0.921	1.080
	GSM850	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 2	189	836.4	25.93	26.5	1.140	0.16	0.968	1.104
	GSM850	GPRS (3 Tx slots)	Right Cheek	Bottom	Full	251	848.8	29.94	30.5	1.138	0.01	0.185	0.210
	GSM850	GPRS (3 Tx slots)	Right Tilted	Bottom	Full	251	848.8	29.94	30.5	1.138	0.04	0.158	0.180
	GSM850	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	251	848.8	29.94	30.5	1.138	0.04	0.263	0.299
	GSM850	GPRS (3 Tx slots)	Left Tilted	Bottom	Full	251	848.8	29.94	30.5	1.138	-0.08	0.148	0.168
	GSM850	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	128	824.2	29.81	30.5	1.172	-0.15	0.168	0.197
	GSM850	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	189	836.4	29.83	30.5	1.167	-0.19	0.196	0.229
	GSM1900	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	810	1909.8	23.38	23.5	1.028	0.17	0.948	0.975
	GSM1900	GPRS (3 Tx slots)	Right Tilted	Top	Reduced Level 1	810	1909.8	23.38	23.5	1.028	-0.18	0.756	0.777
	GSM1900	GPRS (3 Tx slots)	Left Cheek	Top	Reduced Level 1	810	1909.8	23.38	23.5	1.028	-0.11	0.356	0.366
	GSM1900	GPRS (3 Tx slots)	Left Tilted	Top	Reduced Level 1	810	1909.8	23.38	23.5	1.028	0.06	0.391	0.402
	GSM1900	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	512	1850.2	23.32	23.5	1.042	0.08	0.944	0.984
#02	GSM1900	GPRS (3 Tx slots)	Right Cheek	Top	Reduced Level 1	661	1880	23.35	23.5	1.035	0.06	1.070	1.108
	GSM1900	GPRS (3 Tx slots)	Right Cheek	Bottom	Full	810	1909.8	26.42	27	1.143	0.03	0.080	0.091
	GSM1900	GPRS (3 Tx slots)	Right Tilted	Bottom	Full	810	1909.8	26.42	27	1.143	0.01	0.052	0.059
	GSM1900	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	810	1909.8	26.42	27	1.143	0.05	0.109	0.125
	GSM1900	GPRS (3 Tx slots)	Left Tilted	Bottom	Full	810	1909.8	26.42	27	1.143	-0.16	0.034	0.039
	GSM1900	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	512	1850.2	26.32	27	1.169	0.13	0.108	0.126
	GSM1900	GPRS (3 Tx slots)	Left Cheek	Bottom	Full	661	1880	26.35	27	1.161	-0.09	0.114	0.132



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Antenna	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)
#03	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	4182	836.4	21.82	22	1.042	0.12	1.100	1.147
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 1	4182	836.4	21.82	22	1.042	-0.09	0.989	1.031
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 1	4182	836.4	21.82	22	1.042	-0.03	0.705	0.735
	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 1	4182	836.4	21.82	22	1.042	0.02	0.665	0.693
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	4132	826.4	21.78	22	1.052	0.11	1.020	1.073
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	4233	846.6	21.73	22	1.064	0.18	0.994	1.058
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 1	4132	826.4	21.78	22	1.052	0.01	0.998	1.050
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 1	4233	846.6	21.73	22	1.064	0.05	0.898	0.956
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	4182	836.4	20.26	20.5	1.057	0.14	1.010	1.067
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 2	4182	836.4	20.26	20.5	1.057	-0.01	0.748	0.790
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 2	4182	836.4	20.26	20.5	1.057	-0.19	0.680	0.719
	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 2	4182	836.4	20.26	20.5	1.057	0.15	0.652	0.689
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	4132	826.4	20.14	20.5	1.086	0.03	0.948	1.030
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	4233	846.6	20.21	20.5	1.069	0.18	0.925	0.989
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.01	0.172	0.185
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.08	0.117	0.126
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Bottom	Full	4182	836.4	23.19	23.5	1.074	-0.08	0.212	0.228
	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.09	0.126	0.135
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Bottom	Full	4132	826.4	23.14	23.5	1.086	-0.1	0.199	0.216
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Bottom	Full	4233	846.6	23.12	23.5	1.091	0.03	0.241	0.263



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	1513	1752.6	19.9	20.5	1.148	0.1	0.988	1.134
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 1	1513	1752.6	19.9	20.5	1.148	0.06	0.627	0.720
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 1	1513	1752.6	19.9	20.5	1.148	0.01	0.403	0.463
	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 1	1513	1752.6	19.9	20.5	1.148	-0.16	0.451	0.518
#04	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	1312	1712.4	19.87	20.5	1.156	0.13	0.982	1.135
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	1413	1732.6	19.62	20.5	1.225	0.04	0.875	1.072
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	1513	1752.6	19.29	19.5	1.050	0.09	0.882	0.926
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 2	1513	1752.6	19.29	19.5	1.050	0.04	0.649	0.681
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 2	1513	1752.6	19.29	19.5	1.050	-0.04	0.350	0.367
	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 2	1513	1752.6	19.29	19.5	1.050	0.06	0.336	0.353
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	1312	1712.4	19.22	19.5	1.067	0.07	0.870	0.928
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	1413	1732.6	19.00	19.5	1.122	0.11	0.837	0.939
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.02	0.086	0.092
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.08	0.040	0.042
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.09	0.121	0.128
	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Bottom	Full	1513	1752.6	22.24	22.5	1.062	-0.15	0.039	0.042
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Bottom	Full	1312	1712.4	22.22	22.5	1.067	0.01	0.116	0.124
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Bottom	Full	1413	1732.6	22.19	22.5	1.074	0.03	0.125	0.134
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	9538	1907.6	18.43	19	1.140	0.11	0.851	0.970
	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 1	9538	1907.6	18.43	19	1.140	0.12	0.672	0.766
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 1	9538	1907.6	18.43	19	1.140	0.01	0.282	0.322
	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 1	9538	1907.6	18.43	19	1.140	-0.05	0.315	0.359
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	9262	1852.4	18.34	19	1.164	-0.09	0.907	1.056
#05	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 1	9400	1880	18.27	19	1.183	0.01	0.978	1.157
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	9538	1907.6	18.19	18.5	1.074	0.04	0.893	0.959
	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Top	Reduced Level 2	9538	1907.6	18.19	18.5	1.074	0.02	0.643	0.691
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Top	Reduced Level 2	9538	1907.6	18.19	18.5	1.074	-0.03	0.315	0.338
	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Top	Reduced Level 2	9538	1907.6	18.19	18.5	1.074	-0.01	0.294	0.316
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	9262	1852.4	18.17	18.5	1.079	-0.15	0.884	0.954
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Top	Reduced Level 2	9400	1880	18.13	18.5	1.089	0.04	0.976	1.063
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Bottom	Full	9538	1907.6	22.03	22.5	1.114	0.09	0.083	0.092
	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Bottom	Full	9538	1907.6	22.03	22.5	1.114	0.04	0.057	0.063
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Bottom	Full	9538	1907.6	22.03	22.5	1.114	-0.14	0.109	0.121
	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Bottom	Full	9538	1907.6	22.03	22.5	1.114	0.14	0.039	0.044
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Bottom	Full	9262	1852.4	21.94	22.5	1.138	-0.04	0.114	0.130
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Bottom	Full	9400	1880	22.00	22.5	1.122	0.01	0.111	0.125



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Antenna	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)
	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 1	777	848.31	20.69	21	1.074	0.15	0.966	1.037
	CDMA2000 BC0	RC3 SO55	Right Tilted	Top	Reduced Level 1	777	848.31	20.69	21	1.074	0.08	0.926	0.995
	CDMA2000 BC0	RC3 SO55	Left Cheek	Top	Reduced Level 1	777	848.31	20.69	21	1.074	0.07	0.608	0.653
	CDMA2000 BC0	RC3 SO55	Left Tilted	Top	Reduced Level 1	777	848.31	20.69	21	1.074	0.09	0.557	0.598
	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 1	1013	824.7	20.56	21	1.107	0.01	0.931	1.030
#06	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 1	384	836.52	20.47	21	1.130	0.13	1.040	1.175
	CDMA2000 BC0	RC3 SO55	Right Tilted	Top	Reduced Level 1	1013	824.7	20.56	21	1.107	0.16	0.802	0.888
	CDMA2000 BC0	RC3 SO55	Right Tilted	Top	Reduced Level 1	384	836.52	20.47	21	1.130	0.04	0.900	1.017
	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 2	777	848.31	19.68	20	1.076	0.08	0.799	0.860
	CDMA2000 BC0	RC3 SO55	Right Tilted	Top	Reduced Level 2	777	848.31	19.68	20	1.076	-0.01	0.584	0.629
	CDMA2000 BC0	RC3 SO55	Left Cheek	Top	Reduced Level 2	777	848.31	19.68	20	1.076	-0.04	0.515	0.554
	CDMA2000 BC0	RC3 SO55	Left Tilted	Top	Reduced Level 2	777	848.31	19.68	20	1.076	0.01	0.461	0.496
	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 2	1013	824.7	19.55	20	1.109	0.07	0.775	0.860
	CDMA2000 BC0	RC3 SO55	Right Cheek	Top	Reduced Level 2	384	836.52	19.46	20	1.132	0.16	0.784	0.888
	CDMA2000 BC0	RC3 SO55	Right Cheek	Bottom	Full	777	848.31	23.68	24	1.076	-0.07	0.042	0.046
	CDMA2000 BC0	RC3 SO55	Right Tilted	Bottom	Full	777	848.31	23.68	24	1.076	0.06	0.028	0.030
	CDMA2000 BC0	RC3 SO55	Left Cheek	Bottom	Full	777	848.31	23.68	24	1.076	0.09	0.050	0.054
	CDMA2000 BC0	RC3 SO55	Left Tilted	Bottom	Full	777	848.31	23.68	24	1.076	-0.16	0.023	0.025
	CDMA2000 BC0	RC3 SO55	Left Cheek	Bottom	Full	1013	824.7	23.57	24	1.104	0.08	0.047	0.052
	CDMA2000 BC0	RC3 SO55	Left Cheek	Bottom	Full	384	836.52	23.53	24	1.114	0.01	0.048	0.053



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Antenna	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)
#07	LTE Band 12	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	0.03	0.981	1.046
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	0.06	0.724	0.772
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	-0.11	0.589	0.628
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	0.08	0.522	0.557
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 1	23095	707.5	21.74	22	1.062	0.02	0.905	0.961
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 1	23095	707.5	21.74	22	1.062	0.04	0.744	0.790
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 1	23095	707.5	21.74	22	1.062	-0.04	0.607	0.644
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 1	23095	707.5	21.74	22	1.062	0.1	0.538	0.571
	LTE Band 12	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	23095	707.5	21.64	22	1.086	0.18	0.922	1.002
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	23095	707.5	21.29	21.5	1.050	0.19	0.840	0.882
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	23095	707.5	21.29	21.5	1.050	-0.01	0.692	0.726
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	23095	707.5	21.29	21.5	1.050	-0.05	0.532	0.558
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	23095	707.5	21.29	21.5	1.050	-0.11	0.470	0.493
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 2	23095	707.5	21.26	21.5	1.057	0.09	0.821	0.868
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 2	23095	707.5	21.26	21.5	1.057	0.05	0.715	0.756
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 2	23095	707.5	21.26	21.5	1.057	0.11	0.556	0.588
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 2	23095	707.5	21.26	21.5	1.057	0.13	0.497	0.525
	LTE Band 12	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	23095	707.5	21.16	21.5	1.081	0.03	0.951	1.028
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.05	0.123	0.139
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	23095	707.5	22.96	23.5	1.132	-0.04	0.087	0.099
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.03	0.136	0.154
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.06	0.077	0.087
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Cheek	Bottom	Full	23095	707.5	22.07	22.5	1.104	-0.01	0.116	0.128
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Tilted	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.05	0.072	0.079
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Cheek	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.15	0.102	0.113
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Tilted	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.08	0.066	0.073
#08	LTE Band 5	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	0.11	1.110	1.272
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	-0.09	0.893	1.023
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	-0.04	0.720	0.825
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	0.1	0.650	0.745
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 1	20525	836.5	21.86	22.5	1.159	0.19	1.090	1.263
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 1	20525	836.5	21.86	22.5	1.159	-0.14	0.935	1.083
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 1	20525	836.5	21.86	22.5	1.159	0.05	0.759	0.880
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 1	20525	836.5	21.86	22.5	1.159	0.03	0.680	0.788
	LTE Band 5	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	20525	836.5	21.84	22.5	1.164	0.09	1.030	1.199
	LTE Band 5	10M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	20525	836.5	21.84	22.5	1.164	0.15	0.990	1.152
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	20525	836.5	21.35	21.5	1.035	0.18	0.984	1.019
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	20525	836.5	21.35	21.5	1.035	0.01	0.821	0.850
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	20525	836.5	21.35	21.5	1.035	0.11	0.630	0.652
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	20525	836.5	21.35	21.5	1.035	0.16	0.533	0.552
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 2	20525	836.5	21.29	21.5	1.050	0.15	1.040	1.092
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 2	20525	836.5	21.29	21.5	1.050	-0.16	0.834	0.875



	LTE Band 5	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 2	20525	836.5	21.29	21.5	1.050	0.05	0.632	0.663
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 2	20525	836.5	21.29	21.5	1.050	-0.18	0.541	0.568
	LTE Band 5	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	20525	836.5	21.27	21.5	1.054	0.02	0.938	0.989
	LTE Band 5	10M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	20525	836.5	21.27	21.5	1.054	0.04	0.840	0.886
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	20525	836.5	23.18	23.5	1.076	-0.07	0.179	0.193
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	20525	836.5	23.18	23.5	1.076	-0.09	0.122	0.131
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.01	0.202	0.217
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.09	0.108	0.116
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Cheek	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.01	0.164	0.173
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Tilted	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.13	0.103	0.109
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Cheek	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.08	0.155	0.163
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Tilted	Bottom	Full	20525	836.5	22.27	22.5	1.054	-0.04	0.090	0.095
#09	LTE Band 26	15M	QPSK	1RB	37Offset	Right Cheek	Top	Reduced Level 1	26865	831.5	21.19	21.5	1.074	0.06	1.030	1.106
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Tilted	Top	Reduced Level 1	26865	831.5	21.19	21.5	1.074	0.09	0.819	0.880
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Cheek	Top	Reduced Level 1	26865	831.5	21.19	21.5	1.074	-0.15	0.651	0.699
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Tilted	Top	Reduced Level 1	26865	831.5	21.19	21.5	1.074	0.02	0.592	0.636
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Cheek	Top	Reduced Level 1	26765	821.5	21.1	21.5	1.096	0.05	0.952	1.044
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Cheek	Top	Reduced Level 1	26965	841.5	21.18	21.5	1.076	-0.11	0.978	1.053
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Tilted	Top	Reduced Level 1	26765	821.5	21.1	21.5	1.096	-0.09	0.793	0.870
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Tilted	Top	Reduced Level 1	26965	841.5	21.18	21.5	1.076	0.09	0.744	0.801
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Cheek	Top	Reduced Level 1	26865	831.5	21.17	21.5	1.079	0.09	0.960	1.036
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Tilted	Top	Reduced Level 1	26865	831.5	21.17	21.5	1.079	0.07	0.834	0.900
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Cheek	Top	Reduced Level 1	26865	831.5	21.17	21.5	1.079	-0.06	0.669	0.722
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Tilted	Top	Reduced Level 1	26865	831.5	21.17	21.5	1.079	-0.01	0.607	0.655
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Cheek	Top	Reduced Level 1	26765	821.5	21.16	21.5	1.081	-0.16	0.988	1.068
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Cheek	Top	Reduced Level 1	26965	841.5	21.14	21.5	1.086	0.03	0.986	1.071
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Tilted	Top	Reduced Level 1	26765	821.5	21.16	21.5	1.081	0.1	0.788	0.852
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Tilted	Top	Reduced Level 1	26965	841.5	21.14	21.5	1.086	-0.06	0.686	0.745
	LTE Band 26	15M	QPSK	75RB	0Offset	Right Cheek	Top	Reduced Level 1	26865	831.5	21.16	21.5	1.081	0.08	0.950	1.027
	LTE Band 26	15M	QPSK	75RB	0Offset	Right Tilted	Top	Reduced Level 1	26865	831.5	21.16	21.5	1.081	-0.08	0.822	0.889
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Cheek	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.13	0.178	0.183
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Tilted	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.1	0.122	0.126
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Cheek	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.11	0.208	0.214
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Tilted	Bottom	Full	26865	831.5	23.37	23.5	1.030	-0.06	0.111	0.114
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Cheek	Bottom	Full	26865	831.5	22.29	22.5	1.050	-0.07	0.152	0.160
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Tilted	Bottom	Full	26865	831.5	22.29	22.5	1.050	-0.08	0.113	0.119
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Cheek	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.15	0.158	0.166
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Tilted	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.07	0.090	0.095
#10	LTE Band 4	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	20175	1732.5	20.54	21	1.112	0.08	1.020	1.134
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	20175	1732.5	20.54	21	1.112	0.03	0.842	0.936
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	20175	1732.5	20.54	21	1.112	0.07	0.409	0.455
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	20175	1732.5	20.54	21	1.112	-0.15	0.410	0.456
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	20175	1732.5	20.27	20.5	1.054	0.18	1.010	1.065
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	20175	1732.5	20.27	20.5	1.054	0.1	0.814	0.858
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	20175	1732.5	20.27	20.5	1.054	0.05	0.390	0.411





	LTE Band 4	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	20175	1732.5	20.27	20.5	1.054	-0.08	0.440	0.464
	LTE Band 4	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	20175	1732.5	20.16	20.5	1.081	0.09	1.010	1.092
	LTE Band 4	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	20175	1732.5	20.16	20.5	1.081	0.05	0.790	0.854
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	20175	1732.5	19.94	20.5	1.138	0.02	0.902	1.026
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	20175	1732.5	19.94	20.5	1.138	-0.1	0.723	0.823
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	20175	1732.5	19.94	20.5	1.138	-0.01	0.344	0.391
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	20175	1732.5	19.94	20.5	1.138	0.01	0.346	0.394
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	20175	1732.5	19.7	20.5	1.202	-0.15	0.881	1.059
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	20175	1732.5	19.7	20.5	1.202	0.01	0.720	0.866
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 2	20175	1732.5	19.7	20.5	1.202	-0.01	0.334	0.402
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 2	20175	1732.5	19.7	20.5	1.202	0.12	0.342	0.411
	LTE Band 4	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 2	20175	1732.5	19.65	20.5	1.216	0.14	0.885	1.076
	LTE Band 4	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 2	20175	1732.5	19.65	20.5	1.216	-0.13	0.732	0.890
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	20175	1732.5	22.84	23	1.038	-0.04	0.093	0.097
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	20175	1732.5	22.84	23	1.038	-0.15	0.056	0.058
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	20175	1732.5	22.84	23	1.038	-0.07	0.129	0.134
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	20175	1732.5	22.84	23	1.038	0.02	0.070	0.073
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	20175	1732.5	21.81	22	1.045	0.14	0.071	0.074
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	20175	1732.5	21.81	22	1.045	0.11	0.044	0.045
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	20175	1732.5	21.81	22	1.045	0.12	0.097	0.101
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	20175	1732.5	21.81	22	1.045	0.03	0.064	0.067
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	132322	1745	20.13	20.5	1.089	0.05	1.010	1.100
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	132322	1745	20.13	20.5	1.089	-0.08	0.946	1.030
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	132322	1745	20.13	20.5	1.089	0.07	0.410	0.446
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	132322	1745	20.13	20.5	1.089	0.15	0.422	0.460
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	132072	1720	20.12	20.5	1.091	-0.04	1.000	1.091
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	132572	1770	20.1	20.5	1.096	0.09	1.120	1.228
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	132072	1720	20.12	20.5	1.091	0.11	0.931	1.016
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	132572	1770	20.1	20.5	1.096	-0.06	0.949	1.041
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	132322	1745	20.07	20.5	1.104	-0.04	1.030	1.137
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	132322	1745	20.07	20.5	1.104	0.03	0.948	1.047
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	132322	1745	20.07	20.5	1.104	-0.09	0.415	0.458
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	132322	1745	20.07	20.5	1.104	-0.04	0.446	0.492
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	132072	1720	20.03	20.5	1.114	0.16	0.976	1.088
#11	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	132572	1770	19.97	20.5	1.130	0.12	1.170	1.322
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	132072	1720	20.03	20.5	1.114	0.11	0.938	1.045
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	132572	1770	19.97	20.5	1.130	0.09	0.955	1.079
	LTE Band 66	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	132322	1745	20.04	20.5	1.112	0.01	1.000	1.112
	LTE Band 66	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	132322	1745	20.04	20.5	1.112	0.07	0.928	1.032
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	132322	1745	18.77	19	1.054	-0.18	0.828	0.873
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	132322	1745	18.77	19	1.054	0.14	0.702	0.740
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	132322	1745	18.77	19	1.054	0.08	0.326	0.344
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	132322	1745	18.77	19	1.054	-0.01	0.354	0.373
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	132072	1720	18.66	19	1.081	0.01	0.859	0.929
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	132572	1770	18.67	19	1.079	0.09	0.896	0.967



	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	132322	1745	18.74	19	1.062	0.04	0.911	0.967
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	132322	1745	18.74	19	1.062	0.09	0.716	0.760
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 2	132322	1745	18.74	19	1.062	-0.15	0.325	0.345
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 2	132322	1745	18.74	19	1.062	0.08	0.351	0.373
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	132072	1720	18.58	19	1.102	0.1	0.848	0.934
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	132572	1770	18.53	19	1.114	0.16	0.934	1.041
	LTE Band 66	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 2	132322	1745	18.58	19	1.102	-0.1	0.922	1.016
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	132322	1745	22.85	23	1.035	0.09	0.093	0.096
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	132322	1745	22.85	23	1.035	0.02	0.054	0.056
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	132322	1745	22.85	23	1.035	0.02	0.136	0.141
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	132322	1745	22.85	23	1.035	0.06	0.084	0.087
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	132072	1720	22.82	23	1.042	-0.07	0.123	0.128
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	132572	1770	22.70	23	1.072	-0.18	0.117	0.125
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	132322	1745	21.98	22.5	1.127	0.01	0.074	0.084
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	132322	1745	21.98	22.5	1.127	0.06	0.045	0.050
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	132322	1745	21.98	22.5	1.127	-0.06	0.103	0.116
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	132322	1745	21.98	22.5	1.127	0.13	0.063	0.071
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	26590	1905	19.69	20	1.074	0.08	1.160	1.246
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	26590	1905	19.69	20	1.074	-0.04	0.900	0.967
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	26590	1905	19.69	20	1.074	0.01	0.440	0.473
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	26590	1905	19.69	20	1.074	-0.09	0.475	0.510
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	26140	1860	19.62	20	1.091	-0.11	1.060	1.157
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	26340	1880	19.66	20	1.081	-0.13	1.090	1.179
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	26140	1860	19.62	20	1.091	0.01	0.806	0.880
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	26340	1880	19.66	20	1.081	0.05	0.803	0.868
#12	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	26590	1905	19.64	20	1.086	0.17	1.250	1.358
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	26590	1905	19.64	20	1.086	0.19	0.904	0.982
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	26590	1905	19.64	20	1.086	0.11	0.434	0.472
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	26590	1905	19.64	20	1.086	-0.09	0.470	0.511
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	26140	1860	19.42	20	1.143	-0.12	1.030	1.177
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	26340	1880	19.48	20	1.127	-0.01	1.060	1.195
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	26140	1860	19.42	20	1.143	0.05	0.763	0.872
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	26340	1880	19.48	20	1.127	0.08	0.774	0.872
	LTE Band 25	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	26590	1905	19.64	20	1.086	0.04	1.080	1.173
	LTE Band 25	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	26590	1905	19.64	20	1.086	0.01	0.844	0.917
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	26590	1905	18.79	19	1.050	0.02	1.060	1.113
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	26590	1905	18.79	19	1.050	0.09	0.788	0.827
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	26590	1905	18.79	19	1.050	-0.11	0.325	0.341
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	26590	1905	18.79	19	1.050	0.09	0.359	0.377
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	26140	1860	18.75	19	1.059	0.15	0.929	0.984
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	26340	1880	18.7	19	1.072	0.05	0.932	0.999
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	26140	1860	18.75	19	1.059	0.16	0.722	0.765
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	26340	1880	18.7	19	1.072	-0.11	0.731	0.783
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	26590	1905	18.65	19	1.084	0.04	0.953	1.033
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	26590	1905	18.65	19	1.084	0.02	0.763	0.827



	LTE Band 25	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 2	26590	1905	18.65	19	1.084	0.12	0.316	0.343
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 2	26590	1905	18.65	19	1.084	-0.01	0.342	0.371
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	26140	1860	18.43	19	1.140	-0.16	0.939	1.071
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	26340	1880	18.5	19	1.122	0.08	0.944	1.059
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	26140	1860	18.43	19	1.140	-0.12	0.738	0.842
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 2	26340	1880	18.5	19	1.122	0.01	0.729	0.818
	LTE Band 25	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 2	26590	1905	18.64	19	1.086	0.08	0.956	1.039
	LTE Band 25	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 2	26590	1905	18.64	19	1.086	0.01	0.758	0.824
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	26590	1905	22.37	22.5	1.030	0.09	0.098	0.101
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	26590	1905	22.37	22.5	1.030	-0.04	0.062	0.064
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	26590	1905	22.37	22.5	1.030	-0.05	0.153	0.158
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	26590	1905	22.37	22.5	1.030	0.06	0.086	0.089
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	26140	1860	22.35	22.5	1.035	-0.08	0.131	0.136
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	26340	1880	22.34	22.5	1.038	0.12	0.126	0.131
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	26590	1905	21.49	22	1.125	-0.17	0.073	0.082
	LTE Band 25	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	26590	1905	21.49	22	1.125	0.17	0.055	0.062
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	26590	1905	21.49	22	1.125	0.08	0.119	0.134
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	26590	1905	21.49	22	1.125	-0.01	0.067	0.075
#13	LTE Band 30	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	27710	2310	17.89	18	1.026	0.12	1.260	1.292
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	27710	2310	17.89	18	1.026	0.02	0.797	0.817
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	27710	2310	17.89	18	1.026	0.08	0.345	0.354
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	27710	2310	17.89	18	1.026	-0.12	0.309	0.317
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 1	27710	2310	17.65	18	1.084	0.17	1.190	1.290
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 1	27710	2310	17.65	18	1.084	-0.12	0.790	0.856
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 1	27710	2310	17.65	18	1.084	0.03	0.338	0.366
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 1	27710	2310	17.65	18	1.084	-0.02	0.308	0.334
	LTE Band 30	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	27710	2310	17.61	18	1.094	0.07	1.180	1.291
	LTE Band 30	10M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	27710	2310	17.61	18	1.094	0.05	0.787	0.861
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 2	27710	2310	16.19	16.5	1.074	0.12	0.849	0.912
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 2	27710	2310	16.19	16.5	1.074	0.01	0.561	0.603
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 2	27710	2310	16.19	16.5	1.074	-0.19	0.257	0.276
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 2	27710	2310	16.19	16.5	1.074	0.14	0.228	0.245
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Cheek	Top	Reduced Level 2	27710	2310	16.1	16.5	1.096	-0.1	0.830	0.910
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Tilted	Top	Reduced Level 2	27710	2310	16.1	16.5	1.096	0.08	0.526	0.577
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Cheek	Top	Reduced Level 2	27710	2310	16.1	16.5	1.096	0.1	0.231	0.253
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Tilted	Top	Reduced Level 2	27710	2310	16.1	16.5	1.096	0.06	0.212	0.232
	LTE Band 30	10M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 2	27710	2310	16.07	16.5	1.104	0.08	0.821	0.906
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	27710	2310	22.77	23	1.054	0.04	0.068	0.071
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	27710	2310	22.77	23	1.054	0.01	0.021	0.022
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	27710	2310	22.77	23	1.054	0.05	0.155	0.163
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	27710	2310	22.77	23	1.054	0.18	0.032	0.034
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Cheek	Bottom	Full	27710	2310	21.55	22	1.109	0.13	0.051	0.057
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Tilted	Bottom	Full	27710	2310	21.55	22	1.109	-0.15	0.013	0.014
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Cheek	Bottom	Full	27710	2310	21.55	22	1.109	0.02	0.134	0.149
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Tilted	Bottom	Full	27710	2310	21.55	22	1.109	0.09	0.027	0.030



	LTE Band 7	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	21350	2560	16.19	16.5	1.074	0.1	0.849	0.912
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	21350	2560	16.19	16.5	1.074	0.09	0.786	0.844
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	21350	2560	16.19	16.5	1.074	0.07	0.239	0.257
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	21350	2560	16.19	16.5	1.074	-0.15	0.326	0.350
#14	LTE Band 7	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	20850	2510	16.03	16.5	1.114	0.17	0.974	1.085
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	21100	2535	15.96	16.5	1.132	0.06	0.912	1.033
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	20850	2510	16.03	16.5	1.114	0.07	0.878	0.978
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	21100	2535	15.96	16.5	1.132	0.1	0.864	0.978
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	21350	2560	16.05	16.5	1.109	0.01	0.824	0.914
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	21350	2560	16.05	16.5	1.109	0.01	0.771	0.855
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	21350	2560	16.05	16.5	1.109	-0.19	0.212	0.235
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	21350	2560	16.05	16.5	1.109	0.15	0.303	0.336
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	20850	2510	15.86	16.5	1.159	0.07	0.897	1.039
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	21100	2535	15.97	16.5	1.130	-0.11	0.887	1.002
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	20850	2510	15.86	16.5	1.159	0.13	0.841	0.975
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	21100	2535	15.97	16.5	1.130	0.07	0.832	0.940
	LTE Band 7	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	21350	2560	15.99	16.5	1.125	0.03	0.812	0.913
	LTE Band 7	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	21350	2560	15.99	16.5	1.125	-0.05	0.756	0.850
	LTE Band 7	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	20850+21048	2529.8	16.09	16.5	1.099	0.12	0.925	1.017
	LTE Band 7	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	21001+21199	2544.9	16.15	16.5	1.084	0.03	0.822	0.891
	LTE Band 7	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	21152+21350	2540.2	16.16	16.5	1.081	-0.07	0.780	0.844
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	21350	2560	22.37	23	1.156	0.09	0.082	0.095
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	21350	2560	22.37	23	1.156	-0.14	0.036	0.042
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	21350	2560	22.37	23	1.156	0.01	0.118	0.136
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	21350	2560	22.37	23	1.156	0.05	0.053	0.061
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	20850	2510	22.32	23	1.169	0.06	0.117	0.137
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	21100	2535	22.26	23	1.186	0.01	0.119	0.141
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	21350	2560	21.33	22	1.167	0.07	0.060	0.070
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	21350	2560	21.33	22	1.167	-0.08	0.026	0.030
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	21350	2560	21.33	22	1.167	0.07	0.102	0.119
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	21350	2560	21.33	22	1.167	0.13	0.038	0.045
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	20850+21048	2544.9	22.31	23	1.172	0.04	0.105	0.123
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	21001+21199	2529.8	22.29	23	1.178	0.09	0.111	0.131
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	21152+21350	2540.2	22.33	23	1.167	-0.03	0.108	0.126



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Antenna	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)
#15	LTE Band 38	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	0.09	1.010	1.117
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	-0.13	0.865	0.956
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	0.09	0.414	0.458
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	0.01	0.516	0.570
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	38000	2595	19.45	20	1.135	62.9	1.006	0.02	0.869	0.992
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	38150	2610	19.46	20	1.132	62.9	1.006	-0.02	0.866	0.987
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	38000	2595	19.45	20	1.135	62.9	1.006	-0.01	0.854	0.975
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	38150	2610	19.46	20	1.132	62.9	1.006	-0.19	0.847	0.965
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	37850	2580	19.58	20	1.102	62.9	1.006	0.11	0.970	1.075
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	37850	2580	19.58	20	1.102	62.9	1.006	0.15	0.853	0.945
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	37850	2580	19.58	20	1.102	62.9	1.006	0.06	0.395	0.438
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	37850	2580	19.58	20	1.102	62.9	1.006	-0.04	0.401	0.444
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	38000	2595	19.56	20	1.107	62.9	1.006	-0.06	0.866	0.964
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	38150	2610	19.57	20	1.104	62.9	1.006	0.01	0.856	0.951
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	38000	2595	19.56	20	1.107	62.9	1.006	0.09	0.844	0.940
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	38150	2610	19.57	20	1.104	62.9	1.006	0.07	0.832	0.924
	LTE Band 38	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	37850	2580	19.53	20	1.114	62.9	1.006	0.06	0.964	1.081
	LTE Band 38	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	37850	2580	19.53	20	1.114	62.9	1.006	-0.11	0.846	0.948
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.18	0.046	0.050
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.11	0.025	0.027
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.13	0.051	0.056
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.04	0.030	0.033
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	38000	2595	22.51	23	1.119	62.9	1.006	0.09	0.055	0.062
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	38150	2610	22.51	23	1.119	62.9	1.006	-0.14	0.052	0.059
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.06	0.035	0.038
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.06	0.013	0.014
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.01	0.046	0.049
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	-0.01	0.018	0.019
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	40185	2549.5	18.19	18.5	1.074	62.9	1.006	0.15	0.876	0.946
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	40185	2549.5	18.19	18.5	1.074	62.9	1.006	0.01	0.713	0.770
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	40185	2549.5	18.19	18.5	1.074	62.9	1.006	0.19	0.598	0.646
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	40185	2549.5	18.19	18.5	1.074	62.9	1.006	-0.15	0.689	0.744
#16	LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	39750	2506	17.75	18.5	1.189	62.9	1.006	0.13	0.912	1.090
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	40620	2593	18.00	18.5	1.122	62.9	1.006	0.01	0.674	0.761
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	41055	2636.5	17.83	18.5	1.167	62.9	1.006	0.05	0.503	0.590
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	41490	2680	17.55	18.5	1.245	62.9	1.006	0.08	0.389	0.487
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	39750	2506	17.75	18.5	1.189	62.9	1.006	-0.06	0.795	0.951
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	40620	2593	18.00	18.5	1.122	62.9	1.006	-0.01	0.524	0.591
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	41055	2636.5	17.83	18.5	1.167	62.9	1.006	0.18	0.393	0.461
	LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Top	Reduced Level 1	41490	2680	17.55	18.5	1.245	62.9	1.006	0.11	0.299	0.374
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	39750	2506	17.75	18.5	1.189	62.9	1.006	0.02	0.603	0.721
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	40620	2593	18.00	18.5	1.122	62.9	1.006	0.04	0.485	0.547



LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	41055	2636.5	17.83	18.5	1.167	62.9	1.006	0.08	0.402	0.472
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Top	Reduced Level 1	41490	2680	17.55	18.5	1.245	62.9	1.006	0.17	0.285	0.357
LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	39750	2506	17.75	18.5	1.189	62.9	1.006	0.01	0.642	0.768
LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	40620	2593	18.00	18.5	1.122	62.9	1.006	0.19	0.514	0.580
LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	41055	2636.5	17.83	18.5	1.167	62.9	1.006	0.01	0.445	0.522
LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Top	Reduced Level 1	41490	2680	17.55	18.5	1.245	62.9	1.006	0.02	0.317	0.397
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	40185	2549.5	18.00	18.5	1.122	62.9	1.006	0.14	0.771	0.870
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	40185	2549.5	18.00	18.5	1.122	62.9	1.006	0.16	0.561	0.633
LTE Band 41	20M	QPSK	50RB	0Offset	Left Cheek	Top	Reduced Level 1	40185	2549.5	18.00	18.5	1.122	62.9	1.006	-0.02	0.427	0.482
LTE Band 41	20M	QPSK	50RB	0Offset	Left Tilted	Top	Reduced Level 1	40185	2549.5	18.00	18.5	1.122	62.9	1.006	0.04	0.432	0.488
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	39750	2506	17.91	18.5	1.146	62.9	1.006	0.03	0.879	1.013
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	40620	2593	17.93	18.5	1.140	62.9	1.006	0.07	0.548	0.629
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	41055	2636.5	17.95	18.5	1.135	62.9	1.006	-0.01	0.408	0.466
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Top	Reduced Level 1	41490	2680	17.50	18.5	1.259	62.9	1.006	0.06	0.697	0.883
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	39750	2506	17.91	18.5	1.146	62.9	1.006	-0.01	0.765	0.882
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	40620	2593	17.93	18.5	1.140	62.9	1.006	0.12	0.476	0.546
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	41055	2636.5	17.95	18.5	1.135	62.9	1.006	0.01	0.365	0.417
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Top	Reduced Level 1	41490	2680	17.50	18.5	1.259	62.9	1.006	0.11	0.603	0.764
LTE Band 41	20M	QPSK	100RB	0Offset	Right Cheek	Top	Reduced Level 1	40185	2549.5	18.06	18.5	1.107	62.9	1.006	0.09	0.794	0.884
LTE Band 41	20M	QPSK	100RB	0Offset	Right Tilted	Top	Reduced Level 1	40185	2549.5	18.06	18.5	1.107	62.9	1.006	0.07	0.702	0.782
LTE Band 41	20M	QPSK	100RB	0Offset	Left Cheek	Top	Reduced Level 1	40185	2549.5	18.06	18.5	1.107	62.9	1.006	0.09	0.502	0.559
LTE Band 41	20M	QPSK	100RB	0Offset	Left Tilted	Top	Reduced Level 1	40185	2549.5	18.06	18.5	1.107	62.9	1.006	0.07	0.518	0.577
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	39750+39948	2525.8	18.18	18.5	1.076	62.9	1.006	-0.08	0.848	0.918
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	40185+40383	2569.3	18.27	18.5	1.054	62.9	1.006	-0.01	0.726	0.770
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	40620+40818	2612.8	18.13	18.5	1.089	62.9	1.006	0.01	0.651	0.713
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	41055+41253	2656.3	18.06	18.5	1.107	62.9	1.006	0.06	0.396	0.441
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Top	Reduced Level 1	41292+41490	2660.2	18.08	18.5	1.102	62.9	1.006	0.02	0.377	0.418
LTE Band 41	20M	QPSK	1RB	0Offset	Right Cheek	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.08	0.048	0.062
LTE Band 41	20M	QPSK	1RB	0Offset	Right Tilted	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.05	0.023	0.030
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.11	0.059	0.077
LTE Band 41	20M	QPSK	1RB	0Offset	Left Tilted	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.14	0.031	0.040
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	39750	2506	22.35	23.5	1.303	62.9	1.006	0.06	0.060	0.079
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	40620	2593	22.36	23.5	1.300	62.9	1.006	0.04	0.061	0.080
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	41055	2636.5	22.19	23.5	1.352	62.9	1.006	-0.04	0.058	0.079
LTE Band 41	20M	QPSK	1RB	0Offset	Left Cheek	Bottom	Full	41490	2680	21.77	23.5	1.489	62.9	1.006	0.08	0.052	0.078
LTE Band 41	20M	QPSK	50RB	0Offset	Right Cheek	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	-0.01	0.038	0.048
LTE Band 41	20M	QPSK	50RB	0Offset	Right Tilted	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.01	0.012	0.015
LTE Band 41	20M	QPSK	50RB	0Offset	Left Cheek	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.08	0.046	0.058
LTE Band 41	20M	QPSK	50RB	0Offset	Left Tilted	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.1	0.026	0.033
LTE Band 41	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	39750+39948	2525.8	22.35	23.50	1.303	62.9	1.006	0.1	0.057	0.075
LTE Band 41	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	40185+40383	2569.3	22.32	23.50	1.312	62.9	1.006	0.09	0.047	0.062
LTE Band 41	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	40620+40818	2612.8	22.31	23.50	1.315	62.9	1.006	0.12	0.053	0.070
LTE Band 41	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	41055+41253	2656.3	22.33	23.50	1.309	62.9	1.006	0.05	0.041	0.054
LTE Band 41	20M	QPSK	1RB	99Offset	Left Cheek	Bottom	Full	41292+41490	2660.2	22.27	23.50	1.327	62.9	1.006	0.08	0.028	0.037



<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Antenna	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)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.06	0.121	0.123
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.11	0.131	0.133
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.08	0.365	0.372
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	-0.07	0.480	0.489
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant.1	Full	6	2437	18.06	18.5	1.108	98.96	1.011	0.07	0.543	0.608
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant.1	Full	11	2462	17.44	18.5	1.278	98.96	1.011	0.01	0.446	0.576
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.04	0.528	0.567
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	-0.08	0.424	0.455
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.11	0.147	0.158
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.18	0.122	0.131
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant.2	Full	6	2437	15.68	16.00	1.076	99.31	1.007	0.17	0.625	0.677
#17	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant.2	Full	11	2462	15.60	16.00	1.096	99.31	1.007	0.06	0.634	<b>0.700</b>
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant.1	Reduced	1	2412	15.18	15.50	1.076	98.96	1.011	0.03	0.098	0.107
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant.1	Reduced	1	2412	15.18	15.50	1.076	98.96	1.011	0.04	0.121	0.132
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant.1	Reduced	1	2412	15.18	15.50	1.076	98.96	1.011	0.09	0.331	0.360
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant.1	Reduced	1	2412	15.18	15.50	1.076	98.96	1.011	-0.04	0.303	0.330
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant.1	Reduced	6	2437	14.67	15.00	1.079	98.96	1.011	0.01	0.321	0.350
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant.1	Reduced	11	2462	14.81	15.00	1.045	98.96	1.011	0.16	0.326	0.344



<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Antenna	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)
	WLAN5.2GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	44	5220	18.31	18.50	1.045	94.88	1.054	0.04	1.100	1.211
	WLAN5.2GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	44	5220	18.31	18.50	1.045	94.88	1.054	-0.07	0.699	0.770
	WLAN5.2GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Full	44	5220	18.31	18.50	1.045	94.88	1.054	-0.06	0.439	0.483
	WLAN5.2GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Full	44	5220	18.31	18.50	1.045	94.88	1.054	0.01	0.409	0.450
	WLAN5.2GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	36	5180	18.19	18.50	1.073	94.88	1.054	0.15	0.906	1.025
	WLAN5.2GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	40	5200	18.16	18.50	1.081	94.88	1.054	-0.1	0.985	1.123
#18	WLAN5.2GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	48	5240	18.30	18.50	1.046	94.88	1.054	0.04	1.230	1.356
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.09	1.080	1.235
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.04	0.772	0.883
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.01	0.481	0.550
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	-0.14	0.450	0.514
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	56	5280	18.07	18.50	1.105	94.88	1.054	0.09	1.070	1.246
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	60	5300	17.95	18.50	1.136	94.88	1.054	0.03	1.030	1.233
#19	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.03	1.090	1.324
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	56	5280	18.07	18.50	1.105	94.88	1.054	0.15	0.771	0.898
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	60	5300	17.95	18.50	1.136	94.88	1.054	0.02	0.747	0.894
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.01	0.703	0.854
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	56	5280	14.85	15.00	1.035	94.88	1.054	0.08	0.401	0.438
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Reduced	56	5280	14.85	15.00	1.035	94.88	1.054	0.05	0.292	0.319
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Reduced	56	5280	14.85	15.00	1.035	94.88	1.054	0.06	0.178	0.194
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Reduced	56	5280	14.85	15.00	1.035	94.88	1.054	-0.03	0.148	0.161
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	52	5260	14.34	14.50	1.037	94.88	1.054	0.07	0.385	0.421
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	60	5300	14.41	14.50	1.021	94.88	1.054	0.08	0.383	0.412
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	64	5320	14.43	14.50	1.016	94.88	1.054	0.11	0.353	0.378





**FCC SAR Test Report**

**Report No. : FA712206**

Plot No.	Band	Mode	Test Position	Antenna	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)
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.09	1.150	1.302
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.13	0.836	0.947
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.05	0.701	0.794
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.06	0.593	0.671
#20	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	0.07	1.160	<b>1.372</b>
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	132	5660	18.12	18.50	1.092	94.88	1.054	0.09	1.060	1.220
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	140	5700	17.94	18.00	1.015	94.88	1.054	0.09	0.992	1.061
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	0.06	0.894	1.057
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	132	5660	18.12	18.50	1.092	94.88	1.054	-0.18	0.780	0.898
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	140	5700	17.94	18.00	1.015	94.88	1.054	0.11	0.677	0.724
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	132	5660	14.93	15.50	1.140	94.88	1.054	0.02	0.375	0.451
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Reduced	132	5660	14.93	15.50	1.140	94.88	1.054	0.05	0.262	0.315
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Reduced	132	5660	14.93	15.50	1.140	94.88	1.054	0.05	0.214	0.257
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Reduced	132	5660	14.93	15.50	1.140	94.88	1.054	0.03	0.183	0.220
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	100	5500	13.87	14.00	1.032	94.88	1.054	0.09	0.407	0.443
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	116	5580	12.00	12.50	1.122	94.88	1.054	0.07	0.359	0.425
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	140	5700	12.00	12.50	1.122	94.88	1.054	0.05	0.372	0.440
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.09	0.896	0.965
	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.11	0.642	0.692
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.15	0.447	0.482
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.01	0.434	0.468
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	149	5745	18.17	18.50	1.078	94.88	1.054	0.09	0.856	0.972
#21	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Full	165	5825	18.36	18.50	1.033	94.88	1.054	0.09	0.938	<b>1.021</b>
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	165	5825	15.47	16.00	1.129	94.88	1.054	0.03	0.375	0.446
	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant.1+2	Reduced	165	5825	15.47	16.00	1.129	94.88	1.054	0.06	0.272	0.324
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant.1+2	Reduced	165	5825	15.47	16.00	1.129	94.88	1.054	-0.07	0.203	0.242
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant.1+2	Reduced	165	5825	15.47	16.00	1.129	94.88	1.054	-0.08	0.186	0.221
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	149	5745	15.20	15.50	1.073	94.88	1.054	0.02	0.379	0.428
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant.1+2	Reduced	157	5785	14.86	15.00	1.033	94.88	1.054	0.09	0.389	0.424



14.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	GSM850	GPRS (3 Tx slots)	Front	10	Top	Full	251	848.8	29.94	30.5	1.138	0.07	0.638	0.726
	GSM850	GPRS (3 Tx slots)	Back	10	Top	Full	251	848.8	29.94	30.5	1.138	0.05	0.604	0.687
	GSM850	GPRS (3 Tx slots)	Left Side	10	Top	Full	251	848.8	29.94	30.5	1.138	-0.15	0.299	0.340
	GSM850	GPRS (3 Tx slots)	Top Side	10	Top	Full	251	848.8	29.94	30.5	1.138	0.01	0.574	0.653
	GSM850	GPRS (3 Tx slots)	Front	10	Top	Full	128	824.2	29.81	30.5	1.172	0.08	0.660	0.774
#22	GSM850	GPRS (3 Tx slots)	Front	10	Top	Full	189	836.4	29.83	30.5	1.167	0.12	0.681	0.795
	GSM850	GPRS (3 Tx slots)	Front	10	Bottom	Full	251	848.8	29.94	30.5	1.138	-0.01	0.297	0.338
	GSM850	GPRS (3 Tx slots)	Back	10	Bottom	Full	251	848.8	29.94	30.5	1.138	0.15	0.353	0.402
	GSM850	GPRS (3 Tx slots)	Left Side	10	Bottom	Full	251	848.8	29.94	30.5	1.138	0.02	0.396	0.451
	GSM850	GPRS (3 Tx slots)	Right Side	10	Bottom	Full	251	848.8	29.94	30.5	1.138	0.07	0.203	0.231
	GSM850	GPRS (3 Tx slots)	Bottom Side	10	Bottom	Full	251	848.8	29.94	30.5	1.138	0.04	0.299	0.340
	GSM850	GPRS (3 Tx slots)	Left Side	10	Bottom	Full	128	824.2	29.81	30.5	1.172	-0.03	0.244	0.286
	GSM850	GPRS (3 Tx slots)	Left Side	10	Bottom	Full	189	836.4	29.83	30.5	1.167	-0.04	0.262	0.306
	GSM1900	GPRS (3 Tx slots)	Front	10	Top	Full	810	1909.8	26.42	27	1.143	0.19	0.423	0.483
	GSM1900	GPRS (3 Tx slots)	Back	10	Top	Full	810	1909.8	26.42	27	1.143	0.11	0.344	0.393
	GSM1900	GPRS (3 Tx slots)	Left Side	10	Top	Full	810	1909.8	26.42	27	1.143	0.1	0.403	0.461
	GSM1900	GPRS (3 Tx slots)	Top Side	10	Top	Full	810	1909.8	26.42	27	1.143	0.06	0.414	0.473
	GSM1900	GPRS (3 Tx slots)	Front	10	Top	Full	512	1850.2	26.32	27	1.169	-0.07	0.410	0.479
	GSM1900	GPRS (3 Tx slots)	Front	10	Top	Full	661	1880	26.35	27	1.161	0.05	0.487	0.566
	GSM1900	GPRS (3 Tx slots)	Front	10	Bottom	Hotspot On	810	1909.8	23.34	23.5	1.038	0.08	0.343	0.356
	GSM1900	GPRS (3 Tx slots)	Back	10	Bottom	Hotspot On	810	1909.8	23.34	23.5	1.038	0.09	0.252	0.261
	GSM1900	GPRS (3 Tx slots)	Left Side	10	Bottom	Hotspot On	810	1909.8	23.34	23.5	1.038	-0.01	0.060	0.062
	GSM1900	GPRS (3 Tx slots)	Right Side	10	Bottom	Hotspot On	810	1909.8	23.34	23.5	1.038	0.07	0.027	0.028
	GSM1900	GPRS (3 Tx slots)	Bottom Side	10	Bottom	Hotspot On	810	1909.8	23.34	23.5	1.038	0.01	0.692	0.718
#23	GSM1900	GPRS (3 Tx slots)	Bottom Side	10	Bottom	Hotspot On	512	1850.2	23.29	23.5	1.050	0.14	0.921	0.967
	GSM1900	GPRS (3 Tx slots)	Bottom Side	10	Bottom	Hotspot On	661	1880	23.28	23.5	1.052	0.1	0.892	0.938



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
#24	WCDMA Band V	RMC 12.2Kbps	Front	10	Top	Full	4182	836.4	23.19	23.5	1.074	0.13	0.484	0.520
	WCDMA Band V	RMC 12.2Kbps	Back	10	Top	Full	4182	836.4	23.19	23.5	1.074	-0.08	0.428	0.460
	WCDMA Band V	RMC 12.2Kbps	Left Side	10	Top	Full	4182	836.4	23.19	23.5	1.074	0.01	0.224	0.241
	WCDMA Band V	RMC 12.2Kbps	Top Side	10	Top	Full	4182	836.4	23.19	23.5	1.074	-0.14	0.443	0.476
	WCDMA Band V	RMC 12.2Kbps	Front	10	Top	Full	4132	826.4	23.14	23.5	1.086	0.08	0.452	0.491
	WCDMA Band V	RMC 12.2Kbps	Front	10	Top	Full	4233	846.6	23.12	23.5	1.091	-0.01	0.463	0.505
	WCDMA Band V	RMC 12.2Kbps	Front	10	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.06	0.349	0.375
	WCDMA Band V	RMC 12.2Kbps	Back	10	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.01	0.355	0.381
	WCDMA Band V	RMC 12.2Kbps	Left Side	10	Bottom	Full	4182	836.4	23.19	23.5	1.074	-0.08	0.367	0.394
	WCDMA Band V	RMC 12.2Kbps	Right Side	10	Bottom	Full	4182	836.4	23.19	23.5	1.074	-0.15	0.363	0.390
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	10	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.14	0.327	0.351
	WCDMA Band V	RMC 12.2Kbps	Left Side	10	Bottom	Full	4132	826.4	23.14	23.5	1.086	0.11	0.372	0.404
	WCDMA Band V	RMC 12.2Kbps	Left Side	10	Bottom	Full	4233	846.6	23.12	23.5	1.091	0.14	0.383	0.418
	WCDMA Band IV	RMC 12.2Kbps	Front	10	Top	Full	1513	1752.6	22.24	22.5	1.062	0.04	0.408	0.433
	WCDMA Band IV	RMC 12.2Kbps	Back	10	Top	Full	1513	1752.6	22.24	22.5	1.062	0.06	0.259	0.275
	WCDMA Band IV	RMC 12.2Kbps	Left Side	10	Top	Full	1513	1752.6	22.24	22.5	1.062	0.04	0.197	0.209
	WCDMA Band IV	RMC 12.2Kbps	Top Side	10	Top	Full	1513	1752.6	22.24	22.5	1.062	0.02	0.450	0.478
	WCDMA Band IV	RMC 12.2Kbps	Top Side	10	Top	Full	1312	1712.4	22.22	22.5	1.067	-0.11	0.418	0.446
	WCDMA Band IV	RMC 12.2Kbps	Top Side	10	Top	Full	1413	1732.6	22.19	22.5	1.074	0.13	0.372	0.400
	WCDMA Band IV	RMC 12.2Kbps	Front	10	Bottom	Hotspot On	1513	1752.6	19.55	20	1.109	0.16	0.601	0.667
	WCDMA Band IV	RMC 12.2Kbps	Back	10	Bottom	Hotspot On	1513	1752.6	19.55	20	1.109	-0.07	0.461	0.511
	WCDMA Band IV	RMC 12.2Kbps	Left Side	10	Bottom	Hotspot On	1513	1752.6	19.55	20	1.109	-0.12	0.069	0.077
	WCDMA Band IV	RMC 12.2Kbps	Right Side	10	Bottom	Hotspot On	1513	1752.6	19.55	20	1.109	0.19	0.065	0.072
#25	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	1513	1752.6	19.55	20	1.109	-0.13	1.070	1.187
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	1312	1712.4	19.53	20	1.114	0.05	0.779	0.868
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	1413	1732.6	19.47	20	1.130	-0.01	0.884	0.999



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band II	RMC 12.2Kbps	Front	10	Top	Full	9538	1907.6	22.03	22.5	1.114	-0.04	0.454	0.506
	WCDMA Band II	RMC 12.2Kbps	Back	10	Top	Full	9538	1907.6	22.03	22.5	1.114	0.09	0.385	0.429
	WCDMA Band II	RMC 12.2Kbps	Left Side	10	Top	Full	9538	1907.6	22.03	22.5	1.114	-0.01	0.424	0.472
	WCDMA Band II	RMC 12.2Kbps	Top Side	10	Top	Full	9538	1907.6	22.03	22.5	1.114	0.15	0.452	0.504
	WCDMA Band II	RMC 12.2Kbps	Front	10	Top	Full	9262	1852.4	21.94	22.5	1.138	0.07	0.481	0.547
	WCDMA Band II	RMC 12.2Kbps	Front	10	Top	Full	9400	1880	22	22.5	1.122	0.09	0.500	0.561
	WCDMA Band II	RMC 12.2Kbps	Front	10	Bottom	Hotspot On	9538	1907.6	18.06	18.5	1.107	0.13	0.425	0.470
	WCDMA Band II	RMC 12.2Kbps	Back	10	Bottom	Hotspot On	9538	1907.6	18.06	18.5	1.107	-0.04	0.258	0.286
	WCDMA Band II	RMC 12.2Kbps	Left Side	10	Bottom	Hotspot On	9538	1907.6	18.06	18.5	1.107	-0.15	0.042	0.047
	WCDMA Band II	RMC 12.2Kbps	Right Side	10	Bottom	Hotspot On	9538	1907.6	18.06	18.5	1.107	-0.07	0.029	0.032
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	9538	1907.6	18.06	18.5	1.107	0.11	0.772	0.854
#26	WCDMA Band II	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	9262	1852.4	17.92	18.5	1.143	0.01	0.944	1.079
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	10	Bottom	Hotspot On	9400	1880	18.04	18.5	1.112	0.16	0.878	0.976



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
#27	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Top	Full	777	848.31	23.53	24	1.114	0.02	0.629	0.701
	CDMA2000 BC0	RTAP 153.6Kbps	Back	10	Top	Full	777	848.31	23.53	24	1.114	0.09	0.512	0.571
	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	10	Top	Full	777	848.31	23.53	24	1.114	0.04	0.070	0.078
	CDMA2000 BC0	RTAP 153.6Kbps	Top Side	10	Top	Full	777	848.31	23.53	24	1.114	-0.01	0.472	0.526
	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Top	Full	1013	824.7	23.51	24	1.119	-0.08	0.581	0.650
	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Top	Full	384	836.52	23.46	24	1.132	0.09	0.568	0.643
	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Bottom	Full	777	848.31	23.53	24	1.114	0.09	0.296	0.330
	CDMA2000 BC0	RTAP 153.6Kbps	Back	10	Bottom	Full	777	848.31	23.53	24	1.114	0.04	0.258	0.287
	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	10	Bottom	Full	777	848.31	23.53	24	1.114	0.08	0.271	0.302
	CDMA2000 BC0	RTAP 153.6Kbps	Right Side	10	Bottom	Full	777	848.31	23.53	24	1.114	-0.01	0.161	0.179
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	10	Bottom	Full	777	848.31	23.53	24	1.114	0.18	0.206	0.230
	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Bottom	Full	1013	824.7	23.51	24	1.119	0.04	0.195	0.218
	CDMA2000 BC0	RTAP 153.6Kbps	Front	10	Bottom	Full	384	836.52	23.46	24	1.132	0.16	0.197	0.223



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
#28	LTE Band 12	10M	QPSK	1RB	0Offset	Front	10	Top	Full	23095	707.5	22.96	23.5	1.132	0.04	0.389	0.441
	LTE Band 12	10M	QPSK	1RB	0Offset	Back	10	Top	Full	23095	707.5	22.96	23.5	1.132	0.01	0.358	0.405
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Side	10	Top	Full	23095	707.5	22.96	23.5	1.132	0.15	0.207	0.234
	LTE Band 12	10M	QPSK	1RB	0Offset	Top Side	10	Top	Full	23095	707.5	22.96	23.5	1.132	-0.1	0.313	0.354
	LTE Band 12	10M	QPSK	25RB	0Offset	Front	10	Top	Full	23095	707.5	22.07	22.5	1.104	0.06	0.306	0.338
	LTE Band 12	10M	QPSK	25RB	0Offset	Back	10	Top	Full	23095	707.5	22.07	22.5	1.104	0.15	0.295	0.326
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Side	10	Top	Full	23095	707.5	22.07	22.5	1.104	-0.04	0.176	0.194
	LTE Band 12	10M	QPSK	25RB	0Offset	Top Side	10	Top	Full	23095	707.5	22.07	22.5	1.104	-0.05	0.276	0.305
	LTE Band 12	10M	QPSK	1RB	0Offset	Front	10	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.02	0.186	0.211
	LTE Band 12	10M	QPSK	1RB	0Offset	Back	10	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.14	0.195	0.221
	LTE Band 12	10M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	23095	707.5	22.96	23.5	1.132	-0.08	0.182	0.206
	LTE Band 12	10M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.07	0.145	0.164
	LTE Band 12	10M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	23095	707.5	22.96	23.5	1.132	-0.16	0.140	0.159
	LTE Band 12	10M	QPSK	25RB	0Offset	Front	10	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.01	0.171	0.189
	LTE Band 12	10M	QPSK	25RB	0Offset	Back	10	Bottom	Full	23095	707.5	22.07	22.5	1.104	-0.15	0.186	0.205
	LTE Band 12	10M	QPSK	25RB	0Offset	Left Side	10	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.11	0.167	0.184
	LTE Band 12	10M	QPSK	25RB	0Offset	Right Side	10	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.04	0.137	0.151
	LTE Band 12	10M	QPSK	25RB	0Offset	Bottom Side	10	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.06	0.127	0.140
#29	LTE Band 5	10M	QPSK	1RB	0Offset	Front	10	Top	Full	20525	836.5	23.18	23.5	1.076	0.05	0.469	0.505
	LTE Band 5	10M	QPSK	1RB	0Offset	Back	10	Top	Full	20525	836.5	23.18	23.5	1.076	0.04	0.438	0.471
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Side	10	Top	Full	20525	836.5	23.18	23.5	1.076	0.03	0.197	0.212
	LTE Band 5	10M	QPSK	1RB	0Offset	Top Side	10	Top	Full	20525	836.5	23.18	23.5	1.076	0.07	0.414	0.446
	LTE Band 5	10M	QPSK	25RB	0Offset	Front	10	Top	Full	20525	836.5	22.27	22.5	1.054	0.16	0.437	0.461
	LTE Band 5	10M	QPSK	25RB	0Offset	Back	10	Top	Full	20525	836.5	22.27	22.5	1.054	0.07	0.384	0.405
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Side	10	Top	Full	20525	836.5	22.27	22.5	1.054	-0.15	0.159	0.168
	LTE Band 5	10M	QPSK	25RB	0Offset	Top Side	10	Top	Full	20525	836.5	22.27	22.5	1.054	-0.01	0.336	0.354
	LTE Band 5	10M	QPSK	1RB	0Offset	Front	10	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.05	0.328	0.353
	LTE Band 5	10M	QPSK	1RB	0Offset	Back	10	Bottom	Full	20525	836.5	23.18	23.5	1.076	-0.07	0.335	0.361
	LTE Band 5	10M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.14	0.387	0.417
	LTE Band 5	10M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	20525	836.5	23.18	23.5	1.076	-0.11	0.273	0.294
	LTE Band 5	10M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.12	0.312	0.336
	LTE Band 5	10M	QPSK	25RB	0Offset	Front	10	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.13	0.286	0.302
	LTE Band 5	10M	QPSK	25RB	0Offset	Back	10	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.16	0.291	0.307
	LTE Band 5	10M	QPSK	25RB	0Offset	Left Side	10	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.01	0.316	0.333
	LTE Band 5	10M	QPSK	25RB	0Offset	Right Side	10	Bottom	Full	20525	836.5	22.27	22.5	1.054	-0.11	0.240	0.253
	LTE Band 5	10M	QPSK	25RB	0Offset	Bottom Side	10	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.08	0.273	0.288



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
#30	LTE Band 26	15M	QPSK	1RB	37Offset	Front	10	Top	Full	26865	831.5	23.37	23.5	1.030	0.18	0.465	0.479
	LTE Band 26	15M	QPSK	1RB	37Offset	Back	10	Top	Full	26865	831.5	23.37	23.5	1.030	0.09	0.389	0.401
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Side	10	Top	Full	26865	831.5	23.37	23.5	1.030	-0.1	0.217	0.224
	LTE Band 26	15M	QPSK	1RB	37Offset	Top Side	10	Top	Full	26865	831.5	23.37	23.5	1.030	-0.11	0.378	0.389
	LTE Band 26	15M	QPSK	36RB	20Offset	Front	10	Top	Full	26865	831.5	22.29	22.5	1.050	0.04	0.417	0.438
	LTE Band 26	15M	QPSK	36RB	20Offset	Back	10	Top	Full	26865	831.5	22.29	22.5	1.050	0.06	0.377	0.396
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Side	10	Top	Full	26865	831.5	22.29	22.5	1.050	-0.08	0.169	0.177
	LTE Band 26	15M	QPSK	36RB	20Offset	Top Side	10	Top	Full	26865	831.5	22.29	22.5	1.050	-0.04	0.315	0.331
	LTE Band 26	15M	QPSK	1RB	37Offset	Front	10	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.09	0.298	0.307
	LTE Band 26	15M	QPSK	1RB	37Offset	Back	10	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.04	0.297	0.306
	LTE Band 26	15M	QPSK	1RB	37Offset	Left Side	10	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.04	0.361	0.372
	LTE Band 26	15M	QPSK	1RB	37Offset	Right Side	10	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.13	0.199	0.205
	LTE Band 26	15M	QPSK	1RB	37Offset	Bottom Side	10	Bottom	Full	26865	831.5	23.37	23.5	1.030	-0.18	0.285	0.294
	LTE Band 26	15M	QPSK	36RB	20Offset	Front	10	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.06	0.203	0.213
	LTE Band 26	15M	QPSK	36RB	20Offset	Back	10	Bottom	Full	26865	831.5	22.29	22.5	1.050	-0.04	0.205	0.215
	LTE Band 26	15M	QPSK	36RB	20Offset	Left Side	10	Bottom	Full	26865	831.5	22.29	22.5	1.050	-0.08	0.293	0.308
	LTE Band 26	15M	QPSK	36RB	20Offset	Right Side	10	Bottom	Full	26865	831.5	22.29	22.5	1.050	-0.11	0.191	0.200
	LTE Band 26	15M	QPSK	36RB	20Offset	Bottom Side	10	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.12	0.200	0.210
	LTE Band 4	20M	QPSK	1RB	0Offset	Front	10	Top	Full	20175	1732.5	22.84	23	1.038	0.09	0.377	0.391
	LTE Band 4	20M	QPSK	1RB	0Offset	Back	10	Top	Full	20175	1732.5	22.84	23	1.038	0.01	0.275	0.285
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	20175	1732.5	22.84	23	1.038	-0.13	0.228	0.237
	LTE Band 4	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	20175	1732.5	22.84	23	1.038	-0.02	0.462	0.479
	LTE Band 4	20M	QPSK	50RB	0Offset	Front	10	Top	Full	20175	1732.5	21.81	22	1.045	0.01	0.243	0.254
	LTE Band 4	20M	QPSK	50RB	0Offset	Back	10	Top	Full	20175	1732.5	21.81	22	1.045	0.08	0.213	0.223
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	20175	1732.5	21.81	22	1.045	-0.11	0.177	0.185
	LTE Band 4	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	20175	1732.5	21.81	22	1.045	0.15	0.327	0.342
	LTE Band 4	20M	QPSK	1RB	0Offset	Front	10	Bottom	Hotspot On	20175	1732.5	20.03	20.5	1.114	0.03	0.687	0.766
	LTE Band 4	20M	QPSK	1RB	0Offset	Back	10	Bottom	Hotspot On	20175	1732.5	20.03	20.5	1.114	0.04	0.534	0.595
	LTE Band 4	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Hotspot On	20175	1732.5	20.03	20.5	1.114	-0.05	0.078	0.087
	LTE Band 4	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Hotspot On	20175	1732.5	20.03	20.5	1.114	0.1	0.066	0.074
#31	LTE Band 4	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	20175	1732.5	20.03	20.5	1.114	0.17	0.982	1.094
	LTE Band 4	20M	QPSK	50RB	0Offset	Front	10	Bottom	Hotspot On	20175	1732.5	19.87	20	1.030	0.06	0.676	0.697
	LTE Band 4	20M	QPSK	50RB	0Offset	Back	10	Bottom	Hotspot On	20175	1732.5	19.87	20	1.030	-0.04	0.518	0.534
	LTE Band 4	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Hotspot On	20175	1732.5	19.87	20	1.030	-0.08	0.071	0.074
	LTE Band 4	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Hotspot On	20175	1732.5	19.87	20	1.030	0.06	0.059	0.061
	LTE Band 4	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	20175	1732.5	19.87	20	1.030	0.14	0.934	0.962
	LTE Band 4	20M	QPSK	100RB	0Offset	Bottom Side	10	Bottom	Hotspot On	20175	1732.5	19.85	20	1.035	0.15	0.946	0.979



**FCC SAR Test Report**

**Report No. : FA712206**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	10	Top	Full	132322	1745	22.85	23	1.035	0.08	0.338	0.350
	LTE Band 66	20M	QPSK	1RB	0Offset	Back	10	Top	Full	132322	1745	22.85	23	1.035	-0.09	0.285	0.295
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	132322	1745	22.85	23	1.035	0.01	0.262	0.271
	LTE Band 66	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	132322	1745	22.85	23	1.035	0.07	0.477	0.494
	LTE Band 66	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	132072	1720	22.82	23	1.042	-0.01	0.424	0.442
	LTE Band 66	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	132572	1770	22.70	23	1.072	0.06	0.418	0.448
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	10	Top	Full	132322	1745	21.98	22.5	1.127	0.14	0.228	0.257
	LTE Band 66	20M	QPSK	50RB	0Offset	Back	10	Top	Full	132322	1745	21.98	22.5	1.127	0.16	0.201	0.227
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	132322	1745	21.98	22.5	1.127	-0.08	0.175	0.197
	LTE Band 66	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	132322	1745	21.98	22.5	1.127	0.09	0.351	0.396
	LTE Band 66	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	132072	1720	21.73	22.5	1.194	0.11	0.321	0.383
	LTE Band 66	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	132572	1770	21.70	22.5	1.202	0.15	0.316	0.380
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	10	Bottom	Hotspot On	132322	1745	18.67	19	1.079	0.15	0.588	0.634
	LTE Band 66	20M	QPSK	1RB	0Offset	Back	10	Bottom	Hotspot On	132322	1745	18.67	19	1.079	0.08	0.437	0.471
	LTE Band 66	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Hotspot On	132322	1745	18.67	19	1.079	-0.19	0.068	0.074
	LTE Band 66	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Hotspot On	132322	1745	18.67	19	1.079	0.15	0.055	0.060
	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132322	1745	18.67	19	1.079	0.01	0.852	0.919
	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132072	1720	18.61	19	1.094	-0.03	0.720	0.788
#32	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132572	1770	18.64	19	1.086	0.15	1.010	1.097
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	10	Bottom	Hotspot On	132322	1745	18.6	19	1.096	-0.07	0.562	0.616
	LTE Band 66	20M	QPSK	50RB	0Offset	Back	10	Bottom	Hotspot On	132322	1745	18.6	19	1.096	0.05	0.426	0.467
	LTE Band 66	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Hotspot On	132322	1745	18.6	19	1.096	0.01	0.057	0.062
	LTE Band 66	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Hotspot On	132322	1745	18.6	19	1.096	0.16	0.052	0.057
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132322	1745	18.6	19	1.096	-0.05	0.811	0.889
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132072	1720	18.56	19	1.107	0.04	0.701	0.776
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132572	1770	18.46	19	1.132	-0.08	0.961	1.088
	LTE Band 66	20M	QPSK	100RB	0Offset	Bottom Side	10	Bottom	Hotspot On	132322	1745	18.55	19	1.109	0.02	0.832	0.923
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	10	Top	Full	26590	1905	22.37	22.5	1.030	0.13	0.482	0.497
	LTE Band 25	20M	QPSK	1RB	0Offset	Back	10	Top	Full	26590	1905	22.37	22.5	1.030	-0.11	0.360	0.371
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	26590	1905	22.37	22.5	1.030	0.05	0.355	0.366
	LTE Band 25	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	26590	1905	22.37	22.5	1.030	-0.1	0.458	0.472
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	10	Top	Full	26140	1860	22.35	22.5	1.035	0.03	0.521	0.539
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	10	Top	Full	26340	1880	22.34	22.5	1.038	0.06	0.464	0.481
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	10	Top	Full	26590	1905	21.49	22	1.125	0.01	0.423	0.476
	LTE Band 25	20M	QPSK	50RB	0Offset	Back	10	Top	Full	26590	1905	21.49	22	1.125	0.06	0.319	0.359
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	26590	1905	21.49	22	1.125	-0.07	0.316	0.355
	LTE Band 25	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	26590	1905	21.49	22	1.125	0.11	0.413	0.464
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	10	Bottom	Hotspot On	26590	1905	18.89	19	1.026	0.11	0.580	0.595
	LTE Band 25	20M	QPSK	1RB	0Offset	Back	10	Bottom	Hotspot On	26590	1905	18.89	19	1.026	0.02	0.349	0.358
	LTE Band 25	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Hotspot On	26590	1905	18.89	19	1.026	0.18	0.071	0.073
	LTE Band 25	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Hotspot On	26590	1905	18.89	19	1.026	0.08	0.039	0.040
	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26590	1905	18.89	19	1.026	0.07	0.862	0.884
#33	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26140	1860	18.81	19	1.045	0.04	1.120	1.170
	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26340	1880	18.75	19	1.059	0.11	1.050	1.112
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	10	Bottom	Hotspot On	26590	1905	18.68	19	1.076	0.05	0.580	0.624
	LTE Band 25	20M	QPSK	50RB	0Offset	Back	10	Bottom	Hotspot On	26590	1905	18.68	19	1.076	0.06	0.361	0.389
	LTE Band 25	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Hotspot On	26590	1905	18.68	19	1.076	0.01	0.713	0.768

**SPORTON International (ShenZhen) INC.**

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FCC ID : 2ABZ2-A5000

Issued Date : Jun. 19, 2017

Form version. : 170509





	LTE Band 25	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Hotspot On	26590	1905	18.68	19	1.076	-0.05	0.038	0.041
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26590	1905	18.68	19	1.076	-0.08	0.862	0.928
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26140	1860	18.43	19	1.140	0.15	1.010	1.152
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26340	1880	18.47	19	1.130	0.01	0.975	1.102
	LTE Band 25	20M	QPSK	100RB	0Offset	Bottom Side	10	Bottom	Hotspot On	26590	1905	18.64	19	1.086	-0.12	0.890	0.967
	LTE Band 30	10M	QPSK	1RB	0Offset	Front	10	Top	Full	27710	2310	22.77	23	1.054	0.08	0.686	0.723
	LTE Band 30	10M	QPSK	1RB	0Offset	Back	10	Top	Full	27710	2310	22.77	23	1.054	0.06	0.658	0.694
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Side	10	Top	Full	27710	2310	22.77	23	1.054	0.01	0.608	0.641
	LTE Band 30	10M	QPSK	1RB	0Offset	Top Side	10	Top	Full	27710	2310	22.77	23	1.054	-0.13	0.327	0.345
	LTE Band 30	10M	QPSK	25RB	0Offset	Front	10	Top	Full	27710	2310	21.55	22	1.109	0.15	0.534	0.592
	LTE Band 30	10M	QPSK	25RB	0Offset	Back	10	Top	Full	27710	2310	21.55	22	1.109	-0.16	0.519	0.576
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Side	10	Top	Full	27710	2310	21.55	22	1.109	-0.07	0.480	0.532
	LTE Band 30	10M	QPSK	25RB	0Offset	Top Side	10	Top	Full	27710	2310	21.55	22	1.109	0.04	0.254	0.282
	LTE Band 30	10M	QPSK	1RB	0Offset	Front	10	Bottom	Full	27710	2310	22.77	23	1.054	0.06	0.652	0.687
	LTE Band 30	10M	QPSK	1RB	0Offset	Back	10	Bottom	Full	27710	2310	22.77	23	1.054	0.04	0.523	0.551
	LTE Band 30	10M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	27710	2310	22.77	23	1.054	-0.08	0.119	0.125
	LTE Band 30	10M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	27710	2310	22.77	23	1.054	-0.04	0.159	0.168
#34	LTE Band 30	10M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	27710	2310	22.77	23	1.054	-0.13	0.980	1.033
	LTE Band 30	10M	QPSK	25RB	0Offset	Front	10	Bottom	Full	27710	2310	21.55	22	1.109	0.01	0.503	0.558
	LTE Band 30	10M	QPSK	25RB	0Offset	Back	10	Bottom	Full	27710	2310	21.55	22	1.109	0.1	0.403	0.447
	LTE Band 30	10M	QPSK	25RB	0Offset	Left Side	10	Bottom	Full	27710	2310	21.55	22	1.109	0.11	0.089	0.099
	LTE Band 30	10M	QPSK	25RB	0Offset	Right Side	10	Bottom	Full	27710	2310	21.55	22	1.109	0.04	0.124	0.138
	LTE Band 30	10M	QPSK	25RB	0Offset	Bottom Side	10	Bottom	Full	27710	2310	21.55	22	1.109	0.08	0.874	0.969
	LTE Band 30	10M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Full	27710	2310	21.56	22	1.107	0.06	0.890	0.985
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	10	Top	Full	21350	2560	22.37	23	1.156	0.04	0.666	0.770
	LTE Band 7	20M	QPSK	1RB	0Offset	Back	10	Top	Full	21350	2560	22.37	23	1.156	0.01	0.550	0.636
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	21350	2560	22.37	23	1.156	0.13	0.743	0.859
	LTE Band 7	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	21350	2560	22.37	23	1.156	0.08	0.457	0.528
#35	LTE Band 7	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	20850	2510	22.32	23	1.169	0.03	0.886	1.036
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	21100	2535	22.26	23	1.186	0.06	0.754	0.894
	LTE Band 7	20M	QPSK	50RB	0Offset	Front	10	Top	Full	21350	2560	21.33	22	1.167	0.06	0.507	0.592
	LTE Band 7	20M	QPSK	50RB	0Offset	Back	10	Top	Full	21350	2560	21.33	22	1.167	0.01	0.419	0.489
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	21350	2560	21.33	22	1.167	-0.02	0.648	0.756
	LTE Band 7	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	21350	2560	21.33	22	1.167	0.15	0.420	0.490
	LTE Band 7	20M	QPSK	100RB	0Offset	Left Side	10	Top	Full	21350	2560	21.32	22	1.169	0.14	0.633	0.740
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	20850+21048	2529.8	22.31	23	1.172	0.12	0.879	1.030
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	21001+21199	2544.9	22.29	23	1.178	0.01	0.829	0.976
	LTE Band 7	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	21152+21350	2540.2	22.33	23	1.167	0.08	0.749	0.874
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	10	Bottom	Full	21350	2560	22.37	23	1.156	0.06	0.592	0.684
	LTE Band 7	20M	QPSK	1RB	0Offset	Back	10	Bottom	Full	21350	2560	22.37	23	1.156	-0.01	0.473	0.547
	LTE Band 7	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	21350	2560	22.37	23	1.156	0.14	0.059	0.068
	LTE Band 7	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	21350	2560	22.37	23	1.156	0.17	0.168	0.194
	LTE Band 7	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	21350	2560	22.37	23	1.156	0.04	0.628	0.726
	LTE Band 7	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	20850	2510	22.32	23	1.169	0.13	0.776	0.908
	LTE Band 7	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	21100	2535	22.26	23	1.186	0.07	0.535	0.634
	LTE Band 7	20M	QPSK	50RB	0Offset	Front	10	Bottom	Full	21350	2560	21.33	22	1.167	0.06	0.465	0.543
	LTE Band 7	20M	QPSK	50RB	0Offset	Back	10	Bottom	Full	21350	2560	21.33	22	1.167	-0.07	0.375	0.438
	LTE Band 7	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Full	21350	2560	21.33	22	1.167	0.05	0.047	0.055
	LTE Band 7	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Full	21350	2560	21.33	22	1.167	0.06	0.134	0.156



	LTE Band 7	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Full	21350	2560	21.33	22	1.167	0.01	0.491	0.573
	LTE Band 7	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	20850+21048	2529.8	22.31	23	1.172	-0.01	0.767	0.899
	LTE Band 7	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	21001+21199	2544.9	22.29	23	1.178	-0.07	0.590	0.695
	LTE Band 7	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	21152+21350	2540.2	22.33	23	1.167	0.04	0.564	0.658

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	10	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.11	0.220	0.241
	LTE Band 38	20M	QPSK	1RB	0Offset	Back	10	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.13	0.211	0.231
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.03	0.294	0.322
	LTE Band 38	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.09	0.293	0.321
#36	LTE Band 38	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	38000	2595	22.51	23	1.119	62.9	1.006	0.02	0.350	0.394
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	38150	2610	22.51	23	1.119	62.9	1.006	0.02	0.305	0.343
	LTE Band 38	20M	QPSK	50RB	0Offset	Front	10	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.02	0.248	0.265
	LTE Band 38	20M	QPSK	50RB	0Offset	Back	10	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	-0.01	0.209	0.224
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.11	0.297	0.318
	LTE Band 38	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.09	0.220	0.236
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	10	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.05	0.288	0.315
	LTE Band 38	20M	QPSK	1RB	0Offset	Back	10	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.02	0.231	0.253
	LTE Band 38	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.12	0.050	0.055
	LTE Band 38	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.11	0.097	0.106
	LTE Band 38	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.07	0.247	0.271
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	10	Bottom	Full	38000	2595	22.51	23	1.119	62.9	1.006	0.03	0.270	0.304
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	10	Bottom	Full	38150	2610	22.51	23	1.119	62.9	1.006	0.08	0.260	0.293
	LTE Band 38	20M	QPSK	50RB	0Offset	Front	10	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.05	0.247	0.264
	LTE Band 38	20M	QPSK	50RB	0Offset	Back	10	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.04	0.210	0.225
	LTE Band 38	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.01	<0.001	<0.001
	LTE Band 38	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	-0.03	0.075	0.080
	LTE Band 38	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.11	0.222	0.238
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	10	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.04	0.406	0.527
	LTE Band 41	20M	QPSK	1RB	0Offset	Back	10	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.01	0.350	0.455
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.06	0.430	0.559
	LTE Band 41	20M	QPSK	1RB	0Offset	Top Side	10	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.08	0.350	0.455
#37	LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	39750	2506	22.35	23.5	1.303	62.9	1.006	0.02	0.454	0.595
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	40620	2593	22.36	23.5	1.300	62.9	1.006	0.03	0.410	0.536
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	41055	2636.5	22.19	23.5	1.352	62.9	1.006	-0.13	0.329	0.448
	LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Top	Full	41490	2680	21.77	23.5	1.489	62.9	1.006	-0.14	0.232	0.348
	LTE Band 41	20M	QPSK	50RB	0Offset	Front	10	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.04	0.313	0.394
	LTE Band 41	20M	QPSK	50RB	0Offset	Back	10	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	-0.06	0.264	0.332
	LTE Band 41	20M	QPSK	50RB	0Offset	Left Side	10	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.16	0.391	0.492
	LTE Band 41	20M	QPSK	50RB	0Offset	Top Side	10	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.01	0.266	0.335
	LTE Band 41	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	39750+39948	2525.8	22.35	23.50	1.303	62.9	1.006	0.06	0.427	0.560
	LTE Band 41	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	40185+40383	2569.3	22.32	23.50	1.312	62.9	1.006	-0.04	0.413	0.545
	LTE Band 41	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	40620+40818	2612.8	22.31	23.50	1.315	62.9	1.006	0.04	0.345	0.456
	LTE Band 41	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	41055+41253	2656.3	22.33	23.50	1.309	62.9	1.006	0.01	0.264	0.348



LTE Band 41	20M	QPSK	1RB	99Offset	Left Side	10	Top	Full	41292+41490	2660.2	22.27	23.50	1.327	62.9	1.006	0.02	0.226	0.302
LTE Band 41	20M	QPSK	1RB	0Offset	Front	10	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.08	0.339	0.440
LTE Band 41	20M	QPSK	1RB	0Offset	Back	10	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.19	0.275	0.357
LTE Band 41	20M	QPSK	1RB	0Offset	Left Side	10	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.01	0.038	0.049
LTE Band 41	20M	QPSK	1RB	0Offset	Right Side	10	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.05	0.134	0.174
LTE Band 41	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.07	0.348	0.452
LTE Band 41	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	39750	2506	22.35	23.5	1.303	62.9	1.006	0.06	0.397	0.520
LTE Band 41	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	40620	2593	22.36	23.5	1.300	62.9	1.006	-0.01	0.308	0.403
LTE Band 41	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	41055	2636.5	22.19	23.5	1.352	62.9	1.006	0.1	0.218	0.297
LTE Band 41	20M	QPSK	1RB	0Offset	Bottom Side	10	Bottom	Full	41490	2680	21.77	23.5	1.489	62.9	1.006	0.07	0.124	0.186
LTE Band 41	20M	QPSK	50RB	0Offset	Front	10	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.18	0.262	0.330
LTE Band 41	20M	QPSK	50RB	0Offset	Back	10	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.06	0.216	0.272
LTE Band 41	20M	QPSK	50RB	0Offset	Left Side	10	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	-0.01	0.009	0.011
LTE Band 41	20M	QPSK	50RB	0Offset	Right Side	10	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.01	0.102	0.128
LTE Band 41	20M	QPSK	50RB	0Offset	Bottom Side	10	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.03	0.306	0.385
LTE Band 41	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	39750+39948	2525.8	22.35	23.50	1.303	62.9	1.006	0.08	0.348	0.456
LTE Band 41	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	40185+40383	2569.3	22.32	23.50	1.312	62.9	1.006	0.05	0.280	0.370
LTE Band 41	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	40620+40818	2612.8	22.31	23.50	1.315	62.9	1.006	-0.01	0.234	0.310
LTE Band 41	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	41055+41253	2656.3	22.33	23.50	1.309	62.9	1.006	0.07	0.099	0.130
LTE Band 41	20M	QPSK	1RB	99Offset	Bottom Side	10	Bottom	Full	41292+41490	2660.2	22.27	23.50	1.327	62.9	1.006	-0.14	0.102	0.136

<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.08	0.105	0.107
	WLAN2.4GHz	802.11b 1Mbps	Back	10	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	-0.09	0.092	0.094
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	-0.02	0.120	0.122
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.12	0.093	0.095
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10	Ant.1	Full	6	2437	18.06	18.5	1.108	98.96	1.011	0.07	0.110	0.123
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10	Ant.1	Full	11	2462	17.44	18.5	1.278	98.96	1.011	0.04	0.107	0.138
#38	WLAN2.4GHz	802.11b 1Mbps	Front	10	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.07	0.126	0.135
	WLAN2.4GHz	802.11b 1Mbps	Back	10	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.09	0.094	0.101
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.06	0.089	0.096
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	-0.08	0.060	0.064
	WLAN2.4GHz	802.11b 1Mbps	Front	10	Ant.2	Full	6	2437	15.68	16.00	1.076	99.31	1.007	-0.18	0.094	0.102
	WLAN2.4GHz	802.11b 1Mbps	Front	10	Ant.2	Full	11	2462	15.60	16.00	1.096	99.31	1.007	0.02	0.100	0.110



<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	WLAN5.2GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	44	5220	18.31	18.50	1.046	94.88	1.054	0.08	0.140	0.154
	WLAN5.2GHz	802.11a 6Mbps	Back	10	Ant.1+2	Full	44	5220	18.31	18.50	1.046	94.88	1.054	0.02	0.039	0.042
	WLAN5.2GHz	802.11a 6Mbps	Left Side	10	Ant.1+2	Full	44	5220	18.31	18.50	1.046	94.88	1.054	-0.03	0.127	0.140
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10	Ant.1+2	Full	44	5220	18.31	18.50	1.046	94.88	1.054	0.06	0.111	0.122
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10	Ant.1+2	Full	44	5220	18.31	18.50	1.046	94.88	1.054	-0.02	0.063	0.069
	WLAN5.2GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	36	5180	18.19	18.50	1.073	94.88	1.054	-0.01	0.146	0.165
#39	WLAN5.2GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	40	5200	18.16	18.50	1.081	94.88	1.054	-0.05	0.145	0.165
	WLAN5.2GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	48	5240	18.30	18.50	1.046	94.88	1.054	0.02	0.135	0.149
	WLAN5.8GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.05	0.107	0.115
	WLAN5.8GHz	802.11a 6Mbps	Back	10	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	-0.04	0.045	0.048
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.09	0.101	0.109
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.12	0.099	0.106
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.04	0.065	0.070
	WLAN5.8GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	149	5745	18.17	18.50	1.078	94.88	1.054	-0.13	0.103	0.117
#40	WLAN5.8GHz	802.11a 6Mbps	Front	10	Ant.1+2	Full	165	5825	18.36	18.50	1.033	94.88	1.054	-0.01	0.122	0.133



14.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
#41	GSM850	GPRS (3 Tx slots)	Front	15	Top	Full	251	848.8	29.94	30.5	1.138	0.02	0.310	0.353
	GSM850	GPRS (3 Tx slots)	Back	15	Top	Full	251	848.8	29.94	30.5	1.138	0.12	0.275	0.313
	GSM850	GPRS (3 Tx slots)	Front	15	Top	Full	128	824.2	29.81	30.5	1.172	0.01	0.299	0.350
	GSM850	GPRS (3 Tx slots)	Front	15	Top	Full	189	836.4	29.83	30.5	1.167	-0.08	0.301	0.351
	GSM850	GPRS (3 Tx slots)	Front	15	Bottom	Full	251	848.8	29.94	30.5	1.138	0.03	0.267	0.304
	GSM850	GPRS (3 Tx slots)	Back	15	Bottom	Full	251	848.8	29.94	30.5	1.138	0.15	0.298	0.339
	GSM850	GPRS (3 Tx slots)	Back	15	Bottom	Full	128	824.2	29.81	30.5	1.172	0.04	0.194	0.227
	GSM850	GPRS (3 Tx slots)	Back	15	Bottom	Full	189	836.4	29.83	30.5	1.167	-0.05	0.245	0.286
	GSM1900	GPRS (3 Tx slots)	Front	15	Top	Full	810	1909.8	26.42	27	1.143	0.01	0.158	0.181
	GSM1900	GPRS (3 Tx slots)	Back	15	Top	Full	810	1909.8	26.42	27	1.143	0.08	0.136	0.155
	GSM1900	GPRS (3 Tx slots)	Front	15	Top	Full	512	1850.2	26.32	27	1.169	0.11	0.177	0.207
	GSM1900	GPRS (3 Tx slots)	Front	15	Top	Full	661	1880	26.35	27	1.161	0.11	0.168	0.195
	GSM1900	GPRS (3 Tx slots)	Front	15	Bottom	Full	810	1909.8	26.42	27	1.143	0.08	0.348	0.398
	GSM1900	GPRS (3 Tx slots)	Back	15	Bottom	Full	810	1909.8	26.42	27	1.143	0.09	0.272	0.311
#42	GSM1900	GPRS (3 Tx slots)	Front	15	Bottom	Full	512	1850.2	26.32	27	1.169	0.12	0.714	0.835
	GSM1900	GPRS (3 Tx slots)	Front	15	Bottom	Full	661	1880	26.35	27	1.161	0.1	0.527	0.612



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band V	RMC 12.2Kbps	Front	15	Top	Full	4182	836.4	23.19	23.5	1.074	-0.05	0.202	0.217
	WCDMA Band V	RMC 12.2Kbps	Back	15	Top	Full	4182	836.4	23.19	23.5	1.074	-0.08	0.170	0.183
	WCDMA Band V	RMC 12.2Kbps	Front	15	Top	Full	4132	826.4	23.14	23.5	1.086	0.01	0.201	0.218
	WCDMA Band V	RMC 12.2Kbps	Front	15	Top	Full	4233	846.6	23.12	23.5	1.091	0.15	0.222	0.242
	WCDMA Band V	RMC 12.2Kbps	Front	15	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.06	0.227	0.244
	WCDMA Band V	RMC 12.2Kbps	Back	15	Bottom	Full	4182	836.4	23.19	23.5	1.074	0.01	0.251	0.270
#43	WCDMA Band V	RMC 12.2Kbps	Back	15	Bottom	Full	4132	826.4	23.14	23.5	1.086	0.11	0.281	0.305
	WCDMA Band V	RMC 12.2Kbps	Back	15	Bottom	Full	4233	846.6	23.12	23.5	1.091	0.02	0.257	0.281
	WCDMA Band IV	RMC 12.2Kbps	Front	15	Top	Full	1513	1752.6	22.24	22.5	1.062	0.16	0.135	0.143
	WCDMA Band IV	RMC 12.2Kbps	Back	15	Top	Full	1513	1752.6	22.24	22.5	1.062	0.12	0.110	0.117
	WCDMA Band IV	RMC 12.2Kbps	Front	15	Top	Full	1312	1712.4	22.22	22.5	1.067	0.18	0.142	0.151
	WCDMA Band IV	RMC 12.2Kbps	Front	15	Top	Full	1413	1732.6	22.19	22.5	1.074	0.05	0.133	0.143
#44	WCDMA Band IV	RMC 12.2Kbps	Front	15	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.02	0.722	0.767
	WCDMA Band IV	RMC 12.2Kbps	Back	15	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.04	0.464	0.493
	WCDMA Band IV	RMC 12.2Kbps	Front	15	Bottom	Full	1312	1712.4	22.22	22.5	1.067	0.07	0.490	0.523
	WCDMA Band IV	RMC 12.2Kbps	Front	15	Bottom	Full	1413	1732.6	22.19	22.5	1.074	0.17	0.581	0.624
	WCDMA Band II	RMC 12.2Kbps	Front	15	Top	Full	9538	1907.6	22.03	22.5	1.114	0.01	0.182	0.203
	WCDMA Band II	RMC 12.2Kbps	Back	15	Top	Full	9538	1907.6	22.03	22.5	1.114	0.15	0.151	0.168
	WCDMA Band II	RMC 12.2Kbps	Front	15	Top	Full	9262	1852.4	21.94	22.5	1.138	0.08	0.201	0.229
	WCDMA Band II	RMC 12.2Kbps	Front	15	Top	Full	9400	1880	22	22.5	1.122	0.03	0.193	0.217
	WCDMA Band II	RMC 12.2Kbps	Front	15	Bottom	Full	9538	1907.6	22.03	22.5	1.114	-0.07	0.423	0.471
	WCDMA Band II	RMC 12.2Kbps	Back	15	Bottom	Full	9538	1907.6	22.03	22.5	1.114	0.12	0.291	0.324
#45	WCDMA Band II	RMC 12.2Kbps	Front	15	Bottom	Full	9262	1852.4	21.94	22.5	1.138	0.09	0.691	0.786
	WCDMA Band II	RMC 12.2Kbps	Front	15	Bottom	Full	9400	1880	22	22.5	1.122	0.11	0.567	0.636



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
#46	CDMA2000 BC0	RC3 SO32	Front	15	Top	Full	777	848.31	23.67	24	1.079	0.17	0.273	0.295
	CDMA2000 BC0	RC3 SO32	Back	15	Top	Full	777	848.31	23.67	24	1.079	0.18	0.216	0.233
	CDMA2000 BC0	RC3 SO32	Front	15	Top	Full	1013	824.7	23.55	24	1.109	-0.11	0.241	0.267
	CDMA2000 BC0	RC3 SO32	Front	15	Top	Full	384	836.52	23.54	24	1.112	-0.13	0.243	0.270
	CDMA2000 BC0	RC3 SO32	Front	15	Bottom	Full	777	848.31	23.67	24	1.079	0.16	0.066	0.071
	CDMA2000 BC0	RC3 SO32	Back	15	Bottom	Full	777	848.31	23.67	24	1.079	-0.01	0.051	0.055
	CDMA2000 BC0	RC3 SO32	Front	15	Bottom	Full	1013	824.7	23.55	24	1.109	0.03	0.058	0.064
	CDMA2000 BC0	RC3 SO32	Front	15	Bottom	Full	384	836.52	23.54	24	1.112	0.04	0.060	0.067



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
#47	LTE Band 12	10M	QPSK	1RB	0Offset	Front	15	Top	Full	23095	707.5	22.96	23.5	1.132	0.18	0.190	0.215
	LTE Band 12	10M	QPSK	1RB	0Offset	Back	15	Top	Full	23095	707.5	22.96	23.5	1.132	0.03	0.145	0.164
	LTE Band 12	10M	QPSK	25RB	0Offset	Front	15	Top	Full	23095	707.5	22.07	22.5	1.104	0.01	0.133	0.147
	LTE Band 12	10M	QPSK	25RB	0Offset	Back	15	Top	Full	23095	707.5	22.07	22.5	1.104	-0.15	0.119	0.131
	LTE Band 12	10M	QPSK	1RB	0Offset	Front	15	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.07	0.156	0.177
	LTE Band 12	10M	QPSK	1RB	0Offset	Back	15	Bottom	Full	23095	707.5	22.96	23.5	1.132	0.17	0.165	0.187
	LTE Band 12	10M	QPSK	25RB	0Offset	Front	15	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.06	0.122	0.135
	LTE Band 12	10M	QPSK	25RB	0Offset	Back	15	Bottom	Full	23095	707.5	22.07	22.5	1.104	0.07	0.137	0.151
	LTE Band 5	10M	QPSK	1RB	0Offset	Front	15	Top	Full	20525	836.5	23.18	23.5	1.076	0.07	0.206	0.222
	LTE Band 5	10M	QPSK	1RB	0Offset	Back	15	Top	Full	20525	836.5	23.18	23.5	1.076	0.11	0.166	0.179
	LTE Band 5	10M	QPSK	25RB	0Offset	Front	15	Top	Full	20525	836.5	22.27	22.5	1.054	0.01	0.150	0.158
	LTE Band 5	10M	QPSK	25RB	0Offset	Back	15	Top	Full	20525	836.5	22.27	22.5	1.054	-0.06	0.131	0.138
	LTE Band 5	10M	QPSK	1RB	0Offset	Front	15	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.07	0.224	0.241
#48	LTE Band 5	10M	QPSK	1RB	0Offset	Back	15	Bottom	Full	20525	836.5	23.18	23.5	1.076	0.05	0.270	0.291
	LTE Band 5	10M	QPSK	25RB	0Offset	Front	15	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.06	0.181	0.191
	LTE Band 5	10M	QPSK	25RB	0Offset	Back	15	Bottom	Full	20525	836.5	22.27	22.5	1.054	0.04	0.193	0.203
	LTE Band 26	15M	QPSK	1RB	37Offset	Front	15	Top	Full	26865	831.5	23.37	23.5	1.030	-0.16	0.202	0.208
	LTE Band 26	15M	QPSK	1RB	37Offset	Back	15	Top	Full	26865	831.5	23.37	23.5	1.030	0.02	0.161	0.166
	LTE Band 26	15M	QPSK	1RB	37Offset	Front	15	Top	Full	26765	821.5	23.17	23.5	1.079	0.05	0.191	0.206
	LTE Band 26	15M	QPSK	1RB	37Offset	Front	15	Top	Full	26965	841.5	23.31	23.5	1.045	-0.08	0.198	0.207
	LTE Band 26	15M	QPSK	36RB	20Offset	Front	15	Top	Full	26865	831.5	22.29	22.5	1.050	0.01	0.152	0.160
	LTE Band 26	15M	QPSK	36RB	20Offset	Back	15	Top	Full	26865	831.5	22.29	22.5	1.050	0.09	0.130	0.136
	LTE Band 26	15M	QPSK	1RB	37Offset	Front	15	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.01	0.228	0.235
#49	LTE Band 26	15M	QPSK	1RB	37Offset	Back	15	Bottom	Full	26865	831.5	23.37	23.5	1.030	0.15	0.265	0.273
	LTE Band 26	15M	QPSK	1RB	37Offset	Back	15	Bottom	Full	26765	821.5	23.17	23.5	1.079	0.06	0.248	0.268
	LTE Band 26	15M	QPSK	1RB	37Offset	Back	15	Bottom	Full	26965	841.5	23.31	23.5	1.045	-0.04	0.259	0.271
	LTE Band 26	15M	QPSK	36RB	20Offset	Front	15	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.16	0.182	0.191
	LTE Band 26	15M	QPSK	36RB	20Offset	Back	15	Bottom	Full	26865	831.5	22.29	22.5	1.050	0.02	0.204	0.214
	LTE Band 4	20M	QPSK	1RB	0Offset	Front	15	Top	Full	20175	1732.5	22.84	23	1.038	0.18	0.149	0.155
	LTE Band 4	20M	QPSK	1RB	0Offset	Back	15	Top	Full	20175	1732.5	22.84	23	1.038	0.04	0.106	0.110
	LTE Band 4	20M	QPSK	50RB	0Offset	Front	15	Top	Full	20175	1732.5	21.81	22	1.045	0.05	0.103	0.108
	LTE Band 4	20M	QPSK	50RB	0Offset	Back	15	Top	Full	20175	1732.5	21.81	22	1.045	0.09	0.079	0.083
#50	LTE Band 4	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	20175	1732.5	22.84	23	1.038	0.07	0.637	0.661
	LTE Band 4	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	20175	1732.5	22.84	23	1.038	-0.04	0.455	0.472
	LTE Band 4	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	20175	1732.5	21.81	22	1.045	0.06	0.439	0.459
	LTE Band 4	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	20175	1732.5	21.81	22	1.045	0.01	0.357	0.373





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Top	Full	132322	1745	22.85	23	1.035	0.01	0.162	0.168
	LTE Band 66	20M	QPSK	1RB	0Offset	Back	15	Top	Full	132322	1745	22.85	23	1.035	0.11	0.116	0.120
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Top	Full	132072	1720	22.82	23	1.042	0.08	0.165	0.172
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Top	Full	132572	1770	22.70	23	1.072	-0.02	0.181	0.194
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	15	Top	Full	132322	1745	21.98	22.5	1.127	0.09	0.133	0.150
	LTE Band 66	20M	QPSK	50RB	0Offset	Back	15	Top	Full	132322	1745	21.98	22.5	1.127	-0.05	0.096	0.108
#51	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	132322	1745	22.85	23	1.035	0.03	0.675	0.675
	LTE Band 66	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	132322	1745	22.85	23	1.035	0.07	0.474	0.491
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	132072	1720	22.82	23	1.042	0.02	0.525	0.547
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	132572	1770	22.70	23	1.072	-0.09	0.618	0.662
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	132322	1745	21.98	22.5	1.127	0.12	0.503	0.567
	LTE Band 66	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	132322	1745	21.98	22.5	1.127	0.13	0.381	0.429
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Top	Full	26590	1905	22.37	22.5	1.030	-0.07	0.192	0.198
	LTE Band 25	20M	QPSK	1RB	0Offset	Back	15	Top	Full	26590	1905	22.37	22.5	1.030	0.04	0.145	0.149
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Top	Full	26140	1860	22.35	22.5	1.035	0.12	0.216	0.224
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Top	Full	26340	1880	22.34	22.5	1.038	0.01	0.173	0.179
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	15	Top	Full	26590	1905	21.49	22	1.125	-0.06	0.166	0.187
	LTE Band 25	20M	QPSK	50RB	0Offset	Back	15	Top	Full	26590	1905	21.49	22	1.125	0.11	0.127	0.143
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	26590	1905	22.37	22.5	1.030	0.17	0.506	0.521
	LTE Band 25	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	26590	1905	22.37	22.5	1.030	0.05	0.367	0.378
#52	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	26140	1860	22.35	22.5	1.035	0.08	0.621	0.643
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	26340	1880	22.34	22.5	1.038	0.06	0.552	0.573
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	26590	1905	21.49	22	1.125	0.01	0.399	0.449
	LTE Band 25	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	26590	1905	21.49	22	1.125	0.08	0.366	0.412
#53	LTE Band 30	10M	QPSK	1RB	0Offset	Front	15	Top	Full	27710	2310	22.77	23	1.054	0.04	0.345	0.364
	LTE Band 30	10M	QPSK	1RB	0Offset	Back	15	Top	Full	27710	2310	22.77	23	1.054	-0.14	0.314	0.331
	LTE Band 30	10M	QPSK	25RB	0Offset	Front	15	Top	Full	27710	2310	21.55	22	1.109	0.12	0.266	0.295
	LTE Band 30	10M	QPSK	25RB	0Offset	Back	15	Top	Full	27710	2310	21.55	22	1.109	0.02	0.240	0.266
	LTE Band 30	10M	QPSK	1RB	0Offset	Front	15	Bottom	Full	27710	2310	22.77	23	1.054	0.03	0.299	0.315
	LTE Band 30	10M	QPSK	1RB	0Offset	Back	15	Bottom	Full	27710	2310	22.77	23	1.054	0.01	0.200	0.211
	LTE Band 30	10M	QPSK	25RB	0Offset	Front	15	Bottom	Full	27710	2310	21.55	22	1.109	0.06	0.217	0.241
	LTE Band 30	10M	QPSK	25RB	0Offset	Back	15	Bottom	Full	27710	2310	21.55	22	1.109	0.07	0.133	0.148
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Top	Full	21350	2560	22.37	23	1.156	0.03	0.313	0.362
	LTE Band 7	20M	QPSK	1RB	0Offset	Back	15	Top	Full	21350	2560	22.37	23	1.156	0.06	0.254	0.294
#54	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Top	Full	20850	2510	22.32	23	1.169	0.03	0.430	0.503
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Top	Full	21100	2535	22.26	23	1.186	0.15	0.371	0.440
	LTE Band 7	20M	QPSK	50RB	0Offset	Front	15	Top	Full	21350	2560	21.33	22	1.167	-0.11	0.235	0.274
	LTE Band 7	20M	QPSK	50RB	0Offset	Back	15	Top	Full	21350	2560	21.33	22	1.167	0.06	0.194	0.226
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Top	Full	20850+21048	2529.8	22.31	23	1.172	-0.14	0.423	0.496
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Top	Full	21001+21199	2544.9	22.29	23	1.178	0.02	0.408	0.480
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Top	Full	21152+21350	2540.2	22.33	23	1.167	0.04	0.356	0.415
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	21350	2560	22.37	23	1.156	0.07	0.300	0.347
	LTE Band 7	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	21350	2560	22.37	23	1.156	0.08	0.249	0.288
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	20850	2510	22.32	23	1.169	0.09	0.326	0.381
	LTE Band 7	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	21100	2535	22.26	23	1.186	0.01	0.318	0.377
	LTE Band 7	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	21350	2560	21.33	22	1.167	0.02	0.230	0.268
	LTE Band 7	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	21350	2560	21.33	22	1.167	0.12	0.195	0.228
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Bottom	Full	20850+21048	2529.8	22.31	23	1.172	-0.05	0.320	0.375
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Bottom	Full	21001+21199	2544.9	22.29	23	1.178	0.01	0.288	0.339
	LTE Band 7	20M	QPSK	1RB	99 Offset	Front	15	Bottom	Full	21152+21350	2540.2	22.33	23	1.167	0.09	0.293	0.342



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	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)
#55	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.15	0.167	<b>0.183</b>
	LTE Band 38	20M	QPSK	1RB	0Offset	Back	15	Top	Full	37850	2580	22.63	23	1.089	62.9	1.006	-0.11	0.134	0.147
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Top	Full	38000	2595	22.51	23	1.119	62.9	1.006	0.12	0.148	0.167
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Top	Full	38150	2610	22.51	23	1.119	62.9	1.006	0.01	0.126	0.142
	LTE Band 38	20M	QPSK	50RB	0Offset	Front	15	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.06	0.122	0.131
	LTE Band 38	20M	QPSK	50RB	0Offset	Back	15	Top	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.08	0.101	0.108
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.06	0.152	0.167
	LTE Band 38	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	37850	2580	22.63	23	1.089	62.9	1.006	0.01	0.145	0.159
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	38000	2595	22.51	23	1.119	62.9	1.006	0.13	0.142	0.160
	LTE Band 38	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	38150	2610	22.51	23	1.119	62.9	1.006	0.14	0.132	0.149
	LTE Band 38	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.02	0.129	0.138
	LTE Band 38	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	37850	2580	21.73	22	1.064	62.9	1.006	0.1	0.110	0.118
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.1	0.193	0.251
	LTE Band 41	20M	QPSK	1RB	0Offset	Back	15	Top	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.04	0.156	0.203
#56	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Top	Full	39750	2506	22.35	23.5	1.303	62.9	1.006	0.08	0.252	<b>0.330</b>
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Top	Full	40620	2593	22.36	23.5	1.300	62.9	1.006	0.07	0.142	0.186
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Top	Full	41055	2636.5	22.19	23.5	1.352	62.9	1.006	0.01	0.107	0.146
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Top	Full	41490	2680	21.77	23.5	1.489	62.9	1.006	-0.07	0.075	0.112
	LTE Band 41	20M	QPSK	50RB	0Offset	Front	15	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.09	0.151	0.190
	LTE Band 41	20M	QPSK	50RB	0Offset	Back	15	Top	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	-0.07	0.116	0.146
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Top	Full	39750+39948	2525.8	22.35	23.50	1.303	62.9	1.006	0.01	0.224	0.294
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Top	Full	40185+40383	2569.3	22.32	23.50	1.312	62.9	1.006	0.17	0.180	0.238
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Top	Full	40620+40818	2612.8	22.31	23.50	1.315	62.9	1.006	0.08	0.205	0.271
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Top	Full	41055+41253	2656.3	22.33	23.50	1.309	62.9	1.006	0.14	0.106	0.140
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Top	Full	41292+41490	2660.2	22.27	23.50	1.327	62.9	1.006	0.02	0.169	0.226
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	0.03	0.168	0.218
	LTE Band 41	20M	QPSK	1RB	0Offset	Back	15	Bottom	Full	40185	2549.5	22.39	23.5	1.291	62.9	1.006	-0.04	0.150	0.195
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	39750	2506	22.35	23.5	1.303	62.9	1.006	0.04	0.183	0.240
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	40620	2593	22.36	23.5	1.300	62.9	1.006	0.16	0.150	0.196
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	41055	2636.5	22.19	23.5	1.352	62.9	1.006	0.1	0.145	0.197
	LTE Band 41	20M	QPSK	1RB	0Offset	Front	15	Bottom	Full	41490	2680	21.77	23.5	1.489	62.9	1.006	-0.12	0.086	0.129
	LTE Band 41	20M	QPSK	50RB	0Offset	Front	15	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	0.02	0.142	0.179
	LTE Band 41	20M	QPSK	50RB	0Offset	Back	15	Bottom	Full	40185	2549.5	21.53	22.5	1.250	62.9	1.006	-0.02	0.144	0.181
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Bottom	Full	39750+39948	2525.8	22.35	23.50	1.303	62.9	1.006	-0.05	0.180	0.236
	LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Bottom	Full	40185+40383	2569.3	22.32	23.50	1.312	62.9	1.006	0.07	0.156	0.206
LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Bottom	Full	40620+40818	2612.8	22.31	23.50	1.315	62.9	1.006	0.04	0.154	0.204	
LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Bottom	Full	41055+41253	2656.3	22.33	23.50	1.309	62.9	1.006	0.12	0.125	0.165	
LTE Band 41	20M	QPSK	1RB	99Offset	Front	15	Bottom	Full	41292+41490	2660.2	22.27	23.50	1.327	62.9	1.006	-0.12	0.077	0.103	



<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	0.13	0.058	0.059
	WLAN2.4GHz	802.11b 1Mbps	Back	15	Ant.1	Full	1	2412	18.47	18.5	1.007	98.96	1.011	-0.04	0.057	0.058
	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.1	Full	6	2437	18.06	18.5	1.108	98.96	1.011	0.04	0.057	0.064
	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.1	Full	11	2462	17.44	18.5	1.278	98.96	1.011	0.07	0.045	0.058
#57	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.03	0.063	0.068
	WLAN2.4GHz	802.11b 1Mbps	Back	15	Ant.2	Full	1	2412	15.72	16.00	1.067	99.31	1.007	0.01	0.049	0.053
	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.2	Full	6	2437	15.68	16.00	1.076	99.31	1.007	-0.12	0.049	0.053
	WLAN2.4GHz	802.11b 1Mbps	Front	15	Ant.2	Full	11	2462	15.60	16.00	1.096	99.31	1.007	-0.02	0.052	0.057

<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	WLAN5.3GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	-0.08	0.058	0.066
	WLAN5.3GHz	802.11a 6Mbps	Back	15	Ant.1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	-0.01	0.032	0.036
	WLAN5.3GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	56	5280	18.07	18.50	1.105	94.88	1.054	0.03	0.056	0.065
	WLAN5.3GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	60	5300	17.95	18.50	1.136	94.88	1.054	0.13	0.056	0.066
#58	WLAN5.3GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.09	0.065	0.079
#59	WLAN5.5GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	100	5825	18.19	18.50	1.074	94.88	1.054	-0.01	0.125	0.142
	WLAN5.5GHz	802.11a 6Mbps	Back	15	Ant.1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	-0.01	0.045	0.051
	WLAN5.5GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	0.05	0.115	0.136
	WLAN5.5GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	132	5660	18.12	18.50	1.092	94.88	1.054	0.13	0.080	0.092
	WLAN5.5GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	140	5700	17.94	18.00	1.015	94.88	1.054	-0.07	0.068	0.073
	WLAN5.8GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.13	0.061	0.066
	WLAN5.8GHz	802.11a 6Mbps	Back	15	Ant.1+2	Full	157	5785	18.40	18.50	1.022	94.88	1.054	0.17	0.039	0.042
	WLAN5.8GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	149	5745	18.17	18.50	1.078	94.88	1.054	0.01	0.057	0.064
#60	WLAN5.8GHz	802.11a 6Mbps	Front	15	Ant.1+2	Full	165	5825	18.36	18.50	1.033	94.88	1.054	-0.06	0.064	0.070



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
#61	Bluetooth	1Mbps	Front	15	Ant.1	Full	0	2402	10.38	11	1.151	77	1.082	-0.08	0.004	0.005
	Bluetooth	1Mbps	Back	15	Ant.1	Full	0	2402	10.38	11	1.151	77	1.082	0.08	0.002	0.003
	Bluetooth	1Mbps	Front	15	Ant.1	Full	39	2441	10.18	11	1.208	77	1.082	-0.06	0.001	0.001
	Bluetooth	1Mbps	Front	15	Ant.1	Full	78	2480	9.89	11	1.291	77	1.082	-0.01	0.004	0.005



14.4 Product specific 10g SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
#62	GSM1900	GPRS (3 Tx slots)	Bottom Side	0	Bottom	Full	810	1909.8	26.42	27	1.143	0.07	2.270	2.594
	GSM1900	GPRS (3 Tx slots)	Bottom Side	0	Bottom	Full	512	1850.2	26.32	27	1.169	0.09	1.790	2.093
	GSM1900	GPRS (3 Tx slots)	Bottom Side	0	Bottom	Full	661	1880	26.35	27	1.161	0.07	2.200	2.555

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
#63	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	1513	1752.6	22.24	22.5	1.062	0.06	3.100	3.291
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	1312	1712.4	22.22	22.5	1.067	0.05	3.210	3.424
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	1413	1732.6	22.19	22.5	1.074	0.11	3.060	3.286
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	9538	1907.6	22.03	22.5	1.114	-0.17	2.720	3.031
#64	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	9262	1852.4	21.94	22.5	1.138	0.09	2.930	3.333
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	9400	1880	22	22.5	1.122	-0.03	2.840	3.187



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	LTE Band 4	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	20175	1732.5	22.84	23	1.038	0.03	2.780	2.884
#65	LTE Band 4	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	20175	1732.5	22.84	23	1.038	0.07	3.410	3.538
	LTE Band 4	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	20175	1732.5	21.81	22	1.045	-0.09	2.210	2.309
	LTE Band 4	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	20175	1732.5	21.81	22	1.045	-0.07	2.690	2.810
	LTE Band 4	20M	QPSK	100RB	0Offset	Front	0	Bottom	Full	20175	1732.5	21.77	22	1.054	-0.12	2.240	2.362
	LTE Band 4	20M	QPSK	100RB	0Offset	Bottom Side	0	Bottom	Full	20175	1732.5	21.77	22	1.054	0.11	2.670	2.815
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	132322	1745	22.85	23	1.035	0.06	2.570	2.660
#66	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	132322	1745	22.85	23	1.035	0.14	3.450	3.571
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	132072	1720	22.82	23	1.042	-0.11	2.460	2.564
	LTE Band 66	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	132572	1770	22.7	23	1.072	-0.08	2.870	3.075
	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	132072	1720	22.82	23	1.042	0.06	3.170	3.304
	LTE Band 66	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	132572	1770	22.7	23	1.072	0.01	3.160	3.386
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	132322	1745	21.98	22.5	1.127	0.06	2.230	2.514
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	132322	1745	21.98	22.5	1.127	0.07	2.790	3.145
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	132072	1720	21.73	22.5	1.194	-0.01	2.070	2.472
	LTE Band 66	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	132572	1770	21.7	22.5	1.202	-0.06	2.330	2.801
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	132072	1720	21.73	22.5	1.194	-0.01	2.600	3.104
	LTE Band 66	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	132572	1770	21.7	22.5	1.202	0.05	2.770	3.330
	LTE Band 66	20M	QPSK	100RB	0Offset	Front	0	Bottom	Full	132322	1745	21.92	22.5	1.143	-0.15	2.150	2.457
	LTE Band 66	20M	QPSK	100RB	0Offset	Bottom Side	0	Bottom	Full	132322	1745	21.92	22.5	1.143	0.14	2.760	3.154
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	26590	1905	22.37	22.5	1.030	0.01	2.400	2.473
#67	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	26590	1905	22.37	22.5	1.030	0.05	2.900	2.988
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	26140	1860	22.35	22.5	1.035	0.06	2.430	2.515
	LTE Band 25	20M	QPSK	1RB	0Offset	Front	0	Bottom	Full	26340	1880	22.34	22.5	1.038	-0.11	2.350	2.438
	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	26140	1860	22.35	22.5	1.035	0.15	2.880	2.981
	LTE Band 25	20M	QPSK	1RB	0Offset	Bottom Side	0	Bottom	Full	26340	1880	22.34	22.5	1.038	-0.01	2.860	2.967
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	26590	1905	21.49	22	1.125	0.01	1.860	2.092
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	26590	1905	21.49	22	1.125	-0.08	2.440	2.744
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	26140	1860	21.21	22	1.199	0.02	1.780	2.135
	LTE Band 25	20M	QPSK	50RB	0Offset	Front	0	Bottom	Full	26340	1880	21.38	22	1.153	0.12	1.700	1.961
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	26140	1860	21.21	22	1.199	0.09	2.310	2.771
	LTE Band 25	20M	QPSK	50RB	0Offset	Bottom Side	0	Bottom	Full	26340	1880	21.38	22	1.153	0.04	2.230	2.572
	LTE Band 25	20M	QPSK	100RB	0Offset	Front	0	Bottom	Full	26590	1905	21.38	22	1.153	-0.05	1.680	1.938
	LTE Band 25	20M	QPSK	100RB	0Offset	Bottom Side	0	Bottom	Full	26590	1905	21.38	22	1.153	-0.15	2.360	2.722



<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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)
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.08	0.580	0.663
	WLAN5.3GHz	802.11a 6Mbps	Back	0	Ant. 1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	-0.01	0.309	0.353
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0	Ant. 1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.08	0.452	0.517
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0	Ant. 1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.07	0.213	0.243
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0	Ant. 1+2	Full	52	5260	18.15	18.50	1.085	94.88	1.054	0.08	0.242	0.277
#68	WLAN5.3GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	56	5280	18.07	18.50	1.105	94.88	1.054	0.03	0.591	0.688
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	60	5300	17.95	18.50	1.136	94.88	1.054	-0.11	0.572	0.685
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.13	0.565	0.686
	WLAN5.5GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.02	0.605	0.685
	WLAN5.5GHz	802.11a 6Mbps	Back	0	Ant. 1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	-0.04	0.324	0.367
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0	Ant. 1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.01	0.396	0.448
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0	Ant. 1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.09	0.159	0.180
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0	Ant. 1+2	Full	100	5500	18.19	18.50	1.074	94.88	1.054	0.11	0.179	0.203
#69	WLAN5.5GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	-0.07	0.583	0.689
	WLAN5.5GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	132	5660	18.12	18.50	1.092	94.88	1.054	-0.08	0.574	0.661
	WLAN5.5GHz	802.11a 6Mbps	Front	0	Ant. 1+2	Full	140	5700	17.94	18.00	1.015	94.88	1.054	0.04	0.628	0.672



14.5 Repeated SAR Measurement

<1g SAR>

No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	Antenna	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	LTE Band 12	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	-	-	0.03	0.981	1	1.046
2nd	LTE Band 12	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	23095	707.5	21.72	22	1.067	-	-	-0.02	0.923	1.063	0.984
1st	LTE Band 5	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	-	-	0.11	1.110	1	1.272
2nd	LTE Band 5	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	20525	836.5	21.91	22.5	1.146	-	-	0.04	1.100	1.009	1.260
1st	LTE Band 66	20M	QPSK	50RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	132572	1770	19.97	20.5	1.130	-	-	0.12	1.170	1	1.322
2nd	LTE Band 66	20M	QPSK	50RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	132572	1770	19.97	20.5	1.130	-	-	0.17	1.140	1.026	1.288
1st	LTE Band 25	20M	QPSK	50RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	26590	1905	19.64	20	1.086	-	-	0.17	1.250	1	1.358
2nd	LTE Band 25	20M	QPSK	50RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	26590	1905	19.64	20	1.086	-	-	0.15	1.230	1.016	1.336
1st	LTE Band 30	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	27710	2310	17.89	18	1.026	-	-	0.12	1.260	1	1.292
2nd	LTE Band 30	10M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	27710	2310	17.89	18	1.026	-	-	0.08	1.230	1.024	1.262
1st	LTE Band 38	20M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	0.09	1.010	1	1.117
2nd	LTE Band 38	20M	QPSK	1RB	0Offset	-	Right Cheek	-	Top	Reduced Level 1	37850	2580	19.59	20	1.099	62.9	1.006	0.19	0.990	1.020	1.095
1st	WLAN5.2GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	48	5240	18.30	18.50	1.046	94.88	1.054	0.04	1.230	1	1.356
2nd	WLAN5.2GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	48	5240	18.30	18.50	1.046	94.88	1.054	0.01	1.140	1.079	1.257
1st	WLAN5.3GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.03	1.090	1	1.324
2nd	WLAN5.3GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	64	5320	17.88	18.50	1.152	94.88	1.054	0.11	1.060	1.028	1.287
1st	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	0.07	1.160	1	1.372
2nd	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	116	5580	18.00	18.50	1.122	94.88	1.054	0.05	1.110	1.045	1.313
1st	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	165	5825	18.36	18.50	1.033	94.88	1.054	0.09	0.938	1	1.021
2nd	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Right Cheek	-	Ant.1+2	Full	165	5825	18.36	18.50	1.033	94.88	1.054	-0.01	0.913	1.027	0.994

<10g SAR>

No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Mode	Test Position	Gap (mm)	Antenna	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	LTE Band 66	20M	QPSK	1RB	0Offset	-	Bottom Side	0	Bottom	Full	132322	1745	22.85	23	1.035	-	-	0.14	3.450	1	3.571
2nd	LTE Band 66	20M	QPSK	1RB	0Offset	-	Bottom Side	0	Bottom	Full	132322	1745	22.85	23	1.035	-	-	0.05	3.340	1.033	3.457
1st	WCDMA Band II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	9262	1852.4	21.94	22.5	1.138	-	-	0.09	2.930	1	3.333
2nd	WCDMA Band II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0	Bottom	Full	9262	1852.4	21.94	22.5	1.138	-	-	0.11	2.920	1.003	3.322

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8W/kg$ .
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  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	
1.	GSM Voice + WLAN2.4GHz (SISO)	Yes	Yes		
2.	GPRS/EDGE + WLAN2.4GHz (SISO)	Yes	Yes	Yes	WWAN VoIP
3.	WCDMA + WLAN2.4GHz (SISO)	Yes	Yes	Yes	WWAN VoIP
4.	LTE + WLAN2.4GHz (SISO)	Yes	Yes	Yes	WWAN VoIP
5.	GSM Voice + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		
6.	GPRS/EDGE + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		WWAN VoIP
7.	WCDMA + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		WWAN VoIP
8.	LTE + WLAN5.3/5.5GHz (MIMO)	Yes	Yes		WWAN VoIP
9.	GSM Voice + WLAN5.2/5.8GHz (MIMO)	Yes	Yes		
10.	GPRS/EDGE + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	WWAN VoIP
11.	WCDMA + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	WWAN VoIP
12.	LTE + WLAN5.2/5.8GHz (MIMO)	Yes	Yes	Yes	WWAN VoIP
13.	GSM Voice + Bluetooth		Yes		
14.	GPRS/EDGE + Bluetooth		Yes		WWAN VoIP
15.	WCDMA + Bluetooth		Yes		WWAN VoIP
16.	LTE + Bluetooth		Yes		WWAN VoIP
17.	GSM Voice + WLAN5.2/5.8GHz (MIMO) + Bluetooth		Yes		
18.	GPRS/EDGE + WLAN5.2/5.8GHz (MIMO) + Bluetooth		Yes		WWAN VoIP
19.	WCDMA + WLAN5.2/5.8GHz (MIMO) + Bluetooth		Yes		WWAN VoIP
20.	LTE + WLAN5.2/5.8GHz (MIMO) + Bluetooth		Yes		WWAN VoIP
21.	2.4GHz WLAN Ant.1+ 2.4GHz WLAN Ant.2	Yes	Yes	Yes	

**General Note:**

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- EUT will choose each GSM, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- WLAN 2.4GHz Antenna 1 and Bluetooth share the same antenna so can't transmit simultaneously.
- 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).
- For body-worn 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.
- 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.
- 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.
- WLAN 2.4G Ant.2 share the same antenna with Top WWAN antenna and can't transmit simultaneously.
- WLAN 2.4GHz can transmit in SISO antenna mode only when transmit simultaneously with WWAN.
- 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.
- For 5GHz WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode SAR.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - Scalar SAR summation < 1.6W/kg.
  - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
  - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
- For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01v06 based on the formula below.
  - $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})} / x] \text{ W/kg}$  for test separation distances  $\leq 50 \text{ mm}$ ; where  $x = 7.5$  for 1-g SAR, and  $x = 18.75$  for 10-g SAR.
  - When the minimum separation distance is < 5mm, the distance is used 5mm to determine SAR test exclusion.
  - 0.4 W/kg for 1-g SAR and 1.0 W/kg for 10-g SAR, when the test separation distances is > 50 mm.



**<10g SAR>**

Bluetooth Max Power (dBm)	Exposure Position	Product specific 10g SAR
11	Test separation	0 mm
	Estimated SAR (W/kg)	0.218



15.1 Head Exposure Conditions

<Top Antenna>

WWAN Band		Exposure Position	1	2	4	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	5GHz WLAN Ant.1+2		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM	GSM850	Right Cheek	1.104	0.107	0.451	1.21	1.56
		Right Tilted	0.742	0.132	0.324	0.87	1.07
		Left Cheek	0.687	0.360	0.257	1.05	0.94
		Left Tilted	0.657	0.330	0.221	0.99	0.88
	GSM1900	Right Cheek	1.108	0.107	0.451	<b>1.22</b>	1.56
		Right Tilted	0.777	0.132	0.324	0.91	1.10
		Left Cheek	0.366	0.360	0.257	0.73	0.62
		Left Tilted	0.402	0.330	0.221	0.73	0.62
WCDMA	Band V	Right Cheek	1.067	0.107	0.451	1.17	1.52
		Right Tilted	0.790	0.132	0.324	0.92	1.11
		Left Cheek	0.719	0.360	0.257	1.08	0.98
		Left Tilted	0.689	0.330	0.221	1.02	0.91
	Band IV	Right Cheek	0.939	0.107	0.451	1.05	1.39
		Right Tilted	0.681	0.132	0.324	0.81	1.01
		Left Cheek	0.367	0.360	0.257	0.73	0.62
		Left Tilted	0.353	0.330	0.221	0.68	0.57
	Band II	Right Cheek	1.063	0.107	0.451	1.17	1.51
		Right Tilted	0.691	0.132	0.324	0.82	1.02
		Left Cheek	0.338	0.360	0.257	0.70	0.60
		Left Tilted	0.316	0.330	0.221	0.65	0.54
CDMA2000	BC0	Right Cheek	0.888	0.107	0.451	1.00	1.34
		Right Tilted	0.629	0.132	0.324	0.76	0.95
		Left Cheek	0.554	0.360	0.257	0.91	0.81
		Left Tilted	0.496	0.330	0.221	0.83	0.72



WWAN Band		Exposure Position	1	2	4	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	5GHz WLAN Ant.1+2		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE	Band 12	Right Cheek	1.028	0.107	0.451	1.14	1.48
		Right Tilted	0.756	0.132	0.324	0.89	1.08
		Left Cheek	0.588	0.360	0.257	0.95	0.85
		Left Tilted	0.525	0.330	0.221	0.86	0.75
	Band 5	Right Cheek	1.092	0.107	0.451	1.20	1.54
		Right Tilted	0.886	0.132	0.324	1.02	1.21
		Left Cheek	0.663	0.360	0.257	1.02	0.92
		Left Tilted	0.568	0.330	0.221	0.90	0.79
	Band 26	Right Cheek	1.106	0.107	0.451	1.21	1.56
		Right Tilted	0.889	0.132	0.324	1.02	1.21
		Left Cheek	0.722	0.360	0.257	1.08	0.98
		Left Tilted	0.655	0.330	0.221	0.99	0.88
	Band 4	Right Cheek	1.076	0.107	0.451	1.18	1.53
		Right Tilted	0.890	0.132	0.324	1.02	1.21
		Left Cheek	0.402	0.360	0.257	0.76	0.66
		Left Tilted	0.411	0.330	0.221	0.74	0.63
	Band 66	Right Cheek	1.041	0.107	0.451	1.15	1.49
		Right Tilted	0.760	0.132	0.324	0.89	1.08
		Left Cheek	0.345	0.360	0.257	0.71	0.60
		Left Tilted	0.373	0.330	0.221	0.70	0.59
	Band 25	Right Cheek	1.113	0.107	0.451	1.22	1.56
		Right Tilted	0.842	0.132	0.324	0.97	1.17
		Left Cheek	0.343	0.360	0.257	0.70	0.60
		Left Tilted	0.377	0.330	0.221	0.71	0.60
	Band 30	Right Cheek	0.912	0.107	0.451	1.02	1.36
		Right Tilted	0.603	0.132	0.324	0.74	0.93
		Left Cheek	0.276	0.360	0.257	0.64	0.53
		Left Tilted	0.245	0.330	0.221	0.58	0.47
	Band 7	Right Cheek	1.085	0.107	0.451	1.19	1.54
		Right Tilted	0.978	0.132	0.324	1.11	1.30
		Left Cheek	0.257	0.360	0.257	0.62	0.51
		Left Tilted	0.350	0.330	0.221	0.68	0.57
	Band 38	Right Cheek	1.117	0.107	0.451	1.22	1.57
		Right Tilted	0.975	0.132	0.324	1.11	1.30
		Left Cheek	0.458	0.360	0.257	0.82	0.72
		Left Tilted	0.570	0.330	0.221	0.90	0.79
	Band 41	Right Cheek	1.090	0.107	0.451	1.20	1.54
		Right Tilted	0.951	0.132	0.324	1.08	1.28
		Left Cheek	0.721	0.360	0.257	1.08	0.98
		Left Tilted	0.768	0.330	0.221	1.10	0.99



<Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	2.4GHz WLAN Ant.2	5GHz WLAN Ant.1+2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850	Right Cheek	0.210	0.123	0.700	1.372	0.33	0.91	1.58	0.82
		Right Tilted	0.180	0.133	0.455	1.057	0.31	0.64	1.24	0.59
		Left Cheek	0.299	0.372	0.158	0.794	0.67	0.46	1.09	0.53
		Left Tilted	0.168	0.608	0.131	0.671	0.78	0.30	0.84	0.74
	GSM1900	Right Cheek	0.091	0.123	0.700	1.372	0.21	0.79	1.46	0.82
		Right Tilted	0.059	0.133	0.455	1.057	0.19	0.51	1.12	0.59
		Left Cheek	0.132	0.372	0.158	0.794	0.50	0.29	0.93	0.53
		Left Tilted	0.039	0.608	0.131	0.671	0.65	0.17	0.71	0.74
WCDMA	Band V	Right Cheek	0.185	0.123	0.700	1.372	0.31	0.89	1.56	0.82
		Right Tilted	0.126	0.133	0.455	1.057	0.26	0.58	1.18	0.59
		Left Cheek	0.263	0.372	0.158	0.794	0.64	0.42	1.06	0.53
		Left Tilted	0.135	0.608	0.131	0.671	0.74	0.27	0.81	0.74
	Band IV	Right Cheek	0.092	0.123	0.700	1.372	0.22	0.79	1.46	0.82
		Right Tilted	0.042	0.133	0.455	1.057	0.18	0.50	1.10	0.59
		Left Cheek	0.134	0.372	0.158	0.794	0.51	0.29	0.93	0.53
		Left Tilted	0.042	0.608	0.131	0.671	0.65	0.17	0.71	0.74
	Band II	Right Cheek	0.092	0.123	0.700	1.372	0.22	0.79	1.46	0.82
		Right Tilted	0.063	0.133	0.455	1.057	0.20	0.52	1.12	0.59
		Left Cheek	0.130	0.372	0.158	0.794	0.50	0.29	0.92	0.53
		Left Tilted	0.044	0.608	0.131	0.671	0.65	0.18	0.72	0.74
CDMA2000	BC0	Right Cheek	0.046	0.123	0.700	1.372	0.17	0.75	1.42	0.82
		Right Tilted	0.030	0.133	0.455	1.057	0.16	0.49	1.09	0.59
		Left Cheek	0.054	0.372	0.158	0.794	0.43	0.21	0.85	0.53
		Left Tilted	0.025	0.608	0.131	0.671	0.63	0.16	0.70	0.74



WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	2.4GHz WLAN Ant.2	5GHz WLAN Ant.1+2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE	Band 12	Right Cheek	0.139	0.123	0.700	1.372	0.26	0.84	1.51	0.82
		Right Tilted	0.099	0.133	0.455	1.057	0.23	0.55	1.16	0.59
		Left Cheek	0.154	0.372	0.158	0.794	0.53	0.31	0.95	0.53
		Left Tilted	0.087	0.608	0.131	0.671	0.70	0.22	0.76	0.74
	Band 5	Right Cheek	0.193	0.123	0.700	1.372	0.32	0.89	1.57	0.82
		Right Tilted	0.131	0.133	0.455	1.057	0.26	0.59	1.19	0.59
		Left Cheek	0.217	0.372	0.158	0.794	0.59	0.38	1.01	0.53
		Left Tilted	0.116	0.608	0.131	0.671	0.72	0.25	0.79	0.74
	Band 26	Right Cheek	0.183	0.123	0.700	1.372	0.31	0.88	1.56	0.82
		Right Tilted	0.126	0.133	0.455	1.057	0.26	0.58	1.18	0.59
		Left Cheek	0.214	0.372	0.158	0.794	0.59	0.37	1.01	0.53
		Left Tilted	0.114	0.608	0.131	0.671	0.72	0.25	0.79	0.74
	Band 4	Right Cheek	0.097	0.123	0.700	1.372	0.22	0.80	1.47	0.82
		Right Tilted	0.058	0.133	0.455	1.057	0.19	0.51	1.12	0.59
		Left Cheek	0.134	0.372	0.158	0.794	0.51	0.29	0.93	0.53
		Left Tilted	0.073	0.608	0.131	0.671	0.68	0.20	0.74	0.74
	Band 66	Right Cheek	0.096	0.123	0.700	1.372	0.22	0.80	1.47	0.82
		Right Tilted	0.056	0.133	0.455	1.057	0.19	0.51	1.11	0.59
		Left Cheek	0.141	0.372	0.158	0.794	0.51	0.30	0.94	0.53
		Left Tilted	0.087	0.608	0.131	0.671	0.70	0.22	0.76	0.74
	Band 25	Right Cheek	0.101	0.123	0.700	1.372	0.22	0.80	1.47	0.82
		Right Tilted	0.064	0.133	0.455	1.057	0.20	0.52	1.12	0.59
		Left Cheek	0.158	0.372	0.158	0.794	0.53	0.32	0.95	0.53
		Left Tilted	0.089	0.608	0.131	0.671	0.70	0.22	0.76	0.74
	Band 30	Right Cheek	0.071	0.123	0.700	1.372	0.19	0.77	1.44	0.82
		Right Tilted	0.022	0.133	0.455	1.057	0.16	0.48	1.08	0.59
		Left Cheek	0.163	0.372	0.158	0.794	0.54	0.32	0.96	0.53
		Left Tilted	0.034	0.608	0.131	0.671	0.64	0.17	0.71	0.74
	Band 7	Right Cheek	0.095	0.123	0.700	1.372	0.22	0.80	1.47	0.82
		Right Tilted	0.042	0.133	0.455	1.057	0.18	0.50	1.10	0.59
		Left Cheek	0.141	0.372	0.158	0.794	0.51	0.30	0.94	0.53
		Left Tilted	0.061	0.608	0.131	0.671	0.67	0.19	0.73	0.74
	Band 38	Right Cheek	0.050	0.123	0.700	1.372	0.17	0.75	1.42	0.82
		Right Tilted	0.027	0.133	0.455	1.057	0.16	0.48	1.08	0.59
		Left Cheek	0.062	0.372	0.158	0.794	0.43	0.22	0.86	0.53
		Left Tilted	0.033	0.608	0.131	0.671	0.64	0.16	0.70	0.74
	Band 41	Right Cheek	0.062	0.123	0.700	1.372	0.19	0.76	1.43	0.82
		Right Tilted	0.030	0.133	0.455	1.057	0.16	0.49	1.09	0.59
		Left Cheek	0.080	0.372	0.158	0.794	0.45	0.24	0.87	0.53
		Left Tilted	0.040	0.608	0.131	0.671	0.65	0.17	0.71	0.74

15.2 Hotspot Exposure Conditions

<Top Antenna>

WWAN Band		Exposure Position	1	2	4	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	5GHz WLAN Ant.1+2		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM	GSM850	Front	0.795	0.107	0.165	0.90	0.96
		Back	0.687	0.094	0.048	0.78	0.74
		Left side	0.340		0.140	0.34	0.48
		Right side		0.138	0.122	0.14	0.12
		Top side	0.653	0.095	0.070	0.75	0.72
	GSM1900	Front	0.566	0.107	0.165	0.67	0.73
		Back	0.393	0.094	0.048	0.49	0.44
		Left side	0.461		0.140	0.46	0.60
		Right side		0.138	0.122	0.14	0.12
		Top side	0.473	0.095	0.070	0.57	0.54
WCDMA	Band V	Front	0.520	0.107	0.165	0.63	0.69
		Back	0.460	0.094	0.048	0.55	0.51
		Left side	0.241		0.140	0.24	0.38
		Right side		0.138	0.122	0.14	0.12
		Top side	0.476	0.095	0.070	0.57	0.55
	Band IV	Front	0.433	0.107	0.165	0.54	0.60
		Back	0.275	0.094	0.048	0.37	0.32
		Left side	0.209		0.140	0.21	0.35
		Right side		0.138	0.122	0.14	0.12
		Top side	0.478	0.095	0.070	0.57	0.55
	Band II	Front	0.561	0.107	0.165	0.67	0.73
		Back	0.429	0.094	0.048	0.52	0.48
		Left side	0.472		0.140	0.47	0.61
		Right side		0.138	0.122	0.14	0.12
		Top side	0.504	0.095	0.070	0.60	0.57
CDMA2000	BC0	Front	0.701	0.107	0.165	0.81	0.87
		Back	0.571	0.094	0.048	0.67	0.62
		Left side	0.078		0.140	0.08	0.22
		Right side		0.138	0.122	0.14	0.12
		Top side	0.526	0.095	0.070	0.62	0.60



WWAN Band		Exposure Position	1	2	4	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	5GHz WLAN Ant.1+2		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE	Band 12	Front	0.441	0.107	0.165	0.55	0.61
		Back	0.405	0.094	0.048	0.50	0.45
		Left side	0.234		0.140	0.23	0.37
		Right side		0.138	0.122	0.14	0.12
		Top side	0.354	0.095	0.070	0.45	0.42
	Band 5	Front	0.505	0.107	0.165	0.61	0.67
		Back	0.471	0.094	0.048	0.57	0.52
		Left side	0.212		0.140	0.21	0.35
		Right side		0.138	0.122	0.14	0.12
		Top side	0.446	0.095	0.070	0.54	0.52
	Band 26	Front	0.479	0.107	0.165	0.59	0.64
		Back	0.401	0.094	0.048	0.50	0.45
		Left side	0.224		0.140	0.22	0.36
		Right side		0.138	0.122	0.14	0.12
		Top side	0.389	0.095	0.070	0.48	0.46
	Band 4	Front	0.391	0.107	0.165	0.50	0.56
		Back	0.285	0.094	0.048	0.38	0.33
		Left side	0.237		0.140	0.24	0.38
		Right side		0.138	0.122	0.14	0.12
		Top side	0.479	0.095	0.070	0.57	0.55
	Band 66	Front	0.350	0.107	0.165	0.46	0.52
		Back	0.295	0.094	0.048	0.39	0.34
		Left side	0.271		0.140	0.27	0.41
		Right side		0.138	0.122	0.14	0.12
		Top side	0.494	0.095	0.070	0.59	0.56
	Band 25	Front	0.539	0.107	0.165	0.65	0.70
		Back	0.371	0.094	0.048	0.47	0.42
		Left side	0.366		0.140	0.37	0.51
		Right side		0.138	0.122	0.14	0.12
		Top side	0.472	0.095	0.070	0.57	0.54
	Band 30	Front	0.723	0.107	0.165	0.83	0.89
		Back	0.694	0.094	0.048	0.79	0.74
		Left side	0.641		0.140	0.64	0.78
		Right side		0.138	0.122	0.14	0.12
		Top side	0.345	0.095	0.070	0.44	0.42
	Band 7	Front	0.770	0.107	0.165	0.88	0.94
		Back	0.636	0.094	0.048	0.73	0.68
		Left side	1.036		0.140	1.04	1.18
		Right side		0.138	0.122	0.14	0.12
		Top side	0.528	0.095	0.070	0.62	0.60
	Band 38	Front	0.265	0.107	0.165	0.37	0.43
		Back	0.231	0.094	0.048	0.33	0.28
		Left side	0.394		0.140	0.39	0.53
		Right side		0.138	0.122	0.14	0.12
		Top side	0.321	0.095	0.070	0.42	0.39
	Band 41	Front	0.527	0.107	0.165	0.63	0.69
		Back	0.455	0.094	0.048	0.55	0.50
		Left side	0.595		0.140	0.60	0.74
Right side			0.138	0.122	0.14	0.12	
Top side		0.455	0.095	0.070	0.55	0.53	





<Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	2.4GHz WLAN Ant.2	5GHz WLAN Ant.1+2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850	Front	0.338	0.107	0.135	0.165	0.45	0.47	0.50	0.24
		Back	0.402	0.094	0.101	0.048	0.50	0.50	0.45	0.20
		Left side	0.451		0.096	0.140	0.45	0.55	0.59	0.10
		Right side	0.231	0.138		0.122	0.37	0.23	0.35	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.340				0.34	0.34	0.34	
	GSM1900	Front	0.356	0.107	0.135	0.165	0.46	0.49	0.52	0.24
		Back	0.261	0.094	0.101	0.048	0.36	0.36	0.31	0.20
		Left side	0.062		0.096	0.140	0.06	0.16	0.20	0.10
		Right side	0.028	0.138		0.122	0.17	0.03	0.15	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.967				0.97	0.97	0.97	
WCDMA	Band V	Front	0.375	0.107	0.135	0.165	0.48	0.51	0.54	0.24
		Back	0.381	0.094	0.101	0.048	0.48	0.48	0.43	0.20
		Left side	0.418		0.096	0.140	0.42	0.51	0.56	0.10
		Right side	0.390	0.138		0.122	0.53	0.39	0.51	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.351				0.35	0.35	0.35	
	Band IV	Front	0.667	0.107	0.135	0.165	0.77	0.80	0.83	0.24
		Back	0.511	0.094	0.101	0.048	0.61	0.61	0.56	0.20
		Left side	0.077		0.096	0.140	0.08	0.17	0.22	0.10
		Right side	0.072	0.138		0.122	0.21	0.07	0.19	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	1.187				1.19	1.19	1.19	
	Band II	Front	0.470	0.107	0.135	0.165	0.58	0.61	0.64	0.24
		Back	0.286	0.094	0.101	0.048	0.38	0.39	0.33	0.20
		Left side	0.047		0.096	0.140	0.05	0.14	0.19	0.10
		Right side	0.032	0.138		0.122	0.17	0.03	0.15	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	1.079				1.08	1.08	1.08	
CDMA2000	BC0	Front	0.330	0.107	0.135	0.165	0.44	0.47	0.50	0.24
		Back	0.287	0.094	0.101	0.048	0.38	0.39	0.34	0.20
		Left side	0.302		0.096	0.140	0.30	0.40	0.44	0.10
		Right side	0.179	0.138		0.122	0.32	0.18	0.30	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.230				0.23	0.23	0.23	



WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant.1	2.4GHz WLAN Ant.2	5GHz WLAN Ant.1+2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE	Band 12	Front	0.211	0.107	0.135	0.165	0.32	0.35	0.38	0.24
		Back	0.221	0.094	0.101	0.048	0.32	0.32	0.27	0.20
		Left side	0.206		0.096	0.140	0.21	0.30	0.35	0.10
		Right side	0.164	0.138		0.122	0.30	0.16	0.29	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.159				0.16	0.16	0.16	
	Band 5	Front	0.353	0.107	0.135	0.165	0.46	0.49	0.52	0.24
		Back	0.361	0.094	0.101	0.048	0.46	0.46	0.41	0.20
		Left side	0.417		0.096	0.140	0.42	0.51	0.56	0.10
		Right side	0.294	0.138		0.122	0.43	0.29	0.42	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.336				0.34	0.34	0.34	
	Band 26	Front	0.307	0.107	0.135	0.165	0.41	0.44	0.47	0.24
		Back	0.306	0.094	0.101	0.048	0.40	0.41	0.35	0.20
		Left side	0.372		0.096	0.140	0.37	0.47	0.51	0.10
		Right side	0.205	0.138		0.122	0.34	0.21	0.33	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	0.294				0.29	0.29	0.29	
	Band 4	Front	0.766	0.107	0.135	0.165	0.87	0.90	0.93	0.24
		Back	0.595	0.094	0.101	0.048	0.69	0.70	0.64	0.20
		Left side	0.087		0.096	0.140	0.09	0.18	0.23	0.10
		Right side	0.074	0.138		0.122	0.21	0.07	0.20	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	1.094				1.09	1.09	1.09	
	Band 66	Front	0.634	0.107	0.135	0.165	0.74	0.77	0.80	0.24
		Back	0.471	0.094	0.101	0.048	0.57	0.57	0.52	0.20
		Left side	0.074		0.096	0.140	0.07	0.17	0.21	0.10
		Right side	0.060	0.138		0.122	0.20	0.06	0.18	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
		Bottom side	1.097				1.10	1.10	1.10	
Band 25	Front	0.624	0.107	0.135	0.165	0.73	0.76	0.79	0.24	
	Back	0.389	0.094	0.101	0.048	0.48	0.49	0.44	0.20	
	Left side	0.768		0.096	0.140	0.77	0.86	0.91	0.10	
	Right side	0.041	0.138		0.122	0.18	0.04	0.16	0.14	
	Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16	
	Bottom side	1.170				1.17	1.17	1.17		
Band 30	Front	0.687	0.107	0.135	0.165	0.79	0.82	0.85	0.24	
	Back	0.551	0.094	0.101	0.048	0.65	0.65	0.60	0.20	
	Left side	0.125		0.096	0.140	0.13	0.22	0.27	0.10	
	Right side	0.168	0.138		0.122	0.31	0.17	0.29	0.14	
	Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16	



	Band 7	Bottom side	1.033				1.03	1.03	1.03	
		Front	0.684	0.107	0.135	0.165	0.79	0.82	0.85	0.24
		Back	0.547	0.094	0.101	0.048	0.64	0.65	0.60	0.20
		Left side	0.068		0.096	0.140	0.07	0.16	0.21	0.10
		Right side	0.194	0.138		0.122	0.33	0.19	0.32	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
	Band 38	Bottom side	0.908				0.91	0.91	0.91	
		Front	0.315	0.107	0.135	0.165	0.42	0.45	0.48	0.24
		Back	0.253	0.094	0.101	0.048	0.35	0.35	0.30	0.20
		Left side	0.055		0.096	0.140	0.06	0.15	0.20	0.10
		Right side	0.106	0.138		0.122	0.24	0.11	0.23	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
	Band 41	Bottom side	0.271				0.27	0.27	0.27	
		Front	0.440	0.107	0.135	0.165	0.55	0.58	0.61	0.24
		Back	0.357	0.094	0.101	0.048	0.45	0.46	0.41	0.20
		Left side	0.049		0.096	0.140	0.05	0.15	0.19	0.10
		Right side	0.174	0.138		0.122	0.31	0.17	0.30	0.14
		Top side		0.095	0.064	0.070	0.10	0.06	0.07	0.16
	Bottom side	0.520				0.52	0.52	0.52		



15.3 Body-Worn Accessory Exposure Conditions

<Top Antenna>

WWAN Band		Exposure Position	1	2	4	5	1+2 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant. 1	5GHz WLAN Ant. 1+2	Bluetooth		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM	GSM850	Front	0.353	0.064	0.142	0.005	0.42	0.50
		Back	0.313	0.058	0.051	0.003	0.37	0.37
	GSM1900	Front	0.207	0.064	0.142	0.005	0.27	0.35
		Back	0.155	0.058	0.051	0.003	0.21	0.21
WCDMA	Band V	Front	0.242	0.064	0.142	0.005	0.31	0.39
		Back	0.183	0.058	0.051	0.003	0.24	0.24
	Band IV	Front	0.151	0.064	0.142	0.005	0.22	0.30
		Back	0.117	0.058	0.051	0.003	0.18	0.17
	Band II	Front	0.229	0.064	0.142	0.005	0.29	0.38
		Back	0.168	0.058	0.051	0.003	0.23	0.22
CDMA2000	BC0	Front	0.295	0.064	0.142	0.005	0.36	0.44
		Back	0.233	0.058	0.051	0.003	0.29	0.29
LTE	Band 12	Front	0.215	0.064	0.142	0.005	0.28	0.36
		Back	0.164	0.058	0.051	0.003	0.22	0.22
	Band 5	Front	0.222	0.064	0.142	0.005	0.29	0.37
		Back	0.179	0.058	0.051	0.003	0.24	0.23
	Band 26	Front	0.208	0.064	0.142	0.005	0.27	0.36
		Back	0.166	0.058	0.051	0.003	0.22	0.22
	Band 4	Front	0.155	0.064	0.142	0.005	0.22	0.30
		Back	0.110	0.058	0.051	0.003	0.17	0.16
	Band 66	Front	0.194	0.064	0.142	0.005	0.26	0.34
		Back	0.120	0.058	0.051	0.003	0.18	0.17
	Band 25	Front	0.224	0.064	0.142	0.005	0.29	0.37
		Back	0.149	0.058	0.051	0.003	0.21	0.20
	Band 30	Front	0.364	0.064	0.142	0.005	0.43	0.51
		Back	0.331	0.058	0.051	0.003	0.39	0.39
	Band 7	Front	0.503	0.064	0.142	0.005	0.57	0.65
		Back	0.294	0.058	0.051	0.003	0.35	0.35
	Band 38	Front	0.183	0.064	0.142	0.005	0.25	0.33
		Back	0.147	0.058	0.051	0.003	0.21	0.20
	Band 41	Front	0.330	0.064	0.142	0.005	0.39	0.48
		Back	0.203	0.058	0.051	0.003	0.26	0.26



<Bottom Antenna>

WWAN Band		Exposure Position	1	2	3	4	5	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant.1 1g SAR (W/kg)	2.4GHz WLAN Ant.2 1g SAR (W/kg)	5GHz WLAN Ant.1+2 1g SAR (W/kg)	Bluetooth 1g SAR (W/kg)				
GSM	GSM850	Front	0.304	0.064	0.068	0.142	0.005	0.37	0.37	0.13	0.45
		Back	0.339	0.058	0.053	0.051	0.003	0.40	0.39	0.11	0.39
	GSM1900	Front	0.835	0.064	0.068	0.142	0.005	0.90	0.90	0.13	0.98
		Back	0.311	0.058	0.053	0.051	0.003	0.37	0.36	0.11	0.37
WCDMA	Band V	Front	0.244	0.064	0.068	0.142	0.005	0.31	0.31	0.13	0.39
		Back	0.305	0.058	0.053	0.051	0.003	0.36	0.36	0.11	0.36
	Band IV	Front	0.767	0.064	0.068	0.142	0.005	0.83	0.84	0.13	0.91
		Back	0.493	0.058	0.053	0.051	0.003	0.55	0.55	0.11	0.55
	Band II	Front	0.786	0.064	0.068	0.142	0.005	0.85	0.85	0.13	0.93
		Back	0.324	0.058	0.053	0.051	0.003	0.38	0.38	0.11	0.38
CDMA2000	BC0	Front	0.071	0.064	0.068	0.142	0.005	0.14	0.14	0.13	0.22
		Back	0.055	0.058	0.053	0.051	0.003	0.11	0.11	0.11	0.11
LTE	Band 12	Front	0.177	0.064	0.068	0.142	0.005	0.24	0.25	0.13	0.32
		Back	0.187	0.058	0.053	0.051	0.003	0.25	0.24	0.11	0.24
	Band 5	Front	0.241	0.064	0.068	0.142	0.005	0.31	0.31	0.13	0.39
		Back	0.291	0.058	0.053	0.051	0.003	0.35	0.34	0.11	0.35
	Band 26	Front	0.235	0.064	0.068	0.142	0.005	0.30	0.30	0.13	0.38
		Back	0.273	0.058	0.053	0.051	0.003	0.33	0.33	0.11	0.33
	Band 4	Front	0.661	0.064	0.068	0.142	0.005	0.73	0.73	0.13	0.81
		Back	0.472	0.058	0.053	0.051	0.003	0.53	0.53	0.11	0.53
	Band 66	Front	0.675	0.064	0.068	0.142	0.005	0.74	0.74	0.13	0.82
		Back	0.491	0.058	0.053	0.051	0.003	0.55	0.54	0.11	0.55
	Band 25	Front	0.643	0.064	0.068	0.142	0.005	0.71	0.71	0.13	0.79
		Back	0.412	0.058	0.053	0.051	0.003	0.47	0.47	0.11	0.47
	Band 30	Front	0.315	0.064	0.068	0.142	0.005	0.38	0.38	0.13	0.46
		Back	0.211	0.058	0.053	0.051	0.003	0.27	0.26	0.11	0.27
	Band 7	Front	0.381	0.064	0.068	0.142	0.005	0.45	0.45	0.13	0.53
		Back	0.288	0.058	0.053	0.051	0.003	0.35	0.34	0.11	0.34
	Band 38	Front	0.167	0.064	0.068	0.142	0.005	0.23	0.24	0.13	0.31
		Back	0.159	0.058	0.053	0.051	0.003	0.22	0.21	0.11	0.21
	Band 41	Front	0.240	0.064	0.068	0.142	0.005	0.30	0.31	0.13	0.39
		Back	0.195	0.058	0.053	0.051	0.003	0.25	0.25	0.11	0.25



15.4 Product specific 10g SAR Exposure Conditions

WWAN Band		Exposure Position	1	2	3	1+2+3 Summed 10g SAR (W/kg)
			WWAN	5GHz WLAN	Bluetooth	
			10g SAR (W/kg)	10g SAR (W/kg)	Estimated 10g SAR (W/kg)	
GSM	GSM1900	Bottom Side	2.594			2.59
WCDMA	Band IV	Bottom Side	3.424			3.42
	Band II	Bottom Side	3.333			3.33
LTE	Band 4	Front	2.884	0.689	0.218	3.79
		Bottom Side	3.538			3.54
	Band 66	Front	3.075	0.689	0.218	<b>3.98</b>
		Bottom Side	3.571			3.57
	Band 25	Front	2.515	0.689	0.218	3.42
		Bottom Side	2.988			2.99



## **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 96 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-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 two separate antennas, so each antenna system will have its own test plan to cover the corresponding 96 tuner states.
3. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.



16.1 Supplemental Head SAR Results

Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State59)	1	15	29	43	57	71	85
CDMA2000 BC0	RC3 SO55	848.31	777	-	-	Left Cheek	0.05	0.062	0.027	0.05	0.048	0.044	0.058	0.021	0.033
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State59)	2	16	30	44	58	72	86
WCDMA Band V	RMC12.2Kbps	846.6	4233	-	-	Left Cheek	0.241	0.397	0.051	0.096	0.144	0.301	0.394	0.077	0.093
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State23)	3	17	31	45	59	73	87
WCDMA Band IV	RMC12.2Kbps	1732.6	1413	-	-	Left Cheek	0.125	0.213	0.094	0.145	0.125	0.176	0.205	0.106	0.122
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State65)	4	18	32	46	60	74	88
WCDMA Band II	RMC12.2Kbps	1852.4	9262	-	-	Left Cheek	0.114	0.173	0.109	0.161	0.144	0.135	0.082	0.096	0.157
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State78)	5	19	33	47	61	75	89
LTE Band 12	10M_QPSK	707.5	23095	1	0	Left Cheek	0.136	0.25	0.08	0.094	0.175	0.217	0.04	0.15	0.174
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State59)	6	20	34	48	62	76	90
LTE Band 26	15M_QPSK	836.5	26915	1	37	Left Cheek	0.214	0.4	0.14	0.288	0.309	0.1	0.12	0.25	0.278
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State59)	7	21	35	49	63	77	91
LTE Band 5	10M_QPSK	836.5	20525	1	0	Left Cheek	0.202	0.392	0.165	0.31	0.32	0.14	0.17	0.29	0.29
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State23)	8	22	36	50	64	78	92
LTE Band 4	20M_QPSK	1732.5	20175	1	0	Left Cheek	0.129	0.239	0.163	0.236	0.045	0.167	0.16	0.185	0.196
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State41)	9	23	37	51	65	79	93
LTE Band 25	20M_QPSK	1905	26590	1	0	Left Cheek	0.153	0.236	0.188	0.166	0.108	0.138	0.195	0.179	0.184
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State23)	10	24	38	52	66	80	94
LTE Band 66	20M_QPSK	1745	132322	1	0	Left Cheek	0.136	0.198	0.196	0.046	0.079	0.184	0.179	0.196	0.219
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State1)	11	25	39	53	67	81	95
LTE Band 30	10M_QPSK	2310	27710	1	0	Left Cheek	0.155	0.251	0.178	0.21	0.198	0.138	0.086	0.18	0.116
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State4)	12	26	40	54	68	82	96
LTE Band 7	20M_QPSK	2535	21100	1	0	Left Cheek	0.119	0.211	0.196	0.15	0.175	0.17	0.145	0.165	0.171
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State61)	13	27	41	55	69	83	
LTE Band 38	20M_QPSK	2595	38000	1	0	Left Cheek	0.055	0.095	0.086	0.082	0.075	0.052	0.04	0.062	
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
								State							
								Auto-Tune (State60)	14	28	42	56	70	84	
LTE Band 41	20M_QPSK	2593	40620	1	0	Left Cheek	0.061	0.109	0.08	0.081	0.076	0.053	0.035	0.087	





16.2 Supplemental Body SAR Results

Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
									Auto-Tune (State 59)	1	15	29	43	57	71	85
CDMA2000 BC0	RTAP 153.6Kbps	848.31	777	-	-	Front	10mm	0.296	0.529	0.038	0.075	0.138	0.286	0.47	0.46	0.08
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
WCDMA Band V	RMC12.2Kbps	846.6	4233	-	-	Left Side	10mm	0.383	0.58	0.085	0.155	0.23	0.43	0.56	0.121	0.152
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
WCDMA Band IV	RMC12.2Kbps	1752.6	1513	-	-	Bottom Side	10mm	1.07	1.85	0.77	1.48	1.15	1.348	1.426	0.98	0.79
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
WCDMA Band II	RMC12.2Kbps	1852.4	9262	-	-	Bottom Side	10mm	0.944	1.64	0.708	1.11	0.6	0.78	1.33	1.34	0.96
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 12	10M_QPSK	707.5	23095	1	0	Back	10mm	0.195	0.325	0.098	0.115	0.203	0.266	0.043	0.166	0.19
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 26	15M_QPSK	836.5	26915	1	37	Left Side	10mm	0.368	0.582	0.24	0.42	0.478	0.165	0.202	0.398	0.429
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 5	10M_QPSK	836.5	20525	1	0	Left Side	10mm	0.387	0.58	0.254	0.461	0.464	0.205	0.292	0.434	0.443
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 4	20M_QPSK	1732.5	20175	1	0	Bottom Side	10mm	0.982	1.69	0.87	1.42	0.8	1.22	1.03	1.18	1.41
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 25	20M_QPSK	1860	26140	1	0	Bottom Side	10mm	1.12	2.02	1.45	1.55	0.717	0.833	1.319	1.274	1.55
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 66	20M_QPSK	1770	132572	1	0	Bottom Side	10mm	1.01	1.75	1.6	0.32	0.75	1.046	0.907	1.26	1.44
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 30	10M_QPSK	2310	27710	1	0	Bottom Side	10mm	1.033	1.86	1.44	1.744	1.62	1.13	0.75	1.42	0.96
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 7	20M_QPSK	2510	20850	1	0	Bottom Side	10mm	0.656	1.23	1.18	0.9	1.09	1.08	0.86	1.075	1.2
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 38	20M_QPSK	2580	37850	1	0	Front	10mm	0.288	0.526	0.28	0.26	0.257	0.19	0.15	0.22	
Mode	Service/Modulation	Frequency (MHz)	Channel	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	Average Value of Time Sweep (W/kg)							
LTE Band 41	20M_QPSK	2506	39750	1	0	Bottom Side	10mm	0.397	0.742	0.694	0.58	0.64	0.6	0.47	0.64	

Test Engineer : Luke Lu

## 17. Uncertainty Assessment

The component of uncertainty may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainty by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observations is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience, and knowledge of the behavior and properties of relevant materials and instruments, manufacture’s specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in table below.

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor <sup>(a)</sup>	1/k <sup>(b)</sup>	1/√3	1/√6	1/√2

(a) standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b)  $\kappa$  is the coverage factor

**Table 17.1. Standard Uncertainty for Assumed Distribution**

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual “root-sum-squares” (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY uncertainty Budget is shown in the following tables.



Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
<b>Measurement System</b>							
Probe Calibration	6.0	N	1	1	1	6.0	6.0
Axial Isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9
Boundary Effects	1.0	R	1.732	1	1	0.6	0.6
Linearity	4.7	R	1.732	1	1	2.7	2.7
System Detection Limits	1.0	R	1.732	1	1	0.6	0.6
Modulation Response	3.2	R	1.732	1	1	1.8	1.8
Readout Electronics	0.3	N	1	1	1	0.3	0.3
Response Time	0.0	R	1.732	1	1	0.0	0.0
Integration Time	2.6	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7
Probe Positioner	0.4	R	1.732	1	1	0.2	0.2
Probe Positioning	2.9	R	1.732	1	1	1.7	1.7
Max. SAR Eval.	2.0	R	1.732	1	1	1.2	1.2
<b>Test Sample Related</b>							
Device Positioning	3.0	N	1	1	1	3.0	3.0
Device Holder	3.6	N	1	1	1	3.6	3.6
Power Drift	5.0	R	1.732	1	1	2.9	2.9
Power Scaling	0.0	R	1.732	1	1	0.0	0.0
<b>Phantom and Setup</b>							
Phantom Uncertainty	6.1	R	1.732	1	1	3.5	3.5
SAR correction	0.0	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.2	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	2.5	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	3.4	R	1.732	0.78	0.71	1.5	1.4
Liquid Permittivity Repeatability	0.15	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.5	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.83	R	1.732	0.23	0.26	0.1	0.1
<b>Combined Std. Uncertainty</b>						11.4%	11.4%
<b>Coverage Factor for 95 %</b>						K=2	K=2
<b>Expanded STD Uncertainty</b>						22.9%	22.7%

Table 17.2. Uncertainty Budget for frequency range 300 MHz to 3 GHz

Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
<b>Measurement System</b>							
Probe Calibration	6.55	N	1	1	1	6.6	6.6
Axial Isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9
Boundary Effects	2.0	R	1.732	1	1	1.2	1.2
Linearity	4.7	R	1.732	1	1	2.7	2.7
System Detection Limits	1.0	R	1.732	1	1	0.6	0.6
Modulation Response	3.2	R	1.732	1	1	1.8	1.8
Readout Electronics	0.3	N	1	1	1	0.3	0.3
Response Time	0.0	R	1.732	1	1	0.0	0.0
Integration Time	2.6	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7
Probe Positioner	0.4	R	1.732	1	1	0.2	0.2
Probe Positioning	6.7	R	1.732	1	1	3.9	3.9
Max. SAR Eval.	4.0	R	1.732	1	1	2.3	2.3
<b>Test Sample Related</b>							
Device Positioning	3.0	N	1	1	1	3.0	3.0
Device Holder	3.6	N	1	1	1	3.6	3.6
Power Drift	5.0	R	1.732	1	1	2.9	2.9
Power Scaling	0.0	R	1.732	1	1	0.0	0.0
<b>Phantom and Setup</b>							
Phantom Uncertainty	6.6	R	1.732	1	1	3.8	3.8
SAR correction	0.0	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.2	N	1	0.78	0.71	0.1	0.1
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0
Liquid Conductivity (mea.)	2.5	R	1.732	0.78	0.71	1.1	1.0
Temp. unc. - Conductivity	3.4	R	1.732	0.78	0.71	1.5	1.4
Liquid Permittivity Repeatability	0.15	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.5	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.83	R	1.732	0.23	0.26	0.1	0.1
<b>Combined Std. Uncertainty</b>						12.5%	12.5%
<b>Coverage Factor for 95 %</b>						K=2	K=2
<b>Expanded STD Uncertainty</b>						25.1%	25.0%

**Table 17.3. Uncertainty Budget for frequency range 3 GHz to 6 GHz**



## 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.



**Appendix B. Plots of High SAR Measurement**

The plots are shown as follows.



## **Appendix C. DASYS Calibration Certificate**

The DASYS calibration certificates are shown as follows.