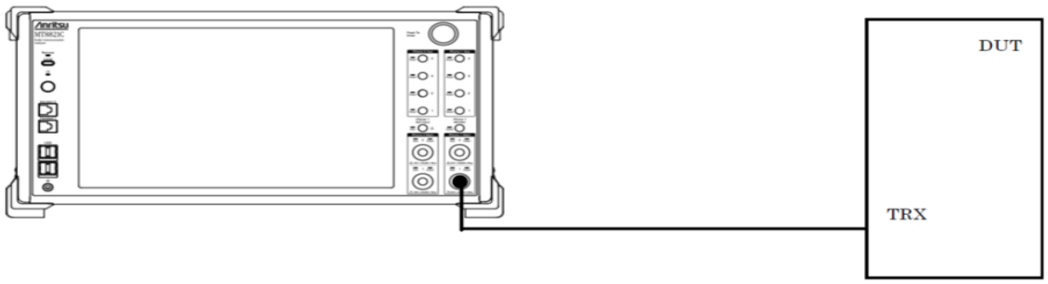
[2A]-14A-30A	2	20	19100	1900	1100	1980	QPSK	1	0	14	10	5330	763	30	10	9820	2355	23.75	23.89	0.14
14A-[2A]-30A	14	10	23330	793	5330	763	QPSK	1	0	2	20	900	1960	30	10	9820	2355	23.51	23.55	0.04
30A-[2A]-14A	30	10	27710	2310	9820	2355	QPSK	1	0	2	20	900	1960	14	10	5330	763	22.45	22.48	0.03
[2A]-14A-66A	2	20	19100	1900	1100	1980	QPSK	1	0	14	10	5330	763	66	20	67036	2170	23.75	23.92	0.17
2A-14A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	14	10	5330	763	66	20	67036	2170	23.75	23.87	0.12
[2A]-14A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	14	10	5330	763	66	20	67036	2170	23.75	23.96	0.21
14A-[2A]-66A	14	10	23330	793	5330	763	QPSK	1	0	2	20	900	1960	66	20	67036	2170	23.51	23.58	0.07
14A-2A-[66A]	14	10	23330	793	5330	763	QPSK	1	0	2	20	900	1960	66	20	67036	2170	23.51	23.55	0.04
14A-[2A]-[66A]	14	10	23330	793	5330	763	QPSK	1	0	2	20	900	1960	66	20	67036	2170	23.51	23.63	0.12
66A-[2A]-14A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	14	10	5330	763	24.33	24.33	0
[66A]-2A-14A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	14	10	5330	763	24.33	24.34	0.01
[66A]-[2A]-14A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	14	10	5330	763	24.33	24.36	0.03
[2A]-29A-30A	2	20	19100	1900	1100	1980	QPSK	1	0	29	10	9715	722.5	30	10	9820	2355	23.75	23.94	0.19
30A-[2A]-29A	30	10	27710	2310	9820	2355	QPSK	1	0	2	20	900	1960	29	10	9715	722.5	22.45	22.44	-0.01
[2A]-29A-66A	2	20	19100	1900	1100	1980	QPSK	1	0	29	10	9715	722.5	66	20	67036	2170	23.75	23.86	0.11
2A-29A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	29	10	9715	722.5	66	20	67036	2170	23.75	23.95	0.2
[2A]-29A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	29	10	9715	722.5	66	20	67036	2170	23.75	23.97	0.22
66A-[2A]-29A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	29	10	9715	722.5	24.33	24.38	0.05
[66A]-2A-29A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	29	10	9715	722.5	24.33	24.31	-0.02
[66A]-[2A]-29A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	29	10	9715	722.5	24.33	24.34	0.01
[2A]-30A-66A	2	20	19100	1900	1100	1980	QPSK	1	0	30	10	9820	2355	66	20	67036	2170	23.75	23.86	0.11
2A-30A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	30	10	9820	2355	66	20	67036	2170	23.75	23.91	0.16
[2A]-30A-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	30	10	9820	2355	66	20	67036	2170	23.75	23.93	0.18
30A-[2A]-66A	30	10	27710	2310	9820	2355	QPSK	1	0	2	20	900	1960	66	20	67036	2170	22.45	22.53	0.08
30A-2A-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	2	20	900	1960	66	20	67036	2170	22.45	22.48	0.03
30A-[2A]-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	2	20	900	1960	66	20	67036	2170	22.45	22.49	0.04
66A-[2A]-30A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	30	10	9820	2355	24.33	24.32	-0.01
[66A]-2A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	30	10	9820	2355	24.33	24.35	0.02
[66A]-[2A]-30A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	30	10	9820	2355	24.33	24.37	0.04
[2A]-66A-66A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.75	23.87	0.12
2A-[66A]-66A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.75	23.9	0.15
[2A]-[66A]-66A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.75	23.86	0.11
2A-[66A]-[66A]	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.75	23.93	0.18
66A-66A-[2A]	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	2	20	900	1960	24.33	24.37	0.04
[66A]-66A-2A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	2	20	900	1960	24.33	24.36	0.03
[66A]-66A-[2A]	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	2	20	900	1960	24.33	24.31	-0.02
[66A]-[66A]-2A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	2	20	900	1960	24.33	24.35	0.02
[2A]-66B	2	20	19100	1900	1100	1980	QPSK	1	0	66	15	66786	2145	66	5	66879	2154.3	23.75	23.91	0.16
2A-[66B]	2	20	19100	1900	1100	1980	QPSK	1	0	66	15	66786	2145	66	5	66879	2154.3	23.75	23.88	0.13
66B-[2A]	66	15	132322	1745	66786	2145	QPSK	1	74	66	5	66879	2154.3	2	20	900	1960	24.33	23.38	-0.95
[66B]-2A	66	15	132322	1745	66786	2145	QPSK	1	74	66	5	66879	2154.3	2	20	900	1960	24.33	24.36	0.03
[2A]-66C	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	23.75	23.89	0.14
2A-[66C]	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	23.75	23.85	0.1
66C-[2A]	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	2	20	900	1960	24.33	24.2	-0.13
[66C]-2A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	2	20	900	1960	24.33	24.2	-0.13
[2A]-66A-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	71	20	68786	637	23.75	23.88	0.13
2A-[66A]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	71	20	68786	637	23.75	23.86	0.11
[2A]-[66A]-71A	2	20	19100	1900	1100	1980	QPSK	1	0	66	20	66786	2145	71	20	68786	637	23.75	23.9	0.15
66A-[2A]-71A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	71	20	68786	637	24.33	24.31	-0.02
[66A]-2A-71A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	71	20	68786	637	24.33	24.25	-0.08
[66A]-[2A]-71A	66	20	132322	1745	66786	2145	QPSK	1	99	2	20	900	1960	71	20	68786	637	24.33	24.35	0.02
71A-[2A]-66A	71	20	133322	683	68786	2145	QPSK	1	99	2	20	900	1960	66	20	67036	2170	24.36	24.38	0.02
71A-2A-[66A]	71	20	133322	683	68786	2145	QPSK	1	99	2	20	900	1960	66	20	67036	2170	24.36	24.21	-0.15
71A-[2A]-[66A]	71	20	133322	683	68786	2145	QPSK	1	99	2	20	900	1960	66	20	67036	2170	24.36	24.22	-0.14
[2A]-12B	2	20	19100	1900	1100	1980	QPSK	1	0	12	5	5095	737.5	12	10	5167	744.7	23.75	23.88	0.13
12B-[2A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	12	10	5167	744.7	2	20	900	1960	24.32	24.48	0.16
4A-[4A]-5A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	5	10	2525	881.5	23.79	23.77	-0.02
[4A]-4A-5A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	5	10	2525	881.5	23.79	23.78	-0.01
[4A]-[4A]-5A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	5	10	2525	881.5	23.79	23.82	0.03
5A-4A-[4A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	4	15	2325	2147.5	4	20	2175	2132.5	23.84	23.93	0.09
5A-[4A]-4A	5	10	20525	836.5	2525	881.5	QPSK	1	49	4	15	2325	2147.5	4	20	2175	2132.5	23.84	23.99	0.15
5A-[4A]-[4A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	4	15	2325	2147.5	4	20	2175	2132.5	23.84	23.92	0.08
4A-[4A]-12A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	12	10	5167	744.7	23.79	23.76	-0.03
[4A]-4A-12A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	12	10	5167	744.7	23.79	23.78	-0.01
[4A]-[4A]-12A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	12	10	5167	744.7	23.79	23.79	0
12A-4A-[4A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	24.32	24.41	0.09
12A-[4A]-4A	12	5	23095	707.5	5095	737.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	24.32	24.35	0.03
12A-[4A]-[4A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	24.32	24.36	0.04
4A-[4A]-13A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	13	10	5230	751	23.79	23.84	0.05
[4A]-4A-13A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	13	10	5230	751	23.79	23.79	0
[4A]-[4A]-13A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	13	10	5230	751	23.79	23.85	0.06
13A-4A-[4A]	13	5	23255	784.5	5255	753.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	23.42	23.51	0.09

13A-[4A]-4A	13	5	23255	784.5	5255	753.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	23.42	23.49	0.07
13A-[4A]-[4A]	13	5	23255	784.5	5255	753.5	QPSK	1	0	4	15	2325	2147.5	4	20	2175	2132.5	23.42	23.46	0.04
4A-[4A]-71A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	71	20	68786	637	23.79	23.77	-0.02
[4A]-4A-71A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	71	20	68786	637	23.79	23.82	0.03
[4A]-[4A]-71A	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	4	20	2175	2132.5	71	20	68786	637	23.79	23.79	0
71A-4A-[4A]	71	20	133322	683	68786	2145	QPSK	1	99	4	15	2325	2147.5	4	20	2175	2132.5	24.36	24.33	-0.03
71A-[4A]-4A	71	20	133322	683	68786	2145	QPSK	1	99	4	15	2325	2147.5	4	20	2175	2132.5	24.36	24.35	-0.01
71A-[4A]-[4A]	71	20	133322	683	68786	2145	QPSK	1	99	4	15	2325	2147.5	4	20	2175	2132.5	24.36	24.41	0.05
[4A]-5B	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	5	10	2525	881.5	5	10	2426	871.6	23.79	23.78	-0.01
5B-[4A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	5	10	2426	871.6	4	20	2175	2132.5	23.84	23.89	0.05
[4A]-12B	4	15	20325	1747.5	2325	2147.5	QPSK	1	74	12	5	5095	737.5	12	10	5167	744.7	23.79	23.78	-0.01
12B-[4A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	12	10	5167	744.7	4	20	2175	2132.5	24.32	24.4	0.08
5A-5A-[66A]	5	10	20450	829	2450	874	QPSK	1	0	5	10	2600	889	66	20	66786	2145	23.84	23.82	-0.02
[66A]-5A-5A	66	20	132322	1745	66786	2145	QPSK	1	99	5	10	2450	874	5	10	2600	889	24.33	24.34	0.01
5A-30A-[66A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	30	10	9820	2355	66	20	66786	2145	23.84	24.02	0.18
30A-5A-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	5	10	2525	881.5	66	20	66786	2145	22.45	22.39	-0.06
[66A]-5A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	5	10	2525	881.5	30	10	9820	2355	24.33	24.31	-0.02
5A-[66A]-66A	5	10	20525	836.5	2525	881.5	QPSK	1	49	66	20	66786	2145	66	20	67036	2170	23.84	23.98	0.14
5A-[66A]-[66A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	66	20	66786	2145	66	20	67036	2170	23.84	23.96	0.12
[66A]-66A-5A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	5	10	2525	881.5	24.33	24.24	-0.09
[66A]-[66A]-5A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	5	10	2525	881.5	24.33	24.28	-0.05
5A-[66B]	5	10	20525	836.5	2525	881.5	QPSK	1	49	66	15	66786	2145	66	5	66879	2154.3	23.84	23.98	0.14
[66B]-5A	66	15	132322	1745	66786	2145	QPSK	1	74	66	5	66879	2154.3	5	10	2525	881.5	24.3	24.34	0.04
5A-[66C]	5	10	20525	836.5	2525	881.5	QPSK	1	49	66	20	66786	2145	66	20	66984	2164.8	23.84	23.97	0.13
[66C]-5A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	5	10	2525	881.5	24.33	24.3	-0.03
5B-[66A]	5	10	20525	836.5	2525	881.5	QPSK	1	49	5	10	2426	871.6	66	20	67036	2170	23.84	23.55	-0.29
[66A]-5B	66	20	132322	1745	66786	2145	QPSK	1	99	5	10	2525	881.5	5	10	2426	871.6	24.33	24.29	-0.04
12A-30A-[66A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	30	10	9820	2355	66	20	66786	2145	24.32	24.39	0.07
30A-12A-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	12	10	5095	737.5	66	20	66786	2145	22.45	22.42	-0.03
[66A]-12A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	12	10	5095	737.5	30	10	9820	2355	24.33	24.31	-0.02
12A-[66A]-66A	12	5	23095	707.5	5095	737.5	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	24.32	24.43	0.11
12A-66A-[66A]	12	5	23095	707.5	5095	737.5	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	24.32	24.4	0.08
[66A]-66A-12A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	12	10	5167	744.7	24.33	24.32	-0.01
66A-[66A]-12A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	12	10	5167	744.7	24.33	24.31	-0.02
12A-[66C]	12	5	23095	707.5	5095	737.5	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	24.32	24.38	0.06
[66C]-12A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	12	10	5167	744.7	24.33	24.24	-0.09
12B-[66A]	12	5	23095	707.5	5095	5095	737.5	1	0	12	10	744.7	5167	66	20	66786	2145	24.32	24.36	0.04
[66A]-12B	66	20	132322	1745	66786	2145	QPSK	1	99	12	5	5095	737.5	12	10	5167	744.7	24.33	24.3	-0.03
13A-[66A]-66A	13	5	23255	784.5	5255	753.5	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.42	23.44	0.02
13A-[66A]-[66A]	13	5	23255	784.5	5255	753.5	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.42	23.5	0.08
[66A]-66A-13A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	13	10	5230	751	24.33	24.28	-0.05
[66A]-[66A]-13A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	13	10	5230	751	24.33	24.29	-0.04
13A-[66B]	13	5	23255	784.5	5255	753.5	QPSK	1	0	66	15	66786	2145	66	5	66879	2154.3	23.42	23.49	0.07
[66B]-13A	66	15	132322	1745	66786	2145	QPSK	1	74	66	5	66879	2154.3	13	10	5230	751	24.3	24.33	0.03
13A-[66C]	13	5	23255	784.5	5255	753.5	QPSK	1	0	66	20	66786	2145	66	20	66984	2164.8	23.42	23.53	0.11
[66C]-13A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	13	10	5230	751	24.33	24.29	-0.04
14A-30A-[66A]	14	10	23330	793	5330	763	QPSK	1	0	30	10	9820	2355	66	20	66786	2145	23.51	23.61	0.1
30A-14A-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	14	10	5330	763	66	20	66786	2145	22.45	22.51	0.06
[66A]-14A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	14	10	5330	763	30	10	9820	2355	24.33	24.33	0
14A-[66A]-66A	14	10	23330	793	5330	763	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.51	23.61	0.1
14A-[66A]-[66A]	14	10	23330	793	5330	763	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	23.51	23.65	0.14
[66A]-66A-14A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	14	10	5330	763	24.33	24.26	-0.07
[66A]-[66A]-14A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	14	10	5330	763	24.33	24.31	-0.02
25A-[25A]-26A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	26	15	8865	876.5	23.72	23.83	0.11
[25A]-25A-26A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	26	15	8865	876.5	23.72	23.9	0.18
[25A]-[25A]-26A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	26	15	8865	876.5	23.72	23.82	0.1
26A-25A-[25A]	26	15	26865	831.5	8865	876.5	QPSK	1	0	25	10	8365	1962.5	25	10	8640	1990	23.91	23.96	0.05
26A-[25A]-25A	26	15	26865	831.5	8865	876.5	QPSK	1	0	25	10	8365	1962.5	25	10	8640	1990	23.91	23.91	0
26A-[25A]-[25A]	26	15	26865	831.5	8865	876.5	QPSK	1	0	25	10	8365	1962.5	25	10	8640	1990	23.91	23.94	0.03
25A-[25A]-41A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	41	20	40620	2593	23.72	23.82	0.1
[25A]-25A-41A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	41	20	40620	2593	23.72	23.85	0.13
[25A]-[25A]-41A	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	25	20	8590	1985	41	20	40620	2593	23.72	23.83	0.11
[25A]-41C	25	15	26365	1882.5	8365	1962.5	QPSK	1	0	41	20	39750	2506	41	20	40383	2569.3	23.72	23.82	0.1
30A-29A-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	29	10	9715	722.5	66	20	66786	2145	22.45	22.48	0.03
[66A]-29A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	29	10	9715	722.5	30	10	9820	2355	24.33	24.43	0.1
30A-[66A]-66A	30	10	27710	2310	9820	2355	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	22.45	22.48	0.03
30A-[66A]-[66A]	30	10	27710	2310	9820	2355	QPSK	1	0	66	20	66786	2145	66	20	67036	2170	22.45	22.5	0.05
[66A]-66A-30A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	30	10	9820	2355	24.33	24.38	0.05
[66A]-[66A]-30A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	30	10	9820	2355	24.33	24.43	0.1
66A-[66C]	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67038	2170.2	66	20	67236	2190	24.33	24.29	-0.04
[66A]-66C	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67038	2170.2	66	20	67236	2190	24.33	24.3	-0.03
[66C]-66A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	66	20	67236	2190	24.33	24.3	-0.03
66C-[66A]	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	66	20	67236	2190	24.33	24.33	0
66A-[66A]-71A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	71	20	68786	637	24.33	24.32	-0.01
[66A]-66A-71A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	71	20	68786	637	24.33	24.34	0.01
[66A]-[66A]-71A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	67036	2170	71	20	68786	637	24.33	24.31	-0.02
71A-66A-[66A]	71	20	133322	683	68786	637	QPSK	1	99	66	20	66786	2145	66	20	67036	2170	24.36	24.33	-0.03
71A-[66A]-66A	71	20	133322	683	68786	637	QPSK	1	99	66	20	66786	2145	66	20	67036	2170	24.36	24.35	-0.01
71A-[66A]-[66A]	71	20	133322	683	68786	637	QPSK	1	99	66	20	66786	2145	66	20	67036	2170	24.36	24.37	0.01
[66C]-71A	66	20	132322	1745	66786	2145	QPSK	1	99	66	20	66984	2164.8	71	20	68786	637	24.33	24.33	0
71A-[66C]	71	20	133322	683	68786	637	QPSK	1	99	66	20	66786	2145	66	20	66984	2164.8	24.36	24.35	-0.01

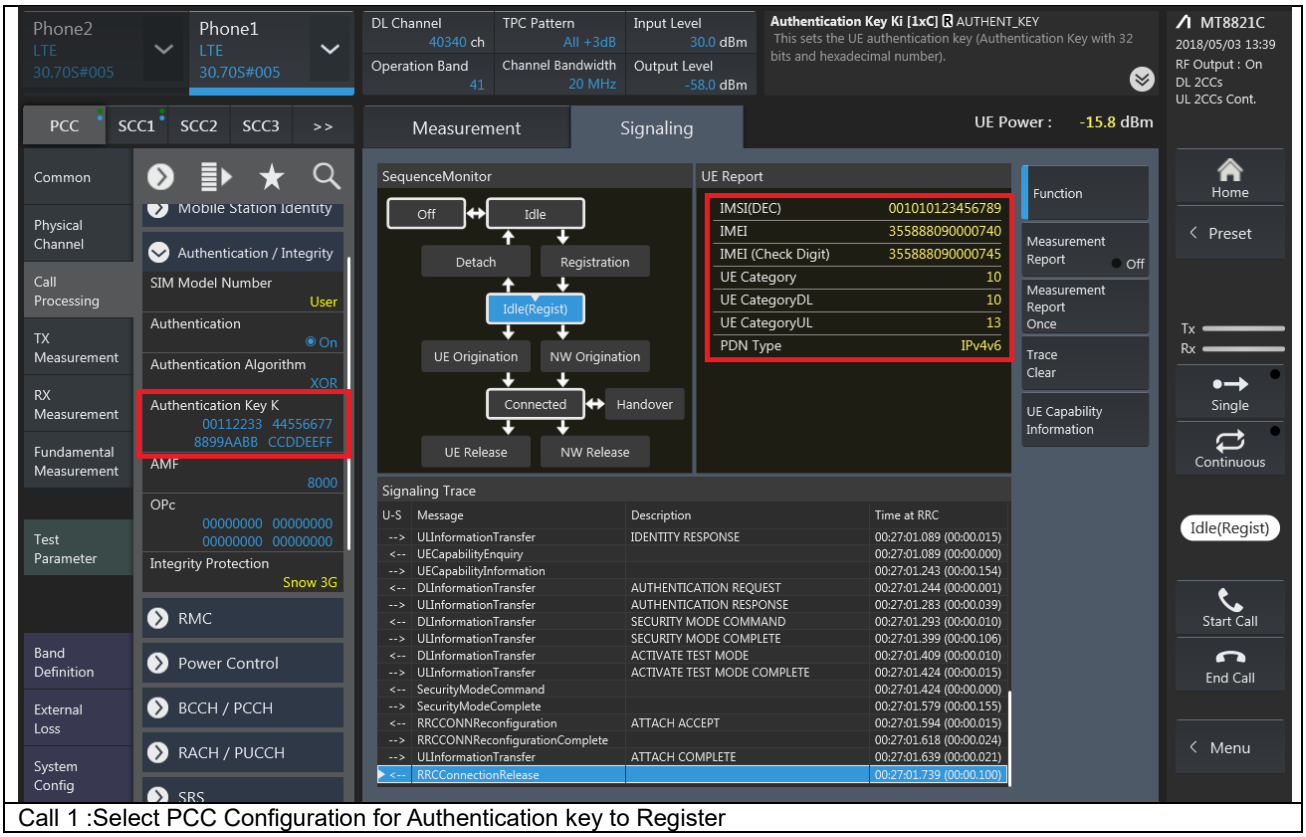
11.4.5 LTE Up-link Carrier Aggregation Conducted Powers Setup

To measure the LTE UP CA power of this device, Anritsu's MT8821C was used to check the power as follows.

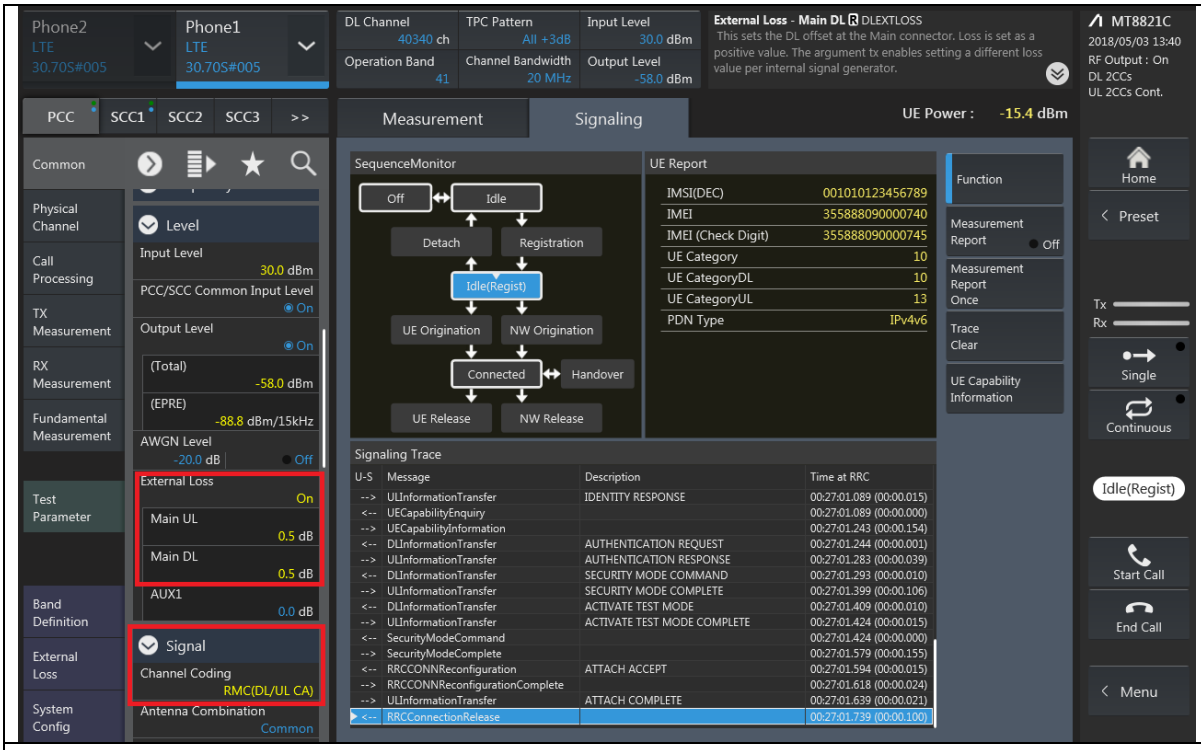


Power Measurement setup

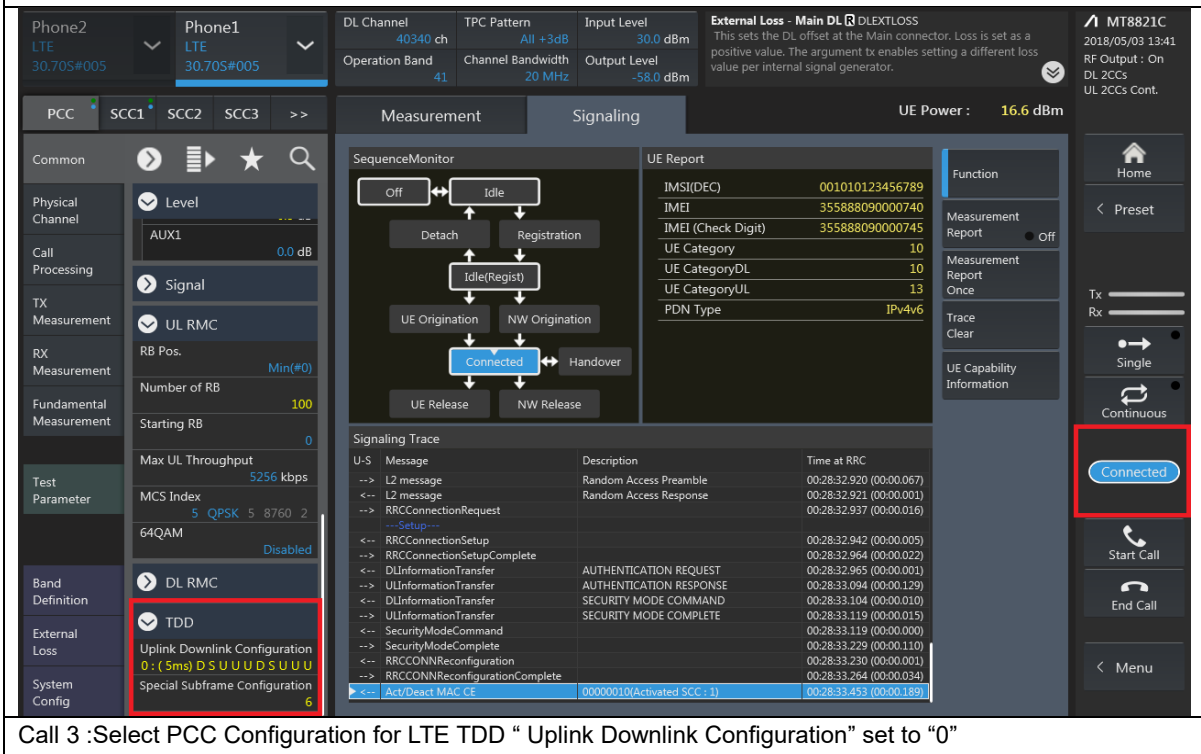
.TDD CA_41C Intra-Band Contiguous Call Connection
Set to MT8821C with following parameters:
-. Set up the call box for PCC Configuration for LTE Uplink CA
-. Set up the call box for SCC Configuration for LTE Uplink CA
-. Measure the maximum output power in Uplink LTE CA conditions.



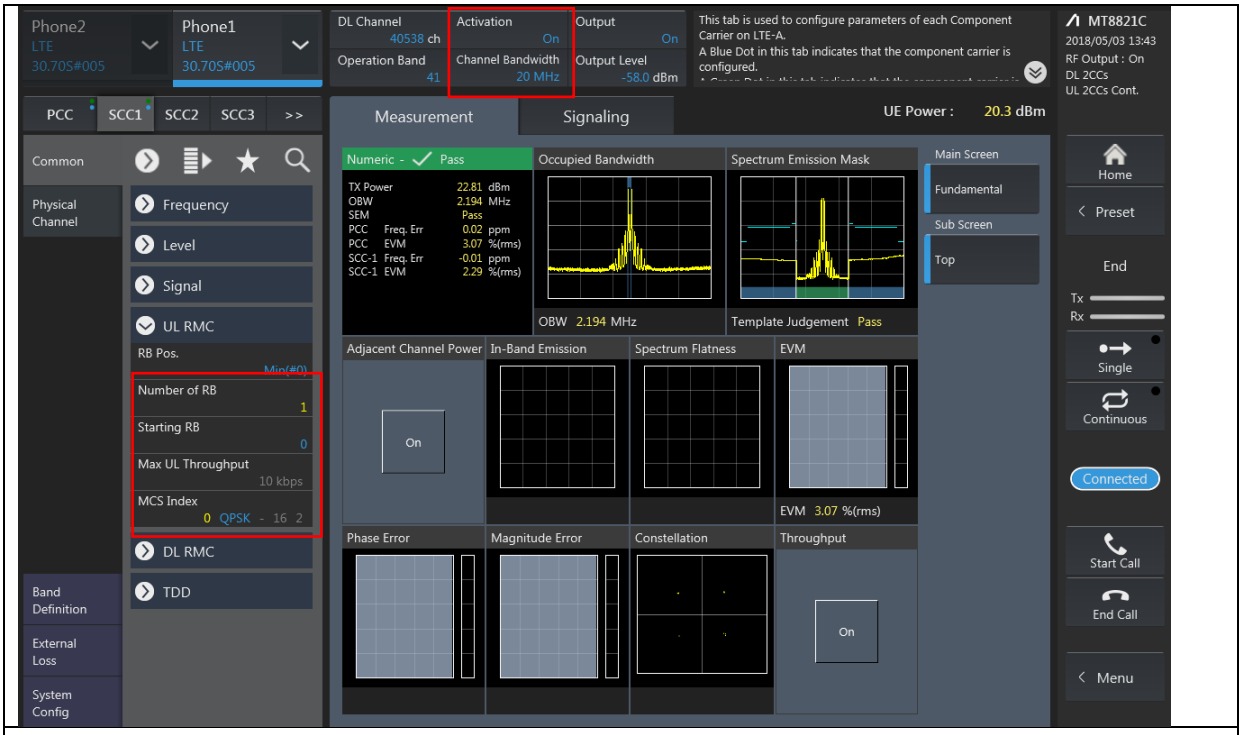
Call 1 :Select PCC Configuration for Authentication key to Register



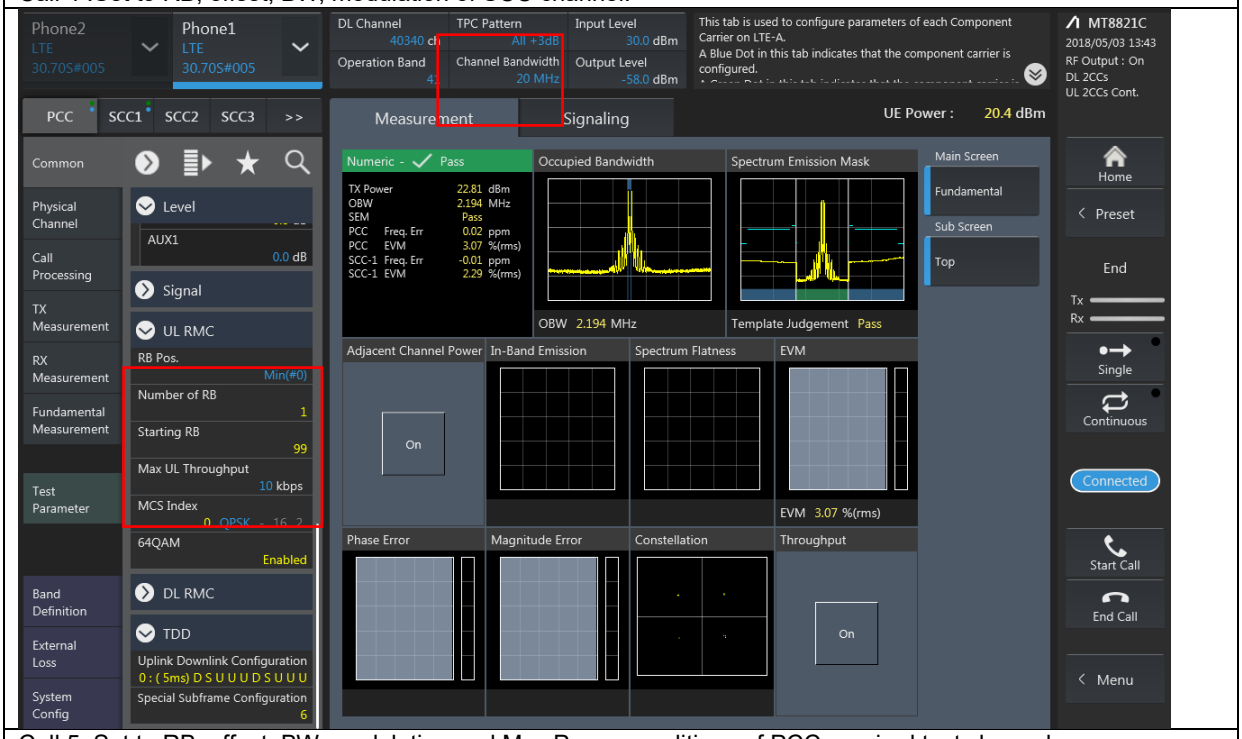
Call 2 :Select PCC Configuration for LTE UL CA and Cable loss



Call 3 :Select PCC Configuration for LTE TDD " Uplink Downlink Configuration" set to "0"
And then Select "connect"button.



Call 4 :Set to RB, offset, BW, modulation of SCC channel.



Call 5: Set to RB, offset, BW, modulation and Max Power conditions of PCC required test channel.

2CA 41C Uplink Carrier aggregation Conducted Powers- Maximum Power Mode

Combination	PCC									SCC							Tx Power	
	Band	BW	PCC UL/DL Channel	PCCUL/DL Frequency	PCC UL/DL Channel	PCCUL/DL Frequency	Modulation	RB	offset	Band	BW	SCC UL Channel	SCC UL Frequency	Modulation	RB	offset	LTE Single Carrier Tx Power (dBm)	LTE Tx Power with UL CA Enabled(dBm)
CA_41C MAX	41	20	39750	2506	39750	2506	QPSK	1	99	41	20	39948	2525.8	QPSK	1	0	22.50	23.23
CA_41C Hotspot	41	20	39750	2506	39750	2506	QPSK	1	99	41	20	39948	2525.8	QPSK	1	0	20.54	21.24

11.5 NR Maximum Output Power

5G NR Call Box Setup

Procedure used to establish output Power measurement for NR Bands

- Select operating band, BW and Channel.
- Click Cell on button in the right of Test application screen.
- Turn the LTE Cell On using “ON/OFF” Key.

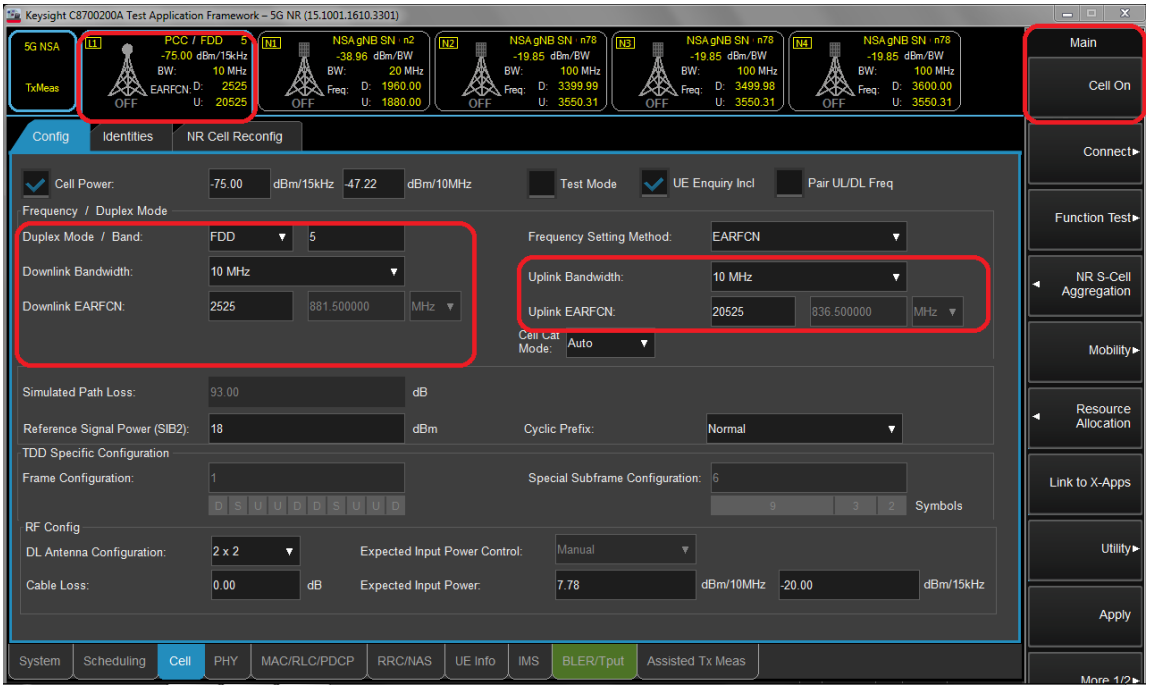


Figure-1

- Turn the Airplane Mode On and then turn the Airplane mode off.
- Select All down bits for UL Power control Mode in LTE.

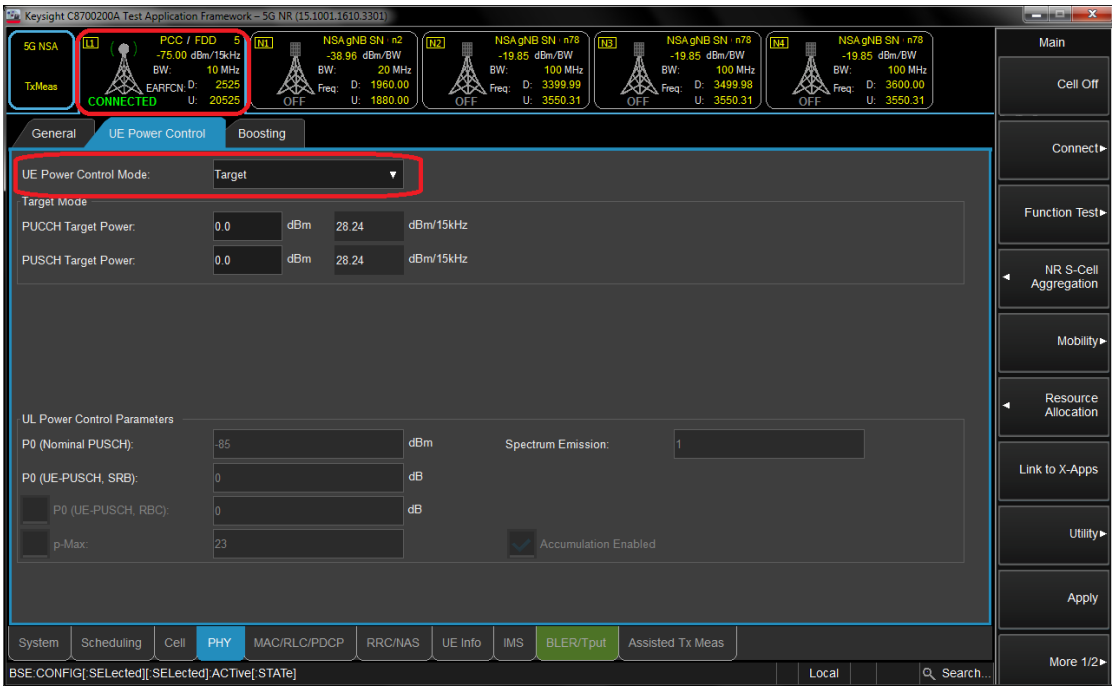


Figure-2

11.5.5.2 Setup for NR Band

- Select waveform for Setting NR Band (PHY->PUSCH->Enable Transform Precoder)
  - Enable : DFT-s-OFDM, Disable : CP-OFDM

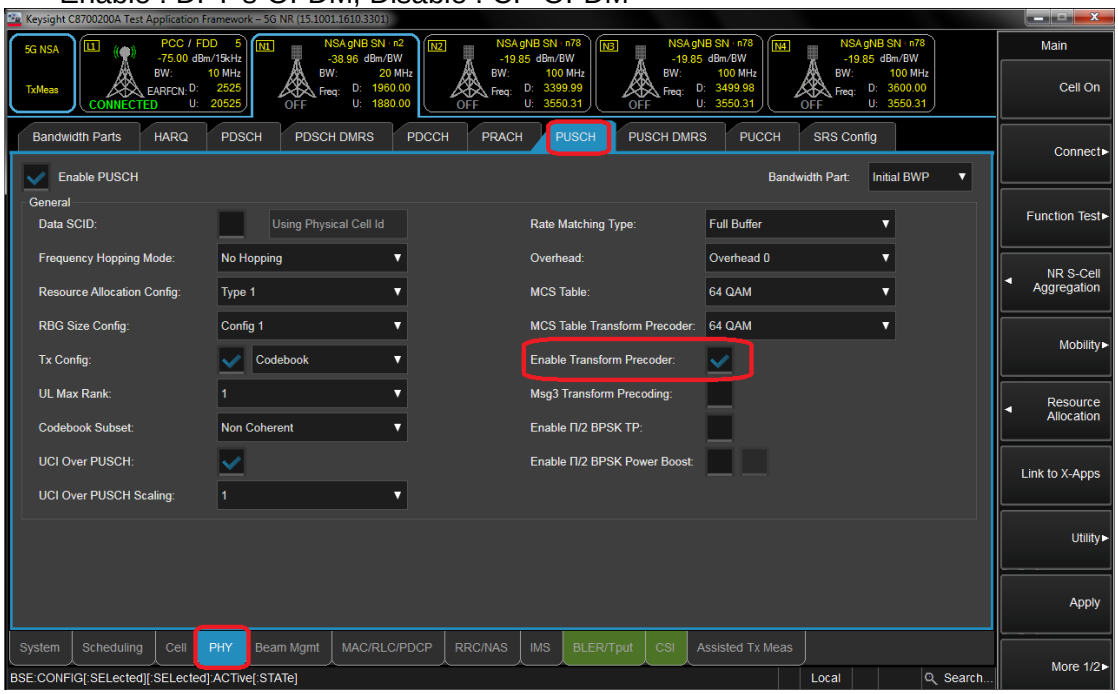


Figure-3

- Select operating band, BW, SCS and Channel.
- Turn the NR Cell On using “ON/OFF” Key.

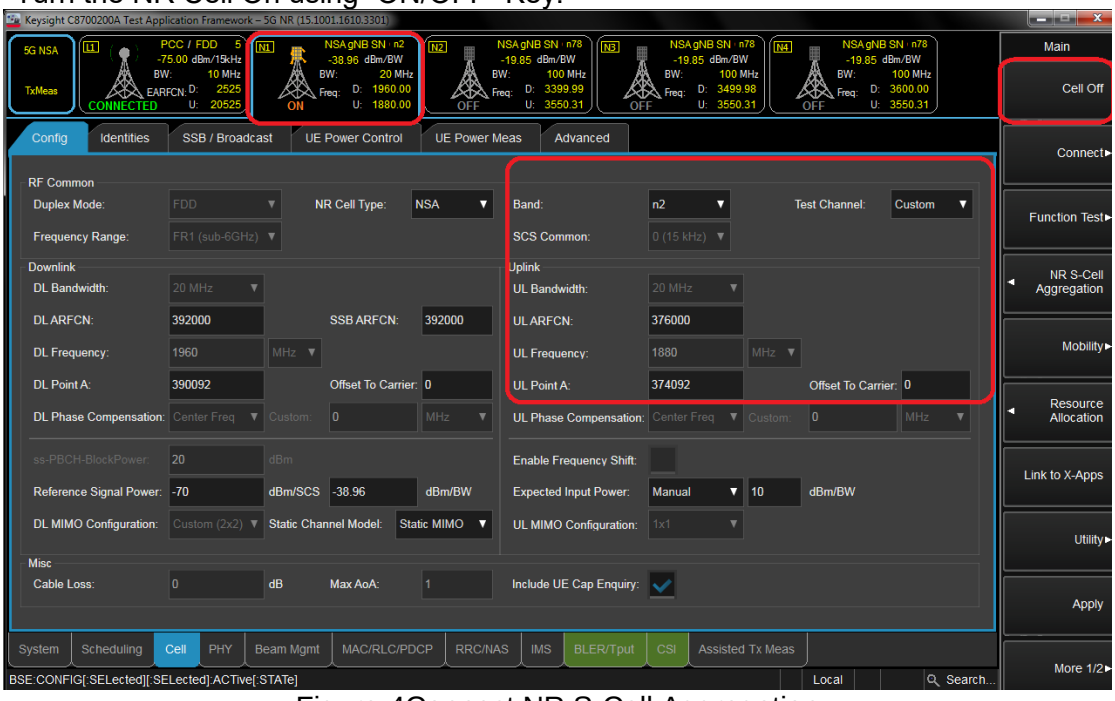


Figure-4Connect NR S-Cell Aggregation

- Click NR S-Cell Aggregation

- Check the Cell 1's DL and UL box(PCC) and than Click Apply.
- Check the message summary If message shows NR Msg 5, It is connected.

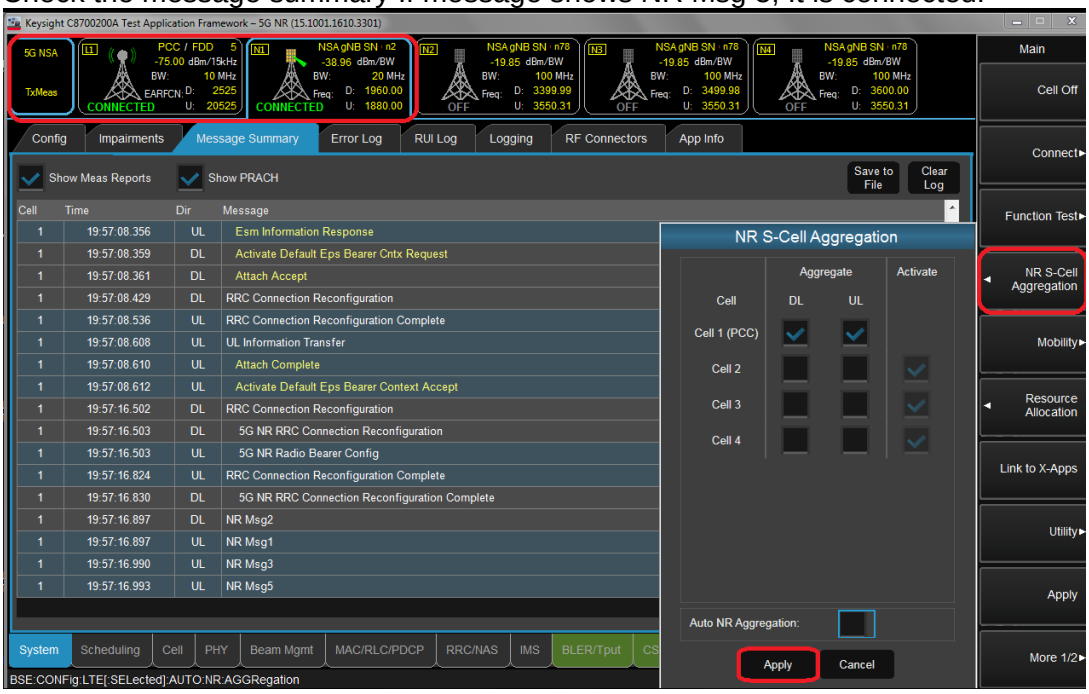


Figure-5

Max Power setting

- Click "Cell in the bottom of screen.
- Click "UE Power control" than change UE Power control mode to All Up bits.

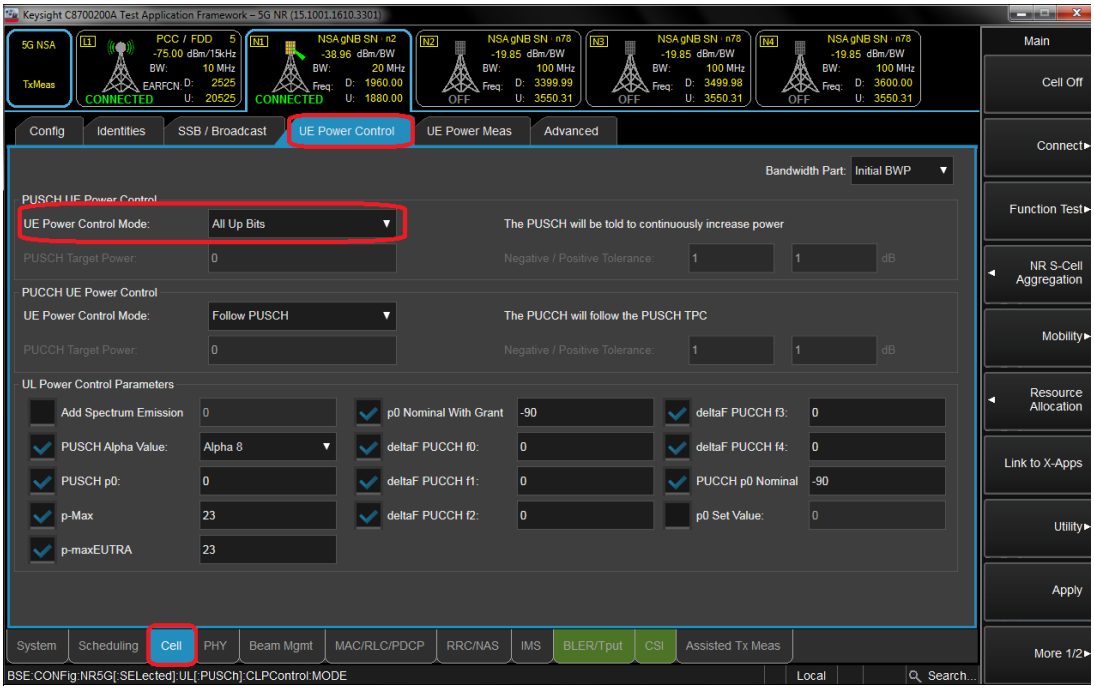


Figure-6

Selecting Start RB/Count/MCS

- Select the each test configurating (Start RB, Count, MCS).

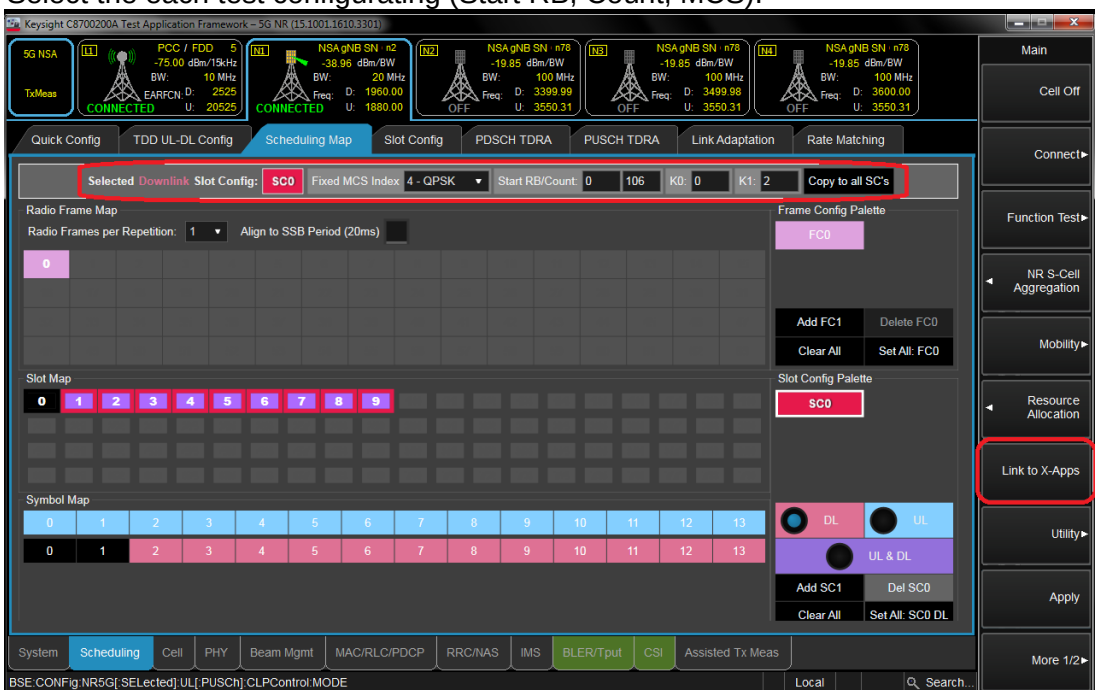


Figure-7

View Tx Power

- Click “Link to X-Apps.”(Please refer to Figure-7)
- Select “Channel Power”.

Figure-8

11.5.1 NR Band Maximum Conducted Power

[NR Band n2 Conducted Power]

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	23.94	23.95	24.06	0
				1	13	23.85	23.83	23.94	0
				1	23	23.88	23.85	23.97	0
				12	0	23.39	23.41	23.45	1
				12	7	23.91	23.91	23.97	0
				12	13	23.47	23.40	23.41	1
				25	0	23.40	23.32	23.34	1
			QPSK	1	1	23.88	23.82	23.91	0
				1	13	23.84	23.73	23.84	0
				1	23	23.92	23.83	23.89	0
				12	0	22.97	22.88	22.91	1
				12	7	23.93	23.92	23.97	0
				12	13	22.91	22.84	22.95	1
				25	0	22.90	22.78	23.10	1
			16QAM	1	1	22.83	22.81	23.06	1
		CP	QPSK	1	1	22.45	22.31	22.58	1.5

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	23.95	23.75	24.14	0
				1	26	24.03	23.84	24.15	0
				1	50	24.00	23.84	23.54	0
				25	0	23.44	23.22	23.60	1
				25	14	23.90	23.73	24.07	0
				25	27	23.42	23.22	23.50	1
				50	0	23.45	23.20	23.47	1
			QPSK	1	1	23.91	23.79	24.09	0
				1	26	23.84	23.80	24.17	0
				1	50	23.92	23.83	23.47	0
				25	0	22.95	22.79	23.09	1
				25	14	23.91	23.78	24.05	0
				25	27	22.94	22.75	23.05	1
				50	0	22.80	22.83	23.07	1
			16QAM	1	1	22.89	22.68	22.91	1
		CP	QPSK	1	1	22.43	22.45	22.49	1.5

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	24.00	23.88	24.12	0
				1	40	23.85	23.79	23.99	0
				1	77	23.94	23.92	23.64	0
				36	0	23.43	23.41	23.69	1
				36	22	23.90	23.94	24.15	0
				36	43	23.20	23.39	23.18	1
				75	0	23.44	23.40	23.59	1
			QPSK	1	1	23.94	23.85	24.05	0
				1	40	23.84	23.91	24.01	0
				1	77	23.82	23.93	23.63	0
				36	0	22.98	22.94	23.10	1
				36	22	24.07	23.89	24.09	0
				36	43	22.87	22.90	22.81	1
				75	0	22.88	22.85	23.12	1
			16QAM	1	1	23.05	22.63	22.94	1
		CP	QPSK	1	1	22.34	22.52	22.64	1.5

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	23.91	23.92	24.05	0
				1	53	24.00	23.99	24.26	0
				1	104	24.02	24.00	23.34	0
				50	0	23.48	23.49	23.62	1
				50	28	**24.01**	23.91	24.14	0
				50	56	**23.49**	23.43	23.62	1
				100	0	23.51	23.44	23.60	1
			QPSK	1	1	23.92	23.95	24.07	0
				1	53	23.95	23.97	24.00	0
				1	104	24.00	24.03	24.08	0
				50	0	22.97	22.93	22.99	1
				50	28	**23.85**	23.89	23.91	0
				50	56	**22.99**	22.92	23.14	1
				100	0	22.95	22.90	22.92	1
			16QAM	1	1	23.02	22.99	23.04	1
		CP	QPSK	1	1	22.60	22.55	22.58	1.5

[NR Band n5 Conducted Power]

NR Band n5 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						165300	167300	169300	
						826.5 ㎒	836.5 ㎒	846.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.26	24.11	24.11	0
				1	13	24.01	23.97	23.98	0
				1	23	24.12	24.07	24.05	0
				12	0	23.75	23.60	23.50	1
				12	7	24.21	24.04	24.04	0
				12	13	23.81	23.60	23.40	1
				25	0	23.79	23.61	23.59	1
			QPSK	1	1	24.19	24.08	24.12	0
				1	13	24.14	23.94	23.97	0
				1	23	24.25	24.06	24.17	0
				12	0	23.24	23.08	23.12	1
				12	7	24.26	24.05	24.12	0
				12	13	23.23	23.04	23.11	1
				25	0	23.15	22.96	23.06	1
			16QAM	1	1	23.29	23.10	23.10	1
		CP	QPSK	1	1	22.72	22.54	22.56	1.5

NR Band n5 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						165800		168800	
						829 ㎒		844 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.26		24.20	0
				1	26	24.21		24.25	0
				1	50	24.16		24.22	0
				25	0	23.19		23.24	1
				25	14	24.23		23.94	0
				25	27	23.25		23.28	1
				50	0	23.15		23.19	1
			QPSK	1	1	24.15		24.11	0
				1	26	24.19		24.10	0
				1	50	24.09		23.31	0
				25	0	23.17		23.04	1
				25	14	24.20		24.02	0
				25	27	23.17		22.92	1
				50	0	23.09		23.00	1
			16QAM	1	1	23.15		23.32	1
		CP	QPSK	1	1	22.64		22.21	1.5

NR Band n5 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							167300		
							836.5 ㎒		
15 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1		24.25		0
				1	40		24.13		0
				1	77		23.08		0
				36	0		23.75		1
				36	22		24.22		0
				36	43		23.60		1
				75	0		23.66		1
			QPSK	1	1		24.03		0
				1	40		24.01		0
				1	77		23.67		0
				36	0		23.11		1
				36	22		24.14		0
				36	43		23.10		1
				75	0		23.01		1
			16QAM	1	1		23.22		1
		CP	QPSK	1	1		22.64		1.5

NR Band n5 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							167300		
							836.5 ㎒		
20 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1		24.29		0
				1	53		24.31		0
				1	104		24.10		0
				50	0		23.76		1
				50	28		24.23		0
				50	56		23.67		1
				100	0		23.65		1
			QPSK	1	1		24.29		0
				1	53		24.26		0
				1	104		24.03		0
				50	0		23.29		1
				50	28		24.23		0
				50	56		23.14		1
				100	0		23.23		1
			16QAM	1	1		23.30		1
		CP	QPSK	1	1		22.73		1.5

NR Band n5 (Cell) at 15 ㎒/ 20 ㎒ Bandwidth does not support three non-overlapping channels. Per FCC Guidance, 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.

[NR Band n41 Conducted Power]

NR Band n41 _20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						501204	509898	518598	527298	535998	
						2506.02 ㎒	2549.49 ㎒	2592.99 ㎒	2636.49 ㎒	2679.99 ㎒	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.92	23.45	23.39	23.45	23.47	0
				1	26	23.96	23.41	23.62	23.48	23.46	0
				1	49	23.85	23.49	23.59	23.48	23.51	0
				25	0	23.44	22.92	22.95	22.87	22.95	0.5
				25	13	23.89	23.41	23.60	23.51	23.50	0
				25	26	23.38	22.87	23.18	22.96	23.03	0.5
				50	0	23.35	23.00	23.07	23.00	23.02	0.5
			QPSK	1	1	24.12	23.69	23.62	23.70	23.72	0
				1	26	24.10	23.65	23.82	23.75	23.72	0
				1	49	24.15	23.53	23.82	23.70	23.75	0
				25	0	23.15	22.69	22.69	22.63	22.71	1
				25	13	24.10	23.70	23.79	23.73	23.77	0
				25	26	23.01	22.59	22.85	22.61	22.72	1
				50	0	23.10	22.63	22.83	22.73	22.71	1
			16QAM	1	1	22.89	22.66	22.52	22.53	22.56	1
		CP	QPSK	1	1	22.24	22.06	21.90	21.97	21.87	1.5

NR Band n41 _40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						503202	513468		523734	534000	
						2516.01 ㎒	2567.34 ㎒		2618.67 ㎒	2670 ㎒	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.96	23.46		23.68	23.48	0
				1	53	23.90	23.57		23.66	23.51	0
				1	104	23.55	23.51		23.46	23.50	0
				50	0	23.41	23.09		23.13	23.09	0.5
				50	28	23.96	23.67		23.63	23.50	0
				50	56	23.24	23.28		23.05	22.91	0.5
				100	0	23.31	23.12		23.05	22.97	0.5
			QPSK	1	1	24.32	23.89		23.90	23.92	0
				1	53	24.30	23.85		23.95	23.92	0
				1	104	24.35	23.73		23.90	23.95	0
				50	0	23.35	22.89		22.83	22.91	1
				50	28	24.30	23.90		23.93	23.97	0
				50	56	23.21	22.79		22.81	22.92	1
				100	0	23.30	22.83		22.93	22.91	1
			16QAM	1	1	22.88	22.44		22.61	22.46	1
		CP	QPSK	1	1	22.41	22.04		22.07	22.05	1.5

NR Band n41 _50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						504204		518598		532998		
						2521.02 ㎒		2592.99 ㎒		2664.99 ㎒		
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.65		23.25		22.90		0
				1	67	23.95		23.70		22.95		0
				1	131	23.65		23.74		23.20		0
				64	0	23.41		23.22		23.02		0.5
				64	35	23.90		23.65		23.52		0
				64	69	23.27		23.17		22.80		0.5
				128	0	23.25		23.27		23.01		0.5
			QPSK	1	1	23.97		23.47		23.69		0
				1	67	24.01		23.87		23.73		0
				1	131	23.71		23.82		23.33		0
				64	0	23.12		22.72		22.74		1
				64	35	24.10		23.92		23.68		0
				64	69	22.94		22.98		22.56		1
				128	0	23.09		22.86		22.64		1
			16QAM	1	1	22.92		22.36		22.38		1
		CP	QPSK	1	1	22.28		21.77		21.89		1.5

NR Band n41 _60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						505200		518598		531996		
						2526 ㎒		2592.99 ㎒		2659.98 ㎒		
60 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.46		23.16		23.30		0
				1	81	23.53		23.21		23.57		0
				1	160	23.50		23.45		23.10		0
				81	0	23.21		22.98		22.92		0.5
				81	41	23.58		23.76		23.55		0
				81	81	22.96		23.22		22.84		0.5
				162	0	22.95		23.17		23.05		0.5
			QPSK	1	1	24.03		23.33		23.52		0
				1	81	24.02		24.03		23.81		0
				1	160	23.69		23.65		23.31		0
				81	0	23.06		22.78		22.73		1
				81	41	24.03		23.98		23.80		0
				81	81	22.90		22.93		22.55		1
				162	0	23.01		22.84		22.70		1
			16QAM	1	1	22.83		22.16		22.15		1
		CP	QPSK	1	1	22.32		21.69		21.73		1.5

NR Band n41 _80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						507204				529998	
						2536.02 ㎒				2649.99 ㎒	
80 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.79				23.54	0
				1	109	23.64				23.53	0
				1	215	23.70				23.10	0
				108	0	23.22				22.84	0.5
				108	55	23.67				23.59	0
				108	109	22.95				22.79	0.5
				216	0	22.99				22.97	0.5
			QPSK	1	1	23.92				23.82	0
				1	109	23.94				23.88	0
				1	215	23.85				23.29	0
				108	0	23.05				22.68	1
				108	55	23.93				23.78	0
				108	109	22.76				22.52	1
				216	0	22.77				22.66	1
			16QAM	1	1	22.80				22.59	1
		CP	QPSK	1	1	22.30				22.09	1.5

NR Band n41 _90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						508200				**528996**	
						2541 ㎒				**2644.98 ㎒**	
90 ㎒	30	DFT-s	pi/2 BPSK	1	1	23.76				23.53	0
				1	123	23.57				23.53	0
				1	243	23.65				23.04	0
				120	0	23.21				22.80	0.5
				120	63	23.63				23.53	0
				120	125	22.88				22.81	0.5
				243	0	22.97				22.80	0.5
			QPSK	1	1	23.93				23.65	0
				1	123	23.92				23.86	0
				1	243	23.88				23.24	0
				120	0	22.94				22.67	1
				120	63	23.86				23.81	0
				120	125	22.71				22.61	1
				243	0	22.77				22.67	1
			16QAM	1	1	22.97				22.66	1
		CP	QPSK	1	1	22.30				22.01	1.5

NR Band n41 _100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			23.07			0
				1	137			23.60			0
				1	271			23.38			0
				135	0			23.13			0.5
				135	69			23.60			0
				135	138			23.10			0.5
				270	0			22.75			0.5
			QPSK	1	1			23.31			0
				1	137			23.98			0
				1	271			23.72			0
				135	0			22.39			1
				135	69			23.92			0
				135	138			22.70			1
				270	0			22.72			1
			16QAM	1	1			22.10			1
		CP	QPSK	1	1			21.66			1.5

NR Band n41 at 100 ㎒ Bandwidth does not support three non-overlapping channels. Per FCC Guidance, 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.

[NR Band n66 Conducted Power]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
						342500	346820	351160	355500	
						1712.5 ㎒	1734.1 ㎒	1755.8 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.16	24.05	24.29	24.18	0
				1	13	24.11	24.03	24.25	24.08	0
				1	23	24.22	24.06	24.21	24.10	0
				12	0	23.66	23.53	23.75	23.67	1
				12	7	24.16	24.06	23.21	24.10	0
				12	13	23.71	23.50	23.59	23.55	1
				25	0	23.76	23.57	23.71	23.65	1
			QPSK	1	1	24.12	24.00	24.21	24.14	0
				1	13	24.05	23.95	24.11	24.03	0
				1	23	24.20	24.04	24.21	24.12	0
				12	0	23.16	23.01	23.21	23.16	1
				12	7	24.19	24.05	24.22	24.12	0
				12	13	23.19	23.08	23.15	23.07	1
				25	0	23.15	23.05	23.22	23.12	1
			16QAM	1	1	23.16	23.13	23.28	23.03	1
		CP	QPSK	1	1	22.69	22.57	22.83	22.67	1.5

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
						343000	347000	351000	355000	
						1715 ㎒	1735 ㎒	1755 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.10	24.13	24.34	24.25	0
				1	26	24.18	24.24	24.40	24.23	0
				1	50	24.18	24.17	24.29	24.11	0
				25	0	23.59	23.60	23.82	23.71	1
				25	14	24.08	24.08	24.32	24.21	0
				25	27	23.64	23.62	23.75	23.66	1
				50	0	23.60	23.60	23.79	23.70	1
			QPSK	1	1	24.05	24.05	24.32	24.23	0
				1	26	24.12	24.10	24.33	24.22	0
				1	50	24.18	24.19	24.24	24.21	0
				25	0	23.10	23.04	23.31	23.27	1
				25	14	24.06	24.12	24.28	24.15	0
				25	27	23.12	23.09	23.28	23.12	1
				50	0	22.32	23.08	23.30	23.12	1
			16QAM	1	1	23.13	23.15	23.42	23.38	1
		CP	QPSK	1	1	22.64	22.59	22.83	22.79	1.5

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
						343500	347160	350820	354500	
						1717.5 ㎒	1735.8 ㎒	1754.1 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.24	24.07	24.31	24.20	0
				1	40	24.17	24.10	24.22	24.12	0
				1	77	24.19	24.23	24.21	24.15	0
				36	0	23.78	23.65	23.68	23.55	1
				36	22	24.23	24.20	24.25	24.14	0
				36	43	23.72	23.72	23.71	23.57	1
				75	0	23.74	23.70	23.79	23.68	1
			QPSK	1	1	24.10	24.07	24.16	24.14	0
				1	40	24.15	24.13	24.20	24.05	0
				1	77	24.13	24.09	24.15	24.07	0
				36	0	23.23	23.09	23.26	23.16	1
				36	22	24.26	24.13	24.28	24.13	0
				36	43	23.24	23.23	23.28	23.09	1
				75	0	23.21	23.14	23.23	23.10	1
			16QAM	1	1	23.21	23.15	23.20	23.05	1
		CP	QPSK	1	1	22.64	22.63	22.79	22.71	1.5

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
						344000	349000		354000	
						1720 ㎒	1745 ㎒		1770 ㎒	
20 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	24.18	24.14		24.17	0
				1	53	24.33	24.36		24.26	0
				1	104	24.32	24.31		24.06	0
				50	0	23.69	23.72		23.69	1
				50	28	24.23	24.29		24.17	0
				50	56	23.80	23.83		23.59	1
				100	0	23.70	23.73		23.67	1
			QPSK	1	1	24.15	24.07		24.13	0
				1	53	24.78	24.26		24.12	0
				1	104	24.11	24.28		24.02	0
				50	0	23.27	23.18		23.18	1
				50	28	24.75	24.20		24.16	0
				50	56	23.21	23.10		23.08	1
				100	0	23.21	23.21		23.16	1
			16QAM	1	1	23.16	23.11		23.15	1
		CP	QPSK	1	1	22.70	22.57		22.67	1.5

[NR Band n71 Conducted Power]

NR Band n71 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						133100	136100	139100	
						665.5 ㎒	680.5 ㎒	695.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	23.72	24.19	24.50	0
				1	13	23.72	24.21	24.45	0
				1	23	23.86	24.30	24.52	0
				12	0	23.27	23.72	23.98	1
				12	7	23.79	24.24	24.50	0
				12	13	23.27	23.74	23.96	1
				25	0	23.30	23.70	23.98	1
			QPSK	1	1	23.74	24.23	24.46	0
				1	13	23.71	24.18	24.42	0
				1	23	23.81	24.32	24.47	0
				12	0	22.76	23.20	23.47	1
				12	7	23.80	24.24	24.51	0
				12	13	22.82	23.25	23.51	1
				25	0	22.73	23.22	23.44	1
			16QAM	1	1	22.80	23.29	23.46	1
		CP	QPSK	1	1	22.26	22.68	22.53	1.5

NR Band n71 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						133600	136100	138600	
						668 ㎒	680.5 ㎒	693 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	23.76	24.13	24.50	0
				1	26	23.98	24.25	24.62	0
				1	50	24.02	24.38	24.55	0
				25	0	23.29	23.69	23.96	1
				25	14	23.83	24.25	24.48	0
				25	27	23.45	23.85	23.98	1
				50	0	23.43	23.63	23.97	1
			QPSK	1	1	23.73	24.09	24.42	0
				1	26	23.87	24.14	24.52	0
				1	50	24.00	24.25	24.50	0
				25	0	22.77	23.00	23.43	1
				25	14	23.83	24.13	24.45	0
				25	27	22.97	23.30	23.46	1
				50	0	22.81	23.12	23.44	1
			16QAM	1	1	22.75	23.13	23.51	1
		CP	QPSK	1	1	22.28	22.63	22.95	1.5

NR Band n71 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						134100	518598	138100	
						670.5 ㎒	2592.99 ㎒	690.5 ㎒	
15 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	23.81		24.38	0
				1	40	23.93		24.42	0
				1	77	24.22		24.62	0
				36	0	23.36		23.95	1
				36	22	24.00		24.51	0
				36	43	23.56		23.97	1
				75	0	23.43		23.98	1
			QPSK	1	1	23.63		24.41	0
				1	40	23.92		24.37	0
				1	77	24.22		24.64	0
				36	0	22.83		23.20	1
				36	22	23.98		24.41	0
				36	43	23.06		23.51	1
				75	0	22.97		23.50	1
			16QAM	1	1	22.79		23.42	1
		CP	QPSK	1	1	22.30		22.92	1.5

NR Band n71 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							136100		
							680.5 ㎒		
20 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1		24.00		0
				1	53		24.39		0
				1	104		24.49		0
				50	0		23.63		1
				50	28		24.00		0
				50	56		23.88		1
				100	0		23.68		1
			QPSK	1	1		23.98		0
				1	53		24.31		0
				1	104		24.45		0
				50	0		23.19		1
				50	28		24.27		0
				50	56		23.39		1
				100	0		23.26		1
			16QAM	1	1		23.11		1
		CP	QPSK	1	1		22.55		1.5

NR Band n71 at 20 ㎒ Bandwidth does not support three non-overlapping channels. Per FCC Guidance, 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.

11.5.2 NR Band Reduced Conducted Power (Hotspot activated)

[NR Band n2 Conducted Power]

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	19.33	19.28	18.97	0
				1	13	19.37	19.27	18.98	0
				1	23	19.36	19.25	18.99	0
				12	0	19.34	19.28	19.01	0.5
				12	7	19.38	19.23	18.98	0
				12	13	19.37	19.23	18.99	0.5
				25	0	19.38	19.24	19.02	0.5
			QPSK	1	1	19.33	19.27	19.03	0
				1	13	19.37	19.25	18.83	0
				1	23	19.41	19.19	18.99	0
				12	0	19.35	19.24	18.86	1
				12	7	19.38	19.22	18.95	0
				12	13	19.38	19.21	18.91	1
				25	0	19.37	19.23	18.99	1
			16QAM	1	1	19.35	19.27	19.06	1
		CP	QPSK	1	1	19.38	19.23	18.92	1.5

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	19.44	19.36	19.17	0
				1	26	19.62	19.29	19.11	0
				1	50	19.51	19.21	18.94	0
				25	0	19.36	19.24	19.12	0.5
				25	14	19.36	19.23	19.03	0
				25	27	19.47	19.17	19.02	0.5
				50	0	19.46	19.27	19.08	0.5
			QPSK	1	1	19.43	19.35	19.16	0
				1	26	19.41	19.23	19.12	0
				1	50	19.52	19.14	19.03	0
				25	0	19.47	19.28	19.09	1
				25	14	19.44	19.26	19.10	0
				25	27	19.45	19.20	19.09	1
				50	0	19.45	19.27	19.05	1
			16QAM	1	1	19.40	19.19	19.07	1
		CP	QPSK	1	1	19.39	19.22	19.15	1.5

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	19.45	19.36	19.20	0
				1	40	19.41	19.20	19.01	0
				1	77	19.52	19.20	19.02	0
				36	0	19.50	19.37	19.06	0.5
				36	22	19.52	19.32	19.04	0
				36	43	19.48	19.26	19.05	0.5
				75	0	19.51	19.31	19.04	0.5
			QPSK	1	1	19.42	19.42	19.16	0
				1	40	19.41	19.21	19.00	0
				1	77	19.52	19.23	18.97	0
				36	0	19.49	19.36	19.14	1
				36	22	19.52	19.31	19.13	0
				36	43	19.58	19.24	19.07	1
				75	0	19.51	19.29	19.05	1
			16QAM	1	1	19.43	19.39	19.15	1
		CP	QPSK	1	1	19.32	19.23	19.12	1.5

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	19.42	19.37	19.28	0
				1	53	19.64	19.41	19.26	0
				1	104	19.48	19.28	19.04	0
				50	0	19.38	19.32	19.21	0.5
				50	28	19.48	19.27	19.12	0
				50	56	19.37	19.19	19.01	0.5
				100	0	19.45	19.24	19.22	0.5
			QPSK	1	1	19.36	19.36	19.20	0
				1	53	19.51	19.31	19.31	0
				1	104	19.38	19.19	18.98	0
				50	0	19.36	19.31	19.17	1
				50	28	19.48	19.23	19.20	0
				50	56	19.37	19.23	19.08	1
				100	0	19.52	19.28	19.11	1
			16QAM	1	1	19.43	19.37	19.44	1
		CP	QPSK	1	1	19.45	19.31	19.43	1.5

[NR Band n66 Conducted Power]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						342500	346820	351160	355500	
						1712.5 ㎒	1734.1 ㎒	1755.8 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	19.04	19.02	19.17	18.83	0
				1	13	18.98	18.99	18.94	18.73	0
				1	23	19.10	19.05	19.12	18.81	0
				12	0	19.03	19.02	19.14	18.81	1
				12	7	19.04	18.97	19.13	18.78	0
				12	13	19.01	18.91	19.09	18.76	1
				25	0	18.93	18.93	19.10	18.78	1
			QPSK	1	1	18.98	18.91	19.18	18.85	0
				1	13	19.07	18.80	19.03	18.71	0
				1	23	19.05	19.02	19.10	18.81	0
				12	0	18.99	18.86	19.13	18.81	1
				12	7	19.06	18.90	19.04	18.77	0
				12	13	19.05	18.93	19.09	18.76	1
				25	0	19.06	18.95	19.11	18.79	1
			16QAM	1	1	18.79	19.12	19.34	18.91	1
		CP	QPSK	1	1	19.08	18.94	19.11	18.92	1.5

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						343000	347000	351000	355000	
						1715 ㎒	1735 ㎒	1755 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	18.99	19.00	19.23	19.00	0
				1	26	19.14	19.15	19.26	18.98	0
				1	50	19.07	19.12	19.11	18.78	0
				25	0	19.01	19.00	19.25	18.95	1
				25	14	19.05	18.99	19.15	18.86	0
				25	27	19.07	19.05	19.16	18.81	1
				50	0	19.04	19.02	19.16	18.89	1
			QPSK	1	1	19.00	18.97	19.22	19.01	0
				1	26	19.22	19.14	19.26	18.96	0
				1	50	19.05	19.13	19.06	18.82	0
				25	0	19.04	18.95	19.22	18.95	1
				25	14	19.04	19.01	19.13	18.88	0
				25	27	19.07	19.06	19.11	18.82	1
				50	0	19.06	19.01	19.16	18.88	1
			16QAM	1	1	19.08	19.06	19.40	19.14	1
		CP	QPSK	1	1	18.98	18.96	19.22	18.99	1.5

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						343500	347160	350820	354500	
						1717.5 ㎒	1735.8 ㎒	1754.1 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	18.98	19.00	19.11	19.09	0
				1	40	19.00	18.94	19.07	18.90	0
				1	77	19.05	19.14	19.09	18.69	0
				36	0	18.98	19.00	19.10	19.01	1
				36	22	19.07	19.10	19.08	18.85	0
				36	43	19.16	19.11	19.09	18.80	1
				75	0	19.10	19.08	19.11	19.96	1
			QPSK	1	1	19.01	19.04	19.13	18.88	0
				1	40	19.03	18.94	19.10	18.87	0
				1	77	19.11	19.21	19.01	18.81	0
				36	0	19.08	19.02	19.18	18.90	1
				36	22	18.99	19.14	19.10	18.84	0
				36	43	19.07	19.13	19.05	18.79	1
				75	0	19.02	19.11	19.08	18.88	1
			16QAM	1	1	18.98	19.00	19.10	19.26	1
		CP	QPSK	1	1	19.01	18.90	19.17	19.06	1.5

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						344000	349000		354000	
						1720 ㎒	1745 ㎒		1770 ㎒	
20 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	19.00	19.07		19.11	0
				1	53	19.13	19.23		19.14	0
				1	104	19.05	19.17		18.86	0
				50	0	19.02	19.13		19.13	1
				50	28	19.07	19.15		19.04	0
				50	56	19.03	19.18		18.99	1
				100	0	19.06	19.13		19.06	1
			QPSK	1	1	18.96	19.04		19.05	0
				1	53	19.11	19.21		19.11	0
				1	104	19.04	19.12		18.83	0
				50	0	19.02	19.09		19.10	1
				50	28	19.06	19.19		19.13	0
				50	56	19.04	19.11		18.88	1
				100	0	19.06	19.17		19.04	1
			16QAM	1	1	18.99	19.01		19.10	1
		CP	QPSK	1	1	18.97	19.02		19.13	1.5

11.5.2 NR Band Reduced Conducted Power

[NR Band n2 Conducted Power]

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	21.22	21.13	21.25	0
				1	13	20.99	20.89	21.23	0
				1	23	21.09	21.06	21.32	0
				12	0	20.88	21.06	21.33	1
				12	7	20.91	21.04	21.28	0
				12	13	20.84	21.03	21.30	1
				25	0	20.95	21.04	21.32	1
			QPSK	1	1	20.96	21.08	21.25	0
				1	13	20.98	20.97	21.22	0
				1	23	21.07	21.09	21.26	0
				12	0	20.88	21.03	21.30	1
				12	7	20.92	21.02	21.27	0
				12	13	20.91	21.10	21.29	1
				25	0	20.85	21.01	21.21	1
			16QAM	1	1	20.93	21.14	21.32	1
		CP	QPSK	1	1	20.84	21.00	21.18	1.5

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	20.87	21.04	21.24	0
				1	26	20.89	21.11	21.35	0
				1	50	20.92	21.01	21.35	0
				25	0	20.87	21.04	21.29	1
				25	14	20.87	20.99	21.26	0
				25	27	20.91	21.01	21.28	1
				50	0	20.86	21.02	21.22	1
			QPSK	1	1	20.87	20.97	21.25	0
				1	26	20.93	21.14	21.34	0
				1	50	20.91	21.01	21.33	0
				25	0	20.88	20.97	21.26	1
				25	14	20.87	21.01	21.24	0
				25	27	20.91	21.02	21.27	1
				50	0	20.85	21.03	21.22	1
			16QAM	1	1	20.95	20.95	21.44	1
		CP	QPSK	1	1	20.82	21.05	21.19	1.5

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	20.94	21.00	21.21	0
				1	40	20.84	20.97	21.18	0
				1	77	21.02	21.14	21.02	0
				36	0	20.85	20.98	21.21	1
				36	22	20.89	21.08	21.23	0
				36	43	21.01	20.97	21.22	1
				75	0	20.86	21.01	21.26	1
			QPSK	1	1	21.02	21.07	21.22	0
				1	40	20.94	20.89	21.13	0
				1	77	21.03	21.15	20.95	0
				36	0	20.85	21.08	21.25	1
				36	22	20.88	20.99	21.29	0
				36	43	21.00	21.06	21.21	1
				75	0	20.86	21.00	21.25	1
			16QAM	1	1	21.04	20.96	21.22	1
		CP	QPSK	1	1	20.82	21.08	21.17	1.5

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	PI/2 BPSK	1	1	20.93	21.07	21.26	0
				1	53	21.07	21.14	21.36	0
				1	104	21.01	21.22	21.24	0
				50	0	20.90	21.06	21.28	1
				50	28	21.04	20.99	21.32	0
				50	56	21.05	21.08	21.24	1
				100	0	20.97	20.98	21.26	1
			QPSK	1	1	20.89	21.04	21.21	0
				1	53	21.06	21.17	21.41	0
				1	104	21.02	21.16	21.24	0
				50	0	20.87	21.02	21.23	1
				50	28	21.04	21.08	21.29	0
				50	56	21.04	21.07	21.29	1
				100	0	20.96	21.06	21.32	1
			16QAM	1	1	21.05	21.02	21.21	1
		CP	QPSK	1	1	20.92	21.00	21.15	1.5

[NR Band n66 Conducted Power]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						342500	346820	351160	355500	
						1712.5 ㎒	1734.1 ㎒	1755.8 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	20.87	20.95	21.24	20.85	0
				1	13	20.94	20.93	21.05	20.78	0
				1	23	21.05	20.97	21.11	20.79	0
				12	0	20.85	20.99	21.17	20.86	1
				12	7	**20.94**	20.99	21.13	20.75	0
				12	13	**20.97**	20.95	21.15	20.77	1
				25	0	20.89	20.96	21.21	20.81	1
			QPSK	1	1	20.92	20.93	21.22	20.90	0
				1	13	20.97	20.90	21.11	20.78	0
				1	23	21.13	20.96	21.16	20.88	0
				12	0	20.87	21.00	21.11	20.87	1
				12	7	**20.99**	20.92	21.17	20.86	0
				12	13	**21.04**	20.97	21.06	20.88	1
				25	0	20.91	20.96	21.12	20.81	1
			16QAM	1	1	20.96	20.97	21.11	20.91	1
		CP	QPSK	1	1	20.94	20.96	21.28	20.89	1.5

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						343000	347000	351000	355000	
						1715 ㎒	1735 ㎒	1755 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	20.94	21.07	21.19	21.08	0
				1	26	21.20	21.07	21.32	21.05	0
				1	50	21.06	21.14	21.06	20.91	0
				25	0	21.09	21.00	21.15	21.01	1
				25	14	**21.14**	**21.09**	**21.14**	20.89	0
				25	27	**21.12**	**21.10**	**21.17**	20.78	1
				50	0	21.09	21.01	21.25	20.95	1
			QPSK	1	1	20.88	21.02	21.24	21.07	0
				1	26	21.16	21.07	21.33	20.98	0
				1	50	21.06	21.09	21.16	20.86	0
				25	0	21.03	21.02	21.25	21.01	1
				25	14	**21.09**	**21.03**	**21.13**	20.89	0
				25	27	**21.11**	**21.13**	**21.17**	20.89	1
				50	0	21.05	21.04	21.16	20.95	1
			16QAM	1	1	21.11	21.22	21.28	21.15	1
		CP	QPSK	1	1	20.91	20.99	21.26	21.07	1.5

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						343500	347160	350820	354500	
						1717.5 ㎒	1735.8 ㎒	1754.1 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	20.95	21.06	21.16	20.99	0
				1	40	21.08	21.04	21.07	20.81	0
				1	77	21.09	21.14	21.10	20.72	0
				36	0	21.01	21.09	21.24	20.93	1
				36	22	**21.12**	21.09	21.21	20.88	0
				36	43	**21.12**	21.21	21.11	20.82	1
				75	0	21.05	21.06	21.19	20.94	1
			QPSK	1	1	21.02	21.13	21.17	21.05	0
				1	40	21.07	20.92	21.12	20.84	0
				1	77	21.03	21.12	21.16	20.84	0
				36	0	21.08	21.00	21.12	21.03	1
				36	22	**21.10**	21.01	21.20	20.99	0
				36	43	**21.09**	21.13	21.12	20.82	1
				75	0	21.02	20.97	21.20	20.94	1
			16QAM	1	1	20.96	21.08	21.11	21.12	1
		CP	QPSK	1	1	21.01	21.19	21.26	21.07	1.5

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR [dB]
						344000	349000		354000	
						1720 ㎒	1745 ㎒		1770 ㎒	
20 ㎒	15	DFT-s OFDM	PI/2 BPSK	1	1	21.00	21.06		21.04	0
				1	53	21.13	21.34		21.09	0
				1	104	21.01	21.18		20.81	0
				50	0	21.03	21.15		21.04	1
				50	28	**21.07**	21.20		21.01	0
				50	56	**21.04**	21.17		20.94	1
				100	0	21.05	21.17		21.02	1
			QPSK	1	1	21.04	21.02		21.06	0
				1	53	21.11	21.25		21.03	0
				1	104	21.07	21.09		20.87	0
				50	0	21.04	21.16		21.07	1
				50	28	**21.08**	21.14		21.03	0
				50	56	**21.05**	21.21		20.86	1
				100	0	21.05	21.21		21.03	1
			16QAM	1	1	20.91	20.97		21.04	1
		CP	QPSK	1	1	21.13	21.12		21.08	1.5

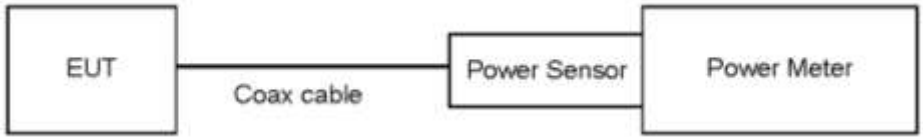
11.6 WIFI Conducted Power measurement method

Un-Licensed bands (DTS Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 558074 v05 - Section 8.3.2.3 - ANSI 63.10-2013 - Section 11.9.2.3

Test Procedure
1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup

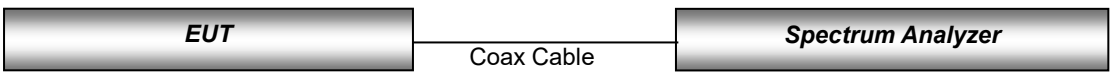


Un-Licensed bands (NII Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 789033 D02 v02r01 - Section E.3.a

Test Procedure
1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup



11.6.1 IEEE 802.11 (2.4 GHz) Maximum Conducted Power

Mode	Frequency [㎒]	Channel	IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]
802.11b	2 412	1	19.58
	2 437	6	19.87
	2 462	11	19.65
	2 467	12	6.83
	2 472	13	6.44
802.11g	2 412	1	18.41
	2 437	6	18.65
	2 462	11	18.61
	2 467	12	7.44
	2 472	13	5.34
802.11n (HT20)	2 412	1	18.37
	2 437	6	18.73
	2 462	11	18.69
	2 467	12	6.46
	2 472	13	3.28

11.6.2 IEEE 802.11 (2.4 GHz) Reduced Conducted Power (Held to ear VOIP)

Mode	Frequency [㎒]	Channel	IEEE 802.11 (2.4 ㎓) Reduced Average Conducted Power [dBm]
802.11b	2 412	1	10.38
	2 437	6	10.42
	2 462	11	10.49
	2 467	12	6.83
	2 472	13	6.40
802.11g	2 412	1	11.21
	2 437	6	11.40
	2 462	11	11.37
	2 467	12	7.44
	2 472	13	5.35
802.11n (HT20)	2 412	1	11.08
	2 437	6	11.53
	2 462	11	11.37
	2 467	12	6.47
	2 472	13	3.29

11.6.3 IEEE 802.11 (5 GHz) Maximum Conducted Power

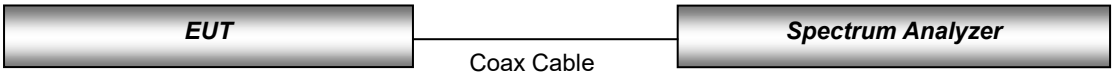
Mode	Frequency [㎒]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]
802.11a (20 ㎒ BW)	5 180	36	16.92
	5 200	40	16.86
	5 220	44	16.38
	5 240	48	16.34
	5 260	52	16.40
	5 280	56	16.60
	5 300	60	16.91
	5 320	64	16.39
	5 500	100	16.37
	5 600	120	16.14
	5 620	124	16.23
	5 720	144	16.20
	5 745	149	16.55
	5 785	157	16.20
	5 825	165	16.27

11.6.4 IEEE 802.11 (5 GHz) Reduced Conducted Power

Mode	Frequency [㎒]	Channel	IEEE 802.11 (5 ㎓) Reduced Average Conducted Power [dBm]
802.11ac (80 ㎒ BW)	5 210	42	13.38
	5 290	58	13.13
	5 530	106	13.13
	5 610	122	12.80
	5 690	138	12.68
	5 775	155	12.92

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:
▪ Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
▪ For transmission mode with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
▪ For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
▪ For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

Test Configuration

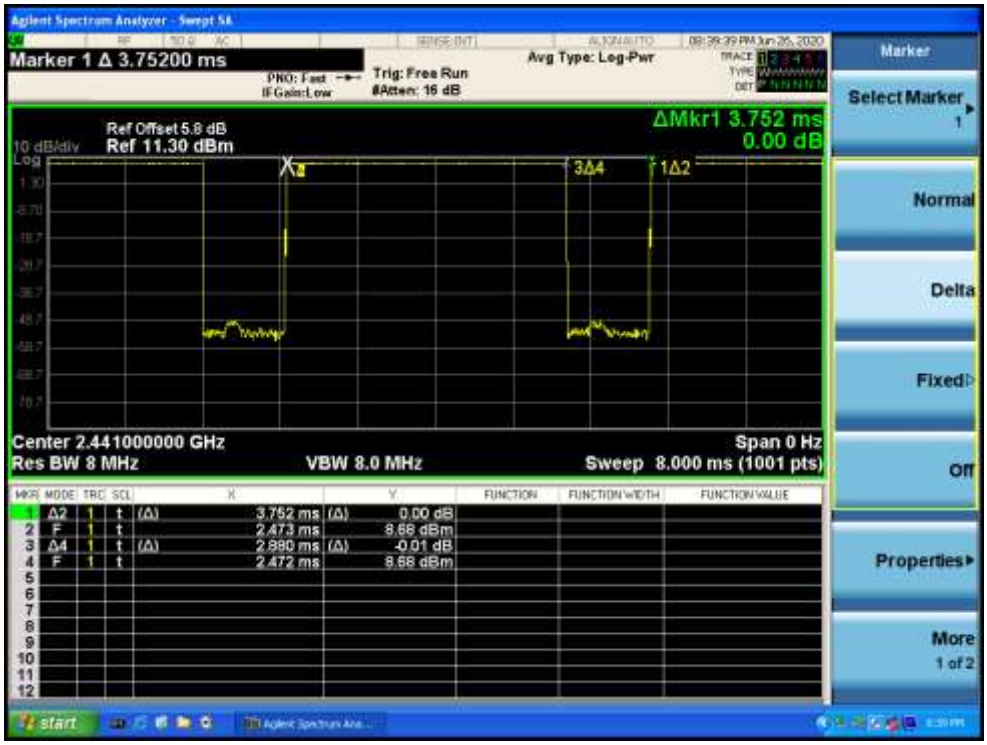


11.7 Bluetooth Conducted Power

The Burst averaged-conducted power

Mode	Channel	Bluetooth Power [dBm]
DH5	0	8.38
	39	8.74
	78	8.60
2-DH5	0	6.73
	39	7.10
	78	6.83
3-DH5	0	6.72
	39	7.08
	78	6.81

Per October 2016 TCB Workshop Notes:
When call box and Bluetooth protocol are used for Bluetooth SAR measurement, time-domain plot is required to identify duty factor for supporting the test setup and result.
Bluetooth duty cycle was measured using Bluetooth tester equipment (CBT / R&S) with Bluetooth DH5 mode.



Duty Cycle

= (BT-On time /BT-Full time) =(2.880/3.752) = 0.768 (DH5)

Duty factor= 1/Duty cycle : 1.302

12. System Verification

12.1 Tissue Verification

The body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity.

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
06/09/2020	21.2	750H (NR71)	705	0.868	42.682	0.889	42.174	-2.36	1.20
			710	0.874	42.553	0.890	42.148	-1.80	0.96
			750	0.913	42.062	0.893	41.940	2.24	0.29
05/08/2020	20.3	750H (LTE71)	705	0.887	43.070	0.889	42.174	-0.22	2.12
			710	0.891	42.995	0.890	42.148	0.11	2.01
			750	0.932	42.502	0.893	41.940	4.37	1.34
05/11/2020	21.3	750H (LTE12)	705	0.859	44.070	0.889	42.174	-3.37	4.50
			710	0.864	43.995	0.890	42.148	-2.92	4.38
			750	0.903	43.502	0.893	41.940	1.12	3.72
05/12/2020	21.0	750H (LTE13)	750	0.903	42.465	0.893	41.940	1.12	1.25
			785	0.934	41.967	0.896	41.758	4.24	0.50
05/13/2020	20.1	750H (LTE14)	750	0.869	41.859	0.893	41.940	-2.69	-0.19
			785	0.903	41.369	0.896	41.758	0.78	-0.93
05/11/2020	20.0	835H (GSM850, WCDMA5)	820	0.922	42.779	0.899	41.577	2.56	2.89
			835	0.935	42.599	0.900	41.500	3.89	2.65
			850	0.950	42.423	0.916	41.500	3.71	2.22
05/07/2020	20.5	835H (LTE26)	820	0.913	42.532	0.899	41.577	1.56	2.30
			835	0.927	42.308	0.900	41.500	3.00	1.95
			850	0.934	42.172	0.916	41.500	1.97	1.62
06/08/2020	22.5	835H (Sub n5)	820	0.906	42.930	0.899	41.577	0.78	3.25
			835	0.922	42.739	0.900	41.500	2.44	2.99
			850	0.934	42.559	0.916	41.500	1.97	2.55
06/22/2020	21.0	835H (CDMA BC0)	820	0.929	41.874	0.899	41.577	3.34	0.71
			835	0.944	41.692	0.900	41.500	4.89	0.46
			850	0.958	41.519	0.916	41.500	4.59	0.05
06/18/2020	21.0	835H (CDMA BC10)	820	0.903	41.974	0.899	41.577	0.44	0.95
			835	0.917	41.780	0.900	41.500	1.89	0.67
			850	0.930	41.601	0.916	41.500	1.53	0.24
05/29/2020	22.0	1800H LTE66 Phablet	1710	1.344	40.231	1.348	40.144	-0.30	0.22
			1750	1.381	40.173	1.371	40.080	0.73	0.23
			1800	1.429	40.035	1.400	40.000	2.07	0.09
05/28/2020	21.0	1800H LTE66	1710	1.337	39.884	1.348	40.144	-0.82	-0.65
			1750	1.390	39.860	1.371	40.080	1.39	-0.55
			1800	1.456	39.857	1.400	40.000	4.00	-0.36
05/26/2020	20.3	1800H WCDMA4 Phablet	1710	1.297	40.262	1.348	40.144	-3.78	0.29
			1750	1.331	40.162	1.371	40.080	-2.92	0.20
			1800	1.378	40.013	1.400	40.000	-1.57	0.03
05/25/2020	20.3	1800H WCMDA4	1710	1.305	40.423	1.348	40.144	-3.19	0.69
			1750	1.342	40.383	1.371	40.080	-2.12	0.76
			1800	1.389	40.231	1.400	40.000	-0.79	0.58

06/11/2020	19.6	1800H Nr66 Head	1710	1.301	40.348	1.348	40.144	-3.49	0.51
			1750	1.337	40.261	1.371	40.080	-2.48	0.45
			1800	1.383	40.143	1.400	40.000	-1.21	0.36
06/11/2020	21.0	1800H Nr66	1710	1.336	40.084	1.348	40.144	-0.89	-0.15
			1750	1.374	39.995	1.371	40.080	0.22	-0.21
			1800	1.42	39.861	1.400	40.000	1.43	-0.35
05/20/2020	21.8	1900H LTE25Phablet	1850	1.389	40.344	1.400	40.000	-0.79	0.86
			1900	1.446	40.109	1.400	40.000	3.29	0.27
			1910	1.454	40.077	1.400	40.000	3.86	0.19
05/18/2020	20.7	1900H LTE25	1850	1.389	39.190	1.400	40.000	-0.79	-2.03
			1900	1.44	38.964	1.400	40.000	2.86	-2.59
			1910	1.451	38.904	1.400	40.000	3.64	-2.74
06/08/2020	22.2	1900H WCDMA2	1850	1.383	39.006	1.400	40.000	-1.21	-2.49
			1900	1.437	38.799	1.400	40.000	2.64	-3.00
			1910	1.441	38.738	1.400	40.000	2.93	-3.16
06/09/2020	20.3	1900H WCDMA2 Phablet	1850	1.395	39.427	1.400	40.000	-0.36	-1.43
			1900	1.449	39.190	1.400	40.000	3.50	-2.03
			1910	1.456	39.115	1.400	40.000	4.00	-2.21
06/16/2020	20.5	1900H Nr2	1850	1.355	39.821	1.400	40.000	-3.21	-0.45
			1900	1.412	39.646	1.400	40.000	0.86	-0.89
			1910	1.418	39.615	1.400	40.000	1.29	-0.96
06/16/2020	20.5	1900H Nr2 Head body worn	1850	1.385	38.652	1.400	40.000	-1.07	-3.37
			1900	1.436	38.43	1.400	40.000	2.57	-3.93
			1910	1.444	38.385	1.400	40.000	3.14	-4.04
06/17/2020	20.0	1900H nr2 Phablet	1850	1.335	39.330	1.400	40.000	-4.64	-1.68
			1900	1.39	39.089	1.400	40.000	-0.71	-2.28
			1910	1.399	39.030	1.400	40.000	-0.07	-2.43
05/27/2020	21.1	1900H GSM1900 Head Body	1850	1.346	39.376	1.400	40.000	-3.86	-1.56
			1900	1.4	39.144	1.400	40.000	0.00	-2.14
			1910	1.411	39.036	1.400	40.000	0.79	-2.41
05/28/2020	21.2	1900H GSM1900 Phablet	1850	1.341	39.190	1.400	40.000	-4.21	-2.03
			1900	1.395	38.693	1.400	40.000	-0.36	-3.27
			1910	1.402	38.905	1.400	40.000	0.14	-2.74
06/04/2020	23.5	1900H LTE B2 head	1850	1.368	39.636	1.400	40.000	-2.29	-0.91
			1900	1.415	39.437	1.400	40.000	-0.14	-1.41
			1910	1.425	39.456	1.400	40.000	1.79	-1.36
06/05/2020	23.2	1900H LTE B2 Phablet	1850	1.346	39.368	1.400	40.000	-3.86	-1.58
			1900	1.401	39.133	1.400	40.000	0.07	-2.17
			1910	1.411	39.069	1.400	40.000	0.81	-2.33
06/18/2020	19.9	1900H CDMA BC1	1850	1.417	38.164	1.400	40.000	1.21	-4.59
			1900	1.422	38.424	1.400	40.000	1.57	-3.94
			1910	1.420	38.496	1.400	40.000	1.43	-3.76
06/19/2020	20.4	1900H CDMA BC1 Phablet	1850	1.418	38.157	1.400	40.000	1.29	-4.61
			1900	1.422	38.459	1.400	40.000	1.57	-3.85
			1910	1.417	38.502	1.400	40.000	1.21	-3.75
07/02/2020	20.5	1900H WCDMA2 Ear jack	1850	1.335	39.893	1.400	40.000	-4.64	-0.27
			1900	1.388	39.723	1.400	40.000	-0.86	-0.69
			1910	1.397	39.653	1.400	40.000	-0.21	-0.87
05/14/2020	20.1	2300H LTE30phablet	2300	1.642	40.094	1.667	39.470	-1.50	1.58
			2310	1.652	40.114	1.676	39.452	-1.43	1.68
			2350	1.695	40.052	1.711	39.380	-0.94	1.71
			2360	1.710	39.964	1.720	39.362	-0.58	1.53
05/13/2020	20.2	2300H	2300	1.634	40.251	1.667	39.470	-1.98	1.98

		LTE30 H,b	2310	1.639	40.223	1.676	39.452	-2.21	1.95
			2350	1.685	40.136	1.711	39.380	-1.52	1.92
			2360	1.700	40.097	1.720	39.362	-1.16	1.87
06/15/2020	21.5	2300H LTE40 Low	2300	1.643	40.256	1.667	39.470	-1.44	1.99
			2310	1.648	40.287	1.676	39.452	-1.67	2.12
			2350	1.695	40.200	1.711	39.380	-0.94	2.08
			2360	1.709	40.110	1.720	39.362	-0.64	1.90
06/16/2020	21.0	2300H LTE40 Upper	2300	1.643	40.064	1.667	39.470	-1.44	1.50
			2310	1.648	40.102	1.676	39.452	-1.67	1.65
			2350	1.696	39.970	1.711	39.380	-0.88	1.50
			2360	1.709	39.952	1.720	39.362	-0.64	1.50
06/10/2020	21.5	2450H	2400	1.759	39.446	1.756	39.290	0.17	0.40
			2450	1.82	39.241	1.800	39.200	1.11	0.10
			2500	1.871	39.043	1.855	39.140	0.86	-0.25
05/21/2020	21.5	2600H LTE7 Phablet	2500	1.855	38.238	1.855	39.140	0.00	-2.30
			2600	1.949	37.764	1.964	39.010	-0.76	-3.19
			2690	2.047	37.550	2.062	38.894	-0.73	-3.46
05/20/2020	20.2	2600H LTE7 Head	2500	1.851	38.269	1.855	39.140	-0.22	-2.23
			2600	1.948	37.846	1.964	39.010	-0.81	-2.98
			2690	2.054	37.517	2.062	38.894	-0.39	-3.54
05/20/2020	21.4	2600H LTE7	2500	1.849	38.331	1.855	39.140	-0.32	-2.07
			2600	1.94	37.842	1.964	39.010	-1.22	-2.99
			2690	2.053	37.550	2.062	38.894	-0.44	-3.46
06/22/2020	21.0	2600H LTE41	2500	1.852	38.263	1.855	39.140	-0.16	-2.24
			2600	1.943	37.836	1.964	39.010	-1.07	-3.01
			2690	2.052	37.535	2.062	38.894	-0.48	-3.49
06/23/2020	21.1	2600H LTE41HPUE +ULCA	2500	1.851	38.303	1.855	39.140	-0.22	-2.14
			2600	1.946	37.881	1.964	39.010	-0.92	-2.89
			2690	2.048	37.548	2.062	38.894	-0.68	-3.46
06/04/2020	21.2	2600H Nr41	2500	1.854	38.238	1.855	39.140	-0.05	-2.30
			2600	1.944	37.858	1.964	39.010	-1.02	-2.95
			2690	2.051	37.534	2.062	38.894	-0.53	-3.50

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
06/11/2020	19.6	5180H-5825H	5180	4.526	37.155	4.635	36.010	-2.35	3.18
			5250	4.6	37.014	4.706	35.930	-2.25	3.02
			5280	4.621	36.972	4.737	35.894	-2.45	3.00
			5320	4.664	36.906	4.778	35.846	-2.39	2.96
			5500	4.870	36.635	4.963	35.640	-1.87	2.79
			5600	4.994	36.492	5.065	35.530	-1.40	2.71
			5750	5.172	36.269	5.219	35.360	-0.90	2.57
			5800	5.209	36.209	5.270	35.300	-1.16	2.58
			5825	5.227	36.185	5.296	35.270	-1.30	2.59
06/12/2020	21.2	5180H-5825H	5180	4.526	37.155	4.635	36.010	-2.35	3.18
			5250	4.6	37.014	4.706	35.930	-2.25	3.02
			5280	4.621	36.972	4.737	35.894	-2.45	3.00
			5320	4.664	36.906	4.778	35.846	-2.39	2.96
			5500	4.870	36.635	4.963	35.640	-1.87	2.79
			5600	4.994	36.492	5.065	35.530	-1.40	2.71
			5750	5.172	36.269	5.219	35.360	-0.90	2.57
			5800	5.209	36.209	5.270	35.300	-1.16	2.58
			5825	5.227	36.185	5.296	35.270	-1.30	2.59

12.2 System Verification

Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]	Plot
750 LTE12	05/11/2020	3797	1014	Head	21.5	21.3	8.25	0.432	8.12	- 1.58	± 10	100
750 LTE13	05/12/2020	3797		Head	21.1	21.0	8.25	0.432	8.64	+ 4.73	± 10	101
750 LTE14	05/13/2020	3797		Head	20.3	20.1	8.25	0.414	8.28	+ 0.36	± 10	102
750 LTE71	05/08/2020	3797		Head	20.5	20.3	8.25	0.431	8.62	+ 4.48	± 10	104
750 NR 71	06/09/2020	3076		Head	21.4	21.2	8.25	0.421	8.42	+ 2.06	± 10	103
835 GSM850, WCDMA5	05/11/2020	3076	441	Head	20.3	20.0	9.69	0.483	9.66	- 0.31	± 10	107
835 LTE26	05/07/2020	3797		Head	20.7	20.5	9.69	0.456	9.12	- 5.88	± 10	108
835 CDMA BC0	06/22/2020	3968		Head	21.1	21.0	9.69	0.497	9.94	+ 2.58	± 10	105
835 CDMA BC10	06/18/2020	3968		Head	21.2	21.0	9.69	0.481	9.62	- 0.72	± 10	106
835 Nr 5	06/08/2020	3076		Head	22.8	22.5	9.69	0.494	9.88	+ 1.96	± 10	109
1 800 WDMA4	05/25/2020	3076	2d015	Head	20.5	20.3	38.5	1.87	37.4	- 2.86	± 10	113
1 800 LTE66	05/28/2020	3076		Head	21.1	21.0	38.5	2.01	40.2	+ 4.42	± 10	115
1 800 LTE66	05/29/2020	3076		Head	22.0	21.8	38.5	1.97	40.2	+ 4.42	± 10	114
1 800 Nr66 Head	06/11/2020	3903		Head	19.7	19.6	38.5	1.83	36.6	- 4.94	± 10	111
1 800 Nr66	06/11/2020	3797		Head	21.1	21.0	38.5	1.93	38.6	+ 0.26	± 10	110
1 800 Nr66 phablet	06/12/2020	3797		Head	19.7	19.6	38.5	1.85	37	- 3.90	± 10	112

Freq. [㎒]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]	Plot
1 900 WCDMA2	06/08/2020	3076	5d061	Head	22.4	22.2	40.0	1.98	39.6	- 1.00	± 10	121
1 900 CDMA BC1	06/18/2020	3797		Head	20.0	19.9	40.0	2	40	+ 0.00	± 10	128
1 900 LTE25	05/19/2020	3076		Head	20.8	20.6	40.0	2.15	43	+ 7.50	± 10	129
1 900 GSM1900 Head b ody	05/27/2020	3903		Head	21.3	21.1	40.0	1.91	38.2	- 4.50	± 10	119
1 900 LTE2	06/04/2020	3797		Head	23.8	23.5	40.0	2.04	40.8	+ 2.00	± 10	123
1 900 LTE2 Hotspot	06/16/2020	3797		Head	19.8	19.7	40.0	2.03	40.6	+ 1.50	± 10	126
1 900 Nr 2	06/16/2020	3797		Head	19.8	19.7	40.0	1.99	39.8	- 0.50	± 10	125
1 900 Nr 2 Head ,body worn	06/16/2020	3903		Head	20.7	20.5	40.0	2.01	40.2	+ 0.50	± 10	118
1 900 LTE2 Hospot	06/16/2020	3797		Head	19.8	19.7	40.0	2.03	40.6	+ 1.50	± 10	124
1 900 WCDMA2 EAR jack	07/02/2020	3797		Head	20.5	20.3	40.0	1.93	38.6	- 3.50	± 10	124
2 300 LTE Band 30 Head Body	05/13/2020	3903	1010	Head	20.4	20.2	48.5	2.31	46.2	- 4.74	± 10	130
2 300 LTE40 Low	06/15/2020	3903		Head	21.8	21.5	48.5	2.39	47.8	- 1.44	± 10	132
2 300 LTE40 Upper	06/16/2020	3903		Head	21.1	21.0	48.5	2.39	47.8	- 1.44	± 10	133
2 450	06/10/2020	3903	743	Head	21.6	21.5	52.3	2.57	51.4	- 1.72	± 10	134
2 600 LTE7	05/20/2020	3968	1106	Head	21.6	21.4	56.5	2.86	57.2	+ 1.24	± 10	136
2 600 LTE41	06/22/2020	3968		Head	21.1	21.0	56.5	2.81	56.2	- 0.53	± 10	138
2 600 NR Band n41	06/04/2020	3903		Head	21.4	21.2	56.5	2.7	54	- 4.42	± 10	135
2 600 LTE41 HPUE+UL CA	06/23/2020	3968		Head	21.2	21.1	56.5	2.79	55.8	- 1.24	± 10	139

Input Power: 50 mW

Freq. [㎒]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]	Plot
5 250 5G WLAN Body	06/12/2020	3968	1107	Head	21.4	21.2	81.6	4.04	80.8	- 0.98	± 10	141
5 250 5G WLAN Head	06/11/2020	3968		Head	19.7	19.6	81.6	4.03	80.6	- 1.23	± 10	140
5 600 5G WLAN Body	06/12/2020	3968		Head	21.4	21.2	84.0	4.26	85.2	+ 1.43	± 10	143
5 600 5G WLAN head	06/11/2020	3968		Head	19.7	19.6	84.0	4.24	84.8	+ 0.95	± 10	142
5 750 5G WLAN Body	06/12/2020	3968		Head	21.4	21.2	80.9	4.15	83	+ 2.60	± 10	145
5 750 5G WLAN head	06/11/2020	3968		Head	19.7	19.6	80.9	4.17	83.4	+ 3.09	± 10	144

System Verification Results – Extremity SAR Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{10g} (SPEAG) [W/kg]	50mW Measured SAR_{10g} [W/kg]	1 W Normalized SAR_{10g} [W/kg]	Deviation [%]	Limit [%]	Plot
1 800 LTE66 Phablet	05/29/2020	3076	2d015	Head	22.2	22.0	20.0	1.06	21.2	+ 6.00	± 10	114
1 800 UMTS4 Phablet	05/26/2020	3076		Head	20.6	20.3	20.0	0.992	19.84	- 0.80	± 10	116
1 900 CDMA BC1	06/19/2020	3797	5d061	Head	20.6	20.4	20.7	1.02	20.4	- 1.45	± 10	118
1 900 GSM1900 Phablet)	05/28/2020	3903		Head	21.4	21.2	20.7	0.986	19.72	- 4.73	± 10	120
1 900 LTE 2	06/05/2020	3797		Head	23.5	23.2	20.7	1.03	21	+ 1.45	± 10	124
1 900 NR 2	06/17/2020	3797		Head	20.2	20.0	20.7	0.994	19.88	- 3.96	± 10	127
1 900 UMTS 2	06/09/2020	3797		Head	20.5	20.3	20.7	1.03	20.6	- 0.48	± 10	122
1 900 LTE25 Phablet	05/20/2020	3076		Head	21.9	21.8	20.7	1.04	20.8	+ 0.48	± 10	128
2 300 LTE 30 Phablet	05/14/2020	3903	1010	Head	20.3	20.1	23.3	1.08	21.6	- 7.30	± 10	131
2 600 LTE7 Phablet	05/21/2020	3968	1106	Head	21.7	21.5	25.5	1.26	25.2	- 1.18	± 10	137
5 250	06/12/2020	3968	1107	Head	21.4	21.2	23.4	1.12	22.4	- 4.27	± 10	141
5 600	06/12/2020	3968		Head	21.4	21.2	24.0	1.19	23.8	- 0.83	± 10	143

12.3 System Verification Procedure

SAR measurement was prior to assessment, the system is verified to the ± 10 % of the specifications at each frequency band by using the system verification kit. (Graphic Plots Attached)
- Cabling the system, using the verification kit equipment.
- Generate about 50 ㎽ Input level from the signal generator to the Dipole Antenna.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.
- The results are normalized to 1 W input power.

Note;
SAR Verification was performed according to the FCC KDB 865664 D01v01r04.

13. SAR Test Data Summary

13.1 SAR Measurement Results

CDMA BC10 (§90S) Head SAR													
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	0.10	Left Cheek	1:1	Free	0.162	1.213	0.197	-
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	0.18	Left Tilt	1:1	Free	0.094	1.213	0.114	-
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	0.15	Right Cheek	1:1	Free	0.220	1.213	0.267	-
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	-0.11	Right Tilt	1:1	Free	0.106	1.213	0.129	-
820	560	CDMA BC10	EVDO Rev. A	25.5	24.55	0.11	Left Cheek	1:1	Free	0.154	1.245	0.192	-
820	560	CDMA BC10	EVDO Rev. A	25.5	24.55	0.10	Left Tilt	1:1	Free	0.093	1.245	0.116	-
820	560	CDMA BC10	EVDO Rev. A	25.5	24.55	0.15	Right Cheek	1:1	Free	0.221	1.245	**0.275**	1
820	560	CDMA BC10	EVDO Rev. A	25.5	24.55	0.12	Right Tilt	1:1	Free	0.105	1.245	0.131	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

CDMA BC0 (§22H) Head SAR													
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	0.14	Left Cheek	1:1	Free	0.203	1.288	0.262	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.18	Left Tilt	1:1	Free	0.134	1.288	0.173	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.10	Right Cheek	1:1	Free	0.310	1.288	**0.399**	2
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.04	Right Tilt	1:1	Free	0.132	1.288	0.170	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.10	Left Cheek	1:1	Free	0.157	1.040	0.163	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.19	Left Tilt	1:1	Free	0.100	1.040	0.104	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.15	Right Cheek	1:1	Free	0.212	1.040	0.220	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.14	Right Tilt	1:1	Free	0.088	1.040	0.092	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

PCS CDMA Head SAR

Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	-0.03	Left Cheek	1:1	Free	0.293	1.081	0.317	-
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	0.08	Left Tilt	1:1	Free	0.131	1.081	0.142	-
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	0.15	Right Cheek	1:1	Free	0.191	1.081	0.207	-
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	-0.19	Right Tilt	1:1	Free	0.135	1.081	0.146	-
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	-0.18	Left Cheek	1:1	Free	0.304	1.084	**0.330**	3
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	0.10	Left Tilt	1:1	Free	0.132	1.084	0.143	-
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	0.16	Right Cheek	1:1	Free	0.187	1.084	0.203	-
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	-0.04	Right Tilt	1:1	Free	0.133	1.084	0.144	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

GSM 850 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	190	GSM	33.5	32.42	0.01	Left Cheek	1:8.3	Free	0.103	1.282	0.132	-
836.6	190	GSM	33.5	32.42	-0.02	Left Tilt	1:8.3	Free	0.065	1.282	0.083	-
836.6	190	GSM	33.5	32.42	-0.10	Right Cheek	1:8.3	Free	0.148	1.282	0.190	-
836.6	190	GSM	33.5	32.42	0.16	Right Tilt	1:8.3	Free	0.060	1.282	0.077	-
836.6	190	GPRS 3Tx	30.5	28.88	0.13	Left Cheek	1:2.77	Free	0.133	1.452	0.193	-
836.6	190	GPRS 3Tx	30.5	28.88	0.19	Left Tilt	1:2.77	Free	0.086	1.452	0.125	-
836.6	190	GPRS 3Tx	30.5	28.88	0.03	Right Cheek	1:2.77	Free	0.205	1.452	**0.298**	4
836.6	190	GPRS 3Tx	30.5	28.88	0.13	Right Tilt	1:2.77	Free	0.081	1.452	0.118	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

GSM 1900 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	661	GSM	31.5	30.34	0.10	Left Cheek	1:8.3	Free	0.102	1.306	0.133	5
1 880	661	GSM	31.5	30.34	0.14	Left Tilt	1:8.3	Free	0.043	1.306	0.056	-
1 880	661	GSM	31.5	30.34	0.18	Right Cheek	1:8.3	Free	0.075	1.306	0.098	-
1 880	661	GSM	31.5	30.34	0.17	Right Tilt	1:8.3	Free	0.071	1.306	0.093	-
1 880	661	GPRS 3Tx	27.5	26.15	0.14	Left Cheek	1:2.77	Free	0.101	1.365	**0.138**	-
1 880	661	GPRS 3Tx	27.5	26.15	0.18	Left Tilt	1:2.77	Free	0.045	1.365	0.061	-
1 880	661	GPRS 3Tx	27.5	26.15	-0.17	Right Cheek	1:2.77	Free	0.074	1.365	0.101	-
1 880	661	GPRS 3Tx	27.5	26.15	0.07	Right Tilt	1:2.77	Free	0.041	1.365	0.056	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

UMTS 850 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
836.6	4183	RMC	24.0	22.56	0.18	Left Cheek	1:1	Free	0.106	1.393	0.148	-
836.6	4183	RMC	24.0	22.56	0.16	Left Tilt	1:1	Free	0.064	1.393	0.089	-
836.6	4183	RMC	24.0	22.56	0.09	Right Cheek	1:1	Free	0.146	1.393	**0.203**	6
836.6	4183	RMC	24.0	22.56	0.19	Right Tilt	1:1	Free	0.056	1.393	0.078	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

UMTS 1700 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
1 732.4	1412	RMC	24.0	22.91	0.17	Left Cheek	1:1	Free	0.094	1.285	**0.121**	7
1 732.4	1412	RMC	24.0	22.91	0.02	Left Tilt	1:1	Free	0.057	1.285	0.073	-
1 732.4	1412	RMC	24.0	22.91	0.04	Right Cheek	1:1	Free	0.065	1.285	0.084	-
1 732.4	1412	RMC	24.0	22.91	0.19	Right Tilt	1:1	Free	0.048	1.285	0.062	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

UMTS 1900 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
1 880	9400	RMC	24.0	22.64	0.15	Left Cheek	1:1	Free	0.217	1.368	**0.297**	8
1 880	9400	RMC	24.0	22.64	-0.08	Left Tilt	1:1	Free	0.121	1.368	0.165	-
1 880	9400	RMC	24.0	22.64	0.17	Right Cheek	1:1	Free	0.127	1.368	0.174	-
1 880	9400	RMC	24.0	22.64	0.15	Right Tilt	1:1	Free	0.114	1.368	0.156	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

LTE Band 2 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1900	19100	QPSK	20	24.5	23.75	-0.14	Left Cheek	0	1	0	1:1	Free	0.266	1.189	**0.316**	9
1900	19100	QPSK	20	23.5	22.83	0.12	Left Cheek	1	50	0	1:1	Free	0.205	1.167	0.239	-
1900	19100	QPSK	20	24.5	23.75	0.11	Left Tilt	0	1	0	1:1	Free	0.122	1.189	0.145	-
1900	19100	QPSK	20	23.5	22.83	0.06	Left Tilt	1	50	0	1:1	Free	0.106	1.167	0.124	-
1900	19100	QPSK	20	24.5	23.75	-0.17	Right Cheek	0	1	0	1:1	Free	0.165	1.189	0.196	-
1900	19100	QPSK	20	23.5	22.83	0.15	Right Cheek	1	50	0	1:1	Free	0.142	1.167	0.166	-
1900	19100	QPSK	20	24.5	23.75	0.06	Right Tilt	0	1	0	1:1	Free	0.112	1.189	0.133	-
1900	19100	QPSK	20	23.5	22.83	0.09	Right Tilt	1	50	0	1:1	Free	0.088	1.167	0.103	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 7 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 510	20850	QPSK	20	24.0	23.01	-0.13	Left Cheek	0	1	0	1:1	Free	0.089	1.256	**0.112**	10
2 510	20850	QPSK	20	23.0	22.03	0.18	Left Cheek	1	50	0	1:1	Free	0.081	1.250	0.101	-
2 510	20850	QPSK	20	24.0	23.01	0.15	Left Tilt	0	1	0	1:1	Free	0.057	1.256	0.072	-
2 510	20850	QPSK	20	23.0	22.03	0.19	Left Tilt	1	50	0	1:1	Free	0.046	1.250	0.058	-
2 510	20850	QPSK	20	24.0	23.01	0.01	Right Cheek	0	1	0	1:1	Free	0.067	1.256	0.084	-
2 510	20850	QPSK	20	23.0	22.03	0.01	Right Cheek	1	50	0	1:1	Free	0.050	1.250	0.063	-
2 510	20850	QPSK	20	24.0	23.01	0.19	Right Tilt	0	1	0	1:1	Free	0.085	1.256	0.107	-
2 510	20850	QPSK	20	23.0	22.03	0.19	Right Tilt	1	50	0	1:1	Free	0.069	1.250	0.086	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 12 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
707.5	23095	QPSK	10	25.5	24.29	0.15	Left Cheek	0	1	0	1:1	Free	0.059	1.321	0.078	-
707.5	23095	QPSK	10	24.5	23.38	0.10	Left Cheek	1	25	0	1:1	Free	0.055	1.294	0.071	-
707.5	23095	QPSK	10	25.5	24.29	0.10	Left Tilt	0	1	0	1:1	Free	0.04	1.321	0.053	-
707.5	23095	QPSK	10	24.5	23.38	-0.04	Left Tilt	1	25	0	1:1	Free	0.033	1.294	0.043	-
707.5	23095	QPSK	10	25.5	24.29	0.03	Right Cheek	0	1	0	1:1	Free	0.102	1.321	**0.135**	11
707.5	23095	QPSK	10	24.5	23.38	0.19	Right Cheek	1	25	0	1:1	Free	0.086	1.294	0.111	-
707.5	23095	QPSK	10	25.5	24.29	0.12	Right Tilt	0	1	0	1:1	Free	0.03	1.321	0.040	-
707.5	23095	QPSK	10	24.5	23.38	0.08	Right Tilt	1	25	0	1:1	Free	0.027	1.294	0.035	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 13 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
782	23230	QPSK	10	25.0	23.39	0.18	Left Cheek	0	1	0	1:1	Free	0.143	1.449	0.207	-
782	23230	QPSK	10	24.0	22.47	0.12	Left Cheek	1	25	0	1:1	Free	0.115	1.422	0.164	-
782	23230	QPSK	10	25.0	23.39	0.02	Left Tilt	0	1	0	1:1	Free	0.089	1.449	0.129	-
782	23230	QPSK	10	24.0	22.47	0.05	Left Tilt	1	25	0	1:1	Free	0.071	1.422	0.101	-
782	23230	QPSK	10	25.0	23.39	0.15	Right Cheek	0	1	0	1:1	Free	0.168	1.449	**0.243**	12
782	23230	QPSK	10	24.0	22.47	0.12	Right Cheek	1	25	0	1:1	Free	0.140	1.422	0.199	-
782	23230	QPSK	10	25.0	23.39	0.01	Right Tilt	0	1	0	1:1	Free	0.089	1.449	0.129	-
782	23230	QPSK	10	24.0	22.47	0.14	Right Tilt	1	25	0	1:1	Free	0.072	1.422	0.102	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 14 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
793	23330	QPSK	10	25.0	23.51	0.12	Left Cheek	0	1	0	1:1	Free	0.125	1.409	0.176	-
793	23330	QPSK	10	24.0	22.47	0.14	Left Cheek	1	25	0	1:1	Free	0.099	1.422	0.141	-
793	23330	QPSK	10	25.0	23.51	0.09	Left Tilt	0	1	0	1:1	Free	0.084	1.409	0.118	-
793	23330	QPSK	10	24.0	22.47	0.11	Left Tilt	1	25	0	1:1	Free	0.065	1.422	0.092	-
793	23330	QPSK	10	25.0	23.51	0.11	Right Cheek	0	1	0	1:1	Free	0.162	1.409	**0.228**	13
793	23330	QPSK	10	24.0	22.47	0.05	Right Cheek	1	25	0	1:1	Free	0.123	1.422	0.175	-
793	23330	QPSK	10	25.0	23.51	0.02	Right Tilt	0	1	0	1:1	Free	0.080	1.409	0.113	-
793	23330	QPSK	10	24.0	22.47	0.09	Right Tilt	1	25	0	1:1	Free	0.063	1.422	0.090	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 25 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 882.5	26365	QPSK	20	24.5	23.69	0.13	Left Cheek	0	1	99	1:1	Free	0.245	1.205	**0.295**	14
1 882.5	26365	QPSK	20	23.5	22.80	-0.13	Left Cheek	1	50	0	1:1	Free	0.155	1.175	0.182	-
1 882.5	26365	QPSK	20	24.5	23.69	0.13	Left Tilt	0	1	99	1:1	Free	0.084	1.205	0.101	-
1 882.5	26365	QPSK	20	23.5	22.80	0.19	Left Tilt	1	50	0	1:1	Free	0.069	1.175	0.081	-
1 882.5	26365	QPSK	20	24.5	23.69	0.06	Right Cheek	0	1	99	1:1	Free	0.164	1.205	0.198	-
1 882.5	26365	QPSK	20	23.5	22.80	0.13	Right Cheek	1	50	0	1:1	Free	0.135	1.175	0.159	-
1 882.5	26365	QPSK	20	24.5	23.69	0.08	Right Tilt	0	1	99	1:1	Free	0.101	1.205	0.122	-
1 882.5	26365	QPSK	20	23.5	22.80	0.07	Right Tilt	1	50	0	1:1	Free	0.085	1.175	0.100	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 26 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
831.5	26865	QPSK	15	25.0	23.91	0.13	Left Cheek	0	1	0	1:1	Free	0.114	1.285	0.147	-
831.5	26865	QPSK	15	24.0	23.01	0.16	Left Cheek	1	36	18	1:1	Free	0.094	1.256	0.118	-
831.5	26865	QPSK	15	25.0	23.91	0.19	Left Tilt	0	1	0	1:1	Free	0.073	1.285	0.094	-
831.5	26865	QPSK	15	24.0	23.01	-0.04	Left Tilt	1	36	18	1:1	Free	0.061	1.256	0.077	-
831.5	26865	QPSK	15	25.0	23.91	0.02	Right Cheek	0	1	0	1:1	Free	0.161	1.285	**0.207**	15
831.5	26865	QPSK	15	24.0	23.01	-0.03	Right Cheek	1	36	18	1:1	Free	0.133	1.256	0.167	-
831.5	26865	QPSK	15	25.0	23.91	0.07	Right Tilt	0	1	0	1:1	Free	0.078	1.285	0.100	-
831.5	26865	QPSK	15	24.0	23.01	-0.18	Right Tilt	1	36	18	1:1	Free	0.044	1.256	0.055	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 30 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 310	27710	QPSK	10	23.5	22.45	-0.11	Left Cheek	0	1	0	1:1	Free	0.081	1.274	0.103	-
2 310	27710	QPSK	10	22.5	21.53	0.01	Left Cheek	1	25	0	1:1	Free	0.064	1.250	0.080	-
2 310	27710	QPSK	10	23.5	22.45	0.17	Left Tilt	0	1	0	1:1	Free	0.069	1.274	0.088	-
2 310	27710	QPSK	10	22.5	21.53	0.18	Left Tilt	1	25	0	1:1	Free	0.054	1.250	0.068	-
2 310	27710	QPSK	10	23.5	22.45	-0.12	Right Cheek	0	1	0	1:1	Free	0.065	1.274	0.083	-
2 310	27710	QPSK	10	22.5	21.53	0.12	Right Cheek	1	25	0	1:1	Free	0.048	1.250	0.060	-
2 310	27710	QPSK	10	23.5	22.45	-0.09	Right Tilt	0	1	0	1:1	Free	0.102	1.274	**0.130**	16
2 310	27710	QPSK	10	22.5	21.53	-0.11	Right Tilt	1	25	0	1:1	Free	0.088	1.250	0.110	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 40 Head SAR _ Lower frequency range																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 310	38750	QPSK	10	12.0	11.01	-0.02	Left Cheek	0	1	0	1:1.58	Free	0.00124	1.256	0.002	-
2 310	38750	QPSK	10	12.0	10.89	0.01	Left Cheek	0	25	0	1:1.58	Free	0.00128	1.291	**0.002**	17
2 310	38750	QPSK	10	12.0	11.01	0.01	Left Tilt	0	1	0	1:1.58	Free	0	1.256	0.000	-
2 310	38750	QPSK	10	12.0	10.89	0.01	Left Tilt	0	25	0	1:1.58	Free	0.00000511	1.291	0.000	-
2 310	38750	QPSK	10	12.0	11.01	0.01	Right Cheek	0	1	0	1:1.58	Free	0	1.256	0.000	-
2 310	38750	QPSK	10	12.0	10.89	0.01	Right Cheek	0	25	0	1:1.58	Free	0	1.291	0.000	-
2 310	38750	QPSK	10	12.0	11.01	0.01	Right Tilt	0	1	0	1:1.58	Free	0	1.256	0.000	-
2 310	38750	QPSK	10	12.0	10.89	0.01	Right Tilt	0	25	0	1:1.58	Free	0.000789	1.291	0.001	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 40 Head SAR _ Upper frequency range																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 355	39200	QPSK	10	12.0	11.03	0.01	Left Cheek	0	1	0	1:1.58	Free	0	1.250	0.000	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Left Cheek	0	25	0	1:1.58	Free	0.0014	1.274	**0.002**	18
2 355	39200	QPSK	10	12.0	11.03	0.01	Left Tilt	0	1	0	1:1.58	Free	0	1.250	0.000	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Left Tilt	0	25	0	1:1.58	Free	0	1.274	0.000	-
2 355	39200	QPSK	10	12.0	11.03	0.01	Right Cheek	0	1	0	1:1.58	Free	0	1.250	0.000	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Right Cheek	0	25	0	1:1.58	Free	0	1.274	0.000	-
2 355	39200	QPSK	10	12.0	11.03	0.01	Right Tilt	0	1	0	1:1.58	Free	0.000557	1.250	0.001	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Right Tilt	0	25	0	1:1.58	Free	0.000141	1.274	0.000	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE TDD Band 41 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
Power class 3																
2 506.0	39750	QPSK	20	24.0	22.70	0.15	Left Cheek	0	1	0	1:1.58	Free	0.048	1.349	0.065	
2 506.0	39750	QPSK	20	23.0	21.96	0.18	Left Cheek	1	50	0	1:1.58	Free	0.040	1.271	0.051	-
2 506.0	39750	QPSK	20	24.0	22.70	0.11	Left Tilt	0	1	0	1:1.58	Free	0.024	1.349	0.032	-
2 506.0	39750	QPSK	20	23.0	21.96	-0.18	Left Tilt	1	50	0	1:1.58	Free	0.022	1.271	0.028	-
2 506.0	39750	QPSK	20	24.0	22.70	0.01	Right Cheek	0	1	0	1:1.58	Free	0.044	1.349	0.059	-
2 506.0	39750	QPSK	20	23.0	21.96	0.01	Right Cheek	1	50	0	1:1.58	Free	0.038	1.271	0.048	-
2 506.0	39750	QPSK	20	24.0	22.70	0.13	Right Tilt	0	1	0	1:1.58	Free	0.038	1.349	0.051	-
2 506.0	39750	QPSK	20	23.0	21.96	0.11	Right Tilt	1	50	0	1:1.58	Free	0.031	1.271	0.039	-
2 506.0	39750	QPSK	20	24.0	22.50	-0.17	Left Cheek	0	1	99	1:1.58	Free	0.049	1.413	0.069	
Power class 2 (HPUE)																
2 506.0	39750	QPSK	20	26.5	25.64	-0.08	Left Cheek	0	1	0	1:1.58	Free	0.066	1.219	0.080	19**
2 506.0	39750	QPSK	20	26.5	25.49	0.07	Left Cheek		1	99	1:1.58	Free	0.065	1.262	**0.082**	-
ULCA(41C)																
2 506.0	39750	QPSK	20	24.0	23.23	-0.08	Left Cheek	0	1	99	1:1.58	Free	0.052	1.194	0.062	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

Note: ** Data entry indicate LTE 41 Power Class 2(HPUE)
When Power reduction is applied to LTE B41 PC 2(HPUE), The power level of LTE B41 PC became same as the reduction power of LTE B41 PC3

LTE Band 66 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	132322	QPSK	20	25.0	24.33	0.18	Left Cheek	0	1	99	1:1	Free	0.174	1.167	**0.203**	20
1 770	132572	QPSK	20	24.0	23.41	0.14	Left Cheek	1	50	25	1:1	Free	0.141	1.146	0.162	-
1 745	132322	QPSK	20	25.0	24.33	0.08	Left Tilt	0	1	99	1:1	Free	0.080	1.167	0.093	-
1 770	132572	QPSK	20	24.0	23.41	0.19	Left Tilt	1	50	25	1:1	Free	0.073	1.146	0.084	-
1 745	132322	QPSK	20	25.0	24.33	0.17	Right Cheek	0	1	99	1:1	Free	0.086	1.167	0.100	-
1 770	132572	QPSK	20	24.0	23.41	0.11	Right Cheek	1	50	25	1:1	Free	0.089	1.146	0.102	-
1 745	132322	QPSK	20	25.0	24.33	0.07	Right Tilt	0	1	99	1:1	Free	0.081	1.167	0.095	-
1 770	132572	QPSK	20	24.0	23.41	0.15	Right Tilt	1	50	25	1:1	Free	0.089	1.146	0.102	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 71 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
683	133322	QPSK	20	25.0	24.36	0.19	Left Cheek	0	1	99	1:1	Free	0.133	1.159	0.154	-
683	133322	QPSK	20	24.0	23.45	0.19	Left Cheek	1	50	49	1:1	Free	0.117	1.135	0.133	-
683	133322	QPSK	20	25.0	24.36	0.08	Left Tilt	0	1	99	1:1	Free	0.082	1.159	0.095	-
683	133322	QPSK	20	24.0	23.45	0.11	Left Tilt	1	50	49	1:1	Free	0.072	1.135	0.082	-
683	133322	QPSK	20	25.0	24.36	-0.04	Right Cheek	0	1	99	1:1	Free	0.180	1.159	**0.209**	21
683	133322	QPSK	20	24.0	23.45	0.07	Right Cheek	1	50	49	1:1	Free	0.143	1.135	0.162	-
683	133322	QPSK	20	25.0	24.36	-0.01	Right Tilt	0	1	99	1:1	Free	0.065	1.159	0.075	-
683	133322	QPSK	20	24.0	23.45	-0.05	Right Tilt	1	50	49	1:1	Free	0.051	1.135	0.058	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n2 (PCS) Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
1900	380000	DFT-s OFDM QPSK	20	25	24.08	-0.19	Left Cheek	0	1	104	1:1	0.225	1.236	0.278	-
1900	380000	DFT-s OFDM QPSK	20	25	23.91	0.17	Left Cheek	0	50	28	1:1	0.232	1.285	**0.298**	22
1900	380000	DFT-s OFDM QPSK	20	25	24.08	-0.02	Left Tilt	0	1	104	1:1	0.107	1.236	0.132	-
1900	380000	DFT-s OFDM QPSK	20	25	23.91	0.01	Left Tilt	0	50	28	1:1	0.109	1.285	0.140	-
1900	380000	DFT-s OFDM QPSK	20	25	24.08	0.01	Right Cheek	0	1	104	1:1	0.166	1.236	0.205	-
1900	380000	DFT-s OFDM QPSK	20	25	23.91	-0.15	Right Cheek	0	50	28	1:1	0.169	1.285	0.217	-
1900	380000	DFT-s OFDM QPSK	20	25	24.08	-0.08	Right Tilt	0	1	104	1:1	0.094	1.236	0.116	-
1900	380000	DFT-s OFDM QPSK	20	25	23.91	0.03	Right Tilt	0	50	28	1:1	0.090	1.285	0.116	-
1860	372000	CP QPSK	20	23.5	22.4	0.02	Left Cheek	1.5	1	1	1:1	0.170	1.288	0.219	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n5 (Cell) Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
836.5	167300	DFT-s OFDM QPSK	20	25	24.29	0.19	Left Cheek	0	1	1	1:1	0.177	1.178	0.208	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.23	0.11	Left Cheek	0	50	28	1:1	0.169	1.194	0.202	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.29	0.12	Left Tilt	0	1	1	1:1	0.106	1.178	0.125	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.23	0.19	Left Tilt	0	50	28	1:1	0.099	1.194	0.118	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.29	0.12	Right Cheek	0	1	1	1:1	0.239	1.178	0.281	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.23	0.16	Right Cheek	0	50	28	1:1	0.249	1.194	**0.297**	23
836.5	167300	DFT-s OFDM QPSK	20	25	24.29	0.12	Right Tilt	0	1	1	1:1	0.108	1.178	0.127	-
836.5	167300	DFT-s OFDM QPSK	20	25	24.23	0.12	Right Tilt	0	50	28	1:1	0.105	1.194	0.125	-
836.5	167300	CP QPSK	20	23.5	22.73	0.15	Right Tilt	1.5	1	1	1:1	0.173	1.194	0.207	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n41 Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.98	-0.01	Left Cheek	0	1	137	1:3.7	0.414	1.127	0.467	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.92	0.04	Left Cheek	0	135	69	1:3.7	0.353	1.143	0.403	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.98	0.03	Left Tilt	0	1	137	1:3.7	0.598	1.127	0.674	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.92	0.01	Left Tilt	0	135	69	1:3.7	0.447	1.143	0.511	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.98	-0.14	Right Cheek	0	1	137	1:3.7	0.719	1.127	0.810	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.92	0.05	Right Cheek	0	135	69	1:3.7	0.726	1.143	0.830	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.98	0.11	Right Tilt	0	1	137	1:3.7	0.883	1.127	0.995	-
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.92	0.04	Right Tilt	0	135	69	1:3.7	1.03	1.143	**1.177**	24
2592.99	518598	CP QPSK	100	23.0	21.66	-0.05	Right Tilt	1.5	135	69	1:3.7	0.704	1.361	0.958	
2592.99	518598	DFT-s OFDM QPSK	100	24.5	23.92	-0.01	Right Tilt	0	135	69	1:3.7	0.981	1.143	1.121	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

Note: * Data entry indicate Variability measurement.

NR Band n66 Head SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.11	Left Cheek	0	1	53	1:1	0.103	1.052	0.108	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.10	Left Cheek	0	50	28	1:1	0.104	1.059	**0.110**	25
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.18	Left Tilt	0	1	53	1:1	0.048	1.052	0.049	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.13	Left Tilt	0	50	28	1:1	0.047	1.059	0.051	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	-0.15	Right Cheek	0	1	53	1:1	0.068	1.052	0.072	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	-0.10	Right Cheek	0	50	28	1:1	0.062	1.059	0.066	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.02	Right Tilt	0	1	53	1:1	0.037	1.052	0.039	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.12	Right Tilt	0	50	28	1:1	0.038	1.059	0.040	-
1720	344000	CP QPSK	20	23.5	22.70	-0.11	Left Cheek	1.5	1	1	1:1	0.085	1.202	0.102	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

NR Band n71 Head SAR																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
680.5	136100	DFT-s OFDM QPSK	20	25	24.65	0.18	Left Cheek	0	1	104	1:1	0.132	1.084	0.143	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.47	0.16	Left Cheek	0	50	28	1:1	0.106	1.130	0.120	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.65	-0.16	Left Tilt	0	1	104	1:1	0.081	1.084	0.088	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.47	0.03	Left Tilt	0	50	28	1:1	0.066	1.130	0.075	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.65	0.15	Right Cheek	0	1	104	1:1	0.156	1.084	**0.169**	26
680.5	136100	DFT-s OFDM QPSK	20	25	24.47	0.12	Right Cheek	0	50	28	1:1	0.143	1.130	0.162	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.65	0.13	Right Tilt	0	1	104	1:1	0.074	1.084	0.080	-
680.5	136100	DFT-s OFDM QPSK	20	25	24.47	0.10	Right Tilt	0	50	28	1:1	0.069	1.130	0.078	-
680.5	136100	CP QPSK	20	23.5	22.55	0.11	Right Cheek	1.5	1	1	1:1	0.102	1.245	0.127	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

DTS Head SAR															
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(W/kg)	(W/kg)		(Duty)	(W/kg)	
2 462	11	802.11b	20	1	12.0	10.49	-0.19	Left Cheek	99.0	0.0683	0.040				-
2 462	11	802.11b	20	1	12.0	10.49	0.10	Left Tilt	99.0	0.0704	0.043				-
2 462	11	802.11b	20	1	12.0	10.49	0.18	Right Cheek	99.0	0.344	0.166	1.416	1.012	**0.238**	27
2 462	11	802.11b	20	1	12.0	10.49	0.01	Right Tilt	99.0	0.208	0				-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

NII Head SAR															
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 290	58	802.11ac	80	MCS0	12.0	10.61		Left Cheek	85.1	0.0707	0				-
5 290	58	802.11ac	80	MCS0	12.0	10.61		Left Tilt	85.1	0.0647	0				-
5 290	58	802.11ac	80	MCS0	12.0	10.61	0.19	Right Check	85.1	0.684	0.234	1.377	1.175	**0.379**	28
5 290	58	802.11ac	80	MCS0	12.0	10.61		Right Tilt	85.1	0.307	0				-
5 690	138	802.11ac	80	MCS0	12.0	11.45	-0.18	Left Cheek	85.1	0.121	0.024				-
5 690	138	802.11ac	80	MCS0	12.0	11.45	0.15	Left Tilt	85.1	0.0907	0.024				-
5 690	138	802.11ac	80	MCS0	12.0	11.45	0.06	Right Cheek	85.1	0.461	0.150	1.135	1.175	0.200	-
5 690	138	802.11ac	80	MCS0	12.0	11.45	0.01	Right Tilt	85.1	0.214	0				-
5 775	155	802.11ac	80	MCS0	12.0	11.28	0.04	Left Cheek	85.1	0.123	0.021				-
5 775	155	802.11ac	80	MCS0	12.0	11.28	0.12	Left Tilt	85.1	0.072	0.021				-
5 775	155	802.11ac	80	MCS0	12.0	11.28	-0.10	Right Cheek	85.1	0.497	0.156	1.180	1.175	0.216	-
5 775	155	802.11ac	80	MCS0	12.0	11.28	0.01	Right Tilt	85.1	0.228	0				-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

DSS Head SAR											
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dBm)	(dBm)	(dB)		(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	9.5	8.74	-0.18	Left Cheek	0.027	1.191	1.302	0.0419	-
2 441	39	Bluetooth DH5	9.5	8.74	0.13	Left Tilt	0.018	1.191	1.302	0.028	-
2 441	39	Bluetooth DH5	9.5	8.74	0.12	Right Cheek	0.071	1.191	1.302	**0.110**	29
2 441	39	Bluetooth DH5	9.5	8.74	-0.11	Right Tilt	0.050	1.191	1.302	0.078	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram					

13.2 Body-worn SAR Measurement Results

CDMA/GSM/ UMTS Body-Worn SAR														
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	-0.18	Rear	1:1	Free	15	0.281	1.213	0.341	-
820	560	CDMA BC10	RC3 / SO55	25.5	24.66	-0.19	Front	1:1	Free	15	0.236	1.213	0.286	-
820	560	CDMA BC10	EVDO Rev.A	25.5	24.55	0.18	Rear	1:1	Free	15	0.372	1.245	**0.463**	30
820	560	CDMA BC10	EVDO Rev.A	25.5	24.55	-0.12	Front	1:1	Free	15	0.316	1.245	0.393	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	0.02	Rear	1:1	Free	15	0.374	1.288	**0.482**	31
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.05	Front	1:1	Free	15	0.318	1.288	0.410	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.12	Rear	1:1	Free	15	0.363	1.040	0.377	-
836.52	384	CDMA BC0	EVDO Rev. A	24.5	24.33	-0.14	Front	1:1	Free	15	0.302	1.040	0.314	-
1851.25	25	PCS CDMA	RC3 / SO55	25.5	25.16	-0.05	Rear	1:1	Free	15	0.881	1.081	0.953	-
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	0.10	Rear	1:1	Free	15	0.944	1.081	1.021	-
1908.75	1175	PCS CDMA	RC3 / SO55	25.5	25.14	0.06	Rear	1:1	Free	15	1.09	1.086	1.184	
1851.25	25	PCS CDMA	RC3 / SO55	25.5	25.16	-0.02	Front	1:1	Free	15	0.920	1.081	0.995	-
1880.0	600	PCS CDMA	RC3 / SO55	25.5	25.16	-0.04	Front	1:1	Free	15	0.981	1.081	1.062	-
1908.75	1175	PCS CDMA	RC3 / SO55	25.5	25.17	-0.07	Front	1:1	Free	15	1.11	1.079	1.198	32
1851.25	25	PCS CDMA	EVDO Rev. A	25.5	25.18	-0.10	Rear	1:1	Free	15	0.883	1.076	0.951	-
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	-0.07	Rear	1:1	Free	15	0.969	1.084	1.050	
1908.75	1175	PCS CDMA	EVDO Rev. A	25.5	25.1	0.03	Rear	1:1	Free	15	1.09	1.096	**1.195**	-
1851.25	25	PCS CDMA	EVDO Rev. A	25.5	25.18	-0.06	Front	1:1	Free	15	0.853	1.076	0.918	-
1880.0	600	PCS CDMA	EVDO Rev. A	25.5	25.15	-0.01	Front	1:1	Free	15	0.951	1.084	1.031	-
1908.75	1175	PCS CDMA	EVDO Rev. A	25.5	25.1	-0.04	Front	1:1	Free	15	1.03	1.096	1.129	
1908.75	1175	PCS CDMA	RC3 / SO55	25.5	25.14	0.02	Front	1:1	Free	15	1.09	1.086	1.184	*
836.6	190	GSM 850 Voice		33.5	32.42	0.01	Rear	1:8.3	Free	15	0.266	1.282	0.341	-
836.6	190	GSM 850 Voice		33.5	32.42	-0.01	Front	1:8.3	Free	15	0.217	1.282	0.278	-
836.6	190	GSM 850 GPRS 3Tx		30.5	28.88	0.04	Rear	1:2.77	Free	15	0.375	1.452	**0.545**	33
836.6	190	GSM 850 GPRS 3Tx		30.5	28.88	-0.06	Front	1:2.77	Free	15	0.297	1.452	0.431	-
1 880	661	GSM 1900 Voice		31.5	30.34	0.13	Rear	1:8.3	Free	15	0.364	1.306	0.475	-
1 880	661	GSM 1900 Voice		31.5	30.34	0.07	Front	1:8.3	Free	15	0.394	1.306	0.515	-
1 880	661	GSM 1900 GPRS 3Tx		27.5	26.15	0.12	Rear	1:2.77	Free	15	0.413	1.365	0.564	-
1 880	661	GSM 1900 GPRS 3Tx		27.5	26.15	0.09	Front	1:2.77	Free	15	0.444	1.365	**0.606**	34
836.6	4183	UMTS 850	RMC	24.0	22.56	0.03	Rear	1:1	Free	15	0.244	1.393	**0.340**	35
836.6	4183	UMTS 850	RMC	24.0	22.56	-0.01	Front	1:1	Free	15	0.191	1.393	0.266	-
1 732.4	1412	UMTS 1700	RMC	24.0	22.91	0.10	Rear	1:1	Free	15	0.293	1.285	**0.377**	36
1 732.4	1412	UMTS 1700	RMC	24.0	22.91	0.19	Front	1:1	Free	15	0.199	1.285	0.256	-
1 880	9400	UMTS 1900	RMC	24.0	22.64	0.10	Rear	1:1	Free	15	0.417	1.368	**0.570**	37
1 880	9400	UMTS 1900	RMC	24.0	22.64	-0.05	Front	1:1	Free	15	0.314	1.368	0.429	-
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Note: * Data entry indicate Variability measurement.

LTE Body-Worn SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1860	18700	LTE 2 QPSK	20	24.5	23.68	0.02	Rear	0	1	99	1:1	Free	15	0.863	1.208	1.042	-
1880	18900		20	24.5	23.65	-0.07	Rear	0	1	99	1:1	Free	15	0.914	0.216	1.112	-
1900	19100		20	24.5	23.75	0.12	Rear	0	1	0	1:1	Free	15	0.948	1.189	**1.127**	38
1860	18700		20	23.5	22.76	0.03	Rear	1	50	49	1:1	Free	15	0.709	1.186	0.841	-
1880	18900		20	23.5	22.74	-0.14	Rear	1	50	0	1:1	Free	15	0.747	1.191	0.890	-
1900	19100		20	23.5	22.83	0.03	Rear	1	50	0	1:1	Free	15	0.778	1.167	0.908	-
1900	19100		20	23.5	22.81	0.01	Rear	1	100	0	1:1	Free	15	0.742	1.172	0.870	-
1860	18700		20	24.5	23.68	-0.03	Front	0	1	99	1:1	Free	15	0.861	1.208	1.040	-
1880	18900		20	24.5	23.65	0.17	Front	0	1	99	1:1	Free	15	0.911	1.216	1.108	-
1900	19100		20	24.5	23.75	0.03	Front	0	1	0	1:1	Free	15	0.872	1.189	1.036	-
1860	18700		20	23.5	22.76	0.03	Front	1	50	49	1:1	Free	15	0.700	1.186	0.830	-
1880	18900		20	23.5	22.74	0.16	Front	1	50	0	1:1	Free	15	0.752	1.191	0.896	-
1900	19100		20	23.5	22.83	-0.12	Front	1	50	0	1:1	Free	15	0.729	1.167	0.851	-
1900	19100		20	23.5	22.81	-0.04	Front	1	100	0	1:1	Free	15	0.789	1.172	0.925	-
2 510	20850	LTE 7 QPSK	20	24.0	23.01	-0.14	Rear	0	1	0	1:1	Free	15	0.265	1.256	0.333	-
2 510	20850		20	23.0	22.03	-0.11	Rear	1	50	0	1:1	Free	15	0.170	1.250	0.213	-
2 510	20850		20	24.0	23.01	-0.11	Front	0	1	0	1:1	Free	15	0.306	1.256	**0.384**	39
2 510	20850		20	23.0	22.03	0.17	Front	1	50	0	1:1	Free	15	0.250	1.250	0.313	-
707.5	23095	LTE 12 QPSK	10	25.5	24.29	0.05	Rear	0	1	0	1:1	Free	15	0.210	1.321	**0.277**	40
707.5	23095		10	24.5	23.38	-0.19	Rear	1	25	0	1:1	Free	15	0.157	1.294	0.203	-
707.5	23095		10	25.5	24.29	0.08	Front	0	1	0	1:1	Free	15	0.160	1.321	0.211	-
707.5	23095		10	24.5	23.38	0.01	Front	1	25	0	1:1	Free	15	0.135	1.294	0.175	-
782	23230	LTE 13 QPSK	10	25.0	23.39	0.01	Rear	0	1	0	1:1	Free	15	0.323	1.449	**0.468**	41
782	23230		10	24.0	22.47	0.01	Rear	1	25	0	1:1	Free	15	0.262	1.422	0.373	-
782	23230		10	25.0	23.39	-0.11	Front	0	1	0	1:1	Free	15	0.263	1.449	0.381	-
782	23230		10	24.0	22.47	-0.03	Front	1	25	0	1:1	Free	15	0.217	1.422	0.309	-
793	23330	LTE 14 QPSK	10	25.0	23.51	0.05	Rear	0	1	0	1:1	Free	15	0.325	1.409	**0.458**	42
793	23330		10	24.0	22.47	0.01	Rear	1	25	0	1:1	Free	15	0.261	1.422	0.371	-
793	23330		10	25.0	23.51	0.01	Front	0	1	0	1:1	Free	15	0.278	1.409	0.392	-
793	23330		10	24.0	22.47	-0.07	Front	1	25	0	1:1	Free	15	0.224	1.422	0.319	-
1 860	26140	LTE 25 QPSK	20	24.5	23.22	0.04	Rear	0	1	99	1:1	Free	15	0.556	1.343	0.747	-
1 882.5	26365		20	24.5	23.69	0.07	Rear	0	1	99	1:1	Free	15	0.746	1.205	**0.899**	43
1905	26590		20	24.5	23.78	0.09	Rear	0	1	0	1:1	Free	15	0.575	1.180	0.679	-
1 882.5	26365		20	23.5	22.80	0.07	Rear	1	50	0	1:1	Free	15	0.582	1.175	0.684	-
1882.5	26365		20	23.5	22.81	-0.17	Rear	1	100	0	1:1	Free	15	0.555	1.172	0.651	-
1 860	26140		20	24.5	23.22	-0.01	Front	0	1	99	1:1	Free	15	0.559	1.343	0.751	-
1 882.5	26365		20	24.5	23.69	0.10	Front	0	1	99	1:1	Free	15	0.714	1.205	0.860	-
1905	26590		20	24.5	23.78	0.08	Front	0	1	0	1:1	Free	15	0.606	1.180	0.715	-
1 882.5	26365		20	23.5	22.80	0.13	Front	1	50	0	1:1	Free	15	0.602	1.175	0.707	-
1882.5	26365		20	23.5	22.81	0.06	Front	1	100	0	1:1	Free	15	0.612	1.172	0.717	-
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LTE Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	26865	LTE 26 QPSK	15	25.0	23.91	0.18	Rear	0	1	0	1:1	Free	15	0.303	1.285	**0.389**	44
831.5	26865		15	24.0	23.01	-0.01	Rear	1	36	18	1:1	Free	15	0.242	1.256	0.304	-
831.5	26865		15	25.0	23.91	0.12	Front	0	1	0	1:1	Free	15	0.255	1.285	0.328	-
831.5	26865		15	24.0	23.01	-0.15	Front	1	36	18	1:1	Free	15	0.205	1.256	0.257	-
2 310	27710	LTE 30 QPSK	10	23.5	22.45	0.10	Rear	0	1	0	1:1	Free	15	0.299	1.274	**0.381**	45
2 310	27710		10	22.5	21.53	0.17	Rear	1	25	0	1:1	Free	15	0.227	1.250	0.284	-
2 310	27710		10	23.5	22.45	-0.15	Front	0	1	0	1:1	Free	15	0.259	1.274	0.330	-
2 310	27710		10	22.5	21.53	0.03	Front	1	25	0	1:1	Free	15	0.208	1.250	0.260	-
2 593	40620	LTE 40 QPSK (Low)	10	12.0	11.01	0.01	Rear	0	1	0	1:1.58	Free	15	0.00684	1.256	0.009	-
2 593	40620		10	12.0	10.89	0.01	Rear	1	25	0	1:1.58	Free	15	0.00731	1.291	0.009	-
2 593	40620		10	12.0	11.01	0.01	Front	0	1	0	1:1.58	Free	15	0.00741	1.256	**0.009**	46
2 593	40620		10	12.0	10.89	0.01	Front	1	25	0	1:1.58	Free	15	0.00701	1.291	0.009	-
2 310	38750	LTE 40 QPSK (Upper)	10	12.0	11.03	0.01	Rear	0	1	0	1:1.58	Free	15	0.00865	1.250	**0.011**	47
2 310	38750		10	12.0	10.95	0.01	Rear	1	25	0	1:1.58	Free	15	0.0076	1.274	0.010	-
2 310	38750		10	12.0	11.03	0.01	Front	0	1	0	1:1.58	Free	15	0.00704	1.250	0.009	-
2 310	38750		10	12.0	10.95	0.01	Front	1	25	0	1:1.58	Free	15	0.00702	1.274	0.009	-
2 506.0	39750	LTE 41 QPSK	20	24.0	22.70	0.19	Rear	0	1	0	1:1.58	Free	15	0.133	1.349	0.179	-
2 506.0	39750		20	23.0	21.96	-0.18	Rear	1	50	0	1:1.58	Free	15	0.112	1.271	0.142	-
2 506.0	39750		20	24.0	22.70	-0.11	Front	0	1	0	1:1.58	Free	15	0.137	1.349	0.185	-
2 506.0	39750		20	23.0	21.96	-0.12	Front	1	50	0	1:1.58	Free	15	0.117	1.271	0.149	-
Power class 2 (HPUE)																	
2 506.0	39750	LTE 41 QPSK	20	26.5	25.64	-0.02	Front	0	1	0	1:1.58	Free	15	0.182	1.219	0.222	-
2 506.0	39750		20	26.5	25.61	0.14	Front	0	1	99	1:1.58	Free	15	0.191	1.262	0.241	-
ULCA(41C)																	
2 506.0	39750	LTE 41 QPSK	20	24.0	23.23	-0.17	Front		1	99	1:1.58	Free	15	0.251	1.194	**0.300**	48
1 745	132322	LTE 66 QPSK	20	25.0	24.33	0.13	Rear	0	1	99	1:1	Free	15	0.453	1.167	0.529	-
1 770	132572		20	24.0	23.41	0.09	Rear	1	50	25	1:1	Free	15	0.441	1.146	0.505	-
1 745	132322		20	25.0	24.33	0.16	Front	0	1	99	1:1	Free	15	0.495	1.167	**0.578**	49
1 770	132572		20	24.0	23.41	0.08	Front	1	50	25	1:1	Free	15	0.476	1.146	0.545	-
683	133322	LTE 71 QPSK	20	25.0	24.36	0.05	Rear	0	1	99	1:1	Free	15	0.357	1.159	**0.414**	50
683	133322		20	24.0	23.45	0.13	Rear	1	50	49	1:1	Free	15	0.281	1.135	0.319	-
683	133322		20	25.0	24.36	-0.03	Front	0	1	99	1:1	Free	15	0.299	1.159	0.346	-
683	133322		20	24.0	23.45	0.04	Front	1	50	49	1:1	Free	15	0.24	1.135	0.272	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

Note: ** Data entry indicate LTE 41 Power Class 2(HPUE)

NR Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
1860	372000	NR n2 DFT-s OFDM QPSK	20	25	24.00	0.13	Rear	0	1	104	1:1	15	0.848	1.259	1.068	-
1880	376000		20	25	24.03	0.06	Rear	0	1	104	1:1	15	0.867	1.250	1.084	
1900	380000		20	25	24.08	0.13	Rear	0	1	104	1:1	15	0.713	1.236	0.881	
1860	372000		20	25	23.85	0.03	Rear	0	50	28	1:1	15	0.840	1.303	1.095	-
1880	376000		20	25	23.89	0.13	Rear	0	50	28	1:1	15	0.870	1.291	1.123	
1900	380000		20	25	23.91	0.01	Rear	0	50	28	1:1	15	0.893	1.285	1.148	
1860	372000		20	25	24.00	0.19	Front	0	1	104	1:1	15	0.937	1.259	**1.180**	51
1880	376000		20	25	24.03	-0.17	Front	0	1	104	1:1	15	0.901	1.250	1.126	
1900	380000		20	25	24.08	-0.06	Front	0	1	104	1:1	15	0.768	1.236	0.949	
1860	372000		20	25	23.85	-0.05	Front	0	50	28	1:1	15	0.764	1.303	0.996	-
1880	376000		20	25	23.89	0.03	Front	0	50	28	1:1	15	0.897	1.285	1.153	
1900	380000		20	25	23.91	0.03	Front	0	50	28	1:1	15	0.906	1.285	1.164	
1860	372000	NR n2 CP QPSK	20	23.5	22.40	0.01	Front	1.5	1	1	1:1	15	0.637	1.288	0.821	
836.5	167300	NR n5 DFT-s OFDM QPSK	20	25	24.29	0.11	Rear	0	1	1	1:1	15	0.392	1.178	**0.462**	52
836.5	167300		20	25	24.23	0.05	Rear	0	50	28	1:1	15	0.386	1.194	0.461	-
836.5	167300		20	25	24.29	-0.02	Front	0	1	1	1:1	15	0.341	1.178	0.402	-
836.5	167300		20	25	24.23	-0.07	Front	0	50	28	1:1	15	0.311	1.194	0.371	-
836.5	167300	NR n5 CP QPSK	20	23.5	22.73	0.07	Rear	1.5	1	1	1:1	15	0.256	1.194	0.306	-
2592.99	518598	NR n41 DFT-s OFDM QPSK	100	25	23.98	-0.01	Rear	0	1	137	1:3.7	15	0.161	1.265	0.204	-
2592.99	518598		100	25	23.92	0.01	Rear	0	135	69	1:3.7	15	0.165	1.282	**0.212**	53
2592.99	518598		100	25	23.98	-0.20	Front	0	1	137	1:3.7	15	0.109	1.265	0.138	-
2592.99	518598		100	25	23.92	-0.13	Front	0	135	69	1:3.7	15	0.122	1.282	0.156	-
2592.99	518598	NR n41 CP QPSK	100	23.0	21.66	0.15	Rear	1.5	1	1	1:3.7	15	0.043	1.361	0.067	-
1720	344000	NR n66 DFT-s OFDM QPSK	20	25	24.78	-0.03	Rear	0	1	53	1:1	15	0.459	1.052	**0.483**	54
1720	344000		20	25	24.75	0.09	Rear	0	50	28	1:1	15	0.424	1.059	0.449	-
1720	344000		20	25	24.78	0.17	Front	0	1	53	1:1	15	0.456	1.052	0.480	-
1720	344000		20	25	24.75	0.18	Front	0	50	28	1:1	15	0.423	1.059	0.448	-
1770.0	354000	NR n66 CP QPSK	20	23.5	22.70	0.08	Rear	1.5	1	1	1:1	15	0.351	1.202	0.422	-
680.5	136100	NR n71 DFT-s OFDM QPSK	20	25	24.65	0.01	Rear	0	1	104	1:1	15	0.243	1.084	0.263	-
680.5	136100		20	25	24.47	0.03	Rear	0	50	28	1:1	15	0.253	1.130	**0.286**	55
680.5	136100		20	25	24.65	-0.01	Front	0	1	104	1:1	15	0.2	1.084	0.217	-
680.5	136100		20	25	24.47	-0.04	Front	0	50	28	1:1	15	0.212	1.130	0.240	-
680.5	136100	NR n71 CP QPSK	20	23.5	22.55	-0.02	Rear	1.5	1	1	1:1	15	0.187	1.245	0.233	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

DTS Body-Worn SAR

Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
2 437	6	802.11b	20	1	21	19.87	-0.05	Rear	99.0	15	0.251	0.154	1.297	1.010	**0.202**	56
2 437	6	802.11b	20	1	21	19.87		Front	99.0	15	0.24	0.152				-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg (mW/g) Averaged over 1 gram								

NII Body-Worn SAR

Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 300	60	802.11a	20	6	18	16.90	-0.01	Rear	93.8	15	0.127	0.055				-
5 300	60	802.11a	20	6	18	16.90	0.12	Front	93.8	15	0.226	0.092	1.288	1.066	0.126	-
5 500	100	802.11a	20	6	18	16.37	-0.11	Rear	93.8	15	0.247	0.106	1.455	1.066	**0.164**	57
5 500	100	802.11a	20	6	18	16.37	0.19	Front	93.8	15	0.204	0.090				-
5 745	149	802.11a	20	6	18	16.55	-0.01	Rear	93.8	15	0.193	0.086	1.396	1.066	0.128	-
5 745	149	802.11a	20	6	18	16.55	-0.08	Front	93.8	15	0.0827	0.035				-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg (mW/g) Averaged over 1 gram								

DSS Body-Worn SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Distance	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dBm)	(dBm)	(dB)		(mm)	(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	9.5	8.74	-0.10	Rear	15	0.00919	1.191	1.302	**0.0143**	58
2 441	39	Bluetooth DH5	9.5	8.74	-0.19	Front	15	0.0076	1.191	1.302	0.012	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg (mW/g) Averaged over 1 gram					

13.3 Hotspot SAR Measurement Results

CDMA BC10 (§90S) Hotspot SAR														
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
817.25	450	CDMA BC10	EVDO Rev.0	25.5	24.62	-0.12	Rear	1:1	Free	10	0.654	1.225	0.801	-
820	560	CDMA BC10	EVDO Rev.0	25.5	24.63	-0.14	Rear	1:1	Free	10	0.651	1.222	0.795	-
822.75	670	CDMA BC10	EVDO Rev.0	25.5	24.50	-0.11	Rear	1:1	Free	10	0.726	1.259	0.914	-
820	560	CDMA BC10	EVDO Rev.0	25.5	24.63	-0.01	Front	1:1	Free	10	0.515	1.222	0.629	-
820	560	CDMA BC10	EVDO Rev.0	25.5	24.63	-0.15	Left	1:1	Free	10	0.292	1.222	0.357	-
817.25	450	CDMA BC10	EVDO Rev.0	25.5	24.62	-0.11	Right	1:1	Free	10	0.334	1.225	0.409	-
820	560	CDMA BC10	EVDO Rev.0	25.5	24.63	-0.14	Right	1:1	Free	10	0.688	1.222	0.841	-
822.75	670	CDMA BC10	EVDO Rev.0	25.5	24.50	-0.11	Right	1:1	Free	10	0.698	1.259	0.879	-
820	560	CDMA BC10	EVDO Rev.0	25.5	24.63	-0.12	Bottom	1:1	Free	10	0.737	1.222	0.900	-
817.25	450	CDMA BC10	EVDO Rev.0	25.5	24.62	-0.18	Bottom	1:1	Free	10	0.697	1.225	0.854	-
822.75	670	CDMA BC10	EVDO Rev.0	25.5	24.50	-0.16	Bottom	1:1	Free	10	0.791	1.259	**0.996**	59
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

CDMA BC0 (§22H) Hotspot SAR														
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
824.7	1013	CDMA BC0	EVDO Rev.0	25.5	23.64	-0.14	Rear	1:1	Free	10	0.886	1.535	**1.360**	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.19	Rear	1:1	Free	10	0.992	1.303	1.293	60
848.31	777	CDMA BC0	EVDO Rev.0	25.5	23.51	0.04	Rear	1:1	Free	10	0.848	1.581	1.341	-
824.7	1013	CDMA BC0	EVDO Rev.0	25.5	23.64	-0.01	Front	1:1	Free	10	0.667	1.535	1.024	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.11	Front	1:1	Free	10	0.800	1.303	1.043	-
848.31	777	CDMA BC0	EVDO Rev.0	25.5	23.51	0.06	Front	1:1	Free	10	0.691	1.581	1.093	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.11	Left	1:1	Free	10	0.094	1.303	0.122	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.11	Right	1:1	Free	10	0.336	1.303	0.438	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.04	Bottom	1:1	Free	10	0.375	1.303	0.489	-
824.7	1013	CDMA BC0	RC3 / SO55	25.5	23.74	-0.03	Rear	1:1	Free	10	0.640	1.500	0.960	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.12	Rear	1:1	Free	10	0.752	1.288	0.969	-
848.31	777	CDMA BC0	RC3 / SO55	25.5	23.55	-0.08	Rear	1:1	Free	10	0.627	1.567	0.982	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.05	Front	1:1	Free	10	0.485	1.288	0.625	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	-0.16	Left	1:1	Free	10	0.145	1.288	0.187	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	0.10	Right	1:1	Free	10	0.328	1.288	0.423	-
836.52	384	CDMA BC0	RC3 / SO55	25.5	24.40	0.05	Bottom	1:1	Free	10	0.419	1.288	0.540	-
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	0.06	Rear	1:1	Free	10	0.939	1.303	1.224	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

Note: * Data entry indicate Variability measurement.

PCS CDMA Hotspot SAR

Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 880	600	PCS CDMA	EVDO Rev.0	18.5	18.05	-0.15	Rear	1:1	Free	10	0.384	1.109	0.426	-
1 880	600	PCS CDMA	EVDO Rev.0	18.5	18.05	0.01	Front	1:1	Free	10	0.203	1.109	0.225	-
1 880	600	PCS CDMA	EVDO Rev.0	18.5	18.05	-0.09	Left	1:1	Free	10	0.056	1.109	0.062	-
1 880	600	PCS CDMA	EVDO Rev.0	18.5	18.05	0.06	Right	1:1	Free	10	0.081	1.109	0.090	-
1851.25	25	PCS CDMA	EVDO Rev.0	18.5	18.11	-0.08	Bottom	1:1	Free	10	0.765	1.094	0.837	-
1880.0	600	PCS CDMA	EVDO Rev.0	18.5	18.05	0.02	Bottom	1:1	Free	10	0.800	1.109	0.887	-
1908.75	1175	PCS CDMA	EVDO Rev.0	18.5	18.08	-0.08	Bottom	1:1	Free	10	0.904	1.102	**0.996**	61
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

GSM 850 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
824.2	128	GPRS 3Tx	30.5	29.00	-0.19	Rear	1:2.77	10	Free	0.580	1.413	0.819	-
836.6	190	GPRS 3Tx	30.5	28.88	-0.08	Rear	1:2.77	10	Free	0.588	1.452	0.854	-
848.8	251	GPRS 3Tx	30.5	29.06	-0.17	Rear	1:2.77	10	Free	0.716	1.393	**0.998**	62
836.6	190	GPRS 3Tx	30.5	28.88	-0.02	Front	1:2.77	10	Free	0.479	1.452	0.696	-
836.6	190	GPRS 3Tx	30.5	28.88	0.11	Left	1:2.77	10	Free	0.073	1.452	0.106	-
836.6	190	GPRS 3Tx	30.5	28.88	-0.04	Right	1:2.77	10	Free	0.332	1.452	0.482	-
836.6	190	GPRS 3Tx	30.5	28.88	0.11	Bottom	1:2.77	10	Free	0.382	1.452	0.555	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

GSM 1900 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
1 880	661	GPRS 4Tx	23.0	21.66	0.01	Rear	1:2.075	10	Free	0.301	1.361	0.410	-
1 880	661	GPRS 4Tx	23.0	21.66	0.15	Front	1:2.075	10	Free	0.378	1.361	0.515	-
1 880	661	GPRS 4Tx	23.0	21.66	0.18	Left	1:2.075	10	Free	0.035	1.361	0.048	-
1 880	661	GPRS 4Tx	23.0	21.66	0.04	Right	1:2.075	10	Free	0.078	1.361	0.106	-
1 850.2	512	GPRS 4Tx	23.0	21.56	-0.06	Bottom	1:2.075	10	Free	0.498	1.393	0.694	-
1 880	661	GPRS 4Tx	23.0	21.66	0.06	Bottom	1:2.075	10	Free	0.805	1.361	1.096	-
1 909.8	810	GPRS 4Tx	23.0	21.68	-0.04	Bottom	1:2.075	10	Free	0.918	1.355	**1.244**	63
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS 850 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	4183	RMC	24.0	22.56	0.19	Rear	1:1	Free	10	0.431	1.393	**0.600**	64
836.6	4183	RMC	24.0	22.56	0.01	Front	1:1	Free	10	0.323	1.393	0.450	-
836.6	4183	RMC	24.0	22.56	0.04	Left	1:1	Free	10	0.057	1.393	0.079	-
836.6	4183	RMC	24.0	22.56	0.02	Right	1:1	Free	10	0.267	1.393	0.372	-
836.6	4183	RMC	24.0	22.56	0.07	Bottom	1:1	Free	10	0.244	1.393	0.340	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS 1700 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 732.4	1412	RMC	21.0	19.87	-0.15	Rear	1:1	Free	10	0.272	1.297	0.353	-
1 732.4	1412	RMC	21.0	19.87	0.11	Front	1:1	Free	10	0.282	1.297	0.366	-
1 732.4	1412	RMC	21.0	19.87	0.04	Left	1:1	Free	10	0.055	1.297	0.071	-
1 732.4	1412	RMC	21.0	19.87	0.12	Right	1:1	Free	10	0.044	1.297	0.057	-
1 732.4	1412	RMC	21.0	19.87	0.13	Bottom	1:1	Free	10	0.477	1.297	**0.619**	65
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS 1900 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 880	9400	RMC	18.5	17.64	-0.16	Rear	1:1	Free	10	0.386	1.219	0.471	-
1 880	9400	RMC	18.5	17.64	0.02	Front	1:1	Free	10	0.432	1.219	0.527	-
1 880	9400	RMC	18.5	17.64	0.06	Left	1:1	Free	10	0.061	1.219	0.074	-
1 880	9400	RMC	18.5	17.64	-0.01	Right	1:1	Free	10	0.088	1.219	0.107	-
1 852.4	9262	RMC	18.5	17.58	-0.15	Bottom	1:1	Free	10	0.718	1.236	0.887	
1 880	9400	RMC	18.5	17.64	0.11	Bottom	1:1	Free	10	0.899	1.219	1.096	-
1 907.6	9538	RMC	18.5	17.61	0.13	Bottom	1:1	Free	10	0.919	1.227	**1.128**	66
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

LTE Band 2Hotspot SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1900	19100	QPSK	20	19.5	19.01	-0.11	Rear	0	1	99	1:1	Free	10	0.561	1.119	0.628	-
1900	19100	QPSK	20	19.5	18.99	0.13	Rear	0	50	49	1:1	Free	10	0.576	1.125	0.648	-
1860	18700	QPSK	20	19.5	19.01	0.12	Front	0	1	0	1:1	Free	10	0.548	1.119	0.613	-
1880	18900	QPSK	20	19.5	19.01	-0.09	Front	0	1	99	1:1	Free	10	0.620	1.119	0.694	-
1900	19100	QPSK	20	19.5	19.01	0.09	Front	0	1	99	1:1	Free	10	0.715	1.119	0.800	-
1860	18700	QPSK	20	19.5	19.01	0.13	Front	0	50	0	1:1	Free	10	0.542	1.119	0.607	-
1880	18900	QPSK	20	19.5	19.01	0.09	Front	0	50	49	1:1	Free	10	0.609	1.119	0.682	-
1900	19100	QPSK	20	19.5	18.99	0.11	Front	0	50	49	1:1	Free	10	0.723	1.125	0.813	-
1900	19100	QPSK	20	19.5	18.99	-0.01	Front	0	100	0	1:1	Free	10	0.637	1.125	0.716	-
1900	19100	QPSK	20	19.5	19.01	0.15	Left	0	1	99	1:1	Free	10	0.070	1.119	0.078	-
1900	19100	QPSK	20	19.5	18.99	0.01	Left	0	50	49	1:1	Free	10	0.076	1.125	0.085	-
1900	19100	QPSK	20	19.5	19.01	0.08	Right	0	1	99	1:1	Free	10	0.120	1.119	0.134	-
1900	19100	QPSK	20	19.5	18.99	0.18	Right	0	50	49	1:1	Free	10	0.124	1.125	0.139	-
1860	18700	QPSK	20	19.5	19.01	0.12	Bottom	0	1	0	1:1	Free	10	0.861	1.119	0.964	-
1880	18900	QPSK	20	19.5	19.01	0.09	Bottom	0	1	99	1:1	Free	10	1.07	1.119	1.189	-
1900	19100	QPSK	20	19.5	19.01	0.17	Bottom	0	1	99	1:1	Free	10	1.19	1.119	**1.332**	67
1860	18700	QPSK	20	19.5	19.01	0.14	Bottom	0	50	0	1:1	Free	10	0.888	1.119	0.994	-
1880	18900	QPSK	20	19.5	19.01	0.16	Bottom	0	50	49	1:1	Free	10	1.05	1.119	1.175	-
1900	19100	QPSK	20	19.5	18.99	0.16	Bottom	0	50	49	1:1	Free	10	1.14	1.125	1.282	-
1900	19100	QPSK	20	19.5	19.01	0.10	Bottom	0	100	0	1:1	Free	10	1.12	1.119	1.254	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 7 Hotspot SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 510	20850	QPSK	20	22.0	21.01	0.06	Rear	0	1	0	1:1	Free	10	0.379	1.256	0.476	-
2 510	20850	QPSK	20	22.0	21.01	0.14	Rear	1	50	0	1:1	Free	10	0.389	1.256	0.489	-
2 510	20850	QPSK	20	22.0	21.01	-0.14	Front	0	1	0	1:1	Free	10	0.329	1.256	0.413	-
2 510	20850	QPSK	20	22.0	21.01	0.14	Front	1	50	0	1:1	Free	10	0.339	1.256	0.426	-
2 510	20850	QPSK	20	22.0	21.01	-0.17	Left	0	1	0	1:1	Free	10	0.268	1.256	0.337	-
2 510	20850	QPSK	20	22.0	21.01	0.12	Left	1	50	0	1:1	Free	10	0.278	1.256	0.349	-
2 510	20850	QPSK	20	22.0	21.01	0.07	Right	0	1	0	1:1	Free	10	0.115	1.256	0.144	-
2 510	20850	QPSK	20	22.0	21.01	0.01	Right	1	50	0	1:1	Free	10	0.119	1.256	0.149	-
2 510	20850	QPSK	20	22.0	21.01	0.18	Bottom	0	1	0	1:1	Free	10	0.654	1.256	0.821	-
2 535	21100	QPSK	20	22.0	20.90	-0.18	Bottom	0	1	0	1:1	Free	10	0.735	1.288	0.947	-
2 560	21350	QPSK	20	22.0	20.96	-0.05	Bottom	0	1	0	1:1	Free	10	0.676	1.271	0.859	-
2 510	20850	QPSK	20	22.0	21.01	-0.16	Bottom	1	50	0	1:1	Free	10	0.662	1.256	0.831	-
2 535	21100	QPSK	20	22.0	20.87	0.02	Bottom	1	50	0	1:1	Free	10	0.922	1.297	**1.196**	68
2 560	21350	QPSK	20	22.0	20.93	0.03	Bottom	1	50	0	1:1	Free	10	0.825	1.279	1.055	-
2 510	20850	QPSK	20	22.0	21.00	0.01	Bottom	1	100	0	1:1	Free	10	0.766	1.259	0.964	-
2 535	21100	QPSK	20	22.0	20.87	-0.01	Bottom	1	50	0	1:1	Free	10	0.917	1.297	1.190	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

Note: * Data entry indicate Variability measurement.

LTE Band 12 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
707.5	23095	QPSK	10	25.5	24.29	0.01	Rear	0	1	0	1:1	Free	10	0.269	1.321	**0.355**	69
707.5	23095	QPSK	10	24.5	23.38	0.01	Rear	1	25	0	1:1	Free	10	0.220	1.294	0.285	-
707.5	23095	QPSK	10	25.5	24.29	0.11	Front	0	1	0	1:1	Free	10	0.180	1.321	0.238	-
707.5	23095	QPSK	10	24.5	23.38	0.03	Front	1	25	0	1:1	Free	10	0.136	1.294	0.176	-
707.5	23095	QPSK	10	25.5	24.29	0.11	Left	0	1	0	1:1	Free	10	0.094	1.321	0.124	-
707.5	23095	QPSK	10	24.5	23.38	0.04	Left	1	25	0	1:1	Free	10	0.082	1.294	0.106	-
707.5	23095	QPSK	10	25.5	24.29	0.12	Right	0	1	0	1:1	Free	10	0.141	1.321	0.186	-
707.5	23095	QPSK	10	24.5	23.38	-0.02	Right	1	25	0	1:1	Free	10	0.129	1.294	0.167	-
707.5	23095	QPSK	10	25.5	24.29	0.14	Bottom	0	1	0	1:1	Free	10	0.177	1.321	0.234	-
707.5	23095	QPSK	10	24.5	23.38	0.17	Bottom	1	25	0	1:1	Free	10	0.130	1.294	0.168	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

LTE Band 13 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
782	23230	QPSK	10	25.0	23.39	-0.06	Rear	0	1	0	1:1	Free	10	0.422	1.449	**0.611**	70
782	23230	QPSK	10	24.0	22.47	0.09	Rear	1	25	0	1:1	Free	10	0.349	1.422	0.496	-
782	23230	QPSK	10	25.0	23.39	-0.05	Front	0	1	0	1:1	Free	10	0.294	1.449	0.426	-
782	23230	QPSK	10	24.0	22.47	0.02	Front	1	25	0	1:1	Free	10	0.242	1.422	0.344	-
782	23230	QPSK	10	25.0	23.39	0.07	Left	0	1	0	1:1	Free	10	0.157	1.449	0.227	-
782	23230	QPSK	10	24.0	22.47	0.09	Left	1	25	0	1:1	Free	10	0.118	1.422	0.168	-
782	23230	QPSK	10	25.0	23.39	0.07	Right	0	1	0	1:1	Free	10	0.386	1.449	0.559	-
782	23230	QPSK	10	24.0	22.47	0.07	Right	1	25	0	1:1	Free	10	0.308	1.422	0.438	-
782	23230	QPSK	10	25.0	23.39	0.17	Bottom	0	1	0	1:1	Free	10	0.297	1.449	0.430	-
782	23230	QPSK	10	24.0	22.47	0.11	Bottom	1	25	0	1:1	Free	10	0.243	1.422	0.346	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

LTE Band 14 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
793	23330	QPSK	10	25.0	23.51	0.10	Rear	0	1	0	1:1	Free	10	0.448	1.409	**0.631**	71
793	23330	QPSK	10	24.0	22.47	0.01	Rear	1	25	0	1:1	Free	10	0.359	1.422	0.511	-
793	23330	QPSK	10	25.0	23.51	-0.02	Front	0	1	0	1:1	Free	10	0.318	1.409	0.448	-
793	23330	QPSK	10	24.0	22.47	-0.03	Front	1	25	0	1:1	Free	10	0.253	1.422	0.360	-
793	23330	QPSK	10	25.0	23.51	0.14	Left	0	1	0	1:1	Free	10	0.146	1.409	0.206	-
793	23330	QPSK	10	24.0	22.47	0.01	Left	1	25	0	1:1	Free	10	0.117	1.422	0.166	-
793	23330	QPSK	10	25.0	23.51	0.03	Right	0	1	0	1:1	Free	10	0.389	1.409	0.548	-
793	23330	QPSK	10	24.0	22.47	0.09	Right	1	25	0	1:1	Free	10	0.323	1.422	0.459	-
793	23330	QPSK	10	25.0	23.51	0.19	Bottom	0	1	0	1:1	Free	10	0.306	1.409	0.431	-
793	23330	QPSK	10	24.0	22.47	0.12	Bottom	1	25	0	1:1	Free	10	0.211	1.422	0.300	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 25 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 882.5	26365	QPSK	20	18.5	17.72	0.19	Rear	0	1	99	1:1	Free	10	0.432	1.197	0.517	-
1 882.5	26365	QPSK	20	18.5	17.72	0.18	Rear	0	50	49	1:1	Free	10	0.387	1.197	0.463	-
1 882.5	26365	QPSK	20	18.5	17.72	0.15	Front	0	1	99	1:1	Free	10	0.457	1.197	0.547	-
1 882.5	26365	QPSK	20	18.5	17.72	0.19	Front	0	50	49	1:1	Free	10	0.452	1.197	0.541	-
1 882.5	26365	QPSK	20	18.5	17.72	0.17	Left	0	1	99	1:1	Free	10	0.048	1.197	0.057	-
1 882.5	26365	QPSK	20	18.5	17.72	0.14	Left	0	50	49	1:1	Free	10	0.047	1.197	0.056	-
1 882.5	26365	QPSK	20	18.5	17.72	0.17	Right	0	1	99	1:1	Free	10	0.071	1.197	0.085	-
1 882.5	26365	QPSK	20	18.5	17.72	0.16	Right	0	50	49	1:1	Free	10	0.070	1.197	0.084	-
1860	26140	QPSK	20	18.5	17.13	0.04	Bottom	0	1	99	1:1	Free	10	0.702	1.371	0.962	-
1 882.5	26365	QPSK	20	18.5	17.72	0.04	Bottom	0	1	99	1:1	Free	10	0.795	1.197	0.951	-
1905	26590	QPSK	20	18.5	17.27	0.03	Bottom	0	1	99	1:1	Free	10	0.882	1.327	**1.171**	72
1860	26140	QPSK	20	18.5	17.12	-0.03	Bottom	0	50	25	1:1	Free	10	0.679	1.374	0.933	-
1 882.5	26365	QPSK	20	18.5	17.72	0.09	Bottom	0	50	49	1:1	Free	10	0.790	1.197	0.945	-
1905	26590	QPSK	20	18.5	17.28	-0.02	Bottom	0	50	49	1:1	Free	10	0.791	1.324	1.048	-
1 882.5	26365	QPSK	20	18.5	17.72	-0.03	Bottom	0	100	0	1:1	Free	10	0.827	1.197	0.990	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 26 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	26865	QPSK	15	25.0	23.91	0.07	Rear	0	1	0	1:1	Free	10	0.500	1.285	**0.643**	73
831.5	26865	QPSK	15	24.0	23.01	-0.12	Rear	1	36	18	1:1	Free	10	0.402	1.256	0.505	-
831.5	26865	QPSK	15	25.0	23.91	-0.05	Front	0	1	0	1:1	Free	10	0.364	1.285	0.468	-
831.5	26865	QPSK	15	24.0	23.01	0.01	Front	1	36	18	1:1	Free	10	0.294	1.256	0.369	-
831.5	26865	QPSK	15	25.0	23.91	0.14	Left	0	1	0	1:1	Free	10	0.086	1.285	0.111	-
831.5	26865	QPSK	15	24.0	23.01	0.14	Left	1	36	18	1:1	Free	10	0.073	1.256	0.092	-
831.5	26865	QPSK	15	25.0	23.91	0.07	Right	0	1	0	1:1	Free	10	0.253	1.285	0.325	-
831.5	26865	QPSK	15	24.0	23.01	0.07	Right	1	36	18	1:1	Free	10	0.237	1.256	0.298	-
831.5	26865	QPSK	15	25.0	23.91	0.16	Bottom	0	1	0	1:1	Free	10	0.326	1.285	0.419	-
831.5	26865	QPSK	15	24.0	23.01	0.12	Bottom	1	36	18	1:1	Free	10	0.254	1.256	0.319	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 30 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 310	27710	QPSK	10	22.0	20.51	-0.10	Rear	0	1	0	1:1	Free	10	0.298	1.409	0.420	-
2 310	27710	QPSK	10	22.0	20.57	0.01	Rear	0	25	0	1:1	Free	10	0.300	1.390	0.417	-
2 310	27710	QPSK	10	22.0	20.51	0.13	Front	0	1	0	1:1	Free	10	0.341	1.409	0.481	-
2 310	27710	QPSK	10	22.0	20.57	-0.11	Front	0	25	0	1:1	Free	10	0.343	1.390	0.477	-
2 310	27710	QPSK	10	22.0	20.51	-0.14	Left	0	1	0	1:1	Free	10	0.152	1.409	0.214	-
2 310	27710	QPSK	10	22.0	20.57	0.01	Left	0	25	0	1:1	Free	10	0.152	1.390	0.211	-
2 310	27710	QPSK	10	22.0	20.51	-0.14	Right	0	1	0	1:1	Free	10	0.082	1.409	0.116	-
2 310	27710	QPSK	10	22.0	20.57	-0.10	Right	0	25	0	1:1	Free	10	0.083	1.390	0.115	-
2 310	27710	QPSK	10	22.0	20.51	0.15	Bottom	0	1	0	1:1	Free	10	0.850	1.409	**1.198**	74
2 310	27710	QPSK	10	22.0	20.57	-0.11	Bottom	0	25	0	1:1	Free	10	0.772	1.390	1.073	-
2 310	27710	QPSK	10	22.0	20.66	0.10	Bottom	0	50	0	1:1	Free	10	0.788	1.361	1.073	
2 310	27710	QPSK	10	22.0	20.51	0.03	Bottom	0	1	0	1:1	Free	10	0.841	1.409	1.185	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

Note: * Data entry indicate Variability measurement.

LTE Band 40 Hotspot SAR_ Lower frequency range																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 310	38750	QPSK	10	12.0	11.01	-0.15	Rear	0	1	0	1:1.58	Free	10	0.019	1.256	0.024	-
2 310	38750	QPSK	10	12.0	10.89	0.16	Rear	0	25	0	1:1.58	Free	10	0.018	1.291	0.023	-
2 310	38750	QPSK	10	12.0	11.01	-0.13	Front	0	1	0	1:1.58	Free	10	0.017	1.256	0.021	-
2 310	38750	QPSK	10	12.0	10.89	0.01	Front	0	25	0	1:1.58	Free	10	0.017	1.291	0.022	-
2 310	38750	QPSK	10	12.0	11.01	-0.13	Left	0	1	0	1:1.58	Free	10	0.0059 1	1.256	0.007	-
2 310	38750	QPSK	10	12.0	10.89	0.03	Left	0	25	0	1:1.58	Free	10	0.0069 2	1.291	0.009	-
2 310	38750	QPSK	10	12.0	11.01	0.01	Right	0	1	0	1:1.58	Free	10	0.0010 9	1.256	0.001	
2 310	38750	QPSK	10	12.0	10.89	0.01	Right	0	25	0	1:1.58	Free	10	0.0009 7	1.291	0.001	
2 310	38750	QPSK	10	12.0	11.01	-0.14	Bottom	0	1	0	1:1.58	Free	10	0.055	1.256	**0.069**	75
2 310	38750	QPSK	10	12.0	10.89	-0.04	Bottom	0	25	0	1:1.58	Free	10	0.032	1.291	0.041	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 40 Hotspot SAR_ Upper frequency range																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 355	39200	QPSK	10	12.0	11.03	-0.12	Rear	0	1	0	1:1.58	Free	10	0.018	1.250	0.023	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Rear	0	25	0	1:1.58	Free	10	0.014	1.274	0.018	-
2 355	39200	QPSK	10	12.0	11.03	0.01	Front	0	1	0	1:1.58	Free	10	0.019	1.250	0.024	-
2 355	39200	QPSK	10	12.0	10.95	0.01	Front	0	25	0	1:1.58	Free	10	0.018	1.274	0.023	-
2 355	39200	QPSK	10	12.0	11.03	-0.10	Left	0	1	0	1:1.58	Free	10	0.0081 8	1.250	0.010	-
2 355	39200	QPSK	10	12.0	10.95	-0.10	Left	0	25	0	1:1.58	Free	10	0.0082 5	1.274	0.011	-
2 355	39200	QPSK	10	12.0	11.03	0.01	Right	0	1	0	1:1.58	Free	10	0.0002 8	1.250	0.000	
2 355	39200	QPSK	10	12.0	10.95	0.01	Right	0	25	0	1:1.58	Free	10	0.00069 1	1.274	0.001	
2 355	39200	QPSK	10	12.0	11.03	0.10	Bottom	0	1	0	1:1.58	Free	10	0.067	1.250	**0.084**	76
2 355	39200	QPSK	10	12.0	10.95	-0.02	Bottom	0	25	0	1:1.58	Free	10	0.033	1.274	0.042	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE TDD Band 41 Hotspot SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
Power class 3																	
2 506	39750	QPSK	20	22.0	20.69	-0.13	Rear	0	1	0	1:1.58	Free	10	0.140	1.352	0.189	
2 506	39750	QPSK	20	22.0	20.96	-0.15	Rear	0	50	0	1:1.58	Free	10	0.142	1.271	0.180	-
2 506	39750	QPSK	20	22.0	20.69	-0.01	Front	0	1	0	1:1.58	Free	10	0.148	1.352	0.200	-
2 506	39750	QPSK	20	22.0	20.96	0.15	Front	0	50	0	1:1.58	Free	10	0.152	1.271	0.193	-
2 506	39750	QPSK	20	22.0	20.69	-0.16	Left	0	1	0	1:1.58	Free	10	0.087	1.352	0.118	-
2 506	39750	QPSK	20	22.0	20.96	-0.05	Left	0	50	0	1:1.58	Free	10	0.097	1.271	0.123	-
2 506	39750	QPSK	20	22.0	20.69	0.15	Right	0	1	0	1:1.58	Free	10	0.036	1.352	0.049	-
2 506	39750	QPSK	20	22.0	20.96	-0.11	Right	0	50	0	1:1.58	Free	10	0.038	1.271	0.048	-
2 506	39750	QPSK	20	22.0	20.69	-0.03	Bottom	0	1	0	1:1.58	Free	10	0.340	1.352	0.460	-
2 506	39750	QPSK	20	22.0	20.96	-0.04	Bottom	0	50	0	1:1.58	Free	10	0.364	1.271	0.462	-
Power class 2 (HPUE)																	
2506	39750	QPSK	20	22.0	20.77	-0.02	Bottom	0	50	0	1:2.31	Free	10	0.243	1.327	0.323	-
2506	39750	QPSK	20	22.0	20.72	-0.05	Bottom	0	50	49	1:1.58	Free	10	0.237	1.343	0.318	-
ULCA(41C)																	
2506	39750	QPSK	20	22.0	21.24	0.01	Bottom	0	50	49	1:1.58	Free	10	0.468	1.191	**0.558**	*77
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

Note: * Data entry indicate 2CC UP link measurement result
** Data entry indicate LTE 41 Power class 2(HPUE)
When Power reduction is applied to LTE B41 PC 2(HPUE), The power level of LTE B41 PC became same as the reduction power of LTE B41 PC3

LTE Band 66 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	132322	QPSK	20	21.0	19.57	0.18	Rear	0	1	99	1:1	Free	10	0.328	1.390	0.456	-
1 770	132572	QPSK	20	21.0	19.80	0.16	Rear	1	50	25	1:1	Free	10	0.375	1.318	0.494	-
1 745	132322	QPSK	20	21.0	19.57	0.13	Front	0	1	99	1:1	Free	10	0.336	1.390	0.467	-
1 770	132572	QPSK	20	21.0	19.80	0.17	Front	1	50	25	1:1	Free	10	0.372	1.318	0.490	-
1 745	132322	QPSK	20	21.0	19.57	0.19	Left	0	1	99	1:1	Free	10	0.054	1.390	0.075	-
1 770	132572	QPSK	20	21.0	19.80	0.16	Left	1	50	25	1:1	Free	10	0.051	1.318	0.067	-
1 745	132322	QPSK	20	21.0	19.57	0.19	Right	0	1	99	1:1	Free	10	0.05	1.390	0.069	-
1 770	132572	QPSK	20	21.0	19.80	0.17	Right	1	50	25	1:1	Free	10	0.047	1.318	0.062	-
1 745	132322	QPSK	20	21.0	19.57	0.05	Bottom	0	1	99	1:1	Free	10	0.519	1.390	**0.721**	-
1 770	132572	QPSK	20	21.0	19.80	0.02	Bottom	1	50	25	1:1	Free	10	0.534	1.318	0.704	78
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 71 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
680.5	133297	QPSK	20	25.0	24.36	0.10	Rear	0	1	99	1:1	Free	10	0.499	1.159	**0.578**	79
680.5	133297	QPSK	20	24.0	23.45	0.02	Rear	1	50	49	1:1	Free	10	0.396	1.135	0.449	-
680.5	133297	QPSK	20	25.0	24.36	0.14	Front	0	1	99	1:1	Free	10	0.366	1.159	0.424	-
680.5	133297	QPSK	20	24.0	23.45	0.04	Front	1	50	49	1:1	Free	10	0.280	1.135	0.318	-
680.5	133297	QPSK	20	25.0	24.36	0.05	Left	0	1	99	1:1	Free	10	0.174	1.159	0.202	-
680.5	133297	QPSK	20	24.0	23.45	0.05	Left	1	50	49	1:1	Free	10	0.139	1.135	0.158	-
680.5	133297	QPSK	20	25.0	24.36	0.07	Right	0	1	99	1:1	Free	10	0.321	1.159	0.372	-
680.5	133297	QPSK	20	24.0	23.45	0.11	Right	1	50	49	1:1	Free	10	0.248	1.135	0.281	-
680.5	133297	QPSK	20	25.0	24.36	0.11	Bottom	0	1	99	1:1	Free	10	0.249	1.159	0.289	-
680.5	133297	QPSK	20	24.0	23.45	-0.03	Bottom	1	50	49	1:1	Free	10	0.211	1.135	0.239	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n2 (PCS) Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
1860	372000	DFT-s OFDM QPSK	20	20.0	19.51	-0.06	Rear	0	1	53	1:1	10	0.474	1.119	0.531	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.48	-0.06	Rear	0	50	28	1:1	10	0.401	1.127	0.452	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.51	-0.17	Front	0	1	53	1:1	10	0.603	1.119	0.675	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.48	-0.03	Front	0	50	28	1:1	10	0.465	1.127	0.524	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.51	0.14	Left	0	1	53	1:1	10	0.078	1.119	0.087	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.48	0.09	Left	0	50	28	1:1	10	0.073	1.127	0.082	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.51	0.01	Right	0	1	53	1:1	10	0.106	1.119	0.119	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.48	0.13	Right	0	50	28	1:1	10	0.108	1.127	0.122	-
1860	372000	DFT-s OFDM QPSK	20	20.0	19.51	0.13	Bottom	0	1	53	1:1	10	1.09	1.119	1.220	-
1880	376000	DFT-s OFDM QPSK	20	20.0	19.36	0.15	Bottom	0	1	1	1:1	10	1.01	1.159	1.170	-
1900	380000	DFT-s OFDM QPSK	20	20.0	19.31	0.13	Bottom	0	1	53	1:1	10	1.15	1.172	1.348	80
1860	372000	DFT-s OFDM QPSK	20	20.0	19.48	0.09	Bottom	0	50	28	1:1	10	0.937	1.127	1.056	-
1880	376000	DFT-s OFDM QPSK	20	20.0	19.31	0.17	Bottom	0	50	0	1:1	10	1.02	1.172	1.196	-
1900	380000	DFT-s OFDM QPSK	20	20.0	19.20	0.16	Bottom	0	50	28	1:1	10	1.14	1.202	**1.371**	-
1860	372000	CP QPSK	20	20.0	19.45	0.17	Bottom	1.5	1	1	1:1	10	0.748	1.135	0.849	-
1900	380000	DFT-s OFDM QPSK	20	20.0	19.2	0.03	Bottom	0	50	28	1:1	10	1.03	1.202	1.238	*
1900	380000	DFT-s OFDM QPSK	20	20.0	19.2	0.19	Bottom	0	50	28	1:1	10	1.05	1.202	1.262	**
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

Note: * Data entry indicate Variability measurement.
** Data entry indicate Device holder perturbation measurement.

NR Band n5 (Cell) Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.29	0.06	Rear	0	1	1	1:1	10	0.775	1.178	**0.913**	81
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.19	Rear	0	50	28	1:1	10	0.722	1.194	0.862	-
836.5	167300	DFT-s OFDM QPSK	20	24.0	23.23	0.14	Rear	0	100	0	1:1	10	0.630	1.194	0.752	
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.29	0.01	Front	0	1	1	1:1	10	0.686	1.178	0.808	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.03	Front	0	50	28	1:1	10	0.676	1.194	0.807	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.29	0.01	Left	0	1	1	1:1	10	0.123	1.178	0.145	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.07	Left	0	50	28	1:1	10	0.078	1.194	0.093	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.29	-0.02	Right	0	1	1	1:1	10	0.354	1.178	0.417	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.01	Right	0	50	28	1:1	10	0.303	1.194	0.362	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.29	-0.16	Bottom	0	1	1	1:1	10	0.417	1.178	0.491	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.01	Bottom	0	50	28	1:1	10	0.384	1.194	0.458	-
836.5	167300	CP QPSK	20	23.5	22.73	0.05	Rear	1.5	1	1	1:1	10	0.443	1.194	0.529	
836.5	167300	DFT-s OFDM QPSK	20	25.0	24.23	0.01	Rear	0	50	28	1:1	10	0.547	1.194	0.653	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

Note: * Data entry indicate Variability measurement.

NR Band n41 Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
2592.99	518598	DFT-s OFDM QPSK	100	25	23.98	-0.15	Rear	0	1	137	1:3.7	10	0.164	1.265	0.207	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.92	-0.13	Rear	0	135	69	1:3.7	10	0.172	1.282	0.221	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.98	-0.11	Front	0	1	137	1:3.7	10	0.259	1.265	0.328	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.92	-0.19	Front	0	135	69	1:3.7	10	0.281	1.282	0.360	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.98	-0.19	Left	0	1	137	1:3.7	10	0.065	1.265	0.082	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.92	0.09	Left	0	135	69	1:3.7	10	0.067	1.282	0.086	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.98	-0.13	Right	0	1	137	1:3.7	10	0.114	1.265	0.144	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.92	0.17	Right	0	135	69	1:3.7	10	0.127	1.282	0.163	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.98	-0.19	Top	0	1	137	1:3.7	10	0.488	1.265	0.617	-
2592.99	518598	DFT-s OFDM QPSK	100	25	23.92	0.02	Top	0	135	69	1:3.7	10	0.543	1.282	**0.696**	82
2592.99	518598	CP QPSK	100	25	23.98	0.15	Top	1.5	1	1	1:3.7	10	0.145	1.265	0.204	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

NR Band n66 Hotspot SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		(W/kg)	
1745	349000	DFT-s OFDM QPSK	20	20	19.21	0.01	Rear	0	1	53	1:1	10	0.339	1.199	0.407	-
1745	349000	DFT-s OFDM QPSK	20	20	19.19	0.19	Rear	0	50	28	1:1	10	0.272	1.205	0.328	-
1745	349000	DFT-s OFDM QPSK	20	20	19.21	0.11	Front	0	1	53	1:1	10	0.364	1.199	0.437	-
1745	349000	DFT-s OFDM QPSK	20	20	19.19	0.11	Front	0	50	28	1:1	10	0.291	1.205	0.351	-
1745	349000	DFT-s OFDM QPSK	20	20	19.21	0.13	Left	0	1	53	1:1	10	0.065	1.199	0.078	-
1745	349000	DFT-s OFDM QPSK	20	20	19.19	0.15	Left	0	50	28	1:1	10	0.065	1.205	0.078	-
1745	349000	DFT-s OFDM QPSK	20	20	19.21	0.17	Right	0	1	53	1:1	10	0.066	1.199	0.079	-
1745	349000	DFT-s OFDM QPSK	20	20	19.19	0.13	Right	0	50	28	1:1	10	0.063	1.205	0.076	-
1745	349000	DFT-s OFDM QPSK	20	20	19.21	0.13	Bottom	0	1	53	1:1	10	0.546	1.199	0.655	-
1745	349000	DFT-s OFDM QPSK	20	20	19.19	0.19	Bottom	0	50	28	1:1	10	0.595	1.205	**0.717**	83
1770	354000	CP QPSK	20	20	19.13	0.08	Rear	1.5	1	1	1:1	10	0.453	1.222	0.553	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

NR Band n71 Hotspot SAR															
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)				(W/kg)		(W/kg)	
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.65	-0.06	Rear	0	1	104	1:1	0.449	1.084	0.487	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.47	0.06	Rear	0	50	28	1:1	0.465	1.130	**0.525**	84
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.65	0.01	Front	0	1	104	1:1	0.314	1.084	0.340	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.47	0.05	Front	0	50	28	1:1	0.323	1.130	0.365	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.65	-0.05	Left	0	1	104	1:1	0.123	1.084	0.133	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.47	0.04	Left	0	50	28	1:1	0.134	1.130	0.151	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.65	0.01	Right	0	1	104	1:1	0.2	1.084	0.217	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.47	0.01	Right	0	50	28	1:1	0.221	1.130	0.250	-
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.65	-0.14	Bottom	0	1	104	1:1	0.263	1.084	0.285	
680.5	136100	DFT-s OFDM QPSK	20	25.0	24.47	-0.16	Bottom	0	50	28	1:1	0.264	1.130	0.298	
680.5	136100	CP QPSK	20	23.5	22.55	0.05	Rear	0	1	1	1:1	0.317	1.245	0.395	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								

DTS Hotspot SAR																
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
2 437	6	802.11b	20	1	21	19.87	-0.13	Rear	99.0	10	0.517	0.320	1.297	1.010	0.419	-
2 437	6	802.11b	20	1	21	19.87	0.01	Front	99.0	10	0.514	0.220	1.297	1.010	0.288	-
2 437	6	802.11b	20	1	21	19.87	0.11	Left	99.0	10	1.21	0.689	1.297	1.010	0.904	85
2 462	11	802.11b	20	11	21	19.65	0.14	Left	99.0	10	1.04	0.507	1.365	1.010	0.699	-
2 437	6	802.11b	20	1	21	19.87	0.01	Top	99.0	10	0.37	0.130	1.297	1.010	0.170	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								

5 GHz WLAN Hotspot SAR																
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 745	149	802.11a	20	6	18	16.55	-0.19	Rear	93.8	10	0.319	0.134	1.396	1.066	0.199	-
5 745	149	802.11a	20	6	18	16.55	0.01	Front	93.8	10	0.15	0.07	1.396	1.066	0.104	-
5 745	149	802.11a	20	6	18	16.55	-0.15	Left	93.8	10	0.446	0.189	1.396	1.066	**0.281**	86
5 745	149	802.11a	20	6	18	16.55	0.16	Top	93.8	10	0.0853	0.038	1.396	1.066	0.057	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								

DSS Tethering SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Distance	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dBm)	(dBm)	(dB)		(mm)	(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	9.5	8.74	-0.13	Rear	10	0.023	1.191	1.302	0.0357	-
2 441	39	Bluetooth DH5	9.5	8.74	0.15	Front	10	0.019	1.191	1.302	0.030	-
2 441	39	Bluetooth DH5	9.5	8.74	0.01	Left	10	0.037	1.191	1.302	**0.057**	87
2 441	39	Bluetooth DH5	9.5	8.74	-0.15	Top	10	0.011	1.191	1.302	0.017	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg (mW/g) Averaged over 1 gram					

13.4 Phablet SAR Measurement Considerations

Per FCC KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is greater than 160 mm and less than 200 mm. Therefore, extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR >1.2 W/kg. When hotspot mode applies, 10g SAR required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1g SAR > 1.2 W/kg.

13.5 Phablet SAR Measurement Results

CDMA BC0 Phablet SAR 10g															
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)					(mm)	(W/kg)		(W/kg)	
836.52	384	CDMA BC0	EVDO Rev.0	25.5	24.35	-0.11	Rear	OFF	1:1	Free	0	1.34	1.303	1.75	147

PCS CDMA Phablet SAR 10g															
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)					(mm)	(W/kg)		(W/kg)	
1 880	600	PCS CDMA	EVDO Rev.0	25.5	25.19	0.07	Rear	OFF	1:1	Free	8	1.23	1.074	1.321	-
1851.25	25	PCS CDMA	EVDO Rev.0	25.5	25.04	-0.06	Front	OFF	1:1	Free	6	1.7	1.112	1.890	-
1 880	600	PCS CDMA	EVDO Rev.0	25.5	25.19	0.06	Front	OFF	1:1	Free	6	1.94	1.074	2.084	
1908.75	1175	PCS CDMA	EVDO Rev.0	25.5	25.01	-0.03	Front	OFF	1:1	Free	6	1.98	1.119	2.216	
1 880	600	PCS CDMA	EVDO Rev.0	25.5	25.19	0.18	Bottom	OFF	1:1	Free	12	1.68	1.074	1.804	-
1 880	600	PCS CDMA	EVDO Rev.0	25.5	25.19	-0.10	Left	N/A	1:1	Free	0	0.684	1.074	0.735	-
1 880	600	PCS CDMA	EVDO Rev.0	25.5	25.19	0.10	Right	N/A	1:1	Free	0	0.877	1.074	0.942	-
1 880	600	PCS CDMA	EVDO Rev.0	21.5	21.13	0.01	Rear	ON	1:1	Grip	0	1.14	1.089	1.241	-
1851.25	25	PCS CDMA	EVDO Rev.0	21.5	21.19	0.12	Front	ON	1:1	Grip	0	2.22	1.074	2.384	-
1 880	600	PCS CDMA	EVDO Rev.0	21.5	21.13	0.13	Front	ON	1:1	Grip	0	2.32	1.089	2.526	-
1908.75	1175	PCS CDMA	EVDO Rev.0	21.5	21.11	0.16	Front	ON	1:1	Grip	0	2.3	1.094	2.516	-
1851.25	25	PCS CDMA	EVDO Rev.0	21.5	21.19	0.15	Bottom	ON	1:1	Grip	0	2.73	1.074	**2.932**	88
1 880	600	PCS CDMA	EVDO Rev.0	21.5	21.13	0.15	Bottom	ON	1:1	Grip	0	2.52	1.089	2.744	-
1908.75	1175	PCS CDMA	EVDO Rev.0	21.5	21.11	0.14	Bottom	ON	1:1	Grip	0	2.25	1.094	2.461	-
1851.25	25	PCS CDMA	EVDO Rev.0	21.5	21.19	0.12	Bottom	ON	1:1	Grip	0	2.68	1.074	2.878	*
1 880	600	PCS CDMA	EVDO Rev.0	22.5	21.95	0.06	Rear	Ear jack	1:1	E/J	0	0.383	1.135	0.435	-
1 880	600	PCS CDMA	EVDO Rev.0	22.5	21.95	0.08	Front		1:1	E/J	0	0.693	1.135	0.787	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Hand 4.0 W/kg Averaged over 10gram

Note: * Data entry indicate Variability measurement.

GSM 1900 Phablet SAR 10g														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1 880	661	GPRS 3Tx	27.5	26.15	0.17	Rear	OFF	1:2.77	Free	8	0.468	1.365	0.639	-
1 880	661	GPRS 3Tx	27.5	26.15	0.14	Front	OFF	1:2.77	Free	6	0.777	1.365	1.060	-
1 880	661	GPRS 3Tx	27.5	26.15	0.04	Bottom	OFF	1:2.77	Free	12	0.700	1.365	0.955	-
1 880	661	GPRS 3Tx	27.5	26.15	0.13	Left	N/A	1:2.77	Free	0	0.178	1.365	0.243	-
1 880	661	GPRS 3Tx	27.5	26.15	0.10	Right	N/A	1:2.77	Free	0	0.289	1.365	0.394	-
1 880	661	GPRS 4Tx	23.0	21.79	0.19	Rear	ON	1:2.075	Grip	0	0.632	1.321	0.835	-
1 880	661	GPRS 4Tx	23.0	21.79	0.01	Front	ON	1:2.075	Grip	0	1.01	1.321	1.335	-
1 880	661	GPRS 4Tx	23.0	21.79	-0.05	Bottom	ON	1:2.075	Grip	0	1.07	1.321	**1.414**	89
1 880	661	GPRS 3Tx	26.5	25.6	0.05	Rear	Ear jack	1:2.77	E/J	0	0.376	1.230	0.463	-
1 880	661	GPRS 3Tx	26.5	25.6	0.01	Front		1:2.77	E/J	0	0.645	1.230	0.794	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

UMTS 1700 Phablet SAR 10g														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1732.4	1412	RMC	24.0	22.91	0.12	Rear	OFF	1:1	Free	8	0.396	1.285	0.509	-
1732.4	1412	RMC	24.0	22.91	0.16	Front	OFF	1:1	Free	6	0.552	1.285	0.709	-
1732.4	1412	RMC	24.0	22.91	0.03	Bottom	OFF	1:1	Free	12	0.405	1.285	0.521	-
1732.4	1412	RMC	24.0	22.91	0.17	Left	N/A	1:1	Free	0	0.227	1.285	0.292	-
1732.4	1412	RMC	24.0	22.91	0.16	Right	N/A	1:1	Free	0	0.178	1.285	0.229	-
1732.4	1412	RMC	21.0	19.83	0.13	Rear	ON	1:1	Grip	0	0.937	1.309	1.227	-
1732.4	1412	RMC	21.0	19.83	0.10	Front	ON	1:1	Grip	0	1.4	1.309	**1.833**	90
1732.4	1412	RMC	21.0	19.83	0.15	Bottom	ON	1:1	Grip	0	1.35	1.309	1.767	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

UMTS 1900 Phablet SAR 10g														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1 880.0	9400	RMC	24.0	22.64	0.02	Rear	OFF	1:1	Free	8	1.05	1.368	1.436	-
1852.4	9262	RMC	24.0	22.56	0.14	Front	OFF	1:1	Free	6	1.66	1.393	**2.313**	-
1880	9400	RMC	24.0	22.64	0.17	Front	OFF	1:1	Free	6	1.53	1.368	2.093	
1907.6	9538	RMC	24.0	22.69	-0.11	Front	OFF	1:1	Free	6	1.3	1.352	1.758	
1 880.0	9400	RMC	24.0	22.64	0.11	Bottom	OFF	1:1	Free	12	1.17	1.368	1.600	-
1 880.0	9400	RMC	24.0	22.64	0.19	Left	N/A	1:1	Free	0	0.471	1.368	0.644	-
1 880.0	9400	RMC	24.0	22.64	0.12	Right	N/A	1:1	Free	0	0.606	1.368	0.829	-
1 880.0	9400	RMC	20.0	19.77	-0.19	Rear	ON	1:1	Grip	0	0.901	1.054	0.950	-
1 880.0	9400	RMC	20.0	19.77	0.13	Front	ON	1:1	Grip	0	1.57	1.054	1.655	-
1 852.4	9262	RMC	20.0	19.65	0.14	Bottom	ON	1:1	Grip	0	1.85	1.084	**2.005**	91
1 880.0	9400	RMC	20.0	19.77	0.18	Bottom	ON	1:1	Grip	0	1.72	1.054	1.814	-
1 907.6	9538	RMC	20.0	19.83	0.15	Bottom	ON	1:1	Grip	0	1.55	1.040	1.612	
1 880.0	9400	RMC	21.0	19.80	0.05	Rear	Ear jack	1:1	E/J	0	0.592	1.318	0.780	
1 880.0	9400	RMC	21.0	19.80	0.16	Front		1:1	E/J	0	0.910	1.318	1.200	
1 880.0	9400	AMR	23.0	21.82	0.18	Rear		1:1	E/J	0	0.943	1.312	1.237	
1 880.0	9400	AMR	23.0	21.82	0.16	Front		1:1	E/J	0	1.460	1.312	1.916	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

LTE Band 2 Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
1 900	19100	QPSK	20	24.5	23.75	0.11	Rear	OFF	0	1	0	1:1	Free	8	1.04	1.189	1.236	-
1 900	19100	QPSK	20	23.5	22.83	0.14	Rear	OFF	1	50	0	1:1	Free	8	0.882	1.167	1.029	-
1 860	18700	QPSK	20	24.5	23.68	0.02	Front	OFF	0	1	99	1:1	Free	6	1.87	1.208	2.259	
1 880	18900	QPSK	20	24.5	23.65	0.04	Front	OFF	0	1	99	1:1	Free	6	1.76	1.216	2.140	
1 900	19100	QPSK	20	24.5	23.75	0.03	Front	OFF	0	1	0	1:1	Free	6	1.78	1.189	2.116	-
1 900	19100	QPSK	20	23.5	22.83	0.04	Front	OFF	1	50	0	1:1	Free	6	1.48	1.167	1.727	-
1 900	19100	QPSK	20	23.5	22.81	0.04	Front	OFF	1	100	0	1:1	Free	6	1.55	1.172	1.817	
1 900	19100	QPSK	20	24.5	23.75	0.15	Bottom	OFF	0	1	0	1:1	Free	12	1.61	1.189	1.913	-
1 900	19100	QPSK	20	23.5	22.83	0.10	Bottom	OFF	1	50	0	1:1	Free	12	1.32	1.167	1.540	-
1 900	19100	QPSK	20	24.5	23.75	0.12	Left	N/A	0	1	0	1:1	Free	0	0.557	1.189	0.662	-
1 900	19100	QPSK	20	23.5	22.83	0.17	Left	N/A	1	50	0	1:1	Free	0	0.437	1.167	0.510	-
1 900	19100	QPSK	20	24.5	23.75	0.14	Right	N/A	0	1	0	1:1	Free	0	0.768	1.189	0.913	-
1 900	19100	QPSK	20	23.5	22.83	0.19	Right	N/A	1	50	0	1:1	Free	0	0.631	1.167	0.736	-
1 900	19100	QPSK	20	21.0	19.91	0.16	Rear	ON	0	1	99	1:1	Grip	0	1.24	1.285	1.594	-
1 900	19100	QPSK	20	21.0	19.90	0.11	Rear	ON	0	50	0	1:1	Grip	0	1.24	1.288	1.597	-
1 860	18700	QPSK	20	21.0	19.84	0.12	Front	ON	0	1	99	1:1	Grip	0	2.14	1.306	2.795	-
1 880	18900	QPSK	20	21.0	19.80	-0.10	Front	ON	0	1	99	1:1	Grip	0	2.08	1.318	2.742	-
1 900	19100	QPSK	20	21.0	19.91	0.10	Front	ON	0	1	99	1:1	Grip	0	1.98	1.285	2.545	-
1 860	18700	QPSK	20	21.0	19.83	0.11	Front	ON	0	50	25	1:1	Grip	0	2.23	1.309	2.919	-
1 880	18900	QPSK	20	21.0	19.79	-0.13	Front	ON	0	50	49	1:1	Grip	0	2.18	1.321	2.880	-
1 900	19100	QPSK	20	21.0	19.90	0.10	Front	ON	0	50	0	1:1	Grip	0	2.15	1.288	2.770	-
1 900	19100	QPSK	20	21.0	19.92	0.17	Front	ON	0	100	0	1:1	Grip	0	2.09	1.282	2.680	-
1 860	18700	QPSK	20	21.0	19.84	0.15	Bottom	ON	0	1	99	1:1	Grip	0	2.23	1.306	2.913	-
1 880	18900	QPSK	20	21.0	19.80	0.10	Bottom	ON	0	1	99	1:1	Grip	0	2.11	1.318	2.782	-
1 900	19100	QPSK	20	21.0	19.91	0.17	Bottom	ON	0	1	99	1:1	Grip	0	2.33	1.285	2.995	-
1 860	18700	QPSK	20	21.0	19.83	0.14	Bottom	ON	0	50	25	1:1	Grip	0	2.38	1.309	3.116	-
1 880	18900	QPSK	20	21.0	19.79	0.11	Bottom	ON	0	50	49	1:1	Grip	0	2.21	1.321	2.920	-
1 900	19100	QPSK	20	21.0	19.90	0.18	Bottom	ON	0	50	0	1:1	Grip	0	2.15	1.288	2.770	-
1 900	19100	QPSK	20	21.0	19.92	0.14	Bottom	ON	0	100	0	1:1	Grip	0	2.12	1.282	2.719	-
1 860	18700	QPSK	20	21.0	19.83	0.11	Front	ON	0	50	25	1:1	Grip	0	2.36	1.309	3.090	*
1 860	18700	QPSK	20	21.0	19.83	0.17	Front	ON	0	50	25	1:1	Grip	0	2.38	1.309	**3.116**	92**
1 860	18700	QPSK	20	22.5	21.93	0.01	Rear	Ear jack	0	1	0	1:1	E/J	0	1.44	1.140	1.642	-
1 860	18700	QPSK	20	22.5	21.92	0.18	Rear		0	50	0	1:1	E/J	0	1.49	1.143	1.703	
1 860	18700	QPSK	20	22.5	21.93	0.04	Front		0	1	0	1:1	E/J	0	1.67	1.140	1.904	-
1 860	18700	QPSK	20	22.5	21.92	0.03	Front		0	50	0	1:1	E/J	0	1.570	1.143	1.794	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand 4.0 W/kg Averaged over 10 gram									

Note: * Data entry indicate Variability measurement

** Data entry indicate Device holder perturbation measurement.

LTE Band 7 Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
2 510	20850	QPSK	20	24.0	23.01	0.01	Rear	OFF	0	1	0	1:1	Free	8	0.363	1.256	0.456	-
2 510	20850	QPSK	20	23.0	22.03	-0.06	Rear	OFF	1	50	0	1:1	Free	8	0.300	1.250	0.375	-
2 510	20850	QPSK	20	24.0	23.01	-0.10	Front	OFF	0	1	0	1:1	Free	6	0.527	1.256	0.662	-
2 510	20850	QPSK	20	23.0	22.03	0.09	Front	OFF	1	50	0	1:1	Free	6	0.423	1.250	0.529	-
2 510	20850	QPSK	20	24.0	23.01	-0.01	Bottom	OFF	0	1	0	1:1	Free	12	0.450	1.256	0.565	-
2 510	20850	QPSK	20	23.0	22.03	-0.06	Bottom	OFF	1	50	0	1:1	Free	12	0.371	1.250	0.464	-
2 510	20850	QPSK	20	24.0	23.01	-0.08	Left	N/A	0	1	0	1:1	Free	0	0.504	1.256	0.633	-
2 510	20850	QPSK	20	23.0	22.03	0.19	Left	N/A	1	50	0	1:1	Free	0	0.523	1.250	0.654	-
2 510	20850	QPSK	20	24.0	23.01	0.01	Right	N/A	0	1	0	1:1	Free	0	0.102	1.256	0.128	-
2 510	20850	QPSK	20	23.0	22.03	0.01	Right	N/A	1	50	0	1:1	Free	0	0.110	1.250	0.138	-
2 510	20850	QPSK	20	22.0	21.00	0.11	Rear	ON	0	1	0	1:1	Grip	0	1.2	1.259	1.511	-
2 510	20850	QPSK	20	22.0	21.01	0.16	Rear	ON	0	50	0	1:1	Grip	0	1.22	1.256	1.532	-
2 510	20850	QPSK	20	22.0	21.00	-0.19	Front	ON	0	1	0	1:1	Grip	0	1.49	1.259	1.876	-
2 510	20850	QPSK	20	22.0	21.01	0.10	Front	ON	0	50	0	1:1	Grip	0	1.55	1.256	1.947	-
2 510	20850	QPSK	20	22.0	21.00	-0.17	Bottom	ON	0	1	0	1:1	Grip	0	1.59	1.259	2.002	-
2 535	21100	QPSK	20	22.0	20.86	0.03	Bottom	ON	0	1	0	1:1	Grip	0	1.58	1.300	2.054	-
2 560	21350	QPSK	20	22.0	20.92	1.4	Bottom	ON	0	1	0	1:1	Grip	0	1.4	1.282	1.795	-
2 510	20850	QPSK	20	22.0	21.01	0.06	Bottom	ON	0	50	0	1:1	Grip	0	1.64	1.256	2.060	-
2 535	21100	QPSK	20	22.0	20.87	-0.01	Bottom	ON	0	50	0	1:1	Grip	0	1.63	1.297	2.114	-
2 560	21350	QPSK	20	22.0	20.94	0.01	Bottom	ON	0	50	0	1:1	Grip	0	1.67	1.276	**2.132**	93
2 510	20850	QPSK	20	22.0	20.95	0.07	Bottom	ON	0	100	0	1:1	Grip	0	1.63	1.274	2.076	-
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LTE Band 25 Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
1 882.5	26365	QPSK	20	24.5	23.69	0.06	Rear	OFF	0	1	99	1:1	Free	8	1.27	1.205	1.530	-
1 882.5	26365	QPSK	20	23.5	22.80	0.09	Rear	OFF	1	50	0	1:1	Free	8	1.06	1.175	1.245	-
1 860.0	26140	QPSK	20	24.5	23.22	0.06	Front	OFF	0	1	99	1:1	Free	6	1.81	1.343	2.430	-
1 882.5	26365	QPSK	20	24.5	23.69	0.06	Front	OFF	0	1	99	1:1	Free	6	2.08	1.205	2.506	-
1 905.0	26590	QPSK	20	24.5	22.78	0.07	Front	OFF	0	1	0	1:1	Free	6	1.88	1.486	2.794	-
1 860.0	26140	QPSK	20	23.5	22.26	0.11	Front	OFF	1	50	0	1:1	Free	6	1.23	1.330	1.636	-
1 882.5	26365	QPSK	20	23.5	22.80	0.14	Front	OFF	1	50	0	1:1	Free	6	1.71	1.175	2.009	-
1 905.0	26590	QPSK	20	23.5	21.84	0.18	Front	OFF	1	50	25	1:1	Free	6	1.33	1.466	1.949	-
1 882.5	26365	QPSK	20	23.5	22.81	0.11	Front	OFF	1	100	0	1:1	Free	6	1.55	1.172	1.817	-
1 860.0	26140	QPSK	20	24.5	23.22	0.04	Bottom	OFF	0	1	99	1:1	Free	12	1.48	1.343	1.987	-
1 882.5	26365	QPSK	20	24.5	23.69	0.03	Bottom	OFF	0	1	99	1:1	Free	12	1.69	1.205	2.037	-
1 905.0	26590	QPSK	20	24.5	22.78	-0.03	Bottom	OFF	0	1	0	1:1	Free	12	1.49	1.486	2.214	-
1 882.5	26365	QPSK	20	23.5	22.80	0.01	Bottom	OFF	1	50	0	1:1	Free	12	1.41	1.175	1.657	-
1 882.5	26365	QPSK	20	23.5	22.81	0.03	Bottom	OFF	1	100	0	1:1	Free	12	1.42	1.172	1.665	-
1 882.5	26365	QPSK	20	24.5	23.69	0.17	Left	N/A	0	1	99	1:1	Free	0	0.532	1.205	0.641	-
1 882.5	26365	QPSK	20	23.5	22.80	0.19	Left	N/A	0	50	0	1:1	Free	0	0.438	1.175	0.515	-
1 882.5	26365	QPSK	20	24.5	23.69	0.12	Right	N/A	0	1	99	1:1	Free	0	0.604	1.205	0.728	-
1 882.5	26365	QPSK	20	23.5	22.80	0.11	Right	N/A	0	50	0	1:1	Free	0	0.482	1.175	0.566	-
1 882.5	26365	QPSK	20	21.0	19.77	0.15	Rear	ON	0	1	0	1:1	Grip	0	1.24	1.327	1.646	-
1 882.5	26365	QPSK	20	21.0	19.78	0.11	Rear	ON	0	50	49	1:1	Grip	0	1.29	1.324	1.708	-
1 860.0	26140	QPSK	20	21.0	19.27	0.16	Front	ON	0	1	99	1:1	Grip	0	1.99	1.489	2.964	-
1 882.5	26365	QPSK	20	21.0	19.77	0.19	Front	ON	0	1	99	1:1	Grip	0	2.08	1.327	2.761	-
1 905.0	26590	QPSK	20	21.0	18.83	0.11	Front	ON	0	1	99	1:1	Grip	0	1.7	1.648	2.802	-
1 860.0	26140	QPSK	20	21.0	19.36	0.15	Front	ON	0	50	49	1:1	Grip	0	2.05	1.459	**2.991**	-
1 882.5	26365	QPSK	20	21.0	19.78	0.12	Front	ON	0	50	49	1:1	Grip	0	2.24	1.324	2.967	94
1 905.0	26590	QPSK	20	21.0	18.83	0.07	Front	ON	0	50	49	1:1	Grip	0	1.77	1.648	2.917	-
1 882.5	26365	QPSK	20	21.0	19.76	0.10	Front	ON	0	100	0	1:1	Grip	0	2.17	1.330	2.887	-
1 860.0	26140	QPSK	20	21.0	19.27	0.15	Bottom	ON	0	1	99	1:1	Grip	0	1.56	1.489	2.323	-
1 882.5	26365	QPSK	20	21.0	19.77	0.14	Bottom	ON	0	1	99	1:1	Grip	0	1.68	1.327	2.230	-
1 905.0	26590	QPSK	20	21.0	18.83	0.19	Bottom	ON	0	1	99	1:1	Grip	0	1.43	1.648	2.357	-
1 860.0	26140	QPSK	20	21.0	19.36	0.16	Bottom	ON	0	50	49	1:1	Grip	0	1.6	1.459	2.334	-
1 882.5	26365	QPSK	20	21.0	19.78	0.06	Bottom	ON	0	50	49	1:1	Grip	0	1.57	1.324	2.079	-
1 905.0	26590	QPSK	20	21.0	18.83	0.10	Bottom	ON	0	50	49	1:1	Grip	0	1.45	1.648	2.390	-
1 882.5	26365	QPSK	20	21.0	19.76	0.14	Bottom	ON	0	100	0	1:1	Grip	0	1.78	1.330	2.368	-
1 882.5	26365	QPSK	20	21.0	19.78	0.11	Front	ON	0	50	49	1:1	Grip	0	1.82	1.324	2.410	*
1 860.0	26140	QPSK	20	23	22.09	0.11	Rear	Ear jack	0	1	0	1:1	E/J	0	1.58	1.233	1.948	-
1 905.0	26590	QPSK	20	23	22.13	0.16	Rear		0	50	0	1:1	E/J	0	1.55	1.222	1.894	
1 860.0	26140	QPSK	20	23	22.18	0.05	Front		0	1	50	1:1	E/J	0	1.65	1.208	1.993	-
1 905.0	26590	QPSK	20	23	22.13	0.08	Front		0	50	0	1:1	E/J	0	1.44	1.222	1.759	
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Note: * Data entry indicate Variability measurement.

LTE Band 30 Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
2 310	27710	QPSK	10	23.5	22.45	-0.16	Rear	OFF	0	1	0	1:1	Free	8	0.347	1.274	0.442	-
2 310	27710	QPSK	10	22.5	21.53	-0.10	Rear	OFF	1	25	0	1:1	Free	8	0.278	1.250	0.348	-
2 310	27710	QPSK	10	23.5	22.45	0.09	Front	OFF	0	1	0	1:1	Free	6	0.560	1.274	0.713	-
2 310	27710	QPSK	10	22.5	21.53	-0.01	Front	OFF	1	25	0	1:1	Free	6	0.449	1.250	0.561	-
2 310	27710	QPSK	10	23.5	22.45	-0.15	Bottom	OFF	0	1	0	1:1	Free	12	0.524	1.274	0.667	-
2 310	27710	QPSK	10	22.5	21.53	-0.12	Bottom	OFF	1	25	0	1:1	Free	12	0.420	1.250	0.525	-
2 310	27710	QPSK	10	23.5	22.45	-0.18	Left	N/A	0	1	0	1:1	Free	0	0.568	1.274	0.723	-
2 310	27710	QPSK	10	22.5	21.53	-0.12	Left	N/A	1	25	0	1:1	Free	0	0.457	1.250	0.571	-
2 310	27710	QPSK	10	23.5	22.45	-0.16	Right	N/A	0	1	0	1:1	Free	0	0.401	1.274	0.511	-
2 310	27710	QPSK	10	22.5	21.53	0.11	Right	N/A	1	25	0	1:1	Free	0	0.320	1.250	0.400	-
2 310	27710	QPSK	10	22.0	20.48	-0.12	Rear	ON	0	1	0	1:1	Grip	0	0.717	1.419	1.017	-
2 310	27710	QPSK	10	22.0	20.50	-0.11	Rear	ON	0	25	0	1:1	Grip	0	0.744	1.413	1.051	-
2 310	27710	QPSK	10	22.0	20.48	0.17	Front	ON	0	1	0	1:1	Grip	0	1.12	1.419	1.589	-
2 310	27710	QPSK	10	22.0	20.50	0.11	Front	ON	0	25	0	1:1	Grip	0	1.14	1.413	1.610	-
2 310	27710	QPSK	10	22.0	20.48	0.16	Bottom	ON	0	1	0	1:1	Grip	0	1.58	1.419	2.242	-
2 310	27710	QPSK	10	22.0	20.50	0.12	Bottom	ON	0	25	0	1:1	Grip	0	1.62	1.413	2.288	-
2 310	27720	QPSK	10	22.0	20.56	0.13	Bottom	ON	0	50	0	1:1	Grip	0	1.67	1.393	**2.327**	95
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand 4.0 W/kg Averaged over 10 gram									

LTE Band 66 Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
1 745	132322	QPSK	20	25.0	24.33	0.04	Rear	OFF	0	1	99	1:1	Free	8	0.873	1.167	1.019	-
1 770	132575	QPSK	20	24.0	23.41	0.07	Rear	OFF	1	50	25	1:1	Free	8	0.744	1.146	0.852	-
1 745	132322	QPSK	20	25.0	24.33	0.12	Front	OFF	0	1	99	1:1	Free	6	1.32	1.167	1.540	-
1 770	132575	QPSK	20	24.0	23.41	0.16	Front	OFF	1	50	25	1:1	Free	6	1.07	1.146	1.226	-
1 745	132322	QPSK	20	25.0	24.33	0.08	Bottom	OFF	0	1	99	1:1	Free	12	0.790	1.167	0.922	-
1 770	132575	QPSK	20	24.0	23.41	0.08	Bottom	OFF	1	50	25	1:1	Free	12	0.795	1.146	0.911	-
1 745	132322	QPSK	20	25.0	24.33	0.11	Left	N/A	0	1	99	1:1	Free	0	0.457	1.167	0.533	-
1 770	132575	QPSK	20	24.0	23.41	0.15	Left	N/A	1	50	25	1:1	Free	0	0.371	1.146	0.425	-
1 745	132322	QPSK	20	25.0	24.33	0.14	Right	N/A	0	1	99	1:1	Free	0	0.345	1.167	0.403	-
1 770	132575	QPSK	20	24.0	23.41	0.10	Right	N/A	1	50	25	1:1	Free	0	0.273	1.146	0.313	-
1 745	132322	QPSK	20	22.0	21.49	0.11	Rear	ON	0	1	99	1:1	Grip	0	1.59	1.125	1.788	-
1 770	132575	QPSK	20	22.0	21.48	0.16	Rear	ON	0	50	0	1:1	Grip	0	1.26	1.127	1.420	-
1 720	132072	QPSK	20	22.0	21.35	0.01	Front	ON	0	1	99	1:1	Grip	0	1.79	1.161	2.079	-
1 745	132322	QPSK	20	22.0	21.49	0.11	Front	ON	0	1	99	1:1	Grip	0	2.05	1.125	2.305	-
1 770	132572	QPSK	20	22.0	21.48	0.10	Front	ON	0	1	0	1:1	Grip	0	2.19	1.127	2.469	
1 720	132072	QPSK	20	22.0	21.31	0.14	Front	ON	0	50	0	1:1	Grip	0	1.87	1.172	2.192	
1 745	132322	QPSK	20	22.0	21.47	0.08	Front	ON	0	50	49	1:1	Grip	0	2.07	1.130	2.339	
1 770	132572	QPSK	20	22.0	21.48	0.15	Front	ON	0	50	0	1:1	Grip	0	2.3	1.127	2.593	
1 745	132322	QPSK	20	22.0	21.52	0.12	Front	ON	0	100	0	1:1	Grip	0	2.28	1.117	2.546	
1 720	132072	QPSK	20	22.0	21.35	0.18	Bottom	ON	0	1	99	1:1	Grip	0	2.3	1.161	2.671	-
1 745	132322	QPSK	20	22.0	21.49	0.12	Bottom	ON	0	1	99	1:1	Grip	0	2.21	1.125	2.485	-
1 770	132572	QPSK	20	22.0	21.48	0.19	Bottom	ON	0	1	0	1:1	Grip	0	2.43	1.127	2.739	-
1 720	132072	QPSK	20	22.0	21.31	0.17	Bottom	ON	0	50	0	1:1	Grip	0	2.34	1.172	2.743	-
1 745	132322	QPSK	20	22.0	21.47	0.19	Bottom	ON	0	50	49	1:1	Grip	0	2.3	1.130	2.599	-
1 770	132572	QPSK	20	22.0	21.48	0.18	Bottom	ON	0	50	0	1:1	Grip	0	2.52	1.127	**2.841**	96
1 745	132322	QPSK	20	22.0	21.52	0.19	Bottom	ON	0	100	0	1:1	Grip	0	2.49	1.117	2.781	-
1 770	132572	QPSK	20	22.0	21.48	2.52	Bottom	ON	0	50	0	1:1	Grip	0	2.51	1.127	2.829	*

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Note: * Data entry indicate Variability measurement.

NR Band n2 (PCS) Phablet SAR 10g																	
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
1900	380000	DFT-s OFDM QPSK	20	25.0	24.08	0.03	Rear	OFF	0	1	104	1:1	8	0.975	1.236	1.205	-
1900	380000	DFT-s OFDM QPSK	20	25.0	23.91	-0.05	Rear	OFF	0	50	28	1:1	8	1.08	1.285	1.388	-
1860	372000	DFT-s OFDM QPSK	20	25.0	24.00	-0.07	Front	OFF	0	1	104	1:1	6	1.45	1.259	1.825	-
1880	376000	DFT-s OFDM QPSK	20	25.0	24.03	-0.09	Front	OFF	0	1	104	1:1	6	1.36	1.250	1.700	-
1900	380000	DFT-s OFDM QPSK	20	25.0	24.08	-0.01	Front	OFF	0	1	104	1:1	6	1.66	1.236	2.052	-
1860	372000	DFT-s OFDM QPSK	20	25.0	23.85	0.02	Front	OFF	0	50	28	1:1	6	1.25	1.303	1.629	-
1880	376000	DFT-s OFDM QPSK	20	25.0	23.89	0.03	Front	OFF	0	50	28	1:1	6	1.31	1.291	1.691	-
1900	380000	DFT-s OFDM QPSK	20	25.0	23.91	0.02	Front	OFF	0	50	28	1:1	6	1.72	1.285	2.211	-
1860	372000	DFT-s OFDM QPSK	20	24.0	22.95	-0.06	Front	OFF	1	100	0	1:1	6	0.987	1.274	1.257	-
1860	372000	DFT-s OFDM QPSK	20	25.0	24.00	0.01	Bottom	OFF	0	1	104	1:1	12	1.27	1.259	1.599	-
1880	376000	DFT-s OFDM QPSK	20	25.0	24.03	0.09	Bottom	OFF	0	1	104	1:1	12	1.46	1.250	1.825	-
1900	380000	DFT-s OFDM QPSK	20	25.0	24.08	0.11	Bottom	OFF	0	1	104	1:1	12	1.62	1.236	2.002	-
1900	380000	DFT-s OFDM QPSK	20	25.0	23.91	0.08	Bottom	OFF	0	50	28	1:1	12	1.53	1.285	1.966	-
1860	372000	DFT-s OFDM QPSK	20	24.0	22.95	0.03	Bottom	OFF	1	100	0	1:1	12	1.03	1.274	1.312	-
1900	380000	DFT-s OFDM QPSK	20	25.0	24.08	0.15	Left	N/A	0	1	104	1:1	0	0.399	1.236	0.493	-
1900	380000	DFT-s OFDM QPSK	20	25.0	23.91	0.16	Left	N/A	0	50	28	1:1	0	0.428	1.285	0.550	-
1900	380000	DFT-s OFDM QPSK	20	25.0	24.08	0.17	Right	N/A	0	1	104	1:1	0	0.629	1.236	0.777	-
1900	380000	DFT-s OFDM QPSK	20	25.0	23.91	0.16	Right	N/A	0	50	28	1:1	0	0.672	1.285	0.864	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.41	0.09	Rear	ON	0	1	53	1:1	0	1.53	1.146	1.753	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.29	-0.06	Rear	ON	0	50	28	1:1	0	1.57	1.178	1.849	-
1860	372000	DFT-s OFDM QPSK	20	22.0	21.06	-0.17	Front	ON	0	1	53	1:1	0	2.42	1.242	3.005	-
1880	376000	DFT-s OFDM QPSK	20	22.0	21.17	-0.14	Front	ON	0	1	53	1:1	0	2.54	1.211	3.075	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.41	-0.01	Front	ON	0	1	53	1:1	0	2.53	1.146	2.898	-
1860	372000	DFT-s OFDM QPSK	20	22.0	21.04	-0.19	Front	ON	0	50	28	1:1	0	2.45	1.247	3.056	-
1880	376000	DFT-s OFDM QPSK	20	22.0	21.08	0.18	Front	ON	0	50	28	1:1	0	2.52	1.236	**3.115**	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.29	0.11	Front	ON	0	50	28	1:1	0	2.61	1.178	3.074	97
1900	380000	DFT-s OFDM QPSK	20	22.0	21.32	0.01	Front	ON	0	100	0	1:1	0	2.02	1.169	2.362	-
1860	372000	DFT-s OFDM QPSK	20	22.0	21.06	0.12	Bottom	ON	0	1	53	1:1	0	1.67	1.242	2.074	-
1880	376000	DFT-s OFDM QPSK	20	22.0	21.17	0.19	Bottom	ON	0	1	53	1:1	0	2.32	1.211	2.809	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.41	0.13	Bottom	ON	0	1	53	1:1	0	2.21	1.146	2.532	-
1860	372000	DFT-s OFDM QPSK	20	22.0	21.04	0.13	Bottom	ON	0	50	28	1:1	0	1.68	1.247	2.096	-
1880	376000	DFT-s OFDM QPSK	20	22.0	21.08	0.18	Bottom	ON	0	50	28	1:1	0	2.33	1.236	2.880	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.29	0.10	Bottom	ON	0	50	28	1:1	0	2.34	1.178	2.756	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.32	0.11	Bottom	ON	0	100	0	1:1	0	2.24	1.169	2.620	-
1900	380000	CP QPSK	20	22.0	21.15	-0.10	Front	ON	0	1	1	1:1	0	2.5	1.216	3.040	-
1900	380000	DFT-s OFDM QPSK	20	22.0	21.29	0.11	Front	ON	0	50	28	1:1	0	2.59	1.178	3.050	*
1880	376000	DFT-s OFDM QPSK	20	22.0	21.08	0.17	Front	ON	0	50	28	1:1	0	2.47	1.236	3.053	**
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population														Hand-4.0 W/kg Averaged over 10 gram			

Note: * Data entry indicate Variability measurement

** Data entry indicate Device holder perturbation measurement.

NR Band n66 (PCS) Phablet SAR 10g																	
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.14	Rear	OFF	0	1	53	1:1	8	0.376	1.052	0.396	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.03	Rear	OFF	0	50	28	1:1	8	0.396	1.059	0.419	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.04	Front	OFF	0	1	53	1:1	6	0.724	1.052	0.762	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	-0.07	Front	OFF	0	50	28	1:1	6	0.52	1.059	0.551	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.12	Bottom	OFF	0	1	53	1:1	12	0.55	1.052	0.579	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.08	Bottom	OFF	0	50	28	1:1	12	0.419	1.059	0.444	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	-0.11	Left	N/A	0	1	53	1:1	0	0.328	1.052	0.345	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.13	Left	N/A	0	50	28	1:1	0	0.262	1.059	0.278	-
1720	344000	DFT-s OFDM QPSK	20	25	24.78	0.12	Right	N/A	0	1	53	1:1	0	0.294	1.052	0.309	-
1720	344000	DFT-s OFDM QPSK	20	25	24.75	0.12	Right	N/A	0	50	28	1:1	0	0.232	1.059	0.246	-
1745	349000	DFT-s OFDM QPSK	20	22	21.65	-0.10	Rear	ON	0	1	53	1:1	0	1.12	1.084	1.214	-
1745	349000	DFT-s OFDM QPSK	20	22	21.61	-0.13	Rear	ON	0	50	56	1:1	0	1.03	1.094	1.127	-
1745	349000	DFT-s OFDM QPSK	20	22	21.65	-0.01	Front	ON	0	1	53	1:1	0	1.5	1.084	1.626	-
1745	349000	DFT-s OFDM QPSK	20	22	21.61	0.14	Front	ON	0	50	56	1:1	0	1.57	1.094	1.718	-
1720	344000	DFT-s OFDM QPSK	20	22	21.51	0.11	Bottom	ON	0	1	53	1:1	0	2.85	1.119	3.190	-
1745	349000	DFT-s OFDM QPSK	20	22	21.65	0.10	Bottom	ON	0	1	53	1:1	0	2.77	1.084	3.002	-
1770	354000	DFT-s OFDM QPSK	20	22	21.46	0.15	Bottom	ON	0	1	1	1:1	0	2.87	1.132	**3.250**	98
1720	344000	DFT-s OFDM QPSK	20	22	21.48	0.11	Bottom	ON	0	50	28	1:1	0	2.46	1.127	2.773	-
1745	349000	DFT-s OFDM QPSK	20	22	21.61	0.14	Bottom	ON	0	50	56	1:1	0	2.85	1.094	3.118	-
1770	354000	DFT-s OFDM QPSK	20	22	21.47	0.17	Bottom	ON	0	50	0	1:1	0	2.63	1.130	2.971	-
1745	349000	DFT-s OFDM QPSK	20	22	21.61	0.13	Bottom	ON	0	100	0	1:1	0	2.76	1.094	3.019	-
1720	344000	CP QPSK	20	22	21.53	0.16	Bottom	ON	0	1	1	1:1	0	2.33	1.114	2.596	-
1770	354000	DFT-s OFDM QPSK	20	22	21.46	0.11	Bottom	ON	0	1	1	1:1	0	2.81	1.132	3.182	*
1770	354000	DFT-s OFDM QPSK	20	22	21.46	0.16	Bottom	ON	0	1	1	1:1	0	2.81	1.132	3.182	**
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand-4.0 W/kg Averaged over 10 gram								

Note: * Data entry indicate Variability measurement

** Data entry indicate Device holder perturbation measurement.

5 GHz WLAN Phablet SAR 10g																
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor (Duty)	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(mm)	(W/kg)	(W/kg)			(W/kg)	
5 300	60	802.11a	20	6	18	16.91		Rear	93.8	0	1.85					-
5 300	60	802.11a	20	6	18	16.91	0.01	Front	93.8	0	6.17	0.804	1.285	1.066	1.101	-
5 300	60	802.11a	20	6	18	16.91	0.16	Left	93.8	0	9.03	1.13	1.285	1.066	1.548	-
5 300	60	802.11a	20	6	18	16.91		Top	93.8	0	0.736					-
5 500	100	802.11a	20	6	18	16.37	0.03	Rear	93.8	0	3.05	0.651	1.455	1.066	0.700	-
5 500	100	802.11a	20	6	18	16.37	0.01	Front	93.8	0	7.25	0.956	1.455	1.066	1.483	-
5 500	100	802.11a	20	6	18	16.37	-0.10	Left	93.8	0	10.7	1.28	1.455	1.066	**1.985**	99
5 620	124	802.11a	20	6	18	16.23	-0.18	Left	93.8	0	8.19	1.01	1.503	1.066	1.618	-
5 500	100	802.11a	20	6	18	16.37	0.18	Top	93.8	0	1.68	0.153	1.455	1.066	0.237	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram						

13.6 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Procedure.
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 15 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was ≤ 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable hotspot operation (with actual simultaneous transmission of a transmitter with WiFi) was not activated.
12. This Device supports Antenna Impedance Tuner with open loop type for some bands. Per April 2019 TCBC Workshop Notes, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Sec 18 for more information .

CDMA Notes:

1. Head SAR for CDMA2000 mode was tested under RC3/SO55 per FCC KDB Publication 941225 D01v03r01.
2. Body-Worn SAR was tested with 1x RTT with TDSO / SO32 FCH and EVDO Rev A. EVDO Rev0 and TDSO / SO32 FCH+SCH SAR tests were not required per the 3G SAR Test Reduction Procedure in FCC KDB Publication 941225 D01v03r01
3. CDMA Wireless Router SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0 according to KDB 941225 D01v03r01 procedures for data devices. Wireless Router SAR tests for Subtype 2 of Rev.A configurations were not required per the 3G SAR Test Reduction Policy in KDB Publication 941225 D01v03r01.
4. Head SAR was additionally evaluated using EVDO Rev. A to determine compliance for VoIP operations.
5. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

GSM/GPRS Test Notes:

1. This EUT'S GSM and GPRS device class is B.
2. This device supports GPRS VOIP in the head and the body-worn configurations therefore GPRS was additionally evaluated for head and body-worn compliance.
3. Body-Worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
4. Justification for reduced test configurations per KDB 941225 D01v03r01: The source-based time-averaged output power was evaluated for all multi-slot operations. The multi-slot configuration with the highest frame averaged output power including tolerance was evaluated for SAR.
5. Per FCC KDB 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is 1/2 dB, instead of the middle channel, the highest output power channel must be used.
6. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.

UMTS Notes:

1. The 12.2 kbps RMC mode is the primary mode per KDB 941225 D01v03r01.
2. UMTS SAR was tested under RMC 12.2 kbps with HSPA inactive per KDB publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
3. Per FCC KDB 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the channel highest output power channel was used.

LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Consideration for LTE Devices in FCC KDB 941225 D05v02r05.
2. According to FCC KDB 941225 D05v02r05:
   When the reported SAR is ≤ 0.8 W/kg, testing of the 100% RB allocation and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the 1RB, 50%RB and 100%RB allocation with highest output power for that channel.
   Only one channel, and as reported SAR values for 1RB allocation and 50%RB allocation were less than 1.45W/Kg only the highest power RB offset for each allocation was required.
3. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to target MPR is indicated alongside the SAR results.
4. When Power reduction is applied, MPR is 0
5. A-MPR was disabled for all SAR tests by setting NS=01 on the base station simulator.
6. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) LTE TDD Band 41 SAR measured at the highest output power channel for each test configuration is ≤ 0.6 W/kg then testing at the other channels is not required for such test configurations.
7. TDD LTE (Power Class 3) was tested using UL-DL configuration 0 with 6 UL sub frames and 2S sub frames using extended cyclic prefix only and special sub frame configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix.

Per 3GPP 36.211 Sec. 4, the duty factor using extended cyclic prefix is 0.633(cf=1.58).

8. Per KDB 941225 D05Av01r02, SAR for LTE Carrier Aggregation operations was not needed because the maximum average output power in LTE CA mode was not > 0.25 dB higher than the maximum output power when downlink CA was not activated.
9. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The Highest available duty cycle for Power Class 2 operations is 43.3% using UL-DL configuration 1. Per May TCB Workshop notes, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions.
10. This device supports LTE Carrier Aggregation(CA) in Uplink for LTE 41 with two component carriers in the uplink. SAR measurements and conducted powers were evaluated per Fall 2017 TCBC Workshop notes (LTE Carrier aggregation).
    Because the maximum output for UL CA of LTE 41 is ≤ standalone LTE mode (without CA),
    SAR for LTE B41 Up link CA was performed at the highest standalone SAR configuration without CA and also UL CA SAR is not required for all required test channels, Because the reported SAR for UL CA configuration is < 1.4 W/kg.
11. SAR test reduction is applied using the following criteria:
    Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is >0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are >0.8 W/kg, testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation <1.45 W/kg. Testing for 16-QAM modulation is not required because the reported SAR for QPSK is <1.45 W/kg and its output power is not more than 0.5 dB higher than that a QPSK. Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is <1.45 W/kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

NR Notes:

1. NR implementation of n71, n5, n66, n2, and n41 is limited to EN-DC operations only, with LTE Bands 2/512/66 acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
3. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
4. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
5. For final implementation, TDD NR slot configuration is synchronized using maximum duty cycle of 25%. SAR testing was performed using FTM mode with a 25% duty cycle applied to match final duty cycle.

WLAN Notes:

1. For held-to-ear and hotspot operations, the initial test position procedures were applied. For initial test position, the highest extrapolated peak SAR will be used. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g SAR and ≤ 1.0 W/kg for 10g SAR, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR results is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10g SAR or all test position are measured.
2. Per KDB 2482227 D01v02r02 justification for test configurations of 2.4 GHz WiFi Single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11 g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR.
3. Per KDB 2482227 D01v02r02 justification for test configurations of 5 GHz WiFi Single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission mode were not investigated since the highest reported SAR for initial test configuration adjusted by the ration of maximum output powers is less than 1.2 W/kg for 1g SAR and less than 3.0 W/kg for 10 g SAR.
4. When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg or all test channels were measured.
5. The device was configured to transmit continuously at the required data rated, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.

Bluetooth Notes:

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests mode type. Per October 2016 TCBC Workshop Notes, the reported SAR was scaled to 100% transmission duty factor to determine compliance. Please see sec.11 for the time-domain plot and calculation for duty factor of the device.
2. Head and Bluetooth tethering SAR were evaluated for BT BR tethering applications.

14. Simultaneous SAR Analysis

This device is contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per KDB Publication 447498 D01v06 4.3.2, simultaneous transmission SAR test exclusion may be applied when the sum of 1g SAR and 10g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6W/kg for 1g SAR and ≤4 W/kg for 10g SAR. The different test positions in an exposure condition may be considered collectively to determine SAR exclusion according to the sum of 1g or 10g SAR.

14.1 Head SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Summation Scenario with 2.4 GHz WLAN				
Exposure condition	Band	WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)
Head SAR	EVDO BC10 (§90S)	0.275	0.238	0.513
	EVDO BC0 (§22H)	0.399	0.238	0.637
	PCS CDMA/EVDO	0.330	0.238	0.568
	GSM 850	0.298	0.238	0.536
	GPRS 850	0.295	0.238	0.533
	GSM 1900	0.133	0.238	0.371
	GPRS 1900	0.138	0.238	0.376
	UMTS 850	0.203	0.238	0.441
	UMTS 1700	0.121	0.238	0.359
	UMTS 1900	0.297	0.238	0.535
	LTE Band 2	0.316	0.238	0.554
	LTE Band 7	0.112	0.238	0.35
	LTE Band 12	0.135	0.238	0.373
	LTE Band 13	0.243	0.238	0.481
	LTE Band 14	0.228	0.238	0.466
	LTE Band 25	0.295	0.238	0.533
	LTE Band 26	0.207	0.238	0.445
	LTE Band 30	0.130	0.238	0.368
	LTE Band 40 Low	0.002	0.238	0.24
	LTE Band 40 Upper	0.002	0.238	0.24
	LTE Band 41	0.080	0.238	0.318
	LTE Band 66	0.203	0.238	0.441
	LTE Band 71	0.209	0.238	0.447
	NR Band n2	0.298	0.238	0.536
	NR Band n5	0.297	0.238	0.535
	NR Band n41	1.177	0.238	1.415
	NR Band n66	0.110	0.238	0.348
	NR Band n71	0.169	0.238	0.407

Simultaneous Transmission Summation Scenario with 5 GHz WLAN				
Exposure condition	Band	WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)
Head SAR	EVDO BC10 (§90S)	0.275	0.379	0.654
	EVDO BC0 (§22H)	0.399	0.379	0.778
	PCS CDMA/EVDO	0.330	0.379	0.709
	GSM 850	0.298	0.379	0.677
	GPRS 850	0.295	0.379	0.674
	GSM 1900	0.133	0.379	0.512
	GPRS 1900	0.138	0.379	0.517
	UMTS 850	0.203	0.379	0.582
	UMTS 1700	0.121	0.379	0.5
	UMTS 1900	0.297	0.379	0.676
	LTE Band 2	0.316	0.379	0.695
	LTE Band 7	0.112	0.379	0.491
	LTE Band 12	0.135	0.379	0.514
	LTE Band 13	0.243	0.379	0.622
	LTE Band 14	0.228	0.379	0.607
	LTE Band 25	0.295	0.379	0.674
	LTE Band 26	0.207	0.379	0.586
	LTE Band 30	0.130	0.379	0.509
	LTE Band 40 Low	0.002	0.379	0.381
	LTE Band 40 Upper	0.002	0.379	0.381
	LTE Band 41	0.080	0.379	0.459
	LTE Band 66	0.203	0.379	0.582
	LTE Band 71	0.209	0.379	0.588
	NR Band n2	0.298	0.379	0.677
	NR Band n5	0.297	0.379	0.676
	NR Band n41	1.177	0.379	1.556
	NR Band n66	0.110	0.379	0.489
	NR Band n71	0.169	0.379	0.548

Simultaneous Transmission Summation Scenario with Bluetooth				
Exposure condition	Band	WWAN SAR (W/kg)	Bluetooth SAR (W/kg)	∑ 1-g SAR (W/kg)
Head SAR	EVDO BC10 (§90S)	0.275	0.110	0.385
	EVDO BC0 (§22H)	0.399	0.110	0.899
	PCS CDMA/EVDO	0.330	0.110	0.44
	GSM 850	0.298	0.110	0.408
	GPRS 850	0.295	0.110	0.405
	GSM 1900	0.133	0.110	0.243
	GPRS 1900	0.138	0.110	0.248
	UMTS 850	0.203	0.110	0.313
	UMTS 1700	0.121	0.110	0.231
	UMTS 1900	0.297	0.110	0.407
	LTE Band 2	0.316	0.110	0.426
	LTE Band 7	0.112	0.110	0.222
	LTE Band 12	0.135	0.110	0.245
	LTE Band 13	0.243	0.110	0.353
	LTE Band 14	0.228	0.110	0.338
	LTE Band 25	0.295	0.110	0.405
	LTE Band 26	0.207	0.110	0.317
	LTE Band 30	0.130	0.110	0.24
	LTE Band 40 Low	0.002	0.110	0.112
	LTE Band 40 Upper	0.002	0.110	0.112
	LTE Band 41	0.080	0.110	0.19
	LTE Band 66	0.203	0.110	0.313
	LTE Band 71	0.209	0.110	0.319
	NR Band n2	0.298	0.110	0.408
	NR Band n5	0.297	0.110	0.407
	NR Band n41	1.177	0.110	1.287
	NR Band n66	0.110	0.110	0.22
	NR Band n71	0.169	0.110	0.279

14.2 Body-Worn SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Summation Scenario with 2.4 GHz WLAN					
Exposure condition	Distance (mm)	Band	WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)
Body-worn	15	EVDO BC10 (§90S)	0.463	0.202	0.665
		EVDO BC0 (§22H)	0.482	0.202	0.684
		PCS CDMA/EVDO	1.195	0.202	**1.397**
		GSM 850	0.341	0.202	0.543
		GPRS 850	0.545	0.202	0.747
		GSM 1900	0.515	0.202	0.717
		GPRS 1900	0.606	0.202	0.808
		UMTS 850	0.340	0.202	0.542
		UMTS 1700	0.377	0.202	0.579
		UMTS 1900	0.570	0.202	0.772
		LTE Band 2	1.127	0.202	1.329
		LTE Band 7	0.384	0.202	0.586
		LTE Band 12	0.277	0.202	0.479
		LTE Band 13	0.468	0.202	0.67
		LTE Band 14	0.458	0.202	0.66
		LTE Band 25	0.899	0.202	1.101
		LTE Band 26	0.389	0.202	0.591
		LTE Band 30	0.381	0.202	0.583
		LTE Band 40 Low	0.009	0.202	0.211
		LTE Band 40 Upper	0.011	0.202	0.213
		LTE Band 41	0.300	0.202	0.502
		LTE Band 66	0.578	0.202	0.78
		LTE Band 71	0.414	0.202	0.616
		NR Band n2	1.180	0.202	1.382
		NR Band n5	0.462	0.202	0.664
		NR Band n41	0.212	0.202	0.414
		NR Band n66	0.483	0.202	0.685
		NR Band n71	0.286	0.202	0.488

Simultaneous Transmission Summation Scenario with 5 GHz WLAN					
Exposure condition	Distance (mm)	Band	WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)
Body-worn	15	EVDO BC10 (§90S)	0.463	0.164	0.627
		EVDO BC0 (§22H)	0.482	0.164	0.646
		PCS CDMA/EVDO	1.195	0.164	1.359
		GSM 850	0.341	0.164	0.505
		GPRS 850	0.545	0.164	0.709
		GSM 1900	0.515	0.164	0.679
		GPRS 1900	0.606	0.164	0.77
		UMTS 850	0.340	0.164	0.504
		UMTS 1700	0.377	0.164	0.541
		UMTS 1900	0.570	0.164	0.734
		LTE Band 2	1.127	0.164	1.291
		LTE Band 7	0.384	0.164	0.548
		LTE Band 12	0.277	0.164	0.441
		LTE Band 13	0.468	0.164	0.632
		LTE Band 14	0.458	0.164	0.622
		LTE Band 25	0.899	0.164	1.063
		LTE Band 26	0.389	0.164	0.553
		LTE Band 30	0.381	0.164	0.545
		LTE Band 40 Low	0.009	0.164	0.173
		LTE Band 40 Upper	0.011	0.164	0.175
		LTE Band 41	0.300	0.164	0.464
		LTE Band 66	0.578	0.164	0.742
		LTE Band 71	0.414	0.164	0.578
		NR Band n2	1.180	0.164	1.344
		NR Band n5	0.462	0.164	0.626
		NR Band n41	0.212	0.164	0.376
		NR Band n66	0.483	0.164	0.647
		NR Band n71	0.286	0.164	0.45

Simultaneous Transmission Summation Scenario with Bluetooth					
Exposure condition	Distance (mm)	Band	WWAN SAR (W/kg)	Bluetooth SAR (W/kg)	∑ 1-g SAR (W/kg)
Body-worn	15	EVDO BC10 (§90S)	0.463	0.0143	0.477
		EVDO BC0 (§22H)	0.482	0.0143	0.496
		PCS CDMA/EVDO	1.195	0.0143	1.209
		GSM 850	0.341	0.0143	0.355
		GPRS 850	0.545	0.0143	0.559
		GSM 1900	0.515	0.0143	0.529
		GPRS 1900	0.606	0.0143	0.620
		UMTS 850	0.340	0.0143	0.354
		UMTS 1700	0.377	0.0143	0.391
		UMTS 1900	0.570	0.0143	0.584
		LTE Band 2	1.127	0.0143	1.141
		LTE Band 7	0.384	0.0143	0.398
		LTE Band 12	0.277	0.0143	0.291
		LTE Band 13	0.468	0.0143	0.482
		LTE Band 14	0.458	0.0143	0.472
		LTE Band 25	0.899	0.0143	0.913
		LTE Band 26	0.389	0.0143	0.403
		LTE Band 30	0.381	0.0143	0.395
		LTE Band 40 Low	0.009	0.0143	0.023
		LTE Band 40 Upper	0.011	0.0143	0.025
		LTE Band 41	0.300	0.0143	0.314
		LTE Band 66	0.578	0.0143	0.592
		LTE Band 71	0.414	0.0143	0.428
		NR Band n2	1.180	0.0143	1.194
		NR Band n5	0.462	0.0143	0.476
		NR Band n41	0.212	0.0143	0.226
		NR Band n66	0.483	0.0143	0.497
		NR Band n71	0.286	0.0143	0.300

14.3 Hotspot SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Scenario with 2.4G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
CDMA BC10	Rear	0.914	0.419	1.333	No
	Front	0.629	0.288	0.917	No
	Left	0.357	0.904	1.261	No
	Right	0.879		0.879	No
	Top		0.170	0.17	No
	Bottom	0.996		0.996	No
CDMA BC0	Rear	1.360	0.419	1.779	Yes
	Front	1.093	0.288	1.381	No
	Left	0.122	0.904	1.026	No
	Right	0.438		0.438	No
	Top		0.170	0.17	No
	Bottom	0.489		0.489	No
PCS CDMA	Rear	0.426	0.419	0.845	No
	Front	0.225	0.288	0.513	No
	Left	0.062	0.904	0.966	No
	Right	0.090		0.09	No
	Top		0.170	0.17	No
	Bottom	0.996		0.996	No
GSM 850	Rear	0.998	0.419	1.417	No
	Front	0.696	0.288	0.984	No
	Left	0.106	0.904	1.01	No
	Right	0.482		0.482	No
	Top		0.170	0.17	No
	Bottom	0.555		0.555	No
GSM 1900	Rear	0.410	0.419	0.829	No
	Front	0.515	0.288	0.803	No
	Left	0.048	0.904	0.952	No
	Right	0.106		0.106	No
	Top		0.170	0.17	No
	Bottom	1.244		1.244	No
UMTS 850	Rear	0.600	0.419	1.019	No
	Front	0.450	0.288	0.738	No
	Left	0.079	0.904	0.983	No
	Right	0.372		0.372	No
	Top		0.170	0.17	No
	Bottom	0.340		0.34	No
UMTS 1700	Rear	0.353	0.419	0.772	No
	Front	0.366	0.288	0.654	No
	Left	0.071	0.904	0.975	No
	Right	0.057		0.057	No
	Top		0.170	0.17	No
	Bottom	0.619		0.619	No
UMTS 1900	Rear	0.471	0.419	0.89	No
	Front	0.527	0.288	0.815	No
	Left	0.074	0.904	0.978	No
	Right	0.107		0.107	No
	Top		0.170	0.17	No
	Bottom	1.128		1.128	No

Simultaneous Transmission Scenario with 2.4G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
LTE Band 2	Rear	0.648	0.419	1.067	No
	Front	0.813	0.288	1.101	No
	Left	0.085	0.904	0.989	No
	Right	0.139		0.139	No
	Top		0.170	0.17	No
	Bottom	1.332		1.332	No
LTE Band 7	Rear	0.489	0.419	0.908	No
	Front	0.426	0.288	0.714	No
	Left	0.349	0.904	1.253	No
	Right	0.149		0.149	No
	Top		0.170	0.17	No
	Bottom	1.196		1.196	No
LTE Band 12	Rear	0.355	0.419	0.774	No
	Front	0.238	0.288	0.526	No
	Left	0.124	0.904	1.028	No
	Right	0.186		0.186	No
	Top		0.170	0.17	No
	Bottom	0.168		0.168	No
LTE Band 13	Rear	0.611	0.419	1.03	No
	Front	0.426	0.288	0.714	No
	Left	0.227	0.904	1.131	No
	Right	0.559		0.559	No
	Top		0.170	0.17	No
	Bottom	0.430		0.43	No
LTE Band 14	Rear	0.631	0.419	1.05	No
	Front	0.448	0.288	0.736	No
	Left	0.206	0.904	1.11	No
	Right	0.548		0.548	No
	Top		0.170	0.17	No
	Bottom	0.431		0.431	No
LTE Band 25	Rear	0.517	0.419	0.936	No
	Front	0.547	0.288	0.835	No
	Left	0.057	0.904	0.961	No
	Right	0.085		0.085	No
	Top		0.170	0.17	No
	Bottom	1.171		1.171	No
LTE Band 26	Rear	0.643	0.419	1.062	No
	Front	0.468	0.288	0.756	No
	Left	0.111	0.904	1.015	No
	Right	0.325		0.325	No
	Top		0.170	0.17	No
	Bottom	0.419		0.419	No

Simultaneous Transmission Scenario with 2.4G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
LTE Band 30	Rear	0.420	0.419	0.839	No
	Front	0.481	0.288	0.769	No
	Left	0.214	0.904	1.118	No
	Right	0.116		0.116	No
	Top		0.170	0.17	No
	Bottom	1.198		1.198	No
LTE Band 40 Low	Rear	0.024	0.419	0.443	No
	Front	0.022	0.288	0.31	No
	Left	0.009	0.904	0.913	No
	Right	0.001		0.001	No
	Top		0.170	0.17	No
	Bottom	0.069		0.069	No
LTE Band 40 Upper	Rear	0.023	0.419	0.442	No
	Front	0.024	0.288	0.312	No
	Left	0.011	0.904	0.915	No
	Right	0.001		0.001	No
	Top		0.170	0.17	No
	Bottom	0.084		0.084	No
LTE Band 41	Rear	0.189	0.419	0.608	No
	Front	0.200	0.288	0.488	No
	Left	0.123	0.904	1.027	No
	Right	0.049		0.049	No
	Top		0.170	0.17	No
	Bottom	0.558		0.558	No
LTE Band 66	Rear	0.494	0.419	0.913	No
	Front	0.490	0.288	0.778	No
	Left	0.075	0.904	0.979	No
	Right	0.069		0.069	No
	Top		0.170	0.17	No
	Bottom	0.721		0.721	No
LTE Band 71	Rear	0.578	0.419	0.997	No
	Front	0.424	0.288	0.712	No
	Left	0.202	0.904	1.106	No
	Right	0.372		0.372	No
	Top		0.170	0.17	No
	Bottom	0.289		0.289	No
NR Band n2	Rear	0.531	0.419	0.95	No
	Front	0.675	0.288	0.963	No
	Left	0.087	0.904	0.991	No
	Right	0.122		0.122	No
	Top		0.170	0.17	No
	Bottom	1.371		1.371	No

Simultaneous Transmission Scenario with 2.4G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	2.4 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
NR Band n5	Rear	0.913	0.419	1.333	No
	Front	0.808	0.288	0.808	No
	Left	0.145	0.904	1.049	No
	Right	0.417		0.417	No
	Top		0.17	1.332	No
	Bottom	0.491		1.096	No
NR Band n41	Rear	0.221	0.419	1.049	No
	Front	0.360	0.288	0.417	No
	Left	0.086	0.904	0.17	No
	Right	0.163		0.491	No
	Top	0.696	0.17	0.64	No
	Bottom			0.648	No
NR Band n66	Rear	0.553	0.419	0.99	No
	Front	0.437	0.288	0.163	No
	Left	0.078	0.904	0.866	No
	Right	0.079		0	No
	Top		0.17	0.972	No
	Bottom	0.717		0.725	No
NR Band n71	Rear	0.525	0.419	0.982	No
	Front	0.365	0.288	0.079	No
	Left	0.151	0.904	0.17	No
	Right	0.250		0.717	No
	Top		0.17	0.944	No
	Bottom	0.298		0.653	No

Simultaneous Transmission Scenario with 5G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
CDMA BC10	Rear	0.914	0.199	1.113	No
	Front	0.629	0.104	0.733	No
	Left	0.357	0.281	0.638	No
	Right	0.879		0.879	No
	Top		0.057	0.057	No
	Bottom	0.996		0.996	No
CDMA BC0	Rear	1.360	0.199	1.559	No
	Front	1.093	0.104	1.197	No
	Left	0.122	0.281	0.403	No
	Right	0.438		0.438	No
	Top		0.057	0.057	No
	Bottom	0.489		0.489	No
PCS CDMA	Rear	0.426	0.199	0.625	No
	Front	0.225	0.104	0.329	No
	Left	0.062	0.281	0.343	No
	Right	0.090		0.09	No
	Top		0.057	0.057	No
	Bottom	0.996		0.996	No
GSM 850	Rear	0.998	0.199	1.197	No
	Front	0.696	0.104	0.8	No
	Left	0.106	0.281	0.387	No
	Right	0.482		0.482	No
	Top		0.057	0.057	No
	Bottom	0.555		0.555	No
GSM 1900	Rear	0.410	0.199	0.609	No
	Front	0.515	0.104	0.619	No
	Left	0.048	0.281	0.329	No
	Right	0.106		0.106	No
	Top		0.057	0.057	No
	Bottom	1.244		1.244	No
UMTS 850	Rear	0.600	0.199	0.799	No
	Front	0.450	0.104	0.554	No
	Left	0.079	0.281	0.36	No
	Right	0.372		0.372	No
	Top		0.057	0.057	No
	Bottom	0.340		0.34	No
UMTS 1700	Rear	0.353	0.199	0.552	No
	Front	0.366	0.104	0.47	No
	Left	0.071	0.281	0.352	No
	Right	0.057		0.057	No
	Top		0.057	0.057	No
	Bottom	0.619		0.619	No
UMTS 1900	Rear	0.471	0.199	0.67	No
	Front	0.527	0.104	0.631	No
	Left	0.074	0.281	0.355	No
	Right	0.107		0.107	No
	Top		0.057	0.057	No
	Bottom	1.128		1.128	No

Simultaneous Transmission Scenario with 2.4G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
LTE Band 2	Rear	0.648	0.199	0.847	No
	Front	0.813	0.104	0.917	No
	Left	0.085	0.281	0.366	No
	Right	0.139		0.139	No
	Top		0.057	0.057	No
	Bottom	1.332		1.332	No
LTE Band 7	Rear	0.489	0.199	0.688	No
	Front	0.426	0.104	0.53	No
	Left	0.349	0.281	0.63	No
	Right	0.149		0.149	No
	Top		0.057	0.057	No
	Bottom	1.196		1.196	No
LTE Band 12	Rear	0.355	0.199	0.554	No
	Front	0.238	0.104	0.342	No
	Left	0.124	0.281	0.405	No
	Right	0.186		0.186	No
	Top		0.057	0.057	No
	Bottom	0.168		0.168	No
LTE Band 13	Rear	0.611	0.199	0.81	No
	Front	0.426	0.104	0.53	No
	Left	0.227	0.281	0.508	No
	Right	0.559		0.559	No
	Top		0.057	0.057	No
	Bottom	0.430		0.43	No
LTE Band 14	Rear	0.631	0.199	0.83	No
	Front	0.448	0.104	0.552	No
	Left	0.206	0.281	0.487	No
	Right	0.548		0.548	No
	Top		0.057	0.057	No
	Bottom	0.431		0.431	No
LTE Band 25	Rear	0.517	0.199	0.716	No
	Front	0.547	0.104	0.651	No
	Left	0.057	0.281	0.338	No
	Right	0.085		0.085	No
	Top		0.057	0.057	No
	Bottom	1.171		1.171	No
LTE Band 26	Rear	0.643	0.199	0.842	No
	Front	0.468	0.104	0.572	No
	Left	0.111	0.281	0.392	No
	Right	0.325		0.325	No
	Top		0.057	0.057	No
	Bottom	0.419		0.419	No

Simultaneous Transmission Scenario with 5G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
LTE Band 30	Rear	0.420	0.199	0.619	No
	Front	0.481	0.104	0.585	No
	Left	0.214	0.281	0.495	No
	Right	0.116		0.116	No
	Top		0.057	0.057	No
	Bottom	1.198		1.198	No
LTE Band 40 Low	Rear	0.024	0.199	0.223	No
	Front	0.022	0.104	0.126	No
	Left	0.009	0.281	0.29	No
	Right	0.001		0.001	No
	Top		0.057	0.057	No
	Bottom	0.069		0.069	No
LTE Band 40 Upper	Rear	0.023	0.199	0.222	No
	Front	0.024	0.104	0.128	No
	Left	0.011	0.281	0.292	No
	Right	0.001		0.001	No
	Top		0.057	0.057	No
	Bottom	0.084		0.084	No
LTE Band 41	Rear	0.189	0.199	0.388	No
	Front	0.200	0.104	0.304	No
	Left	0.123	0.281	0.404	No
	Right	0.049		0.049	No
	Top		0.057	0.057	No
	Bottom	0.558		0.558	No
LTE Band 66	Rear	0.494	0.199	0.693	No
	Front	0.490	0.104	0.594	No
	Left	0.075	0.281	0.356	No
	Right	0.069		0.069	No
	Top		0.057	0.057	No
	Bottom	0.721		0.721	No
LTE Band 71	Rear	0.578	0.199	0.777	No
	Front	0.424	0.104	0.528	No
	Left	0.202	0.281	0.483	No
	Right	0.372		0.372	No
	Top		0.057	0.057	No
	Bottom	0.289		0.289	No
NR Band n2	Rear	0.531	0.199	0.73	No
	Front	0.675	0.104	0.779	No
	Left	0.087	0.281	0.368	No
	Right	0.122		0.122	No
	Top		0.057	0.057	No
	Bottom	1.371		1.371	No

Simultaneous Transmission Scenario with 5G WLAN (10 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
NR Band n5	Rear	0.913	0.199	1.112	No
	Front	0.808	0.104	0.912	No
	Left	0.145	0.281	0.426	No
	Right	0.417		0.417	No
	Top		0.057	0.057	No
	Bottom	0.491		0.491	No
NR Band n41	Rear	0.221	0.199	0.42	No
	Front	0.360	0.104	0.464	No
	Left	0.086	0.281	0.367	No
	Right	0.163		0.163	No
	Top	0.696	0.057	0.753	No
	Bottom			0	No
NR Band n66	Rear	0.553	0.199	0.752	No
	Front	0.437	0.104	0.541	No
	Left	0.078	0.281	0.359	No
	Right	0.079		0.079	No
	Top		0.057	0.057	No
	Bottom	0.717		0.717	No
NR Band n71	Rear	0.525	0.199	0.724	No
	Front	0.365	0.104	0.469	No
	Left	0.151	0.281	0.432	No
	Right	0.250		0.25	No
	Top		0.057	0.057	No
	Bottom	0.298		0.298	No

Simultaneous Transmission Summation Scenario with Bluetooth					
Exposure condition	Distance (mm)	Band	WWAN SAR (W/kg)	Bluetooth SAR (W/kg)	∑ 1-g SAR (W/kg)
Hotspot	10	EVDO BC10 (§90S)	0.996	0.057	1.053
		EVDO BC0 (§22H)	1.360	0.057	1.417
		PCS CDMA/EVDO	0.996	0.057	1.053
		GPRS 850	0.998	0.057	1.055
		GPRS 1900	1.244	0.057	1.301
		UMTS 850	0.600	0.057	0.657
		UMTS 1700	0.619	0.057	0.676
		UMTS 1900	1.128	0.057	1.185
		LTE Band 2	1.332	0.057	1.389
		LTE Band 7	1.196	0.057	1.253
		LTE Band 12	0.355	0.057	0.412
		LTE Band 13	0.611	0.057	0.668
		LTE Band 14	0.631	0.057	0.688
		LTE Band 25	1.171	0.057	1.228
		LTE Band 26	0.643	0.057	0.700
		LTE Band 30	1.198	0.057	1.255
		LTE Band 40 Low	0.069	0.057	0.126
		LTE Band 40 Upper	0.084	0.057	0.141
		LTE Band 41	0.558	0.057	0.615
		LTE Band 66	0.721	0.057	0.778
		LTE Band 71	0.578	0.057	0.635
		NR Band n2	1.371	0.057	1.428
		NR Band n5	0.913	0.057	0.970
		NR Band n41	0.696	0.057	0.753
		NR Band n66	0.717	0.057	0.774
		NR Band n71	0.525	0.057	0.582

14.4 Phablet SAR Simultaneous Transmission Analysis

Simultaneous Transmission Scenario with 5G WLAN (0 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
CDMA BC0	Rear	1.75	0.700	2.45	No
PCS CDMA	Rear	1.321	0.700	2.021	No
	Front	2.526	1.483	4.009	Yes
	Left	0.735	1.985	2.72	No
	Right	0.942		0.942	No
	Top		0.237	0.237	No
	Bottom	2.932		2.932	No
GSM 1900	Rear	0.835	0	1.535	No
	Front	1.335	1.483	2.818	No
	Left	0.243	1.985	2.228	No
	Right	0.394		0.394	No
	Top		0.237	0.237	No
	Bottom	1.414		1.414	No
UMTS 1700	Rear	1.227	0	1.927	No
	Front	1.833	1.483	3.316	No
	Left	0.292	1.985	2.277	No
	Right	0.229		0.229	No
	Top		0.237	0.237	No
	Bottom	1.767		1.767	No
UMTS 1900	Rear	1.436	0	2.136	No
	Front	2.313	1.483	**3.796**	No
	Left	0.644	1.985	2.629	No
	Right	0.829		0.829	No
	Top		0.237	0.237	No
	Bottom	2.005		2.005	No
LTE Band 2	Rear	1.597	0	2.297	No
	Front	3.116	1.483	4.599	Yes
	Left	0.662	1.985	2.647	No
	Right	0.913		0.913	No
	Top		0.237	0.237	No
	Bottom	3.116		3.116	No
LTE Band 7	Rear	1.532	0	2.232	No
	Front	1.947	1.483	3.43	No
	Left	0.654	1.985	2.639	No
	Right	0.138		0.138	No
	Top		0.237	0.237	No
	Bottom	2.132		2.132	No

Simultaneous Transmission Scenario with 5G WLAN (0 mm)					
Band		WWAN SAR (W/kg)	5 GHz WLAN SAR (W/kg)	∑ 1-g SAR (W/kg)	SPLSR
		1	2	1+2	(Yes/No)
LTE Band 25	Rear	2.964	0.7	3.664	No
	Front	2.991	1.483	4.474	Yes
	Left	0.641	1.985	2.626	No
	Right	0.728		0.728	No
	Top		0.237	0.237	No
	Bottom	2.390		2.39	No
LTE Band 30	Rear	1.051	0.7	1.751	No
	Front	1.610	1.483	3.093	No
	Left	0.723	1.985	2.708	No
	Right	0.511		0.511	No
	Top		0.237	0.237	No
	Bottom	2.327		2.327	No
LTE Band 66	Rear	1.788	0.7	2.488	No
	Front	2.593	1.483	4.076	Yes
	Left	0.533	1.985	2.518	No
	Right	0.403		0.403	No
	Top		0.237	0.237	No
	Bottom	2.841		2.841	No
NR Band 2	Rear	1.849	0.7	2.549	No
	Front	3.115	1.483	4.598	Yes
	Left	0.550	1.985	2.535	No
	Right	0.864		0.864	No
	Top		0.237	0.237	No
	Bottom	2.880		2.88	No
NR Band 66	Rear	1.214	0.7	1.914	No
	Front	1.718	1.483	3.201	No
	Left	0.345	1.985	2.33	No
	Right	0.309		0.309	No
	Top		0.237	0.237	No
	Bottom	3.250		3.25	No

14.4 SAR to Peak Location Separation Ratio (SPLSR)

FCC KDB 447498 D01v06 General RF Exposure Guidance introduces a new formula for calculating the SAR a Peak Location Separation Ratio(SPLSR) between pairs of simultaneously transmitting antennas:

$\boldsymbol{SPLSR}$ =$(\boldsymbol{SAR_1} + \boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i}$

Where:

$\boldsymbol{SAR_1}$ is the highest measured or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

$\boldsymbol{SAR_2}$ is the highest measured of estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

$\boldsymbol{Ri}$ is the separation distance between the pair of simultaneous transmitting antennas, When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of $[(\mathbf{X_1} - \mathbf{X_2})^2 + (\mathbf{Y_1} - \mathbf{Y_2})^2 + (\mathbf{Z_1} - \mathbf{Z_2})^2]$

In order for a pair of simultaneous transmitting antennas with the sum 1-g of SAR> 1.6 W/kg and with the sum 10-g of SAR >4 W/Kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$(\boldsymbol{SAR_1} + \boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i} \leq \mathbf{0.04}$ for 1g SAR and $(\boldsymbol{SAR_1} + \boldsymbol{SAR_2})^{1.5}/\boldsymbol{R_i} \leq \mathbf{0.1}$ for 10g SAR

Per Sec. 14, below simultaneous transmission summations need to be calculated SPLSR.

14.4.1 SPLSR Evaluation

Peak location for SAR Rear side (Active)

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
CDMA PCS	-0.0095	-0.08	-0.206	2.526
CDMA BC0	-0.0065	-0.067	-0.203	1.360
LTE 2	-0.002	-0.0735	-0.206	2.919
LTE 25	-0.0065	-0.0805	-0.204	2.991
LTE 66	-0.008	-0.0805	-0.204	2.593
NR Band 2	-0.011	-0.0845	-0.206	3.115
WLAN 2.4GHz	0.017	0.0566	-0.205	0.419
WLAN 5GHz	-0.065	0.062	-0.206	1.483

14.4.2 SAR to Peak Location Ratio (SPLSR) Figures

CDMA PCS SAR 10g (W/kg)	5GHz WLAN SAR 10g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
2.526	1.483	4.009	152.461	0.053	#1

CDMA PCS SAR 1g (W/kg)	2.4GHz WLAN SAR 1g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
1.360	0.419	1.779	125.830	0.019	#2

NR Band 2 SAR 10g (W/kg)	5GHz WLAN SAR 10g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
3.115	1.483	4.598	156.135	0.063	#3

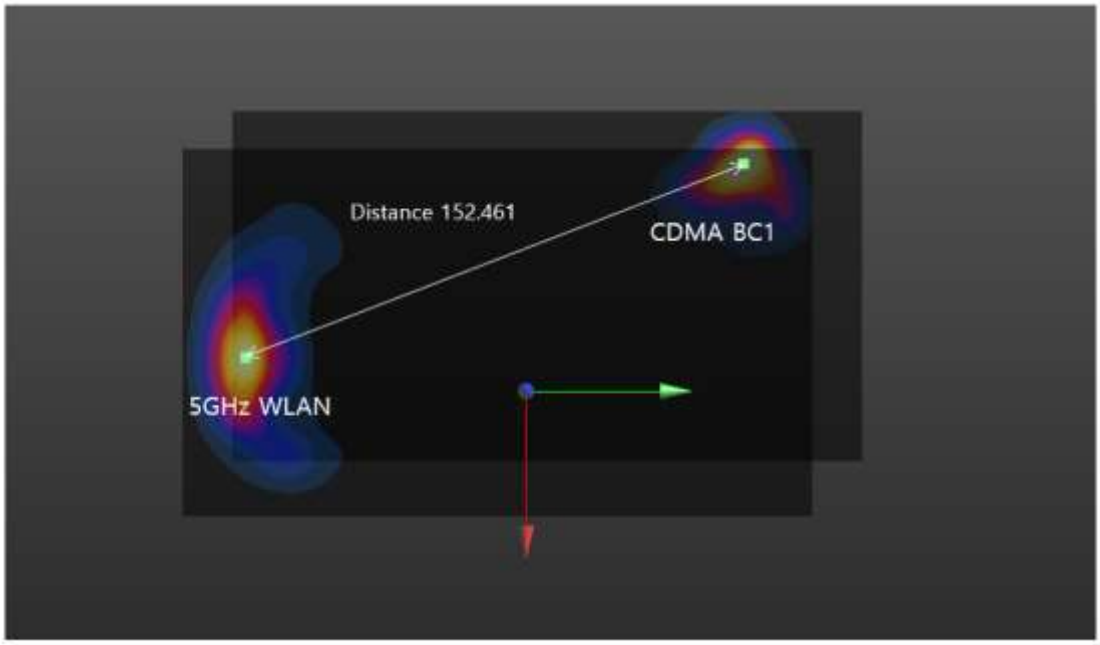
LTE Band 2 SAR 10g (W/kg)	5GHz WLAN SAR 10g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
2.919	1.483	4.402	149.430	0.062	#4

LTE Band 25 SAR 10g (W/kg)	5GHz WLAN SAR 10g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
2.991	1.483	4.474	154.054	0.061	#5

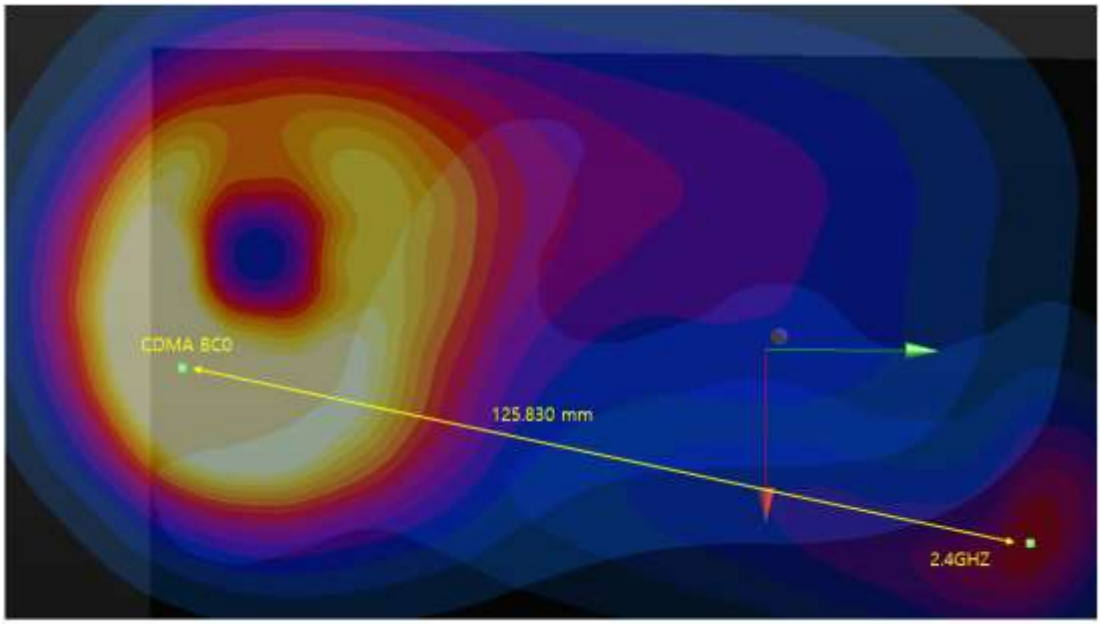
LTE Band 66 SAR 10g (W/kg)	5GHz WLAN SAR 10g (W/kg)	Sum 1g SAR 1+2	Peak SAR Seperation Distance (mm)	SPLSR	Plot No
1	2				
2.593	1.483	4.076	153.490	0.054	#6

14.5 SPLSR Plot

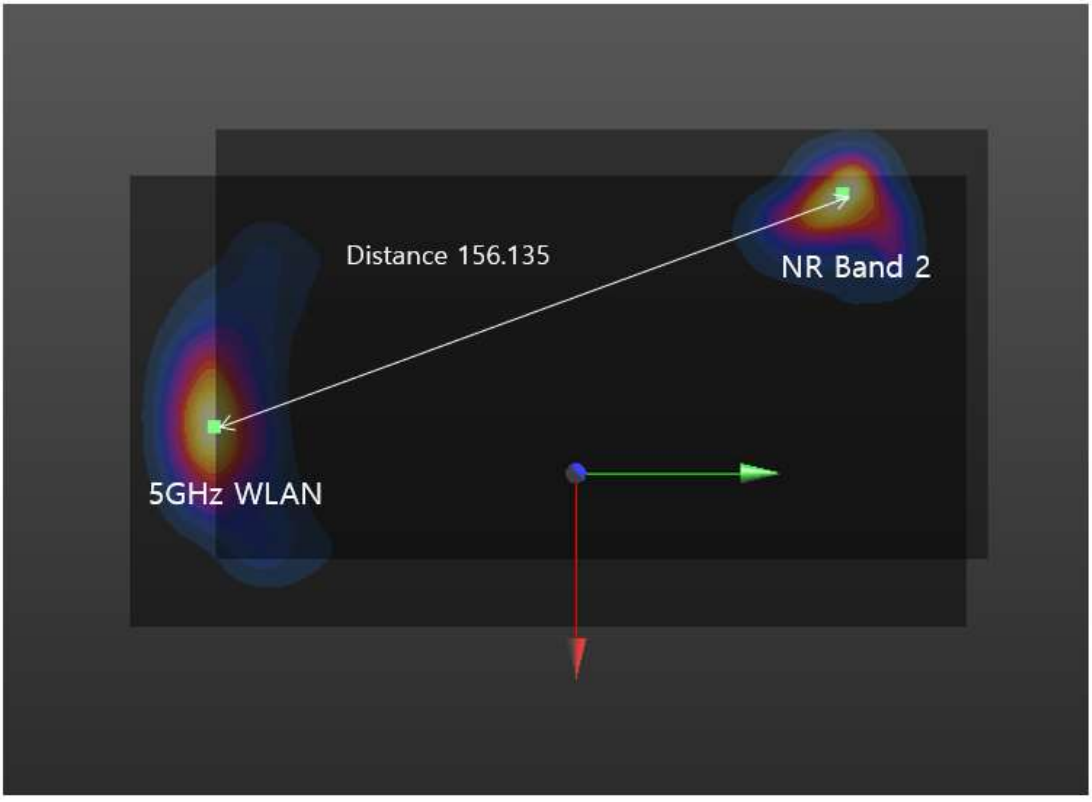
Plot #1 CDMA PCS + WLAN 5GHz



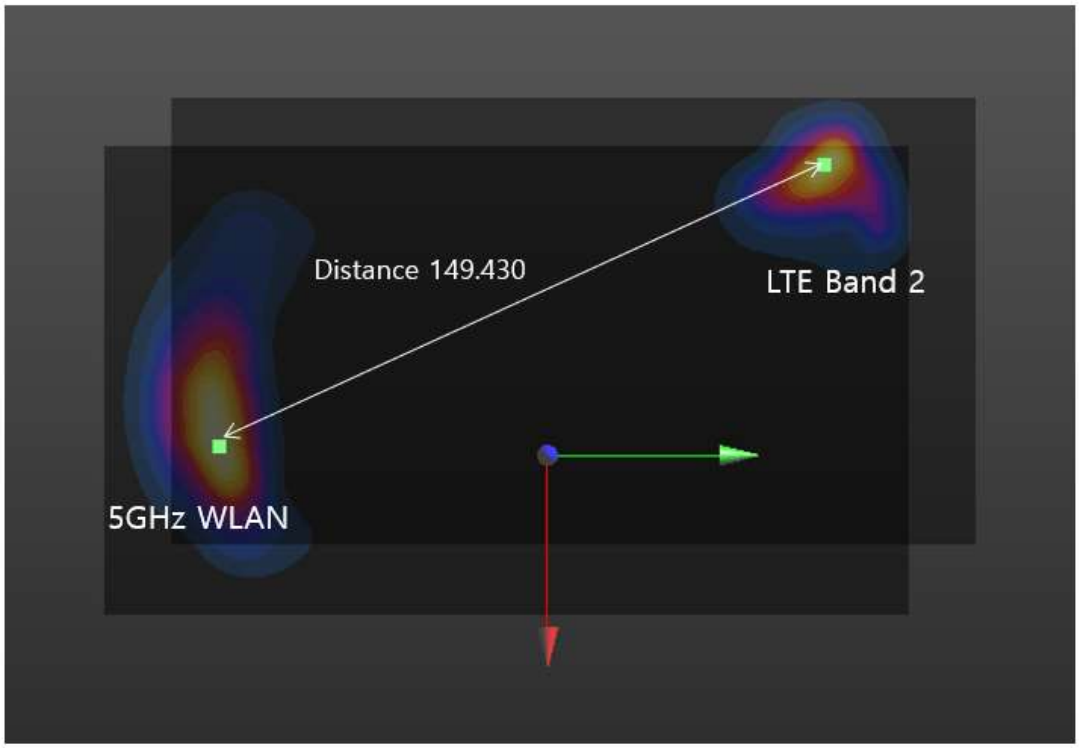
Plot #2 CDMA BC0 + WLAN 2.4GHz



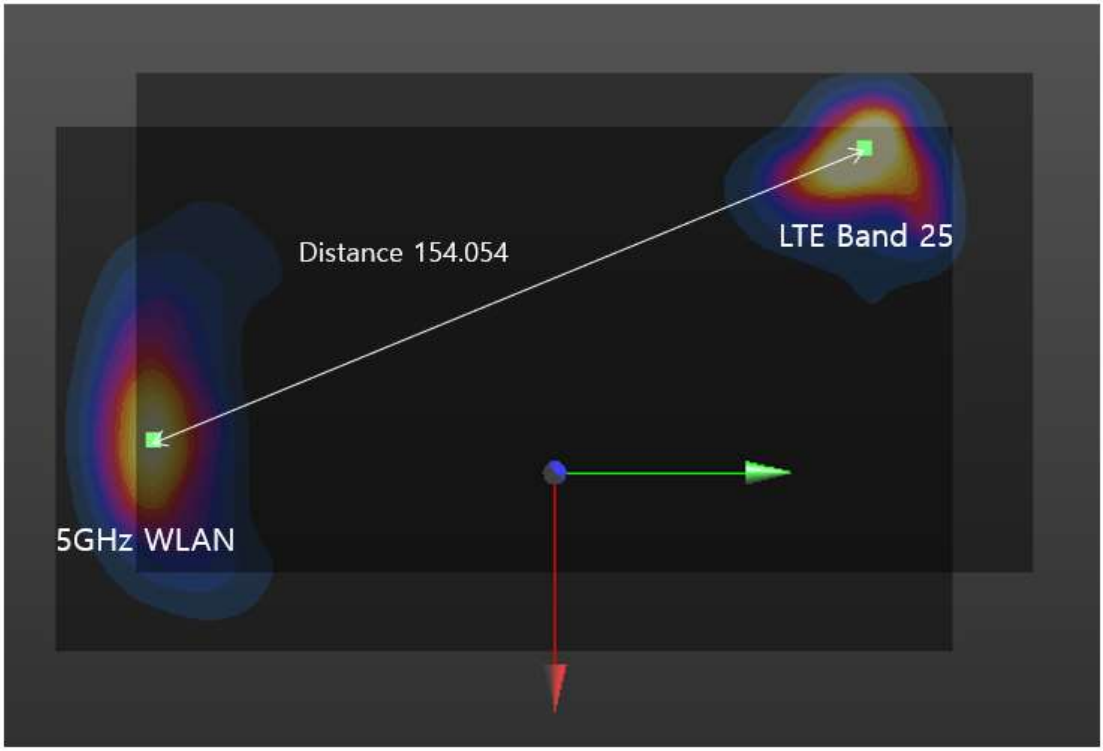
Plot #3 NR Band 2 + WLAN 5GHz



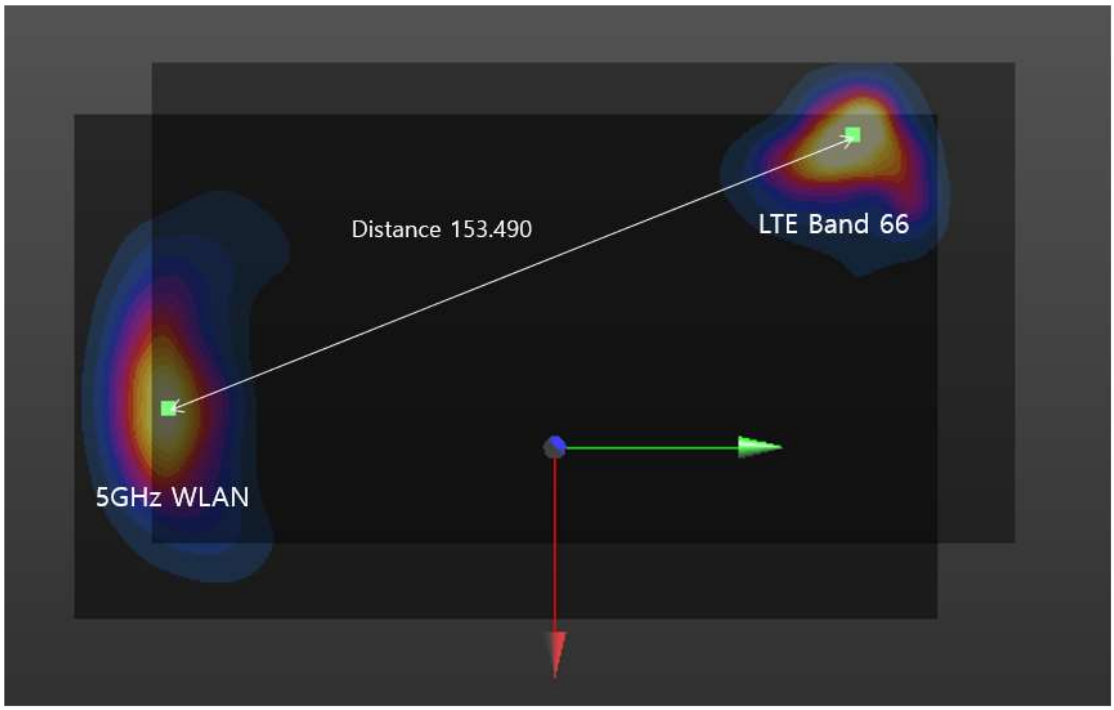
Plot #4 LTE Band 2 + WLAN 5GHz



Plot #5 LTE Band 25 + WLAN 5GHz



Plot #6 LTE Band 66 + WLAN 5GHz


Distance 153.490
LTE Band 66
5GHz WLAN

14.6 Simultaneous Transmission Conclusion

The above numerical summed SAR Results are sufficient to determine that simultaneous transmission cases will not exceed the SAR Limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE1528-2013.

15. SAR Measurement Variability and Uncertainty

In accordance with KDB procedure 865664 D01v01r04 SAR measurement 100 ㎒ to 6 ㎓, SAR additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement variability was assessed using the following procedures for each frequency band:

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg for 1g SAR or < 2.0 W/kg for 10g SAR; steps 2) through 4) do not apply.

2) When the original highest measured 1g SAR is ≥ 0.80 W/kg or 10g SAR ≥ 2.0W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg for 1g SAR or ≥ 3.625 W/kg for 10g SAR (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg for 1g SAR or ≥3.75 W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Head SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
2592.99	518598	NR Band n41	Right Tilt	1.03	0.981	1.05

Body-Worn SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1908.75	1175	RC3 / SO55	Front	1.11	1.09	1.02

Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
MHz	Channel					
2535	21100	LTE Band 7	Bottom	0.922	0.917	1.01
2 310	27710	LTE Band 30	Bottom	0.850	0.841	1.05
1900	380000	NR Band 2	Bottom	1.15	1.03	1.12

Phablet SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
MHz	Channel					
1851.25	25	CDMA PCS	Bottom	2.73	2.68	1.02
1900	19100	LTE Band 2	Front	2.38	2.36	1.01
1882.5	26365	LTE Band 25	Front	2.24	1.92	1.17
1770	132572	LTE Band 66	Bottom	2.52	2.51	1.00
1900	380000	NR Band 2	Front	2.61	2.47	1.06
1770	354000	NR Band 66	Bottom	2.87	2.81	1.02

16. Device Holder Perturbation Verification.

In accordance with published DUT Holder Perturbations in Oct.2016 TCB Workshop.
When Highest reported SAR is over 1.2 W/kg, Holder Perturbation Verification is required for each antenna, using the highest configuration among all applicable frequency bands.

Frequency		Mode/Band	Configuration	Highest Reported SAR		Deviation (%)
				(without Device Holder)	(with Device Holder)	
MHz	Channel			(W/kg)	(W/kg)	
1900	380000	NR band 2	Bottom	1.371	1.262	-7.94%

17. LTE Band 41 Power Class 2 and Power class 3 Linearity

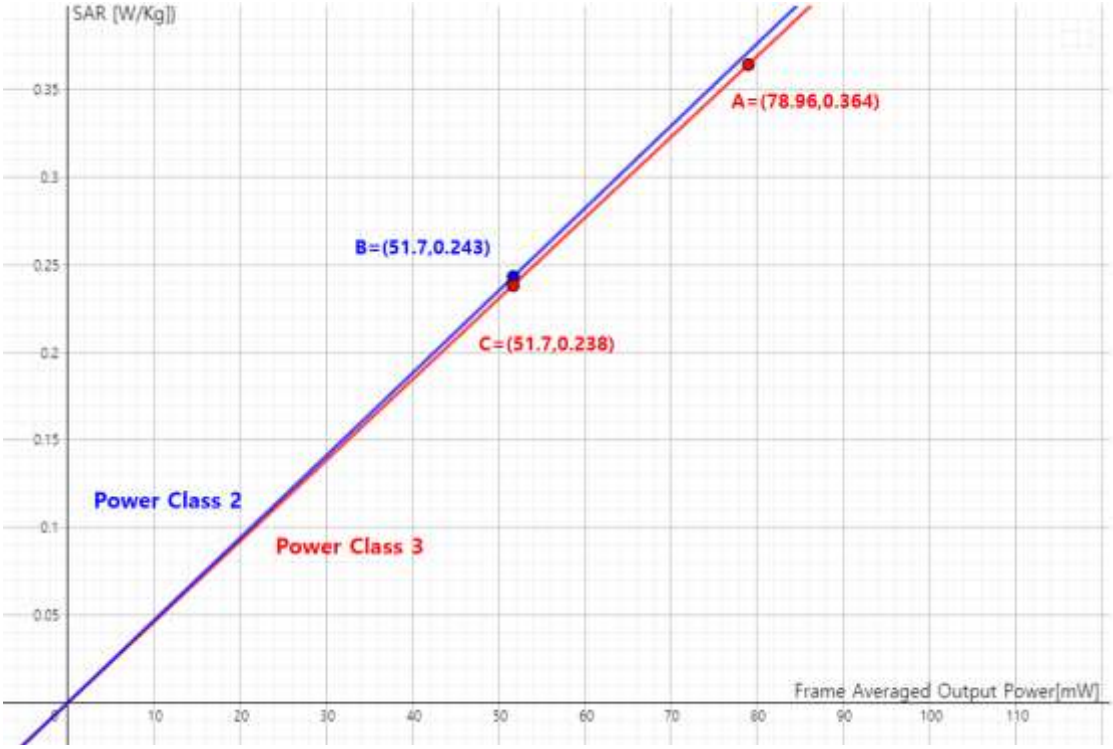
This Device Supports Power Class 2 and Power Class 3 operations for LTE band 41. The Highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL Configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power class 3. SAR with power class 2 at the highest power and available duty factor was additionally performed for the power class 2 configuration with the Highest SAR for each exposure condition.

The linearity between the power class 3and Power class 2 SAR Results and the respective frame averaged powers was calculated to determine the results were linear.

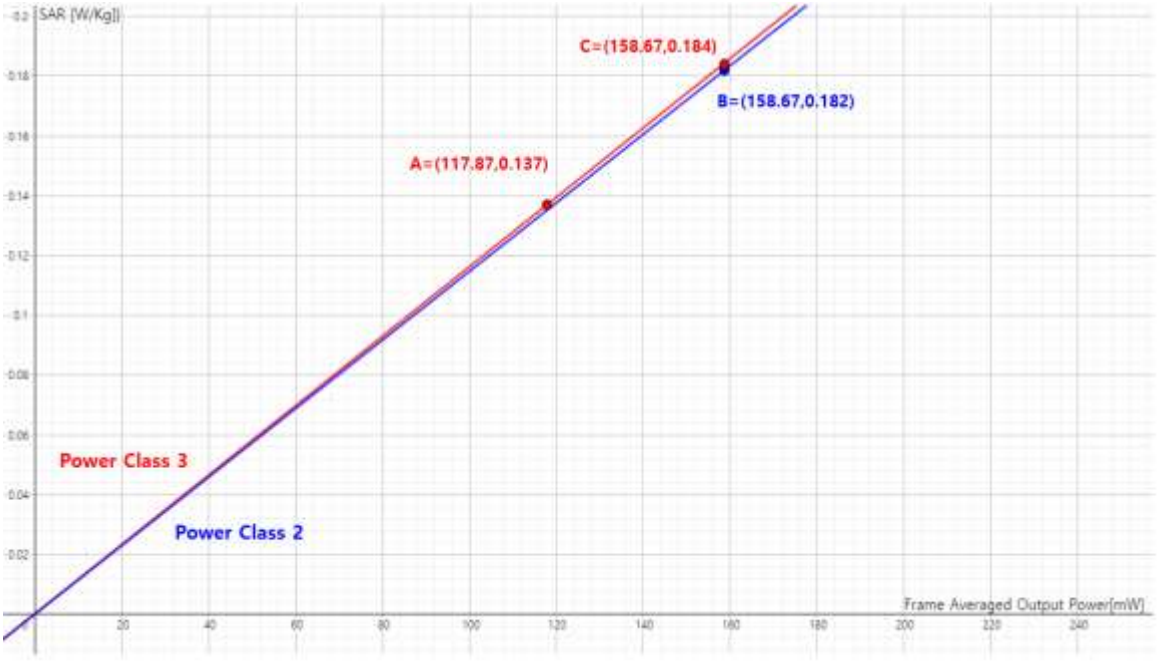
Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes as less than 10 % and all reported SAR values were < 1.4 W/kg

LTE Band 41 Head Linearity Data Table		
Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	24	26.5
Measured Output Power[dBm]	22.7	25.64
Measured SAR[W/kg]	0.048	0.066
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	117.87	158.67
	0.000407228	0.000415958
% deviation from expected linearity		-2.098614035

LTE Band Hotspot Linearity Data Table		
Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	22	22
Measured Output Power[dBm]	20.96	20.77
Measured SAR[W/kg]	0.364	0.243
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	78.96	51.7
	0.004609929	0.004700193
% deviation from expected linearity		-1.920438957



LTE Band Body Worn Linearity Data Table		
Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	24	26.5
Measured Output Power[dBm]	22.7	25.64
Measured SAR[W/kg]	0.137	0.182
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	117.87	158.67
	0.001162297	0.001147035
% deviation from expected linearity		1.330624072



18. Antenna Impedance tuner testing

This Device applies Antenna Impedance tuner to some 3G / 4G bands. Antenna Impedance tuning were tested in accordance with the April 2019 FCC TCBC Workshop nots.

Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other impedance matching.

The AIT applied to this device has 4 antenna states in an open loop state method. - Free, Earpiece, USB and Grip

This Device supports LTE capabilities with overlapping transmission frequency ranges.
LTE Band 17(706.5 ㎒ ~ 713.5 ㎒) is covered by LTE Band 12 (699.7 ㎒ ~ 715.3 ㎒)
LTE Band 4 (1 710.7 ㎒ ~ 1 754.3 ㎒) is covered by LTE Band 66 (1 710.7 ㎒ ~ 1 779.3 ㎒)
LTE Band 5(824.7 ㎒ ~ 848.3 ㎒) is covered by LTE Band 26 (814.7 ㎒ ~ 848.3 ㎒)

Head SAR Data

UMTS 850		UMTS 1700		UMTS 1900	
RMC		RMC		RMC	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1880
Channel	4183	Channel	1412	Channel	9400
Measured 1g SAR (W/kg)	0.146	Measured 1g SAR (W/kg)	0.094	Measured 1g SAR (W/kg)	0.217
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.136	Free	0.087	Free	0.220
Grip	0.129	Grip	0.068	Grip	0.177
Ear jack	0.133	Ear jack	0.075	Ear jack	0.201
USB	0.046	USB	0.073	USB	0.203

CDMA BC0		CDMA BC1		CDMA BC10	
EVDO Rev. A		EVDO Rev. A		EVDO Rev. A	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Right Cheek
Frequency (MHz)	836.52	Frequency (MHz)	1880	Frequency (MHz)	820
Channel	384	Channel	600	Channel	560
Measured 1g SAR (W/kg)	0.212	Measured 1g SAR (W/kg)	0.304	Measured 1g SAR (W/kg)	0.221
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.221	Free	0.297	Free	0.217
Grip	0.211	Grip	0.288	Grip	0.208
Ear jack	0.207	Ear jack	0.281	Ear jack	0.212
USB	0.027	USB	0.290	USB	0.089

LTE Band 2		LTE Band 7		LTE Band 12	
QPSK, 20MHz 1RB 0offset		QPSK, 20MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Right Touch
Spacing	-	Spacing	-	Spacing	-
Frequency (MHz)	1900	Frequency (MHz)	2510	Frequency (MHz)	707.5
Channel	19100	Channel	20850	Channel	23095
Measured 1g SAR (W/kg)	0.266	Measured 1g SAR (W/kg)	0.089	Measured 1g SAR (W/kg)	0.102
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.181	Free	0.076	Free	0.134
Grip	0.146	Grip	0.069	Grip	0.111
Ear jack	0.175	Ear jack	0.071	Ear jack	0.117
USB	0.179	USB	0.073	USB	0.053

LTE Band 13		LTE Band 14		LTE Band 25(2)	
QPSK, 10MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset		QPSK, 20MHz 1RB 99offset	
Test Position	Left Touch	Test Position	Right Touch	Test Position	Left Touch
Spacing	-	Spacing	-	Spacing	-
Frequency (MHz)	782	Frequency (MHz)	793	Frequency (MHz)	1882.5
Channel	23230	Channel	2330	Channel	26365
Measured 1g SAR (W/kg)	0.168	Measured 1g SAR (W/kg)	0.162	Measured 1g SAR (W/kg)	0.245
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.198	Free	0.283	Free	0.17
Grip	0.196	Grip	0.237	Grip	0.153
Ear jack	0.184	Ear jack	0.241	Ear jack	0.15
USB	0.048	USB	0.074	USB	0.147

LTE Band 26		LTE Band 30		LTE Band 40 (Low)	
QPSK, 15MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset		QPSK, 10MHz 25RB 0offset	
Test Position	Right Touch	Test Position	Right Tilt	Test Position	Left Touch
Spacing	-	Spacing	-	Spacing	-
Frequency (MHz)	831.5	Frequency (MHz)	2310	Frequency (MHz)	2310
Channel	26865	Channel	27710	Channel	38750
Measured 1g SAR (W/kg)	0.161	Measured 1g SAR (W/kg)	0.102	Measured 1g SAR (W/kg)	0.00128
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.137	Free	0.100	Free	0
Grip	0.113	Grip	0.099	Grip	0
Ear jack	0.105	Ear jack	0.098	Ear jack	0
USB	0.068	USB	0.091	USB	0

LTE Band 40 (Upper)		LTE Band 41 (PC2)		LTE Band 41 (PC3)	
QPSK, 10MHz 25RB 0offset		QPSK, 20MHz 1RB 0offset		QPSK, 20MHz 1RB 0offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch
Spacing	-	Spacing	-	Spacing	-
Frequency (MHz)	2355	Frequency (MHz)	2506	Frequency (MHz)	2506
Channel	39200	Channel	39750	Channel	39750
Measured 1g SAR (W/kg)	0.0014	Measured 1g SAR (W/kg)	0.066	Measured 1g SAR (W/kg)	0.049
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0	Free	0.039	Free	0.048
Grip	0	Grip	0	Grip	0.048
Ear jack	0	Ear jack	0	Ear jack	0.044
USB	0	USB	0	USB	0.044

LTE Band 66		LTE Band 71	
QPSK, 20MHz 1RB 99offset		QPSK, 20MHz 1RB 99offset	
Test Position	Left Touch	Test Position	Right Touch
Spacing	-	Spacing	-
Frequency (MHz)	1745	Frequency (MHz)	683
Channel	132322	Channel	13322
Measured 1g SAR (W/kg)	0.174	Measured 1g SAR (W/kg)	0.18
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.178	Free	0.177
Grip	0.173	Grip	0.151
Ear jack	0.175	Ear jack	0.150
USB	0.175	USB	0.06

Body SAR

UMTS 850		UMTS 1700		UMTS 1900	
RMC		RMC		RMC	
Test Position	Rear	Test Position	Bottom	Test Position	Bottom
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1907.6
Channel	4183	Channel	1412	Channel	9538
Measured 1g SAR (W/kg)	0.431	Measured 1g SAR (W/kg)	0.477	Measured 1g SAR (W/kg)	0.919
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.411	Free	0.412	Free	0.912
Grip	0.402	Grip	0.402	Grip	0.897
Ear jack	0.399	Ear jack	0.411	Ear jack	0.877
USB	0.078	USB	0.406	USB	0.902

CDMA BC0		CDMA BC1		CDMA BC10	
EVDO Rev. 0 Hotspot		RC3 S055 Body Worn		EVDO Rev. 0	
Test Position	Rear	Test Position	Front	Test Position	Bottom
Frequency (MHz)	836.52	Frequency (MHz)	1908.75	Frequency (MHz)	822.75
Channel	384	Channel	1175	Channel	670
Measured 1g SAR (W/kg)	0.992	Measured 1g SAR (W/kg)	1.11	Measured 1g SAR (W/kg)	0.791
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.913	Free	1.05	Free	0.780
Grip	0.901	Grip	0.968	Grip	0.779
Ear jack	0.903	Ear jack	0.998	Ear jack	0.750
USB	0.245	USB	0.995	USB	0.254

LTE Band 2		LTE Band 7		LTE Band 12	
QPSK, 20MHz 1RB 99offset		QPSK, 20MHz 50RB 0offset		QPSK, 10MHz 1RB 0offset	
Test Position	Bottom	Test Position	Bottom	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	1900	Frequency (MHz)	2535	Frequency (MHz)	707.5
Channel	19100	Channel	21100	Channel	23095
Measured 1g SAR (W/kg)	1.19	Measured 1g SAR (W/kg)	0.922	Measured 1g SAR (W/kg)	0.269
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	1.17	Free	0.828	Free	0.261
Grip	1.12	Grip	0.711	Grip	0.221
Ear jack	1.05	Ear jack	0.611	Ear jack	0.231
USB	1.03	USB	0.608	USB	0.117

LTE Band 13		LTE Band 14		LTE Band 25(2)	
QPSK, 10MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset		QPSK, 20MHz 1RB 99offset	
Test Position	Rear	Test Position	Rear	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	782	Frequency (MHz)	793	Frequency (MHz)	1905
Channel	23230	Channel	23330	Channel	26590
Measured 1g SAR (W/kg)	0.422	Measured 1g SAR (W/kg)	0.448	Measured 1g SAR (W/kg)	0.882
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.418	Free	0.422	Free	0.701
Grip	0.406	Grip	0.405	Grip	0.585
Ear jack	0.350	Ear jack	0.405	Ear jack	0.462
USB	0.091	USB	0.083	USB	0.065

LTE Band 26		LTE Band 30		LTE Band 40 (Low)	
QPSK, 15MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset		QPSK, 10MHz 1RB 0offset	
Test Position	Rear	Test Position	Bottom	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	831.5	Frequency (MHz)	2310	Frequency (MHz)	2310
Channel	26865	Channel	27710	Channel	38750
Measured 1g SAR (W/kg)	0.5	Measured 1g SAR (W/kg)	0.85	Measured 1g SAR (W/kg)	0.055
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.474	Free	0.844	Free	0.061
Grip	0.429	Grip	0.834	Grip	0.060
Ear jack	0.418	Ear jack	0.821	Ear jack	0.051
USB	0.198	USB	0.816	USB	0.054

LTE Band 40 (Upper)		LTE Band 41 (PC3)		LTE Band 66		LTE Band 71	
QPSK, 10MHz 1RB 0offset		QPSK, 20MHz 50RB 0offset		QPSK, 20MHz 1RB 0offset		QPSK 20MHz 1RB 99offset	
Test Position	Bottom	Test Position	Bottom	Test Position	Bottom	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	2355	Frequency (MHz)	2506	Frequency (MHz)	1770	Frequency (MHz)	683
Channel	39200	Channel	39750	Channel	132572	Channel	133322
Measured 1g SAR (W/kg)	0.067	Measured 1g SAR (W/kg)	0.364	Measured 1g SAR (W/kg)	0.534	Measured 1g SAR (W/kg)	0.499
Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)		Average Value of time Sweep (W/kg)	
Free	0.065	Free	0.359	Free	0.531	Free	0.491
Grip	0.06	Grip	0.308	Grip	0.509	Grip	0.393
Ear jack	0.061	Ear jack	0.344	Ear jack	0.454	Ear jack	0.306
USB	0.061	USB	0.341	USB	0.515	USB	0.382

19. Measurement Uncertainty

The measured SAR was <1.5 W/Kg for 1g SAR and <3.75 W/Kg For 10g SAR for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE1528-2013 was not required.

20. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	Triple Modular Phantom	-	N/A	N/A	N/A
SPEAG	SAM Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F12/5K9GA1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/59CHA1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/59RAA1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/5R4XF1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F11/5K3RA1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F12/5K9GA1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/59CHA1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/59RAA1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/5R4XF1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F11/5K3RA1/A/01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1206 0513	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	010963	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	011578	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1338 1332	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1203 0309	N/A	N/A	N/A
SPEAG	DAE3	446	07/18/2019	Annual	07/18/2020
SPEAG	DAE4	1417	02/26/2020	Annual	02/26/2021
SPEAG	DAE4	466	04/22/2020	Annual	04/22/2021
SPEAG	DAE4	869	09/19/2019	Annual	09/19/2020
SPEAG	DAE4	648	05/25/2020	Annual	05/25/2021
SPEAG	E-Field Probe EX3DV4	3797	11/28/2019	Annual	11/28/2020
SPEAG	E-Field Probe EX3DV4	3903	03/25/2020	Annual	03/25/2021
SPEAG	E-Field Probe EX3DV4	3968	09/27/2019	Annual	09/27/2020
SPEAG	E-Field Probe ES3DV3	3076	07/23/2019	Annual	07/23/2020
SPEAG	Dipole D750V3	1014	05/19/2020	Annual	05/19/2021
SPEAG	Dipole D835V2	441	08/23/2019	Annual	08/23/2020
SPEAG	Dipole D1800V2	2d015	09/19/2019	Annual	09/19/2020
SPEAG	Dipole D1900V2	5d061	01/21/2020	Annual	01/21/2021
SPEAG	Dipole D2300V2	1010	08/26/2019	Annual	08/26/2020
SPEAG	Dipole D2450V2	743	02/20/2020	Annual	02/20/2021
SPEAG	Dipole D2600V2	1106	09/19/2019	Annual	09/19/2020
SPEAG	Dipole D5GHzV2	1107	09/26/2019	Annual	09/26/2020
Agilent	Power Meter E4419B	MY41291386	10/07/2019	Annual	10/07/2020
Agilent	Power Meter N1911A	MY45101406	09/10/2019	Annual	09/10/2020
Agilent	Power Sensor 8481A	SG1091286	10/07/2019	Annual	10/07/2020
Agilent	Power Sensor 8481A	MY41090873	10/07/2019	Annual	10/07/2020
Agilent	Power Sensor N1921A	MY55220026	09/06/2019	Annual	09/06/2020
SPEAG	DAKS 3.5	1038	03/24/2020	Annual	03/24/2021
H.P	Network Analyzer /8753ES	JP39240221	01/28/2020	Annual	01/28/2021
Agilent	WIRELESS COMMUNICATION E5515C	MY48361100	10/07/2019	Annual	10/07/2020
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	08/07/2019	Annual	08/07/2020
Agilent	WIRELESS COMMUNICATION E5515C	GB44051865	06/04/2019	Annual	06/04/2020
Agilent	WIRELESS COMMUNICATION E5515C	GB44051865	06/01/2020	Annual	06/01/2021

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
Agilent	Signal Generator N5182A	MY47070230	05/08/2019	Annual	05/08/2020
Agilent	Signal Generator N5182A	MY47070230	05/06/2020	Annual	05/06/2021
Agilent	11636B/Power Divider	58698	02/28/2020	Annual	02/28/2021
TESTO	175-H1/Thermometer	40331915309	01/29/2020	Annual	01/29/2021
TESTO	175-H1/Thermometer	40331922309	01/29/2020	Annual	01/29/2021
TESTO	175-H1/Thermometer	40332651310	01/29/2020	Annual	01/29/2021
TESTO	175-H1/Thermometer	40331949309	01/29/2020	Annual	01/29/2021
TESTO	175-H1/Thermometer	40331939309	01/29/2020	Annual	01/29/2021
EMPOWER	RF Power Amplifier	1084	07/23/2019	Annual	07/23/2020
EMPOWER	RF Power Amplifier	1011	10/08/2019	Annual	10/08/2020
MICRO LAB	LP Filter / LA-15N	10453	10/07/2019	Annual	10/07/2020
MICRO LAB	LP Filter / LA-30N	-	10/07/2019	Annual	10/07/2020
MICRO LAB	LP Filter / LA-60N	32011	10/07/2019	Annual	10/07/2020
Agilent	Attenuator (3dB) 8693B	MY39260298	09/18/2019	Annual	09/18/2020
HP	Attenuator (20dB) 8493C	09271	09/18/2019	Annual	09/18/2020
Agilent	Directional Bridge	3140A03878	06/12/2019	Annual	06/12/2020
Agilent	MXA Signal Analyzer N9020A	MY50510407	10/29/2019	Annual	10/29/2020
HP	Dual Directional Coupler	16072	10/07/2019	Annual	10/07/2020
Anritsu	Radio Communication Tester MT8820C	6201074225	03/02/2020	Annual	03/02/2021
Anritsu	Radio Communication Tester MT8820C	6200695605	05/06/2020	Annual	05/06/2021
Anritsu	Radio Communication Tester MT8820C	6200628628	09/20/2019	Annual	09/20/2020
Anritsu	Radio Communication Tester MT8821C	6201502997	08/09/2019	Annual	08/09/2020
Anritsu	Radio Communication Test Station MT8000A	6262036812	01/06/2020	Annual	01/06/2021
R&S	Bluetooth CBT	100272	03/02/2020	Annual	03/02/2021

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

21. Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/ IEEE C95.1 - 2005.

These measurements were taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the abortion and distribution of electromagnetic energy in the body are very complex phenomena the depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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Appendix

Please refer to test setup photo file no. as follows.

Appendix A. DUT Ant. Information & Test SETUP PHOTO
Appendix B. SAR Test Plots
Appendix C. Dipole Verification Plots
Appendix D. SAR Tissue Characterization
Appendix E. SAR System Validation
Appendix F. Probe Calibration Data
Appendix G. Dipole Calibration Data
Appendix H. Power reduction verification

End of Report