Hotspot SAR test results of GSM(Second Modem)

Test No.	Band	Mode	CH	Test Position With 10mm	ANT	SIM	Battery	Tune up	Measured	Drift(dB)	SAR Value (W/kg)1-g	Reported SAR
T168	GSM850	GPRS 2TX	190	Front Face	1	2	1	31	29.9	0.04	0.215	0.277
T169	GSM850	GPRS 2TX	190	Rear Face	1	2	1	31	29.9	-0.01	**0.264**	0.340
T170	GSM850	GPRS 2TX	190	Left Side	1	2	1	31	29.9	0.05	0.186	0.240
T171	GSM850	GPRS 2TX	190	Right Side	1	2	1	31	29.9	0.09	0.255	0.329
T172	GSM850	GPRS 2TX	190	Bottom Side	1	2	1	31	29.9	0.01	0.064	0.082
T173	GSM850	GPRS 2TX	190	Rear Face	1	2	2	31	29.9	0.01	0.207	0.267
T174	GSM850	GPRS 2TX	190	Rear Face	1	2	3	31	29.9	-0.03	0.213	0.274
T192	GSM850	GPRS 2TX	190	Front Face	2	2	1	31	30.56	-0.05	0.583	0.645
T193	GSM850	GPRS 2TX	190	Rear Face	2	2	1	31	30.56	-0.09	**0.721**	0.798
T194	GSM850	GPRS 2TX	190	Left Side	2	2	1	31	30.56	-0.06	0.458	0.507
T195	GSM850	GPRS 2TX	190	Right Side	2	2	1	31	30.56	-0.07	0.106	0.117
T196	GSM850	GPRS 2TX	190	Top Side	2	2	1	31	30.56	0.09	0.507	0.561
T197	GSM850	GPRS 2TX	190	Rear Face	2	2	2	31	30.56	0.03	0.572	0.633
T198	GSM850	GPRS 2TX	190	Rear Face	2	2	3	31	30.56	0.01	0.633	0.700
GSM850:Additional SAR test (Modem1+Modem2+ WiFi station)(Modem1+Modem2+ Hotspot on)												
T0193	GSM850	GPRS 2TX	190	Rear Face	2	2	1	28.5	28.04	-0.02	0.164	0.182
T216	GSM1900	GPRS 3TX	661	Front Face	1	2	1	26.5	25.73	0.06	0.648	0.774
T217	GSM1900	GPRS 3TX	661	Rear Face	1	2	1	26.5	25.73	0.01	**0.976**	1.165
T218	GSM1900	GPRS 3TX	661	Left Side	1	2	1	26.5	25.73	0.07	0.101	0.121
T219	GSM1900	GPRS 3TX	661	Right Side	1	2	1	26.5	25.73	-0.02	0.463	0.553
T220	GSM1900	GPRS 3TX	661	Bottom Side	1	2	1	26.5	25.73	0.02	0.762	0.910
T221	GSM1900	GPRS 3TX	512	Rear Face	1	2	1	26.5	25.74	0.05	0.864	1.029
T222	GSM1900	GPRS 3TX	810	Rear Face	1	2	1	26.5	25.82	-0.01	0.594	0.695
T317	GSM1900	GPRS 3TX	512	Bottom Side	1	2	1	26.5	25.74	0.01	0.753	0.897
T318	GSM1900	GPRS 3TX	810	Bottom Side	1	2	1	26.5	25.82	0.04	0.697	0.815
T223	GSM1900	GPRS 3TX	661	Rear Face	1	2	2	26.5	25.73	-0.03	0.812	0.970
T224	GSM1900	GPRS 3TX	661	Rear Face	1	2	3	26.5	25.73	-0.04	0.852	1.017
T225	GSM1900	GPRS 3TX	661	Rear Face	1	2	2	26.5	25.73	0.07	0.864	1.032
T217-1	GSM1900	GPRS 3TX	661	Rear Face(1st Reapeat)	1	2	1	26.5	25.73	0.01	0.947	1.131
GSM1900:Additional SAR test (Modem1+Modem2+ WiFi station)(Modem1+Modem2+ Hotspot on)												
T0126	GSM1900	GPRS 3TX	661	Rear Face	1	2	1	24.5	24.09	0.04	0.687	0.755
T242	GSM1900	GPRS 3TX	661	Front Face	2	2	1	26.5	24.76	-0.02	0.142	0.212
T243	GSM1900	GPRS 3TX	661	Rear Face	2	2	1	26.5	24.76	0.07	**0.188**	0.281
T244	GSM1900	GPRS 3TX	661	Left Side	2	2	1	26.5	24.76	-0.06	0.167	0.249
T245	GSM1900	GPRS 3TX	661	Right Side	2	2	1	26.5	24.76	0.07	0.036	0.054
T246	GSM1900	GPRS 3TX	661	Top Side	2	2	1	26.5	24.76	0.09	0.112	0.167
T247	GSM1900	GPRS 3TX	661	Rear Face	2	2	2	26.5	24.76	0.01	0.141	0.210
T248	GSM1900	GPRS 3TX	661	Rear Face	2	2	3	26.5	24.76	0	0.154	0.230

Per KDB648474D04, when hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test No.	Band	Mode	CH	Test Position With 10mm	ANT	SIM	Battery	Tune up(Full power)	Measured	Drift(dB)	SAR Value (W/kg)1-g	Scaled SAR_{1g} (W/kg)	product specific 10-g SAR Exclusion
T168	GSM850	GPRS 2TX	190	Front Face	1	2	1	31	29.9	0.04	0.215	0.277	Yes
T169	GSM850	GPRS 2TX	190	Rear Face	1	2	1	31	29.9	-0.01	**0.264**	0.340	Yes
T170	GSM850	GPRS 2TX	190	Left Side	1	2	1	31	29.9	0.05	0.186	0.240	Yes
T171	GSM850	GPRS 2TX	190	Right Side	1	2	1	31	29.9	0.09	0.255	0.329	Yes
T172	GSM850	GPRS 2TX	190	Bottom Side	1	2	1	31	29.9	0.01	0.064	0.082	Yes
T173	GSM850	GPRS 2TX	190	Rear Face	1	2	2	31	29.9	0.01	0.207	0.267	Yes
T174	GSM850	GPRS 2TX	190	Rear Face	1	2	3	31	29.9	-0.03	0.213	0.274	Yes
T192	GSM850	GPRS 2TX	190	Front Face	2	2	1	31	30.56	-0.05	0.583	0.645	Yes
T193	GSM850	GPRS 2TX	190	Rear Face	2	2	1	31	30.56	-0.09	**0.721**	0.798	Yes
T194	GSM850	GPRS 2TX	190	Left Side	2	2	1	31	30.56	-0.06	0.458	0.507	Yes
T195	GSM850	GPRS 2TX	190	Right Side	2	2	1	31	30.56	-0.07	0.106	0.117	Yes
T196	GSM850	GPRS 2TX	190	Top Side	2	2	1	31	30.56	0.09	0.507	0.561	Yes
T197	GSM850	GPRS 2TX	190	Rear Face	2	2	2	31	30.56	0.03	0.572	0.633	Yes
T198	GSM850	GPRS 2TX	190	Rear Face	2	2	3	31	30.56	0.01	0.633	0.700	Yes
GSM850:Additional SAR test (Modem1+Modem2+ WiFi station)(Modem1+Modem2+ Hotspot on)													
T0193	GSM850	GPRS 2TX	190	Rear Face	2	2	1	31	28.04	-0.02	0.164	0.324	Yes
T216	GSM1900	GPRS 3TX	661	Front Face	1	2	1	26.5	25.73	0.06	0.648	0.774	Yes
T217	GSM1900	GPRS 3TX	661	Rear Face	1	2	1	26.5	25.73	0.01	**0.976**	1.165	Yes
T218	GSM1900	GPRS 3TX	661	Left Side	1	2	1	26.5	25.73	0.07	0.101	0.121	Yes
T219	GSM1900	GPRS 3TX	661	Right Side	1	2	1	26.5	25.73	-0.02	0.463	0.553	Yes
T220	GSM1900	GPRS 3TX	661	Bottom Side	1	2	1	26.5	25.73	0.02	0.762	0.910	Yes
T221	GSM1900	GPRS 3TX	512	Rear Face	1	2	1	26.5	25.74	0.05	0.864	1.029	Yes
T222	GSM1900	GPRS 3TX	810	Rear Face	1	2	1	26.5	25.82	-0.01	0.594	0.695	Yes
T317	GSM1900	GPRS 3TX	512	Bottom Side	1	2	1	26.5	25.74	0.01	0.753	0.897	Yes
T318	GSM1900	GPRS 3TX	810	Bottom Side	1	2	1	26.5	25.82	0.04	0.697	0.815	Yes
T223	GSM1900	GPRS 3TX	661	Rear Face	1	2	2	26.5	25.73	-0.03	0.812	0.970	Yes
T224	GSM1900	GPRS 3TX	661	Rear Face	1	2	3	26.5	25.73	-0.04	0.852	1.017	Yes
T225	GSM1900	GPRS 3TX	661	Rear Face	1	2	2	26.5	25.73	0.07	0.864	1.032	Yes
T217-1	GSM1900	GPRS 3TX	661	Rear Face(1st Reapeat)	1	2	1	26.5	25.73	0.01	0.947	1.131	Yes
GSM1900:Additional SAR test (Modem1+Modem2+ WiFi station)(Modem1+Modem2+ Hotspot on)													
T0126	GSM1900	GPRS 3TX	661	Rear Face	1	2	1	26.5	24.09	0.04	0.687	1.197	Yes
T242	GSM1900	GPRS 3TX	661	Front Face	2	2	1	26.5	24.76	-0.02	0.142	0.212	Yes
T243	GSM1900	GPRS 3TX	661	Rear Face	2	2	1	26.5	24.76	0.07	**0.188**	0.281	Yes
T244	GSM1900	GPRS 3TX	661	Left Side	2	2	1	26.5	24.76	-0.06	0.167	0.249	Yes
T245	GSM1900	GPRS 3TX	661	Right Side	2	2	1	26.5	24.76	0.07	0.036	0.054	Yes
T246	GSM1900	GPRS 3TX	661	Top Side	2	2	1	26.5	24.76	0.09	0.112	0.167	Yes
T247	GSM1900	GPRS 3TX	661	Rear Face	2	2	2	26.5	24.76	0.01	0.141	0.210	Yes

T248	GSM1900	GPRS 3TX	661	Rear Face	2	2	3	26.5	24.76	0	0.154	0.230	Yes

4. Hotspot SAR test results of LTE(SIM 1)

Test No.	Band	Mode	CH	RB	Offset	Test Position With 10mm	ANT	Battery	Tune up	Measured	Drift(dB)	SAR Value (W/kg) 1-g	Reported SAR
T657	LTE B2	QPSK20M	18900	1	50	Front Face	1	1	20.5	20.07	0.04	0.453	0.500
T658	LTE B2	QPSK20M	18900	1	50	Rear Face	1	1	20.5	20.07	0.01	**0.532**	0.587
T659	LTE B2	QPSK20M	18900	1	50	Left Side	1	1	20.5	20.07	0.05	0.250	0.276
T660	LTE B2	QPSK20M	18900	1	50	Right Side	1	1	20.5	20.07	0.02	0.361	0.399
T661	LTE B2	QPSK20M	18900	1	50	Bottom Side	1	1	20.5	20.07	-0.01	0.041	0.045
T662	LTE B2	QPSK20M	18900	50	0	Front Face	1	1	19.5	19.23	0.06	0.325	0.346
T663	LTE B2	QPSK20M	18900	50	0	Rear Face	1	1	19.5	19.23	0.03	0.414	0.441
T664	LTE B2	QPSK20M	18900	50	0	Left Side	1	1	19.5	19.23	0.08	0.105	0.112
T665	LTE B2	QPSK20M	18900	50	0	Right Side	1	1	19.5	19.23	-0.02	0.034	0.036
T666	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	1	19.5	19.23	0.01	0.288	0.306
T669	LTE B2	QPSK20M	18900	1	50	Rear Face	1	2	20.5	20.07	0.05	0.462	0.510
T670	LTE B2	QPSK20M	18900	1	50	Rear Face	1	3	20.5	20.07	-0.04	0.478	0.528
T688	LTE B2	QPSK20M	18900	1	50	Front Face	2	1	16.5	16.35	0.03	0.158	0.164
T689	LTE B2	QPSK20M	18900	1	50	Rear Face	2	1	16.5	16.35	0.04	**0.235**	0.243
T690	LTE B2	QPSK20M	18900	1	50	Left Side	2	1	16.5	16.35	-0.07	0.203	0.210
T691	LTE B2	QPSK20M	18900	1	50	Right Side	2	1	16.5	16.35	0.01	0.067	0.069
T692	LTE B2	QPSK20M	18900	1	50	Top Side	2	1	16.5	16.35	0.07	0.138	0.143
T693	LTE B2	QPSK20M	18900	50	0	Front Face	2	1	15.5	15.42	-0.02	0.125	0.127
T694	LTE B2	QPSK20M	18900	50	0	Rear Face	2	1	15.5	15.42	-0.04	0.147	0.150
T695	LTE B2	QPSK20M	18900	50	0	Left Side	2	1	15.5	15.42	0	0.134	0.136
T696	LTE B2	QPSK20M	18900	50	0	Right Side	2	1	15.5	15.42	-0.01	0.076	0.077
T697	LTE B2	QPSK20M	18900	50	0	Top Side	2	1	15.5	15.42	0.01	0.092	0.094
T701	LTE B2	QPSK20M	18900	1	50	Rear Face	2	2	16.5	16.35	0.01	0.213	0.220
T702	LTE B2	QPSK20M	18900	1	50	Rear Face	2	3	16.5	16.35	0.02	0.218	0.226
T711	LTE B4	QPSK20M	20175	1	50	Front Face	1	1	23	22.81	0.01	0.738	0.771
T712	LTE B4	QPSK20M	20175	1	50	Rear Face	1	1	23	22.81	-0.02	**0.920**	0.961
T713	LTE B4	QPSK20M	20175	1	50	Left Side	1	1	23	22.81	-0.04	0.191	0.200
T714	LTE B4	QPSK20M	20175	1	50	Right Side	1	1	23	22.81	0.05	0.586	0.612
T715	LTE B4	QPSK20M	20175	1	50	Bottom Side	1	1	23	22.81	0.05	0.072	0.075
T716	LTE B4	QPSK20M	20175	50	0	Front Face	1	1	22	21.96	0.07	0.514	0.519
T717	LTE B4	QPSK20M	20175	50	0	Rear Face	1	1	22	21.96	0.02	0.731	0.738
T718	LTE B4	QPSK20M	20175	50	0	Left Side	1	1	22	21.96	0	0.128	0.129
T719	LTE B4	QPSK20M	20175	50	0	Right Side	1	1	22	21.96	0.01	0.441	0.445
T720	LTE B4	QPSK20M	20175	50	0	Bottom Side	1	1	22	21.96	0.04	0.066	0.067
T721	LTE B4	QPSK20M	20050	1	50	Front Face	1	1	23	22.81	0.01	0.687	0.718

T722	LTE B4	QPSK20M	20300	1	50	Front Face	1	1	23	22.77	-0.01	0.652	0.687
T723	LTE B4	QPSK20M	20175	1	50	Rear Face	1	2	23	22.81	-0.01	0.702	0.733
T724	LTE B4	QPSK20M	20175	1	50	Rear Face	1	3	23	22.81	-0.05	0.724	0.756
T725	LTE B4	QPSK20M	20175	100	0	Rear Face	1	1	22	21.76	0.06	0.674	0.712
T712-1	LTE B4	QPSK20M	20175	1	50	Rear Face(1st Reapeat)	1	1	23	22.81	-0.02	0.916	0.957
T739	LTE B4	QPSK20M	20175	1	0	Front Face	2	1	17.8	17.75	0.05	0.077	0.078
T740	LTE B4	QPSK20M	20175	1	0	Rear Face	2	1	17.8	17.75	0.03	**0.106**	0.107
T741	LTE B4	QPSK20M	20175	1	0	Left Side	2	1	17.8	17.75	0.01	0.097	0.098
T742	LTE B4	QPSK20M	20175	1	0	Right Side	2	1	17.8	17.75	-0.02	0.047	0.048
T743	LTE B4	QPSK20M	20175	1	0	Top Side	2	1	17.8	17.75	0.04	0.079	0.080
T744	LTE B4	QPSK20M	20175	50	0	Front Face	2	1	17	16.94	0.06	0.062	0.063
T745	LTE B4	QPSK20M	20175	50	0	Rear Face	2	1	17	16.94	-0.03	0.071	0.072
T746	LTE B4	QPSK20M	20175	50	0	Left Side	2	1	17	16.94	0.08	0.070	0.071
T747	LTE B4	QPSK20M	20175	50	0	Right Side	2	1	17	16.94	0.02	0.041	0.042
T748	LTE B4	QPSK20M	20175	50	0	Top Side	2	1	17	16.94	0.03	0.064	0.065
T752	LTE B4	QPSK20M	20175	1	0	Rear Face	2	2	17.8	17.75	0.07	0.092	0.093
T753	LTE B4	QPSK20M	20175	1	0	Rear Face	2	3	17.8	17.75	-0.04	0.098	0.099
T760	LTE B5	QPSK10M	20525	1	24	Front Face	1	1	24	23.37	0.02	0.217	0.251
T761	LTE B5	QPSK10M	20525	1	24	Rear Face	1	1	24	23.37	-0.01	0.303	0.350
T762	LTE B5	QPSK10M	20525	1	24	Left Side	1	1	24	23.37	-0.05	0.121	0.140
T763	LTE B5	QPSK10M	20525	1	24	Right Side	1	1	24	23.37	-0.01	**0.380**	0.439
T764	LTE B5	QPSK10M	20525	1	24	Bottom Side	1	1	24	23.37	0.06	0.253	0.292
T765	LTE B5	QPSK10M	20525	25	0	Front Face	1	1	23	21.95	0.01	0.155	0.197
T766	LTE B5	QPSK10M	20525	25	0	Rear Face	1	1	23	21.95	0.01	0.198	0.252
T767	LTE B5	QPSK10M	20525	25	0	Left Side	1	1	23	21.95	0.09	0.088	0.112
T768	LTE B5	QPSK10M	20525	25	0	Right Side	1	1	23	21.95	0.07	0.207	0.264
T769	LTE B5	QPSK10M	20525	25	0	Bottom Side	1	1	23	21.95	-0.07	0.179	0.228
T770	LTE B5	QPSK10M	20525	1	24	Right Side	1	2	24	23.37	-0.01	0.263	0.304
T771	LTE B5	QPSK10M	20525	1	24	Right Side	1	3	24	23.37	-0.06	0.301	0.348
T784	LTE B5	QPSK10M	20525	1	24	Front Face	2	1	22.5	21.26	0	0.333	0.443
T785	LTE B5	QPSK10M	20525	1	24	Rear Face	2	1	22.5	21.26	-0.04	**0.379**	0.504
T786	LTE B5	QPSK10M	20525	1	24	Left Side	2	1	22.5	21.26	0.07	0.191	0.254
T787	LTE B5	QPSK10M	20525	1	24	Right Side	2	1	22.5	21.26	0.05	0.087	0.116
T788	LTE B5	QPSK10M	20525	1	24	Top Side	2	1	22.5	21.26	-0.01	0.291	0.387
T789	LTE B5	QPSK10M	20450	25	0	Front Face	2	1	21.5	20.3	0.01	0.261	0.344
T790	LTE B5	QPSK10M	20450	25	0	Rear Face	2	1	21.5	20.3	0.02	0.338	0.446
T791	LTE B5	QPSK10M	20450	25	0	Left Side	2	1	21.5	20.3	0.04	0.174	0.229
T792	LTE B5	QPSK10M	20450	25	0	Right Side	2	1	21.5	20.3	0.04	0.080	0.105
T793	LTE B5	QPSK10M	20450	25	0	Top Side	2	1	21.5	20.3	-0.05	0.249	0.328
T797	LTE B5	QPSK10M	20525	1	24	Rear Face	2	2	22.5	21.26	-0.06	0.321	0.427
T798	LTE B5	QPSK10M	20525	1	24	Rear Face	2	3	22.5	21.26	-0.02	0.327	0.435

State 2													
T807	LTE B7	QPSK20M	21100	1	50	Rear Face	1	1	24	22.68	0.03	0.531	0.720
State 1													
T807-1	LTE B7	QPSK20M	21100	1	50	Rear Face	1	1	24	22.68	0.06	**0.558**	0.756
T808	LTE B7	QPSK20M	21100	1	50	Front Face	1	1	24	22.68	-0.02	0.472	0.640
T809	LTE B7	QPSK20M	21100	1	50	Left Side	1	1	24	22.68	0.03	0.421	0.571
T810	LTE B7	QPSK20M	21100	1	50	Right Side	1	1	24	22.68	0.02	0.114	0.154
T811	LTE B7	QPSK20M	21100	1	50	Bottom Side	1	1	24	22.68	0.05	0.096	0.130
T812	LTE B7	QPSK20M	21100	50	25	Front Face	1	1	23	21.83	0.09	0.405	0.530
T813	LTE B7	QPSK20M	21100	50	25	Rear Face	1	1	23	21.83	-0.09	0.463	0.606
T814	LTE B7	QPSK20M	21100	50	25	Left Side	1	1	23	21.83	-0.01	0.301	0.394
T815	LTE B7	QPSK20M	21100	50	25	Right Side	1	1	23	21.83	-0.04	0.098	0.128
T816	LTE B7	QPSK20M	21100	50	25	Bottom Side	1	1	23	21.83	0.02	0.099	0.130
T817	LTE B7	QPSK20M	21100	1	50	Rear Face	1	2	24	22.68	-0.05	0.535	0.725
T818	LTE B7	QPSK20M	21100	1	50	Rear Face	1	3	24	22.68	0.07	0.549	0.744
T831	LTE B7	QPSK20M	21100	1	0	Front Face	2	1	15	13.66	0.04	0.144	0.196
T832	LTE B7	QPSK20M	21100	1	0	Rear Face	2	1	15	13.66	0.02	**0.196**	0.267
T833	LTE B7	QPSK20M	21100	1	0	Left Side	2	1	15	13.66	0.05	0.188	0.256
T834	LTE B7	QPSK20M	21100	1	0	Right Side	2	1	15	13.66	0.07	0.093	0.127
T835	LTE B7	QPSK20M	21100	1	0	Top Side	2	1	15	13.66	-0.04	0.103	0.140
T836	LTE B7	QPSK20M	21100	50	25	Front Face	2	1	14	12.67	-0.01	0.125	0.170
T837	LTE B7	QPSK20M	21100	50	25	Rear Face	2	1	14	12.67	0.01	0.158	0.215
T838	LTE B7	QPSK20M	21100	50	25	Left Side	2	1	14	12.67	0	0.142	0.193
T839	LTE B7	QPSK20M	21100	50	25	Right Side	2	1	14	12.67	-0.05	0.091	0.124
T840	LTE B7	QPSK20M	21100	50	25	Top Side	2	1	14	12.67	-0.09	0.098	0.133
T844	LTE B7	QPSK20M	21100	1	0	Rear Face	2	2	15	13.66	0.09	0.175	0.238
T845	LTE B7	QPSK20M	21100	1	0	Rear Face	2	3	15	13.66	0.05	0.172	0.234
T855	LTE B12	QPSK10M	23095	1	24	Front Face	1	1	24.3	23.6	0.03	0.132	0.155
T856	LTE B12	QPSK10M	23095	1	24	Rear Face	1	1	24.3	23.6	-0.04	0.191	0.224
T857	LTE B12	QPSK10M	23095	1	24	Left Side	1	1	24.3	23.6	0.07	0.082	0.096
T858	LTE B12	QPSK10M	23095	1	24	Right Side	1	1	24.3	23.6	-0.02	0.196	0.230
T859	LTE B12	QPSK10M	23095	1	24	Bottom Side	1	1	24.3	23.6	0.01	0.054	0.063
T860	LTE B12	QPSK10M	23095	25	12	Front Face	1	1	23.3	22.63	-0.02	0.107	0.125
T861	LTE B12	QPSK10M	23095	25	12	Rear Face	1	1	23.3	22.63	0.04	0.142	0.166
T862	LTE B12	QPSK10M	23095	25	12	Left Side	1	1	23.3	22.63	0.05	0.066	0.077
T863	LTE B12	QPSK10M	23095	25	12	Right Side	1	1	23.3	22.63	0.06	0.168	0.196
T864	LTE B12	QPSK10M	23095	25	12	Bottom Side	1	1	23.3	22.63	0.01	0.047	0.055
T865	LTE B12	QPSK10M	23095	1	24	Right Side	1	2	24.3	23.6	0.03	**0.269**	0.316
T866	LTE B12	QPSK10M	23095	1	24	Right Side	1	3	24.3	23.6	0.07	0.232	0.273
T885	LTE B12	QPSK10M	23095	1	24	Front Face	2	1	22.8	22	0.01	0.418	0.503
T886	LTE B12	QPSK10M	23095	1	24	Rear Face	2	1	22.8	22	-0.05	**0.545**	0.655
T887	LTE B12	QPSK10M	23095	1	24	Left Side	2	1	22.8	22	0.07	0.419	0.504

T888	LTE B12	QPSK10M	23095	1	24	Right Side	2	1	22.8	22	-0.02	0.131	0.157
T889	LTE B12	QPSK10M	23095	1	24	Top Side	2	1	22.8	22	-0.01	0.356	0.428
T890	LTE B12	QPSK10M	23095	25	12	Front Face	2	1	21.8	21.03	0.01	0.416	0.497
T891	LTE B12	QPSK10M	23095	25	12	Rear Face	2	1	21.8	21.03	0	0.509	0.608
T892	LTE B12	QPSK10M	23095	25	12	Left Side	2	1	21.8	21.03	0.08	0.407	0.486
T893	LTE B12	QPSK10M	23095	25	12	Right Side	2	1	21.8	21.03	0.05	0.132	0.158
T894	LTE B12	QPSK10M	23095	25	12	Top Side	2	1	21.8	21.03	-0.03	0.338	0.404
T898	LTE B12	QPSK10M	23095	1	24	Rear Face	2	2	22.8	22	0.03	0.518	0.623
T899	LTE B12	QPSK10M	23095	1	24	Rear Face	2	3	22.8	22	0.02	0.529	0.636
T910	LTE B17	QPSK10M	23790	1	24	Front Face	1	1	24	23.57	0.01	0.112	0.124
T911	LTE B17	QPSK10M	23790	1	24	Rear Face	1	1	24	23.57	0.03	0.177	0.195
T912	LTE B17	QPSK10M	23790	1	24	Left Side	1	1	24	23.57	0.04	0.072	0.079
T913	LTE B17	QPSK10M	23790	1	24	Right Side	1	1	24	23.57	-0.01	0.156	0.172
T914	LTE B17	QPSK10M	23790	1	24	Bottom Side	1	1	24	23.57	0.01	0.043	0.047
T915	LTE B17	QPSK10M	23800	25	12	Front Face	1	1	23	22.79	0.08	0.102	0.107
T916	LTE B17	QPSK10M	23800	25	12	Rear Face	1	1	23	22.79	0.09	0.154	0.162
T917	LTE B17	QPSK10M	23800	25	12	Left Side	1	1	23	22.79	0.05	0.066	0.069
T918	LTE B17	QPSK10M	23800	25	12	Right Side	1	1	23	22.79	0	0.012	0.013
T919	LTE B17	QPSK10M	23800	25	12	Bottom Side	1	1	23	22.79	-0.05	0.163	0.171
T920	LTE B17	QPSK10M	23790	1	24	Rear Face	1	2	24	23.57	0.04	**0.285**	0.315
T921	LTE B17	QPSK10M	23790	1	24	Rear Face	1	3	24	23.57	0.02	0.261	0.288
T946	LTE B17	QPSK10M	23790	1	24	Front Face	2	1	23	22.49	0.07	0.351	0.395
T947	LTE B17	QPSK10M	23790	1	24	Rear Face	2	1	23	22.49	0	**0.420**	0.472
T948	LTE B17	QPSK10M	23790	1	24	Left Side	2	1	23	22.49	-0.08	0.347	0.390
T949	LTE B17	QPSK10M	23790	1	24	Right Side	2	1	23	22.49	-0.01	0.111	0.125
T950	LTE B17	QPSK10M	23790	1	24	Top Side	2	1	23	22.49	-0.02	0.281	0.316
T951	LTE B17	QPSK10M	23800	25	12	Front Face	2	1	22	21.76	0.01	0.323	0.341
T952	LTE B17	QPSK10M	23800	25	12	Rear Face	2	1	22	21.76	0.04	0.387	0.409
T953	LTE B17	QPSK10M	23800	25	12	Left Side	2	1	22	21.76	0.04	0.303	0.320
T954	LTE B17	QPSK10M	23800	25	12	Right Side	2	1	22	21.76	0.09	0.099	0.105
T955	LTE B17	QPSK10M	23800	25	12	Top Side	2	1	22	21.76	-0.05	0.259	0.274
T959	LTE B17	QPSK10M	23790	1	24	Rear Face	2	2	23	22.49	0.06	0.391	0.440
T960	LTE B17	QPSK10M	23790	1	24	Rear Face	2	3	23	22.49	0.07	0.403	0.453
T970	LTE B26	QPSK15M	26865	1	0	Front Face	1	1	23.5	22.92	0.04	0.148	0.169
T971	LTE B26	QPSK15M	26865	1	0	Rear Face	1	1	23.5	22.92	0.05	0.183	0.209
T972	LTE B26	QPSK15M	26865	1	0	Left Side	1	1	23.5	22.92	0.07	0.091	0.104
T973	LTE B26	QPSK15M	26865	1	0	Right Side	1	1	23.5	22.92	-0.05	0.186	0.213
T974	LTE B26	QPSK15M	26865	1	0	Bottom Side	1	1	23.5	22.92	-0.07	0.059	0.067
T975	LTE B26	QPSK15M	26765	36	0	Front Face	1	1	23	21.93	-0.01	0.118	0.151
T976	LTE B26	QPSK15M	26765	36	0	Rear Face	1	1	23	21.93	0.01	0.128	0.164
T977	LTE B26	QPSK15M	26765	36	0	Left Side	1	1	23	21.93	0.09	0.069	0.088
T978	LTE B26	QPSK15M	26765	36	0	Right Side	1	1	23	21.93	-0.04	0.149	0.191

T979	LTE B26	QPSK15M	26765	36	0	Bottom Side	1	1	23	21.93	0.07	0.042	0.054
T980	LTE B26	QPSK15M	26865	1	0	Rear Face	1	2	23.5	22.92	0.02	**0.234**	0.267
T981	LTE B26	QPSK15M	26865	1	0	Rear Face	1	3	23.5	22.92	0.06	0.221	0.253
T1005	LTE B26	QPSK15M	26865	1	0	Front Face	2	1	21.5	20.85	-0.05	0.478	0.555
T1006	LTE B26	QPSK15M	26865	1	0	Rear Face	2	1	21.5	20.85	-0.01	**0.559**	0.649
T1007	LTE B26	QPSK15M	26865	1	0	Left Side	2	1	21.5	20.85	-0.04	0.258	0.300
T1008	LTE B26	QPSK15M	26865	1	0	Right Side	2	1	21.5	20.85	0.02	0.059	0.069
T1009	LTE B26	QPSK15M	26865	1	0	Top Side	2	1	21.5	20.85	0	0.358	0.416
T1010	LTE B26	QPSK15M	26765	36	0	Front Face	2	1	21	19.86	0.09	0.288	0.374
T1011	LTE B26	QPSK15M	26765	36	0	Rear Face	2	1	21	19.86	0.07	0.305	0.397
T1012	LTE B26	QPSK15M	26765	36	0	Left Side	2	1	21	19.86	-0.09	0.156	0.203
T1013	LTE B26	QPSK15M	26765	36	0	Right Side	2	1	21	19.86	-0.08	0.044	0.057
T1014	LTE B26	QPSK15M	26765	36	0	Top Side	2	1	21	19.86	0.02	0.216	0.281
T1018	LTE B26	QPSK15M	26865	1	0	Rear Face	2	2	21.5	20.85	0.01	0.109	0.127
T1019	LTE B26	QPSK15M	26865	1	0	Rear Face	2	3	21.5	20.85	0.01	0.516	0.599
T1037	LTE B38	QPSK20M	38000	1	0	Front Face	1	1	24	23.87	0.03	0.223	0.230
T1038	LTE B38	QPSK20M	38000	1	0	Rear Face	1	1	24	23.87	0.05	**0.316**	0.326
T1039	LTE B38	QPSK20M	38000	1	0	Left Side	1	1	24	23.87	-0.02	0.054	0.056
T1040	LTE B38	QPSK20M	38000	1	0	Right Side	1	1	24	23.87	0.05	0.296	0.305
T1041	LTE B38	QPSK20M	38000	1	0	Bottom Side	1	1	24	23.87	-0.04	0.085	0.088
T1042	LTE B38	QPSK20M	38000	50	25	Front Face	1	1	23	22.96	0.01	0.174	0.176
T1043	LTE B38	QPSK20M	38000	50	25	Rear Face	1	1	23	22.96	0.06	0.202	0.204
T1044	LTE B38	QPSK20M	38000	50	25	Left Side	1	1	23	22.96	-0.02	0.049	0.049
T1045	LTE B38	QPSK20M	38000	50	25	Right Side	1	1	23	22.96	0.08	0.171	0.173
T1046	LTE B38	QPSK20M	38000	50	25	Bottom Side	1	1	23	22.96	-0.03	0.068	0.069
T1047	LTE B38	QPSK20M	38000	1	0	Rear Face	1	2	24	23.87	0.01	0.109	0.112
T1048	LTE B38	QPSK20M	38000	1	0	Rear Face	1	3	24	23.87	0.07	0.211	0.217
T1061	LTE B38	QPSK20M	38000	1	0	Front Face	2	1	21	20.89	-0.01	0.242	0.248
T1062	LTE B38	QPSK20M	38000	1	0	Rear Face	2	1	21	20.89	0.01	**0.314**	0.322
T1063	LTE B38	QPSK20M	38000	1	0	Left Side	2	1	21	20.89	0.04	0.285	0.292
T1064	LTE B38	QPSK20M	38000	1	0	Right Side	2	1	21	20.89	0.04	0.095	0.097
T1065	LTE B38	QPSK20M	38000	1	0	Top Side	2	1	21	20.89	0.07	0.208	0.213
T1066	LTE B38	QPSK20M	38000	50	25	Front Face	2	1	20	19.3	0.02	0.192	0.226
T1067	LTE B38	QPSK20M	38000	50	25	Rear Face	2	1	20	19.3	-0.01	0.265	0.311
T1068	LTE B38	QPSK20M	38000	50	25	Left Side	2	1	20	19.3	-0.03	0.222	0.261
T1069	LTE B38	QPSK20M	38000	50	25	Right Side	2	1	20	19.3	0.09	0.079	0.093
T1070	LTE B38	QPSK20M	38000	50	25	Top Side	2	1	20	19.3	0.08	0.158	0.186
T1074	LTE B38	QPSK20M	38000	1	0	Rear Face	2	2	21	20.89	0	0.284	0.291
T1075	LTE B38	QPSK20M	38000	1	0	Rear Face	2	3	21	20.89	0.05	0.294	0.302
T1157	LTE B41	QPSK20M	40740	1	50	Front Face	1	1	24	23.85	0.03	0.513	0.531
T1158	LTE B41	QPSK20M	40740	1	50	Rear Face	1	1	24	23.85	0.05	**0.609**	0.630
T1159	LTE B41	QPSK20M	40740	1	50	Left Side	1	1	24	23.85	-0.01	0.300	0.311

T1160	LTE B41	QPSK20M	40740	1	50	Right Side	1	1	24	23.85	0.04	0.606	0.627
T1161	LTE B41	QPSK20M	40740	1	50	Bottom Side	1	1	24	23.85	-0.02	0.332	0.344
T1162	LTE B41	QPSK20M	40740	50	25	Front Face	1	1	23	22.96	0.03	0.434	0.438
T1163	LTE B41	QPSK20M	40740	50	25	Rear Face	1	1	23	22.96	-0.04	0.517	0.522
T1164	LTE B41	QPSK20M	40740	50	25	Left Side	1	1	23	22.96	0.06	0.244	0.246
T1165	LTE B41	QPSK20M	40740	50	25	Right Side	1	1	23	22.96	-0.02	0.511	0.516
T1166	LTE B41	QPSK20M	40740	50	25	Bottom Side	1	1	23	22.96	-0.07	0.292	0.295
T1167	LTE B41	QPSK20M	40740	1	50	Rear Face	1	2	24	23.85	0.05	0.596	0.617
T1168	LTE B41	QPSK20M	40740	1	50	Rear Face	1	3	24	23.85	-0.08	0.586	0.607
T1175	LTE B41	QPSK20M	40740	1	50	Front Face	2	1	20	19.71	0.01	0.184	0.197
T1176	LTE B41	QPSK20M	40740	1	50	Rear Face	2	1	20	19.71	0.03	**0.226**	0.242
T1177	LTE B41	QPSK20M	40740	1	50	Left Side	2	1	20	19.71	-0.05	0.215	0.230
T1178	LTE B41	QPSK20M	40740	1	50	Right Side	2	1	20	19.71	0.04	0.155	0.166
T1179	LTE B41	QPSK20M	40740	1	50	Top Side	2	1	20	19.71	0.03	0.172	0.184
T1180	LTE B41	QPSK20M	40740	50	25	Front Face	2	1	19	18.83	-0.02	0.173	0.180
T1181	LTE B41	QPSK20M	40740	50	25	Rear Face	2	1	19	18.83	0.06	0.180	0.187
T1182	LTE B41	QPSK20M	40740	50	25	Left Side	2	1	19	18.83	0.07	0.192	0.200
T1183	LTE B41	QPSK20M	40740	50	25	Right Side	2	1	19	18.83	0.05	0.150	0.156
T1184	LTE B41	QPSK20M	40740	50	25	Top Side	2	1	19	18.83	-0.01	0.164	0.171
T1185	LTE B41	QPSK20M	40740	1	50	Rear Face	2	2	20	19.71	0.06	0.213	0.228
T1186	LTE B41	QPSK20M	40740	1	50	Rear Face	2	3	20	19.71	0.02	0.209	0.223

Note: 1.The value with boldface is the maximum SAR Value of each test band.
2. Main antenna is bottom antenna(Ant 1), and the second antenna is top antenna(Ant 2).

Per KDB648474D04, when hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test No.	Band	Mode	CH	RB	Offset	Test Position With 10mm	ANT	Battery	Tune up(Full power)	Measured	Drift(dB)	SAR Value (W/kg) 1-g	Scaled SAR_{1g} (W/kg)	product specific 10-g SAR Exclusion
T657	LTE B2	QPSK20M	18900	1	50	Front Face	1	1	24	20.07	0.04	0.453	1.120	Yes
T658	LTE B2	QPSK20M	18900	1	50	Rear Face	1	1	24	20.07	0.01	**0.532**	1.315	No
T659	LTE B2	QPSK20M	18900	1	50	Left Side	1	1	24	20.07	0.05	0.250	0.618	Yes
T660	LTE B2	QPSK20M	18900	1	50	Right Side	1	1	24	20.07	0.02	0.361	0.892	Yes
T661	LTE B2	QPSK20M	18900	1	50	Bottom Side	1	1	24	20.07	-0.01	0.041	0.101	Yes
T662	LTE B2	QPSK20M	18900	50	0	Front Face	1	1	23	19.23	0.06	0.325	0.774	Yes
T663	LTE B2	QPSK20M	18900	50	0	Rear Face	1	1	23	19.23	0.03	0.414	0.986	Yes
T664	LTE B2	QPSK20M	18900	50	0	Left Side	1	1	23	19.23	0.08	0.105	0.250	Yes

T665	LTE B2	QPSK20M	18900	50	0	Right Side	1	1	23	19.23	-0.02	0.034	0.081	Yes
T666	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	1	23	19.23	0.01	0.288	0.686	Yes
T669	LTE B2	QPSK20M	18900	1	50	Rear Face	1	2	24	20.07	0.05	0.462	1.142	Yes
T670	LTE B2	QPSK20M	18900	1	50	Rear Face	1	3	24	20.07	-0.04	0.478	1.181	Yes
T688	LTE B2	QPSK20M	18900	1	50	Front Face	2	1	24	16.35	0.03	0.158	0.920	Yes
T689	LTE B2	QPSK20M	18900	1	50	Rear Face	2	1	24	16.35	0.04	**0.235**	1.368	No
T690	LTE B2	QPSK20M	18900	1	50	Left Side	2	1	24	16.35	-0.07	0.203	1.182	Yes
T691	LTE B2	QPSK20M	18900	1	50	Right Side	2	1	24	16.35	0.01	0.067	0.390	Yes
T692	LTE B2	QPSK20M	18900	1	50	Top Side	2	1	24	16.35	0.07	0.138	0.803	Yes
T693	LTE B2	QPSK20M	18900	50	0	Front Face	2	1	23	15.42	-0.02	0.125	0.716	Yes
T694	LTE B2	QPSK20M	18900	50	0	Rear Face	2	1	23	15.42	-0.04	0.147	0.842	Yes
T695	LTE B2	QPSK20M	18900	50	0	Left Side	2	1	23	15.42	0	0.134	0.768	Yes
T696	LTE B2	QPSK20M	18900	50	0	Right Side	2	1	23	15.42	-0.01	0.076	0.435	Yes
T697	LTE B2	QPSK20M	18900	50	0	Top Side	2	1	23	15.42	0.01	0.092	0.527	Yes
T701	LTE B2	QPSK20M	18900	1	50	Rear Face	2	2	24	16.35	0.01	0.213	1.240	No
T702	LTE B2	QPSK20M	18900	1	50	Rear Face	2	3	24	16.35	0.02	0.218	1.269	No
T711	LTE B4	QPSK20M	20175	1	50	Front Face	1	1	24	22.81	0.01	0.738	0.971	Yes
T712	LTE B4	QPSK20M	20175	1	50	Rear Face	1	1	24	22.81	-0.02	**0.920**	1.210	No
T713	LTE B4	QPSK20M	20175	1	50	Left Side	1	1	24	22.81	-0.04	0.191	0.251	Yes
T714	LTE B4	QPSK20M	20175	1	50	Right Side	1	1	24	22.81	0.05	0.586	0.771	Yes
T715	LTE B4	QPSK20M	20175	1	50	Bottom Side	1	1	24	22.81	0.05	0.072	0.095	Yes
T716	LTE B4	QPSK20M	20175	50	0	Front Face	1	1	23	21.96	0.07	0.514	0.653	Yes
T717	LTE B4	QPSK20M	20175	50	0	Rear Face	1	1	23	21.96	0.02	0.731	0.929	Yes
T718	LTE B4	QPSK20M	20175	50	0	Left Side	1	1	23	21.96	0	0.128	0.163	Yes
T719	LTE B4	QPSK20M	20175	50	0	Right Side	1	1	23	21.96	0.01	0.441	0.560	Yes
T720	LTE B4	QPSK20M	20175	50	0	Bottom Side	1	1	23	21.96	0.04	0.066	0.084	Yes
T721	LTE B4	QPSK20M	20050	1	50	Front Face	1	1	24	22.81	0.01	0.687	0.904	Yes
T722	LTE B4	QPSK20M	20300	1	50	Front Face	1	1	24	22.77	-0.01	0.652	0.865	Yes
T723	LTE B4	QPSK20M	20175	1	50	Rear Face	1	2	24	22.81	-0.01	0.702	0.923	Yes
T724	LTE B4	QPSK20M	20175	1	50	Rear Face	1	3	24	22.81	-0.05	0.724	0.952	Yes
T725	LTE B4	QPSK20M	20175	100	0	Rear Face	1	1	23	21.76	0.06	0.674	0.897	Yes
T712-1	LTE B4	QPSK20M	20175	1	50	Rear Face(1st Reapeat)	1	1	24	22.81	-0.02	0.916	1.205	No
T739	LTE B4	QPSK20M	20175	1	0	Front Face	2	1	23.8	17.75	0.05	0.077	0.310	Yes
T740	LTE B4	QPSK20M	20175	1	0	Rear Face	2	1	23.8	17.75	0.03	**0.106**	0.427	Yes
T741	LTE B4	QPSK20M	20175	1	0	Left Side	2	1	23.8	17.75	0.01	0.097	0.391	Yes
T742	LTE B4	QPSK20M	20175	1	0	Right Side	2	1	23.8	17.75	-0.02	0.047	0.189	Yes
T743	LTE B4	QPSK20M	20175	1	0	Top Side	2	1	23.8	17.75	0.04	0.079	0.318	Yes
T744	LTE B4	QPSK20M	20175	50	0	Front Face	2	1	23	16.94	0.06	0.062	0.250	Yes
T745	LTE B4	QPSK20M	20175	50	0	Rear Face	2	1	23	16.94	-0.03	0.071	0.287	Yes
T746	LTE B4	QPSK20M	20175	50	0	Left Side	2	1	23	16.94	0.08	0.070	0.283	Yes
T747	LTE B4	QPSK20M	20175	50	0	Right Side	2	1	23	16.94	0.02	0.041	0.165	Yes
T748	LTE B4	QPSK20M	20175	50	0	Top Side	2	1	23	16.94	0.03	0.064	0.258	Yes

T752	LTE B4	QPSK20M	20175	1	0	Rear Face	2	2	23.8	17.75	0.07	0.092	0.370	Yes
T753	LTE B4	QPSK20M	20175	1	0	Rear Face	2	3	23.8	17.75	-0.04	0.098	0.395	Yes
T760	LTE B5	QPSK10M	20525	1	24	Front Face	1	1	24	23.37	0.02	0.217	0.251	Yes
T761	LTE B5	QPSK10M	20525	1	24	Rear Face	1	1	24	23.37	-0.01	0.303	0.350	Yes
T762	LTE B5	QPSK10M	20525	1	24	Left Side	1	1	24	23.37	-0.05	0.121	0.140	Yes
T763	LTE B5	QPSK10M	20525	1	24	Right Side	1	1	24	23.37	-0.01	**0.380**	0.439	Yes
T764	LTE B5	QPSK10M	20525	1	24	Bottom Side	1	1	24	23.37	0.06	0.253	0.292	Yes
T765	LTE B5	QPSK10M	20525	25	0	Front Face	1	1	23	21.95	0.01	0.155	0.197	Yes
T766	LTE B5	QPSK10M	20525	25	0	Rear Face	1	1	23	21.95	0.01	0.198	0.252	Yes
T767	LTE B5	QPSK10M	20525	25	0	Left Side	1	1	23	21.95	0.09	0.088	0.112	Yes
T768	LTE B5	QPSK10M	20525	25	0	Right Side	1	1	23	21.95	0.07	0.207	0.264	Yes
T769	LTE B5	QPSK10M	20525	25	0	Bottom Side	1	1	23	21.95	-0.07	0.179	0.228	Yes
T770	LTE B5	QPSK10M	20525	1	24	Right Side	1	2	24	23.37	-0.01	0.263	0.304	Yes
T771	LTE B5	QPSK10M	20525	1	24	Right Side	1	3	24	23.37	-0.06	0.301	0.348	Yes
T784	LTE B5	QPSK10M	20525	1	24	Front Face	2	1	24	21.26	0	0.333	0.626	Yes
T785	LTE B5	QPSK10M	20525	1	24	Rear Face	2	1	24	21.26	-0.04	**0.379**	0.712	Yes
T786	LTE B5	QPSK10M	20525	1	24	Left Side	2	1	24	21.26	0.07	0.191	0.359	Yes
T787	LTE B5	QPSK10M	20525	1	24	Right Side	2	1	24	21.26	0.05	0.087	0.164	Yes
T788	LTE B5	QPSK10M	20525	1	24	Top Side	2	1	24	21.26	-0.01	0.291	0.547	Yes
T789	LTE B5	QPSK10M	20450	25	0	Front Face	2	1	23	20.3	0.01	0.261	0.486	Yes
T790	LTE B5	QPSK10M	20450	25	0	Rear Face	2	1	23	20.3	0.02	0.338	0.629	Yes
T791	LTE B5	QPSK10M	20450	25	0	Left Side	2	1	23	20.3	0.04	0.174	0.324	Yes
T792	LTE B5	QPSK10M	20450	25	0	Right Side	2	1	23	20.3	0.04	0.080	0.149	Yes
T793	LTE B5	QPSK10M	20450	25	0	Top Side	2	1	23	20.3	-0.05	0.249	0.464	Yes
T797	LTE B5	QPSK10M	20525	1	24	Rear Face	2	2	24	21.26	-0.06	0.321	0.603	Yes
T798	LTE B5	QPSK10M	20525	1	24	Rear Face	2	3	24	21.26	-0.02	0.327	0.615	Yes
State 2														
T807	LTE B7	QPSK20M	21100	1	50	Rear Face	1	1	24	22.68	0.03	0.531	0.720	Yes
State 1														
T807-1	LTE B7	QPSK20M	21100	1	50	Rear Face	1	1	24	22.68	0.06	**0.558**	0.756	Yes
T808	LTE B7	QPSK20M	21100	1	50	Front Face	1	1	24	22.68	-0.02	0.472	0.640	Yes
T809	LTE B7	QPSK20M	21100	1	50	Left Side	1	1	24	22.68	0.03	0.421	0.571	Yes
T810	LTE B7	QPSK20M	21100	1	50	Right Side	1	1	24	22.68	0.02	0.114	0.154	Yes
T811	LTE B7	QPSK20M	21100	1	50	Bottom Side	1	1	24	22.68	0.05	0.096	0.130	Yes
T812	LTE B7	QPSK20M	21100	50	25	Front Face	1	1	23	21.83	0.09	0.405	0.530	Yes
T813	LTE B7	QPSK20M	21100	50	25	Rear Face	1	1	23	21.83	-0.09	0.463	0.606	Yes
T814	LTE B7	QPSK20M	21100	50	25	Left Side	1	1	23	21.83	-0.01	0.301	0.394	Yes
T815	LTE B7	QPSK20M	21100	50	25	Right Side	1	1	23	21.83	-0.04	0.098	0.128	Yes
T816	LTE B7	QPSK20M	21100	50	25	Bottom Side	1	1	23	21.83	0.02	0.099	0.130	Yes
T817	LTE B7	QPSK20M	21100	1	50	Rear Face	1	2	24	22.68	-0.05	0.535	0.725	Yes
T818	LTE B7	QPSK20M	21100	1	50	Rear Face	1	3	24	22.68	0.07	0.549	0.744	Yes
T831	LTE B7	QPSK20M	21100	1	0	Front Face	2	1	24	13.66	0.04	0.144	1.557	No

T832	LTE B7	QPSK20M	21100	1	0	Rear Face	2	1	24	13.66	0.02	**0.196**	2.120	No
T833	LTE B7	QPSK20M	21100	1	0	Left Side	2	1	24	13.66	0.05	0.188	2.033	No
T834	LTE B7	QPSK20M	21100	1	0	Right Side	2	1	24	13.66	0.07	0.093	1.006	Yes
T835	LTE B7	QPSK20M	21100	1	0	Top Side	2	1	24	13.66	-0.04	0.103	1.114	Yes
T836	LTE B7	QPSK20M	21100	50	25	Front Face	2	1	23	12.67	-0.01	0.125	1.349	No
T837	LTE B7	QPSK20M	21100	50	25	Rear Face	2	1	23	12.67	0.01	0.158	1.705	No
T838	LTE B7	QPSK20M	21100	50	25	Left Side	2	1	23	12.67	0	0.142	1.532	No
T839	LTE B7	QPSK20M	21100	50	25	Right Side	2	1	23	12.67	-0.05	0.091	0.982	Yes
T840	LTE B7	QPSK20M	21100	50	25	Top Side	2	1	23	12.67	-0.09	0.098	1.057	Yes
T844	LTE B7	QPSK20M	21100	1	0	Rear Face	2	2	24	13.66	0.09	0.175	1.893	No
T845	LTE B7	QPSK20M	21100	1	0	Rear Face	2	3	24	13.66	0.05	0.172	1.860	No
T855	LTE B12	QPSK10M	23095	1	24	Front Face	1	1	24.3	23.6	0.03	0.132	0.155	Yes
T856	LTE B12	QPSK10M	23095	1	24	Rear Face	1	1	24.3	23.6	-0.04	0.191	0.224	Yes
T857	LTE B12	QPSK10M	23095	1	24	Left Side	1	1	24.3	23.6	0.07	0.082	0.096	Yes
T858	LTE B12	QPSK10M	23095	1	24	Right Side	1	1	24.3	23.6	-0.02	0.196	0.230	Yes
T859	LTE B12	QPSK10M	23095	1	24	Bottom Side	1	1	24.3	23.6	0.01	0.054	0.063	Yes
T860	LTE B12	QPSK10M	23095	25	12	Front Face	1	1	23.3	22.63	-0.02	0.107	0.125	Yes
T861	LTE B12	QPSK10M	23095	25	12	Rear Face	1	1	23.3	22.63	0.04	0.142	0.166	Yes
T862	LTE B12	QPSK10M	23095	25	12	Left Side	1	1	23.3	22.63	0.05	0.066	0.077	Yes
T863	LTE B12	QPSK10M	23095	25	12	Right Side	1	1	23.3	22.63	0.06	0.168	0.196	Yes
T864	LTE B12	QPSK10M	23095	25	12	Bottom Side	1	1	23.3	22.63	0.01	0.047	0.055	Yes
T865	LTE B12	QPSK10M	23095	1	24	Right Side	1	2	24.3	23.6	0.03	**0.269**	0.316	Yes
T866	LTE B12	QPSK10M	23095	1	24	Right Side	1	3	24.3	23.6	0.07	0.232	0.273	Yes
T885	LTE B12	QPSK10M	23095	1	24	Front Face	2	1	24.3	22	0.01	0.418	0.710	Yes
T886	LTE B12	QPSK10M	23095	1	24	Rear Face	2	1	24.3	22	-0.05	**0.545**	0.926	Yes
T887	LTE B12	QPSK10M	23095	1	24	Left Side	2	1	24.3	22	0.07	0.419	0.712	Yes
T888	LTE B12	QPSK10M	23095	1	24	Right Side	2	1	24.3	22	-0.02	0.131	0.222	Yes
T889	LTE B12	QPSK10M	23095	1	24	Top Side	2	1	24.3	22	-0.01	0.356	0.605	Yes
T890	LTE B12	QPSK10M	23095	25	12	Front Face	2	1	23.3	21.03	0.01	0.416	0.702	Yes
T891	LTE B12	QPSK10M	23095	25	12	Rear Face	2	1	23.3	21.03	0	0.509	0.858	Yes
T892	LTE B12	QPSK10M	23095	25	12	Left Side	2	1	23.3	21.03	0.08	0.407	0.686	Yes
T893	LTE B12	QPSK10M	23095	25	12	Right Side	2	1	23.3	21.03	0.05	0.132	0.223	Yes
T894	LTE B12	QPSK10M	23095	25	12	Top Side	2	1	23.3	21.03	-0.03	0.338	0.570	Yes
T898	LTE B12	QPSK10M	23095	1	24	Rear Face	2	2	24.3	22	0.03	0.518	0.880	Yes
T899	LTE B12	QPSK10M	23095	1	24	Rear Face	2	3	24.3	22	0.02	0.529	0.898	Yes
T910	LTE B17	QPSK10M	23790	1	24	Front Face	1	1	24	23.57	0.01	0.112	0.124	Yes
T911	LTE B17	QPSK10M	23790	1	24	Rear Face	1	1	24	23.57	0.03	0.177	0.195	Yes
T912	LTE B17	QPSK10M	23790	1	24	Left Side	1	1	24	23.57	0.04	0.072	0.079	Yes
T913	LTE B17	QPSK10M	23790	1	24	Right Side	1	1	24	23.57	-0.01	0.156	0.172	Yes
T914	LTE B17	QPSK10M	23790	1	24	Bottom Side	1	1	24	23.57	0.01	0.043	0.047	Yes
T915	LTE B17	QPSK10M	23800	25	12	Front Face	1	1	23	22.79	0.08	0.102	0.107	Yes
T916	LTE B17	QPSK10M	23800	25	12	Rear Face	1	1	23	22.79	0.09	0.154	0.162	Yes

T917	LTE B17	QPSK10M	23800	25	12	Left Side	1	1	23	22.79	0.05	0.066	0.069	Yes
T918	LTE B17	QPSK10M	23800	25	12	Right Side	1	1	23	22.79	0	0.012	0.013	Yes
T919	LTE B17	QPSK10M	23800	25	12	Bottom Side	1	1	23	22.79	-0.05	0.163	0.171	Yes
T920	LTE B17	QPSK10M	23790	1	24	Rear Face	1	2	24	23.57	0.04	**0.285**	0.315	Yes
T921	LTE B17	QPSK10M	23790	1	24	Rear Face	1	3	24	23.57	0.02	0.261	0.288	Yes
T946	LTE B17	QPSK10M	23790	1	24	Front Face	2	1	24	22.49	0.07	0.351	0.497	Yes
T947	LTE B17	QPSK10M	23790	1	24	Rear Face	2	1	24	22.49	0	**0.420**	0.595	Yes
T948	LTE B17	QPSK10M	23790	1	24	Left Side	2	1	24	22.49	-0.08	0.347	0.491	Yes
T949	LTE B17	QPSK10M	23790	1	24	Right Side	2	1	24	22.49	-0.01	0.111	0.157	Yes
T950	LTE B17	QPSK10M	23790	1	24	Top Side	2	1	24	22.49	-0.02	0.281	0.398	Yes
T951	LTE B17	QPSK10M	23800	25	12	Front Face	2	1	23	21.76	0.01	0.323	0.430	Yes
T952	LTE B17	QPSK10M	23800	25	12	Rear Face	2	1	23	21.76	0.04	0.387	0.515	Yes
T953	LTE B17	QPSK10M	23800	25	12	Left Side	2	1	23	21.76	0.04	0.303	0.403	Yes
T954	LTE B17	QPSK10M	23800	25	12	Right Side	2	1	23	21.76	0.09	0.099	0.132	Yes
T955	LTE B17	QPSK10M	23800	25	12	Top Side	2	1	23	21.76	-0.05	0.259	0.345	Yes
T959	LTE B17	QPSK10M	23790	1	24	Rear Face	2	2	24	22.49	0.06	0.391	0.554	Yes
T960	LTE B17	QPSK10M	23790	1	24	Rear Face	2	3	24	22.49	0.07	0.403	0.571	Yes
T970	LTE B26	QPSK15M	26865	1	0	Front Face	1	1	23.5	22.92	0.04	0.148	0.169	Yes
T971	LTE B26	QPSK15M	26865	1	0	Rear Face	1	1	23.5	22.92	0.05	0.183	0.209	Yes
T972	LTE B26	QPSK15M	26865	1	0	Left Side	1	1	23.5	22.92	0.07	0.091	0.104	Yes
T973	LTE B26	QPSK15M	26865	1	0	Right Side	1	1	23.5	22.92	-0.05	0.186	0.213	Yes
T974	LTE B26	QPSK15M	26865	1	0	Bottom Side	1	1	23.5	22.92	-0.07	0.059	0.067	Yes
T975	LTE B26	QPSK15M	26765	36	0	Front Face	1	1	23	21.93	-0.01	0.118	0.151	Yes
T976	LTE B26	QPSK15M	26765	36	0	Rear Face	1	1	23	21.93	0.01	0.128	0.164	Yes
T977	LTE B26	QPSK15M	26765	36	0	Left Side	1	1	23	21.93	0.09	0.069	0.088	Yes
T978	LTE B26	QPSK15M	26765	36	0	Right Side	1	1	23	21.93	-0.04	0.149	0.191	Yes
T979	LTE B26	QPSK15M	26765	36	0	Bottom Side	1	1	23	21.93	0.07	0.042	0.054	Yes
T980	LTE B26	QPSK15M	26865	1	0	Rear Face	1	2	23.5	22.92	0.02	**0.234**	0.267	Yes
T981	LTE B26	QPSK15M	26865	1	0	Rear Face	1	3	23.5	22.92	0.06	0.221	0.253	Yes
T1005	LTE B26	QPSK15M	26865	1	0	Front Face	2	1	23.5	20.85	-0.05	0.478	0.880	Yes
T1006	LTE B26	QPSK15M	26865	1	0	Rear Face	2	1	23.5	20.85	-0.01	**0.559**	1.029	Yes
T1007	LTE B26	QPSK15M	26865	1	0	Left Side	2	1	23.5	20.85	-0.04	0.258	0.475	Yes
T1008	LTE B26	QPSK15M	26865	1	0	Right Side	2	1	23.5	20.85	0.02	0.059	0.109	Yes
T1009	LTE B26	QPSK15M	26865	1	0	Top Side	2	1	23.5	20.85	0	0.358	0.659	Yes
T1010	LTE B26	QPSK15M	26765	36	0	Front Face	2	1	23	19.86	0.09	0.288	0.593	Yes
T1011	LTE B26	QPSK15M	26765	36	0	Rear Face	2	1	23	19.86	0.07	0.305	0.628	Yes
T1012	LTE B26	QPSK15M	26765	36	0	Left Side	2	1	23	19.86	-0.09	0.156	0.321	Yes
T1013	LTE B26	QPSK15M	26765	36	0	Right Side	2	1	23	19.86	-0.08	0.044	0.091	Yes
T1014	LTE B26	QPSK15M	26765	36	0	Top Side	2	1	23	19.86	0.02	0.216	0.445	Yes
T1018	LTE B26	QPSK15M	26865	1	0	Rear Face	2	2	23.5	20.85	0.01	0.109	0.201	Yes
T1019	LTE B26	QPSK15M	26865	1	0	Rear Face	2	3	23.5	20.85	0.01	0.516	0.950	Yes
T1037	LTE B38	QPSK20M	38000	1	0	Front Face	1	1	24	23.87	0.03	0.223	0.230	Yes

T1038	LTE B38	QPSK20M	38000	1	0	Rear Face	1	1	24	23.87	0.05	**0.316**	0.326	Yes
T1039	LTE B38	QPSK20M	38000	1	0	Left Side	1	1	24	23.87	-0.02	0.054	0.056	Yes
T1040	LTE B38	QPSK20M	38000	1	0	Right Side	1	1	24	23.87	0.05	0.296	0.305	Yes
T1041	LTE B38	QPSK20M	38000	1	0	Bottom Side	1	1	24	23.87	-0.04	0.085	0.088	Yes
T1042	LTE B38	QPSK20M	38000	50	25	Front Face	1	1	23	22.96	0.01	0.174	0.176	Yes
T1043	LTE B38	QPSK20M	38000	50	25	Rear Face	1	1	23	22.96	0.06	0.202	0.204	Yes
T1044	LTE B38	QPSK20M	38000	50	25	Left Side	1	1	23	22.96	-0.02	0.049	0.049	Yes
T1045	LTE B38	QPSK20M	38000	50	25	Right Side	1	1	23	22.96	0.08	0.171	0.173	Yes
T1046	LTE B38	QPSK20M	38000	50	25	Bottom Side	1	1	23	22.96	-0.03	0.068	0.069	Yes
T1047	LTE B38	QPSK20M	38000	1	0	Rear Face	1	2	24	23.87	0.01	0.109	0.112	Yes
T1048	LTE B38	QPSK20M	38000	1	0	Rear Face	1	3	24	23.87	0.07	0.211	0.217	Yes
T1061	LTE B38	QPSK20M	38000	1	0	Front Face	2	1	24	20.89	-0.01	0.242	0.495	Yes
T1062	LTE B38	QPSK20M	38000	1	0	Rear Face	2	1	24	20.89	0.01	**0.314**	0.643	Yes
T1063	LTE B38	QPSK20M	38000	1	0	Left Side	2	1	24	20.89	0.04	0.285	0.583	Yes
T1064	LTE B38	QPSK20M	38000	1	0	Right Side	2	1	24	20.89	0.04	0.095	0.194	Yes
T1065	LTE B38	QPSK20M	38000	1	0	Top Side	2	1	24	20.89	0.07	0.208	0.426	Yes
T1066	LTE B38	QPSK20M	38000	50	25	Front Face	2	1	23	19.3	0.02	0.192	0.450	Yes
T1067	LTE B38	QPSK20M	38000	50	25	Rear Face	2	1	23	19.3	-0.01	0.265	0.621	Yes
T1068	LTE B38	QPSK20M	38000	50	25	Left Side	2	1	23	19.3	-0.03	0.222	0.520	Yes
T1069	LTE B38	QPSK20M	38000	50	25	Right Side	2	1	23	19.3	0.09	0.079	0.185	Yes
T1070	LTE B38	QPSK20M	38000	50	25	Top Side	2	1	23	19.3	0.08	0.158	0.370	Yes
T1074	LTE B38	QPSK20M	38000	1	0	Rear Face	2	2	24	20.89	0	0.284	0.581	Yes
T1075	LTE B38	QPSK20M	38000	1	0	Rear Face	2	3	24	20.89	0.05	0.294	0.602	Yes
T1157	LTE B41	QPSK20M	40740	1	50	Front Face	1	1	24	23.85	0.03	0.513	0.531	Yes
T1158	LTE B41	QPSK20M	40740	1	50	Rear Face	1	1	24	23.85	0.05	**0.609**	0.630	Yes
T1159	LTE B41	QPSK20M	40740	1	50	Left Side	1	1	24	23.85	-0.01	0.300	0.311	Yes
T1160	LTE B41	QPSK20M	40740	1	50	Right Side	1	1	24	23.85	0.04	0.606	0.627	Yes
T1161	LTE B41	QPSK20M	40740	1	50	Bottom Side	1	1	24	23.85	-0.02	0.332	0.344	Yes
T1162	LTE B41	QPSK20M	40740	50	25	Front Face	1	1	23	22.96	0.03	0.434	0.438	Yes
T1163	LTE B41	QPSK20M	40740	50	25	Rear Face	1	1	23	22.96	-0.04	0.517	0.522	Yes
T1164	LTE B41	QPSK20M	40740	50	25	Left Side	1	1	23	22.96	0.06	0.244	0.246	Yes
T1165	LTE B41	QPSK20M	40740	50	25	Right Side	1	1	23	22.96	-0.02	0.511	0.516	Yes
T1166	LTE B41	QPSK20M	40740	50	25	Bottom Side	1	1	23	22.96	-0.07	0.292	0.295	Yes
T1167	LTE B41	QPSK20M	40740	1	50	Rear Face	1	2	24	23.85	0.05	0.596	0.617	Yes
T1168	LTE B41	QPSK20M	40740	1	50	Rear Face	1	3	24	23.85	-0.08	0.586	0.607	Yes
T1175	LTE B41	QPSK20M	40740	1	50	Front Face	2	1	24	19.71	0.01	0.184	0.494	Yes
T1176	LTE B41	QPSK20M	40740	1	50	Rear Face	2	1	24	19.71	0.03	**0.226**	0.607	Yes
T1177	LTE B41	QPSK20M	40740	1	50	Left Side	2	1	24	19.71	-0.05	0.215	0.577	Yes
T1178	LTE B41	QPSK20M	40740	1	50	Right Side	2	1	24	19.71	0.04	0.155	0.416	Yes
T1179	LTE B41	QPSK20M	40740	1	50	Top Side	2	1	24	19.71	0.03	0.172	0.462	Yes
T1180	LTE B41	QPSK20M	40740	50	25	Front Face	2	1	23	18.83	-0.02	0.173	0.452	Yes
T1181	LTE B41	QPSK20M	40740	50	25	Rear Face	2	1	23	18.83	0.06	0.180	0.470	Yes

T1182	LTE B41	QPSK20M	40740	50	25	Left Side	2	1	23	18.83	0.07	0.192	0.502	Yes
T1183	LTE B41	QPSK20M	40740	50	25	Right Side	2	1	23	18.83	0.05	0.150	0.392	Yes
T1184	LTE B41	QPSK20M	40740	50	25	Top Side	2	1	23	18.83	-0.01	0.164	0.428	Yes
T1185	LTE B41	QPSK20M	40740	1	50	Rear Face	2	2	24	19.71	0.06	0.213	0.572	Yes
T1186	LTE B41	QPSK20M	40740	1	50	Rear Face	2	3	24	19.71	0.02	0.209	0.561	Yes

5. product specific 10-g SAR test of LTE

Test No.	Band	Mode	CH	RB	offset	Test Position With 0mm	SIM	ANT	Battery	Tune up	Measured	Drift(dB)	SAR Value (W/kg)10-g	Reported SAR
T10g-658	LTE B2	QPSK20M	18900	1	50	Rear Face	1	1	2	24	23.62	0.02	2.83	3.089
T10g-659	LTE B2	QPSK20M	18700	1	50	Rear Face	1	1	2	24	23.59	0.07	**3.29**	3.616
T10g-660	LTE B2	QPSK20M	19100	1	50	Rear Face	1	1	2	24	23.56	0.03	2.53	2.800
T10g-661	LTE B2	QPSK20M	18900	50	0	Rear Face	1	1	2	23	22.89	0.05	2.03	2.082
T10g-664	LTE B2	QPSK20M	18700	50	0	Rear Face	1	1	2	23	22.81	-0.03	2.52	2.633
T10g-665	LTE B2	QPSK20M	19100	50	25	Rear Face	1	1	2	23	22.59	-0.04	2.37	2.605
T10g-666	LTE B2	QPSK20M	18700	100	0	Rear Face	1	1	2	23	22.28	-0.06	2.42	2.856
T10g-667	LTE B2	QPSK20M	18700	1	50	Rear Face	1	1	1	24	23.59	-0.07	3.26	3.583
T10g-668	LTE B2	QPSK20M	18900	1	50	Rear Face	1	1	3	24	23.62	-0.03	3.25	3.547
T10g-669	LTE B2	QPSK20M	18700	1	50	Rear Face	1	1	3	24	23.59	-0.04	3.27	3.594
T10g-670	LTE B2	QPSK20M	18700	1	50	Rear Face	1	1	2	24	23.59	0.02	3.09	3.396
T10g-671	LTE B2	QPSK20M	18700	1	50	Rear Face	1	1	2	24	23.59	0.07	3.13	3.440
T10g-672	LTE B2	QPSK20M	18700	1	50	Rear Face(1st Repeat)	1	1	2	24	23.59	0.05	3.21	3.528
T10g-689	LTE B2	QPSK20M	18900	1	50	Rear Face	1	2	2	24	23.56	0.01	**1.2**	1.328
T10g-690	LTE B2	QPSK20M	18900	50	0	Rear Face	1	2	2	23	22.75	0.03	0.684	0.725
T10g-691	LTE B2	QPSK20M	18900	1	50	Rear Face	1	2	1	24	23.56	0.02	1.16	1.284
T10g-692	LTE B2	QPSK20M	18900	1	50	Rear Face	1	2	3	24	23.56	0.05	1.18	1.306
T10g-712	LTE B4	QPSK20M	20175	1	50	Rear Face	1	1	2	24	23.41	0.03	2.93	3.356
T10g-713	LTE B4	QPSK20M	20050	1	50	Rear Face	1	1	2	24	23.37	0.07	**3.12**	3.607
T10g-714	LTE B4	QPSK20M	20300	1	50	Rear Face	1	1	2	24	22.83	-0.03	2.66	3.482
T10g-715	LTE B4	QPSK20M	20175	50	0	Rear Face	1	1	2	23	21.99	-0.05	2.79	3.520
T10g-716	LTE B4	QPSK20M	20050	50	0	Rear Face	1	1	2	23	21.95	-0.06	2.35	2.993
T10g-717	LTE B4	QPSK20M	20300	50	0	Rear Face	1	1	2	23	21.86	0.02	2.19	2.847
T10g-718	LTE B4	QPSK20M	20175	100	0	Rear Face	1	1	2	23	21.93	0.03	2.55	3.262
T10g-719	LTE B4	QPSK20M	20050	1	50	Rear Face	1	1	1	24	23.37	0.08	3.03	3.503
T10g-720	LTE B4	QPSK20M	20050	1	50	Rear Face	1	1	3	24	23.37	-0.04	3.08	3.561
T10g-721	LTE B4	QPSK20M	20050	1	50	Rear Face	1	1	2	24	23.37	0.07	3.05	3.526
T10g-722	LTE B4	QPSK20M	20050	1	50	Rear Face	1	1	2	24	23.37	0.05	3.06	3.538
T10g-723	LTE B4	QPSK20M	20050	1	50	Rear Face(1st Repeat)	1	1	2	24	23.37	0.02	3.09	3.572

T10g-831	LTE B7	QPSK20M	21100	1	0	Front Face	1	2	2	24	22.65	0.04	0.612	0.835
T10g-832	LTE B7	QPSK20M	21100	1	0	Rear Face	1	2	2	24	22.65	-0.01	**0.913**	1.246
T10g-833	LTE B7	QPSK20M	21100	1	0	Left Side	1	2	2	24	22.65	0.03	0.337	0.460
T10g-834	LTE B7	QPSK20M	21100	50	25	Front Face	1	2	2	23	21.68	0.02	0.512	0.694
T10g-835	LTE B7	QPSK20M	21100	50	25	Rear Face	1	2	2	23	21.68	0.09	0.588	0.797
T10g-836	LTE B7	QPSK20M	21100	50	25	Left Side	1	2	2	23	21.68	0.04	0.221	0.299
T10g-837	LTE B7	QPSK20M	21100	1	0	Rear Face	1	2	1	24	22.65	0.08	0.798	1.089
T10g-838	LTE B7	QPSK20M	21100	1	0	Rear Face	1	2	3	24	22.65	0.01	0.755	1.030

Note: 1. The value with boldface is the maximum SAR Value of each test band.
2.Main antenna is bottom antenna(Ant 1), and the second antenna is top antenna(Ant 2).

6. Hotspot SAR test results of WIFI(Full Power)

Test No.	Band	CH	Test Position With 10mm	Battery	Data Rate	Power Setting	Tune up	Measured	Drift(dB)	SAR Value (W/kg)1-g	Reported SAR
T1-1423	802.11b	11	Front Face	1	1	17	18	17.54	0.04	**0.077**	0.085
T1-1424	802.11b	11	Rear Face	1	1	17	18	17.54	0.02	0.069	0.077
T1-1426	802.11b	11	Right Side	1	1	17	18	17.54	0.03	0.063	0.070
T1-1427	802.11b	11	Top Side	1	1	17	18	17.54	-0.03	0.074	0.082
T1-1428	802.11b	11	Front Face	2	1	17	18	17.54	-0.05	0.076	0.084
T1-1429	802.11b	11	Front Face	3	1	17	18	17.54	-0.07	0.073	0.081
T1-1434	802.11a	36	Front Face	1	6	15	16	15.66	0.06	0.056	0.061
T1-1435	802.11a	36	Rear Face	1	6	15	16	15.66	0	**0.061**	0.065
T1-1437	802.11a	36	Right Side	1	6	15	16	15.66	-0.03	0.059	0.064
T1-1438	802.11a	36	Top Side	1	6	15	16	15.66	-0.08	0.043	0.047
T1-1439	802.11a	36	Rear Face	2	6	15	16	15.66	0.09	0.058	0.063
T1-1440	802.11a	36	Rear Face	3	6	15	16	15.66	0.07	0.057	0.062
T1-1472	802.11a	149	Front Face	1	6	15	16	14.3	-0.01	0.081	0.120
T1-1473	802.11a	149	Rear Face	1	6	15	16	14.3	0.03	0.046	0.068
T1-1474	802.11a	149	Right Side	1	6	15	16	14.3	-0.02	**0.147**	0.217
T1-1475	802.11a	149	Top Side	1	6	15	16	14.3	-0.01	0.062	0.092
T1-1476	802.11a	149	Right Side	2	6	15	16	14.3	-0.05	0.138	0.204
T1-1477	802.11a	149	Right Side	3	6	15	16	14.3	0.05	0.135	0.200

Note:1. Per KDB248227D01, the highest SAR measured for the initial test position or initial test configuration should be used to determine SAR test exclusion according to the sum of 1-g SAR and SAR peak to location ratio provisions in KDB 447498. In addition, a test lab may also choose to perform standalone SAR measurements for test positions and 802.11 configurations that are not required by the initial test position or initial test configuration procedures and apply the results to determine simultaneous transmission SAR test exclusion, according to sum of 1-g and SAR peak to location ratio requirements to reduce the number of simultaneous transmission SAR measurements.

2.AS 5G WIFI hotspot is only supported for 5.2G and 5.8G, therefore 5.3G and 5.5G were not evaluated for hotspot condition.

3.Per KDB 648474 D04, product specific 10-g SAR test is not required for 2.4G ,5.2G and 5.8G since hotspot mod 1-g reported SAR<1.2W/kg.

7. product specific 10-g SAR test of 5G WiFi

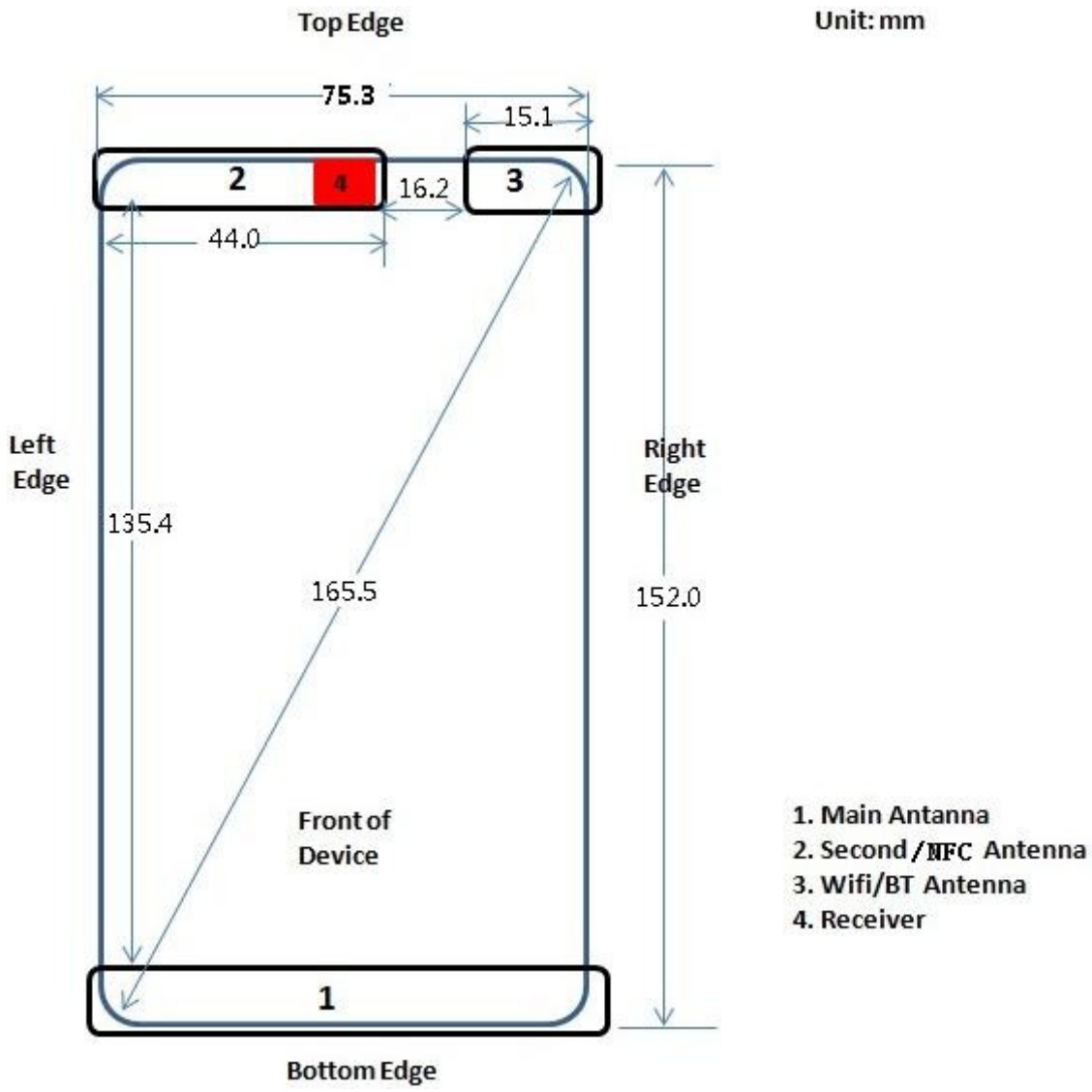
Test No.	Band	CH	Test Position With 0mm	Battery	Data Rate	Power Setting	Tune up	Measured	Drift(dB)	SAR Value (W/kg)10-g	Reported SAR
T1-1448	802.11a	52	Front Face	1	6	15	16	14.83	0.01	0.198	0.259
T1-1449	802.11a	52	Rear Face	1	6	15	16	14.83	0	0.288	0.377
T1-1451	802.11a	52	Right Side	1	6	15	16	14.83	-0.03	**0.416**	0.545
T1-1452	802.11a	52	Top Side	1	6	15	16	14.83	0.04	0.215	0.281
T1-1453	802.11a	52	Right Side	2	6	15	16	14.83	0.05	0.412	0.539
T1-1454	802.11a	52	Right Side	3	6	15	16	14.83	0.06	0.409	0.535
T1-1460	802.11a	100	Front Face	1	6	15	16	14.9	0.03	0.256	0.330
T1-1461	802.11a	100	Rear Face	1	6	15	16	14.9	0.01	0.400	0.515
T1-1463	802.11a	100	Right Side	1	6	15	16	14.9	-0.05	**0.657**	0.846
T1-1464	802.11a	100	Top Side	1	6	15	16	14.9	0.02	0.352	0.453
T1-1465	802.11a	100	Right Side	2	6	15	16	14.9	0.01	0.542	0.698
T1-1466	802.11a	100	Right Side	3	6	15	16	14.9	0.03	0.587	0.756

Note: 1. Per KDB 648474 D04, For product specific 10-g SAR test of 5G WiFi, as 5.3G and 5.5G do not support hotspot function, so full product specific 10-g SAR test were evaluated for 5.3G and 5.5G.Particular EUT edges were not required to be evaluated for product specific 10-g SAR if the antenna-to-edge distance is greater than 2.5cm.

8.3 MULTIPLE TRANSMITTER EVALUATION

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v06. The size of the mobile phone is152mm (length)X75.3mm (width).

The location of the antennas inside mobile phone is shown as below picture:



Note1: The device supports the dynamic antenna switching function to optimize transmission efficiency for wide range frequency operations. It has two 2G/3G/4G Tx antennas (Top Antenna and Bottom Antenna). It can transmit from either Top Antenna or Bottom Antenna. The device is capable of switching between the Top Antenna and Bottom Antenna based on signal strength. The top Antenna and Bottom Antenna can transmit simultaneously. For SAR test, the Top Antenna and Bottom Antenna are set to the MAX transmit power level respectively and test the SAR respectively in all applicable RF exposure conditions. Some AT commands are supplied to fix the operation state and choose the antenna, and some test scripts are supplied to fix the modem state so that only one TX antenna and one modem is chosen and tested at a time. All independent antennas and modems are completely covered by the appropriate SAR measurements and all simultaneous transmission possibilities are fully considered.

Note 2: The Top Antenna and Bottom Antenna can also transmit simultaneously only when two SIM cards work at the same time by using different modems. Main modem can support 2G/3G/4G. Second modem only supports 2G and can only be used for SIM2.

Note 3: The equipment under test(EUT) is a Dual-SIM-Card Mobile Phone. SIM1 supports 2G/3G/LTE, and SIM2 only supports 2G.

Note 4: Phones with built-in NFC functions do not require separate SAR testing and can generally be tested according to the SAR measurement procedures normally required for the phone. Influences of the hardware introduced by the built-in NFC functions are inherently considered through testing of the other transmitters that require SAR.

Note5: The device supports the dynamic antenna tuning function to optimize transmission efficiency for 2500MHz ~2570MHz(Main antenna: LTE Band7) frequency operations, especially in any hand usage scenario. The dynamic antenna tuning function is only applicable for the main Tx antenna. The main antenna has two fixed states for some bands: the state 1 and state 2.

Note6: Main antenna is bottom antenna, and the second antenna is top antenna.

8.3.1STAND-ALONE SAR TEST EXCLUSION

Per FCC KDB 447498D01v06, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)][√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for product specific 10-g SAR, where:

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Standalone SAR test exclusion for BT

Mode	Position	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
BT	Body-Worn	9.8	9.55	15	2.48	1.00	3	Yes
BT	product specific 10-g SAR	9.8	9.55	5	2.48	3.01	7.5	Yes

Note:

1)* - maximum possible output power declared by manufacturer

2) Held to ear configurations are not applicable to Bluetooth for this device.

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)/x] W/kg for test separation distances≤50 mm,where x = 7.5 for 1-g SAR and x = 18.75 for 10-g SAR.
When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

According to KDB 447498 D01,when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standslone SAR was estimated according to following formula to result in substantially conservative SAR values of≤0.4W/Kg to determine simultaneous transmission SAR test exclusion.

$$\text{Estimated SAR} = \frac{\text{Max. Tune up Power}_{(mW)}}{\text{Min. Test Separation Distance}_{(mm)}} \times \frac{\sqrt{f_{(GHz)}}}{7.5}$$

Estimated SAR calculation

Mode	Position	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	X	Estimated SAR (W/Kg)*
BT	Body-Worn	9.8	9.55	15	2.48	7.5	0.134
BT	product specific 10-g SAR	9.8	9.55	5	2.48	18.75	0.160

Note: * - maximum possible output power declared by manufacturer

8.3.2STAND-ALONE SAR TEST EXCLUSION

Per FCC KDB 447498D01v06, SAR compliance for simultaneous transmission must be considered when the maximum duration of overlapping transmissions, including network hand-offs, is greater than 30 seconds. This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis.

The Simultaneous Transmission Possibilities of this device are as below:

No.	Configuration	Head	Body-worn	Hotspot	product specific 10-g SAR
1	GSM Voice(Ant 2) + UMTS Data(Ant 1)	Yes	Yes	Yes	Yes
2	GSM Voice(Ant 2) + UMTS Voice(Ant 1)	Yes	Yes	N/A	Yes
3	GSM Voice (Ant 2)+ LTE DATA(Ant 1)	Yes*	Yes*	Yes	Yes*
4	GSM DATA(Ant 2) + LTE DATA(Ant 1)	Yes*	Yes*	N/A	Yes*
5	GSM Voice(Ant 2) + GSM Voice(Ant 1)	Yes	Yes	N/A	Yes
6	GSM Voice (Ant 2) + GSM Data(Ant 1)	Yes	Yes	Yes	Yes
7	GSM Data(Ant 2) + UMTS Voice(Ant 1)	Yes	Yes	Yes	Yes
8	GSM Data(Ant 2) + GSM Voice(Ant 1)	Yes	Yes	Yes	Yes
9	GSM Voice(Ant 1) + UMTS Data(Ant 2)	Yes	Yes	Yes	Yes
10	GSM Voice(Ant 1)+ UMTS Voice(Ant 2)	Yes	Yes	N/A	Yes
11	GSM Data(Ant 1)+ UMTS Voice(Ant 2)	Yes	Yes	Yes	Yes
12	GSM Voice(Ant 1)+ LTE Data(Ant 2)	Yes*	Yes*	Yes	Yes*
13	GSM DATA(Ant 1) + LTE DATA(Ant 2)	Yes*	Yes*	N/A	Yes*
14	GSM Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
15	GSM DATA(Ant 1) + BT	N/A	Yes	N/A	Yes
16	GSM Voice(Ant 2) + BT	N/A	Yes	N/A	Yes
17	GSM DATA (Ant 2)+ BT	N/A	Yes	N/A	Yes
18	GSM Voice(Ant 1) + WiFi	Yes	Yes	N/A	Yes
19	GSM DATA(Ant 1) + WiFi	N/A	Yes	Yes	Yes
20	GSM Voice(Ant 2) + WiFi	Yes	Yes	N/A	Yes
21	GSM DATA(Ant 2) + WiFi	N/A	Yes	Yes	Yes
22	UMTS Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
23	UMTS Data(Ant 1) + BT	N/A	Yes	N/A	Yes
24	UMTS Voice(Ant 2) + BT	N/A	Yes	N/A	Yes
25	UMTS Data(Ant 2) + BT	N/A	Yes	N/A	Yes
26	UMTS Voice(Ant 1) + WiFi	Yes	Yes	N/A	Yes
27	UMTS Data (Ant 1) + WiFi	N/A	Yes	Yes	Yes
28	UMTS Voice (Ant 2) + WiFi	Yes	Yes	N/A	Yes
29	UMTS Data (Ant 2)+ WiFi	N/A	Yes	Yes	Yes
30	LTE Data(Ant 1) + WiFi	Yes	Yes*	Yes	Yes*
31	LTE Data(Ant 1) + BT	N/A	Yes*	N/A	Yes*
32	LTE Data(Ant 2) + WiFi	Yes	Yes	Yes	Yes
33	LTE Data(Ant 2) + BT	N/A	Yes*	N/A	Yes*
34	GSM Voice(Ant 2)+ UMTS Data(Ant 1) + BT	N/A	Yes	N/A	Yes
35	GSM Voice(Ant 2)+ UMTS Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
36	GSM Voice(Ant 2) + LTE DATA(Ant 1) + BT	N/A	Yes*	N/A	Yes*
37	GSM Voice(Ant 2) + GSM Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
38	GSM Voice(Ant 2) + GSM Data(Ant 1) + BT	N/A	Yes	N/A	Yes
39	GSM Data(Ant 2) + UMTS Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
40	GSM Data(Ant 2) + GSM Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
41	GSM DATA(Ant 2) + LTE DATA(Ant 1) + BT	N/A	Yes*	N/A	Yes*
42	GSM Voice(Ant 1) + UMTS Data(Ant 2) + BT	N/A	Yes	N/A	Yes

43	GSM Voice(Ant 1) + UMTS Voice(Ant 2) + BT	N/A	Yes	N/A	Yes
44	GSM Data(Ant 1) + UMTS Voice(Ant 2) + BT	N/A	Yes	N/A	Yes
45	GSM Voice(Ant 1) + LTE Data(Ant 2) + BT	N/A	Yes*	N/A	Yes*
46	GSM DATA(Ant 1) + LTE Data(Ant 2) + BT	N/A	Yes*	N/A	Yes*
47	GSM Voice(Ant 2) + UMTS Data(Ant 1) +WiFi	Yes	Yes	Yes	Yes
48	GSM Voice(Ant 2) + UMTS Voice(Ant 1) +WiFi	Yes	Yes	N/A	Yes
49	GSM Voice(Ant 2) + LTE DATA(Ant 1) +WiFi	Yes*	Yes*	Yes	Yes*
50	GSM Voice(Ant 2) + GSM Voice(Ant 1) +WiFi	Yes	Yes	N/A	Yes
51	GSM Voice(Ant 2) + GSM Data(Ant 1) +WiFi	Yes	Yes	Yes	Yes
52	GSM Data(Ant 2) + UMTS Voice(Ant 1) +WiFi	Yes	Yes	Yes	Yes
53	GSM Data (Ant 2) + GSM Voice(Ant 1) +WiFi	Yes	Yes	Yes	Yes
54	GSM DATA(Ant 2) + LTE DATA(Ant 1) +WiFi	Yes	Yes	N/A	Yes
55	GSM Voice(Ant 1) + UMTS Data(Ant 2) +WiFi	Yes	Yes	Yes	Yes
56	GSM Voice(Ant 1)+ UMTS Voice(Ant 2) +WiFi	Yes	Yes	N/A	Yes
57	GSM Data(Ant 1)+ UMTS Voice(Ant 2) +WiFi	Yes	Yes	Yes	Yes
58	GSM Voice(Ant 1)+ LTE Data(Ant 2) +WiFi	Yes*	Yes*	Yes	Yes*
59	GSM DATA(Ant 1) + LTE Data(Ant 2) + BT	N/A	Yes*	N/A	Yes*

Note:
i)* VOIP 3rd party applications may possibly be installed and used by the end user.
ii) Wi-Fi and Bluetooth share the same antenna and can't transmit simultaneously.
iii) The device does not support DTM function.
iv) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.
v) Ant 1 is bottom antenna, and Ant 2 is top antenna.

8.3.3 SAR SUMMATION SCENARIO

The yellow color SAR test data in the following summed SAR tables represent that the additional SAR test results in simultaneous transmission fixed power reduction scenario are used to ensure simultaneous transmission SAR test exclusion. FOR the other SAR test data in the summed SAR tables below, the more conservation SAR test results at the maximum output power level without any simultaneous transmission power reduction are used.

1. Bottom antenna(Main Modem) + Top antenna (Second Modem) + WiFi/BT.

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Bottom Antenna (Main Modem)	GSM 850	0.395	0.182	0.309	0.125	0.398	0.400	0.349	0.394	-	0.110	0.304	0.339	-	-	-	-	-	-
	GSM 1900	0.511	0.138	0.265	0.291	0.690	0.938	0.112	0.477	-	0.799	0.396	0.525	-	-	-	-	-	-
	UMTS B2	0.245	0.141	0.254	0.210	0.327	0.475	0.092	0.216	-	0.386	0.356	0.552	-	-	-	-	-	-
	UMTS B4	0.512	0.207	0.357	0.232	0.412	0.644	0.101	0.331	-	0.140	0.357	0.474	-	-	-	-	-	-
	UMTS B5	0.282	0.189	0.237	0.225	0.203	0.299	0.101	0.260	-	0.104	0.188	0.213	-	-	-	-	-	-
	LTE B2	0.480	0.218	0.333	0.261	0.500	0.587	0.276	0.399	-	0.045	0.500	0.611	-	3.616	-	-	-	-
	LTE B4	0.412	0.389	0.469	0.344	0.771	0.961	0.200	0.612	-	0.075	0.556	0.676	-	3.607	-	-	-	-
	LTE B5	0.405	0.267	0.346	0.324	0.251	0.350	0.140	0.439	-	0.292	0.269	0.292	-	-	-	-	-	-
	LTE B7	0.413	0.111	0.190	0.143	0.640	0.756	0.571	0.154	-	0.130	0.257	0.255	-	-	-	-	-	-
	LTE B12	0.211	0.080	0.105	0.083	0.155	0.224	0.096	0.316	-	0.063	0.150	0.260	-	-	-	-	-	-
	LTE B17	0.169	0.055	0.077	0.066	0.124	0.315	0.079	0.172	-	0.171	0.118	0.247	-	-	-	-	-	-
	LTE B26	0.306	0.160	0.170	0.155	0.169	0.267	0.104	0.213	-	0.067	0.169	0.255	-	-	-	-	-	-
	LTE B38	0.214	0.116	0.141	0.095	0.230	0.326	0.056	0.305	-	0.088	0.086	0.100	-	-	-	-	-	-
	LTE B41	0.372	0.165	0.232	0.146	0.531	0.630	0.311	0.627	-	0.344	0.182	0.196	-	-	-	-	-	-
Top Antenna Second modem	GSM 850	0.866	1.083	0.622	0.868	0.645	0.182	0.507	0.117	0.561	-	0.405	0.423	-	-	-	-	-	-
	GSM 1900	0.547	0.677	0.236	0.281	0.212	0.281	0.249	0.054	-	-	0.127	0.133	-	-	-	-	-	-
2.4G WiFi		0.059	0.097	0.427	0.202	0.085	0.077	-	0.070	0.082	-	0.038	0.025	-	-	-	-	-	-
5.2G WiFi		-	-	-	-	0.061	0.065	-	0.064	0.047	-	-	-	-	-	-	-	-	-
5.3G WiFi		0.105	0.087	0.231	0.122	-	-	-	-	-	-	0.048	0.022	0.259	0.377	-	0.545	0.281	-
5.6G WiFi		0.188	0.120	0.424	0.366	-	-	-	-	-	-	0.100	0.114	0.330	0.515	-	0.846	0.453	-
5.8G WiFi		0.133	0.080	0.256	0.188	0.120	0.068	-	0.217	0.092	-	0.083	0.068	-	-	-	-	-	-
BT		-	-	-	-	-	-	-	-	-	-	0.134	0.134	0.160	0.160	-	0.160	0.160	-
SUM MAX		1.566	1.592	1.518	1.578	1.536	1.319	1.078	0.961	0.653	0.799	1.095	1.233	0.330	**4.131/ 4.122**	-	0.846	0.453	-

Note: See section 8.3.4 for more information.

2. Top antenna(Main Modem) + Bottom antenna (Second Modem) + WiFi/BT.

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Top Antenna (Main Modem)	GSM 850	1.169	1.161	0.912	0.881	0.468	0.548	0.301	0.095	0.375	-	0.215	0.231	-	-	-	-	-	-
	GSM 1900	1.111	0.861	0.857	0.841	0.266	0.318	0.286	0.063	0.206	-	0.150	0.172	-	-	-	-	-	-
	UMTS B2	1.089	0.829	0.407	0.253	0.185	0.216	0.191	0.071	0.142	-	0.090	0.088	-	-	-	-	-	-
	UMTS B4	0.841	0.313	0.198	0.171	0.094	0.145	0.115	0.074	0.102	-	0.041	0.047	-	-	-	-	-	-
	UMTS B5	0.506	0.642	0.864	0.798	0.489	0.545	0.235	0.103	0.384	-	0.239	0.311	-	-	-	-	-	-
	LTE B2	0.882	0.879	0.603	0.435	0.164	0.243	0.210	0.077	0.143	-	0.117	0.142	-	1.328	-	-	-	-
	LTE B4	0.486	0.300	0.210	0.212	0.078	0.107	0.098	0.048	0.080	-	0.062	0.067	-	-	-	-	-	-
	LTE B5	0.923	0.928	0.768	0.685	0.443	0.504	0.254	0.116	0.387	-	0.217	0.243	-	-	-	-	-	-
	LTE B7	1.157	1.130	0.332	0.394	0.196	0.267	0.256	0.127	0.140	-	0.093	0.097	0.350	1.246	0.460	-	-	-
	LTE B12	1.122	1.199	0.668	0.873	0.503	0.655	0.504	0.157	0.428	-	0.285	0.332	-	-	-	-	-	-
	LTE B17	1.073	0.859	0.720	0.642	0.395	0.472	0.390	0.125	0.316	-	0.204	0.233	-	-	-	-	-	-
	LTE B26	1.089	0.987	0.739	0.724	0.555	0.649	0.300	0.069	0.416	-	0.275	0.302	-	-	-	-	-	-
	LTE B38	1.152	0.790	0.228	0.252	0.248	0.322	0.292	0.097	0.213	-	0.105	0.132	-	-	-	-	-	-
	LTE B41	1.176	0.684	0.201	0.239	0.197	0.242	0.230	0.166	0.184	-	0.056	0.037	-	-	-	-	-	-
Bottom Antenna (Second modem)	GSM 850	0.131	0.088	0.240	0.119	0.277	0.340	0.240	0.329	-	0.082	0.245	0.272	-	-	-	-	-	-
	GSM 1900	0.230	0.177	0.255	0.207	0.774	0.755	0.121	0.553	-	0.91	0.373	0.52	-	-	-	-	-	-
2.4G WiFi		0.059	0.097	0.427	0.202	0.085	0.077	-	0.070	0.082	-	0.038	0.025	-	-	-	-	-	-
5.2G WiFi		-	-	-	-	0.061	0.065	-	0.064	0.047	-	-	-	-	-	-	-	-	-
5.3G WiFi		0.105	0.087	0.231	0.122	-	-	-	-	-	-	0.048	0.022	0.259	0.377	-	0.545	0.281	-
5.6G WiFi		0.188	0.120	0.424	0.366	-	-	-	-	-	-	0.100	0.114	0.330	0.515	-	0.846	0.453	-
5.8G WiFi		0.133	0.080	0.256	0.188	0.120	0.068	-	0.217	0.092	-	0.083	0.068	-	-	-	-	-	-
BT		-	-	-	-	-	-	-	-	-	-	0.134	0.134	0.160	0.160	-	0.160	0.160	-
SUM MAX		1.594	1.496	1.594	1.454	1.449	1.487	0.744	0.936	0.520	0.910	0.758	0.986	0.680	1.843	0.460	0.846	0.453	-

Note: See section 8.3.4 for more information.

3. Bottom antenna(Main Modem) + Top antenna (Second Modem)

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Bottom Antenna (Main Modem)	GSM 850	0.395	0.182	0.309	0.125	0.398	0.400	0.349	0.394	-	0.110	0.304	0.339	-	-	-	-	-	-
	GSM 1900	0.511	0.138	0.265	0.291	0.690	0.938	0.112	0.477	-	0.799	0.396	0.525	-	-	-	-	-	-
	UMTS B2	0.245	0.141	0.254	0.21	0.327	0.475	0.092	0.216	-	0.386	0.356	0.552	-	-	-	-	-	-
	UMTS B4	0.512	0.207	0.357	0.232	0.412	0.644	0.101	0.331	-	0.14	0.357	0.474	-	-	-	-	-	-
	UMTS B5	0.282	0.189	0.237	0.225	0.203	0.299	0.101	0.26	-	0.104	0.188	0.213	-	-	-	-	-	-
	LTE B2	0.480	0.218	0.333	0.261	0.5	0.587	0.276	0.399	-	0.045	0.5	0.611	-	3.616	-	-	-	-
	LTE B4	0.412	0.389	0.469	0.344	0.771	0.961	0.2	0.612	-	0.075	0.556	0.676	-	3.607	-	-	-	-
	LTE B5	0.405	0.267	0.346	0.324	0.251	0.35	0.14	0.439	-	0.292	0.269	0.292	-	-	-	-	-	-
	LTE B7	0.413	0.111	0.19	0.143	0.64	0.756	0.571	0.154	-	0.13	0.257	0.255	-	-	-	-	-	-
	LTE B12	0.211	0.08	0.105	0.083	0.155	0.224	0.096	0.316	-	0.063	0.15	0.26	-	-	-	-	-	-
	LTE B17	0.169	0.055	0.077	0.066	0.124	0.315	0.079	0.172	-	0.171	0.118	0.247	-	-	-	-	-	-
	LTE B26	0.306	0.16	0.17	0.155	0.169	0.267	0.104	0.213	-	0.067	0.169	0.255	-	-	-	-	-	-
	LTE B38	0.214	0.116	0.141	0.095	0.23	0.326	0.056	0.305	-	0.088	0.086	0.1	-	-	-	-	-	-
	LTE B41	0.372	0.165	0.232	0.146	0.531	0.63	0.311	0.627	-	0.344	0.182	0.196	-	-	-	-	-	-
Top Antenna Second modem	GSM 850	0.866	1.083	0.622	0.868	0.645	0.182	0.507	0.117	0.561	-	0.405	0.423	-	-	-	-	-	-
	GSM 1900	0.547	0.677	0.247	0.281	0.212	0.281	0.249	0.054	-	-	0.127	0.133	-	-	-	-	-	-
SUM MAX		1.378	1.472	1.091	1.212	1.416	1.242	1.078	0.744	0.561	0.799	0.961	1.099	-	3.616	-	-	-	-

Note: See section 8.3.4 for more information.

4. Top antenna(Main Modem) + Bottom antenna (Second Modem)

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Top Antenna (Main Modem)	GSM 850	1.169	1.161	0.912	0.881	0.468	0.548	0.301	0.095	0.375	-	0.215	0.231	-	-	-	-	-	-
	GSM 1900	1.111	0.861	0.857	0.841	0.266	0.318	0.286	0.063	0.206	-	0.150	0.172	-	-	-	-	-	-
	UMTS B2	1.089	0.829	0.407	0.253	0.185	0.216	0.191	0.071	0.142	-	0.09	0.088	-	-	-	-	-	-
	UMTS B4	0.841	0.313	0.198	0.171	0.094	0.145	0.115	0.074	0.102	-	0.041	0.047	-	-	-	-	-	-
	UMTS B5	0.506	0.642	0.864	0.798	0.489	0.545	0.235	0.103	0.384	-	0.239	0.311	-	-	-	-	-	-
	LTE B2	0.882	0.879	0.603	0.435	0.164	0.243	0.21	0.077	0.143	-	0.117	0.142	-	1.328	-	-	-	-
	LTE B4	0.486	0.3	0.21	0.212	0.078	0.107	0.098	0.048	0.08	-	0.062	0.067	-	-	-	-	-	-
	LTE B5	0.923	0.928	0.768	0.685	0.443	0.504	0.254	0.116	0.387	-	0.217	0.243	-	-	-	-	-	-
	LTE B7	1.157	1.13	0.332	0.394	0.196	0.267	0.256	0.127	0.14	-	0.093	0.097	0.35	1.246	0.46	-	-	-
	LTE B12	1.122	1.199	0.976	0.873	0.503	0.655	0.504	0.157	0.428	-	0.285	0.332	-	-	-	-	-	-
	LTE B17	1.073	0.859	0.72	0.642	0.395	0.472	0.39	0.125	0.316	-	0.204	0.233	-	-	-	-	-	-
	LTE B26	1.089	0.987	0.739	0.724	0.555	0.649	0.3	0.069	0.416	-	0.275	0.302	-	-	-	-	-	-
	LTE B38	1.152	0.79	0.228	0.252	0.248	0.322	0.292	0.097	0.213	-	0.105	0.132	-	-	-	-	-	-
	LTE B41	1.176	0.684	0.201	0.239	0.197	0.242	0.23	0.166	0.184	-	0.056	0.037	-	-	-	-	-	-
Bottom Antenna (Second modem)	GSM 850	0.131	0.088	0.24	0.119	0.277	0.34	0.24	0.329	-	0.082	0.245	0.272	-	-	-	-	-	-
	GSM 1900	0.230	0.177	0.255	0.207	0.774	0.755	0.121	0.553	-	0.910	0.373	0.520	-	-	-	-	-	-
SUM MAX		1.406	1.376	1.231	1.088	1.329	1.41	0.744	0.719	0.428	0.910	0.658	0.852	0.35	1.328	0.46	-	-	-

Note: See section 8.3.4 for more information.

5. Bottom antenna(Main Modem) + WiFi/BT.

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Bottom Antenna (Main Modem)	GSM 850	0.395	0.182	0.309	0.125	0.398	0.400	0.349	0.394	-	0.110	0.304	0.339	-	-	-	-	-	-
	GSM 1900	0.511	0.138	0.265	0.291	0.690	0.938	0.112	0.477	-	0.799	0.396	0.525	-	-	-	-	-	-
	UMTS B2	0.549	0.141	0.254	0.210	0.327	0.475	0.092	0.216	-	0.386	0.356	0.552	-	-	-	-	-	-
	UMTS B4	0.561	0.207	0.357	0.232	0.412	0.644	0.101	0.331	-	0.140	0.357	0.474	-	-	-	-	-	-
	UMTS B5	0.282	0.189	0.237	0.225	0.203	0.299	0.101	0.260	-	0.104	0.188	0.213	-	-	-	-	-	-
	LTE B2	1.037	0.218	0.333	0.261	0.500	0.587	0.276	0.399	-	0.045	0.500	0.611	-	3.616	-	-	-	-
	LTE B4	0.767	0.389	0.469	0.344	0.771	0.961	0.200	0.612	-	0.075	0.556	0.676	-	3.607	-	-	-	-
	LTE B5	0.405	0.267	0.346	0.324	0.251	0.350	0.140	0.439	-	0.292	0.269	0.292	-	-	-	-	-	-
	LTE B7	0.413	0.111	0.190	0.143	0.640	0.756	0.571	0.154	-	0.13	0.257	0.255	-	-	-	-	-	-
	LTE B12	0.211	0.080	0.105	0.083	0.155	0.224	0.096	0.316	-	0.063	0.150	0.260	-	-	-	-	-	-
	LTE B17	0.169	0.055	0.077	0.066	0.124	0.315	0.079	0.172	-	0.171	0.118	0.247	-	-	-	-	-	-
	LTE B26	0.306	0.160	0.170	0.155	0.169	0.267	0.104	0.213	-	0.067	0.169	0.255	-	-	-	-	-	-
	LTE B38	0.214	0.116	0.141	0.095	0.230	0.326	0.056	0.305	-	0.088	0.086	0.100	-	-	-	-	-	-
	LTE B41	0.372	0.165	0.232	0.146	0.531	0.630	0.311	0.627	-	0.344	0.182	0.196	-	-	-	-	-	-
2.4G WiFi		0.078	0.108	0.617	0.315	0.085	0.077	-	0.07	0.082	-	0.038	0.025	-	-	-	-	-	-
5.2G WiFi		-	-	-	-	0.061	0.065	-	0.064	0.047	-	-	-	-	-	-	-	-	-
5.3G WiFi		0.131	0.12	0.307	0.201	-	-	-	-	-	-	0.048	0.022	0.259	0.377	-	0.545	0.281	-
5.6G WiFi		0.223	0.115	0.453	0.298	-	-	-	-	-	-	0.100	0.114	0.330	0.515	-	0.846	0.453	-
5.8G WiFi		0.218	0.26	0.417	0.311	0.12	0.068	-	0.217	0.092	-	0.083	0.068	-	-	-	-	-	-
BT		-	-	-	-	-	-	-	-	-	-	0.134	0.134	0.160	0.160	-	0.160	0.160	-
SUM MAX		1.260	0.649	1.086	0.659	0.891	1.038	0.571	0.844	0.092	0.799	0.690	0.810	0.330	**4.131/ 4.122**	-	0.846	0.453	-

Note: See section 8.3.4 for more information.

6. Top antenna(Main Modem) + WiFi/BT.

Position		Head				Hotspot						Body-worn		product specific 10-g SAR					
		Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front	Rear	Left	Right	Top	Bottom	Front	Rear	Front	Rear	Left	Right	Top	Bottom
Top Antenna (Main Modem)	GSM 850	1.169	1.161	0.912	0.881	0.468	0.548	0.301	0.095	0.375	-	0.215	0.231	-	-	-	-	-	-
	GSM 1900	1.111	0.861	0.857	0.841	0.266	0.318	0.286	0.063	0.206	-	0.150	0.172	-	-	-	-	-	-
	UMTS B2	1.089	0.829	0.407	0.253	0.185	0.216	0.191	0.071	0.142	-	0.09	0.088	-	-	-	-	-	-
	UMTS B4	0.841	0.313	0.198	0.171	0.094	0.145	0.115	0.074	0.102	-	0.041	0.047	-	-	-	-	-	-
	UMTS B5	0.506	0.642	0.864	0.798	0.489	0.545	0.235	0.103	0.384	-	0.239	0.311	-	-	-	-	-	-
	LTE B2	0.882	0.879	0.603	0.435	0.164	0.243	0.21	0.077	0.143	-	0.117	0.142	-	1.328	-	-	-	-
	LTE B4	0.486	0.3	0.21	0.212	0.078	0.107	0.098	0.048	0.08	-	0.062	0.067	-	-	-	-	-	-
	LTE B5	0.923	0.928	0.768	0.685	0.443	0.504	0.254	0.116	0.387	-	0.217	0.243	-	-	-	-	-	-
	LTE B7	1.157	1.130	0.332	0.394	0.196	0.267	0.256	0.127	0.140	-	0.093	0.097	0.35	1.246	0.46	-	-	-
	LTE B12	1.122	1.199	0.976	0.873	0.503	0.655	0.504	0.157	0.428	-	0.285	0.332	-	-	-	-	-	-
	LTE B17	1.073	0.859	0.72	0.642	0.395	0.472	0.39	0.125	0.316	-	0.204	0.233	-	-	-	-	-	-
	LTE B26	1.089	0.987	0.739	0.724	0.555	0.649	0.300	0.069	0.416	-	0.275	0.302	-	-	-	-	-	-
	LTE B38	1.152	0.79	0.228	0.252	0.248	0.322	0.292	0.097	0.213	-	0.105	0.132	-	-	-	-	-	-
	LTE B41	1.176	0.684	0.201	0.239	0.197	0.242	0.230	0.166	0.184	-	0.056	0.037	-	-	-	-	-	-
2.4G WiFi		0.078	0.108	0.617	0.315	0.085	0.077	-	0.070	0.082	-	0.038	0.025	-	-	-	-	-	-
5.2G WiFi		-	-	-	-	0.061	0.065	-	0.064	0.047	-	-	-	-	-	-	-	-	-
5.3G WiFi		0.131	0.120	0.307	0.201	-	-	-	-	-	-	0.048	0.022	0.259	0.377	-	0.545	0.281	-
5.6G WiFi		0.223	0.115	0.453	0.298	-	-	-	-	-	-	0.100	0.114	0.330	0.515	-	0.846	0.453	-
5.8G WiFi		0.218	0.260	0.417	0.311	0.120	0.068	-	0.217	0.092	-	0.083	0.068	-	-	-	-	-	-
BT		-	-	-	-	-	-	-	-	-	-	0.134	0.134	0.160	0.160	-	0.160	0.160	-
SUM MAX		1.399	1.459	1.593	1.196	0.675	0.732	0.504	0.383	0.520	-	0.385	0.466	0.680	1.843	0.460	0.846	0.453	-

MAX. $\sum SAR_{1g}$=1.594W/Kg<1.6 W/Kg, so the SAR to peak location separation ratio should not be considered.

Note: 1.MAX. $\sum SAR_{1g}$ <1.6 W/Kg, the SAR to peak location separation ratio should not be considered, otherwise, see section 8.3.4 for more information.
2.MAX. $\sum SAR_{10g}$ <4 W/Kg, the SAR to peak location separation ratio should not be considered, otherwise, see section 8.3.4 for more information.

8.3.4 SIMULTANEOUS TRANSMISSION CONLCUSION

According to KDB447498 D01v06, When the sum of SAR is larger than limit, SAR test exclusion is determined by the SAR to peak location separation ratio(SPLSR).When the SAR to peak location ratio for each pair of antennas is ⩽0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion. When 10-g SAR applies, the ratio must be ≤ 0.10.

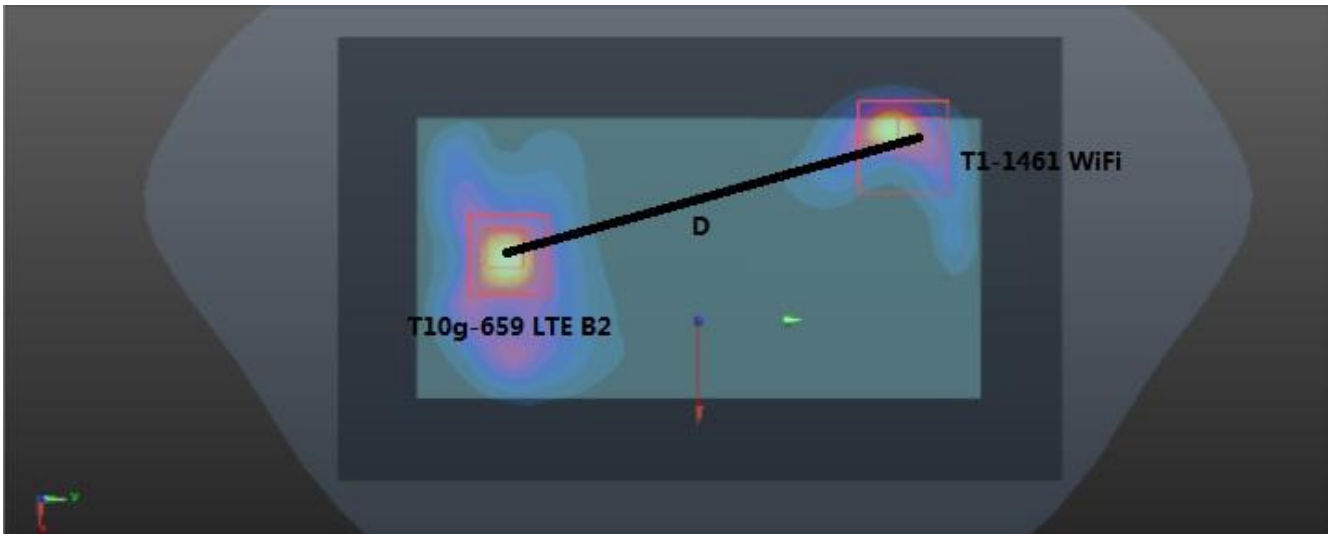
When SAR is measured for both antennas in the pair the peak location separation distance is computed by the following fomula:

$$\text{Distance}_{Tx1\text{-}Tx2} = R_i = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

$$\text{SPLS Ratio} = (SAR_1 + SAR_2)^{1.5}/R_i$$

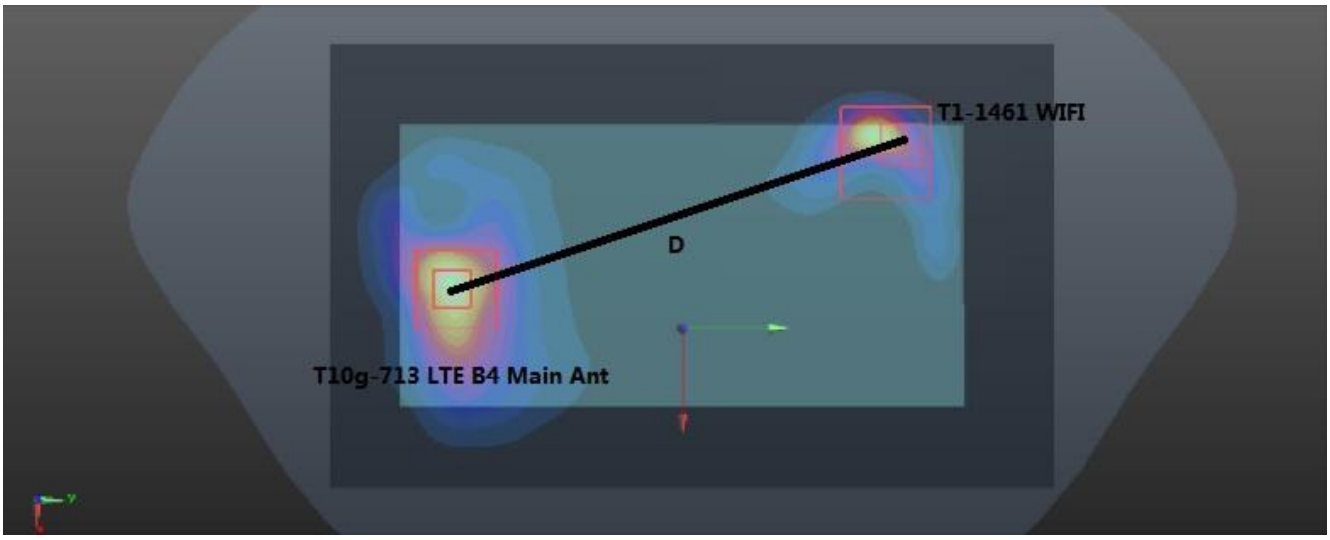
When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna. Due to curvatures on the SAM phantom, when SAR is estimated for one of the antennas in an antenna pair, the measured peak SAR location should be translated onto the test device to determine the peak location separation for the antenna pair. The ERP location on the phantom is aligned with the ERP location on the handset, with 6mm separation in the z coordinate due to the ear spacer. A measured peak location can be translated onto the handset, with respect to the ERP location, by ignoring the 6 mm offset in the z coordinate. The assumed peak location of the antenna with estimated SAR can also be determined with respect to the ERP location on the handset. The peak location separation distance is estimated by the x and y coordinated of the peaks, referenced to the ERP location. While flat phantoms are not expected to have these issues, the same peak translation approach should be applied to determine peak location separation.

1) The sum of aggregate 10g SAR was above 4.0 W/Kg for Rear Face configuration with LTE B2(Bottom Ant) and 5GWiFi
The Peak SAR location is as below:



Mode	Reported SAR_{10g}	Peak SAR_{1g}	X	Y	Z	D(mm)	SPLSR	Ratio Limit	Simultaneous SAR
	mW/g	mW/g	m	m	m				
LTE B2	3.616	10.5	-0.017	-0.052	-0.202	120.212	0.070	0.10	No
5GWiFi	0.515	3.06	-0.052	0.063	-0.203				

2) The sum of aggregate 10g SAR was above 4.0 W/Kg for Rear Face configuration with LTE B4(Bottom Ant) and 5GWiFi
The Peak SAR location is as below:

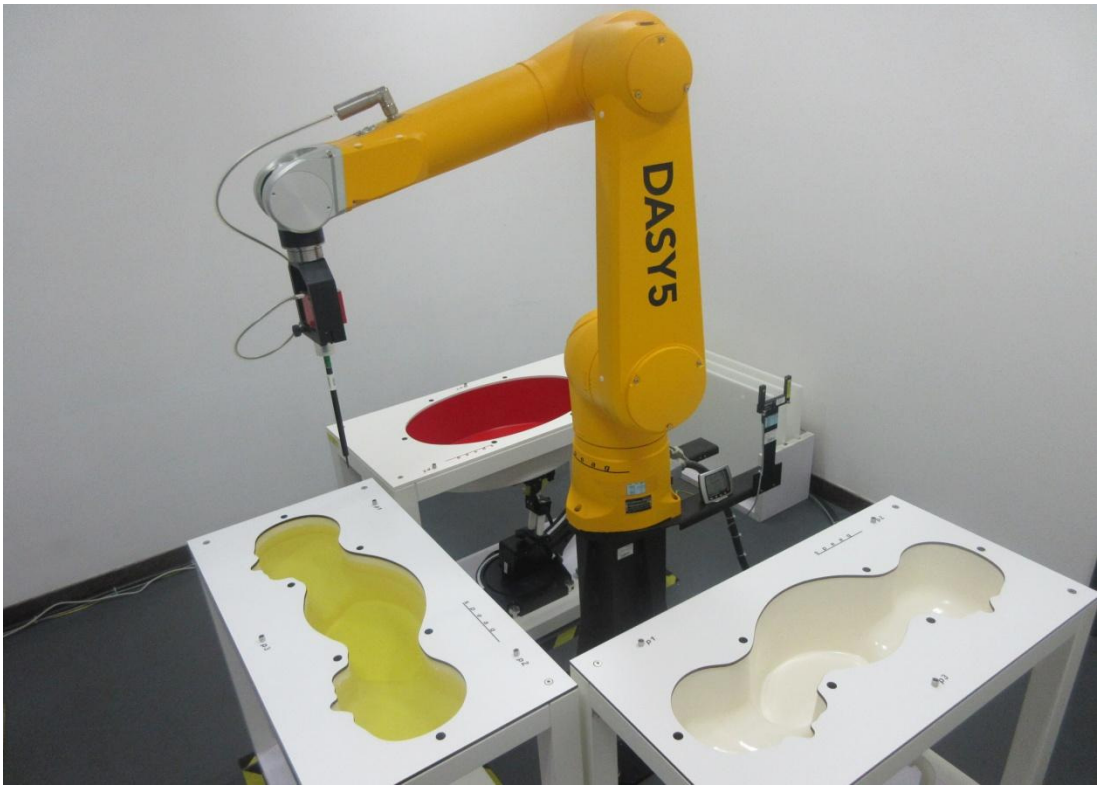


Mode	Reported SAR_{10g}	Peak SAR_{1g}	X	Y	Z	D(mm)	SPLSR	Ratio Limit	Simultaneous SAR
	mW/g	mW/g	m	m	m				
LTE B4	3.607	-0.0125	-0.0125	-0.062	-0.203	131.093	0.064	0.10	No
5GWiFi	0.515	3.06	-0.052	0.063	-0.203				

APPENDIX

1. Test Layout

Specific Absorption Rate Test Layout



Liquid depth in the flat Phantom (≥15cm depth)

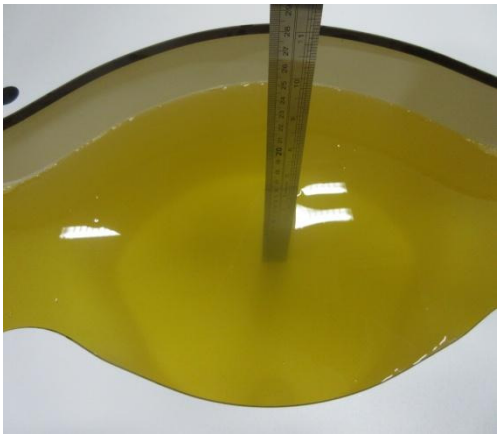
Body(750MHz)_15.6cm

Head(750MHz))_15.6cm

Body(835~900)MHz_15.7cm

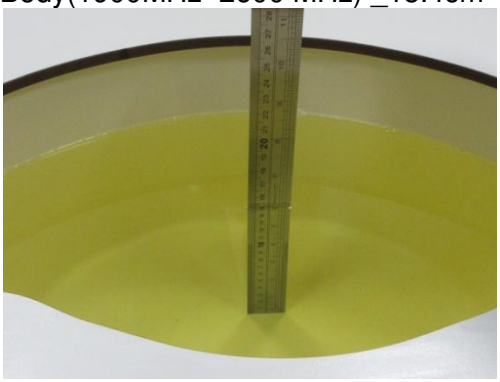
Head(835~900)MHz_16.0cm

Body(1750MHz) _16.0cm



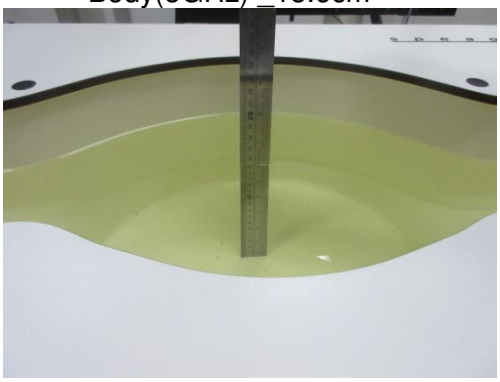
Head(1750MHz) _15.9cm

Body(1900MHz~2600 MHz) _15.4cm



Head (1900MHz~2600 MHz) _15.6cm

Body(5GHz) _15.6cm



Head(5GHz) _15.1cm

Appendix A. SAR Plots of System Verification

The plots for system verification with largest deviation for each SAR system combination are shown as follows.

Appendix B. SAR Plots of SAR Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination are shown as follows.

Appendix C. Calibration Certificate for Probe and Dipole

The SPEAG calibration certificates are shown as follows.

Appendix D. Photographs of the Test Set-Up

Photographs of the Test Set-up are shown as follows.