

7.2.28 SAR measurement Result of LTE Band XLI (Main Antenna)

Test Position of Head	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g	10-g					
1RB									
Left Hand Touched	41055/2636.5	20M QPSK 1RB#50	0.165	0.090	-0.020	22.26	22.70	0.183	21.5°C
Left Hand Tilted 15°	41055/2636.5	20M QPSK 1RB#50	0.032	0.017	0.180	22.26	22.70	0.035	21.5°C
Right Hand Touched	41055/2636.5	20M QPSK 1RB#50	0.075	0.043	0.130	22.26	22.70	0.083	21.5°C
Right Hand Tilted 15°	41055/2636.5	20M QPSK 1RB#50	0.051	0.027	0.170	22.26	22.70	0.056	21.5°C
Left Hand Touched	39750/2506	20M QPSK 1RB#0	0.243	0.139	0.130	21.70	22.70	0.306	21.5°C
Left Hand Touched	40185/2549.5	20M QPSK 1RB#50	0.221	0.124	0.160	21.76	22.70	0.274	21.5°C
Left Hand Touched	40620/2593	20M QPSK 1RB#50	0.186	0.102	0.170	22.03	22.70	0.217	21.5°C
Left Hand Touched	41490/2680	20M QPSK 1RB#0	0.151	0.081	0.140	21.93	22.70	0.180	21.5°C
50%RB									
Left Hand Touched	41055/2636.5	20M QPSK 50%RB#0	0.127	0.071	-0.180	21.39	21.70	0.136	21.5°C
Left Hand Tilted 15°	41055/2636.5	20M QPSK 50%RB#0	0.030	0.018	0.120	21.39	21.70	0.032	21.5°C
Right Hand Touched	41055/2636.5	20M QPSK 50%RB#0	0.062	0.033	0.020	21.39	21.70	0.066	21.5°C
Right Hand Tilted 15°	41055/2636.5	20M QPSK 50%RB#0	0.043	0.022	0.050	21.39	21.70	0.046	21.5°C

Table 235: Head SAR test results of LTE Band XLI

Test Position of Body-Worn with 15mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	41055/2636.5	20M QPSK 1RB#50	0.185	0.095	0.180	22.26	22.70	0.205	21.5°C
Back Side	41055/2636.5	20M QPSK 1RB#50	0.228	0.112	0.180	22.26	22.70	0.252	21.5°C
50%RB									
Front Side	41055/2636.5	20M QPSK 50%RB#0	0.158	0.084	-0.080	21.39	21.70	0.170	21.5°C
Back Side	41055/2636.5	20M QPSK 50%RB#0	0.186	0.098	0.150	21.39	21.70	0.200	21.5°C

Table 236: Body-Worn SAR test results of LTE Band XLI

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g	10-g					
Test data with battery 1#									
1RB									
Front Side	40185/2549.5	20M QPSK 1RB#50	0.233	0.113	0.010	18.59	20.00	0.322	21.5°C
Back Side	40185/2549.5	20M QPSK 1RB#50	0.209	0.103	-0.140	18.59	20.00	0.289	21.5°C
Left Side	40185/2549.5	20M QPSK 1RB#50	0.103	0.052	-0.110	18.59	20.00	0.143	21.5°C
Right Side	40185/2549.5	20M QPSK 1RB#50	0.039	0.024	0.050	18.59	20.00	0.053	21.5°C
Bottom Side	40185/2549.5	20M QPSK 1RB#50	0.526	0.249	-0.180	18.59	20.00	0.728	21.5°C
Bottom Side	39750/2506	20M QPSK 1RB#0	0.648	0.305	0.030	18.51	20.00	0.913	21.5°C
Bottom Side	40620/2593	20M QPSK 1RB#0	0.484	0.227	-0.140	18.48	20.00	0.687	21.5°C
Bottom Side	41055/2636.5	20M QPSK 1RB#50	0.441	0.206	-0.110	18.30	20.00	0.652	21.5°C
Bottom Side	41490/2680	20M QPSK 1RB#50	0.450	0.209	-0.140	18.34	20.00	0.659	21.5°C
50%RB									
Front Side	40185/2549.5	20M QPSK 50%RB#25	0.268	0.126	0.110	18.89	20.00	0.346	21.5°C
Back Side	40185/2549.5	20M QPSK 50%RB#25	0.243	0.116	-0.030	18.89	20.00	0.314	21.5°C
Left Side	40185/2549.5	20M QPSK 50%RB#25	0.110	0.055	-0.140	18.89	20.00	0.142	21.5°C
Right Side	40185/2549.5	20M QPSK 50%RB#25	0.041	0.023	0.100	18.89	20.00	0.053	21.5°C
Bottom Side	40185/2549.5	20M QPSK 50%RB#25	0.561	0.265	0.130	18.89	20.00	0.724	21.5°C
100%RB									
Bottom Side	39750/2506	20M QPSK 100%RB#0	0.646	0.306	-0.190	18.74	20.00	0.863	21.5°C

Table 237: Hotspot SAR test results of LTE Band XLI

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

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conduct Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	10-g Extremity SAR Exclusion
			1-g	10-g					
1RB									
Front Side	40185/2549.5	20M QPSK 1RB#50	0.233	0.113	0.010	18.59	22.70	0.600	Yes
Back Side	40185/2549.5	20M QPSK 1RB#50	0.209	0.103	-0.140	18.59	22.70	0.538	Yes
Left Side	40185/2549.5	20M QPSK 1RB#50	0.103	0.052	-0.110	18.59	22.70	0.265	Yes
Right Side	40185/2549.5	20M QPSK 1RB#50	0.039	0.024	0.050	18.59	22.70	0.099	Yes
Bottom Side	40185/2549.5	20M QPSK 1RB#50	0.526	0.249	-0.180	18.59	22.70	1.355	No
Bottom Side	39750/2506	20M QPSK 1RB#0	0.648	0.305	0.030	18.51	22.70	1.700	No
Bottom Side	40620/2593	20M QPSK 1RB#0	0.484	0.227	-0.140	18.48	22.70	1.279	No
Bottom Side	41055/2636.5	20M QPSK 1RB#50	0.441	0.206	-0.110	18.30	22.70	1.215	No
Bottom Side	41490/2680	20M QPSK 1RB#50	0.450	0.209	-0.140	18.34	22.70	1.228	No
50%RB									
Front Side	40185/2549.5	20M QPSK 50%RB#25	0.268	0.126	0.110	18.89	21.70	0.512	Yes
Back Side	40185/2549.5	20M QPSK 50%RB#25	0.243	0.116	-0.030	18.89	21.70	0.464	Yes
Left Side	40185/2549.5	20M QPSK 50%RB#25	0.110	0.055	-0.140	18.89	21.70	0.210	Yes
Right Side	40185/2549.5	20M QPSK 50%RB#25	0.041	0.023	0.100	18.89	21.70	0.078	Yes
Bottom Side	40185/2549.5	20M QPSK 50%RB#25	0.561	0.265	0.130	18.89	21.70	1.071	Yes
100%RB									
Bottom Side	39750/2506	20M QPSK 100%RB#0	0.646	0.306	-0.190	18.74	21.70	1.277	No

Table 238: 10-g Extremity SAR test reduction evaluation of LTE Band XLI

Note : According to the table above , 10-g Extremity SAR test is required for this frequency band.

According to the table above , only **Bottom Side** 10-g Extremity SAR test are required for this frequency band:

Test Position of 10-g Extremity with 0mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{10-g} (W/kg)	Liquid Temp.
			1-g	10-g					
1RB									
Bottom Side	41055/2636.5	20M QPSK 1RB#50	1.450	0.526	-0.160	22.26	22.70	0.582	21.4°C
50%RB									
Bottom Side	41055/2636.5	20M QPSK 50%RB#0	1.220	0.439	-0.090	21.39	21.70	0.471	21.4°C

Table 239: 10-g Extremity SAR results of LTE Band XLI

7.2.29 SAR measurement Result of WiFi 2.4G

Test Position of Head	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
802.11b CORE0(Power setting Level 13)									
Left Hand Touched	6/2437	802.11 b	0.113	/	0.150	13.24	14.00	/	21.6°C
Left Hand Tilted 15°	6/2437	802.11 b	0.079	/	0.140	13.24	14.00	/	21.6°C
Right Hand Touched	6/2437	802.11 b	0.491	0.504	0.070	13.24	14.00	0.600	21.6°C
Right Hand Tilted 15°	6/2437	802.11 b	0.329	0.290	0.090	13.24	14.00	0.345	21.6°C
Right Hand Touched	1/2412	802.11 b	0.461	0.449	0.130	12.62	14.00	0.617	21.6°C
Right Hand Touched	11/2462	802.11 b	0.399	0.389	0.140	12.35	14.00	0.569	21.6°C
802.11b CORE1(Power setting Level 13)									
Left Hand Touched	6/2437	802.11 b	0.564	0.599	0.140	12.77	14.00	0.795	21.6°C
Left Hand Tilted 15°	6/2437	802.11 b	0.433	0.438	-0.130	12.77	14.00	0.581	21.6°C
Right Hand Touched	6/2437	802.11 b	0.123	/	-0.170	12.77	14.00	/	21.6°C
Right Hand Tilted 15°	6/2437	802.11 b	0.192	/	0.170	12.77	14.00	/	21.6°C
Left Hand Touched	1/2412	802.11 b	0.428	0.491	-0.160	12.73	14.00	0.658	21.6°C
Left Hand Touched	11/2462	802.11 b	0.368	0.399	0.040	12.44	14.00	0.571	21.6°C
802.11n 2Tx MIMO 40M(Power setting Level 13)									
Left Hand Touched	6/2437	802.11 n	0.475	0.541	0.140	15.84	17.00	0.707	21.6°C
Left Hand Tilted 15°	6/2437	802.11 n	0.349	/	0.110	15.84	17.00	/	21.6°C
Right Hand Touched	6/2437	802.11 n	0.528	0.545	-0.020	15.84	17.00	0.712	21.6°C
Right Hand Tilted 15°	6/2437	802.11 n	0.392	/	0.060	15.84	17.00	/	21.6°C
Right Hand Touched	3/2422	802.11 n	0.476	0.483	0.130	15.68	17.00	0.655	21.6°C
Right Hand Touched	9/2452	802.11 n	0.472	0.472	0.140	15.75	17.00	0.629	21.6°C
Additional 1Tx Ant SAR test when simultaneous transmission with Second Antenna(Power setting Level 10)									
802.11b CORE0									
Right Hand Touched	6/2437	802.11 b	0.198	0.193	0.050	9.51	11.00	0.272	21.6°C
Right Hand Tilted 15°	6/2437	802.11 b	0.147	0.123	0.060	9.51	11.00	0.173	21.6°C

802.11b CORE1									
Left Hand Touched	6/2437	802.11 b	0.213	0.237	0.030	9.11	11.00	0.366	21.6°C
Left Hand Tilted 15°	6/2437	802.11 b	0.170	0.175	0.080	9.11	11.00	0.270	21.6°C
Additional 2Tx SAR test twhen simultaneous transmission with Second Antenna,Power setting Level 10)									
Left Hand Touched	6/2437	802.11 n	0.214	0.238	0.050	12.83	14.00	0.312	21.6°C
Left Hand Tilted 15°	6/2437	802.11 n	0.176	0.181	0.060	12.83	14.00	0.237	21.6°C
Right Hand Touched	6/2437	802.11 n	0.195	0.205	0.030	12.83	14.00	0.268	21.6°C
Right Hand Tilted 15°	6/2437	802.11 n	0.147	0.142	0.110	12.83	14.00	0.186	21.6°C

Table 240: Head SAR test results of WiFi 2450MHz

Test Position of Body-Worn with 15mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
802.11b CORE0(Power setting Level 18)									
Front Side	6/2437	802.11 b	0.148	/	0.130	18.35	19.00	/	21.0°C
Back Side	6/2437	802.11 b	0.173	0.181	0.140	18.35	19.00	0.210	21.0°C
802.11b CORE1(Power setting Level 18)									
Front Side	1/2412	802.11 b	0.089	/	0.100	18.02	19.00	/	21.0°C
Back Side	1/2412	802.11 b	0.116	0.125	0.140	18.02	19.00	0.157	21.0°C
802.11g 2Tx CDD (Power setting Level 18)									
Front Side	1/2412	802.11 g	0.135	/	0.170	21.64	22.00	/	21.0°C
Back Side	1/2412	802.11 g	0.157	0.158	0.000	21.64	22.00	0.172	21.0°C

Table 241: Body-Worn SAR test results of WiFi 2450MHz

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
802.11b CORE0(Power setting Level 11)									
Front Side	6/2437	802.11 b	0.044	/	0.180	10.89	12.00	/	21.0°C
Back Side	6/2437	802.11 b	0.059	/	0.060	10.89	12.00	/	21.0°C
Left Side	6/2437	802.11 b	0.067	0.068	0.170	10.89	12.00	0.087	21.0°C
Right Side	6/2437	802.11 b	<0.01	/	0.130	10.89	12.00	/	21.0°C
Top Side	6/2437	802.11 b	0.042	/	0.120	10.89	12.00	/	21.0°C
802.11b CORE1(Power setting Level 11)									
Front Side	1/2412	802.11 b	0.045	/	0.130	10.85	12.00	/	21.0°C
Back Side	1/2412	802.11 b	0.057	/	0.100	10.85	12.00	/	21.0°C
Left Side	1/2412	802.11 b	<0.01	/	0.000	10.85	12.00	/	21.0°C
Right Side	1/2412	802.11 b	0.061	/	-0.110	10.85	12.00	/	21.0°C
Top Side	1/2412	802.11 b	0.082	0.081	0.130	10.85	12.00	0.105	21.0°C
802.11n 2Tx MIMO 40M(Power setting Level 11)									
Front Side	6/2437	802.11 n	0.037	/	0.030	14.14	15.00	/	21.0°C
Back Side	6/2437	802.11 n	0.041	/	0.150	14.14	15.00	/	21.0°C
Left Side	6/2437	802.11 n	0.035	/	0.130	14.14	15.00	/	21.0°C
Right Side	6/2437	802.11 n	0.052	/	0.180	14.14	15.00	/	21.0°C
Top Side	6/2437	802.11 n	0.082	0.082	0.180	14.14	15.00	0.099	21.0°C

Table 242: Hotspot SAR test results of WiFi 2450MHz

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

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	10-g Extremity SAR Exclusion
			1-g Area Scan	1-g Zoom Scan					
802.11b CORE0(Power setting Level 11)									
Front Side	6/2437	802.11 b	0.044	/	0.180	10.89	19.00	/	No
Back Side	6/2437	802.11 b	0.059	/	0.060	10.89	19.00	/	No
Left Side	6/2437	802.11 b	0.067	0.068	0.170	10.89	19.00	0.437	No
Right Side	6/2437	802.11 b	<0.01	/	0.130	10.89	19.00	/	No
Top Side	6/2437	802.11 b	0.042	/	0.120	10.89	19.00	/	No
802.11b CORE1(Power setting Level 11)									
Front Side	1/2412	802.11 b	0.045	/	0.130	10.85	19.00	/	No
Back Side	1/2412	802.11 b	0.057	/	0.100	10.85	19.00	/	No
Left Side	1/2412	802.11 b	<0.01	/	0.000	10.85	19.00	/	No
Right Side	1/2412	802.11 b	0.061	/	-0.110	10.85	19.00	/	No
Top Side	1/2412	802.11 b	0.082	0.081	0.130	10.85	19.00	0.526	No
802.11n 2Tx MIMO 40M(Power setting Level 11)									
Front Side	6/2437	802.11 n	0.037	/	0.030	14.14	21.00	/	No
Back Side	6/2437	802.11 n	0.041	/	0.150	14.14	21.00	/	No
Left Side	6/2437	802.11 n	0.035	/	0.130	14.14	21.00	/	No
Right Side	6/2437	802.11 n	0.052	/	0.180	14.14	21.00	/	No
Top Side	6/2437	802.11 n	0.082	0.082	0.180	14.14	21.00	0.396	No

Table 243: 10-g Extremity SAR test reduction evaluation of WiFi 2450MHz

Note : According to the table above , 10-g Extremity SAR test is required for this frequency band.

7.2.30 SAR measurement Result of WiFi 5G

Test Position of Head	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
802.11ac 2Tx MIMO 80M (Power setting Level 13)									
5.3G									
Left Hand Touched	58/5290	802.11ac	0.581	0.624	0.100	15.93	17.50	0.896	21.3°C
Left Hand Tilted 15°	58/5290	802.11ac	0.418	/	-0.170	15.93	17.50	/	21.3°C
Right Hand Touched	58/5290	802.11ac	0.430	0.536	0.060	15.93	17.50	0.769	21.3°C
Right Hand Tilted 15°	58/5290	802.11ac	0.352	/	0.020	15.93	17.50	/	21.3°C
5.5G									
Left Hand Touched	138/5690	802.11ac	0.545	0.589	0.110	16.26	17.50	0.784	21.3°C
Left Hand Tilted 15°	138/5690	802.11ac	0.455	/	0.140	16.26	17.50	/	21.3°C
Right Hand Touched	138/5690	802.11ac	0.620	0.800	0.110	16.26	17.50	1.064	21.3°C
Right Hand Touched-repeated	138/5690	802.11ac	0.640	0.780	0.060	16.26	17.50	1.038	21.3°C
Right Hand Touched	106/5530	802.11ac	0.472	0.623	0.170	15.63	17.50	0.958	21.3°C
Right Hand Touched	122/5610	802.11ac	0.610	/	0.030	15.52	17.50	/	21.3°C
5.8G									
Left Hand Touched	155/5775	802.11ac	0.463	0.485	0.120	16.15	17.50	0.662	21.3°C
Left Hand Tilted 15°	155/5775	802.11ac	0.332	/	0.070	16.15	17.50	/	21.3°C
Right Hand Touched	155/5775	802.11ac	0.640	0.718	0.030	16.15	17.50	0.980	21.3°C
Right Hand Tilted 15°	155/5775	802.11ac	0.447	/	0.190	16.15	17.50	/	21.3°C
Additional SAR test(transmission with Second Antenna,Power setting Level 10)									
Left Hand Touched	58/5290	802.11ac	0.291	0.315	0.030	12.81	14.50	0.465	21.3°C
Left Hand Tilted 15°	138/5690	802.11ac	0.193	0.203	0.040	12.59	14.50	0.315	21.3°C
Right Hand Touched	138/5690	802.11ac	0.297	0.364	-0.160	12.59	14.50	0.565	21.3°C
Right Hand Tilted 15°	155/5775	802.11ac	0.223	0.284	0.090	12.79	14.50	0.421	21.3°C

Table 244: Head SAR test results of WiFi 5G

Test Position of Body-Worn with 15mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
5.3G(802.11a 2Tx CDD, Power setting Level 18)									
Front Side	52/5260	802.11a	0.205	0.208	-0.020	21.73	22.00	0.221	21.3°C
Back Side	52/5260	802.11a	0.180	0.186	-0.130	21.73	22.00	0.198	21.3°C
5.5G(802.11a 2Tx CDD, Power setting Level 18)									
Front Side	128/5640	802.11a	0.236	0.238	0.150	21.79	22.00	0.250	21.3°C
Back Side	128/5640	802.11a	0.180	0.178	0.070	21.79	22.00	0.187	21.3°C
5.8G(802.11a 2Tx CDD, Power setting Level 18)									
Front Side	161/5805	802.11a	0.198	0.202	-0.170	21.60	22.00	0.221	21.3°C
Back Side	161/5805	802.11a	0.190	0.188	0.190	21.60	22.00	0.206	21.3°C

Table 245: Body-Worn SAR test results of WiFi 5G

Note: Per KDB 248227D01, as the same maximum output power is specified for U-NII-1(5.2G) and U-NII-2A(5.3G) bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration.

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
5.2G(802.11ac 2Tx MIMO 80M,Power setting Level 11)									
Front Side	42/5210	802.11ac	0.059	/	0.150	14.19	15.50	/	21.3°C
Back Side	42/5210	802.11ac	0.064	/	0.120	14.19	15.50	/	21.3°C
Left Side	42/5210	802.11ac	0.085	0.076	0.070	14.19	15.50	0.102	21.3°C
Right Side	42/5210	802.11ac	0.073	/	-0.130	14.19	15.50	/	21.3°C
Top Side	42/5210	802.11ac	0.054	/	0.130	14.19	15.50	/	21.3°C
5.8G(802.11ac 2Tx MIMO 80M,Power setting Level 11)									
Front Side	155/5775	802.11ac	0.063	/	0.160	13.84	15.50	/	21.3°C
Back Side	155/5775	802.11ac	0.068	/	0.000	13.84	15.50	/	21.3°C
Left Side	155/5775	802.11ac	0.088	0.077	0.130	13.84	15.50	0.113	21.3°C
Right Side	155/5775	802.11ac	0.076	/	0.170	13.84	15.50	/	21.3°C
Top Side	155/5775	802.11ac	0.044	/	0.190	13.84	15.50	/	21.3°C

Table 246: Hotspot SAR test results of WiFi 5G

Note: WiFi 5G hotspot is only supported for U-NII-1(5.2G) and U-NII-3 (5.8G) bands, therefore U-NII-2A (5.3G) and U-NII-2C(5.5G) were not evaluated for hotspot condition.

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

Test Position of Hotspot with 10mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{1-g} (W/kg)	10-g Extremity SAR Exclusion
			1-g Area Scan	1-g Zoom Scan					
5.2G(802.11ac 2Tx MIMO 80M,Power setting Level 11)									
Front Side	42/5210	802.11ac	0.059	/	0.150	14.19		/	No
Back Side	42/5210	802.11ac	0.064	/	0.120	14.19		/	No
Left Side	42/5210	802.11ac	0.085	0.076	0.070	14.19	20.50	0.323	No
Right Side	42/5210	802.11ac	0.073	/	-0.130	14.19		/	No
Top Side	42/5210	802.11ac	0.054	/	0.130	14.19		/	No
5.8G(802.11ac 2Tx MIMO 80M,Power setting Level 11)									
Front Side	155/5775	802.11ac	0.063	/	0.160	13.84		/	No
Back Side	155/5775	802.11ac	0.068	/	0.000	13.84		/	No
Left Side	155/5775	802.11ac	0.088	0.077	0.130	13.84	20.50	0.357	No
Right Side	155/5775	802.11ac	0.076	/	0.170	13.84		/	No
Top Side	155/5775	802.11ac	0.044	/	0.190	13.84		/	No

Table 247: 10-g Extremity SAR test reduction evaluation of WiFi 5G(5.2G&5.8G)

Note : According to the table above , 10-g Extremity SAR test is required for WiFi 5G(5.2G&5.8G).



Test Position of 10-g extremity 0mm	Test channel / Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR _{10-g} (W/kg)	Liquid Temp.
			1-g Area Scan	1-g Zoom Scan					
5.3G(802.11a 2Tx CDD/802.11n 2Tx MIMO 20M, Power setting Level 18)									
Front Side	52/5260	802.11a	2.010	2.010	0.000	21.73	22.00	2.139	21.3°C
Front Side	56/5280	802.11a	1.710	1.730	0.000	21.43	22.00	1.973	21.3°C
Back Side	52/5260	802.11a	1.000	1.220	0.000	21.73	22.00	1.298	21.3°C
Left Side	52/5260	802.11a	1.300	1.440	-0.190	21.73	22.00	1.532	21.3°C
Right Side	52/5260	802.11a	2.690	2.980	-0.060	21.73	22.00	3.171	21.3°C
Right Side-repeated	52/5260	802.11a	2.310	3.110	-0.060	21.73	22.00	3.309	21.3°C
Right Side	56/5280	802.11a	2.210	2.840	0.100	21.43	22.00	3.238	21.3°C
Right Side	64/5320	802.11a	2.060	2.820	0.100	21.27	22.00	3.336	21.3°C
Right Side	60/5300	802.11a	2.080	2.930	-0.090	21.22	22.00	3.506	21.3°C
Top Side	52/5260	802.11a	0.871	/	-0.130	21.73	22.00	/	21.3°C
Front Side	52/5260	802.11n	1.640	1.740	0.000	21.07	22.00	2.156	21.3°C
Back Side	52/5260	802.11n	0.888	1.090	0.000	21.07	22.00	1.350	21.3°C
Left Side	52/5260	802.11n	1.260	1.330	0.000	21.07	22.00	1.648	21.3°C
Right Side	52/5260	802.11n	2.140	2.700	0.010	21.07	22.00	3.345	21.3°C
Right Side	56/5280	802.11n	2.010	2.630	-0.170	20.92	22.00	3.373	21.3°C
Right Side	60/5300	802.11n	2.050	2.700	0.170	20.83	22.00	3.535	21.3°C
Right Side-repeated	64/5320	802.11n	2.110	2.650	0.150	20.83	22.00	3.469	21.3°C
Top Side	52/5260	802.11n	0.815	/	0.140	21.07	22.00	/	21.3°C
Front Side	52/5260	802.11n	1.770	1.750	0.000	21.33	22.00	2.042	21.3°C
Back Side	52/5260	802.11n	1.120	1.170	0.000	21.33	22.00	1.365	21.3°C
Left Side	52/5260	802.11n	1.020	1.350	0.040	21.33	22.00	1.575	21.3°C
Right Side	52/5260	802.11n	2.620	2.840	0.020	21.33	22.00	3.314	21.3°C
Right Side	56/5280	802.11n	2.500	2.690	-0.160	21.25	22.00	3.197	21.3°C
Right Side	60/5300	802.11n	2.390	2.880	-0.030	21.10	22.00	3.543	21.3°C
Right Side	64/5320	802.11n	2.610	2.740	-0.140	21.19	22.00	3.302	21.3°C
Top Side	52/5260	802.11n	0.752	/	0.120	21.33	22.00	/	21.3°C
5.5G(802.11a 2Tx CDD,Power setting Level 18)									
Front Side	128/5640	802.11a	1.570	1.690	0.180	21.79	22.00	1.774	21.3°C
Back Side	128/5640	802.11a	0.926	1.180	0.000	21.79	22.00	1.238	21.3°C
Left Side	128/5640	802.11a	1.910	2.190	-0.180	21.79	22.00	2.298	21.3°C
Left Side	116/5580	802.11a	1.550	2.180	0.060	21.69	22.00	2.341	21.3°C
Right Side	128/5640	802.11a	1.400	/	0.150	21.79	22.00	/	21.3°C
Top Side	128/5640	802.11a	0.761	/	0.170	21.79	22.00	/	21.3°C
Additional SAR test for 5.3G when transmission with Main Antenna (802.11ac 2Tx MIMO 80M,Power setting Level 11)									
Front Side	58/5290	802.11ac	0.278	0.269	0.000	14.12	15.50	0.370	21.3°C
Back Side	58/5290	802.11ac	0.168	0.153	0.000	14.12	15.50	0.210	21.3°C
Left Side	58/5290	802.11ac	0.175	/	0.080	14.12	15.50	/	21.3°C
Right Side	58/5290	802.11ac	0.377	0.423	0.110	14.12	15.50	0.581	21.3°C
Top Side	58/5290	802.11ac	0.123	/	0.190	14.12	15.50	/	21.3°C

Additional SAR test for 5.5G when transmission with Main Antenna
(802.11ac 2Tx MIMO 80M, Power setting Level 11)

Front Side	138/5690	802.11ac	0.197	0.210	0.000	13.77	15.50	0.313	21.3°C
Back Side	138/5690	802.11ac	0.150	0.156	0.000	13.77	15.50	0.232	21.3°C
Left Side	138/5690	802.11ac	0.238	0.320	0.150	13.77	15.50	0.477	21.3°C
Right Side	138/5690	802.11ac	0.196	0.203	0.060	13.77	15.50	0.302	21.3°C
Top Side	138/5690	802.11ac	0.108	0.121	0.120	13.77	15.50	0.180	21.3°C

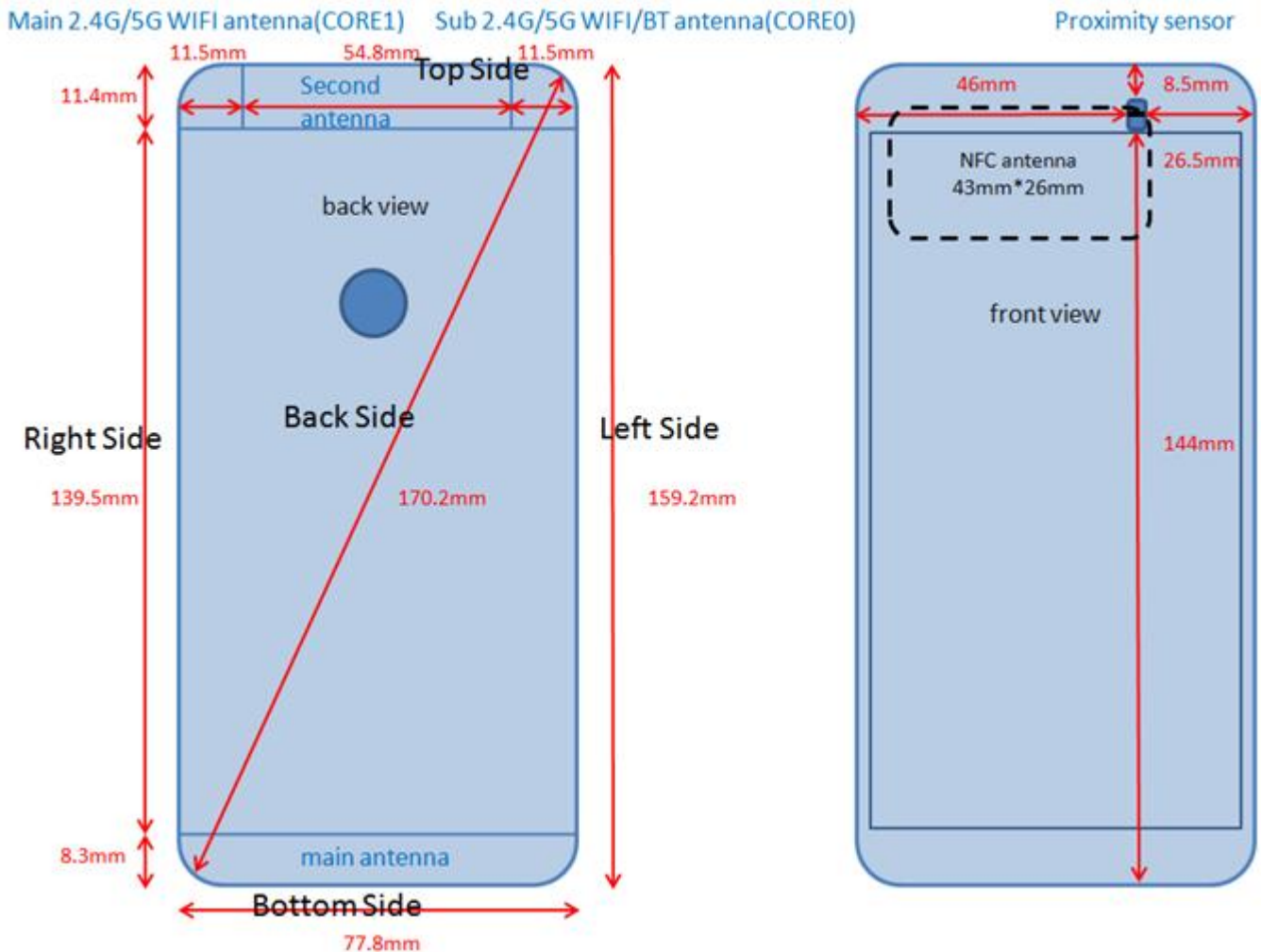
Table 248: 10-g extremity SAR test results of WiFi 5G

Note: As U-NII-2A (5.3G) and U-NII-2C(5.5G) do not support hotspot function, so full 10-g extremity SAR tests were evaluated for U-NII-2A (5.3G) and U-NII-2C(5.5G) bands.

7.3 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 v05r02.

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



Note:

- 1) The device has two 2G/3G/4G Tx antennas (Main Antenna and Second Antenna). It can transmit from either Main Antenna or Second Antenna, but they can not transmit simultaneously. Second Antenna only supports GSM850, UMTS Band V, CDMA BC0, CDMA BC10, LTE B5/12/13/17/26 for FCC Bands.
- 2) The device also supports the dynamic antenna switching function for 802.11b 2.4G Wi-Fi. The device has two Wi-Fi Tx antennas (Main Wi-Fi & BT antenna and Sub Wi-Fi Antenna). 802.11b can transmit from either Main Wi-Fi antenna or Sub Wi-Fi Antenna, but can not transmit simultaneously.
- 3) For 802.11 g/a WIFI CDD and 802.11n/ac Wi-Fi MIMO mode, only the scenario two Wi-Fi antennas transmitting at the same time are supported.
- 4) The NFC antenna is integrated onto the Back cover. The SAR tests were performed with the Battery cover. Per KDB 648474 D04 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.
- 5) The overall dimension of the device (Length* Width) is 159.2mm*77.8mm. Per KDB 648474 D04, because the diagonal distance of this device is > 160mm, it is considered a "Phablet" device.

Mode	Exposure Condition	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main antenna	Hotspot/ Extremity	Yes	Yes	Yes	Yes	No	Yes
Second antenna	Hotspot/ Extremity	Yes	Yes	Yes	Yes	Yes	No
WiFi 1Tx (802.11b CORE0)	Hotspot/ Extremity	Yes	Yes	Yes	No	Yes	No
WiFi 1Tx (802.11b CORE1)	Hotspot/ Extremity	Yes	Yes	No	Yes	Yes	No
WiFi 2Tx CDD/MIMO	Hotspot/ Extremity	Yes	Yes	Yes	Yes	Yes	No

Table 249: Sides for Hotspot SAR testing

Note:

- 1) Per KDB 941225 D06 and KDB 648474 D04, particular DUT edges were not required to be evaluated for Hotspot and/or Extremity SAR if the antenna-to-edge distance is greater than 2.5cm.
- 2) Per KDB 648474 D04, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;
- 3) WiFi 5G hotspot is only supported for U-NII-1 and U-NII-3, therefore U-NII-2A and U-NII-2C were not evaluated for hotspot condition.

7.3.1 Stand-alone SAR test exclusion

Per FCC KDB 447498D01v05, 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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- $f(\text{GHz})$ 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.

Mode	Position	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
BT	Body-Worn	11.00	12.59	15	2.450	1.31	3.00	Yes
BT	10-g Extremity	11.00	12.59	5	2.450	3.94	7.50	Yes

Table 250: Standalone SAR test exclusion for BT

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:

$(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})/x}] \text{ W/kg}$ for test separation distances ≤ 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

Mode	Position	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/Kg)*
BT	Body-worn	11.00	12.59	15	2.450	7.50	0.175
BT	10-g Extremity	11.00	12.59	5	2.450	18.75	0.210

Table 251: Estimated SAR calculation for BT

Note:

- 1) * - maximum possible output power declared by manufacturer
- 2) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.

7.3.2 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

No.	Configuration	Head	Body-worn	Hotspot	10g Extremity
1	GSM(Voice) + BT	No	Yes	No	Yes
2	GSM(DATA) + BT	No	No	No	Yes
3	GSM(Voice)+ WLAN 2.4G/5G	Yes	Yes	No	Yes
4	GSM(DATA) + WLAN 2.4G/5G	No	No	Yes	Yes
5	UMTS(voice) + BT	No	Yes	No	Yes
6	UMTS(Data) + BT	No	Yes	No	Yes
7	UMTS(voice) + WLAN 2.4G/5G	Yes	Yes	No	Yes
8	UMTS(Data) + WLAN 2.4G/5G	No	Yes	Yes	Yes
9	1x CDMA(Voice) + BT	No	Yes	No	Yes
10	1x/EVDO(Data) + BT	No	Yes	No	Yes
11	1x CDMA(Voice) + WLAN 2.4G/5G	Yes	Yes	No	Yes
12	1x/EVDO(Data) + WLAN 2.4G/5G	No	Yes	Yes	Yes
13	LTE(Data) + BT	No	Yes	No	Yes
14	LTE(VoLTE) + BT	No	Yes	No	Yes
15	LTE(Data) + WLAN 2.4G/5G	No	Yes	Yes	Yes
16	LTE(VoLTE) + WLAN 2.4G/5G	Yes	Yes	Yes	Yes

Table 252: Simultaneous Transmission Possibilities

Note:

- 1) 2G&3G&4G can't transmit simutanously.It can transmit from either 2G&3G&4G Main antenna or 2G&3G&4G Second antenna, but Main antenna and Second antenna can't transmit simutanously,
- 2) WiFi 2.4G and WiFi 5G can't transmit simutanously.
- 3) WiFi 2.4G/5G and BT can't transmit simutanously.
- 4) WiFi 5G hotspot is only supported for U-NII-1 and U-NII-3, therefore U-NII-2A and U-NII-2C were not evaluated for hotspot condition.
- 5) The device supports VoLTE and WiFi VOIP function.
- 6) The device does not support 2G&3G VoIP function.
- 7) The device does not support SVDO or SVLTE function.
- 8) The device does not support GSM DTM function. Body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
- 9) Held to ear configurations are not applicable to Bluetooth for this device.
- 10) 2G&3G&4G and WiFi VOIP can't transmit simutanously

7.3.3 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 (Also see Section 7.3). For the other SAR test data in the summed SAR tables, the more conservative SAR test results at the maximum output power level without any simultaneous transmission power reduction are used.

Test Position		Second antenna SAR _{Max}									WiFi antenna SAR _{Max}		BT	Σ1-g or 10-g Extremity SAR
		GSM850	UMTS Band V	CDMA BC0	CDMA BC10	LTE Band V	LTE Band XII	LTE Band XIII	LTE Band XVII	LTE Band XXVI	WiFi 2.4G 1TX	WiFi 2.4G 2TX CDD/MIMO		
Head	Left Hand Touched	0.966	1.083	0.903	0.463	0.924	0.934	1.098	0.995	0.730	0.366	0.312	/	1.464
	Left Hand Tilted 15°	0.767	1.039	0.796	0.418	0.869	0.764	0.969	0.874	0.743	0.270	0.237	/	1.309
	Right Hand Touched	0.814	0.738	0.778	0.997	0.844	0.785	0.955	0.813	0.814	0.272	0.268	/	1.269
	Right Hand Tilted 15°	0.696	0.712	0.692	0.674	0.833	0.727	0.810	0.754	0.747	0.173	0.186	/	1.019
Body-worn 15mm	Front side	0.280	0.083	0.175	0.149	0.155	0.116	0.233	0.154	0.120	0.210	0.172	0.175	0.490
	Back side	0.299	0.176	0.200	0.171	0.183	0.129	0.290	0.159	0.136	0.210	0.172	0.175	0.509
Hotspot 10mm	Front side	0.332	0.227	0.312	0.116	0.141	0.246	0.377	0.251	0.213	0.105	0.099	/	0.482
	Back side	0.362	0.281	0.358	0.157	0.175	0.379	0.406	0.305	0.365	0.105	0.099	/	0.511
	Left side	0.155	0.118	0.146	0.064	0.084	0.118	0.223	0.137	0.124	0.105	0.099	/	0.328
	Right side	0.031	0.027	0.035	0.009	0.011	0.031	0.067	0.024	0.018	0.105	0.099	/	0.172
	Top side	0.211	0.176	0.293	0.076	0.119	0.205	0.267	0.231	0.170	0.105	0.099	/	0.398
	Bottom side	/	/	/	/	/	/	/	/	/	/	0.099	/	0.099
10-g Extremity 0mm	Front side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Back side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Left side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Right side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Top side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210

Table 253: SAR Simultaneous Tx Combination of Second Antenna and 2.4G WiFi/BT.

Test Position		Second antenna SAR _{Max}									WiFi antenna SAR _{Max}	Σ1-g or 10-g Extremity SAR
		GSM850	UMTS Band V	CDMA BC0	CDMA BC10	LTE Band V	LTE Band XII	LTE Band XIII	LTE Band XVII	LTE Band XXVI	WiFi 5G 2TX CDD/MIMO	
Head	Left Hand Touched	0.966	1.083	0.903	0.463	0.924	0.934	1.098	0.995	0.730	0.465	1.563
	Left Hand Tilted 15°	0.767	1.039	0.796	0.418	0.869	0.764	0.969	0.874	0.743	0.315	1.354
	Right Hand Touched	0.814	0.738	0.778	0.997	0.844	0.785	0.955	0.813	0.814	0.565	1.563
	Right Hand Tilted 15°	0.696	0.712	0.692	0.674	0.833	0.727	0.810	0.754	0.747	0.421	1.254
Body-worn 15mm	Front side	0.280	0.083	0.175	0.149	0.155	0.116	0.233	0.154	0.120	0.250	0.530
	Back side	0.299	0.176	0.200	0.171	0.183	0.129	0.290	0.159	0.136	0.206	0.505
Hotspot 10mm	Front side	0.332	0.227	0.312	0.116	0.141	0.246	0.377	0.251	0.213	0.113	0.490
	Back side	0.362	0.281	0.358	0.157	0.175	0.379	0.406	0.305	0.365	0.113	0.519
	Left side	0.155	0.118	0.146	0.064	0.084	0.118	0.223	0.137	0.124	0.113	0.336
	Right side	0.031	0.027	0.035	0.009	0.011	0.031	0.067	0.024	0.018	0.113	0.180
	Top side	0.211	0.176	0.293	0.076	0.119	0.205	0.267	0.231	0.170	0.113	0.406
	Bottom side	/	/	/	/	/	/	/	/	/	0.113	0.113
10-g Extremity 0mm	Front side	/	/	/	/	/	/	/	/	/	0.370	0.370
	Back side	/	/	/	/	/	/	/	/	/	0.232	0.232
	Left side	/	/	/	/	/	/	/	/	/	0.447	0.447
	Right side	/	/	/	/	/	/	/	/	/	0.581	0.581
	Top side	/	/	/	/	/	/	/	/	/	0.581	0.581
	Bottom side	/	/	/	/	/	/	/	/	/	/	0.000

Table 254: SAR Simultaneous Tx Combination of Second Antenna and 5G WiFi

Test Position		Main antenna SAR _{Max}																		WiFi antenna SAR _{Max}		BT	Σ1-g or 10-g Extremity SAR	
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	CDMA BC0	CDMA BC1	CDMA BC10	LTE Band II	LTE Band IV	LTE Band V	LTE Band VII	LTE Band XII	LTE Band XIII	LTE Band XVII	LTE Band XXV	LTE Band XXVI	LTE Band XXX	LTE Band XLI	WiFi 2.4G 1Tx			WiFi 2.4G 2Tx CDD/MIMO
Head	Left Hand Touched	0.238	0.122	0.127	0.091	0.275	0.342	0.119	0.271	0.181	0.113	0.236	0.504	0.141	0.194	0.150	0.116	0.224	0.331	0.306	0.759	0.707	/	1.263
	Left Hand Tilted 15°	0.210	0.076	0.119	0.031	0.262	0.329	0.089	0.224	0.120	0.032	0.164	0.095	0.101	0.115	0.122	0.075	0.160	0.141	0.035	0.581	0.712	/	1.041
	Right Hand Touched	0.362	0.143	0.143	0.120	0.402	0.458	0.150	0.314	0.158	0.107	0.318	0.197	0.178	0.250	0.182	0.165	0.313	0.179	0.083	0.617	0.712	/	1.170
	Right Hand Tilted 15°	0.171	0.081	0.076	0.056	0.203	0.258	0.084	0.290	0.108	0.043	0.155	0.132	0.081	0.124	0.079	0.080	0.130	0.133	0.056	0.345	0.712	/	1.002
Body 15mm	Front side	0.272	0.563	0.687	0.527	0.295	0.337	0.669	0.331	0.748	0.511	0.296	0.494	0.208	0.306	0.220	0.721	0.253	0.522	0.205	0.210	0.172	0.175	0.958
	Back side	0.280	0.602	0.674	0.509	0.319	0.410	0.593	0.437	0.812	0.558	0.276	0.443	0.210	0.251	0.232	0.728	0.264	0.480	0.252	0.210	0.172	0.175	1.022
Hotspot 10mm	Front side	0.402	0.546	0.546	0.723	0.376	0.666	0.626	0.257	0.552	0.913	0.549	0.515	0.205	0.322	0.197	0.844	0.227	0.754	0.346	0.105	0.099	/	1.018
	Back side	0.475	0.594	0.596	0.782	0.419	0.670	0.713	0.285	0.544	1.162	0.577	0.631	0.240	0.346	0.228	0.886	0.299	0.719	0.314	0.105	0.099	/	1.267
	Left side	0.128	0.129	0.086	0.161	0.173	0.293	0.107	0.144	0.126	0.333	0.188	0.260	0.146	0.179	0.136	0.159	0.137	0.115	0.143	0.105	0.099	/	0.438
	Right side	0.366	0.055	0.034	0.071	0.402	0.566	0.039	0.308	0.053	0.117	0.443	0.046	0.295	0.344	0.291	0.062	0.307	0.100	0.053	0.105	0.099	/	0.671
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.105	0.099	/	0.105
	Bottom side	0.267	1.165	0.841	1.143	0.271	0.387	1.228	0.172	1.140	1.425	0.308	1.329	0.110	0.202	0.103	1.441	0.168	1.441	0.913	/	/	/	/
10-g Extremity 0mm	Front side	/	/	/	3.590	/	/	2.930	/	/	3.623	/	/	/	/	/	3.199	/	3.263	/	/	/	0.210	3.833
	Back side	/	/	/	3.332	/	/	3.492	/	/	3.486	/	3.617	/	/	/	3.517	/	2.966	/	/	/	0.210	3.827
	Left side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Right side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.210	0.210
	Bottom side	/	1.431	1.455	2.674	/	/	1.604	/	1.441	2.960	/	1.353	/	/	/	1.525	/	1.446	0.582	/	/	0.210	3.170

Table 255: SAR Simultaneous Tx Combination of Main Antenna and 2.4G WiFi/BT.

Test Position		Main antenna SAR _{Max}																		WiFi antenna SAR _{Max}		Σ1-g or 10-g Extremity SAR
		GSM850	GSM1900	UMTS Band II	UMTS Band IV	UMTS Band V	CDMA BC0	CDMA BC1	CDMA BC10	LTE Band II	LTE Band IV	LTE Band V	LTE Band VII	LTE Band XII	LTE Band XIII	LTE Band XVII	LTE Band XXV	LTE Band XXVI	LTE Band XXX	LTE Band XLI	WiFi 5G	
Head	Left Hand Touched	0.238	0.122	0.127	0.091	0.275	0.342	0.119	0.271	0.181	0.113	0.236	0.504	0.141	0.194	0.150	0.116	0.224	0.331	0.306	0.896	1.400
	Left Hand Tilted 15°	0.210	0.076	0.119	0.031	0.262	0.329	0.089	0.224	0.120	0.032	0.164	0.095	0.101	0.115	0.122	0.075	0.160	0.141	0.035	1.064	1.393
	Right Hand Touched	0.362	0.143	0.143	0.120	0.402	0.458	0.150	0.314	0.158	0.107	0.318	0.197	0.178	0.250	0.182	0.165	0.313	0.179	0.083	1.064	1.522
	Right Hand Tilted 15°	0.171	0.081	0.076	0.056	0.203	0.258	0.084	0.290	0.108	0.043	0.155	0.132	0.081	0.124	0.079	0.080	0.130	0.133	0.056	1.064	1.354
Body 15mm	Front side	0.272	0.563	0.687	0.527	0.295	0.337	0.669	0.331	0.748	0.511	0.296	0.494	0.208	0.306	0.220	0.721	0.253	0.522	0.205	0.250	0.998
	Back side	0.280	0.602	0.674	0.509	0.319	0.410	0.593	0.437	0.812	0.558	0.276	0.443	0.210	0.251	0.232	0.728	0.264	0.480	0.252	0.206	1.019
Hotspot 10mm	Front side	0.402	0.546	0.546	0.723	0.376	0.666	0.626	0.257	0.552	0.913	0.549	0.515	0.205	0.322	0.197	0.844	0.227	0.754	0.346	0.113	1.026
	Back side	0.475	0.594	0.596	0.782	0.419	0.670	0.713	0.285	0.544	1.162	0.577	0.631	0.240	0.346	0.228	0.886	0.299	0.719	0.314	0.113	1.275
	Left side	0.128	0.129	0.086	0.161	0.173	0.293	0.107	0.144	0.126	0.333	0.188	0.260	0.146	0.179	0.136	0.159	0.137	0.115	0.143	0.113	0.446
	Right side	0.366	0.055	0.034	0.071	0.402	0.566	0.039	0.308	0.053	0.117	0.443	0.046	0.295	0.344	0.291	0.062	0.307	0.100	0.053	0.113	0.679
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.113	0.113
	Bottom side	0.267	1.165	0.841	1.143	0.271	0.387	1.228	0.172	1.140	1.425	0.308	1.329	0.110	0.202	0.103	1.441	0.168	1.441	0.913	0.113	1.554
10-g Extremity 0mm	Front side	/	/	/	3.590	/	/	2.930	/	/	3.623	/	/	/	/	/	3.199	/	3.263	/	0.370	3.993
	Back side	/	/	/	3.332	/	/	3.492	/	/	3.486	/	3.617	/	/	/	3.517	/	2.966	/	0.232	3.849
	Left side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.447	0.447
	Right side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.581	0.581
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.581	0.581
	Bottom side	/	1.431	1.455	2.674	/	/	1.604	/	1.441	2.960	/	1.353	/	/	/	1.525	/	1.446	0.582	/	3.170

Table 256: SAR Simultaneous Tx Combination of Main Antenna and 5G WiFi.

Note: Per KDB 648474 D04, simultaneous transmission SAR consideration for 10-g extremity SAR requires consideration only when standalone 10-g SAR is required.

7.3.4 Simultaneous Transmission Conclusion

The above numeral summed SAR results and/or SPLSR analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore simultaneous transmission SAR with Volume Scans is not required per KDB 447498 D01v05r02.

Appendix A. System Check Plots
(Pls See Appendix A.)

Appendix B. SAR Measurement Plots
(Pls See Appendix B.)

Appendix C. Calibration Certificate
(Pls See Appendix C.)

Appendix D. Photo documentation
(Pls See Appendix D.)

End