



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Headset	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	N5_Ant0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Full	167300	836.5	23.25	24.00	1.189	0.05	0.365	0.434
	N5_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Full	167300	836.5	23.25	24.00	1.189	-0.07	0.459	0.546
	N5_Ant0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Full	167300	836.5	23.20	24.00	1.202	-0.1	0.412	0.495
	N5_Ant0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Full	167300	836.5	23.20	24.00	1.202	0.14	0.557	0.670
	N5_Ant1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Full	167300	836.5	23.35	24.00	1.161	-0.18	0.705	0.819
	N5_Ant1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Full	167300	836.5	23.35	24.00	1.161	-0.14	0.593	0.689
	N5_Ant1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Full	167300	836.5	23.32	24.00	1.169	-0.06	0.708	0.828
	N5_Ant1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Full	167300	836.5	23.32	24.00	1.169	-0.18	0.568	0.664
52	N5_Ant1	20M	BPSK	100	0	DFT-15	Front	5mm	-	DSI 3	Full	167300	836.5	22.95	23.50	1.135	-0.09	0.730	0.829
	N66_Ant0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	349000	1745	18.44	19.30	1.219	0.12	0.626	0.763
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.44	19.30	1.219	-0.15	0.718	0.875
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	346000	1730	18.37	19.30	1.239	0.05	0.621	0.769
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	352000	1760	18.27	19.30	1.268	0.13	0.829	1.051
	N66_Ant0	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI 4	Sensor Off	349000	1745	22.84	24.00	1.306	-0.14	0.275	0.359
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI 4	Sensor Off	352000	1760	22.78	24.00	1.324	-0.05	0.031	0.041
	N66_Ant0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Standalone	349000	1745	18.37	19.30	1.239	-0.05	0.626	0.775
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.37	19.30	1.239	0.18	0.889	1.101
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	346000	1730	18.29	19.30	1.262	-0.07	0.810	1.022
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	352000	1760	18.25	19.30	1.274	-0.06	0.933	1.188
	N66_Ant0	40M	BPSK	108	54	DFT-15	Front	16mm	-	DSI 4	Sensor Off	349000	1745	22.79	24.00	1.321	-0.12	0.303	0.400
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	27mm	-	DSI 4	Sensor Off	352000	1760	22.75	24.00	1.334	0.04	0.031	0.041
	N66_Ant0	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.23	19.30	1.279	0.14	0.816	1.044
	N66_Ant0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	349000	1745	17.33	18.30	1.250	-0.15	0.381	0.476
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	349000	1745	17.33	18.30	1.250	0.13	0.585	0.731
	N66_Ant0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	349000	1745	17.23	18.30	1.279	-0.14	0.471	0.603
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	349000	1745	17.23	18.30	1.279	-0.04	0.664	0.850
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	346000	1730	17.17	18.30	1.297	0.01	0.600	0.778
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	352000	1760	17.22	18.30	1.282	-0.12	0.561	0.719
	N66_Ant0	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	349000	1745	17.25	18.30	1.274	-0.03	0.660	0.841
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	349000	1745	18.72	19.30	1.143	-0.14	0.970	1.109
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	346000	1730	18.61	19.30	1.172	-0.12	0.865	1.014
53	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	352000	1760	18.59	19.30	1.178	0.03	1.050	1.236
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.72	19.30	1.143	0.08	1.018	1.163
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	346000	1730	18.61	19.30	1.172	0.05	0.843	0.988
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	352000	1760	18.59	19.30	1.178	-0.12	0.967	1.139
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	Headset	DSI 3	Standalone	352000	1760	18.59	19.30	1.178	0.12	0.884	1.041
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI 4	Sensor Off	352000	1760	22.93	24.00	1.279	-0.05	0.602	0.770
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI 4	Sensor Off	349000	1745	22.98	24.00	1.265	0.03	0.210	0.266
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Standalone	349000	1745	18.64	19.30	1.164	0.15	0.997	1.161
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Standalone	346000	1730	18.53	19.30	1.194	-0.15	0.952	1.137
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Standalone	352000	1760	18.48	19.30	1.208	0.18	1.000	1.208
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.64	19.30	1.164	-0.06	0.997	1.161
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	346000	1730	18.53	19.30	1.194	-0.05	0.933	1.114
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Standalone	352000	1760	18.48	19.30	1.208	-0.1	0.886	1.070
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	5mm	Headset	DSI 3	Standalone	352000	1760	18.48	19.30	1.208	-0.12	0.861	1.040
	N66_Ant1	40M	BPSK	216	0	DFT-15	Front	5mm	-	DSI 3	Standalone	349000	1745	18.65	19.30	1.161	-0.03	0.823	0.956
	N66_Ant1	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI 3	Standalone	349000	1745	18.65	19.30	1.161	0.15	0.936	1.087
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	349000	1745	15.63	16.50	1.222	0.16	0.468	0.572
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	349000	1745	15.63	16.50	1.222	0.11	0.442	0.540
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	349000	1745	15.52	16.50	1.253	-0.09	0.524	0.657
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	349000	1745	15.52	16.50	1.253	0.17	0.470	0.589



**FCC SAR Test Report**

**Report No. : FA151701-02**

	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	18.26	19.00	1.186	0.18	0.789	0.935
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	376000	1880	18.05	19.00	1.245	-0.13	0.538	0.670
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	380000	1900	18.03	19.00	1.250	-0.16	0.580	0.725
54	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	18.26	19.00	1.186	0.01	1.040	1.233
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	376000	1880	18.05	19.00	1.245	-0.07	0.807	1.004
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	380000	1900	18.03	19.00	1.250	-0.05	0.800	1.000
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	Headset	DSI 3	Standalone	372000	1860	18.26	19.00	1.186	-0.01	0.588	0.697
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	16mm	-	DSI 4	Sensor Off	372000	1860	23.24	24.00	1.191	-0.12	0.478	0.569
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	27mm	-	DSI 4	Sensor Off	372000	1860	23.24	24.00	1.191	0.15	0.230	0.274
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	18.09	19.00	1.233	-0.01	0.732	0.903
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	376000	1880	18.07	19.00	1.239	0.01	0.562	0.696
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	380000	1900	17.99	19.00	1.262	0.18	0.626	0.790
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	18.09	19.00	1.233	-0.08	0.881	1.086
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	376000	1880	18.07	19.00	1.239	-0.11	0.684	0.847
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	380000	1900	17.99	19.00	1.262	0.06	0.916	1.156
	N2_Ant0	20M	BPSK	100	0	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	18.15	19.00	1.216	0.01	0.759	0.923
	N2_Ant0	20M	BPSK	100	0	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	18.15	19.00	1.216	-0.05	0.893	1.086
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	372000	1860	16.06	17.00	1.242	-0.01	0.511	0.634
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	372000	1860	16.06	17.00	1.242	0.15	0.583	0.724
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	372000	1860	16.00	17.00	1.259	-0.02	0.486	0.612
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	372000	1860	16.00	17.00	1.259	0.07	0.567	0.714
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	20.35	21.00	1.161	-0.07	0.694	0.806
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	376000	1880	20.24	21.00	1.191	-0.04	0.892	1.063
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Standalone	380000	1900	20.19	21.00	1.205	-0.02	0.960	1.157
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	20.35	21.00	1.161	0.16	0.706	0.820
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	376000	1880	20.24	21.00	1.191	0.01	0.889	1.059
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Standalone	380000	1900	20.19	21.00	1.205	-0.03	0.990	1.193
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	16mm	-	DSI 4	Sensor Off	380000	1900	23.22	24.00	1.197	0.18	0.379	0.454
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	27mm	-	DSI 4	Sensor Off	380000	1900	23.22	24.00	1.197	-0.05	0.129	0.154
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	20.25	21.00	1.189	-0.07	0.674	0.801
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	376000	1880	20.20	21.00	1.202	-0.07	0.934	1.123
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Standalone	380000	1900	20.17	21.00	1.211	-0.06	0.936	1.133
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	20.25	21.00	1.189	0.01	0.683	0.812
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	376000	1880	20.20	21.00	1.202	0.05	0.934	1.123
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Standalone	380000	1900	20.17	21.00	1.211	-0.06	0.966	1.169
	N2_Ant1	20M	BPSK	100	0	DFT-15	Front	5mm	-	DSI 3	Standalone	372000	1860	20.16	21.00	1.213	-0.02	0.642	0.779
	N2_Ant1	20M	BPSK	100	0	DFT-15	Back	5mm	-	DSI 3	Standalone	372000	1860	20.16	21.00	1.213	0.14	0.568	0.689
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	372000	1860	16.99	17.80	1.205	-0.17	0.320	0.386
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	372000	1860	16.99	17.80	1.205	0.12	0.269	0.324
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI 3	Sim-Tx	372000	1860	16.92	17.80	1.225	-0.01	0.286	0.350
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI 3	Sim-Tx	372000	1860	16.92	17.80	1.225	-0.17	0.250	0.306
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	16.05	16.80	1.189	0.04	0.157	0.186
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	16.05	16.80	1.189	0.03	0.880	1.046
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	15.82	16.80	1.253	0.16	0.830	1.040
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	15.77	16.80	1.268	-0.13	0.878	1.113
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	656000	3840	22.95	24.00	1.274	0.02	0.213	0.271
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	662000	3930	22.80	24.00	1.318	0.05	0.314	0.414
	N77_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	15.90	16.80	1.230	-0.14	0.147	0.181
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	15.90	16.80	1.230	0.04	0.893	1.099
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	15.77	16.80	1.268	0.09	0.839	1.064
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	15.78	16.80	1.265	-0.12	0.845	1.069
	N77_Ant3	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	15.79	16.80	1.262	-0.1	0.884	1.115
	N77_Ant3	100M	BPSK	270	0	DFT-30	Back	27mm	-	DSI 4	Sensor Off	656000	3840	22.87	24.00	1.297	0.02	0.290	0.376
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	15.96	16.80	1.213	-0.16	0.090	0.109
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.96	16.80	1.213	0.14	0.934	1.133
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	633334	3500.01	22.91	24.00	1.285	0.01	0.156	0.201



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	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	633334	3500.01	22.91	24.00	1.285	0.06	0.278	0.357
	N77_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.07	0.105	0.132
55	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.06	0.985	1.240
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	Headset	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.11	0.849	1.069
	N77_Ant3	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI 4	Sensor Off	633334	3500.01	22.88	24.00	1.294	0.05	0.159	0.206
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI 4	Sensor Off	633334	3500.01	22.88	24.00	1.294	0.02	0.317	0.410
	N77_Ant3	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.72	16.80	1.282	0.01	0.864	1.108
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	12.16	13.00	1.213	-0.18	0.065	0.079
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	12.16	13.00	1.213	0.02	0.338	0.410
	N77_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	12.13	13.00	1.222	-0.18	0.069	0.084
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	12.13	13.00	1.222	-0.06	0.364	0.445
	N77_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	12.00	13.00	1.259	-0.09	0.085	0.107
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	12.00	13.00	1.259	-0.06	0.341	0.429
	N77_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	11.98	13.00	1.265	-0.02	0.094	0.119
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	11.98	13.00	1.265	0.09	0.352	0.445
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	16.05	16.80	1.189	0.04	0.156	0.186
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	16.05	16.80	1.189	0.03	0.880	1.046
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	15.82	16.80	1.253	0.16	0.830	1.040
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	15.77	16.80	1.268	-0.13	0.878	1.113
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	656000	3840	26.00	27.00	1.259	-0.03	0.177	0.223
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	662000	3930	25.83	27.00	1.309	0.05	0.456	0.597
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	15.90	16.80	1.230	-0.14	0.140	0.172
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	15.90	16.80	1.230	0.04	0.893	1.099
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	15.77	16.80	1.268	0.09	0.839	1.064
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	15.78	16.80	1.265	-0.12	0.845	1.069
	N77_HPUE_Ant3	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	15.79	16.80	1.262	-0.1	0.884	1.115
	N77_HPUE_Ant3	100M	BPSK	270	0	DFT-30	Back	27mm	-	DSI 4	Sensor Off	656000	3840	25.46	26.50	1.271	0.03	0.411	0.522
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	15.96	16.80	1.213	-0.16	0.090	0.109
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.96	16.80	1.213	0.14	0.934	1.133
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	633334	3500.01	25.93	27.00	1.279	-0.06	0.174	0.223
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	633334	3500.01	25.93	27.00	1.279	0.1	0.406	0.519
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.07	0.105	0.132
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.06	0.985	1.240
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	Headset	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-0.11	0.849	1.069
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI 4	Sensor Off	633334	3500.01	25.83	27.00	1.309	0.03	0.197	0.258
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI 4	Sensor Off	633334	3500.01	25.83	27.00	1.309	0.05	0.452	0.592
	N77_HPUE_Ant3	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	15.72	16.80	1.282	0.01	0.959	1.230
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	12.16	13.00	1.213	-0.18	0.065	0.079
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	12.16	13.00	1.213	0.02	0.338	0.410
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	12.13	13.00	1.222	-0.18	0.069	0.084
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	12.13	13.00	1.222	-0.06	0.364	0.445
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	12.00	13.00	1.259	-0.09	0.085	0.107
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	12.00	13.00	1.259	-0.06	0.341	0.429
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	11.98	13.00	1.265	-0.02	0.094	0.119
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	11.98	13.00	1.265	0.09	0.352	0.445
	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	13.48	14.50	1.265	0.11	0.064	0.081
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	13.48	14.50	1.265	0.05	0.841	1.064
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	13.42	14.50	1.282	0.07	0.869	1.114
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	13.43	14.50	1.279	-0.01	0.761	0.974
	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	656000	3840	20.24	21.00	1.191	-0.14	0.050	0.060
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	650000	3750	20.23	21.00	1.194	0.12	0.089	0.106
	N77_Ant5	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	656000	3840	13.40	14.50	1.288	0.07	0.057	0.073
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	13.40	14.50	1.288	-0.08	0.825	1.063
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	650000	3750	13.38	14.50	1.294	0.13	0.842	1.090
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	662000	3930	13.39	14.50	1.291	-0.14	0.748	0.966
	N77_Ant5	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	656000	3840	13.39	14.50	1.291	0.05	0.830	1.072



	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	13.47	14.50	1.268	-0.1	0.037	0.047
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	13.47	14.50	1.268	-0.07	0.632	0.801
	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI 4	Sensor Off	633334	3500.01	20.19	21.00	1.205	0.07	0.019	0.023
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI 4	Sensor Off	633334	3500.01	20.19	21.00	1.205	0.04	0.076	0.092
	N77_Ant5	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Standalone	633334	3500.01	13.44	14.50	1.276	-0.11	0.034	0.043
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	13.44	14.50	1.276	-0.18	0.615	0.785
	N77_Ant5	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI 3	Standalone	633334	3500.01	13.41	14.50	1.285	0.04	0.548	0.704
	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	10.19	11.00	1.205	0.09	0.017	0.020
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	10.19	11.00	1.205	0.02	0.363	0.437
	N77_Ant5	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	656000	3840	10.15	11.00	1.216	-0.03	0.015	0.018
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	656000	3840	10.15	11.00	1.216	-0.08	0.309	0.376
	N77_Ant5	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	10.11	11.00	1.227	0.03	0.010	0.012
	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	10.11	11.00	1.227	0.11	0.173	0.212
	N77_Ant5	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI 3	Sim-Tx	633334	3500.01	10.08	11.00	1.236	0.06	0.015	0.019
	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI 3	Sim-Tx	633334	3500.01	10.08	11.00	1.236	0.13	0.258	0.319

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	DH5 1Mbps	Front	5mm	Ant 2	-	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.14	0.071	0.120
56	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	-	Full	39	2441	11.40	12.50	1.288	76.13	1.314	-0.07	0.079	<b>0.133</b>

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 2+4	-	Standalone	1	2412	19.78	21.00	1.324	100	1.000	-0.17	0.183	0.242
57	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	-	Standalone	1	2412	19.78	21.00	1.324	100	1.000	-0.17	0.879	<b>1.164</b>
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	-	Standalone	6	2437	19.64	21.00	1.368	100	1.000	0.12	0.681	0.931
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	-	Standalone	11	2462	19.36	21.00	1.459	100	1.000	0.09	0.588	0.858
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 2+4	-	Simultaneous	1	2412	15.31	16.50	1.315	100	1.000	0.14	0.069	0.091
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	-	Simultaneous	1	2412	15.31	16.50	1.315	100	1.000	0.02	0.302	0.397
	WLAN2.4GHz	802.11b 1Mbps	Front	16mm	Ant 2+4	-	Full	1	2412	21.66	22.50	1.213	100	1.000	0.03	0.063	0.076
	WLAN2.4GHz	802.11b 1Mbps	Back	27mm	Ant 2+4	-	Full	1	2412	21.66	22.50	1.213	100	1.000	-0.02	0.041	0.050



<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4+12	-	Standalone	62	5310	19.62	21.00	1.374	100	1.000	-0.13	0.108	0.148
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4+12	-	Standalone	62	5310	19.62	21.00	1.374	100	1.000	-0.05	0.619	0.851
58	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4+12	-	Standalone	54	5270	19.51	21.00	1.409	100	1.000	-0.12	0.761	1.072
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 4+12	-	Simultaneous	50	5250	14.65	16.00	1.365	100	1.000	-0.12	0.058	0.079
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 4+12	-	Simultaneous	50	5250	14.65	16.00	1.365	100	1.000	-0.18	0.291	0.397
	WLAN5.3GHz	802.11a 6Mbps	Front	16mm	Ant 4+12	-	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.11	0.015	0.021
	WLAN5.3GHz	802.11a 6Mbps	Back	27mm	Ant 4+12	-	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.08	0.109	0.149
	WLAN5.5GHz	802.11a 6Mbps	Front	5mm	Ant 4+12	-	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.02	0.091	0.119
59	WLAN5.5GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	-	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.12	0.533	0.695
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	-	Simultaneous	106	5530	17.66	19.00	1.361	100	1.000	0.09	0.068	0.093
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	-	Simultaneous	106	5530	17.66	19.00	1.361	100	1.000	-0.09	0.257	0.350
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	-	Standalone	155	5775	18.22	20.00	1.507	100	1.000	-0.16	0.115	0.173
60	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	-	Standalone	155	5775	18.22	20.00	1.507	100	1.000	0.12	0.735	1.107
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	-	Simultaneous	155	5775	13.81	15.00	1.315	100	1.000	0.06	0.041	0.054
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	-	Simultaneous	155	5775	13.81	15.00	1.315	100	1.000	0.18	0.244	0.321
	WLAN5.8GHz	802.11a 6Mbps	Front	16mm	Ant 4+12	-	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.04	0.036	0.051
	WLAN5.8GHz	802.11a 6Mbps	Back	27mm	Ant 4+12	-	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.02	0.112	0.158



16.4 Product specific 10g SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	GSM1900_Ant 0	GPRS (3 Tx slots)	Front	0mm	DSI6	Standalone&Sim-Tx	512	1850.2	24.43	25.50	1.279	0.07	1.370	1.753
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	0mm	DSI6	Standalone&Sim-Tx	512	1850.2	24.43	25.50	1.279	0.04	1.630	2.085
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	0mm	DSI6	Standalone&Sim-Tx	661	1880	24.01	25.50	1.409	0.1	1.480	2.086
62	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	0mm	DSI6	Standalone&Sim-Tx	810	1909.8	23.81	25.50	1.476	0.05	1.960	2.892
	GSM1900_Ant 0	GPRS (3 Tx slots)	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	512	1850.2	24.43	25.50	1.279	0.05	1.460	1.868
	GSM1900_Ant 0	GPRS (3 Tx slots)	Front	6mm	DSI 4	Sensor Off	512	1850.2	25.58	26.50	1.236	0.07	0.603	0.745
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	8mm	DSI 4	Sensor Off	810	1909.8	25.10	26.50	1.380	0.09	0.774	1.068
	GSM1900_Ant 0	GPRS (3 Tx slots)	Bottom Side	11mm	DSI 4	Sensor Off	512	1850.2	25.58	26.50	1.236	0.02	0.615	0.760

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Full	4233	846.6	24.29	25.00	1.178	0.05	1.700	2.002
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Full	4182	836.4	24.28	25.00	1.180	-0.17	1.670	1.971
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Full	4132	826.4	24.24	25.00	1.191	0.16	1.260	1.501
63	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Full	4233	846.6	23.82	25.00	1.312	-0.13	1.560	2.047
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Full	4132	826.4	23.77	25.00	1.327	0.12	1.520	2.018
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Full	4182	836.4	23.76	25.00	1.330	-0.06	1.480	1.969
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	0mm	DSI6	Standalone&Sim-Tx	9538	1907.6	20.92	22.00	1.282	0.17	1.700	2.180
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	0mm	DSI6	Standalone&Sim-Tx	9262	1852.4	20.69	22.00	1.352	0.02	1.510	2.042
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	0mm	DSI6	Standalone&Sim-Tx	9400	1880	20.72	22.00	1.343	-0.12	1.650	2.216
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Standalone&Sim-Tx	9538	1907.6	20.92	22.00	1.282	0.01	2.060	2.642
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Standalone&Sim-Tx	9262	1852.4	20.69	22.00	1.352	0.13	1.720	2.326
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	0mm	DSI6	Standalone&Sim-Tx	9400	1880	20.72	22.00	1.343	-0.09	1.920	2.578
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	9538	1907.6	20.92	22.00	1.282	0.08	2.110	2.706
64	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	9262	1852.4	20.69	22.00	1.352	0.06	2.330	3.150
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	9400	1880	20.72	22.00	1.343	-0.12	2.010	2.699
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	6mm	DSI 4	Sensor Off	9400	1880	23.73	25.00	1.340	-0.12	1.140	1.527
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	8mm	DSI 4	Sensor Off	9538	1907.6	23.81	25.00	1.315	0.01	1.000	1.315
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	11mm	DSI 4	Sensor Off	9262	1852.4	23.69	25.00	1.352	0.06	1.440	1.947
	WCDMA II_Ant1	RMC 12.2Kbps	Front	0mm	DSI6	Standalone	9538	1907.6	21.01	21.80	1.199	-0.02	1.810	2.171
	WCDMA II_Ant1	RMC 12.2Kbps	Front	0mm	DSI6	Standalone	9262	1852.4	20.77	21.80	1.268	0.08	1.540	1.952
	WCDMA II_Ant1	RMC 12.2Kbps	Front	0mm	DSI6	Standalone	9400	1880	20.87	21.80	1.239	-0.18	1.680	2.081
	WCDMA II_Ant1	RMC 12.2Kbps	Back	0mm	DSI6	Standalone	9538	1907.6	21.01	21.80	1.199	-0.06	0.803	0.963
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Standalone	9538	1907.6	21.01	21.80	1.199	-0.17	2.620	3.143
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Standalone	9262	1852.4	20.77	21.80	1.268	0.07	2.390	3.030
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Standalone	9400	1880	20.87	21.80	1.239	0.17	2.070	2.564
	WCDMA II_Ant1	RMC 12.2Kbps	Front	6mm	DSI 4	Sensor Off	9538	1907.6	22.26	23.00	1.186	0.02	0.382	0.453
	WCDMA II_Ant1	RMC 12.2Kbps	Back	8mm	DSI 4	Sensor Off	9538	1907.6	22.26	23.00	1.186	0.06	0.301	0.357
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	9mm	DSI 4	Sensor Off	9538	1907.6	22.26	23.00	1.186	0.01	0.549	0.651
	WCDMA II_Ant1	RMC 12.2Kbps	Front	0mm	DSI6	Sim-Tx	9538	1907.6	20.14	21.00	1.219	0.16	1.480	1.804
	WCDMA II_Ant1	RMC 12.2Kbps	Back	0mm	DSI6	Sim-Tx	9538	1907.6	20.14	21.00	1.219	-0.18	0.703	0.857
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Sim-Tx	9538	1907.6	20.14	21.00	1.219	-0.11	1.990	2.426
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Sim-Tx	9262	1852.4	20.13	21.00	1.222	-0.02	1.860	2.273
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6	Sim-Tx	9400	1880	20.03	21.00	1.250	0.09	1.650	2.063



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
65	LTE Band 5_Ant1	10M	QPSK	1	0	Top Side	0mm	DSI 6	Full	20525	836.5	22.45	23.50	1.274	0.07	1.630	<b>2.076</b>
	LTE Band 5B_Ant1	10M	QPSK	1	0	Top Side	0mm	DSI 6	Full	20476+20575	831.5+841.5	22.38	23.50	1.294	0.03	1.470	1.902
	LTE Band 5_Ant1	10M	QPSK	25	0	Top Side	0mm	DSI 6	Full	20525	836.5	21.62	22.50	1.225	-0.13	0.892	1.092
	LTE Band 5_Ant1	10M	QPSK	50	0	Top Side	0mm	DSI 6	Full	20525	836.5	21.62	22.50	1.225	-0.11	0.885	1.084
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.67	21.80	1.297	0.05	1.030	1.336
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.67	21.80	1.297	0.02	1.520	1.972
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.67	21.80	1.297	-0.05	1.860	2.413
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132072	1720	20.65	21.80	1.303	-0.18	1.640	2.137
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132572	1770	20.58	21.80	1.324	0.1	1.960	2.596
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	6mm	DSI 4	Sensor Off	132322	1745	22.42	24.00	1.439	0.03	1.000	1.439
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	8mm	DSI 4	Sensor Off	132322	1745	22.42	24.00	1.439	-0.02	1.260	1.813
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	11mm	DSI 4	Sensor Off	132572	1770	22.21	24.00	1.510	0.04	1.300	1.963
	LTE Band 66_Ant0	20M	QPSK	50	0	Front	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.61	21.80	1.315	-0.04	1.180	1.552
	LTE Band 66_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.61	21.80	1.315	0.04	1.590	2.091
	LTE Band 66_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	132072	1720	20.58	21.80	1.324	0.07	1.450	1.920
	LTE Band 66_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	132572	1770	20.55	21.80	1.334	-0.16	1.560	2.080
	LTE Band 66_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.61	21.80	1.315	-0.17	1.970	2.591
	LTE Band 66_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132072	1720	20.58	21.80	1.324	0.1	1.730	2.291
	LTE Band 66_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132572	1770	20.55	21.80	1.334	0.09	2.070	2.760
	LTE Band 66C_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	132572+132374	1770+1750.2	20.19	21.80	1.449	0.02	1.890	2.738
	LTE Band 66_Ant0	20M	QPSK	50	0	Front	6mm	DSI 4	Sensor Off	132322	1745	21.75	23.00	1.334	0.11	0.574	0.765
	LTE Band 66_Ant0	20M	QPSK	50	0	Back	8mm	DSI 4	Sensor Off	132322	1745	21.75	23.00	1.334	0.01	0.659	0.879
	LTE Band 66_Ant0	20M	QPSK	50	0	Bottom Side	11mm	DSI 4	Sensor Off	132572	1770	21.59	23.00	1.384	0.03	0.748	1.035
	LTE Band 66_Ant0	20M	QPSK	100	0	Back	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.49	21.80	1.352	-0.12	1.590	2.150
	LTE Band 66_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	132322	1745	20.49	21.80	1.352	0.18	1.990	2.691
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Standalone	132322	1745	20.27	21.00	1.183	-0.04	1.900	2.248
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Standalone	132072	1720	20.00	21.00	1.259	0.01	1.800	2.266
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Standalone	132572	1770	20.11	21.00	1.227	-0.07	1.740	2.136
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI6	Standalone	132322	1745	20.27	21.00	1.183	0.1	0.976	1.155
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Standalone	132322	1745	20.27	21.00	1.183	-0.18	2.080	2.461
66	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Standalone	132072	1720	20.00	21.00	1.259	0.07	2.320	<b>2.921</b>
	LTE Band 66C_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Standalone	132072+132270	1720+1739.8	19.97	21.00	1.268	0.01	1.880	2.383
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Standalone	132572	1770	20.11	21.00	1.227	-0.02	1.900	2.332
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	6mm	DSI 4	Sensor Off	132072	1720	20.55	22.00	1.396	0.1	1.000	1.396
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	8mm	DSI 4	Sensor Off	132322	1745	20.80	22.00	1.318	0.05	0.792	1.044
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	9mm	DSI 4	Sensor Off	132072	1720	20.55	22.00	1.396	0.03	1.010	1.410
	LTE Band 66_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Standalone	132322	1745	20.13	21.00	1.222	0.02	1.760	2.150
	LTE Band 66_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Standalone	132072	1720	19.93	21.00	1.279	0.09	1.700	2.175
	LTE Band 66_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Standalone	132572	1770	19.98	21.00	1.265	-0.04	1.550	1.960
	LTE Band 66_Ant1	20M	QPSK	50	0	Back	0mm	DSI6	Standalone	132322	1745	20.13	21.00	1.222	-0.08	0.907	1.108
	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Standalone	132322	1745	20.13	21.00	1.222	0.11	2.010	2.456
	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Standalone	132072	1720	19.93	21.00	1.279	-0.07	2.190	2.802
	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Standalone	132572	1770	19.98	21.00	1.265	0.05	1.730	2.188
	LTE Band 66_Ant1	20M	QPSK	100	0	Front	0mm	DSI6	Standalone	132322	1745	20.07	21.00	1.239	-0.12	1.760	2.180
	LTE Band 66_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6	Standalone	132322	1745	20.07	21.00	1.239	0.03	1.980	2.453
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Sim-Tx	132322	1745	19.69	20.50	1.205	0.12	1.480	1.783
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI6	Sim-Tx	132322	1745	19.69	20.50	1.205	0.07	0.624	0.752
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	132322	1745	19.69	20.50	1.205	-0.12	1.740	2.097
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	132072	1720	19.38	20.50	1.294	0.05	1.800	2.330
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	132572	1770	19.46	20.50	1.271	-0.01	1.650	2.096
	LTE Band 66_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Sim-Tx	132322	1745	19.38	20.50	1.294	0.06	1.490	1.928
	LTE Band 66_Ant1	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	132322	1745	19.38	20.50	1.294	-0.17	0.641	0.830



**FCC SAR Test Report**

**Report No. : FA151701-02**

	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	132322	1745	19.38	20.50	1.294	-0.04	1.900	2.459
	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	132072	1720	19.37	20.50	1.297	0.06	1.900	2.465
	LTE Band 66C_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	132072+ 132270	1720+ 1739.8	19.35	20.50	1.303	0.07	1.870	2.437
	LTE Band 66_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	132572	1770	19.34	20.50	1.306	0.17	1.660	2.168
	LTE Band 66_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6	Sim-Tx	132322	1745	19.32	20.50	1.312	-0.14	1.840	2.414
	LTE Band 2_Ant0	20M	QPSK	1	0	Front	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.88	21.80	1.236	0.09	1.480	1.829
	LTE Band 2_Ant0	20M	QPSK	1	0	Back	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.88	21.80	1.236	-0.17	1.610	1.990
	LTE Band 2_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.88	21.80	1.236	-0.08	2.190	2.707
	LTE Band 2_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	18900	1880	20.60	21.80	1.318	-0.08	2.020	2.663
	LTE Band 2_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	19100	1900	20.50	21.80	1.349	-0.16	1.940	2.617
	LTE Band 2_Ant0	20M	QPSK	1	0	Front	6mm	DSI 4	Sensor Off	18700	1860	22.66	24.00	1.361	0.04	1.050	1.430
	LTE Band 2_Ant0	20M	QPSK	1	0	Back	8mm	DSI 4	Sensor Off	18700	1860	22.66	24.00	1.361	-0.03	1.170	1.593
	LTE Band 2_Ant0	20M	QPSK	1	0	Bottom Side	11mm	DSI 4	Sensor Off	18700	1860	22.66	24.00	1.361	0.05	1.670	2.274
	LTE Band 2_Ant0	20M	QPSK	50	0	Front	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.48	21.80	1.355	0.07	1.490	2.019
	LTE Band 2_Ant0	20M	QPSK	50	0	Front	0mm	DSI6	Standalone&Sim-Tx	18900	1880	20.38	21.80	1.387	-0.05	1.500	2.080
	LTE Band 2_Ant0	20M	QPSK	50	0	Front	0mm	DSI6	Standalone&Sim-Tx	19100	1900	20.34	21.80	1.400	0.1	1.560	2.183
	LTE Band 2_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.48	21.80	1.355	0.17	1.670	2.263
	LTE Band 2_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	18900	1880	20.38	21.80	1.387	-0.08	1.690	2.344
	LTE Band 2_Ant0	20M	QPSK	50	0	Back	0mm	DSI6	Standalone&Sim-Tx	19100	1900	20.34	21.80	1.400	-0.16	1.760	2.463
	LTE Band 2_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.48	21.80	1.355	0.14	2.220	3.009
	LTE Band 2_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	18900	1880	20.38	21.80	1.387	0.1	2.070	2.871
	LTE Band 2_Ant0	20M	QPSK	50	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	19100	1900	20.34	21.80	1.400	0.04	1.980	2.771
	LTE Band 2_Ant0	20M	QPSK	50	0	Front	6mm	DSI 4	Sensor Off	19100	1900	21.68	23.00	1.355	0.01	0.602	0.816
	LTE Band 2_Ant0	20M	QPSK	50	0	Back	8mm	DSI 4	Sensor Off	19100	1900	21.68	23.00	1.355	0.13	0.658	0.892
	LTE Band 2_Ant0	20M	QPSK	50	0	Bottom Side	11mm	DSI 4	Sensor Off	18700	1860	21.69	23.00	1.352	0.05	0.962	1.301
	LTE Band 2_Ant0	20M	QPSK	100	0	Front	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.45	21.80	1.365	0.09	1.520	2.074
	LTE Band 2_Ant0	20M	QPSK	100	0	Back	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.45	21.80	1.365	-0.11	1.680	2.292
	LTE Band 2_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6	Standalone&Sim-Tx	18700	1860	20.45	21.80	1.365	0.18	2.130	2.907
	LTE Band 2_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Full	18700	1860	21.18	22.00	1.208	-0.03	1.840	2.222
	LTE Band 2_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Full	18900	1880	20.98	22.00	1.265	0.03	1.910	2.416
	LTE Band 2_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Full	19100	1900	20.98	22.00	1.265	-0.08	1.740	2.201
	LTE Band 2_Ant1	20M	QPSK	1	0	Back	0mm	DSI6	Full	18700	1860	21.18	22.00	1.208	0.05	0.944	1.140
	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Full	18700	1860	21.18	22.00	1.208	-0.12	2.400	2.899
	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Full	18900	1880	20.98	22.00	1.265	-0.03	2.330	2.947
67	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Full	19100	1900	20.98	22.00	1.265	0.13	2.410	<b>3.048</b>
	LTE Band 2_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Full	18700	1860	20.10	21.00	1.230	-0.1	1.360	1.673
	LTE Band 2_Ant1	20M	QPSK	50	0	Back	0mm	DSI6	Full	18700	1860	20.10	21.00	1.230	-0.03	0.689	0.848
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Full	18700	1860	20.10	21.00	1.230	0.08	1.730	2.128
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Full	18900	1880	20.00	21.00	1.259	-0.03	1.720	2.165
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Full	19100	1900	20.05	21.00	1.245	0.11	1.750	2.178
	LTE Band 2_Ant1	20M	QPSK	100	0	Front	0mm	DSI6	Full	18700	1860	20.12	21.00	1.225	0.03	1.410	1.727
	LTE Band 2_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6	Full	18700	1860	20.12	21.00	1.225	0.02	1.740	2.131
	LTE Band 2_Ant1	20M	QPSK	1	0	Front	0mm	DSI6	Sim-Tx	18700	1860	20.48	21.00	1.127	-0.16	1.450	1.634
	LTE Band 2_Ant1	20M	QPSK	1	0	Back	0mm	DSI6	Sim-Tx	18700	1860	20.48	21.00	1.127	0.08	0.749	0.844
	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	18700	1860	20.48	21.00	1.127	-0.17	1.880	2.119
	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	18900	1880	20.34	21.00	1.164	0.16	1.820	2.119
	LTE Band 2_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6	Sim-Tx	19100	1900	20.05	21.00	1.245	-0.12	1.930	2.402
	LTE Band 2_Ant1	20M	QPSK	50	0	Front	0mm	DSI6	Sim-Tx	18700	1860	19.99	21.00	1.262	-0.09	1.340	1.691
	LTE Band 2_Ant1	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	18700	1860	19.99	21.00	1.262	0.11	0.686	0.866
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	18700	1860	19.99	21.00	1.262	0.05	1.700	2.145
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	18900	1880	19.89	21.00	1.291	-0.11	1.670	2.156
	LTE Band 2_Ant1	20M	QPSK	50	0	Top Side	0mm	DSI6	Sim-Tx	19100	1900	19.75	21.00	1.334	0.02	1.710	2.280
	LTE Band 2_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6	Sim-Tx	18700	1860	19.92	21.00	1.282	-0.02	1.730	2.218
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	0mm	DSI6	Full	21350	2560	23.04	24.00	1.247	-0.17	1.260	1.572
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	0mm	DSI6	Full	21350	2560	23.04	24.00	1.247	-0.05	1.330	1.659
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6	Full	21350	2560	23.04	24.00	1.247	-0.04	2.330	2.906

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FCC ID : IHDT56ZP1

Issued Date : Jul. 26, 2021

Form version. : 200414





	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6	Full	20850	2510	22.89	24.00	1.291	0.15	2.230	2.879
68	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6	Full	21100	2535	22.75	24.00	1.334	0.05	2.320	3.094
	LTE Band 7_Ant0	20M	QPSK	50	50	Front	0mm	DSI6	Full	21350	2560	22.07	23.00	1.239	0.17	0.996	1.234
	LTE Band 7_Ant0	20M	QPSK	50	50	Back	0mm	DSI6	Full	21350	2560	22.07	23.00	1.239	0.02	1.100	1.363
	LTE Band 7_Ant0	20M	QPSK	50	50	Bottom Side	0mm	DSI6	Full	21350	2560	22.07	23.00	1.239	0.11	1.950	2.416
	LTE Band 7_Ant0	20M	QPSK	50	50	Bottom Side	0mm	DSI6	Full	20850	2510	22.04	23.00	1.247	0.06	1.970	2.457
	LTE Band 7_Ant0	20M	QPSK	50	50	Bottom Side	0mm	DSI6	Full	21100	2535	21.92	23.00	1.282	0.07	1.930	2.475
	LTE Band 7_Ant0	20M	QPSK	100	0	Front	0mm	DSI6	Full	21350	2560	22.05	23.00	1.245	0.13	1.020	1.269
	LTE Band 7_Ant0	20M	QPSK	100	0	Back	0mm	DSI6	Full	21350	2560	22.05	23.00	1.245	-0.14	1.100	1.369
	LTE Band 7_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6	Full	21350	2560	22.05	23.00	1.245	-0.18	1.950	2.427

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Standalone	55830	3609	19.60	20.50	1.230	62.9	1.006	0.14	2.170	2.686
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Standalone	55340	3560	19.52	20.50	1.253	62.9	1.006	0.03	2.110	2.660
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Standalone	56150	3641	19.28	20.50	1.324	62.9	1.006	0.1	2.160	2.878
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Standalone	56640	3690	19.21	20.50	1.346	62.9	1.006	-0.13	2.090	2.830
	LTE Band 48_Ant3	20M	QPSK	1	49	Left Side	0mm	DSI6	Standalone	55830	3609	19.60	20.50	1.230	62.9	1.006	0.15	1.510	1.869
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	12mm	DSI 4	Sensor Off	56150	3641	21.73	23.00	1.340	62.9	1.006	0.1	0.475	0.640
	LTE Band 48_Ant3	20M	QPSK	1	49	Left Side	5mm	DSI 4	Sensor Off	55830	3609	22.00	23.00	1.259	62.9	1.006	-0.02	0.746	0.945
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Standalone	55830	3609	19.56	20.50	1.242	62.9	1.006	-0.1	2.280	2.848
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Standalone	55340	3560	19.50	20.50	1.259	62.9	1.006	-0.13	2.230	2.824
69	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Standalone	56150	3641	19.32	20.50	1.312	62.9	1.006	-0.06	2.230	2.944
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Standalone	56640	3690	19.20	20.50	1.349	62.9	1.006	0.13	2.150	2.918
	LTE Band 48_Ant3	20M	QPSK	50	0	Left Side	0mm	DSI6	Standalone	55830	3609	19.56	20.50	1.242	62.9	1.006	0.12	1.570	1.961
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	12mm	DSI 4	Sensor Off	56150	3641	21.80	23.00	1.318	62.9	1.006	0.02	0.390	0.517
	LTE Band 48_Ant3	20M	QPSK	50	0	Left Side	5mm	DSI 4	Sensor Off	55830	3609	21.95	23.00	1.274	62.9	1.006	0.08	0.617	0.790
	LTE Band 48_Ant3	20M	QPSK	100	0	Back	0mm	DSI6	Standalone	55830	3609	19.48	20.50	1.265	62.9	1.006	0.12	2.300	2.926
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Sim-Tx	55830	3609	18.75	19.50	1.189	62.9	1.006	0.13	1.900	2.272
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Sim-Tx	55340	3560	18.56	19.50	1.242	62.9	1.006	0.03	1.810	2.261
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Sim-Tx	56150	3641	18.48	19.50	1.265	62.9	1.006	-0.16	1.780	2.265
	LTE Band 48_Ant3	20M	QPSK	1	49	Back	0mm	DSI6	Sim-Tx	56640	3690	18.31	19.50	1.315	62.9	1.006	0.09	1.700	2.249
	LTE Band 48_Ant3	20M	QPSK	1	49	Left Side	0mm	DSI6	Sim-Tx	55830	3609	18.75	19.50	1.189	62.9	1.006	0.05	1.180	1.411
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	55830	3609	18.74	19.50	1.191	62.9	1.006	0.14	1.990	2.385
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	55340	3560	18.54	19.50	1.247	62.9	1.006	-0.01	1.910	2.397
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	56150	3641	18.44	19.50	1.276	62.9	1.006	0.15	1.890	2.427
	LTE Band 48_Ant3	20M	QPSK	50	0	Back	0mm	DSI6	Sim-Tx	56640	3690	18.32	19.50	1.312	62.9	1.006	-0.08	1.800	2.376
	LTE Band 48_Ant3	20M	QPSK	50	0	Left Side	0mm	DSI6	Sim-Tx	55830	3609	18.74	19.50	1.191	62.9	1.006	0.07	1.250	1.498
	LTE Band 48_Ant3	20M	QPSK	100	0	Back	0mm	DSI6	Sim-Tx	55830	3609	18.67	19.50	1.211	62.9	1.006	0.02	1.920	2.338



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	N66_Ant0	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.56	22.50	1.242	-0.14	1.380	1.713
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.56	22.50	1.242	-0.05	1.990	2.471
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	346000	1730	21.49	22.50	1.262	-0.06	1.940	2.448
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	352000	1760	21.42	22.50	1.282	0.07	1.810	2.321
	N66_Ant0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.56	22.50	1.242	-0.14	1.520	1.887
	N66_Ant0	40M	BPSK	1	1	DFT-15	Front	6mm	DSI 4	Sensor Off	349000	1745	22.84	24.00	1.306	0.09	0.455	0.594
	N66_Ant0	40M	BPSK	1	1	DFT-15	Back	8mm	DSI 4	Sensor Off	349000	1745	22.84	24.00	1.306	-0.05	0.593	0.775
	N66_Ant0	40M	BPSK	1	1	DFT-15	Bottom Side	11mm	DSI 4	Sensor Off	349000	1745	22.84	24.00	1.306	0.04	0.618	0.807
	N66_Ant0	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.52	22.50	1.253	-0.18	1.560	1.955
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.52	22.50	1.253	0.04	1.990	2.494
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	346000	1730	21.45	22.50	1.274	-0.02	1.980	2.522
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	352000	1760	21.40	22.50	1.288	0.02	2.140	2.757
	N66_Ant0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.52	22.50	1.253	0.06	1.530	1.917
	N66_Ant0	40M	BPSK	108	54	DFT-15	Front	6mm	DSI 4	Sensor Off	349000	1745	22.79	24.00	1.321	0.16	0.492	0.650
	N66_Ant0	40M	BPSK	108	54	DFT-15	Back	8mm	DSI 4	Sensor Off	352000	1760	22.75	24.00	1.334	0.02	0.607	0.809
	N66_Ant0	40M	BPSK	108	54	DFT-15	Bottom Side	11mm	DSI 4	Sensor Off	349000	1745	22.79	24.00	1.321	0.07	0.781	1.032
	N66_Ant0	40M	BPSK	216	0	DFT-15	Back	0mm	DS16	Standalone&Sim-Tx	349000	1745	21.48	22.50	1.265	0.03	2.020	2.555
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Standalone	349000	1745	21.96	23.00	1.271	0.03	2.200	2.795
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Standalone	346000	1730	21.88	23.00	1.294	-0.13	2.120	2.744
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Standalone	352000	1760	21.86	23.00	1.300	-0.18	2.370	3.081
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	0mm	DS16	Standalone	349000	1745	21.96	23.00	1.271	-0.17	1.356	1.723
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Standalone	349000	1745	21.96	23.00	1.271	-0.06	2.440	3.100
70	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Standalone	346000	1730	21.88	23.00	1.294	-0.01	2.460	3.184
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Standalone	352000	1760	21.86	23.00	1.300	0.02	2.330	3.029
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	6mm	DSI 4	Sensor Off	352000	1760	22.93	24.00	1.279	0.02	0.642	0.821
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	8mm	DSI 4	Sensor Off	349000	1745	22.98	24.00	1.265	0.06	0.745	0.942
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	9mm	DSI 4	Sensor Off	346000	1730	22.88	24.00	1.294	0.16	0.209	0.270
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Standalone	349000	1745	21.94	23.00	1.276	-0.02	2.220	2.834
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Standalone	346000	1730	21.84	23.00	1.306	-0.01	2.150	2.808
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Standalone	352000	1760	21.82	23.00	1.312	-0.04	2.020	2.651
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	0mm	DS16	Standalone	349000	1745	21.94	23.00	1.276	0.03	1.310	1.672
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Standalone	349000	1745	21.94	23.00	1.276	0.18	2.320	2.961
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Standalone	346000	1730	21.84	23.00	1.306	-0.05	2.430	3.174
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Standalone	352000	1760	21.82	23.00	1.312	0.09	2.010	2.638
	N66_Ant1	40M	BPSK	216	0	DFT-15	Front	0mm	DS16	Standalone	349000	1745	21.88	23.00	1.294	0.14	2.310	2.990
	N66_Ant1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DS16	Standalone	349000	1745	21.88	23.00	1.294	-0.12	2.330	3.015
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Sim-Tx	349000	1745	20.93	21.80	1.222	0.06	1.920	2.346
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Sim-Tx	346000	1730	20.91	21.80	1.227	0.04	1.560	1.915
	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	0mm	DS16	Sim-Tx	352000	1760	20.87	21.80	1.239	0.12	1.900	2.354
	N66_Ant1	40M	BPSK	1	1	DFT-15	Back	0mm	DS16	Sim-Tx	349000	1745	20.93	21.80	1.222	-0.17	1.050	1.283
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Sim-Tx	349000	1745	20.93	21.80	1.222	0.06	1.960	2.395
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Sim-Tx	346000	1730	20.91	21.80	1.227	0.06	1.910	2.344
	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DS16	Sim-Tx	352000	1760	20.87	21.80	1.239	-0.14	1.850	2.292
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Sim-Tx	349000	1745	20.90	21.80	1.230	-0.09	1.900	2.338
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Sim-Tx	346000	1730	20.86	21.80	1.242	-0.16	1.630	2.024
	N66_Ant1	40M	BPSK	108	54	DFT-15	Front	0mm	DS16	Sim-Tx	352000	1760	20.85	21.80	1.245	0.06	1.790	2.228
	N66_Ant1	40M	BPSK	108	54	DFT-15	Back	0mm	DS16	Sim-Tx	349000	1745	20.90	21.80	1.230	0.17	1.100	1.353
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Sim-Tx	349000	1745	20.90	21.80	1.230	0.17	1.850	2.276
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Sim-Tx	346000	1730	20.86	21.80	1.242	-0.18	1.870	2.322
	N66_Ant1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DS16	Sim-Tx	352000	1760	20.85	21.80	1.245	-0.1	1.610	2.004
	N66_Ant1	40M	BPSK	216	0	DFT-15	Front	0mm	DS16	Sim-Tx	349000	1745	20.85	21.80	1.245	-0.18	1.830	2.277
	N66_Ant1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DS16	Sim-Tx	349000	1745	20.85	21.80	1.245	-0.13	1.920	2.389
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.16	22.00	1.213	0.03	1.720	2.087



**FCC SAR Test Report**

**Report No. : FA151701-02**

	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.93	22.00	1.279	-0.12	1.480	1.893
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.85	22.00	1.303	-0.03	1.660	2.163
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.16	22.00	1.213	0.12	1.910	2.318
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.93	22.00	1.279	-0.05	1.930	2.469
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.85	22.00	1.303	-0.01	2.120	2.763
	N2_Ant0	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.16	22.00	1.213	-0.02	1.870	2.269
	N2_Ant0	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.93	22.00	1.279	0.01	2.390	3.058
	N2_Ant0	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.85	22.00	1.303	0.05	2.220	2.893
	N2_Ant0	20M	BPSK	1	1	DFT-15	Front	6mm	DSI 4	Sensor Off	380000	1900	23.12	24.00	1.225	0.17	0.818	1.002
	N2_Ant0	20M	BPSK	1	1	DFT-15	Back	8mm	DSI 4	Sensor Off	380000	1900	23.12	24.00	1.225	0.06	0.749	0.917
	N2_Ant0	20M	BPSK	1	1	DFT-15	Bottom Side	11mm	DSI 4	Sensor Off	376000	1880	23.15	24.00	1.216	-0.1	0.910	1.107
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.00	22.00	1.259	-0.17	1.660	2.090
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.92	22.00	1.282	0.16	1.560	2.000
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.90	22.00	1.288	0.1	1.720	2.216
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.00	22.00	1.259	0.06	1.840	2.316
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.92	22.00	1.282	0.12	2.070	2.654
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.90	22.00	1.288	-0.03	2.340	3.015
	N2_Ant0	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.00	22.00	1.259	0.01	1.850	2.329
	N2_Ant0	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	376000	1880	20.92	22.00	1.282	-0.14	2.320	2.975
	N2_Ant0	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	380000	1900	20.90	22.00	1.288	0.09	2.110	2.718
	N2_Ant0	20M	BPSK	50	28	DFT-15	Front	6mm	DSI 4	Sensor Off	380000	1900	23.07	24.00	1.239	0.07	0.845	1.047
	N2_Ant0	20M	BPSK	50	28	DFT-15	Back	8mm	DSI 4	Sensor Off	380000	1900	23.07	24.00	1.239	0.06	0.774	0.959
	N2_Ant0	20M	BPSK	100	0	DFT-15	Front	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.05	22.00	1.245	-0.02	1.580	1.966
	N2_Ant0	20M	BPSK	100	0	DFT-15	Back	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.05	22.00	1.245	0.05	1.650	2.053
	N2_Ant0	20M	BPSK	100	0	DFT-15	Bottom Side	0mm	DSI 6	Standalone&Sim-Tx	372000	1860	21.05	22.00	1.245	-0.03	1.840	2.290
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	0mm	DSI 6	Standalone	372000	1860	21.63	22.70	1.279	-0.16	1.360	1.740
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	0mm	DSI 6	Standalone	372000	1860	21.63	22.70	1.279	-0.04	0.882	1.128
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Standalone	372000	1860	21.63	22.70	1.279	0.18	2.390	3.058
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Standalone	376000	1880	21.54	22.70	1.306	-0.03	2.360	3.083
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Standalone	380000	1900	21.48	22.70	1.324	0.16	2.370	3.139
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	6mm	DSI 4	Sensor Off	372000	1860	23.31	24.00	1.172	-0.01	0.474	0.556
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	8mm	DSI 4	Sensor Off	372000	1860	23.31	24.00	1.172	0.15	0.410	0.481
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	9mm	DSI 4	Sensor Off	380000	1900	23.22	24.00	1.197	-0.15	0.791	0.947
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	0mm	DSI 6	Standalone	372000	1860	21.55	22.70	1.303	-0.01	1.355	1.766
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	0mm	DSI 6	Standalone	372000	1860	21.55	22.70	1.303	0.15	0.876	1.142
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Standalone	372000	1860	21.55	22.70	1.303	0.05	2.380	3.102
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Standalone	376000	1880	21.47	22.70	1.327	-0.02	2.290	3.040
71	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Standalone	380000	1900	21.46	22.70	1.330	-0.15	2.380	<b>3.166</b>
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	6mm	DSI 4	Sensor Off	372000	1860	23.28	24.00	1.180	-0.01	0.570	0.673
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	8mm	DSI 4	Sensor Off	372000	1860	23.28	24.00	1.180	0.15	0.484	0.571
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	9mm	DSI 4	Sensor Off	380000	1900	23.13	24.00	1.222	-0.15	0.916	1.119
	N2_Ant1	20M	BPSK	100	0	DFT-15	Top Side	0mm	DSI 6	Standalone	372000	1860	21.54	22.70	1.306	0.13	2.350	3.070
	N2_Ant1	20M	BPSK	1	1	DFT-15	Front	0mm	DSI 6	Sim-Tx	372000	1860	20.85	21.70	1.216	-0.09	1.100	1.338
	N2_Ant1	20M	BPSK	1	1	DFT-15	Back	0mm	DSI 6	Sim-Tx	372000	1860	20.85	21.70	1.216	0.17	0.708	0.861
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	372000	1860	20.85	21.70	1.216	-0.09	1.920	2.335
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	376000	1880	20.77	21.70	1.239	-0.17	1.880	2.329
	N2_Ant1	20M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	380000	1900	20.70	21.70	1.259	0.04	1.820	2.291
	N2_Ant1	20M	BPSK	50	28	DFT-15	Front	0mm	DSI 6	Sim-Tx	372000	1860	20.78	21.70	1.236	-0.12	1.050	1.298
	N2_Ant1	20M	BPSK	50	28	DFT-15	Back	0mm	DSI 6	Sim-Tx	372000	1860	20.78	21.70	1.236	0.11	0.702	0.868
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	372000	1860	20.78	21.70	1.236	-0.04	1.850	2.287
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	376000	1880	20.70	21.70	1.259	0.15	1.880	2.367
	N2_Ant1	20M	BPSK	50	28	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	380000	1900	20.63	21.70	1.279	0.18	1.880	2.405
	N2_Ant1	20M	BPSK	100	0	DFT-15	Top Side	0mm	DSI 6	Sim-Tx	372000	1860	20.76	21.70	1.242	0.06	1.850	2.297
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.92	20.00	1.282	-0.13	2.170	2.783
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.88	20.00	1.294	0.02	2.040	2.640
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.73	20.00	1.340	0.16	2.130	2.854



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	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Standalone	656000	3840	18.92	20.00	1.282	-0.16	1.260	1.616
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 4	Sensor Off	662000	3930	22.80	24.00	1.318	0.09	0.387	0.510
	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI 4	Sensor Off	656000	3840	22.95	24.00	1.274	-0.05	0.788	1.004
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.89	20.00	1.291	0.08	2.320	2.996
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.85	20.00	1.303	0.16	2.330	3.036
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.72	20.00	1.343	-0.05	2.280	3.062
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Standalone	656000	3840	18.89	20.00	1.291	0.02	1.300	1.679
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	12mm	DSI 4	Sensor Off	662000	3930	22.77	24.00	1.327	0.02	0.375	0.498
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4	Sensor Off	656000	3840	22.92	24.00	1.282	0.08	0.763	0.978
	N77_Ant3	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.85	20.00	1.303	0.15	2.190	2.854
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.91	20.00	1.285	0.09	2.120	2.725
	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Standalone	633334	3500.01	18.91	20.00	1.285	-0.16	1.240	1.594
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 4	Sensor Off	633334	3500.01	22.91	24.00	1.285	0.07	0.379	0.487
	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI 4	Sensor Off	633334	3500.01	22.91	24.00	1.285	-0.03	0.758	0.974
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	0.06	2.410	3.141
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	0.14	1.350	1.759
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	12mm	DSI 4	Sensor Off	633334	3500.01	22.88	24.00	1.294	0.02	0.389	0.503
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4	Sensor Off	633334	3500.01	22.88	24.00	1.294	-0.06	0.766	0.991
	N77_Ant3	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.69	20.00	1.352	0.17	2.260	3.056
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	15.82	16.50	1.169	0.18	1.110	1.298
	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	656000	3840	15.82	16.50	1.169	0.06	0.686	0.802
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	15.76	16.50	1.186	-0.01	0.940	1.115
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	656000	3840	15.76	16.50	1.186	0.08	0.659	0.781
	N77_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	15.64	16.50	1.219	-0.06	0.874	1.065
	N77_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	633334	3500.01	15.64	16.50	1.219	-0.03	0.689	0.840
	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	15.56	16.50	1.242	0.04	1.190	1.478
	N77_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	633334	3500.01	15.56	16.50	1.242	-0.15	0.699	0.868
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.92	20.00	1.282	-0.13	2.170	2.783
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.88	20.00	1.294	0.02	2.040	2.640
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.73	20.00	1.340	0.16	2.130	2.854
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Standalone	656000	3840	18.92	20.00	1.282	-0.16	1.260	1.616
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 4	Sensor Off	662000	3930	25.83	27.00	1.309	0.03	0.698	0.914
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI 4	Sensor Off	656000	3840	26.00	27.00	1.259	0.08	1.240	1.561
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.89	20.00	1.291	0.08	2.320	2.996
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.85	20.00	1.303	0.16	2.330	3.036
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.72	20.00	1.343	-0.05	2.280	3.062
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Standalone	656000	3840	18.89	20.00	1.291	0.02	1.300	1.679
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	12mm	DSI 4	Sensor Off	662000	3930	25.79	27.00	1.321	0.06	0.694	0.917
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4	Sensor Off	656000	3840	25.95	27.00	1.274	0.02	1.300	1.656
	N77_HPUE_Ant3	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.85	20.00	1.303	0.15	2.190	2.854
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.91	20.00	1.285	0.09	2.120	2.725
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Standalone	633334	3500.01	18.91	20.00	1.285	-0.16	1.240	1.594
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 4	Sensor Off	633334	3500.01	25.93	27.00	1.279	0.05	0.711	0.910
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI 4	Sensor Off	633334	3500.01	25.93	27.00	1.279	0.01	1.130	1.446
72	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	0.06	2.410	3.141
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	0.14	1.350	1.759
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	12mm	DSI 4	Sensor Off	633334	3500.01	25.83	27.00	1.309	0.02	0.729	0.954
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4	Sensor Off	633334	3500.01	25.83	27.00	1.309	0.05	1.330	1.741
	N77_HPUE_Ant3	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.69	20.00	1.352	0.17	2.260	3.056
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	15.82	16.50	1.169	0.18	1.110	1.298
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	656000	3840	15.82	16.50	1.169	0.06	0.686	0.802
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	15.76	16.50	1.186	-0.01	0.940	1.115
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	656000	3840	15.76	16.50	1.186	0.08	0.659	0.781
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	15.64	16.50	1.219	-0.06	0.874	1.065
	N77_HPUE_Ant3	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	633334	3500.01	15.64	16.50	1.219	-0.03	0.689	0.840
	N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	15.56	16.50	1.242	0.04	1.190	1.478



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N77_HPUE_Ant3	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI 6	Sim-Tx	633334	3500.01	15.56	16.50	1.242	-0.15	0.699	0.868
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.28	19.00	1.180	-0.02	2.370	2.797
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.25	19.00	1.189	-0.05	2.420	2.876
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.23	19.00	1.194	0.03	2.250	2.686
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 6	Sensor Off	650000	3750	20.23	21.00	1.194	0.09	0.252	0.301
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.24	19.00	1.191	-0.19	2.310	2.752
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.19	19.00	1.205	0.17	2.580	3.109
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	662000	3930	18.17	19.00	1.211	-0.15	2.120	2.566
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	12mm	DSI 6	Sensor Off	650000	3750	20.15	21.00	1.216	0.04	0.262	0.319
N77_Ant5	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.21	19.00	1.199	-0.11	2.340	2.807
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.26	19.00	1.186	-0.12	2.380	2.822
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.24	19.00	1.191	-0.16	2.340	2.788
N77_Ant5	100M	BPSK	270	0	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.21	19.00	1.199	0.02	2.050	2.459
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	12mm	DSI 6	Sensor Off	633334	3500.01	20.19	21.00	1.205	0.01	0.202	0.243
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	14.36	15.50	1.300	-0.18	0.912	1.186
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	656000	3840	14.25	15.50	1.334	0.18	0.916	1.222
N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	14.25	15.50	1.334	-0.19	0.727	0.969
N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Sim-Tx	633334	3500.01	14.22	15.50	1.343	-0.1	0.777	1.043

**<WLAN2.4G SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
73	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	-0.01	1.030	<b>1.250</b>
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	6	2437	21.56	22.50	1.242	100	1.000	0.08	0.800	0.993
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	11	2462	21.33	22.50	1.309	100	1.000	0.02	0.862	1.129



<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	44	5220	20.11	21.50	1.377	99.32	1.007	-0.04	1.460	2.025
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	36	5180	20.02	21.50	1.406	99.32	1.007	0.16	1.460	2.067
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	40	5200	20.07	21.50	1.390	99.32	1.007	0.12	1.480	2.072
74	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	48	5240	19.94	21.50	1.432	99.32	1.007	-0.16	1.440	2.077
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	42	5210	18.18	19.50	1.355	100	1.000	0.04	0.940	1.274
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.1	0.216	0.295
75	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.15	0.983	1.345
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-0.04	0.166	0.227
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-0.01	0.018	0.025
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.09	0.258	0.353
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.05	0.161	0.228
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.16	0.728	1.033
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	-0.1	0.129	0.183
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	-0.14	0.011	0.016
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.14	0.153	0.217
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.15	0.124	0.162
76	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.16	1.210	1.577
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.12	0.119	0.155
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-	n/a	n/a
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.08	0.140	0.182
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.14	0.070	0.096
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.14	0.921	1.263
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	-0.08	0.066	0.090
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	-0.04	0.037	0.051
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.04	0.076	0.104
77	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.09	1.690	2.387
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	149	5745	19.99	21.50	1.416	99.32	1.007	-0.12	1.550	2.210
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	165	5825	19.98	21.50	1.419	99.32	1.007	0.08	1.150	1.643
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	155	5775	16.36	18.00	1.459	100	1.000	0.01	0.792	1.155



16.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA II_Ant1	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	DSI 2	Standalone	9538	1907.6	16.12	16.80	1.169	-	-	0.09	1.070	1	1.251
2nd	WCDMA II_Ant1	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	DSI 2	Standalone	9538	1907.6	16.12	16.80	1.169	-	-	0.01	1.010	1.059	1.181
1st	LTE Band 12_Ant1	10M	QPSK	1	0	-	Left Cheek	0mm	DSI 2	Full	23095	707.5	22.52	24.00	1.406	-	-	-0.12	0.881	1	1.239
2nd	LTE Band 12_Ant1	10M	QPSK	1	0	-	Left Cheek	0mm	DSI 2	Full	23095	707.5	22.52	24.00	1.406	-	-	0.05	0.823	1.070	1.157
1st	N77_Ant3	100M	BPSK	1	1	DFT-30	Right Cheek	0mm	DSI 2	Standalone	662000	3930	20.26	21.50	1.330	-	-	-0.02	0.920	1	1.224
2nd	N77_Ant3	100M	BPSK	1	1	DFT-30	Right Cheek	0mm	DSI 2	Standalone	662000	3930	20.26	21.50	1.330	-	-	-0.05	0.908	1.013	1.208
1st	WCDMA V_Ant 0	-	-	-	-	RMC 12.2Kbps	Back	5mm	DSI 3	Full	4182	836.4	24.28	25.00	1.180	-	-	0.18	1.050	1	1.239
2nd	WCDMA V_Ant 0	-	-	-	-	RMC 12.2Kbps	Back	5mm	DSI 3	Full	4182	836.4	24.28	25.00	1.180	-	-	0.14	0.989	1.062	1.167
1st	LTE Band 7_Ant 0	20M	QPSK	50	50	-	Back	5mm	DSI 3	Standalone	20850	2510	21.72	23.00	1.343	-	-	0.09	0.872	1	1.171
2nd	LTE Band 7_Ant 0	20M	QPSK	50	50	-	Back	5mm	DSI 3	Standalone	20850	2510	21.72	23.00	1.343	-	-	0.08	0.859	1.015	1.153
1st	LTE Band 48_Ant3	20M	QPSK	50	0	-	Back	5mm	DSI 3	Standalone	55830	3609	16.18	17.00	1.208	62.9	1.006	0.09	0.862	1	1.047
2nd	LTE Band 48_Ant3	20M	QPSK	50	0	-	Back	5mm	DSI 3	Standalone	55830	3609	16.18	17.00	1.208	62.9	1.006	0.04	0.851	1.013	1.034
1st	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	DSI 3	Standalone	352000	1760	18.59	19.30	1.178	-	-	0.03	1.050	1	1.236
2nd	N66_Ant1	40M	BPSK	1	1	DFT-15	Front	5mm	DSI 3	Standalone	352000	1760	18.59	19.30	1.178	-	-	0.07	0.986	1.065	1.161
1st	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-	-	-0.06	0.985	1	1.240
2nd	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	5mm	DSI 3	Standalone	633334	3500.01	15.80	16.80	1.259	-	-	-0.01	0.884	1.114	1.113
1st	WLAN2.4GHz_Ant 2+4	-	-	-	-	802.11b 1Mbps	Back	5mm	-	Standalone	1	2412	19.78	21.00	1.324	100	1.000	-0.17	0.879	1	1.164
2nd	WLAN2.4GHz_Ant 2+4	-	-	-	-	802.11b 1Mbps	Back	5mm	-	Standalone	1	2412	19.78	21.00	1.324	100	1.000	0.05	0.848	1.037	1.123
1st	WLAN6GHz_Ant 4+12	-	-	-	-	802.11ac-VHT160 MCS0	Back	5mm	-	Full	175	6825	14.39	15.50	1.291	100	1.000	0.05	0.865	1	1.117
2nd	WLAN6GHz_Ant 4+12	-	-	-	-	802.11ac-VHT160 MCS0	Back	5mm	-	Full	175	6825	14.39	15.50	1.291	100	1.000	-0.03	0.832	1.040	1.074

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power State	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	WCDMA II_Ant1	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	DSI 6	Standalone	9538	1907.6	21.01	21.80	1.199	-0.17	2.620	1	3.143
2nd	WCDMA II_Ant1	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	DSI 6	Standalone	9538	1907.6	21.01	21.80	1.199	-0.02	2.580	1.016	3.095
1st	LTE Band 7_Ant0	20M	QPSK	1	99	-	Bottom Side	0mm	DSI 6	Full	21350	2560	23.04	24.00	1.247	-0.04	2.330	1	2.906
2nd	LTE Band 7_Ant0	20M	QPSK	1	99	-	Bottom Side	0mm	DSI 6	Full	21350	2560	23.04	24.00	1.247	0.05	2.250	1.036	2.807
1st	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Standalone	346000	1730	21.88	23.00	1.294	-0.01	2.460	1	3.184
2nd	N66_Ant1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI 6	Standalone	346000	1730	21.88	23.00	1.294	0.15	2.391	1.029	3.094
1st	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	0.06	2.410	1	3.141
2nd	N77_Ant3	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	633334	3500.01	18.85	20.00	1.303	-0.12	2.354	1.024	3.068
1st	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.28	19.00	1.180	-0.02	2.370	1	2.797
2nd	N77_Ant5	100M	BPSK	1	1	DFT-30	Back	0mm	DSI 6	Standalone	656000	3840	18.28	19.00	1.180	0.11	2.310	1.026	2.727
1st	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.19	19.00	1.205	0.17	2.580	1	3.109
2nd	N77_Ant5	100M	BPSK	135	69	DFT-30	Back	0mm	DSI 6	Standalone	650000	3750	18.19	19.00	1.205	0.07	2.512	1.027	3.027

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8W/kg$ .
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45W/kg$ , only one repeated measurement is required.
- Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
- The ratio is the difference in percentage between original and repeated *measured SAR*.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

## 17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + WLAN6E	Yes	Yes		Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
6.	Bluetooth + WLAN6E	Yes	Yes		Yes
7.	WWAN + Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
8.	WWAN + Bluetooth + WLAN6E	Yes	Yes		Yes

### General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- WIFI 6E has no hotspot function.
- WIFI 6E can transmit simultaneously with Bluetooth.
- The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- WLAN 2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/ WLAN6E and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz /WLAN6E and WLAN 2.4GHz can't transmit simultaneously.
- The maximum SAR summation is calculated based on the same configuration and test position.
- SAR test report for WLAN6E U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth, always chose higher SAR of WLAN5G U-NII-1/2A/2C/3 and U-NII-5/6/7/8.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
  - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.
  - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
  - The SPLSR calculated results please refer to section 17.6.



### 17.1 5G NR + LTE + WLAN + BT Sim-Tx analysis

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR and LTE transmission are managed and controlled by Qualcomm® Smart Transmit, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values. Smart Transmit current implementation assumes hotspots from 5G NR and LTE are collocated. Therefore, for a total of 100% exposure margin, if LTE uses x%, then the exposure margin left for 5G NR is capped to (100-x)%. Thus, the compliance equation for LTE + 5G NR is

$$x\% * A + (100-x)\% * B \leq 1.0,$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and  $A \leq 1.0$ ; B is normalized reported time-averaged exposure ratio from 5G NR (i.e. SAR exposure for 5G FR1), and  $B \leq 1.0$ .

Let C = normalized reported SAR exposure ratio from WLAN+BT, then for compliance,

$$x\% * A + (100-x)\% * B + C \leq 1.0 \quad (1)$$

$$x\% * A + (100-x)\% * B \leq x\% * \max(A, B) + (100-x)\% * \max(A, B) \leq \max(A, B)$$

$$x\% * A + (100-x)\% * B + C \leq \max(A, B) + C \leq 1.0 \quad (2)$$

if  $A + C \leq 1.0$  and  $B + C \leq 1.0$  can be proven, then " $x\% * A + (100-x)\% * B + C \leq 1.0$ ". Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove total exposure ratio (TER) of LTE + WLAN + BT < 1

Step 2: Prove total exposure ratio (TER) of 5G NR + WLAN + BT < 1

Above analysis is also apply to LTE inter band uplink, LTE + LTE + WLAN + BT simultaneous transmission, So inter band CA uplink no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.



17.2 Head Exposure Conditions

Exposure Position	8	9	10	8+9 Summed 1g SAR (W/kg)	9+10 Summed 1g SAR (W/kg)
	5GHz WLAN Ant 4+12	Bluetooth Ant 2	WLAN6GHz Ant 4+12		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Right Cheek	0.841	0.255	0.022	1.10	0.28
Right Tilted	0.402	0.183	0.032	0.59	0.22
Left Cheek	0.195	0.139	0.014	0.33	0.15
Left Tilted	0.237	0.118	0.012	0.36	0.13

WWAN Band	Exposure Position	1	9	1+9 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 2	
		1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	
GSM850_Ant 0	Right Cheek	0.221	0.255	0.48
	Right Tilted	0.084	0.183	0.27
	Left Cheek	0.155	0.139	0.29
	Left Tilted	0.073	0.118	0.19
GSM1900_Ant 0	Right Cheek	0.042	0.255	0.30
	Right Tilted	0.021	0.183	0.20
	Left Cheek	0.044	0.139	0.18
	Left Tilted	0.022	0.118	0.14
WCDMA V_Ant 0	Right Cheek	0.257	0.255	0.51
	Right Tilted	0.124	0.183	0.31
	Left Cheek	0.166	0.139	0.31
	Left Tilted	0.115	0.118	0.23
WCDMA V_Ant1	Right Cheek	0.757	0.255	1.01
	Right Tilted	0.758	0.183	0.94
	Left Cheek	1.176	0.139	1.32
	Left Tilted	1.063	0.118	1.18
WCDMA II_Ant 0	Right Cheek	0.091	0.255	0.35
	Right Tilted	0.052	0.183	0.24
	Left Cheek	0.125	0.139	0.26
	Left Tilted	0.069	0.118	0.19
WCDMA II_Ant1	Right Cheek	0.582	0.255	0.84
	Right Tilted	0.720	0.183	0.90
	Left Cheek	1.129	0.139	1.27
	Left Tilted	1.251	0.118	1.37
LTE Band 12_Ant 0	Right Cheek	0.123	0.255	0.38
	Right Tilted	0.051	0.183	0.23
	Left Cheek	0.116	0.139	0.26
	Left Tilted	0.050	0.118	0.17
LTE Band 12_Ant1	Right Cheek	0.797	0.255	1.05
	Right Tilted	0.727	0.183	0.91
	Left Cheek	1.239	0.139	1.38
	Left Tilted	1.053	0.118	1.17
LTE Band 13_Ant 0	Right Cheek	0.187	0.255	0.44
	Right Tilted	0.089	0.183	0.27
	Left Cheek	0.148	0.139	0.29
	Left Tilted	0.078	0.118	0.20
LTE Band 13_Ant1	Right Cheek	0.927	0.255	1.18
	Right Tilted	0.828	0.183	1.01
	Left Cheek	1.057	0.139	1.20
	Left Tilted	0.995	0.118	1.11
LTE Band 5_Ant 0	Right Cheek	0.348	0.255	0.60



	Right Tilted	0.164	0.183	0.35
	Left Cheek	0.213	0.139	0.35
	Left Tilted	0.147	0.118	0.27
LTE Band 5_Ant1	Right Cheek	0.958	0.255	1.21
	Right Tilted	0.796	0.183	0.98
	Left Cheek	1.077	0.139	1.22
	Left Tilted	1.060	0.118	1.18
LTE Band 66_Ant 0	Right Cheek	0.102	0.255	0.36
	Right Tilted	0.001	0.183	0.18
	Left Cheek	0.140	0.139	0.28
	Left Tilted	0.083	0.118	0.20
LTE Band 66_Ant1	Right Cheek	0.557	0.255	0.81
	Right Tilted	0.652	0.183	0.84
	Left Cheek	0.975	0.139	1.11
	Left Tilted	1.120	0.118	1.24
LTE Band 2_Ant 0	Right Cheek	0.086	0.255	0.34
	Right Tilted	0.052	0.183	0.24
	Left Cheek	0.108	0.139	0.25
	Left Tilted	0.052	0.118	0.17
LTE Band 2_Ant1	Right Cheek	0.476	0.255	0.73
	Right Tilted	0.579	0.183	0.76
	Left Cheek	1.114	0.139	1.25
	Left Tilted	1.220	0.118	1.34
LTE Band 7_Ant 0	Right Cheek	0.081	0.255	0.34
	Right Tilted	0.056	0.183	0.24
	Left Cheek	0.088	0.139	0.23
	Left Tilted	0.079	0.118	0.20
LTE Band 48_Ant3	Right Cheek	1.078	0.255	1.33
	Right Tilted	0.580	0.183	0.76
	Left Cheek	0.526	0.139	0.67
	Left Tilted	0.249	0.118	0.37
N5_Ant 0	Right Cheek	0.133	0.255	0.39
	Right Tilted	0.044	0.183	0.23
	Left Cheek	0.091	0.139	0.23
	Left Tilted	0.057	0.118	0.18
N5_Ant1	Right Cheek	0.854	0.255	1.11
	Right Tilted	0.826	0.183	1.01
	Left Cheek	1.235	0.139	1.37
	Left Tilted	1.187	0.118	1.31
N66_Ant 0	Right Cheek	0.063	0.255	0.32
	Right Tilted	0.001	0.183	0.18
	Left Cheek	0.066	0.139	0.21
	Left Tilted	0.001	0.118	0.12
N66_Ant1	Right Cheek	0.623	0.255	0.88
	Right Tilted	0.731	0.183	0.91
	Left Cheek	0.998	0.139	1.14
	Left Tilted	1.159	0.118	1.28
N2_Ant 0	Right Cheek	0.001	0.255	0.26
	Right Tilted	0.001	0.183	0.18
	Left Cheek	0.062	0.139	0.20
	Left Tilted	0.054	0.118	0.17
N2_Ant1	Right Cheek	0.454	0.255	0.71
	Right Tilted	0.563	0.183	0.75
	Left Cheek	0.886	0.139	1.03
	Left Tilted	1.157	0.118	1.28
N77_Ant3	Right Cheek	1.224	0.255	1.48



	Right Tilted	0.515	0.183	0.70
	Left Cheek	0.401	0.139	0.54
	Left Tilted	0.215	0.118	0.33

WWAN Band	Exposure Position	1	5	8	9	10	1+5 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+8+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+9+10 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	WLAN6GHz Ant 4+12 1g SAR (W/kg)					
GSM850_Ant 0	Right Cheek	0.221	0.328	0.348	0.255	0.022	0.55	0.57	0.82	0.24	0.50
	Right Tilted	0.084	0.176	0.321	0.183	0.032	0.26	0.41	0.59	0.12	0.30
	Left Cheek	0.155	0.130	0.197	0.139	0.014	0.29	0.35	0.49	0.17	0.31
	Left Tilted	0.073	0.108	0.208	0.118	0.012	0.18	0.28	0.40	0.09	0.20
GSM1900_Ant 0	Right Cheek	0.042	0.328	0.348	0.255	0.022	0.37	0.39	0.65	0.06	0.32
	Right Tilted	0.021	0.176	0.321	0.183	0.032	0.20	0.34	0.53	0.05	0.24
	Left Cheek	0.044	0.130	0.197	0.139	0.014	0.17	0.24	0.38	0.06	0.20
	Left Tilted	0.022	0.108	0.208	0.118	0.012	0.13	0.23	0.35	0.03	0.15
WCDMA V_Ant 0	Right Cheek	0.257	0.328	0.348	0.255	0.022	0.59	0.61	0.86	0.28	0.53
	Right Tilted	0.124	0.176	0.321	0.183	0.032	0.30	0.45	0.63	0.16	0.34
	Left Cheek	0.166	0.130	0.197	0.139	0.014	0.30	0.36	0.50	0.18	0.32
	Left Tilted	0.115	0.108	0.208	0.118	0.012	0.22	0.32	0.44	0.13	0.25
WCDMA V_Ant1	Right Cheek	0.631	0.328	0.348	0.255	0.022	0.96	0.98	1.23	0.65	0.91
	Right Tilted	0.619	0.176	0.321	0.183	0.032	0.80	0.94	1.12	0.65	0.83
	Left Cheek	0.844	0.130	0.197	0.139	0.014	0.97	1.04	1.18	0.86	1.00
	Left Tilted	0.795	0.108	0.208	0.118	0.012	0.90	1.00	1.12	0.81	0.93
WCDMA II_Ant 0	Right Cheek	0.091	0.328	0.348	0.255	0.022	0.42	0.44	0.69	0.11	0.37
	Right Tilted	0.052	0.176	0.321	0.183	0.032	0.23	0.37	0.56	0.08	0.27
	Left Cheek	0.125	0.130	0.197	0.139	0.014	0.26	0.32	0.46	0.14	0.28
	Left Tilted	0.069	0.108	0.208	0.118	0.012	0.18	0.28	0.40	0.08	0.20
WCDMA II_Ant1	Right Cheek	0.392	0.328	0.348	0.255	0.022	0.72	0.74	1.00	0.41	0.67
	Right Tilted	0.401	0.176	0.321	0.183	0.032	0.58	0.72	0.91	0.43	0.62
	Left Cheek	0.713	0.130	0.197	0.139	0.014	0.84	0.91	1.05	0.73	0.87
	Left Tilted	0.908	0.108	0.208	0.118	0.012	1.02	1.12	1.23	0.92	1.04
LTE Band 12_Ant 0	Right Cheek	0.123	0.328	0.348	0.255	0.022	0.45	0.47	0.73	0.15	0.40
	Right Tilted	0.051	0.176	0.321	0.183	0.032	0.23	0.37	0.56	0.08	0.27
	Left Cheek	0.116	0.130	0.197	0.139	0.014	0.25	0.31	0.45	0.13	0.27
	Left Tilted	0.050	0.108	0.208	0.118	0.012	0.16	0.26	0.38	0.06	0.18
LTE Band 12_Ant1	Right Cheek	0.559	0.328	0.348	0.255	0.022	0.89	0.91	1.16	0.58	0.84
	Right Tilted	0.499	0.176	0.321	0.183	0.032	0.68	0.82	1.00	0.53	0.71
	Left Cheek	0.950	0.130	0.197	0.139	0.014	1.08	1.15	1.29	0.96	1.10
	Left Tilted	0.865	0.108	0.208	0.118	0.012	0.97	1.07	1.19	0.88	1.00
LTE Band 13_Ant 0	Right Cheek	0.187	0.328	0.348	0.255	0.022	0.52	0.54	0.79	0.21	0.46
	Right Tilted	0.089	0.176	0.321	0.183	0.032	0.27	0.41	0.59	0.12	0.30
	Left Cheek	0.148	0.130	0.197	0.139	0.014	0.28	0.35	0.48	0.16	0.30
	Left Tilted	0.078	0.108	0.208	0.118	0.012	0.19	0.29	0.40	0.09	0.21
LTE Band 13_Ant1	Right Cheek	0.663	0.328	0.348	0.255	0.022	0.99	1.01	1.27	0.69	0.94
	Right Tilted	0.645	0.176	0.321	0.183	0.032	0.82	0.97	1.15	0.68	0.86
	Left Cheek	0.979	0.130	0.197	0.139	0.014	1.11	1.18	1.32	0.99	1.13
	Left Tilted	0.863	0.108	0.208	0.118	0.012	0.97	1.07	1.19	0.88	0.99
LTE Band 5_Ant 0	Right Cheek	0.348	0.328	0.348	0.255	0.022	0.68	0.70	0.95	0.37	0.63
	Right Tilted	0.164	0.176	0.321	0.183	0.032	0.34	0.49	0.67	0.20	0.38
	Left Cheek	0.213	0.130	0.197	0.139	0.014	0.34	0.41	0.55	0.23	0.37
	Left Tilted	0.147	0.108	0.208	0.118	0.012	0.26	0.36	0.47	0.16	0.28
LTE Band 5_Ant1	Right Cheek	0.757	0.328	0.348	0.255	0.022	1.09	1.11	1.36	0.78	1.03
	Right Tilted	0.650	0.176	0.321	0.183	0.032	0.83	0.97	1.15	0.68	0.87
	Left Cheek	0.973	0.130	0.197	0.139	0.014	1.10	1.17	1.31	0.99	1.13



	Left Tilted	0.879	0.108	0.208	0.118	0.012	0.99	1.09	1.21	0.89	1.01
LTE Band 66_Ant0	Right Cheek	0.102	0.328	0.348	0.255	0.022	0.43	0.45	0.71	0.12	0.38
	Right Tilted	0.001	0.176	0.321	0.183	0.032	0.18	0.32	0.51	0.03	0.22
	Left Cheek	0.140	0.130	0.197	0.139	0.014	0.27	0.34	0.48	0.15	0.29
	Left Tilted	0.083	0.108	0.208	0.118	0.012	0.19	0.29	0.41	0.10	0.21
LTE Band 66_Ant1	Right Cheek	0.450	0.328	0.348	0.255	0.022	0.78	0.80	1.05	0.47	0.73
	Right Tilted	0.525	0.176	0.321	0.183	0.032	0.70	0.85	1.03	0.56	0.74
	Left Cheek	0.791	0.130	0.197	0.139	0.014	0.92	0.99	1.13	0.81	0.94
	Left Tilted	0.935	0.108	0.208	0.118	0.012	1.04	1.14	1.26	0.95	1.07
LTE Band 2_Ant0	Right Cheek	0.086	0.328	0.348	0.255	0.022	0.41	0.43	0.69	0.11	0.36
	Right Tilted	0.052	0.176	0.321	0.183	0.032	0.23	0.37	0.56	0.08	0.27
	Left Cheek	0.108	0.130	0.197	0.139	0.014	0.24	0.31	0.44	0.12	0.26
	Left Tilted	0.052	0.108	0.208	0.118	0.012	0.16	0.26	0.38	0.06	0.18
LTE Band 2_Ant1	Right Cheek	0.356	0.328	0.348	0.255	0.022	0.68	0.70	0.96	0.38	0.63
	Right Tilted	0.435	0.176	0.321	0.183	0.032	0.61	0.76	0.94	0.47	0.65
	Left Cheek	0.631	0.130	0.197	0.139	0.014	0.76	0.83	0.97	0.65	0.78
	Left Tilted	0.960	0.108	0.208	0.118	0.012	1.07	1.17	1.29	0.97	1.09
LTE Band 7_Ant0	Right Cheek	0.081	0.328	0.348	0.255	0.022	0.41	0.43	0.68	0.10	0.36
	Right Tilted	0.056	0.176	0.321	0.183	0.032	0.23	0.38	0.56	0.09	0.27
	Left Cheek	0.088	0.130	0.197	0.139	0.014	0.22	0.29	0.42	0.10	0.24
	Left Tilted	0.079	0.108	0.208	0.118	0.012	0.19	0.29	0.41	0.09	0.21
LTE Band 48_Ant3	Right Cheek	0.931	0.328	0.348	0.255	0.022	1.26	1.28	1.53	0.95	1.21
	Right Tilted	0.496	0.176	0.321	0.183	0.032	0.67	0.82	1.00	0.53	0.71
	Left Cheek	0.434	0.130	0.197	0.139	0.014	0.56	0.63	0.77	0.45	0.59
	Left Tilted	0.187	0.108	0.208	0.118	0.012	0.30	0.40	0.51	0.20	0.32
N5_Ant0	Right Cheek	0.133	0.328	0.348	0.255	0.022	0.46	0.48	0.74	0.16	0.41
	Right Tilted	0.044	0.176	0.321	0.183	0.032	0.22	0.37	0.55	0.08	0.26
	Left Cheek	0.091	0.130	0.197	0.139	0.014	0.22	0.29	0.43	0.11	0.24
	Left Tilted	0.057	0.108	0.208	0.118	0.012	0.17	0.27	0.38	0.07	0.19
N5_Ant1	Right Cheek	0.658	0.328	0.348	0.255	0.022	0.99	1.01	1.26	0.68	0.94
	Right Tilted	0.631	0.176	0.321	0.183	0.032	0.81	0.95	1.14	0.66	0.85
	Left Cheek	0.943	0.130	0.197	0.139	0.014	1.07	1.14	1.28	0.96	1.10
	Left Tilted	0.899	0.108	0.208	0.118	0.012	1.01	1.11	1.23	0.91	1.03
N66_Ant0	Right Cheek	0.063	0.328	0.348	0.255	0.022	0.39	0.41	0.67	0.09	0.34
	Right Tilted	0.001	0.176	0.321	0.183	0.032	0.18	0.32	0.51	0.03	0.22
	Left Cheek	0.066	0.130	0.197	0.139	0.014	0.20	0.26	0.40	0.08	0.22
	Left Tilted	0.001	0.108	0.208	0.118	0.012	0.11	0.21	0.33	0.01	0.13
N66_Ant1	Right Cheek	0.496	0.328	0.348	0.255	0.022	0.82	0.84	1.10	0.52	0.77
	Right Tilted	0.588	0.176	0.321	0.183	0.032	0.76	0.91	1.09	0.62	0.80
	Left Cheek	0.818	0.130	0.197	0.139	0.014	0.95	1.02	1.15	0.83	0.97
	Left Tilted	0.983	0.108	0.208	0.118	0.012	1.09	1.19	1.31	1.00	1.11
N2_Ant0	Right Cheek	0.001	0.328	0.348	0.255	0.022	0.33	0.35	0.60	0.02	0.28
	Right Tilted	0.001	0.176	0.321	0.183	0.032	0.18	0.32	0.51	0.03	0.22
	Left Cheek	0.062	0.130	0.197	0.139	0.014	0.19	0.26	0.40	0.08	0.22
	Left Tilted	0.054	0.108	0.208	0.118	0.012	0.16	0.26	0.38	0.07	0.18
N2_Ant1	Right Cheek	0.344	0.328	0.348	0.255	0.022	0.67	0.69	0.95	0.37	0.62
	Right Tilted	0.417	0.176	0.321	0.183	0.032	0.59	0.74	0.92	0.45	0.63
	Left Cheek	0.723	0.130	0.197	0.139	0.014	0.85	0.92	1.06	0.74	0.88
	Left Tilted	0.993	0.108	0.208	0.118	0.012	1.10	1.20	1.32	1.01	1.12
N77_Ant3	Right Cheek	0.890	0.328	0.348	0.255	0.022	1.22	1.24	1.49	0.91	1.17
	Right Tilted	0.376	0.176	0.321	0.183	0.032	0.55	0.70	0.88	0.41	0.59
	Left Cheek	0.303	0.130	0.197	0.139	0.014	0.43	0.50	0.64	0.32	0.46
	Left Tilted	0.159	0.108	0.208	0.118	0.012	0.27	0.37	0.49	0.17	0.29



For 5G NR UL MIMO

WWAN Band	Exposure Position	1	3	5	8	9	10	1+3+5 Summed 1g SAR (W/kg)	1+3+8 Summed 1g SAR (W/kg)	1+3+8+9 Summed 1g SAR (W/kg)	1+3+10 Summed 1g SAR (W/kg)	1+3+9+10 Summed 1g SAR (W/kg)
		WWAN	N77 Ant 5	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	Bluetooth Ant 2	WLAN6GHz Ant 4+12					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
N77_Ant3	Right Cheek	0.890	0.090	0.328	0.348	0.255	0.022	1.31	1.33	1.58	1.00	1.26
	Right Tilted	0.376	0.132	0.176	0.321	0.183	0.032	0.68	0.83	1.01	0.54	0.72
	Left Cheek	0.303	0.105	0.130	0.197	0.139	0.014	0.54	0.61	0.74	0.42	0.56
	Left Tilted	0.159	0.120	0.108	0.208	0.118	0.012	0.39	0.49	0.61	0.29	0.41



17.3 Hotspot Exposure Conditions

Exposure Position	8	9	8+9 Summed 1g SAR (W/kg)
	5GHz WLAN Ant 4+12	Bluetooth Ant 2	
	1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	
Front	0.071	0.120	0.19
Back	0.342	0.133	0.48
Left side	0.092		0.09
Right side	0.087		0.09
Top side	0.133	0.058	0.19
Bottom side			0.00

WWAN Band	Exposure Position	1	9	1+9
		WWAN	Bluetooth Ant 2	Summed
		1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant 0	Front	0.638	0.120	0.76
	Back	0.881	0.133	1.01
	Left side	0.150		0.15
	Right side	0.286		0.29
	Top side		0.058	0.06
	Bottom side	0.658		0.66
GSM1900_Ant 0	Front	0.479	0.120	0.60
	Back	0.534	0.133	0.67
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.124		1.12
WCDMA V_Ant 0	Front	1.001	0.120	1.12
	Back	1.239	0.133	1.37
	Left side	0.151		0.15
	Right side	0.226		0.23
	Top side		0.058	0.06
	Bottom side	0.834		0.83
WCDMA V_Ant1	Front	0.741	0.120	0.86
	Back	0.622	0.133	0.76
	Left side	0.160		0.16
	Right side	0.329		0.33
	Top side	0.982	0.058	1.04
	Bottom side			0.00
WCDMA II_Ant 0	Front	0.517	0.120	0.64
	Back	0.604	0.133	0.74
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.110		1.11
WCDMA II_Ant1	Front	0.487	0.120	0.61
	Back	0.434	0.133	0.57
	Left side	0.078		0.08
	Right side	0.403		0.40
	Top side	0.854	0.058	0.91
	Bottom side			0.00
LTE Band 12_Ant0	Front	0.361	0.120	0.48
	Back	0.572	0.133	0.71
	Left side	0.200		0.20



	Right side	0.203		0.20
	Top side		0.058	0.06
	Bottom side	0.310		0.31
LTE Band 12_Ant1	Front	0.352	0.120	0.47
	Back	0.420	0.133	0.55
	Left side	0.212		0.21
	Right side	0.464		0.46
	Top side	0.477	0.058	0.54
	Bottom side			0.00
LTE Band 13_Ant0	Front	0.601	0.120	0.72
	Back	0.846	0.133	0.98
	Left side	0.138		0.14
	Right side	0.175		0.18
	Top side		0.058	0.06
	Bottom side	0.426		0.43
LTE Band 13_Ant1	Front	0.600	0.120	0.72
	Back	0.494	0.133	0.63
	Left side	0.175		0.18
	Right side	0.460		0.46
	Top side	0.660	0.058	0.72
	Bottom side			0.00
LTE Band 5_Ant0	Front	0.891	0.120	1.01
	Back	1.144	0.133	1.28
	Left side	0.146		0.15
	Right side	0.215		0.22
	Top side		0.058	0.06
	Bottom side	0.830		0.83
LTE Band 5_Ant1	Front	0.791	0.120	0.91
	Back	0.605	0.133	0.74
	Left side	0.176		0.18
	Right side	0.347		0.35
	Top side	0.998	0.058	1.06
	Bottom side			0.00
LTE Band 66_Ant0	Front	0.422	0.120	0.54
	Back	0.605	0.133	0.74
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.022		1.02
LTE Band 66_Ant1	Front	0.609	0.120	0.73
	Back	0.508	0.133	0.64
	Left side	0.001		0.00
	Right side	0.066		0.07
	Top side	0.967	0.058	1.03
	Bottom side			0.00
LTE Band 2_Ant0	Front	0.477	0.120	0.60
	Back	0.542	0.133	0.68
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.151		1.15
LTE Band 2_Ant1	Front	0.507	0.120	0.63
	Back	0.459	0.133	0.59
	Left side	0.001		0.00
	Right side	0.067		0.07
	Top side	0.995	0.058	1.05





	Bottom side			0.00
LTE Band 7_Ant 0	Front	0.602	0.120	0.72
	Back	0.625	0.133	0.76
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.012		1.01
	LTE Band 48_Ant3	Front	0.120	0.120
Back		0.885	0.133	1.02
Left side		0.417		0.42
Right side				0.00
Top side		0.140	0.058	0.20
Bottom side				0.00
N5_Ant0		Front	0.495	0.120
	Back	0.670	0.133	0.80
	Left side	0.064		0.06
	Right side	0.118		0.12
	Top side		0.058	0.06
	Bottom side	0.511		0.51
	N5_Ant1	Front	0.829	0.120
Back		0.689	0.133	0.82
Left side		0.164		0.16
Right side		0.332		0.33
Top side		0.999	0.058	1.06
Bottom side				0.00
N66_Ant0		Front	0.603	0.120
	Back	0.850	0.133	0.98
	Left side	0.001		0.00
	Right side	0.056		0.06
	Top side		0.058	0.06
	Bottom side	1.255		1.26
	N66_Ant1	Front	0.657	0.120
Back		0.589	0.133	0.72
Left side		0.001		0.00
Right side		0.071		0.07
Top side		0.986	0.058	1.04
Bottom side				0.00
N2_Ant0		Front	0.634	0.120
	Back	0.724	0.133	0.86
	Left side	0.001		0.00
	Right side	0.001		0.00
	Top side		0.058	0.06
	Bottom side	1.223		1.22
	N2_Ant1	Front	0.386	0.120
Back		0.324	0.133	0.46
Left side		0.001		0.00
Right side		0.001		0.00
Top side		0.995	0.058	1.05
Bottom side				0.00
N77_Ant3		Front	0.119	0.120
	Back	0.445	0.133	0.58
	Left side	0.212		0.21
	Right side			0.00
	Top side	0.090	0.058	0.15
	Bottom side			0.00



WWAN Band	Exposure Position	1	5	8	9	1+5 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+8+9 Summed 1g SAR (W/kg)	Case No
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)				
GSM850_Ant 0	Front	0.638	0.091	0.071	0.120	0.73	0.71	0.83	
	Back	0.881	0.397	0.342	0.133	1.28	1.22	1.36	
	Left side	0.150	0.017	0.092		0.17	0.24	0.24	
	Right side	0.286		0.087		0.29	0.37	0.37	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.658				0.66	0.66	0.66	
GSM1900_Ant 0	Front	0.479	0.091	0.071	0.120	0.57	0.55	0.67	
	Back	0.534	0.397	0.342	0.133	0.93	0.88	1.01	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.124				1.12	1.12	1.12	
WCDMA V_Ant 0	Front	1.001	0.091	0.071	0.120	1.09	1.07	1.19	
	Back	1.239	0.397	0.342	0.133	1.64	1.58	1.71	7/8
	Left side	0.151	0.017	0.092		0.17	0.24	0.24	
	Right side	0.226		0.087		0.23	0.31	0.31	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.834				0.83	0.83	0.83	
WCDMA V_Ant1	Front	0.741	0.091	0.071	0.120	0.83	0.81	0.93	
	Back	0.622	0.397	0.342	0.133	1.02	0.96	1.10	
	Left side	0.160	0.017	0.092		0.18	0.25	0.25	
	Right side	0.329		0.087		0.33	0.42	0.42	
	Top side	0.982	0.110	0.133	0.058	1.09	1.12	1.17	
	Bottom side					0.00	0.00	0.00	
WCDMA II_Ant 0	Front	0.517	0.091	0.071	0.120	0.61	0.59	0.71	
	Back	0.604	0.397	0.342	0.133	1.00	0.95	1.08	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.110				1.11	1.11	1.11	
WCDMA II_Ant1	Front	0.487	0.091	0.071	0.120	0.58	0.56	0.68	
	Back	0.434	0.397	0.342	0.133	0.83	0.78	0.91	
	Left side	0.078	0.017	0.092		0.10	0.17	0.17	
	Right side	0.403		0.087		0.40	0.49	0.49	
	Top side	0.854	0.110	0.133	0.058	0.96	0.99	1.05	
	Bottom side					0.00	0.00	0.00	
LTE Band 12_Ant0	Front	0.361	0.091	0.071	0.120	0.45	0.43	0.55	
	Back	0.572	0.397	0.342	0.133	0.97	0.91	1.05	
	Left side	0.200	0.017	0.092		0.22	0.29	0.29	
	Right side	0.203		0.087		0.20	0.29	0.29	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.310				0.31	0.31	0.31	
LTE Band 12_Ant1	Front	0.352	0.091	0.071	0.120	0.44	0.42	0.54	
	Back	0.420	0.397	0.342	0.133	0.82	0.76	0.90	
	Left side	0.212	0.017	0.092		0.23	0.30	0.30	
	Right side	0.464		0.087		0.46	0.55	0.55	
	Top side	0.477	0.110	0.133	0.058	0.59	0.61	0.67	
	Bottom side					0.00	0.00	0.00	
LTE Band 13_Ant0	Front	0.601	0.091	0.071	0.120	0.69	0.67	0.79	
	Back	0.846	0.397	0.342	0.133	1.24	1.19	1.32	
	Left side	0.138	0.017	0.092		0.16	0.23	0.23	
	Right side	0.175		0.087		0.18	0.26	0.26	



	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.426				0.43	0.43	0.43	
LTE Band 13_Ant1	Front	0.600	0.091	0.071	0.120	0.69	0.67	0.79	
	Back	0.494	0.397	0.342	0.133	0.89	0.84	0.97	
	Left side	0.175	0.017	0.092		0.19	0.27	0.27	
	Right side	0.460		0.087		0.46	0.55	0.55	
	Top side	0.660	0.110	0.133	0.058	0.77	0.79	0.85	
	Bottom side					0.00	0.00	0.00	
LTE Band 5_Ant0	Front	0.891	0.091	0.071	0.120	0.98	0.96	1.08	
	Back	1.144	0.397	0.342	0.133	1.54	1.49	1.62	9
	Left side	0.146	0.017	0.092		0.16	0.24	0.24	
	Right side	0.215		0.087		0.22	0.30	0.30	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.830				0.83	0.83	0.83	
LTE Band 5_Ant1	Front	0.791	0.091	0.071	0.120	0.88	0.86	0.98	
	Back	0.605	0.397	0.342	0.133	1.00	0.95	1.08	
	Left side	0.176	0.017	0.092		0.19	0.27	0.27	
	Right side	0.347		0.087		0.35	0.43	0.43	
	Top side	0.998	0.110	0.133	0.058	1.11	1.13	1.19	
	Bottom side					0.00	0.00	0.00	
LTE Band 66_Ant0	Front	0.422	0.091	0.071	0.120	0.51	0.49	0.61	
	Back	0.605	0.397	0.342	0.133	1.00	0.95	1.08	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.022				1.02	1.02	1.02	
LTE Band 66_Ant1	Front	0.609	0.091	0.071	0.120	0.70	0.68	0.80	
	Back	0.508	0.397	0.342	0.133	0.91	0.85	0.98	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.066		0.087		0.07	0.15	0.15	
	Top side	0.967	0.110	0.133	0.058	1.08	1.10	1.16	
	Bottom side					0.00	0.00	0.00	
LTE Band 2_Ant0	Front	0.477	0.091	0.071	0.120	0.57	0.55	0.67	
	Back	0.542	0.397	0.342	0.133	0.94	0.88	1.02	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.151				1.15	1.15	1.15	
LTE Band 2_Ant1	Front	0.507	0.091	0.071	0.120	0.60	0.58	0.70	
	Back	0.459	0.397	0.342	0.133	0.86	0.80	0.93	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.067		0.087		0.07	0.15	0.15	
	Top side	0.995	0.110	0.133	0.058	1.11	1.13	1.19	
	Bottom side					0.00	0.00	0.00	
LTE Band 7_Ant 0	Front	0.602	0.091	0.071	0.120	0.69	0.67	0.79	
	Back	0.625	0.397	0.342	0.133	1.02	0.97	1.10	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.012				1.01	1.01	1.01	
LTE Band 48_Ant3	Front	0.120	0.091	0.071	0.120	0.21	0.19	0.31	
	Back	0.885	0.397	0.342	0.133	1.28	1.23	1.36	
	Left side	0.417	0.017	0.092		0.43	0.51	0.51	
	Right side			0.087		0.00	0.09	0.09	
	Top side	0.140	0.110	0.133	0.058	0.25	0.27	0.33	
	Bottom side					0.00	0.00	0.00	



N5_Ant0	Front	0.495	0.091	0.071	0.120	0.59	0.57	0.69	
	Back	0.670	0.397	0.342	0.133	1.07	1.01	1.15	
	Left side	0.064	0.017	0.092		0.08	0.16	0.16	
	Right side	0.118		0.087		0.12	0.21	0.21	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	0.511				0.51	0.51	0.51	
N5_Ant1	Front	0.829	0.091	0.071	0.120	0.92	0.90	1.02	
	Back	0.689	0.397	0.342	0.133	1.09	1.03	1.16	
	Left side	0.164	0.017	0.092		0.18	0.26	0.26	
	Right side	0.332		0.087		0.33	0.42	0.42	
	Top side	0.999	0.110	0.133	0.058	1.11	1.13	1.19	
	Bottom side					0.00	0.00	0.00	
N66_Ant0	Front	0.603	0.091	0.071	0.120	0.69	0.67	0.79	
	Back	0.850	0.397	0.342	0.133	1.25	1.19	1.33	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.056		0.087		0.06	0.14	0.14	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.255				1.26	1.26	1.26	
N66_Ant1	Front	0.657	0.091	0.071	0.120	0.75	0.73	0.85	
	Back	0.589	0.397	0.342	0.133	0.99	0.93	1.06	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.071		0.087		0.07	0.16	0.16	
	Top side	0.986	0.110	0.133	0.058	1.10	1.12	1.18	
	Bottom side					0.00	0.00	0.00	
N2_Ant0	Front	0.634	0.091	0.071	0.120	0.73	0.71	0.83	
	Back	0.724	0.397	0.342	0.133	1.12	1.07	1.20	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side		0.110	0.133	0.058	0.11	0.13	0.19	
	Bottom side	1.223				1.22	1.22	1.22	
N2_Ant1	Front	0.386	0.091	0.071	0.120	0.48	0.46	0.58	
	Back	0.324	0.397	0.342	0.133	0.72	0.67	0.80	
	Left side	0.001	0.017	0.092		0.02	0.09	0.09	
	Right side	0.001		0.087		0.00	0.09	0.09	
	Top side	0.995	0.110	0.133	0.058	1.11	1.13	1.19	
	Bottom side					0.00	0.00	0.00	
N77_Ant3	Front	0.119	0.091	0.071	0.120	0.21	0.19	0.31	
	Back	0.445	0.397	0.342	0.133	0.84	0.79	0.92	
	Left side	0.212	0.017	0.092		0.23	0.30	0.30	
	Right side			0.087		0.00	0.09	0.09	
	Top side	0.090	0.110	0.133	0.058	0.20	0.22	0.28	
	Bottom side					0.00	0.00	0.00	

For 5G NR UL MIMO

WWAN Band	Exposure Position	1	3	5	8	9	1+3+5 Summed 1g SAR (W/kg)	1+3+8 Summed 1g SAR (W/kg)	1+3+8+9 Summed 1g SAR (W/kg)
		WWAN	N77 Ant 5	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	Bluetooth Ant 2			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
N77_Ant3	Front	0.119	0.020	0.091	0.071	0.120	0.23	0.21	0.33
	Back	0.445	0.437	0.397	0.342	0.133	1.28	1.22	1.36
	Left side	0.212		0.017	0.092		0.23	0.30	0.30
	Right side				0.087		0.00	0.09	0.09
	Top side	0.090	0.105	0.110	0.133	0.058	0.31	0.33	0.39
	Bottom side						0.00	0.00	0.00



17.4 Body-Worn Accessory Exposure Conditions

Exposure Position	8	9	10	8+9 Summed 1g SAR (W/kg)	9+10 Summed 1g SAR (W/kg)
	5GHz WLAN Ant 4+12	Bluetooth Ant 2	WLAN6GHz Ant 4+12		
	1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	1g SAR 1g SAR (W/kg)		
Front	0.173	0.120	0.012	0.29	0.13
Back	1.107	0.133	1.117	1.24	1.25
Front with Headset				0.00	0.00
Back with Headset				0.00	0.00

WWAN Band	Exposure Position	1	9	1+9 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 2	
		1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	
GSM850_Ant 0	Front	0.638	0.120	0.76
	Back	0.881	0.133	1.01
	Front with Headset			0.00
	Back with Headset			0.00
GSM1900_Ant 0	Front	0.998	0.120	1.12
	Back	1.232	0.133	1.37
	Front with Headset			0.00
	Back with Headset	0.572		0.57
WCDMA V_Ant 0	Front	1.001	0.120	1.12
	Back	1.239	0.133	1.37
	Front with Headset			0.00
	Back with Headset	0.770		0.77
WCDMA V_Ant1	Front	1.088	0.120	1.21
	Back	0.767	0.133	0.90
	Front with Headset			0.00
	Back with Headset			0.00
WCDMA II_Ant 0	Front	0.877	0.120	1.00
	Back	1.196	0.133	1.33
	Front with Headset			0.00
	Back with Headset			0.00
WCDMA II_Ant1	Front	1.102	0.120	1.22
	Back	1.011	0.133	1.14
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 12_Ant0	Front	0.361	0.120	0.48
	Back	0.572	0.133	0.71
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 12_Ant1	Front	0.352	0.120	0.47
	Back	0.420	0.133	0.55
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 13_Ant0	Front	0.601	0.120	0.72
	Back	0.846	0.133	0.98
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 13_Ant1	Front	0.600	0.120	0.72
	Back	0.494	0.133	0.63
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 5_Ant0	Front	0.891	0.120	1.01



	Back	1.144	0.133	1.28
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 5_Ant1	Front	1.258	0.120	1.38
	Back	0.935	0.133	1.07
	Front with Headset	1.198		1.20
	Back with Headset			0.00
LTE Band 66_Ant0	Front	0.886	0.120	1.01
	Back	1.253	0.133	1.39
	Front with Headset			0.00
	Back with Headset	0.866		0.87
LTE Band 66_Ant1	Front	1.187	0.120	1.31
	Back	1.026	0.133	1.16
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 2_Ant0	Front	0.994	0.120	1.11
	Back	1.215	0.133	1.35
	Front with Headset			0.00
	Back with Headset	0.821		0.82
LTE Band 2_Ant1	Front	1.238	0.120	1.36
	Back	1.151	0.133	1.28
	Front with Headset	1.205		1.21
	Back with Headset			0.00
LTE Band 7_Ant 0	Front	1.043	0.120	1.16
	Back	1.171	0.133	1.30
	Front with Headset			0.00
	Back with Headset			0.00
LTE Band 48_Ant3	Front	0.157	0.120	0.28
	Back	1.165	0.133	1.30
	Front with Headset			0.00
	Back with Headset			0.00
N5_Ant0	Front	0.495	0.120	0.62
	Back	0.670	0.133	0.80
	Front with Headset			0.00
	Back with Headset			0.00
N5_Ant1	Front	0.829	0.120	0.95
	Back	0.689	0.133	0.82
	Front with Headset			0.00
	Back with Headset			0.00
N66_Ant0	Front	0.775	0.120	0.90
	Back	1.188	0.133	1.32
	Front with Headset			0.00
	Back with Headset			0.00
N66_Ant1	Front	1.236	0.120	1.36
	Back	1.163	0.133	1.30
	Front with Headset	1.041		1.04
	Back with Headset			0.00
N2_Ant0	Front	0.935	0.120	1.06
	Back	1.233	0.133	1.37
	Front with Headset			0.00
	Back with Headset	0.697		0.70
N2_Ant1	Front	1.157	0.120	1.28
	Back	1.193	0.133	1.33
	Front with Headset			0.00
	Back with Headset			0.00
N77_Ant3	Front	0.186	0.120	0.31



	Back	1.240	0.133	1.37
	Front with Headset			0.00
	Back with Headset	1.069		1.07

WWAN Band	Exposure Position	1	5	8	9	10	1+5 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+8+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+9+10 Summed 1g SAR (W/kg)	Case No
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	WLAN6GHz Ant 4+12 1g SAR (W/kg)						
GSM850_Ant 0	Front	0.638	0.091	0.093	0.120	0.004	0.73	0.73	0.85	0.64	0.76	
	Back	0.881	0.397	0.397	0.133	0.388	1.28	1.28	1.41	1.27	1.40	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
GSM1900_Ant 0	Front	0.479	0.091	0.093	0.120	0.004	0.57	0.57	0.69	0.48	0.60	
	Back	0.534	0.397	0.397	0.133	0.388	0.93	0.93	1.06	0.92	1.06	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA V_Ant 0	Front	1.001	0.091	0.093	0.120	0.004	1.09	1.09	1.21	1.01	1.13	
	Back	1.239	0.397	0.397	0.133	0.388	1.64	1.64*	1.77	1.63*	1.76	7/10/11
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset	0.770					0.77	0.77	0.77	0.77	0.77	
WCDMA V_Ant1	Front	0.741	0.091	0.093	0.120	0.004	0.83	0.83	0.95	0.75	0.87	
	Back	0.622	0.397	0.397	0.133	0.388	1.02	1.02	1.15	1.01	1.14	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA II_Ant 0	Front	0.517	0.091	0.093	0.120	0.004	0.61	0.61	0.73	0.52	0.64	
	Back	0.604	0.397	0.397	0.133	0.388	1.00	1.00	1.13	0.99	1.13	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA II_Ant1	Front	0.487	0.091	0.093	0.120	0.004	0.58	0.58	0.70	0.49	0.61	
	Back	0.434	0.397	0.397	0.133	0.388	0.83	0.83	0.96	0.82	0.96	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 12_Ant0	Front	0.361	0.091	0.093	0.120	0.004	0.45	0.45	0.57	0.37	0.49	
	Back	0.572	0.397	0.397	0.133	0.388	0.97	0.97	1.10	0.96	1.09	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 12_Ant1	Front	0.352	0.091	0.093	0.120	0.004	0.44	0.45	0.57	0.36	0.48	
	Back	0.420	0.397	0.397	0.133	0.388	0.82	0.82	0.95	0.81	0.94	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 13_Ant0	Front	0.601	0.091	0.093	0.120	0.004	0.69	0.69	0.81	0.61	0.73	
	Back	0.846	0.397	0.397	0.133	0.388	1.24	1.24	1.38	1.23	1.37	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 13_Ant1	Front	0.600	0.091	0.093	0.120	0.004	0.69	0.69	0.81	0.60	0.72	
	Back	0.494	0.397	0.397	0.133	0.388	0.89	0.89	1.02	0.88	1.02	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 5_Ant0	Front	0.891	0.091	0.093	0.120	0.004	0.98	0.98	1.10	0.90	1.02	
	Back	1.144	0.397	0.397	0.133	0.388	1.54	1.54	1.67	1.53	1.67	12/13
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 5_Ant1	Front	0.791	0.091	0.093	0.120	0.004	0.88	0.88	1.00	0.80	0.92	
	Back	0.605	0.397	0.397	0.133	0.388	1.00	1.00	1.14	0.99	1.13	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	



	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 66_Ant0	Front	0.422	0.091	0.093	0.120	0.004	0.51	0.52	0.64	0.43	0.55	
	Back	0.605	0.397	0.397	0.133	0.388	1.00	1.00	1.14	0.99	1.13	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 66_Ant1	Front	0.609	0.091	0.093	0.120	0.004	0.70	0.70	0.82	0.61	0.73	
	Back	0.508	0.397	0.397	0.133	0.388	0.91	0.91	1.04	0.90	1.03	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 2_Ant0	Front	0.477	0.091	0.093	0.120	0.004	0.57	0.57	0.69	0.48	0.60	
	Back	0.542	0.397	0.397	0.133	0.388	0.94	0.94	1.07	0.93	1.06	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 2_Ant1	Front	0.507	0.091	0.093	0.120	0.004	0.60	0.60	0.72	0.51	0.63	
	Back	0.459	0.397	0.397	0.133	0.388	0.86	0.86	0.99	0.85	0.98	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 7_Ant 0	Front	0.602	0.091	0.093	0.120	0.004	0.69	0.70	0.82	0.61	0.73	
	Back	0.625	0.397	0.397	0.133	0.388	1.02	1.02	1.16	1.01	1.15	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 48_Ant3	Front	0.120	0.091	0.093	0.120	0.004	0.21	0.21	0.33	0.12	0.24	
	Back	0.885	0.397	0.397	0.133	0.388	1.28	1.28	1.42	1.27	1.41	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N5_Ant0	Front	0.495	0.091	0.093	0.120	0.004	0.59	0.59	0.71	0.50	0.62	
	Back	0.670	0.397	0.397	0.133	0.388	1.07	1.07	1.20	1.06	1.19	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N5_Ant1	Front	0.829	0.091	0.093	0.120	0.004	0.92	0.92	1.04	0.83	0.95	
	Back	0.689	0.397	0.397	0.133	0.388	1.09	1.09	1.22	1.08	1.21	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N66_Ant0	Front	0.603	0.091	0.093	0.120	0.004	0.69	0.70	0.82	0.61	0.73	
	Back	0.850	0.397	0.397	0.133	0.388	1.25	1.25	1.38	1.24	1.37	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N66_Ant1	Front	0.657	0.091	0.093	0.120	0.004	0.75	0.75	0.87	0.66	0.78	
	Back	0.589	0.397	0.397	0.133	0.388	0.99	0.99	1.12	0.98	1.11	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N2_Ant0	Front	0.634	0.091	0.093	0.120	0.004	0.73	0.73	0.85	0.64	0.76	
	Back	0.724	0.397	0.397	0.133	0.388	1.12	1.12	1.25	1.11	1.25	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N2_Ant1	Front	0.386	0.091	0.093	0.120	0.004	0.48	0.48	0.60	0.39	0.51	
	Back	0.324	0.397	0.397	0.133	0.388	0.72	0.72	0.85	0.71	0.85	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N77_Ant3	Front	0.119	0.091	0.093	0.120	0.004	0.21	0.21	0.33	0.12	0.24	
	Back	0.445	0.397	0.397	0.133	0.388	0.84	0.84	0.98	0.83	0.97	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	

“\*\*” means sum SAR value is higher than 1.6W/Kg for 2 transmitters at body, the multi-band analysis is included at 3 transmitters, for those bands with the same SAR value used for 3 transmitters. Due to 3 transmitters value is more conservatively than 2 transmitters, so multi-band analysis for 3 transmitters can represent 2 transmitters.





**For 5G NR UL MIMO**

WWAN Band	Exposure Position	1	3	5	8	9	10	1+3+5 Summed 1g SAR (W/kg)	1+3+8 Summed 1g SAR (W/kg)	1+3+8+9 Summed 1g SAR (W/kg)	1+3+10 Summed 1g SAR (W/kg)	1+3+9+10 Summed 1g SAR (W/kg)
		WWAN	N77 Ant 5	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	Bluetooth Ant 2	WLAN6GHz Ant 4+12					
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR 1g SAR (W/kg)	1g SAR 1g SAR (W/kg)					
N77_Ant3	Front	0.119	0.020	0.091	0.093	0.120	0.004	0.23	0.23	0.35	0.14	0.26
	Back	0.445	0.437	0.397	0.397	0.133	0.388	1.28	1.28	1.41	1.27	1.40



### 17.5 Product Specific 10g SAR Exposure Conditions

**Remark:**

1. For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

WWAN Band	Exposure Position	1	5	8	10	1+5 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	Case No
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	WLAN6GHz Ant 4+12				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM1900_Ant 0	Front	1.753		0.228	0.013	1.75	1.98	1.77	
	Back	2.892	1.250	1.274	0.293	4.14	4.17	3.19	1/2
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	1.868				1.87	1.87	1.87	
WCDMA II_Ant 0	Front	2.216		0.228	0.013	2.22	2.44	2.23	
	Back	2.642	1.250	1.274	0.293	3.89	3.92	2.94	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	3.150				3.15	3.15	3.15	
WCDMA II_Ant1	Front	1.804		0.228	0.013	1.80	2.03	1.82	
	Back	0.857	1.250	1.274	0.293	2.11	2.13	1.15	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side	2.426		0.217	0.065	2.43	2.64	2.49	
	Bottom side					0.00	0.00	0.00	
LTE Band 66_Ant0	Front	1.552		0.228	0.013	1.55	1.78	1.57	
	Back	2.150	1.250	1.274	0.293	3.40	3.42	2.44	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	2.760				2.76	2.76	2.76	
LTE Band 66_Ant1	Front	1.928		0.228	0.013	1.93	2.16	1.94	
	Back	0.830	1.250	1.274	0.293	2.08	2.10	1.12	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side	2.465		0.217	0.065	2.47	2.68	2.53	
	Bottom side					0.00	0.00	0.00	
LTE Band 2_Ant0	Front	2.183		0.228	0.013	2.18	2.41	2.20	
	Back	2.463	1.250	1.274	0.293	3.71	3.74	2.76	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	3.009				3.01	3.01	3.01	
LTE Band 2_Ant1	Front	1.691		0.228	0.013	1.69	1.92	1.70	
	Back	0.866	1.250	1.274	0.293	2.12	2.14	1.16	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side	2.402		0.217	0.065	2.40	2.62	2.47	
	Bottom side					0.00	0.00	0.00	
LTE Band 7_Ant0	Front	1.572		0.228	0.013	1.57	1.80	1.59	
	Back	1.659	1.250	1.274	0.293	2.91	2.93	1.95	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side								



	Bottom side	3.094				3.09	3.09	3.09	
LTE Band 48_Ant3	Front			0.228	0.013	0.00	0.23	0.01	
	Back	2.427	1.250	1.274	0.293	3.68	3.70	2.72	
	Left side	1.498		0.183	0.079	1.50	1.68	1.58	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side					0.00	0.00	0.00	
N66_Ant0	Front	1.955		0.228	0.013	1.96	2.18	1.97	
	Back	2.757	1.250	1.274	0.293	4.01	4.03	3.05	3/4
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	1.917				1.92	1.92	1.92	
N66_Ant1	Front	2.354		0.228	0.013	2.35	2.58	2.37	
	Back	1.353	1.250	1.274	0.293	2.60	2.63	1.65	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side	2.395		0.217	0.065	2.40	2.61	2.46	
	Bottom side					0.00	0.00	0.00	
N2_Ant0	Front	2.216		0.228	0.013	2.22	2.44	2.23	
	Back	3.015	1.250	1.274	0.293	4.27	4.29	3.31	5/6
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side	3.058				3.06	3.06	3.06	
N2_Ant1	Front	1.338		0.228	0.013	1.34	1.57	1.35	
	Back	0.868	1.250	1.274	0.293	2.12	2.14	1.16	
	Left side			0.183	0.079	0.00	0.18	0.08	
	Right side			0.051		0.00	0.05	0.00	
	Top side	2.405		0.217	0.065	2.41	2.62	2.47	
	Bottom side					0.00	0.00	0.00	
N77_Ant3	Front			0.228	0.013	0.00	0.23	0.01	
	Back	1.478	1.250	1.274	0.293	2.73	2.75	1.77	
	Left side	0.868		0.183	0.079	0.87	1.05	0.95	
	Right side			0.051		0.00	0.05	0.00	
	Top side			0.217	0.065	0.00	0.22	0.07	
	Bottom side					0.00	0.00	0.00	

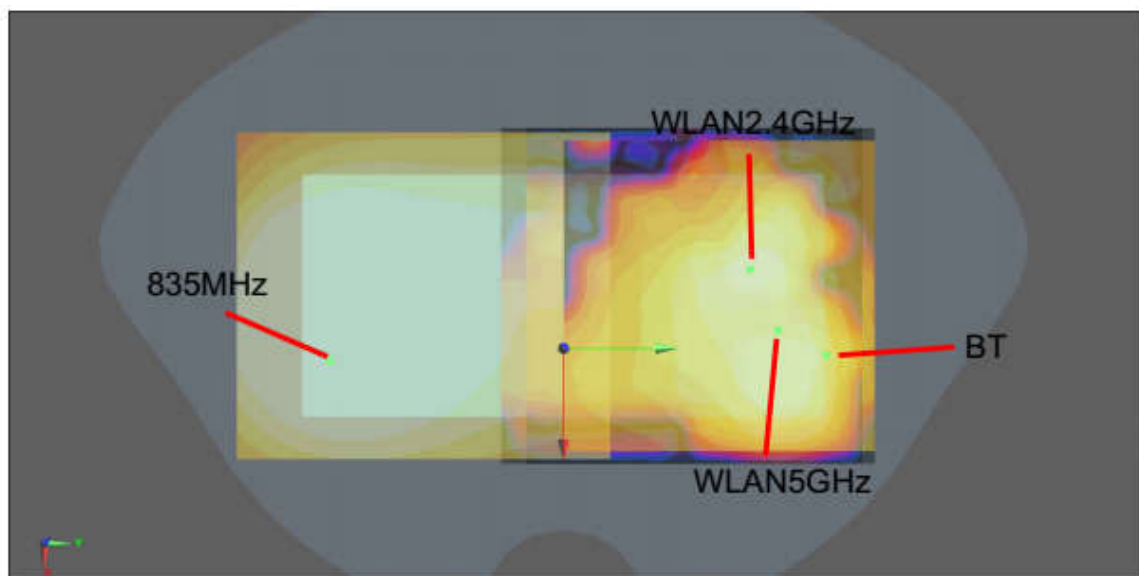
For 5G NR UL MIMO

WWAN Band	Exposure Position	1	3	5	8	10	1+3+5 Summed 1g SAR (W/kg)	1+3+8 Summed 1g SAR (W/kg)	1+3+10 Summed 1g SAR (W/kg)
		WWAN	N77 Ant 5	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	WLAN6GHz Ant 4+12			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
N77_Ant3	Front				0.228	0.013	0.00	0.23	0.01
	Back	1.478	1.222	1.250	1.274	0.293	3.95	3.97	2.99
	Left side	0.868			0.183	0.079	0.87	1.05	0.95
	Right side				0.051		0.00	0.05	0.00
	Top side				0.217	0.065	0.00	0.22	0.07
	Bottom side						0.00	0.00	0.00

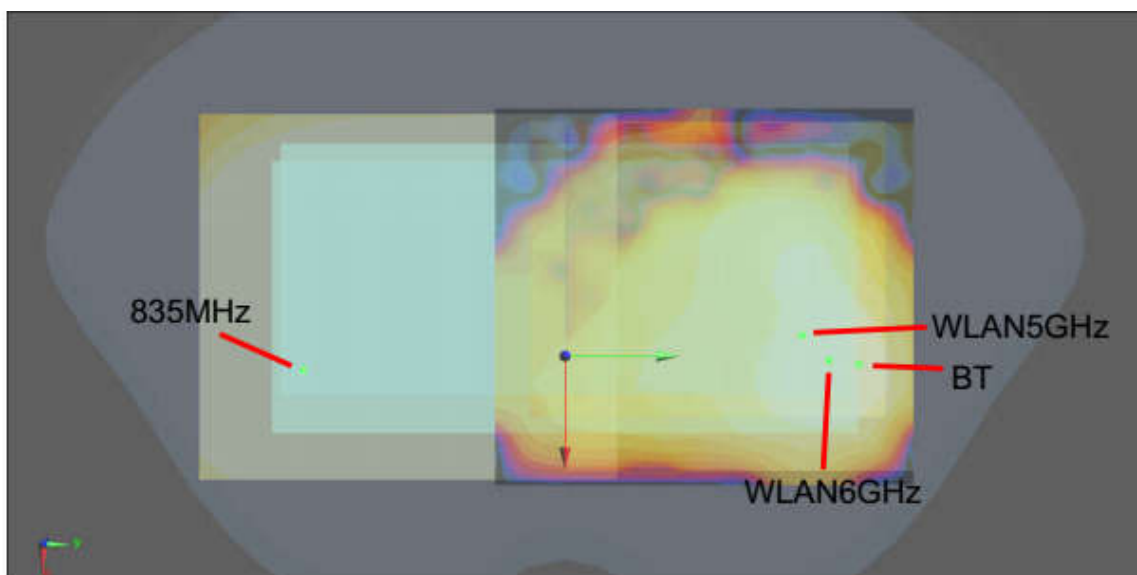
### 17.6 SPLSR Evaluation and Analysis

**General Note:**

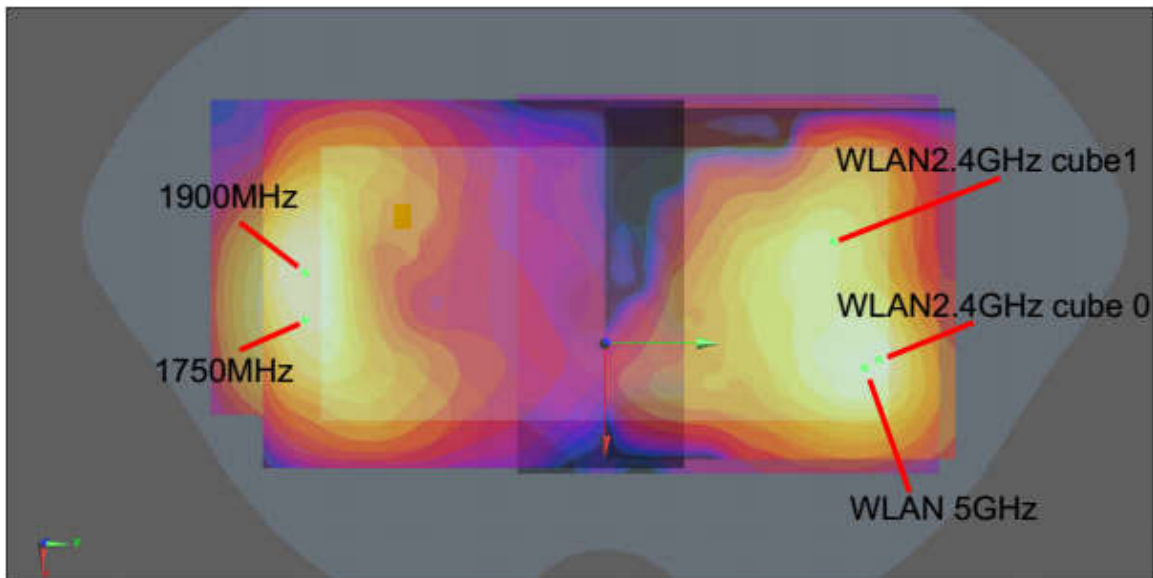
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2.  $SPLSR = (SAR1 + SAR2)1.5 / (\text{min. separation distance, mm})$ . If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.



**WWAN+WLAN2.4GHz/WWAN+ WLAN5GHz+ BT for Hotspot**



**WWAN+ WLAN5GHz/6GHz+ BT for Body-worn**



WWAN+WLAN2.4GHz/5GHz\_Back for Product Specific 10g SAR

For Product Specific 10g SAR											
Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 1	GSM1900	Back	2.892	0	-0.02	-0.0855	-0.205	165.5	4.14	0.05	Not required
	WLAN2.4GHz Cube 0		1.25	0	0.0046	0.0782	-0.204				
	GSM1900	Back	2.892	0	-0.02	-0.0855	-0.205	150.8	3.94	0.05	Not required
	WLAN2.4GHz Cube 1		1.051	0	-0.029	0.065	-0.205				
Case 2	GSM1900	Back	2.892	0	-0.02	-0.0855	-0.205	157.5	4.17	0.05	Not required
	WLAN5GHz		1.274	0	-0.002	0.071	-0.206				
	WLAN2.4GHz Cube 0	1.25	0	0.0046	0.0782	-0.204	164.8	4.01	0.05	Not required	
Case 3	N66	Back	2.757	0	-0.0145	-0.0855	-0.206	164.8	4.01	0.05	Not required
	WLAN2.4GHz Cube 0		1.25	0	0.0046	0.0782	-0.204				
	N66	Back	2.757	0	-0.0145	-0.0855	-0.206	151.2	3.81	0.05	Not required
	WLAN2.4GHz Cube 1		1.051	0	-0.029	0.065	-0.205				
Case 4	N66	Back	2.757	0	-0.0145	-0.0855	-0.206	157.0	4.03	0.05	Not required
	WLAN5GHz		1.274	0	-0.002	0.071	-0.206				
	WLAN2.4GHz Cube 0	1.25	0	0.0046	0.0782	-0.204	165.3	4.27	0.05	Not required	
Case 5	N2	Back	3.015	0	-0.0215	-0.085	-0.206	165.3	4.27	0.05	Not required
	WLAN2.4GHz Cube 0		1.25	0	0.0046	0.0782	-0.204				
	N2	Back	3.015	0	-0.0215	-0.085	-0.206	150.2	4.07	0.05	Not required
	WLAN2.4GHz Cube 1		1.051	0	-0.029	0.065	-0.205				
Case 6	N2	Back	3.015	0	-0.0215	-0.085	-0.206	157.2	4.29	0.06	Not required
	WLAN5GHz		1.274	0	-0.002	0.071	-0.206				
	WLAN2.4GHz Cube 0	1.25	0	0.0046	0.0782	-0.204	165.3	4.27	0.05	Not required	



For Hotspot											
Case 7	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 7	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	138.2	1.64	0.02	Not required
	WLAN2.4GHz		0.397	5	-0.0254	0.06	-0.206				
Case 8	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 8	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	145.2	1.58	0.01	Not required
	WLAN5GHz		0.34	5	-0.003	0.07	-0.206				
Case 8	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	159.4	1.37	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 8	WLAN5GHz	Back	0.34	5	-0.003	0.07	-0.206	15.3	0.47	0.02	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 9	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 9	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	143.7	1.48	0.01	Not required
	WLAN5GHz		0.34	5	-0.003	0.07	-0.206				
Case 9	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	157.9	1.28	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 9	WLAN5GHz	Back	0.34	5	-0.003	0.07	-0.206	15.3	0.47	0.02	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
For Body-worn											
Case 10	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 10	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	144.4	1.64	0.01	Not required
	WLAN5GHz		0.397	5	-0.007	0.069	-0.206				
Case 10	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	159.4	1.37	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 10	WLAN5GHz	Back	0.397	5	-0.007	0.069	-0.206	18.0	0.53	0.02	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 11	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 11	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	159.4	1.37	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 11	WCDMA V	Back	1.239	5	0.004	-0.075	-0.206	152.8	1.63	0.01	Not required
	WLAN6GHz		0.388	5	-0.00305	0.0776	-0.207				
Case 11	WLAN6GHz	Back	0.388	5	-0.00305	0.0776	-0.207	8.6	0.52	0.04	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 12	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 12	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	142.9	1.54	0.01	Not required
	WLAN5GHz		0.397	5	-0.007	0.069	-0.206				
Case 12	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	157.9	1.28	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 12	WLAN5GHz	Back	0.397	5	-0.007	0.069	-0.206	18.0	0.53	0.02	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 13	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 13	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	157.9	1.28	0.01	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				
Case 13	LTE Band 5	Back	1.144	5	0.004	-0.0735	-0.206	151.3	1.53	0.01	Not required
	WLAN6GHz		0.388	5	-0.00305	0.0776	-0.207				
Case 13	WLAN6GHz	Back	0.388	5	-0.00305	0.0776	-0.207	8.6	0.52	0.04	Not required
	Bluetooth		0.133	5	0.0022	0.0844	-0.207				

## **18. Supplemental tuner tests results**

### **General Note:**

1. This device implements impedance tuner (144 status) antenna tuning techniques in the WCDMA Band II/V, LTE B2/B4/B5/B7/B12 /B13/B17/B66, n2/n5/n66 for ANT0.
2. This device implements impedance tuner (144 status) antenna tuning techniques in the WCDMA Band II/V, LTE B2/B4/B5/B12/ B13/B17/B66, n2/n5/n66for ANT1.
3. LTE B4 / B17 SAR test was covered by LTE B66 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced.
4. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
5. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values.
6. To evaluate all of the tuner states, the 144 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
7. According to TCBC 201904 workshop, total number tuner states divided evenly among each supported band / air interface and exposure condition combination.
8. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

### **18.1 Supplemental Tuner Head & Body SAR Results**

Please refer to Appendix F.

**Test Engineer** : Hank Huang, Bin He, David Dai



## **19. Uncertainty Assessment**

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.



## **20. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [8] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [9] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [10] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [11] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [12] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [13] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [14] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

-----THE END-----



**Appendix A. Plots of System Performance Check**

The plots are shown as follows.

## #System Check\_Head\_750MHz

**DUT: D750V3-SN:1099**

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL\_750\_210607 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.883 \text{ S/m}$ ;  $\epsilon_r = 40.81$ ;  $\rho = 1000 \text{ kg/m}^3$

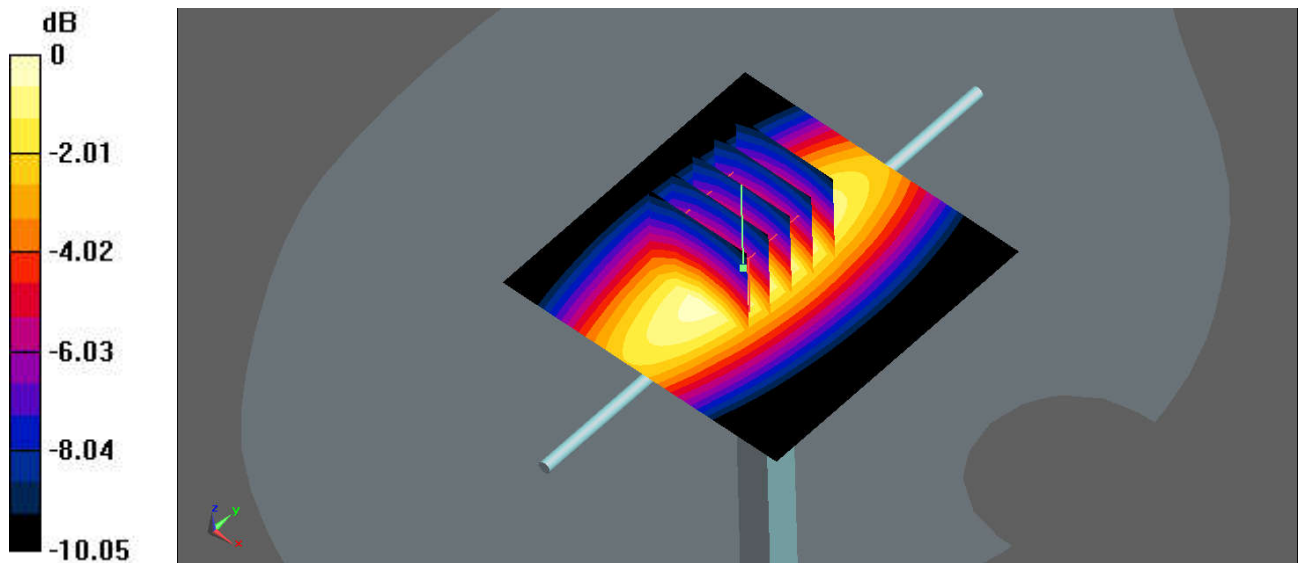
Ambient Temperature :  $23.7 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $22.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(10.23, 10.23, 10.23); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) =  $2.59 \text{ W/kg}$

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value =  $56.36 \text{ V/m}$ ; Power Drift =  $0.06 \text{ dB}$   
Peak SAR (extrapolated) =  $2.93 \text{ W/kg}$   
**SAR(1 g) =  $2.02 \text{ W/kg}$ ; SAR(10 g) =  $1.35 \text{ W/kg}$**   
Maximum value of SAR (measured) =  $2.66 \text{ W/kg}$



0 dB =  $2.66 \text{ W/kg}$

## #System Check\_Head\_750MHz

**DUT: D750V3-SN:1099**

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL\_750\_210618 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 40.957$ ;  $\rho = 1000$  kg/m<sup>3</sup>

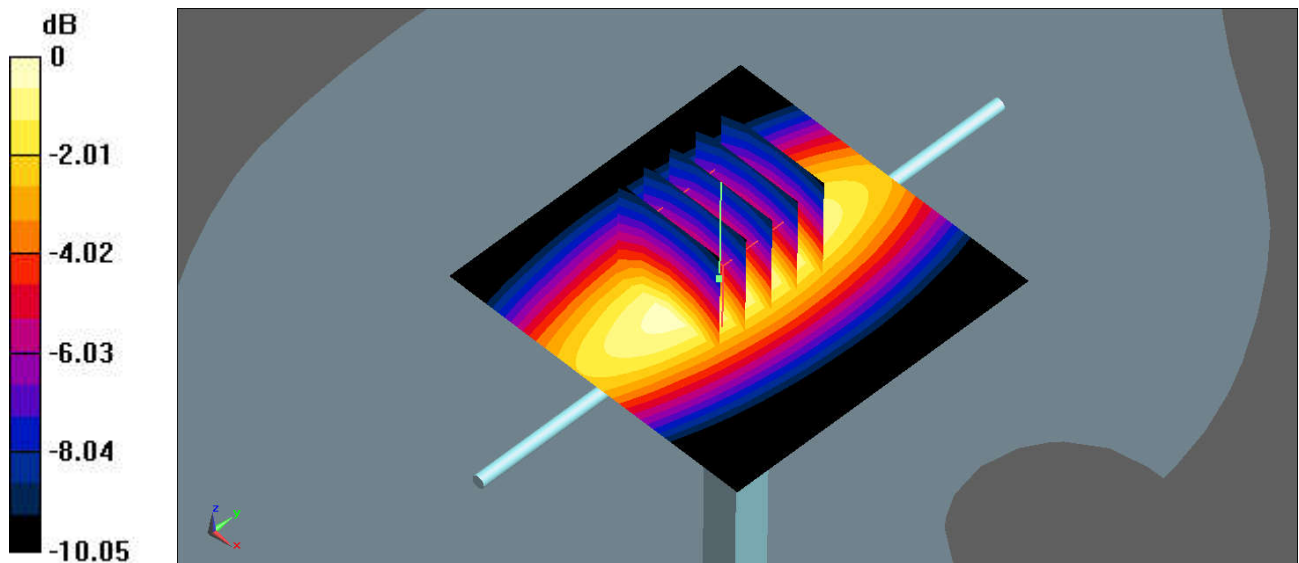
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(10.23, 10.23, 10.23); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 2.58 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 56.36 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 2.92 W/kg  
**SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.35 W/kg**  
Maximum value of SAR (measured) = 2.64 W/kg



0 dB = 2.64 W/kg

## #System Check\_Head\_835MHz

**DUT: D835V2-SN:4d162**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_210604 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.914$  S/m;  $\epsilon_r = 41.826$ ;  $\rho = 1000$  kg/m<sup>3</sup>

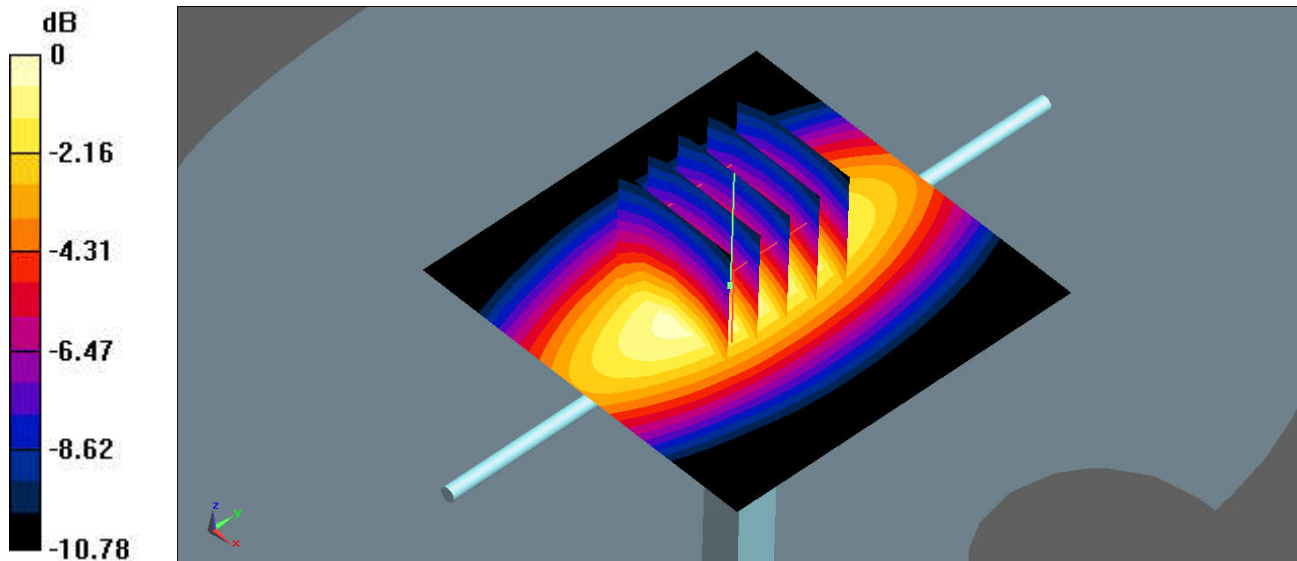
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 3.15 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 61.77 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 3.56 W/kg  
**SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.58 W/kg**  
Maximum value of SAR (measured) = 3.19 W/kg



0 dB = 3.19 W/kg

## #System Check\_Head\_835MHz

**DUT: D835V2-SN:4d162**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_210621 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.916$  S/m;  $\epsilon_r = 42.677$ ;  $\rho = 1000$  kg/m<sup>3</sup>

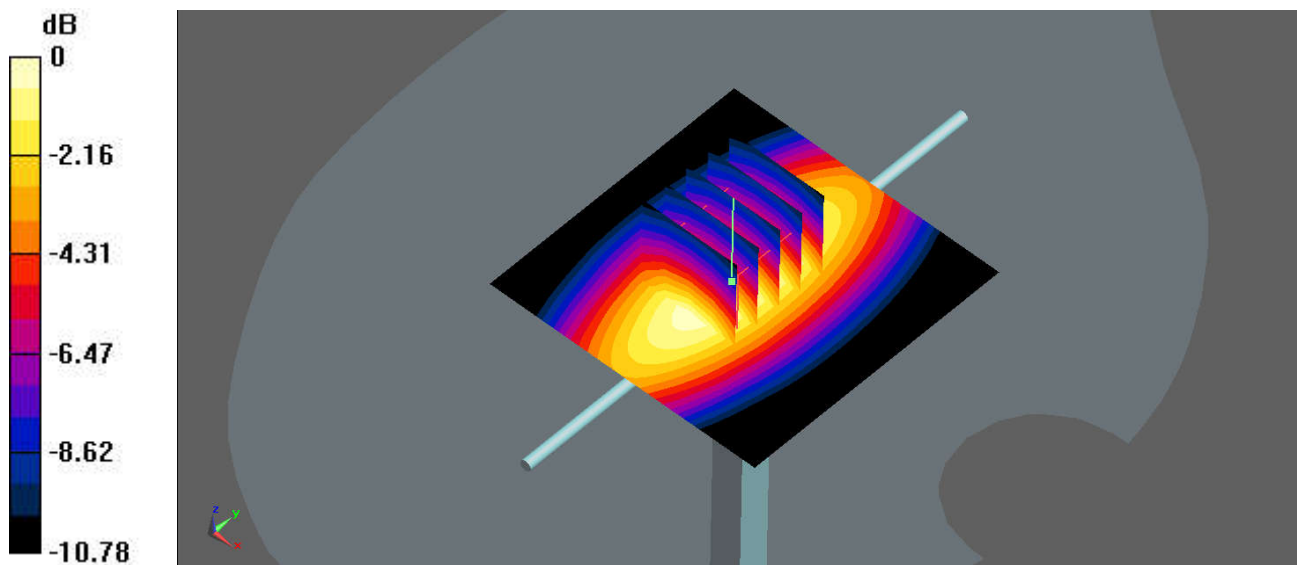
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 3.16 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 61.77 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 3.57 W/kg  
**SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.58 W/kg**  
Maximum value of SAR (measured) = 3.20 W/kg



0 dB = 3.16 W/kg

## #System Check\_Head\_1750MHz

**DUT: D1750V2-SN:1137**

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL\_1750\_210605 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.407$  S/m;  $\epsilon_r = 41.718$ ;  $\rho = 1000$  kg/m<sup>3</sup>

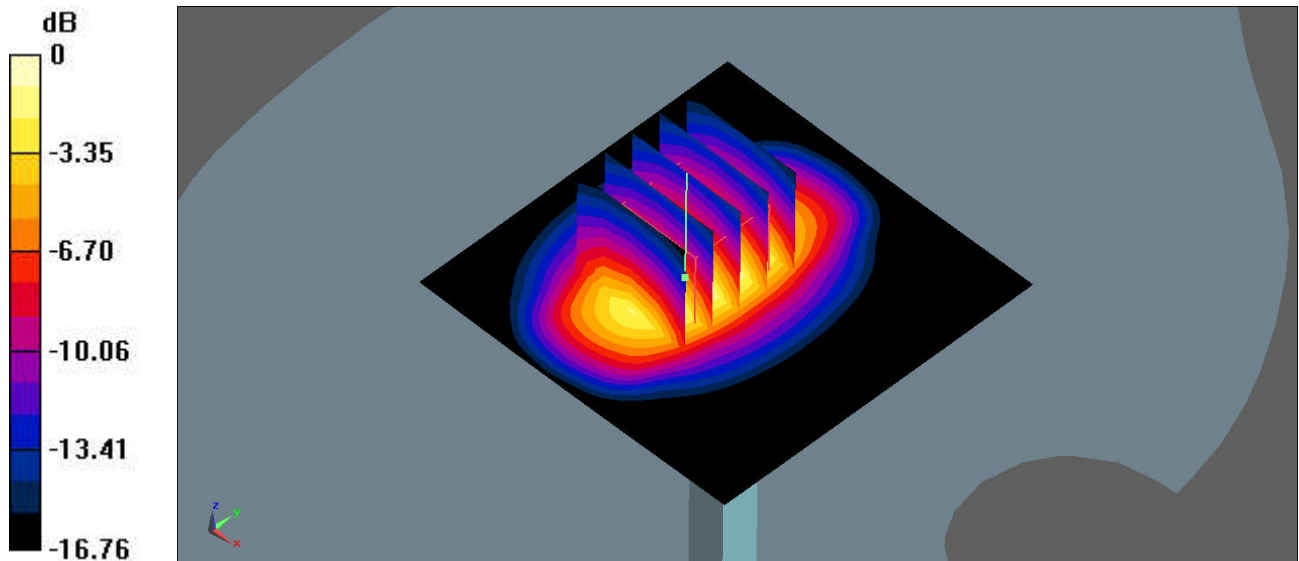
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.6, 8.6, 8.6); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 13.5 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 80.97 V/m; Power Drift = 0.06 dB  
Peak SAR (extrapolated) = 16.6 W/kg  
**SAR(1 g) = 9.24 W/kg; SAR(10 g) = 4.94 W/kg**  
Maximum value of SAR (measured) = 13.0 W/kg



0 dB = 13.0 W/kg

## #System Check\_Head\_1750MHz

**DUT: D1750V2-SN:1137**

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL\_1750\_210617 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.404$  S/m;  $\epsilon_r = 40.106$ ;  $\rho = 1000$  kg/m<sup>3</sup>

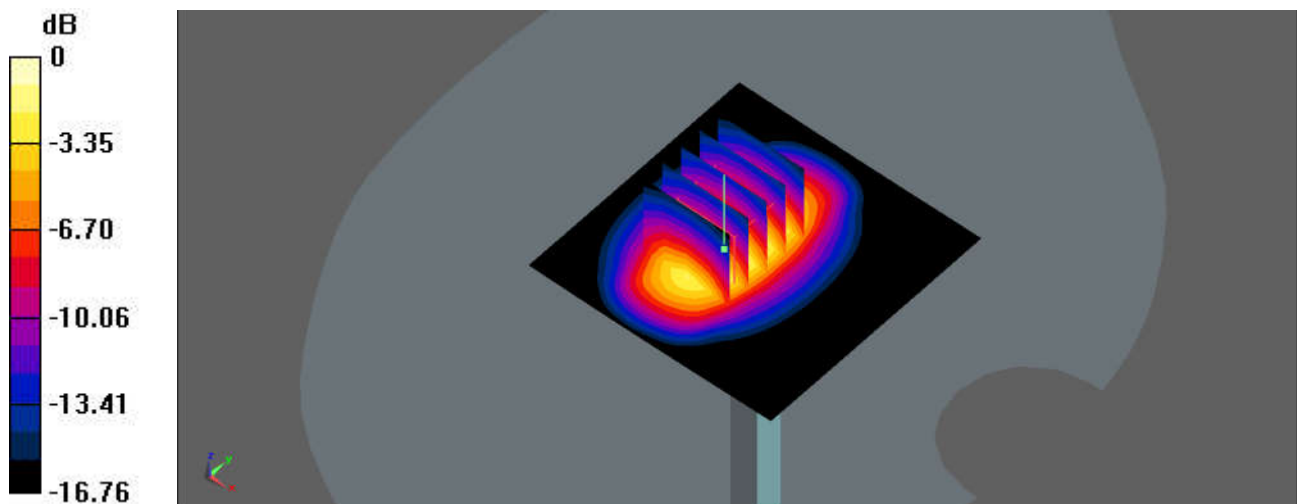
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.6, 8.6, 8.6); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 13.1 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 80.72 V/m; Power Drift = 0.06 dB  
Peak SAR (extrapolated) = 16.5 W/kg  
**SAR(1 g) = 9.22 W/kg; SAR(10 g) = 4.93 W/kg**  
Maximum value of SAR (measured) = 13.0 W/kg



0 dB = 13.1 W/kg



## #System Check\_Head\_1900MHz

**DUT: D1900V2-SN:5d182**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_210606 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 40.994$ ;  $\rho = 1000$  kg/m<sup>3</sup>

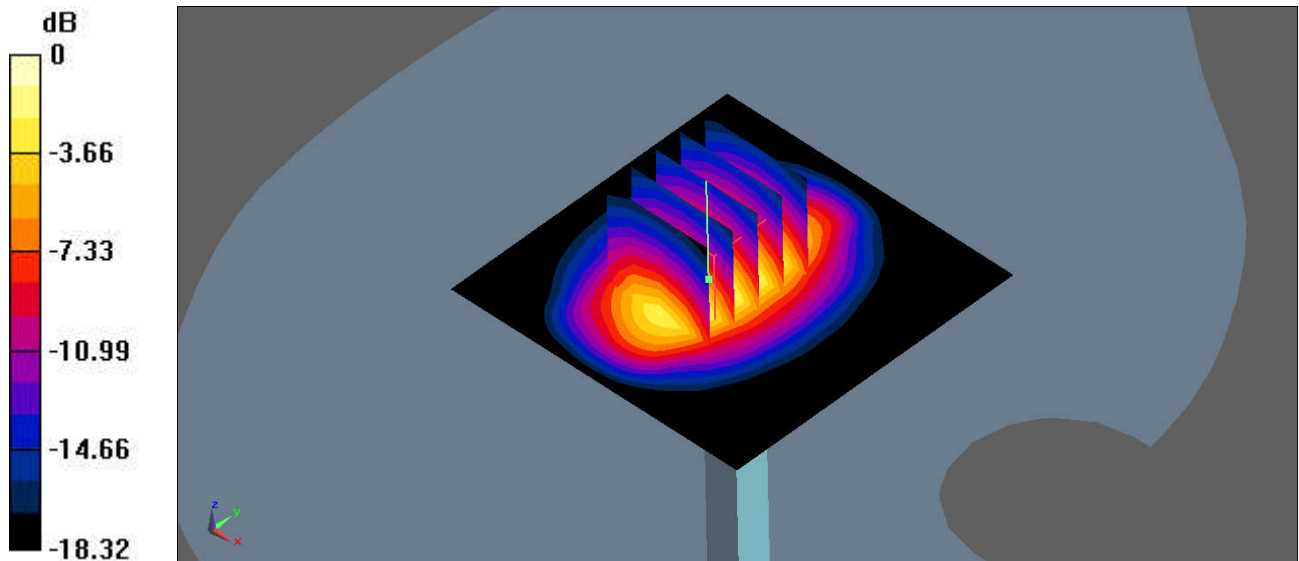
Ambient Temperature : 23.6 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.32, 8.32, 8.32); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 13.7 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 94.31 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 17.8 W/kg  
**SAR(1 g) = 9.49 W/kg; SAR(10 g) = 4.88 W/kg**  
Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg

## #System Check\_Head\_1900MHz

**DUT: D1900V2-SN:5d182**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_210623 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.421$  S/m;  $\epsilon_r = 41.283$ ;  $\rho = 1000$  kg/m<sup>3</sup>

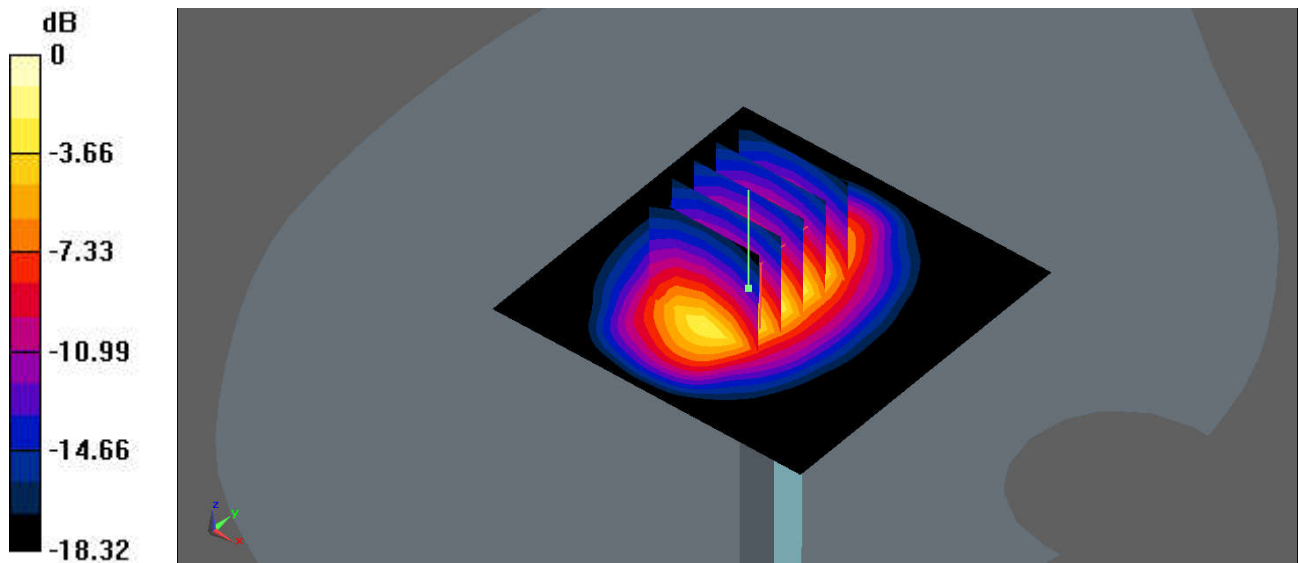
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.32, 8.32, 8.32); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 13.7 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 94.31 V/m; Power Drift = 0.07 dB  
Peak SAR (extrapolated) = 17.9 W/kg  
**SAR(1 g) = 9.51 W/kg; SAR(10 g) = 4.89 W/kg**  
Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg

## #System Check\_Head\_2450MHz

**DUT: D2450V2-SN:924**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_210614 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.857$  S/m;  $\epsilon_r = 37.67$ ;  $\rho = 1000$  kg/m<sup>3</sup>

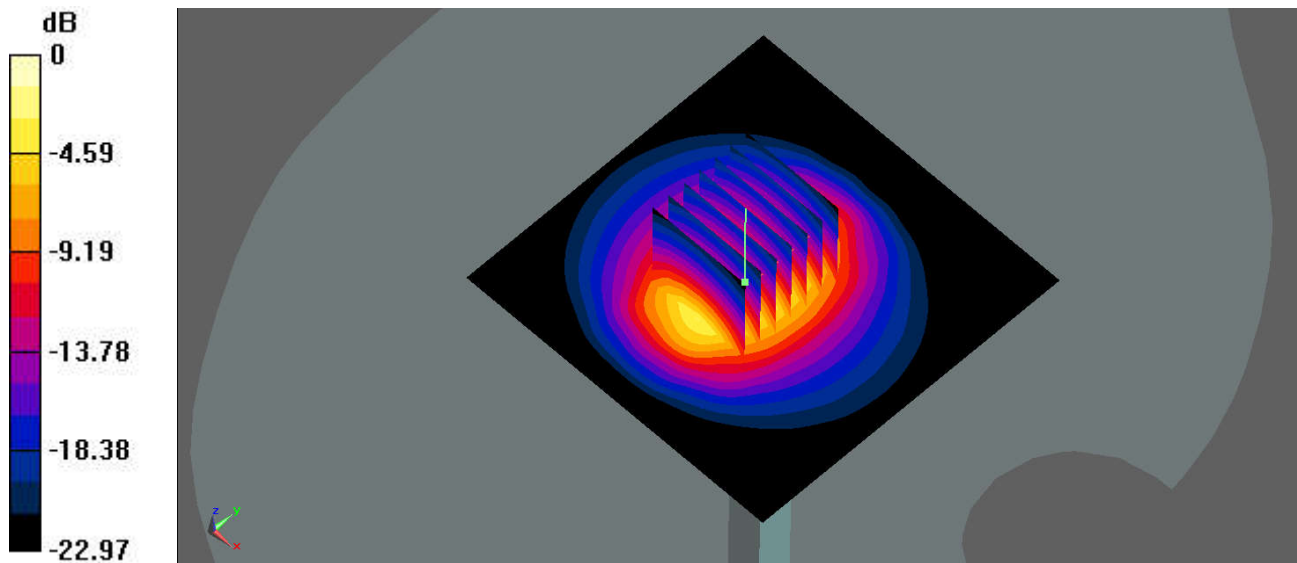
Ambient Temperature : 23.3 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.54, 7.54, 7.54); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 19.4 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 84.61 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 27.1 W/kg  
**SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.64 W/kg**  
Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg

## #System Check\_Head\_2450MHz

**DUT: D2450V2-SN:924**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_210701 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.825$  S/m;  $\epsilon_r = 39.664$ ;  $\rho = 1000$  kg/m<sup>3</sup>

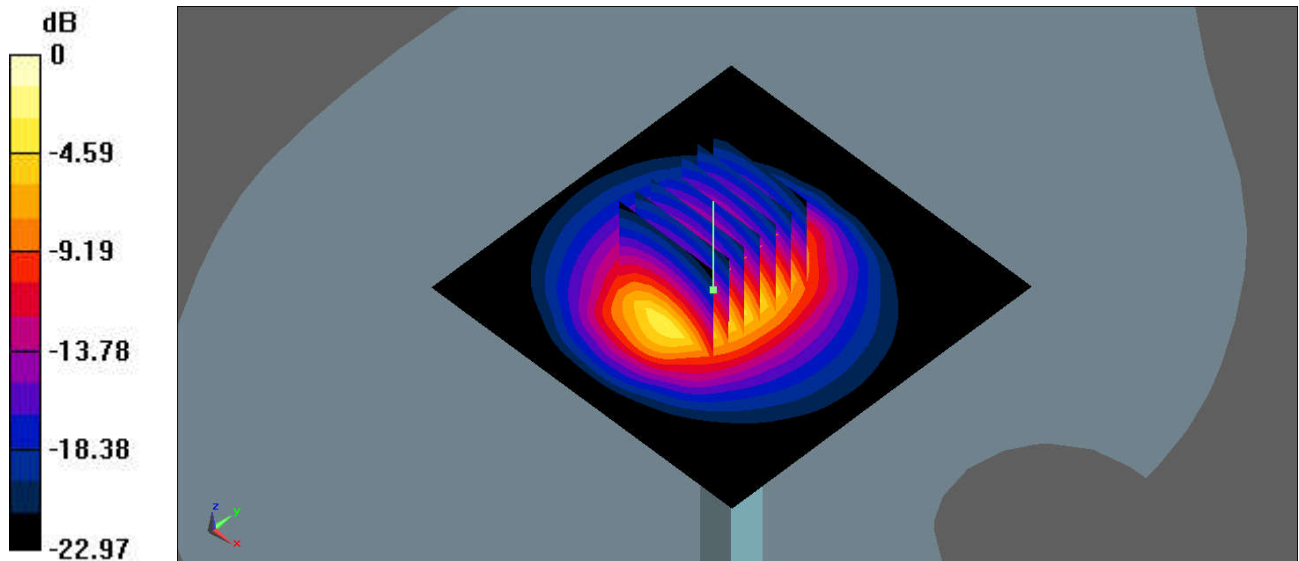
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.54, 7.54, 7.54); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 19.1 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 84.61 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 26.6 W/kg  
**SAR(1 g) = 12.3 W/kg; SAR(10 g) = 5.55 W/kg**  
Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.4 W/kg

## #System Check\_Head\_2600MHz

**DUT: D2600V2-SN:1070**

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL\_2600\_210607 Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.009$  S/m;  $\epsilon_r = 39.626$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.4, 7.4, 7.4); Calibrated: 2020/12/21

- Sensor-Surface: 1.4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13

- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671

- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (71x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.1 W/kg

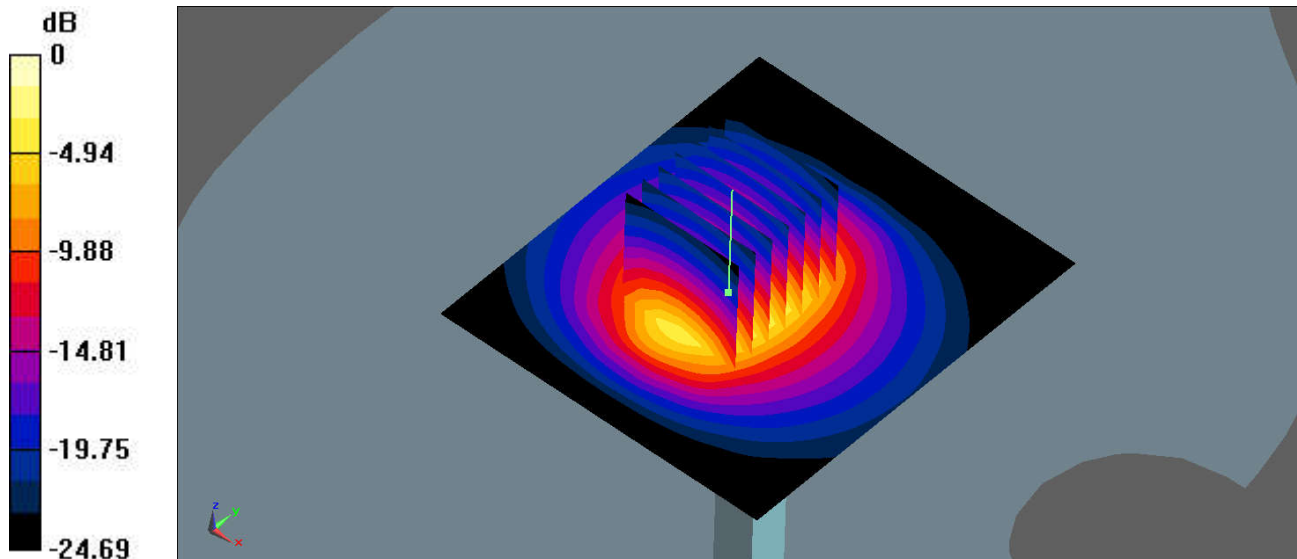
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.63 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 29.9 W/kg

**SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.08 W/kg**

Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg

## #System Check\_Head\_2600MHz

**DUT: D2600V2-SN:1070**

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL\_2600\_210626 Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.056$  S/m;  $\epsilon_r = 37.575$ ;  $\rho = 1000$  kg/m<sup>3</sup>

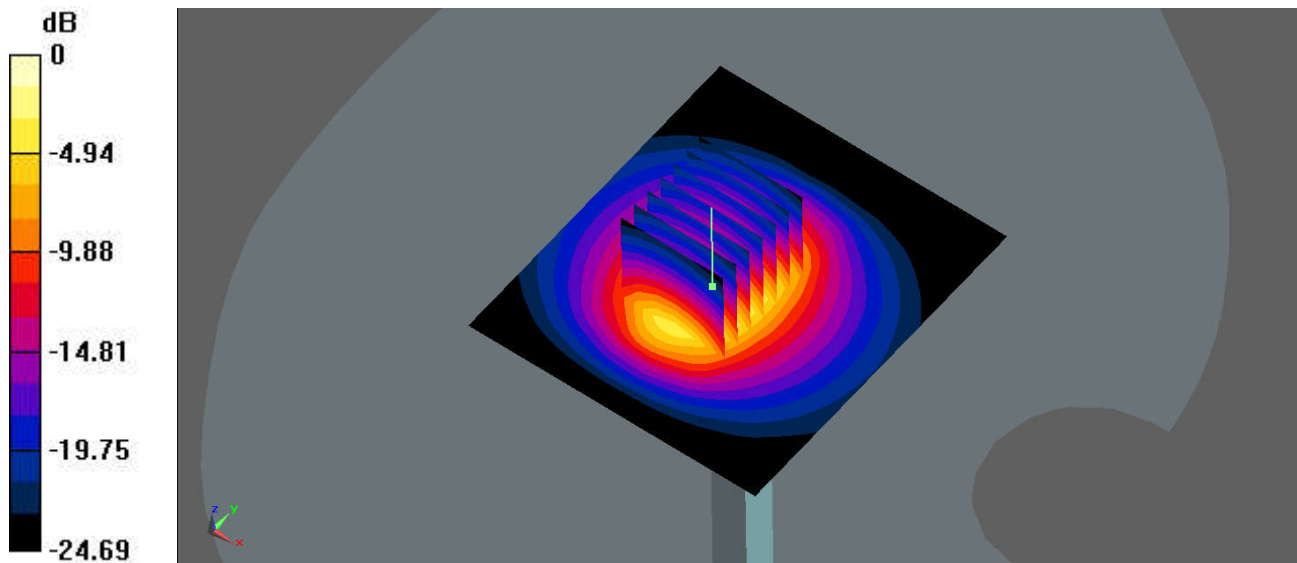
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.4, 7.4, 7.4); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=250mW/Area Scan (71x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 22.6 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 97.63 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 30.6 W/kg  
**SAR(1 g) = 13.6 W/kg; SAR(10 g) = 5.91 W/kg**  
Maximum value of SAR (measured) = 21.7 W/kg



0 dB = 21.7 W/kg

## #System Check\_Head\_3500MHz

**DUT: D3500V2-SN:1076**

Communication System: UID 0, CW (0); Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: HSL\_3500\_210609 Medium parameters used:  $f = 3500$  MHz;  $\sigma = 2.934$  S/m;  $\epsilon_r = 39.309$ ;  $\rho = 1000$  kg/m<sup>3</sup>

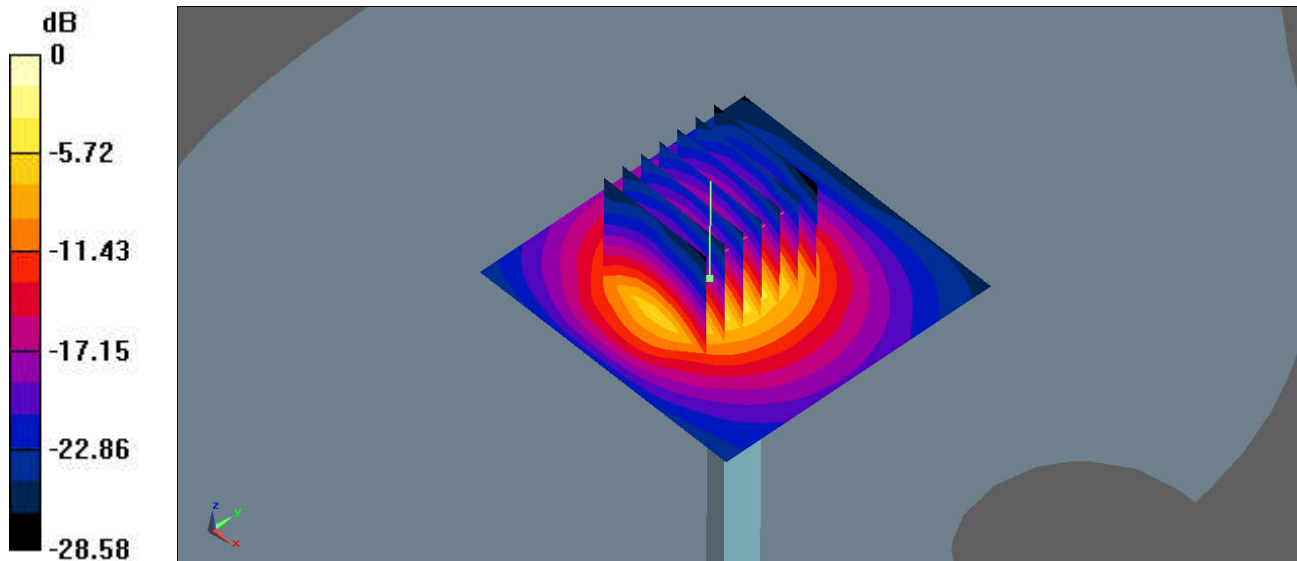
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.88, 6.88, 6.88); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 11.8 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 53.89 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 15.9 W/kg  
**SAR(1 g) = 6.27 W/kg; SAR(10 g) = 2.4 W/kg**  
Maximum value of SAR (measured) = 11.9 W/kg



## #System Check\_Head\_3500MHz

**DUT: D3500V2-SN:1076**

Communication System: UID 0, CW (0); Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: HSL\_3500\_210629 Medium parameters used:  $f = 3500$  MHz;  $\sigma = 2.866$  S/m;  $\epsilon_r = 37.003$ ;  $\rho = 1000$  kg/m<sup>3</sup>

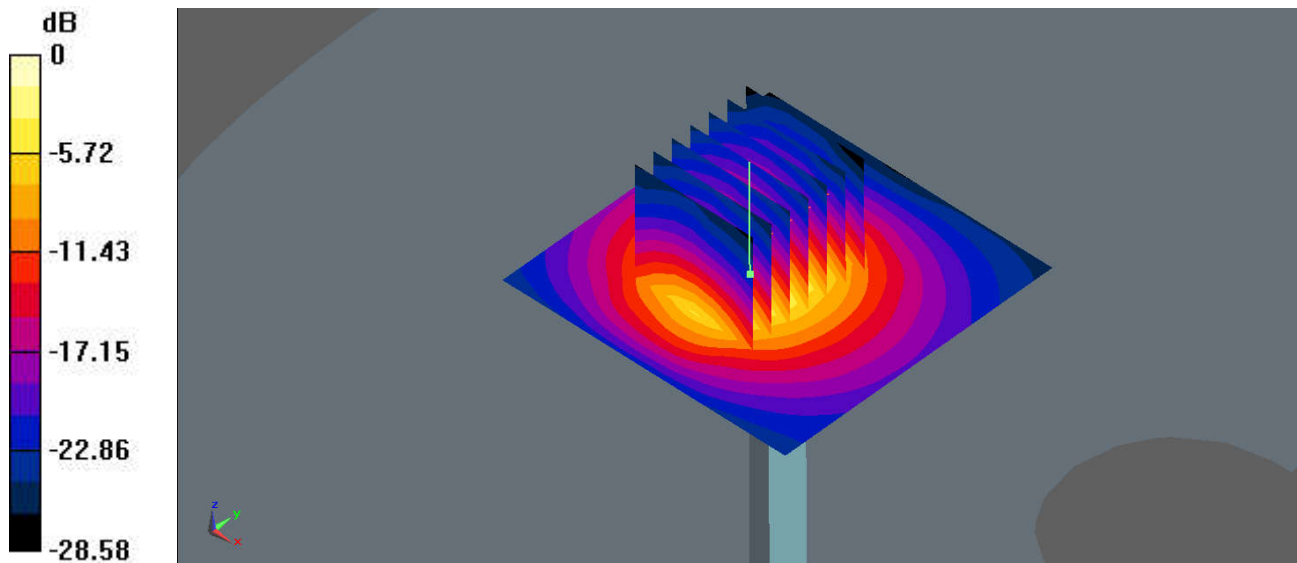
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.88, 6.88, 6.88); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 11.6 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 53.89 V/m; Power Drift = 0.09 dB  
Peak SAR (extrapolated) = 15.6 W/kg  
**SAR(1 g) = 6.28 W/kg; SAR(10 g) = 2.35 W/kg**  
Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.6 W/kg



## #System Check\_Head\_3700MHz

**DUT: D3700V2-SN:1037**

Communication System: UID 0, CW (0); Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: HSL\_3700\_210611 Medium parameters used:  $f = 3700$  MHz;  $\sigma = 3.048$  S/m;  $\epsilon_r = 37.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>

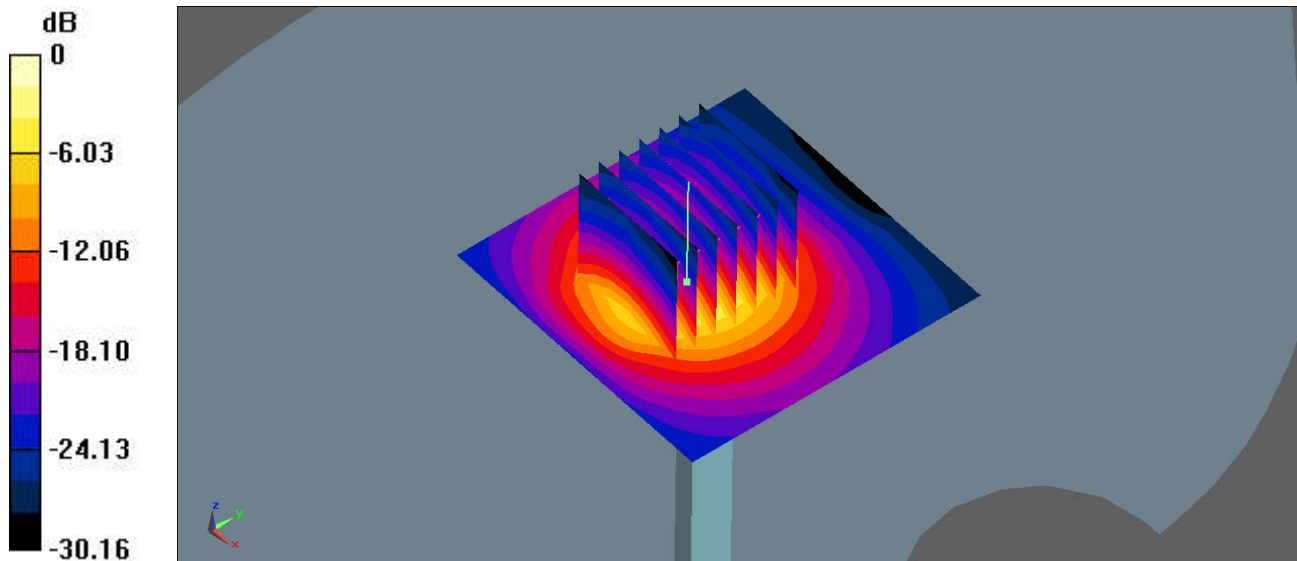
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.97, 6.97, 6.97); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 14.3 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 57.14 V/m; Power Drift = 0.16 dB  
Peak SAR (extrapolated) = 20.5 W/kg  
**SAR(1 g) = 6.86 W/kg; SAR(10 g) = 2.49 W/kg**  
Maximum value of SAR (measured) = 14.2 W/kg



0 dB = 14.2 W/kg

## #System Check\_Head\_3700MHz

**DUT: D3700V2-SN:1037**

Communication System: UID 0, CW (0); Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: HSL\_3700\_210624 Medium parameters used:  $f = 3700$  MHz;  $\sigma = 3.01$  S/m;  $\epsilon_r = 36.788$ ;  $\rho = 1000$  kg/m<sup>3</sup>

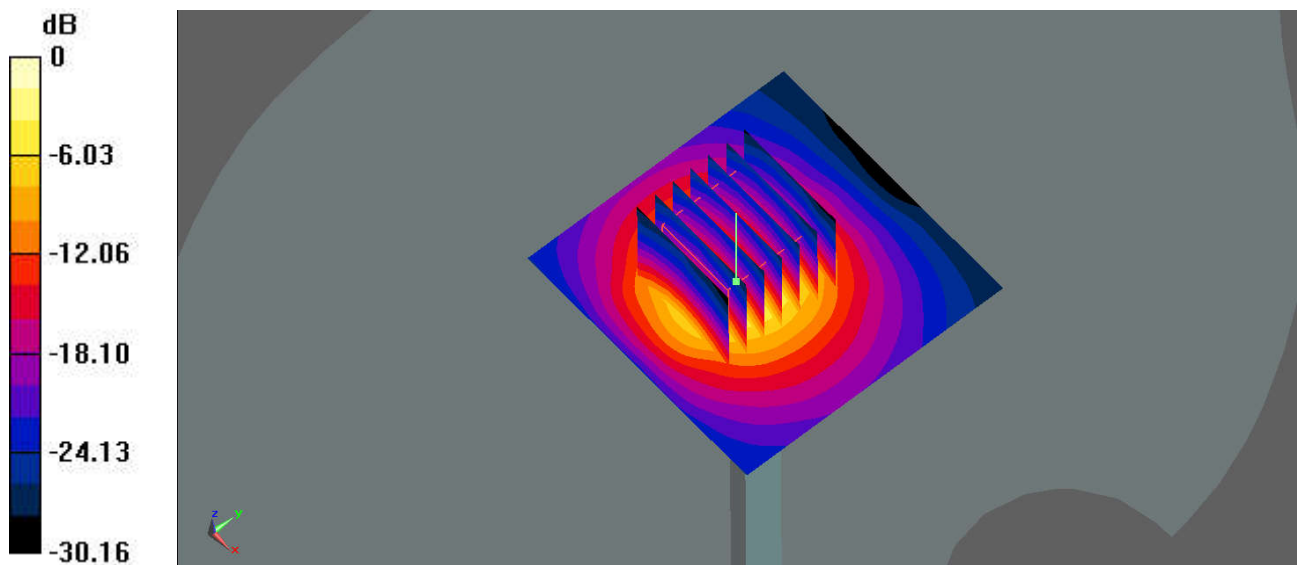
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.97, 6.97, 6.97); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 14.2 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 57.14 V/m; Power Drift = 0.18 dB  
Peak SAR (extrapolated) = 20.3 W/kg  
**SAR(1 g) = 6.77 W/kg; SAR(10 g) = 2.46 W/kg**  
Maximum value of SAR (measured) = 14.0 W/kg



0 dB = 14.2 W/kg

## #System Check\_Head\_3900MHz

**DUT: D3900V2-SN:1022**

Communication System: UID 0, CW (0); Frequency: 3900 MHz; Duty Cycle: 1:1

Medium: HSL\_3900\_210612 Medium parameters used:  $f = 3900$  MHz;  $\sigma = 3.208$  S/m;  $\epsilon_r = 37.743$ ;  $\rho = 1000$  kg/m<sup>3</sup>

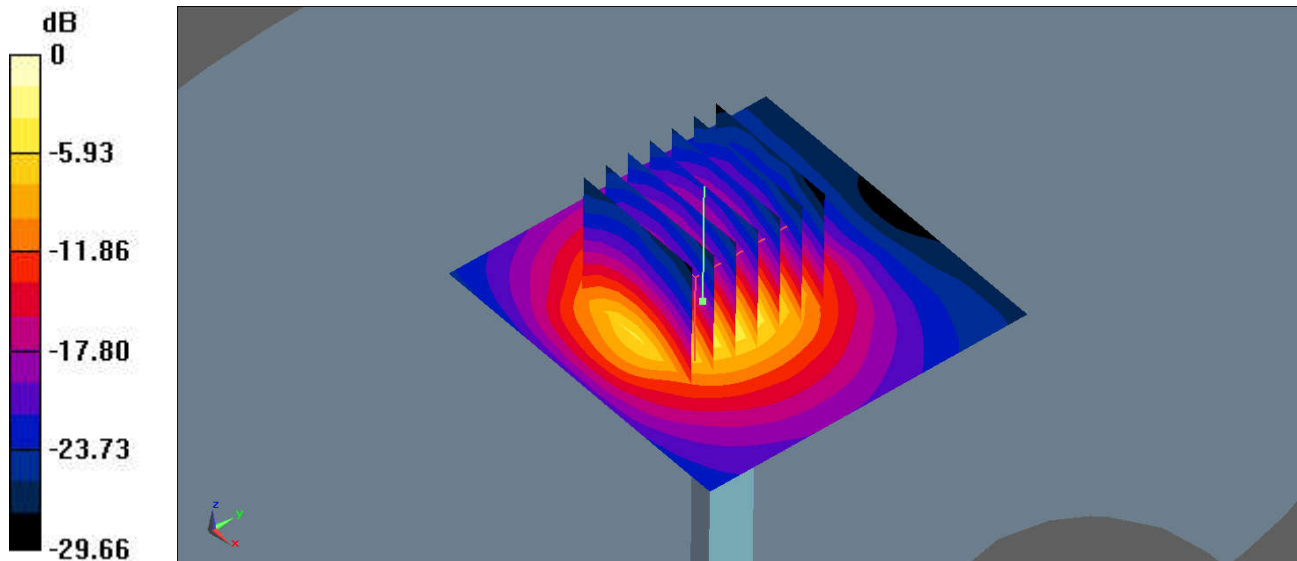
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.53, 6.53, 6.53); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 13.3 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 55.80 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 17.4 W/kg  
**SAR(1 g) = 6.62 W/kg; SAR(10 g) = 2.45 W/kg**  
Maximum value of SAR (measured) = 13.1 W/kg



0 dB = 13.1 W/kg

## #System Check\_Head\_3900MHz

**DUT: D3900V2-SN:1022**

Communication System: UID 0, CW (0); Frequency: 3900 MHz; Duty Cycle: 1:1

Medium: HSL\_3900\_210625 Medium parameters used:  $f = 3900$  MHz;  $\sigma = 3.165$  S/m;  $\epsilon_r = 36.583$ ;  $\rho = 1000$  kg/m<sup>3</sup>

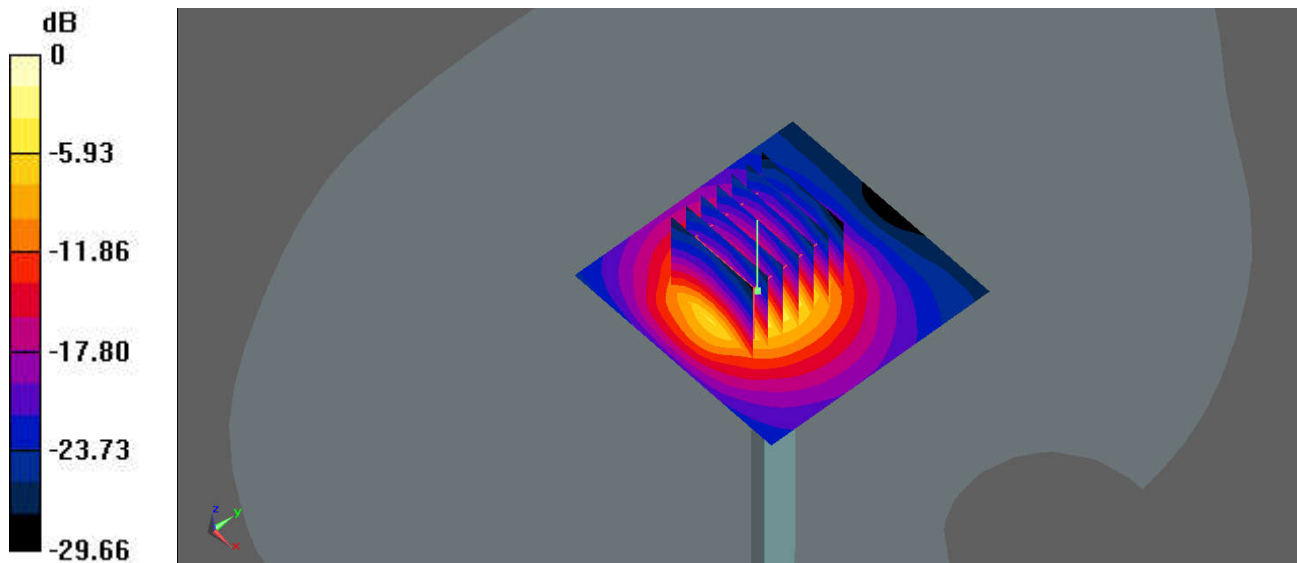
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(6.53, 6.53, 6.53); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 13.1 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm  
Reference Value = 55.80 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 17.2 W/kg  
**SAR(1 g) = 6.53 W/kg; SAR(10 g) = 2.41 W/kg**  
Maximum value of SAR (measured) = 13.0 W/kg



0 dB = 13.1 W/kg

## #System Check\_Head\_5250MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL\_5250\_210615 Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.597$  S/m;  $\epsilon_r = 36.241$ ;  $\rho = 1000$  kg/m<sup>3</sup>

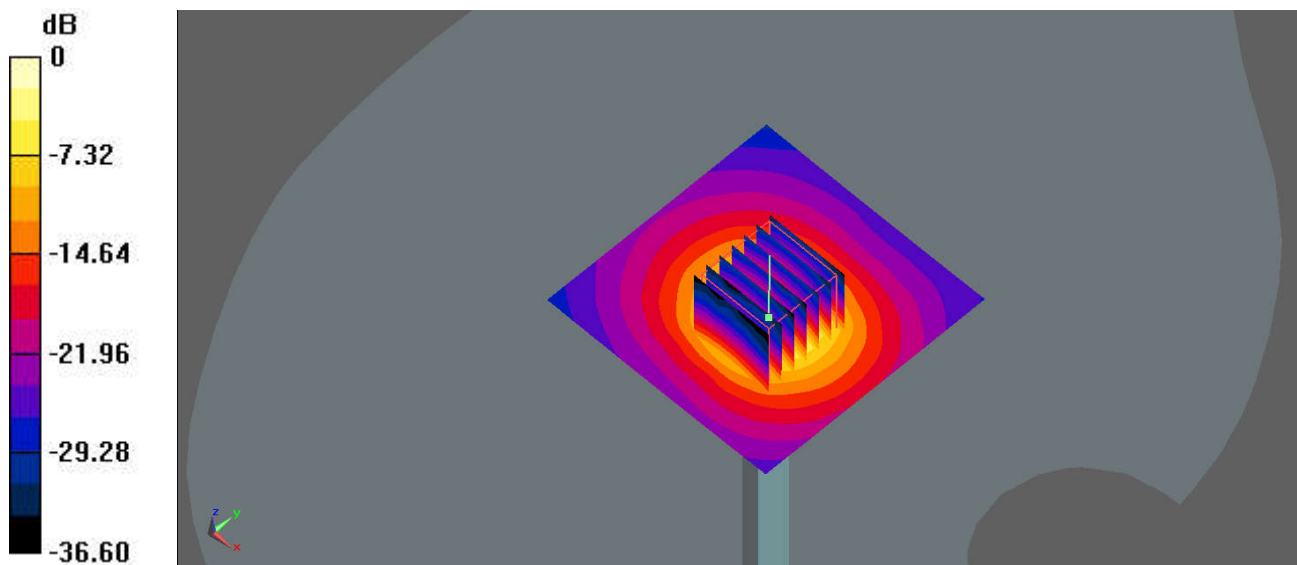
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(5.19, 5.19, 5.19); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 18.4 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 60.32 V/m; Power Drift = -0.11 dB  
Peak SAR (extrapolated) = 30.4 W/kg  
**SAR(1 g) = 7.47 W/kg; SAR(10 g) = 2.04 W/kg**  
Maximum value of SAR (measured) = 18.4 W/kg



0 dB = 18.4 W/kg

## #System Check\_Head\_5250MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL\_5250\_210704 Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.767$  S/m;  $\epsilon_r = 36.98$ ;  $\rho = 1000$  kg/m<sup>3</sup>

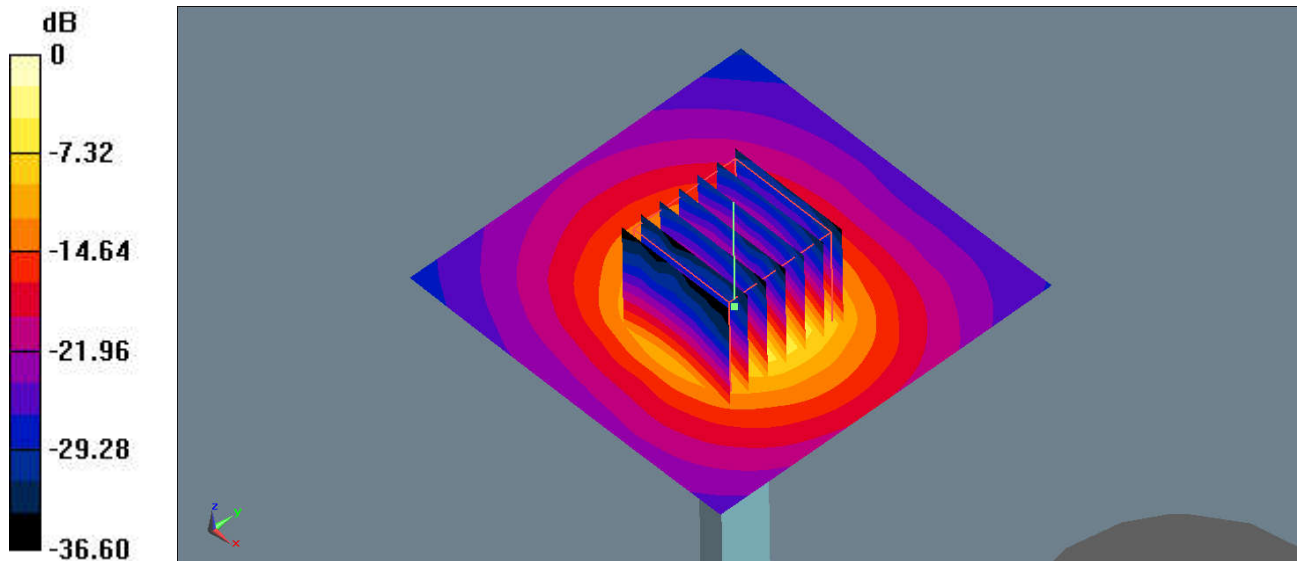
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(5.19, 5.19, 5.19); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 19.1 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 60.32 V/m; Power Drift = -0.11 dB  
Peak SAR (extrapolated) = 31.5 W/kg  
**SAR(1 g) = 7.75 W/kg; SAR(10 g) = 2.11 W/kg**  
Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg

## #System Check\_Head\_5600MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL\_5600\_210616 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.954$  S/m;  $\epsilon_r = 35.793$ ;  $\rho = 1000$  kg/m<sup>3</sup>

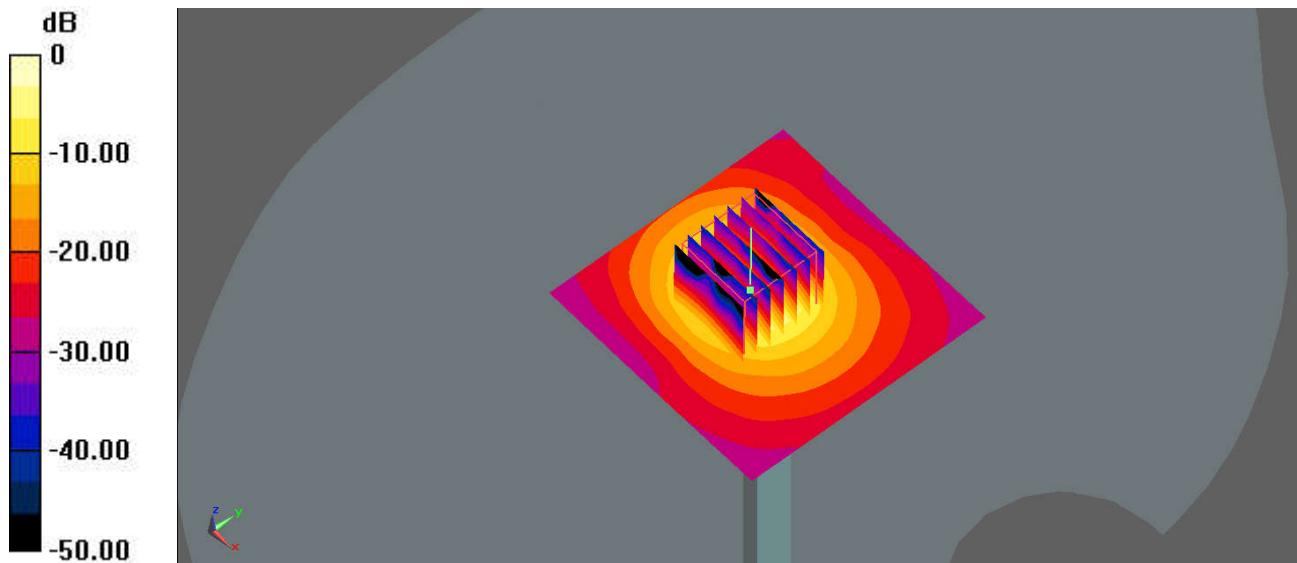
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(4.59, 4.59, 4.59); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 20.9 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 45.53 V/m; Power Drift = 0.05 dB  
Peak SAR (extrapolated) = 36.0 W/kg  
**SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.16 W/kg**  
Maximum value of SAR (measured) = 20.2 W/kg



0 dB = 20.9 W/kg

## #System Check\_Head\_5600MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL\_5600\_210707 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.189$  S/m;  $\epsilon_r = 36.13$ ;  $\rho = 1000$  kg/m<sup>3</sup>

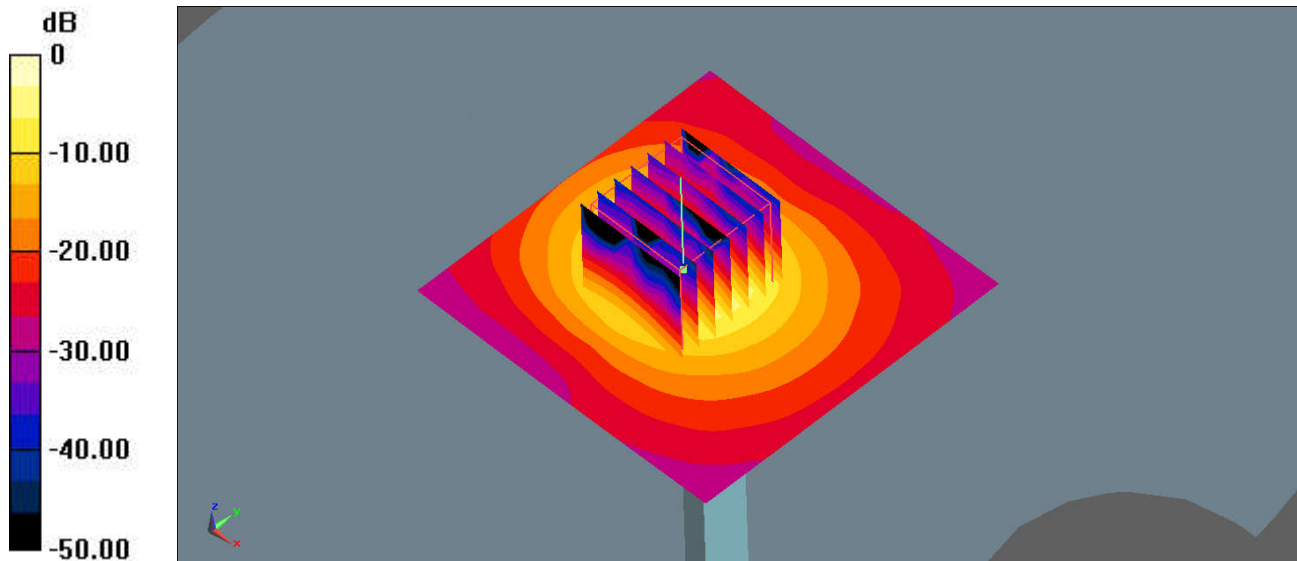
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(4.59, 4.59, 4.59); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 21.8 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 45.53 V/m; Power Drift = 0.05 dB  
Peak SAR (extrapolated) = 37.7 W/kg  
**SAR(1 g) = 8.31 W/kg; SAR(10 g) = 2.26 W/kg**  
Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg



## #System Check\_Head\_5750MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL\_5750\_210619 Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.119$  S/m;  $\epsilon_r = 35.497$ ;  $\rho = 1000$  kg/m<sup>3</sup>

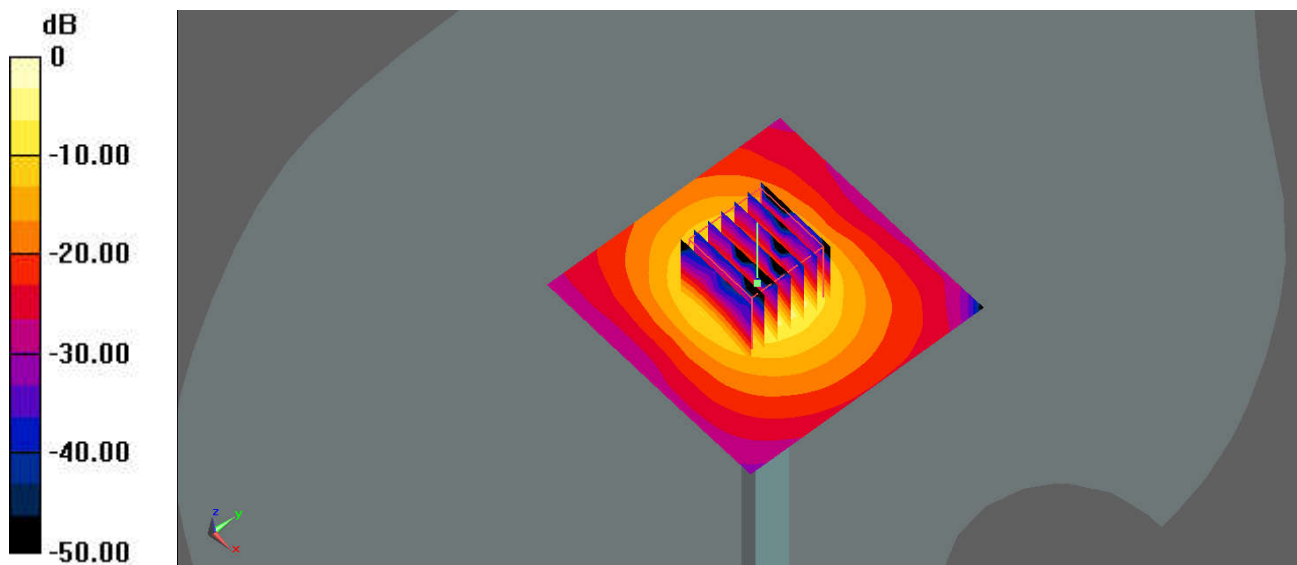
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(4.72, 4.72, 4.72); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 18.8 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 46.43 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 34.4 W/kg  
**SAR(1 g) = 7.37 W/kg; SAR(10 g) = 2.02 W/kg**  
Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 18.8 W/kg

## #System Check\_Head\_5750MHz

**DUT: D5GHzV2-SN:1167**

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL\_5750\_210710 Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.203$  S/m;  $\epsilon_r = 36.253$ ;  $\rho = 1000$  kg/m<sup>3</sup>

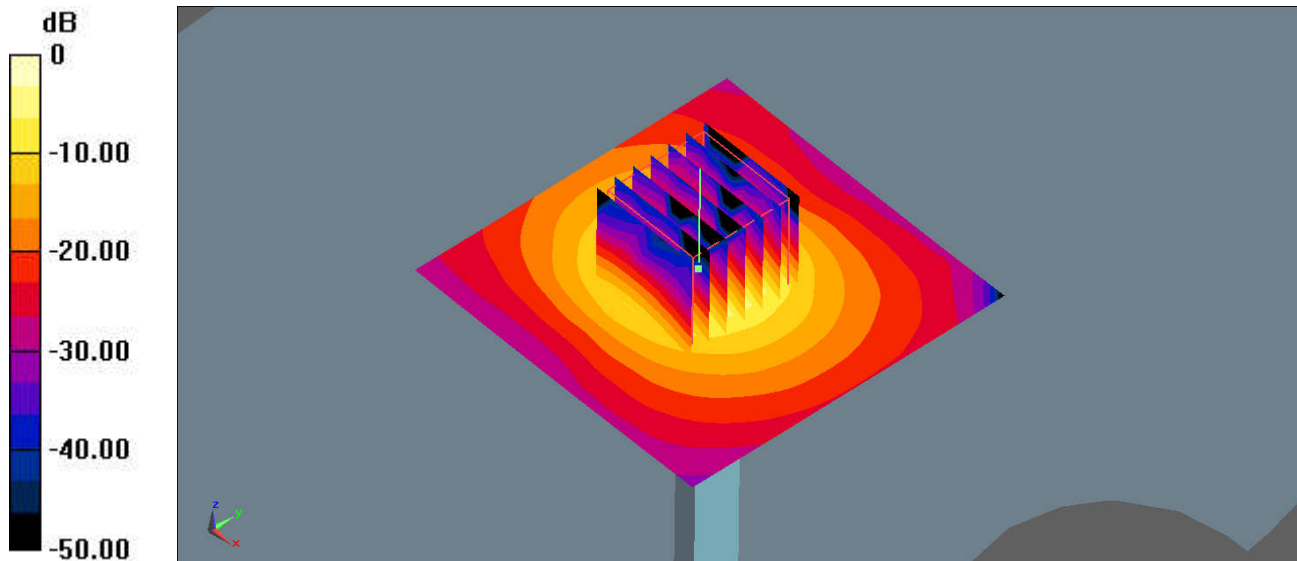
Ambient Temperature : 23.6 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(4.72, 4.72, 4.72); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 19.1 W/kg

**Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 46.43 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 34.9 W/kg  
**SAR(1 g) = 7.49 W/kg; SAR(10 g) = 2.05 W/kg**  
Maximum value of SAR (measured) = 19.3 W/kg



0 dB = 19.3 W/kg



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

The plots are shown as follows.

## 01\_GSM850\_GPRS (3 Tx slots)\_Right Cheek\_Ch128

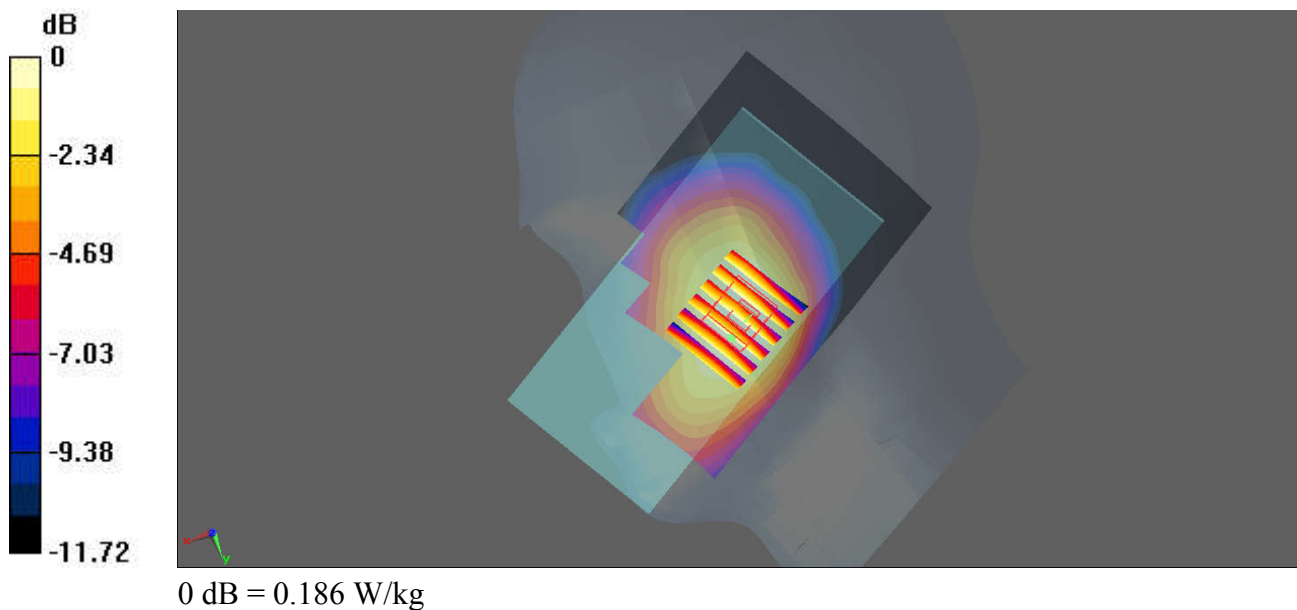
Communication System: UID 0, GPRS/EDGE11 (0); Frequency: 824.2 MHz; Duty Cycle: 1:2.77  
Medium: HSL\_835\_210621 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 42.786$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.4 °C

### DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch128/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.186 W/kg

**Ch128/Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.081 V/m; Power Drift = 0.07 dB  
Peak SAR (extrapolated) = 0.227 W/kg  
**SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.132 W/kg**  
Maximum value of SAR (measured) = 0.192 W/kg



## 02\_GSM1900\_GPRS (3 Tx slots)\_Left Cheek\_Ch512

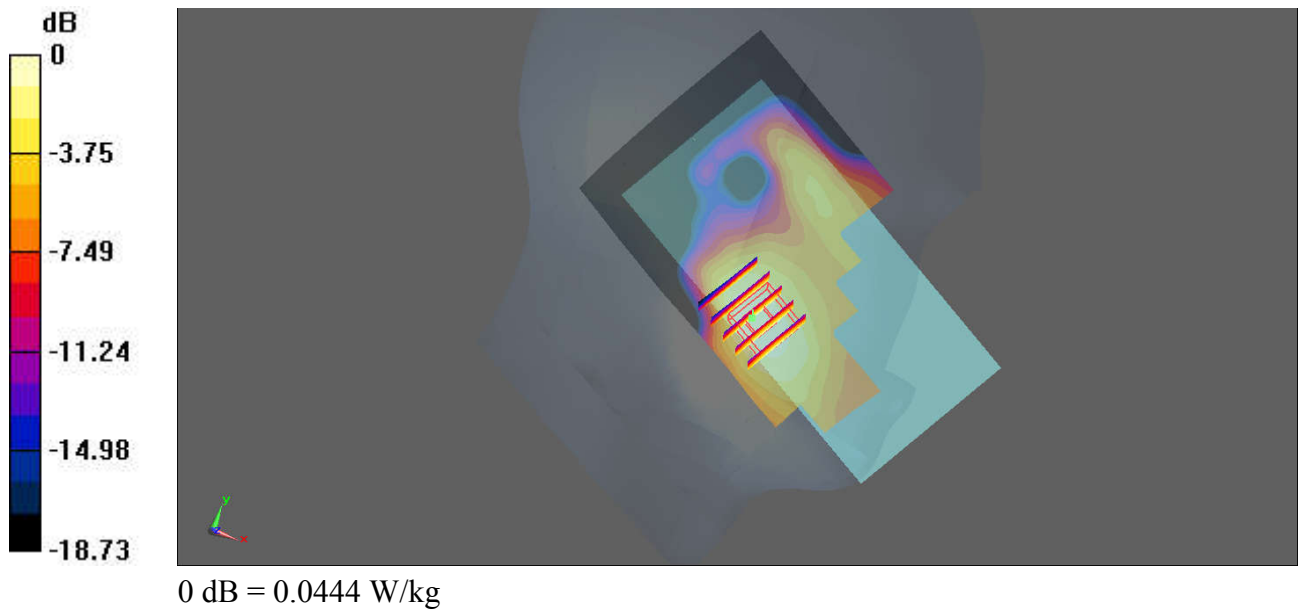
Communication System: UID 0, GPRS/EDGE11 (0); Frequency: 1850.2 MHz; Duty Cycle: 1:2.77  
Medium: HSL\_1900\_210623 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  S/m;  $\epsilon_r = 41.501$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.7 °C

### DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.32, 8.32, 8.32); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch512/Area Scan (71x101x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
Maximum value of SAR (interpolated) = 0.0444 W/kg

**Ch512/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
Reference Value = 0 V/m; Power Drift = 0.09 dB  
Peak SAR (extrapolated) = 0.0570 W/kg  
**SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.022 W/kg**  
Maximum value of SAR (measured) = 0.0419 W/kg



### 03\_WCDMA V\_RMC 12.2Kbps\_Left Cheek\_Ch4132

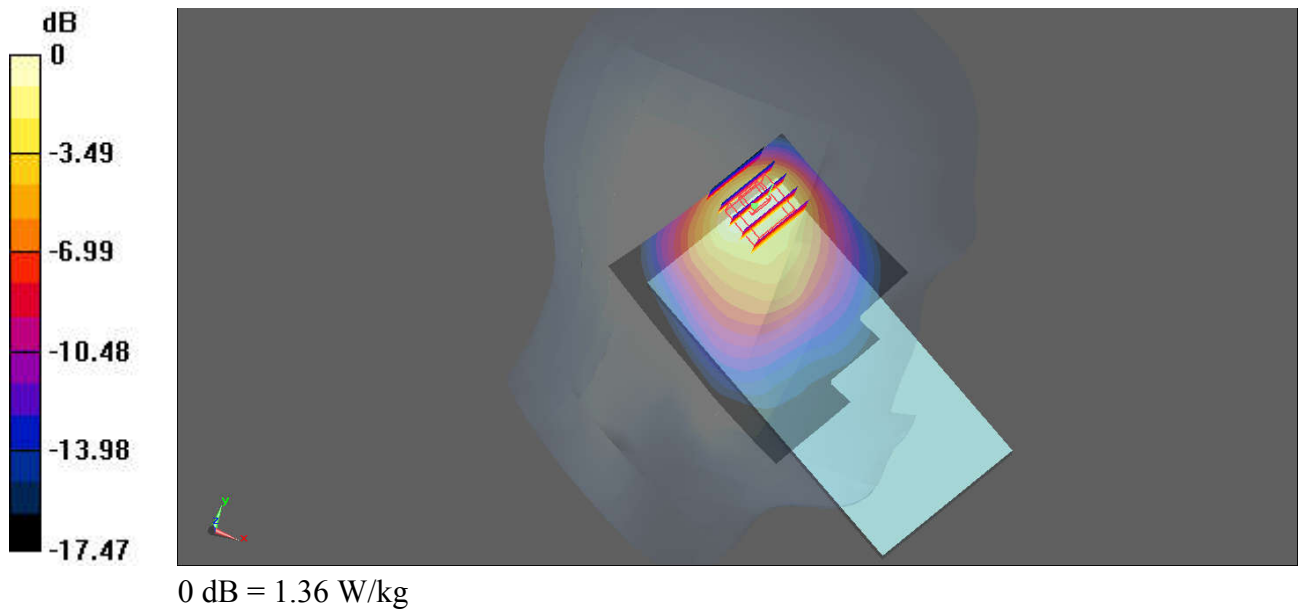
Communication System: UID 0, UMTS (0); Frequency: 826.4 MHz; Duty Cycle: 1:1  
Medium: HSL\_835\_210621 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 42.764$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.4 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch4132/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.96 W/kg

**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.32 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 2.16 W/kg  
**SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.482 W/kg**  
Maximum value of SAR (measured) = 1.36 W/kg



## 04\_WCDMA II\_RMC 12.2Kbps\_Left Tilted\_Ch9538

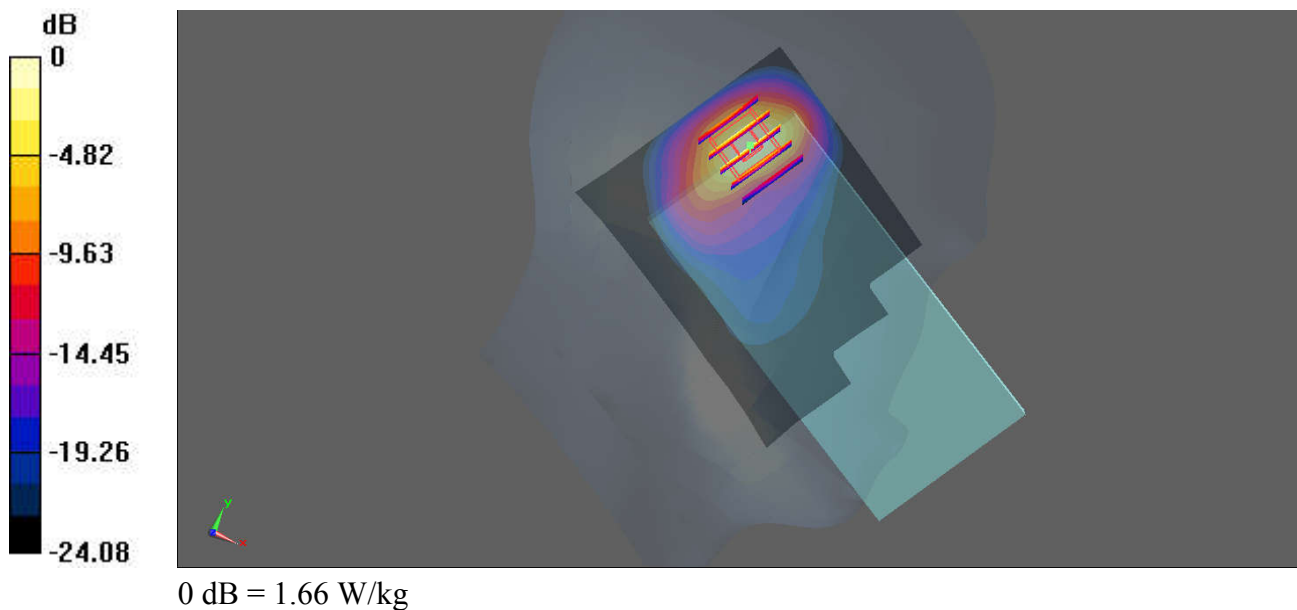
Communication System: UID 0, UMTS (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium: HSL\_1900\_210623 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.429$  S/m;  $\epsilon_r = 41.247$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.7 °C

### DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.32, 8.32, 8.32); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch9538/Area Scan (71x91x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.66 W/kg

**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.20 V/m; Power Drift = 0.09 dB  
Peak SAR (extrapolated) = 2.51 W/kg  
**SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.457 W/kg**  
Maximum value of SAR (measured) = 1.93 W/kg



### 05\_LTE Band 12\_10M\_QPSK\_1RB\_0Offset\_Left Cheek\_Ch23095

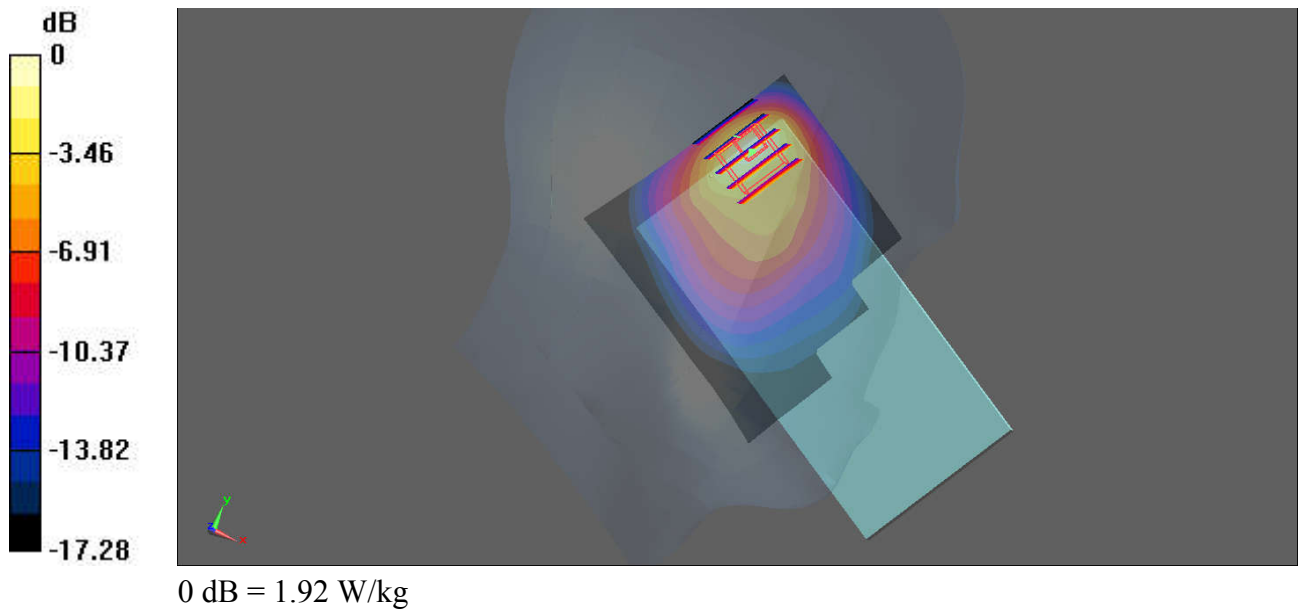
Communication System: UID 0, LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1  
Medium: HSL\_750\_210607 Medium parameters used:  $f = 707.5$  MHz;  $\sigma = 0.86$  S/m;  $\epsilon_r = 41.73$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.7 °C; Liquid Temperature : 22.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(10.23, 10.23, 10.23); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch23095/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.92 W/kg

**Ch23095/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 30.89 V/m; Power Drift = -0.12 dB  
Peak SAR (extrapolated) = 2.25 W/kg  
**SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.489 W/kg**  
Maximum value of SAR (measured) = 1.39 W/kg





## 06\_LTE Band 13\_10M\_QPSK\_1RB\_0Offset\_Left Cheek\_Ch23230

Communication System: UID 0, LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: HSL\_750\_210607 Medium parameters used:  $f = 782 \text{ MHz}$ ;  $\sigma = 0.902 \text{ S/m}$ ;  $\epsilon_r = 40.073$ ;  $\rho = 1000 \text{ kg/m}^3$

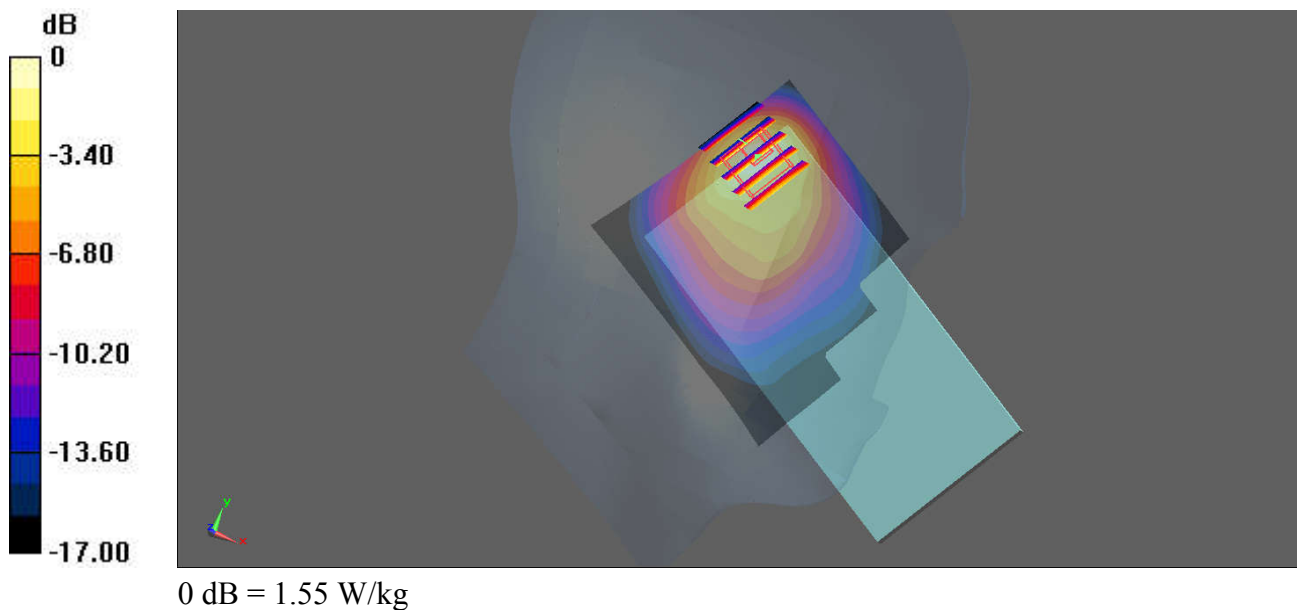
Ambient Temperature :  $23.7 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $22.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(10.23, 10.23, 10.23); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch23230/Area Scan (71x81x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) =  $1.55 \text{ W/kg}$

**Ch23230/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value =  $31.53 \text{ V/m}$ ; Power Drift =  $0.09 \text{ dB}$   
Peak SAR (extrapolated) =  $2.06 \text{ W/kg}$   
**SAR(1 g) =  $0.847 \text{ W/kg}$ ; SAR(10 g) =  $0.486 \text{ W/kg}$**   
Maximum value of SAR (measured) =  $1.38 \text{ W/kg}$



## 07\_LTE Band 5\_10M\_QPSK\_50RB\_0Offset\_Left Cheek\_Ch20525

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_210604 Medium parameters used:  $f = 836.5$  MHz;  $\sigma = 0.917$  S/m;  $\epsilon_r = 42.664$ ;  $\rho = 1000$  kg/m<sup>3</sup>

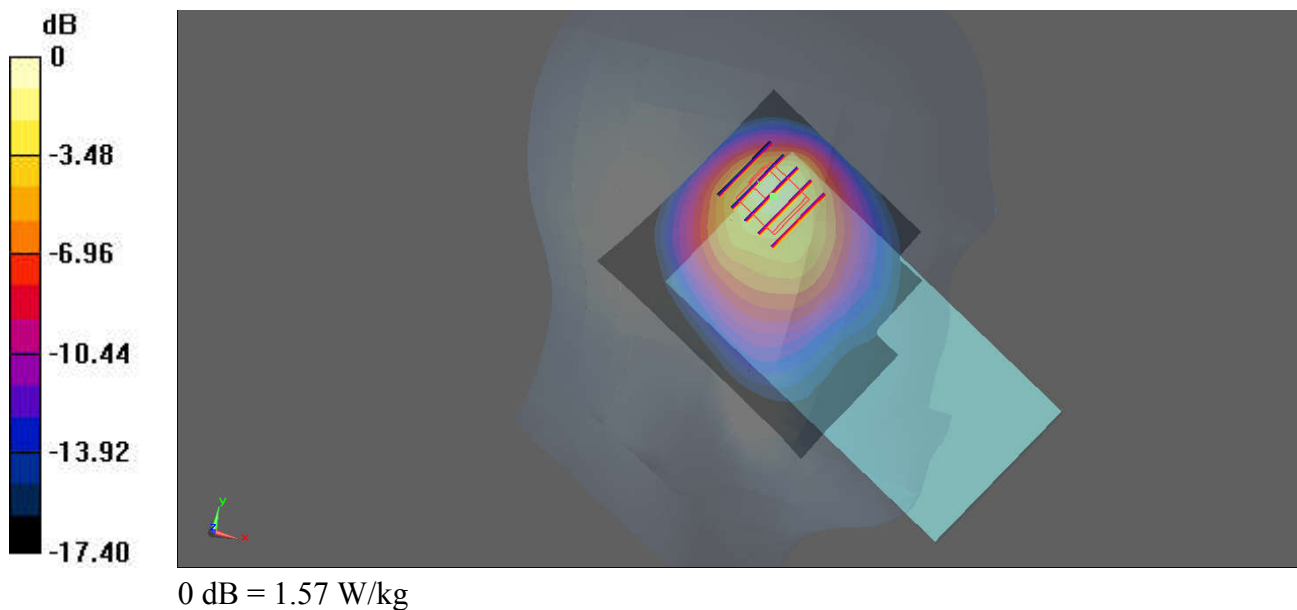
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch20525/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 1.15 W/kg

**Ch20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.15 V/m; Power Drift = -0.08 dB  
Peak SAR (extrapolated) = 2.21 W/kg  
**SAR(1 g) = 0.823 W/kg; SAR(10 g) = 0.453 W/kg**  
Maximum value of SAR (measured) = 1.57 W/kg



## 08\_LTE Band 66\_20M\_QPSK\_1RB\_0Offset\_Left Tilted\_Ch132572

Communication System: UID 0, LTE (0); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: HSL\_1750\_210617 Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.423$  S/m;  $\epsilon_r = 40.013$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(8.6, 8.6, 8.6); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1386; Calibrated: 2021/1/13
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP-1671
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Ch132572/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.971 W/kg

**Ch132572/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 0.8310 V/m; Power Drift = 0.08 dB  
Peak SAR (extrapolated) = 1.78 W/kg  
**SAR(1 g) = 0.828 W/kg; SAR(10 g) = 0.362 W/kg**  
Maximum value of SAR (measured) = 1.16 W/kg

