15.4 Product Specific SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	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)
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 3	Reduced	1413	1732.6	21.29	22.00	1.178	-	-	0.04	1.780	2.096
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 3	Reduced	1312	1712.4	21.15	22.00	1.216	-	-	0.06	1.700	2.068
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 3	Reduced	1513	1752.6	21.22	22.00	1.197	-	-	0.02	1.730	2.070
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 3	Reduced	1413	1732.6	21.29	22.00	1.178	-	-	0.12	1.870	2.202
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 3	Reduced	1312	1712.4	21.15	22.00	1.216	-	-	-0.1	1.810	2.201
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 3	Reduced	1513	1752.6	21.22	22.00	1.197	-	-	0.02	1.820	2.178
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 4	Full	1413	1732.6	23.26	24.00	1.186	-	-	0.01	1.130	1.340
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 4	Full	1413	1732.6	23.26	24.00	1.186	-	-	0.08	1.290	1.530
93	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	1413	1732.6	23.92	24.50	1.143	-	-	0.03	2.260	**2.583**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	1312	1712.4	23.82	24.50	1.169	-	-	0.01	2.110	2.468
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	1513	1752.6	23.90	24.50	1.148	-	-	0.1	2.210	2.537
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	15mm	Ant 2	DSI 4	Full	1413	1732.6	24.39	25.00	1.151	-	-	-0.12	0.404	0.465
	LTE Band 4	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	21.14	22.50	1.368	-	-	-0.12	1.610	2.202
	LTE Band 4	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	21.14	22.50	1.368	-	-	0.1	1.680	2.298
	LTE Band 4	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 4	Full	20175	1732.5	23.54	25.00	1.400	-	-	0.09	1.220	1.707
	LTE Band 4	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 4	Full	20175	1732.5	23.54	25.00	1.400	-	-	0.14	1.380	1.931
	LTE Band 4	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	20.95	22.50	1.429	-	-	0.01	1.530	2.186
	LTE Band 4	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	20.95	22.50	1.429	-	-	0.09	1.560	2.229
	LTE Band 4	20M	QPSK	100	0	-	Back	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	20.86	22.50	1.459	-	-	-0.08	1.480	2.159
	LTE Band 4	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	20.86	22.50	1.459	-	-	0.05	1.510	2.203
	LTE Band 4	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	20175	1732.5	21.65	23.00	1.365	-	-	0.05	1.610	2.197
	LTE Band 4	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	20175	1732.5	23.66	25.00	1.361	-	-	0.09	0.874	1.190
	LTE Band 4	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	20175	1732.5	21.57	23.00	1.390	-	-	0.05	1.620	2.252
	LTE Band 4	20M	QPSK	50	0	-	Left Side	5mm	Ant 3	DSI 4	Full	20175	1732.5	22.53	24.00	1.403	-	-	-0.06	0.816	1.145
	LTE Band 4	20M	QPSK	100	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	20175	1732.5	21.49	23.00	1.416	-	-	0.02	1.570	2.223
94	LTE Band 4	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	22.08	23.00	1.236	-	-	0.05	1.990	**2.460**
	LTE Band 4	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	22.08	23.00	1.236	-	-	-0.11	1.180	1.458
	LTE Band 4	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	Full	20175	1732.5	24.63	25.50	1.222	-	-	-0.05	0.261	0.319
	LTE Band 4	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	20175	1732.5	24.63	25.50	1.222	-	-	0.01	0.412	0.503
	LTE Band 4	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	22.06	23.00	1.242	-	-	-0.01	1.840	2.285
	LTE Band 4	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	22.06	23.00	1.242	-	-	-0.02	1.130	1.403
	LTE Band 4	20M	QPSK	100	0	-	Back	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	22.00	23.00	1.259	-	-	0.03	1.870	2.354
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	20.20	21.50	1.349	-	-	-0.16	1.370	1.848
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 4	Full	132322	1745	22.75	24.00	1.334	-	-	0.01	0.920	1.227
95	LTE Band 66	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	19.98	21.50	1.419	-	-	-0.11	1.370	**1.944**
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 4	Full	132322	1745	21.71	23.00	1.346	-	-	0.06	0.833	1.121
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	132322	1745	21.06	22.50	1.393	-	-	0.14	1.290	1.797
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	132322	1745	23.04	24.50	1.400	-	-	0.07	0.886	1.240
	LTE Band 66	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	132322	1745	20.97	22.50	1.422	-	-	0.04	1.230	1.749
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	132322	1745	22.98	24.00	1.265	-	-	-0.13	1.440	1.821
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	132322	1745	23.54	24.50	1.247	-	-	0.02	0.341	0.425
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	132322	1745	22.62	23.50	1.225	-	-	-0.12	1.400	1.714
	N66	40M	BPSK	1	1	DFT-15	Back	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.46	22.00	1.426	-	-	0.02	1.630	2.324
	N66	40M	BPSK	1	1	DFT-15	Top Side	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.46	22.00	1.426	-	-	-0.04	1.680	2.395
	N66	40M	BPSK	1	1	DFT-15	Back	5mm	Ant 1	DSI 4	Full	349000	1745	22.46	24.00	1.426	-	-	0.06	0.971	1.384
	N66	40M	BPSK	1	1	DFT-15	Top Side	5mm	Ant 1	DSI 4	Full	349000	1745	22.46	24.00	1.426	-	-	0.13	1.190	1.696
	N66	40M	BPSK	108	54	DFT-15	Back	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.40	22.00	1.445	-	-	-0.07	1.660	2.399
96	N66	40M	BPSK	108	54	DFT-15	Top Side	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.40	22.00	1.445	-	-	0.01	1.720	**2.486**
	N66	40M	BPSK	108	54	DFT-15	Back	5mm	Ant 1	DSI 4	Full	349000	1745	22.41	24.00	1.442	-	-	0.16	0.962	1.387
	N66	40M	BPSK	108	54	DFT-15	Top Side	5mm	Ant 1	DSI 4	Full	349000	1745	22.41	24.00	1.442	-	-	0.08	1.150	1.658

	N66	40M	BPSK	216	0	DFT-15	Back	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.27	22.00	1.489	-	-	0.01	1.480	2.204
	N66	40M	BPSK	216	0	DFT-15	Top Side	0mm	Ant 1	DSI 3	Reduced	349000	1745	20.27	22.00	1.489	-	-	0.01	1.610	2.398
	N66	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Full	349000	1745	23.81	24.50	1.172	-	-	-0.06	1.610	1.887
	N66	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Full	349000	1745	23.79	24.50	1.178	-	-	-0.16	1.630	1.919
1900MHz																					
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 3	Reduced	9400	1880	20.27	21.00	1.183	-	-	0.04	1.650	1.952
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 3	Reduced	9400	1880	20.27	21.00	1.183	-	-	0.04	1.030	1.219
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 4	Reduced	9400	1880	22.79	23.50	1.178	-	-	0.11	1.190	1.401
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 4	Reduced	9400	1880	22.79	23.50	1.178	-	-	0.04	0.951	1.120
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	9400	1880	22.71	23.00	1.069	-	-	-0.07	1.930	2.063
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	9262	1852.4	22.54	23.00	1.112	-	-	-0.07	1.820	2.023
97	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	9538	1907.6	22.70	23.00	1.072	-	-	0.03	2.090	**2.239**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	15mm	Ant 2	DSI 4	Full	9538	1907.6	24.66	25.00	1.081	-	-	-0.1	0.448	0.484
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18900	1880	22.76	24.00	1.330	-	-	0.15	1.530	2.036
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18700	1860	22.71	24.00	1.346	-	-	0.12	1.540	2.073
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	19100	1900	22.72	24.00	1.343	-	-	-0.09	1.450	1.947
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	18700	1860	24.19	25.50	1.352	-	-	-0.08	0.910	1.230
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18900	1880	22.69	24.00	1.352	-	-	-0.12	1.560	2.109
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18700	1860	22.63	24.00	1.371	-	-	0.15	1.610	2.207
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	19100	1900	22.62	24.00	1.374	-	-	0.08	1.520	2.089
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 3	DSI 4	Full	18700	1860	23.29	24.50	1.321	-	-	-0.1	0.849	1.122
	LTE Band 2	20M	QPSK	100	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18900	1880	22.62	24.00	1.374	-	-	-0.07	1.530	2.102
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	18900	1880	24.48	25.50	1.265	-	-	-0.12	1.900	2.403
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	18700	1860	24.47	25.50	1.268	-	-	0.05	1.440	1.825
98	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	19100	1900	24.45	25.50	1.274	-	-	-0.05	2.000	**2.547**
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	18900	1880	23.27	24.50	1.327	-	-	0.13	1.570	2.084
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	18700	1860	23.21	24.50	1.346	-	-	-0.04	1.480	1.992
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	19100	1900	23.08	24.50	1.387	-	-	0.03	1.690	2.344
	LTE Band 2	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	DSI 3	Full	18900	1880	23.13	24.50	1.371	-	-	-0.07	1.620	2.221
99	LTE Band 25	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	26340	1880	21.63	23.00	1.371	-	-	0.13	1.380	**1.892**
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	26340	1880	24.08	25.50	1.387	-	-	0.1	0.975	1.352
	LTE Band 25	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	26340	1880	21.60	23.00	1.380	-	-	0.15	1.300	1.794
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	26340	1880	21.52	22.50	1.253	-	-	-0.09	1.010	1.266
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	26340	1880	24.50	25.50	1.259	-	-	-0.05	0.321	0.404
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	26340	1880	21.44	22.50	1.276	-	-	0.16	1.090	1.391
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	26340	1880	23.35	24.50	1.303	-	-	-0.07	0.266	0.347
2600MHz																					
100	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	21100	2535	21.78	22.50	1.180	-	-	0.16	1.030	**1.216**
	LTE Band 7C	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	21100 +20902	2535 +2515.2	21.67	22.50	1.211	-	-	-0.16	0.920	1.114
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	21100	2535	24.73	25.50	1.194	-	-	0.01	0.294	0.351
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	21100	2535	21.73	22.50	1.194	-	-	-0.06	0.980	1.170
	N7	40M	BPSK	1	1	DFT-15	Back	0mm	Ant 2	DSI 3	Reduced	507000	2535	21.34	22.00	1.164	-	-	-0.04	1.670	1.944
	N7	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	507000	2535	21.34	22.00	1.164	-	-	0.08	1.030	1.199
	N7	40M	BPSK	1	1	DFT-15	Back	15mm	Ant 2	DSI 4	Full	507000	2535	24.33	25.50	1.309	-	-	-0.09	0.268	0.351
	N7	40M	BPSK	1	1	DFT-15	Bottom Side	15mm	Ant 2	DSI 4	Full	507000	2535	24.33	25.50	1.309	-	-	-0.1	0.296	0.388
101	N7	40M	BPSK	108	54	DFT-15	Back	0mm	Ant 2	DSI 3	Reduced	507000	2535	21.25	22.00	1.189	-	-	0.11	1.830	**2.175**
	N7	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	507000	2535	21.25	22.00	1.189	-	-	0.05	1.030	1.224
	N7	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 2	DSI 4	Full	507000	2535	24.27	25.50	1.327	-	-	0.02	0.266	0.353
	N7	40M	BPSK	108	54	DFT-15	Bottom Side	15mm	Ant 2	DSI 4	Full	507000	2535	24.27	25.50	1.327	-	-	0.05	0.303	0.402
	N7	40M	BPSK	216	0	DFT-15	Back	0mm	Ant 2	DSI 3	Reduced	507000	2535	21.17	22.00	1.211	-	-	-0.06	1.630	1.973
102	N41	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	Ant 2	DSI 3	Reduced	518598	2592.99	21.25	22.00	1.189	-	-	-0.13	1.140	**1.355**
	N41	100M	BPSK	1	1	DFT-30	Bottom Side	15mm	Ant 2	DSI 4	Full	518598	2592.99	24.25	25.00	1.189	-	-	-0.05	0.277	0.329
	N41	100M	BPSK	135	69	DFT-30	Bottom Side	0mm	Ant 2	DSI 3	Reduced	518598	2592.99	21.02	22.00	1.253	-	-	-0.1	0.918	1.150
3500-3900MHz																					
	LTE Band 42	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42590	3500	20.01	21.20	1.315	62.9	1.006	-0.05	1.400	1.852
	LTE Band 42	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42190	3460	19.90	21.20	1.349	62.9	1.006	0.08	1.210	1.642

	LTE Band 42	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42990	3540	19.87	21.20	1.358	62.9	1.006	0.05	1.290	1.763
	LTE Band 42	20M	QPSK	1	0	-	Top Side	5mm	Ant 5	DSI 4	Full	42590	3500	24.45	25.70	1.334	62.9	1.006	0.01	0.807	1.083
	LTE Band 42	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42590	3500	20.00	21.20	1.318	62.9	1.006	-0.04	1.420	1.883
	LTE Band 42	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42190	3460	19.82	21.20	1.374	62.9	1.006	0.02	1.280	1.769
	LTE Band 42	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42990	3540	19.83	21.20	1.371	62.9	1.006	-0.07	1.310	1.807
	LTE Band 42	20M	QPSK	50	0	-	Top Side	5mm	Ant 5	DSI 4	Full	42590	3500	23.42	24.70	1.343	62.9	1.006	0.11	0.679	0.917
	LTE Band 42	20M	QPSK	100	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	42590	3500	19.98	21.20	1.324	62.9	1.006	-0.01	1.370	1.825
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42590	3500	20.08	21.50	1.387	62.9	1.006	0.03	1.350	1.883
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42190	3460	20.02	21.50	1.406	62.9	1.006	-0.06	1.210	1.712
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42990	3540	19.96	21.50	1.426	62.9	1.006	0.12	1.170	1.678
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	DSI 4	Full	42590	3500	23.57	25.00	1.390	62.9	1.006	0.01	0.920	1.286
103	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42590	3500	20.07	21.50	1.390	62.9	1.006	0.01	1.430	**2.000**
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42190	3460	19.96	21.50	1.426	62.9	1.006	-0.15	1.290	1.850
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42990	3540	19.92	21.50	1.439	62.9	1.006	-0.08	1.220	1.766
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	DSI 4	Full	42590	3500	22.50	24.00	1.413	62.9	1.006	-0.15	1.100	1.563
	LTE Band 42	20M	QPSK	100	0	-	Back	0mm	Ant 7	DSI 3	Reduced	42590	3500	20.02	21.50	1.406	62.9	1.006	0.03	1.320	1.867
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	55830	3609	20.57	22.00	1.390	62.9	1.006	0.03	1.670	2.335
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	55340	3560	20.53	22.00	1.403	62.9	1.006	-0.05	1.610	2.272
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	56150	3641	20.55	22.00	1.396	62.9	1.006	-0.05	1.510	2.121
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	56640	3690	20.47	22.00	1.422	62.9	1.006	0.16	1.540	2.204
	LTE Band 48	20M	QPSK	1	0	-	Top Side	5mm	Ant 5	DSI 4	Full	55830	3609	24.04	25.50	1.400	62.9	1.006	0.15	0.615	0.866
104	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	55830	3609	20.56	22.00	1.393	62.9	1.006	0.03	1.740	**2.439**
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	55340	3560	20.54	22.00	1.400	62.9	1.006	0.07	1.670	2.351
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	56150	3641	20.54	22.00	1.400	62.9	1.006	-0.04	1.590	2.239
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	56640	3690	20.45	22.00	1.429	62.9	1.006	0.04	1.630	2.343
	LTE Band 48	20M	QPSK	50	0	-	Top Side	5mm	Ant 5	DSI 4	Full	55830	3609	22.96	24.50	1.426	62.9	1.006	0.12	0.774	1.110
	LTE Band 48	20M	QPSK	100	0	-	Top Side	0mm	Ant 5	DSI 3	Reduced	55830	3609	20.55	22.00	1.396	62.9	1.006	0.07	1.650	2.318
	LTE Band 48	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	55830	3609	19.75	21.00	1.334	62.9	1.006	-0.11	1.330	1.784
	LTE Band 48	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	55340	3560	19.74	21.00	1.337	62.9	1.006	0.04	1.400	1.882
	LTE Band 48	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	56150	3641	19.62	21.00	1.374	62.9	1.006	0.07	1.280	1.769
	LTE Band 48	20M	QPSK	1	0	-	Back	0mm	Ant 7	DSI 3	Reduced	56640	3690	19.36	21.00	1.459	62.9	1.006	0.15	1.180	1.732
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant 7	DSI 4	Full	55340	3560	23.22	24.50	1.343	62.9	1.006	0.09	0.978	1.321
	LTE Band 48	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	55830	3609	19.74	21.00	1.337	62.9	1.006	-0.03	1.370	1.842
	LTE Band 48	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	55340	3560	19.60	21.00	1.380	62.9	1.006	0.12	1.660	2.305
	LTE Band 48	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	56150	3641	19.71	21.00	1.346	62.9	1.006	-0.04	1.310	1.774
	LTE Band 48	20M	QPSK	50	0	-	Back	0mm	Ant 7	DSI 3	Reduced	56640	3690	19.72	21.00	1.343	62.9	1.006	-0.01	1.220	1.648
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant 7	DSI 4	Full	55340	3560	22.22	23.50	1.343	62.9	1.006	0.04	1.180	1.594
	LTE Band 48	20M	QPSK	100	0	-	Back	0mm	Ant 7	DSI 3	Reduced	55830	3609	19.73	21.00	1.340	62.9	1.006	-0.16	1.270	1.712
	N77	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	17.85	19.20	1.365	-	-	-0.11	1.650	2.252
	N77	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	633334	3500.01	24.34	25.70	1.368	-	-	0.09	1.450	1.983
	N77	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	17.80	19.20	1.380	-	-	-0.04	1.570	2.167
	N77	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	633334	3500.01	24.28	25.70	1.387	-	-	0.06	1.400	1.941
	N77	100M	BPSK	270	0	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	17.58	19.20	1.452	-	-	-0.14	1.450	2.106
	N77	100M	BPSK	270	0	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	633334	3500.01	23.77	25.20	1.390	-	-	0.08	1.350	1.876
	N77	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	656000	3840	17.55	19.20	1.462	-	-	0.07	1.270	1.857
	N77	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	656000	3840	24.03	25.70	1.469	-	-	0.13	1.210	1.777
	N77	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	656000	3840	17.48	19.20	1.486	-	-	0.01	1.320	1.961
	N77	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	656000	3840	23.97	25.70	1.489	-	-	-0.03	1.230	1.832
	N77	100M	BPSK	270	0	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	656000	3840	17.45	19.20	1.496	-	-	0.14	1.220	1.825
	N77	100M	BPSK	270	0	DFT-30	Top Side	5mm	Ant 5	DSI 4	Full	656000	3840	23.40	25.20	1.514	-	-	0.08	1.160	1.756
105	N77	100M	BPSK	1	1	DFT-30	Right Side	0mm	Ant 6	DSI 4	Reduced	656000	3840	18.60	20.00	1.380	-	-	-0.05	1.810	**2.498**
	N77	100M	BPSK	135	69	DFT-30	Right Side	0mm	Ant 6	DSI 4	Reduced	656000	3840	18.55	20.00	1.396	-	-	-0.11	1.620	2.262
	N77	100M	BPSK	270	0	DFT-30	Right Side	0mm	Ant 6	DSI 4	Reduced	656000	3840	18.50	20.00	1.413	-	-	0.13	1.550	2.189
	N77	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	656000	3840	15.03	16.50	1.403	-	-	0.13	1.190	1.669
	N77	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	656000	3840	19.05	20.50	1.396	-	-	-0.11	1.720	2.402
	N77	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	656000	3840	15.02	16.50	1.406	-	-	0.09	1.040	1.462
	N77	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	656000	3840	19.03	20.50	1.403	-	-	-0.02	1.650	2.315

	N77	100M	BPSK	270	0	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	656000	3840	15.01	16.50	1.409	-	-	-0.13	1.000	1.409
	N77	100M	BPSK	270	0	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	656000	3840	19.02	20.50	1.406	-	-	0.09	1.660	2.334
	N78	100M	BPSK	1	1	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	633334	3500.01	19.20	21.00	1.514	-	-	0.05	1.210	1.831
	N78	100M	BPSK	1	1	DFT-30	Left Side	5mm	Ant 4	DSI 4	Full	633334	3500.01	24.69	26.50	1.517	-	-	0.04	0.699	1.060
	N78	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	633334	3500.01	19.02	21.00	1.578	-	-	0.03	1.240	1.956
	N78	100M	BPSK	135	69	DFT-30	Left Side	5mm	Ant 4	DSI 4	Full	633334	3500.01	24.55	26.50	1.567	-	-	0.09	0.708	1.109
	N78	100M	BPSK	270	0	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	633334	3500.01	19.00	21.00	1.585	-	-	-0.06	1.120	1.775
	N78	100M	BPSK	1	1	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	650000	3750	19.08	21.00	1.556	-	-	0.12	1.140	1.774
	N78	100M	BPSK	1	1	DFT-30	Left Side	5mm	Ant 4	DSI 4	Full	650000	3750	24.59	26.50	1.552	-	-	0.02	0.806	1.251
	N78	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	650000	3750	19.05	21.00	1.567	-	-	0.02	1.110	1.739
	N78	100M	BPSK	135	69	DFT-30	Left Side	5mm	Ant 4	DSI 4	Full	650000	3750	24.58	26.50	1.556	-	-	-0.07	0.789	1.228
	N78	100M	BPSK	270	0	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	650000	3750	19.00	21.00	1.585	-	-	-0.13	1.050	1.664
	N78	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.64	18.00	1.368	-	-	0.07	0.315	0.431
	N78	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.64	18.00	1.368	-	-	-0.06	1.040	1.422
	N78	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.63	27.00	1.371	-	-	-0.01	1.290	1.768
106	N78	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.63	27.00	1.371	-	-	-0.09	1.870	**2.564**
	N78	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.54	18.00	1.400	-	-	-0.15	0.300	0.420
	N78	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.54	18.00	1.400	-	-	-0.08	1.000	1.400
	N78	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.61	27.00	1.377	-	-	-0.09	1.200	1.653
	N78	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.61	27.00	1.377	-	-	0.07	1.810	2.493
	N78	100M	BPSK	270	0	DFT-30	Back	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.57	27.00	1.390	-	-	-0.09	1.150	1.598
	N78	100M	BPSK	270	0	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	25.57	27.00	1.390	-	-	0.02	1.760	2.446
	N78	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.65	18.00	1.365	-	-	0.14	0.150	0.205
	N78	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.65	18.00	1.365	-	-	0.11	0.923	1.260
	N78	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 5	DSI 4	Reduced	650000	3750	25.68	27.00	1.355	-	-	-0.01	0.788	1.068
	N78	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	650000	3750	25.68	27.00	1.355	-	-	0.09	1.350	1.830
	N78	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.63	18.00	1.371	-	-	0.09	0.134	0.184
	N78	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.63	18.00	1.371	-	-	0.03	1.010	1.385
	N78	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 5	DSI 4	Reduced	650000	3750	25.57	27.00	1.390	-	-	0.12	0.792	1.101
	N78	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	650000	3750	25.57	27.00	1.390	-	-	-0.06	1.390	1.932
	N78	100M	BPSK	270	0	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	650000	3750	25.51	27.00	1.409	-	-	-0.06	1.270	1.790
	N78	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	633334	3500.01	16.60	18.00	1.380	-	-	-0.01	0.700	0.966
	N78	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	633334	3500.01	21.12	22.50	1.374	-	-	-0.07	0.967	1.329
	N78	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	633334	3500.01	16.56	18.00	1.393	-	-	-0.11	0.735	1.024
	N78	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	633334	3500.01	21.05	22.50	1.396	-	-	-0.08	0.980	1.368
	N78	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	650000	3750	16.31	18.00	1.476	-	-	0.08	0.984	1.452
	N78	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	650000	3750	20.81	22.50	1.476	-	-	0.03	1.630	2.405
	N78	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	650000	3750	16.23	18.00	1.503	-	-	0.09	1.070	1.608
	N78	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	650000	3750	20.76	22.50	1.493	-	-	-0.14	1.670	2.493
	N78	100M	BPSK	270	0	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	650000	3750	20.67	22.50	1.524	-	-	0.05	1.570	2.393

DL CA / Inter-band CA & EN-DC LTE Main PA

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	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)
1750MHz																			
	LTE Band 4_Main PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	20175	1732.5	19.21	20.50	1.346	-0.06	0.905	1.218
	LTE Band 4_Main PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	20175	1732.5	23.66	25.00	1.361	0.09	0.874	1.190
	LTE Band 4_Main PA	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	20175	1732.5	19.19	20.50	1.352	-0.07	0.911	1.232
	LTE Band 4_Main PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	19.16	20.00	1.213	-0.16	0.591	0.717
	LTE Band 4_Main PA	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Reduced	20175	1732.5	23.66	24.50	1.213	0.02	0.367	0.445
	LTE Band 4_Main PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	20175	1732.5	19.12	20.00	1.225	-0.14	0.566	0.693
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	18.23	19.50	1.340	0.16	0.864	1.157
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 4	Reduced	132322	1745	22.30	23.50	1.318	0.04	0.820	1.081
	LTE Band 66_Main PA	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	18.15	19.50	1.365	-0.07	0.880	1.201
	LTE Band 66_Main PA	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 4	Reduced	132322	1745	21.76	23.00	1.330	0.08	0.742	0.987
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	132322	1745	19.58	21.00	1.387	0.02	0.913	1.266
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	132322	1745	23.04	24.50	1.400	0.07	0.886	1.240
	LTE Band 66_Main PA	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	132322	1745	19.46	21.00	1.426	0.15	0.871	1.242
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	132322	1745	22.06	23.00	1.242	-0.08	1.030	1.279
	LTE Band 66_Main PA	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	132322	1745	23.54	24.50	1.247	0.02	0.341	0.425
	LTE Band 66_Main PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	132322	1745	22.05	23.00	1.245	0.03	0.970	1.207
	N66_Main PA	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	349000	1745	21.95	22.50	1.135	0.13	1.010	1.146
	N66_Main PA	40M	BPSK	1	1	DFT-15	Bottom Side	15mm	Ant 2	DSI 4	Full	349000	1745	23.81	24.50	1.172	0.06	0.313	0.367
	N66_Main PA	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	349000	1745	21.88	22.50	1.153	-0.08	0.986	1.137
1900MHz																			
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18900	1880	20.26	21.50	1.330	-0.16	0.950	1.264
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	Full	18900	1880	24.26	25.50	1.330	0.06	0.897	1.193
	LTE Band 2_Main PA	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	Reduced	18900	1880	20.19	21.50	1.352	0.15	0.890	1.203
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	18900	1880	21.50	22.50	1.259	0.02	0.952	1.198
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Full	18900	1880	24.48	25.50	1.265	0.13	0.273	0.345
	LTE Band 2_Main PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	18900	1880	21.37	22.50	1.297	0.04	0.943	1.223
2600MHz																			
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	21100	2535	21.78	22.50	1.180	0.16	1.030	1.216
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Bottom Side	15mm	Ant 2	DSI 4	Reduced	21100	2535	24.22	25.00	1.197	0.01	0.274	0.328
	LTE Band 7_Main PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 3	Reduced	21100	2535	21.73	22.50	1.194	-0.06	0.980	1.170
	N7_Main PA	40M	BPSK	1	1	DFT-15	Back	0mm	Ant 2	DSI 3	Reduced	507000	2535	18.83	19.50	1.167	0.13	0.939	1.096
	N7_Main PA	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	507000	2535	18.83	19.50	1.167	0.05	0.579	0.676
	N7_Main PA	40M	BPSK	1	1	DFT-15	Back	15mm	Ant 2	DSI 4	Reduced	507000	2535	23.87	24.50	1.156	-0.08	0.268	0.310
	N7_Main PA	40M	BPSK	1	1	DFT-15	Bottom Side	15mm	Ant 2	DSI 4	Reduced	507000	2535	23.87	24.50	1.156	-0.11	0.296	0.342
	N7_Main PA	40M	BPSK	108	54	DFT-15	Back	0mm	Ant 2	DSI 3	Reduced	507000	2535	18.72	19.50	1.197	0.01	1.030	1.233
	N7_Main PA	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	Ant 2	DSI 3	Reduced	507000	2535	18.72	19.50	1.197	-0.03	0.583	0.698
	N7_Main PA	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 2	DSI 4	Reduced	507000	2535	23.83	24.50	1.167	-0.16	0.266	0.310
	N7_Main PA	40M	BPSK	108	54	DFT-15	Bottom Side	15mm	Ant 2	DSI 4	Reduced	507000	2535	23.83	24.50	1.167	0.09	0.303	0.354
	N41_Main PA	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	Ant 2	DSI 3	Reduced	518598	2592.99	20.77	21.50	1.183	-0.04	1.060	1.254
	N41_Main PA	100M	BPSK	1	1	DFT-30	Bottom Side	15mm	Ant 2	DSI 4	Reduced	518598	2592.99	23.75	24.50	1.189	0.08	0.277	0.329
	N41_Main PA	100M	BPSK	135	69	DFT-30	Bottom Side	0mm	Ant 2	DSI 3	Reduced	518598	2592.99	20.58	21.50	1.236	0.11	0.818	1.011
3500-3900MHz																			
	N78_Main PA	100M	BPSK	1	1	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	633334	3500.01	17.19	19.00	1.517	-0.15	0.763	1.158
	N78_Main PA	100M	BPSK	1	1	DFT-30	Left Side	5mm	Ant 4	DSI 4	Reduced	633334	3500.01	23.72	25.50	1.507	0.09	0.555	0.836
	N78_Main PA	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 4	DSI 3	Reduced	633334	3500.01	17.04	19.00	1.570	0.13	0.782	1.228
	N78_Main PA	100M	BPSK	135	69	DFT-30	Left Side	5mm	Ant 4	DSI 4	Reduced	633334	3500.01	23.60	25.50	1.549	0.09	0.562	0.870
	N78_Main PA	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.12	17.50	1.374	-0.08	0.927	1.274
	N78_Main PA	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	24.16	25.50	1.361	0.08	1.310	1.783
	N78_Main PA	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	633334	3500.01	16.02	17.50	1.406	0.14	0.891	1.253
	N78_Main PA	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	633334	3500.01	24.07	25.50	1.390	0.15	1.281	1.781
	N78_Main PA	100M	BPSK	1	1	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.17	17.50	1.358	0.06	0.823	1.118
	N78_Main PA	100M	BPSK	1	1	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	650000	3750	24.20	25.50	1.349	-0.13	0.956	1.290

	N78_Main PA	100M	BPSK	135	69	DFT-30	Top Side	0mm	Ant 5	DSI 3	Reduced	650000	3750	16.11	17.50	1.377	-0.07	0.900	1.239
	N78_Main PA	100M	BPSK	135	69	DFT-30	Top Side	5mm	Ant 5	DSI 4	Reduced	650000	3750	24.07	25.50	1.390	0.07	0.984	1.368
	N78_Main PA	100M	BPSK	1	1	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	650000	3750	15.32	17.00	1.472	-0.1	0.782	1.151
	N78_Main PA	100M	BPSK	1	1	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	650000	3750	17.82	19.50	1.472	0.15	0.763	1.123
	N78_Main PA	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 7	DSI 3	Reduced	650000	3750	15.23	17.00	1.503	0.1	0.850	1.278
	N78_Main PA	100M	BPSK	135	69	DFT-30	Back	5mm	Ant 7	DSI 4	Reduced	650000	3750	17.73	19.50	1.503	0.08	0.816	1.227

DL CA / Inter-Band CA & EN-DC LTE Other PA

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	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)
1750MHz																			
	LTE Band 4_Other PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	18.76	19.50	1.186	-0.03	0.923	1.094
	LTE Band 4_Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 4	Reduced	20175	1732.5	22.67	23.50	1.211	-0.09	0.893	1.081
	LTE Band 4_Other PA	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	20175	1732.5	18.75	19.50	1.189	-0.08	0.914	1.086
	LTE Band 66_Other PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	19.08	20.00	1.236	-0.03	0.981	1.212
	LTE Band 66_Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 4	Reduced	132322	1745	21.60	22.50	1.230	-0.16	0.833	1.025
	LTE Band 66_Other PA	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 3	Reduced	132322	1745	18.98	20.00	1.265	0.16	0.957	1.210
	N66_Other PA	40M	BPSK	1	1	DFT-15	Top Side	0mm	Ant 1	DSI 3	Reduced	349000	1745	18.60	19.50	1.230	0.08	0.951	1.170
	N66_Other PA	40M	BPSK	1	1	DFT-15	Top Side	5mm	Ant 1	DSI 4	Reduced	349000	1745	22.63	23.50	1.222	0.1	0.909	1.111
	N66_Other PA	40M	BPSK	108	54	DFT-15	Top Side	0mm	Ant 1	DSI 3	Reduced	349000	1745	18.58	19.50	1.236	0.03	0.969	1.198
	N66_Other PA	40M	BPSK	108	54	DFT-15	Top Side	5mm	Ant 1	DSI 4	Reduced	349000	1745	22.60	23.50	1.230	-0.05	0.937	1.153

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)
5000MHz																
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 17+18	Full	64	5320	22.16	23.50	1.361	99.31	1.007	-0.13	1.160	1.590
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 17+18	Full	64	5320	22.16	23.50	1.361	99.31	1.007	0.15	0.664	0.910
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 17+18	Full	64	5320	22.16	23.50	1.361	99.31	1.007	-0.01	0.097	0.133
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 17+18	Full	64	5320	22.16	23.50	1.361	99.31	1.007	0.15	1.610	2.207
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 17+18	Full	56	5280	22.14	23.50	1.368	99.31	1.007	0.16	1.720	2.369
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 17+18	Full	52	5260	22.13	23.50	1.371	99.31	1.007	-0.12	1.540	2.126
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 17+18	Full	64	5320	22.16	23.50	1.361	99.31	1.007	0.03	1.720	2.358
107	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 17+18	Full	56	5280	22.14	23.50	1.368	99.31	1.007	0.16	1.840	**2.534**
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 17+18	Full	52	5260	22.13	23.50	1.371	99.31	1.007	-0.12	1.710	2.361
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	0.08	0.564	0.836
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	0.06	0.320	0.474
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	-0.02	0.043	0.064
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	0.13	0.819	1.214
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	-0.02	0.890	1.320
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 17+18	Simultaneous	50	5250	18.82	20.50	1.472	99.3	1.007	0.09	0.156	0.231
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 17+18	Full	122	5610	20.19	21.50	1.352	99.12	1.009	0.05	0.727	0.992
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 17+18	Full	122	5610	20.19	21.50	1.352	99.12	1.009	-0.12	0.400	0.546
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 17+18	Full	122	5610	20.19	21.50	1.352	99.12	1.009	0.02	0.031	0.042
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Full	122	5610	20.19	21.50	1.352	99.12	1.009	0.01	1.560	2.128
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 17+18	Full	122	5610	20.19	21.50	1.352	99.12	1.009	-0.11	0.756	1.031
108	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Full	138	5690	19.65	21.50	1.531	99.12	1.009	-0.05	1.500	**2.317**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Full	106	5530	19.58	21.50	1.556	99.12	1.009	0.07	1.370	2.151
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	-0.11	0.456	0.590
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	0.04	0.251	0.325
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Side	0mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	-0.15	0.023	0.030
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	-0.12	0.990	1.281
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	-0.09	0.467	0.604
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Top Side	5mm	Ant 17+18	Simultaneous	114	5570	17.91	19.00	1.285	99.3	1.007	0.05	0.135	0.175
109	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Full	155	5775	19.67	21.50	1.524	99.12	1.009	-0.03	1.630	**2.507**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 17+18	Simultaneous	155	5775	13.71	15.50	1.510	99.12	1.009	0.08	0.391	0.596

15.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	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	N38	40M	BPSK	1	1	DFT-30	Right Cheek	0mm	Ant 3	DSI 1	Reduced	519000	2595	20.18	21.00	1.208	-	-	-0.09	0.841	1	1.016
2nd	N38	40M	BPSK	1	1	DFT-30	Right Cheek	0mm	Ant 3	DSI 1	Reduced	519000	2595	20.18	21.00	1.208	-	-	0.03	0.827	1.017	0.999
1st	N77	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 1	Reduced	633334	3500.01	19.87	21.00	1.297	-	-	0.09	0.825	1	1.070
2nd	N77	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	DSI 1	Reduced	633334	3500.01	19.87	21.00	1.297	-	-	0.02	0.801	1.030	1.039
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 16+18	-	Standalone	11	2462	19.49	20.50	1.262	100	1.000	0.11	0.805	1	1.016
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 16+18	-	Standalone	11	2462	19.49	20.50	1.262	100	1.000	0.01	0.795	1.013	1.003
1st	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+18	-	Standalone	114	5570	17.91	19.00	1.285	99.3	1.007	-0.06	0.816	1	1.056
2nd	WLAN5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+18	-	Standalone	114	5570	17.91	19.00	1.285	99.3	1.007	-0.12	0.811	1.006	1.050
1st	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	DSI 5	Reduced	132572	1770	21.98	23.00	1.265	-	-	0.01	0.865	1	1.094
2nd	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	DSI 5	Reduced	132572	1770	21.98	23.00	1.265	-	-	0.06	0.848	1.020	1.072
1st	WCDMA II					RMC 12.2Kbps	Bottom Side	10mm	Ant 2	DSI 5	Reduced	9400	1880	22.71	23.00	1.069	-	-	-0.04	1.010	1	1.080
2nd	WCDMA II					RMC 12.2Kbps	Bottom Side	10mm	Ant 2	DSI 5	Reduced	9400	1880	22.71	23.00	1.069	-	-	0.01	0.981	1.030	1.049

<10g>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	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 IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	1413	1732.6	23.92	24.50	1.143	0.03	2.260	1	2.583
2nd	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	1413	1732.6	23.92	24.50	1.143	0.13	2.230	1.013	2.549
1st	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	9538	1907.6	22.70	23.00	1.072	0.03	2.090	1	2.239
2nd	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 3	Reduced	9538	1907.6	22.70	23.00	1.072	0.13	2.040	1.025	2.186

General Note:

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

16. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product Specific
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
5.	WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes
6.	WWAN + Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
7.	WWAN + WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP) and LTE supports VoLTE operation.
2. WWAN above includes 5G NR bands and EN-DC combination.
3. 5G NR NSA EN-DC mode, standalone SAR performed for 5GNR band with the maximum power, EN-DC SAR summed 5GNR standalone SAR and LTE standalone SAR , the result of EN-DC SAR is more conservatively.
4. EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. This device 2.4GHz WLAN/ 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).
7. WLAN2.4GHz and Bluetooth share the same antenna, so can't transmit simultaneously.
8. According to the characteristic of EUT, WLAN5GHz and Bluetooth can transmit simultaneously.
9. According to the EUT character, WLAN 2.4GHz and WLAN 5GHz can transmit simultaneously.
10. For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
11. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
12. Chose the worst zoom scan SAR of WLAN correspondingly for co-located with WWAN analysis.
13. The reported SAR summation is calculated based on the same configuration and test position.
14. For standalone WWAN, always choose the highest SAR among all WWAN bands for each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each bands.
15. For Inter Band CA and EN-DC, always choose the highest SAR among same antenna of all WWAN bands to perform simultaneous transmission analysis with WLAN/BT. The worst co-located analysis and can represent each LTE/NR bands.
16. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
    ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
    iii) If SPLSR ≤ 0.04 for 1g SAR and SPLSR≤ 0.10 for 10g SAR , simultaneously transmission SAR measurement is not necessary.
    iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.

16.1 Head Exposure Conditions

WWAN Band	Exposure Position	1	5	8	9	10	1+5+8	1+8+9	1+8+10
		WWAN	WLAN2.4GHz _Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth _Ant 16	Bluetooth _Ant 18	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	Right Cheek	1.082	0.135	0.108	0.093	0.063	1.33	1.28	1.25
	Right Tilted	0.965	0.071	0.104	0.077	0.010	1.14	1.15	1.08
	Left Cheek	1.076	0.231	0.237	0.163	0.135	**1.54**	**1.48**	1.45
	Left Tilted	1.054	0.183	0.222	0.159	0.022	1.46	1.44	1.30

WWAN Band	Exposure Position	4	7	4+7
		WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DBS	Right Cheek	0.399	0.330	0.73
	Right Tilted	0.211	0.312	0.52
	Left Cheek	0.730	0.772	1.50
	Left Tilted	0.563	0.696	1.26

Inter-Band UL CA

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz _Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth _Ant 16	Bluetooth _Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Right Cheek	0.544	0.535	0.135	0.108	0.093	0.063	1.32	1.28	1.25
		Right Tilted	0.518	0.372	0.071	0.104	0.077	0.010	1.07	1.07	1.00
		Left Cheek	0.377	0.544	0.231	0.237	0.163	0.135	1.39	1.32	1.29
		Left Tilted	0.345	0.542	0.183	0.222	0.159	0.022	1.29	1.27	1.13

EN-DC

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz _Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth _Ant 16	Bluetooth _Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Right Cheek	0.540	0.540	0.135	0.108	0.093	0.063	1.32	1.28	1.25
		Right Tilted	0.536	0.518	0.071	0.104	0.077	0.010	1.23	1.24	1.17
		Left Cheek	0.478	0.544	0.231	0.237	0.163	0.135	1.49	1.42	1.39
		Left Tilted	0.309	0.542	0.183	0.222	0.159	0.022	1.26	1.23	1.10

16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	5	8	9	10	1+5+8	1+8+9	1+8+10
		WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	Front	0.633	0.101	0.181	0.134	0.188	0.92	0.95	1.00
	Back	1.014	0.134	0.227	0.157	0.144	1.38	1.40	1.39
	Left side	0.693	0.005	0.034	0.009	0.008	0.73	0.74	0.74
	Right side	0.544	0.228	0.221	0.072	0.264	0.99	0.84	1.03
	Top side	0.622	0.047	0.241	0.227	0.033	0.91	1.09	0.90
	Bottom side	1.094					1.09	1.09	1.09

WWAN Band	Exposure Position	4	7	4+7
		WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DBS	Front	0.101	0.181	0.28
	Back	0.134	0.227	0.36
	Left side	0.005	0.034	0.04
	Right side	0.228	0.221	0.45
	Top side	0.047	0.241	0.29
	Bottom side			0.00

Inter-Band UL CA

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Front	0.466	0.329	0.101	0.181	0.134	0.188	1.08	1.11	1.16
		Back	0.500	0.511	0.134	0.227	0.157	0.144	1.37	1.40	1.38
		Left side	0.531	0.428	0.005	0.034	0.009	0.008	1.00	1.00	1.00
		Right side	0.267	0.428	0.228	0.221	0.072	0.264	1.14	0.99	1.18
		Top side	0.269	0.262	0.047	0.241	0.227	0.033	0.82	1.00	0.81
		Bottom side	0.531	0.434					0.97	0.97	0.97

EN-DC

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Front	0.499	0.466	0.101	0.181	0.134	0.188	1.25	1.28	1.33
		Back	0.513	0.511	0.134	0.227	0.157	0.144	1.39	1.41	1.40
		Left side	0.443	0.463	0.005	0.034	0.009	0.008	0.95	0.95	0.95
		Right side	0.306	0.428	0.228	0.221	0.072	0.264	1.18	1.03	1.22
		Top side	0.383	0.281	0.047	0.241	0.227	0.033	0.95	1.13	0.94
		Bottom side	0.543	0.528					1.07	1.07	1.07

16.3 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	5	8	9	10	1+5+8	1+8+9	1+8+10
		WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	Front	0.583	0.188	0.173	0.055	0.076	0.94	0.81	0.83
	Back	1.068	0.253	0.182	0.079	0.073	1.50	1.33	1.32

WWAN Band	Exposure Position	4	7	4+7
		WLAN2.4GHz Ant 16+18	WLAN5GHz Ant 17+18	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DBS	Front	0.188	0.308	0.50
	Back	0.253	0.435	0.69

Inter-Band UL CA

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Front	0.368	0.371	0.188	0.173	0.055	0.076	1.10	0.97	0.99
		Back	0.505	0.552	0.253	0.182	0.079	0.073	1.49	1.32	1.31

EN-DC

WWAN Band		Exposure Position	1	2	5	8	9	10	1+2+5+8	1+2+8+9	1+2+8+10
			WWAN	WWAN	WLAN2.4GHz Ant 16+18	WLAN5GHz _Ant 17+18	Bluetooth Ant 16	Bluetooth Ant 18	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WWAN Band	WWAN Band	Front	0.521	0.385	0.188	0.173	0.055	0.076	1.27	1.13	1.16
		Back	0.552	0.534	0.253	0.182	0.079	0.073	1.52	1.35	1.34

16.4 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 WWAN 10g SAR (W/kg)	8 WLAN5GHz_Ant 17+18 10g SAR (W/kg)	1+8 Summed 10g SAR (W/kg)
WWAN Band	Front		0.836	0.84
	Back	2.493	0.474	2.97
	Left side	2.252	0.064	2.32
	Right side	2.498	1.281	3.78
	Top side	2.564	1.320	**3.88**
	Bottom side	2.583		2.58

WWAN Band	Exposure Position	4 WLAN2.4GHz Ant 17+18 10g SAR (W/kg)	7 WLAN5GHz Ant 17+18 10g SAR (W/kg)	4+7 Summed 10g SAR (W/kg)
DBS	Front		1.590	1.59
	Back		0.910	0.91
	Left side		0.133	0.13
	Right side		2.507	2.51
	Top side		2.534	2.53
	Bottom side			0.00

Inter-Band UL CA

WWAN Band		Exposure Position	1 WWAN 10g SAR (W/kg)	2 WWAN 10g SAR (W/kg)	8 WLAN5GHz_Ant 17+18 10g SAR (W/kg)	1+2+8 Summed 10g SAR (W/kg)
WWAN Band	WWAN Band	Front			0.836	0.84
		Back	1.233	1.278	0.474	2.99
		Left side	1.232	1.228	0.064	2.52
		Right side			1.281	1.28
		Top side		1.783	1.320	3.10
		Bottom side	0.717			0.72

EN-DC

WWAN Band		Exposure Position	1 WWAN 10g SAR (W/kg)	2 WWAN 10g SAR (W/kg)	8 WLAN5GHz_Ant 17+18 10g SAR (W/kg)	1+2+8 Summed 10g SAR (W/kg)
WWAN Band	WWAN Band	Front			0.836	0.84
		Back		1.278	0.474	1.75
		Left side	1.266	1.228	0.064	2.56
		Right side			1.281	1.28
		Top side	1.212	1.274	1.320	3.81
		Bottom side	1.279	1.254		2.53

N-1 distance SAR <sensor off>

WWAN Band		Exposure Position	1	2	8	1+2+8
			WWAN	WWAN	WLAN5GHz_Ant 17+18	Summed
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
WWAN Band	WWAN Band	Front			0.836	0.84
		Back		1.278	0.474	1.75
		Left side	1.266	1.228	0.064	2.56
		Right side			1.281	1.28
		Top side	1.212	1.783	0.231	3.23
		Bottom side	1.279	1.254		2.53

Test Engineer : Hank Huang, Kevin Xu, David Dai, Bin He

17. 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 ≤ 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.

18. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[6] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.

[7] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[8] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.

[9] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

[10] FCC KDB 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.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/15

System Check_Head_750MHz

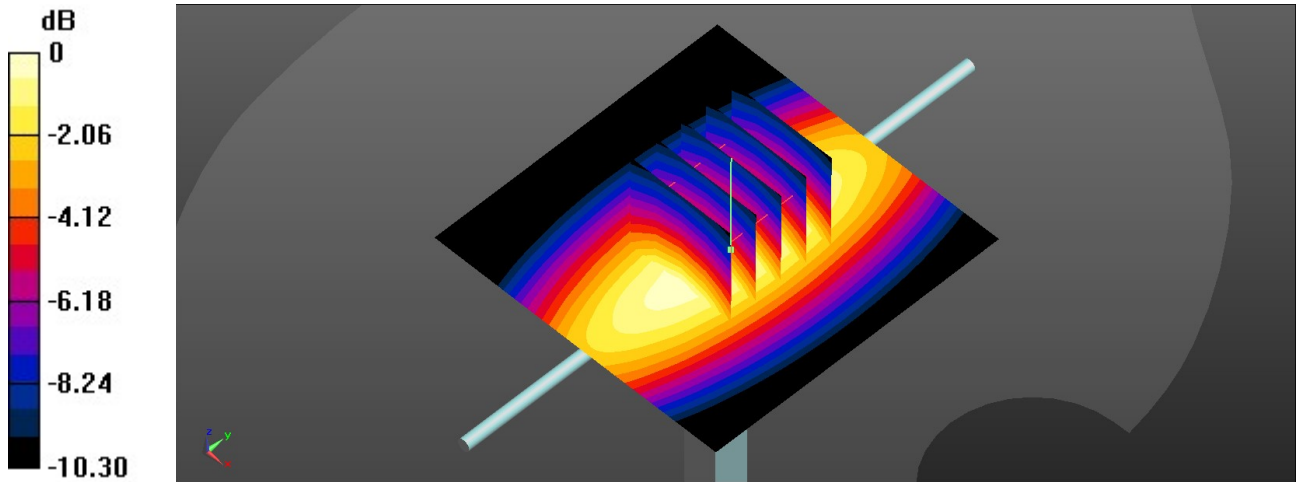
DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750_220615 Medium parameters used: f = 750 MHz; σ = 0.875 S/m; ε_r = 41.534; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(11.1, 11.1, 11.1); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.65 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 56.22 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.04 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.34 W/kg
Maximum value of SAR (measured) = 2.67 W/kg



0 dB = 2.67 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/24

System Check_Head_750MHz

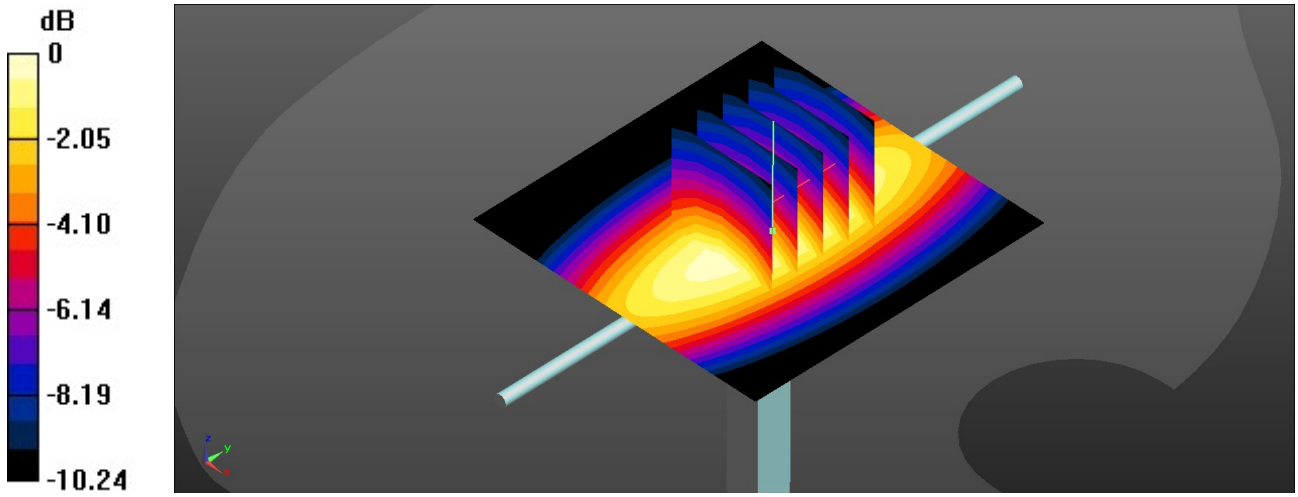
DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750_220624 Medium parameters used: f = 750 MHz; σ = 0.886 S/m; ε_r = 41.532; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(11.1, 11.1, 11.1); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.20 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 51.45 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.51 W/kg
SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.22 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/16

System Check_Head_835MHz

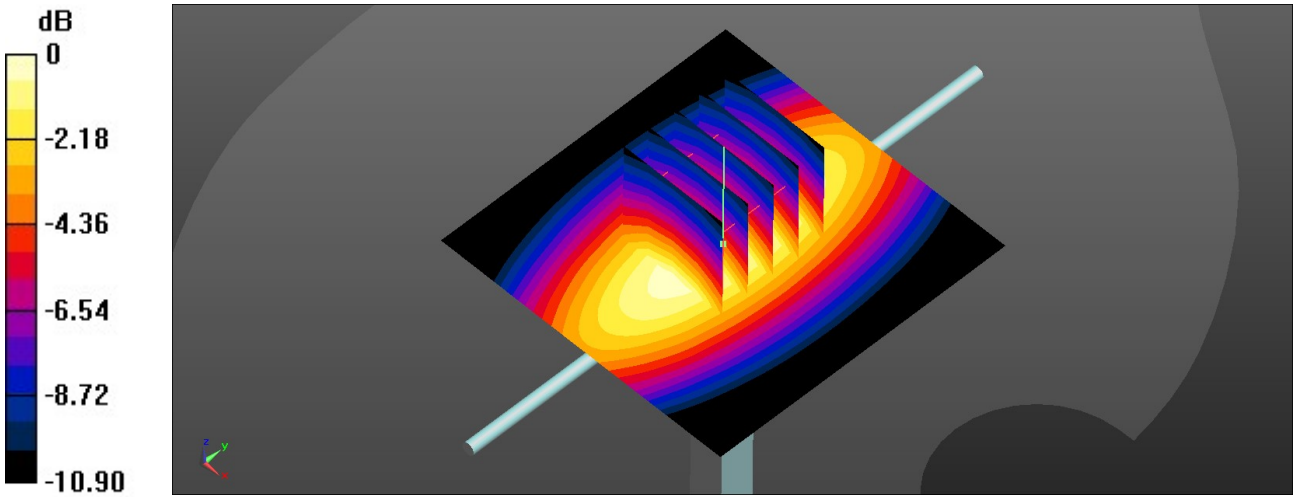
DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835_220616 Medium parameters used: f = 835 MHz; σ = 0.904 S/m; ε_r = 40.381; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(10.81, 10.81, 10.81); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.92 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 69.12 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 4.42 W/kg
SAR(1 g) = 2.56W/kg; SAR(10 g) = 1.52 W/kg
Maximum value of SAR (measured) = 3.88 W/kg



0 dB = 3.88 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/25

System Check_Head_835MHz

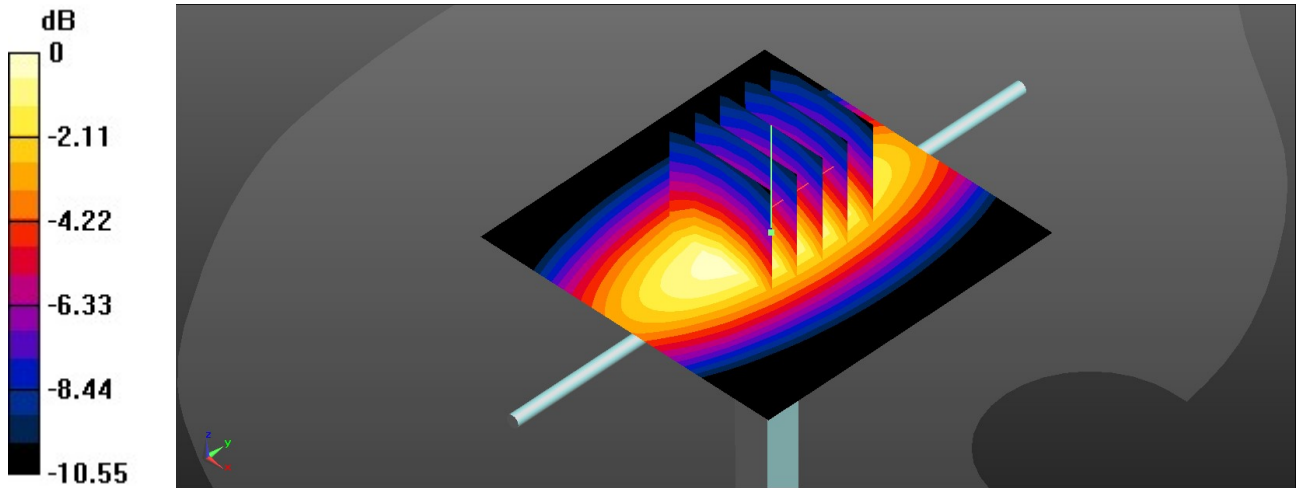
DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835_220625 Medium parameters used: f = 835 MHz; σ = 0.92 S/m; ε_r = 42.227; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(10.81, 10.81, 10.81); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.54 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 55.75 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.87 W/kg
SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.45 W/kg
Maximum value of SAR (measured) = 2.55 W/kg



0 dB = 2.55 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/16

System Check_Head_1750MHz

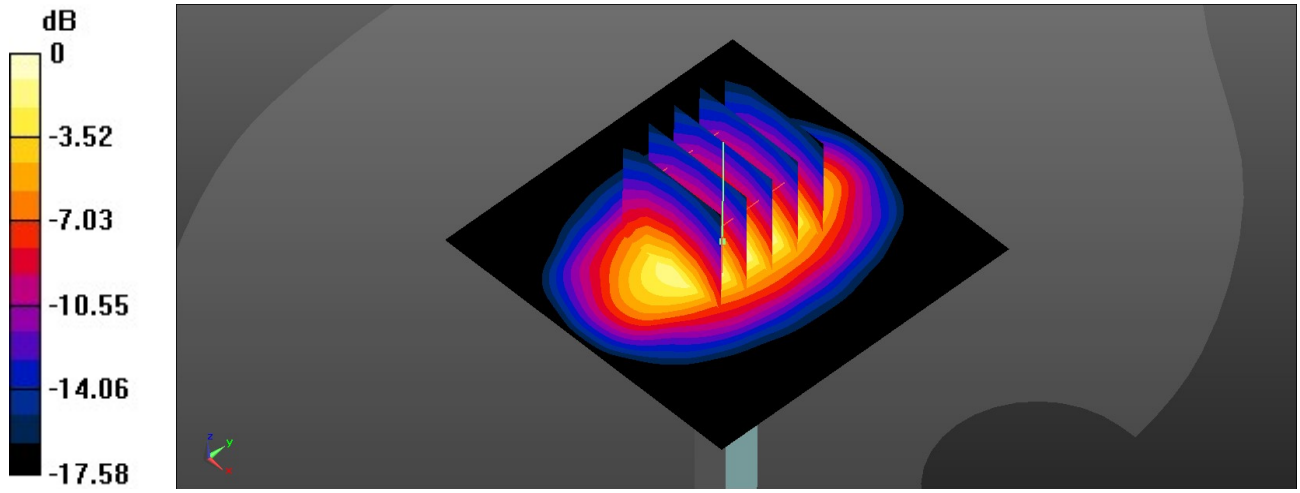
DUT: D1750V2-SN:1137

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750_220616 Medium parameters used: f = 1750 MHz; σ = 1.385 S/m; ε_r = 39.708; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.9 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.47, 9.47, 9.47); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 17.1 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 112.8 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 20.4 W/kg
SAR(1 g) = 8.95 W/kg; SAR(10 g) = 5.06 W/kg
Maximum value of SAR (measured) = 16.8 W/kg



0 dB = 17.1 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/21

System Check_Head_1750MHz

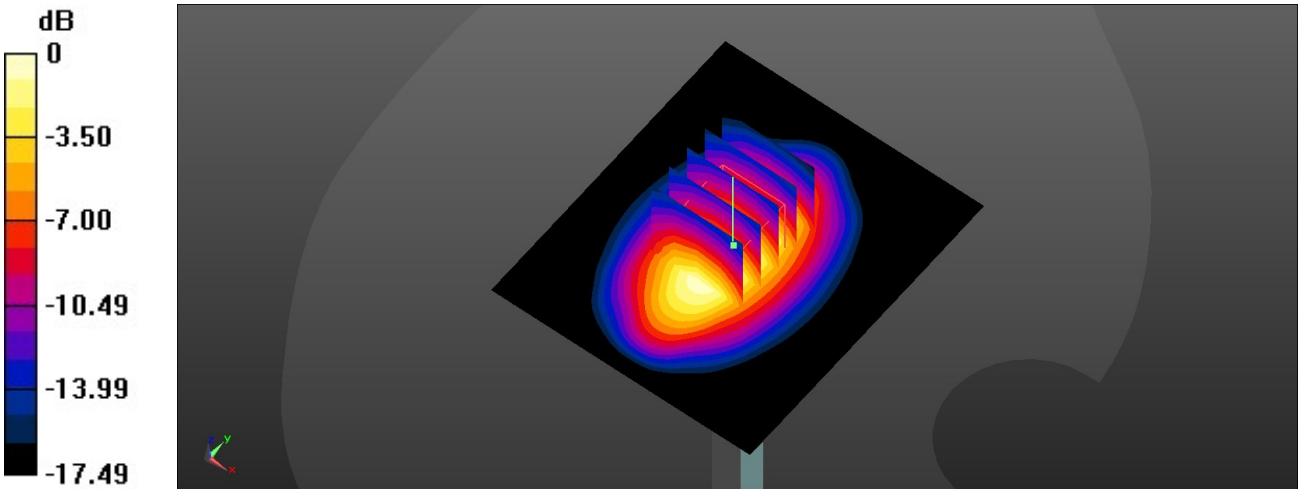
DUT: D1750V2-SN:1137

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750_220621 Medium parameters used: f = 1750 MHz; σ = 1.355 S/m; ε_r = 38.395; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.47, 9.47, 9.47); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 13.9 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 104.6 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 8.6 W/kg; SAR(10 g) = 4.64 W/kg
Maximum value of SAR (measured) = 12.6 W/kg



0 dB = 12.6 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/26

System Check_Head_1750MHz

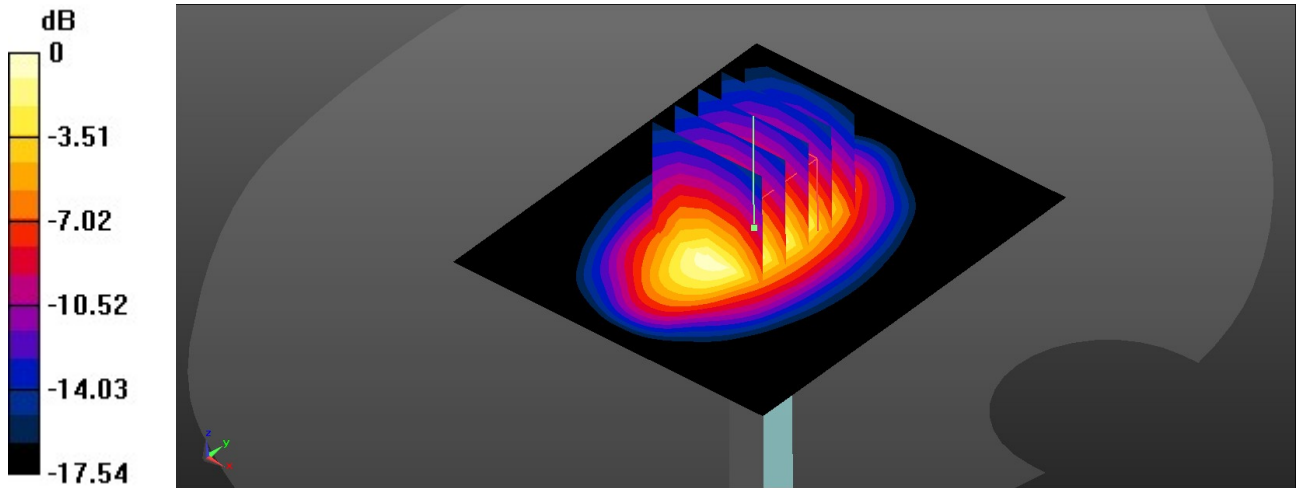
DUT: D1750V2-SN:1137

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750_220626 Medium parameters used: f = 1750 MHz; σ = 1.378 S/m; ε_r = 41.34; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.47, 9.47, 9.47); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 11.8 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 94.13 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 13.2 W/kg
SAR(1 g) = 9.23 W/kg; SAR(10 g) = 4.63 W/kg
Maximum value of SAR (measured) = 10.7 W/kg



0 dB = 10.7 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/15

System Check_Head_1900MHz

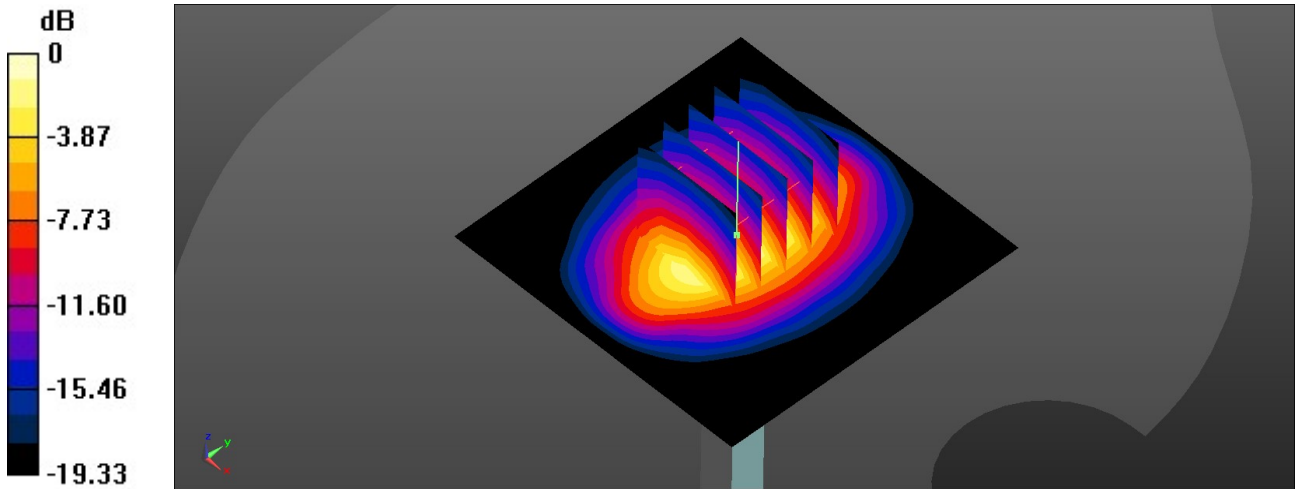
DUT: D1900V2-SN:5d182

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900_220615 Medium parameters used: f = 1900 MHz; σ = 1.422 S/m; ε_r = 41.138; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.09, 9.09, 9.09); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 19.5 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 120.6 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 24.0 W/kg
SAR(1 g) = 9.86 W/kg; SAR(10 g) = 4.65 W/kg
Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.5 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/24

System Check_Head_1900MHz

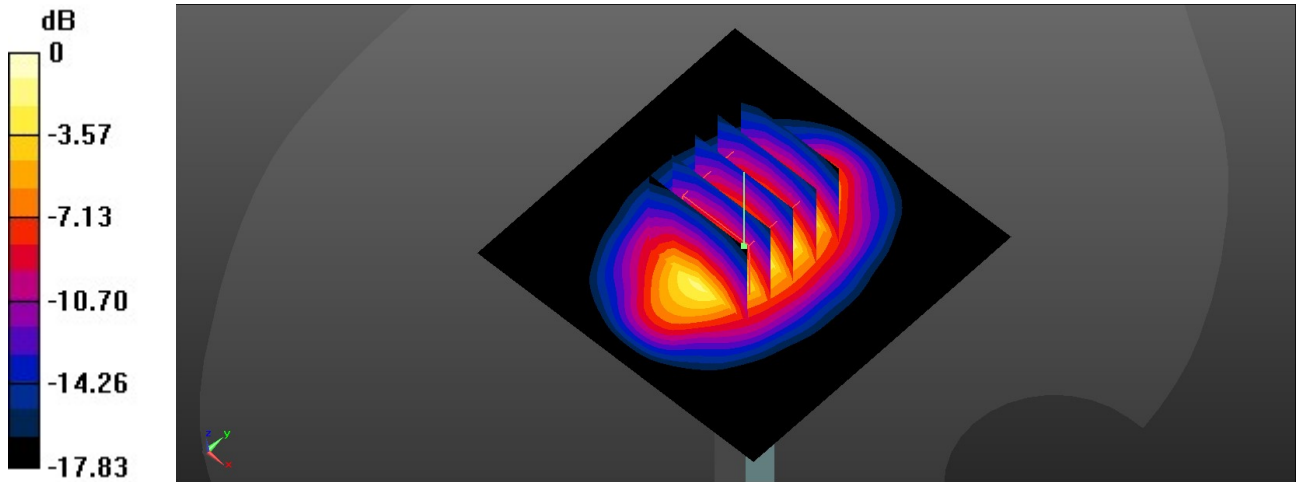
DUT: D1900V2-SN:5d182

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900_220624 Medium parameters used: f = 1900 MHz; σ = 1.415 S/m; ε_r = 40.527; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.09, 9.09, 9.09); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 15.1 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 107.4 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 18.1 W/kg
SAR(1 g) = 9.66 W/kg; SAR(10 g) = 5 W/kg
Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/27

System Check_Head_1900MHz

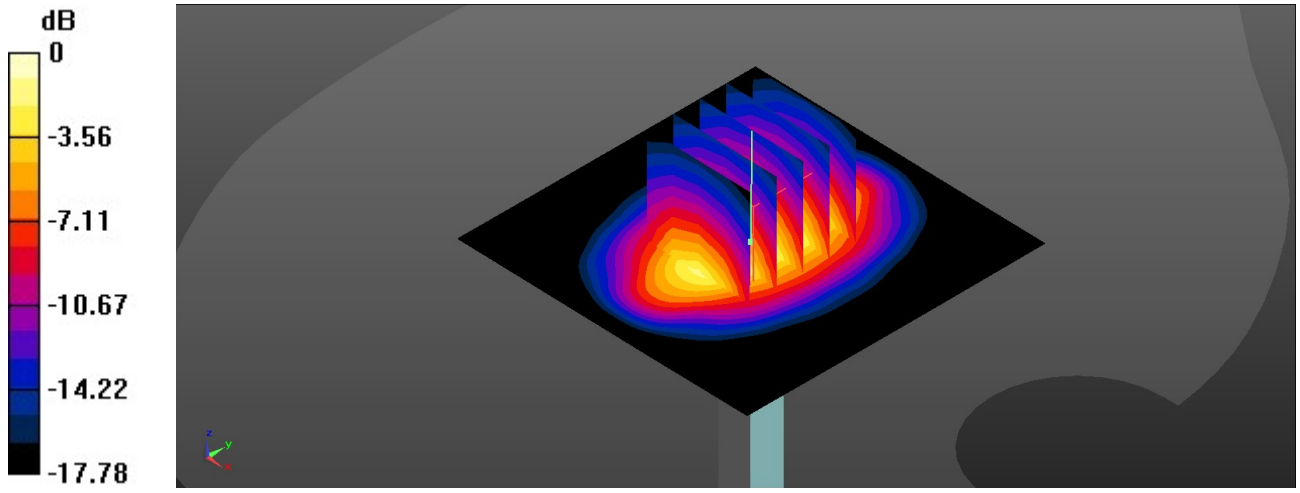
DUT: D1900V2-SN:5d182

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900_220627 Medium parameters used: f = 1900 MHz; σ = 1.451 S/m; ε_r = 39.099; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(9.09, 9.09, 9.09); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 12.5 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 96.42 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 14.9 W/kg
SAR(1 g) = 10.20 W/kg; SAR(10 g) = 4.76 W/kg
Maximum value of SAR (measured) = 12.5 W/kg



0 dB = 12.5 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/18

System Check_Head_2450MHz

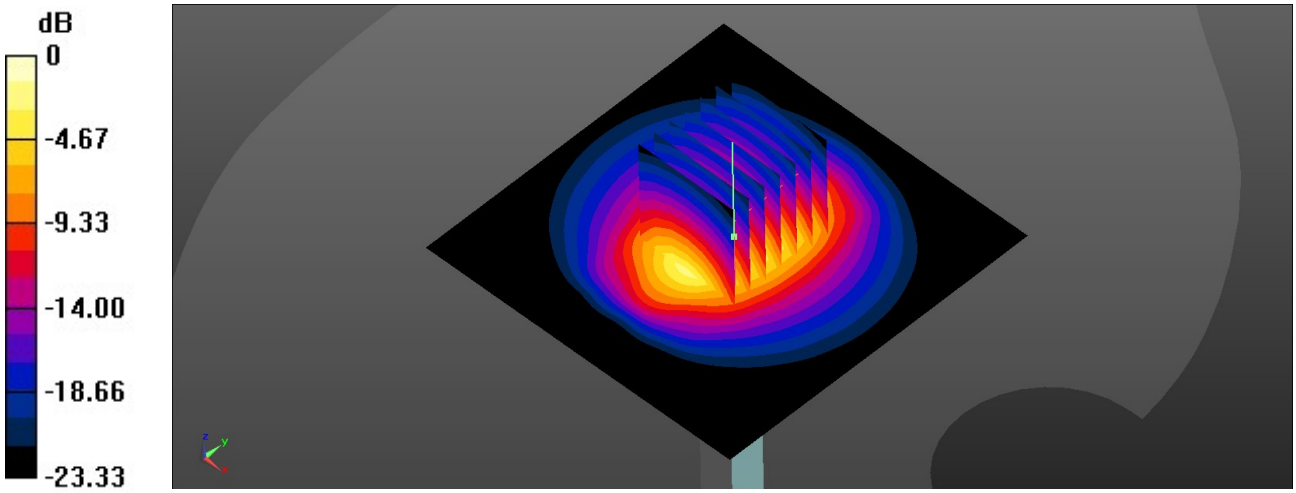
DUT: D2450V2-SN:924

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450_220618 Medium parameters used: f = 2450 MHz; σ = 1.736 S/m; ε_r = 40.751; ρ = 1000 kg/m^3
Ambient Temperature：23.1 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(8.24, 8.24, 8.24); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 24.0 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 121.9 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 30.2 W/kg
SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.18 W/kg
Maximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/27

System Check_Head_2450MHz

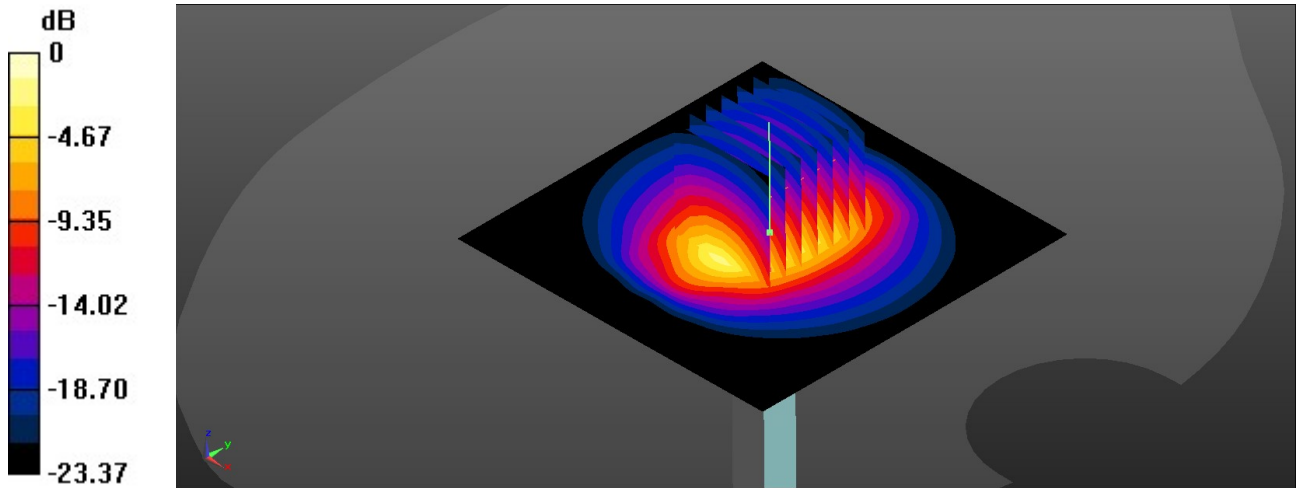
DUT: D2450V2-SN:924

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450_220627 Medium parameters used: f = 2450 MHz; σ = 1.82 S/m; ε_r = 39.753; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature：22.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(8.24, 8.24, 8.24); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 21.1 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 110.1 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 26.9 W/kg
SAR(1 g) = 12 W/kg; SAR(10 g) = 5.6 W/kg
Maximum value of SAR (measured) = 21.0 W/kg



0 dB = 21.0 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/15

System Check_Head_2600MHz

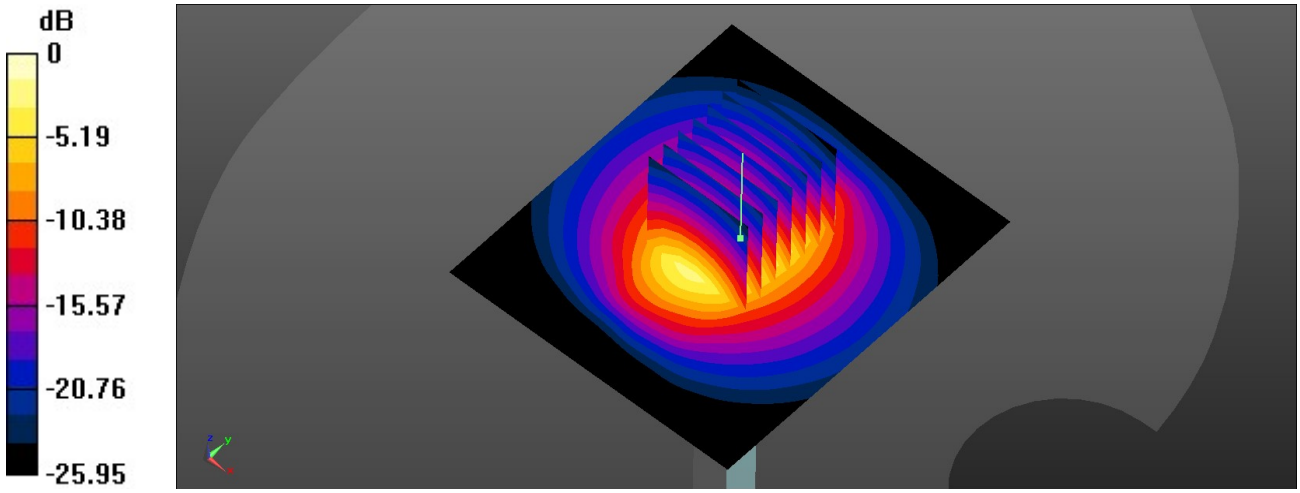
DUT: D2600V2-SN:1070

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL_2600_220615 Medium parameters used: f = 2600 MHz; σ = 1.89 S/m; ε_r = 40.256; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(7.93, 7.93, 7.93); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 27.3 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 124.7 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 35.1 W/kg
SAR(1 g) = 15.2 W/kg; SAR(10 g) = 6.58 W/kg
Maximum value of SAR (measured) = 27.2 W/kg



0 dB = 27.2 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/22

System Check_Head_2600MHz

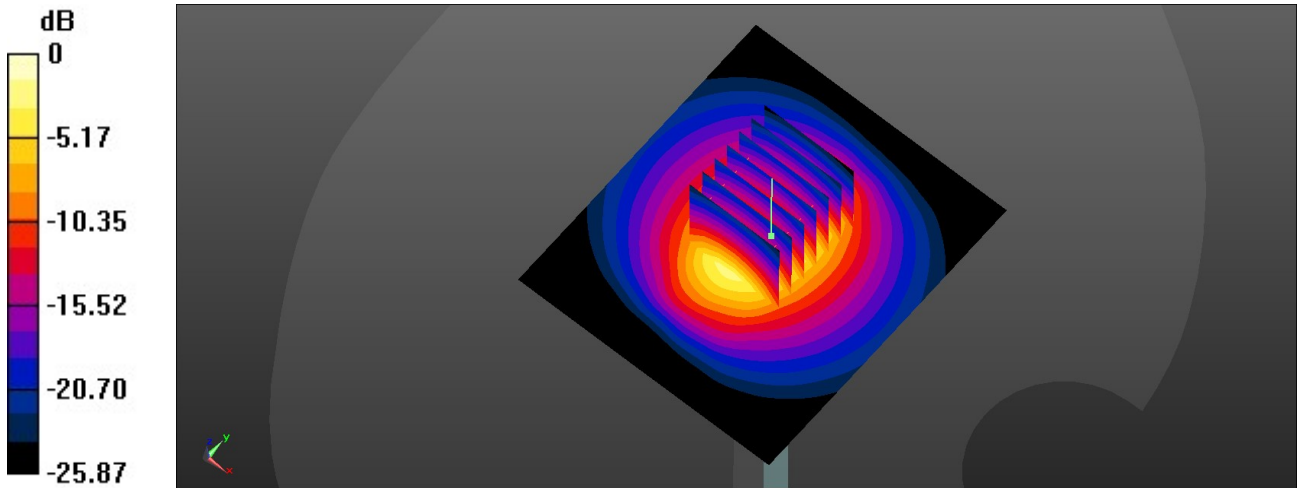
DUT: D2600V2-SN:1070

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL_2600_220622 Medium parameters used: f = 2600 MHz; σ = 2.056 S/m; ε_r = 37.284; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(7.93, 7.93, 7.93); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 29.8 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 124.9 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 38.3 W/kg
SAR(1 g) = 14.8 W/kg; SAR(10 g) = 5.77 W/kg
Maximum value of SAR (measured) = 29.6 W/kg



0 dB = 29.6 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/29

System Check_Head_2600MHz

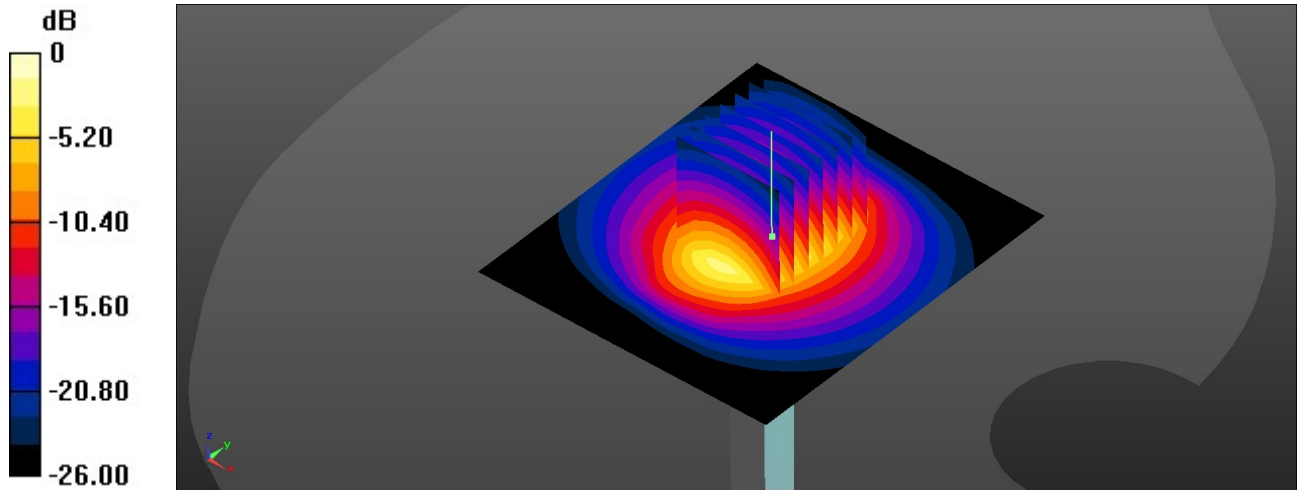
DUT: D2600V2-SN:1070

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL_2600_220629 Medium parameters used: f = 2600 MHz; σ = 1.894 S/m; ε_r = 40.24; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(7.93, 7.93, 7.93); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 23.4 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 113.3 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 30.4 W/kg
SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.58 W/kg
Maximum value of SAR (measured) = 23.2 W/kg



0 dB = 23.2 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/21

System Check_Head_3500MHz

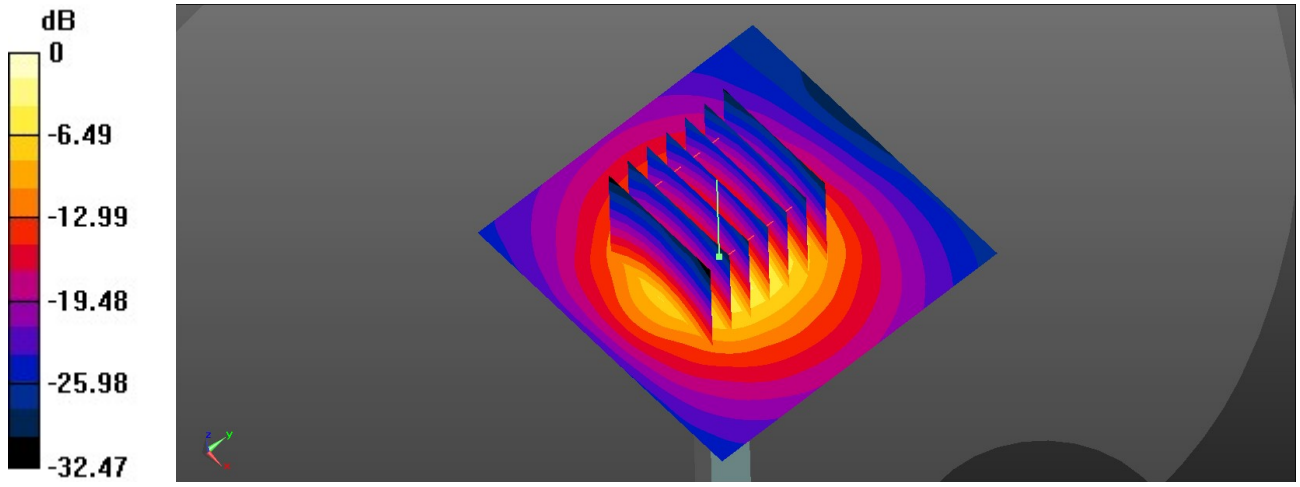
DUT: D3500V2-SN:1076

Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: HSL_3500_2206021 Medium parameters used: f = 3500 MHz; σ = 2.905 S/m; ε_r = 39.577; ρ 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(7.33, 7.33, 7.33); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (61x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 13.0 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 69.90 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 17.7 W/kg
SAR(1 g) = 6.29 W/kg; SAR(10 g) = 2.5 W/kg
Maximum value of SAR (measured) = 12.8 W/kg



0 dB = 13.0 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/6/30

System Check_Head_3500MHz

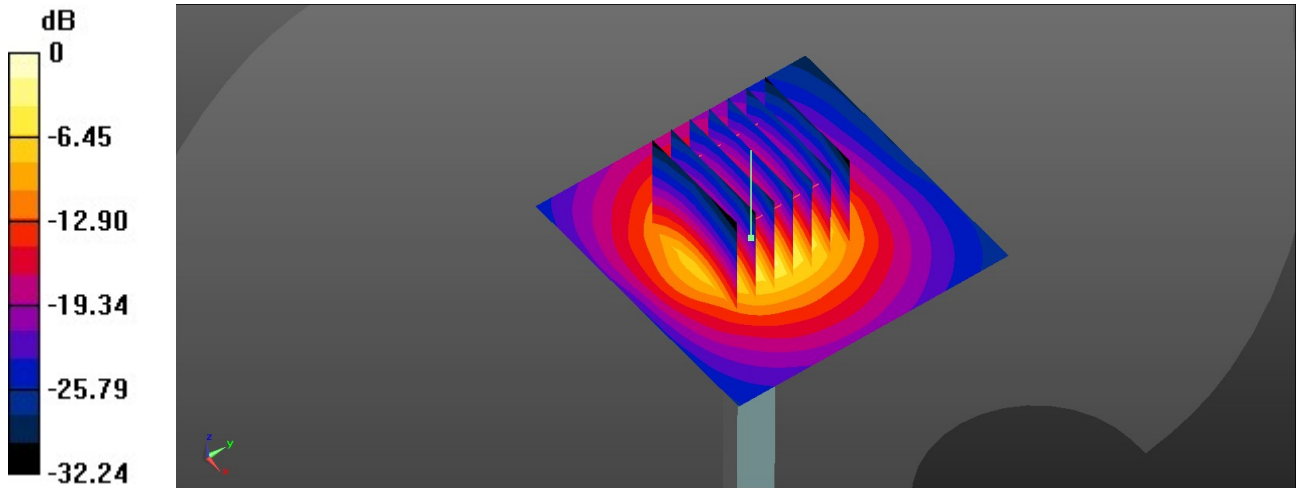
DUT: D3500V2-SN:1076

Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: HSL_3500_220630 Medium parameters used: f = 3500 MHz; σ = 3.025 S/m; ε_r = 36.334; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7641; ConvF(7.33, 7.33, 7.33); Calibrated: 2022/4/11
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2021/10/26
- Phantom: Twin-SAM V8.0 (Left); Type: QD 000 P41 AA; Serial: 2035
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (61x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 7.37 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 49.30 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 10.1 W/kg
SAR(1 g) = 7.03 W/kg; SAR(10 g) = 2.42 W/kg
Maximum value of SAR (measured) = 7.35 W/kg



0 dB = 7.35 W/kg