



Liquid depth (15 cm)





12. SAR Result Summary

12.1 Head SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	GPRS Data-2 Slot	Right Cheek	836.6	0.379	-3.82	31.00	30.56	0.419	1
		Right Tilt	836.6	0.127	2.32	31.00	30.56	0.141	/
		Left Cheek	836.6	0.351	-0.68	31.00	30.56	0.388	/
		Left Tilt	836.6	0.127	1.92	31.00	30.56	0.141	/
GSM1900	GPRS Data-4 Slot	Right Cheek	1880	0.069	3.45	24.00	23.53	0.077	/
		Right Tilt	1880	0.037	1.83	24.00	23.53	0.041	/
		Left Cheek	1880	0.244	-0.94	24.00	23.53	0.272	3
		Left Tilt	1880	0.157	0.82	24.00	23.53	0.175	/
WCDMA Band II	RMC	Right Cheek	1852.4	0.127	2.14	25.00	24.63	0.138	/
		Right Tilt	1852.4	0.054	2.30	25.00	24.63	0.059	/
		Left Cheek	1852.4	0.371	-2.79	25.00	24.63	0.404	5
		Left Tilt	1852.4	0.107	-0.52	25.00	24.63	0.117	/
WCDMA Band V	RMC	Right Cheek	846.6	0.292	-0.85	25.00	24.51	0.327	7
		Right Tilt	846.6	0.083	3.30	25.00	24.51	0.093	/
		Left Cheek	846.6	0.237	-0.25	25.00	24.51	0.265	/
		Left Tilt	846.6	0.105	0.73	25.00	24.51	0.118	/
WCDMA Band IV	RMC	Right Cheek	1712.6	0.317	2.34	23.50	23.01	0.355	9
		Right Tilt	1712.6	0.114	-1.01	23.50	23.01	0.128	/
		Left Cheek	1712.6	0.301	1.96	23.50	23.01	0.337	/
		Left Tilt	1712.6	0.105	-3.17	23.50	23.01	0.118	/
EVDO	BC0	Right Cheek	824.7	0.038	3.81	21.00	20.11	0.047	/
		Right Tilt	824.7	0.021	3.48	21.00	20.11	0.026	/
		Left Cheek	824.7	0.143	2.65	21.00	20.11	0.176	11
		Left Tilt	824.7	0.051	0.52	21.00	20.11	0.063	/
CDMA	BC1	Right Cheek	1908.75	0.077	3.87	22.00	21.99	0.077	13
		Right Tilt	1908.75	0.037	-2.53	22.00	21.99	0.037	/
		Left Cheek	1908.75	0.052	-0.89	22.00	21.99	0.052	/
		Left Tilt	1908.75	0.021	2.43	22.00	21.99	0.021	/
CDMA	BC10	Right Cheek	822.35	0.041	-0.40	26.00	25.46	0.046	15
		Right Tilt	822.35	0.024	2.45	26.00	25.46	0.027	/
		Left Cheek	822.35	0.037	-0.71	26.00	25.46	0.042	/
		Left Tilt	822.35	0.011	0.51	26.00	25.46	0.012	/



2.4G WLAN ANT 1	802.11b	Right Cheek	2437	0.208	0.80	14.50	14.31	0.217	/
		Right Tilt	2437	0.105	-0.47	14.50	14.31	0.110	/
		Left Cheek	2437	0.471	2.06	14.50	14.31	0.492	17
		Left Tilt	2437	0.213	-2.77	14.50	14.31	0.223	/
2.4G WLAN ANT 2	802.11b	Right Cheek	2412	0.031	-0.59	14.50	14.09	0.034	/
		Right Tilt	2412	0.017	-0.79	14.50	14.09	0.019	/
		Left Cheek	2412	0.039	1.45	14.50	14.09	0.043	19
		Left Tilt	2412	0.024	0.60	14.50	14.09	0.026	/
2.4G WLAN ANT 1	802.11 n- HT20	Right Cheek	2437	0.212	3.44	15.50	15.19	0.228	21
		Right Tilt	2437	0.087	-3.96	15.50	15.19	0.093	/
		Left Cheek	2437	0.114	2.30	15.50	15.19	0.122	/
		Left Tilt	2437	0.051	2.57	15.50	15.19	0.055	/
2.4G WLAN ANT 2	802.11 n- HT20	Right Cheek	2437	0.084	-1.49	15.50	15.19	0.090	23
		Right Tilt	2437	0.046	-0.08	15.50	15.19	0.049	/
		Left Cheek	2437	0.064	0.20	15.50	15.19	0.069	/
		Left Tilt	2437	0.024	-1.69	15.50	15.19	0.026	/
5.2G WLAN ANT 1	802.11a	Right Cheek	5240	0.123	2.49	14.50	14.08	0.135	25
		Right Tilt	5240	0.051	-2.73	14.50	14.08	0.056	/
		Left Cheek	5240	0.087	-0.93	14.50	14.08	0.096	/
		Left Tilt	5240	0.044	-2.08	14.50	14.08	0.048	/
5.2G WLAN ANT 2	802.11a	Right Cheek	5180	0.137	-2.43	12.50	12.19	0.147	27
		Right Tilt	5180	0.064	-1.76	12.50	12.19	0.069	/
		Left Cheek	5180	0.105	1.72	12.50	12.19	0.113	/
		Left Tilt	5180	0.047	-0.14	12.50	12.19	0.050	/
5.2G WLAN ANT 1	802.11n20	Right Cheek	5180	0.095	1.26	16.00	15.79	0.100	29
		Right Tilt	5180	0.052	-2.94	16.00	15.79	0.055	/
		Left Cheek	5180	0.081	0.31	16.00	15.79	0.085	/
		Left Tilt	5180	0.044	1.19	16.00	15.79	0.046	/
5.2G WLAN ANT 2	802.11n20	Right Cheek	5180	0.18	2.59	16.00	15.79	0.189	31
		Right Tilt	5180	0.083	-3.03	16.00	15.79	0.087	/
		Left Cheek	5180	0.142	3.05	16.00	15.79	0.149	/
		Left Tilt	5180	0.067	3.64	16.00	15.79	0.070	/
5.3G WLAN ANT 1	802.11a	Right Cheek	5260	0.068	2.34	12.00	11.69	0.073	33
		Right Tilt	5260	0.024	-2.67	12.00	11.69	0.026	/
		Left Cheek	5260	0.057	-0.95	12.00	11.69	0.061	/
		Left Tilt	5260	0.018	0.78	12.00	11.69	0.019	/



5.3G WLAN ANT 2	802.11a	Right Cheek	5260	0.146	-2.75	12.00	11.95	0.148	35
		Right Tilt	5260	0.072	-1.96	12.00	11.95	0.073	/
		Left Cheek	5260	0.125	-1.73	12.00	11.95	0.126	/
		Left Tilt	5260	0.059	-0.78	12.00	11.95	0.060	/
5.3G WLAN ANT 1	802.11n20	Right Cheek	5260	0.136	1.04	14.50	14.06	0.151	37
		Right Tilt	5260	0.064	-1.15	14.50	14.06	0.071	/
		Left Cheek	5260	0.111	3.27	14.50	14.06	0.123	/
		Left Tilt	5260	0.059	-0.33	14.50	14.06	0.065	/
5.3G WLAN ANT 2	802.11n20	Right Cheek	5260	0.206	-3.58	14.50	14.06	0.228	39
		Right Tilt	5260	0.083	0.78	14.50	14.06	0.092	/
		Left Cheek	5260	0.174	-1.39	14.50	14.06	0.193	/
		Left Tilt	5260	0.048	-3.32	14.50	14.06	0.053	/
5.6G WLAN ANT 1	802.11a	Right Cheek	5500	0.083	-1.80	12.50	12.38	0.085	41
		Right Tilt	5500	0.044	-3.80	12.50	12.38	0.045	/
		Left Cheek	5500	0.061	0.02	12.50	12.38	0.063	/
		Left Tilt	5500	0.029	-3.78	12.50	12.38	0.030	/
5.6G WLAN ANT 2	802.11a	Right Cheek	5500	0.332	-2.93	12.50	12.27	0.350	43
		Right Tilt	5500	0.105	-0.63	12.50	12.27	0.111	/
		Left Cheek	5500	0.245	-2.86	12.50	12.27	0.258	/
		Left Tilt	5500	0.083	1.49	12.50	12.27	0.088	/
5.6G WLAN ANT 1	802.11n20	Right Cheek	5500	0.112	-1.69	14.50	14.34	0.116	45
		Right Tilt	5500	0.059	-3.56	14.50	14.34	0.061	/
		Left Cheek	5500	0.094	-2.16	14.50	14.34	0.098	/
		Left Tilt	5500	0.037	1.25	14.50	14.34	0.038	/
5.6G WLAN ANT 2	802.11n20	Right Cheek	5500	0.15	-3.19	14.50	14.34	0.156	47
		Right Tilt	5500	0.071	-3.83	14.50	14.34	0.074	/
		Left Cheek	5500	0.127	-2.84	14.50	14.34	0.132	/
		Left Tilt	5500	0.051	-0.82	14.50	14.34	0.053	/
5.8G WLAN ANT 1	802.11a	Right Cheek	5745	0.123	0.48	11.00	10.89	0.126	49
		Right Tilt	5745	0.074	-3.42	11.00	10.89	0.076	/
		Left Cheek	5745	0.103	-3.34	11.00	10.89	0.106	/
		Left Tilt	5745	0.044	-3.19	11.00	10.89	0.045	/
5.8G WLAN ANT 2	802.11a	Right Cheek	5825	0.171	-0.85	11.50	11.19	0.184	51
		Right Tilt	5825	0.081	1.96	11.50	11.19	0.087	/
		Left Cheek	5825	0.146	-1.48	11.50	11.19	0.157	/
		Left Tilt	5825	0.037	-3.41	11.50	11.19	0.040	/



5.8G WLAN ANT 1	802.11n20	Right Cheek	5745	0.124	-3.33	14.00	13.56	0.137	53
		Right Tilt	5745	0.062	0.03	14.00	13.56	0.069	/
		Left Cheek	5745	0.113	3.50	14.00	13.56	0.125	/
		Left Tilt	5745	0.047	0.03	14.00	13.56	0.052	/
5.8G WLAN ANT 2	802.11n20	Right Cheek	5745	0.128	2.48	14.00	13.56	0.142	55
		Right Tilt	5745	0.053	3.24	14.00	13.56	0.059	/
		Left Cheek	5745	0.106	1.35	14.00	13.56	0.117	/
		Left Tilt	5745	0.037	0.90	14.00	13.56	0.041	/
BT	8DPSK	Right Cheek	2441	0.013	-1.00	7.00	6.68	0.014	57
		Right Tilt	2441	0.008	-2.71	7.00	6.68	0.009	/
		Left Cheek	2441	0.011	-2.07	7.00	6.68	0.012	/
		Left Tilt	2441	0.005	-0.69	7.00	6.68	0.005	/

Band	Mode	Max SAR (W/Kg)	MIMO
2.4G WLAN MIMO	802.11 n-HT20 ANT 1	0.228	0.318
	802.11 n-HT20 ANT 2	0.09	
5.2G WLAN MIMO	802.11 n-HT20 ANT 1	0.1	0.289
	802.11 n-HT20 ANT 2	0.189	
5.3G WLAN MIMO	802.11 n-HT20 ANT 1	0.151	0.379
	802.11 n-HT20 ANT 2	0.228	
5.6G WLAN MIMO	802.11 n-HT20 ANT 1	0.116	0.272
	802.11 n-HT20 ANT 2	0.156	
5.8G WLAN MIMO	802.11 n-HT20 ANT 1	0.137	0.279
	802.11 n-HT20 ANT 2	0.142	



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Me as. No.
LTE Band 2	20M	QPSK	1	0	Right Cheek	1880	0.041	0.50	24.00	23.54	0.046	/
			50	0	Right Cheek	1880	0.038	-3.99	23.00	22.56	0.042	/
			1	0	Right Tilt	1880	0.012	-1.32	24.00	23.54	0.013	/
			50	0	Right Tilt	1880	0.005	2.51	23.00	22.56	0.006	/
			1	0	Left Cheek	1880	0.056	0.78	24.00	23.54	0.062	59
			50	0	Left Cheek	1880	0.031	-2.63	23.00	22.56	0.034	/
			1	0	Left Tilt	1880	0.022	1.85	24.00	23.54	0.024	/
			50	0	Left Tilt	1880	0.019	-3.41	23.00	22.56	0.021	/
LTE Band 4	20M	QPSK	1	0	Right Cheek	1745	0.125	-2.03	23.50	23.03	0.139	/
			50	0	Right Cheek	1732.5	0.11	-3.05	22.00	21.99	0.110	/
			1	0	Right Tilt	1745	0.045	-2.30	23.50	23.03	0.050	/
			50	0	Right Tilt	1732.5	0.038	-3.29	22.00	21.99	0.038	/
			1	0	Left Cheek	1745	0.148	1.03	23.50	23.03	0.165	61
			50	0	Left Cheek	1732.5	0.127	1.38	22.00	21.99	0.127	/
			1	0	Left Tilt	1745	0.067	1.62	23.50	23.03	0.075	/
			50	0	Left Tilt	1732.5	0.059	1.03	22.00	21.99	0.059	/
LTE Band 5	10M	QPSK	1	0	Right Cheek	829	0.162	2.39	25.00	24.55	0.180	63
			25	0	Right Cheek	829	0.127	0.42	23.00	22.91	0.130	/
			1	0	Right Tilt	829	0.047	1.76	25.00	24.55	0.052	/
			25	0	Right Tilt	829	0.042	-1.72	23.00	22.91	0.043	/
			1	0	Left Cheek	829	0.114	1.42	25.00	24.55	0.126	/
			25	0	Left Cheek	829	0.098	-3.03	23.00	22.91	0.100	/
			1	0	Left Tilt	829	0.038	-3.54	25.00	24.55	0.042	/
			25	0	Left Tilt	829	0.029	1.92	23.00	22.91	0.030	/
LTE Band 12	10M	QPSK	1	0	Right Cheek	707.5	0.073	3.87	26.00	25.85	0.076	65
			25	0	Right Cheek	704	0.062	-3.87	25.00	24.79	0.065	/
			1	0	Right Tilt	707.5	0.032	0.85	26.00	25.85	0.033	/
			25	0	Right Tilt	704	0.027	-2.07	25.00	24.79	0.028	/
			1	0	Left Cheek	707.5	0.061	-1.05	26.00	25.85	0.063	/
			25	0	Left Cheek	704	0.059	0.73	25.00	24.79	0.062	/
			1	0	Left Tilt	707.5	0.025	-2.91	26.00	25.85	0.026	/
			25	0	Left Tilt	704	0.013	-0.49	25.00	24.79	0.014	/



LTE Band 13	10M	QPSK	1	0	Right Cheek	782	0.110	2.54	23.00	22.44	0.125	67
			25	0	Right Cheek	782	0.083	2.30	21.50	21.30	0.087	/
			1	0	Right Tilt	782	0.048	3.71	23.00	22.44	0.055	/
			25	0	Right Tilt	782	0.042	-1.69	21.50	21.30	0.044	/
			1	0	Left Cheek	782	0.097	0.77	23.00	22.44	0.110	/
			25	0	Left Cheek	782	0.073	3.12	21.50	21.30	0.076	/
			1	0	Left Tilt	782	0.047	-1.63	23.00	22.44	0.053	/
			25	0	Left Tilt	782	0.030	3.49	21.50	21.30	0.031	/
LTE Band 17	10M	QPSK	1	0	Right Cheek	709	0.053	-1.91	26.00	25.74	0.056	69
			25	0	Right Cheek	709	0.042	1.70	24.50	24.40	0.043	/
			1	0	Right Tilt	709	0.025	3.90	26.00	25.74	0.027	/
			25	0	Right Tilt	709	0.022	-3.61	24.50	24.40	0.023	/
			1	0	Left Cheek	709	0.043	0.14	26.00	25.74	0.046	/
			25	0	Left Cheek	709	0.038	2.92	24.50	24.40	0.039	/
			1	0	Left Tilt	709	0.027	0.73	26.00	25.74	0.029	/
			25	0	Left Tilt	709	0.013	2.66	24.50	24.40	0.013	/
LTE Band 25	20M	QPSK	1	0	Right Cheek	1882.5	0.034	-2.33	24.00	23.69	0.037	/
			50	0	Right Cheek	1882.5	0.025	2.52	23.50	22.36	0.033	/
			1	0	Right Tilt	1882.5	0.013	-1.92	24.00	23.69	0.014	/
			50	0	Right Tilt	1882.5	0.011	-0.23	23.50	22.36	0.014	/
			1	0	Left Cheek	1882.5	0.059	-0.28	24.00	23.69	0.063	71
			50	0	Left Cheek	1882.5	0.045	-2.57	23.50	22.36	0.059	/
			1	0	Left Tilt	1882.5	0.024	-0.93	24.00	23.69	0.026	/
			50	0	Left Tilt	1882.5	0.009	3.48	23.50	22.36	0.012	/
LTE Band 26	15M	QPSK	1	0	Right Cheek	821.5	0.374	-3.33	25.00	24.08	0.462	73
			38	0	Right Cheek	821.5	0.345	2.18	24.00	23.66	0.373	/
			1	0	Right Tilt	821.5	0.123	-1.70	25.00	24.08	0.152	/
			38	0	Right Tilt	821.5	0.112	-3.18	24.00	23.66	0.121	/
			1	0	Left Cheek	821.5	0.324	-3.44	25.00	24.08	0.400	/
			38	0	Left Cheek	821.5	0.297	0.31	24.00	23.66	0.321	/
			1	0	Left Tilt	821.5	0.105	0.87	25.00	24.08	0.130	/
			38	0	Left Tilt	821.5	0.098	-3.17	24.00	23.66	0.106	/



LTE Band 38	20M	QPSK	1	0	Right Cheek	2580	0.072	3.35	23.50	23.07	0.079	/
			50	0	Right Cheek	2580	0.065	3.00	22.50	21.93	0.074	/
			1	0	Right Tilt	2580	0.014	-2.18	23.50	23.07	0.015	/
			50	0	Right Tilt	2580	0.011	3.26	22.50	21.93	0.013	/
			1	0	Left Cheek	2580	0.080	1.53	23.50	23.07	0.088	75
			50	0	Left Cheek	2580	0.065	-3.61	22.50	21.93	0.074	/
			1	0	Left Tilt	2580	0.011	-3.73	23.50	23.07	0.012	/
			50	0	Left Tilt	2580	0.008	-1.56	22.50	21.93	0.009	/
LTE Band 40	20M	QPSK	1	0	Right Cheek	2310	0.043	-1.45	24.00	23.19	0.052	/
			50	0	Right Cheek	2310	0.038	1.96	23.00	22.15	0.046	/
			1	0	Right Tilt	2310	0.015	-0.49	24.00	23.19	0.018	/
			50	0	Right Tilt	2310	0.011	3.78	23.00	22.15	0.013	/
			1	0	Left Cheek	2310	0.051	0.74	24.00	23.19	0.061	77
			50	0	Left Cheek	2310	0.046	-3.05	23.00	22.15	0.056	/
			1	0	Left Tilt	2310	0.027	3.01	24.00	23.19	0.033	/
			50	0	Left Tilt	2310	0.021	1.55	23.00	22.15	0.026	/
LTE Band 41	20M	QPSK	1	0	Right Cheek	2680	0.084	1.03	24.00	23.16	0.102	/
			50	0	Right Cheek	2680	0.053	-1.64	22.00	21.84	0.055	/
			1	0	Right Tilt	2680	0.042	-3.37	24.00	23.16	0.051	/
			50	0	Right Tilt	2680	0.025	-1.44	22.00	21.84	0.026	/
			1	0	Left Cheek	2680	0.116	1.62	24.00	23.16	0.141	79
			50	0	Left Cheek	2680	0.073	-2.91	22.00	21.84	0.076	/
			1	0	Left Tilt	2680	0.058	3.40	24.00	23.16	0.070	/
			50	0	Left Tilt	2680	0.037	0.07	22.00	21.84	0.038	/
LTE Band 66	20M	QPSK	1	0	Right Cheek	1720	0.162	-3.86	23.00	22.99	0.162	81
			50	0	Right Cheek	1720	0.134	0.88	22.00	21.78	0.141	/
			1	0	Right Tilt	1720	0.073	1.52	23.00	22.99	0.073	/
			50	0	Right Tilt	1720	0.065	3.57	22.00	21.78	0.068	/
			1	0	Left Cheek	1720	0.142	-0.25	23.00	22.99	0.142	/
			50	0	Left Cheek	1720	0.117	0.53	22.00	21.78	0.123	/
			1	0	Left Tilt	1720	0.065	0.93	23.00	22.99	0.065	/
			50	0	Left Tilt	1720	0.051	1.24	22.00	21.78	0.054	/



LTE Band 71	20M	QPSK	1	0	Right Cheek	688	0.071	-0.53	25.00	24.58	0.078	/
			50	0	Right Cheek	688	0.051	-2.51	23.00	22.76	0.054	/
			1	0	Right Tilt	688	0.033	2.35	25.00	24.58	0.036	/
			50	0	Right Tilt	688	0.017	3.68	23.00	22.76	0.018	/
			1	0	Left Cheek	688	0.095	-3.80	25.00	24.58	0.105	83
			50	0	Left Cheek	688	0.064	1.23	23.00	22.76	0.068	/
			1	0	Left Tilt	688	0.047	-0.69	25.00	24.58	0.052	/
			50	0	Left Tilt	688	0.028	-3.42	23.00	22.76	0.030	/
SA N2	20M	DFT_QPSK	1	1	Right Cheek	1860	0.081	-3.03	23.00	22.61	0.089	85
			50	25	Right Cheek	1860	0.073	-3.49	23.00	22.84	0.076	/
			1	1	Right Tilt	1860	0.042	-1.46	23.00	22.61	0.046	/
			50	25	Right Tilt	1860	0.033	-3.34	23.00	22.84	0.034	/
			1	1	Left Cheek	1860	0.034	2.50	23.00	22.61	0.037	/
			50	25	Left Cheek	1860	0.028	-2.31	23.00	22.84	0.029	/
			1	1	Left Tilt	1860	0.017	2.04	23.00	22.61	0.019	/
			50	25	Left Tilt	1860	0.011	2.10	23.00	22.84	0.011	/
SA N5	20M	DFT_QPSK	1	1	Right Cheek	839	0.057	-3.86	22.50	21.83	0.067	/
			50	25	Right Cheek	839	0.081	3.83	22.50	22.18	0.087	87
			1	1	Right Tilt	839	0.031	-1.80	22.50	21.83	0.036	/
			50	25	Right Tilt	839	0.047	-2.52	22.50	22.18	0.051	/
			1	1	Left Cheek	839	0.013	-1.52	22.50	21.83	0.015	/
			50	25	Left Cheek	839	0.034	-1.38	22.50	22.18	0.037	/
			1	1	Left Tilt	839	0.008	-0.17	22.50	21.83	0.009	/
			50	25	Left Tilt	839	0.011	3.73	22.50	22.18	0.012	/
SA N7	20M	DFT_QPSK	1	1	Right Cheek	2560	0.060	1.26	23.00	22.31	0.070	/
			50	25	Right Cheek	2560	0.068	-3.30	23.00	22.62	0.074	/
			1	1	Right Tilt	2560	0.024	0.65	23.00	22.31	0.028	/
			50	25	Right Tilt	2560	0.030	3.06	23.00	22.62	0.033	/
			1	1	Left Cheek	2560	0.108	3.30	23.00	22.31	0.127	89
			50	25	Left Cheek	2560	0.101	3.54	23.00	22.62	0.110	/
			1	1	Left Tilt	2560	0.073	-2.24	23.00	22.31	0.086	/
			50	25	Left Tilt	2560	0.081	0.39	23.00	22.62	0.088	/
SA N41	100M	DFT_QPSK	1	1	Right Cheek	2592.99	0.076	0.90	26.00	24.43	0.109	/
			135	67	Right Cheek	2592.99	0.100	-3.02	26.00	25.61	0.109	/
			1	1	Right Tilt	2592.99	0.031	-1.99	26.00	24.43	0.045	/
			135	67	Right Tilt	2592.99	0.055	2.41	26.00	25.61	0.060	/
			1	1	Left Cheek	2592.99	0.142	-0.52	26.00	24.43	0.204	/
			135	67	Left Cheek	2592.99	0.203	-0.61	26.00	25.61	0.222	91



			1	1	Left Tilt	2592.99	0.071	-2.83	26.00	24.43	0.102	/
			135	67	Left Tilt	2592.99	0.097	3.51	26.00	25.61	0.106	/
SA N66	20M	DFT_QPSK	1	1	Right Cheek	1720	0.039	1.97	23.50	22.99	0.044	/
			50	25	Right Cheek	1720	0.041	-0.32	23.50	23.08	0.045	/
			1	1	Right Tilt	1720	0.012	-2.12	23.50	22.99	0.013	/
			50	25	Right Tilt	1720	0.024	-1.21	23.50	23.08	0.026	/
			1	1	Left Cheek	1720	0.057	-3.46	23.50	22.99	0.064	/
			50	25	Left Cheek	1720	0.060	-1.99	23.50	23.08	0.066	93
			1	1	Left Tilt	1720	0.027	1.78	23.50	22.99	0.030	/
			50	25	Left Tilt	1720	0.030	1.87	23.50	23.08	0.033	/
SA N77	100M	DFT_QPSK	1	271	Right Cheek	3930	0.031	-3.79	24.50	23.43	0.040	/
			135	67	Right Cheek	3930	0.037	-3.10	24.50	23.79	0.044	/
			1	271	Right Tilt	3930	0.011	-3.67	24.50	23.43	0.014	/
			135	67	Right Tilt	3930	0.017	2.75	24.50	23.79	0.020	/
			1	271	Left Cheek	3930	0.040	-1.14	24.50	23.43	0.051	/
			135	67	Left Cheek	3930	0.044	-0.68	24.50	23.79	0.052	95
			1	271	Left Tilt	3930	0.018	1.88	24.50	23.43	0.023	/
			135	67	Left Tilt	3930	0.024	1.01	24.50	23.79	0.028	/
SA N78	100M	DFT_QPSK	1	271	Right Cheek	3500	0.174	-1.29	20.50	20.05	0.193	/
			135	67	Right Cheek	3500	0.116	1.04	20.50	19.58	0.143	/
			1	271	Right Tilt	3500	0.087	-3.88	20.50	20.05	0.096	/
			135	67	Right Tilt	3500	0.053	-0.05	20.50	19.58	0.066	/
			1	271	Left Cheek	3500	0.226	0.92	20.50	20.05	0.251	97
			135	67	Left Cheek	3500	0.153	-1.78	20.50	19.58	0.189	/
			1	271	Left Tilt	3500	0.106	-3.55	20.50	20.05	0.118	/
			135	67	Left Tilt	3500	0.073	2.21	20.50	19.58	0.090	/

Note:

1. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
2. Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg



12.2 Body-worn and Hotspot SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	GPRS Data-2 Slot	Front Side	836.6	0.657	-1.62	31.00	30.56	0.727	/
		Back Side	824.2	0.845	-1.40	31.00	30.44	0.961	/
		Back Side	836.6	0.889	-2.67	31.00	30.56	0.984	2
		Back Side	848.8	0.813	1.97	31.00	30.42	0.929	/
		Left Side	836.6	0.347	1.12	31.00	30.56	0.384	/
		Right Side	836.6	0.122	-3.18	31.00	30.56	0.135	/
		Top Side	836.6	0.083	2.83	31.00	30.56	0.092	/
		Bottom Side	836.6	0.571	-1.93	31.00	30.56	0.632	/
GSM1900	GPRS Data-4 Slot	Front Side	1880	0.19	1.33	24.00	23.53	0.212	/
		Back Side	1880	0.46	2.56	24.00	23.53	0.513	4
		Left Side	1880	0.083	-2.29	24.00	23.53	0.092	/
		Right Side	1880	0.064	-1.97	24.00	23.53	0.071	/
		Bottom Side	1880	0.105	-3.82	24.00	23.53	0.117	/
WCDMA Band II	RMC	Front Side	1852.4	0.236	2.14	25.00	24.63	0.257	/
		Back Side	1852.4	0.397	-0.21	25.00	24.63	0.432	6
		Left Side	1852.4	0.092	-2.78	25.00	24.63	0.100	/
		Right Side	1852.4	0.073	-0.64	25.00	24.63	0.079	/
		Bottom Side	1852.4	0.112	-1.18	25.00	24.63	0.122	/
WCDMA Band V	RMC	Front Side	846.6	0.47	-2.08	25.00	24.51	0.526	8
		Back Side	846.6	0.407	3.81	25.00	24.51	0.456	/
		Left Side	846.6	0.104	1.83	25.00	24.51	0.116	/
		Right Side	846.6	0.054	-3.19	25.00	24.51	0.060	/
		Bottom Side	846.6	0.127	1.38	25.00	24.51	0.142	/
WCDMA Band IV	RMC	Front Side	1712.6	0.485	-3.70	23.50	23.01	0.543	/
		Back Side	1712.6	0.531	-3.56	23.50	23.01	0.594	10
		Left Side	1712.6	0.127	3.17	23.50	23.01	0.142	/
		Bottom Side	1712.6	0.247	-3.48	23.50	23.01	0.277	/
EVDO	BC0	Front Side	824.7	0.183	-1.02	21.00	20.11	0.225	/
		Back Side	824.7	0.240	-0.80	21.00	20.11	0.295	12
		Left Side	824.7	0.105	-3.36	21.00	20.11	0.129	/
		Bottom Side	824.7	0.145	-3.43	21.00	20.11	0.178	/



CDMA	BC1	Front Side	1908.75	0.205	-1.68	22.00	21.99	0.205	/
		Back Side	1908.75	0.285	-1.58	22.00	21.99	0.286	14
		Left Side	1908.75	0.112	3.52	22.00	21.99	0.112	/
		Right Side	1908.75	0.034	0.51	22.00	21.99	0.034	/
		Bottom Side	1908.75	0.157	-1.86	22.00	21.99	0.157	/
CDMA	BC10	Front Side	822.35	0.142	-3.57	26.00	25.46	0.161	/
		Back Side	822.35	0.165	1.78	26.00	25.46	0.187	16
		Left Side	822.35	0.054	1.46	26.00	25.46	0.061	/
		Right Side	822.35	0.031	-3.74	26.00	25.46	0.035	/
		Bottom Side	822.35	0.087	-3.87	26.00	25.46	0.099	/
2.4GHz WLAN ANT 1	802.11b	Front Side	2437	0.124	-2.90	14.50	14.31	0.130	/
		Back Side	2437	0.138	-1.43	14.50	14.31	0.144	18
		Right Side	2437	0.042	1.27	14.50	14.31	0.044	/
		Top Side	2437	0.077	-3.55	14.50	14.31	0.080	/
2.4GHz WLAN ANT 2	802.11b	Front Side	2412	0.028	2.70	14.50	14.09	0.031	/
		Back Side	2412	0.035	-0.52	14.50	14.09	0.038	20
		Right Side	2412	0.009	3.32	14.50	14.09	0.010	/
2.4GHz WLAN ANT 1	802.11 n- HT20	Front Side	2437	0.073	-1.93	15.50	15.19	0.078	/
		Back Side	2437	0.090	3.61	15.50	15.19	0.097	22
		Right Side	2437	0.034	-2.58	15.50	15.19	0.037	/
		Top Side	2437	0.057	0.15	15.50	15.19	0.061	/
2.4GHz WLAN ANT 2	802.11 n- HT20	Front Side	2437	0.038	3.64	15.50	15.19	0.041	/
		Back Side	2437	0.046	1.58	15.50	15.19	0.049	24
		Right Side	2437	0.025	-2.63	15.50	15.19	0.027	/
5.2GHz WLAN ANT 1	802.11a	Front Side	5240	0.212	-1.26	14.50	14.08	0.234	/
		Back Side	5240	0.233	1.95	14.50	14.08	0.257	26
		Right Side	5240	0.077	-0.39	14.50	14.08	0.085	/
		Top Side	5240	0.054	-2.44	14.50	14.08	0.059	/
5.2GHz WLAN ANT 2	802.11a	Front Side	5180	0.073	-2.88	12.50	12.19	0.078	/
		Back Side	5180	0.079	-0.83	12.50	12.19	0.085	28
		Right Side	5180	0.024	2.37	12.50	12.19	0.026	/
5.2GHz WLAN ANT 1	802.11n20	Front Side	5180	0.152	-0.81	16.00	15.79	0.160	/
		Back Side	5180	0.168	3.19	16.00	15.79	0.176	30
		Right Side	5180	0.087	-0.72	16.00	15.79	0.091	/
		Top Side	5180	0.102	1.62	16.00	15.79	0.107	/
5.2GHz WLAN ANT 2	802.11n20	Front Side	5180	0.067	-3.95	16.00	15.79	0.070	/
		Back Side	5180	0.074	1.85	16.00	15.79	0.078	32
		Right Side	5180	0.042	2.59	16.00	15.79	0.044	/



5.3GHz WLAN ANT 1	802.11a	Front Side	5260	0.071	3.60	12.00	11.69	0.076	/
		Back Side	5260	0.085	-0.52	12.00	11.69	0.091	34
		Right Side	5260	0.042	-3.70	12.00	11.69	0.045	/
		Top Side	5260	0.057	1.18	12.00	11.69	0.061	/
5.3GHz WLAN ANT 2	802.11a	Front Side	5260	0.315	-2.11	12.00	11.95	0.319	/
		Back Side	5260	0.499	-2.75	12.00	11.95	0.505	36
		Right Side	5260	0.147	2.21	12.00	11.95	0.149	/
5.3GHz WLAN ANT 1	802.11n20	Front Side	5260	0.061	-0.97	14.50	14.06	0.068	/
		Back Side	5260	0.073	-3.69	14.50	14.06	0.081	38
		Right Side	5260	0.044	1.91	14.50	14.06	0.049	/
		Top Side	5260	0.059	1.44	14.50	14.06	0.065	/
5.3GHz WLAN ANT 2	802.11n20	Front Side	5260	0.297	-1.86	14.50	14.06	0.329	/
		Back Side	5260	0.334	-3.61	14.50	14.06	0.370	40
		Right Side	5260	0.105	2.37	14.50	14.06	0.116	/
5.6GHz WLAN ANT 1	802.11a	Front Side	5500	0.110	3.57	12.50	12.38	0.113	/
		Back Side	5500	0.123	-1.57	12.50	12.38	0.126	42
		Right Side	5500	0.049	-1.78	12.50	12.38	0.050	/
		Top Side	5500	0.067	3.76	12.50	12.38	0.069	/
5.6GHz WLAN ANT 2	802.11a	Front Side	5500	0.152	-0.60	12.50	12.27	0.160	/
		Back Side	5500	0.272	-0.92	12.50	12.27	0.287	44
		Right Side	5500	0.103	3.26	12.50	12.27	0.109	/
5.6GHz WLAN ANT 1	802.11n20	Front Side	5500	0.075	-3.22	14.50	14.34	0.078	/
		Back Side	5500	0.090	3.58	14.50	14.34	0.093	46
		Right Side	5500	0.042	-3.61	14.50	14.34	0.044	/
		Top Side	5500	0.061	-1.19	14.50	14.34	0.063	/
5.6GHz WLAN ANT 2	802.11n20	Front Side	5500	0.154	-1.05	14.50	14.34	0.160	/
		Back Side	5500	0.161	-3.16	14.50	14.34	0.167	48
		Right Side	5500	0.043	-0.47	14.50	14.34	0.045	/
5.8GHz WLAN ANT 1	802.11a	Front Side	5745	0.147	-2.75	11.00	10.89	0.151	/
		Back Side	5745	0.167	-0.50	11.00	10.89	0.171	50
		Right Side	5745	0.107	-2.90	11.00	10.89	0.110	/
		Top Side	5745	0.124	-3.93	11.00	10.89	0.127	/
5.8GHz WLAN ANT 2	802.11a	Front Side	5825	0.176	-0.76	11.50	11.19	0.189	/
		Back Side	5825	0.217	3.35	11.50	11.19	0.233	52
		Right Side	5825	0.087	-0.59	11.50	11.19	0.093	/



5.8GHz WLAN ANT 1	802.11n20	Front Side	5745	0.083	-2.89	14.00	13.56	0.092	/
		Back Side	5745	0.104	2.12	14.00	13.56	0.115	54
		Right Side	5745	0.029	-3.70	14.00	13.56	0.032	/
		Top Side	5745	0.061	-2.43	14.00	13.56	0.068	/
5.8GHz WLAN ANT 2	802.11n20	Front Side	5745	0.143	-0.81	14.00	13.56	0.158	/
		Back Side	5745	0.167	-0.54	14.00	13.56	0.185	56
		Right Side	5745	0.102	0.45	7.00	6.68	0.110	/
BT	GFSK	Front Side	2402	0.008	-1.63	7.00	6.68	0.009	/
		Back Side	2402	0.010	-2.31	7.00	6.68	0.011	58
		Top Side	2402	0.008	1.55	7.00	6.68	0.009	/

Band	Mode	Max SAR (W/Kg)	MIMO
2.4G WLAN MIMO	802.11 n-HT20 ANT 1	0.097	0.146
	802.11 n-HT20 ANT 2	0.049	
5.2G WLAN MIMO	802.11 n-HT20 ANT 1	0.176	0.254
	802.11 n-HT20 ANT 2	0.078	
5.3G WLAN MIMO	802.11 n-HT20 ANT 1	0.081	0.451
	802.11 n-HT20 ANT 2	0.37	
5.6G WLAN MIMO	802.11 n-HT20 ANT 1	0.093	0.26
	802.11 n-HT20 ANT 2	0.167	
5.8G WLAN MIMO	802.11 n-HT20 ANT 1	0.115	0.3
	802.11 n-HT20 ANT 2	0.185	



Band	BW (MHz)	Mod	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Me as. No.
LTE Band 2	20M	QP SK	1	0	Front side	1880	0.211	-3.67	24.00	23.54	0.235	/
			50	0	Front side	1880	0.230	-2.01	23.00	22.56	0.255	/
			1	0	Back Side	1880	0.33	3.59	24.00	23.54	0.367	60
			50	0	Back Side	1880	0.310	0.18	23.00	22.56	0.343	/
			1	0	Left Side	1880	0.221	0.24	24.00	23.54	0.246	/
			50	0	Left Side	1880	0.185	1.89	23.00	22.56	0.205	/
			1	0	Right Side	1880	0.156	-1.56	24.00	23.54	0.173	/
			50	0	Right Side	1880	0.147	2.04	23.00	22.56	0.163	/
			1	0	Bottom Side	1880	0.111	-1.22	24.00	23.54	0.123	/
			50	0	Bottom Side	1880	0.123	2.01	23.00	22.56	0.136	/
LTE Band 4	20M	QP SK	1	0	Front side	1745	0.707	2.60	23.50	23.03	0.788	62
			50	0	Front side	1732.5	0.657	3.33	22.00	21.99	0.659	/
			1	0	Back Side	1745	0.560	2.41	23.50	23.03	0.624	/
			50	0	Back Side	1732.5	0.458	-3.21	22.00	21.99	0.459	/
			1	0	Left Side	1745	0.210	1.39	23.50	23.03	0.234	/
			50	0	Left Side	1732.5	0.262	-1.48	22.00	21.99	0.263	/
			1	0	Right Side	1745	0.124	3.15	23.50	23.03	0.138	/
			50	0	Right Side	1732.5	0.211	-2.06	22.00	21.99	0.211	/
			1	0	Bottom Side	1745	0.221	3.05	23.50	23.03	0.246	/
			50	0	Bottom Side	1732.5	0.247	-3.22	22.00	21.99	0.248	/
LTE Band 5	10M	QP SK	1	0	Front side	829	0.332	-0.71	25.00	24.55	0.368	/
			25	0	Front side	829	0.314	-2.10	23.00	22.91	0.321	/
			1	0	Back Side	829	0.474	3.57	25.00	24.55	0.526	64
			25	0	Back Side	829	0.412	-3.11	23.00	22.91	0.421	/
			1	0	Left Side	829	0.211	-3.66	25.00	24.55	0.234	/
			25	0	Left Side	829	0.257	-2.70	23.00	22.91	0.262	/
			1	0	Right Side	829	0.147	0.37	25.00	24.55	0.163	/
			25	0	Right Side	829	0.136	0.23	23.00	22.91	0.139	/
			1	0	Bottom Side	829	0.158	-0.66	25.00	24.55	0.175	/
			25	0	Bottom Side	829	0.169	-2.29	23.00	22.91	0.173	/
LTE Band 12	10M	QP SK	1	0	Front side	707.5	0.156	3.27	26.00	25.85	0.161	/
			25	0	Front side	704	0.147	-2.93	25.00	24.79	0.154	/
			1	0	Back Side	707.5	0.252	-1.52	26.00	25.85	0.261	66
			25	0	Back Side	704	0.234	-0.68	25.00	24.79	0.246	/
			1	0	Left Side	707.5	0.121	0.37	26.00	25.85	0.125	/



			25	0	Left Side	704	0.124	3.60	25.00	24.79	0.130	/
			1	0	Right Side	707.5	0.133	-1.54	26.00	25.85	0.138	/
			25	0	Right Side	704	0.147	1.13	25.00	24.79	0.154	/
			1	0	Bottom Side	707.5	0.102	-1.53	26.00	25.85	0.106	/
			25	0	Bottom Side	704	0.106	-1.22	25.00	24.79	0.111	/
LTE Band 13	10M	QP SK	1	0	Front side	782	0.156	1.94	23.00	22.44	0.177	/
			25	0	Front side	782	0.133	2.35	21.50	21.30	0.139	/
			1	0	Back Side	782	0.232	-3.31	23.00	22.44	0.264	68
			25	0	Back Side	782	0.210	-0.20	21.50	21.30	0.220	/
			1	0	Left Side	782	0.155	-2.01	23.00	22.44	0.176	/
			25	0	Left Side	782	0.147	-2.09	21.50	21.30	0.154	/
			1	0	Right Side	782	0.121	-0.08	23.00	22.44	0.138	/
			25	0	Right Side	782	0.102	0.69	21.50	21.30	0.107	/
			1	0	Bottom Side	782	0.111	-3.90	23.00	22.44	0.126	/
			25	0	Bottom Side	782	0.102	-3.99	21.50	21.30	0.107	/
LTE Band 17	10M	QP SK	1	0	Front side	709	0.201	-1.64	26.00	25.74	0.213	/
			25	0	Front side	709	0.198	1.95	24.50	24.40	0.203	/
			1	0	Back Side	709	0.296	3.34	26.00	25.74	0.314	70
			25	0	Back Side	709	0.245	2.69	24.50	24.40	0.251	/
			1	0	Left Side	709	0.133	0.41	26.00	25.74	0.141	/
			25	0	Left Side	709	0.142	-3.36	24.50	24.40	0.145	/
			1	0	Right Side	709	0.125	-1.32	26.00	25.74	0.133	/
			25	0	Right Side	709	0.124	3.36	24.50	24.40	0.127	/
			1	0	Bottom Side	709	0.133	3.27	26.00	25.74	0.141	/
			25	0	Bottom Side	709	0.124	-3.30	24.50	24.40	0.127	/
LTE Band 25	20M	QP SK	1	0	Front side	1882.5	0.201	-3.39	24.00	23.69	0.216	/
			50	0	Front side	1882.5	0.195	0.61	23.50	22.36	0.254	/
			1	0	Back Side	1882.5	0.340	0.72	24.00	23.69	0.365	72
			50	0	Back Side	1882.5	0.256	1.34	23.50	22.36	0.333	/
			1	0	Left Side	1882.5	0.220	-0.53	24.00	23.69	0.236	/
			50	0	Left Side	1882.5	0.210	3.77	23.50	22.36	0.273	/
			1	0	Right Side	1882.5	0.102	3.26	24.00	23.69	0.110	/
			50	0	Right Side	1882.5	0.106	2.42	23.50	22.36	0.138	/
			1	0	Bottom Side	1882.5	0.111	2.47	24.00	23.69	0.119	/
			50	0	Bottom Side	1882.5	0.147	-3.55	23.50	22.36	0.191	/



LTE Band 26	15M	QP SK	1	0	Front side	821.5	0.321	3.27	25.00	24.08	0.397	/
			36	0	Front side	821.5	0.333	-2.44	24.00	23.66	0.360	/
			1	0	Back Side	821.5	0.430	0.11	25.00	24.08	0.531	74
			36	0	Back Side	821.5	0.410	0.10	24.00	23.66	0.443	/
			1	0	Left Side	821.5	0.210	0.00	25.00	24.08	0.260	/
			36	0	Left Side	821.5	0.223	-0.98	24.00	23.66	0.241	/
			1	0	Right Side	821.5	0.156	0.99	25.00	24.08	0.193	/
			36	0	Right Side	821.5	0.145	0.24	24.00	23.66	0.157	/
			1	0	Bottom Side	821.5	0.133	0.58	25.00	24.08	0.164	/
			36	0	Bottom Side	821.5	0.125	2.04	24.00	23.66	0.135	/
LTE Band 38	20M	QP SK	1	0	Front side	2580	0.441	-1.20	23.50	23.07	0.487	/
			50	0	Front side	2580	0.425	-1.95	22.50	21.93	0.485	/
			1	0	Back Side	2580	0.569	-0.93	23.50	23.07	0.628	76
			50	0	Back Side	2580	0.522	-0.57	22.50	21.93	0.595	/
			1	0	Left Side	2580	0.310	0.71	23.50	23.07	0.342	/
			50	0	Left Side	2580	0.289	-0.21	22.50	21.93	0.330	/
			1	0	Right Side	2580	0.224	-2.57	23.50	23.07	0.247	/
			50	0	Right Side	2580	0.269	3.10	22.50	21.93	0.307	/
			1	0	Bottom Side	2580	0.158	2.92	23.50	23.07	0.174	/
			50	0	Bottom Side	2580	0.157	-1.15	22.50	21.93	0.179	/
LTE Band 40	20M	QP SK	1	0	Front side	2310	0.214	2.96	24.00	23.19	0.258	/
			50	0	Front side	2310	0.202	-1.13	23.00	22.15	0.246	/
			1	0	Back Side	2310	0.368	0.33	24.00	23.19	0.443	78
			50	0	Back Side	2310	0.325	1.20	23.00	22.15	0.395	/
			1	0	Left Side	2310	0.115	0.70	24.00	23.19	0.139	/
			50	0	Left Side	2310	0.125	-0.72	23.00	22.15	0.152	/
			1	0	Right Side	2310	0.133	-3.02	24.00	23.19	0.160	/
			50	0	Right Side	2310	0.142	0.38	23.00	22.15	0.173	/
			1	0	Bottom Side	2310	0.102	2.06	24.00	23.19	0.123	/
			50	0	Bottom Side	2310	0.100	-3.51	23.00	22.15	0.122	/
LTE Band 41	20M	QP SK	1	0	Front side	2680	0.454	-2.08	24.00	23.16	0.551	/
			50	0	Front side	2680	0.369	-2.05	22.00	21.84	0.383	/
			1	0	Back Side	2680	0.585	1.58	24.00	23.16	0.710	80
			50	0	Back Side	2680	0.574	-1.06	22.00	21.84	0.596	/
			1	0	Left Side	2680	0.336	-0.74	24.00	23.16	0.408	/
			50	0	Left Side	2680	0.325	-2.35	22.00	21.84	0.337	/
			1	0	Right Side	2680	0.322	-3.75	24.00	23.16	0.391	/
			50	0	Right Side	2680	0.285	1.05	22.00	21.84	0.296	/



			1	0	Bottom Side	2680	0.156	-2.15	24.00	23.16	0.189	/
			50	0	Bottom Side	2680	0.153	2.81	22.00	21.84	0.159	/
LTE Band 66	20M	QP SK	1	0	Front side	1720	0.262	2.55	23.00	22.99	0.263	/
			50	0	Front side	1720	0.241	-1.89	22.00	21.78	0.254	/
			1	0	Back Side	1720	0.414	-0.75	23.00	22.99	0.415	82
			50	0	Back Side	1720	0.358	-0.45	22.00	21.78	0.377	/
			1	0	Left Side	1720	0.125	-3.86	23.00	22.99	0.125	/
			50	0	Left Side	1720	0.136	-0.88	22.00	21.78	0.143	/
			1	0	Right Side	1720	0.147	-2.92	23.00	22.99	0.147	/
			50	0	Right Side	1720	0.169	-3.53	22.00	21.78	0.178	/
			1	0	Bottom Side	1720	0.112	-2.56	23.00	22.99	0.112	/
			50	0	Bottom Side	1720	0.134	3.59	22.00	21.78	0.141	/
LTE Band 71	20M	QP SK	1	0	Front side	688	0.455	-0.23	25.00	24.58	0.501	/
			50	0	Front side	688	0.426	0.15	23.00	22.76	0.450	/
			1	0	Back Side	673	0.322	-3.61	25.00	22.53	0.569	/
			1	0	Back Side	680.5	0.455	2.75	25.00	23.68	0.617	/
			1	0	Back Side	688	0.601	-3.08	25.00	24.58	0.662	84
			50	0	Back Side	688	0.522	0.56	23.00	22.76	0.552	/
			1	0	Left Side	688	0.336	1.18	25.00	24.58	0.370	/
			50	0	Left Side	688	0.325	0.09	23.00	22.76	0.343	/
			1	0	Right Side	688	0.332	-2.56	25.00	24.58	0.366	/
			50	0	Right Side	688	0.215	-1.86	23.00	22.76	0.227	/
			1	0	Bottom Side	688	0.221	0.26	25.00	24.58	0.243	/
			50	0	Bottom Side	688	0.231	2.76	23.00	22.76	0.244	/
SA N2	20M	DFT _Q PS K	1	1	Front Side	1860	0.125	2.83	23.00	22.61	0.137	/
			50	25	Front Side	1860	0.133	-1.08	23.00	22.84	0.138	/
			1	1	Back Side	1860	0.244	-3.32	23.00	22.61	0.267	86
			50	25	Back Side	1860	0.211	-3.08	23.00	22.84	0.219	/
			1	1	Left Edge	1860	0.120	0.09	23.00	22.61	0.131	/
			50	25	Left Edge	1860	0.133	-1.15	23.00	22.84	0.138	/
			1	1	Bottom Edge	1860	0.089	2.92	23.00	22.61	0.097	/
			50	25	Bottom Edge	1860	0.095	3.01	23.00	22.84	0.099	/
SA N5	20M	DFT _Q PS K	1	1	Front Side	839	0.250	-2.57	22.50	21.83	0.292	/
			50	25	Front Side	839	0.262	0.00	22.50	22.18	0.282	/
			1	1	Back Side	839	0.382	0.65	22.50	21.83	0.446	88
			50	25	Back Side	839	0.325	-3.90	22.50	22.18	0.350	/
			1	1	Left Edge	839	0.154	3.37	22.50	21.83	0.180	/
			50	25	Left Edge	839	0.133	-0.87	22.50	22.18	0.143	/



			1	1	Bottom Edge	839	0.125	-0.81	22.50	21.83	0.146	/
			50	25	Bottom Edge	839	0.102	0.93	22.50	22.18	0.110	/
SA N7	20M	DFT _Q PS K	1	1	Front Side	2560	0.325	-3.57	23.00	22.31	0.381	/
			50	25	Front Side	2560	0.336	-1.30	23.00	22.62	0.367	/
			1	1	Back Side	2560	0.441	1.06	23.00	22.31	0.517	90
			50	25	Back Side	2560	0.410	-0.36	23.00	22.62	0.447	/
			1	1	Left Edge	2560	0.202	0.03	23.00	22.31	0.237	/
			50	25	Left Edge	2560	0.205	-3.00	23.00	22.62	0.224	/
			1	1	Bottom Edge	2560	0.166	1.54	23.00	22.31	0.195	/
			50	25	Bottom Edge	2560	0.158	2.74	23.00	22.62	0.172	/
SA N41	100M	DFT _Q PS K	1	1	Front Side	2592.99	0.211	3.82	26.00	24.43	0.303	/
			135	67	Front Side	2592.99	0.233	0.62	26.00	25.61	0.255	/
			1	1	Back Side	2592.99	0.329	3.18	26.00	24.43	0.472	92
			135	67	Back Side	2592.99	0.315	-2.67	26.00	25.61	0.345	/
			1	1	Left Edge	2592.99	0.152	3.00	26.00	24.43	0.218	/
			135	67	Left Edge	2592.99	0.133	-0.27	26.00	25.61	0.145	/
			1	1	Right Edge	2592.99	0.125	1.43	26.00	24.43	0.179	/
			135	67	Right Edge	2592.99	0.124	0.93	26.00	25.61	0.136	/
			1	1	Bottom Edge	2592.99	0.102	3.41	26.00	24.43	0.146	/
			135	67	Bottom Edge	2592.99	0.103	-2.43	26.00	25.61	0.113	/
SA N66	20M	DFT _Q PS K	1	1	Front Side	1720	0.100	2.68	23.50	22.99	0.112	/
			50	25	Front Side	1720	0.099	-0.28	23.50	23.08	0.109	/
			1	1	Back Side	1720	0.121	1.17	23.50	22.99	0.136	94
			50	25	Back Side	1720	0.112	0.21	23.50	23.08	0.123	/
			1	1	Left Edge	1720	0.059	-2.96	23.50	22.99	0.066	/
			50	25	Left Edge	1720	0.058	-2.52	23.50	23.08	0.064	/
			1	1	Top Edge	1720	0.066	2.46	23.50	22.99	0.074	/
			50	25	Top Edge	1720	0.063	-0.95	23.50	23.08	0.069	/
			1	1	Bottom Edge	1720	0.024	-1.03	23.50	22.99	0.027	/
			50	25	Bottom Edge	1720	0.032	1.53	23.50	23.08	0.035	/
SA N77	100M	DFT _Q PS K	1	271	Front Side	3930	0.211	3.11	24.50	23.43	0.270	/
			135	67	Front Side	3930	0.202	3.78	24.50	23.79	0.238	/
			1	271	Back Side	3930	0.333	-1.52	24.50	23.43	0.426	96
			135	67	Back Side	3930	0.301	-3.64	24.50	23.79	0.354	/
			1	271	Left Edge	3930	0.136	2.69	24.50	23.43	0.174	/
			135	67	Left Edge	3930	0.125	-1.03	24.50	23.79	0.147	/
			1	271	Top Edge	3930	0.100	0.67	24.50	23.43	0.128	/
			135	67	Top Edge	3930	0.136	0.38	24.50	23.79	0.160	/



			1	271	Bottom Edge	3930	0.125	-0.30	24.50	23.43	0.160	/
			135	67	Bottom Edge	3930	0.104	3.74	24.50	23.79	0.122	/
SA N78	100M	DFT	1	271	Front Side	3500	0.102	0.29	20.50	20.05	0.113	/
			135	67	Front Side	3500	0.109	2.51	20.50	19.58	0.135	/
		_Q	1	271	Back Side	3500	0.212	3.71	20.50	20.05	0.235	98
			135	67	Back Side	3500	0.202	-3.30	20.50	19.58	0.250	/
		PS	1	271	Left Edge	3500	0.111	-0.04	20.50	20.05	0.123	/
			135	67	Left Edge	3500	0.121	-0.41	20.50	19.58	0.150	/
		K	1	271	Top Edge	3500	0.105	-1.35	20.50	20.05	0.116	/
			135	67	Top Edge	3500	0.102	-1.39	20.50	19.58	0.126	/
			1	271	Bottom Edge	3500	0.099	-3.47	20.50	20.05	0.110	/
			135	67	Bottom Edge	3500	0.095	-0.69	20.50	19.58	0.117	/

Note:

1. The test separation of all above table is 10mm.
2. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
3. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The “Portable Hotspot” feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

**Repeated SAR**

Band	Mode	Test Position	Freq.	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
GSM 850	GPRS Data-2 Slot	Back Side	824.2	0.830	3.67	31.00	30.44	0.944	-
		Back Side	836.6	0.872	-0.58	31.00	30.56	0.965	-
		Back Side	848.8	0.781	1.92	31.00	30.42	0.893	-

12.3 repeated SAR measurement

Band	Mode	Test Position	Freq.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(W/kg)	2nd Repeated SAR 1g	Ratio
GSM 850	GPRS Data-2 Slot	Back Side	824.2	0.845	0.830	1.018	-	-	-
		Back Side	836.6	0.889	0.872	1.019	-	-	-
		Back Side	848.8	0.813	0.781	1.041	-	-	-

Note:

1. Per KDB 865664 D01, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/Kg.
2. Per KDB 865664 D01, if the ratio of largest to smallest SAR for the original and first repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/Kg, only one repeated measurement is required.
3. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/Kg
4. The ratio is the difference in percentage between original and repeated measured SAR.

**Simultaneous Multi-band Transmission Evaluation:**

Application Simultaneous Transmission information:

Position	Simultaneous State
Head	1. GSM + 2.4GHz WLAN/5G WLAN /Bluetooth
	2. WCDMA+2.4GHzWLAN/5GWLAN/Bluetooth
	3. LTE + 2.4GHz WLAN/5G WLAN/Bluetooth
	4. NR + 2.4GHz WLAN/5G WLAN/Bluetooth
	5. CDMA+2.4GHzWLAN/5GWLAN/Bluetooth
Body	1. GSM + 2.4GHz WLAN/5G WLAN /Bluetooth
	2. WCDMA+2.4GHzWLAN/5GWLAN/Bluetooth
	3. LTE + 2.4GHz WLAN/5G WLAN/Bluetooth
	4. NR + 2.4GHz WLAN/5G WLAN/Bluetooth
	5. CDMA+2.4GHzWLAN/5GWLAN/Bluetooth

NOTE:

- Bluetooth and WLAN can't simultaneous transmission at the same time.
- For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
- If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
- For minimum test separation distance $\leq 50\text{mm}$, Bluetooth standalone SAR is excluded according to $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot \sqrt{f \text{ (GHz)}} / x] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
- The reported SAR summation is calculated based on the same configuration and test position.
- KDB 447498 / 4.3.2 (2) when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
 - $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot \sqrt{f \text{ (GHz)}} / x$ W/kg for test separation distances $\leq 50 \text{ mm}$;
Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is $>50\text{mm}$.



Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
GSM + 2.4G WLAN	Head	GSM	0.419	0.911
		2.4G WLAN	0.492	
	Body	GSM	0.984	1.130
		2.4G WLAN	0.146	
GSM + Bluetooth	Head	GSM	0.419	0.433
		Bluetooth	0.014	
	Body	GSM	0.984	0.995
		Bluetooth	0.011	
GSM + 5G WLAN	Head	GSM	0.419	0.798
		5G WLAN	0.379	
	Body	GSM	0.984	1.489
		5G WLAN	0.505	
WCDMA + 2.4G WLAN	Head	WCDMA	0.404	0.896
		2.4G WLAN	0.492	
	Body	WCDMA	0.594	0.740
		2.4G WLAN	0.146	
WCDMA + Bluetooth	Head	WCDMA	0.404	0.418
		Bluetooth	0.014	
	Body	WCDMA	0.594	0.605
		Bluetooth	0.011	
WCDMA + 5G WLAN	Head	WCDMA	0.404	0.783
		5G WLAN	0.379	
	Body	WCDMA	0.594	1.099
		5G WLAN	0.505	
CDMA + 2.4G WLAN	Head	CDMA	0.176	0.668
		2.4G WLAN	0.492	
	Body	CDMA	0.295	0.441
		2.4G WLAN	0.146	
CDMA + Bluetooth	Head	CDMA	0.176	0.190
		Bluetooth	0.014	
	Body	CDMA	0.295	0.306
		Bluetooth	0.011	



CDMA + 5G WLAN	Head	CDMA	0.176	0.555
		5G WLAN	0.379	
	Body	CDMA	0.295	0.800
		5G WLAN	0.505	
LTE + 2.4G WLAN	Head	LTE	0.462	0.954
		2.4G WLAN	0.492	
	Body	LTE	0.710	0.856
		2.4G WLAN	0.146	
LTE + Bluetooth	Head	LTE	0.462	0.476
		Bluetooth	0.014	
	Body	LTE	0.710	0.721
		Bluetooth	0.011	
LTE + 5G WLAN	Head	LTE	0.462	0.841
		5G WLAN	0.379	
	Body	LTE	0.710	1.215
		5G WLAN	0.505	
SA+ 2.4G WLAN	Head	SA	0.251	0.743
		2.4G WLAN	0.492	
	Body	SA	0.517	0.663
		2.4G WLAN	0.146	
SA + Bluetooth	Head	SA	0.251	0.265
		Bluetooth	0.014	
	Body	SA	0.517	0.528
		Bluetooth	0.011	
SA + 5G WLAN	Head	SA	0.251	0.630
		5G WLAN	0.379	
	Body	SA	0.517	1.022
		5G WLAN	0.505	

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.

When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR-1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR-1g 1.6 W/kg), SAR test exclusion is determined by the SPLSR.



13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	MVG	SID750	SN 30/14 DIP0G750-331	2020.07.14	2023.07.13
835MHz Dipole	MVG	SID835	SN 30/14 DIP0G835-332	2020.07.14	2023.07.13
1800MHz Dipole	MVG	SID1800	SN 30/14 DIP1G800-329	2020.07.14	2023.07.13
1900MHz Dipole	MVG	SID1900	SN 30/14 DIP1G900-333	2020.07.14	2023.07.13
2450MHz Dipole	MVG	SID2450	SN 30/14 DIP2G450-335	2020.07.14	2023.07.13
2600MHz Dipole	MVG	SID2600	SN 30/14 DIP2G600-336	2020.07.14	2023.07.13
3500MHz Dipole	MVG	SID3500	SN 08/21 DIP3G500-553	2020.07.14	2023.07.13
3900MHz Dipole	MVG	SID3900	SN 08/21 DIP3G900-555	2020.07.14	2023.07.13
Waveguide	MVG	SWG5500	SN 13/14 WGA32	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE2	SN 07/21 EPGO352	2022.02.28	2023.02.27
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2022.11.15	2023.11.14
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom3	MVG	SAM	SN 21/21 ELLI48	N/A	N/A
Phone holder	MVG	N/A	SN 32/14 MSH97	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	99899	DC-18GHz	N/A	N/A
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2022.09.28	2023.09.27
Multi Meter	Keithley	Multi Meter 2000	4050073	2022.09.29	2023.09.28
Signal Generator	Agilent	N5182A	MY50140530	2022.09.28	2023.09.27
Wireless Communication Test Set	Agilent	8960- E5515C	MY48360751	2022.09.28	2023.09.27
Wireless Communication Test Set	R&S	CMW500	156324	2022.09.29	2023.09.28
Power Amplifier	DESAY	ZHL-42W	9638	2022.10.08	2023.10.07
Power Meter	R&S	NRP	100510	2022.09.28	2023.09.27
Power Sensor	R&S	NRP-Z11	101919	2022.09.28	2023.09.27
Power Sensor	Keysight	U2021XA	MY56280002	2022.09.29	2023.09.28
Temperature hygrometer	SuWei	SW-108	N/A	2022.09.30	2023.09.29
Thermograph	Elitech	RC-4	S/N EF7176501537	2022.09.30	2023.09.29

Note:

Per KDB 865664 D01, Dipole SAR Validation Verification, STS LAB has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole
2. System validation with specific dipole is within 10% of calibrated value Return-loss in within 20% of calibrated measurement

Appendix A. System Validation Plots

System Performance Check Data(750MHz)

Type: Phone measurement (Complete)

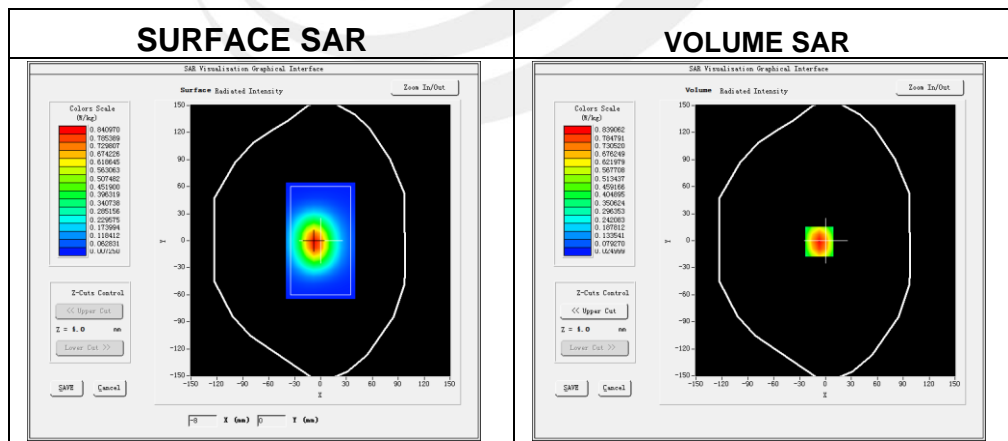
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2023-01-10

Experimental conditions

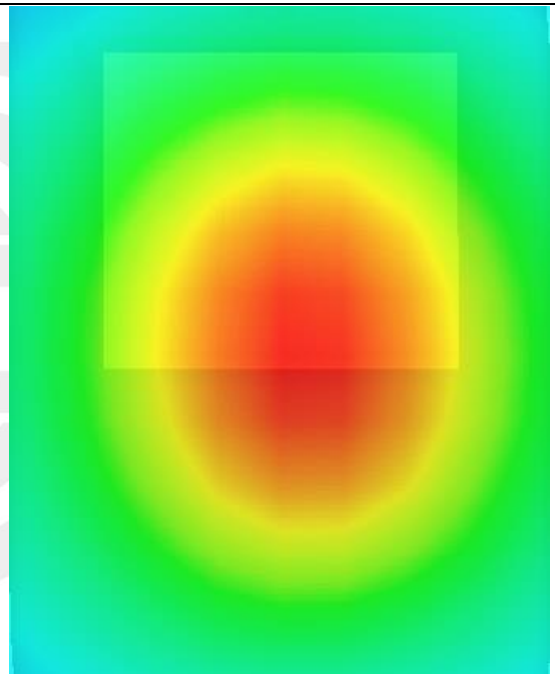
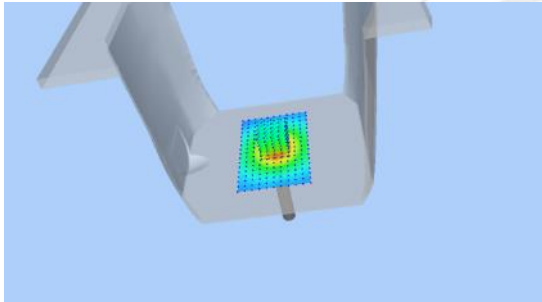
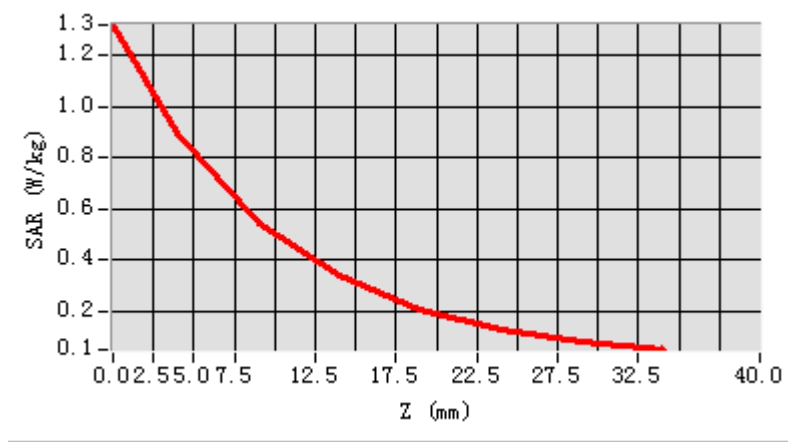
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity	42.48
Conductivity (S/m)	0.86
Probe	SN 07/21 EPGO352
ConvF:	1.58
Crest factor:	1:1



Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.524748
SAR 1g (W/Kg)	0.871296

Z Axis Scan



System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

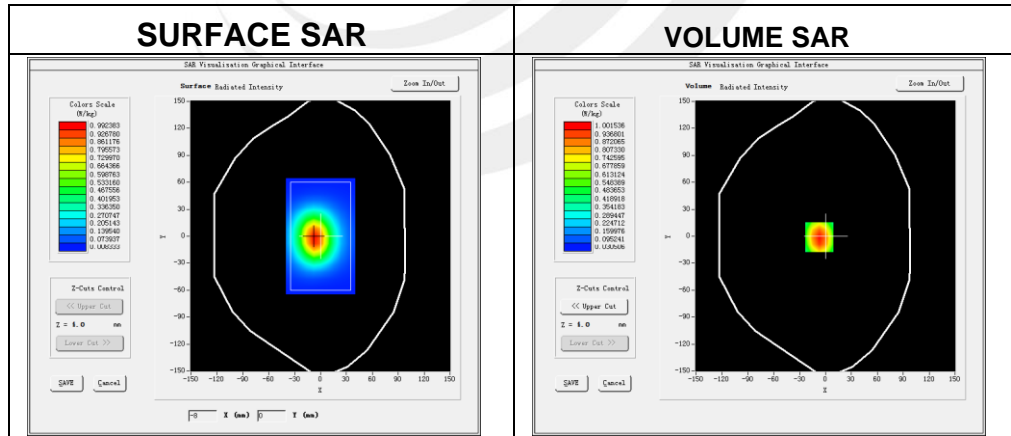
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2023-01-11

Experimental conditions

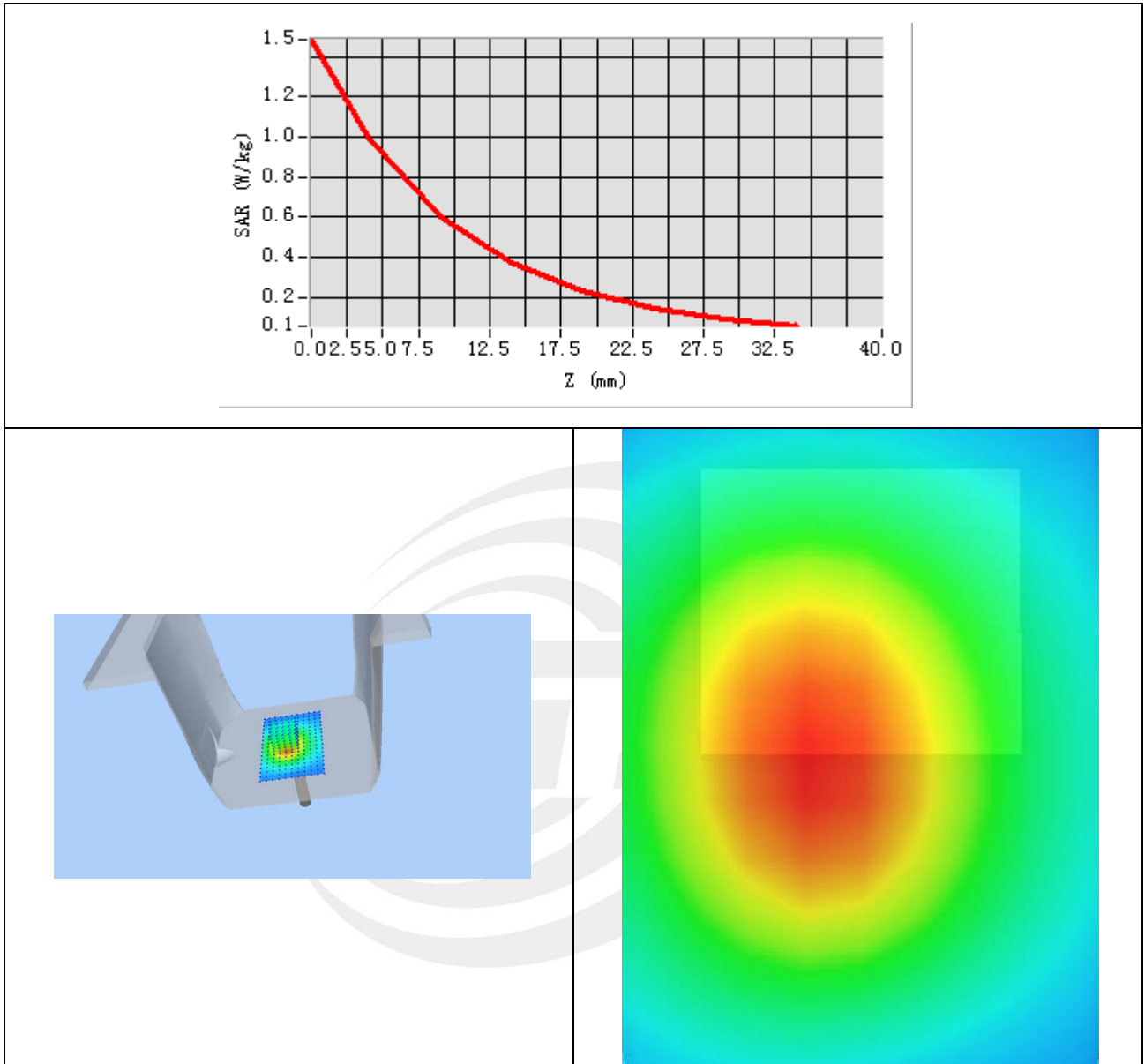
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	41.60
Conductivity (S/m)	0.92
Probe	SN 07/21 EPG0352
ConvF:	1.57
Crest factor:	1:1



Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.651421
SAR 1g (W/Kg)	0.947127

Z Axis Scan



System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

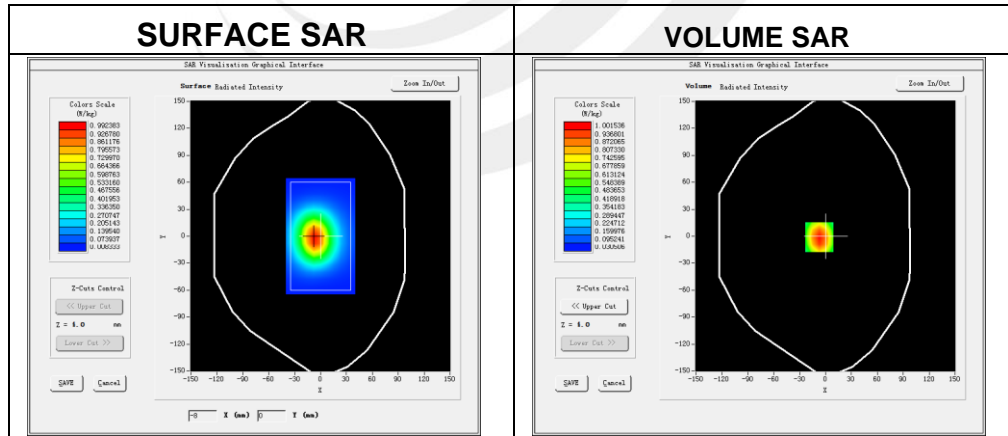
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2023-01-12

Experimental conditions

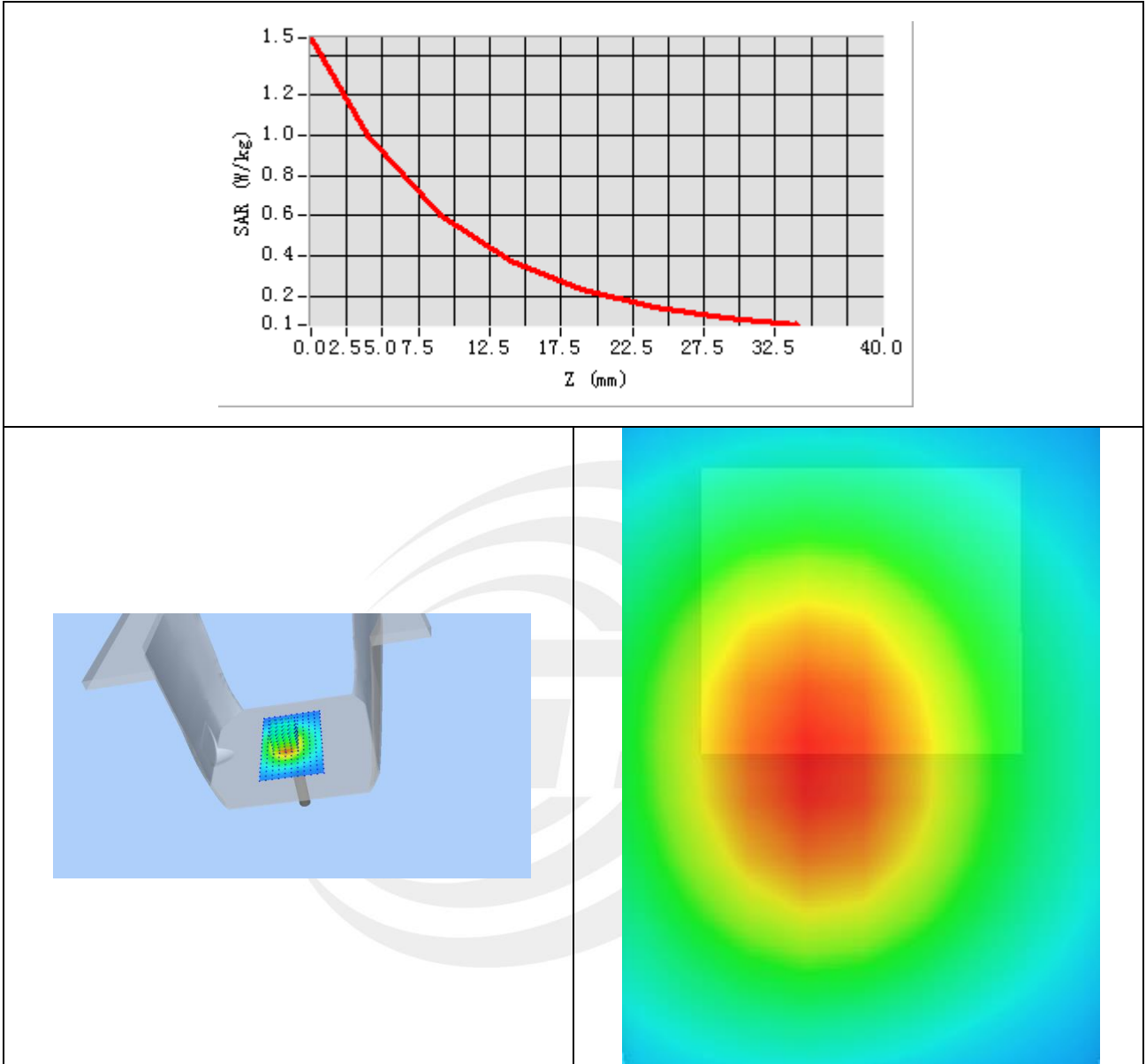
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	41.63
Conductivity (S/m)	0.89
Probe	SN 07/21 EPG0352
ConvF:	1.57
Crest factor:	1:1



Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.645346
SAR 1g (W/Kg)	0.943515

Z Axis Scan





System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)

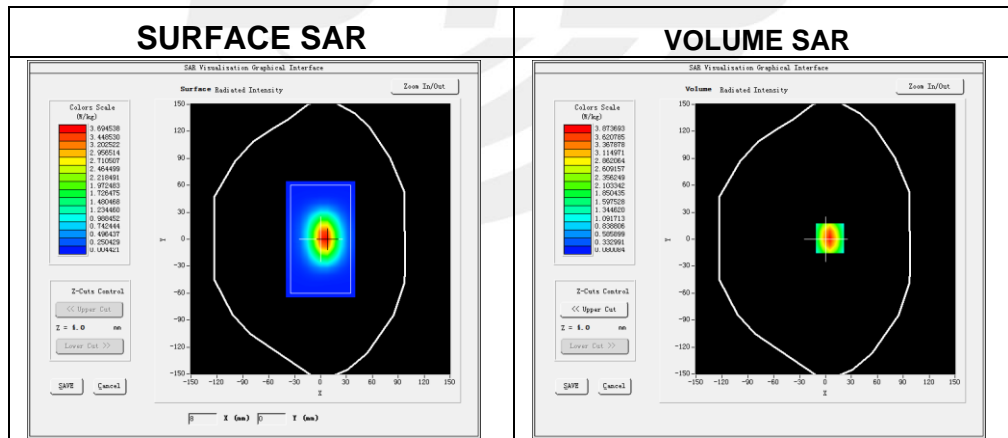
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2023-01-13

Experimental conditions.

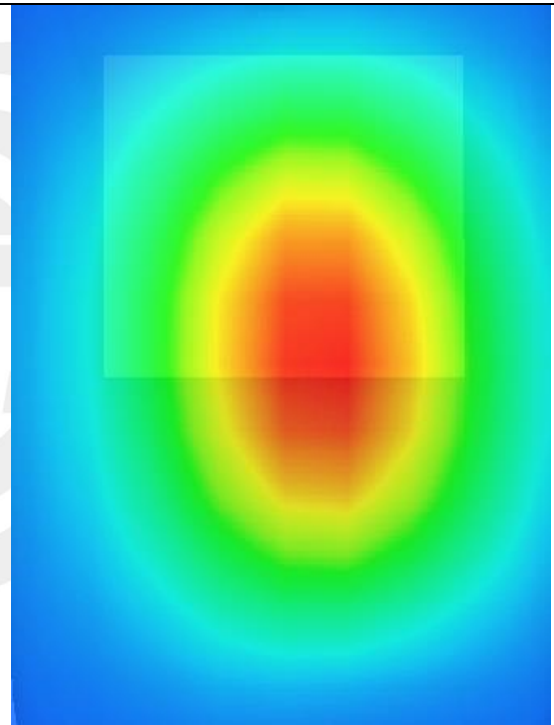
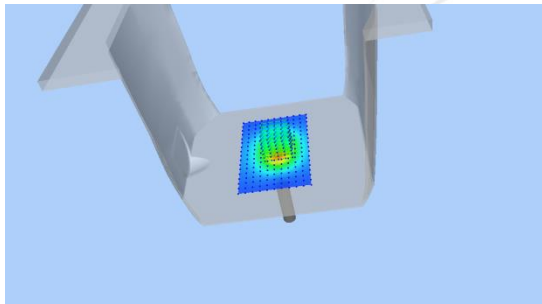
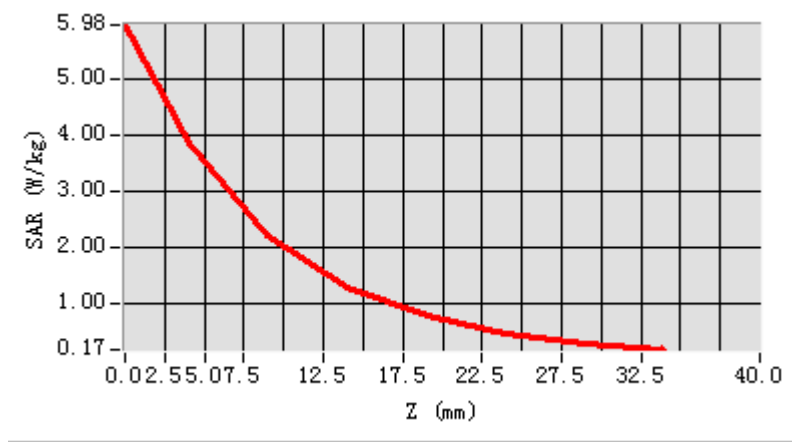
Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	41.32
Conductivity (S/m)	1.44
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1



Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	2.042710
SAR 1g (W/Kg)	3.793412

Z Axis Scan

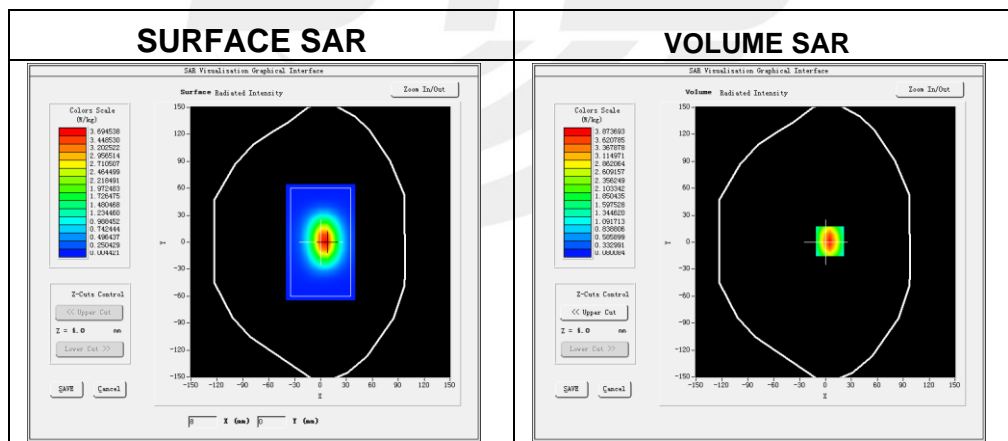


System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)
 Area scan resolution: dx=8mm, dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2023-02-01

Experimental conditions.

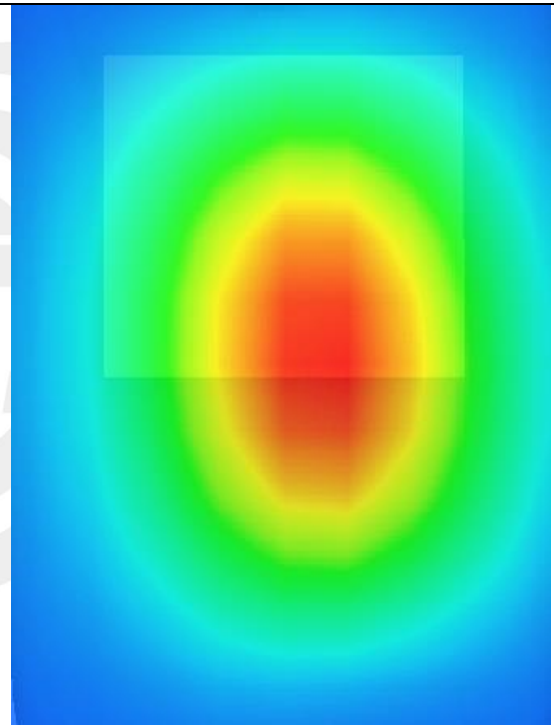
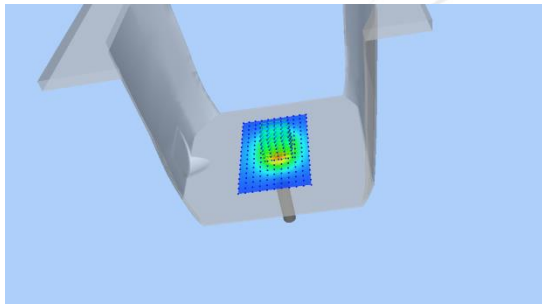
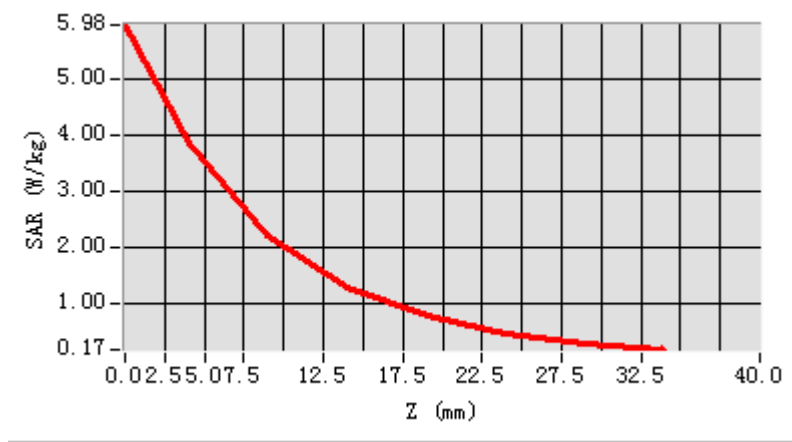
Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	41.26
Conductivity (S/m)	1.42
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1



Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	2.030694
SAR 1g (W/Kg)	3.732911

Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

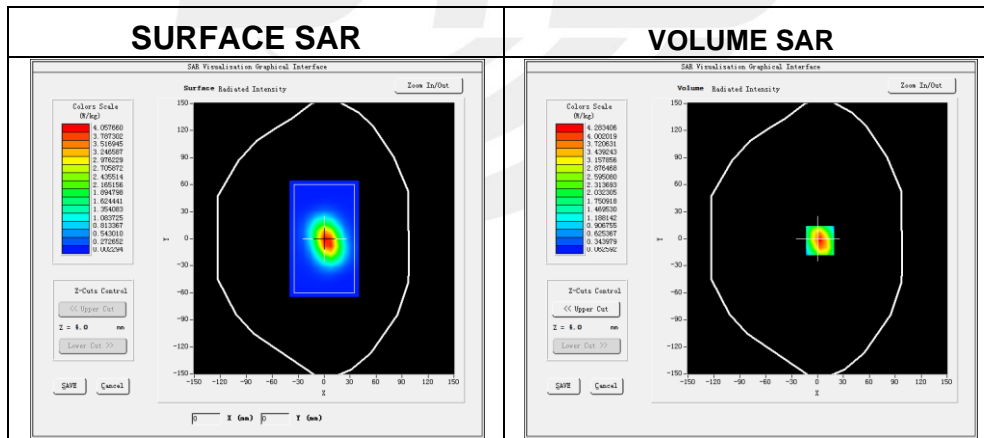
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2023-02-02

Experimental conditions.

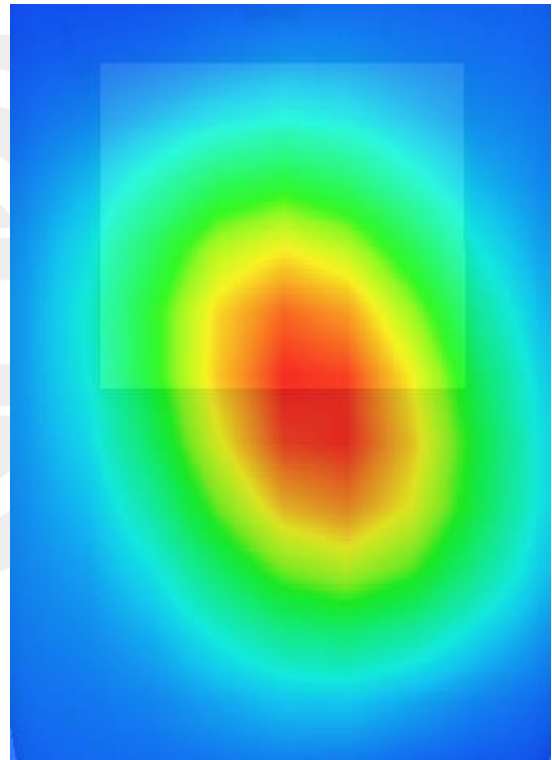
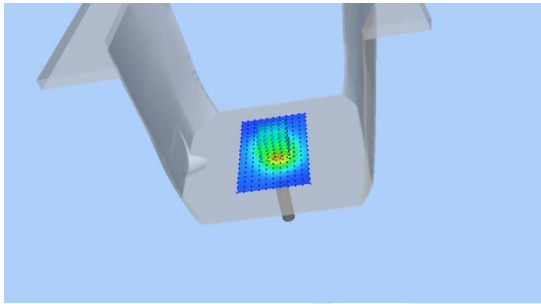
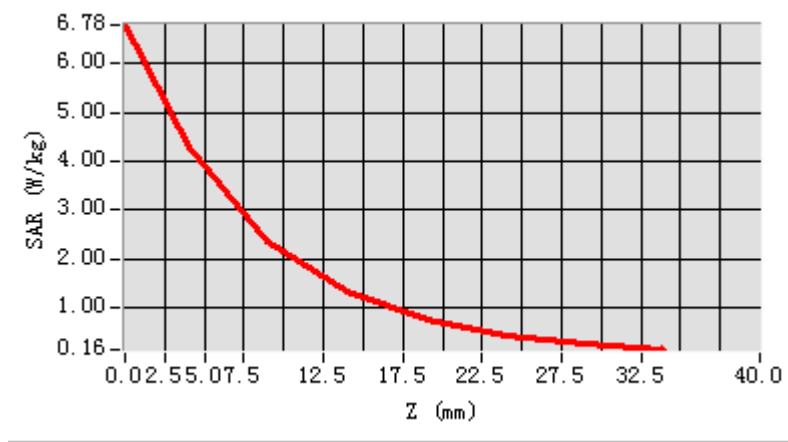
Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	40.80
Conductivity (S/m)	1.43
Probe	SN 07/21 EPGO352
ConvF:	1.78
Crest factor:	1:1



Maximum location: X=3.00, Y=-2.00

SAR 10g (W/Kg)	2.017536
SAR 1g (W/Kg)	3.994997

Z Axis Scan



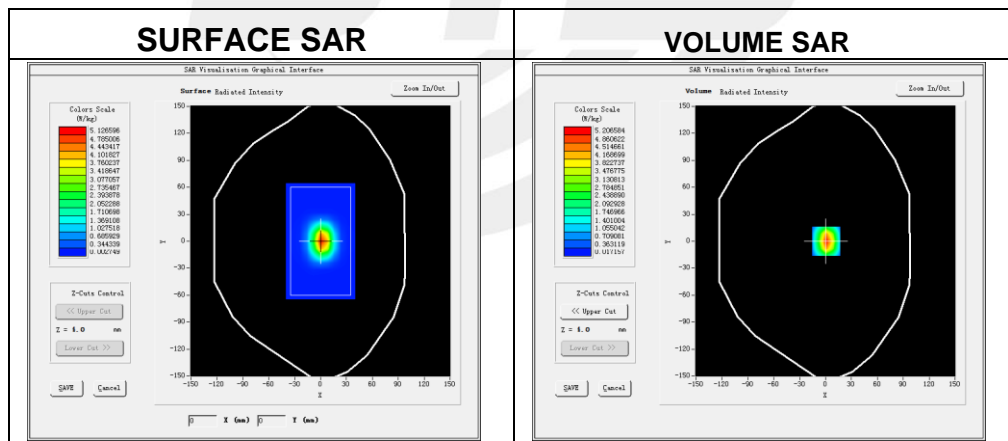


System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)
 Area scan resolution: dx=8mm, dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2023-02-03

Experimental conditions.

Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.73
Conductivity (S/m)	1.75
Probe	SN 07/21 EPGO352
ConvF	1.75
Crest factor:	1:1



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.430459
SAR 1g (W/Kg)	5.492367