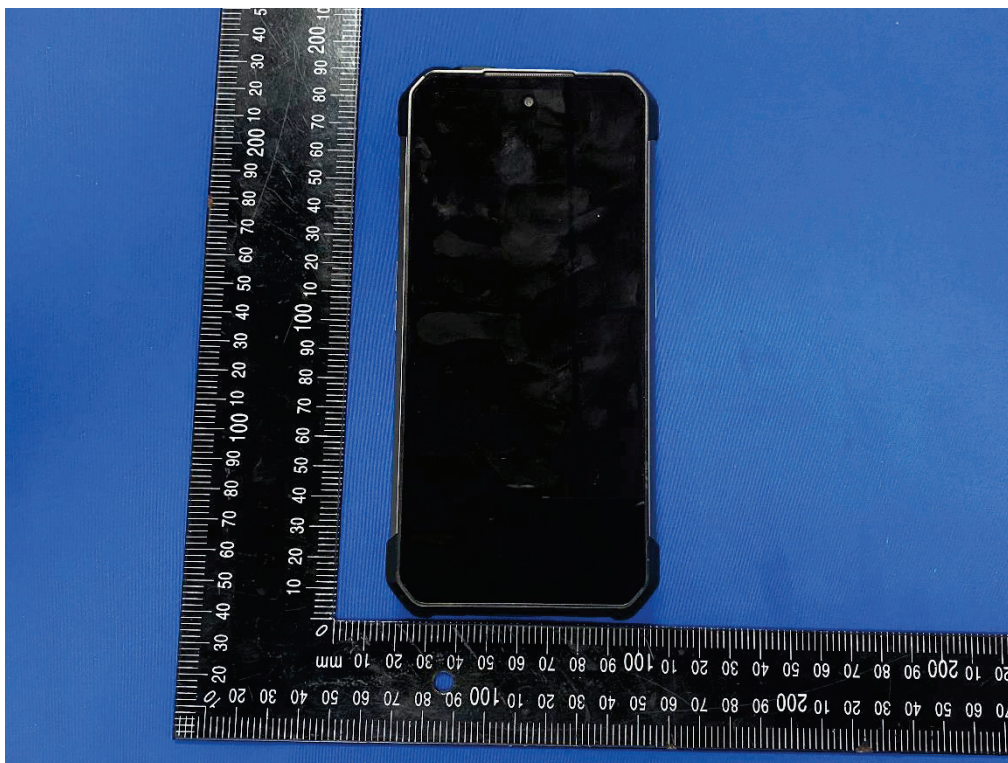


11. EUT and Test Setup Photo

11.1 EUT Photos

Front side

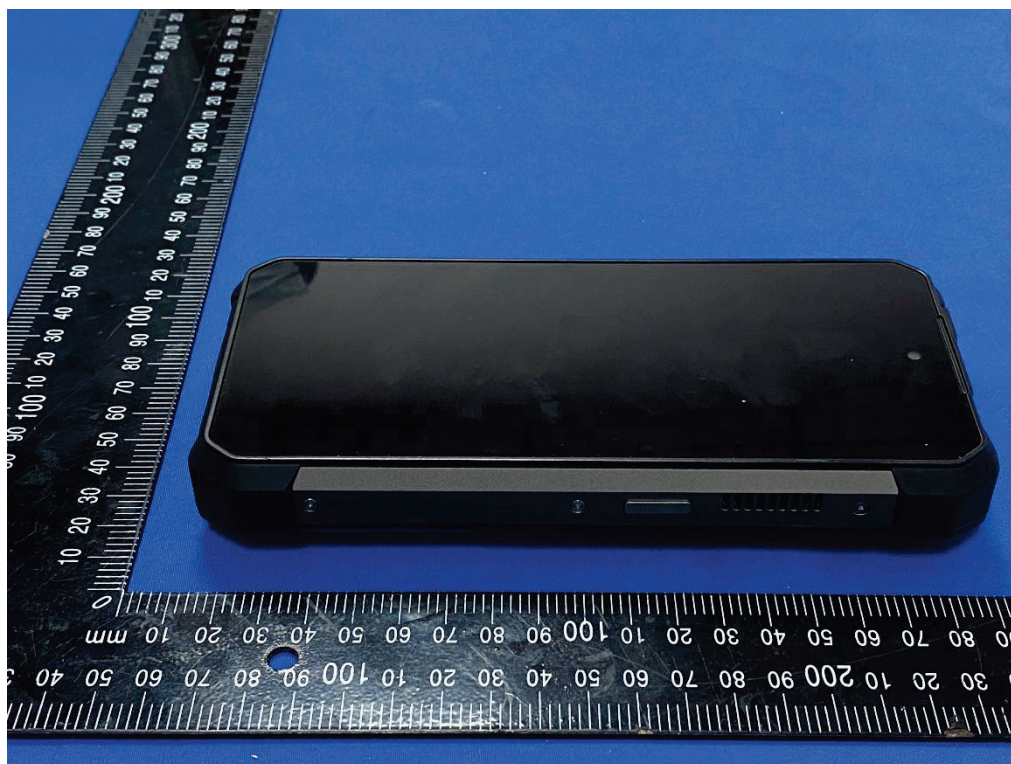


Back side





Right Edge



Left Edge





Top Edge



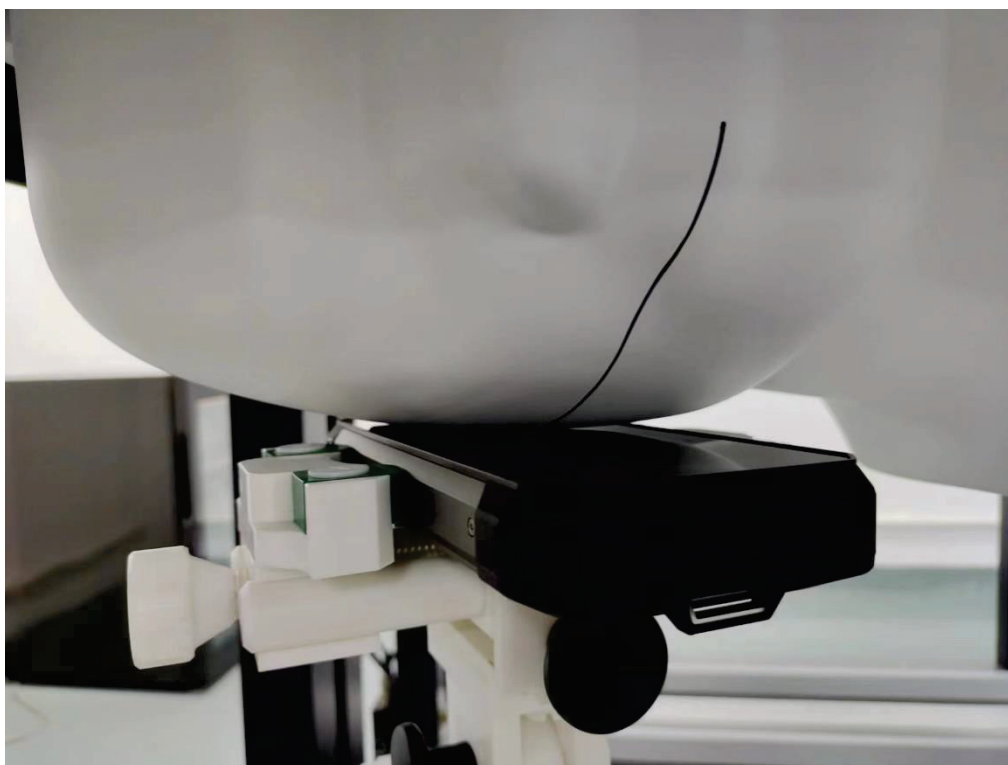
Bottom Edge



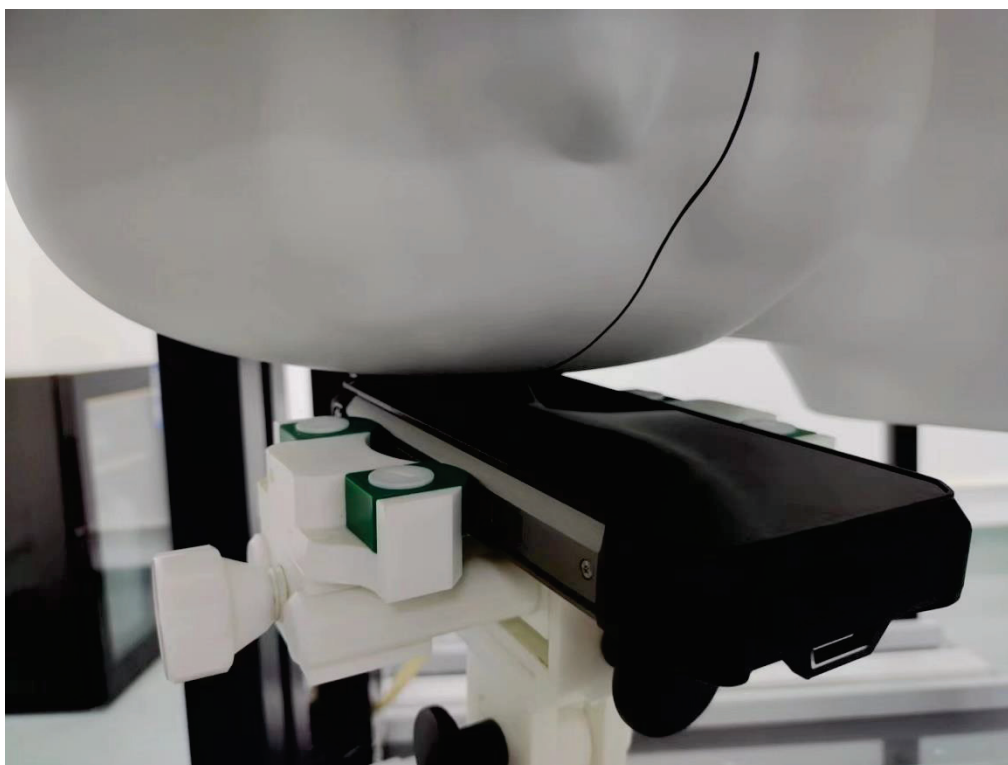


11.2 Setup Photos

Right Touch

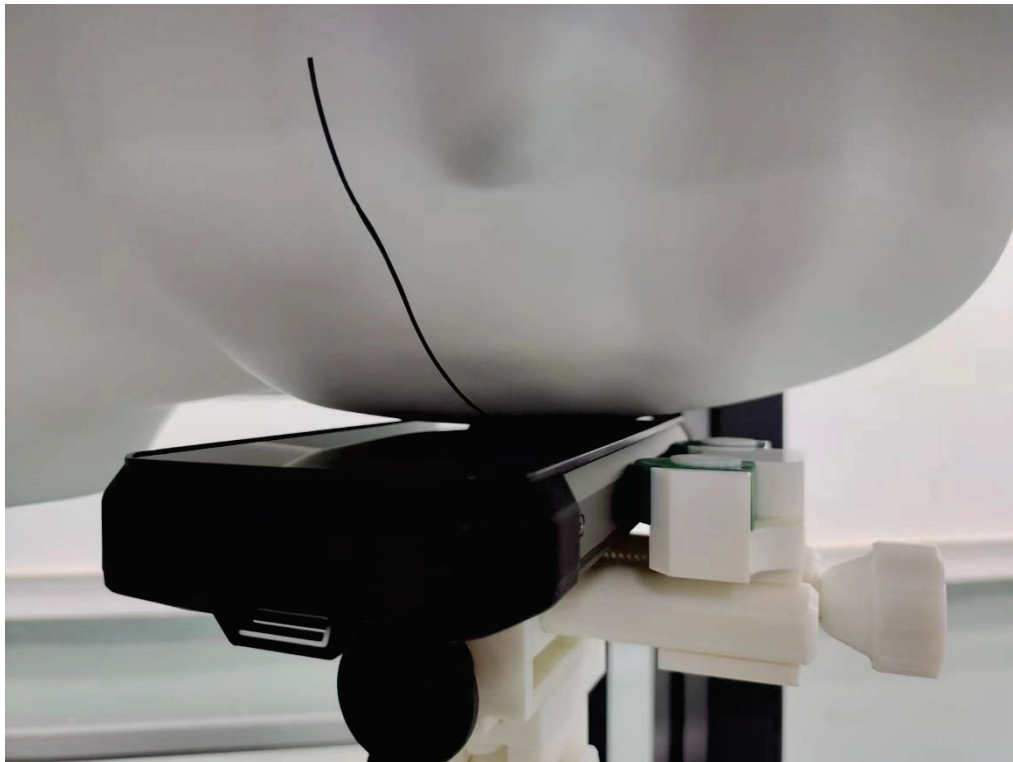


Right Tilt

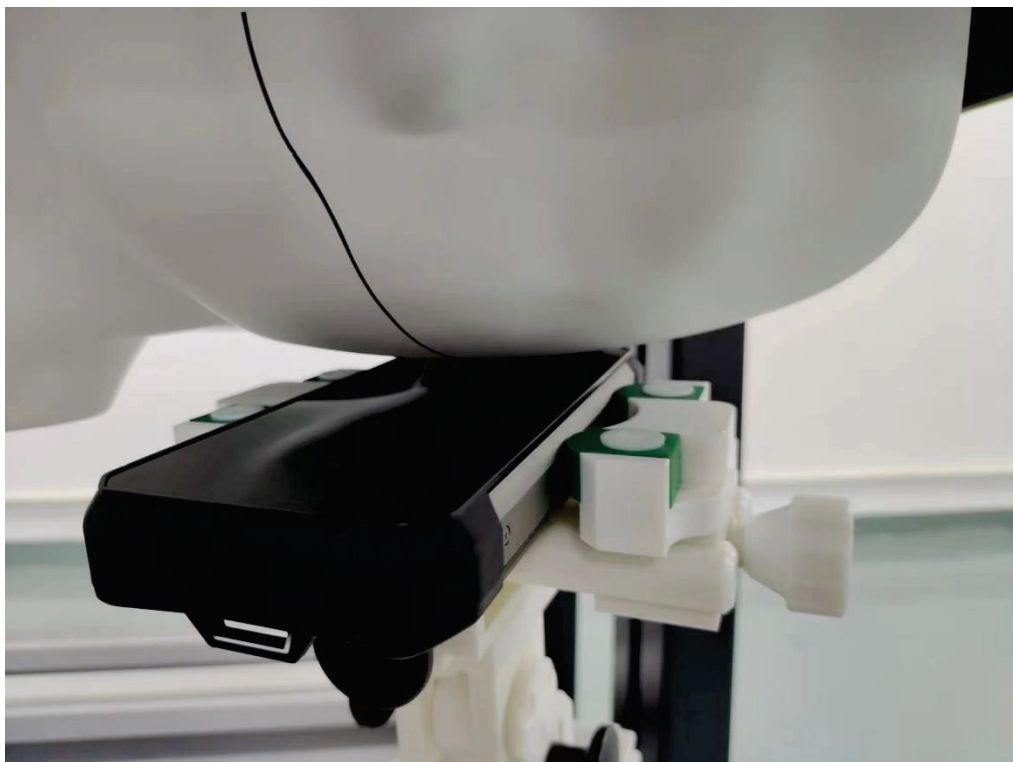




Left Touch

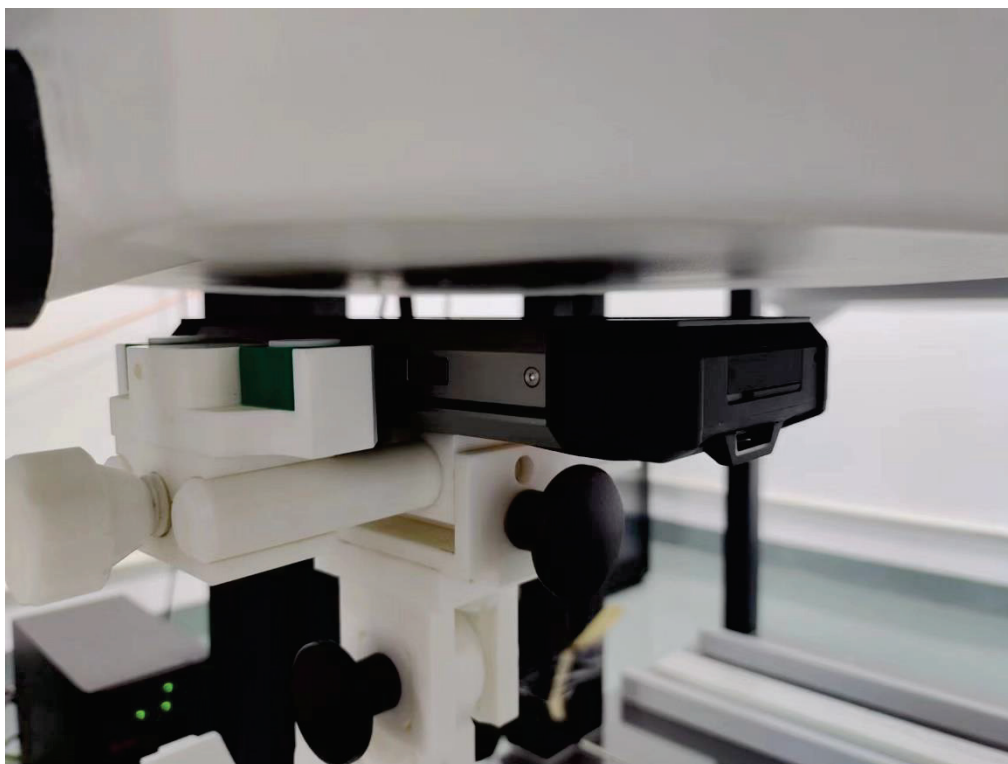


Left Tilt





Body Front side (separation distance is 10mm)

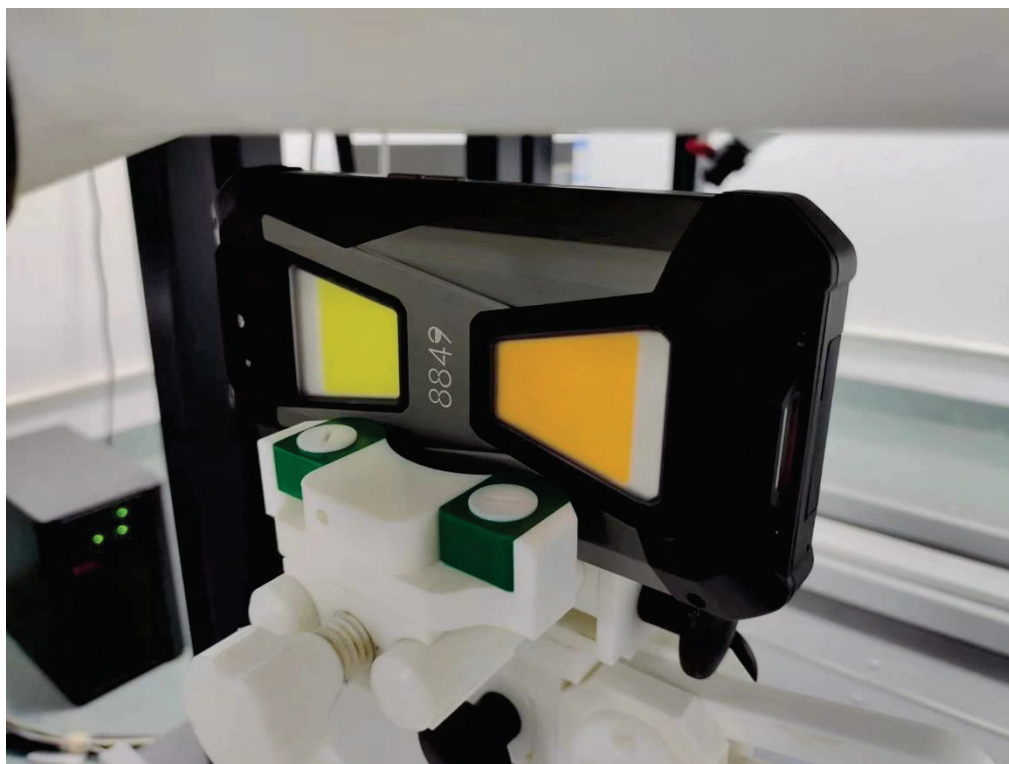


Body Back side (separation distance 10mm)





Body Left side (separation distance is 10mm)



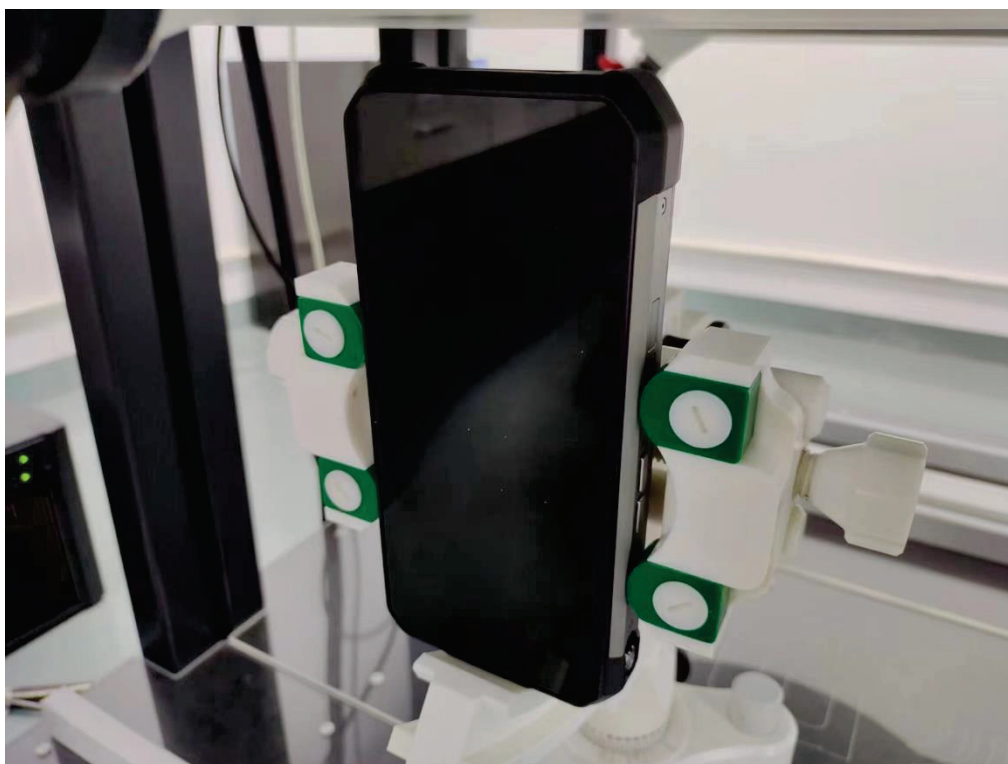
Body Right side (separation distance is 10mm)



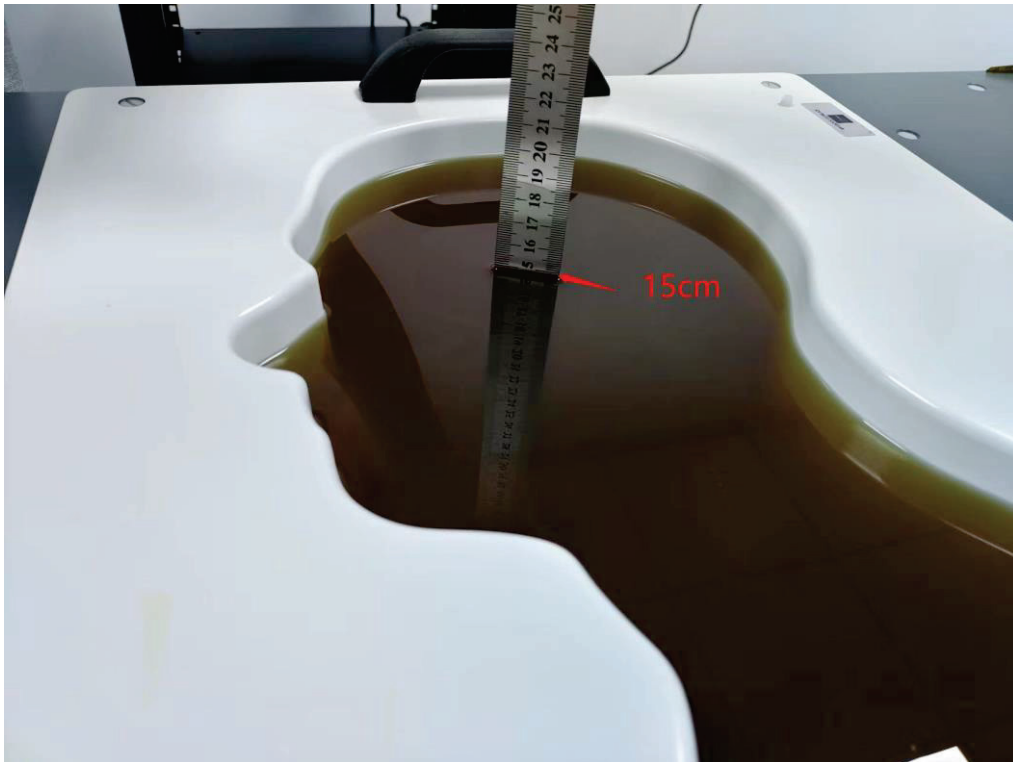
Body Top side (separation distance is 10mm)



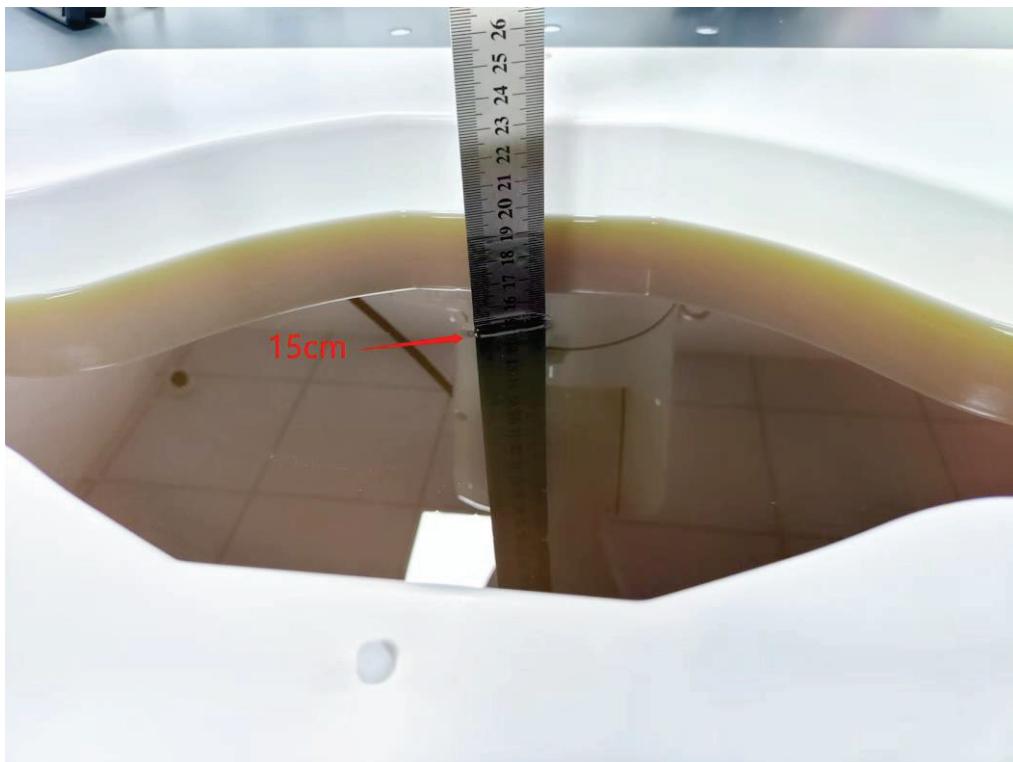
Body Bottom side (separation distance is 10mm)



Liquid depth (15 cm)



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	Vioce	Right Cheek	836.6	0.149	-1.57	34.50	33.94	0.170	/
		Right Tilt	836.6	0.105	-1.20	34.50	33.94	0.119	/
		Left Cheek	836.6	0.177	1.74	34.50	33.94	0.201	1
		Left Tilt	836.6	0.134	-0.77	34.50	33.94	0.152	/
PCS 1900	Vioce	Right Cheek	1909.8	0.081	-2.93	30.50	30.30	0.085	/
		Right Tilt	1909.8	0.066	3.43	30.50	30.30	0.069	/
		Left Cheek	1909.8	0.096	0.82	30.50	30.30	0.101	3
		Left Tilt	1909.8	0.08	3.36	30.50	30.30	0.084	/
WCDMA Band II	RMC	Right Cheek	1880	0.082	-0.87	24.00	23.73	0.087	5
		Right Tilt	1880	0.061	-2.89	24.00	23.73	0.065	/
		Left Cheek	1880	0.064	3.90	24.00	23.73	0.068	/
		Left Tilt	1880	0.053	-0.69	24.00	23.73	0.056	/
WCDMA Band IV	RMC	Right Cheek	1752.4	0.068	-3.95	24.00	23.63	0.074	/
		Right Tilt	1752.4	0.046	-3.35	24.00	23.63	0.050	/
		Left Cheek	1752.4	0.100	-1.20	24.00	23.63	0.109	7
		Left Tilt	1752.4	0.082	1.91	24.00	23.63	0.089	/
WCDMA Band V	RMC	Right Cheek	846.6	0.124	-2.75	24.00	23.69	0.133	/
		Right Tilt	846.6	0.088	-0.43	24.00	23.69	0.095	/
		Left Cheek	846.6	0.136	-3.47	24.00	23.69	0.146	9
		Left Tilt	846.6	0.09	3.97	24.00	23.69	0.097	/
CDMA	BC0	Right Cheek	848.31	0.057	0.14	22.50	22.33	0.059	/
		Right Tilt	848.31	0.041	2.62	22.50	22.33	0.043	/
		Left Cheek	848.31	0.063	-2.31	22.50	22.33	0.066	11
		Left Tilt	848.31	0.047	1.16	22.50	22.33	0.049	/
CDMA	BC1	Right Cheek	1880	0.071	3.42	23.00	22.51	0.079	/
		Right Tilt	1880	0.057	-3.20	23.00	22.51	0.064	/
		Left Cheek	1880	0.081	1.68	23.00	22.51	0.091	13
		Left Tilt	1880	0.063	-2.50	23.00	22.51	0.071	/
2.4G WLAN ANT1	802.11b	Right Cheek	2412	0.098	3.97	12.00	11.85	0.101	/
		Right Tilt	2412	0.110	0.19	12.00	11.85	0.114	15
		Left Cheek	2412	0.056	2.07	12.00	11.85	0.058	/
		Left Tilt	2412	0.079	2.14	12.00	11.85	0.082	/
2.4G WLAN ANT2	802.11b	Right Cheek	2462	0.313	2.64	15.50	15.17	0.338	/
		Right Tilt	2462	0.469	3.33	15.50	15.17	0.506	17
		Left Cheek	2462	0.217	-3.21	15.50	15.17	0.234	/
		Left Tilt	2462	0.404	-3.62	15.50	15.17	0.436	/
2.4G WLAN ANT 1 MIMO	802.11ax-HET20	Right Cheek	2412	0.384	1.65	15.00	14.81	0.401	/
		Right Tilt	2412	0.540	1.55	15.00	14.81	0.564	19
		Left Cheek	2412	0.242	1.31	15.00	14.81	0.253	/
		Left Tilt	2412	0.469	-3.00	15.00	14.81	0.490	/



2.4G WLAN ANT 2 MIMO	802.11ax- HET20	Right Cheek	2412	0.411	3.23	15.00	14.81	0.429	/
		Right Tilt	2412	0.555	1.73	15.00	14.81	0.580	21
		Left Cheek	2412	0.266	-3.59	15.00	14.81	0.278	/
		Left Tilt	2412	0.508	-0.99	15.00	14.81	0.531	/
5.2G WLAN ANT1	802.11ac- VHT20	Right Cheek	5180	0.134	2.10	7.00	6.88	0.138	/
		Right Tilt	5180	0.174	1.95	7.00	6.88	0.179	23
		Left Cheek	5180	0.081	1.68	7.00	6.88	0.083	/
		Left Tilt	5180	0.152	-1.08	7.00	6.88	0.156	/
5.2G WLAN ANT2	802.11ax- HE20	Right Cheek	5230	0.185	3.03	8.50	7.95	0.210	/
		Right Tilt	5230	0.255	3.13	8.50	7.95	0.289	25
		Left Cheek	5230	0.128	0.66	8.50	7.95	0.145	/
		Left Tilt	5230	0.235	-2.28	8.50	7.95	0.267	/
5.2G WLAN ANT 1 MIMO	802.11ac- VHT40	Right Cheek	5230	0.36	0.08	9.00	8.55	0.399	/
		Right Tilt	5230	0.508	2.44	9.00	8.55	0.563	27
		Left Cheek	5230	0.221	1.22	9.00	8.55	0.245	/
		Left Tilt	5230	0.441	0.40	9.00	8.55	0.489	/
5.2G WLAN ANT 2 MIMO	802.11ac- VHT40	Right Cheek	5230	0.277	-3.13	9.00	8.55	0.307	/
		Right Tilt	5230	0.386	1.74	9.00	8.55	0.428	29
		Left Cheek	5230	0.189	2.63	9.00	8.55	0.210	/
		Left Tilt	5230	0.342	-3.63	9.00	8.55	0.379	/
5.3G WLAN ANT1	802.11ax- HE40	Right Cheek	5270	0.146	-3.20	8.00	7.56	0.162	/
		Right Tilt	5270	0.196	-1.40	8.00	7.56	0.217	31
		Left Cheek	5270	0.101	3.28	8.00	7.56	0.112	/
		Left Tilt	5270	0.178	-3.05	8.00	7.56	0.197	/
5.3G WLAN ANT2	802.11ax- HE20	Right Cheek	5320	0.137	1.72	9.00	8.87	0.141	/
		Right Tilt	5320	0.185	-0.71	9.00	8.87	0.191	33
		Left Cheek	5320	0.108	-2.26	9.00	8.87	0.111	/
		Left Tilt	5320	0.177	-2.08	9.00	8.87	0.182	/
5.3G WLAN ANT 1 MIMO	802.11ax- HE20	Right Cheek	5320	0.52	0.52	9.50	9.32	0.542	/
		Right Tilt	5260	0.521	0.87	9.50	8.19	0.704	/
		Right Tilt	5300	0.574	-2.39	9.50	8.57	0.711	/
		Right Tilt	5320	0.715	2.81	9.50	9.32	0.745	35
		Left Cheek	5320	0.318	-0.29	9.50	9.32	0.331	/
		Left Tilt	5320	0.622	1.24	9.50	9.32	0.648	/
5.3G WLAN ANT 2 MIMO	802.11ax- HE20	Right Cheek	5320	0.172	-0.04	9.50	9.32	0.179	/
		Right Tilt	5320	0.238	2.56	9.50	9.32	0.248	37
		Left Cheek	5320	0.12	-1.20	9.50	9.32	0.125	/
		Left Tilt	5320	0.204	0.70	9.50	9.32	0.213	/
5.6G WLAN ANT1	802.11ac- VHT20	Right Cheek	5700	0.169	2.13	7.50	7.23	0.180	/
		Right Tilt	5700	0.216	0.64	7.50	7.23	0.230	39
		Left Cheek	5700	0.1	0.31	7.50	7.23	0.106	/
		Left Tilt	5700	0.19	0.72	7.50	7.23	0.202	/
5.6G WLAN ANT2	802.11ac- VHT20	Right Cheek	5580	0.234	2.45	9.50	9.23	0.249	/
		Right Tilt	5580	0.320	-3.36	9.50	9.23	0.341	41
		Left Cheek	5580	0.156	-3.63	9.50	9.23	0.166	/
		Left Tilt	5580	0.285	3.28	9.50	9.23	0.303	/



5.6G WLAN ANT 1 MIMO	802.11ax-HE40	Right Cheek	5510	0.201	3.80	9.50	9.23	0.214	/
		Right Tilt	5510	0.270	-3.59	9.50	9.23	0.287	43
		Left Cheek	5510	0.124	1.60	9.50	9.23	0.132	/
		Left Tilt	5510	0.237	3.80	9.50	9.23	0.252	/
5.6G WLAN ANT 2 MIMO	802.11ax-HE40	Right Cheek	5510	0.184	-0.26	9.50	9.23	0.196	/
		Right Tilt	5510	0.252	-3.65	9.50	9.23	0.268	45
		Left Cheek	5510	0.117	-2.39	9.50	9.23	0.125	/
		Left Tilt	5510	0.231	1.82	9.50	9.23	0.246	/
5.8G WLAN ANT1	802.11ac-VHT40	Right Cheek	5795	0.250	-0.79	7.50	6.95	0.284	/
		Right Tilt	5795	0.346	-2.85	7.50	6.95	0.393	47
		Left Cheek	5795	0.127	3.51	7.50	6.95	0.144	/
		Left Tilt	5795	0.231	2.27	7.50	6.95	0.262	/
5.8G WLAN ANT2	802.11ac-VHT40	Right Cheek	5755	0.204	-1.71	9.50	8.94	0.232	/
		Right Tilt	5755	0.496	-1.60	9.50	8.94	0.564	49
		Left Cheek	5755	0.177	-3.95	9.50	8.94	0.201	/
		Left Tilt	5755	0.335	-2.50	9.50	8.94	0.381	/
5.8G WLAN ANT 1 MIMO	802.11ac-VHT20	Right Cheek	5745	0.451	0.63	9.50	8.95	0.512	/
		Right Tilt	5745	0.623	-1.24	9.50	8.95	0.707	51
		Left Cheek	5745	0.284	2.46	9.50	8.95	0.322	/
		Left Tilt	5745	0.533	-2.93	9.50	8.95	0.605	/
5.8G WLAN ANT 2 MIMO	802.11ac-VHT20	Right Cheek	5745	0.116	-3.79	9.50	8.95	0.132	/
		Right Tilt	5745	0.156	-2.71	9.50	8.95	0.177	53
		Left Cheek	5745	0.072	0.72	9.50	8.95	0.082	/
		Left Tilt	5745	0.142	-3.68	9.50	8.95	0.161	/

Band	Mode	Max SAR	WIFI MIMO
		(W/Kg)	
2.4G WLAN	802.11ax-HET20 ANT 1	0.564	1.144
	802.11ax-HET20 ANT 2	0.58	
5.2G WLAN	802.11ac-VHT40 ANT 1	0.563	0.991
	802.11ac-VHT40 ANT 2	0.428	
5.3G WLAN	802.11ax-HE20 ANT 1	0.745	0.993
	802.11ax-HE20 ANT 2	0.248	
5.6G WLAN	802.11ax-HE40 ANT 1	0.287	0.555
	802.11ax-HE40 ANT 2	0.268	
5.8G WLAN	802.11ac-VHT20 ANT 1	0.707	0.884
	802.11ac-VHT20 ANT 2	0.177	



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)	Meas. No.
LTE Band 2	20M	QPSK	1	0	Right Cheek	1900	0.079	2.02	25.00	24.63	0.086	/
			50	0	Right Cheek	1900	0.071	3.80	23.50	23.42	0.072	/
			1	0	Right Tilt	1900	0.058	2.93	25.00	24.63	0.063	/
			50	0	Right Tilt	1900	0.054	-3.72	23.50	23.42	0.055	/
			1	0	Left Cheek	1900	0.096	2.73	25.00	24.63	0.105	55
			50	0	Left Cheek	1900	0.090	-3.76	23.50	23.42	0.092	/
			1	0	Left Tilt	1900	0.077	0.83	25.00	24.63	0.084	/
			50	0	Left Tilt	1900	0.069	-1.55	23.50	23.42	0.070	/
LTE Band 4	20M	QPSK	1	0	Right Cheek	1720	0.099	3.93	24.50	24.42	0.101	/
			50	0	Right Cheek	1745	0.089	-3.86	23.50	23.33	0.093	/
			1	0	Right Tilt	1720	0.070	-0.91	24.50	24.42	0.071	/
			50	0	Right Tilt	1745	0.063	2.11	23.50	23.33	0.066	/
			1	0	Left Cheek	1720	0.132	1.17	24.50	24.42	0.134	57
			50	0	Left Cheek	1745	0.120	2.64	23.50	23.33	0.125	/
			1	0	Left Tilt	1720	0.097	-0.72	24.50	24.42	0.099	/
			50	0	Left Tilt	1745	0.088	-3.03	23.50	23.33	0.092	/
LTE Band 5	10M	QPSK	1	0	Right Cheek	844	0.159	-1.15	25.00	24.59	0.175	/
			25	0	Right Cheek	844	0.147	-1.61	23.50	23.46	0.148	/
			1	0	Right Tilt	844	0.119	0.04	25.00	24.59	0.131	/
			25	0	Right Tilt	844	0.109	1.94	23.50	23.46	0.110	/
			1	0	Left Cheek	844	0.191	-3.10	25.00	24.59	0.210	59
			25	0	Left Cheek	844	0.176	-2.44	23.50	23.46	0.178	/
			1	0	Left Tilt	844	0.141	1.86	25.00	24.59	0.155	/
			25	0	Left Tilt	844	0.128	1.26	23.50	23.46	0.129	/
LTE Band 7	20M	QPSK	1	0	Right Cheek	2535	0.159	1.57	25.50	24.98	0.179	/
			50	0	Right Cheek	2560	0.142	0.49	24.50	23.96	0.161	/
			1	0	Right Tilt	2535	0.116	-0.71	25.50	24.98	0.131	/
			50	0	Right Tilt	2560	0.105	1.80	24.50	23.96	0.119	/
			1	0	Left Cheek	2535	0.196	-3.82	25.50	24.98	0.221	61
			50	0	Left Cheek	2560	0.179	1.89	24.50	23.96	0.203	/
			1	0	Left Tilt	2535	0.145	-0.84	25.50	24.98	0.163	/
			50	0	Left Tilt	2560	0.131	0.32	24.50	23.96	0.148	/
LTE Band 12	10M	QPSK	1	0	Right Cheek	704	0.118	-3.20	25.00	24.40	0.135	/
			25	0	Right Cheek	704	0.108	-1.62	23.50	23.27	0.114	/
			1	0	Right Tilt	704	0.085	1.84	25.00	24.40	0.098	/
			25	0	Right Tilt	704	0.078	1.00	23.50	23.27	0.082	/
			1	0	Left Cheek	704	0.143	0.14	25.00	24.40	0.164	63
			25	0	Left Cheek	704	0.130	2.59	23.50	23.27	0.137	/
			1	0	Left Tilt	704	0.106	-3.40	25.00	24.40	0.122	/
			25	0	Left Tilt	704	0.096	3.15	23.50	23.27	0.101	/



LTE Band 13	10M	QPSK	1	0	Right Cheek	782	0.110	-1.51	25.00	24.67	0.119	/
			25	0	Right Cheek	782	0.099	0.78	24.00	23.58	0.109	/
			1	0	Right Tilt	782	0.081	-2.59	25.00	24.67	0.087	/
			25	0	Right Tilt	782	0.076	-0.09	24.00	23.58	0.084	/
			1	0	Left Cheek	782	0.138	-3.62	25.00	24.67	0.149	65
			25	0	Left Cheek	782	0.123	-1.61	24.00	23.58	0.135	/
			1	0	Left Tilt	782	0.106	-3.17	25.00	24.67	0.114	/
			25	0	Left Tilt	782	0.098	-1.73	24.00	23.58	0.108	/
LTE Band 17	10M	QPSK	1	0	Right Cheek	709	0.124	-2.53	25.00	24.75	0.131	/
			25	0	Right Cheek	710	0.114	-2.49	24.00	23.59	0.125	/
			1	0	Right Tilt	709	0.089	2.07	25.00	24.75	0.094	/
			25	0	Right Tilt	710	0.080	-2.36	24.00	23.59	0.088	/
			1	0	Left Cheek	709	0.147	3.39	25.00	24.75	0.156	67
			25	0	Left Cheek	710	0.135	-2.45	24.00	23.59	0.148	/
			1	0	Left Tilt	709	0.110	-0.74	25.00	24.75	0.117	/
			25	0	Left Tilt	710	0.100	2.10	24.00	23.59	0.110	/
LTE Band 25	20M	QPSK	1	0	Right Cheek	1905	0.083	-3.48	24.50	24.23	0.088	/
			50	0	Right Cheek	1905	0.075	-1.99	23.50	23.16	0.081	/
			1	0	Right Tilt	1905	0.062	-3.19	24.50	24.23	0.066	/
			50	0	Right Tilt	1905	0.056	2.15	23.50	23.16	0.061	/
			1	0	Left Cheek	1905	0.099	-2.59	24.50	24.23	0.105	69
			50	0	Left Cheek	1905	0.092	-3.59	23.50	23.16	0.099	/
			1	0	Left Tilt	1905	0.072	0.23	24.50	24.23	0.077	/
			50	0	Left Tilt	1905	0.066	-2.26	23.50	23.16	0.071	/
LTE Band 26	15M	QPSK	1	0	Right Cheek	841.5	0.154	3.61	25.00	24.61	0.168	/
			36	0	Right Cheek	841.5	0.140	-2.42	24.00	23.46	0.159	/
			1	0	Right Tilt	841.5	0.109	-0.82	25.00	24.61	0.119	/
			36	0	Right Tilt	841.5	0.100	-2.46	24.00	23.46	0.113	/
			1	0	Left Cheek	841.5	0.182	0.29	25.00	24.61	0.199	71
			36	0	Left Cheek	841.5	0.164	2.00	24.00	23.46	0.186	/
			1	0	Left Tilt	841.5	0.137	-1.22	25.00	24.61	0.150	/
			36	0	Left Tilt	841.5	0.122	2.83	24.00	23.46	0.138	/
LTE Band 38	20M	QPSK	1	0	Right Cheek	2580	0.114	-1.44	25.50	24.98	0.129	/
			50	0	Right Cheek	2580	0.102	-1.23	24.00	23.70	0.109	/
			1	0	Right Tilt	2580	0.084	2.05	25.50	24.98	0.095	/
			50	0	Right Tilt	2580	0.075	-2.86	24.00	23.70	0.080	/
			1	0	Left Cheek	2580	0.140	3.79	25.50	24.98	0.158	73
			50	0	Left Cheek	2580	0.128	-2.48	24.00	23.70	0.137	/
			1	0	Left Tilt	2580	0.108	2.47	25.50	24.98	0.122	/
			50	0	Left Tilt	2580	0.099	2.56	24.00	23.70	0.106	/
LTE Band 40	10M	QPSK	1	0	Right Cheek	2310	0.126	-2.76	12.00	11.75	0.133	/
			50	0	Right Cheek	2310	0.113	3.92	11.00	10.74	0.120	/
			1	0	Right Tilt	2310	0.096	-3.08	12.00	11.75	0.102	/
			50	0	Right Tilt	2310	0.090	-3.26	11.00	10.74	0.096	/
			1	0	Left Cheek	2310	0.157	3.60	12.00	11.75	0.166	75
			50	0	Left Cheek	2310	0.143	-1.75	11.00	10.74	0.152	/
			1	0	Left Tilt	2310	0.117	2.73	12.00	11.75	0.124	/
			50	0	Left Tilt	2310	0.105	1.36	11.00	10.74	0.111	/



LTE Band 41	20M	16QAM	1	0	Right Cheek	2506	0.097	0.74	25.50	24.93	0.111	/
			50	0	Right Cheek	2506	0.088	3.18	24.50	24.48	0.088	/
			1	0	Right Tilt	2506	0.077	-3.49	25.50	24.93	0.088	/
			50	0	Right Tilt	2506	0.070	-2.24	24.50	24.48	0.070	/
			1	0	Left Cheek	2506	0.111	-1.35	25.50	24.93	0.127	77
			50	0	Left Cheek	2506	0.103	2.77	24.50	24.48	0.103	/
			1	0	Left Tilt	2506	0.086	-2.80	25.50	24.93	0.098	/
			50	0	Left Tilt	2506	0.079	3.82	24.50	24.48	0.079	/
LTE Band 66	20M	QPSK	1	0	Right Cheek	1720	0.107	0.94	24.50	24.07	0.118	/
			50	0	Right Cheek	1720	0.100	-1.18	23.00	22.93	0.102	/
			1	0	Right Tilt	1720	0.076	-3.13	24.50	24.07	0.084	/
			50	0	Right Tilt	1720	0.068	2.37	23.00	22.93	0.069	/
			1	0	Left Cheek	1720	0.126	3.30	24.50	24.07	0.139	79
			50	0	Left Cheek	1720	0.114	-2.94	23.00	22.93	0.116	/
			1	0	Left Tilt	1720	0.093	0.45	24.50	24.07	0.103	/
			50	0	Left Tilt	1720	0.084	1.57	23.00	22.93	0.085	/
SA N2	20M	DFT_B PSK	1	1	Right Cheek	1860	0.047	-1.64	21.00	20.94	0.048	/
			50	25	Right Cheek	1900	0.049	0.32	21.50	21.12	0.053	/
			1	1	Right Tilt	1860	0.030	-2.72	21.00	20.94	0.030	/
			50	25	Right Tilt	1900	0.035	1.95	21.50	21.12	0.038	/
			1	1	Left Cheek	1860	0.054	-3.88	21.00	20.94	0.055	/
			50	25	Left Cheek	1900	0.061	3.02	21.50	21.12	0.067	81
			1	1	Left Tilt	1860	0.048	1.00	21.00	20.94	0.049	/
			50	25	Left Tilt	1900	0.051	1.05	21.50	21.12	0.056	/
SA N5	20M	DFT_Q PSK	1	1	Right Cheek	834	0.113	-1.04	21.50	21.12	0.123	/
			50	25	Right Cheek	839	0.125	-0.41	21.50	21.16	0.135	/
			1	1	Right Tilt	834	0.085	-2.61	21.50	21.12	0.093	/
			50	25	Right Tilt	839	0.092	-1.62	21.50	21.16	0.099	/
			1	1	Left Cheek	834	0.139	-3.58	21.50	21.12	0.152	/
			50	25	Left Cheek	839	0.155	-3.04	21.50	21.16	0.168	83
			1	1	Left Tilt	834	0.097	1.06	21.50	21.12	0.106	/
			50	25	Left Tilt	839	0.110	-1.76	21.50	21.16	0.119	/
SA N7	20M	DFT_Q PSK	1	104	Right Cheek	2560	0.080	1.35	20.50	20.33	0.083	/
			135	25	Right Cheek	2560	0.086	-3.33	20.50	20.37	0.089	/
			1	104	Right Tilt	2560	0.055	0.90	20.50	20.33	0.057	/
			135	25	Right Tilt	2560	0.061	1.17	20.50	20.37	0.063	/
			1	104	Left Cheek	2560	0.089	-0.96	20.50	20.33	0.093	/
			135	25	Left Cheek	2560	0.097	3.70	20.50	20.37	0.100	85
			1	104	Left Tilt	2560	0.068	-1.84	20.50	20.33	0.071	/
			135	25	Left Tilt	2560	0.076	-3.43	20.50	20.37	0.078	/
SA N25	20M	DFT_B PSK	1	104	Right Cheek	1905	0.029	-0.86	21.00	20.99	0.029	/
			50	25	Right Cheek	1860	0.032	-3.31	21.50	21.01	0.036	/
			1	104	Right Tilt	1905	0.031	2.30	21.00	20.99	0.031	/
			50	25	Right Tilt	1860	0.031	-2.49	21.50	21.01	0.035	/
			1	104	Left Cheek	1905	0.036	-1.39	21.00	20.99	0.036	/
			50	25	Left Cheek	1860	0.040	3.55	21.50	21.01	0.045	87
			1	104	Left Tilt	1905	0.030	-0.87	21.00	20.99	0.030	/
			50	25	Left Tilt	1860	0.035	1.53	21.50	21.01	0.039	/



SA N38	20M	DFT_B PSK	1	104	Right Cheek	2600	0.060	-1.22	20.00	19.54	0.067	/
			50	25	Right Cheek	2600	0.067	1.56	20.50	20.00	0.075	/
			1	104	Right Tilt	2600	0.049	2.81	20.00	19.54	0.054	/
			50	25	Right Tilt	2600	0.052	2.32	20.50	20.00	0.058	/
			1	104	Left Cheek	2600	0.070	-2.46	20.00	19.54	0.078	/
			50	25	Left Cheek	2600	0.075	0.92	20.50	20.00	0.084	89
			1	104	Left Tilt	2600	0.056	-0.05	20.00	19.54	0.062	/
			50	25	Left Tilt	2600	0.060	0.14	20.50	20.00	0.067	/
SA N41	100M	DFT_Q PSK	1	271	Right Cheek	2640	0.096	1.80	22.50	21.92	0.110	/
			135	67	Right Cheek	2640	0.103	0.57	23.00	22.46	0.117	/
			1	271	Right Tilt	2640	0.071	-2.51	22.50	21.92	0.081	/
			135	67	Right Tilt	2640	0.079	3.66	23.00	22.46	0.089	/
			1	271	Left Cheek	2640	0.116	-2.79	22.50	21.92	0.133	/
			135	67	Left Cheek	2640	0.127	-1.25	23.00	22.46	0.144	91
			1	271	Left Tilt	2640	0.084	-1.19	22.50	21.92	0.096	/
			135	67	Left Tilt	2640	0.090	3.14	23.00	22.46	0.102	/
SA N77	100M	DFT_B PSK	1	271	Right Cheek	3930	0.162	-1.54	21.00	20.35	0.188	/
			135	67	Right Cheek	3750	0.178	1.85	21.50	21.04	0.198	/
			1	271	Right Tilt	3930	0.118	2.36	21.00	20.35	0.137	/
			135	67	Right Tilt	3750	0.130	-1.77	21.50	21.04	0.145	/
			1	271	Left Cheek	3930	0.195	0.91	21.00	20.35	0.226	/
			135	67	Left Cheek	3750	0.216	1.71	21.50	21.04	0.240	93
			1	271	Left Tilt	3930	0.143	0.25	21.00	20.35	0.166	/
			135	67	Left Tilt	3750	0.158	-1.10	21.50	21.04	0.176	/



NSA

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)	Meas. No.
SA 41	100M	DFT_QPSK	1	271	Right Cheek	2640	0.096	1.80	22.50	21.92	0.110	/
			135	67	Right Cheek	2640	0.103	0.57	23.00	22.46	0.117	/
			1	271	Right Tilt	2640	0.071	-2.51	22.50	21.92	0.081	/
			135	67	Right Tilt	2640	0.079	3.66	23.00	22.46	0.089	/
			1	271	Left Cheek	2640	0.116	-2.79	22.50	21.92	0.133	/
			135	67	Left Cheek	2640	0.127	-1.25	23.00	22.46	0.144	91
			1	271	Left Tilt	2640	0.084	-1.19	22.50	21.92	0.096	/
			135	67	Left Tilt	2640	0.090	3.14	23.00	22.46	0.102	/
LTE Band 5	10M	QPSK	1	0	Right Cheek	844	0.159	-1.15	25.00	24.59	0.175	/
			50	0	Right Cheek	844	0.147	-1.61	23.50	23.46	0.148	/
			1	0	Right Tilt	844	0.119	0.04	25.00	24.59	0.131	/
			50	0	Right Tilt	844	0.109	1.94	23.50	23.46	0.110	/
			1	0	Left Cheek	844	0.191	-3.10	25.00	24.59	0.210	59
			50	0	Left Cheek	844	0.176	-2.44	23.50	23.46	0.178	/
			1	0	Left Tilt	844	0.141	1.86	25.00	24.59	0.155	/
			50	0	Left Tilt	844	0.128	1.26	23.50	23.46	0.129	/

Band	Mode	Head Max SAR	Head Test sum
		(W/Kg)	
NSA N41+B5	SA N41	0.144	0.354
	LTE B5	0.210	

Note:

1. Per KDB 447498 D01, 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. Scaled SAR(W/kg) = Measured SAR(W/kg) *Tune-up Scaling Factor

2. Per KDB 865664 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.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM850	Vioce	Front Side	836.6	0.127	-0.18	34.50	33.94	0.144	/
		Back Side	836.6	0.218	1.82	34.50	33.94	0.248	/
		Left Side	836.6	0.071	2.29	34.50	33.94	0.081	/
		Right Side	836.6	0.083	-3.29	34.50	33.94	0.094	/
		Top Side	836.6	0.089	-3.95	34.50	33.94	0.101	/
		Bottom Side	836.6	0.282	-2.85	34.50	33.94	0.321	2
PCS 1900	Vioce	Front Side	1909.8	0.169	-0.47	30.50	30.30	0.177	/
		Back Side	1909.8	0.290	0.55	30.50	30.30	0.304	/
		Left Side	1909.8	0.071	0.34	30.50	30.30	0.074	/
		Right Side	1909.8	0.119	1.49	30.50	30.30	0.125	/
		Bottom Side	1909.8	0.331	2.08	30.50	30.30	0.347	4
WCDMA Band II	RMC	Front Side	1880	0.135	-2.05	24.00	23.73	0.144	/
		Back Side	1880	0.340	-3.45	24.00	23.73	0.362	/
		Left Side	1880	0.085	-1.32	24.00	23.73	0.090	/
		Right Side	1880	0.086	3.95	24.00	23.73	0.092	/
		Bottom Side	1880	0.383	-3.00	24.00	23.73	0.408	6
WCDMA Band IV	RMC	Front Side	1752.4	0.205	3.65	24.00	23.63	0.223	/
		Back Side	1752.4	0.478	2.42	24.00	23.63	0.521	/
		Left Side	1752.4	0.092	1.48	24.00	23.63	0.100	/
		Right Side	1752.4	0.109	-3.42	24.00	23.63	0.119	/
		Bottom Side	1752.4	0.681	2.79	24.00	23.63	0.742	8
WCDMA Band V	RMC	Front Side	846.6	0.129	2.68	24.00	23.69	0.139	/
		Back Side	846.6	0.222	-0.76	24.00	23.69	0.238	/
		Left Side	846.6	0.216	1.67	24.00	23.69	0.232	/
		Right Side	846.6	0.173	3.81	24.00	23.69	0.186	/
		Bottom Side	846.6	0.234	1.71	24.00	23.69	0.251	10
CDMA	BC0	Front Side	848.31	0.035	-2.44	22.50	22.33	0.036	/
		Back Side	848.31	0.064	1.18	22.50	22.33	0.067	/
		Left Side	848.31	0.030	3.54	22.50	22.33	0.031	/
		Right Side	848.31	0.028	2.33	22.50	22.33	0.029	/
		Bottom Side	848.31	0.072	-1.37	22.50	22.33	0.075	12
CDMA	BC1	Front Side	1880	0.086	-3.21	23.00	22.51	0.096	/
		Back Side	1880	0.151	2.42	23.00	22.51	0.169	/
		Left Side	1880	0.030	-1.67	23.00	22.51	0.034	/
		Right Side	1880	0.069	-2.33	23.00	22.51	0.077	/
		Bottom Side	1880	0.157	2.47	23.00	22.51	0.176	14
2.4GHz WLAN ANT 1	802.11b	Front Side	2412	0.075	-2.88	12.00	11.85	0.078	/
		Back Side	2412	0.067	2.28	12.00	11.85	0.069	/
		Left Side	2412	0.082	0.74	12.00	11.85	0.085	/
		Right Side	2412	0.100	0.71	12.00	11.85	0.104	/
		Top Side	2412	0.109	-0.33	12.00	11.85	0.113	16
2.4GHz WLA ANT 2	802.11a	Front Side	2462	0.118	-1.49	15.50	15.17	0.127	/
		Back Side	2462	0.089	0.59	15.50	15.17	0.096	/
		Left Side	2462	0.084	-0.48	15.50	15.17	0.091	/
		Right Side	2462	0.114	-3.39	15.50	15.17	0.123	/
		Top Side	2462	0.217	-1.20	15.50	15.17	0.234	18
2.4GHz WLA ANT 1 MIMO	802.11ax-HET20	Front Side	2412	0.162	0.08	15.00	14.81	0.169	/
		Back Side	2412	0.143	-1.05	15.00	14.81	0.149	/
		Left Side	2412	0.196	1.21	15.00	14.81	0.205	/
		Right Side	2412	0.254	2.50	15.00	14.81	0.265	/
		Top Side	2412	0.313	-3.03	15.00	14.81	0.327	20



2.4GHz WLA ANT 2 MIMO	802.11ax- HET20	Front Side	2412	0.135	1.73	15.00	14.81	0.141	/
		Back Side	2412	0.066	-3.01	15.00	14.81	0.069	/
		Left Side	2412	0.110	1.42	15.00	14.81	0.115	/
		Right Side	2412	0.166	0.61	15.00	14.81	0.173	/
		Top Side	2412	0.300	2.16	15.00	14.81	0.313	22
5.2G WLAN ANT 1	802.11ac- VHT20	Front Side	5180	0.204	-1.40	7.00	6.88	0.210	/
		Back Side	5180	0.149	-3.14	7.00	6.88	0.153	/
		Left Side	5180	0.245	-1.10	7.00	6.88	0.252	/
		Right Side	5180	0.314	3.06	7.00	6.88	0.323	/
		Top Side	5180	0.381	1.18	7.00	6.88	0.392	24
5.2G WLAN ANT 2	802.11ax- HE20	Front Side	5230	0.101	-0.36	8.50	7.95	0.115	/
		Back Side	5230	0.080	-0.88	8.50	7.95	0.091	/
		Left Side	5230	0.076	-3.68	8.50	7.95	0.086	/
		Right Side	5230	0.118	-2.83	8.50	7.95	0.134	/
		Top Side	5230	0.213	0.65	8.50	7.95	0.242	26
5.2G WLAN ANT 1 MIMO	802.11ac- VHT40	Front Side	5230	0.170	-3.81	9.00	8.55	0.189	/
		Back Side	5230	0.128	-3.65	9.00	8.55	0.142	/
		Left Side	5230	0.217	0.83	9.00	8.55	0.241	/
		Right Side	5230	0.283	0.30	9.00	8.55	0.314	/
		Top Side	5230	0.335	-0.02	9.00	8.55	0.372	28
5.2G WLAN ANT 2 MIMO	802.11ac- VHT40	Front Side	5230	0.134	-1.64	9.00	8.55	0.149	/
		Back Side	5230	0.071	-2.89	9.00	8.55	0.079	/
		Left Side	5230	0.100	1.51	9.00	8.55	0.111	/
		Right Side	5230	0.153	3.41	9.00	8.55	0.170	/
		Top Side	5230	0.285	-3.65	9.00	8.55	0.316	30
5.3G WLAN ANT 1	802.11ax- HE40	Front Side	5270	0.212	1.54	8.00	7.56	0.235	/
		Back Side	5270	0.179	-2.13	8.00	7.56	0.198	/
		Left Side	5270	0.261	0.02	8.00	7.56	0.289	/
		Right Side	5270	0.343	2.89	8.00	7.56	0.380	/
		Top Side	5270	0.406	-3.54	8.00	7.56	0.449	32
5.3G WLAN ANT 2	802.11ax- HE20	Front Side	5320	0.066	-1.29	9.00	8.87	0.068	/
		Back Side	5320	0.041	0.96	9.00	8.87	0.042	/
		Left Side	5320	0.059	3.98	9.00	8.87	0.061	/
		Right Side	5320	0.077	0.83	9.00	8.87	0.079	/
		Top Side	5320	0.151	3.89	9.00	8.87	0.156	34
5.3G WLAN ANT 1 MIMO	802.11ax- HE20	Front Side	5320	0.130	3.30	9.50	9.32	0.136	/
		Back Side	5320	0.099	-3.36	9.50	9.32	0.103	/
		Left Side	5320	0.136	3.74	9.50	9.32	0.142	/
		Right Side	5320	0.184	2.64	9.50	9.32	0.192	/
		Top Side	5320	0.224	-2.79	9.50	9.32	0.233	36
5.3G WLAN ANT 2 MIMO	802.11ax- HE20	Front Side	5320	0.128	-3.21	9.50	9.32	0.133	/
		Back Side	5320	0.057	2.49	9.50	9.32	0.059	/
		Left Side	5320	0.089	0.90	9.50	9.32	0.093	/
		Right Side	5320	0.146	2.62	9.50	9.32	0.152	/
		Top Side	5320	0.286	2.57	9.50	9.32	0.298	38
5.6G WLAN ANT 1	802.11ac- VHT20	Front Side	5700	0.371	-2.15	7.50	7.23	0.395	/
		Back Side	5700	0.318	-3.92	7.50	7.23	0.338	/
		Left Side	5700	0.459	2.47	7.50	7.23	0.488	/
		Right Side	5700	0.605	0.99	7.50	7.23	0.644	/
		Top Side	5700	0.739	-2.49	7.50	7.23	0.786	40
		Bottom Side	5700	0.103	-1.46	7.50	7.23	0.110	/
5.6G WLAN ANT 2	802.11ac- VHT20	Front Side	5580	0.145	0.19	9.50	9.23	0.154	/
		Back Side	5580	0.105	1.60	9.50	9.23	0.112	/
		Left Side	5580	0.113	-0.85	9.50	9.23	0.120	/
		Right Side	5580	0.179	-2.23	9.50	9.23	0.190	/
		Top Side	5580	0.334	-3.38	9.50	9.23	0.355	42



5.6G WLAN ANT 1 MIMO	802.11ax- HE40	Front Side	5510	0.133	2.02	9.50	9.23	0.142	/
		Back Side	5510	0.106	1.75	9.50	9.23	0.113	/
		Left Side	5510	0.164	-2.15	9.50	9.23	0.175	/
		Right Side	5510	0.218	-1.25	9.50	9.23	0.232	/
		Top Side	5510	0.251	-2.89	9.50	9.23	0.267	44
5.6G WLAN ANT 2 MIMO	802.11ax- HE40	Front Side	5510	0.157	0.39	9.50	9.23	0.167	/
		Back Side	5510	0.073	-2.82	9.50	9.23	0.078	/
		Left Side	5510	0.124	-0.38	9.50	9.23	0.132	/
		Right Side	5510	0.197	0.26	9.50	9.23	0.210	/
		Top Side	5510	0.378	-1.04	9.50	9.23	0.402	46
5.8G WLAN ANT 1	802.11ac- VHT40	Front Side	5795	0.133	0.22	7.50	6.95	0.151	/
		Back Side	5795	0.088	0.79	7.50	6.95	0.100	/
		Left Side	5795	0.157	2.26	7.50	6.95	0.178	/
		Right Side	5795	0.205	2.96	7.50	6.95	0.233	/
		Top Side	5795	0.365	-2.24	7.50	6.95	0.414	48
5.8G WLAN ANT 2	802.11ac- VHT40	Front Side	5755	0.153	-0.45	9.50	8.94	0.174	/
		Back Side	5755	0.078	-0.88	9.50	8.94	0.089	/
		Left Side	5755	0.126	1.64	9.50	8.94	0.143	/
		Right Side	5755	0.181	1.82	9.50	8.94	0.206	/
		Top Side	5755	0.353	-2.69	9.50	8.94	0.402	50
5.8G WLAN ANT 1 MIMO	802.11ac- VHT20	Front Side	5745	0.126	3.56	9.50	8.95	0.143	/
		Back Side	5745	0.072	3.24	9.50	8.95	0.082	/
		Left Side	5745	0.133	-2.24	9.50	8.95	0.151	/
		Right Side	5745	0.186	0.45	9.50	8.95	0.211	/
		Top Side	5745	0.214	2.66	9.50	8.95	0.243	52
5.8G WLAN ANT 2 MIMO	802.11ac- VHT20	Front Side	5745	0.106	3.36	9.50	8.95	0.120	/
		Back Side	5745	0.030	1.15	9.50	8.95	0.034	/
		Left Side	5745	0.076	-0.44	9.50	8.95	0.086	/
		Right Side	5745	0.122	2.14	9.50	8.95	0.138	/
		Top Side	5745	0.224	0.02	9.50	8.95	0.254	54

Band	Mode	Max SAR	WIFI MIMO
		(W/Kg)	
2.4G WLAN	802.11ax-HET20 ANT 1	0.327	0.640
	802.11ax-HET20 ANT 2	0.313	
5.2G WLAN	802.11ac-VHT40 ANT 1	0.372	0.688
	802.11ac-VHT40 ANT 2	0.316	
5.3G WLAN	802.11ax-HE20 ANT 1	0.233	0.531
	802.11ax-HE20 ANT 2	0.298	
5.6G WLAN	802.11ax-HE40 ANT 1	0.267	0.669
	802.11ax-HE40 ANT 2	0.402	
5.8G WLAN	802.11ac-VHT20 ANT 1	0.243	0.497
	802.11ac-VHT20 ANT 2	0.254	



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)	Meas. No.
LTE Band 2	20M	QPSK	1	0	Front side	1900	0.287	1.83	25.00	24.63	0.313	/
			50	0	Front side	1900	0.261	3.54	23.50	23.42	0.266	/
			1	0	Back Side	1900	0.531	-2.19	25.00	24.63	0.578	/
			50	0	Back Side	1900	0.478	0.04	23.50	23.42	0.487	/
			1	0	Left Side	1900	0.167	-2.95	25.00	24.63	0.182	/
			50	0	Left Side	1900	0.150	2.52	23.50	23.42	0.153	/
			1	0	Right Side	1900	0.217	3.88	25.00	24.63	0.236	/
			50	0	Right Side	1900	0.196	-0.81	23.50	23.42	0.200	/
			1	0	Bottom Side	1900	0.619	-0.29	25.00	24.63	0.674	56
			50	0	Bottom Side	1900	0.560	-3.28	23.50	23.42	0.570	/
LTE Band 4	20M	QPSK	1	0	Front side	1720	0.366	2.14	24.50	24.42	0.373	/
			50	0	Front side	1745	0.331	0.32	23.50	23.33	0.344	/
			1	0	Back Side	1720	0.696	1.33	24.50	24.42	0.709	/
			50	0	Back Side	1745	0.629	1.68	23.50	23.33	0.654	/
			1	0	Left Side	1720	0.202	-1.15	24.50	24.42	0.206	/
			50	0	Left Side	1745	0.185	1.44	23.50	23.33	0.192	/
			1	0	Right Side	1720	0.271	-1.72	24.50	24.42	0.276	/
			50	0	Right Side	1745	0.247	2.04	23.50	23.33	0.257	/
			1	0	Bottom Side	1720	0.807	-1.82	24.50	24.42	0.822	58
			1	0	Bottom Side	1732.5	0.711	-2.26	24.50	24.19	0.764	/
			1	0	Bottom Side	1745	0.762	-0.04	24.50	24.33	0.792	/
			50	0	Bottom Side	1745	0.725	-0.25	23.50	23.33	0.754	/



LTE Band 5	10M	QPSK	1	0	Front side	844	0.095	2.54	25.00	24.59	0.104	/
			25	0	Front side	844	0.088	0.29	23.50	23.46	0.089	/
			1	0	Back Side	844	0.158	0.07	25.00	24.59	0.174	/
			25	0	Back Side	844	0.146	-0.95	23.50	23.46	0.147	/
			1	0	Left Side	844	0.047	1.93	25.00	24.59	0.052	/
			25	0	Left Side	844	0.042	2.95	23.50	23.46	0.042	/
			1	0	Right Side	844	0.072	1.37	25.00	24.59	0.079	/
			25	0	Right Side	844	0.064	3.87	23.50	23.46	0.065	/
			1	0	Bottom Side	844	0.200	0.89	25.00	24.59	0.220	60
			25	0	Bottom Side	844	0.179	0.70	23.50	23.46	0.181	/
LTE Band 7	20M	QPSK	1	0	Front side	2535	0.116	0.20	25.50	24.98	0.131	/
			50	0	Front side	2560	0.107	-0.34	24.50	23.96	0.121	/
			1	0	Back Side	2535	0.220	2.80	25.50	24.98	0.248	/
			50	0	Back Side	2560	0.201	0.81	24.50	23.96	0.228	/
			1	0	Left Side	2535	0.061	1.94	25.50	24.98	0.069	/
			50	0	Left Side	2560	0.057	-2.98	24.50	23.96	0.065	/
			1	0	Right Side	2535	0.089	-3.97	25.50	24.98	0.100	/
			50	0	Right Side	2560	0.079	-1.20	24.50	23.96	0.089	/
			1	0	Top Side	2535	0.254	-2.89	25.50	24.98	0.286	62
			50	0	Top Side	2560	0.231	-3.75	24.50	23.96	0.262	/
LTE Band 12	10M	QPSK	1	0	Front side	704	0.063	-3.36	25.00	24.40	0.072	/
			25	0	Front side	704	0.059	-1.82	23.50	23.27	0.062	/
			1	0	Back Side	704	0.117	0.04	25.00	24.40	0.134	/
			25	0	Back Side	704	0.108	-1.95	23.50	23.27	0.114	/
			1	0	Left Side	704	0.040	0.97	25.00	24.40	0.046	/
			25	0	Left Side	704	0.038	2.77	23.50	23.27	0.040	/
			1	0	Right Side	704	0.053	0.17	25.00	24.40	0.061	/
			25	0	Right Side	704	0.047	3.70	23.50	23.27	0.050	/
			1	0	Bottom Side	704	0.146	0.79	25.00	24.40	0.168	64
			25	0	Bottom Side	704	0.133	-3.95	23.50	23.27	0.140	/



LTE Band 13	10M	QPSK	1	0	Front side	782	0.082	-3.26	25.00	24.67	0.088	/
			25	0	Front side	782	0.077	2.25	24.00	23.58	0.085	/
			1	0	Back Side	782	0.162	-3.51	25.00	24.67	0.175	/
			25	0	Back Side	782	0.144	-2.48	24.00	23.58	0.159	/
			1	0	Left Side	782	0.058	-1.40	25.00	24.67	0.063	/
			25	0	Left Side	782	0.055	0.44	24.00	23.58	0.061	/
			1	0	Right Side	782	0.068	2.15	25.00	24.67	0.073	/
			25	0	Right Side	782	0.065	-1.14	24.00	23.58	0.072	/
			1	0	Bottom Side	782	0.198	0.84	25.00	24.67	0.214	66
			25	0	Bottom Side	782	0.181	-0.12	24.00	23.58	0.199	/
LTE Band 17	10M	QPSK	1	0	Front side	709	0.066	-3.79	25.00	24.75	0.070	/
			25	0	Front side	710	0.062	-3.15	24.00	23.59	0.068	/
			1	0	Back Side	709	0.139	0.94	25.00	24.75	0.147	/
			25	0	Back Side	710	0.123	-0.47	24.00	23.59	0.135	/
			1	0	Left Side	709	0.035	-0.24	25.00	24.75	0.037	/
			25	0	Left Side	710	0.030	3.99	24.00	23.59	0.033	/
			1	0	Right Side	709	0.056	-2.54	25.00	24.75	0.059	/
			25	0	Right Side	710	0.053	-0.57	24.00	23.59	0.058	/
			1	0	Bottom Side	709	0.163	2.36	25.00	24.75	0.173	68
			25	0	Bottom Side	710	0.146	-0.40	24.00	23.59	0.160	/
LTE Band 25	20M	QPSK	1	0	Front side	1905	0.253	1.66	24.50	24.23	0.269	/
			50	0	Front side	1905	0.226	1.06	23.50	23.16	0.244	/
			1	0	Back Side	1905	0.476	-3.41	24.50	24.23	0.507	/
			50	0	Back Side	1905	0.428	-1.12	23.50	23.16	0.463	/
			1	0	Left Side	1905	0.123	-1.56	24.50	24.23	0.131	/
			50	0	Left Side	1905	0.113	2.47	23.50	23.16	0.122	/
			1	0	Right Side	1905	0.195	-1.48	24.50	24.23	0.208	/
			50	0	Right Side	1905	0.177	1.25	23.50	23.16	0.191	/
			1	0	Bottom Side	1905	0.552	-2.65	24.50	24.23	0.587	70
			50	0	Bottom Side	1905	0.496	0.74	23.50	23.16	0.536	/



LTE Band 26	15M	QPSK	1	0	Front side	841.5	0.087	-1.56	25.00	24.61	0.095	/
			36	0	Front side	841.5	0.080	3.94	24.00	23.46	0.091	/
			1	0	Back Side	841.5	0.142	2.06	25.00	24.61	0.155	/
			36	0	Back Side	841.5	0.127	-3.89	24.00	23.46	0.144	/
			1	0	Left Side	841.5	0.055	-0.23	25.00	24.61	0.060	/
			36	0	Left Side	841.5	0.053	0.00	24.00	23.46	0.060	/
			1	0	Right Side	841.5	0.067	-2.17	25.00	24.61	0.073	/
			36	0	Right Side	841.5	0.061	-2.62	24.00	23.46	0.069	/
			1	0	Bottom Side	841.5	0.185	0.47	25.00	24.61	0.202	72
			36	0	Bottom Side	841.5	0.166	1.17	24.00	23.46	0.188	/
LTE Band 38	20M	QPSK	1	0	Front side	2580	0.094	-0.20	25.50	24.98	0.106	/
			50	0	Front side	2580	0.087	3.26	24.00	23.70	0.093	/
			1	0	Back Side	2580	0.160	2.17	25.50	24.98	0.180	/
			50	0	Back Side	2580	0.145	0.41	24.00	23.70	0.155	/
			1	0	Left Side	2580	0.027	3.70	25.50	24.98	0.030	/
			50	0	Left Side	2580	0.024	2.44	24.00	23.70	0.026	/
			1	0	Right Side	2580	0.066	0.70	25.50	24.98	0.074	/
			50	0	Right Side	2580	0.060	-1.06	24.00	23.70	0.064	/
			1	0	Top Side	2580	0.178	-3.94	25.50	24.98	0.201	74
			50	0	Top Side	2580	0.162	-2.33	24.00	23.70	0.174	/
LTE Band 40	10M	QPSK	1	0	Front side	2310	0.168	-1.69	12.00	11.75	0.178	/
			50	0	Front side	2310	0.152	3.31	11.00	10.74	0.161	/
			1	0	Back Side	2310	0.285	2.91	12.00	11.75	0.302	/
			50	0	Back Side	2310	0.255	-0.42	11.00	10.74	0.271	/
			1	0	Left Side	2310	0.055	1.45	12.00	11.75	0.058	/
			50	0	Left Side	2310	0.051	0.80	11.00	10.74	0.054	/
			1	0	Right Side	2310	0.112	-0.12	12.00	11.75	0.119	/
			50	0	Right Side	2310	0.100	-1.29	11.00	10.74	0.106	/
			1	0	Top Side	2310	0.332	1.29	12.00	11.75	0.352	76
			50	0	Top Side	2310	0.299	-3.09	11.00	10.74	0.317	/



LTE Band 41	20M	QPSK	1	0	Front side	2506	0.080	-2.46	25.50	24.93	0.091	/
			50	0	Front side	2506	0.076	1.52	24.50	24.48	0.076	/
			1	0	Back Side	2506	0.155	1.46	25.50	24.93	0.177	/
			50	0	Back Side	2506	0.140	-3.70	24.50	24.48	0.141	/
			1	0	Left Side	2506	0.030	-3.07	25.50	24.93	0.034	/
			50	0	Left Side	2506	0.026	-0.75	24.50	24.48	0.026	/
			1	0	Right Side	2506	0.072	1.70	25.50	24.93	0.082	/
			50	0	Right Side	2506	0.064	-3.94	24.50	24.48	0.064	/
			1	0	Top Side	2506	0.159	2.59	25.50	24.93	0.181	78
			50	0	Top Side	2506	0.143	2.45	24.50	24.48	0.144	/
LTE Band 66	20M	QPSK	1	0	Front side	1720	0.394	1.90	24.50	24.07	0.435	/
			50	0	Front side	1720	0.354	1.78	23.00	22.93	0.360	/
			1	0	Back Side	1720	0.712	-2.86	24.50	24.07	0.786	/
			50	0	Back Side	1720	0.668	3.53	23.00	22.93	0.679	/
			1	0	Left Side	1720	0.232	2.89	24.50	24.07	0.256	/
			50	0	Left Side	1720	0.209	-2.97	23.00	22.93	0.212	/
			1	0	Right Side	1720	0.291	-1.93	24.50	24.07	0.321	/
			50	0	Right Side	1720	0.265	-0.42	23.00	22.93	0.269	/
			1	0	Top Side	1720	0.094	0.96	24.50	24.07	0.104	/
			1	0	Bottom Side	1720	0.857	0.96	24.50	24.07	0.946	80
			1	0	Bottom Side	1745	0.759	-2.23	24.50	23.89	0.873	/
			1	0	Bottom Side	1770	0.802	-3.14	24.50	23.91	0.919	/
			50	0	Bottom Side	1720	0.773	-0.69	23.00	22.93	0.786	/
SA N2	20M	DFT_QPSK	1	1	Front side	1860	0.213	-3.85	21.00	20.94	0.216	/
			50	25	Front side	1900	0.238	-2.89	21.50	21.12	0.260	/
			1	1	Back Side	1860	0.408	2.68	21.00	20.94	0.414	/
			50	25	Back Side	1900	0.452	-0.31	21.50	21.12	0.493	/
			1	1	Left Side	1860	0.086	1.87	21.00	20.94	0.087	/
			50	25	Left Side	1900	0.094	1.69	21.50	21.12	0.103	/
			1	1	Right Side	1860	0.152	3.48	21.00	20.94	0.154	/
			50	25	Right Side	1900	0.169	-0.53	21.50	21.12	0.184	/
			1	1	Bottom Side	1860	0.459	1.15	21.00	20.94	0.465	/
			50	25	Bottom Side	1900	0.511	-1.31	21.50	21.12	0.558	82



SA N5	20M	DFT_QPSK	1	1	Front side	834	0.107	-0.87	21.50	21.12	0.117	/
			50	25	Front side	839	0.116	-0.88	21.50	21.16	0.125	/
			1	1	Back Side	834	0.171	-2.63	21.50	21.12	0.187	/
			50	25	Back Side	839	0.187	0.53	21.50	21.16	0.202	/
			1	1	Left Side	834	0.054	-1.27	21.50	21.12	0.059	/
			50	25	Left Side	839	0.059	2.88	21.50	21.16	0.064	/
			1	1	Right Side	834	0.078	-3.05	21.50	21.12	0.085	/
			50	25	Right Side	839	0.086	0.60	21.50	21.16	0.093	/
			1	1	Bottom Side	834	0.223	-0.38	21.50	21.12	0.243	/
			50	25	Bottom Side	839	0.248	2.43	21.50	21.16	0.268	84
SA N7	50M	DFT_QPSK	1	104	Front side	2560	0.127	1.51	20.50	20.33	0.132	/
			135	25	Front side	2560	0.143	1.67	20.50	20.37	0.147	/
			1	104	Back Side	2560	0.242	-2.67	20.50	20.33	0.252	/
			135	25	Back Side	2560	0.268	-1.35	20.50	20.37	0.276	/
			1	104	Left Side	2560	0.059	-0.82	20.50	20.33	0.061	/
			135	25	Left Side	2560	0.067	1.32	20.50	20.37	0.069	/
			1	104	Right Side	2560	0.106	-2.02	20.50	20.33	0.110	/
			135	25	Right Side	2560	0.115	1.48	20.50	20.37	0.118	/
			1	104	Top Side	2560	0.282	1.13	20.50	20.33	0.293	/
			135	25	Top Side	2560	0.312	-2.37	20.50	20.37	0.321	86
SA N25	20M	DFT_QPSK	1	104	Front side	1905	0.181	-0.33	21.00	20.99	0.181	/
			50	25	Front side	1860	0.202	-0.04	21.50	21.01	0.226	/
			1	104	Back Side	1905	0.353	-2.34	21.00	20.99	0.354	/
			50	25	Back Side	1860	0.389	3.44	21.50	21.01	0.435	/
			1	104	Left Side	1905	0.066	-1.51	21.00	20.99	0.066	/
			50	25	Left Side	1860	0.070	-2.36	21.50	21.01	0.078	/
			1	104	Right Side	1905	0.147	3.68	21.00	20.99	0.147	/
			50	25	Right Side	1860	0.161	0.25	21.50	21.01	0.180	/
			1	104	Bottom Side	1905	0.398	-2.73	21.00	20.99	0.399	/
			50	25	Bottom Side	1860	0.438	3.86	21.50	21.01	0.490	88



SA N38	20M	DFT_QPSK	1	104	Front side	2600	0.094	2.03	20.00	19.54	0.105	/
			50	25	Front side	2600	0.101	-0.16	20.50	20.00	0.113	/
			1	104	Back Side	2600	0.171	0.53	20.00	19.54	0.190	/
			50	25	Back Side	2600	0.193	-0.57	20.50	20.00	0.217	/
			1	104	Left Side	2600	0.022	-0.41	20.00	19.54	0.024	/
			50	25	Left Side	2600	0.027	-1.79	20.50	20.00	0.030	/
			1	104	Right Side	2600	0.087	-2.37	20.00	19.54	0.097	/
			50	25	Right Side	2600	0.093	2.60	20.50	20.00	0.104	/
			1	104	Top Side	2600	0.198	3.73	20.00	19.54	0.220	/
			50	25	Top Side	2600	0.220	-0.74	20.50	20.00	0.247	90
SA N41	100M	DFT_QPSK	1	271	Front side	2640	0.127	3.40	22.50	21.92	0.145	/
			135	67	Front side	2640	0.142	1.30	23.00	22.46	0.161	/
			1	271	Back Side	2640	0.231	1.53	22.50	21.92	0.264	/
			135	67	Back Side	2640	0.256	-1.51	23.00	22.46	0.290	/
			1	271	Left Side	2640	0.034	3.20	22.50	21.92	0.039	/
			135	67	Left Side	2640	0.035	3.41	23.00	22.46	0.040	/
			1	271	Right Side	2640	0.102	-1.58	22.50	21.92	0.117	/
			135	67	Right Side	2640	0.113	2.52	23.00	22.46	0.128	/
			1	271	Top Side	2640	0.259	-1.31	22.50	21.92	0.296	/
			135	67	Top Side	2640	0.284	-2.87	23.00	22.46	0.322	92
SA N77	100M	DFT_QPSK	1	271	Front side	3930	0.083	-0.58	21.00	20.35	0.096	/
			135	67	Front side	3750	0.094	-1.07	21.50	21.04	0.105	/
			1	271	Back Side	3930	0.166	-0.73	21.00	20.35	0.193	/
			135	67	Back Side	3750	0.182	-0.48	21.50	21.04	0.202	/
			1	271	Left Side	3930	0.268	2.06	21.00	20.35	0.311	/
			135	67	Left Side	3750	0.371	1.57	21.50	21.04	0.412	94
			1	271	Right Side	3930	0.077	1.03	21.00	20.35	0.089	/
			135	67	Right Side	3750	0.085	-0.41	21.50	21.04	0.094	/
			1	271	Top Side	3930	0.184	2.12	21.00	20.35	0.214	/
			135	67	Top Side	3750	0.202	-1.98	21.50	21.04	0.225	/



NSA

Band	BW (MHz)	Mod.	RB Size	Test Position	Freq.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaled SAR (W/Kg)	Meas. No.
SA N41	100	DFT_QPSK	1	Front side	2640	0.127	3.40	22.50	21.92	0.145	/
			135	Front side	2640	0.142	1.30	23.00	22.46	0.161	/
			1	Back Side	2640	0.231	1.53	22.50	21.92	0.264	/
			135	Back Side	2640	0.256	-1.51	23.00	22.46	0.290	/
			1	Left Side	2640	0.034	3.20	22.50	21.92	0.039	/
			135	Left Side	2640	0.035	3.41	23.00	22.46	0.040	/
			1	Right Side	2640	0.102	-1.58	22.50	21.92	0.117	/
			135	Right Side	2640	0.113	2.52	23.00	22.46	0.128	/
			1	Top Side	2640	0.259	-1.31	22.50	21.92	0.296	/
			135	Top Side	2640	0.284	-2.87	23.00	22.46	0.322	92
LTE Band 5	10M	QPSK	1	Front side	844	0.095	2.54	25.00	24.59	0.104	/
			50	Front side	844	0.088	0.29	23.50	23.46	0.089	/
			1	Back Side	844	0.158	0.07	25.00	24.59	0.174	/
			50	Back Side	844	0.146	-0.95	23.50	23.46	0.147	/
			1	Left Side	844	0.047	1.93	25.00	24.59	0.052	/
			50	Left Side	844	0.042	2.95	23.50	23.46	0.042	/
			1	Right Side	844	0.072	1.37	25.00	24.59	0.079	/
			50	Right Side	844	0.064	3.87	23.50	23.46	0.065	/
			1	Bottom Side	844	0.200	0.89	25.00	24.59	0.220	60
			50	Bottom Side	844	0.179	0.70	23.50	23.46	0.181	/

Band	Mode	Max SAR	NSA N41+ LTE B5
		(W/Kg)	
NSA N41+ LTE B5	SA N41 Left Side	0.284	0.484
	LTE B5 Left Side	0.200	

Note:

- The test separation of all above table is 10mm.
- Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - 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.
 - Scaled SAR(W/kg) = Measured SAR(W/kg) *Tune-up Scaling Factor
- 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.



12.3 Repeated SAR

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)
LTE Band 4	20M	QPSK	1	0	Bottom Side	1720	0.787	-2.42	24.5	24.42	0.801
LTE Band 66	20M	QPSK	1	0	Bottom Side	1720	0.853	2.84	24.5	24.07	0.942

12.4 Repeated SAR measurement

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio
LTE Band 4	20M	QPSK	1	0	Bottom Side	1720	0.807	0.787	1.026
LTE Band 66	20M	QPSK	1	0	Bottom Side	1720	0.857	0.853	1.005

Note:

1. Per KDB 865664 D01,for each frequency band ,repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/Kg}$.
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 $< 1.45\text{W/Kg}$, 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 $\geq 1.45\text{W/Kg}$.
4. The ratio is the difference in percentage between original and repeated measured SAR.



12.5 Simultaneous Multi-band Transmission Evaluation:

Application Simultaneous Transmission information:

Position	Simultaneous State
Head	1. GSM + 2.4GHz WLAN/5G WLAN+NFC
	2. GSM + Bluetooth+NFC
	3. WCDMA + 2.4GHz WLAN/5G WLAN+NFC
	4. WCDMA + Bluetooth+NFC
	5. CDMA + 2.4GHz WLAN/5G WLAN+NFC
	6. CDMA + Bluetooth+NFC
	7. LTE + 2.4GHz WLAN/5G WLAN+NFC
	8. LTE + Bluetooth+NFC
	9. SA+2.4GHz WLAN/5G WLAN+NFC
	10. SA+ Bluetooth+NFC
	11. NSA + 2.4GHz WLAN/5G WLAN+NFC
	12. NSA + Bluetooth+NFC
Body	1. GSM + 2.4GHz WLAN/5G WLAN+NFC
	2. GSM + Bluetooth+NFC
	3. WCDMA + 2.4GHz WLAN/5G WLAN+NFC
	4. WCDMA + Bluetooth+NFC
	5. CDMA + 2.4GHz WLAN/5G WLAN+NFC
	6. CDMA + Bluetooth+NFC
	7. LTE + 2.4GHz WLAN/5G WLAN+NFC
	8. LTE + Bluetooth+NFC
	9. SA+2.4GHz WLAN/5G WLAN+NFC
	10. SA+ Bluetooth+NFC
	11. NSA + 2.4GHz WLAN/5G WLAN+NFC
	12. NSA + Bluetooth+NFC

NOTE:

1. Bluetooth and WLAN can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
4. 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:
 - a) $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f} \text{ (GHz)} / x] \text{ W/kg}$ for test separation distances $\leq 50 \text{ mm}$;
Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - b) 0.4 W/Kg for 1-g SAR and 1.0 W/Kg for 10-g SAR, when the separation distance is $>50 \text{ mm}$.

Estimated SAR		Maximum Turn-up Power		Antenna to user(mm)	Frequency (GHz)	Stand Alone SAR(1g) [W/kg]
		dBm	mW			
BT	Head	1.5	1.413	5	2.48	0.059
	Body			5	2.48	0.059
NFC	Head	-48	1.413	5	0.01356	0.00000005
	Body			5	0.01356	0.00000005



Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
GSM + 2.4G WLAN+NFC	Head	GSM	0.201	1.345
		2.4G WLAN	1.144	
		NFC	0.00000005	
	Body	GSM	0.347	0.987
		2.4G WLAN	0.640	
		NFC	0.00000005	
GSM + Bluetooth+NFC	Head	GSM	0.201	0.260
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	GSM	0.347	0.406
		Bluetooth	0.059	
		NFC	0.00000005	
GSM + 5G WLAN+NFC	Head	GSM	0.201	1.194
		5G WLAN	0.993	
		NFC	0.00000005	
	Body	GSM	0.347	1.133
		5G WLAN	0.786	
		NFC	0.00000005	
WCDMA + 2.4G WLAN+NFC	Head	WCDMA	0.109	1.253
		2.4G WLAN	1.144	
		NFC	0.00000005	
	Body	WCDMA	0.742	1.382
		2.4G WLAN	0.640	
		NFC	0.00000005	
WCDMA + Bluetooth+NFC	Head	WCDMA	0.109	0.168
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	WCDMA	0.742	0.801
		Bluetooth	0.059	
		NFC	0.00000005	
WCDMA + 5G WLAN+NFC	Head	WCDMA	0.109	1.102
		5G WLAN	0.993	
		NFC	0.00000005	
	Body	WCDMA	0.742	1.528
		5G WLAN	0.786	
		NFC	0.00000005	
CDMA + 2.4G WLAN+NFC	Head	CDMA	0.091	1.235
		2.4G WLAN	1.144	
	Body	CDMA	0.176	0.816
		2.4G WLAN	0.640	
		NFC	0.00000005	
CDMA + Bluetooth+NFC	Head	CDMA	0.091	0.150
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	CDMA	0.176	0.235
		Bluetooth	0.059	
		NFC	0.00000005	



CDMA + 5G WLAN+NFC	Head	CDMA	0.091	1.084
		5G WLAN	0.993	
		NFC	0.00000005	
	Body	CDMA	0.176	0.962
		5G WLAN	0.786	
		NFC	0.00000005	
LTE + 2.4G WLAN+NFC	Head	LTE	0.221	1.365
		2.4G WLAN	1.144	
		NFC	0.00000005	
	Body	LTE	0.846	1.486
		2.4G WLAN	0.640	
		NFC	0.00000005	
LTE + Bluetooth+NFC	Head	LTE	0.221	0.280
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	LTE	0.946	1.005
		Bluetooth	0.059	
		NFC	0.00000005	
LTE + 5G WLAN+NFC	Head	LTE	0.221	1.214
		5G WLAN	0.993	
		NFC	0.00000005	
	Body Top Side	LTE	0.104	0.890
		5G WLAN	0.786	
		NFC	0.00000005	
	Body Bottom Side	LTE	0.946	1.056
		5G WLAN	0.110	
		NFC	0.00000005	
SA + 2.4G WLAN+NFC	Head	SA	0.240	1.384
		2.4G WLAN	1.144	
		NFC	0.00000005	
	Body	SA	0.558	1.198
		2.4G WLAN	0.640	
		NFC	0.00000005	
SA+ Bluetooth+NFC	Head	NR SA	0.240	0.299
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	NR SA	0.556	0.615
		Bluetooth	0.059	
		NFC	0.00000005	
SA + 5G WLAN	Head	NR SA	0.240	1.233
		5G WLAN	0.993	
		NFC	0.00000005	
	Body	NR SA	0.558	1.344
		5G WLAN	0.786	
		NFC	0.00000005	



NSA + 2.4G WLAN+NFC	Head	NR NSA	0.354	1.498
		2.4G WLAN	1.144	
		NFC	0.00000005	
	Body	NR NSA	0.484	1.124
		2.4G WLAN	0.640	
		NFC	0.00000005	
NSA + Bluetooth+NFC	Head	NR NSA	0.354	0.413
		Bluetooth	0.059	
		NFC	0.00000005	
	Body	NR NSA	0.484	0.543
		Bluetooth	0.059	
		NFC	0.00000005	
NSA + 5G WLAN+NFC	Head	NR NSA	0.354	1.347
		5G WLAN	0.993	
		NFC	0.00000005	
	Body	NR NSA	0.484	1.270
		5G WLAN	0.786	
		NFC	0.00000005	

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	DIP0G750	SN 06/22 DIP0G750-638	2022.02.11	2025.02.10
835MHz Dipole	MVG	DIP0G835	SN 06/22 DIP0G835-639	2022.02.11	2025.02.10
1800MHz Dipole	MVG	DIP1G800	SN 06/22 DIP1G800-640	2022.02.11	2025.02.10
1900MHz Dipole	MVG	DIP1G900	SN 06/22 DIP1G900-641	2022.02.11	2025.02.10
2300MHz Dipole	MVG	DIP2G300	SN 06/22 DIP2G100-644	2022.02.11	2025.02.10
2450MHz Dipole	MVG	DIP2G450	SN 06/22 DIP2G450-645	2022.02.11	2025.02.10
2600MHz Dipole	MVG	DIP2G600	SN 06/22 DIP2G600-646	2022.02.11	2025.02.10
3700MHz Dipole	MVG	DIP3G700	SN 06/22 DIP3G700-648	2022.02.11	2025.02.10
3900MHz Dipole	MVG	DIP3G900	SN 06/22 DIP3G900-649	2022.02.11	2025.02.10
5000MHz Dipole	MVG	DIP5G000	SN 06/22 DIP5G000-653	2022.02.11	2025.02.10
E-Field Probe	MVG	EPGO364	SN 04/22 EPGO364	2024.02.07	2025.02.06
Liquid Calibration Kit	MVG	OCPG 87	SN 06/22 OCPG87	2024.02.07	2025.02.06
Antenna	MVG	ANTA 73	SN 06/22 ANTA 73	N/A	N/A
Ellipsoid Phantom	MVG	ELLI 51	SN 06/22 ELLI 51	N/A	N/A
Phantom	MVG	SAM 148	SN 06/22 SAM148	N/A	N/A
Phone holder	MVG	MSH 117	SN 06/22 MSH 117	N/A	N/A
Laptop positioner	MVG	LSH 36	SN 06/22 LSH 38	N/A	N/A
Directional coupler	SHW	SHWDCP	202203280013	N/A	N/A
Network Analyzer	ZVL	R&S	116184-HC	2024.03.25	2025.03.24
Multi Meter	DMM6500	Keithley	4527252	2024.03.15	2025.03.14
Signal Generator	Keysight	N5182B	MY59100717	2024.03.09	2025.03.08
Wireless Communication Test Set	R&S	CMW500	137737	2024.03.09	2025.03.08
Power Sensor	R&S	Z11	116184	2024.02.23	2025.02.22
Electronic Temperature hygrometer	N/A	ST-W2318	N/A	2024.03.11	2025.03.10
Temperature hygrometer	N/A	TP101	N/A	2024.03.11	2025.03.10



Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

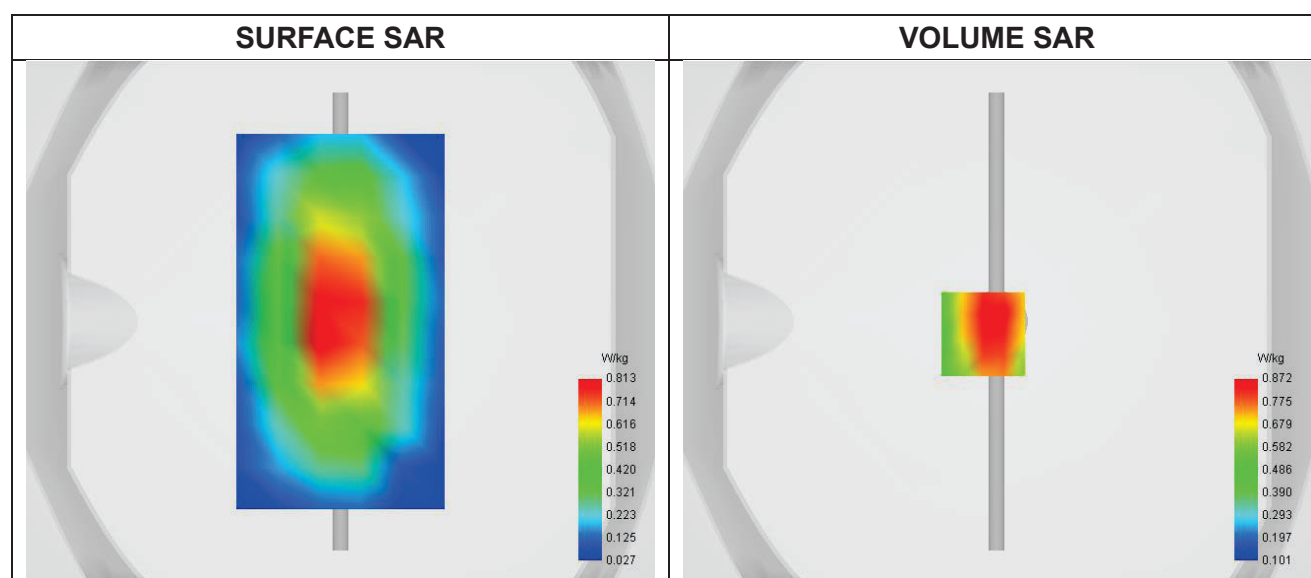
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2024-05-09

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW
Frequency (MHz)	750.000
Relative permittivity	42.20
Conductivity (S/m)	0.87
Probe	SN 04/22 EPGO364
ConvF	1.68
Crest factor:	1:1

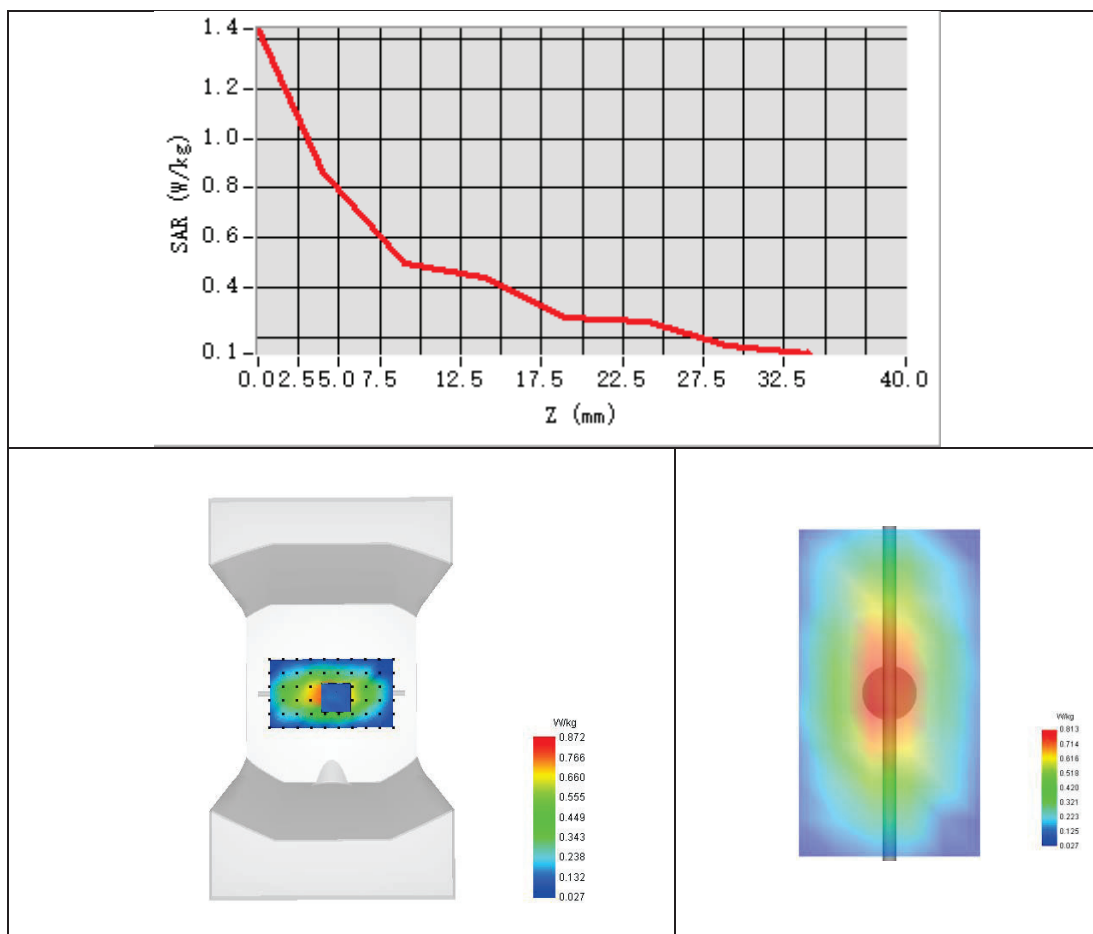


Maximum location: X=0.00, Y=6.00 ; SAR Peak: 1.08 W/kg

SAR 10g (W/Kg)	0.542
SAR 1g (W/Kg)	0.843



Z Axis Scan





System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

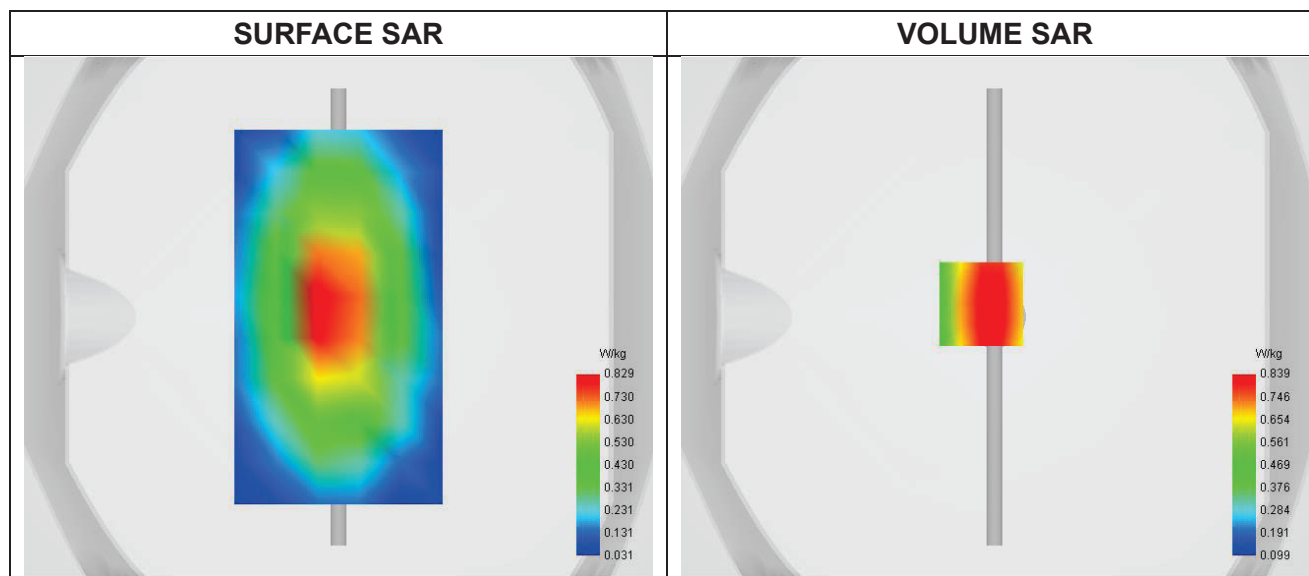
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2024-05-16

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW
Frequency (MHz)	750.000
Relative permittivity	42.69
Conductivity (S/m)	0.92
Probe	SN 04/22 EPGO364
ConvF	1.68
Crest factor:	1:1

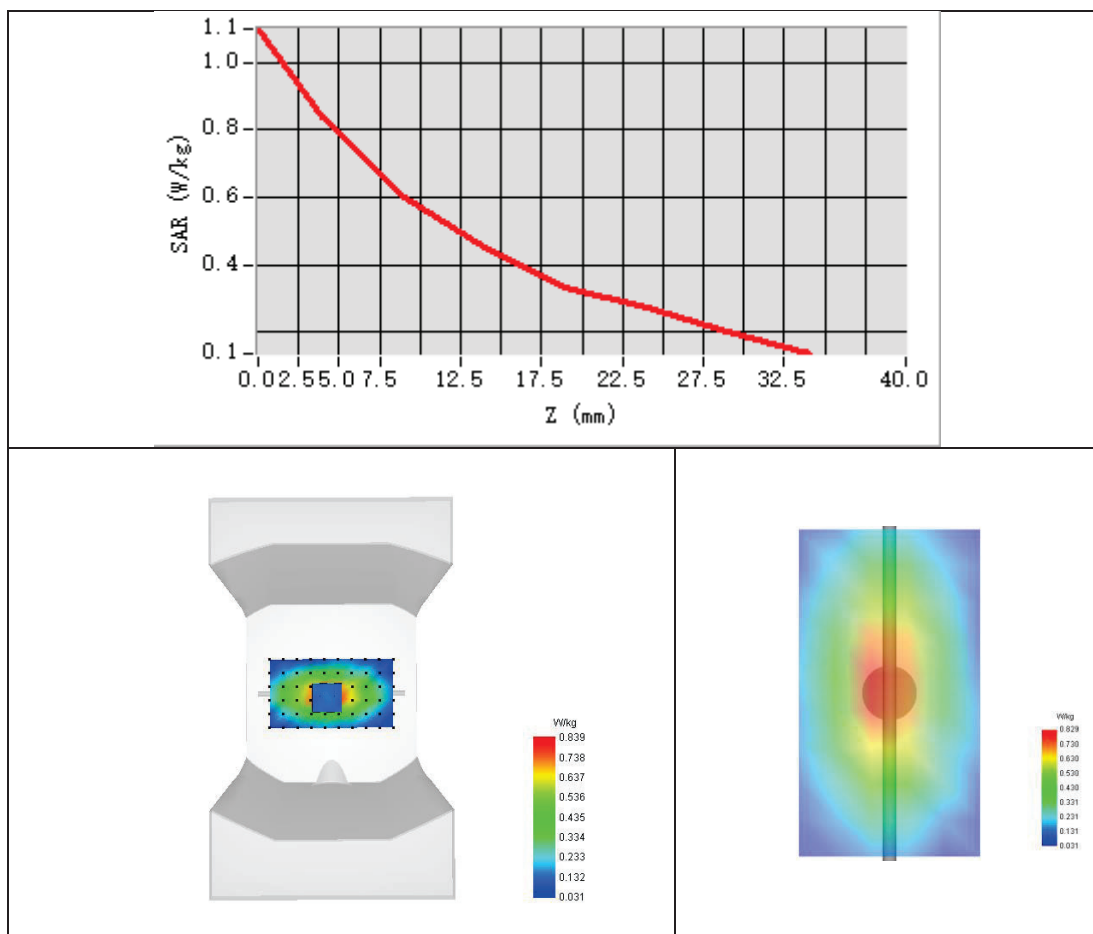


Maximum location: X=0.00, Y=6.00 ; SAR Peak: 1.32 W/kg

SAR 10g (W/Kg)	0.531
SAR 1g (W/Kg)	0.866



Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

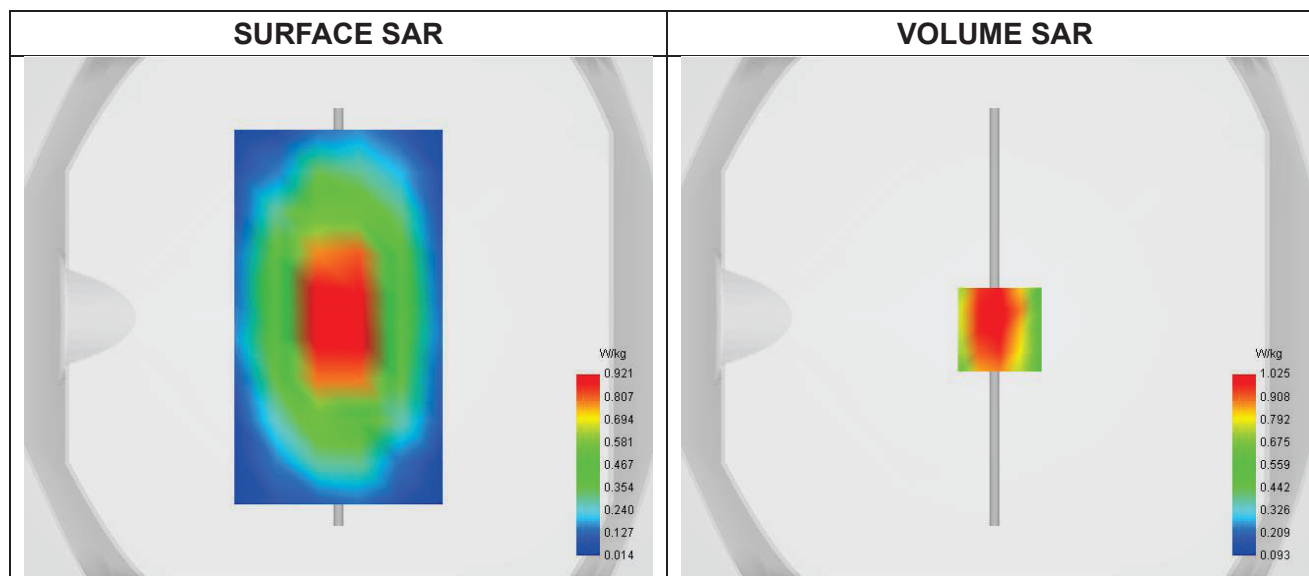
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2024-06-01

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW
Frequency (MHz)	835.000
Relative permittivity	41.87
Conductivity (S/m)	0.91
Probe	SN 04/22 EPGO364
ConvF	1.70
Crest factor:	1:1

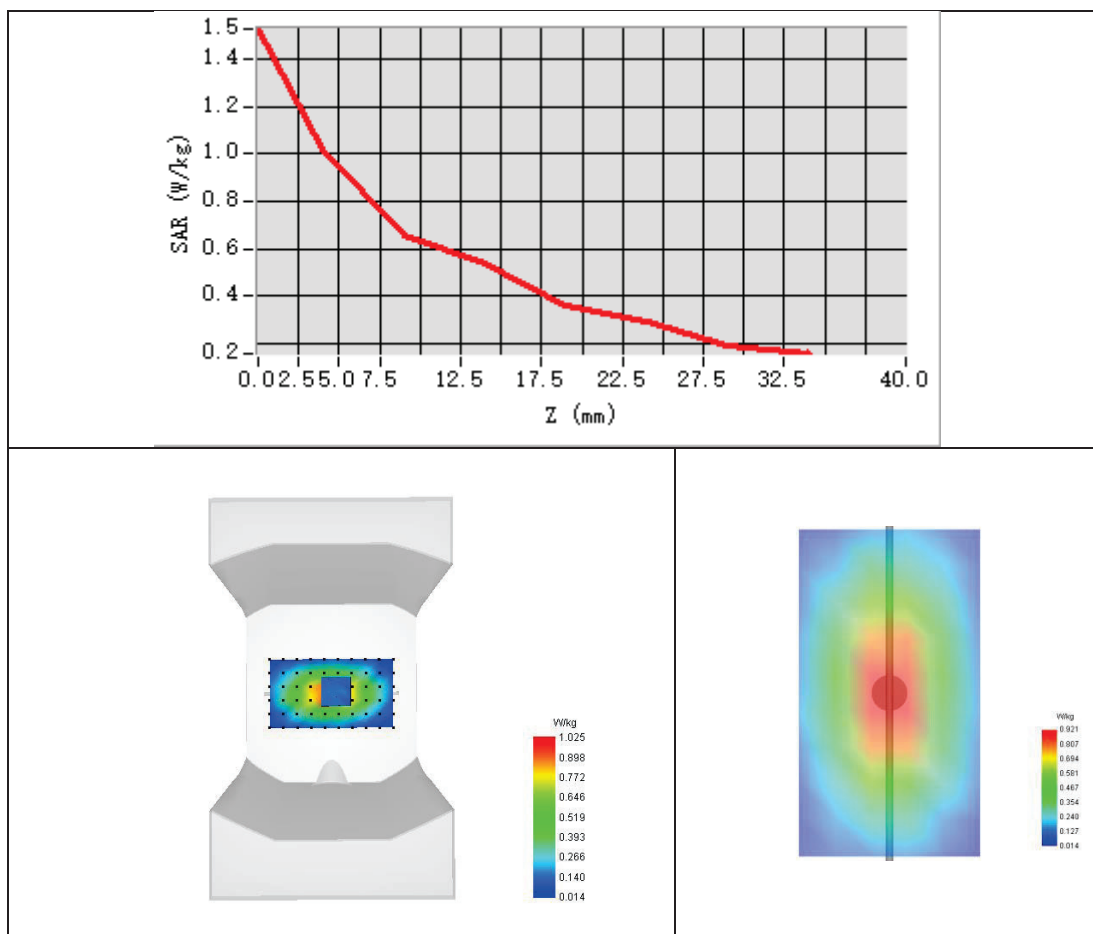


Maximum location: X=0.00, Y=-0.00 ; SAR Peak: 1.50 W/kg

SAR 10g (W/Kg)	0.621
SAR 1g (W/Kg)	0.980



Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

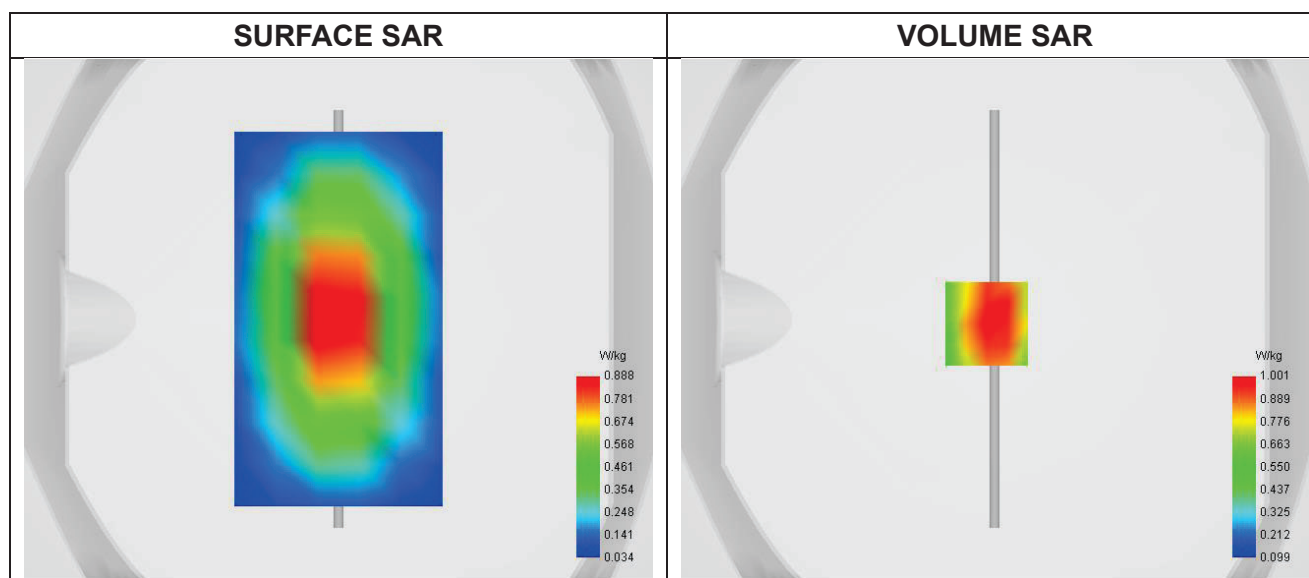
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2024-05-13

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW
Frequency (MHz)	835.000
Relative permittivity	42.59
Conductivity (S/m)	0.88
Probe	SN 04/22 EPGO364
ConvF	1.70
Crest factor:	1:1

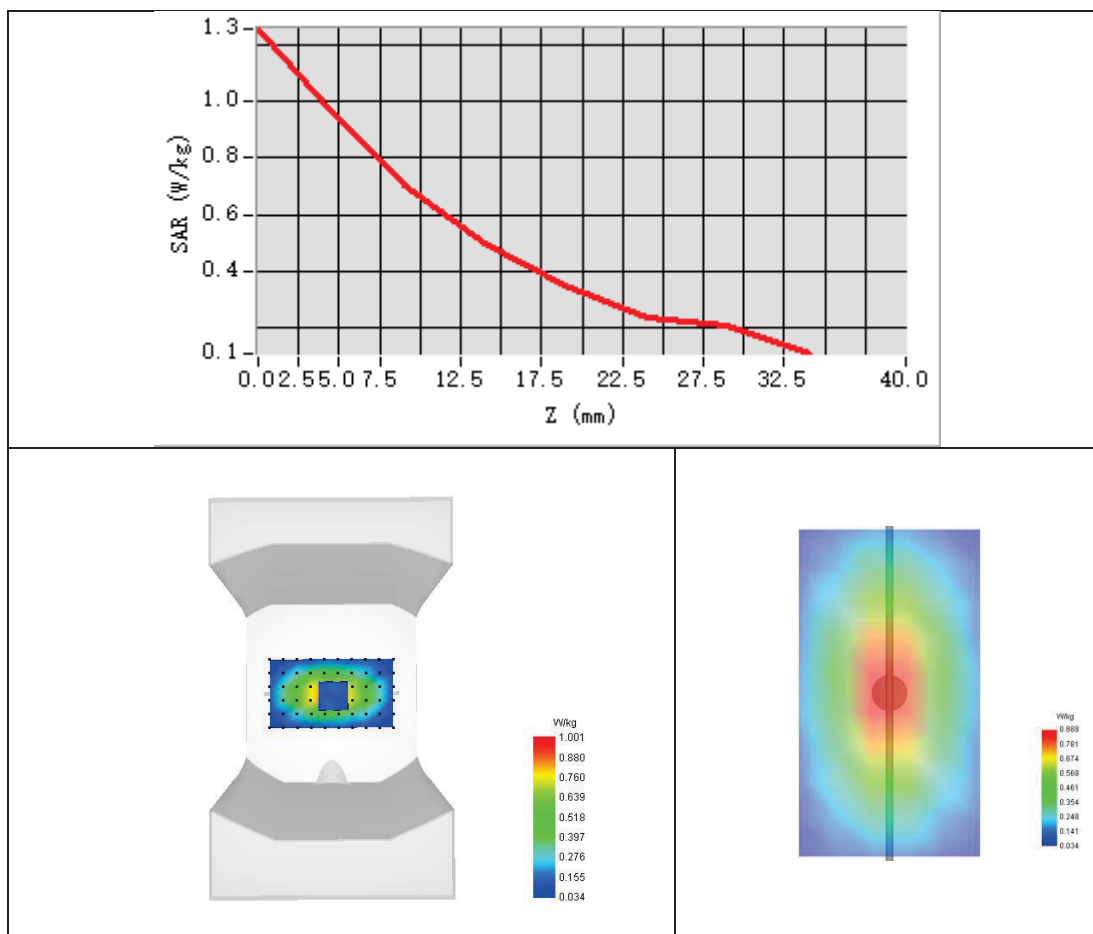


Maximum location: X=-1.00, Y=-5.00 ; SAR Peak: 1.28 W/kg

SAR 10g (W/Kg)	0.601
SAR 1g (W/Kg)	1.020



Z Axis Scan





System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)

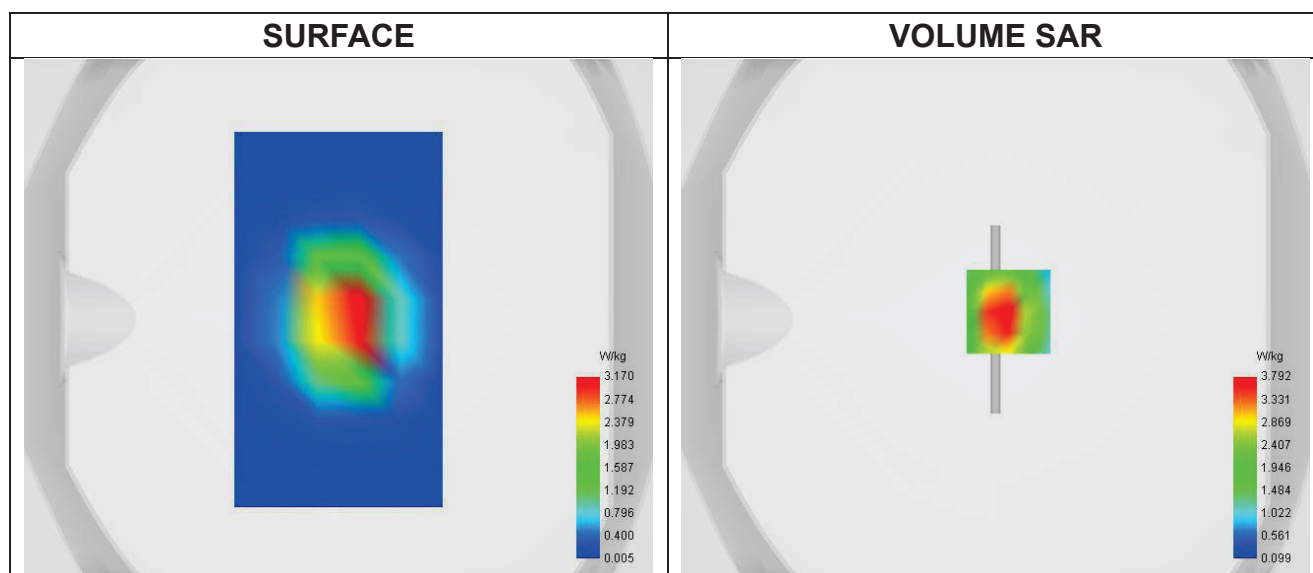
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2024-06-02

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW
Frequency (MHz)	1800.000
Relative permittivity	40.82
Conductivity (S/m)	1.38
Probe	SN 04/22 EPGO364
ConvF	1.91
Crest factor:	1:1

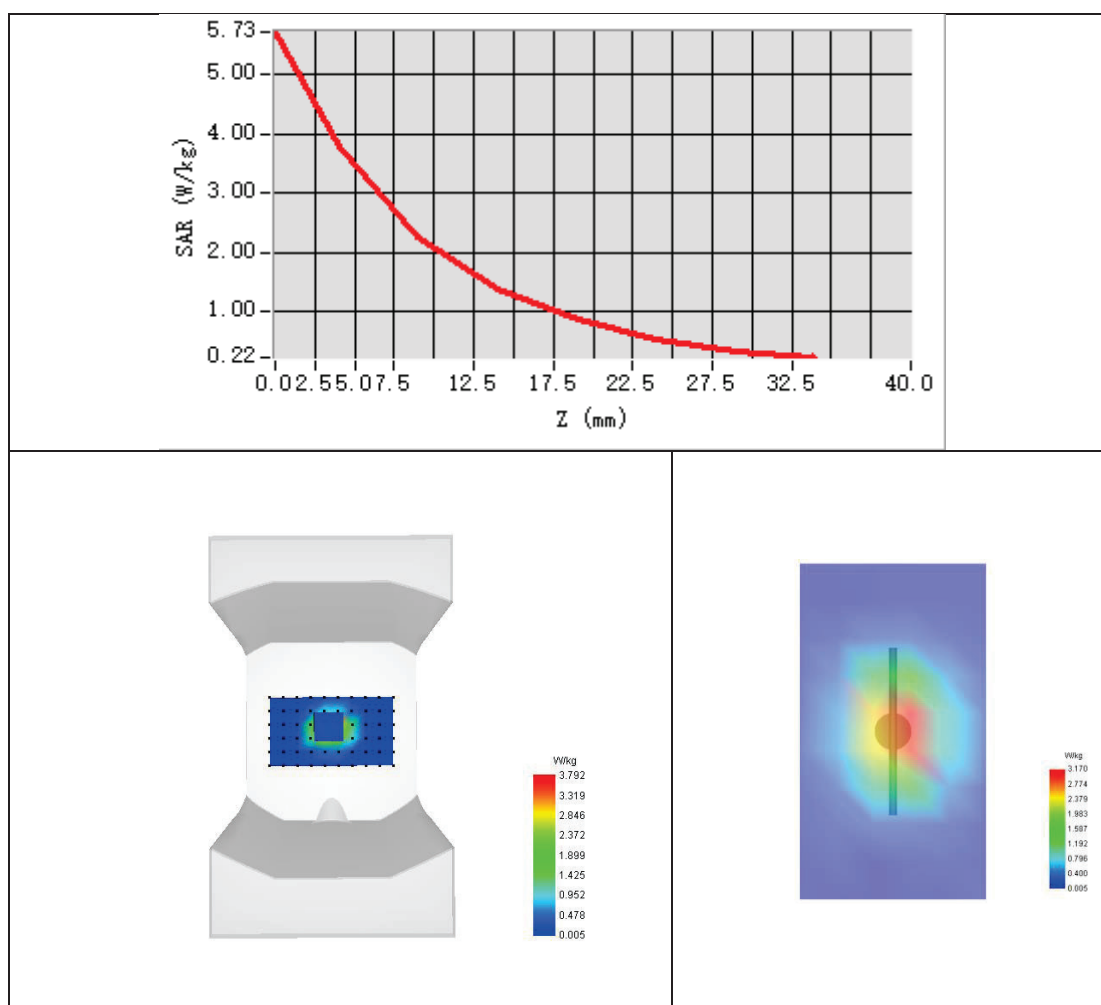


Maximum location: X=1.00, Y=2.00 ; SAR Peak: 6.83 W/kg

SAR 10g (W/Kg)	2.026
SAR 1g (W/Kg)	3.935



Z Axis Scan





System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)

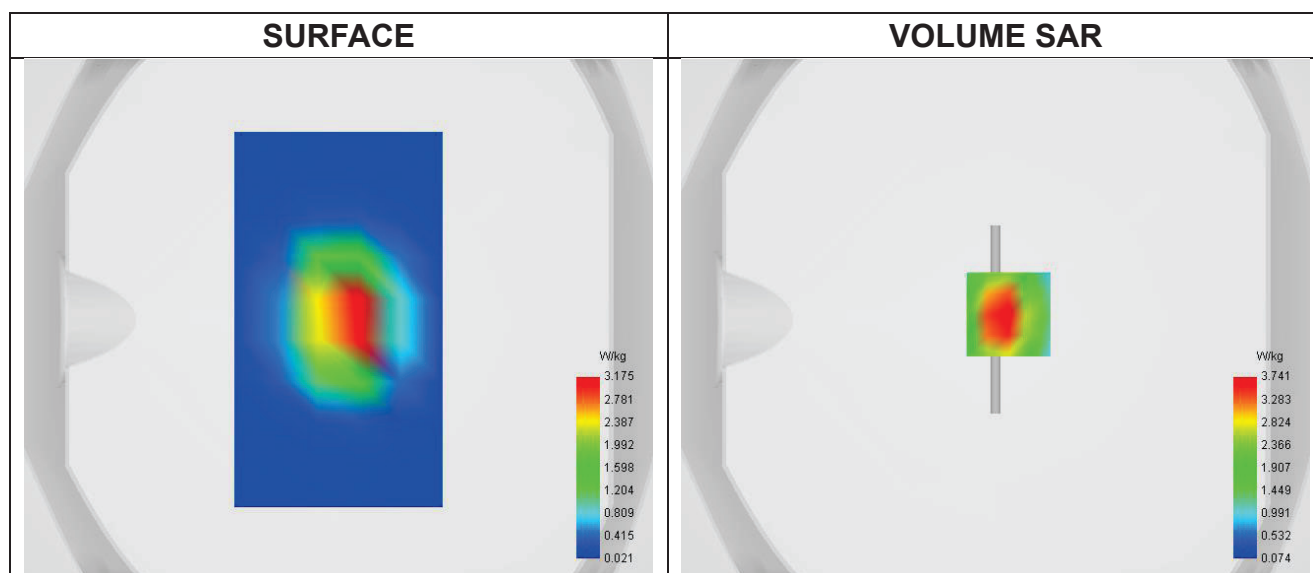
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2024-05-17

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW
Frequency (MHz)	1800.000
Relative permittivity	40.93
Conductivity (S/m)	1.45
Probe	SN 04/22 EPGO364
ConvF	1.91
Crest factor:	1:1

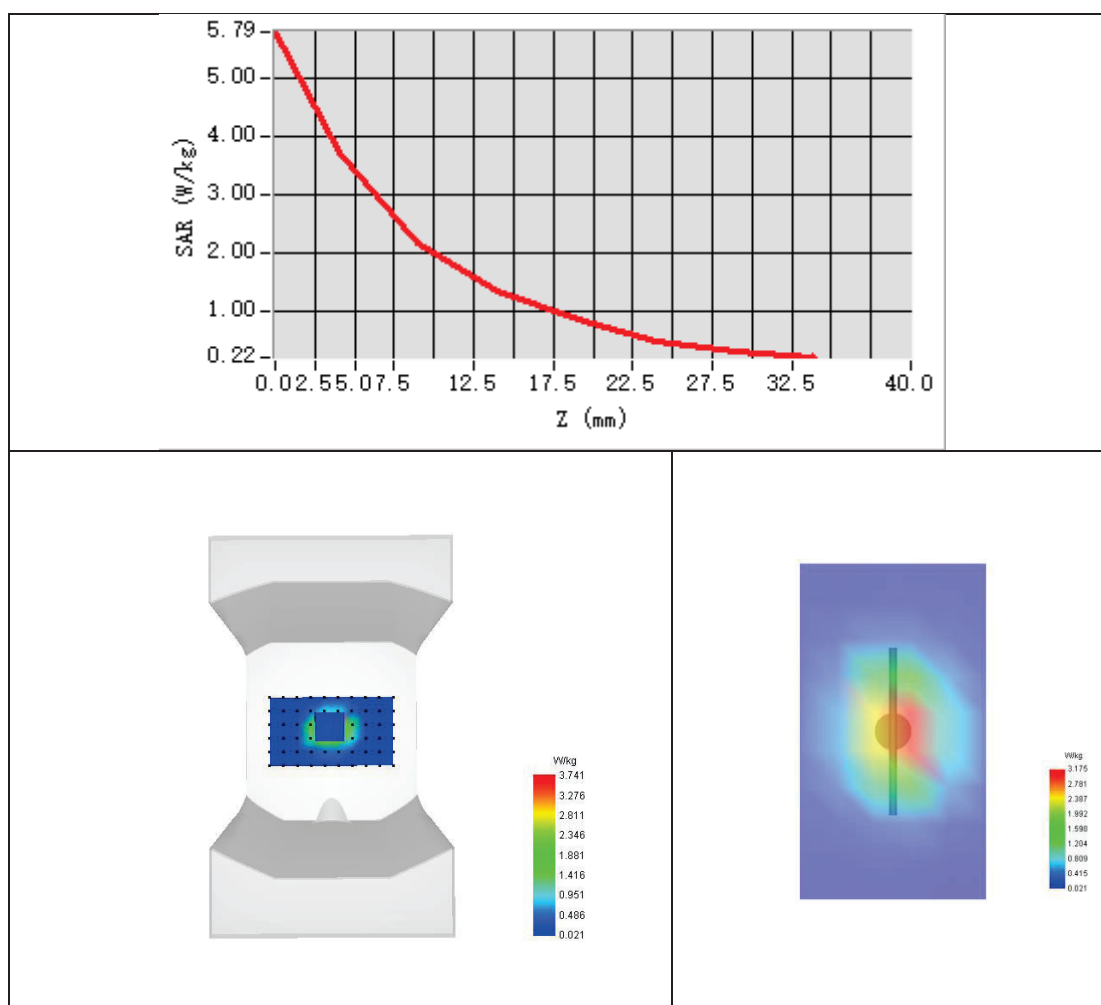


Maximum location: X=0.00, Y=0.00 ; SAR Peak: 6.51 W/kg

SAR 10g (W/Kg)	2.044
SAR 1g (W/Kg)	3.928



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

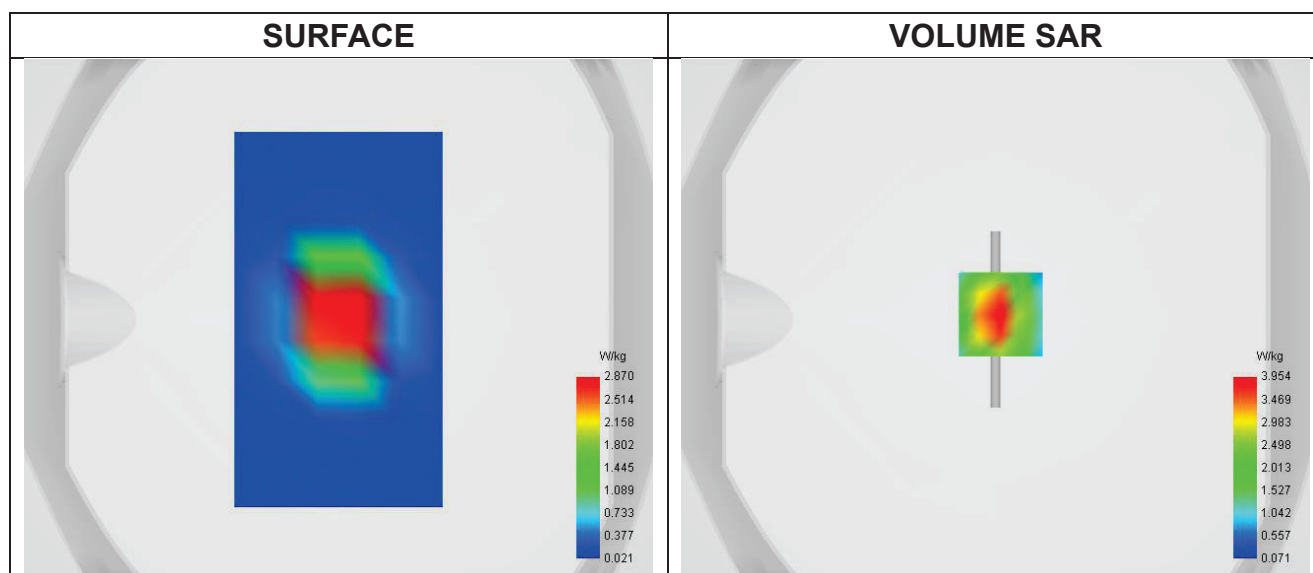
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2024-05-20

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.93
Conductivity (S/m)	1.46
Probe	SN 04/22 EPGO364
ConvF	2.24
Crest factor:	1:1

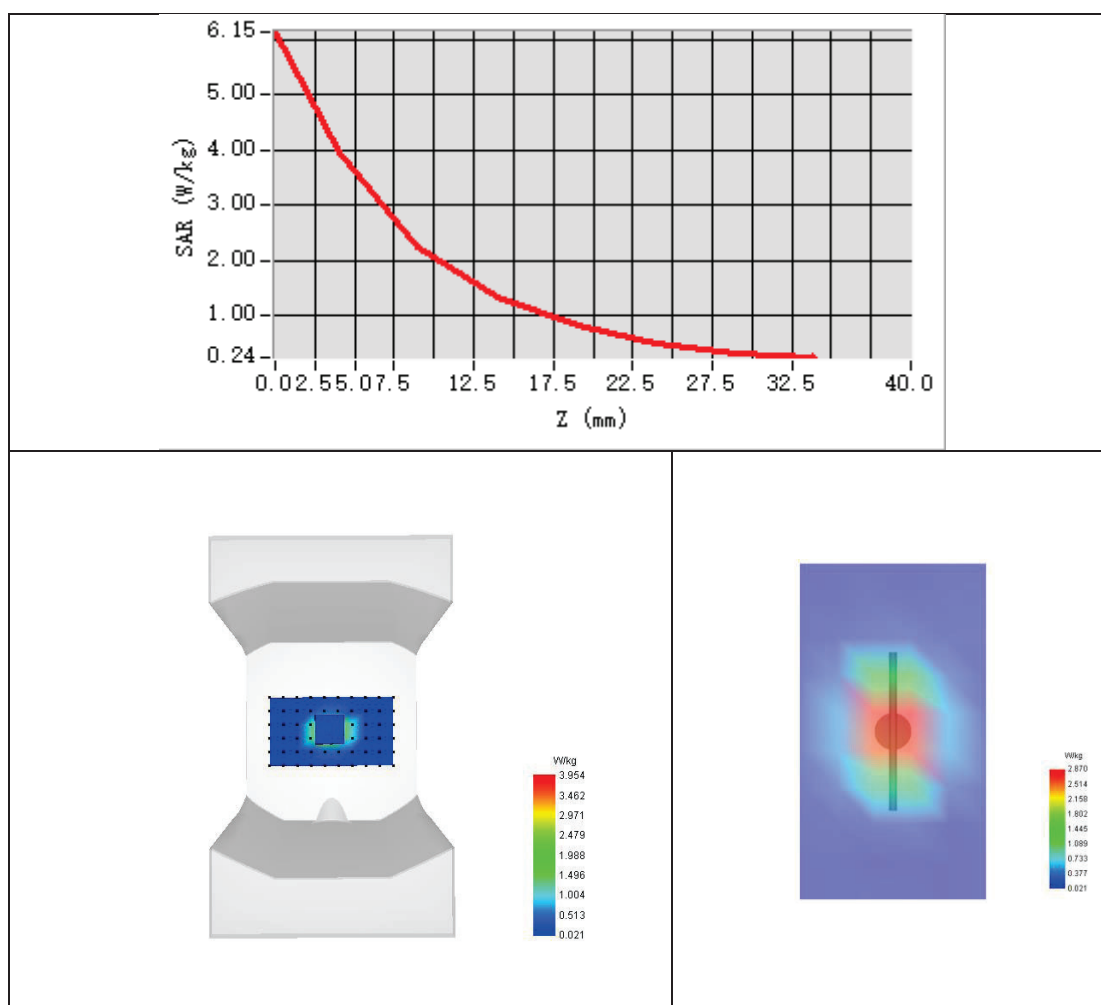


Maximum location: X=2.00, Y=2.00 ; SAR Peak: 6.38 W/kg

SAR 10g (W/Kg)	2.035
SAR 1g (W/Kg)	4.091



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

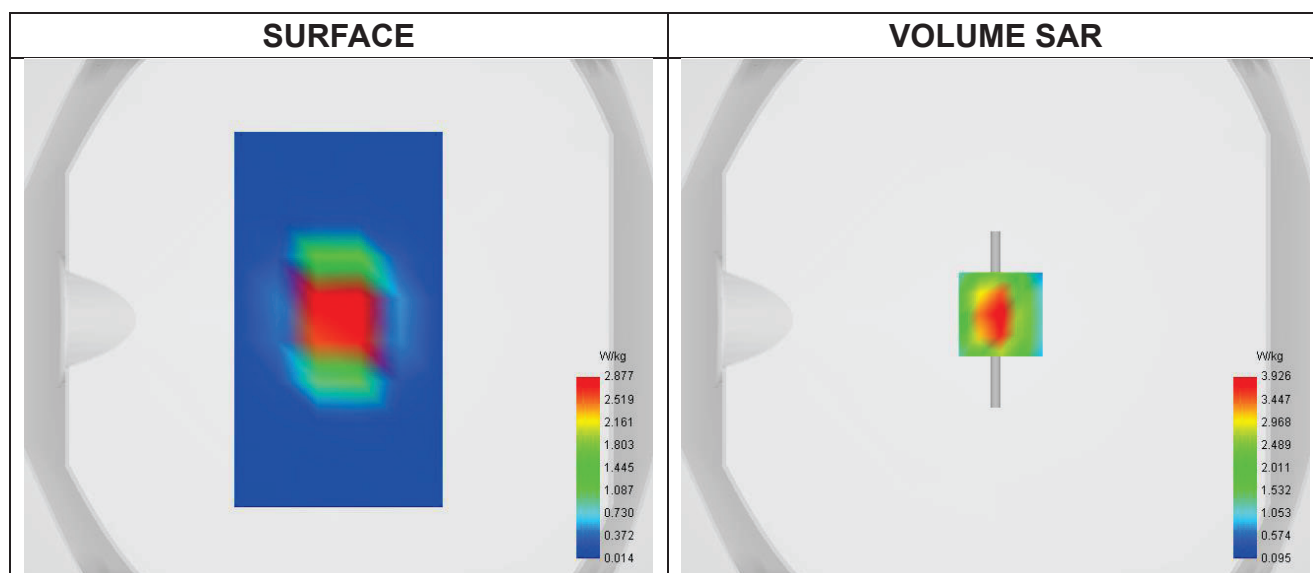
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2024-05-10

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.22
Conductivity (S/m)	1.42
Probe	SN 04/22 EPGO364
ConvF	2.24
Crest factor:	1:1

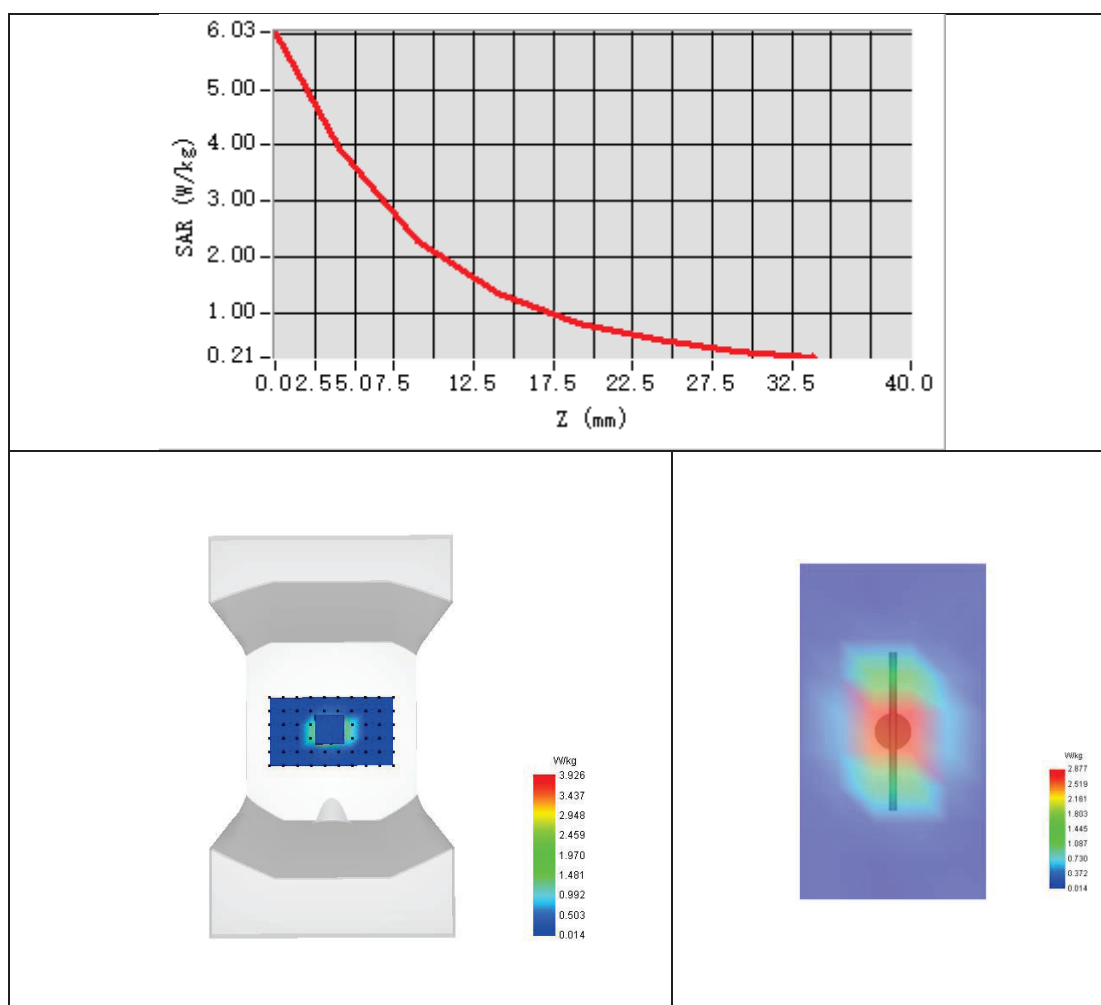


Maximum location: X=1.00, Y=0.00 ; SAR Peak: 6.71 W/kg

SAR 10g (W/Kg)	2.102
SAR 1g (W/Kg)	4.125



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

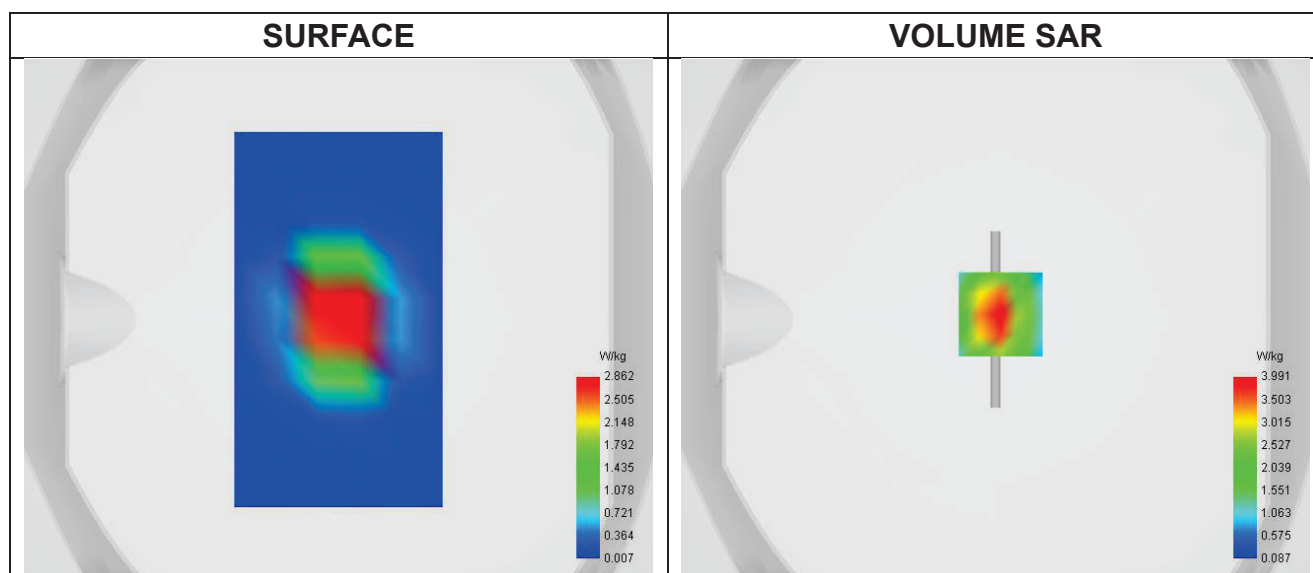
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2024-05-14

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.34
Conductivity (S/m)	1.42
Probe	SN 04/22 EPGO364
ConvF	2.24
Crest factor:	1:1



Maximum location: X=1.00, Y=0.00 ; SAR Peak: 6.29 W/kg

SAR 10g (W/Kg)	2.035
SAR 1g (W/Kg)	4.094