



WLAN (5.8G band)

5.8G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	149	5745	9.71	9.35
	157	5785	10.11	10.26
	165	5825	9.71	9.35
802.11 n-HT20	149	5745	10.44	11.07
	157	5785	10.7	11.75
	165	5825	11.22	13.24
802.11 n-HT40	151	5755	10.28	10.67
	159	5795	10.47	11.14
802.11ac-VHT20	149	5745	7.47	5.58
	157	5785	7.72	5.92
	165	5825	7.08	5.11
802.11ac-VHT40	151	5755	6.93	4.93
	159	5795	6.97	4.98
802.11ac-VHT80	155	5775	9.2	8.32

Bluetooth

BT				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	9.4	8.70
	39	2441	8.62	7.28
	78	2480	7.71	5.90
$\pi/4$ -QPSK(2Mbps)	0	2402	8.61	7.26
	39	2441	7.78	6.00
	78	2480	7.4	5.50
8DPSK(3Mbps)	0	2402	8.49	7.06
	39	2441	7.66	5.83
	78	2480	7.34	5.42



BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	-4.93	0.32
	19	2440	-4.83	0.32
	39	2480	-8.63	0.14
GFSK(2Mbps)	0	2402	-6.35	0.23
	19	2440	-6.96	0.20
	39	2480	-10.68	0.09

Tune Up Power:

GSM

Mode	GSM850(AVG)	GSM1900(AVG)
GSM/DCS	32±1dBm	29.5±1dBm
GPRS (1 Slot)	32±1dBm	29.5±1dBm
GPRS (2 Slot)	31.5±1dBm	28.5±1dBm
GPRS (3 Slot)	30±1dBm	26.5±1dBm
GPRS (4 Slot)	29±1dBm	25.5±1dBm
EGPRS(8PSK, 1-Slot)	27.5±1dBm	24.5±1dBm
EGPRS(8PSK, 2-Slot)	26.5±1dBm	24±1dBm
EGPRS(8PSK, 3-Slot)	24±1dBm	22.5±1dBm
EGPRS(8PSK, 4-Slot)	23±1dBm	21.5±1dBm

WCDMA

Mode	WCDMA Band 2	WCDMA Band 4	WCDMA Band 5
RMC 12.2Kbps	24±1dBm	23.5±1dBm	23.5±1dBm
HSDPA Subtest-1	23±1dBm	22.5±1dBm	22.5±1dBm
HSDPA Subtest-2	22.5±1dBm	22±1dBm	22±1dBm
HSDPA Subtest-3	21.5±1dBm	21±1dBm	21±1dBm
HSDPA Subtest-4	21.5±1dBm	21.5±1dBm	21±1dBm
HSUPA Subtest-1	22.5±1dBm	22±1dBm	22.5±1dBm
HSUPA Subtest-2	22.5±1dBm	22.5±1dBm	22.5±1dBm
HSUPA Subtest-3	21.5±1dBm	21.5±1dBm	21±1dBm
HSUPA Subtest-4	23±1dBm	22.5±1dBm	22.5±1dBm
HSUPA Subtest-5	22±1dBm	22±1dBm	22±1dBm

LTE

Band	Band 2	Band 4	Band 5	Band 7	Band 12	Band 13	Band 17
	21.5±1dBm	22±1dBm	22±1dBm	21±1dBm	22±1dBm	21.5±1dBm	22±1dBm
Band	Band 25	Band 26	Band 38	Band 40	Band 41	Band 66	
	21.5±1dBm	21±1dBm	22.5±1dBm	22.5±1dBm	21±1dBm	23±1dBm	



Mode	2.4G WLAN		
802.11b	1	2412	14±1dBm
	6	2437	13±1dBm
	11	2462	13±1dBm
802.11g	1	2412	7.5±1dBm
	6	2437	6.5±1dBm
	11	2462	6±1dBm
802.11 n-HT20	1	2412	4.5±1dBm
	6	2437	3.5±1dBm
	11	2462	3.5±1dBm
802.11 n-HT40	3	2422	4.5±1dBm
	6	2437	4±1dBm
	9	2452	4±1dBm

WLAN (5.2Gband)

Mode	5.2G		
802.11a20	36	5180	11.5±1dBm
	40	5200	12±1dBm
	48	5240	12±1dBm
802.11 n-HT20	36	5180	9.5±1dBm
	40	5200	10.5±1dBm
	48	5240	10.5±1dBm
802.11 n-HT40	38	5190	10±1dBm
	46	5230	N/A
802.11ac-VHT20	36	5180	10.5±1dBm
	40	5200	6.5±1dBm
	48	5240	7±1dBm
802.11ac-VHT40	38	5190	N/A
	46	5230	6.5±1dBm
802.11ac-VHT80	42	5210	N/A



WLAN (5.3G band)

Mode	5.3G		
802.11a20	52	5260	12±1dBm
	60	5300	12.5±1dBm
	64	5320	13±1dBm
802.11 n-HT20	52	5260	10±1dBm
	60	5300	11±1dBm
	64	5320	10.5±1dBm
802.11 n-HT40	54	5270	10±1dBm
	62	5310	10.5±1dBm
802.11ac-VHT20	52	5260	7.5±1dBm
	60	5300	7.5±1dBm
	64	5320	7.5±1dBm
802.11ac-VHT40	54	5270	7.5±1dBm
	62	5310	7±1dBm
802.11ac-VHT80	58	5290	6.5±1dBm

WLAN (5.6G band)

Mode	5.6G		
802.11a20	100	5500	9.5±1dBm
	116	5580	9.5±1dBm
	140	5700	9±1dBm
802.11 n-HT20	100	5500	10±1dBm
	116	5580	9.5±1dBm
	140	5700	10±1dBm
802.11 n-HT40	102	5510	12±1dBm
	110	5550	9.5±1dBm
	134	5670	10.5±1dBm
802.11ac-VHT20	100	5500	6.5±1dBm
	116	5580	6.5±1dBm
	140	5700	7±1dBm
802.11ac-VHT40	102	5510	8±1dBm
	110	5550	8±1dBm
	134	5670	6.5±1dBm
802.11ac-VHT80	106	5530	8±1dBm
	122	5610	8±1dBm
	138	5690	8±1dBm



WLAN (5.8G band)

Mode	5.8G		
802.11a20	149	5745	9±1dBm
	157	5785	9.5±1dBm
	165	5825	9±1dBm
802.11 n-HT20	149	5745	9.5±1dBm
	157	5785	10±1dBm
	165	5825	10.5±1dBm
802.11 n-HT40	151	5755	9.5±1dBm
	159	5795	9.5±1dBm
802.11ac-VHT20	149	5745	6.5±1dBm
	157	5785	7±1dBm
	165	5825	6.5±1dBm
802.11ac-VHT40	151	5755	6±1dBm
	159	5795	6±1dBm
802.11ac-VHT80	155	5775	8.5±1dBm

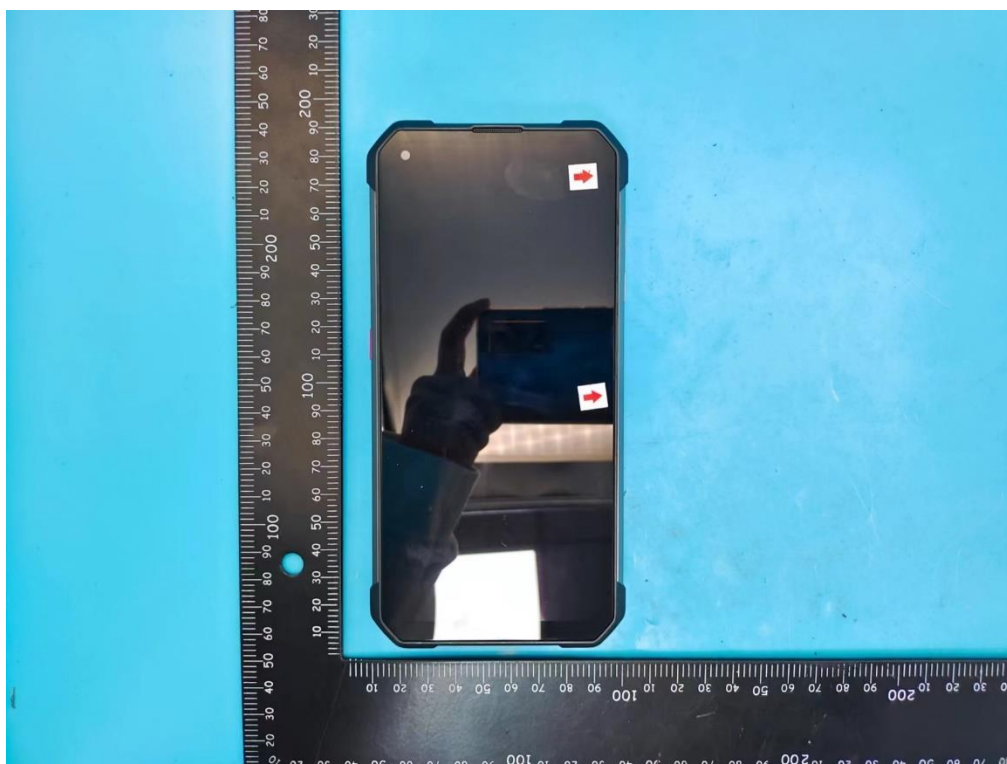
Mode	BT	
GFSK π/4-DQPSK	0	8.5±1dBm
	39	8±1dBm
	78	7±1dBm
GFSK π/4-DQPSK	0	8±1dBm
	39	7±1dBm
	78	6.5±1dBm
GFSK	0	7.5±1dBm
	39	7±1dBm
	78	6.5±1dBm

Mode	BLE	
GFSK(1Mbps)	0	-4±1dBm
	19	-4±1dBm
	39	-8±1dBm
GFSK(2Mbps)	0	-5.5±1dBm
	19	-6±1dBm
	39	-10±1dBm

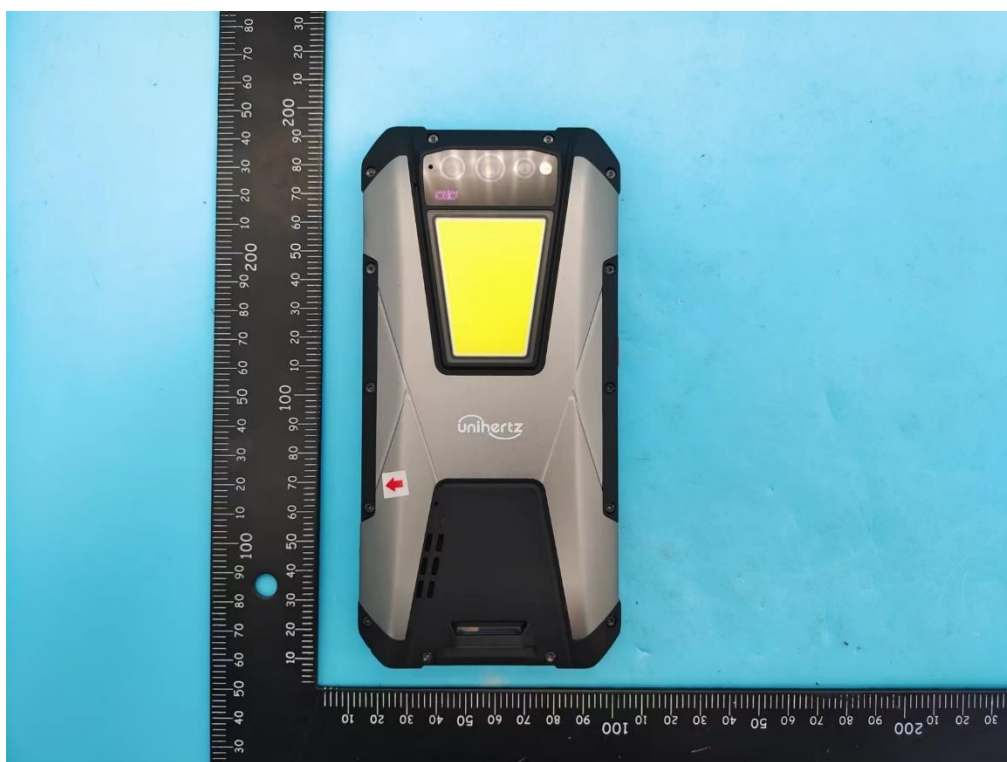
10. Test Photos and Results

10.1 EUT Photos

Front side



Back side

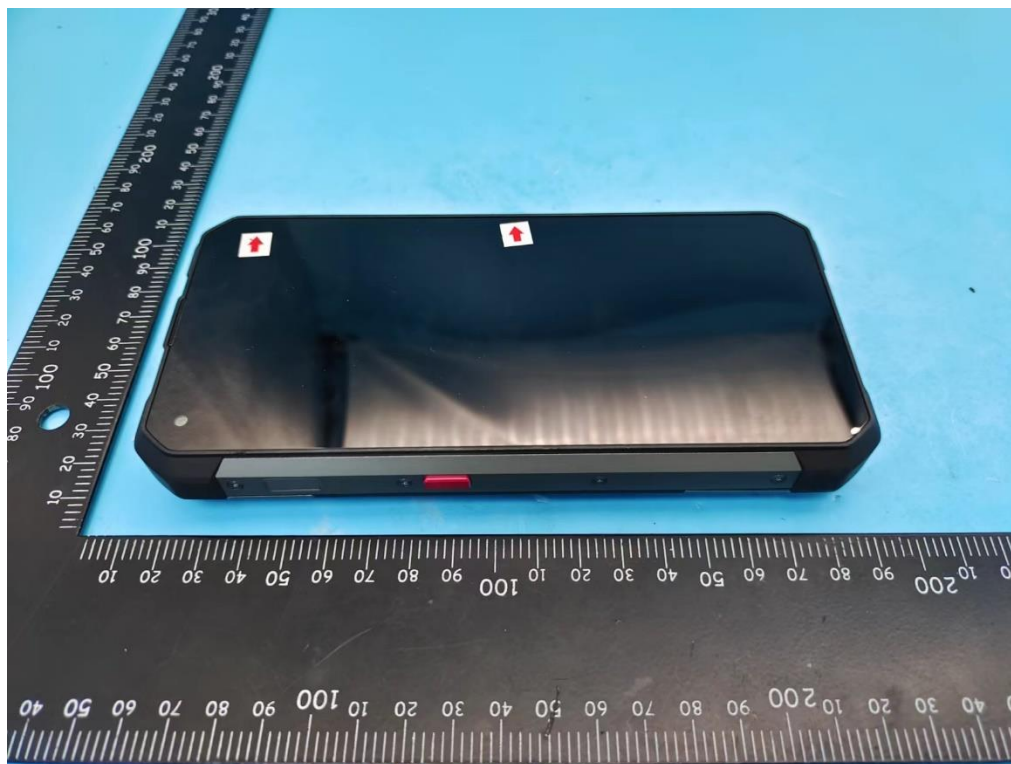




Right Edge



Left Edge





Top Edge

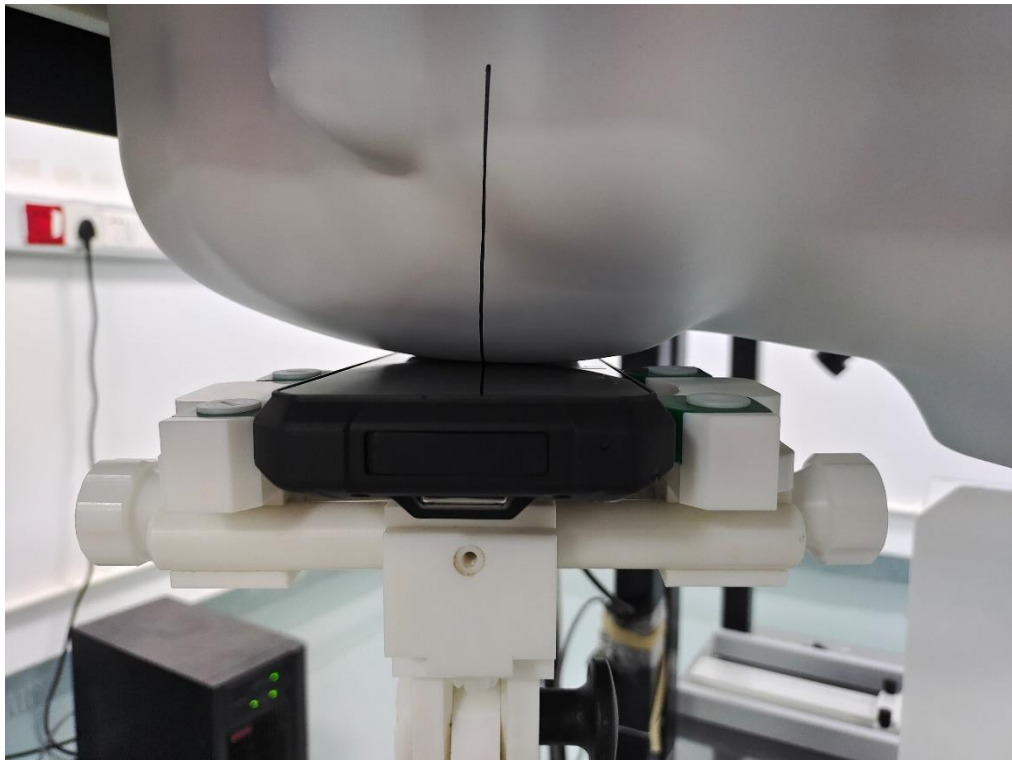


Bottom Edge

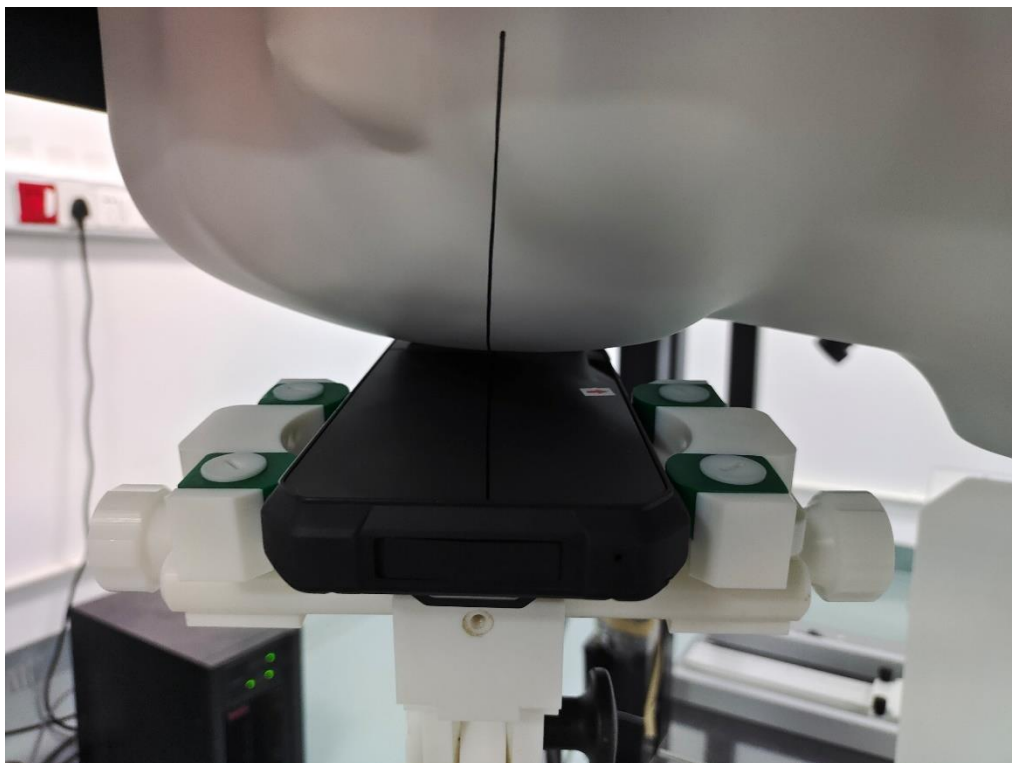


10.2 Setup Photos

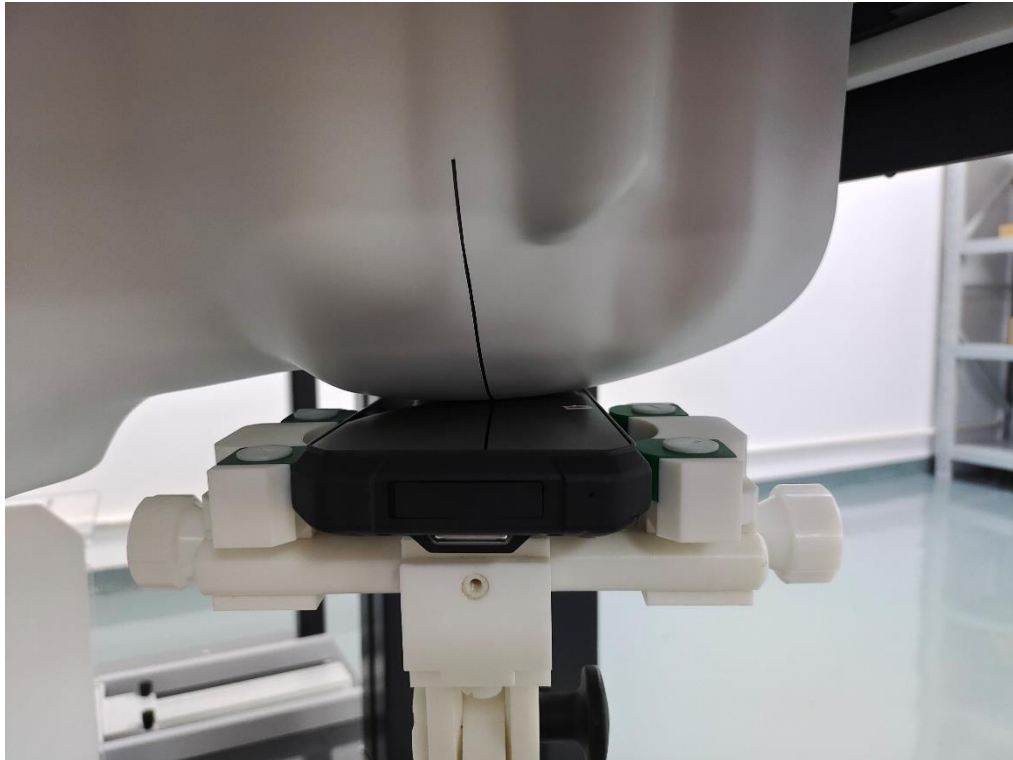
Right Touch



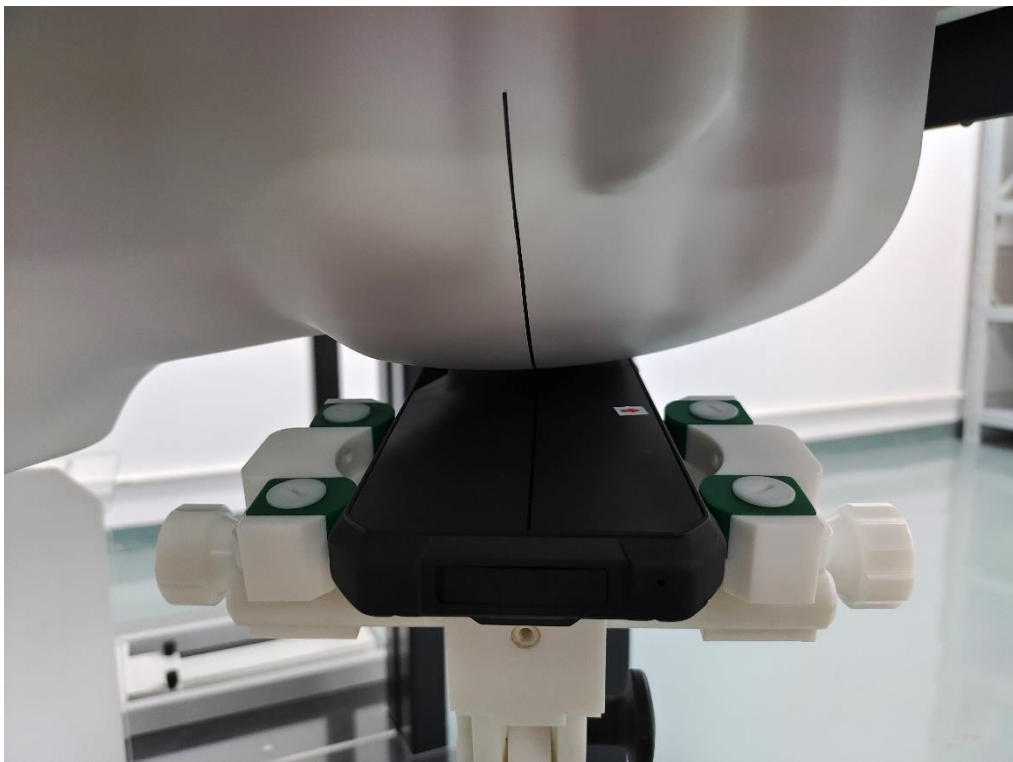
Right Tilt



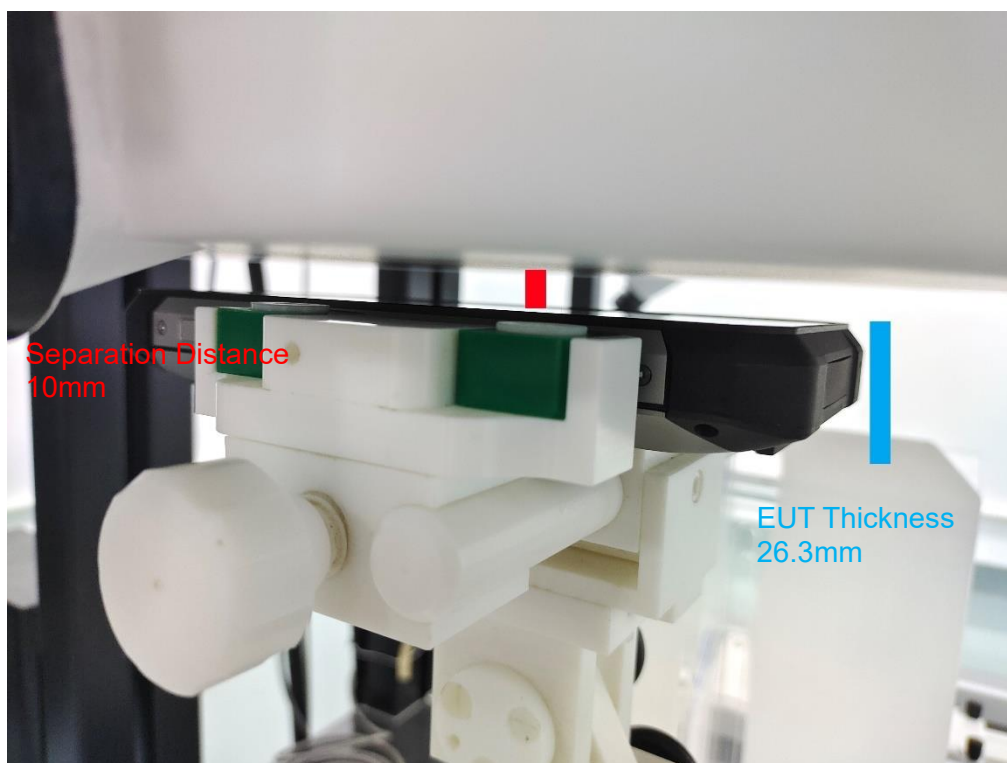
Left Touch



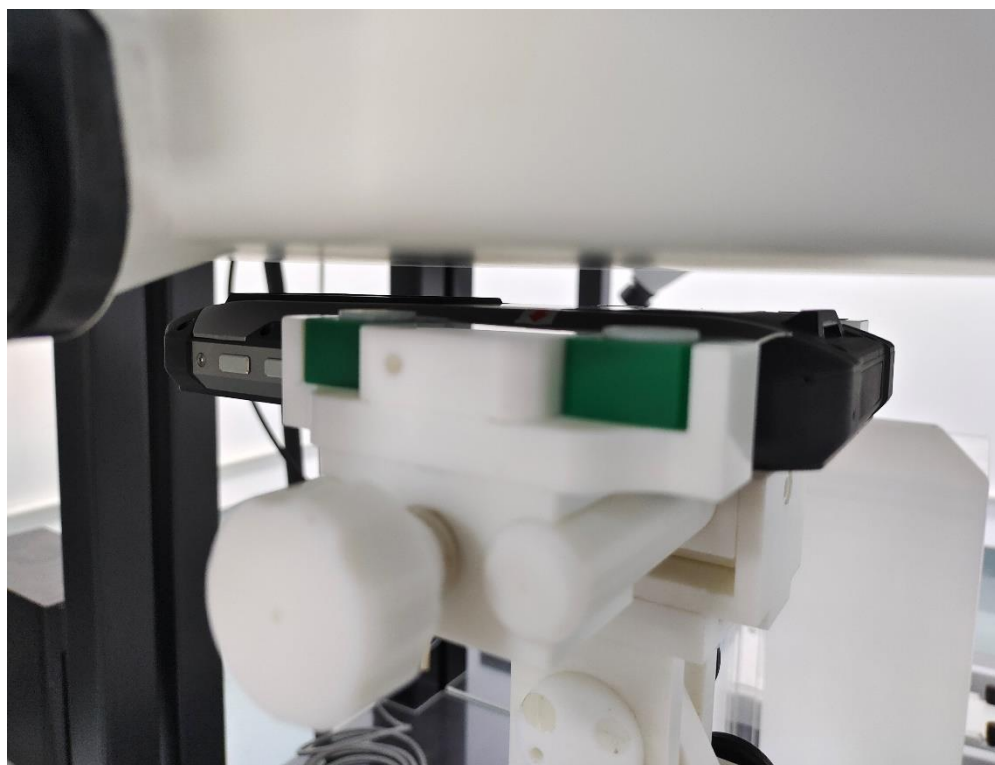
Left Tilt



Body Front side



Body Back side



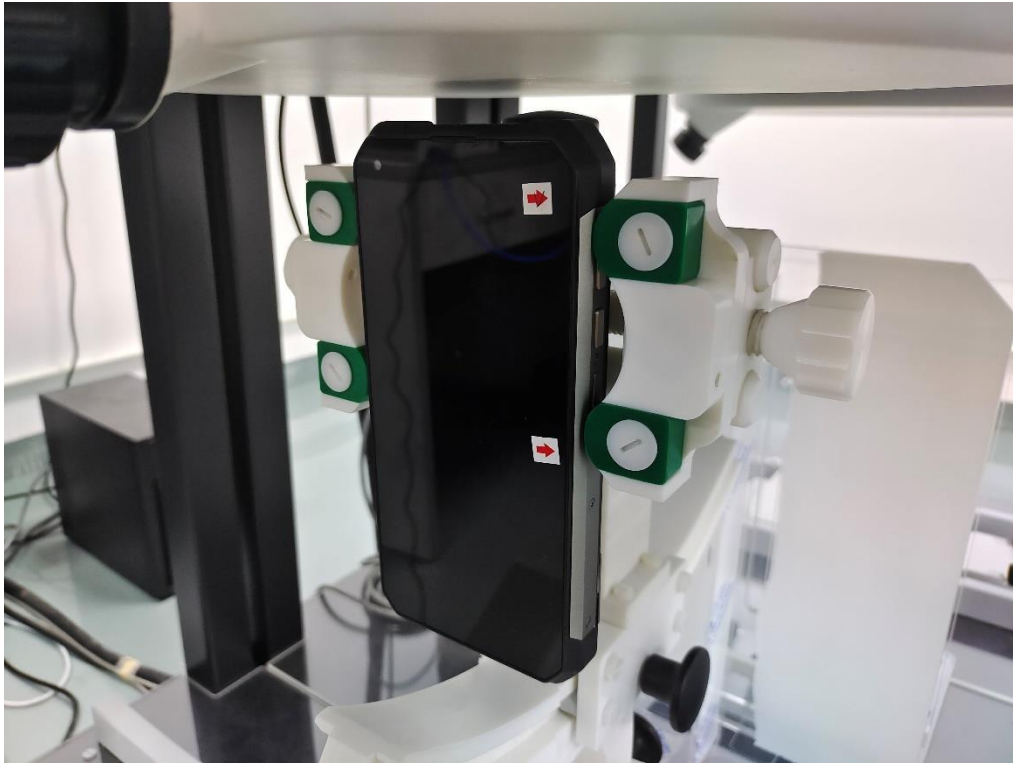
Body Right side



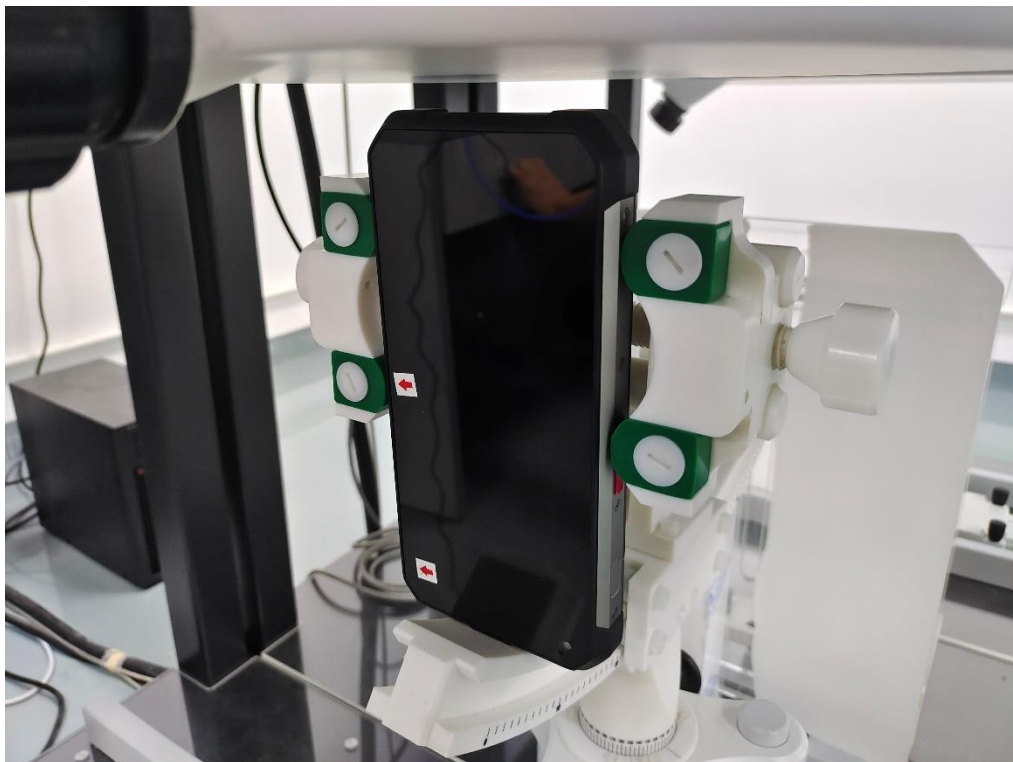
Body Left side



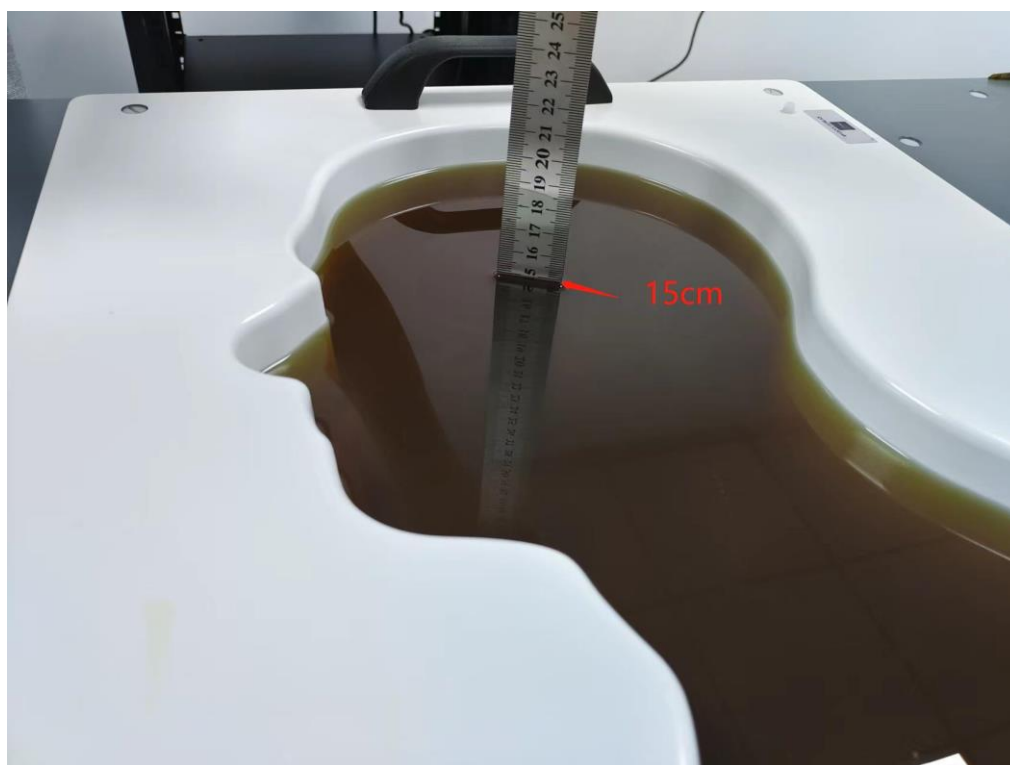
Top Edge



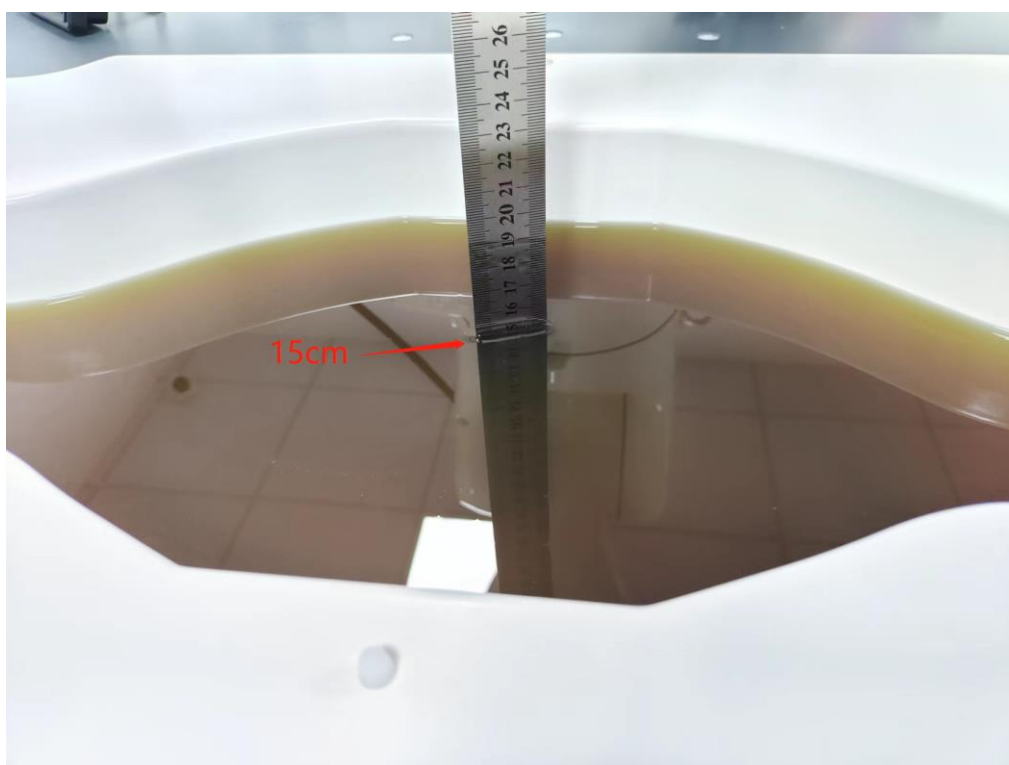
Bottom Edge



Liquid depth (15 cm)



Liquid depth (15 cm)





11. SAR Result Summary

HEAD SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Meas.Output Power(dBm)	Max.Turn-up Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	Voice	Right Cheek	824.2	0.062	-3.87	32.59	33	0.068	/
		Right Tilt	824.2	0.04	-2.45	32.59	33	0.044	/
		Left Cheek	824.2	0.11	-1.69	32.59	33	0.121	/
		Left Cheek	836.6	0.116	-2.72	32.41	33	0.133	1
		Left Cheek	848.8	0.115	-2.53	32.58	33	0.127	/
		Left Tilt	824.2	0.044	-2.42	32.59	33	0.048	/
GSM1900	Voice	Right Cheek	1909.8	0.022	-2.69	30.14	30.5	0.024	/
		Right Tilt	1909.8	0.011	-0.22	30.14	30.5	0.012	/
		Left Cheek	1909.8	0.038	-3.44	30.14	30.5	0.041	3
		Left Tilt	1909.8	0.028	-2.78	30.14	30.5	0.030	/
WCDMA Band 2	RMC	Right Cheek	1880	0.044	-1.27	24.6	25	0.048	/
		Right Tilt	1880	0.038	-4.40	24.6	25	0.042	/
		Left Cheek	1880	0.046	-1.05	24.6	25	0.050	5
		Left Tilt	1880	0.031	1.92	24.6	25	0.034	/
WCDMA Band 4	RMC	Right Cheek	1740	0.084	-1.54	24.3	24.5	0.088	/
		Right Tilt	1740	0.06	1.83	24.3	24.5	0.063	/
		Left Cheek	1712.4	0.043	-2.41	24.21	24.5	0.046	/
		Left Cheek	1740	0.098	-1.52	24.3	24.5	0.103	7
		Left Cheek	1752.6	0.056	-4.01	24.23	24.5	0.060	/
		Left Tilt	1740	0.027	3.70	24.3	24.5	0.028	/
WCDMA Band 5	RMC	Right Cheek	846.6	0.079	-3.87	24.3	24.5	0.083	/
		Right Tilt	846.6	0.066	-4.75	24.3	24.5	0.069	/
		Left Cheek	846.6	0.095	-3.19	24.3	24.5	0.099	9
		Left Tilt	846.6	0.07	-1.95	24.3	24.5	0.073	/
CDMA BC0	RMC	Right Cheek	836.52	0.03	0.19	24.64	25	0.033	/
		Right Tilt	836.52	0.033	-4.3	24.64	25	0.036	11
		Left Cheek	836.52	0.028	-1.61	24.64	25	0.030	/
		Left Tilt	836.52	0.021	-0.83	24.64	25	0.023	/
CDMA BC1	RMC	Right Cheek	1880	0.033	-4.39	23.95	24	0.033	/
		Right Tilt	1880	0.037	-4.66	23.95	24	0.037	13
		Left Cheek	1880	0.024	2.94	23.95	24	0.024	/
		Left Tilt	1880	0.032	4.05	23.95	24	0.032	/
LTE Band 2	20MHz QPSK 1RB	Right Cheek	1873.7	0.04	4.05	22.17	22.5	0.043	/
		Right Tilt	1873.7	0.039	-1.32	22.17	22.5	0.042	/
		Left Cheek	1873.7	0.037	-1.96	22.17	22.5	0.040	/
		Left Tilt	1873.7	0.049	2.85	22.17	22.5	0.053	15
	20MHz QPSK 50RB	Right Cheek	1873.7	0.014	3.94	21.23	22.5	0.019	/
		Right Tilt	1873.7	0.013	-1.32	21.23	22.5	0.017	/
		Left Cheek	1873.7	0.021	-2.47	21.23	22.5	0.028	/
		Left Tilt	1873.7	0.024	-2.49	21.23	22.5	0.032	/
LTE Band 4	20MHz QPSK 1RB	Right Cheek	1726.2	0.075	-1.93	22.57	23	0.083	/
		Right Tilt	1726.2	0.045	4.66	22.57	23	0.050	/
		Left Cheek	1726.2	0.033	-2.22	22.57	23	0.036	/
		Left Tilt	1726.2	0.045	1.81	22.57	23	0.050	/
	20MHz QPSK 50RB	Right Cheek	1726.2	0.072	-4.45	21.59	23	0.100	17
		Right Tilt	1726.2	0.035	-3.16	21.59	23	0.048	/
		Left Cheek	1726.2	0.028	1.53	21.59	23	0.039	/
		Left Tilt	1726.2	0.039	-3.71	21.59	23	0.054	/



LTE Band 5	10MHz QPSK 1RB	Right Cheek	834.7	0.09	2.10.	22.71	23	0.096	/
		Right Tilt	834.7	0.11	-1.46	22.71	23	0.118	19
		Left Cheek	834.7	0.101	1.20	22.71	23	0.108	/
		Left Tilt	834.7	0.104	-3.85	22.71	23	0.111	/
	10MHz QPSK 25RB	Right Cheek	834.7	0.063	-2.54	21.63	23	0.086	/
		Right Tilt	834.7	0.071	-2.47	21.63	23	0.097	/
		Left Cheek	834.7	0.069	-0.78	21.63	23	0.095	/
		Left Tilt	834.7	0.074	-3.69	21.63	23	0.101	/
LTE Band 7	20MHz QPSK 1RB	Right Cheek	2528.7	0.039	-4.85	21.3	22	0.046	/
		Right Tilt	2528.7	0.06	-1.04	21.3	22	0.070	/
		Left Cheek	2528.7	0.055	-2.07	21.3	22	0.065	/
		Left Tilt	2528.7	0.032	-2.49	21.3	22	0.038	/
	20MHz QPSK 50RB	Right Cheek	2528.7	0.028	1.05	20.18	22	0.043	/
		Right Tilt	2528.7	0.051	-2.95	20.18	22	0.078	21
		Left Cheek	2528.7	0.049	-2.37	20.18	22	0.075	/
		Left Tilt	2528.7	0.028	-2.12	20.18	22	0.043	/
LTE Band 12	10MHz QPSK 1RB	Right Cheek	705.7	0.053	1.42	22.6	23	0.058	/
		Right Tilt	705.7	0.028	1.83	22.6	23	0.031	/
		Left Cheek	705.7	0.053	-1.97	22.6	23	0.058	/
		Left Tilt	705.7	0.039	-0.22	22.6	23	0.043	/
	10MHz QPSK 25RB	Right Cheek	705.7	0.048	-1.02	21.65	23	0.065	/
		Right Tilt	705.7	0.021	-1.78	21.65	23	0.029	/
		Left Cheek	705.7	0.054	2.98	21.65	23	0.074	23
		Left Tilt	705.7	0.037	-1.51	21.65	23	0.050	/
LTE Band 13	10MHz QPSK 1RB	Right Cheek	780.2	0.066	-0.53	22.4	22.5	0.068	/
		Right Tilt	780.2	0.083	-1.51	22.4	22.5	0.085	/
		Left Cheek	780.2	0.086	-4.97	22.4	22.5	0.088	/
		Left Tilt	780.2	0.098	-1.92	22.4	22.5	0.100	25
	10MHz QPSK 25RB	Right Cheek	780.2	0.045	4.35	21.25	22.5	0.060	/
		Right Tilt	780.2	0.057	-2.42	21.25	22.5	0.076	/
		Left Cheek	780.2	0.049	1.22	21.25	22.5	0.065	/
		Left Tilt	780.2	0.059	3.58	21.25	22.5	0.079	/
LTE Band 17	10MHz QPSK 1RB	Right Cheek	708.2	0.082	3.57	22.7	23	0.088	/
		Right Tilt	708.2	0.078	3.57	22.7	23	0.084	/
		Left Cheek	708.2	0.069	1.89	22.7	23	0.074	/
		Left Tilt	708.2	0.086	2.31	22.7	23	0.092	27
	10MHz QPSK 25RB	Right Cheek	708.2	0.063	-4.65	21.68	23	0.085	/
		Right Tilt	708.2	0.060	-4.16	21.68	23	0.081	/
		Left Cheek	708.2	0.055	1.64	21.68	23	0.075	/
		Left Tilt	708.2	0.064	2.53	21.68	23	0.087	/
LTE Band 25	20MHz QPSK 1RB	Right Cheek	1876.2	0.042	-3.20	22.14	22.5	0.046	/
		Right Tilt	1876.2	0.031	1.67	22.14	22.5	0.034	/
		Left Cheek	1876.2	0.021	1.10	22.14	22.5	0.023	/
		Left Tilt	1876.2	0.033	-4.03	22.14	22.5	0.036	/
	20MHz QPSK 50RB	Right Cheek	1876.2	0.065	1.59	21.15	22.5	0.089	29
		Right Tilt	1876.2	0.039	-2.17	21.15	22.5	0.053	/
		Left Cheek	1876.2	0.027	-2.77	21.15	22.5	0.037	/
		Left Tilt	1876.2	0.032	2.68	21.15	22.5	0.044	/
LTE Band 26	15MHz QPSK 1RB	Right Cheek	827.45	0.062	-2.54	22.8	23	0.065	/
		Right Tilt	827.45	0.029	-3.90	22.8	23	0.030	/
		Left Cheek	827.45	0.06	-3.09	22.8	23	0.063	/
		Left Tilt	827.45	0.045	2.17	22.8	23	0.047	/
	15MHz	Right Cheek	827.45	0.067	-3.86	21.85	23	0.087	31



	QPSK 36RB	Right Tilt	827.45	0.027	-1.27	21.85	23	0.035	/
		Left Cheek	827.45	0.054	-4.69	21.85	23	0.070	/
		Left Tilt	827.45	0.029	-0.40	21.85	23	0.038	/
LTE Band 38	20MHz QPSK 1RB	Right Cheek	2588.7	0.066	1.85	22.9	23.5	0.076	/
		Right Tilt	2588.7	0.068	-0.51	22.9	23.5	0.078	/
		Left Cheek	2588.7	0.088	-3.46	22.9	23.5	0.101	33
		Left Tilt	2588.7	0.062	2.87	22.9	23.5	0.071	/
	20MHz QPSK 50RB	Right Cheek	2588.7	0.028	-1.33	21.78	23.5	0.042	/
		Right Tilt	2588.7	0.032	-3.97	21.78	23.5	0.048	/
		Left Cheek	2588.7	0.036	-0.98	21.78	23.5	0.053	/
		Left Tilt	2588.7	0.033	-1.80	21.78	23.5	0.049	/
LTE Band 40	10MHz QPSK 1RB	Right Cheek	2303.7	0.092	3.49	23.03	23.5	0.103	/
		Right Cheek	2343.7	0.14	-4.82	23.03	23.5	0.156	35
		Right Cheek	2383.7	0.129	1.22	23.03	23.5	0.144	/
		Right Tilt	2343.7	0.103	-4.66	23.03	23.5	0.115	/
		Left Cheek	2343.7	0.133	4.39	23.03	23.5	0.148	/
		Left Tilt	2343.7	0.112	-4.12	23.03	23.5	0.125	/
	10MHz QPSK 25RB	Right Cheek	2343.7	0.069	-3.65	22.08	23.5	0.096	/
		Right Tilt	2343.7	0.050	-1.37	22.08	23.5	0.069	/
		Left Cheek	2343.7	0.061	3.94	22.08	23.5	0.085	/
		Left Tilt	2343.7	0.059	3.41	22.08	23.5	0.082	/
LTE Band 41	20MHz QPSK 1RB	Right Cheek	2586.7	0.190	4.70	21.23	22	0.227	37
		Right Tilt	2586.7	0.106	-3.51	21.23	22	0.127	/
		Left Cheek	2586.7	0.143	-3.72	21.23	22	0.171	/
		Left Tilt	2586.7	0.092	1.23	21.23	22	0.110	/
	20MHz QPSK 50RB	Right Cheek	2586.7	0.029	-1.19	20.32	22	0.043	/
		Right Tilt	2586.7	0.025	-2.51	20.32	22	0.037	/
		Left Cheek	2586.7	0.033	1.89	20.32	22	0.049	/
		Left Tilt	2586.7	0.027	3.06	20.32	22	0.040	/
LTE Band 66	20MHz QPSK 1RB	Right Cheek	1738.7	0.093	-2.05	23.71	24	0.099	/
		Right Tilt	1713.7	0.118	2.20	23.64	24	0.128	39
		Right Tilt	1738.7	0.111	4.93	23.71	24	0.119	/
		Right Tilt	1763.7	0.059	-4.22	23.59	24	0.065	/
		Left Cheek	1738.7	0.035	-2.95	23.71	24	0.037	/
		Left Tilt	1738.7	0.047	-1.47	23.71	24	0.050	/
	20MHz QPSK 50RB	Right Cheek	1738.7	0.095	-2.98	23.12	24	0.116	/
		Right Tilt	1738.7	0.047	1.79	23.12	24	0.058	/
		Left Cheek	1738.7	0.031	4.59	23.12	24	0.038	/
		Left Tilt	1738.7	0.043	-3.59	23.12	24	0.053	/
2.4G WLAN	802.11b	Right Cheek	2412	0.088	2.82	14.91	15	0.090	41
		Right Tilt	2412	0.072	3.17	14.91	15	0.074	/
		Left Cheek	2412	0.082	1.77	14.91	15	0.084	/
		Left Tilt	2412	0.068	0.97	14.91	15	0.069	/
5.2G WLAN	802.11a	Right Cheek	5240	0.082	-1.79	12.73	13	0.087	/
		Right Tilt	5240	0.037	-2.73	12.73	13	0.039	/
		Left Cheek	5240	0.095	0.51	12.73	13	0.101	43
		Left Tilt	5240	0.048	-3.10	12.73	13	0.051	/
5.3G WLAN	802.11a	Right Cheek	5320	0.070	-4.14	13.59	14	0.077	/
		Right Tilt	5320	0.044	-1.65	13.59	14	0.048	/
		Left Cheek	5320	0.134	-4.08	13.59	14	0.147	45
		Left Tilt	5320	0.069	-3.42	13.59	14	0.076	/
5.6G WLAN	802.11n40	Right Cheek	5510	0.087	-4.07	12.68	13	0.094	47
		Right Tilt	5510	0.051	3.11	12.68	13	0.055	/



		Left Cheek	5510	0.078	-1.42	12.68	13	0.084	/
		Left Tilt	5510	0.053	-0.81	12.68	13	0.057	/
5.8G WLAN	802.11n20	Right Cheek	5825	0.132	4.97	11.22	11.5	0.141	49
		Right Tilt	5825	0.091	-3.76	11.22	11.5	0.097	/
		Left Cheek	5825	0.127	-2.43	11.22	11.5	0.135	/
		Left Tilt	5825	0.079	-1.17	11.22	11.5	0.084	/
Bluetooth	8DPSK	Right Cheek	2402	0.105	1.39	9.4	9.5	0.107	/
		Right Tilt	2402	0.073	-3.25	9.4	9.5	0.075	/
		Left Cheek	2402	0.134	-2.69	9.4	9.5	0.137	51
		Left Tilt	2402	0.025	-3.45	9.4	9.5	0.026	/



Body-worn and Hotspot SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Meas.Output Power(dBm)	Max.Turn-up Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	GPRS (GMSK, 4-Slot)	Front Side	824.2	0.152	2.42	29.61	30	0.166	/
		Back Side	824.2	0.232	-3.54	29.61	30	0.254	/
		Back Side	836.6	0.248	-0.74	29.34	30	0.289	/
		Back Side	848.8	0.358	-1.90	29.35	30	0.416	2
		Right Edge	824.2	0.035	-1.54	29.61	30	0.038	/
		Left Edge	824.2	0.072	-4.66	29.61	30	0.079	/
		Bottom Edge	824.2	0.117	-1.84	29.61	30	0.128	/
GSM1900	GPRS (GMSK, 2-Slot)	Front Side	1909.8	0.04	-2.28	29.22	29.5	0.043	/
		Back Side	1909.8	0.087	-2.38	29.22	29.5	0.093	4
		Right Edge	1909.8	0.054	-2.24	29.22	29.5	0.058	/
		Left Edge	1909.8	0.037	4.26	29.22	29.5	0.039	/
		Bottom Edge	1909.8	0.02	3.19	29.22	29.5	0.021	/
WCDMA Band 2	HSDPA Subtest-1	Front Side	1880	0.116	-1.98	23.64	24	0.126	/
		Back Side	1880	0.416	2.87	23.64	24	0.452	/
		Right Edge	1880	0.036	2.69	23.64	24	0.039	/
		Left Edge	1880	0.062	1.94	23.64	24	0.067	/
		Bottom Edge	1852.4	0.467	-3.08	23.39	24	0.537	/
		Bottom Edge	1880	0.468	-4.52	23.64	24	0.508	/
		Bottom Edge	1907.6	0.53	1.43	23.41	24	0.607	6
WCDMA Band 4	HSDPA Subtest-1	Front Side	1740	0.073	-0.19	23.39	23.5	0.075	/
		Back Side	1740	0.227	-1.92	23.39	23.5	0.233	/
		Right Edge	1740	0.193	-4.64	23.39	23.5	0.198	/
		Left Edge	1740	0.037	-4.47	23.39	23.5	0.038	/
		Bottom Edge	1740	0.375	-3.42	23.39	23.5	0.385	8
WCDMA Band 5	HSDPA Subtest-1	Front Side	846.6	0.051	-3.41	23.33	23.5	0.053	/
		Back Side	846.6	0.091	3.23	23.33	23.5	0.095	10
		Right Edge	846.6	0.01	3.60	23.33	23.5	0.010	/
		Left Edge	846.6	0.064	-2.36	23.33	23.5	0.067	/
		Bottom Edge	846.6	0.074	-1.56	23.33	23.5	0.077	/
CDMA BC0	CDMA	Front Side	836.52	0.015	-0.82	24.64	25	0.016	/
		Back Side	836.52	0.017	-2.78	24.64	25	0.018	/
		Right Edge	836.52	0.017	-3.91	24.64	25	0.018	/
		Left Edge	836.52	0.028	4.60	24.64	25	0.030	/
		Bottom Edge	836.52	0.037	-4.68	24.64	25	0.040	12
CDMA BC1	CDMA	Front Side	1880	0.049	2.14	23.95	24	0.050	/
		Back Side	1880	0.042	3.19	23.95	24	0.042	/
		Right Edge	1880	0.015	-4.70	23.95	24	0.015	/
		Left Edge	1880	0.016	-2.37	23.95	24	0.016	/
		Bottom Edge	1880	0.079	2.62	23.95	24	0.080	14
LTE Band 2	20MHz QPSK 1RB	Front Side	1893.7	0.116	3.08	22.17	22.5	0.125	/
		Back Side	1893.7	0.496	-4.60	22.17	22.5	0.535	/
		Right Edge	1893.7	0.16	1.74	22.17	22.5	0.173	/



			Left Edge	1893.7	0.025	3.57	22.17	22.5	0.027	/
			Bottom Edge	1893.7	0.554	-0.70	22.17	22.5	0.598	16
		20MHz QPSK 50RB	Front Side	846.6	0.102	-2.74	21.23	22.5	0.137	/
			Back Side	846.6	0.357	-1.55	21.23	22.5	0.478	/
			Right Edge	846.6	0.124	-2.86	21.23	22.5	0.166	/
			Left Edge	846.6	0.183	-4.48	21.23	22.5	0.245	/
			Bottom Edge	846.6	0.441	-3.98	21.23	22.5	0.591	/
LTE Band 4	20MHz QPSK 1RB		Front Side	1726.2	0.103	2.92	22.57	23	0.114	/
			Back Side	1726.2	0.385	-3.25	22.57	23	0.425	/
			Right Edge	1726.2	0.297	-4.44	22.57	23	0.328	/
			Left Edge	1726.2	0.06	-3.72	22.57	23	0.066	/
			Bottom Edge	1726.2	0.644	-1.78	22.57	23	0.711	18
	20MHz QPSK 50RB		Front Side	1893.7	0.087	1.61	21.59	23	0.120	/
			Back Side	1893.7	0.276	-2.89	21.59	23	0.382	/
			Right Edge	1893.7	0.228	-3.01	21.59	23	0.315	/
			Left Edge	1893.7	0.048	-3.17	21.59	23	0.066	/
			Bottom Edge	1893.7	0.341	-2.48	21.59	23	0.472	/
LTE Band 5	10MHz QPSK 1RB		Front Side	834.7	0.073	-4.10	22.71	23	0.078	/
			Back Side	834.7	0.206	-3.09	22.71	23	0.220	20
			Right Edge	834.7	0.031	2.53	22.71	23	0.033	/
			Left Edge	834.7	0.104	-4.75	22.71	23	0.111	/
			Bottom Edge	834.7	0.084	2.49	22.71	23	0.090	/
	10MHz QPSK 25RB		Front Side	1726.2	0.041	-3.47	21.63	23	0.056	/
			Back Side	1726.2	0.100	-1.17	21.63	23	0.137	/
			Right Edge	1726.2	0.018	-1.38	21.63	23	0.025	/
			Left Edge	1726.2	0.061	-2.45	21.63	23	0.084	/
			Bottom Edge	1726.2	0.056	-1.55	21.63	23	0.077	/
LTE Band 7	20MHz QPSK 1RB		Front Side	2528.7	0.277	3.16	21.3	22	0.325	/
			Back Side	2528.7	0.355	-4.39	21.3	22	0.417	/
			Right Edge	2528.7	0.126	1.38	21.3	22	0.148	/
			Left Edge	2528.7	0.118	4.51	21.3	22	0.139	/
			Bottom Edge	2528.7	0.355	-4.69	21.3	22	0.417	22
	20MHz QPSK 50RB		Front Side	834.7	0.184	-3.58	20.18	22	0.280	/
			Back Side	834.7	0.209	-2.43	20.18	22	0.318	/
			Right Edge	834.7	0.089	-1.43	20.18	22	0.135	/
			Left Edge	834.7	0.08	-2.72	20.18	22	0.122	/
			Bottom Edge	834.7	0.234	-2.63	20.18	22	0.356	/
LTE Band 12	10MHz QPSK 1RB		Front Side	705.7	0.053	1.09	22.6	23	0.058	/
			Back Side	705.7	0.074	3.30	22.6	23	0.081	/
			Right Edge	705.7	0.126	2.83	22.6	23	0.138	24
			Left Edge	705.7	0.124	2.54	22.6	23	0.136	/
			Bottom Edge	705.7	0.059	-1.17	22.6	23	0.065	/
	10MHz QPSK 25RB		Front Side	2528.7	0.033	-0.66	21.65	23	0.045	/
			Back Side	2528.7	0.059	-2.07	21.65	23	0.081	/
			Right Edge	2528.7	0.075	3.23	21.65	23	0.102	/
			Left Edge	2528.7	0.068	-4.29	21.65	23	0.093	/



		Bottom Edge	2528.7	0.048	-3.65	21.65	23	0.065	/
LTE Band 13	10MHz QPSK 1RB	Front Side	780.2	0.084	-1.54	22.4	22.5	0.086	/
		Back Side	780.2	0.107	3.31	22.4	22.5	0.109	/
		Right Edge	780.2	0.113	4.39	22.4	22.5	0.116	/
		Left Edge	780.2	0.138	-1.73	22.4	22.5	0.141	26
		Bottom Edge	780.2	0.093	1.38	22.4	22.5	0.095	/
	10MHz QPSK 25RB	Front Side	705.7	0.048	3.58	21.25	22.5	0.064	/
		Back Side	705.7	0.059	1.64	21.25	22.5	0.079	/
		Right Edge	705.7	0.055	1.33	21.25	22.5	0.073	/
		Left Edge	705.7	0.078	-2.12	21.25	22.5	0.104	/
		Bottom Edge	705.7	0.064	-2.35	21.25	22.5	0.085	/
LTE Band 17	10MHz QPSK 1RB	Front Side	708.2	0.088	-4.51	22.7	23	0.094	/
		Back Side	708.2	0.147	-4.69	22.7	23	0.158	28
		Right Edge	708.2	0.101	1.27	22.7	23	0.108	/
		Left Edge	708.2	0.071	3.20	22.7	23	0.076	/
		Bottom Edge	708.2	0.086	2.49	22.7	23	0.092	/
	10MHz QPSK 25RB	Front Side	780.2	0.021	-2.17	21.68	23	0.028	/
		Back Side	780.2	0.058	1.92	21.68	23	0.079	/
		Right Edge	780.2	0.045	-3.86	21.68	23	0.061	/
		Left Edge	780.2	0.02	-3.75	21.68	23	0.027	/
		Bottom Edge	780.2	0.028	-1.65	21.68	23	0.038	/
LTE Band 25	20MHz QPSK 1RB	Front Side	1876.2	0.131	4.67	22.14	22.5	0.142	/
		Back Side	1876.2	0.544	-1.25	22.14	22.5	0.591	/
		Right Edge	1876.2	0.075	3.16	22.14	22.5	0.081	/
		Left Edge	1876.2	0.047	4.98	22.14	22.5	0.051	/
		Bottom Edge	1876.2	0.567	-0.33	22.14	22.5	0.616	30
	20MHz QPSK 50RB	Front Side	708.2	0.098	3.94	21.15	22.5	0.134	/
		Back Side	708.2	0.423	3.41	21.15	22.5	0.577	/
		Right Edge	708.2	0.064	1.94	21.15	22.5	0.087	/
		Left Edge	708.2	0.036	1.19	21.15	22.5	0.049	/
		Bottom Edge	708.2	0.442	4.50	21.15	22.5	0.603	/
LTE Band 26	15MHz QPSK 1RB	Front Side	827.4	0.046	-1.28	22.8	23	0.048	/
		Back Side	827.4	0.148	2.32	22.8	23	0.155	32
		Right Edge	827.4	0.048	1.36	22.8	23	0.050	/
		Left Edge	827.4	0.032	4.64	22.8	23	0.034	/
		Bottom Edge	827.4	0.082	-4.52	22.8	23	0.086	/
	15MHz QPSK 36RB	Front Side	1876.2	0.039	-3.84	21.85	23	0.051	/
		Back Side	1876.2	0.107	-1.29	21.85	23	0.139	/
		Right Edge	1876.2	0.041	1.53	21.85	23	0.053	/
		Left Edge	1876.2	0.025	1.89	21.85	23	0.033	/
		Bottom Edge	1876.2	0.073	1.79	21.85	23	0.095	/
LTE Band 38	20MHz QPSK 1RB	Front Side	2588.7	0.14	1.81	22.9	23.5	0.161	/
		Back Side	2588.7	0.17	2.31	22.9	23.5	0.195	/
		Right Edge	2588.7	0.075	-2.01	22.9	23.5	0.086	/
		Left Edge	2588.7	0.087	-1.76	22.9	23.5	0.100	/
		Bottom Edge	2588.7	0.23	-1.24	22.9	23.5	0.264	34



	20MHz QPSK 50RB	Front Side	827.4	0.091	-3.00	21.78	23.5	0.135	/
		Back Side	827.4	0.128	2.51	21.78	23.5	0.190	/
		Right Edge	827.4	0.067	-2.95	21.78	23.5	0.100	/
		Left Edge	827.4	0.059	-0.95	21.78	23.5	0.088	/
		Bottom Edge	827.4	0.108	-2.81	21.78	23.5	0.160	/
LTE Band 40	10MHz QPSK 1RB	Front Side	2343.7	0.202	-1.57	23.03	23.5	0.225	/
		Back Side	2303.7	0.403	-3.22	23.03	23.5	0.449	36
		Back Side	2343.7	0.357	-1.09	23.03	23.5	0.398	/
		Back Side	2383.7	0.325	-2.84	23.03	23.5	0.362	/
		Right Edge	2343.7	0.078	-2.49	23.03	23.5	0.087	/
		Left Edge	2343.7	0.069	-1.31	23.03	23.5	0.077	/
		Bottom Edge	2343.7	0.321	2.35	23.03	23.5	0.358	/
	10MHz QPSK 25RB	Front Side	2343.7	0.075	-1.88	22.08	23.5	0.104	/
		Back Side	2343.7	0.122	-2.23	22.08	23.5	0.169	/
		Right Edge	2343.7	0.036	-1.00	22.08	23.5	0.050	/
		Left Edge	2343.7	0.03	-2.31	22.08	23.5	0.042	/
		Bottom Edge	2343.7	0.116	1.42	22.08	23.5	0.161	/
LTE Band 41	20MHz QPSK 1RB	Front Side	2586.7	0.135	-1.81	21.23	22	0.161	/
		Back Side	2586.7	0.23	0.28	21.23	22	0.275	38
		Right Edge	2586.7	0.069	-2.71	21.23	22	0.082	/
		Left Edge	2586.7	0.104	-1.83	21.23	22	0.124	/
		Bottom Edge	2586.7	0.131	0.91	21.23	22	0.156	/
	20MHz QPSK 50RB	Front Side	2586.7	0.094	-1.25	20.32	22	0.138	/
		Back Side	2586.7	0.101	-0.77	20.32	22	0.149	/
		Right Edge	2586.7	0.051	1.58	20.32	22	0.075	/
		Left Edge	2586.7	0.079	-3.58	20.32	22	0.116	/
LTE Band 66	20MHz QPSK 1RB	Front Side	1738.7	0.148	1.52	23.71	24	0.158	/
		Back Side	1738.7	0.555	-2.09	23.71	24	0.593	/
		Right Edge	1738.7	0.284	-4.45	23.71	24	0.304	/
		Left Edge	1738.7	0.092	-4.80	23.71	24	0.098	/
		Bottom Edge	1713.7	0.653	1.28	23.64	24	0.709	/
		Bottom Edge	1738.7	0.665	3.75	23.71	24	0.711	/
		Bottom Edge	1763.7	0.722	-3.22	23.59	24	0.793	40
	20MHz QPSK 50RB	Front Side	1738.7	0.126	-3.62	23.12	24	0.154	/
		Back Side	1738.7	0.473	-2.43	23.12	24	0.579	/
		Right Edge	1738.7	0.227	-2.72	23.12	24	0.278	/
		Left Edge	1738.7	0.087	-1.43	23.12	24	0.107	/
		Bottom Edge	1738.7	0.595	2.39	23.12	24	0.729	/
2.4G WLAN	802.11b	Front Side	2412	0.042	-1.63	14.91	15	0.043	/
		Back Side	2412	0.061	-2.04	14.91	15	0.062	/
		Right Edge	2412	0.044	2.89	14.91	15	0.045	/
		Left Edge	2412	0.080	-1.50	14.91	15	0.082	42
		Bottom Edge	2412	0.037	-3.27	14.91	15	0.038	/
5.2G WLAN	802.11a	Front Side	5240	0.073	-1.59	12.73	13	0.078	/
		Back Side	5240	0.100	-1.93	12.73	13	0.106	44
		Right Edge	5240	0.025	-0.53	12.73	13	0.027	/



		Left Edge	5240	0.039	0.18	12.73	13	0.042	/
		Bottom Edge	5240	0.057	-4.30	12.73	13	0.061	/
5.3G WLAN	802.11a	Front Side	5320	0.094	-3.31	13.59	14	0.103	/
		Back Side	5320	0.062	4.58	13.59	14	0.068	/
		Right Edge	5320	0.100	-1.70	13.59	14	0.110	46
		Left Edge	5320	0.075	-1.33	13.59	14	0.082	/
		Bottom Edge	5320	0.085	-2.84	13.59	14	0.093	/
5.6G WLAN	802.11n40	Front Side	5510	0.086	2.01	12.68	13	0.093	/
		Back Side	5510	0.091	-1.51	12.68	13	0.098	48
		Right Edge	5510	0.038	0.29	12.68	13	0.041	/
		Left Edge	5510	0.054	-4.15	12.68	13	0.058	/
		Bottom Edge	5510	0.066	-2.81	12.68	13	0.071	/
5.8G WLAN	802.11n20	Front Side	5825	0.080	-1.72	11.22	11.5	0.085	/
		Back Side	5825	0.089	4.29	11.22	11.5	0.095	50
		Right Edge	5825	0.035	-1.26	11.22	11.5	0.037	/
		Left Edge	5825	0.057	-1.52	11.22	11.5	0.061	/
		Bottom Edge	5825	0.072	2.61	11.22	11.5	0.077	/
Bluetooth	GFSK	Front Side	2402	0.074	-0.69	9.4	9.5	0.076	/
		Back Side	2402	0.087	-4.31	9.4	9.5	0.089	52
		Right Edge	2402	0.056	0.74	9.4	9.5	0.057	/
		Left Edge	2402	0.031	-1.66	9.4	9.5	0.032	/
		Bottom Edge	2402	0.050	-1.47	9.4	9.5	0.051	/

Note:

- Per KDB 447498 D04, 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
- Per KDB 865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg
- Two SIM card slot can't work at the same time.



Simultaneous Multi-band Transmission Evaluation:

Application Simultaneous Transmission information:

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

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 Appendix E, 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:

$$SAR_{est} = 1.6 \cdot P_{ant} / P_{th} [W/kg].$$

P_{ant} is maximum time-averaged power or effective radiated power (ERP), whichever is greater, and P_{th} is defined in Formula KDB 447498 (B.2).

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.

Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
GSM + 2.4G WLAN	Head	GSM	0.133	0.223
		2.4G WLAN	0.090	
	Body	GSM	0.416	0.498
		2.4G WLAN	0.082	
GSM + 5G WLAN	Head	GSM	0.133	0.280
		5G WLAN	0.147	
	Body	GSM	0.416	0.526
		5G WLAN	0.110	
GSM + Bluetooth	Head	GSM	0.133	0.270
		Bluetooth	0.137	
	Body	GSM	0.416	0.505
		Bluetooth	0.089	
WCDMA + 2.4G WLAN	Head	WCDMA	0.103	0.193
		2.4G WLAN	0.090	
	Body	WCDMA	0.607	0.689
		2.4G WLAN	0.082	
WCDMA + 5G WLAN	Head	WCDMA	0.103	0.250
		5G WLAN	0.147	
	Body	WCDMA	0.607	0.717
		5G WLAN	0.110	
WCDMA + Bluetooth	Head	WCDMA	0.103	0.240
		Bluetooth	0.137	
	Body	WCDMA	0.607	0.696
		Bluetooth	0.089	
CDMA + 2.4G WLAN	Head	CDMA	0.037	0.127
		2.4G WLAN	0.090	
	Body	CDMA	0.080	0.162
		2.4G WLAN	0.082	
CDMA + 5G WLAN	Head	CDMA	0.037	0.184
		5G WLAN	0.147	
	Body	CDMA	0.080	0.190
		5G WLAN	0.110	
CDMA + Bluetooth	Head	CDMA	0.037	0.174
		Bluetooth	0.137	



	Body	CDMA	0.080	0.169
		Bluetooth	0.089	
LTE + 2.4G WLAN	Head	LTE	0.227	0.317
		2.4G WLAN	0.090	
	Body	LTE	0.793	0.875
		2.4G WLAN	0.082	
LTE + 5G WLAN	Head	LTE	0.227	0.374
		5G WLAN	0.147	
	Body	LTE	0.793	0.903
		5G WLAN	0.110	
LTE + Bluetooth	Head	LTE	0.227	0.364
		Bluetooth	0.137	
	Body	LTE	0.793	0.882
		Bluetooth	0.089	



12. 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	2023.02.10
835MHz Dipole	MVG	DIP0G835	SN 06/22 DIP0G835-639	2022.02.11	2023.02.10
1800MHz Dipole	MVG	DIP1G800	SN 06/22 DIP1G800-640	2022.02.11	2023.02.10
1900MHz Dipole	MVG	DIP1G900	SN 06/22 DIP1G900-641	2022.02.11	2023.02.10
2450MHz Dipole	MVG	GIP2G450	SN 06/22 DIP2G450-645	2022.02.11	2023.02.10
2600MHz Dipole	MVG	DIP2G600	SN 06/22 DIP2G600-646	2022.02.11	2023.02.10
5000MHz Dipole	MVG	GIP5G000	SN 06/22 DIP5G00-653	2022.02.11	2023.02.10
E-Field Probe	MVG	EPGO364	SN 04/22 EPGO364	2022.02.11	2023.02.10
Dielectric Probe Kit	MVG	OCPG 87	SN 06/22 OCPG87	2022.02.11	2023.02.10
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 holder	MVG	LSH 36	SN 06/22 LSH 38	N/A	N/A
Directional coupler	SHW	SHWDCP	202203280013	N/A	N/A
Network Analyzer	Agilent	E5071C	MY46418070	2022.03.28	2023.03.27
Multi Meter	Keithley	DMM6500	DMM6500	2022.05.05	2023.05.04
Signal Generator	Keithley	N5182B	MY59100717	2022.04.29	2023.04.28
Wireless Communication Test Set	R&S	CMW500	137737	2022.04.29	2023.04.28
Power Sensor	R&S	Z11	116184	2022.03.28	2023.03.27
Temperature hygrometer	N/A	ST-W2318	N/A	2022.05.05	2023.05.04
Thermograph	N/A	TP101	N/A	2022.05.05	2023.05.04



Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

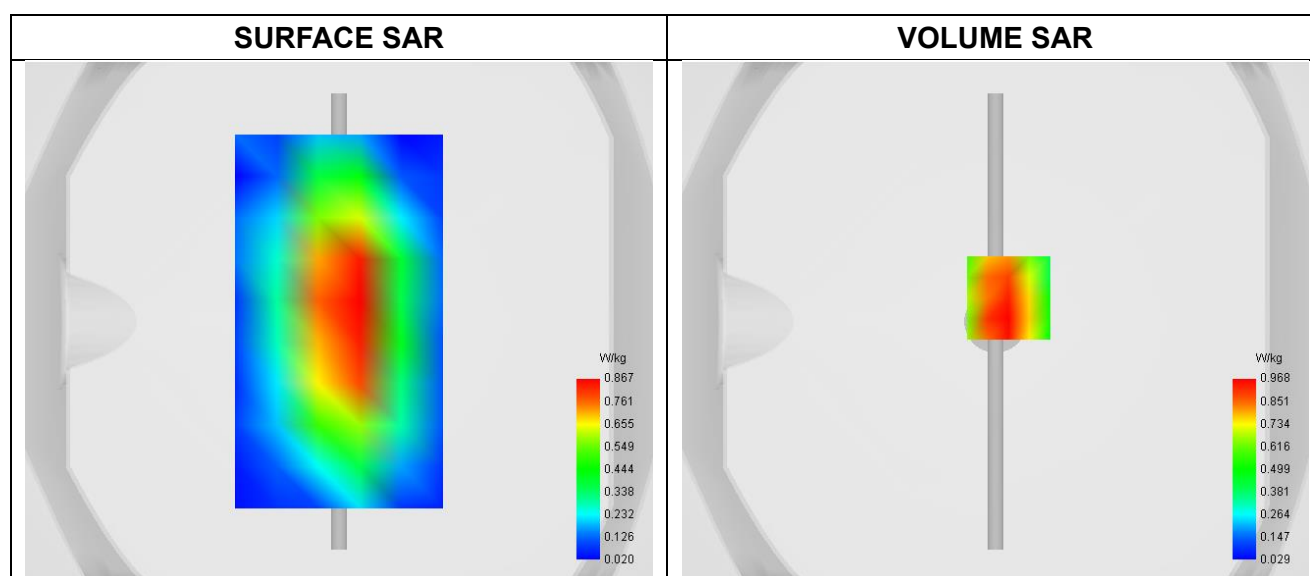
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2022-10-26

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW
Frequency (MHz)	750.000
Relative permittivity	41.900
Conductivity (S/m)	0.890
Probe	SN 04/22 EPGO364
ConvF	1.69
Crest factor:	1:1

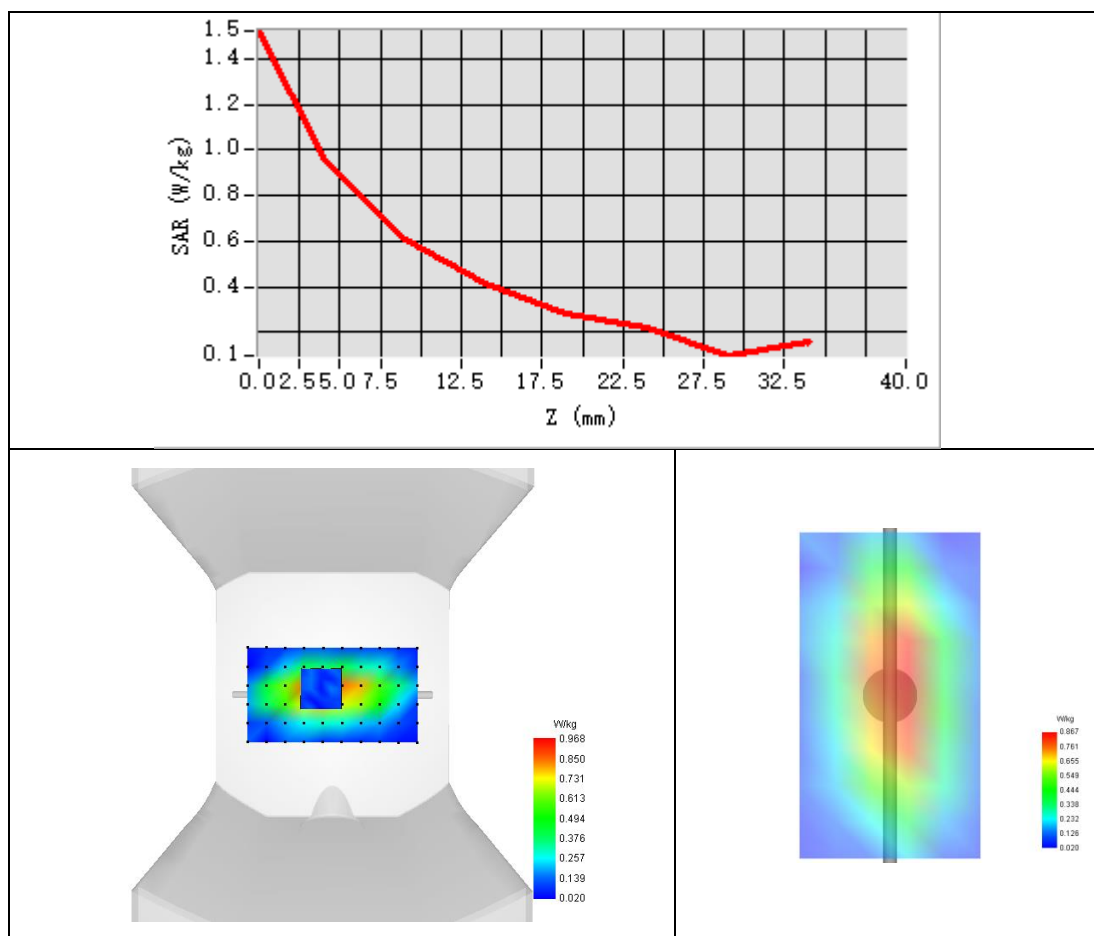


Maximum location: X=5.00, Y=9.00 ; SAR Peak: 1.52 W/kg

SAR 10g (W/Kg)	0.574
SAR 1g (W/Kg)	0.917



Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

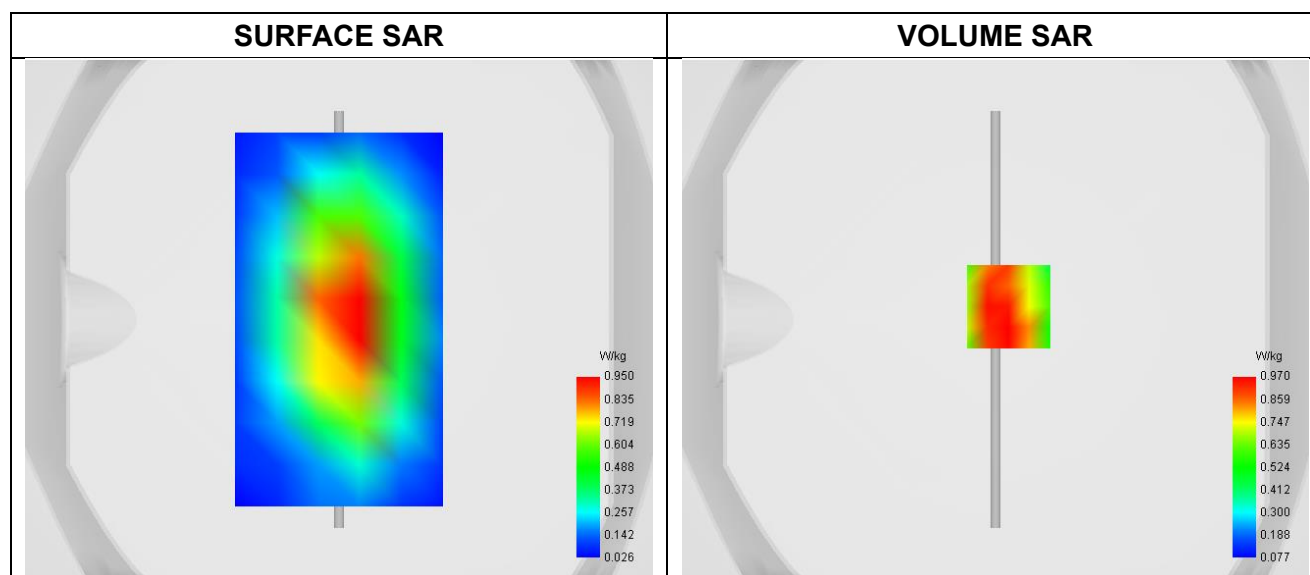
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2022-10-27

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW
Frequency (MHz)	835.000
Relative permittivity	41.500
Conductivity (S/m)	0.900
Probe	SN 04/22 EPGO364
ConvF	1.72
Crest factor:	1:1

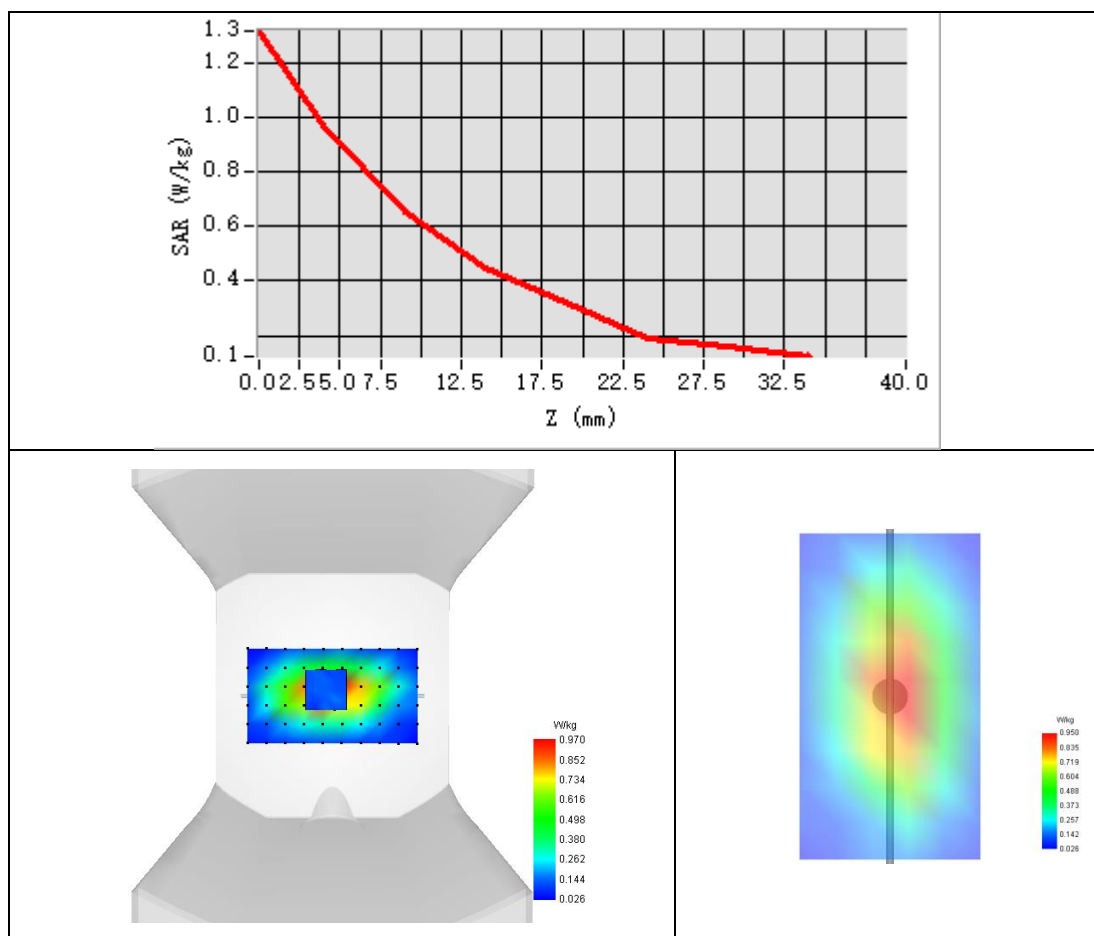


Maximum location: X=5.00, Y=5.00 ; SAR Peak: 1.45 W/kg

SAR 10g (W/Kg)	0.604
SAR 1g (W/Kg)	0.950



Z Axis Scan





System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)

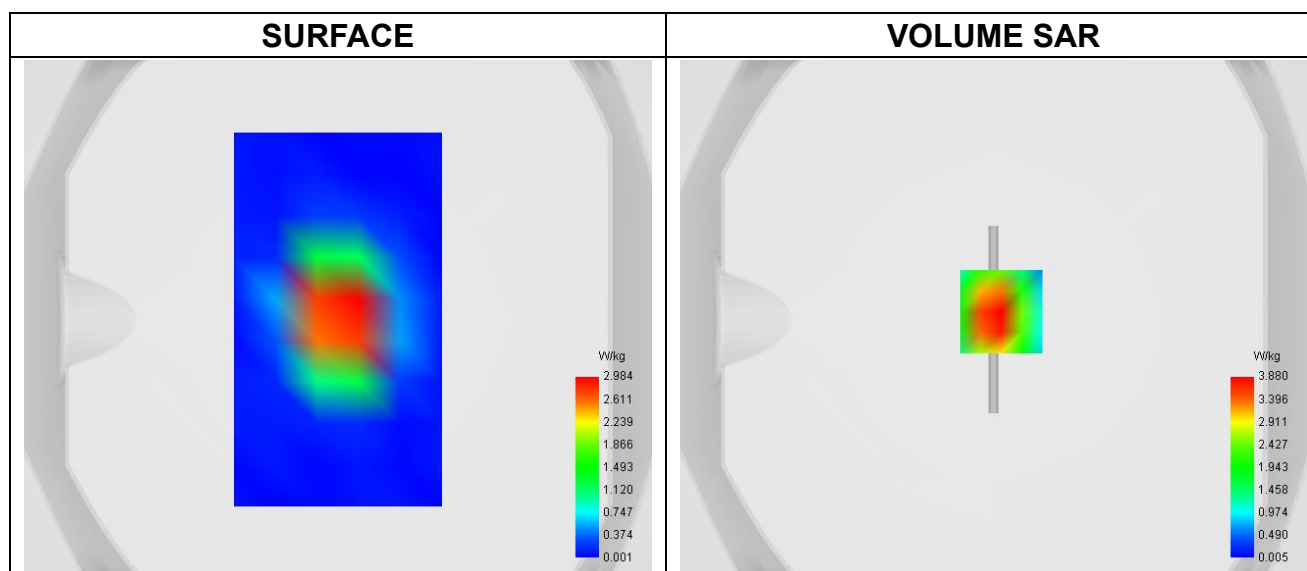
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-10-20

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW
Frequency (MHz)	1800.000
Relative permittivity	40.000
Conductivity (S/m)	1.400
Probe	SN 04/22 EPG0364
ConvF	1.95
Crest factor:	1:1

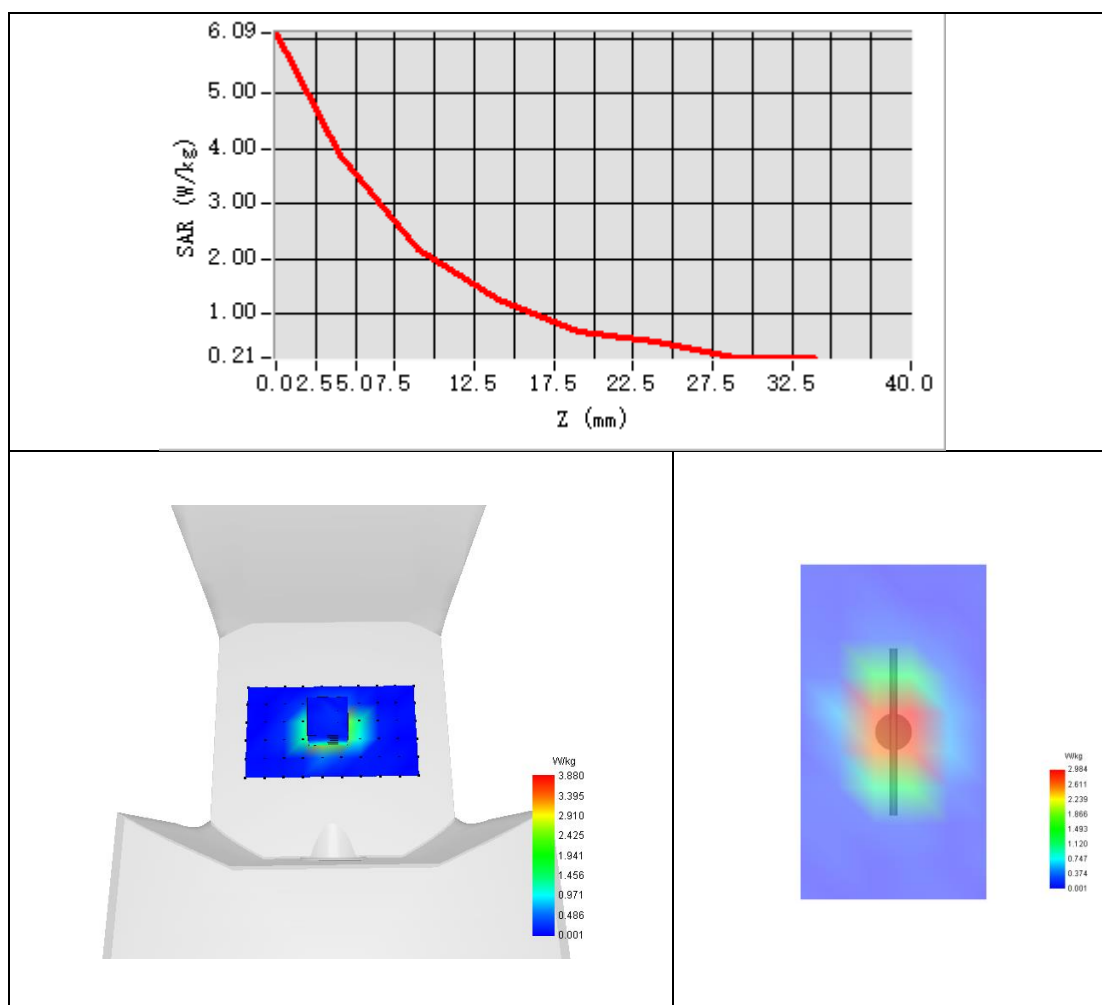


Maximum location: X=3.00, Y=3.00 ; SAR Peak: 6.84 W/kg

SAR 10g (W/Kg)	1.953
SAR 1g (W/Kg)	3.823



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

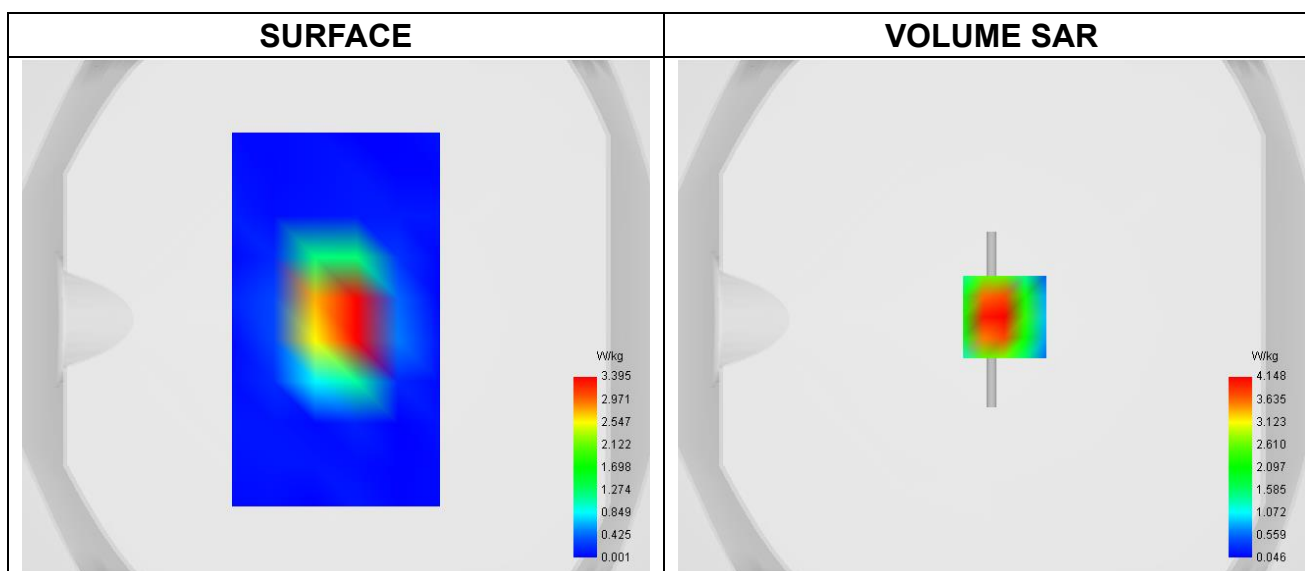
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-10-24

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.000
Conductivity (S/m)	1.400
Probe	SN 04/22 EPGO364
ConvF	2.25
Crest factor:	1:1

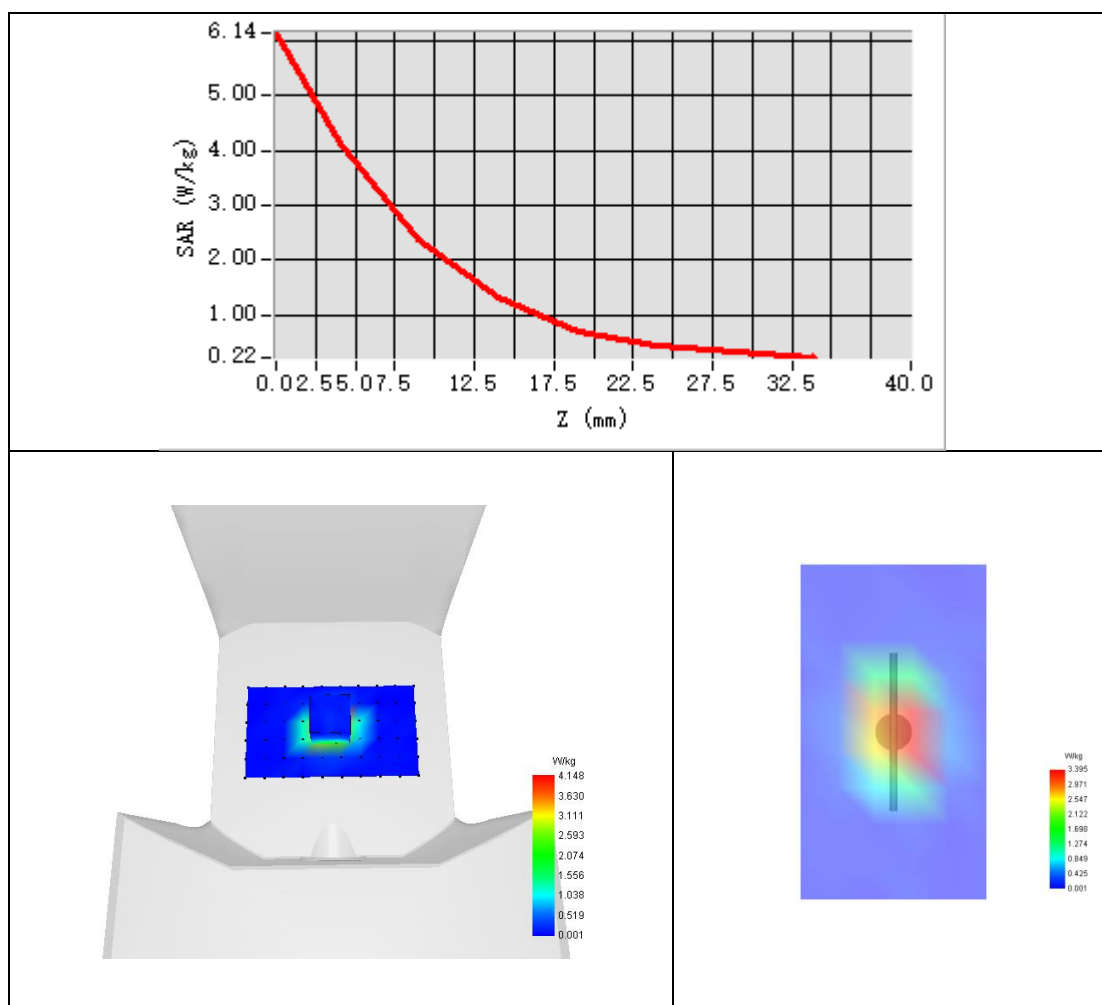


Maximum location: X=5.00, Y=1.00 ; SAR Peak: 6.89 W/kg

SAR 10g (W/Kg)	2.080
SAR 1g (W/Kg)	4.109



Z Axis Scan





System Performance Check Data (2300MHz)

Type: Phone measurement (Complete)

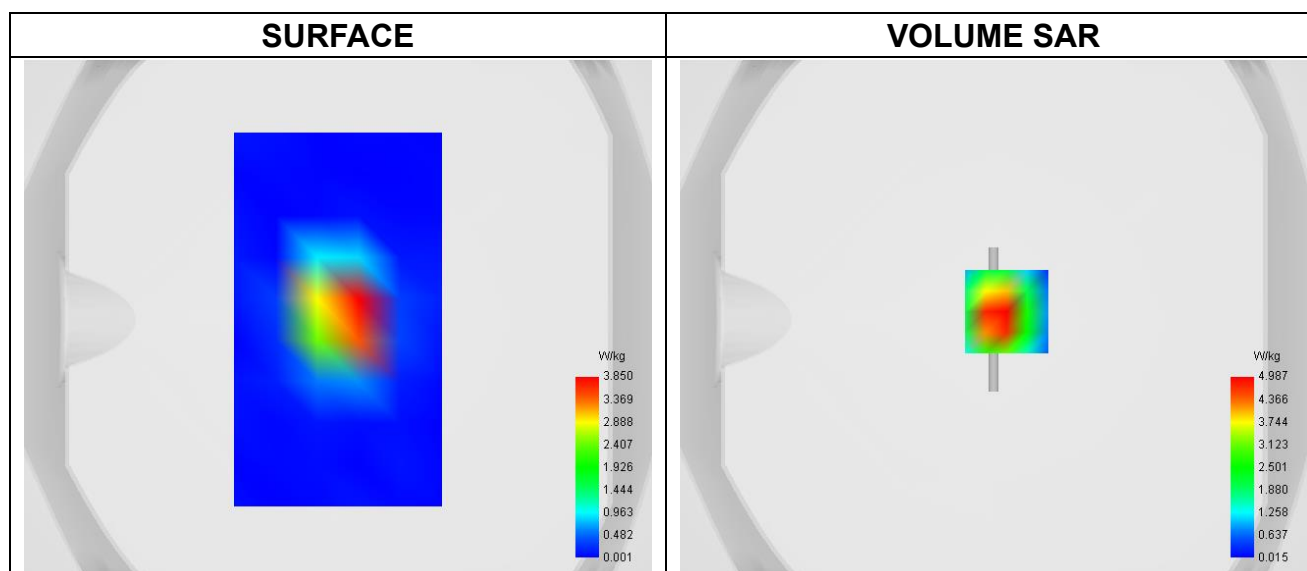
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-10-29

Experimental conditions.

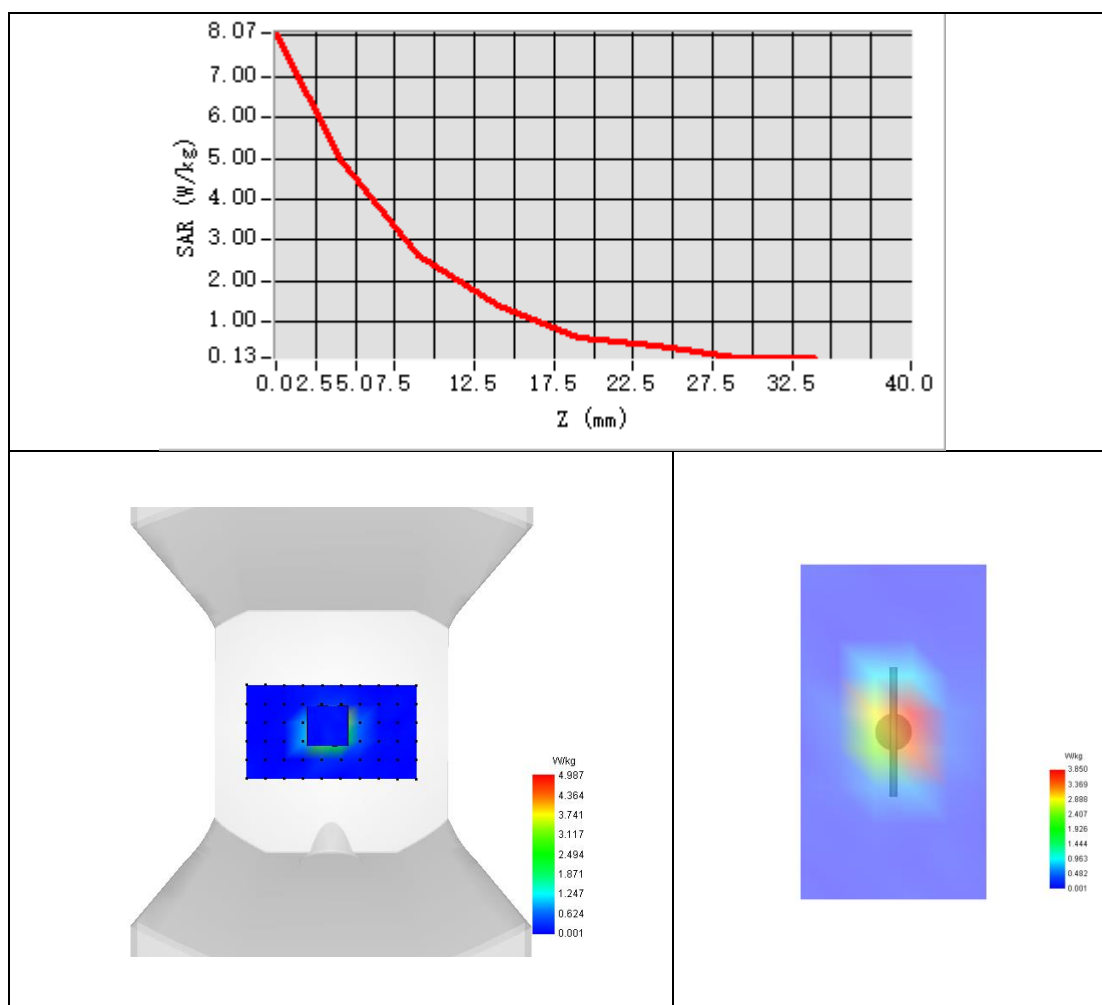
Phantom	Validation plane
Device Position	Dipole
Band	CW2300
Channels	Middle
Signal	CW
Frequency (MHz)	2300.000
Relative permittivity	39..500
Conductivity (S/m)	1.670
Probe	SN 04/22 EPGO364
ConvF	2.32
Crest factor:	1:1



Maximum location: X=5.00, Y=3.00 ; SAR Peak: 8.96 W/kg

SAR 10g (W/Kg)	2.287
SAR 1g (W/Kg)	5.002

Z Axis Scan





System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)

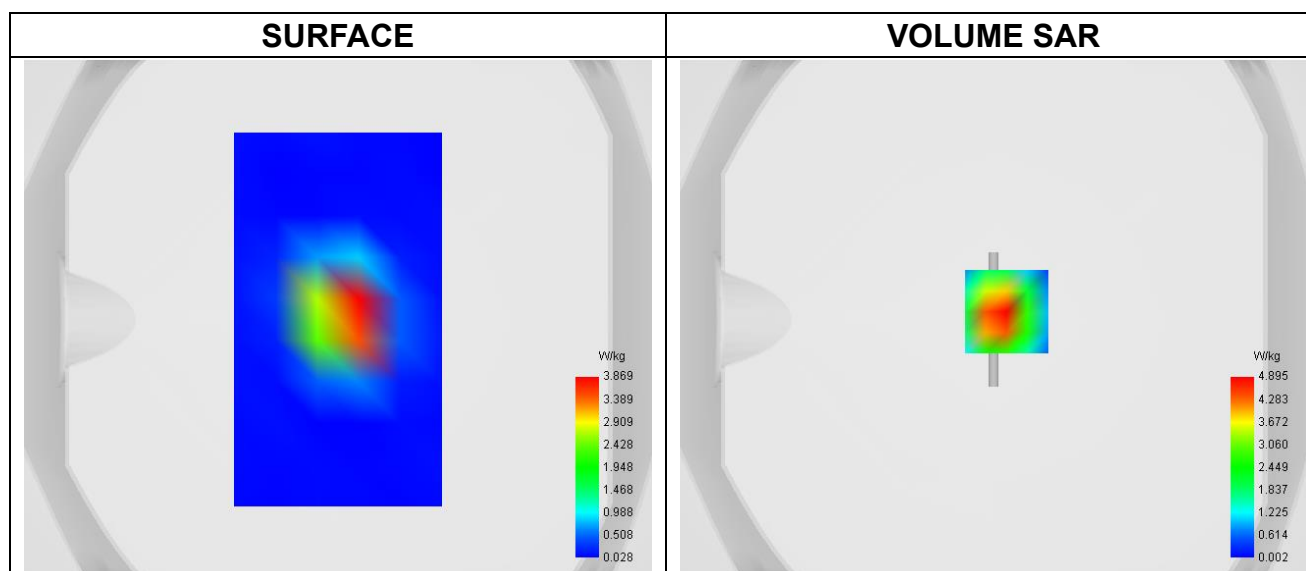
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-10-31

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Channels	Middle
Signal	CW
Frequency (MHz)	2450.000
Relative permittivity	39.200
Conductivity (S/m)	1.799
Probe	SN 04/22 EPGO364
ConvF	2.33
Crest factor:	1:1

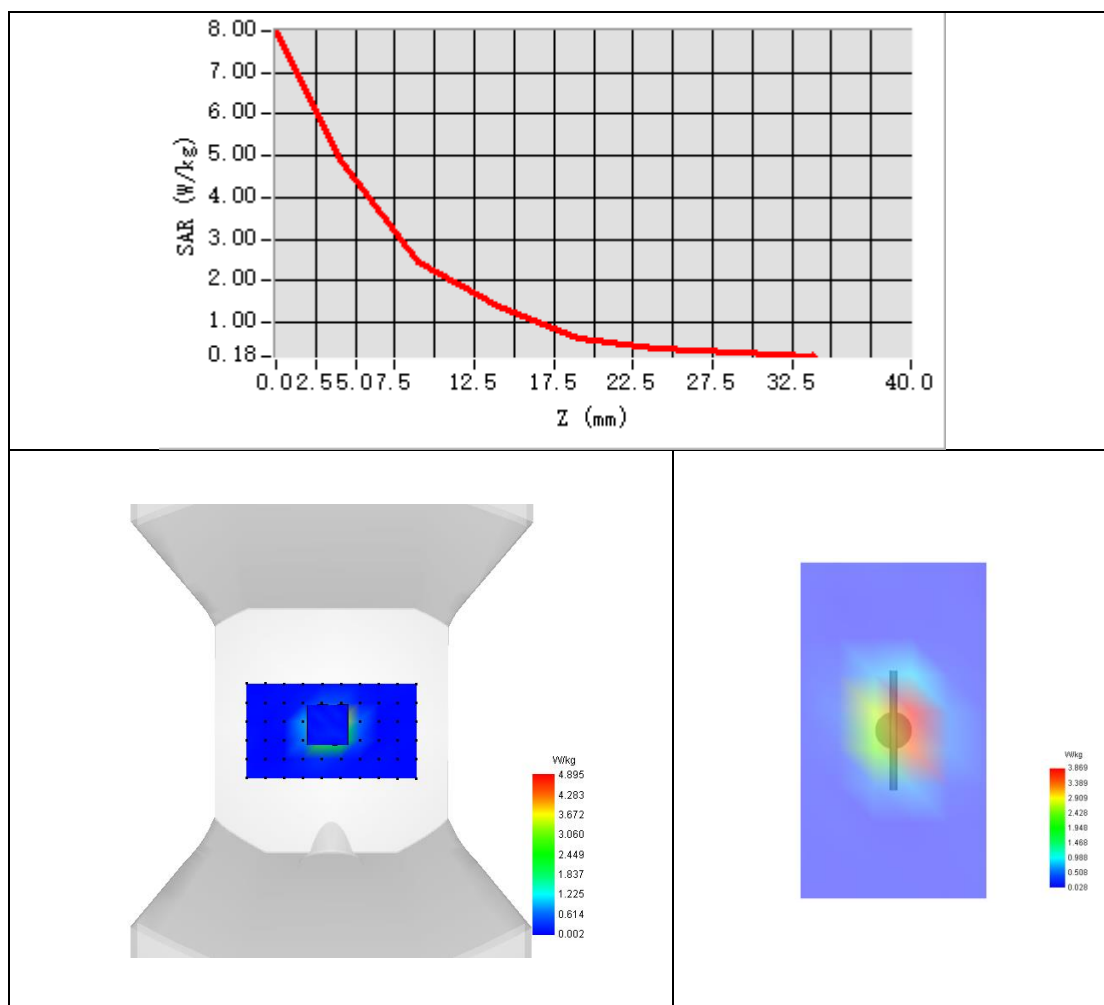


Maximum location: X=5.00, Y=3.00 ; SAR Peak: 8.39 W/kg

SAR 10g (W/Kg)	2.191
SAR 1g (W/Kg)	4.744



Z Axis Scan





System Performance Check Data (2600MHz)

Type: Phone measurement (Complete)

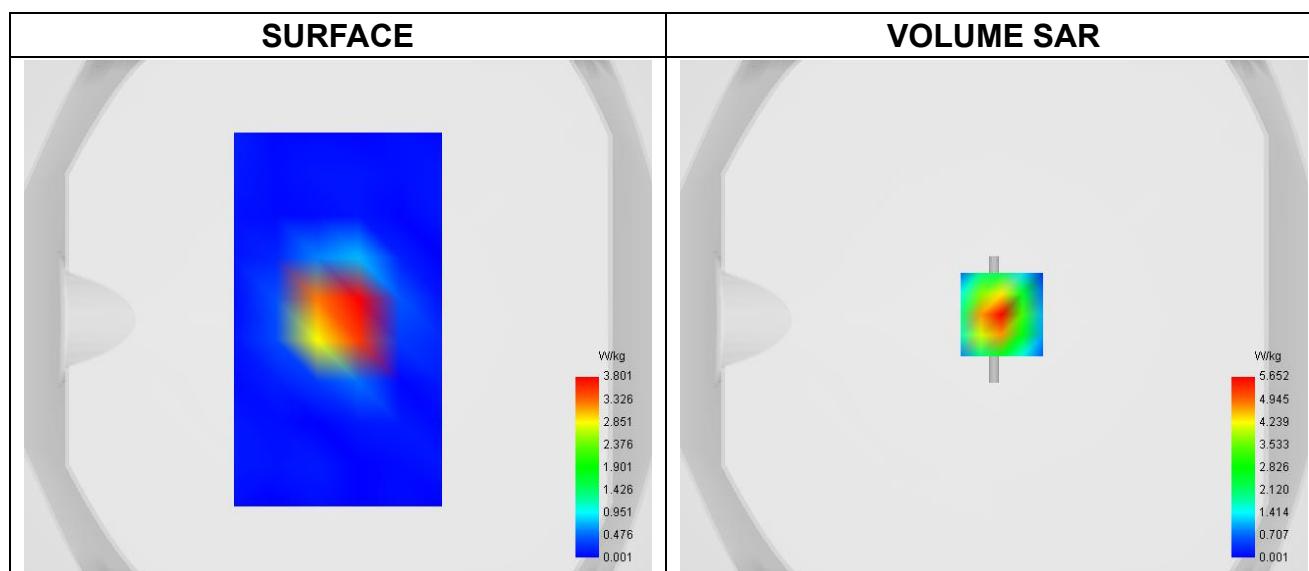
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-11-01

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels	Middle
Signal	CW
Frequency (MHz)	2600.000
Relative permittivity	39.000
Conductivity (S/m)	1.960
Probe	SN 04/22 EPGO364
ConvF	2.36
Crest factor:	1:1

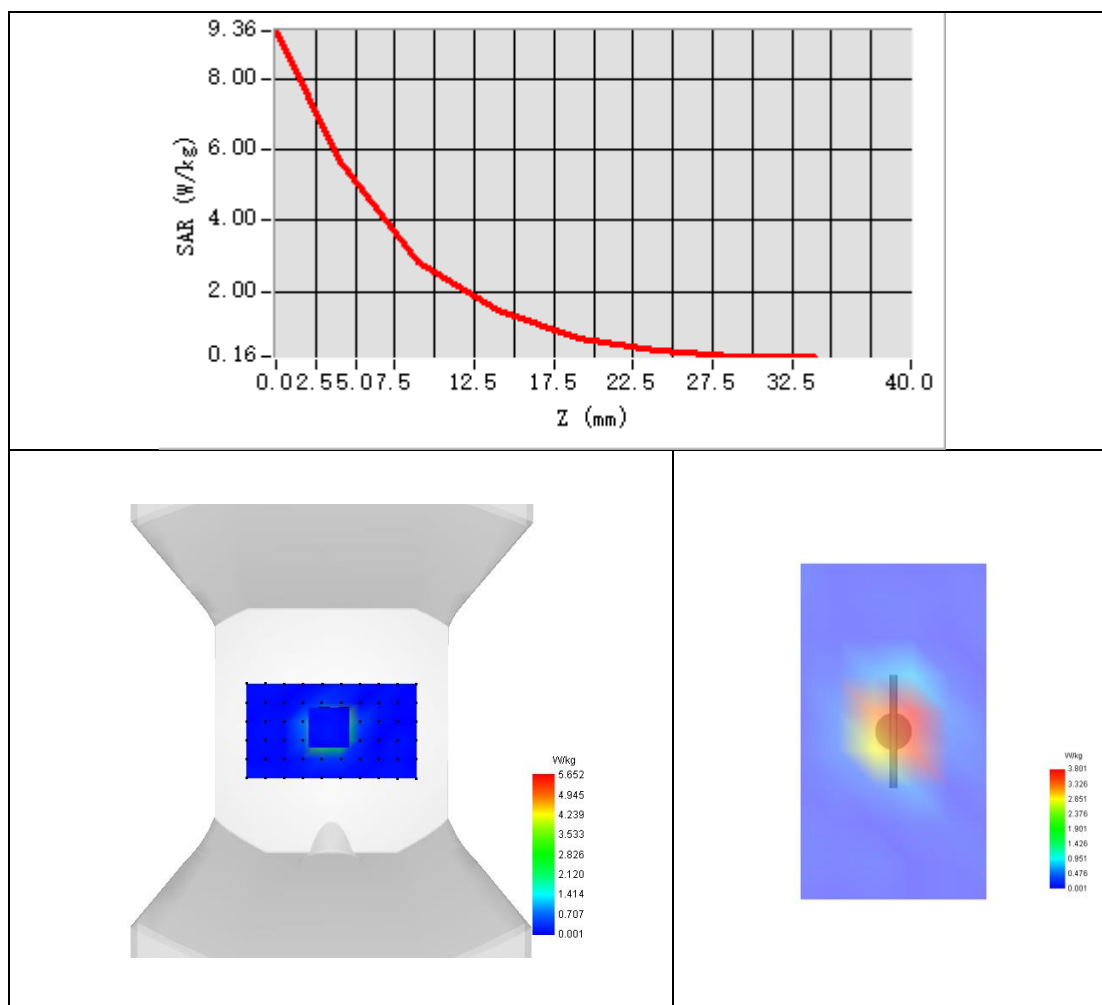


Maximum location: X=3.00, Y=3.00 ; SAR Peak: 9.58 W/kg

SAR 10g (W/Kg)	2.347
SAR 1g (W/Kg)	5.316



Z Axis Scan





System Performance Check Data (5200MHz)

Type: Phone measurement (Complete)

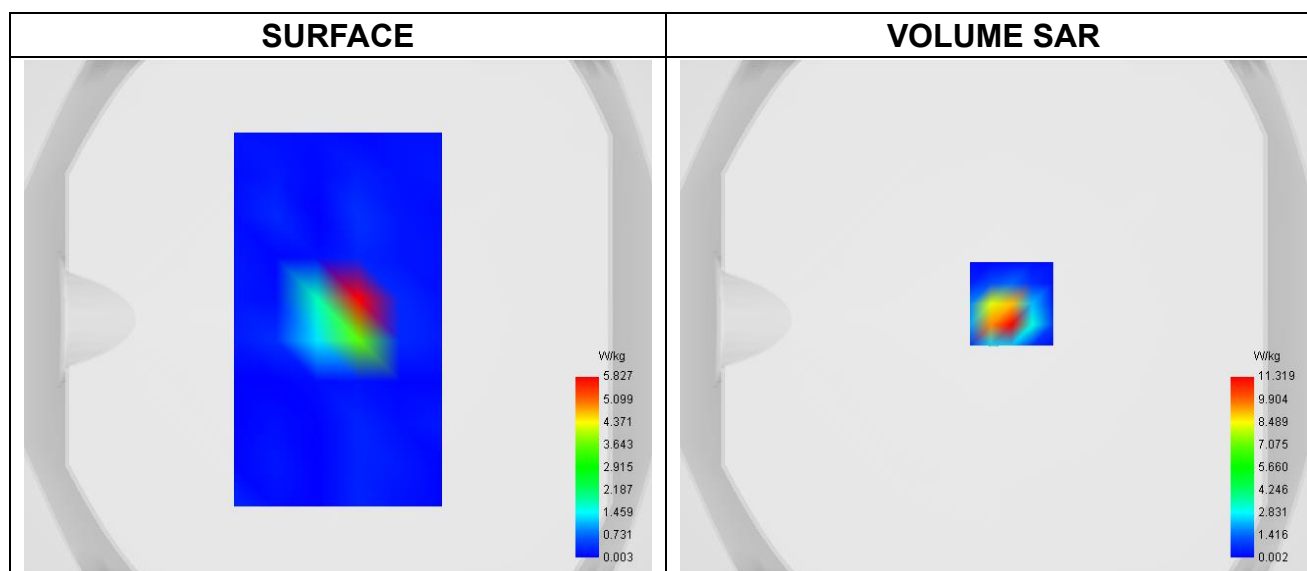
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2022-10-31

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Channels	Middle
Signal	CW
Frequency (MHz)	5200.000
Relative permittivity	36.000
Conductivity (S/m)	4.660
Probe	SN 04/22 EPGO364
ConvF	1.95
Crest factor:	1:1

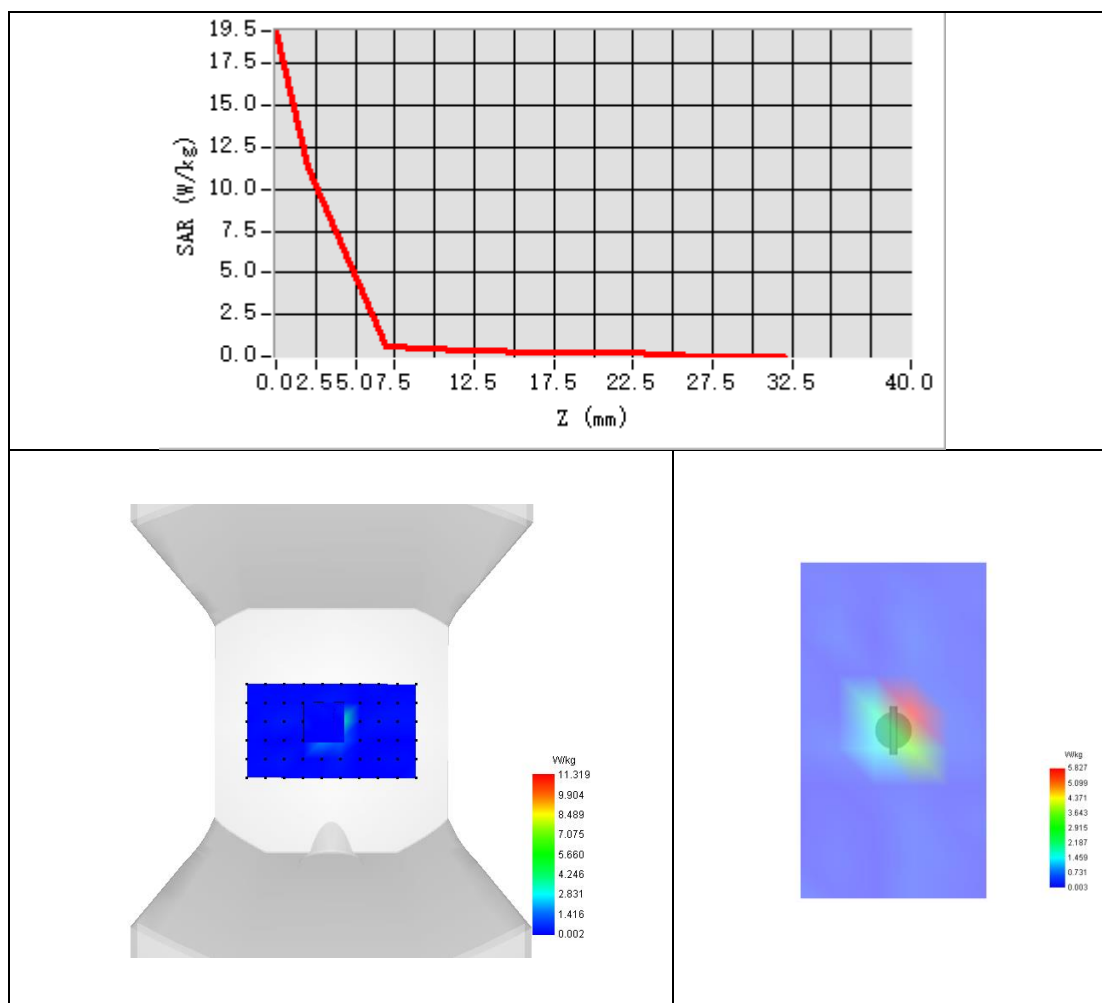


Maximum location: X=7.00, Y=6.00 ; SAR Peak: 21.79 W/kg

SAR 10g (W/Kg)	2.001
SAR 1g (W/Kg)	7.658



Z Axis Scan





System Performance Check Data (5400MHz)

Type: Phone measurement (Complete)

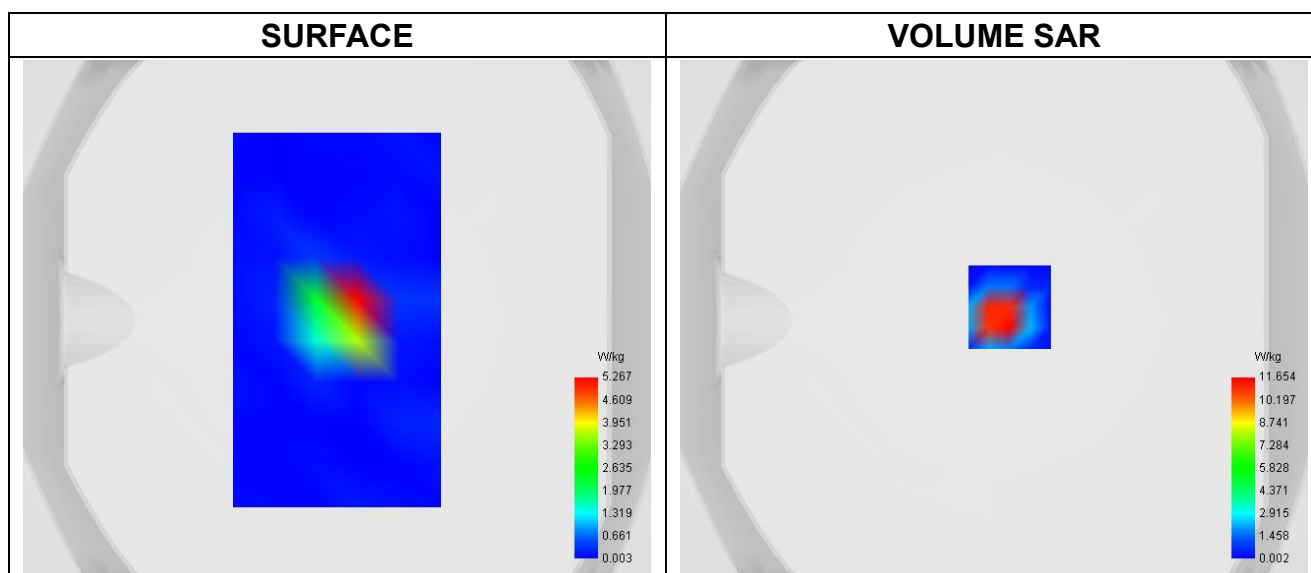
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-11-02

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW5400
Channels	Middle
Signal	CW
Frequency (MHz)	5400.000
Relative permittivity	35.800
Conductivity (S/m)	4.860
Probe	SN 04/22 EPGO364
ConvF	1.85
Crest factor:	1:1

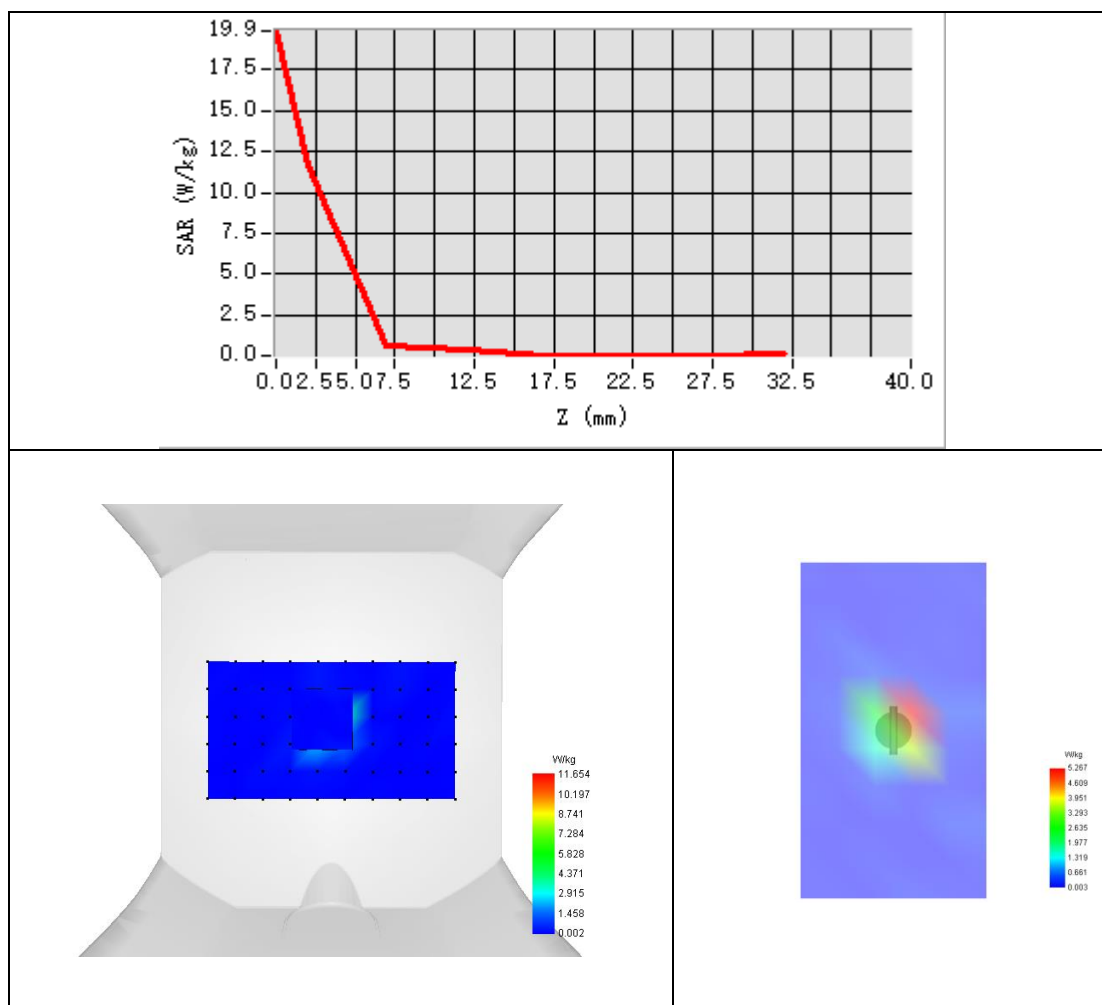


Maximum location: X=6.00, Y=5.00 ; SAR Peak: 25.72 W/kg

SAR 10g (W/Kg)	2.210
SAR 1g (W/Kg)	8.667



Z Axis Scan





System Performance Check Data (5600MHz)

Type: Phone measurement (Complete)

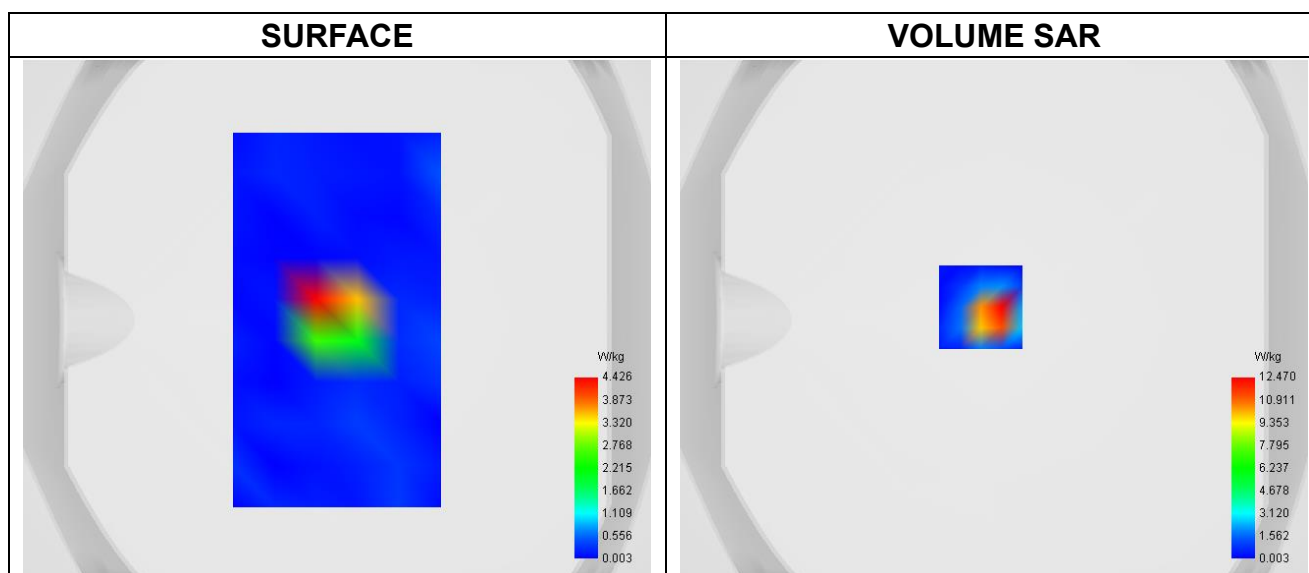
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-11-02

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW5600
Channels	Middle
Signal	CW
Frequency (MHz)	5600.000
Relative permittivity	35.500
Conductivity (S/m)	5.071
Probe	SN 04/22 EPGO364
ConvF	1.86
Crest factor:	1:1

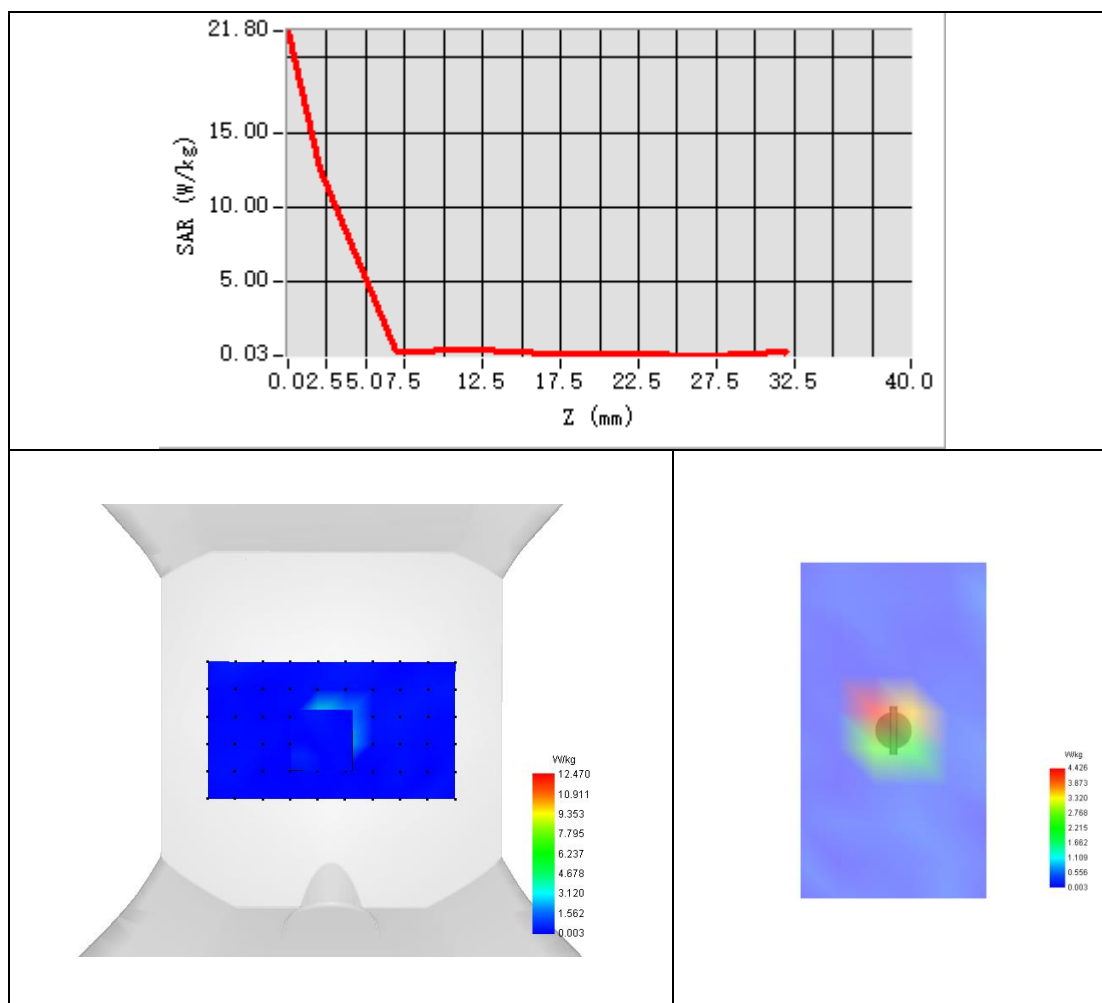


Maximum location: X=-5.00, Y=5.00 ; SAR Peak: 25.45 W/kg

SAR 10g (W/Kg)	2.243
SAR 1g (W/Kg)	8.533



Z Axis Scan





System Performance Check Data (5800MHz)

Type: Phone measurement (Complete)

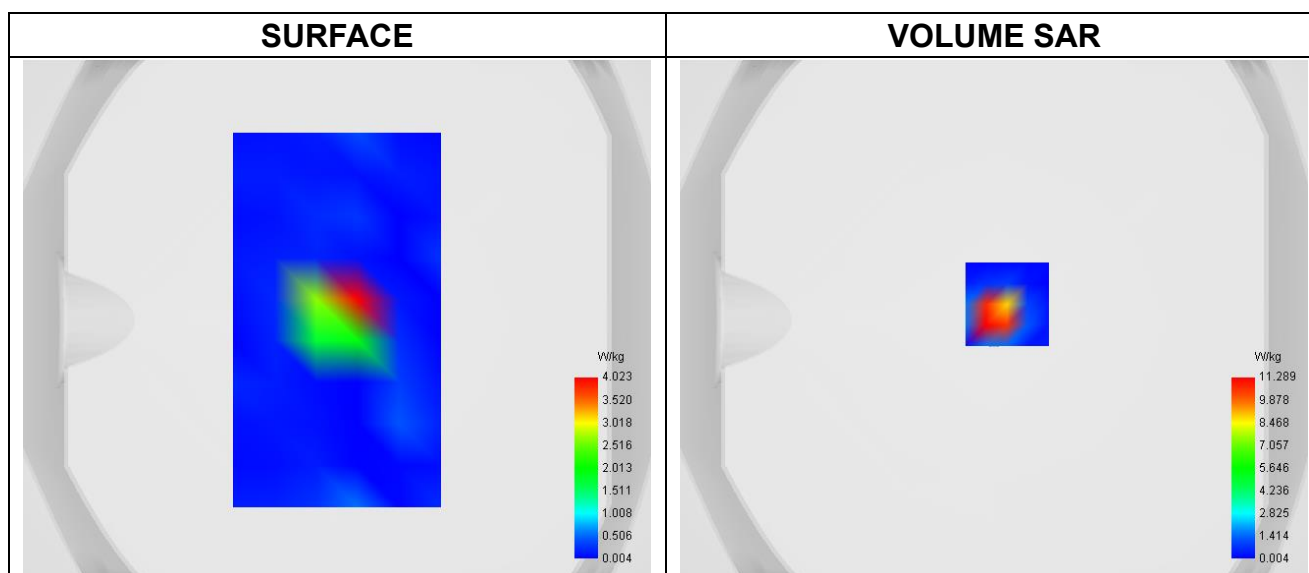
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement:2022-11-02

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Channels	Middle
Signal	CW
Frequency (MHz)	5800.000
Relative permittivity	35.300
Conductivity (S/m)	5.272
Probe	SN 04/22 EPG0364
ConvF	1.73
Crest factor:	1:1

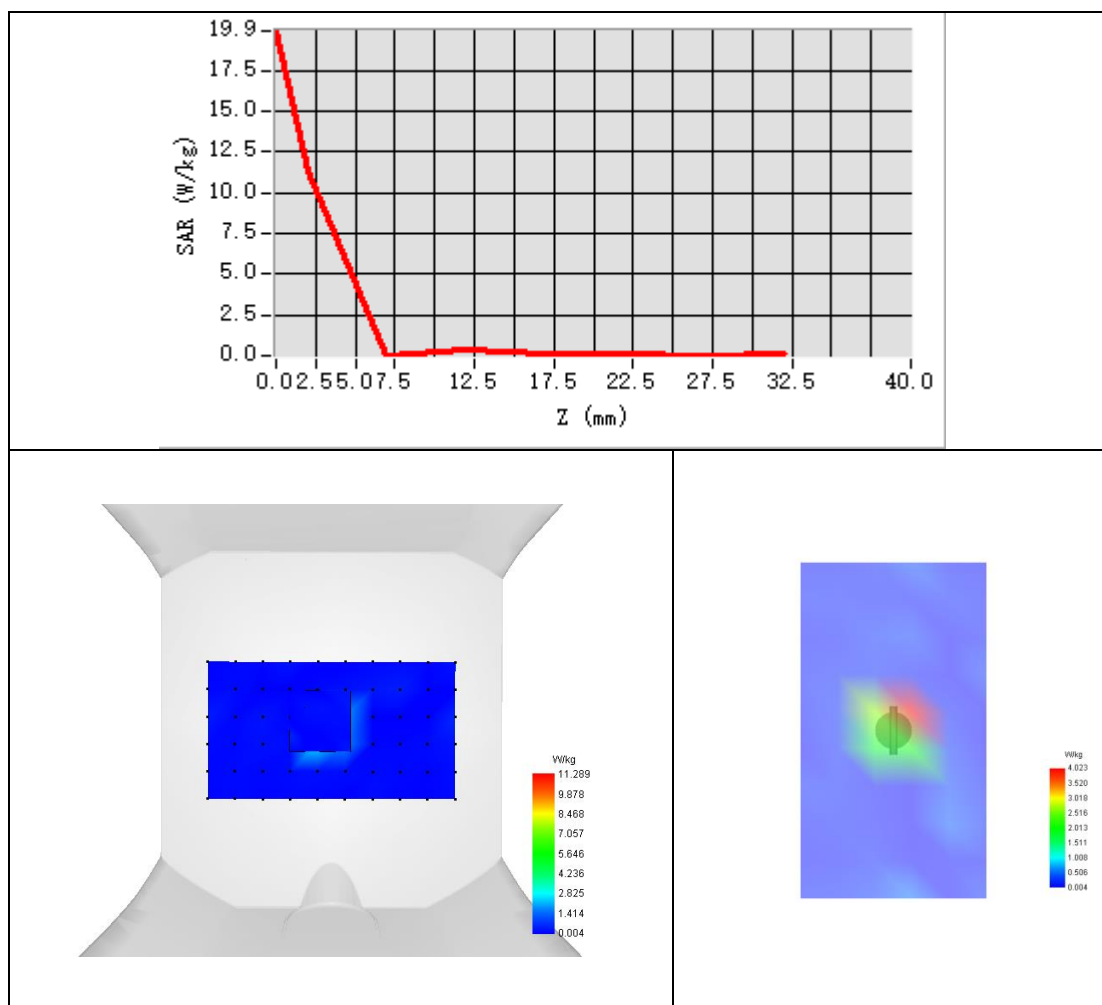


Maximum location: X=5.00, Y=6.00 ; SAR Peak: 25.18 W/kg

SAR 10g (W/Kg)	2.025
SAR 1g (W/Kg)	8.172



Z Axis Scan



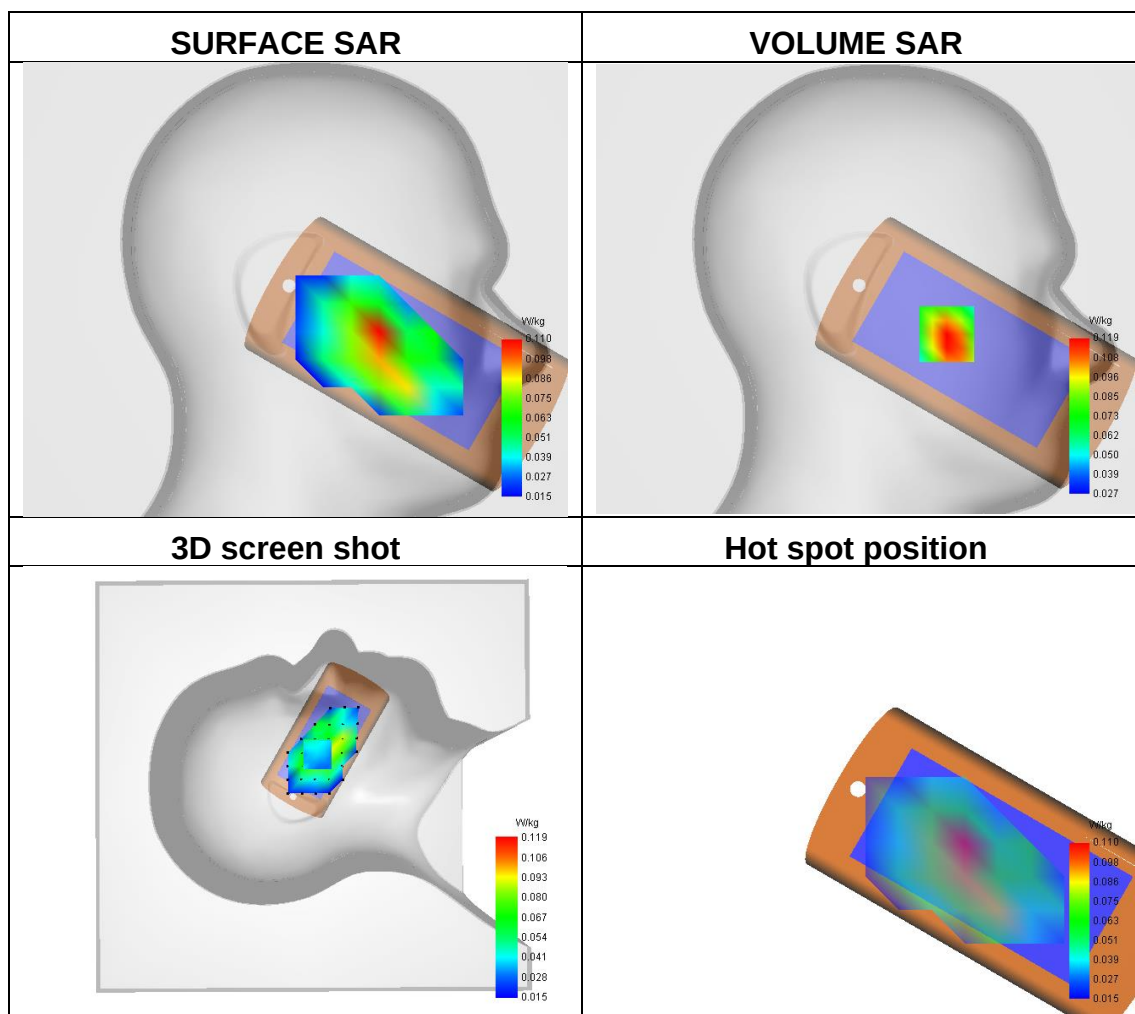


Appendix B. SAR Test Plots

Plot 1:

Test Date	2022-10-27
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	GSM850
Signal	TDMA (GSM)
Frequency	836.600
SAR 10g (W/Kg)	0.075
SAR 1g (W/Kg)	0.116

Maximum location: X=-47.00, Y=-26.00 ; SAR Peak: 0.18 W/kg

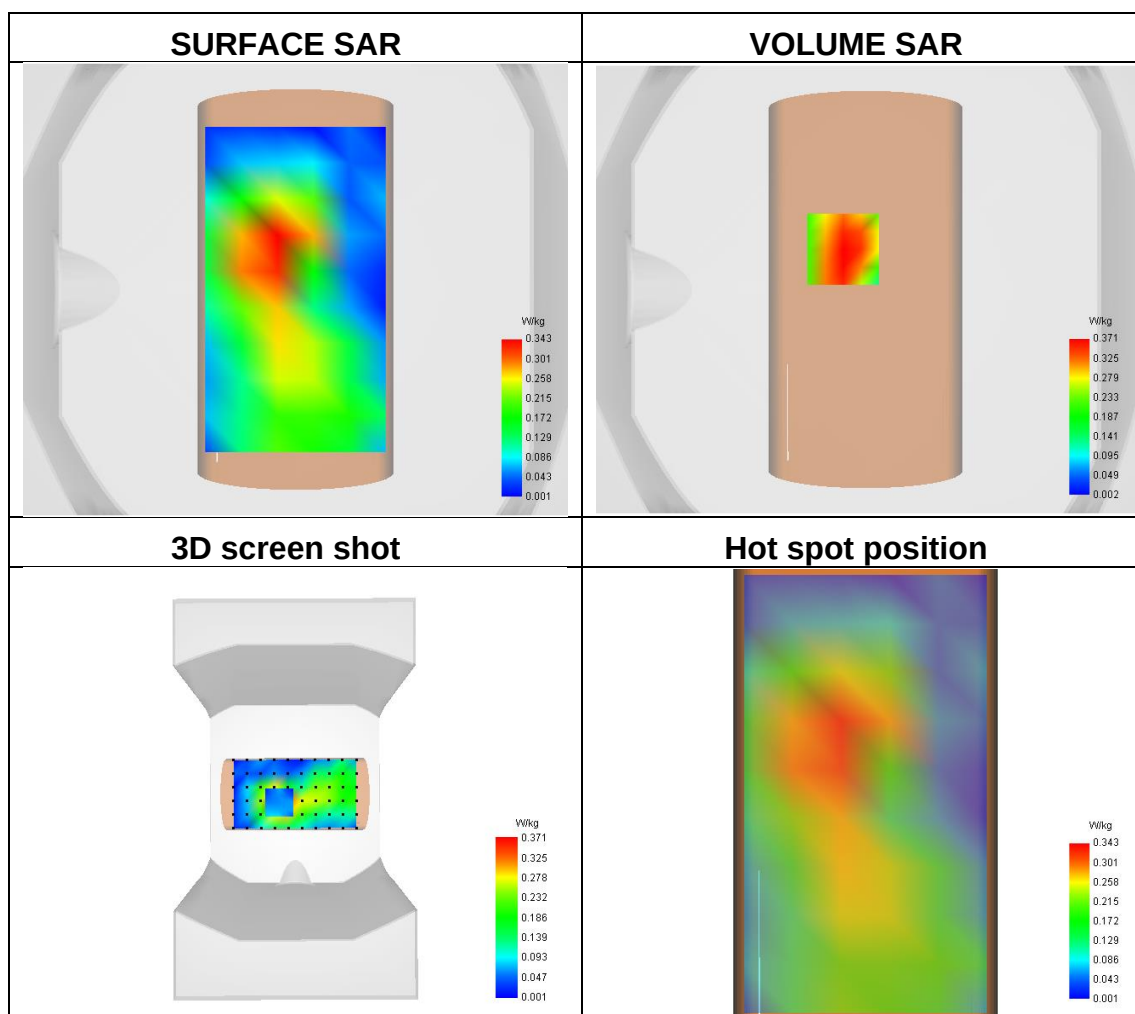




Plot 2:

Test Date	2022-10-27
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Signal	TDMA (GPRS)
Frequency	848.800
SAR 10g (W/Kg)	0.212
SAR 1g (W/Kg)	0.358

Maximum location: X=-10.00, Y=18.00 ; SAR Peak: 0.62 W/kg

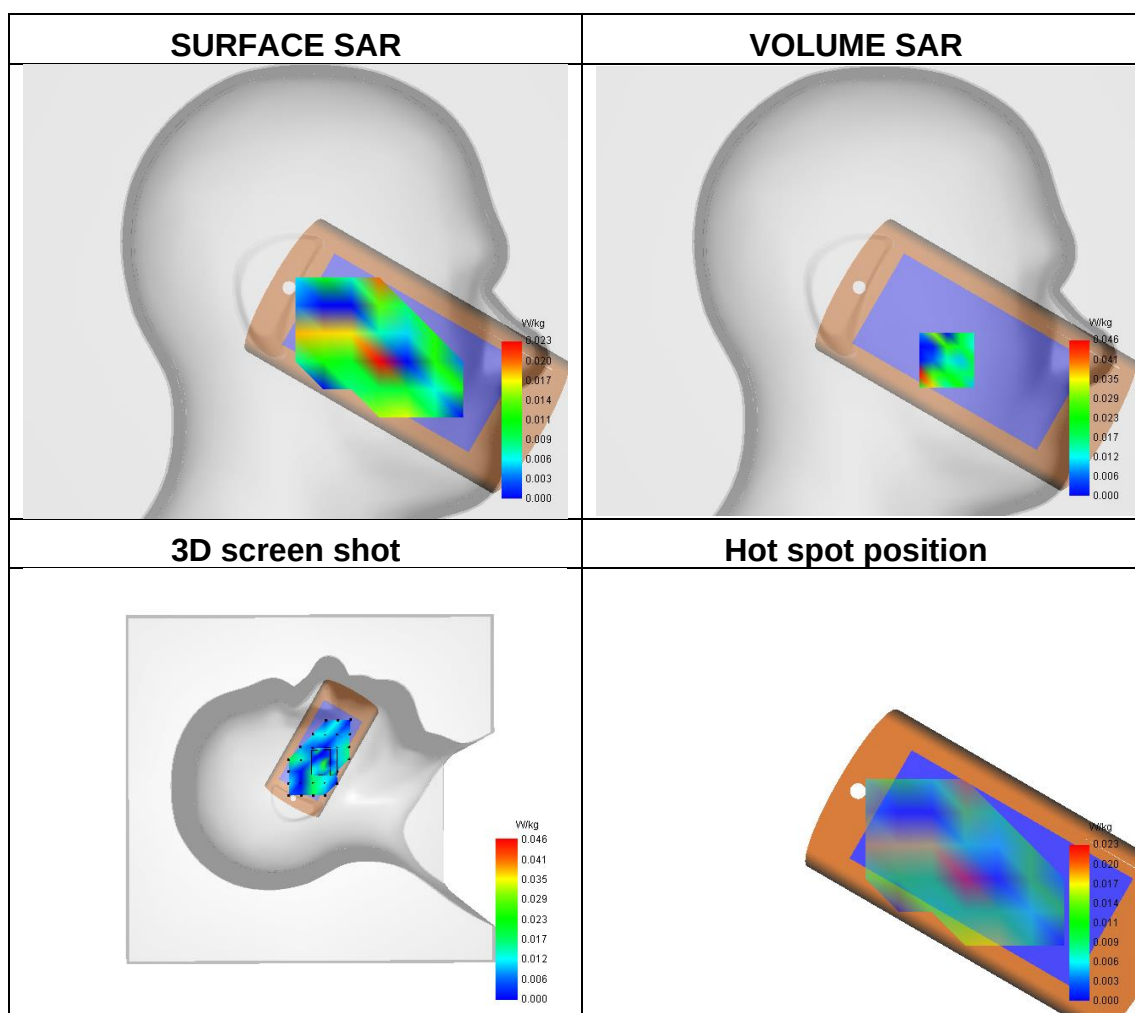




Plot 3:

Test Date	2022-10-24
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Signal	TDMA (GSM)
Frequency	1909.800
SAR 10g (W/Kg)	0.015
SAR 1g (W/Kg)	0.038

Maximum location: X=-47.00, Y=-40.00 ; SAR Peak: 0.09 W/kg

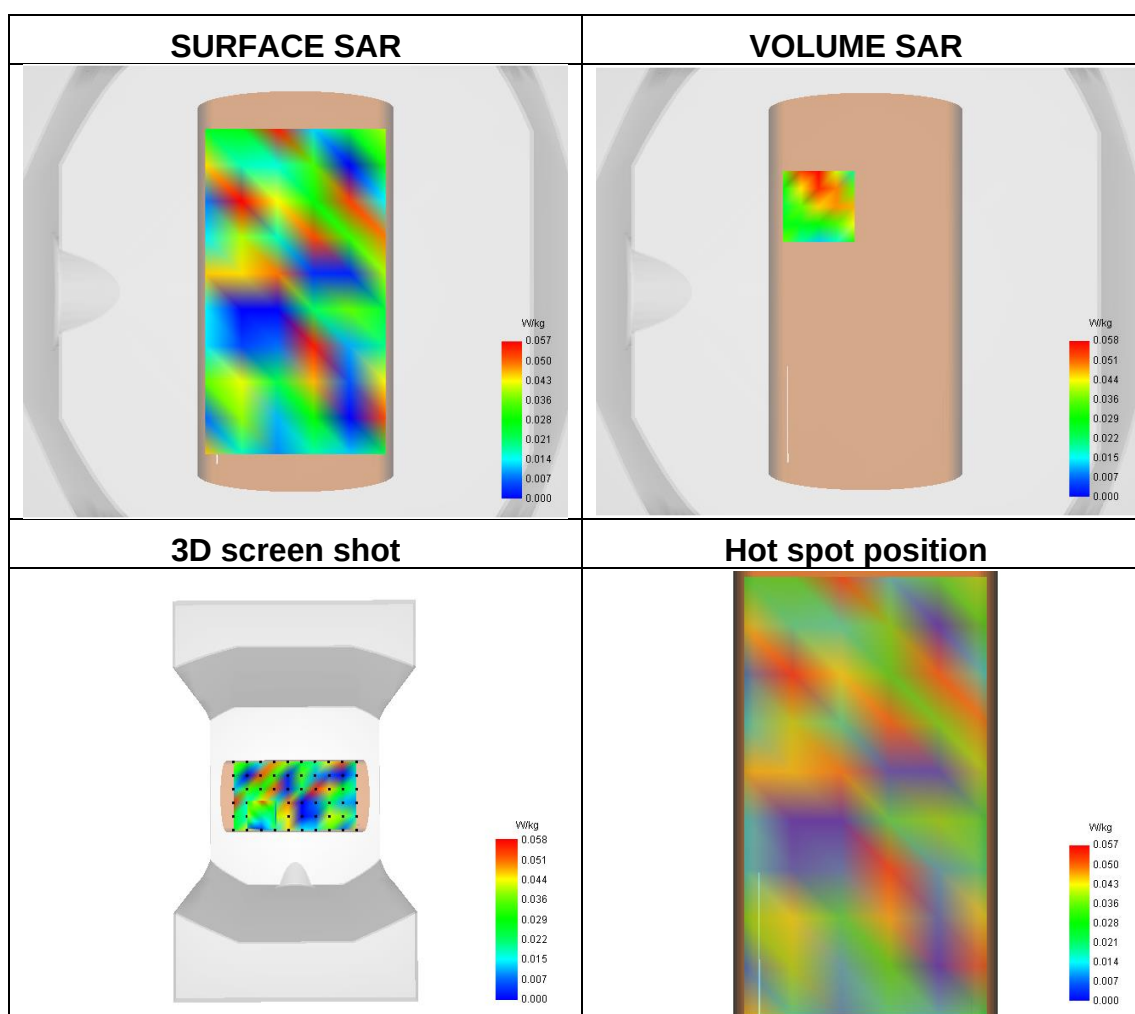




Plot 4:

Test Date	2022-10-24
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Signal	TDMA (GPRS)
Frequency	1909.800
SAR 10g (W/Kg)	0.036
SAR 1g (W/Kg)	0.087

Maximum location: X=-21.00, Y=38.00 ; SAR Peak: 0.26 W/kg

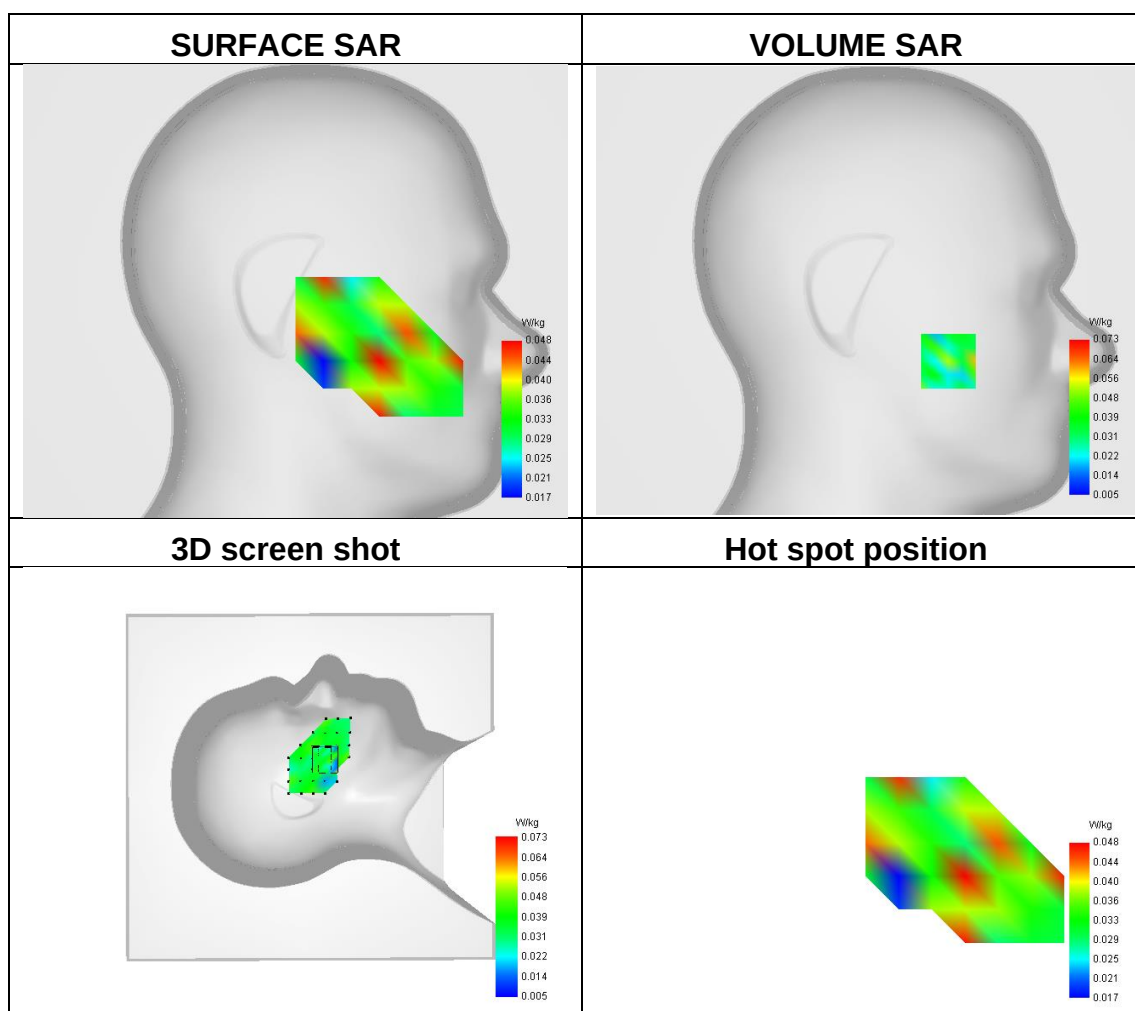




Plot 5:

Test Date	2022-10-24
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	Band 2 (1900)
Signal	WCDMA
Frequency	1880.000
SAR 10g (W/Kg)	0.034
SAR 1g (W/Kg)	0.046

Maximum location: X=-48.00, Y=-41.00 ; SAR Peak: 0.12 W/kg

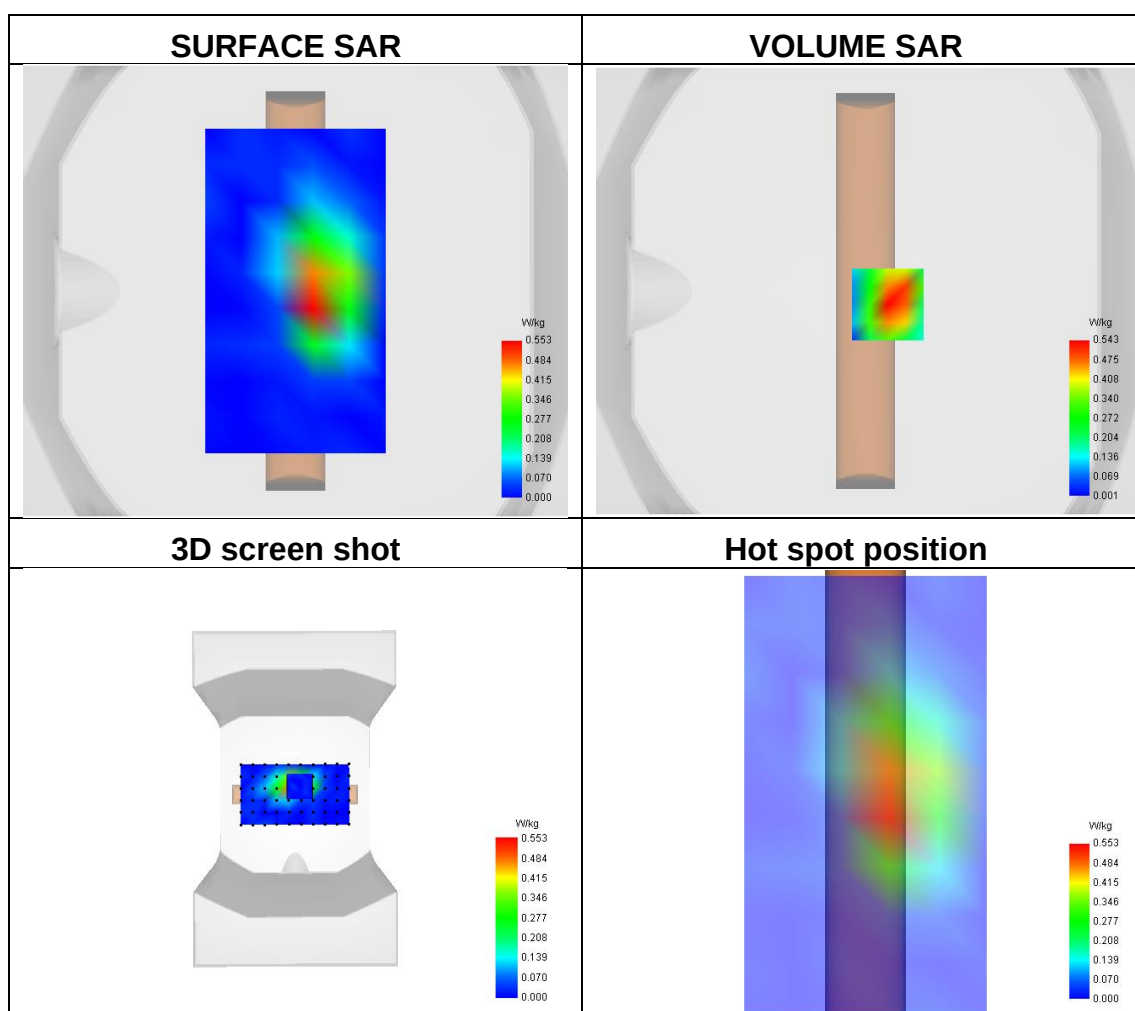




Plot 6:

Test Date	2022-10-24
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	Band 2 (1900)
Signal	WCDMA
Frequency	1907.600
SAR 10g (W/Kg)	0.249
SAR 1g (W/Kg)	0.530

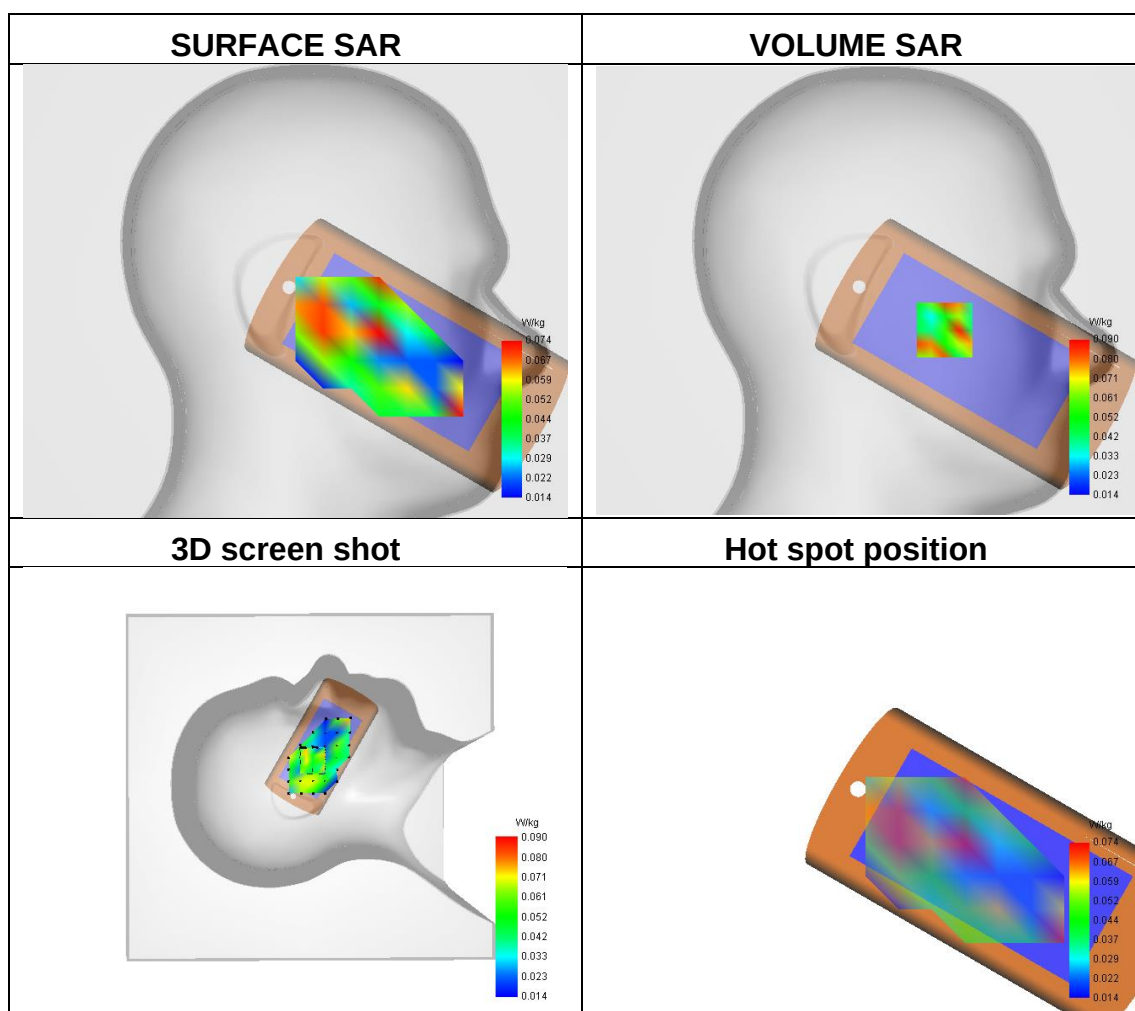
Maximum location: X=10.00, Y=-6.00 ; SAR Peak: 1.01 W/kg



Plot 7:

Test Date	2022-10-20
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	Band 4 (1700)
Signal	WCDMA
Frequency	1740.000
SAR 10g (W/Kg)	0.059
SAR 1g (W/Kg)	0.098

Maximum location: X=-46.00, Y=-23.00 ; SAR Peak: 0.21 W/kg

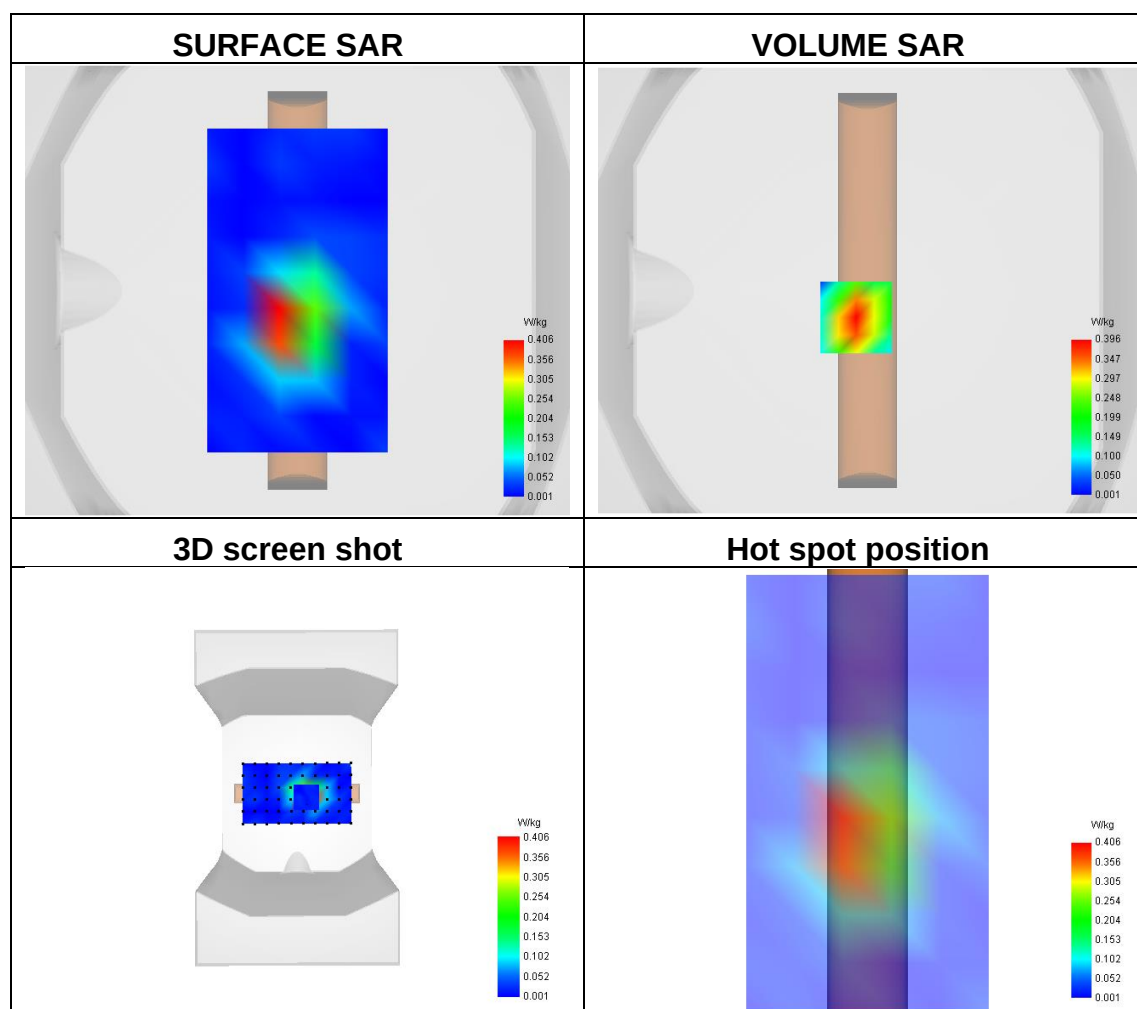




Plot 8:

Test Date	2022-10-20
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	Band 4 (1700)
Signal	WCDMA
Frequency	1740.000
SAR 10g (W/Kg)	0.189
SAR 1g (W/Kg)	0.375

Maximum location: X=-5.00, Y=-12.00 ; SAR Peak: 0.66 W/kg

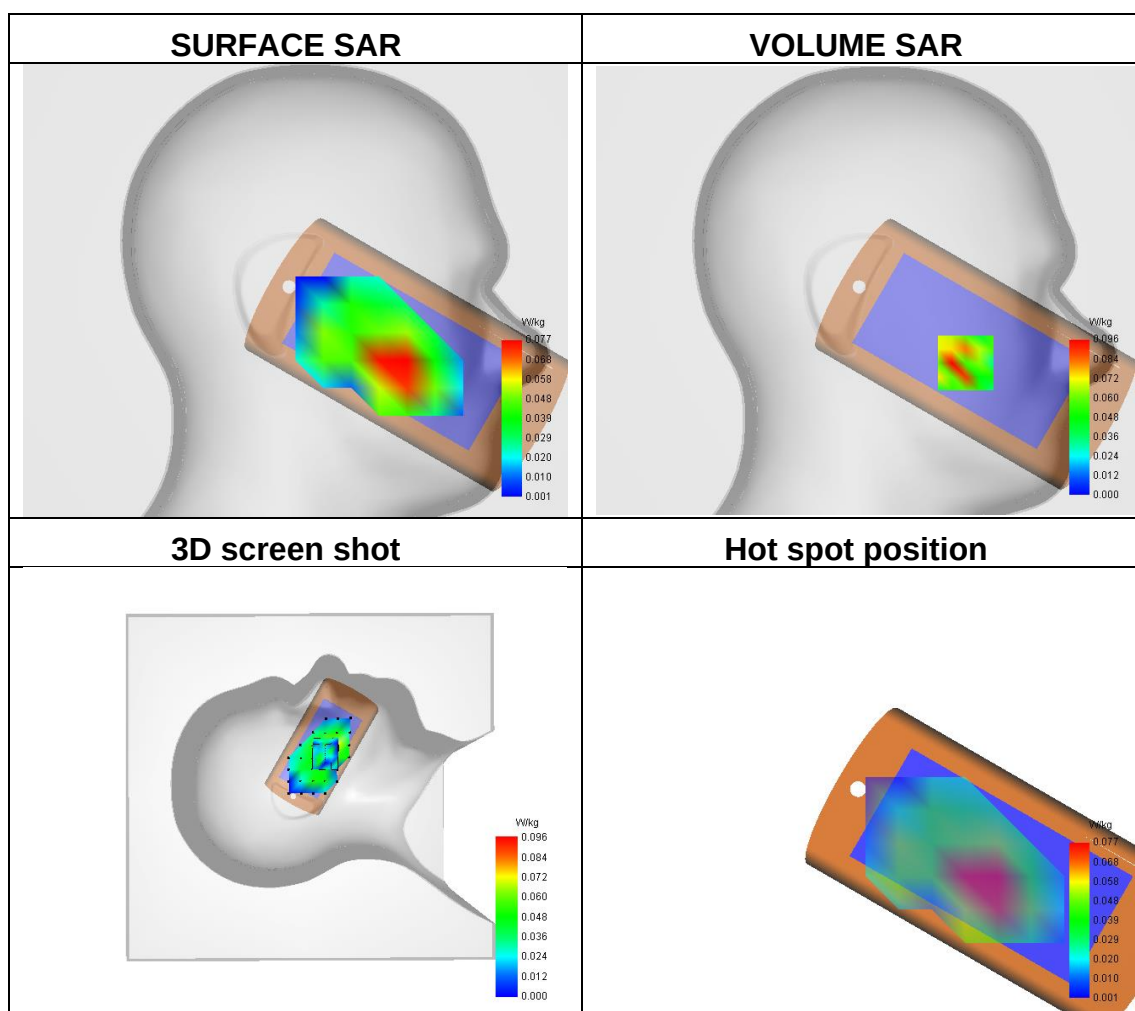




Plot 9:

Test Date	2022-10-27
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Cheek
Band	Band 5 (850)
Signal	WCDMA
Frequency	846.600
SAR 10g (W/Kg)	0.058
SAR 1g (W/Kg)	0.095

Maximum location: X=-58.00, Y=-42.00 ; SAR Peak: 0.21 W/kg

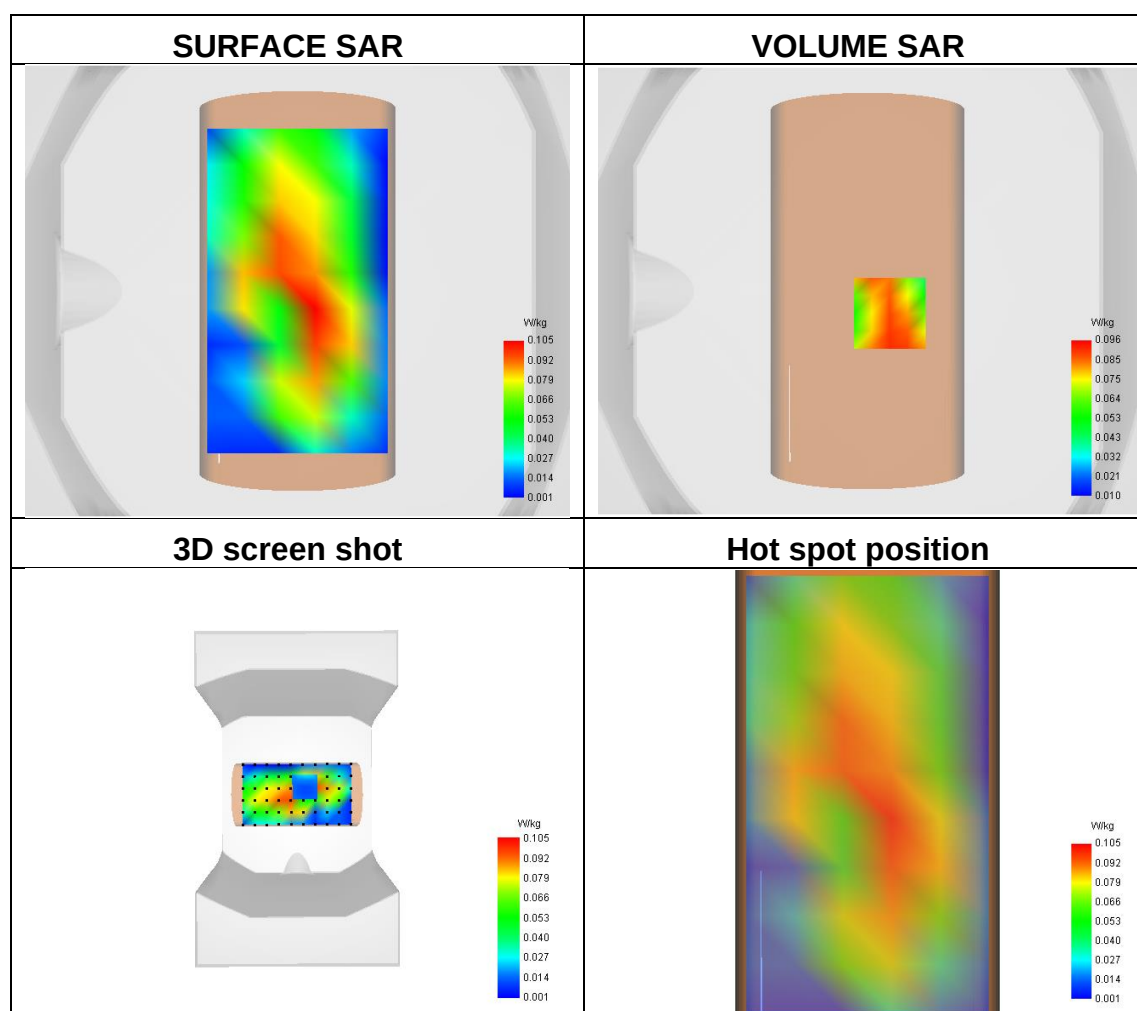




Plot 10:

Test Date	2022-10-27
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	Band 5 (850)
Signal	WCDMA
Frequency	846.6
SAR 10g (W/Kg)	0.064
SAR 1g (W/Kg)	0.091

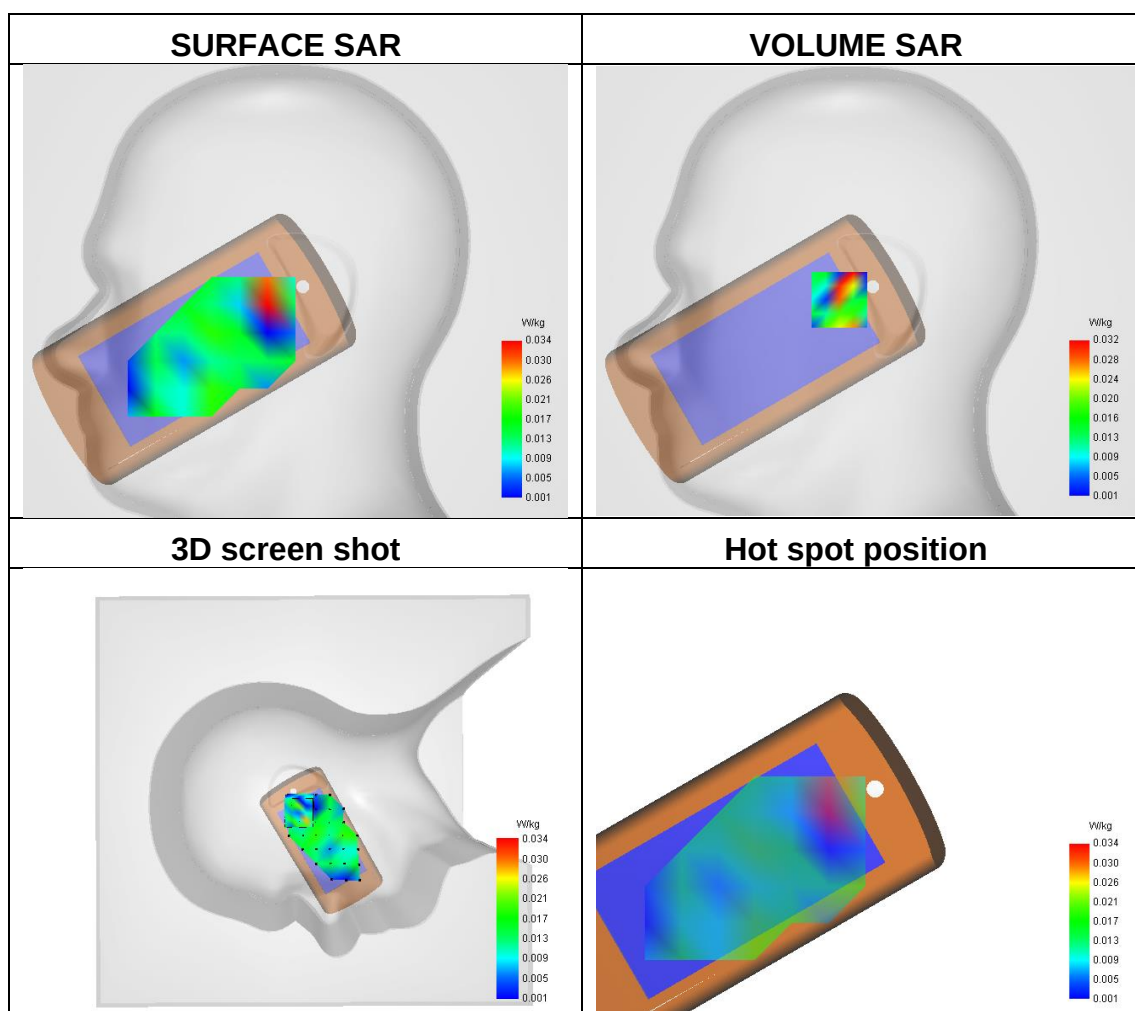
Maximum location: X=10.00, Y=-10.00 ; SAR Peak: 0.12 W/kg



Plot 11:

Test Date	2022-10-27
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right head
Device Position	Tilt
Band	BC0 (US Cellular)
Signal	CDMA (CDMA2000)
Frequency	836.520
SAR 10g (W/Kg)	0.015
SAR 1g (W/Kg)	0.033

Maximum location: X=-15.00, Y=-5.00 ; SAR Peak: 0.08 W/kg

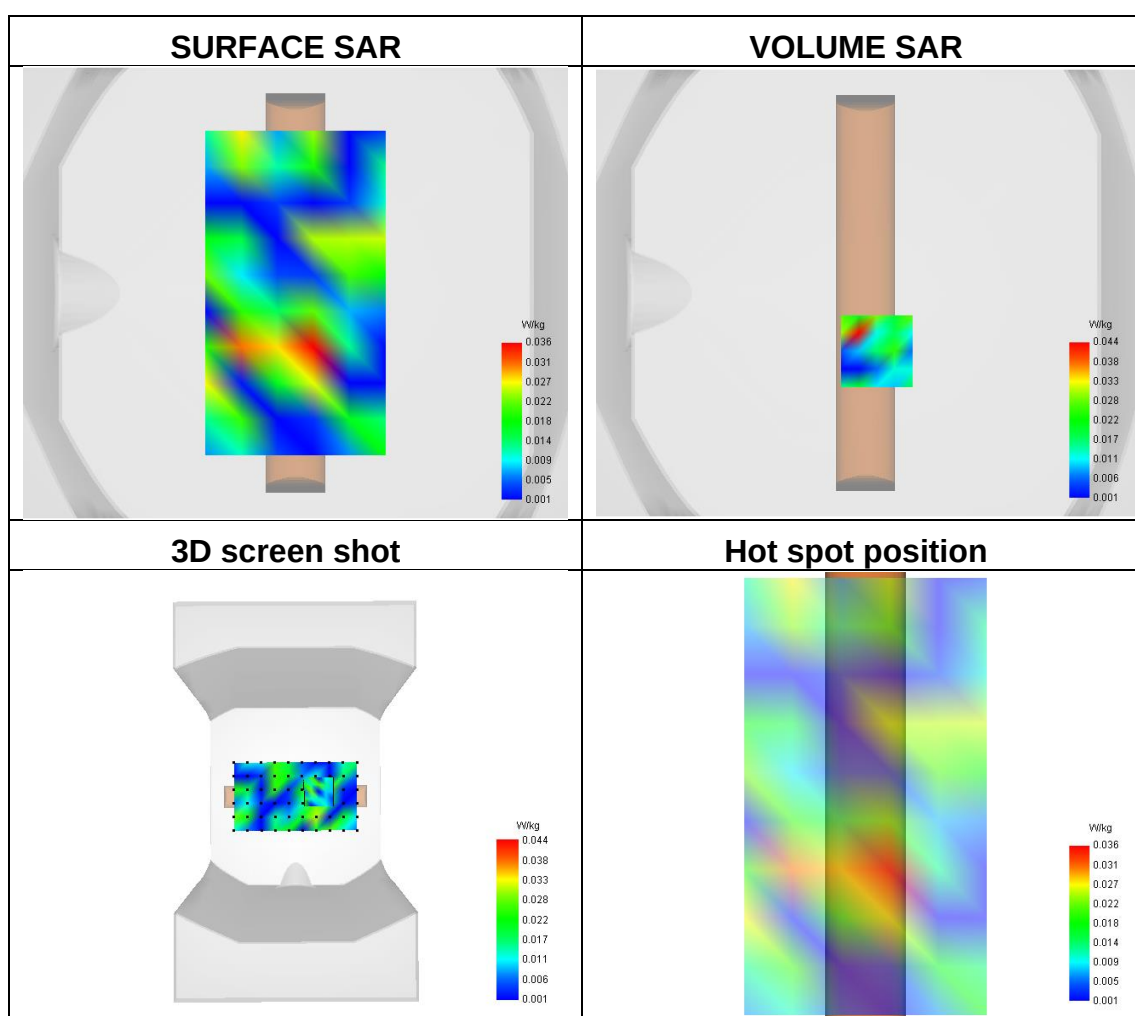




Plot 12:

Test Date	2022-10-27
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	BC0 (US Cellular)
Signal	CDMA (CDMA2000)
Frequency	836.520
SAR 10g (W/Kg)	0.017
SAR 1g (W/Kg)	0.037

Maximum location: X=5.00, Y=-26.00 ; SAR Peak: 0.10 W/kg

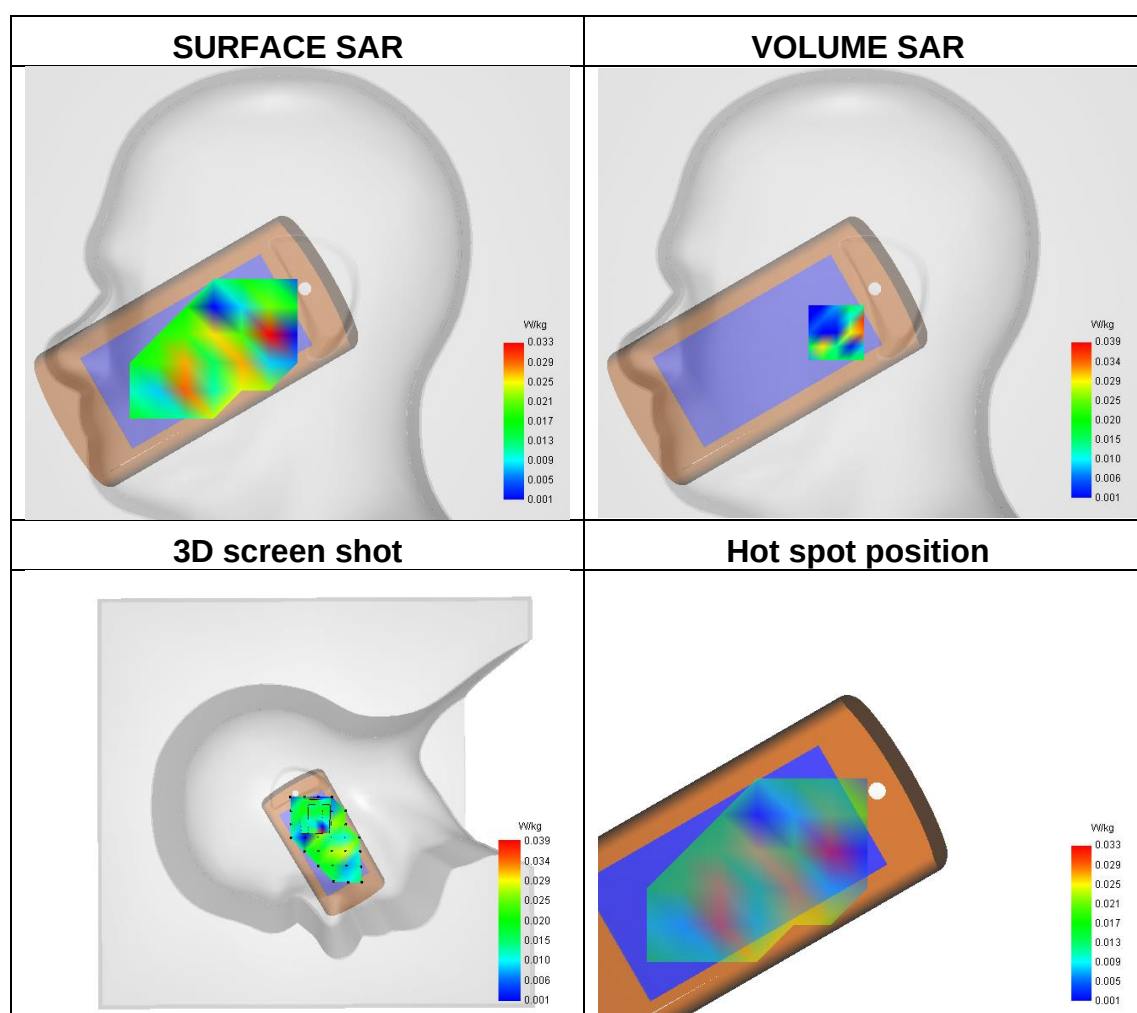




Plot 13:

Test Date	2022-10-24
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right head
Device Position	Tilt
Band	BC1 (North American PCS)
Signal	CDMA (CDMA2000)
Frequency	1880.000
SAR 10g (W/Kg)	0.014
SAR 1g (W/Kg)	0.037

Maximum location: X=-18.00, Y=-23.00 ; SAR Peak: 0.10 W/kg

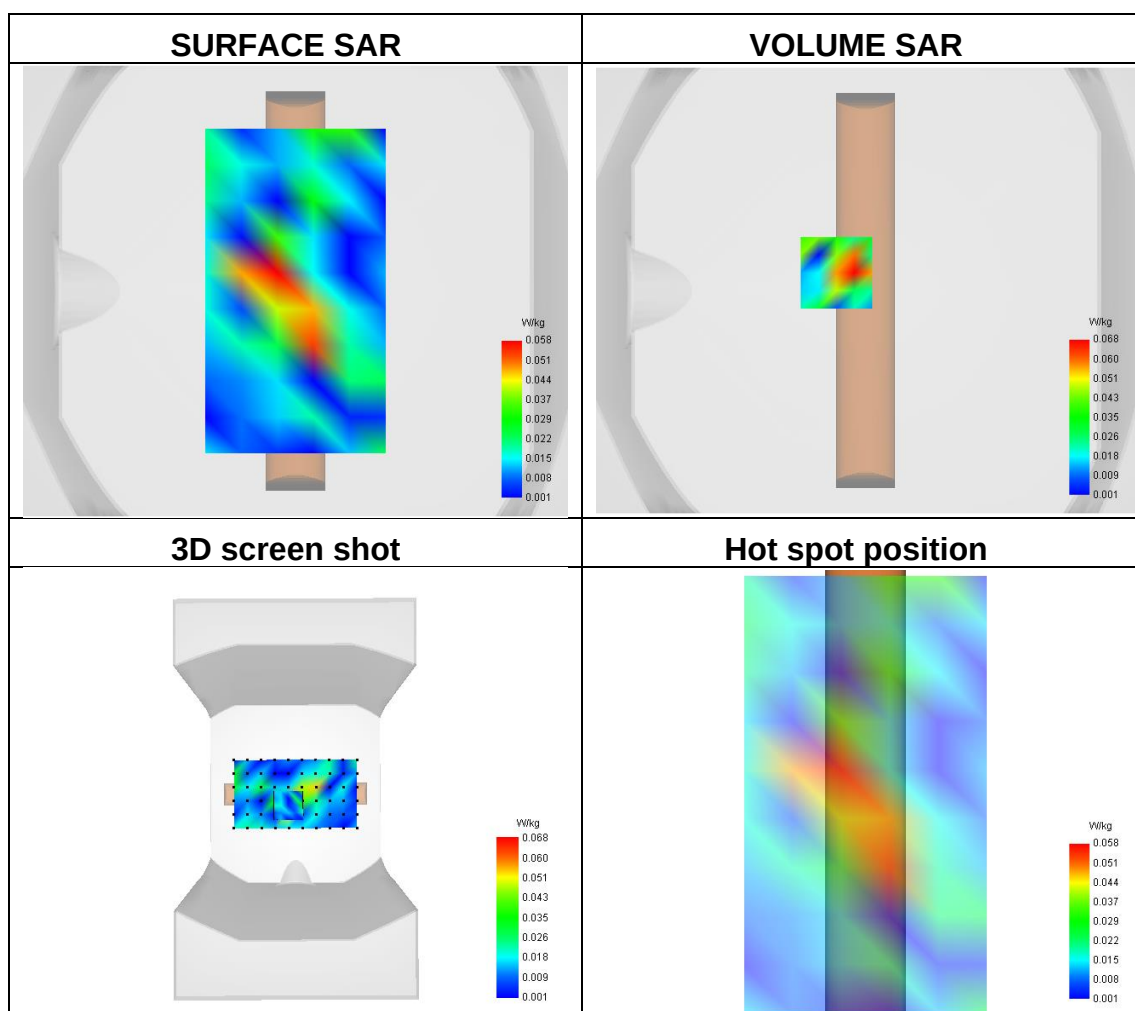




Plot 14:

Test Date	2022-10-24
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	BC1 (North American PCS)
Signal	CDMA (CDMA2000)
Frequency	1880.000
SAR 10g (W/Kg)	0.035
SAR 1g (W/Kg)	0.079

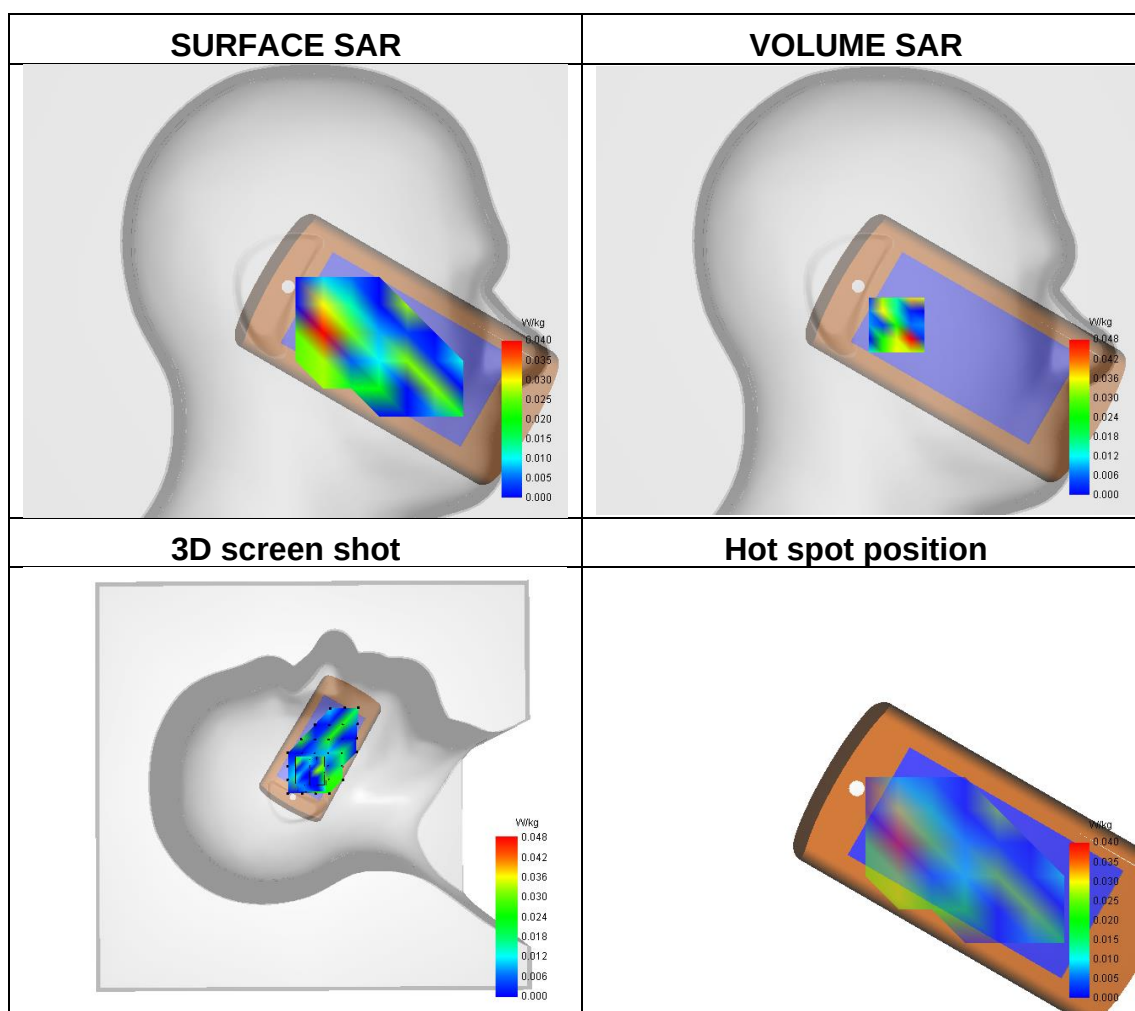
Maximum location: X=-13.00, Y=8.00 ; SAR Peak: 0.18 W/kg



Plot 15:

Test Date	2022-10-24
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Left head
Device Position	Tilt
Band	LTE band 2
Signal	LTE FDD
Frequency	1873.700
SAR 10g (W/Kg)	0.018
SAR 1g (W/Kg)	0.049

Maximum location: X=-18.00, Y=-20.00 ; SAR Peak: 0.13 W/kg

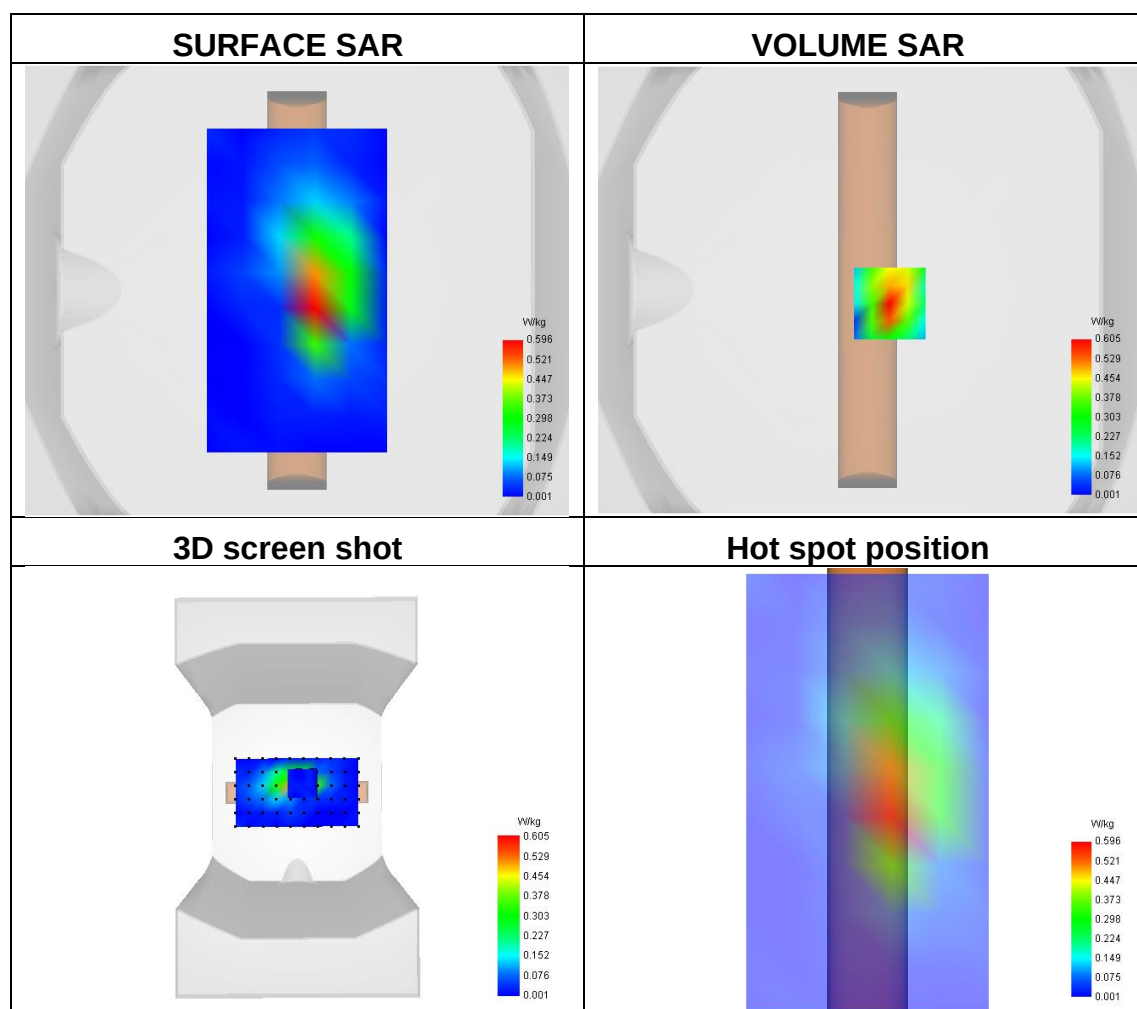




Plot 16:

Test Date	2022-10-24
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 2
Signal	LTE FDD
Frequency	1893.700
SAR 10g (W/Kg)	0.270
SAR 1g (W/Kg)	0.554

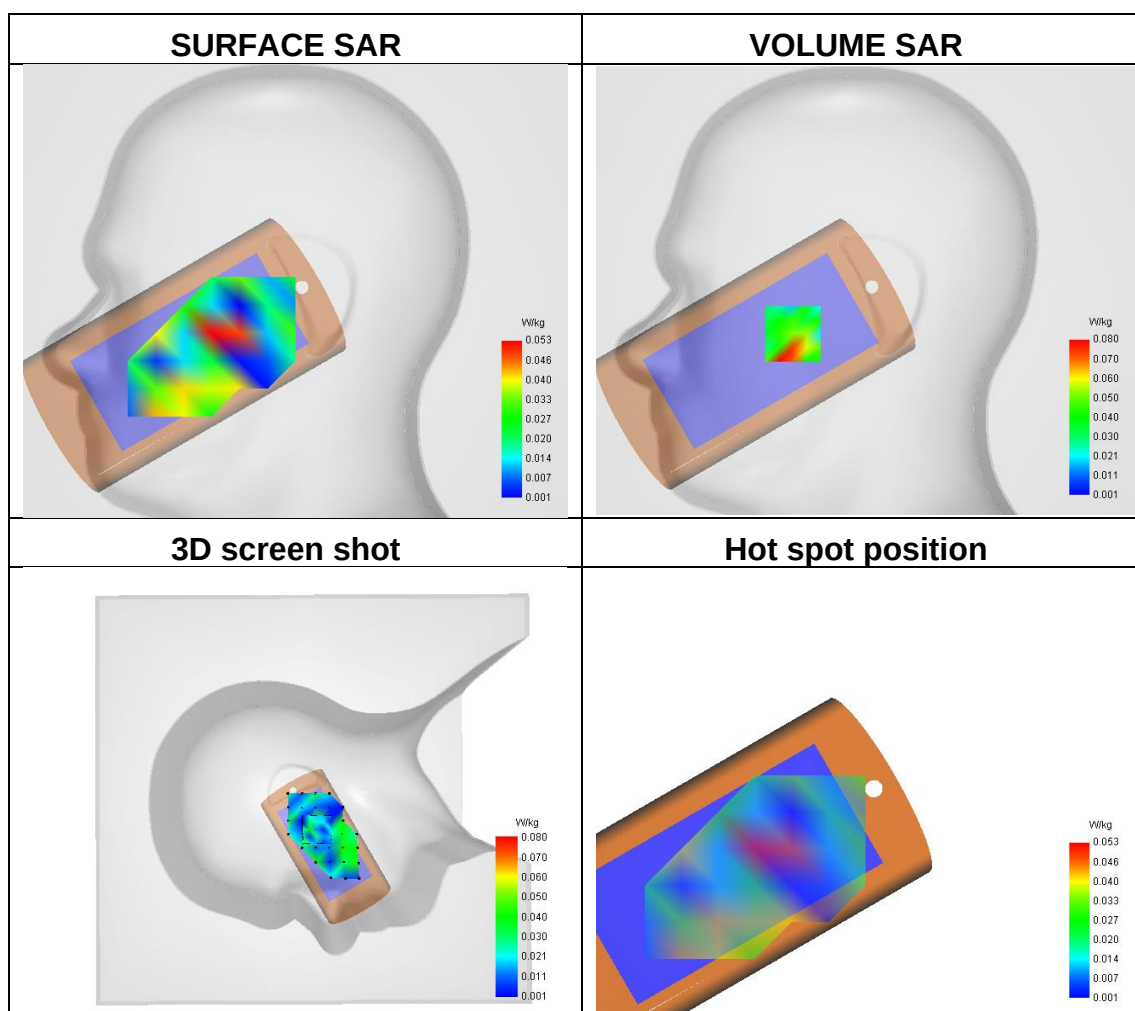
Maximum location: X=10.00, Y=-6.00 ; SAR Peak: 0.96 W/kg



Plot 17:

Test Date	2022-10-20
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right head
Device Position	Cheek
Band	LTE band 4
Signal	LTE FDD
Frequency	1726.200
SAR 10g (W/Kg)	0.041
SAR 1g (W/Kg)	0.100

Maximum location: X=-42.00, Y=-25.00 ; SAR Peak: 0.16 W/kg

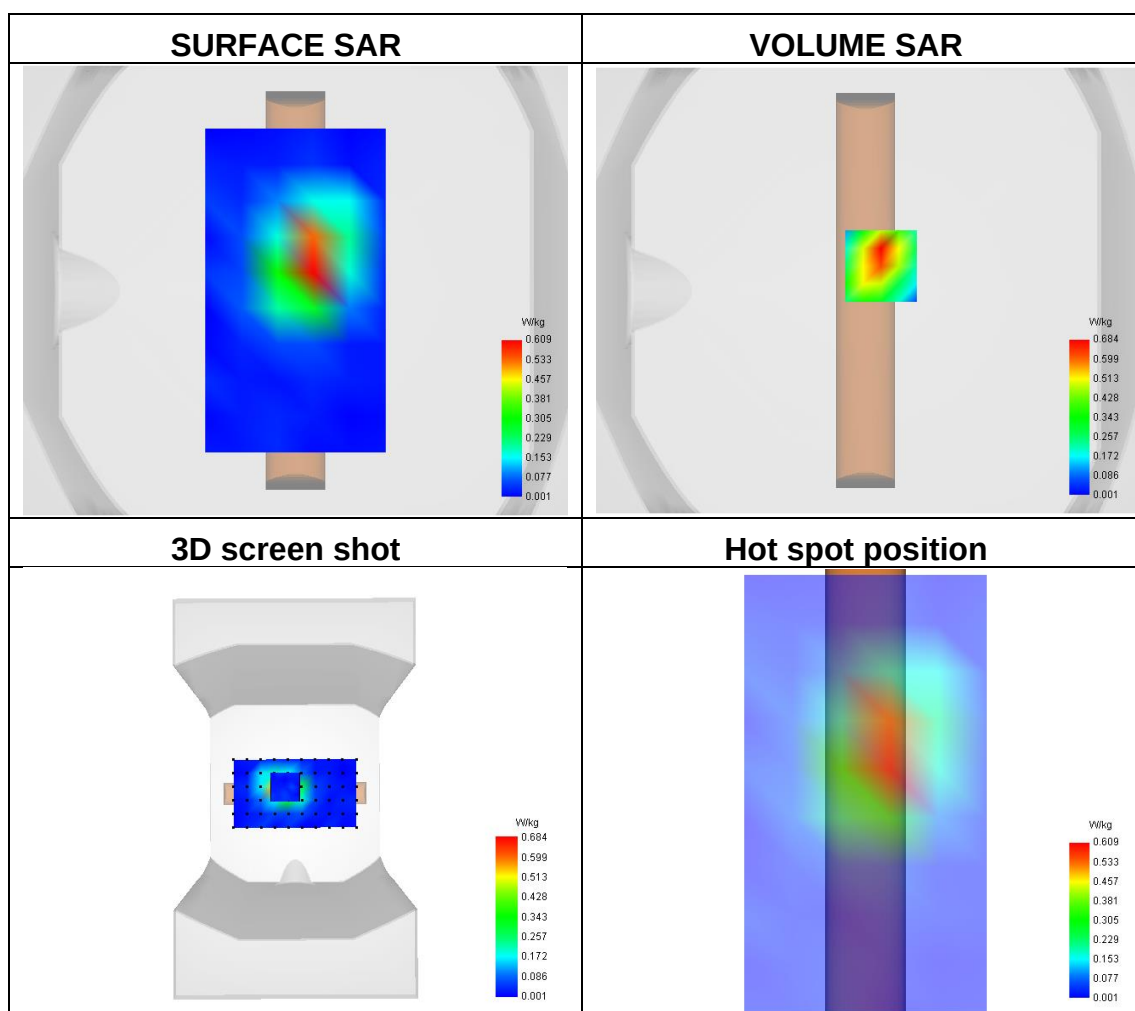




Plot 18:

Test Date	2022-10-20
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Signal	LTE FDD
Frequency	1726.200
SAR 10g (W/Kg)	0.311
SAR 1g (W/Kg)	0.644

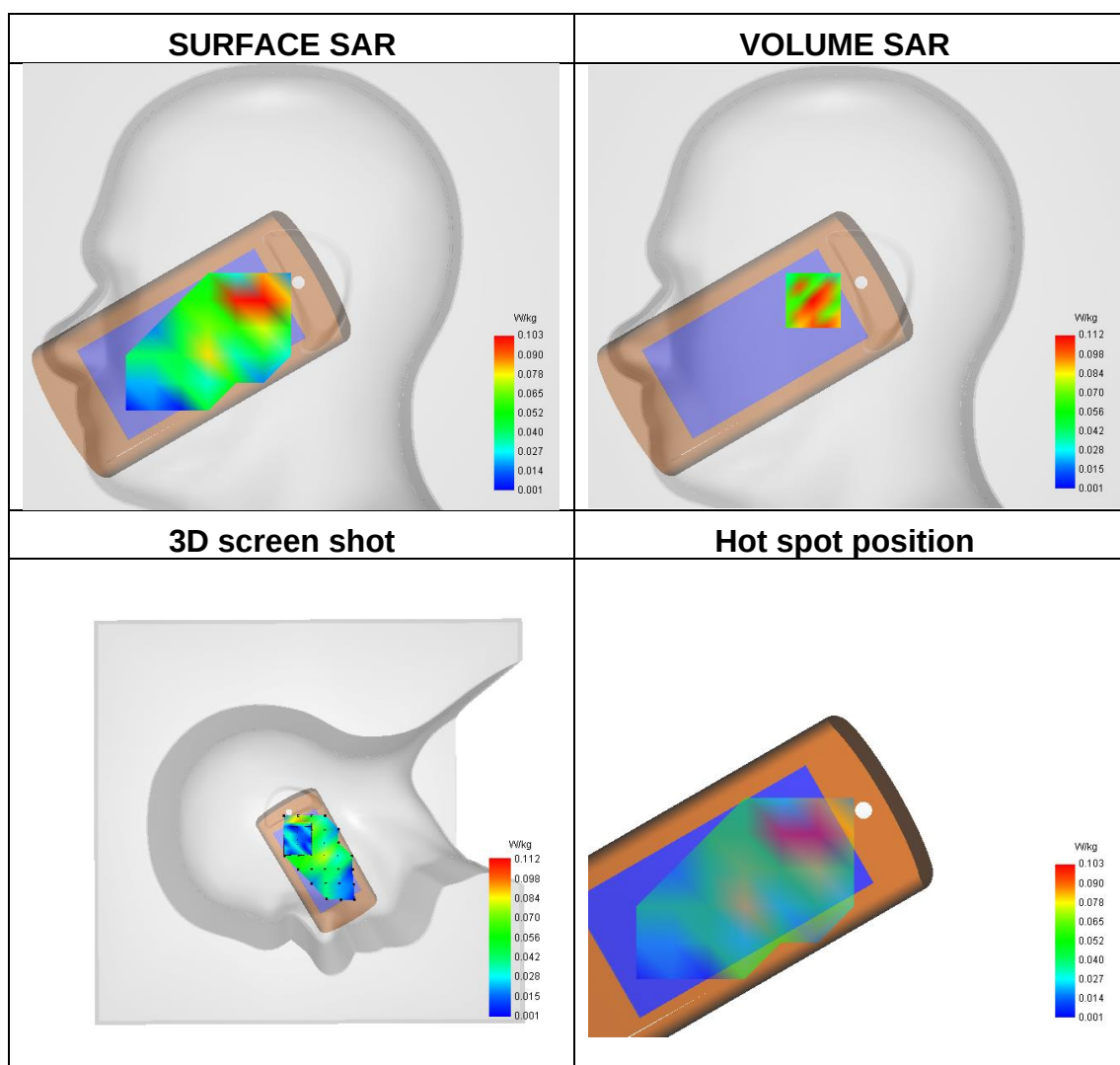
Maximum location: X=7.00, Y=11.00 ; SAR Peak: 1.21 W/kg



Plot 19:

Test Date	2022-10-27
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right head
Device Position	Tilt
Band	LTE band 5
Signal	LTE FDD
Frequency	834.700
SAR 10g (W/Kg)	0.062
SAR 1g (W/Kg)	0.110

Maximum location: X=-24.00, Y=-8.00 ; SAR Peak: 0.22 W/kg

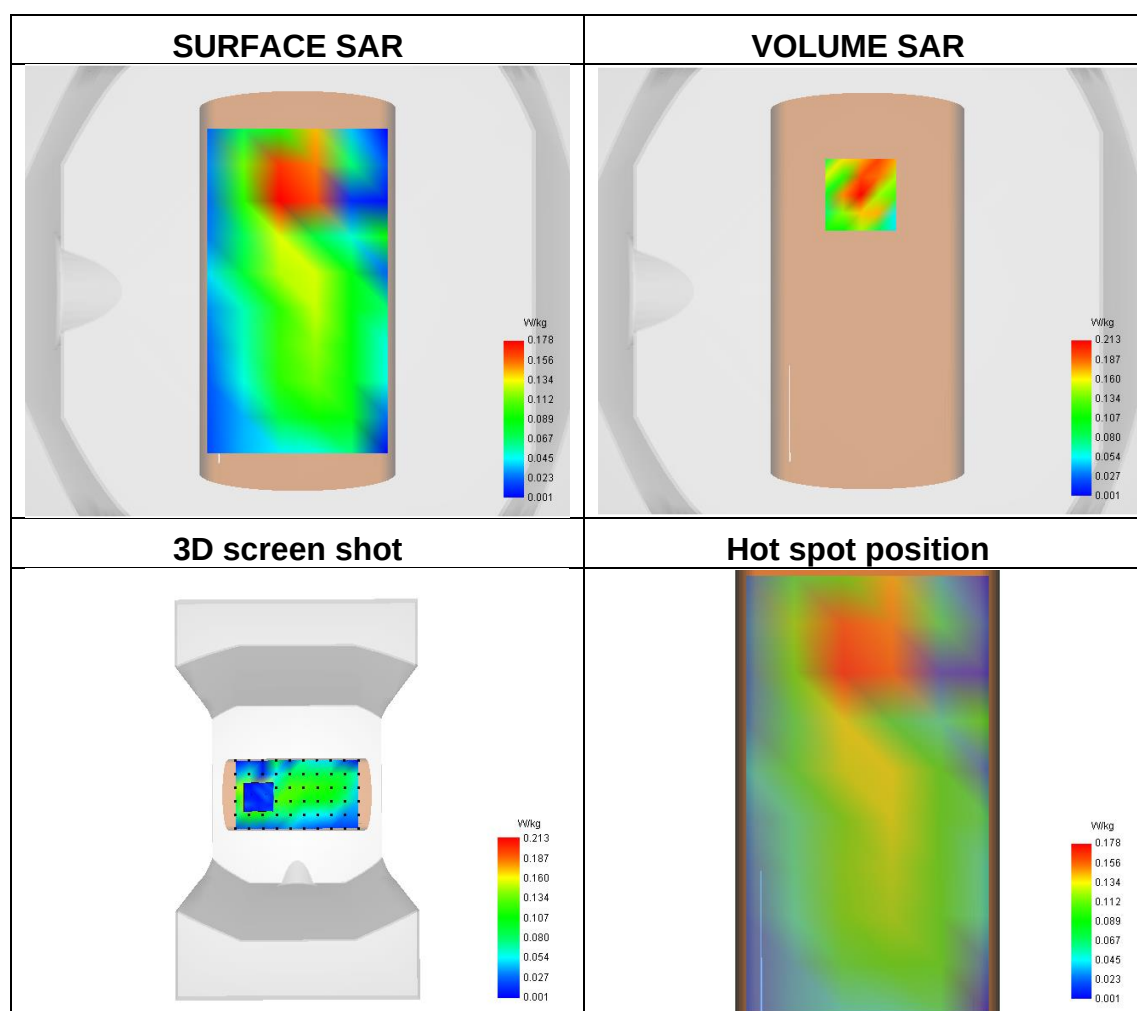




Plot 20:

Test Date	2022-10-27
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 5
Signal	LTE FDD
Frequency	834.700
SAR 10g (W/Kg)	0.115
SAR 1g (W/Kg)	0.206

Maximum location: X=-3.00, Y=43.00 ; SAR Peak: 0.40 W/kg

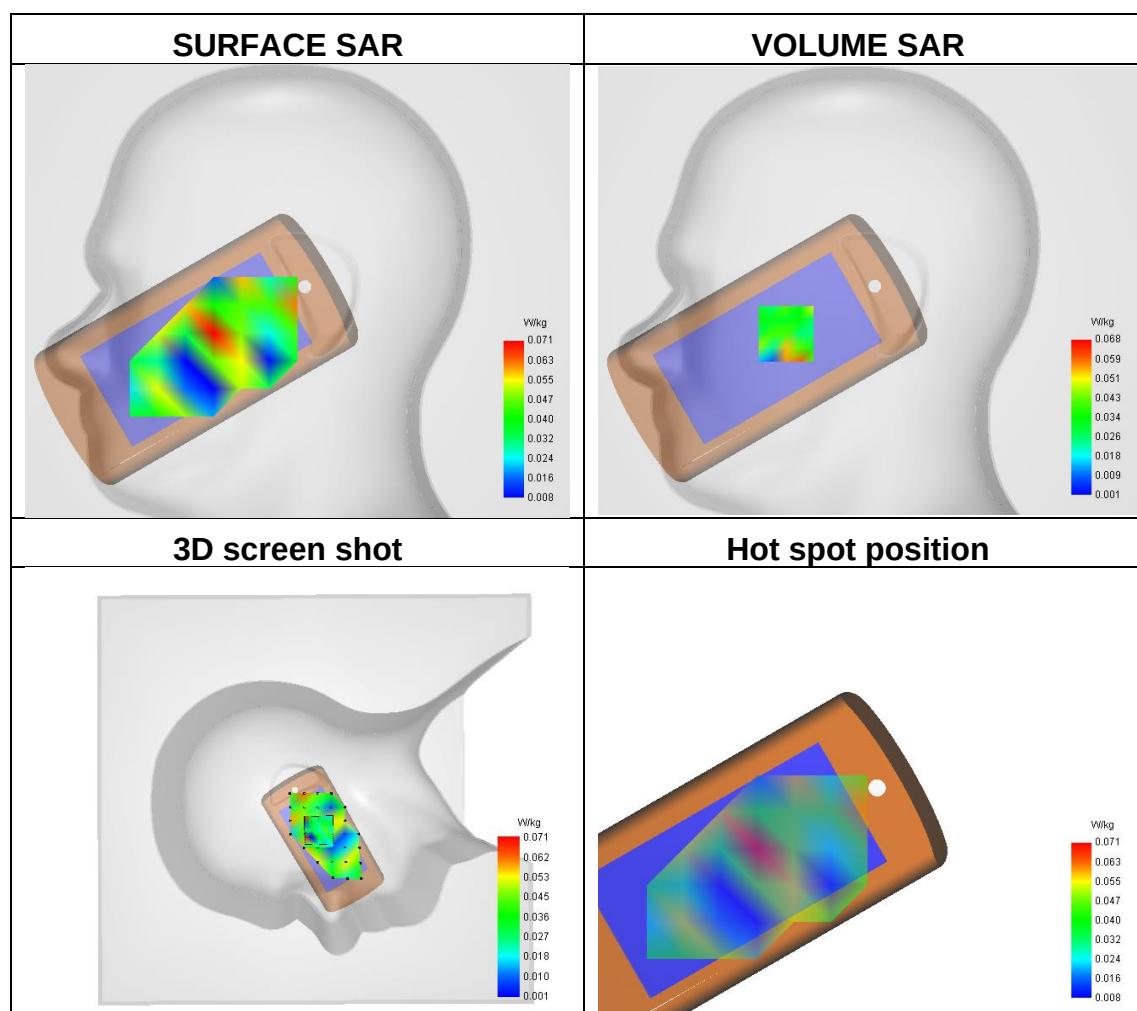




Plot 21:

Test Date	2022-11-01
Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Right head
Device Position	Tilt
Band	LTE band 7
Signal	LTE FDD
Frequency	2528.700
SAR 10g (W/Kg)	0.036
SAR 1g (W/Kg)	0.051

Maximum location: X=-47.00, Y=-25.00 ; SAR Peak: 0.15 W/kg





Plot 22:

Test Date	2022-11-01
Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 7
Signal	LTE FDD
Frequency	2528.7000
SAR 10g (W/Kg)	0.190
SAR 1g (W/Kg)	0.355

Maximum location: X=6.00, Y=-10.00 ; SAR Peak: 0.68 W/kg

