9.4. SAR Simultaneous Transmission Analysis

Band	Test Position	Scaled SAR			Σ SAR (W/kg)	SPLSR	Remark
		Body-Worn	WIFI 2.4G	BT			
WCDMA Band II	Front	0.43	0.12	0.04	0.55	N/A	N/A
	Back	0.79	0.22	0.09	1.01	N/A	N/A
	Top	0.06	/	/	0.06	N/A	N/A
	Bottom	/	0.01	0.01	0.01	N/A	N/A
WCDMA Band IV	Front	0.13	0.12	0.04	0.25	N/A	N/A
	Back	0.33	0.22	0.09	0.55	N/A	N/A
	Top	0.02	/	/	0.02	N/A	N/A
	Bottom	/	0.01	0.01	0.01	N/A	N/A
WCDMA Band V	Front	0.12	0.12	0.04	0.24	N/A	N/A
	Back	0.21	0.22	0.09	0.43	N/A	N/A
	Top	0.01	/	/	0.01	N/A	N/A
	Bottom	/	0.01	0.01	0.01	N/A	N/A

Band	Test Position	RB allocation	Scaled			Σ SAR (W/kg)	SPLSR	Remark
			Body-Worn	WIFI 2.4G	Bluetooth			
LTE Band 2 QPSK (20MHz)	Front	1	0.13	0.12	0.04	0.25	N/A	N/A
		50	0.12	0.12	0.04	0.24	N/A	N/A
	Back	1	0.27	0.22	0.09	0.49	N/A	N/A
		50	0.26	0.22	0.09	0.48	N/A	N/A
	Top	1	0.01	/	/	0.02	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Bottpm	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.31	0.12	0.04	0.43	N/A	N/A
		50	0.44	0.12	0.04	0.56	N/A	N/A
	Back	1	0.63	0.22	0.09	0.85	N/A	N/A
		50	0.77	0.22	0.09	0.99	N/A	N/A
	Top	1	0.04	/	/	0.04	N/A	N/A
		50	0.02	/	/	0.02	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A

LTE Band 5 QPSK (10MHz)	Front	1	0.10	0.12	0.04	0.22	N/A	N/A
		25	0.10	0.12	0.04	0.22	N/A	N/A
	Back	1	0.21	0.22	0.09	0.43	N/A	N/A
		25	0.18	0.22	0.09	0.40	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.33	0.12	0.04	0.45	N/A	N/A
		50	0.40	0.12	0.04	0.52	N/A	N/A
	Back	1	0.76	0.22	0.09	0.98	N/A	N/A
		50	0.67	0.22	0.09	0.89	N/A	N/A
	Top	1	0.05	/	/	0.05	N/A	N/A
		50	0.04	/	/	0.04	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A
LTE Band 12 QPSK (10MHz)	Front	1	0.21	0.12	0.04	0.33	N/A	N/A
		25	0.19	0.12	0.04	0.31	N/A	N/A
	Back	1	0.38	0.22	0.09	0.60	N/A	N/A
		25	0.38	0.22	0.09	0.60	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 13 QPSK (10MHz)	Front	1	0.16	0.12	0.04	0.28	N/A	N/A
		25	0.16	0.12	0.04	0.28	N/A	N/A
	Back	1	0.38	0.22	0.09	0.60	N/A	N/A
		25	0.32	0.22	0.09	0.54	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 14 QPSK (10MHz)	Front	1	0.14	0.12	0.04	0.26	N/A	N/A
		25	0.11	0.12	0.04	0.23	N/A	N/A
	Back	1	0.31	0.22	0.09	0.53	N/A	N/A
		25	0.25	0.22	0.09	0.47	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

LTE Band 17 QPSK (10MHz)	Front	1	0.18	0.12	0.04	0.30	N/A	N/A
		25	0.14	0.12	0.04	0.26	N/A	N/A
	Back	1	0.39	0.22	0.09	0.61	N/A	N/A
		25	0.38	0.22	0.09	0.60	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 25 QPSK (20MHz)	Front	1	0.21	0.12	0.04	0.33	N/A	N/A
		25	0.21	0.12	0.04	0.33	N/A	N/A
	Back	1	0.47	0.22	0.09	0.69	N/A	N/A
		25	0.43	0.22	0.09	0.65	N/A	N/A
	Top	1	0.02	/	/	0.02	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 26-1 QPSK (10MHz)	Front	1	0.12	0.12	0.04	0.24	N/A	N/A
		25	0.11	0.12	0.04	0.33	N/A	N/A
	Back	1	0.22	0.22	0.09	0.33	N/A	N/A
		25	0.22	0.22	0.09	0.44	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	0.01	N/A	N/A
LTE Band 26-2 QPSK (15MHz)	Front	1	0.25	0.12	0.04	0.37	N/A	N/A
		38	0.31	0.12	0.04	0.43	N/A	N/A
	Back	1	0.50	0.22	0.09	0.72	N/A	N/A
		38	0.54	0.22	0.09	0.76	N/A	N/A
	Top	1	0.02	/	/	0.02	N/A	N/A
		38	0.02	/	/	0.02	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		38	/	0.01	0.01	0.01	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.18	0.12	0.04	0.30	N/A	N/A
		50	0.13	0.12	0.04	0.25	N/A	N/A
	Back	1	0.31	0.22	0.09	0.53	N/A	N/A
		50	0.30	0.22	0.09	0.52	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

LTE Band 66 QPSK (20MHz)	Front	1	0.45	0.12	0.04	0.57	N/A	N/A
		50	0.39	0.12	0.04	0.51	N/A	N/A
	Back	1	0.79	0.22	0.09	1.01	N/A	N/A
		50	0.69	0.22	0.09	0.91	N/A	N/A
	Top	1	0.06	/	/	0.06	N/A	N/A
		50	0.05	/	/	0.05	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A
LTE Band 71 QPSK (20MHz)	Front	1	0.08	0.12	0.04	0.20	N/A	N/A
		50	0.08	0.12	0.04	0.20	N/A	N/A
	Back	1	0.15	0.22	0.09	0.37	N/A	N/A
		50	0.16	0.22	0.09	0.38	N/A	N/A
	Top	1	0.01	/	/	0.01	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	0.01	N/A	N/A

Band	Test Position	Scaled SAR		Σ SAR (W/kg)	SPLSR	Remark
		Hotspot	WIFI 2.4G			
WCDMA Band II	Front	0.45	0.13	0.58	N/A	N/A
	Back	0.80	0.28	1.08	N/A	N/A
	Left	0.04	0.01	0.05	N/A	N/A
	Top	0.06	/	0.06	N/A	N/A
	Bottom	/	0.01	0.01	N/A	N/A
WCDMA Band IV	Front	0.42	0.13	0.55	N/A	N/A
	Back	0.77	0.28	1.05	N/A	N/A
	Left	0.04	0.01	0.05	N/A	N/A
	Top	0.06	/	0.06	N/A	N/A
	Bottom	/	0.01	0.01	N/A	N/A
WCDMA Band V	Front	0.11	0.13	0.24	N/A	N/A
	Back	0.20	0.28	0.48	N/A	N/A
	Left	0.01	0.01	0.02	N/A	N/A
	Top	0.01	/	0.01	N/A	N/A
	Bottom	/	0.01	0.01	N/A	N/A

Band	Test Position	RB allocation	Scaled		Σ SAR (W/kg)	SPLSR	Remark
			Hotspot	WIFI2.4G			
LTE Band 2 QPSK (20MHz)	Front	1	0.19	0.13	0.32	N/A	N/A
		50	0.16	0.13	0.29	N/A	N/A
	Back	1	0.39	0.28	0.67	N/A	N/A
		50	0.38	0.28	0.66	N/A	N/A
	Left	1	0.02	0.01	0.03	N/A	N/A
		50	0.02	0.01	0.03	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		50	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.40	0.13	0.53	N/A	N/A
		50	0.33	0.13	0.46	N/A	N/A
	Back	1	0.64	0.28	0.92	N/A	N/A
		50	0.77	0.28	1.05	N/A	N/A
	Left	1	0.02	0.01	0.03	N/A	N/A
		50	0.04	0.01	0.05	N/A	N/A
	Top	1	0.03	/	0.03	N/A	N/A
		50	0.07	/	0.07	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A

LTE Band 5 QPSK (10MHz)	Front	1	0.11	0.13	0.24	N/A	N/A
		50	0.09	0.13	0.22	N/A	N/A
	Back	1	0.21	0.28	0.49	N/A	N/A
		50	0.20	0.28	0.48	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		50	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		50	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.44	0.13	0.57	N/A	N/A
		50	0.42	0.13	0.55	N/A	N/A
	Back	1	0.82	0.28	1.10	N/A	N/A
		50	0.76	0.28	1.04	N/A	N/A
	Left	1	0.03	0.01	0.04	N/A	N/A
		50	0.02	0.01	0.03	N/A	N/A
	Top	1	0.04	/	0.04	N/A	N/A
		50	0.04	/	0.04	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A
LTE Band 12 QPSK (10MHz)	Front	1	0.18	0.13	0.31	N/A	N/A
		25	0.17	0.13	0.30	N/A	N/A
	Back	1	0.38	0.28	0.66	N/A	N/A
		25	0.37	0.28	0.65	N/A	N/A
	Left	1	0.02	0.01	0.03	N/A	N/A
		25	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		25	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01		N/A
		25	/	0.01	0.01		N/A
LTE Band 13 QPSK (10MHz)	Front	1	0.19	0.13	0.32	N/A	N/A
		25	0.15	0.13	0.28	N/A	N/A
	Back	1	0.38	0.28	0.66	N/A	N/A
		25	0.32	0.28	0.60	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		25	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		25	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01		N/A
		25	/	0.01	0.01		N/A

LTE Band 14 QPSK (10MHz)	Front	1	0.20	0.13	0.33	N/A	N/A
		25	0.13	0.13	0.26	N/A	N/A
	Back	1	0.30	0.28	0.58	N/A	N/A
		25	0.25	0.28	0.53	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		25	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		25	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.23	0.13	0.36	N/A	N/A
		25	0.21	0.13	0.34	N/A	N/A
	Back	1	0.40	0.28	0.68	N/A	N/A
		25	0.40	0.28	0.68	N/A	N/A
	Left	1	0.02	0.01	0.03	N/A	N/A
		25	0.02	0.01	0.03	N/A	N/A
	Top	1	0.02	/	0.02	N/A	N/A
		25	0.02	/	0.02	N/A	N/A
	Bottom	1	/	0.01	0.02	N/A	N/A
		25	/	0.01	0.02	N/A	N/A
LTE Band 25 QPSK (20MHz)	Front	1	0.25	0.13	0.38	N/A	N/A
		50	0.24	0.13	0.37	N/A	N/A
	Back	1	0.48	0.28	0.76	N/A	N/A
		50	0.47	0.28	0.75	N/A	N/A
	Left	1	0.02	0.01	0.03	N/A	N/A
		50	0.02	0.01	0.03	N/A	N/A
	Top	1	0.03	/	0.03	N/A	N/A
		50	0.03	/	0.03	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	N/A	N/A
LTE Band 26-1 QPSK (10MHz)	Front	1	0.13	0.13	0.26	N/A	N/A
		25	0.14	0.13	0.27	N/A	N/A
	Back	1	0.22	0.28	0.50	N/A	N/A
		25	0.22	0.28	0.50	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		25	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		25	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		25	/	0.01	0.01	N/A	N/A

LTE Band 26-2 QPSK (15MHz)	Front	1	0.29	0.13	0.42	N/A	N/A
		38	0.29	0.13	0.42	N/A	N/A
	Back	1	0.54	0.28	0.82	N/A	N/A
		38	0.53	0.28	0.81	N/A	N/A
	Left	1	0.03	0.01	0.04	N/A	N/A
		38	0.03	0.01	0.04	N/A	N/A
	Top	1	0.04	/	0.04	N/A	N/A
		38	0.03	/	0.03	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		38	/	0.01	0.01	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.17	0.13	0.30	N/A	N/A
		50	0.13	0.13	0.26	N/A	N/A
	Back	1	0.32	0.28	0.60	N/A	N/A
		50	0.31	0.28	0.59	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		50	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		50	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		38	/	0.01	0.01	N/A	N/A
LTE Band 66 QPSK (20MHz)	Front	1	0.43	0.13	0.56	N/A	N/A
		50	0.36	0.13	0.49	N/A	N/A
	Back	1	0.78	0.28	1.06	N/A	N/A
		50	0.68	0.28	0.96	N/A	N/A
	Left	1	0.03	0.01	0.04	N/A	N/A
		50	0.03	0.01	0.04	N/A	N/A
	Top	1	0.03	/	0.03	N/A	N/A
		50	0.03	/	0.03	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A

LTE Band 71 QPSK (20MHz)	Front	1	0.07	0.13	0.20	N/A	N/A
		50	0.07	0.13	0.20	N/A	N/A
	Back	1	0.15	0.28	0.43	N/A	N/A
		50	0.15	0.28	0.43	N/A	N/A
	Left	1	0.01	0.01	0.02	N/A	N/A
		50	0.01	0.01	0.02	N/A	N/A
	Top	1	0.01	/	0.01	N/A	N/A
		50	0.01	/	0.01	N/A	N/A
	Bottom	1	/	0.01	0.01	N/A	N/A
		50	/	0.01	0.01	N/A	N/A

Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore measured volumetric simultaneous SAR summation is not required per FCC KDB Publication 447498 D01v05r02.

9.5. Measurement Uncertainty (450MHz-3GHz)

UNCERTAINTY EVALUATION FOR HEADSET SAR									
Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	3.00	3.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Test sample related									
Test sample positioning	7.2.2.4.4	2.6	N	1	1	1	2.60	2.60	∞
Device holder uncertainty	7.2.2.4.2 7.2.2.4.3	3	N	1	1	1	3.00	3.00	∞
output power variation-SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
SAR scaling	7.2.5	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.83	10.54	
Expanded uncertainty (95%CONFIDENCEINTERVAL			k				21.26	21.08	

UNCERTAINTY FOR PERFORMANCE CHECK									
Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	0.00	0.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Dipole									
Deviation of experimental source from numerical source		4	N	1	1	1	4.00	4.00	∞
Input power and SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole axis to liquid distance		2	R	$\sqrt{3}$	1	1			∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.15	10.05	
Expanded uncertainty (95%CONFIDENCEINTERVAL			k				20.29	20.10	

9.6. Test Equipment List

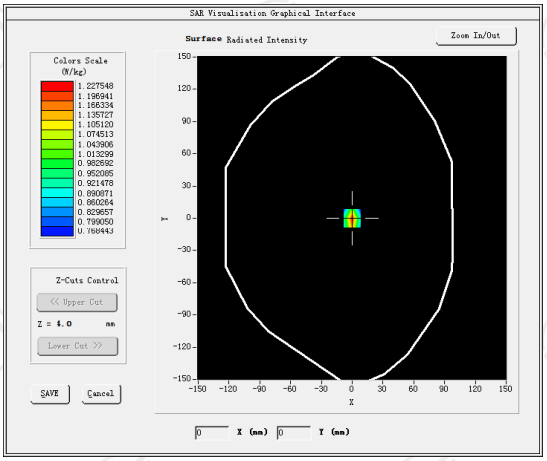
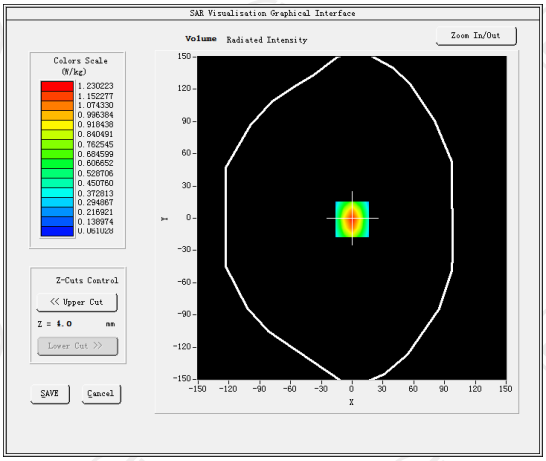
Test Equipment	Manufacturer	Model	Serial Number	Calibration	
				Calibration Date (D.M.Y)	Calibration Due (D.M.Y)
PC	Lenovo	H3050	N/A	N/A	N/A
Signal Generator	Angilent	N5182A	MY47070282	Jun. 29, 2023	Jun. 28, 2024
Multimeter	Keithley	Multimeter 2000	4078275	Jun. 29, 2023	Jun. 28, 2024
Network Analyzer	Agilent	8753E	US38432457	Feb. 24, 2023	Feb. 23, 2024
Wideband Radio Communication Tester	R&S	CMW500	114220	Jun. 29, 2023	Jun. 28, 2024
Power Meter	Agilent	E4418B	GB43312526	Mar. 13, 2023	Mar. 12, 2024
Power Meter	Agilent	E4416A	MY45101555	Jun. 29, 2023	Jun. 28, 2024
Power Meter	Agilent	N1912A	MY50001018	Jun. 29, 2023	Jun. 28, 2024
Power Sensor	Agilent	E9301A	MY41497725	Jun. 29, 2023	Jun. 28, 2024
Power Sensor	Agilent	E9327A	MY44421198	Jun. 29, 2023	Jun. 28, 2024
Power Sensor	Agilent	E9323A	MY53070005	Jun. 29, 2023	Jun. 28, 2024
Power Amplifier	PE	PE15A4019	112342	N/A	N/A
Directional Coupler	Agilent	722D	MY52180104	N/A	N/A
Attenuator	Chensheng	FF779	134251	N/A	N/A
E-Field PROBE	MVG	SSE2	SN 25/22 EPGO375	Jun 29, 2023	Jun. 28, 2024
DIPOLE 835	MVG	SID835	SN 16/15 DIP 0G835-369	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 1800	MVG	SID 1800	SN 16/15 DIP 1G800-371	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 1900	MVG	SID1900	SN 16/15 DIP 1G900-372	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 2450	MVG	SID 2450	SN 16/15 DIP 2G450-374	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 2600	MVG	SID 2600	SN 16/15 DIP 2G600-375	Jun. 05, 2021	Jun. 04, 2024
Limesar Dielectric Probe	MVG	SCLMP	SN 19/15 OCPG71	Jun. 05, 2021	Jun. 04, 2024
Communication Antenna	MVG	ANTA59	SN 39/14 ANTA59	N/A	N/A
Mobile Phone Position Device	MVG	MSH101	SN 19/15 MSH101	N/A	N/A
Dummy Probe	MVG	DP66	SN 13/15 DP66	N/A	N/A
SAM PHANTOM	MVG	SAM120	SN 19/15 SAM120	N/A	N/A
PHANTOM TABLE	MVG	TABP101	SN 19/15 TABP101	N/A	N/A
Robot TABLE	MVG	TABP61	SN 19/15 TABP61	N/A	N/A
6 AXIS ROBOT	KUKA	KR6-R900	501822	N/A	N/A

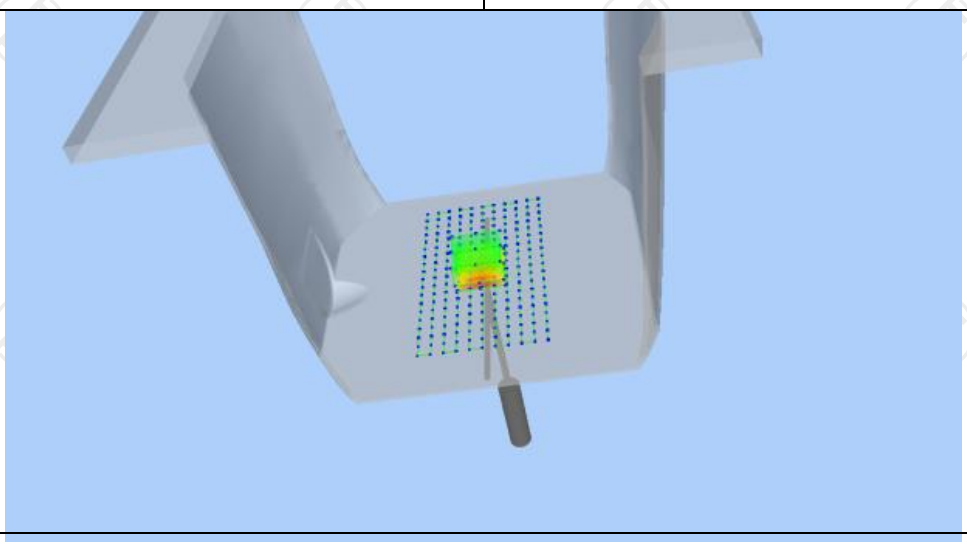
Note: *1.N/A means this equipment no need to calibrate*
2.Each Time means this device need to calibrate every use time
3. The dipole was not damaged properly repaired.
4. The measured SAR deviates from the calibrated SAR value by less than 10%
5. The most recent return-loss result meets the required 20 dB minimum return-loss requirement
6. The most recent measurement of the real or imaginary parts of the impedance deviates by less than 5 Ω from the previous measurement.

10. System Check Results

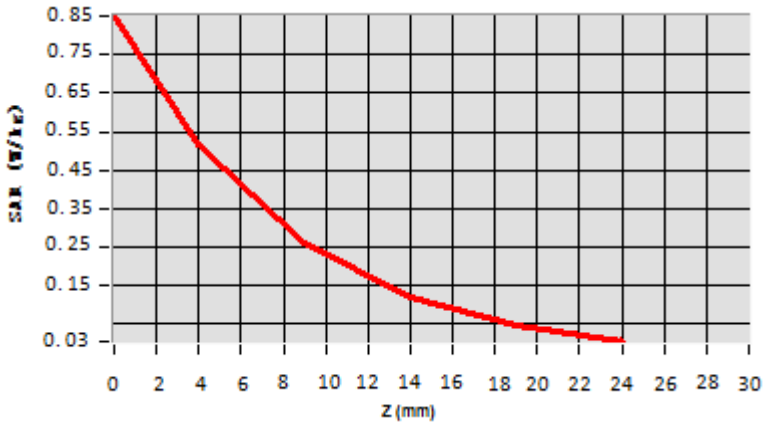
Date of measurement: 05/29/2023 Test mode: 835 (Head)
Product Description: Validation
Dipole Model: SID835
E-Field Probe: SSE2 (SN 25/22 EPGO375)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.80
Frequency (MHz)	835.000000
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	-0.090000
SAR 10g (W/Kg)	**0.570250**
SAR 1g (W/Kg)	**0.886135**

SURFACE SAR	**VOLUME SAR**
	



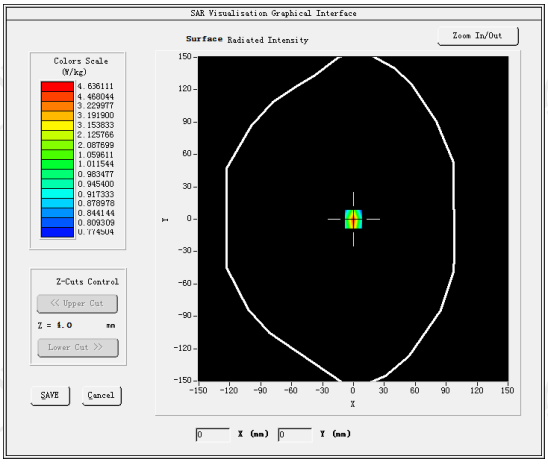
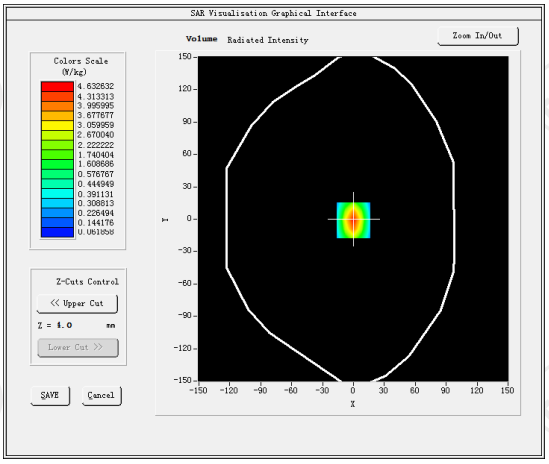
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8625	0.5302	0.2594	0.1302	0.1025

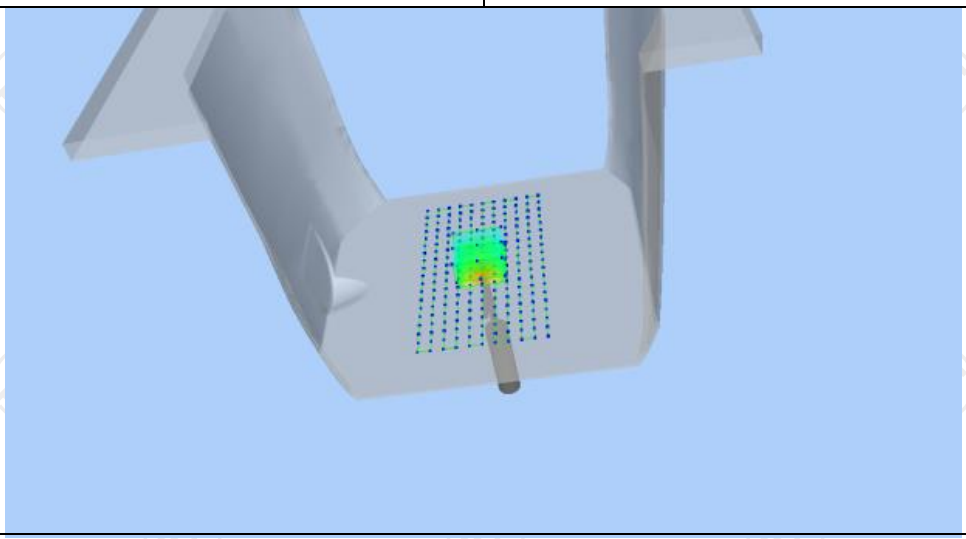


Hot spot position

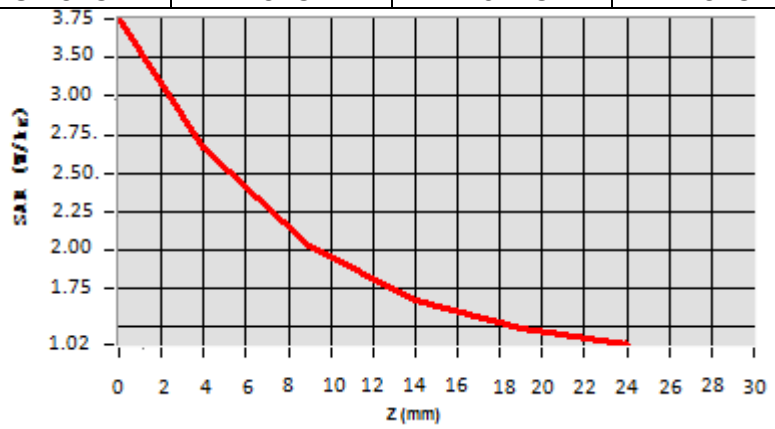
Date of measurement: 06/05/2023 Test mode: 1800MHz (Head)
Product Description: Validation
Dipole Model: SID1800
E-Field Probe: SSE2 (SN 25/22 EPGO375)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.08
Frequency (MHz)	1800.000000
Relative permittivity (real part)	39.070000
Relative permittivity (imaginary part)	14.000000
Conductivity (S/m)	1.380000
Variation (%)	1.250000
SAR 10g (W/Kg)	**2.201458**
SAR 1g (W/Kg)	**3.752497**

SURFACE SAR	**VOLUME SAR**
	



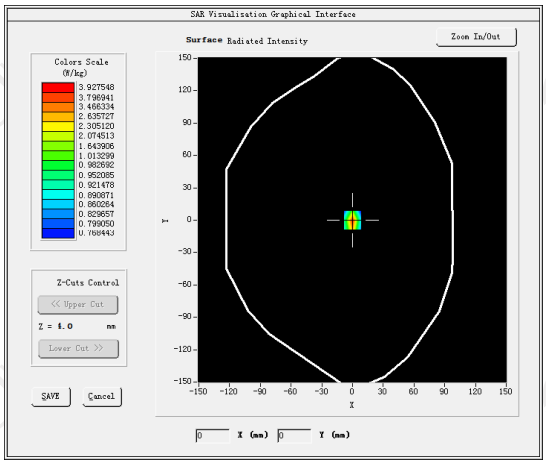
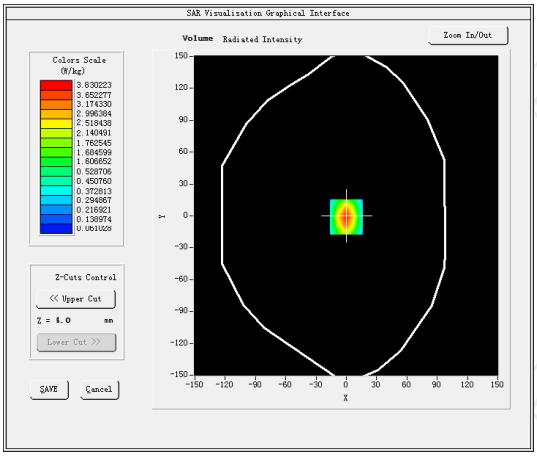
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7625	2.6254	2.0245	1.6254	1.0214

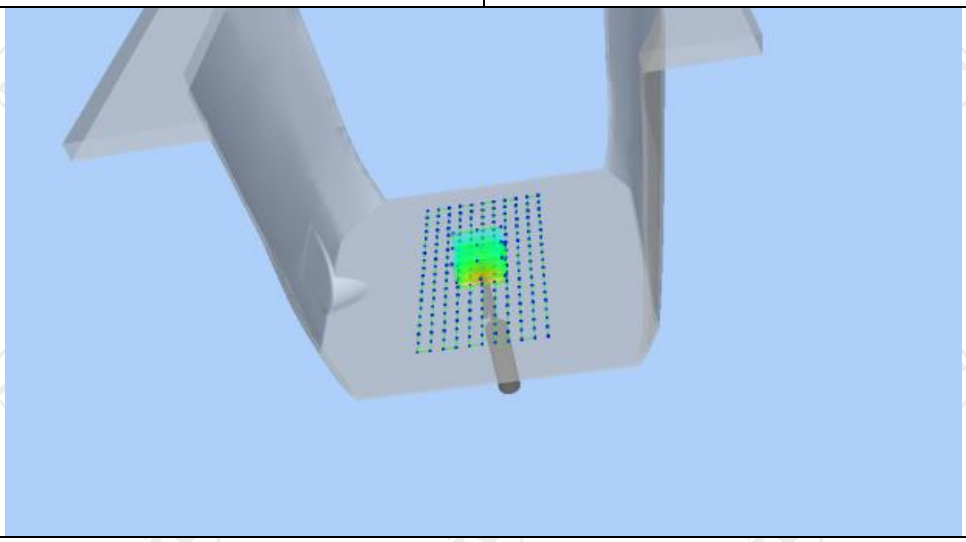


Hot spot position

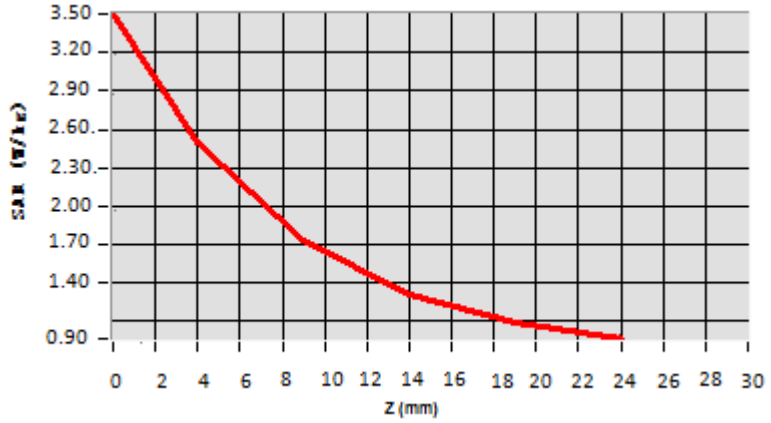
Date of measurement: 06/13/2023 Test mode: 1900MHz (Head)
Product Description: Validation
Dipole Model: SID1900
E-Field Probe: SSE2 (SN 25/22 EPGO375)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.23
Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.076721
Relative permittivity (imaginary part)	12.607061
Conductivity (S/m)	1.367609
Variation (%)	-0.910000
SAR 10g (W/Kg)	**1.899324**
SAR 1g (W/Kg)	**3.576354**

SURFACE SAR	**VOLUME SAR**
	



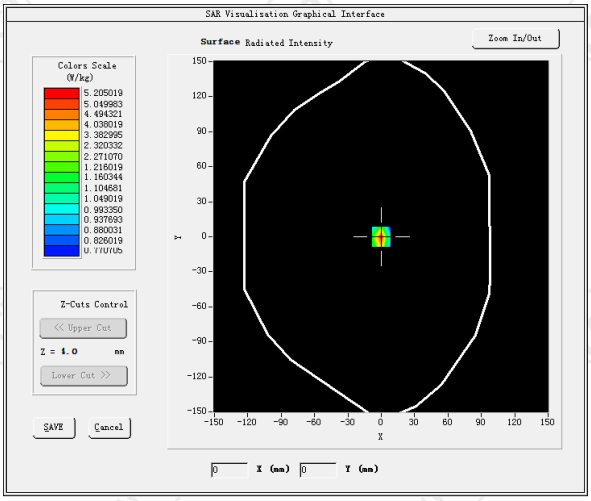
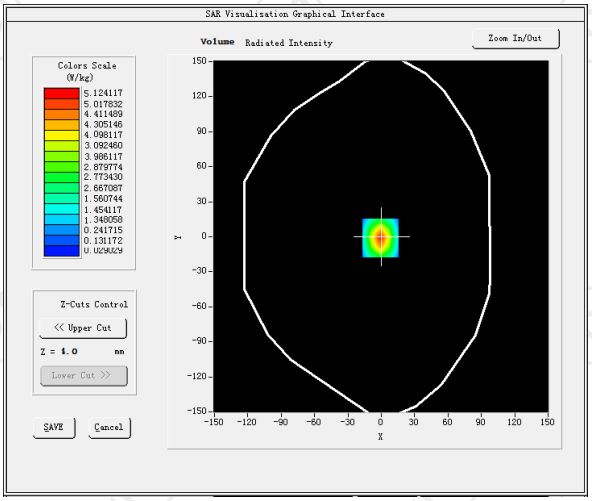
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.5325	2.5687	1.7025	1.3025	0.1125

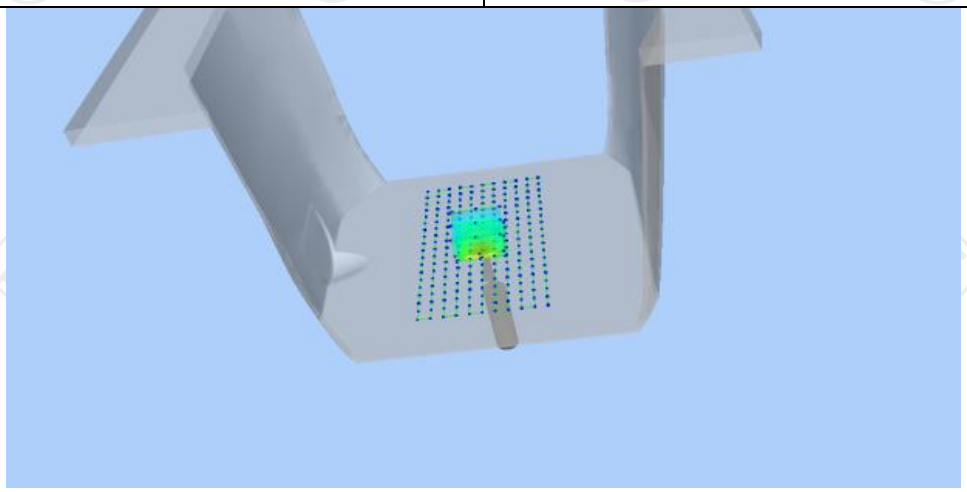


Hot spot position

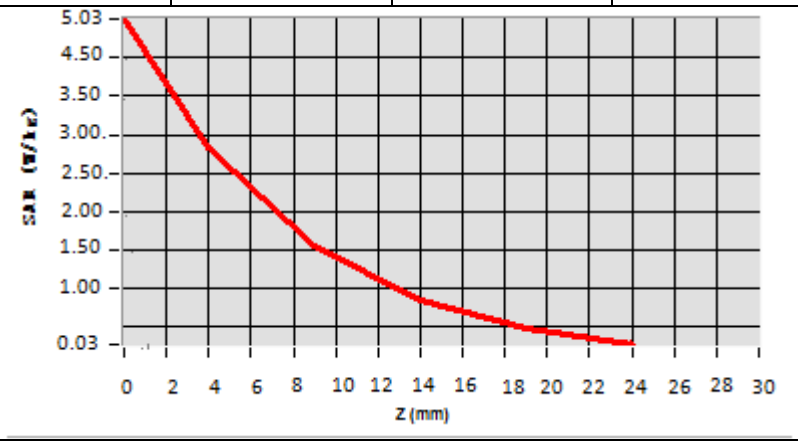
Date of measurement: 06/19/2023 Test mode: 2450MHz (Head)
Product Description: Validation
Dipole Model: SID2450
E-Field Probe: SSE2 (SN 25/22 EPGO375)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.31
Frequency (MHz)	2450.000000
Relative permittivity (real part)	37.821613
Relative permittivity (imaginary part)	13.546980
Conductivity (S/m)	1.834111
Variation (%)	-0.470000
SAR 10g (W/Kg)	**2.364445**
SAR 1g (W/Kg)	**4.994244**

SURFACE SAR	**VOLUME SAR**
	



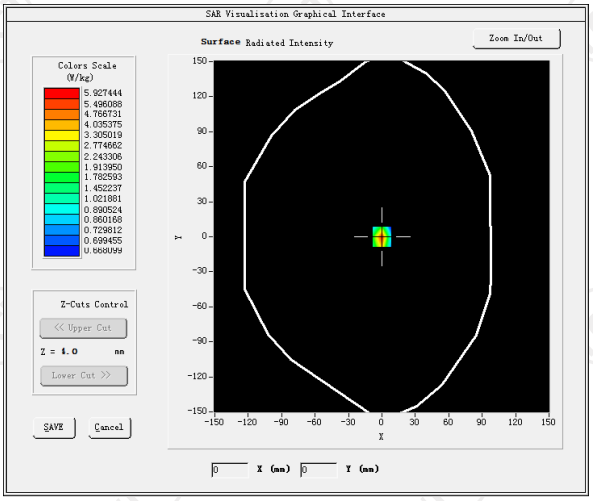
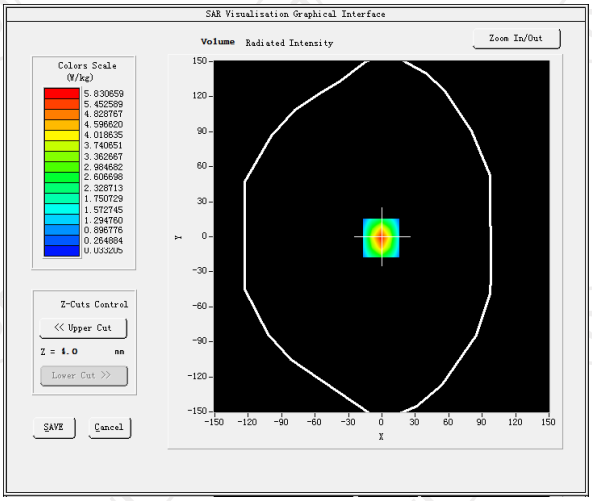
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0262	2.7584	1.5026	0.8252	0.4125

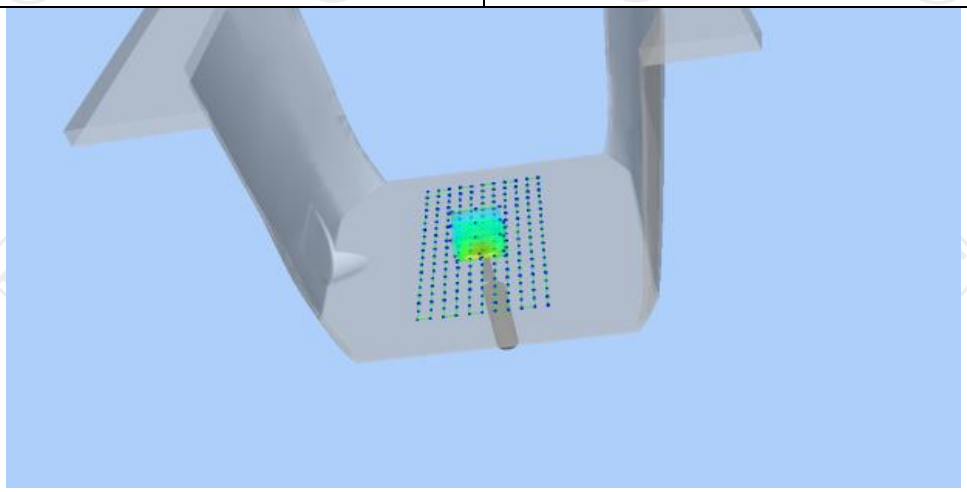


Hot spot position

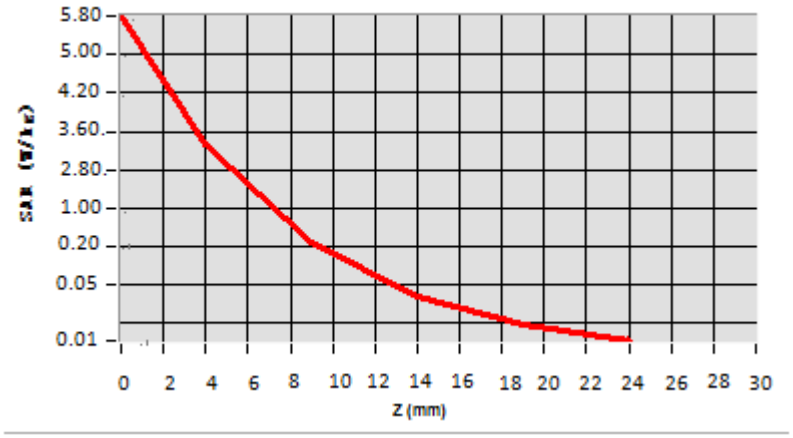
Date of measurement: 06/25/2023 Test mode: 2600MHz (Head)
Product Description: Validation
Dipole Model: SID2600
E-Field Probe: SSE2 (SN 25/22 EPGO375)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.36
Frequency (MHz)	2535.000000
Relative permittivity (real part)	38.853477
Relative permittivity (imaginary part)	13.545489
Conductivity (S/m)	1.922567
Variation (%)	-1.360000
SAR 10g (W/Kg)	**2.430127**
SAR 1g (W/Kg)	**5.413744**

SURFACE SAR	**VOLUME SAR**
	



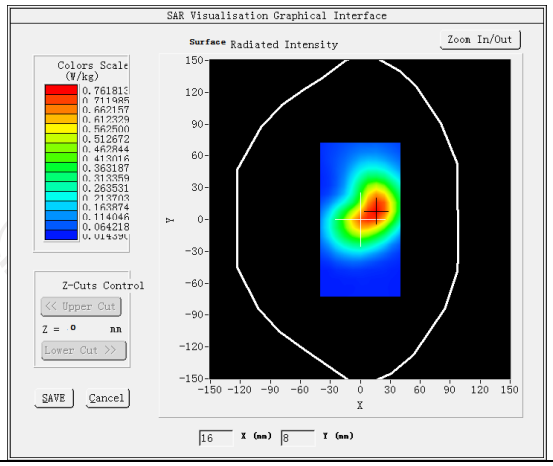
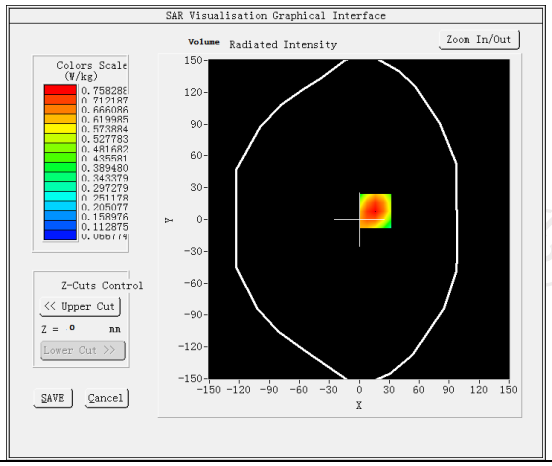
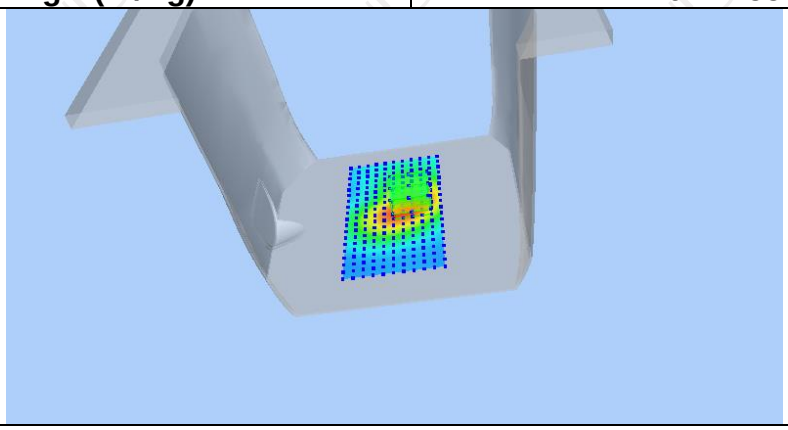
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7893	3.2375	0.2098	0.0387	0.0249



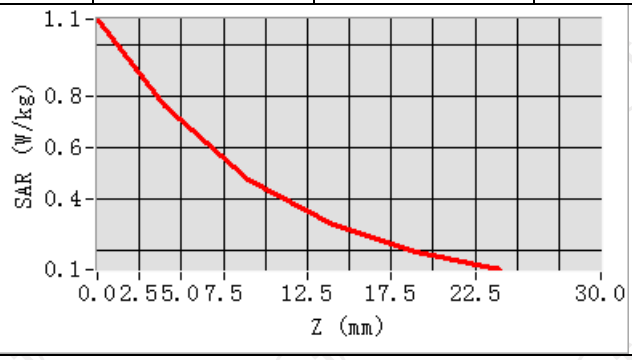
Hot spot position

11. SAR Test Data

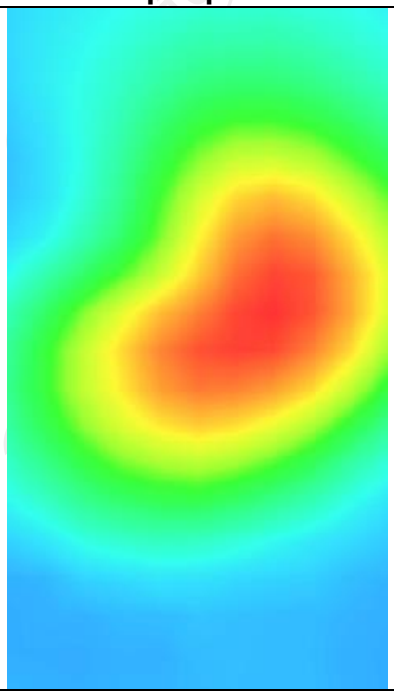
WCDMA Band II

MEASUREMENT 1	
Middle Band SAR (Channel 9400):	Date: 06/05/2023
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.408000
Conductivity (S/m)	1.400391
Variation (%)	-1.860000
Crest Factor	1.0
Probe Conversion factor	2.23
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	BAND2_WCDMA1900
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=16.00, Y=8.00 SAR Peak: 1.10 W/kg	
SAR 10g (W/Kg)	0.442698
SAR 1g (W/Kg)	0.721554
	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0991	0.7583	0.4715	0.2963	0.1919



Hot spot position

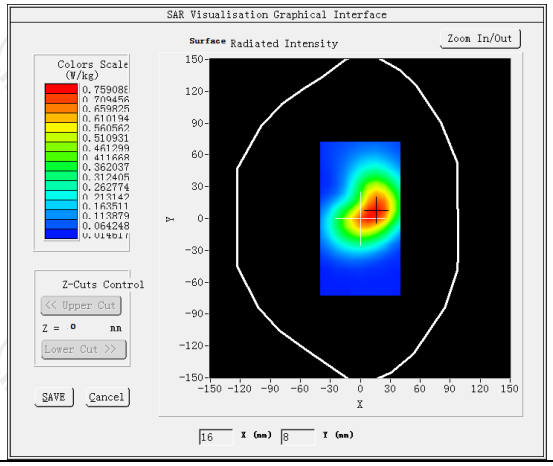


MEASUREMENT 2

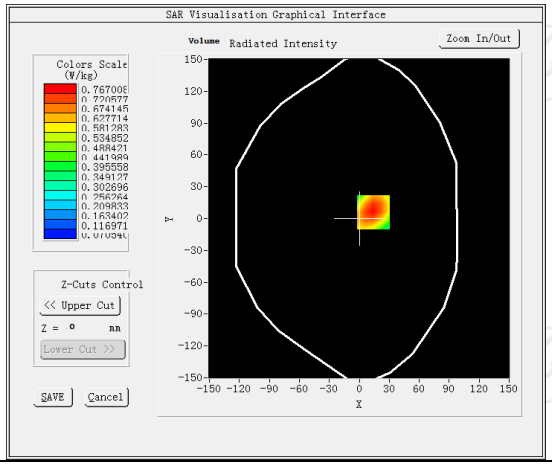
Middle Band SAR (Channel 9400): Date: 06/13/2023

Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.408000
Conductivity (S/m)	1.400391
Variation (%)	-1.590000
Crest Factor	1.0
Probe Conversion factor	2.23
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	BAND2_WCDMA1900(hotspot)

SURFACE SAR

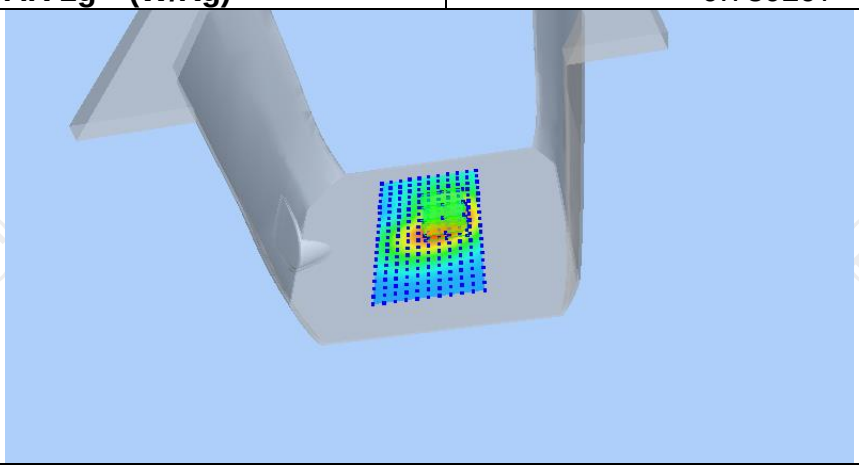


VOLUME SAR

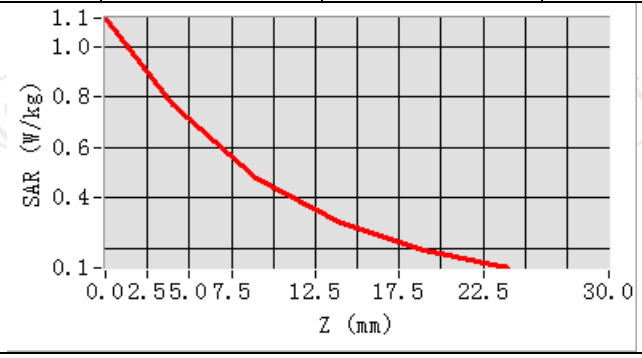


Maximum location: X=14.00, Y=6.00 SAR Peak: 1.12 W/kg

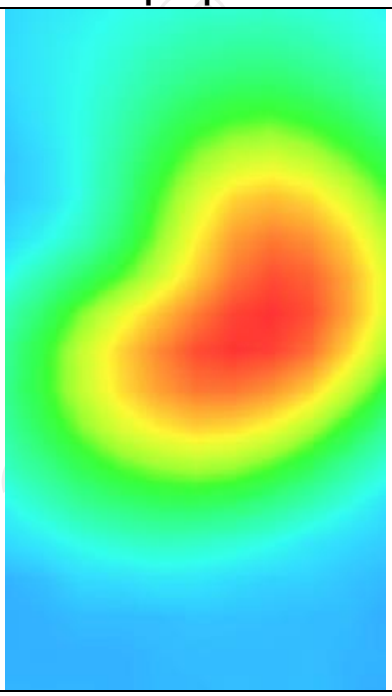
SAR 10g (W/Kg)	0.448912
SAR 1g (W/Kg)	0.730297



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1129	0.7670	0.4760	0.2985	0.1927



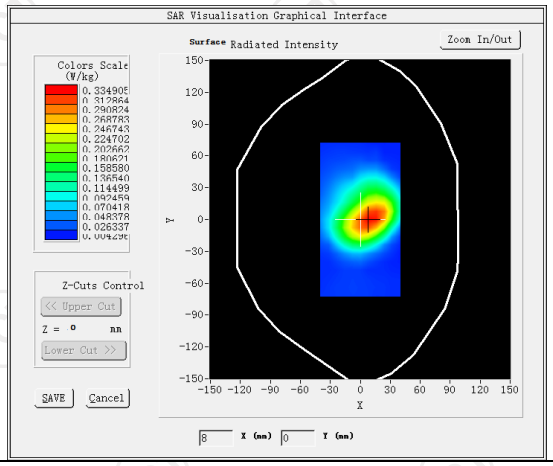
Hot spot position

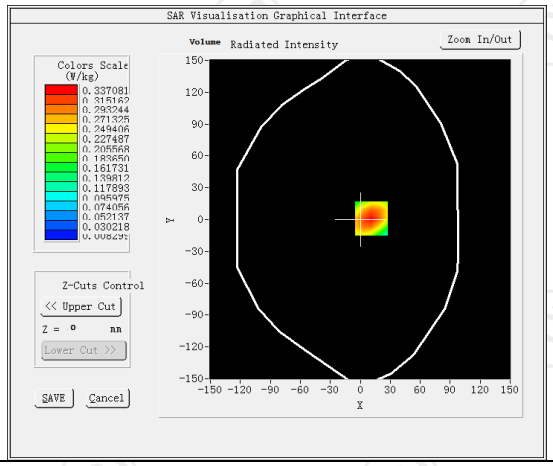


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

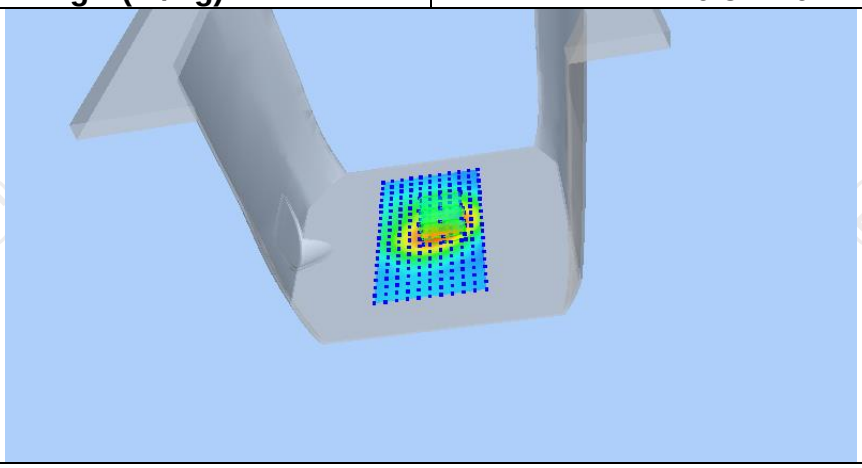
WCDMA Band IV

MEASUREMENT 1	
Middle Band SAR (Channel 1413):	Date: 06/05/2023
Frequency (MHz)	1732.600000
Relative permittivity (real part)	40.116364
Relative permittivity (imaginary part)	14.137455
Conductivity (S/m)	1.360337
Variation (%)	-2.820000
Crest Factor	1.0
Probe Conversion factor	2.08
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	BAND4_WCDMA1700
SURFACE SAR	**VOLUME SAR**

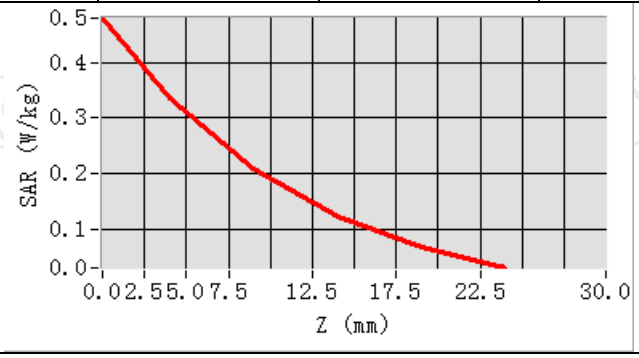




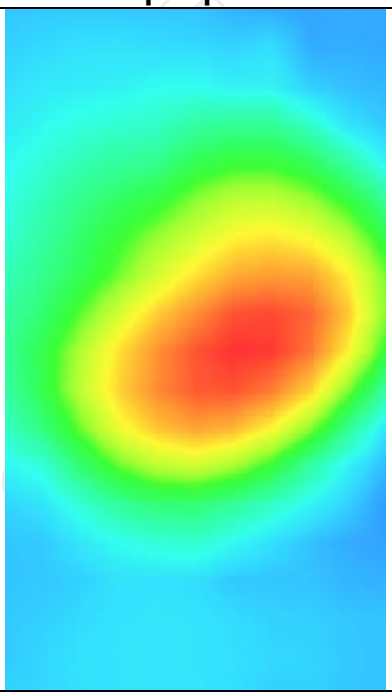
Maximum location: X=11.00, Y=1.00 SAR Peak:0.48 W/kg	
SAR 10g (W/Kg)	0.185394
SAR 1g (W/Kg)	0.317164



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4808	0.3371	0.2078	0.1214	0.0655



Hot spot position



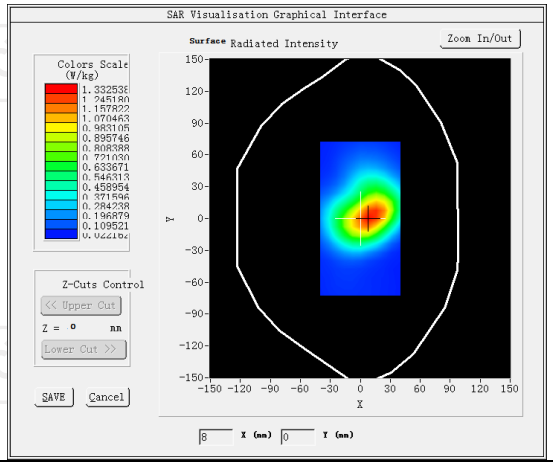
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

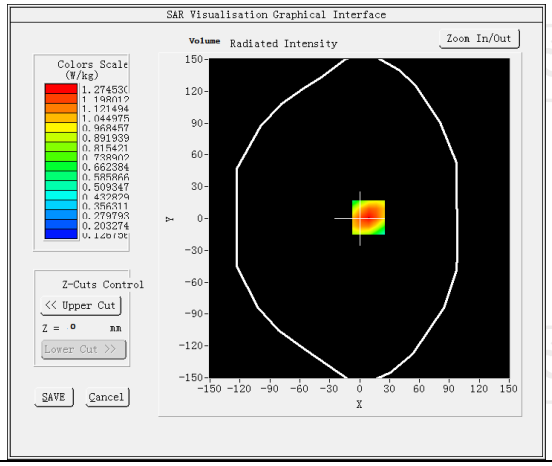
Middle Band SAR (Channel 1413): Date: 06/05/2023

Frequency (MHz)	1732.600000
Relative permittivity (real part)	40.116364
Relative permittivity (imaginary part)	14.137455
Conductivity (S/m)	1.360337
Variation (%)	-0.850000
Crest Factor	1.0
Probe Conversion factor	2.08
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	BAND4_WCDMA1700

SURFACE SAR

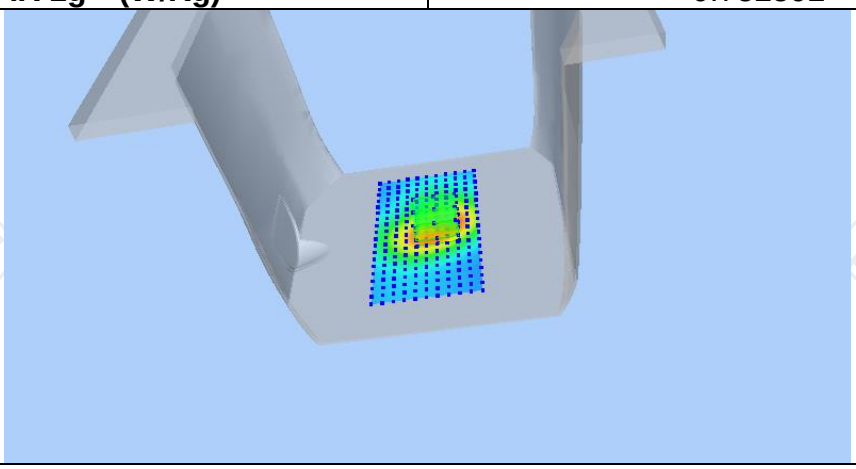


VOLUME SAR

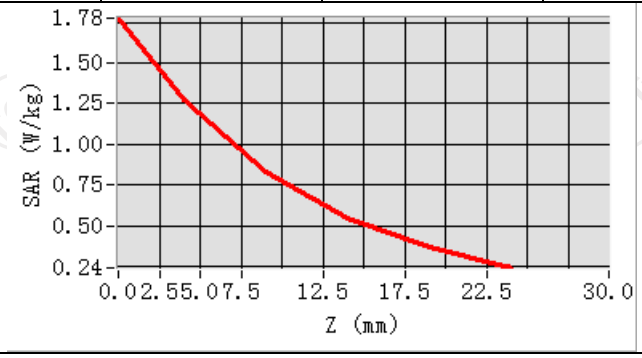


Maximum location: X=9.00, Y=1.00 SAR Peak: 1.78 W/kg

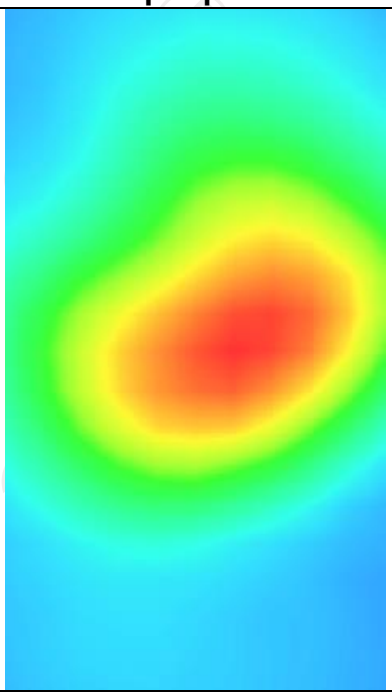
SAR 10g (W/Kg)	0.558868
SAR 1g (W/Kg)	0.752592



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.7763	1.2745	0.8345	0.5501	0.3688

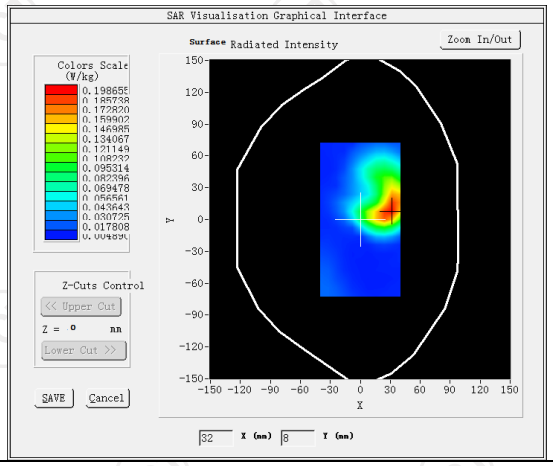
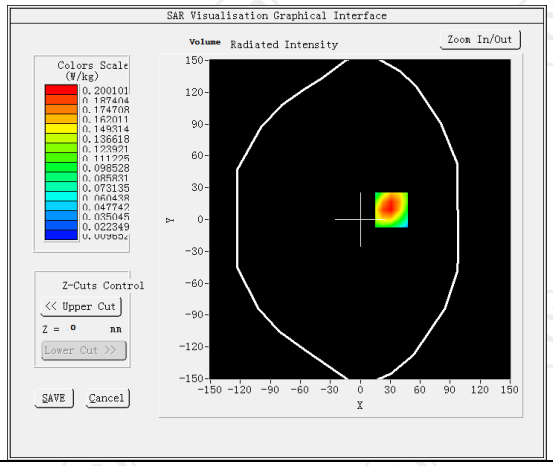


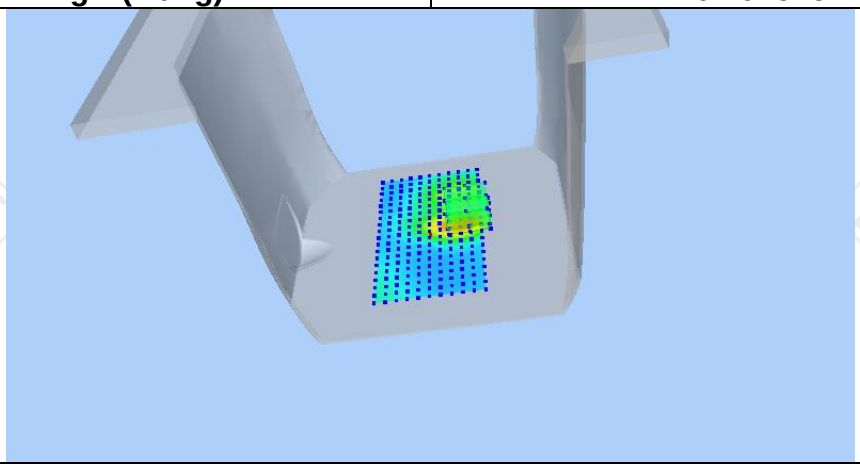
Hot spot position



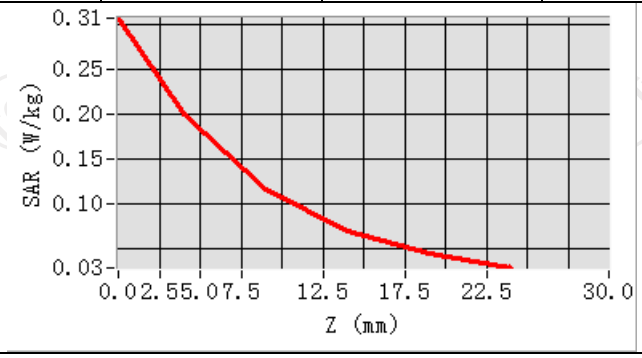
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

WCDMA Band V

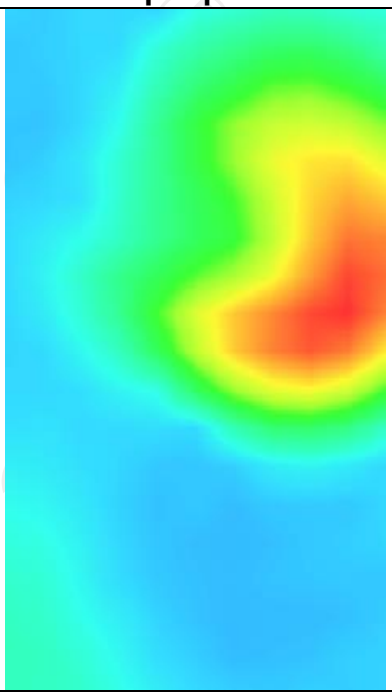
MEASUREMENT 1	
Middle Band SAR (Channel 4182):	Date: 05/29/2023
Frequency (MHz)	836.400000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901453
Variation (%)	-4.060000
Crest Factor:	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	BAND5_WCDMA850
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=31.00, Y=9.00 SAR Peak: 0.31 W/kg	
SAR 10g (W/Kg)	0.110072
SAR 1g (W/Kg)	0.191575



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3062	0.2001	0.1160	0.0689	0.0438



Hot spot position



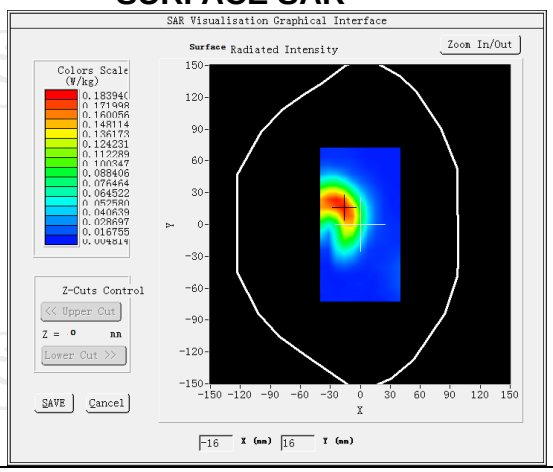
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

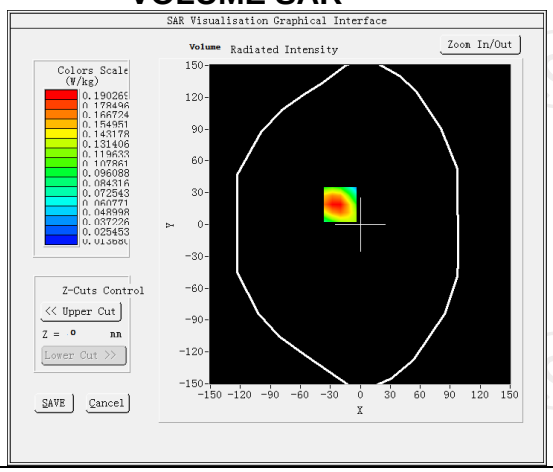
Middle Band SAR (Channel 4182): Date: 05/29/2023

Frequency (MHz)	836.400000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901453
Variation (%)	-3.570000
Crest Factor:	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	BAND5_WCDMA850(hotspot)

SURFACE SAR

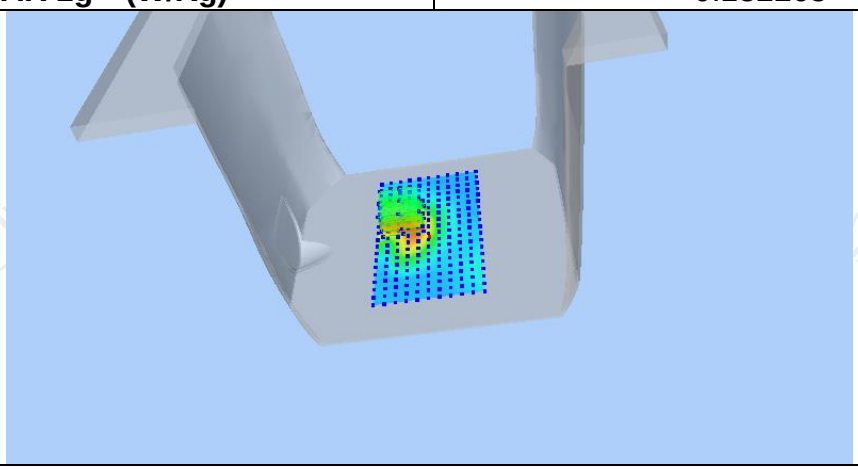


VOLUME SAR

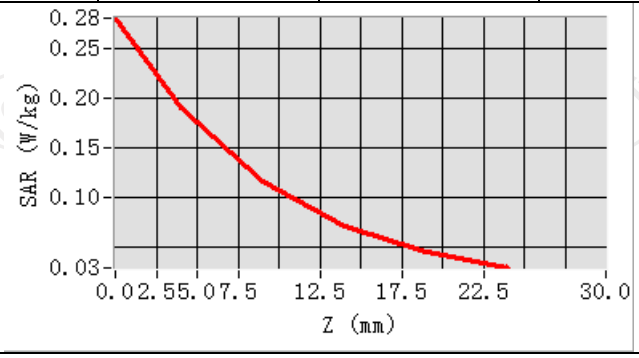


Maximum location: X=-20.00, Y=19.00 SAR Peak:0.29 W/kg

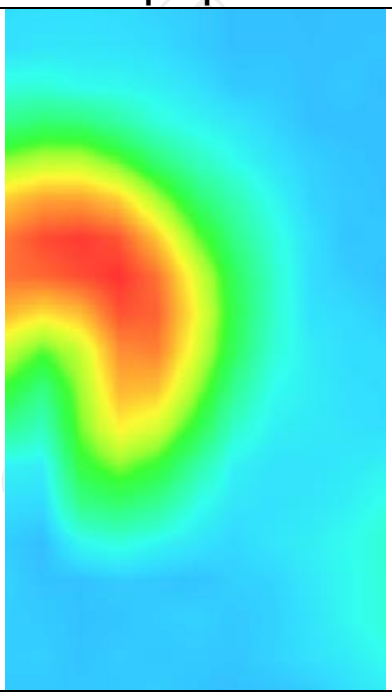
SAR 10g (W/Kg)	0.107563
SAR 1g (W/Kg)	0.182263



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2805	0.1903	0.1156	0.0710	0.0451



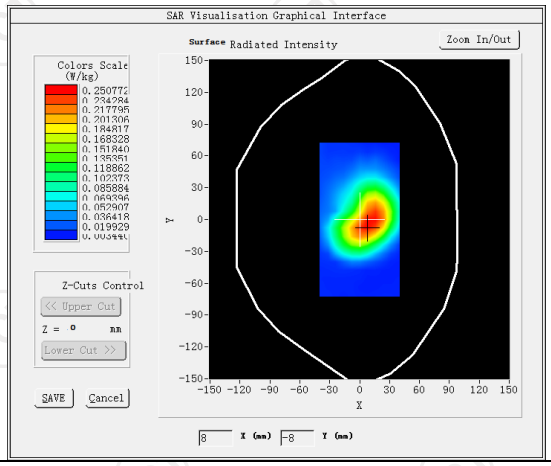
Hot spot position

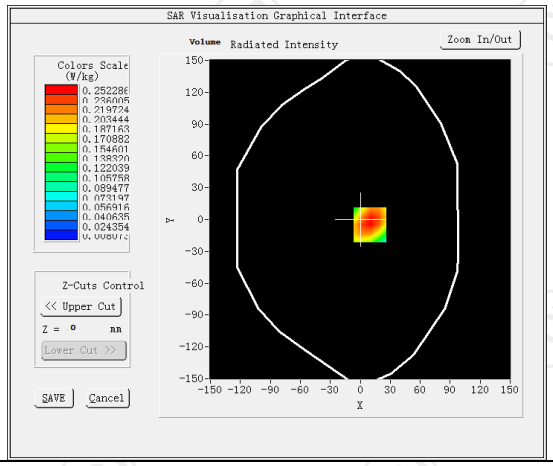


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

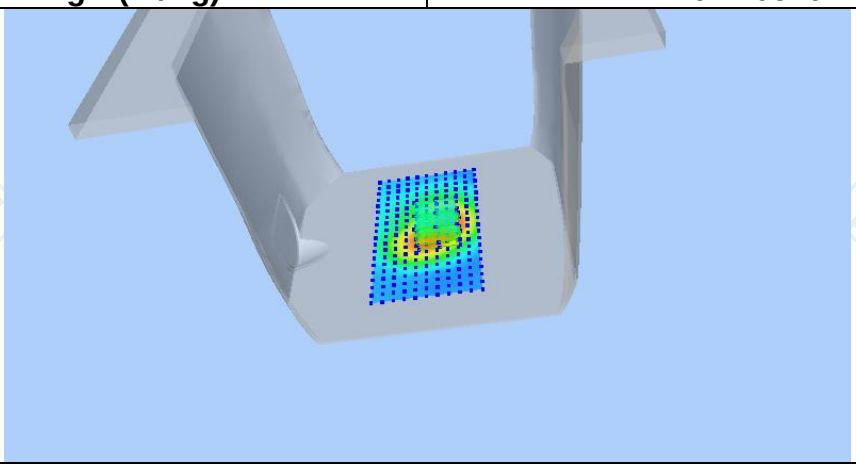
LTE Band 2

MEASUREMENT 1	
High Band SAR (Channel 19100):	Date: 06/13/2023
Frequency (MHz)	1900.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	-4.030000
Crest Factor	1.0
Probe Conversion factor	2.23
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 2 (1 RB#0)
SURFACE SAR	**VOLUME SAR**

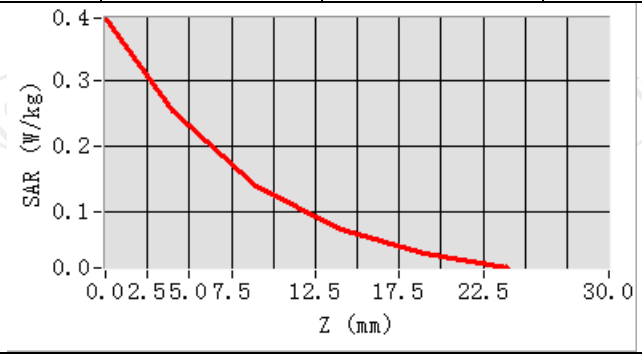




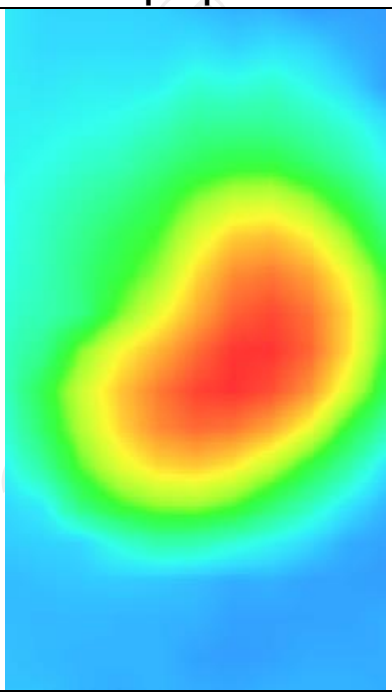
Maximum location: X=10.00, Y=-5.00 SAR Peak: 0.40 W/kg	
SAR 10g (W/Kg)	0.133358
SAR 1g (W/Kg)	0.240579



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3935	0.2523	0.1382	0.0724	0.0361



Hot spot position



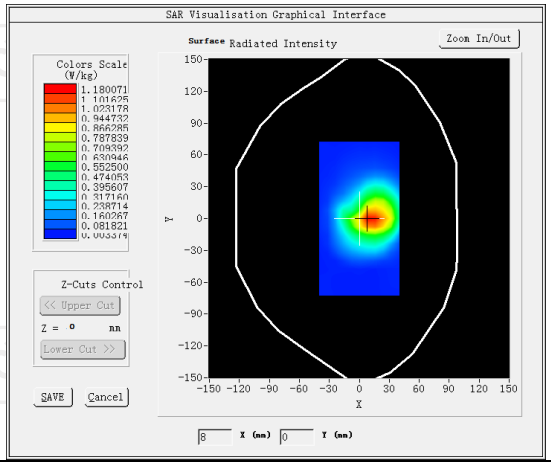
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

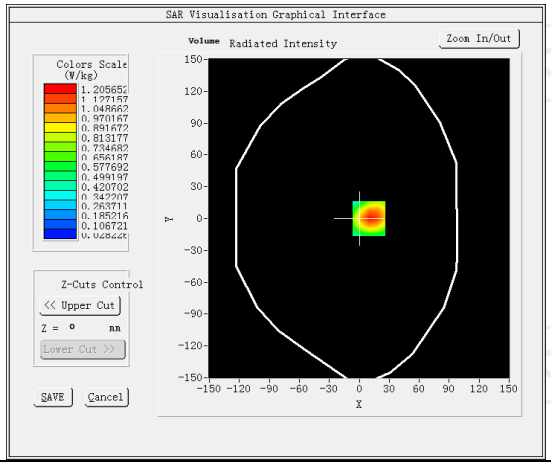
High Band SAR (Channel 19100): Date: 06/13/2023

Frequency (MHz)	1900.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	-1.450000
Crest Factor	1.0
Probe Conversion factor	2.23
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 2 (1 RB#0)

SURFACE SAR

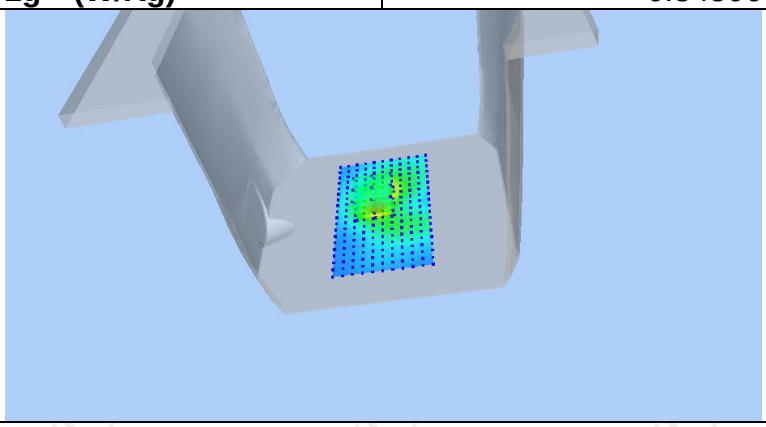


VOLUME SAR

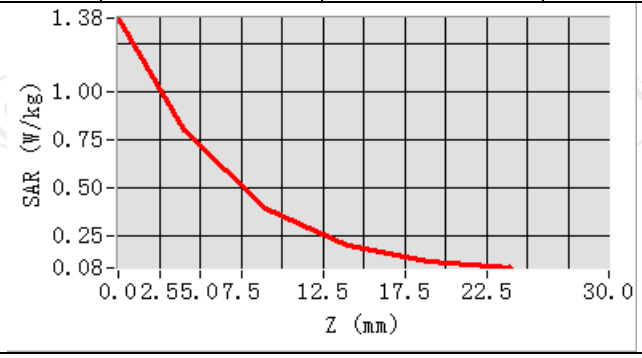


Maximum location: X=10.00, Y=0.00 SAR Peak: 1.39 W/kg

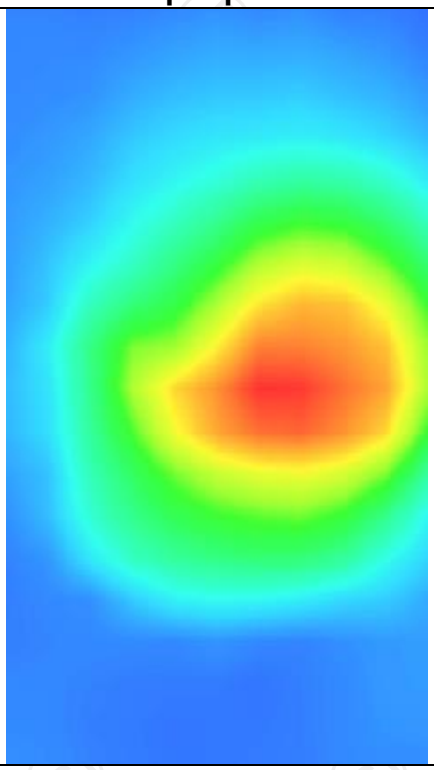
SAR 10g (W/Kg)	0.259834
SAR 1g (W/Kg)	0.345065



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.3811	0.7958	0.3847	0.1949	0.1172



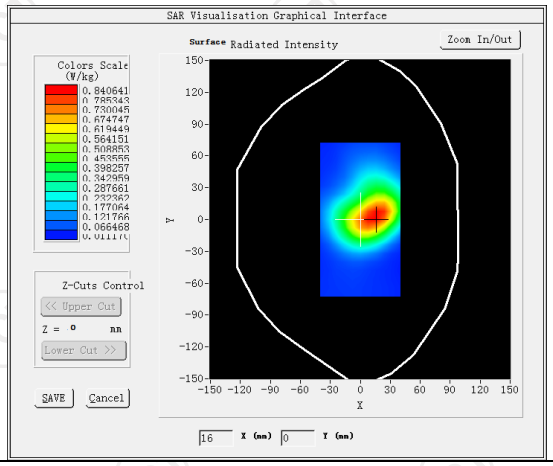
Hot spot position

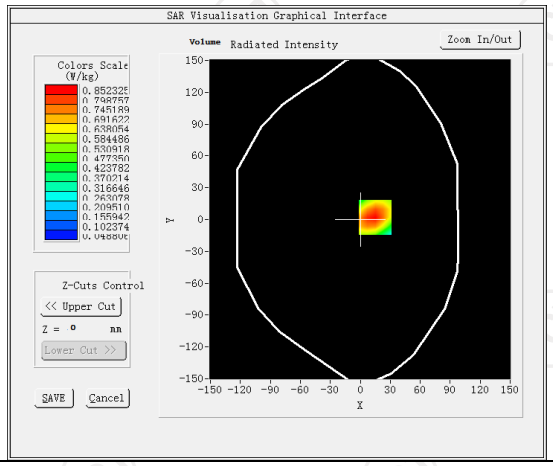


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

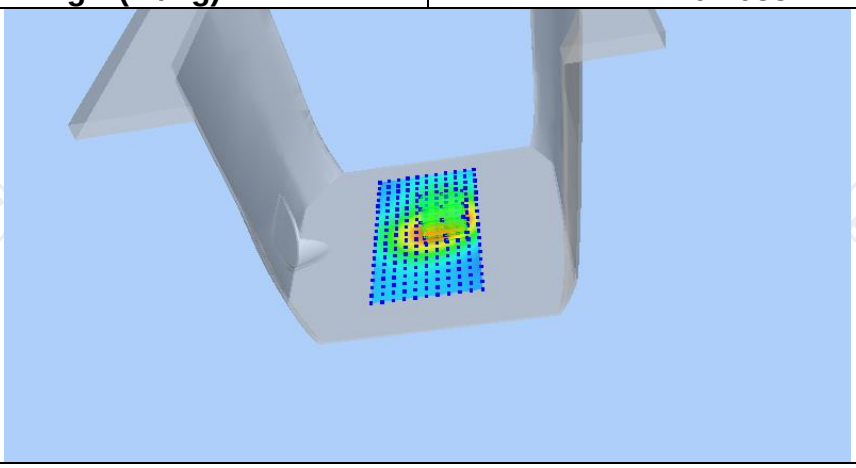
LTE Band 4

MEASUREMENT 1	
High Band SAR (Channel 20300):	Date: 06/05/2023
Frequency (MHz)	1745.000000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	-1.390000
Crest Factor	1.0
Probe Conversion factor	2.08
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 4(50 RB#0)
SURFACE SAR	**VOLUME SAR**

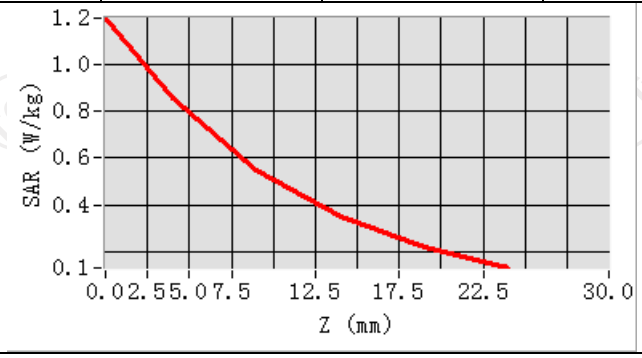




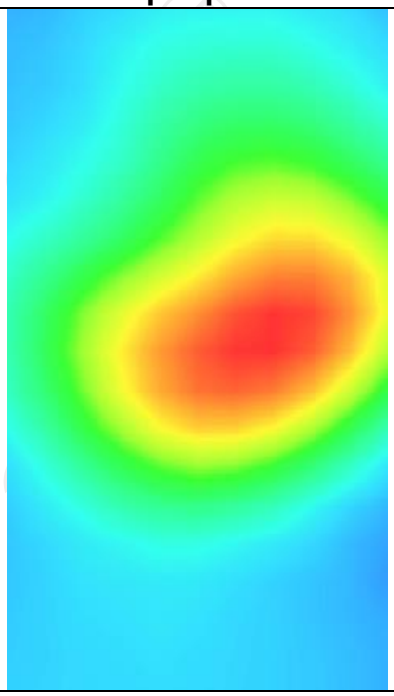
Maximum location: X=15.00, Y=2.00 SAR Peak: 1.21 W/kg	
SAR 10g (W/Kg)	0.493310
SAR 1g (W/Kg)	0.708317



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1974	0.8523	0.5474	0.3478	0.2193



Hot spot position



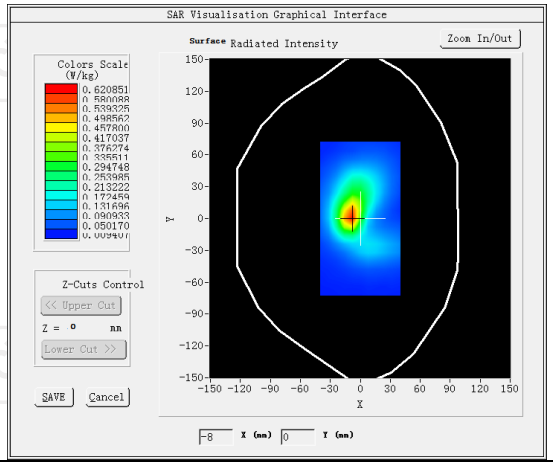
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

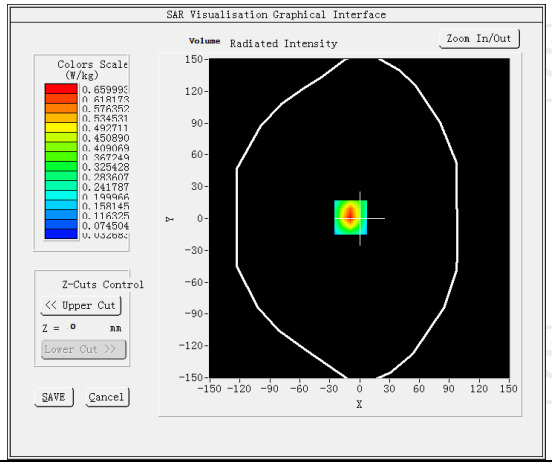
High Band SAR (Channel 20300): Date: 06/05/2023

Frequency (MHz)	1745.000000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	2.300000
Crest Factor	1.0
Probe Conversion factor	2.08
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 4(50 RB#0)

SURFACE SAR

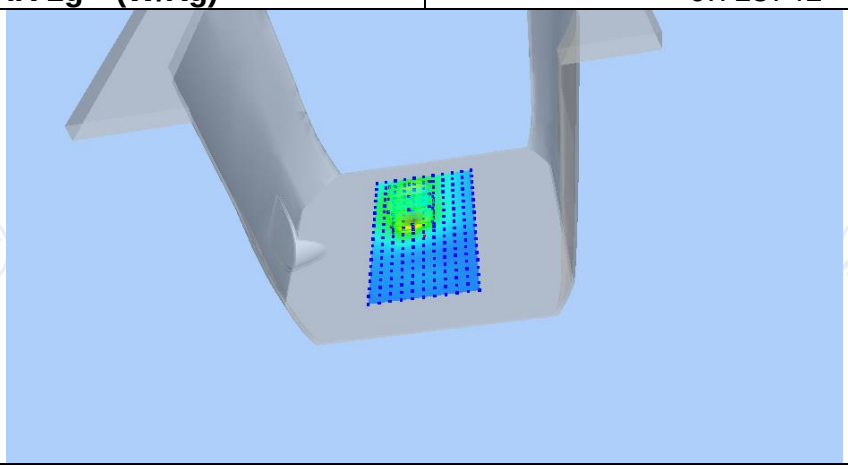


VOLUME SAR

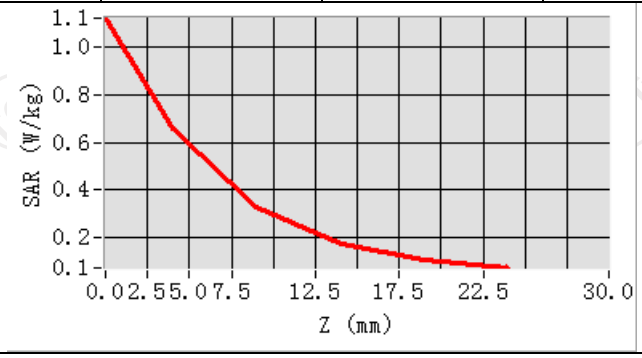


Maximum location: X=-9.00, Y=1.00 SAR Peak: 1.13 W/kg

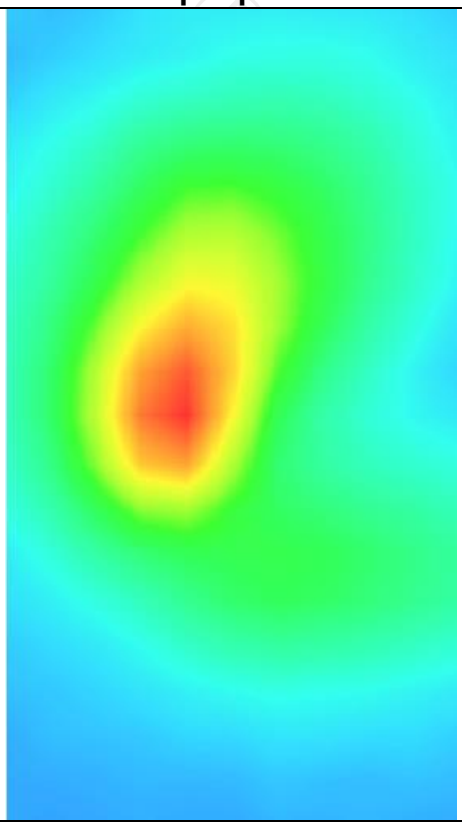
SAR 10g (W/Kg)	0.310507
SAR 1g (W/Kg)	0.713741



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1226	0.6600	0.3295	0.1725	0.1057



Hot spot position



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

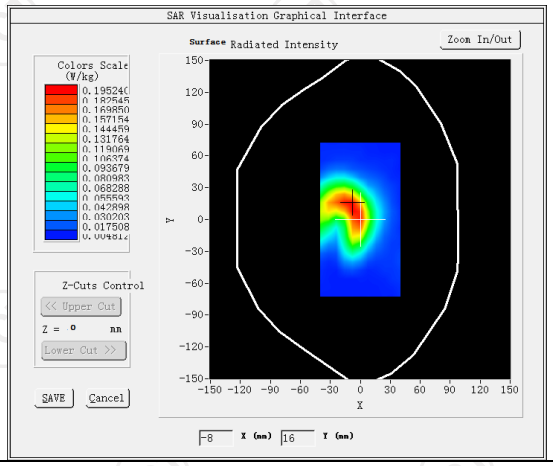
LTE Band 5

MEASUREMENT 2

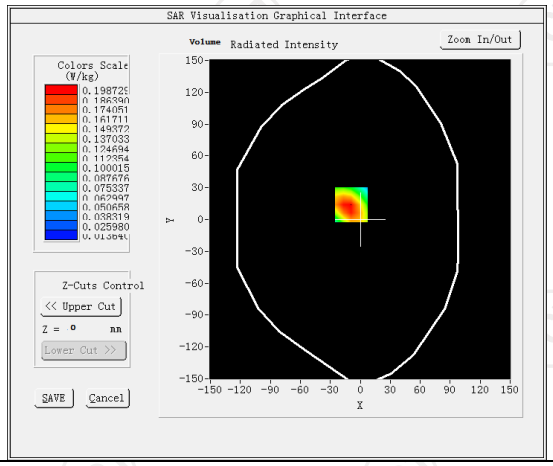
Low Band SAR (Channel 20450): Date: 05/29/2023

Frequency (MHz)	829.000000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	-1.350000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 5(1 RB#24)

SURFACE SAR

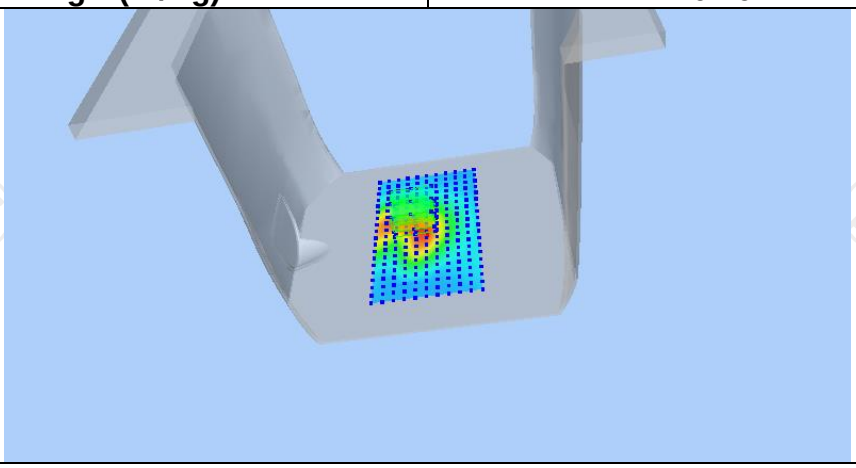


VOLUME SAR

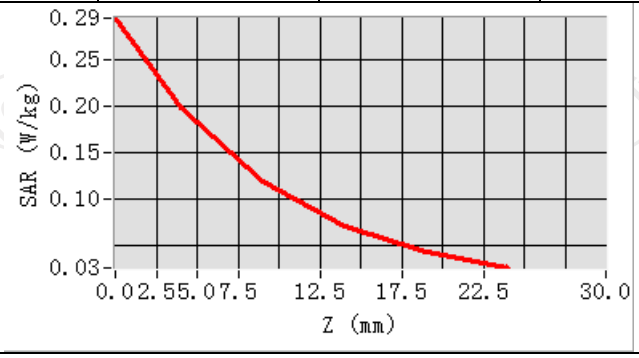


Maximum location: X=-9.00, Y=14.00 SAR Peak: 0.30 W/kg

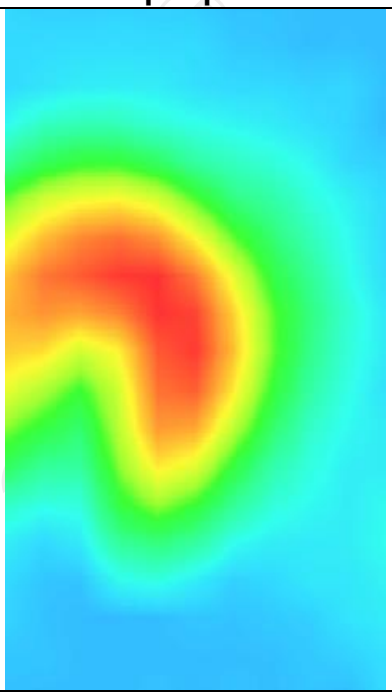
SAR 10g (W/Kg)	0.111826
SAR 1g (W/Kg)	0.191714



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2944	0.1987	0.1195	0.0721	0.0445



Hot spot position



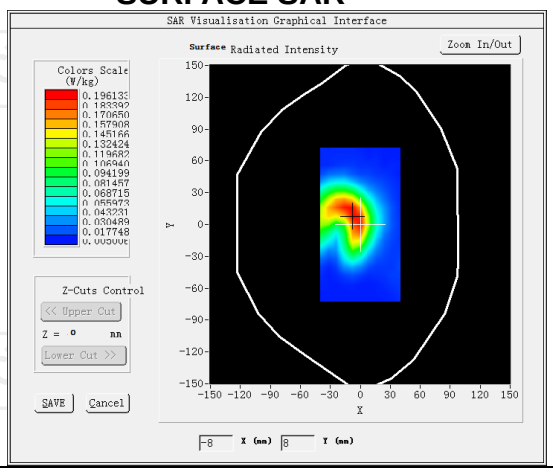
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

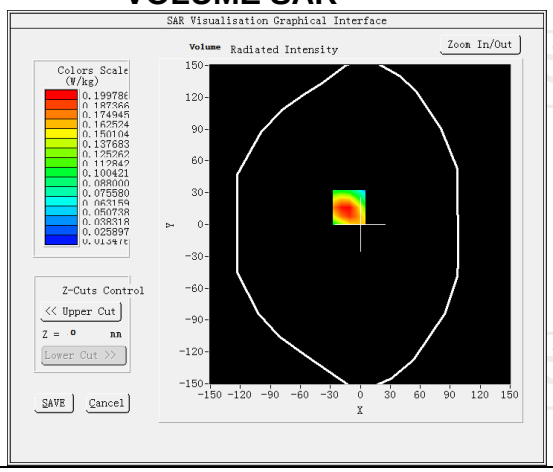
Low Band SAR (Channel 20450): Date: 05/29/2023

Frequency (MHz)	829.000000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	-1.530000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back((hotspot 0mm)
Band	LTE band 5(1 RB#24)

SURFACE SAR

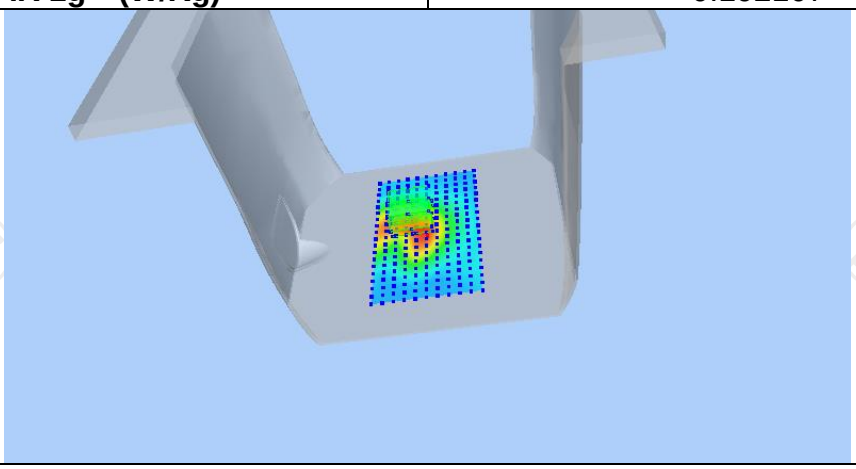


VOLUME SAR

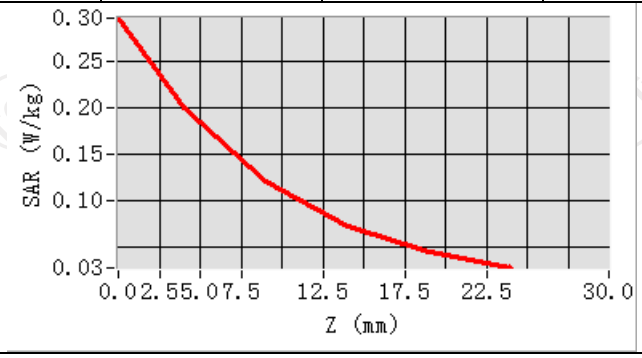


Maximum location: X=-11.00, Y=16.00 SAR Peak: 0.30 W/kg

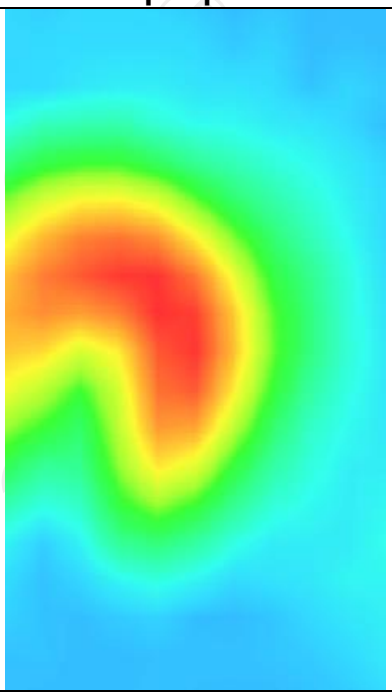
SAR 10g (W/Kg)	0.112803
SAR 1g (W/Kg)	0.192107



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2959	0.1998	0.1204	0.0731	0.0458

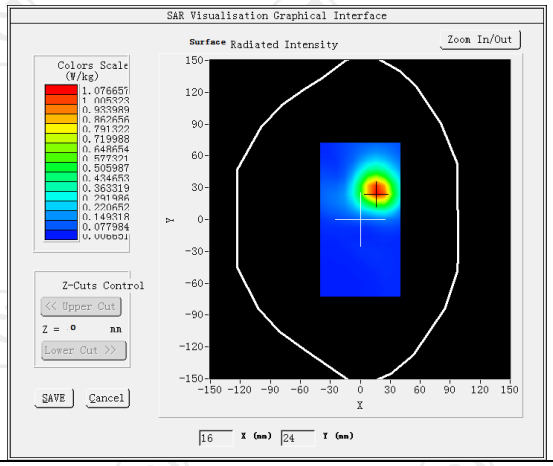
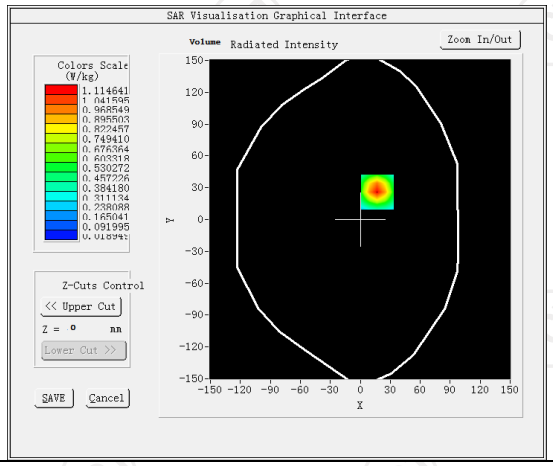
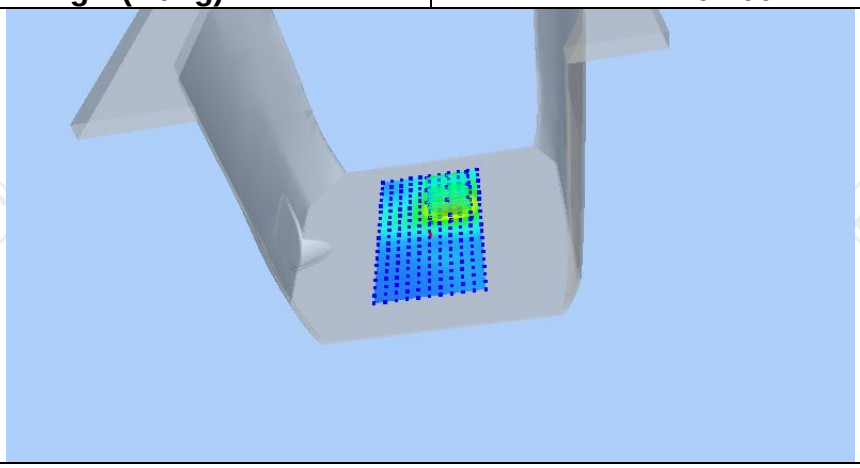


Hot spot position

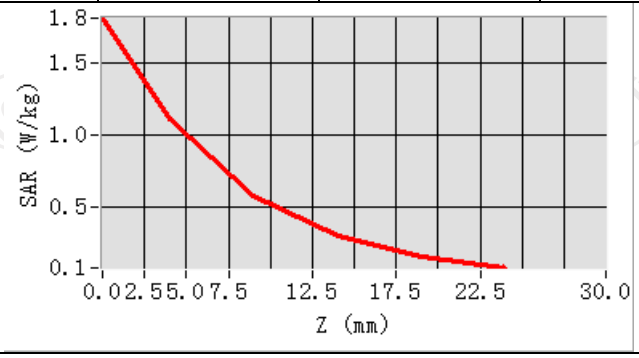


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

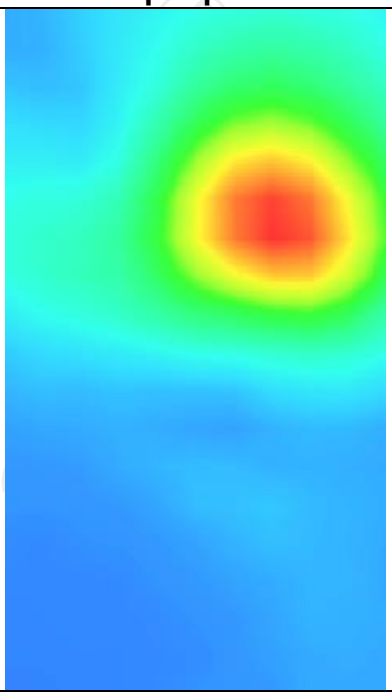
LTE Band 7

MEASUREMENT 1	
Middle Band SAR (Channel 21100):	Date: 06/25/2023
Frequency (MHz)	2535.000000
Relative permittivity (real part)	37.432823
Relative permittivity (imaginary part)	13.671675
Conductivity (S/m)	1.925428
Variation (%)	-4.530000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 7(1 RB#24)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=17.00, Y=26.00 SAR Peak: 1.82 W/kg	
SAR 10g (W/Kg)	0.525809
SAR 1g (W/Kg)	0.700241
	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.8135	1.1146	0.5812	0.2978	0.1560



Hot spot position

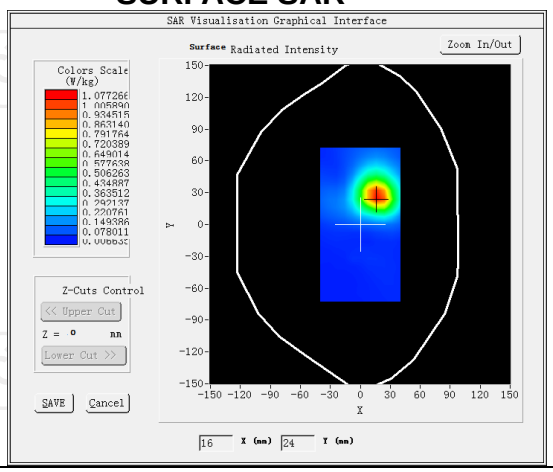


MEASUREMENT 2

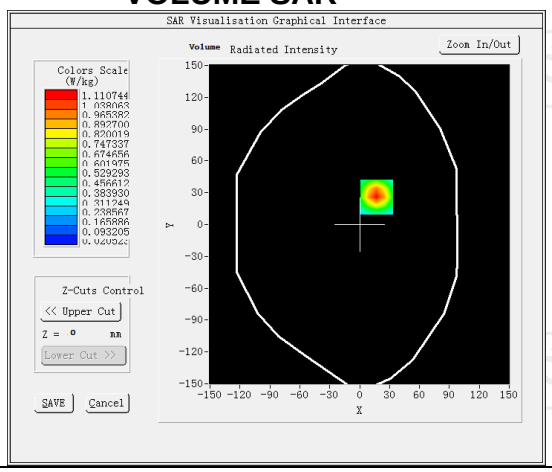
Middle Band SAR (Channel 21100): Date: 06/25/2022

Frequency (MHz)	2535.000000
Relative permittivity (real part)	37.432823
Relative permittivity (imaginary part)	13.671675
Conductivity (S/m)	1.925428
Variation (%)	-4.040000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 7(1 RB#0)

SURFACE SAR

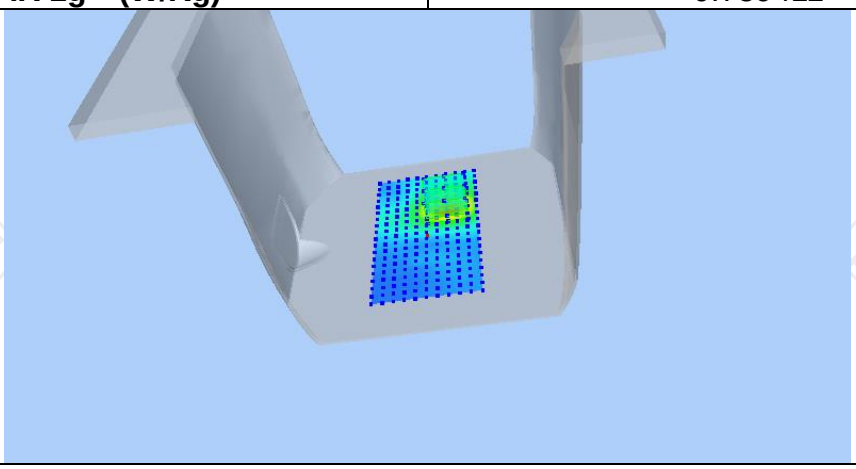


VOLUME SAR

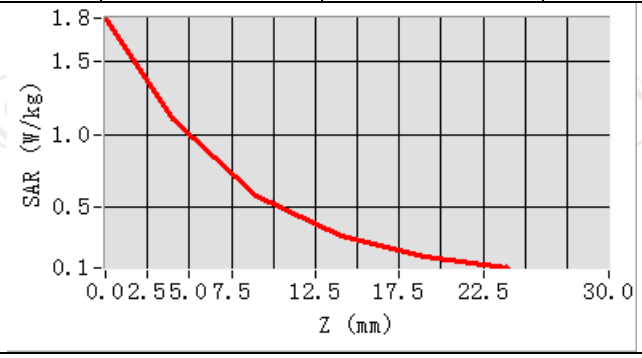


Maximum location: X=17.00, Y=26.00 SAR Peak: 1.81 W/kg

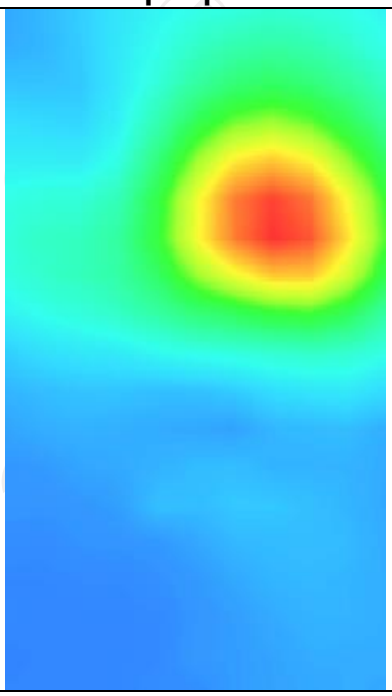
SAR 10g (W/Kg)	0.526135
SAR 1g (W/Kg)	0.759411



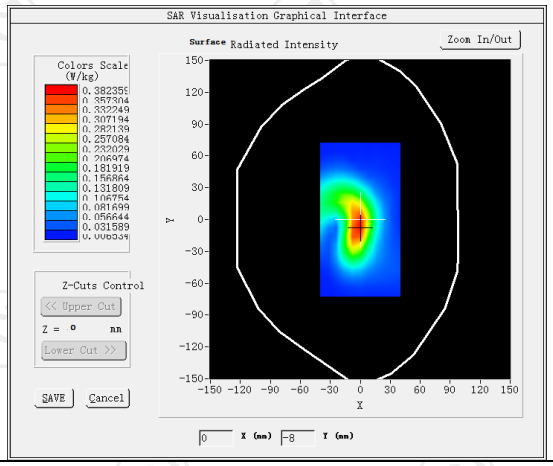
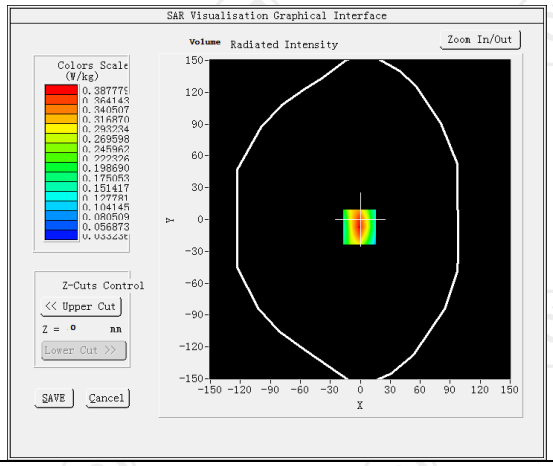
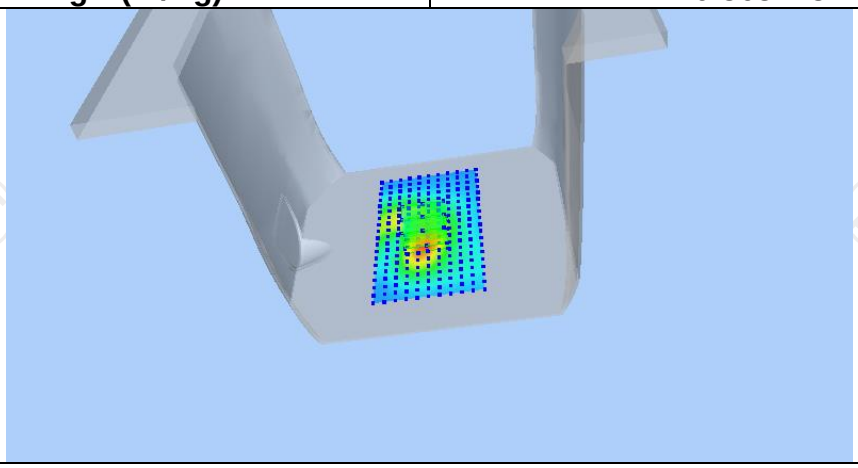
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.8021	1.1107	0.5822	0.3009	0.1596



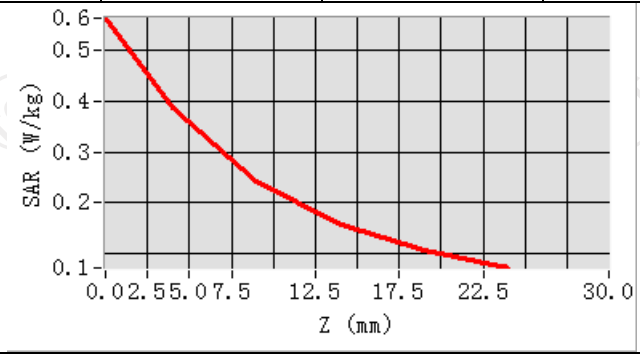
Hot spot position



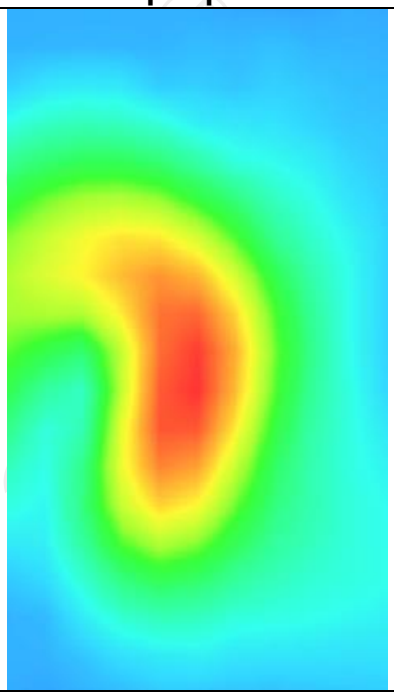
LTE Band 12

MEASUREMENT 1	
Middle Band SAR (Channel 23095):	Date: 05/26/2023
Frequency (MHz)	707.500000
Relative permittivity (real part)	42.126667
Relative permittivity (imaginary part)	23.264000
Conductivity (S/m)	0.914404
Variation (%)	-1.050000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 12(1 RB#24)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=-1.00, Y=-7.00 SAR Peak:0.56 W/kg	
SAR 10g (W/Kg)	0.215309
SAR 1g (W/Kg)	0.368248
	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5624	0.3878	0.2428	0.1562	0.1060



Hot spot position



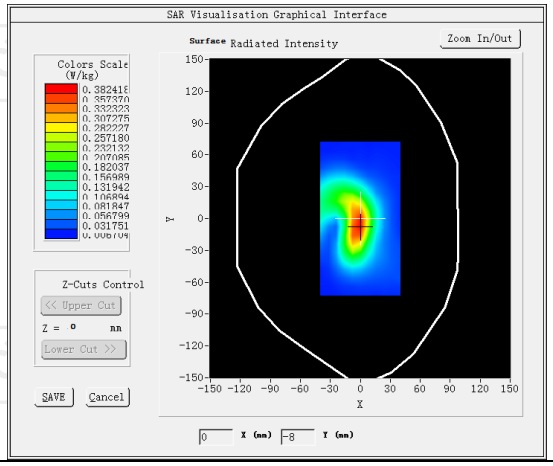
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

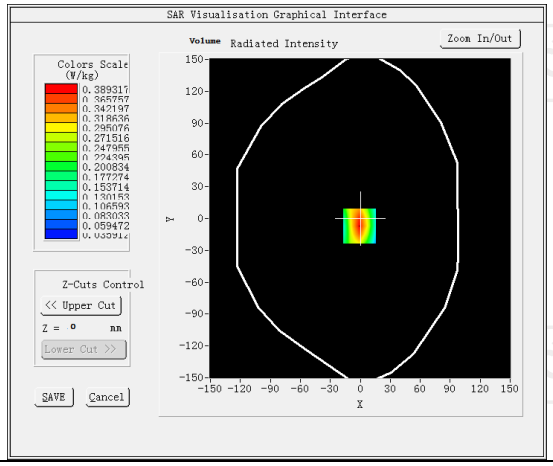
Middle Band SAR (Channel 23095): Date: 05/26/2023

Frequency (MHz)	707.500000
Relative permittivity (real part)	42.126667
Relative permittivity (imaginary part)	23.264000
Conductivity (S/m)	0.914404
Variation (%)	-1.370000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 12(1 RB#24)

SURFACE SAR

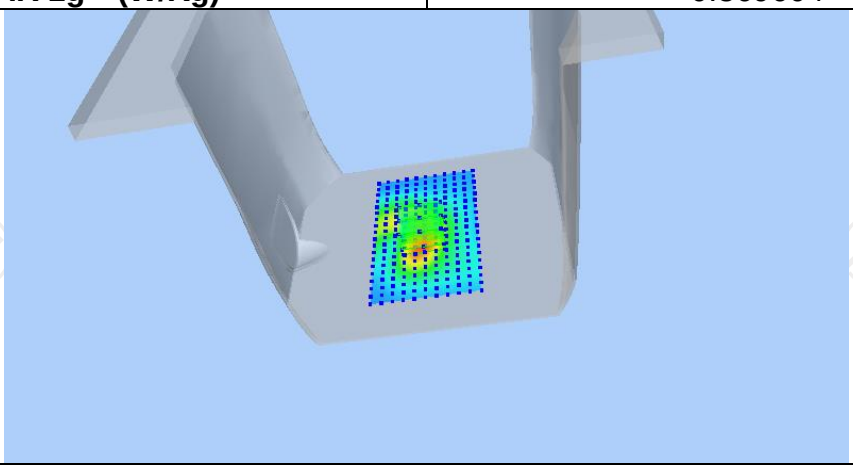


VOLUME SAR

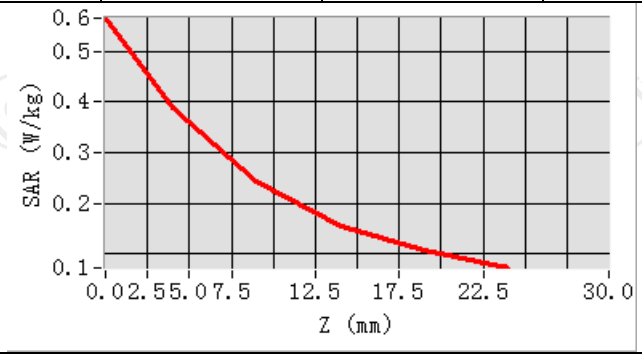


Maximum location: X=-1.00, Y=-7.00 SAR Peak: 0.57W/kg

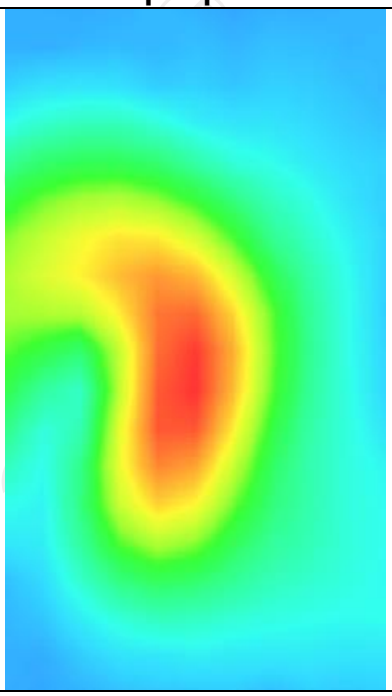
SAR 10g (W/Kg)	0.215734
SAR 1g (W/Kg)	0.369604



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5656	0.3893	0.2432	0.1561	0.1058

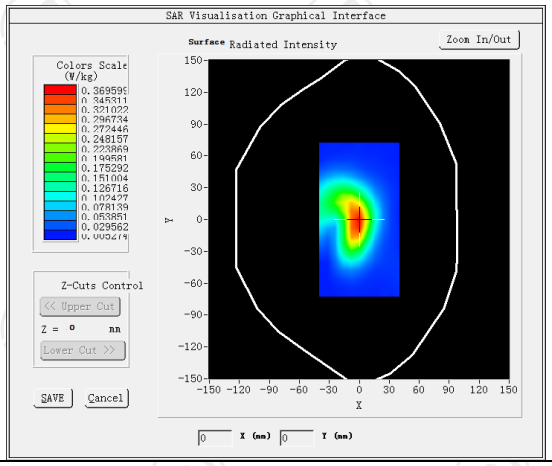
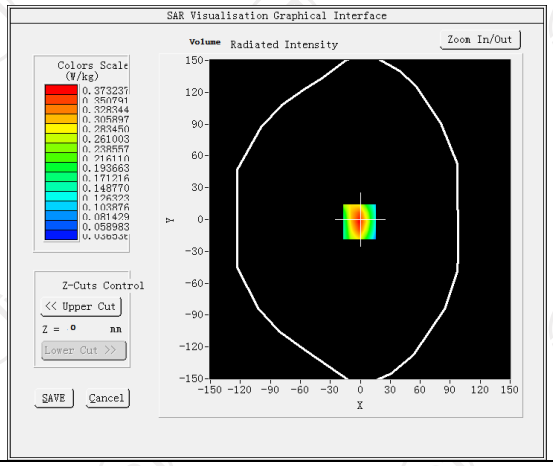
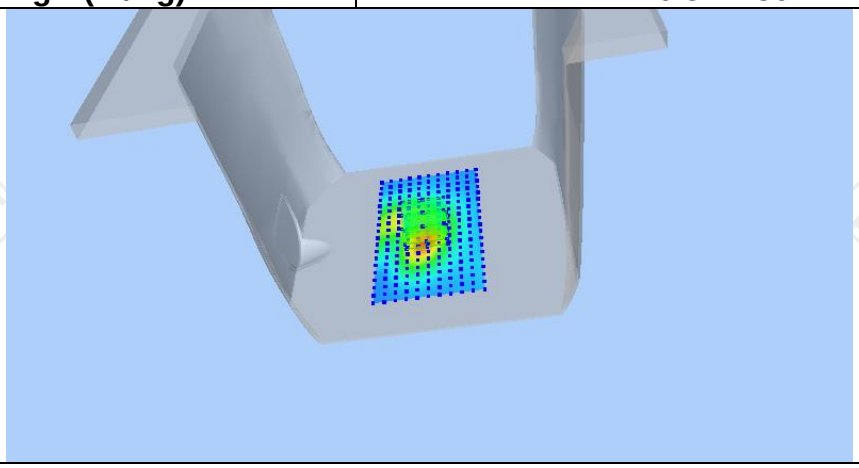


Hot spot position

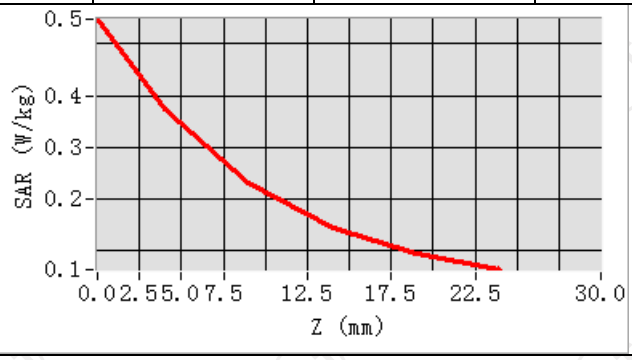


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

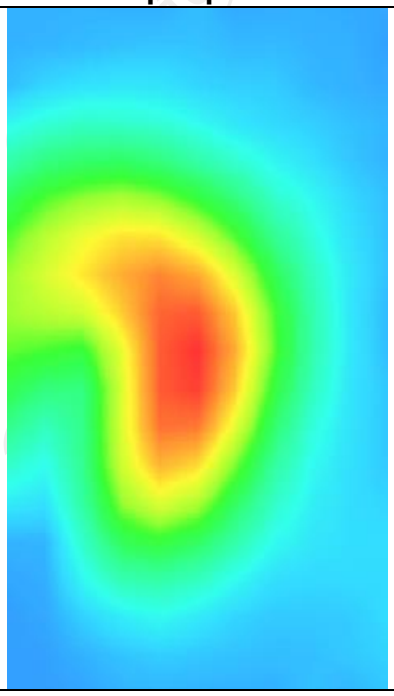
LTE Band 13

MEASUREMENT 1	
Middle Band SAR (Channel 23230):	Date: 05/26/2023
Frequency (MHz)	782.000000
Relative permittivity (real part)	41.751766
Relative permittivity (imaginary part)	20.633648
Conductivity (S/m)	0.895844
Variation (%)	-1.100000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 13(1 RB#0)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=-1.00, Y=-2.00 SAR Peak: 0.55 W/kg	
SAR 10g (W/Kg)	0.200840
SAR 1g (W/Kg)	0.347786
	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5478	0.3732	0.2292	0.1438	0.0947



Hot spot position

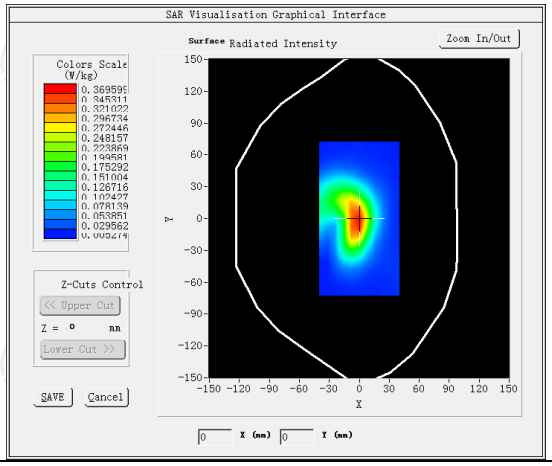


MEASUREMENT 2

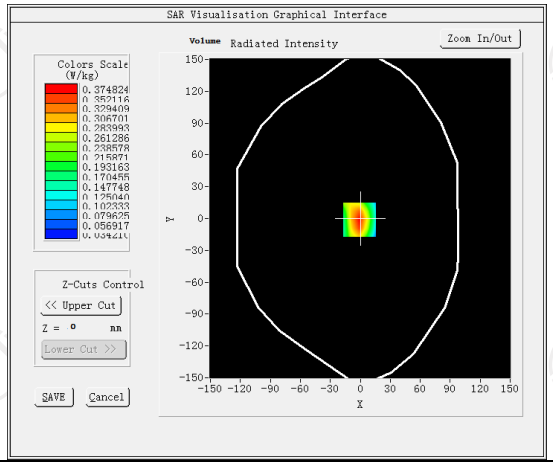
Middle Band SAR (Channel 23230): Date: 05/226/2023

Frequency (MHz)	782.000000
Relative permittivity (real part)	41.751766
Relative permittivity (imaginary part)	20.633648
Conductivity (S/m)	0.895844
Variation (%)	-1.070000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 13(1 RB#0)

SURFACE SAR

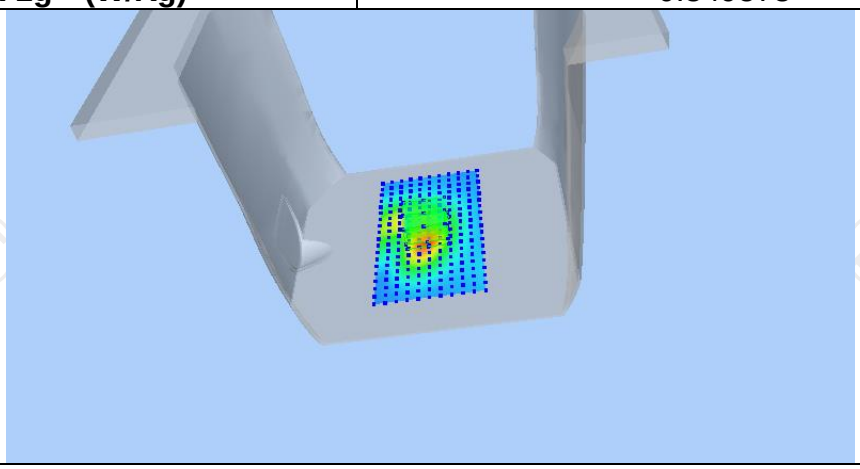


VOLUME SAR

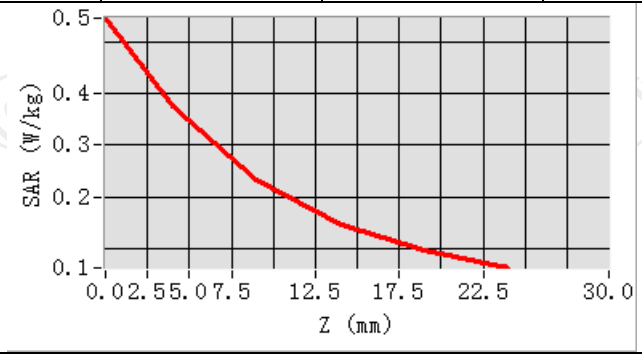


Maximum location: X=-1.00, Y=-1.00 SAR Peak: 0.55 W/kg

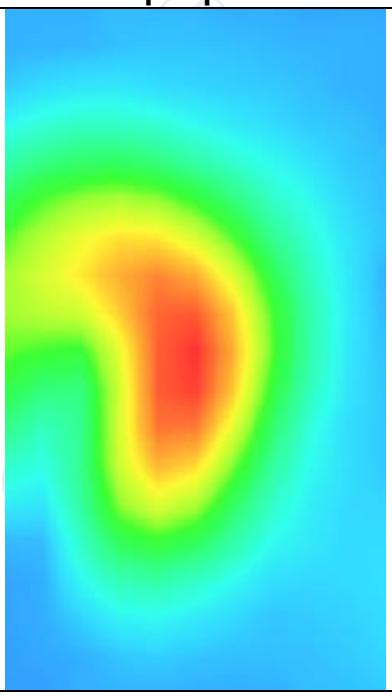
SAR 10g (W/Kg)	0.202204
SAR 1g (W/Kg)	0.349578



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5454	0.3748	0.2323	0.1464	0.0958



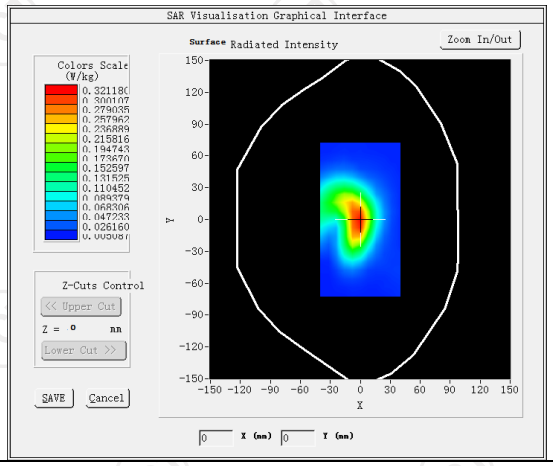
Hot spot position

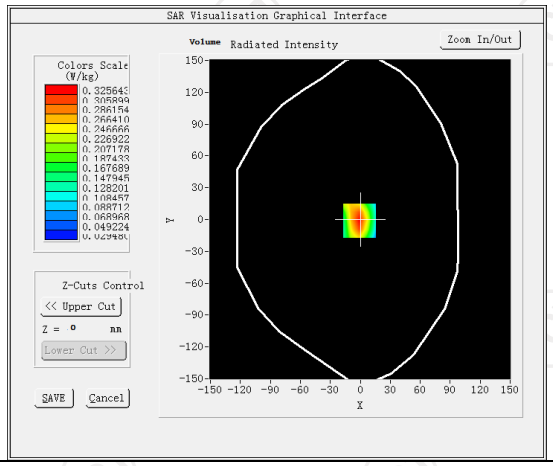


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

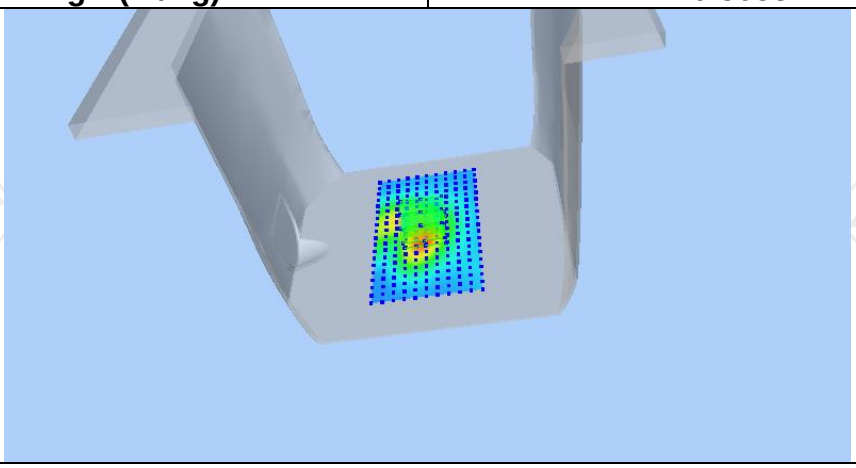
LTE Band 14

MEASUREMENT 1	
Middle Band SAR (Channel 23330):	Date: 05/26/2023
Frequency (MHz)	793.000000
Relative permittivity (real part)	41.700001
Relative permittivity (imaginary part)	20.379999
Conductivity (S/m)	0.897286
Variation (%)	-0.990000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 14(1 RB#24)
SURFACE SAR	**VOLUME SAR**

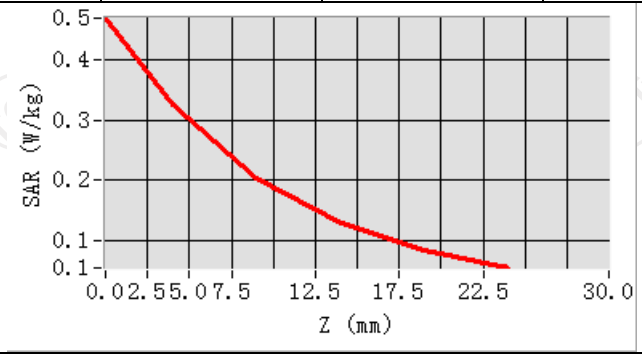




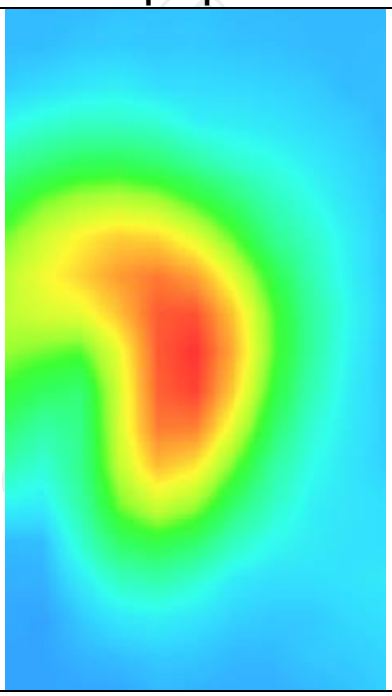
Maximum location: X=-1.00, Y=-1.00 SAR Peak:0.47 W/kg	
SAR 10g (W/Kg)	0.176808
SAR 1g (W/Kg)	0.303817



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4703	0.3256	0.2035	0.1285	0.0835



Hot spot position



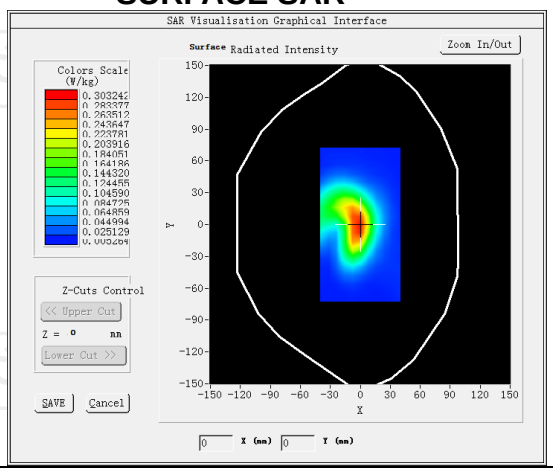
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

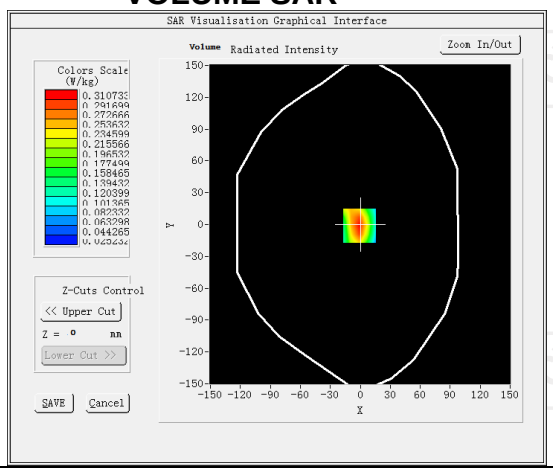
Middle Band SAR (Channel 23300): Date: 05/26/2023

Frequency (MHz)	793.000000
Relative permittivity (real part)	41.700001
Relative permittivity (imaginary part)	20.379999
Conductivity (S/m)	0.897286
Variation (%)	-0.980000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 12(1 RB#24)

SURFACE SAR

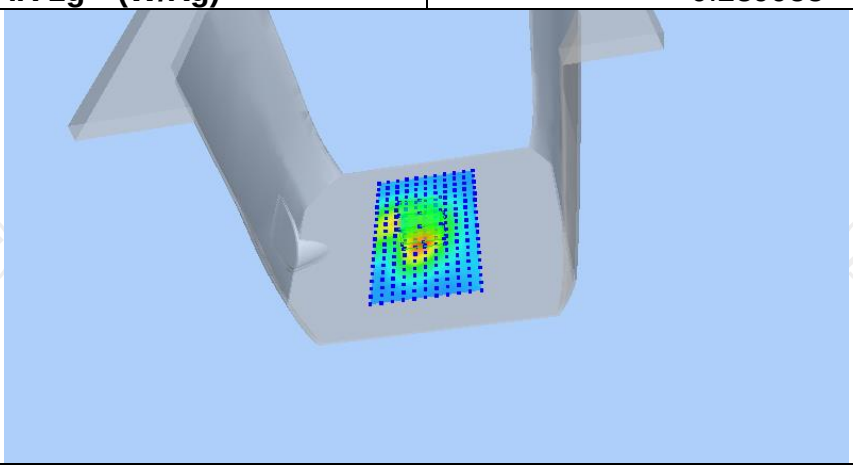


VOLUME SAR

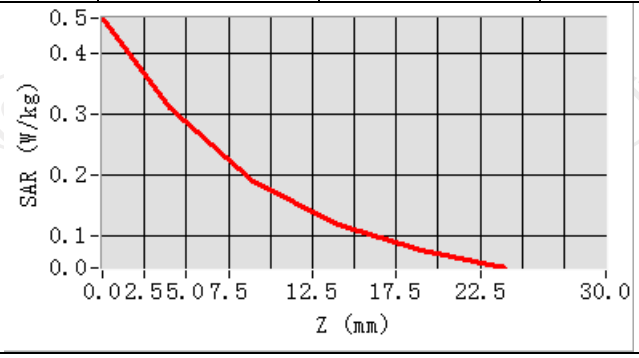


Maximum location: X=-1.00, Y=-1.00 SAR Peak: 0.46W/kg

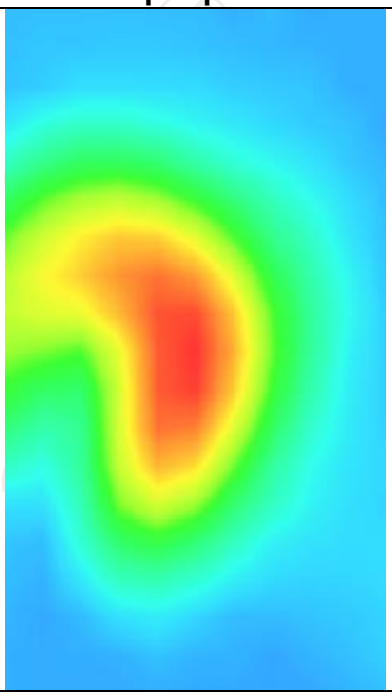
SAR 10g (W/Kg)	0.166851
SAR 1g (W/Kg)	0.289953



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4564	0.3107	0.1899	0.1177	0.0757



Hot spot position



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

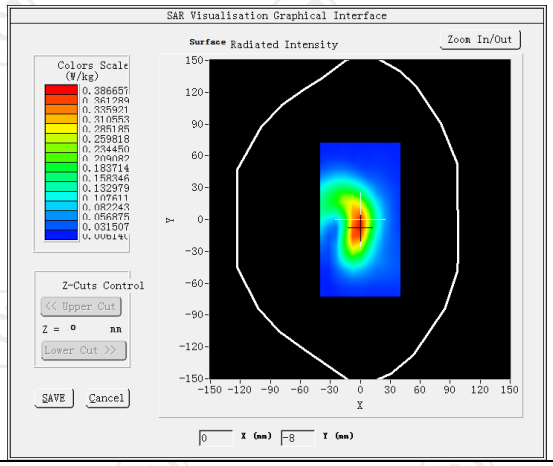
LTE Band 17

MEASUREMENT 1

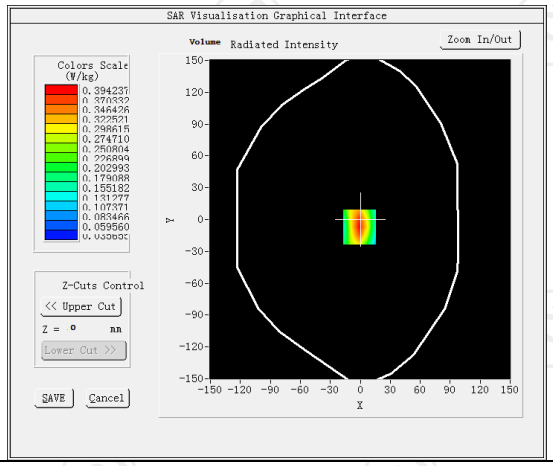
Low Band SAR (Channel 23780): Date: 05/26/2023

Frequency (MHz)	709.000000
Relative permittivity (real part)	42.113335
Relative permittivity (imaginary part)	23.152000
Conductivity (S/m)	0.913218
Variation (%)	-0.990000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(0mm)
Band	LTE band 17(1 RB#24)

SURFACE SAR

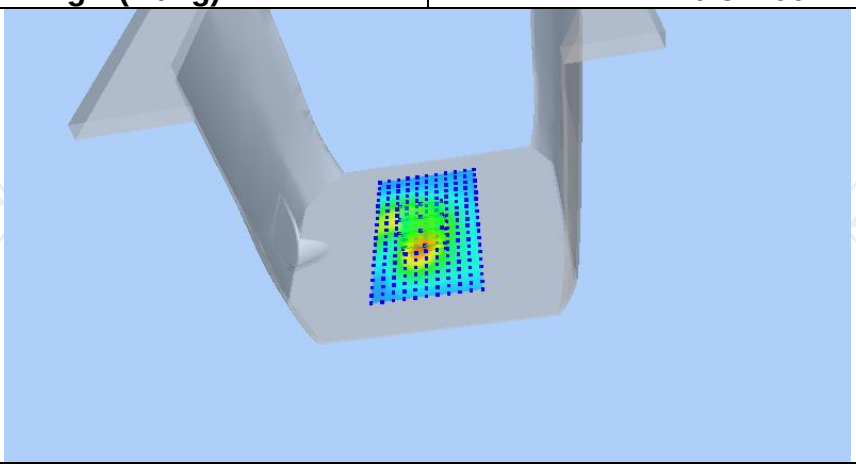


VOLUME SAR

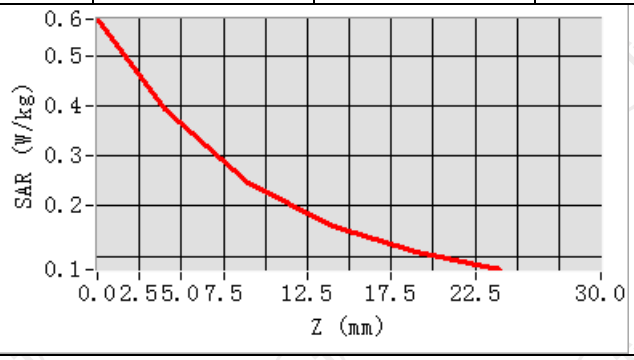


Maximum location: X=-1.00, Y=-7.00 SAR Peak: 0.57 W/kg

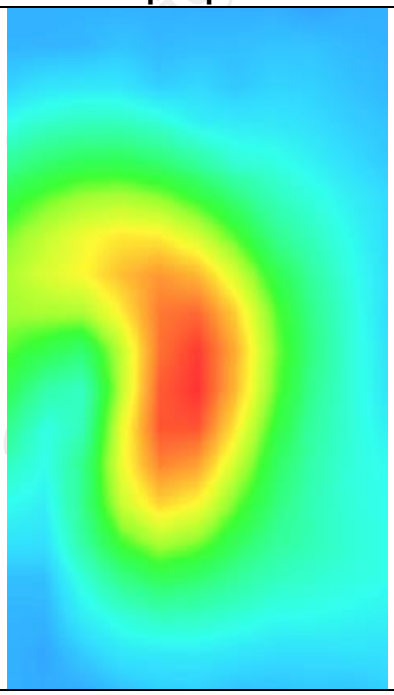
SAR 10g (W/Kg)	0.218990
SAR 1g (W/Kg)	0.374007



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5721	0.3942	0.2466	0.1585	0.1075



Hot spot position

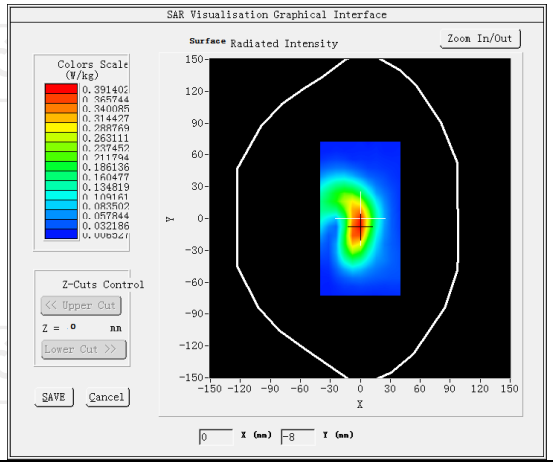


MEASUREMENT 2

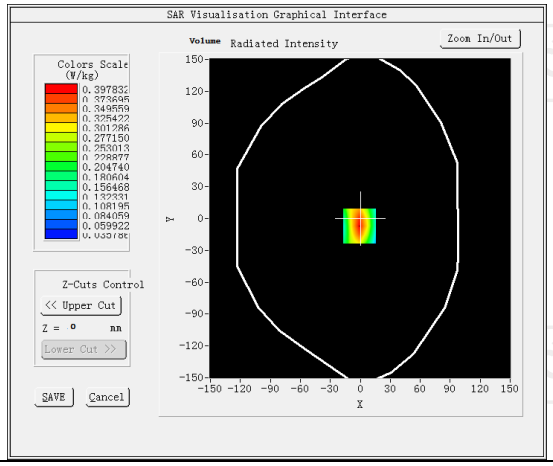
Low Band SAR (Channel 23780): Date: 05/26/2023

Frequency (MHz)	709.000000
Relative permittivity (real part)	42.113335
Relative permittivity (imaginary part)	23.152000
Conductivity (S/m)	0.913218
Variation (%)	-1.370000
Crest Factor	1.0
Probe Conversion factor	1.71
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back(hotspot 0mm)
Band	LTE band 17(1 RB#24)

SURFACE SAR

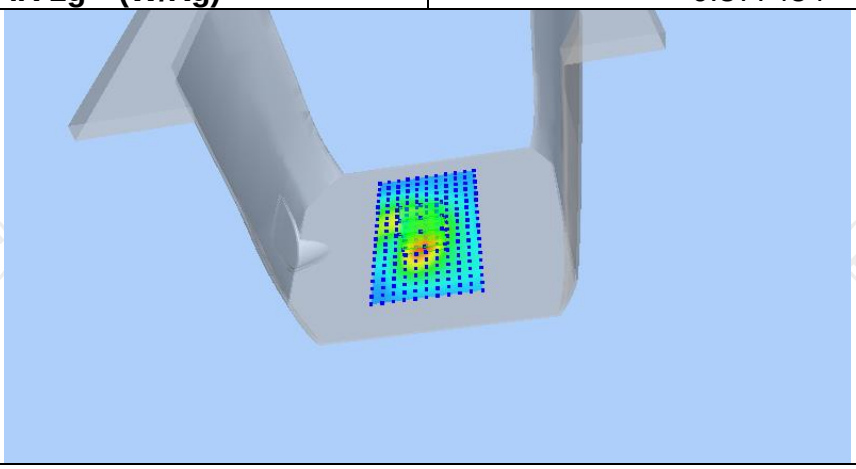


VOLUME SAR

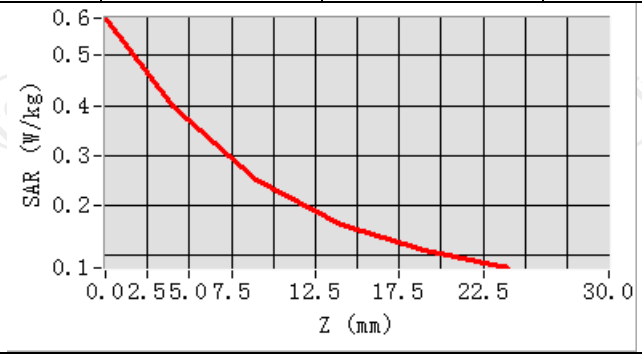


Maximum location: X=-1.00, Y=-7.00 SAR Peak: 0.58 W/kg

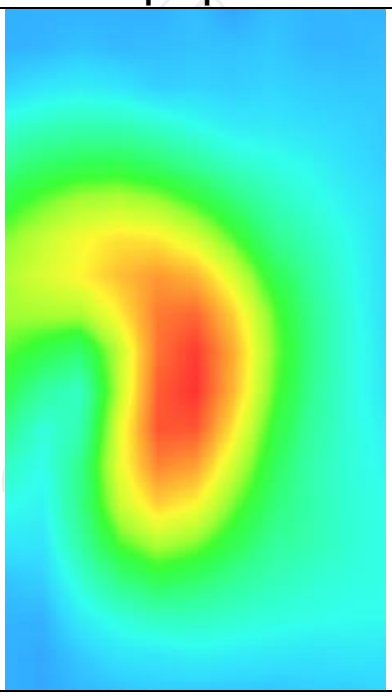
SAR 10g (W/Kg)	0.221285
SAR 1g (W/Kg)	0.377454



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5749	0.3978	0.2500	0.1611	0.1091

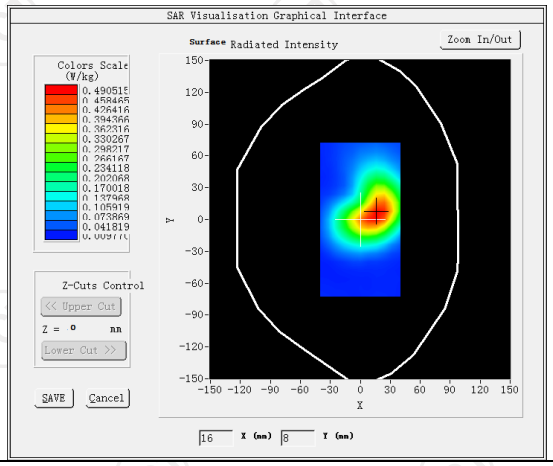
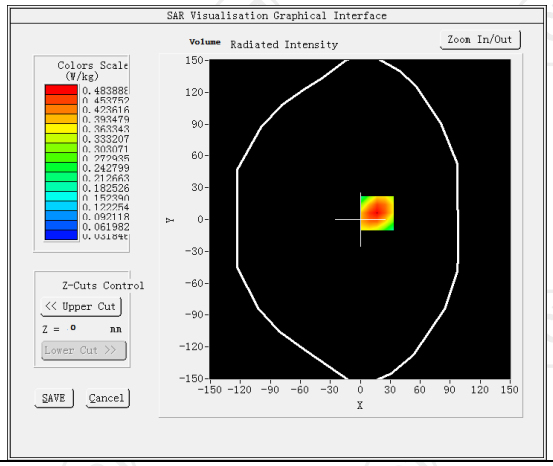


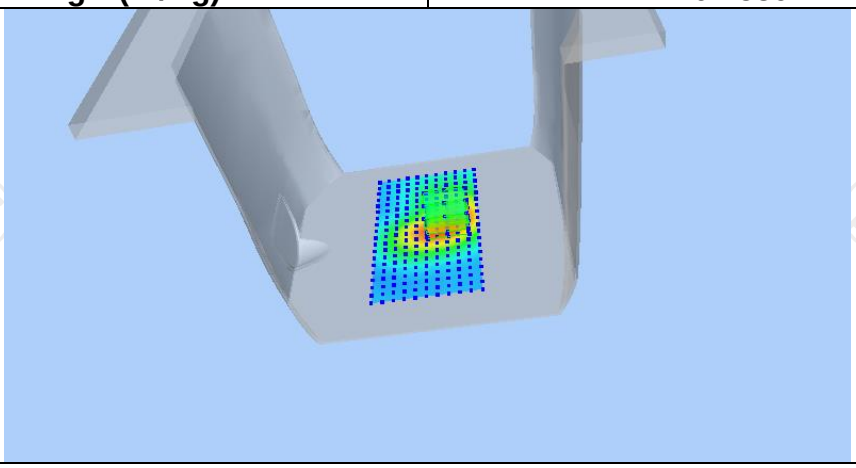
Hot spot position



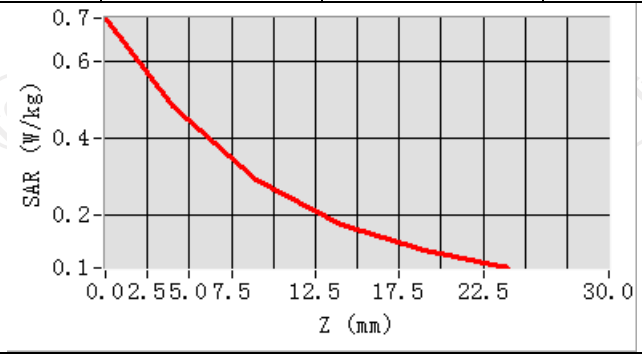
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

LTE Band 25

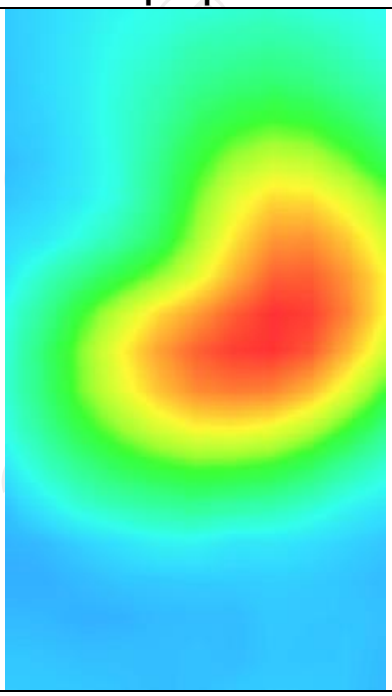
MEASUREMENT 1	
Hight Band SAR (Channel 26590):	Date: 06/13/2023
Frequency (MHz)	1905.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.393200
Conductivity (S/m)	1.400333
Variation (%)	-1.660000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (0mm)
Band	LTE band 25(1 RB#0)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=17.00, Y=6.00 SAR Peak: 0.71W/kg	
SAR 10g (W/Kg)	0.273562
SAR 1g (W/Kg)	0.458911



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7117	0.4839	0.2927	0.1761	0.1068



Hot spot position



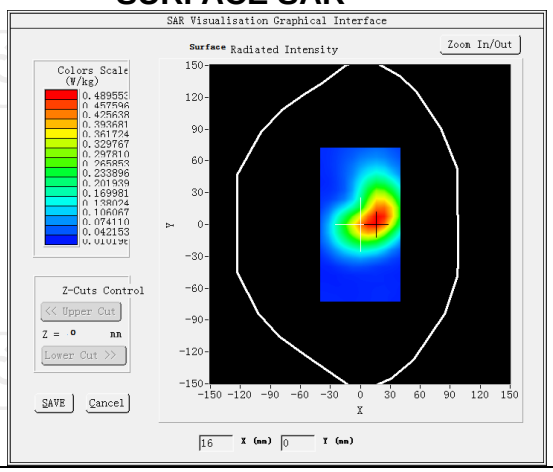
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

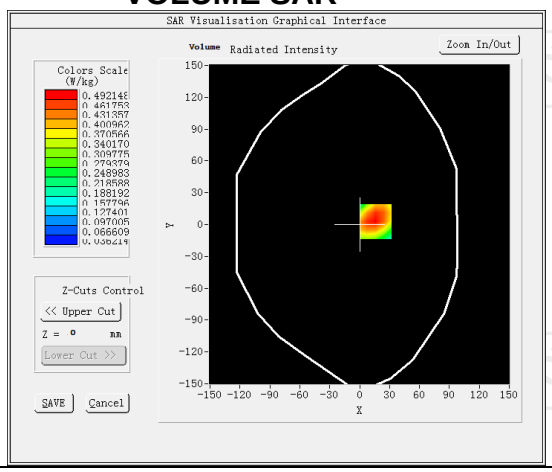
Hight Band SAR (Channel 26590): Date: 06/13/2023

Frequency (MHz)	1905.000000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.393200
Conductivity (S/m)	1.400333
Variation (%)	-1.930000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (hotspot 0mm)
Band	LTE band 25(1 RB#0)

SURFACE SAR

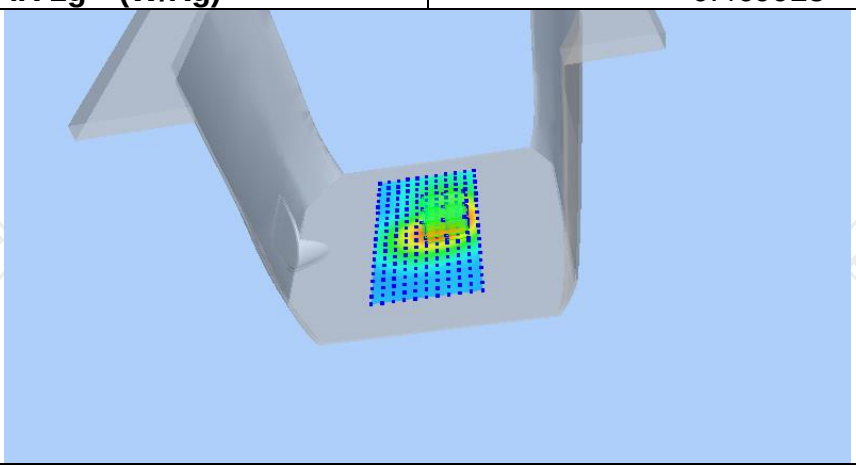


VOLUME SAR

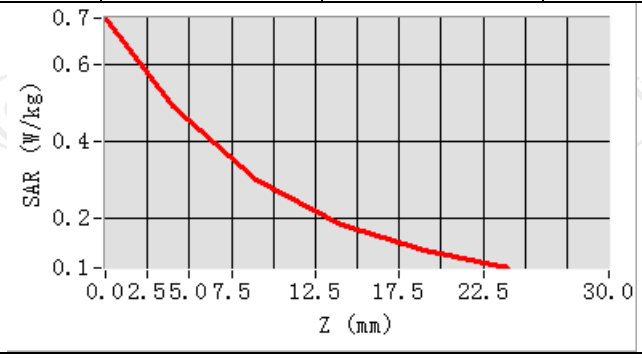


Maximum location: X=16.00, Y=3.00 SAR Peak: 0.73 W/kg

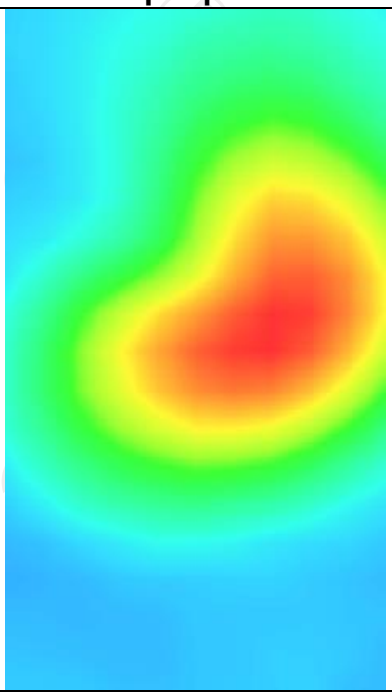
SAR 10g (W/Kg)	0.280919
SAR 1g (W/Kg)	0.469923



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7220	0.4921	0.3001	0.1840	0.1154

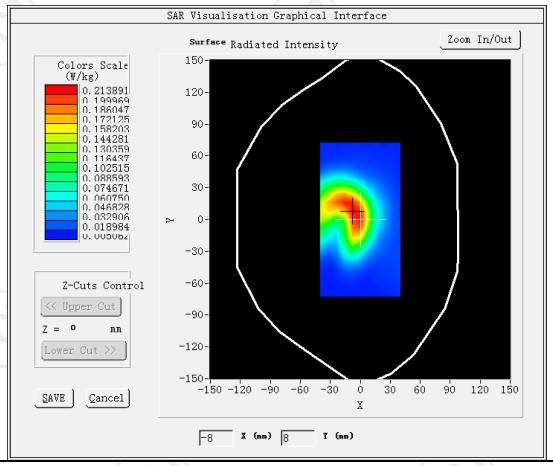
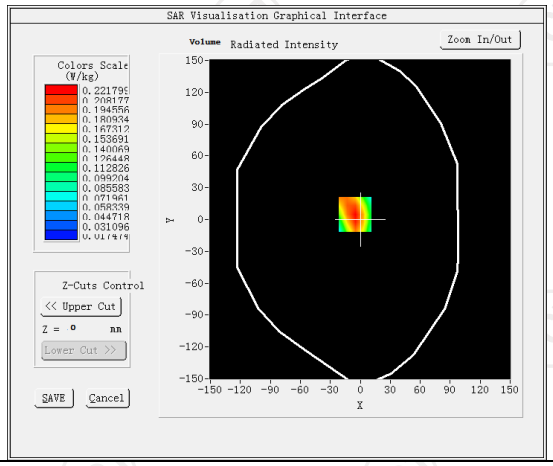


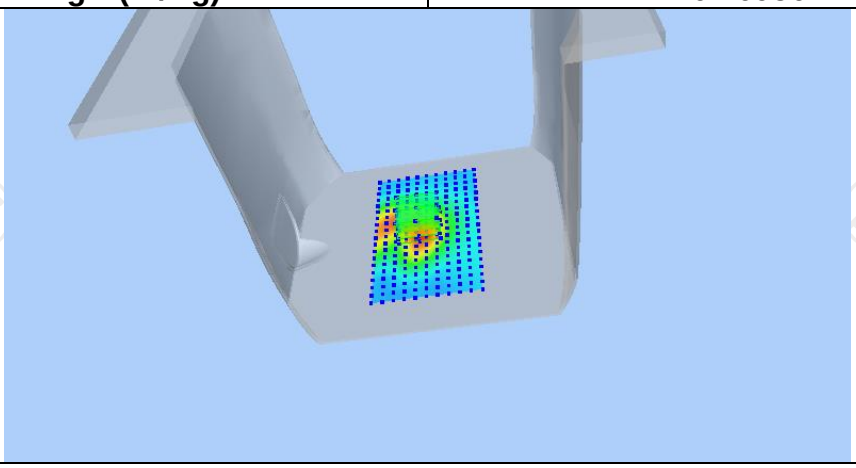
Hot spot position



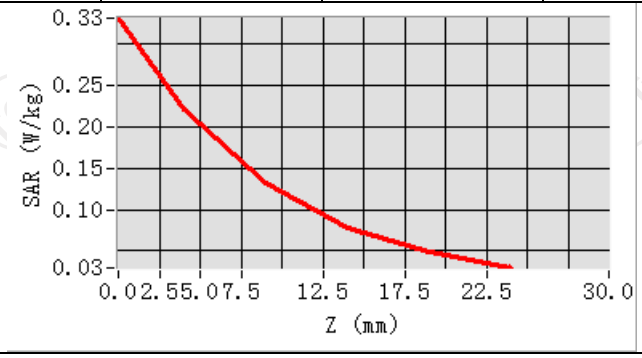
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

LTE Band 26-1

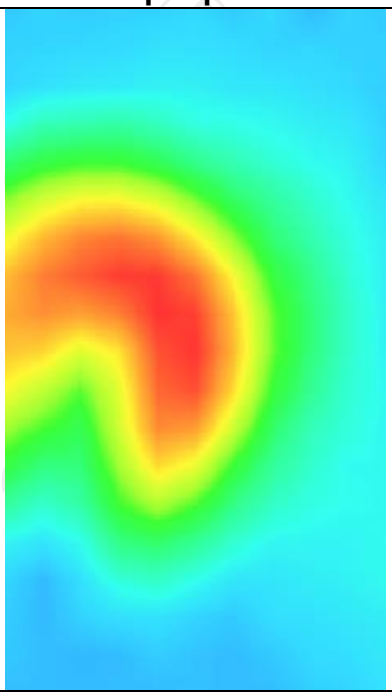
MEASUREMENT 1	
Lower Band SAR (Channel 26740):	Date: 05/29/2023
Frequency (MHz)	819.000000
Relative permittivity (real part)	41.751766
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	-2.030000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (10mm)
Band	LTE band 26(1 RB#0)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=-5.00, Y=5.00 SAR Peak: 0.33 W/kg	
SAR 10g (W/Kg)	0.122347
SAR 1g (W/Kg)	0.209567



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3318	0.2218	0.1318	0.0789	0.0488



Hot spot position



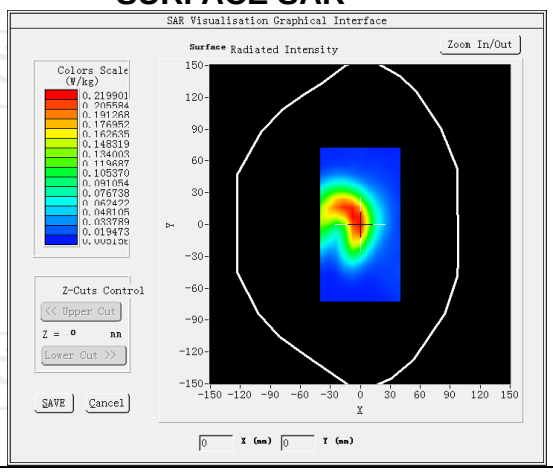
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

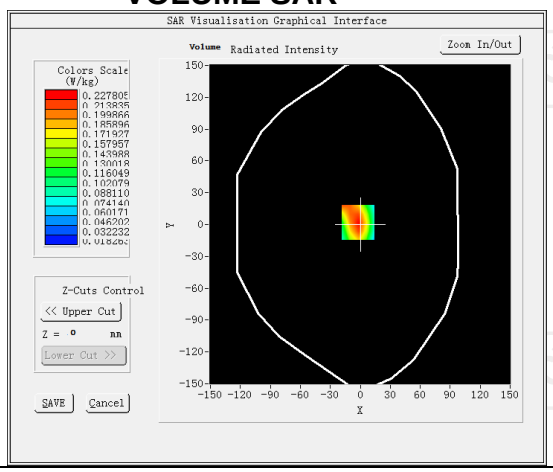
Lower Band SAR (Channel 26740): Date: 05/29/2023

Frequency (MHz)	819.000000
Relative permittivity (real part)	41.751766
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	-1.220000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (hotspot 10mm)
Band	LTE band 26(1 RB#0)

SURFACE SAR

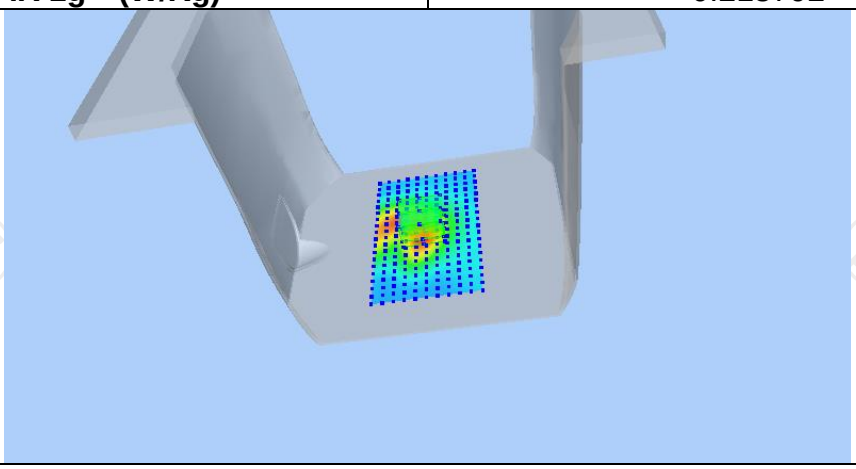


VOLUME SAR

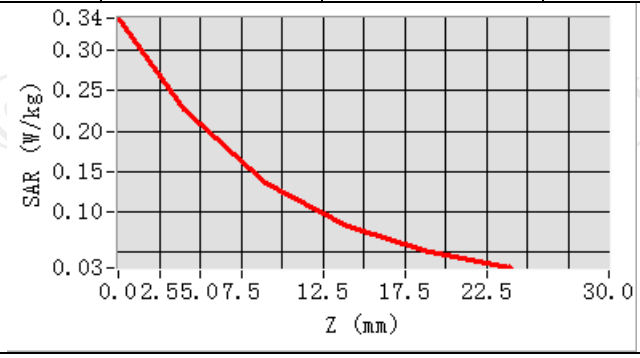


Maximum location: X=-2.00, Y=2.00 SAR Peak: 0.34 W/kg

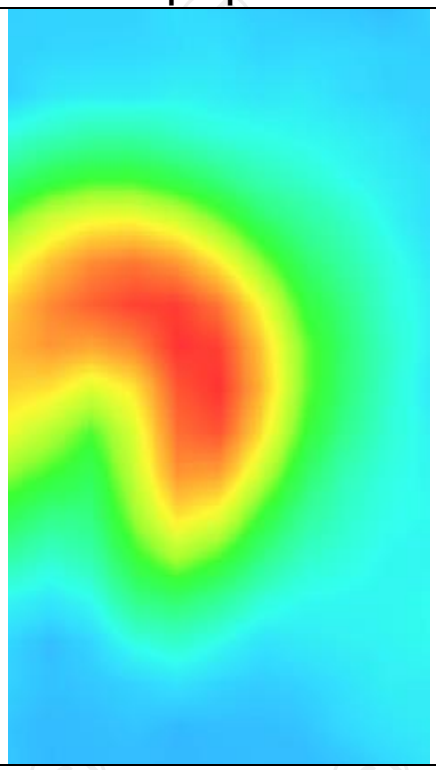
SAR 10g (W/Kg)	0.123688
SAR 1g (W/Kg)	0.213792



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3399	0.2278	0.1358	0.0816	0.0506



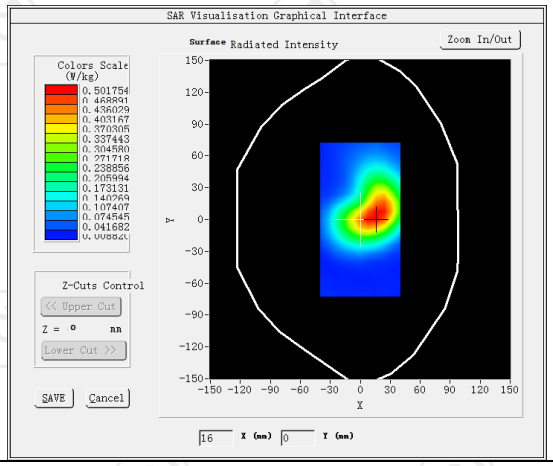
Hot spot position

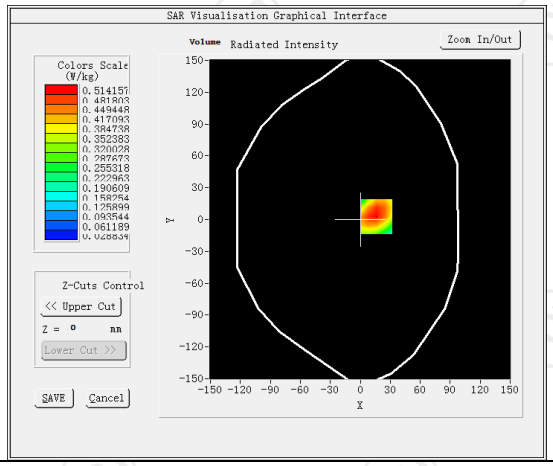


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

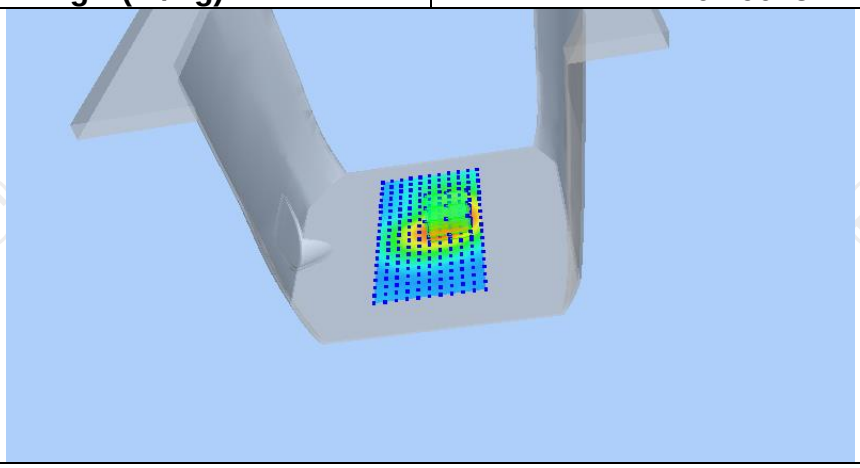
LTE Band 26-2

MEASUREMENT 1	
Low Band SAR (Channel 26915):	Date: 05/26/2023
Frequency (MHz)	831.500000
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	-1.900000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (0mm)
Band	LTE band 26(38 RB#0)
SURFACE SAR	**VOLUME SAR**

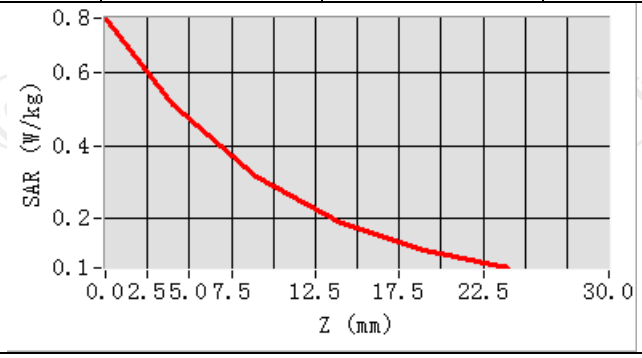




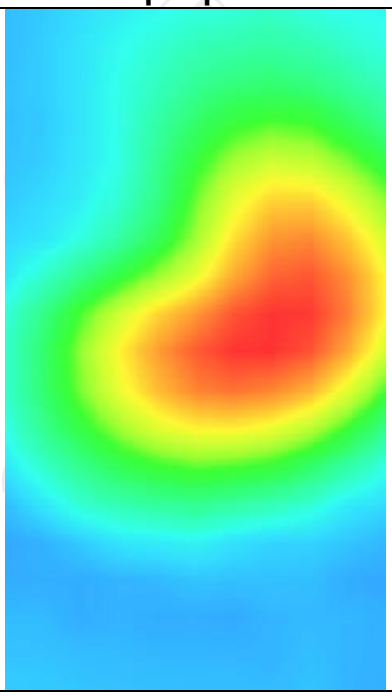
Maximum location: X=16.00, Y=3.00 SAR Peak: 0.76 W/kg	
SAR 10g (W/Kg)	0.289427
SAR 1g (W/Kg)	0.490187



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7510	0.5142	0.3129	0.1880	0.1124



Hot spot position



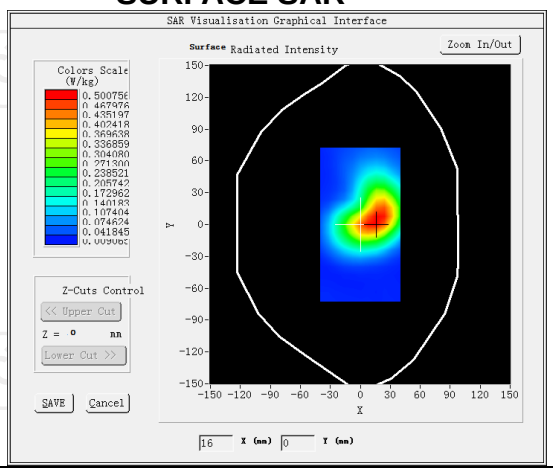
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

MEASUREMENT 2

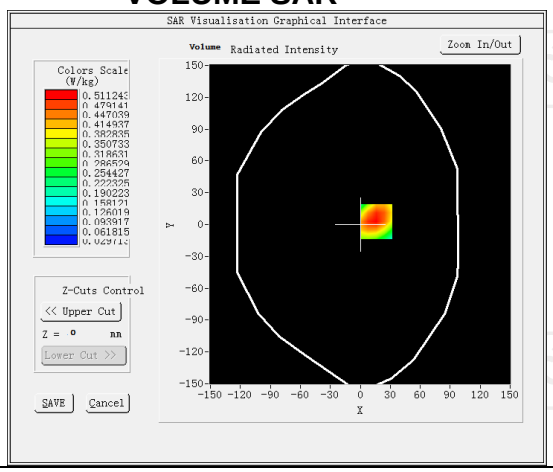
Low Band SAR (Channel 26915): Date: 05/26/2023

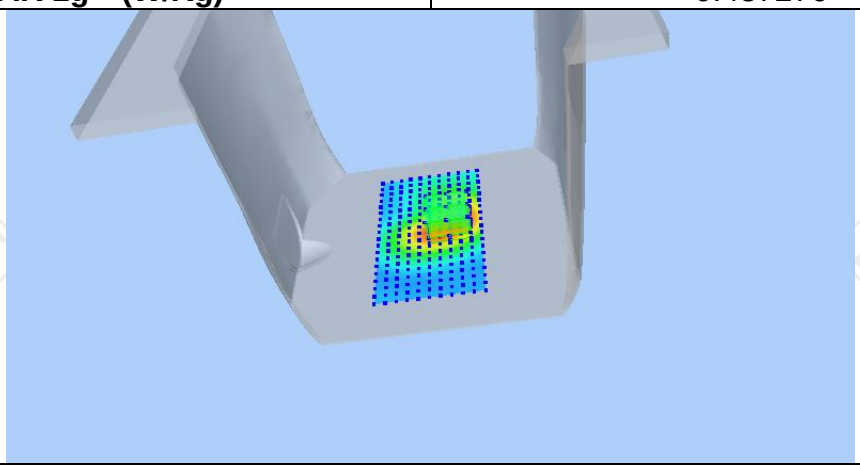
Frequency (MHz)	831.500000
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	-2.090000
Crest Factor	1.0
Probe Conversion factor	1.80
E-Field Probe:	SSE2 (SN 25/22 EPGO375)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back (hotspot 0mm)
Band	LTE band 26(38 RB#0)

SURFACE SAR



VOLUME SAR



Maximum location: X=16.00, Y=3.00 SAR Peak: 0.76 W/kg

SAR 10g (W/Kg)	0.288579
SAR 1g (W/Kg)	0.487276