LTE Band 17	QPSK (10MHz)	Front	23790	710	1	0	24.88	25.00	1.10	0.11	1.084	0.12
					25	12	24.62	25.00	0.31	0.08	1.005	0.08
		Back	23790	710	1	0	24.88	25.00	2.17	0.21	1.084	**0.23**
					25	12	24.62	25.00	-2.67	0.17	1.005	0.17
		Right	23790	710	1	0	24.88	25.00	-1.18	0.02	1.084	0.02
					25	12	24.62	25.00	-1.78	0.01	1.005	0.01
		Left	23790	710	1	0	24.88	25.00	0.97	0.03	1.084	0.03
					25	12	24.62	25.00	-0.08	0.02	1.005	0.02
		Bottom	23790	710	1	0	24.88	25.00	1.04	0.01	1.084	0.01
					25	12	24.62	25.00	-0.37	0.01	1.005	0.01
LTE Band 41	QPSK (20MHz)	Front	39750	2506	1	49	24.80	25.00	-1.14	0.18	1.035	0.19
					50	0	24.51	25.00	2.31	0.14	1.045	0.15
		Back	39750	2506	1	49	24.80	25.00	-1.81	0.33	1.035	**0.34**
					50	0	24.51	25.00	0.42	0.27	1.045	0.28
		Right	39750	2506	1	49	24.80	25.00	1.66	0.04	1.035	0.04
					50	0	24.51	25.00	1.39	0.03	1.045	0.03
		Left	39750	2506	1	49	24.80	25.00	0.47	0.02	1.035	0.02
					50	0	24.51	25.00	-0.77	0.01	1.045	0.01
		Bottom	39750	2506	1	49	24.80	25.00	-2.39	0.02	1.035	0.02
					50	0	24.51	25.00	-0.61	0.01	1.045	0.01

Note:

1. Per KDB 447498 D01 v06, for each exposure position, if the highest output power channel Reported SAR ≤ 0.8W/kg, other channels SAR testing is not necessary.
2. Per KDB 447498 D01 v06, body-worn with hotspot use is evaluated with the device positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium.
3. Per KDB 447498 D01 v06, the report SAR is measured SAR value adjusted for maximum tune-up tolerance. Scaling Factor=10^[(tune-up limit power(dBm) - Ave. power (dBm))/10], where tune-up limit is the maximum rated power among all production units.
   Reported SAR(W/kg)=Measured SAR (W/kg)*Scaling Factor.
4. Per KDB865664D01 v01r04 perform a second repeated measurement only the ratio of largest to smallest SAR for the original and first repeated measurement is >1.20 or when the original or repeated measurement is ≥ 1.45W/kg.
5. Perform a second measurement only if the original, first and second repeated measurement is ≥1.5w/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurement is >1.20.

10.4. Simultaneous Transmission Conclusion

Multi-Band Simultaneous Transmission Considerations

According to FCC KDB Publication 447498 D01v05r02, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown in below Figure and are color-coded to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.

Simultaneous Transmission Paths

Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D01v05r02, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg. When standalone SAR is not required to be measured, per FCC KDB 447498 D01v05r02 4.3.2.2), the following equation must be used to estimate the standalone 1g SAR and 10g extremity SAR for simultaneous transmission assessment involving that transmitter.

$$\text{Estimated SAR} = \frac{\sqrt{f(GHz)}}{7.5(18.75)} \cdot \frac{\text{Max. power of channel, mW}}{\text{Min. Separation Distance, mm}}$$

Mode	Max. tune-up Power (dBm)	Exposure Position	Head	Body -worn
		Test Distance (mm)	5	5
BT	8.50	Estimated SAR (W/kg)	0.29	0.29

Note:

1. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according is applied to determine estimated SAR.
2. (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 5 mm; where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.
3. Next to the mouth exposure requires 1-g SAR, and the wrist-worn condition requires 10-g extremity SAR.

Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Configuration	Head	Body-Worn	Hotspot
1	GSM850/1900(Voice)+WIFI(2.4/5G)	YES	YES	NO
2	GPRS 850/1900(DATA)+WIFI(2.4/5G)	NO	YES	YES
3	WCDMA+ WIFI(2.4/5G)	YES	YES	YES
4.	LTE+WIFI(2.4/5G)	YES	YES	YES
5.	GSM850/1900(Voice)+BT	YES	YES	NO
6	GPRS/EDGE 850/1900(DATA)+BT	YES	YES	NO
7.	WCDMA+ BT	YES	YES	NO
8.	LTE+BT	YES	YES	NO

10.5. SAR Simultaneous Transmission Analysis

Band	Test Position		Scaled SAR			Σ SAR (W/kg)	SPLSR	Remark
		Head	WIFI 2.4G	WIFI 5 G	BT			
GSM850 (voice)	Front	0.19	0.17	0.29	0.29	0.48	N/A	N/A
	Bottom	0.02	0.01	0.02	0.29	0.31	N/A	N/A
GSM1900 (voice)	Front	0.31	0.17	0.29	0.29	0.60	N/A	N/A
	Bottom	0.01	0.01	0.02	0.29	0.30	N/A	N/A
WCDMA Band II	Front	0.42	0.17	0.29	0.29	0.71	N/A	N/A
	Bottom	0.02	0.01	0.02	0.29	0.31	N/A	N/A
WCDMA Band IV	Front	0.53	0.17	0.29	0.29	**0.82**	N/A	N/A
	Bottom	0.01	0.01	0.02	0.29	0.30	N/A	N/A
WCDMA Band V	Front	0.18	0.17	0.29	0.29	0.47	N/A	N/A
	Bottom	0.02	0.01	0.02	0.29	0.31	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg)	SPLSR	Remark
			Head	WIFI2.4G	WIFI 5G	Bluetooth			
LTE Band 2 QPSK (20MHz)	Front	1	0.26	0.17	0.29	0.29	0.55	N/A	N/A
		50	0.21	0.17	0.29	0.29	0.50	N/A	N/A
	Bottom	1	0.02	0.01	0.02	0.29	0.31	N/A	N/A
		50	0.01	0.01	0.02	0.29	0.30	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.31	0.17	0.29	0.29	0.60	N/A	N/A
		50	0.30	0.17	0.29	0.29	0.59	N/A	N/A
	Bottom	1	0.03	0.01	0.02	0.29	0.32	N/A	N/A
		50	0.02	0.01	0.02	0.29	0.31	N/A	N/A
LTE Band 5 QPSK (10MHz)	Front	1	0.14	0.17	0.29	0.29	0.43	N/A	N/A
		25	0.11	0.17	0.29	0.29	0.40	N/A	N/A
	Bottom	1	0.02	0.01	0.02	0.29	0.31	N/A	N/A
		25	0.01	0.01	0.02	0.29	0.30	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.19	0.17	0.29	0.29	0.48	N/A	N/A
		50	0.16	0.17	0.29	0.29	0.45	N/A	N/A
	Bottom	1	0.02	0.01	0.02	0.29	0.31	N/A	N/A
		50	0.01	0.01	0.02	0.29	0.30	N/A	N/A

LTE Band 12 QPSK (10MHz)	Front	1	0.10	0.17	0.29	0.29	0.39	N/A	N/A
		25	0.07	0.17	0.29	0.29	0.36	N/A	N/A
	Bottom	1	0.02	0.01	0.02	0.29	0.31	N/A	N/A
		25	0.01	0.01	0.02	0.29	0.30	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.13	0.17	0.29	0.29	0.42	N/A	N/A
		25	0.10	0.17	0.29	0.29	0.39	N/A	N/A
	Bottom	1	0.03	0.01	0.02	0.29	0.32	N/A	N/A
		25	0.01	0.01	0.02	0.29	0.30	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.18	0.17	0.29	0.29	0.47	N/A	N/A
		50	0.15	0.17	0.29	0.29	0.44	N/A	N/A
	Bottom	1	0.02	0.01	0.02	0.29	0.31	N/A	N/A
		50	0.01	0.01	0.02	0.29	0.30	N/A	N/A

Band	Test Position	Scaled SAR				Σ SAR (W/kg)	SPLSR	Remark
		Body-Worn	WIFI 2.4G	WIFI 5G	BT			
GSM850 (voice)	Front	0.18	0.08	0.13	0.29	0.47	N/A	N/A
	Back	0.37	0.18	0.30	0.29	0.67	N/A	N/A
GSM850 (GPRS 4slot)	Front	0.37	0.08	0.13	0.29	0.66	N/A	N/A
	Back	0.70	0.18	0.30	0.29	1.00	N/A	N/A
GSM1900 (voice)	Front	0.28	0.08	0.13	0.29	0.57	N/A	N/A
	Back	0.58	0.18	0.30	0.29	0.88	N/A	N/A
GSM1900 (GPRS 3slot)	Front	0.32	0.08	0.13	0.29	0.61	N/A	N/A
	Back	0.64	0.18	0.30	0.29	0.94	N/A	N/A
WCDMA Band II	Front	0.36	0.08	0.13	0.29	0.65	N/A	N/A
	Back	0.73	0.18	0.30	0.29	1.03	N/A	N/A
WCDMA Band IV	Front	0.45	0.08	0.13	0.29	0.74	N/A	N/A
	Back	0.76	0.18	0.30	0.29	**1.06**	N/A	N/A
WCDMA Band V	Front	0.16	0.08	0.13	0.29	0.45	N/A	N/A
	Back	0.33	0.18	0.30	0.29	0.63	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg)	SPLSR	Remark
			Body-Worn	WIFI 2.4G	WIFI 5G	Bluetooth			
LTE Band 2 QPSK (20MHz)	Front	1	0.23	0.08	0.13	0.29	0.52	N/A	N/A
		50	0.21	0.08	0.13	0.29	0.50	N/A	N/A
	Back	1	0.45	0.18	0.30	0.29	0.75	N/A	N/A
		50	0.42	0.18	0.30	0.29	0.72	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.30	0.08	0.13	0.29	0.59	N/A	N/A
		50	0.28	0.08	0.13	0.29	0.57	N/A	N/A
	Back	1	0.59	0.18	0.30	0.29	0.89	N/A	N/A
		50	0.56	0.18	0.30	0.29	0.86	N/A	N/A
LTE Band 5 QPSK (10MHz)	Front	1	0.11	0.08	0.13	0.29	0.40	N/A	N/A
		25	0.10	0.08	0.13	0.29	0.39	N/A	N/A
	Back	1	0.23	0.18	0.30	0.29	0.53	N/A	N/A
		25	0.21	0.18	0.30	0.29	0.51	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.17	0.08	0.13	0.29	0.46	N/A	N/A
		50	0.14	0.08	0.13	0.29	0.43	N/A	N/A
	Back	1	0.33	0.18	0.30	0.29	0.63	N/A	N/A
		50	0.27	0.18	0.30	0.29	0.57	N/A	N/A
LTE Band 12 QPSK (10MHz)	Front	1	0.08	0.08	0.13	0.29	0.37	N/A	N/A
		25	0.05	0.08	0.13	0.29	0.34	N/A	N/A
	Back	1	0.16	0.18	0.30	0.29	0.46	N/A	N/A
		25	0.10	0.18	0.30	0.29	0.40	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.11	0.08	0.13	0.29	0.40	N/A	N/A
		25	0.08	0.08	0.13	0.29	0.37	N/A	N/A
	Back	1	0.22	0.18	0.30	0.29	0.52	N/A	N/A
		25	0.16	0.18	0.30	0.29	0.46	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.16	0.08	0.13	0.29	0.45	N/A	N/A
		50	0.13	0.08	0.13	0.29	0.42	N/A	N/A
	Back	1	0.31	0.18	0.30	0.29	0.61	N/A	N/A
		50	0.25	0.18	0.30	0.29	0.55	N/A	N/A

Band	Test Position	Scaled SAR			Σ SAR (W/kg)	SPLSR	Remark
		Hotspot	WIFI 2.4G	WIFI 5G			
GSM850 (GPRS)	Front	0.45	0.08	0.14	0.59	N/A	N/A
	Back	0.75	0.20	0.31	1.06	N/A	N/A
	Right	0.03	/	/	0.03	N/A	N/A
	Left	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	0.01	/	/	0.01	N/A	N/A
	Top	/	0.01	0.02	0.02	N/A	N/A
GSM1900 (GPRS)	Front	0.32	0.08	0.14	0.46	N/A	N/A
	Back	0.67	0.20	0.31	0.98	N/A	N/A
	Right	0.02	/	/	0.02	N/A	N/A
	Left	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	0.01	/	/	0.01	N/A	N/A
	Top	/	0.01	0.02	0.02	N/A	N/A
WCDMA Band II	Front	0.36	0.08	0.14	0.5	N/A	N/A
	Back	0.74	0.20	0.31	1.05	N/A	N/A
	Right	0.03	/	/	0.03	N/A	N/A
	Left	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	0.01	/	/	0.01	N/A	N/A
	Top	/	0.01	0.02	0.02	N/A	N/A
WCDMA Band IV	Front	0.48	0.08	0.14	0.62	N/A	N/A
	Back	0.77	0.20	0.31	**1.08**	N/A	N/A
	Right	0.02	/	/	0.02	N/A	N/A
	Left	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	0.01	/	/	0.01	N/A	N/A
	Top	/	0.01	0.02	0.02	N/A	N/A
WCDMA Band V	Front	0.16	0.08	0.14	0.3	N/A	N/A
	Back	0.33	0.20	0.31	0.64	N/A	N/A
	Right	0.02	/	/	0.02	N/A	N/A
	Left	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	0.01	/	/	0.01	N/A	N/A
	Top	/	0.01	0.02	0.02	N/A	N/A

Band	Test Position	RB allocation	Scaled			Σ SAR (W/kg)	SPLSR	Remark
			Hotspot	WIFI2.4G	WIFI 5G			
LTE Band 2 QPSK (20MHz)	Front	1	0.25	0.08	0.14	0.39	N/A	N/A
		50	0.21	0.08	0.14	0.35	N/A	N/A
	Back	1	**0.49**	0.20	0.31	0.8	N/A	N/A
		50	0.42	0.20	0.31	0.73	N/A	N/A
	Right	1	0.03	/	/	0.03	N/A	N/A
		50	0.03	/	/	0.03	N/A	N/A
	Left	1	0.02	0.02	0.03	0.05	N/A	N/A
		50	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	1	0.01	/	/	0.01	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		50	/	0.01	0.02	0.02	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.30	0.08	0.14	0.44	N/A	N/A
		50	0.28	0.08	0.14	0.42	N/A	N/A
	Back	1	**0.59**	0.20	0.31	0.9	N/A	N/A
		50	0.56	0.20	0.31	0.87	N/A	N/A
	Right	1	0.03	/	/	0.03	N/A	N/A
		50	0.02	/	/	0.02	N/A	N/A
	Left	1	0.01	0.02	0.03	0.04	N/A	N/A
		50	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	1	0.02	/	/	0.02	N/A	N/A
		50	0.02	/	/	0.02	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		50	/	0.01	0.02	0.02	N/A	N/A
LTE Band 5 QPSK (10MHz)	Front	1	0.11	0.08	0.14	0.25	N/A	N/A
		25	0.10	0.08	0.14	0.24	N/A	N/A
	Back	1	**0.24**	0.20	0.31	0.55	N/A	N/A
		25	0.21	0.20	0.31	0.52	N/A	N/A
	Right	1	0.03	/	/	0.03	N/A	N/A
		25	0.03	/	/	0.03	N/A	N/A
	Left	1	0.02	0.02	0.03	0.05	N/A	N/A
		25	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		25	/	0.01	0.02	0.02	N/A	N/A

LTE Band 7 QPSK (20MHz)	Front	1	0.20	0.08	0.14	0.34	N/A	N/A
		50	0.15	0.08	0.14	0.29	N/A	N/A
	Back	1	**0.37**	0.20	0.31	0.68	N/A	N/A
		50	0.30	0.20	0.31	0.61	N/A	N/A
	Right	1	0.03	/	/	0.03	N/A	N/A
		50	0.02	/	/	0.02	N/A	N/A
	Left	1	0.02	0.02	0.03	0.05	N/A	N/A
		50	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	1	0.02	/	/	0.02	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		50	/	0.01	0.02	0.02	N/A	N/A
LTE Band 12 QPSK (10MHz)	Front	1	0.09	0.08	0.14	0.23	N/A	N/A
		25	0.05	0.08	0.14	0.19	N/A	N/A
	Back	1	**0.18**	0.20	0.31	0.49	N/A	N/A
		25	0.10	0.20	0.31	0.41	N/A	N/A
	Right	1	0.03	/	/	0.03	N/A	N/A
		25	0.02	/	/	0.02	N/A	N/A
	Left	1	0.02	0.02	0.03	0.05	N/A	N/A
		25	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	1	0.02	/	/	0.02	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		25	/	0.01	0.02	0.02	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.12	0.08	0.14	0.26	N/A	N/A
		25	0.08	0.08	0.14	0.22	N/A	N/A
	Back	1	**0.23**	0.20	0.31	0.54	N/A	N/A
		25	0.17	0.20	0.31	0.48	N/A	N/A
	Right	1	0.02	/	/	0.02	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Left	1	0.03	0.02	0.03	0.06	N/A	N/A
		25	0.02	0.02	0.03	0.05	N/A	N/A
	Bottom	1	0.01	/	/	0.01	N/A	N/A
		25	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		25	/	0.01	0.02	0.02	N/A	N/A

LTE Band 41 QPSK (20MHz)	Front	1	0.19	0.08	0.14	0.33	N/A	N/A
		50	0.15	0.08	0.14	0.29	N/A	N/A
	Back	1	**0.34**	0.20	0.31	0.65	N/A	N/A
		50	0.28	0.20	0.31	0.59	N/A	N/A
	Right	1	0.04	/	/	0.04	N/A	N/A
		50	0.03	/	/	0.03	N/A	N/A
	Left	1	0.02	0.02	0.03	0.05	N/A	N/A
		50	0.01	0.02	0.03	0.04	N/A	N/A
	Bottom	1	0.02	/	/	0.02	N/A	N/A
		50	0.01	/	/	0.01	N/A	N/A
	Top	1	/	0.01	0.02	0.02	N/A	N/A
		50	/	0.01	0.02	0.02	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.

10.6. 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	

10.7. Test Equipment List

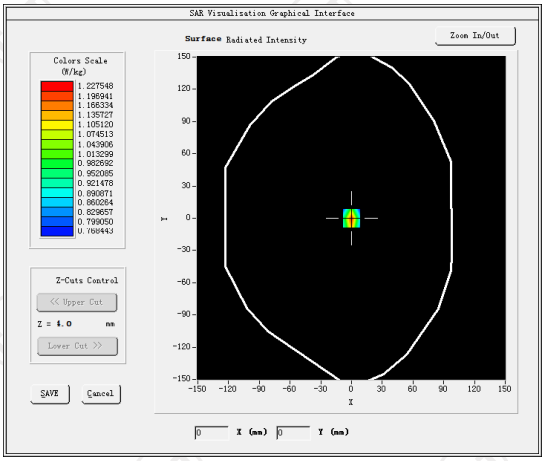
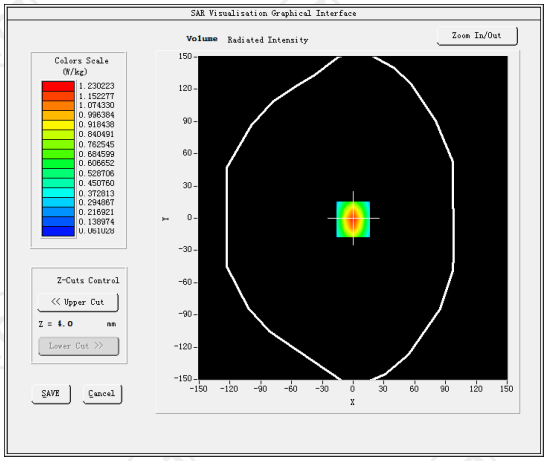
Test Equipment	Manufacturer	Model	Serial Number	Calibration	
				Calibration Date (D.M.Y)	Calibration Due (D.M.Y)
PC	Lenovo	H3050	N/A	N/A	N/A
Signal Generator	Angilent	N5182A	MY47070282	Jun. 08, 2021	Jun. 07, 2022
Multimeter	Keithley	Multimeter 2000	4078275	Jun. 08, 2021	Jun. 07, 2022
Network Analyzer	Agilent	8753E	US38432457	Jun. 08, 2021	Jun. 07, 2022
Wideband Radio Communication Tester	R&S	CMW500	114220	Jun. 08, 2021	Jun. 07, 2022
Power Meter	Agilent	E4418B	GB43312526	Jun. 08, 2021	Jun. 07, 2022
Power Meter	Agilent	E4416A	MY45101555	Jun. 08, 2021	Jun. 07, 2022
Power Meter	Agilent	N1912A	MY50001018	Jun. 08, 2021	Jun. 07, 2022
Power Sensor	Agilent	E9301A	MY41497725	Jun. 08, 2021	Jun. 07, 2022
Power Sensor	Agilent	E9327A	MY44421198	Jun. 08, 2021	Jun. 07, 2022
Power Sensor	Agilent	E9323A	MY53070005	Jun. 08, 2021	Jun. 07, 2022
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 36/20 EPGO346	Oct. 23, 2020	Oct. 22, 2021
DIPOLE 750	MVG	SID750	SN 16/15 DIP 0G750-368	Jun. 05, 2021	Jun. 04, 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
DIPOLE 5G	MVG	SID 5G	SN 13/14 WGA32	May. 15, 2021	May. 14, 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

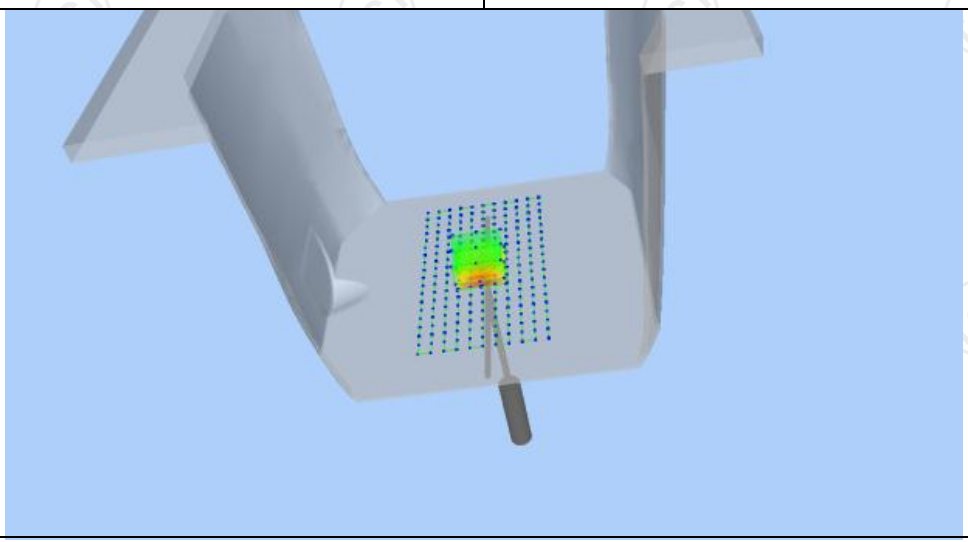
Note: *1.N/A means this equipment no need to calibrate*
2.Each Time means this device need to calibrate every use time
3. The dipole was not damaged properly repaired.
4. The measured SAR deviates from the calibrated SAR value by less than 10%
5. The most recent return-loss result meets the required 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.

11. System Check Results

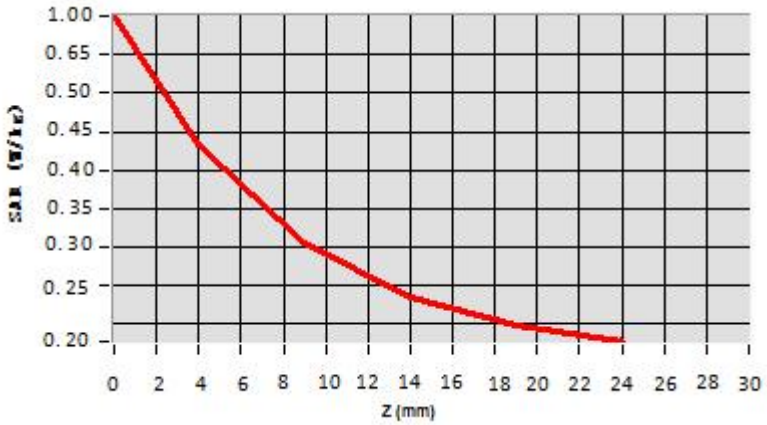
Date of measurement: 10/09/2021 Test mode: 750 (Head)
Product Description: Validation
Dipole Model: SID750
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.71
Frequency (MHz)	750.000000
Relative permittivity (real part)	40.761260
Relative permittivity (imaginary part)	17.130904
Conductivity (S/m)	0.931220
Variation (%)	-0.090000
SAR 10g (W/Kg)	**0.540421**
SAR 1g (W/Kg)	**0.804230**

SURFACE SAR	**VOLUME SAR**
	



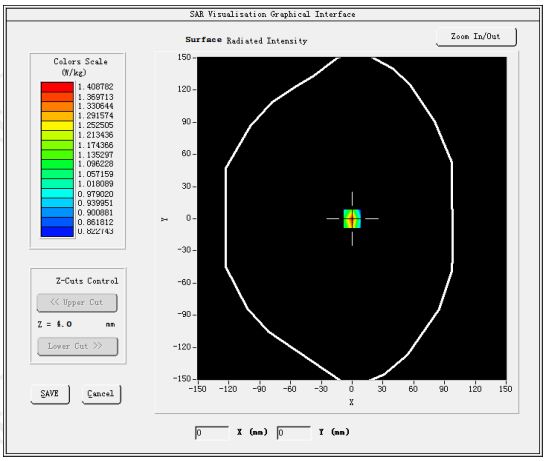
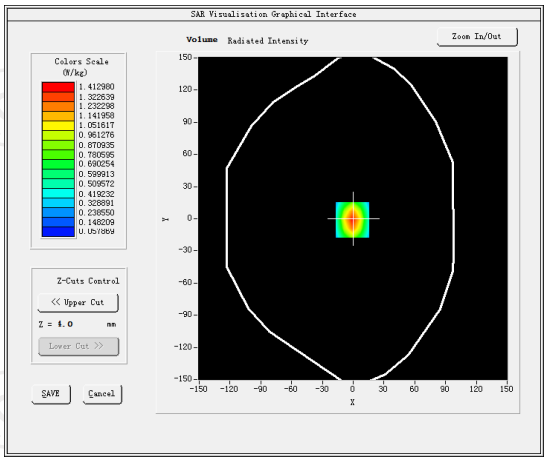
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0014	0.4404	0.3024	0.2342	0.2221

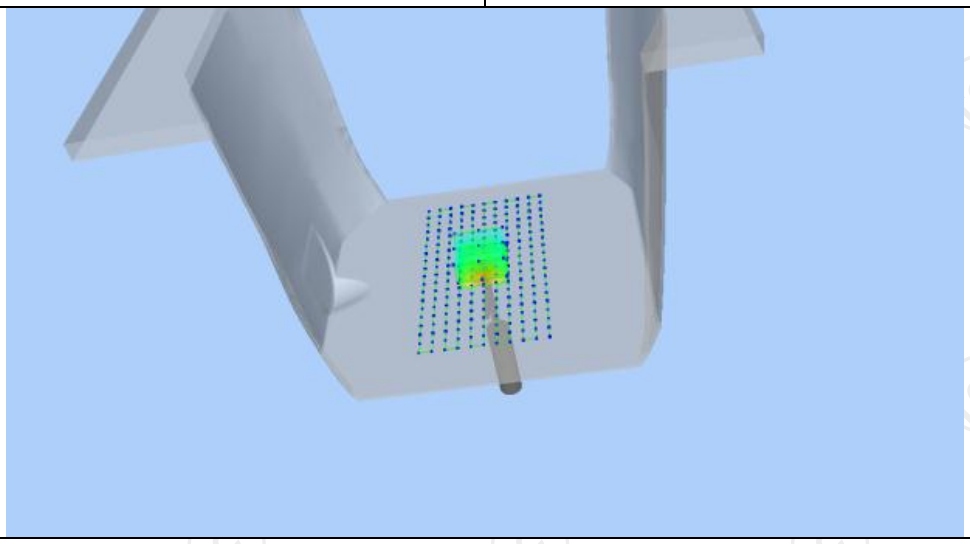


Hot spot position

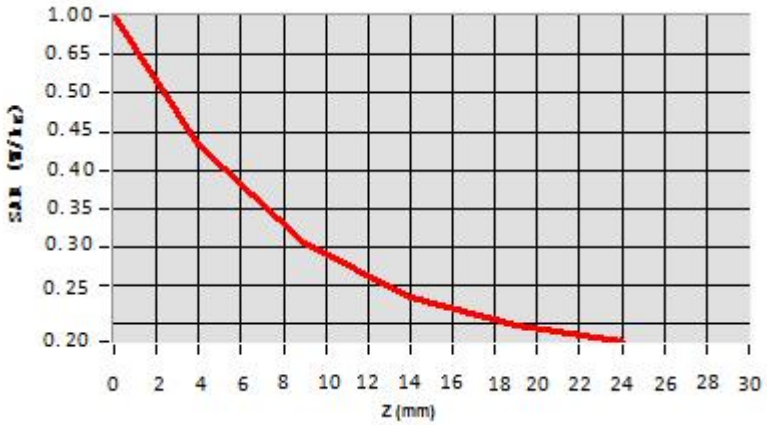
Date of measurement: 10/09/2021 Test mode: 750 (Body)
Product Description: Validation
Dipole Model: SID750
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.78
Frequency (MHz)	750.000000
Relative permittivity (real part)	56.701166
Relative permittivity (imaginary part)	20.148160
Conductivity (S/m)	0.981243
Variation (%)	-0.150000
SAR 10g (W/Kg)	**0.562014**
SAR 1g (W/Kg)	**0.832441**

SURFACE SAR	**VOLUME SAR**
	



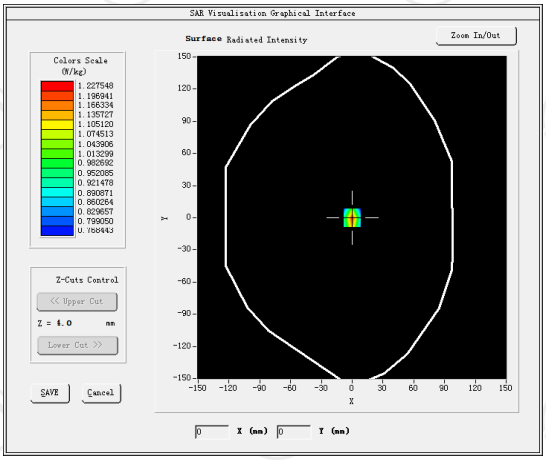
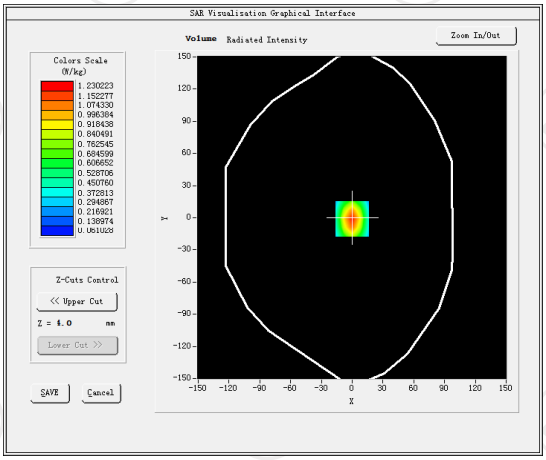
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.014	0.4420	0.3029	0.2419	0.2240

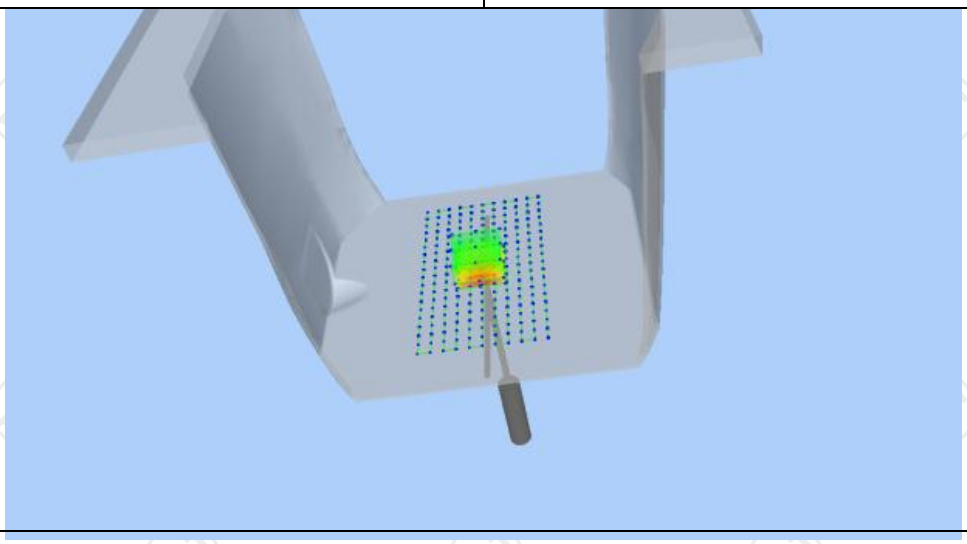


Hot spot position

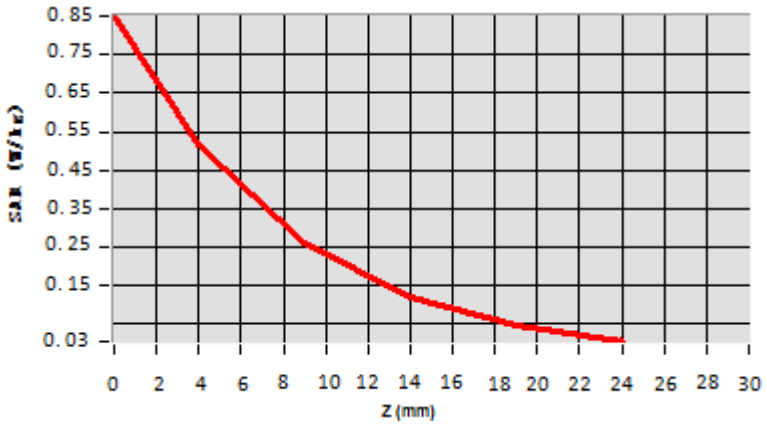
Date of measurement: 10/11/2021 Test mode: 835 (Head)
Product Description: Validation
Dipole Model: SID835
E-Field Probe: SSE2 (SN 36/20 EPGO346)

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**
	



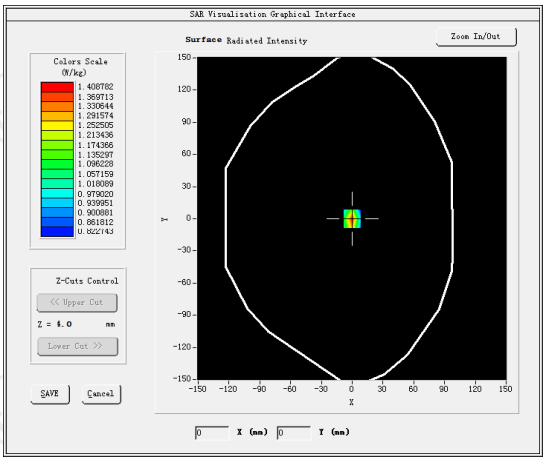
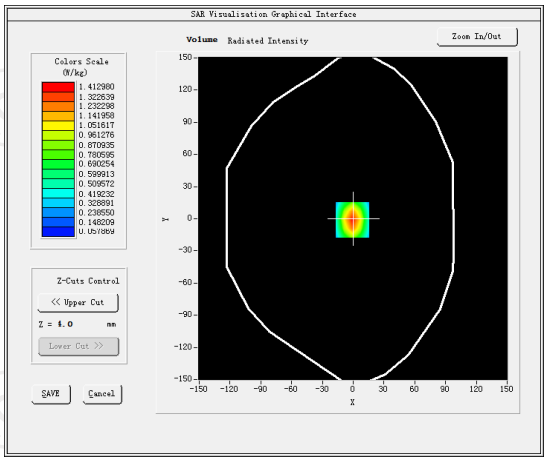
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8625	0.5302	0.2594	0.1302	0.1025

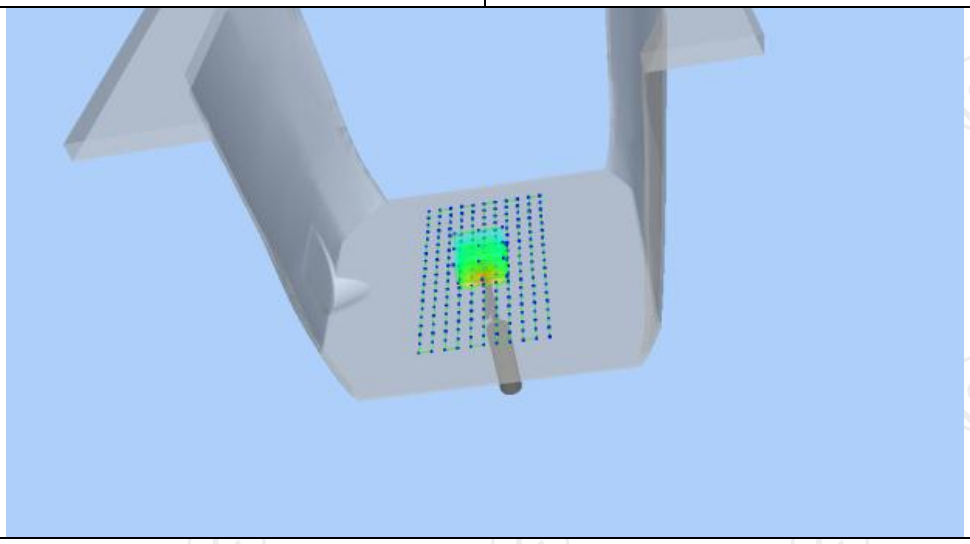


Hot spot position

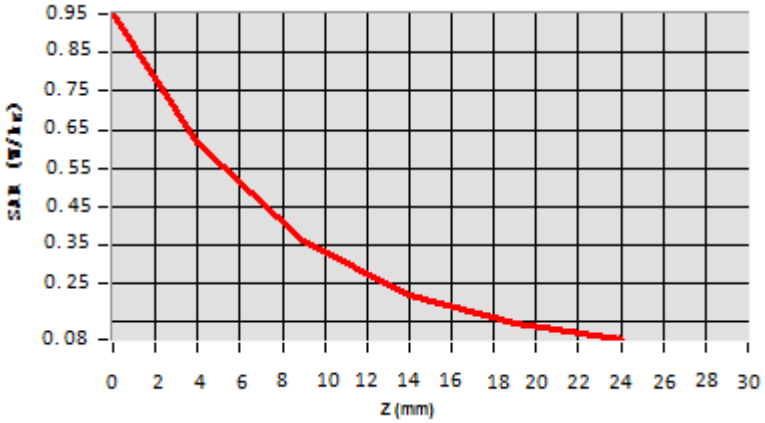
Date of measurement: 10/11/2021 Test mode: 835 (Body)
Product Description: Validation
Dipole Model: SID835
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.86
Frequency (MHz)	835.000000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-0.150000
SAR 10g (W/Kg)	**0.633123**
SAR 1g (W/Kg)	**0.949446**

SURFACE SAR	**VOLUME SAR**
	



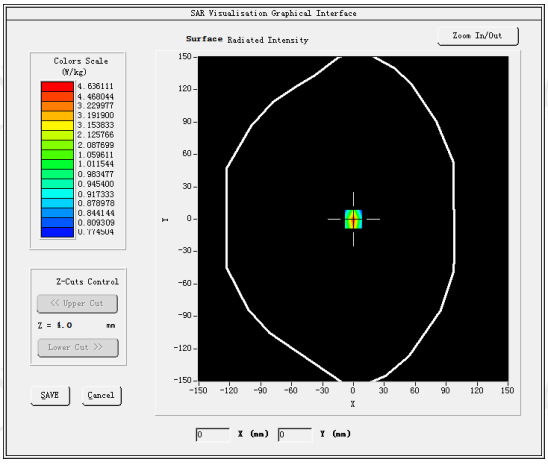
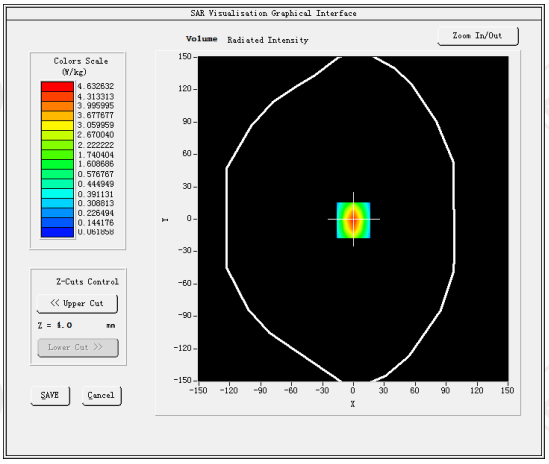
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9625	0.6022	0.3594	0.2202	0.0725

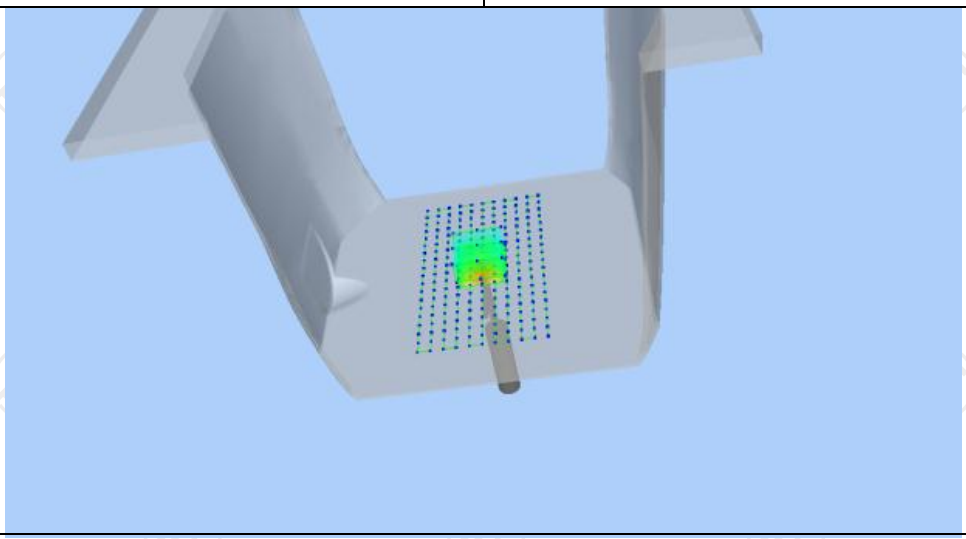


Hot spot position

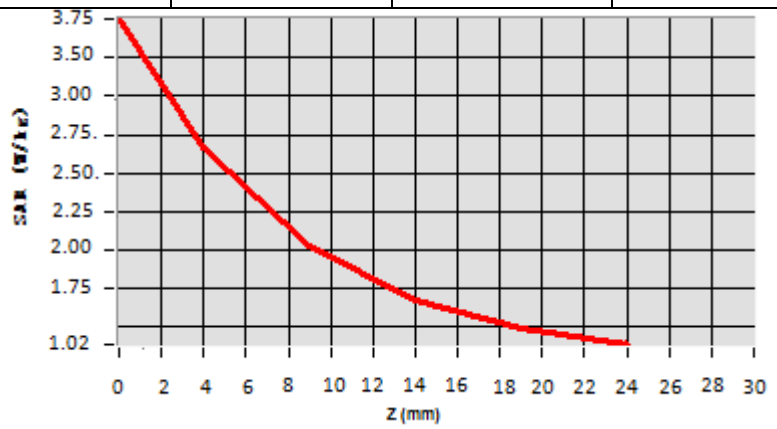
Date of measurement: 10/13/2021 Test mode: 1800MHz (Head)
Product Description: Validation
Dipole Model: SID1800
E-Field Probe: SSE2 (SN 36/20 EPGO346)

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)	1.38000
Variation (%)	1.250000
SAR 10g (W/Kg)	**2.201458**
SAR 1g (W/Kg)	**3.752497**

SURFACE SAR	**VOLUME SAR**
	



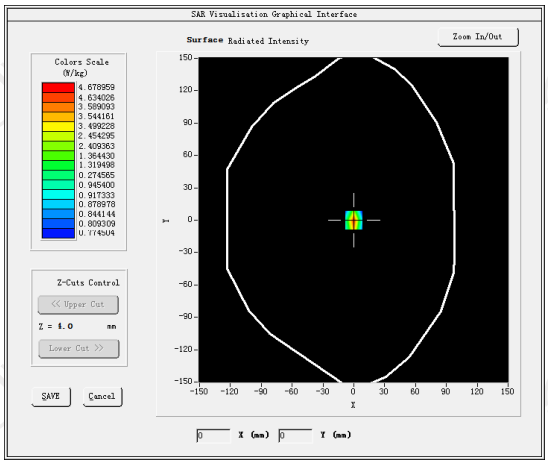
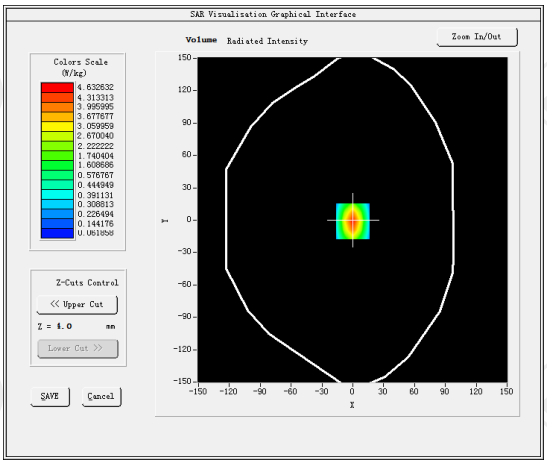
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7625	2.6254	2.0245	1.6254	1.0214

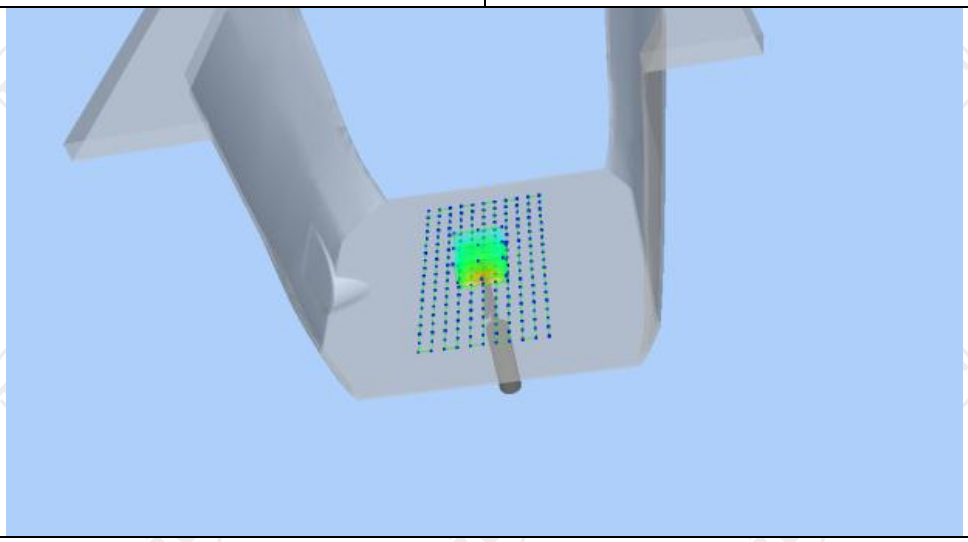


Hot spot position

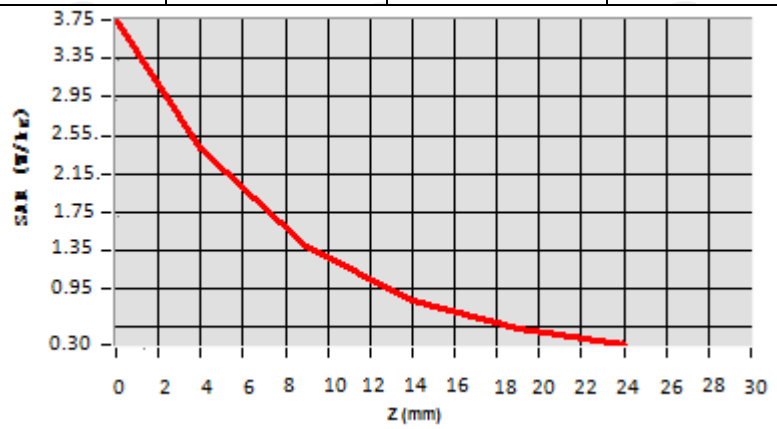
Date of measurement: 10/13/2021 Test mode: 1800MHz (Body)
Product Description: Validation
Dipole Model: SID1800
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.16
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	3.050000
SAR 10g (W/Kg)	**2.053687**
SAR 1g (W/Kg)	**3.782547**

SURFACE SAR	**VOLUME SAR**
	



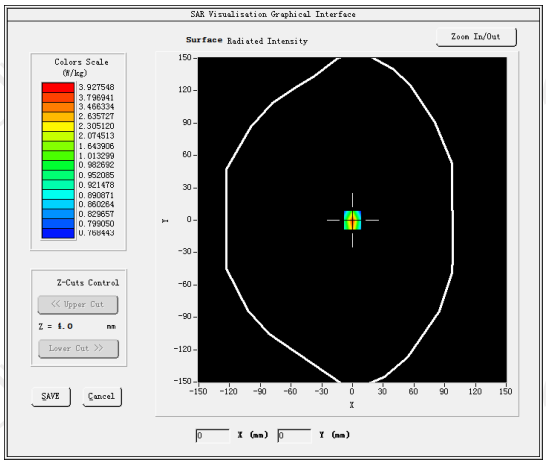
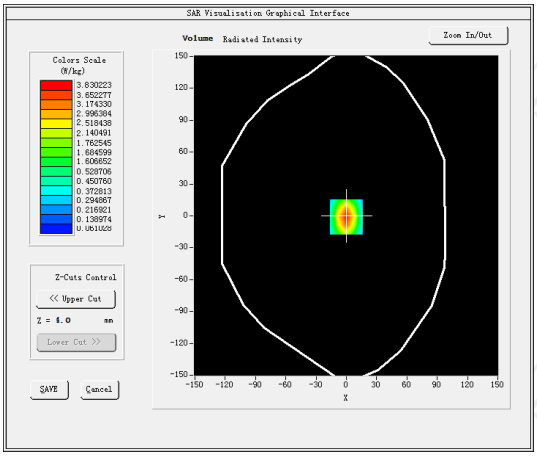
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7545	2.4524	1.3520	0.8214	0.5525

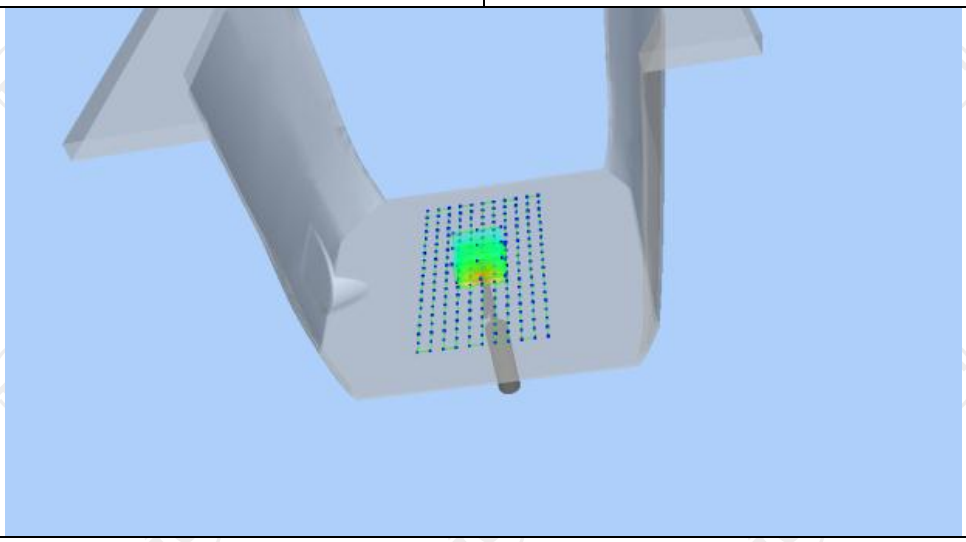


Hot spot position

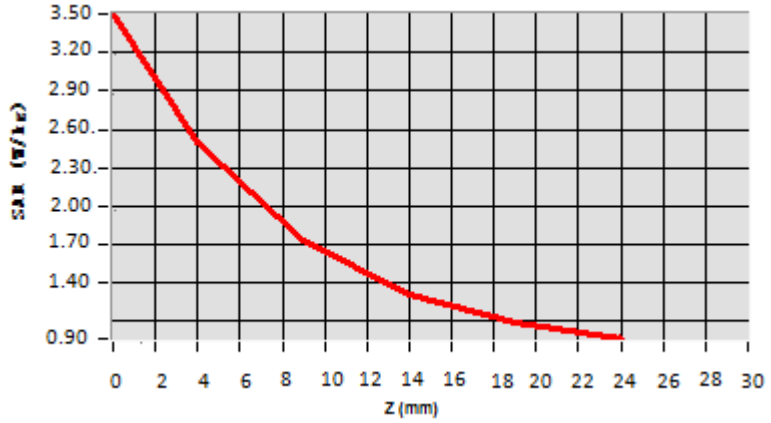
Date of measurement: 10/15/2021 Test mode: 1900MHz (Head)
Product Description: Validation
Dipole Model: SID1900
E-Field Probe: SSE2 (SN 36/20 EPGO346)

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**
	



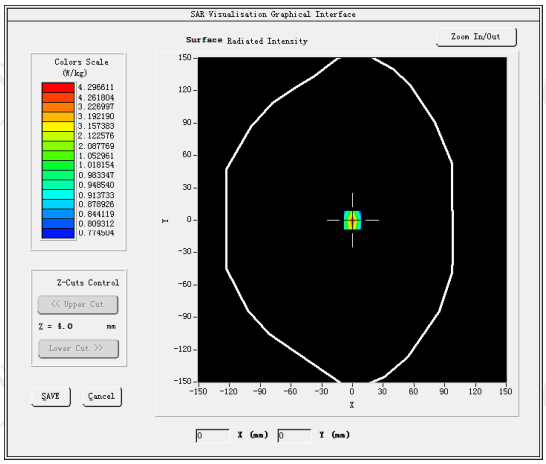
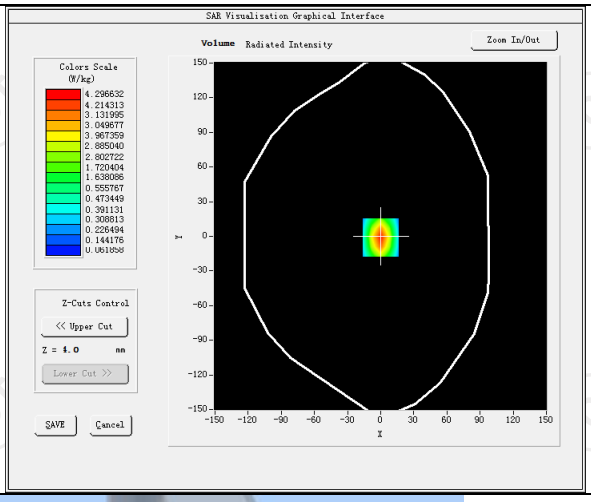
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.5325	2.5687	1.7025	1.3025	0.1125

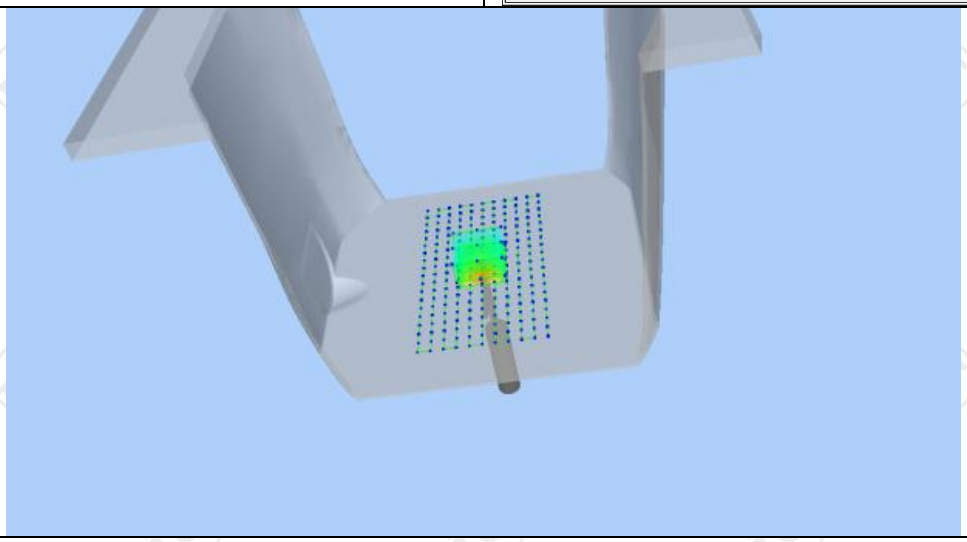


Hot spot position

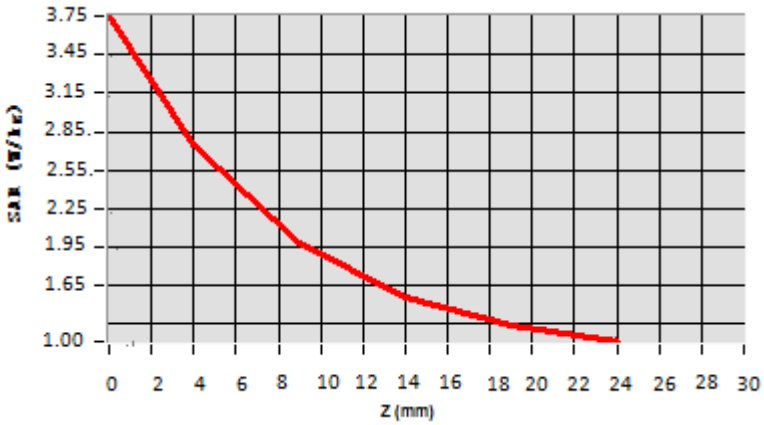
Date of measurement: 10/15/2021 Test mode: 1900MHz (Body)
Product Description: Validation
Dipole Model: SID1900
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.32
Frequency (MHz)	1900.000000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	1.250000
SAR 10g (W/Kg)	**1.994255**
SAR 1g (W/Kg)	**3.766112**

SURFACE SAR	**VOLUME SAR**
	



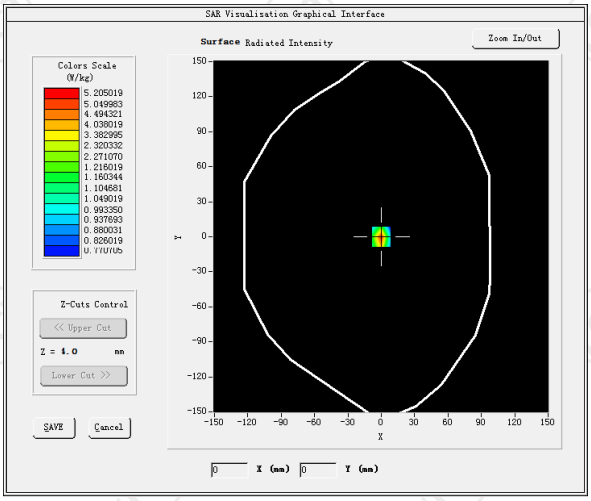
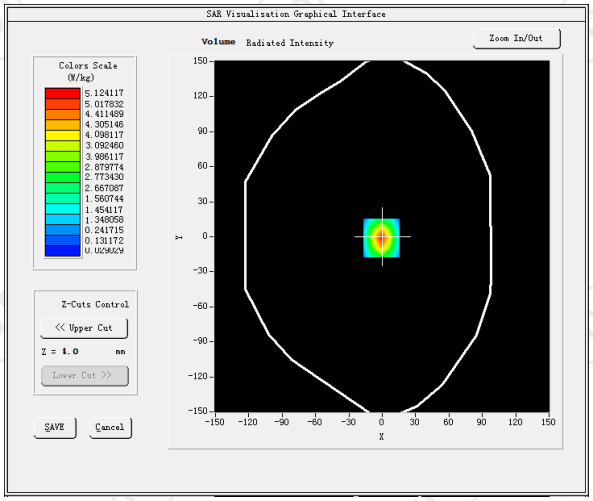
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7752	2.7154	1.9525	1.5694	0.9014

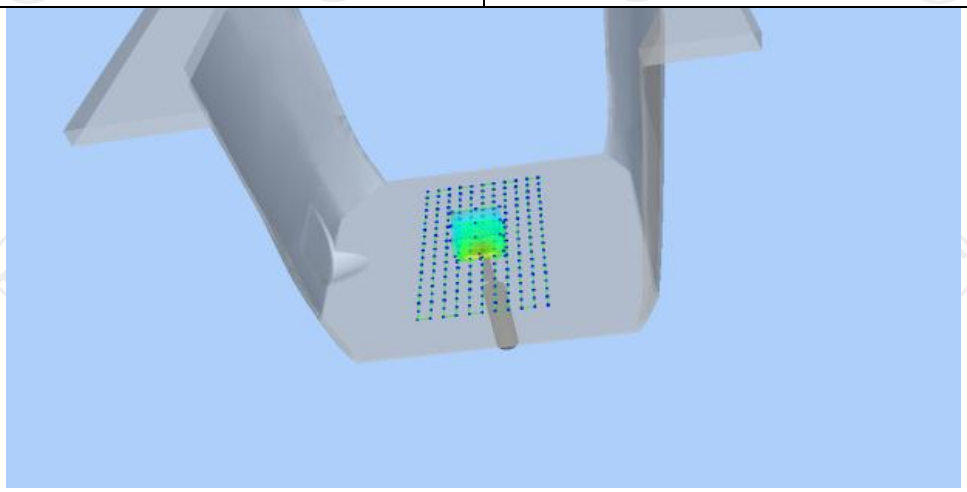


Hot spot position

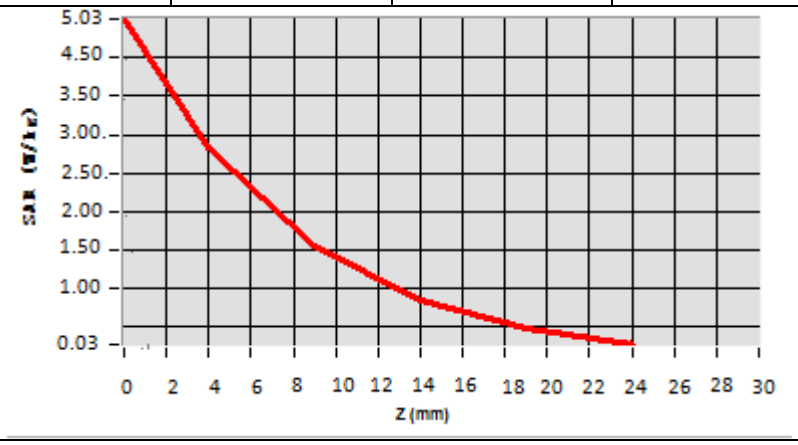
Date of measurement: 10/18/2021 Test mode: 2450MHz (Head)
Product Description: Validation
Dipole Model: SID2450
E-Field Probe: SSE2 (SN 36/20 EPGO346)

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**
	



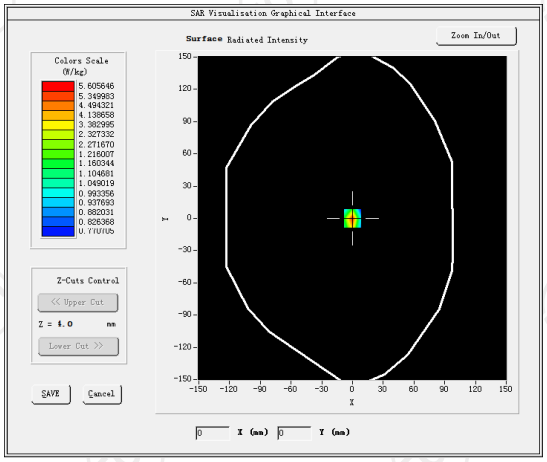
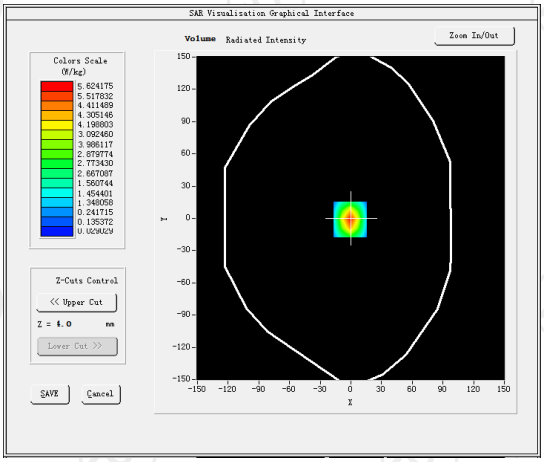
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0262	2.7584	1.5026	0.8252	0.4125

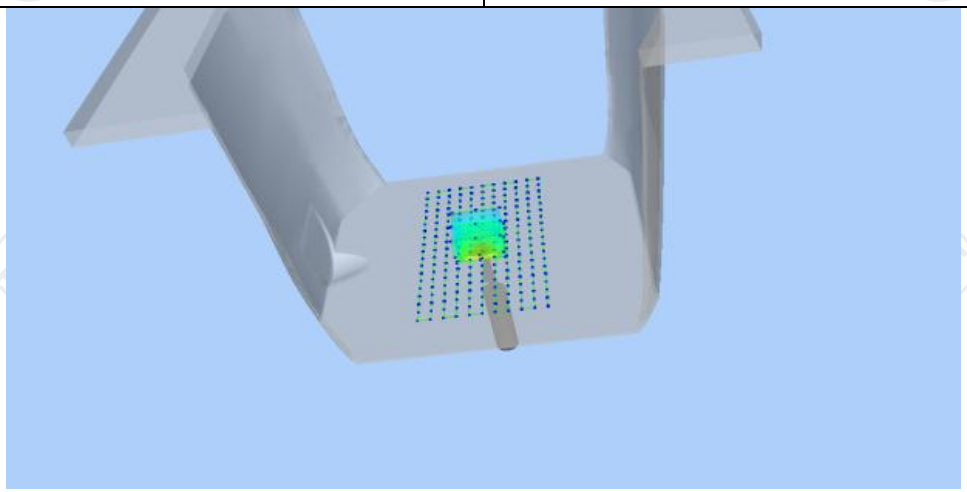


Hot spot position

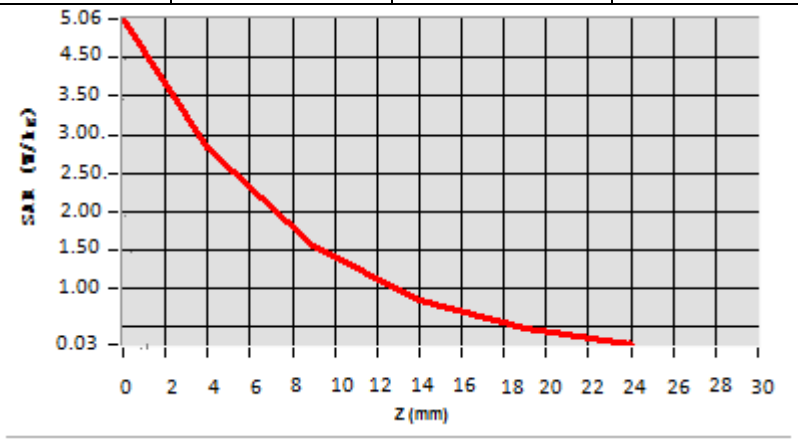
Date of measurement: 10/18/2021 Test mode: 2450MHz (Body)
Product Description: Validation
Dipole Model: SID2450
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.37
Frequency (MHz)	2450.000000
Relative permittivity (real part)	54.616199
Relative permittivity (imaginary part)	14.930150
Conductivity (S/m)	2.012159
Variation (%)	-0.230000
SAR 10g (W/Kg)	**2.416669**
SAR 1g (W/Kg)	**5.066368**

SURFACE SAR	**VOLUME SAR**
	



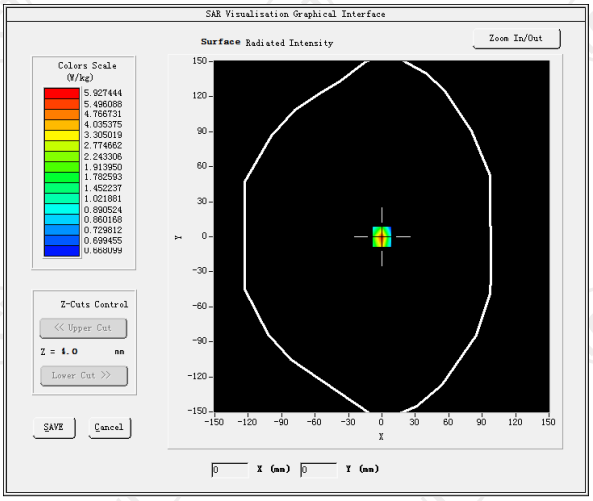
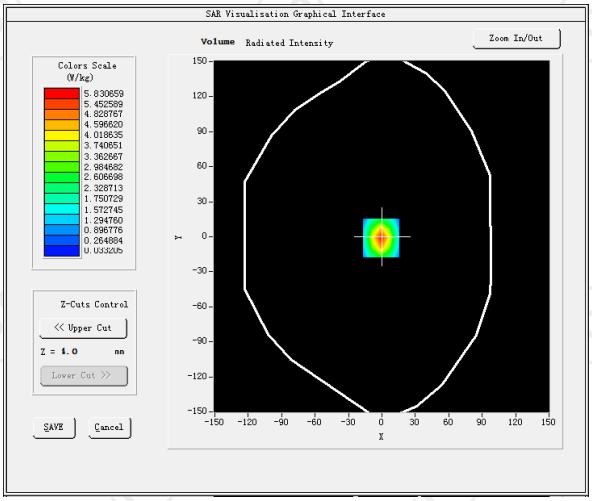
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0622	2.7984	1.5251	0.8352	0.4200

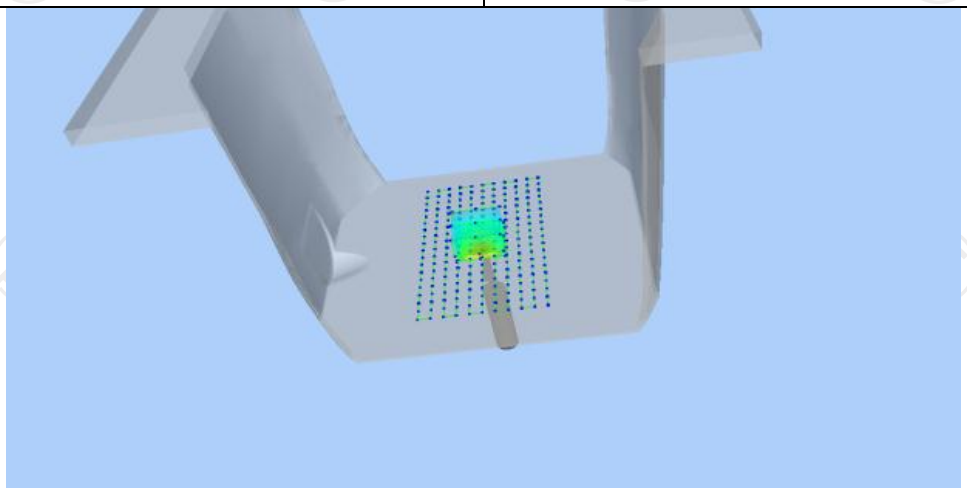


Hot spot position

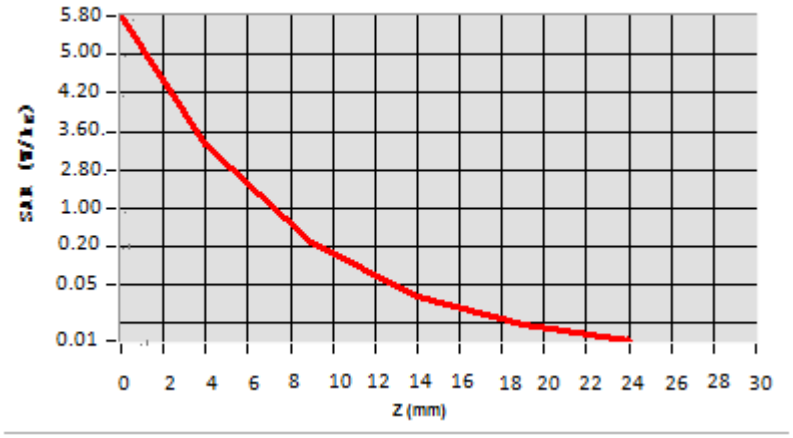
Date of measurement: 10/19/2021 Test mode: 2600MHz (Head)
Product Description: Validation
Dipole Model: SID2600
E-Field Probe: SSE2 (SN 36/20 EPGO346)

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**
	



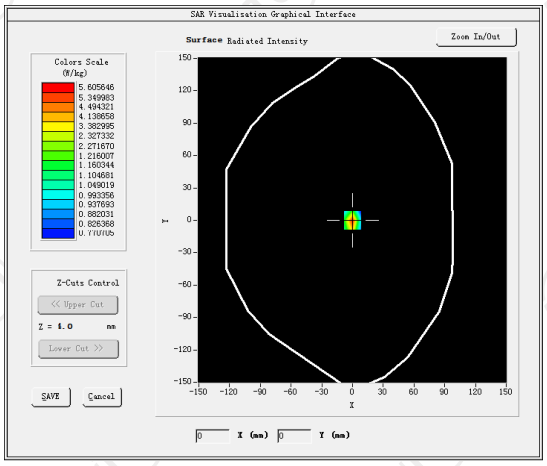
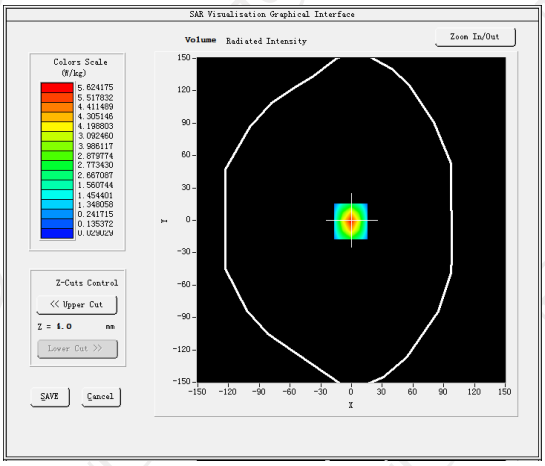
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7893	3.2375	0.2098	0.0387	0.0249

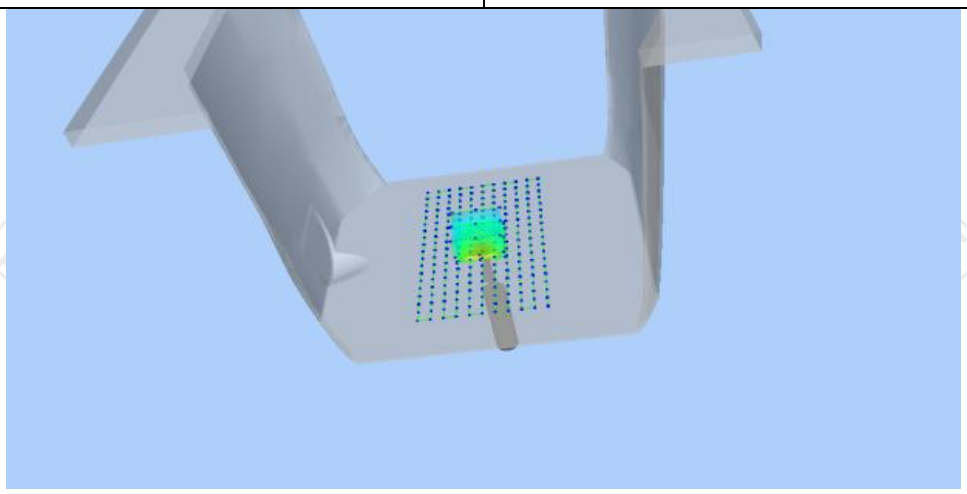


Hot spot position

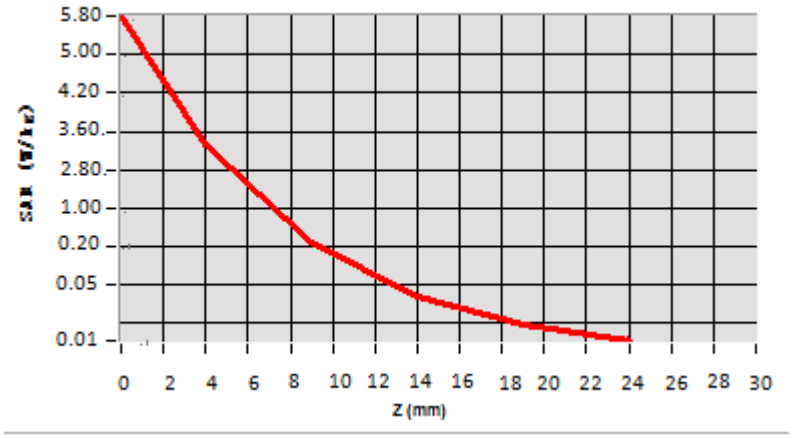
Date of measurement: 10/19/2021 Test mode: 2600MHz (Body)
Product Description: Validation
Dipole Model: SID2600
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.50
Frequency (MHz)	2535.000000
Relative permittivity (real part)	52.013887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	2.114821
Variation (%)	-1.800000
SAR 10g (W/Kg)	**2.382177**
SAR 1g (W/Kg)	**5.365098**

SURFACE SAR	**VOLUME SAR**
	



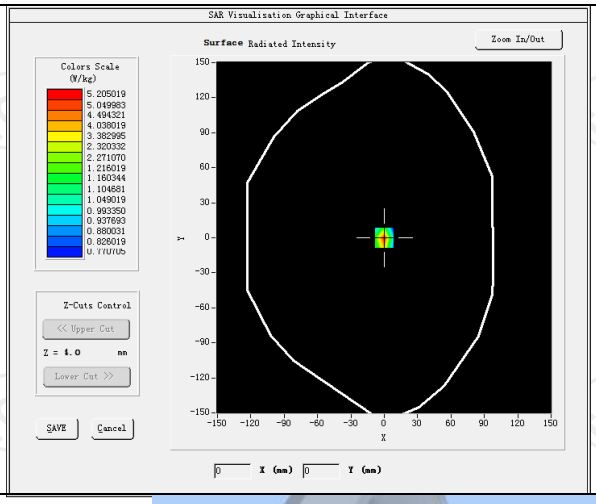
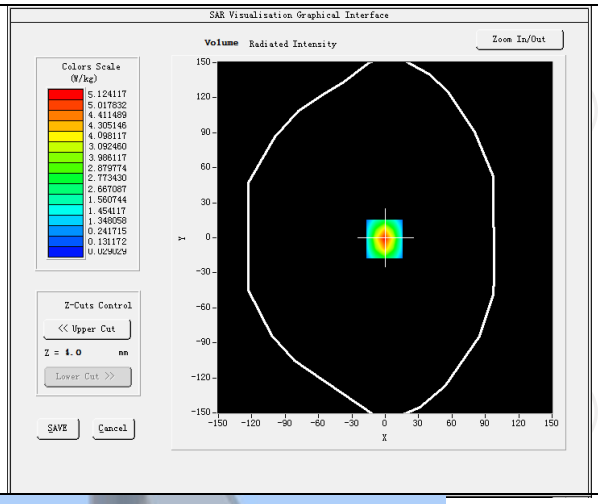
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7721	3.2210	0.1937	0.0321	0.0203

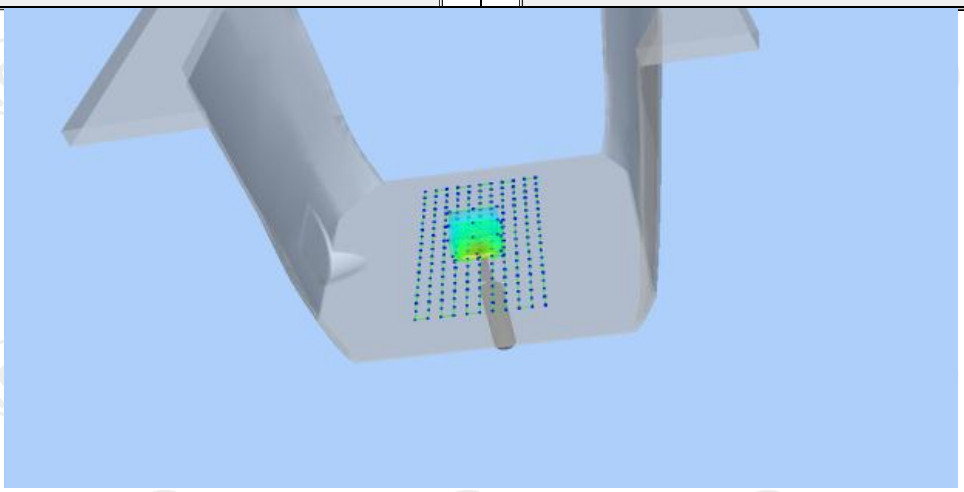


Hot spot position

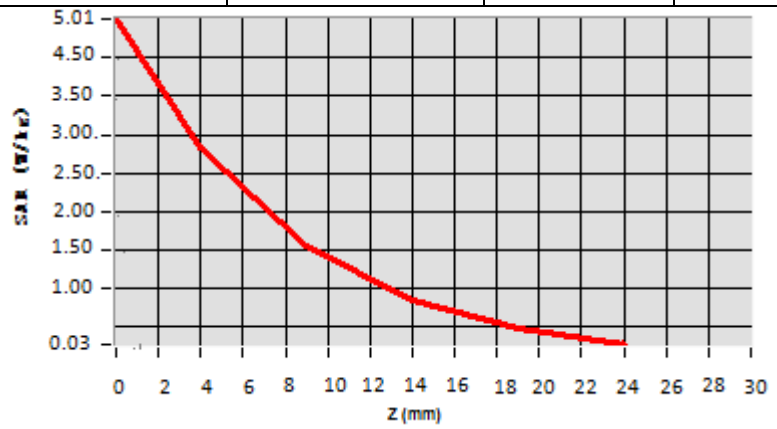
Date of measurement: 10/20/2021 Test mode: 5200MHz (Head)
Product Description: Validation
Dipole Model: SID5200
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.01
Frequency (MHz)	5200.000000
Relative permittivity (real part)	35.068832
Relative permittivity (imaginary part)	13.679428
Conductivity (S/m)	5.220788
Variation (%)	-0.820000
SAR 10g (W/Kg)	**1.807521**
SAR 1g (W/Kg)	**5.012481**

SURFACE SAR	**VOLUME SAR**
	



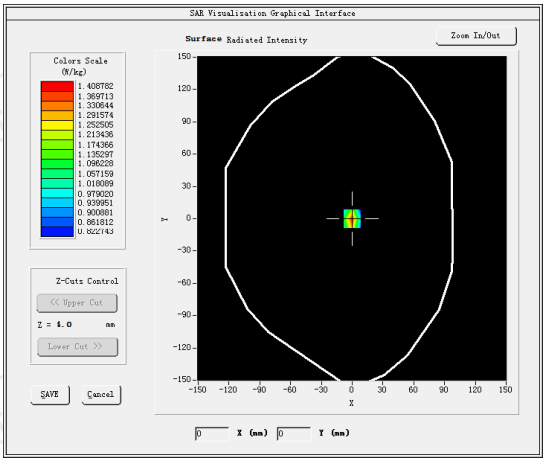
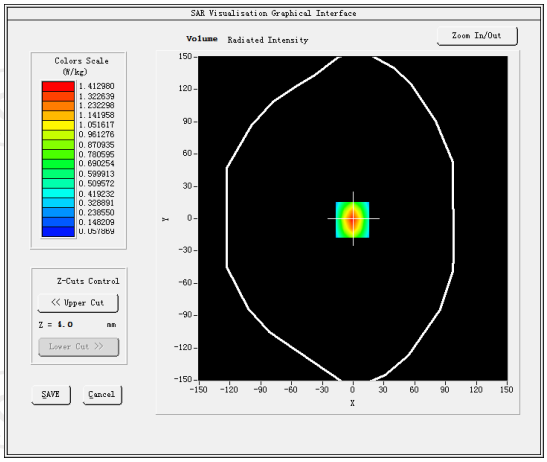
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0132	2.7584	1.5026	0.8252	0.4125

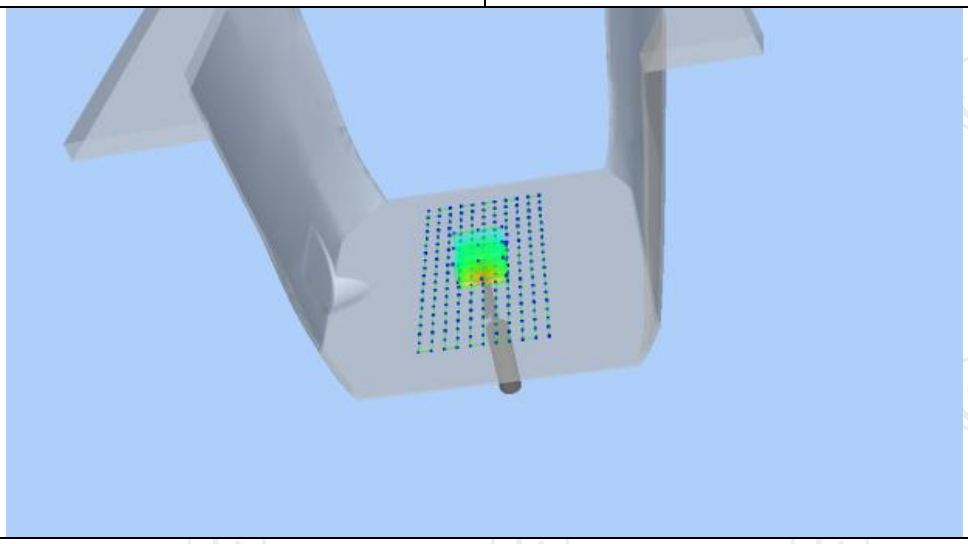


Hot spot position

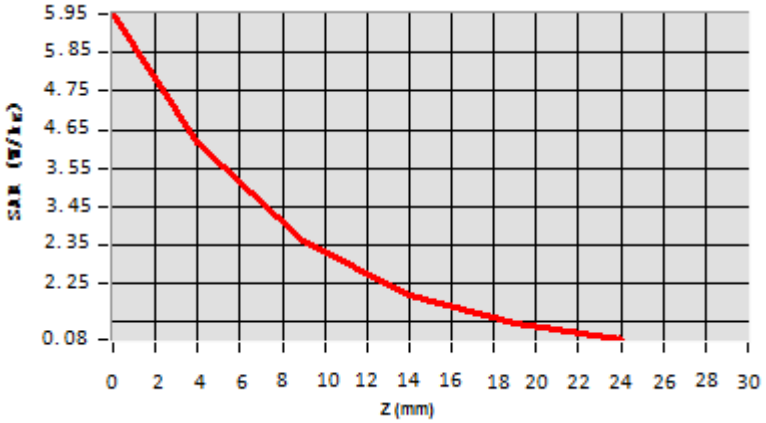
Date of measurement: 10/20/2021 Test mode: 5200 (Body)
Product Description: Validation
Dipole Model: SID5000
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.08
Frequency (MHz)	5200.000000
Relative permittivity (real part)	49.012077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	5.458883
Variation (%)	-3.140000
SAR 10g (W/Kg)	**5.633123**
SAR 1g (W/Kg)	**2.949446**

SURFACE SAR	**VOLUME SAR**
	



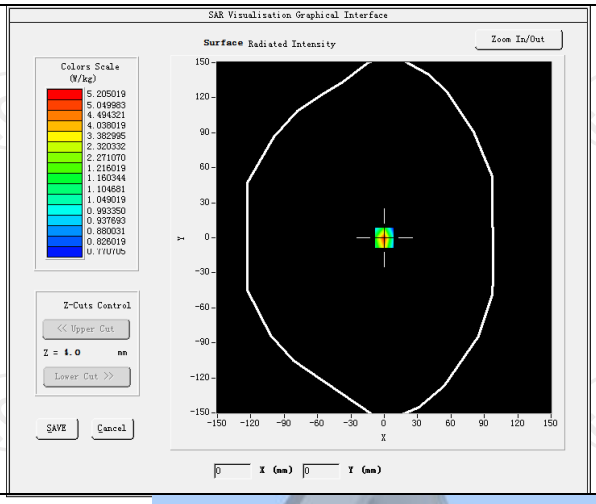
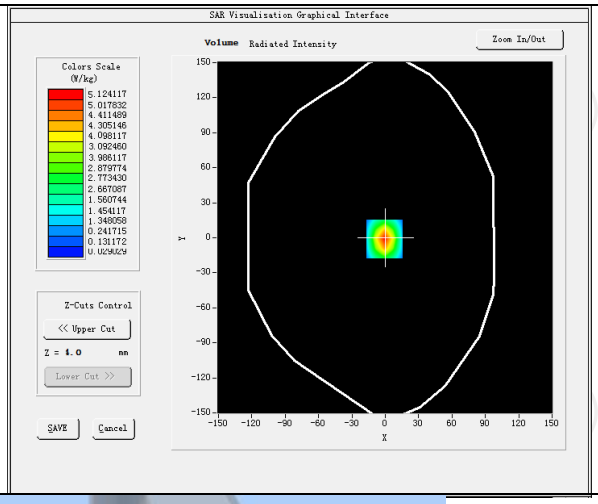
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.9525	0.6022	0.3594	0.2202	0.0725

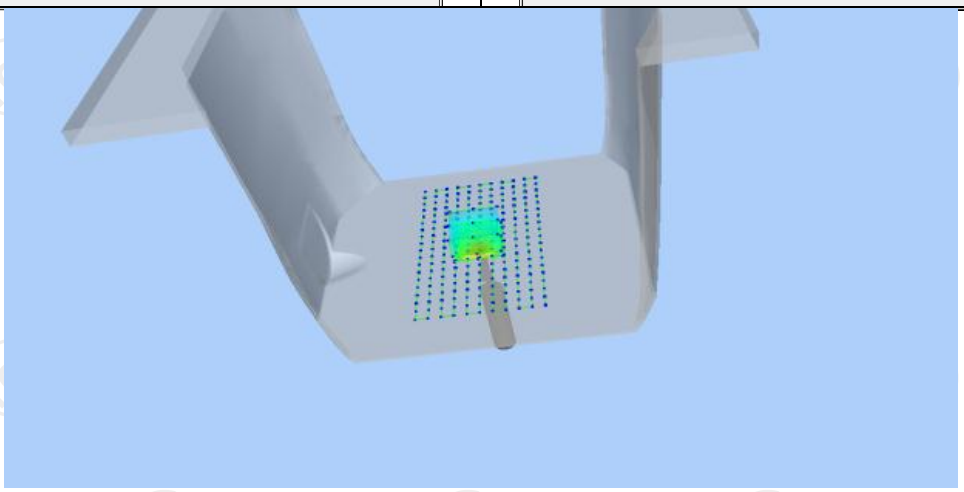


Hot spot position

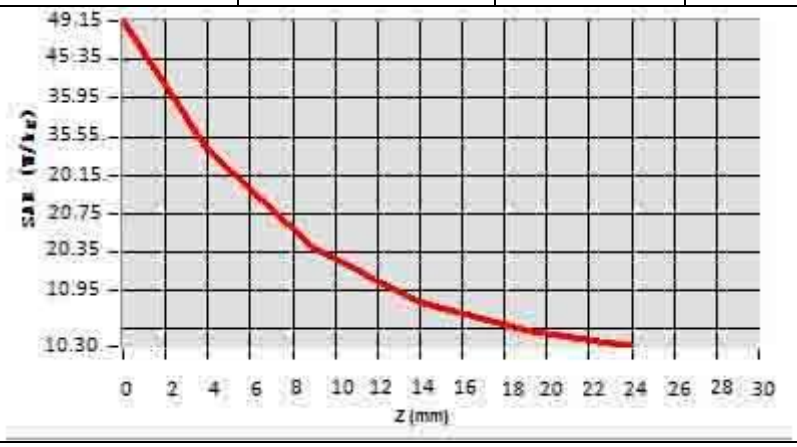
Date of measurement: 10/21/2021 Test mode: 5300MHz (Head)
Product Description: Validation
Dipole Model: SID5300
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.94
Frequency (MHz)	5300.000000
Relative permittivity (real part)	36.068832
Relative permittivity (imaginary part)	13.680430
Conductivity (S/m)	4.690788
Variation (%)	-0.820000
SAR 10g (W/Kg)	**17.217521**
SAR 1g (W/Kg)	**5.922481**

SURFACE SAR	**VOLUME SAR**
	



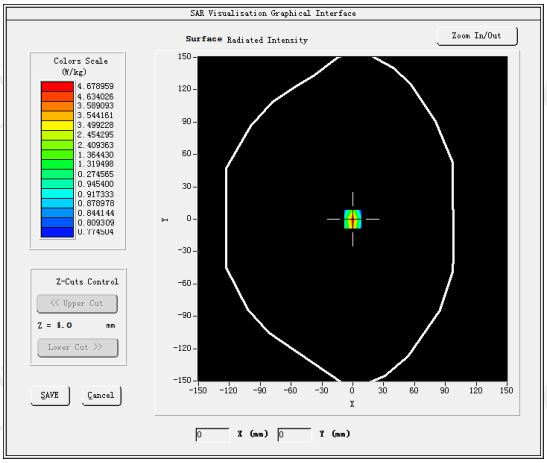
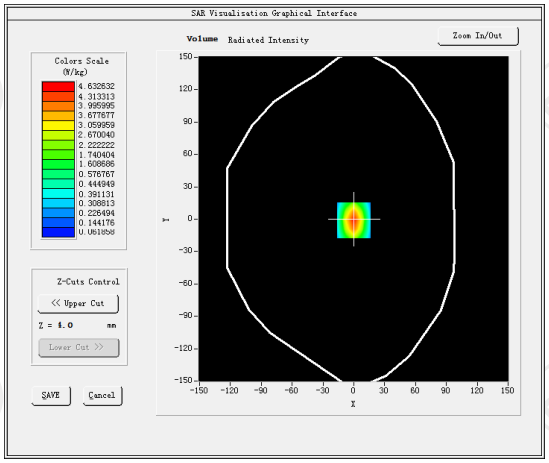
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	49.15	27.584	20.346	11.252	5.4125

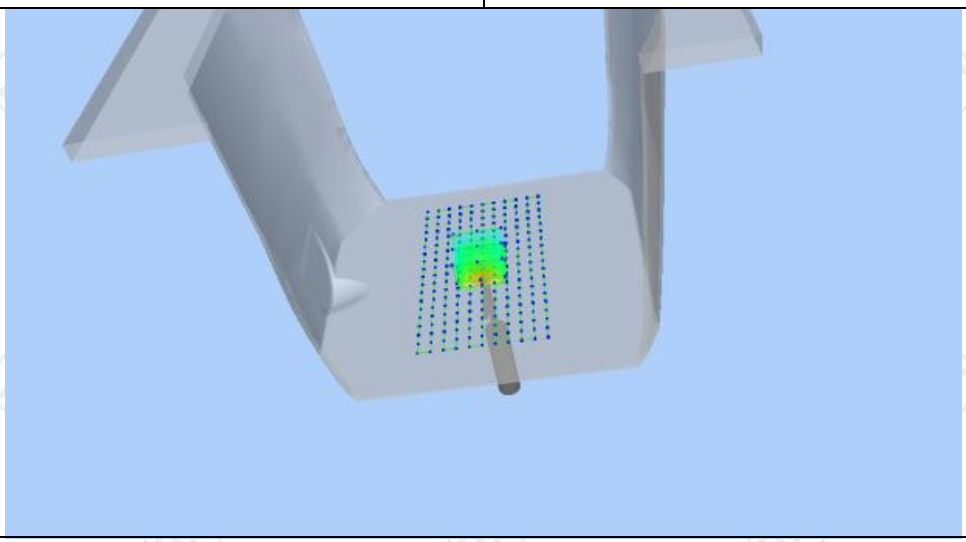


Hot spot position

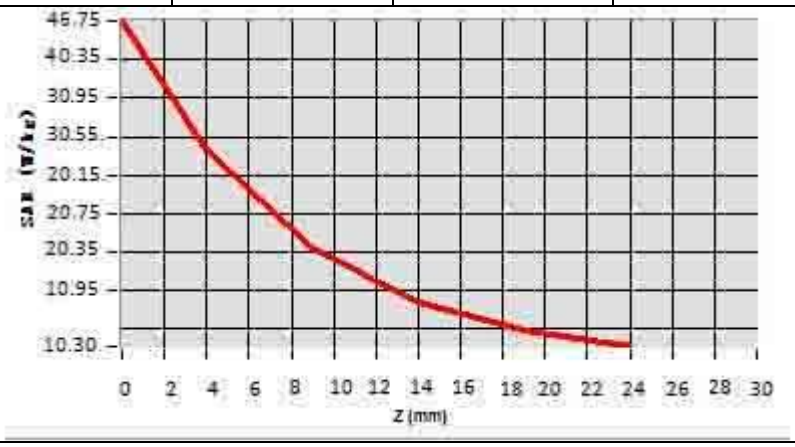
Date of measurement: 10/21/2021 Test mode: 5300MHz (Body)
Product Description: Validation
Dipole Model: SID5000
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.99
Frequency (MHz)	5300.000000
Relative permittivity (real part)	49.552699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	5.530000
Variation (%)	0.450000
SAR 10g (W/Kg)	**5.693687**
SAR 1g (W/Kg)	**16.782547**

SURFACE SAR	**VOLUME SAR**
	



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	46.7545	28.4524	20.3120	10.8214	10.5525

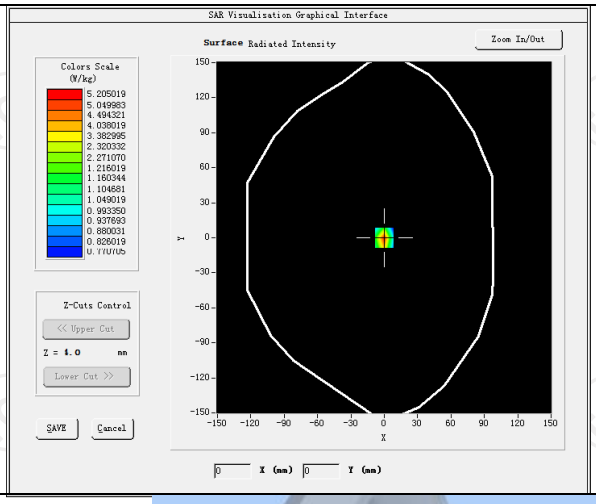
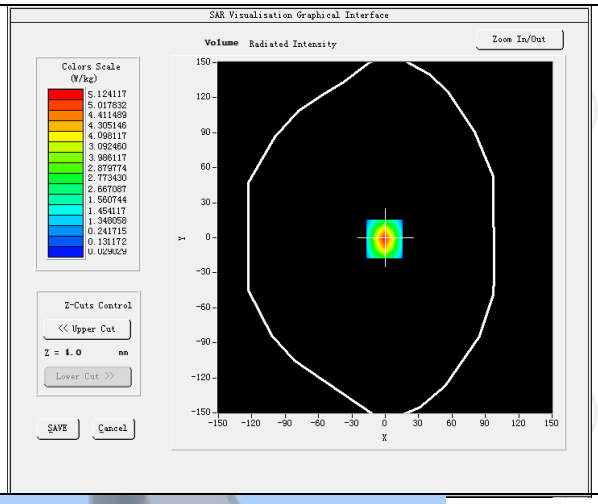


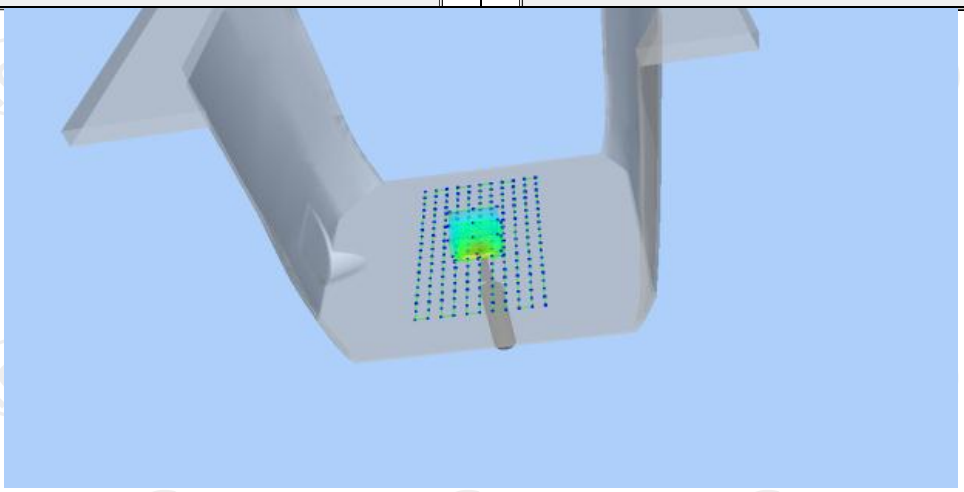
Hot spot position

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

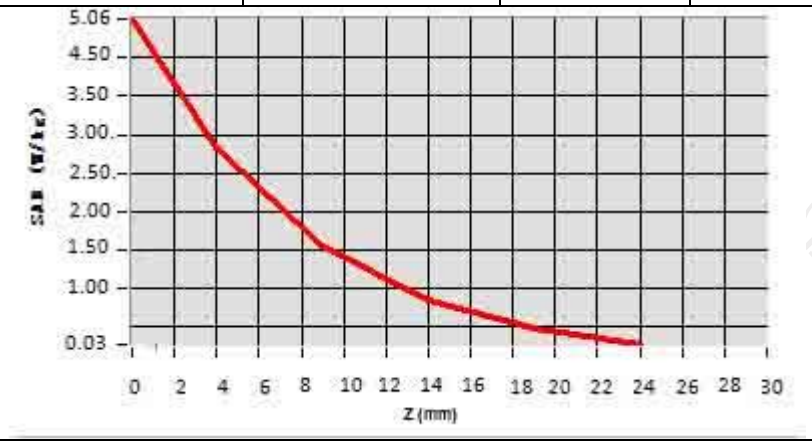
Date of measurement: 10/25/2021 Test mode: 5800MHz (Head)
Product Description: Validation
Dipole Model: SID5800
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.06
Frequency (MHz)	5800.000000
Relative permittivity (real part)	38.352823
Relative permittivity (imaginary part)	13.671675
Conductivity (S/m)	5.430828
Variation (%)	-2.800000
SAR 10g (W/Kg)	**2.005121**
SAR 1g (W/Kg)	**5.063573**

SURFACE SAR	**VOLUME SAR**
	



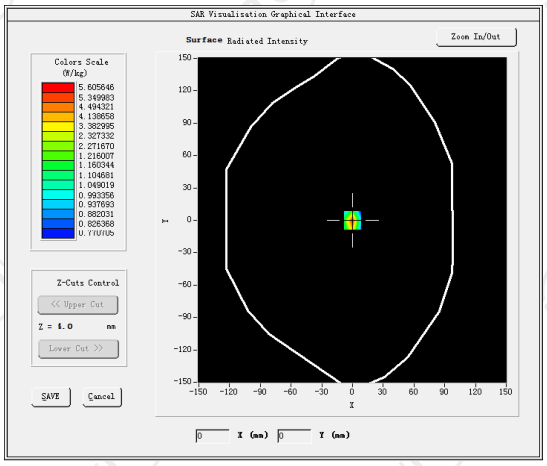
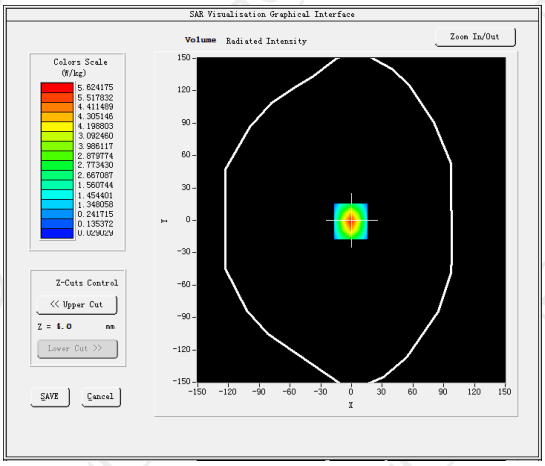
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0622	2.8054	1.5421	0.8321	0.4130

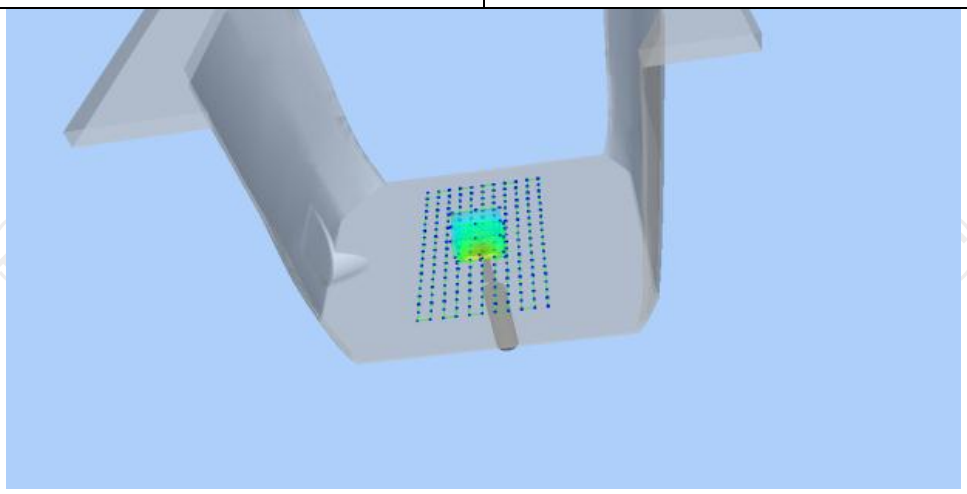


Hot spot position

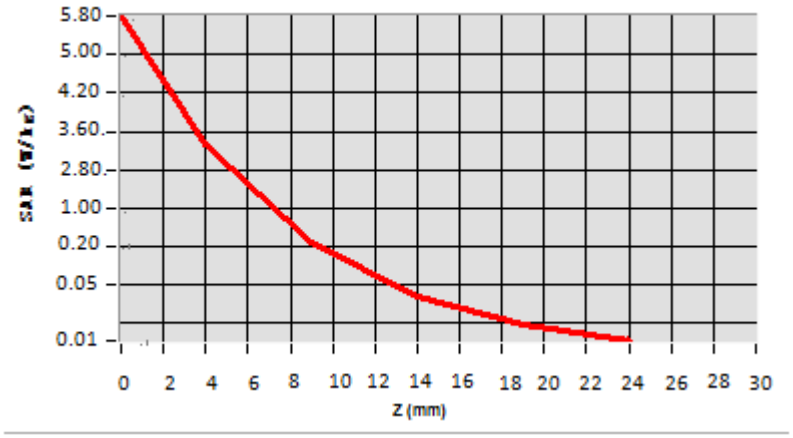
Date of measurement: 10/25/2021 Test mode: 5800MHz (Body)
Product Description: Validation
Dipole Model: SID5000
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.13
Frequency (MHz)	5800.000000
Relative permittivity (real part)	47.393887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	6.274821
Variation (%)	-1.420000
SAR 10g (W/Kg)	**5.382177**
SAR 1g (W/Kg)	**2.365098**

SURFACE SAR	**VOLUME SAR**
	



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7721	3.2210	0.1937	0.0321	0.0203

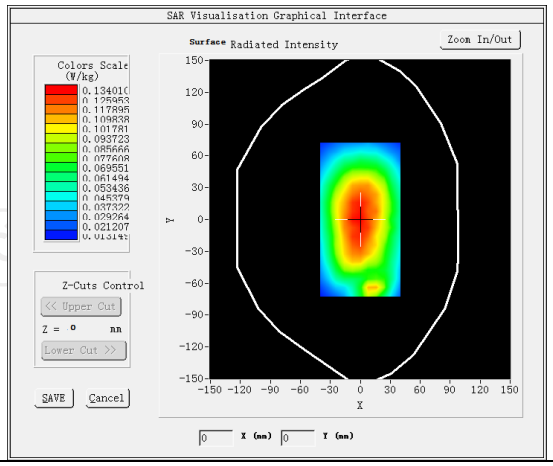


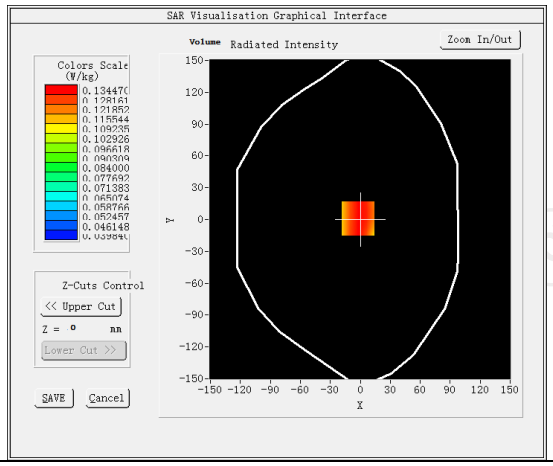
Hot spot position

12. SAR Test Data

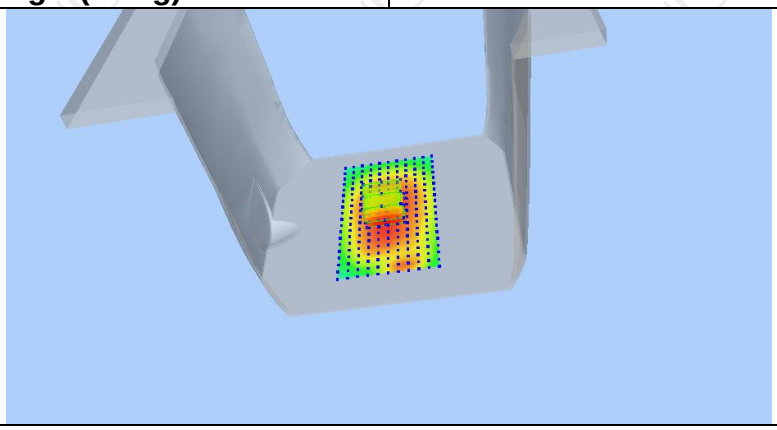
GSM850

MEASUREMENT 1	
Hight Band SAR (Channel 251):	Date: 10/11/2021
Frequency (MHz)	848.800000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	2.400000
Crest Factor:	1.0
Probe Conversion factor	1.86
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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 front(10mm)
Band	GSM850(Voice)
SURFACE SAR	**VOLUME SAR**

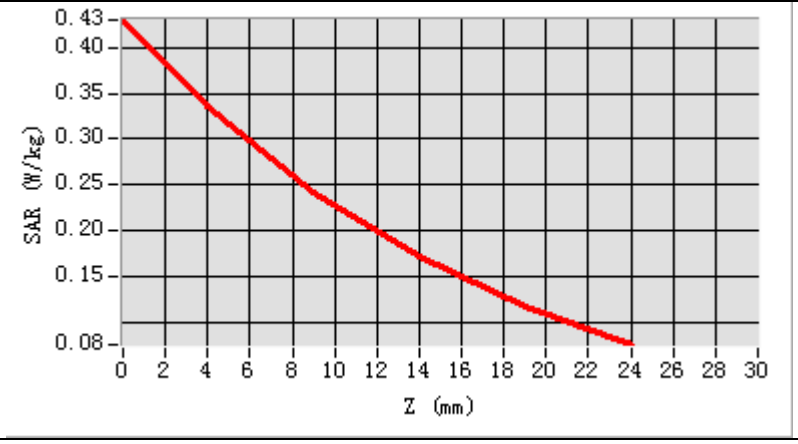




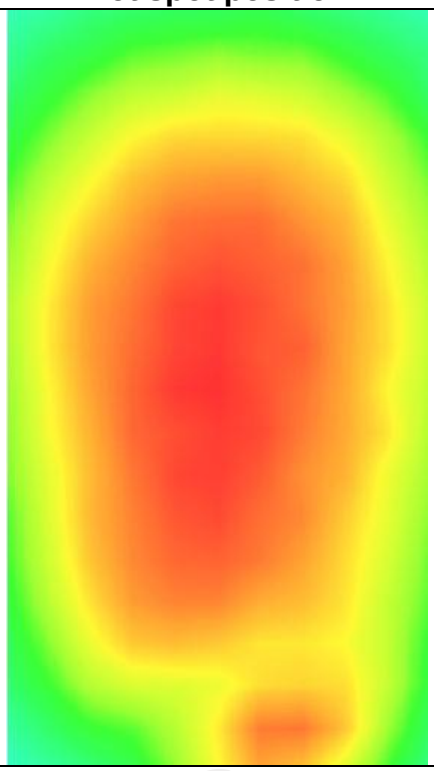
Maximum location: X=-2.00, Y=1.00 SAR Peak: 0.43 W/kg	
SAR 10g (W/Kg)	0.312914
SAR 1g (W/Kg)	0.175770



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4300	0.3357	0.2419	0.1707	0.1169



Hot spot position



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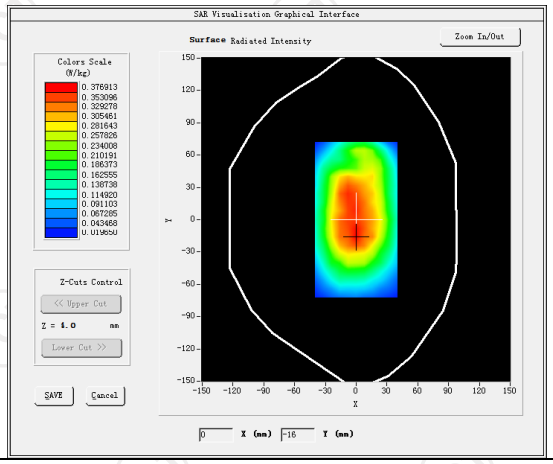
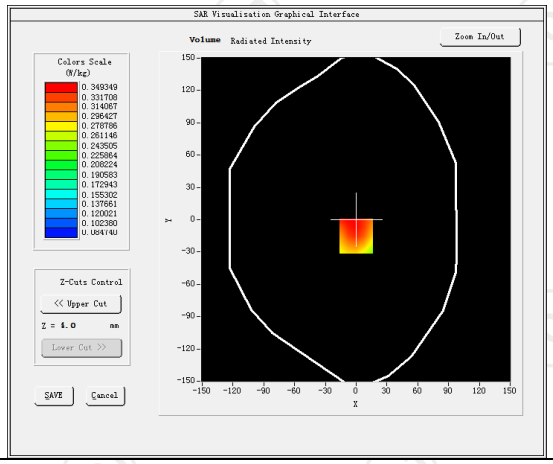
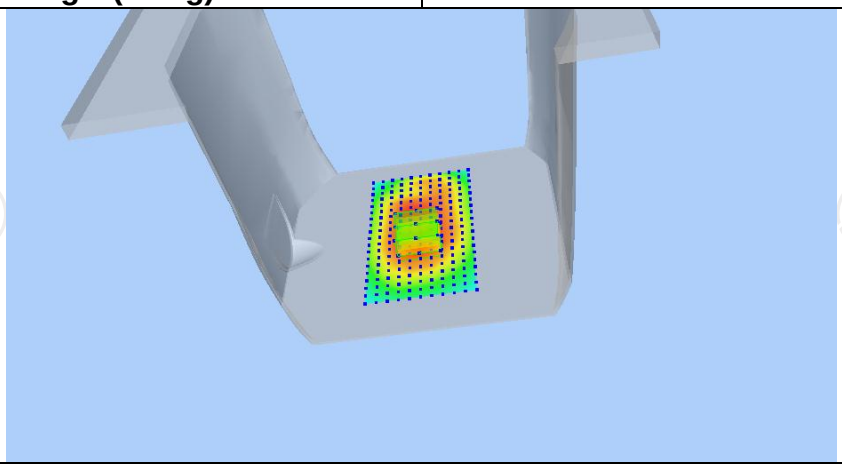
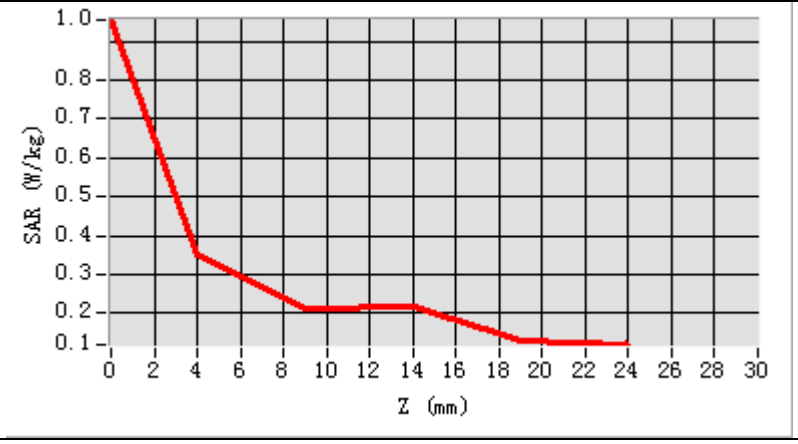
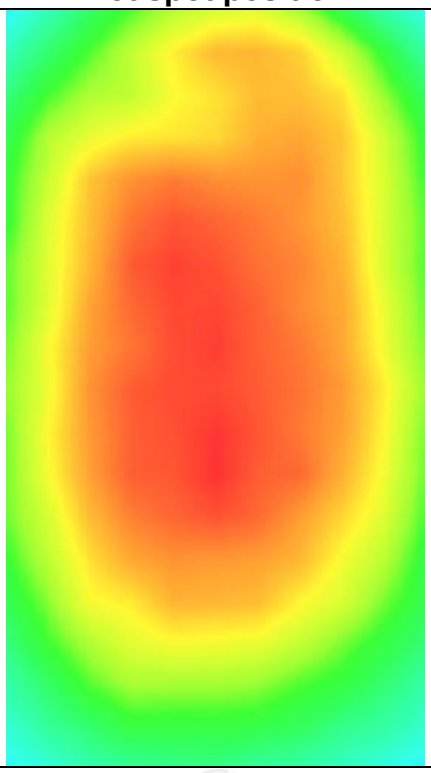
MEASUREMENT 2	
Hight Band SAR (Channel 251):	Date: 10/11/2021
Frequency (MHz)	848.800000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-4.600000
Crest Factor:	1.0
Probe Conversion factor	1.86
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM850(Voice)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=0.00, Y=-15.00 SAR Peak: 0.43 W/kg	
SAR 10g (W/Kg)	0.259375
SAR 1g (W/Kg)	0.339121

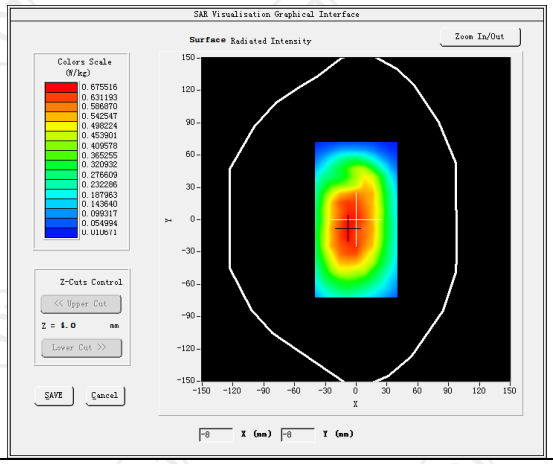
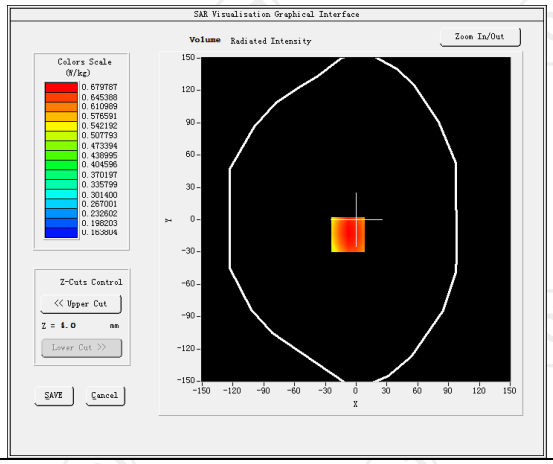


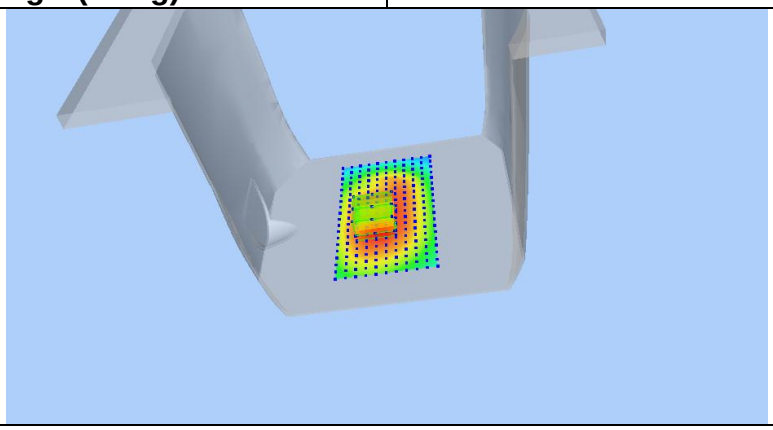
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9547	0.3493	0.2145	0.2163	0.1300



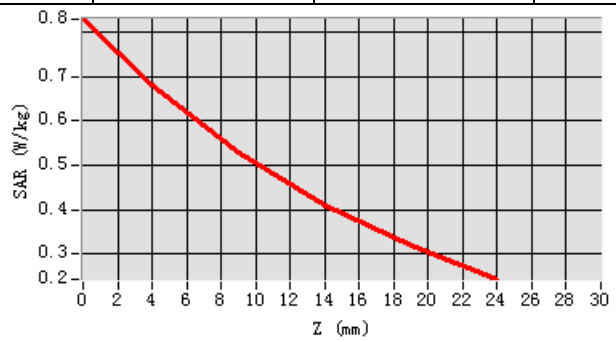
Hot spot position



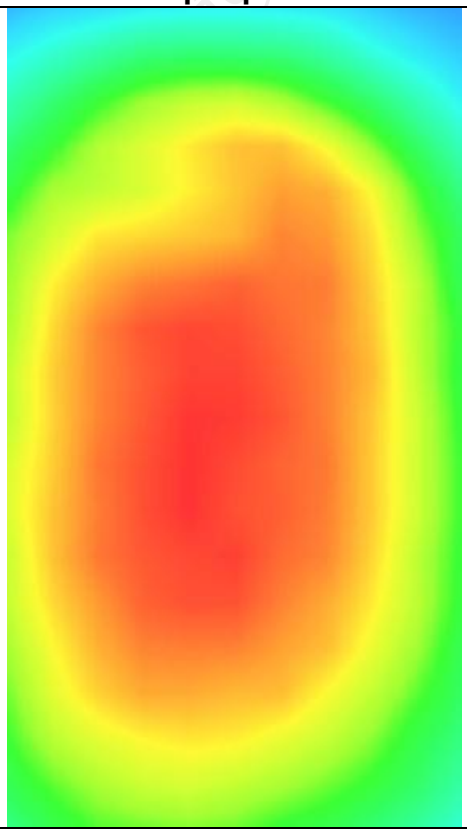
MEASUREMENT 3	
Middle Band SAR (Channel 190):	Date: 10/11/2021
Frequency (MHz)	836.600000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	0.200000
Crest Factor:	1.0
Probe Conversion factor	1.86
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM850(GPRS 4slot)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=-8.00, Y=-14.00 SAR Peak: 0.84 W/kg	
SAR 10g (W/Kg)	0.494016
SAR 1g (W/Kg)	0.660314

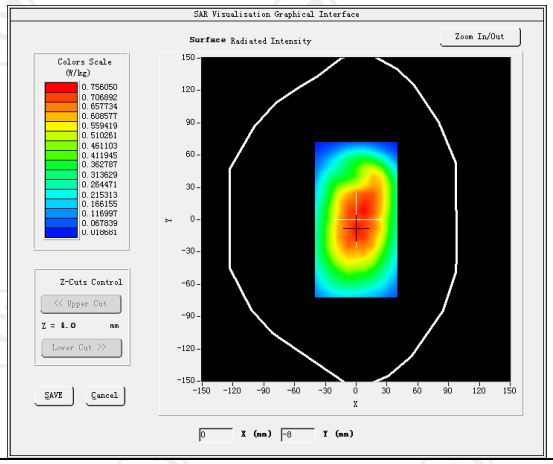
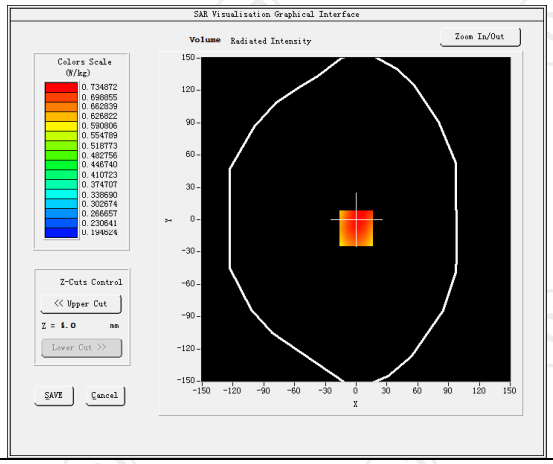
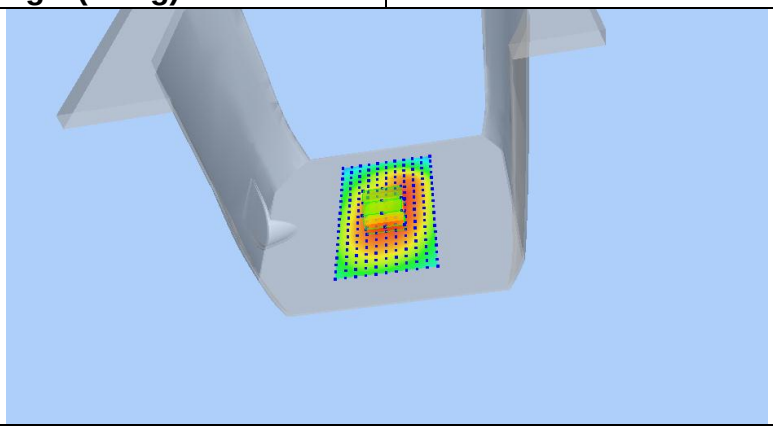


Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8297	0.6798	0.5281	0.4101	0.3180

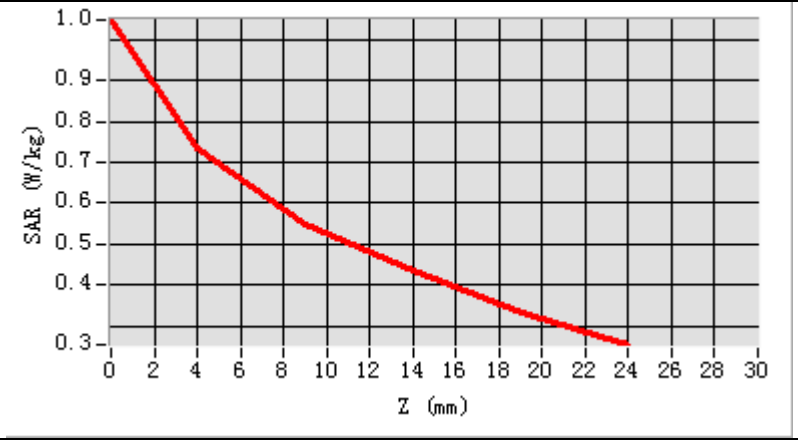


Hot spot position

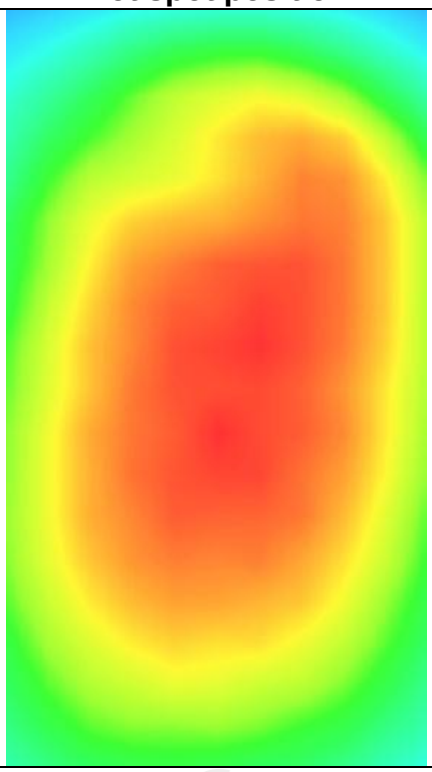


MEASUREMENT 4	
Middle Band SAR (Channel 190):	Date: 10/11/2021
Frequency (MHz)	836.600000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-0.370000
Crest Factor:	1.0
Probe Conversion factor	1.86
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM850(GPRS 4slot hotspot)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=0.00, Y=-8.00 SAR Peak: 0.92 W/kg	
SAR 10g (W/Kg)	0.530886
SAR 1g (W/Kg)	0.709812
	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0470	0.7349	0.5467	0.4377	0.3352

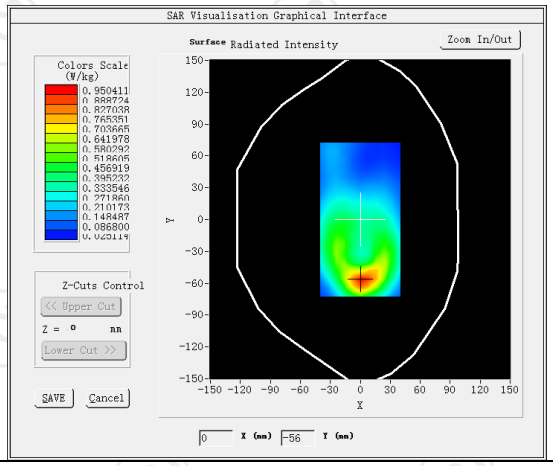


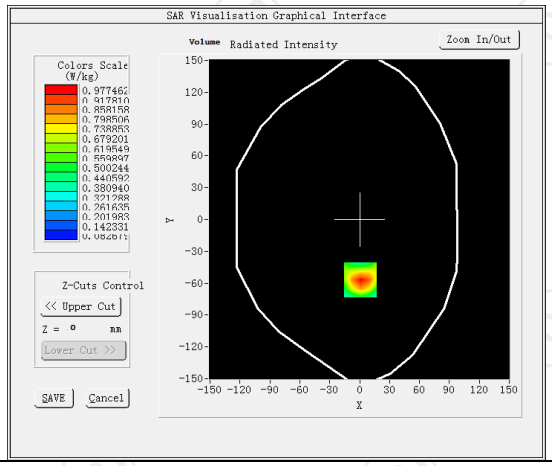
Hot spot position



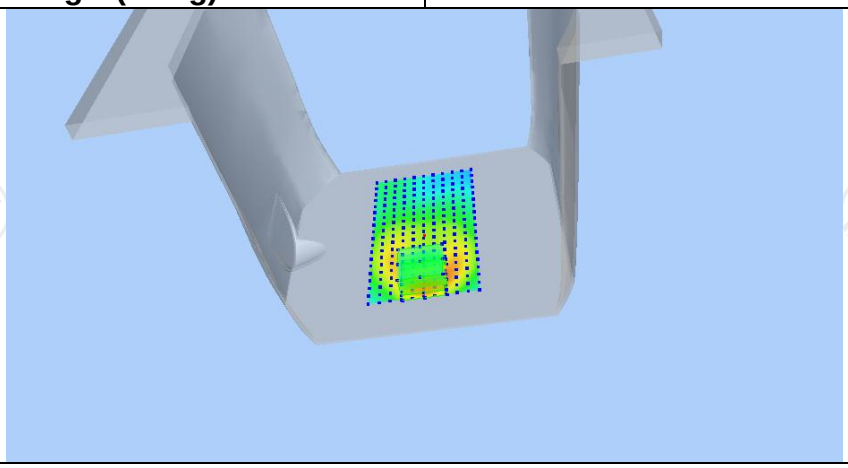
GSM1900

MEASUREMENT 1	
Hight Band SAR (Channel 810):	Date: 10/15/2021
Frequency (MHz)	1909.800000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	-0.730000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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 front(10mm)
Band	GSM1900(voice)
SURFACE SAR	**VOLUME SAR**

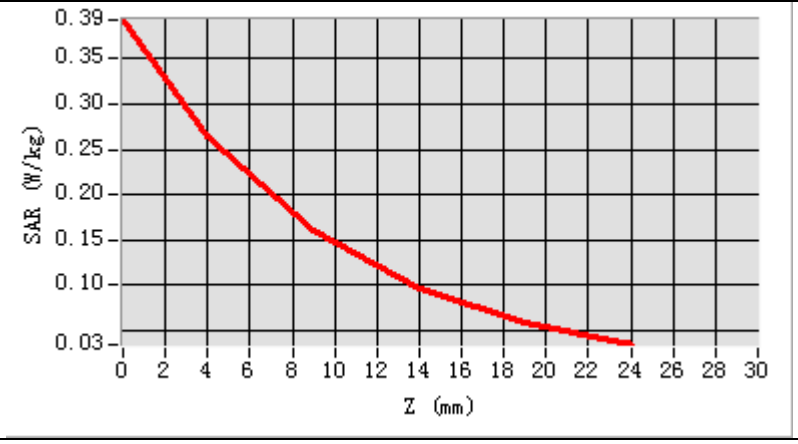




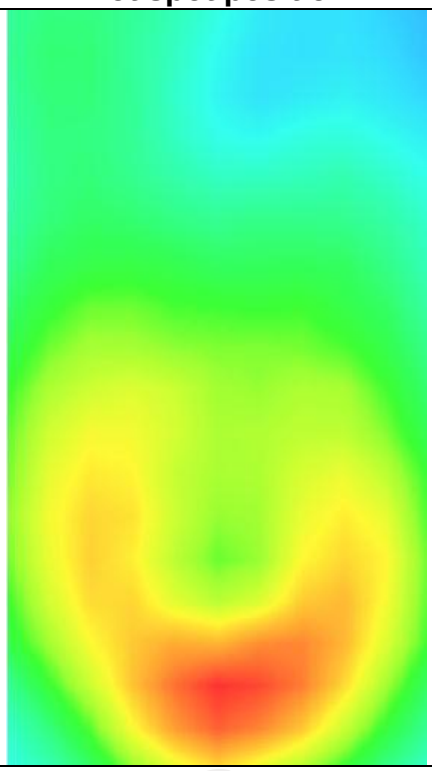
Maximum location: X=1.00, Y=-57.00 SAR Peak: 1.49 W/kg	
SAR 10g (W/Kg)	0.145589
SAR 1g (W/Kg)	0.290076



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3941	0.2663	0.1681	0.0960	0.0592



Hot spot position

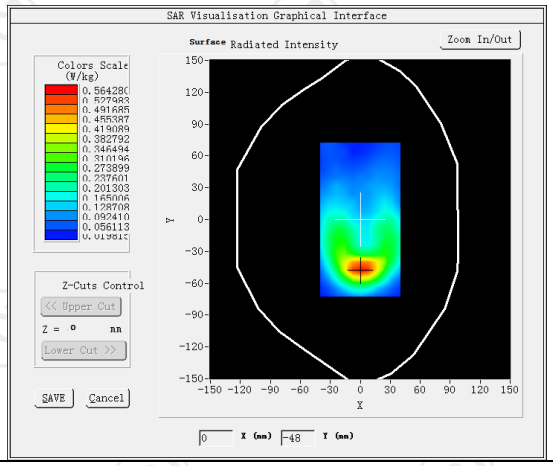


MEASUREMENT 2

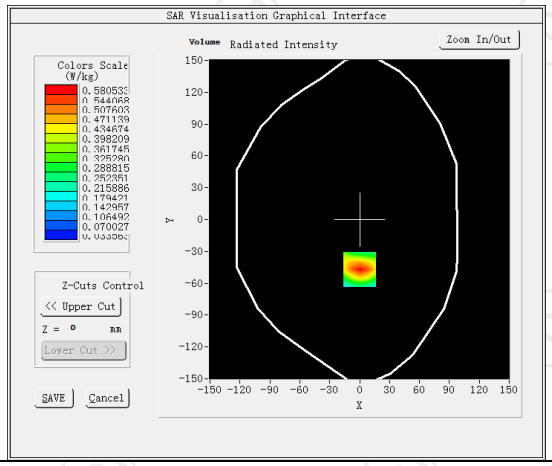
Hight Band SAR (Channel 810): Date: 10/15/2021

Frequency (MHz)	1909.800000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	-1.680000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM1900(voice)

SURFACE SAR

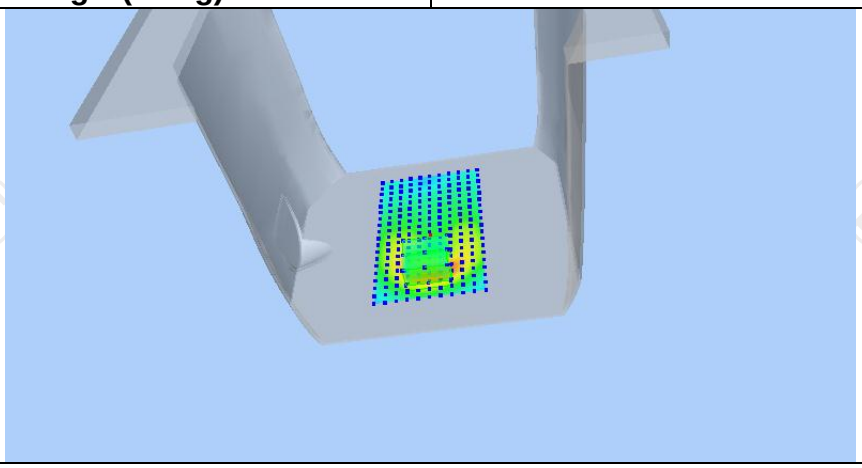


VOLUME SAR

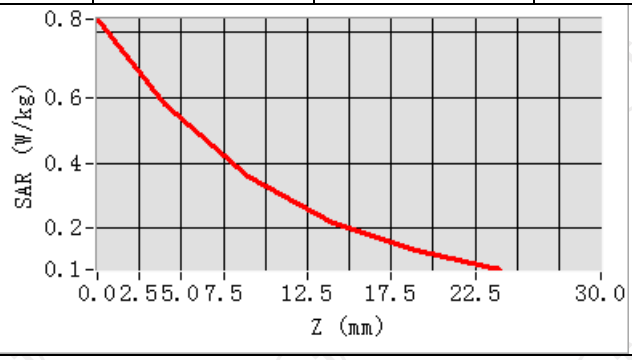


Maximum location: X=0.00, Y=-47.00 SAR Peak: 0.84 W/kg

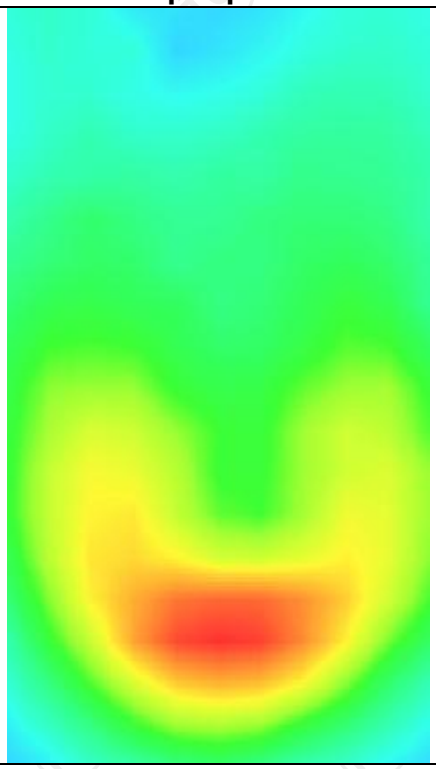
SAR 10g (W/Kg)	0.305824
SAR 1g (W/Kg)	0.540363



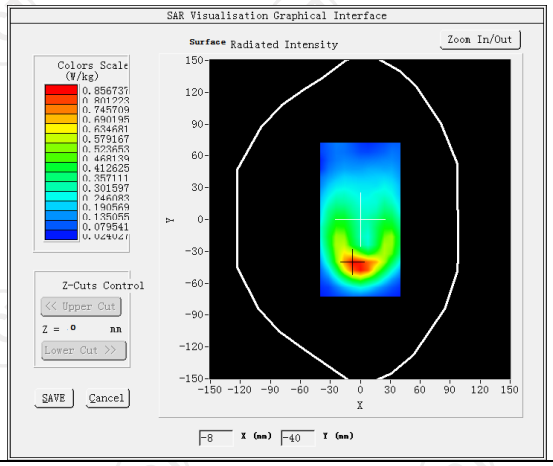
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8414	0.5805	0.3567	0.2159	0.1294

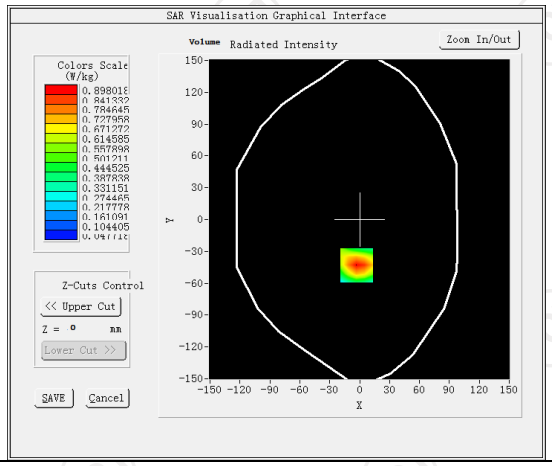


Hot spot position

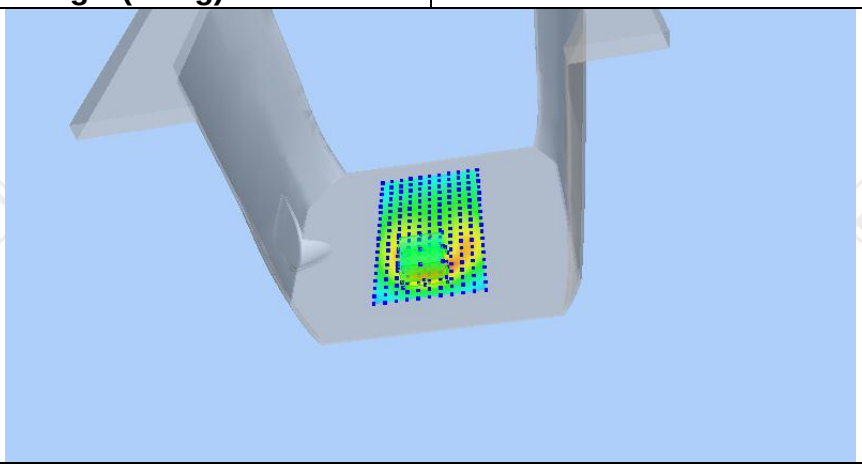


MEASUREMENT 3	
Hight Band SAR (Channel 810):	Date: 10/15/2021
Frequency (MHz)	1909.800000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	-0.930000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM1900(GPRS 3slot)
SURFACE SAR	**VOLUME SAR**

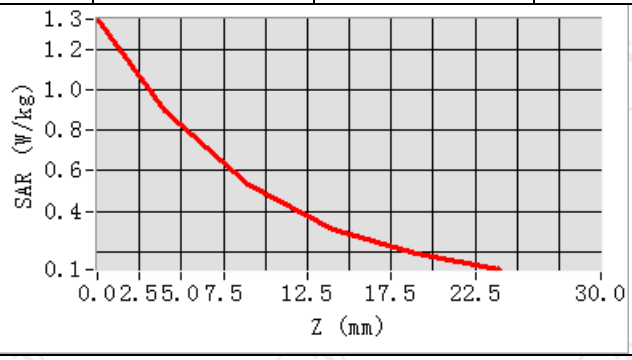




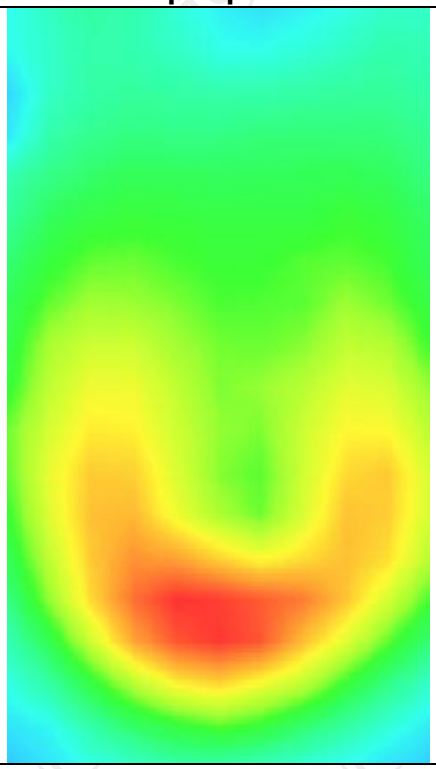
Maximum location: X=-3.00, Y=-43.00 SAR Peak: 1.36 W/kg	
SAR 10g (W/Kg)	0.469354
SAR 1g (W/Kg)	0.610432

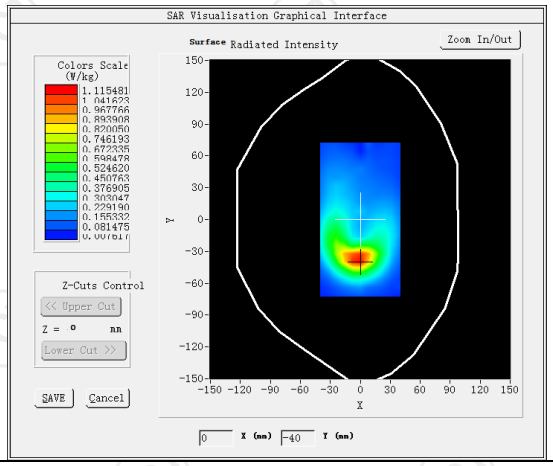
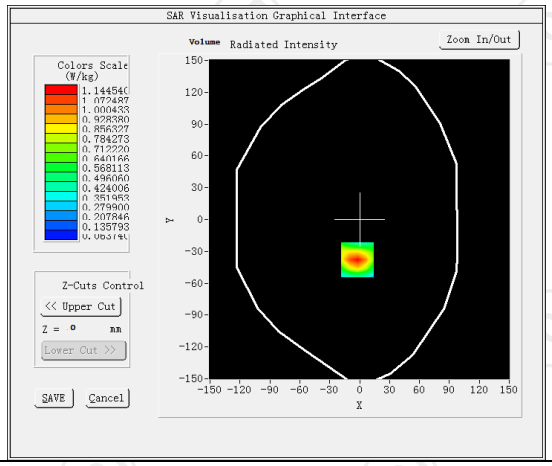


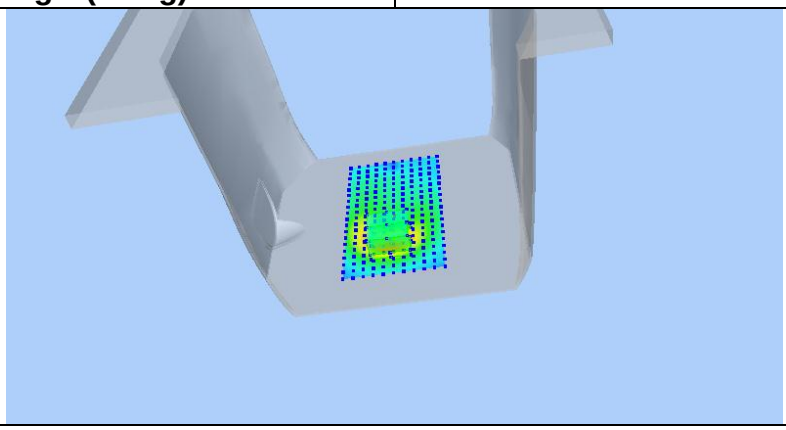
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.3494	0.8980	0.5288	0.3119	0.1885



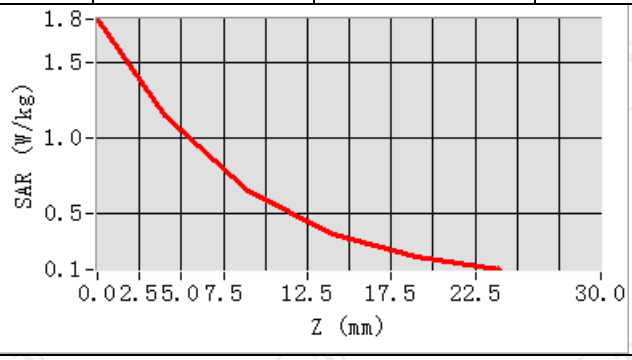
Hot spot position



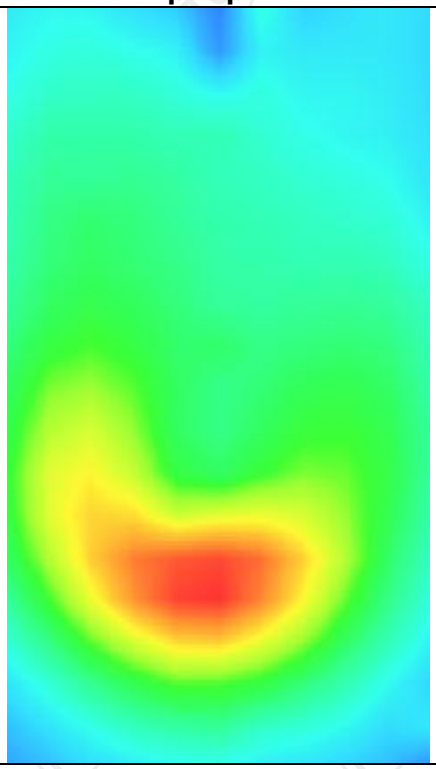
MEASUREMENT 4	
Hight Band SAR (Channel 810):	Date: 10/15/2021
Frequency (MHz)	1909.800000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	1.840000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	GSM1900(GPRS 3slot hotspot)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=-2.00, Y=-38.00 SAR Peak: 1.80 W/kg	
SAR 10g (W/Kg)	0.365070
SAR 1g (W/Kg)	0.641860



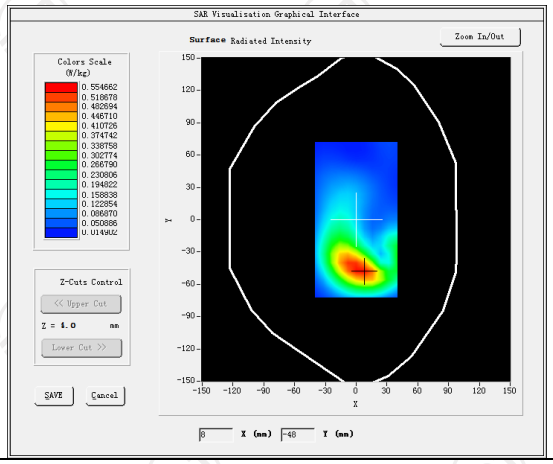
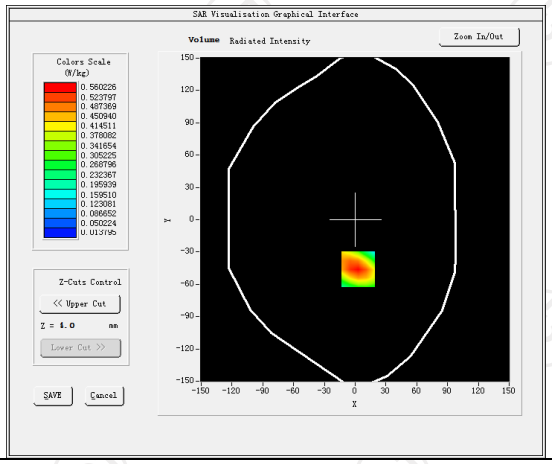
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.7861	1.1445	0.6398	0.3597	0.2111

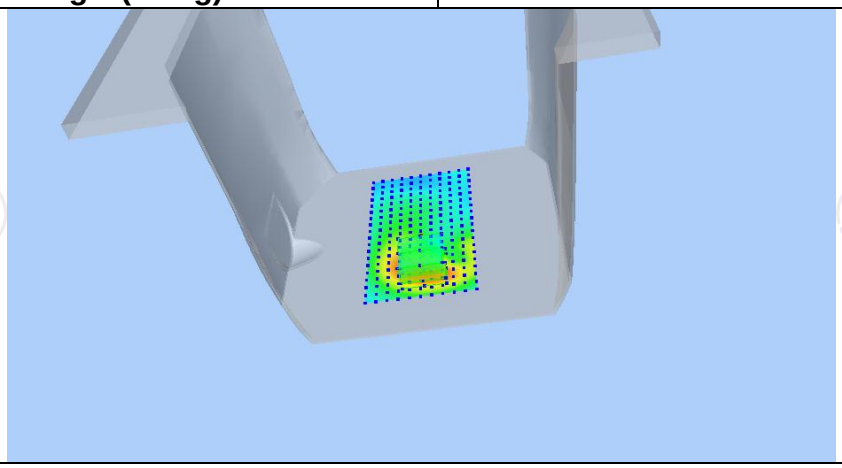


Hot spot position

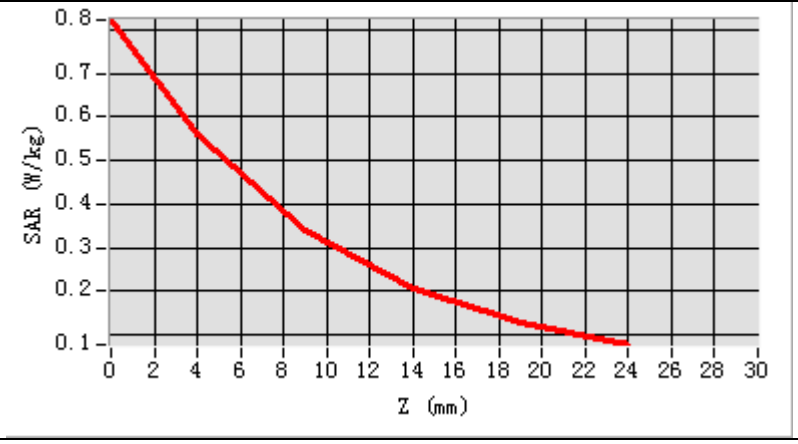


WCDMA Band II

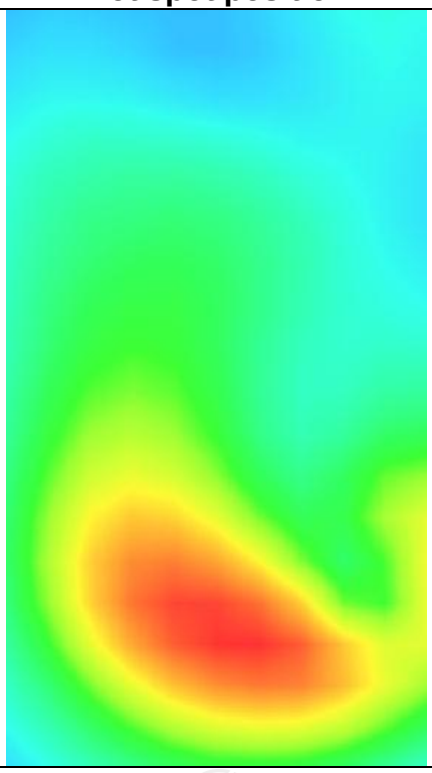
MEASUREMENT 1	
Middle Band SAR (Channel 9400):	Date: 10/15/2021
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	-0.170000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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 front(10mm)
Band	BAND2 WCDMA1900
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=3.00, Y=-46.00 SAR Peak: 0.82 W/kg	
SAR 10g (W/Kg)	0.407663
SAR 1g (W/Kg)	0.387314

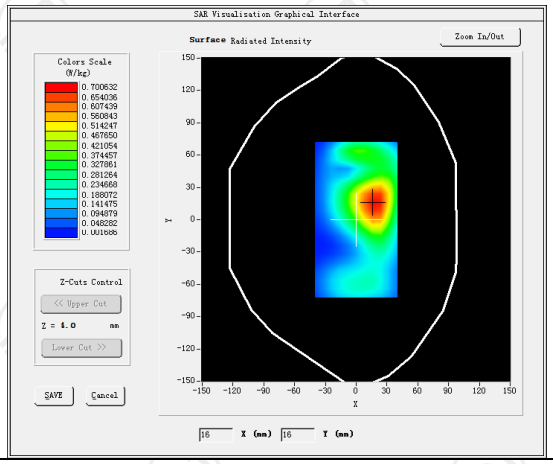
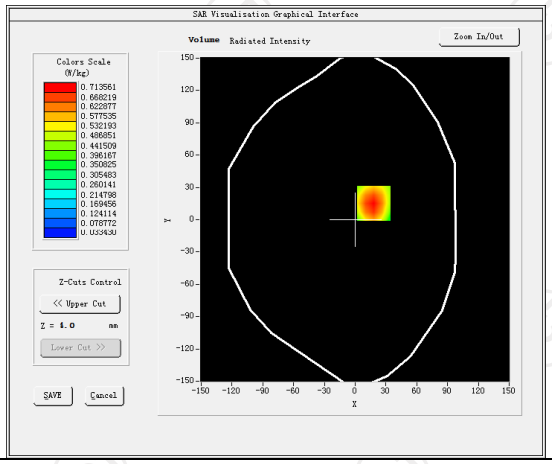


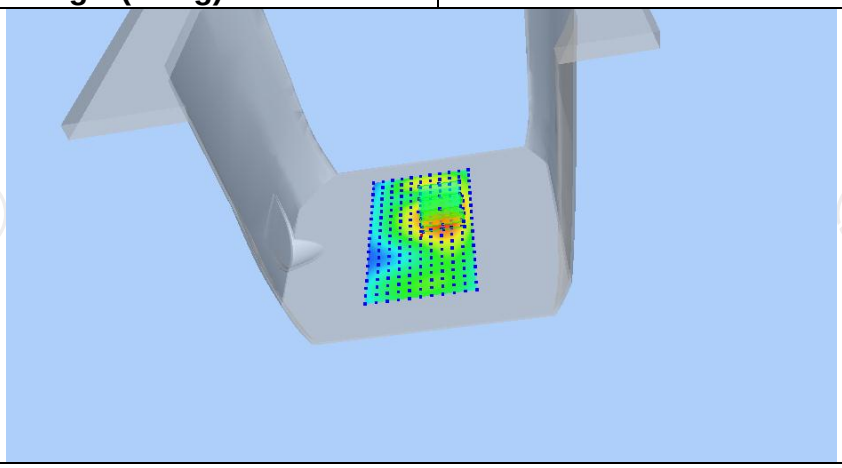
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8225	0.5602	0.3408	0.2077	0.1290



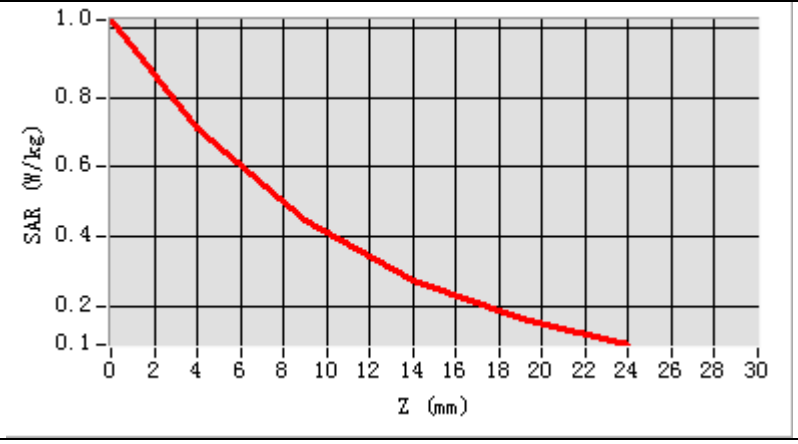
Hot spot position



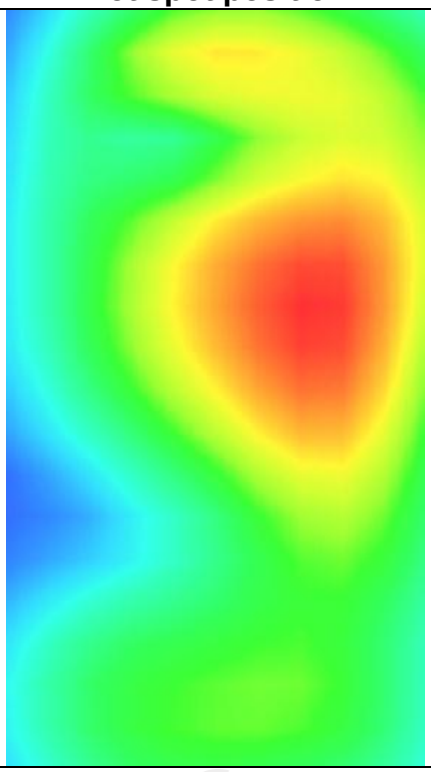
MEASUREMENT 2	
Middle Band SAR (Channel 9400):	Date: 10/15/2021
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	-1.730000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	BAND2_WCDMA1900
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=18.00, Y=15.00 SAR Peak: 1.02 W/kg	
SAR 10g (W/Kg)	0.403860
SAR 1g (W/Kg)	0.676382

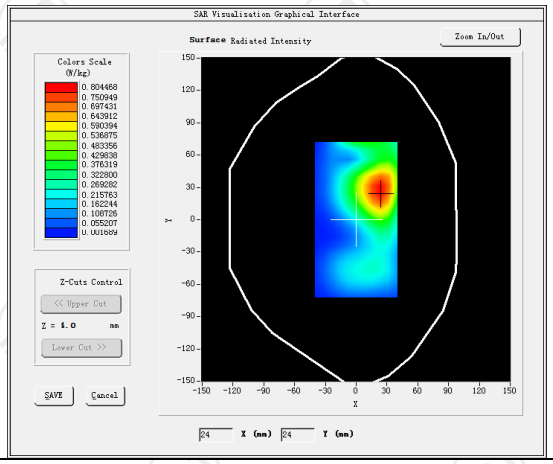
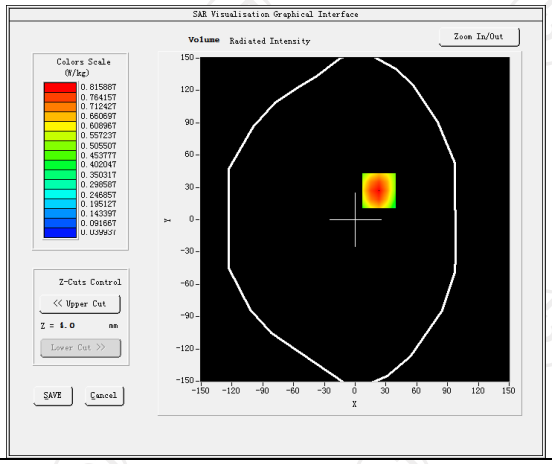


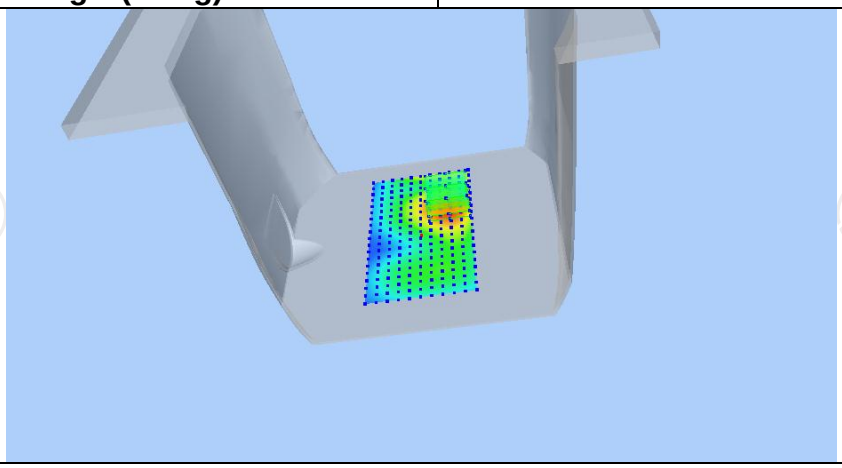
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0209	0.7136	0.4457	0.2737	0.1655



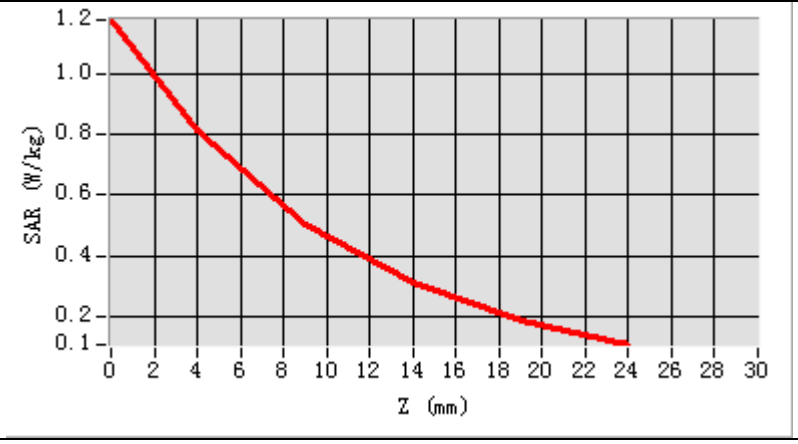
Hot spot position



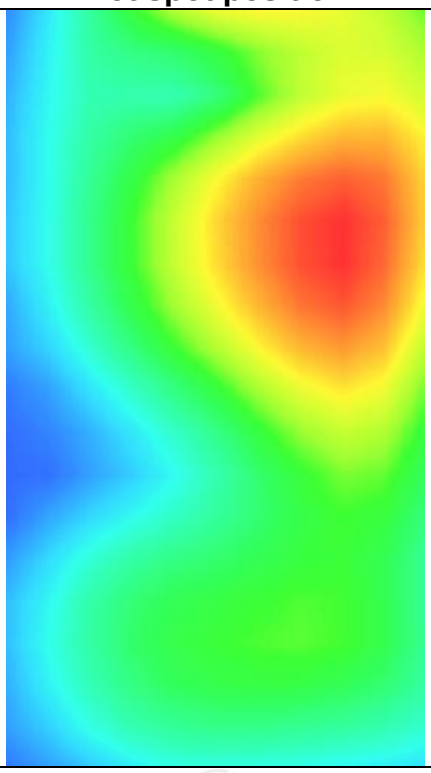
MEASUREMENT 3	
Middle Band SAR (Channel 9400):	Date: 10/15/2021
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	0.240000
Crest Factor	1.0
Probe Conversion factor	2.32
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	BAND2_WCDMA1900(hotspot)
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=23.00, Y=27.00 SAR Peak: 1.18 W/kg	
SAR 10g (W/Kg)	0.419745
SAR 1g (W/Kg)	0.694034



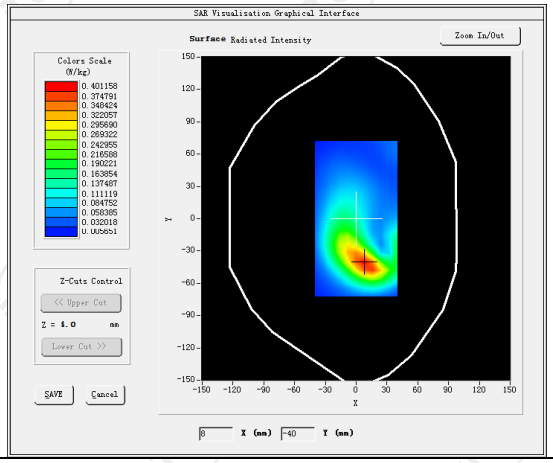
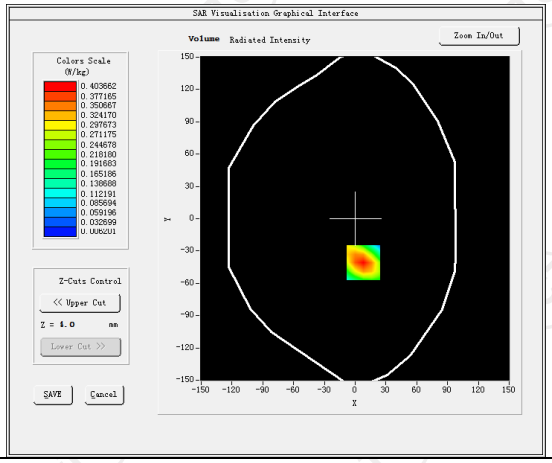
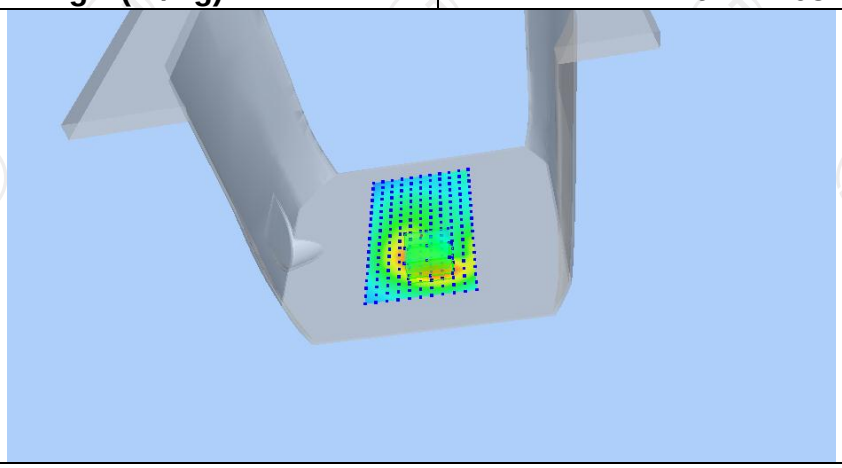
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1768	0.8159	0.5054	0.3095	0.1885



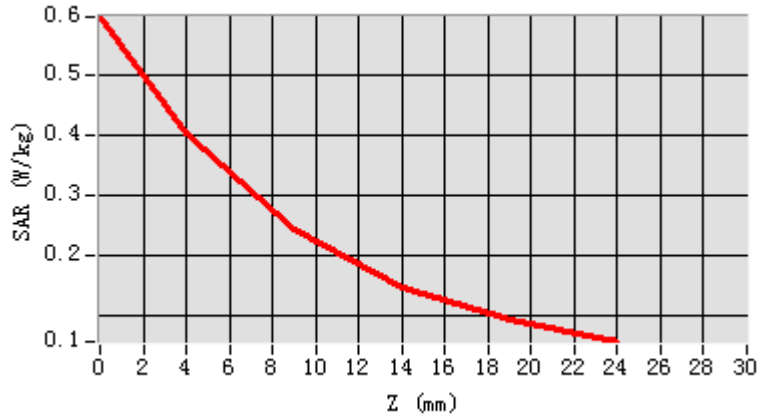
Hot spot position



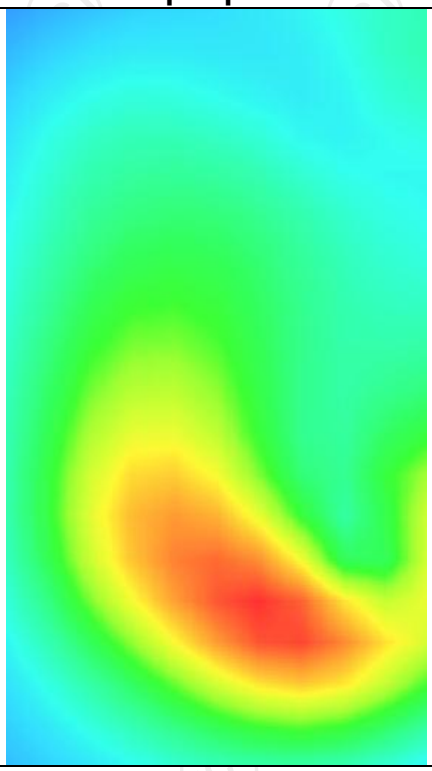
WCDMA Band IV

MEASUREMENT 1	
Middle Band SAR (Channel 1450):	Date: 10/13/2021
Frequency (MHz)	1740.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	-0.230000
Crest Factor	1.0
Probe Conversion factor	2.16
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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 front(10mm)
Band	BAND4_WCDMA1700
SURFACE SAR	**VOLUME SAR**
	
Maximum location: X=8.00, Y=-41.00 SAR Peak: 0.60 W/kg	
SAR 10g (W/Kg)	0.215418
SAR 1g (W/Kg)	0.477408
	

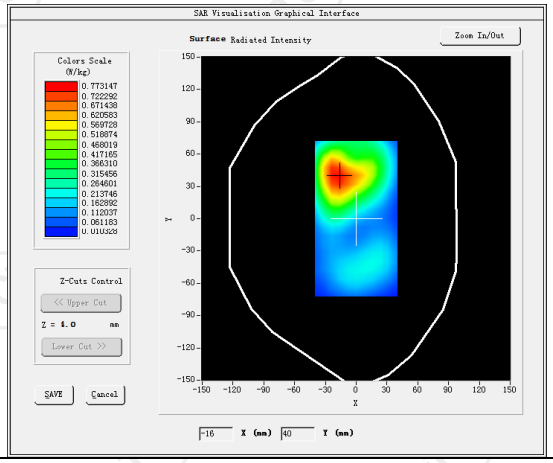
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5985	0.4037	0.2429	0.1473	0.0922

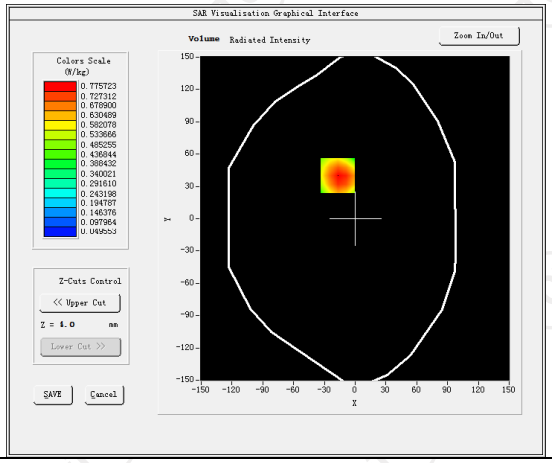


Hot spot position

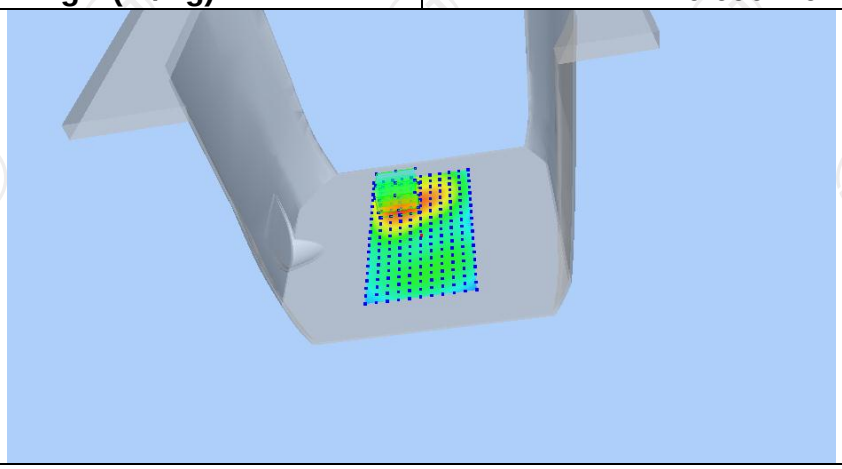


MEASUREMENT 2	
Middle Band SAR (Channel 1450):	Date: 10/13/2021
Frequency (MHz)	1740.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	-1.300000
Crest Factor	1.0
Probe Conversion factor	2.16
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	BAND4_WCDMA1700
SURFACE SAR	**VOLUME SAR**

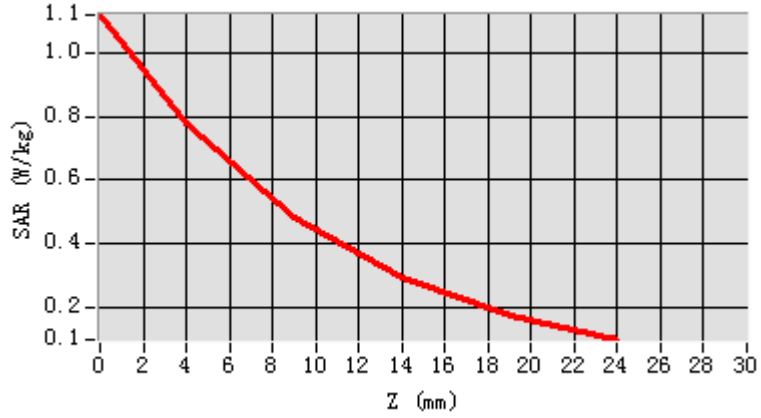




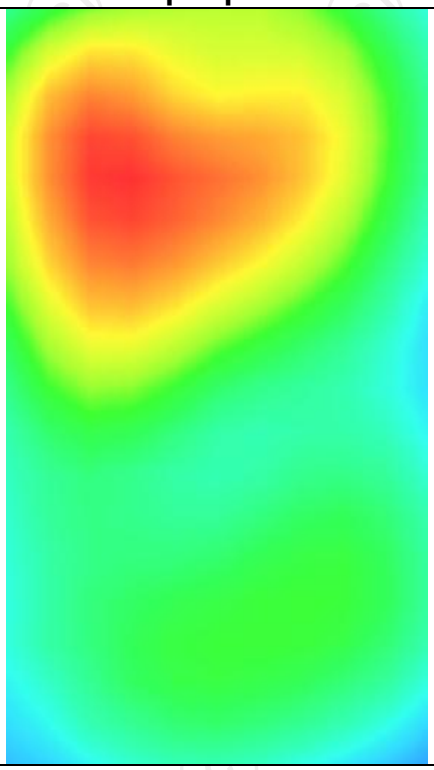
Maximum location: X=-17.00, Y=40.00 SAR Peak: 1.12 W/kg	
SAR 10g (W/Kg)	0.429877
SAR 1g (W/Kg)	0.690716



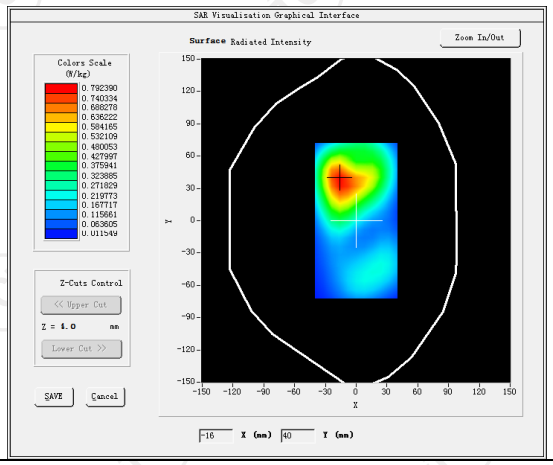
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1165	0.7757	0.4816	0.2952	0.1795

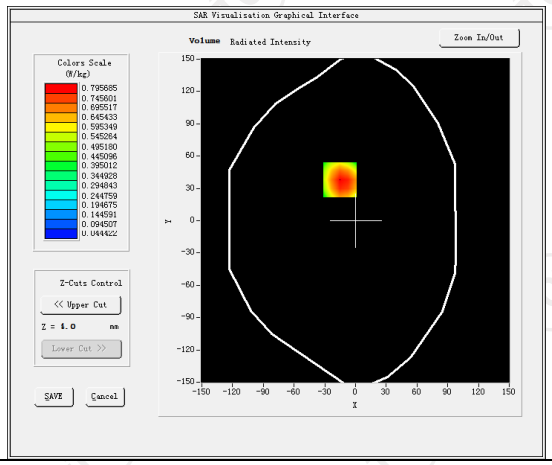
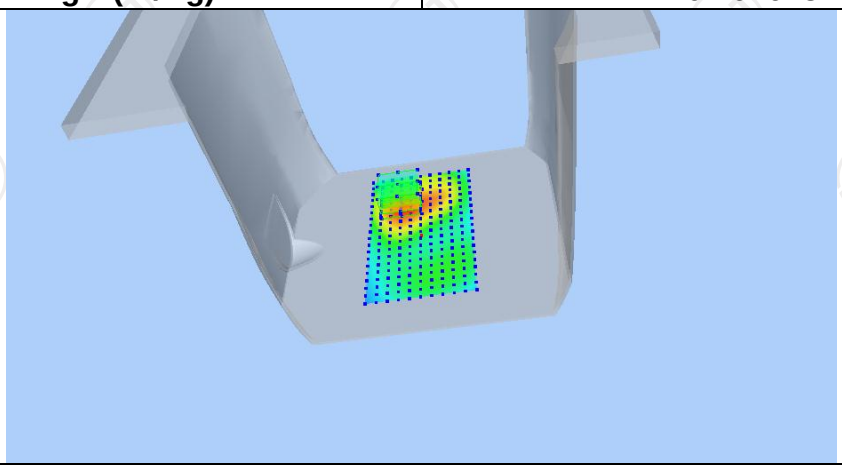


Hot spot position



MEASUREMENT 3	
Middle Band SAR (Channel 1450):	Date: 10/13/2021
Frequency (MHz)	1740.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	0.660000
Crest Factor	1.0
Probe Conversion factor	2.16
E-Field Probe:	SSE2 (SN 36/20 EPGO346)
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	BAND4_WCDMA1700
SURFACE SAR	**VOLUME SAR**





Maximum location: X=-15.00, Y=38.00 SAR Peak: 1.17 W/kg	
SAR 10g (W/Kg)	0.399273
SAR 1g (W/Kg)	0.701618