

11. EUT And Test Setup Photo

11.1 EUT Photo

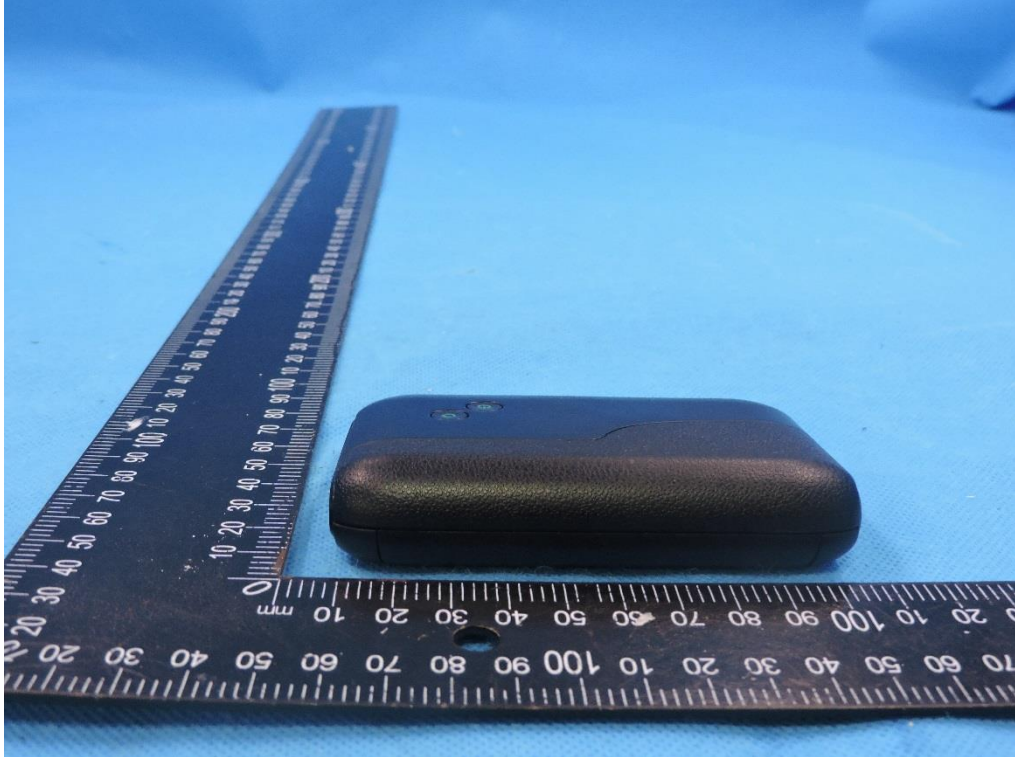
Front side



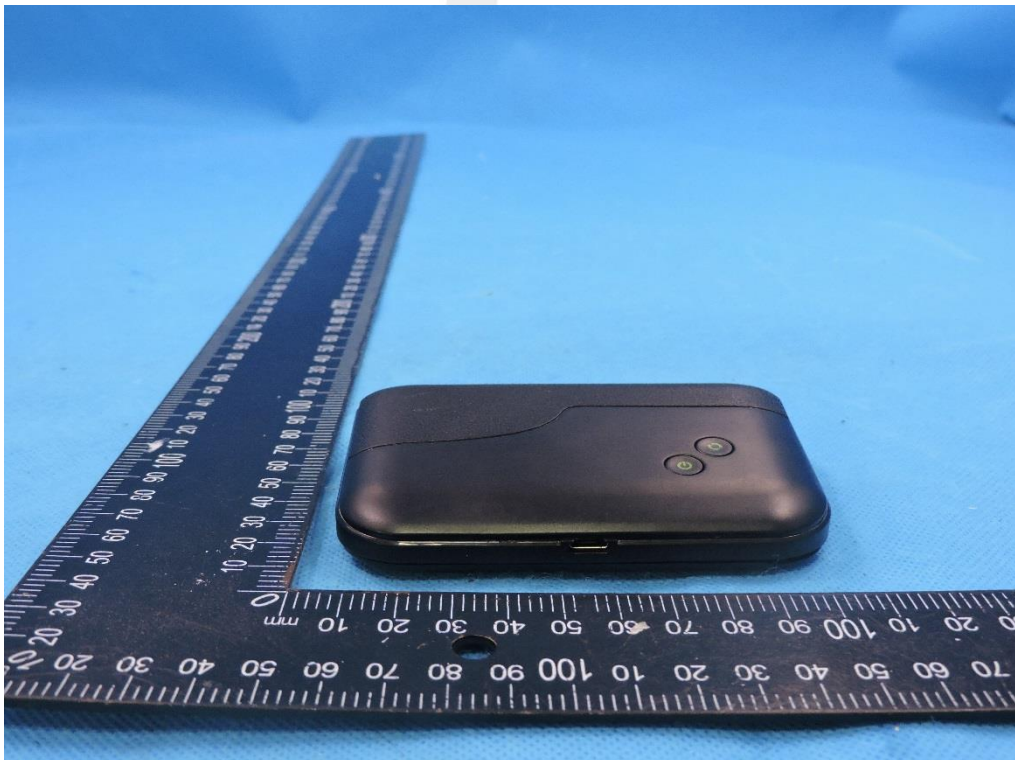
Back side



Top side



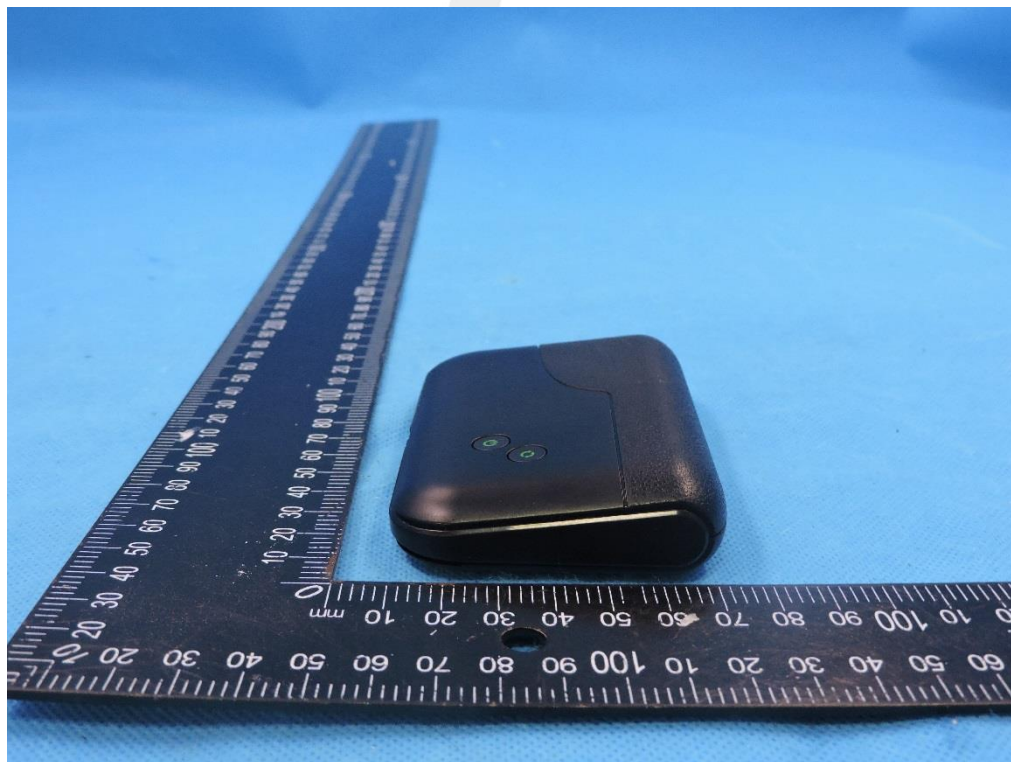
Bottom side



Left side



Right side



11.2 Setup Photo

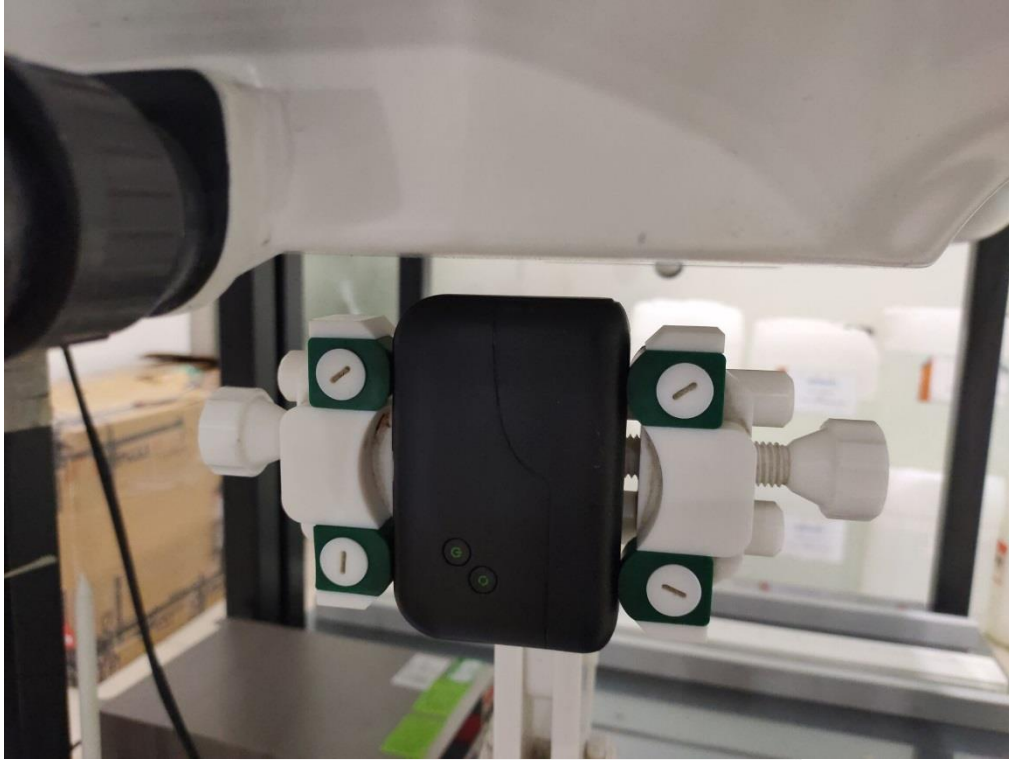
Body Front side(separation distance is 10mm)



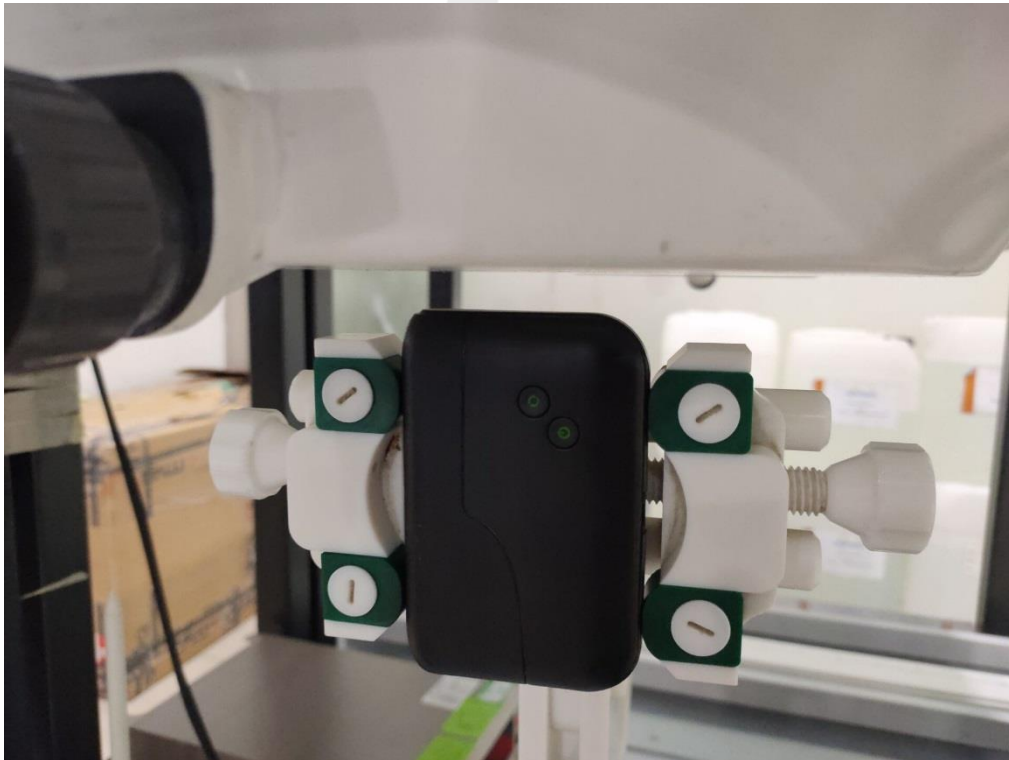
Body Back side(separation distance is 10mm)



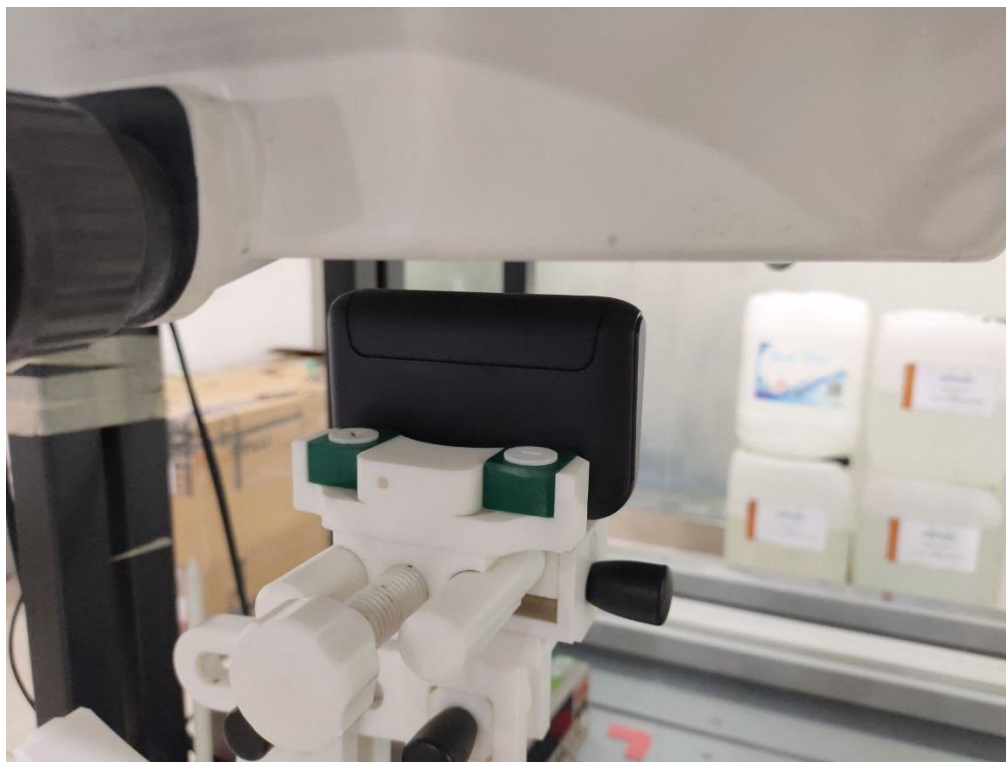
Body Left side(separation distance is 10mm)



Body Right side(separation distance is 10mm)



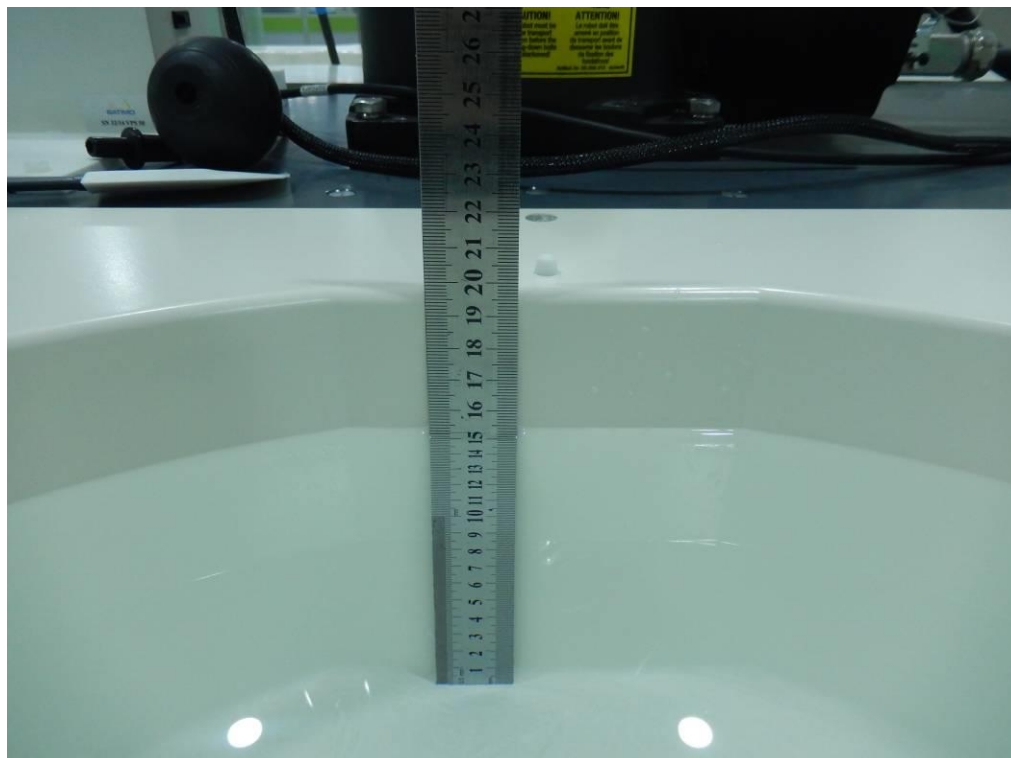
Body Top side(separation distance is 10mm)



Body Bottom side(separation distance is 10mm)



Liquid depth (15 cm)





12. SAR Result Summary

12.1 Body-worn SAR

Band	Model	Test Position	Ch.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
WCDMA Band II	RMC	Front Side	9637	0.225	2.19	23.00	23.40	0.205	/
		Back Side	9637	0.341	-2.07	23.00	23.40	0.311	1
		Left Edge	9637	0.318	-0.60	23.00	23.40	0.290	/
		Right Edge	9637	0.339	-0.44	23.00	23.40	0.309	/
		Top Edge	9637	0.330	-2.06	23.00	23.40	0.301	/
		Bottom Edge	9637	0.104	-0.22	23.00	23.40	0.095	/
WCDMA Band IV	RMC	Front Side	1512	0.782	0.98	23.50	23.45	0.791	2
		Back Side	1512	0.469	2.41	23.50	23.45	0.474	/
		Left Edge	1512	0.449	-0.87	23.50	23.45	0.454	/
		Right Edge	1512	0.122	-1.14	23.50	23.45	0.123	/
		Top Edge	1512	0.435	2.51	23.50	23.45	0.440	/
		Bottom Edge	1512	0.441	0.40	23.50	23.45	0.446	/
WCDMA Band V	RMC	Front Side	4133	0.848	0.25	23.00	22.71	0.907	/
		Front Side	4175	0.854	0.54	23.00	22.97	0.860	/
		Front Side	4323	0.864	3.95	24.00	23.48	0.974	3
		Back Side	4323	0.768	-0.44	24.00	23.48	0.866	/
		Left Edge	4323	0.125	-1.69	24.00	23.48	0.141	/
		Right Edge	4323	0.051	2.55	24.00	23.48	0.057	/
		Top Edge	4323	0.405	-1.28	24.00	23.48	0.457	/
		Bottom Edge	4323	0.435	-1.77	24.00	23.48	0.490	/



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
LTE Band 2	20M	QPSK	1	50	Front side	19100	0.310	0.83	25.00	24.69	0.333	/
			50	0	Front side	18900	0.298	0.44	24.00	23.62	0.325	/
			1	50	Back Side	19100	0.497	-2.35	25.00	24.69	0.534	4
			50	0	Back Side	18900	0.457	-2.28	24.00	23.62	0.499	/
			1	50	Left Side	19100	0.416	-0.80	25.00	24.69	0.447	/
			50	0	Left Side	18900	0.398	1.64	24.00	23.62	0.434	/
			1	50	Right Side	19100	0.053	-2.94	25.00	24.69	0.057	/
			50	0	Right Side	18900	0.051	2.61	24.00	23.62	0.056	/
			1	50	Top Edge	19100	0.362	0.81	25.00	24.69	0.389	/
			50	0	Top Edge	18900	0.354	-3.80	24.00	23.62	0.386	/
			1	50	Bottom Side	19100	0.180	2.66	25.00	24.69	0.193	/
			50	0	Bottom Side	18900	0.171	3.47	24.00	23.62	0.187	/
LTE Band 4	20M	QPSK	1	50	Front side	20050	0.709	3.56	24.60	24.55	0.717	/
			50	25	Front side	20050	0.685	-2.59	23.60	23.51	0.699	/
			1	50	Back Side	20050	0.851	0.50	24.60	24.55	0.861	5
			1	50	Back Side	20175	0.631	0.30	24.60	23.36	0.840	/
			1	50	Back Side	20300	0.706	0.93	24.60	24.44	0.732	/
			50	25	Back Side	20050	0.763	0.20	23.60	23.51	0.779	/
			100	0	Back Side	20050	0.633	1.20	23.50	23.33	0.658	/
			1	50	Left Side	20050	0.764	-1.38	24.60	24.55	0.773	/
			50	25	Left Side	20050	0.754	0.57	23.60	23.51	0.770	/
			1	50	Right Side	20050	0.081	2.39	24.60	24.55	0.082	/
			50	25	Right Side	20050	0.074	1.04	23.60	23.51	0.076	/
			1	50	Top Edge	20050	0.402	-3.63	24.60	24.55	0.407	/
			50	25	Top Edge	20050	0.387	-0.61	23.60	23.51	0.395	/
			1	50	Bottom Side	20050	0.433	-3.61	24.60	24.55	0.438	/
			50	25	Bottom Side	20050	0.421	-2.37	23.60	23.51	0.430	/



LTE Band 5	10M	QPSK	1	25	Front side	20600	0.626	-0.45	24.50	24.32	0.652	6
			25	13	Front side	20600	0.584	2.71	24.00	23.56	0.646	/
			1	25	Back Side	20600	0.536	-2.00	24.50	24.32	0.559	/
			25	13	Back Side	20600	0.512	2.65	24.00	23.56	0.567	/
			1	25	Left Side	20600	0.119	-2.64	24.50	24.32	0.124	/
			25	13	Left Side	20600	0.093	-2.27	24.00	23.56	0.103	/
			1	25	Right Side	20600	0.047	3.88	24.50	24.32	0.049	/
			25	13	Right Side	20600	0.038	0.92	24.00	23.56	0.042	/
			1	25	Top Edge	20600	0.317	-1.40	24.50	24.32	0.330	/
			25	13	Top Edge	20600	0.301	-0.66	24.00	23.56	0.333	/
			1	25	Bottom Side	20600	0.347	-2.12	24.50	24.32	0.362	/
			25	13	Bottom Side	20600	0.324	2.21	24.00	23.56	0.359	/
LTE Band 12	10M	QPSK	1	0	Front side	23060	0.40	0.82	24.50	24.09	0.440	7
			25	0	Front side	23060	0.374	3.99	23.00	22.84	0.388	/
			1	0	Back Side	23060	0.385	0.91	24.50	24.09	0.423	/
			25	0	Back Side	23060	0.364	2.13	23.00	22.84	0.378	/
			1	0	Left Side	23060	0.14	-1.19	24.50	24.09	0.154	/
			25	0	Left Side	23060	0.12	-3.99	23.00	22.84	0.125	/
			1	0	Right Side	23060	0.02	-1.86	24.50	24.09	0.022	/
			25	0	Right Side	23060	0.018	2.79	23.00	22.84	0.019	/
			1	0	Top Edge	23060	0.222	3.73	24.50	24.09	0.244	/
			25	0	Top Edge	23060	0.214	-3.84	23.00	22.84	0.222	/
			1	0	Bottom Side	23060	0.266	2.71	24.50	24.09	0.292	/
			25	0	Bottom Side	23060	0.254	-0.27	23.00	22.84	0.264	/



LTE Band 13	10M	QPSK	1	25	Front side	23230	0.716	0.36	25.00	24.93	0.728	/
			25	25	Front side	23230	0.701	-2.20	24.00	23.59	0.770	/
			1	25	Back Side	23230	0.778	1.42	25.00	24.93	0.791	8
			25	25	Back Side	23230	0.717	-0.36	24.00	23.59	0.788	/
			1	25	Left Side	23230	0.145	0.12	25.00	24.93	0.147	/
			25	25	Left Side	23230	0.139	-3.93	24.00	23.59	0.153	/
			1	25	Right Side	23230	0.037	-3.46	25.00	24.93	0.038	/
			25	25	Right Side	23230	0.03	2.92	24.00	23.59	0.033	/
			1	25	Top Edge	23230	0.323	-1.44	25.00	24.93	0.328	/
			25	25	Top Edge	23230	0.302	-1.63	24.00	23.59	0.332	/
			1	25	Bottom Side	23230	0.39	0.45	25.00	24.93	0.396	/
			25	25	Bottom Side	23230	0.384	3.34	24.00	23.59	0.422	/
LTE Band 14	10M	QPSK	1	0	Front side	23330	0.569	2.34	25.00	24.60	0.624	/
			25	0	Front side	23330	0.551	2.55	23.50	23.37	0.568	/
			1	0	Back Side	23330	0.618	-2.12	25.00	24.60	0.678	9
			25	0	Back Side	23330	0.603	-0.21	23.50	23.37	0.621	/
			1	0	Left Side	23330	0.137	1.79	25.00	24.60	0.150	/
			25	0	Left Side	23330	0.125	-0.16	23.50	23.37	0.129	/
			1	0	Right Side	23330	0.037	-0.45	25.00	24.60	0.041	/
			25	0	Right Side	23330	0.029	0.15	23.50	23.37	0.030	/
			1	0	Top Edge	23330	0.274	-0.87	25.00	24.60	0.300	/
			25	0	Top Edge	23330	0.261	0.88	23.50	23.37	0.269	/
			1	0	Bottom Side	23330	0.299	0.17	25.00	24.60	0.328	/
			25	0	Bottom Side	23330	0.287	-3.81	23.50	23.37	0.296	/



LTE Band 41	20M	QPSK	1	99	Front side	40620	0.297	-1.34	25.00	24.87	0.306	/
			50	50	Front side	40620	0.292	-2.54	24.50	24.13	0.318	/
			1	99	Back Side	40620	0.722	0.97	25.00	24.87	0.744	10
			50	50	Back Side	40620	0.702	-3.40	24.50	24.13	0.764	/
			1	99	Left Side	40620	0.124	0.81	25.00	24.87	0.128	/
			50	50	Left Side	40620	0.119	-0.83	24.50	24.13	0.130	/
			1	99	Right Side	40620	0.045	-1.67	25.00	24.87	0.046	/
			50	50	Right Side	40620	0.038	-0.84	24.50	24.13	0.041	/
			1	99	Top Edge	40620	0.049	3.22	25.00	24.87	0.050	/
			50	50	Top Edge	40620	0.042	1.11	24.50	24.13	0.046	/
			1	99	Bottom Side	40620	0.649	-1.02	25.00	24.87	0.669	/
			50	50	Bottom Side	40620	0.631	-3.83	24.50	24.13	0.687	/
LTE Band 66	20M	QPSK	1	50	Front side	132072	0.44	0.37	25.00	24.90	0.450	/
			50	50	Front side	132422	0.428	3.41	24.00	23.66	0.463	/
			1	50	Back Side	132072	0.347	3.93	25.00	24.90	0.355	/
			50	50	Back Side	132422	0.336	3.07	24.00	23.66	0.363	/
			1	50	Left Side	132072	0.396	-0.28	25.00	24.90	0.405	/
			50	50	Left Side	132422	0.387	3.85	24.00	23.66	0.419	/
			1	50	Right Side	132072	0.05	-0.92	25.00	24.90	0.051	/
			50	50	Right Side	132422	0.048	-1.28	24.00	23.66	0.052	/
			1	50	Top Edge	132072	0.977	-0.70	25.00	24.67	1.054	11
			1	50	Top Edge	132422	0.852	0.12	25.00	24.64	0.926	/
			1	50	Top Edge	132572	0.685	0.23	25.00	23.36	0.999	/
			50	50	Top Edge	132072	0.878	0.54	24.00	23.50	0.985	/
			50	50	Top Edge	132422	0.824	3.59	24.00	23.57	0.910	/
			50	50	Top Edge	132572	0.658	0.64	24.00	22.42	0.947	/
			100	0	Top Edge	132422	0.734	0.64	23.50	23.44	0.744	/
			1	50	Bottom Side	132072	0.541	3.69	25.00	24.90	0.554	/
			50	50	Bottom Side	132422	0.528	-2.09	24.00	23.66	0.571	/



LTE Band 71	20M	QPSK	1	50	Front side	133372	0.426	0.67	24.50	24.19	0.458	/
			50	50	Front side	133372	0.403	-3.79	23.50	23.27	0.425	/
			1	50	Back Side	133372	0.562	0.20	24.50	24.19	0.604	12
			50	50	Back Side	133372	0.554	-1.05	23.50	23.27	0.584	/
			1	50	Left Side	133372	0.228	2.26	24.50	24.19	0.245	/
			50	50	Left Side	133372	0.221	-1.40	23.50	23.27	0.233	/
			1	50	Right Side	133372	0.027	1.43	24.50	24.19	0.029	/
			50	50	Right Side	133372	0.021	2.11	23.50	23.27	0.022	/
			1	50	Top Edge	133372	0.175	2.76	24.50	24.19	0.188	/
			50	50	Top Edge	133372	0.165	2.95	23.50	23.27	0.174	/
			1	50	Bottom Side	133372	0.197	1.37	24.50	24.19	0.212	/
			50	50	Bottom Side	133372	0.184	1.85	23.50	23.27	0.194	/





Band	Model	Test Position	Ch.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
2.4GHz WLAN	802.11b ANT1	Front Side	6	0.056	-0.72	22.00	21.56	0.062	13
		Back Side	6	0.028	2.33	22.00	21.56	0.031	/
		Left Edge	6	0.019	-1.46	22.00	21.56	0.021	/
		Top Edge	6	0.015	-0.59	22.00	21.56	0.017	/
		Bottom Edge	6	0.045	1.40	22.00	21.56	0.050	/
2.4GHz WLAN	802.11b ANT2	Front Side	6	0.014	-2.78	22.00	21.88	0.014	14
		Back Side	6	0.013	-0.36	22.00	21.88	0.013	/
		Top Edge	6	0.011	-3.87	22.00	21.88	0.011	/
		Bottom Edge	6	0.013	0.90	22.00	21.88	0.013	/
2.4GHz WLAN	802.11n20 ANT 1	Front Side	6	0.016	2.39	20.50	20.43	0.016	15
		Back Side	6	0.012	-2.64	20.50	20.43	0.012	/
		Left Edge	6	0.011	-3.57	20.50	20.43	0.011	/
		Bottom Edge	6	0.013	1.00	20.50	20.43	0.013	/
2.4GHz WLAN	802.11n20 ANT 2	Front Side	6	0.017	0.23	20.00	19.47	0.019	/
		Back Side	6	0.020	1.82	20.00	19.47	0.023	16
		Left Edge	6	0.014	3.53	20.00	19.47	0.016	/
		Bottom Edge	6	0.018	2.12	20.00	19.47	0.020	/

Band	Model	Scaled SAR	ANT 1+2 (W/Kg)
		(W/Kg)	
2.4GHz WLAN	802.11n20 ANT 1	0.016	0.039
2.4GHz WLAN	802.11n20 ANT 2	0.019	

Note:

- The test separation of all above table is 10mm.
- The Bluetooth and WLAN can't simultaneous transmission at the same time.
- Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
- Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.044** W/kg for Body)
- When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The "Portable Hotspot" feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

**Repeated SAR**

Band	Mode	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
WCDMA Band V	RMC	Front Side	4133	0.820	0.86	23.00	22.71	0.877	-
		Front Side	4175	0.827	0.61	23.00	22.97	0.833	
		Front Side	4323	0.864	2.26	24.00	23.48	0.974	-
LTE Band 4	QPSK	Back Side	20050	0.851	-3.39	24.60	24.55	0.861	-
		Back Side	20175	0.608	0.41	24.60	23.36	0.809	-
LTE Band 66	QPSK	Top Edge	132072	0.967	1.22	25.00	24.67	1.043	-
		Top Edge	132422	0.813	-1.80	25.00	24.64	0.883	-
		Top Edge	132572	0.652	1.40	25.00	23.36	0.951	-
		Top Edge	132072	0.849	0.27	24.00	23.5	0.953	-
		Top Edge	132422	0.823	-0.03	24.00	23.57	0.909	-
		Top Edge	132572	0.627	2.33	24.00	22.42	0.902	-





12.2 repeated SAR measurement

Band	Mode	Test Position	Ch.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(W/kg)	2nd Repeated SAR 1g	Ratio
WCDMA Band V	RMC	Front Side	4133	0.848	0.820	1.034	-	-	-
		Front Side	4175	0.854	0.827	1.033	-	-	-
		Front Side	4323	0.864	0.864	1.000	-	-	-
LTE Band 4	QPSK	Back Side	20050	0.851	0.851	1.000	-	-	-
		Back Side	20175	0.631	0.608	1.038	-	-	-
LTE Band 66	QPSK	Top Edge	132072	0.977	0.967	1.010	-	-	-
		Top Edge	132422	0.852	0.813	1.048	-	-	-
		Top Edge	132572	0.685	0.652	1.051	-	-	-
		Top Edge	132072	0.878	0.849	1.034	-	-	-
		Top Edge	132422	0.824	0.823	1.001	-	-	-
		Top Edge	132572	0.658	0.627	1.049	-	-	-

Note:

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

**Simultaneous Multi-band Transmission Evaluation:**

Application Simultaneous Transmission information:

Position	Simultaneous State
Body	1. WCDMA + 2.4GHz WLAN
	2. LTE + 2.4GHz WLAN

NOTE:

- For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
- If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
- For minimum test separation distance $\leq 50\text{mm}$, Bluetooth standalone SAR is excluded according to $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f} (\text{GHz}) / x] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
- The reported SAR summation is calculated based on the same configuration and test position.
- KDB 447498 / 4.3.2 (2) when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
 - $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f} (\text{GHz}) / x] \text{ W/kg}$ for test separation distances $\leq 50 \text{ mm}$; Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is $>50\text{mm}$.

Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
WCDMA + 2.4G WLAN	Body	WCDMA	0.974	1.036
		2.4G WLAN	0.062	
LTE + 2.4G WLAN	Body	LTE	1.054	1.116
		2.4G WLAN	0.062	

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

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



13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	MVG	SID750	SN 30/14 DIP0G750-331	2020.07.14	2023.07.13
835MHz Dipole	MVG	SID835	SN 30/14 DIP0G835-332	2020.07.14	2023.07.13
1800MHz Dipole	MVG	SID1800	SN 30/14 DIP1G800-329	2020.07.14	2023.07.13
1900MHz Dipole	MVG	SID1900	SN 30/14 DIP1G900-333	2020.07.14	2023.07.13
2450MHz Dipole	MVG	SID2450	SN 30/14 DIP2G450-335	2020.07.14	2023.07.13
2600MHz Dipole	MVG	SID2600	SN 30/14 DIP2G600-336	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE2	SN 07/21 EPG0352	2021.03.01	2022.02.28
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2020.11.24	2021.11.23
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	MVG	SAM	SN 32/14 SAM116	N/A	N/A
Phone holder	MVG	N/A	SN 32/14 MSH97	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	99899	DC-18GHz	N/A	N/A
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2020.10.12	2021.10.11
Multi Meter	Keithley	Multi Meter 2000	4050073	2020.10.10	2021.10.09
Signal Generator	Agilent	N5182A	MY50140530	2020.10.10	2021.10.09
Wireless Communication Test Set	Agilent	8960-E5515C	MY48360751	2020.10.10	2021.10.09
Wireless Communication Test Set	R&S	CMW500	117239	2020.10.10	2021.10.09
Power Amplifier	DESAY	ZHL-42W	9638	2020.10.12	2021.10.11
Power Meter	R&S	NRP	100510	2020.10.10	2021.10.09
Power Meter	Agilent	E4418B	GB43312526	2020.10.10	2021.10.09
Power Sensor	R&S	NRP-Z11	101919	2020.10.10	2021.10.09
Power Sensor	Agilent	E9301A	MY41497725	2020.10.10	2021.10.09
Temperature hygrometer	SuWei	SW-108	N/A	2020.10.12	2021.10.11
Thermograph	Elitech	RC-4	S/N EF7176501537	2020.10.12	2021.10.11

Note:

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

1. There is no physical damage on the dipole
2. System validation with specific dipole is within 10% of calibrated value

Return-loss in within 20% of calibrated measurement



Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

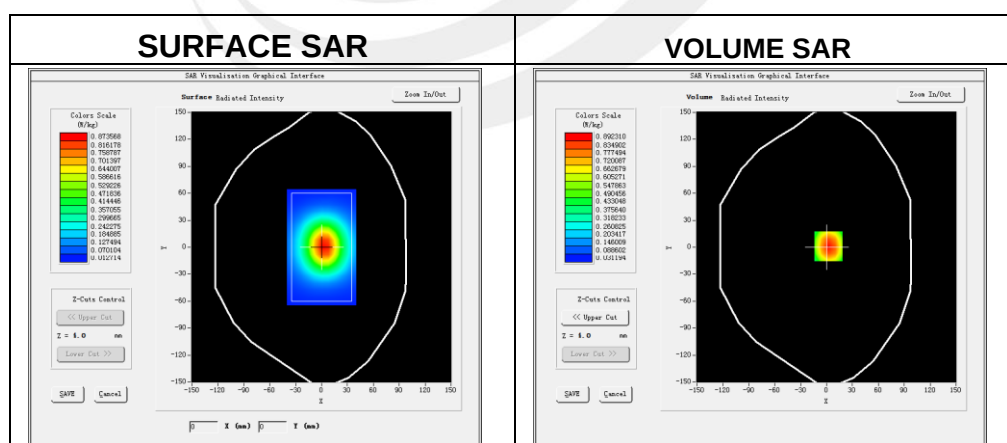
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2021-06-10

Experimental conditions

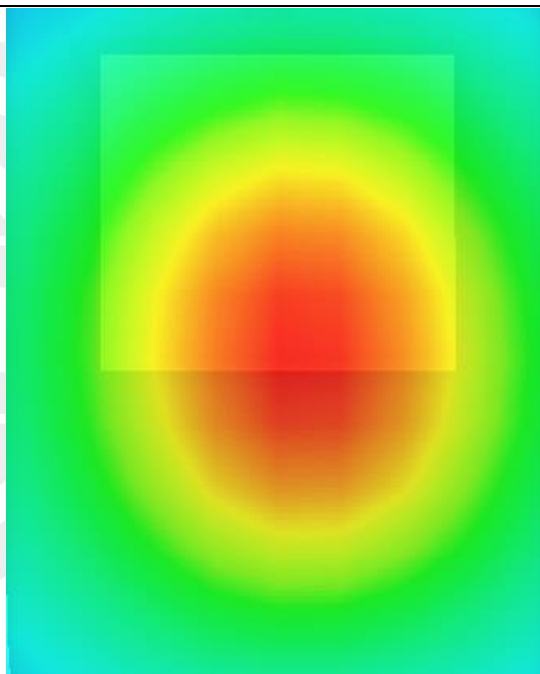
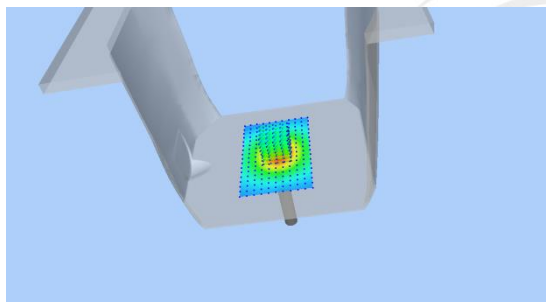
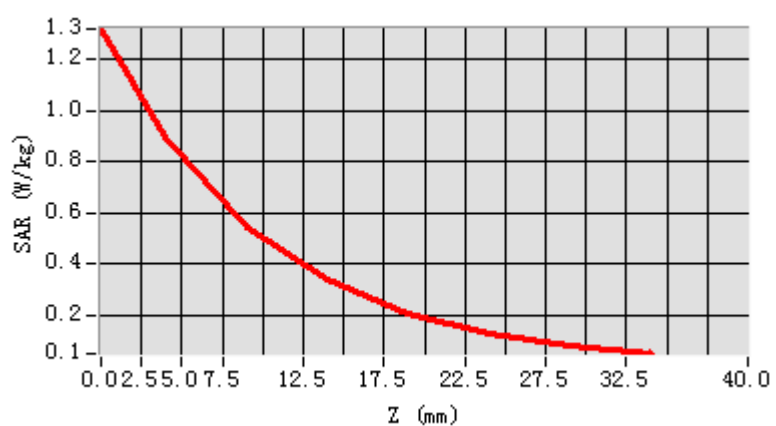
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity	41.65
Conductivity (S/m)	0.87
Probe	SN 07/21 EPG0352
ConvF	1.58
Crest factor	1:1



Maximum location: X=2.00, Y=1.00

SAR 10g (W/Kg)	0.556207
SAR 1g (W/Kg)	0.857042

Z Axis Scan



**System Performance Check Data (835MHz)**

Type: Phone measurement (Complete)

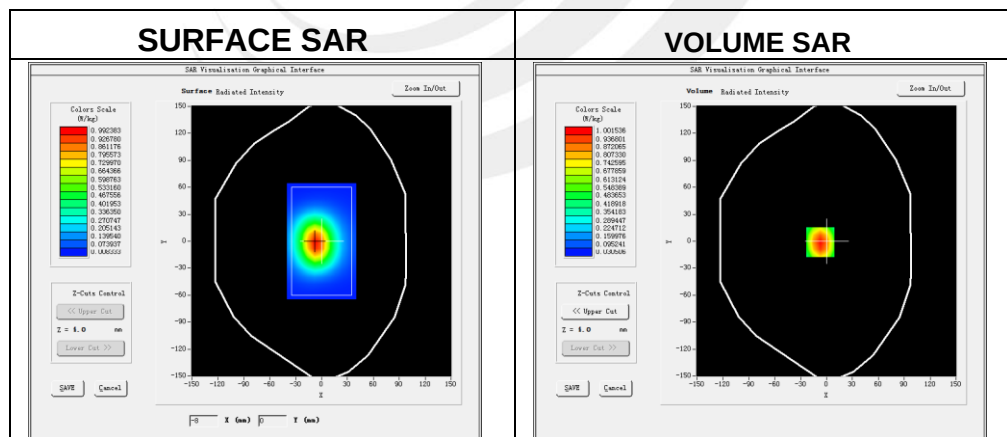
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2021-06-10

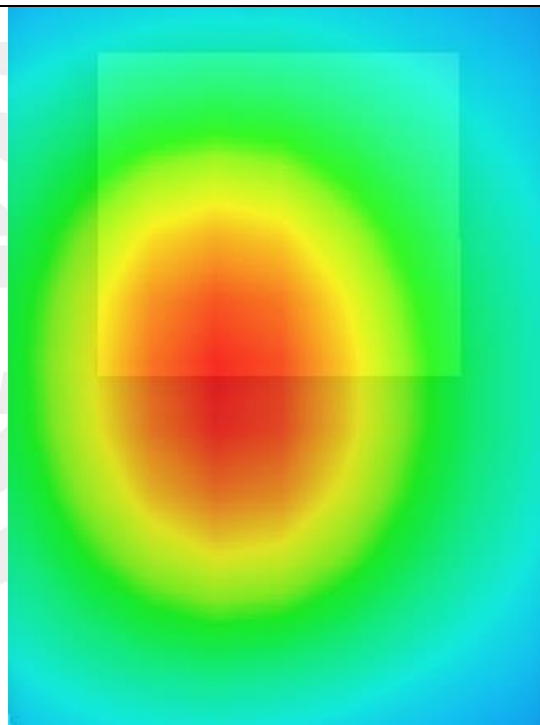
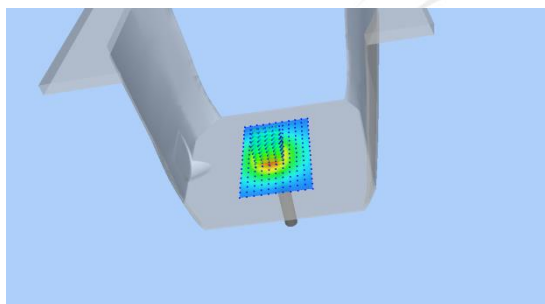
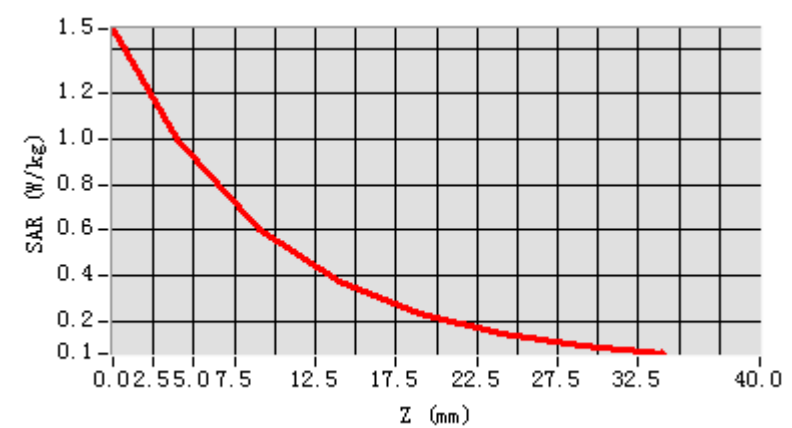
Experimental conditions

Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	41.98
Conductivity (S/m)	0.92
Probe	SN 07/21 EPG0352
ConvF:	1.57
Crest factor:	1:1

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

SAR 10g (W/Kg)	0.631954
SAR 1g (W/Kg)	0.943550

Z Axis Scan





System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)

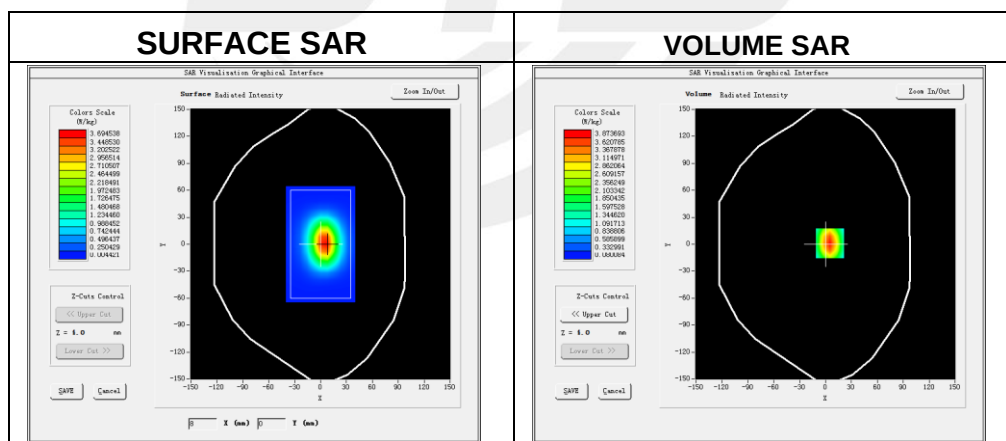
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2021-06-11

Experimental conditions.

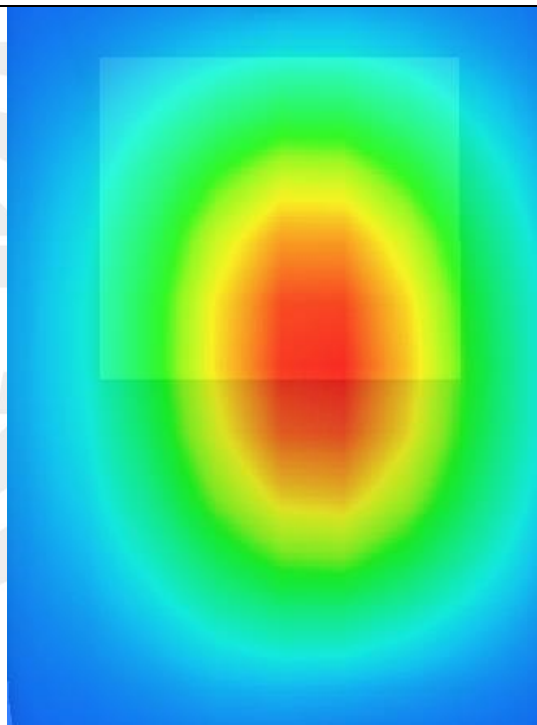
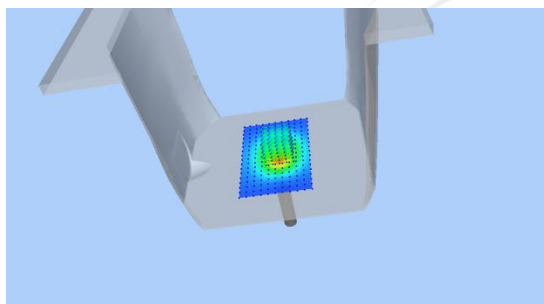
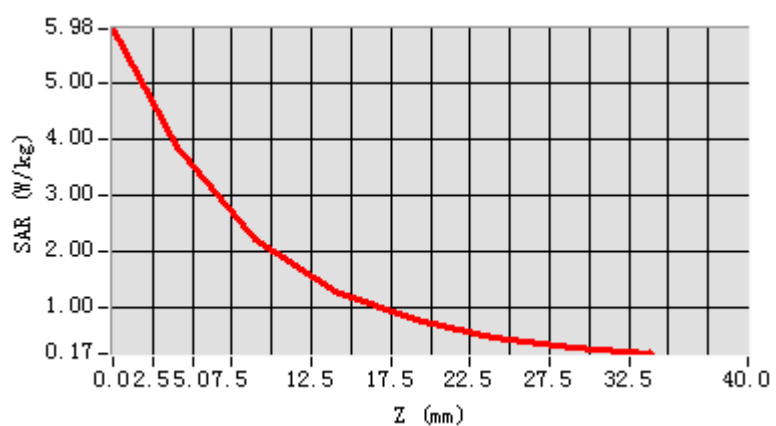
Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	40.28
Conductivity (S/m)	1.41
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1



Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	2.072381
SAR 1g (W/Kg)	3.986320

Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

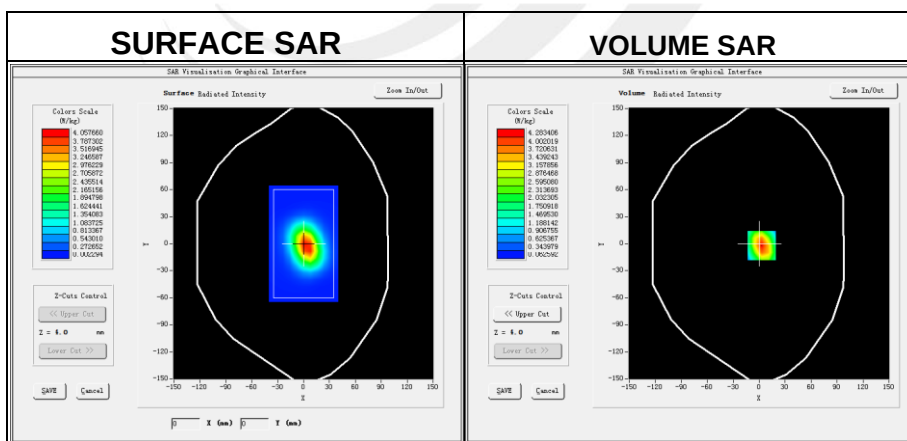
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2021-06-15

Experimental conditions.

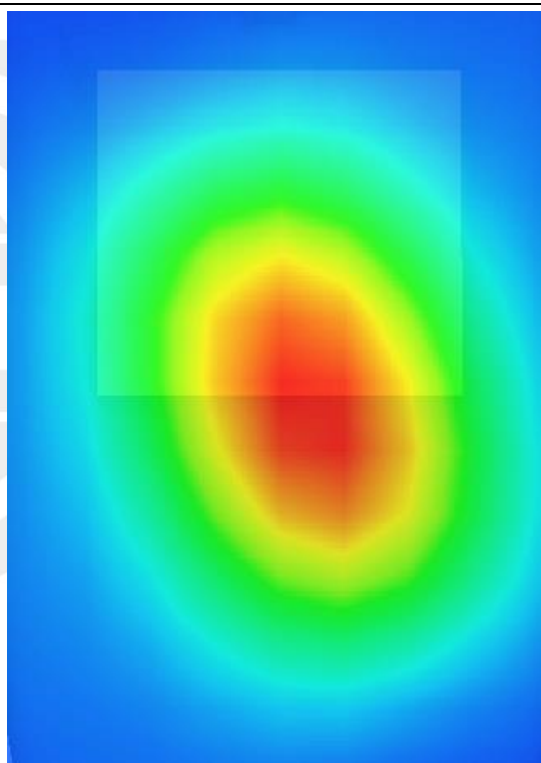
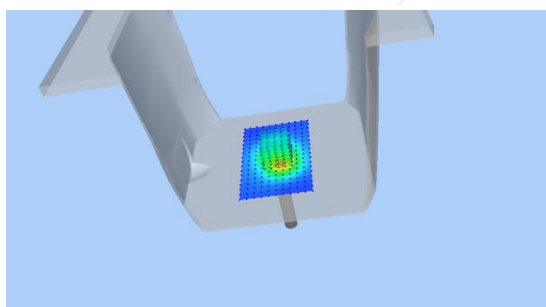
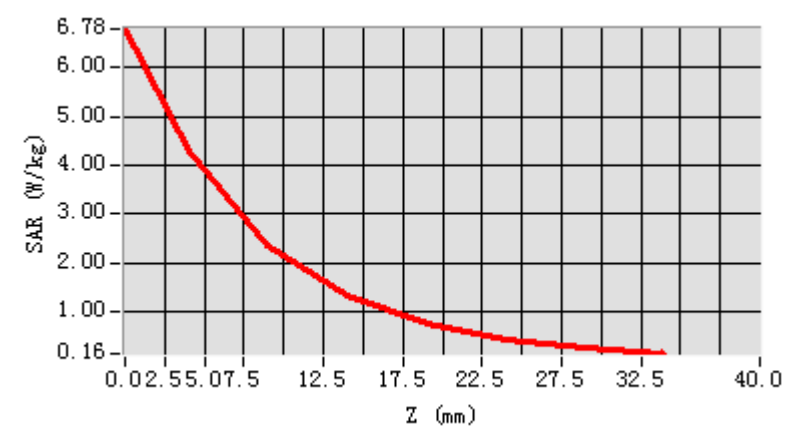
Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	38.63
Conductivity (S/m)	1.40
Probe	SN 07/21 EPGO352
ConvF:	1.78
Crest factor:	1:1



Maximum location: X=3.00, Y=-2.00

SAR 10g (W/Kg)	2.038110
SAR 1g (W/Kg)	4.056543

Z Axis Scan





System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)

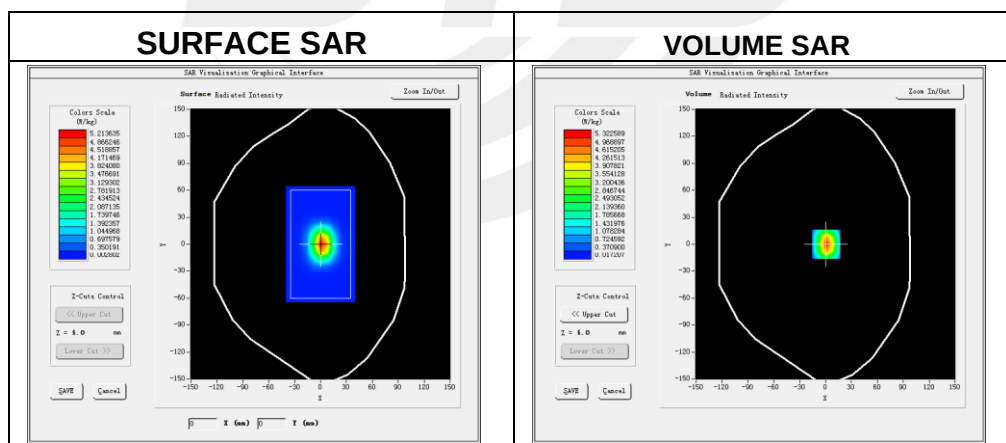
Area scan resolution: dx=8mm, dy=8mm

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

Date of measurement: 2021-06-18

Experimental conditions.

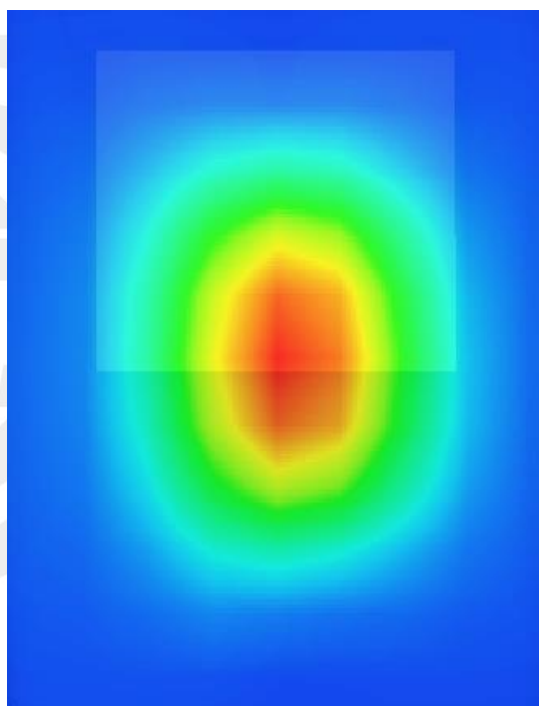
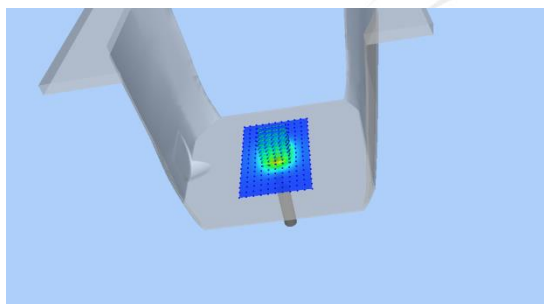
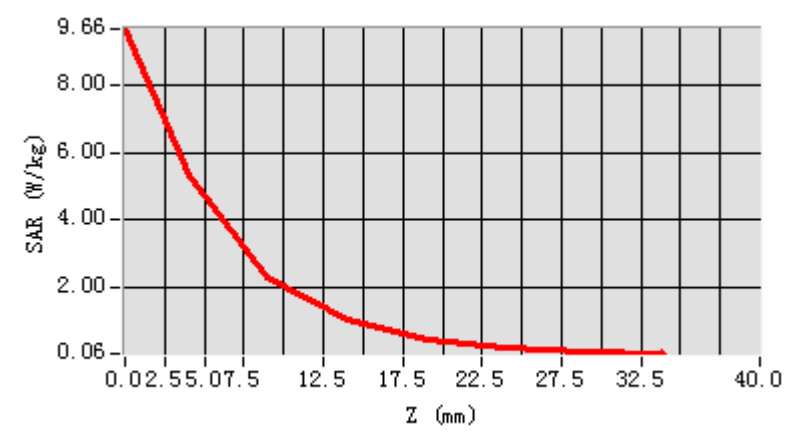
Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.12
Conductivity (S/m)	1.78
Probe	SN 07/21 EPGO352
ConvF	1.75
Crest factor	1:1



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.375381
SAR 1g (W/Kg)	5.362856

Z Axis Scan





System Performance Check Data(2600MHz)

Type: Dipole measurement (Complete)

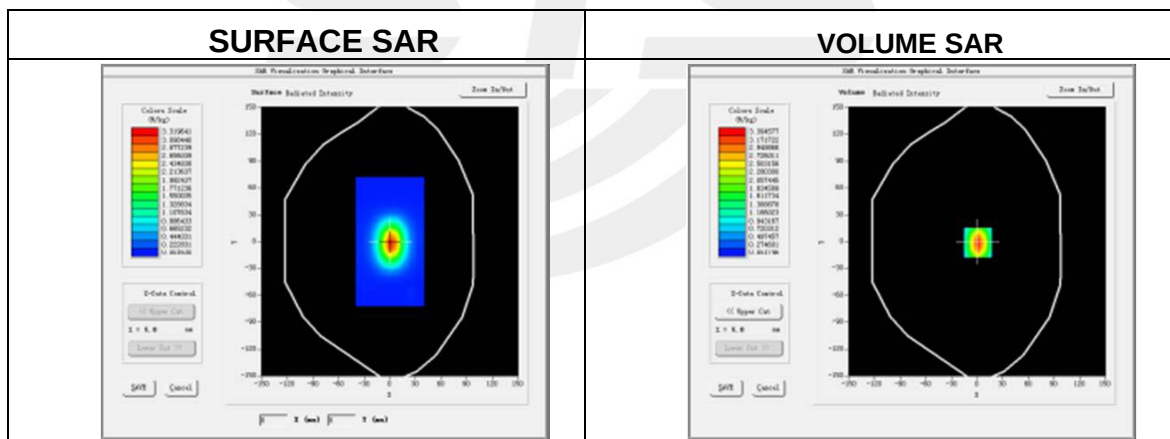
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2021-06-18

Experimental conditions.

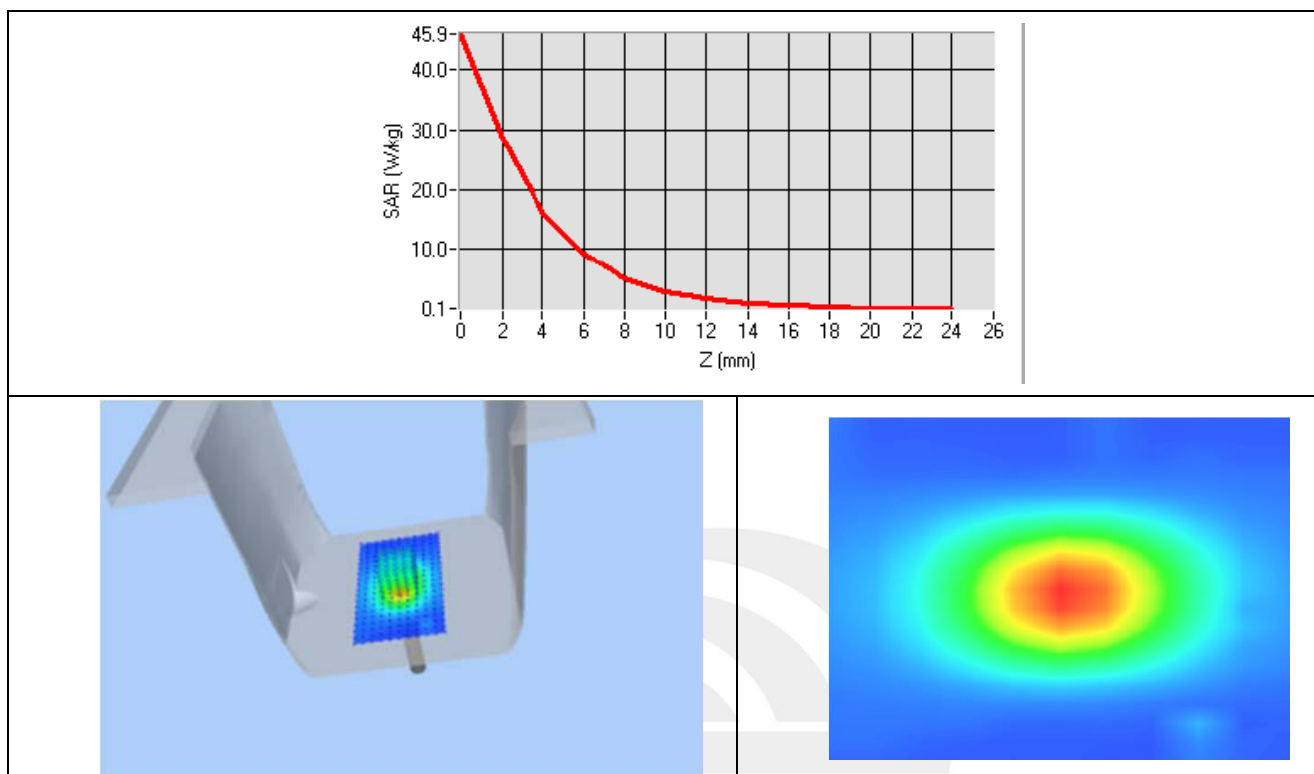
Device Position	Validation plane
Band	2600 MHz
Channels	-
Signal	CW
Frequency (MHz)	2600
Relative permittivity	39.72
Conductivity (S/m)	1.99
Probe	SN 07/21 EPGO352
ConvF	1.78
Crest factor:	1:1



Maximum location: X=7.00, Y=2.00

SAR 10g (W/Kg)	2.358271
SAR 1g (W/Kg)	5.524043

Z Axis Scan



Appendix B. SAR Test Plots

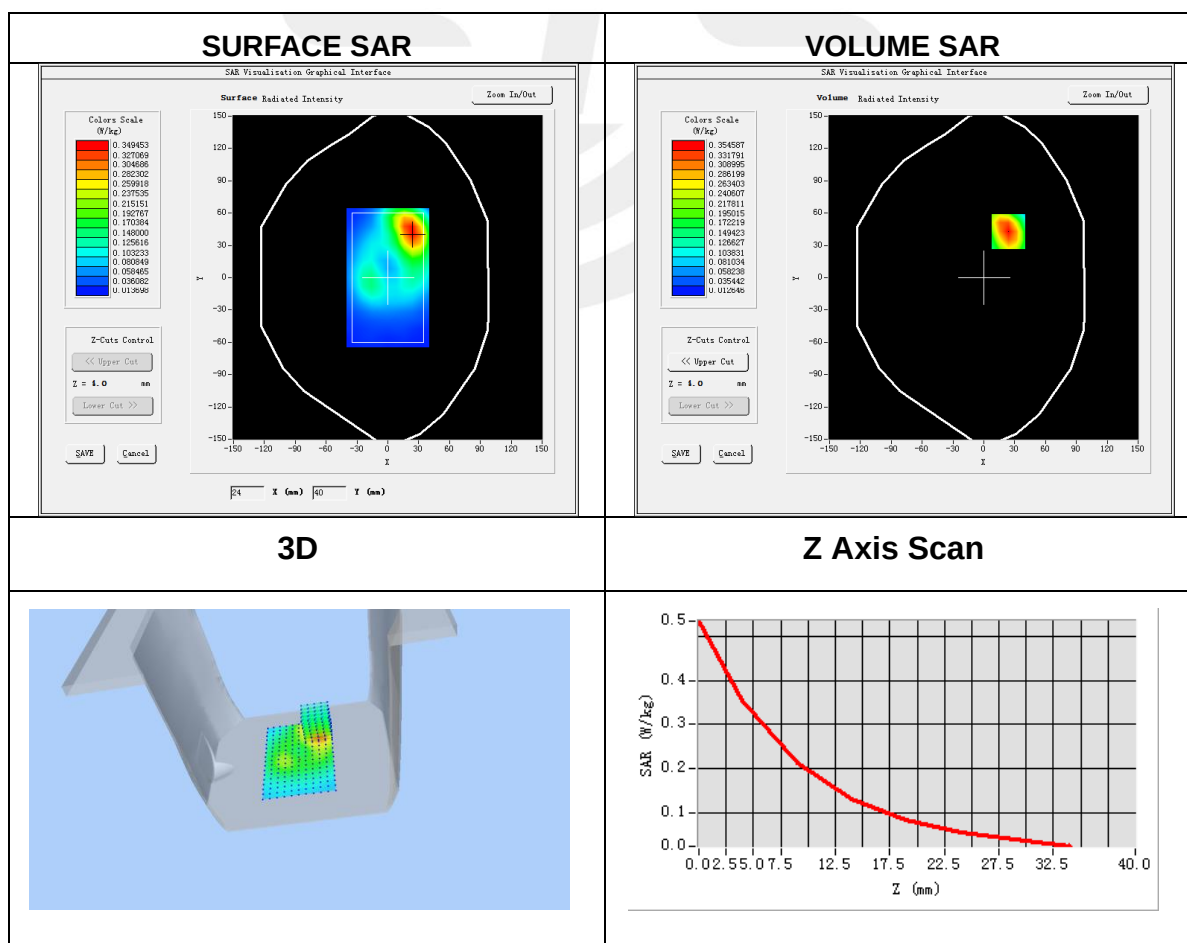
Plot 1: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-15
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	WCDMA II
Channels	9637
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.4
Relative permittivity (real part)	39.57
Conductivity (S/m)	1.43

Maximum location: X=24.00 Y=43.00

SAR Peak: 0.53W/kg

SAR 10g (W/Kg)	0.193297
SAR 1g (W/Kg)	0.341409



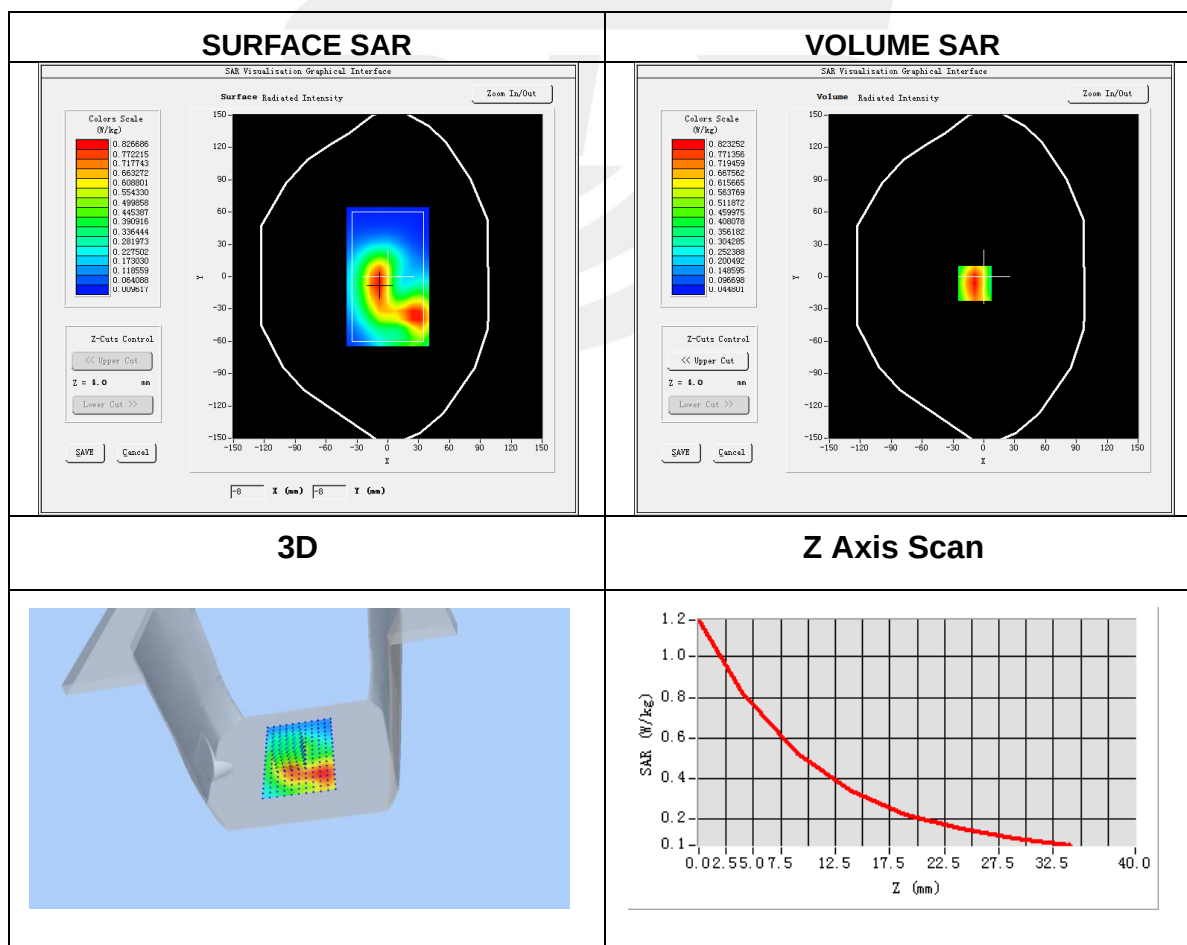

Plot 2: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-11
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	WCDMA IV
Channels	1512
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	39.89
Conductivity (S/m)	1.37

Maximum location: X=-9.00 Y=-6.00

SAR Peak: 1.18 W/kg

SAR 10g (W/Kg)	0.466033
SAR 1g (W/Kg)	0.782165



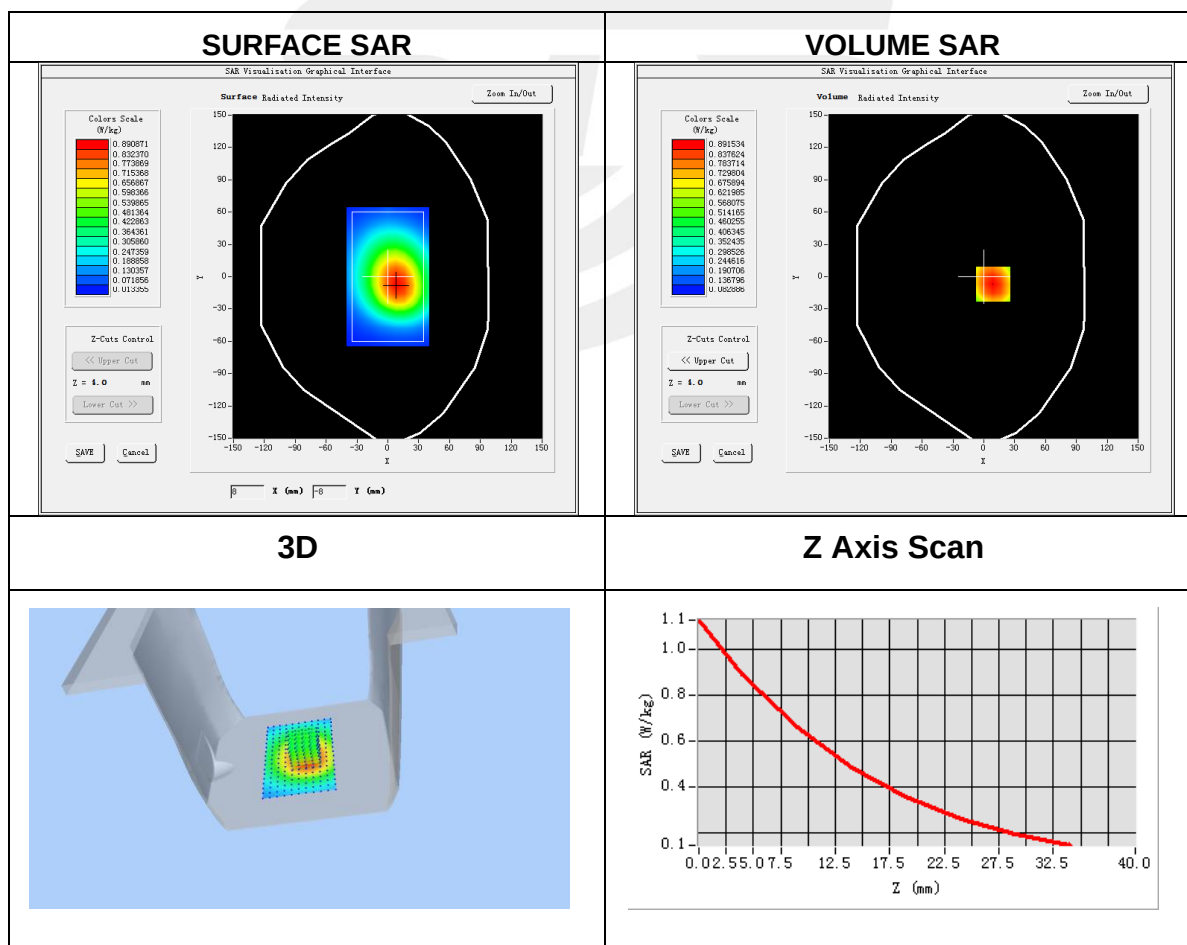

Plot 3: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-10
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	WCDMA V
Channels	4323
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.4
Relative permittivity (real part)	43.39
Conductivity (S/m)	0.92

Maximum location: X=9.00 Y=7.00

SAR Peak: 1.14 W/kg

SAR 10g (W/Kg)	0.606402
SAR 1g (W/Kg)	0.864135



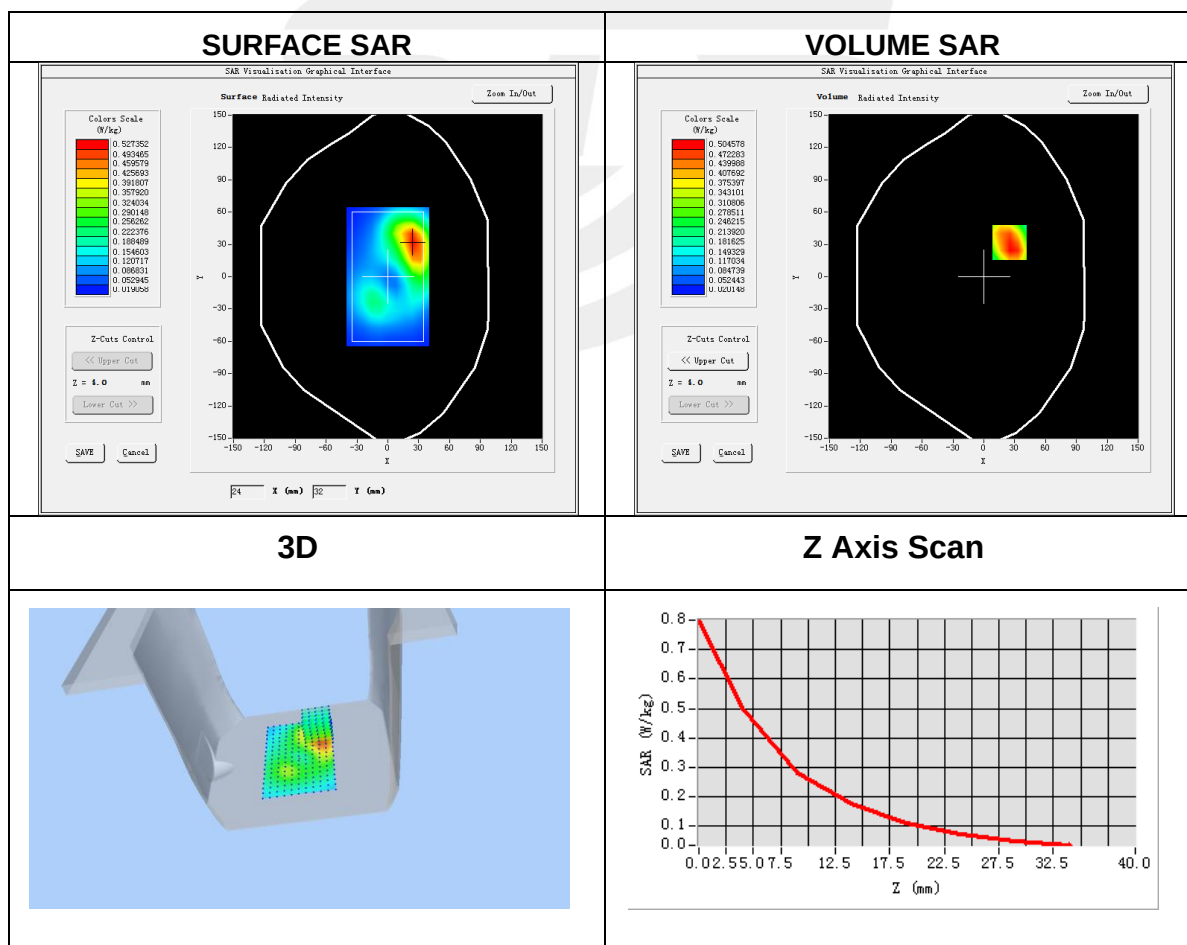
Plot 4: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-11
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 2
Channels	19100
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1900
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=25.00 Y=32.00

SAR Peak: 0.83 W/kg

SAR 10g (W/Kg)	0.278852
SAR 1g (W/Kg)	0.496726



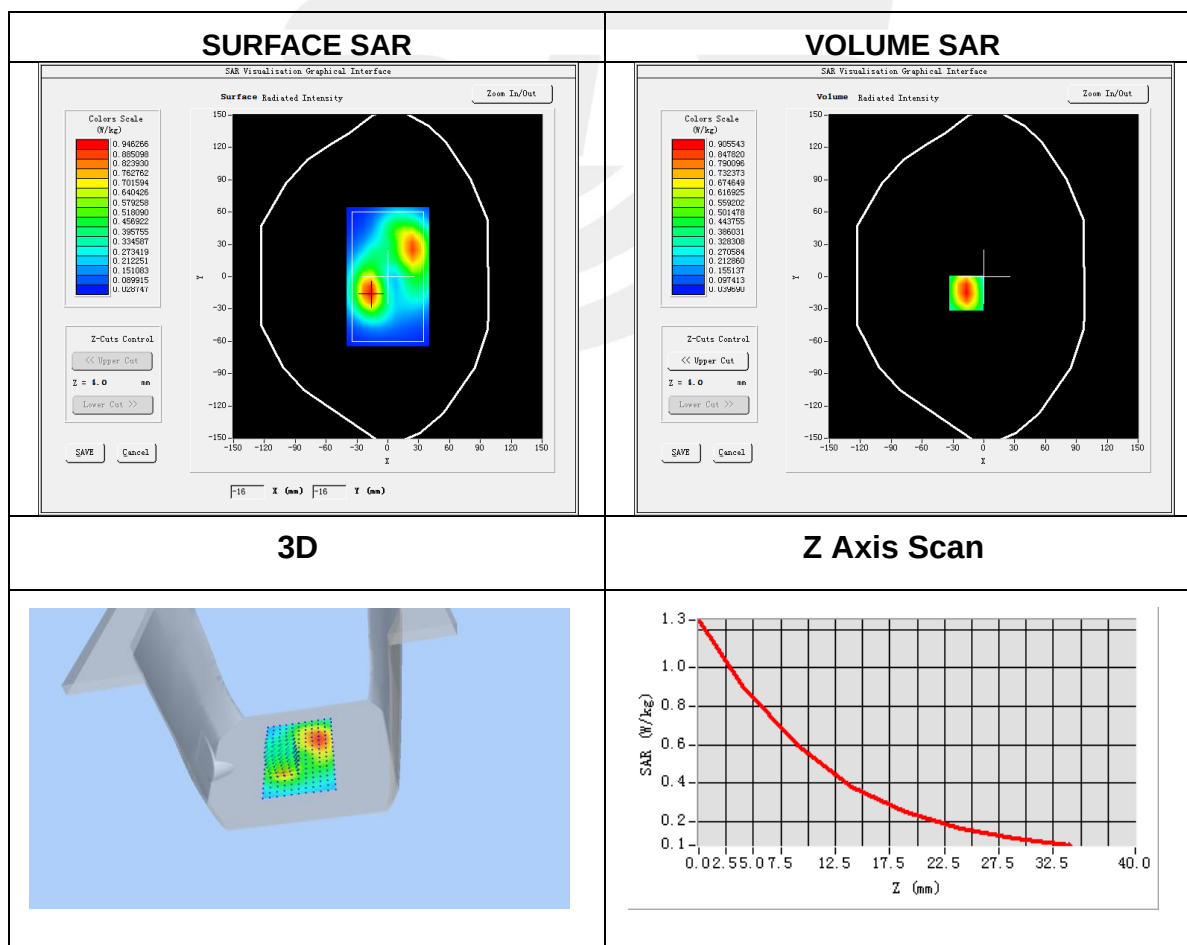
Plot 5: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-11
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 4
Channels	20050
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=-17.00 Y=-15.00

SAR Peak: 1.28 W/Kg

SAR 10g (W/Kg)	0.498336
SAR 1g (W/Kg)	0.850583



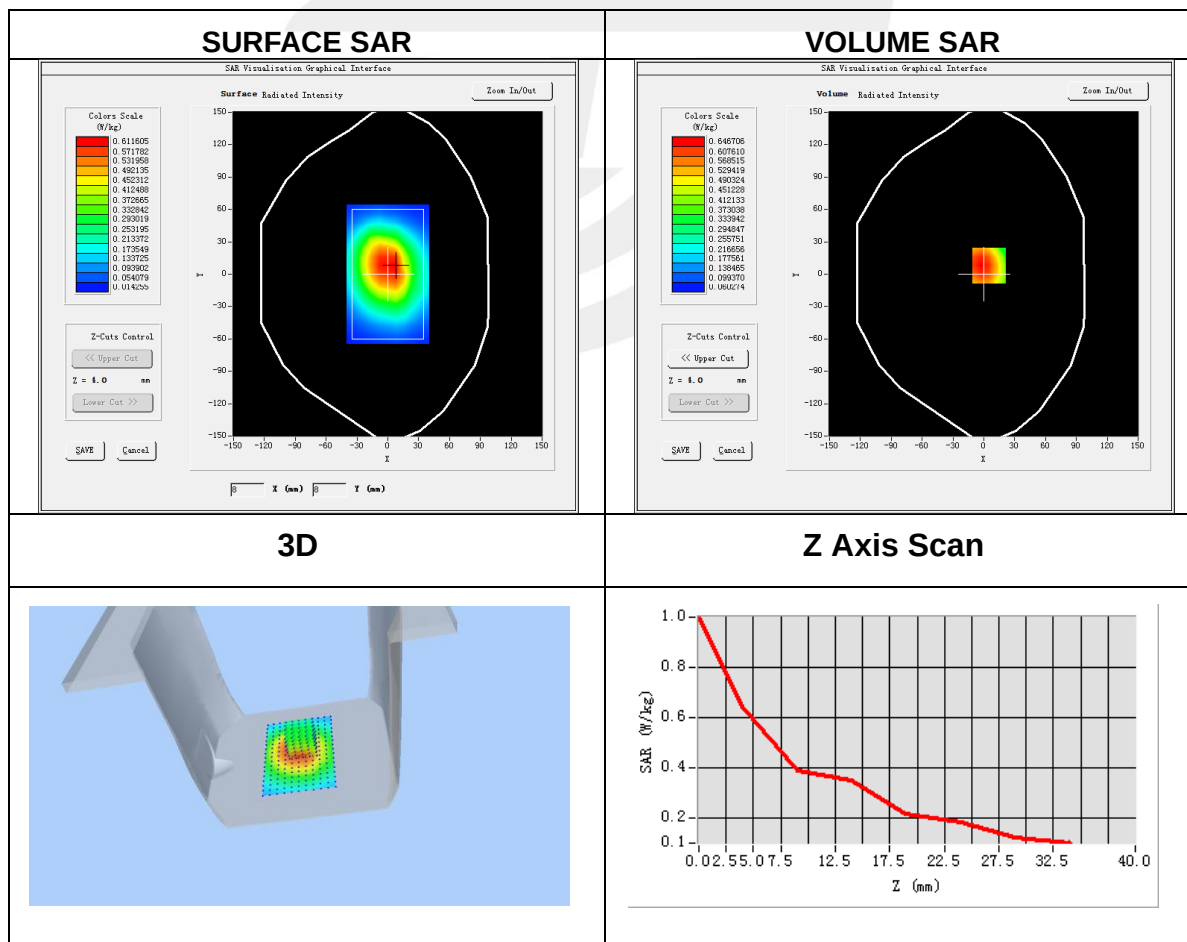
Plot 6: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-10
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	LTE Band 5
Channels	20600
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	844
Relative permittivity (real part)	43.39
Conductivity (S/m)	0.92

Maximum location: X=5.00 Y=8.00

SAR Peak: 0.83 W/kg

SAR 10g (W/Kg)	0.437769
SAR 1g (W/Kg)	0.626302





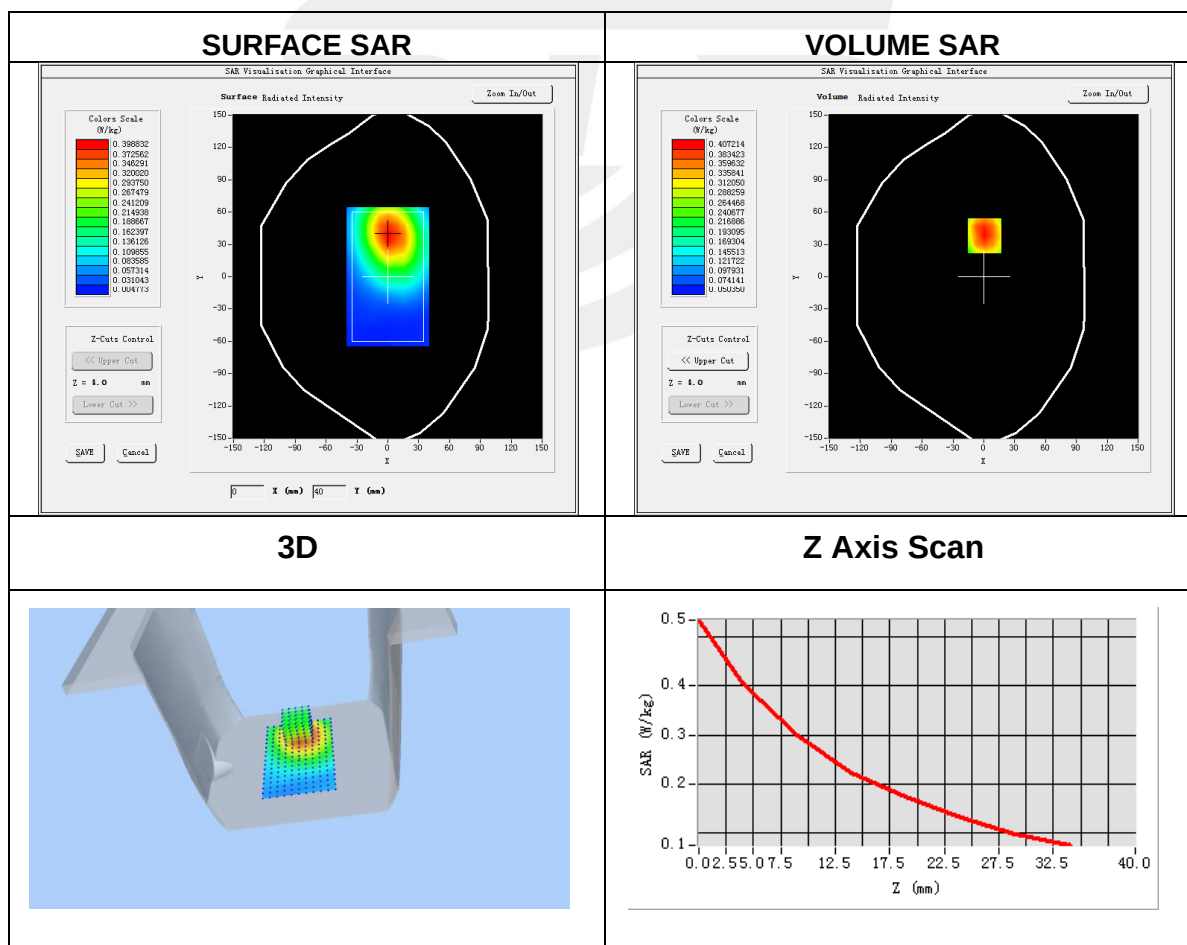
Plot 7: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-10
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	LTE Band 12
Channels	23060
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	704
Relative permittivity (real part)	42.13
Conductivity (S/m)	0.91

Maximum location: X=1.00 Y=38.00

SAR Peak: 0.53 W/kg

SAR 10g (W/Kg)	0.279549
SAR 1g (W/Kg)	0.399682



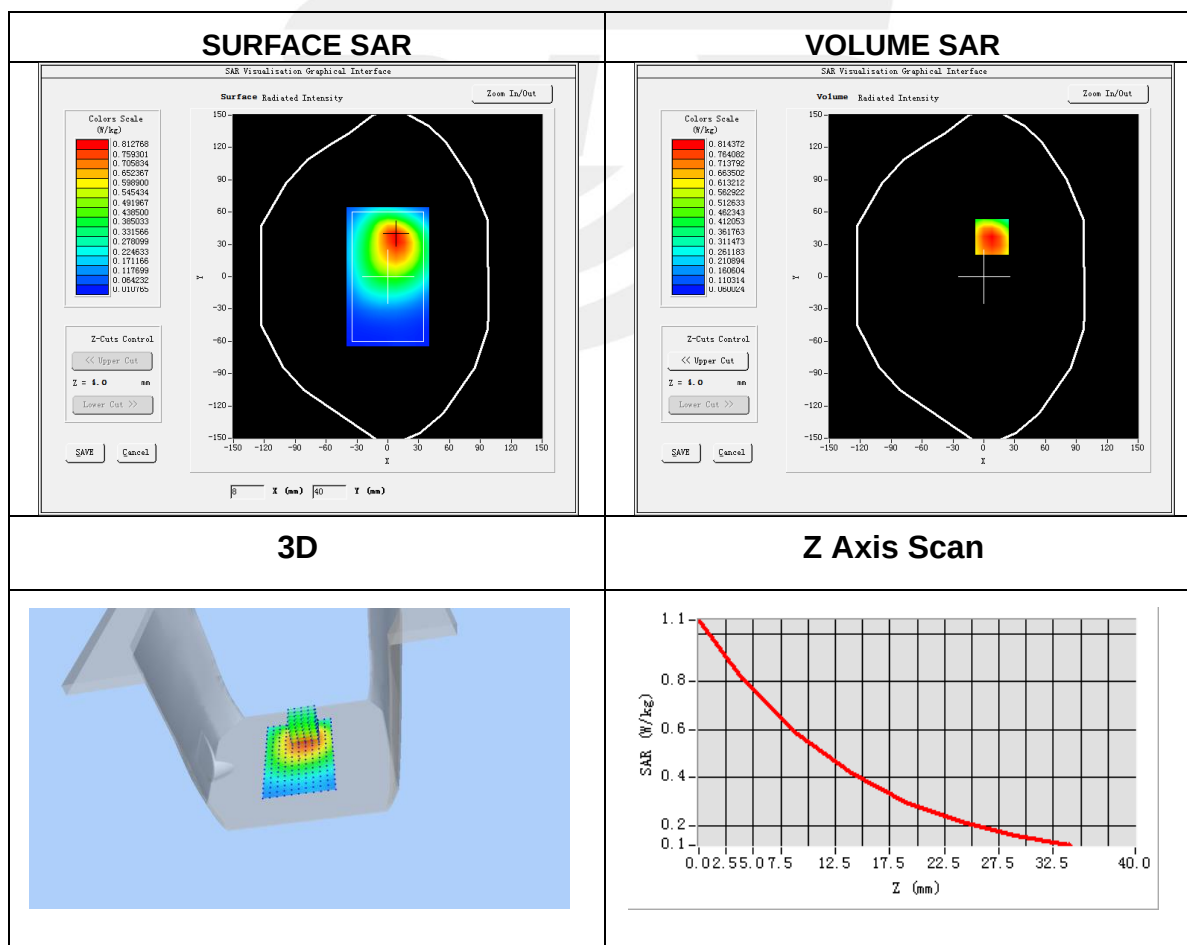
Plot 8: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-10
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 13
Channels	23230
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	782
Relative permittivity (real part)	41.75
Conductivity (S/m)	0.90

Maximum location: X=8.00 Y=37.00

SAR Peak: 1.07 W/kg

SAR 10g (W/Kg)	0.530576
SAR 1g (W/Kg)	0.777990



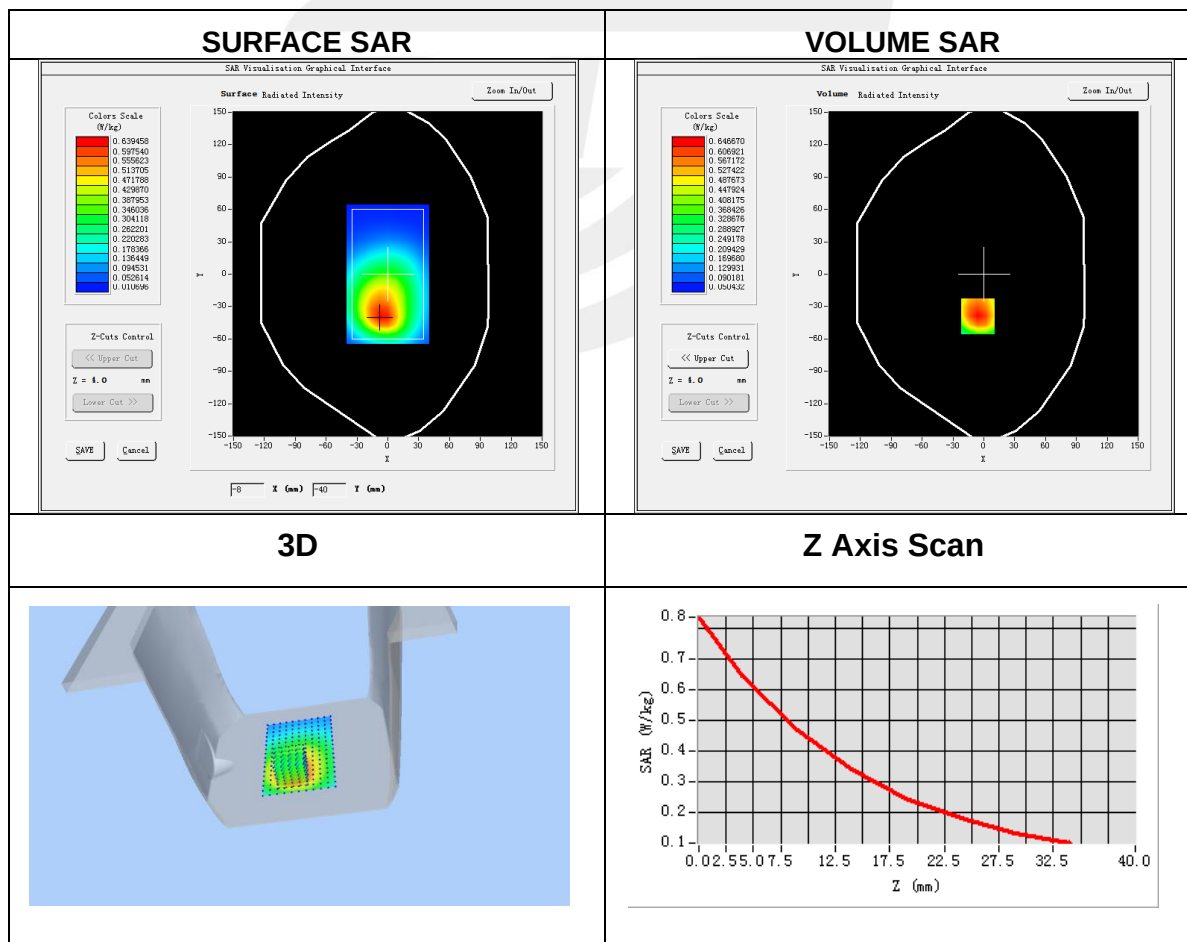
Plot 9: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-10
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 14
Channels	23330
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	793
Relative permittivity (real part)	41.70
Conductivity (S/m)	0.90

Maximum location: X=-6.00 Y=-39.00

SAR Peak: 0.85 W/kg

SAR 10g (W/Kg)	0.418964
SAR 1g (W/Kg)	0.618460



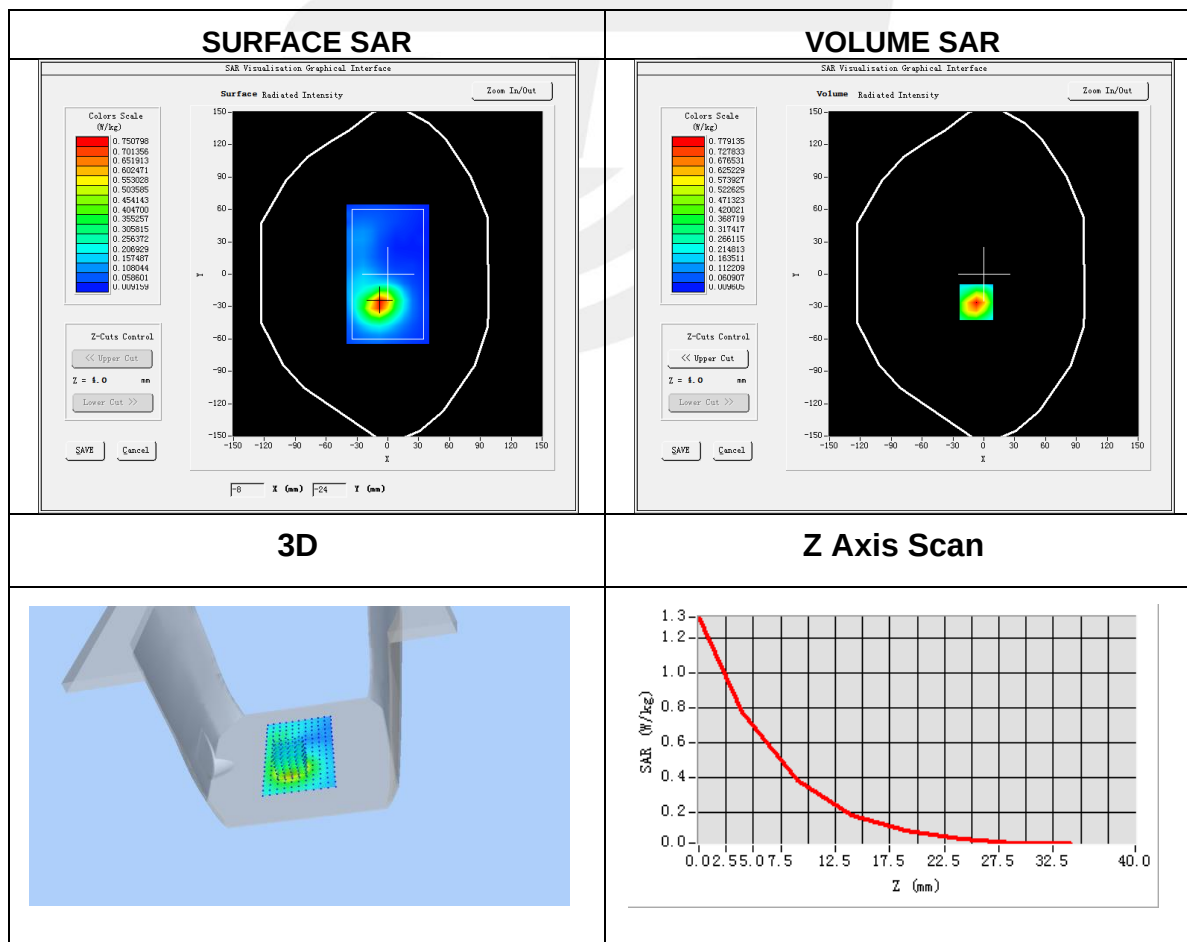
Plot 10: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-18
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 41
Channels	40620
Signal	LTE (Crest factor: 1.58)
Frequency (MHz)	2593
Relative permittivity (real part)	40.10
Conductivity (S/m)	1.37

Maximum location: X=-7.00 Y=-26.00

SAR Peak: 1.31 W/kg

SAR 10g (W/Kg)	0.334568
SAR 1g (W/Kg)	0.721895



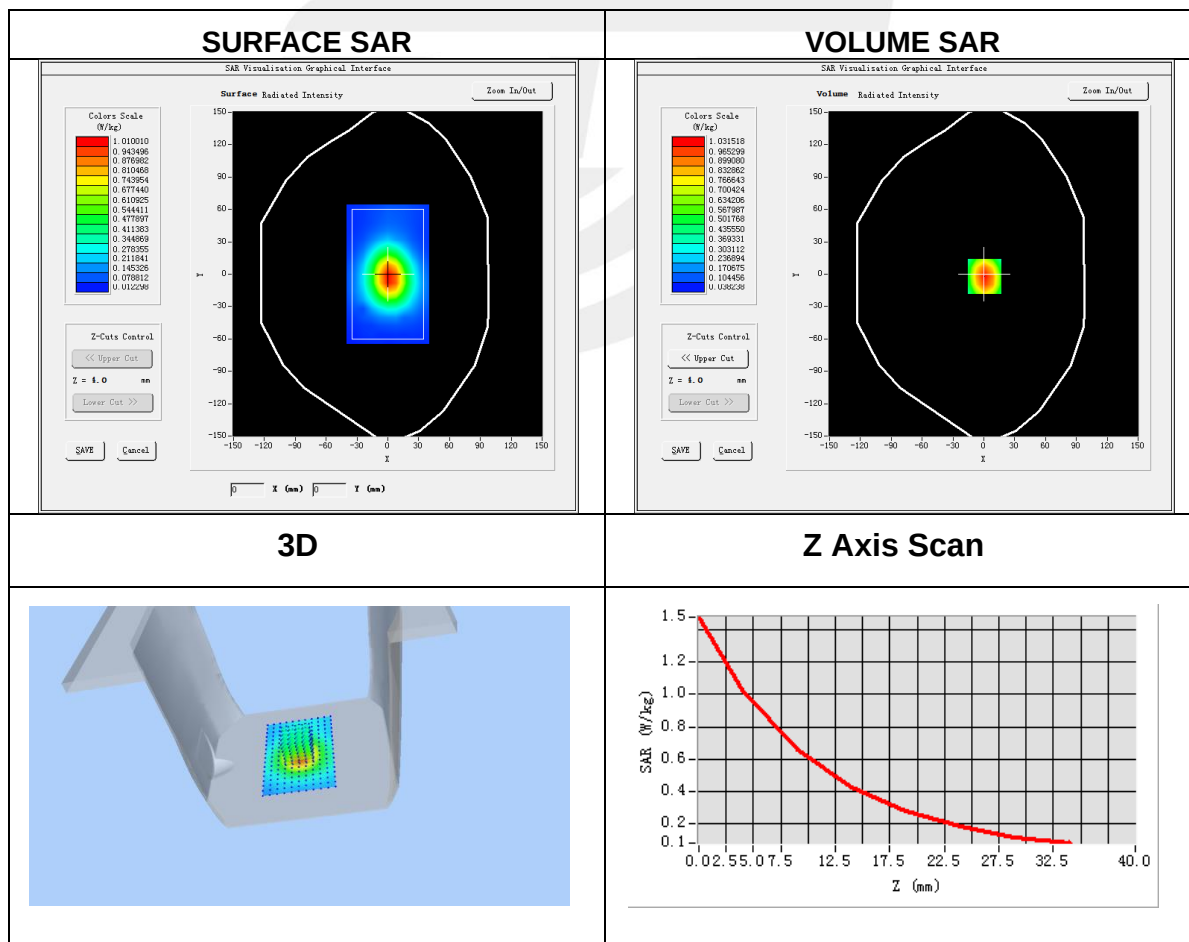
Plot 11: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-11
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Top Edge
Band	LTE Band 66
Channels	132072
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.10
Conductivity (S/m)	1.37

Maximum location: X=1.00 Y=-2.00

SAR Peak: 1.48 W/kg

SAR 10g (W/Kg)	0.576908
SAR 1g (W/Kg)	0.977120



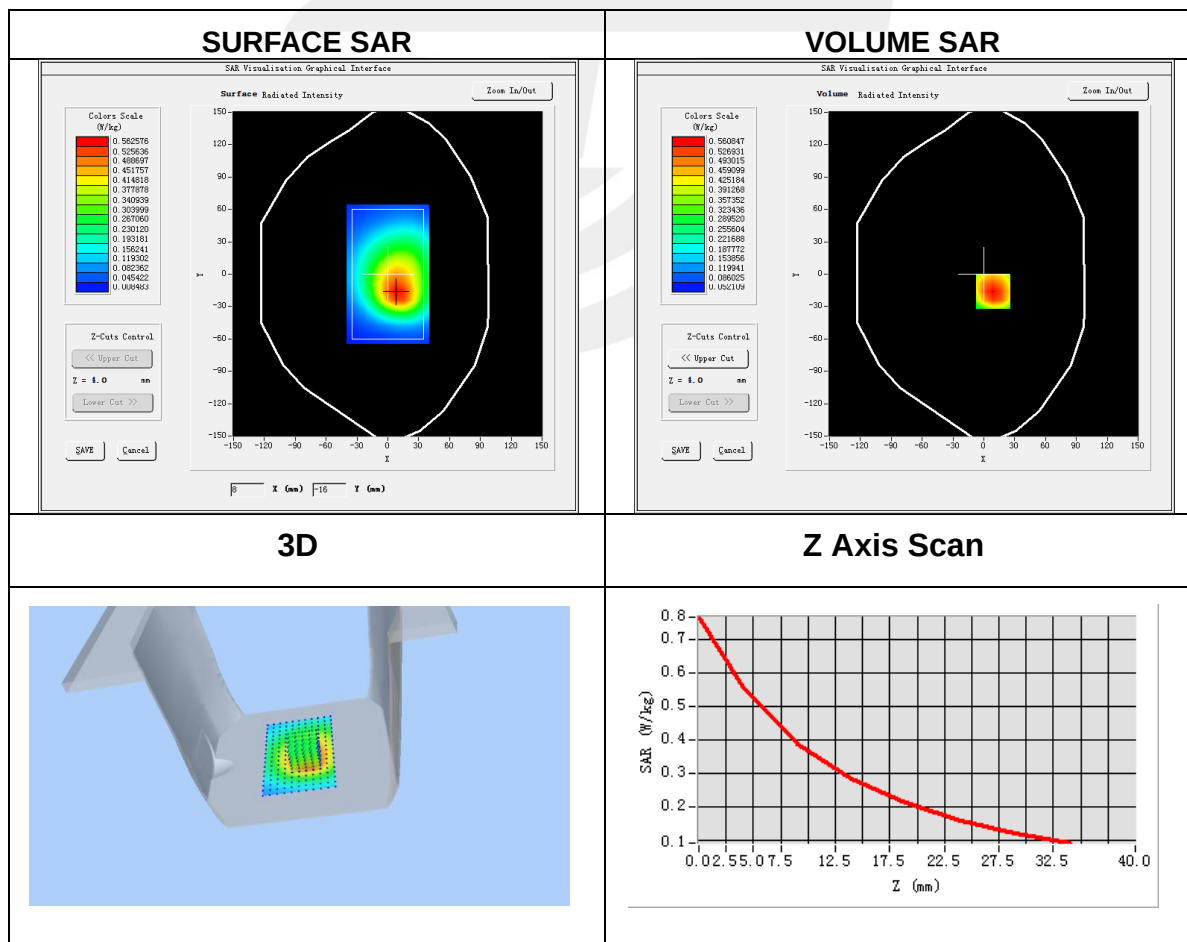
Plot 12: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-11
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	LTE Band 71
Channels	133372
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	673
Relative permittivity (real part)	42.27
Conductivity (S/m)	0.93

Maximum location: X=9.00 Y=-16.00

SAR Peak: 0.78 W/kg

SAR 10g (W/Kg)	0.371245
SAR 1g (W/Kg)	0.562466





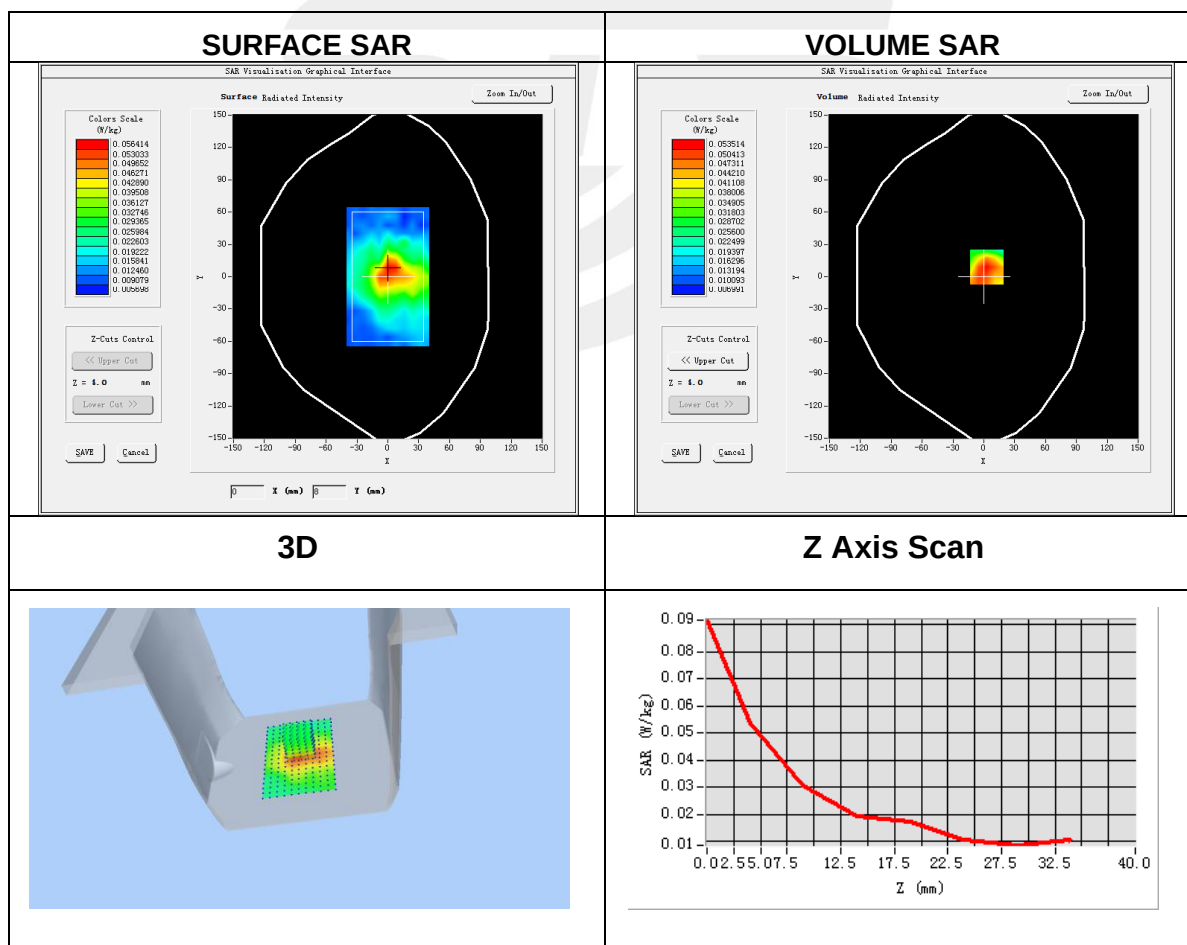
Plot 13: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-18
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	IEEE 802.11b ANT 1
Channels	6
Signal	IEEE802.11b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=3.00 Y=9.00

SAR Peak: 0.11W/kg

SAR 10g (W/Kg)	0.031372
SAR 1g (W/Kg)	0.055699



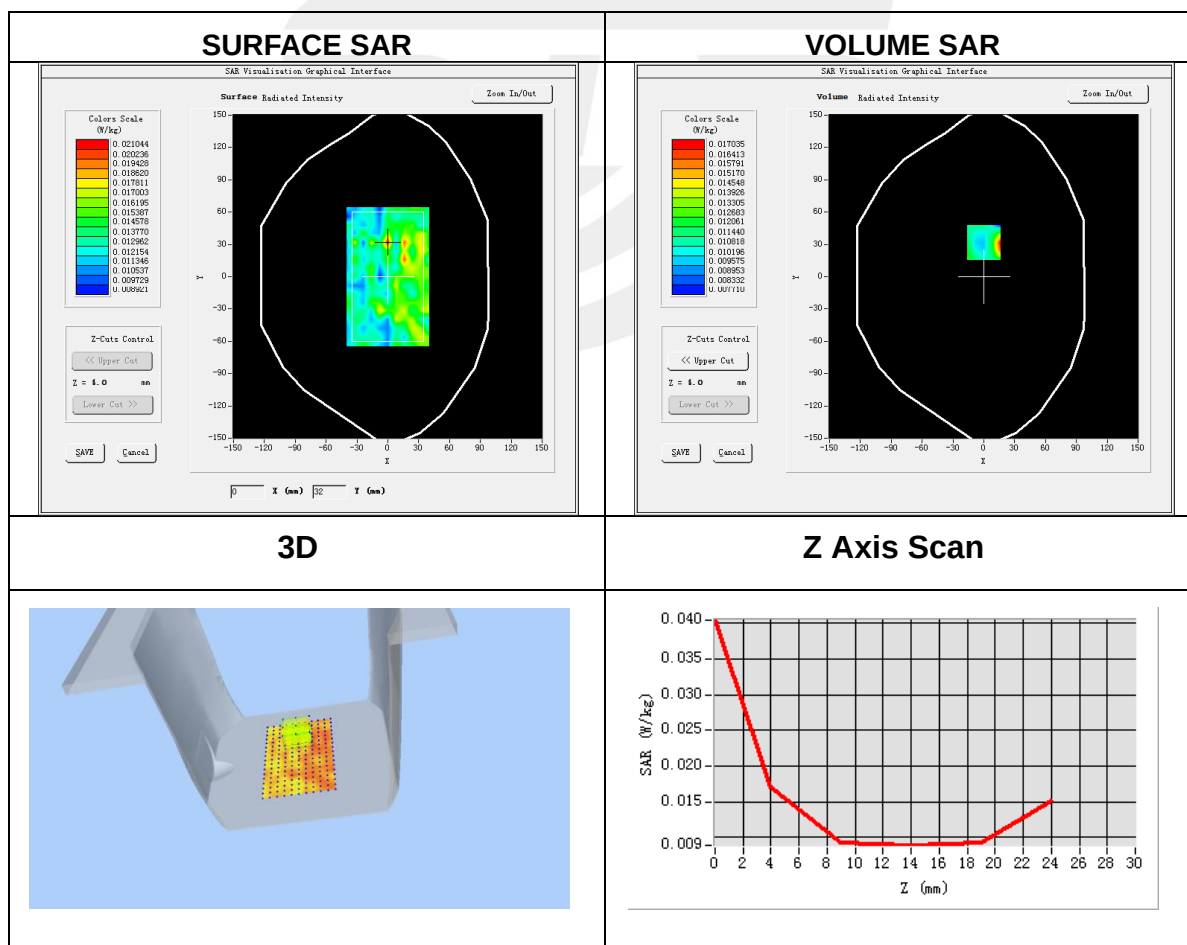

Plot 14: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-18
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	IEEE 802.11b ANT 2
Channels	6
Signal	IEEE802.11b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=0.00 Y=32.00

SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)	0.010301
SAR 1g (W/Kg)	0.014367



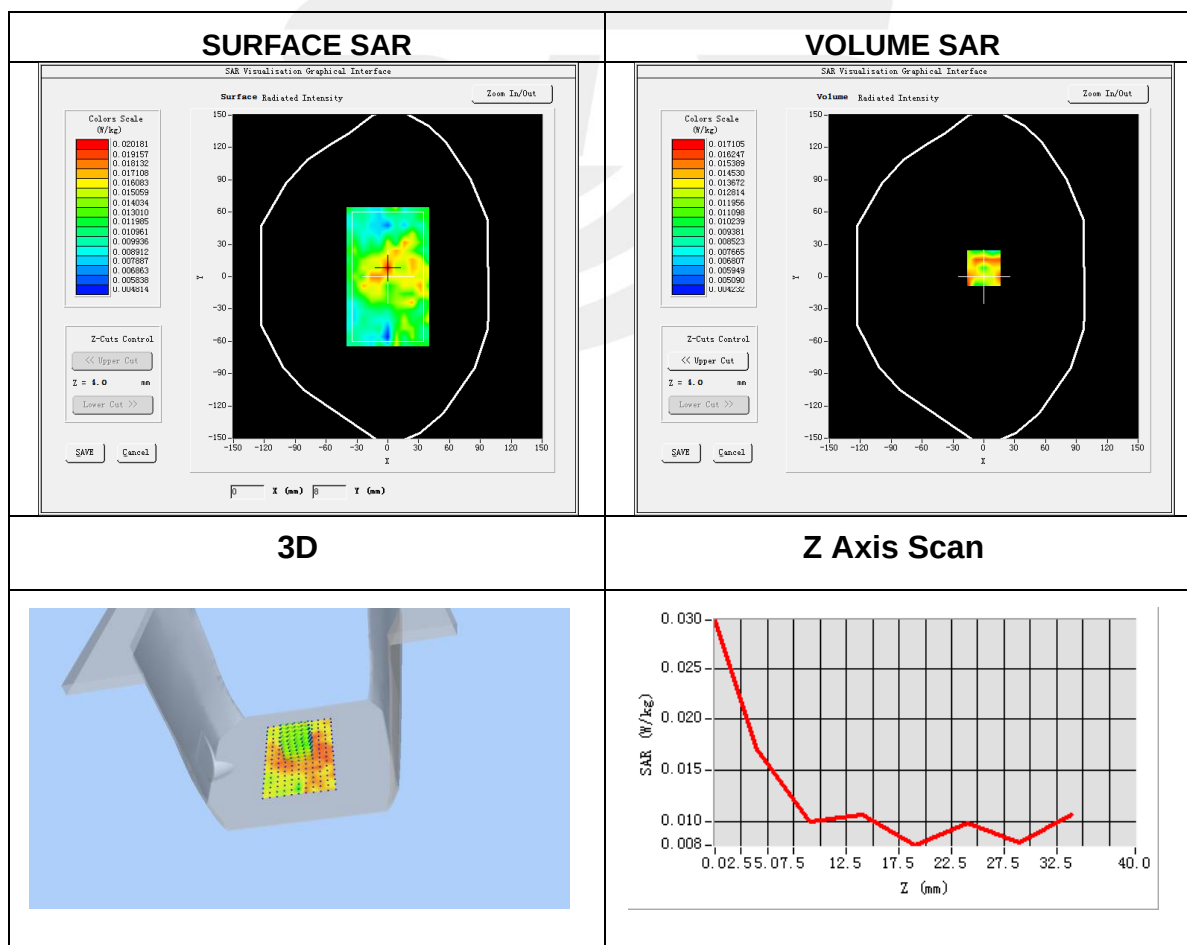

Plot 15: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-18
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Front Side
Band	IEEE 802.11n20 ANT 1
Channels	6
Signal	IEEE802.11n20 (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=0.00 Y=8.00

SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)	0.010994
SAR 1g (W/Kg)	0.015592



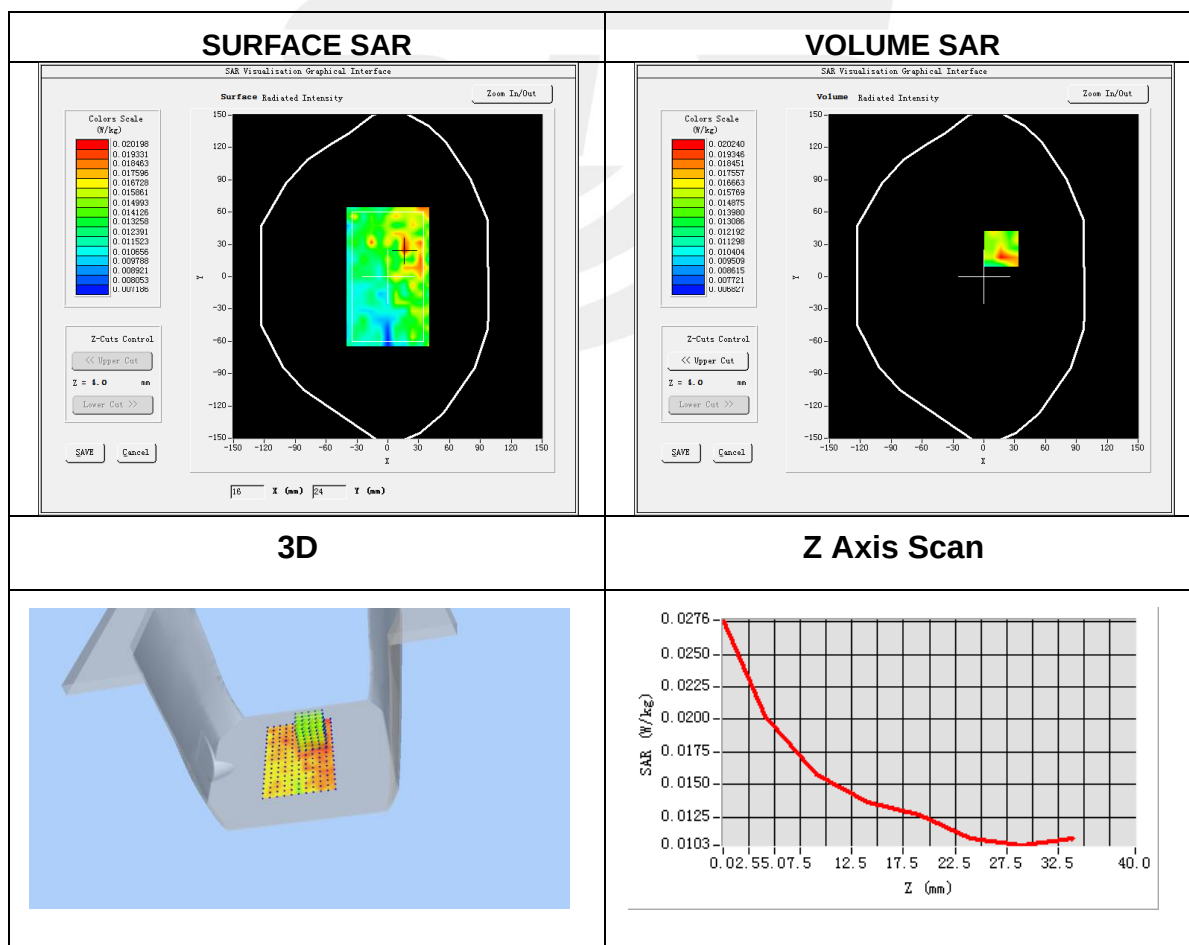

Plot 16: DUT: TD0301 LTE Wi-Fi Hotspot; EUT Model: TD0301

Test Date	2021-06-18
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Back Side
Band	IEEE 802.11n20 ANT 2
Channels	6
Signal	IEEE802.11n20 (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79

Maximum location: X=17.00 Y=26.00

SAR Peak: 0.04W/kg

SAR 10g (W/Kg)	0.014038
SAR 1g (W/Kg)	0.020390





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※END OF THE REPORT※※※※

