

Conducted Power of LTE Band 12								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					23035	23095	23155	
5MHz	QPSK	1	0	24.00	23.54	23.71	23.59	
			13	24.00	23.67	23.68	23.57	
			24	24.00	23.72	23.70	23.58	
		12	0	23.50	22.94	23.07	23.06	
			6	23.50	23.02	23.07	23.00	
			13	23.50	22.99	23.05	22.86	
	25	0	23.50	22.98	23.05	22.97		
	16QAM	1	0	23.00	22.45	22.78	22.72	
			13	23.00	22.59	22.73	22.66	
			24	23.00	22.61	22.74	22.71	
		12	0	22.50	21.93	22.10	22.10	
			6	22.50	22.02	22.08	22.04	
13			22.50	22.01	22.06	21.88		
25	0	22.50	21.98	22.10	21.94			
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					23060	23095	23130	
10MHz	QPSK	1	0	24.00	23.44	23.52	23.56	
			25	24.00	23.56	23.57	23.50	
			49	24.00	<b>23.63</b>	23.61	23.53	
		25	0	23.50	22.94	23.10	23.04	
			13	23.50	23.05	23.04	23.06	
			25	23.50	<b>23.08</b>	23.12	23.01	
		50	0	23.50	23.04	23.14	23.04	
		16QAM	1	0	23.00	22.59	22.42	22.82
				25	23.00	22.71	22.42	22.73
	49			23.00	22.80	22.52	22.77	
	25		0	22.50	21.92	22.16	22.03	
			13	22.50	22.04	22.07	22.08	
			25	22.50	22.04	22.14	22.02	
	50		0	22.50	22.01	22.12	22.05	

## LTE Band 13

Conducted Power of LTE Band 13								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					23205	23230	23255	
5MHz	QPSK	1	0	24.00	23.50	23.54	23.52	
			13	24.00	23.60	23.56	23.49	
			24	24.00	23.59	23.52	23.47	
		12	0	23.00	22.93	22.94	22.90	
			6	23.00	22.89	22.90	22.87	
			13	23.00	22.93	22.90	22.82	
	25	0	23.00	22.95	22.91	22.84		
	16QAM	1	0	23.00	22.41	22.60	22.61	
			13	23.00	22.47	22.60	22.54	
			24	23.00	22.47	22.55	22.56	
		12	0	22.50	22.01	21.95	21.92	
			6	22.00	21.93	21.93	21.94	
			13	22.00	21.83	21.94	21.87	
		25	0	22.50	21.96	22.02	21.83	
		Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	
10MHz		QPSK	1	0	23.50	23.44		
	25			23.50	<b>23.47</b>			
	49			23.50	23.46			
	25		0	23.00	<b>22.98</b>			
			13	23.00	22.94			
			25	23.00	22.94			
	50	0	23.00	22.94				
	16QAM	1	0	23.00	22.61			
			25	23.00	22.64			
			49	23.00	22.62			
		25	0	22.00	21.99			
			13	22.00	21.92			
			25	22.00	21.94			
		50	0	22.00	21.96			

LTE Band 17

Conducted Power of LTE Band 17								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					23755	23790	23825	
5MHz	QPSK	1	0	24.00	23.67	23.72	23.62	
			13	24.00	23.64	23.70	23.63	
			24	24.00	23.74	23.74	23.63	
		12	0	23.50	23.06	23.07	23.07	
			6	23.50	23.02	23.03	22.99	
			13	23.50	23.02	23.05	22.89	
		25	0	23.50	23.04	23.08	23.01	
		16QAM	1	0	23.00	22.58	22.81	22.76
				13	23.00	22.56	22.75	22.72
	24			23.00	22.68	22.78	22.77	
	12		0	22.50	22.04	22.09	22.10	
			6	22.50	22.03	22.06	22.05	
			13	22.50	22.02	22.09	21.92	
	25	0	22.50	22.07	22.13	21.97		
	Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
23780						23790	23800	
10MHz	QPSK	1	0	24.00	23.55	23.60	23.51	
			25	24.00	23.57	23.58	23.54	
			49	24.00	<b>23.65</b>	23.55	23.58	
		25	0	23.50	23.08	23.07	23.06	
			13	23.50	23.04	23.02	23.06	
			25	23.50	<b>23.13</b>	23.06	23.00	
		50	0	23.50	23.15	23.10	23.05	
		16QAM	1	0	23.00	22.71	22.52	22.77
				25	23.00	22.73	22.44	22.77
	49			23.00	22.79	22.48	22.80	
	25		0	22.50	22.06	22.09	22.09	
			13	22.50	22.06	22.07	22.07	
			25	22.50	22.10	22.09	22.02	
	50	0	22.50	22.10	22.08	22.02		

LTE Band 26

Conducted Power of LTE Band 26								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					26797	26915	27033	
1.4MHz	QPSK	1	0	24.00	23.44	23.37	23.90	
			2	24.00	23.42	23.33	23.91	
			5	24.00	23.46	23.30	23.78	
		3	0	24.00	23.95	23.82	23.96	
			2	24.50	24.04	23.96	23.95	
			3	24.50	24.11	23.93	23.76	
	16QAM	1	0	23.50	23.11	22.91	22.91	
			2	23.00	22.65	22.91	22.75	
			5	23.00	22.74	22.93	22.92	
		3	0	23.00	22.37	22.91	22.92	
			2	23.50	23.00	23.12	23.03	
			3	23.50	22.99	22.95	23.05	
	6	0	23.50	22.96	22.90	23.13		
	6	0	22.00	22.14	21.84	21.81		
	Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
						26805	26915	27025
	3MHz	QPSK	1	0	24.50	24.15	23.88	23.87
				7	24.50	24.18	23.85	24.02
14				24.50	24.04	23.86	23.93	
8			0	23.50	23.07	22.90	22.90	
			4	23.50	23.01	22.89	22.95	
			7	23.00	22.96	22.88	22.83	
15		0	23.50	23.01	22.95	22.92		
16QAM		1	0	23.50	23.31	22.97	22.88	
			7	23.50	23.41	23.23	23.22	
			14	23.50	23.02	22.93	22.93	
		8	0	22.50	22.06	21.91	21.93	
			4	22.50	22.04	21.92	21.92	
			7	22.50	22.05	21.93	21.89	
		15	0	22.50	22.03	21.97	21.85	

Conducted Power of LTE Band 26									
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel		
					26815	26915	27015		
5MHz	QPSK	1	0	24.50	24.28	24.01	24.06		
			13	24.50	24.13	24.16	23.93		
			24	24.50	24.06	24.08	24.11		
		12	0	23.50	23.15	22.98	22.97		
			6	23.50	23.03	22.99	22.92		
			13	23.50	23.03	22.93	22.90		
		25	0	23.50	23.10	22.98	22.96		
			16QAM	1	0	23.50	23.18	23.15	23.17
					13	23.50	23.21	23.04	23.06
	24	23.50			23.26	23.12	23.05		
	12	0		22.50	22.10	21.95	21.99		
		6		22.50	22.08	21.94	21.88		
		13		22.50	22.02	21.96	21.80		
	25	0	22.50	22.14	21.96	21.94			
		Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
						26840	26915	26990	
10MHz	QPSK	1	0	24.50	24.16	24.06	23.97		
			25	24.50	24.21	23.91	23.98		
			49	24.50	24.09	24.04	23.98		
		25	0	23.50	23.07	23.01	22.99		
			13	23.50	23.09	22.97	22.92		
			25	23.50	23.07	22.93	22.84		
		50	0	23.50	23.06	22.97	22.95		
			16QAM	1	0	23.50	23.33	23.02	22.99
					25	23.50	23.29	23.18	22.89
	49	23.50			23.21	22.98	22.92		
	25	0		22.50	22.12	22.04	22.00		
		13		22.50	22.13	22.05	21.94		
		25		22.50	22.15	21.90	21.88		
	50	0	22.50	22.05	21.95	21.92			
		Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
						26765	26865	26965	
15MHz	QPSK	1	0	24.50	24.09	23.96	24.03		
			38	24.50	24.09	23.95	24.08		
			74	24.50	24.06	23.83	23.97		
		36	0	23.00	22.91	22.96	22.96		
			18	23.00	22.95	22.96	22.90		
			39	23.00	22.97	22.94	22.85		
		75	0	23.00	22.98	22.97	22.92		
			16QAM	1	0	23.50	23.11	23.00	23.00
					38	23.50	23.25	23.02	22.97
	74	23.50			23.18	22.91	22.92		
	36	0		22.00	21.99	21.99	22.00		
		18		22.00	22.00	21.97	21.97		
		39		22.50	22.02	21.97	21.89		
	75	0	22.00	21.99	21.93	21.97			

LTE Band 41

Conducted Power of LTE Band 41								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					39675	40620	41565	
5MHz	QPSK	1	0	23.50	21.95	23.08	23.18	
			13	23.50	21.80	23.06	23.23	
			24	23.50	21.97	23.18	23.21	
		12	0	22.50	20.76	22.02	22.19	
			6	22.50	20.76	22.05	22.15	
			13	22.50	20.80	22.00	22.17	
		25	0	22.50	20.82	22.05	22.21	
		16QAM	1	0	23.00	20.87	22.07	22.50
				13	22.50	20.84	22.06	21.95
	24			22.50	20.82	22.13	22.22	
	12		0	21.50	19.76	20.92	21.16	
			6	21.50	19.76	21.07	21.22	
			13	21.50	19.79	21.01	21.04	
	25	0	21.50	19.81	21.04	21.17		
	Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39700	40620	41540	
10MHz	QPSK	1	0	23.50	21.93	23.01	23.37	
			25	23.50	21.97	23.14	23.29	
			49	23.50	21.89	23.21	23.19	
		25	0	22.50	20.81	22.04	22.37	
			13	22.50	20.84	22.07	22.29	
			25	22.50	20.88	22.14	22.22	
		50	0	22.50	20.87	22.13	22.36	
		16QAM	1	0	22.50	21.03	21.85	22.25
				25	23.00	20.95	21.90	22.57
	49			22.50	20.68	22.10	21.88	
	25		0	21.50	19.84	21.10	21.37	
			13	21.50	19.88	21.12	21.28	
			25	21.50	19.93	21.19	21.22	
	50	0	21.50	19.84	21.07	21.29		

Conducted Power of LTE Band 41							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39725	40620	41515
15MHz	QPSK	1	0	23.50	21.98	22.93	23.45
			38	23.50	21.95	23.10	23.31
			74	23.50	21.88	23.16	23.08
		36	0	22.50	20.80	21.99	22.38
			18	22.50	20.87	22.11	22.28
			39	22.50	20.84	22.15	22.23
	75	0	22.50	20.82	22.12	22.34	
	16QAM	1	0	22.50	20.96	21.83	22.29
			38	22.50	21.06	22.04	22.39
			74	22.50	20.86	22.08	21.92
		36	0	21.50	19.84	21.00	21.43
			18	21.50	19.86	21.04	21.30
			39	21.50	19.82	21.13	21.24
	75	0	21.50	19.82	21.10	21.31	
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39750	40620	41490
20MHz	QPSK	1	0	23.50	21.87	22.83	23.41
			50	23.50	21.93	23.13	<b>23.45</b>
			99	23.50	21.86	23.12	23.21
		50	0	23.00	20.84	22.06	<b>22.51</b>
			25	22.50	20.94	22.20	22.44
			50	22.50	20.91	22.23	22.30
	100	0	22.50	20.86	22.15	22.43	
	16QAM	1	0	23.00	20.80	21.64	22.54
			50	23.00	20.89	21.90	22.65
			99	22.50	20.83	22.22	22.39
		50	0	22.00	19.82	21.12	21.51
			25	21.50	19.87	21.15	21.43
			50	21.50	19.88	21.17	21.30
	100	0	21.50	19.82	21.14	21.36	

LTE Band 66

Conducted Power of LTE Band 66								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					131979	132322	132665	
1.4MHz	QPSK	1	0	23.50	23.15	23.04	23.07	
			2	23.50	23.14	23.00	23.06	
			5	23.50	23.15	23.03	23.01	
		3	0	23.50	23.17	23.11	23.18	
			2	23.50	23.17	23.13	23.19	
			3	23.50	23.16	23.14	23.19	
	16QAM	1	0	22.50	22.09	22.27	22.21	
			2	22.50	22.14	22.30	22.28	
			5	22.50	22.11	22.27	22.25	
		3	0	22.50	22.22	22.03	22.16	
			2	22.50	22.22	22.05	22.15	
			3	22.50	22.19	22.02	22.13	
		6	0	21.50	21.29	21.01	21.27	
		Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel
3MHz	QPSK	1	0	23.50	23.33	23.10	23.13	
			7	23.50	23.33	23.06	23.16	
			14	23.50	23.32	23.01	23.13	
		8	0	22.50	22.24	22.11	22.28	
			4	22.50	22.22	22.06	22.27	
			7	22.50	22.24	22.08	22.25	
		15	0	22.50	22.23	22.10	22.24	
		16QAM	1	0	23.00	22.53	22.01	22.40
				7	23.00	22.56	21.99	22.38
	14			22.50	22.46	21.99	22.34	
	8		0	21.50	21.31	21.13	21.25	
			4	21.50	21.33	21.12	21.22	
			7	21.50	21.34	21.11	21.22	
	15		0	21.50	21.29	21.05	21.21	



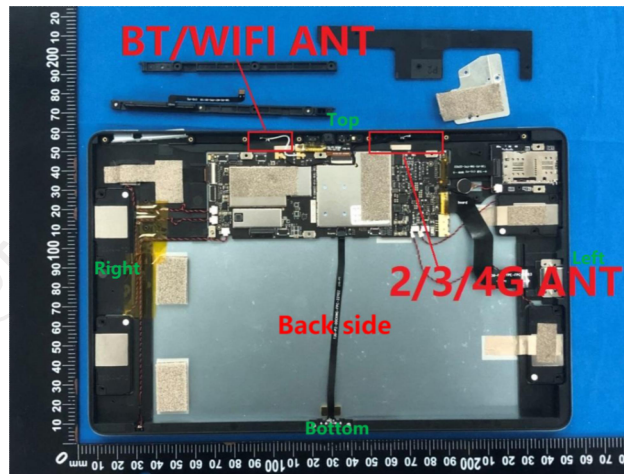
Conducted Power of LTE Band 66								
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
					131997	132322	132647	
5MHz	QPSK	1	0	24.00	23.51	23.37	23.42	
			13	23.50	23.43	23.25	23.32	
			24	23.50	23.49	23.35	23.39	
		12	0	22.50	22.29	22.14	22.37	
			6	22.50	22.29	22.12	22.25	
			13	22.50	22.25	22.13	22.13	
	25	0	22.50	22.29	22.13	22.26		
	16QAM	1	0	23.00	22.45	22.46	22.52	
			13	22.50	22.30	22.27	22.39	
			24	22.50	22.41	22.39	22.47	
		12	0	21.50	21.31	21.14	21.43	
			6	21.50	21.28	21.13	21.32	
13			21.50	21.29	21.13	21.21		
25	0	21.50	21.33	21.18	21.24			
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel	
10MHz	QPSK	1	0	23.50	23.41	23.16	23.18	
			25	23.50	23.36	23.10	23.18	
			49	23.50	23.37	23.09	23.20	
		25	0	22.50	22.26	22.05	22.23	
			13	22.50	22.27	22.14	22.30	
			25	22.50	22.30	22.18	22.17	
		50	0	22.50	22.29	22.14	22.23	
		16QAM	1	0	23.00	22.57	22.12	22.47
				25	22.50	22.48	22.03	22.37
	49			23.00	22.56	22.08	22.46	
	25		0	21.50	21.28	21.10	21.26	
			13	21.50	21.28	21.17	21.35	
			25	21.50	21.28	21.22	21.21	
	50		0	21.50	21.28	21.13	21.20	

Conducted Power of LTE Band 66

Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel		
					132047	132322	132597		
15MHz	QPSK	1	0	23.50	23.33	23.16	22.72		
			38	23.50	23.34	22.84	22.66		
			74	23.50	23.21	22.75	22.65		
		36	0	22.50	22.23	22.08	22.13		
			18	22.50	22.24	22.15	22.22		
			39	22.50	22.15	22.12	22.18		
	75	0	22.50	22.23	22.12	22.18			
	16QAM	1	0	23.00	22.52	21.66	21.84		
			38	22.50	22.48	21.60	21.94		
			74	22.50	22.38	21.48	21.90		
		36	0	21.50	21.27	21.04	21.18		
			18	21.50	21.23	21.12	21.30		
			39	21.50	21.17	21.12	21.25		
	75	0	21.50	21.17	21.10	21.20			
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel		
20MHz	QPSK	1	0	23.00	<b>22.94</b>	22.64	22.62		
			50	23.00	22.89	22.55	22.68		
			99	23.00	22.88	22.41	22.70		
		50	0	22.50	<b>22.35</b>	22.04	22.12		
			25	22.50	22.26	22.20	22.26		
			50	22.50	22.15	22.12	22.19		
		100	0	22.50	22.25	22.09	22.16		
		16QAM	1	0	22.50	22.03	21.83	21.78	
				50	22.00	21.93	21.73	21.88	
	99			22.00	21.99	21.67	21.96		
	50		0	21.50	21.32	21.07	21.10		
			25	21.50	21.28	21.24	21.26		
			50	21.50	21.12	21.14	21.21		
	100		0	21.50	21.22	21.08	21.13		
	Bandwidth		Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
	20MHz		QPSK	1	0	23.00	<b>22.94</b>	22.64	22.62
		50			23.00	22.89	22.55	22.68	
		99			23.00	22.88	22.41	22.70	
50		0		22.50	<b>22.35</b>	22.04	22.12		
		25		22.50	22.26	22.20	22.26		
		50		22.50	22.15	22.12	22.19		
100		0		22.50	22.25	22.09	22.16		
16QAM		1		0	22.50	22.03	21.83	21.78	
				50	22.00	21.93	21.73	21.88	
			99	22.00	21.99	21.67	21.96		
		50	0	21.50	21.32	21.07	21.10		
			25	21.50	21.28	21.24	21.26		
			50	21.50	21.12	21.14	21.21		
		100	0	21.50	21.22	21.08	21.13		

## 9. Exposure Position Consideration

### 9.1. Antenna information



WWAN Main Antenna	GSM/UMTS/LTE TX/RX
WLAN/BT Antenna	WLAN/BT TX/RX
<b>Note:</b>	
1. KDB 447498 D01 v06, particular DUT edges were not required to be evaluated for SAR if the antenna-to-edge distance is greater than 2.5cm.	
2. KDB 616217 D04 SAR for laptop and tablets v01r02, it doesn't require SAR evaluation for the front surface of a tablet.	
3. Per KDB648474 D04, 10-g extremity SAR is not required when Body-Worn mode 1-g reported SAR < 1.2W/Kg.	

Distance of The Antenna to the EUT surface and edge (mm)						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	<5	<5	84	166	<5	152
BT/Wifi ANT	<5	<5	156	94	<5	152

### 9.2. Test Position Consideration

Positions for SAR tests: Hotspot mode						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	No	Yes	No	No	Yes	No
BT/Wifi ANT	No	Yes	No	No	Yes	No

## 10. SAR Test Results Summary

### 10.1. Body 1g SAR Data

Band	Mode	Test Position with 0 mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
GSM 850	GPRS 2slots	Back	128	824.2	29.29	29.50	-0.020	0.360	1.050	0.378	1.60
		Top	128	824.2	29.29	29.50	0.800	0.718	1.050	<b>0.754</b>	
GSM 1900	GPRS 4slots	Back	512	1850.2	23.03	23.50	-0.120	0.210	1.114	0.234	
		Top	512	1850.2	23.03	23.50	-0.880	0.574	1.114	<b>0.639</b>	
WCDMA Band II	RMC	Back	9538	1907.6	22.42	22.50	-0.220	0.156	1.019	0.159	
		Top	9538	1907.6	22.42	22.50	0.270	0.423	1.019	<b>0.431</b>	
WCDMA Band V	RMC	Back	4132	826.4	23.12	23.50	-1.660	0.431	1.091	0.470	
		Top	4132	826.4	23.12	23.50	-1.300	0.731	1.091	<b>0.798</b>	
2.4G	802.11b	Back	6	2437	16.25	16.50	-3.570	0.225	1.059	<b>0.238</b>	
		Top	6	2437	16.25	16.50	-1.880	0.172	1.059	0.182	
5.2G	802.11a	Back	36	5180	16.58	17.00	0.700	0.349	1.102	<b>0.385</b>	
		Top	36	5180	16.58	17.00	2.851	0.120	1.102	0.132	
5.8G	802.11ac (VHT40)	Back	159	5795	15.46	15.50	-1.334	0.123	1.009	<b>0.124</b>	
		Top	159	5795	15.46	15.50	-1.603	0.108	1.009	0.109	
Bluetooth	Classic	Back	1	2402	8.84	9.00	-3.030	0.101	1.038	<b>0.105</b>	
		Top	1	2402	8.84	9.00	-1.603	0.085	1.038	0.088	

Band	Mode	Test Position with 0 mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 2	QPSK (20MHz)	Back	19100	1900.0	1	0	24.41	24.50	-1.160	0.251	1.021	0.256	1.60
					50	0	23.51	24.00	-1.200	0.228	1.119	0.255	
		Top	19100	1900.0	1	0	24.41	24.50	-0.950	0.598	1.021	<b>0.611</b>	
					50	0	23.51	24.00	0.800	0.542	1.119	0.606	
LTE Band 4	QPSK (20MHz)	Back	20050	1720.0	1	99	24.00	24.00	-1.160	0.322	1.000	0.322	
					50	0	22.97	23.00	0.520	0.311	1.007	0.313	
		Top	20050	1720.0	1	99	24.00	24.00	-4.350	0.669	1.000	<b>0.669</b>	
					50	0	22.97	23.00	1.260	0.650	1.007	0.655	
LTE Band 5	QPSK (10MHz)	Back	20450	829.0	1	49	24.17	24.50	-1.160	0.270	1.079	0.291	
					25	25	23.12	23.50	-1.200	0.265	1.091	0.289	
		Top	20450	829.0	1	49	24.17	24.50	-2.240	0.581	1.079	<b>0.627</b>	
					25	25	23.12	23.50	1.003	0.573	1.091	0.625	
LTE Band 7	QPSK (20MHz)	Back	20850	2510.0	1	99	23.62	24.00	-1.160	0.210	1.091	0.229	
					50	25	22.97	23.00	2.600	0.198	1.007	0.199	
		Top	20850	2510.0	1	99	23.62	24.00	3.910	0.550	1.091	<b>0.600</b>	
					50	25	22.97	23.00	-2.066	0.445	1.007	0.448	
LTE Band 12	QPSK (10MHz)	Back	23060	704.0	1	49	23.63	24.00	-1.160	0.249	1.089	0.271	
					25	25	23.08	23.50	-1.100	0.235	1.102	0.259	
		Top	23060	704.0	1	49	23.63	24.00	-3.970	0.589	1.089	<b>0.641</b>	
					25	25	23.08	23.50	-0.553	0.580	1.102	0.639	
LTE Band 13	QPSK (10MHz)	Back	23230	782.0	1	25	23.47	23.50	-1.160	0.237	1.007	0.239	
					25	0	22.98	23.00	-1.100	0.222	1.005	0.223	
		Top	23230	782.0	1	25	23.47	23.50	-3.970	0.579	1.007	<b>0.583</b>	
					25	0	22.98	23.00	-0.553	0.579	1.005	0.582	
LTE Band 17	QPSK (10MHz)	Back	23780	709.0	1	49	23.65	24.00	-1.160	0.238	1.084	0.258	
					25	25	23.13	23.50	-1.230	0.223	1.089	0.243	
		Top	23780	709.0	1	49	23.65	24.00	-3.480	0.580	1.084	<b>0.629</b>	
					25	25	23.13	23.50	-3.500	0.572	1.089	0.623	

Band	Mode	Test Position with 0 mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR 1g (W/kg)	Scaling Factor	Reported SAR 1g (W/kg)	Limit (W/Kg)
LTE Band 26	QPSK (15MHz)	Back	26765	821.5	1	0	24.09	24.50	-1.160	0.260	1.099	0.286	1.60
					36	39	22.97	23.00	1.366	0.247	1.007	0.249	
		Top	26765	821.5	1	0	24.09	24.50	-2.450	0.598	1.099	0.657	
					36	39	22.97	23.00	-0.855	0.581	1.007	0.585	
LTE Band 41	QPSK (20MHz)	Back	41490	2680.0	1	50	23.45	23.50	-1.160	0.217	1.012	0.220	
					50	0	22.51	23.00	1.209	0.195	1.119	0.218	
		Top	41490	2680.0	1	50	23.45	23.50	-1.470	0.369	1.012	0.373	
					50	0	22.51	23.00	1.025	0.331	1.119	0.370	
LTE Band 66	QPSK (20MHz)	Back	132072	1720.0	1	0	22.94	23.00	-2.050	0.234	1.014	0.237	
					50	0	22.35	22.50	1.054	0.228	1.035	0.236	
		Top	132072	1720.0	1	0	22.94	23.00	-1.370	0.478	1.014	0.485	
					50	0	22.35	22.50	0.221	0.466	1.035	0.482	

**Note:**

- 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.
- Per KDB 447498 D01 v06, body use is evaluated with the device positioned at 0 mm from a flat phantom filled with head tissue-equivalent medium.
- Per KDB 447498 D01 v06, the report SAR is measured SAR value adjusted for maximum tune-up tolerance.  
Scaling Factor = 10<sup>[(tune-up limit power (dBm) - Ave. power (dBm))/10]</sup>,  
where tune-up limit is the maximum rated power among all production units.  
Reported SAR (W/kg) = Measured SAR (W/kg) \* Scaling Factor.
- Per KDB 865664 D01 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.
- 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.

## 10.2. 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 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.

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

**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)<sup>2</sup>·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm; where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.
3. Per KDB 648474 D04 require when the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, using the same wireless mode test configuration for voice and data, such as UMTS, LTE and Wi-Fi, and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration.

**Simultaneous Transmission Possibilities**

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Configuration	Body
1	WWAN+WIFI(2.4g)	Yes
2	WWAN+WIFI(5g)	Yes
3	WWAN+BT	Yes

**Body**

Band	Test Position	Scaled SAR				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5G	BT					
GSM850 (GPRS 4slots)	Back	0.378	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.616	0.763	0.483	N/A	N/A
	Top	<b>0.754</b>	0.182	0.132	0.088	0.936	0.886	0.842	N/A	N/A
GSM1900 (GPRS 2slots)	Back	0.234	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.472	0.619	0.339	N/A	N/A
	Top	<b>0.639</b>	0.182	0.132	0.088	0.821	0.771	0.727	N/A	N/A
WCDMA Band II	Back	0.159	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.397	0.544	0.264	N/A	N/A
	Top	<b>0.431</b>	0.182	0.132	0.088	0.613	0.563	0.519	N/A	N/A
WCDMA Band V	Back	0.470	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.708	0.855	0.575	N/A	N/A
	Top	<b>0.798</b>	0.182	0.132	0.088	0.980	0.930	0.886	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 2 QPSK (20MHz)	Back	1	0.256	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.494	0.641	0.361	N/A	N/A
		50	0.255	0.182	0.132	0.088	0.437	0.387	0.343	N/A	N/A
	Top	1	<b>0.611</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.849	0.996	0.716	N/A	N/A
		50	0.606	0.182	0.132	0.088	0.788	0.738	0.694	N/A	N/A
LTE Band 4 QPSK (20MHz)	Back	1	0.322	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.560	0.707	0.427	N/A	N/A
		50	0.313	0.182	0.132	0.088	0.495	0.445	0.401	N/A	N/A
	Top	1	<b>0.669</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.907	<b>1.054</b>	0.774	N/A	N/A
		50	0.655	0.182	0.132	0.088	0.837	0.787	0.743	N/A	N/A
LTE Band 5 QPSK (10MHz)	Back	1	0.291	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.529	0.676	0.396	N/A	N/A
		25	0.289	0.182	0.132	0.088	0.471	0.421	0.377	N/A	N/A
	Top	1	<b>0.627</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.865	1.012	0.732	N/A	N/A
		25	0.625	0.182	0.132	0.088	0.807	0.757	0.713	N/A	N/A
LTE Band 7 QPSK (20MHz)	Back	1	0.229	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.467	0.614	0.334	N/A	N/A
		50	0.199	0.182	0.132	0.088	0.381	0.331	0.287	N/A	N/A
	Top	1	<b>0.600</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.838	0.985	0.705	N/A	N/A
		50	0.448	0.182	0.132	0.088	0.630	0.580	0.536	N/A	N/A
LTE Band 12 QPSK (10MHz)	Back	1	0.271	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.509	0.656	0.376	N/A	N/A
		25	0.259	0.182	0.132	0.088	0.441	0.391	0.347	N/A	N/A
	Top	1	<b>0.641</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.879	1.026	0.746	N/A	N/A
		25	0.639	0.182	0.132	0.088	0.821	0.771	0.727	N/A	N/A

Band	Test Position	RB allocation	Scaled				$\Sigma$ SAR (W/kg) WWAN + WIFI 2.4G	$\Sigma$ SAR (W/kg) WWAN + WIFI 5G	$\Sigma$ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 13 QPSK (10MHz)	Front	1	0.239	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.477	0.624	0.344	N/A	N/A
		25	0.223	0.182	0.132	0.088	0.405	0.355	0.311	N/A	N/A
	Back	1	<b>0.583</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.821	0.968	0.688	N/A	N/A
		25	0.582	0.182	0.132	0.088	0.764	0.714	0.670	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.258	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.496	0.643	0.363	N/A	N/A
		25	0.243	0.182	0.132	0.088	0.425	0.375	0.331	N/A	N/A
	Back	1	<b>0.629</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.867	1.014	0.734	N/A	N/A
		25	0.623	0.182	0.132	0.088	0.805	0.755	0.711	N/A	N/A
LTE Band 26 QPSK (15MHz)	Front	1	0.286	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.524	0.671	0.391	N/A	N/A
		36	0.249	0.182	0.132	0.088	0.431	0.381	0.337	N/A	N/A
	Back	1	<b>0.657</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.895	1.042	0.762	N/A	N/A
		36	0.585	0.182	0.132	0.088	0.767	0.717	0.673	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.220	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.458	0.605	0.325	N/A	N/A
		50	0.218	0.182	0.132	0.088	0.400	0.350	0.306	N/A	N/A
	Back	1	<b>0.373</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.611	0.758	0.478	N/A	N/A
		50	0.370	0.182	0.132	0.088	0.552	0.502	0.458	N/A	N/A
LTE Band 66 QPSK (20MHz)	Front	1	0.237	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.475	0.622	0.342	N/A	N/A
		50	0.236	0.182	0.132	0.088	0.418	0.368	0.324	N/A	N/A
	Back	1	<b>0.485</b>	<b>0.238</b>	<b>0.385</b>	<b>0.105</b>	0.723	0.870	0.590	N/A	N/A
		50	0.482	0.182	0.132	0.088	0.664	0.614	0.570	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.

**10.3. 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
<b>Measurement system</b>									
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	∞
<b>Test sample related</b>									
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	∞
<b>Phantom and tissue parameters</b>									
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
<b>Measurement system</b>									
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	∞
<b>Dipole</b>									
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			∞
<b>Phantom and tissue parameters</b>									
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	

### 10.4. 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	Agilent	N5182A	MY47070282	Jun. 08, 2022	Jun. 07, 2023
Multimeter	Keithley	Multimeter 2000	4078275	Jun. 08, 2022	Jun. 07, 2023
Network Analyzer	Agilent	8753E	US38432457	Jun. 08, 2022	Jun. 07, 2023
Wireless Communication Test Set	R & S	CMU200	111382	Jun. 08, 2022	Jun. 07, 2023
Wideband Radio Communication Tester	R&S	CMW500	114220	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4418B	GB43312526	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4416A	MY45101555	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	N1912A	MY50001018	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9301A	MY41497725	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9327A	MY44421198	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9323A	MY53070005	Jun. 08, 2022	Jun. 07, 2023
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 EPOG346	Oct. 08, 2022	Oct. 07, 2023
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, 2022	Jun. 04, 2023
DIPOLE 1800	MVG	SID 1800	SN 16/15 DIP 1G800-371	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 1900	MVG	SID1900	SN 16/15 DIP 1G900-372	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2450	MVG	SID 2450	SN 16/15 DIP 2G450-374	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2600	MVG	SID 2600	SN 16/15 DIP 2G600-375	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 5200-5800	MVG	SID 5000	SN 13/14 WGA32	May 15, 2022	May 14, 2023
Limesar Dielectric Probe	MVG	SCLMP	SN 19/15 OCPG71	Jun. 05, 2022	Jun. 04, 2023
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

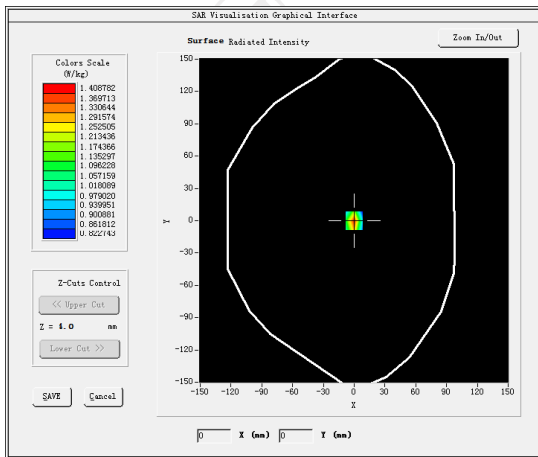
- Note:**
1. N/A means this equipment no need to calibrate
  2. Each Time means this device need to calibrate every use time
  3. The dipole was not damaged properly repaired.
  4. The measured SAR deviates from the calibrated SAR value by less than 10%
  5. The most recent return-loss result meets the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

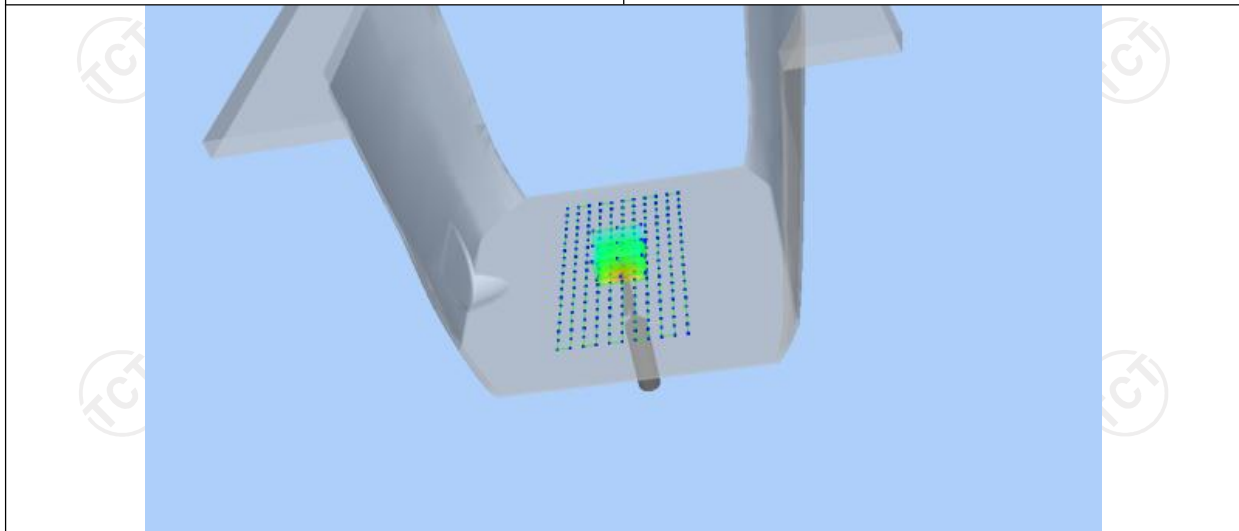
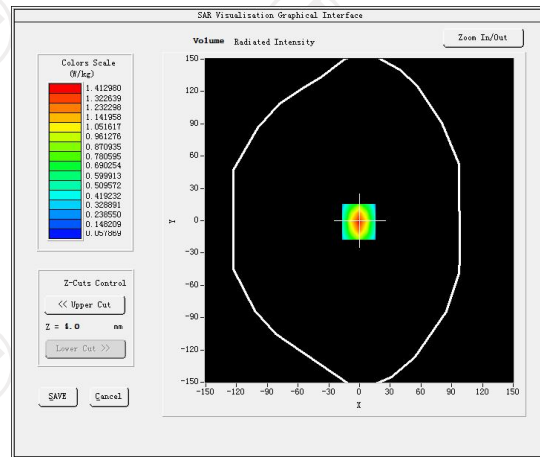
Date of measurement: 01/16/2023 Test mode: 750 (Body)  
 Product Description: Validation  
 Dipole Model: SID750  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.78
Frequency (MHz)	750.000000
Relative permittivity (real part)	56.121166
Relative permittivity (imaginary part)	20.148160
Conductivity (S/m)	0.921243
Variation (%)	-0.150000
<b>SAR 10g (W/Kg)</b>	<b>0.602014</b>
<b>SAR 1g (W/Kg)</b>	<b>0.872441</b>

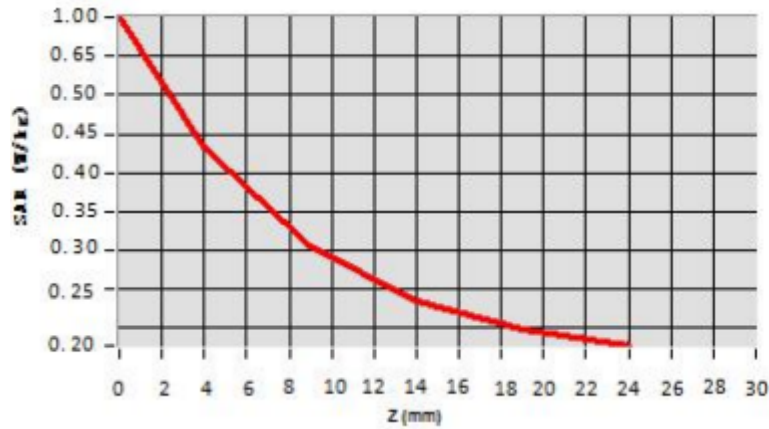
**SURFACE SAR**



**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: 01/16/2023 Test mode: 835 (Body)

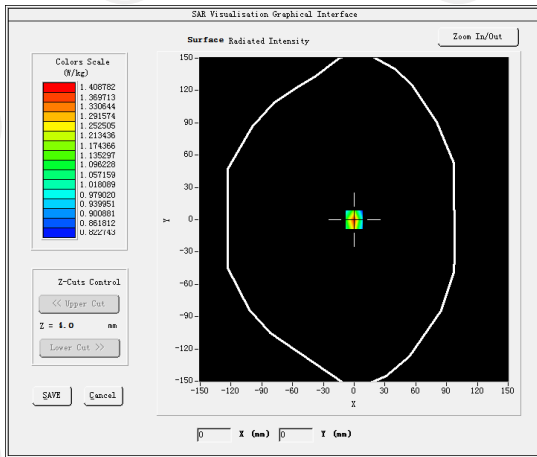
Product Description: Validation

Dipole Model: SID835

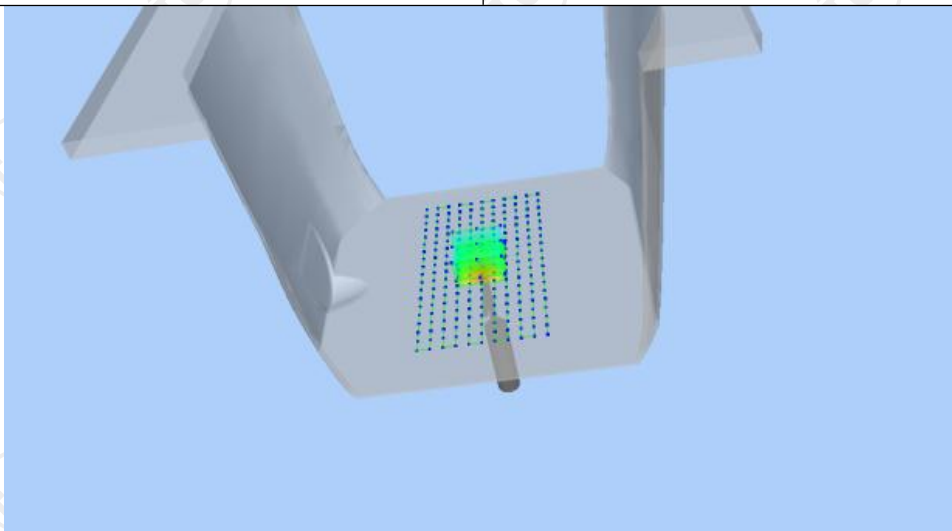
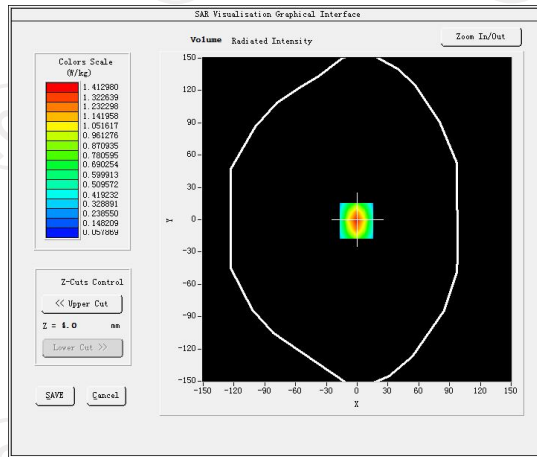
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
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
<b>SAR 10g (W/Kg)</b>	<b>0.633123</b>
<b>SAR 1g (W/Kg)</b>	<b>0.949446</b>

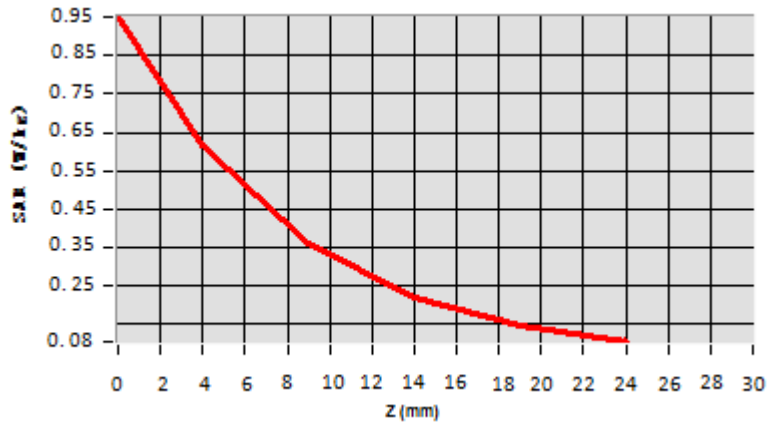
### SURFACE SAR



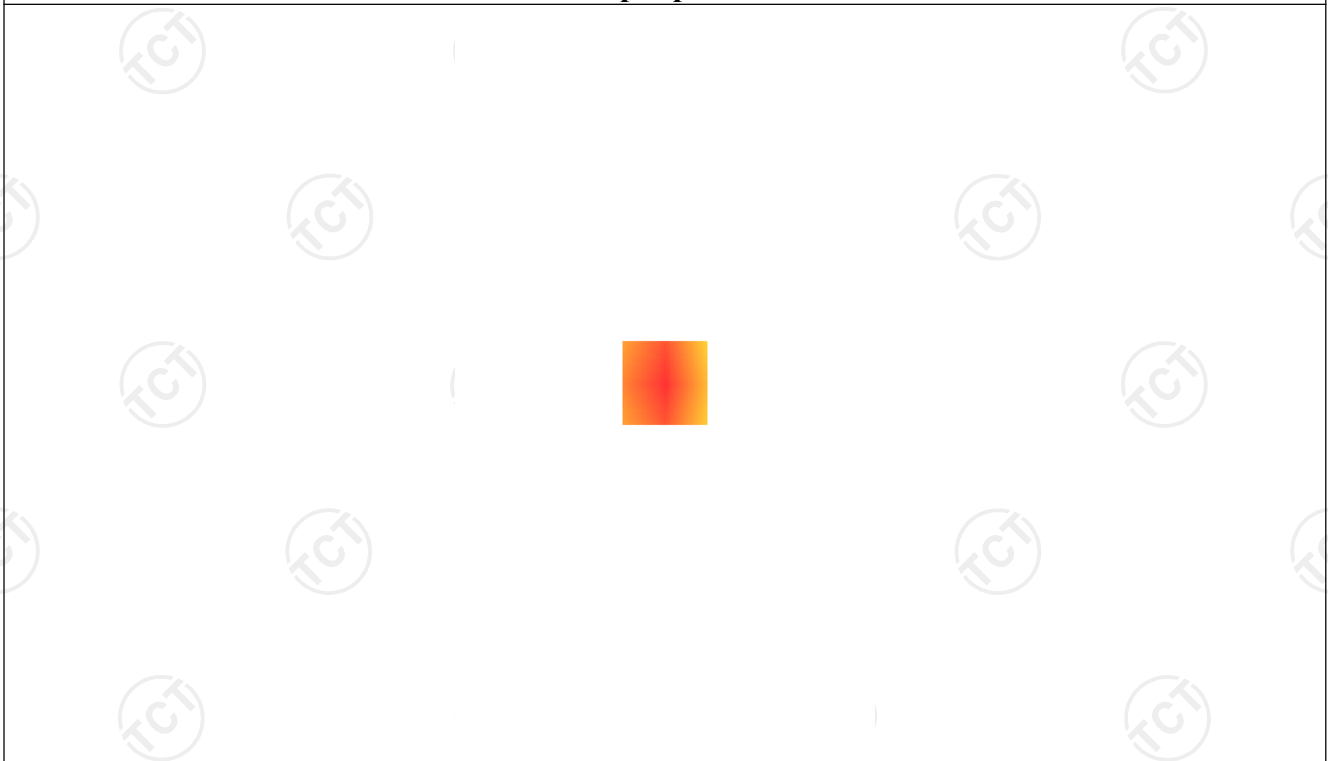
### VOLUME SAR



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



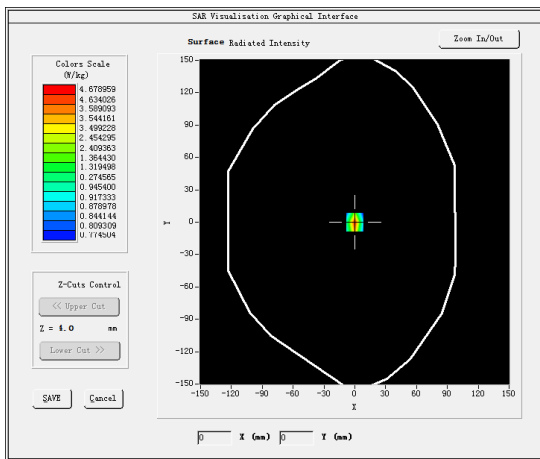
**Hot spot position**



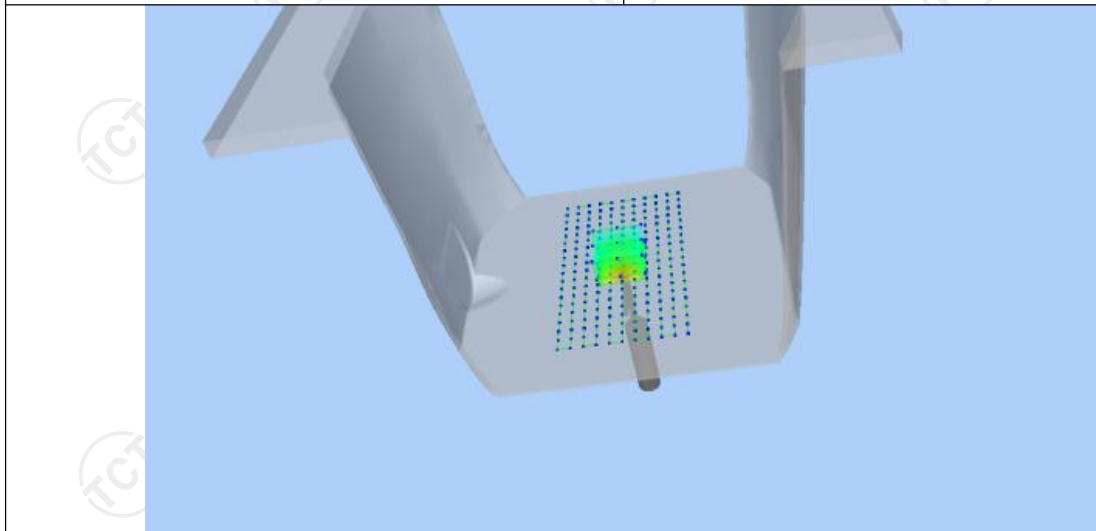
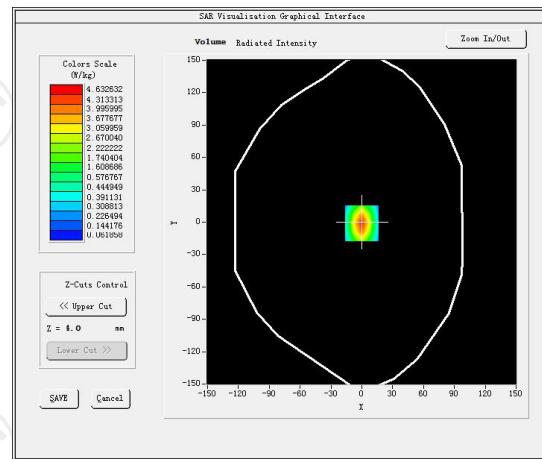
Date of measurement: 01/17/2023 Test mode: 1800MHz (Body)  
 Product Description: Validation  
 Dipole Model: SID1800  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

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
<b>SAR 10g (W/Kg)</b>	<b>2.053687</b>
<b>SAR 1g (W/Kg)</b>	<b>3.782547</b>

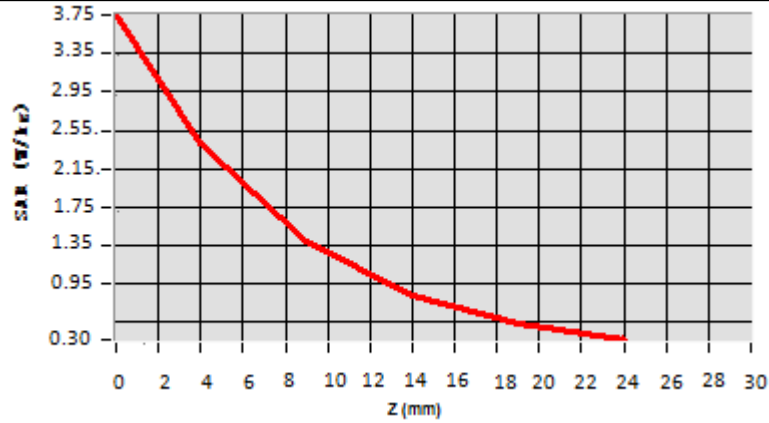
**SURFACE SAR**



**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**

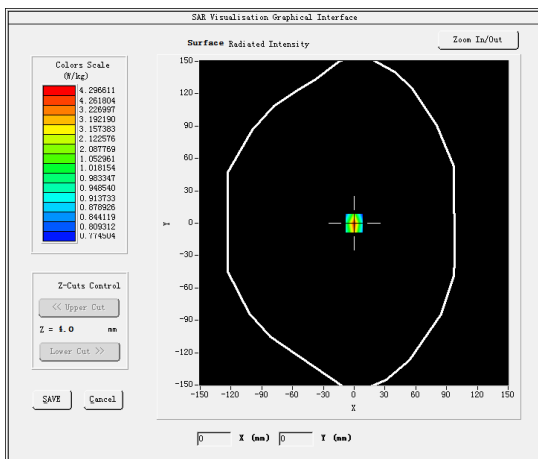




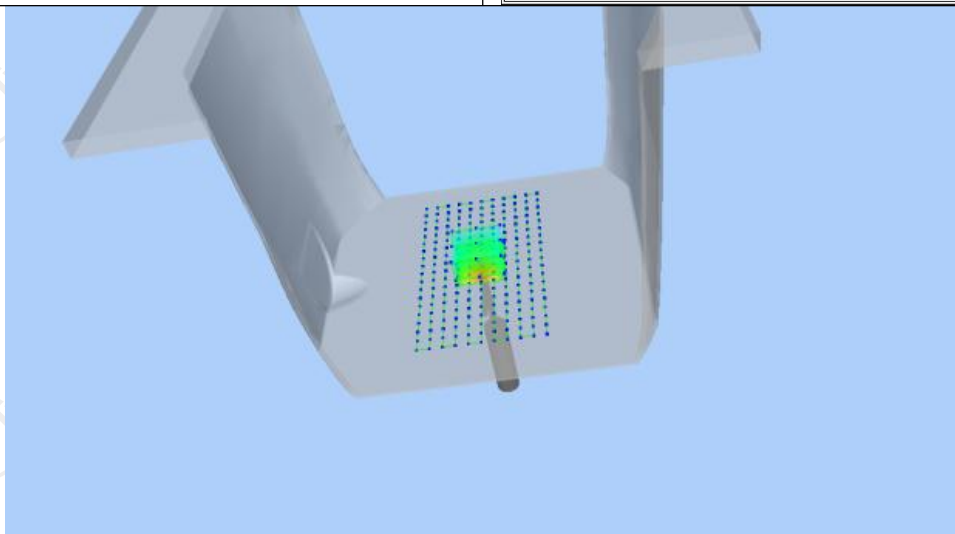
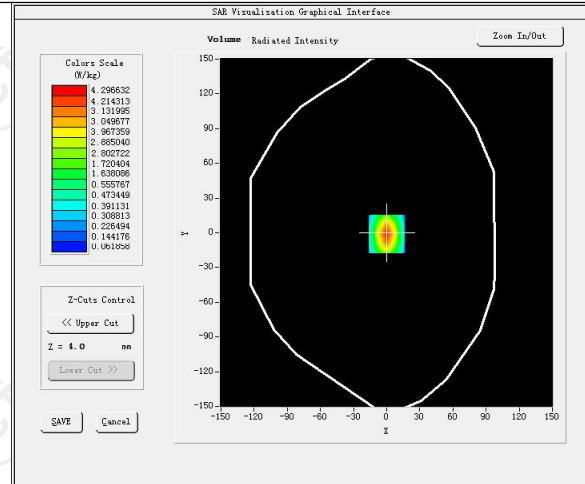
Date of measurement: 01/17/2023 Test mode: 1900MHz (Body)  
 Product Description: Validation  
 Dipole Model: SID1900  
 E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
Probe Conversion factor	2.32
Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.230999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.580354
Variation (%)	1.250000
<b>SAR 10g (W/Kg)</b>	<b>1.994255</b>
<b>SAR 1g (W/Kg)</b>	<b>3.766112</b>

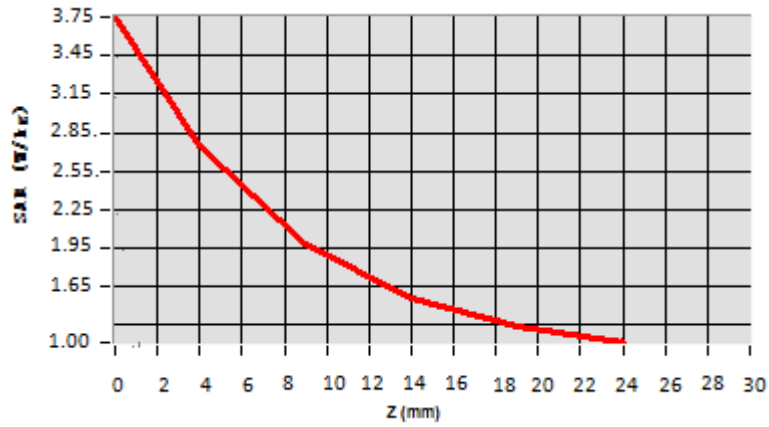
**SURFACE SAR**



**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

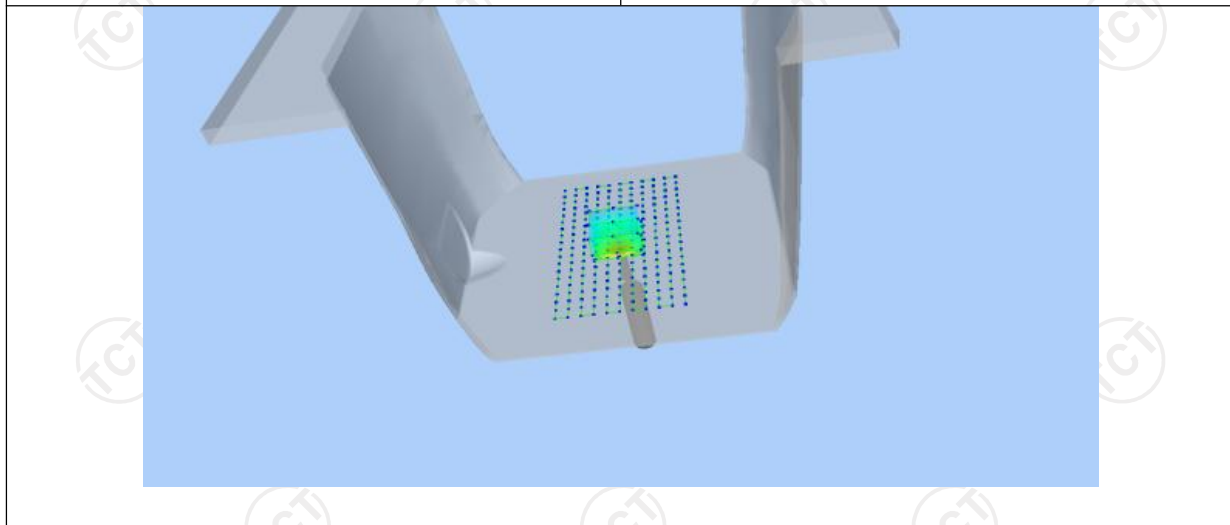
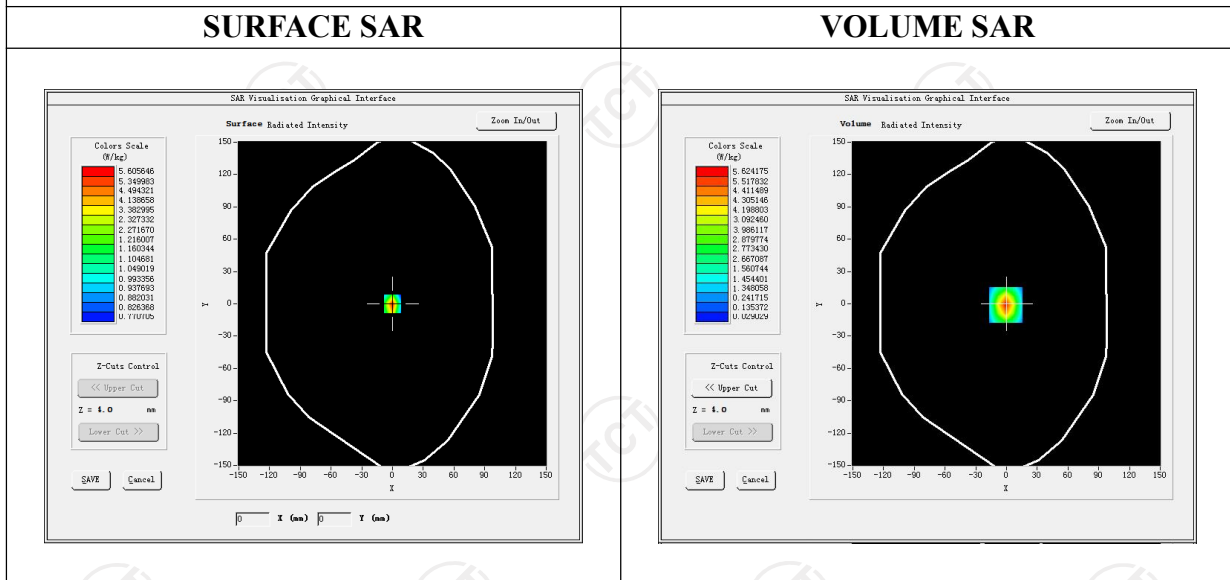


**Hot spot position**

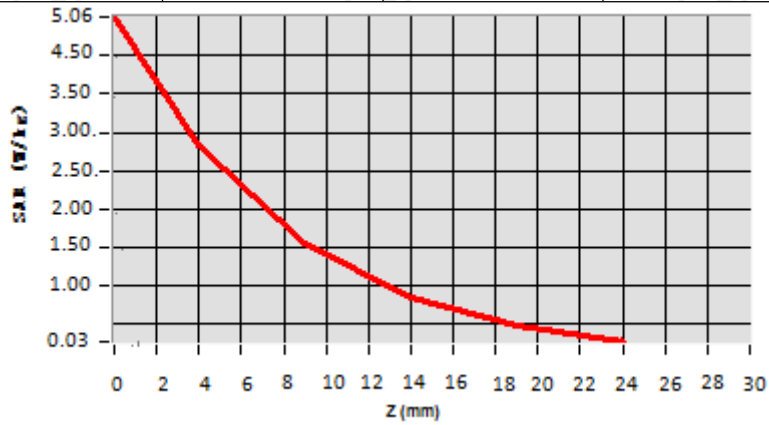


Date of measurement: 01/18/2023 Test mode: 2450MHz (Body)  
 Product Description: Validation  
 Dipole Model: SID2450  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.37
Frequency (MHz)	2450.000000
Relative permittivity (real part)	51.921199
Relative permittivity (imaginary part)	14.930150
Conductivity (S/m)	2.012159
Variation (%)	-0.230000
<b>SAR 10g (W/Kg)</b>	<b>2.416669</b>
<b>SAR 1g (W/Kg)</b>	<b>5.066368</b>



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



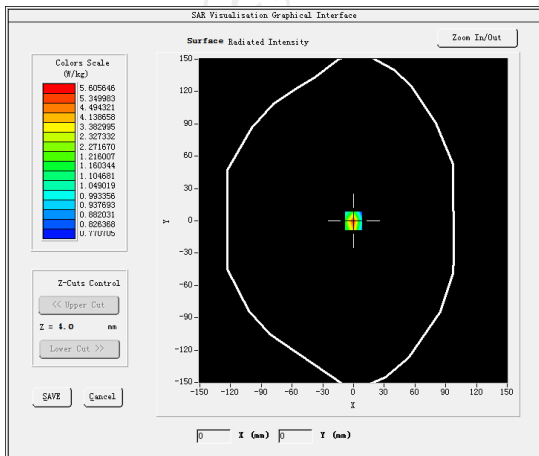
**Hot spot position**



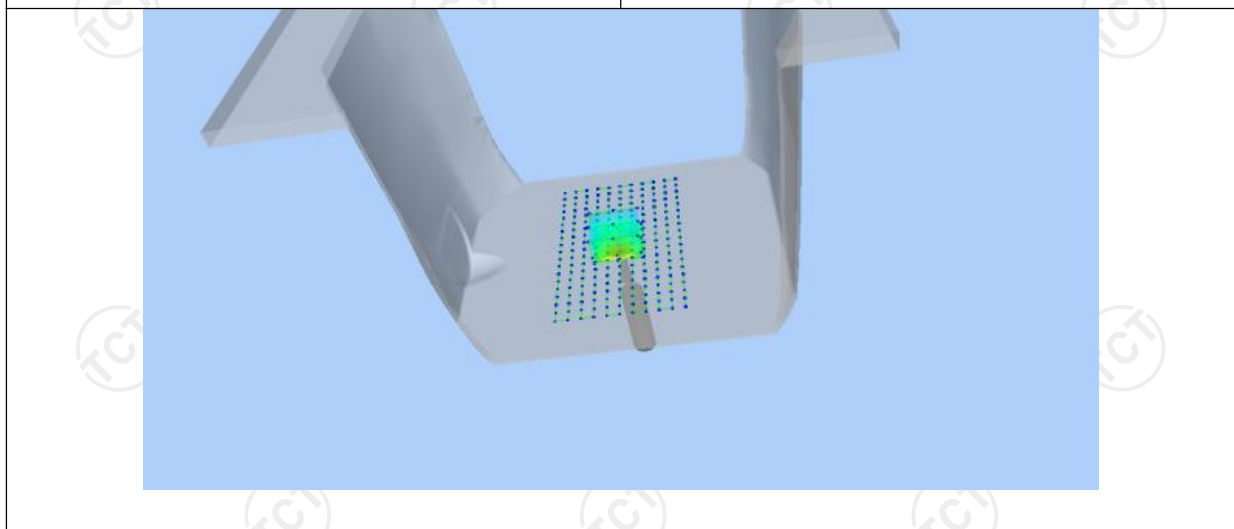
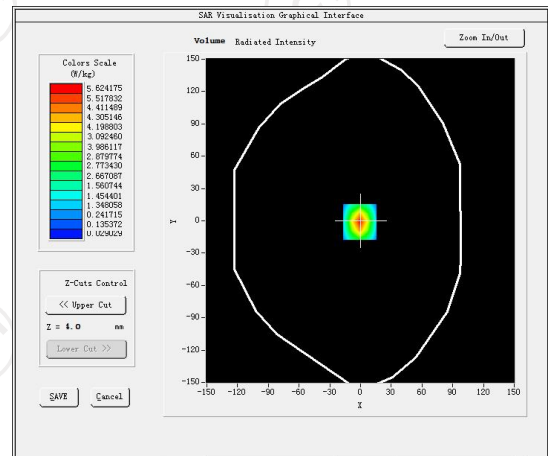
Date of measurement: 01/18/2023 Test mode: 2600MHz (Body)  
 Product Description: Validation  
 Dipole Model: SID2600  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.23
Frequency (MHz)	2600.000000
Relative permittivity (real part)	51.830887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	2.134821
Variation (%)	-1.800000
<b>SAR 10g (W/Kg)</b>	<b>2.382177</b>
<b>SAR 1g (W/Kg)</b>	<b>5.365098</b>

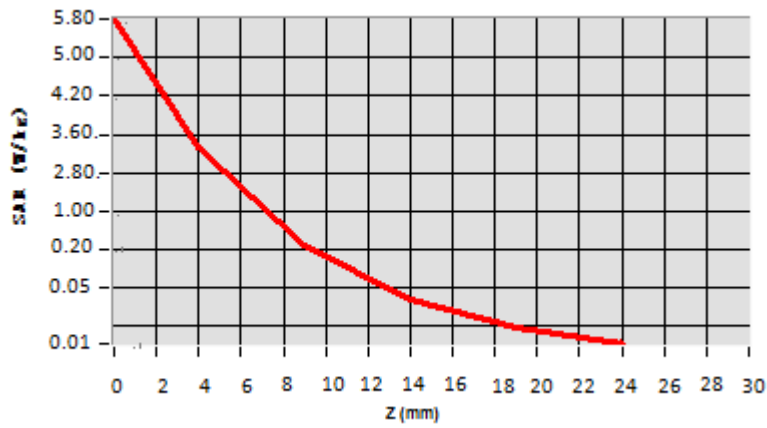
### SURFACE SAR



### 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



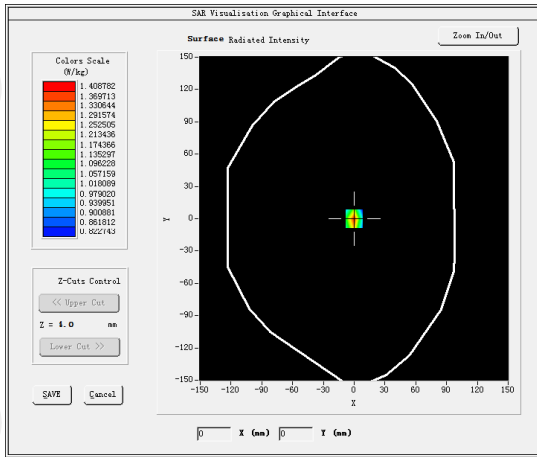
**Hot spot position**



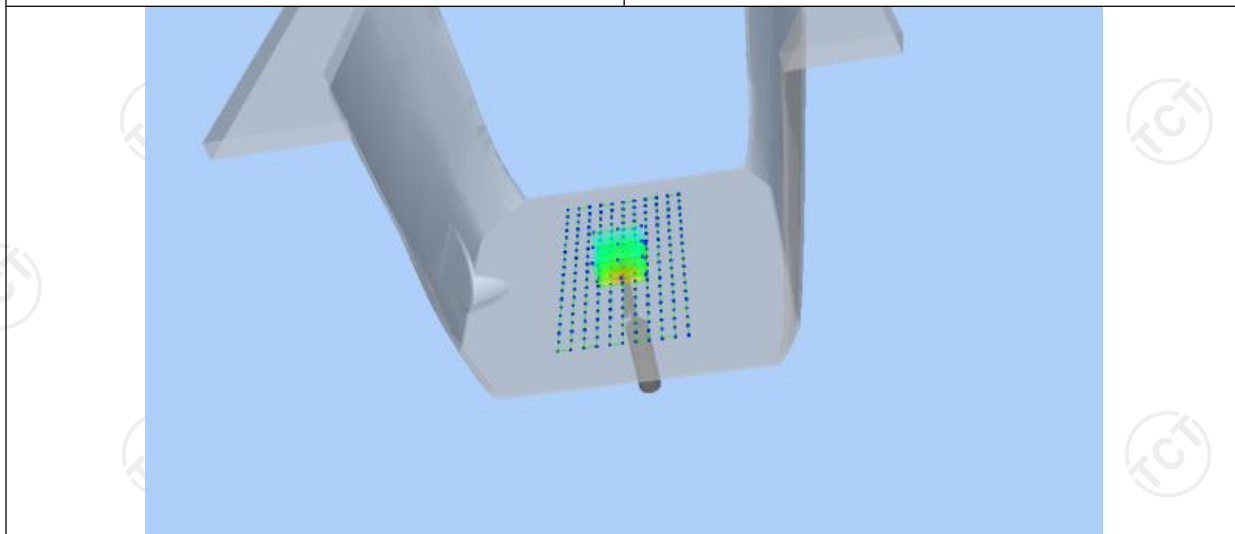
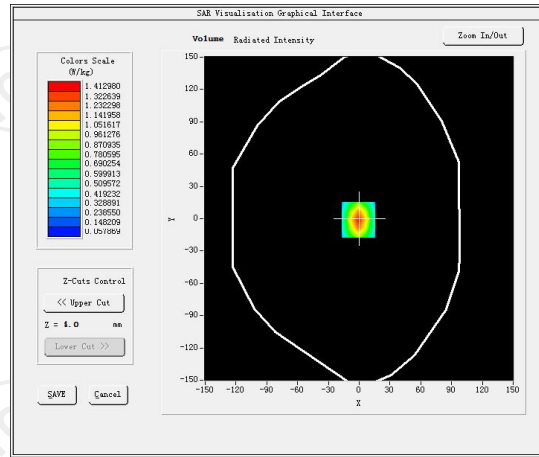
Date of measurement: 01/19/2023 Test mode: 5200 (Body)  
 Product Description: Validation  
 Dipole Model: SID5000  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.08
Frequency (MHz)	5200.000000
Relative permittivity (real part)	49.522077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	5.403883
Variation (%)	-3.140000
<b>SAR 10g (W/Kg)</b>	<b>5.513123</b>
<b>SAR 1g (W/Kg)</b>	<b>15.472446</b>

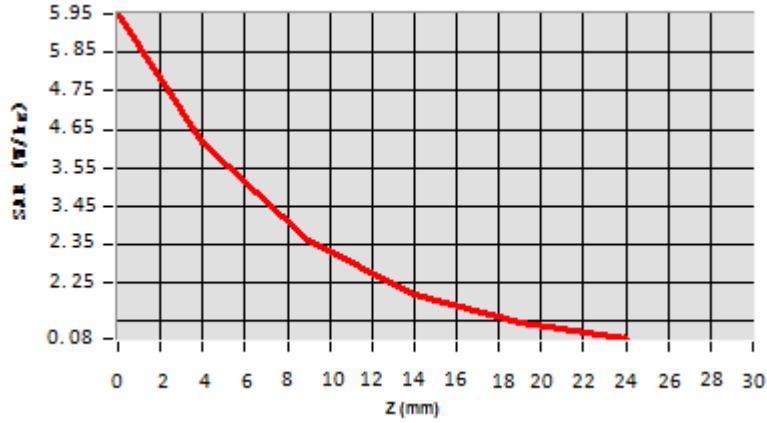
**SURFACE SAR**



**VOLUME SAR**



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



**Hot spot position**

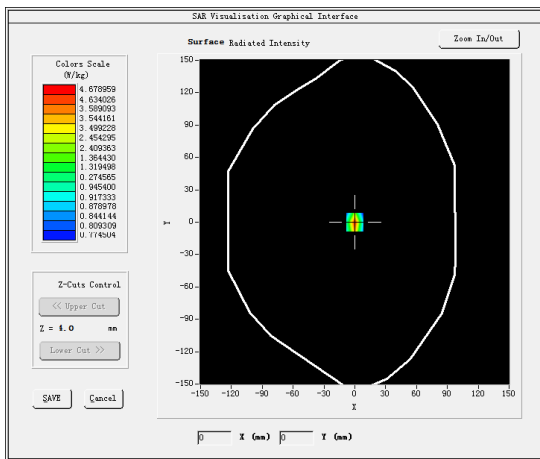




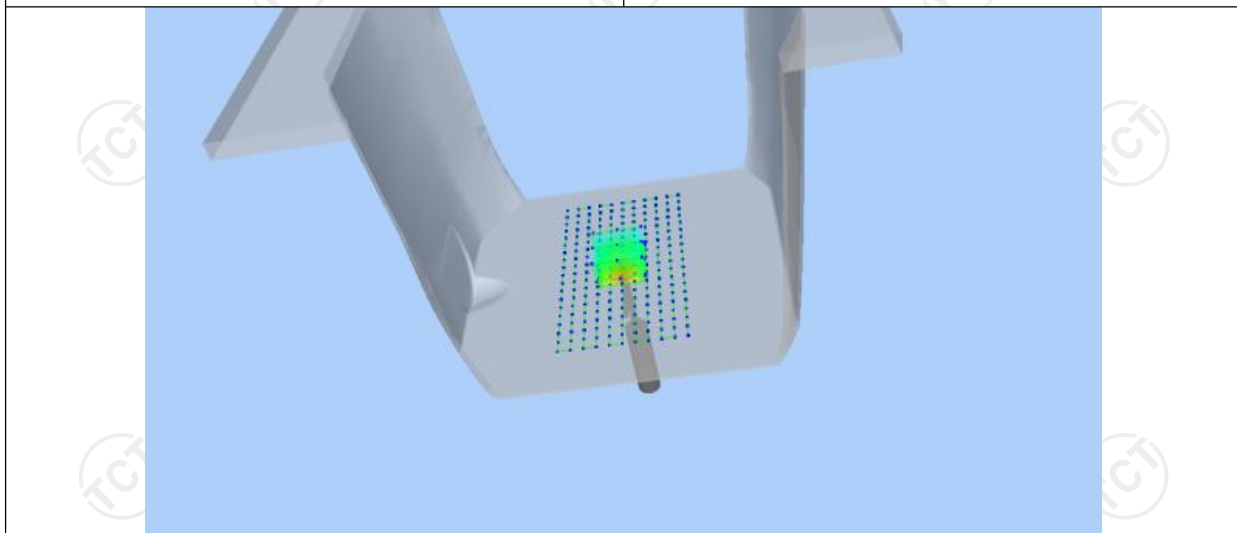
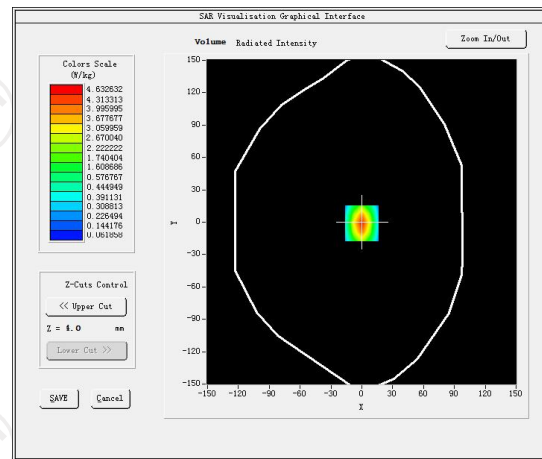
Date of measurement: 01/19/2023 Test mode: 5300MHz (Body)  
 Product Description: Validation  
 Dipole Model: SID5000  
 E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.99
Frequency (MHz)	5300.000000
Relative permittivity (real part)	49.012699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	5.460000
Variation (%)	0.450000
<b>SAR 10g (W/Kg)</b>	<b>5.813687</b>
<b>SAR 1g (W/Kg)</b>	<b>15.812547</b>

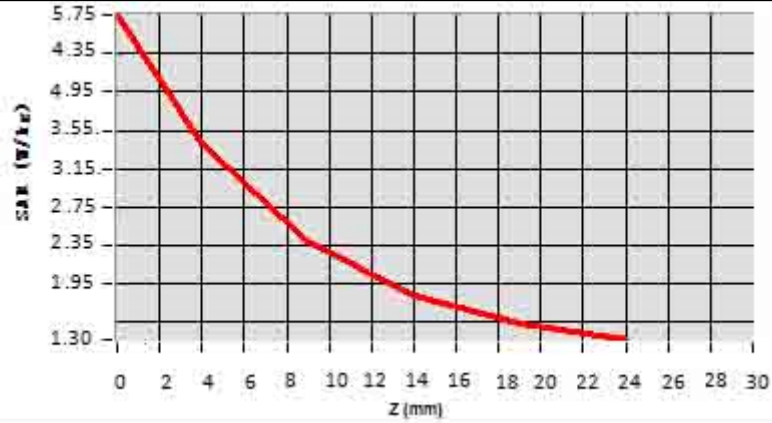
### SURFACE SAR



### VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7545	2.4524	1.3520	0.8214	0.5525



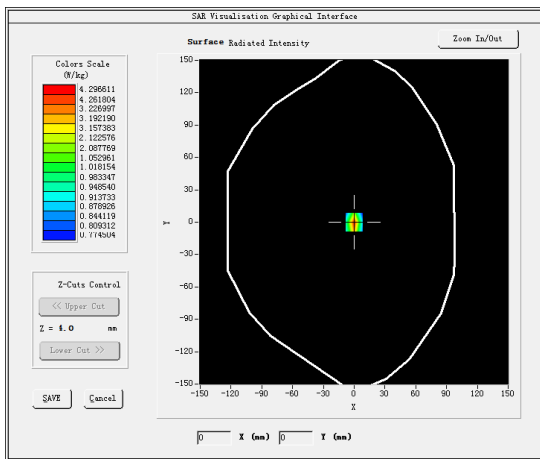
**Hot spot position**



Date of measurement: 01/19/2023 Test mode: 5600MHz (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	2.12
Frequency (MHz)	5600.000000
Relative permittivity (real part)	47.809999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	5.530354
Variation (%)	1.410000
<b>SAR 10g (W/Kg)</b>	<b>6.024255</b>
<b>SAR 1g (W/Kg)</b>	<b>17.633112</b>

**SURFACE SAR**



**VOLUME SAR**

