

		64/5320	10.00	9.26
		100/5500	5.00	4.09
		116/5580	10.00	8.91
		140/5700	10.50	10.00
		149/5745	10.00	9.48
		157/5785	10.00	8.96
		165/5825	10.00	8.95
802.11n	20M	36/5180	10.00	9.20
		40/5200	7.00	5.68
		48/5240	7.00	6.13
		52/5260	9.00	8.34
		56/5280	9.00	8.35
		64/5320	7.00	5.66
		100/5500	6.00	4.42
		116/5580	10.00	8.67
		140/5700	10.00	9.27
		149/5745	10.00	8.92
		157/5785	10.00	8.30
		165/5825	10.00	8.16
	40M	38/5190	9.00	7.77
		46/5230	9.00	8.13
		54/5270	8.00	7.42
		62/5310	9.00	7.69
		102/5510	6.00	5.24
		110/5550	8.00	6.82
		134/5670	9.00	7.81
		151/5755	9.00	7.48
802.11ac	20M	159/5795	8.00	6.96
		36/5180	7.00	6.16
		40/5200	7.00	5.72
		48/5240	6.00	4.98
		52/5260	6.00	5.25
		64/5320	6.00	5.62

		100/5500	6.00	4.28
		116/5580	6.00	4.77
		140/5700	7.00	5.69
		149/5745	7.00	5.74
		157/5785	6.00	5.18
		165/5825	6.00	5.11
	40M	38/5190	7.00	5.67
		46/5230	6.00	5.03
		54/5270	6.00	5.15
		62/5310	7.00	5.57
		102/5510	5.00	4.31
		110/5550	6.00	4.40
		134/5670	7.00	5.75
		151/5755	7.00	5.61
		159/5795	6.00	4.87
	80M	42/5210	6.00	5.23
		58/5290	6.00	5.26
		106/5530	5.00	4.21
		122/5610	6.00	5.00
		155/5775	7.00	6.04

13.7 NFC Measurement result

Frequency(MHz)	dBμV/m @3m	EIRP(dBm)	Tune up(dBm)
13.56	71.358	-23.87	-23.00

Note: EIRP(dBm)=Radiated field strength(dBμV/m)+20Log(3)-104.77.

14 Test Results

14.1 Standalone SAR Test Result

14.1.1 Limit/Criterion

At frequencies between 100 kHz and 6 GHz, the MPE (Maximum Permissible Exposure) in population/uncontrolled environments for electromagnetic field strengths may be exceeded if

- (a) The exposure conditions can be shown by appropriate techniques to produce SARs below 0.08W/kg, as averaged over the whole body, and spatial peak SAR values not exceeding 1.6 W/kg, as averaged over any 1g of tissue (defined as a tissue volume in the shape of a cube), except for the hands, wrists, feet, and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10g of tissue (defined as a tissue volume in the shape of a cube); and
- (b) The induced currents in the body confirm with the MPE in table 2, Part B in ANSI/IEEE C95.1-1992.

14.1.2 Test Results

Table 14.1.2-1: SAR Values for GSM850

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)											
Front Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	0.01	0.585	1.15	0.675	/
Back Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	-0.12	0.358	1.15	0.413	/
Left Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	0.03	0.270	1.15	0.311	/
Right Side	Sensor on	GPRS 4TS	190	836.6	23.81	24.50	-0.05	0.522	1.17	0.612	/
Top Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	-0.02	0.327	1.15	0.377	/
Body SAR Define (16mm)											
Right Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	-0.10	0.413	1.15	0.476	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply											
Front Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	-0.01	0.777	1.15	0.896	/
Front Side	Full power	GPRS 4TS	128	824.2	29.12	30.00	-0.04	0.795	1.22	0.974	A.1-1
Front Side	Full power	GPRS 4TS	251	848.8	29.36	30.00	0.10	0.736	1.16	0.853	/
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
								Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)											
Front Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	0.02	0.739	1.15	0.852	/
Back Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	-0.06	0.320	1.15	0.369	/
Left Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	0.03	0.204	1.15	0.235	/
Right Side	Sensor on	GPRS 4TS	190	836.6	23.81	24.50	0.18	1.110	1.17	1.301	A.1-2
Top Side	Full power	GPRS 4TS	190	836.6	29.38	30.00	0.09	0.355	1.15	0.409	/
Limb SAR (0mm)-Secondary Supply											
Right Side	Sensor on	GPRS 4TS	190	836.6	23.81	24.50	-0.08	0.794	1.17	0.931	/

Table 14.1.2-2: SAR Values for GSM1900

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)											
Front Side	Full power	GPRS 4TS	661	1880	26.14	26.50	-0.03	0.818	1.09	0.889	/
Back Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.11	0.136	1.09	0.148	/
Left Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.14	0.150	1.09	0.163	/
Right Side	Sensor on	GPRS 4TS	661	1880	22.44	22.50	0.04	0.832	1.01	0.844	/
Top Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.00	0.217	1.09	0.236	/
Front Side	Full power	GPRS 4TS	512	1850.2	26.13	26.50	0.01	0.630	1.09	0.686	/
Front Side	Full power	GPRS 4TS	810	1909.8	26.11	26.50	-0.01	0.746	1.09	0.816	/
Right Side	Sensor on	GPRS 4TS	512	1850.2	22.31	22.50	-0.09	0.727	1.04	0.760	/
Right Side	Sensor on	GPRS 4TS	810	1909.8	22.42	22.50	-0.14	0.926	1.02	0.943	A.1-3
Repeat											
Right Side	Sensor on	GPRS 4TS	810	1909.8	22.42	22.50	-0.14	0.925	1.02	0.942	/
Body SAR Define (16mm)											
Right Side	Full power	GPRS 4TS	661	1880	26.14	26.50	-0.02	0.383	1.09	0.416	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply											
Right Side	Sensor on	GPRS 4TS	810	1909.8	22.42	22.50	-0.08	0.838	1.02	0.854	/
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
								Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)											
Front Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.06	1.190	1.09	1.293	A.1-4
Back Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.06	0.110	1.09	0.120	/
Left Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.13	0.120	1.09	0.130	/
Right Side	Sensor on	GPRS 4TS	661	1880	22.44	22.50	0.07	0.906	1.01	0.919	/
Top Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.10	0.157	1.09	0.171	/
Limb SAR (0mm)-Secondary Supply											
Front Side	Full power	GPRS 4TS	661	1880	26.14	26.50	0.11	0.969	1.09	1.053	/

Table 14.1.2-3: SAR Values for WCDMA Band II

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)											
Front Side	Full power	RMC12.2k	9400	1880	23.08	23.50	-0.07	0.833	1.10	0.918	A.1-5
Back Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.09	0.110	1.10	0.121	/
Left Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.13	0.138	1.10	0.152	/
Right Side	Sensor on	RMC12.2k	9400	1880	18.03	18.50	-0.02	0.569	1.11	0.634	/
Top Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.07	0.212	1.10	0.234	/
Front Side	Full power	RMC12.2k	9262	1852.4	23.05	23.50	0.04	0.790	1.11	0.876	/
Front Side	Full power	RMC12.2k	9538	1907.6	23.06	23.50	-0.09	0.813	1.11	0.900	/
Repeat											
Front Side	Full power	RMC12.2k	9400	1880	23.08	23.50	-0.15	0.828	1.10	0.912	/
Body SAR Define (16mm)											
Right Side	Full power	RMC12.2k	9400	1880	23.08	23.50	-0.02	0.376	1.10	0.414	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply											
Front Side	Full power	RMC12.2k	9400	1880	23.08	23.50	-0.04	0.822	1.10	0.905	/
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
								Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)											
Front Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.11	1.120	1.10	1.234	A.1-6
Back Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.05	0.102	1.10	0.112	/
Left Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.04	0.083	1.10	0.091	/
Right Side	Sensor on	RMC12.2k	9400	1880	18.03	18.50	0.06	0.688	1.11	0.767	/
Top Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.01	0.160	1.10	0.176	/
Limb SAR (0mm)-Secondary Supply											
Front Side	Full power	RMC12.2k	9400	1880	23.08	23.50	0.13	1.040	1.10	1.146	/

Table 14.1.2-4: SAR Values for WCDMA Band IV

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)											
Front Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	0.04	0.882	1.09	0.960	A.1-7
Back Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	0.03	0.036	1.09	0.039	/
Left Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.09	0.168	1.09	0.183	/
Right Side	Sensor on	RMC12.2k	1413	1732.6	21.06	21.50	-0.11	0.818	1.11	0.905	/
Top Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	0.01	0.417	1.09	0.454	/
Front Side	Full power	RMC12.2k	1312	1712.4	23.11	23.50	0.06	0.860	1.09	0.941	/
Front Side	Full power	RMC12.2k	1513	1752.6	23.06	23.50	-0.07	0.838	1.11	0.927	/
Right Side	Sensor on	RMC12.2k	1312	1712.4	21.14	21.50	-0.10	0.800	1.09	0.869	/
Right Side	Sensor on	RMC12.2k	1513	1752.6	21.09	21.50	-0.09	0.851	1.10	0.935	/
Repeat											
Front Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.19	0.810	1.09	0.882	/
Body SAR Define (16mm)											
Right Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.15	0.320	1.09	0.348	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply											
Front Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.10	0.881	1.09	0.959	/
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
								Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)											
Front Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	0.04	1.060	1.09	1.154	/
Back Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.02	0.029	1.09	0.031	/
Left Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	0.02	0.119	1.09	0.130	/
Right Side	Sensor on	RMC12.2k	1413	1732.6	21.06	21.50	-0.11	1.190	1.11	1.317	A.1-8
Top Side	Full power	RMC12.2k	1413	1732.6	23.13	23.50	-0.02	0.363	1.09	0.395	/
Limb SAR (0mm)-SIM2											
Right Side	Sensor on	RMC12.2k	1413	1732.6	21.06	21.50	0.07	1.170	1.11	1.295	/
Limb SAR (0mm)-Battery BB13											
Right Side	Sensor on	RMC12.2k	1413	1732.6	21.06	21.50	-0.05	1.120	1.11	1.239	/
Limb SAR (0mm)-Secondary Supply											
Right Side	Sensor on	RMC12.2k	1413	1732.6	21.06	21.50	-0.07	1.150	1.11	1.273	/

Table 14.1.2-5: SAR Values for WCDMA Band V

Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
								Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)											
Front Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.07	0.355	1.18	0.419	/
Back Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	-0.12	0.206	1.18	0.243	/
Left Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.04	0.152	1.18	0.179	/
Right Side	Sensor on	RMC12.2k	4183	836.6	20.66	21.50	0.02	0.375	1.21	0.455	/
Top Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.10	0.202	1.18	0.238	/
Body SAR Define (16mm)											
Right Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	-0.14	0.263	1.18	0.310	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply											
Right Side	Sensor on	RMC12.2k	4183	836.6	20.66	21.50	0.07	0.507	1.21	0.615	A.1-9
Test Position	Power Reduction	Mode	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
								Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)											
Front Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.04	0.408	1.18	0.482	/
Back Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	-0.08	0.175	1.18	0.207	/
Left Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.13	0.104	1.18	0.123	/
Right Side	Sensor on	RMC12.2k	4183	836.6	20.66	21.50	0.02	0.221	1.21	0.268	/
Top Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	-0.03	0.215	1.18	0.254	/
Limb SAR (0mm)-Secondary Supply											
Front Side	Full power	RMC12.2k	4183	836.6	23.78	24.50	0.03	0.470	1.18	0.555	A.1-10

Table 14.1.2-6: SAR Values for LTE Band 2

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	-0.01	0.784	1.16	0.908	/
Back Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.00	0.089	1.16	0.104	/
Left Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.09	0.113	1.16	0.131	/
Right Side	Sensor on	QPSK	20	1	mid	18900	1880	17.36	18.00	-0.15	0.634	1.16	0.735	/
Top Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.03	0.137	1.16	0.159	/
Front Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.02	0.608	1.11	0.673	/
Back Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.05	0.083	1.11	0.091	/
Left Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.03	0.090	1.11	0.099	/
Right Side	Sensor on	QPSK	20	50%	low	18900	1880	17.28	18.00	-0.03	0.629	1.18	0.742	/
Top Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.03	0.110	1.11	0.122	/
Front Side	Full power	QPSK	20	1	mid	18700	1860	22.35	23.00	0.05	0.826	1.16	0.959	/
Front Side	Full power	QPSK	20	1	mid	19100	1900	22.25	23.00	0.03	0.843	1.19	1.002	A.1-11
Repeat														
Front Side	Full power	QPSK	20	1	mid	19100	1900	22.25	23.00	-0.09	0.837	1.19	0.995	/
Body SAR (Worn&HotSpot 5mm)-SIM2														
Front Side	Full power	QPSK	20	1	mid	19100	1900	22.25	23.00	-0.08	0.702	1.19	0.834	/
Body SAR (Worn&HotSpot 5mm)-Battery BB13														
Front Side	Full power	QPSK	20	1	mid	19100	1900	22.25	23.00	0.01	0.773	1.19	0.919	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	-0.08	0.350	1.16	0.406	/
Right Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	-0.15	0.277	1.11	0.307	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Front Side	Full power	QPSK	20	1	mid	19100	1900	22.25	23.00	0.03	0.791	1.19	0.940	/
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.02	1.090	1.16	1.263	A.1-12
Back Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.02	0.063	1.16	0.073	/
Left Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.02	0.109	1.16	0.126	/
Right Side	Sensor on	QPSK	20	1	mid	18900	1880	17.36	18.00	-0.05	0.679	1.16	0.787	/
Top Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	-0.02	0.109	1.16	0.126	/
Front Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.08	0.859	1.11	0.951	/
Back Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.17	0.049	1.11	0.054	/
Left Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.03	0.075	1.11	0.083	/
Right Side	Sensor on	QPSK	20	50%	low	18900	1880	17.28	18.00	-0.04	0.646	1.18	0.762	/
Top Side	Full power	QPSK	20	50%	low	18900	1880	21.56	22.00	0.07	0.090	1.11	0.099	/
Limb SAR (0mm)-Secondary Supply														
Front Side	Full power	QPSK	20	1	mid	18900	1880	22.36	23.00	0.11	1.060	1.16	1.228	/

Table 14.1.2-7: SAR Values for LTE Band 4

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.05	0.727	1.21	0.882	/
Back Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.04	0.035	1.21	0.042	/
Left Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.02	0.173	1.21	0.210	/
Right Side	Sensor on	QPSK	20	1	mid	20175	1732.5	19.22	20.00	-0.09	0.721	1.20	0.863	/
Top Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	-0.04	0.286	1.21	0.347	/
Front Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	-0.05	0.615	1.18	0.724	/
Back Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	0.12	0.026	1.18	0.031	/
Left Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	0.04	0.129	1.18	0.152	/
Right Side	Sensor on	QPSK	20	50%	low	20175	1732.5	19.29	20.00	-0.06	0.685	1.18	0.807	/
Top Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	-0.06	0.240	1.18	0.283	/
Front Side	Full power	QPSK	20	1	mid	20050	1720	22.05	23.00	-0.03	0.760	1.24	0.946	/
Front Side	Full power	QPSK	20	1	mid	20300	1745	22.15	23.00	0.08	0.780	1.22	0.949	A.1-13
Right Side	Sensor on	QPSK	20	1	mid	20050	1720	19.15	20.00	-0.15	0.707	1.22	0.860	/
Right Side	Sensor on	QPSK	20	1	mid	20300	1745	19.17	20.00	-0.02	0.733	1.21	0.887	/
Right Side	Sensor on	QPSK	20	50%	low	20050	1720	19.22	20.00	0.00	0.693	1.20	0.829	/
Right Side	Sensor on	QPSK	20	50%	low	20300	1745	19.23	20.00	-0.03	0.730	1.19	0.872	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	-0.13	0.295	1.21	0.358	/
Right Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	-0.10	0.231	1.18	0.272	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Front Side	Full power	QPSK	20	1	mid	20300	1745	22.15	23.00	0.07	0.698	1.22	0.849	/
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	-0.06	0.996	1.21	1.209	A.1-14
Back Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.02	0.025	1.21	0.030	/
Left Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.18	0.117	1.21	0.142	/
Right Side	Sensor on	QPSK	20	1	mid	20175	1732.5	19.22	20.00	-0.09	0.806	1.20	0.965	/
Top Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.04	0.254	1.21	0.308	/
Front Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	0.05	0.859	1.18	1.012	/
Back Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	-0.04	0.019	1.18	0.023	/
Left Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	0.08	0.087	1.18	0.102	/
Right Side	Sensor on	QPSK	20	50%	low	20175	1732.5	19.29	20.00	-0.04	0.782	1.18	0.921	/
Top Side	Full power	QPSK	20	50%	low	20175	1732.5	21.29	22.00	0.03	0.203	1.18	0.239	/
Limb SAR (0mm)-Secondary Supply														
Front Side	Full power	QPSK	20	1	mid	20175	1732.5	22.16	23.00	0.16	0.908	1.21	1.102	/

Table 14.1.2-8: SAR Values for LTE Band 7

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	0.10	0.728	1.24	0.902	/
Back Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	0.06	0.284	1.24	0.352	/
Left Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	-0.12	0.193	1.24	0.239	/
Right Side	Sensor on	QPSK	20	1	mid	21100	2535	16.05	16.50	-0.09	0.758	1.11	0.841	/
Top Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	-0.14	0.325	1.24	0.403	/
Front Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	0.06	0.570	1.24	0.704	/
Back Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	-0.18	0.208	1.24	0.257	/
Left Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	-0.13	0.151	1.24	0.187	/
Right Side	Sensor on	QPSK	20	50%	low	21100	2535	16.02	16.50	-0.06	0.767	1.12	0.857	/
Top Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	-0.02	0.264	1.24	0.326	/
Front Side	Full power	QPSK	20	1	mid	20850	2510	22.54	23.50	0.17	0.796	1.25	0.993	A.1-15
Front Side	Full power	QPSK	20	1	mid	21350	2560	22.47	23.50	0.02	0.676	1.27	0.857	/
Right Side	Sensor on	QPSK	20	1	mid	20850	2510	15.98	16.50	-0.10	0.777	1.13	0.876	/
Right Side	Sensor on	QPSK	20	1	mid	21350	2560	15.88	16.50	-0.04	0.739	1.15	0.852	/
Right Side	Sensor on	QPSK	20	50%	low	20850	2510	15.76	16.50	-0.02	0.740	1.19	0.877	/
Right Side	Sensor on	QPSK	20	50%	low	21350	2560	15.79	16.50	0.00	0.709	1.18	0.835	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	0.14	0.737	1.24	0.913	/
Right Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	-0.18	0.595	1.24	0.735	/
Right Side	Full power	QPSK	20	1	mid	20850	2510	22.54	23.50	-0.05	0.786	1.25	0.980	/
Right Side	Full power	QPSK	20	1	mid	21350	2560	22.47	23.50	0.10	0.713	1.27	0.904	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Front Side	Full power	QPSK	20	1	mid	20850	2510	22.54	23.50	0.07	0.760	1.25	0.948	/
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	0.00	0.560	1.24	0.694	/
Back Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	-0.03	0.142	1.24	0.176	/
Left Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	-0.08	0.132	1.24	0.164	/
Right Side	Sensor on	QPSK	20	1	mid	21100	2535	16.05	16.50	-0.11	0.699	1.11	0.775	A.1-16
Top Side	Full power	QPSK	20	1	mid	21100	2535	22.57	23.50	0.03	0.266	1.24	0.330	/
Front Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	0.00	0.452	1.24	0.559	/
Back Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	0.03	0.118	1.24	0.146	/
Left Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	-0.12	0.105	1.24	0.130	/
Right Side	Sensor on	QPSK	20	50%	low	21100	2535	16.02	16.50	-0.08	0.625	1.12	0.698	/
Top Side	Full power	QPSK	20	50%	low	21100	2535	21.58	22.50	0.19	0.212	1.24	0.262	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Sensor on	QPSK	20	1	mid	21100	2535	16.05	16.50	0.00	0.656	1.11	0.728	/

Table 14.1.2-9: SAR Values for LTE Band 26

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	0.03	0.314	1.27	0.400	/
Back Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	-0.10	0.258	1.27	0.329	/
Left Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	-0.03	0.154	1.27	0.196	/
Right Side	Sensor on	QPSK	15	1	mid	26865	831.5	20.87	21.00	-0.06	0.593	1.03	0.611	/
Top Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	0.04	0.164	1.27	0.209	/
Front Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	0.16	0.258	1.24	0.319	/
Back Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	-0.07	0.195	1.24	0.241	/
Left Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	0.02	0.123	1.24	0.152	/
Right Side	Sensor on	QPSK	15	50%	low	26865	831.5	20.59	21.00	0.04	0.537	1.10	0.590	/
Top Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	0.02	0.154	1.24	0.190	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	-0.07	0.238	1.27	0.303	/
Right Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	-0.18	0.192	1.24	0.237	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Sensor on	QPSK	15	1	mid	26865	831.5	20.87	21.00	-0.05	0.767	1.03	0.790	/
Right Side	Sensor on	QPSK	15	1	mid	26765	821.5	20.82	21.00	-0.08	0.673	1.04	0.701	/
Right Side	Sensor on	QPSK	15	1	low	26965	841.5	20.85	21.00	-0.05	0.796	1.04	0.824	A.1-17
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	0.03	0.434	1.27	0.553	/
Back Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	-0.10	0.190	1.27	0.242	/
Left Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	-0.01	0.105	1.27	0.134	/
Right Side	Sensor on	QPSK	15	1	mid	26865	831.5	20.87	21.00	0.05	0.876	1.03	0.903	/
Top Side	Full power	QPSK	15	1	mid	26865	831.5	22.45	23.50	0.03	0.164	1.27	0.209	/
Front Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	0.16	0.350	1.24	0.433	/
Back Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	-0.03	0.158	1.24	0.195	/
Left Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	-0.14	0.083	1.24	0.102	/
Right Side	Sensor on	QPSK	15	50%	low	26865	831.5	20.59	21.00	0.05	0.877	1.10	0.964	/
Top Side	Full power	QPSK	15	50%	low	26865	831.5	21.58	22.50	-0.03	0.153	1.24	0.189	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Sensor on	QPSK	15	50%	low	26865	831.5	20.59	21.00	-0.08	0.926	1.10	1.018	A.1-18

Table 14.1.2-10: SAR Values for LTE Band 40(2305 MHz-2315 MHz)

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.07	0.355	1.17	0.414	/
Back Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	-0.05	0.145	1.17	0.169	/
Left Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.06	0.065	1.17	0.076	/
Right Side	Sensor on	QPSK	10	1	mid	38750	2310	17.10	17.50	-0.10	0.373	1.10	0.409	/
Top Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.04	0.086	1.17	0.100	/
Front Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	-0.01	0.271	1.16	0.313	/
Back Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.10	0.109	1.16	0.126	/
Left Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.05	0.055	1.16	0.063	/
Right Side	Sensor on	QPSK	10	50%	low	38750	2310	17.09	17.50	-0.15	0.357	1.10	0.392	/
Top Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.05	0.065	1.16	0.075	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.03	0.336	1.17	0.392	/
Right Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.04	0.277	1.16	0.320	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.02	0.390	1.17	0.455	A.1-19
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.00	0.369	1.17	0.431	/
Back Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.04	0.093	1.17	0.108	/
Left Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.10	0.102	1.17	0.119	/
Right Side	Sensor on	QPSK	10	1	mid	38750	2310	17.10	17.50	-0.04	0.452	1.10	0.496	/
Top Side	Full power	QPSK	10	1	mid	38750	2310	22.83	23.50	0.02	0.069	1.17	0.081	/
Front Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.00	0.280	1.16	0.324	/
Back Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.03	0.070	1.16	0.081	/
Left Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.10	0.080	1.16	0.092	/
Right Side	Sensor on	QPSK	10	50%	low	38750	2310	17.09	17.50	-0.04	0.437	1.10	0.480	/
Top Side	Full power	QPSK	10	50%	low	38750	2310	21.87	22.50	0.01	0.048	1.16	0.055	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Sensor on	QPSK	10	1	mid	38750	2310	17.10	17.50	-0.06	0.483	1.10	0.530	A.1-20

Table 14.1.2-11: SAR Values for LTE Band 40(2350 MHz-2360MHz)

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	-0.11	0.346	1.12	0.389	/
Back Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	0.09	0.138	1.12	0.155	/
Left Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	0.03	0.095	1.12	0.107	/
Right Side	Sensor on	QPSK	10	1	mid	39200	2355	17.08	17.50	-0.05	0.467	1.10	0.514	/
Top Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	-0.08	0.100	1.12	0.112	/
Front Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.07	0.271	1.08	0.292	/
Back Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.02	0.115	1.08	0.124	/
Left Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.05	0.073	1.08	0.078	/
Right Side	Sensor on	QPSK	10	50%	low	39200	2355	17.07	17.50	-0.02	0.458	1.10	0.506	/
Top Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.03	0.076	1.08	0.082	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	-0.02	0.413	1.12	0.464	/
Right Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	-0.09	0.319	1.08	0.343	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Sensor on	QPSK	10	1	mid	39200	2355	17.08	17.50	-0.05	0.514	1.10	0.566	A.1-21
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	0.00	0.413	1.12	0.464	/
Back Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	-0.03	0.104	1.12	0.117	/
Left Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	0.07	0.127	1.12	0.143	/
Right Side	Sensor on	QPSK	10	1	mid	39200	2355	17.08	17.50	-0.02	0.491	1.10	0.541	A.1-22
Top Side	Full power	QPSK	10	1	mid	39200	2355	22.99	23.50	0.05	0.077	1.12	0.086	/
Front Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.00	0.324	1.08	0.349	/
Back Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	-0.03	0.083	1.08	0.089	/
Left Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	0.16	0.096	1.08	0.104	/
Right Side	Sensor on	QPSK	10	50%	low	39200	2355	17.07	17.50	-0.14	0.488	1.10	0.539	/
Top Side	Full power	QPSK	10	50%	low	39200	2355	22.18	22.50	-0.15	0.060	1.08	0.065	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Sensor on	QPSK	10	1	mid	39200	2355	17.08	17.50	-0.07	0.484	1.10	0.533	/

Table 14.1.2-12: SAR Values for LTE Band 41

Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR1g	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	0.05	0.401	1.21	0.485	/
Back Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	-0.04	0.330	1.21	0.399	/
Left Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	0.02	0.127	1.21	0.154	/
Right Side	Sensor on	QPSK	20	1	mid	40620	2593	17.16	18.00	-0.04	0.587	1.21	0.712	/
Top Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	0.10	0.078	1.21	0.094	/
Front Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	-0.06	0.142	1.22	0.173	/
Back Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	-0.02	0.107	1.22	0.130	/
Left Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	-0.03	0.099	1.22	0.121	/
Right Side	Sensor on	QPSK	20	50%	mid	40620	2593	17.15	18.00	-0.13	0.579	1.22	0.704	/
Top Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	0.05	0.058	1.22	0.071	/
Right Side	Sensor on	QPSK	20	1	mid	39750	2506	17.13	18.00	0.04	0.635	1.22	0.776	A.1-23
Right Side	Sensor on	QPSK	20	1	mid	40185	2549.5	17.07	18.00	-0.02	0.626	1.24	0.775	/
Right Side	Sensor on	QPSK	20	1	mid	41055	2636.5	17.09	18.00	-0.05	0.564	1.23	0.695	/
Right Side	Sensor on	QPSK	20	1	mid	41490	2680	17.03	18.00	0.15	0.553	1.25	0.691	/
Right Side	Sensor on	QPSK	20	50%	low	39750	2506	17.14	18.00	-0.10	0.629	1.22	0.767	/
Right Side	Sensor on	QPSK	20	50%	mid	40185	2549.5	17.09	18.00	-0.03	0.603	1.23	0.744	/
Right Side	Sensor on	QPSK	20	50%	mid	41055	2636.5	17.11	18.00	-0.04	0.551	1.23	0.676	/
Right Side	Sensor on	QPSK	20	50%	low	41490	2680	17.09	18.00	0.02	0.534	1.23	0.658	/
Body SAR Define (16mm)														
Right Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	0.03	0.415	1.21	0.502	/
Right Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	0.02	0.308	1.22	0.375	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Sensor on	QPSK	20	1	mid	39750	2506	17.13	18.00	-0.04	0.590	1.22	0.721	/
Test Position	Power Reduction	Mode				Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)			Figure No.
		Modulation	BW(MHz)	RB Allocation	RB Offset						Measured SAR10g	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	0.00	0.373	1.21	0.452	/
Back Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	-0.10	0.093	1.21	0.113	/
Left Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	-0.04	0.101	1.21	0.122	/
Right Side	Sensor on	QPSK	20	1	mid	40620	2593	17.16	18.00	-0.05	0.541	1.21	0.656	A.1-24
Top Side	Full power	QPSK	20	1	mid	40620	2593	23.17	24.00	-0.06	0.148	1.21	0.179	/
Front Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	0.00	0.283	1.22	0.344	/
Back Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	-0.03	0.072	1.22	0.088	/
Left Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	0.04	0.081	1.22	0.098	/
Right Side	Sensor on	QPSK	20	50%	mid	40620	2593	17.15	18.00	-0.07	0.534	1.22	0.649	/
Top Side	Full power	QPSK	20	50%	mid	40620	2593	22.15	23.00	-0.030	0.131	1.22	0.159	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Sensor on	QPSK	20	1	mid	40620	2593	17.16	18.00	0.08	0.493	1.21	0.598	/

Table 14.1.2-13: SAR Values for Wi-Fi 2.4G

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.10	0.034	1.00	1.03	0.035	/
Back Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.03	0.099	1.00	1.03	0.102	/
Left Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.09	0.028	1.00	1.03	0.029	/
Right Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.09	0.469	1.00	1.03	0.482	/
Top Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	-0.12	0.007	1.00	1.03	0.007	/
Body SAR Define (16mm)														
Right Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	-0.07	0.093	1.00	1.03	0.096	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	-0.03	0.489	1.00	1.03	0.503	A.1-25
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.10	0.032	1.00	1.03	0.033	/
Back Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.07	0.066	1.00	1.03	0.068	/
Left Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.10	0.018	1.00	1.03	0.019	/
Right Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.02	0.281	1.00	1.03	0.289	A.1-26
Top Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	0.18	0.005	1.00	1.03	0.005	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Full power	802.11b	20	100%	6	2437	16.88	17.00	-0.04	0.277	1.00	1.03	0.285	/

Table 14.1.2-14: SAR Values for Wi-Fi 5G U-NII-1

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.00	0.014	1.03	1.09	0.016	/
Back Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.03	0.060	1.03	1.09	0.067	/
Left Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.03	0.053	1.03	1.09	0.060	/
Right Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.10	0.173	1.03	1.09	0.194	/
Top Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.00	0.000	1.03	1.09	0.000	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.07	0.190	1.03	1.09	0.213	A.1-27
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.00	0.011	1.03	1.09	0.012	/
Back Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.09	0.034	1.03	1.09	0.038	/
Left Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.10	0.028	1.03	1.09	0.031	/
Right Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.04	0.159	1.03	1.09	0.179	/
Top Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.00	0.000	1.03	1.09	0.000	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	36	5180	10.62	11.00	0.02	0.174	1.03	1.09	0.195	A.1-28

Table 14.1.2-15: SAR Values for Wi-Fi 5G U-NII-2A

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.10	0.025	1.03	1.19	0.030	/
Back Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.09	0.080	1.03	1.19	0.098	/
Left Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.10	0.023	1.03	1.19	0.028	/
Right Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.03	0.320	1.03	1.19	0.390	A.1-29
Top Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.10	0.008	1.03	1.19	0.010	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	-0.02	0.269	1.03	1.19	0.328	/
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.00	0.017	1.03	1.19	0.021	/
Back Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.14	0.041	1.03	1.19	0.050	/
Left Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.00	0.016	1.03	1.19	0.020	/
Right Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.04	0.226	1.03	1.19	0.276	A.1-30
Top Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.00	0.004	1.03	1.19	0.005	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	64	5320	9.26	10.00	0.12	0.213	1.03	1.19	0.260	/

Table 14.1.2-16: SAR Values for Wi-Fi 5G U-NII-2C

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.10	0.023	1.03	1.12	0.027	/
Back Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.06	0.065	1.03	1.12	0.075	/
Left Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.00	0.044	1.03	1.12	0.051	/
Right Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	-0.04	0.284	1.03	1.12	0.328	A.1-31
Top Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.00	0.000	1.03	1.12	0.000	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.10	0.278	1.03	1.12	0.321	/
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.00	0.019	1.03	1.12	0.022	/
Back Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.10	0.032	1.03	1.12	0.037	/
Left Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.00	0.019	1.03	1.12	0.022	/
Right Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.02	0.204	1.03	1.12	0.235	/
Top Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.10	0.003	1.03	1.12	0.003	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Full power	802.11a	20	97.20%	140	5700	10.00	10.50	0.10	0.218	1.03	1.12	0.252	A.1-32

Table 14.1.2-17: SAR Values for Wi-Fi 5G U-NII-3

Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
										Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)														
Front Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	-0.03	0.042	1.04	1.13	0.049	/
Back Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.10	0.066	1.04	1.13	0.077	/
Left Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.00	0.062	1.04	1.13	0.072	/
Right Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	-0.03	0.287	1.04	1.13	0.335	/
Top Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.00	0.002	1.04	1.13	0.002	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply														
Right Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.05	0.297	1.04	1.13	0.347	A.1-33
Test Position	Power Reduction	Mode	BW(MHz)	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
										Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)														
Front Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.00	0.016	1.04	1.13	0.019	/
Back Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.10	0.032	1.04	1.13	0.037	/
Left Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.10	0.020	1.04	1.13	0.023	/
Right Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	-0.11	0.224	1.04	1.13	0.262	A.1-34
Top Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.10	0.003	1.04	1.13	0.004	/
Limb SAR (0mm)-Secondary Supply														
Right Side	Full power	802.11a	20	96.53%	149	5745	9.48	10.00	0.05	0.218	1.04	1.13	0.255	/

Table 14.1.2-18: SAR Values for BT

Test Position	Power Reduction	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 1gSAR 1.6 W/kg (mW/g)				Figure No.
									Measured SAR1g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR1g	
Body SAR (Worn&HotSpot 5mm)													
Front Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.00	0.005	1.30	1.11	0.008	/
Back Side	Full power	DH5	76.86%	78	2480	9.56	10.00	-0.17	0.023	1.30	1.11	0.033	/
Left Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.00	0.005	1.30	1.11	0.007	/
Right Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.18	0.116	1.30	1.11	0.167	A.1-35
Top Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.11	0.002	1.30	1.11	0.003	/
Body SAR Define (16mm)													
Right Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.08	0.024	1.30	1.11	0.035	/
Body SAR (Worn&HotSpot 5mm)-Secondary Supply													
Right Side	Full power	DH5	76.86%	78	2480	9.56	10.00	-0.01	0.085	1.30	1.11	0.123	/
Test Position	Power Reduction	Mode	Duty Cycle	Channel	Frequency (MHz)	Measured power (dBm)	Tune-up (dBm)	Power Drift (dB)	Limit of 10gSAR 4.0 W/kg (mW/g)				Figure No.
									Measured SAR10g	Duty Cycle Scaling Factor	Scaling Factor	Report SAR10g	
Limb SAR (0mm)													
Front Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.00	0.005	1.30	1.11	0.007	/
Back Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.03	0.014	1.30	1.11	0.020	/
Left Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.00	0.001	1.30	1.11	0.001	/
Right Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.06	0.070	1.30	1.11	0.100	A.1-36
Top Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.06	0.001	1.30	1.11	0.002	/
Limb SAR (0mm)-Secondary Supply													
Right Side	Full power	DH5	76.86%	78	2480	9.56	10.00	0.08	0.046	1.30	1.11	0.066	/

14.2 Simultaneous SAR Evaluation

Table 14.2-1 Max. Reported SAR for GSM/WCDMA/LTE

Simultaneous Transmission Table	Test Position	Cellular											Max.Report SAR _{10g} GSM/WCDMA/LTE	
		Report SAR _{10g} (W/kg)	GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE B2	LTE B4	LTE B7	LTE B26	LTE B40		LTE B41
Body SAR (Worn&HotSpot 5mm)	Front Side		0.974	0.889	0.918	0.960	0.419	1.002	0.949	0.993	0.400	0.455	0.485	1.002
	Back Side		0.413	0.148	0.121	0.039	0.243	0.104	0.042	0.352	0.329	0.169	0.399	0.413
	Left Side		0.311	0.163	0.152	0.183	0.179	0.131	0.210	0.239	0.196	0.107	0.154	0.311
	Right Side		0.612	0.943	0.634	0.935	0.615	0.742	0.887	0.877	0.824	0.566	0.776	0.943
	Top Side		0.377	0.236	0.234	0.454	0.238	0.159	0.347	0.403	0.209	0.112	0.094	0.454
Body SAR Define	Right Side(16mm)		0.476	0.416	0.414	0.348	0.310	0.406	0.358	0.980	0.303	0.464	0.502	0.980
Simultaneous Transmission Table	Test Position	Cellular											Max.Report SAR _{10g} GSM/WCDMA/LTE	
		Report SAR _{10g} (W/kg)	GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE B2	LTE B4	LTE B7	LTE B26	LTE B40		LTE B41
Limb SAR(0mm)	Front Side		0.852	1.293	1.234	1.154	0.555	1.263	1.209	0.694	0.553	0.464	0.452	1.293
	Back Side		0.369	0.120	0.112	0.031	0.207	0.073	0.030	0.176	0.242	0.117	0.113	0.369
	Left Side		0.235	0.130	0.091	0.130	0.123	0.126	0.142	0.164	0.134	0.143	0.122	0.235
	Right Side		1.301	0.919	0.767	1.317	0.268	0.787	0.965	0.775	1.018	0.541	0.656	1.317
	Top Side		0.409	0.171	0.176	0.395	0.254	0.126	0.308	0.330	0.209	0.086	0.179	0.409

Table 14.2-2 Max. Reported SAR for Wi-Fi&BT

Simultaneous Transmission Table	Test Position	Non-Cellular						
		Report SAR _{10g} (W/kg)	Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G			
Body SAR (Worn&HotSpot 5mm)	Front Side		0.008	0.035	0.016	0.030	0.027	0.049
	Back Side		0.033	0.102	0.067	0.098	0.075	0.098
	Left Side		0.007	0.029	0.060	0.028	0.051	0.072
	Right Side		0.167	0.503	0.213	0.390	0.328	0.347
	Top Side		0.003	0.007	0.000	0.010	0.000	0.002
Body SAR Define	Right Side(16mm)		0.035	0.096	0.213	0.390	0.328	0.347
Simultaneous Transmission Table	Test Position	Non-Cellular						
		Report SAR _{10g} (W/kg)	Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G			
Limb SAR(0mm)	Front Side		0.007	0.033	0.012	0.021	0.022	0.019
	Back Side		0.020	0.068	0.038	0.050	0.037	0.050
	Left Side		0.001	0.019	0.031	0.020	0.022	0.023
	Right Side		0.100	0.289	0.195	0.276	0.252	0.262
	Top Side		0.002	0.005	0.000	0.005	0.003	0.004

Table 14.2-3 Simultaneous transmission SAR

Simultaneous Transmission Table	Test Position	Report SAR _{10g} (W/kg)	Max.Report SAR _{10g} GSMWCDMA/LTE	Non-Cellular			WWAN+BT	WWAN+Wi-Fi 2.4G	WWAN+Wi-Fi 5G	MAX.ZSAR _{10g}
				Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G				
Body SAR (Worn&HotSpot 5mm)	Front Side		1.002	0.008	0.035	0.049	1.009	1.037	1.051	1.051
	Back Side		0.413	0.033	0.102	0.098	0.446	0.515	0.511	0.515
	Left Side		0.311	0.007	0.029	0.072	0.318	0.340	0.384	0.384
	Right Side		0.943	0.167	0.503	0.390	1.110	1.446	1.334	1.446
	Top Side		0.454	0.003	0.007	0.010	0.457	0.461	0.464	0.464
Body SAR Define	Right Side(16mm)		0.980	0.035	0.096	0.390	1.015	1.076	1.371	1.371
Simultaneous Transmission Table	Test Position	Report SAR _{10g} (W/kg)	Max.Report SAR _{10g} GSMWCDMA/LTE	Non-Cellular			WWAN+BT	WWAN+Wi-Fi 2.4G	WWAN+Wi-Fi 5G	MAX.ZSAR _{10g}
				Max.Report SAR _{10g} BT	Max.Report SAR _{10g} Wi-Fi 2.4G	Max.Report SAR _{10g} Wi-Fi 5G				
Limb SAR(0mm)	Front Side		1.293	0.007	0.033	0.022	1.300	1.326	1.315	1.326
	Back Side		0.369	0.020	0.068	0.050	0.389	0.437	0.419	0.437
	Left Side		0.235	0.001	0.019	0.031	0.237	0.254	0.267	0.267
	Right Side		1.317	0.100	0.289	0.276	1.417	1.606	1.593	1.606
	Top Side		0.409	0.002	0.005	0.005	0.411	0.415	0.414	0.415

According to the above table, the sum of reported SAR values for partial-body GSM/WCDMA/LTE and Wi-Fi/BT < 1.6W/kg; the sum of reported SAR values for Limb GSM/WCDMA/LTE and Wi-Fi/BT < 4.0W/kg.

14.3 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- (a) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps(b) through (d) do not apply.
- (b) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- (c) 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 ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- (d) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Table 14.3-1: SAR Measurement Variability (1g)

Frequency		Configuration	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio
Channel	Frequency (MHz)					
810	1909.8	GPRS 4TS	Right Side 5mm	0.926	0.925	1.001
9400	1880	RMC 12.2k	Front Side 5mm	0.833	0.828	1.006
1413	1732.6	RMC 12.2k	Front Side 5mm	0.882	0.810	1.089
19100	1900	20MHz 1RB 50 offset	Front Side 5mm	0.843	0.837	1.007

Note: According to the KDB 865664 D01 repeated measurement is not required when the original highest measured SAR is < 0.8 W/kg.

15 SAR Reduction Function Validation Procedure

15.1 Reference Document (Power Reduction for Proximity Sensor)

A proximity sensor for power reduction is implemented in this device to address RF exposure compliance when the cellular antenna is positioned close to the user's body. The sensor's mechanical structure is designed to fit within the enclosure design used in this device and also extended around the edge and top of the antenna element in order to optimize sensitivity in these orientations.

15.2 Procedures for Determining Proximity Sensor Triggering Distances

The following procedures should be applied to determine proximity sensor triggering distances for the back surface and individual edges of a tablet. Conducted power is monitored qualitatively to identify the general triggering characteristics and recorded quantitatively, versus spacing, as required by the procedures. Unless there is built-in test software that reports the triggering conditions and enables the power levels to be confirmed separately, monitoring of conducted power during the triggering tests typically requires internal access to the antenna ports inside the tablet, which may interfere with the triggering tests.

- (a) The relevant transmitter should be set to operate at its normal maximum output power.
- (b) The entire back surface or edge of the tablet is positioned below a flat phantom filled with the required tissue-equivalent medium, and positioned at least 20 mm further than the distance that triggers power reduction.
- (c) It should be ensured that the cables required for power measurements are not interfering with the proximity sensor. Cable losses should be properly compensated to report the measured power results.
- (d) The back surface or edge is moved toward the phantom in 3 mm steps until the sensor triggers.
- (e) The back surface or edge is then moved back (further away) from the phantom by at least 5 mm or until maximum output power is returned to the normal maximum level.
- (f) If the tablet is not touching the phantom, it is moved in 3 mm steps until it touches the phantom to confirm that the sensor remains triggered and the maximum power stays reduced.
- (g) The process is then reversed by moving the tablet away from the phantom according to steps 4) to 7), to determine triggering release, until it is at least 10 mm beyond the point that triggers the return of normal maximum power.
- (h) The measured output power within ± 5 mm of the triggering points, or until the tablet is touching the phantom, for movements to and from the phantom should be tabulated in the SAR report.
- (i) (9) If the sensor design and implementation allow additional variations for triggering distance tolerances, multiple samples should be tested to determine the most conservative distance required for SAR evaluation.

To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

15.3 Procedures for Determining Antenna and Proximity Sensor Coverage

The sensing regions are usually limited to areas near the sensor element. If a sensor is spatially offset

from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. The following are used to determine if additional SAR measurements may be necessary due to sensor and antenna offset. 25 These procedures do not apply and are not required for configurations where the antenna and sensor are collocated and the peak SAR location is overlapping with the sensor.

- (a) The back surface or edge of the tablet is positioned at a test separation distance less than or equal to the distance required for back surface or edge triggering, with both the antenna and sensor pad located at least 20 mm laterally outside the edge (boundary) of the phantom, along the direction of maximum antenna and sensor offset. For the back surface, if the direction of maximum offset is not aligned with the tablet coordinates (physical edges) the tablet test position would not be aligned with the phantom coordinates (orientations). Each applicable tablet edge should be positioned perpendicularly to the phantom to determine sensor coverage. For antennas and/or sensors located near the corner of a tablet, both adjacent edges must be considered.
- (b) The similar sequence of steps applied to determine sensor triggering distance are used to verify back surface and edge sensor coverage by moving the tablet (sensor and antenna) horizontally toward the phantom while maintaining the same vertical separation between the back surface or edge and the phantom.
- (c) After the exact location where triggering of power reduction is determined, with respect to the sensor and antenna, the tablet movement should be continued, in 3 mm increments, until both the sensor and antenna(s) are fully under the phantom and at least 20 mm inside the phantom edge.
- (d) The process is then repeated from the opposite direction, starting at the other end of the maximum antenna and sensor offset, by rotating the tablet 180° along the vertical axis.
- (e) The triggering points should be documented graphically, with the antenna and sensor clearly identified, along with all relevant dimensions.

If the subsequently measured peak SAR location for the antenna is not between the triggering points, established by the sensor coverage tests from opposite ends of the antenna and sensor, additional SAR tests may be required for conditions where only part of the back surface or edge of a tablet corresponding to the antenna is in proximity to the user and the sensor may not be triggering as desired. A KDB inquiry must be submitted by the test lab to determine if additional tests are required and the proper test configurations to use for testing. This may include situations where the sensor coverage region is too small for the antenna, the sensor is located too far away from the antenna, the sensor location is insufficient to cover multiple antennas or the antenna is at the corner of a tablet etc.

15.4 Proximity Sensor Status Table of Trigger Distance

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions.

To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tilt positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

Table 15.4-1 Power reduction for proximity sensor

Main Antenna			
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount(dB)
GSM850 GPRS4TS	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distances≤17mm	5.5
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
GSM1900 GPRS4TS	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distances≤17mm	4.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
WCDMA Band II RMC	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	5.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
WCDMA Band IV RMC	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distances≤17mm	2.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
WCDMA Band V RMC	Front side	N/A	0.0
	Back side	N/A	0.0

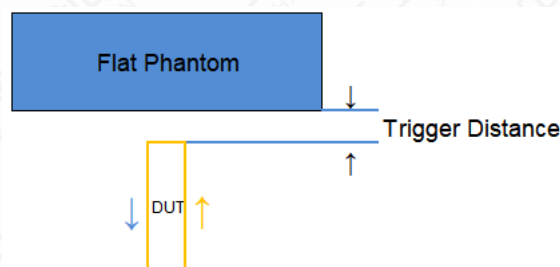
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	3.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B2 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	5.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B4 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	3.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B5 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	2.5
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B7 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	7.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B26 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	2.5
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
LTE B38 QPSK	Front side	N/A	0.0
	Back side	N/A	0.0

	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	6.0
		distance>17mm	0.0
	Top side	N/A	0.0
LTE B40 QPSK	Bottom side	N/A	0.0
	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	6.0
		distance>17mm	0.0
	Top side	N/A	0.0
LTE B41 QPSK	Bottom side	N/A	0.0
	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	6.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0
	Front side	N/A	0.0
	Back side	N/A	0.0
	Left side	N/A	0.0
	Right side	0mm≤distance≤17mm	6.0
		distance>17mm	0.0
	Top side	N/A	0.0
	Bottom side	N/A	0.0

Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the right side of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

The Proximity sensor triggering distance measurement method are as below:



Figuer 15.4-1 Proximity sensor triggering distances assessment(Right side)

The following table is the summary of the trigger distance.

Table 15.4-2 Summary of trigger distance

Band	Trigger distance- Right side	
	Moving toward Phantom	Moving away from Phantom

GSM850	17mm	17mm
GSM1900	17mm	17mm
WCDMA Band II	17mm	17mm
WCDMA Band IV	17mm	17mm
WCDMA Band V	17mm	17mm
LTE Band 2	17mm	17mm
LTE Band 4	17mm	17mm
LTE Band 5	17mm	17mm
LTE Band 7	17mm	17mm
LTE Band 26	17mm	17mm
LTE Band 38	17mm	17mm
LTE Band 40	17mm	17mm
LTE Band 41	17mm	17mm

15.5 Tilt Angle Influences to Proximity Sensor Triggering

The following procedure is used to determine the tilt angle influences to proximity sensor triggering.

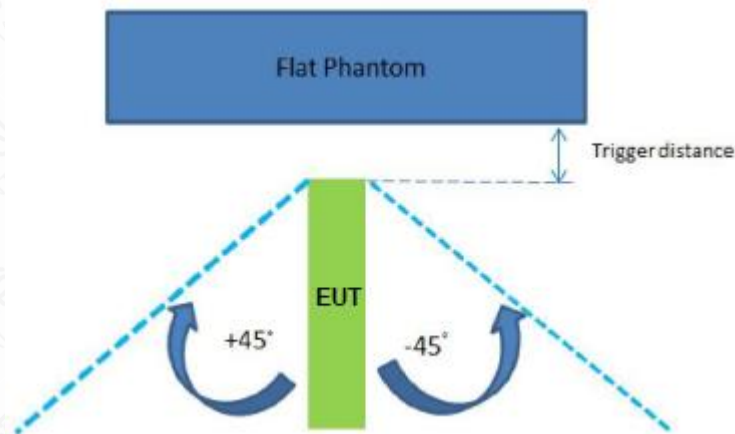


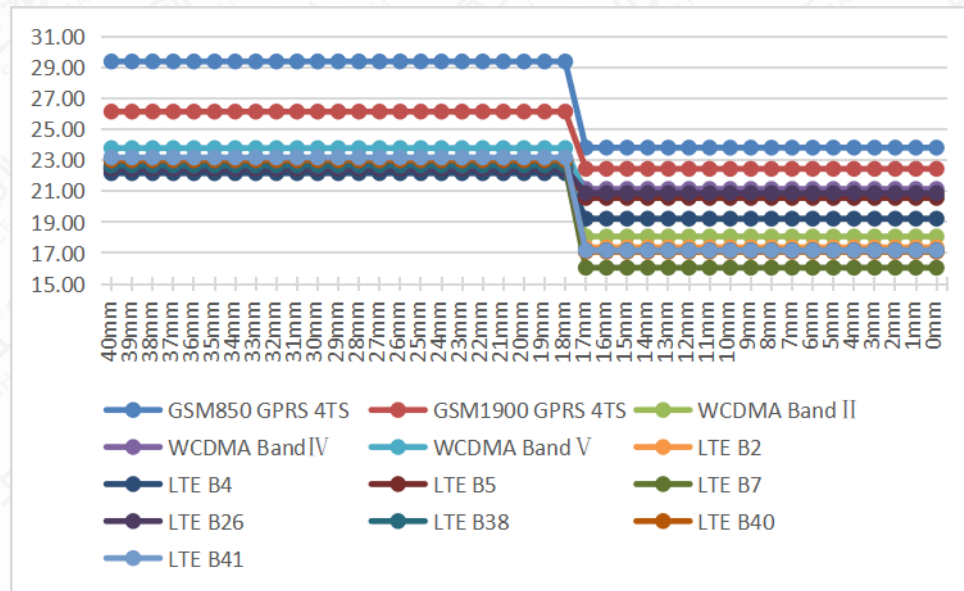
Table 15.5-1 Summary of tilt angle

Test position	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status											
		-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
Right side	17mm	on	on	on	on	on	on	on	on	on	on	on	on

15.6 Power Reduction per Air-interface

The following graphs show the detailed conducted power and the distance from the DUT to the flat phantom for the Right side.

Right Side:



15.7 Proximity Sensor Coverage Area

Proximity Sensor Coverage Area of not request when the antenna and sensor are collocated and the peak SAR location is overlapping with the sensor.

Annex A: Measurement Data

A.1 SAR Graph Results

GSM850 GPRS 4TS Front Side Mode Middle 5mm

Date/Time: 2024/1/3

Electronics: DAE4 Sn1244

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.922 \text{ S/m}$; $\epsilon_r = 41.712$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: GSM 900MHz GPRS 4TS (0); Frequency: 836.6 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 836.6 MHz

GSM850 GPRS 4TS Front Side Mode Middle 5mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.980 W/kg

GSM850 GPRS 4TS Front Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.76 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.795 W/kg ; SAR(10 g) = 0.524 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

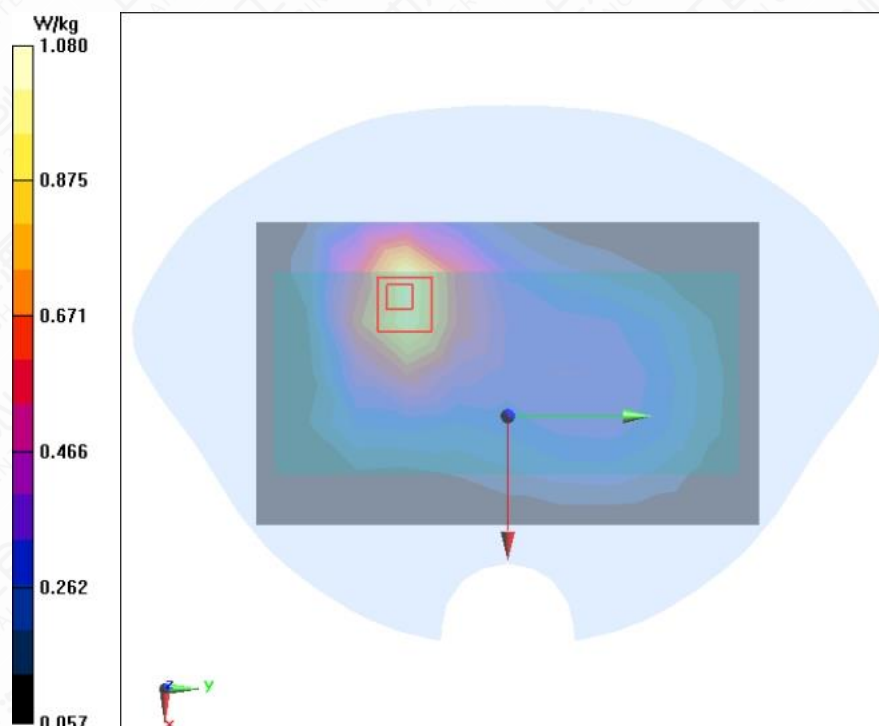


Figure A.1-1 GSM850 GPRS 4TS Front Side Mode Middle 5mm

GSM850 GPRS 4TS Right Side Mode Middle 0mm

Date/Time: 2024/1/3

Electronics: DAE4 Sn1244

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 41.702$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: GPRS 850 4TS 900MHz; Frequency: 836.6 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 836.6 MHz

GSM850 GPRS 4TS Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.48 W/kg

GSM850 GPRS 4TS Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.773 V/m ; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 4.87 W/kg

SAR(1 g) = 2.26 W/kg ; SAR(10 g) = 1.11 W/kg

Maximum of SAR (measured) = 3.86 W/kg

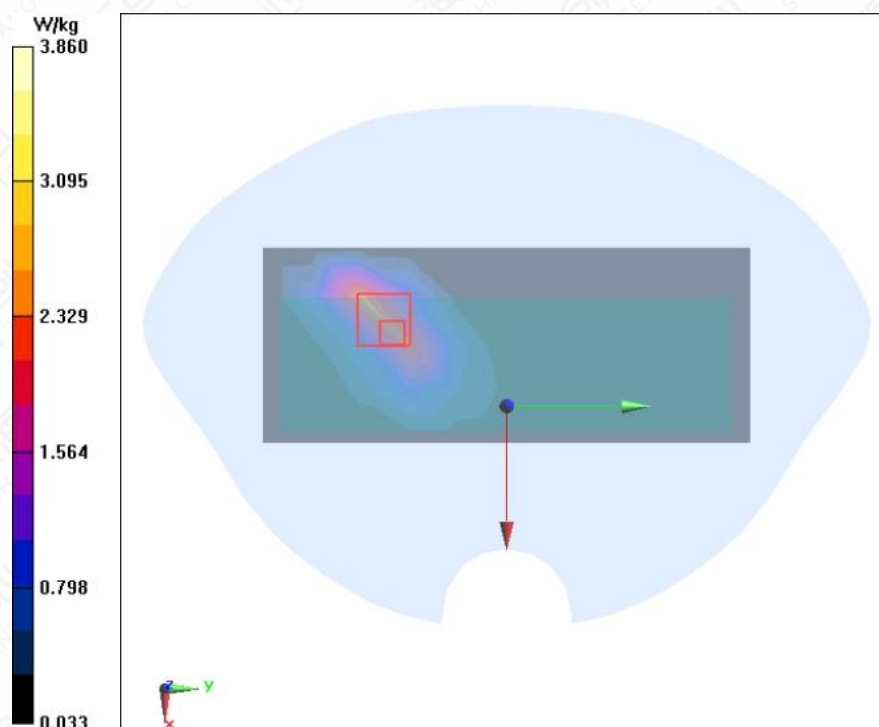


Figure A.1-2 GSM850 GPRS 4TS Right Side Mode Middle 0mm

GSM1900 GPRS 4TS Right Side Mode High 5mm

Date/Time: 2023/12/25

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.422 \text{ S/m}$; $\epsilon_r = 38.544$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.1°C

Communication System: GSM1900 4TS 1900MHz; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1909.8 MHz

GSM1900 GPRS 4TS Right Side Mode High 5mm/Area Scan (5x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.33 W/kg

GSM1900 GPRS 4TS Right Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.477 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 0.926 W/kg ; SAR(10 g) = 0.431 W/kg

Maximum value of SAR (measured) = 1.58 W/kg

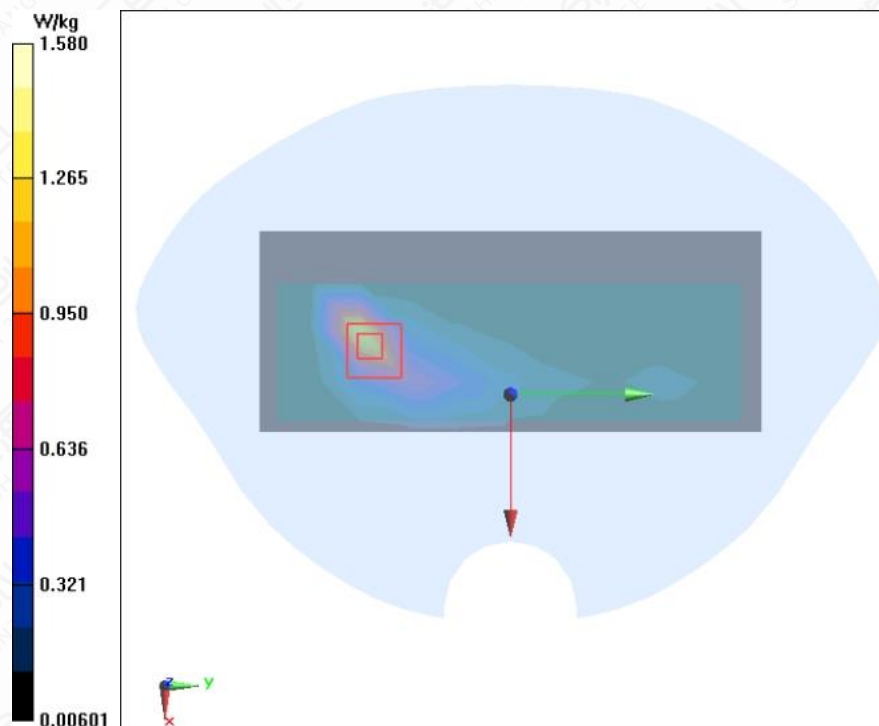


Figure A.1-3 GSM1900 GPRS 4TS Right Side Mode High 5mm

GSM1900 GPRS 4TS Front Side Mode Middle 0mm

Date/Time: 2023/12/25

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.404 \text{ S/m}$; $\epsilon_r = 38.594$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.1°C

Communication System: GSM1900 4TS 1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1880 MHz

GSM1900 GPRS 4TS Front Side Mode Middle 0mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.93 W/kg

GSM1900 GPRS 4TS Front Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.642 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 4.45 W/kg

SAR(1 g) = 2.33 W/kg ; SAR(10 g) = 1.19 W/kg

Maximum value of SAR (measured) = 3.60 W/kg

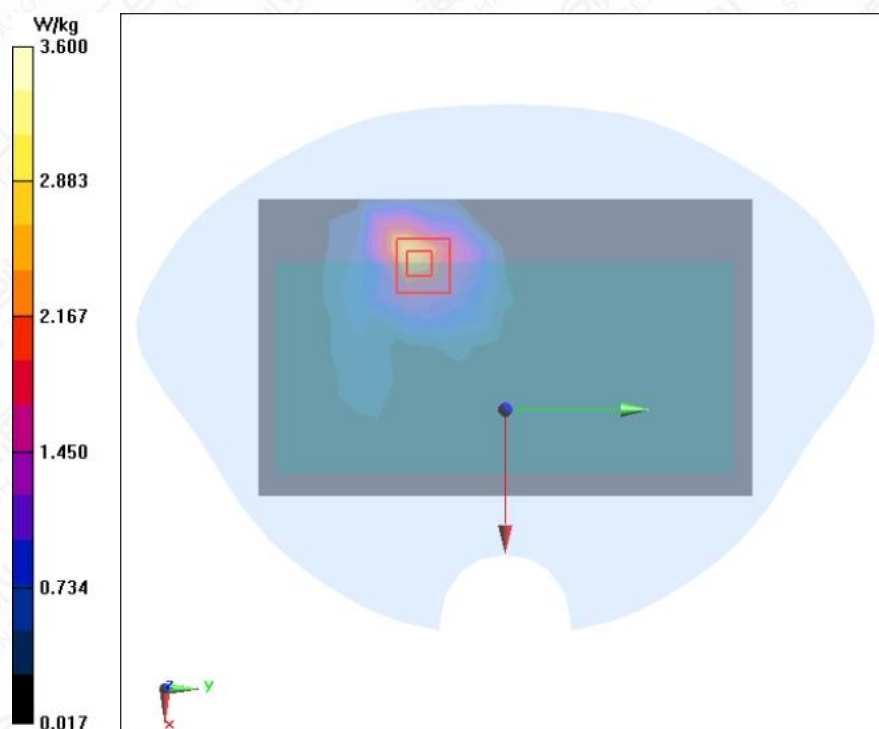


Figure A.1-4 GSM1900 GPRS 4TS Front Side Mode Middle 0mm

WCDMA Band II RMC Front Side Mode Middle 5mm

Date/Time: 2023/12/25

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.404 \text{ S/m}$; $\epsilon_r = 38.594$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.1°C

Communication System: WCDMA Professional Band II; Frequency: 1880 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1880 MHz

WCDMA Band II RMC Front Side Mode Middle 5mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.16 W/kg

WCDMA Band II RMC Front Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.84 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.833 W/kg ; SAR(10 g) = 0.479 W/kg

Maximum value of SAR (measured) = 1.18 W/kg

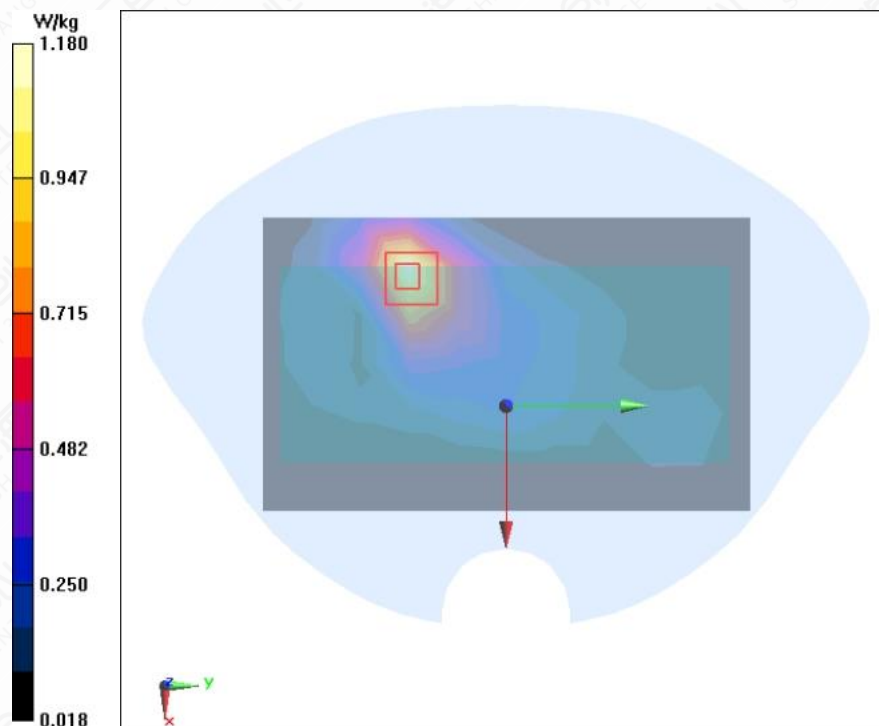


Figure A.1-5 WCDMA Band II RMC Front Side Mode Middle 5mm

WCDMA Band II RMC Front Side Mode Middle 0mm

Date/Time: 2023/12/25

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.404 \text{ S/m}$; $\epsilon_r = 38.594$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.1°C

Communication System: WCDMA Professional Band II; Frequency: 1880 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1880 MHz

WCDMA Band II RMC Front Side Mode Middle 0mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.90 W/kg

WCDMA Band II RMC Front Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.668 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 4.19 W/kg

SAR(1 g) = 2.19 W/kg ; SAR(10 g) = 1.12 W/kg

Maximum value of SAR (measured) = 3.44 W/kg

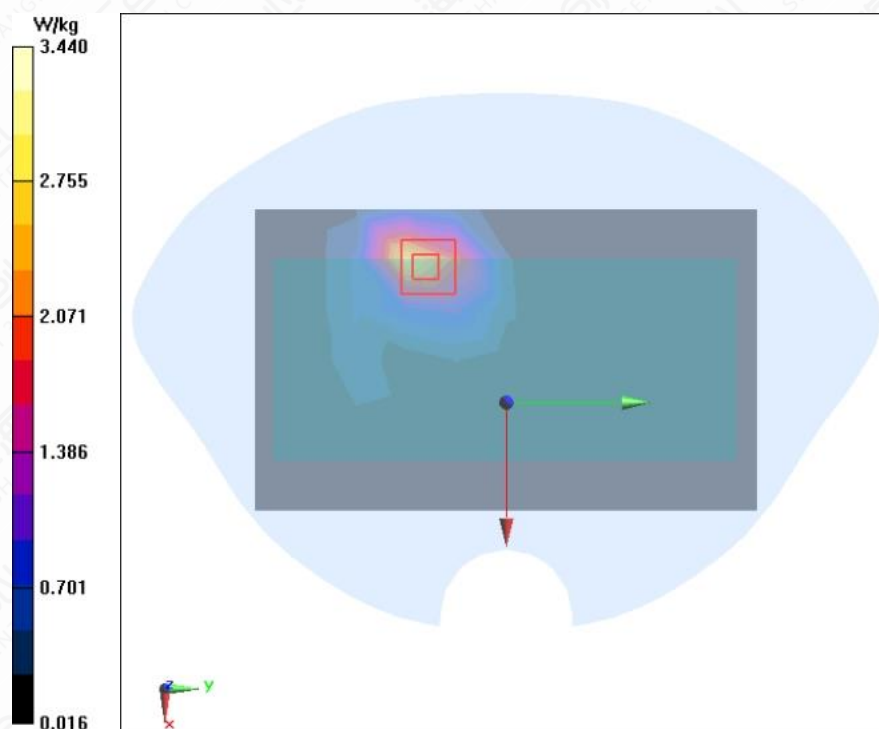


Figure A.1-6 WCDMA Band II RMC Front Side Mode Middle 0mm

WCDMA BandIV RMC Front Side Mode Middle 5mm

Date/Time: 2023/12/11

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1733 \text{ MHz}$; $\sigma = 1.314 \text{ S/m}$; $\epsilon_r = 38.841$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: WCDMA Band IV; Frequency: 1732.6 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1732.6 MHz

WCDMA BandIV RMC Front Side Mode Middle 5mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.04 W/kg

WCDMA BandIV RMC Front Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.59 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.882 W/kg ; SAR(10 g) = 0.503 W/kg

Maximum value of SAR (measured) = 1.23 W/kg

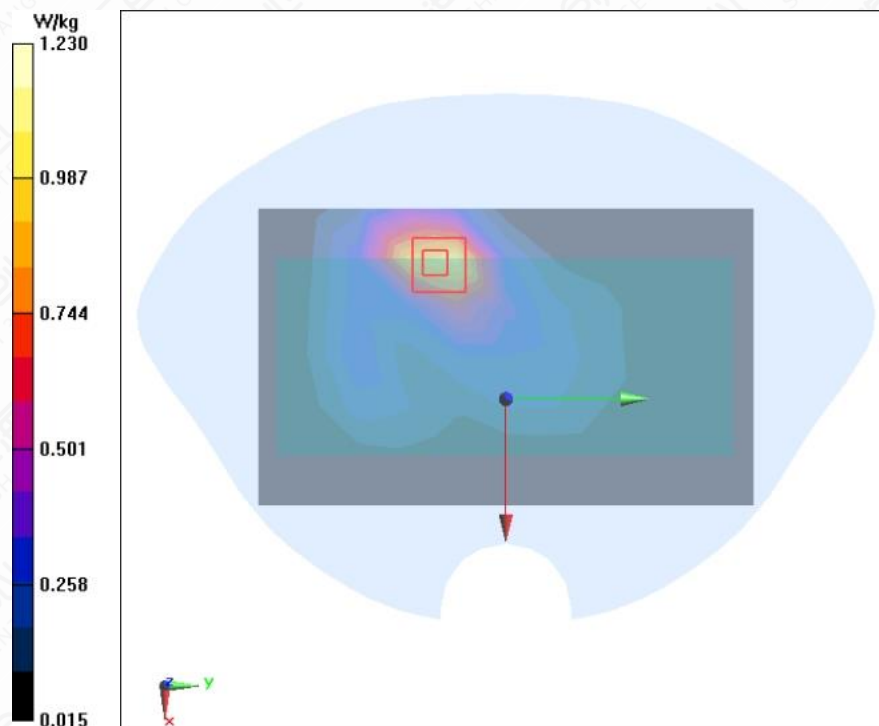


Figure A.1-7 WCDMA BandIV RMC Front Side Mode Middle 5mm

WCDMA BandIV RMC Right Side Mode Middle 0mm

Date/Time: 2023/12/11

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1733 \text{ MHz}$; $\sigma = 1.314 \text{ S/m}$; $\epsilon_r = 38.841$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: WCDMA Band IV; Frequency: 1732.6 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1732.6 MHz

WCDMA BandIV RMC Right Side Mode Middle 0mm/Area Scan (5x6x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.33 W/kg

WCDMA BandIV RMC Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.827 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 6.32 W/kg

SAR(1 g) = 2.68 W/kg ; SAR(10 g) = 1.19 W/kg

Maximum of SAR (measured) = 4.73 W/kg

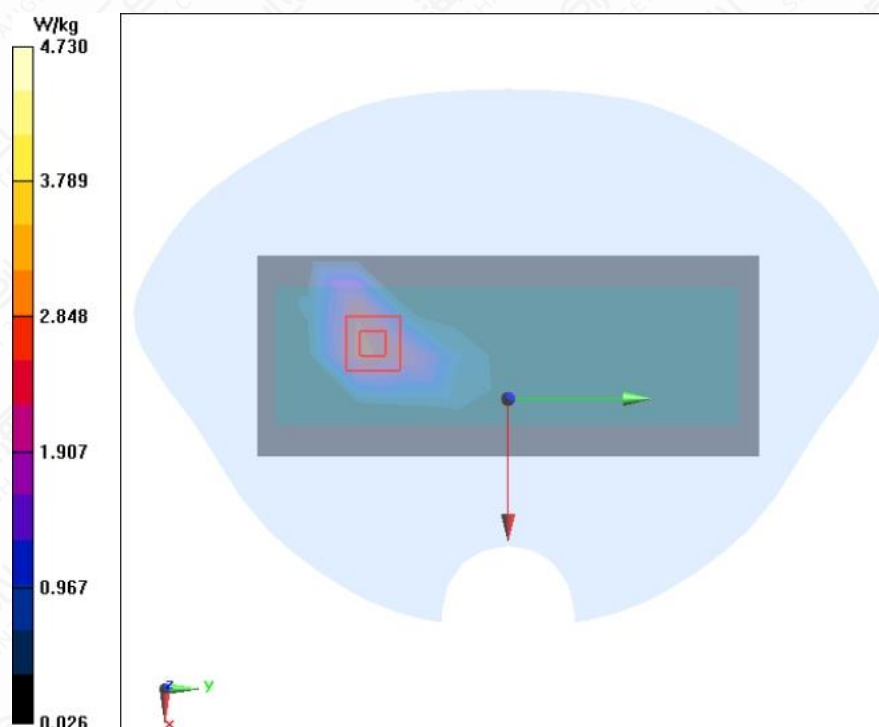


Figure A.1-8 WCDMA BandIV RMC Right Side Mode Middle 0mm

WCDMA Band V RMC Right Side Mode Middle 5mm

Date/Time: 2023/12/18

Electronics: DAE4 Sn1244

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 41.861$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: WCDMA Professional Band V; Frequency: 836.6 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 836.6 MHz

WCDMA Band V RMC Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.644 W/kg

WCDMA Band V RMC Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.45 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.961 W/kg

SAR(1 g) = 0.507 W/kg ; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.773 W/kg

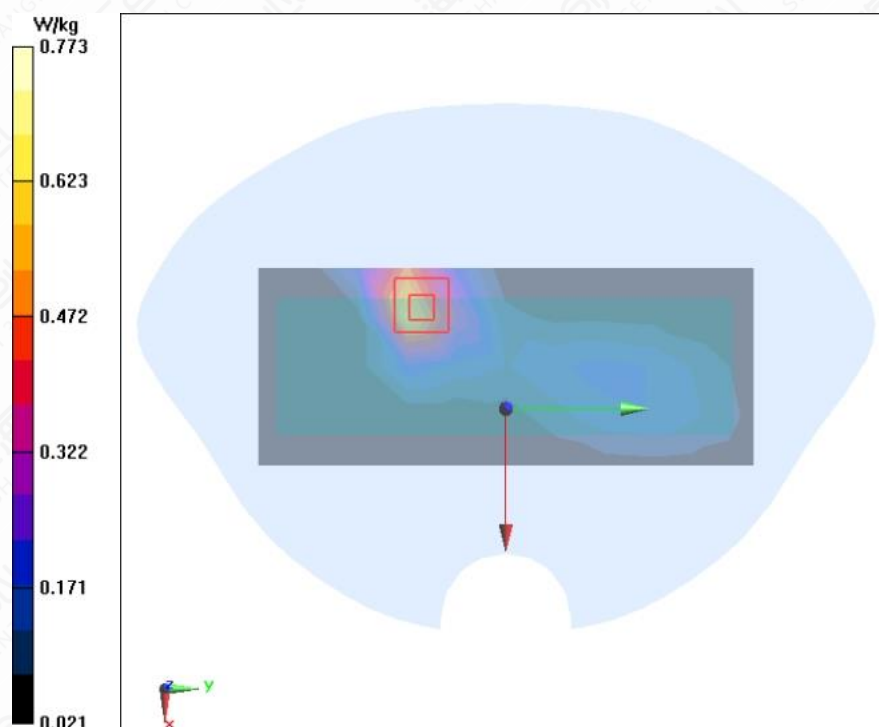


Figure A.1-9 WCDMA Band V RMC Right Side Mode Middle 5mm

WCDMA Band V RMC Front Side Mode Middle 0mm

Date/Time: 2023/12/18

Electronics: DAE4 Sn1244

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 41.861$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: WCDMA Professional Band V; Frequency: 836.6 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 836.6 MHz

WCDMA Band V RMC Front Side Mode Middle 0mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.10 W/kg

WCDMA Band V RMC Front Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.85 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.778 W/kg ; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 1.14 W/kg

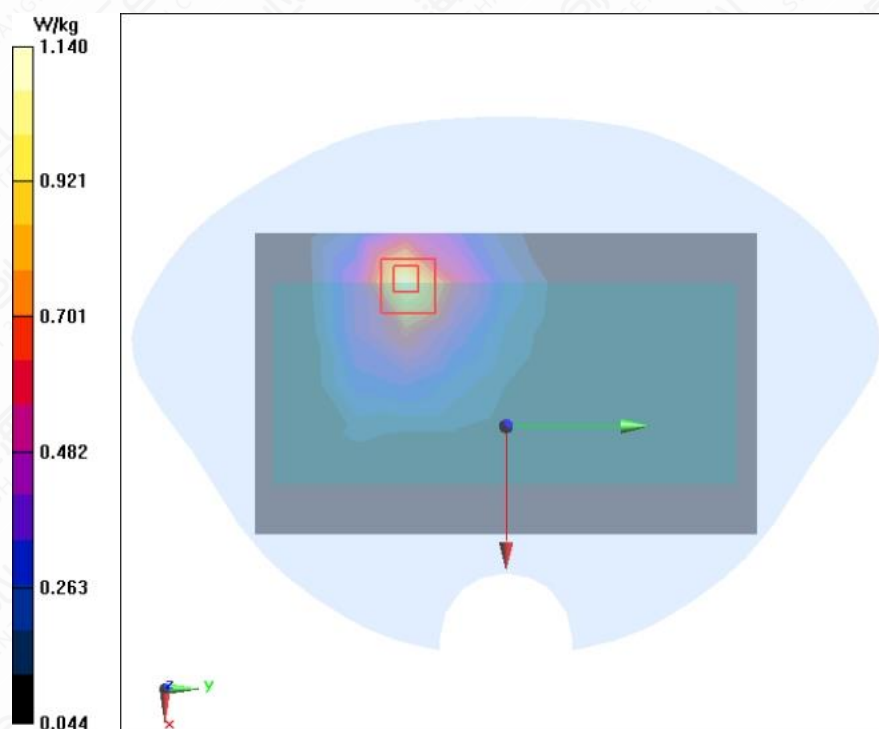


Figure A.1-10 WCDMA Band V RMC Front Side Mode Middle 0mm

LTE B2 20MHz 1RB 50offset Front Side Mode High 5mm

Date/Time: 2023/12/14

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.415 \text{ S/m}$; $\epsilon_r = 38.451$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 2 Professional 1900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1900 MHz

LTE B2 20MHz 1RB 50offset Front Side Mode High 5mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.11 W/kg

LTE B2 20MHz 1RB 50offset Front Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.10 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.843 W/kg ; SAR(10 g) = 0.488 W/kg

Maximum value of SAR (measured) = 1.22 W/kg

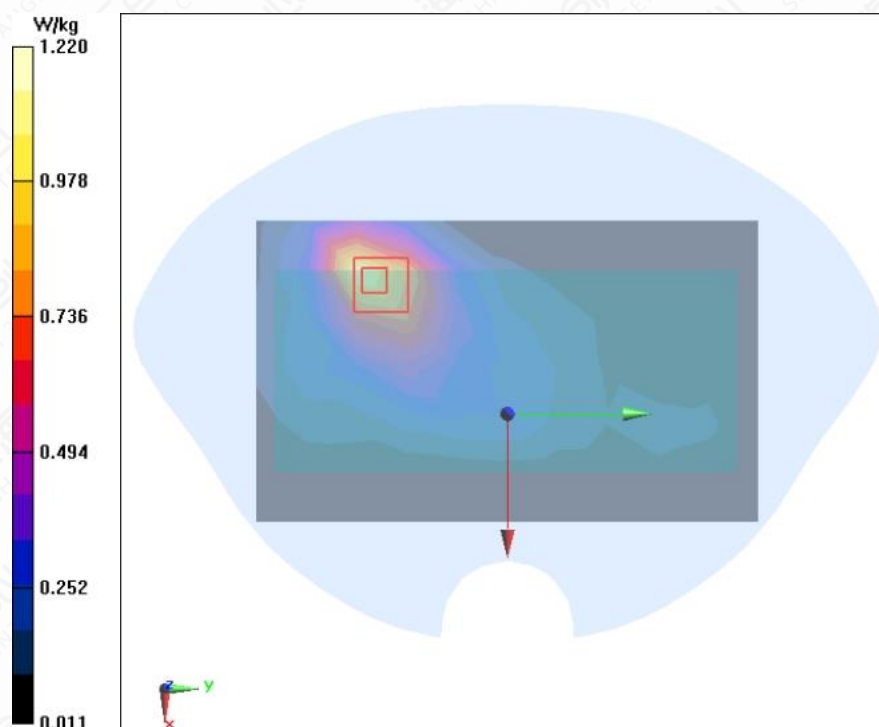


Figure A.1-11 LTE B2 20MHz 1RB 50offset Front Side Mode High 5mm

LTE B2 20MHz 1RB 50offset Front Side Mode Middle 0mm

Date/Time: 2023/12/14

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.404 \text{ S/m}$; $\epsilon_r = 38.494$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 2 Professional 1900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1880 MHz

LTE B2 20MHz 1RB 50offset Front Side Mode Middle 0mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.72 W/kg

LTE B2 20MHz 1RB 50offset Front Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.624 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.11 W/kg

SAR(1 g) = 2.12 W/kg ; SAR(10 g) = 1.09 W/kg

Maximum value of SAR (measured) = 3.13 W/kg

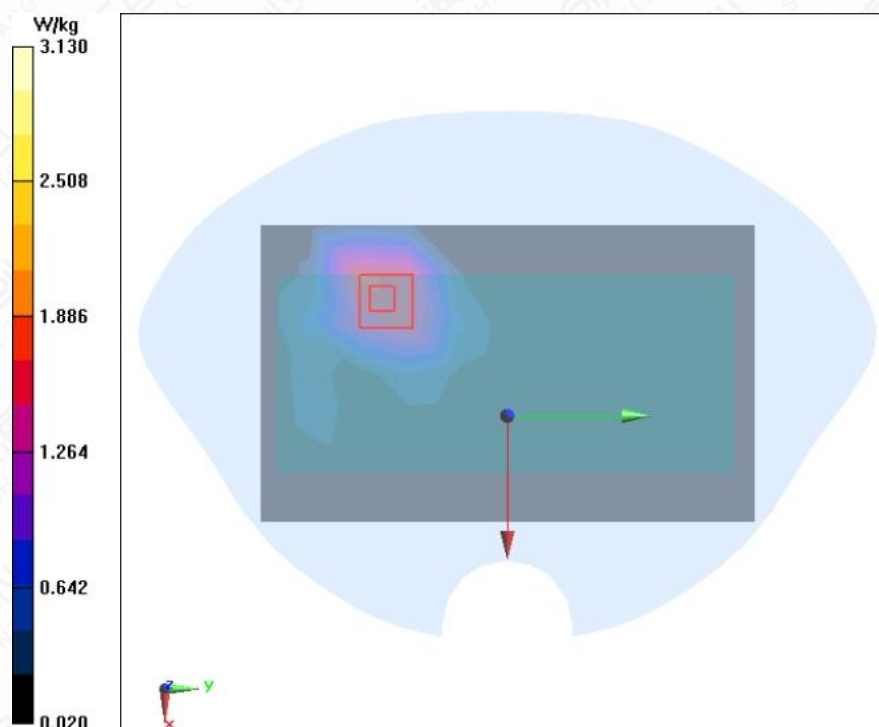


Figure A.1-12 LTE B2 20MHz 1RB 50offset Front Side Mode Middle 0mm

LTE B4 20MHz 1RB 50offset Front Side Mode High 5mm

Date/Time: 2023/12/12

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.327 \text{ S/m}$; $\epsilon_r = 38.518$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 4 Professional 1900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1745 MHz

LTE B4 20MHz 1RB 50offset Front Side Mode High 5mm/Area Scan (7x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.991 W/kg

LTE B4 20MHz 1RB 50offset Front Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.20 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.780 W/kg ; SAR(10 g) = 0.452 W/kg

Maximum value of SAR (measured) = 1.11 W/kg

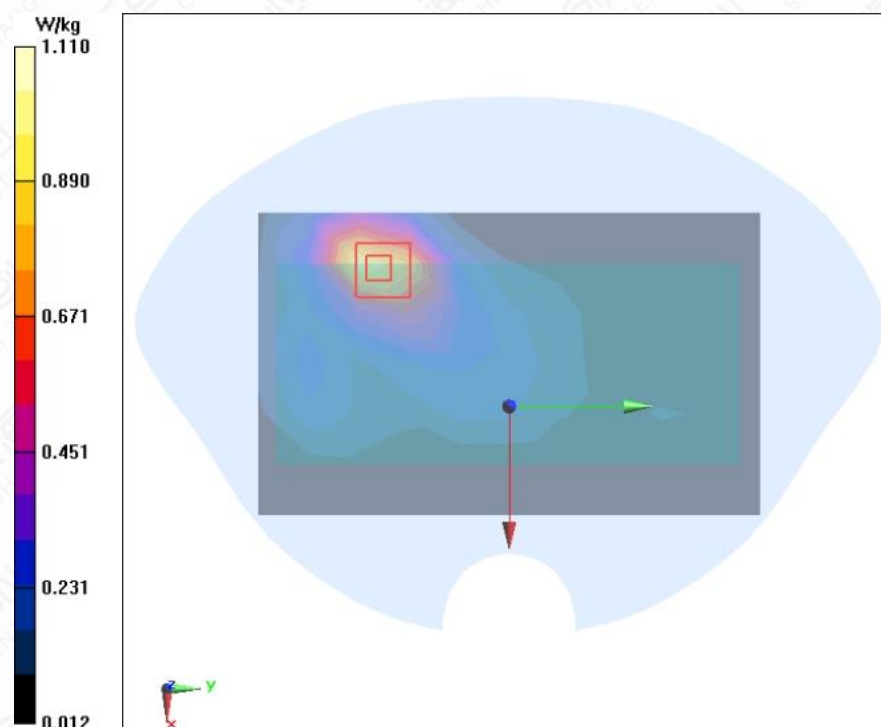


Figure A.1-13 LTE B4 20MHz 1RB 50offset Front Side Mode High 5mm

LTE B4 20MHz 1RB 50offset Front Side Mode Middle 0mm

Date/Time: 2023/12/12

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.321$ S/m; $\epsilon_r = 38.524$; $\rho = 1000$ kg/m³

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 4 Professional 1900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1732.5 MHz

LTE B4 20MHz 1RB 50offset Front Side Mode Middle 0mm/Area Scan (7x11x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.64 W/kg

LTE B4 20MHz 1RB 50offset Front Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.414 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 1.89 W/kg; SAR(10 g) = 0.996 W/kg

Maximum value of SAR (measured) = 2.81 W/kg

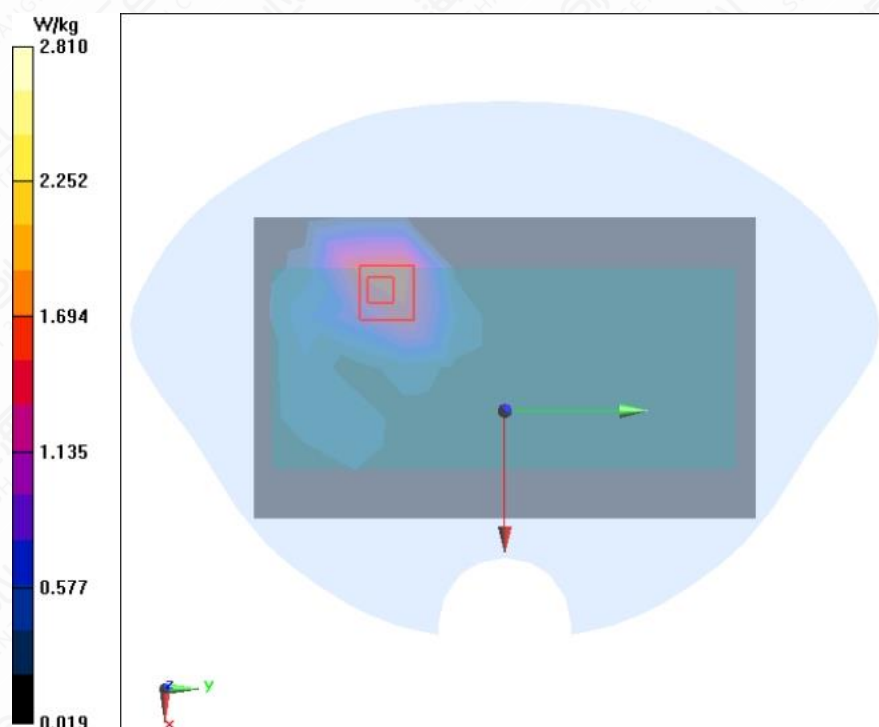


Figure A.1-14 LTE B4 20MHz 1RB 50offset Front Side Mode Middle 0mm

LTE B7 20MHz 50RB 0offset Front Side Mode Low 5mm

Date/Time: 2023/12/13

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2510 \text{ MHz}$; $\sigma = 1.865 \text{ S/m}$; $\epsilon_r = 37.566$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 7 Professional 2600MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2510 MHz

LTE B7 20MHz 50RB 0offset Front Side Mode Low 5mm/Area Scan (7x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.843 W/kg

LTE B7 20MHz 50RB 0offset Front Side Mode Low 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.944 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.796 W/kg ; SAR(10 g) = 0.422 W/kg

Maximum value of SAR (measured) = 1.24 W/kg

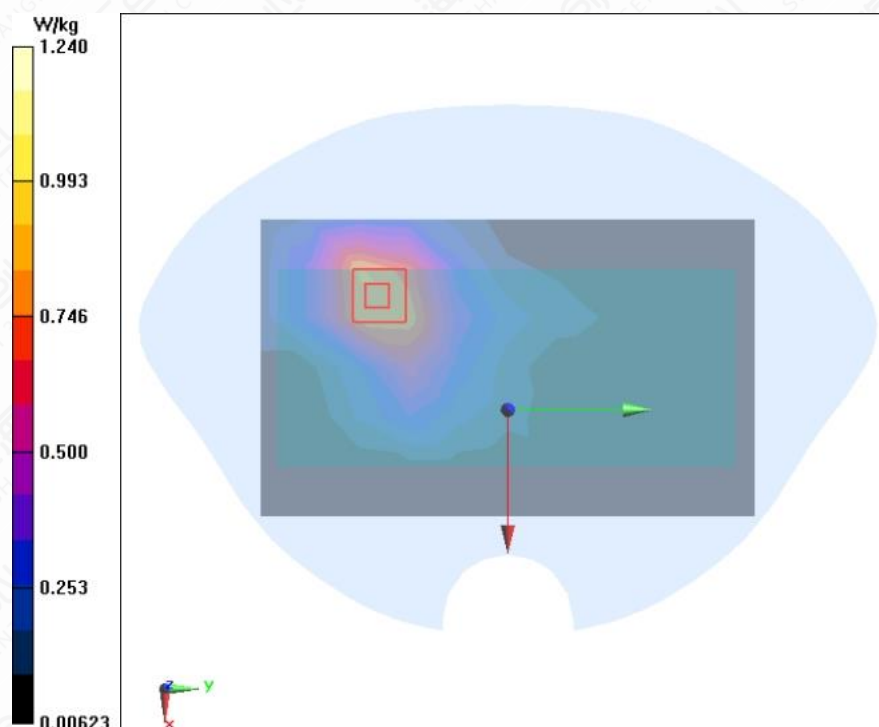


Figure A.1-15 LTE B7 20MHz 50RB 0offset Front Side Mode Low 5mm

LTE B7 20MHz 1RB 50offset Right Side Mode Middle 0mm

Date/Time: 2023/12/13

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 1.883 \text{ S/m}$; $\epsilon_r = 37.531$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 7 Professional 2600MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2535 MHz

LTE B7 20MHz 1RB 50offset Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 1.66 W/kg

LTE B7 20MHz 1RB 50offset Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.887 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 1.61 W/kg ; SAR(10 g) = 0.699 W/kg

Maximum value of SAR (measured) = 2.75 W/kg

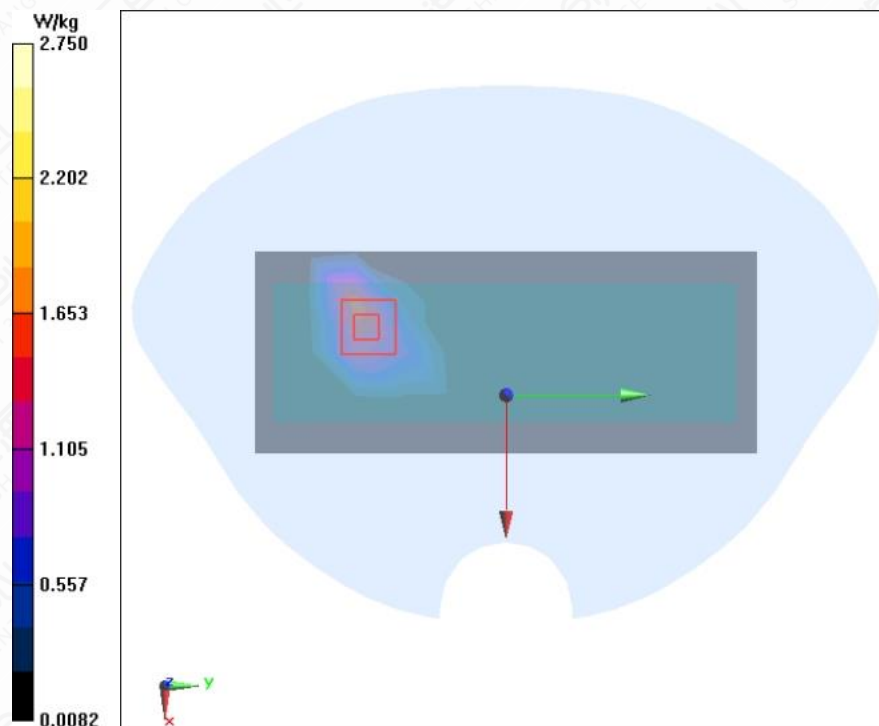


Figure A.1-16 LTE B7 20MHz 1RB 50offset Right Side Mode Middle 0mm

LTE B26 15MHz 1RB 38offset Right Side Mode High 5mm

Date/Time: 2023/12/18

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 841.5 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.843$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 26 Professional 900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 841.5 MHz

LTE B26 15MHz 1RB 38offset Right Side Mode High 5mm/Area Scan (5x6x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.760 W/kg

LTE B26 15MHz 1RB 38offset Right Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.04 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.796 W/kg ; SAR(10 g) = 0.430 W/kg

Maximum value of SAR (measured) = 1.24 W/kg

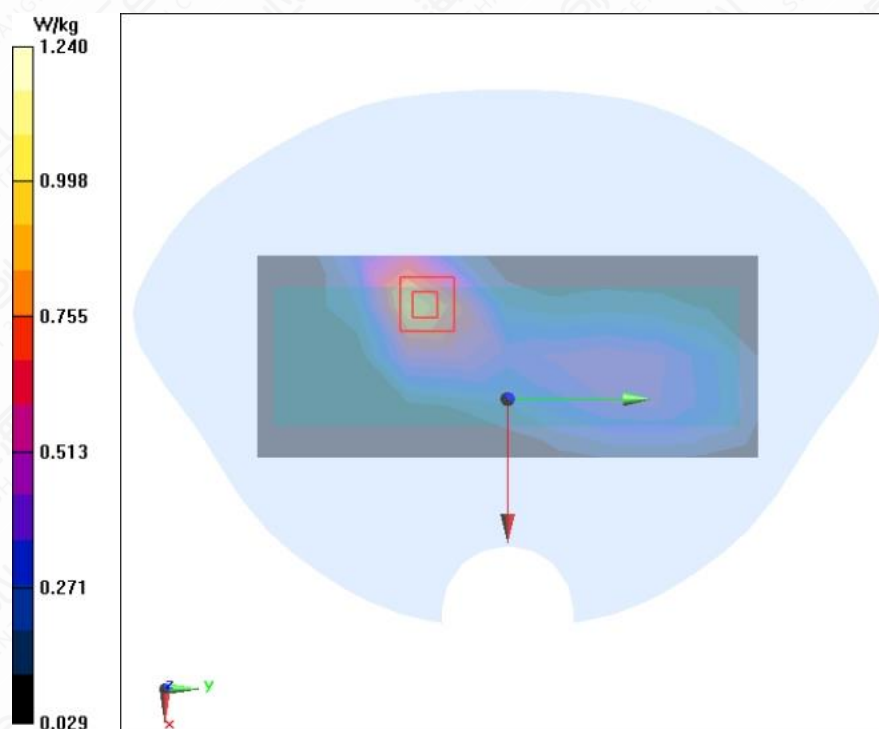


Figure A.1-17 LTE B26 15MHz 1RB 38offset Right Side Mode High 5mm

LTE B26 15MHz 36RB 0offset Right Side Mode Middle 0mm

Date/Time: 2023/12/18

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 831.5 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 41.879$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 26 Professional 900MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 831.5 MHz

LTE B26 15MHz 36RB 0offset Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.00 W/kg

LTE B26 15MHz 36RB 0offset Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.97 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.91 W/kg

SAR(1 g) = 1.82 W/kg ; SAR(10 g) = 0.926 W/kg

Maximum of SAR (measured) = 3.07 W/kg

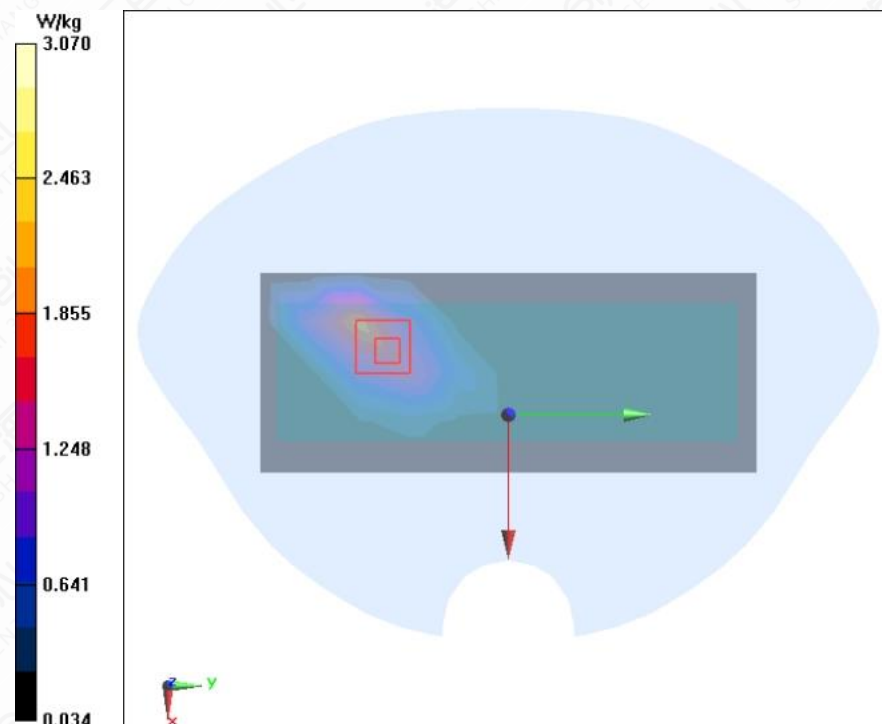


Figure A.1-18 LTE B26 15MHz 36RB 0offset Right Side Mode Middle 0mm

LTE B40 10MHz 1RB 25offset Front Side Mode Middle 5mm

Date/Time: 2023/12/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2310 \text{ MHz}$; $\sigma = 1.721 \text{ S/m}$; $\epsilon_r = 37.998$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.1°C

Communication System: LTE Band 40; Frequency: 2310 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.32, 8.32, 8.32) @ 2310 MHz

LTE B40 10MHz 1RB 25offset Front Side Mode Middle 5mm/Area Scan (7x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.427 W/kg

LTE B40 10MHz 1RB 25offset Front Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.077 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.741 W/kg

SAR(1 g) = 0.390 W/kg ; SAR(10 g) = 0.206 W/kg

Maximum of SAR (measured) = 0.578 W/kg

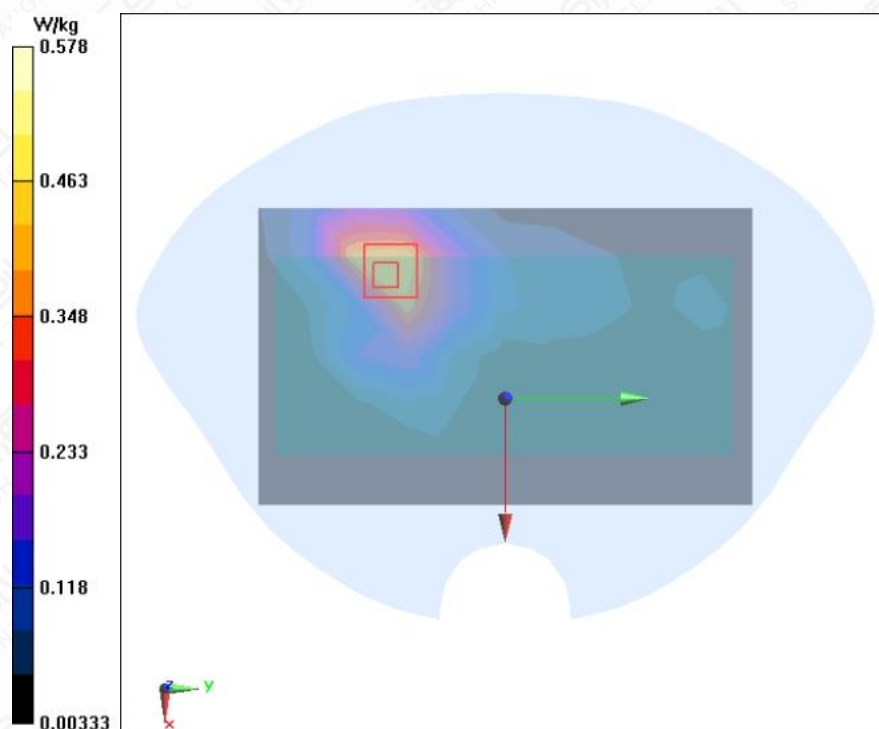


Figure A.1-19 LTE B40 10MHz 1RB 25offset Front Side Mode Middle 5mm

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm

Date/Time: 2023/12/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2310 \text{ MHz}$; $\sigma = 1.721 \text{ S/m}$; $\epsilon_r = 37.998$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.1°C

Communication System: LTE Band 40; Frequency: 2310 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.32, 8.32, 8.32) @ 2310 MHz

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 2.01 W/kg

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.230 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.69 W/kg

SAR(1 g) = 1.14 W/kg ; SAR(10 g) = 0.483 W/kg

Maximum of SAR (measured) = 2.16 W/kg

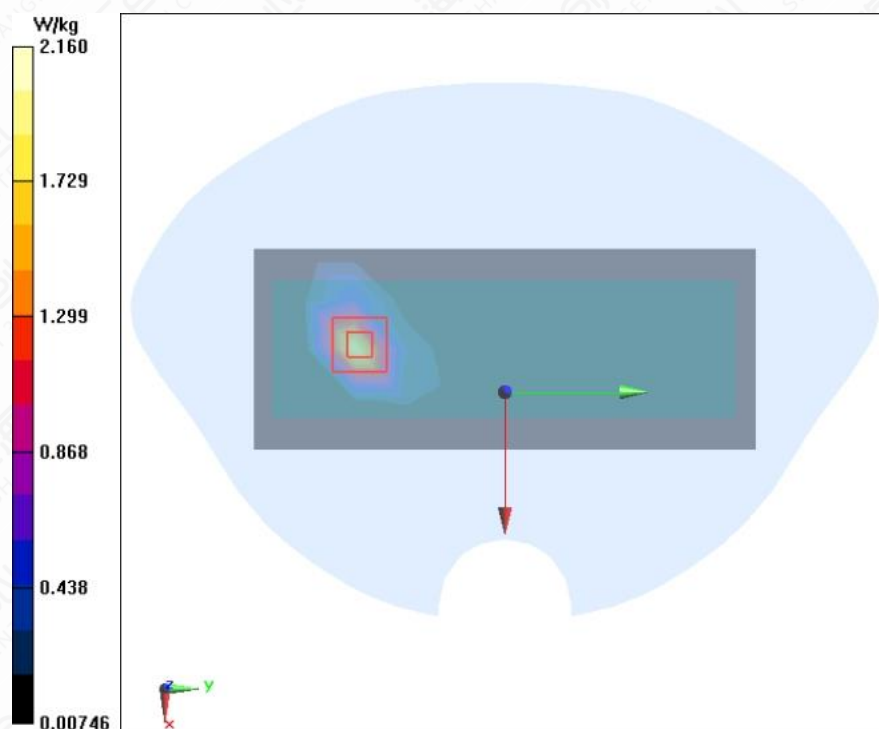


Figure A.1-20 LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 5mm

Date/Time: 2023/12/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2355 \text{ MHz}$; $\sigma = 1.754 \text{ S/m}$; $\epsilon_r = 37.928$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.1°C

Communication System: LTE Band 40; Frequency: 2355 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.32, 8.32, 8.32) @ 2355 MHz

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.842 W/kg

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.848 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.514 W/kg ; SAR(10 g) = 0.236 W/kg

Maximum value of SAR (measured) = 0.858 W/kg

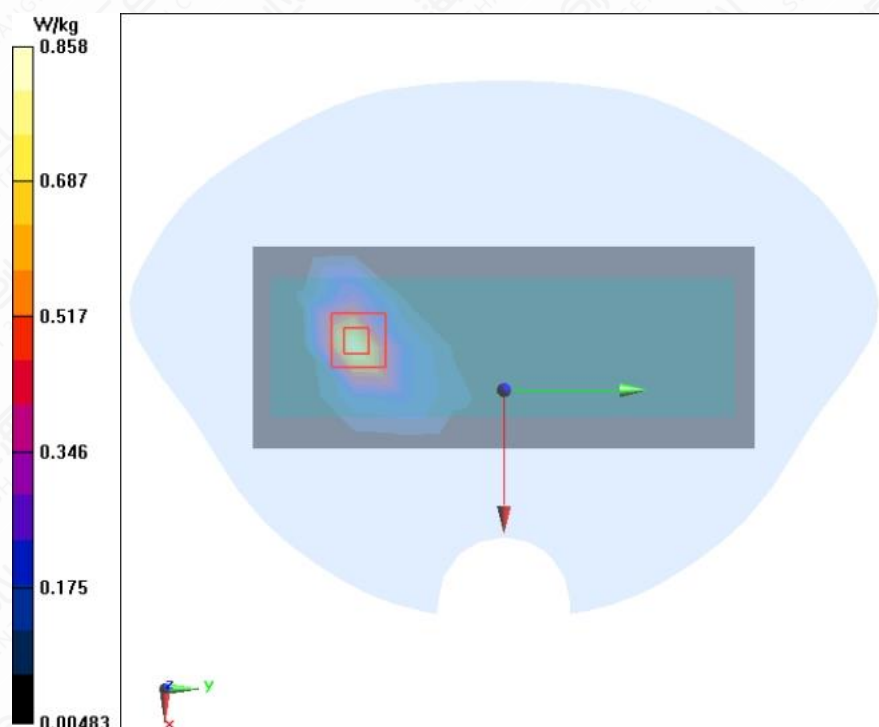


Figure A.1-21 LTE B40 10MHz 1RB 25offset Right Side Mode Middle 5mm

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm

Date/Time: 2023/12/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2355 \text{ MHz}$; $\sigma = 1.754 \text{ S/m}$; $\epsilon_r = 37.928$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.1°C

Communication System: LTE Band 40; Frequency: 2355 MHz ; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.32, 8.32, 8.32) @ 2355 MHz

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 1.02 W/kg

LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.682 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.56 W/kg

SAR(1 g) = 1.13 W/kg ; SAR(10 g) = 0.491 W/kg

Maximum of SAR (measured) = 2.06 W/kg

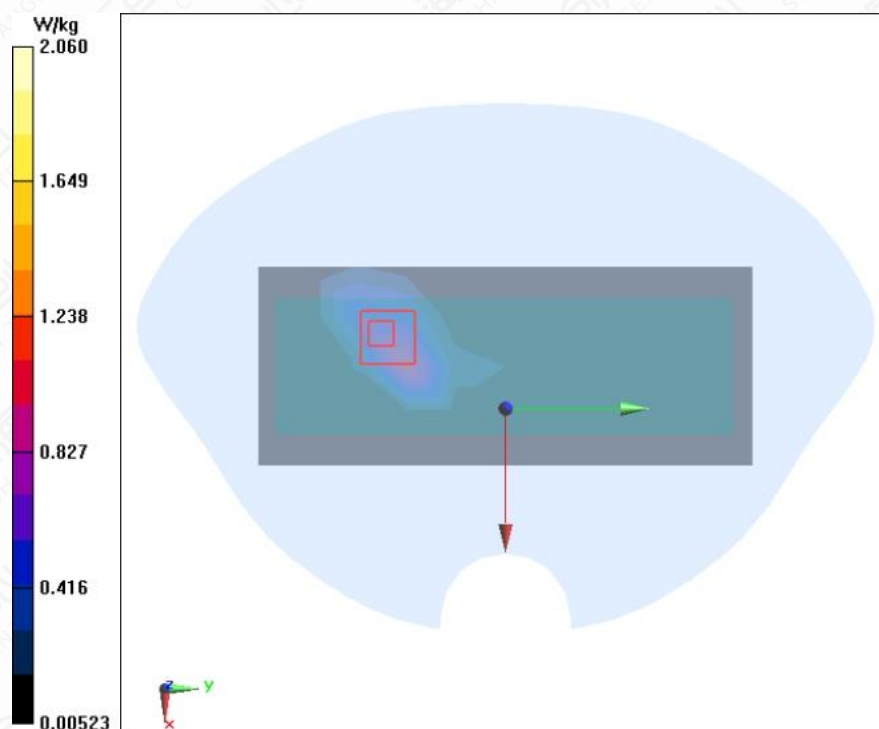


Figure A.1-22 LTE B40 10MHz 1RB 25offset Right Side Mode Middle 0mm

LTE B41 20MHz 1RB 50offset Right Side Mode Low 5mm

Date/Time: 2024/1/22

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2506 \text{ MHz}$; $\sigma = 1.86 \text{ S/m}$; $\epsilon_r = 37.749$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 20.9°C Liquid Temperature: 20.0°C

Communication System: LTE Band 41 Professional 2600MHz; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2506 MHz

LTE B41 20MHz 1RB 50offset Right Side Mode Low 5mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.731 W/kg

LTE B41 20MHz 1RB 50offset Right Side Mode Low 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.485 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.635 W/kg ; SAR(10 g) = 0.301 W/kg

Maximum value of SAR (measured) = 0.964 W/kg

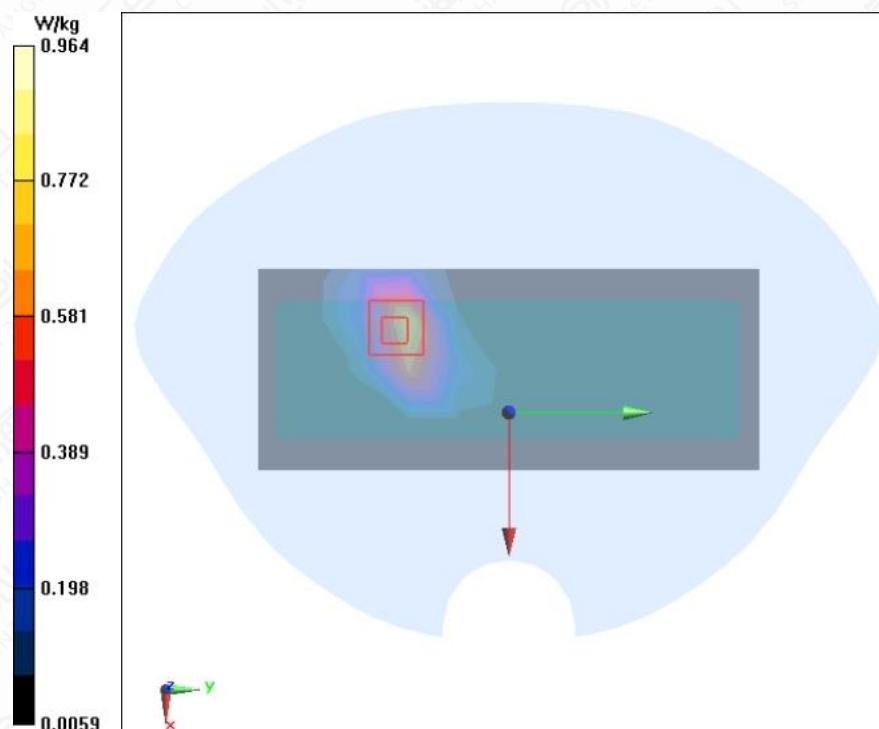


Figure A.1-23 LTE B41 20MHz 1RB 50offset Right Side Mode Low 5mm

LTE B41 20MHz 1RB 50offset Right Side Mode Middle 0mm

Date/Time: 2023/12/13

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2593 \text{ MHz}$; $\sigma = 1.925 \text{ S/m}$; $\epsilon_r = 37.457$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: LTE Band 41 Professional 2600MHz; Duty Cycle: 1:2

Probe: EX3DV4 - SN7633ConvF(7.86, 7.86, 7.86) @ 2593 MHz

LTE B41 20MHz 1RB 50offset Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.953 W/kg

LTE B41 20MHz 1RB 50offset Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.774 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.70 W/kg

SAR(1 g) = 1.24 W/kg ; SAR(10 g) = 0.541 W/kg

Maximum value of SAR (measured) = 1.97 W/kg

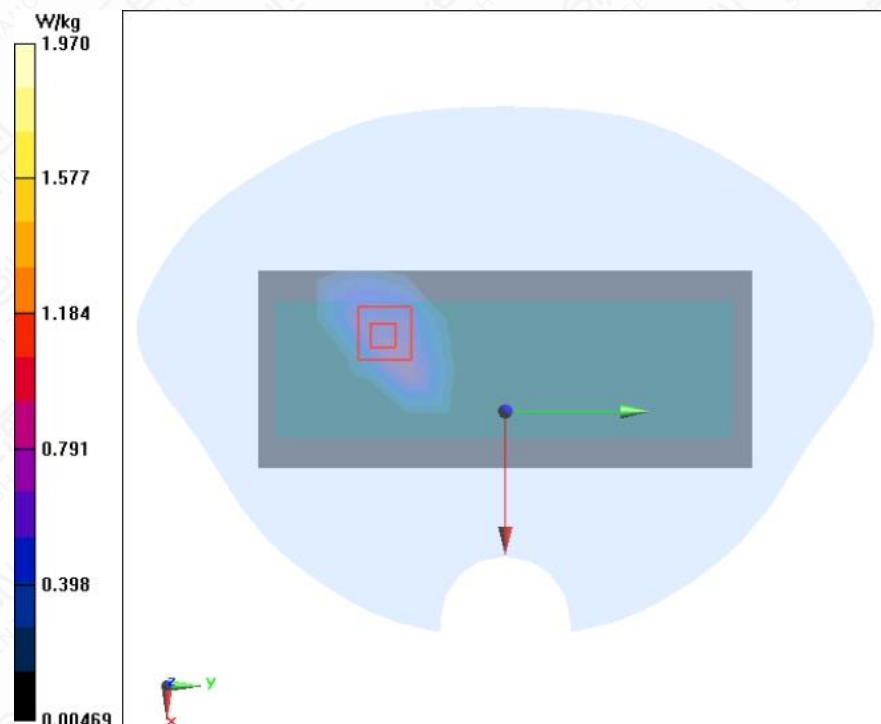


Figure A.1-24 LTE B41 20MHz 1RB 50offset Right Side Mode Middle 0mm

Wi-Fi 2.4G 802.11b Right Side Mode Middle 5mm

Date/Time: 2023/12/20

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.799 \text{ S/m}$; $\epsilon_r = 38.3236$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: Wifi 2450 2600MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2437 MHz

Wi-Fi 2.4G 802.11b Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.870 W/kg

Wi-Fi 2.4G 802.11b Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.303 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.489 W/kg ; SAR(10 g) = 0.201 W/kg

Maximum of SAR (measured) = 0.847 W/kg

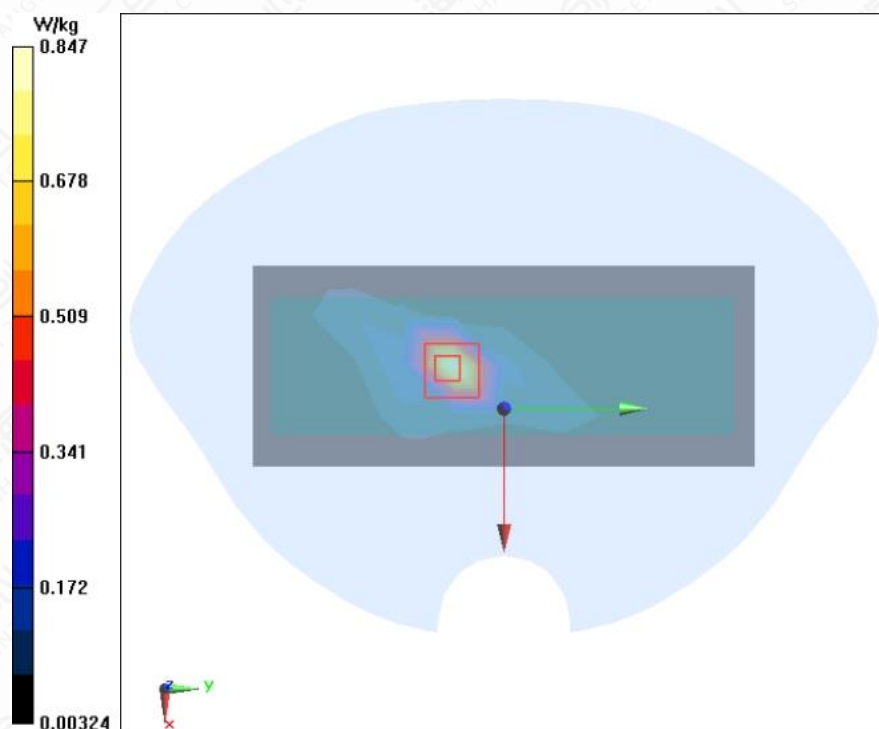


Figure A.1-25 Wi-Fi 2.4G 802.11b Right Side Mode Middle 5mm

Wi-Fi 2.4G 802.11b Right Side Mode Middle 0mm

Date/Time: 2023/12/20

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.799 \text{ S/m}$; $\epsilon_r = 38.3236$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: WLAN 2450 2500MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2437 MHz

Wi-Fi 2.4G 802.11b Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 1.28 W/kg

Wi-Fi 2.4G 802.11b Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.92 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 0.728 W/kg ; SAR(10 g) = 0.281 W/kg

Maximum of SAR (measured) = 1.56 W/kg

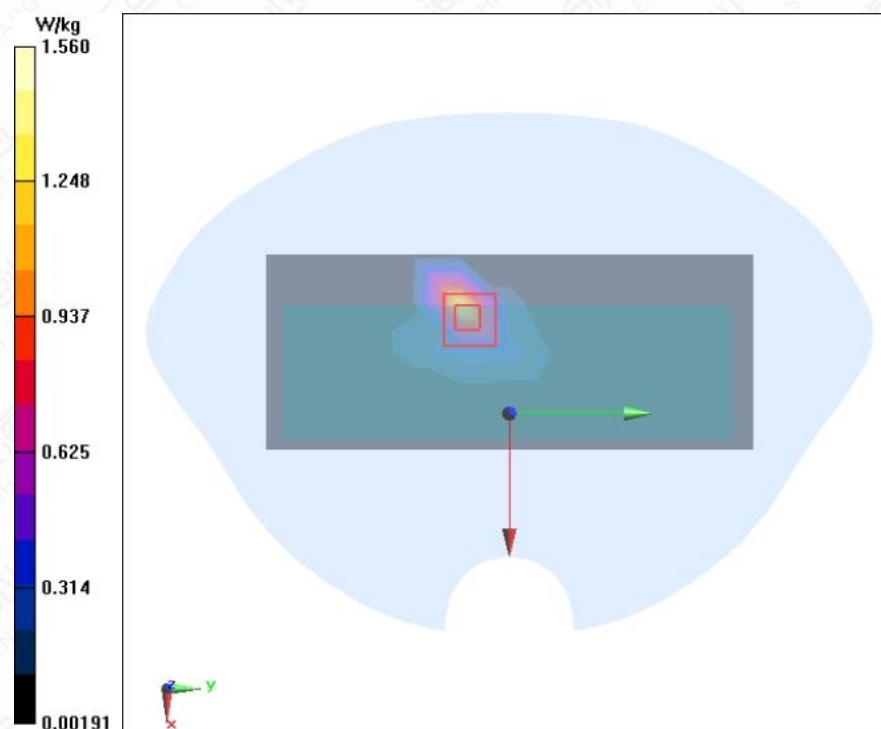


Figure A.1-26 Wi-Fi 2.4G 802.11b Right Side Mode Middle 0mm

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 5mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 4.664 \text{ S/m}$; $\epsilon_r = 35.778$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5GHz U-NII-1 5000MHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5180 MHz

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.534 W/kg

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.015 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.823 W/kg

SAR(1 g) = 0.190 W/kg ; SAR(10 g) = 0.067 W/kg

Maximum of SAR (measured) = 0.430 W/kg

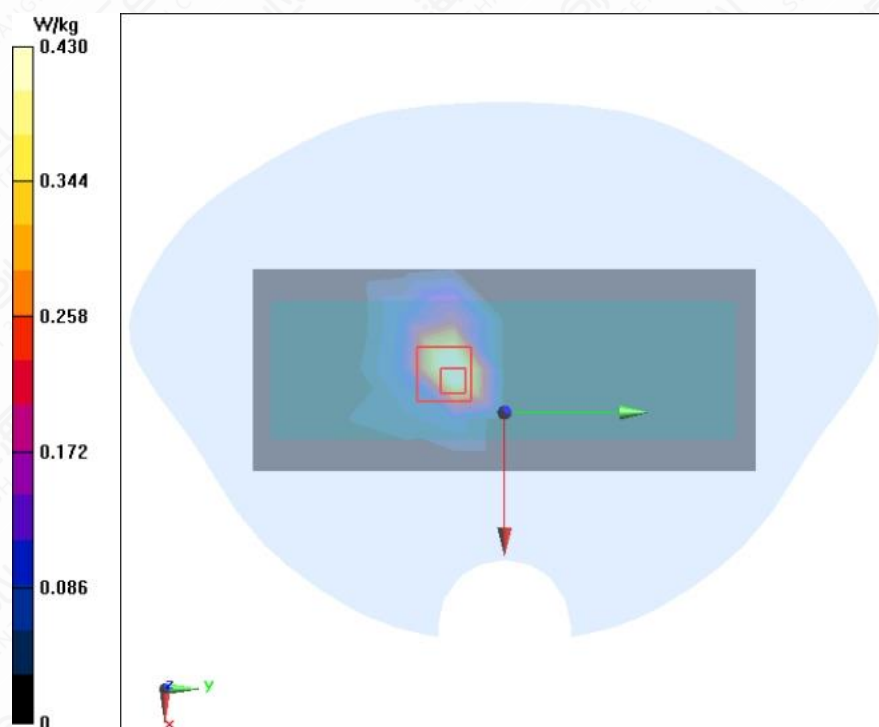


Figure A.1-27 Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 5mm

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 0mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 4.664 \text{ S/m}$; $\epsilon_r = 35.778$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5GHz U-NII-1 5000MHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5180 MHz

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.93 W/kg

Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.959 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.24 W/kg

SAR(1 g) = 0.667 W/kg ; SAR(10 g) = 0.174 W/kg

Maximum of SAR (measured) = 1.54 W/kg

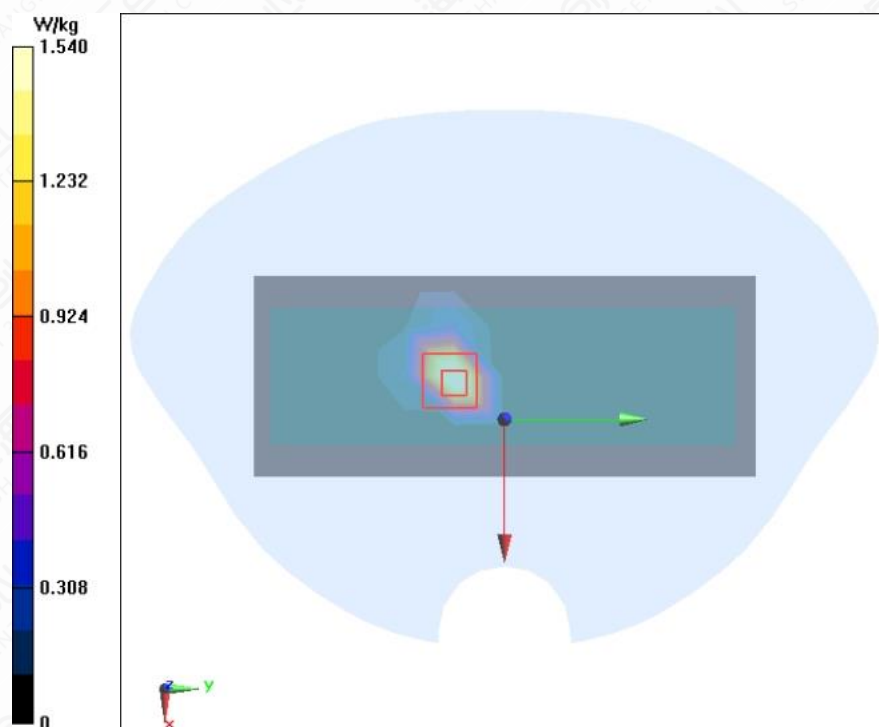


Figure A.1-28 Wi-Fi 5G U-NII-1 802.11a Right Side Mode Middle 0mm

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 5mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.822$ S/m; $\epsilon_r = 35.496$; $\rho = 1000$ kg/m³

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5G-U-NII-2A 5GHz; Frequency: 5320 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5320 MHz

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 5mm/Area Scan (5x11x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.732 W/kg

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.292 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.086 W/kg

Maximum of SAR (measured) = 0.818 W/kg

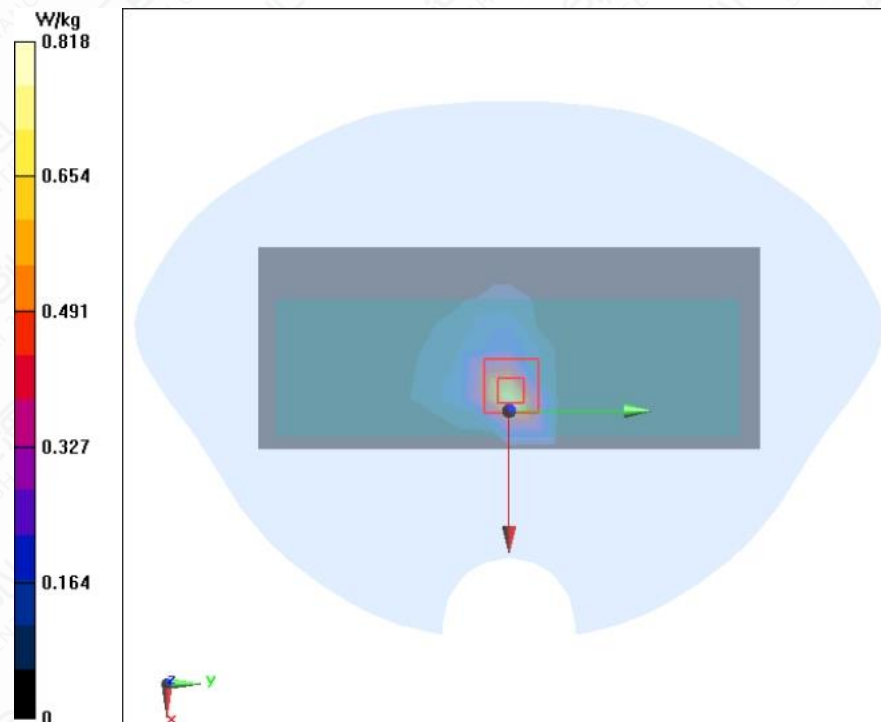


Figure A.1-29 Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 5mm

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 0mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5320 \text{ MHz}$; $\sigma = 4.822 \text{ S/m}$; $\epsilon_r = 35.496$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5G-U-NII-2A 5GHz; Frequency: 5320 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5320 MHz

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 0mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.766 W/kg

Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 8.3204 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 4.38 W/kg

SAR(1 g) = 0.893 W/kg ; SAR(10 g) = 0.226 W/kg

Maximum of SAR (measured) = 2.71 W/kg

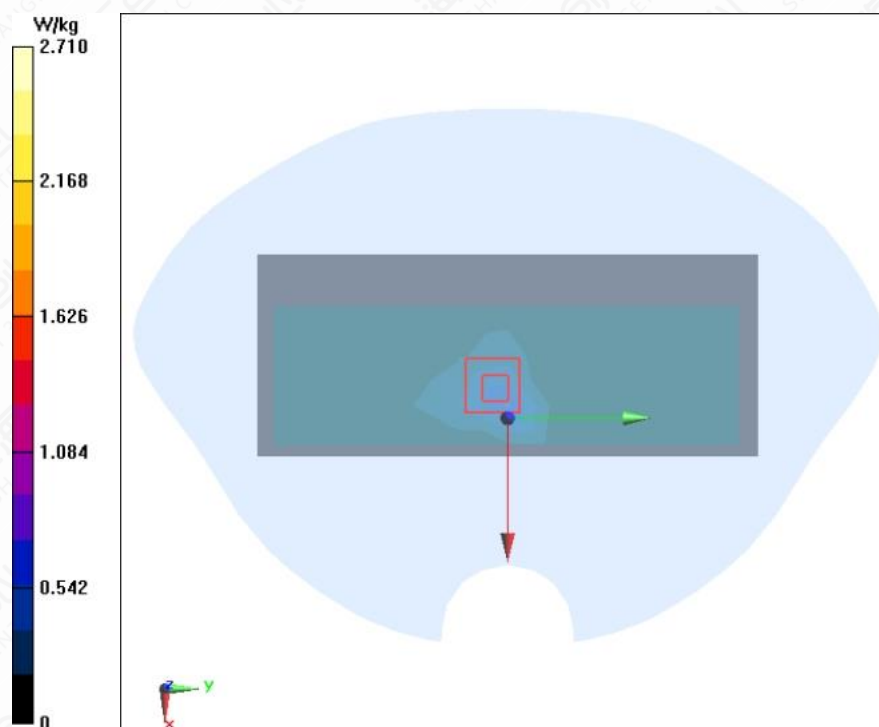


Figure A.1-30 Wi-Fi 5G U-NII-2A 802.11a Right Side Mode High 0mm

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 5mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.263 \text{ S/m}$; $\epsilon_r = 34.737$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5G-U-NII-2C 5GHz; Frequency: 5700 MHz ; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.17, 5.17, 5.17) @ 5700 MHz

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 5mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.655 W/kg

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 12.18 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.284 W/kg ; SAR(10 g) = 0.080 W/kg

Maximum of SAR (measured) = 0.663 W/kg

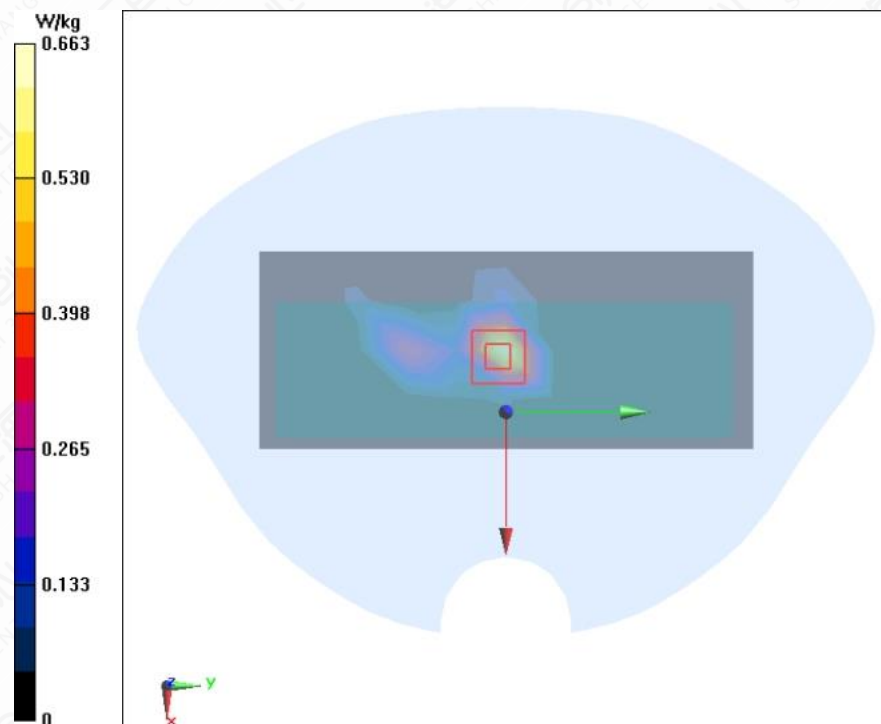


Figure A.1-31 Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 5mm

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 0mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.263 \text{ S/m}$; $\epsilon_r = 34.737$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5G-U-NII-2C 5GHz; Frequency: 5700 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.17, 5.17, 5.17) @ 5700 MHz

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 0mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.728 W/kg

Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 12.64 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 4.19 W/kg

SAR(1 g) = 0.800 W/kg ; SAR(10 g) = 0.218 W/kg

Maximum of SAR (measured) = 2.30 W/kg

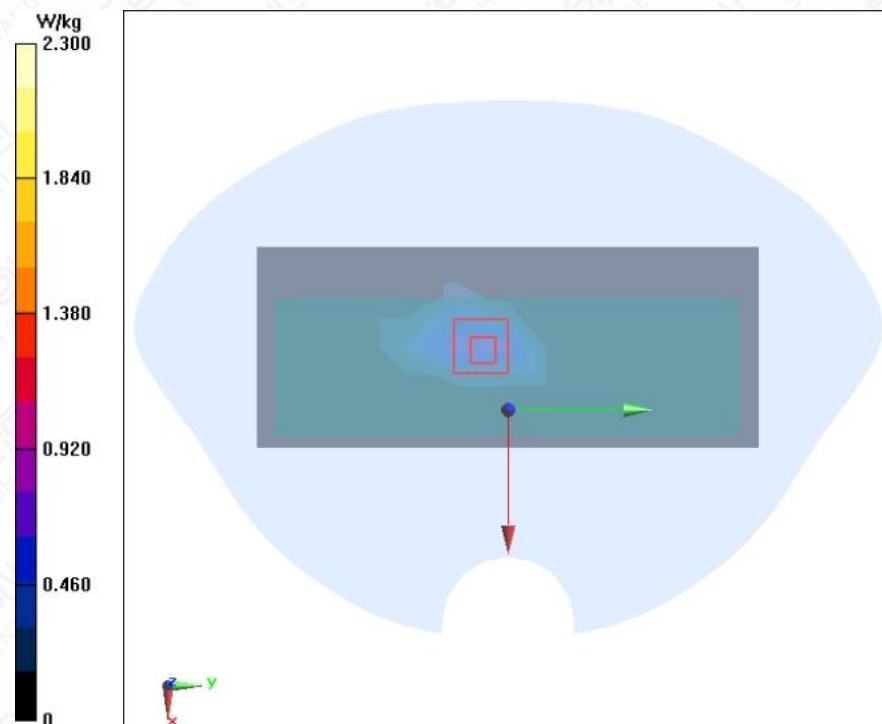


Figure A.1-32 Wi-Fi 5G U-NII-2C 802.11a Right Side Mode High 0mm

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 5mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.316 \text{ S/m}$; $\epsilon_r = 34.649$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5GHz U-NII-3 5000MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.22, 5.22, 5.22) @ 5745 MHz

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.734 W/kg

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 2.291 V/m ; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.297 W/kg ; SAR(10 g) = 0.091 W/kg

Maximum of SAR (measured) = 0.681 W/kg

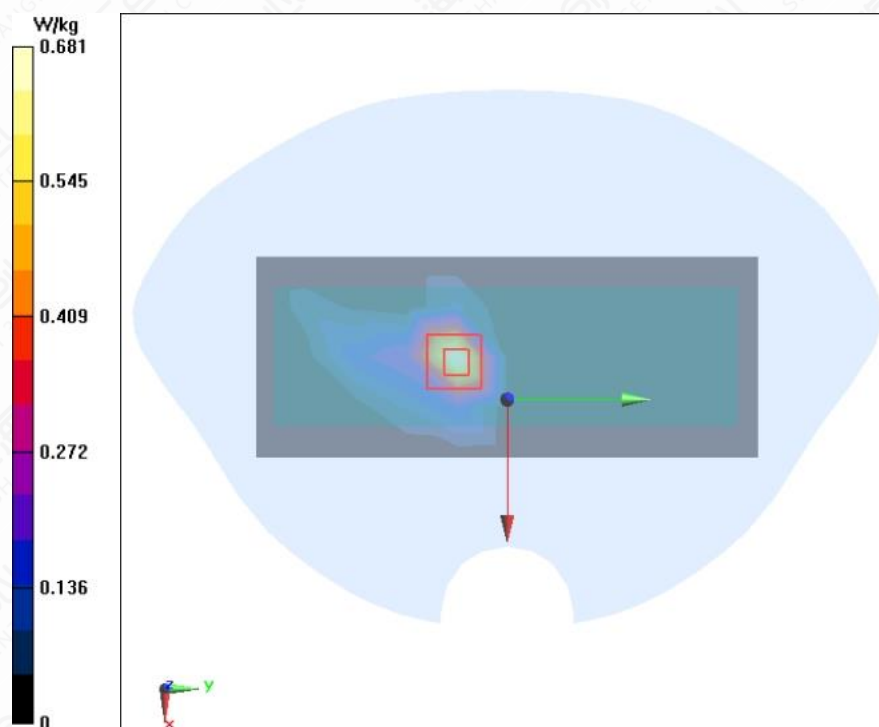


Figure A.1-33 Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 5mm

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 0mm

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.316 \text{ S/m}$; $\epsilon_r = 34.649$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.2°C

Communication System: 5G-U-NII-3 5GHz; Frequency: 5745 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.22, 5.22, 5.22) @ 5745 MHz

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.853 W/kg

Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 13.63 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 4.51 W/kg

SAR(1 g) = 0.874 W/kg ; SAR(10 g) = 0.224 W/kg

Maximum of SAR (measured) = 2.13 W/kg

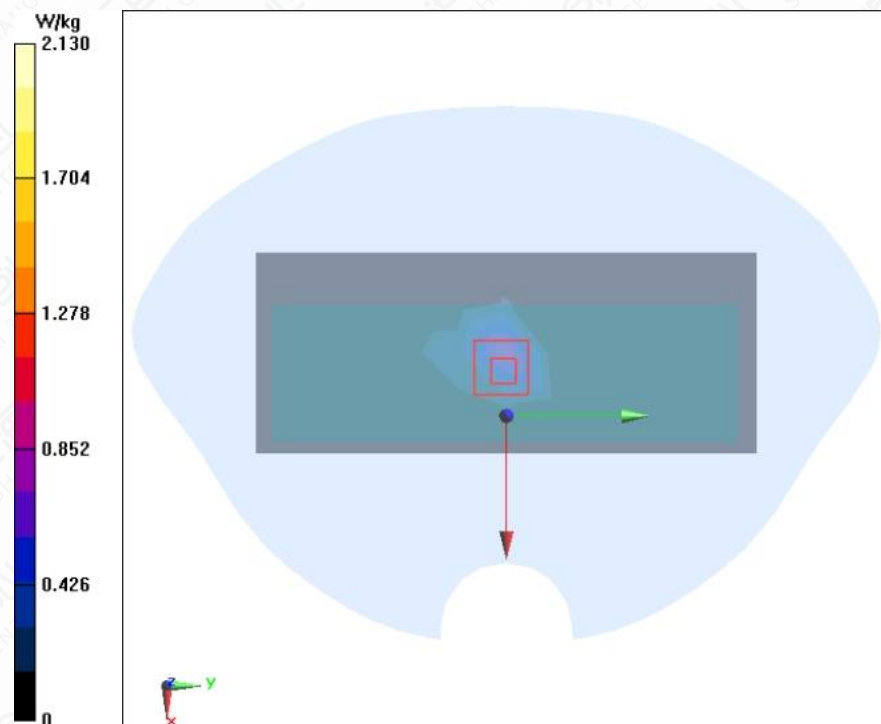


Figure A.1-34 Wi-Fi 5G U-NII-3 802.11a Right Side Mode Middle 0mm

BT DH5 Right Side Mode Middle 5mm

Date/Time: 2023/12/20

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2480 \text{ MHz}$; $\sigma = 1.833 \text{ S/m}$; $\epsilon_r = 38.162$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: Bluetooth 2500MHz; Frequency: 2480 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2480 MHz

BT DH5 Right Side Mode Middle 5mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.160 W/kg

BT DH5 Right Side Mode Middle 5mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.497 V/m ; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.116 W/kg ; SAR(10 g) = 0.044 W/kg

Maximum of SAR (measured) = 0.204 W/kg

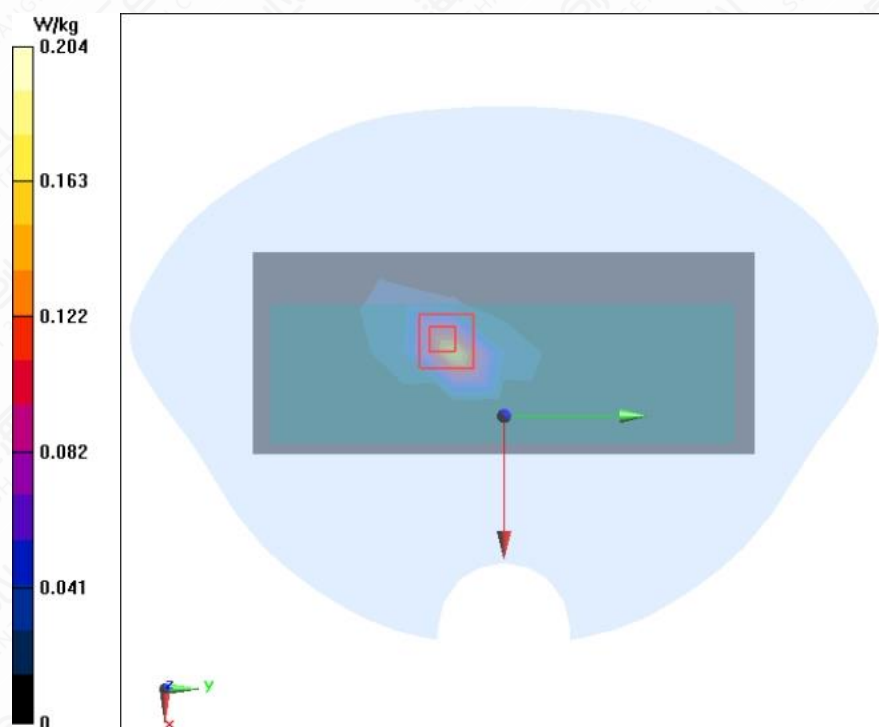


Figure A.1-35 BT DH5 Right Side Mode Middle 5mm

BT DH5 Right Side Mode Middle 0mm

Date/Time: 2023/12/20

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2480 \text{ MHz}$; $\sigma = 1.833 \text{ S/m}$; $\epsilon_r = 38.162$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: BT 2600MHz; Frequency: 2480 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2480 MHz

BT DH5 Right Side Mode Middle 0mm/Area Scan (5x11x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.190 W/kg

BT DH5 Right Side Mode Middle 0mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.058 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.514 W/kg

SAR(1 g) = 0.189 W/kg ; SAR(10 g) = 0.070 W/kg

Maximum of SAR (measured) = 0.350 W/kg

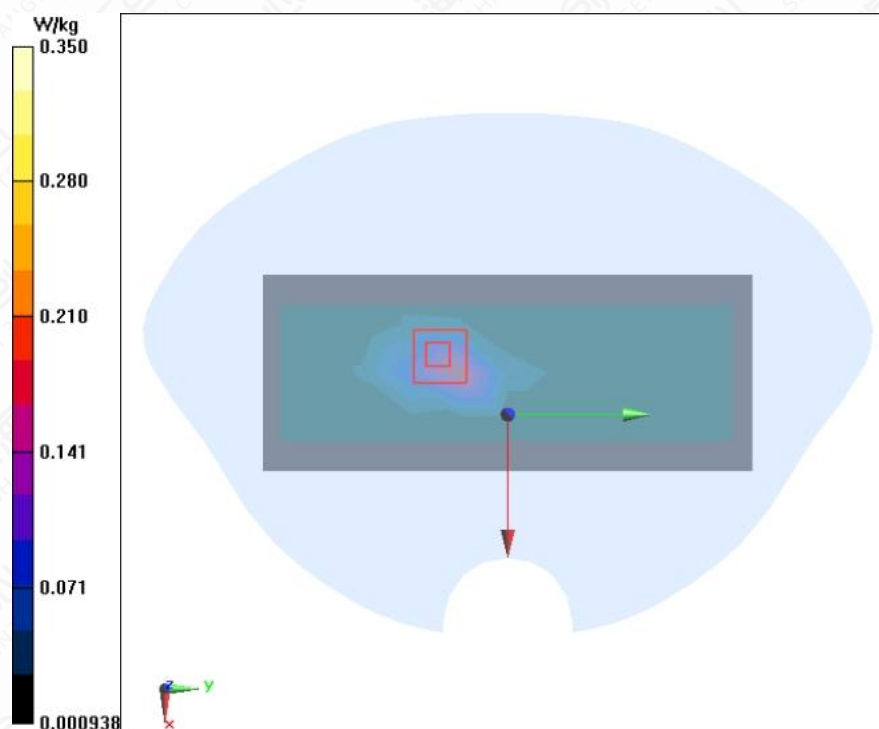


Figure A.1-36 BT DH5 Right Side Mode Middle 0mm

A.2 System Check Graph Results

System Check 835MHz

Date/Time: 2023/12/18

Electronics: DAE4 Sn1244

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 41.865$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: CW 900MHz; Frequency: 835 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 835 MHz

System Check 835MHz/Area Scan (7x13x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 3.00 W/kg

System Check 835MHz/Zoom Scan (7x7x7) (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 60.68 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.96 W/kg

SAR(1 g) = 2.44 W/kg ; SAR(10 g) = 1.57 W/kg

Maximum value of SAR (measured) = 3.40 W/kg

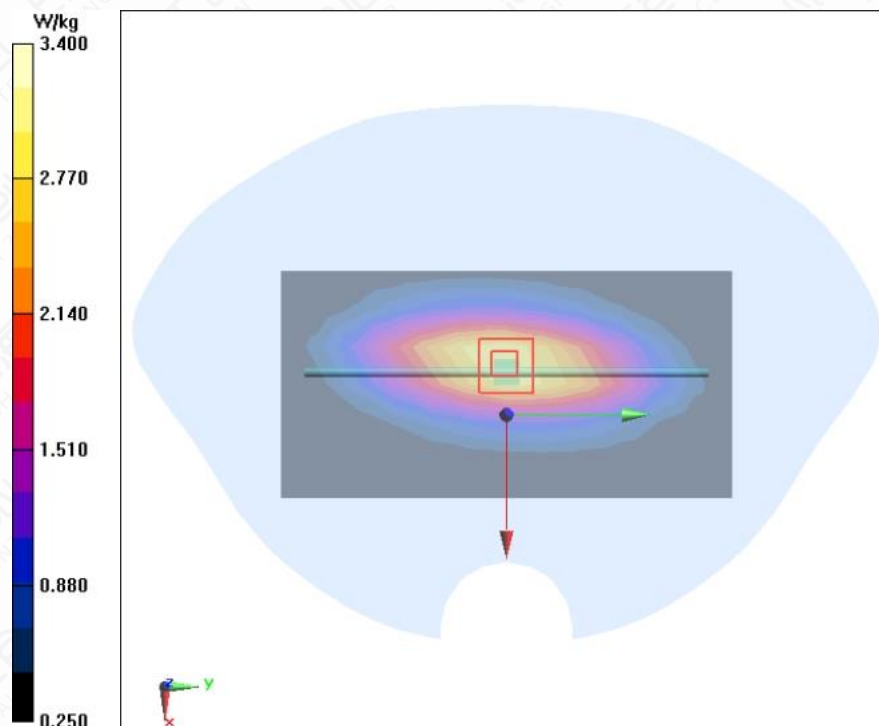


Figure A.2-1 System Check 835MHz

System Check 835MHz

Date/Time: 2024/1/3

Electronics: DAE4 Sn1244

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 41.701$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.1°C Liquid Temperature: 20.0°C

Communication System: CW 900MHz; Frequency: 835 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(10.66, 10.66, 10.66) @ 835 MHz

System Check 835MHz/Area Scan (7x13x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.90 W/kg

System Check 835MHz/Zoom Scan (7x7x7) (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 60.12 V/m ; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 3.86 W/kg

SAR(1 g) = 2.38 W/kg ; SAR(10 g) = 1.53 W/kg

Maximum value of SAR (measured) = 3.31 W/kg

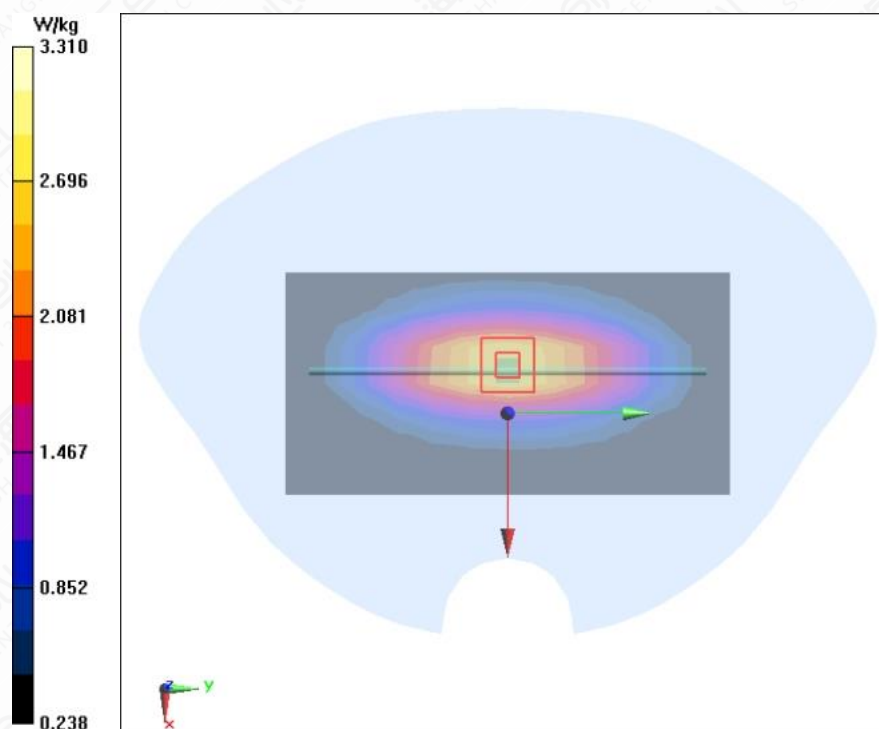


Figure A.2-2 System Check 835MHz

System Check 1750MHz

Date/Time: 2023/12/11

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.323 \text{ S/m}$; $\epsilon_r = 38.81$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.0°C

Communication System: CW 1900MHz; Frequency: 1750 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1750 MHz

System Check 1750MHz/Area Scan (8x7x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.77 W/kg

System Check 1750MHz/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 106.2 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 9.17 W/kg ; SAR(10 g) = 4.85 W/kg

Maximum value of SAR (measured) = 14.3 W/kg

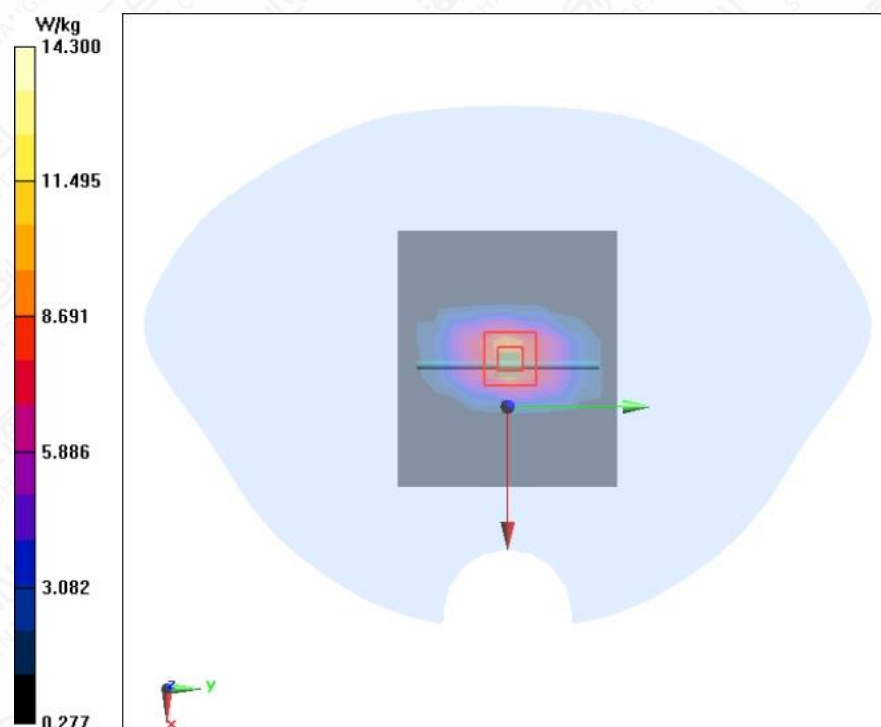


Figure A.2-3 System Check 1750MHz

System Check 1750MHz

Date/Time: 2023/12/12

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.33 \text{ S/m}$; $\epsilon_r = 38.517$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.1°C

Communication System: CW 1900MHz; Frequency: 1750 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.96, 8.96, 8.96) @ 1750 MHz

System Check 1750MHz/Area Scan (8x7x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.79 W/kg

System Check 1750MHz/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 104.8 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.1 W/kg ; SAR(10 g) = 4.82 W/kg

Maximum value of SAR (measured) = 14.1 W/kg

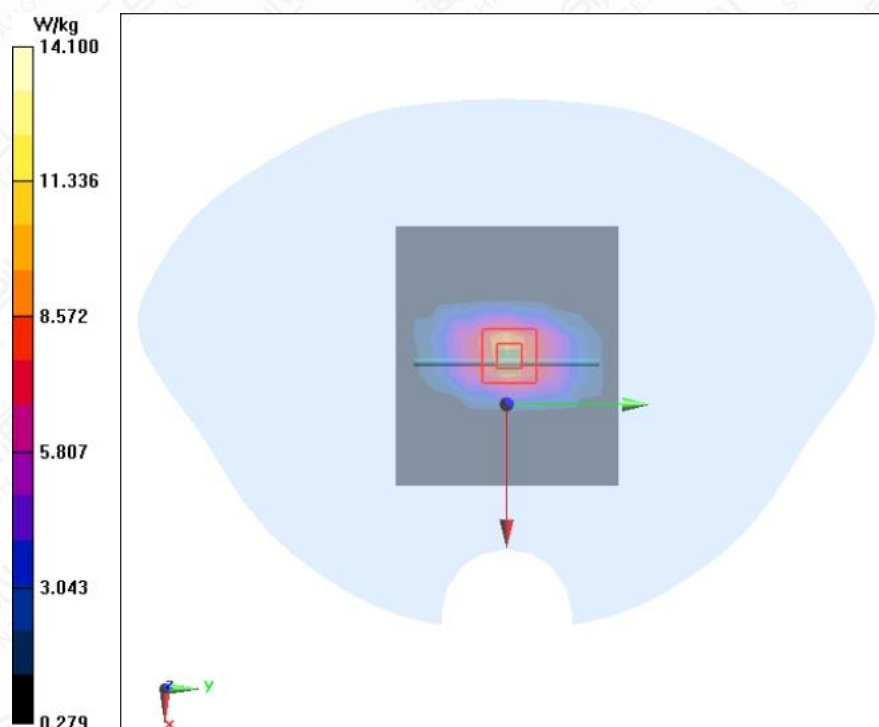


Figure A.2-4 System Check 1750MHz

System Check 1900MHz

Date/Time: 2023/12/14

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.415 \text{ S/m}$; $\epsilon_r = 38.451$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.1°C Liquid Temperature: 20.0°C

Communication System: CW 1900MHz; Frequency: 1900 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1900 MHz

System Check 1900MHz/Area Scan (8x7x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.1 W/kg

System Check 1900MHz/Zoom Scan (7x7x7) (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 105.0 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 18.6 W/kg

SAR(1 g) = 9.72 W/kg ; SAR(10 g) = 4.99 W/kg

Maximum value of SAR (measured) = 15.3 W/kg

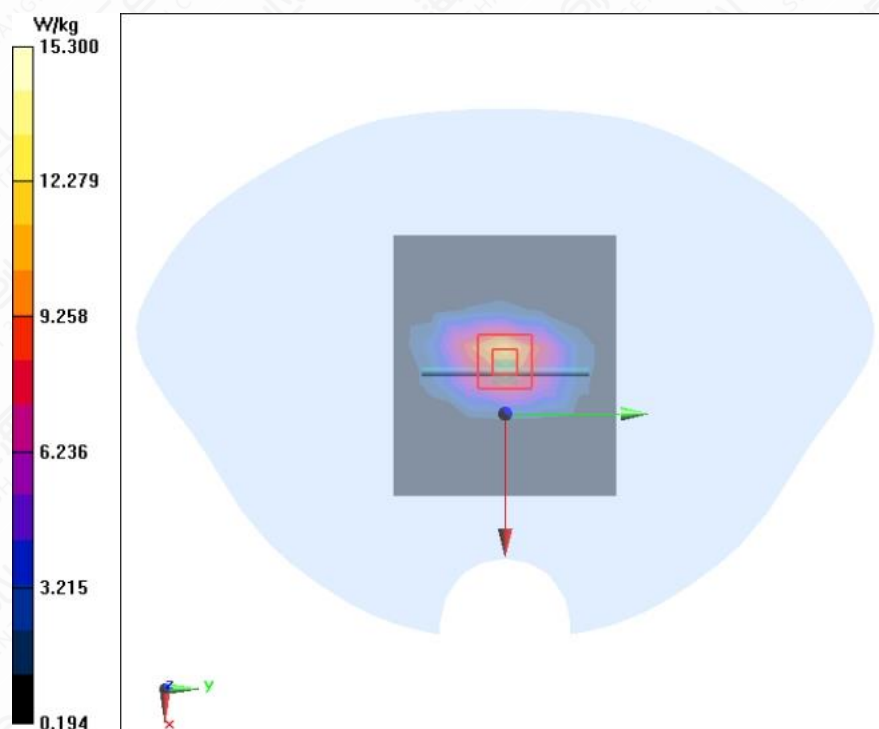


Figure A.2-5 System Check 1900MHz

System Check 1900MHz

Date/Time: 2023/12/25

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.416 \text{ S/m}$; $\epsilon_r = 38.557$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.0°C Liquid Temperature: 20.2°C

Communication System: CW 1900MHz; Frequency: 1900 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.67, 8.67, 8.67) @ 1900 MHz

System Check 1900MHz/Area Scan (8x7x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.4 W/kg

System Check 1900MHz/Zoom Scan (7x7x7) (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 104.5 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 9.93 W/kg ; SAR(10 g) = 5.1 W/kg

Maximum value of SAR (measured) = 15.9 W/kg

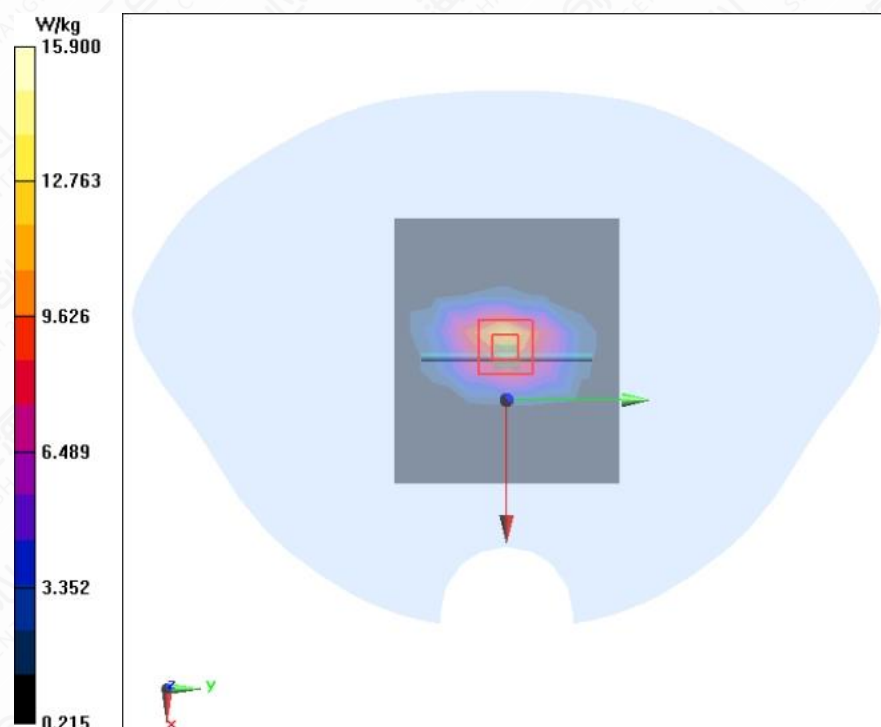


Figure A.2-6 System Check 1900MHz

System Check 2300MHz

Date/Time: 2023/12/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2300 \text{ MHz}$; $\sigma = 1.713 \text{ S/m}$; $\epsilon_r = 38.011$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.1°C

Communication System: CW 2600MHz; Frequency: 2300 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.32, 8.32, 8.32) @ 2300 MHz

System Check 2300MHz/Area Scan (8x8x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 18.7 W/kg

System Check 2300MHz/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 106.2 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 25.9 W/kg

SAR(1 g) = 12.6 W/kg ; SAR(10 g) = 5.97 W/kg

Maximum value of SAR (measured) = 21.0 W/kg

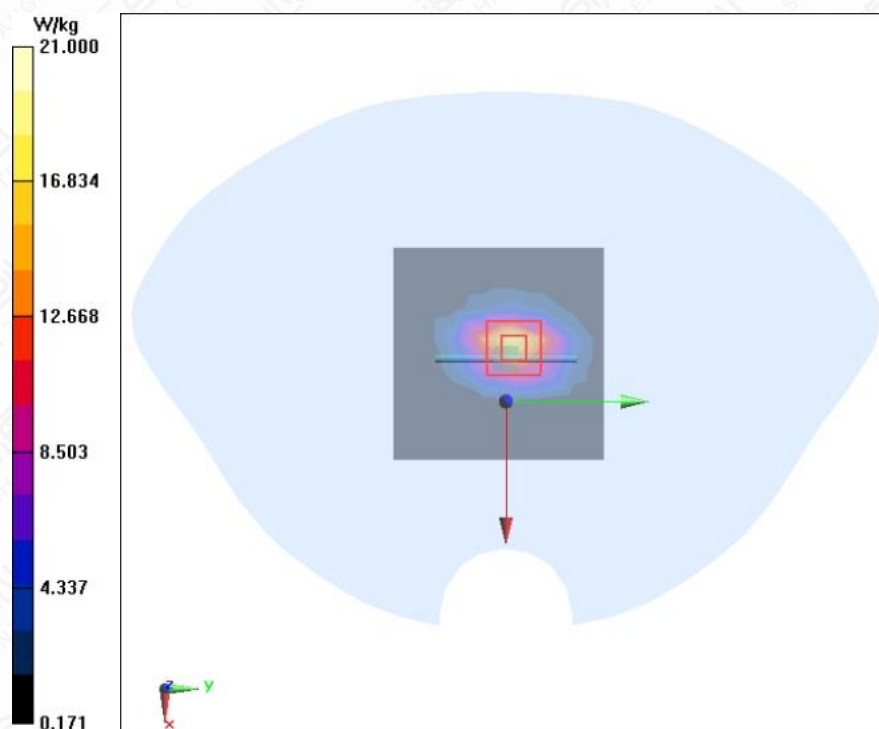


Figure A.2-7 System Check 2300MHz

System Check 2450MHz

Date/Time: 2023/12/20

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.809 \text{ S/m}$; $\epsilon_r = 38.215$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.4°C Liquid Temperature: 20.2°C

Communication System: CW 2600MHz; Frequency: 2450 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(8.07, 8.07, 8.07) @ 2450 MHz

System Check 2450MHz/Area Scan (8x8x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 16.6 W/kg

System Check 2450MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 108.4 V/m ; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 26.4 W/kg

SAR(1 g) = 12.7 W/kg ; SAR(10 g) = 5.9 W/kg

Maximum value of SAR (measured) = 21.3 W/kg

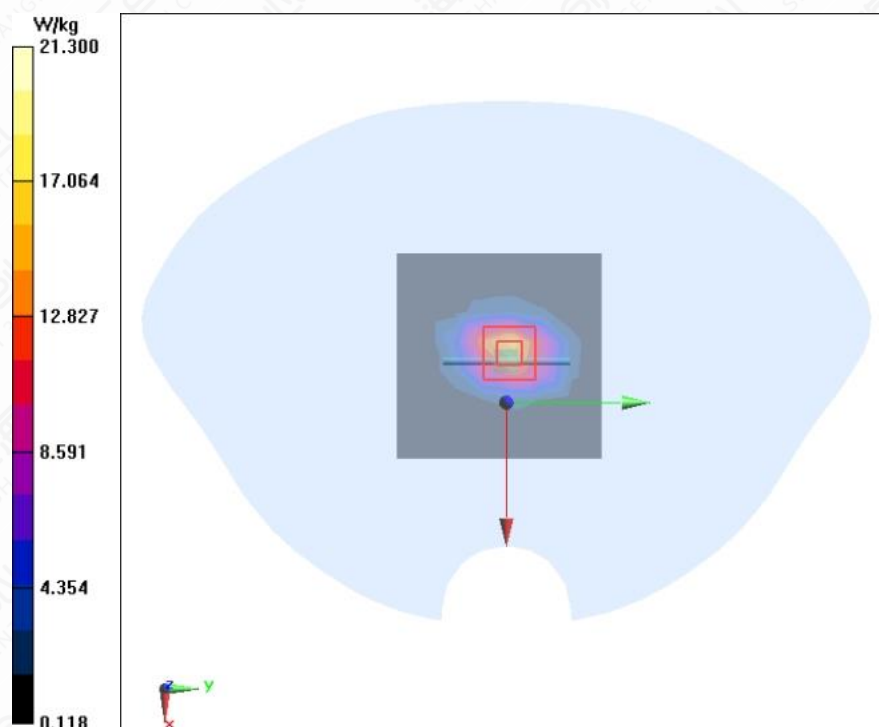


Figure A.2-8 System Check 2450MHz

System Check 2600MHz

Date/Time: 2023/12/13

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 1.931 \text{ S/m}$; $\epsilon_r = 37.445$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.3°C Liquid Temperature: 20.2°C

Communication System: CW 2600MHz; Frequency: 2600 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(7.86, 7.86, 7.86) @ 2600 MHz

System Check 2600MHz/Area Scan (8x8x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 18.9 W/kg

System Check 2600MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 108.5 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 14 W/kg ; SAR(10 g) = 6.3 W/kg

Maximum value of SAR (measured) = 23.9 W/kg

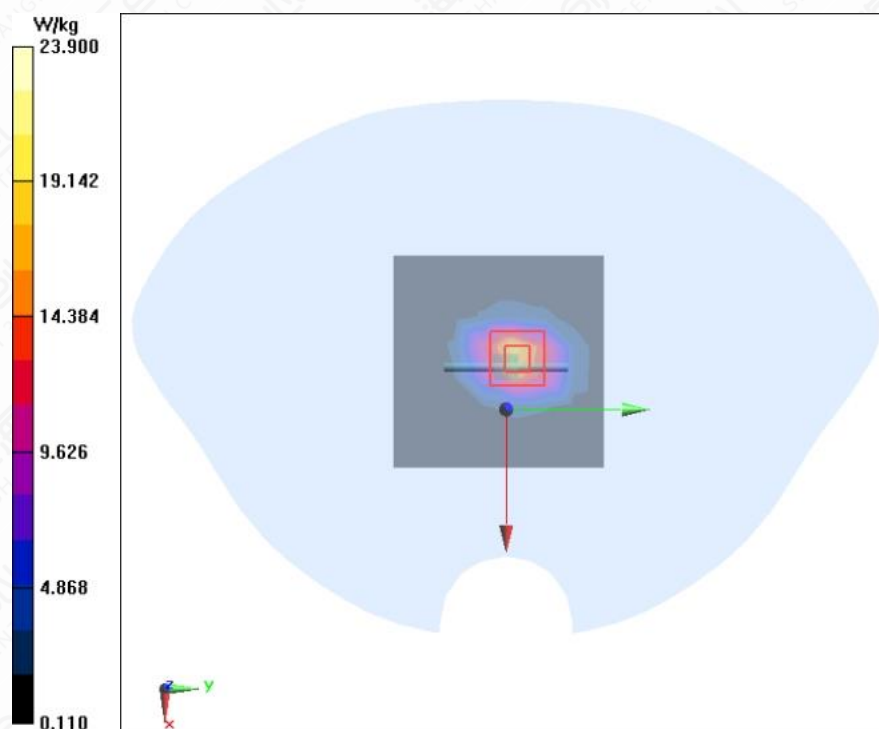


Figure A.2-9 System Check 2600MHz

System Check 2600MHz

Date/Time: 2024/1/22

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 1.928 \text{ S/m}$; $\epsilon_r = 37.621$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 20.9°C Liquid Temperature: 20.0°C

Communication System: CW 2600MHz; Frequency: 2600 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(7.86, 7.86, 7.86) @ 2600 MHz

System Check 2600MHz/Area Scan (8x8x1):

Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 18.3 W/kg

System Check 2600MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 107.6 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 29.2 W/kg

SAR(1 g) = 13.7 W/kg ; SAR(10 g) = 6.12 W/kg

Maximum value of SAR (measured) = 23.5 W/kg

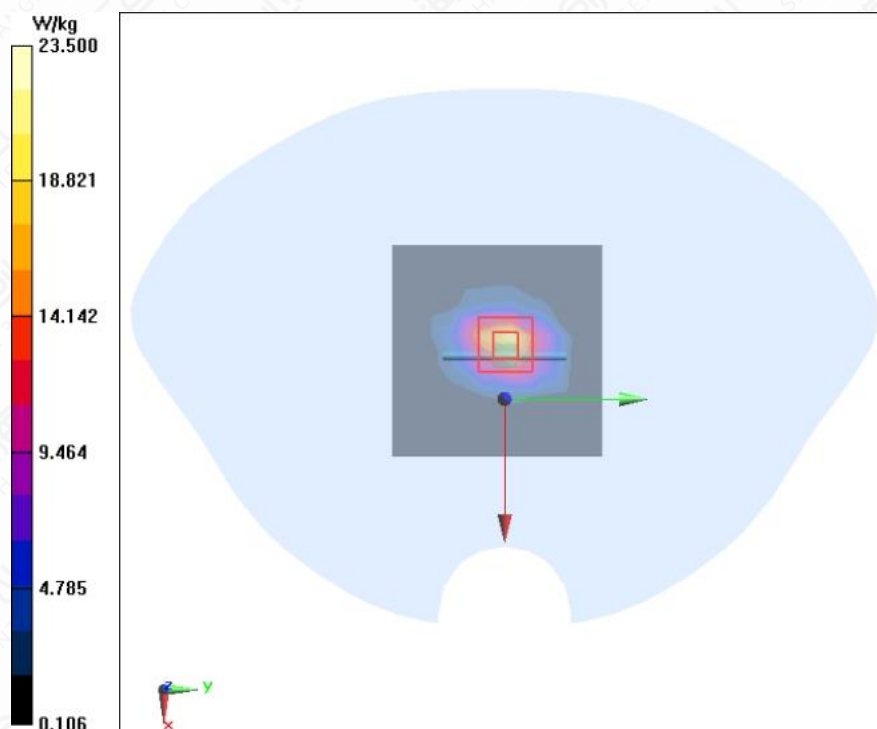


Figure A.2-10 System Check 2600MHz

System Check 5200MHz

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.685 \text{ S/m}$; $\epsilon_r = 35.736$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: CW 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5200 MHz

System Check 5200MHz/Area Scan (10x10x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 16.7 W/kg

System Check 5200MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 60.47 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 31.7 W/kg

SAR(1 g) = 7.69 W/kg ; SAR(10 g) = 2.2 W/kg

Maximum of SAR (measured) = 19.5 W/kg

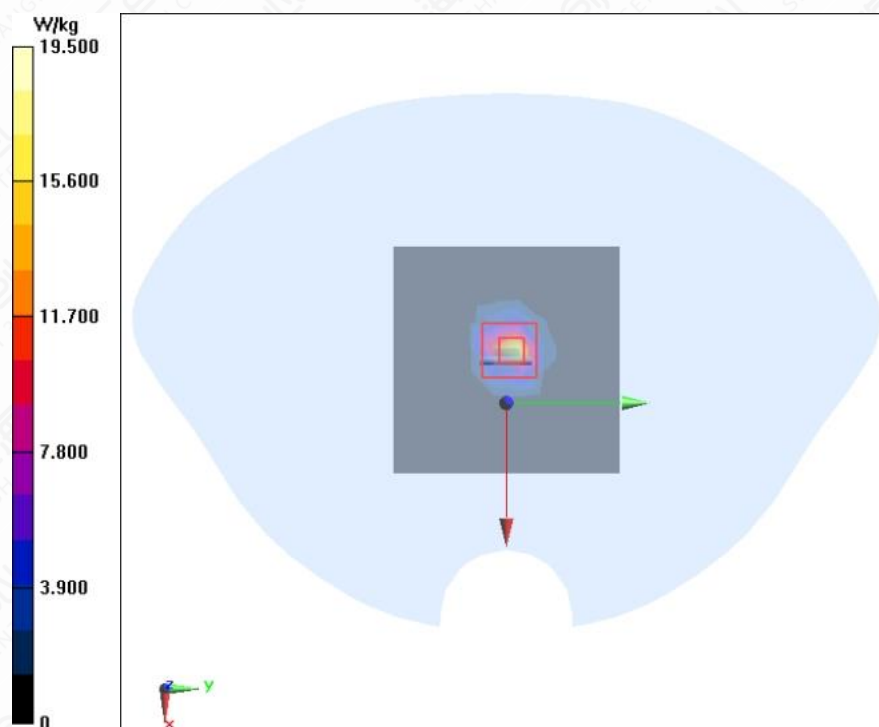


Figure A.2-11 System Check 5200MHz

System Check 5300MHz

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.798 \text{ S/m}$; $\epsilon_r = 35.535$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: CW 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.72, 5.72, 5.72) @ 5300 MHz

System Check 5300MHz/Area Scan (8x8x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 19.7 W/kg

System Check 5300MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 67.33 V/m ; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 32.5 W/kg

SAR(1 g) = 7.86 W/kg ; SAR(10 g) = 2.25 W/kg

Maximum of SAR (measured) = 19.8 W/kg

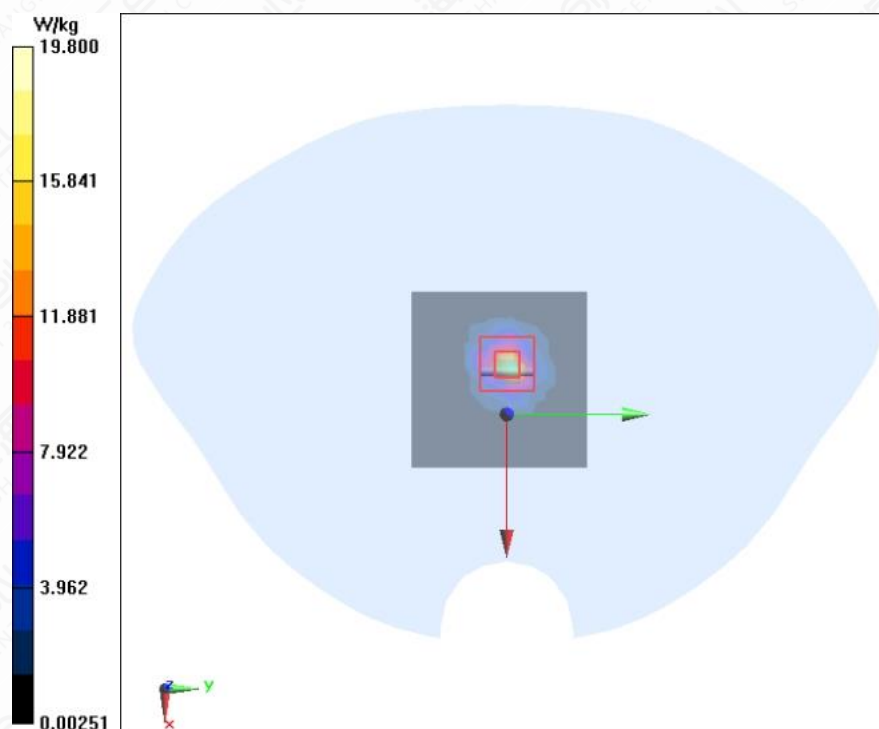


Figure A.2-12 System Check 5300MHz

System Check 5600MHz

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5600 \text{ MHz}$; $\sigma = 5.143 \text{ S/m}$; $\epsilon_r = 34.939$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: CW 5GHz; Frequency: 5600 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.17, 5.17, 5.17) @ 5600 MHz

System Check 5600MHz/Area Scan (10x10x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 17.3 W/kg

System Check 5600MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 65.28 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 8.1 W/kg ; SAR(10 g) = 2.28 W/kg

Maximum of SAR (measured) = 21.2 W/kg

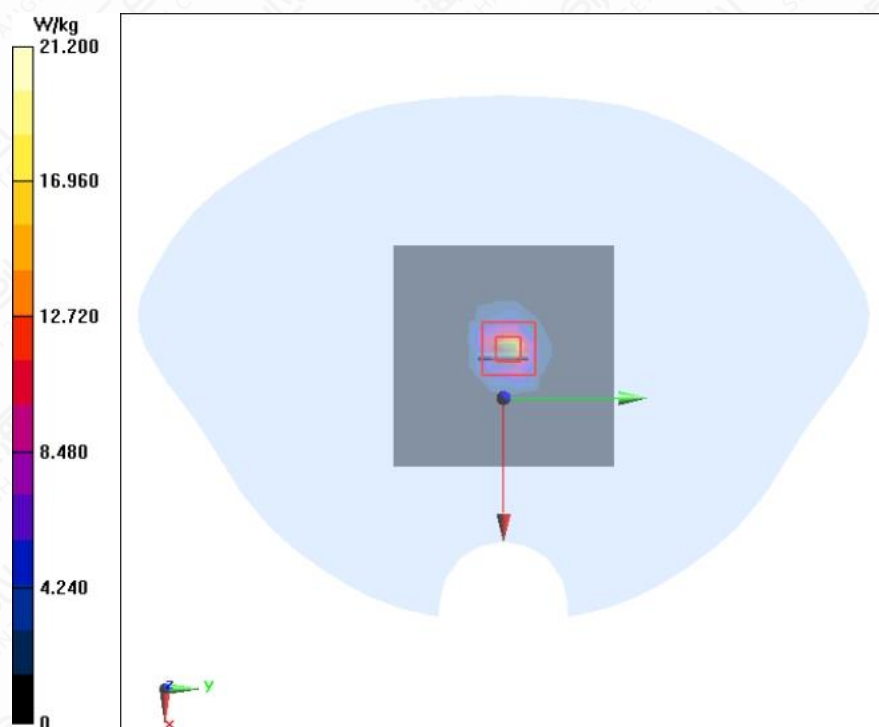


Figure A.2-13 System Check 5600MHz

System Check 5800MHz

Date/Time: 2023/12/21

Electronics: DAE4 Sn1244

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.383 \text{ S/m}$; $\epsilon_r = 34.549$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 21.2°C Liquid Temperature: 20.0°C

Communication System: CW 5GHz; Frequency: 5800 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN7633ConvF(5.22, 5.22, 5.22) @ 5800 MHz

System Check 5800MHz/Area Scan (10x10x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 15.4 W/kg

System Check 5800MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (7x7x7)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 64.56 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 36.6 W/kg

SAR(1 g) = 7.88 W/kg ; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 21.0 W/kg

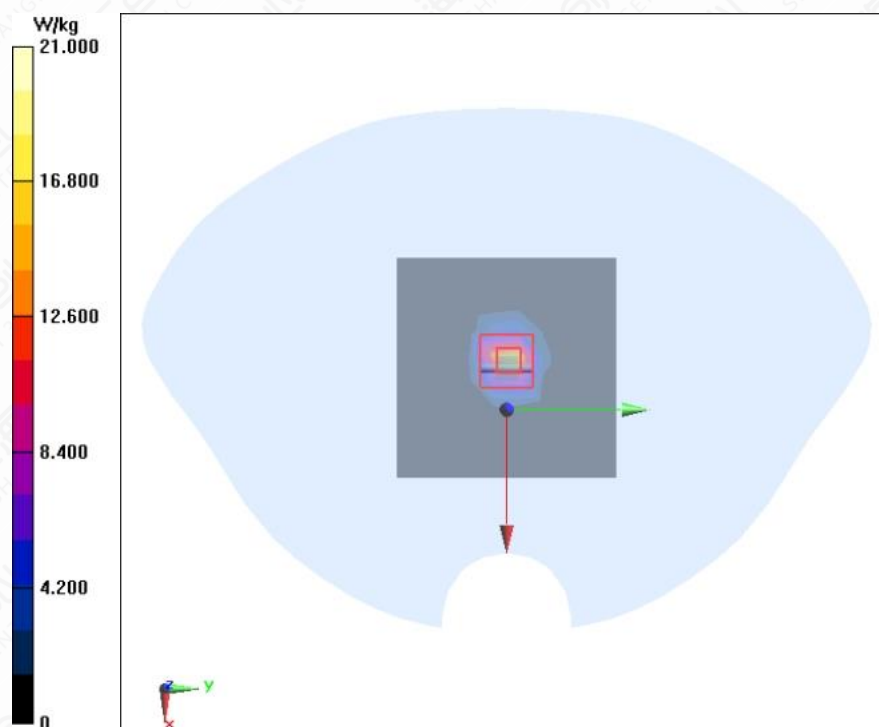


Figure A.2-14 System Check 5800MHz

Annex B: Calibration Certificate



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191, China
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E-mail: cmf@caict.ac.cn <http://www.caict.ac.cn>



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CNAS L0570

Client : **3in**

Certificate No: **J23Z60207**

CALIBRATION CERTIFICATE

Object **DAE4 - SN: 1244**

Calibration Procedure(s) **FF-Z11-002-01
Calibration Procedure for the Data Acquisition Electronics (DAEx)**

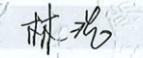
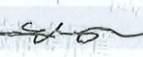
Calibration date: **April 10, 2023**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Process Calibrator 753	1971018	14-Jun-22 (CTTL, No.J22X04180)	Jun-23

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: April 11, 2023

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Certificate No: J23Z60207

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Glossary:

DAE data acquisition electronics
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters:

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle:* The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The report provide only calibration results for DAE, it does not contain other performance test results.



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DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	403.859 $\pm$ 0.15% (k=2)	403.585 $\pm$ 0.15% (k=2)	404.504 $\pm$ 0.15% (k=2)
Low Range	3.95256 $\pm$ 0.7% (k=2)	3.97026 $\pm$ 0.7% (k=2)	3.97966 $\pm$ 0.7% (k=2)

Connector Angle

Connector Angle to be used in DASY system	23.5° $\pm$ 1°
---	----------------



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Client **3in**

Certificate No: **J23Z60208**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN : 7633**

Calibration Procedure(s)
FF-Z11-004-02
Calibration Procedures for Dosimetric E-field Probes

Calibration date: **April 28, 2023**

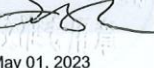
This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101547	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Power sensor NRP-Z91	101548	14-Jun-22(CTTL, No.J22X04181)	Jun-23
Reference 10dBAttenuator	18N50W-10dB	19-Jan-23(CTTL, No.J23X00212)	Jan-25
Reference 20dBAttenuator	18N50W-20dB	19-Jan-23(CTTL, No.J23X00211)	Jan-25
OCP DAK-3.5	SN 1040	18-Jan-23(SPEAG, No.OCP-DAK3.5-1040_Jan23)	Jan-24
Reference Probe EX3DV4	SN 3846	20-May-22(SPEAG, No.EX3-3846_May22)	May-23
DAE4	SN 1555	25-Aug-22(SPEAG, No.DAE4-1555_Aug22)	Aug-23

Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MG3700A	6201052605	14-Jun-22(CTTL, No.J22X04182)	Jun-23
Network Analyzer E5071C	MY46110673	10-Jan-23(CTTL, No.J23X00104)	Jan-24

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: May 01, 2023

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Certificate No: J23Z60208

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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i $\theta=0$ is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}: Assessed for E-field polarization $\theta=0$ ($f \leq 900\text{MHz}$ in TEM-cell; $f > 1800\text{MHz}$: waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E^2 -field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,y,z}; A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800\text{MHz}$) and inside waveguide using analytical field distributions based on power measurements for $f > 800\text{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50\text{MHz}$ to $\pm 100\text{MHz}$.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7633

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc ($k=2$)
Norm($\mu V/(V/m)^2$) ^A	0.66	0.64	0.68	$\pm 10.0\%$
DCP(mV) ^B	109.8	112.6	114.4	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Unc ^E ($k=2$)
0	CW	X	0.0	0.0	1.0	0.00	210.8	$\pm 2.2\%$
		Y	0.0	0.0	1.0		210.6	
		Z	0.0	0.0	1.0		218.3	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 4).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7633

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz] ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unct. (k=2)
750	41.9	0.89	11.03	11.03	11.03	0.13	1.45	±12.7%
835	41.5	0.90	10.66	10.66	10.66	0.16	1.41	±12.7%
900	41.5	0.97	10.62	10.62	10.62	0.19	1.29	±12.7%
1750	40.1	1.37	8.96	8.96	8.96	0.21	1.17	±12.7%
1900	40.0	1.40	8.67	8.67	8.67	0.26	0.99	±12.7%
2000	40.0	1.40	8.72	8.72	8.72	0.27	0.99	±12.7%
2300	39.5	1.67	8.32	8.32	8.32	0.64	0.66	±12.7%
2450	39.2	1.80	8.07	8.07	8.07	0.64	0.66	±12.7%
2600	39.0	1.96	7.86	7.86	7.86	0.48	0.78	±12.7%
3300	38.2	2.71	7.45	7.45	7.45	0.41	1.03	±13.9%
3500	37.9	2.91	7.21	7.21	7.21	0.40	1.04	±13.9%
3700	37.7	3.12	7.00	7.00	7.00	0.43	1.03	±13.9%
3900	37.5	3.32	6.91	6.91	6.91	0.40	1.25	±13.9%
4100	37.2	3.53	6.85	6.85	6.85	0.40	1.15	±13.9%
4200	37.1	3.63	6.75	6.75	6.75	0.35	1.35	±13.9%
4400	36.9	3.84	6.65	6.65	6.65	0.35	1.35	±13.9%
4600	36.7	4.04	6.55	6.55	6.55	0.40	1.30	±13.9%
4800	36.4	4.25	6.50	6.50	6.50	0.40	1.35	±13.9%
4950	36.3	4.40	6.22	6.22	6.22	0.40	1.35	±13.9%
5250	35.9	4.71	5.72	5.72	5.72	0.40	1.50	±13.9%
5600	35.5	5.07	5.17	5.17	5.17	0.55	1.20	±13.9%
5750	35.4	5.22	5.22	5.22	5.22	0.50	1.30	±13.9%

^C Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^F At frequency up to 6 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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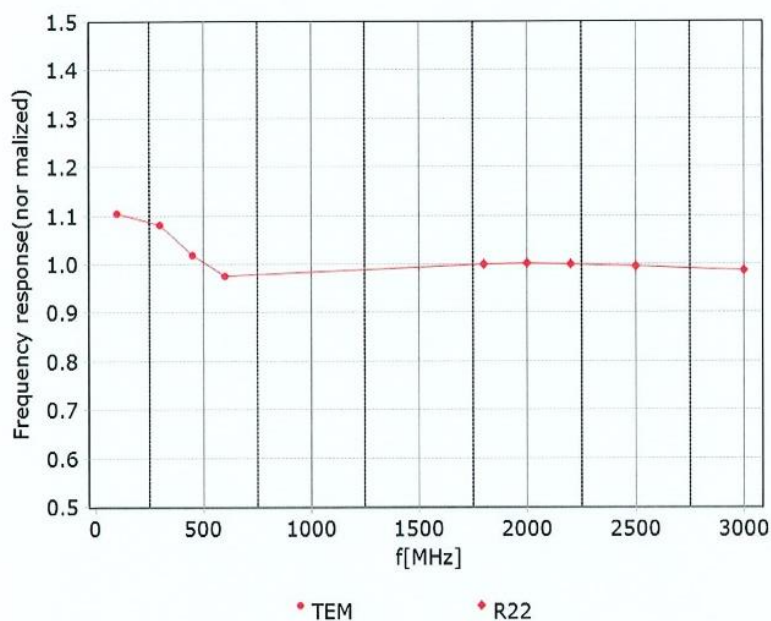


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Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: $\pm 7.4\%$ ($k=2$)



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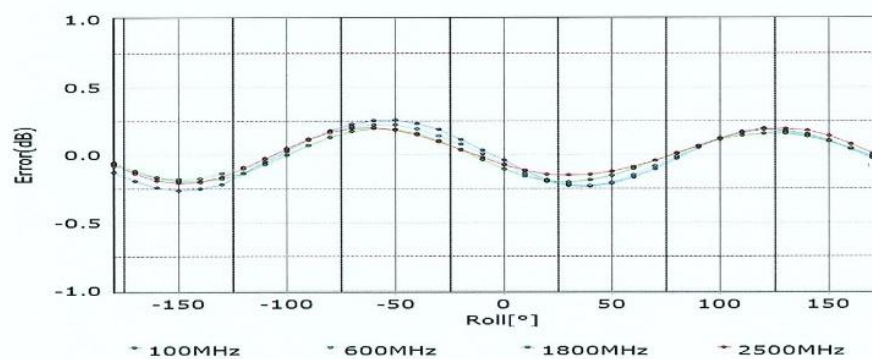
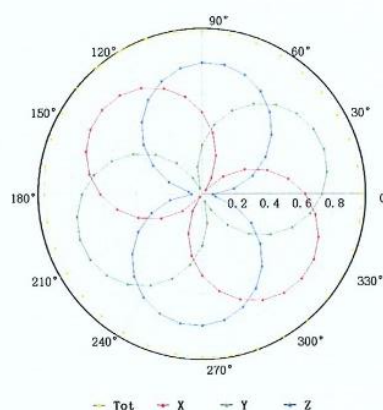
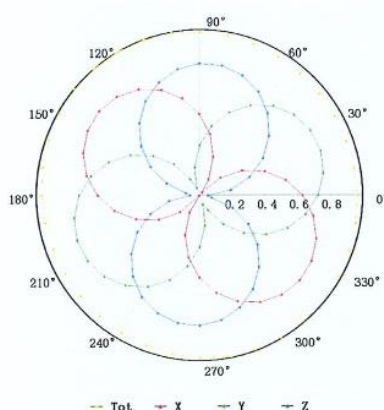


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Receiving Pattern (Φ), $\theta=0^\circ$

f=600 MHz, TEM

f=1800 MHz, R22



Uncertainty of Axial Isotropy Assessment: $\pm 1.2\%$ ($k=2$)

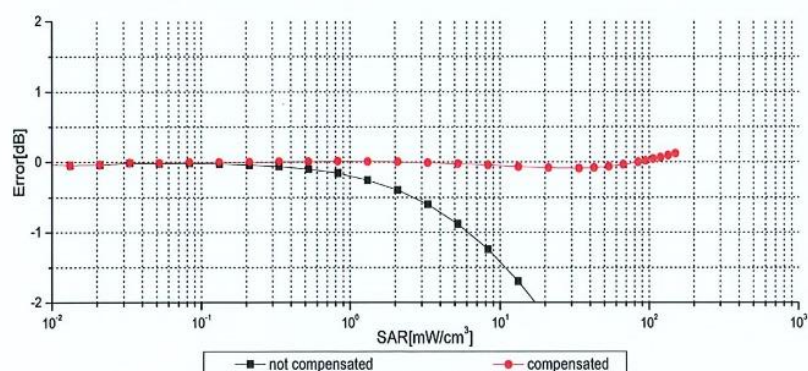
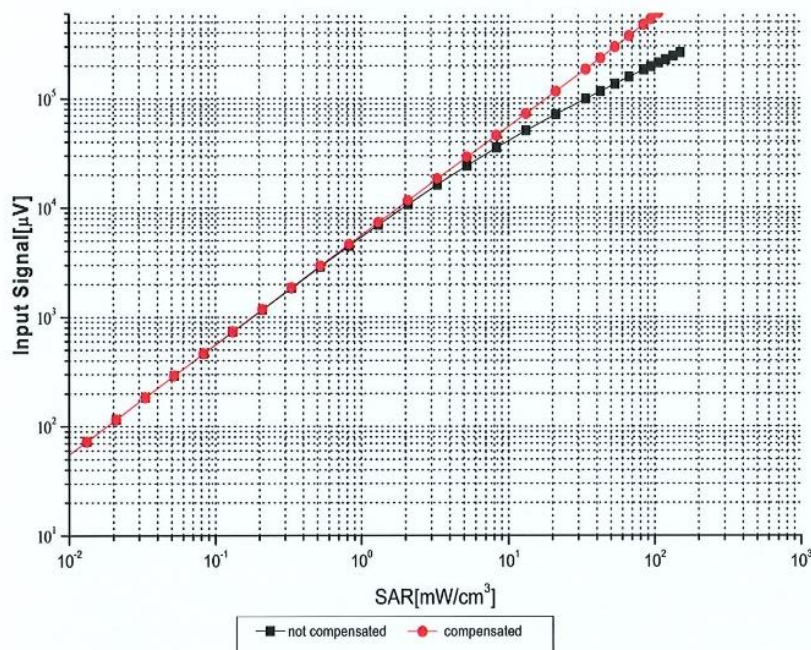


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Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f = 900 \text{ MHz}$)



Uncertainty of Linearity Assessment: $\pm 0.9\%$ ($k=2$)

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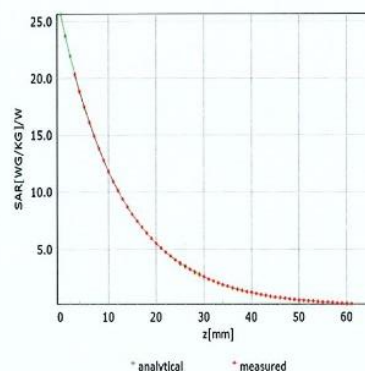
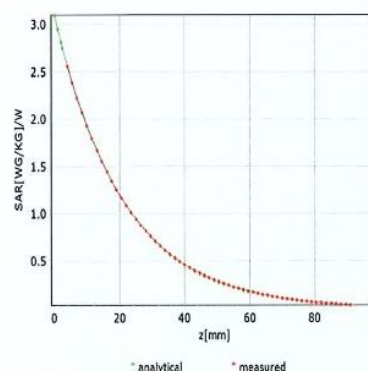
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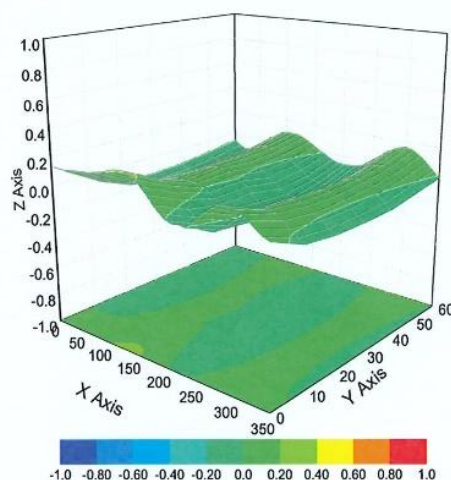
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF)

f=1750 MHz,WGLS R22(H_convF)



Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: $\pm 3.2\%$ ($k=2$)

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7633

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	24.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm



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Client 3in

Certificate No: 23J02Z80032

CALIBRATION CERTIFICATE

Object D835V2 - SN: 4d112

Calibration Procedure(s) FF-Z11-003-01
Calibration Procedures for dipole validation kits

Calibration date: September 6, 2023

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
Power sensor NRP8S	104291	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
Reference Probe EX3DV4	SN 3617	31-Mar-23(CTTL-SPEAG,No.Z23-60161)	Mar-24
DAE4	SN 1556	11-Jan-23(CTTL-SPEAG,No.Z23-60034)	Jan-24
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	05-Jan-23 (CTTL, No. J23X00107)	Jan-24
NetworkAnalyzer E5071C	MY46110673	10-Jan-23 (CTTL, No. J23X00104)	Jan-24

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: September 16, 2023

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: 23J02Z80032

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**Glossary:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- c) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	41.2 $\pm$ 6 %	0.88 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.38 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.67 W/kg $\pm$ 18.8 % ($k=2$)
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.54 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.24 W/kg $\pm$ 18.7 % ($k=2$)



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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.4Ω- 0.55jΩ
Return Loss	- 36.5dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.303 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feed-point may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 2023-09-06

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d112

Communication System: UID 0, CW; Frequency: 835 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 41.24$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(10.1, 10.1, 10.1) @ 835 MHz; Calibrated: 2023-03-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2023-01-11
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.67 V/m; Power Drift = -0.02 dB

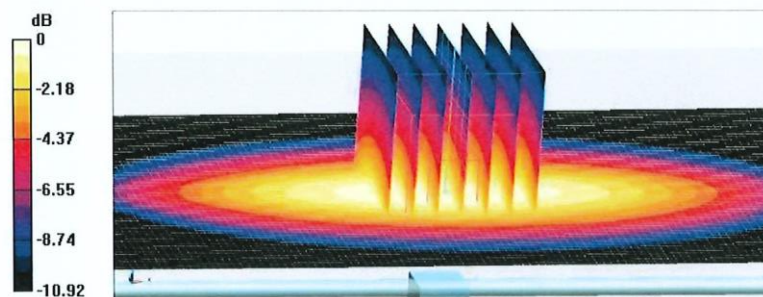
Peak SAR (extrapolated) = 3.85 W/kg

SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.54 W/kg

Smallest distance from peaks to all points 3 dB below = 17.1 mm

Ratio of SAR at M2 to SAR at M1 = 62.4%

Maximum value of SAR (measured) = 3.30 W/kg



0 dB = 3.30 W/kg = 5.19 dBW/kg