

13.3. Proximity Sensor Status Table of trigger distance

As per the KDB 616217 D04 SAR for laptop and tablets v01r02, section 6.2, the following procedure is used to determine the triggering distances.

Proximity Sensor Status Table when DUT is moving towards the phantom

Distance to the DUT (mm)	Proximity Sensor Status – Rear Surface	Proximity Sensor Status – Bottom-Edge	Proximity Sensor Status – Left/Top-Edge
30	OFF	OFF	OFF
27	OFF	OFF	OFF
25	OFF	OFF	OFF
24	OFF	OFF	OFF
23	OFF	OFF	OFF
22	OFF	OFF	OFF
21	OFF	OFF	OFF
20	ON	OFF	OFF
19	ON	OFF	OFF
18	ON	OFF	OFF
17	ON	OFF	OFF
16	ON	OFF	OFF
15	ON	ON	ON
14	ON	ON	ON
13	ON	ON	ON
12	ON	ON	ON
11	ON	ON	ON
10	ON	ON	ON
9	ON	ON	ON
8	ON	ON	ON
7	ON	ON	ON
6	ON	ON	ON
5	ON	ON	ON
4	ON	ON	ON
3	ON	ON	ON
2	ON	ON	ON
1	ON	ON	ON
0	ON	ON	ON

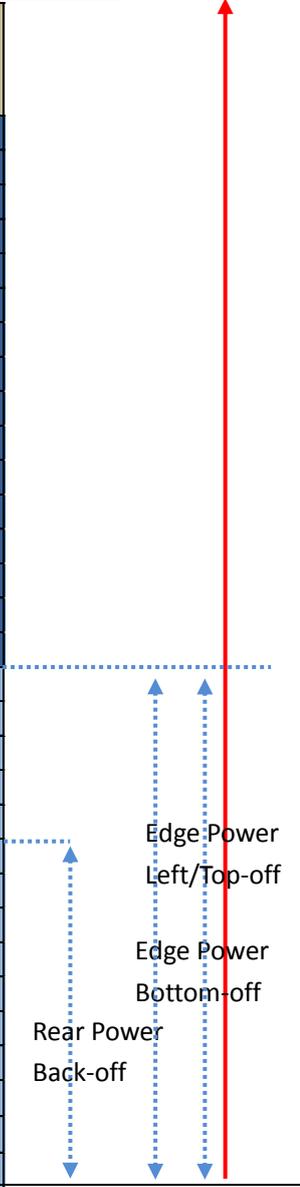


Body Phantom

Proximity Sensor Status Table when DUT is moving away the phantom

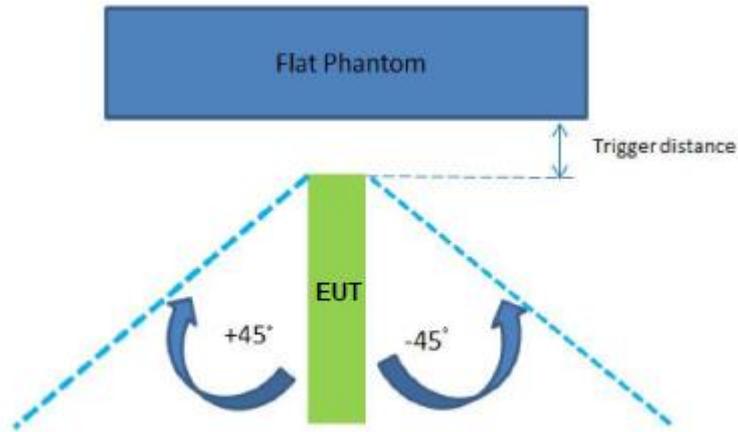
Body Phantom

Distance to the DUT (mm)	Proximity Sensor Status – Rear Surface	Proximity Sensor Status – Bottom-Edge	Proximity Sensor Status – Left/Top-Edge
0	ON	ON	ON
1	ON	ON	ON
2	ON	ON	ON
3	ON	ON	ON
4	ON	ON	ON
5	ON	ON	ON
6	ON	ON	ON
7	ON	ON	ON
8	ON	ON	ON
9	ON	ON	ON
10	ON	ON	ON
11	ON	ON	ON
12	ON	ON	ON
13	ON	ON	ON
14	ON	ON	ON
15	ON	ON	ON
16	ON	OFF	OFF
17	ON	OFF	OFF
18	ON	OFF	OFF
19	ON	OFF	OFF
20	ON	OFF	OFF
21	OFF	OFF	OFF
22	OFF	OFF	OFF
23	OFF	OFF	OFF
24	OFF	OFF	OFF
25	OFF	OFF	OFF
26	OFF	OFF	OFF
27	OFF	OFF	OFF
28	OFF	OFF	OFF
29	OFF	OFF	OFF
30	OFF	OFF	OFF



13.4. Tilt angle influences to proximity sensor triggering

As per the KDB 616217 D04 SAR for laptop and tablets v01r02, section 6.4, the following procedure is used to determine the tilt angle influences to proximity sensor triggering.

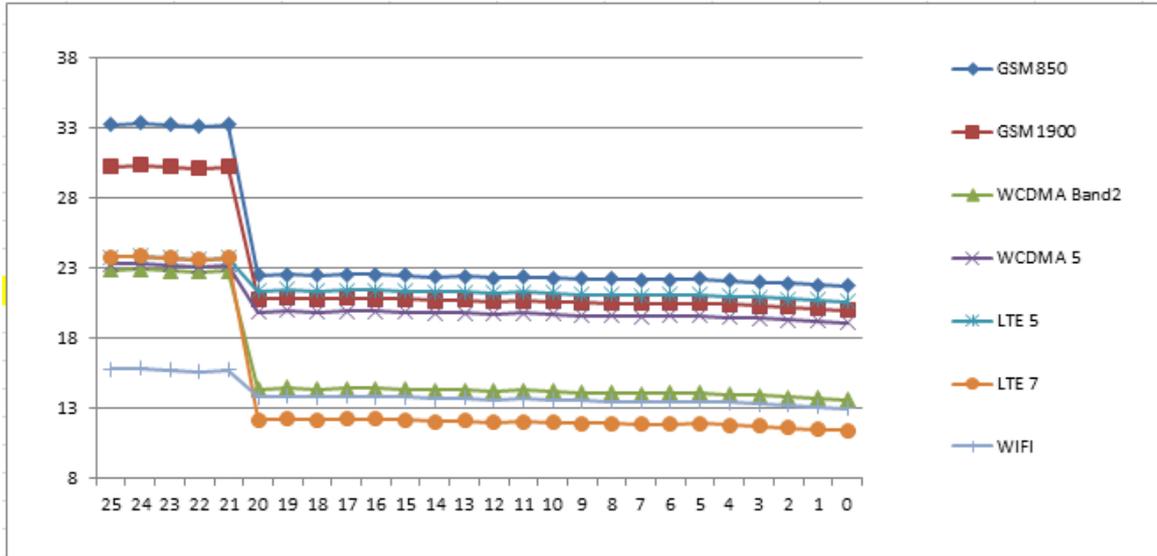


Distance to the DUT (mm)	Proximity Sensor Status 0° to +45°	Proximity Sensor Status 0° to -45°
15	ON	ON
14	ON	ON
13	ON	ON
12	ON	ON
11	ON	ON
10	ON	ON
9	ON	ON
8	ON	ON
7	ON	ON
6	ON	ON
5	ON	ON
4	ON	ON
3	ON	ON
2	ON	ON
1	ON	ON
0	ON	ON

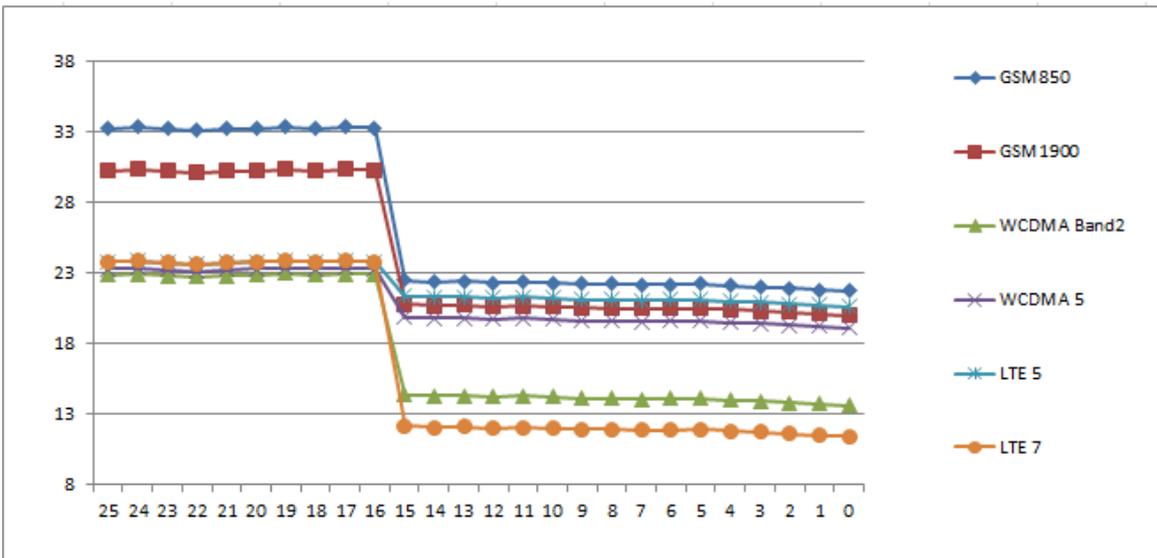
13.5. Power Reduction per Air-interface

The following graphs show the power level and the distance from the DUT to the flat phantom for the Right-Edge, Bottom-Edge and Rear Surface.

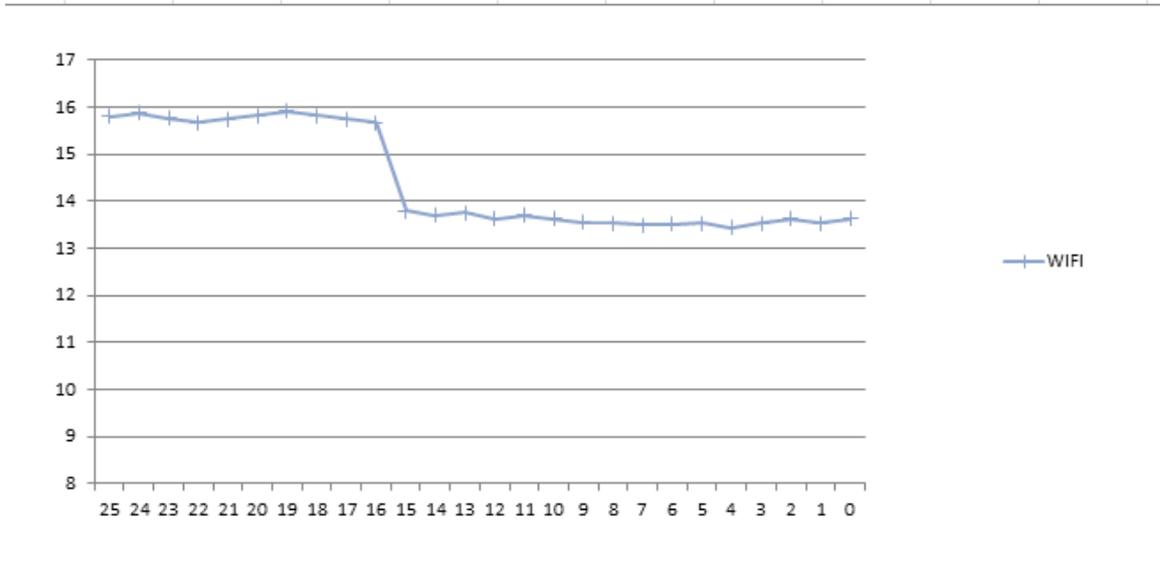
Rear Surface



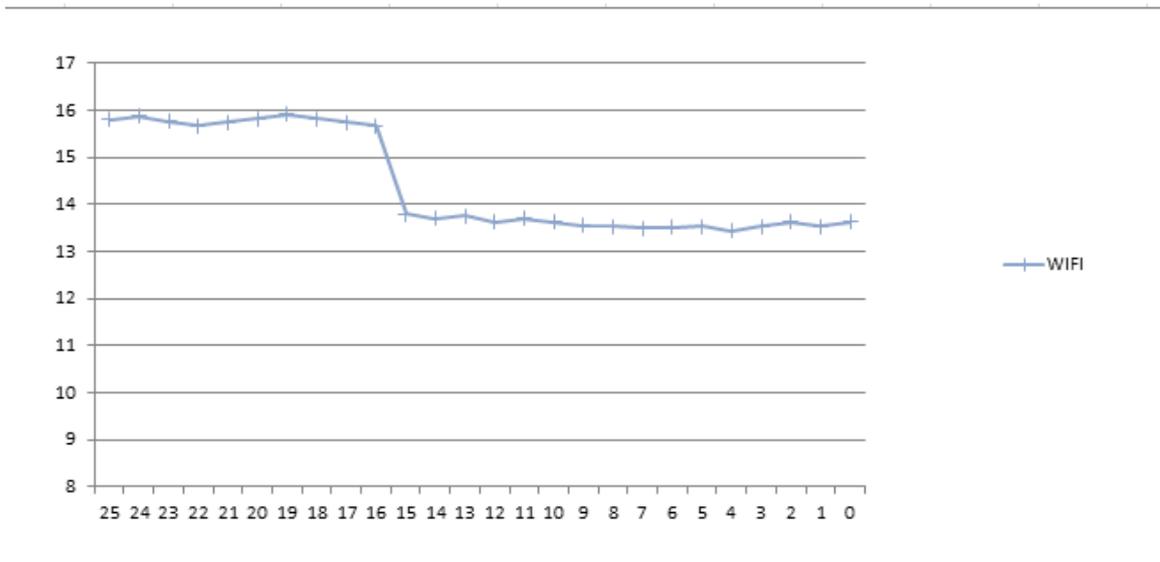
Bottom-Edge



Top-Edge



Left-Edge



13.6. Proximity Sensor Coverage Area

According to KDB 616217 D04, Proximity Sensor Coverage Area of not request when the antenna and sensor are collocated and the peak SAR location is overlapping with the sensor.

14. SAR Test Result

14.1. SAR results for Fast SAR

Table 14.1: SAR Values Sensor Off (GSM 850 MHz Band-Head)

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
836.6	836.6	Left	Touch	/	33.24	33.5	1.062	0.097	0.103	-0.07
836.6	836.6	Left	Tilt	/	33.24	33.5	1.062	0.0405	0.043	-0.07
836.6	836.6	Right	Touch	/	33.24	33.5	1.062	0.053	0.056	0.14
836.6	836.6	Right	Tilt	/	33.24	33.5	1.062	0.0424	0.045	0.05
824.2	824.2	Left	Touch	/	33.34	33.5	1.038	0.084	0.087	0.12
848.8	848.8	Left	Touch	Fig.1	33.22	33.5	1.067	0.113	0.121	0.14

Table 14.2: SAR Values Sensor off (GSM 850 MHz)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
836.6	836.6	GPRS (4)	14	Ground	/	28.67	29	1.079	0.396	0.427	0.04
836.6	836.6	GPRS (4)	0	Right	/	28.67	29	1.079	0.482	0.520	0.10
836.6	836.6	GPRS (4)	14	Bottom	/	28.67	29	1.079	0.265	0.286	0.10
824.2	824.2	GPRS (4)	0	Right	/	28.63	29	1.089	0.374	0.407	-0.14
848.8	848.8	GPRS (4)	0	Right	Fig.2	28.63	29	1.089	0.548	0.597	-0.03

Table 14.3: SAR Values Sensor on (GSM 850 MHz)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
836.6	836.6	GPRS (4)	0	Ground	/	20.52	21	1.117	0.288	0.322	0.04
836.6	836.6	GPRS (4)	0	Bottom	/	20.52	21	1.117	0.0684	0.076	0.10

824.2	824.2	GPRS (4)	0	Ground	/	20.47	21	1.130	0.258	0.291	-0.14
848.8	848.8	GPRS (4)	0	Ground	Fig.3	20.38	21	1.153	0.319	0.368	0.09

Table 14.4: SAR Values Sensor Off(GSM 1900 MHz Band-Head)

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1880	661	Left	Touch	/	30.3	30.5	1.047	0.0336	0.035	0.04
1880	661	Left	Tilt	/	30.3	30.5	1.047	0.0287	0.030	0.10
1880	661	Right	Touch		30.3	30.5	1.047	0.041	0.043	0.14
1880	661	Right	Tilt	/	30.3	30.5	1.047	0.0155	0.016	-0.02
1850.2	512	Right	Touch	Fig.4	29.71	30.5	1.199	0.0385	0.046	0.07
1909.8	810	Right	Touch	/	29.88	30.5	1.153	0.0391	0.045	0.04

Table 14.5: SAR Values Sensor off (GSM 1900 MHz)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1880	661	GPRS (4)	14	Ground	/	26.73	27	1.064	0.326	0.347	0.04
1880	661	GPRS (4)	0	Right		26.73	27	1.064	0.517	0.550	0.15
1880	661	GPRS (4)	14	Bottom	/	26.73	27	1.064	0.381	0.405	0.06
1850.2	512	GPRS (4)	0	Right	/	26.76	27	1.057	0.493	0.521	-0.14
1909.8	810	GPRS (4)	0	Right	Fig.5	26.61	27	1.094	0.511	0.559	0.18

Table 14.6: SAR Values Sensor on (GSM 1900 MHz)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1880	661	GPRS (4)	0	Ground	/	18.48	19	1.127	0.992	1.118	0.04
1880	661	GPRS (4)	0	Bottom	/	18.48	19	1.127	0.589	0.664	0.03
1850.2	512	GPRS (4)	0	Right	/	18.32	19	1.169	0.847	0.991	-0.14

1909.8	810	GPRS (4)	0	Right	Fig.6	18.59	19	1.099	1.04	1.143	0.07
Repeated											
1909.8	810	GPRS (4)	0	Right	Fig.7	18.59	19	1.099	1.02	1.121	0.11
SIM 2											
1909.8	810	GPRS (4)	0	Right	Fig.8	18.59	19	1.099	0.963	1.058	0.01
Headset											
1909.8	810	GPRS (4)	0	Right	Fig.9	18.59	19	1.099	0.958	1.053	0.10

Table 14.7: SAR Values Sensor Off(WCDMA Band II-Head)

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
1880	9400	Left	Touch	/	22.89	23	1.026	0.0904	0.093	0.12
1880	9400	Left	Tilt	/	22.89	23	1.026	0.0833	0.085	0.08
1880	9400	Right	Touch	/	22.89	23	1.026	0.142	0.146	-0.15
1880	9400	Right	Tilt	/	22.89	23	1.026	0.053	0.054	0.03
1852.4	9262	Right	Touch	/	22.82	23	1.042	0.139	0.145	0.06
1907.6	9538	Right	Touch	Fig.10	22.93	23	1.016	0.152	0.154	0.06

Table 14.8: SAR Values Sensor off (WCDMA Band II)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1880	9400	12.2K RMC	14	Ground	/	22.89	23	1.026	0.544	0.558	0.04
1880	9400	12.2K RMC	0	Right	/	22.89	23	1.026	0.775	0.795	0.10
1880	9400	12.2K RMC	14	Bottom	/	22.89	23	1.026	0.567	0.582	-0.06
1852.4	9262	12.2K RMC	0	Right	/	22.82	23	1.042	0.695	0.724	-0.14
1907.6	9538	12.2K RMC	0	Right	Fig.11	22.93	23	1.016	0.857	0.871	0.06
Repeated											
1907.6	9538	12.2K RMC	0	Right	Fig.12	22.93	23	1.016	0.865	0.879	0.05

Table 14.9: SAR Values Sensor on(WCDMA Band II)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1880	9400	12.2K RMC	0	Ground	/	14.41	14.5	1.021	0.889	0.908	0.12
1880	9400	12.2K RMC	0	Bottom	/	14.41	14.5	1.021	0.409	0.418	0.10
1852.4	9262	12.2K RMC	0	Ground		14.38	14.5	1.028	0.735	0.756	0.07
1907.6	9538	12.2K RMC	0	Ground	Fig.13	14.45	14.5	1.012	0.916	0.927	0.12
Repeated											
1907.6	9538	12.2K RMC	0	Ground	Fig.14	14.45	14.5	1.012	0.912	0.923	0.05

Table 14.10: SAR Values sensor Off (WCDMA BandV-Head)

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
836.6	4182	Left	Touch	/	23.39	24	1.151	0.106	0.122	0.06
836.6	4182	Left	Tilt	/	23.39	24	1.151	0.055	0.063	0.01
836.6	4182	Right	Touch	/	23.39	24	1.151	0.0652	0.075	0.07
836.6	4182	Right	Tilt	/	23.39	24	1.151	0.0676	0.078	0.15
826.4	4132	Left	Touch	/	23.43	24	1.140	0.0926	0.106	0.19
846.6	4233	Left	Touch	Fig.15	23.34	24	1.164	0.121	0.141	0.09

Table 14.11: SAR Values Sensor off (WCDMA Band V)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
836.6	4182	12.2K RMC	14	Ground	/	23.39	24	1.151	0.341	0.392	0.12
836.6	4182	12.2K RMC	0	Right	/	23.39	24	1.151	0.355	0.409	-0.15
836.6	4182	12.2K RMC	14	Bottom	/	23.39	24	1.151	0.160	0.184	0.03
826.4	4132	12.2K RMC	14	Ground	/	23.43	24	1.140	0.304	0.347	0.05
846.6	4233	12.2K RMC	14	Ground	Fig.16	23.34	24	1.164	0.36	0.419	-0.01

Table 14.12: SAR Values Sensor on (WCDMA Band V)

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
836.6	4182	12.2K RMC	0	Ground	/	19.90	20	1.023	0.57	0.583	-0.14
836.6	4182	12.2K RMC	0	Bottom	/	19.90	20	1.023	0.185	0.189	0.14
826.4	4132	12.2K RMC	0	Ground	/	19.90	20	1.023	0.558	0.571	0.04
846.6	4233	12.2K RMC	0	Ground	Fig.17	19.96	20	1.009	0.589	0.594	-0.09

Table 14.13: SAR Values (LTE Band 5-Head)

Frequency		Mode	Configuration	Side	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.											
844	20600	LTE5	QPSK_10MHz 1RB_0 offset	Left	Touch	/	23.74	24	1.062	0.0767	0.081	0.05
			QPSK_10MHz 25RB_0 offset	Left	Touch	Fig.19	23.66	24	1.081	0.075	0.081	0.08
844	20600	LTE5	QPSK_10MHz 1RB_0 offset	Left	Tilt	/	23.74	24	1.062	0.0558	0.059	0.09
			QPSK_10MHz 25RB_0 offset	Left	Tilt	/	23.66	24	1.081	0.0451	0.049	0.05
844	20600	LTE5	QPSK_10MHz 1RB_0 offset	Right	Touch	/	23.74	24	1.062	0.0741	0.079	0.18
			QPSK_10MHz 25RB_0 offset	Right	Touch	/	23.66	24	1.081	0.0711	0.077	-0.07
844	20600	LTE5	QPSK_10MHz 1RB_0 offset	Right	Tilt	/	23.74	24	1.062	0.0605	0.064	0.11
			QPSK_10MHz 25RB_0 offset	Right	Tilt	/	23.66	24	1.081	0.0578	0.063	0.05
829	20450	LTE5	QPSK_10MHz 1RB_0 offset	Left	Touch	/	23.53	24	1.114	0.076	0.085	0.05
			QPSK_10MHz 25RB_0 offset	Left	Touch	/	23.52	24	1.117	0.0513	0.057	0.12
836.5	20525	LTE5	QPSK_10MHz 1RB_0 offset	Left	Touch	Fig.18	23.66	24	1.081	0.082	0.089	-0.06
			QPSK_10MHz 25RB_0 offset	Left	Touch	/	23.62	24	1.091	0.0575	0.063	0.05

Table 14.14: SAR Values Sensor off (LTE Band 5)

Frequency		Distance (mm)	Configuration	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.										
844	20600	14	QPSK_10MHz 1RB_25 offset	Toward Ground	/	23.74	24	1.062	0.367	0.390	-0.09
			QPSK_10MHz	Toward	/	23.66	24	1.081	0.310	0.335	0.05

			25RB_0 offset	Ground							
844	20600	0	QPSK_10MHz	Toward	Fig.20	23.74	24	1.062	0.386	0.410	0.07
			1RB_25 offset	Right							
			QPSK_10MHz	Toward	Fig.21	23.66	24	1.081	0.317	0.343	-0.04
			25RB_0 offset	Right							
844	20600	14	QPSK_10MHz	Toward	/	23.74	24	1.062	0.199	0.211	0.04
			1RB_25 offset	Bottom							
			QPSK_10MHz	Toward	/	23.66	24	1.081	0.169	0.183	-0.12
			25RB_0 offset	Bottom							
829	20450	14	QPSK_10MHz	Toward	/	23.53	24	1.114	0.303	0.338	0.07
			1RB_25 offset	Right							
			QPSK_10MHz	Toward	/	23.52	24	1.117	0.234	0.261	0.12
			25RB_0 offset	Right							
836.5	20525	14	QPSK_10MHz	Toward	/	23.66	24	1.081	0.352	0.381	-0.13
			1RB_25 offset	Right							
			QPSK_10MHz	Toward	/	23.62	24	1.091	0.264	0.288	0.12
			25RB_0 offset	Right							

Table 14.15: SAR Values Sensor on (LTE Band 5)

Frequency		Distance (mm)	Configuration	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.										
844	20600	0	QPSK_10MHz	Toward	/	21.65	22	1.084	0.577	0.625	0.14
			1RB_25 offset	Ground							
			QPSK_10MHz	Toward	/	20.64	21	1.086	0.459	0.499	0.15
			25RB_0 offset	Ground							
844	20600	0	QPSK_10MHz	Toward	/	21.65	22	1.084	0.191	0.207	0.19
			1RB_25 offset	Bottom							
			QPSK_10MHz	Toward	/	20.64	21	1.086	0.14	0.152	0.11
			25RB_0 offset	Bottom							
829	20450	0	QPSK_10MHz	Toward	Fig.22	21.59	22	1.099	0.572	0.629	0.05
			1RB_25 offset	Ground							
			QPSK_10MHz	Toward	/	20.61	21	1.094	0.446	0.488	-0.01
			25RB_0 offset	Ground							
836.5	25255	0	QPSK_10MHz	Toward	/	21.65	22	1.084	0.571	0.619	-0.18
			1RB_25 offset	Ground							
			QPSK_10MHz	Toward	Fig.23	20.64	21	1.086	0.467	0.507	0.11
			25RB_0 offset	Ground							

Table 14.16: SAR Values (LTE Band 7- Head)

Frequency		Mode	Configuration	Side	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.											
2535	21100	Band 7	QPSK_20MHz 1RB_50 offset	Left	Touch	/	23.81	24	1.045	0.0799	0.083	0.10
			QPSK_20MHz 50RB_0 offset	Left	Touch	/	23.42	24	1.143	0.0608	0.069	-0.06
2535	21100	Band 7	QPSK_20MHz 1RB_50 offset	Left	Tilt	/	23.81	24	1.045	0.0741	0.077	0.18
		Band 7	QPSK_20MHz 50RB_0 offset	Left	Tilt	/	23.42	24	1.143	0.0591	0.068	0.01
2535	21100	Band 7	QPSK_20MHz 1RB_50 offset	Right	Touch	/	23.81	24	1.045	0.137	0.143	0.04
		Band 7	QPSK_20MHz 50RB_0 offset	Right	Touch	/	23.42	24	1.143	0.102	0.117	-0.07
2535	21100	Band 7	QPSK_20MHz 1RB_50 offset	Right	Tilt	/	23.81	24	1.045	0.0520	0.054	0.05
		Band 7	QPSK_20MHz 50RB_0 offset	Right	Tilt	/	23.42	24	1.143	0.0375	0.043	0.12
2510	20850	Band 7	QPSK_20MHz 1RB_50 offset	Right	Touch	/	23.65	24	1.084	0.127	0.138	0.09
		Band 7	QPSK_20MHz 50RB_0 offset	Right	Touch	/	23.31	24	1.172	0.121	0.142	-0.14
2560	21350	Band 7	QPSK_20MHz 1RB_50 offset	Right	Touch	Fig.24	23.64	24	1.086	0.152	0.165	0.13
			QPSK_20MHz 50RB_0 offset	Right	Touch	Fig.25	23.21	24	1.199	0.136	0.163	0.09

Table 14.17: SAR Values Sensor off (LTE Band 7)

Frequency		Distance (mm)	Configuration	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.										
2535	21100	14	QPSK_20MHz 1RB_50 offset	Toward Ground	/	23.81	24	1.045	0.674	0.704	-0.18
			QPSK_20MHz 50RB_0 offset	Toward Ground	/	23.42	24	1.143	0.555	0.634	0.04
2535	21100	0	QPSK_20MHz 1RB_50 offset	Toward Right	/	23.81	24	1.045	0.985	1.029	-0.12
			QPSK_20MHz 50RB_0 offset	Toward Right	/	23.42	24	1.143	0.672	0.768	0.07
2535	21100	14	QPSK_20MHz 1RB_50 offset	Toward Bottom	/	23.81	24	1.045	0.761	0.795	0.12
			QPSK_20MHz 50RB_0 offset	Toward Bottom	/	23.42	24	1.143	0.625	0.714	0.04
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.26	23.65	24	1.084	1	1.084	-0.07
			QPSK_20MHz 50RB_0 offset	Toward Right	Fig.27	23.31	24	1.172	0.821	0.962	-0.09
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	/	23.64	24	1.086	0.892	0.969	0.12
			QPSK_20MHz 50RB_0 offset	Toward Right	/	23.21	24	1.199	0.608	0.729	0.03
2535	21100	0	QPSK_20MHz 100RB_0 offset	Toward Right	/	23.5	24	1.122	0.660	0.741	-0.11
Repeated											
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.28	23.64	24	1.086	1	1.086	-0.16
2510	20850	0	QPSK_20MHz 50RB_0 offset	Toward Right	Fig.29	23.21	24	1.199	0.862	1.034	-0.08
SIM 2											
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.30	23.64	24	1.086	0.976	1.060	-0.15

Table 14.18: SAR Values Sensor on (LTE Band 7)

Frequency		Distance (mm)	Configuration	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.										
2535	21100	0	QPSK_20MHz 1RB_50 offset	Toward Ground	/	12.2	12.5	1.072	0.944	1.012	0.02
			QPSK_20MHz 50RB_0 offset	Toward Ground	/	10.83	11	1.040	0.722	0.751	0.04
2535	21100	0	QPSK_20MHz 1RB_50 offset	Toward Bottom	/	12.2	12.5	1.072	0.611	0.655	-0.12
			QPSK_20MHz 50RB_0 offset	Toward Bottom	/	10.83	11	1.040	0.516	0.537	0.07
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Ground	Fig.31	12.13	12.5	1.089	0.957	1.042	0.00
			QPSK_20MHz 50RB_0 offset	Toward Ground	Fig.32	10.93	11	1.016	0.742	0.754	-0.02
2560	21350	0	QPSK_20MHz 1RB_50 offset	Toward Ground	/	12.06	12.5	1.107	0.868	0.961	0.19
			QPSK_20MHz 50RB_0 offset	Toward Ground	/	10.83	11	1.040	0.699	0.727	-0.17
2535	21100	0	QPSK_20MHz 100RB_0 offset	Toward Ground	/	10.76	11	1.057	0.724	0.765	0.13
Repeated											
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Ground	Fig.33	12.13	12.5	1.089	0.899	0.979	0.01

Table 14.19: SAR Values (Wi-Fi 802.11b - Head)

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Duty cycle facto	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
2462	11	Left	Touch	/	15.77	16	1.054	1.212	0.175	0.224	0.13
2462	11	Left	Tilt	/	15.77	16	1.054	1.212	0.195	0.249	-0.09
2462	11	Right	Touch	Fig.34	15.77	16	1.054	1.212	0.453	0.579	0.07
2462	11	Right	Tilt	/	15.77	16	1.054	1.212	0.347	0.443	-0.14
2412	1	Right	Touch	/	15.67	16	1.079	1.212	0.354	0.463	-0.09
2437	6	Right	Touch	/	15.73	16	1.064	1.212	0.438	0.565	0.12

Table 14.20:SAR Values Sensor off (WiFi2450 802.11b)

Frequency		Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Duty cycle factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch										
2437	6	14	Left	/	15.73	16	1.064	1.212	0.058	0.075	0.03
2437	6	0	Top	/	15.73	16	1.064	1.212	0.0731	0.094	0.01
2437	6	14	Ground	/	15.73	16	1.064	1.212	0.0957	0.123	0.01
2412	1	14	Ground	Fig.35	15.67	16	1.079	1.212	0.106	0.139	0.12
2462	11	14	Ground	/	15.77	16	1.054	1.212	0.0735	0.094	0.12

Table 14.21:SAR Values Sensor on (WiFi2450 802.11b)

Frequency		Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Duty cycle factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch										
2412	1	0	Ground	/	13.97	14	1.007	1.212	0.277	0.338	0.12
2437	6	0	Ground	/	13.91	14	1.021	1.212	0.269	0.333	0.05
2462	11	0	Ground	Fig.36	13.81	14	1.045	1.212	0.323	0.409	0.13
2437	6	0	Left	/	13.91	14	1.021	1.212	0.136	0.168	0.04
2437	6	0	Top	/	13.91	14	1.021	1.212	0.162	0.200	0.06

14.2. SAR results for Standard procedure

There is zoom scan measurement to be added for the highest measured SAR in each exposure configuration/band.

Table 14.22: SAR Values for Head

Frequency		Side	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.									
848.8	848.8	Left	Touch	Fig.1	33.22	33.5	1.067	0.113	0.121	0.14
1850.2	512	Right	Touch	Fig.4	29.71	30.5	1.199	0.0385	0.046	0.07
1907.6	9538	Right	Touch	Fig.10	22.93	23	1.016	0.152	0.154	0.06
846.6	4233	Left	Touch	Fig.15	23.34	24	1.164	0.121	0.141	0.09
2462	11	Right	Touch	Fig.34	15.77	16	1.054	0.453	0.579	0.07

Frequency		Mode	Configuration	Side	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.											
836.5	20525	Band5	QPSK_10MHz 1RB_0 offset	Left	Touch	Fig.18	23.66	24	1.081	0.082	0.089	-0.06
844	20600		QPSK_10MHz 25RB_0 offset	Left	Touch	Fig.19	23.66	24	1.081	0.075	0.081	0.08
2560	21350	Band 7	QPSK_20MHz 1RB_50 offset	Right	Touch	Fig.24	23.64	24	1.086	0.152	0.165	0.13
2560	21350		QPSK_20MHz 50RB_0 offset	Right	Touch	Fig.25	23.21	24	1.199	0.136	0.163	0.09

Table 14.23: SAR Values for Hotspot/Body worn

Frequency		Mode	Distance (mm)	Test Position	Figure No.	Measured average power(dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
848.8	848.8	GPRS (4)	0	Right	Fig.2	28.63	29	1.089	0.548	0.597	-0.03
848.8	848.8	GPRS (4)	0	Ground	Fig.3	20.38	21	1.153	0.319	0.368	0.09
1909.8	810	GPRS (4)	0	Right	Fig.5	26.61	27	1.094	0.511	0.559	0.18
1909.8	810	GPRS (4)	0	Ground	Fig.6	18.59	19	1.099	1.04	1.143	0.07
1909.8	810	GPRS (4)	0	Ground	Fig.7	18.59	19	1.099	1.02	1.121	0.11
1909.8	810	GPRS (4)	0	Ground	Fig.8	18.59	19	1.099	0.963	1.058	0.01
1909.8	810	GPRS (4)	0	Ground	Fig.9	18.59	19	1.099	0.958	1.053	0.10
1907.6	9538	12.2K RMC	0	Right	Fig.11	22.93	23	1.016	0.857	0.871	0.06
1907.6	9538	12.2K RMC	0	Right	Fig.12	22.93	23	1.016	0.865	0.879	0.05
1907.6	9538	12.2K RMC	0	Ground	Fig.13	14.45	14.5	1.012	0.916	0.927	0.12
1907.6	9538	12.2K RMC	0	Ground	Fig.14	14.45	14.5	1.012	0.912	0.923	0.05
846.6	4233	12.2K RMC	14	Ground	Fig.16	23.34	24	1.164	0.36	0.419	-0.01
846.6	4233	12.2K RMC	0	Ground	Fig.17	19.96	20	1.009	0.589	0.594	-0.09
2412	1	802.11b	14	Ground	Fig.35	15.67	16	1.079	0.106	0.139	0.12
2462	11	802.11b	0	Ground	Fig.36	13.81	14	1.045	0.323	0.409	0.13

Frequency		Distance (mm)	Configuration	Test Position	Figure No.	Measured average power (dBm)	Maximum allowed Power (dBm)	Scaling factor	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.										
844	20600	0	QPSK_10MHz 1RB_25 offset	Toward Right	Fig.20	23.74	24	1.062	0.386	0.410	0.07
			QPSK_10MHz 25RB_0 offset	Toward Right	Fig.21	23.66	24	1.081	0.317	0.343	-0.04
829	20450	0	QPSK_10MHz 1RB_25 offset	Toward Ground	Fig.22	21.59	22	1.099	0.572	0.629	0.07
836.5	25255	0	QPSK_10MHz 25RB_0 offset	Toward Ground	Fig.23	20.64	21	1.086	0.467	0.507	0.11
844	20600	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.26	23.65	24	1.084	1	1.084	-0.07
844	20600	0	QPSK_20MHz 50RB_0 offset	Toward Right	Fig.27	23.31	24	1.172	0.821	0.962	-0.09
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.28	23.64	24	1.086	1	1.086	-0.16
2510	20850	0	QPSK_20MHz 50RB_0 offset	Toward Right	Fig.29	23.21	24	1.199	0.862	1.034	-0.08
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Right	Fig.30	23.64	24	1.086	0.976	1.060	-0.15
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Ground	Fig.31	12.13	12.5	1.089	0.957	1.042	0.00
2510	20850	0	QPSK_20MHz 50RB_0 offset	Toward Ground	Fig.32	10.93	11	1.016	0.742	0.754	-0.02
2510	20850	0	QPSK_20MHz 1RB_50 offset	Toward Ground	Fig.33	12.13	12.5	1.089	0.899	0.979	0.01

15. 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.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 4) 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 16.1: SAR Measurement Variability (1g)

Frequency		Mode	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated (W/kg)
MHz	Ch.						
1909.8	810	GPRS (4)	Ground	1.04	1.02	1.020	N/A
1907.6	9538	12.2K RMC	Right	0.857	0.865	1.009	N/A
1907.6	9538	12.2K RMC	Ground	0.916	0.912	1.004	N/A
2510	20850	QPSK_20MHz 1RB_50 offset	Toward Right	1	1	1.000	N/A
2510	20850	QPSK_20MHz 50RB_0 offset	Toward Right	0.821	0.862	1.050	N/A
2510	20850	QPSK_20MHz 1RB_50 offset	Toward Ground	0.957	0.899	1.065	N/A

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

16. Evaluation of Simultaneous

Table 16.1: Summary of Transmitters for FCC

Band/Mode	Frequency (GHz)	SAR test exclusion threshold(mW)	RF output power (mW)
Bluetooth	2.41	10	5.012
2.4GHz WLAN 802.11 b/g/n	2.45	10	39.811

Table16.2 Simultaneous transmission SAR

Standalone SAR for WWAN (W/Kg)								
Test Position		GSM8	GSM19	WCDMA	WCDMA	LTE	LTE	Highest SAR
		50	00	Band II	Band V	Band 5	Band 7	
Head	Left Touch	0.121	0.035	0.093	0.141	0.089	0.0799	0.141
	Left Tilt	0.043	0.030	0.085	0.063	0.059	0.0741	0.085
	Right Touch	0.056	0.046	0.154	0.075	0.079	0.152	0.154
	Right Tilt	0.045	0.016	0.054	0.078	0.064	0.0520	0.078
Body 14mm	Ground Side	0.347	0.347	0.558	0.419	0.390	0.704	0.704
	Right Side	--	--	--	--	--	--	--
	Bottom Side	0.405	0.405	0.582	0.184	0.211	0.795	0.795
	Top Side	--	--	--	--	--	--	--
Body 0 mm	Ground Side	0.368	1.121	0.927	0.594	0.629	1.042	1.121
	Right Side	0.559	0.559	0.879	0.409	0.410	1.086	1.086
	Bottom Side	0.076	0.664	0.418	0.189	0.207	0.655	0.664
	Top Side	--	--	--	--	--	--	--

Transmission SAR(W/Kg)					
Test Position		WWAN	WIFI 2.4GHz	BT	SUM
Head	Left Touch	0.141	0.224	0.209	0.365
	Left Tilt	0.085	0.249	0.209	0.334
	Right Touch	0.154	0.579	0.209	0.733
	Right Tilt	0.078	0.443	0.209	0.521
Body 14mm	Ground Side	0.704	0.139	0.209	0.843
	Left Side	--	0.075	0.209	0.209
	Right Side	--	--	0.209	0.209
	Bottom Side	0.795	--	0.209	1.004
	Top Side	--	0.094	0.209	0.209
Body 0 mm	Ground Side	1.121	0.409	0.209	1.530
	Left Side	--	0.168	0.209	0.209
	Right Side	1.086	--	0.209	1.295
	Bottom Side	0.664	--	0.209	0.873
	Top Side	--	0.200	0.209	0.209

According to the conducted power measurement result, we can draw the conclusion that: stand-alone SAR for WiFi should be performed. Then, simultaneous transmission SAR for WiFi/BT is considered with measurement results of WCDMA/LTE and WiFi/BT. According to the above table, the sum of reported SAR values for WCDMA/LTE and WiFi<1.6W/kg. So the simultaneous transmission SAR is not required for WiFi/BT transmitter.

17. Measurement Uncertainty

Measurement uncertainty for 750 MHz to 3 GHz averaged over 1 gram						
Uncertainty Component	Uncertainty	Prob.	Div.	$c_{i(1g)}$	Std. Unc. (1-g)	v_i or v_{eff}
Measurement System						
Probe Calibration ($k=1$)	5.4	Normal	2	1	5.40	∞
Probe Isotropy	4.70	Rectangular	$\sqrt{3}$	0.7	1.90	∞
Modulation Response	2.40	Rectangular	$\sqrt{3}$	1	1.39	∞
Hemispherical Isotropy	2.60	Rectangular	$\sqrt{3}$	0.7	1.05	∞
Boundary Effect	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Linearity	4.70	Rectangular	$\sqrt{3}$	1	2.71	∞
System Detection Limit	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Readout Electronics	0.30	Normal	1	1	0.30	∞
Response Time	0.80	Rectangular	$\sqrt{3}$	1	0.46	∞
Integration Time	2.60	Rectangular	$\sqrt{3}$	1	1.50	∞
RF Ambient Noise	0.00	Rectangular	$\sqrt{3}$	1	0.00	∞
RF Ambient Reflections	0.00	Rectangular	$\sqrt{3}$	1	0.00	∞
Probe Positioner	0.40	Rectangular	$\sqrt{3}$	1	0.23	∞
Probe Positioning	2.90	Rectangular	$\sqrt{3}$	1	1.67	∞
Post-processing	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Test sample Related						
Test sample Positioning	1.2	Normal	1	1	1.2	5
Device Holder Uncertainty	3.2	Normal	1	1	3.2	71
Power drift	5	Rectangular	$\sqrt{3}$	1	2.89	∞
Power Scaling	0	Rectangular	$\sqrt{3}$	1	0.00	∞
Phantom and Tissue Parameters						
Phantom Uncertainty	4	Rectangular	$\sqrt{3}$	1	2.31	∞
SAR correction	1.9	Rectangular	$\sqrt{3}$	1	1.10	∞
Liquid Conductivity (meas)	4.19	Rectangular	1	0.78	3.27	∞
Liquid Permittivity (meas)	4.4	Rectangular	1	0.26	1.14	∞
Temp. unc. - Conductivity	0.18	Rectangular	$\sqrt{3}$	0.78	0.08	∞
Temp. unc. - Permittivity	0.54	Rectangular	$\sqrt{3}$	0.23	0.07	∞
Combined Std. Uncertainty		RSS			9.39	
Expanded STD Uncertainty		$k=2$			18.77%	

System check uncertainty for 750 MHz to 3 GHz averaged over 1 gram						
Uncertainty Component	Uncertainty	Prob.	Div.	$C_{i(1g)}$	Std. Unc. (1-g)	V_i or V_{eff}
Measurement System						
Probe Calibration ($k=1$)	5.40	Normal	1	1	5.40	∞
Probe Isotropy	4.70	Rectangular	$\sqrt{3}$	0.7	1.90	∞
Modulation Response	2.40	Rectangular	$\sqrt{3}$	1	1.39	∞
Hemispherical Isotropy	2.60	Rectangular	$\sqrt{3}$	0.7	1.05	∞
Boundary Effect	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Linearity	4.70	Rectangular	$\sqrt{3}$	1	2.71	∞
System Detection Limit	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Readout Electronics	0.30	Normal	1	1	0.30	∞
Response Time	0.80	Rectangular	$\sqrt{3}$	1	0.46	∞
Integration Time	2.60	Rectangular	$\sqrt{3}$	1	1.50	∞
RF Ambient Noise	0.00	Rectangular	$\sqrt{3}$	1	0.00	∞
RF Ambient Reflections	0.00	Rectangular	$\sqrt{3}$	1	0.00	∞
Probe Positioner	0.40	Rectangular	$\sqrt{3}$	1	0.23	∞
Probe Positioning	2.90	Rectangular	$\sqrt{3}$	1	1.67	∞
Post-processing	1.00	Rectangular	$\sqrt{3}$	1	0.58	∞
Field source						
Deviation of the experimental source from numerical source	5.5	Normal	1	1	5.5	∞
Source to liquid distance	2	Rectangular	$\sqrt{3}$	1	1.15	∞
Power drift	5	Rectangular	$\sqrt{3}$	1	2.89	∞
Phantom and Tissue Parameters						
Phantom Uncertainty	4	Rectangular	$\sqrt{3}$	1	2.31	∞
SAR correction	1.9	Rectangular	$\sqrt{3}$	1	1.10	∞
Liquid Conductivity (meas)	4.19	Normal	1	0.78	3.27	∞
Liquid Permittivity (meas)	4.4	Normal	1	0.26	1.14	∞
Temp. unc. - Conductivity	0.18	Rectangular	$\sqrt{3}$	0.78	0.08	∞
Temp. unc. - Permittivity	0.54	Rectangular	$\sqrt{3}$	0.23	0.07	∞
Combined Std. Uncertainty		RSS			10.39	
Expanded STD Uncertainty		$k=2$			20.79%	

18. Main Test Instrument

Table 18.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	N5242A	MY51221755	Dec 25, 2017	1 year
02	Power meter	NRVD	102257	May 11, 2017	1 year
03	Power sensor	NRV-Z5	100241		
			100644		
04	Signal Generator	E4438C	MY49072044	May 11, 2017	1 Year
05	Amplifier	NTWPA-0086010F	12023024	No Calibration Requested	
06	Coupler	778D	MY4825551	May 11, 2017	1 year
07	BTS	E5515C	MY50266468	Dec 25, 2017	1 year
08	BTS	MT8820C	6201240338	May 11, 2017	1 year
09	E-field Probe	ES3DV3	3252	Aug 31, 2017	1 year
10	DAE	SPEAG DAE4	1244	Dec 4,2017	1 year
11	Dipole Validation Kit	SPEAG D835V2	4d112	Oct 22, 2015	3 year
		SPEAG D1900V2	5d134	Nov 4,2015	3 year
		SPEAG D2450V2	858	Oct 30,2015	3 year
		SPEAG D2600V2	1031	Oct 30,2015	3 year

ANNEX A. GRAPH RESULTS

GSM900 Left Cheek Mode High

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 849 \text{ MHz}$; $\sigma = 0.929 \text{ S/m}$; $\epsilon_r = 40.788$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: GSM Professional ; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3252ConvF(6.19, 6.19, 6.19); Calibrated: 8/31/2017

GSM900 Left Cheek Mode High/Area Scan (161x101x1):

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

Maximum value of SAR (Measurement) = 0.119 W/kg

GSM900 Left Cheek Mode High/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 5.464 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.134 W/kg

SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.089 W/kg

Maximum of SAR (measured) = 0.119 W/kg

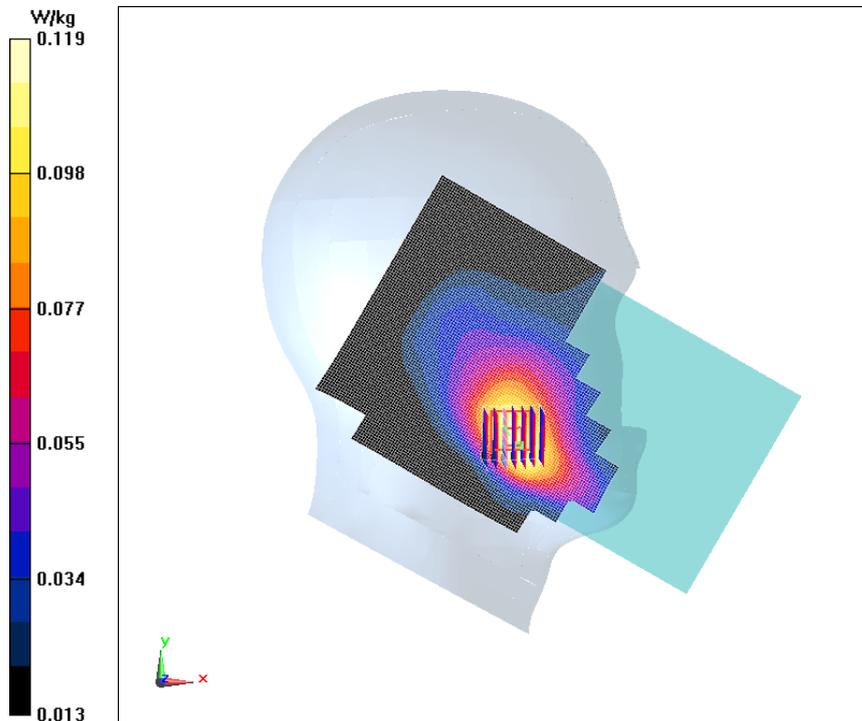


Fig.1 GSM900 Left Cheek Mode High

GSM850 4TS Right Mode High 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 849$ MHz; $\sigma = 1.015$ S/m; $\epsilon_r = 56.966$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: GSM GPRS 4TS (0); Frequency: 848.8 MHz; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

GSM850 4TS Right Mode High 0mm /Area Scan (41x151x1):

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

Maximum value of SAR (Measurement) = 0.595 W/kg

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

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

Reference Value = 15.11 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.336 W/kg

Maximum value of SAR (measured) = 0.605 W/kg

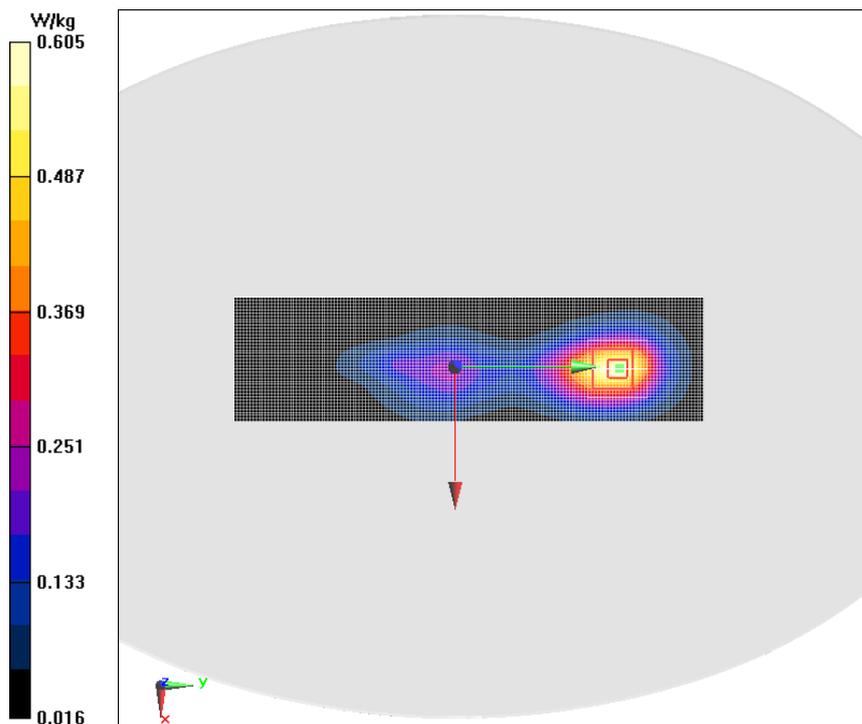


Fig.2 GSM850 4TS Right Mode High 0mm

GSM850 4TS Ground Mode High 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 849 \text{ MHz}$; $\sigma = 1.015 \text{ S/m}$; $\epsilon_r = 56.966$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.5 \text{ }^\circ\text{C}$ Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

Communication System: GSM GPRS 4TS (0); Frequency: 848.8 MHz ; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

GSM850 4TS Ground Mode High 0mm 2/Area Scan (111x171x1):

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

Maximum value of SAR (Measurement) = 0.350 W/kg

GSM850 4TS Ground Mode High 0mm 2/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 3.147 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.736 W/kg

SAR(1 g) = 0.319 W/kg ; SAR(10 g) = 0.180 W/kg

Maximum value of SAR (measured) = 0.355 W/kg

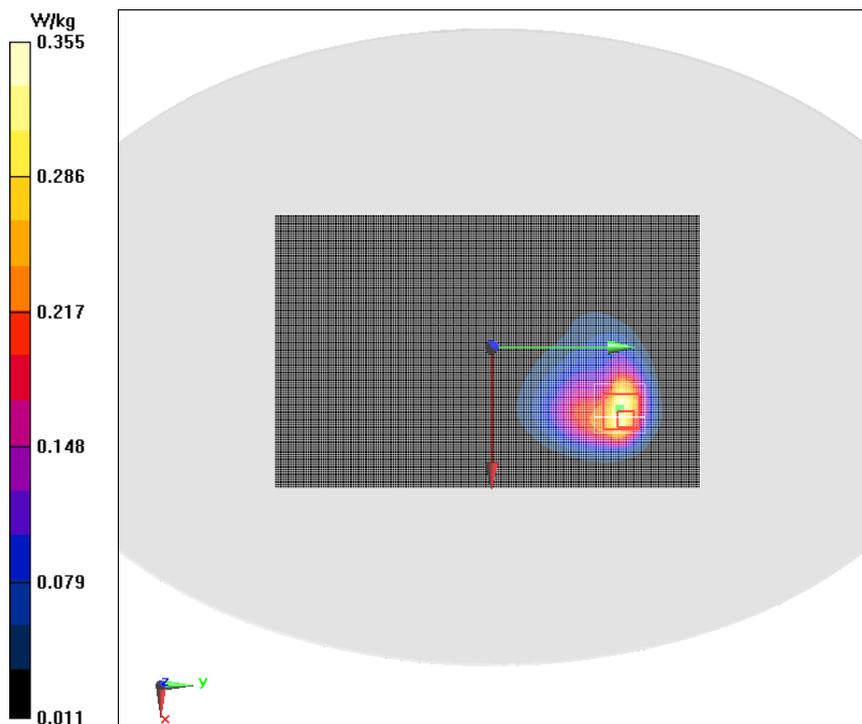


Fig.3 GSM850 4TS Ground Mode High 0mm

GSM1900 Right Cheek Mode High

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.315 \text{ S/m}$; $\epsilon_r = 41.119$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.5 \text{ }^\circ\text{C}$ Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

Communication System: GSM Professional 1900MHz; Frequency: 1909.8 MHz ;

Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3252ConvF(5.11, 5.11, 5.11); Calibrated: 8/31/2017

GSM1900 Right Cheek Mode High/Area Scan (161x101x1):

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

Maximum value of SAR (Measurement) = 0.0421 W/kg

GSM1900 Right Cheek Mode High/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 1.732 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.0510 W/kg

SAR(1 g) = 0.0385 W/kg ; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.0404 W/kg

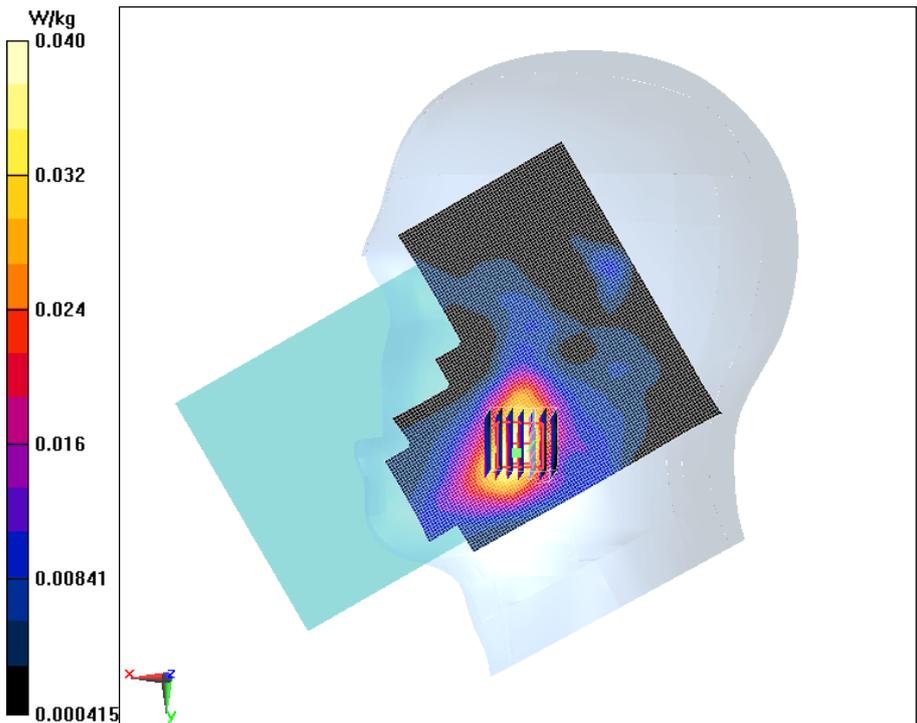


Fig.4 GSM1900 Right Cheek Mode High

GSM1900 Right Mode High 0mm

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.586 \text{ S/m}$; $\epsilon_r = 54.571$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: GSM 1900MHz GPRS 4TS (0); Frequency: 1909.8 MHz;

Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

GSM1900 Right Mode High 0mm/Area Scan (51x171x1):

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

Maximum value of SAR (Measurement) = 0.550 W/kg

GSM1900 Right Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 8.975 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.255 W/kg

Maximum value of SAR (measured) = 0.588 W/kg

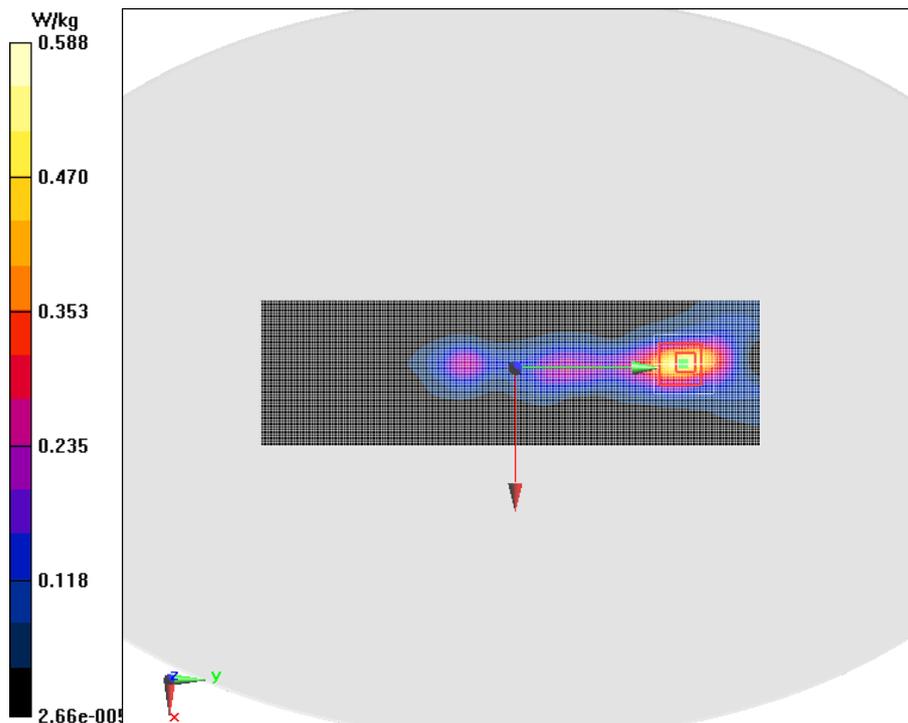


Fig.5 GSM1900 Right Mode High 0mm

GSM1900 Ground Mode High 0mm

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.586$ S/m; $\epsilon_r = 54.571$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: GSM GPRS 4TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

GSM1900 Ground Mode High 0mm /Area Scan (61x81x1):

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

Maximum value of SAR (Measurement) = 0.939 W/kg

GSM1900 Ground Mode High 0mm /Zoom Scan (7x7x7)/Cube 0:

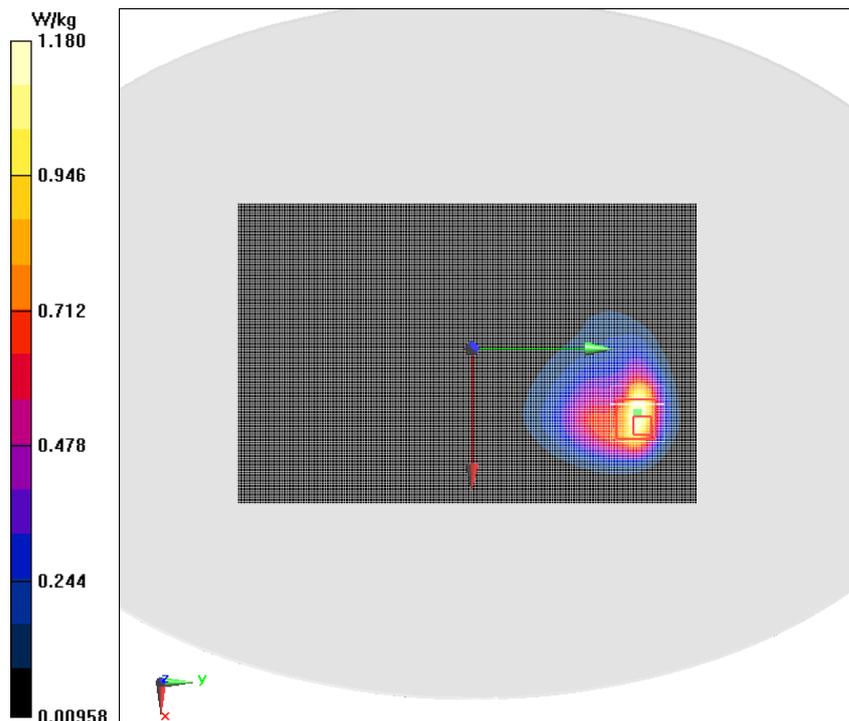
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.039 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.443 W/kg

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

**Fig.6 GSM1900 Ground Mode High 0mm**

GSM1900 Ground Mode High 0mm Repeated

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.586$ S/m; $\epsilon_r = 54.571$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: GSM GPRS 4TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

GSM1900 Ground Mode High 0mm Repeated/Area Scan (61x81x1):

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

Maximum value of SAR (Measurement) = 0.920 W/kg

GSM1900 Ground Mode High 0mm Repeated/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 1.059 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.438 W/kg

Maximum of SAR (measured) = 1.19 W/kg

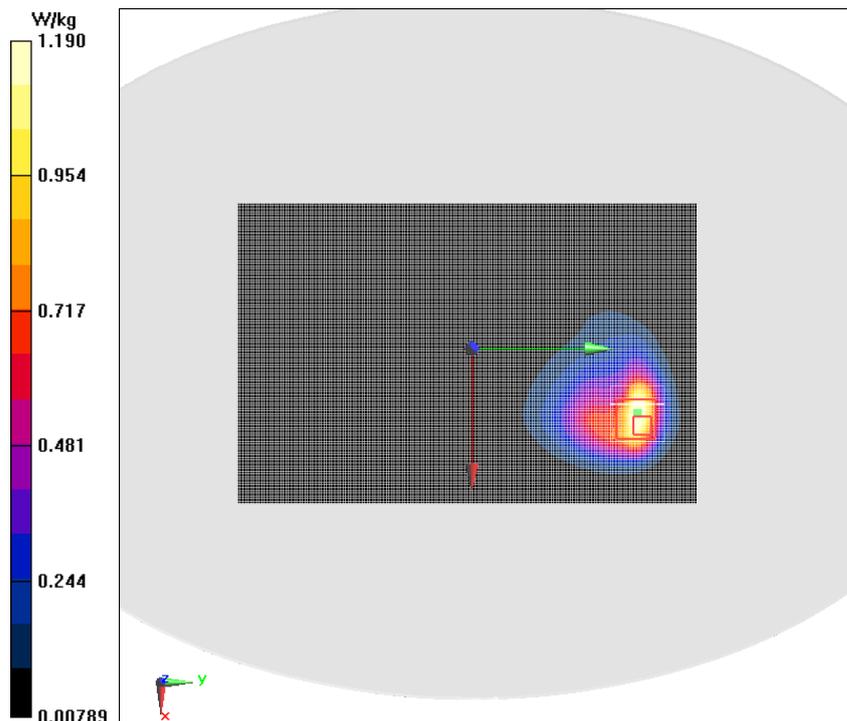


Fig.7 GSM1900 Ground Mode High 0mm Repeated

GSM1900 Ground Mode High 0mm SIM2

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.586$ S/m; $\epsilon_r = 54.571$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: GSM GPRS 4TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

GSM1900 Ground Mode High 0mm SIM2/Area Scan (61x81x1):

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

Maximum value of SAR (Measurement) = 0.915 W/kg

GSM1900 Ground Mode High 0mm SIM2/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 1.218 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 0.963 W/kg; SAR(10 g) = 0.407 W/kg

Maximum value of SAR (measured) = 1.21 W/kg

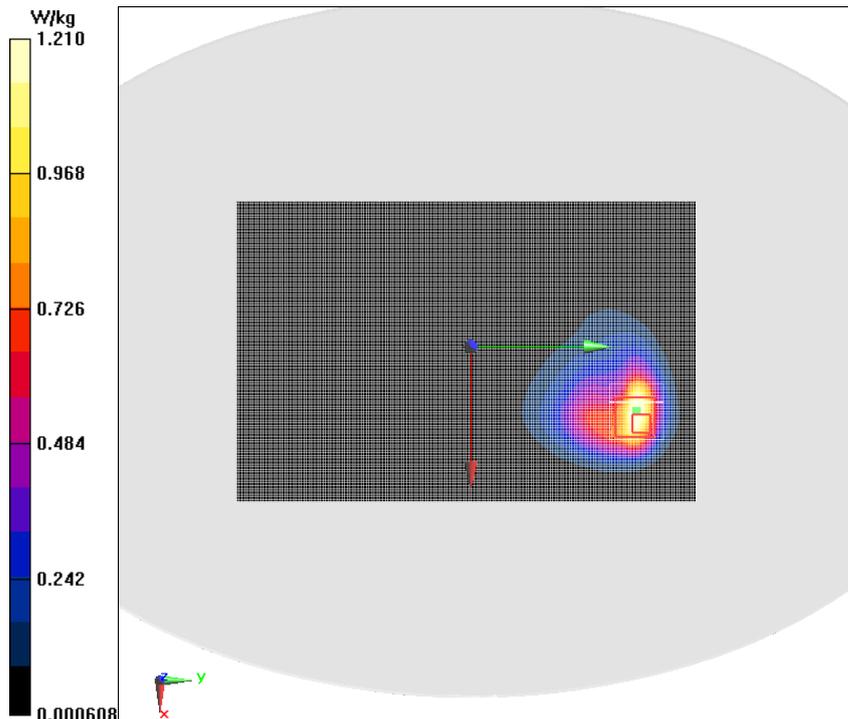


Fig.8 GSM1900 Ground Mode High 0mm SIM2

GSM1900 Ground Mode High 0mm With Headset

Date/Time: 2018/1/16

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.586$ S/m; $\epsilon_r = 54.571$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: GSM GPRS 4TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

GSM1900 Ground Mode High 0mm With Headset/Area Scan (61x81x1):

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

Maximum value of SAR (Measurement) = 0.956 W/kg

GSM1900 Ground Mode High 0mm With Headset/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 1.320 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.406 W/kg

Maximum value of SAR (measured) = 1.21 W/kg

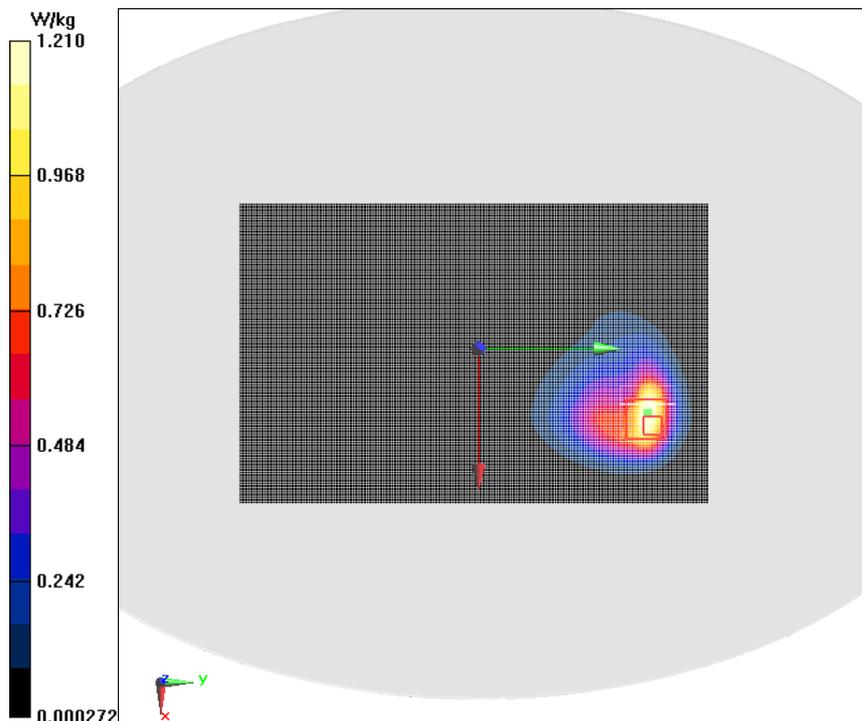


Fig.9 GSM1900 Ground Mode High 0mm With Headset

WCDMA Band 2 Right Cheek Mode High

Date/Time: 2018/1/17

Electronics: DAE4 Sn1244

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.315$ S/m; $\epsilon_r = 41.119$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 1907.6 MHz;

Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(5.11, 5.11, 5.11); Calibrated: 8/31/2017

WCDMA Band 2 Right Cheek Mode High/Area Scan (161x101x1):

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

Maximum value of SAR (interpolated) = 0.176 W/kg

WCDMA Band 2 Right Cheek Mode High/Zoom Scan (7x7x7)/Cube 0:

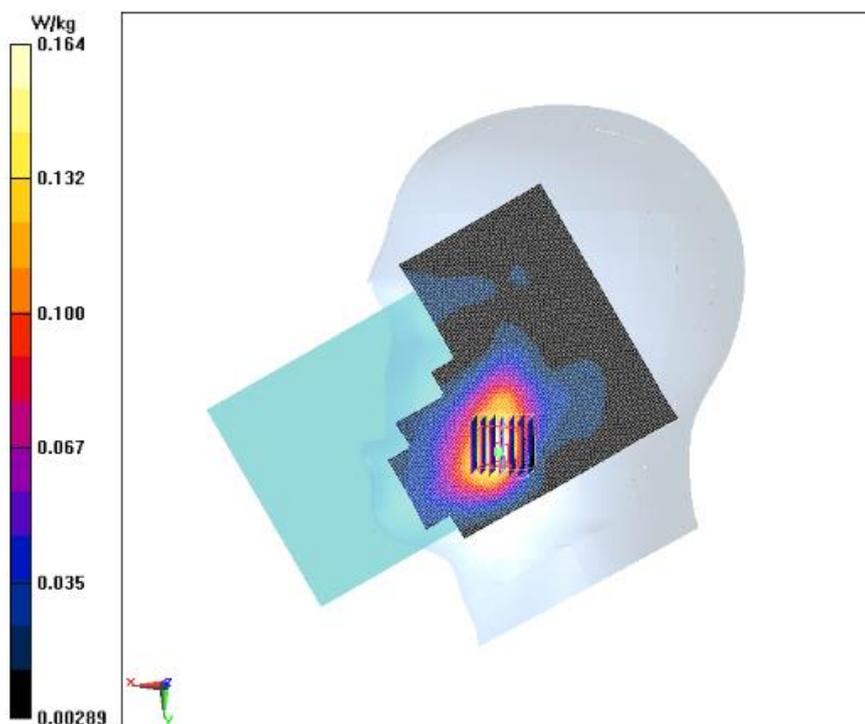
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.897 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.164 W/kg

**Fig.10 WCDMA Band 2 Right Cheek Mode High**

WCDMA Band 2 Right Mode High 0mm

Date/Time: 2018/1/17

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.583$ S/m; $\epsilon_r = 54.577$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

WCDMA Band 2 Right Mode High 0mm/Area Scan (41x71x1):

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

Maximum value of SAR (interpolated) = 0.769 W/kg

WCDMA Band 2 Right Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 9.720 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.857 W/kg; SAR(10 g) = 0.405 W/kg

Maximum value of SAR (measured) = 0.946 W/kg

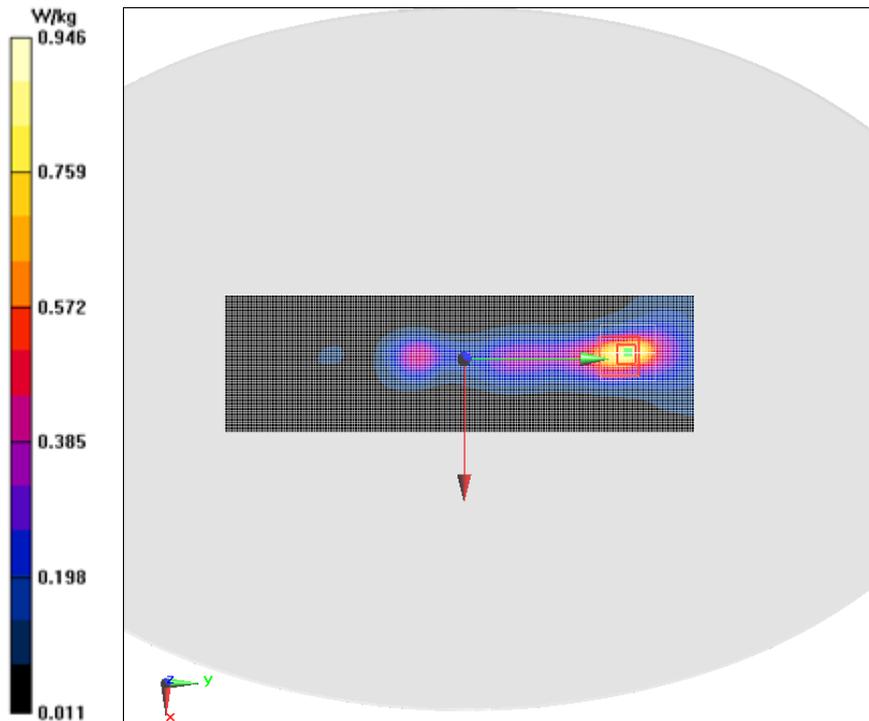


Fig.11 WCDMA Band 2 Right Mode High 0mm

WCDMA Band 2 Right Mode High 0mm Repeated

Date/Time: 2018/1/17

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.583$ S/m; $\epsilon_r = 54.577$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

WCDMA Band 2 Right Mode High 0mm Repeated/Area Scan (41x141x1):

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

Maximum value of SAR (interpolated) = 0.801 W/kg

WCDMA Band 2 Right Mode High 0mm Repeated/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 9.249 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.408 W/kg

Maximum value of SAR (measured) = 0.962 W/kg

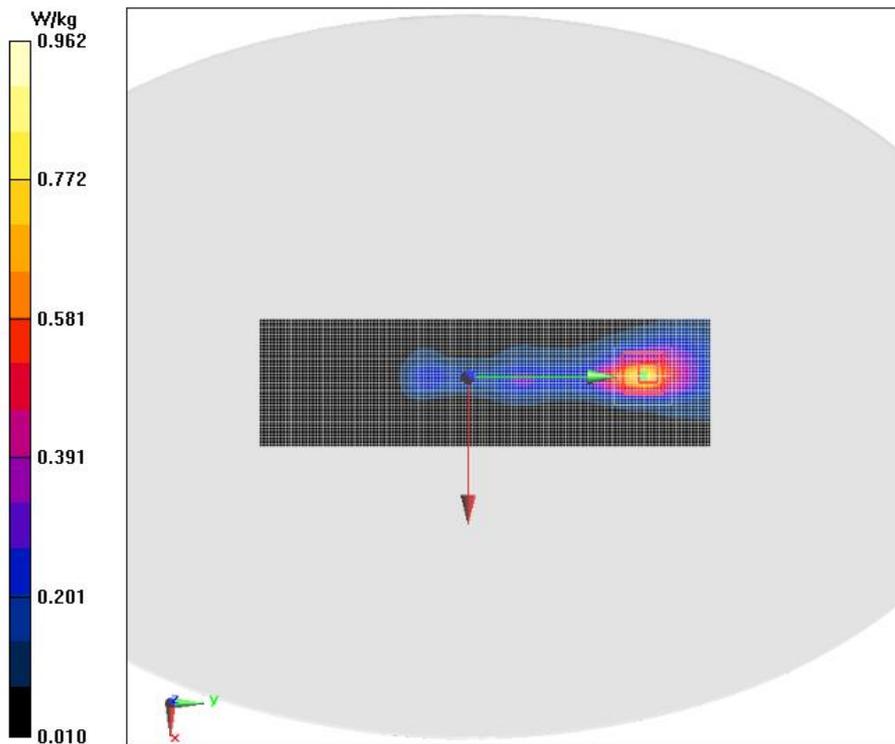


Fig.12 WCDMA Band 2 Right Mode High 0mm Repeated

WCDMA Band 2 Ground Mode High 0mm

Date/Time: 2018/1/17

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.583$ S/m; $\epsilon_r = 54.577$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 1907.6 MHz;
Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

WCDMA Band 2 Ground Mode High 0mm/Area Scan (61x81x1):

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

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

WCDMA Band 2 Ground Mode High 0mm/Zoom Scan (5x5x7)/Cube 0:

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

Reference Value = 1.043 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 0.916 W/kg; SAR(10 g) = 0.389 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

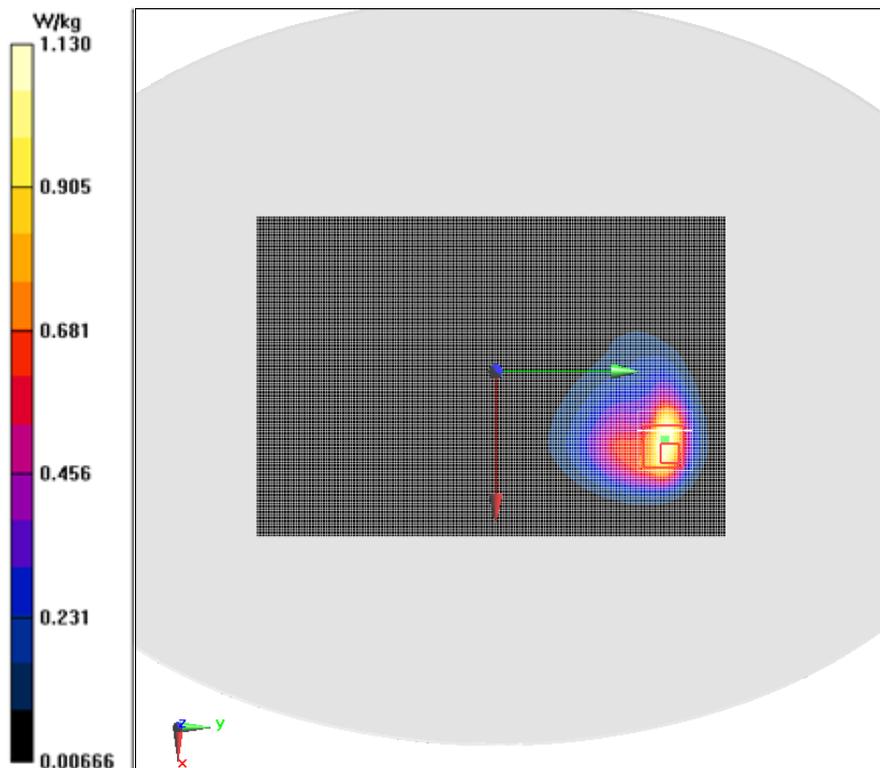


Fig.13 WCDMA Band 2 Ground Mode High 0mm

WCDMA Band 2 Ground Mode High 0mm Repeated

Date/Time: 2018/1/17

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.583$ S/m; $\epsilon_r = 54.577$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(4.69, 4.69, 4.69); Calibrated: 8/31/2017

WCDMA Band 2 Ground Mode High 0mm Repeated/Area Scan (101x141x1):

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

Maximum value of SAR (interpolated) = 0.749 W/kg

WCDMA Band 2 Ground Mode High 0mm Repeated/Zoom Scan (5x5x7)/Cube 0:

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

Reference Value = 1.039 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.388 W/kg

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

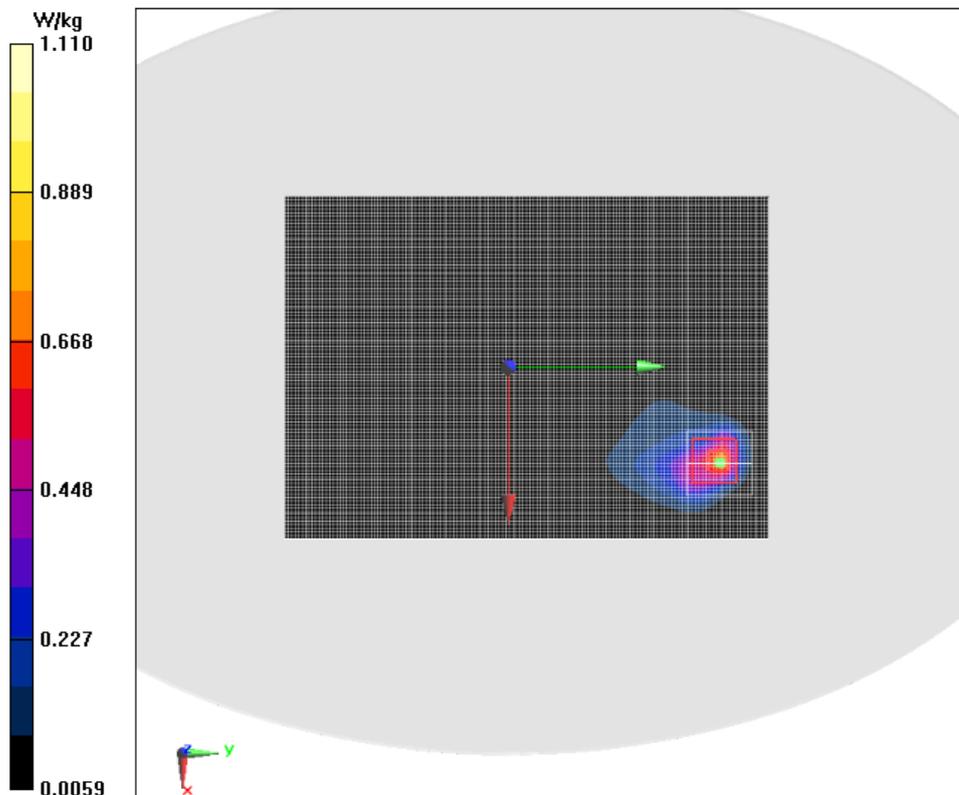


Fig.14 WCDMA Band 2 Ground Mode High 0mm Repeated

WCDMA Band 5 Left Cheek Mode High

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 847$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 40.809$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 846.6 MHz;

Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.19, 6.19, 6.19); Calibrated: 8/31/2017

WCDMA Band 5 Left Cheek Mode High/Area Scan (161x101x1):

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

Maximum value of SAR (interpolated) = 0.126 W/kg

WCDMA Band 5 Left Cheek Mode High/Zoom Scan (7x7x7)/Cube 0:

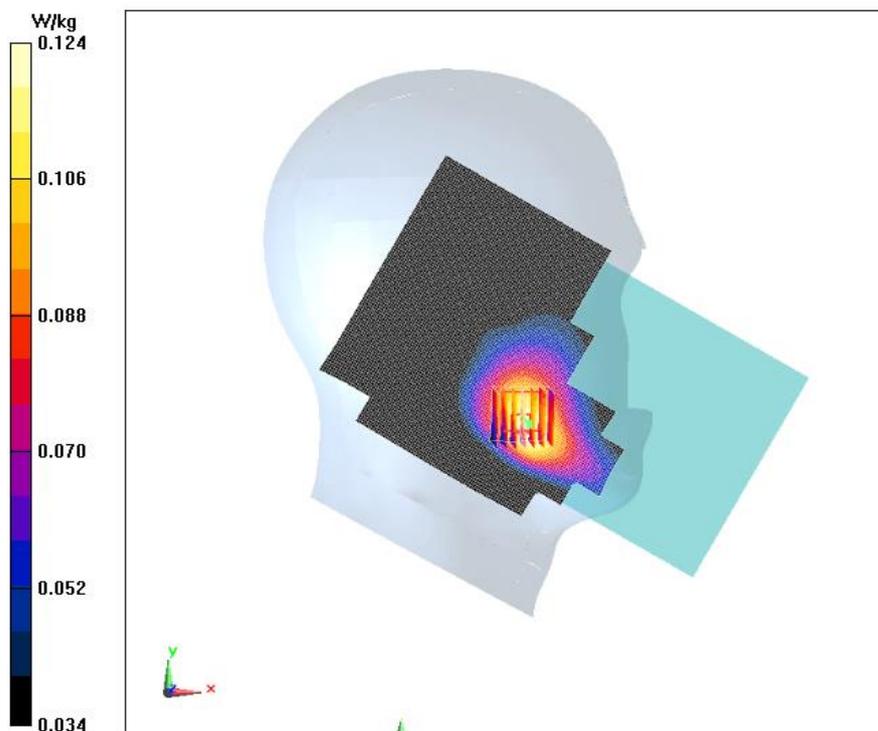
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.208 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.131 W/kg

SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.124 W/kg

**Fig.15 WCDMA Band 5 Left Cheek Mode High**

WCDMA Band 5 Ground Mode High 13mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 847 \text{ MHz}$; $\sigma = 1.012 \text{ S/m}$; $\epsilon_r = 56.994$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: UID 0, WCDMA Professional (0); Frequency: 846.6 MHz;

Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

WCDMA Band 5 Ground Mode High 13mm/Area Scan (111x171x1):

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

Maximum value of SAR (interpolated) = 0.400 W/kg

WCDMA Band 5 Ground Mode High 13mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 9.741 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.360 W/kg; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.382 W/kg

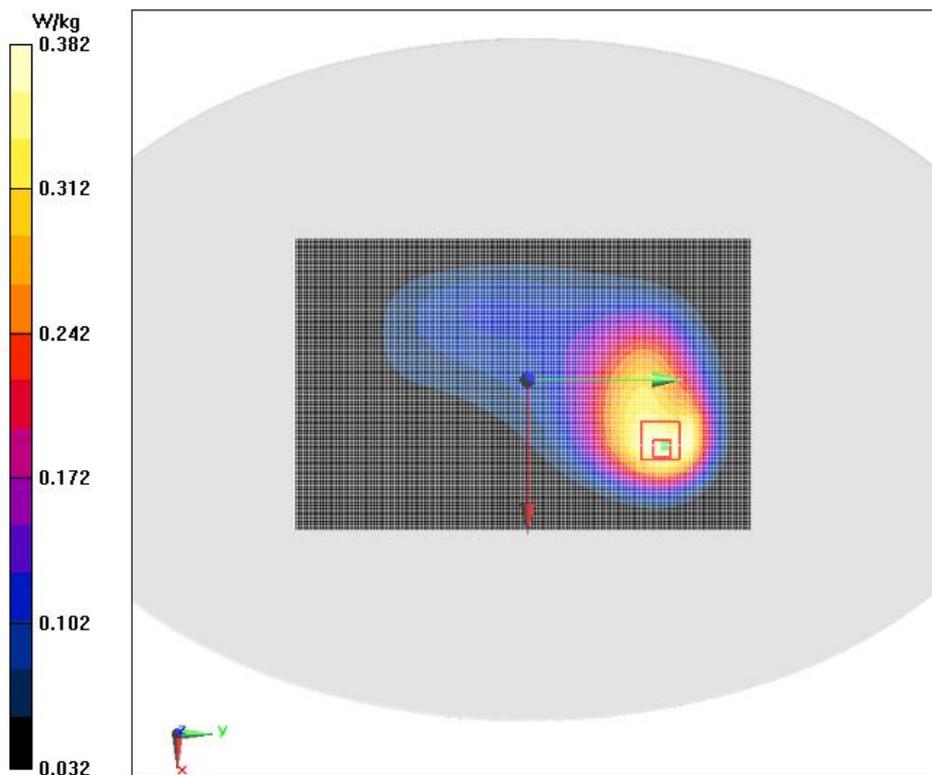


Fig.16 WCDMA Band 5 Ground Mode High 13mm

WCDMA Band 5 Ground Mode High 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 847 \text{ MHz}$; $\sigma = 1.012 \text{ S/m}$; $\epsilon_r = 56.994$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.5 \text{ }^\circ\text{C}$ Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

Communication System: UID 0, WCDMA Professional (0); Frequency: 846.6 MHz ;

Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

WCDMA Band 5 Ground Mode High 0mm/Area Scan (111x171x1):

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

Maximum value of SAR (interpolated) = 0.792 W/kg

WCDMA Band 5 Ground Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 2.726 V/m ; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.589 W/kg ; SAR(10 g) = 0.315 W/kg

Maximum value of SAR (measured) = 0.663 W/kg

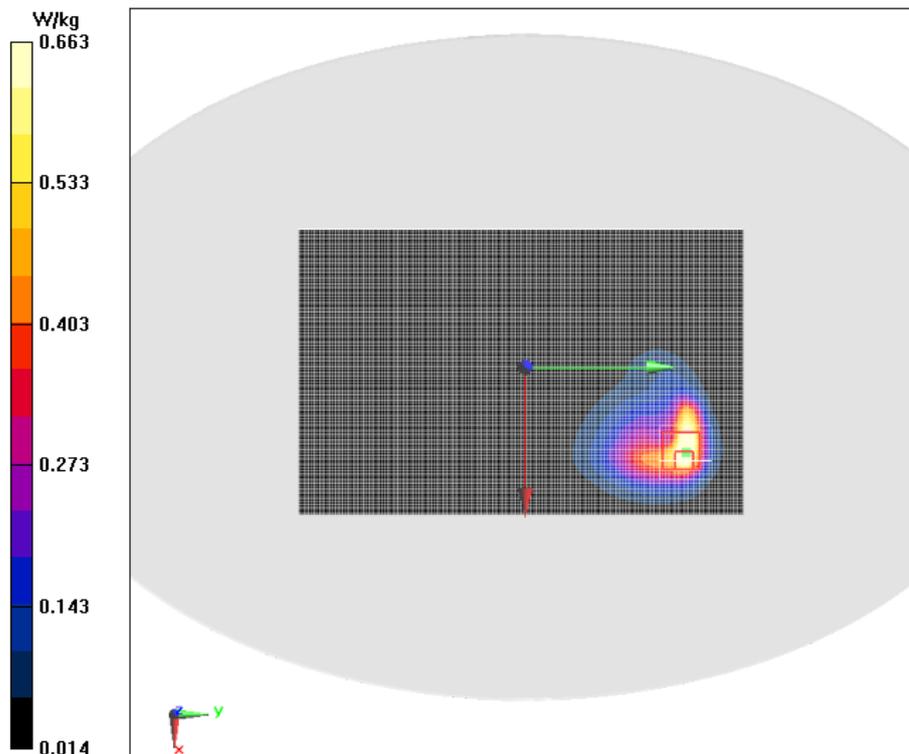


Fig.17 WCDMA Band 5 Ground Mode High 0mm

LTE Band 5 1RB 25 Offset Left Cheek Mode middle

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.918$ S/m; $\epsilon_r = 41.014$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: LTE Band 5 Professional ; Frequency: 836.5 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.19, 6.19, 6.19); Calibrated: 8/31/2017

LTE Band 5 1RB 25 Offset Left Cheek Mode middle/Area Scan (161x101x1):

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

Maximum value of SAR (Measurement) = 0.0854 W/kg

LTE Band 5 1RB 25 Offset Left Cheek Mode middle/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 4.672 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.0960 W/kg

SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.065 W/kg

Maximum of SAR (measured) = 0.0854 W/kg

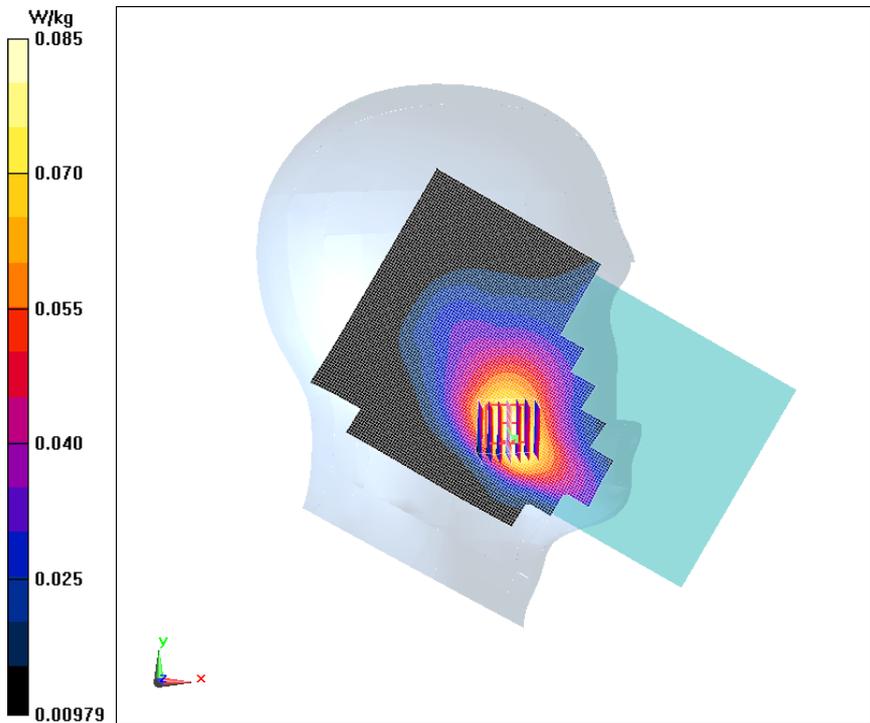


Fig.18 LTE Band 5 1RB 25 Offset Left Cheek Mode middle

LTE Band 5 25RB 0 Offset Left Cheek Mode High

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.924 \text{ S/m}$; $\epsilon_r = 40.846$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.5 \text{ }^\circ\text{C}$ Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

Communication System: LTE Band 5 Professional ; Frequency: 844 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.19, 6.19, 6.19); Calibrated: 8/31/2017

LTE Band 5 25RB 0 Offset Left Cheek Mode High /Area Scan (161x101x1):

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

Maximum value of SAR (Measurement) = 0.0795 W/kg

LTE Band 5 25RB 0 Offset Left Cheek Mode High /Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 4.594 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0890 W/kg

SAR(1 g) = 0.075 W/kg ; SAR(10 g) = 0.060 W/kg

Maximum value of SAR (measured) = 0.0785 W/kg

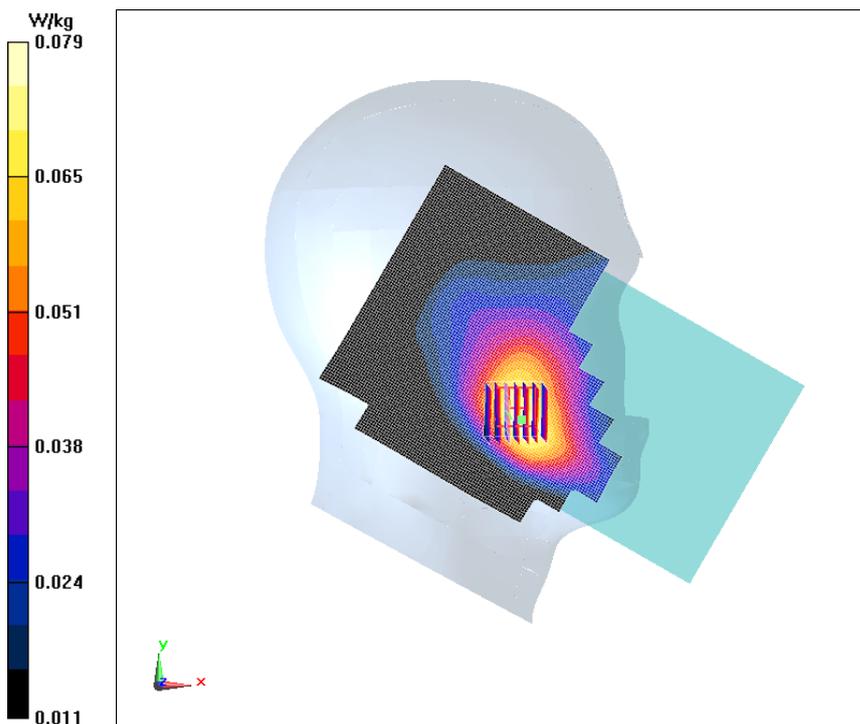


Fig.19 LTE Band 5 25RB 0 Offset Left Cheek Mode High

LTE Band 5 1RB 25 offset Right Mode High 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 1.009 \text{ S/m}$; $\epsilon_r = 57.014$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.5 \text{ }^\circ\text{C}$ Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

Communication System: LTE Band 5 Professional ; Frequency: 844 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

LTE Band 5 1RB 25 offset Right Mode High 0mm/Area Scan (41x141x1):

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

Maximum value of SAR (Measurement) = 0.423 W/kg

LTE Band 5 1RB 25 offset Right Mode High 0mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 12.13 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.386 W/kg ; SAR(10 g) = 0.234 W/kg

Maximum of SAR (measured) = 0.429 W/kg

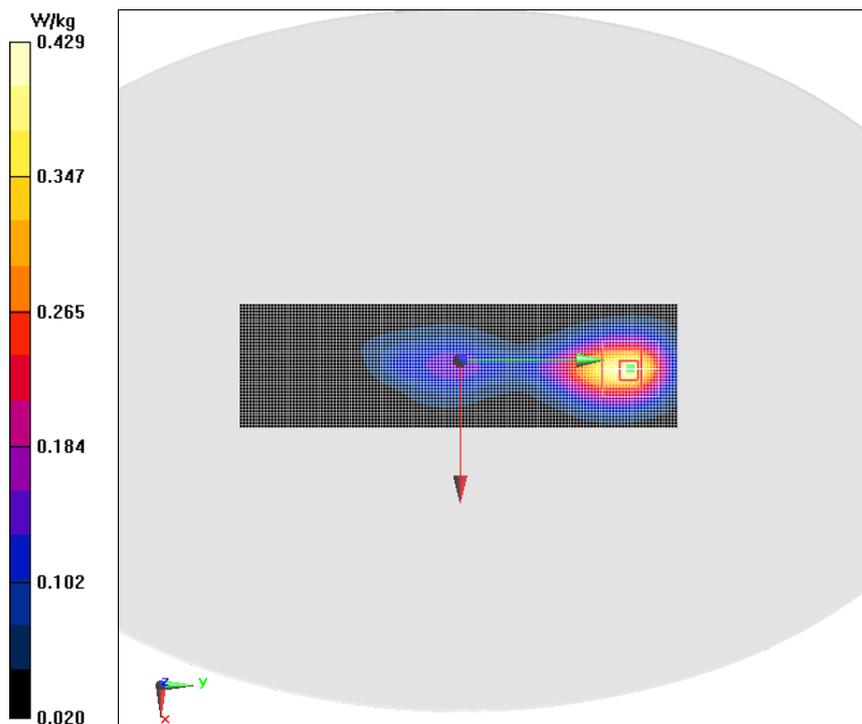


Fig.20 LTE Band 5 1RB 25 offset Right Mode High 0mm

LTE Band 5 25RB 0 offset Right Mode High 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 1.009 \text{ S/m}$; $\epsilon_r = 57.014$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: LTE Band 5 Professional ; Frequency: 844 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

LTE Band 5 25RB 0 offset Right Mode High 0mm /Area Scan (41x141x1):

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

Maximum value of SAR (Measurement) = 0.350 W/kg

LTE Band 5 25RB 0 offset Right Mode High 0mm /Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 11.38 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.525 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.192 W/kg

Maximum of SAR (measured) = 0.353 W/kg

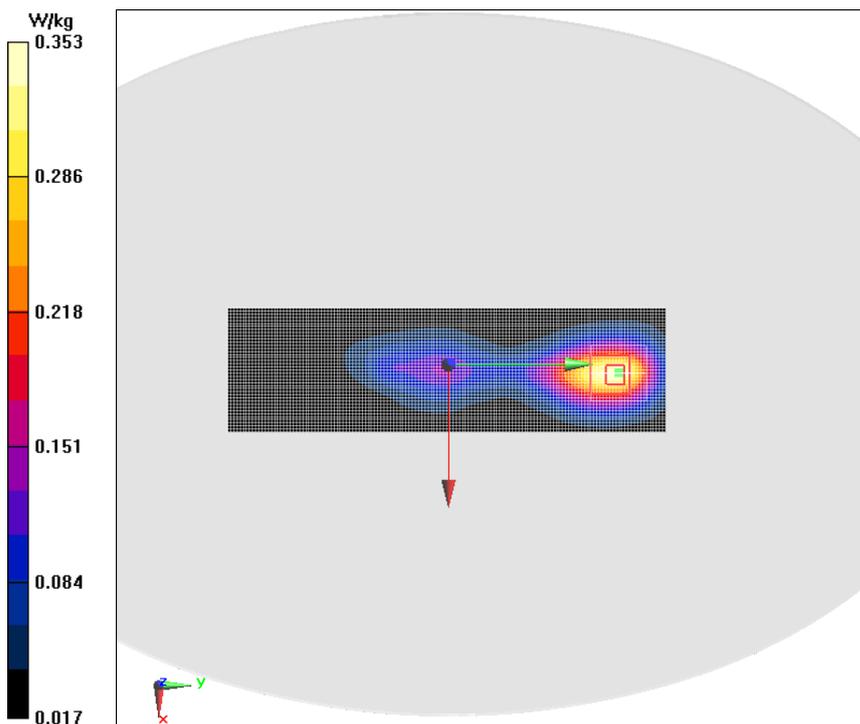


Fig.21 LTE Band 5 25RB 0 offset Right Mode High 0mm

LTE Band 5 1RB 25 offset Ground Mode Low 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium: Body 835MHz

Medium parameters used: $f = 829$ MHz; $\sigma = 0.995$ S/m; $\epsilon_r = 57.167$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: LTE Band 5 Professional 835MHz; Frequency: 829 MHz;

Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

LTE Band 5 1RB 25 offset Ground Mode Low 0mm /Area Scan (111x81x1):

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

Maximum value of SAR (Measurement) = 0.727 W/kg

LTE Band 5 1RB 25 offset Ground Mode Low 0mm/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 3.399 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.324 W/kg

Maximum value of SAR (measured) = 0.679 W/kg

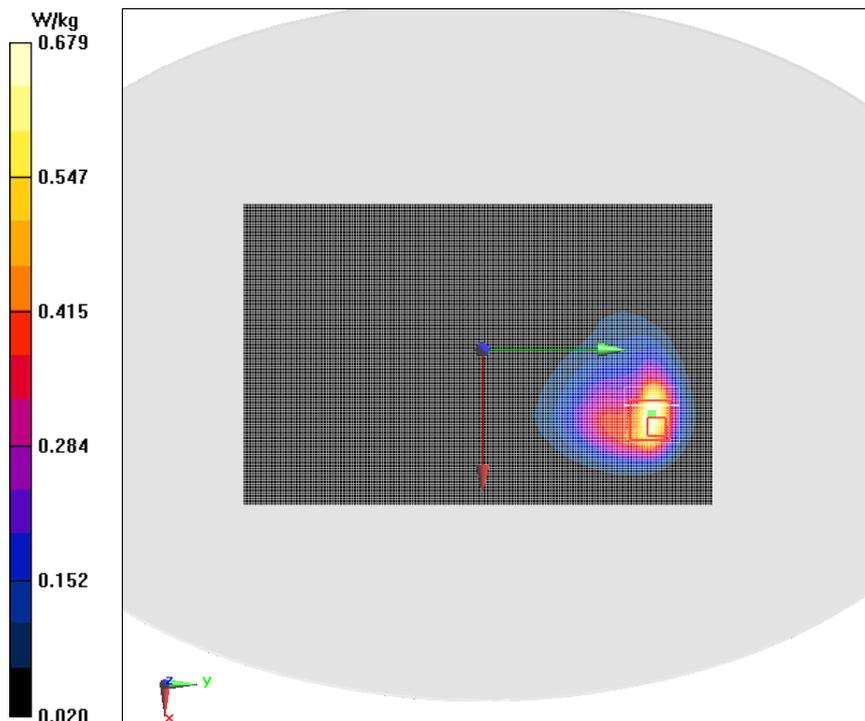


Fig.22 LTE Band 5 1RB 25 offset Ground Mode Low 0mm

LTE Band 5 25RB 0offset Ground Mode Middle 0mm

Date/Time: 2018/1/15

Electronics: DAE4 Sn1244

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 1.002$ S/m; $\epsilon_r = 57.094$; $\rho = 1000$ kg/m³

Ambient Temperature:22.5 °C Liquid Temperature:22.5 °C

Communication System: LTE Band 5 Professional ; Frequency: 836.5 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(6.14, 6.14, 6.14); Calibrated: 8/31/2017

LTE Band 5 25RB 0offset Ground Mode Middle 0mm /Area Scan (111x171x1):

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

Maximum value of SAR (Measurement) = 0.574 W/kg

LTE Band 5 25RB 0offset Ground Mode Middle 0mm /Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 3.047 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 0.551 W/kg

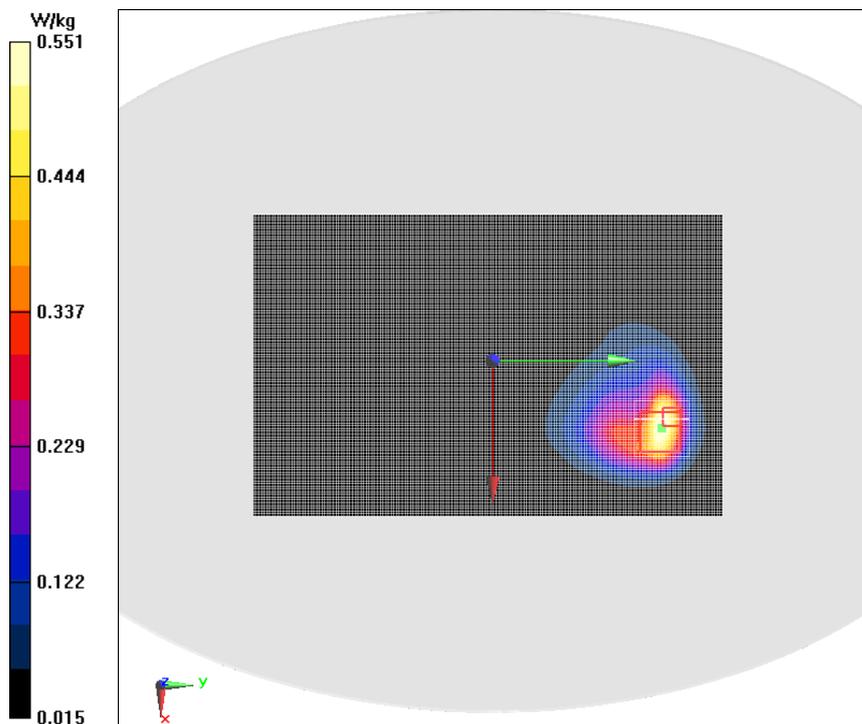


Fig.23 LTE Band 5 25RB 0offset Ground Mode Middle 0mm

LTE Band 7 20MHz 1RB 50Offset Right Cheek Mode High

Date/Time: 2018/1/18

Electronics: DAE4 Sn1244

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.993$ S/m; $\epsilon_r = 38.411$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5 °C Liquid Temperature: 22.5 °C

Communication System: LTE Band 7 Professional ; Frequency: 2560 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3252ConvF(4.44, 4.44, 4.44); Calibrated: 8/31/2017

LTE Band 7 20MHz 1RB 50Offset Right Cheek Mode High/Area Scan (161x101x1):

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

Maximum value of SAR (Measurement) = 0.169 W/kg

LTE Band 7 20MHz 1RB 50Offset Right Cheek Mode High/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 1.059 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.164 W/kg

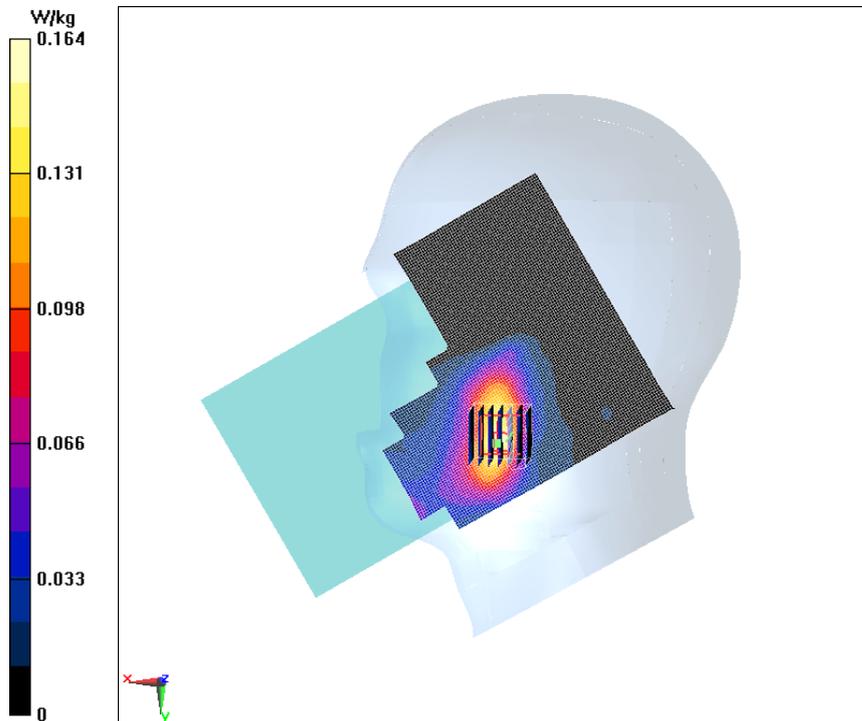


Fig.24 LTE Band 7 20MHz 1RB 50Offset Right Cheek Mode High