

SAR Compliance Test Report

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FCC ID:	PYARM-824	IC:	661V-RM824
Supplement reports:	SAR_Photo_RM-824_04		
Testing has been carried out in accordance with:	47CFR §2.1093 Radiofrequency Radiation Exposure Evaluation: Portable Devices FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01) Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields RSS-102 Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields IEEE 1528 - 2003 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique		
Documentation:	The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.		
Test results:	The tested device complies with the requirements in respect of all parameters subject to the test. The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.		
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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2012-07-02 to 2012-08-27
SN, HW and SW numbers of tested device	SN: 004402/13/976059/3, HW: 2210, SW: 1225.0001.8422.9704.68, DUT: 16501 SN: 004402/13/976065/0, HW: 2210, SW: 1225.0001.8422.9704.68, DUT: 16500 SN: 004402/13/976081/7, HW: 2210, SW: 1225.0001.8422.9704.68, DUT: 16499 SN: 004402/13/976064/3, HW: 2210, SW: 1121.0002.8297.9657.110, DUT: 16502 SN: 004402/13/976060/1, HW: 2210, SW: 1121.0002.8297.9657.110, DUT: 16503 SN: 004402/13/976165/8, HW: 2210, SW: 1225.0001.8422.9704.68, DUT: 16521 SN: 004402/13/976171/6, HW: 2210, SW: 1230.0015.8441.9735.255, DUT: 16611 SN: 004402/13/976156/7, HW: 2210, SW: 1230.0015.8441.9735.255, DUT: 16612
Batteries used in testing	BP-5T, DUT: 16490, 16491, 16492, 16493, 16494, 16495, 16504, 16505, 16506, 16507, 16520
Headsets used in testing	WH-208, DUT:16496, 16497, 16498
Other accessories used in testing	Cover CC-3058 Standard/default back cover Cover CC-3401 Optional Wireless Charging back cover
State of sample	Prototype unit
Notes	-

1.2 Maximum Results

The maximum measured SAR values for Head configuration and Body Worn configuration and Wireless Router (“Hotspot”) configuration are given in section 1.2.1, 1.2.2 and 1.2.3 respectively. The device conforms to the requirements of the standards when the maximum measured SAR value is less than or equal to the limit.

1.2.1 Head Configuration

Mode	Ch / f(MHz)	Conducted power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
LTE700	23780 / 709.0	23.30 dBm	Left, Cheek	0.231 W/kg	0.26 W/kg	1.6 W/kg	PASSED
2-slot GPRS850	251 / 848.8	32.30 dBm	Left, Cheek	0.568 W/kg	0.64 W/kg	1.6 W/kg	PASSED
WCDMA850	4233 / 846.6	23.16 dBm	Left, Cheek	0.292 W/kg	0.33 W/kg	1.6 W/kg	PASSED
LTE850	20525 / 836.5	22.38 dBm	Left, Cheek	0.280 W/kg	0.31 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100	1513 / 1752.6	23.20 dBm	Left, Cheek	0.705 W/kg	0.79 W/kg	1.6 W/kg	PASSED
LTE 1700/2100	20175 / 1732.5	23.31 dBm	Left, Cheek	0.578 W/kg	0.65 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900	661 / 1880.0	30.10 dBm	Left, Cheek	0.970 W/kg	1.09 W/kg	1.6 W/kg	PASSED
WCDMA1900	9400 / 1880.0	22.71 dBm	Left, Cheek	0.913 W/kg	1.02 W/kg	1.6 W/kg	PASSED
LTE1900	18900 / 1880.0	22.82 dBm	Left, Cheek	1.06 W/kg	1.19 W/kg	1.6 W/kg	PASSED
WLAN2450	6 / 2437.0	16.22 dBm	Left, Cheek	0.668 W/kg	0.75 W/kg	1.6 W/kg	PASSED
WLAN5000	64 / 5320.0	12.85 dBm	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
LTE700 + WLAN2450	-	-	Left, Cheek	0.706 W/kg	0.79 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN2450	-	-	Left, Cheek	0.747 W/kg	0.84 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN2450	-	-	Left, Cheek	0.717 W/kg	0.80 W/kg	1.6 W/kg	PASSED
LTE850 + WLAN2450	-	-	Left, Cheek	0.703 W/kg	0.79 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100 + WLAN2450	-	-	Left, Cheek	0.780 W/kg	0.87 W/kg	1.6 W/kg	PASSED
LTE 1700/2100 + WLAN2450	-	-	Left, Cheek	0.770 W/kg	0.86 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN2450	-	-	Left, Cheek	1.05 W/kg	1.18 W/kg	1.6 W/kg	PASSED
WCDMA1900 + WLAN2450	-	-	Left, Cheek	0.980 W/kg	1.10 W/kg	1.6 W/kg	PASSED
LTE1900 + WLAN2450	-	-	Left, Cheek	1.13 W/kg	1.27 W/kg	1.6 W/kg	PASSED
LTE700 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
LTE850 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED

(Table continues)

(Table continues)

LTE 1700/2100 + WLAN5000	-	-	Left, Cheek	0.845 W/kg	0.95 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN5000	-	-	Left, Cheek	1.01 W/kg	1.13 W/kg	1.6 W/kg	PASSED
WCDMA1900 + WLAN5000	-	-	Left, Cheek	0.938 W/kg	1.05 W/kg	1.6 W/kg	PASSED
LTE1900 + WLAN5000	-	-	Left, Cheek	1.09 W/kg	1.22 W/kg	1.6 W/kg	PASSED

1.2.2 Body Worn Configuration

Mode	Ch / f(MHz)	Conducted power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
LTE700	23790 / 710.0	23.05 dBm	1.5 cm	0.230 W/kg	0.26 W/kg	1.6 W/kg	PASSED
2-slot GPRS850	251 / 848.8	32.30 dBm	1.5 cm	0.606 W/kg	0.68 W/kg	1.6 W/kg	PASSED
WCDMA850	4233 / 846.6	23.16 dBm	1.5 cm	0.321 W/kg	0.36 W/kg	1.6 W/kg	PASSED
LTE850	20525 / 836.5	22.38 dBm	1.5 cm	0.277 W/kg	0.31 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100	1412 / 1732.4	23.20 dBm	1.5 cm	0.371 W/kg	0.42 W/kg	1.6 W/kg	PASSED
LTE 1700/2100	20175 / 1732.5	23.45 dBm	1.5 cm	0.435 W/kg	0.49 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900	661 / 1880.0	30.10 dBm	1.5 cm	0.537 W/kg	0.60 W/kg	1.6 W/kg	PASSED
WCDMA1900	9400 / 1880.0	22.71 dBm	1.5 cm	0.460 W/kg	0.52 W/kg	1.6 W/kg	PASSED
LTE1900	18900 / 1880.0	22.82 dBm	1.5 cm	0.502 W/kg	0.56 W/kg	1.6 W/kg	PASSED
WLAN2450	6 / 2437.0	16.22 dBm	1.5 cm	0.070 W/kg	0.08 W/kg	1.6 W/kg	PASSED
WLAN5000	44 / 5220.0	13.06 dBm	1.5 cm	0.196 W/kg	0.22 W/kg	1.6 W/kg	PASSED
LTE700 + WLAN2450	-	-	1.5 cm	0.237 W/kg	0.27 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN2450	-	-	1.5 cm	0.634 W/kg	0.71 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN2450	-	-	1.5 cm	0.353 W/kg	0.40 W/kg	1.6 W/kg	PASSED
LTE850 + WLAN2450	-	-	1.5 cm	0.311 W/kg	0.35 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100 + WLAN2450	-	-	1.5 cm	0.385 W/kg	0.43 W/kg	1.6 W/kg	PASSED
LTE 1700/2100 + WLAN2450	-	-	1.5 cm	0.456 W/kg	0.51 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN2450	-	-	1.5 cm	0.553 W/kg	0.62 W/kg	1.6 W/kg	PASSED
WCDMA1900 + WLAN2450	-	-	1.5 cm	0.478 W/kg	0.54 W/kg	1.6 W/kg	PASSED
LTE1900 + WLAN2450	-	-	1.5 cm	0.516 W/kg	0.58 W/kg	1.6 W/kg	PASSED

(Table continues)

(Table continues)

LTE700 + WLAN5000	-	-	1.5 cm	0.201 W/kg	0.23 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN5000	-	-	1.5 cm	0.606 W/kg	0.68 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN5000	-	-	1.5 cm	0.321 W/kg	0.36 W/kg	1.6 W/kg	PASSED
LTE850 + WLAN5000	-	-	1.5 cm	0.277 W/kg	0.31 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100 + WLAN5000	-	-	1.5 cm	0.371 W/kg	0.42 W/kg	1.6 W/kg	PASSED
LTE 1700/2100 + WLAN5000	-	-	1.5 cm	0.435 W/kg	0.49 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN5000	-	-	1.5 cm	0.537 W/kg	0.60 W/kg	1.6 W/kg	PASSED
WCDMA1900 + WLAN5000	-	-	1.5 cm	0.460 W/kg	0.52 W/kg	1.6 W/kg	PASSED
LTE1900 + WLAN5000	-	-	1.5 cm	0.502 W/kg	0.56 W/kg	1.6 W/kg	PASSED

1.2.3 Wireless Router Configuration

Mode	Ch / f(MHz)	Conducted power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
LTE700	23800 / 711.0	23.02 dBm	10.0 mm	0.327 W/kg	0.37 W/kg	1.6 W/kg	PASSED
2-slot GPRS850	251 / 848.8	32.30 dBm	10.0 mm	0.770 W/kg	0.86 W/kg	1.6 W/kg	PASSED
WCDMA850	4233 / 846.6	23.16 dBm	10.0 mm	0.430 W/kg	0.48 W/kg	1.6 W/kg	PASSED
LTE850	20525 / 836.5	22.38 dBm	10.0 mm	0.383 W/kg	0.43 W/kg	1.6 W/kg	PASSED
WCDMA1700/2100	1513 / 1752.6	23.20 dBm	10.0 mm	0.720 W/kg	0.81 W/kg	1.6 W/kg	PASSED
LTE 1700/2100	20175 / 1732.5	23.45 dBm	10.0 mm	0.781 W/kg	0.87 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900	810 / 1909.8	29.99 dBm	10.0 mm	1.22 W/kg	1.37 W/kg	1.6 W/kg	PASSED
WCDMA1900	9400 / 1880.0	22.71 dBm	10.0 mm	0.850 W/kg	0.95 W/kg	1.6 W/kg	PASSED
LTE1900	18900 / 1880.0	22.82 dBm	10.0 mm	0.854 W/kg	0.96 W/kg	1.6 W/kg	PASSED
WLAN2450	6 / 2437.0	16.22 dBm	10.0 mm	0.128 W/kg	0.14 W/kg	1.6 W/kg	PASSED
LTE700 + WLAN2450	-	-	10.0 mm	0.356 W/kg	0.40 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN2450	-	-	10.0 mm	0.820 W/kg	0.92 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN2450	-	-	10.0 mm	0.485 W/kg	0.54 W/kg	1.6 W/kg	PASSED
LTE850 + WLAN2450	-	-	10.0 mm	0.441 W/kg	0.49 W/kg	1.6 W/kg	PASSED

(Table continues)

(Table continues)

WCDMA1700/2100 + WLAN2450	-	-	10.0 mm	0.779 W/kg	0.87 W/kg	1.6 W/kg	PASSED
LTE 1700/2100 + WLAN2450	-	-	10.0 mm	0.821 W/kg	0.92 W/kg	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN2450	-	-	10.0 mm	1.26 W/kg	1.41 W/kg	1.6 W/kg	PASSED
WCDMA1900 + WLAN2450	-	-	10.0 mm	0.850 W/kg	0.95 W/kg	1.6 W/kg	PASSED
LTE1900 + WLAN2450	-	-	10.0 mm	0.883 W/kg	0.99 W/kg	1.6 W/kg	PASSED

* SAR values are scaled up by 12% to cover measurement drift. As a consequence of this upwards correction of the SAR values, the contribution of measurement drift to the overall measurement uncertainty (Section 6) is reduced to zero.

1.2.4 Summary SAR data

		FCC-defined SAR values for the Grants of Equipment Authorization
Maximum Cellular/AWS/PCS Head SAR value		1.19 W/kg
Maximum WLAN Head SAR value		0.95 W/kg
{Max + Max} Simultaneous Head SAR value	1.59 W/kg†	
Maximum Cellular/AWS/PCS Body SAR value		0.68 W/kg
Maximum WLAN Body SAR value		0.22 W/kg
{Max + Max} Simultaneous Body SAR value	0.83 W/kg	
Maximum Product Specific (Wireless Router) SAR value		1.37 W/kg
Maximum Simultaneous SAR value		1.59 W/kg††

† From Section 7:

The highest {Max + Max} Simultaneous Head SAR value is 1.905W/kg for LTE1900+WLAN5000 Left Cheek test configuration which, when scaled up by 12%, becomes 2.134W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.21 cm, the Antenna Pair SAR to Peak Separation Ratio is $2.134/8.21 = 0.26$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The second highest {Max + Max} Simultaneous Head SAR value is 1.815W/kg for 2-slot GPRS1900+WLAN5000 Left Cheek test configuration which, when scaled up by 12%, becomes 2.033W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.28 cm, the Antenna Pair SAR to Peak Separation Ratio is $2.033/8.28 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The third highest {Max + Max} Simultaneous Head SAR value is 1.758W/kg for WCDMA1900+WLAN5000 Left Cheek test configuration which, when scaled up by 12%,

becomes 1.969W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.18 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.969/8.18 = 0.24$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The fourth {Max + Max} Simultaneous Head SAR value is 1.728W/kg for LTE1900+WLAN2450 Left Cheek test configuration which, when scaled up by 12%, becomes 1.935W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.23 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.935/7.23 = 0.27$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The fifth {Max + Max} Simultaneous Head SAR value is 1.638W/kg for 2-slot GPRS1900+WLAN2450 Left Cheek test configuration which, when scaled up by 12%, becomes 1.835W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.42 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.835/7.42 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The sixth {Max + Max} Simultaneous Head SAR value is 1.581W/kg for WCDMA1900+WLAN2450 Left Cheek test configuration which, when scaled up by 12%, becomes 1.771W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.21 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.771/7.21 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The seventh {Max + Max} Simultaneous Head SAR value is 1.550W/kg for WCDMA1700/2100+WLAN5000 Left Cheek test configuration which, when scaled up by 12%, becomes 1.736W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.09 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.736/8.09 = 0.21$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The eighth {Max + Max} Simultaneous Head SAR value is 1.423W/kg for LTE1700/2100+WLAN5000 Left Cheek test configuration which, when scaled up by 12%, becomes 1.59W/kg. It is this value that is given as the {Max + Max} Simultaneous Head SAR value in the table above.

†† From the † note above and from Section 7:

The highest {Max + Max} Simultaneous Head SAR value is 1.423W/kg for LTE1700/2100+WLAN5000 Left Cheek test configuration which, when scaled up by 12%, becomes 1.59W/kg.

The highest {Max + Max} Simultaneous Body-worn SAR value is 0.743W/kg for 2-slot GPRS850+WLAN5000, which, when scaled up by 12%, becomes 0.83W/kg.

The highest {Max + Max} Simultaneous Wireless Router SAR value is 1.225/kg for 2-slot GPRS1900+WLAN2450 which, when scaled up by 12%, becomes 1.37W/kg.

Consequently, the value quoted here is 1.59W/kg.

1.2.5 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.5 dB

1.2.6 Measurement Uncertainty

Expanded Uncertainty (k=2) 95%	$\pm 25.8\%$
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2. DESCRIPTION OF THE DEVICE UNDER TEST

Device category	Portable
Exposure environment	General population / uncontrolled

Modes of Operation	Bands	Modulation Mode	Duty Cycle	Transmitter Frequency Range (MHz)
GSM	850 1900	GMSK	1/8	824 – 849 1850 – 1910
GPRS	850 1900	GMSK	1/8 to 2/8	824 – 849 1850 – 1910
EGPRS	850 1900	GMSK / 8PSK	1/8 to 2/8	824 – 849 1850 – 1910
WCDMA	850 (Band V) 1700/2100 (Band IV) 1900 (Band II)		1	826 – 847 1712 - 1753 1852 – 1908
HSUPA	850 (Band V) 1700/2100 (Band IV) 1900 (Band II)		1	826 – 847 1712 - 1753 1852 – 1908
LTE	700 (Band 17) 850 (Band 5) 1700/2100 (Band 4) 1900 (Band 2)	QPSK / 16QAM		704 – 716 824 – 849 1710 – 1755 1850 – 1910
BT	2450	GFSK	1	2402 – 2480
WLAN b-mode	2450	Up to 11Mbps QPSK	1	2412 – 2462
WLAN g-mode	2450	Up to 54Mbps 64QAM	1	2412 – 2462
WLAN n-mode 20MHz	2450	Up to 72.2Mbps 64QAM	1	2412 – 2462
WLAN n-mode 40MHz	2450	Up to 150Mbps 64QAM	1	2412 – 2462
WLAN a-mode 20MHz	5000	Up to 54Mbps 64QAM	1	5150 – 5825
WLAN n-mode 20MHz	5000	Up to 72.2Mbps 64QAM	1	5150 – 5825
WLAN n-mode 40MHz	5000	Up to 150Mbps 64QAM	1	5150 – 5825

Outside of USA and Canada, the transmitter of the device is capable of operating also in GSM/GPRS/EGPRS900, GSM/GPRS/EGPRS1800, WCDMA900 and WCDMA2100 bands which are not part of this filing.

This device has Voice-over-IP/Dual Transfer Mode capability for use at the ear. Therefore, SAR for multi slot GPRS mode was evaluated against the head profile of the phantom. Dual Transfer Mode is a feature that utilises the multi-slot GPRS capability in this device; it allows simultaneous transmission of voice and data during the same call, using the same transmitter and antenna.

This is a WCDMA HSUPA device, but SAR tests for HSUPA mode have not been performed as no HSUPA Sub-test mode has an average power > 0.25dB above the basic WCDMA 12.2kbps RMC mode. Appendix D of this report gives a summary of the measured WCDMA and HSUPA average powers; a detailed report of these WCDMA and HSUPA conducted power tests is submitted separately.

This is an LTE Category 3 device; it contains four LTE bands, namely LTE bands 700, 850, 1700/2100 and 1900. In LTE700(Band 17), the device possesses Channel Bandwidths of 10MHz and 5MHz; in LTE850(Band 5), the device possesses Channel Bandwidths of 10MHz, 5MHz, 3MHz and 1.4MHz; in LTE1700/2100 (Band 4) and in LTE1900(Band 2) Channel Bandwidths of 20MHz, 15MHz, 10MHz, 5MHz, 3MHz and 1.4MHz are available.

This is a BT Class 1 device; as its power tuning target is 7dBm (5.0mW), SAR testing was deemed unnecessary

This device uses a single antenna for transmission of all the cellular, AWS and PCS bands; a separate single antenna is used for transmission of WLAN and BT. Simultaneous transmission of any singular cellular, AWS and PCS band is possible with either WLAN or BT in Head and Body-worn use.

Simultaneous transmission capabilities in Head and Body-worn use		
	WLAN2450	WLAN5000
LTE700	✓	✓
GSM/GPRS/EGPRS850	✓	✓
WCDMA850	✓	✓
LTE850	✓	✓
WCDMA1700/2100	✓	✓
LTE1700/2100	✓	✓
GSM/GPRS/EGPRS1900	✓	✓
WCDMA1900	✓	✓
LTE1900	✓	✓

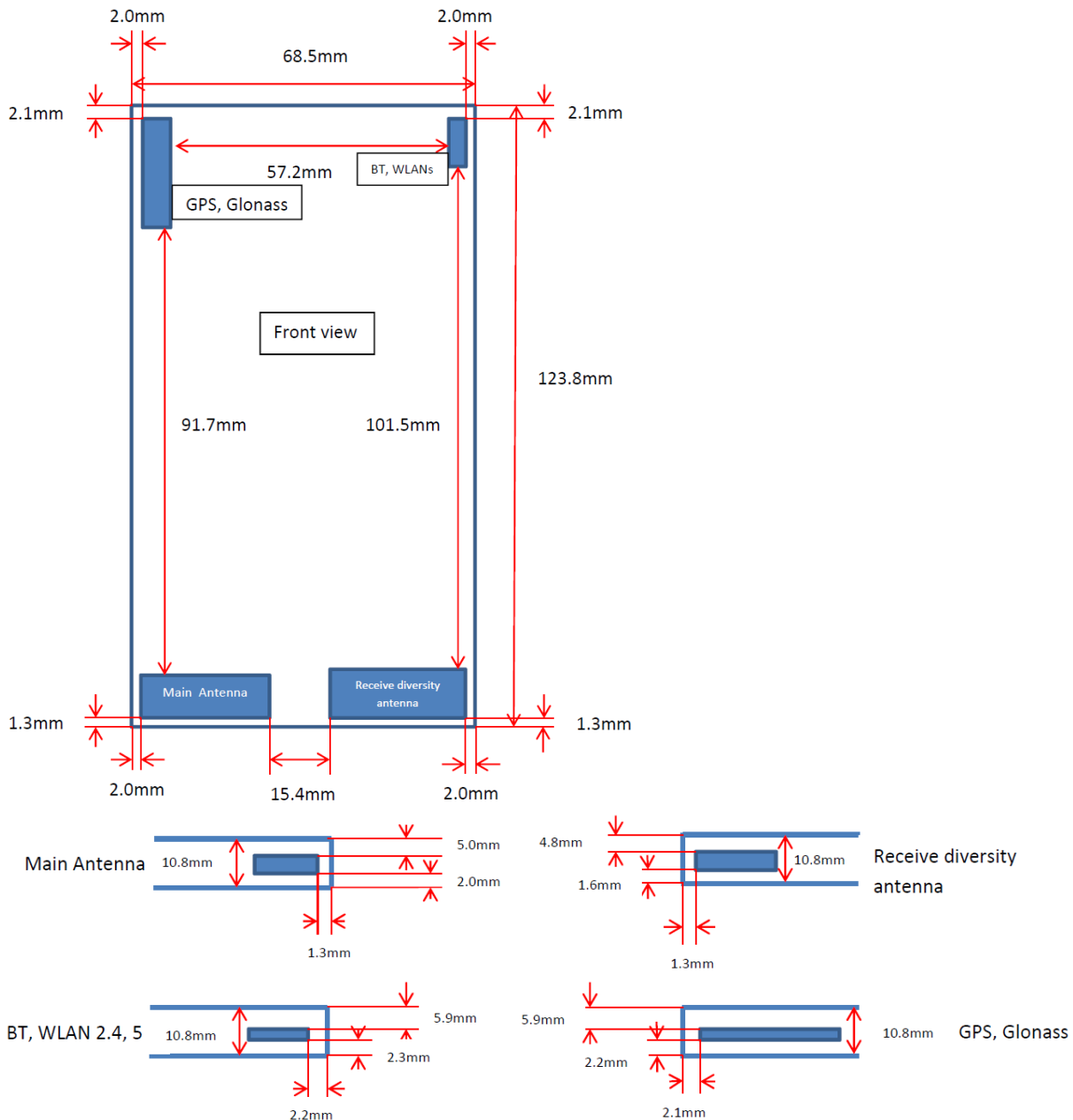
This device has Wireless Router “Hotspot” mode capability. Simultaneous transmission of any singular cellular, AWS and PCS band is possible with WLAN2450 or BT in Wireless Router mode. Wireless Router mode capability is not available with WLAN5000.

Simultaneous transmission capabilities in Wireless Router use		
	WLAN2450	WLAN5000
LTE700	✓	X
GSM/GPRS/EGPRS850	✓	X
WCDMA850	✓	X
LTE850	✓	X
WCDMA1700/2100	✓	X
LTE1700/2100	✓	X
GSM/GPRS/EGPRS1900	✓	X
WCDMA1900	✓	X
LTE1900	✓	X

This device has no power reductions in any of the usage modes and does not feature any diversity antenna functionality when transmitting.

2.1 Description of the Antenna

The device has internal antennas for both cellular/AWS/PCS and WLAN/BT use. The cellular AWS/PCS antenna is located at the bottom underneath the back cover. The WLAN/BT antenna is located at the top underneath the back cover. The device dimensions, antenna locations and antenna interdistances are illustrated below.



3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	19.0 – 25.0
Ambient humidity (RH %):	30 - 65

3.2 Test Signal, Frequencies and Output Power

The device was put into operation by using a call tester except for testing WLAN2450/WLAN 5000 where control software was used. Communication between the device and the call tester was established by air link.

A CMW500 call tester was used to configure the test device for transmitting all the LTE bands; in each band, the Uplink Power Control was set to 'Max Power'. Additional Spectrum Emission was set to 'NS_01' to disable A-MPR.

A CMU200 call tester was used for all the GSM/GPRS/EGPRS and WCDMA bands; in the case of GSM/GPRS/EGPRS the MS signal was always set to maximum power, whereas for WCDMA the UE uplink signal was configured to 12.2kbps RMC with all TPC bit set to 1.

The device output power was set to maximum power level for all tests; a fully charged battery was used for every test sequence.

This device was tested in all the available multi-slot GMSK GPRS modes.

The transmission mode of the device in all WCDMA tests was configured to 12.2kbps RMC with all TPC bits set as "1". All WCDMA testing has been carried out in accordance with FCC KDB 941225: SAR Measurement Procedures for 3G Devices.

LTE bands have been tested according to the guidance given in KDB941225 D05 SAR for LTE Devices v01. MPV values as stipulated in Table 6.2.3_1 of 3GPP TS 36.101 (presented below) have been incorporated into the device; these MPV values are dependent on the modulation, Channel Bandwidth and Resource Block allocations as shown:

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	

QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

Although A-MPR will be supported by the final production device, for all the reported testing A-MPR was deactivated in the test samples.

In all operating bands the measurements were performed on lowest, middle and highest channels.

The radiated output power of the device was measured by a separate test laboratory on the same units as used for SAR testing. The results are given in the EMC report supporting this application.

The transmission mode of the device in all WLAN b-mode tests was DSSS QPSK 11Mbps. The transmission mode of the device in all WLAN n-mode 5GHz tests was WLAN OFDM 9 Mbps. These modes have the highest time-averaged output power of all the WLAN a, b, g and n modulation modes in this device as illustrated in the tables in Appendix G. All WLAN testing has been carried out in accordance with FCC KDB 248227: SAR Measurement Procedures for 802.11 a/b/g Transmitters.

LTE SAR testing has been carried out in accordance with KDB941225 D05 SAR for LTE Devices v01. In addition to the requirements of KDB941225, the following test modulations have voluntarily been measured in both LTE bands:

QPSK, 1RB allocation, 50% offset
QPSK, 100% RB allocation
16QAM, 1RB allocation, 50% offset
16QAM, 100% RB allocation

3.3 Test Cases and Test Minimisation

The tested device examined in this report may not incorporate all of the features described in the text that follows, but its SAR evaluation will have been subjected to the same considerations and test logic described below.

Whilst it's possible to identify the maximum SAR test cases from inspection of the conducted power levels given in the Results tables (Section 7), different modes in the same band and multi-slot transmit GSM/GPRS modes can create some difficulties. Therefore the sequence of the SAR tests made in evaluating this device has used test logic that is based on measured SAR values. Comparison of measured SAR values in this way, can also allow some test minimization (i.e. test elimination) to be made.

For example, when SAR testing multi-slot GSM/GPRS/EGPRS modes, it is an inefficient use of test resources to fully SAR test every test configuration in each of the different modes as these modes have a fixed power relationship between them that is the same, irrespective of the test configuration. In the case of multi-slot GSM/GPRS modes, a single comparative SAR test - using the same test channel and test configuration - is made in each of the n-slot modes; the mode with the highest measured SAR value is then subjected to full SAR testing in all test configurations. These comparative SAR tests (same frequency, same test configuration) are regarded as extremely accurate as they are relative tests in which the tested device changes neither its frequency nor its position between tests. For different modes that operate in the same band and use the same antenna e.g. GSM/GPRS850 and WCDMA850, full SAR testing is carried out in the GSM/GPRS850 mode but WCDMA850 testing is limited to 3 channel testing in the maximum SAR test configuration for GSM/GPRS850.

Multi-slot SAR testing against the Head is always performed whenever such a device offers Push to Talk over cellular with the internal earpiece active, Dual Transfer Mode (i.e. the ability to transmit voice and data simultaneously using the same transmitter) or has WLAN (which enables a Voice over IP call to take place whilst the device can simultaneously transmit data on a cellular band). Whenever a device has an intended multi-slot use against the head, it is also Head SAR tested in EGPRS mode. It should be noted that EGPRS transmit modes can have either GMSK or 8PSK modulation but, when tested, only 8PSK EGPRS will appear explicitly in the results tables, as GMSK EGPRS mode has identical time-averaged power to the reported GPRS mode.

Devices that have flips or slides are fully SAR tested in all device configurations consistent with their intended usage. For example, flip phones that can receive a call in closed mode are SAR tested against the head in both open and closed configurations. Similarly, slide phones are fully SAR tested in all slide configurations in which calls are intended to be made or received.

In the results tables in Section 7, the maximum SAR value for the 'basic' tests (i.e. left cheek, left tilt, right cheek and right tilt in Head SAR testing; with and without headset with the back &/or display side facing the flat phantom in Body SAR testing) is bolded for each band. In some cases, after full testing of the basic SAR test configurations has been completed, additional checking SAR tests are made. These checking tests are always based on the bolded result from the 'basic' testing. When the SAR value of a checking test exceeds the maximum value from the basic tests, it is also bolded and used as the basis for any further checking tests that might be needed.

Checking tests are largely voluntary and can cover optional batteries, different camera slide positions, optional covers, etc. In the case of optional batteries, if the construction of the optional battery is significantly different to the battery used in the full testing e.g. if the outer can is floating electrically rather than grounded, then the maximum SAR test configuration in each band is tested with the optional battery in 3 channels. For camera slides, if the slide

material is metal, then checking tests in 3 channels are again run for the maximum SAR test configuration in each band. For plastic camera slides, SAR checking is only carried out in the channel that provided the maximum SAR value for the original. Optional front and back covers are tested if their shape differs significantly from the original or if their metallic content varies by more than 15% from the original; in the former case, the testing depends on the extent of the physical differences, whereas in the latter case, 3 channel SAR testing is performed in every band in the max SAR test configuration.

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

The measurements were performed using an automated DASY near-field scanning system manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements was the 'advanced extrapolation' algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration date	Calibration expiry
DAE4	793	2011-09	2012-09
DAE4	1316	2012-02	2013-02
DAE4	1213	2012-02	2013-02
DAE4	1309	2012-01	2013-01
DAE4	538	2011-09	2012-09
E-field Probe ES3DV3	3131	2011-09	2012-09
E-field Probe ES3DV3	3165	2012-02	2013-02
E-field Probe EX3DV4	3573	2012-02	2013-02
E-field Probe EX3DV4	3834	2012-02	2013-02
E-field Probe ES3DV4	3790	2012-04	2013-04
Dipole Validation Kit, D750V2	1034	2011-07	2013-07
Dipole Validation Kit, D835V2	462	2011-09	2013-09
Dipole Validation Kit, D1800V2	2d065	2011-09	2013-09
Dipole Validation Kit, D1900V2	5d030	2012-02	2014-02
Dipole Validation Kit, D2450V2	729	2011-09	2013-09
Dipole Validation Kit, D5GHzV2	1032	2012-02	2014-02
DASY4 software	Version 4.7	-	-
DASY5 software	Version 52.6	-	-
DASY5 software	Version 52.8	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration date	Calibration expiry
Signal Generator	E4438C	MY42080610	2011-11	2013-11
Signal Generator	SML03	101264	2011-08	2012-08
Signal Generator	SMB100A	105735	2011-12	2012-12
Signal Generator	E4436B	US39260114	2011-08	2012-08
Amplifier	5S1G4M3	302338	-	-
Amplifier	ZHL-42-SMA	N072095-5	-	-
Amplifier	5S4G11	312661	-	-
Amplifier	5S1G4	25583	-	-
Power Meter	NRVS	838624/032	2011-08	2012-08
Power Meter	NRVD	840023/028	2011-08	2012-08
Power Meter	NRVS	849305/028	2011-08	2012-08
Power Meter	NRVZ	849305/029	2012-02	2013-02
Power Sensor	NRV-Z32	100067	2011-08	2012-08
Power Sensor	URV5-Z2	839080/023	2011-08	2012-08
Power Sensor	NRV-Z32	100069	2011-07	2012-08
Power Sensor	NRV-Z32	825600/002	2012-02	2013-02
Call Tester	CMU 200	103293	-	-
Call Tester	CMU 200	101111	-	-
Call Tester	CMU 200	104983	-	-
Call Tester	CMU 200	103294	-	-
Call Tester	MT8820C	6200883095	-	-
Call Tester	CMW 500	110565	-	-
Network Analyzer	ENA E5071C	MY46213166	2012-01	2013-01
Dielectric Probe Kit	DAK-3.5	1042	-	-

4.1.1 Isotropic E-field Probe Type ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., butyl diglycol)
Calibration	Calibration certificate in Appendix E
Frequency	10 MHz to 4 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in HSL (rotation normal to probe axis)
Dynamic Range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 20 mm Body diameter: 12 mm Tip diameter: 3.9 mm Distance from probe tip to dipole centers: 2.0 mm
Application	General dosimetry up to 4 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

4.1.2 Isotropic E-field Probe Type EX3DV4

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Calibration certificate in Appendix E
Frequency	10 MHz to >6 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g, Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 10 mm Body diameter: 12 mm Tip diameter: 2.5 mm Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 6 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

4.2 Phantoms

The phantom used for all tests i.e. for both system checks and device testing, was the twin-headed "SAM Phantom", manufactured by SPEAG. The phantom conforms to the requirements of IEEE 1528 - 2003.

System checking was performed using the flat section, whilst Head SAR tests used the left and right head profile sections. Body SAR testing also used the flat section between the head profiles.

The SPEAG device holder (see Section 5.1) was used to position the device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Tissue Simulants

Recommended values for the dielectric parameters of the tissue simulants are given in IEEE 1528 - 2003 and FCC Supplement C to OET Bulletin 65. All tests were carried out using simulants whose dielectric parameters were within $\pm 5\%$ of the recommended values. All tests were carried out within 24 hours of measuring the dielectric parameters.

The depth of the tissue simulant was at least 15.0 cm measured from the ear reference point during system checking and device measurements.

4.3.1 Tissue Simulant Recipes

The following recipes were used for Head and Body tissue simulants:

700MHz band		
Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	52.13	69.23
Tween 20	46.59	29.56
Salt	1.28	1.21

800MHz band		
Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	51.50	69.25
Tween 20	47.35	30.00
Salt	1.15	0.75

1800MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.0	70.20
Tween 20	45.6	29.37
Salt	0.4	0.43

1900MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.50	70.25
Tween 20	45.23	29.41
Salt	0.27	0.34

2450MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	56.0	70.20
Tween 20	44.0	29.62
Salt	-	0.18

5000MHz band †

Ingredient	Head (% by weight)	Body (% by weight)
Water	50-65	60-80
Oil	10-30	-
Emulsifiers, Esters, Inhibitors	8-25	20-40
Sodium salt	0-1.5	0-1.5

† Recipe is proprietary to SPEAG. The proportions of the constituents have not been disclosed.

4.3.2 System Checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna (except in the case of the 5000MHz dipole for which 100mw was supplied), which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table below.

System checking, head tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ϵ_r	σ [S/m]	
750	Reference result	2.12	41.7	0.91	
	± 10% window	1.91 – 2.33			
	IEEE1528 / IEC62209 Standard targets		41.9	0.89	
	2012-07-09	2.13	40.6	0.92	21.0
	2012-08-22	2.13	40.3	0.91	21.0
835	Reference result	2.33	41.1	0.89	
	± 10% window	2.10 – 2.56			
	IEEE1528 / IEC62209 Standard targets		41.5	0.90	
	2012-07-06	2.28	40.5	0.92	21.0
	2012-08-15	2.34	39.8	0.89	21.0
	2012-08-16	2.36	40.6	0.92	21.0
1800	Reference result	9.43	39.7	1.37	
	± 10% window	8.49 – 10.37			
	IEEE1528 / IEC62209 Standard targets		40.0	1.40	
	2012-07-06	8.92	39.0	1.38	21.0
	2012-07-07	8.96	38.7	1.41	21.0
	2012-08-20	9.03	38.1	1.40	21.0
1900	Reference result	9.79	40.4	1.40	
	± 10% window	8.81 – 10.77			
	IEEE1528 / IEC62209 Standard targets		40.0	1.40	
	2012-07-06	9.77	38.8	1.40	21.0
	2012-08-16	9.40	38.6	1.38	21.0
	2012-08-17	9.70	38.5	1.40	21.0

(Table continues)

(Table continues)

2450	Reference result	13.9	38.3	1.85	
	± 10% window	12.5 – 15.3			
	IEEE1528 / IEC62209 Standard targets		39.2	1.80	
	2012-07-02	13.5	37.9	1.77	21.0
	2012-08-15	13.5	37.5	1.79	21.0
5200	Reference result	7.98	35.3	4.60	
	± 10% window	7.18 – 8.78			
	IEEE1528 / IEC62209 Standard targets*		36.0	4.66	
	2012-07-03	8.14	35.2	4.48	21.0
	2012-08-15	8.02	34.5	4.50	21.0
5500	Reference result	8.65	34.9	4.89	
	± 10% window	7.79 – 9.52			
	IEEE1528 / IEC62209 Standard targets*		35.6	4.96	
	2012-07-03	9.05	34.8	4.76	21.0
	2012-08-21	8.03	35.5	4.83	21.0
5800	Reference result	7.92	34.4	5.19	
	± 10% window	7.13 - 8.71			
	IEEE1528 / IEC62209 Standard targets*		3.53	5.27	
	2012-07-03	7.72	34.3	5.07	21.0
	2012-07-04	8.50	34.4	5.19	21.0
	2012-08-17	8.60	35.8	5.36	21.0

* Dielectric parameter data taken from IEC62209-2.

System checking, body tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ϵ_r	σ [S/m]	
750	Reference result	2.20	55.2	0.96	
	± 10% window	1.98 – 2.42			
	IEEE1528 / IEC62209 Standard targets		55.5	0.96	
	2012-07-09	2.19	54.6	1.00	21.0
	2012-08-22	2.19	53.8	1.00	21.0
835	Reference result	2.45	53.5	1.00	
	± 10% window	2.20 – 2.70			
	IEEE1528 / IEC62209 Standard targets		55.2	0.97	
	2012-07-06	2.41	52.9	1.00	21.0
	2012-07-08	2.37	53.8	1.01	21.0
	2012-08-17	2.32	53.3	0.99	21.0
	2012-08-21	2.36	52.9	0.99	21.0
1800	Reference result	9.86	54.3	1.52	
	± 10% window	8.87 – 10.85			
	IEEE1528 / IEC62209 Standard targets		53.3	1.52	
	2012-07-07	9.90	52.8	1.53	21.0
	2012-07-08	10.2	52.6	1.53	21.0
	2012-08-16	9.91	52.4	1.52	21.0
	2012-08-21	10.1	51.9	1.52	21.0
1900	Reference result	9.87	53.0	1.56	
	± 10% window	8.88 – 10.86			
	IEEE1528 / IEC62209 Standard targets		53.3	1.52	
	2012-07-07	10.8	52.3	1.54	21.0
	2012-08-17	10.6	51.9	1.52	21.0
	2012-08-22	10.5	51.7	1.52	21.0

(Table continues)

(Table continues)

2450	Reference result	13.3	51.7	2.04	
	± 10% window	12.0 – 14.6			
	IEEE1528 / IEC62209 Standard targets		52.7	1.95	
	2012-07-03	13.8	50.3	1.96	21.0
	2012-07-09	13.8	51.3	1.97	21.0
	2012-08-27	13.8	53.6	1.99	21.0
5200	Reference result	7.23	48.6	5.48	
	± 10% window	6.51 – 7.95			
	FCC OET65 Supplement C targets		49.0	5.30	
	2012-07-04	7.81	48.5	5.46	21.0
	2012-08-22	7.77	48.7	5.41	21.0
5500	Reference result	7.78	48.1	5.87	
	± 10% window	7.00 – 8.56			
	FCC OET65 Supplement C targets		48.6	5.65	
	2012-07-04	8.33	47.6	5.82	21.0
	2012-08-23	8.10	47.7	5.87	21.0
5800	Reference result	7.21	48.2	6.28	
	± 10% window	6.49 – 7.93			
	FCC OET65 Supplement C targets		48.2	6.00	
	2012-07-02	7.36	47.3	6.25	21.0
	2012-07-04	7.19	47.2	6.24	21.0
	2012-08-15	7.15	47.9	6.20	21.0

Plots of the system checking scans are given in Appendix A.

4.3.3 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ϵ_r	σ [S/m]	
710	Recommended value	42.1	0.89	
	$\pm 5\%$ window	40.0 – 44.2	0.85 – 0.93	
	2012-07-09	40.8	0.90	21.0
	2012-08-22	40.6	0.89	21.0
835	Recommended value	41.5	0.90	
	$\pm 5\%$ window	39.4 – 43.6	0.86 – 0.95	
	2012-07-06	40.5	0.92	21.0
836	Recommended value	41.5	0.90	
	$\pm 5\%$ window	39.4 – 43.6	0.86 – 0.95	
	2012-07-06	40.5	0.92	21.0
	2012-08-15	39.8	0.89	21.0
	2012-08-16	40.6	0.92	21.0
1732	Recommended value	40.1	1.36	
	$\pm 5\%$ window	38.1 – 42.1	1.29 – 1.43	
	2012-07-06	39.3	1.31	21.0
	2012-07-07	39.0	1.33	21.0
	2012-08-20	38.4	1.34	21.0
1880	Recommended value	40.0	1.40	
	$\pm 5\%$ window	38.0 – 42.0	1.33 – 1.47	
	2012-07-06	38.9	1.38	21.0
	2012-08-16	38.7	1.36	21.0
2437	Recommended value	39.2	1.79	
	$\pm 5\%$ window	37.3 – 41.2	1.70 – 1.88	
	2012-07-02	37.9	1.76	21.0
	2012-08-15	37.6	1.77	21.0

(Table continues)

(Table continues)

5210	Recommended value	36.1	4.67	
	± 5% window	34.3 – 37.9	4.44 – 4.90	
	2012-07-03	35.2	4.48	21.0
	2012-08-15	34.5	4.51	21.0
5290	Recommended value	36.0	4.75	
	± 5% window	34.2 – 37.8	4.51 – 4.99	
	2012-07-03	35.0	4.56	21.0
	2012-08-15	34.4	4.59	21.0
5600	Recommended value	35.6	5.07	
	± 5% window	33.8 – 37.4	4.82 – 5.32	
	2012-07-03	34.6	4.86	21.0
	2012-08-21	35.4	4.94	21.0
5785	Recommended value	35.4	5.25	
	± 5% window	33.6 – 37.2	4.99 – 5.51	
	2012-07-03	34.4	5.05	21.0
	2012-07-04	34.4	5.17	21.0
	2012-08-17	35.8	5.34	21.0

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ϵ_r	σ [S/m]	
710	Recommended value	55.7	0.96	
	$\pm 5\%$ window	52.9 – 58.5	0.91 – 1.01	
	2012-07-09	54.8	0.98	21.0
	2012-08-22	54.1	0.98	21.0
835	Recommended value	55.2	0.97	
	$\pm 5\%$ window	52.4 – 58.0	0.92 – 1.02	
	2012-07-06	52.9	1.00	21.0
	2012-08-21	52.9	0.99	21.0
836	Recommended value	55.2	0.97	
	$\pm 5\%$ window	52.4 – 58.0	0.92 – 1.02	
	2012-07-06	52.9	1.01	21.0
	2012-07-08	53.8	1.00	21.0
	2012-08-17	53.3	0.99	21.0
	2012-08-21	52.9	0.99	21.0
1732	Recommended value	53.5	1.48	
	$\pm 5\%$ window	50.8 – 56.2	1.40 – 1.55	
	2012-07-07	53.1	1.45	21.0
	2012-07-08	52.9	1.45	21.0
	2012-08-16	52.5	1.44	21.0
	2012-08-21	52.2	1.45	21.0
1880	Recommended value	53.3	1.52	
	$\pm 5\%$ window	50.6 – 56.0	1.44 – 1.60	
	2012-07-07	52.3	1.52	21.0
	2012-08-17	51.9	1.50	21.0
	2012-08-22	51.7	1.50	21.0
2437	Recommended value	52.7	1.94	
	$\pm 5\%$ window	50.1 – 55.3	1.85 – 2.04	
	2012-07-03	50.4	1.94	21.0
	2012-07-09	51.4	1.95	21.0
	2012-08-27	53.6	1.97	21.0

(Table continues)

(Table continues)

5210	Recommended value	49.0	5.31	
	$\pm 5\%$ window	46.6 – 51.5	5.04 – 5.58	
	2012-07-04	48.5	5.46	21.0
	2012-08-22	48.6	5.42	21.0
5290	Recommended value	48.9	5.40	
	$\pm 5\%$ window	46.4 – 51.3	5.13 – 5.67	
	2012-07-04	48.4	5.57	21.0
	2012-08-22	48.5	5.55	21.0
5600	Recommended value	48.5	5.77	
	$\pm 5\%$ window	46.0 – 50.9	5.48 – 6.06	
	2012-07-04	47.5	5.95	21.0
	2012-08-23	47.5	6.00	21.0
5785	Recommended value	48.2	5.98	
	$\pm 5\%$ window	45.8 – 50.6	5.68 – 6.28	
	2012-07-02	47.4	6.20	21.0
	2012-07-04	47.2	6.23	21.0
	2102-08-15	47.9	6.23	21.0

Dielectric parameter data for the band edges is given in Appendix C.

5. DESCRIPTION OF THE TEST PROCEDURE

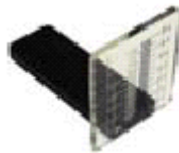
5.1 Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the Dasy system.



Device holder supplied by SPEAG

A Nokia designed spacer (illustrated below) was used to position the device within the SPEAG holder. The spacer positions the device so that the holder has minimal effect on the test results but still holds the device securely. The spacer was removed before the tests.



Nokia spacer

5.2 Test Positions

5.2.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2003 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.2.2 Body Worn Configuration

The device was placed in the SPEAG holder using the Nokia spacer and placed below the flat section of the phantom. The distance between the device and the phantom was kept at the separation distance indicated in Section 1.2.2 using a separate flat spacer that was removed before the start of the measurements. The device was oriented with both sides facing the phantom to find the highest results.

Nokia body-worn accessories are commonly available for the separation distance used in this testing.

5.2.3 Wireless Router Configuration

The device was placed in the SPEAG holder using the Nokia spacer and positioned 10.0mm away from the flat phantom. The spacer was removed before the start of the measurements.

5.3 Scan Procedures

First, area scans were used for determination of the field distribution. Next, a zoom scan, a minimum of 5x5x7 points covering a volume of at least 30x30x30mm, was performed around the highest E-field value to determine the averaged SAR value. Drift was determined by measuring the same point at the start of the area scan and again at the end of the zoom scan.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.

The interpolation, extrapolation and maximum search routines within Dasy4 are all based on the modified Quadratic Shepard's method (Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148).

The interpolation scheme combines a least-square fitted function method with a weighted average method. A trivariate 3-D / bivariate 2-D quadratic function is computed for each measurement point and fitted to neighbouring points by a least-square method. For the zoom scan, inverse distance weighting is incorporated to fit distant points more accurately. The interpolating function is finally calculated as a weighted average of the quadratics.

In the zoom scan, the interpolation function is used to extrapolate the Peak SAR from the deepest measurement points to the inner surface of the phantom.

6. MEASUREMENT UNCERTAINTY

Table 6.1 – Measurement uncertainty evaluation

Uncertainty Component	Section in IEEE 1528	Tol. (%)	Prob Dist	Div	C_i	$C_i \cdot U_i$ (%)	V_i
Measurement System							
Probe Calibration	E2.1	± 6.55	N	1	1	± 6.55	∞
Axial Isotropy	E2.2	± 4.7	R	$\sqrt{3}$	$(1 - c_p)^{1/2}$	± 1.9	∞
Hemispherical Isotropy	E2.2	± 9.6	R	$\sqrt{3}$	$(c_p)^{1/2}$	± 3.9	∞
Boundary Effect	E2.3	± 1.0	R	$\sqrt{3}$	1	± 0.6	∞
Linearity	E2.4	± 4.7	R	$\sqrt{3}$	1	± 2.7	∞
System Detection Limits	E2.5	± 1.0	R	$\sqrt{3}$	1	± 0.6	∞
Readout Electronics	E2.6	± 1.0	N	1	1	± 1.0	∞
Response Time	E2.7	± 0.8	R	$\sqrt{3}$	1	± 0.5	∞
Integration Time	E2.8	± 2.6	R	$\sqrt{3}$	1	± 1.5	∞
RF Ambient Conditions - Noise	E6.1	± 3.0	R	$\sqrt{3}$	1	± 1.7	∞
RF Ambient Conditions - Reflections	E6.1	± 3.0	R	$\sqrt{3}$	1	± 1.7	∞
Probe Positioner Mechanical Tolerance	E6.2	± 0.4	R	$\sqrt{3}$	1	± 0.2	∞
Probe Positioning with respect to Phantom Shell	E6.3	± 2.9	R	$\sqrt{3}$	1	± 1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E5	± 3.9	R	$\sqrt{3}$	1	± 2.3	∞
Test sample Related							
Test Sample Positioning	E4.2	± 6.0	N	1	1	± 6.0	11
Device Holder Uncertainty	E4.1	± 5.0	N	1	1	± 5.0	7
Output Power Variation - SAR drift measurement	6.6.3	± 0.0	R	$\sqrt{3}$	1	± 0.0	∞
Phantom and Tissue Parameters							
Phantom Uncertainty (shape and thickness tolerances)	E3.1	± 4.0	R	$\sqrt{3}$	1	± 2.3	∞
Conductivity Target - tolerance	E3.2	± 5.0	R	$\sqrt{3}$	0.64	± 1.8	∞
Conductivity - measurement uncertainty	E3.3	± 5.5	N	1	0.64	± 3.5	5
Permittivity Target - tolerance	E3.2	± 5.0	R	$\sqrt{3}$	0.6	± 1.7	∞
Permittivity - measurement uncertainty	E3.3	± 2.9	N	1	0.6	± 1.7	5
Combined Standard Uncertainty			RSS			± 13.2	116
Coverage Factor for 95%			k=2				
Expanded Uncertainty						± 26.4	

7. RESULTS

7.1 The measured Head SAR values for the test device

LTE700 (Band17) Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 23780 709.0 MHz	Ch 23790 710.0 MHz	Ch 23800 711.0 MHz
QPSK	Conducted Average Power		-	21.99 dBm	-
10MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.159	-
		Tilt	-	0.078	-
	Right	Cheek	-	0.109	-
		Tilt	-	0.064	-
QPSK	Conducted Average Power		-	22.31 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.177	-
		Tilt	-	0.088	-
	Right	Cheek	-	0.121	-
		Tilt	-	0.073	-
QPSK	Conducted Average Power		-	23.11 dBm	-
10MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.223	-
		Tilt	-	0.111	-
	Right	Cheek	-	0.154	-
		Tilt	-	0.091	-
QPSK	Conducted Average Power		-	22.96 dBm	-
10MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.177	-
		Tilt	-	0.089	-
	Right	Cheek	-	0.122	-
		Tilt	-	0.073	-
QPSK	Conducted Average Power		23.30 dBm	23.05 dBm	23.02 dBm
10MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	0.231	0.226	0.228
		Tilt	-	0.119	-
	Right	Cheek	-	0.159	-
		Tilt	-	0.090	-
16QAM	Conducted Average Power		-	21.03 dBm	-
10MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.131	-
		Tilt	-	0.068	-
	Right	Cheek	-	0.087	-
		Tilt	-	0.055	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	21.56 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.150	-
		Tilt	-	0.078	-
	Right	Cheek	-	0.100	-
		Tilt	-	0.063	-
16QAM	Conducted Average Power		-	22.33 dBm	-
10MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.177	-
		Tilt	-	0.072	-
	Right	Cheek	-	0.121	-
		Tilt	-	0.075	-
16QAM	Conducted Average Power		-	22.23 dBm	-
10MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.137	-
		Tilt	-	0.071	-
	Right	Cheek	-	0.092	-
		Tilt	-	0.058	-
16QAM	Conducted Average Power		-	22.33 dBm	-
10MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	-	0.176	-
		Tilt	-	0.084	-
	Right	Cheek	-	0.122	-
		Tilt	-	0.074	-
QPSK 10MHz Ch BW 1 RB 0% offset CC-3401	Left Cheek		0.197	0.217	0.222

5MHz Channel Bandwidth has a maximum time-averaged output power < 0.5dB above the maximum time-averaged output power in 10MHz Channel Bandwidth. Therefore, according to KDB 941225 D05 SAR for LTE Devices v01, no SAR testing was required for the 5MHz Channel Bandwidth as no SAR value for 10MHz Channel Bandwidth exceeded 1.45W/kg.

850MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
GSM	Conducted Average Power		-	32.20 dBm	-
CC-3058	Left	Cheek	-	0.264	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Conducted Average Power		31.96 dBm	32.19 dBm	32.30 dBm
CC-3058	Left	Cheek	0.461	0.489	0.568
		Tilt	-	0.305	-
	Right	Cheek	-	0.417	-
		Tilt	-	0.304	-
2-slot 8PSK EGPRS	Conducted Average Power		-	-	27.16 dBm
CC-3058	Left	Cheek	-	-	0.177
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA	Maximum Output Power		23.01 dBm	22.84 dBm	23.16 dBm
CC-3058	Left	Cheek	0.249	0.261	0.292
		Tilt	-	0.162	-
	Right	Cheek	-	0.205	-
		Tilt	-	0.153	-
2-slot GPRS CC-3401	Left Cheek		0.409	0.465	0.491

LTE850 (Band5) Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 20450 829.0 MHz	Ch 20525 836.5 MHz	Ch 20600 844.0 MHz
QPSK	Conducted Average Power		-	21.80 dBm	-
10MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.207	-
		Tilt	-	0.126	-
	Right	Cheek	-	0.175	-
		Tilt	-	0.136	-
QPSK	Conducted Average Power		-	21.69 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.207	-
		Tilt	-	0.126	-
	Right	Cheek	-	0.173	-
		Tilt	-	0.135	-
QPSK	Conducted Average Power		-	22.62 dBm	-
10MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.255	-
		Tilt	-	0.155	-
	Right	Cheek	-	0.213	-
		Tilt	-	0.166	-
QPSK	Conducted Average Power		-	22.45 dBm	-
10MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.250	-
		Tilt	-	0.148	-
	Right	Cheek	-	0.208	-
		Tilt	-	0.163	-
QPSK	Conducted Average Power		22.62 dBm	22.38 dBm	22.38 dbm
10MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	0.221	0.280	0.240
		Tilt	-	0.166	-
	Right	Cheek	-	0.224	-
		Tilt	-	0.187	-
16QAM	Conducted Average Power		-	20.82 dBm	-
10MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.163	-
		Tilt	-	0.112	-
	Right	Cheek	-	0.135	-
		Tilt	-	0.112	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	20.64 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.165	-
		Tilt	-	0.114	-
	Right	Cheek	-	0.135	-
		Tilt	-	0.113	-
16QAM	Conducted Average Power		-	21.68 dBm	-
10MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.191	-
		Tilt	-	0.134	-
	Right	Cheek	-	0.161	-
		Tilt	-	0.130	-
16QAM	Conducted Average Power		-	21.81 dBm	-
10MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.185	-
		Tilt	-	0.127	-
	Right	Cheek	-	0.158	-
		Tilt	-	0.126	-
16QAM	Conducted Average Power		-	22.04 dBm	-
10MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	-	0.212	-
		Tilt	-	0.143	-
	Right	Cheek	-	0.175	-
		Tilt	-	0.153	-
QPSK 10MHz Ch BW 1 RB 0% offset CC-3401	Left Cheek		0.227	0.262	0.247

Each of the available smaller Channel Bandwidths (1.4, 3.0 and 5.0MHz) has a maximum time-averaged output power < 0.5dB above the maximum time-averaged output power in 10MHz Channel Bandwidth. Therefore, according to KDB 941225 D05 SAR for LTE Devices v01, no SAR testing was required in any of the smaller Channel Bandwidths as no SAR value for 10MHz Channel Bandwidth exceeded 1.45W/kg.

1700/2100 Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1312 1712.4 MHz	Ch 1412 1732.4 MHz	Ch 1513 1752.6 MHz
WCDMA	Maximum Output Power		23.10 dBm	23.20 dBm	23.20 dBm
CC-3058	Left	Cheek	0.498	0.585	0.705
		Tilt	-	0.202	-
	Right	Cheek	-	0.336	-
		Tilt	-	0.236	-
WCDMA CC-3401	Left Cheek		0.488	0.623	0.678

LTE1700/2100 (Band4) Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 20050 1720.0 MHz	Ch 20175 1732.5 MHz	Ch 20300 1745.0 MHz
QPSK	Conducted Average Power		-	22.48 dBm	-
20MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.476	-
		Tilt	-	0.175	-
	Right	Cheek	-	0.264	-
		Tilt	-	0.188	-
QPSK	Conducted Average Power		-	22.50 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.477	-
		Tilt	-	0.179	-
	Right	Cheek	-	0.263	-
		Tilt	-	0.191	-
QPSK	Conducted Average Power		23.44 dBm	23.31 dBm	23.19 dBm
20MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	0.477	0.576	0.480
		Tilt	-	0.199	-
	Right	Cheek	-	0.311	-
		Tilt	-	0.232	-
QPSK	Conducted Average Power		-	22.86 dBm	-
20MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.562	-
		Tilt	-	0.190	-
	Right	Cheek	-	0.303	-
		Tilt	-	0.217	-

(Table continues)

(Table continues)

QPSK	Conducted Average Power		-	23.45 dBm	-
20MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	-	0.550	-
		Tilt	-	0.203	-
	Right	Cheek	-	0.309	-
		Tilt	-	0.242	-
16QAM	Conducted Average Power		-	21.53 dBm	-
20MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.363	-
		Tilt	-	0.132	-
	Right	Cheek	-	0.207	-
		Tilt	-	0.153	-
16QAM	Conducted Average Power		-	21.55 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.365	-
		Tilt	-	0.131	-
	Right	Cheek	-	0.218	-
		Tilt	-	0.154	-
16QAM	Conducted Average Power		-	22.65 dBm	-
20MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.467	-
		Tilt	-	0.160	-
	Right	Cheek	-	0.254	-
		Tilt	-	0.176	-
16QAM	Conducted Average Power		-	22.51 dBm	-
20MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	-	0.448	-
		Tilt	-	0.163	-
	Right	Cheek	-	0.251	-
		Tilt	-	0.171	-
16QAM	Conducted Average Power		-	22.34 dBm	-
20MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	-	0.448	-
		Tilt	-	0.172	-
	Right	Cheek	-	0.245	-
		Tilt	-	0.181	-
QPSK 20MHz Ch BW 1 RB 50% offset CC-3401	Left Cheek		0.499	0.578	0.540

Each of the available smaller Channel Bandwidths (1.4, 3.0, 5.0, 10.0 and 15.0MHz) has a maximum time-averaged output power < 0.5dB above the maximum time-averaged output power in 20MHz

Channel Bandwidth. Therefore, according to KDB 941225 D05 SAR for LTE Devices v01, no SAR testing was required in any of the smaller Channel Bandwidths as no SAR value for 10MHz Channel Bandwidth exceeded 1.45W/kg.

1900MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM	Conducted Average Power		-	30.14 dBm	-
CC-3058	Left	Cheek	-	0.530	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Conducted Average Power		30.01 dBm	30.10 dBm	29.99 dBm
CC-3058	Left	Cheek	0.942	0.943	0.943
		Tilt	-	0.338	-
	Right	Cheek	-	0.655	-
		Tilt	-	0.368	-
2-slot 8PSK EGPRS	Conducted Average Power		-	26.38 dBm	-
CC-3058	Left	Cheek	-	0.458	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Maximum Output Power		22.64 dBm	22.71 dBm	23.20 dBm
CC-3058	Left	Cheek	0.839	0.913	0.894
		Tilt	-	0.306	-
	Right	Cheek	-	0.508	-
		Tilt	-	0.291	-
2-slot GPRS CC-3401	Left Cheek		0.959	0.970	0.919

LTE1900 (Band2) Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 18700 1860.0 MHz	Ch 18900 1880.0 MHz	Ch 19100 1900.0 MHz
QPSK	Conducted Average Power		22.17dBm	22.20 dBm	22.21 dBm
20MHz Ch BW 100% RB CC-3058	Left	Cheek	0.682	0.848	0.708
		Tilt	-	0.286	-
	Right	Cheek	-	0.509	-
		Tilt	-	0.299	-
QPSK	Conducted Average Power		21.97 dBm	22.15 dBm	22.06 dBm
20MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	0.664	0.844	0.689
		Tilt	-	0.289	-
	Right	Cheek	-	0.512	-
		Tilt	-	0.302	-
QPSK	Conducted Average Power		22.87 dBm	22.63 dBm	22.91 dBm
20MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	0.793	0.939	0.820
		Tilt	-	0.318	-
	Right	Cheek	-	0.559	-
		Tilt	-	0.339	-
QPSK	Conducted Average Power		22.97 dBm	22.82 dBm	22.65 dBm
20MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	0.846	0.989	0.781
		Tilt	-	0.349	-
	Right	Cheek	-	0.604	-
		Tilt	-	0.325	-
QPSK	Conducted Average Power		22.91 dBm	22.68 dBm	22.76 dBm
20MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	0.884	0.883	0.928
		Tilt	-	0.349	-
	Right	Cheek	-	0.513	-
		Tilt	-	0.310	-
16QAM	Conducted Average Power		-	21.16 dBm	-
20MHz Ch BW 100% RB CC-3058	Left	Cheek	-	0.714	-
		Tilt	-	0.264	-
	Right	Cheek	-	0.368	-
		Tilt	-	0.237	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	21.05 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Left	Cheek	-	0.734	-
		Tilt	-	0.267	-
	Right	Cheek	-	0.371	-
		Tilt	-	0.245	-
16QAM	Conducted Average Power		-	21.94 dBm	-
20MHz Ch BW 1 RB 50% offset CC-3058	Left	Cheek	-	0.775	-
		Tilt	-	0.285	-
	Right	Cheek	-	0.395	-
		Tilt	-	0.262	-
16QAM	Conducted Average Power		21.98 dBm	22.02 dBm	22.18 dBm
20MHz Ch BW 1 RB 100% offset CC-3058	Left	Cheek	0.682	0.808	0.690
		Tilt	-	0.297	-
	Right	Cheek	-	0.420	-
		Tilt	-	0.250	-
16QAM	Conducted Average Power		-	21.86 dBm	-
20MHz Ch BW 1 RB 0% offset CC-3058	Left	Cheek	-	0.690	-
		Tilt	-	0.239	-
	Right	Cheek	-	0.356	-
		Tilt	-	0.229	-
QPSK 20MHz Ch BW 1 RB 100% offset CC-3401	Left Cheek		0.879	1.06	0.845

Each of the available smaller Channel Bandwidths (1.4, 3.0, 5.0, 10.0 and 15.0MHz) has a maximum time-averaged output power < 0.5dB above the maximum time-averaged output power in 20MHz Channel Bandwidth. Therefore, according to KDB 941225 D05 SAR for LTE Devices v01, no SAR testing was required in any of the smaller Channel Bandwidths as no SAR value for 20MHz Channel Bandwidth exceeded 1.45W/kg.

2450MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 6 2437.0 MHz	Ch 11 2462.0 MHz
WLAN b-mode	Maximum Output Power		15.60 dBm	16.22 dBm	15.54 dBm
DSSS 11Mbps CC-3058	Left	Cheek	0.506	0.668	0.540
		Tilt	-	0.451	-
	Right	Cheek	-	0.340	-
		Tilt	-	0.338	-
WLAN b-mode DSSS 11Mbps CC-3401	Left Cheek		0.445	0.592	0.509

5000MHz Head SAR results 5150–5250 MHz and 5250–5350 MHz

Mode	Test configuration		SAR, averaged over 1g (W/kg)			
			Ch 36 5180.0 MHz	Ch 44 5220.0 MHz	Ch 52 5260.0 MHz	Ch 64 5320.0 MHz
WLAN a-mode	Maximum Output Power		13.22 dBm	13.06 dBm	13.01 dBm	12.85 dBm
OFDM 9 Mbps CC-3058	Left	Cheek	0.732	0.754	0.837	0.845
		Tilt	-	0.532	-	0.578
	Right	Cheek	-	0.335	-	0.358
		Tilt	-	0.299	-	0.316
WLAN a-mode OFDM 9 Mbps CC-3401	Left Cheek		-	0.746	-	0.772

5000MHz Head SAR results
5470–5725 MHz

Mode	Test configuration		SAR, averaged over 1g (W/kg)			
			Ch 108 5540.0 MHz	Ch 112 5560.0 MHz	Ch 120 5600.0 MHz	Ch 136 5680.0 MHz
WLAN a-mode	Maximum Output Power		13.02 dBm	12.89 dBm	12.86 dBm	12.78 dBm
OFDM 9 Mbps CC-3058	Left	Cheek	0.422	0.370	0.259	0.136
		Tilt	0.338	-	-	-
	Right	Cheek	0.226	-	-	-
		Tilt	0.189	-	-	-
WLAN a-mode OFDM 9 Mbps CC-3401	Left Cheek		0.344	-	-	-

5000MHz Head SAR results
5725–5850 MHz

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 153 5765.0 MHz	Ch 157 5785.0 MHz	Ch 165 5825.0 MHz
WLAN a-mode	Maximum Output Power		12.72 dBm	12.77 dBm	12.64 dBm
OFDM 9 Mbps CC-3058	Left	Cheek	0.096	0.082	0.089
		Tilt	0.079	-	-
	Right	Cheek	0.047	-	-
		Tilt	0.037	-	-
WLAN a-mode OFDM 9 Mbps CC-3401	Left Cheek		0.082	-	-

**Simultaneous transmissions: Combined head SAR results –
Individual band Max results**

Test configuration	Max. 1g SAR results										
	WLAN 2450	WLAN 5000	LTE 700	2-slot GPRS850	WCDMA 850	LTE 850	WCDMA 1700/2100	LTE 1700/2100	2-slot GPRS 1900	WCDMA 1900	LTE 1900
Head: Left, Cheek	0.668	0.845	0.231	0.568	0.292	0.280	0.705	0.578	0.970	0.913	1.06
Head: Left, Tilt	0.451	0.578	0.119	0.305	0.162	0.166	0.202	0.203	0.338	0.306	0.349
Head: Right, Cheek	0.340	0.358	0.159	0.417	0.205	0.224	0.336	0.311	0.655	0.508	0.604
Head: Right, Tilt	0.338	0.316	0.091	0.304	0.153	0.187	0.236	0.242	0.368	0.291	0.339

**Simultaneous transmissions: Combined head SAR results –
Max + Max combined results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/ 2100 + WLAN 2450	LTE 1700/ 2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
Head: Left, Cheek	0.899	1.236	0.960	0.948	1.373	1.246	1.638	1.581	1.728
Head: Left, Tilt	0.570	0.756	0.613	0.617	0.653	0.654	0.789	0.757	0.800
Head: Right, Cheek	0.499	0.757	0.545	0.564	0.676	0.651	0.995	0.848	0.944
Head: Right, Tilt	0.429	0.642	0.491	0.525	0.574	0.580	0.706	0.629	0.677
Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 5000	2-slot GPRS850 + WLAN 5000	WCDMA 850 + WLAN 5000	LTE 850 + WLAN 5000	WCDMA 1700/ 2100 + WLAN 5000	LTE 1700/ 2100 + WLAN 5000	2-slot GPRS 1900 + WLAN 5000	WCDMA 1900 + WLAN 5000	LTE 1900 + WLAN 5000
Head: Left, Cheek	1.076	1.413	1.137	1.125	1.550	1.423	1.815	1.758	1.905
Head: Left, Tilt	0.697	0.883	0.740	0.744	0.780	0.781	0.916	0.884	0.927
Head: Right, Cheek	0.517	0.775	0.563	0.582	0.694	0.669	1.013	0.866	0.962
Head: Right, Tilt	0.407	0.620	0.469	0.503	0.552	0.558	0.684	0.607	0.655

The 2-slot GPRS1900+WLAN2450 Simultaneous Head SAR value for Left Cheek test configuration is 1.638W/kg which, when scaled up by 12%, becomes 1.835W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.42 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.835/7.42 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The WCDMA1900+WLAN2450 Simultaneous Head SAR value for Left Cheek test configuration is 1.581W/kg which, when scaled up by 12%, becomes 1.771W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.21 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.771/7.21 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The LTE1900+WLAN2450 Simultaneous Head SAR value for Left Cheek test configuration is 1.728W/kg which, when scaled up by 12%, becomes 1.935W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 7.23 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.935/7.23 = 0.27$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The WCDMA1700/2100+WLAN5000 Simultaneous Head SAR value for Left Cheek test configuration is 1.550W/kg which, when scaled up by 12%, becomes 1.736W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.09 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.736/8.09 = 0.21$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The 2-slot GPRS1900+WLAN5000 Simultaneous Head SAR value for Left Cheek test configuration is 1.815W/kg which, when scaled up by 12%, becomes 2.033W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.28 cm, the Antenna Pair SAR to Peak Separation Ratio is $2.033/8.28 = 0.25$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The WCDMA1900+WLAN5000 Simultaneous Head SAR value for Left Cheek test configuration is 1.758W/kg which, when scaled up by 12%, becomes 1.969W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.18 cm, the Antenna Pair SAR to Peak Separation Ratio is $1.969/8.18 = 0.24$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The LTE1900+WLAN5000 Simultaneous Head SAR value for Left Cheek test configuration is 1.905W/kg which, when scaled up by 12%, becomes 2.134W/kg i.e. > 1.6W/kg. However, as the separation distance between the SAR peaks is 8.21 cm, the Antenna Pair SAR to Peak Separation Ratio is $2.134/8.21 = 0.26$ i.e. < 0.3, hence Simultaneous Transmission Procedures as described in KDB648474 are not required.

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 or WLAN5000 and the cellular bands point-by-point and c) calculates the combined average SAR values.

**Simultaneous transmissions: Combined head SAR results –
SPEAG Combined Multiband algorithm results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/2100 + WLAN 2450	LTE 1700/2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
Head: Left, Cheek	0.706	0.747	0.717	0.703	0.780	0.770	1.050	0.980	1.13
Head: Left, Tilt	-	-	-	-	-	-	-	-	-
Head: Right, Cheek	-	-	-	-	-	-	-	-	-
Head: Right, Tilt	-	-	-	-	-	-	-	-	-
Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 5000	2-slot GPRS850 + WLAN 5000	WCDMA 850 + WLAN 5000	LTE 850 + WLAN 5000	WCDMA 1700/2100 + WLAN 5000	LTE 1700/2100 + WLAN 5000	2-slot GPRS 1900 + WLAN 5000	WCDMA 1900 + WLAN 5000	LTE 1900 + WLAN 5000
Head: Left, Cheek	0.818	0.828	0.819	0.796	0.827	0.816	1.01	0.938	1.09
Head: Left, Tilt	-	-	-	-	-	-	-	-	-
Head: Right, Cheek	-	-	-	-	-	-	-	-	-
Head: Right, Tilt	-	-	-	-	-	-	-	-	-

Some of the Combined SAR values in the above table are less than the maximum SAR values for the contributing cellular or WLAN band. This is due to a) minimal overlap of the SAR distributions of the cellular band with WLAN2450 or WLAN5000 and b) uncertainties associated with the different methods of calculation. In these cases, the maximum SAR values given for the combined Modes in the Summary table in Section 1.2 are those for the individual cellular or WLAN band.

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for this product. The Combined SAR data given in the tables above has been voluntarily calculated.

Plots of the Measurement scans are given in Appendix B.1.

7.2 The measured Body SAR values for the test device

LTE700 (Band17) Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 23780 709.0 MHz	Ch 23790 710.0 MHz	Ch 23800 711.0 MHz
QPSK	Conducted Average Power		-	21.99 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.154	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.31 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.170	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	23.11 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.210	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.96 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.172	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		23.30 dBm	23.05 dBm	23.02 dBm
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	Without headset	0.222	0.230	0.224
		Headset WH-208	-	0.195	-
	Display facing phantom	Without headset	-	0.172	-
		Headset WH-208	-	0.149	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	21.03 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.126	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	21.56 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.144	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.33 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.168	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.23 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.130	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.33 dBm	-
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	Without headset	-	0.168	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK 10MHz Ch BW 1RB 0% offset CC-3401	Back facing Phantom, Without headset		0.175	0.179	0.207

850MHz Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
2-slot GPRS		Conducted Average Power	31.96 dBm	32.19 dBm	32.30 dBm
CC-3058	Back facing phantom	Without headset	0.522	0.548	0.606
		Headset WH-208	-	0.399	-
	Display facing phantom	Without headset	-	0.437	-
		Headset WH-208	-	0.374	-
Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA		Maximum Output Power	23.01 dBm	22.84 dBm	23.16 dBm
CC-3058	Back facing phantom	Without headset	0.271	0.278	0.321
		Headset WH-208	-	0.241	-
	Display facing phantom	Without headset	-	0.217	-
		Headset WH-208	-	0.180	-
2-slot GPRS CC-3401	Back facing Phantom, Without headset		0.402	0.439	0.471

LTE850 (Band5) Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 20450 829.0 MHz	Ch 20525 836.5 MHz	Ch 20600 844.0 MHz
QPSK	Conducted Average Power		-	21.80 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.214	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	21.69 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.212	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power			22.62 dBm	
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.262	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power			22.45 dBm	
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.267	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		22.62 dBm	22.38 dBm	22.38 dBm
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	Without headset	0.245	0.277	0.254
		Headset WH-208	-	0.245	-
	Display facing phantom	Without headset	-	0.236	-
		Headset WH-208	-	0.193	-
16QAM	Conducted Average Power			20.82 dBm	
10MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.182	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power			20.64 dBm	
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.180	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power			21.68 dBm	
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.210	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power			21.81 dBm	
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.215	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power			22.04 dBm	
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	Without headset	-	0.229	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK 10MHz Ch BW 1RB 0% offset CC-3401	Back facing Phantom, Without headset		0.204	0.221	0.219

1700/2100 Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 1312 1712.4 MHz	Ch 1412 1732.4 MHz	Ch 1513 1752.6 MHz
WCDMA		Maximum Output Power	23.10 dBm	23.20 dBm	23.20 dBm
CC-3058	Back facing phantom	Without headset	-	0.359	-
		Headset WH-208	0.332	0.371	0.351
	Display facing phantom	Without headset	-	0.369	-
		Headset WH-208	-	0.298	-
WCDMA CC-3401	Back facing Phantom, Headset WH-208		0.290	0.339	0.325

LTE1700/2100 (Band4) Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 20050 1720.0 MHz	Ch 20175 1732.5 MHz	Ch 20300 1745.0 MHz
QPSK	Conducted Average Power		-	22.48 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.315	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.50 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.322	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	23.31 dBm	-
20MHz Ch BW 1 RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.390	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.86 dBm	-
20MHz Ch BW 1 RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.344	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		23.53 dBm	23.45 dBm	23.10 dBm
20MHz Ch BW 1 RB 0% offset CC-3058	Back facing phantom	Without headset	0.306	0.435	0.364
		Headset WH-208	-	0.429	-
	Display facing phantom	Without headset	-	0.381	-
		Headset WH-208	-	0.321	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	21.53 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.265	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	21.55 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.270	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.65 dBm	-
20MHz Ch BW 1 RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.318	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.51 dBm	-
20MHz Ch BW 1 RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.275	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.34 dBm	-
20MHz Ch BW 1 RB 0% offset CC-3058	Back facing phantom	Without headset	-	0.335	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK 20MHz Ch BW 1 RB 0% offset CC-3401	Back facing Phantom, Without headset		0.223	0.301	0.269

1900MHz Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
2-slot GPRS	Conducted Average Power		30.01 dBm	30.10 dBm	29.99 dBm
CC-3058	Back facing phantom	Without headset	-	0.430	-
		Headset WH-208	-	0.488	-
	Display facing phantom	Without headset	0.501	0.537	0.490
		Headset WH-208	-	0.491	-
Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Maximum Output Power		22.64 dBm	22.71 dBm	23.2 dBm
CC-3058	Back facing phantom	Without headset		0.385	
		Headset WH-208		0.353	
	Display facing phantom	Without headset	0.369	0.460	0.416
		Headset WH-208		0.395	
2-slot GPRS CC-3401	Display facing phantom, Without headset		0.520	0.484	0.465

LTE1900 (Band2) Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 18700 1860.0 MHz	Ch 18900 1880.0 MHz	Ch 19100 1900.0 MHz
QPSK	Conducted Average Power		-	22.20 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.403	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.15 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.395	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		-	22.63 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.429	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK	Conducted Average Power		22.97 dBm	22.82 dBm	22.65 dBm
20MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	Without headset	-	0.456	-
		Headset WH-208	-	0.387	-
	Display facing phantom	Without headset	0.442	0.502	0.407
		Headset WH-208	-	0.431	-
QPSK	Conducted Average Power		-	22.68 dBm	-
20MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	Without headset	-	0.424	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	21.16 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	Without headset	-	0.308	-
		Headset WH-208	-	-	-
	Display facing phantom	Without headset	-	-	-
		Headset WH-208	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power		-	21.05 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	Without headset	-	0.309	-
		Headset WH-208	-	-	-
	Display facing Phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	21.94 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing Phantom	Without headset	-	0.332	-
		Headset WH-208	-	-	-
	Display facing Phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	22.02 dBm	-
20MHz Ch BW 1RB 100% offset CC-3058	Back facing Phantom	Without headset	-	0.346	-
		Headset WH-208	-	-	-
	Display facing Phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
16QAM	Conducted Average Power		-	21.86 dBm	-
20MHz Ch BW 1RB 0% offset CC-3058	Back facing Phantom	Without headset	-	0.317	-
		Headset WH-208	-	-	-
	Display facing Phantom	Without headset	-	-	-
		Headset WH-208	-	-	-
QPSK 20MHz Ch BW 1RB 100% offset CC-3401	Display facing phantom, Without headset		0.414	0.465	0.379

2450MHz Body SAR results

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 6 2437.0 MHz	Ch 11 2462.0 MHz
WLAN b-mode	Maximum Output Power		15.60 dBm	16.22 dBm	15.54 dBm
DSSS 11Mbps CC-3058	Back facing phantom	Without headset	-	0.051	-
		Headset WH-208	-	0.038	-
	Display facing phantom	Without headset	0.054	0.070	0.054
		Headset WH-208	-	0.039	-
WLAN b-mode DSSS 11Mbps CC-3401	Display facing phantom, Without headset		0.039	0.058	0.045

5000MHz Body SAR results 5150–5250 MHz and 5250–5350 MHz

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)			
			Ch 36 5180.0 MHz	Ch 44 5220.0 MHz	Ch 52 5260.0 MHz	Ch 64 5320.0 MHz
WLAN a-mode	Maximum Output Power		13.22 dBm	13.06 dBm	13.01 dBm	12.85 dBm
OFDM 9 Mbps CC-3058	Back facing phantom	Without headset	0.097	0.117	0.128	0.137
		Headset WH-208	-	0.139	-	0.165
	Display facing phantom	Without headset	-	0.083	-	0.092
		Headset WH-208	-	0.052	-	0.061
WLAN a-mode OFDM 9 Mbps CC-3401	Back facing phantom, Headset WH-208		-	0.196	-	0.151

5000MHz Body SAR results
5470–5725 MHz

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)			
			Ch 108 5540.0 MHz	Ch 112 5560.0 MHz	Ch 120 5600.0 MHz	Ch 136 5680.0 MHz
WLAN a-mode	Maximum Output Power		13.02 dBm	12.89 dBm	12.86 dBm	12.78 dBm
OFDM 9 Mbps CC-3058	Back facing phantom	Without headset	0.120	0.108	0.078	0.040
		Headset WH-208	0.119	-	-	-
	Display facing phantom	Without headset	0.059	-	-	-
		Headset WH-208	0.036	-	-	-
WLAN a-mode OFDM 9 Mbps CC-3401	Back facing phantom, Without headset		0.119	-	-	-

5000MHz Body SAR results
5725–5850 MHz

Mode	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 153 5765.0 MHz	Ch 157 5785.0 MHz	Ch 165 5825.0 MHz
WLAN a-mode	Maximum Output Power		12.72 dBm	12.77 dBm	12.64 dBm
OFDM 9 Mbps CC-3058	Back facing phantom	Without headset	0.022	0.024	0.025
		Headset WH-208	-	-	0.025
	Display facing phantom	Without headset	-	-	0.010
		Headset WH-208	-	-	0.009
WLAN a-mode OFDM 9 Mbps CC-3401	Back facing phantom, Without headset		-	-	0.026

Simultaneous transmissions: Combined body SAR results – Individual band Max results

Test configuration	Max. 1g SAR results										
	WLAN 2450	WLAN 5000	LTE 700	2-slot GPRS850	WCDMA 850	LTE 850	WCDMA 1700/2100	LTE 1700/2100	2-slot GPRS 1900	WCDMA 1900	LTE 1900
Body: Back facing phantom, Without Headset	0.051	0.137	0.230	0.606	0.321	0.277	0.359	0.435	0.430	0.385	0.456
Body: Back facing phantom, Headset WH-208	0.038	0.196	0.195	0.399	0.241	0.245	0.371	0.429	0.488	0.353	0.387
Body: Display facing phantom, Without Headset	0.070	0.092	0.172	0.437	0.217	0.236	0.369	0.381	0.537	0.460	0.502
Body: Display facing phantom, Headset WH-208	0.039	0.061	0.149	0.374	0.180	0.193	0.298	0.321	0.491	0.395	0.431

**Simultaneous transmissions: Combined body SAR results –
Max + Max combined results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/2100 + WLAN 2450	LTE 1700/2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
Body: Back facing phantom, Without Headset	0.281	0.657	0.372	0.328	0.410	0.486	0.481	0.436	0.507
Body: Back facing phantom, Headset WH-208	0.233	0.437	0.279	0.283	0.409	0.467	0.526	0.391	0.425
Body: Display facing phantom, Without Headset	0.242	0.507	0.287	0.306	0.439	0.451	0.607	0.530	0.572
Body: Display facing phantom, Headset WH-208	0.188	0.413	0.219	0.232	0.337	0.360	0.530	0.434	0.470
Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 5000	2-slot GPRS850 + WLAN 5000	WCDMA 850 + WLAN 5000	LTE 850 + WLAN 5000	WCDMA 1700/2100 + WLAN 5000	LTE 1700/2100 + WLAN 5000	2-slot GPRS 1900 + WLAN 5000	WCDMA 1900 + WLAN 5000	LTE 1900 + WLAN 5000
Body: Back facing phantom, Without Headset	0.367	0.743	0.458	0.414	0.496	0.572	0.567	0.522	0.593
Body: Back facing phantom, Headset WH-208	0.391	0.595	0.437	0.441	0.567	0.625	0.684	0.549	0.583
Body: Display facing phantom, Without Headset	0.264	0.529	0.309	0.328	0.461	0.473	0.629	0.552	0.594
Body: Display facing phantom, Headset WH-208	0.210	0.435	0.241	0.254	0.359	0.382	0.552	0.456	0.492

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 or WLAN5000 and the cellular bands point-by-point and c) calculates the combined average SAR values.

**Simultaneous transmissions: Combined body SAR results –
SPEAG Combined Multiband algorithm results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/ 2100 + WLAN 2450	LTE 1700/ 2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
Body: Back facing phantom, Without Headset	0.237	0.634	0.353	0.311	-	0.456	-	-	-
Body: Back facing phantom, Headset WH-208	-	-	-	-	-	-	-	-	-
Body: Display facing phantom, Without Headset	-	-	-	-	0.385	-	0.553	0.478	0.516
Body: Display facing phantom, Headset WH-208	-	-	-	-	-	-	-	-	-
Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 5000	2-slot GPRS850 + WLAN 5000	WCDMA 850 + WLAN 5000	LTE 850 + WLAN 5000	WCDMA 1700/ 2100 + WLAN 5000	LTE 1700/ 2100 + WLAN 5000	2-slot GPRS 1900 + WLAN 5000	WCDMA 1900 + WLAN 5000	LTE 1900 + WLAN 5000
Body: Back facing phantom, Without Headset	-	0.601	0.320	-	-	-	-	-	-
Body: Back facing phantom, Headset WH-208	0.201	-	-	0.246	0.371	0.435	0.485	-	-
Body: Display facing phantom, Without Headset	-	-	-	-	-	-	-	0.439	0.485
Body: Display facing phantom, Headset WH-208	-	-	-	-	-	-	-	-	-

Some of the Combined SAR values in the above table are less than the maximum SAR values for the contributing cellular band. This is due to a) minimal overlap of the SAR distributions of the cellular band with WLAN2450 or WLAN5000 and b) uncertainties associated with the different methods of calculation. In these cases, the maximum SAR values given for the combined Modes in the Summary table in Section 1.2 are those for the individual cellular or WLAN band.

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for this product. The Combined SAR data given in the tables above has been voluntarily calculated.

Plots of the Measurement scans are given in Appendix B.2.

7.3 Body SAR assessment of Wireless Router mode at 10.0mm separation distance

LTE700 (Band17) Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 23780 709.0 MHz	Ch 23790 710.0 MHz	Ch 23800 711.0 MHz
QPSK	Conducted Average Power	-	21.99 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.222	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	22.31 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.245	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	23.11 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.303	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

QPSK	Conducted Average Power	-	22.96 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.257	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	23.30 dBm	23.05 dBm	23.02 dBm
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	0.323	0.319	0.327
	Display facing phantom	-	0.239	-
	Top edge facing phantom	-	0.015	-
	Bottom edge facing phantom	-	0.162	-
	Left edge facing phantom	-	0.213	-
	Right edge facing phantom	-	0.059	-
16QAM	Conducted Average Power	-	21.03 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.175	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.56 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.197	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power	-	22.33 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.233	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.23 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.214	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.33 dBm	-
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	-	0.267	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK 10MHz Ch BW 1RB 0% offset CC-3401	Back facing phantom	0.271	0.274	0.287

850MHz Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
2-slot GPRS	Conducted Average Power	31.96 dBm	32.19 dBm	32.30 dBm
CC-3058	Back facing phantom	0.654	0.720	0.770
	Display facing phantom	-	0.487	-
	Top edge facing phantom	-	0.038	-
	Bottom edge facing phantom	-	0.278	-
	Left edge facing phantom	-	0.619	-
	Right edge facing phantom	-	0.271	-
Mode	Device orientation	Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA	Maximum Output Power	23.01 dBm	22.84 dBm	23.16 dBm
CC-3058	Back facing phantom	0.284	0.360	0.430
	Display facing phantom	-	0.244	-
	Top edge facing phantom	-	0.017	-
	Bottom edge facing phantom	-	0.147	-
	Left edge facing phantom	-	0.334	-
	Right edge facing phantom	-	0.140	-
2-slot GPRS CC-3401	Back facing phantom	0.530	0.577	0.626

LTE850 (Band5) Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 20450 829.0 MHz	Ch 20525 836.5 MHz	Ch 20600 844.0 MHz
QPSK	Conducted Average Power	-	21.80 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.301	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	21.69 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.300	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	22.62 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.367	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

QPSK	Conducted Average Power	-	22.45 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.372	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	22.62 dBm	22.38 dBm	22.38 dBm
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	0.372	0.383	0.346
	Display facing phantom	-	0.280	-
	Top edge facing phantom	-	0.022	-
	Bottom edge facing phantom	-	0.149	-
	Left edge facing phantom	-	0.350	-
	Right edge facing phantom	-	0.166	-
16QAM	Conducted Average Power	-	20.82 dBm	-
10MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.240	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	20.64 dBm	-
10MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.239	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power	-	21.68 dBm	-
10MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.274	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.81 dBm	-
10MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.268	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.04 dBm	-
10MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	-	0.297	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK 10MHz Ch BW 1RB 0% offset CC-3401	Back facing phantom	0266	0.285	0.285

1700/2100 Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 1312 1712.4 MHz	Ch 1412 1732.4 MHz	Ch 1513 1752.6 MHz
WCDMA	Maximum Output Power	23.10 dBm	23.20 dBm	23.20 dBm
CC-3058	Back facing phantom	0.685	0.604	0.720
	Display facing phantom	-	0.586	-
	Top edge facing phantom	-	0.050	-
	Bottom edge facing phantom	-	0.599	-
	Left edge facing phantom	-	0.339	-
	Right edge facing phantom	-	0.054	-
WCDMA CC-3401	Back facing Phantom	0.590	0.516	0.508

LTE1700/2100 (Band4) Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 20050 1720.0 MHz	Ch 20175 1732.5 MHz	Ch 20300 1745.0 MHz
QPSK	Conducted Average Power	-	22.48 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.614	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	22.50 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.620	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	23.31 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.748	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

QPSK	Conducted Average Power	-	22.86 dBm	-
20MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.669	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	23.53 dBm	23.45 dBm	23.10 dBm
20MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	0.543	0.781	0.681
	Display facing phantom	-	0.625	-
	Top edge facing phantom	-	0.053	-
	Bottom edge facing phantom	-	0.604	-
	Left edge facing phantom	-	0.334	-
	Right edge facing phantom	-	0.069	-
16QAM	Conducted Average Power	-	23.45 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.468	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.55 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.480	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power	-	22.65 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.555	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.51 dBm	-
20MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.494	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.34 dBm	-
20MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	-	0.585	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK 20MHz Ch BW 1RB 0% offset CC-3401	Back facing phantom	0.466	0.598	0.587

1900MHz Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
2-slot GPRS	Conducted Average Power	30.01 dBm	30.10 dBm	29.99 dBm
CC-3058	Back facing phantom	0.975	0.957	0.968
	Display facing phantom	0.926	0.881	0.863
	Top edge facing phantom	-	0.057	-
	Bottom edge facing phantom	1.18	1.20	1.22
	Left edge facing phantom	-	0.415	-
	Right edge facing phantom	-	0.104	-
Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Maximum Output Power	22.64 dBm	22.71 dBm	23.2 dBm
CC-3058	Back facing phantom	-	0.722	-
	Display facing phantom	0.805	0.850	0.806
	Top edge facing phantom	-	0.060	-
	Bottom edge facing phantom	-	0.781	-
	Left edge facing phantom	-	0.385	-
	Right edge facing phantom	-	0.106	-
2-slot GPRS CC-3401	Bottom edge facing phantom	1.11	0.999	0.901

LTE1900 (Band2) Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 18700 1860.0 MHz	Ch 18900 1880.0 MHz	Ch 19100 1900.0 MHz
QPSK	Conducted Average Power	-	22.20 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.717	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	22.15 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.694	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK	Conducted Average Power	-	22.63 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.762	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

QPSK	Conducted Average Power	22.97 dBm	22.82 dBm	22.65 dBm
20MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	0.755	0.854	0.675
	Display facing phantom	-	0.770	-
	Top edge facing phantom	-	0.072	-
	Bottom edge facing phantom	0.732	0.811	0.616
	Left edge facing phantom	-	0.423	-
	Right edge facing phantom	-	0.109	-
QPSK	Conducted Average Power	22.91 dBm	22.68 dBm	22.76 dBm
20MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	0.850	0.781	0.637
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.16 dBm	-
20MHz Ch BW 100% RB CC-3058	Back facing phantom	-	0.462	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.05 dBm	-
20MHz Ch BW 50% RB 50% offset CC-3058	Back facing phantom	-	0.473	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-

(Table continues)

(Table continues)

16QAM	Conducted Average Power	-	21.94 dBm	-
20MHz Ch BW 1RB 50% offset CC-3058	Back facing phantom	-	0.500	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	22.02 dBm	-
20MHz Ch BW 1RB 100% offset CC-3058	Back facing phantom	-	0.512	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
16QAM	Conducted Average Power	-	21.86 dBm	-
20MHz Ch BW 1RB 0% offset CC-3058	Back facing phantom	-	0.513	-
	Display facing phantom	-	-	-
	Top edge facing phantom	-	-	-
	Bottom edge facing phantom	-	-	-
	Left edge facing phantom	-	-	-
	Right edge facing phantom	-	-	-
QPSK 20MHz Ch BW 1RB 100% offset CC-3401	Back facing phantom	0.577	0.644	0.503

2450MHz Wireless Router SAR results

Mode	Device orientation	SAR, averaged over 1g (W/kg)		
		Ch 1 2412.0 MHz	Ch 6 2437.0 MHz	Ch 11 2462.0 MHz
WLAN b-mode	Maximum Output Power	15.60 dBm	16.22 dBm	15.54 dBm
DSSS 11Mbps CC-3058	Back facing phantom	0.089	0.128	0.094
	Display facing phantom	-	0.122	-
	Top edge facing phantom	-	0.117	-
	Bottom edge facing phantom	-	0.005	-
	Left edge facing phantom	-	0.038	-
	Right edge facing phantom	-	0.096	-
WLAN b-mode DSSS 11Mbps CC-3401	Back facing phantom	0.060	0.089	0.070

Simultaneous transmissions: Combined Wireless Router SAR results – Individual band Max results

Test configuration	Max. 1g SAR results									
	WLAN 2450	LTE 700	2-slot GPRS850	WCDMA 850	LTE 850	WCDMA 1700/ 2100	LTE 1700/ 2100	2- slot GPRS 1900	WCDMA 1900	LTE 1900
WR: Back facing phantom	0.128	0.327	0.770	0.430	0.383	0.720	0.781	0.975	0.722	0.854
WR: Display facing phantom	0.122	0.239	0.487	0.244	0.280	0.586	0.625	0.926	0.850	0.770
WR: Top edge facing phantom	0.117	0.015	0.038	0.017	0.022	0.050	0.053	0.057	0.060	0.072
WR: Bottom edge facing phantom	0.005	0.162	0.278	0.147	0.149	0.599	0.604	1.22	0.781	0.811
WR: Left edge facing phantom	0.038	0.213	0.619	0.334	0.350	0.339	0.334	0.415	0.385	0.423
WR: Right edge facing phantom	0.096	0.059	0.271	0.140	0.166	0.054	0.069	0.104	0.106	0.109

**Simultaneous transmissions: Combined SAR results –
Max + Max combined results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/2100 + WLAN 2450	LTE 1700/2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
WR: Back facing phantom	0.455	0.898	0.558	0.511	0.848	0.909	1.103	0.850	0.982
WR: Display facing phantom	0.361	0.609	0.366	0.402	0.708	0.747	1.048	0.972	0.892
WR: Top edge facing phantom	0.132	0.155	0.134	0.139	0.167	0.170	0.174	0.177	0.189
WR: Bottom edge facing phantom	0.167	0.283	0.152	0.154	0.604	0.609	1.225	0.786	0.816
WR: Left edge facing phantom	0.251	0.657	0.372	0.388	0.377	0.372	0.453	0.423	0.461
WR: Right edge facing phantom	0.155	0.367	0.236	0.262	0.150	0.165	0.200	0.202	0.205

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 and the cellular bands point-by-point and c) calculates the combined average SAR values.

**Simultaneous transmissions: Combined SAR results –
SPEAG Combined Multiband algorithm results**

Test configuration	Max. 1g SAR results								
	LTE 700 + WLAN 2450	2-slot GPRS850 + WLAN 2450	WCDMA 850 + WLAN 2450	LTE 850 + WLAN 2450	WCDMA 1700/2100 + WLAN 2450	LTE 1700/2100 + WLAN 2450	2-slot GPRS 1900 + WLAN 2450	WCDMA 1900 + WLAN 2450	LTE 1900 + WLAN 2450
WR: Back facing phantom	0.356	0.820	0.485	0.441	0.779	0.821	-	-	0.883
WR: Display facing phantom	-	-	-	-	-	-	-	0.809	-
WR: Top edge facing phantom	-	-	-	-	-	-	-	-	-
WR: Bottom edge facing phantom	-	-	-	-	-	-	1.26	-	-
WR: Left edge facing phantom	-	-	-	-	-	-	-	-	-
WR: Right edge facing phantom	-	-	-	-	-	-	-	-	-

Some of the Combined SAR values in the above table are less than the maximum SAR values for the contributing cellular band. This is due to a) minimal overlap of the SAR distributions of the cellular band with WLAN2450 and b) uncertainties associated with the different methods of calculation. In these cases, the maximum SAR values given for the combined Modes in the Summary table in Section 1.2 are those for the individual cellular band.

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for this product. The Combined SAR data given in the tables above has been voluntarily calculated.

Plots of the Measurement scans are given in Appendix B.3.

APPENDIX A: SYSTEM CHECKING SCANS

Date/Time: 2012-07-09 03:19:44

Test Laboratory: TCC Nokia

Type: D750V3; Serial: D750V3 - SN:1034

Communication System: CW750

Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: $t = 20.8$ C

Medium parameters used: $f = 750$ MHz; $\sigma = 0.924$ mho/m; $\epsilon_r = 40.556$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.28 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.357 V/m

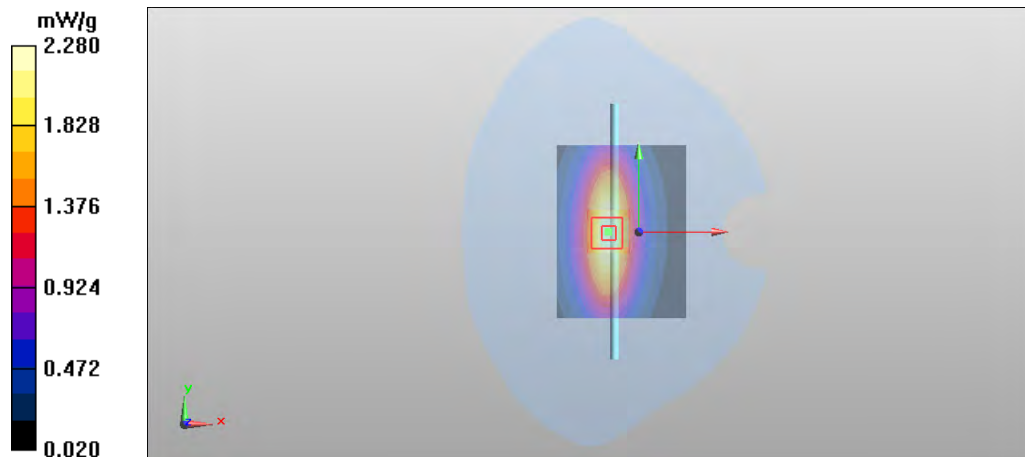
Peak SAR (extrapolated) = 3.182 mW/g

SAR(1 g) = 2.13 mW/g

SAR(10 g) = 1.39 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 2.30 mW/g



Date/Time: 2012-08-22 13:36:48

Test Laboratory: TCC Nokia

Type: D750V3; Serial: D750V3 - SN:1034

Communication System: CW750

Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: $t = 21.0$ C

Medium parameters used: $f = 750$ MHz; $\sigma = 0.911$ mho/m; $\epsilon_r = 40.325$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.26 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.954 V/m

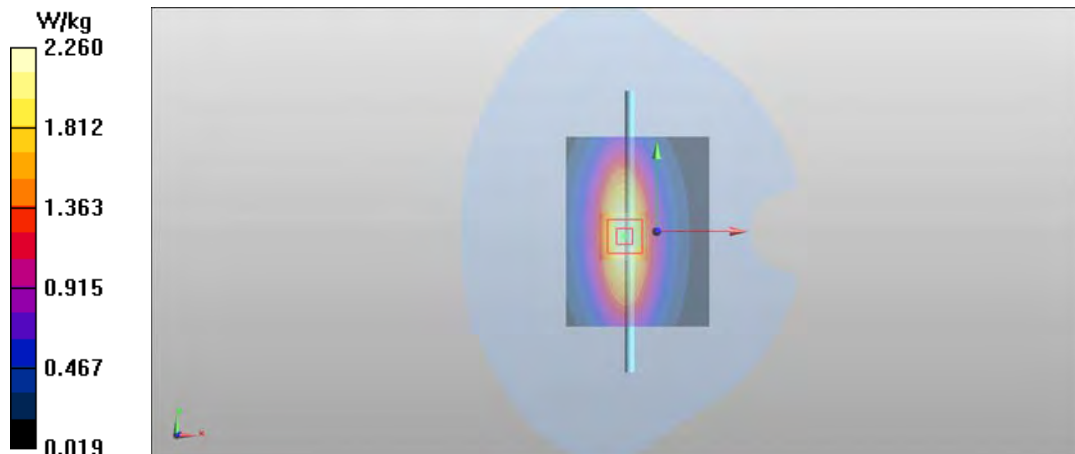
Peak SAR (extrapolated) = 3.173 mW/g

SAR(1 g) = 2.13 mW/g

SAR(10 g) = 1.39 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 2.30 W/kg



Date/Time: 2012-07-06 13:36:25

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 835 MHz; σ = 0.916 mho/m; ϵ_r = 40.478; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.44 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.065 V/m

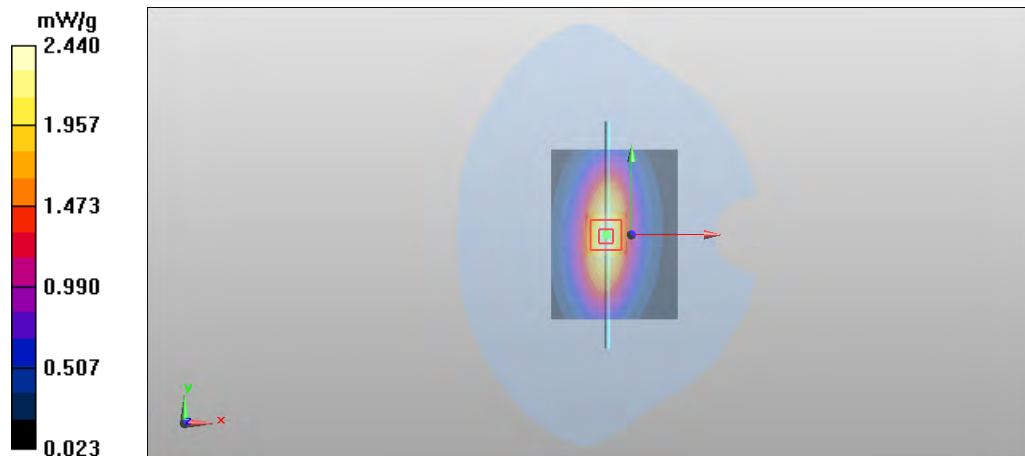
Peak SAR (extrapolated) = 3.328 mW/g

SAR(1 g) = 2.28 mW/g

SAR(10 g) = 1.49 mW/g

Power Drift = -0.05 dB

Maximum value of SAR (measured) = 2.47 mW/g



Date/Time: 2012-08-15 09:12:43

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used: $f = 835$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 39.822$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 2.53 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 53.723 V/m

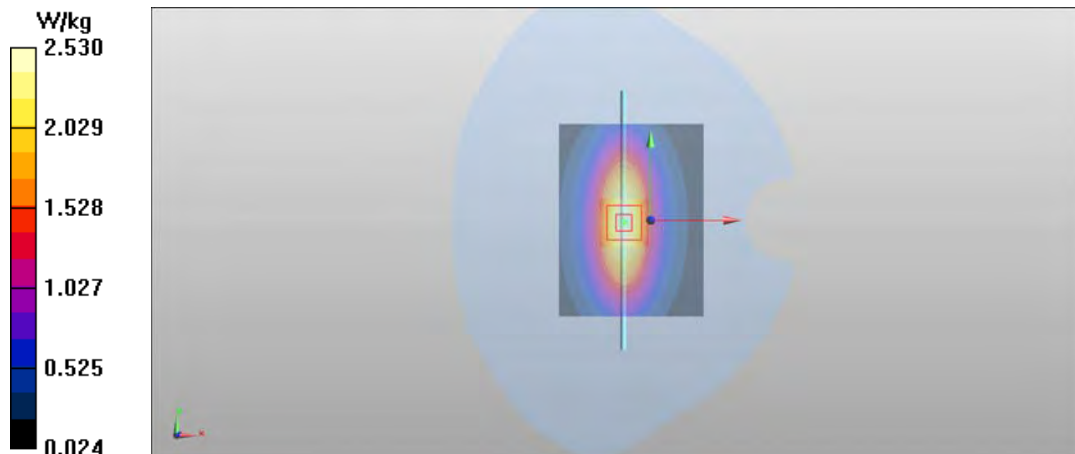
Peak SAR (extrapolated) = 3.476 mW/g

SAR(1 g) = 2.34 mW/g

SAR(10 g) = 1.53 mW/g

Power Drift = -0.04 dB

Maximum value of SAR (measured) = 2.54 W/kg



Date/Time: 2012-08-16 06:52:55

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: t= 21.5 C

Medium parameters used: f = 835 MHz; σ = 0.918 mho/m; ϵ_r = 40.572; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.54 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.780 V/m

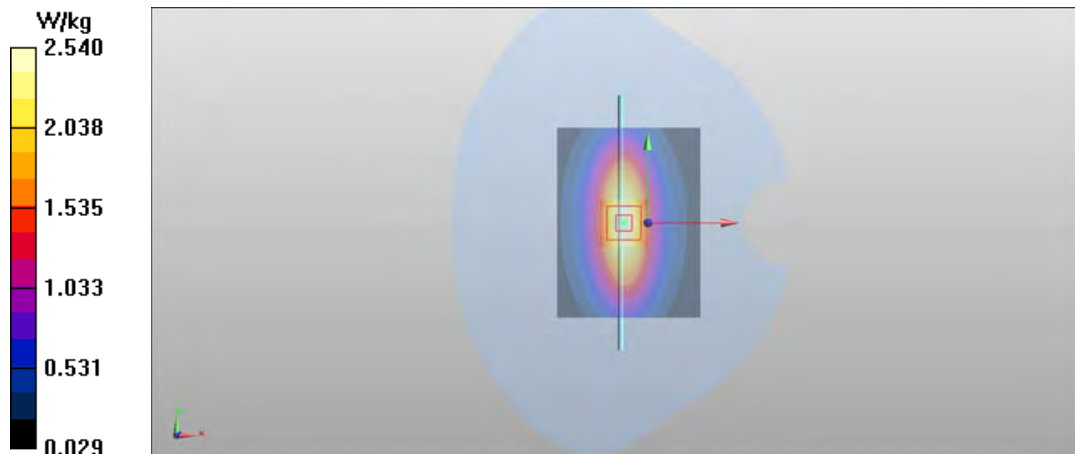
Peak SAR (extrapolated) = 3.485 mW/g

SAR(1 g) = 2.36 mW/g

SAR(10 g) = 1.55 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 2.54 W/kg



Date/Time: 2012-07-06 13:09:22

Test Laboratory: TCC Nokia
Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used: f = 1800 MHz; $\sigma = 1.376$ mho/m; $\epsilon_r = 38.983$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.7 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.047 V/m

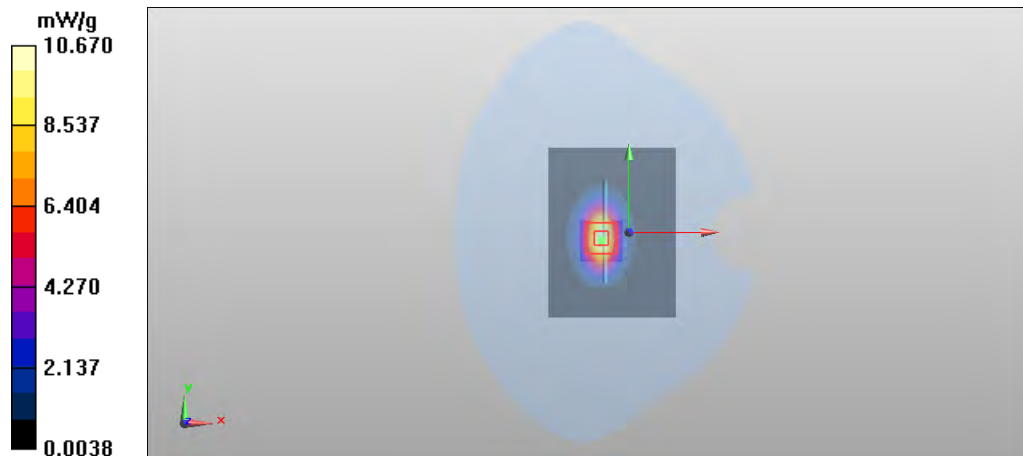
Peak SAR (extrapolated) = 16.539 mW/g

SAR(1 g) = 8.92 mW/g

SAR(10 g) = 4.66 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 10.0 mW/g



Date/Time: 2012-07-07 11:09:29

Test Laboratory: TCC Nokia
Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used: f = 1800 MHz; σ = 1.405 mho/m; ϵ_r = 38.7; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.6 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.055 V/m

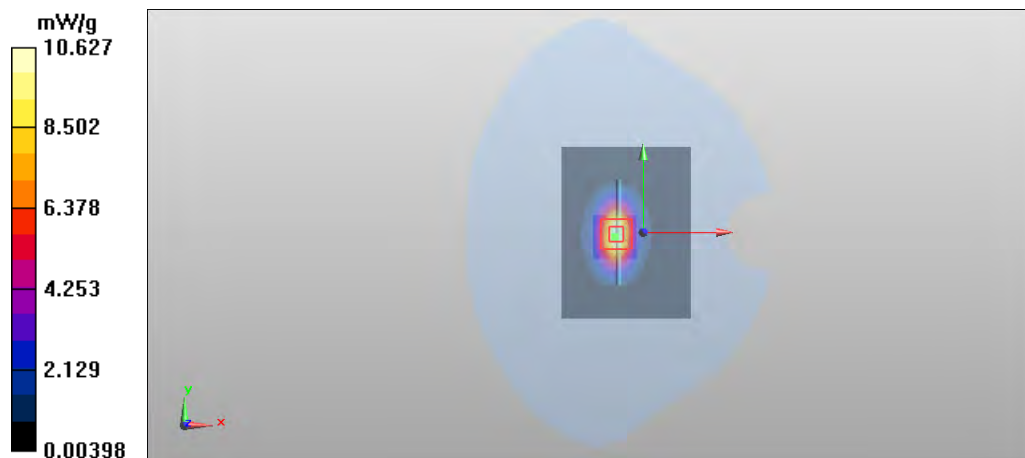
Peak SAR (extrapolated) = 16.590 mW/g

SAR(1 g) = 8.96 mW/g

SAR(10 g) = 4.68 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 10.1 mW/g



Date/Time: 2012-08-20 12:22:57

Test Laboratory: TCC Nokia

Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: $t = 20.9$ C

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 38.112$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.5 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 77.486 V/m

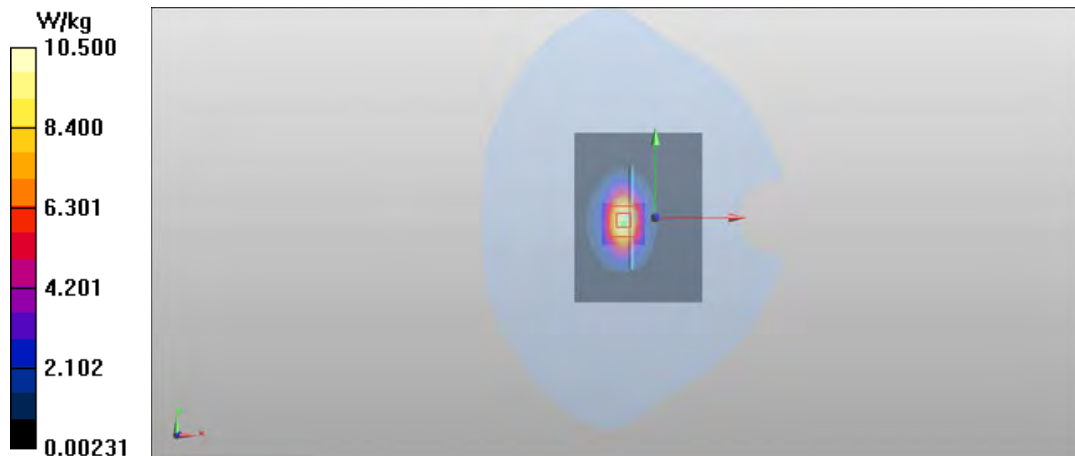
Peak SAR (extrapolated) = 16.693 mW/g

SAR(1 g) = 9.03 mW/g

SAR(10 g) = 4.71 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 10.1 W/kg



Date/Time: 2012-07-06 13:09:04

Test Laboratory: TCC Nokia
Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.398$ mho/m; $\epsilon_r = 38.775$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.7 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 94.359 V/m

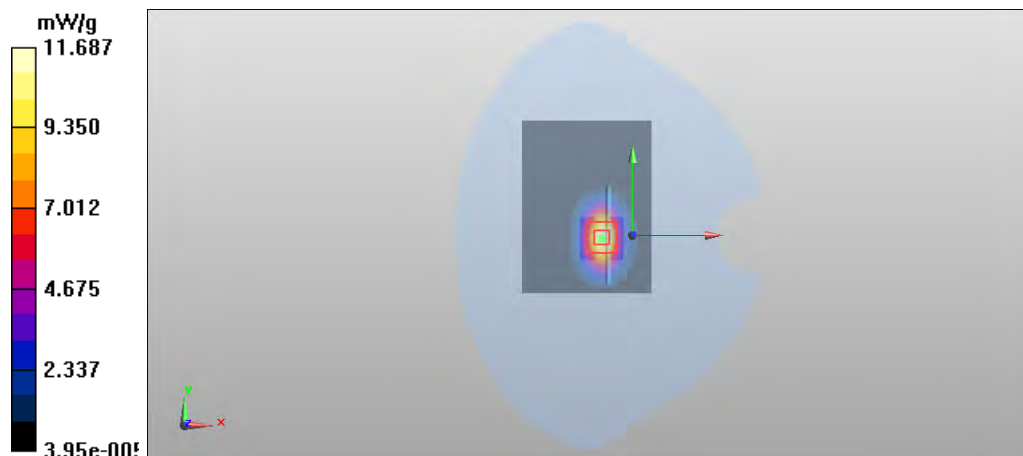
Peak SAR (extrapolated) = 18.052 mW/g

SAR(1 g) = 9.77 mW/g

SAR(10 g) = 5.1 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 11.0 mW/g



Date/Time: 2012-08-16 07:24:21

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: t= 20.5 C

Medium parameters used: f = 1900 MHz; σ = 1.379 mho/m; ϵ_r = 38.618; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.8 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.858 V/m

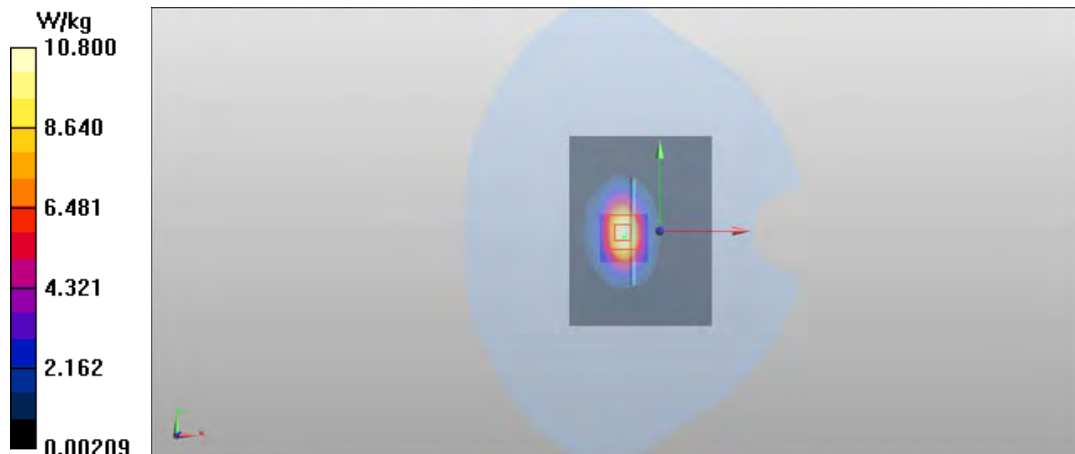
Peak SAR (extrapolated) = 17.547 mW/g

SAR(1 g) = 9.4 mW/g

SAR(10 g) = 4.91 mW/g

Power Drift = -0.08 dB

Maximum value of SAR (measured) = 10.6 W/kg



Date/Time: 2012-08-17 09:16:51

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1900\text{ MHz}$; $\sigma = 1.398\text{ mho/m}$; $\epsilon_r = 38.457$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 11.6 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 87.284 V/m

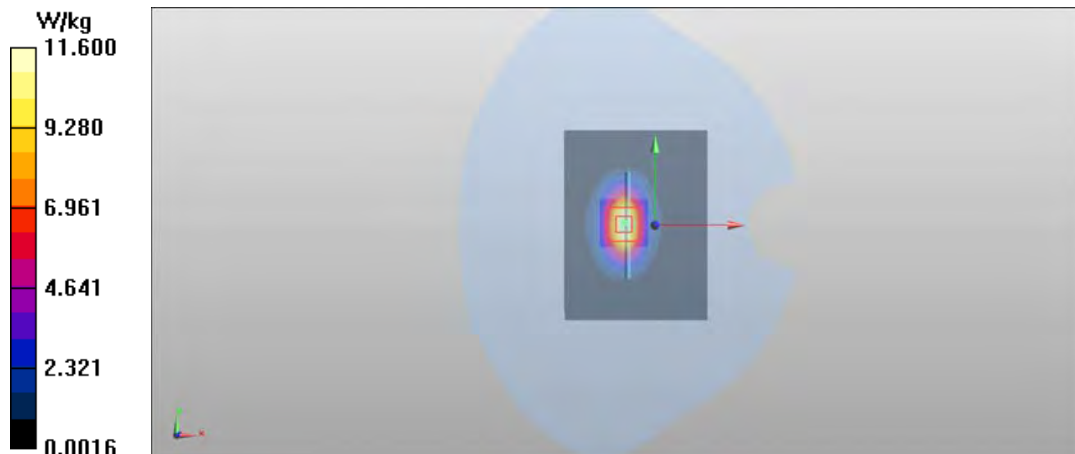
Peak SAR (extrapolated) = 18.080 mW/g

SAR(1 g) = 9.7 mW/g

SAR(10 g) = 5.06 mW/g

Power Drift = -0.06 dB

Maximum value of SAR (measured) = 10.9 W/kg



Date/Time: 2012-07-02 08:22:39

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: t= 21.1 C

Medium parameters used: f = 2450 MHz; σ = 1.773 mho/m; ϵ_r = 37.891; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.7 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 104.9 V/m

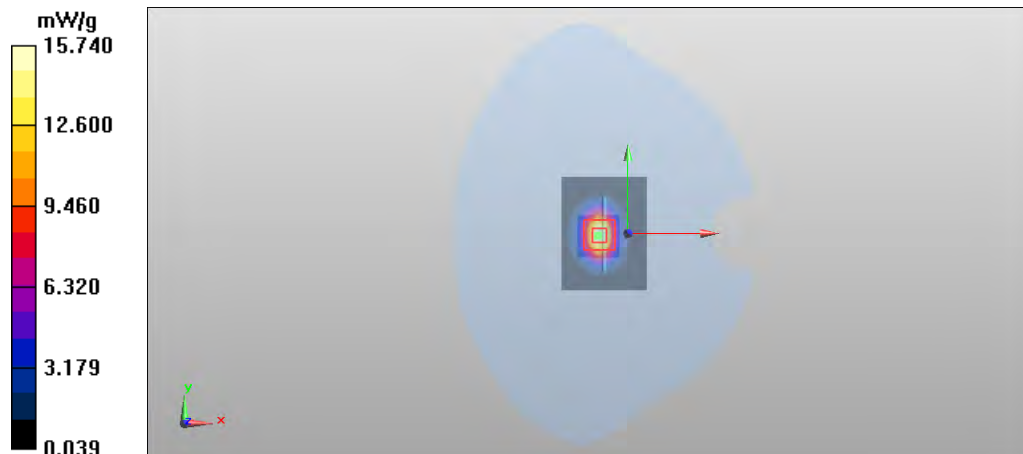
Peak SAR (extrapolated) = 28.064 mW/g

SAR(1 g) = 13.5 mW/g

SAR(10 g) = 6.28 mW/g

Power Drift = -0.13 dB

Maximum value of SAR (measured) = 15.5 mW/g



Date/Time: 2012-08-15 08:01:45

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.4$ C

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.789$ mho/m; $\epsilon_r = 37.541$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.5 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.5 V/m

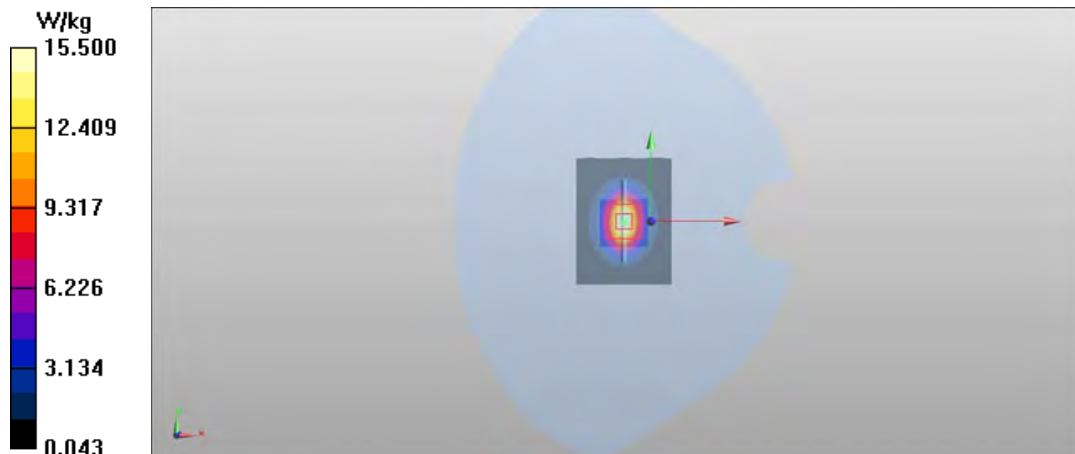
Peak SAR (extrapolated) = 28.259 mW/g

SAR(1 g) = 13.5 mW/g

SAR(10 g) = 6.24 mW/g

Power Drift = -0.04 dB

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



Date/Time: 2012-07-03 06:34:52

Test Laboratory: TCC Nokia
Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5200

Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.479$ mho/m; $\epsilon_r = 35.175$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.81, 4.81, 4.81); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.3 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 63.536 V/m

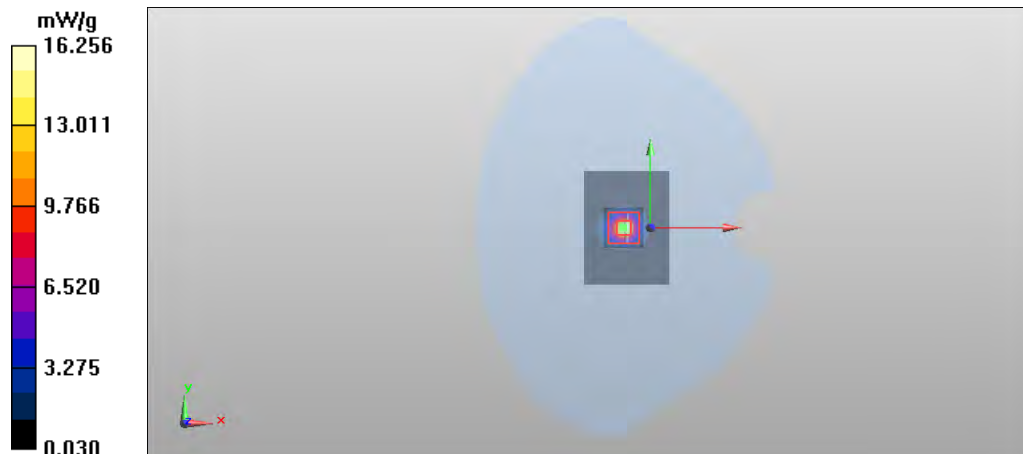
Peak SAR (extrapolated) = 32.715 mW/g

SAR(1 g) = 8.14 mW/g

SAR(10 g) = 2.28 mW/g

Power Drift = 0.22 dB

Maximum value of SAR (measured) = 15.9 mW/g



Date/Time: 2012-08-15 19:03:42

Test Laboratory: TCC Nokia
Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5200

Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.4 C

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.5$ mho/m; $\epsilon_r = 34.521$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.81, 4.81, 4.81); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.9 W/kg

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 66.648 V/m

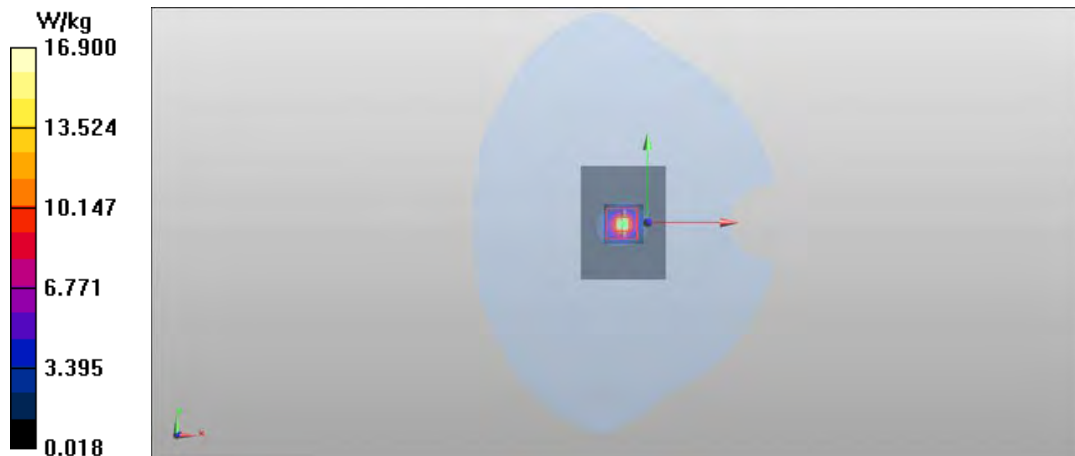
Peak SAR (extrapolated) = 31.687 mW/g

SAR(1 g) = 8.02 mW/g

SAR(10 g) = 2.26 mW/g

Power Drift = -0.00 dB

Maximum value of SAR (measured) = 15.7 W/kg



Date/Time: 2012-07-03 15:37:00

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5500

Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.758$ mho/m; $\epsilon_r = 34.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.6, 4.6, 4.6); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 18.3 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 61.751 V/m

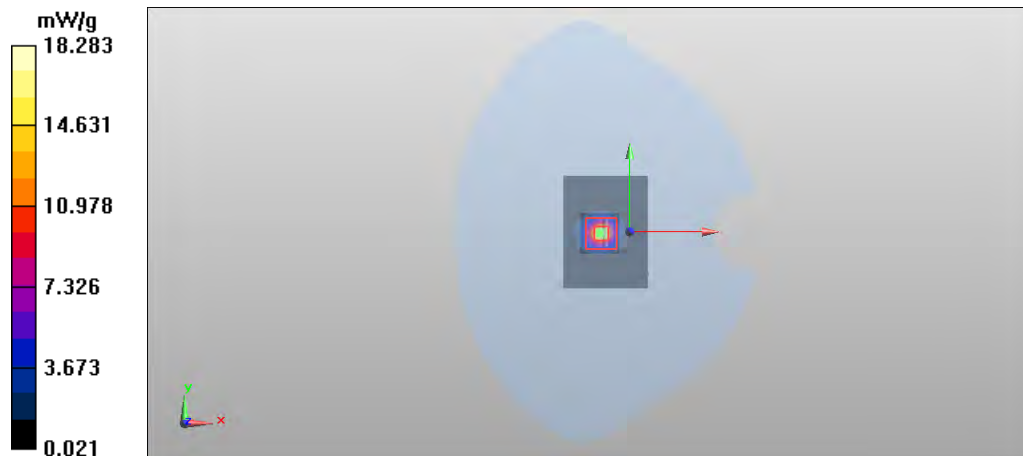
Peak SAR (extrapolated) = 37.789 mW/g

SAR(1 g) = 9.05 mW/g

SAR(10 g) = 2.53 mW/g

Power Drift = 0.17 dB

Maximum value of SAR (measured) = 18.0 mW/g



Date/Time: 2012-08-21 10:10:36

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5500

Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C Old liquid

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.835$ mho/m; $\epsilon_r = 35.545$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.6, 4.6, 4.6); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 17.0 W/kg

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 63.439 V/m

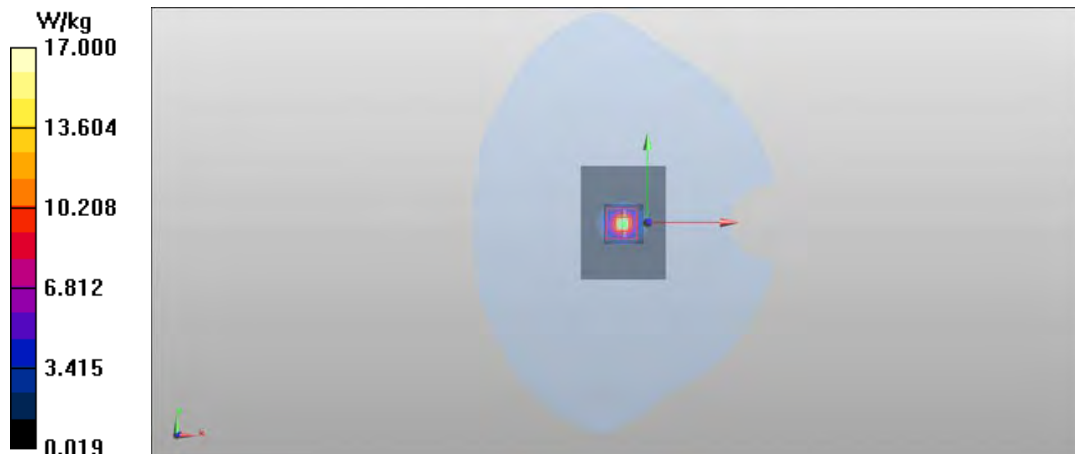
Peak SAR (extrapolated) = 34.440 mW/g

SAR(1 g) = 8.03 mW/g

SAR(10 g) = 2.23 mW/g

Power Drift = -0.00 dB

Maximum value of SAR (measured) = 16.1 W/kg



Date/Time: 2012-07-03 16:25:57

Test Laboratory: TCC Nokia
Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.067$ mho/m; $\epsilon_r = 34.347$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.14, 4.14, 4.14); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.8 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 54.639 V/m

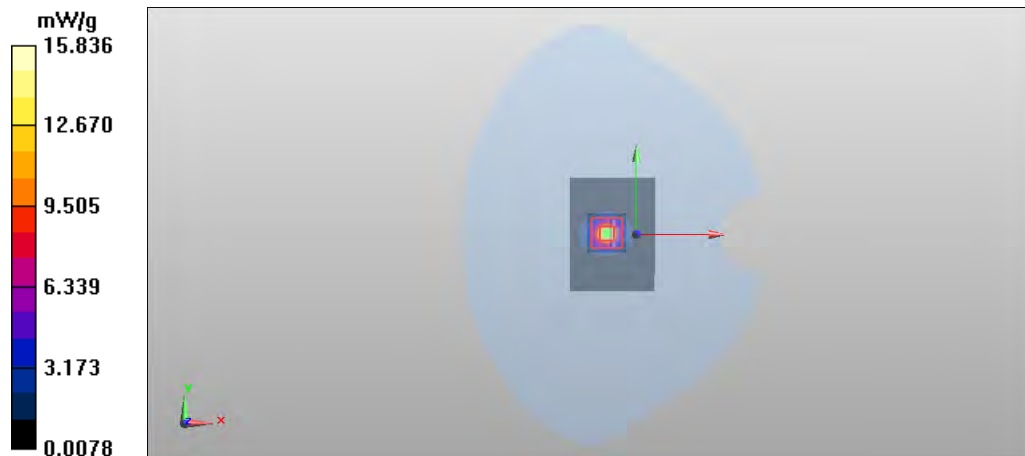
Peak SAR (extrapolated) = 32.509 mW/g

SAR(1 g) = 7.72 mW/g

SAR(10 g) = 2.17 mW/g

Power Drift = 0.25 dB

Maximum value of SAR (measured) = 15.2 mW/g



Date/Time: 2012-07-04 07:04:38

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.2 C

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.185$ mho/m; $\epsilon_r = 34.359$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.14, 4.14, 4.14); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.9 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 63.139 V/m

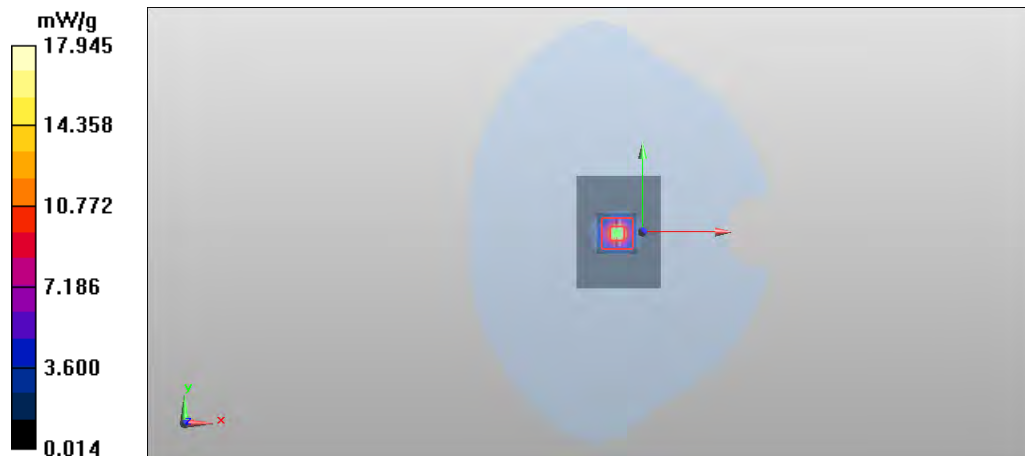
Peak SAR (extrapolated) = 35.483 mW/g

SAR(1 g) = 8.5 mW/g

SAR(10 g) = 2.38 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 16.4 mW/g



Date/Time: 2012-08-17 18:10:53

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.2 C

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.361$ mho/m; $\epsilon_r = 35.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.14, 4.14, 4.14); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 63.039 V/m

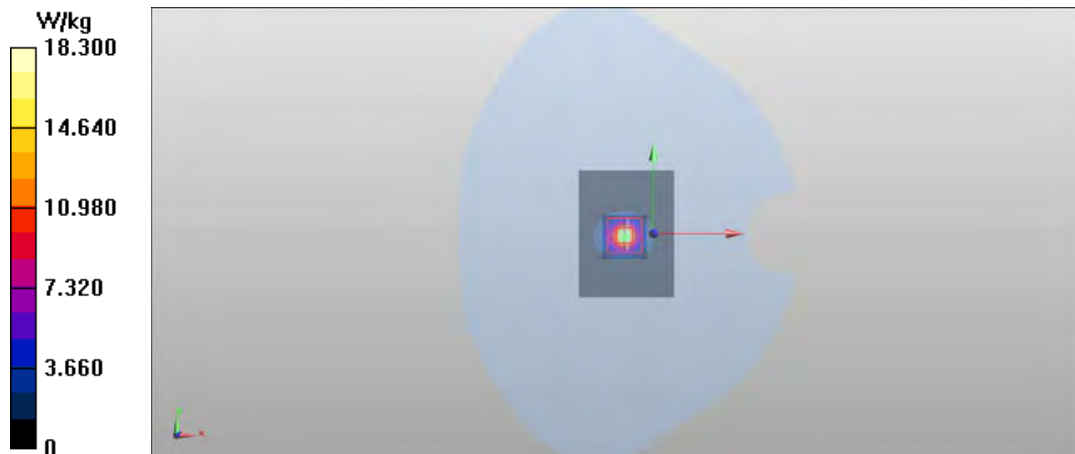
Peak SAR (extrapolated) = 36.129 mW/g

SAR(1 g) = 8.6 mW/g

SAR(10 g) = 2.41 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 17.4 W/kg



Date/Time: 2012-07-09 20:55:32

Test Laboratory: TCC Nokia

Type: D750V3; Serial: D750V3 - SN:1034

Communication System: CW750

Frequency: 750 MHz; Duty Cycle: 1:1

Medium: BSL750; Medium Notes: t= 21.5

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 1.001 \text{ mho/m}$; $\epsilon_r = 54.618$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.06, 6.06, 6.06); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #3 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.34 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.779 V/m

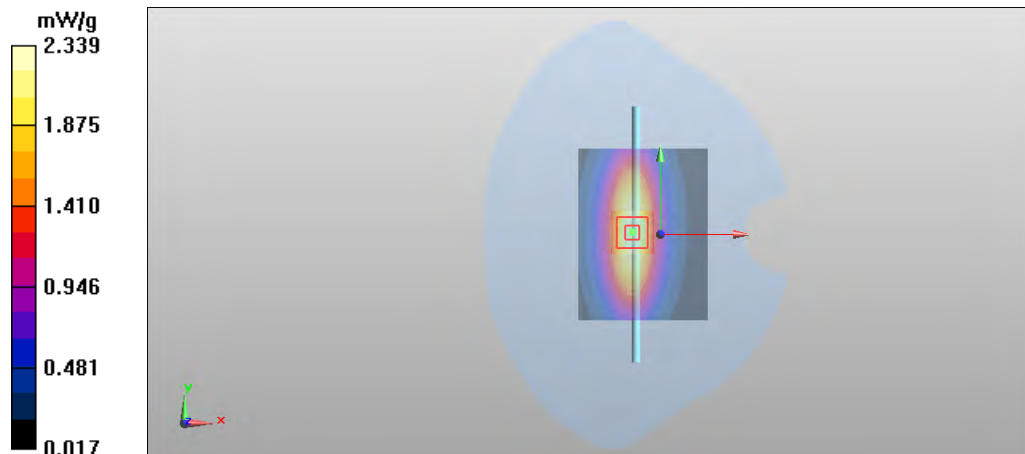
Peak SAR (extrapolated) = 3.202 mW/g

SAR(1 g) = 2.19 mW/g

SAR(10 g) = 1.45 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 2.37 mW/g



Date/Time: 2012-08-22 14:35:55

Test Laboratory: TCC Nokia

Type: D750V3; Serial: D750V3 - SN:1034

Communication System: CW750

Frequency: 750 MHz; Duty Cycle: 1:1

Medium: BSL750; Medium Notes: $t = 21.0$ C

Medium parameters used: $f = 750$ MHz; $\sigma = 0.999$ mho/m; $\epsilon_r = 53.794$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.06, 6.06, 6.06); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #3 CRP; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 2.34 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 49.450 V/m

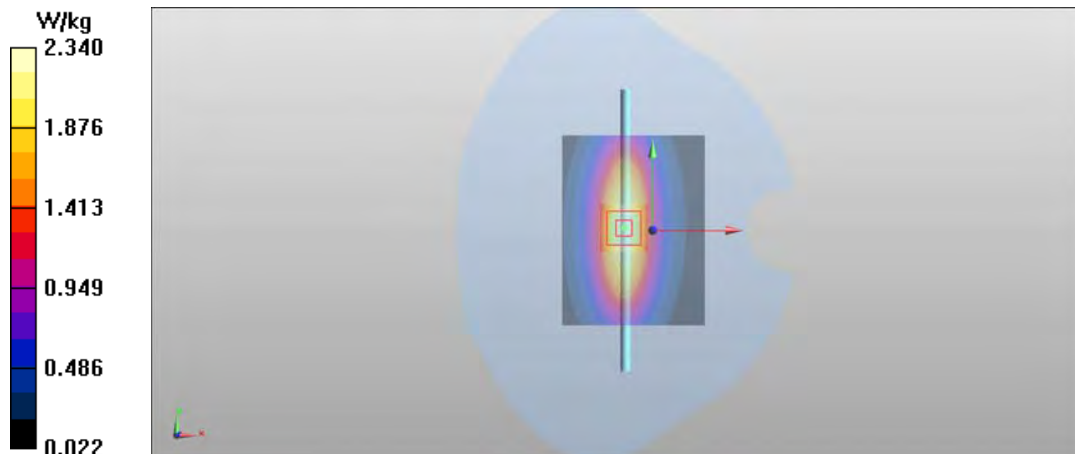
Peak SAR (extrapolated) = 3.213 mW/g

SAR(1 g) = 2.19 mW/g

SAR(10 g) = 1.45 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 2.37 W/kg



Date/Time: 2012-07-06 19:40:05

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL850; Medium Notes: $t = 21.3$ C

Medium parameters used: $f = 835$ MHz; $\sigma = 1.004$ mho/m; $\epsilon_r = 52.914$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.92, 5.92, 5.92); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.60 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.101 V/m

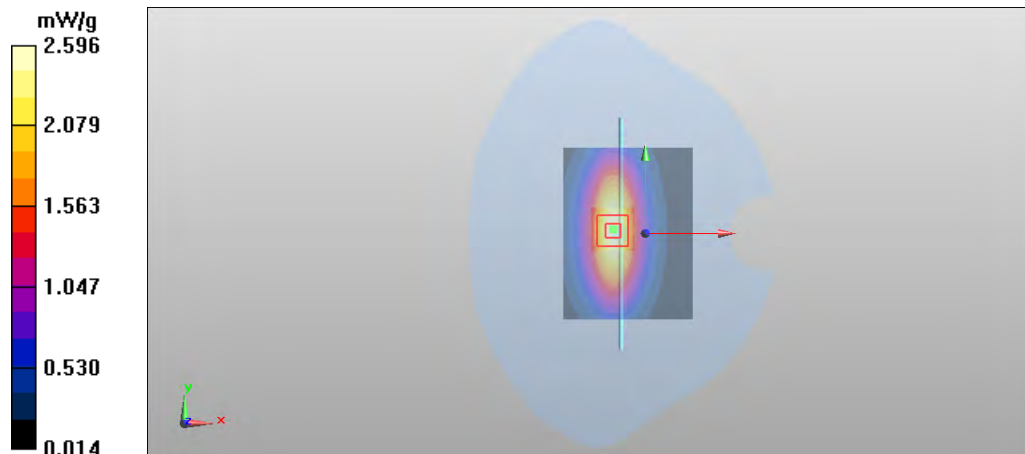
Peak SAR (extrapolated) = 3.427 mW/g

SAR(1 g) = 2.41 mW/g

SAR(10 g) = 1.6 mW/g

Power Drift = -0.03 dB

Maximum value of SAR (measured) = 2.61 mW/g



Date/Time: 2012-07-08 21:53:50

Test Laboratory: TCC Nokia
Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL850; Medium Notes: $t = 21.3$ C

Medium parameters used: $f = 835$ MHz; $\sigma = 1.006$ mho/m; $\epsilon_r = 53.82$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.92, 5.92, 5.92); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.55 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.006 V/m

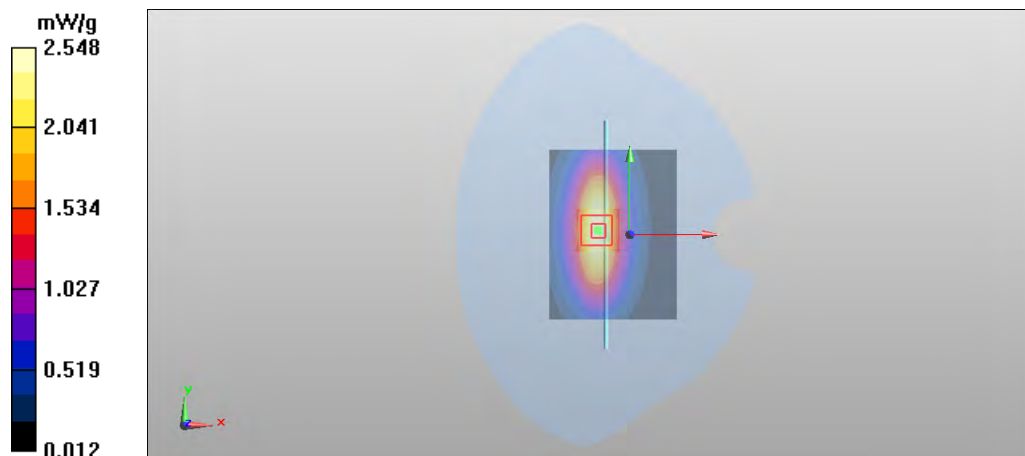
Peak SAR (extrapolated) = 3.374 mW/g

SAR(1 g) = 2.37 mW/g

SAR(10 g) = 1.57 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 2.56 mW/g



Date/Time: 2012-08-17 14:29:43

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL850; Medium Notes: t= 21.0 C

Medium parameters used: f = 835 MHz; σ = 0.988 mho/m; ϵ_r = 53.266; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.54, 8.54, 8.54); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.50 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.769 V/m

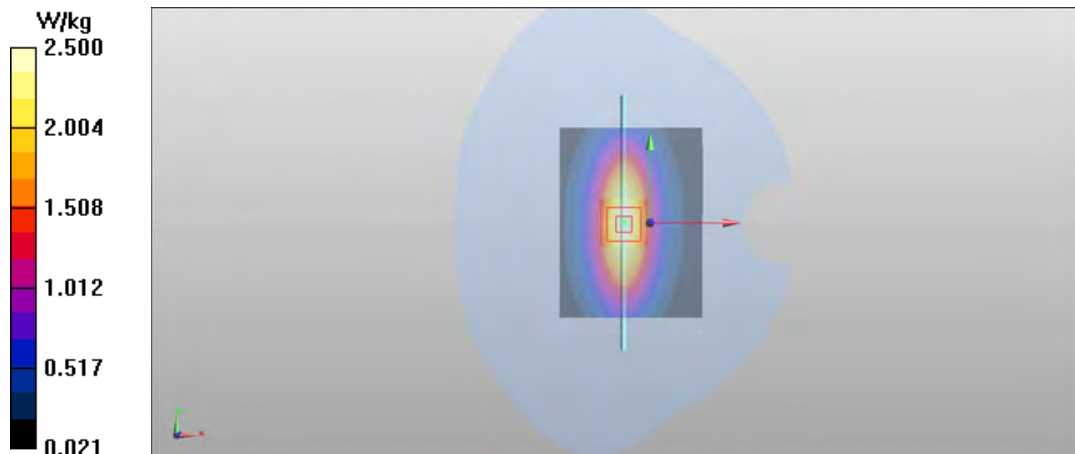
Peak SAR (extrapolated) = 3.367 mW/g

SAR(1 g) = 2.32 mW/g

SAR(10 g) = 1.54 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 2.50 W/kg



Date/Time: 2012-08-21 12:20:52

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:462

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL850; Medium Notes: t= 21.0 C

Medium parameters used: f = 835 MHz; σ = 0.994 mho/m; ϵ_r = 52.924; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.54, 8.54, 8.54); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.52 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.320 V/m

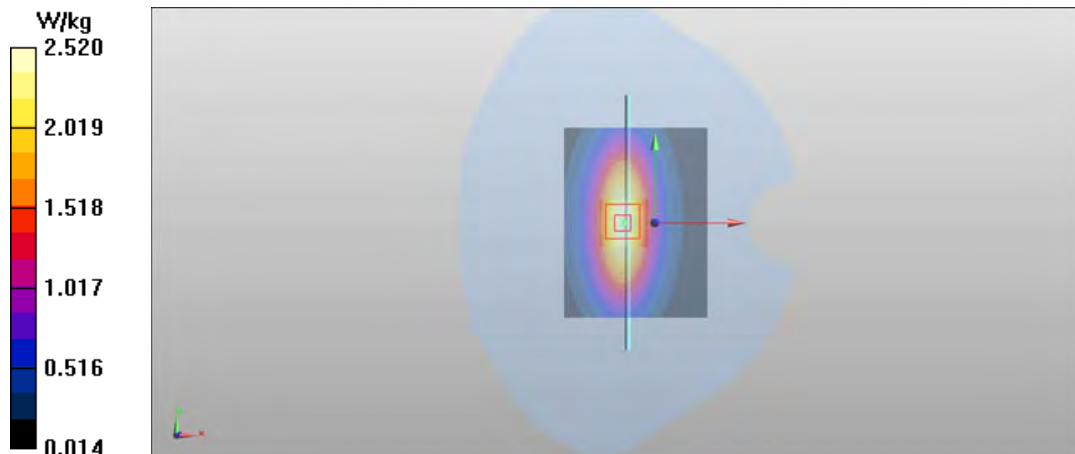
Peak SAR (extrapolated) = 3.404 mW/g

SAR(1 g) = 2.36 mW/g

SAR(10 g) = 1.57 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 2.53 W/kg



Date/Time: 2012-07-07 21:21:12

Test Laboratory: TCC Nokia

Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: BSL1800; Medium Notes: t= 20.8 C

Medium parameters used: f = 1800 MHz; σ = 1.531 mho/m; ϵ_r = 52.792; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(4.84, 4.84, 4.84); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #2 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.1 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.305 V/m

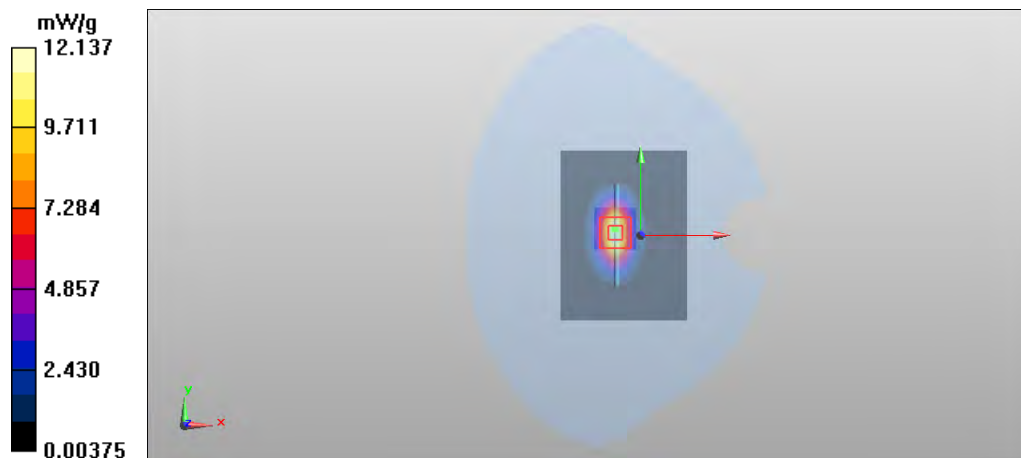
Peak SAR (extrapolated) = 17.573 mW/g

SAR(1 g) = 9.9 mW/g

SAR(10 g) = 5.23 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 11.2 mW/g



Date/Time: 2012-07-08 21:41:51

Test Laboratory: TCC Nokia

Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: BSL1800; Medium Notes: t= 20.8 C

Medium parameters used: f = 1800 MHz; σ = 1.533 mho/m; ϵ_r = 52.603; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(4.84, 4.84, 4.84); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #2 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.6 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.756 V/m

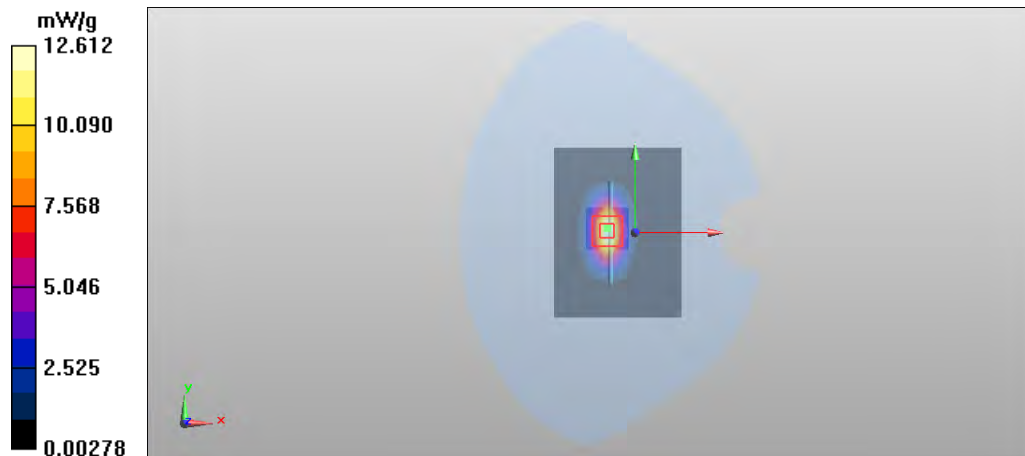
Peak SAR (extrapolated) = 18.040 mW/g

SAR(1 g) = 10.2 mW/g

SAR(10 g) = 5.38 mW/g

Power Drift = 0.09 dB

Maximum value of SAR (measured) = 11.5 mW/g



Date/Time: 2012-08-16 14:44:59

Test Laboratory: TCC Nokia

Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: BSL1800; Medium Notes: $t = 20.9\text{ }^{\circ}\text{C}$

Medium parameters used: $f = 1800\text{ MHz}$; $\sigma = 1.517\text{ mho/m}$; $\epsilon_r = 52.421$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(4.84, 4.84, 4.84); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #2 CRP ; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

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

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{ mm}$, $dy=5\text{ mm}$, $dz=5\text{ mm}$

Reference Value = 83.831 V/m

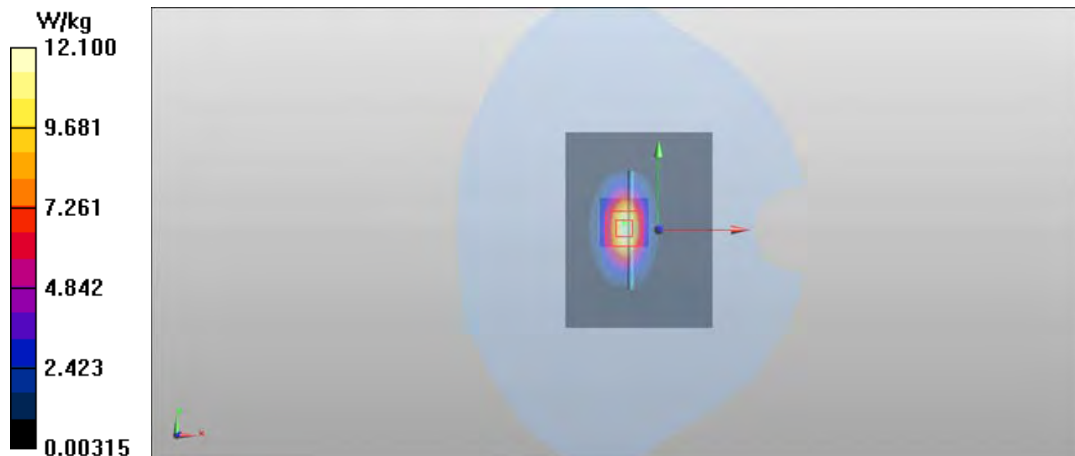
Peak SAR (extrapolated) = 17.546 mW/g

SAR(1 g) = 9.91 mW/g

SAR(10 g) = 5.22 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 11.2 W/kg



Date/Time: 2012-08-21 13:23:41

Test Laboratory: TCC Nokia

Type: D1800V2; Serial: D1800V2 - SN:2d065

Communication System: CW1800

Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: BSL1800; Medium Notes: t= 20.9 C

Medium parameters used: f = 1800 MHz; σ = 1.521 mho/m; ϵ_r = 51.923; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(4.84, 4.84, 4.84); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #2 CRP ; Type: QD000P40CD;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.3 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.302 V/m

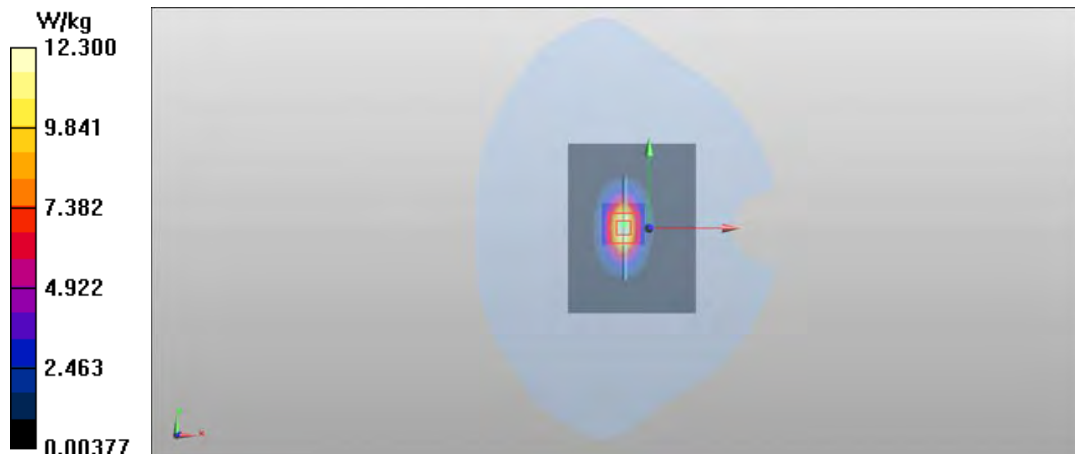
Peak SAR (extrapolated) = 17.998 mW/g

SAR(1 g) = 10.1 mW/g

SAR(10 g) = 5.34 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 11.4 W/kg



Date/Time: 2012-07-07 15:40:56

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: BSL1900; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.541$ mho/m; $\epsilon_r = 52.302$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.69, 6.69, 6.69); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.7 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 97.920 V/m

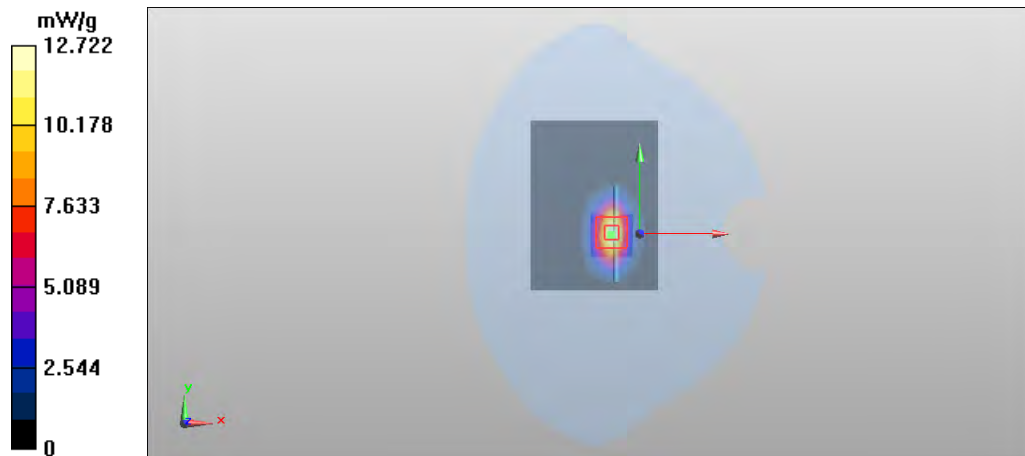
Peak SAR (extrapolated) = 19.500 mW/g

SAR(1 g) = 10.8 mW/g

SAR(10 g) = 5.61 mW/g

Power Drift = -0.03 dB

Maximum value of SAR (measured) = 12.1 mW/g



Date/Time: 2012-08-17 21:52:00

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: BSL1900; Medium Notes: $t = 21.9$ C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.516$ mho/m; $\epsilon_r = 51.865$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.69, 6.69, 6.69); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.7 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.957 V/m

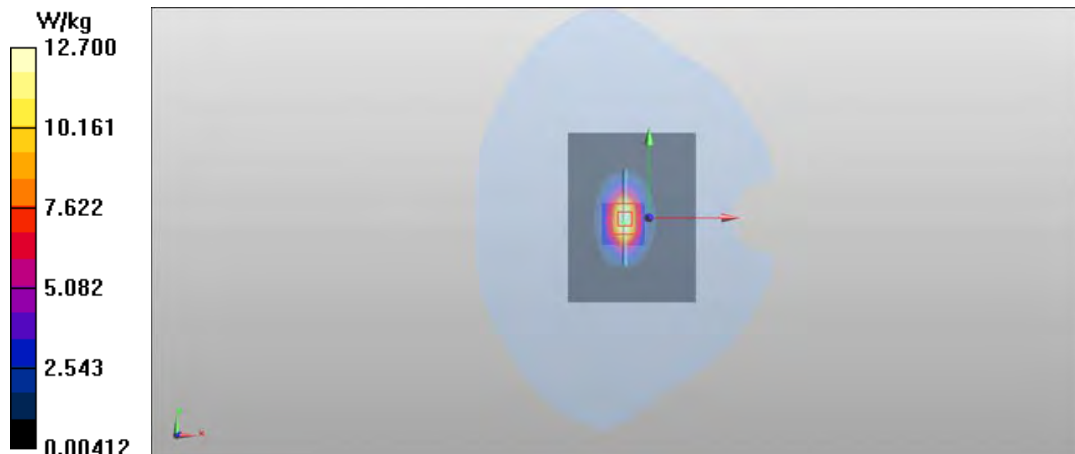
Peak SAR (extrapolated) = 19.026 mW/g

SAR(1 g) = 10.6 mW/g

SAR(10 g) = 5.55 mW/g

Power Drift = -0.04 dB

Maximum value of SAR (measured) = 11.9 W/kg



Date/Time: 2012-08-22 13:01:23

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: BSL1900; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.517$ mho/m; $\epsilon_r = 51.685$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.69, 6.69, 6.69); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 100.3 V/m

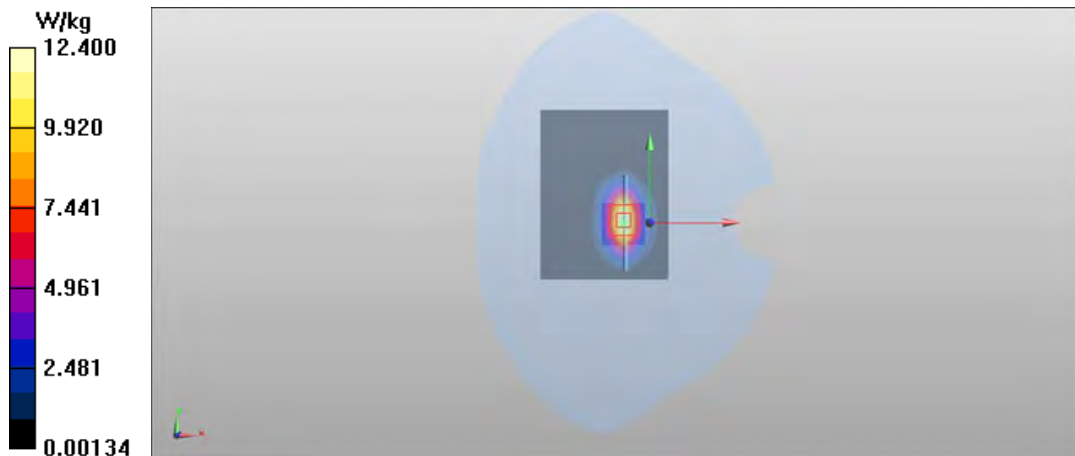
Peak SAR (extrapolated) = 19.128 mW/g

SAR(1 g) = 10.5 mW/g

SAR(10 g) = 5.5 mW/g

Power Drift = -0.10 dB

Maximum value of SAR (measured) = 11.7 W/kg



Date/Time: 2012-07-03 06:19:18

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: BSL2450; Medium Notes: $t = 21.0\text{ C}$

Medium parameters used: $f = 2450\text{ MHz}$; $\sigma = 1.955\text{ mho/m}$; $\epsilon_r = 50.346$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.45, 6.45, 6.45); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.5 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.448 V/m

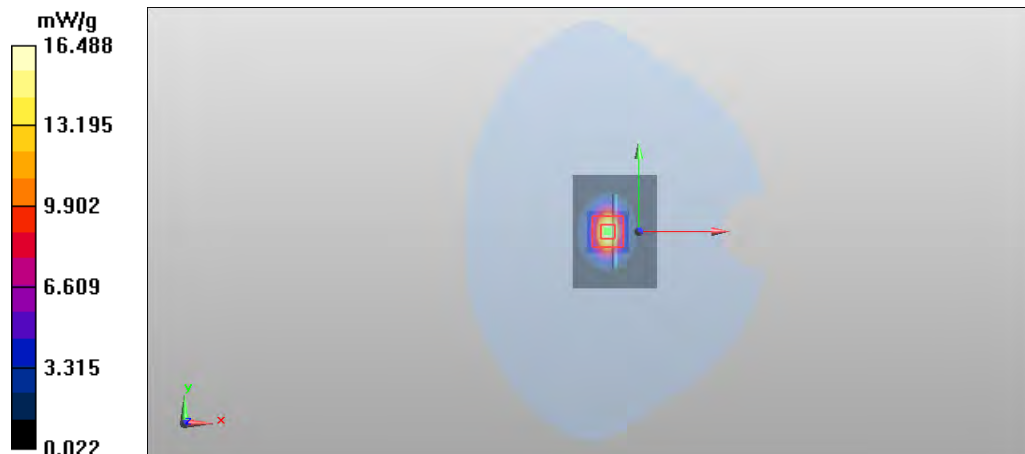
Peak SAR (extrapolated) = 27.672 mW/g

SAR(1 g) = 13.8 mW/g

SAR(10 g) = 6.4 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 16.0 mW/g



Date/Time: 2012-07-09 15:51:31

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: BSL 2450; Medium Notes: $t = 21.0\text{ C}$

Medium parameters used: $f = 2450\text{ MHz}$; $\sigma = 1.967\text{ mho/m}$; $\epsilon_r = 51.337$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.45, 6.45, 6.45); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.5 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.843 V/m

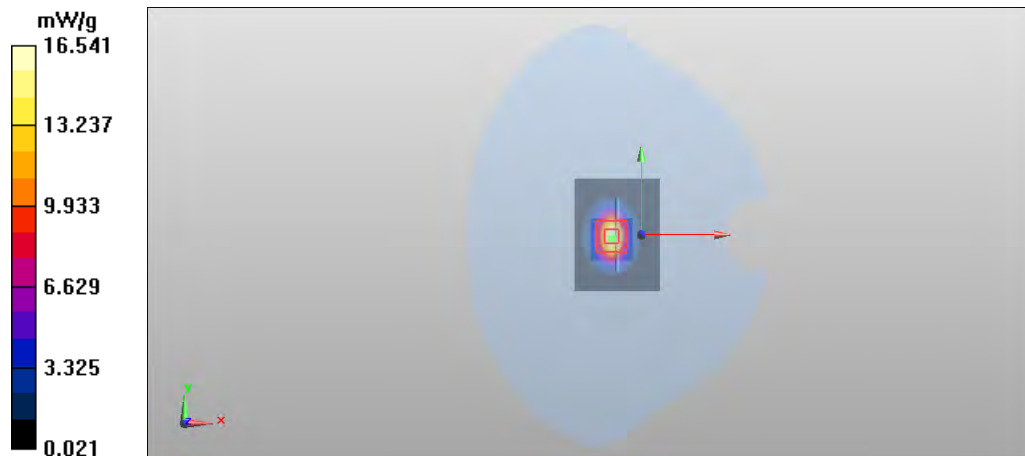
Peak SAR (extrapolated) = 27.374 mW/g

SAR(1 g) = 13.8 mW/g

SAR(10 g) = 6.42 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 15.7 mW/g



Date/Time: 2012-08-27 07:54:28

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: BSL2450; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.988$ mho/m; $\epsilon_r = 53.589$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.45, 6.45, 6.45); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.1 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 103.7 V/m

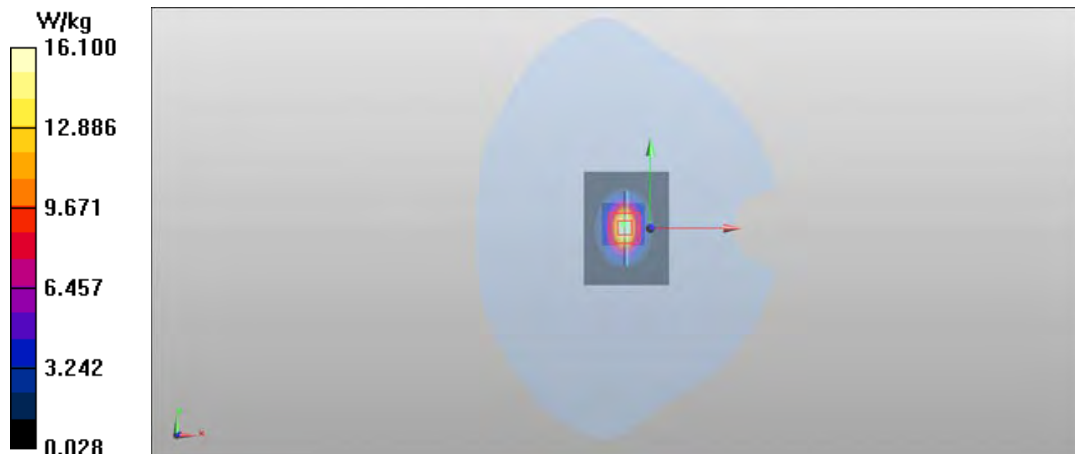
Peak SAR (extrapolated) = 27.712 mW/g

SAR(1 g) = 13.8 mW/g

SAR(10 g) = 6.43 mW/g

Power Drift = -0.07 dB

Maximum value of SAR (measured) = 15.7 W/kg



Date/Time: 2012-07-04 13:34:11

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5200

Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.458$ mho/m; $\epsilon_r = 48.535$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.99, 3.99, 3.99); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.0 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.511 V/m

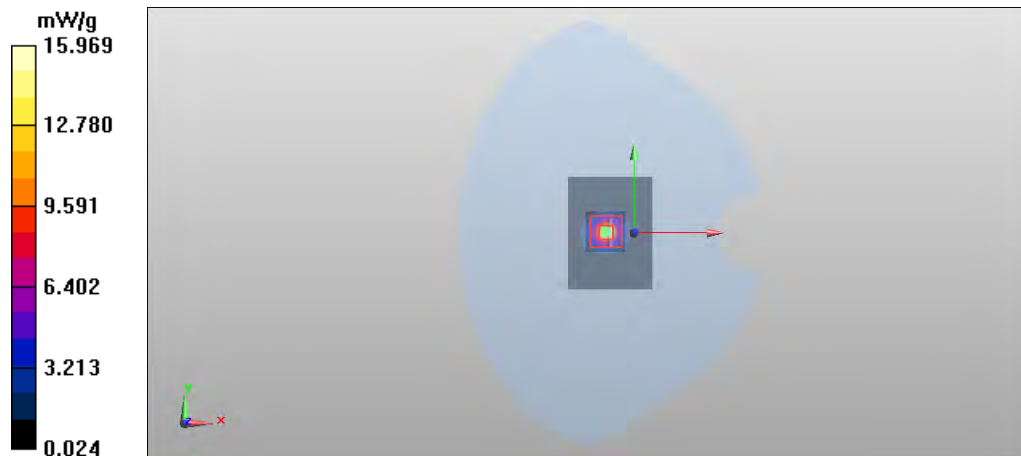
Peak SAR (extrapolated) = 29.651 mW/g

SAR(1 g) = 7.81 mW/g

SAR(10 g) = 2.17 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 14.9 mW/g



Date/Time: 2012-08-22 08:54:37

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5200

Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.414$ mho/m; $\epsilon_r = 48.651$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.99, 3.99, 3.99); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.0 W/kg

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 60.050 V/m

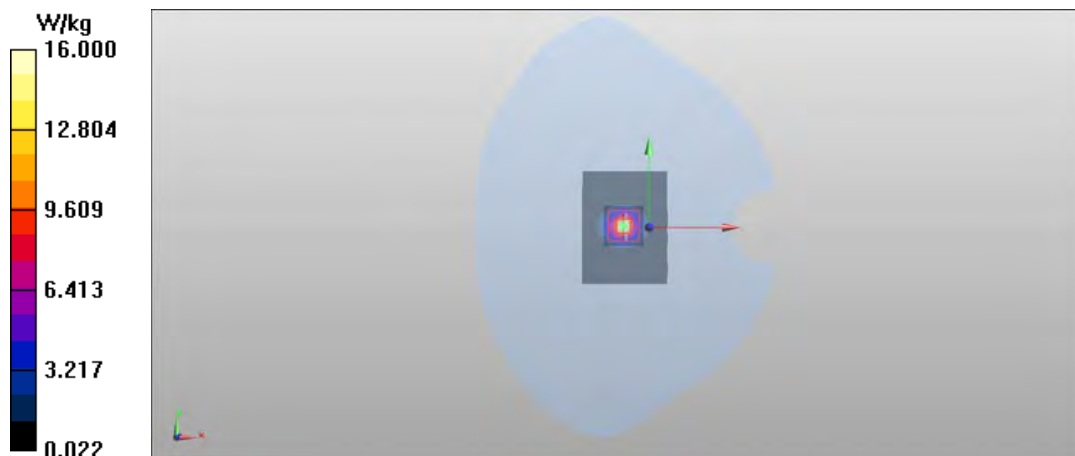
Peak SAR (extrapolated) = 29.178 mW/g

SAR(1 g) = 7.77 mW/g

SAR(10 g) = 2.17 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 15.0 W/kg



Date/Time: 2012-07-04 21:47:39

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5500

Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.7 C..

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.824$ mho/m; $\epsilon_r = 47.64$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.5, 3.5, 3.5); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.3 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.983 V/m

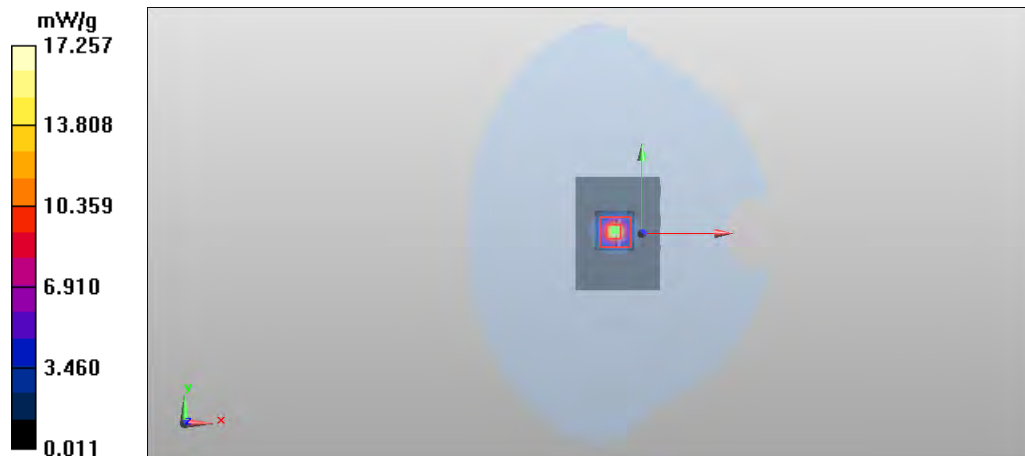
Peak SAR (extrapolated) = 34.392 mW/g

SAR(1 g) = 8.33 mW/g

SAR(10 g) = 2.26 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 17.2 mW/g



Date/Time: 2012-08-23 11:57:05

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5500

Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.6 C

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.87$ mho/m; $\epsilon_r = 47.673$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.5, 3.5, 3.5); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.9 W/kg

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.378 V/m

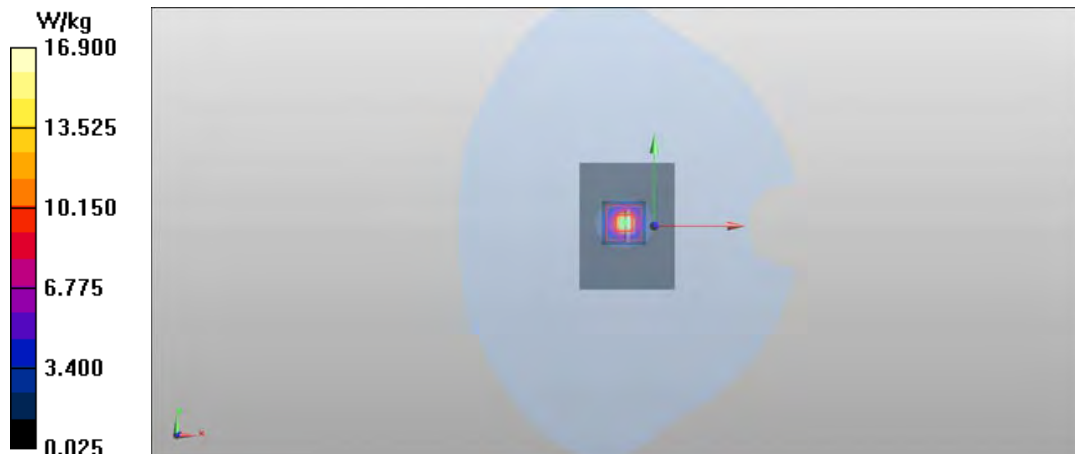
Peak SAR (extrapolated) = 32.281 mW/g

SAR(1 g) = 8.1 mW/g

SAR(10 g) = 2.23 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 15.7 W/kg



Date/Time: 2012-07-02 07:56:04

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.6 C

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.254$ mho/m; $\epsilon_r = 47.339$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.78, 3.78, 3.78); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.5 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 54.736 V/m

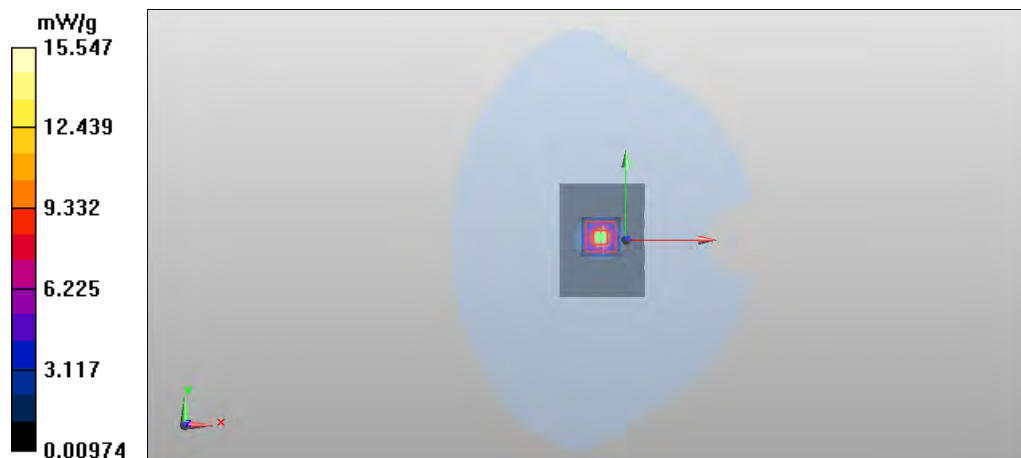
Peak SAR (extrapolated) = 30.929 mW/g

SAR(1 g) = 7.36 mW/g

SAR(10 g) = 2.02 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 14.7 mW/g



Date/Time: 2012-07-04 22:23:46

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.7 C.

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.241$ mho/m; $\epsilon_r = 47.202$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.78, 3.78, 3.78); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

d=15mm, Pin=100mW/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 14.6 mW/g

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 52.405 V/m

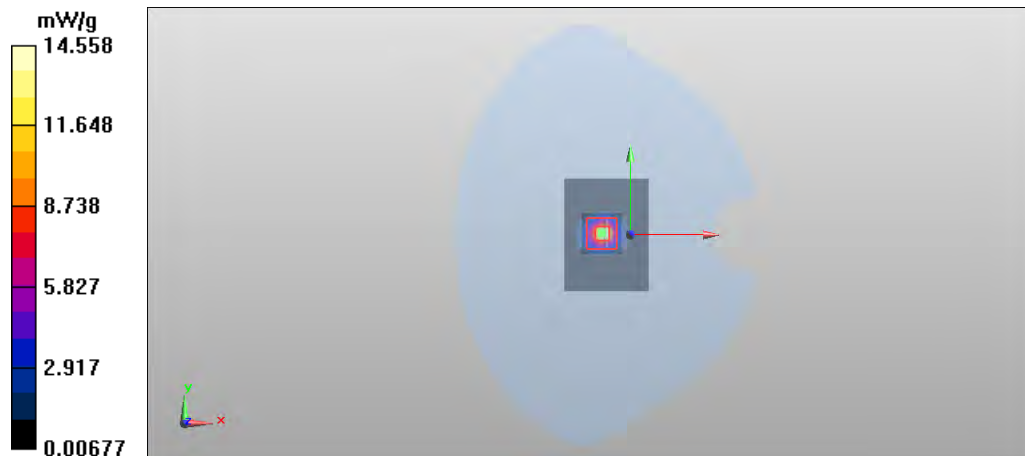
Peak SAR (extrapolated) = 31.332 mW/g

SAR(1 g) = 7.19 mW/g

SAR(10 g) = 1.95 mW/g

Power Drift = 0.21 dB

Maximum value of SAR (measured) = 14.3 mW/g



Date/Time: 2012-08-15 08:05:15

Test Laboratory: TCC Nokia

Type: D5GHzV2; Serial: D5GHzV2 - SN: 1032

Communication System: CW5800

Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: BSL5000; Medium Notes: 21.7 C

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.205$ mho/m; $\epsilon_r = 47.864$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(3.78, 3.78, 3.78); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM2; Type: SAM; Serial: TP-1570
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

d=15mm, Pin=100mW/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.5 W/kg

d=15mm, Pin=100mW/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 55.829 V/m

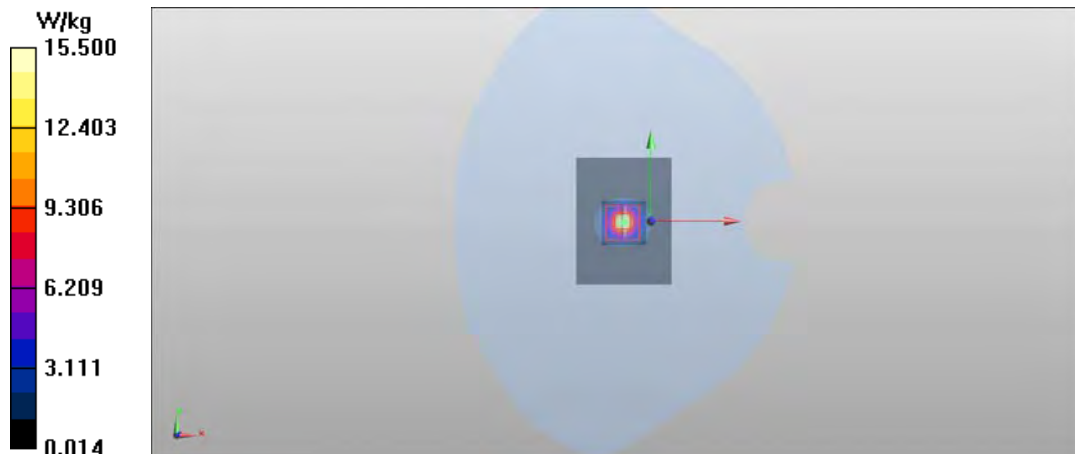
Peak SAR (extrapolated) = 30.400 mW/g

SAR(1 g) = 7.15 mW/g

SAR(10 g) = 1.96 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 14.6 W/kg



APPENDIX B.1: HEAD MEASUREMENT SCANS

Date/Time: 2012-07-09 04:00:35

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: $t = 20.8$ C

Medium parameters used: $f = 710$ MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.169 mW/g

LTE - Left/Cheek - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 4.083 V/m

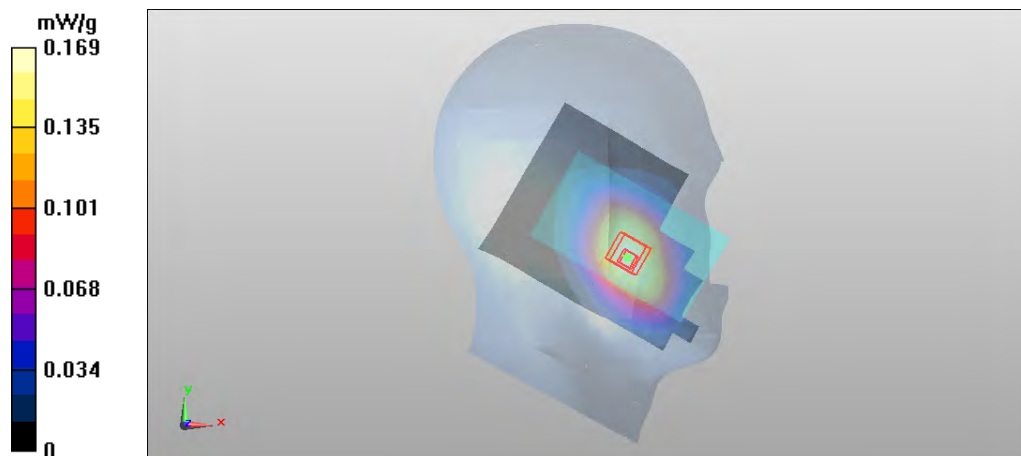
Peak SAR (extrapolated) = 0.210 mW/g

SAR(1 g) = 0.159 mW/g

SAR(10 g) = 0.119 mW/g

Power Drift = -0.04 dB

Maximum value of SAR (measured) = 0.168 mW/g



Date/Time: 2012-07-09 07:25:34

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0838 mW/g

LTE - Left/Tilt - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.454 V/m

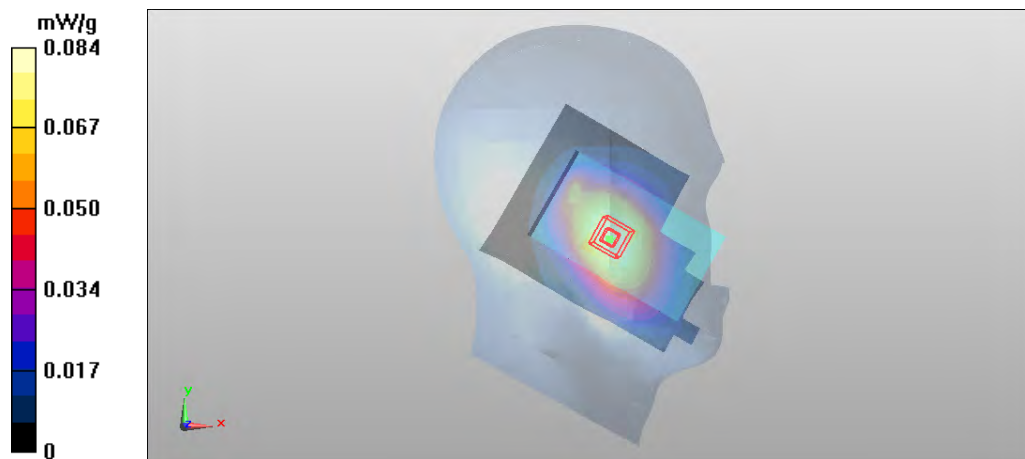
Peak SAR (extrapolated) = 0.093 mW/g

SAR(1 g) = 0.078 mW/g

SAR(10 g) = 0.061 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.0813 mW/g



Date/Time: 2012-07-09 14:10:11

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.113 mW/g

LTE - Right/Cheek - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.408 V/m

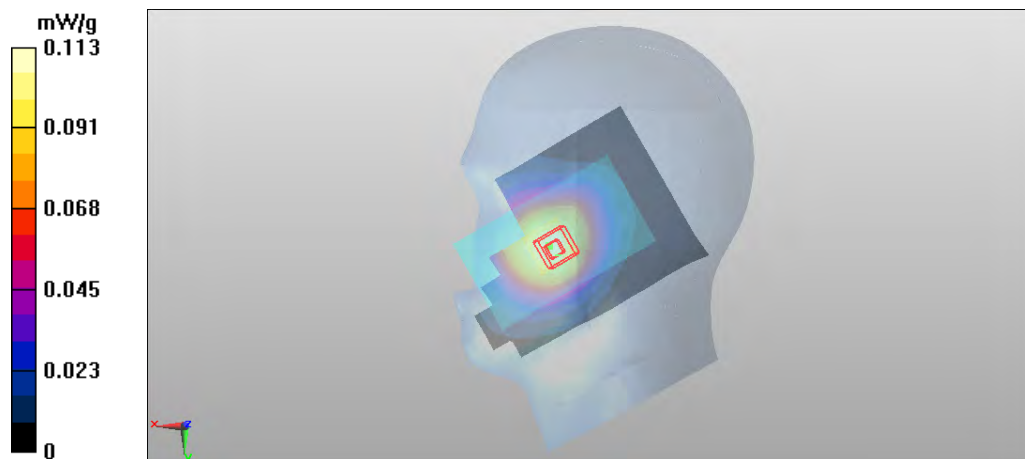
Peak SAR (extrapolated) = 0.133 mW/g

SAR(1 g) = 0.109 mW/g

SAR(10 g) = 0.084 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.114 mW/g



Date/Time: 2012-07-09 17:04:40

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0688 mW/g

LTE - Right/Tilt - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.735 V/m

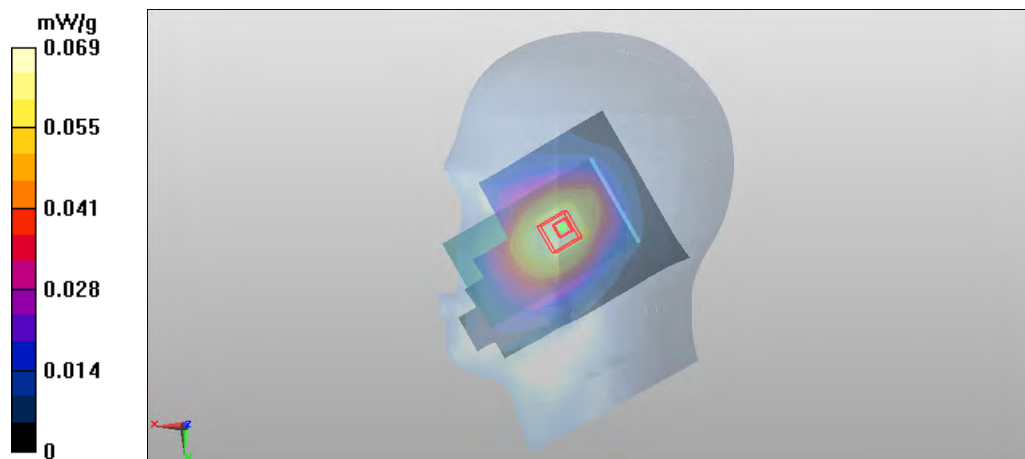
Peak SAR (extrapolated) = 0.076 mW/g

SAR(1 g) = 0.064 mW/g

SAR(10 g) = 0.051 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.0663 mW/g



Date/Time: 2012-07-09 04:26:13

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.193 mW/g

LTE - Left/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 3.931 V/m

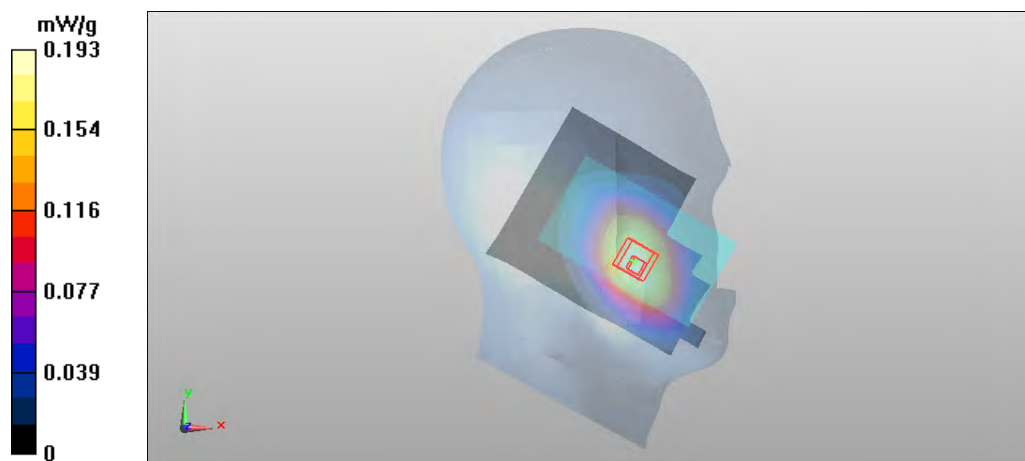
Peak SAR (extrapolated) = 0.234 mW/g

SAR(1 g) = 0.177 mW/g

SAR(10 g) = 0.133 mW/g

Power Drift = 0.44 dB

Maximum value of SAR (measured) = 0.186 mW/g



Date/Time: 2012-07-09 07:41:49

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0943 mW/g

LTE - Left/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.106 V/m

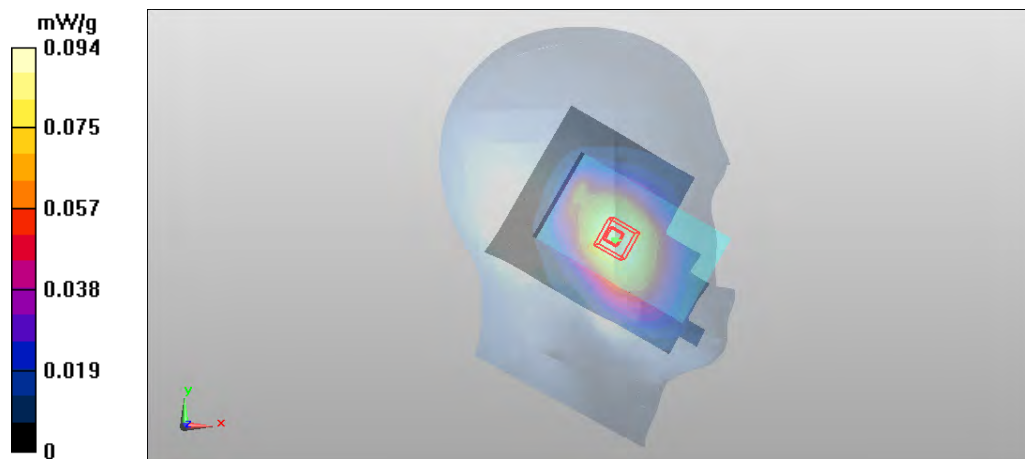
Peak SAR (extrapolated) = 0.106 mW/g

SAR(1 g) = 0.088 mW/g

SAR(10 g) = 0.069 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.0913 mW/g



Date/Time: 2012-07-09 14:29:41

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.131 mW/g

LTE - Right/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.094 V/m

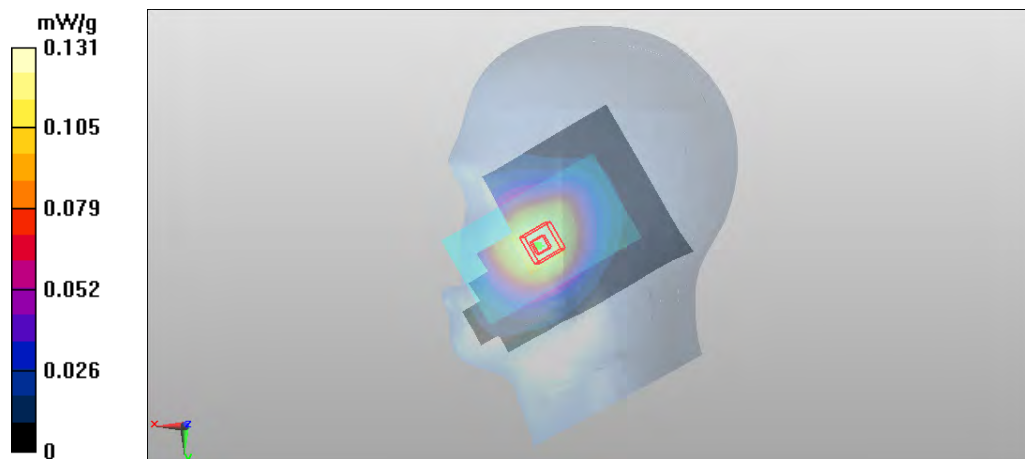
Peak SAR (extrapolated) = 0.147 mW/g

SAR(1 g) = 0.121 mW/g

SAR(10 g) = 0.094 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.127 mW/g



Date/Time: 2012-07-09 17:26:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0781 mW/g

LTE - Right/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.199 V/m

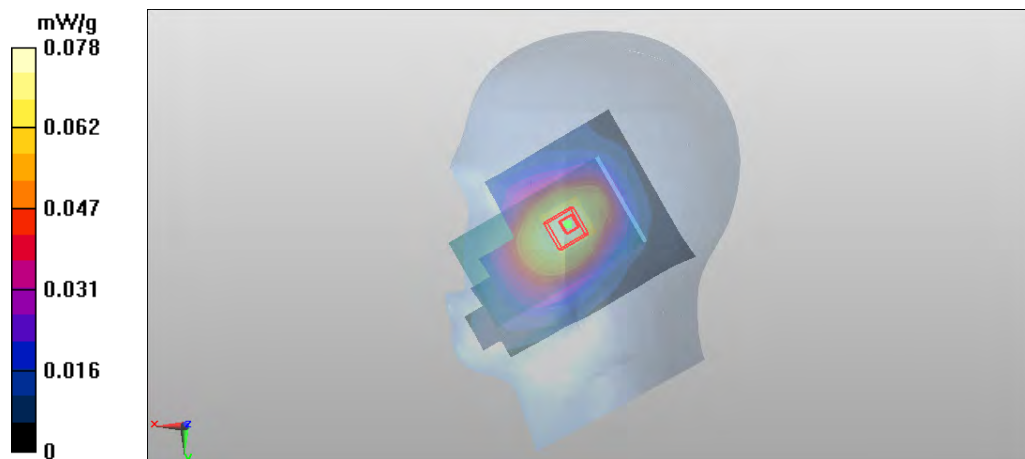
Peak SAR (extrapolated) = 0.087 mW/g

SAR(1 g) = 0.073 mW/g

SAR(10 g) = 0.058 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.0753 mW/g



Date/Time: 2012-07-09 04:59:06

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.244 mW/g

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 16.335 V/m

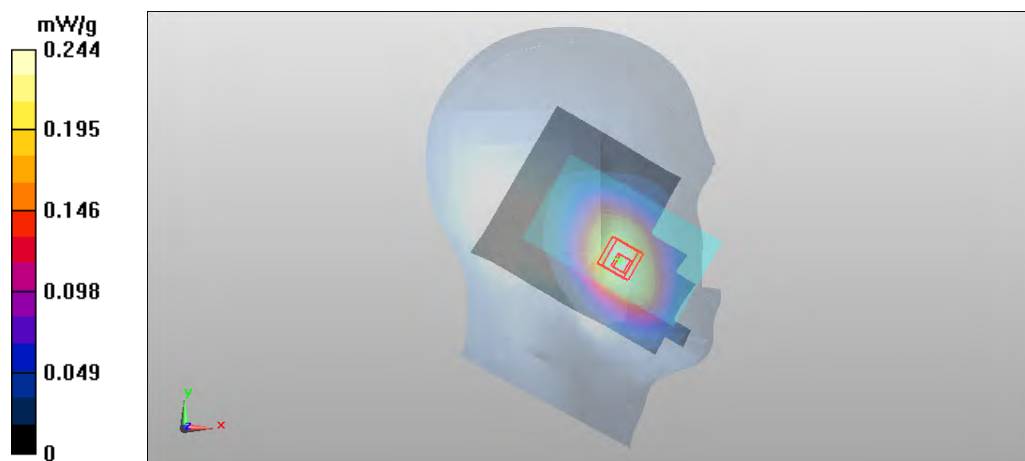
Peak SAR (extrapolated) = 0.288 mW/g

SAR(1 g) = 0.223 mW/g

SAR(10 g) = 0.167 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.233 mW/g



Date/Time: 2012-07-09 07:58:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.117 mW/g

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.346 V/m

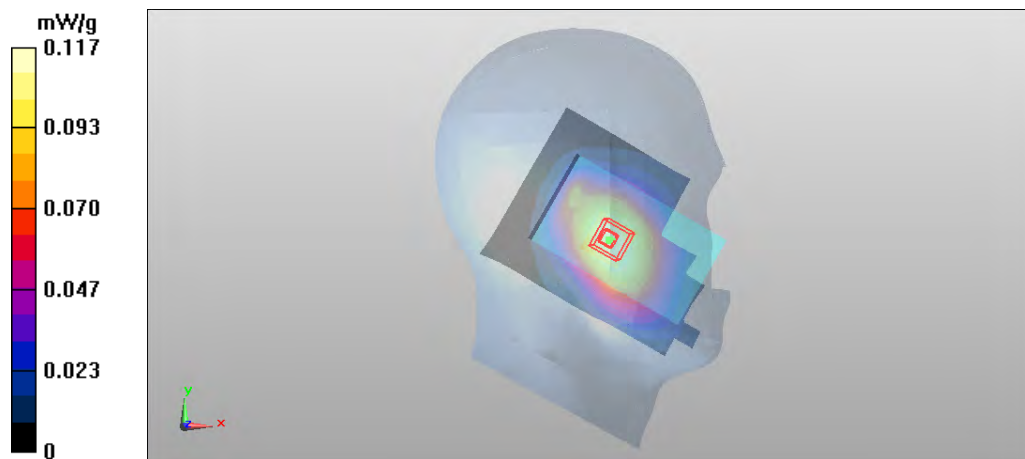
Peak SAR (extrapolated) = 0.133 mW/g

SAR(1 g) = 0.111 mW/g

SAR(10 g) = 0.087 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 0.115 mW/g



Date/Time: 2012-07-09 14:45:14

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.165 mW/g

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.568 V/m

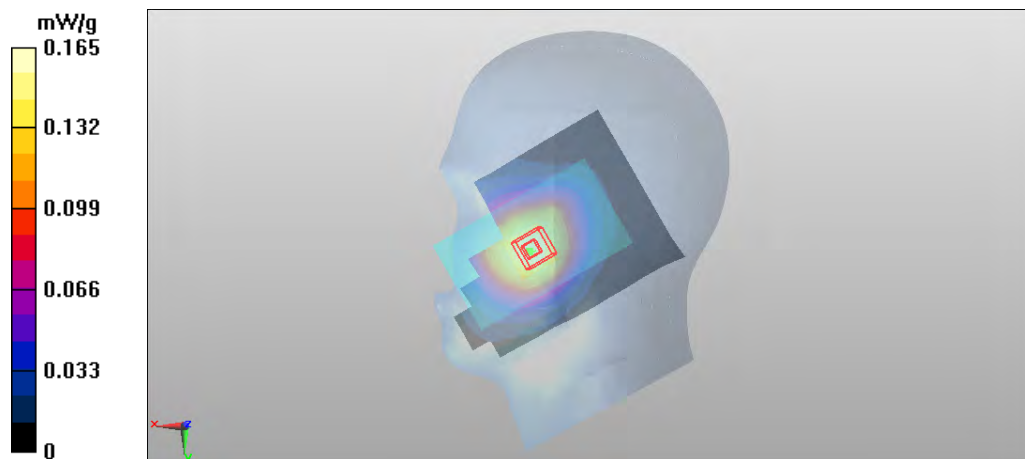
Peak SAR (extrapolated) = 0.186 mW/g

SAR(1 g) = 0.154 mW/g

SAR(10 g) = 0.119 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.161 mW/g



Date/Time: 2012-07-09 17:41:45

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0997 mW/g

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.403 V/m

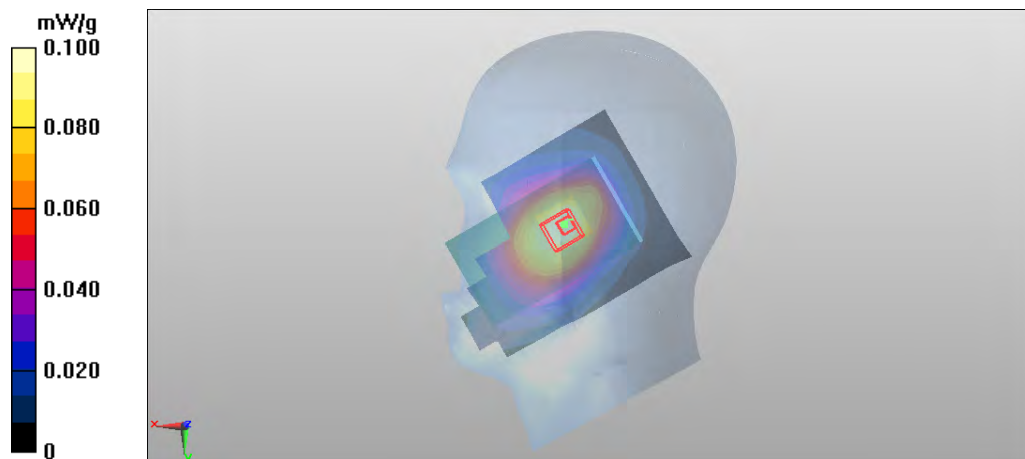
Peak SAR (extrapolated) = 0.110 mW/g

SAR(1 g) = 0.091 mW/g

SAR(10 g) = 0.072 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 0.0948 mW/g



Date/Time: 2012-07-09 04:42:09

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.190 mW/g

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.493 V/m

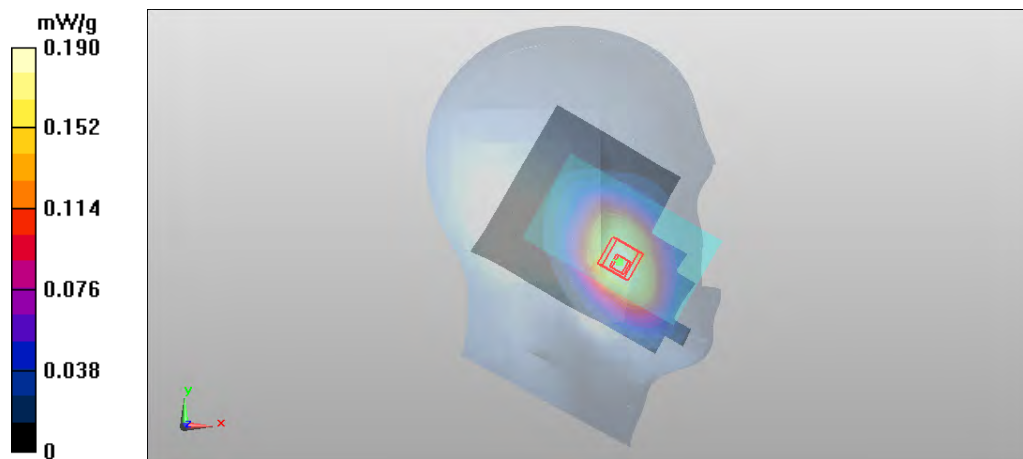
Peak SAR (extrapolated) = 0.234 mW/g

SAR(1 g) = 0.177 mW/g

SAR(10 g) = 0.132 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.185 mW/g



Date/Time: 2012-07-09 08:14:21

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0944 mW/g

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.064 V/m

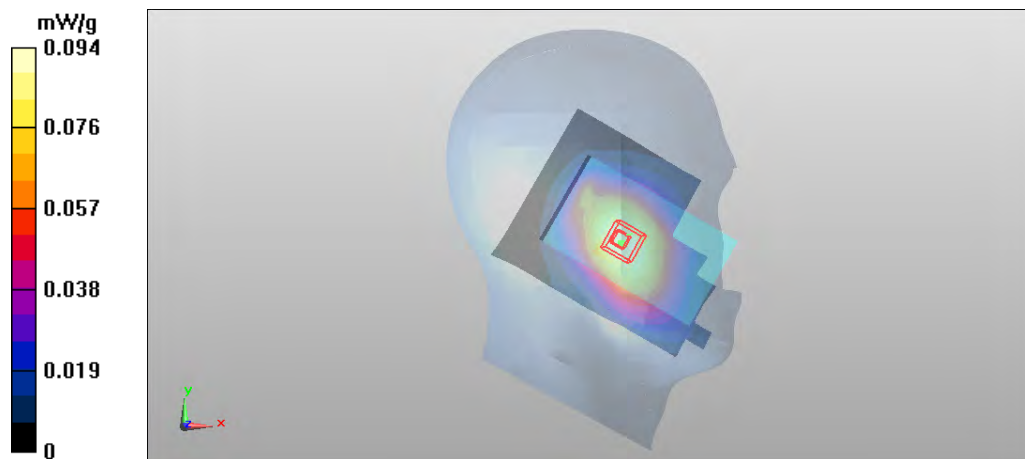
Peak SAR (extrapolated) = 0.106 mW/g

SAR(1 g) = 0.089 mW/g

SAR(10 g) = 0.070 mW/g

Power Drift = 0.14 dB

Maximum value of SAR (measured) = 0.0915 mW/g



Date/Time: 2012-07-09 15:06:53

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: $t = 20.8$ C

Medium parameters used: $f = 710$ MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.130 mW/g

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.186 V/m

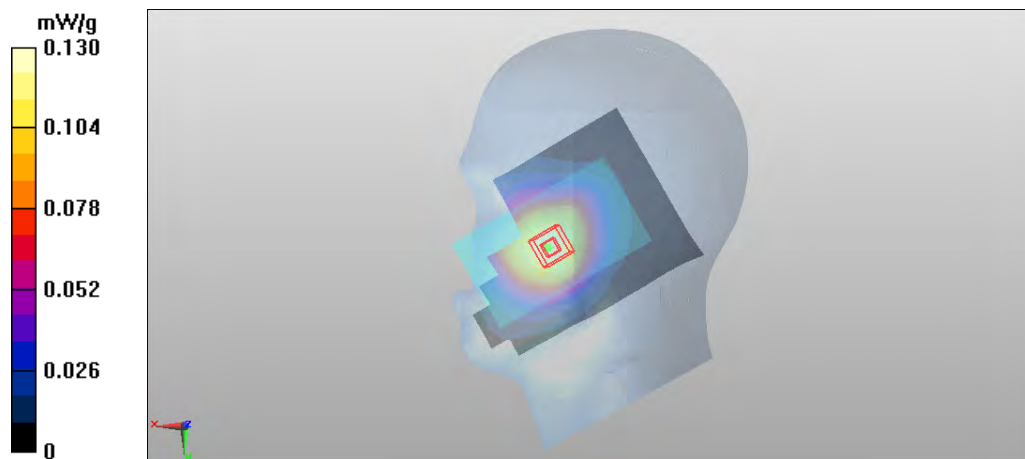
Peak SAR (extrapolated) = 0.148 mW/g

SAR(1 g) = 0.122 mW/g

SAR(10 g) = 0.095 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 0.128 mW/g



Date/Time: 2012-07-09 17:57:34

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0784 mW/g

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.321 V/m

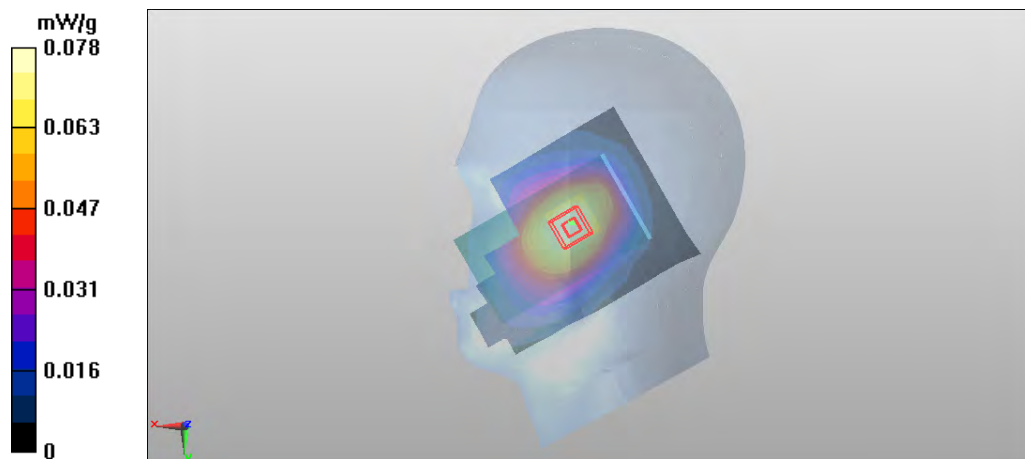
Peak SAR (extrapolated) = 0.087 mW/g

SAR(1 g) = 0.073 mW/g

SAR(10 g) = 0.058 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.0758 mW/g



Date/Time: 2012-07-09 20:07:29

Test Laboratory: TCC Nokia
Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 709 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 709 MHz; $\sigma = 0.897$ mho/m; $\epsilon_r = 40.843$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Low - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.248 mW/g

LTE - Left/Cheek - Low - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 16.586 V/m

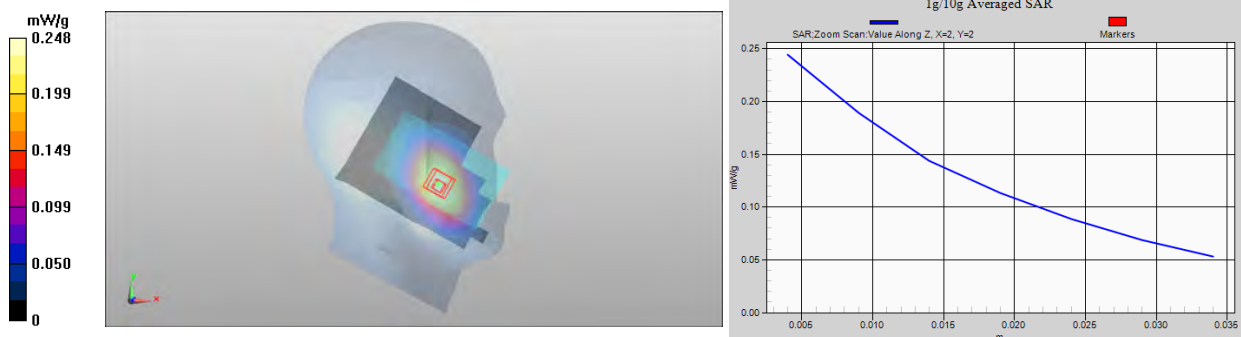
Peak SAR (extrapolated) = 0.303 mW/g

SAR(1 g) = 0.231 mW/g

SAR(10 g) = 0.171 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.244 mW/g



Date/Time: 2012-07-09 08:34:56

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.125 mW/g

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.728 V/m

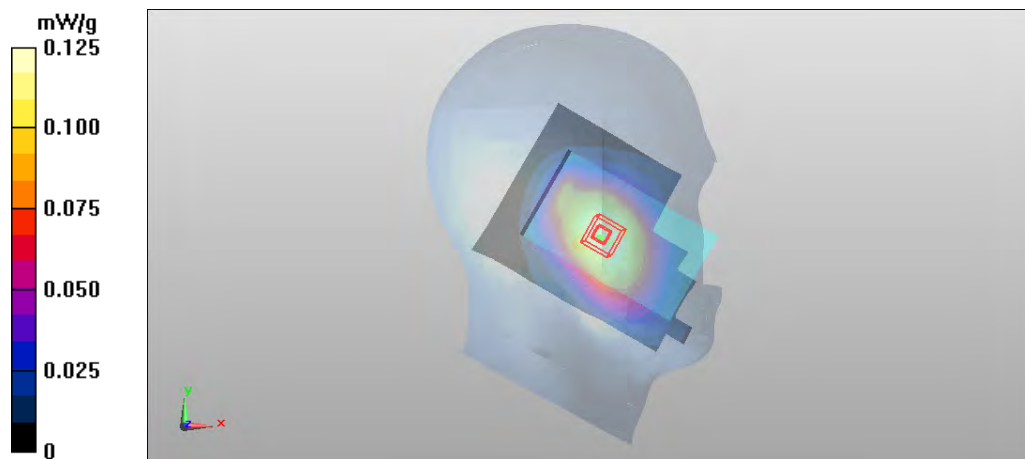
Peak SAR (extrapolated) = 0.141 mW/g

SAR(1 g) = 0.119 mW/g

SAR(10 g) = 0.094 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.123 mW/g



Date/Time: 2012-07-09 15:23:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.169 mW/g

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.848 V/m

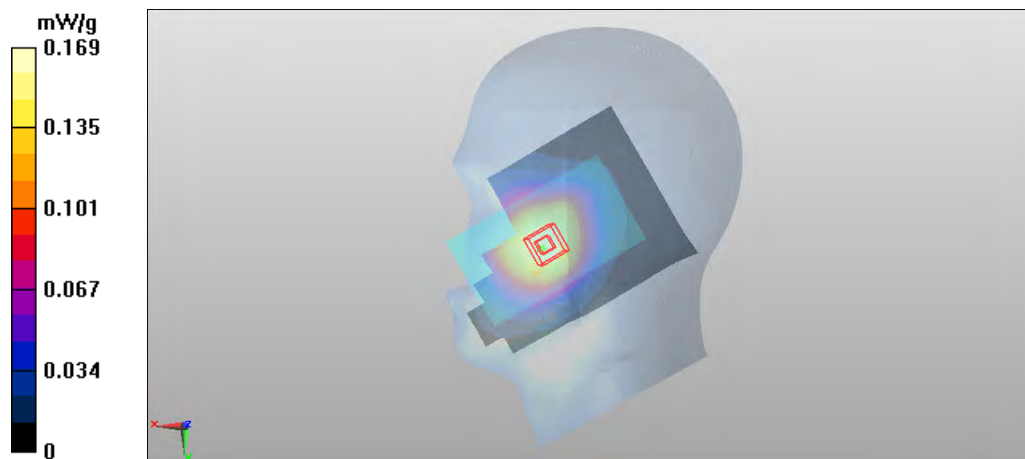
Peak SAR (extrapolated) = 0.193 mW/g

SAR(1 g) = 0.159 mW/g

SAR(10 g) = 0.123 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.165 mW/g



Date/Time: 2012-07-09 18:13:18

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0966 mW/g

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.240 V/m

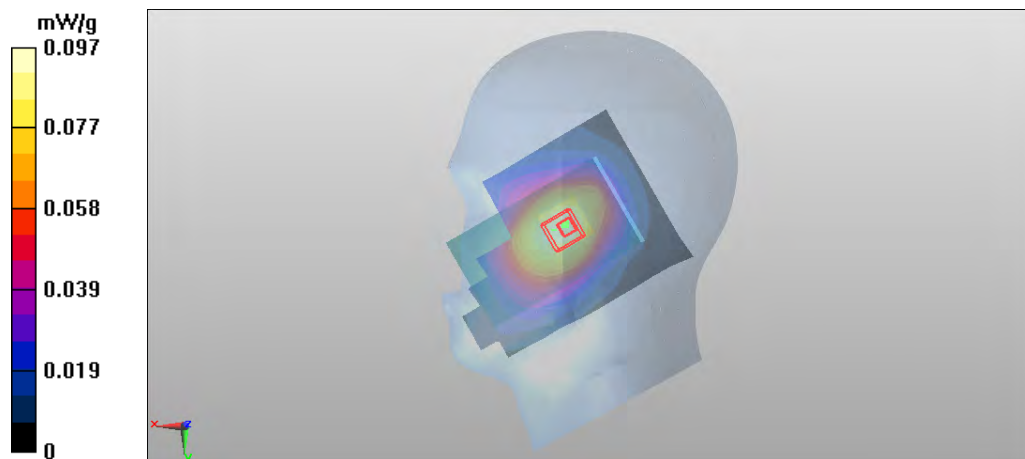
Peak SAR (extrapolated) = 0.108 mW/g

SAR(1 g) = 0.090 mW/g

SAR(10 g) = 0.072 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.0935 mW/g



Date/Time: 2012-07-09 05:40:32

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.141 mW/g

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.522 V/m

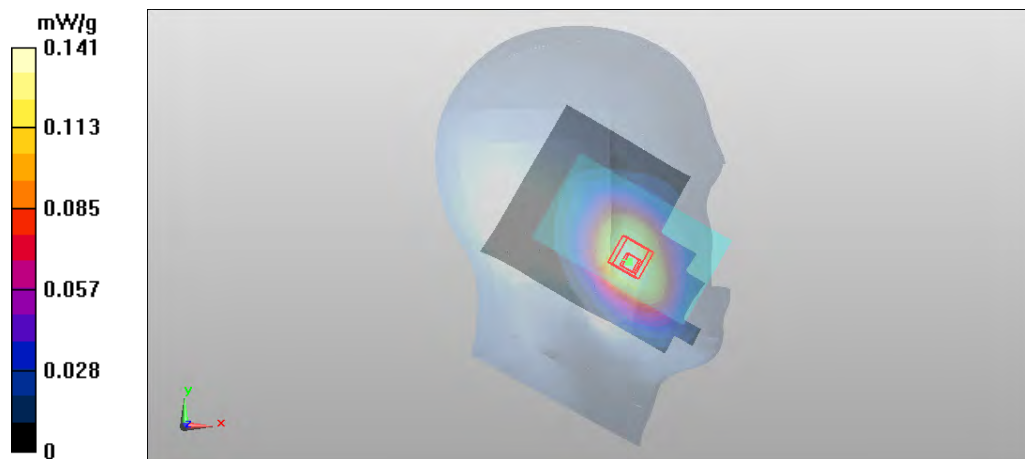
Peak SAR (extrapolated) = 0.173 mW/g

SAR(1 g) = 0.131 mW/g

SAR(10 g) = 0.098 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.139 mW/g



Date/Time: 2012-07-09 08:52:07

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0721 mW/g

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.822 V/m

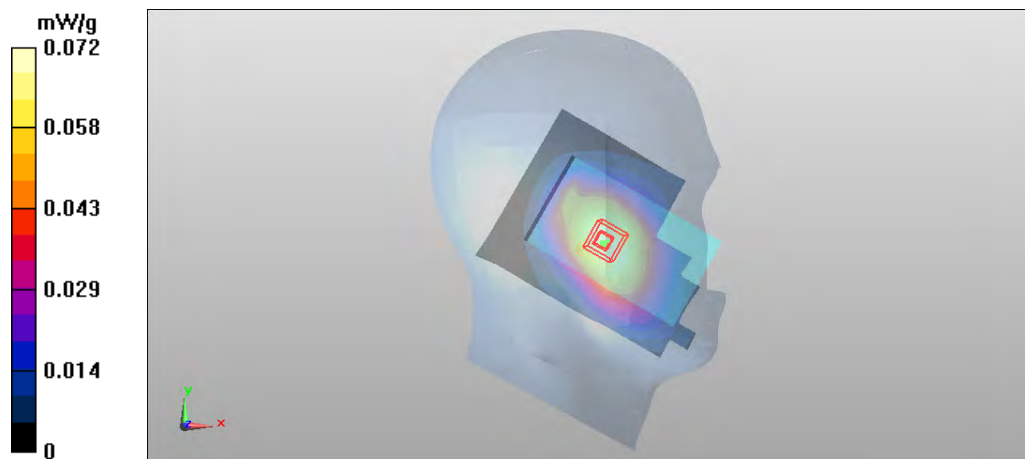
Peak SAR (extrapolated) = 0.081 mW/g

SAR(1 g) = 0.068 mW/g

SAR(10 g) = 0.053 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.0706 mW/g



Date/Time: 2012-07-09 15:38:49

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0926 mW/g

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.229 V/m

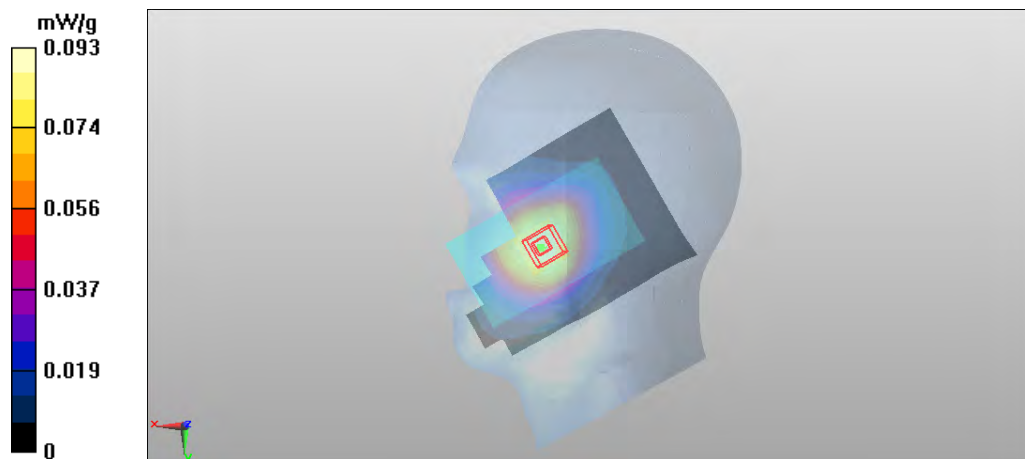
Peak SAR (extrapolated) = 0.108 mW/g

SAR(1 g) = 0.087 mW/g

SAR(10 g) = 0.068 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.0916 mW/g



Date/Time: 2012-07-09 18:35:08

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 40.834$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0600 mW/g

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.134 V/m

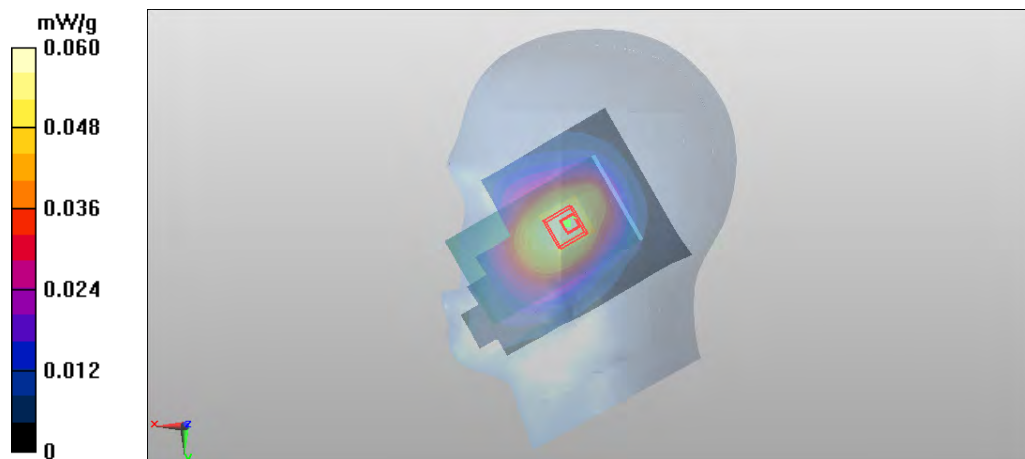
Peak SAR (extrapolated) = 0.067 mW/g

SAR(1 g) = 0.055 mW/g

SAR(10 g) = 0.043 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.0572 mW/g



Date/Time: 2012-07-09 05:56:20

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.163 mW/g

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.288 V/m

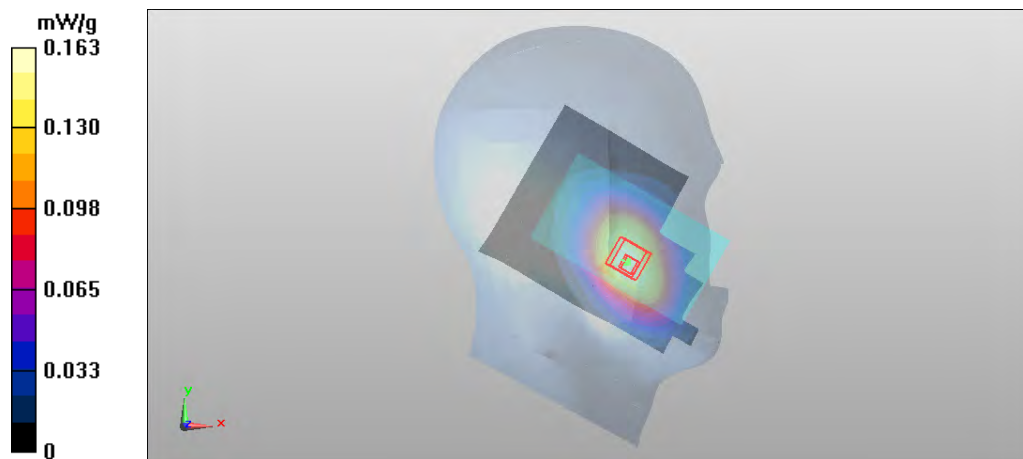
Peak SAR (extrapolated) = 0.200 mW/g

SAR(1 g) = 0.150 mW/g

SAR(10 g) = 0.112 mW/g

Power Drift = 0.14 dB

Maximum value of SAR (measured) = 0.157 mW/g



Date/Time: 2012-07-09 09:09:22

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50 % offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0835 mW/g

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50 % offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.500 V/m

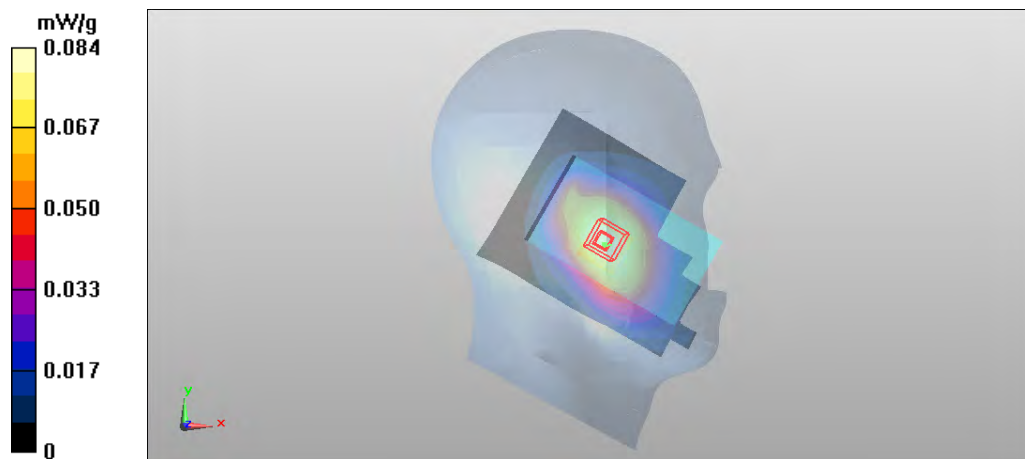
Peak SAR (extrapolated) = 0.095 mW/g

SAR(1 g) = 0.078 mW/g

SAR(10 g) = 0.061 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.0811 mW/g



Date/Time: 2012-07-09 15:54:39

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.106 mW/g

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.918 V/m

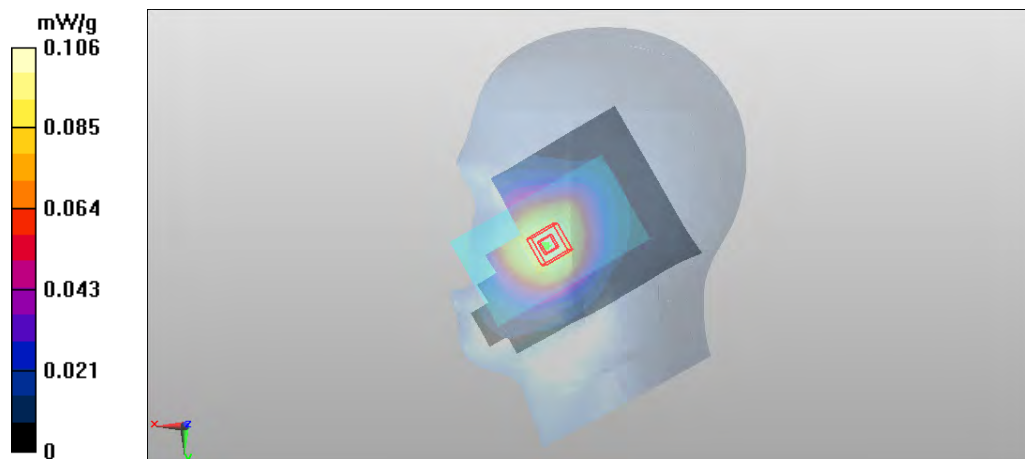
Peak SAR (extrapolated) = 0.120 mW/g

SAR(1 g) = 0.100 mW/g

SAR(10 g) = 0.077 mW/g

Power Drift = 0.09 dB

Maximum value of SAR (measured) = 0.105 mW/g



Date/Time: 2012-07-09 18:51:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0685 mW/g

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.678 V/m

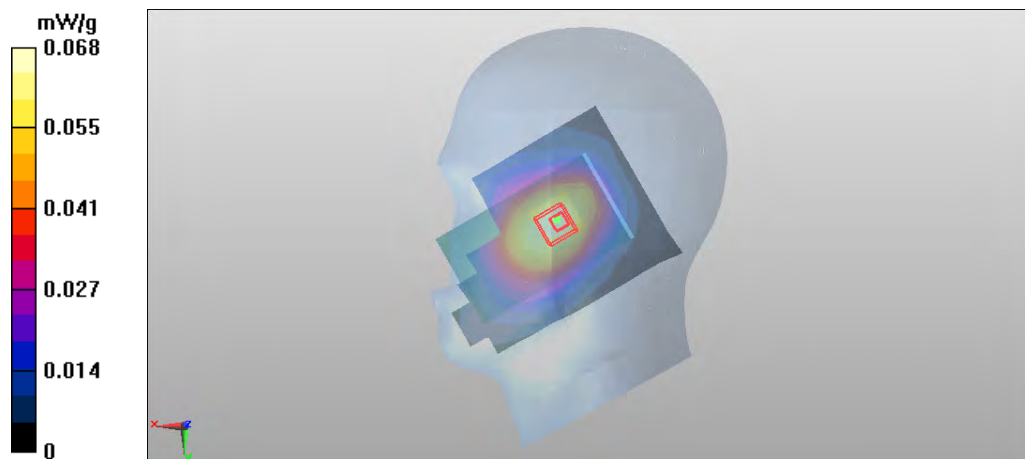
Peak SAR (extrapolated) = 0.076 mW/g

SAR(1 g) = 0.063 mW/g

SAR(10 g) = 0.050 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 0.0656 mW/g



Date/Time: 2012-07-09 06:14:07

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.188 mW/g

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.586 V/m

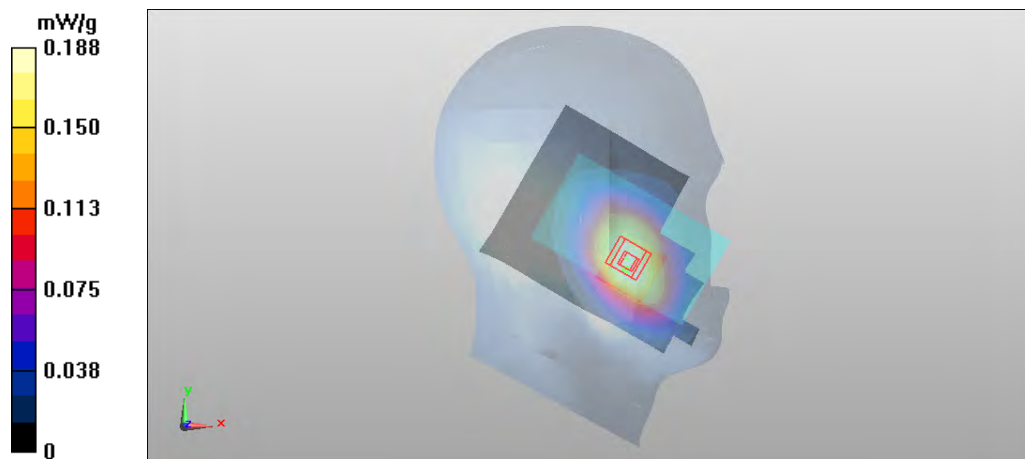
Peak SAR (extrapolated) = 0.238 mW/g

SAR(1 g) = 0.177 mW/g

SAR(10 g) = 0.133 mW/g

Power Drift = 0.14 dB

Maximum value of SAR (measured) = 0.184 mW/g



Date/Time: 2012-07-09 09:27:13

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50 % offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0770 mW/g

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50 % offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.974 V/m

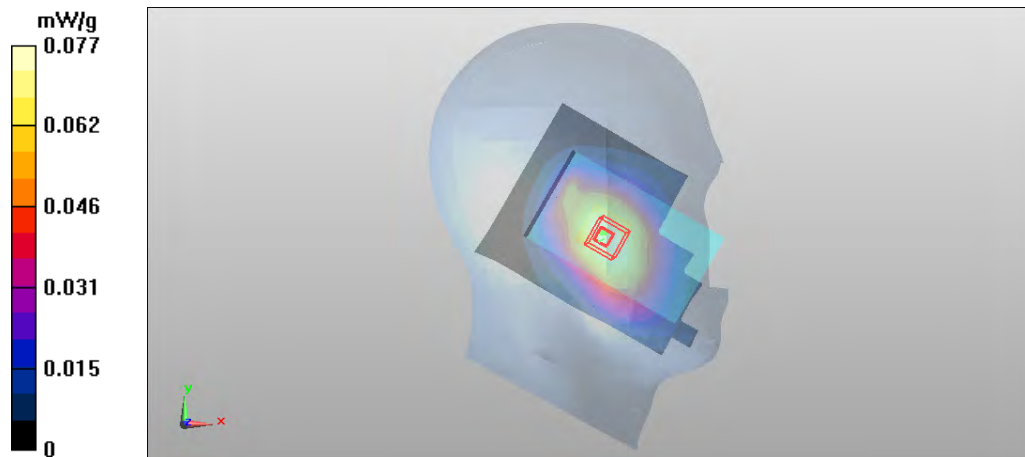
Peak SAR (extrapolated) = 0.086 mW/g

SAR(1 g) = 0.072 mW/g

SAR(10 g) = 0.056 mW/g

Power Drift = 0.22 dB

Maximum value of SAR (measured) = 0.0751 mW/g



Date/Time: 2012-07-09 16:13:41

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.132 mW/g

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.412 V/m

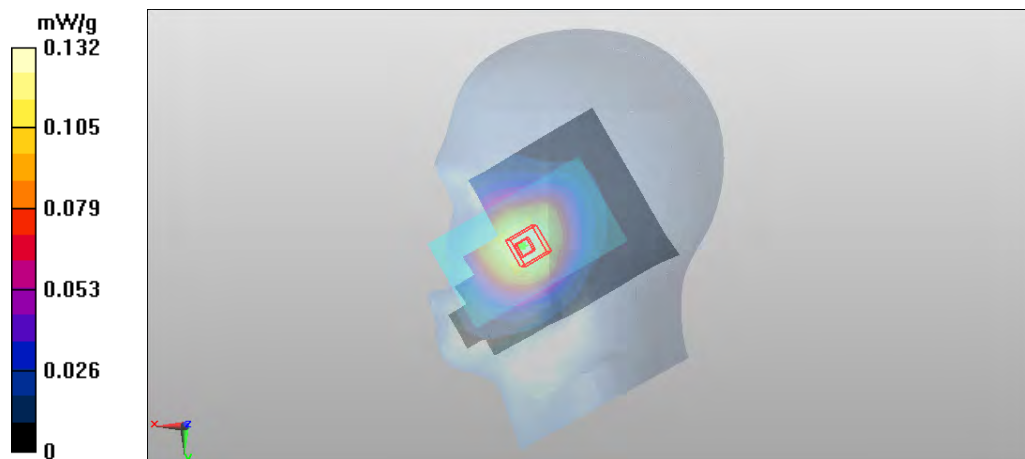
Peak SAR (extrapolated) = 0.150 mW/g

SAR(1 g) = 0.121 mW/g

SAR(10 g) = 0.095 mW/g

Power Drift = -0.21 dB

Maximum value of SAR (measured) = 0.126 mW/g



Date/Time: 2012-07-09 19:11:08

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0825 mW/g

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.490 V/m

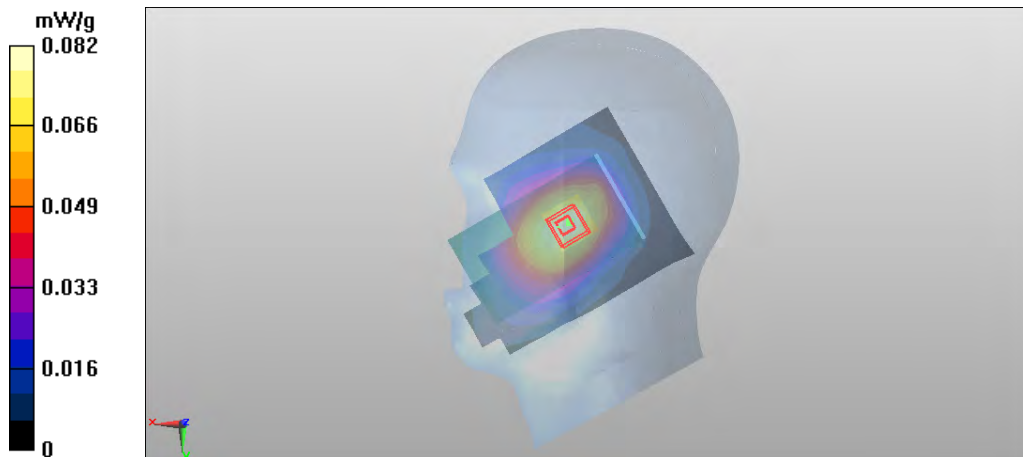
Peak SAR (extrapolated) = 0.090 mW/g

SAR(1 g) = 0.075 mW/g

SAR(10 g) = 0.059 mW/g

Power Drift = -0.10 dB

Maximum value of SAR (measured) = 0.0796 mW/g



Date/Time: 2012-07-09 06:34:36

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.147 mW/g

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.976 V/m

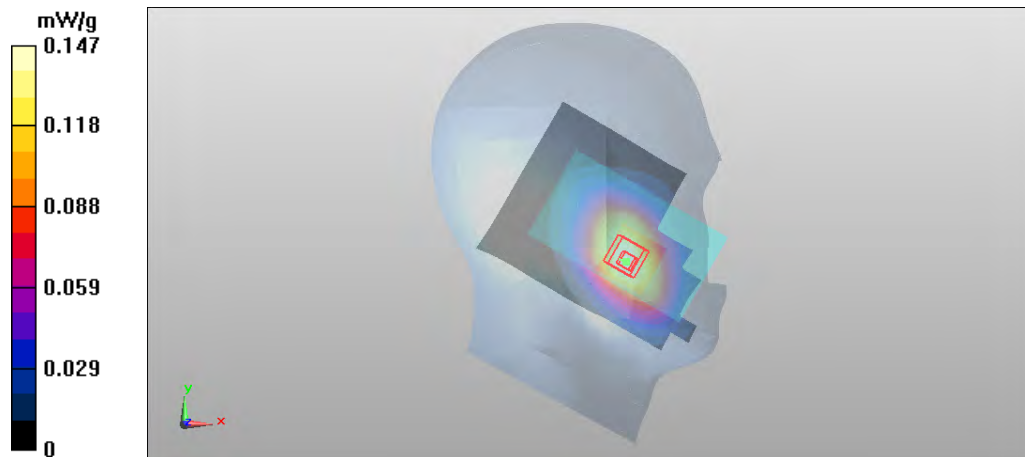
Peak SAR (extrapolated) = 0.180 mW/g

SAR(1 g) = 0.137 mW/g

SAR(10 g) = 0.101 mW/g

Power Drift = -0.13 dB

Maximum value of SAR (measured) = 0.146 mW/g



Date/Time: 2012-07-09 09:46:41

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100 % offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0745 mW/g

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100 % offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.913 V/m

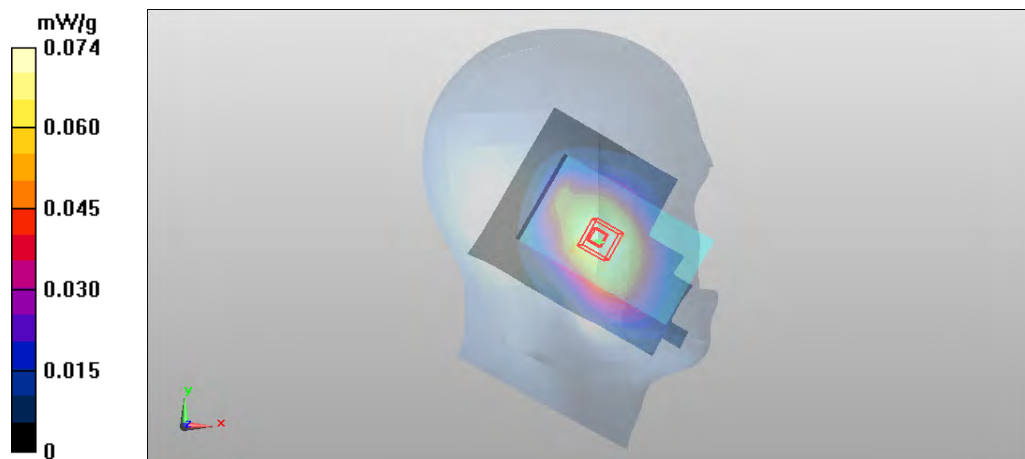
Peak SAR (extrapolated) = 0.089 mW/g

SAR(1 g) = 0.071 mW/g

SAR(10 g) = 0.056 mW/g

Power Drift = 0.29 dB

Maximum value of SAR (measured) = 0.0742 mW/g



Date/Time: 2012-07-09 16:29:45

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0963 mW/g

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.504 V/m

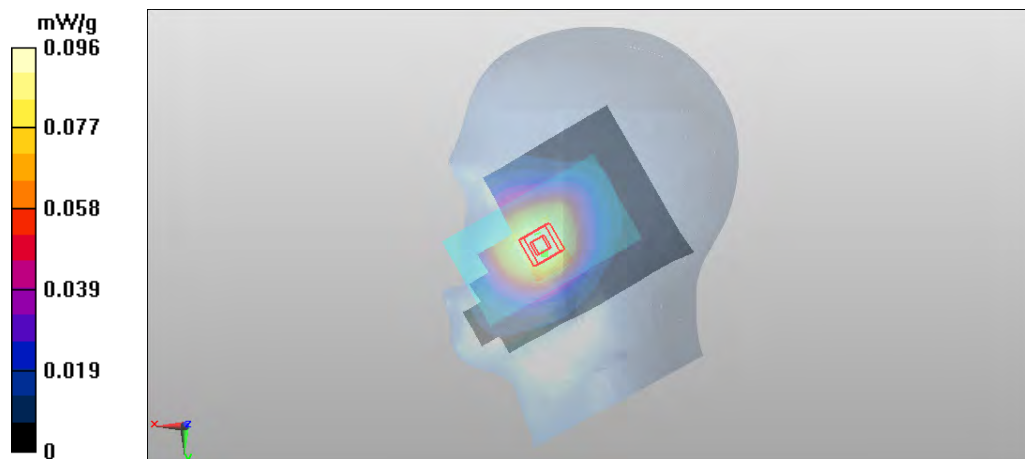
Peak SAR (extrapolated) = 0.122 mW/g

SAR(1 g) = 0.092 mW/g

SAR(10 g) = 0.071 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.0954 mW/g



Date/Time: 2012-07-09 19:26:46

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0624 mW/g

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.372 V/m

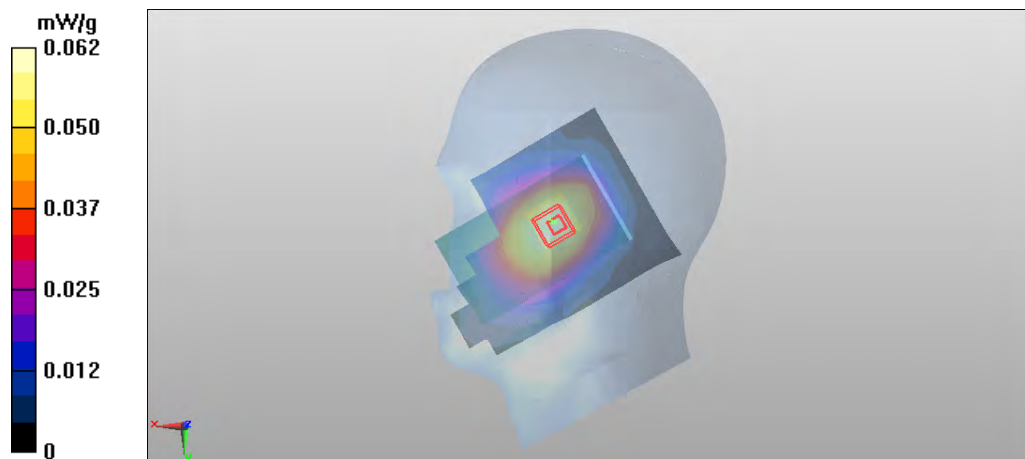
Peak SAR (extrapolated) = 0.072 mW/g

SAR(1 g) = 0.058 mW/g

SAR(10 g) = 0.046 mW/g

Power Drift = -0.17 dB

Maximum value of SAR (measured) = 0.0611 mW/g



Date/Time: 2012-07-09 06:54:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.186 mW/g

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.073 V/m

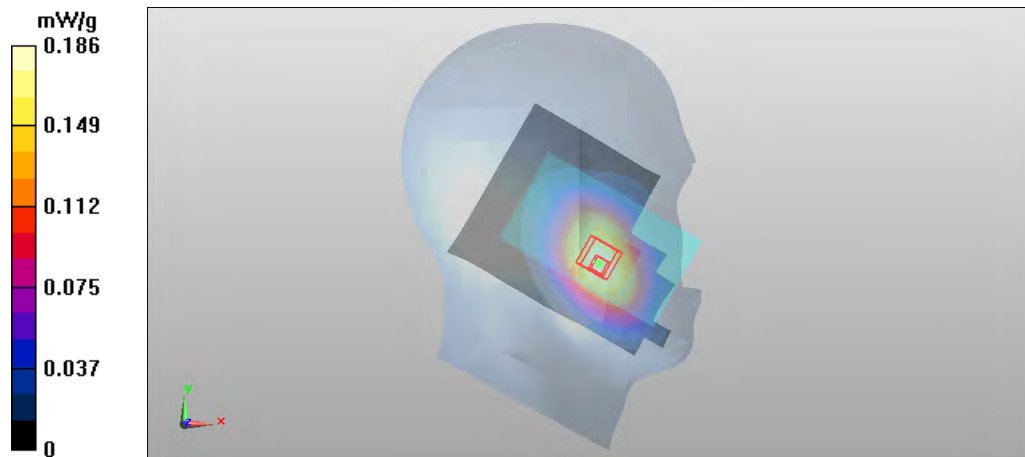
Peak SAR (extrapolated) = 0.229 mW/g

SAR(1 g) = 0.176 mW/g

SAR(10 g) = 0.131 mW/g

Power Drift = 0.32 dB

Maximum value of SAR (measured) = 0.191 mW/g



Date/Time: 2012-07-09 10:02:16

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0 % offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0899 mW/g

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0 % offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.894 V/m

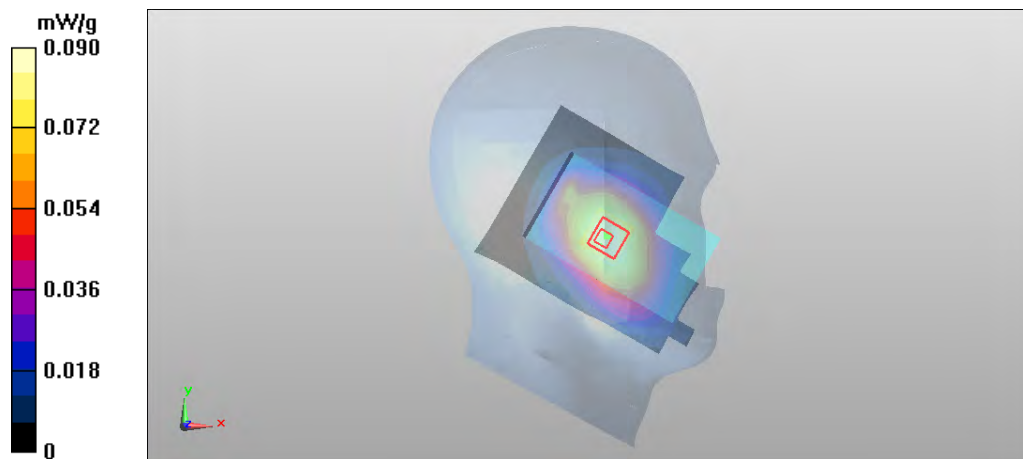
Peak SAR (extrapolated) = 0.103 mW/g

SAR(1 g) = 0.084 mW/g

SAR(10 g) = 0.066 mW/g

Power Drift = 0.24 dB

Maximum value of SAR (measured) = 0.0873 mW/g



Date/Time: 2012-07-09 16:47:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.131 mW/g

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.228 V/m

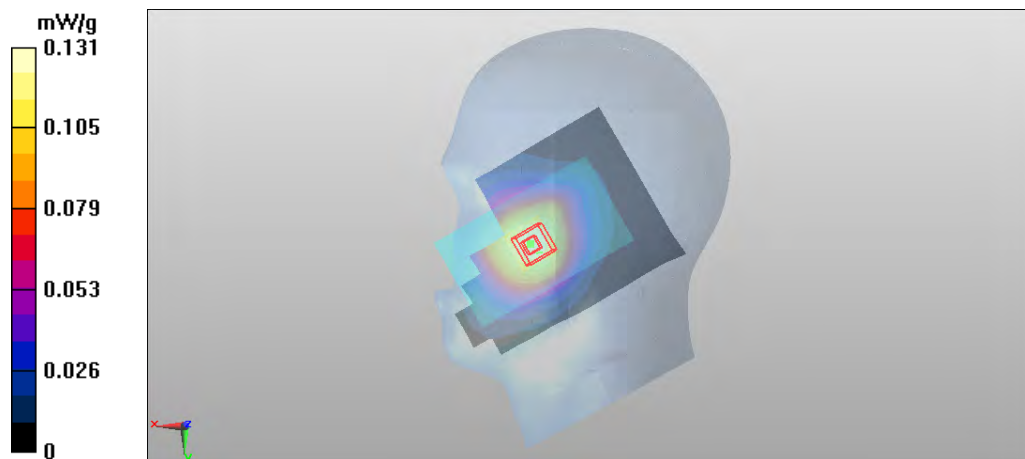
Peak SAR (extrapolated) = 0.154 mW/g

SAR(1 g) = 0.122 mW/g

SAR(10 g) = 0.094 mW/g

Power Drift = 0.00 dB

Maximum value of SAR (measured) = 0.126 mW/g



Date/Time: 2012-07-09 19:42:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 20.8 C

Medium parameters used: f = 710 MHz; σ = 0.898 mho/m; ϵ_r = 40.834; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.0803 mW/g

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.277 V/m

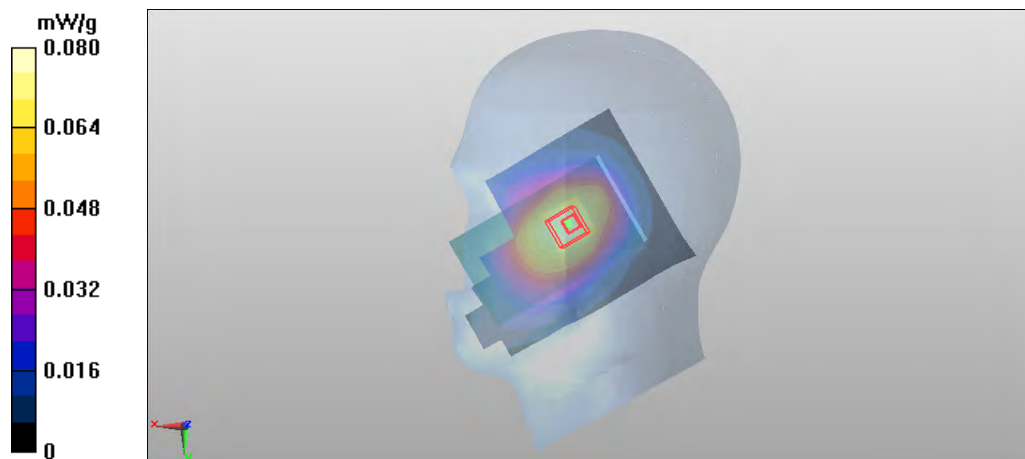
Peak SAR (extrapolated) = 0.090 mW/g

SAR(1 g) = 0.074 mW/g

SAR(10 g) = 0.058 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.0759 mW/g



Date/Time: 2012-08-22 16:37:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700

Frequency: 711 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium Notes: t= 21.0 C

Medium parameters used: f = 711 MHz; $\sigma = 0.888$ mho/m; $\epsilon_r = 40.639$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - High - QPSK - 10MHz - 1 RB - 0% offset - Cover CC-3401/Area Scan (81x121x1): Interpolated
grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.236 W/kg

LTE - Left/Cheek - High - QPSK - 10MHz - 1 RB - 0% offset - Cover CC-3401/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 16.312 V/m

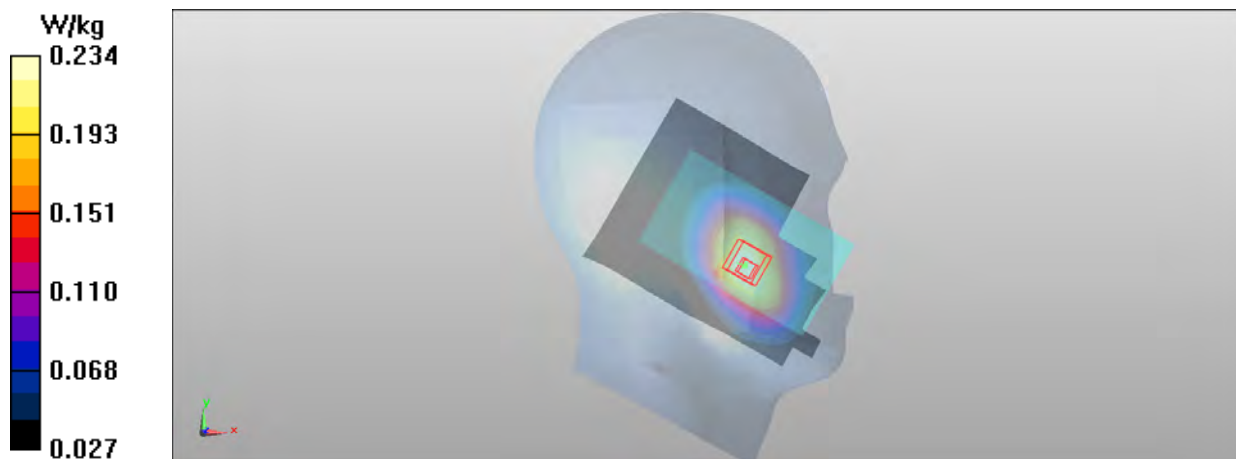
Peak SAR (extrapolated) = 0.293 mW/g

SAR(1 g) = 0.222 mW/g

SAR(10 g) = 0.165 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.234 W/kg



Date/Time: 2012-07-06 14:12:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: GSM850

Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 837 MHz; σ = 0.917 mho/m; ϵ_r = 40.464; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

GSM - Left/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.278 mW/g

GSM - Left/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.466 V/m

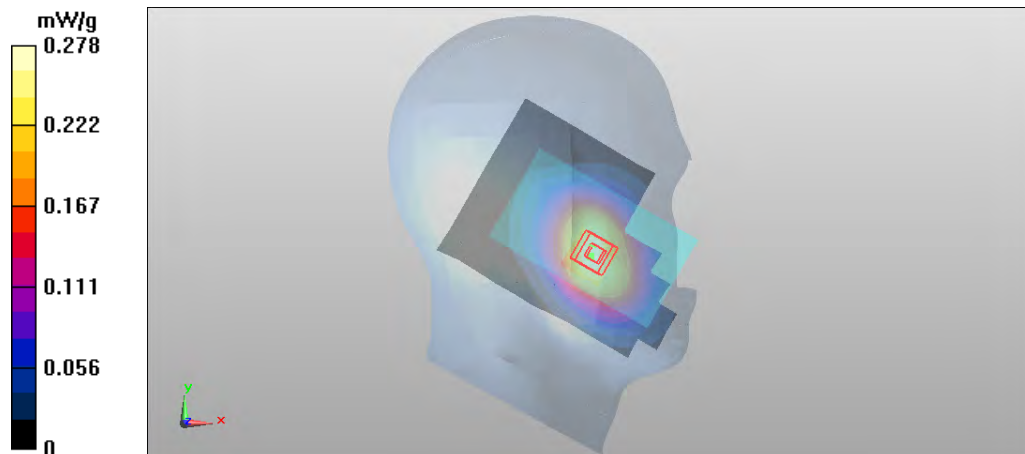
Peak SAR (extrapolated) = 0.333 mW/g

SAR(1 g) = 0.264 mW/g

SAR(10 g) = 0.197 mW/g

Power Drift = -0.30 dB

Maximum value of SAR (measured) = 0.277 mW/g



Date/Time: 2012-07-06 16:14:18

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 849 MHz; $\sigma = 0.925$ mho/m; $\epsilon_r = 40.386$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Left/Cheek - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.629 mW/g

2-slot GPRS - Left/Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.338 V/m

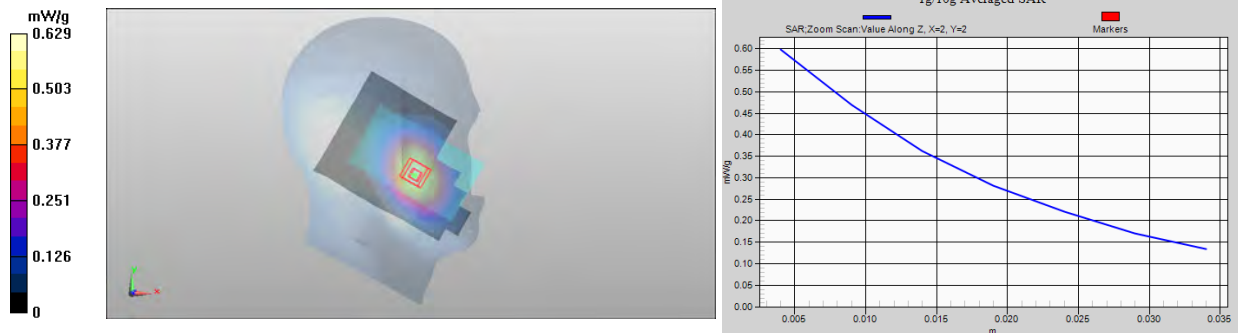
Peak SAR (extrapolated) = 0.728 mW/g

SAR(1 g) = 0.568 mW/g

SAR(10 g) = 0.422 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 0.598 mW/g



Date/Time: 2012-07-06 14:51:36

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 837 MHz; σ = 0.917 mho/m; ϵ_r = 40.464; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Left/Tilt - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.320 mW/g

2-slot GPRS - Left/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.494 V/m

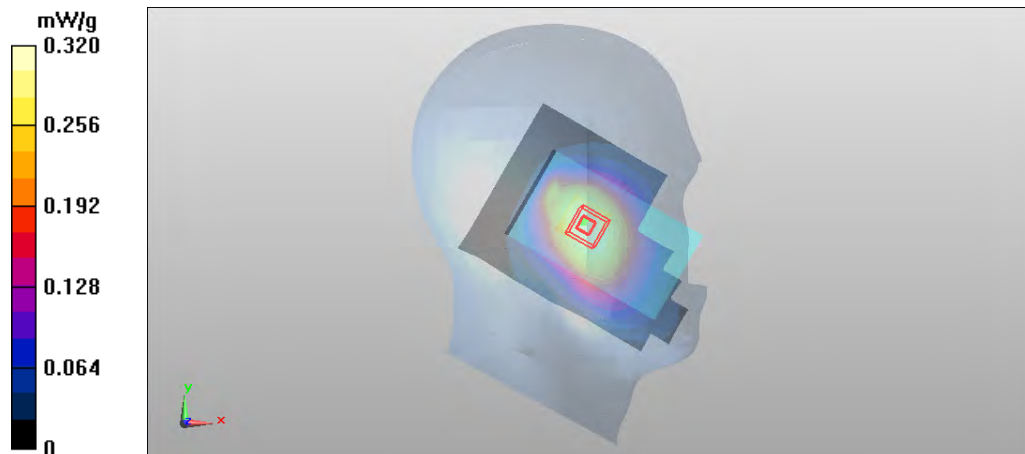
Peak SAR (extrapolated) = 0.365 mW/g

SAR(1 g) = 0.305 mW/g

SAR(10 g) = 0.238 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.321 mW/g



Date/Time: 2012-07-06 15:11:51

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 837 MHz; σ = 0.917 mho/m; ϵ_r = 40.464; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Right/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.442 mW/g

2-slot GPRS - Right/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.604 V/m

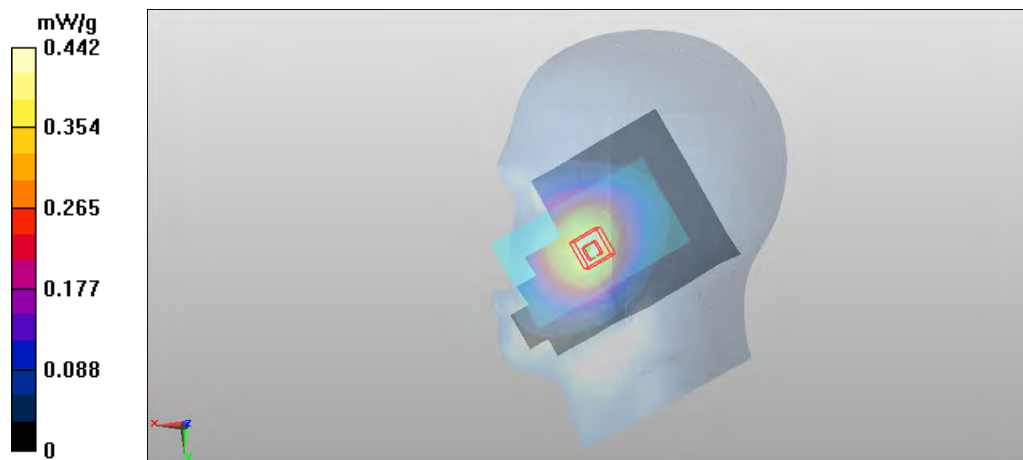
Peak SAR (extrapolated) = 0.505 mW/g

SAR(1 g) = 0.417 mW/g

SAR(10 g) = 0.318 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.432 mW/g



Date/Time: 2012-07-06 15:39:55

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 837 MHz; σ = 0.917 mho/m; ϵ_r = 40.464; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Right/Tilt - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.320 mW/g

2-slot GPRS - Right/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.696 V/m

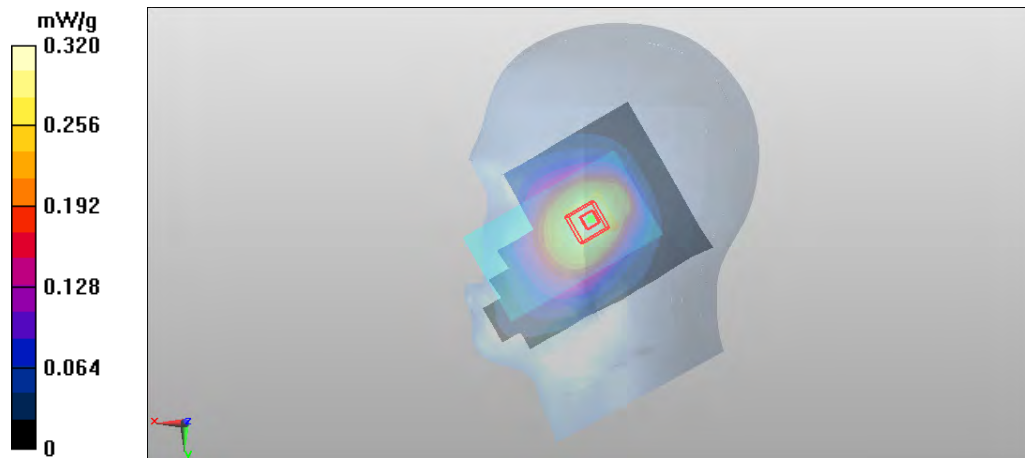
Peak SAR (extrapolated) = 0.362 mW/g

SAR(1 g) = 0.304 mW/g

SAR(10 g) = 0.235 mW/g

Power Drift = -0.07 dB

Maximum value of SAR (measured) = 0.320 mW/g



Date/Time: 2012-07-06 16:35:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot 8PSK EGPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 849 MHz; $\sigma = 0.925$ mho/m; $\epsilon_r = 40.386$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

2-slot 8PSK EGPRS - Left/Cheek - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.184 mW/g

2-slot 8PSK EGPRS - Left/Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 3.870 V/m

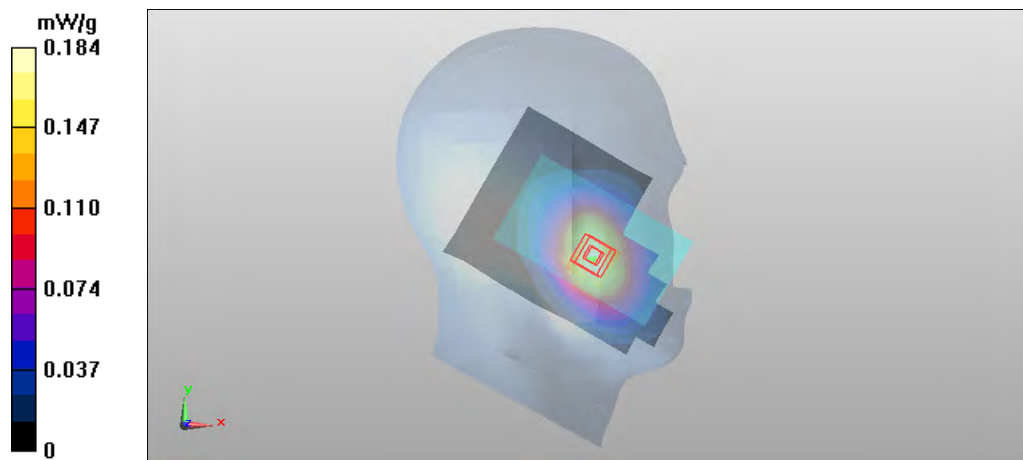
Peak SAR (extrapolated) = 0.225 mW/g

SAR(1 g) = 0.177 mW/g

SAR(10 g) = 0.128 mW/g

Power Drift = -0.34 dB

Maximum value of SAR (measured) = 0.191 mW/g



Date/Time: 2012-07-06 19:08:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850

Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 847 MHz; σ = 0.924 mho/m; ϵ_r = 40.398; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

WCDMA - Left/Cheek - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.314 mW/g

WCDMA - Left/Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.441 V/m

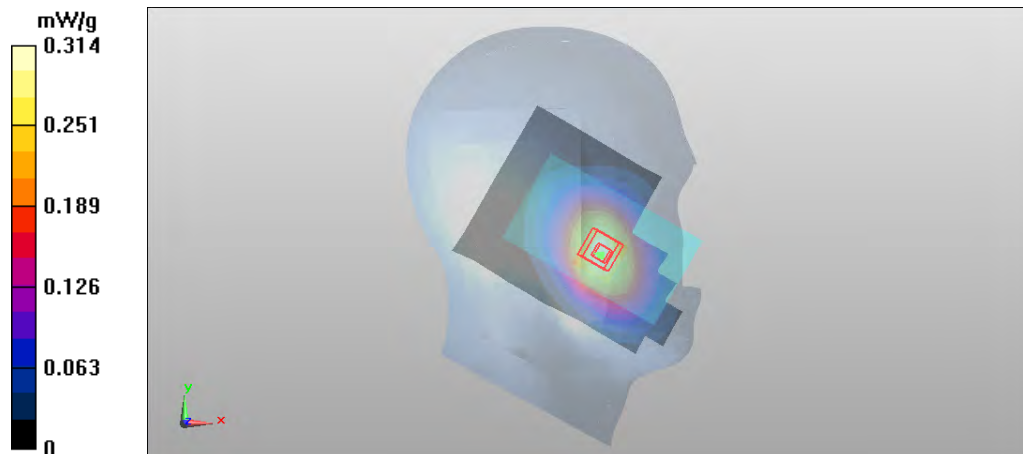
Peak SAR (extrapolated) = 0.364 mW/g

SAR(1 g) = 0.292 mW/g

SAR(10 g) = 0.219 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 0.307 mW/g



Date/Time: 2012-07-06 17:29:20

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: t= 21.3 C

Medium parameters used: f = 835 MHz; σ = 0.916 mho/m; ϵ_r = 40.478; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

WCDMA - Left/Tilt - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.172 mW/g

WCDMA - Left/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.787 V/m

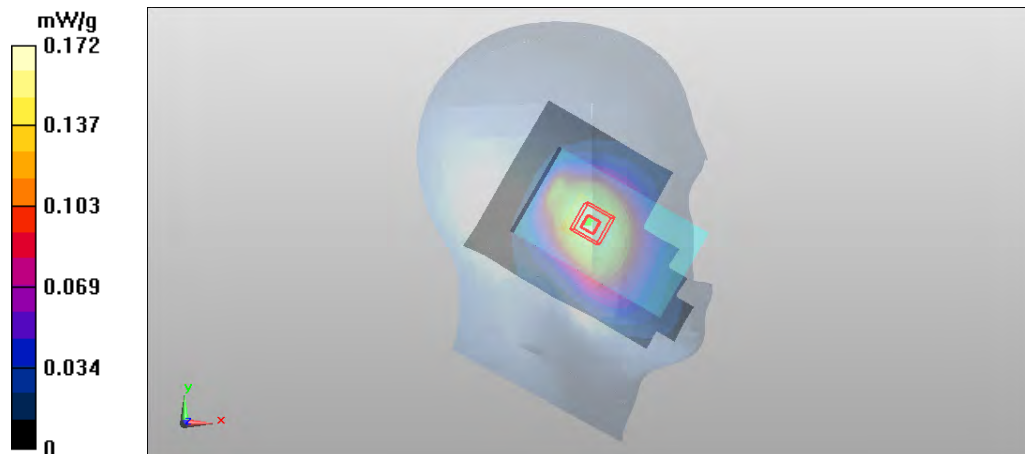
Peak SAR (extrapolated) = 0.194 mW/g

SAR(1 g) = 0.162 mW/g

SAR(10 g) = 0.127 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.169 mW/g



Date/Time: 2012-07-06 17:53:20

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.3$ C

Medium parameters used: $f = 835$ MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 40.478$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

WCDMA - Right/Cheek - Middle/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.216 mW/g

WCDMA - Right/Cheek - Middle/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 5.218 V/m

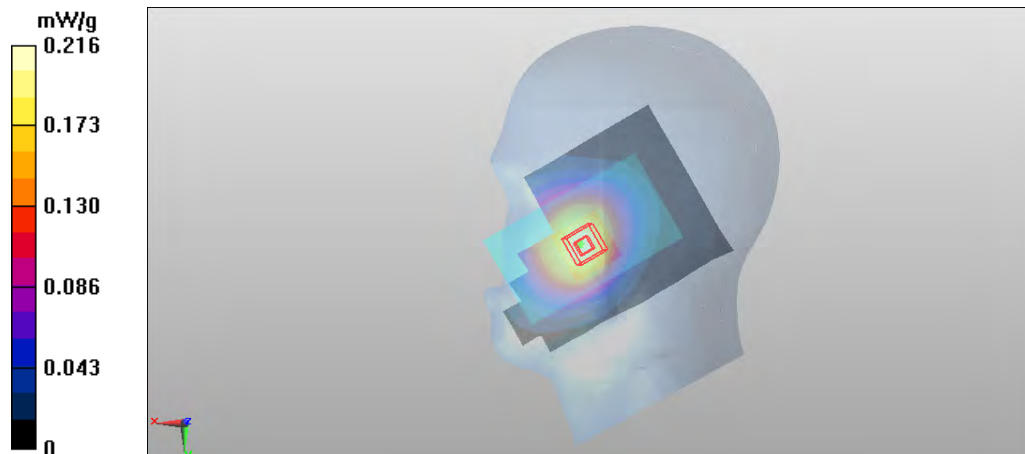
Peak SAR (extrapolated) = 0.247 mW/g

SAR(1 g) = 0.205 mW/g

SAR(10 g) = 0.157 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.213 mW/g



Date/Time: 2012-07-06 18:27:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.3$ C

Medium parameters used: $f = 835$ MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 40.478$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3131
- ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

WCDMA - Right/Tilt - Middle/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.162 mW/g

WCDMA - Right/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 9.645 V/m

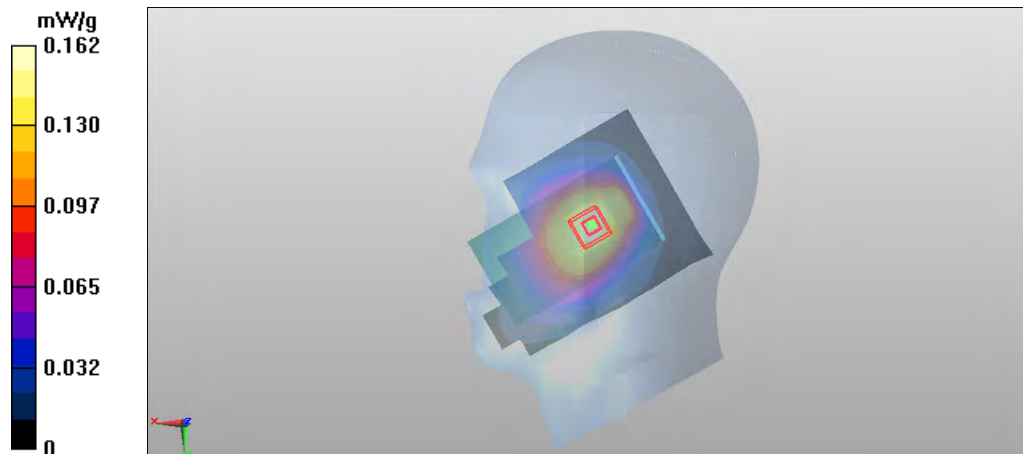
Peak SAR (extrapolated) = 0.182 mW/g

SAR(1 g) = 0.153 mW/g

SAR(10 g) = 0.118 mW/g

Power Drift = 0.00 dB

Maximum value of SAR (measured) = 0.160 mW/g



Date/Time: 2012-08-15 11:16:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.19952

Medium: HSL850; Medium Notes: t= 21.8 C

Medium parameters used: f = 849 MHz; σ = 0.902 mho/m; ϵ_r = 39.745; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

2-slot GPRS - Left/Cheek - High - Cover CC-3401/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.531 W/kg

2-slot GPRS - Left/Cheek - High - Cover CC-3401/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 23.907 V/m

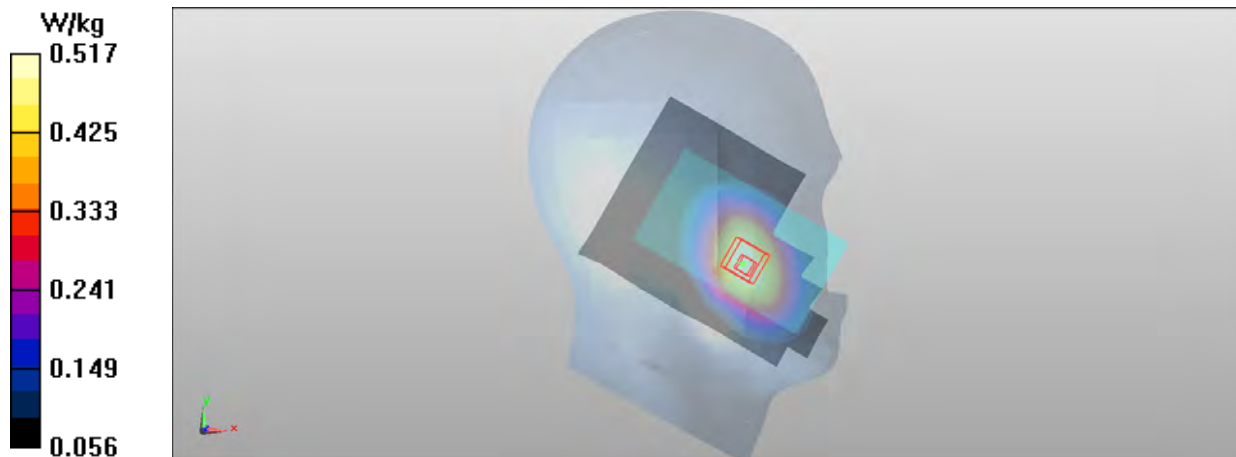
Peak SAR (extrapolated) = 0.635 mW/g

SAR(1 g) = 0.491 mW/g

SAR(10 g) = 0.367 mW/g

Power Drift = -0.03 dB

Maximum value of SAR (measured) = 0.517 W/kg



Date/Time: 2012-08-15 11:54:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.222 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.966 V/m

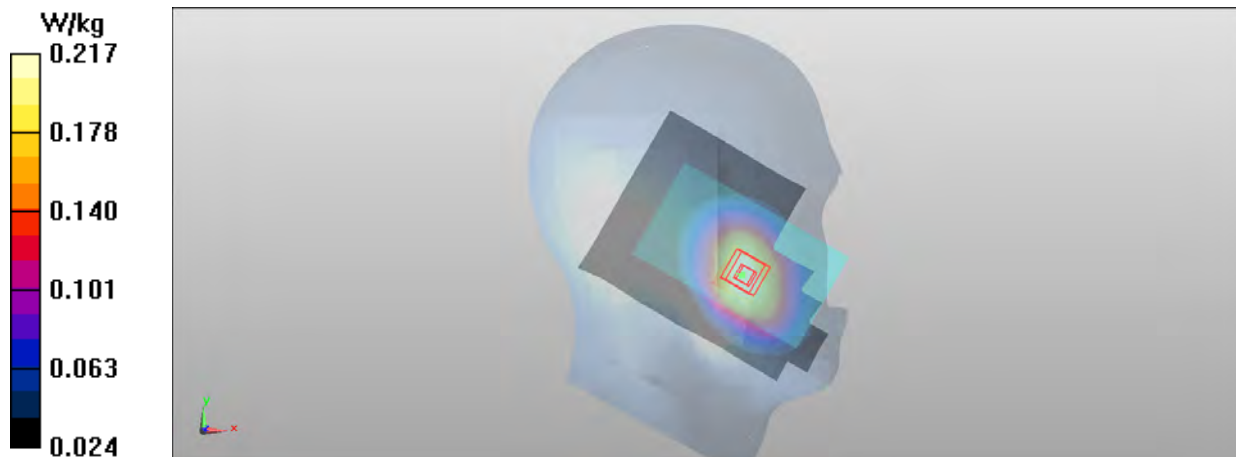
Peak SAR (extrapolated) = 0.266 mW/g

SAR(1 g) = 0.207 mW/g

SAR(10 g) = 0.156 mW/g

Power Drift = 0.17 dB

Maximum value of SAR (measured) = 0.217 W/kg



Date/Time: 2012-08-15 14:38:14

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.136 W/kg

LTE - Left/Tilt - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.165 V/m

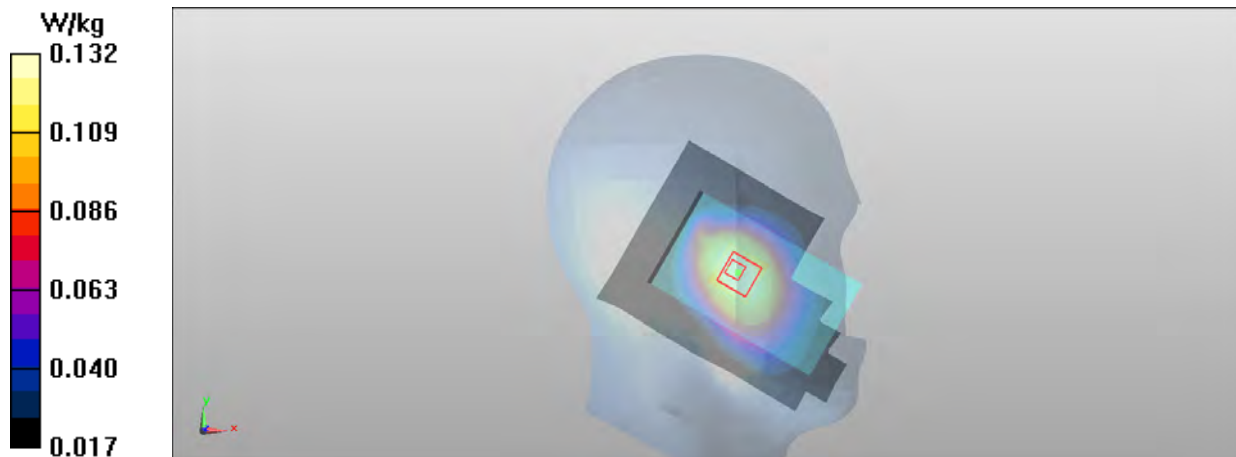
Peak SAR (extrapolated) = 0.156 mW/g

SAR(1 g) = 0.126 mW/g

SAR(10 g) = 0.098 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.132 W/kg



Date/Time: 2012-08-15 18:03:00

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.183 W/kg

LTE - Right/Cheek - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.378 V/m

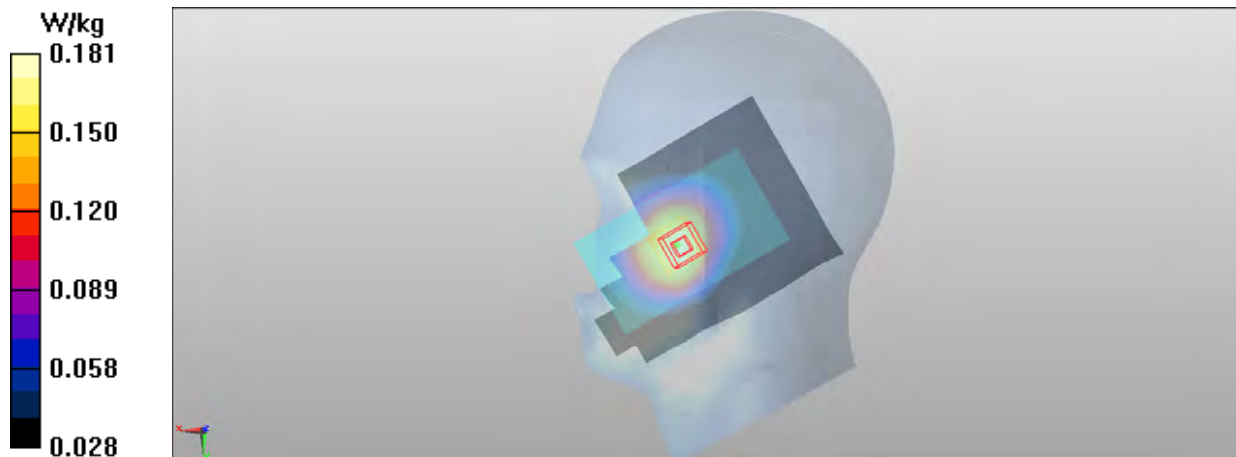
Peak SAR (extrapolated) = 0.213 mW/g

SAR(1 g) = 0.175 mW/g

SAR(10 g) = 0.133 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.181 W/kg



Date/Time: 2012-08-16 08:25:25

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.146 W/kg

LTE - Right/Tilt - Middle - QPSK - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.516 V/m

Peak SAR (extrapolated) = 0.166 mW/g

SAR(1 g) = 0.136 mW/g

SAR(10 g) = 0.105 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.143 W/kg



Date/Time: 2012-08-15 12:13:33

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.224 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 15.456 V/m

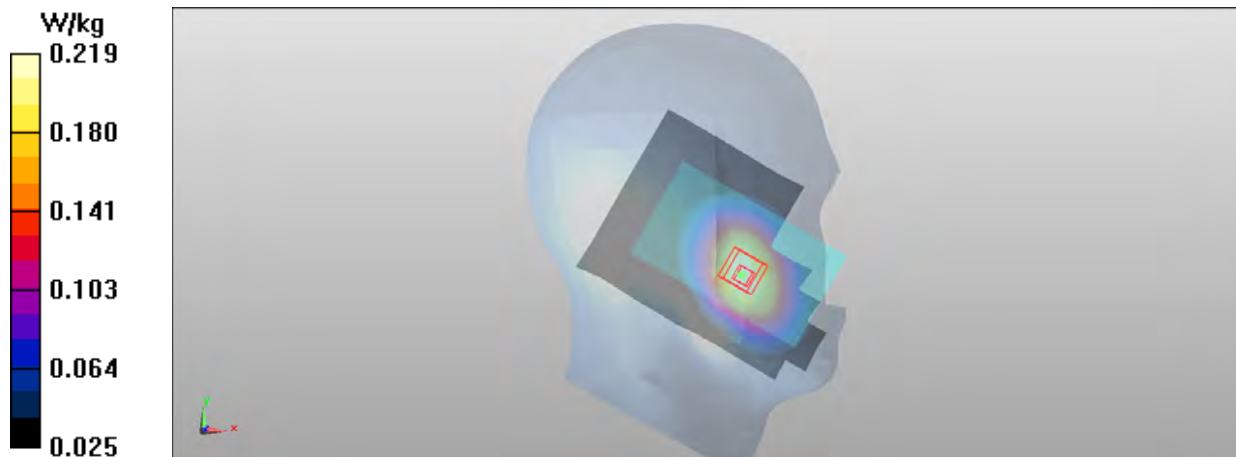
Peak SAR (extrapolated) = 0.266 mW/g

SAR(1 g) = 0.207 mW/g

SAR(10 g) = 0.155 mW/g

Power Drift = -0.10 dB

Maximum value of SAR (measured) = 0.219 W/kg



Date/Time: 2012-08-15 14:52:25

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.132 W/kg

LTE - Left/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.115 V/m

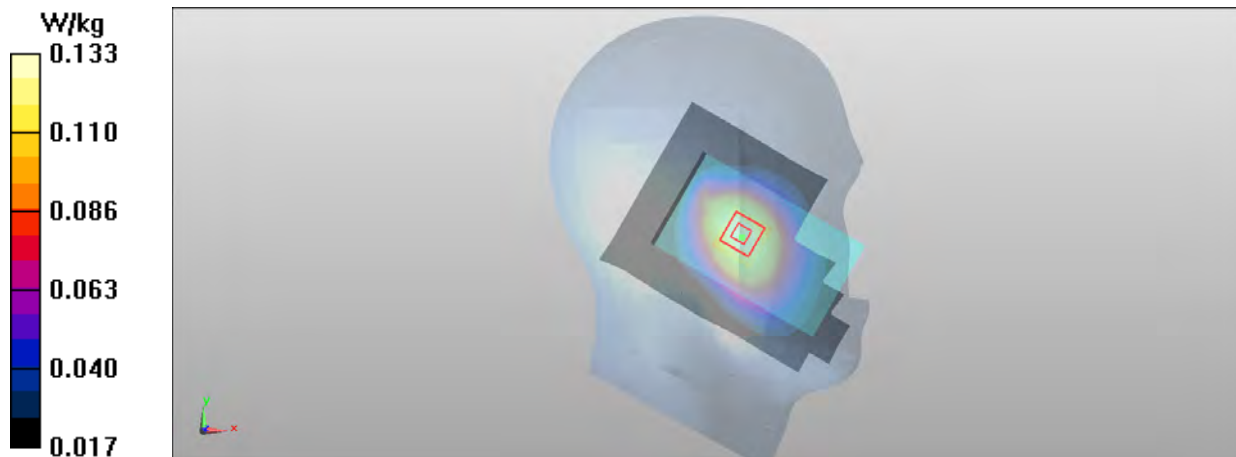
Peak SAR (extrapolated) = 0.154 mW/g

SAR(1 g) = 0.126 mW/g

SAR(10 g) = 0.097 mW/g

Power Drift = 0.13 dB

Maximum value of SAR (measured) = 0.133 W/kg



Date/Time: 2012-08-15 18:21:09

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.182 W/kg

LTE - Right/Cheek - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement

grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.281 V/m

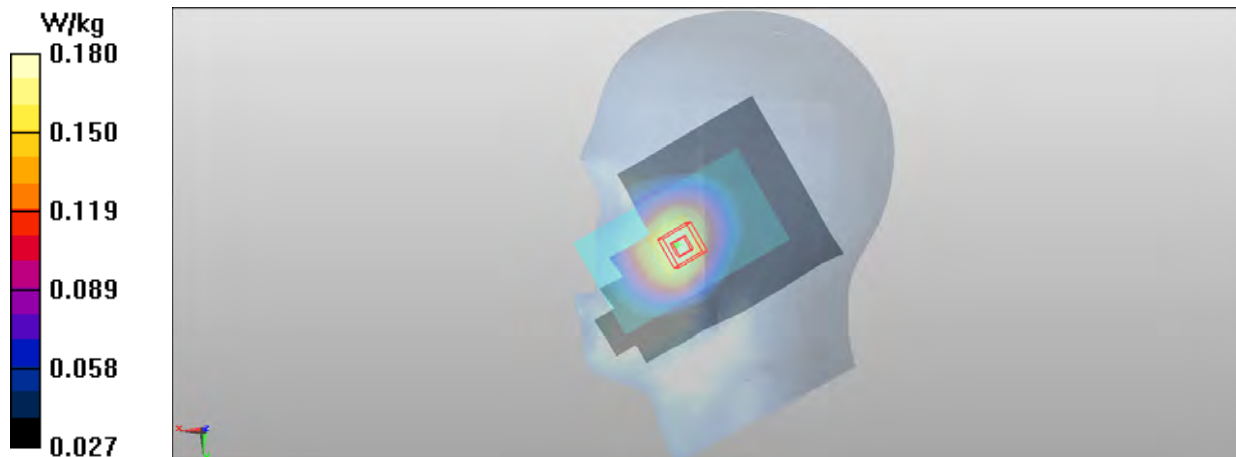
Peak SAR (extrapolated) = 0.211 mW/g

SAR(1 g) = 0.173 mW/g

SAR(10 g) = 0.132 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.180 W/kg



Date/Time: 2012-08-16 08:39:25

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.145 W/kg

LTE - Right/Tilt - Middle - QPSK - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.430 V/m

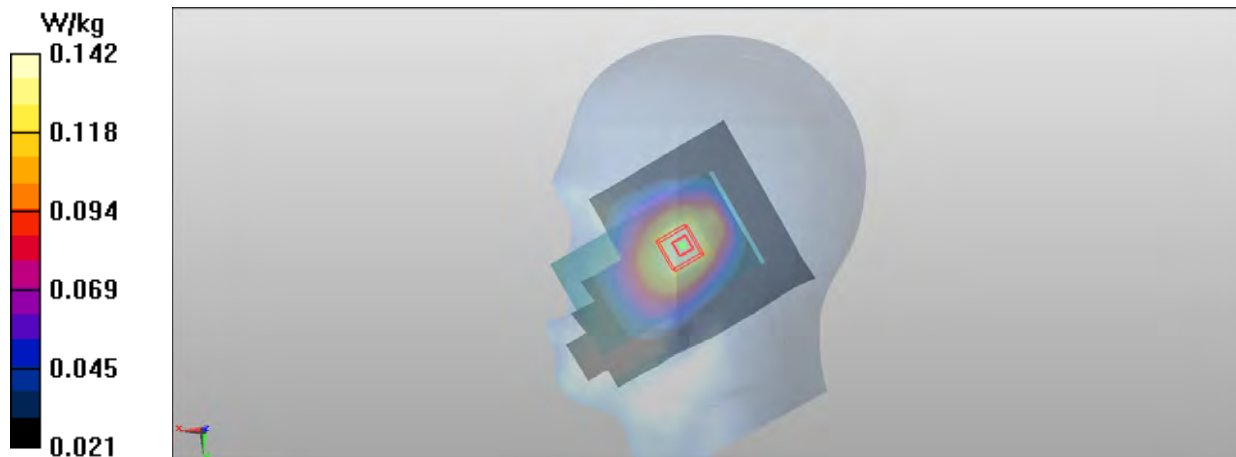
Peak SAR (extrapolated) = 0.166 mW/g

SAR(1 g) = 0.135 mW/g

SAR(10 g) = 0.104 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.142 W/kg



Date/Time: 2012-08-15 12:28:21

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.271 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 17.142 V/m

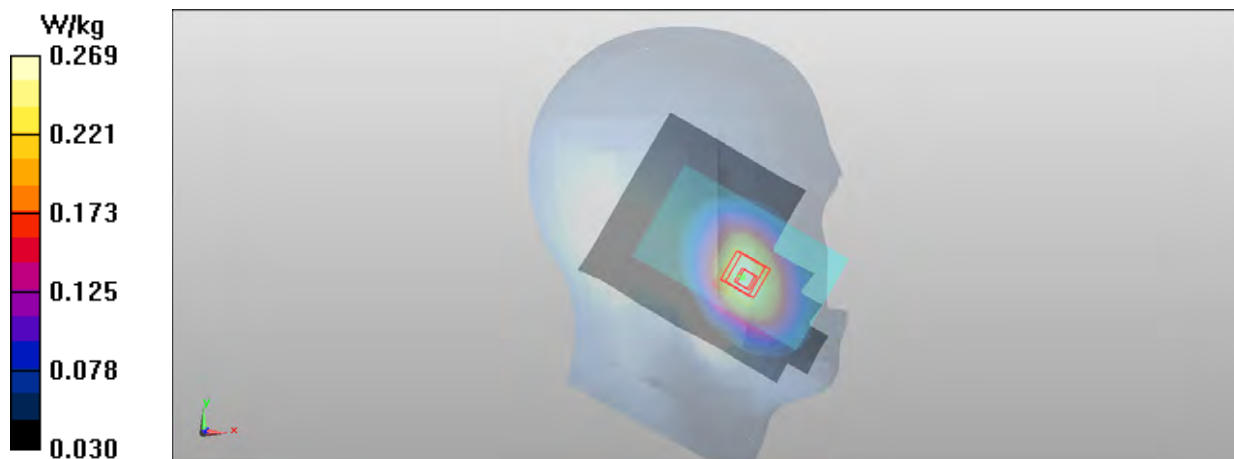
Peak SAR (extrapolated) = 0.329 mW/g

SAR(1 g) = 0.255 mW/g

SAR(10 g) = 0.191 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.269 W/kg



Date/Time: 2012-08-15 15:12:50

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.463 V/m

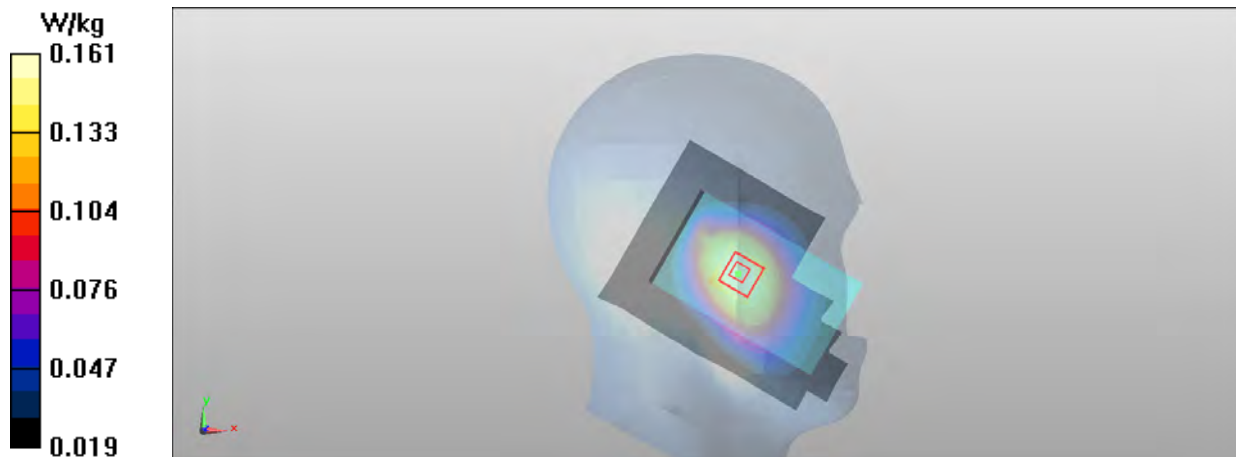
Peak SAR (extrapolated) = 0.188 mW/g

SAR(1 g) = 0.155 mW/g

SAR(10 g) = 0.120 mW/g

Power Drift = -0.03 dB

Maximum value of SAR (measured) = 0.161 W/kg



Date/Time: 2012-08-15 18:39:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.224 W/kg

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 15.801 V/m

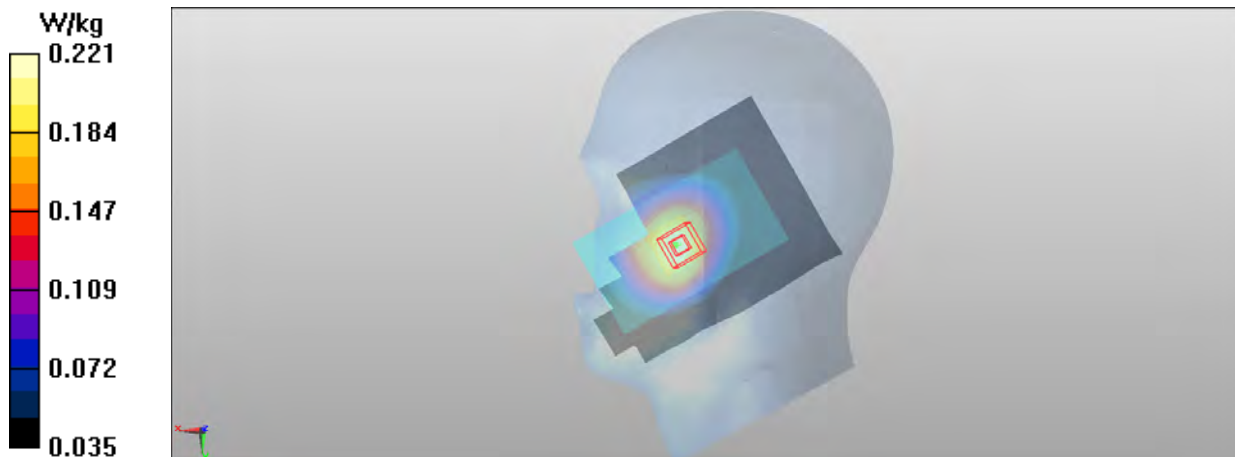
Peak SAR (extrapolated) = 0.260 mW/g

SAR(1 g) = 0.213 mW/g

SAR(10 g) = 0.162 mW/g

Power Drift = 0.09 dB

Maximum value of SAR (measured) = 0.221 W/kg



Date/Time: 2012-08-16 08:53:48

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.173 W/kg

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.802 V/m

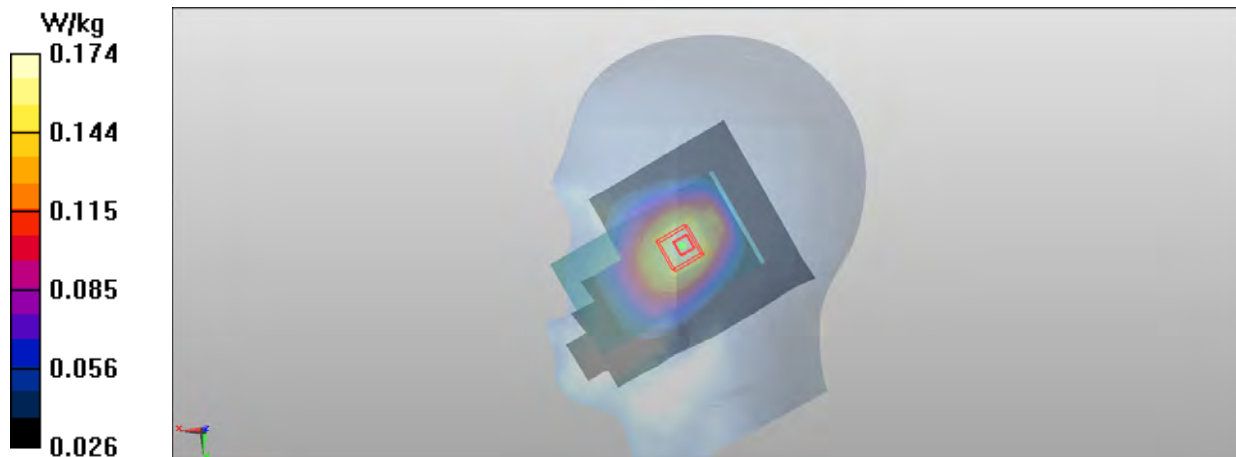
Peak SAR (extrapolated) = 0.203 mW/g

SAR(1 g) = 0.166 mW/g

SAR(10 g) = 0.128 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.174 W/kg



Date/Time: 2012-08-15 12:43:09

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz -RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.268 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz -RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 16.925 V/m

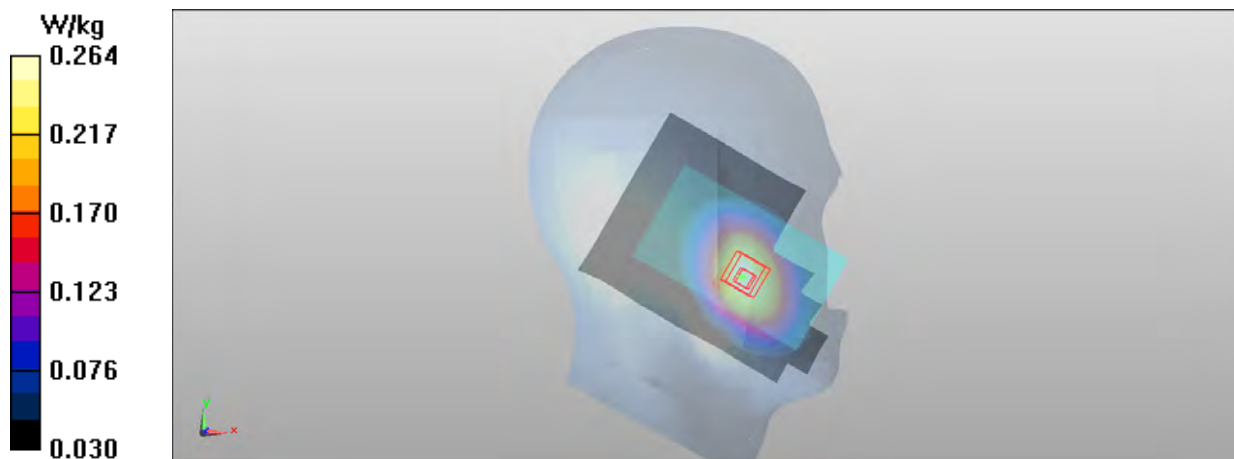
Peak SAR (extrapolated) = 0.323 mW/g

SAR(1 g) = 0.250 mW/g

SAR(10 g) = 0.188 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.264 W/kg



Date/Time: 2012-08-15 15:27:38

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.161 W/kg

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.226 V/m

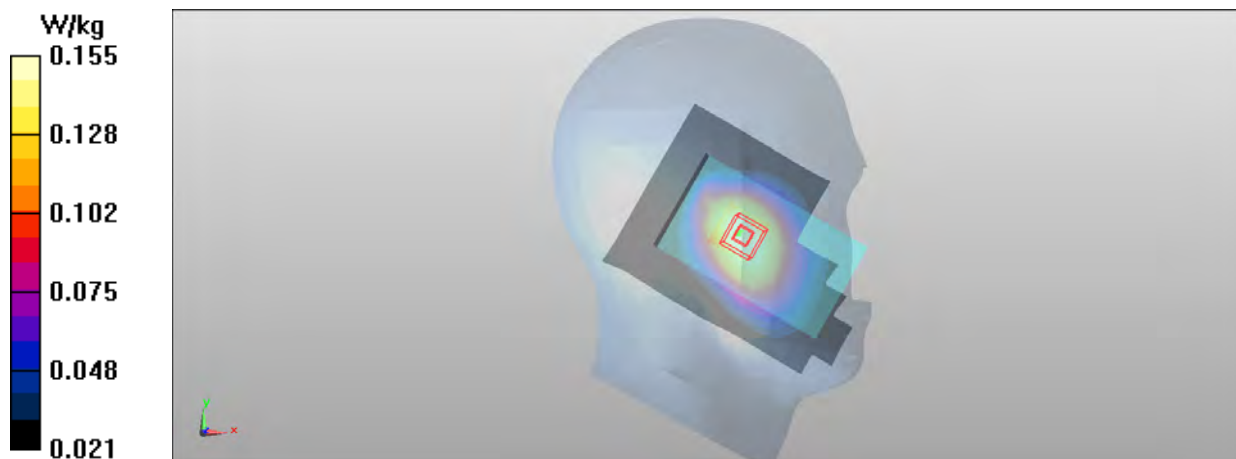
Peak SAR (extrapolated) = 0.181 mW/g

SAR(1 g) = 0.148 mW/g

SAR(10 g) = 0.115 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.155 W/kg



Date/Time: 2012-08-15 19:52:52

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.217 W/kg

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 15.674 V/m

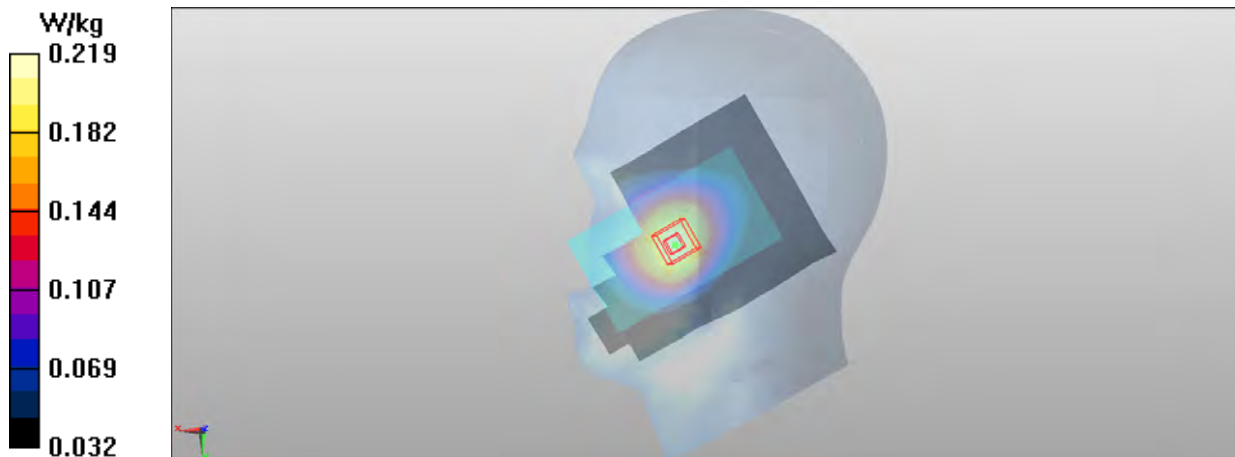
Peak SAR (extrapolated) = 0.254 mW/g

SAR(1 g) = 0.208 mW/g

SAR(10 g) = 0.158 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.219 W/kg



Date/Time: 2012-08-16 09:07:06

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.175 W/kg

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.738 V/m

Peak SAR (extrapolated) = 0.198 mW/g

SAR(1 g) = 0.163 mW/g

SAR(10 g) = 0.125 mW/g

Power Drift = -0.04 dB

Maximum value of SAR (measured) = 0.174 W/kg



Date/Time: 2012-08-15 12:58:00

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.301 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 18.085 V/m

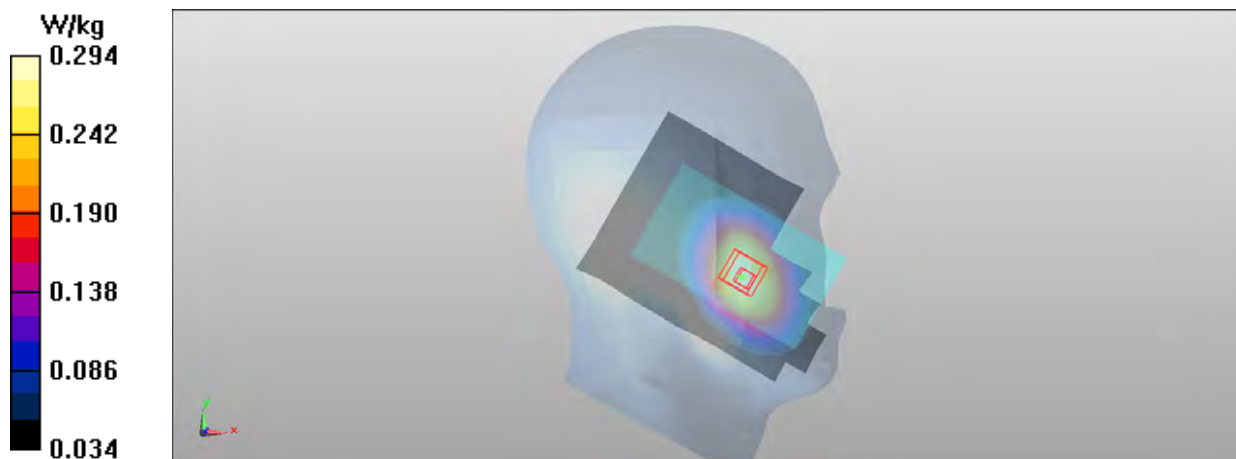
Peak SAR (extrapolated) = 0.352 mW/g

SAR(1 g) = 0.280 mW/g

SAR(10 g) = 0.210 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.294 W/kg



Date/Time: 2012-08-15 15:48:09

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

LTE - Left/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.956 V/m

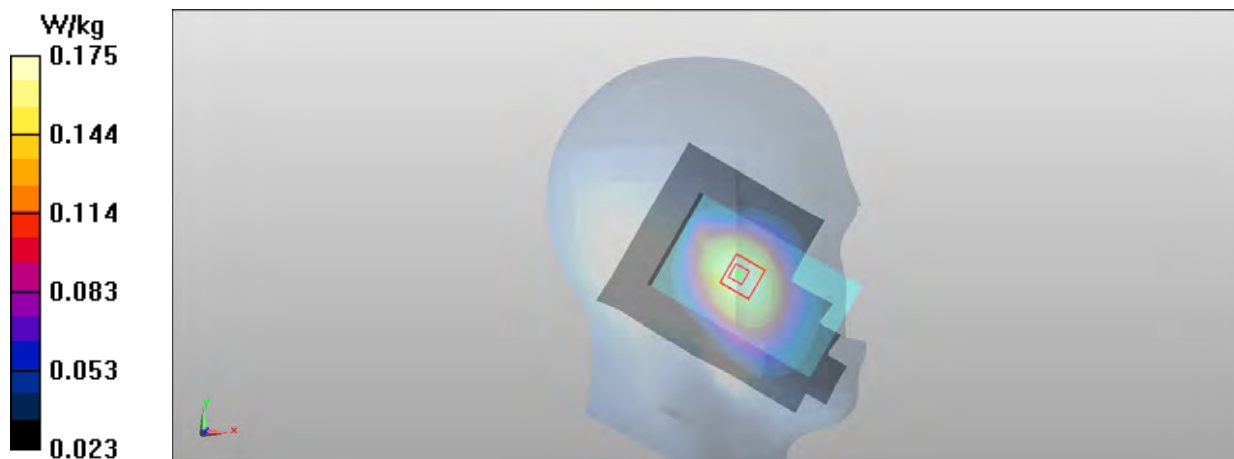
Peak SAR (extrapolated) = 0.197 mW/g

SAR(1 g) = 0.166 mW/g

SAR(10 g) = 0.130 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.175 W/kg



Date/Time: 2012-08-15 19:36:33

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.240 W/kg

LTE - Right/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 16.401 V/m

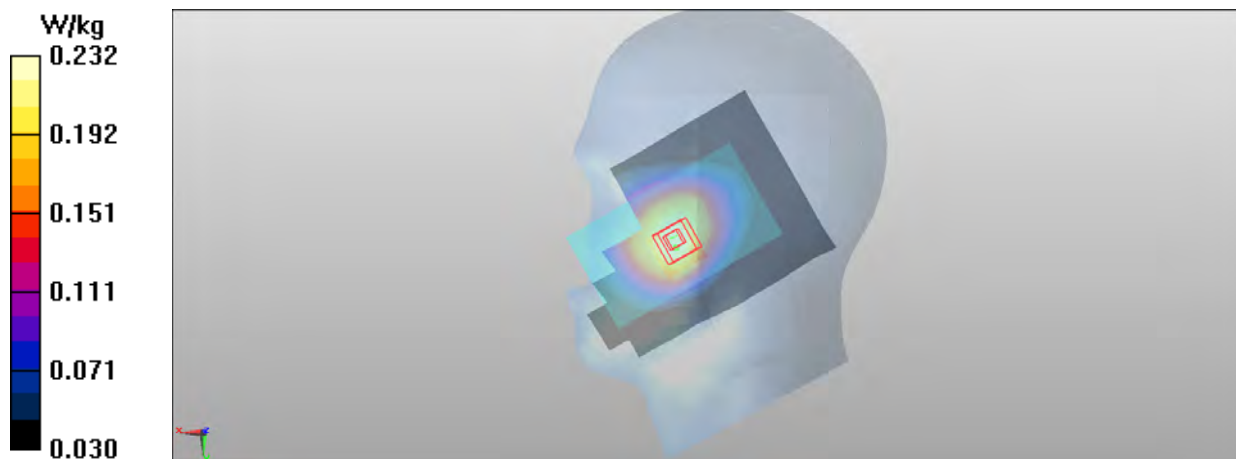
Peak SAR (extrapolated) = 0.274 mW/g

SAR(1 g) = 0.224 mW/g

SAR(10 g) = 0.169 mW/g

Power Drift = -0.03 dB

Maximum value of SAR (measured) = 0.232 W/kg



Date/Time: 2012-08-16 09:20:27

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.197 W/kg

LTE - Right/Tilt - Middle - QPSK - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.614 V/m

Peak SAR (extrapolated) = 0.229 mW/g

SAR(1 g) = 0.187 mW/g

SAR(10 g) = 0.144 mW/g

Power Drift = -0.00 dB

Maximum value of SAR (measured) = 0.197 W/kg



Date/Time: 2012-08-15 13:17:47

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.175 W/kg

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.787 V/m

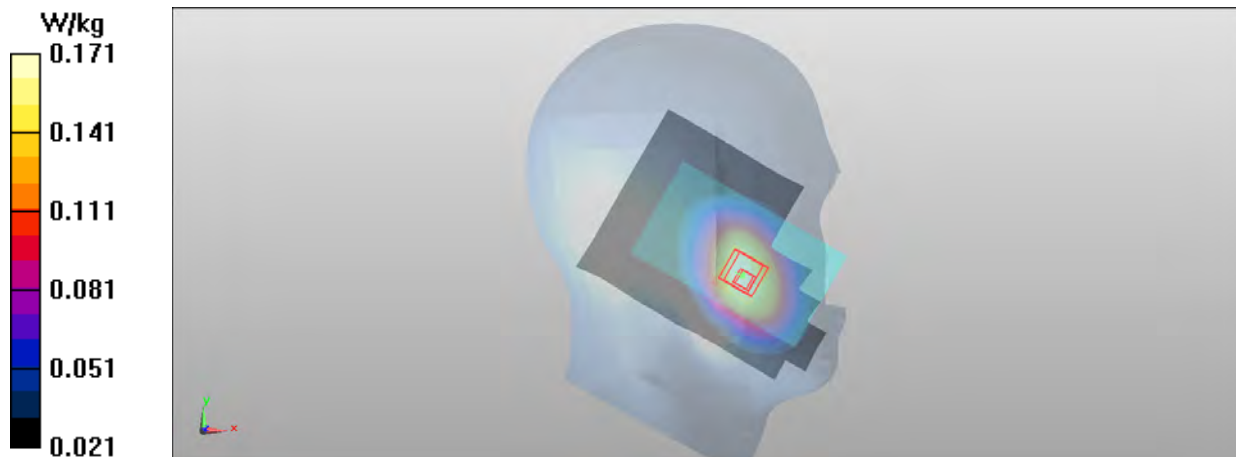
Peak SAR (extrapolated) = 0.211 mW/g

SAR(1 g) = 0.163 mW/g

SAR(10 g) = 0.122 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 0.171 W/kg



Date/Time: 2012-08-15 16:33:06

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.120 W/kg

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.459 V/m

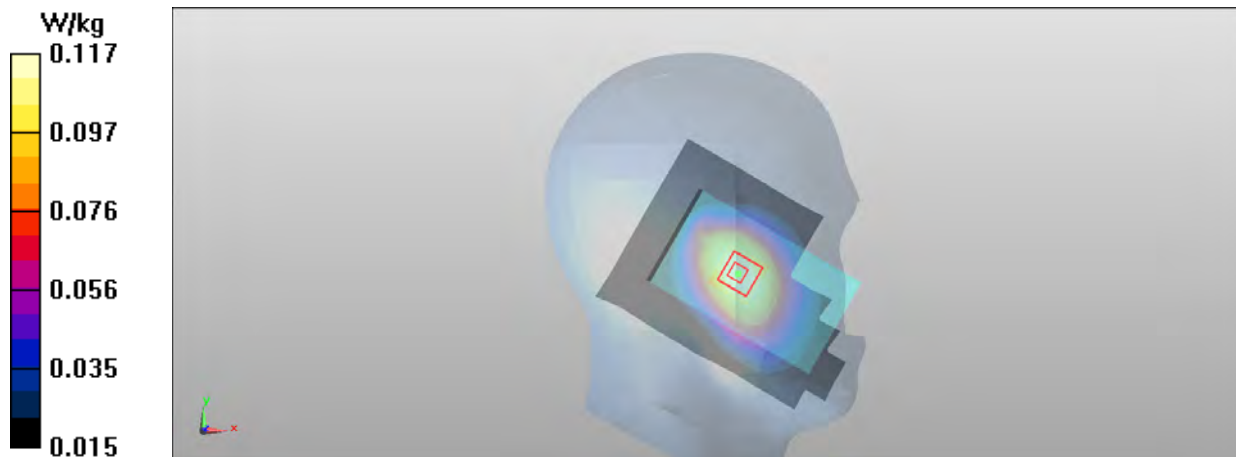
Peak SAR (extrapolated) = 0.137 mW/g

SAR(1 g) = 0.112 mW/g

SAR(10 g) = 0.087 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.117 W/kg



Date/Time: 2012-08-15 20:07:24

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.145 W/kg

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.644 V/m

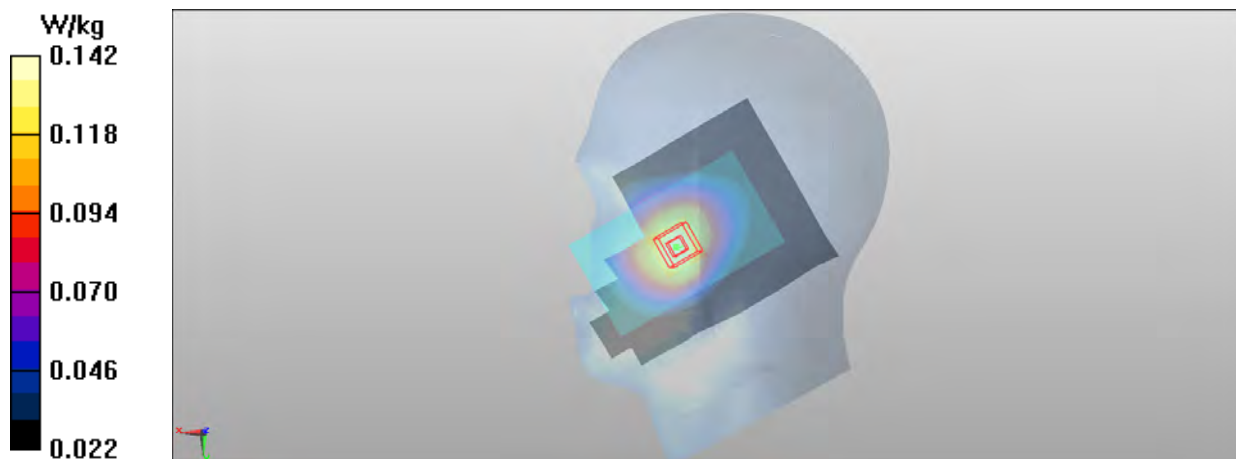
Peak SAR (extrapolated) = 0.164 mW/g

SAR(1 g) = 0.135 mW/g

SAR(10 g) = 0.103 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 0.142 W/kg



Date/Time: 2012-08-16 09:43:40

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.121 W/kg

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.284 V/m

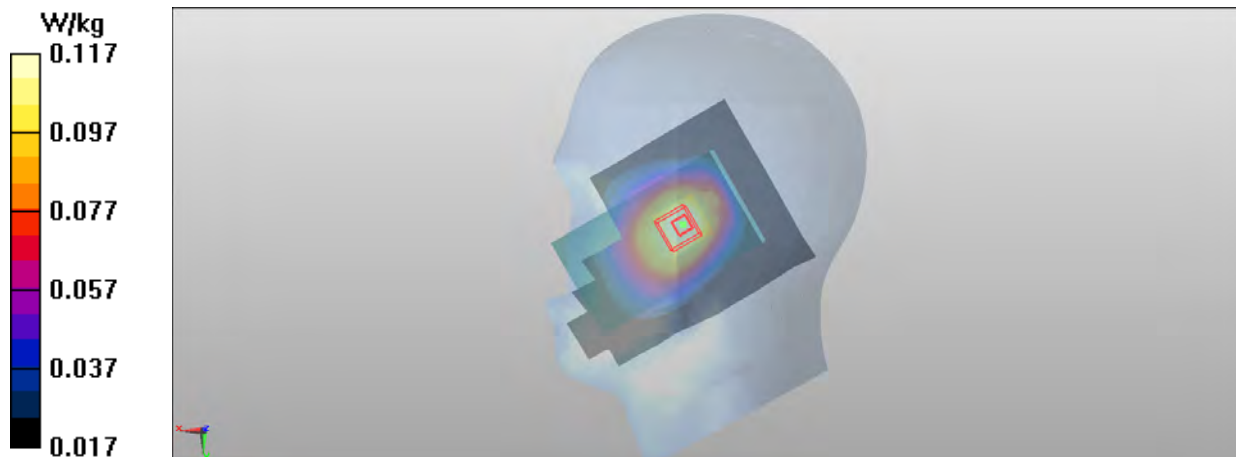
Peak SAR (extrapolated) = 0.135 mW/g

SAR(1 g) = 0.112 mW/g

SAR(10 g) = 0.087 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.117 W/kg



Date/Time: 2012-08-15 13:32:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm

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

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.847 V/m

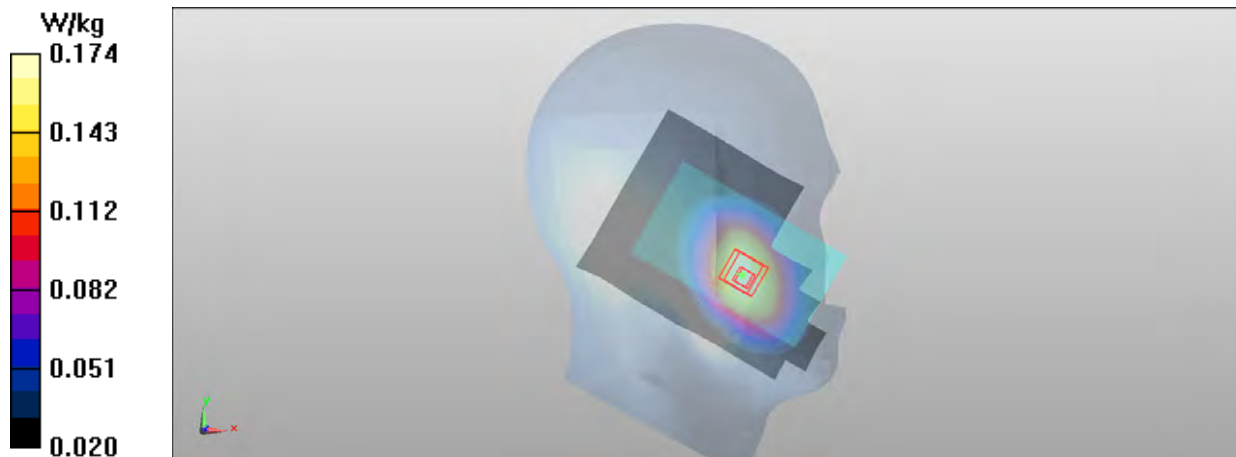
Peak SAR (extrapolated) = 0.212 mW/g

SAR(1 g) = 0.165 mW/g

SAR(10 g) = 0.124 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.174 W/kg



Date/Time: 2012-08-15 16:47:38

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.121 W/kg

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.606 V/m

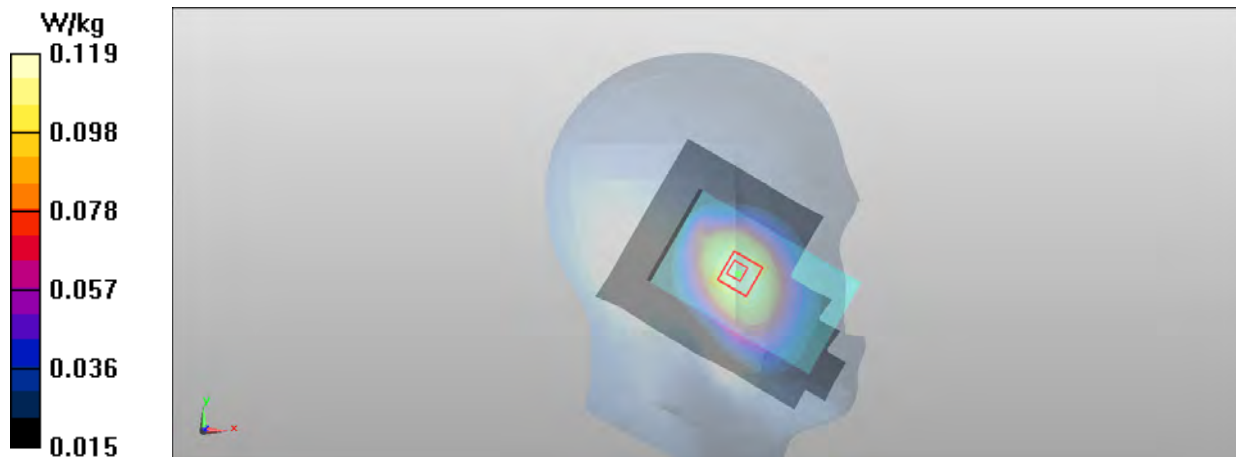
Peak SAR (extrapolated) = 0.138 mW/g

SAR(1 g) = 0.114 mW/g

SAR(10 g) = 0.088 mW/g

Power Drift = 0.02 dB

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



Date/Time: 2012-08-15 20:21:16

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.148 W/kg

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement
grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.663 V/m

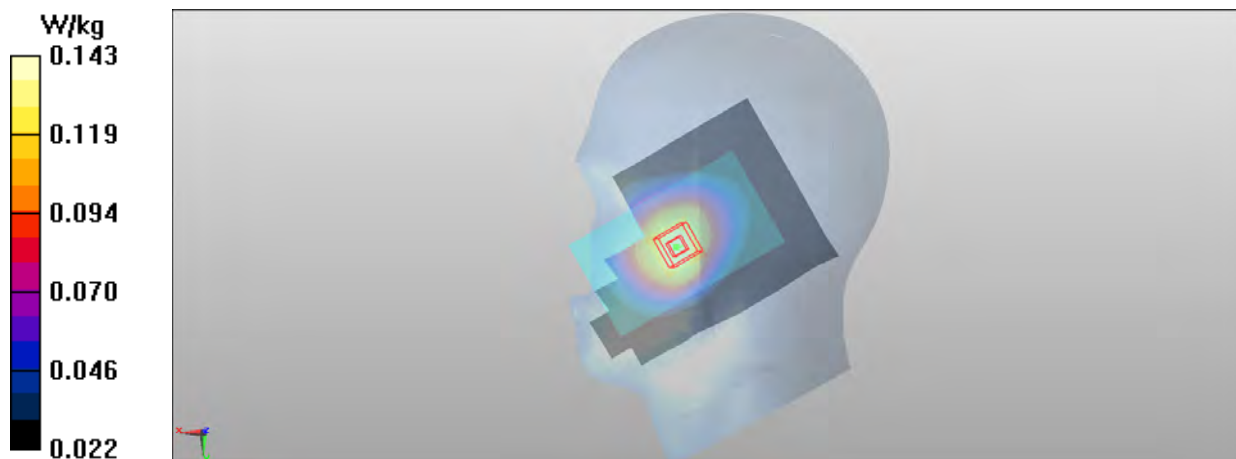
Peak SAR (extrapolated) = 0.167 mW/g

SAR(1 g) = 0.135 mW/g

SAR(10 g) = 0.103 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.143 W/kg



Date/Time: 2012-08-16 09:59:57

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.121 W/kg

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.370 V/m

Peak SAR (extrapolated) = 0.137 mW/g

SAR(1 g) = 0.113 mW/g

SAR(10 g) = 0.088 mW/g

Power Drift = 0.00 dB

Maximum value of SAR (measured) = 0.118 W/kg



Date/Time: 2012-08-15 13:47:01

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.212 W/kg

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.958 V/m

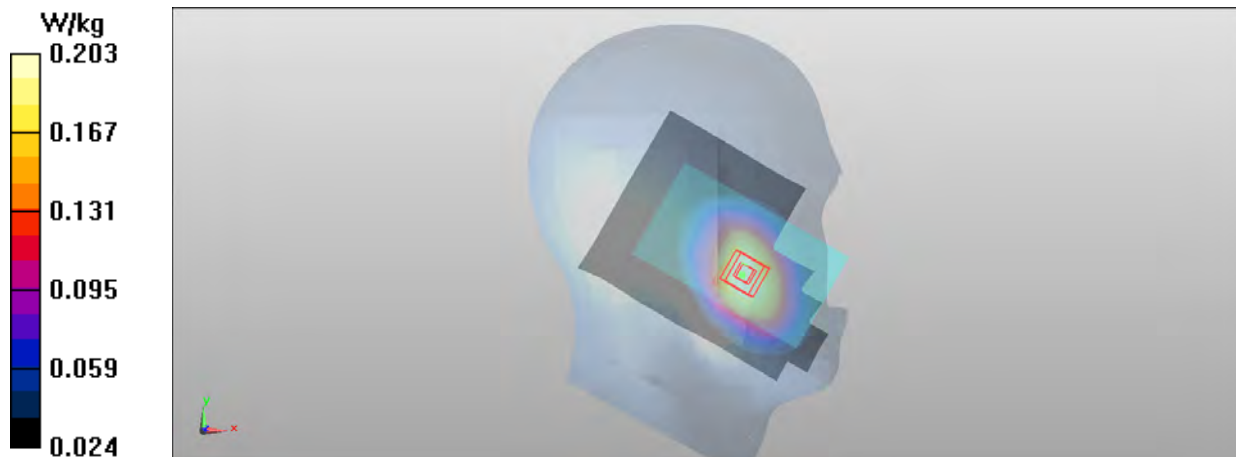
Peak SAR (extrapolated) = 0.250 mW/g

SAR(1 g) = 0.191 mW/g

SAR(10 g) = 0.144 mW/g

Power Drift = 0.14 dB

Maximum value of SAR (measured) = 0.203 W/kg



Date/Time: 2012-08-15 17:03:05

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.136 W/kg

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.427 V/m

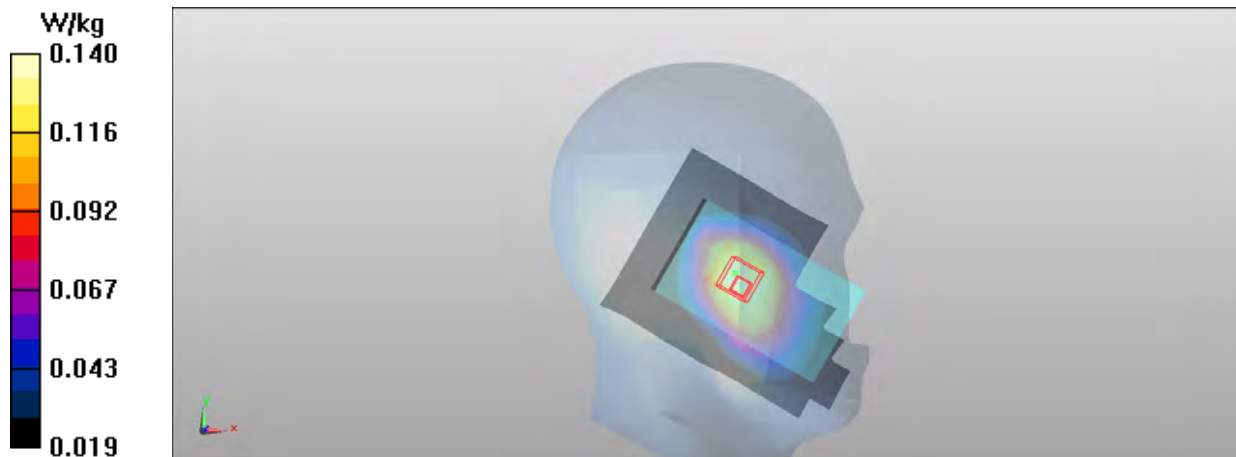
Peak SAR (extrapolated) = 0.167 mW/g

SAR(1 g) = 0.134 mW/g

SAR(10 g) = 0.101 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.140 W/kg



Date/Time: 2012-08-15 20:36:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.172 W/kg

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.768 V/m

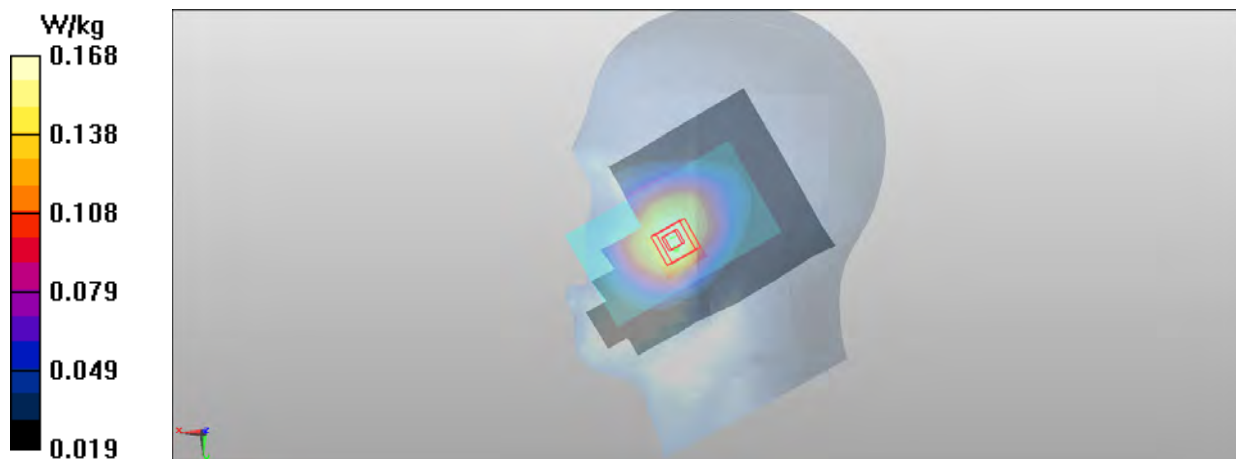
Peak SAR (extrapolated) = 0.204 mW/g

SAR(1 g) = 0.161 mW/g

SAR(10 g) = 0.120 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 0.168 W/kg



Date/Time: 2012-08-16 10:13:28

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.142 W/kg

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.156 V/m

Peak SAR (extrapolated) = 0.159 mW/g

SAR(1 g) = 0.130 mW/g

SAR(10 g) = 0.102 mW/g

Power Drift = 0.19 dB

Maximum value of SAR (measured) = 0.135 W/kg



Date/Time: 2012-08-15 14:01:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.205 W/kg

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.310 V/m

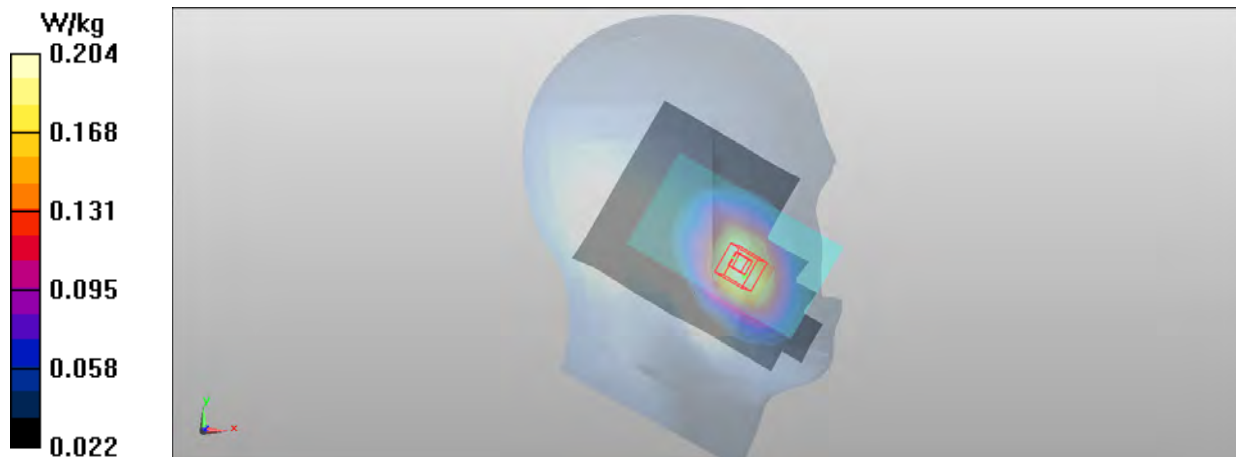
Peak SAR (extrapolated) = 0.268 mW/g

SAR(1 g) = 0.185 mW/g

SAR(10 g) = 0.135 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.204 W/kg



Date/Time: 2012-08-15 17:17:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.134 W/kg

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.930 V/m

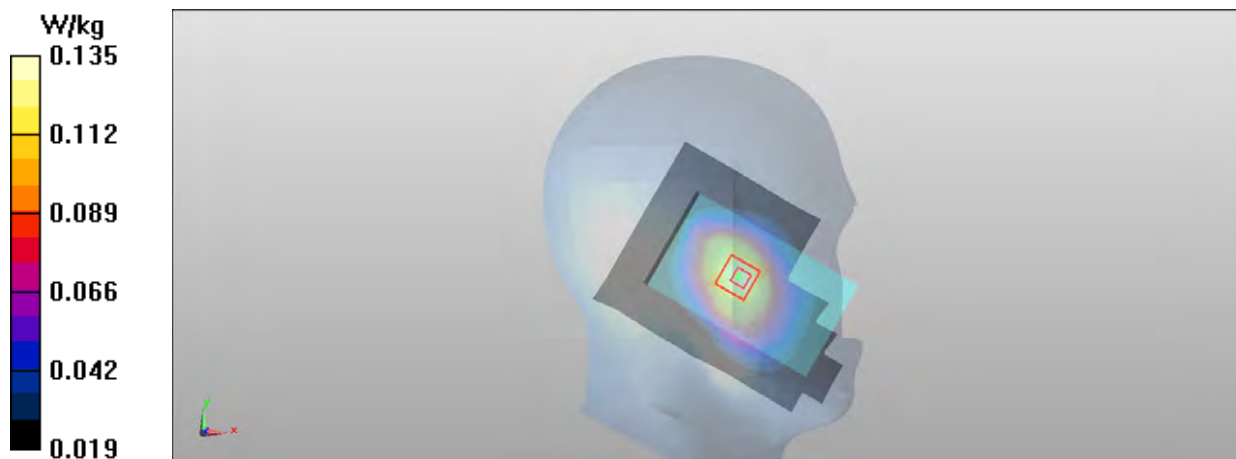
Peak SAR (extrapolated) = 0.161 mW/g

SAR(1 g) = 0.127 mW/g

SAR(10 g) = 0.095 mW/g

Power Drift = 0.36 dB

Maximum value of SAR (measured) = 0.135 W/kg



Date/Time: 2012-08-15 20:55:09

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.167 W/kg

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.652 V/m

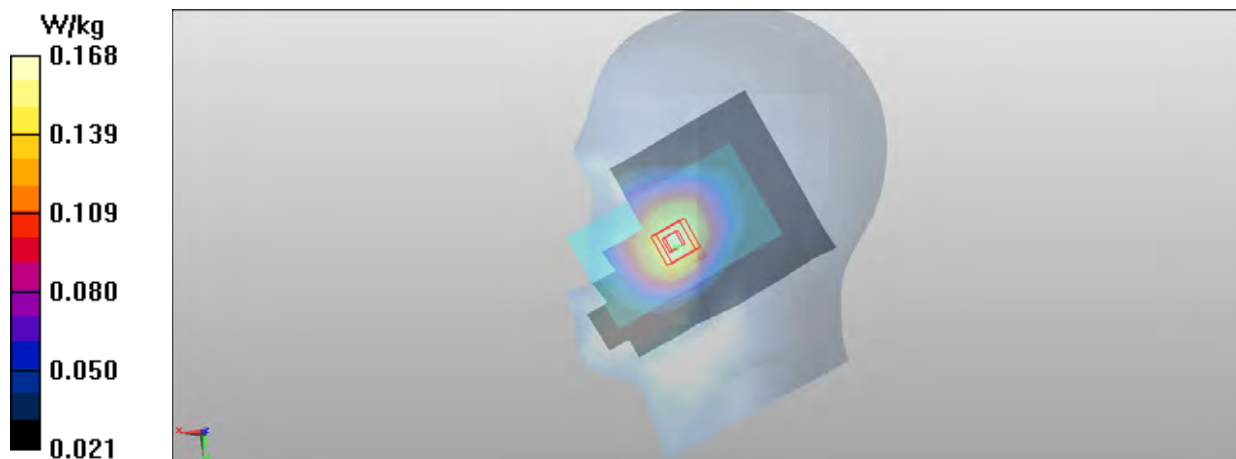
Peak SAR (extrapolated) = 0.203 mW/g

SAR(1 g) = 0.158 mW/g

SAR(10 g) = 0.119 mW/g

Power Drift = 0.20 dB

Maximum value of SAR (measured) = 0.168 W/kg



Date/Time: 2012-08-16 11:20:38

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.137 W/kg

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.815 V/m

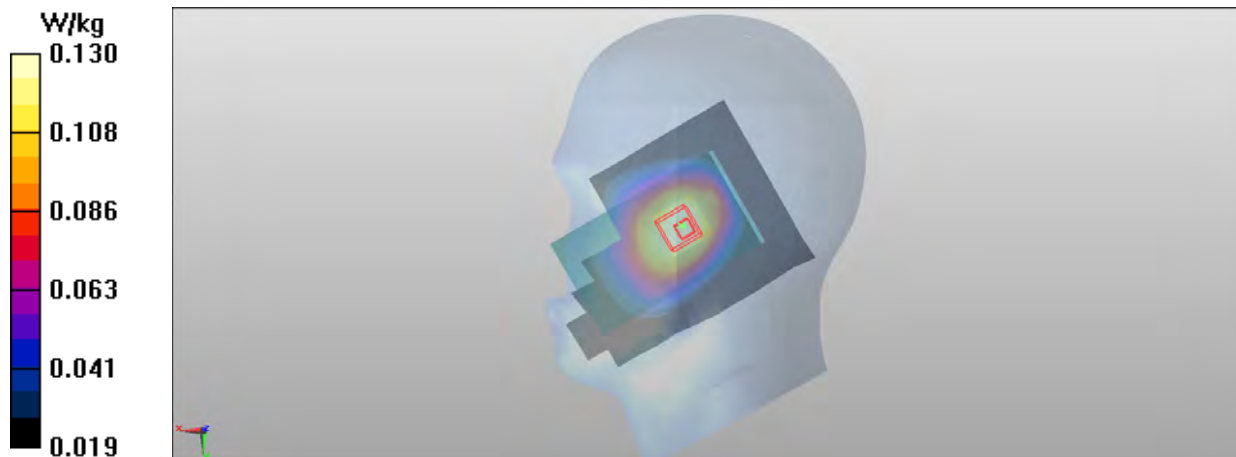
Peak SAR (extrapolated) = 0.164 mW/g

SAR(1 g) = 0.126 mW/g

SAR(10 g) = 0.098 mW/g

Power Drift = 0.34 dB

Maximum value of SAR (measured) = 0.130 W/kg



Date/Time: 2012-08-15 14:15:39

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.227 W/kg

LTE - Left/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 15.599 V/m

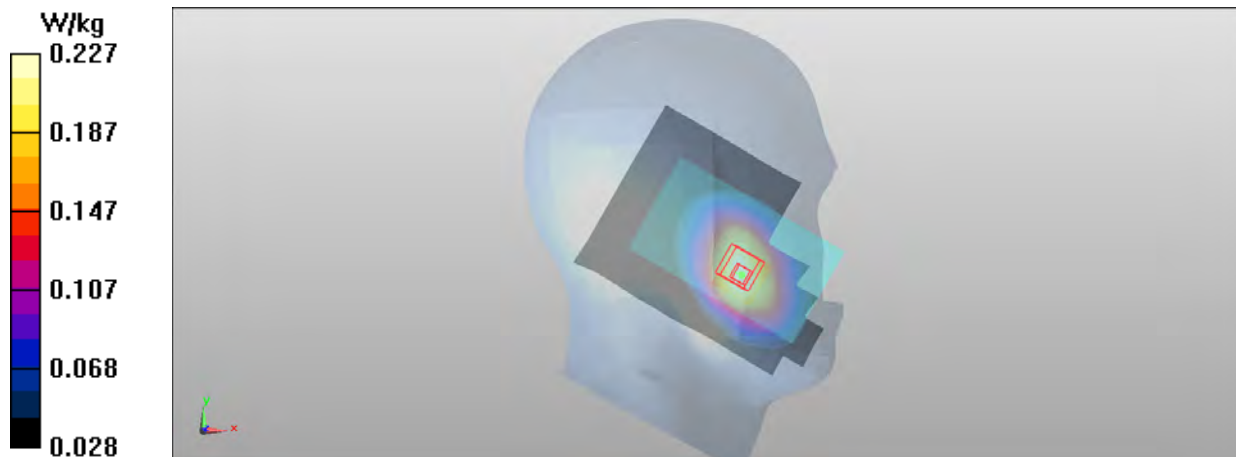
Peak SAR (extrapolated) = 0.279 mW/g

SAR(1 g) = 0.212 mW/g

SAR(10 g) = 0.159 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.227 W/kg



Date/Time: 2012-08-15 17:33:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.152 W/kg

LTE - Left/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.135 V/m

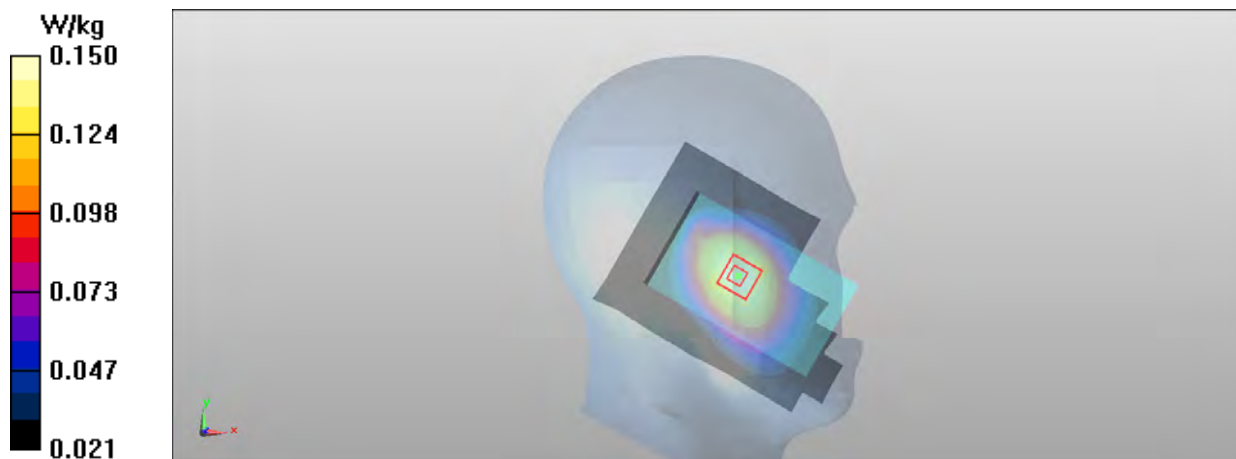
Peak SAR (extrapolated) = 0.171 mW/g

SAR(1 g) = 0.143 mW/g

SAR(10 g) = 0.112 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.150 W/kg



Date/Time: 2012-08-15 21:14:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.8$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.181 W/kg

LTE - Right/Cheek - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 14.571 V/m

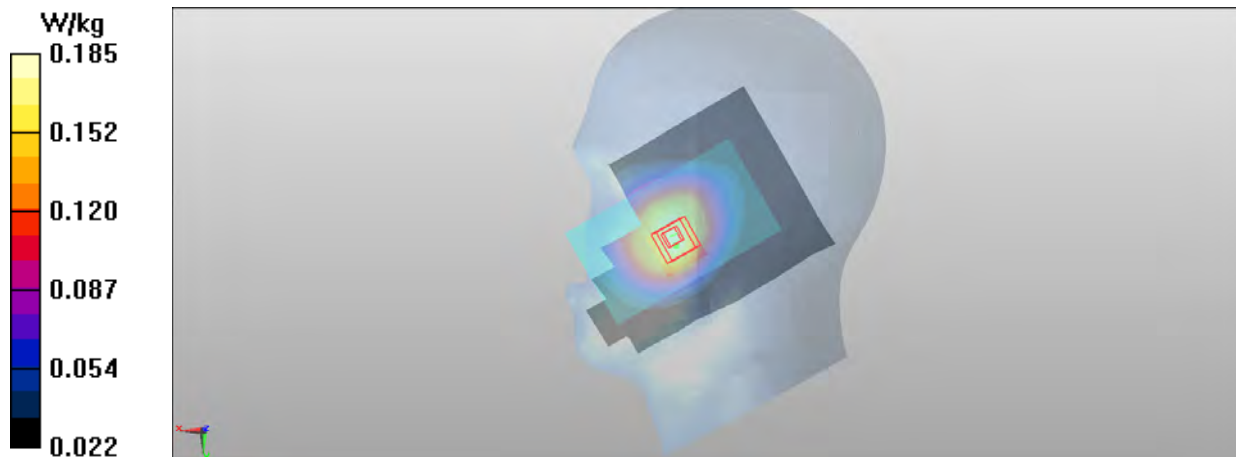
Peak SAR (extrapolated) = 0.222 mW/g

SAR(1 g) = 0.175 mW/g

SAR(10 g) = 0.131 mW/g

Power Drift = -0.10 dB

Maximum value of SAR (measured) = 0.185 W/kg



Date/Time: 2012-08-16 11:35:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.162 W/kg

LTE - Right/Tilt - Middle - 16QAM - 10MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.100 V/m

Peak SAR (extrapolated) = 0.212 mW/g

SAR(1 g) = 0.153 mW/g

SAR(10 g) = 0.116 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.158 W/kg



Date/Time: 2012-08-16 13:01:39

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850

Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL850; Medium Notes: $t = 21.5$ C

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 40.562$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3790
- ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset- Cover CC-3401/Area Scan (81x121x1): Interpolated
grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.286 W/kg

LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset- Cover CC-3401/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 17.169 V/m

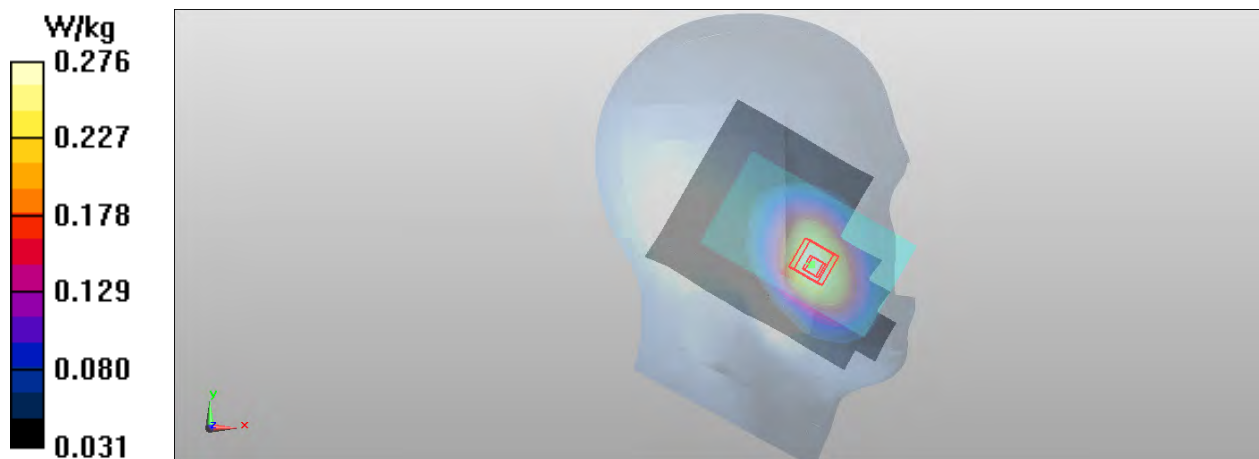
Peak SAR (extrapolated) = 0.339 mW/g

SAR(1 g) = 0.262 mW/g

SAR(10 g) = 0.196 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.276 W/kg



Date/Time: 2012-08-20 17:39:01

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100

Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used: f = 1753 MHz; σ = 1.359 mho/m; ϵ_r = 38.34; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial:

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

WCDMA - Left/Cheek - High/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.788 W/kg

WCDMA - Left/Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.141 V/m

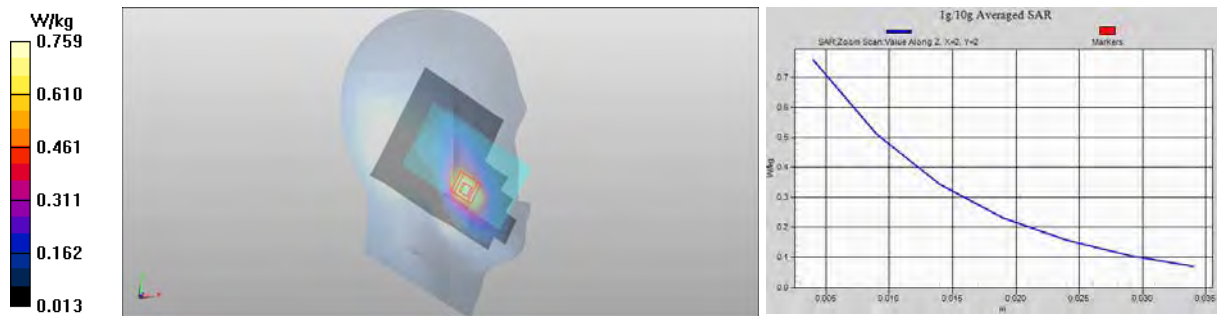
Peak SAR (extrapolated) = 1.055 mW/g

SAR(1 g) = 0.705 mW/g

SAR(10 g) = 0.441 mW/g

Power Drift = 0.19 dB

Maximum value of SAR (measured) = 0.759 W/kg



Date/Time: 2012-08-20 15:52:33

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100

Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used (interpolated): f = 1732.4 MHz; $\sigma = 1.337$ mho/m; $\epsilon_r = 38.422$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial:
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

WCDMA - Left/Tilt - Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.235 W/kg

WCDMA - Left/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.963 V/m

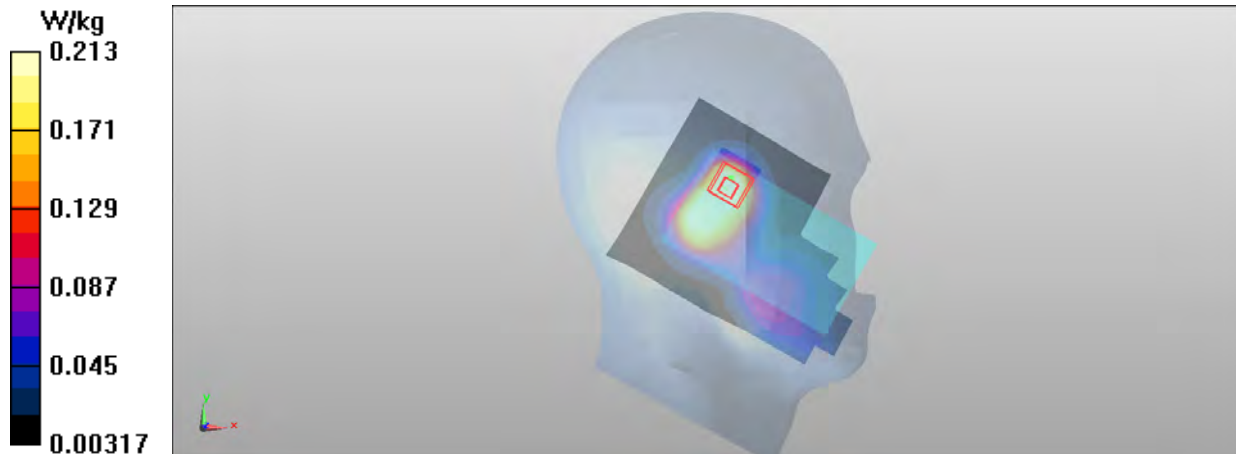
Peak SAR (extrapolated) = 0.302 mW/g

SAR(1 g) = 0.202 mW/g

SAR(10 g) = 0.125 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.213 W/kg



Date/Time: 2012-08-20 16:12:54

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100

Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.337 mho/m; ϵ_r = 38.422; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial:
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

WCDMA - Right/Cheek - Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.359 W/kg

WCDMA - Right/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.859 V/m

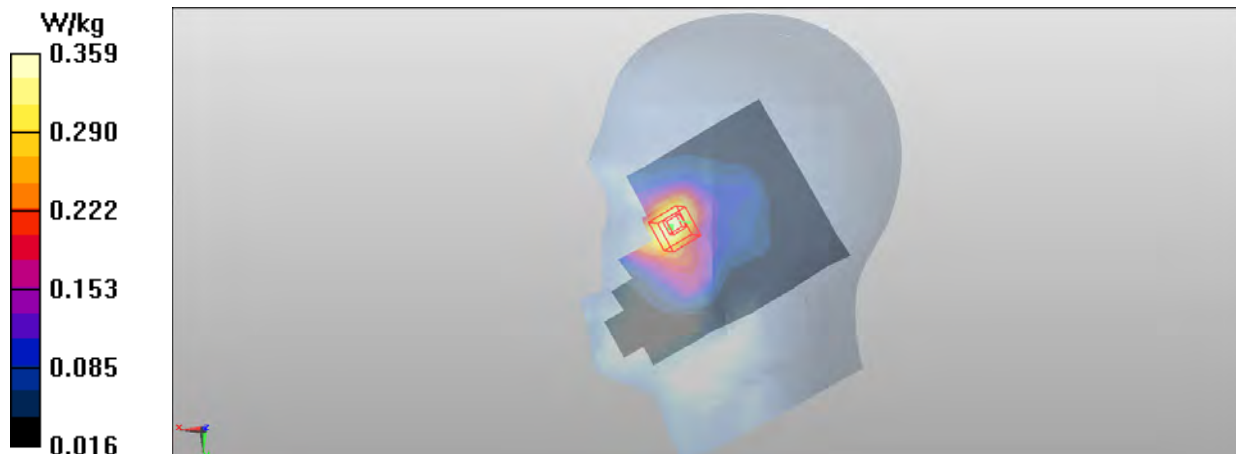
Peak SAR (extrapolated) = 0.478 mW/g

SAR(1 g) = 0.336 mW/g

SAR(10 g) = 0.221 mW/g

Power Drift = 0.19 dB

Maximum value of SAR (measured) = 0.359 W/kg



Date/Time: 2012-08-20 16:36:52

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100

Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.337 mho/m; ϵ_r = 38.422; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial:
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

WCDMA - Right/Tilt - Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.275 W/kg

WCDMA - Right/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.996 V/m

Peak SAR (extrapolated) = 0.360 mW/g

SAR(1 g) = 0.236 mW/g

SAR(10 g) = 0.145 mW/g

Power Drift = -0.16 dB

Maximum value of SAR (measured) = 0.256 W/kg



Date/Time: 2012-08-20 20:12:05

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100

Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used: f = 1753 MHz; σ = 1.359 mho/m; ϵ_r = 38.34; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial:
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

WCDMA - Left/Cheek - High - Cover CC-3401/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.770 W/kg

WCDMA - Left/Cheek - High - Cover CC-3401/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.656 V/m

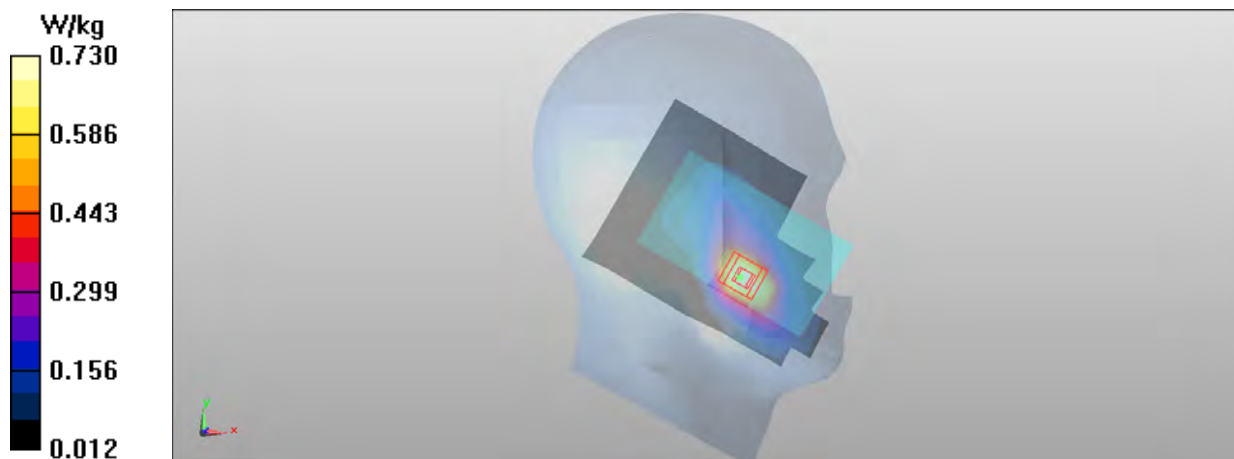
Peak SAR (extrapolated) = 1.020 mW/g

SAR(1 g) = 0.678 mW/g

SAR(10 g) = 0.423 mW/g

Power Drift = 0.13 dB

Maximum value of SAR (measured) = 0.730 W/kg



Date/Time: 2012-07-06 13:59:27

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.534 mW/g

LTE - Left/Cheek - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.141 V/m

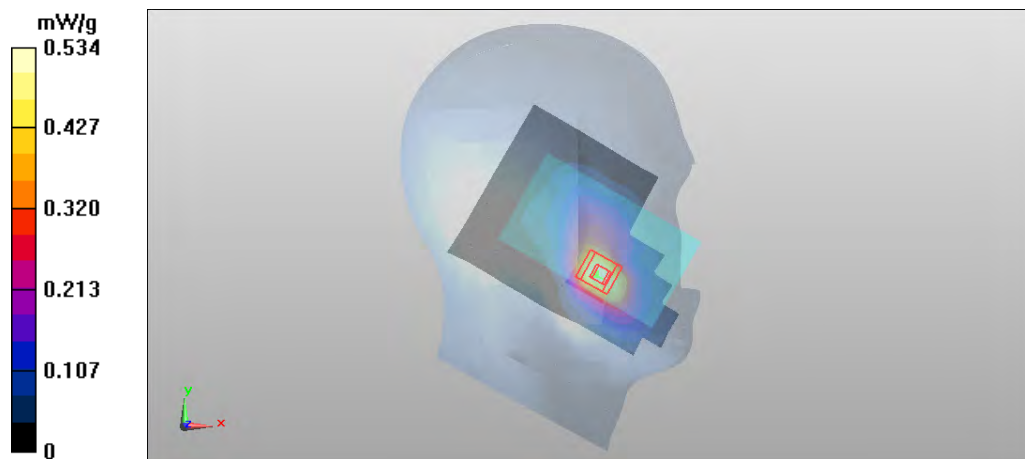
Peak SAR (extrapolated) = 0.699 mW/g

SAR(1 g) = 0.476 mW/g

SAR(10 g) = 0.303 mW/g

Power Drift = -0.08 dB

Maximum value of SAR (measured) = 0.506 mW/g



Date/Time: 2012-07-07 13:39:25

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 100RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.202 mW/g

LTE - Left/Tilt - Middle - QPSK - 20MHz - 100RB/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.145 V/m

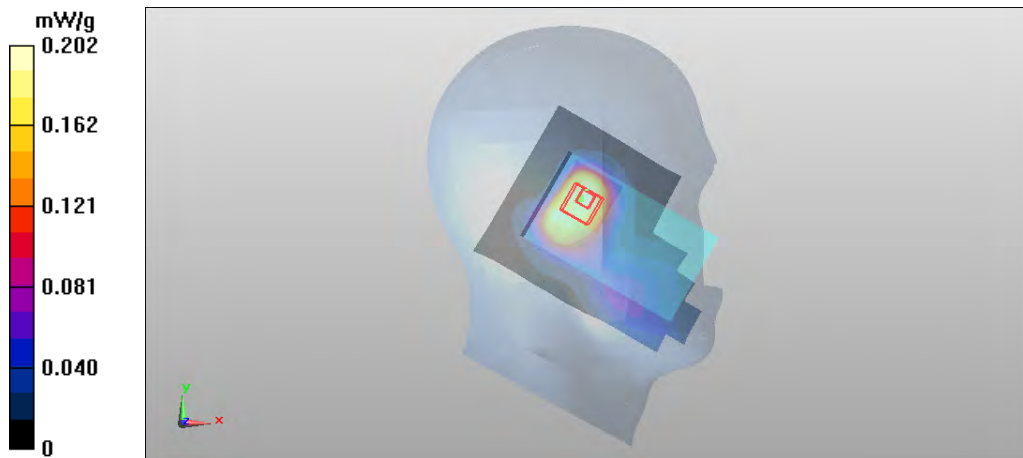
Peak SAR (extrapolated) = 0.255 mW/g

SAR(1 g) = 0.175 mW/g

SAR(10 g) = 0.117 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.184 mW/g



Date/Time: 2012-07-07 14:12:53

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.277 mW/g

LTE - Right/Cheek - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.392 V/m

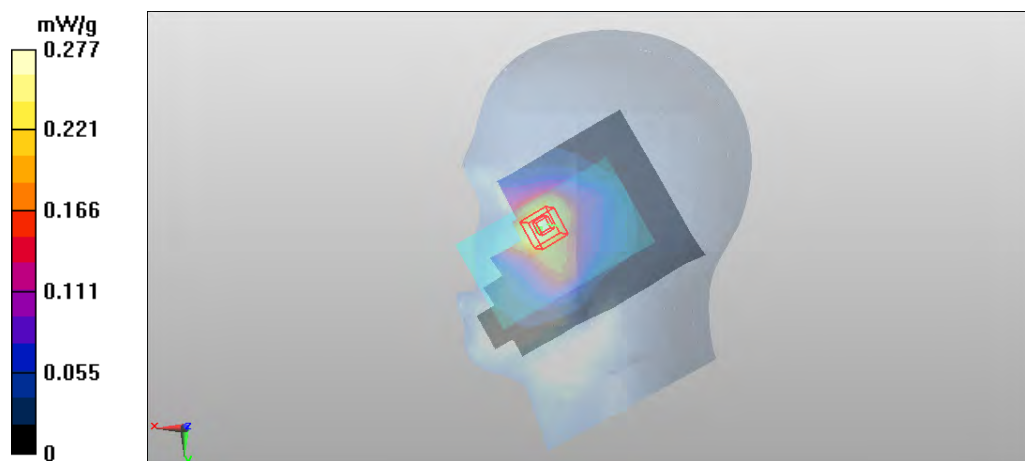
Peak SAR (extrapolated) = 0.379 mW/g

SAR(1 g) = 0.264 mW/g

SAR(10 g) = 0.174 mW/g

Power Drift = 0.42 dB

Maximum value of SAR (measured) = 0.281 mW/g



Date/Time: 2012-07-07 17:52:14

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.215 mW/g

LTE - Right/Tilt - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.872 V/m

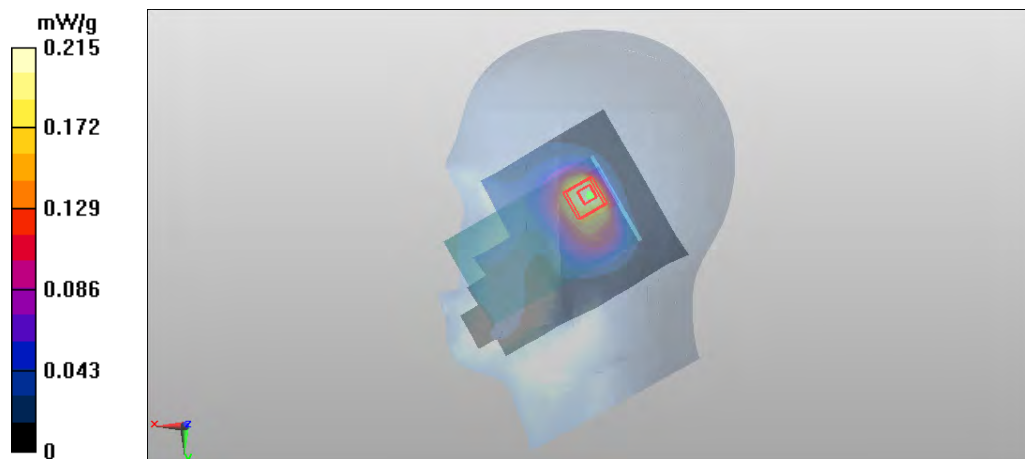
Peak SAR (extrapolated) = 0.277 mW/g

SAR(1 g) = 0.188 mW/g

SAR(10 g) = 0.121 mW/g

Power Drift = 0.24 dB

Maximum value of SAR (measured) = 0.201 mW/g



Date/Time: 2012-07-06 14:28:42

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 50RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.532 mW/g

LTE - Left/Cheek - Middle - QPSK - 20MHz - 50RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.024 V/m

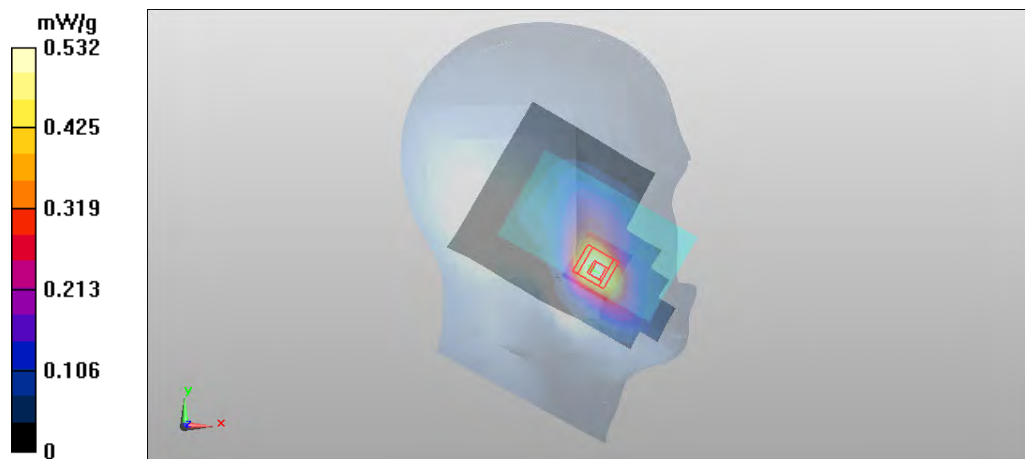
Peak SAR (extrapolated) = 0.714 mW/g

SAR(1 g) = 0.477 mW/g

SAR(10 g) = 0.303 mW/g

Power Drift = 0.29 dB

Maximum value of SAR (measured) = 0.518 mW/g



Date/Time: 2012-07-07 13:18:05

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 50RB - 50% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.209 mW/g

LTE - Left/Tilt - Middle - QPSK - 20MHz - 50RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.185 V/m

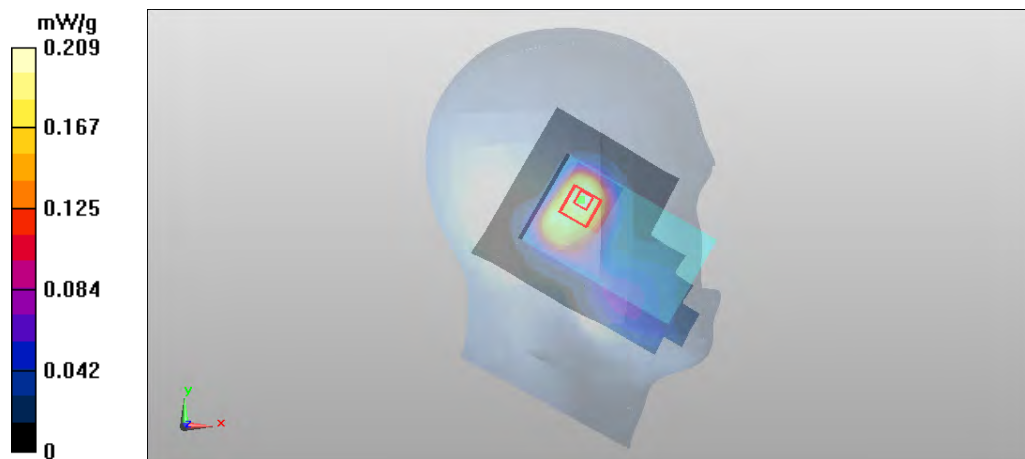
Peak SAR (extrapolated) = 0.262 mW/g

SAR(1 g) = 0.179 mW/g

SAR(10 g) = 0.120 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 0.191 mW/g



Date/Time: 2012-07-07 14:34:38

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.285 mW/g

LTE - Right/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement

grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.676 V/m

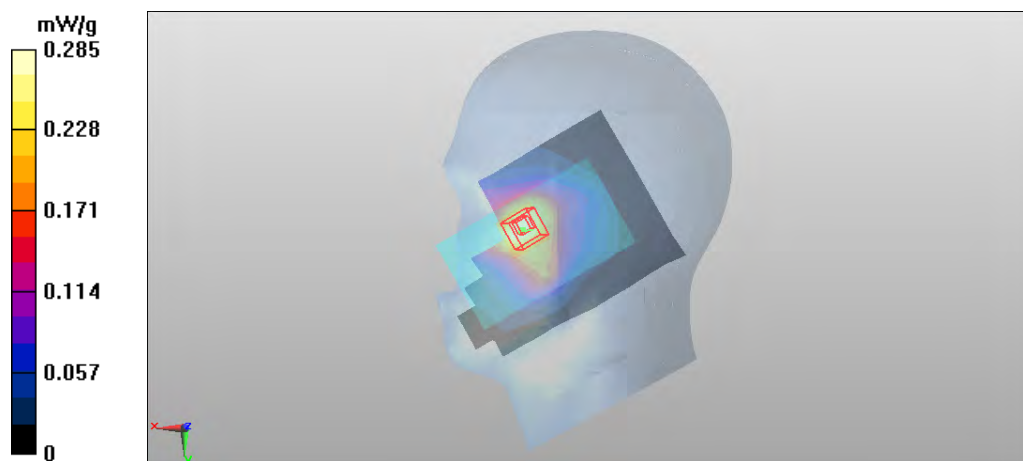
Peak SAR (extrapolated) = 0.379 mW/g

SAR(1 g) = 0.263 mW/g

SAR(10 g) = 0.175 mW/g

Power Drift = -0.06 dB

Maximum value of SAR (measured) = 0.274 mW/g



Date/Time: 2012-07-07 18:22:38

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.213 mW/g

LTE - Right/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.152 V/m

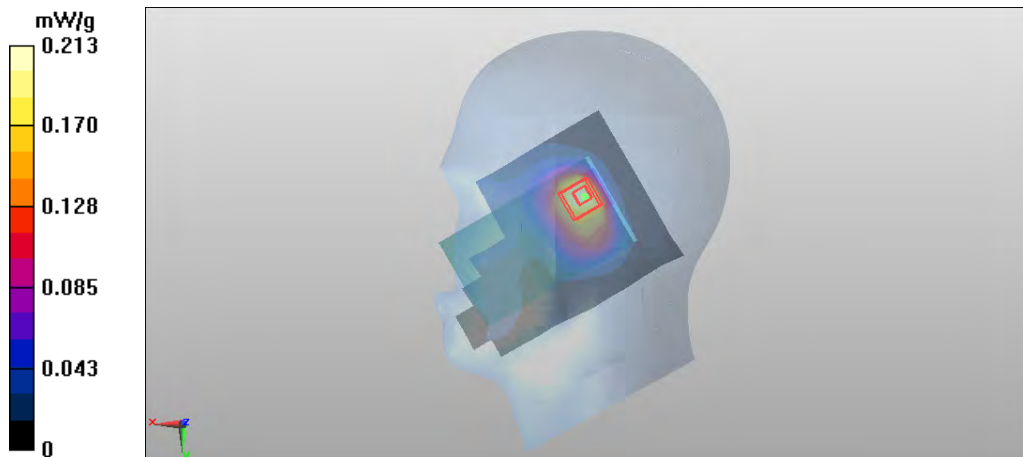
Peak SAR (extrapolated) = 0.283 mW/g

SAR(1 g) = 0.191 mW/g

SAR(10 g) = 0.121 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.206 mW/g



Date/Time: 2012-07-06 14:53:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.653 mW/g

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.581 V/m

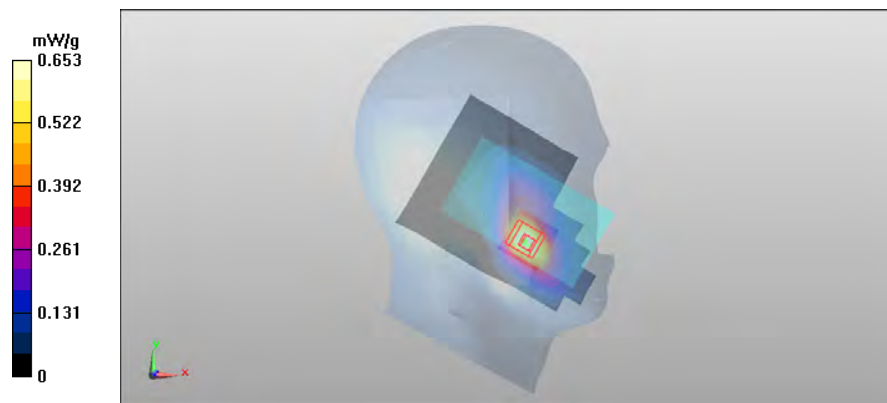
Peak SAR (extrapolated) = 0.854 mW/g

SAR(1 g) = 0.576 mW/g

SAR(10 g) = 0.367 mW/g

Power Drift = 0.22 dB

Maximum value of SAR (measured) = 0.619 mW/g



Date/Time: 2012-07-07 12:46:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.226 mW/g

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.048 V/m

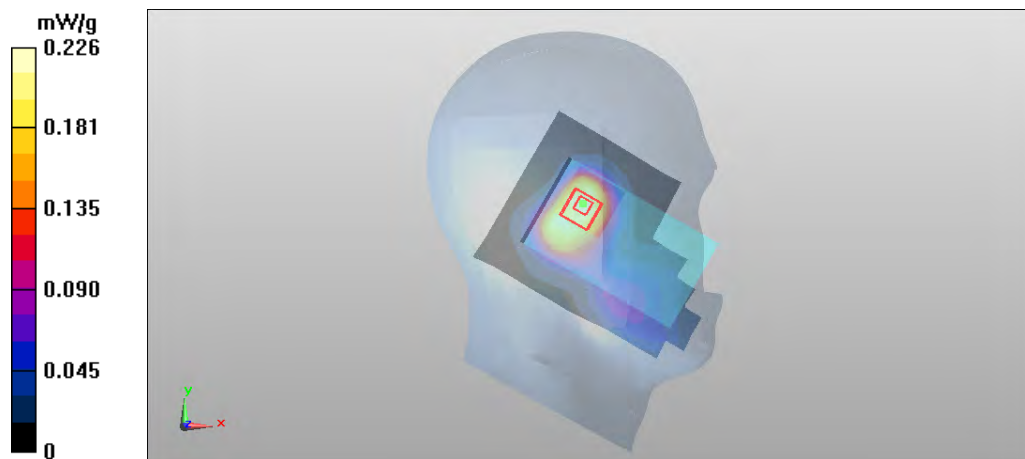
Peak SAR (extrapolated) = 0.286 mW/g

SAR(1 g) = 0.199 mW/g

SAR(10 g) = 0.135 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.212 mW/g



Date/Time: 2012-07-07 15:03:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.334 mW/g

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.460 V/m

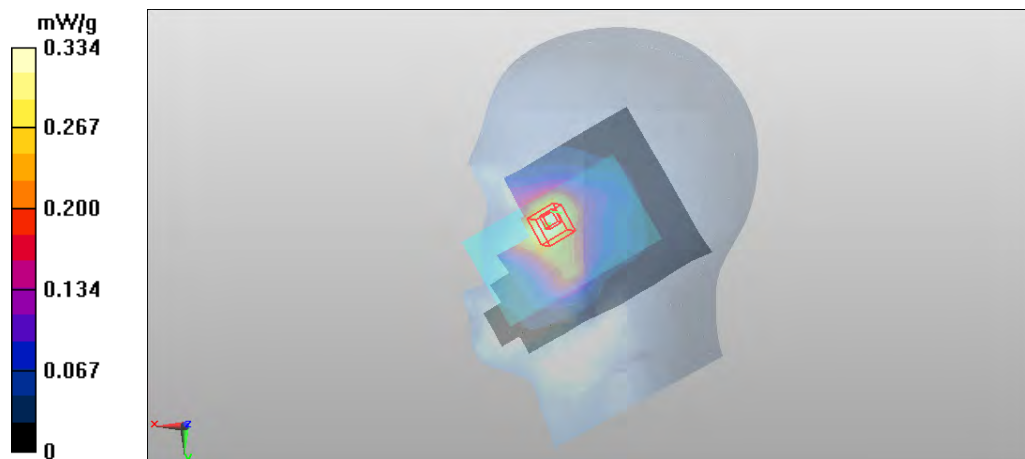
Peak SAR (extrapolated) = 0.443 mW/g

SAR(1 g) = 0.311 mW/g

SAR(10 g) = 0.207 mW/g

Power Drift = 0.09 dB

Maximum value of SAR (measured) = 0.327 mW/g



Date/Time: 2012-07-07 18:38:03

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.265 mW/g

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.200 V/m

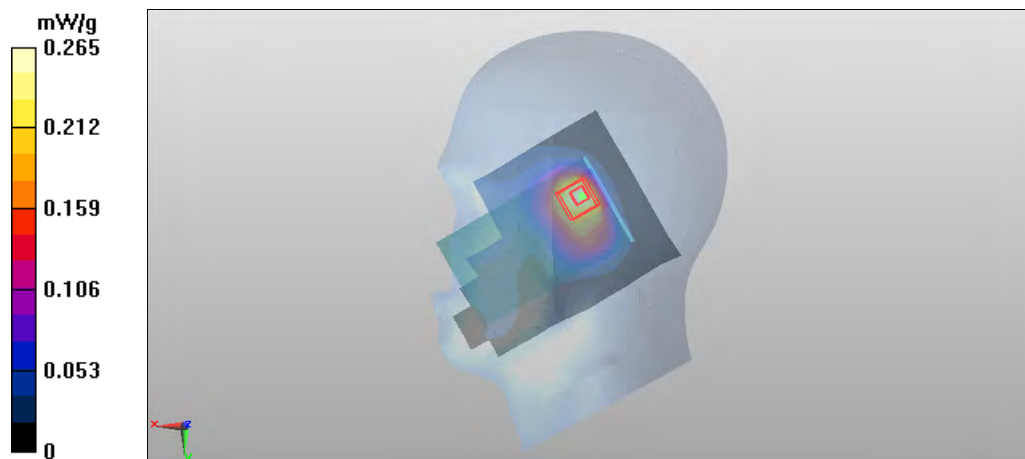
Peak SAR (extrapolated) = 0.340 mW/g

SAR(1 g) = 0.232 mW/g

SAR(10 g) = 0.148 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.249 mW/g



Date/Time: 2012-07-06 15:12:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.642 mW/g

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.569 V/m

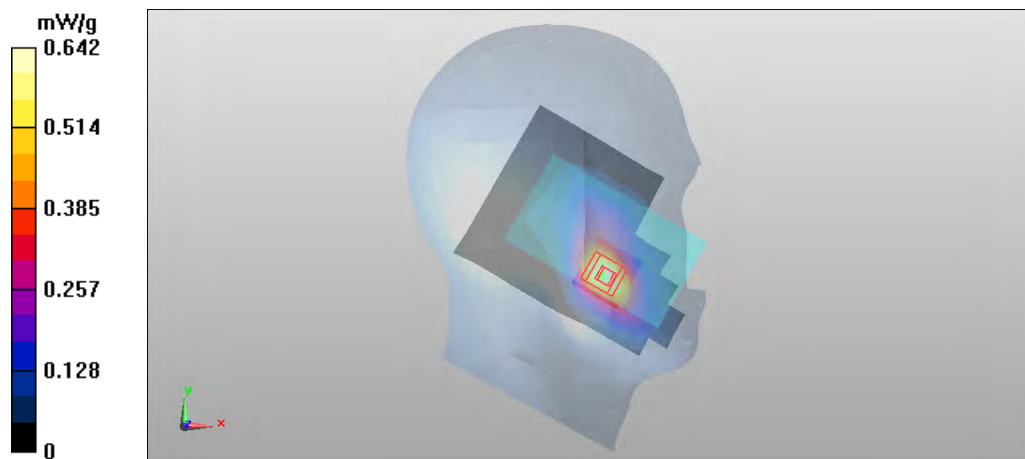
Peak SAR (extrapolated) = 0.838 mW/g

SAR(1 g) = 0.562 mW/g

SAR(10 g) = 0.356 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 0.606 mW/g



Date/Time: 2012-07-07 12:24:11

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.217 mW/g

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.199 V/m

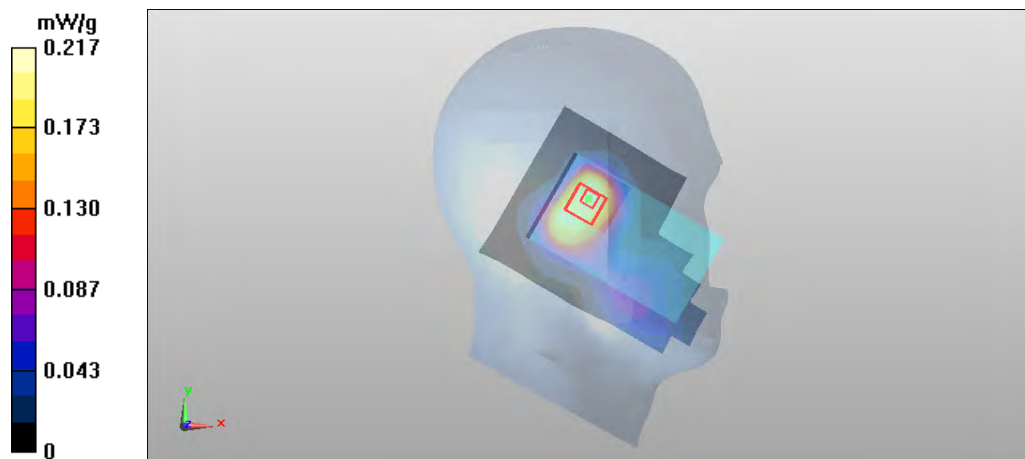
Peak SAR (extrapolated) = 0.275 mW/g

SAR(1 g) = 0.190 mW/g

SAR(10 g) = 0.128 mW/g

Power Drift = -0.13 dB

Maximum value of SAR (measured) = 0.204 mW/g



Date/Time: 2012-07-07 15:20:25

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.318 mW/g

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.167 V/m

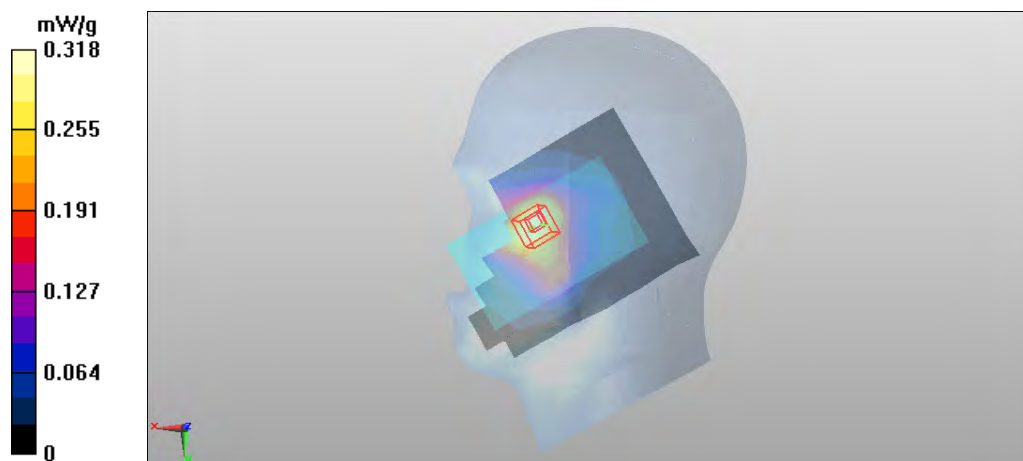
Peak SAR (extrapolated) = 0.434 mW/g

SAR(1 g) = 0.303 mW/g

SAR(10 g) = 0.199 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.319 mW/g



Date/Time: 2012-07-07 18:54:17

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.246 mW/g

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.949 V/m

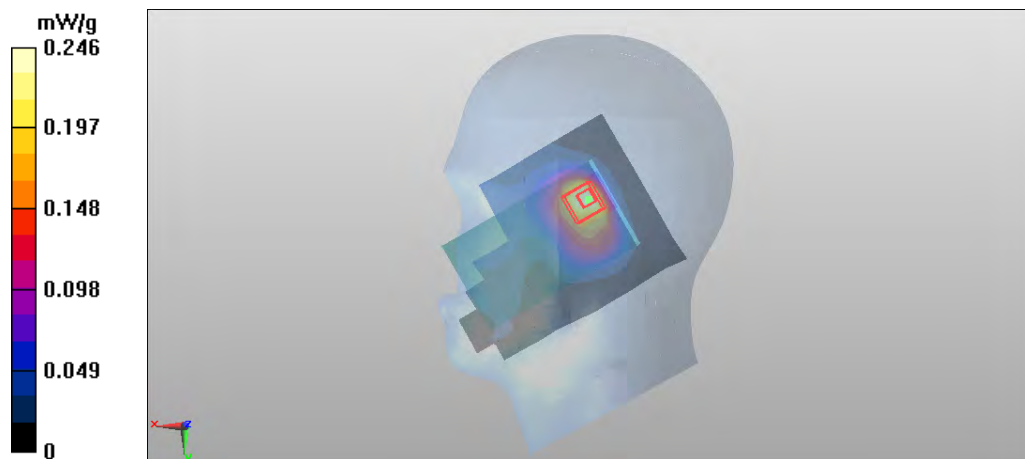
Peak SAR (extrapolated) = 0.322 mW/g

SAR(1 g) = 0.217 mW/g

SAR(10 g) = 0.137 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.234 mW/g



Date/Time: 2012-07-06 16:04:20

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.624 mW/g

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.611 V/m

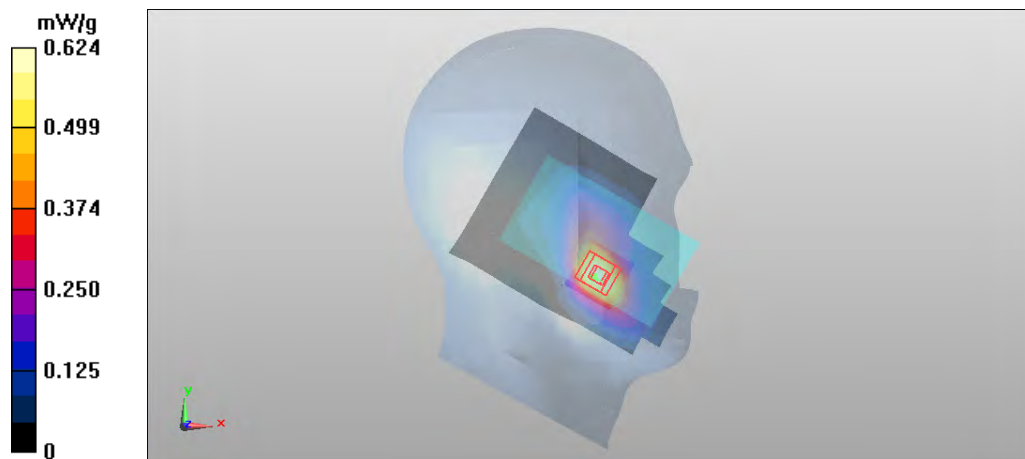
Peak SAR (extrapolated) = 0.812 mW/g

SAR(1 g) = 0.550 mW/g

SAR(10 g) = 0.354 mW/g

Power Drift = -0.02 dB

Maximum value of SAR (measured) = 0.587 mW/g



Date/Time: 2012-07-06 19:53:43

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.236 mW/g

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.876 V/m

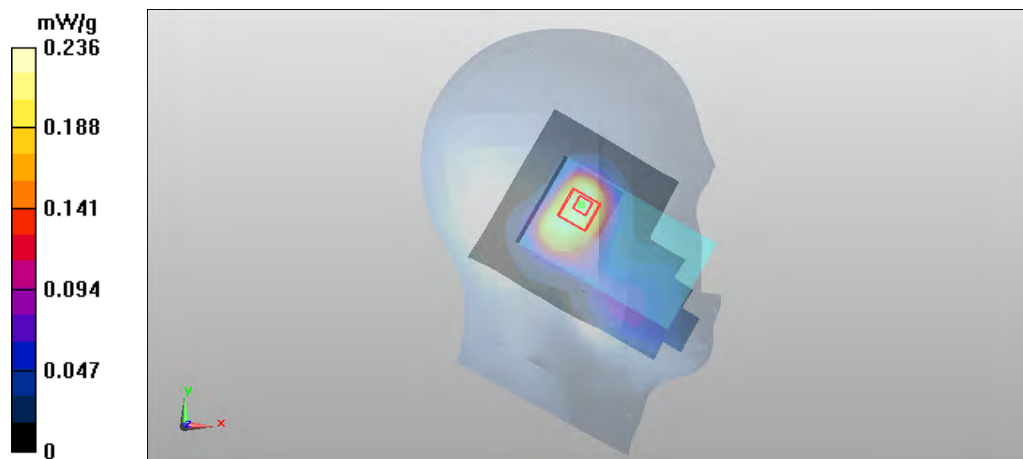
Peak SAR (extrapolated) = 0.294 mW/g

SAR(1 g) = 0.203 mW/g

SAR(10 g) = 0.138 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.217 mW/g



Date/Time: 2012-07-07 15:36:06

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.323 mW/g

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.256 V/m

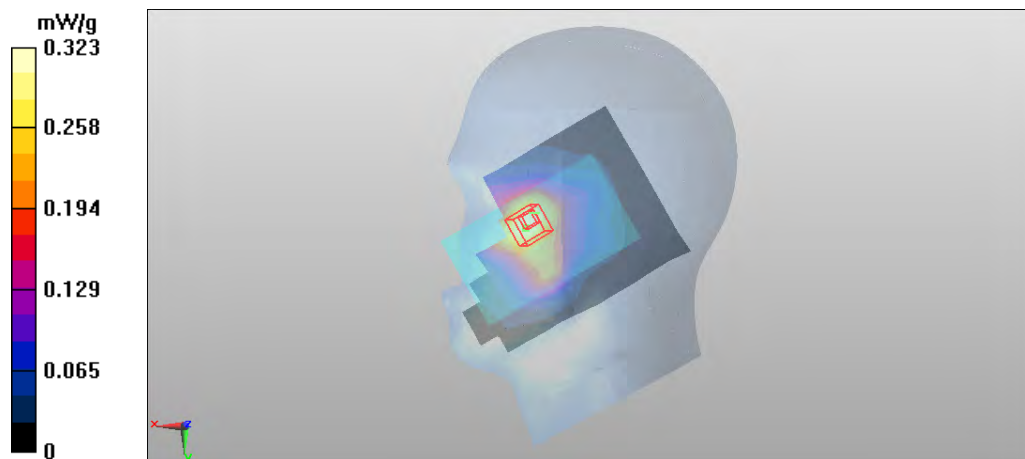
Peak SAR (extrapolated) = 0.438 mW/g

SAR(1 g) = 0.309 mW/g

SAR(10 g) = 0.204 mW/g

Power Drift = 0.13 dB

Maximum value of SAR (measured) = 0.325 mW/g



Date/Time: 2012-07-07 19:16:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.278 mW/g

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.552 V/m

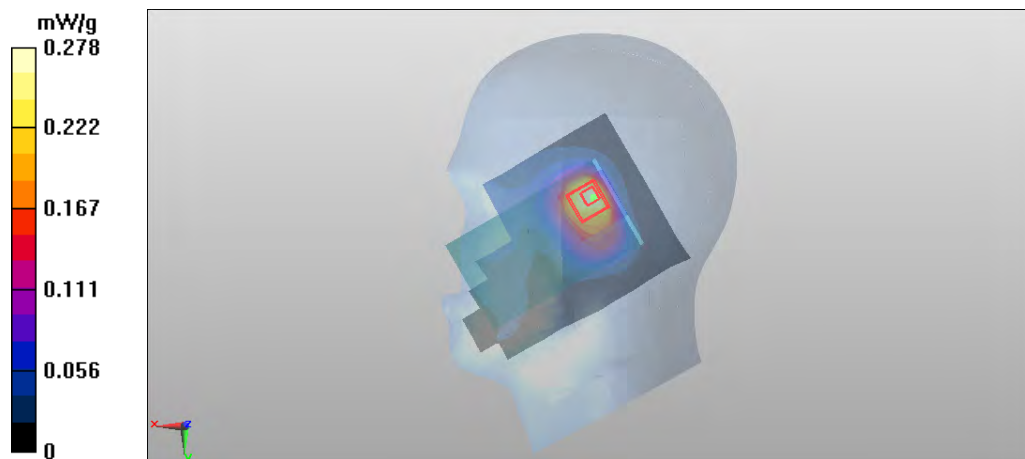
Peak SAR (extrapolated) = 0.360 mW/g

SAR(1 g) = 0.242 mW/g

SAR(10 g) = 0.154 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.259 mW/g



Date/Time: 2012-07-06 16:23:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.417 mW/g

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.372 V/m

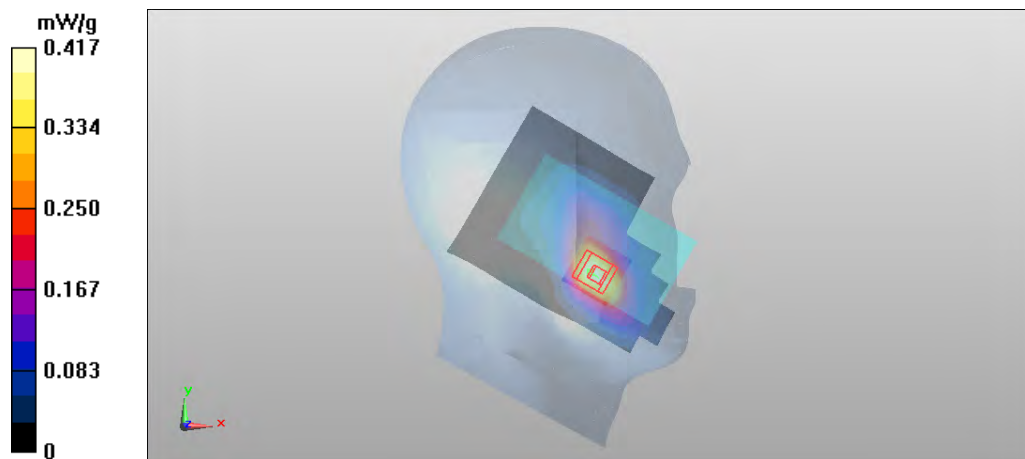
Peak SAR (extrapolated) = 0.547 mW/g

SAR(1 g) = 0.363 mW/g

SAR(10 g) = 0.231 mW/g

Power Drift = 0.34 dB

Maximum value of SAR (measured) = 0.398 mW/g



Date/Time: 2012-07-06 19:33:16

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 20MHz – 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.151 mW/g

LTE - Left/Tilt - Middle - 16QAM - 20MHz – 100% RB/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.886 V/m

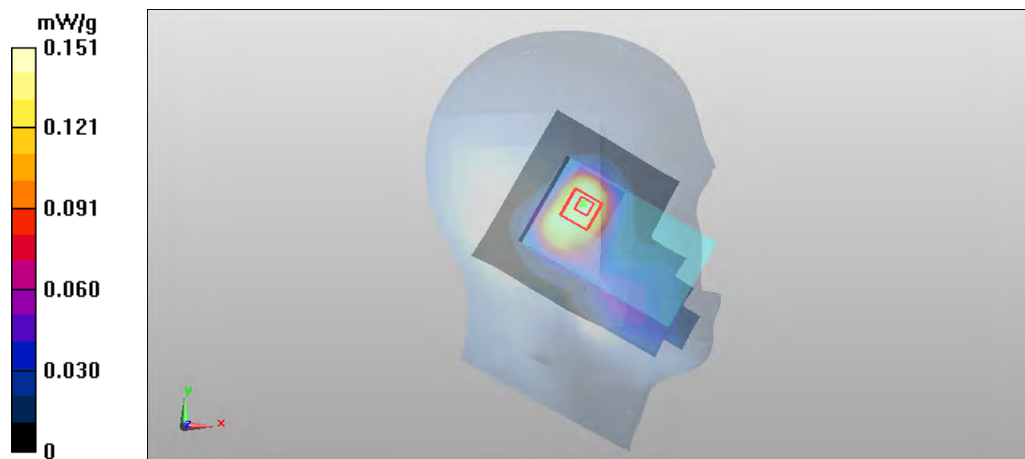
Peak SAR (extrapolated) = 0.189 mW/g

SAR(1 g) = 0.132 mW/g

SAR(10 g) = 0.089 mW/g

Power Drift = 0.29 dB

Maximum value of SAR (measured) = 0.141 mW/g



Date/Time: 2012-07-07 15:51:53

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.219 mW/g

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.082 V/m

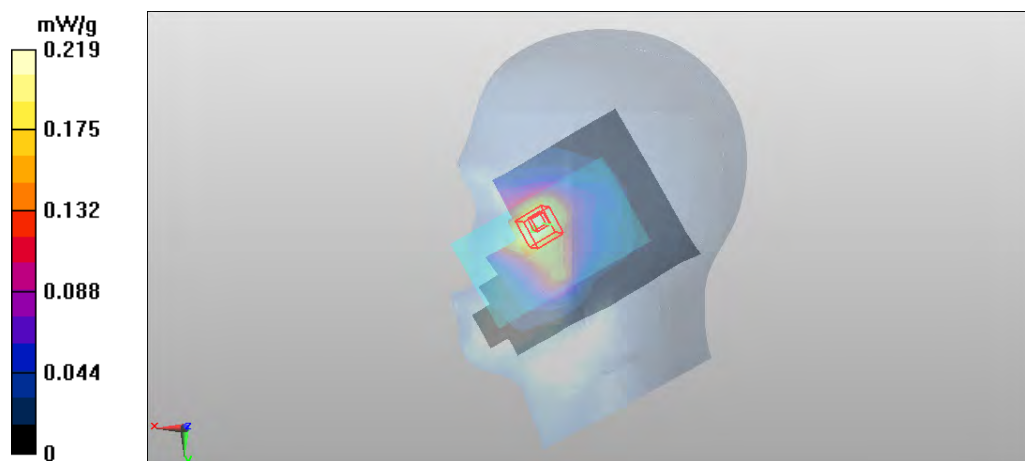
Peak SAR (extrapolated) = 0.294 mW/g

SAR(1 g) = 0.207 mW/g

SAR(10 g) = 0.137 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.217 mW/g



Date/Time: 2012-07-07 19:39:41

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.179 mW/g

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.426 V/m

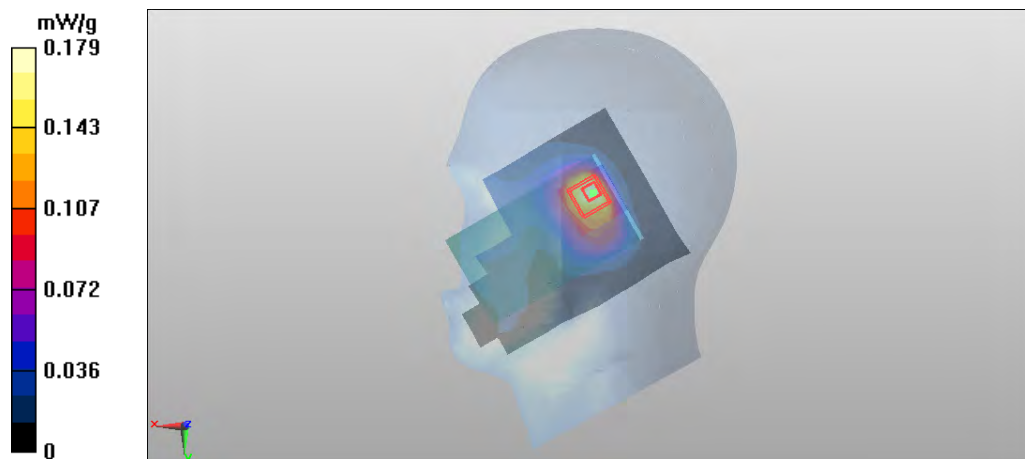
Peak SAR (extrapolated) = 0.235 mW/g

SAR(1 g) = 0.153 mW/g

SAR(10 g) = 0.097 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.164 mW/g



Date/Time: 2012-07-06 16:43:32

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 50RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.416 mW/g

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 50RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.393 V/m

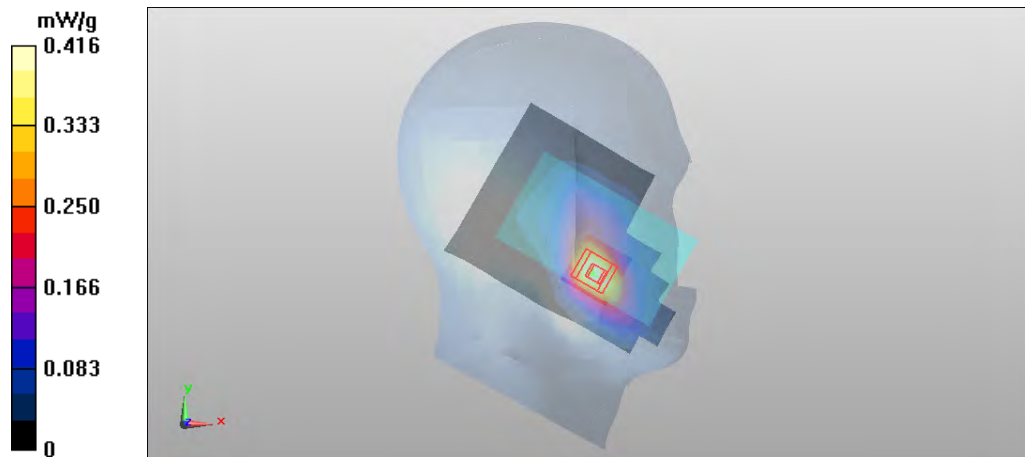
Peak SAR (extrapolated) = 0.544 mW/g

SAR(1 g) = 0.365 mW/g

SAR(10 g) = 0.233 mW/g

Power Drift = 0.34 dB

Maximum value of SAR (measured) = 0.396 mW/g



Date/Time: 2012-07-06 19:14:42

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 50RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.149 mW/g

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 50RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.873 V/m

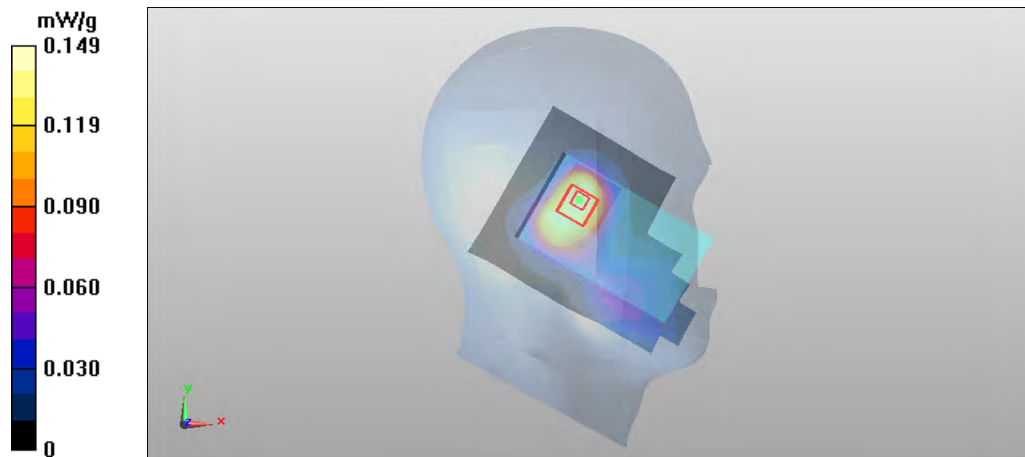
Peak SAR (extrapolated) = 0.190 mW/g

SAR(1 g) = 0.131 mW/g

SAR(10 g) = 0.089 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 0.140 mW/g



Date/Time: 2012-07-07 16:15:58

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.235 mW/g

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.795 V/m

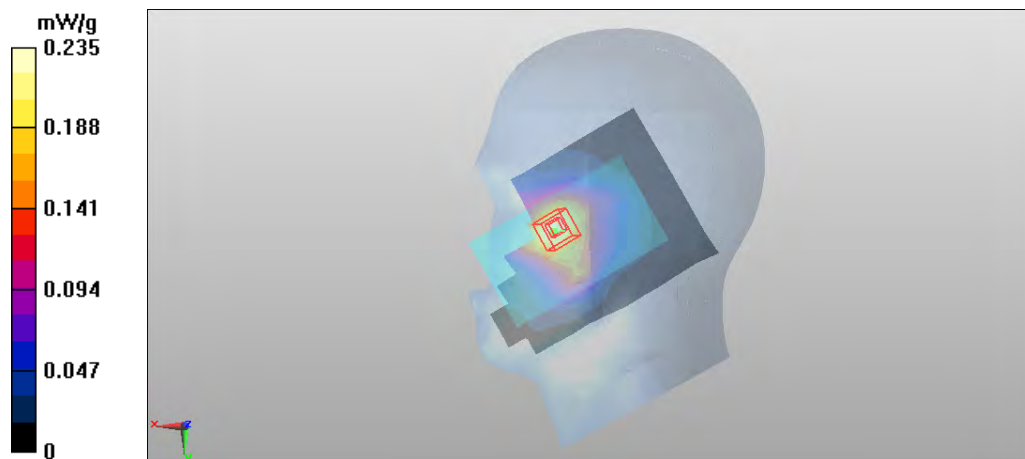
Peak SAR (extrapolated) = 0.311 mW/g

SAR(1 g) = 0.218 mW/g

SAR(10 g) = 0.144 mW/g

Power Drift = 0.21 dB

Maximum value of SAR (measured) = 0.231 mW/g



Date/Time: 2012-07-07 19:58:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.180 mW/g

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.572 V/m

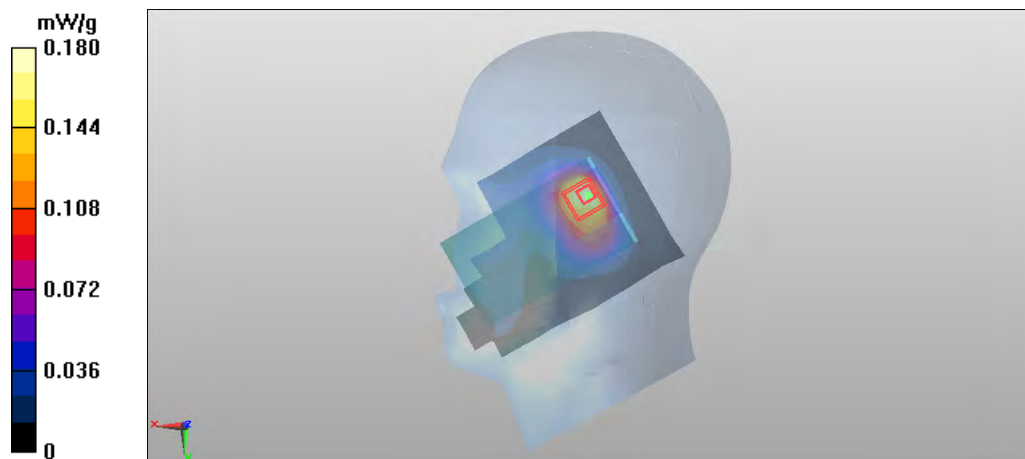
Peak SAR (extrapolated) = 0.232 mW/g

SAR(1 g) = 0.154 mW/g

SAR(10 g) = 0.098 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.165 mW/g



Date/Time: 2012-07-06 17:02:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.502 mW/g

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.974 V/m

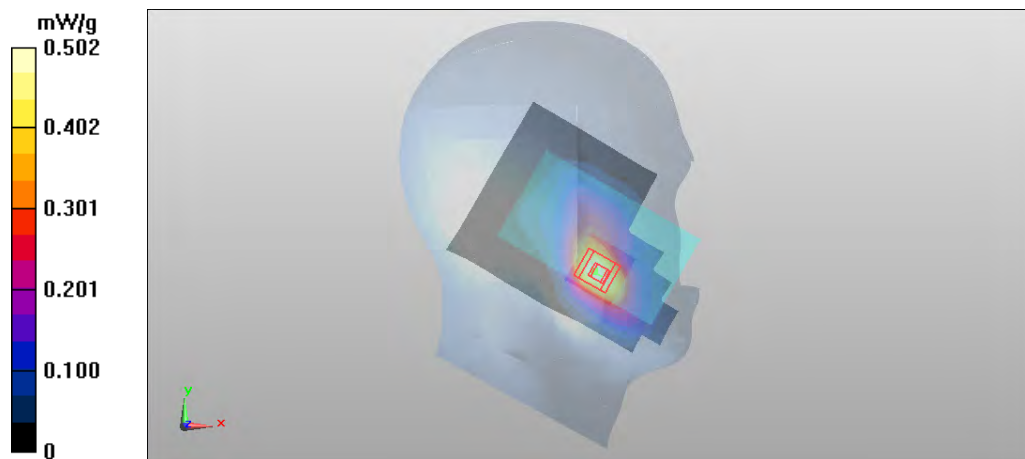
Peak SAR (extrapolated) = 0.697 mW/g

SAR(1 g) = 0.467 mW/g

SAR(10 g) = 0.299 mW/g

Power Drift = 0.17 dB

Maximum value of SAR (measured) = 0.510 mW/g



Date/Time: 2012-07-06 18:55:51

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.181 mW/g

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.749 V/m

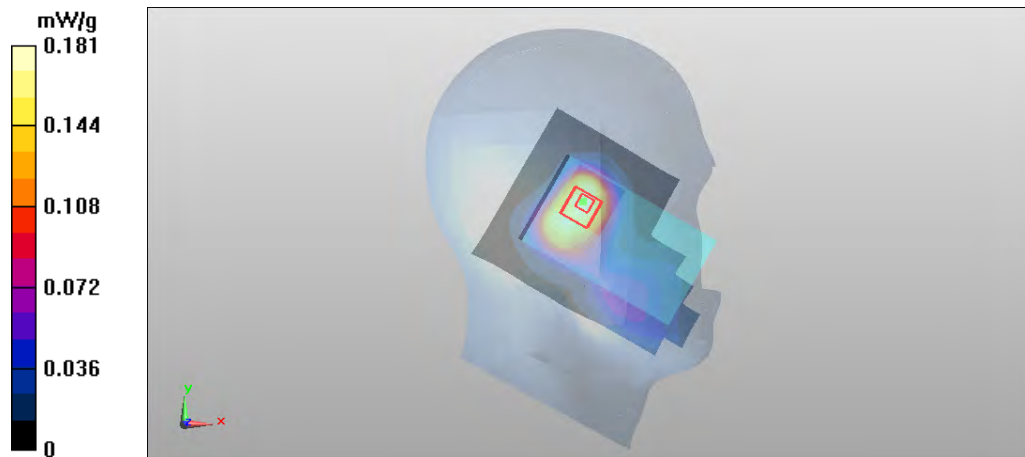
Peak SAR (extrapolated) = 0.231 mW/g

SAR(1 g) = 0.160 mW/g

SAR(10 g) = 0.108 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 0.171 mW/g



Date/Time: 2012-07-07 16:31:35

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.280 mW/g

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.241 V/m

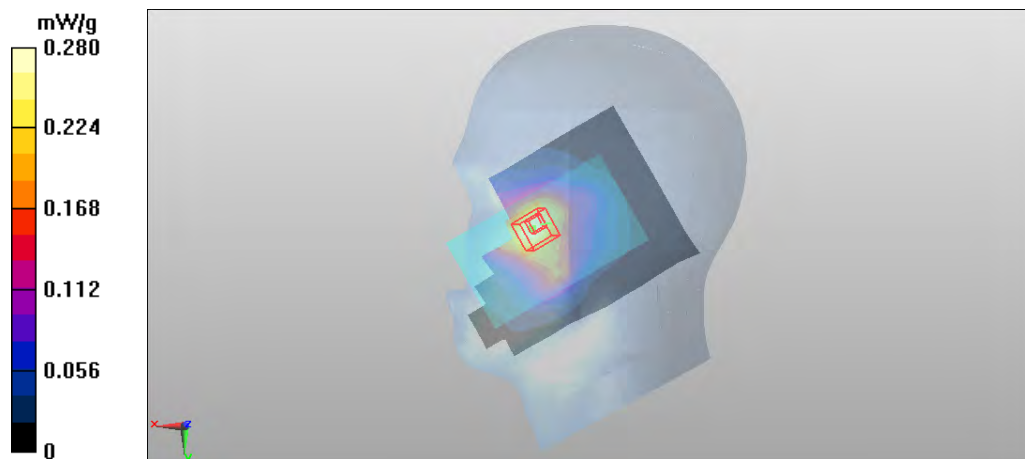
Peak SAR (extrapolated) = 0.390 mW/g

SAR(1 g) = 0.254 mW/g

SAR(10 g) = 0.168 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.269 mW/g



Date/Time: 2012-07-07 20:17:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.215 mW/g

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.487 V/m

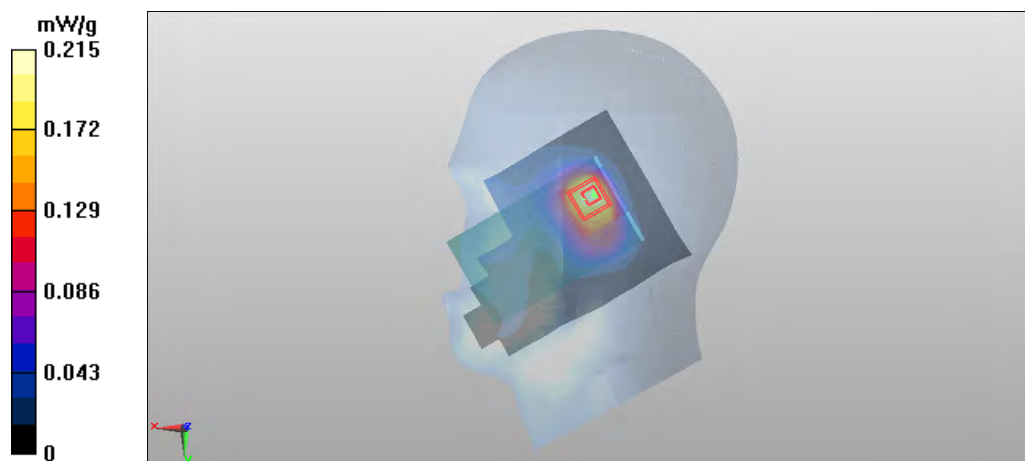
Peak SAR (extrapolated) = 0.244 mW/g

SAR(1 g) = 0.176 mW/g

SAR(10 g) = 0.115 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.185 mW/g



Date/Time: 2012-07-06 17:31:07

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB -100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.505 mW/g

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB -100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.695 V/m

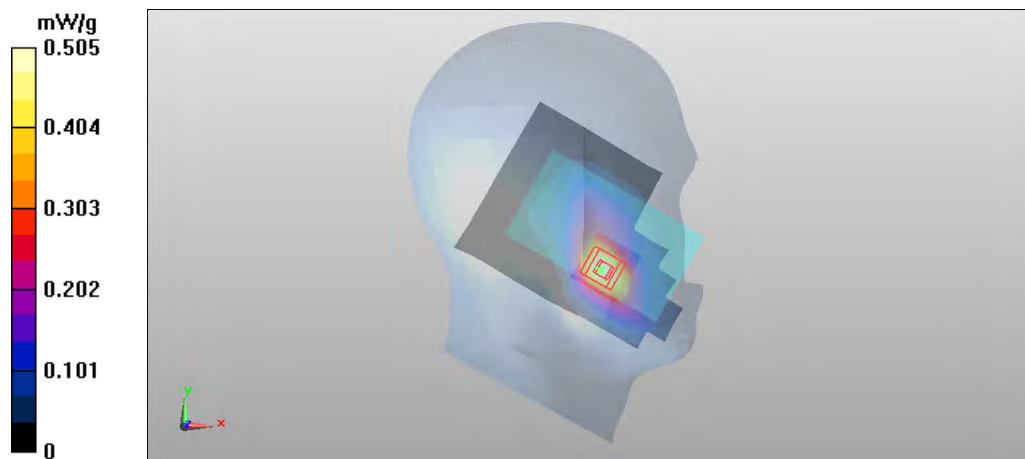
Peak SAR (extrapolated) = 0.655 mW/g

SAR(1 g) = 0.448 mW/g

SAR(10 g) = 0.285 mW/g

Power Drift = 0.27 dB

Maximum value of SAR (measured) = 0.486 mW/g



Date/Time: 2012-07-06 18:27:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.185 mW/g

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.871 V/m

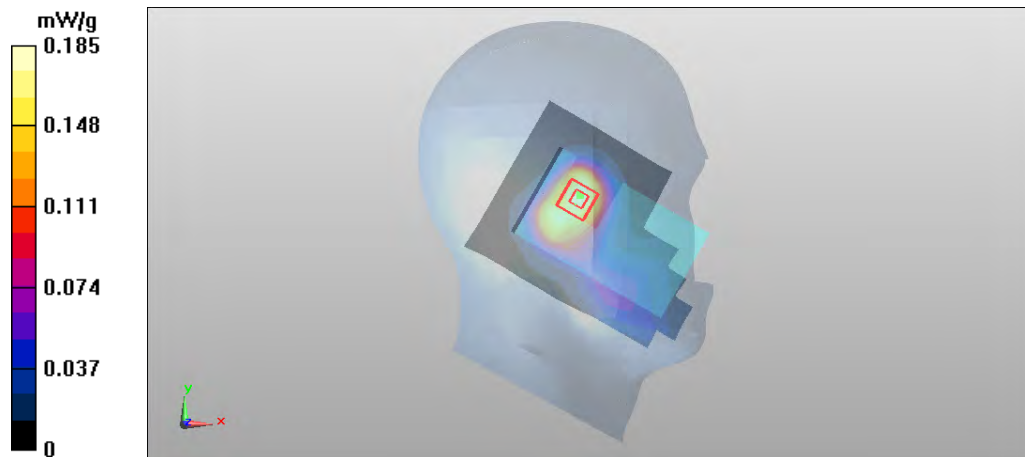
Peak SAR (extrapolated) = 0.237 mW/g

SAR(1 g) = 0.163 mW/g

SAR(10 g) = 0.109 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.175 mW/g



Date/Time: 2012-07-07 16:47:18

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.262 mW/g

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.991 V/m

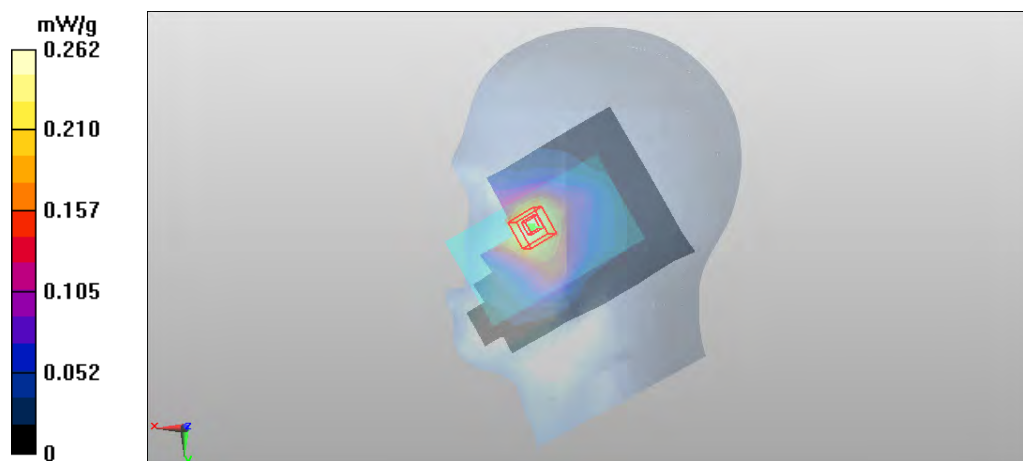
Peak SAR (extrapolated) = 0.389 mW/g

SAR(1 g) = 0.251 mW/g

SAR(10 g) = 0.163 mW/g

Power Drift = 0.20 dB

Maximum value of SAR (measured) = 0.264 mW/g



Date/Time: 2012-07-07 20:43:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1% RB - 100% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.196 mW/g

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1% RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.303 V/m

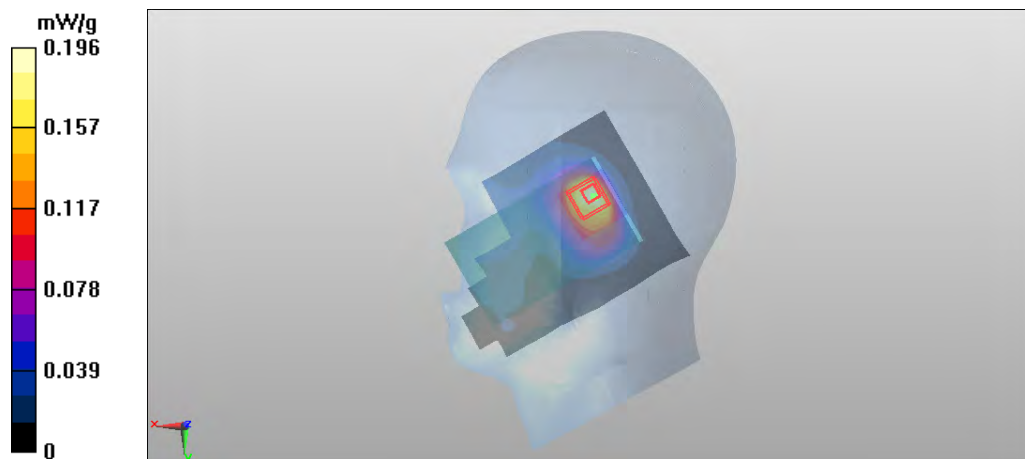
Peak SAR (extrapolated) = 0.260 mW/g

SAR(1 g) = 0.171 mW/g

SAR(10 g) = 0.107 mW/g

Power Drift = -0.10 dB

Maximum value of SAR (measured) = 0.182 mW/g



Date/Time: 2012-07-06 17:49:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.510 mW/g

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.658 V/m

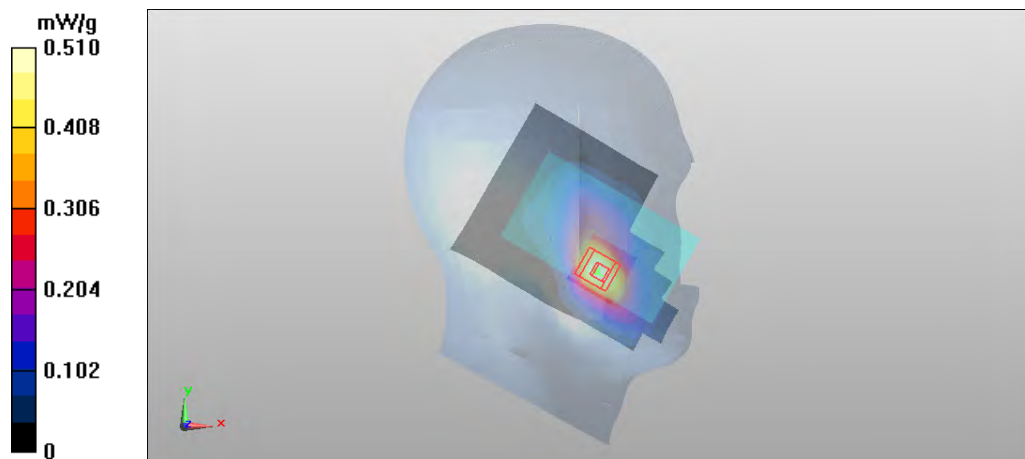
Peak SAR (extrapolated) = 0.651 mW/g

SAR(1 g) = 0.448 mW/g

SAR(10 g) = 0.290 mW/g

Power Drift = 0.42 dB

Maximum value of SAR (measured) = 0.500 mW/g



Date/Time: 2012-07-06 18:09:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.307 mho/m; ϵ_r = 39.274; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165

- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

- Phantom: SAM #1 CRP; Type: SAM; Serial: -

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.200 mW/g

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.892 V/m

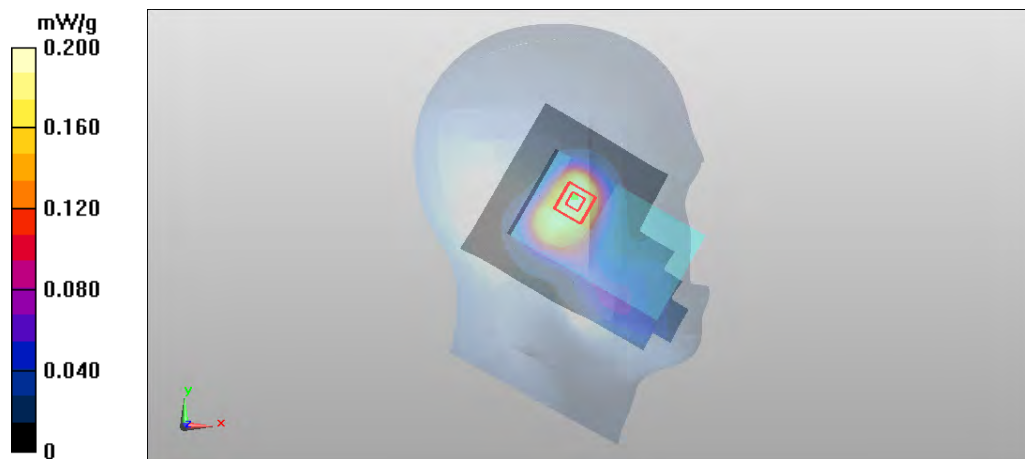
Peak SAR (extrapolated) = 0.248 mW/g

SAR(1 g) = 0.172 mW/g

SAR(10 g) = 0.116 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.182 mW/g



Date/Time: 2012-07-07 17:02:46

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.267 mW/g

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.951 V/m

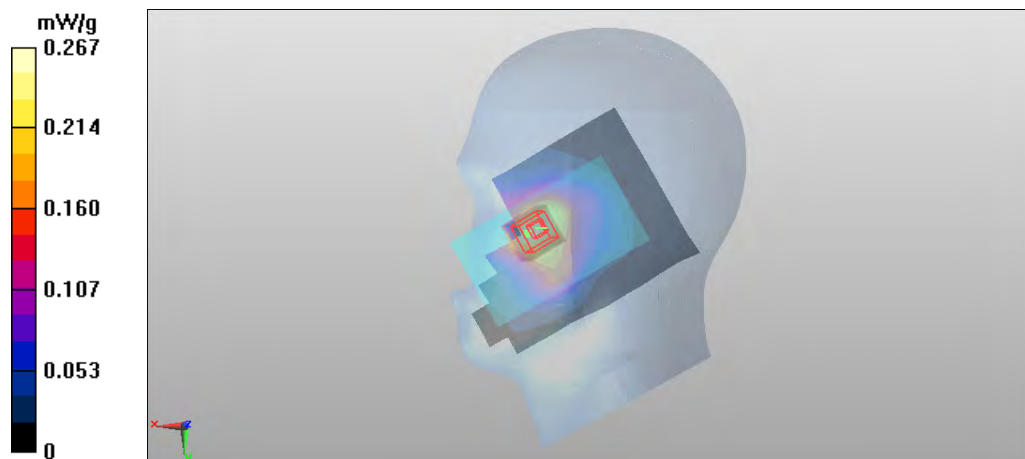
Peak SAR (extrapolated) = 0.356 mW/g

SAR(1 g) = 0.245 mW/g

SAR(10 g) = 0.159 mW/g

Power Drift = 0.33 dB

Maximum value of SAR (measured) = 0.277 mW/g



Date/Time: 2012-07-07 21:01:59

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.8 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.333 mho/m; ϵ_r = 39.04; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial: -
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.5 (6469)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.212 mW/g

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.843 V/m

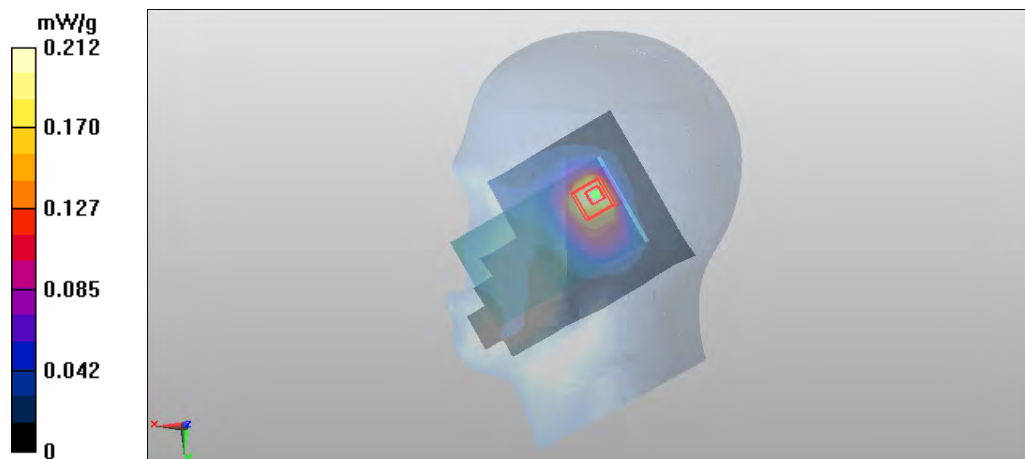
Peak SAR (extrapolated) = 0.272 mW/g

SAR(1 g) = 0.181 mW/g

SAR(10 g) = 0.115 mW/g

Power Drift = 0.42 dB

Maximum value of SAR (measured) = 0.196 mW/g



Date/Time: 2012-08-20 20:34:39

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1800; Medium Notes: t= 20.9 C

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.337 mho/m; ϵ_r = 38.422; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3165
- ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
- Phantom: SAM #1 CRP; Type: SAM; Serial:
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset - Cover CC-3401/Area Scan (81x121x1): Interpolated
grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.635 W/kg

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset - Cover CC-3401/Zoom Scan (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.300 V/m

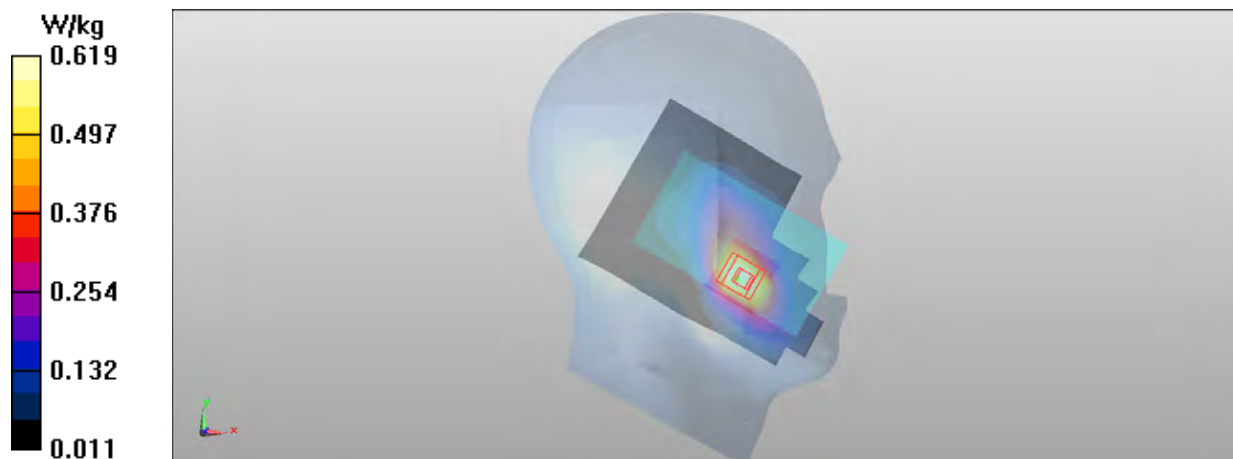
Peak SAR (extrapolated) = 0.861 mW/g

SAR(1 g) = 0.578 mW/g

SAR(10 g) = 0.365 mW/g

Power Drift = -0.36 dB

Maximum value of SAR (measured) = 0.619 W/kg



Date/Time: 2012-07-06 13:31:57

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: GSM1900

Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium Notes: t= 21.2 C

Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; ϵ_r = 38.85; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

GSM - Left/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.626 mW/g

GSM - Left/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.951 V/m

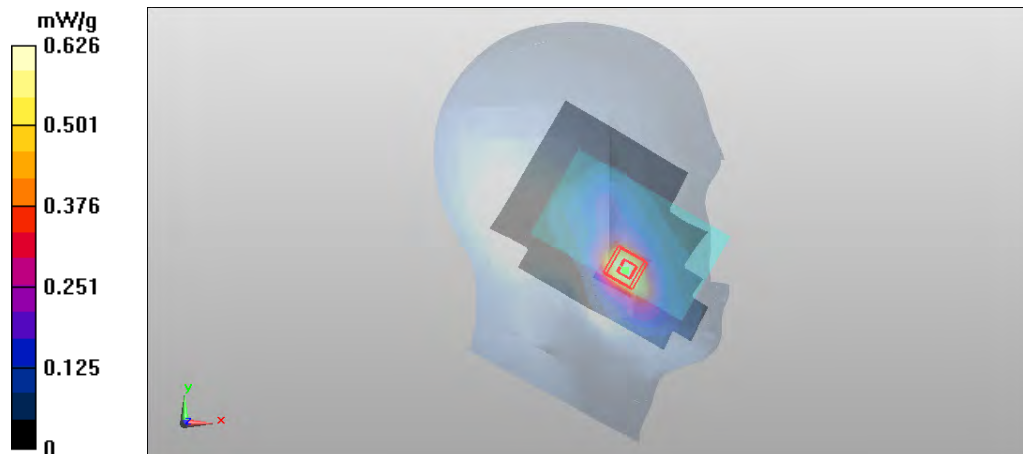
Peak SAR (extrapolated) = 0.803 mW/g

SAR(1 g) = 0.530 mW/g

SAR(10 g) = 0.330 mW/g

Power Drift = -0.01 dB

Maximum value of SAR (measured) = 0.570 mW/g



Date/Time: 2012-07-06 14:19:58

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Left/Cheek - Middle/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 1.12 mW/g

2-slot GPRS - Left/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 8.209 V/m

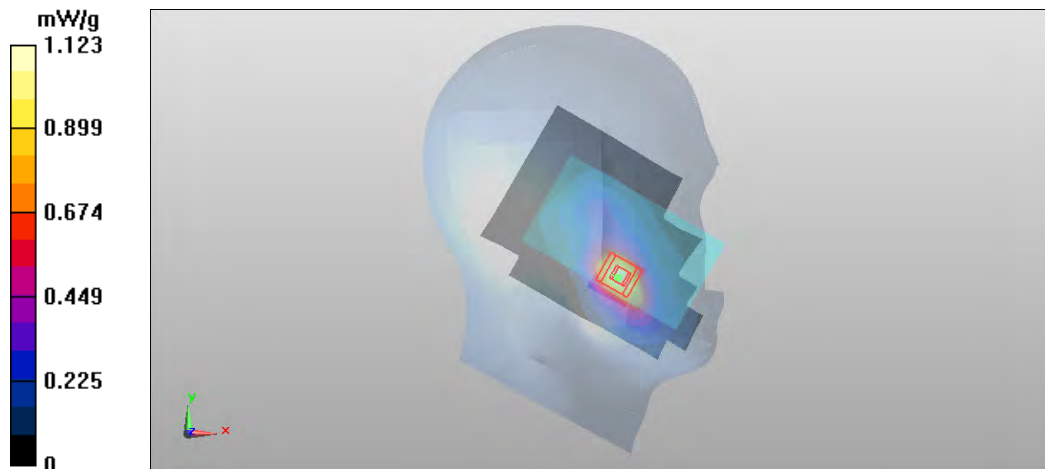
Peak SAR (extrapolated) = 1.435 mW/g

SAR(1 g) = 0.943 mW/g

SAR(10 g) = 0.587 mW/g

Power Drift = -0.29 dB

Maximum value of SAR (measured) = 1.01 mW/g



Date/Time: 2012-07-06 15:12:46

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Left/Tilt -Middle/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.401 mW/g

2-slot GPRS - Left/Tilt -Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.780 V/m

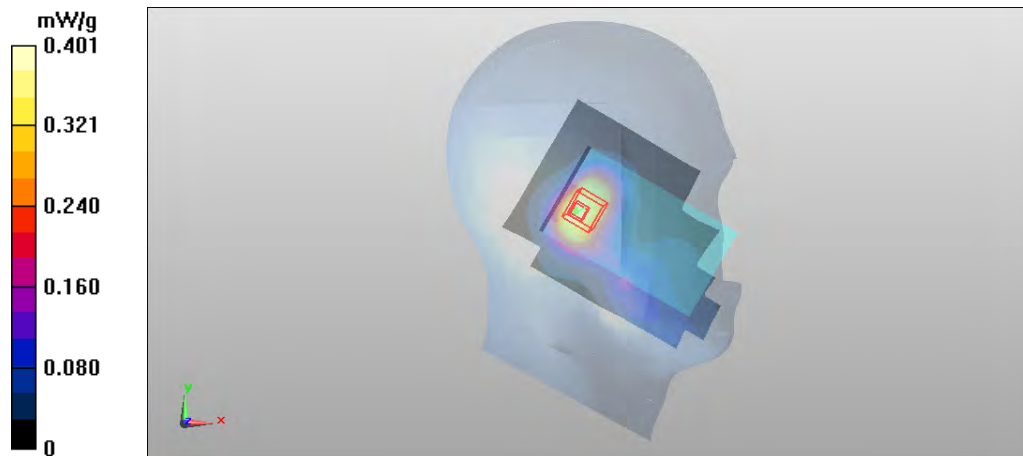
Peak SAR (extrapolated) = 0.507 mW/g

SAR(1 g) = 0.338 mW/g

SAR(10 g) = 0.217 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.365 mW/g



Date/Time: 2012-07-06 15:49:56

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Right/Cheek - Middle/Area Scan (81x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.708 mW/g

2-slot GPRS - Right/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 7.742 V/m

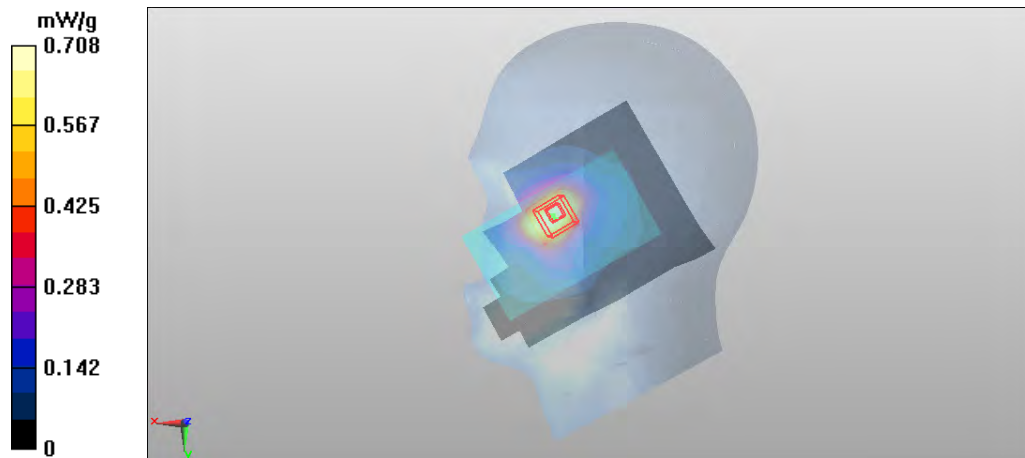
Peak SAR (extrapolated) = 0.968 mW/g

SAR(1 g) = 0.655 mW/g

SAR(10 g) = 0.419 mW/g

Power Drift = -0.18 dB

Maximum value of SAR (measured) = 0.706 mW/g



Date/Time: 2012-07-06 16:09:02

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.378\text{ mho/m}$; $\epsilon_r = 38.85$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

2-slot GPRS - Right/Tilt - Middle/Area Scan (81x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.418 mW/g

2-slot GPRS - Right/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.616 V/m

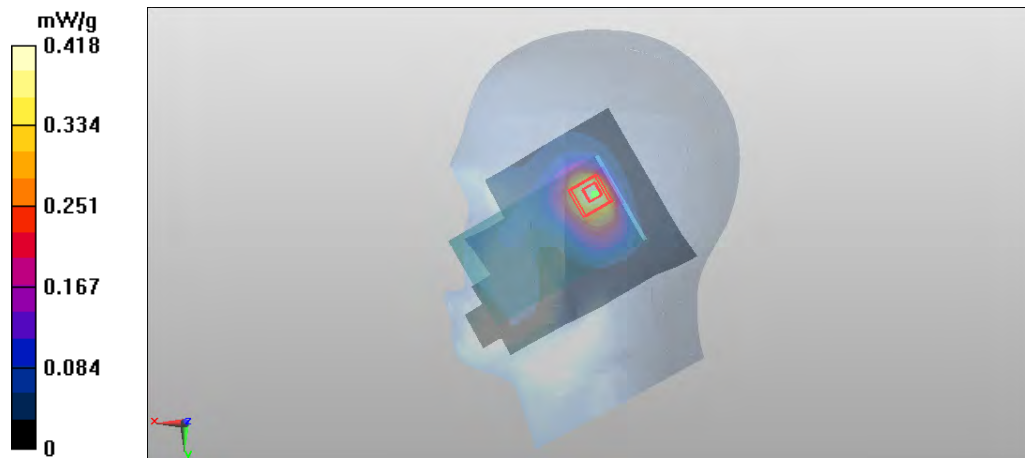
Peak SAR (extrapolated) = 0.548 mW/g

SAR(1 g) = 0.368 mW/g

SAR(10 g) = 0.231 mW/g

Power Drift = 0.19 dB

Maximum value of SAR (measured) = 0.392 mW/g



Date/Time: 2012-07-06 16:36:29

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot 8PSK EGPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

2-slot 8PSK EGPRS - Left/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.532 mW/g

2-slot 8PSK EGPRS - Left/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 4.720 V/m

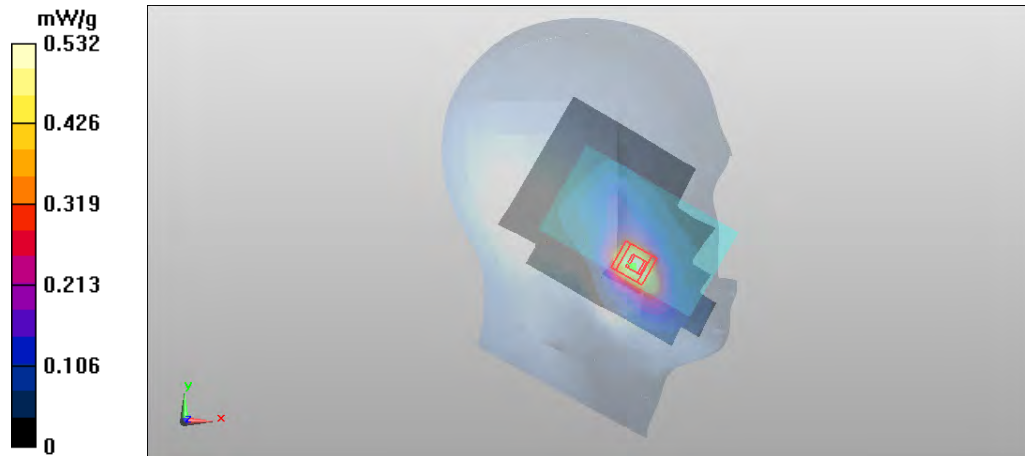
Peak SAR (extrapolated) = 0.691 mW/g

SAR(1 g) = 0.458 mW/g

SAR(10 g) = 0.284 mW/g

Power Drift = 0.49 dB

Maximum value of SAR (measured) = 0.489 mW/g



Date/Time: 2012-07-06 17:13:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: t= 21.2 C

Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; ϵ_r = 38.85; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WCDMA - Left/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.08 mW/g

WCDMA - Left/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.083 V/m

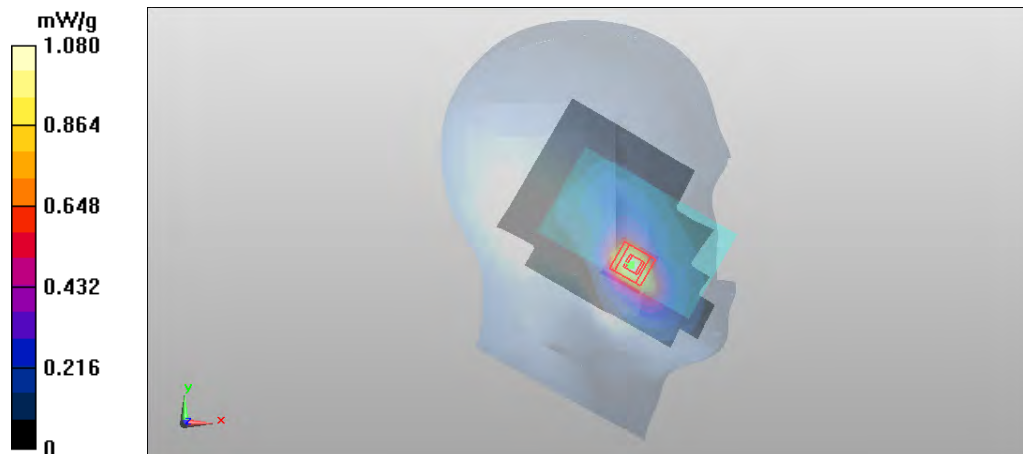
Peak SAR (extrapolated) = 1.386 mW/g

SAR(1 g) = 0.913 mW/g

SAR(10 g) = 0.563 mW/g

Power Drift = -0.14 dB

Maximum value of SAR (measured) = 0.989 mW/g



Date/Time: 2012-07-06 18:04:37

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WCDMA - Left/Tlt - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.378 mW/g

WCDMA - Left/Tlt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.080 V/m

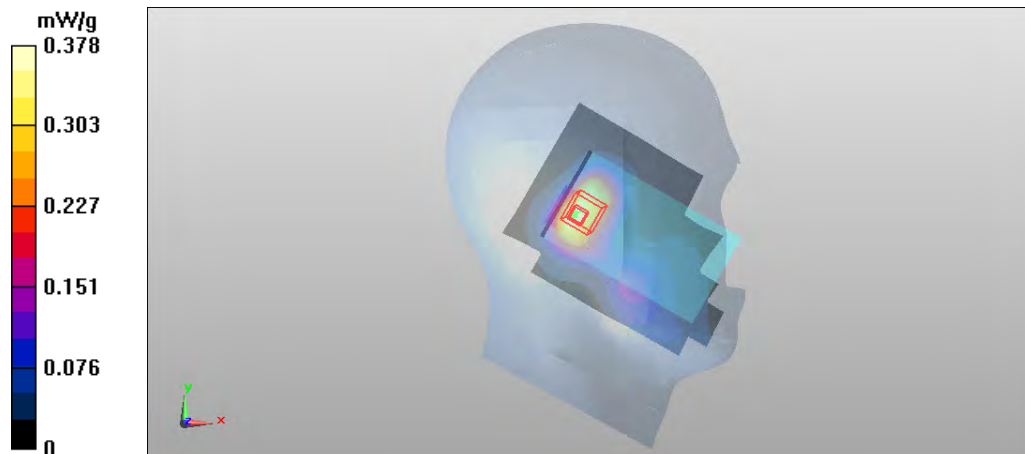
Peak SAR (extrapolated) = 0.459 mW/g

SAR(1 g) = 0.306 mW/g

SAR(10 g) = 0.196 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 0.327 mW/g



Date/Time: 2012-07-06 18:33:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: t= 21.2 C

Medium parameters used: f = 1880 MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 38.85$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WCDMA - Right/Cheek - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.544 mW/g

WCDMA - Right/Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.477 V/m

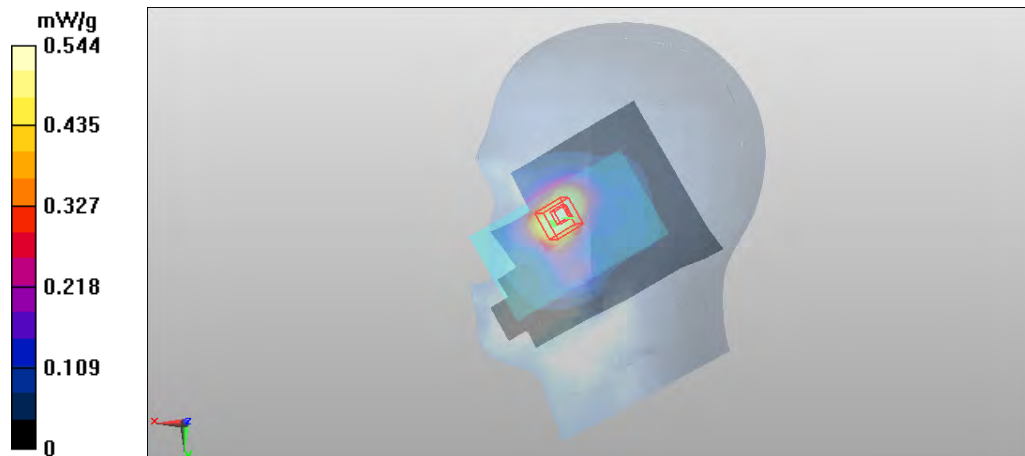
Peak SAR (extrapolated) = 0.739 mW/g

SAR(1 g) = 0.508 mW/g

SAR(10 g) = 0.326 mW/g

Power Drift = -0.14 dB

Maximum value of SAR (measured) = 0.538 mW/g



Date/Time: 2012-07-06 18:52:50

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: t= 21.2 C

Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; ϵ_r = 38.85; ρ = 1000 kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WCDMA - Right/Tilt - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.328 mW/g

WCDMA - Right/Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.493 V/m

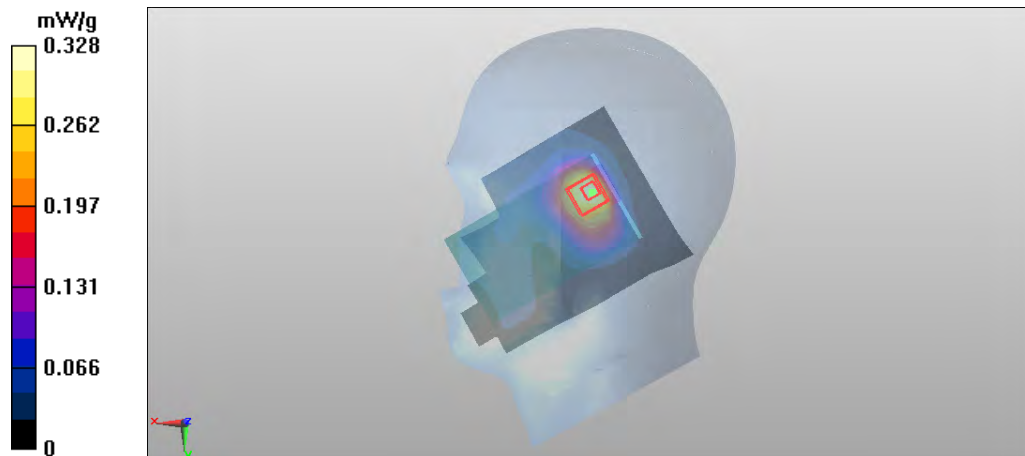
Peak SAR (extrapolated) = 0.427 mW/g

SAR(1 g) = 0.291 mW/g

SAR(10 g) = 0.186 mW/g

Power Drift = 0.33 dB

Maximum value of SAR (measured) = 0.311 mW/g



Date/Time: 2012-08-16 08:56:24

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: $t = 21.2$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

2-slot GPRS - Left/Cheek - Middle - Cover CC-3401/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.17 W/kg

2-slot GPRS - Left/Cheek - Middle - Cover CC-3401/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 7.933 V/m

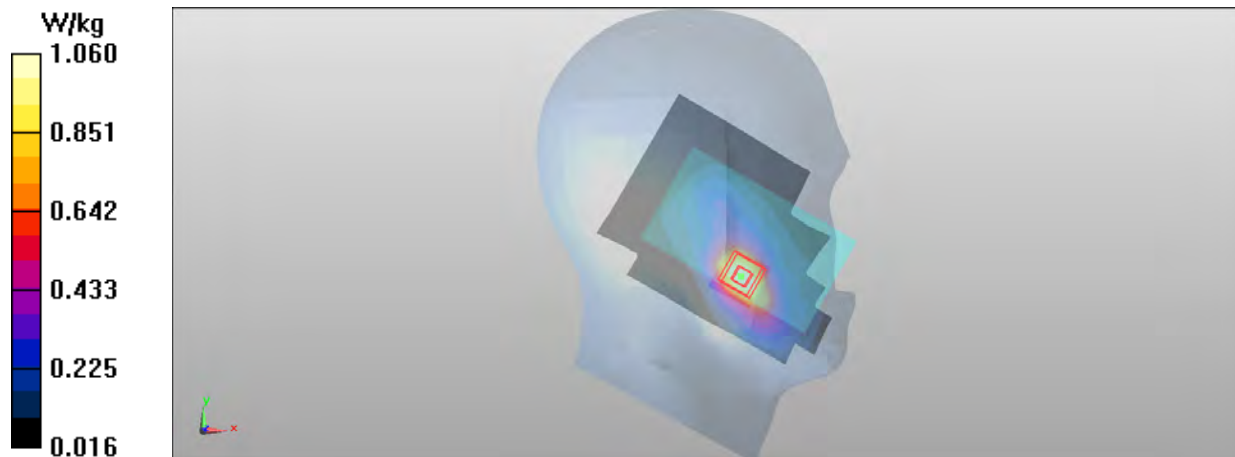
Peak SAR (extrapolated) = 1.465 mW/g

SAR(1 g) = 0.970 mW/g

SAR(10 g) = 0.603 mW/g

Power Drift = -0.28 dB

Maximum value of SAR (measured) = 1.06 W/kg



Date/Time: 2012-08-16 14:14:36

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: t= 20.5 C

Medium parameters used: f = 1880 MHz; σ = 1.362 mho/m; ϵ_r = 38.7; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.00 W/kg

LTE - Left/Cheek - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.249 V/m

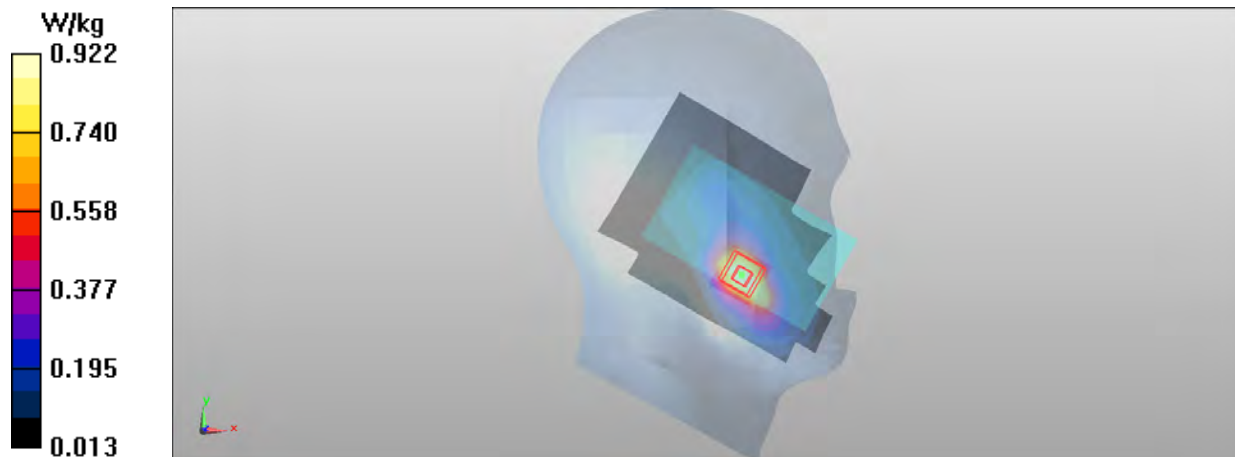
Peak SAR (extrapolated) = 1.291 mW/g

SAR(1 g) = 0.848 mW/g

SAR(10 g) = 0.525 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.922 W/kg



Date/Time: 2012-08-16 20:24:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.323 W/kg

LTE - Left/Tilt - Middle - QPSK - 20MHz - 100% RB/Zoom Scan 3 (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.086 V/m

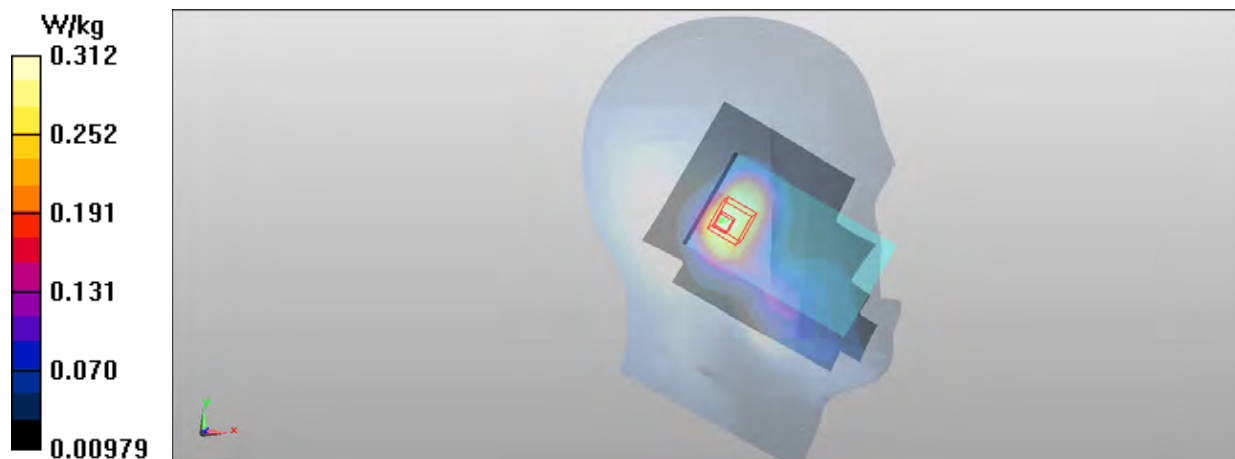
Peak SAR (extrapolated) = 0.429 mW/g

SAR(1 g) = 0.286 mW/g

SAR(10 g) = 0.184 mW/g

Power Drift = 0.09 dB

Maximum value of SAR (measured) = 0.312 W/kg



Date/Time: 2012-08-17 13:39:53

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.552 W/kg

LTE - Right/Cheek - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.575 V/m

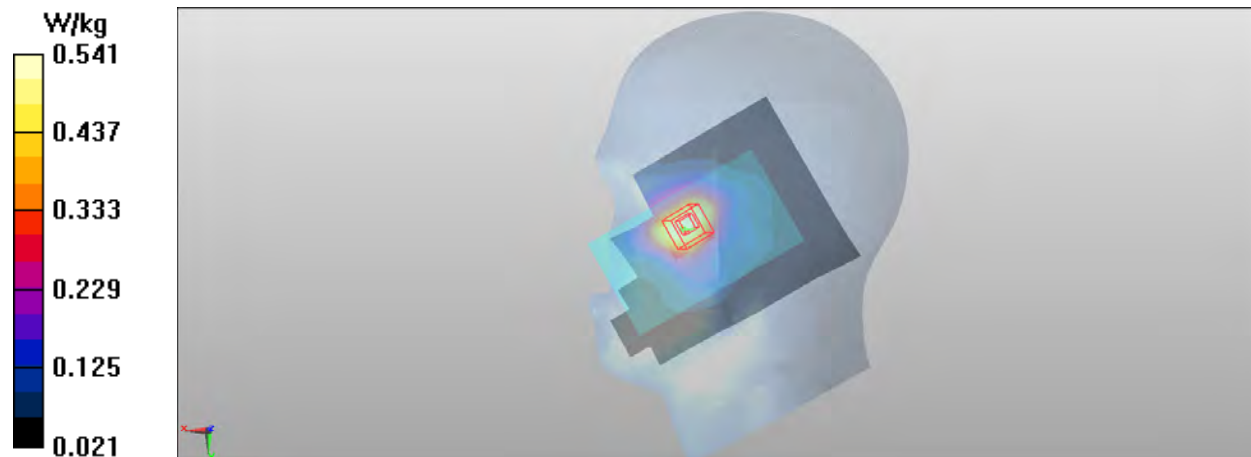
Peak SAR (extrapolated) = 0.750 mW/g

SAR(1 g) = 0.509 mW/g

SAR(10 g) = 0.328 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.541 W/kg



Date/Time: 2012-08-17 16:49:14

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.342 W/kg

LTE - Right/Tilt - Middle - QPSK - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.975 V/m

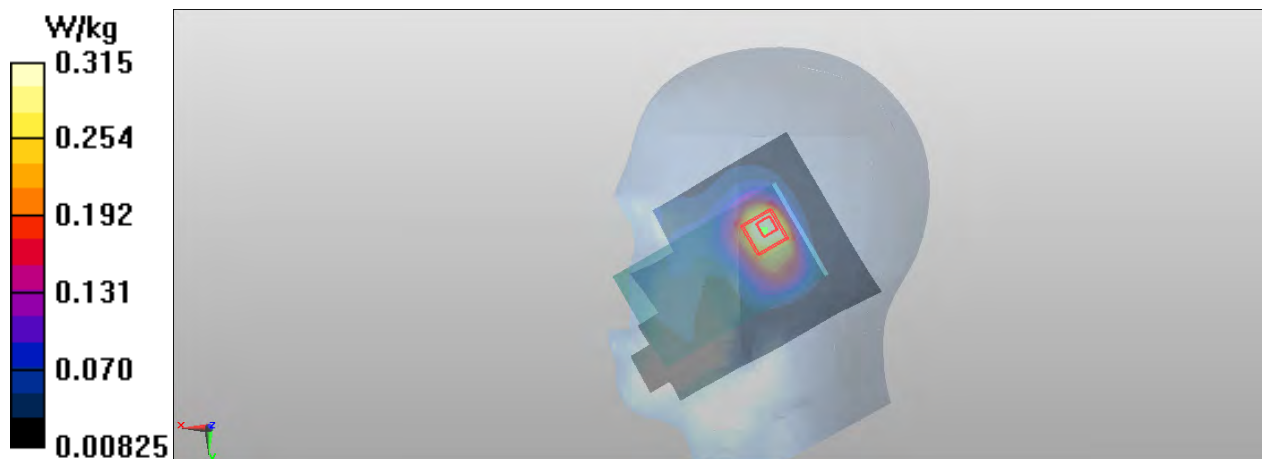
Peak SAR (extrapolated) = 0.447 mW/g

SAR(1 g) = 0.299 mW/g

SAR(10 g) = 0.189 mW/g

Power Drift = -0.24 dB

Maximum value of SAR (measured) = 0.315 W/kg



Date/Time: 2012-08-16 14:36:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

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

LTE - Left/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.189 V/m

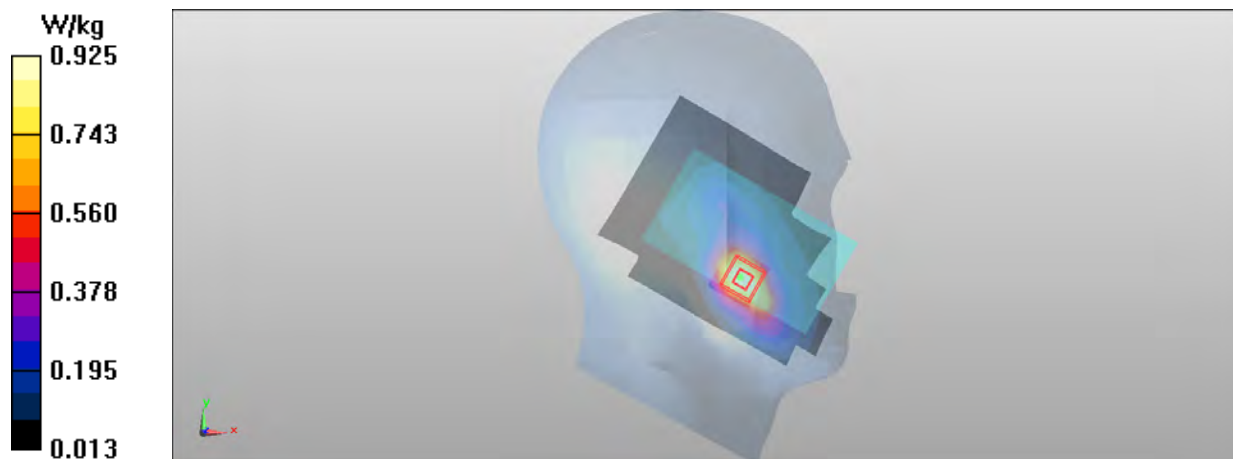
Peak SAR (extrapolated) = 1.276 mW/g

SAR(1 g) = 0.844 mW/g

SAR(10 g) = 0.524 mW/g

Power Drift = 0.28 dB

Maximum value of SAR (measured) = 0.925 W/kg



Date/Time: 2012-08-16 20:48:28

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.324 W/kg

LTE - Left/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan 3 (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.261 V/m

Peak SAR (extrapolated) = 0.436 mW/g

SAR(1 g) = 0.289 mW/g

SAR(10 g) = 0.186 mW/g

Power Drift = -0.05 dB

Maximum value of SAR (measured) = 0.308 W/kg



Date/Time: 2012-08-17 14:18:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.557 W/kg

LTE - Right/Cheek - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 6.452 V/m

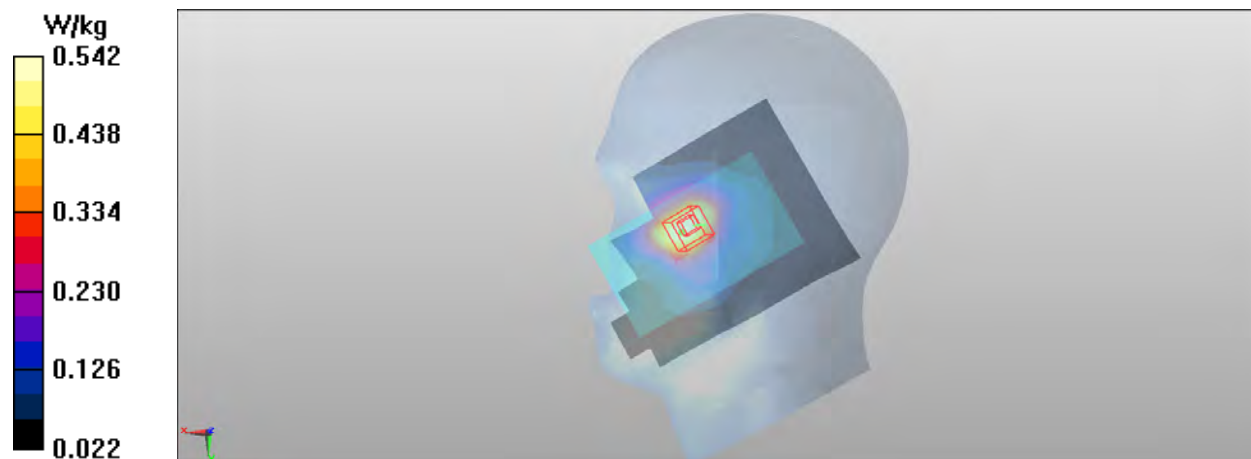
Peak SAR (extrapolated) = 0.745 mW/g

SAR(1 g) = 0.512 mW/g

SAR(10 g) = 0.330 mW/g

Power Drift = 0.22 dB

Maximum value of SAR (measured) = 0.542 W/kg



Date/Time: 2012-08-17 17:03:37

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.336 W/kg

LTE - Right/Tilt - Middle - QPSK - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.715 V/m

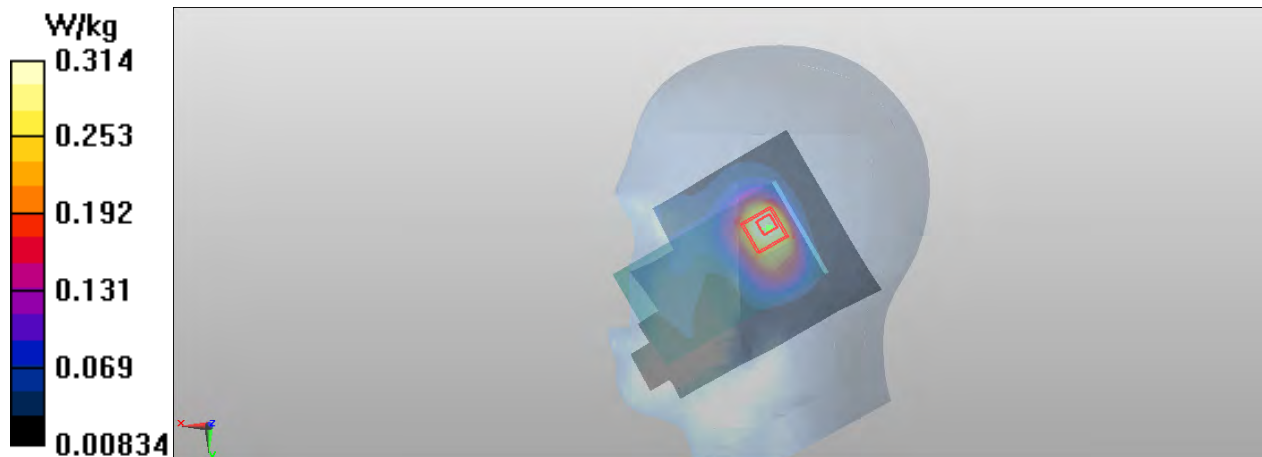
Peak SAR (extrapolated) = 0.453 mW/g

SAR(1 g) = 0.302 mW/g

SAR(10 g) = 0.191 mW/g

Power Drift = 0.10 dB

Maximum value of SAR (measured) = 0.314 W/kg



Date/Time: 2012-08-16 15:55:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

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

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{ mm}$, $dy=7.5\text{ mm}$, $dz=5\text{ mm}$

Reference Value = 6.871 V/m

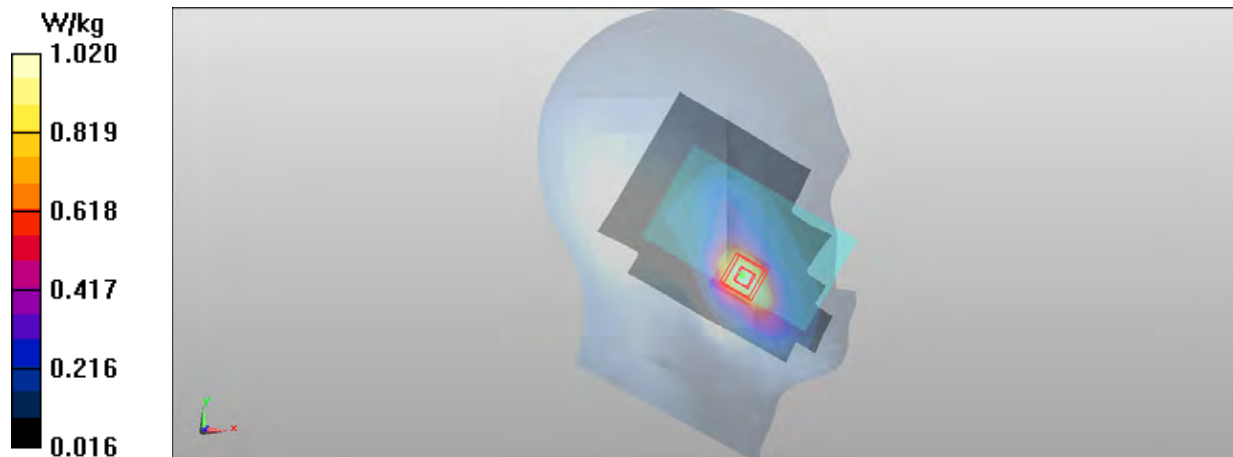
Peak SAR (extrapolated) = 1.427 mW/g

SAR(1 g) = 0.939 mW/g

SAR(10 g) = 0.583 mW/g

Power Drift = 0.11 dB

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



Date/Time: 2012-08-16 21:13:08

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.367 W/kg

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 50% offset/Zoom Scan 3 (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.856 V/m

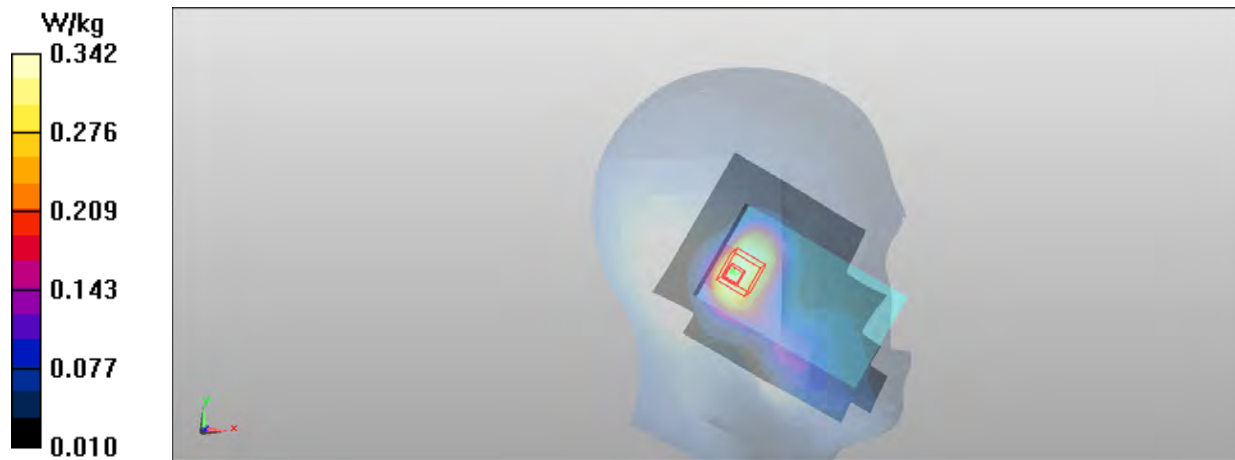
Peak SAR (extrapolated) = 0.477 mW/g

SAR(1 g) = 0.318 mW/g

SAR(10 g) = 0.205 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.342 W/kg



Date/Time: 2012-08-17 14:38:11

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.624 W/kg

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 6.829 V/m

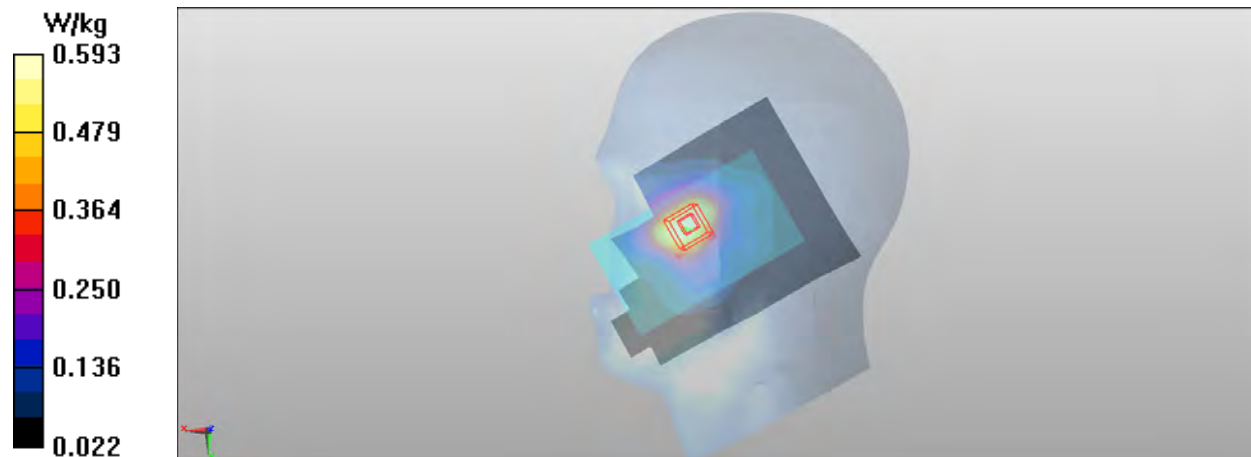
Peak SAR (extrapolated) = 0.824 mW/g

SAR(1 g) = 0.559 mW/g

SAR(10 g) = 0.361 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 0.593 W/kg



Date/Time: 2012-08-17 17:17:29

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.386 W/kg

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.432 V/m

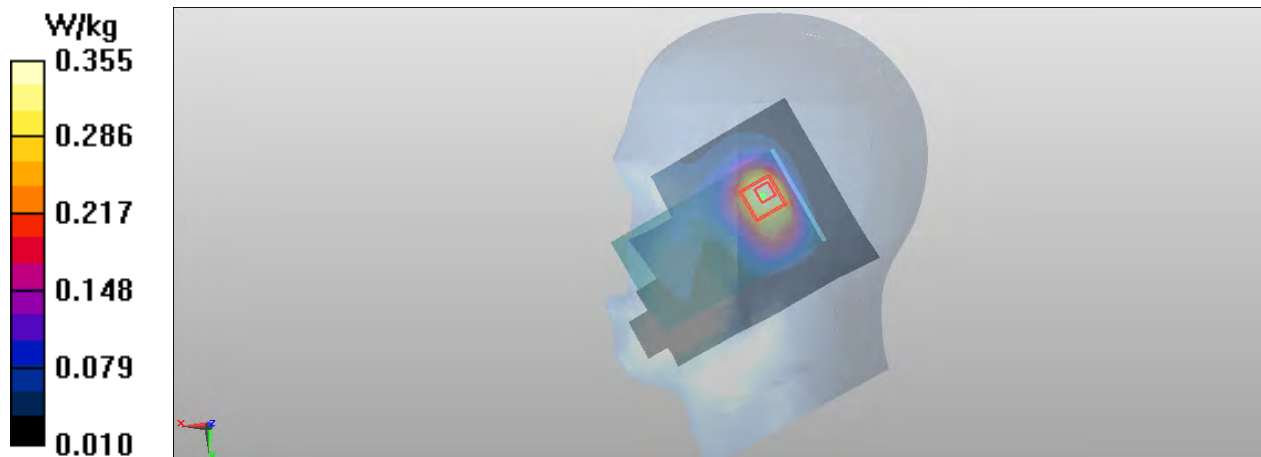
Peak SAR (extrapolated) = 0.502 mW/g

SAR(1 g) = 0.339 mW/g

SAR(10 g) = 0.214 mW/g

Power Drift = 0.06 dB

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



Date/Time: 2012-08-16 16:39:07

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

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

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.041 V/m

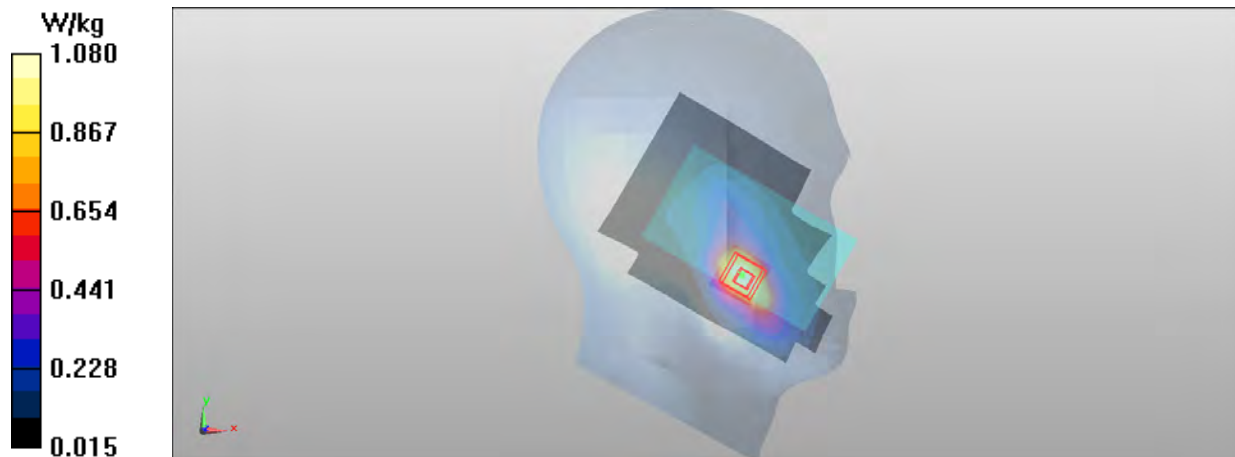
Peak SAR (extrapolated) = 1.510 mW/g

SAR(1 g) = 0.989 mW/g

SAR(10 g) = 0.609 mW/g

Power Drift = 0.20 dB

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



Date/Time: 2012-08-16 21:39:47

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.405 W/kg

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 13.429 V/m

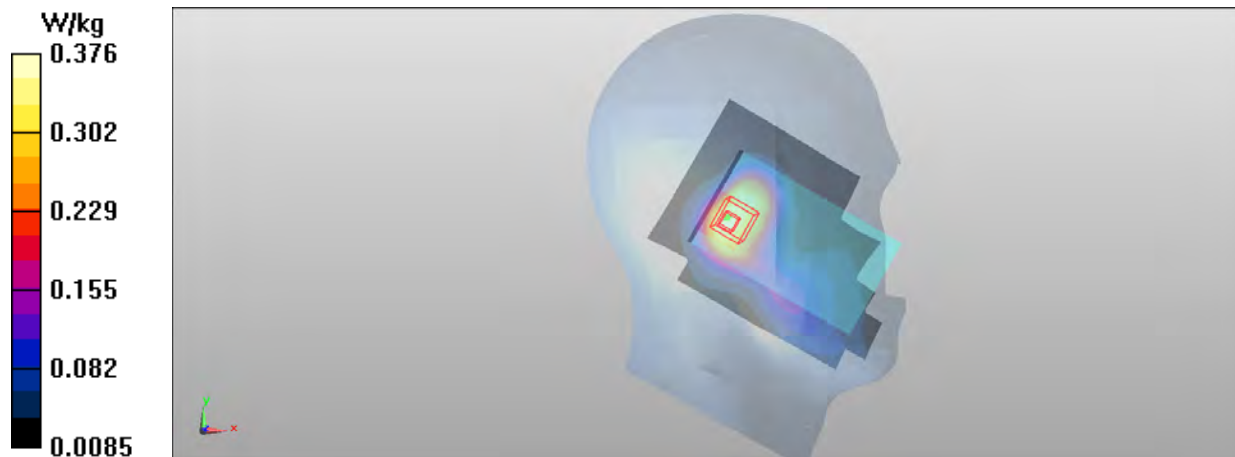
Peak SAR (extrapolated) = 0.524 mW/g

SAR(1 g) = 0.349 mW/g

SAR(10 g) = 0.225 mW/g

Power Drift = 0.00 dB

Maximum value of SAR (measured) = 0.376 W/kg



Date/Time: 2012-08-17 14:53:02

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.657 W/kg

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.166 V/m

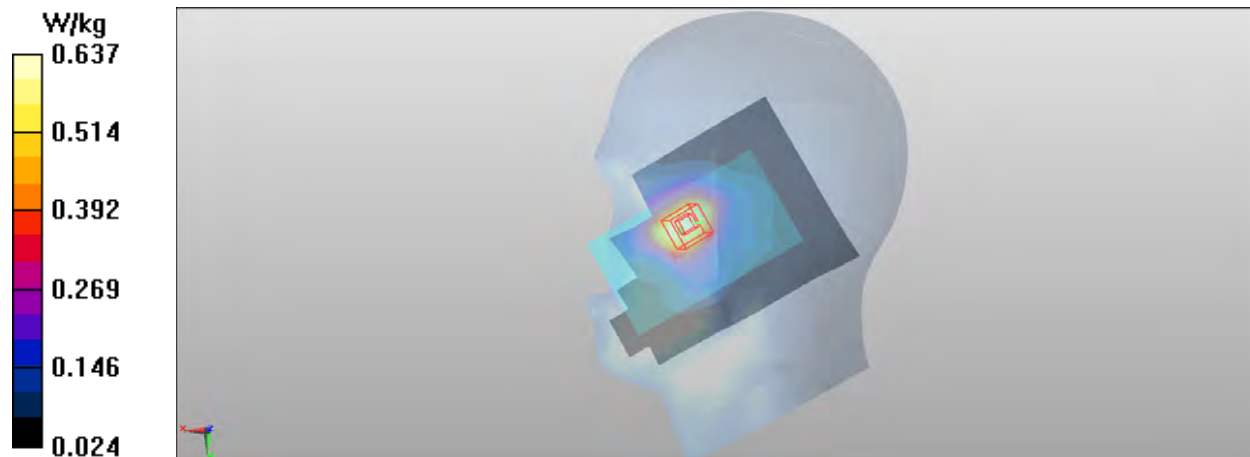
Peak SAR (extrapolated) = 0.889 mW/g

SAR(1 g) = 0.604 mW/g

SAR(10 g) = 0.387 mW/g

Power Drift = 0.17 dB

Maximum value of SAR (measured) = 0.637 W/kg



Date/Time: 2012-08-17 17:31:49

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.367 W/kg

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.281 V/m

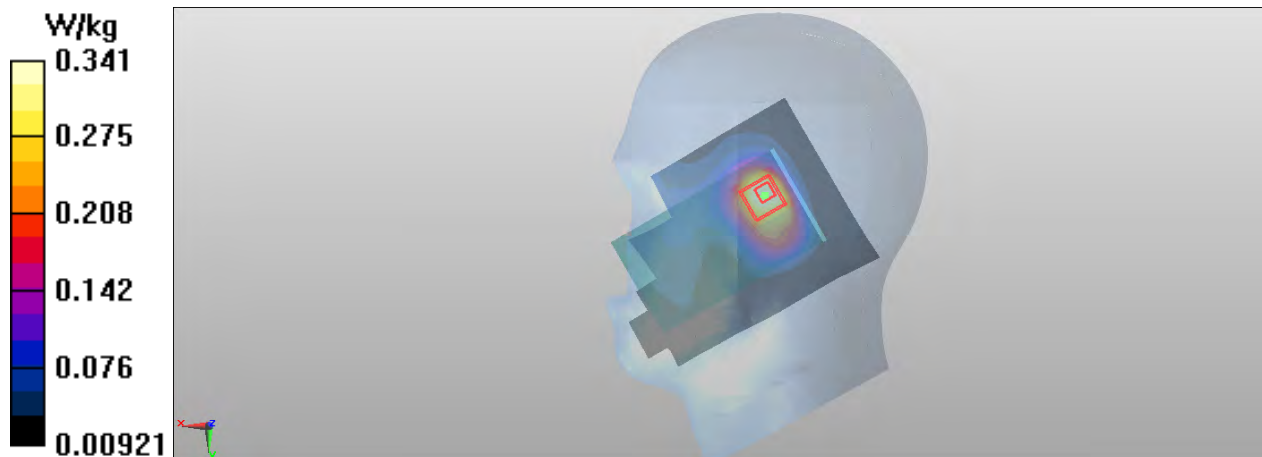
Peak SAR (extrapolated) = 0.486 mW/g

SAR(1 g) = 0.325 mW/g

SAR(10 g) = 0.205 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.341 W/kg



Date/Time: 2012-08-16 18:06:56

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1900\text{ MHz}$; $\sigma = 1.379\text{ mho/m}$; $\epsilon_r = 38.618$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - High - QPSK - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

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

LTE - Left/Cheek - High - QPSK - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{ mm}$, $dy=7.5\text{ mm}$, $dz=5\text{ mm}$

Reference Value = 6.558 V/m

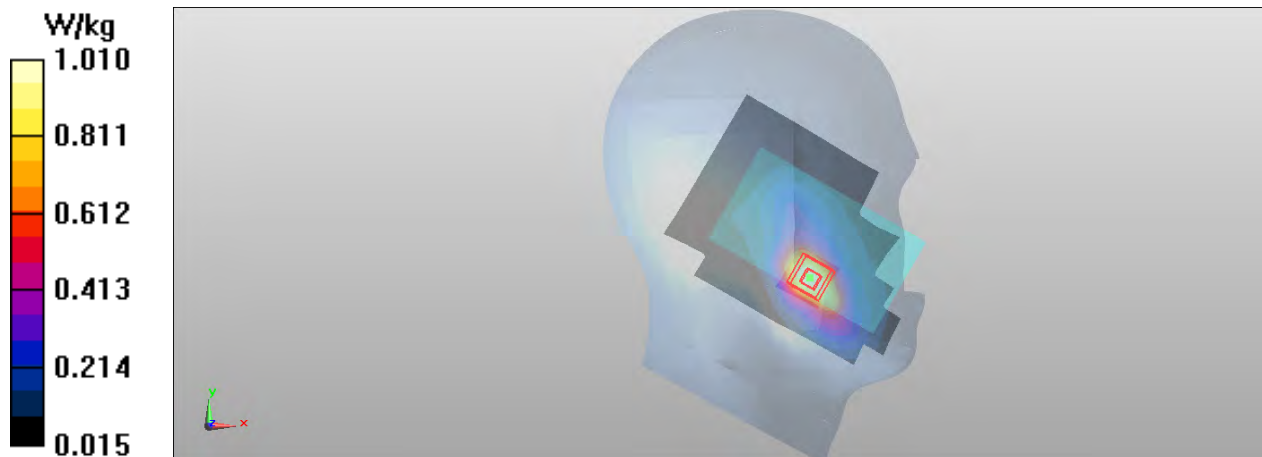
Peak SAR (extrapolated) = 1.408 mW/g

SAR(1 g) = 0.928 mW/g

SAR(10 g) = 0.575 mW/g

Power Drift = 0.34 dB

Maximum value of SAR (measured) = 1.01 W/kg



Date/Time: 2012-08-17 10:14:02

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: t= 20.5 C

Medium parameters used: f = 1880 MHz; σ = 1.384 mho/m; ϵ_r = 38.525; ρ = 1000 kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.391 W/kg

LTE - Left/Tilt - Middle - QPSK - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.160 V/m

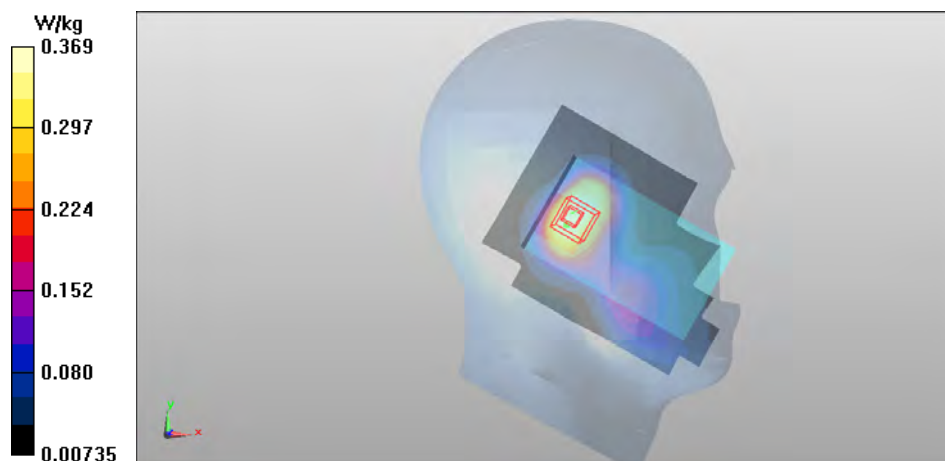
Peak SAR (extrapolated) = 0.519 mW/g

SAR(1 g) = 0.349 mW/g

SAR(10 g) = 0.230 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.369 W/kg



Date/Time: 2012-08-17 15:07:58

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ }^{\circ}\text{C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.568 W/kg

LTE - Right/Cheek - Middle - QPSK - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{ mm}$, $dy=7.5\text{ mm}$, $dz=5\text{ mm}$

Reference Value = 6.388 V/m

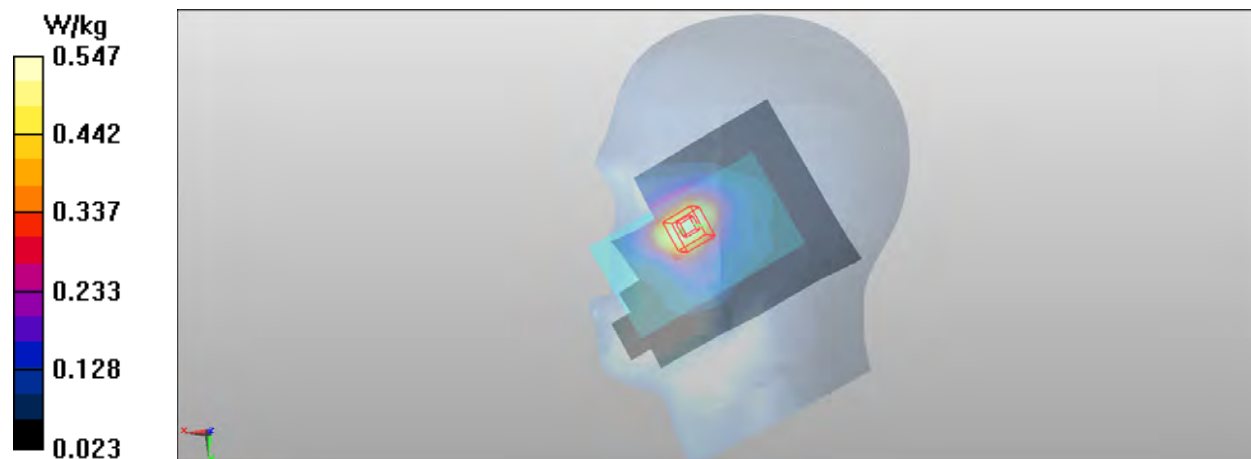
Peak SAR (extrapolated) = 0.752 mW/g

SAR(1 g) = 0.513 mW/g

SAR(10 g) = 0.333 mW/g

Power Drift = 0.28 dB

Maximum value of SAR (measured) = 0.547 W/kg



Date/Time: 2012-08-17 17:45:37

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.353 W/kg

LTE - Right/Tilt - Middle - QPSK - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.680 V/m

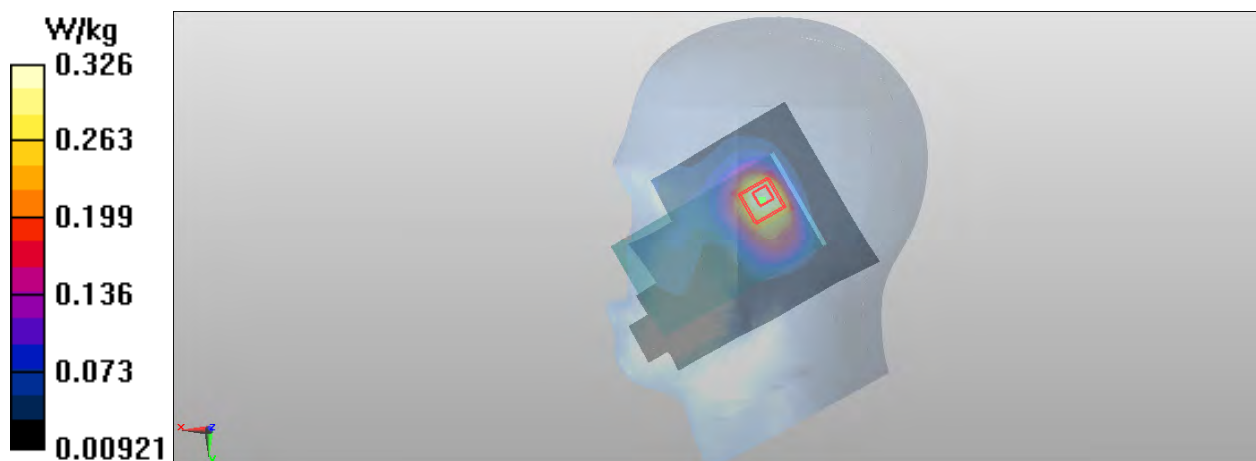
Peak SAR (extrapolated) = 0.453 mW/g

SAR(1 g) = 0.310 mW/g

SAR(10 g) = 0.196 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.326 W/kg



Date/Time: 2012-08-16 18:34:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.859 W/kg

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.576 V/m

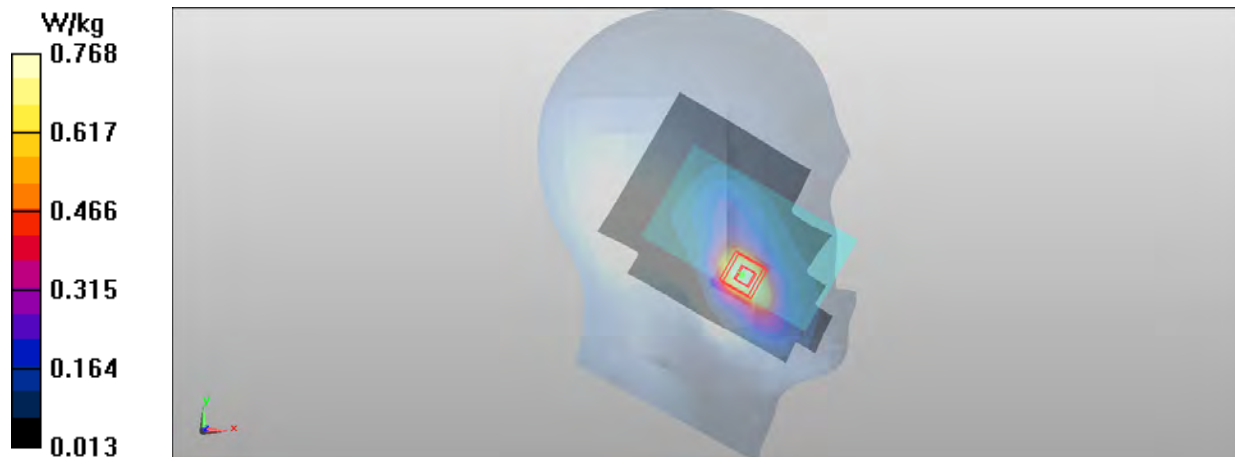
Peak SAR (extrapolated) = 1.079 mW/g

SAR(1 g) = 0.714 mW/g

SAR(10 g) = 0.443 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 0.768 W/kg



Date/Time: 2012-08-17 10:42:19

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.294 W/kg

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.339 V/m

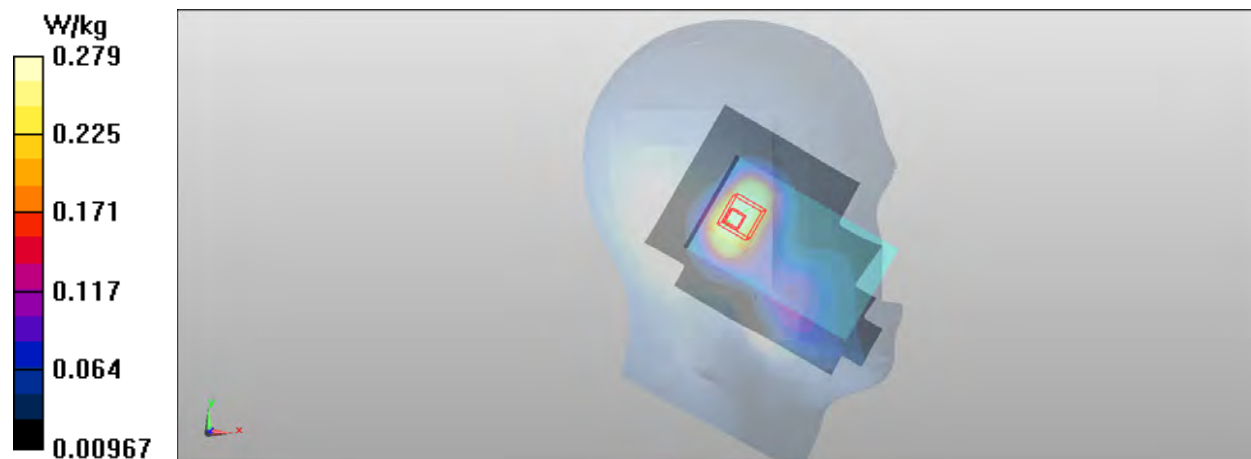
Peak SAR (extrapolated) = 0.390 mW/g

SAR(1 g) = 0.264 mW/g

SAR(10 g) = 0.173 mW/g

Power Drift = 0.07 dB

Maximum value of SAR (measured) = 0.279 W/kg



Date/Time: 2012-08-17 15:30:02

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 5.897 V/m

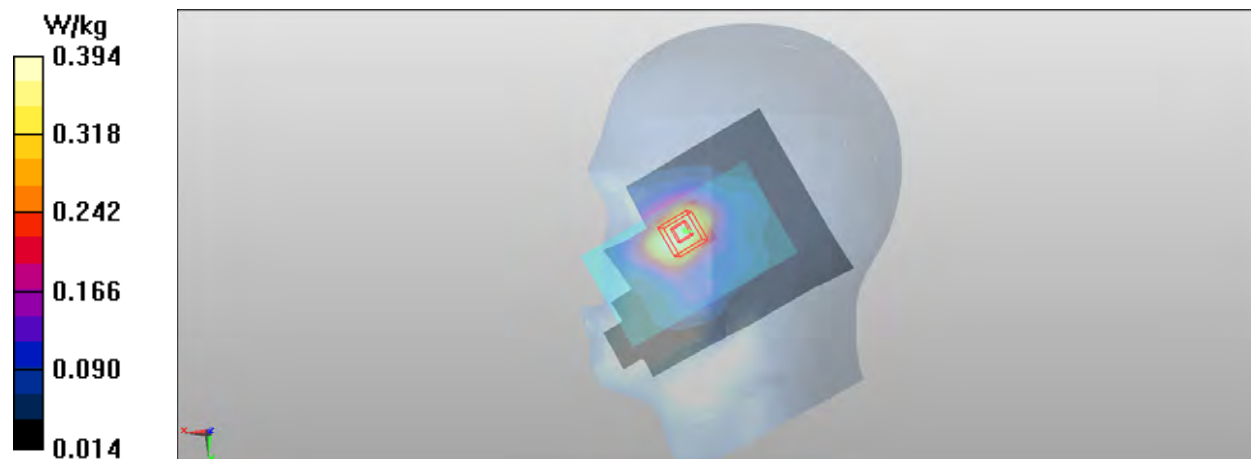
Peak SAR (extrapolated) = 0.547 mW/g

SAR(1 g) = 0.368 mW/g

SAR(10 g) = 0.239 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.394 W/kg



Date/Time: 2012-08-17 17:59:52

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 100% RB/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.269 W/kg

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 100% RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.199 V/m

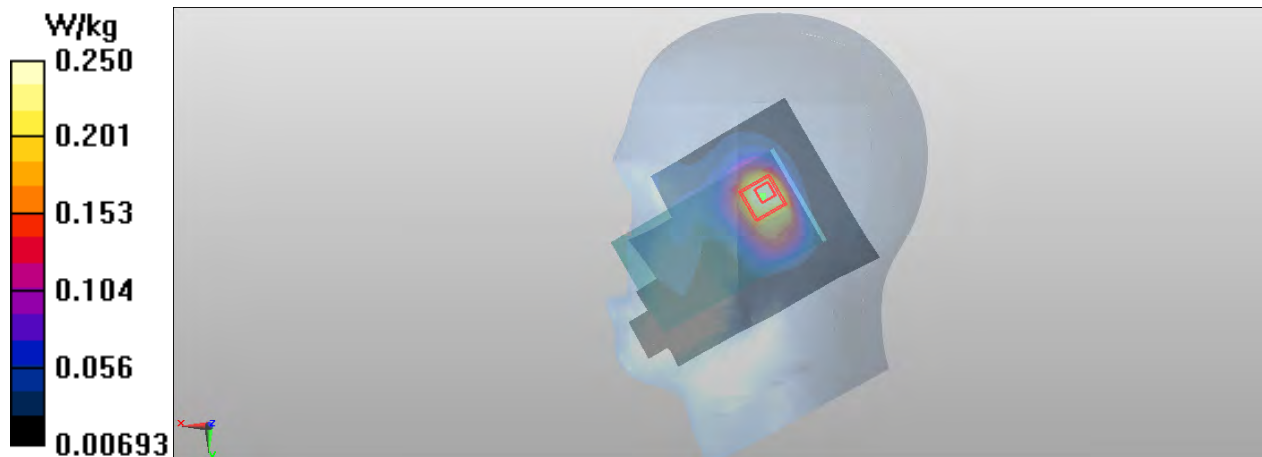
Peak SAR (extrapolated) = 0.354 mW/g

SAR(1 g) = 0.237 mW/g

SAR(10 g) = 0.150 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.250 W/kg



Date/Time: 2012-08-16 18:50:53

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:
 $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.877 W/kg

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement
grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.570 V/m

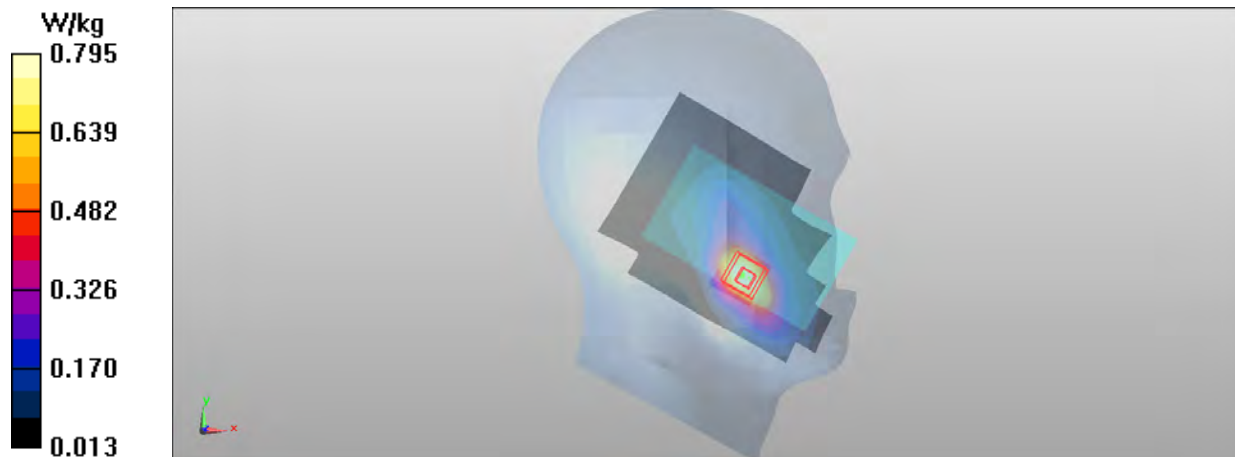
Peak SAR (extrapolated) = 1.136 mW/g

SAR(1 g) = 0.734 mW/g

SAR(10 g) = 0.450 mW/g

Power Drift = 0.27 dB

Maximum value of SAR (measured) = 0.795 W/kg



Date/Time: 2012-08-17 11:46:51

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.295 W/kg

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.421 V/m

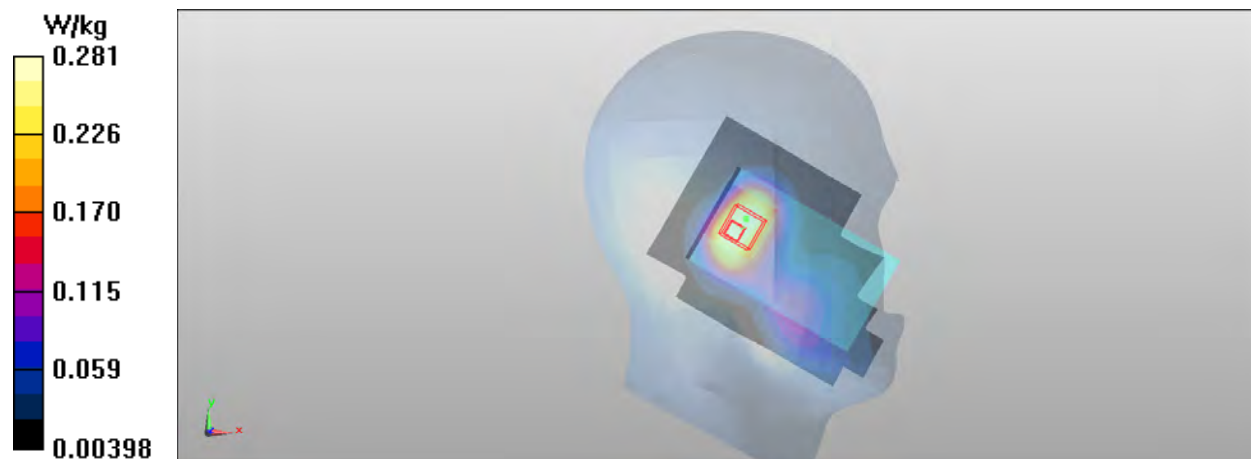
Peak SAR (extrapolated) = 0.401 mW/g

SAR(1 g) = 0.267 mW/g

SAR(10 g) = 0.175 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.281 W/kg



Date/Time: 2012-08-17 15:44:30

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:
 $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.406 W/kg

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

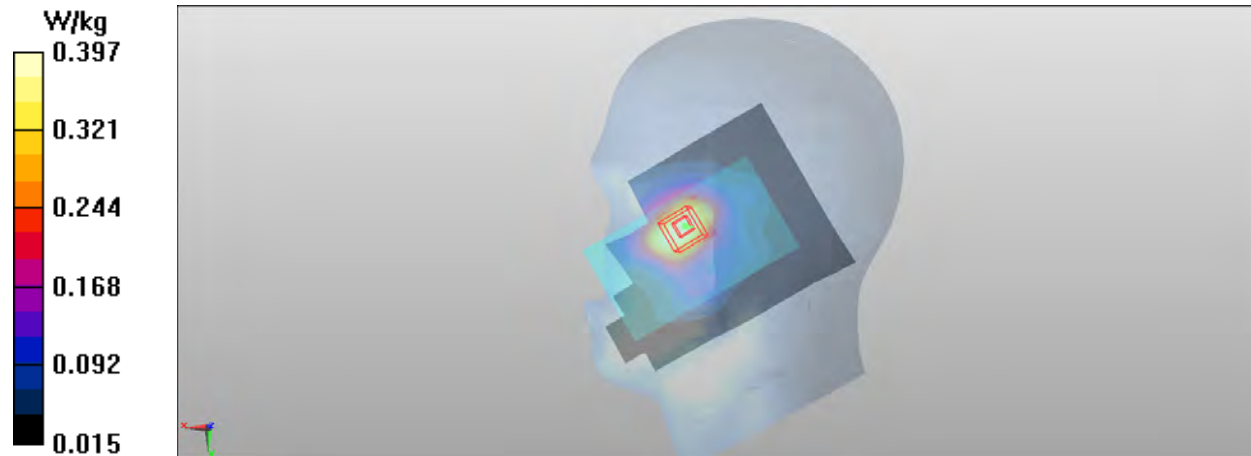
Reference Value = 5.915 V/m

Peak SAR (extrapolated) = 0.552 mW/g

SAR(1 g) = 0.371 mW/g

SAR(10 g) = 0.241 mW/g

Maximum value of SAR (measured) = 0.397 W/kg



Date/Time: 2012-08-17 18:14:00

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.277 W/kg

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 50% RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 10.417 V/m

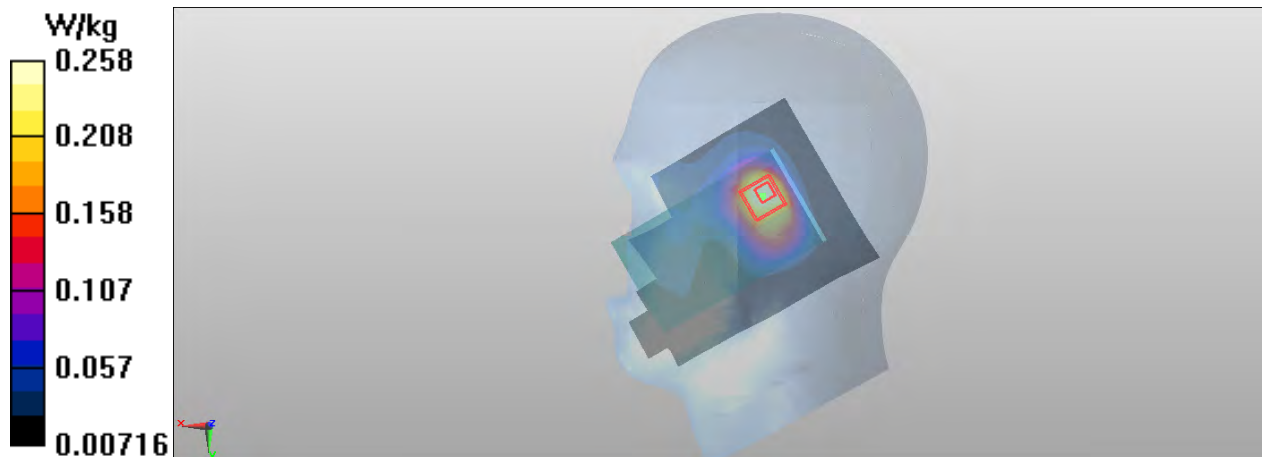
Peak SAR (extrapolated) = 0.362 mW/g

SAR(1 g) = 0.245 mW/g

SAR(10 g) = 0.155 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.258 W/kg



Date/Time: 2012-08-16 19:06:01

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.934 W/kg

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 5.840 V/m

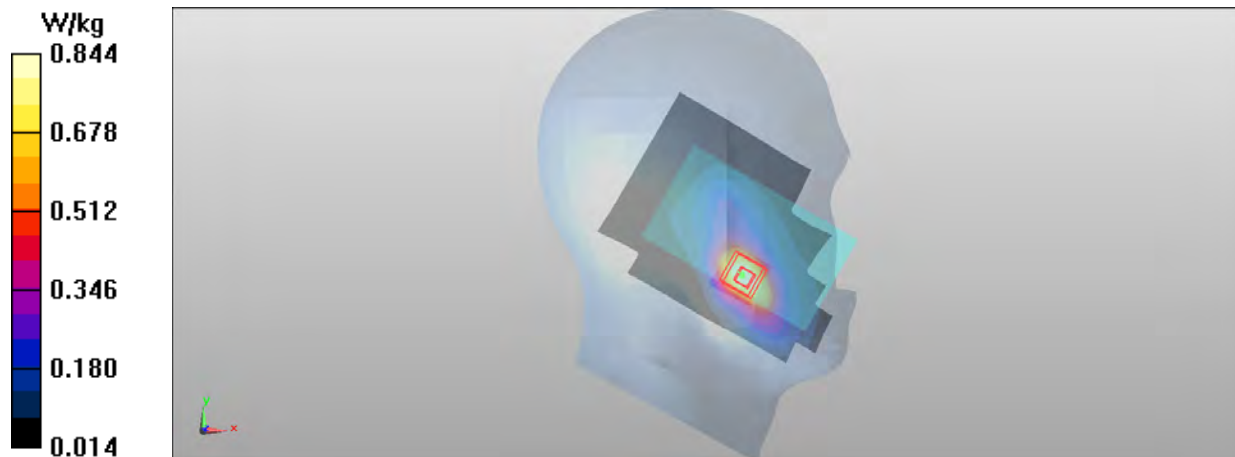
Peak SAR (extrapolated) = 1.178 mW/g

SAR(1 g) = 0.775 mW/g

SAR(10 g) = 0.479 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.844 W/kg



Date/Time: 2012-08-17 12:03:12

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.317 W/kg

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.759 V/m

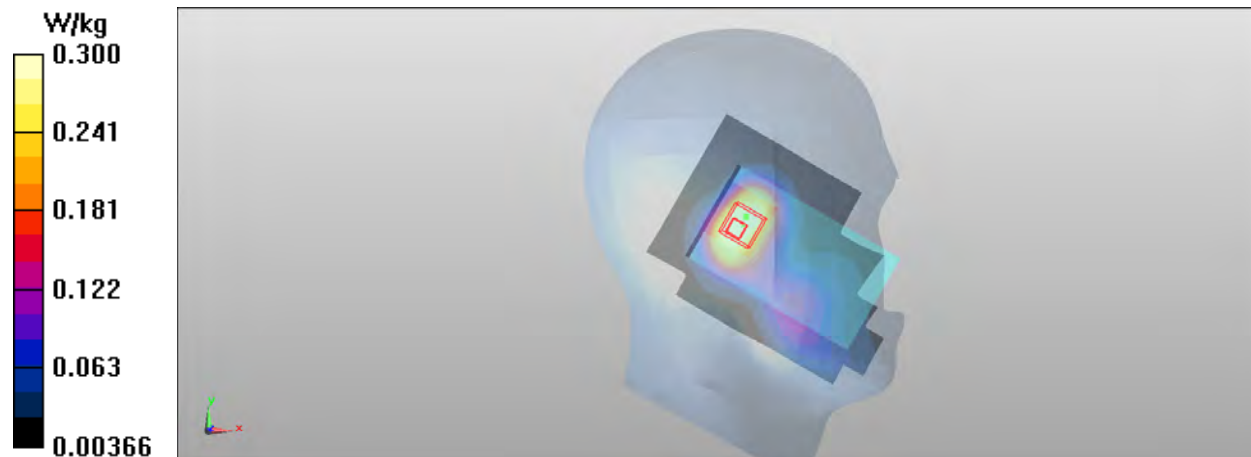
Peak SAR (extrapolated) = 0.425 mW/g

SAR(1 g) = 0.285 mW/g

SAR(10 g) = 0.186 mW/g

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 0.300 W/kg



Date/Time: 2012-08-17 16:01:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.432 W/kg

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 6.078 V/m

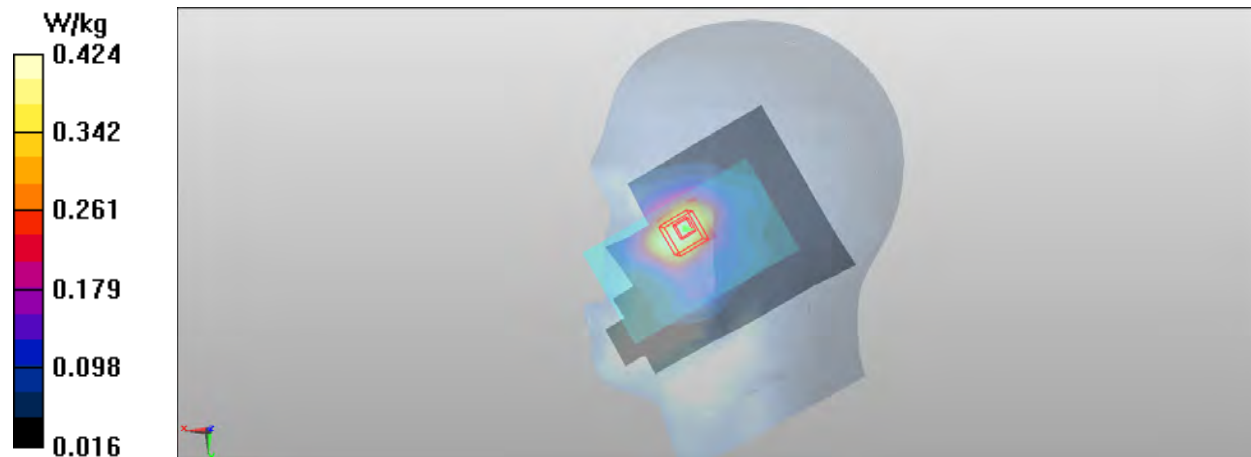
Peak SAR (extrapolated) = 0.593 mW/g

SAR(1 g) = 0.395 mW/g

SAR(10 g) = 0.258 mW/g

Power Drift = 0.29 dB

Maximum value of SAR (measured) = 0.424 W/kg



Date/Time: 2012-08-17 19:04:04

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.305 W/kg

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 50% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 11.358 V/m

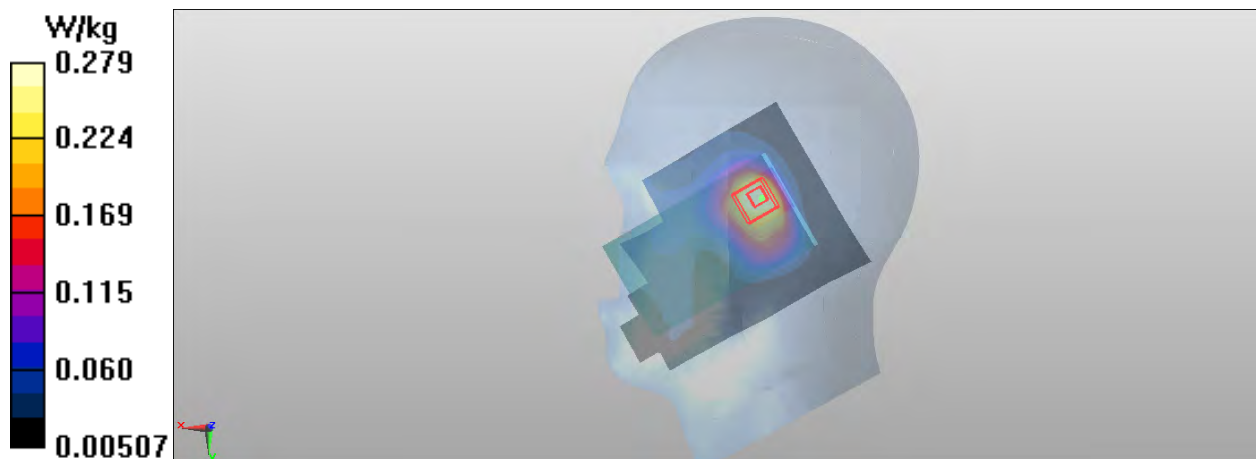
Peak SAR (extrapolated) = 0.394 mW/g

SAR(1 g) = 0.262 mW/g

SAR(10 g) = 0.166 mW/g

Power Drift = 0.02 dB

Maximum value of SAR (measured) = 0.279 W/kg



Date/Time: 2012-08-16 19:20:49

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.974 W/kg

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.011 V/m

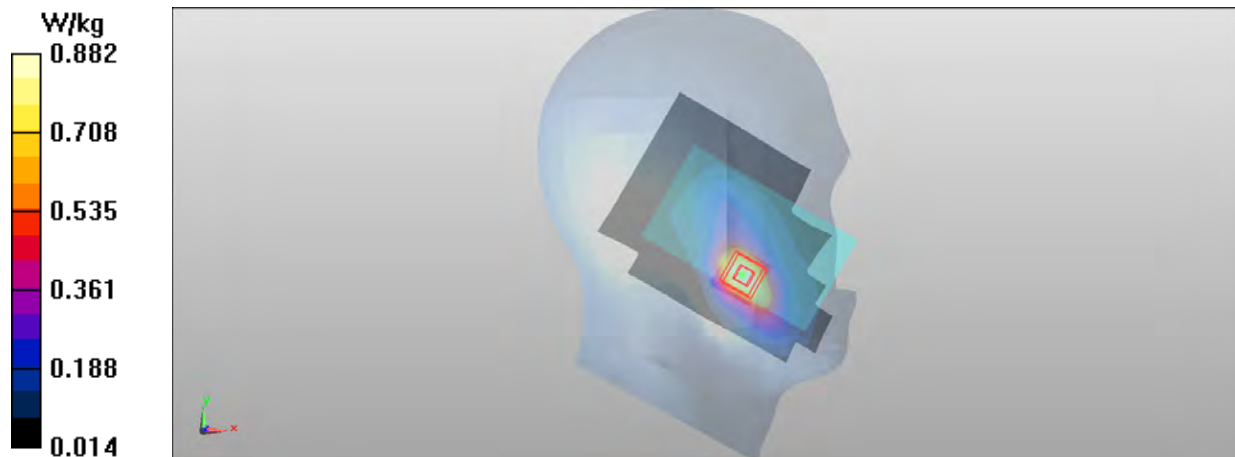
Peak SAR (extrapolated) = 1.220 mW/g

SAR(1 g) = 0.808 mW/g

SAR(10 g) = 0.497 mW/g

Power Drift = 0.08 dB

Maximum value of SAR (measured) = 0.882 W/kg



Date/Time: 2012-08-17 12:26:58

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.337 W/kg

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 12.031 V/m

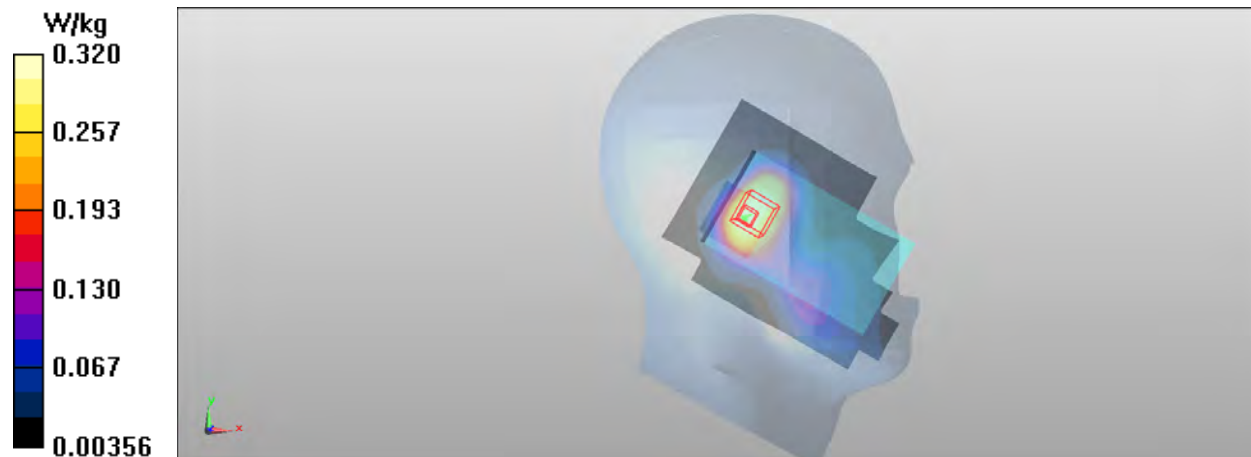
Peak SAR (extrapolated) = 0.443 mW/g

SAR(1 g) = 0.297 mW/g

SAR(10 g) = 0.192 mW/g

Power Drift = 0.05 dB

Maximum value of SAR (measured) = 0.320 W/kg



Date/Time: 2012-08-17 16:15:37

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.455 W/kg

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 6.402 V/m

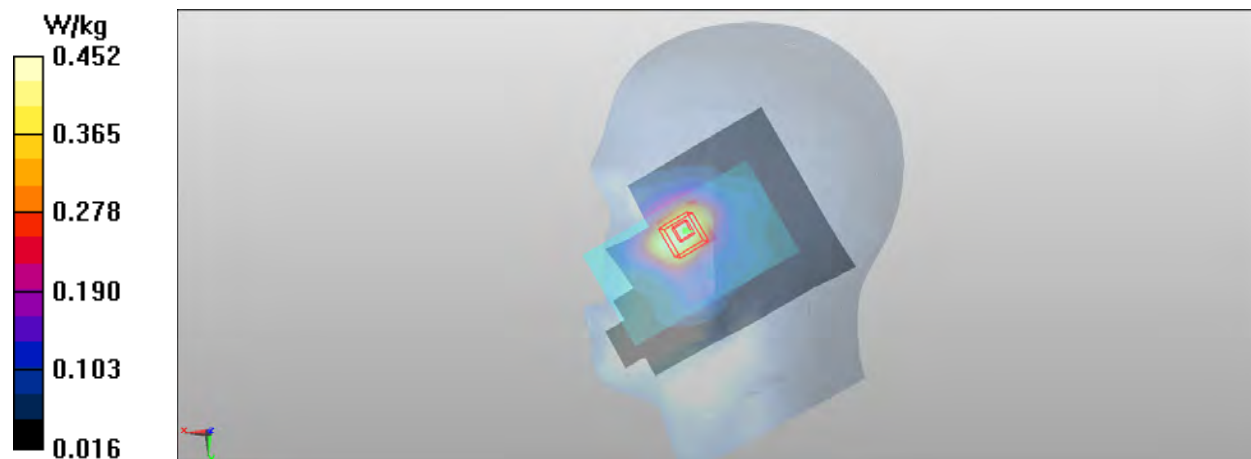
Peak SAR (extrapolated) = 0.622 mW/g

SAR(1 g) = 0.420 mW/g

SAR(10 g) = 0.272 mW/g

Power Drift = 0.20 dB

Maximum value of SAR (measured) = 0.452 W/kg



Date/Time: 2012-08-17 19:27:31

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.384\text{ mho/m}$; $\epsilon_r = 38.525$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.286 W/kg

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 100% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.328 V/m

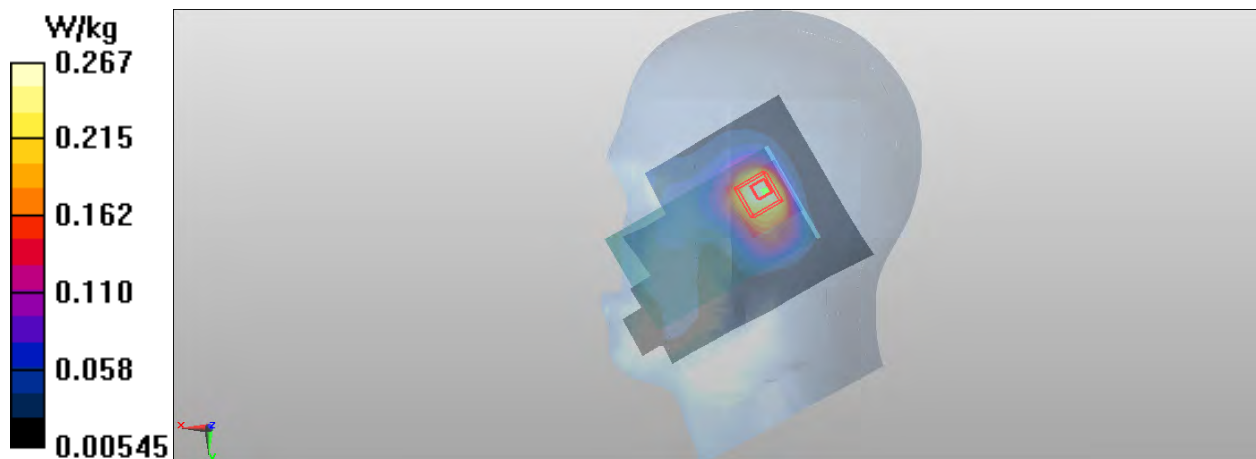
Peak SAR (extrapolated) = 0.376 mW/g

SAR(1 g) = 0.250 mW/g

SAR(10 g) = 0.159 mW/g

Power Drift = 0.01 dB

Maximum value of SAR (measured) = 0.267 W/kg



Date/Time: 2012-08-16 20:08:10

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5\text{ C}$

Medium parameters used: $f = 1880\text{ MHz}$; $\sigma = 1.362\text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.819 W/kg

LTE - Left/Cheek - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.796 V/m

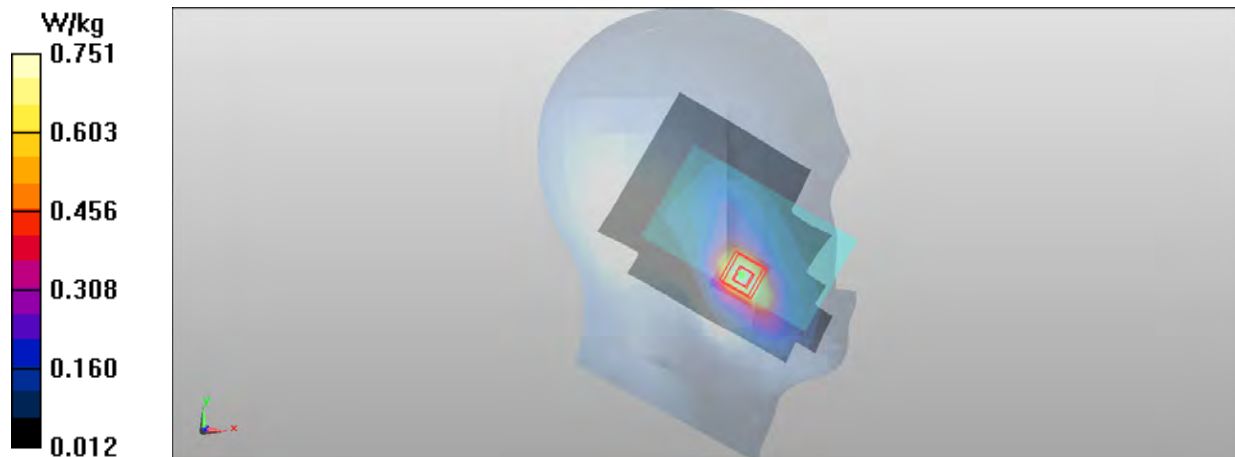
Peak SAR (extrapolated) = 1.045 mW/g

SAR(1 g) = 0.690 mW/g

SAR(10 g) = 0.429 mW/g

Power Drift = 0.35 dB

Maximum value of SAR (measured) = 0.751 W/kg



Date/Time: 2012-08-17 20:10:35

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.267 W/kg

LTE - Left/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 9.436 V/m

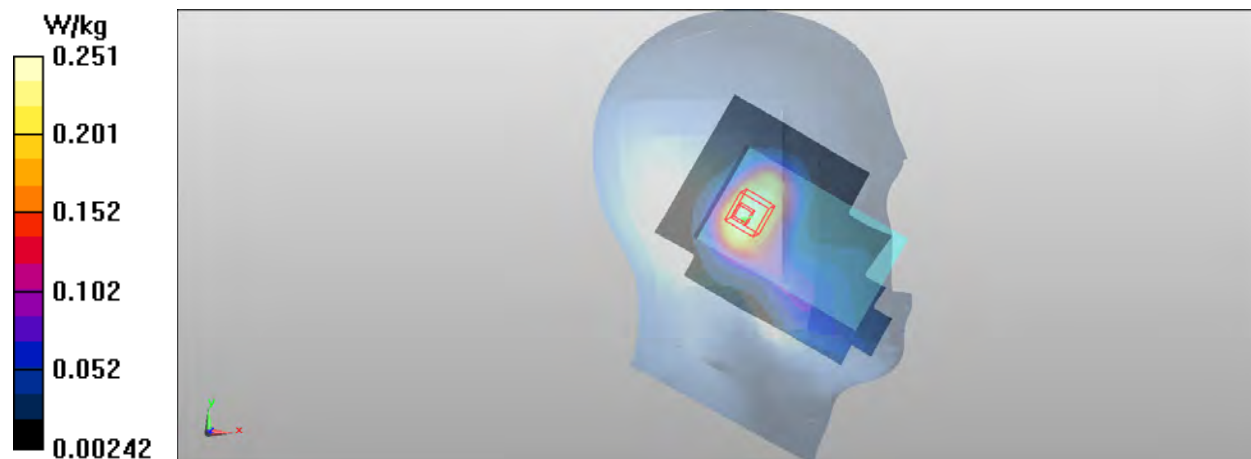
Peak SAR (extrapolated) = 0.365 mW/g

SAR(1 g) = 0.239 mW/g

SAR(10 g) = 0.153 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.251 W/kg



Date/Time: 2012-08-17 16:29:43

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.388 W/kg

LTE - Right/Cheek - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 5.706 V/m

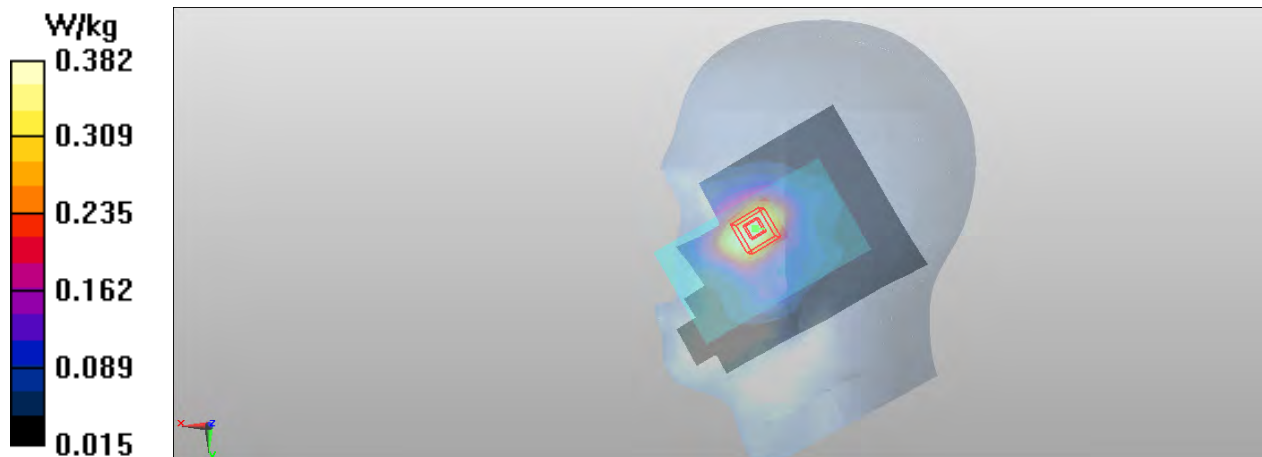
Peak SAR (extrapolated) = 0.529 mW/g

SAR(1 g) = 0.356 mW/g

SAR(10 g) = 0.232 mW/g

Power Drift = 0.33 dB

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



Date/Time: 2012-08-17 19:46:43

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.260 W/kg

LTE - Right/Tilt - Middle - 16QAM - 20MHz - 1 RB - 0% offset/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

$dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 10.547 V/m

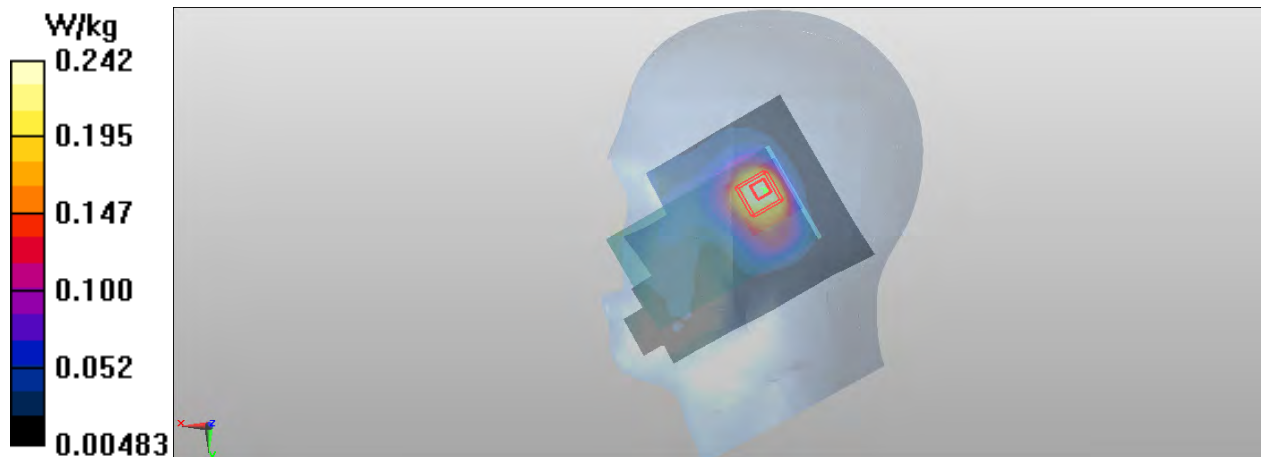
Peak SAR (extrapolated) = 0.344 mW/g

SAR(1 g) = 0.229 mW/g

SAR(10 g) = 0.146 mW/g

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 0.242 W/kg



Date/Time: 2012-08-17 20:49:26

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL 1900; Medium Notes: $t = 20.5$ C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset - Cover CC-3401/Area Scan (81x121x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset - Cover CC-3401/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 6.162 V/m

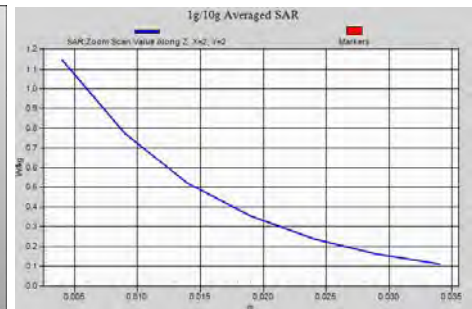
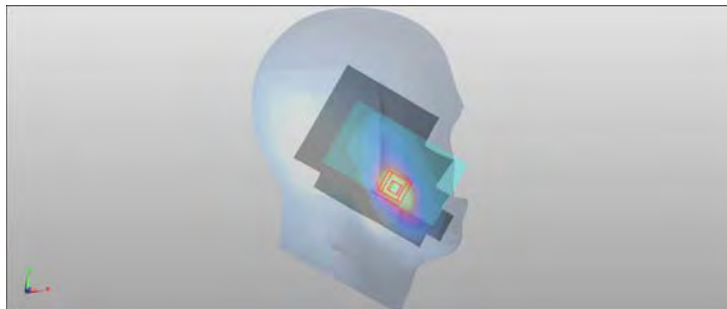
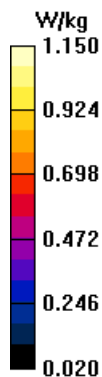
Peak SAR (extrapolated) = 1.613 mW/g

SAR(1 g) = 1.06 mW/g

SAR(10 g) = 0.653 mW/g

Power Drift = -0.11 dB

Maximum value of SAR (measured) = 1.15 W/kg



Date/Time: 2012-07-02 11:04:44

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Left/Cheek - Middle/Area Scan (121x181x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (interpolated) = 0.780 mW/g

WLAN - Left/Cheek - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 8.807 V/m

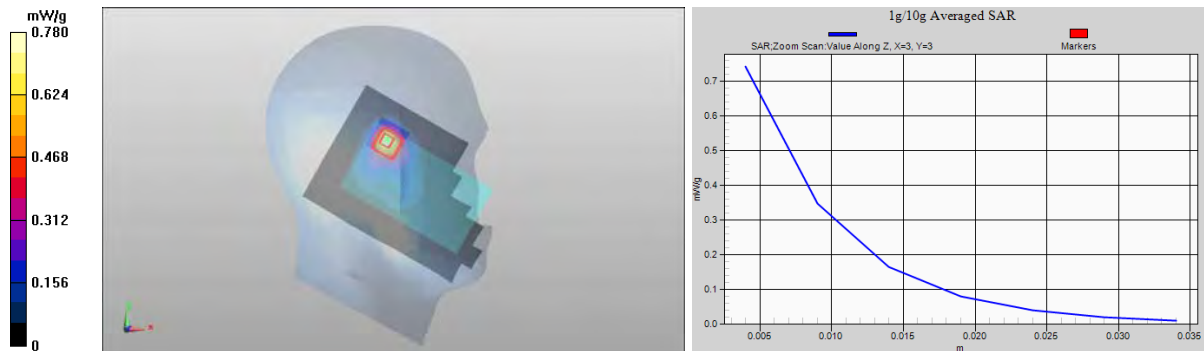
Peak SAR (extrapolated) = 1.450 mW/g

SAR(1 g) = 0.668 mW/g

SAR(10 g) = 0.320 mW/g

Power Drift = 0.11 dB

Maximum value of SAR (measured) = 0.741 mW/g



Date/Time: 2012-07-02 12:47:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Left/Tilt - Middle/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.519 mW/g

WLAN - Left/Tilt - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.299 V/m

Peak SAR (extrapolated) = 0.985 mW/g

SAR(1 g) = 0.451 mW/g

SAR(10 g) = 0.210 mW/g

Power Drift = 0.00 dB

Maximum value of SAR (measured) = 0.501 mW/g



Date/Time: 2012-07-02 13:17:46

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Right/Cheek - Middle/Area Scan (121x181x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (interpolated) = 0.386 mW/g

WLAN - Right/Cheek - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.785 V/m

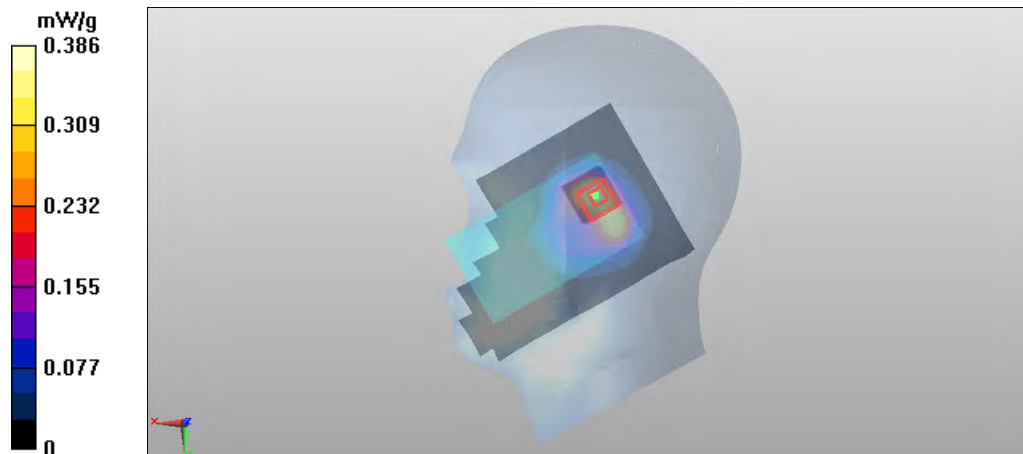
Peak SAR (extrapolated) = 0.601 mW/g

SAR(1 g) = 0.340 mW/g

SAR(10 g) = 0.186 mW/g

Power Drift = 0.44 dB

Maximum value of SAR (measured) = 0.372 mW/g



Date/Time: 2012-07-02 13:59:13

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.1$ C

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2011-09-16
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Right/Tilt - Middle/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.390 mW/g

WLAN - Right/Tilt - Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.346 V/m

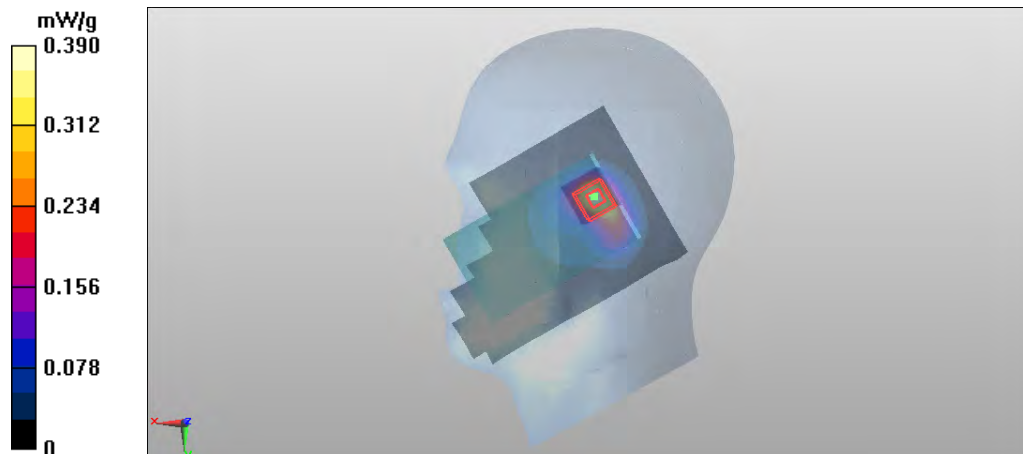
Peak SAR (extrapolated) = 0.623 mW/g

SAR(1 g) = 0.338 mW/g

SAR(10 g) = 0.175 mW/g

Power Drift = -0.12 dB

Maximum value of SAR (measured) = 0.381 mW/g



Date/Time: 2012-08-15 13:58:56

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium Notes: $t = 21.4$ C

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.774$ mho/m; $\epsilon_r = 37.595$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3573
- ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn538; Calibrated: 2012-08-03
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.6 (6824)

WLAN - Left/Cheek - Middle - Cover CC-3401/Area Scan (121x181x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.694 W/kg

WLAN - Left/Cheek - Middle - Cover CC-3401/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 8.806 V/m

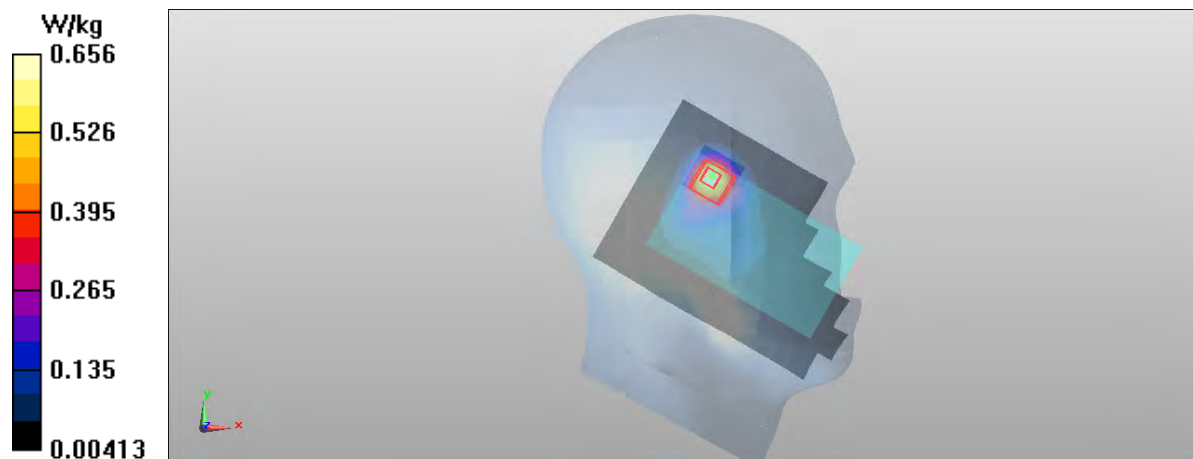
Peak SAR (extrapolated) = 1.301 mW/g

SAR(1 g) = 0.592 mW/g

SAR(10 g) = 0.279 mW/g

Power Drift = 0.04 dB

Maximum value of SAR (measured) = 0.656 W/kg



Date/Time: 2012-07-03 09:44:15

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode

Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Left/Cheek - Channel 64/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.95 mW/g

WLAN - Left/Cheek - Channel 64/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.601 V/m

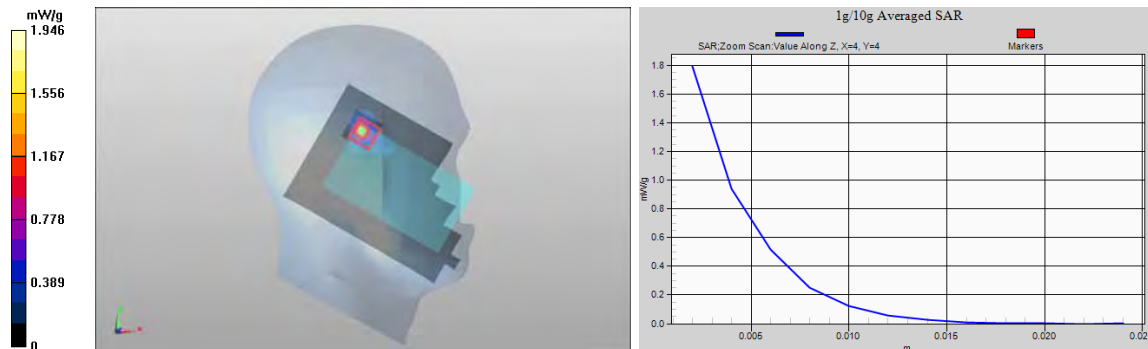
Peak SAR (extrapolated) = 3.931 mW/g

SAR(1 g) = 0.845 mW/g

SAR(10 g) = 0.227 mW/g

Power Drift = 0.45 dB

Maximum value of SAR (measured) = 1.79 mW/g



Date/Time: 2012-07-03 11:28:07

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode

Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Left/Tilt - Channel 64/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.25 mW/g

WLAN - Left/Tilt - Channel 64/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.158 V/m

Peak SAR (extrapolated) = 2.626 mW/g

SAR(1 g) = 0.578 mW/g

SAR(10 g) = 0.160 mW/g

Power Drift = 0.16 dB

Maximum value of SAR (measured) = 1.19 mW/g



Date/Time: 2012-07-03 14:11:40

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode

Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Right/Cheek - Channel 64/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.756 mW/g

WLAN - Right/Cheek - Channel 64/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.979 V/m

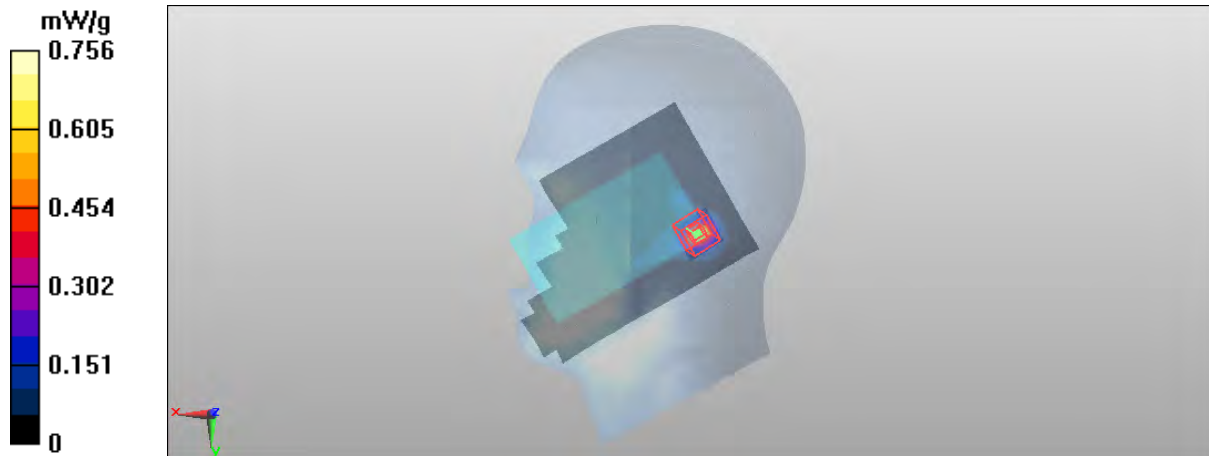
Peak SAR (extrapolated) = 1.397 mW/g

SAR(1 g) = 0.358 mW/g

SAR(10 g) = 0.103 mW/g

Power Drift = -0.41 dB

Maximum value of SAR (measured) = 0.675 mW/g



Date/Time: 2012-07-03 14:48:32

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode

Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.3 C

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.5 (6469)

WLAN - Right/Tilt - Channel 64/Area Scan (121x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.651 mW/g

WLAN - Right/Tilt - Channel 64/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.198 V/m

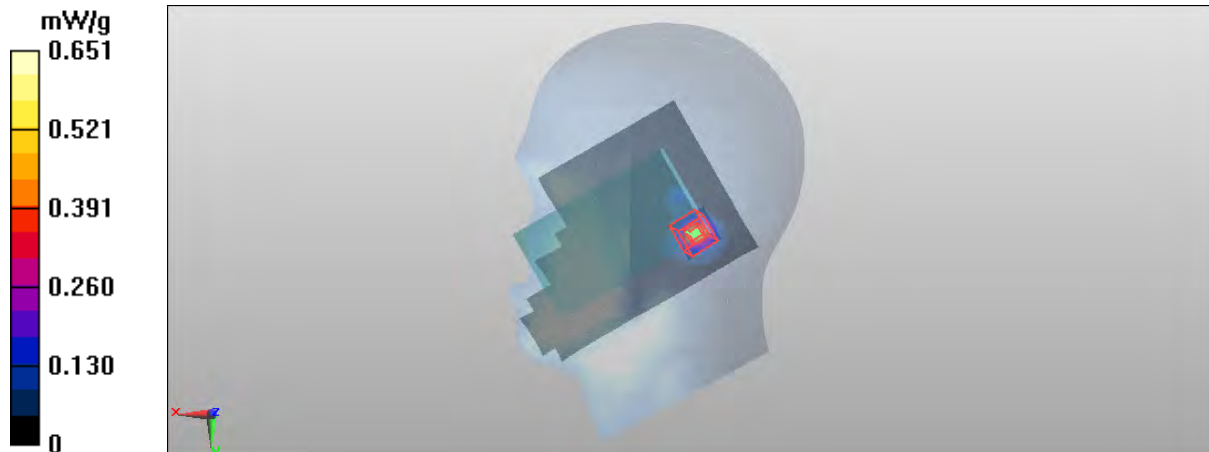
Peak SAR (extrapolated) = 2.439 mW/g

SAR(1 g) = 0.316 mW/g

SAR(10 g) = 0.092 mW/g

Power Drift = 0.12 dB

Maximum value of SAR (measured) = 0.614 mW/g



Date/Time: 2012-08-16 09:28:10

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode

Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000; Medium Notes: 21.4 C

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.619$ mho/m; $\epsilon_r = 34.315$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3834
- ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
- Phantom: SAM1; Type: SAM; Serial: TP-1126
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

WLAN- Left/Cheek - Channel 64 - Cover CC-3401 /Area Scan (121x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

WLAN- Left/Cheek - Channel 64 - Cover CC-3401 /Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.896 V/m

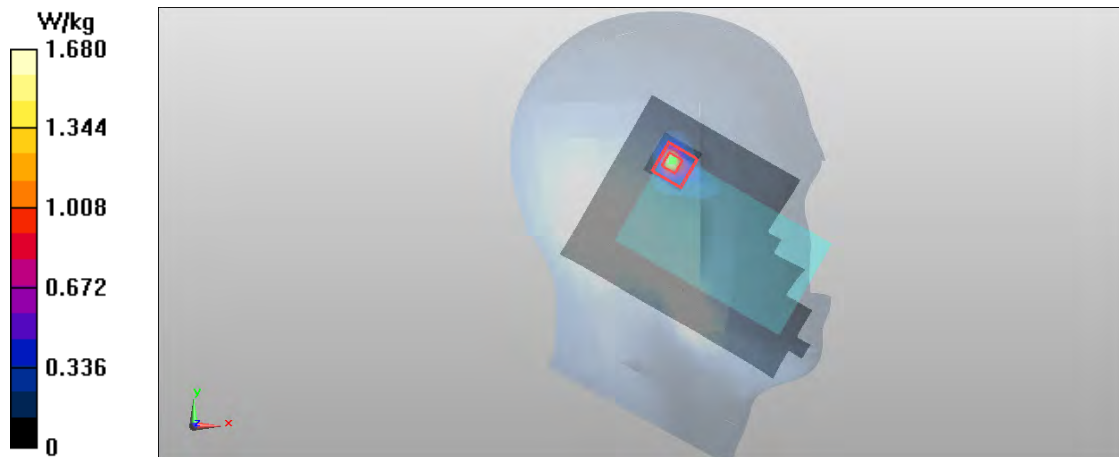
Peak SAR (extrapolated) = 3.501 mW/g

SAR(1 g) = 0.772 mW/g

SAR(10 g) = 0.207 mW/g

Power Drift = 0.19 dB

Maximum value of SAR (measured) = 1.68 W/kg



Date/Time: 2012-07-09 20:07:29

DASY Configuration for LTE - Left/Cheek - Low - QPSK - 10MHz - 1 RB - 0% offset/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700; Frequency: 709 MHz; Duty Cycle: 1:1

Medium: HSL750 Medium parameters used: $f = 709 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 40.843$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.758 \text{ mho/m}$; $\epsilon_r = 37.942$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

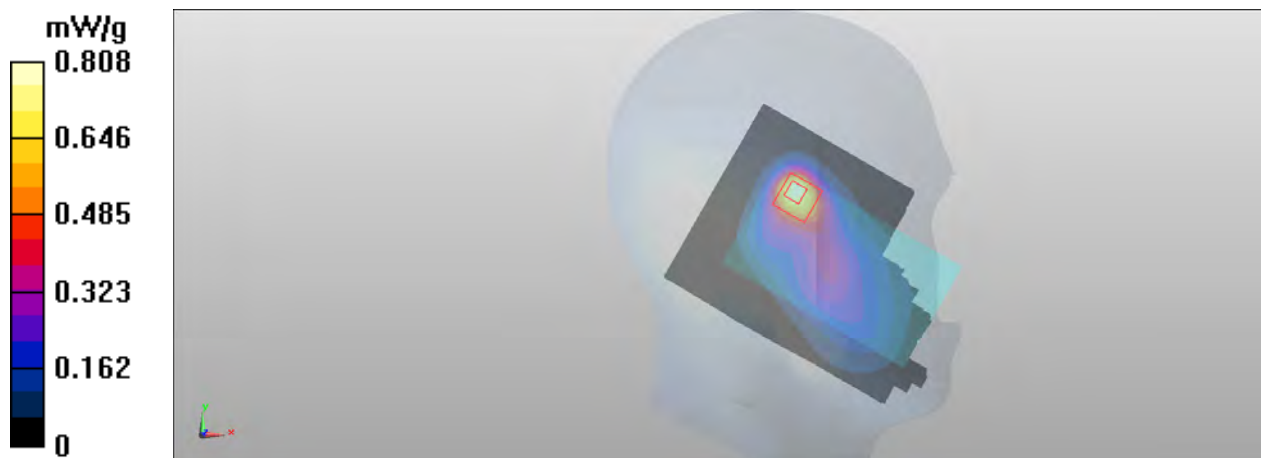
Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018

Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.346 mW/g

Maximum value of SAR (interpolated) = 0.808 mW/g



Date/Time: 2012-07-06 16:14:18

DASY Configuration for 2-slot GPRS - Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:4.19952

Medium: HSL850 Medium parameters used: $f = 849$ MHz; $\sigma = 0.925$ mho/m; $\epsilon_r = 40.386$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3131; ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

Electronics: DAE4 Sn1316; Calibrated: 2012-02-15

Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

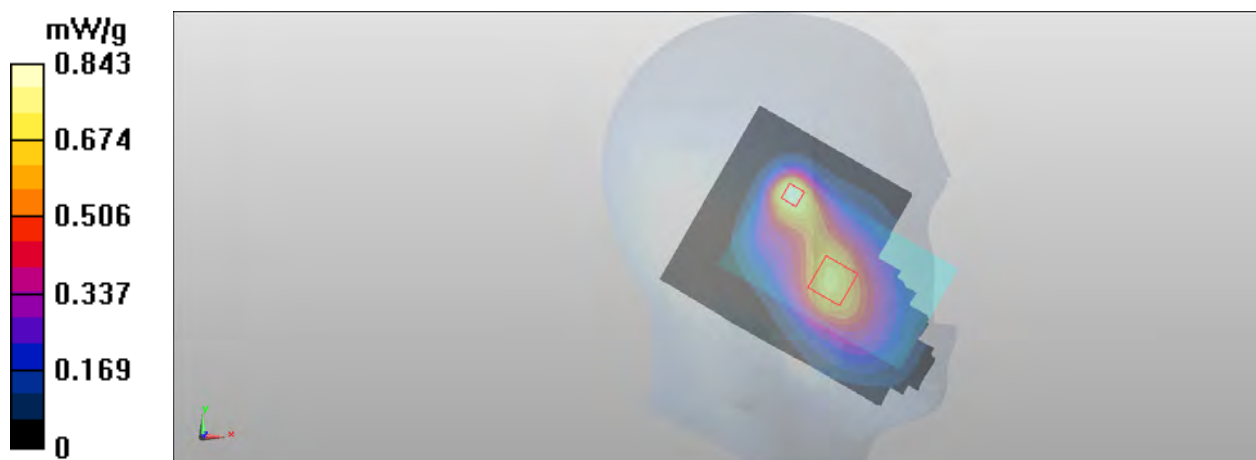
Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018

Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.747 mW/g; SAR(10 g) = 0.439 mW/g

Maximum value of SAR (interpolated) = 0.843 mW/g



Date/Time: 2012-07-06 19:08:17

DASY Configuration for WCDMA - Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used: $f = 847$ MHz; $\sigma = 0.924$ mho/m; $\epsilon_r = 40.398$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3131; ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1

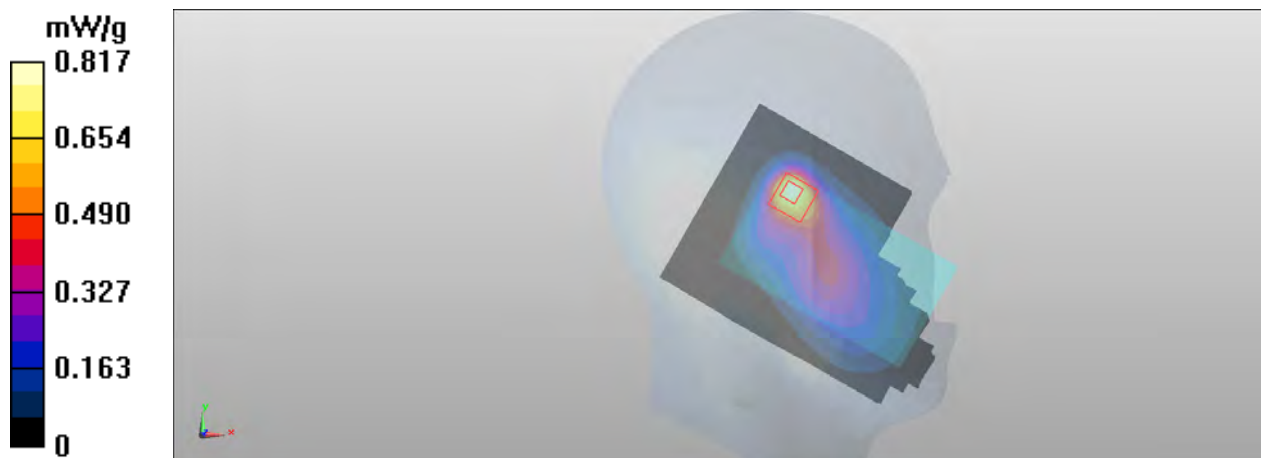
Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn793; Calibrated: 2011-09-16
Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.356 mW/g

Maximum value of SAR (interpolated) = 0.817 mW/g



Date/Time: 2012-08-15 12:58:00

DASY Configuration for LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850 (band 5); Frequency: 836.5 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL850 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3790; ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
Measurement SW: DASY52, Version 52.8 (2)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1; PMF: 1

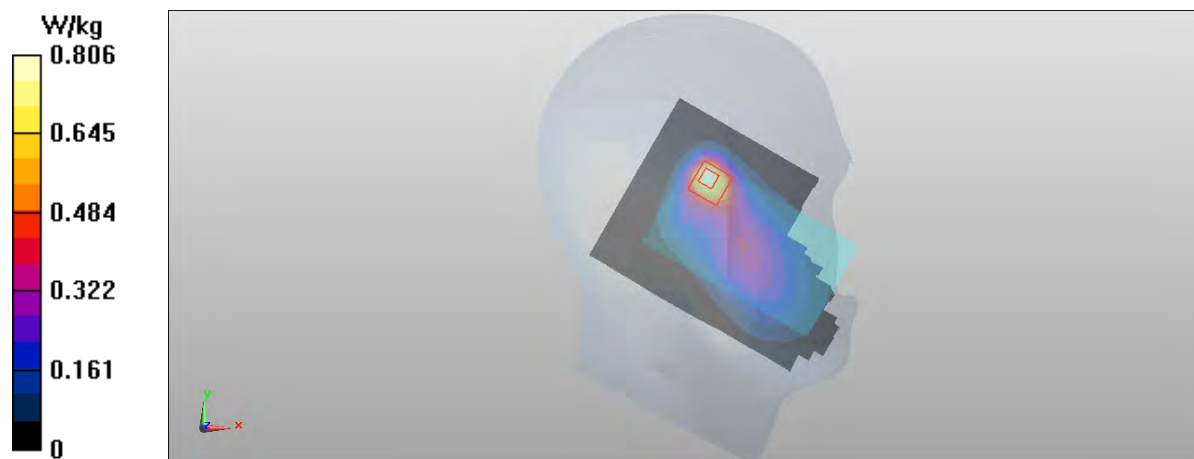
Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn793; Calibrated: 2011-09-16
Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.703 mW/g; SAR(10 g) = 0.343 mW/g

Maximum value of SAR (interpolated) = 0.806 W/kg



Date/Time: 2012-08-20 17:39:01

DASY Configuration for WCDMA _ Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100; Frequency: 1752.6 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL1800 Medium parameters used: $f = 1753$ MHz; $\sigma = 1.359$ mho/m; $\epsilon_r = 38.34$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
Phantom: SAM #1 CRP; Type: SAM; Serial:
Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1; PMF: 1

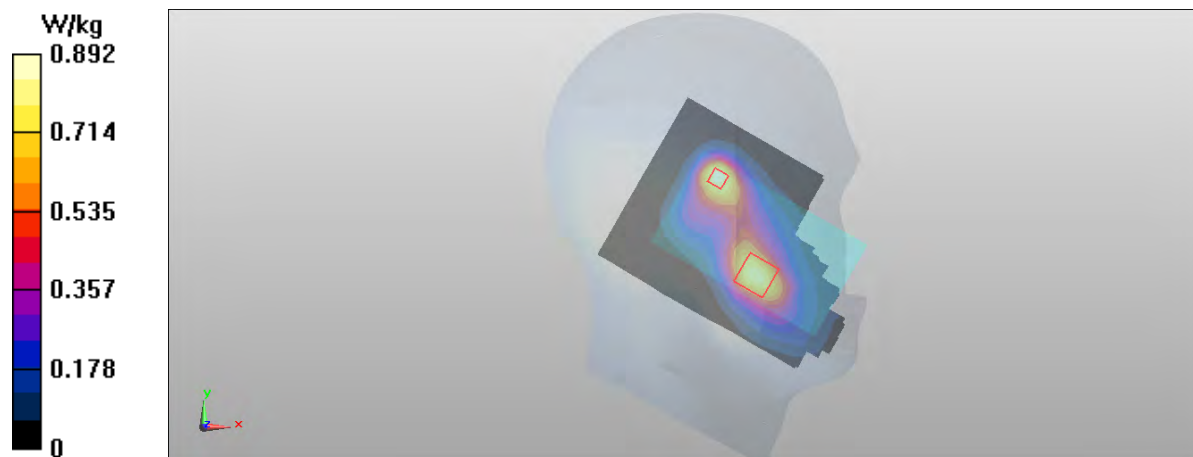
Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn793; Calibrated: 2011-09-16
Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.437 mW/g

Maximum value of SAR (interpolated) = 0.892 W/kg



Date/Time: 2012-08-20 20:34:39

DASY Configuration for LTE/Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100; Frequency: 1732.5 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL1800 Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.337$ mho/m; $\epsilon_r = 38.422$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

Phantom: SAM #1 CRP; Type: SAM; Serial:

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

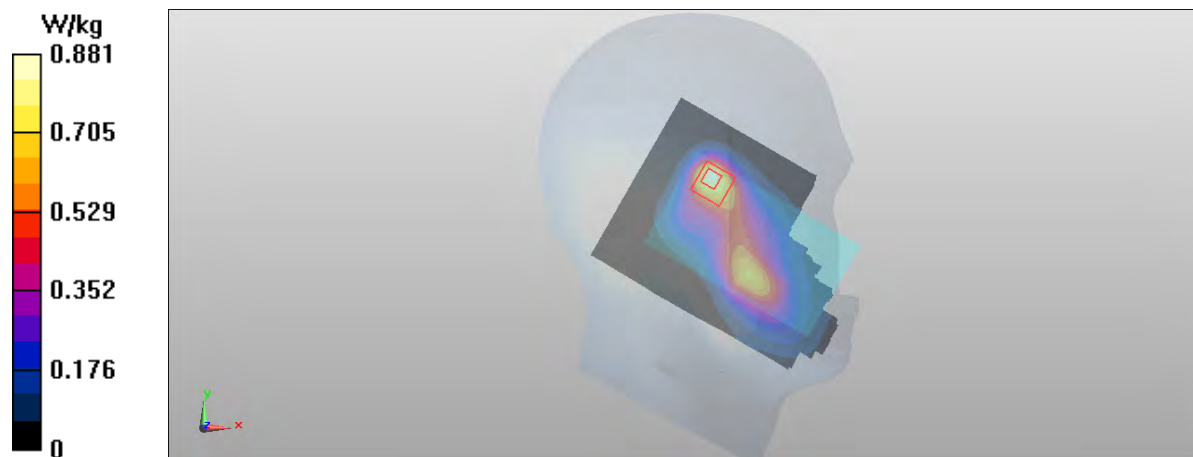
Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018

Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.770 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (interpolated) = 0.881 W/kg



Date/Time: 2012-08-16 08:56:24

DASY Configuration for 2-slot GPRS - Left/Cheek - Middle - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900; Frequency: 1880 MHz; Duty Cycle: 1:4.2; PMF: 2.04939

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn538; Calibrated: 2012-08-03

Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449

Measurement SW: DASY4, Version 4.7 (80)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

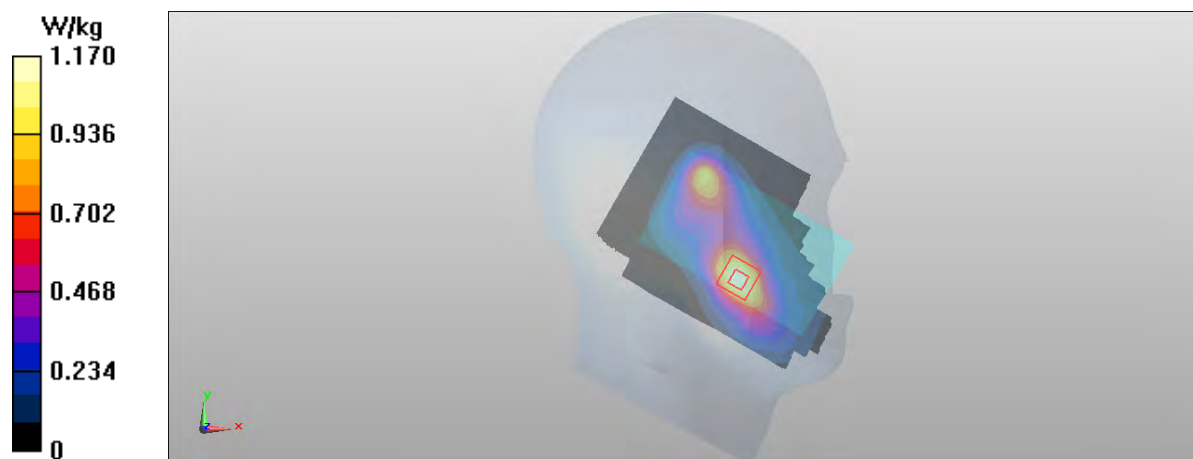
Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018

Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.592 mW/g

Maximum value of SAR (interpolated) = 1.17 W/kg



Date/Time: 2012-07-06 17:13:15

DASY Configuration for WCDMA - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.378 \text{ mho/m}$; $\epsilon_r = 38.85$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449

Measurement SW: DASY4, Version 4.7 (80)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.758 \text{ mho/m}$; $\epsilon_r = 37.942$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

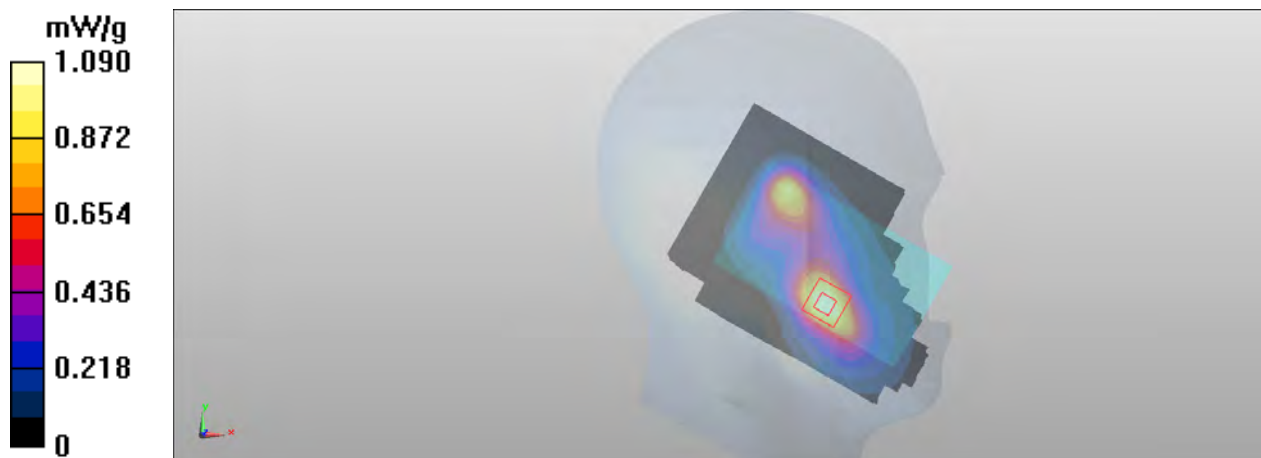
Electronics: DAE4 Sn793; Calibrated: 2011-09-16

Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018

Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.980 mW/g; SAR(10 g) = 0.553 mW/g

Maximum value of SAR (interpolated) = 1.09 mW/g



Date/Time: 2012-08-17 20:49:26

DASY Configuration for LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900 ; Frequency: 1880 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn538; Calibrated: 2012-08-03
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
Measurement SW: DASY4, Version 4.7 (80)

Date/Time: 2012-07-02 11:04:44

DASY Configuration for WLAN - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976064/3

Communication System: WLAN2450 b-mode; Frequency: 2437 MHz; Duty Cycle: 1:1; PMF: 1

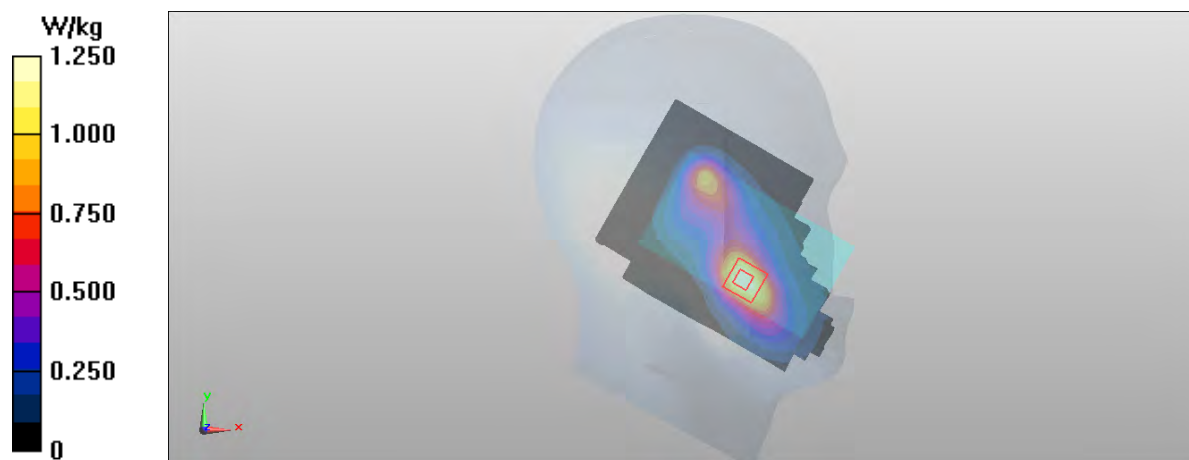
Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.758$ mho/m; $\epsilon_r = 37.942$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(6.52, 6.52, 6.52); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn793; Calibrated: 2011-09-16
Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.643 mW/g

Maximum value of SAR (interpolated) = 1.25 W/kg



Date/Time: 2012-07-09 20:07:29

DASY Configuration for LTE - Left/Cheek - Low - QPSK - 10MHz - 1 RB - 0% offset/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE700; Frequency: 709 MHz; Duty Cycle: 1:1

Medium: HSL750 Medium parameters used: $f = 709 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 40.843$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(6.13, 6.13, 6.13); Calibrated: 2012-02-21;

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1309; Calibrated: 2012-01-11

Phantom: SAM #4 CRP ; Type: QD000P40CD; Serial: -

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000 Medium parameters used: $f = 5320 \text{ MHz}$; $\sigma = 4.594 \text{ mho/m}$; $\epsilon_r = 34.999$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))

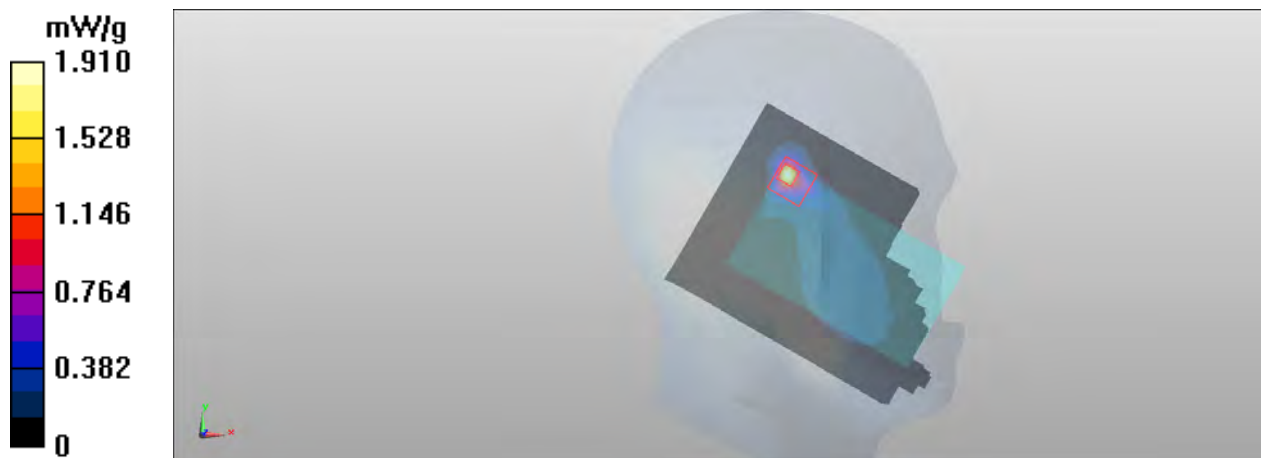
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14

Phantom: SAM1; Type: SAM; Serial: TP-1126

Measurement SW: DASY52, Version 52.8 (1)

Fast SAR of Combined Scans: SAR(1 g) = 0.818 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (interpolated) = 1.91 mW/g



Date/Time: 2012-07-06 16:14:18

DASY Configuration for 2-slot GPRS - Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: 2-slot GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:4.19952

Medium: HSL850 Medium parameters used: $f = 849$ MHz; $\sigma = 0.925$ mho/m; $\epsilon_r = 40.386$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3131; ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

Electronics: DAE4 Sn1316; Calibrated: 2012-02-15

Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))

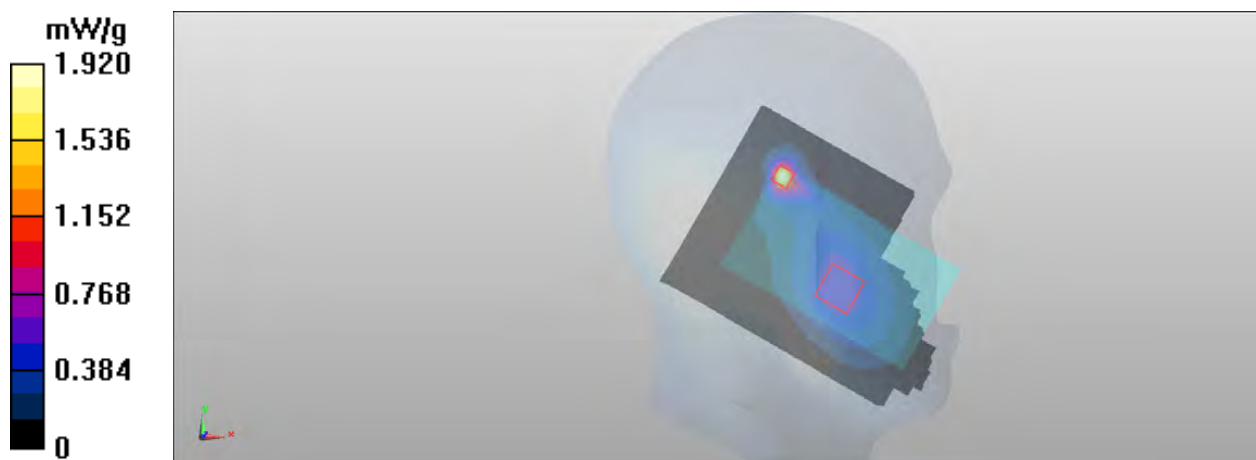
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14

Phantom: SAM1; Type: SAM; Serial: TP-1126

Measurement SW: DASY52, Version 52.8 (1)

Fast SAR of Combined Scans: SAR(1 g) = 0.828 mW/g; SAR(10 g) = 0.403 mW/g

Maximum value of SAR (interpolated) = 1.92 mW/g



Date/Time: 2012-07-06 19:08:17

DASY Configuration for WCDMA - Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976081/7

Communication System: WCDMA850; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used: $f = 847$ MHz; $\sigma = 0.924$ mho/m; $\epsilon_r = 40.398$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3131; ConvF(5.88, 5.88, 5.88); Calibrated: 2011-09-14;

Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))

Electronics: DAE4 Sn1316; Calibrated: 2012-02-15

Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179

Measurement SW: DASY52, Version 52.8 (0)

Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))

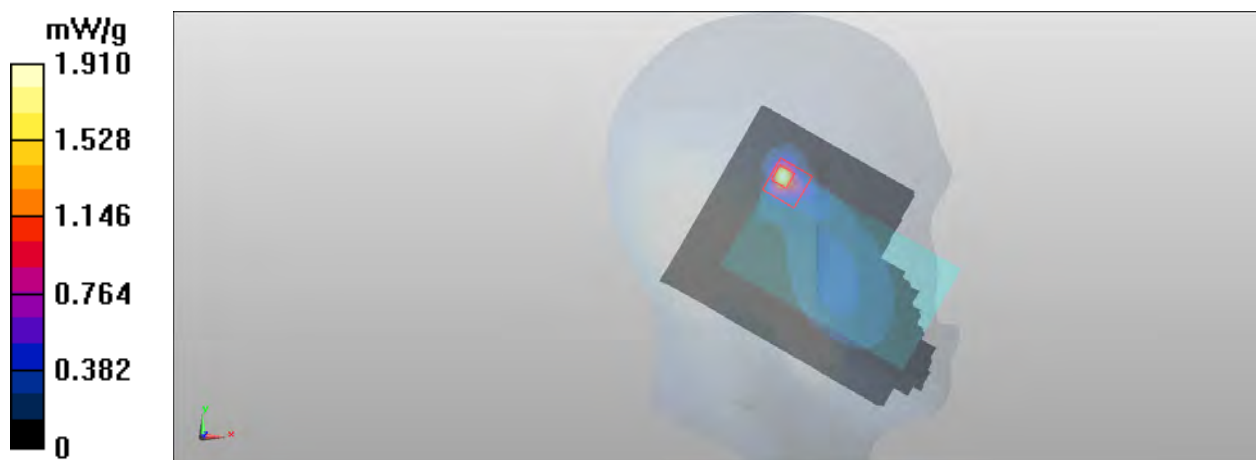
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14

Phantom: SAM1; Type: SAM; Serial: TP-1126

Measurement SW: DASY52, Version 52.8 (1)

Fast SAR of Combined Scans: SAR(1 g) = 0.819 mW/g; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (interpolated) = 1.91 mW/g



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-08-15 12:58:00

DASY Configuration for LTE - Left/Cheek - Middle - QPSK - 10MHz - 1 RB - 0% offset/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976156/7

Communication System: LTE850 (band 5); Frequency: 836.5 MHz; Duty Cycle: 1:1; PMF: 1

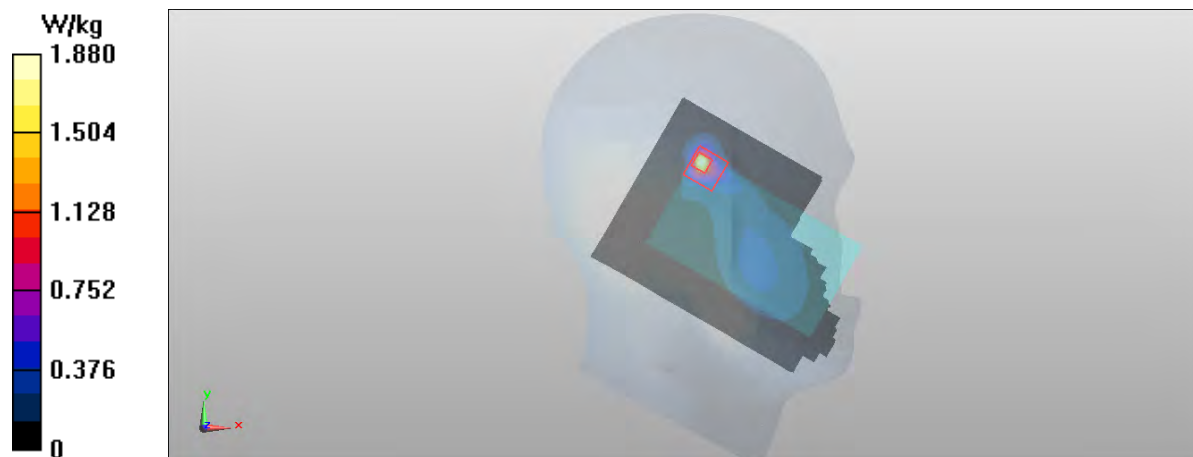
Medium: HSL850 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 39.813$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3790; ConvF(8.44, 8.44, 8.44); Calibrated: 2012-04-27;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1316; Calibrated: 2012-02-15
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
Measurement SW: DASY52, Version 52.8 (2)

Fast SAR of Combined Scans: SAR(1 g) = 0.796 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (interpolated) = 1.88 W/kg



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-08-20 17:39:01

DASY Configuration for WCDMA - Left/Cheek - High/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976165/8

Communication System: WCDMA1700/2100; Frequency: 1752.6 MHz; Duty Cycle: 1:1; PMF: 1

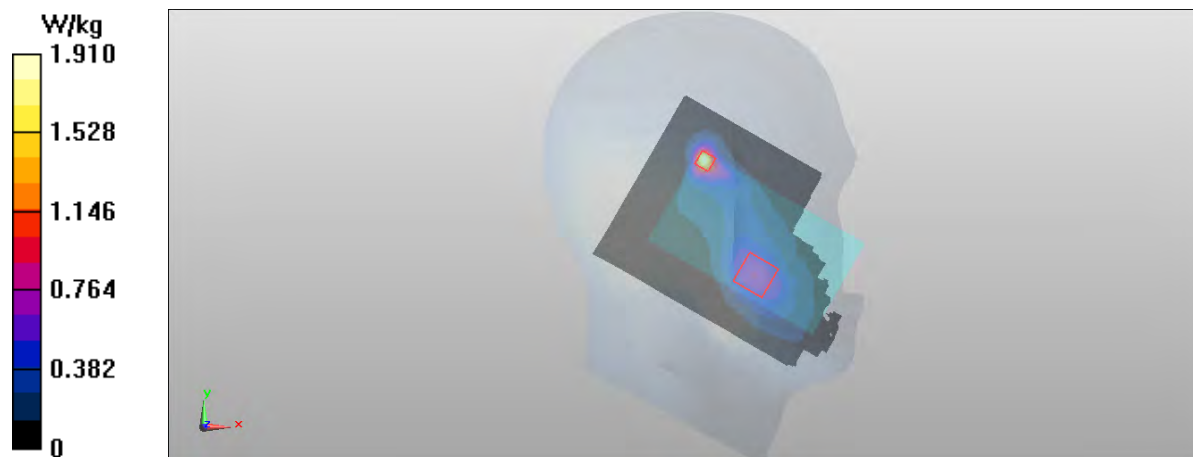
Medium: HSL1800 Medium parameters used: $f = 1753$ MHz; $\sigma = 1.359$ mho/m; $\epsilon_r = 38.34$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
Phantom: SAM #1 CRP; Type: SAM; Serial:
Measurement SW: DASY52, Version 52.8 (0)

Fast SAR of Combined Scans: SAR(1 g) = 0.827 mW/g; SAR(10 g) = 0.417 mW/g

Maximum value of SAR (interpolated) = 1.91 W/kg



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-08-20 20:34:39

DASY Configuration for LTE-Left/Cheek - Middle - QPSK - 20MHz - 1RB - 50% offset - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976065/0

Communication System: LTE1700/2100; Frequency: 1732.5 MHz; Duty Cycle: 1:1; PMF: 1

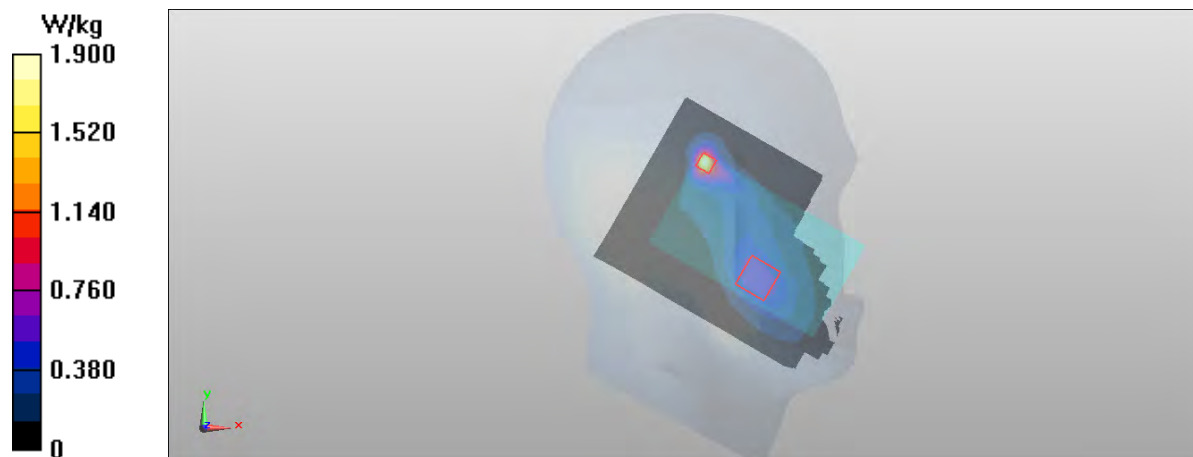
Medium: HSL1800 Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.337$ mho/m; $\epsilon_r = 38.422$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: ES3DV3 - SN3165; ConvF(5.51, 5.51, 5.51); Calibrated: 2012-02-21;
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1309; Calibrated: 2012-01-11
Phantom: SAM #1 CRP; Type: SAM; Serial:
Measurement SW: DASY52, Version 52.8 (0)

Fast SAR of Combined Scans: SAR(1 g) = 0.816 mW/g; SAR(10 g) = 0.344 mW/g

Maximum value of SAR (interpolated) = 1.90 W/kg



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-08-16 08:56:24

DASY Configuration for 2-slot GPRS - Left/Cheek - Middle - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: 2-slot GPRS1900; Frequency: 1880 MHz; Duty Cycle: 1:4.2; PMF: 2.04939

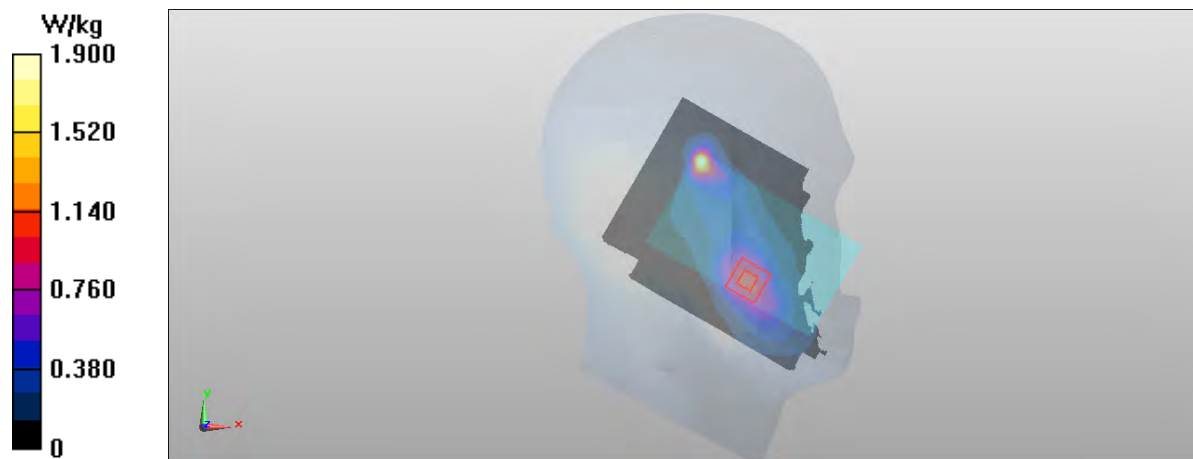
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn538; Calibrated: 2012-08-03
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.572 mW/g

Maximum value of SAR (interpolated) = 1.90 W/kg



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320 \text{ MHz}$; $\sigma = 4.594 \text{ mho/m}$; $\epsilon_r = 34.999$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-07-06 17:13:15

DASY Configuration for WCDMA - Left/Cheek - Middle/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976059/3

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1; PMF: 1

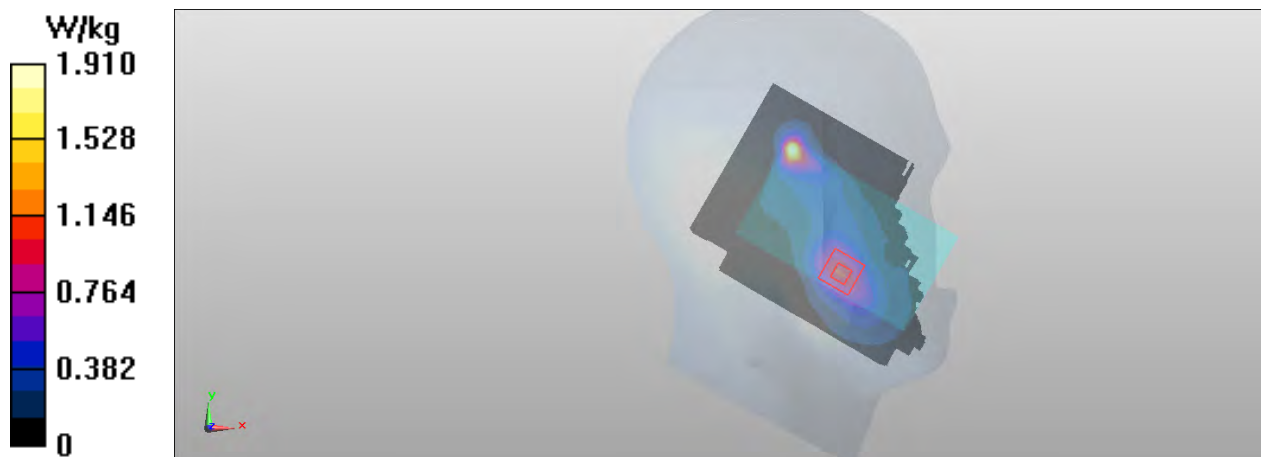
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.378 \text{ mho/m}$; $\epsilon_r = 38.85$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 2011-09-16
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 0.938 mW/g; SAR(10 g) = 0.527 mW/g

Maximum value of SAR (interpolated) = 1.91 W/kg



Date/Time: 2012-07-03 09:44:15

DASY Configuration for WLAN - Left/Cheek - Channel 64/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976060/1

Communication System: WLAN5000 a-mode; Frequency: 5320 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5000 Medium parameters used: $f = 5320$ MHz; $\sigma = 4.594$ mho/m; $\epsilon_r = 34.999$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3834; ConvF(4.57, 4.57, 4.57); Calibrated: 2012-02-07;
Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn1213; Calibrated: 2012-02-14
Phantom: SAM1; Type: SAM; Serial: TP-1126
Measurement SW: DASY52, Version 52.8 (1)

Date/Time: 2012-08-17 20:49:26

DASY Configuration for LTE - Left/Cheek - Middle - QPSK - 20MHz - 1 RB - 100% offset - Cover CC-3401/Area Scan:

Test Laboratory: TCC Nokia

Type: RM-824; Serial: 004402/13/976171/6

Communication System: LTE1900; Frequency: 1880 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.384$ mho/m; $\epsilon_r = 38.525$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Probe: EX3DV4 - SN3573; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-23;
Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
Electronics: DAE4 Sn538; Calibrated: 2012-08-03
Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
Measurement SW: DASY4, Version 4.7 (80)

Fast SAR of Combined Scans: SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.622 mW/g

Maximum value of SAR (interpolated) = 1.90 W/kg

