

## DASY5 Validation Report for Head TSL

Date: 20.07.2017

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.04$  S/m;  $\epsilon_r = 37.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.96, 7.96, 7.96); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

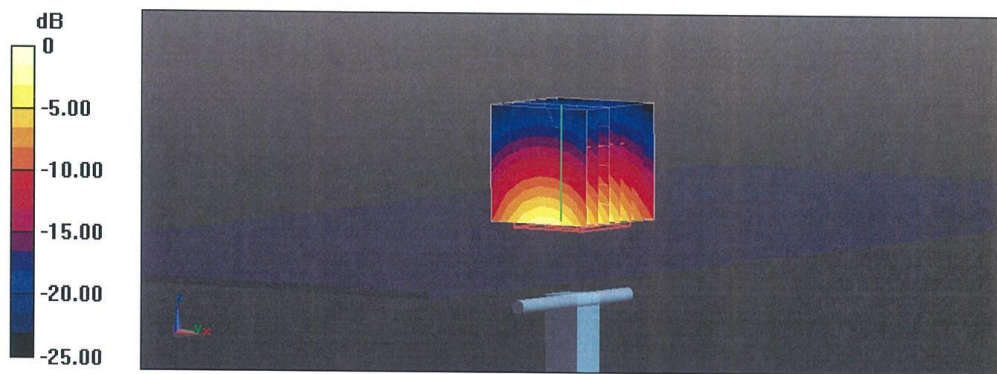
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 113.6 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 32.3 W/kg

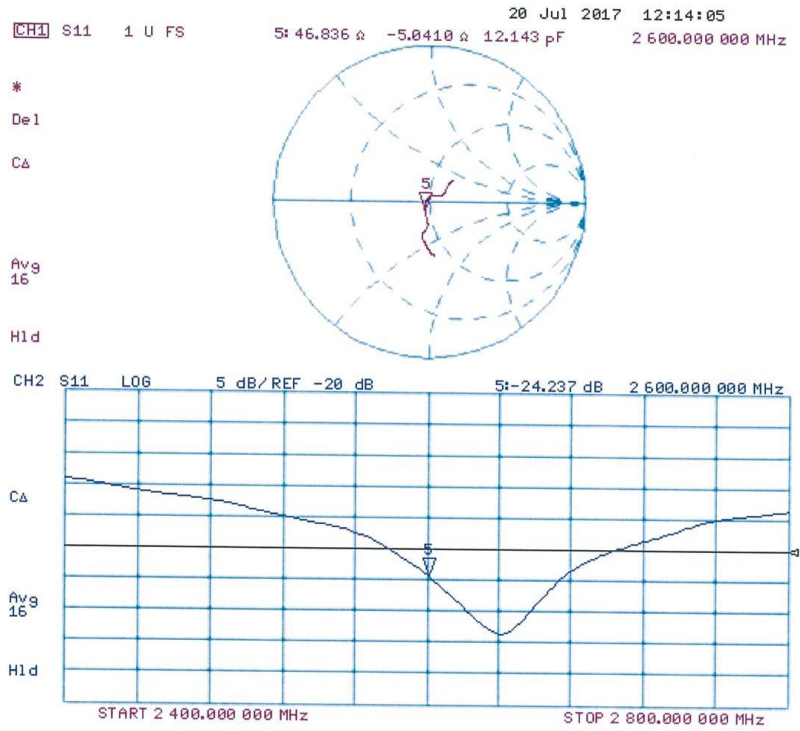
**SAR(1 g) = 14.9 W/kg; SAR(10 g) = 6.57 W/kg**

Maximum value of SAR (measured) = 25.0 W/kg



0 dB = 25.0 W/kg = 13.98 dBW/kg

Impedance Measurement Plot for Head TSL



## DASY5 Validation Report for Body TSL

Date: 21.07.2017

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.22$  S/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.94, 7.94, 7.94); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

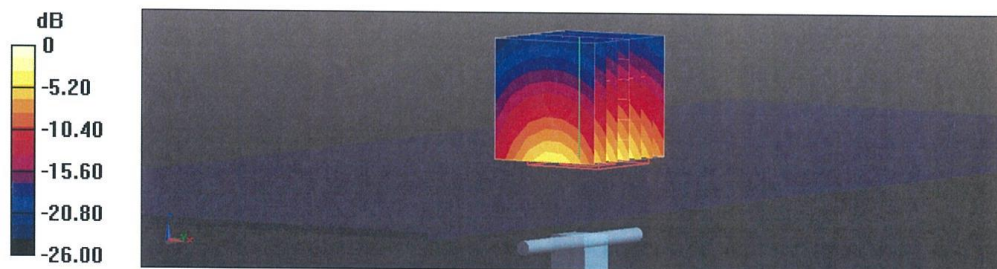
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 106.6 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 30.1 W/kg

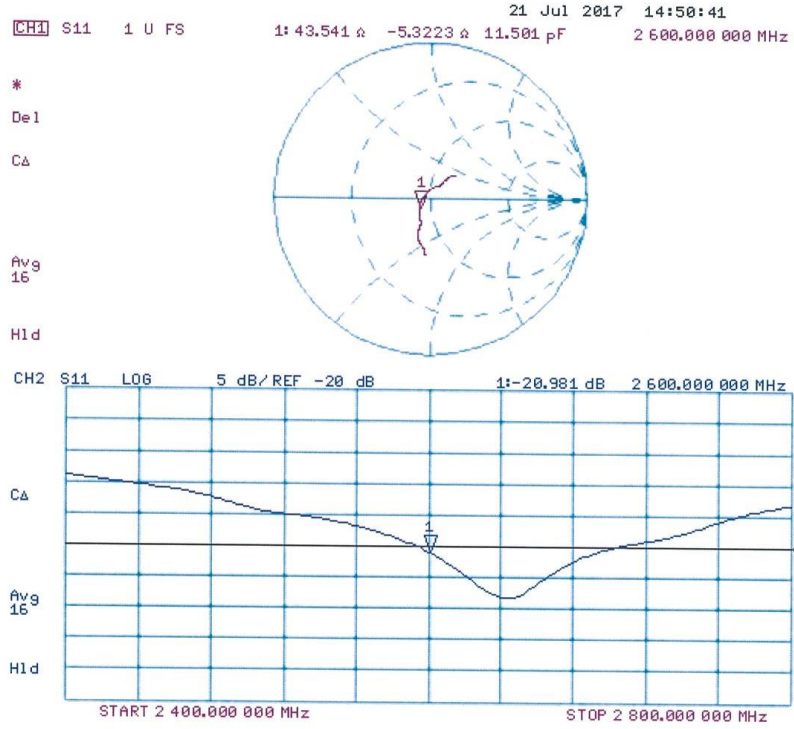
**SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.25 W/kg**

Maximum value of SAR (measured) = 23.4 W/kg



0 dB = 23.4 W/kg = 13.69 dBW/kg

Impedance Measurement Plot for Body TSL



## ANNEX I Spot Check

### I.1 Conducted power of selected case

**Table I.1-1: The conducted power measurement results for GSM850/1900**

GSM 850MHZ	Conducted Power (dBm)		
	<b>CH251 848.8 MHz</b>	<b>CH190 836.6 MHz</b>	<b>CH128 824.2 MHz</b>
Speech	32.46	32.61	32.57
GPRS	30.12	30.29	30.23
GSM 1900MHZ	Conducted Power(dBm)		
	<b>CH810 1909.8 MHz</b>	<b>CH661 1880 MHz</b>	<b>CH512 1850.2 MHz</b>
Speech	30.01	29.13	29.48
GPRS	28.94	28.55	28.39

**Table I.1-2: The conducted Power for WCDMA**

Item	band	FDDV result		
	ARFCN	4233	4182	4132
WCDMA	\	(846.6MHz)	(836.4MHz)	(826.4MHz)
		23.58	23.55	23.54
Item	band	FDDII result		
	ARFCN	9538	9400	9262
WCDMA	\	(1907.6MHz)	(1880MHz)	(1852.4MHz)
		22.18	22.27	22.29

**Table I.1-3: The conducted Power for LTE**

LTE Band7	1RB-Mid	21350	22.04
	1RB-Mid	21100	22.09
	1RB-Mid	20850	22.12

**Table I.1-4: The conducted Power for WLAN**

WLAN2450						
Band	Mode	Channel	Frequency	Data Rate	Tune-up	Measured
WLAN 2.4G 20M	802.11b	11	2462 MHz	1Mbps	18.50	18.50
		6	2437 MHz		18.50	18.50
		1	2412 MHz		18.50	18.50



## I.2 Measurement results

Test Band	Channel	Frequency	Tune-Up	Measured Power	Test Position	Measured 10g SAR	Measured 1g SAR	Reported 10g SAR	Reported 1g SAR	Power Drift	Figure
GSM850	251	848.8 MHz	33.3	32.46	Left Cheek	0.269	0.349	0.33	0.42	0.09	<a href="#">Fig I.1</a>
GSM850	251	848.8 MHz	30.5	30.12	Rear	0.387	0.543	0.42	0.59	-0.01	<a href="#">Fig I.2</a>
PCS1900	661	1880 MHz	30.3	29.13	Left Cheek	0.352	0.568	0.46	0.74	0.07	<a href="#">Fig I.3</a>
PCS1900	512	1850.2 MHz	29	28.39	Rear	0.356	0.615	0.41	0.71	0.03	<a href="#">Fig I.4</a>
WCDMA1900-BII	9400	1880 MHz	24	22.27	Left Cheek	0.393	0.639	0.59	0.95	0.08	<a href="#">Fig I.5</a>
WCDMA1900-BII	9400	1880 MHz	24	22.27	Rear	0.431	0.741	0.64	1.10	0.01	<a href="#">Fig I.6</a>
WCDMA850-BV	4182	835.4 MHz	24	23.55	Left Cheek	0.46	0.594	0.51	0.66	0.03	<a href="#">Fig I.7</a>
WCDMA850-BV	4233	846.6 MHz	24	23.58	Rear	0.533	0.692	0.59	0.76	0.04	<a href="#">Fig I.8</a>
LTE2500-FDD7	21350	2560 MHz	22.5	22.04	Right Cheek	0.0856	0.152	0.10	0.17	0.09	<a href="#">Fig I.11</a>
LTE2500-FDD7	21350	2560 MHz	22.5	22.04	Rear	0.375	0.781	0.42	0.87	0.04	<a href="#">Fig I.12</a>
WLAN2450	11	2462 MHz	18.5	17.94	Right Cheek	0.446	0.851	0.51	0.97	0.12	<a href="#">Fig I.13</a>
WLAN2450	6	2437 MHz	18.5	17.91	Rear	0.14	0.257	0.16	0.29	0.14	<a href="#">Fig I.14</a>

### I.3 Reported SAR Comparison

Exposure Configuration	Technology Band	Reported SAR 1g(W/kg) Original	Reported SAR 1g(W/kg) Spot check	Reported SAR 1g(W/kg) Final
Head (Separation Distance 0mm)	GSM 850	0.31	0.42	0.42
	PCS 1900	0.47	0.74	0.74
	UMTS FDD 2	0.78	0.95	0.95
	UMTS FDD 5	0.33	0.66	0.66
	LTE Band 7	0.32	0.17	0.32
	WLAN 2.4 GHz	1.21	0.97	1.21
Hotspot (Separation Distance 10mm)	GSM 850	0.26	0.59	0.59
	PCS 1900	1.17	0.71	1.17
	UMTS FDD 2	1.30	1.10	1.30
	UMTS FDD 5	0.42	0.76	0.76
	LTE Band 7	0.88	0.87	0.88
	WLAN 2.4 GHz	0.32	0.29	0.32

**Note: The spot check results marked by blue are larger than the original result. So its replace the original result and others are shared.**



#### I.4 Graph Results for Spot check

##### GSM850\_CH251 Left Cheek

Date: 8/1/2018

Electronics: DAE4 Sn1525

Medium: head 835 MHz

Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 41.24$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: GSM850 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 – SN7464 ConvF(10.28,10.28,10.28)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.375 W/kg

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

Reference Value = 4.675 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.433 W/kg

**SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.269 W/kg**

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

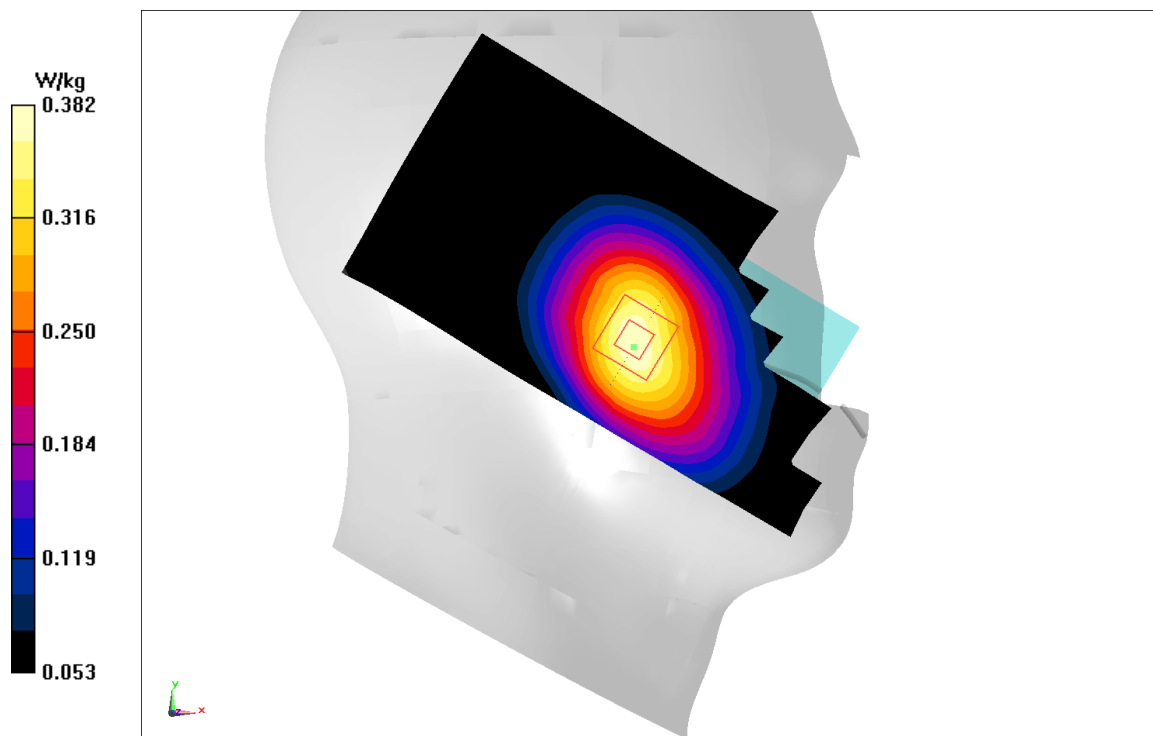


Fig I.1



### GSM850\_CH251 Rear

Date: 8/1/2018

Electronics: DAE4 Sn1525

Medium: body 835 MHz

Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.974$  mho/m;  $\epsilon_r = 55.03$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: GSM850 848.8 MHz Duty Cycle: 1:4

Probe: EX3DV4 – SN7464 ConvF(10.21,10.21,10.21)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.496 W/kg

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

Reference Value = 19.77 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.63 W/kg

**SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.387 W/kg**

Maximum value of SAR (measured) = 0.493 W/kg

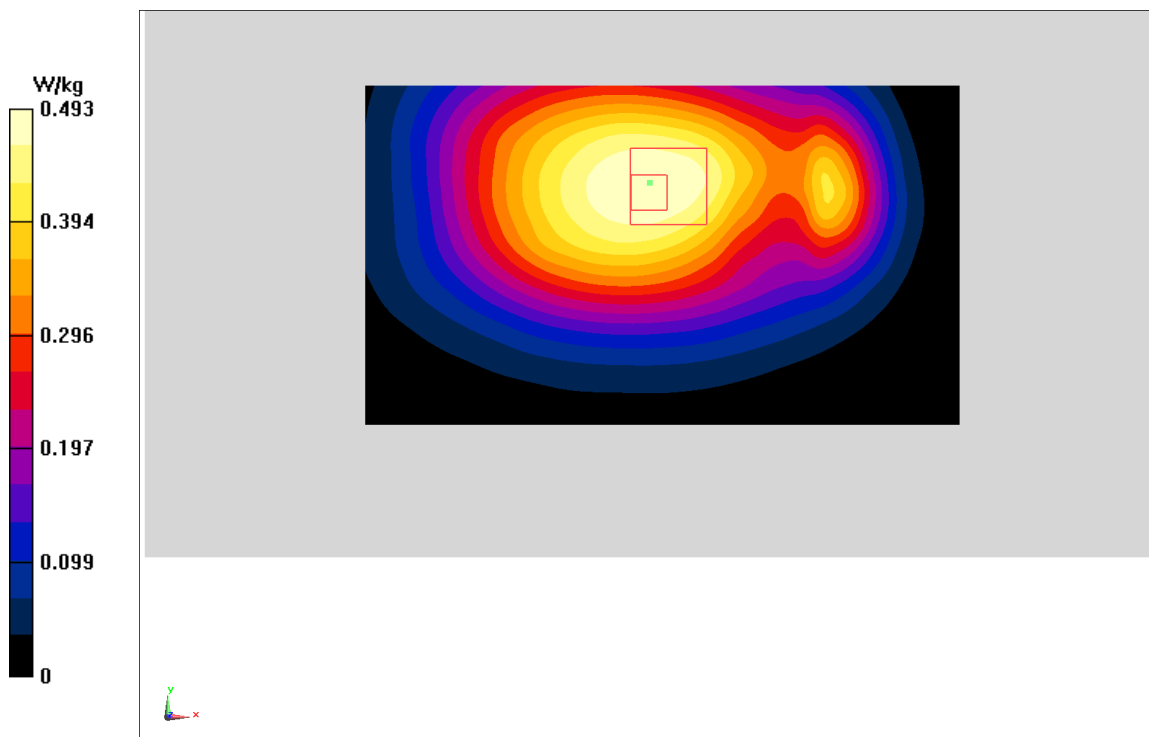


Fig I.2

### PCS1900\_CH661 Left Cheek

Date: 8/2/2018

Electronics: DAE4 Sn1525

Medium: head 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.382$  mho/m;  $\epsilon_r = 40.11$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: PCS1900 1880 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 – SN7464 ConvF(8.39,8.39,8.39)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.675 W/kg

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

Reference Value = 3.087 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.866 W/kg

**SAR(1 g) = 0.568 W/kg; SAR(10 g) = 0.352 W/kg**

Maximum value of SAR (measured) = 0.676 W/kg

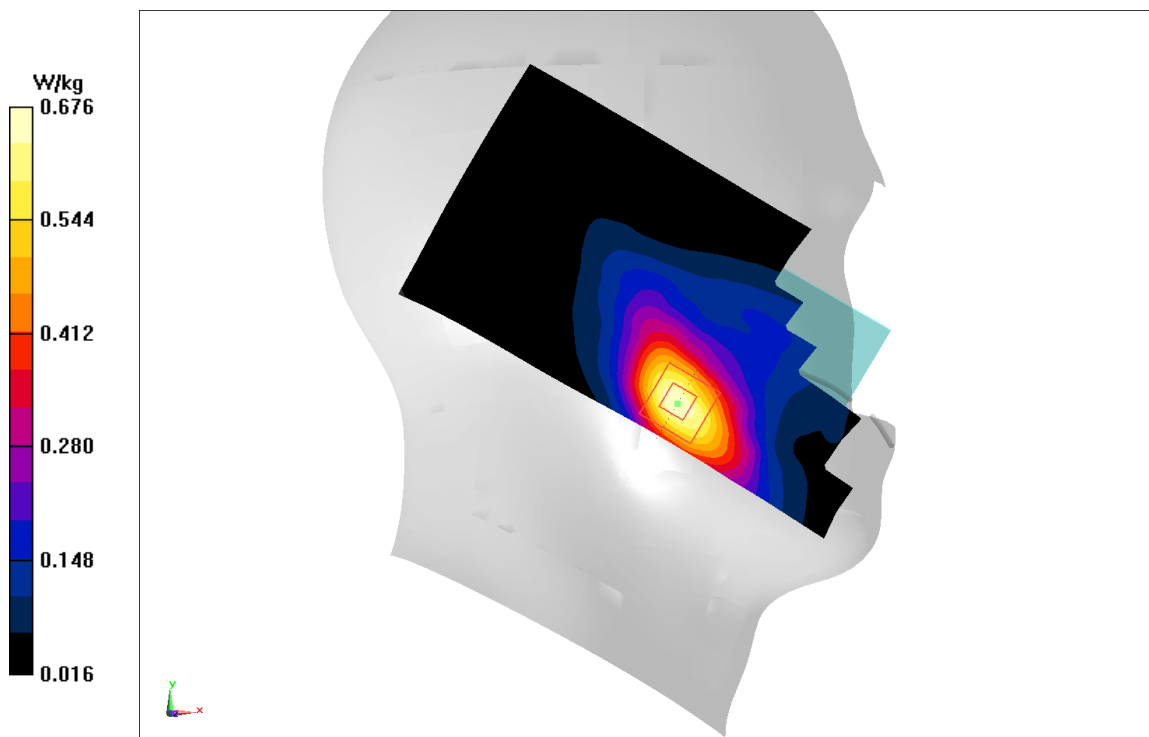


Fig I.3

### PCS1900\_CH512 Rear

Date: 8/2/2018

Electronics: DAE4 Sn1525

Medium: body 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 54.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:4

Probe: EX3DV4 – SN7464 ConvF(8.32,8.32,8.32)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.803 W/kg

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

Reference Value = 9.733 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.356 W/kg**

Maximum value of SAR (measured) = 0.72 W/kg

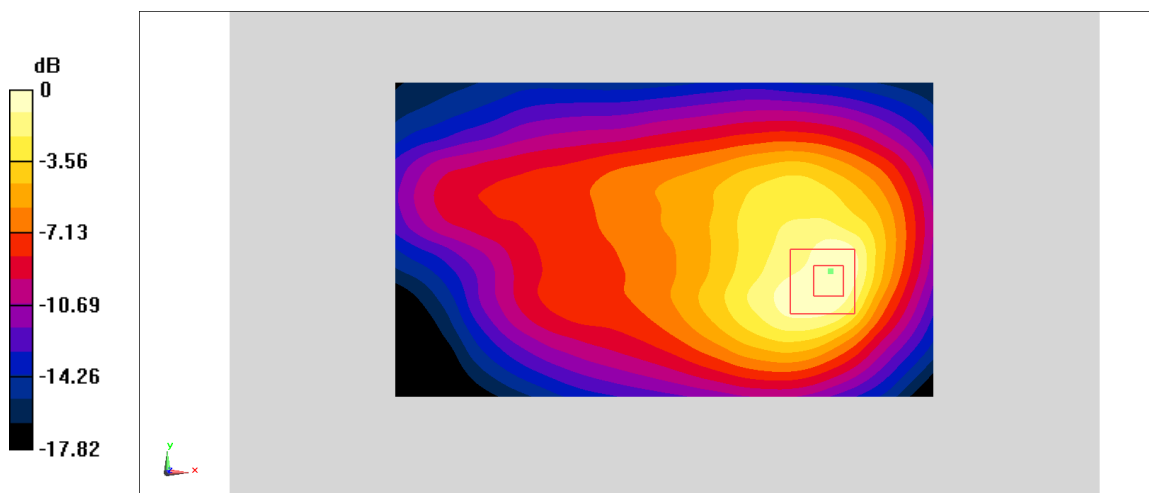


Fig I.4

### WCDMA1900-BII\_CH9400 Left Cheek

Date: 8/2/2018

Electronics: DAE4 Sn1525

Medium: head 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.382$  mho/m;  $\epsilon_r = 40.11$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WCDMA1900-BII 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.39,8.39,8.39)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.75 W/kg

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

Reference Value = 5.066 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.999 W/kg

**SAR(1 g) = 0.639 W/kg; SAR(10 g) = 0.393 W/kg**

Maximum value of SAR (measured) = 0.762 W/kg

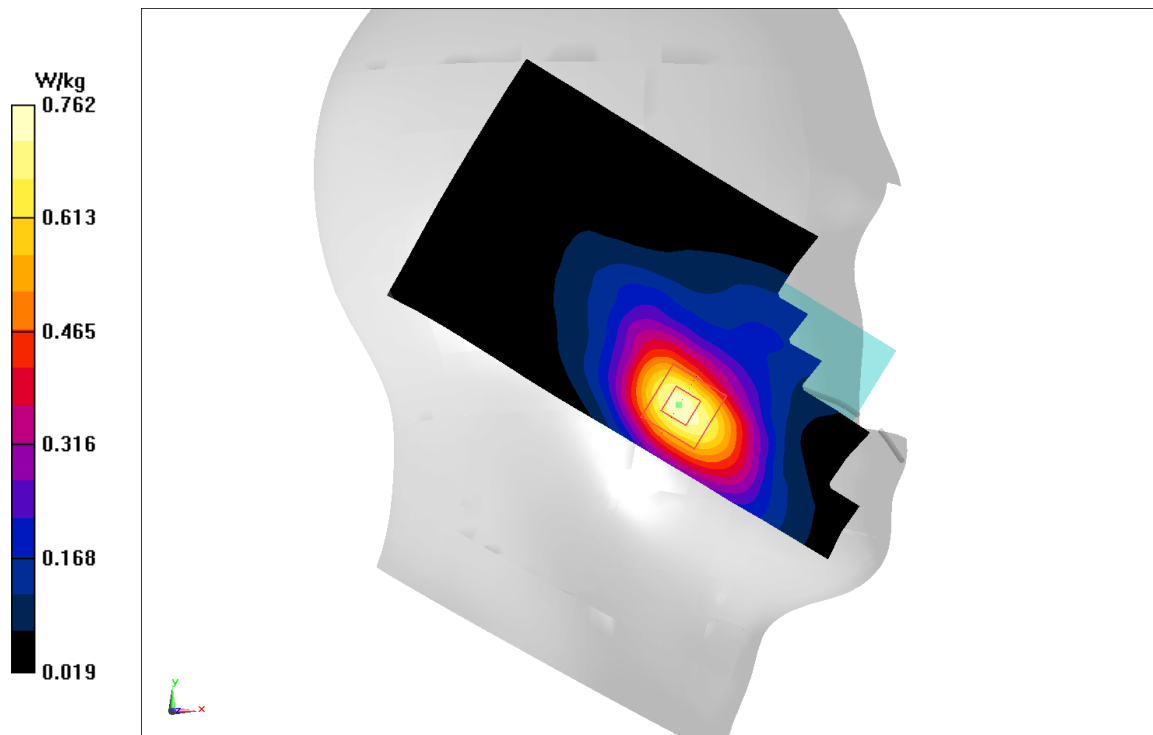


Fig I.5

### WCDMA1900-BII\_CH9400 Rear

Date: 8/2/2018

Electronics: DAE4 Sn1525

Medium: body 1900 MHz

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.529$  mho/m;  $\epsilon_r = 54.19$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WCDMA1900-BII 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.32,8.32,8.32)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.978 W/kg

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

Reference Value = 9.727 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.741 W/kg; SAR(10 g) = 0.431 W/kg**

Maximum value of SAR (measured) = 0.861 W/kg

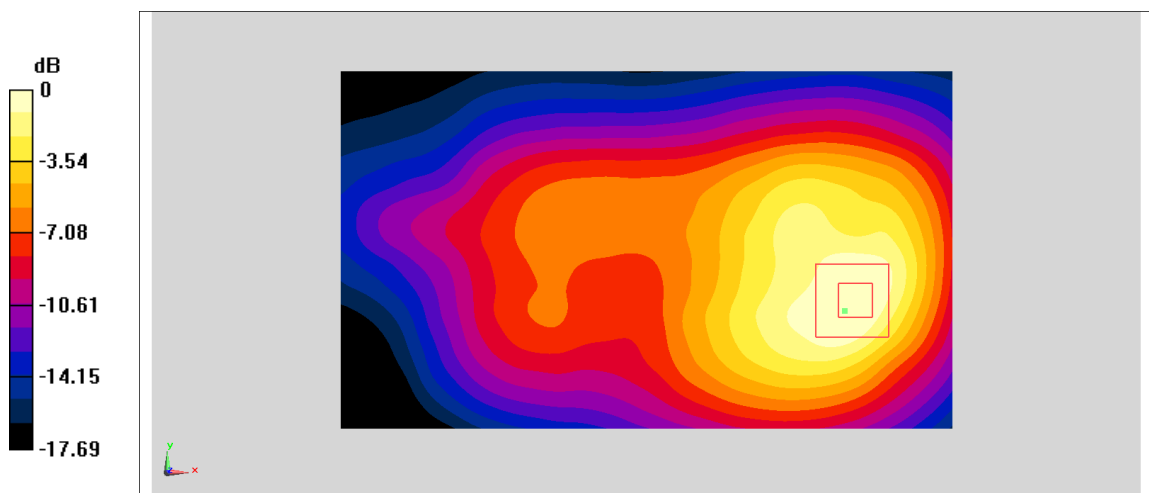


Fig I.6

### WCDMA850-BV\_CH4182 Left Cheek

Date: 8/1/2018

Electronics: DAE4 Sn1525

Medium: head 835 MHz

Medium parameters used:  $f = 835.4$  MHz;  $\sigma = 0.908$  mho/m;  $\epsilon_r = 41.26$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WCDMA850-BV 835.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.28,10.28,10.28)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 10.01 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.728 W/kg

**SAR(1 g) = 0.594 W/kg; SAR(10 g) = 0.46 W/kg**

Maximum value of SAR (measured) = 0.643 W/kg

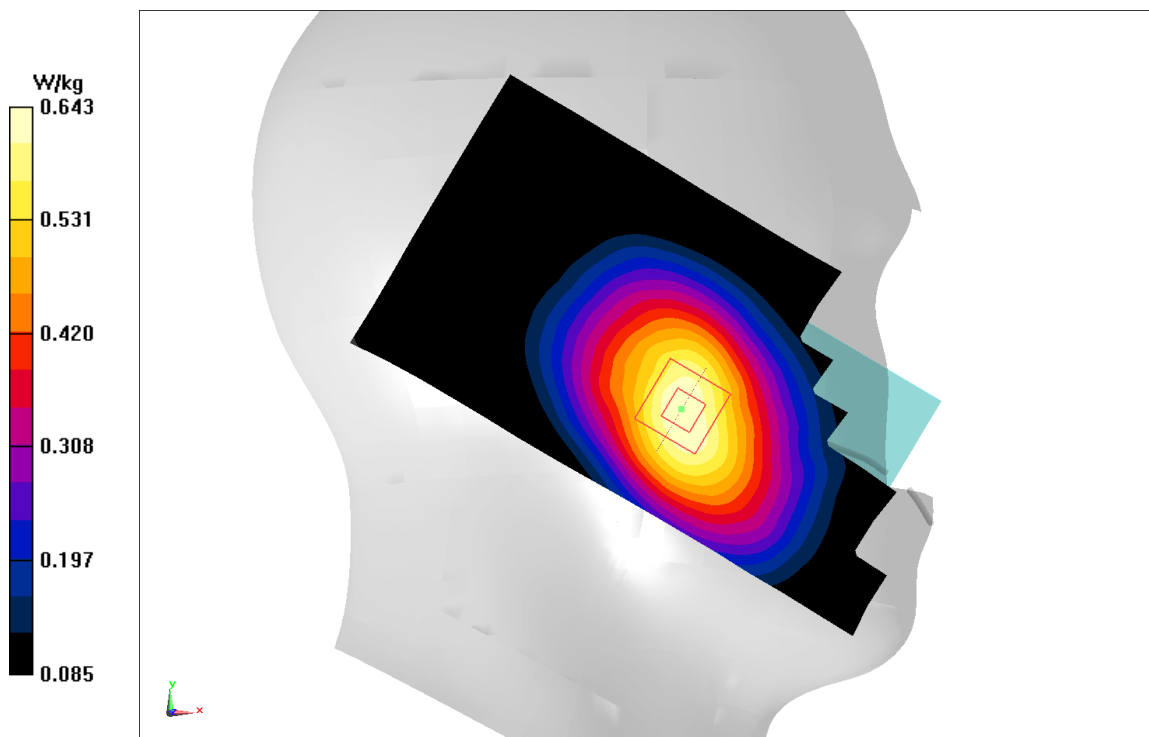


Fig I.7

### WCDMA850-BV\_CH4233 Rear

Date: 8/1/2018

Electronics: DAE4 Sn1525

Medium: body 835 MHz

Medium parameters used:  $f = 846.6$  MHz;  $\sigma = 0.972$  mho/m;  $\epsilon_r = 55.04$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WCDMA850-BV 846.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.21,10.21,10.21)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

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

Reference Value = 26.06 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.859 W/kg

**SAR(1 g) = 0.692 W/kg; SAR(10 g) = 0.533 W/kg**

Maximum value of SAR (measured) = 0.757 W/kg

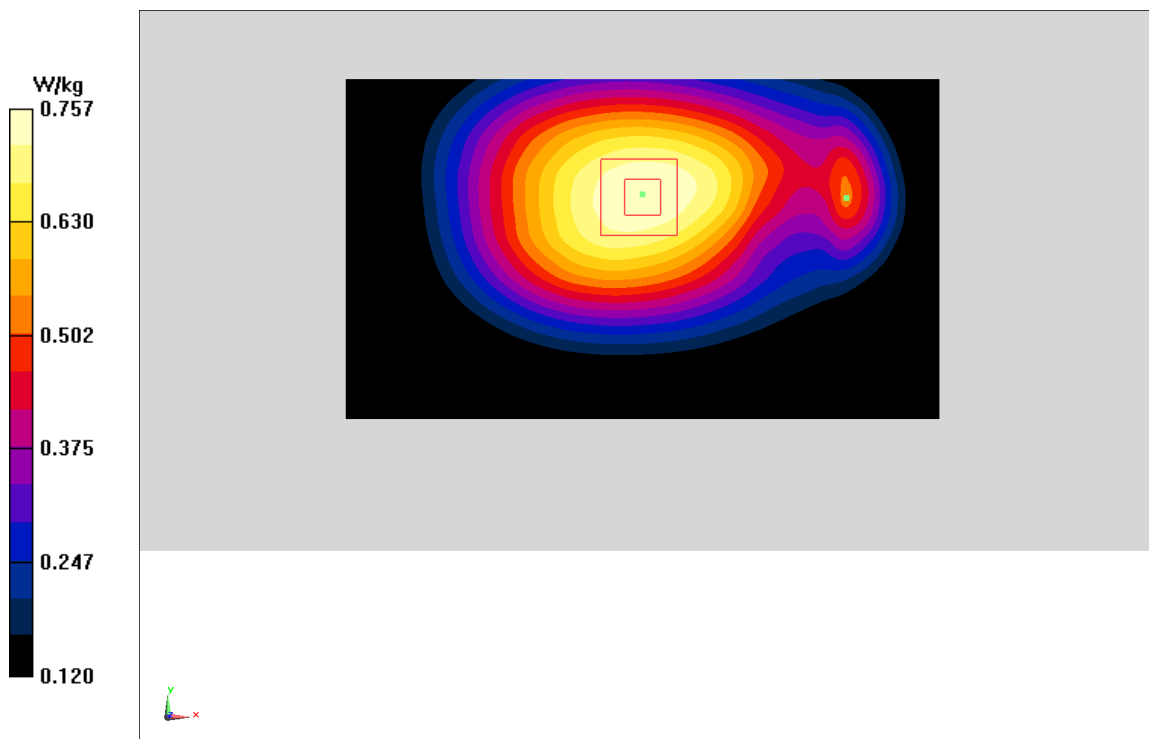


Fig I.8



### LTE2500-FDD7\_CH21350 Right Cheek

Date: 8/3/2018

Electronics: DAE4 Sn1525

Medium: head 2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 1.908$  mho/m;  $\epsilon_r = 38.62$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.76,7.76,7.76)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.181 W/kg

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

Reference Value = 1.53 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.277 W/kg

**SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.0856 W/kg**

Maximum value of SAR (measured) = 0.186 W/kg

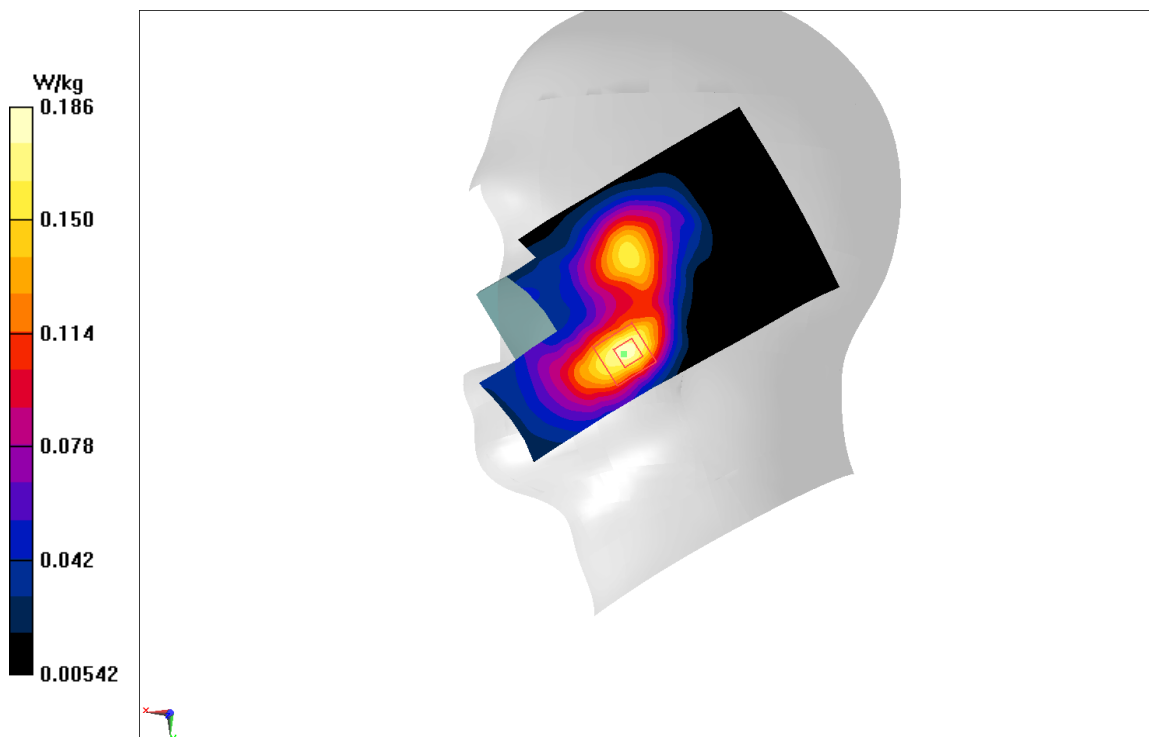


Fig I.9

**LTE2500-FDD7\_CH21350 Rear**

Date: 8/3/2018

Electronics: DAE4 Sn1525

Medium: body 2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 2.145$  mho/m;  $\epsilon_r = 52.44$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.84,7.84,7.84)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

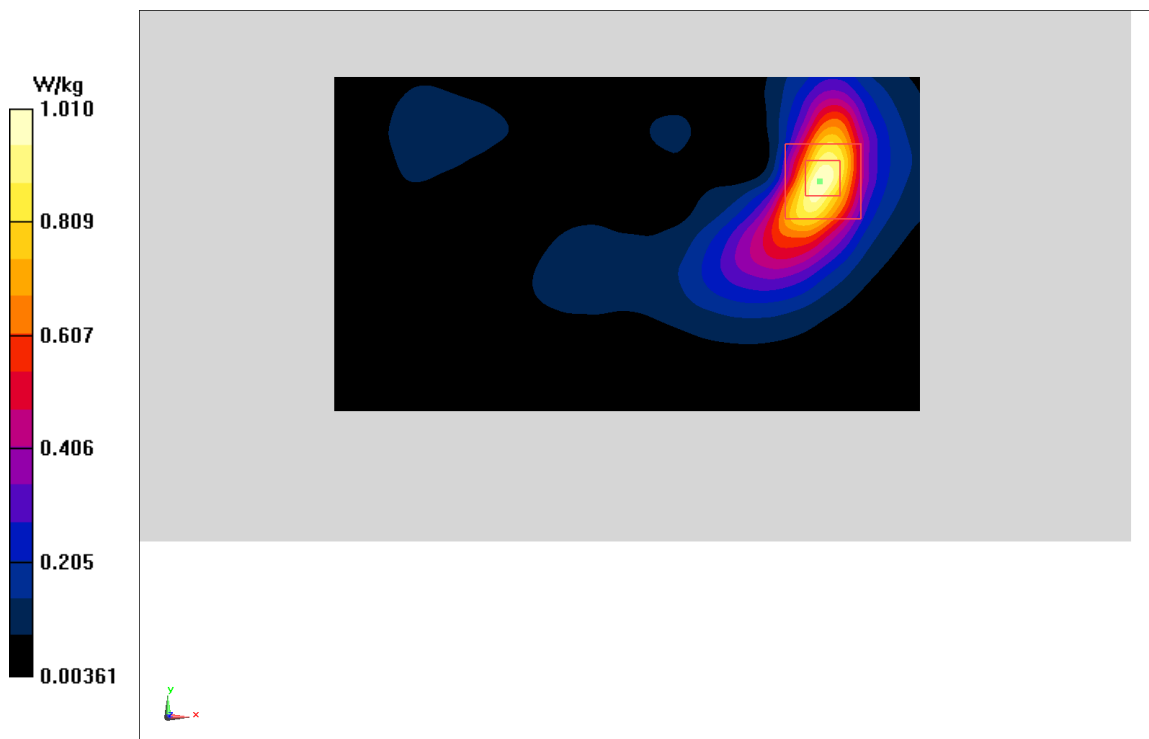
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.888 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.781 W/kg; SAR(10 g) = 0.375 W/kg**

Maximum value of SAR (measured) = 1.01 W/kg



**Fig I.10**

**WLAN2450\_CH11 Right Cheek**

Date: 8/3/2018

Electronics: DAE4 Sn1525

Medium: head 2450 MHz

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.824$  mho/m;  $\epsilon_r = 39.78$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WLAN2450 2462 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(7.89,7.89,7.89)

**Area Scan (81x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.17 W/kg

**Zoom Scan (8x9x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.30 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.60 W/kg

**SAR(1 g) = 0.851 W/kg; SAR(10 g) = 0.446 W/kg**

Maximum value of SAR (measured) = 1.07 W/kg

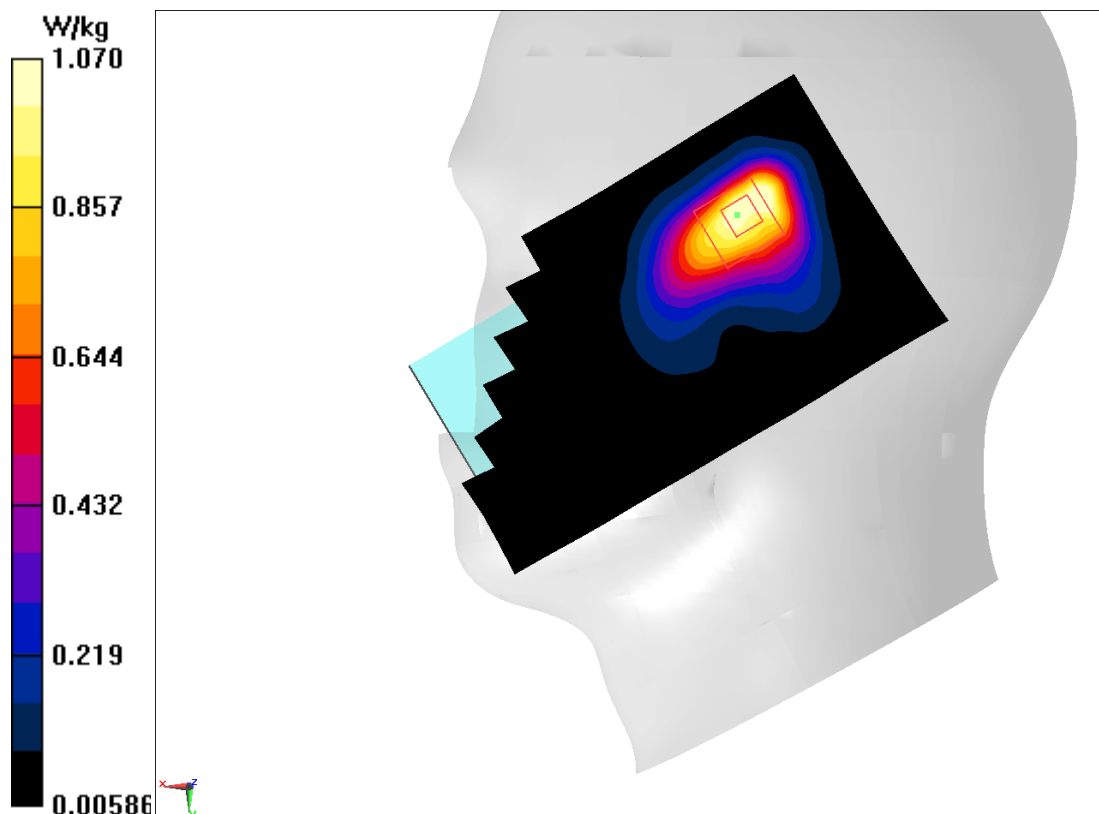


Fig I.11

### WLAN2450\_CH6 Rear

Date: 8/3/2018

Electronics: DAE4 Sn1525

Medium: body 2450 MHz

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.97$  mho/m;  $\epsilon_r = 52.54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.4°C, Liquid Temperature: 22.2°C

Communication System: WLAN2450 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.09,8.09,8.09)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.312 W/kg

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

Reference Value = 8.223 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.453 W/kg

**SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.14 W/kg**

Maximum value of SAR (measured) = 0.316 W/kg

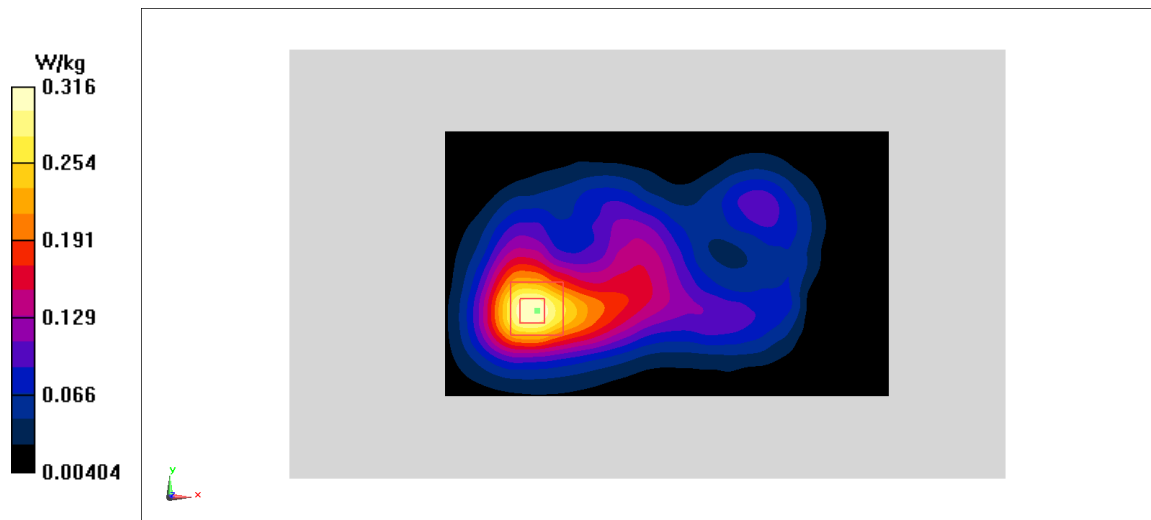


Fig I.12

## ANNEX J Extended Calibration SAR Dipole

Referring to KDB865664 D01, if dipoles are verified in return loss (< -20dBm, within 20% of prior calibration), and in impedance ( within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

Justification of Extended Calibration SAR Dipole D835V2– serial no.4d069

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-19	-32.4		52.1		-1.2	
2018-7-17	-30.3	6.5	53.0	1.1	-1.0	0.2

Body						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-19	-26.9		47.9		-3.9	
2018-7-17	-25.5	5.2	48.5	0.6	-5.0	-1.1

Justification of Extended Calibration SAR Dipole D1900V2– serial no.5d101

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-26	-24.5		51.7		5.8	
2018-7-24	-22.9	6.5	50.6	-1.1	7.2	1.4

Body						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-26	-22.0		46.2		6.6	
2018-7-24	-21.4	2.7	46.4	0.2	7.4	0.8

Justification of Extended Calibration SAR Dipole D2450V2– serial no.853

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-21	-25.6		52.0		5.0	
2018-7-19	-23.1	9.8	53.6	1.6	6.3	1.3

Body						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-21	-24.0		49.6		6.3	
2018-7-19	-22.0	8.3	50.4	0.8	8.0	1.7

Justification of Extended Calibration SAR Dipole D2600V2– serial no.1012

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-21	-24.2		46.8		-5.0	
2018-7-19	-23.7	2.1	47.7	0.9	-5.9	-0.9

Body						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2017-7-21	-21.0		43.5		-5.3	
2018-7-19	-22.4	-6.7	44.4	0.9	-4.5	0.8

## ANNEX K Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p>  <hr/> <p><b>Certificate of Accreditation to ISO/IEC 17025:2005</b></p> <hr/> <p>NVLAP LAB CODE: 600118-0</p> <p><b>Telecommunication Technology Labs, CAICT</b> Beijing China</p> <p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p> <p><b>Electromagnetic Compatibility &amp; Telecommunications</b></p> <p><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i></p> <hr/> <table border="0" style="width: 100%;"><tr><td style="width: 30%;"><p>2017-08-22 through 2018-09-30 <i>Effective Dates</i></p></td><td style="width: 20%; text-align: center;"></td><td style="width: 50%; text-align: right;"> <i>For the National Voluntary Laboratory Accreditation Program</i></td></tr></table>		<p>2017-08-22 through 2018-09-30 <i>Effective Dates</i></p>		 <i>For the National Voluntary Laboratory Accreditation Program</i>
<p>2017-08-22 through 2018-09-30 <i>Effective Dates</i></p>		 <i>For the National Voluntary Laboratory Accreditation Program</i>		