





TEST REPORT

REPORT NUMBER: B15X50050-FCC-SAR_Rev4

ON

Type of Equipment: Ilium X400 SMART PHONE

Type of Designation: Ilium X400

Manufacturer: Shenzhen fortuneship technology.,LTD

ACCORDING TO

FCC Part 2.1093: Radiofrequency radiation exposure evaluation:

portable devices, Oct-1-2013

IEEE Std 1528[™]-2013: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

China Telecommunication Technology Labs.

Month date, year Apr13, 2015

Signature

He Guili

Director



FCC Part 2.1093 (2013-10-1), IEEE Std 1528^{TM} -2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

FCC ID: ZC4X400 **Report Date:** 2015-04-13

Test Firm Name: China Telecommunication Technology Labs

Registration Number: 840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 2.1093. The sample tested was found to comply with the requirements defined in the applied rules.



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中國泰爾實驗室 China Telecommunication Technology Labs.



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1. General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate compliance with the requirements of FCC CFR 47 Part 2.1093.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviations from, additions to, or exclusions from the test specifications have been made. See Annex C.

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1.2 Testers

Name: Li Guoqing

Position: Engineer

Department: Department of EMC test

Signature:

季国庆

Editor of this test report:

Name: Li Guoqing

Position: Engineer

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Date: 2015-04-13

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1.3 Testing Laboratory information

1.3.1 Location

Name: China Telecommunication Technology Labs.

Address: No. 11, Yue Tan Nan Jie, Xi Cheng District,

BEIJING

P.R.CHINA, 100083

Tel: +86 10 68094053

Fax: +86 10 68011404

Email: emc@chinattl.com

1.3.2 Details of accreditation status

China National Accreditation Service for Conformity

Accredited by:
Assessment (CNAS)

DA7130

DAR Registration

Lab number:

DAT-PL-162/04-01

number:

CNAS (China National Accreditation Service for

Accredited by:

Conformity Assessment)

Registration number: CNAS L0570

Standard: ISO/IEC 17025: 2005

1.3.3 Test location, where different from section 1.3.1

Name: -----

Address: -----



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1.4 Details of applicant or manufacturer

1.4.1 Applicant

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Country: Mexico

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Fax: --

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1.4.2 Manufacturer (if different from applicant in section 1.4.1)

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1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: Shenzhen fortuneship technology.,LTD

Address: 6thFloor,KingsonBuilding,NewEnerg Innovation

Industrial Park, No. 1 Chuangsheng

Road, Nanshan District, Shenzhen, P.R. China



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2 Test Item

2.1 General Information

Manufacturer: Shenzhen fortuneship technology,LTD

Name: Ilium X400 SMART PHONE

Model Number: Ilium X400

Serial Number: --

Production Status: Product
Receipt date of test item: 2015-02-02

2.2 Outline of EUT

EUT is a Digital Mobile Phone, supporting GSM/GPRS/EGPRS 850/1900 bands and WCDMA/HSDPA/HSUPA FDD II/V bands. For GPRS, the multi class is 12 (maximum 4 up timeslots) and for EGPRS, it is 12 (maximum 4 up timeslots)

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4Equipment configuration list:

Item	Generic Description	Manufacturer	Туре	Serial No.	Remarks
А	handset	Shenzhen fortuneship technology.,LTD	Ilium X400	1	None
В	battery				None

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter					None

2.5 Other Information

Version of hardware and software:

HW Version: V525-v0.2

SW Version: V01

2.6 References

ANSI C95.1–2006:IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

IEEE Std 1528-2013:IEEE Recommended Practice for Determining the Peak



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IEEE1528a-2005Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques.

KDB248227D01 SAR measurement for 802.11abg v01r02 SAR measurement procedures for 802.112abg transmitters.

KDB447498 D01General RF Exposure Guidance v05r02Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

KDB 447498 DO3 Supplement C Cross-Reference vO1OET Bulletin 65, Supplement C Cross-Reference

KDB865664 D01 SAR Measurement Requirements for 100 MHz to 6 GHzv01r03SAR Measurement Requirements for 100 MHz to 6 GHz.

KDB865664 D02 RF Exposure Reporting v01r01RF Exposure Compliance Reporting and Documentation Considerations.

KDB941225 D01SAR Procedures v033G SAR Measurement Procedures **KDB941225 D06 hotspot Mode v02**SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities.

KDB648474 D04 Handset SAR v01r02SAR Evaluation Considerations for Wireless Handsets



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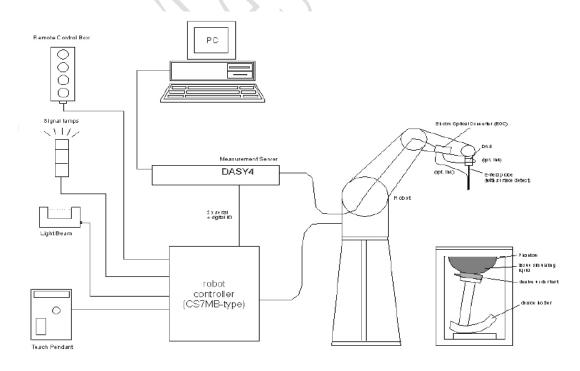
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3 Measurement Systems

3.1 SAR Measurement Systems Setup

All measurements were performed using the automated near-field scanning system, DASY5, from Schmid& Partner Engineering AG (SPEAG). The system is based on a high precision industrial robot which positions the probes with a positional repeatability of better than 0.02mm. Special E- and H-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines (length = 300mm) to the data acquisition unit.

A cell controller system containing the power supply, robot controller, teach pendant (Joystick) and remote control, is used to drive the robot motors. The PC consists of the Micron Pentium III 800 MHz computer with Windows 2000 system and SAR Measurement Software DASY5, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc., which is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical signal to digital electric signal of the DAE and transfers data to the PC plug-in card.



Demonstration of measurement system setup

The DAE4 consists of a highly sensitive electrometer-grade preamplifier with

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auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logicunit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built-in VME-bus computer.

3.2 E-field Probe

3.2.1 E-field Probe Description

The SAR measurements were conducted with the dosimetric probe ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the standard procedure with an accuracy of better than ±10%. The spherical isotropy was evaluated and found to be better than \pm 0.25dB.

Items	Specification
	Symmetrical design with triangular core
	Built-in optical fiber for surface detection System
Construction	Built-in shielding against static charges
	PEEK enclosure material (resistant to
	organic solvents, e.g., glycol)
	In air from 10 MHz to 2.5 GHz
	In brain and muscle simulating tissue at
Calibration	frequencies of 450MHz, 900MHz and 1.8GHz
Calibration	(accuracy±8%)
	Calibration for other liquids and frequencies
	upon request
Frequency	I 0 MHz to > 6 GHz; Linearity: ±0.2 dB
Frequency	(30 MHz to 3 GHz)
Directivity	±0.2 dB in brain tissue (rotation around probe axis)
Directivity	±0.4 dB in brain tissue (rotation normal probe axis)
DynamicRange	5u W/g to > 100 mW/g; Linearity: ± 0.2 dB
Surface Detection	±0.2 mm repeatability in air and clear liquids
Surface Detection	over diffuse reflecting surface
	Overall length: 330mm
	Tip length: 16mm
Dimensions	Body diameter: 12mm
	Tip diameter: 6.8mm
	Distance from probe tip to dipole centers: 2.7mm
Application	General dosimetry up to 3GHz
Аррисаціон	Compliance tests of mobile phones



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Fast automatic scanning in arbitrary phantoms

3.2.2 E-field Probe Calibration

The Annex C is the copy of the calibration certificate of the used probes.

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than \pm 10%. The spherical isotropy was evaluated and found to be better than \pm 0.25dB. The sensitivity parameters (Norm X, Norm Y, Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The free-space E-field measured in the medium correlates to temperature increase in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\mathbf{SAR} = \mathbf{C} \frac{\Delta T}{\Delta t}$$

Where: $\Delta t = \text{Exposure time (30 seconds)}$,

C = Heat capacity of tissue (brain or muscle),

 ΔT = Temperature increase due to RF exposure.

Or

$$SAR = \frac{|E|^{2} \sigma}{\rho}$$

Where:

 σ = Simulated tissue conductivity,

 ρ = Tissue density (kg/m³).

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Specifications:

Shell Thickness: 2±0.1mm Filling Volume: Approx. 20 liters

Dimensions: 810 x l000 x 500 mm (H x L x W)



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Liquid depth when testing: at least 150 mm

3.4 Device Holder

In combination with the Generic Twin Phantom V3.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeat ably positioned according to the FCC and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom etc).



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4 Test Results

4.1 Operational Condition

Specifications IEEE Std 1528^{TM} -2013 **Date of Tests** 2015-03-10 \sim 2015-03-15

Operation Mode TX at the highest output peak power level

Method of measurement: IEEE Std 1528[™]-2013

4.2 Test Equipment Used

ITEM	TYPE	S/N	CALIBRATION DATE	DUE DATE
probe	EX3DV4	3844	2014-05-19	2015-05-18
DAE	DAE4	1329	2014-04-17	2015-04-16
D835V2	dipole	4d135	2014-05-26	2015-05-25
D1900V2	dipole	5d135	2014-05-23	2015-05-22
D2450V2	dipole	886	2014-05-29	2015-05-28
Power Meter	N1914A	MY50001660	2015-03-06	2016-03-05
Radio			*	
Communication	CMU200	112012	2015-03-06	2016-03-05
Analyzer				
Signal	N5181A	MY50143363	2015-03-06	2016-03-05
Generator	ATOTON	W150143363	2015-03-06	2016-03-05
Power Sensor	E8481H	MY51020011	2015-03-06	2016-03-05
Power Amplifier	ZHL	QA1202003	NA	NA
Attenuator	8491A	MY39267989	NA	NA
Probe kit	85070E	3G-S-00139	NA	NA
Network Analyzer	E5071C	US39175666	2015-03-06	2016-03-05

4.3 Applicable Limit Regulations

Item	Limit Level
Local	1.6W/kg
Specific Absorption Rate (SAR) (1g)	1.000/kg

4.4 Test Results

The EUT complies.

Note:

All measurements are traceable to national standards.

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4.5 Test Setup and Procedures

4.5.1 Test distance

The distance between EUT and flat phantom is 10 mm for body modes.

4.5.2Duty Factor and Crest Factor

For GPRS the multi time slot is class 12 with maximum 4 up time slots and for EGPRS it is class 12 with maximum 4 up time slots. For 1 up time slots, the crest factor used is 8.3, for 2 up time slots, it is 4.15, and for 4 up time slots, it is 2. For HSDPA/HSUPA, the crest factor is 1.

4.5.3General body mode measurement procedures

Generally, for body mode, the evaluation was performed according to the following procedure:

- Step 1: The SAR value at a fixed location above the center point flat phantom was measured and was used as a reference value for assessing the power drift.
- Step 2: The SAR distribution at the exposed side of the body was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the EUT and the horizontal grid spacing was 10 mm x 10 mm. Based on these data, the area of the maximum absorption was determined by interpolation.
- Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7 x 7 x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:
- a. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. The extrapolation was based on the least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
- b. The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot"-condition (in $x \sim y$ and z-directions). The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
- c. All neighboring volumes were evaluated until no neighboring volume with a higher average e-value was found.
- Step 4: Re-measurement the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation should be repeated.



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4.6Test Environment and Liquid Information

4.6.1 Test Environment

Date:	Liquid Temperature (°C)	Ambient Temperature (°C)	Ambient Humidity (%)
	18~~25	18~~25	30~~70
2015-03-10	22.5	22.1	47.9
2015-03-11	22.5	22.3	49.3
2015-03-12	22.5	22.1	50.1
2015-03-13	22.5	22.2	51.3
2015-03-14	22.5	22.5	49.7
2015-03-15	22.5	22.6	51.0

4.6.2 Liquid Recipes

INGREDIENTS	TISSUE TYPE						
INGREDIENTS	HSL850	MSL850	HSL1900	MSL1900	HSL2450	MSL2450	
Water	40.29	50.75	55.242	69.91	58.79	72.60	
DGBE	0	0	44.452	29.96	41.15	27.22	
Sugar	57.90	48.21	0	0	0	0	
Salt	1.38	0.94	0.306	0.13	0.06	0.18	
Cellulose	0.24	0.00	0	0	0	0	
Preventol	0.18	0.10	0	0	0	0	

4.6.3 Liquid Parameters

Table 4.6.3.1: Targets for tissue simulating liquid

Table 1.0.0.1. Targets for tissue simulating inquia							
Frequency (MHz)	Liquid Type	Conductivity (σ)	± 5% Range	Permittivity (ε)	± 5% Range		
835	Head	0.90	0.86 - 0.95	41.5	39.4 - 43.6		
835	Body	0.97	0.92 - 1.02	55.2	52.4 - 58.0		
1900	Head	1.40	1.33 - 1.47	40.0	38.0 - 42.0		
1900	Body	1.52	1.44 - 1.60	53.3	50.6 - 56.0		
2450	Head	1.80	1.71 - 1.89	39.2	37.2 - 41.2		
2450	Body	1.95	1.85 - 2.05	52.7	50.1 - 55.3		

Table 4.6.3.2: Dielectric Performance of Tissue Simulating Liquid

Measurement Value								
Туре	Frequency	Permittivity ε	Drift (%)	Conductivity σ	Drift (%)	Test Date		
Head	835 MHz	42.356	+2.06%	0.916	+1.78%	2015-03-10		

Address: 11 YUE TAN NAN JIE,BEIJING,P.R.C,100045Tel: +86 10 68094053 FAX: +86 10 68011404 Web: http://www.chinattl.com



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Body	835 MHz	53.950	-2.26%	0.965	-0.52%	2015-03-11
Head	1900 MHz	39.761	-0.60%	1.384	-1.14%	2015-03-12
Body	1900 MHz	53.715	0.78%	1.499	-1.38%	2015-03-13
Head	2450 MHz	37.393	-4.61%	1.872	+4.00%	2015-03-14
Body	2450 MHz	52.910	+0.40%	1.956	+0.31%	2015-03-15

4.7 System Validation Check

Validation Method:

The setup of system validation check or performance check is demonstrated as figure 5. The amplifier, low pass filter and attenuators are optional. The dipole shall be positioned and centered below the phantom, paralleling to the longest side of the phantom. A low loss and low dielectric constant spacer on the dipole may be used to guarantee the correct distance between the dipole top surface and the phantom bottom surface.

The separation d, which is defined as the distance from the liquid bottom surface to the dipole's central axis at location of the feed-point, should be as following: for 835 MHz dipole, d=15 mm, and for 1900 MHz dipole, d=10 mm, and this can be obtained using two different size spacer. The dipole arms shall be parallel to the flat phantom surface.

First the power meter PM1 is connected to the cable and it measures the forward power at the location of the dipole connector (X). The signal generator is adjusted for the desired forward power at the dipole connector (taking into account the (Att1) value) and the power meter PM2 is read at that level. Then after connecting the cable to the dipole, the signal generator is readjusted for the same reading at the power meter PM2.

The system validation check procedures are the same as all measurement procedures used for compliance tests. A complete 1 g averaged SAR measurement is performed using the flat part of the phantom. The reference dipole input power is adjusted to produce a 1 g averaged SAR value falling in the range of 0.4 – 10 mW/g. The 1 g averaged SAR is measured at 835 MHz and 1900 MHz using corresponding dipole respectively. Then the results are normalized to 1 W forward input power and compared with the reference SAR values.



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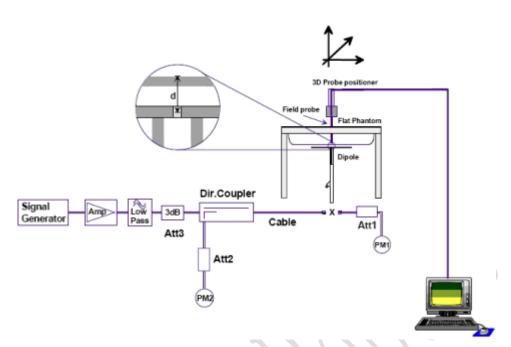


Figure 5Illustration of system validation test setup

Table 4.7.1: System Verification of Head

Verification F	Verification Results							
Input power	Input power level: 250mW							
Target value Measured value (W/kg) Deviation						Test		
Frequency	10 g	1 g	10 g	1 g	10 g	date		
	Average	Average	Average	Average	Average	Average		
835 MHz	1.52	2.28	1.61	2.47	+5.92%	+8.33%	2015-03-10	
1900 MHz	5.09	9.78	5.32	10.0	+4.52%	+2.25%	2015-03-12	
2450 MHz	6.41	13.5	6.47	14.2	+0.94%	+5.19%	2015-03-14	

Table 4.7.2: System Verification of Body

Verification F	Verification Results							
Input power	level: 250m	ιW						
Target value Measured value Deviation Test							Test	
Frequency	10 g	1 g	10 g	1 g	10 g 1 g		date	
	Average	Average	Average	Average	Average	Average		
835 MHz	1.57	2.36	1.60	2.41	+1.91%	+2.12%	2015-03-11	
1900 MHz	5.34	10.1	5.30	9.80	-0.75%	-2.97%	2015-03-13	
2450 MHz	5.89	12.3	6.11	12.9	+3.74%	+4.88%	2015-03-15	



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4.8 Maximum Output Power Measurement

According to FCC OET 65c, maximum output power shall be measured before andafter each SAR test. The test setup and method are described as following.

Test setup

The output power measurement test setup is demonstrated as figure 6.

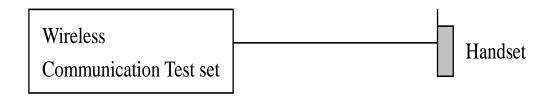


Figure 6 Demonstration of power measurement

Note: For GSM850/EGSM900, the PCL=5, and for DCS1800/PCS1900, PCL=0. For GPRS, the coding scheme used is CS4, and for EGPRS, it is MCS1, i.e. GMSK modulation is used for EGPRS.

GSM modes:

Note: For GSM, GPRS and EGPRS, only the modes with the maximum time average power values, complete set of tests are performed. For GSM+BT (Earphone, Hand free) need to be tested respectively, the test mode is the worst case of GSM modes.

If there is no GSM (voice mode), then for GPRS/EGPRS, only the modes with the maximum time average power values are needed to be tested, which for GPRS, the complete tests are performed using the maximum power configurations, and for EGPRS, its maximum power configurations with position from the worst-case of GPRS are tested.

WCDMA modes:

Note: For WCDMA 12.2 kbps RMC mode, complete tests are performed. For 12.2 kbps AMR + 3.4 kbps SRB mode and all HSDPA and HSUPA modes, only if the peak power values are bigger than the RMC mode values plus 0.25 dB, then the modes shall be tested using the worst case of RMC mode. The power measurement method refers to 3GPP TS34.121. The test parameters configurations are as following table:



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Release 5 HSDPA:

Sub-test	βс	β_d	β_d (SF)	β_c/β_d	β_{hs}	CM (dB)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Release 6 HSUPA:

Sub-	Ω	Q	β_d	β ,/ β	ρ	Ω	Q	β _{ed}	β_{ed}	CM	MPR	AG	E-
test	βс	β _d	(SF)	d	β_{hs}	β _{ec}	β _{ed}	(SF)	(codes)	(dB)	(dB)	Index	TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β _{ed1} :47/15 β _{ed2} :47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	30/15	24/15	134/15	4	1	1.0	0.0	21	81

4.8.1 Manufacturing tolerance

Table 4.8.1.1: GSM Speech

GSM 835					
Channel	Channel 251	Channel 190	Channel 128		
Maximum Target Value (dBm)	31.0±1	31.0±1	31.0±1		
	PCS	1900			
Channel	Channel 810	Channel 661	Channel 512		
Maximum Target Value (dBm)	28.0±1	28.0±1	28.0±1		

Table 4.8.1.2: GPRS/E-GPRS

	GSM 850 GPRS						
	Channel	251	190	128			
1 Tx slots	Maximum Target Value (dBm)	31.0±1	31.0±1	31.0±1			
2 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1			
3 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1			
4 Tx slots	Maximum Target Value (dBm)	26.0±1	26.0±1	26.0±1			
	GSM 850 E-GPRS (GSMK)						
Channel 251 190 128							
1 Tx slots	Maximum Target	31.0±1	31.0±1	31.0±1			

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	Value (dPm)			
	Value (dBm)			
2 Tx slots	Maximum Target Value (dBm)	29.0±1	29.0±1	29.0±1
3 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
4 Tx slots	Maximum Target Value (dBm)	26.0±1	26.0±1	26.0±1
		SM 850 E-GPRS (8	BPSK)	
	Channel	251	190	128
1 Tx slots	Maximum Target Value (dBm)	28.0±1	28.0±1	28.0±1
2 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
3 Tx slots	Maximum Target Value (dBm)	26.0±1	26.0±1	26.0±1
4 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
		GSM 1900 GPR	S	
	Channel	810	661	512
1 Tx slots	Maximum Target Value (dBm)	28.0±1	28.0±1	28.0±1
2 Tx slots	Maximum Target Value (dBm)	26.0±1	26.0±1	26.0±1
3 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
4 Tx slots	Maximum Target Value (dBm)	24.0±1	24.0±1	24.0±1
	GS	M 1900 E-GPRS (GSMK)	
	Channel	810	661	512
1 Tx slots	Maximum Target Value (dBm)	28.0±1	28.0±1	28.0±1
2 Tx slots	Maximum Target Value (dBm)	26.0±1	26.0±1	26.0±1
3 Tx slots	Maximum Target Value (dBm)	25.0±1	25.0±1	25.0±1
4 Tx slots	Maximum Target Value (dBm)	24.0±1	24.0±1	24.0±1
	GS	M 1900 E-GPRS (8PSK)	
	Channel	810	661	512
1 Tx slots	Maximum Target Value (dBm)	27.0±1	27.0±1	27.0±1
2 Tx slots	Maximum Target	25.0±1	25.0±1	25.0±1



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	Value (dBm)			
3 Tx slots	Maximum Target Value (dBm)	24.0±1	24.0±1	24.0±1
4 Tx slots	Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1

Table 4.8.1.3: WCDMA

WCDMA Band V					
Channel	Channel 4132	Channel 4182	Channel 4233		
Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1		
	WCDMA	A Band II			
Channel	Channel 9262	Channel 9400	Channel 9538		
Maximum Target Value (dBm)	23.0±1	23.0±1	23.0±1		

Table 4.8.1.4: HSDPA(QPSK)

	Table 4.6.1.4. HODFA(QFOK)						
	WCDMA Band V						
	Channel	4132	4182	4233			
1	Maximum Target Value (dBm)	21.5±1	21.5±1	21.5±1			
2	Maximum Target Value (dBm)	21.5±1	21.5±1	21.5±1			
3	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
4	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
		WCDMA Band I	I				
	Channel	9262	9400	9538			
1	Maximum Target Value (dBm)	21.5±1	21.5±1	21.5±1			
2	Maximum Target Value (dBm)	21.5±1	21.5±1	21.5±1			
3	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
4	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			



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Table 4.8.1.5: HSUPA (QPSK/16QAM)

	WCDMA Band V						
	Channel	4132	4182	4233			
1	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
2	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
3	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
4	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
5	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
		WCDMA Band I	I				
	Channel	9262	9400	9538			
1	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
2	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
3	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
4	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			
5	Maximum Target Value (dBm)	19.5±1	19.5±1	19.5±1			



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Table 4.8.1.6: Wi-Fi

Table 4.0.1.0. WI-11										
	Wi-Fi 8	302.11b								
Channel	Channel 1	Channel 6	Channel 11							
Maximum Target Value (dBm)	15.0±2	15.0±2	15.0±2							
	Wi-Fi 802.11g									
Channel	Channel 1	Channel 6	Channel 11							
Maximum Target Value (dBm)	13.0±2	13.0±2	13.0±2							
	Wi-Fi 802.1	1n (20MHz)								
Channel	Channel 1	Channel 6	Channel 11							
Maximum Target Value (dBm)	12.0±2	12.0±2	12.0±2							
	Wi-Fi 802.1	1n (40MHz)								
Channel	Channel 3	Channel 7	Channel 11							
Maximum Target Value (dBm)	9.0±2	9.0±2	9.0±2							

Table 4.8.1.7: Bluetooth

		Bluetooth		
(Channel	Channel 0	Channel 39	Channel 78
GFSK	Maximum Target Value (dBm) 3.0±2		3.0±2	3.0±2
п/4 DQPSK	Maximum Target Value (dBm)	3.0±2	3.0±2	3.0±2
8DPSK	Maximum Target Value (dBm)	3.0±2	3.0±2	3.0±2
	Channel	Channel 0	Channel 19	Channel 39
BLE	Maximum Target Value (dBm)	-4.0±2	-4.0±2	-4.0±2

4.8.2Power Measurement result

Table 4.8.2.1: The conducted power measurement results for GSM850/1900

Frequency	(Conducted Power (dBm)						
	Channel	Channel	Channel					
GSM835	251(848.8MHz)	190(836.6MHz)	128(824.2MHz)					
	30.5	30.4	30.4					
	Channel	Channel	Channel					
GSM1900	810(1909.8MHz)	661(1880MHz)	512(1850.2MHz)					
	27.4	27.7	27.9					



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Table 4.8.2.2: The conducted power measurement results for GPRS/E-GPRS

			GSM 83	5 MHz			
GPRS (GMSK)	251	190	128	Calculation	251	190	128
1Txslot	30.5	30.4	30.3	-9.03dB	21.47	21.37	21.27
2Txslots	29.5	29.4	29.4	-6.02dB	23.48	23.38	23.38
3Txslots	27.6	27.5	27.4	-4.26dB	23.34	23.24	23.14
4Txslots	27.0	27.0	27.0	-3.01dB	23.99	23.99	23.99
E-GPRS (GMSK)	251	190	128	Calculation	251	190	128
1Txslot	30.5	30.5	30.4	-9.03dB	21.47	21.47	21.37
2Txslots	29.5	29.5	29.4	-6.02dB	23.48	23.48	23.38
3Txslots	27.6	27.5	27.4	-4.26dB	23.34	23.24	23.14
4Txslots	27.0	27.0	27.0	-3.01dB	23.99	23.99	23.99
E-GPRS (8PSK)	251	190	128	Calculation	251	190	128
1Txslot	28.4	28.3	28.3	-9.03dB	19.37	19.27	19.27
2Txslots	27.4	27.3	27.2	-6.02dB	21.38	21.28	21.18
3Txslots	25.3	25.2	25.2	-4.26dB	21.04	20.94	20.94
4Txslots	24.9	24.8	24.7	-3.01dB	21.89	21.79	21.69
			GSM 190	OO MHz			
GPRS (GMSK)	810	661	512	Calculation	810	661	512
1Txslot	27.4	27.8	27.9	-9.03dB	18.37	18.77	18.87
2Txslots	26.2	26.5	26.7	-6.02dB	20.18	20.48	20.68
3Txslots	24.3	24.6	24.8	-4.26dB	20.04	20.34	20.54
4Txslots	23.9	24.2	24.4	-3.01dB	20.89	21.19	21.39
E-GPRS (GMSK)	810	661	512	Calculation	810	661	512
1Txslot	27.4	27.8	27.9	-9.03dB	18.37	18.77	18.87
2Txslots	26.2	26.5	26.7	-6.02dB	20.18	20.48	20.68
3Txslots	24.4	24.6	24.8	-4.26dB	20.14	20.34	20.54
4Txslots	23.9	24.2	24.3	-3.01dB	20.89	21.19	21.29
E-GPRS (8PSK)	810	661	512	Calculation	810	661	512
1Txslot	26.6	26.5	26.7	-9.03dB	17.57	17.47	17.67
2Txslots	25.4	25.4	25.6	-6.02dB	19.38	19.38	19.58
3Txslots	23.7	23.8	23.9	-4.26dB	19.44	19.54	19.64
4Txslots	23.3	23.4	23.5	-3.01dB	20.29	20.39	20.49

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

 $1TX\text{-slot} = 1 \text{ transmit time slot out of } 8 \text{ time slots} => conducted power divided by } (8/1) => -9.03 dB$

 $2TX\text{-slots} = 2 \text{ transmit time slots out of 8 time slots} \Rightarrow \text{conducted power divided by (8/2)} \Rightarrow -6.02 dB$

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by $(8/3) \Rightarrow -4.26dB$

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01 dB

According to the conducted power as above, the body measurements are performed with GPRS/E-GPRS 4Timeslots for GSM850 and GSM1900.



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Table 4.8.2.3: The conducted power for WCDMA

Mode WCDMA HSDPA	WCDN ARFCN	MA Band V Result (Channel 4233	(dBm) Channel 4182	Channel 4132
WCDMA	ARFCN	Channel 4233	Channel 4182	Channel 4122
WCDMA	711(1 01)		J	CHAILIEL 4132
		(846.6MHz)	(836.4MHz)	(826.4MHz)
HSDPA	RMC	22.25	22.42	22.36
HSDPA	1	21.18	21.21	21.11
ı <u>—</u>	2	20.65	20.55	20.53
(QPSK)	3	19.15	19.18	19.11
	4	19.04	19.05	19.07
	1	19.04	19.12	19.13
LICLIDA	2	19.05	19.08	19.08
HSUPA	3	19.09	19.07	19.04
(QPSK)	4	19.11	19.11	19.05
	5	19.07	19.12	19.05
	1	19.02	19.06	19.04
LICUIDA	2	19.03	19.01	19.01
HSUPA (1/OAA)	3	19.03	19.00	19.04
(16QAM)	4	19.05	19.03	19.02
	5	19.03	19.02	19.05
	WCDN	//A Band II Result	(dBm)	
NA. I.	AREON	Channel 9538	Channel 9400	Channel 9262
Mode	ARFCN	(1907.6MHz)	(1880MHz)	(1852.4MHz)
WCDMA	RMC	22.29	22.41	22.48
	1	21.17	21.24	21.50
HSDPA	2	20.83	20.86	21.18
(QPSK)	3	19.35	19.38	19.41
	4	19.24	19.22	19.24
	1	19.27	19.28	19.27
1101154	2	19.19	19.23	19.25
HSUPA -	3	19.13	19.18	19.16
(QPSK)	4	19.11	19.17	19.23
	5	19.13	19.13	19.14
	5	19.12	19.11	19.12
	2	19.06	19.13	19.11
HSUPA	3	19.08	19.05	19.06
(16QAM)	4	19.07	19.04	19.03
	5	19.06	19.07	19.09

Note: HSDPA/HSUPA body SAR are not required, because maximum average output power of each RF channel with HSDPA/HSUPA active is not 1/4 dB higher than that measured without HSDPA/HSUPA and the maximum SAR for WCDMA850 and WCDMA1900 are not above 75% of the SAR limit.



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Table 4.8.2.4: The conducted power for Bluetooth

	G	FSK							
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)						
Conducted Output Power (dBm)	3.24	3.66	4.27						
п/4 DQPSK									
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)						
Conducted Output Power (dBm)	2.48	2.86	3.55						
	18	PSK							
Channel	Ch0 (2402 MHz)	Ch39 (2441MHz)	CH78 (2480MHz)						
Conducted Output Power (dBm)	2.64	3.08	3.75						
	E	BLE							
Channel	Ch0 (2402 MHz)	Ch19 (2440MHz)	CH39 (2480MHz)						
Conducted Output Power (dBm)	-4.41	-3.95	-3.61						

Note:BT standalone SAR are not required, because maximum average output power is less than 10mW.

When the standalone SAR test exclusion is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] \cdot [$\sqrt{f(GHz)/x}$] W/kg for test separation distances \leq 50 mm; where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.

SAR head value of BT is 0.026W/Kg. SAR body value of BT is 0.013W/Kg.



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Table 4.8.2.5: The average conducted power for Wi-Fi

				,	Wi-F	i Res	ults	dBn (dBn	า)	•					
					80	2.11k) (dBm)							
Channel\data rat	e		1N	lbps			2M	bps		5.5Mbps		11	Mbps		
1	1 15.84					15	.29		1	١5.	72	1	5.83		
6			15.39				15	.55		1	١5.	96	1	6.16	
11			16	.14			16	.04		1	6.	77	1	6.68	
					80	2.11g	y (c	dBm)							
Channel\data rate	6N	1bps	9۱\	/lbps	121	Mbps	18	Mbps	24	4Mbps	3	6Mbps	48Mbps	54M	bps
1	13	3.11	13	3.37	13	.27	1	3.07	1	3.04	1	2.95	13.53	12.	74
6	14	.08	13	3.83	14	.01	1	3.61	1	3.73	\	3.40	14.04	13.	43
11	14	.15	13	3.82	13	.81	1	3.64	1	3.60	1	3.43	13.69	13.	73
				201	ИНz	802	2.11	In (dE	3m)					
Channel\data rat	е	MCS	50	MC:	S1	MCS	2	MCS	3	MCS4	ŀ	MCS5	MCS6	MC	S7
1		12.8	38	12.	52	12.9	9	12.7	2	12.83	3	12.78	13.18	12.	86
6		13.1	12	13.	21	13.6	3	13.2	0	13.72	2	13.42	13.77	13.	51
11		13.4	14	13.	36	13.6	9	13.4	9	13.51		13.28	13.74	13.	59
				401	ИНz	802	2.11	In (dE	3m)			1		
Channel\data rat	е	MCS	50	MC:	S1	MCS	2	MCS	3	MCS4	ŀ	MCS5	MCS6	MC	S7
3		9.3	7	9.5	3	9.9	8	10.4	1	10.04	ļ.	10.09	9.95	8.9	9 5
7		8.7	1	9.7	8	9.6	4	10.3	9	10.02	2	10.27	9.83	9.8	30
11		9.7	0	10.	14	10.1	9	10.4	9	10.25	5	10.24	10.06	10.	21

Note:SAR is not required for 802.11g/n channels if the output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels, and for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 0.25dB higher than those measured at the lowest data rate. According to the above conducted power, the EUT should be tested for "802.11b, 5.5Mbps, channel11".



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4.9Test Data

4.9.1Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Ilium X400are as follows (with expanded uncertainty 21.7%)

Table 4.9.1.1: Max. Reported SAR (1g)

Band	Position/Distance	Reported SAR $1g(W/Kg)$		
CSM OFO	Head/0mm	0.368		
GSM 850	Body/10mm	1.150		
CSM 1000	Head/0mm	0.224		
GSM 1900	Body/10mm	0.735		
WCDMA850	Head/0mm	0.398		
WCDIVIA850	Body/10mm	0.789		
WCDMA 1900	Head/0mm	0.412		
WCDIVIA 1900	Body/10mm	0.892		
Wi-Fi	Head/0mm	0.281		
VVI-F1	Body/10mm	0.100		

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1g tissue according to the ANSI C95.1-2006.

The maximum reported SAR value is obtained at the case of (Table 4.9.1.1), and the values are: 1.150 W/kg (1g).

Table 4.9.1.2: SAR Measurement Variability for Body Value (1g)

Frequ	ency			Original	First	Danautad	
MHz	Ch.	Mode(number of timeslots)	Test Position	SAR (W/kg)	Repeated SAR (W/kg)	Reported SAR(1g)(W/kg)	The Ratio
848.8	251	GPRS (4)	Ground	1.100	1.150	1.150	1.045
836.6	190	GPRS (4)	Ground	0.948	0.957	0.957	1.009
824.2	128	GPRS (4)	Ground	0.944	0.959	0.959	1.016
848.8	251	E-GPRS (4)	Ground	0.941	0.943	0.943	1.002
836.6	190	E-GPRS (4)	Ground	0.972	0.979	0.979	1.007
824.2	128	E-GPRS (4)	Ground	0.919	0.934	0.934	1.016
848.8	251	GPRS (4)	Right	0.958	0.966	0.966	1.008
836.6	190	GPRS (4)	Right	0.972	0.968	0.972	1.004
824.2	128	GPRS (4)	Right	0.907	0.928	0.928	1.023

NOTE:

¹⁾ Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through



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

The sample has three antennas. One is main antenna for GSM/WCDMA, and the other two is for Wi-Fi/BT and GPS. So simultaneous transmission is GSM/WCDMA and Wi-Fi/BT.

Table 4.9.1.3: Simultaneous SAR (1g)

Simul	taneous	s Transm	ission SA	AR(W/Kg)					
Toot D	asition		GSM	GSM	WCDMA	WCDMA	WI-FI	ВТ	SUM	
rest P	osition		850	850 1900		11 701-11		note	SUM	
	Loft	Cheek	0.316	0.224	0.304	0.412	0.121	0.026	0.533	
Left	Leit	Tilt 15°	0.212	0.097	0.228	0.186	0.118	0.026	0.346	
Head	Right	Cheek	0.368	0.182	0.398	0.311	0.281	0.026	0.679	
	Rigitt	Tilt 15°	0.226	0.076	0.240	0.172	0.280	0.026	0.520	
	Ground	Side	1.150	0.735	0.789	0.892	0.100	0.013	1.250	
	Phantom	n Side	0.531	0.216	0.377	0.518	0.041	0.013	0.572	
Dody	Left Side	;	0.712	0.366	0.242	0.558	0.017	0.013	0.729	
Body	Right Sid	de	0.972	0.343	0.325	0.278	0.008	0.013	0.985	
	Top Side	<u>.</u>	N/A	N/A	N/A	N/A	0.003	0.013	N/A	
	Bottom	Side	0.192	0.302	0.046	0.405	0.061	0.013	0.466	

According to the above table, the maximum sum of reported SAR values for GSM 850 and Wi-Fi is **1.250 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 4.9.2.



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4.9.2 Measured Results

Table 4.9.2.1: SAR Values(GSM 835 MHz Band - Head)

Freque	Frequency		Test	Maximum Measured		Scaling	Measured	Reported	Power		
MHz	Ch.	Side	Position	allowed Power (dBm)	average power (dBm)	factor	SAR(1g) (W/kg)	SAR(1g)(W/kg)	Drift (dB)		
	Original										
848.8	251	Left	Touch	32.0	30.5	1.41	0.224	0.316	-0.14		
848.8	251	Left	Tilt	32.0	30.5	1.41	0.150	0.212	-0.11		
848.8	251	Righ	Touch	32.0	30.5	1.41	0.261	0.368	-0.15		
848.8	251	Righ	Tilt	32.0	30.5	1.41	0.160	0.226	-0.13		
836.6	190	Righ	Touch	32.0	30.4	1.45	0.248	0.360	-0.05		
824.2	128	Righ	Touch	32.0	30.4	1.45	0.233	0.337	-0.04		

Table 4.9.2.2: SAR Values(GSM 835 MHz Band - Body)

Frequ	ency	Mode		Maximum	Measured	Scali	Measured	Reported	Power
1		(number of	Test	allowed	average	ng	SAR(1g)	SAR(1g)	Drift
MHz	Ch.	timeslots)	Position	Power (dBm)	power (dBm)	factor	(W/kg)	(W/kg)	(dB)
				Origin	al	*		•	
848.8	251	GPRS (4)	Ground	27.0	27.0	1.00	1.100	1.100	-0.01
848.8	251	GPRS (4)	Phantom	27.0	27.0	1.00	0.531	0.531	-0.12
848.8	251	GPRS (4)	Left	27.0	27.0	1.00	0.712	0.712	-0.09
848.8	251	GPRS (4)	Right	27.0	27.0	1.00	0.958	0.958	-0.09
848.8	251	GPRS (4)	Bottom	27.0	27.0	1.00	0.192	0.192	0.17
836.6	190	GPRS (4)	Ground	27.0	27.0	1.00	0.948	0.948	-0.15
824.2	128	GPRS (4)	Ground	27.0	27.0	1.00	0.944	0.944	-0.09
848.8	251	E-GPRS (4)	Ground	27.0	27.0	1.00	0.941	0.941	-0.09
			I	Add the other char	nnel SAR test				
836.6	190	GPRS (4)	Right	27.0	27.0	1.00	0.972	0.972	0.03
824.2	128	GPRS (4)	Right	27.0	27.0	1.00	0.907	0.907	0.09
836.6	190	E-GPRS (4)	Ground	27.0	27.0	1.00	0.972	0.972	0.01
824.2	128	E-GPRS (4)	Ground	27.0	27.0	1.00	0.919	0.919	-0.16
				First Repeated	I SAR test				
848.8	251	GPRS (4)	Ground	27.0	27.0	1.00	1.150	1.150	0.20
836.6	190	GPRS (4)	Ground	27.0	27.0	1.00	0.957	0.957	-0.01
824.2	128	GPRS (4)	Ground	27.0	27.0	1.00	0.959	0.959	0.06
848.8	251	E-GPRS (4)	Ground	27.0	27.0	1.00	0.943	0.943	-0.18
836.6	190	E-GPRS (4)	Ground	27.0	27.0	1.00	0.979	0.979	-0.01
824.2	128	E-GPRS (4)	Ground	27.0	27.0	1.00	0.934	0.934	0.06
848.8	251	GPRS (4)	Right	27.0	27.0	1.00	0.966	0.966	0.05
836.6	190	GPRS (4)	Right	27.0	27.0	1.00	0.968	0.968	0.04
824.2	128	GPRS (4)	Right	27.0	27.0	1.00	0.928	0.928	-0.05

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Note: The distance between the EUT and the phantom bottom is 10mm.

Table 4.9.2.3: SAR Values(GSM 1900 MHz Band - Head)

Freque	ency		- .	Maximum	Measured	0 !!	Measured	Reported	Power
MHz	Ch.	Side	Test Position	allowed Power (dBm)	average power (dBm)	Scaling factor	SAR(1g) (W/kg)	SAR(1g)(W/kg)	Drift (dB)
					Original		•		
1850.2	512	Left	Touch	29.0	27.9	1.29	0.174	0.224	-0.13
1850.2	512	Left	Tilt	29.0	27.9	1.29	0.075	0.097	-0.15
1850.2	512	Right	Touch	29.0	27.9	1.29	0.141	0.182	0.06
1850.2	512	Right	Tilt	29.0	27.9	1.29	0.059	0.076	-0.17
1909.8	810	Left	Touch	29.0	27.4	1.45	0.126	0.183	-0.12
1880	661	Left	Touch	29.0	27.7	1.35	0.148	0.200	0.14

Table 4.9.2.4: SAR Values(GSM 1900 MHz Band - Body)

	Table 4.7.2.4. SAK Values (GSW 1700 WITZ Ballu - Bouy)										
Freque	Frequency		T	Maximum	Measured	G 1:	Measured	Reported	Power		
		(number	Test	allowed	average	Scaling	SAR(1g)	SAR(1g)	Drift		
MHz	Ch.	of	Position	Power	power	factor	(W/kg)	(W/kg)	(dB)		
		timeslots)		(dBm)	(dBm)		(W/Kg)	(W/Kg)	(uD)		
				Oriç	ginal						
1850.2	512	GPRS (4)	Ground	25.0	24.4	1.15	0.561	0.645	-0.19		
1850.2	512	GPRS (4)	Phantom	25.0	24.4	1.15	0.188	0.216	-0.13		
1850.2	512	GPRS (4)	Left	25.0	24.4	1.15	0.318	0.366	-0.14		
1850.2	512	GPRS (4)	Right	25.0	24.4	1.15	0.298	0.343	-0.12		
1850.2	512	GPRS (4)	Bottom	25.0	24.4	1.15	0.263	0.302	0.02		
1909.8	810	GPRS (4)	Ground	25.0	23.9	1.29	0.418	0.539	-0.14		
1880	661	GPRS (4)	Ground	25.0	24.2	1.20	0.484	0.581	-0.12		
1850.2	512	E-GPRS (4)	Ground	25.0	24.3	1.17	0.628	0.735	-0.07		

Note: The distance between the EUT and the phantom bottom is 10mm.



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Table 4.9.2.5: SAR Values (WCDMA850 MHz Band - Head)

Freque	ency			Maximum 	Measured		Measured	Reported	Power
MHz	Ch.	Side	Test Position	allowed Power (dBm)	average power (dBm)	Scaling factor	SAR(1g) (W/kg)	SAR(1g)(W/kg)	Drift (dB)
					Original		•		
836.4	4182	Left	Touch	24.0	22.42	1.44	0.211	0.304	-0.11
836.4	4182	Left	Tilt	24.0	22.42	1.44	0.158	0.228	-0.06
836.4	4182	Right	Touch	24.0	22.42	1.44	0.237	0.341	-0.11
836.4	4182	Right	Tilt	24.0	22.42	1.44	0.167	0.240	-0.10
846.6	4233	Right	Touch	24.0	22.25	1.50	0.265	0.398	-0.04
826.4	4132	Right	Touch	24.0	22.36	1.46	0.180	0.263	-0.12

Table 4.9.2.6: SAR Values (WCDMA850 MHz Band - Body)

	Table 11712161 Gritt Values (Weblin 1656 In 12 Barta 2663)									
Frequ	ency	Test	Maximum	Measured	Scaling	Measured	Reported	Power		
_	<u> </u>		Position allowed average power factor	SAR(1g)	SAR(1g)	Drift				
MHz	Ch.	Position	Power (dBm)	(dBm)	Tactor	(W/kg)	(W/kg)	(dB)		
				Original						
836.4	4182	Ground	24.0	22.42	1.44	0.528	0.760	-0.02		
836.4	4182	Phantom	24.0	22.42	1.44	0.262	0.377	-0.07		
836.4	4182	Left	24.0	22.42	1.44	0.168	0.242	-0.13		
836.4	4182	Right	24.0	22.42	1.44	0.226	0.325	0.06		
836.4	4182	Bottom	24.0	22.42	1.44	0.032	0.046	0.17		
846.6	4233	Ground	24.0	22.25	1.50	0.526	0.789	-0.06		
826.4	4132	Ground	24.0	22.36	1.46	0.447	0.653	-0.04		

Note: The distance between the EUT and the phantom bottom is 10mm.



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Table 4.9.2.7: SAR Values(WCDMA1900 MHz Band - Head)

Freque	ency			Maximum	Measured		Measured	Reported	Power
MHz	Ch.	Side	Test Position	allowed Power (dBm)	average power (dBm)	Scaling factor	SAR(1g) (W/kg)	SAR(1g)(W/kg)	Drift (dB)
					Original				
1852.4	9262	Left	Touch	24.0	22.48	1.42	0.285	0.405	-0.16
1852.4	9262	Left	Tilt	24.0	22.48	1.42	0.131	0.186	0.07
1852.4	9262	Right	Touch	24.0	22.48	1.42	0.219	0.311	-0.20
1852.4	9262	Right	Tilt	24.0	22.48	1.42	0.121	0.172	-0.17
1907.6	9538	Left	Touch	24.0	22.29	1.48	0.249	0.369	-0.14
1880	9400	Left	Touch	24.0	22.41	1.44	0.286	0.412	-0.17

Table 4.9.2.8: SAR Values (WCDMA1900 MHz Band - Body)

Freque	ency	Test	Maximum	Measured	Scaling	Measured	Reported	Power
MHz	Ch.	Position	allowed	average power (dBm)	factor	SAR(1g) (W/kg)	SAR(1g)	Drift
			Power (dBm)			(W/Kg)	(W/kg)	(dB)
	1	T	T	Original		T	T	
1852.4	9262	Ground	24.0	22.48	1.42	0.628	0.892	-0.04
1852.4	9262	Phantom	24.0	22.48	1.42	0.365	0.518	0.15
1852.4	9262	Left	24.0	22.48	1.42	0.393	0.558	-0.04
1852.4	9262	Right	24.0	22.48	1.42	0.196	0.278	-0.13
1852.4	9262	Bottom	24.0	22.48	1.42	0.285	0.405	-0.12
1907.6	9538	Ground	24.0	22.29	1.48	0.541	0.801	-0.10
1880	9400	Ground	24.0	22.41	1.44	0.567	0.816	-0.11

Note: The distance between the EUT and the phantom bottom is 10mm.



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Table 4.9.2.9: SAR Values (Wi-Fi 802.11b - Head)

Freque	ency		Toot	Maximum	Measured	Caalina	Measured	Reported	Power
MHz	Ch.	Side	Test Position	allowed Power	average power	Scaling factor	SAR(1g)	SAR(1g)(Drift
	0			(dBm)	(dBm)		(W/kg)	W/kg)	(dB)
					Original				
2462	11	Left	Touch	17.0	16.77	1.05	0.115	0.121	-0.06
2462	11	Left	Tilt	17.0	16.77	1.05	0.112	0.118	0.18
2462	11	Right	Touch	17.0	16.77	1.05	0.268	0.281	0.18
2462	11	Right	Tilt	17.0	16.77	1.05	0.267	0.280	-0.19

Table 4.9.2.10: SAR Values(Wi-Fi 802.11b - Body)

Frequ	iency	Test	Maximum	Measured	Scaling	Measured	Reported	Power
	0.1	Position	allowed	average power	factor	SAR(1g)	SAR(1g)	Drift
MHz	Ch.	1 OSITION	Power (dBm)	(dBm)		(W/kg)	(W/kg)	(dB)
				Original		12		
2462	11	Ground	17.0	16.77	1.05	0.095	0.100	-0.19
2462	11	Phantom	17.0	16.77	1.05	0.039	0.041	-0.11
2462	11	Left	17.0	16.77	1.05	0.016	0.017	0.10
2462	11	Right	17.0	16.77	1.05	0.008	0.008	-0.02
2462	11	Bottom	17.0	16.77	1.05	0.003	0.003	-0.02
2462	11	Тор	17.0	16.77	1.05	0.058	0.061	0.05

Note: 1. The distance between the EUT and the phantom bottom is 10mm;



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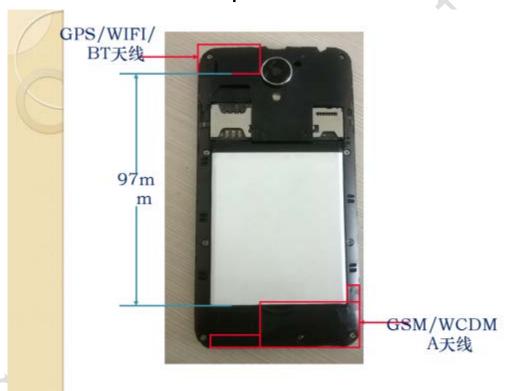
Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

4.9.3 Simultaneous Transmission Consideration

4.9.3.1 Introduction

The following procedures adopted from "FCC SAR Considerations for Cell Phones with Multiple Transmitters" are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

4.9.3.2 Transmit Antenna Separation Distances



Picture 4.9.3.2.1 Antenna Locations

4.9.3.3 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison



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According to the KDB447498 appendix A, the SAR test exclusion threshold for 2450MHz at 5mm test separation distances is 10mW.

(max. power of channel, including tune-up tolerance, mW) *√Frequency (GHz) ≤3.0 (min. test separation distance, mm)

Based on the above equation, Bluetooth SAR was not required: Evaluation=0.495<3.0



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4.10 Measurement uncertainty

ERROR SOURCE	Uncertainty value (%)	Probability distribution	Divisor	(1g)	Standard Uncertainty (%)	
Measurement equipment						
Probe calibration	5.9	Normal	1	1	5.9	
Probe axial isotropy	4.7	Rectangular	$\sqrt{3}$	0.7	1.9	
Probe hemispherical isotropy	9.6	Rectangular	$\sqrt{3}$	0.7	3.9	
Probe linearity	4.7	Rectangular	$\sqrt{3}$	1	2.7	
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	0.6	
Boundary effect	0.8	Rectangular	$\sqrt{3}$	1	0.6	
Measurement device	0.3	Normal	1	1	0.3	
Response time	0.0	Normal	1	1	0	
Noise	0.0	Normal	1	1	0	
Integration time	1.7	Normal	1	1	2.6	
Mechanical constraints						
Scanning system	1.5	Rectangular	$\sqrt{3}$	1	0.2	
Positioning of the probe	2.9	Normal	1	1	2.9	
Phantom shell	4.0	Rectangular	$\sqrt{3}$	1	2.3	
Positioning of the dipole	2.0	Normal	1	1	2.0	
Positioning of the phone	2.9	Normal	1	1	2.9	
Device holder disturbance	3.6	Normal	1	1	3.6	
Physical parameters						
Liquid conductivity	F.O.	Rectangular	$\sqrt{3}$	0.5	1.4	
(deviation from target)	5.0					
Liquid conductivity (measurement error)	4.3	Rectangular	$\sqrt{3}$	0.5	1.2	
Liquid permittivity (deviation from target)	5.0	Rectangular	$\sqrt{3}$	0.5	1.4	
Liquid permittivity (measurement error)	4.3	Rectangular	$\sqrt{3}$	0.5	1.2	
Drifts in output power of the phone, probe, temperature and humidity	5.0	Rectangular	$\sqrt{3}$	1	2.9	
Environment disturbance	3.0	Rectangular	$\sqrt{3}$	1	1.7	
Post-processing						
SAR interpolation and extrapolation	0.6	Rectangular	$\sqrt{3}$	1	0.6	
Maximum SAR evaluation	1.0	Rectangular	$\sqrt{3}$		0.6	
Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{m} c_i^2 \cdot u_i^2} = 11.08\%$					



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Expanded uncertainty	Normal	$u_e = 1.96u_c = 21.7\%$	
(confidence interval of 95%)	NOTITIAL	$u_e - 1.70u_c = 21.770$	

Annex A Graphical Measurement Results

GSM850 Left Cheek High

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.929$ mho/m; $\epsilon r = 42.198$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

High Cheek Left GSM850MHz/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.226 mW/g

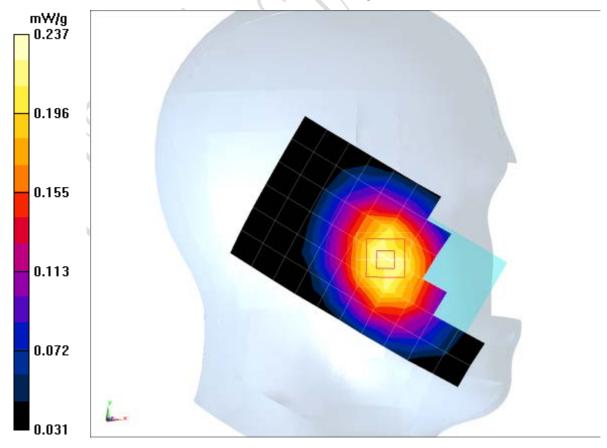
High Cheek Left GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 4.429 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.2750 mW/g

SAR(1 g) = 0.224 mW/g; SAR(10 g) = 0.170 mW/gMaximum value of SAR (measured) = 0.237 mW/g





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Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Left Tilt High

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.929$ mho/m; $\epsilon r = 42.198$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

High Tilt Left GSM850MHz/Area Scan (11x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.154 mW/g

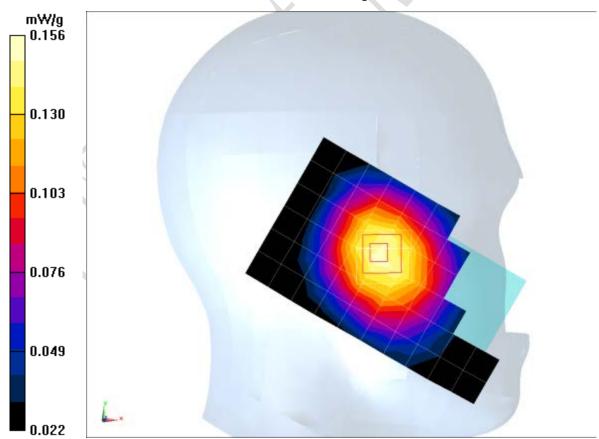
High Tilt Left GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 7.043 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.1790 mW/g

SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.115 mW/gMaximum value of SAR (measured) = 0.156 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Right Cheek High

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.929$ mho/m; $\epsilon r = 42.198$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

High Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.285 mW/g

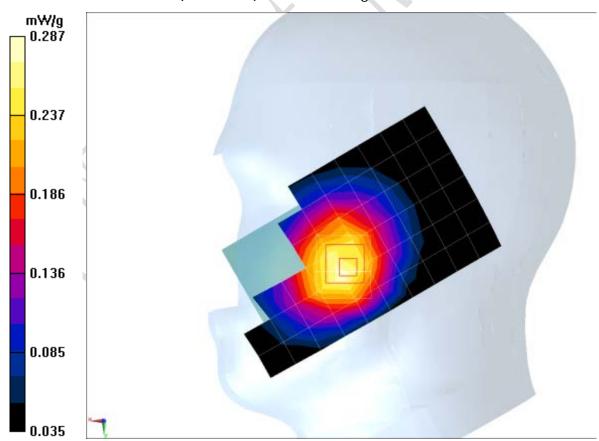
High Cheek Right GSM850MHz/Zoom Scan (7x8x7)/Cube 0: Measurement

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

Reference Value = 4.897 V/m; Power Drift = -015 dB

Peak SAR (extrapolated) = 0.3330 mW/g

SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.196 mW/gMaximum value of SAR (measured) = 0.287 mW/g

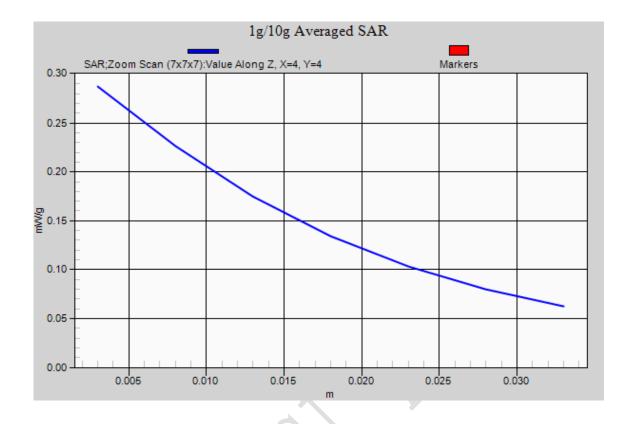




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}\text{-}2013$ Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Right Tilt High

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.929$ mho/m; $\epsilon r = 42.198$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

High Tilt Right GSM850MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.171 mW/g

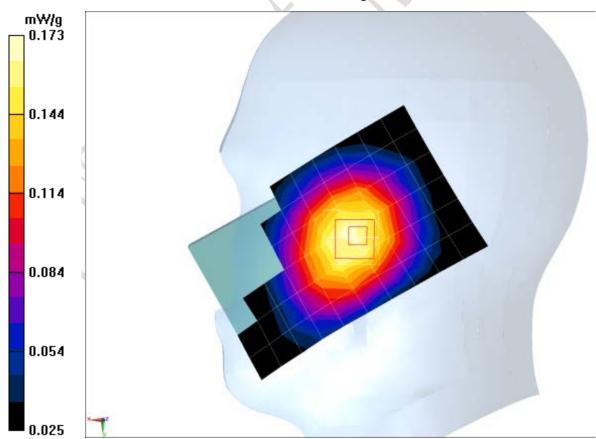
High Tilt Right GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 8.916 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.1950 mW/g

SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.124 mW/gMaximum value of SAR (measured) = 0.173 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Right Cheek Middle

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used: f = 837 MHz; $\sigma = 0.918$ mho/m; $\epsilon r = 42.326$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Middle Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.270 mW/g

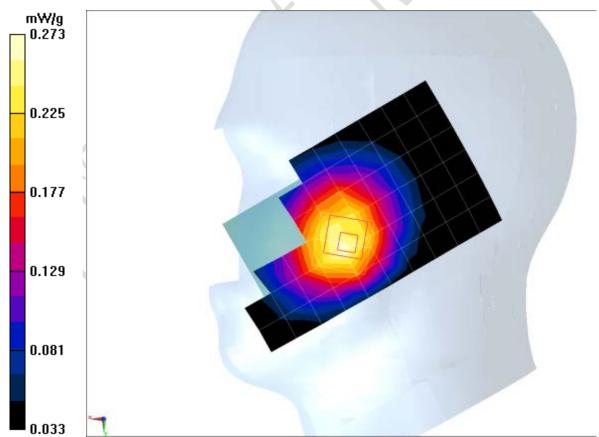
Middle Cheek Right GSM850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 4.835 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.3140 mW/g

SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.186 mW/gMaximum value of SAR (measured) = 0.273 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Right Cheek Low

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.907$ mho/m; $\epsilon r = 42.465$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Low Cheek Right GSM850MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.257 mW/g

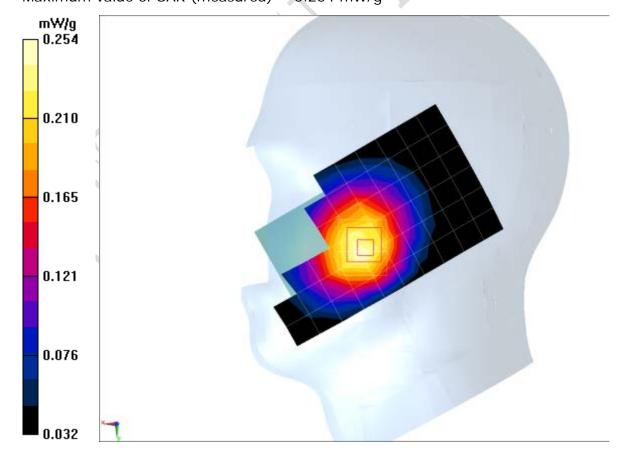
Low Cheek Right GSM850MHz/Zoom Scan (7x8x7)/Cube 0: Measurement

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

Reference Value = 4.800 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.2950 mW/g

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.176 mW/gMaximum value of SAR (measured) = 0.254 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Ground GPRS 4TS 850MHz/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.150 mW/g

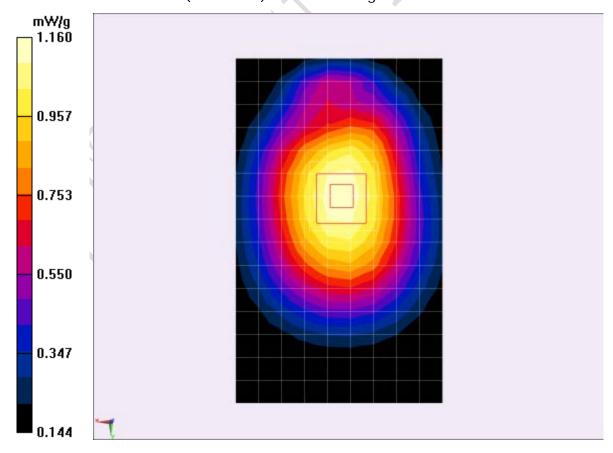
High Toward Ground GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 33.462 V/m; Power Drift = -0.0064 dB

Peak SAR (extrapolated) = 1.3870 mW/g

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.829 mW/gMaximum value of SAR (measured) = 1.160 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Phantom GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Phantom GPRS 4TS 850MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.548 mW/g

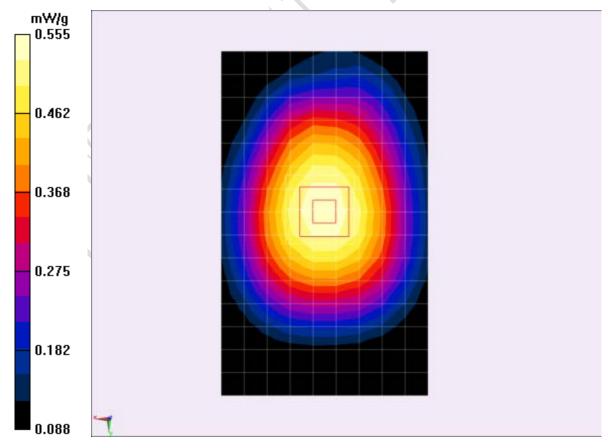
High Toward Phantom GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 24.040 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.6510 mW/g

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.406 mW/gMaximum value of SAR (measured) = 0.555 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Left GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Left GPRS 4TS 850MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.762 mW/g

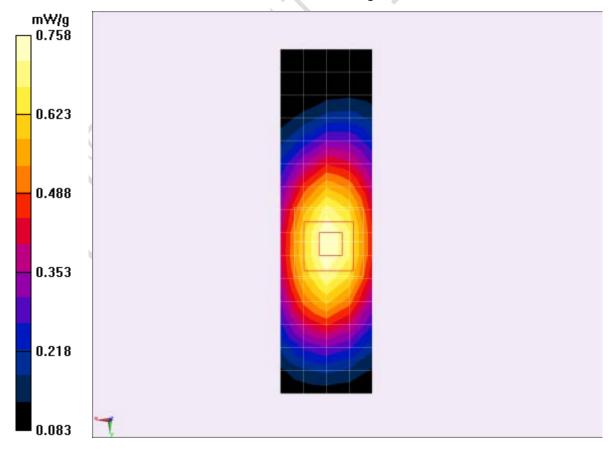
High Left GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 28.806 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.9930 mW/g

SAR(1 g) = 0.712 mW/g; SAR(10 g) = 0.491 mW/gMaximum value of SAR (measured) = 0.758 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Right GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Right GPRS 4TS 850MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.007 mW/g

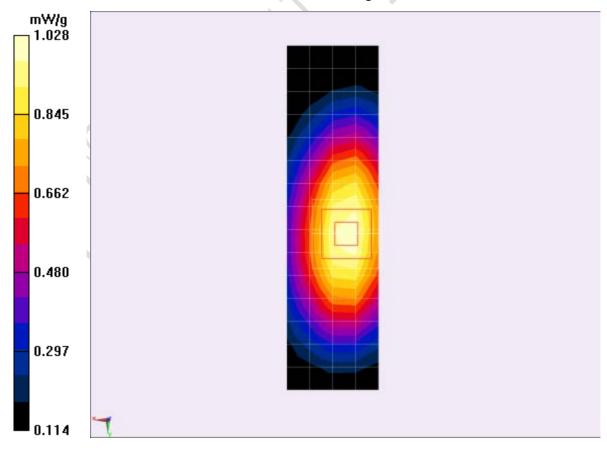
High Right GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 31.288 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.3510 mW/g

SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.658 mW/gMaximum value of SAR (measured) = 1.028 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Bottom GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Bottom GPRS 4TS 850MHz/Area Scan (5x11x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.218 mW/g

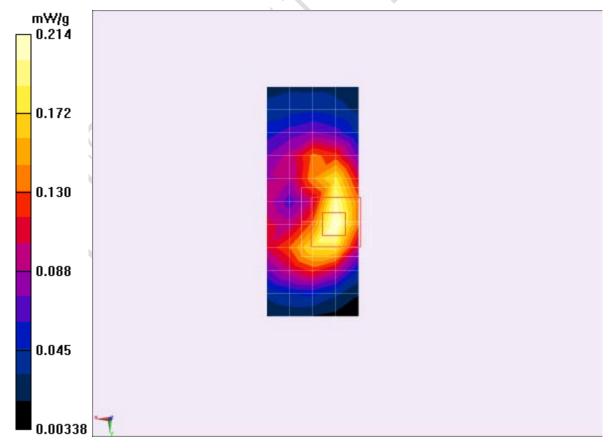
High Bottom GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 9.966 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.3360 mW/g

SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.108 mW/gMaximum value of SAR (measured) = 0.214 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground GPRS 4TS Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.934$; $\rho = 0.967$ mho/m; $\epsilon r = 53.934$; $\epsilon = 0.967$ mho/m; $\epsilon r = 0.967$ mho/m; ϵ

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground GPRS 4TS 850MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 1.031 mW/g

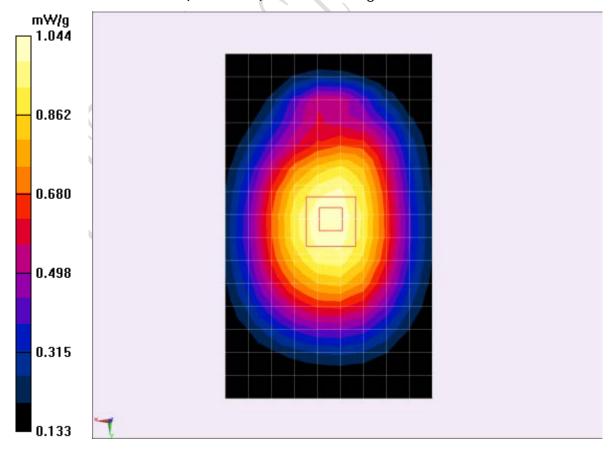
Middle Toward Ground GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 33.743 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.1820 mW/g

SAR(1 g) = 0.948 mW/g; SAR(10 g) = 0.716 mW/gMaximum value of SAR (measured) = 1.044 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground GPRS 4TS Low

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955$ mho/m; $\epsilon r = 54.052$; $\rho = 0.955$ mho/m; $\epsilon r = 54.052$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground GPRS 4TS 850MHz/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.983 mW/g

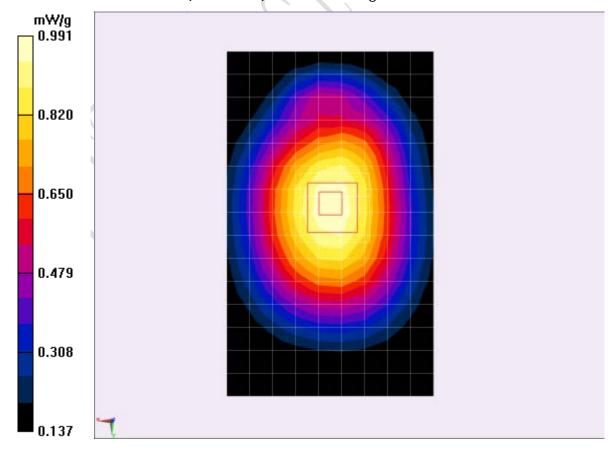
Low Toward Ground GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 32.527 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.1790 mW/g

SAR(1 g) = 0.944 mW/g; SAR(10 g) = 0.714 mW/gMaximum value of SAR (measured) = 0.991 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Ground E-GPRS 4TS 850MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.969 mW/g

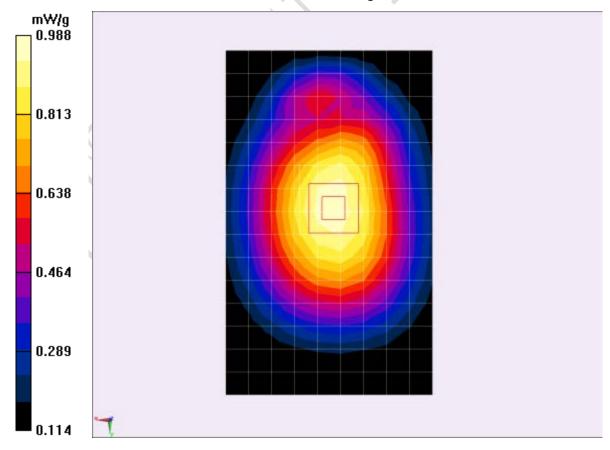
High Toward Ground E-GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 31.952 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.1800 mW/g

SAR(1 g) = 0.941 mW/g; SAR(10 g) = 0.709 mW/gMaximum value of SAR (measured) = 0.988 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Add the other channel SAR test GSM850 Body Right GPRS 4TS Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.934$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Right GPRS 4TS 850MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.011 mW/g

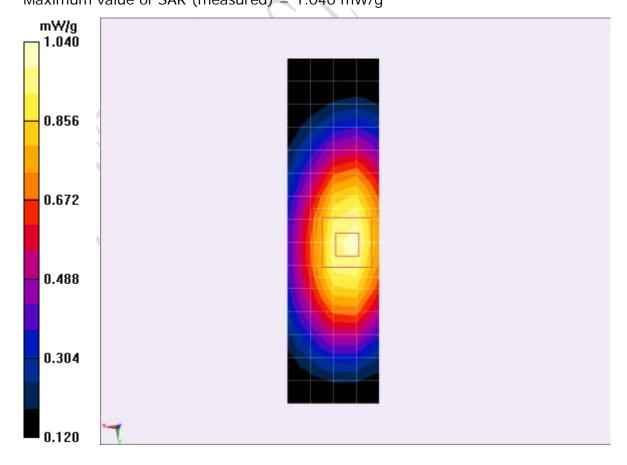
Middle Right GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 31.472 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.3610 mW/g

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.669 mW/gMaximum value of SAR (measured) = 1.040 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Right GPRS 4TS Low

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955 \text{ mho/m}$; $\epsilon r = 54.052$; $\rho = 0.955 \text{ mho/m}$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Right GPRS 4TS 850MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.932 mW/g

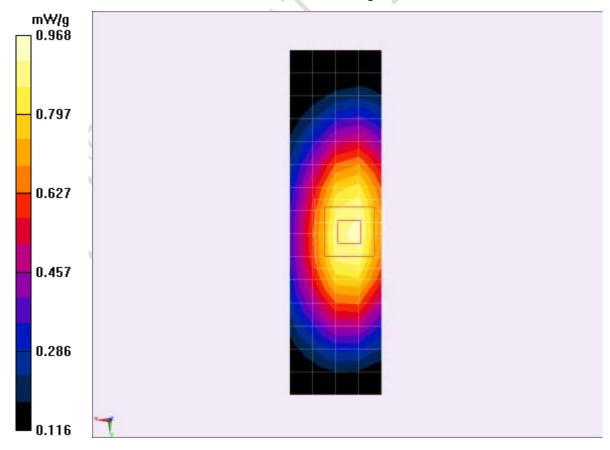
Low Right GPRS 4TS 850MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 30.754 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.2630 mW/g

SAR(1 g) = 0.907 mW/g; SAR(10 g) = 0.628 mW/gMaximum value of SAR (measured) = 0.968 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.934$; $\rho = 0.967$ mho/m; $\epsilon r = 53.934$; $\epsilon = 0.967$ mho/m; $\epsilon r = 0.967$ mho/m; ϵ

1000 kg/m3

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground E-GPRS 4TS 850MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 1.006 mW/g

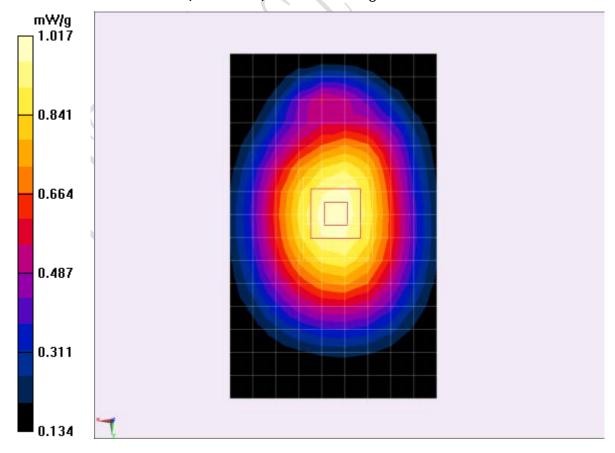
Middle Toward Ground E-GPRS 4TS 850MHz/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 32.479 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.2150 mW/g

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.733 mW/gMaximum value of SAR (measured) = 1.017 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS Low

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955$ mho/m; $\epsilon r = 54.052$; $\rho = 0.955$ mho/m; $\epsilon r = 54.052$; $\epsilon = 0.955$ mho/m; $\epsilon r = 0.955$ mho/m; ϵ

1000 kg/m3

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground E-GPRS 4TS 850MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.945 mW/g

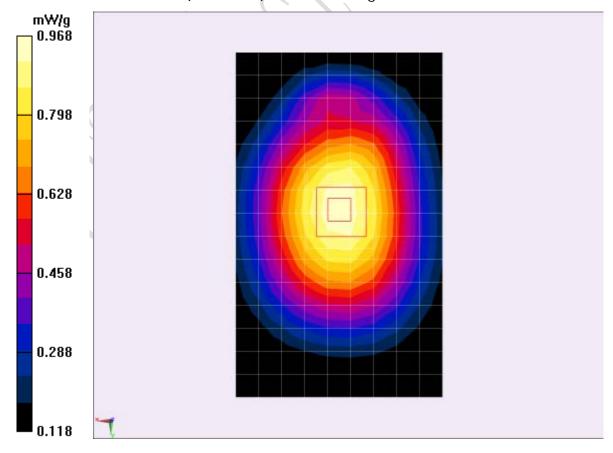
Low Toward Ground E-GPRS 4TS 850MHz/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 32.612 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.1500 mW/g

SAR(1 g) = 0.919 mW/g; SAR(10 g) = 0.694 mW/gMaximum value of SAR (measured) = 0.968 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

First Repeated SAR test

GSM850 Body Toward Ground GPRS 4TS High 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Ground GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 1.146 mW/g

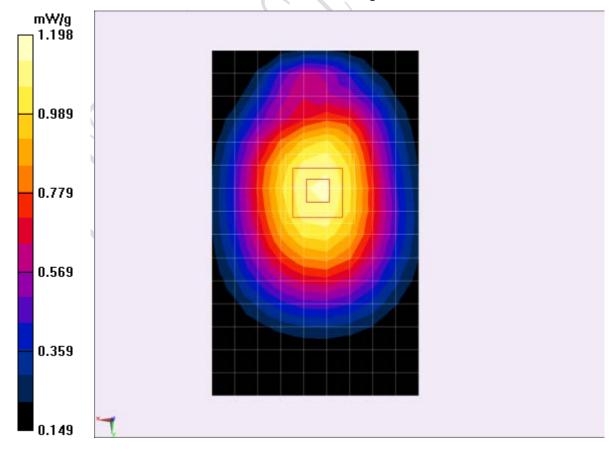
High Toward Ground GPRS 4TS 850MHz 2/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 33.359 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 1.4240 mW/g

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.866 mW/gMaximum value of SAR (measured) = 1.198 mW/g

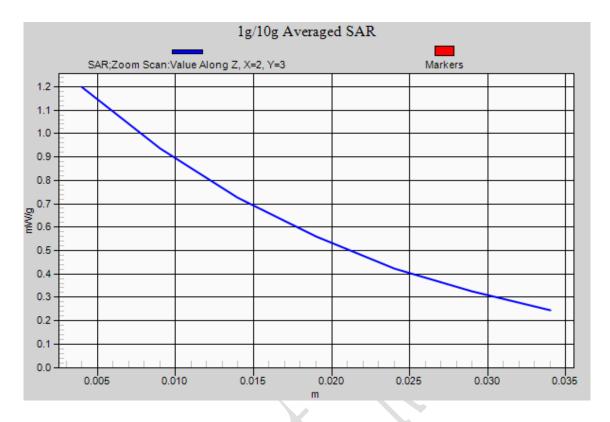




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground GPRS 4TS Middle 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.934$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 1.039 mW/g

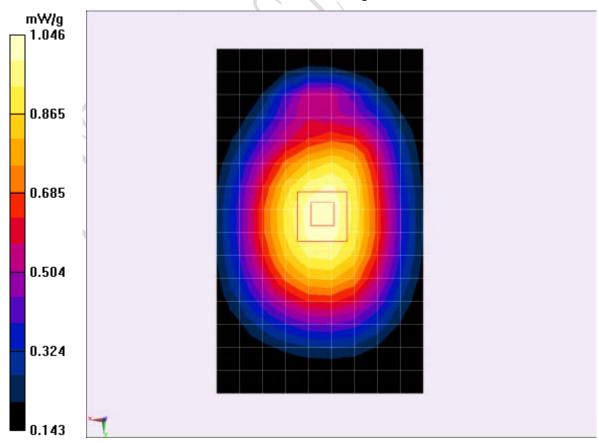
Middle Toward Ground GPRS 4TS 850MHz 2/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 33.265 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.1920 mW/g

SAR(1 g) = 0.957 mW/g; SAR(10 g) = 0.724 mW/gMaximum value of SAR (measured) = 1.046 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground GPRS 4TS Low 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955$ mho/m; $\epsilon r = 54.052$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.983 mW/g

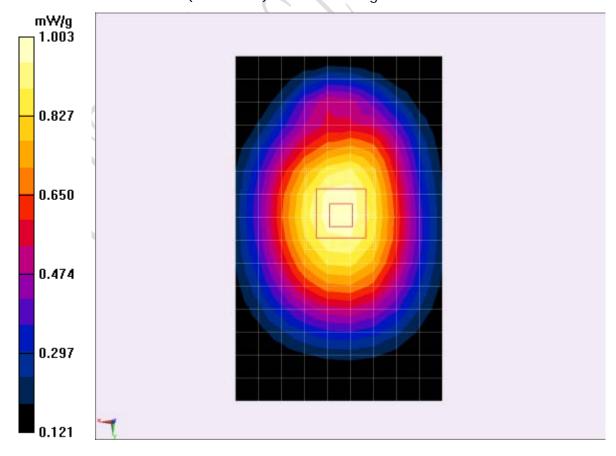
Low Toward Ground GPRS 4TS 850MHz 2/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 32.318 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.1960 mW/g

SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.727 mW/gMaximum value of SAR (measured) = 1.003 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS High 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Ground E-GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.980 mW/g

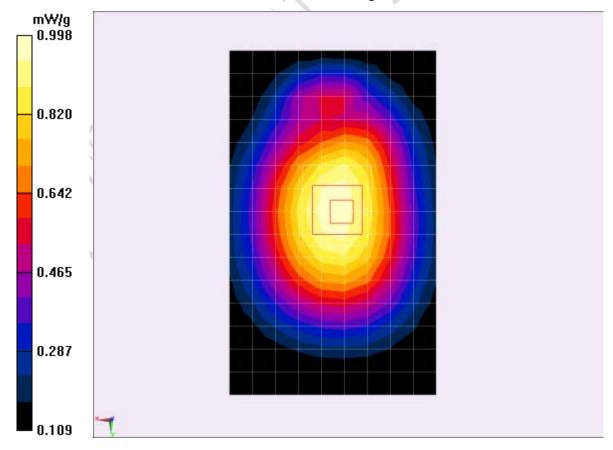
High Toward Ground E-GPRS 4TS 850MHz 2/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 32.912 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.2000 mW/g

SAR(1 g) = 0.943 mW/g; SAR(10 g) = 0.710 mW/gMaximum value of SAR (measured) = 0.998 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS Middle 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967 \text{ mho/m}$; $\epsilon r = 53.934$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground E-GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 1.022 mW/g

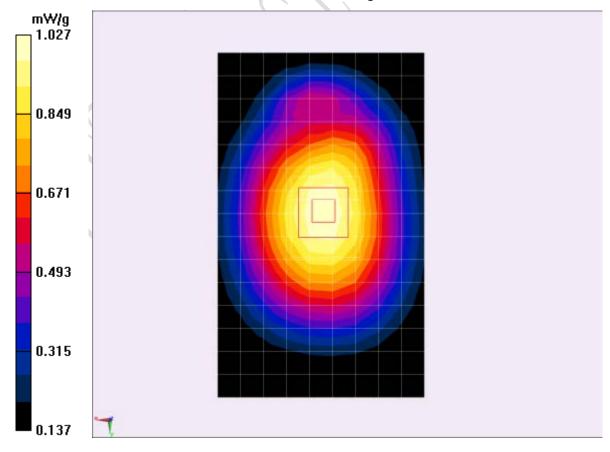
Middle Toward Ground E-GPRS 4TS 850MHz 2/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 32.530 V/m; Power Drift = -0.0031 dB

Peak SAR (extrapolated) = 1.2210 mW/g

SAR(1 g) = 0.979 mW/g; SAR(10 g) = 0.740 mW/gMaximum value of SAR (measured) = 1.027 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Toward Ground E-GPRS 4TS Low 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955$ mho/m; $\epsilon r = 54.052$; $\rho = 0.955$ mho/m; $\epsilon r = 54.052$; $\epsilon = 0.955$ mho/m; $\epsilon r = 0.955$ mho/m; ϵ

1000 kg/m3

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

Communication System: GSM 850MHz E-GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground E-GPRS 4TS 850MHz 2/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.965 mW/g

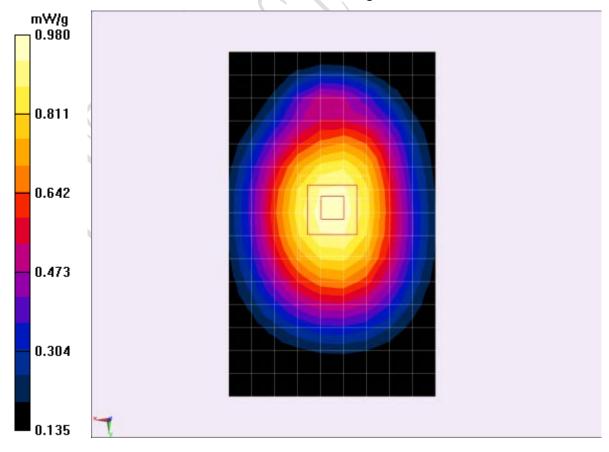
Low Toward Ground E-GPRS 4TS 850MHz 2/Zoom Scan (7x8x7)/Cube 0:

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

Reference Value = 31.842 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.1620 mW/g

SAR(1 g) = 0.934 mW/g; SAR(10 g) = 0.706 mW/gMaximum value of SAR (measured) = 0.980 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Right GPRS 4TS High 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used: f = 849 MHz; $\sigma = 0.981$ mho/m; $\epsilon r = 53.825$; $\rho = 1000$ kg/m³

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 848.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Right GPRS 4TS 850MHz 2/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.005 mW/g

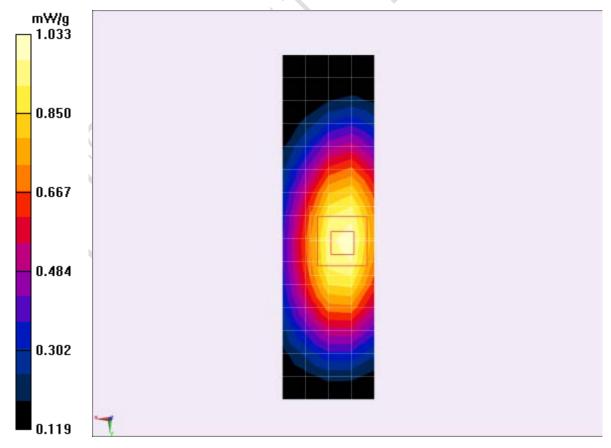
High Right GPRS 4TS 850MHz 2/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 31.095 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.3560 mW/g

SAR(1 g) = 0.966 mW/g; SAR(10 g) = 0.664 mW/gMaximum value of SAR (measured) = 1.033 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Right GPRS 4TS Middle 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.934$; $\rho =$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 836.6 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Right GPRS 4TS 850MHz 2/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.006 mW/g

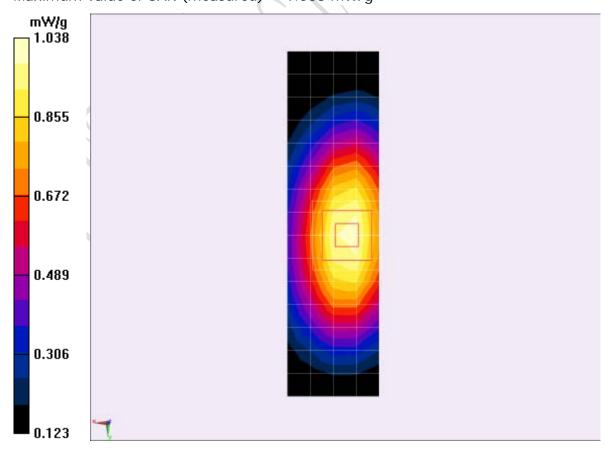
Middle Right GPRS 4TS 850MHz 2/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 31.585 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.3670 mW/g

SAR(1 g) = 0.968 mW/g; SAR(10 g) = 0.669 mW/gMaximum value of SAR (measured) = 1.038 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM850 Body Right GPRS 4TS Low 2

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 850MHz

Medium parameters used (interpolated): f = 824.2 MHz; $\sigma = 0.955$ mho/m; $\epsilon r = 54.052$; $\rho = 0.955$ mho/m; $\epsilon r = 54.052$

1000 kg/m3

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

Communication System: GSM 850MHz GPRS 4TS; Frequency: 824.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Right GPRS 4TS 850MHz 2/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.951 mW/g

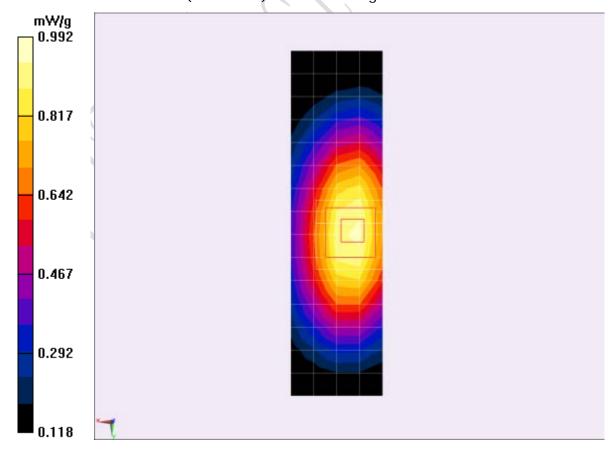
Low Right GPRS 4TS 850MHz 2/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 30.845 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.2910 mW/g

SAR(1 g) = 0.928 mW/g; SAR(10 g) = 0.644 mW/gMaximum value of SAR (measured) = 0.992 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Left Cheek Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.333$ mho/m; $\epsilon = 39.947$; $\rho = 1.333$ mho/m; $\epsilon = 39.947$; $\epsilon =$

1000 kg/m3

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

Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Cheek Left GSM1900MHz/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.178 mW/g

Low Cheek Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

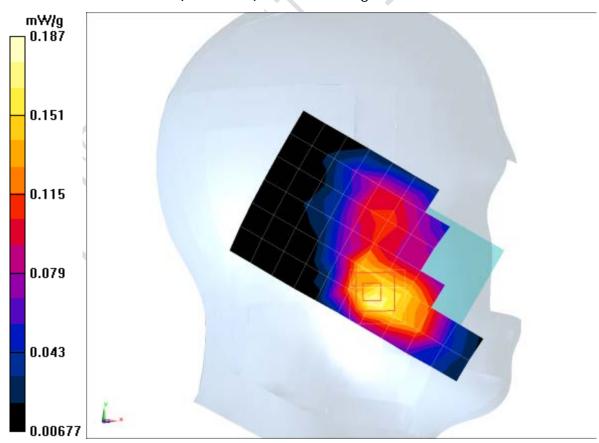
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.543 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.2700 mW/g

SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.187 mW/g

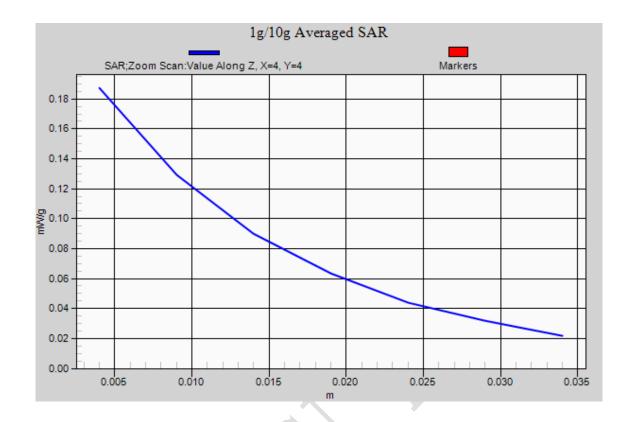




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013 Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Left Tilt Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.333 \text{ mho/m}$; $\epsilon = 39.947$; $\rho = 1.333 \text{ mho/m}$; $\epsilon = 39.947$; $\epsilon = 1.333 \text{ mho/m}$;

1000 kg/m3

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

Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Tilt Left GSM1900MHz/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.081 mW/g

Low Tilt Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

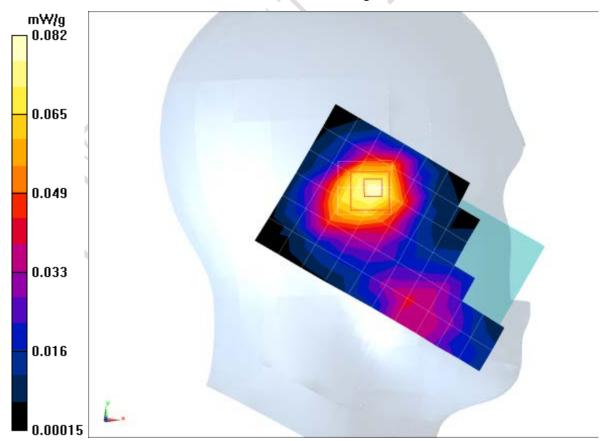
dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.317 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.1100 mW/g

SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.048 mW/g

Maximum value of SAR (measured) = 0.082 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Right Cheek Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.333 \text{ mho/m}$; $\epsilon = 39.947$; $\rho = 1.333 \text{ mho/m}$; $\epsilon = 39.947$; $\epsilon = 1.333 \text{ mho/m}$;

1000 kg/m3

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

Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Cheek Right GSM1900MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.155 mW/g

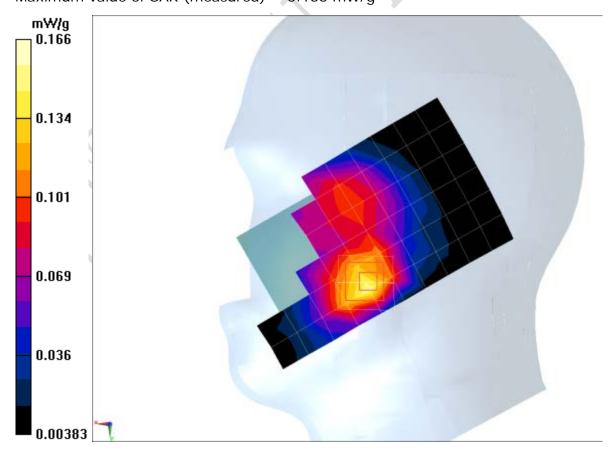
Low Cheek Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 3.007 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.2170 mW/g

SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.088 mW/gMaximum value of SAR (measured) = 0.166 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Right Tilt Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.333$ mho/m; $\epsilon = 39.947$; $\rho = 1.333$ mho/m; $\epsilon = 39.947$; $\epsilon =$

1000 kg/m3

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

Communication System: GSM 1900MHz; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Tilt Right GSM1900MHz/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.061 mW/g

Low Tilt Right GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

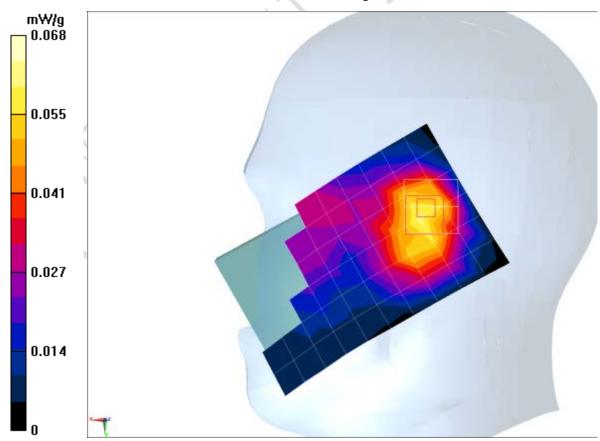
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.224 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.0870 mW/g

SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.068 mW/g





FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Left Cheek High

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used: f = 1910 MHz; $\sigma = 1.396$ mho/m; $\epsilon = 39.721$; $\rho = 1000$ kg/m³

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

Communication System: GSM 1900MHz; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

High Cheek Left GSM1900MHz/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.126 mW/g

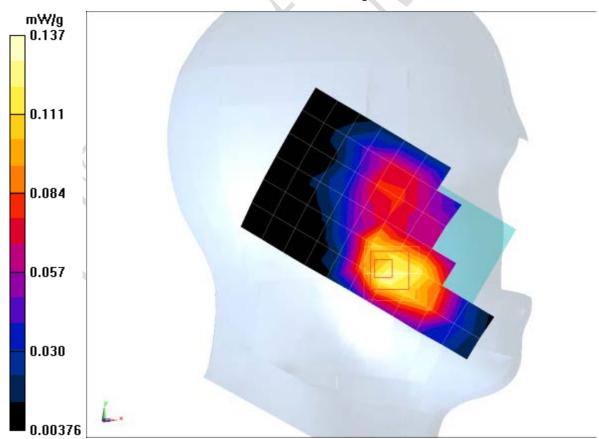
High Cheek Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 2.466 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.1980 mW/g

SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.079 mW/gMaximum value of SAR (measured) = 0.137 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Left Cheek Middle

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.361$ mho/m; $\epsilon = 39.844$; $\rho = 1000$ kg/m³

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

Communication System: GSM 1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Middle Cheek Left GSM1900MHz/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.150 mW/g

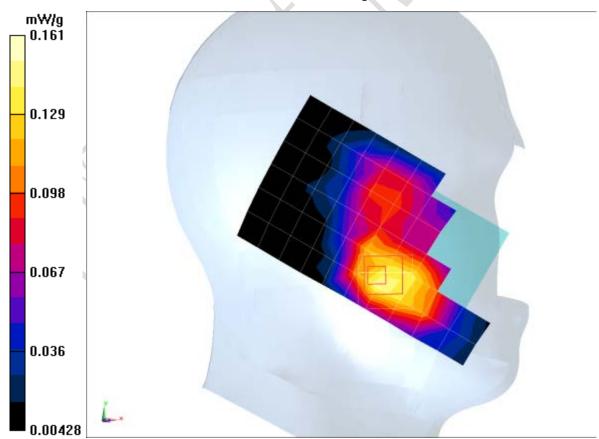
Middle Cheek Left GSM1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 2.510 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.2310 mW/g

SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.094 mW/gMaximum value of SAR (measured) = 0.161 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Toward Ground GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448 \text{ mho/m}$; $\epsilon = 53.933$; $\rho = 1.448 \text{ mho/m}$; $\epsilon = 53.933$; $\epsilon = 1.448 \text{ mho/m}$;

1000 kg/m3

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Ground GPRS 4TS 1900MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.612 mW/g

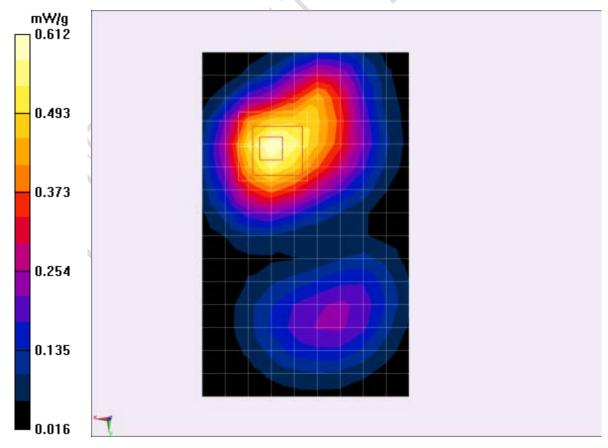
Low Toward Ground GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 8.453 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.8060 mW/g

SAR(1 g) = 0.561 mW/g; SAR(10 g) = 0.360 mW/gMaximum value of SAR (measured) = 0.612 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Toward Phantom GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448 \text{ mho/m}$; $\epsilon = 53.933$;

 $\rho = 1000 \text{ kg/m}3$

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Phantom GPRS 4TS 1900MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.202 mW/g

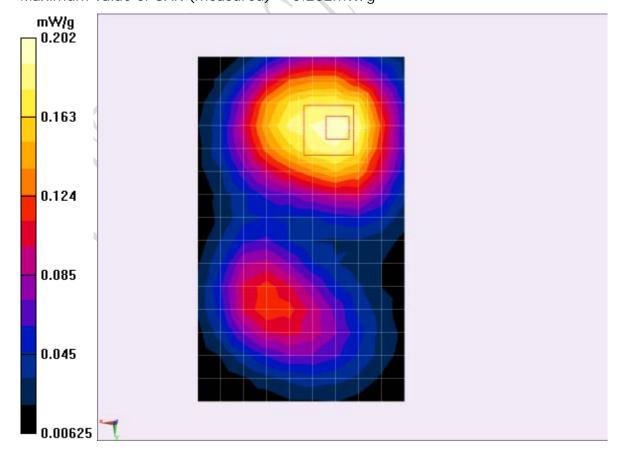
Low Toward Phantom GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 5.122 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.2730 mW/g

SAR(1 g) = 0.188 mW/g; SAR(10 g) = 0.124 mW/gMaximum value of SAR (measured) = 0.202mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Left GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448$ mho/m; $\epsilon = 53.933$; $\rho = 1.448$ mho/m; $\epsilon = 53.933$; $\epsilon = 1.448$ mho/m; $\epsilon = 1.448$ mho

1000 kg/m3

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Left GPRS 4TS 1900MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.344 mW/g

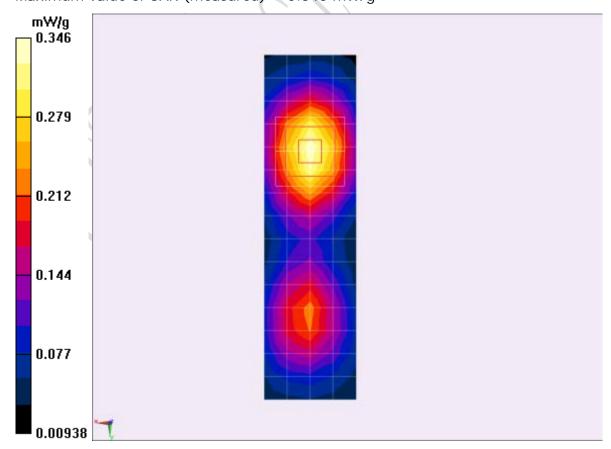
Low Left GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 9.463 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.4710 mW/g

SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.194 mW/gMaximum value of SAR (measured) = 0.346 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Right GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448$ mho/m; $\epsilon = 53.933$; $\rho = 1.448$ mho/m; $\epsilon = 53.933$; $\epsilon = 1.448$ mho/m; $\epsilon = 1.448$ mho/m;

1000 kg/m3

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Right GPRS 4TS 1900MHz/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.328 mW/g

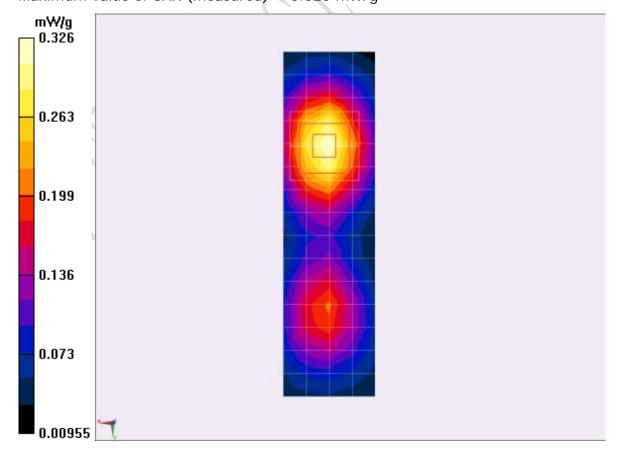
Low Right GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 9.099 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.4490 mW/g

SAR(1 g) = 0.298 mW/g; SAR(10 g) = 0.181 mW/gMaximum value of SAR (measured) = 0.326 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Bottom GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448$ mho/m; $\epsilon = 53.933$; $\rho = 1.448$ mho/m; $\epsilon = 53.933$; $\epsilon = 1.448$ mho/m; $\epsilon = 1.448$ mho

1000 kg/m3

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Bottom GPRS 4TS 1900MHz/Area Scan (5x11x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.266 mW/g

Low Bottom GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

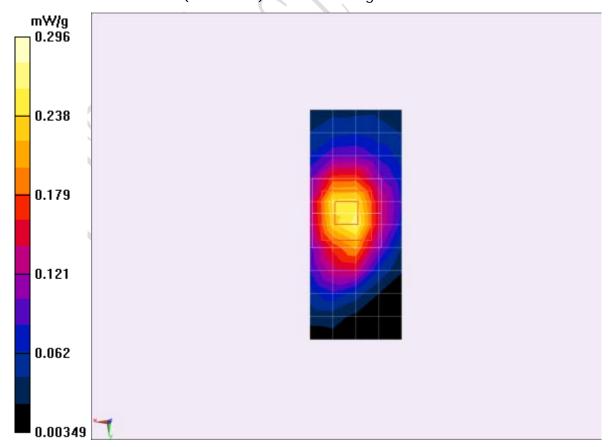
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.765 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.4100 mW/g

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.296 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Toward Ground GPRS 4TS High

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used: f = 1910 MHz; $\sigma = 1.513$ mho/m; $\epsilon r = 53.642$; $\rho = 1000$ kg/m³

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1909.8 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

High Toward Ground GPRS 4TS 1900MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.444 mW/g

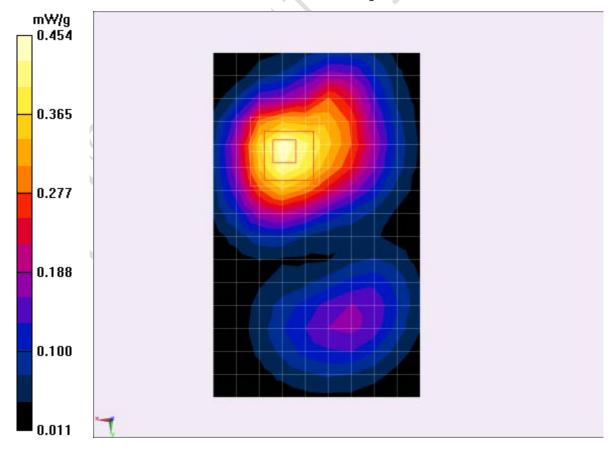
High Toward Ground GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 8.232 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.6020 mW/g

SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.267 mW/gMaximum value of SAR (measured) = 0.454 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Toward Ground GPRS 4TS Middle

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.475$ mho/m; $\epsilon r = 53.878$; $\rho = 1000$ kg/m³

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

Communication System: GSM1900MHz GPRS 4TS; Frequency: 1880 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Middle Toward Ground GPRS 4TS 1900MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.558 mW/g

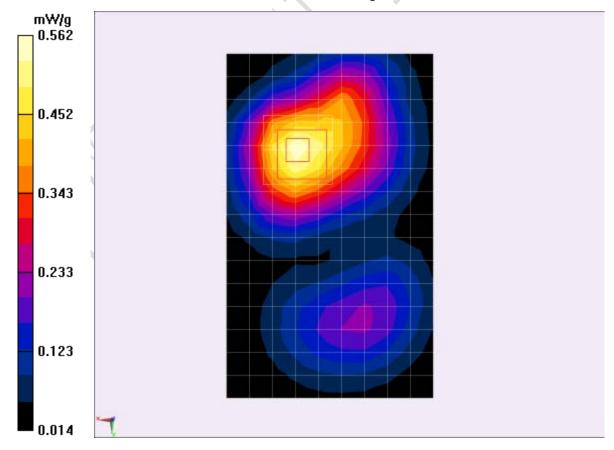
Middle Toward Ground GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 8.604 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.6880 mW/g

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.310 mW/gMaximum value of SAR (measured) = 0.562 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

GSM1900 Body Toward Ground E-GPRS 4TS Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.448 \text{ mho/m}$; $\epsilon = 53.933$; $\rho = 1.448 \text{ mho/m}$; $\epsilon = 53.933$; $\epsilon = 1.448 \text{ mho/m}$;

1000 kg/m3

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

Communication System: GSM 1900MHz E-GPRS 4TS; Frequency: 1850.2 MHz; Duty

Cycle: 1:2

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Ground E-GPRS 4TS 1900MHz/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.671 mW/g

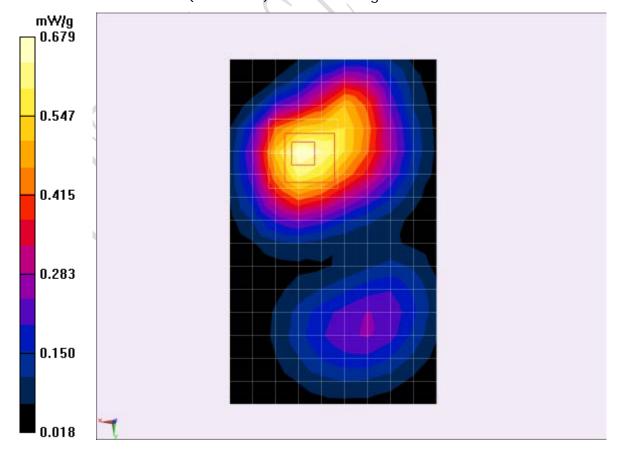
Low Toward Ground E-GPRS 4TS 1900MHz/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 9.381 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.9010 mW/g

SAR(1 g) = 0.628 mW/g; SAR(10 g) = 0.406 mW/gMaximum value of SAR (measured) = 0.679 mW/g

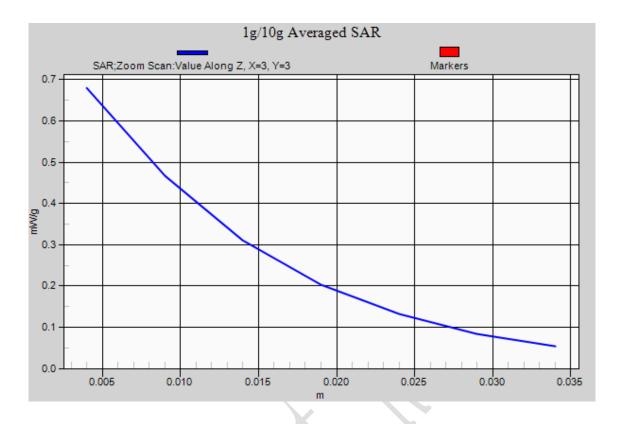




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013 Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Left Cheek Middle

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.917$ mho/m; $\epsilon = 42.33$; $\rho = 0.917$ mho/m; $\epsilon = 42.33$; $\epsilon = 0.917$ mho/m; $\epsilon = 0$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Middle Cheek Left WCDMA Band V/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.213 mW/g

Middle Cheek Left WCDMA Band V/Zoom Scan (7x7x7)/Cube 0:

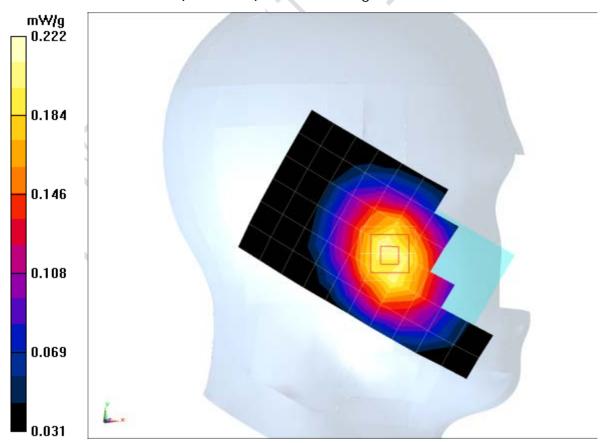
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.526 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.2530 mW/g

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.222 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Left Tilt Middle

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.917$ mho/m; $\epsilon = 42.33$; $\rho = 0.917$ mho/m; $\epsilon = 42.33$; $\epsilon = 0.917$ mho/m; $\epsilon = 0$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Middle Tilt Left WCDMA Band V/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.162 mW/g

Middle Tilt Left WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement

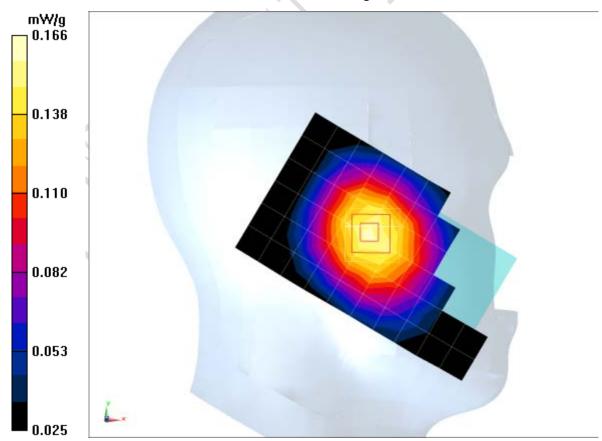
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.466 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.1890 mW/g

SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.123 mW/g

Maximum value of SAR (measured) = 0.166 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Right Cheek Middle

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.917$ mho/m; $\epsilon = 42.33$; $\rho = 0.917$ mho/m; $\epsilon = 42.33$; $\epsilon = 0.917$ mho/m; $\epsilon = 0$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Middle Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.258 mW/g

Middle Cheek Right WCDMA Band V/Zoom Scan (7x8x7)/Cube 0:

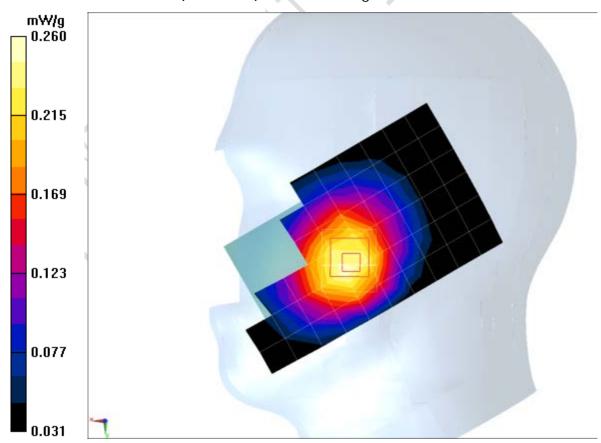
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.671 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.2940 mW/g

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.179 mW/g

Maximum value of SAR (measured) = 0.260 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Right Tilt Middle

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.917$ mho/m; $\epsilon = 42.33$; $\rho = 0.917$ mho/m; $\epsilon = 42.33$; $\epsilon = 0.917$ mho/m; $\epsilon = 0$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Middle Tilt Right WCDMA Band V/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.171 mW/g

Middle Tilt Right WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement

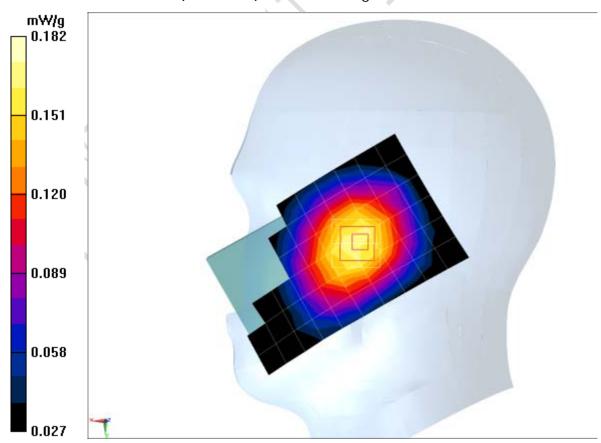
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.612 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.2020 mW/g

SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.182 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Right Cheek High

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used: f = 847 MHz; $\sigma = 0.927$ mho/m; $\epsilon r = 42.22$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

High Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.286 mW/g

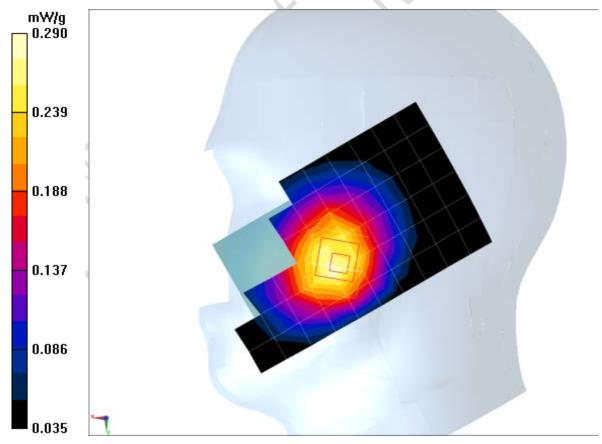
High Cheek Right WCDMA Band V/Zoom Scan (7x8x7)/Cube 0: Measurement

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

Reference Value = 5.339 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.3310 mW/g

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.199 mW/gMaximum value of SAR (measured) = 0.290 mW/g

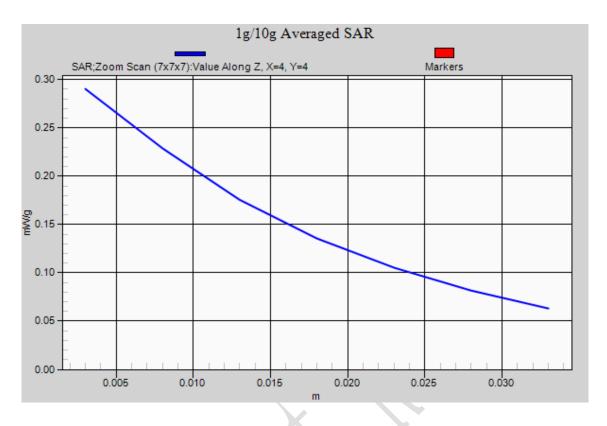




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}\text{-}2013$ Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Right Cheek Low

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used (interpolated): f = 826.4 MHz; $\sigma = 0.909$ mho/m; $\epsilon r = 42.443$; $\rho = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 42.443$; $\epsilon r = 0.909$ mho/m; $\epsilon r = 0.909$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

Low Cheek Right WCDMA Band V/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.197 mW/g

Low Cheek Right WCDMA Band V/Zoom Scan (7x8x7)/Cube 0: Measurement

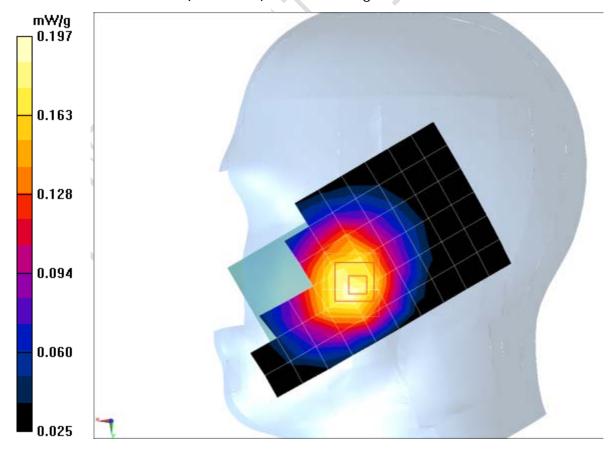
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.229 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.2280 mW/g

SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.136 mW/g

Maximum value of SAR (measured) = 0.197mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Toward Ground Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.935$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Ground WCDMA Band V/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.543 mW/g

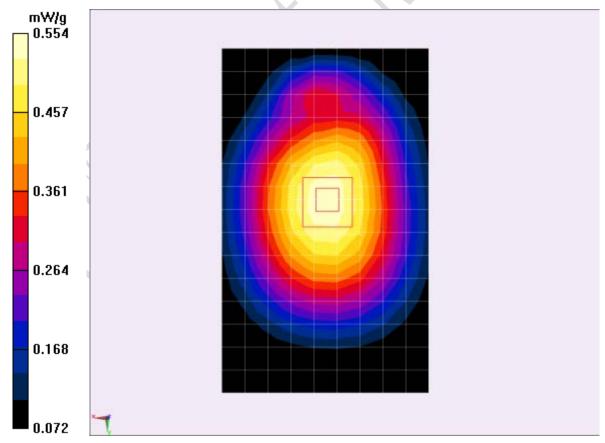
Middle Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 23.825 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.6520 mW/g

SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.402 mW/gMaximum value of SAR (measured) = 0.554 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Toward Phantom Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.967 \text{ mho/m}$; $\epsilon = 53.935$; $\rho = 1000 \text{ kg/m}$ 3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Toward Phantom WCDMA Band V/Area Scan (10x16x1):

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

Maximum value of SAR (measured) = 0.276 mW/g

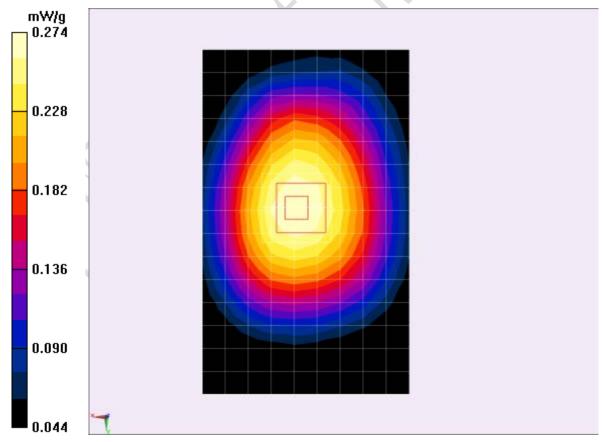
Middle Toward Phantom WCDMA Band V/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 16.887 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.3210 mW/g

SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.202 mW/gMaximum value of SAR (measured) = 0.274 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Left Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.967 \text{ mho/m}$; $\epsilon = 53.935$; $\rho = 1000 \text{ kg/m}$ 3

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Left WCDMA Band V/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.176 mW/g

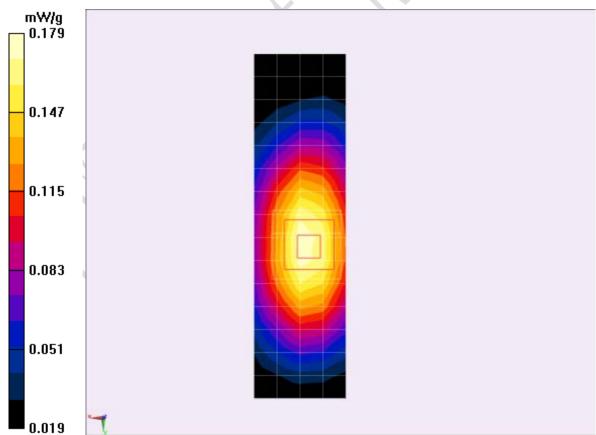
Middle Left WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 13.517 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.2310 mW/g

SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.116 mW/gMaximum value of SAR (measured) = 0.179 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Right Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.935$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Right WCDMA Band V/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.238 mW/g

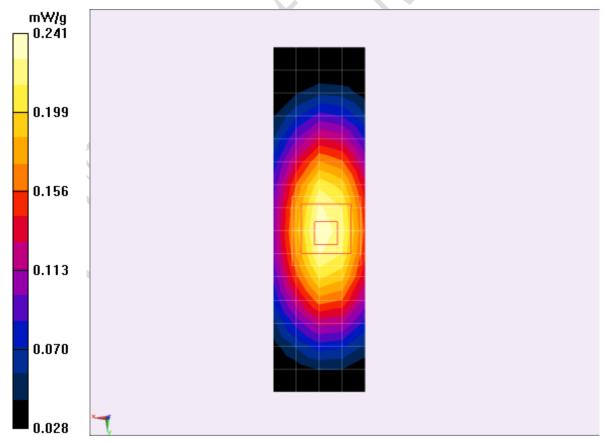
Middle Right WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 15.564 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.3180 mW/g

SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.156 mW/gMaximum value of SAR (measured) = 0.241 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Bottom Middle

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.967$ mho/m; $\epsilon r = 53.935$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Middle Bottom WCDMA Band V/Area Scan (5x11x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.033 mW/g

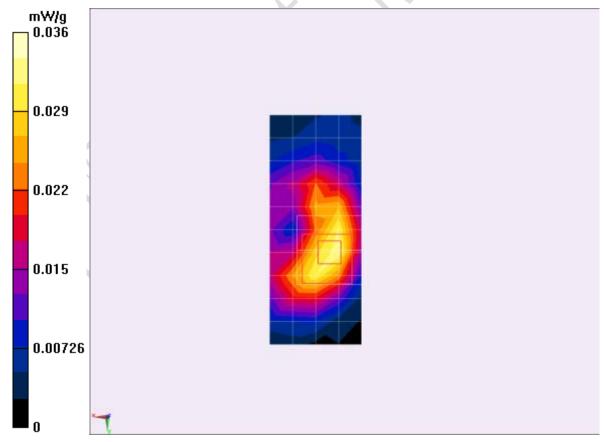
Middle Bottom WCDMA Band V/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 4.737 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.0600 mW/g

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.017 mW/gMaximum value of SAR (measured) = 0.036 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Toward Ground High

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used (interpolated): f = 846.6 MHz; $\sigma = 0.978$ mho/m; $\epsilon r = 53.847$; $\rho =$

1000 kg/m3

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

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

High Toward Ground WCDMA Band V/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.568 mW/g

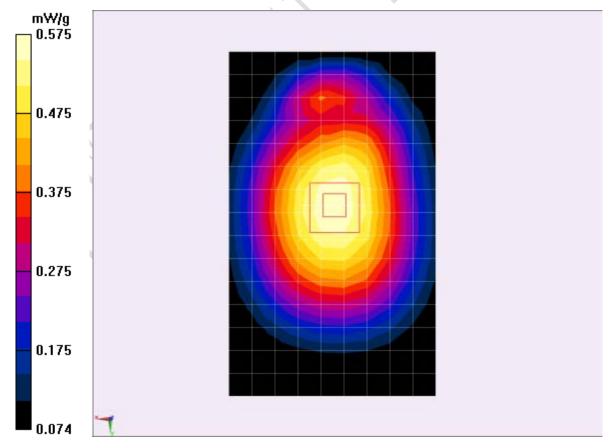
High Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 24.412 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.6490 mW/g

SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.400 mW/gMaximum value of SAR (measured) = 0.575 mW/g

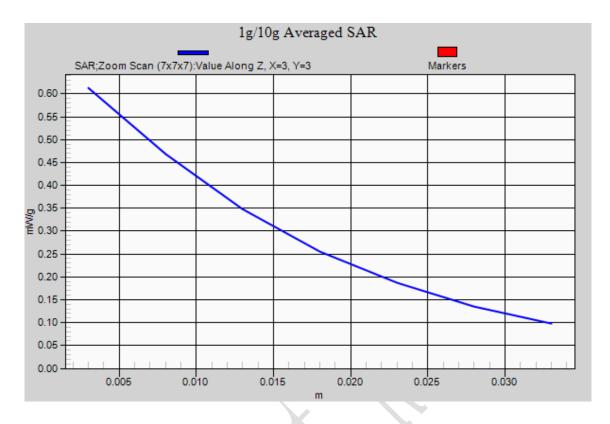




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band V Body Toward Ground Low

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 826.5 MHz; $\sigma = 0.957$ mho/m; $\epsilon = 54.03$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

Low Toward Ground WCDMA Band V/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.460 mW/g

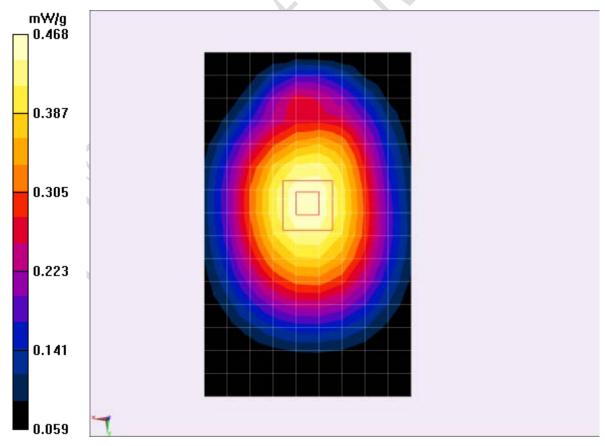
Low Toward Ground WCDMA Band V/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 21.982 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.5530 mW/g

SAR(1 g) = 0.447 mW/g; SAR(10 g) = 0.341 mW/gMaximum value of SAR (measured) = 0.468 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Left Cheek Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.335 \text{ mho/m}$; $\epsilon = 39.94$;

 $\rho = 1000 \text{ kg/m}3$

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Cheek Left WCDMA Band II/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.295 mW/g

Low Cheek Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement

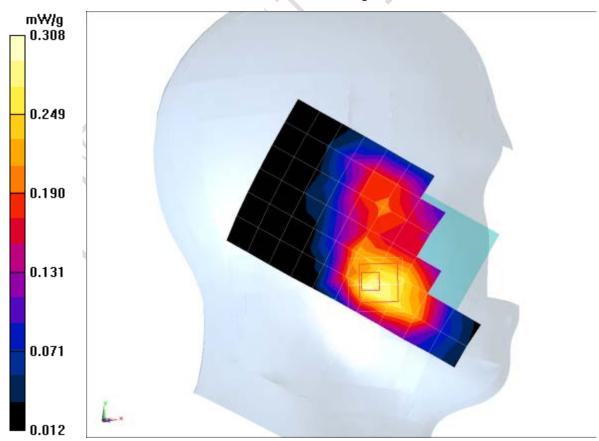
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.002 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.4450 mW/g

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.182 mW/g

Maximum value of SAR (measured) = 0.308 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Left Tilt Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.335$ mho/m; $\epsilon = 39.94$; $\rho = 1.335$ mho/m; $\epsilon = 39.94$; $\epsilon = 1.335$ mho/m; $\epsilon = 1.335$ mho/m; $\epsilon = 39.94$; $\epsilon = 1.335$ mho/m; ϵ

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Tilt Left WCDMA Band II/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.144 mW/g

Low Tilt Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

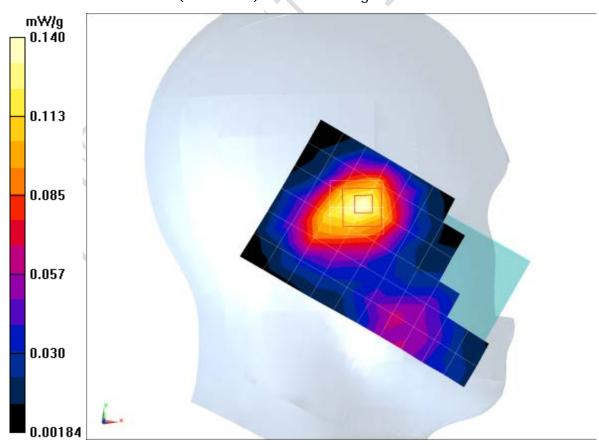
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.822 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.1870 mW/g

SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.086 mW/g

Maximum value of SAR (measured) = 0.140 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Right Cheek Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.335$ mho/m; $\epsilon r = 39.94$; $\rho = 1.335$ mho/m; $\epsilon r = 39.94$; $\epsilon = 1.335$ mho/m; $\epsilon r = 39.94$; $\epsilon = 1.335$ mho/m; $\epsilon $\epsilon = 1.335$

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Cheek Right WCDMA Band II/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.252 mW/g

Low Cheek Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement

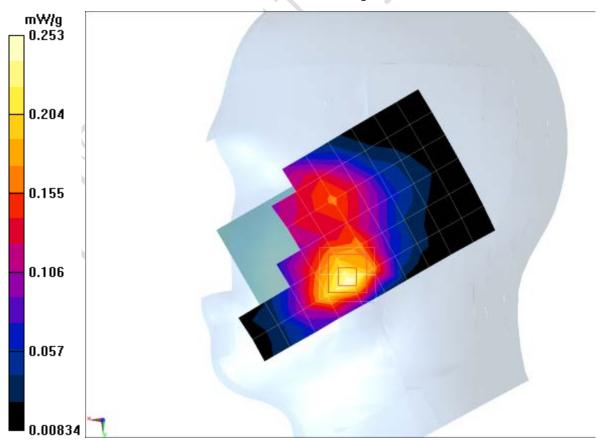
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.489 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 0.3270 mW/g

SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.140 mW/g

Maximum value of SAR (measured) = 0.253 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Right Tilt Low

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.335$ mho/m; $\epsilon r = 39.94$; $\rho = 1.335$ mho/m; $\epsilon r = 39.94$; $\epsilon = 1.335$ mho/m; $\epsilon r = 39.94$; $\epsilon = 1.335$ mho/m; $\epsilon $\epsilon = 1.335$

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Low Tilt Right WCDMA Band II/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

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

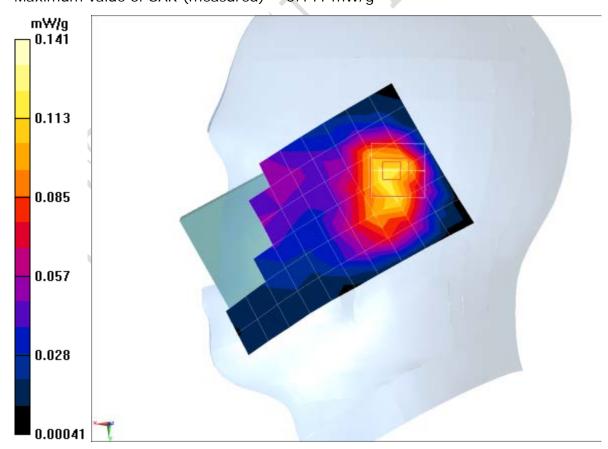
Low Tilt Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 10.403 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.1720 mW/g

SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.075 mW/gMaximum value of SAR (measured) = 0.141 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Left Cheek High

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used: f = 1908 MHz; $\sigma = 1.394$ mho/m; $\epsilon r = 39.731$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

High Cheek Left WCDMA Band II/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.250 mW/g

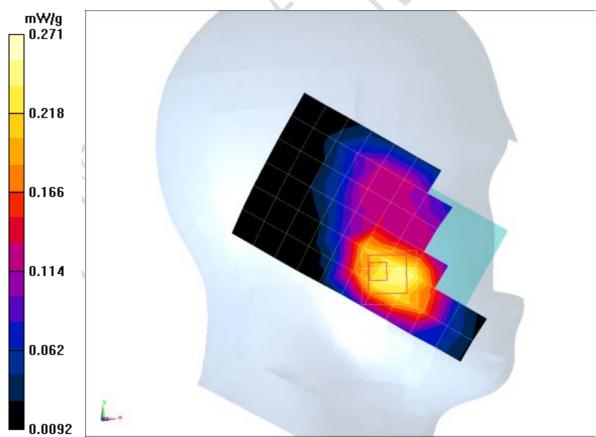
High Cheek Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 4.186 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.3860 mW/g

SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.159 mW/gMaximum value of SAR (measured) = 0.271 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Left Cheek Middle

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.361 \text{ mho/m}$; $\epsilon = 39.844$; $\rho = 1000 \text{ kg/m}$

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

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

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

Middle Cheek Left WCDMA Band II/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.281 mW/g

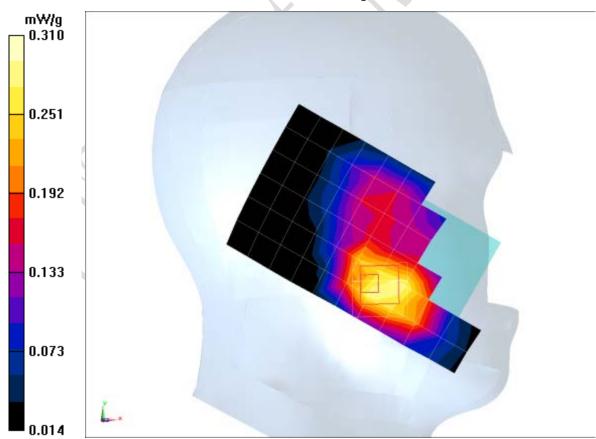
Middle Cheek Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 4.638 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.4370 mW/g

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.185 mW/gMaximum value of SAR (measured) = 0.310 mW/g

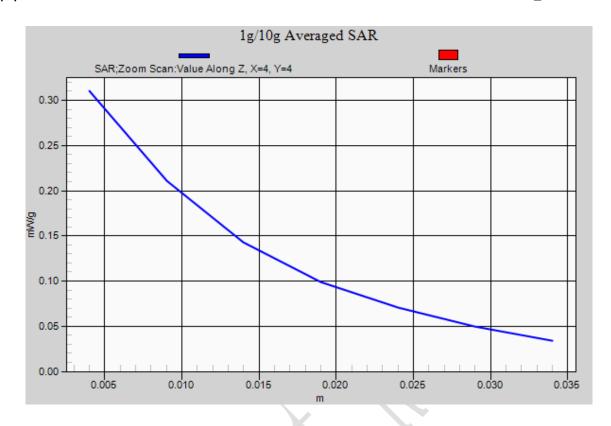




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013 Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Toward Ground Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.45$ mho/m; $\epsilon r = 53.942$; $\rho = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon r = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon r = 1.45$ mho/m; ϵr

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Ground WCDMA Band II/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.653 mW/g

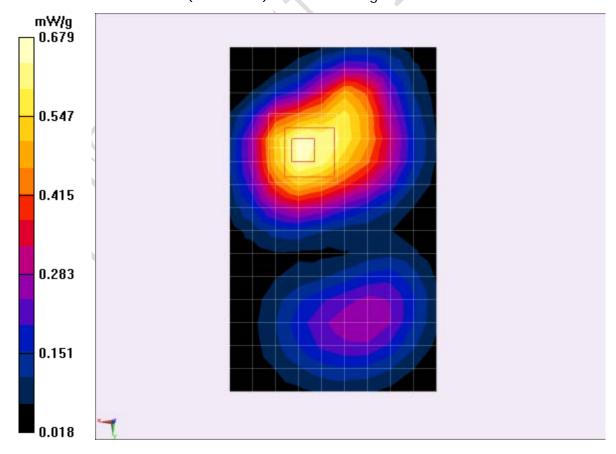
Low Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 10.769 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.8850 mW/g

SAR(1 g) = 0.628 mW/g; SAR(10 g) = 0.412 mW/gMaximum value of SAR (measured) = 0.679 mW/g

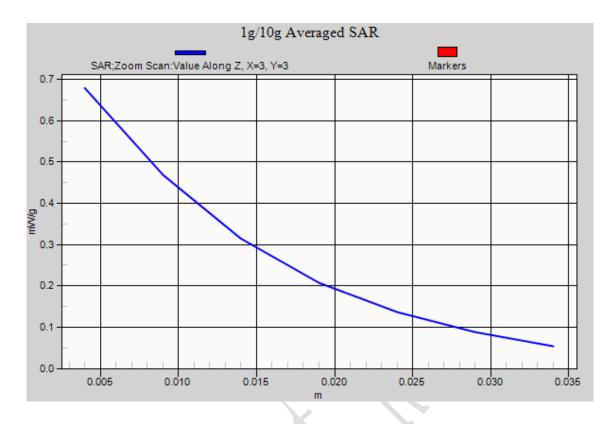




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013 Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Toward Phantom Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.45$ mho/m; $\epsilon r = 53.942$; $\rho = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon r = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon r = 1.45$ mho/m; ϵr

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Toward Phantom WCDMA Band II/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.383 mW/g

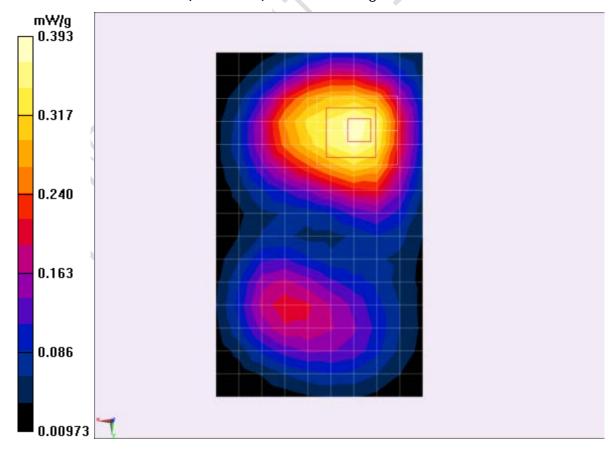
Low Toward Phantom WCDMA Band II/Zoom Scan (8x7x7)/Cube 0:

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

Reference Value = 6.398 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.5160 mW/g

SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.242 mW/gMaximum value of SAR (measured) = 0.393 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Left Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.45$ mho/m; $\epsilon r = 53.942$; $\rho =$

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Left WCDMA Band II/Area Scan (5x16x1): Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (measured) = 0.431 mW/g

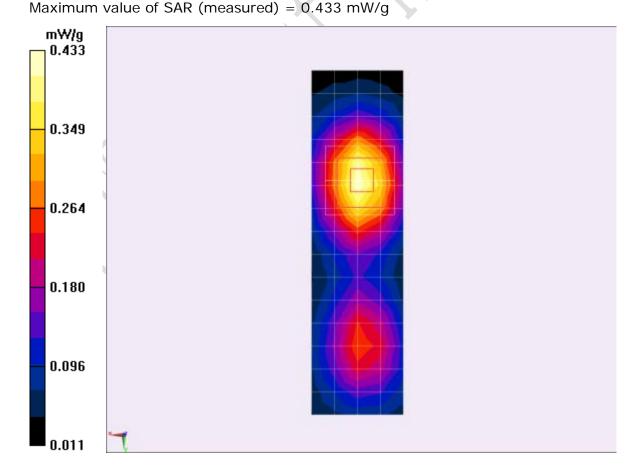
Low Left WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 11.791 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.5910 mW/g

SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.237 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Right Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.45$ mho/m; $\epsilon r = 53.942$; $\rho = 1.45$

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Right WCDMA Band II/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.214 mW/g

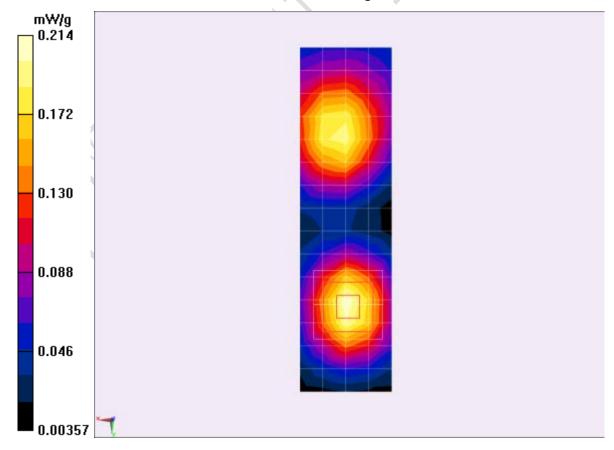
Low Right WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 4.625 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.2930 mW/g

SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.119 mW/gMaximum value of SAR (measured) = 0.214mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Bottom Low

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.45$ mho/m; $\epsilon r = 53.942$; $\rho = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 53.942$; $\epsilon = 1.45$ mho/m; $\epsilon r = 1$

1000 kg/m3

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

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Low Bottom WCDMA Band II/Area Scan (5x11x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.308 mW/g

Low Bottom WCDMA Band II/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

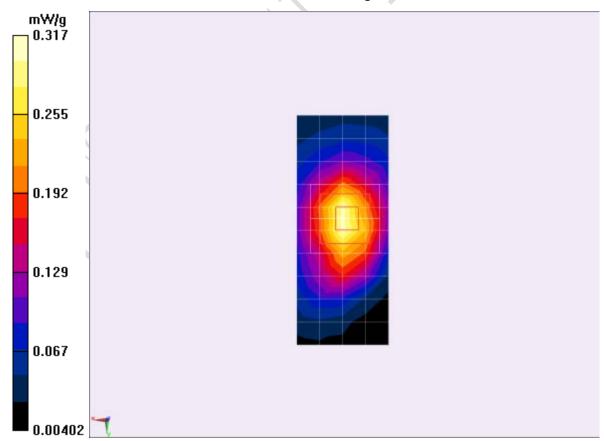
dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.127 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.4430 mW/g

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.163 mW/g

Maximum value of SAR (measured) = 0.317 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Toward Ground High

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used: f = 1908 MHz; $\sigma = 1.511 \text{ mho/m}$; $\epsilon = 53.655$; $\rho = 1000 \text{ kg/m}$ 3

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

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

High Toward Ground WCDMA Band II/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.515 mW/g

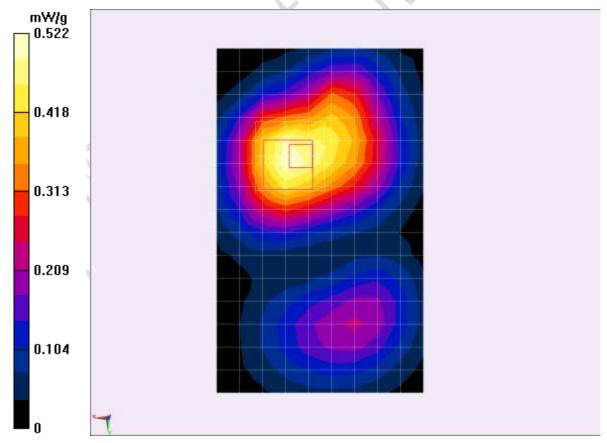
High Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 10.562 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.2870 mW/g

SAR(1 g) = 0.541 mW/g; SAR(10 g) = 0.312 mW/gMaximum value of SAR (measured) = 0.522 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

WCDMA Band II Body Toward Ground Middle

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.475$ mho/m; $\epsilon r = 53.878$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

Middle Toward Ground WCDMA Band II/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.604 mW/g

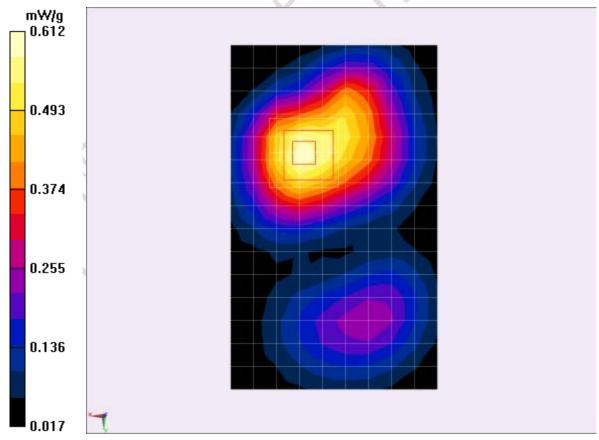
Middle Toward Ground WCDMA Band II/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 11.054 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.8000 mW/g

SAR(1 g) = 0.567 mW/g; SAR(10 g) = 0.369 mW/gMaximum value of SAR (measured) = 0.612 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Left Cheek High

Date/Time: 03/14/2015 Electronics: DAE4 Sn1329 Medium: Head 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.883$ mho/m; $\epsilon = 37.372$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)

High Cheek Left Wi-Fi 802.11b/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.096 mW/g

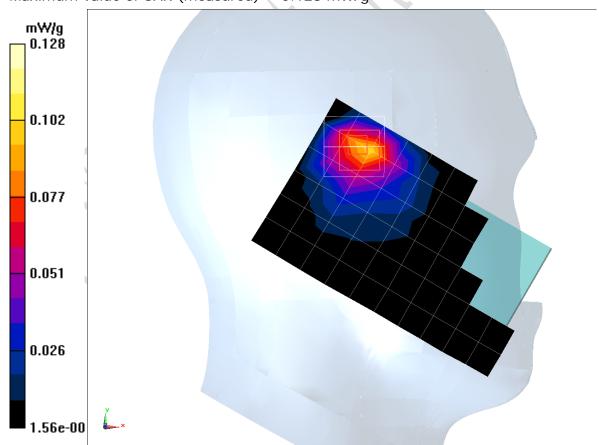
High Cheek Left Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 6.983 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.2390 mW/g

SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.050 mW/gMaximum value of SAR (measured) = 0.128 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Left Tilt High

Date/Time: 03/14/2015 Electronics: DAE4 Sn1329 Medium: Head 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.883$ mho/m; $\epsilon r = 37.372$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)

High Tilt Left Wi-Fi 802.11b/Area Scan (11x7x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.112 mW/g

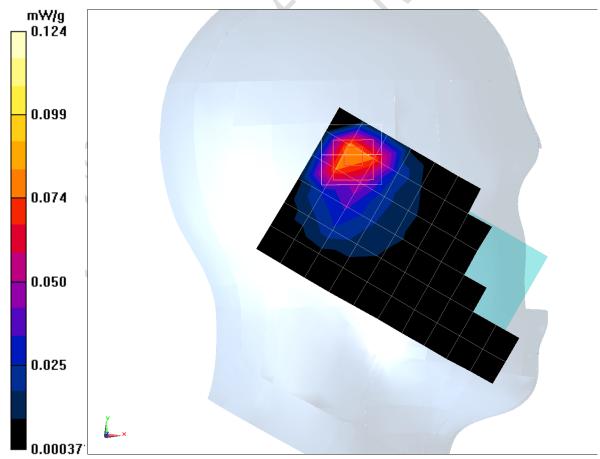
High Tilt Left Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 7.668 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.2510 mW/g

SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.047 mW/gMaximum value of SAR (measured) = 0.108 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Right Cheek High

Date/Time: 03/14/2015 Electronics: DAE4 Sn1329 Medium: Head 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.883$ mho/m; $\epsilon = 37.372$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)

High Cheek Right Wi-Fi 802.11b/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.357 mW/g

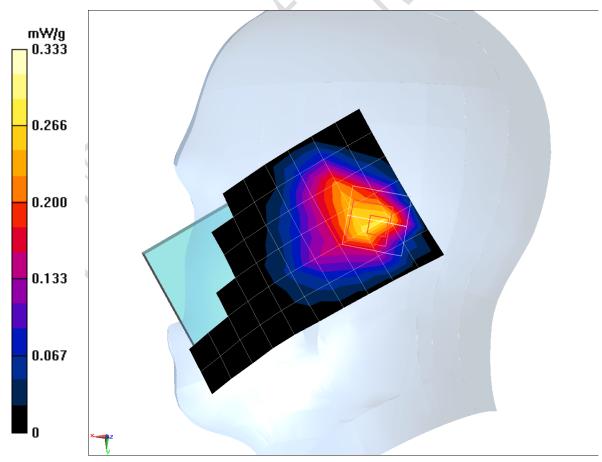
High Cheek Right Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 7.467 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.5770 mW/g

SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.119 mW/gMaximum value of SAR (measured) = 0.333 mW/g

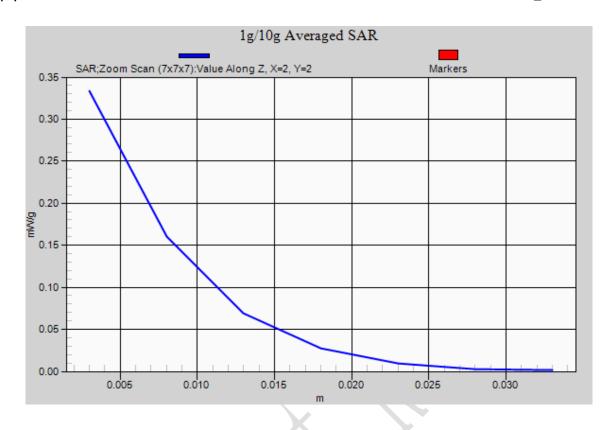




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528 $^{\text{TM}}$ -2013 Equipment: Ilium X400

REPORT NO.:B15X50050-FCC-SAR_Rev4





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Right Tilt High

Date/Time: 03/14/2015 Electronics: DAE4 Sn1329 Medium: Head 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.883$ mho/m; $\epsilon = 37.372$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)

High Tilt Right Wi-Fi 802.11b/Area Scan (7x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.285 mW/g

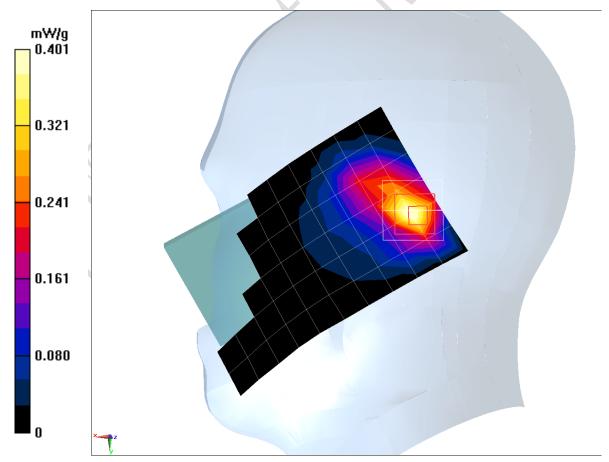
High Tilt Right Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube0: Measurement grid:

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

Reference Value = 8.184 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.7080 mW/g

SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.105 mW/gMaximum value of SAR (measured) = 0.401 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Toward Ground High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Toward Ground Wi-Fi 802.11b/Area Scan (10x16x1): Measurement grid:

dx=10mm, dy=10mm

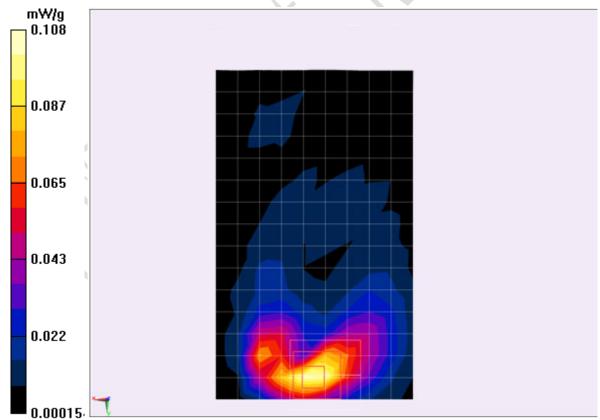
Maximum value of SAR (measured) = 0.103 mW/g

High Toward Ground Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube

0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 2.360 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.2010 mW/g

SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.043 mW/gMaximum value of SAR (measured) = 0.108 mW/g

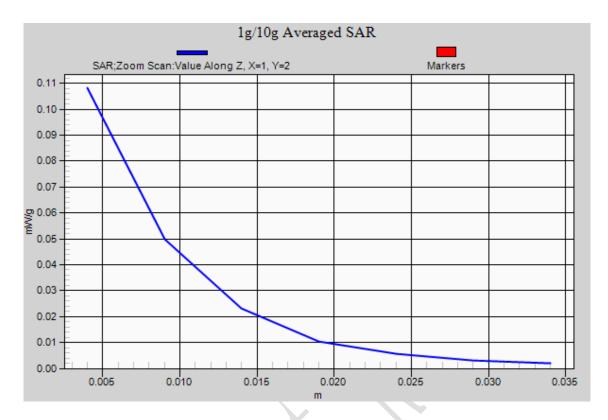




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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4







FCC Part 2.1093 (2013-10-1), IEEE Std 1528^{TM} -2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Toward Phantom High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Toward Phantom Wi-Fi 802.11b/Area Scan (10x16x1): Measurement

grid: dx=10mm, dy=10mm

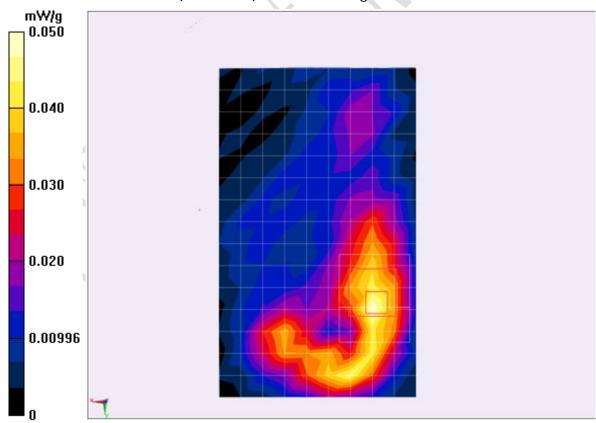
Maximum value of SAR (measured) = 0.050 mW/g

High Toward Phantom Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube

0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 2.089 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.0830 mW/g

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.019 mW/gMaximum value of SAR (measured) = 0.050 mW/g



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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Left High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Left Wi-Fi 802.11b 11M/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.022 mW/g

High Left Wi-Fi802.11b 11M/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

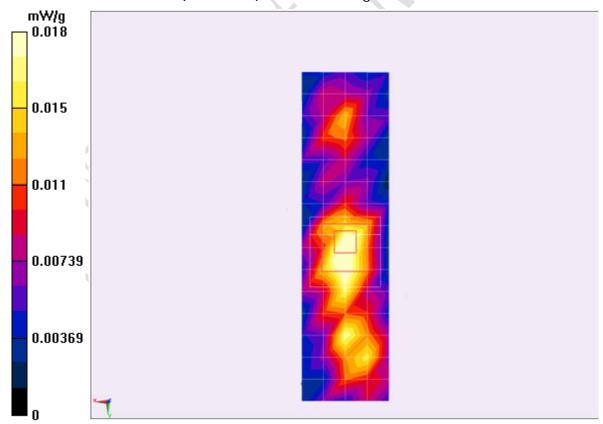
dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.930 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.0490 mW/g

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00672 mW/g

Maximum value of SAR (measured) = 0.018 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Right High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Right Wi-Fi 802.11b 11M/Area Scan (5x16x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.0075 mW/g

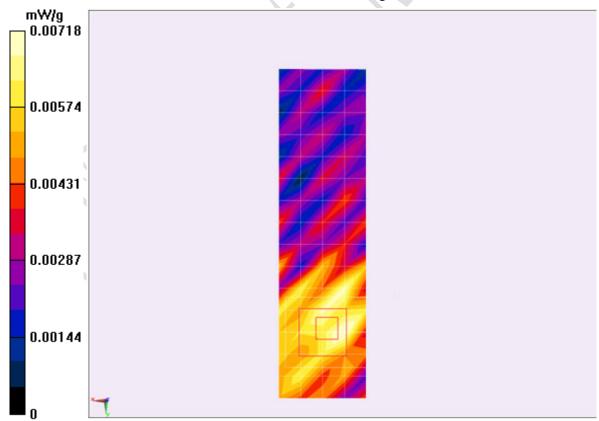
High Right Wi-Fi 802.11b 11M/Zoom Scan (7x7x7)/Cube 0: Measurement

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

Reference Value = 0.756 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.0380 mW/g

SAR(1 g) = 0.00818 mW/g; SAR(10 g) = 0.00328 mW/gMaximum value of SAR (measured) = 0.00718 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Bottom High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Bottom Wi-Fi 802.11b/Area Scan (5x11x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.00693 mW/g

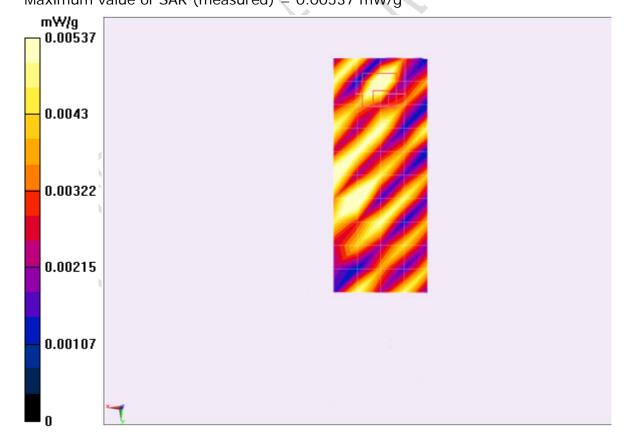
High Bottom Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 1.033 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.0190 mW/g

SAR(1 g) = 0.00323 mW/g; SAR(10 g) = 0.000951 mW/gMaximum value of SAR (measured) = 0.00537 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Wi-Fi 802.11b Body Top High

Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2462 MHz; $\sigma = 1.972$ mho/m; $\epsilon r = 52.868$; $\rho = 1000$ kg/m³

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

Communication System: Wi-Fi; Frequency: 2462 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

High Top Wi-Fi 802.11b/Area Scan (5x11x1): Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (measured) = 0.075 mW/g

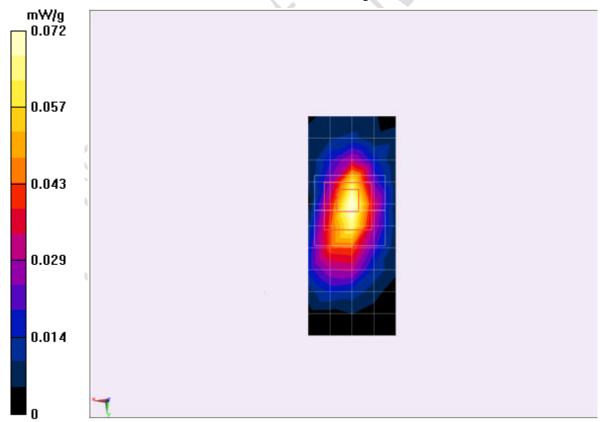
High Top Wi-Fi 802.11b/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

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

Reference Value = 5.325 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.2170 mW/g

SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.024 mW/gMaximum value of SAR (measured) = 0.072 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

AnnexB System Performance Check Graphical Results Head 835MHz

Date/Time: 03/10/2015 Electronics: DAE4 Sn1329 Medium: Head 900MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.916$ mho/m; $\epsilon r = 42.346$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(9.92, 9.92, 9.92)

System Performance Check 835MHz Head/Area Scan (6x18x1):

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

Maximum value of SAR (measured) = 2.880 mW/g

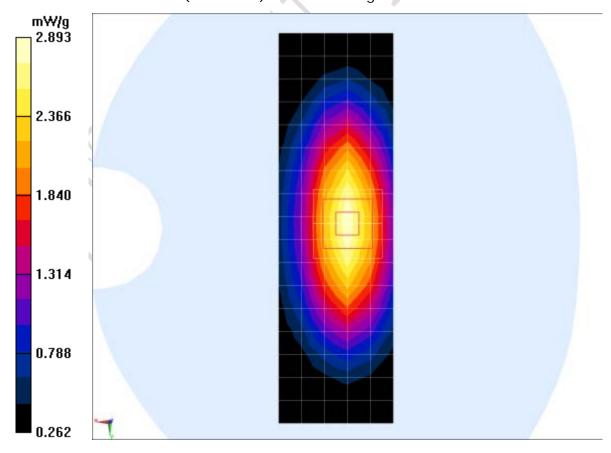
System Performance Check 835MHz Head/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 54.599 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 3.6300 mW/g

SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.62 mW/gMaximum value of SAR (measured) = 2.893 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Head 1900MHz

Date/Time: 03/12/2015 Electronics: DAE4 Sn1329 Medium: Head 1900MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.384$ mho/m; $\epsilon = 39.761$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(8.37, 8.37, 8.37)

System Performance Check 1900MHz Head 2/Area Scan (6x10x1):

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

Maximum value of SAR (measured) = 12.313 mW/g

System Performance Check 1900MHz Head 2/Zoom Scan (7x7x7)/Cube 0:

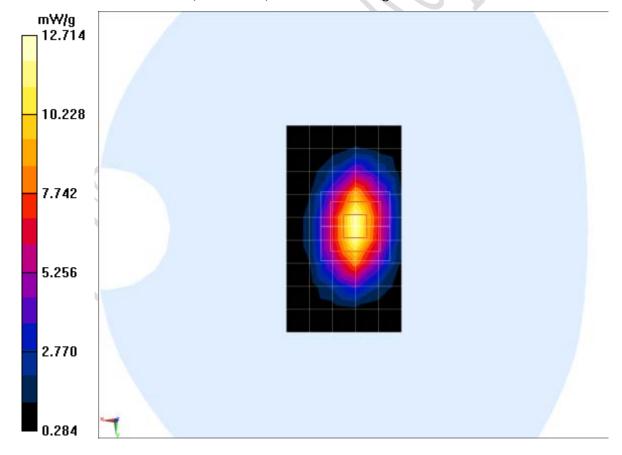
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.716 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 17.5630 mW/g

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.32 mW/g

Maximum value of SAR (measured) = 12.714 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Head 2450MHz

Date/Time: 03/14/2015 Electronics: DAE4 Sn1329 Medium: Head 2450MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.872$ mho/m; $\epsilon = 37.393$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(7.79, 7.79, 7.79)

System Performance Check 2450MHz Head/Area Scan (6x9x1):

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

Maximum value of SAR (measured) = 18.109 mW/g

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

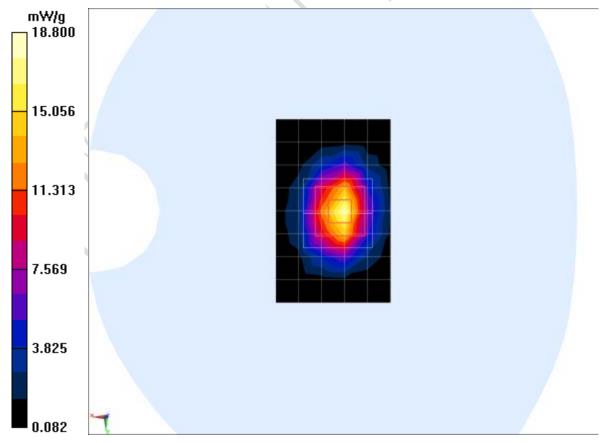
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.891 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 30.3510 mW/g

SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.47 mW/g

Maximum value of SAR (measured) = 18.800 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Body835MHz

Date/Time: 03/11/2015 Electronics: DAE4 Sn1329 Medium: Body 900MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.965$ mho/m; $\epsilon r = 53.95$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(9.77, 9.77, 9.77)

System Performance Check 835MHz Head/Area Scan (6x18x1):

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

Maximum value of SAR (measured) = 2.793 mW/g

System Performance Check 835MHz Head/Zoom Scan (7x7x7)/Cube 0:

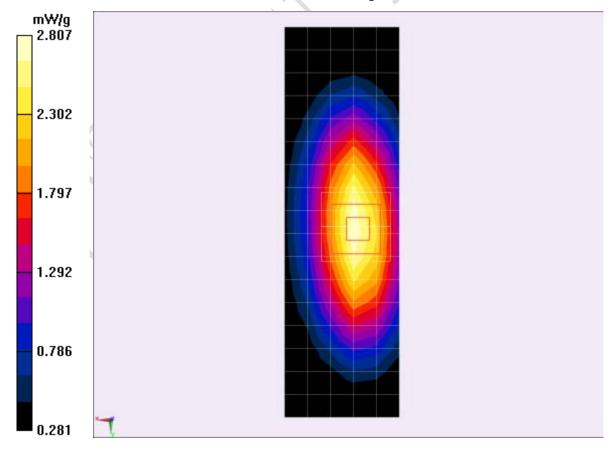
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.841 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.5060 mW/g

SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (measured) = 2.807 mW/g





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FCC Part 2.1093 (2013-10-1), IEEE Std 1528[™]-2013

Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Body1900MHz

Date/Time: 03/13/2015 Electronics: DAE4 Sn1329 Medium: Body 1900MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.499 \text{ mho/m}$; $\epsilon = 53.715$; $\epsilon = 1000 \text{ kg/m}$

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

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

Probe: EX3DV4 - SN3844ConvF(7.99, 7.99, 7.99)

System Performance Check 1900MHz Body/Area Scan (6x11x1):

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

Maximum value of SAR (measured) = 10.270 mW/g

System Performance Check 1900MHz Body/Zoom Scan (7x7x7)/Cube 0:

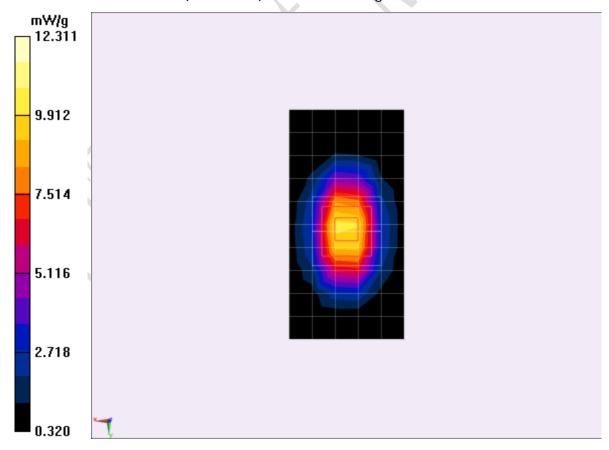
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.060 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 16.2450 mW/g

SAR(1 g) = 9.8 mW/g; SAR(10 g) = 5.3 mW/g

Maximum value of SAR (measured) = 12.311 mW/g







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Equipment: Ilium X400 REPORT NO.:B15X50050-FCC-SAR_Rev4

Body2450MHz

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Date/Time: 03/15/2015 Electronics: DAE4 Sn1329 Medium: Body 2450MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.956$ mho/m; $\epsilon r = 52.91$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4 - SN3844ConvF(7.64, 7.64, 7.64)

System Performance Check 2450MHz Body/Area Scan (6x9x1):

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

Maximum value of SAR (measured) = 13.104 mW/g

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

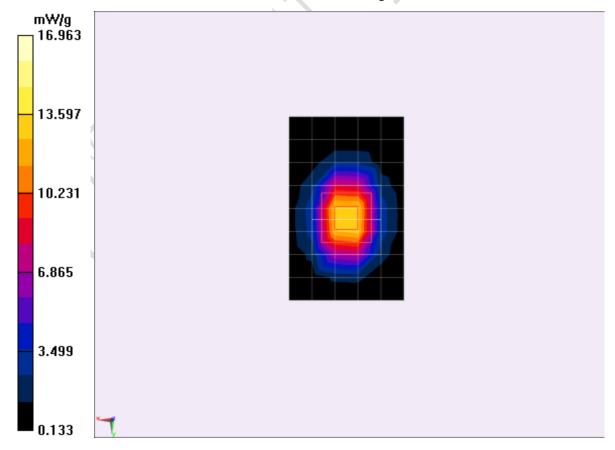
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.734 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 25.0940 mW/g

SAR(1 g) = 12.9 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 16.963 mW/g





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AnnexC Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

Annex DEUT Test Setup Photos

See the Pic1~Pic10in the document"Ilium X400-SAR test setup photos_Rev2".

Annex E External Photos

See the document" Ilium X400-External Photos".

Annex F Internal Photos

See the document" Ilium X400-Internal Photos".

Annex HCalibration Certificates

See the documents"Ilium X400_DAE Calibration Certificate", "Ilium X400_Dipole Calibration Certificate" and "Ilium X400_Probe Calibration Certificate".

