Test Report Serial Number:	45461374R2.0
Test Report Date:	24 March 2017
Project Number:	1364

SAR Test Report - New Certification

Applicant:

Harris Corporation
221 Jefferson Ridge Parkway
Lynchburg, VA, 24501
USA

Maximum Reported 1g SAR			
FCC	FACE:	1.52	W/kg
	BODY:	4.43	
ISED	FACE:	1.58	
	BODY:	4.43	
Occupational Limit:		8.00	

FCC ID: **OWDTR-0143-E**

ISED Certification Number: **3636B-0143**

Product Model Number / HVIN: **XL-PFM9M, XL-PFM9Y, XL-PPM9M, XL-PPM9Y,**

Product Name / PMN: **XL-185P**

In Accordance With:

FCC 47 CFR §2.1093
Radiofrequency Radiation Exposure Evaluation: Portable Devices

IC RSS-102 Issue 5
Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

Approved By:

Ben Hewson, President
Celltech Labs Inc.
21-364 Lougheed Rd.
Kelowna, BC, V1X 7R8
Canada

Test Lab Certificate: 2470.01

IC Registration 3874A-1

FCC Registration: 714830

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1.0 DOCUMENT CONTROL

Tested By:	**Jasmeet Gill**
Prepared By:	**Jasmeet Gill**
Reviewed By:	**Ben Hewson**

Issue Number	Description	By	Issue Date
1.0	Initial Release	Jasmeet Gill	21 February 2017
1.1	Correcting ID#'s	Jasmeet Gill	24 February 2017
1.2	Added BLE/WLAN Reference	Jasmeet Gill	06 March 2017
1.3	Revised SAR for Table 10.0	Jasmeet Gill	20 March 2017
2.0	Removed reference to LTE-Populated Radio	Jasmeet Gill	24 March 2017

2.0 NORMATIVE REFERENCES

Normative References*	
ANSI / ISO 17025:2005	General Requirements for competence of testing and calibration laboratories
FCC CFR Title 47 Part 2	Code of Federal Regulations
Title 47:	Telecommunication
Part 2.1093:	Radiofrequency Radiation Exposure Evaluation: Portable Devices
Health Canada	
Safety Code 6 (2015)	Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3kHz to 300GHz
Industry Canada Spectrum Management & Telecommunications Policy	
RSS-102 Issue 5:	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
IEEE International Committee on Electromagnetic Safety	
IEEE 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
IEC International Standard	
IEC 62209-2	Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 2
FCC KDB	
KDB 865664	SAR Measurement Requirements for 100MHz to 6GHz
FCC KDB	
KDB 447498	Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

* When the issue number or issue date is omitted, the latest version is assumed.

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3.0 CLIENT AND DEVICE INFORMATION

Client Information	
Applicant Name	Harris Corporation
Applicant Address	221 Jefferson Ridge Parkway
	Lynchburg, VA, 24501
	USA
DUT Information	
Device Identifier(s):	**FCC ID:** OWDTR-0143-E
	ISED: 3636B-0143
Type of Equipment:	Licensed Non-Broadcast Transmitter Held to Face (TNF) FCC Part 90
	Land Mobile Radio Transmitter/Receiver (27.41-960MHz) RSS-119
Device Model(s) / HVIN:	XL-PFM9M, XL-PFM9Y, XL-PPM9M, XL-PPM9Y
Device Marketing Name / PMN:	XL-185P
Test Sample Serial No.:	T/A Sample - Identical Prototype
Transmit Frequency Range:	7/8/900: 768-776 / 798-816 / 851-861 / 896-902 / 935-944 MHz / 2402-2480 MHz / 2412-2462 MHz / 5150-5850 MHz
Number of Channels:	Programmable
Manuf. Max. Rated Output Power:	7/8/900: 34.8dBm / BLE: 8.4dBm / BT: 12.7dBM / WLAN 2.4G: 23.7dBM / WLAN 5G: 11.8dBM
Modulation:	FM
Duty Cycle:	50% PTT Duty Cycle
DUT Power Source:	7.2/7.4VDC, 22Wh Li-Ion Battery
Deviation(s) from standard/procedure:	None
Modification of DUT:	None

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4.0 STATEMENT OF COMPLIANCE

This measurement report demonstrates that the:

Applicant:	Model / HVIN:
Harris Corporation	**XL-PFM9M, XL-PFM9Y, XL-PPM9M, XL-PPM9Y**

complies with the SAR (Specific Absorption Rate) RF exposure requirements and limits specified in the following:

Standard(s):	Measurement Procedure(s):
FCC 47 CFR §2.1093	**FCC KDB 865664, FCC KDB 447498, FCC KDB 643646**
Health Canada's Safety Code 6	**Industry Canada RSS-102 Issue 5**
	IEEE Standard 1528-2013, IEC 62209-2

Use Group:

[X] **Occupational / Controlled** [ ] **General Population / Uncontrolled**

Reason for Issue:
New certification

The following report is of the XL-185P without any modifications. This unit was tested concurrently with the LTE populated XL-185P. Due to SAR values being lower on this device it was only tested at the worst case frequencies.

A description of the device, operating configuration, detailed summary of the test results, methodology and procedures used during this evaluation, equipment used and the various provisions of the rules are included within this test report.

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5.0 SAR MEASUREMENT SYSTEM

Celltech Labs Inc. SAR measurement facility employs a Dosimetric Assessment System (DASY™) manufactured by Schmid & Partner Engineering AG (SPEAG™) of Zurich, Switzerland. The DASY4 measurement system is comprised of the measurement server, a robot controller, a computer, a near-field probe, a probe alignment sensor, an Elliptical Planar Phantom (ELI) phantom and a specific anthropomorphic mannequin (SAM) phantom for Head and/or Body SAR evaluations. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF). A cell controller system contains the power supply, robot controller and a teach pendant (Joystick) to control the robot's servo motors. The Staubli robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical form the DAE to digital electronic signal and transfers data to the DASY4 measurement server. The DAE4 utilizes a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16-bit AD-converter, a command decoder and a control logic unit. Transmission to the DASY4 measurement server 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. The sensor systems are also used for mechanical surface detection and probe collision detection. The robot utilizes a controller with built in VME-bus computer.

DASY4 SAR System with SAM Phantom

DASY4 Measurement Server

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6.0 RF CONDUCTED POWER MEASUREMENT

Table 6.0

Conducted Power Measurements

Channel	Frequency (MHz)	Measured Power (dBm)	Rated Power (dBm)	Delta (dBm)	SAR Test Channel (Y/N)
n/a	768.000	34.32	34.40	-0.08	Y
n/a	776.000	34.31	34.30	0.01	Y
n/a	798.000	34.37	34.40	-0.03	Y
n/a	806.000	35.09	35.10	-0.01	Y
n/a	816.000	35.11	35.20	-0.09	Y
n/a	851.000	35.09	35.10	-0.01	Y
n/a	861.000	35.10	35.10	0.00	Y
n/a	896.000	35.05	35.00	0.05	Y
n/a	901.000	35.07	35.00	0.07	Y
n/a	935.000	35.14	35.10	0.04	Y

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7.0 NUMBER OF TEST CHANNELS (N_C)

Table 7.0

Number of Test Channels (N_C)

Antenna Part Number	Antenna Type	Frequency Range (MHz)	N_C (1)
14035-4450-01	1/2 Wave 7/800 Band	762-944 MHz	10
14035-4450-02	1/4 Wave 7/800 Band	762-944 MHz	10
KRE1011223/02	900 Band	896-941 MHz	3

(1) In accordance with FCC KDB 447498

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8.0 ACCESSORIES EVALUATED

Table 8.1

Manufacturer's Accessory List						
Test Report ID Number	Manufacturer's Part Number	Description	UDC Group[1]	Type II Group[2]	SAR[3] Evaluated	SAR[4] Tested
Antenna						
T1	14035-4450-01	1/2 Wave Whip Antenna, (762-944 MHz)			Y	Y
T2	14035-4450-02	1/4 Wave Stub Antenna, (762-944 MHz)			Y	Y
T3	KRE1011223/02	900 MHz Antenna, (896-941 MHz)			Y	Y
Battery						
P1	14035-4010-01	Li-Ion Battery 7.2VDC, 3300mAh			Y	Y
P2	14035-4010-04	Li-Ion Battery 7.2VDC, 3100mAh, 22Wh			Y	Y
P3	14035-4010-05	Li-Ion Battery 7.2VDC, 3100mAh, 22Wh, UL			Y	-

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Table 8.2

Manufacturer's Accessory List						
Test Report ID Number	Manufacturer's Part Number	Description	UDC Group[1]	Type II Group[2]	SAR[3] Evaluated	SAR[4] Tested
Audio Accessory						
A1	12082-0600-01	Standard Speaker Microphone	7A	PB	Y	Y
A2	12082-0600-02	Storm Speaker Microphone	7A	PB	Y	-
A28	12082-0600-03	Antenna Speaker Microphone, 18"	7A	PB	Y	-
A29	12082-0600-04	Antenna Speaker Microphone, 25.6"	7A	PB	Y	-
A30	12082-0600-05	Antenna Speaker Microphone, 30"	7A	PB	Y	-
A3	12150-1000-01	Premium Speaker MIC, Fire, NC	9	PB	Y	Y
A4	12082-0650-01	Microphone, Palm, 2-Wire Black	7A	IL	Y	-
A5	12082-0650-02	Microphone, Palm, 2-Wire Beige	7A	IL	Y	-
A6	12082-0650-03	Microphone, Mini Lapel, 3-Wire Black	7A	IL	Y	-
A7	12082-0650-04	Microphone, Mini Lapel, 3-Wire Beige	7A	IL	Y	-
A8	12082-0650-05	Earphone Kit, Black, XG-100P			Y	-
A9	12082-0650-06	Earphone Kit, Beige, XG-100P			Y	-
A10	12082-0650-07	Headset, In-Ear, Boom MIC, In-Line PTT	7A	IL	Y	-
A11	12082-0650-08	Headset, LTWT, OTH, Single Ear, IN-Line PTT	7A	IL	Y	-
A12	12082-0650-09	Headset, LTWT, BTH, Dual Ear, In_Line PTT	7A	IL	Y	-
A13	12082-0650-10	Headset, LTWT, BTH, Dual Ear, Pig Tail PTT	7A	PT	Y	-
A14	12082-0650-11	Headset, LTWT, BTH, Dual In-Ear, In_Line PTT	7A	IL	Y	-
A15	12082-0650-12	Headset, LTWT, BTH, Dual In-Ear, Pig Tail PTT	7A	PT	Y	-
A16	12082-0650-13	Headset, Heavy Duty, BTH, w/PTT, XG-100P	7A	IL	Y	-
A17	12082-0650-14	Headset, Heavy Duty, OTH, w/PTT, XG-100P	7A	IL	Y	-
A18	12082-0650-15	Headset, BTH, Boom MIC, Earpiece, w/PTT			Y	-
A19	12082-0650-16	Headset, Tactical, Boom MIC, Earpiece, w/PTT	7A	PT	Y	-
A20	12082-0650-17	Skull MIC, w/Body PTT, Earcup, XG-100P	9	BB	Y	-
A21	12082-0650-18	Throat MIC, w/Acoustic Tube, Body PTT	9	BB	Y	-
A22	12082-0650-19	Throat MIC, w/Acoustic Tube, Body & Ring PTT	9	RB	Y	-
A23	12082-0681-01	Speaker MIC, Wireless Bluetooth	BT	PB	Y	-
A24	12082-0684-01	BlueTooth, Covert, Earpiece, MIC, PTT	BT	n/a	Y	-
A25	14002-0197-01	Hirose to Unity Adapter	7B	n/a	Y	Y
A26	LS103239V1	Earphone, Lapel MIC, 2.5mm	n/a	n/a	Y	-
A27	LS103239V2	Earphone, Lapel MIC, 2.5mm, Right Angle	n/a	n/a	Y	-

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Table 8.3

Manufacturer's Accessory List						
Test Report ID Number	Manufacturer's Part Number	Description	UDC Group(1)	Type II Group(2)	SAR(3) Evaluated	SAR(4) Tested
		Body-Worn Accessory				
B1	12082-1290-01	Metal Belt Clip			Y	Y
B2	12082-3230-01	D-Swivel (Used w/ 14002-0218-01 and KRY 1011609/1)			Y	Y
B3	14002-0218-01	Premium Belt Loop			Y	Y
B4	14035-4200-01	Holster, Leather, Radio, Premium			Y	-
B5	14035-4200-02	Holster, Leather w/Rings for Shoulder Strap, Radio, Premium			Y	-
B6	14035-4200-03	Holster, Nylon, Black, Radio, Premium			Y	-
B7	14035-4200-04	Holster, Ring, Leather, Radio, Premium			Y	-
B8	14035-4201-01	Kit, 14035-4200-01 Holster Assy w/ 14002-0218-01 Belt Loop			Y	-
B9	14035-4202-02	Kit, 14035-4200-02 Holster Assy w/ 14002-0218-01 Belt Loop			Y	-
B10	14035-4202-01	Holster, Leather, Radio, Standard			Y	-
B11	14035-4202-02	Holster, Leather w/Rings for Shoulder Strap, Radio, Standard			Y	-
B12	14035-4202-03	Holster, Nylon, Black, Radio, Standard			Y	-
B13	14035-4202-04	Holster, Ring, Leather, Radio, Standard			Y	-
B14	CC103333V1	Shoulder Strap			Y	-
B15	KRY 1011609/1	Leather Belt Loop			Y	Y

(1) UDC Group: 9 = 9 Pin, 7A = 7 Pin, 7B = 7 Pin Modified

(2) Type II Group: PB = Palm Button, IL = In-Line Pushbutton, PT = Pigtail Pushbutton, RB = Ring Pushbutton, BB = Body Button, BT = BlueTooth

(3) Accessories are categorized into groups of similar design and construction. Samples of individual groups are SAR Tested and the SAR results apply to ALL members of the Accessory Group. A "Y" in this column indicates the accessory is deemed acceptable.

(4) Accessories and/or Accessory Group members SAR Tested.

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9.0 SAR MEASUREMENT SUMMARY

Table 9.0

7/8/900 Band - 14035-4450-01 BODY SAR Evaluation Results (FCC/IC)													
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)		SAR Drift
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%	PTT Duty Cycle 50%	(dB)
21 Dec 2016	XL-185	PTT	B11	896	4010-01	4450-01	B1	A1	0	25	8.820	4.410	-0.166
23 Dec 2016	XL-185	PTT	B23	896	4010-01	4450-02	B1	A1	0	25	8.770	4.385	-0.132
23 Dec 2016	XL-185	PTT	B24	901	4010-01	4450-02	B1	A1	0	25	6.600	3.300	-0.206
23 Dec 2016	XL-185	PTT	B30	935	4010-01	1223/02	B1	A1	0	25	8.360	4.180	-0.221
SAR LIMIT(S)						Head/Body		Spatial Peak			RF Exposure Category		
FCC 47 CFR 2.1093		Health Canada Safety Code 6				8.0 W/kg		1g average			Occupational		

Table 9.1

7/8/900 Band - 14035-4450-01 FACE SAR Evaluation Results (FCC/IC)													
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)		SAR Drift
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%	PTT Duty Cycle 50%	(dB)
30 Dec 2016	XL-185	PTT	H11	896	4010-01	4450-01	n/a	n/a	25	50	2.810	1.405	-0.106
3 Jan 2017	XL-185	PTT	H23	896	4010-01	4450-02	n/a	n/a	25	50	2.980	1.490	0.055
4 Jan 2017	XL-185	PTT	H28	935	4010-01	1223/02	n/a	n/a	25	50	2.310	1.155	-0.042
SAR LIMIT(S)						Head/Body		Spatial Peak			RF Exposure Category		
FCC 47 CFR 2.1093		Health Canada Safety Code 6				8.0 W/kg		1g average			Occupational		

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Table 9.7

2.4GHz 802.11 Band - BODY SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
5 Jan 2017	XL-185	PTT	B39	2437	4010-04	4450-02	B1	A1	0	25	0.004
5 Jan 2017	XL-185	PTT	B40	2437	4010-01	4450-02	B1	A1	0	25	0.006
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

Table 9.8

2.4GHz 802.11 Band - FACE SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
9 Jan 2017	XL-185	PTT	H33	2412	4010-04	4450-02	n/a	n/a	25	50	0.006
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

Table 9.9

2.4GHz Bluetooth Band - BODY SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
5 Jan 2017	XL-185	PTT	B42	2480	4010-04	4450-02	n/a	n/a	0	25	0.002
5 Jan 2017	XL-185	PTT	B43	2480	4010-01	4450-02	n/a	n/a	0	25	0.005
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

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Table 9.10

2.4GHz Bluetooth Band - FACE SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
9 Jan 2017	XL-185	PTT	H35	2480	4010-04	4450-02	n/a	n/a	25	50	0.005
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

Table 9.11

5GHz 802.11 Band - BODY SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
13 Jan 2017	XL-185	PTT	B48	5300	4010-04	4450-02	B1	A1	0	25	0.002
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

Table 9.12

5GHz 802.11 Band - FACE SAR Evaluation Results (FCC/IC)											
Date	Radio Model		Plot #	Freq	Battery Number	Antenna	Accessories		DUT Spacing		Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	PTT Duty Cycle 100%
16 Jan 2017	XL-185	PTT	H40	5300	4010-04	4450-02	n/a	n/a	25	50	0.028
SAR LIMIT(S)						Head/Body		Spatial Peak		RF Exposure Category	
FCC 47 CFR 2.1093		Health Canada Safety Code 6				1.6 W/kg		1g average		General Population	

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10.0 SCALING OF MAXIMUM MEASURE SAR

Table 10.0

Scaling of Maximum Measured SAR (1)

Plot ID	Configuration	Freq	Measured Fluid Deviation		Measured Conducted Power	Measured Drift	Measured SAR (1g)
		(MHz)	Permittivity	Conductivity	(dBm)	(dB)	(W/kg)
H23	FACE	896	-2.53%	-1.98%	35.5	-0.166	1.490
B11	BODY	896	-7.08%	-1.73%	35.5	0.055	4.410

Step 1

Fluid Sensitivity Adjustment

Plot ID	Scale Factor (%)	x	Measured SAR (W/kg)	=	Step 1 Adjusted SAR (1g) (W/kg)
H23	1.000%	x	1.490	=	1.490
B11	0.27%	x	4.410	=	4.422

Step 2

Manufacturer's Tune-Up Tolerance

Plot ID	Measured Conducted Power (dBm)	Rated Power (dBm)	Delta (dB)	+	Step 1 Adjusted SAR (W/kg)	=	Step 2 Adjusted SAR (1g) (W/kg)
H23	35.05	35.0	0.05	+	1.490	=	1.490
B11	35.05	35.0	0.05	+	4.422	=	4.422

Step 3

Simultaneous Transmission – Bluetooth and/or WiFi

Plot ID	Rated Output Power (mw)	Frequency (MHz)	Seperation Distance (mm)	Measured SAR (W/kg)	+	Step 2 Adjusted SAR (W/kg)	=	Step 3 Adjusted SAR (1g) (W/kg)
H40	15	5300	n/a	0.028	+	1.490	=	1.518
B40	15	2437	n/a	0.006	+	4.422	=	4.428

Step 4

Drift Adjustment

Plot ID	Measured Drift (dB)	+	Step 3 Adjusted SAR (W/kg)	=	Step 4 Adjusted SAR (1g) (W/kg)
H23	-0.166	+	1.518	=	1.577
B11	0.055	+	4.428	=	4.428

Step 5

Reported SAR

Plot ID	FCC From Steps 1 through 3 1g SAR (W/kg)	IC From Steps 1 through 4 1g SAR (W/kg)
H23	1.518	1.577
B11	4.428	4.428

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NOTES to Table 10.0
(1) Scaling of the Maximum Measured SAR is based on the highest, 100% duty cycle, Face, Body and/or Head SAR measured of ALL test channels, configurations and accessories used during THIS evaluation. The Measured Fluid Deviation parameters apply only to deviation of the tissue equivalent fluids used at the frequencies which produced the highest measured SAR. The Measured Conducted Power applies to the Conducted Power measured at the frequencies producing the highest Face and Body SAR. The Measured Drift is the SAR drift associated with that specific SAR measurement. The Reported SAR is the accumulation of all SAR Adjustments from the applicable Steps 1 through 4. The Plot ID is for indentification of the SAR Measurement Plots in Annex A of this report. NOTE: Some of the scaling factors in Steps 1 through 4 may not apply and are identified by light gray text.
Step 1
Per IEC-62209-1 and FCC KDB 865664. Scaling required only when Measured Fluid Deviation is greater than 5%. If the Measured Fluid Deviation is greater than 5%, Table 10.1 will be shown and will indicate the SAR scaling factor in percent (%). SAR is MULTIPLIED by this scaling factor only when the scaling factor is positive (+).
Step 2
Per KDB 447498. Scaling required only when the difference (Delta) between the Measured Conducted Power and the Manufacturer's Rated Conducted Power is (-) Negative. The absolute value of Delta is ADDED to the SAR.
Step 3
Per KDB 447498 4.3.2. The SAR, either measured or calculated, of ANY and ALL simultaneous transmitters must be added together and includes all contributors.
Step 4
Per IEC 62209-1. Scaling required only when Measured Drift is (-) Negative. The absolute value of Measured Drift is added to Reported or Simultaneous Reported SAR.
Step 5
The Reported SAR is the Maximum Final Adjusted Cumulative SAR from the applicable Steps 1 through 4 and are reported on Page 1 of this report.

Table 10.1

Fluid Sensitivity Calculation (10g)	
Delta SAR = Ce * Delta Er + C(sigma)*Delta Sigma	
Frequency (GHz)	**Plot ID**
2.462	**B3**
Ce	-0.2202
Cσ	0.7471
Δ E	-7.08%
Δσ	-1.73%
ΔSAR	0.27%
Scale Factor Is Positive. Scaling Required	

I attest that the data reported herein is true and accurate within the tolerance of the Measurement Instrument Uncertainty; that all tests and measurements were performed in accordance with accepted practices or procedures; and that all tests and measurements were performed by me or by trained personnel under my direct supervision. The results of this investigation are based solely on the test sample(s) provided by the client which were not adjusted, modified or altered in any manner whatsoever, except as required to carry out specific tests or measurements. This test report has been completed in accordance with ISO/IEC 17025.

Jasmeet Gill
Test Lab Engineer
Celltech Labs Inc.

24 March 2017
Date

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11.0 SAR EXPOSURE LIMITS

Table 11.0

SAR RF EXPOSURE LIMITS			
FCC 47 CFR§2.1093	Health Canada Safety Code 6	General Population / Uncontrolled Exposure(4)	Occupational / Controlled Exposure(5)
Spatial Average(1) (averaged over the whole body)		0.08 W/kg	0.4 W/kg
Spatial Peak(2) (averaged over any 1 g of tissue)		1.6 W/kg	**8.0 W/kg**
Spatial Peak(3) (hands/wrists/feet/ankles averaged over 10 g)		4.0 W/kg	20.0 W/kg
(1) The Spatial Average value of the SAR averaged over the whole body.			
(2) The Spatial Peak value of the SAR averaged over any 1 gram of tissue, defined as a tissue volume in the shape of a cube and over the appropriate averaging time.			
(3) The Spatial Peak value of the SAR averaged over any 10 grams of tissue, defined as a tissue volume in the shape of a cube and over the appropriate averaging time.			
(4) Uncontrolled environments are defined as locations where there is potential exposure to individuals who have no knowledge or control of their potential exposure.			
(5) Controlled environments are defined as locations where there is potential exposure to individuals who have knowledge of their potential exposure and can exercise control over their exposure.			

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12.0 DETAILS OF SAR EVALUATION

EVALUATION DETAILS	
1	The number of test channels and test configurations performed on this accessory were based on the antenna-configuration combinations which produced the highest, or worst case, SAR from previous SAR evaluations performed on the transceiver. Table 6.0 identifies those test channels and each channel was tested in the Body and Face configuration.
2	The DUT was evaluated for SAR in accordance with the procedures described in IEEE 1528, FCC KDB 865646 and RSS-102.
3	The DUT was evaluated for SAR at the maximum conducted output power level, preset by the manufacturer, in unmodulated continuous transmit operation (Continuous Wave mode at 100% duty cycle) with the transmit key continuously depressed. For a Push-To-Talk (PTT) device, the 50% duty cycle compensation reported assumes a transmit/receive cycle of equal time base.
4	A single point SAR measurement was taken prior to the Area Scan and after the Zoom Scan and the SAR drift of the DUT was evaluated. The measured SAR drift was added to the measured SAR levels of the Maximum ***reported*** SAR (IC/EU only).
5	Each SAR evaluations were performed with a fully charged battery.
6	The fluid temperature remained within +/-2°C from the time of the fluid dielectric parameter measurement to the completion of the SAR evaluation.
7	The fluid temperature remained within +/-0.5°C throughout the test day.

SCAN PROCEDURE	
Maximum distance from the closest measurement point to phantom surface.	4 ± 1mm
Maximum probe angle normal to phantom surface.	5^{o} ± 1^{o}
Area Scan Spatial Resolution ΔX, ΔY	15mm
Zoom Scan Spatial Resolution ΔX, ΔY	7.5mm
Zoom Scan Spatial Resolution ΔZ	5mm
Zoom Scan Volume X, Y, Z	30mm x 30mm x 30mm
Phantom	SAM
Fluid Depth	150mm
An Area Scan with an area extending beyond the device was used to locate the candidate maximas within 2dB of the global maxima.	
A Zoom Scan centered over the peak SAR location(s) determined by the Area Scan was used to determine the 1 gram and 10 gram peak spatial-averge SAR	

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13.0 MEASUREMENT UNCERTAINTIES

Table 13.0

UNCERTAINTY BUDGET FOR DEVICE EVALUATION (IEEE 1528-2013 Table 9)

Uncertainty Component	IEEE 1528 Section	Uncertainty Value ±%	Probability Distribution	Divisor	ci 1g	ci 10g	Uncertainty Value ±% (1g)	Uncertainty Value ±% (10g)	V_i or V_{eff}
Measurement System									
Probe Calibration*	E.2.1	6.6	Normal	1	1	1	6.60	6.60	∞
Axial Isotropy*	E.2.2	4.7	Rectangular	1.732050808	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy*	E.2.2	9.6	Rectangular	1.732050808	0.7	0.7	3.9	3.9	∞
Boundary Effect*	E.2.3	8.3	Rectangular	1.732050808	1	1	4.8	4.8	∞
Linearity*	E.2.4	4.7	Rectangular	1.732050808	1	1	2.7	2.7	∞
System Detection Limits*	E.2.4	1.0	Rectangular	1.732050808	1	1	0.6	0.6	∞
Modulation Response	E.2.5	4.0	Rectangular	1.732050808	1	1	2.3	2.3	∞
Readout Electronics*	E.2.6	1.0	Normal	1	1	1	1.0	1.0	∞
Response Time*	E.2.7	0.8	Rectangular	1.732050808	1	1	0.5	0.5	∞
Integration Time*	E.2.8	1.4	Rectangular	1.732050808	1	1	0.8	0.8	∞
RF Ambient Conditions - Noise	E.6.1	0.0	Rectangular	1.732050808	1	1	0.0	0.0	∞
RF Ambient Conditions - Reflection	E.6.1	0.0	Rectangular	1.732050808	1	1	0.0	0.0	∞
Probe Positioner Mechanical Tolerance*	E.6.2	0.4	Rectangular	1.732050808	1	1	0.2	0.2	∞
Probe Positioning wrt Phantom Shell*	E.6.3	2.9	Rectangular	1.732050808	1	1	1.7	1.7	∞
Extrapolation, interpolation & integration algorithms for max. SAR evaluation*	E.5	3.9	Rectangular	1.732050808	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	0.3	Normal	1	1	1	0.3	0.3	5
Device Holder Uncertainty*	E.4.1	3.6	Normal	1	1	1	3.6	3.6	∞
SAR Drift Measurement**	E.2.9	0.0	Rectangular	1.732050808	1	1	0.0	0.0	∞
SAR Scaling***	E.6.5	2.0	Rectangular	1.732050808	1	1	1.2	1.2	∞
Phantom and Tissue Parameters									
Phantom Uncertainty*	E.3.1	4.0	Rectangular	1.732050808	1	1	2.3	2.3	∞
SAR Correction Uncertainty	E.3.2	1.2	Normal	1	1	0.84	1.2	1.0	∞
Liquid Conductivity (measurement)	E.3.3	6.8	Normal	1	0.78	0.71	5.3	4.8	10
Liquid Permittivity (measurement)	E.3.3	5.3	Normal	1	0.23	0.26	1.2	1.4	10
Liquid Conductivity (Temperature)	E.3.2	0.1	Rectangular	1.732050808	0.78	0.71	0.1	0.0	∞
Liquid Permittivity Temperature)	E.3.2	0.0	Rectangular	1.732050808	0.23	0.26	0.0	0.0	∞
Effective Degrees of Freedom(1)								**V_{eff} =**	**873.2**
Combined Standard Uncertainty			**RSS**				**12.59**	**12.40**	
Expanded Uncertainty (95% Confidence Interval)			**k=2**				**25.18**	**24.80**	
Measurement Uncertainty Table in accordance with IEEE Standard 1528-2003									

(1) The Effective Degrees of Freedom is > 30 therefore a coverage factor of k=2 represents an approximate confidence level of 95%.

* Provided by SPEAG

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Table 13.1

Calculation of the Degrees and Effective Degrees of Freedom	
$v_i = n - 1$	$v_{eff} = \dfrac{u_c^4}{\dfrac{m}{\sum_{i=1} \dfrac{c_i^4 u_i^4}{v_i}}}$

14.0 FLUID DIELECTRIC PARAMETERS

****

Aprel Laboratory
Test Result for UIM Dielectric Parameter
Mon 19/Dec/2016 14:59:54
Freq Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eB	FCC_sB	Test_e	Test_s
0.7350	55.59	0.96	52.44	0.87
0.7450	55.55	0.96	52.61	0.89
0.7550	55.51	0.96	52.50	0.88
0.7650	55.47	0.96	52.25	0.90
0.7750	55.43	0.97	52.39	0.91
0.7850	55.39	0.97	52.14	0.92
0.7950	55.36	0.97	51.92	0.93
0.8050	55.32	0.97	52.21	0.93
0.8150	55.28	0.97	51.73	0.94
0.8250	55.24	0.97	51.95	0.96
0.8350	55.20	0.97	51.50	0.96
0.8450	55.17	0.98	51.26	0.97
0.8550	55.14	0.99	51.20	0.99
0.8650	55.11	1.01	51.60	0.99
0.8750	55.08	1.02	51.21	1.02
0.8850	55.05	1.03	51.36	1.02
0.8950	55.02	1.04	51.15	1.02
0.9050	55.00	1.05	50.87	1.05
0.9150	55.00	1.06	50.66	1.05
0.9250	54.98	1.06	50.76	1.05
0.9350	54.96	1.07	50.53	1.07

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Table 14.0

FLUID DIELECTRIC PARAMETERS

Date:	19 Dec 2016	Fluid Temp:	20.8	Frequency:	835MHz	Tissue:	Body

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
735.0000		54.5400	0.8600	55.5900	0.96	-1.89%	-10.42%
745.0000		54.0600	0.8900	55.5500	0.96	-2.68%	-7.29%
755.0000		53.9500	0.9000	55.5100	0.96	-2.81%	-6.25%
765.0000		53.9900	0.9000	55.4700	0.96	-2.67%	-6.25%
768.0000	*	53.9930	0.9090	55.4580	0.96	-2.64%	-5.61%
775.0000		54.0000	0.9300	55.4300	0.97	-2.58%	-4.12%
776.0000	*	53.9840	0.9280	55.4260	0.97	-2.60%	-4.33%
785.0000		53.8400	0.9100	55.3900	0.97	-2.80%	-6.19%
795.0000		53.9100	0.9500	55.3600	0.97	-2.62%	-2.06%
798.0000	*	53.8200	0.9500	55.3480	0.97	-2.76%	-2.06%
805.0000		53.6100	0.9500	55.3200	0.97	-3.09%	-2.06%
806.0000	*	53.6190	0.9530	55.3160	0.97	-3.07%	-1.75%
815.0000		53.7000	0.9800	55.2800	0.97	-2.86%	1.03%
816.0000	*	53.6980	0.9780	55.2760	0.97	-2.85%	0.82%
825.0000		53.6800	0.9600	55.2400	0.97	-2.82%	-1.03%
835.0000		53.3400	0.9800	55.2000	0.97	-3.37%	1.03%
845.0000		53.3900	0.9900	55.1700	0.98	-3.23%	1.02%
851.0000	*	53.3600	0.9840	55.1520	0.99	-3.25%	-0.20%
855.0000		53.3400	0.9800	55.1400	0.99	-3.26%	-1.01%
861.0000	*	53.2020	1.0040	55.1220	1.00	-3.48%	0.20%
865.0000		53.1100	1.0200	55.1100	1.01	-3.63%	0.99%
875.0000		53.0900	1.0200	55.0800	1.02	-3.61%	0.00%
885.0000		53.0000	1.0100	55.0500	1.03	-3.72%	-1.94%
895.0000		52.9700	1.0400	55.0200	1.04	-3.73%	0.00%
896.0000	*	52.9710	1.0410	55.0180	1.04	-3.72%	0.00%
901.0000	*	52.9760	1.0460	55.0080	1.05	-3.69%	0.00%
905.0000		52.9800	1.0500	55.0000	1.05	-3.67%	0.00%
915.0000		52.4800	1.0500	55.0000	1.06	-4.58%	-0.94%
925.0000		52.7600	1.0700	54.9800	1.06	-4.04%	0.94%
935.0000	*	52.6300	1.0800	54.9600	1.07	-4.24%	0.93%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Wed 28/Dec/2016 11:28:06
Freq Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eB	FCC_sB	Test_e	Test_s
0.7350	55.59	0.96	54.54	0.86
0.7450	55.55	0.96	54.06	0.89
0.7550	55.51	0.96	53.95	0.90
0.7650	55.47	0.96	53.99	0.90
0.7750	55.43	0.97	54.00	0.93
0.7850	55.39	0.97	53.84	0.91
0.7950	55.36	0.97	53.91	0.95
0.8050	55.32	0.97	53.61	0.95
0.8150	55.28	0.97	53.70	0.98
0.8250	55.24	0.97	53.68	0.96
0.8350	55.20	0.97	53.34	0.98
0.8450	55.17	0.98	53.39	0.99
0.8550	55.14	0.99	53.34	0.98
0.8650	55.11	1.01	53.11	1.02
0.8750	55.08	1.02	53.09	1.02
0.8850	55.05	1.03	53.00	1.01
0.8950	55.02	1.04	52.97	1.04
0.9050	55.00	1.05	52.98	1.05
0.9150	55.00	1.06	52.48	1.05
0.9250	54.98	1.06	52.76	1.07
0.9350	54.96	1.07	52.63	1.08

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Table 14.1

FLUID DIELECTRIC PARAMETERS

Date:	28 Dec 2016	Fluid Temp:	19.6	Frequency:	835MHz	Tissue:	Body

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
735.0000		52.4400	0.8700	55.5900	0.96	-5.67%	-9.38%
745.0000		52.6100	0.8900	55.5500	0.96	-5.29%	-7.29%
755.0000		52.5000	0.8800	55.5100	0.96	-5.42%	-8.33%
765.0000		52.2500	0.9000	55.4700	0.96	-5.80%	-6.25%
768.0000	*	52.2920	0.9030	55.4580	0.96	-5.71%	-6.23%
775.0000		52.3900	0.9100	55.4300	0.97	-5.48%	-6.19%
776.0000	*	52.3650	0.9110	55.4260	0.97	-5.52%	-6.08%
785.0000		52.1400	0.9200	55.3900	0.97	-5.87%	-5.15%
795.0000		51.9200	0.9300	55.3600	0.97	-6.21%	-4.12%
798.0000	*	52.0070	0.9300	55.3480	0.97	-6.04%	-4.12%
805.0000		52.2100	0.9300	55.3200	0.97	-5.62%	-4.12%
806.0000	*	52.1620	0.9310	55.3160	0.97	-5.70%	-4.02%
815.0000		51.7300	0.9400	55.2800	0.97	-6.42%	-3.09%
816.0000	*	51.7520	0.9420	55.2760	0.97	-6.38%	-2.89%
825.0000		51.9500	0.9600	55.2400	0.97	-5.96%	-1.03%
835.0000		51.5000	0.9600	55.2000	0.97	-6.70%	-1.03%
845.0000		51.2600	0.9700	55.1700	0.98	-7.09%	-1.02%
851.0000	*	51.2240	0.9820	55.1520	0.99	-7.12%	-0.41%
855.0000		51.2000	0.9900	55.1400	0.99	-7.15%	0.00%
861.0000	*	51.4400	0.9900	55.1220	1.00	-6.68%	-1.20%
865.0000		51.6000	0.9900	55.1100	1.01	-6.37%	-1.98%
875.0000		51.2100	1.0200	55.0800	1.02	-7.03%	0.00%
885.0000		51.3600	1.0200	55.0500	1.03	-6.70%	-0.97%
895.0000		51.1500	1.0200	55.0200	1.04	-7.03%	-1.92%
896.0000	*	51.1220	1.0230	55.0180	1.04	-7.08%	-1.73%
901.0000	*	50.9820	1.0380	55.0080	1.05	-7.32%	-0.76%
905.0000		50.8700	1.0500	55.0000	1.05	-7.51%	0.00%
915.0000		50.6600	1.0500	55.0000	1.06	-7.89%	-0.94%
925.0000		50.7600	1.0500	54.9800	1.06	-7.68%	-0.94%
935.0000	*	50.5300	1.0700	54.9600	1.07	-8.06%	0.00%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Thu 29/Dec/2016 10:49:00
Freq Frequency(GHz)
FCC_eH FCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC OET 65 Supplement C (June 2001) Limits for Head Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eH	FCC_sH	Test_e	Test_s
0.7350	42.02	0.89	43.55	0.84
0.7450	41.97	0.89	43.59	0.85
0.7550	41.92	0.89	43.01	0.86
0.7650	41.86	0.89	42.97	0.87
0.7750	41.81	0.90	43.09	0.87
0.7850	41.76	0.90	42.61	0.87
0.7950	41.71	0.90	42.48	0.89
0.8050	41.66	0.90	42.64	0.89
0.8150	41.60	0.90	42.47	0.90
0.8250	41.55	0.90	42.39	0.91
0.8350	41.50	0.90	41.94	0.93
0.8450	41.50	0.91	42.03	0.95
0.8550	41.50	0.92	41.79	0.95
0.8650	41.50	0.93	41.75	0.95
0.8750	41.50	0.94	41.65	0.96
0.8850	41.50	0.95	41.47	0.98
0.8950	41.50	0.96	41.46	0.99
0.9050	41.50	0.97	41.06	1.00
0.9150	41.50	0.98	40.91	1.01
0.9250	41.48	0.98	41.16	1.02
0.9350	41.46	0.99	40.66	1.04

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Table 14.2

FLUID DIELECTRIC PARAMETERS

Date:	29 Dec 2016	Fluid Temp:	19.5	Frequency:	835MHz	Tissue:	Head

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
735.0000		43.5500	0.8400	42.0200	0.89	3.64%	-5.62%
745.0000		43.5900	0.8500	41.9700	0.89	3.86%	-4.49%
755.0000		43.0100	0.8600	41.9200	0.89	2.60%	-3.37%
765.0000		42.9700	0.8700	41.8600	0.89	2.65%	-2.25%
768.0000	*	43.0060	0.8700	41.8450	0.89	2.77%	-2.58%
775.0000		43.0900	0.8700	41.8100	0.90	3.06%	-3.33%
776.0000	*	43.0420	0.8700	41.8050	0.90	2.96%	-3.33%
785.0000		42.6100	0.8700	41.7600	0.90	2.04%	-3.33%
795.0000		42.4800	0.8900	41.7100	0.90	1.85%	-1.11%
798.0000	*	42.5280	0.8900	41.6950	0.90	2.00%	-1.11%
805.0000		42.6400	0.8900	41.6600	0.90	2.35%	-1.11%
806.0000	*	42.6230	0.8910	41.6540	0.90	2.33%	-1.00%
815.0000		42.4700	0.9000	41.6000	0.90	2.09%	0.00%
816.0000	*	42.4620	0.9010	41.5950	0.90	2.08%	0.11%
825.0000		42.3900	0.9100	41.5500	0.90	2.02%	1.11%
835.0000		41.9400	0.9300	41.5000	0.90	1.06%	3.33%
845.0000		42.0300	0.9500	41.5000	0.91	1.28%	4.40%
851.0000	*	41.8860	0.9500	41.5000	0.92	0.93%	3.71%
855.0000		41.7900	0.9500	41.5000	0.92	0.70%	3.26%
861.0000	*	41.7660	0.9500	41.5000	0.93	0.64%	2.59%
865.0000		41.7500	0.9500	41.5000	0.93	0.60%	2.15%
875.0000		41.6500	0.9600	41.5000	0.94	0.36%	2.13%
885.0000		41.4700	0.9800	41.5000	0.95	-0.07%	3.16%
895.0000		41.4600	0.9900	41.5000	0.96	-0.10%	3.13%
896.0000	*	41.4200	0.9910	41.5000	0.96	-0.19%	3.12%
901.0000	*	41.2200	0.9960	41.5000	0.97	-0.67%	3.11%
905.0000		41.0600	1.0000	41.5000	0.97	-1.06%	3.09%
915.0000		40.9100	1.0100	41.5000	0.98	-1.42%	3.06%
925.0000		41.1600	1.0200	41.4800	0.98	-0.77%	4.08%
935.0000	*	40.6600	1.0400	41.4600	0.99	-1.93%	5.05%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Tue 03/Jan/2017 11:00:15
Freq Frequency(GHz)
FCC_eH FCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC OET 65 Supplement C (June 2001) Limits for Head Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eH	FCC_sH	Test_e	Test_s
0.7350	42.02	0.89	42.33	0.81
0.7450	41.97	0.89	42.56	0.82
0.7550	41.92	0.89	42.43	0.82
0.7650	41.86	0.89	42.36	0.83
0.7750	41.81	0.90	42.17	0.84
0.7850	41.76	0.90	41.93	0.86
0.7950	41.71	0.90	41.97	0.88
0.8050	41.66	0.90	42.01	0.87
0.8150	41.60	0.90	41.62	0.89
0.8250	41.55	0.90	41.46	0.90
0.8350	41.50	0.90	41.31	0.91
0.8450	41.50	0.91	41.43	0.91
0.8550	41.50	0.92	41.19	0.92
0.8650	41.50	0.93	40.92	0.94
0.8750	41.50	0.94	40.66	0.95
0.8850	41.50	0.95	40.47	0.94
0.8950	41.50	0.96	40.47	0.94
0.9050	41.50	0.97	40.28	0.96
0.9150	41.50	0.98	39.95	0.97
0.9250	41.48	0.98	39.92	0.98
0.9350	41.46	0.99	40.02	1.00

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Table 14.3

FLUID DIELECTRIC PARAMETERS

Date:	3 Jan 2017	Fluid Temp:	19.9	Frequency:	835MHz	Tissue:	Head

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
735.0000		42.3300	0.8100	42.0200	0.89	0.74%	-8.99%
745.0000		42.5600	0.8200	41.9700	0.89	1.41%	-7.87%
755.0000		42.4300	0.8200	41.9200	0.89	1.22%	-7.87%
765.0000		42.3600	0.8300	41.8600	0.89	1.19%	-6.74%
768.0000	*	42.3030	0.8330	41.8450	0.89	1.09%	-6.72%
775.0000		42.1700	0.8400	41.8100	0.90	0.86%	-6.67%
776.0000	*	42.1460	0.8420	41.8050	0.90	0.82%	-6.44%
785.0000		41.9300	0.8600	41.7600	0.90	0.41%	-4.44%
795.0000		41.9700	0.8800	41.7100	0.90	0.62%	-2.22%
798.0000	*	41.9820	0.8770	41.6950	0.90	0.69%	-2.56%
805.0000		42.0100	0.8700	41.6600	0.90	0.84%	-3.33%
806.0000	*	41.9710	0.8720	41.6540	0.90	0.76%	-3.11%
815.0000		41.6200	0.8900	41.6000	0.90	0.05%	-1.11%
816.0000	*	41.6040	0.8910	41.5950	0.90	0.02%	-1.00%
825.0000		41.4600	0.9000	41.5500	0.90	-0.22%	0.00%
835.0000		41.3100	0.9100	41.5000	0.90	-0.46%	1.11%
845.0000		41.4300	0.9100	41.5000	0.91	-0.17%	0.00%
851.0000	*	41.2860	0.9160	41.5000	0.92	-0.52%	0.00%
855.0000		41.1900	0.9200	41.5000	0.92	-0.75%	0.00%
861.0000	*	41.0280	0.9320	41.5000	0.93	-1.14%	0.65%
865.0000		40.9200	0.9400	41.5000	0.93	-1.40%	1.08%
875.0000		40.6600	0.9500	41.5000	0.94	-2.02%	1.06%
885.0000		40.4700	0.9400	41.5000	0.95	-2.48%	-1.05%
895.0000		40.4700	0.9400	41.5000	0.96	-2.48%	-2.08%
896.0000	*	40.4510	0.9420	41.5000	0.96	-2.53%	-1.98%
901.0000	*	40.3560	0.9520	41.5000	0.97	-2.76%	-1.45%
905.0000		40.2800	0.9600	41.5000	0.97	-2.94%	-1.03%
915.0000		39.9500	0.9700	41.5000	0.98	-3.73%	-1.02%
925.0000		39.9200	0.9800	41.4800	0.98	-3.76%	0.00%
935.0000	*	40.0200	1.0000	41.4600	0.99	-3.47%	1.01%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Thu 05/Jan/2017 10:27:21
Freq Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.3500	52.83	1.85	49.85	1.87
2.3600	52.82	1.86	49.84	1.90
2.3700	52.81	1.87	49.90	1.90
2.3800	52.79	1.88	49.81	1.92
2.3900	52.78	1.89	49.65	1.94
2.4000	52.77	1.90	49.60	1.94
2.4100	52.75	1.91	49.55	1.94
2.4200	52.74	1.92	49.63	1.97
2.4300	52.73	1.93	49.68	1.98
2.4400	52.71	1.94	49.45	2.00
2.4500	52.70	1.95	49.72	2.03
2.4600	52.69	1.96	49.70	2.03
2.4700	52.67	1.98	49.64	2.03
2.4800	52.66	1.99	49.54	2.07
2.4900	52.65	2.01	49.55	2.06
2.5000	52.64	2.02	49.44	2.10
2.5100	52.62	2.04	49.26	2.11
2.5200	52.61	2.05	49.32	2.12
2.5300	52.60	2.06	49.36	2.12
2.5400	52.59	2.08	49.39	2.17
2.5500	52.57	2.09	49.24	2.18

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Table 14.4

FLUID DIELECTRIC PARAMETERS

Date:	5 Jan 2017	Fluid Temp:	19.9	Frequency:	2450MHz	Tissue:	Body

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
2350.0000		49.8500	1.8700	52.8300	1.85	-5.64%	1.08%
2360.0000		49.8400	1.9000	52.8200	1.86	-5.64%	2.15%
2370.0000		49.9000	1.9000	52.8100	1.87	-5.51%	1.60%
2380.0000		49.8100	1.9200	52.7900	1.88	-5.65%	2.13%
2390.0000		49.6500	1.9400	52.7800	1.89	-5.93%	2.65%
2400.0000		49.6000	1.9400	52.7700	1.90	-6.01%	2.11%
2410.0000		49.5500	1.9400	52.7500	1.91	-6.07%	1.57%
2412.0000	*	49.5660	1.9460	52.7480	1.91	-6.03%	1.78%
2420.0000		49.6300	1.9700	52.7400	1.92	-5.90%	2.60%
2430.0000		49.6800	1.9800	52.7300	1.93	-5.78%	2.59%
2437.0000	*	49.5190	1.9940	52.7160	1.94	-6.06%	2.94%
2440.0000		49.4500	2.0000	52.7100	1.94	-6.18%	3.09%
2450.0000		49.7200	2.0300	52.7000	1.95	-5.65%	4.10%
2460.0000		49.7000	2.0300	52.6900	1.96	-5.67%	3.57%
2462.0000	*	49.6880	2.0300	52.6860	1.96	-5.69%	3.36%
2470.0000		49.6400	2.0300	52.6700	1.98	-5.75%	2.53%
2472.0000	*	49.6200	2.0380	52.6680	1.98	-5.79%	2.83%
2480.0000		49.5400	2.0700	52.6600	1.99	-5.92%	4.02%
2490.0000		49.5500	2.0600	52.6500	2.01	-5.89%	2.49%
2500.0000		49.4400	2.1000	52.6400	2.02	-6.08%	3.96%
2510.0000		49.2600	2.1100	52.6200	2.04	-6.39%	3.43%
2520.0000		49.3200	2.1200	52.6100	2.05	-6.25%	3.41%
2530.0000		49.3600	2.1200	52.6000	2.06	-6.16%	2.91%
2540.0000		49.3900	2.1700	52.5900	2.08	-6.08%	4.33%
2550.0000		49.2400	2.1800	52.5700	2.09	-6.33%	4.31%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Mon 09/Jan/2017 13:47:40
Freq Frequency(GHz)
FCC_eH FCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC OET 65 Supplement C (June 2001) Limits for Head Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eH	FCC_sH	Test_e	Test_s
2.3500	39.38	1.71	39.98	1.79
2.3600	39.36	1.72	39.93	1.81
2.3700	39.34	1.73	39.69	1.84
2.3800	39.32	1.74	39.72	1.83
2.3900	39.31	1.75	39.69	1.86
2.4000	39.29	1.76	39.77	1.87
2.4100	39.27	1.76	39.66	1.87
2.4200	39.25	1.77	39.75	1.87
2.4300	39.24	1.78	39.57	1.90
2.4400	39.22	1.79	39.49	1.92
2.4500	39.20	1.80	39.47	1.93
2.4600	39.19	1.81	39.53	1.94
2.4700	39.17	1.82	39.39	1.95
2.4800	39.16	1.83	39.57	1.97
2.4900	39.15	1.84	39.42	1.97
2.5000	39.14	1.85	39.21	1.99
2.5100	39.12	1.87	39.21	2.01
2.5200	39.11	1.88	39.41	2.00
2.5300	39.10	1.89	39.36	2.03
2.5400	39.09	1.90	39.23	2.06
2.5500	39.07	1.91	39.22	2.03

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Table 14.5

FLUID DIELECTRIC PARAMETERS

Date:	9 Jan 2017	Fluid Temp:	22.7	Frequency:	2450MHz	Tissue:	Head

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
2350.0000		39.9800	1.7900	39.3800	1.71	1.52%	4.68%
2360.0000		39.9300	1.8100	39.3600	1.72	1.45%	5.23%
2370.0000		39.6900	1.8400	39.3400	1.73	0.89%	6.36%
2380.0000		39.7200	1.8300	39.3200	1.74	1.02%	5.17%
2390.0000		39.6900	1.8600	39.3100	1.75	0.97%	6.29%
2400.0000		39.7700	1.8700	39.2900	1.76	1.22%	6.25%
2410.0000		39.6600	1.8700	39.2700	1.76	0.99%	6.25%
2412.0000	*	39.6780	1.8700	39.2660	1.76	1.05%	6.13%
2420.0000		39.7500	1.8700	39.2500	1.77	1.27%	5.65%
2430.0000		39.5700	1.9000	39.2400	1.78	0.84%	6.74%
2437.0000	*	39.5140	1.9140	39.2260	1.79	0.73%	7.11%
2440.0000		39.4900	1.9200	39.2200	1.79	0.69%	7.26%
2450.0000		39.4700	1.9300	39.2000	1.80	0.69%	7.22%
2460.0000		39.5300	1.9400	39.1900	1.81	0.87%	7.18%
2462.0000	*	39.5020	1.9420	39.1860	1.81	0.81%	7.17%
2470.0000		39.3900	1.9500	39.1700	1.82	0.56%	7.14%
2472.0000	*	39.4260	1.9540	39.1680	1.82	0.66%	7.24%
2480.0000		39.5700	1.9700	39.1600	1.83	1.05%	7.65%
2490.0000		39.4200	1.9700	39.1500	1.84	0.69%	7.07%
2500.0000		39.2100	1.9900	39.1400	1.85	0.18%	7.57%
2510.0000		39.2100	2.0100	39.1200	1.87	0.23%	7.49%
2520.0000		39.4100	2.0000	39.1100	1.88	0.77%	6.38%
2530.0000		39.3600	2.0300	39.1000	1.89	0.66%	7.41%
2540.0000		39.2300	2.0600	39.0900	1.90	0.36%	8.42%
2550.0000		39.2200	2.0300	39.0700	1.91	0.38%	6.28%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Wed 11/Jan/2017 10:53:43
Freq Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eB	FCC_sB	Test_e	Test_s
5.1500	49.08	5.24	48.84	5.59
5.1600	49.07	5.25	48.65	5.56
5.1700	49.06	5.26	48.49	5.65
5.1800	49.04	5.28	48.50	5.62
5.1900	49.03	5.29	48.70	5.61
5.2000	49.01	5.30	48.51	5.64
5.2100	49.00	5.31	48.37	5.64
5.2200	48.99	5.32	48.64	5.57
5.2300	48.97	5.33	48.31	5.63
5.2400	48.96	5.35	48.42	5.67
5.2500	48.95	5.36	48.44	5.64
5.2600	48.93	5.37	48.09	5.76
5.2700	48.92	5.38	48.15	5.80
5.2800	48.91	5.39	48.31	5.78
5.2900	48.89	5.40	48.39	5.92
5.3000	48.88	5.42	48.69	5.83
5.3100	48.87	5.43	48.63	5.80
5.3200	48.85	5.44	48.44	5.77
5.3300	48.84	5.45	47.98	5.77
5.3400	48.82	5.46	48.01	5.75
5.3500	48.81	5.47	48.12	5.82

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Table 14.6

FLUID DIELECTRIC PARAMETERS

Date:	11 Jan 2017	Fluid Temp:	20.9	Frequency:	5250MHz	Tissue:	Body

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
5150.0000		48.8400	5.5900	49.0800	5.24	-0.49%	6.68%
5160.0000		48.6500	5.5600	49.0700	5.25	-0.86%	5.90%
5170.0000		48.4900	5.6500	49.0600	5.26	-1.16%	7.41%
5180.0000	*	48.5000	5.6200	49.0400	5.28	-1.10%	6.44%
5190.0000		48.7000	5.6100	49.0300	5.29	-0.67%	6.05%
5200.0000		48.5100	5.6400	49.0100	5.30	-1.02%	6.42%
5210.0000		48.3700	5.6400	49.0000	5.31	-1.29%	6.21%
5220.0000		48.6400	5.5700	48.9900	5.32	-0.71%	4.70%
5230.0000		48.3100	5.6300	48.9700	5.33	-1.35%	5.63%
5240.0000	*	48.4200	5.6700	48.9600	5.35	-1.10%	5.98%
5250.0000		48.4400	5.6400	48.9500	5.36	-1.04%	5.22%
5260.0000	*	48.0900	5.7600	48.9300	5.37	-1.72%	7.26%
5270.0000		48.1500	5.8000	48.9200	5.38	-1.57%	7.81%
5280.0000		48.3100	5.7800	48.9100	5.39	-1.23%	7.24%
5290.0000		48.3900	5.9200	48.8900	5.40	-1.02%	9.63%
5300.0000	*	48.6900	5.8300	48.8800	5.42	-0.39%	7.56%
5310.0000		48.6300	5.8000	48.8700	5.43	-0.49%	6.81%
5320.0000		48.4400	5.7700	48.8500	5.44	-0.84%	6.07%
5330.0000		47.9800	5.7700	48.8400	5.45	-1.76%	5.87%
5340.0000		48.0100	5.7500	48.8200	5.46	-1.66%	5.31%
5350.0000		48.1200	5.8200	48.8100	5.47	-1.41%	6.40%

*Channel Frequency Tested

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Mon 16/Jan/2017 11:11:54
Freq Frequency(GHz)
FCC_eH FCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC OET 65 Supplement C (June 2001) Limits for Head Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eH	FCC_sH	Test_e	Test_s
5.1500	36.04	4.60	36.32	4.91
5.1600	36.03	4.61	35.98	4.86
5.1700	36.02	4.62	36.16	4.91
5.1800	36.01	4.63	36.12	4.92
5.1900	36.00	4.64	36.00	5.00
5.2000	35.99	4.65	36.04	4.95
5.2100	35.97	4.67	36.18	4.92
5.2200	35.96	4.68	36.06	4.94
5.2300	35.95	4.69	35.92	5.01
5.2400	35.94	4.70	36.21	4.96
5.2500	35.93	4.71	36.21	5.00
5.2600	35.92	4.72	35.97	5.00
5.2700	35.91	4.73	35.74	5.02
5.2800	35.89	4.74	35.97	5.05
5.2900	35.88	4.75	35.95	5.06
5.3000	35.87	4.76	35.90	5.01
5.3100	35.86	4.77	35.64	5.01
5.3200	35.85	4.78	35.63	5.17
5.3300	35.84	4.79	35.85	5.06
5.3400	35.83	4.80	35.97	5.08
5.3500	35.81	4.81	35.76	5.14

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Table 14.7

FLUID DIELECTRIC PARAMETERS

Date:	16 Jan 2017	Fluid Temp:	22	Frequency:	5250MHz	Tissue:	Head

Freq (MHz)		Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
5150.0000		36.3200	4.9100	36.0400	4.60	0.78%	6.74%
5160.0000		35.9800	4.8600	36.0300	4.61	-0.14%	5.42%
5170.0000		36.1600	4.9100	36.0200	4.62	0.39%	6.28%
5180.0000	*	36.1200	4.9200	36.0100	4.63	0.31%	6.26%
5190.0000		36.0000	5.0000	36.0000	4.64	0.00%	7.76%
5200.0000		36.0400	4.9500	35.9900	4.65	0.14%	6.45%
5210.0000		36.1800	4.9200	35.9700	4.67	0.58%	5.35%
5220.0000		36.0600	4.9400	35.9600	4.68	0.28%	5.56%
5230.0000		35.9200	5.0100	35.9500	4.69	-0.08%	6.82%
5240.0000	*	36.2100	4.9600	35.9400	4.70	0.75%	5.53%
5250.0000		36.2100	5.0000	35.9300	4.71	0.78%	6.16%
5260.0000	*	35.9700	5.0000	35.9200	4.72	0.14%	5.93%
5270.0000		35.7400	5.0200	35.9100	4.73	-0.47%	6.13%
5280.0000		35.9700	5.0500	35.8900	4.74	0.22%	6.54%
5290.0000		35.9500	5.0600	35.8800	4.75	0.20%	6.53%
5300.0000	*	35.9000	5.0100	35.8700	4.76	0.08%	5.25%
5310.0000		35.6400	5.0100	35.8600	4.77	-0.61%	5.03%
5320.0000		35.6300	5.1700	35.8500	4.78	-0.61%	8.16%
5330.0000		35.8500	5.0600	35.8400	4.79	0.03%	5.64%
5340.0000		35.9700	5.0800	35.8300	4.80	0.39%	5.83%
5350.0000		35.7600	5.1400	35.8100	4.81	-0.14%	6.86%

*Channel Frequency Tested

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15.0 SYSTEM VERIFICATION TEST RESULTS

Table 15.0

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source	
								P/N	S/N
19 Dec 2016	835	Body	20.8	22	11%	250	15	D835V2	4d075

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
2.39	2.42	1.26%	1.55	1.59	-2.52%	53.34	55.20	-3.37%	0.98	0.97	1.03%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1.
The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.
The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

Table 15.1

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source	
								P/N	S/N
28 Dec 2016	835	Body	19.6	22	11%	250	15	D835V2	4d075

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
2.51	2.42	3.72%	1.62	1.59	1.89%	51.50	55.20	-6.70%	0.96	0.97	-1.03%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1
The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.
The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

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Table 15.2

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source P/N	Validation Source S/N
29 Dec 2016	835	Head	19.5	21	12%	250	15	D835V2	4d075

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
2.50	2.41	3.73%	1.60	1.56	2.56%	41.94	41.50	1.06%	0.93	0.90	3.33%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1

The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.

The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

Table 15.3

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source P/N	Validation Source S/N
03 January 2017	835	Head	19.9	22	11%	250	15	D835V2	4d075

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
2.37	2.41	-1.66%	1.53	1.56	-1.92%	41.31	41.50	-0.46%	0.91	0.90	1.11%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1

The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.

The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

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Table 15.4

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source	
								P/N	S/N
05 January 2017	2450	Body	19.9	22	11%	250	10	D2450V2	825

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
12.90	13.00	-0.77%	5.78	6.05	-4.46%	49.78	52.70	-5.54%	2.03	1.95	4.10%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1
The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.
The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

Table 15.5

System Verification Test Results

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source	
								P/N	S/N
09 January 2017	2450	Head	22.7	24	11%	250	10	D2450V2	825

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
12.20	13.10	-6.87%	5.64	6.06	-6.93%	39.47	39.20	0.69%	1.93	1.80	7.22%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1

The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.

The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

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Table 15.6

System Verification Test Results											
Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source			
								P/N		S/N	
11 January 2017	5250	Body	20.9	24	10%	100	10	D5GHzV2		1031	
SAR					Fluid Parameters						
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
7.10	7.26	-2.20%	1.98	2.04	-2.94%	48.44	48.95	-1.04%	5.64	5.36	5.22%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1

The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.

The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

Table 15.7

System Verification Test Results											
Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Forward Power (mW)	Dipole Spacing (mm)	Validation Source			
								P/N		S/N	
16 January 2017	5250	Head	22.0	24	10%	100	10	D5GHzV2		1031	
SAR					Fluid Parameters						
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
8.12	7.98	1.75%	2.32	2.30	0.87%	36.21	35.93	0.78%	5.00	4.71	6.16%

Prior to the SAR evaluations, system checks were performed on the planar section of the phantom and a SPEAG validation dipole in accordance with the procedures described in IEEE 1528-2013, FCC KDB 846224 and IEC 62209-1

The dielectric parameters of the simulated tissue mixture were measured prior to the system performance check using a Dielectric Probe Kit and a Network Analyzer.

The forward power was applied to the dipole and the system was verified to a tolerance of +10% from the system manufacturer's dipole calibration target SAR value

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16.0 MEASUREMENT SYSTEM SPECIFICATIONS

Table 16.0

Measurement System Specification	
Specifications	
Positioner	Stäubli Unimation Corp. Robot Model: RX60L
Repeatability	0.02 mm
No. of axis	6
Data Acquisition Electronic (DAE) System	
Cell Controller	
Processor	AMD Athlon XP 2400+
Clock Speed	2.0 GHz
Operating System	Windows XP Professional
Data Converter	
Features	Signal Amplifier, multiplexer, A/D converter, and control logic
Software	Measurement Software: DASY4, V4.7 Build 80
	Postprocessing Software: SEMCAD, V1.8 Build 186
Connecting Lines	Optical downlink for data and status info., Optical uplink for commands and clock
DASY4 Measurement Server	
Function	Real-time data evaluation for field measurements and surface detection
Hardware	PC/104 166MHz Pentium CPU; 32 MB chipdisk; 64 MB RAM
Connections	COM1, COM2, DAE, Robot, Ethernet, Service Interface
E-Field Probe	
Model	EX3DV4
Serial No.	3600
Construction	Triangular core fiber optic detection system
Frequency	10 MHz to 6 GHz
Linearity	±0.2 dB (30 MHz to 3 GHz)
Phantom	
Type	ELI
Shell Material	Fiberglass
Thickness	2mm +/- .2mm
Volume	> 30 Liter

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Table 16.1

Measurement System Specification (Continued)

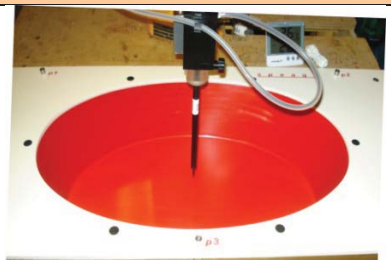
Probe Specification

Construction:	Symmetrical design with triangular core; Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, glycol)
Calibration:	In air from 10 MHz to 2.5 GHz In head simulating tissue at frequencies of 900 MHz and 1.8 GHz (accuracy ± 8%)
Frequency:	10 MHz to > 6 GHz; Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Directivity:	± 0.2 dB in head tissue (rotation around probe axis) ± 0.4 dB in head tissue (rotation normal to probe axis)
Dynamic Range:	5 μW/g to > 100 mW/g; Linearity: ± 0.2 dB
Surface Detect:	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Dimensions:	Overall length: 330 mm; Tip length: 16 mm; Body diameter: 12 mm; Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm
Application:	General dosimetry up to 3 GHz; Compliance tests of mobile phone

EX3DV4 E-Field Probe

Phantom Specification

The ELI V5.0 phantom is an elliptical planar fiberglass shell phantom with a shell thickness of 2.0mm +/- .2mm at the planar area. This phantom conforms to OET Bulletin 65, Supplement C, IEEE 1528-2013, IEC 62209-1 and IEC 62209-2.



ELI Phantom

Device Positioner Specification

The DASY4 device positioner has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65^{O}. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections.

Device Positioner

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17.0 TEST EQUIPMENT LIST

Table 17.0

Test Equipment List

DESCRIPTION	ASSET NO.	SERIAL NO.	DATE CALIBRATED	CALIBRATION INTERVAL
Schmid & Partner DASY4 System	-	-	-	-
-DASY4 Measurement Server	00158	1078	CNR	CNR
-Robot	00046	599396-01	CNR	CNR
-DAE4	00019	353	20 April 2016	Annual
-EX3DV6 E-Field Probe	00213	3600	27 April 2016	Annual
-CLA150 Validation Source	00251	4007	24 Jan 2016	Triennial
-D835V2 Validation Dipole	00217	4D075	23 April 2015	Triennial
-D450V3 Validation Dipole	00221	1068	21 April 2015	Triennial
ELI Phantom	00247	-	CNR	CNR
HP 85070C Dielectric Probe Kit	00033	none	CNR	CNR
Gigatronics 8652A Power Meter	00110	1835801	29 Feb 2016	Triennial
Gigatronics 80701A Power Sensor	00248	1833687	29 Feb 2016	Triennial
HP 8753ET Network Analyzer	00134	US39170292	22 Oct 2014	Triennial
Rohde & Schwarz SMR20 Signal Generator	00006	100104	8 May 2014	Triennial
Amplifier Research 5S1G4 Power Amplifier	00106	26235	CNR	CNR

CNR = Calibration Not Required

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18.0 FLUID COMPOSITION

Table 18.0			835MHz Head	
Tissue Simulating Liquid (TSL) Composition				
Component by Percent Weight				
Water	Sugar	Salt(1)	HEC(2)	Bacteriacide(3)
40.71	56.63	1.48	0.99	0.19

(1) Non-Iodinized
(2) **H**ydroxy**E**thyl-**C**ellulose: Sigma-Aldrich P/N 54290-500g
(3) Dow Chemical Dowicil 75 Antimicrobial Perservative

Table 18.1			835MHz Body	
Tissue Simulating Liquid (TSL) Composition				
Component by Percent Weight				
Water	Sugar	Salt(1)	HEC(2)	Bacteriacide(3)
53.79	45.13	0.98	0.0	0.1

(1) Non-Iodinized
(2) **H**ydroxy**E**thyl-**C**ellulose: Sigma-Aldrich P/N 54290-500g
(3) Dow Chemical Dowicil 75 Antimicrobial Perservative

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APPENDIX A – SYSTEM VERIFICATION PLOTS

Date/Time: 19/12/2016 2:47:18 PM

Test Laboratory: Celltech Labs

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d075
Program Name: SPC 835B

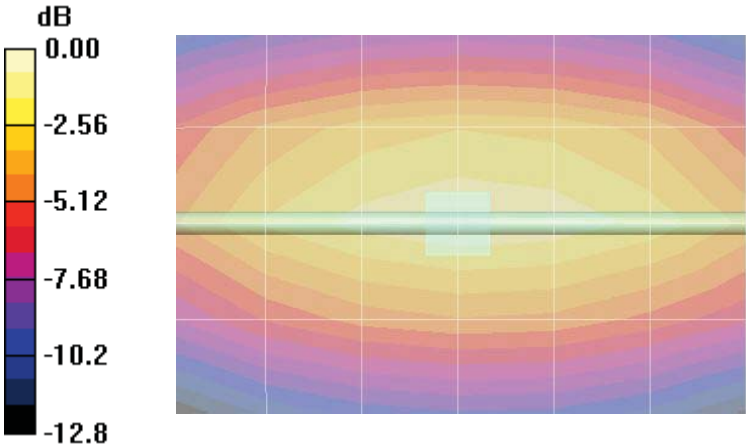
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.98 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Body d=15mm Pin=250mW. TS=[2.178][2.42][2.662]W/kg/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.58 mW/g

Body d=15mm Pin=250mW. TS=[2.178][2.42][2.662]W/kg/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 58.1 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 3.60 W/kg
SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.55 mW/g
Maximum value of SAR (measured) = 2.57 mW/g

Body d=15mm Pin=250mW. TS=[2.178][2.42][2.662]W/kg/Z Scan (1x1x42): Measurement grid: dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (interpolated) = 3.15 mW/g



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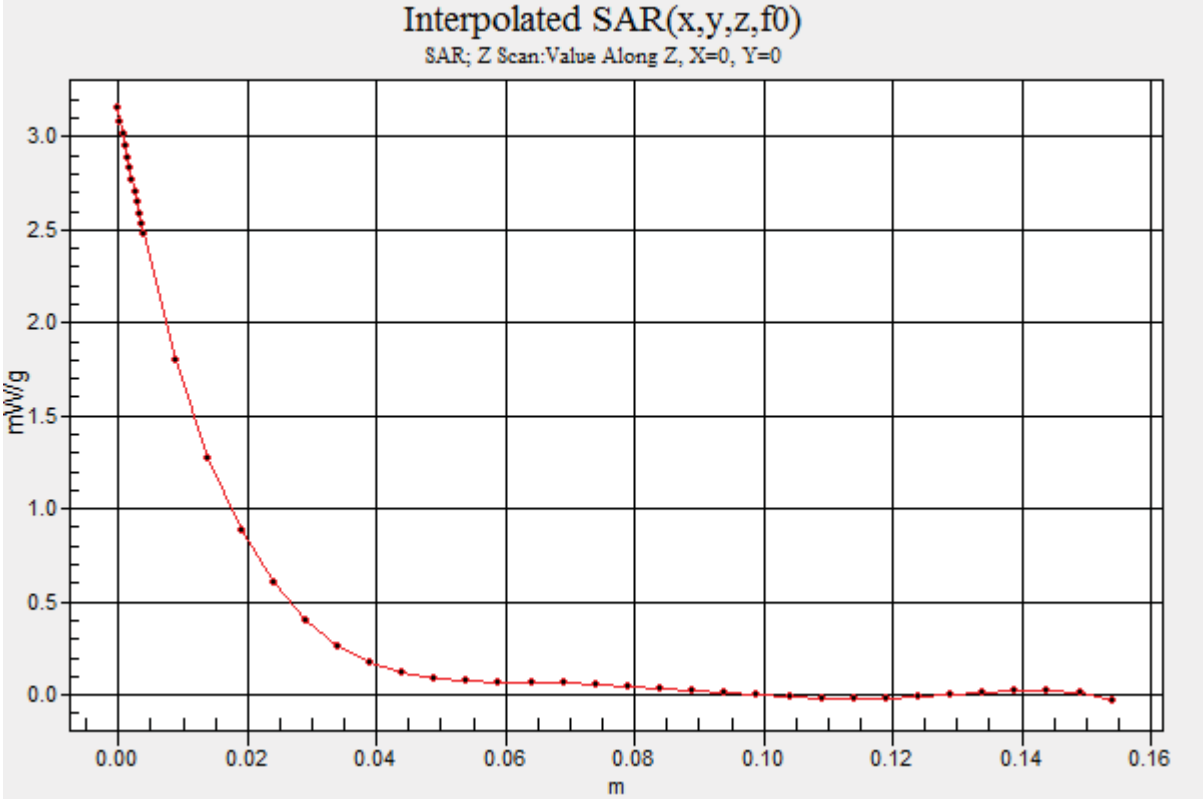

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Date/Time: 28/12/2016 10:53:28 AM

Test Laboratory: Celltech Labs

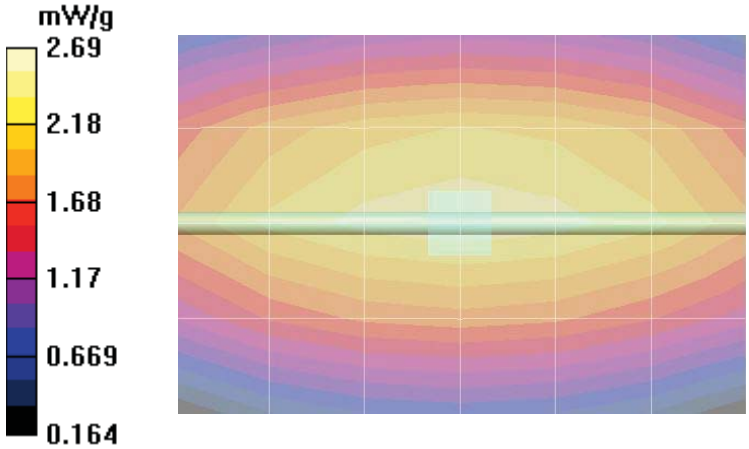
DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d075
Program Name: SPC 835B

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.96 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Body d=15mm Pin=250mW. TS=[2.178][2.42][2.662]W/kg/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.69 mW/g

Body d=15mm Pin=250mW. TS=[2.178][2.42][2.662]W/kg/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 57.5 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 3.79 W/kg
SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.70 mW/g



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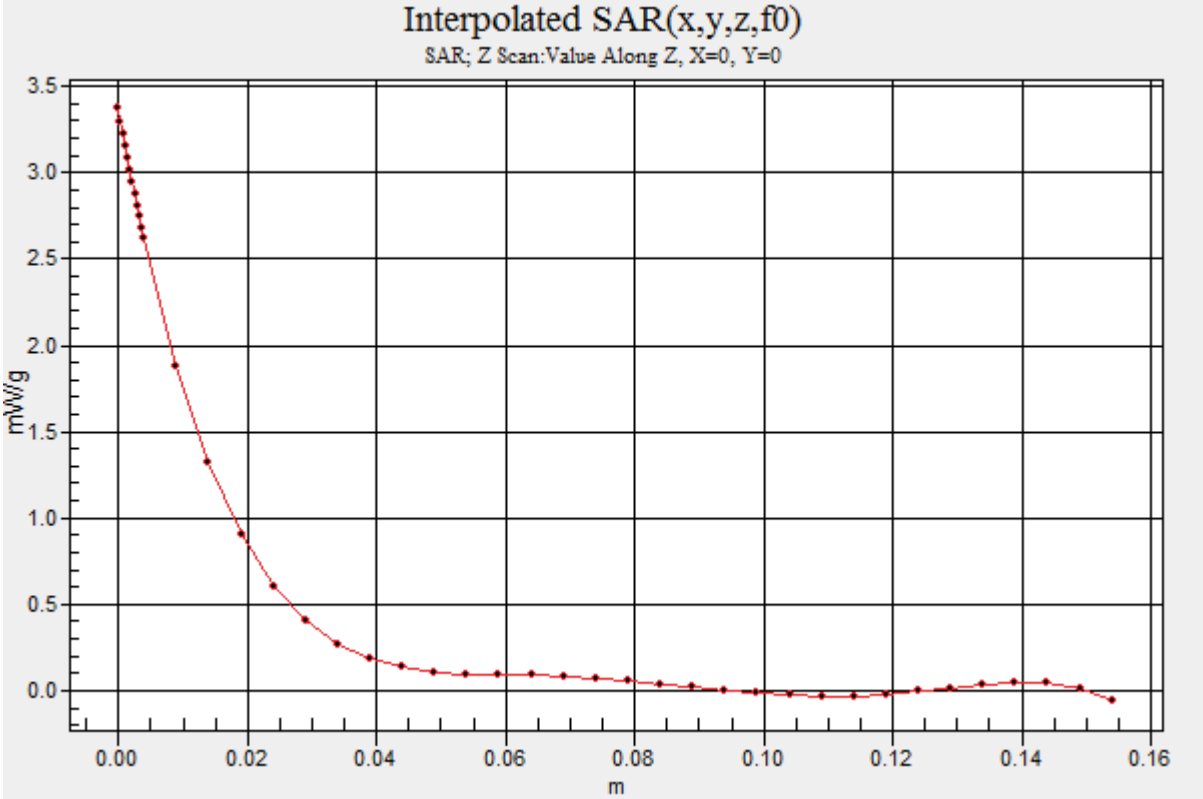

Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Date/Time: 29/12/2016 10:42:32 AM

Test Laboratory: Celltech Labs

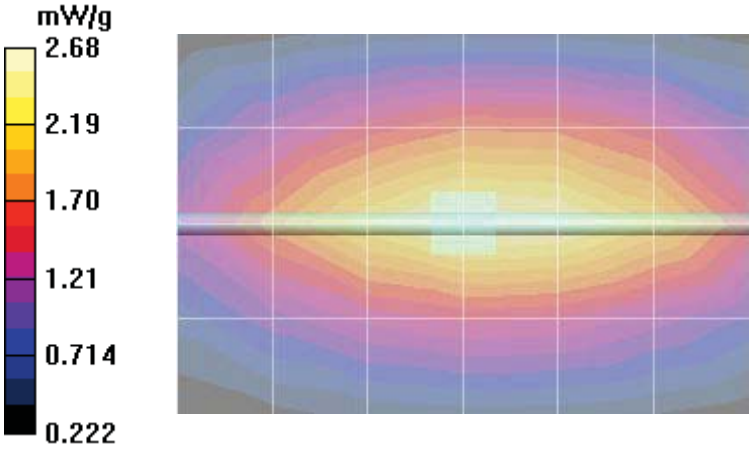
DUT: Dipole 835 MHz; Type: D835V2; Serial: 411
Program Name: SPC 835H

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.93 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(8.12, 8.12, 8.12); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Head d=15mm Pin=250mW. TS=[2.169][2.41][2.651]W/kg/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.68 mW/g

Head d=15mm Pin=250mW. TS=[2.169][2.41][2.651]W/kg/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 58.9 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 3.87 W/kg
SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.70 mW/g



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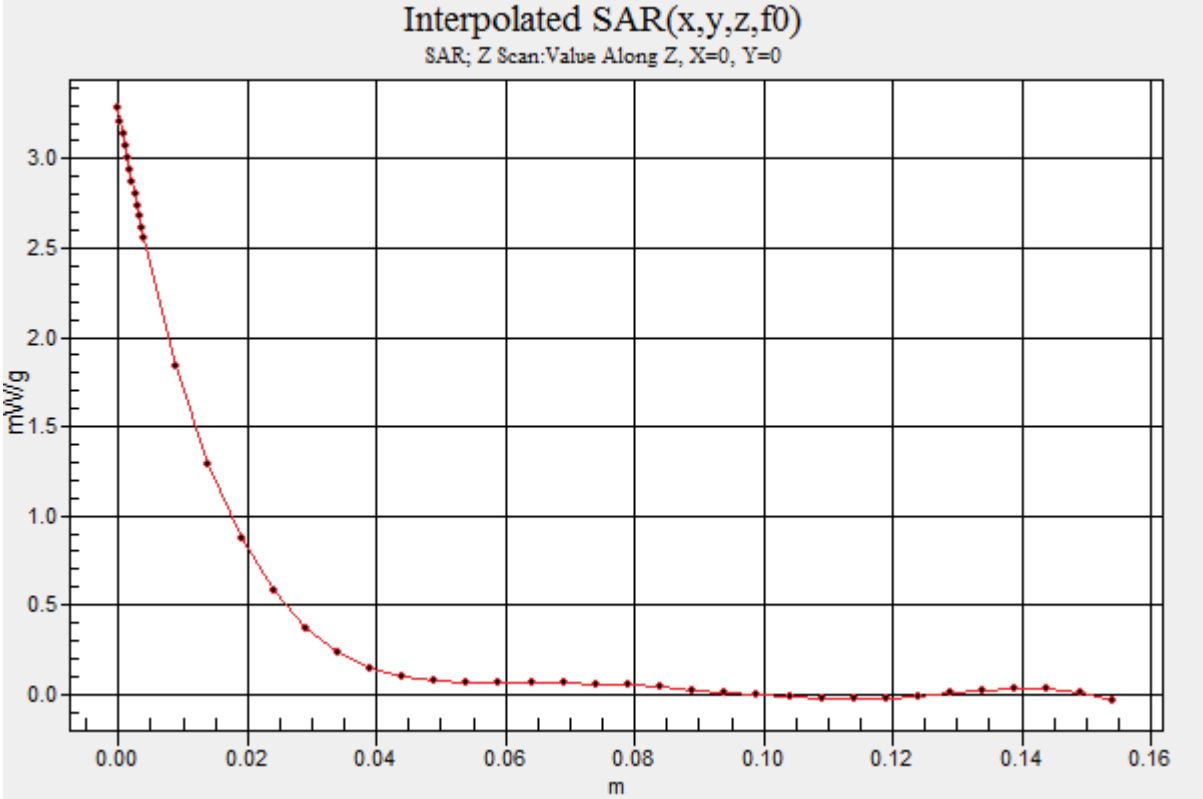

Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Date/Time: 03/01/2017 10:41:18 AM

Test Laboratory: Celltech Labs

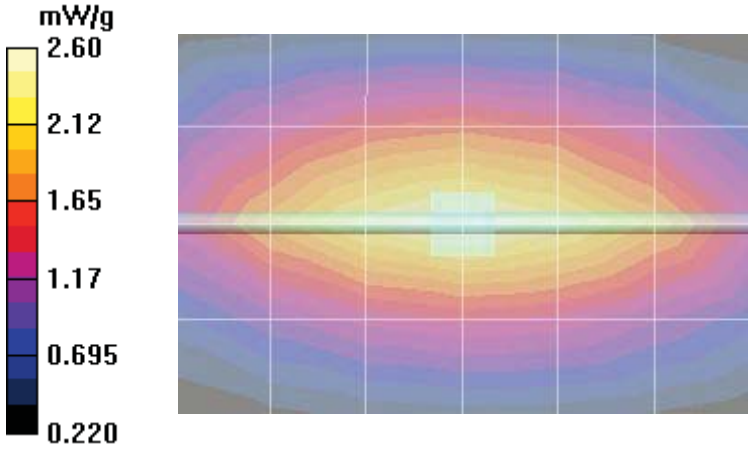
DUT: Dipole 835 MHz; Type: D835V2; Serial: 411
Program Name: SPC 835H

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.91 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(8.12, 8.12, 8.12); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Head d=15mm Pin=250mW. TS=[2.169][2.41][2.651]W/kg/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.60 mW/g

Head d=15mm Pin=250mW. TS=[2.169][2.41][2.651]W/kg/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 58.6 V/m; Power Drift = -0.046 dB
Peak SAR (extrapolated) = 3.64 W/kg
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.53 mW/g
Maximum value of SAR (measured) = 2.55 mW/g



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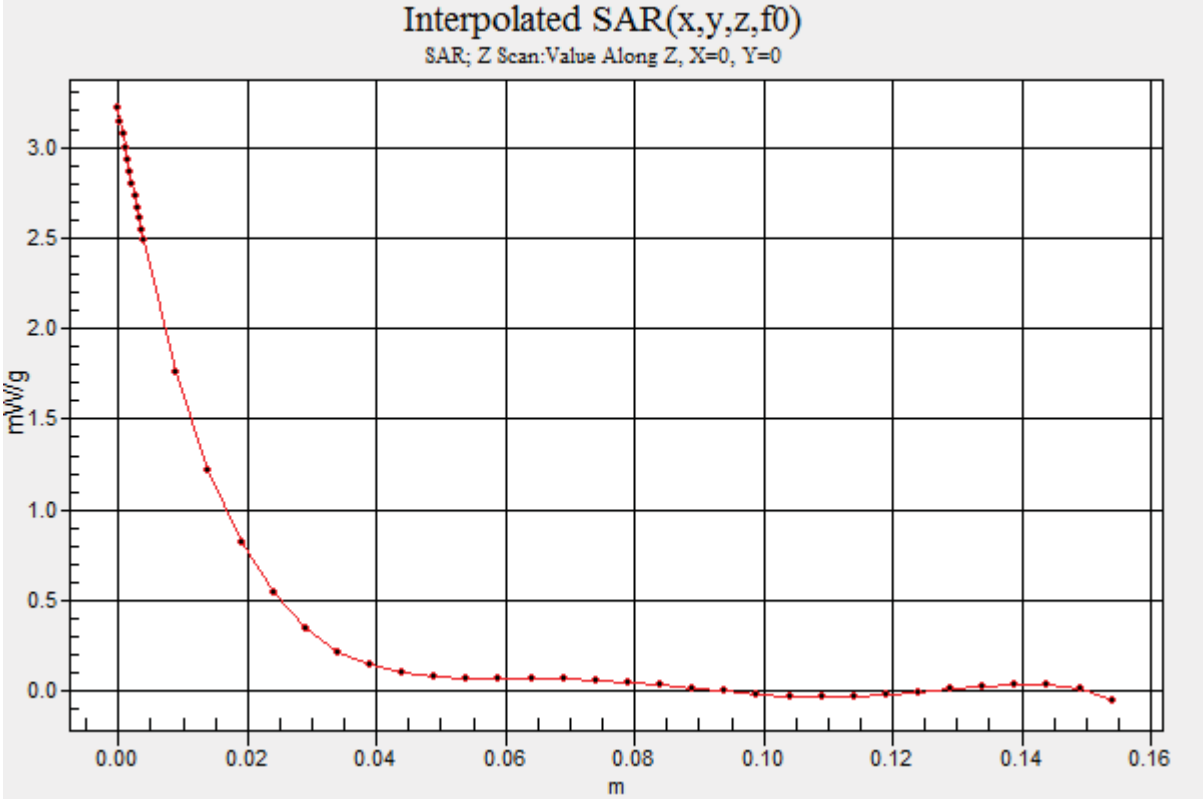

Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Date/Time: 05/01/2017 10:06:20 AM

Test Laboratory: Celltech Labs

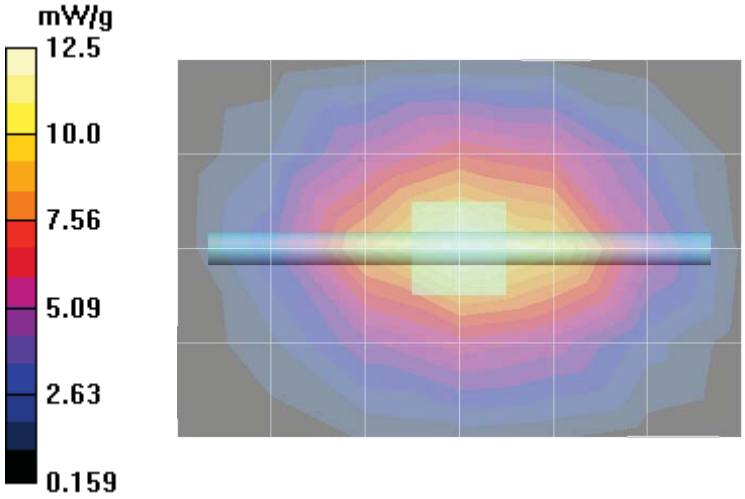
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 825
Program Name: 2450MHz Body SPC

Communication System: WiFi; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 2.03 mho/m; ε_r = 49.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 5mm (Mechanical Surface Detection)Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

2450MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 12.5 mW/g

2450MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.5 V/m; Power Drift = -0.049 dB
Peak SAR (extrapolated) = 28.5 W/kg
SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.78 mW/g
Maximum value of SAR (measured) = 16.9 mW/g



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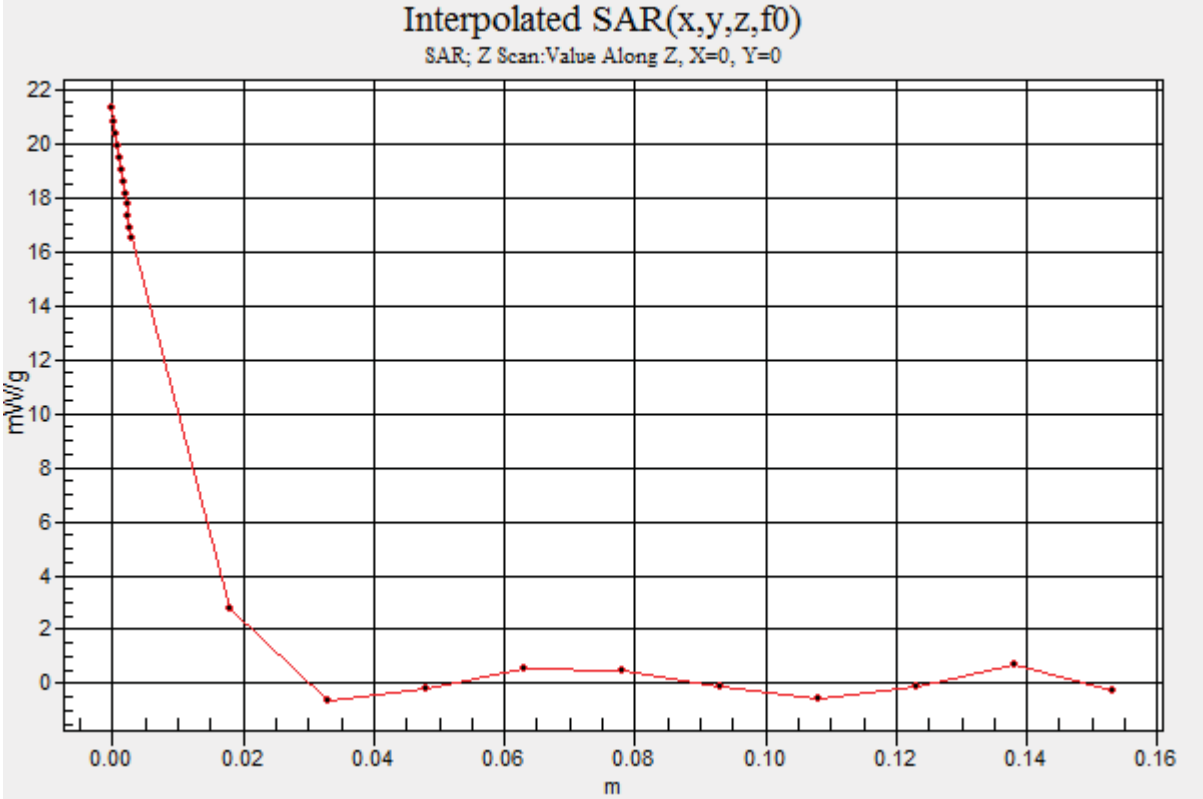

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Date/Time: 09/01/2017 1:12:32 PM

Test Laboratory: Celltech Labs

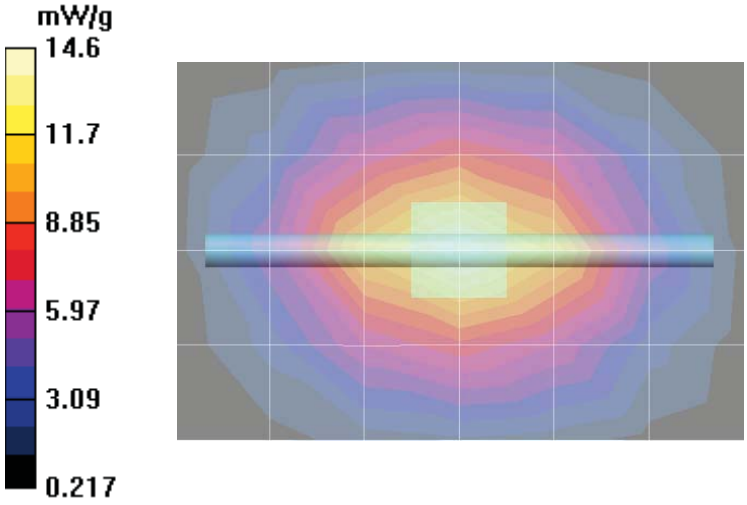
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 825
Program Name: 2450MHz Head SPC

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.93 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.37, 6.37, 6.37); Calibrated: 27/04/2016
- Sensor-Surface: 5mm (Mechanical Surface Detection)Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

2450 MHz Head Dipole d=10mm P=250mW TS=[11.79][13.1][14.41]/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 14.6 mW/g

2450 MHz Head Dipole d=10mm P=250mW TS=[11.79][13.1][14.41]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 102.6 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 25.8 W/kg
SAR(1 g) = 12.2 mW/g; SAR(10 g) = 5.64 mW/g
Maximum value of SAR (measured) = 15.9 mW/g



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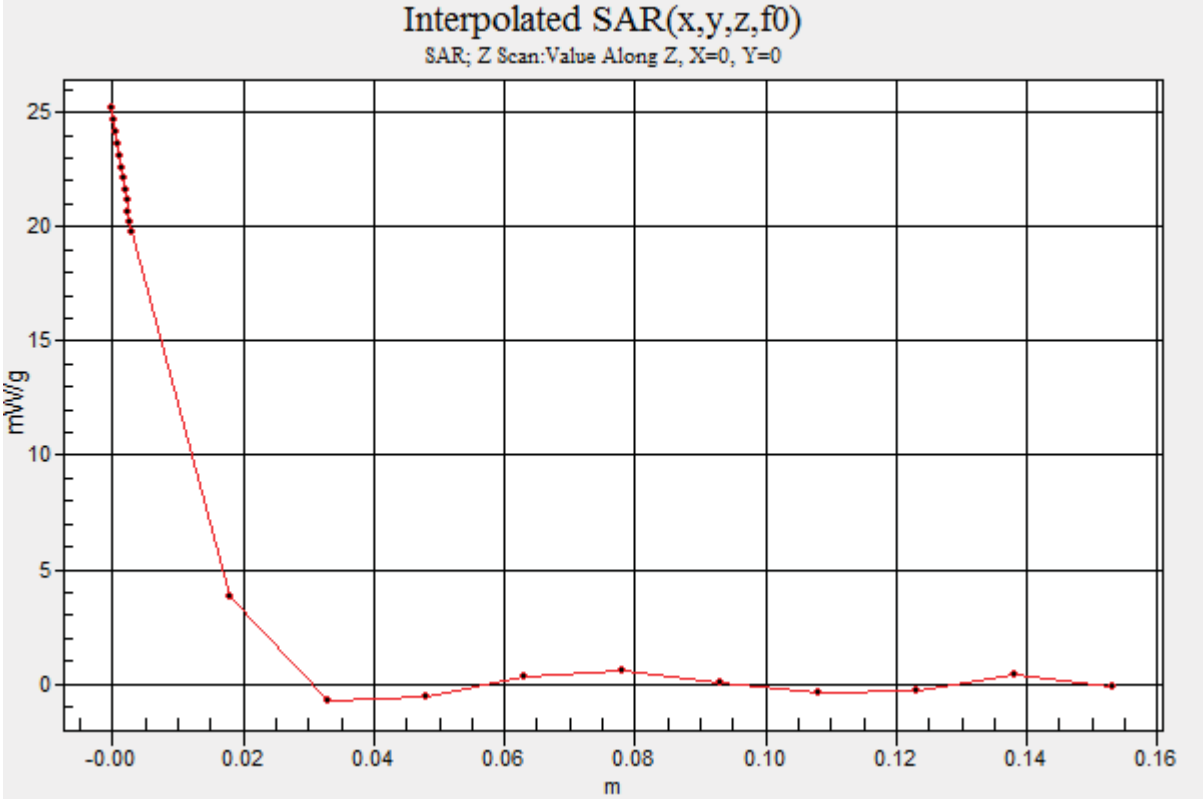

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Date/Time: 11/01/2017 12:51:58 PM

Test Laboratory: Celltech Labs

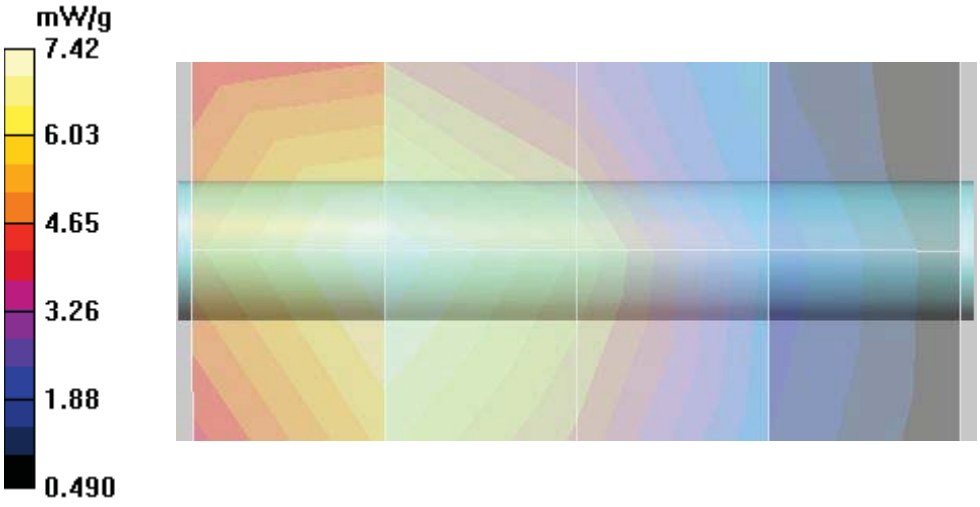
DUT: Dipole 5GHz; Type: D5GHzV2; Serial: 1031
Program Name: 5200 MHz SPC

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 5.64 mho/m; ε_r = 48.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(3.88, 3.88, 3.88); Calibrated: 27/04/2016
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

5200-5800 MHz Dipole d=10mm P=50mW, TS=7.26/Area Scan (3x5x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of SAR (measured) = 7.42 mW/g

5200-5800 MHz Dipole d=10mm P=50mW, TS=7.26/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 33.6 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 14.2 W/kg
SAR(1 g) = 3.55 mW/g; SAR(10 g) = 0.992 mW/g
Maximum value of SAR (measured) = 7.47 mW/g



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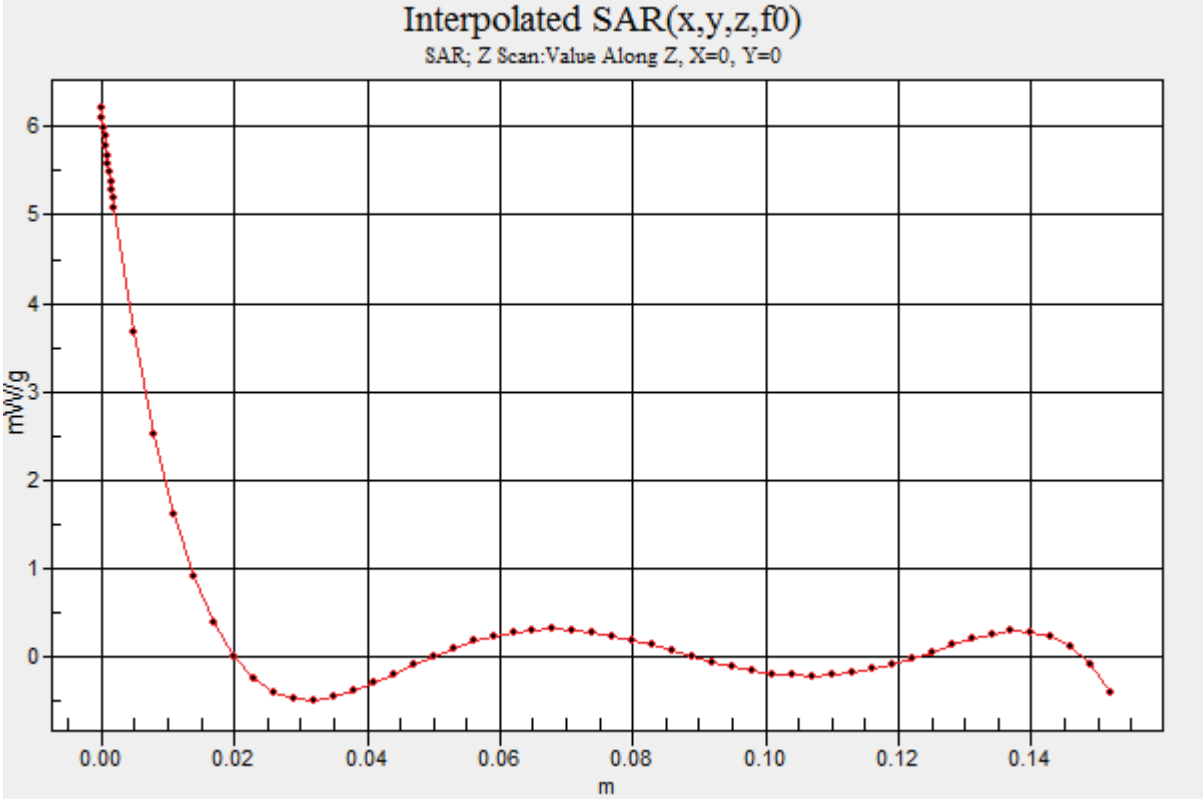

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Date/Time: 16/01/2017 12:39:36 PM

Test Laboratory: Celltech Labs

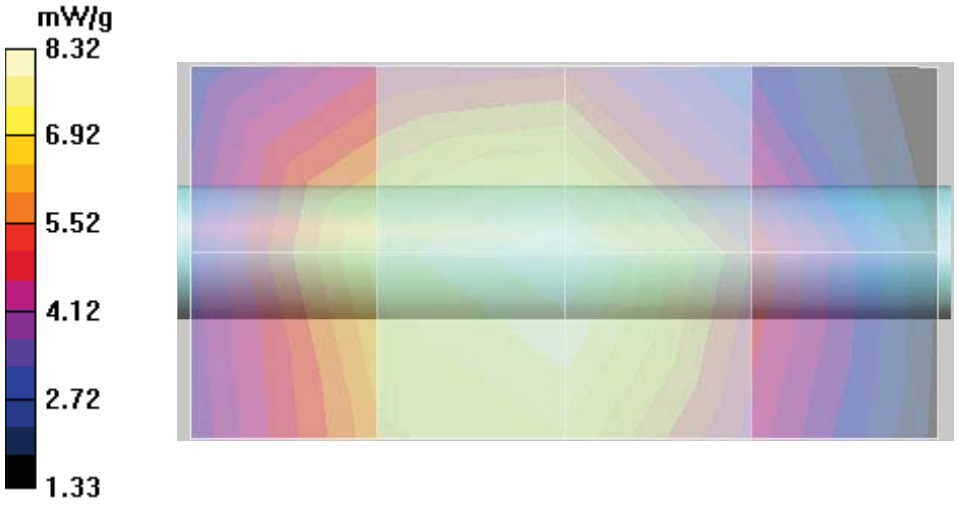
DUT: Dipole 5GHz; Type: D5GHzV2; Serial: 1031
Program Name: 5200 MHz SPC

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 5 mho/m; ε_r = 36.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(4.41, 4.41, 4.41); Calibrated: 27/04/2016
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

5200-5800 MHz Dipole d=10mm P=48.6 mW, TS=3.88/Area Scan (3x5x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of SAR (measured) = 8.32 mW/g

5200-5800 MHz Dipole d=10mm P=48.6 mW, TS=3.88/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 47.4 V/m; Power Drift = -0.160 dB
Peak SAR (extrapolated) = 16.7 W/kg
SAR(1 g) = 4.06 mW/g; SAR(10 g) = 1.16 mW/g



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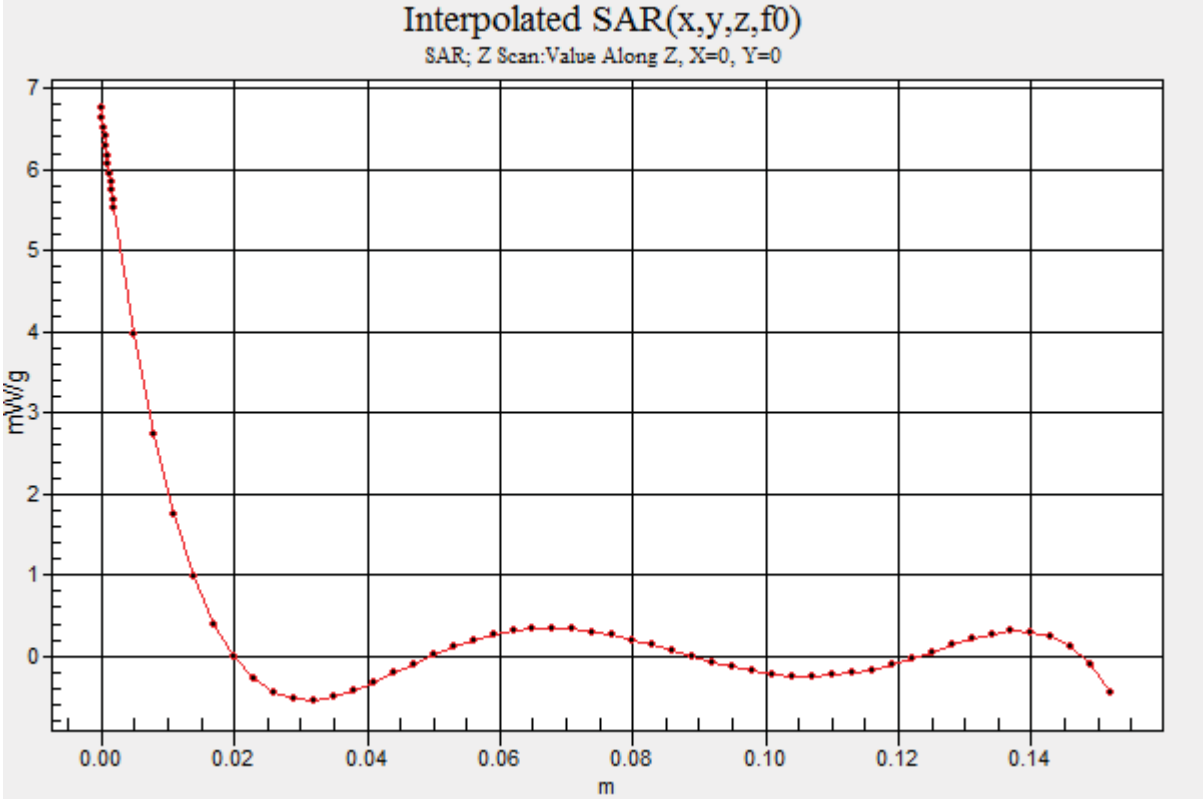

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APPENDIX B – MEASUREMENT PLOTS OF MAXIMUM MEASURED SAR

Plot B11

Date/Time: 21/12/2016 3:19:25 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835B

Communication System: Harris; Frequency: 896 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 896 MHz; σ = 1.02 mho/m; ε_r = 51.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

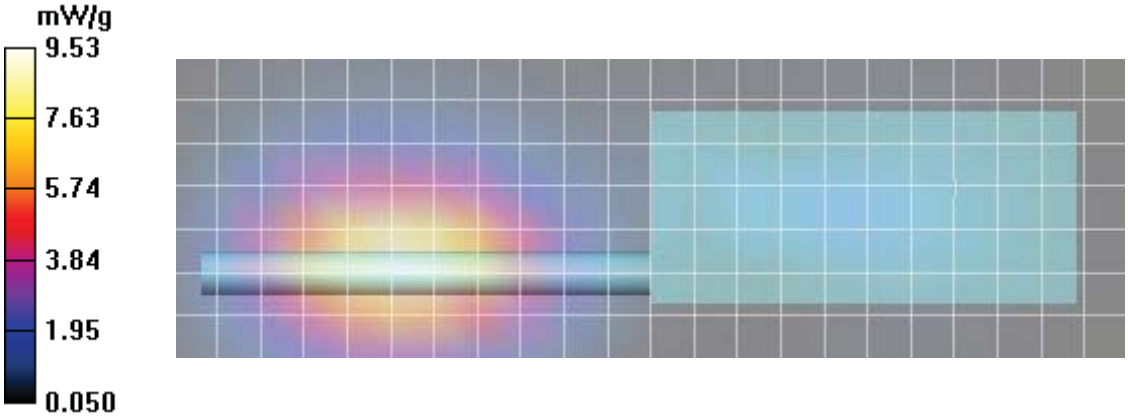
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B11 w/c Body, XL-185, 896MHz, ant 4450-01, bat 4010-01, LUE/Area Scan (8x23x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 9.53 mW/g

B11 w/c Body, XL-185, 896MHz, ant 4450-01, bat 4010-01, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 25.2 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 8.82 mW/g; SAR(10 g) = 6.2 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 9.38 mW/g



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Plot B23

Date/Time: 23/12/2016 9:27:51 AM

Test Laboratory: The name of your organization

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835B

Communication System: Harris; Frequency: 896 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 896 MHz; σ = 1.02 mho/m; ε_r = 51.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

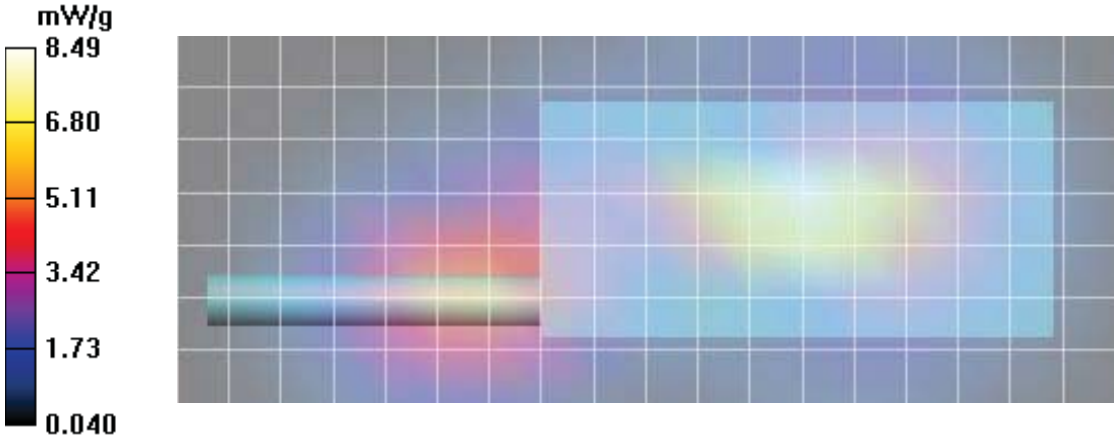
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B23 w/c Body, XL-185, 896MHz, ant 4450-02, bat 4010-01, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 8.49 mW/g

B23 w/c Body, XL-185, 896MHz, ant 4450-02, bat 4010-01, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 57.8 V/m; Power Drift = -0.132 dB
Peak SAR (extrapolated) = 12.3 W/kg
SAR(1 g) = 8.77 mW/g; SAR(10 g) = 5.8 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 9.34 mW/g



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Plot B24

Date/Time: 23/12/2016 9:52:11 AM

Test Laboratory: The name of your organization

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835B

Communication System: Harris; Frequency: 901 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 901 MHz; σ = 1.04 mho/m; ε_r = 51; ρ = 1000 kg/m^3
Phantom section: Flat Section

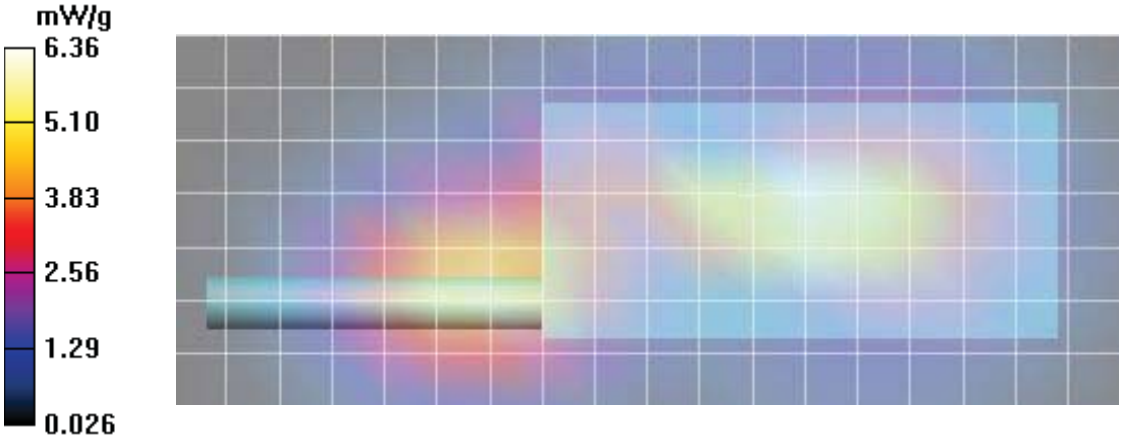
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B24 w/c Body, XL-185, 901MHz, ant 4450-02, bat 4010-01, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 6.36 mW/g

B24 w/c Body, XL-185, 901MHz, ant 4450-02, bat 4010-01, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 59.8 V/m; Power Drift = -0.206 dB
Peak SAR (extrapolated) = 9.26 W/kg
SAR(1 g) = 6.6 mW/g; SAR(10 g) = 4.52 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 6.95 mW/g



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Plot B30

Date/Time: 23/12/2016 12:54:06 PM

Test Laboratory: The name of your organization

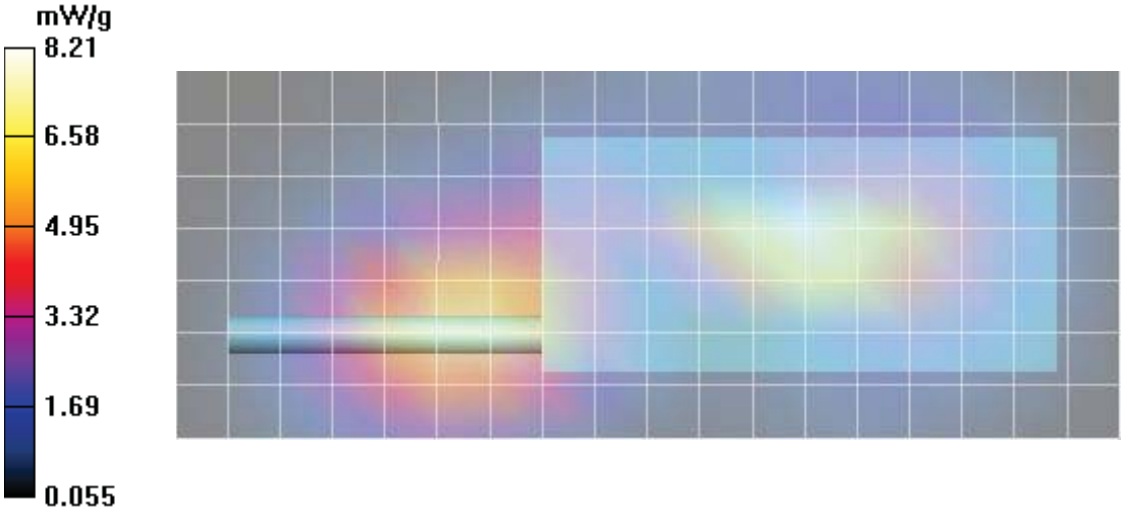
DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835B

Communication System: Harris; Frequency: 935 MHz;Duty Cycle: 1:1
Medium parameters used: f = 935 MHz; σ = 1.07 mho/m; ε_r = 50.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(7.94, 7.94, 7.94); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B30 w/c Body, XL-185, 935MHz, ant 11223/02, bat 4010-01, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.21 mW/g

B30 w/c Body, XL-185, 935MHz, ant 11223/02, bat 4010-01, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 62.9 V/m; Power Drift = -0.221 dB
Peak SAR (extrapolated) = 11.9 W/kg
SAR(1 g) = 8.36 mW/g; SAR(10 g) = 5.4 mW/g
Maximum value of SAR (measured) = 8.80 mW/g



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Plot H11

Date/Time: 30/12/2016 12:29:06 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835H

Communication System: Harris; Frequency: 896 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 896 MHz; σ = 0.991 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

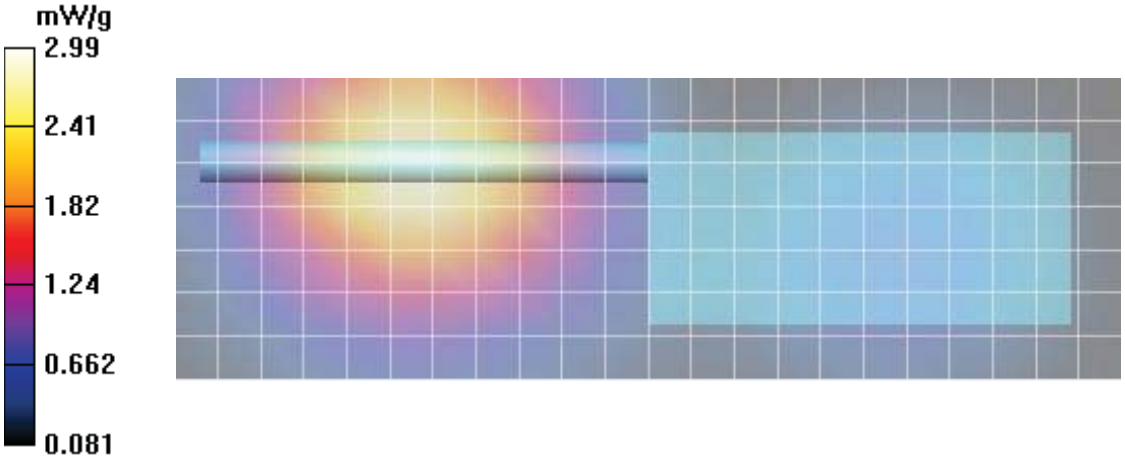
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(8.12, 8.12, 8.12); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H11 w/c XL-185, 896 MHz, ant 4450-01, bat 4010-01,LUE/Area Scan (8x23x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 2.99 mW/g

H11 w/c XL-185, 896 MHz, ant 4450-01, bat 4010-01,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 21.7 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 3.80 W/kg
SAR(1 g) = 2.81 mW/g; SAR(10 g) = 2.02 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 2.98 mW/g



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Plot H23

Date/Time: 03/01/2017 1:10:55 PM

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835H

Communication System: Harris; Frequency: 896 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 896 MHz; σ = 0.942 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

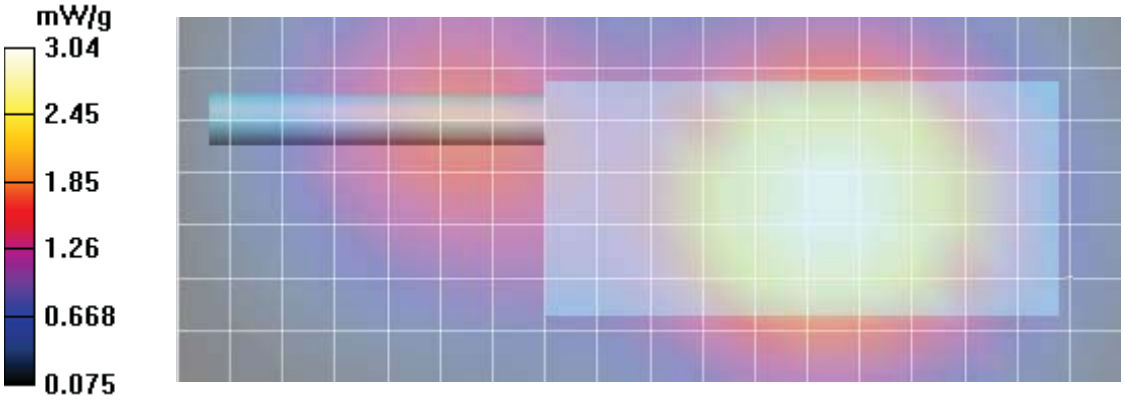
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(8.12, 8.12, 8.12); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H23 XL-185,896 MHz, ant 4450-02, bat HR003, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 3.04 mW/g

H23 XL-185,896 MHz, ant 4450-02, bat HR003, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.0 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 3.98 W/kg
SAR(1 g) = 2.98 mW/g; SAR(10 g) = 2.17 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 3.14 mW/g



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Plot H28

Date/Time: 04/01/2017 10:01:52 AM

Test Laboratory: Celltech Labs

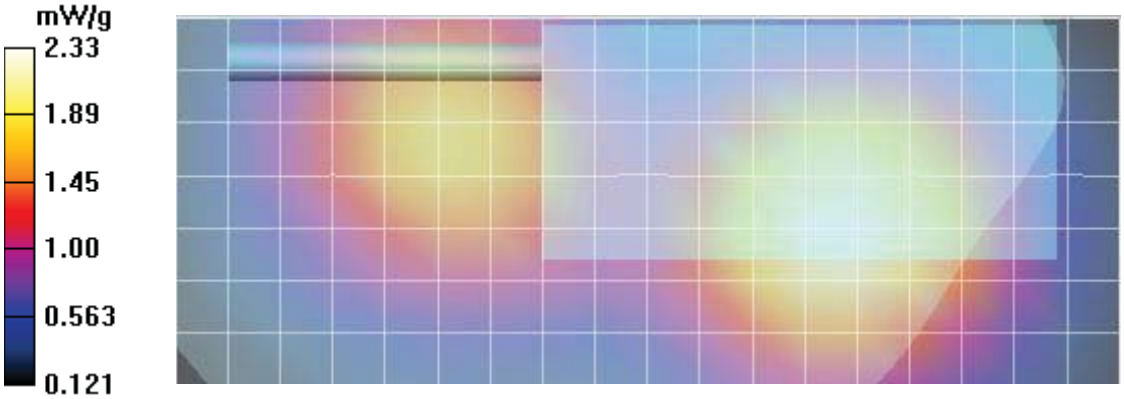
DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 835H

Communication System: Harris; Frequency: 935 MHz;Duty Cycle: 1:1
Medium parameters used: f = 935 MHz; σ = 1 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(8.12, 8.12, 8.12); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H28 XL-185,w/c 935 MHz, ant 11223/02, bat HR003, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.33 mW/g

H28 XL-185,w/c 935 MHz, ant 11223/02, bat HR003, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.2 V/m; Power Drift = -0.042 dB
Peak SAR (extrapolated) = 3.13 W/kg
SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.65 mW/g
Maximum value of SAR (measured) = 2.43 mW/g



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Plot B39

Date/Time: 05/01/2017 12:19:04 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

Communication System: WiFi; Frequency: 2437 MHz;Duty Cycle: 1:1.11
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.99 mho/m; ε_r = 49.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

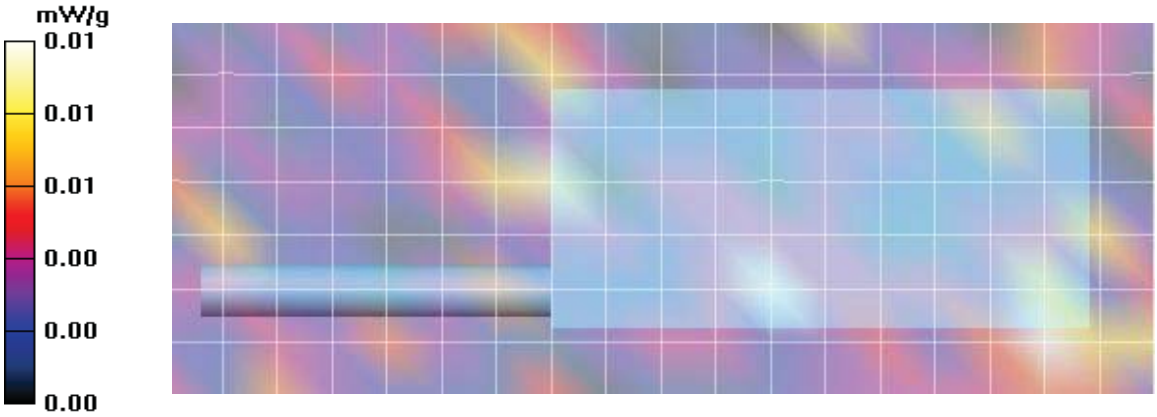
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B39 XL-185,w/c 2437 MHz, ant 4450-02, bat 4010-04,LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.01 mW/g

B39 XL-185,w/c 2437 MHz, ant 4450-02, bat 4010-04,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 1.27 V/m; Power Drift = 0.597 dB
Peak SAR (extrapolated) = 0.020 W/kg
SAR(1 g) = 0.00415 mW/g; SAR(10 g) = 0.000936 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.020 mW/g



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Plot B40

Date/Time: 05/01/2017 2:25:31 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

Communication System: WiFi; Frequency: 2437 MHz;Duty Cycle: 1:1.11
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.99 mho/m; ε_r = 49.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

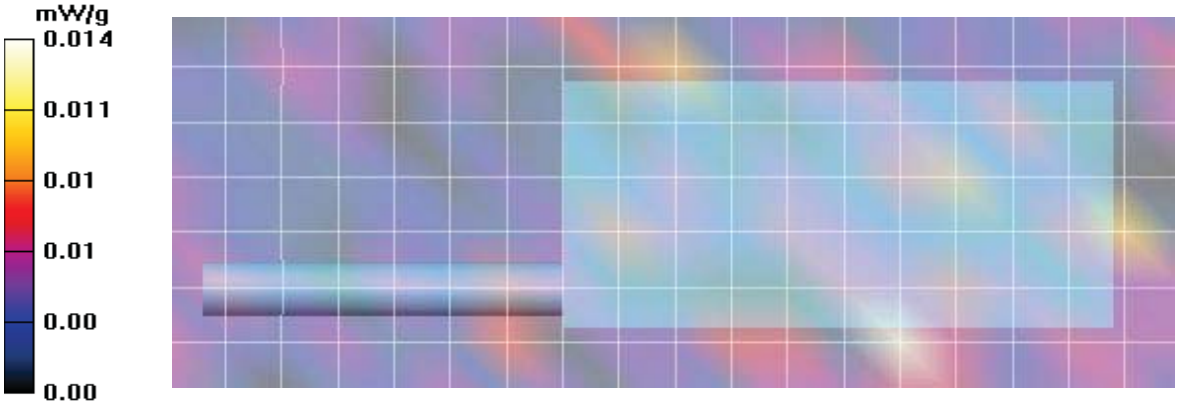
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B40 XL-185,w/c 2437 MHz, ant 4450-02, bat 4010-01,LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.014 mW/g

B40 XL-185,w/c 2437 MHz, ant 4450-02, bat 4010-01,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 0.627 V/m; Power Drift = 9.75 dB
Peak SAR (extrapolated) = 0.012 W/kg
SAR(1 g) = 0.000615 mW/g; SAR(10 g) = 0.000155 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.012 mW/g



Plot B42

Date/Time: 05/01/2017 1:48:19 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

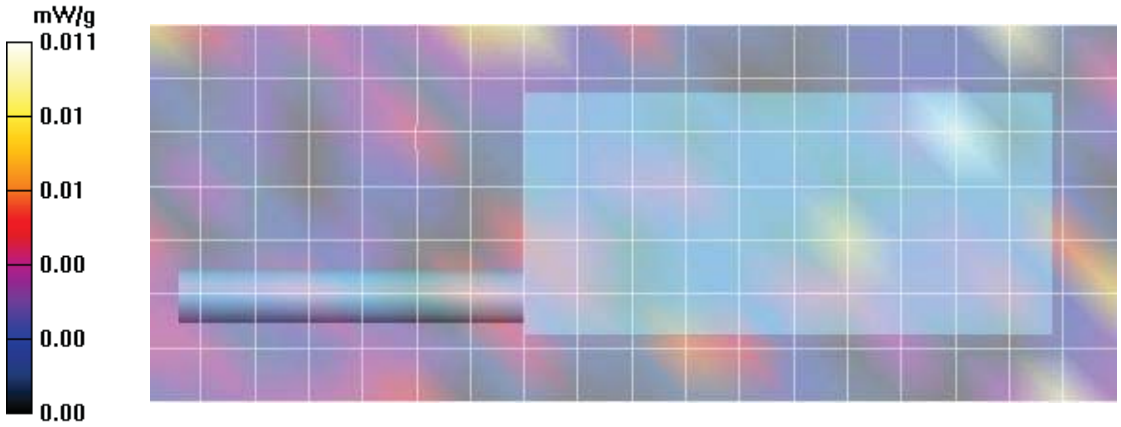
Communication System: WiFi; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 2.07 mho/m; ε_r = 49.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B42 XL-185,2480 MHz, ant 4450-02, bat 4010-04,LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.011 mW/g

B42 XL-185,2480 MHz, ant 4450-02, bat 4010-04,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 0.590 V/m; Power Drift = 12.4 dB
Peak SAR (extrapolated) = 0.025 W/kg
SAR(1 g) = 0.00222 mW/g; SAR(10 g) = 0.000403 mW/g

Maximum value of SAR (measured) = 0.020 mW/g



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Plot B43

Date/Time: 05/01/2017 2:07:41 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

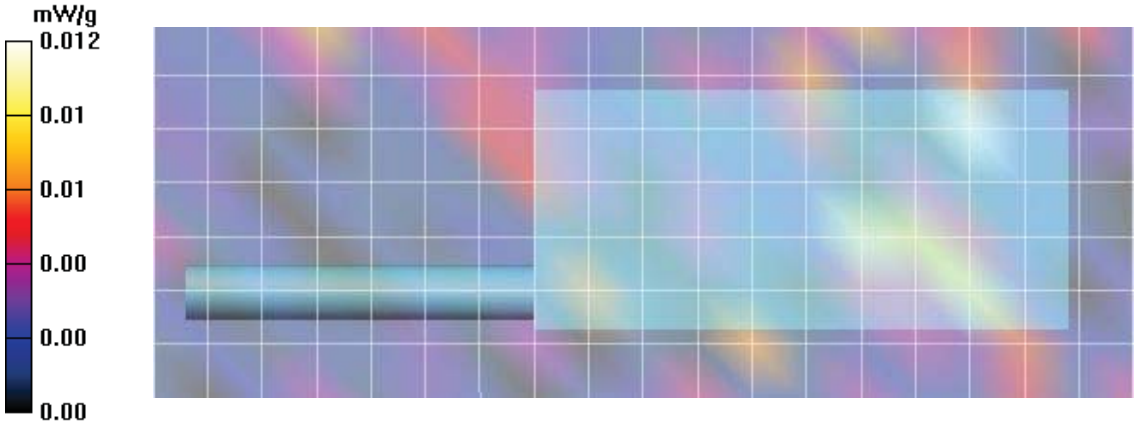
Communication System: WiFi; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 2.07 mho/m; ε_r = 49.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B43 XL-185,2480 MHz, ant 4450-02, bat 4010-01,LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.012 mW/g

B43 XL-185,2480 MHz, ant 4450-02, bat 4010-01,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 0.577 V/m; Power Drift = 12.3 dB
Peak SAR (extrapolated) = 0.020 W/kg
SAR(1 g) = 0.00493 mW/g; SAR(10 g) = 0.000789 mW/g

Maximum value of SAR (measured) = 0.018 mW/g



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Plot H33

Date/Time: 10/01/2017 9:40:34 AM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

Communication System: WiFi; Frequency: 2412 MHz;Duty Cycle: 1:1.11
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.87 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

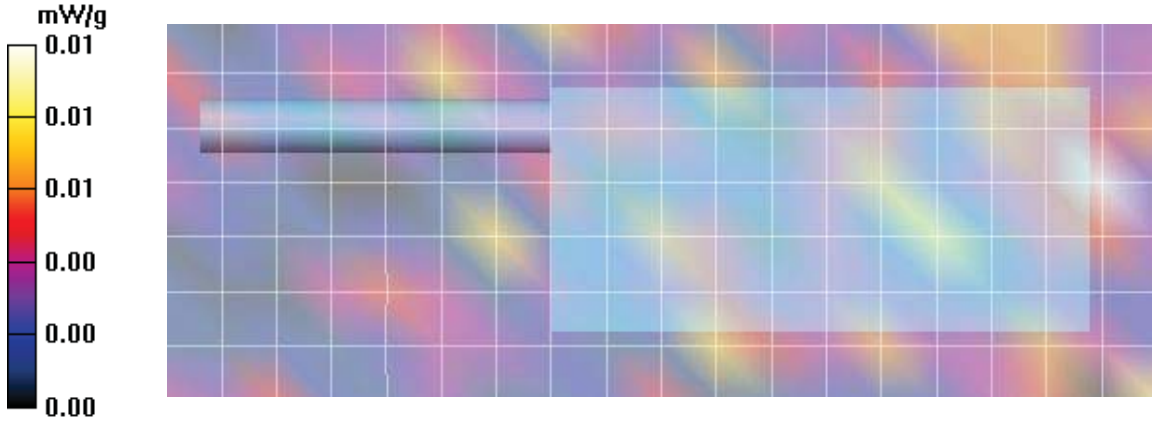
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.37, 6.37, 6.37); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H33 XL-185,2412 MHz, ant 4450-02, bat 4010-04, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.01 mW/g

H33 XL-185,2412 MHz, ant 4450-02, bat 4010-04, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 0.411 V/m; Power Drift = 11.5 dB
Peak SAR (extrapolated) = 0.023 W/kg
SAR(1 g) = 0.00634 mW/g; SAR(10 g) = 0.00328 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.013 mW/g



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Plot H35

Date/Time: 10/01/2017 10:16:44 AM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 2450B

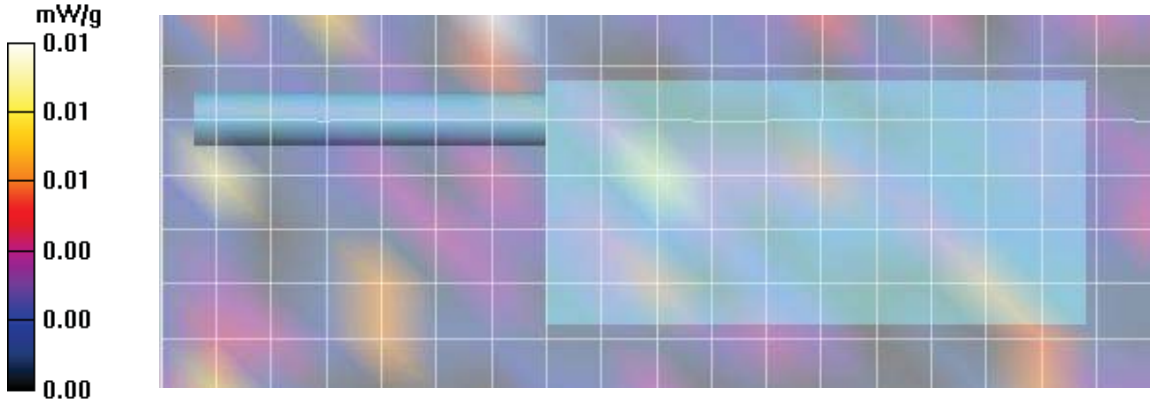
Communication System: WiFi; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.97 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.37, 6.37, 6.37); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H35 BT, XL-185,2480 MHz, ant 4450-02, bat 4010-04, LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.01 mW/g

H35 BT, XL-185,2480 MHz, ant 4450-02, bat 4010-04, LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 0.362 V/m; Power Drift = 10.6 dB
Peak SAR (extrapolated) = 0.026 W/kg
SAR(1 g) = 0.00484 mW/g; SAR(10 g) = 0.00298 mW/g

Maximum value of SAR (measured) = 0.014 mW/g



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Plot B48

Date/Time: 13/01/2017 2:25:31 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 5250B

Communication System: WiFi; Frequency: 5300 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5300 MHz; σ = 5.83 mho/m; ε_r = 48.69; ρ = 1000 kg/m^3
Phantom section: Flat Section

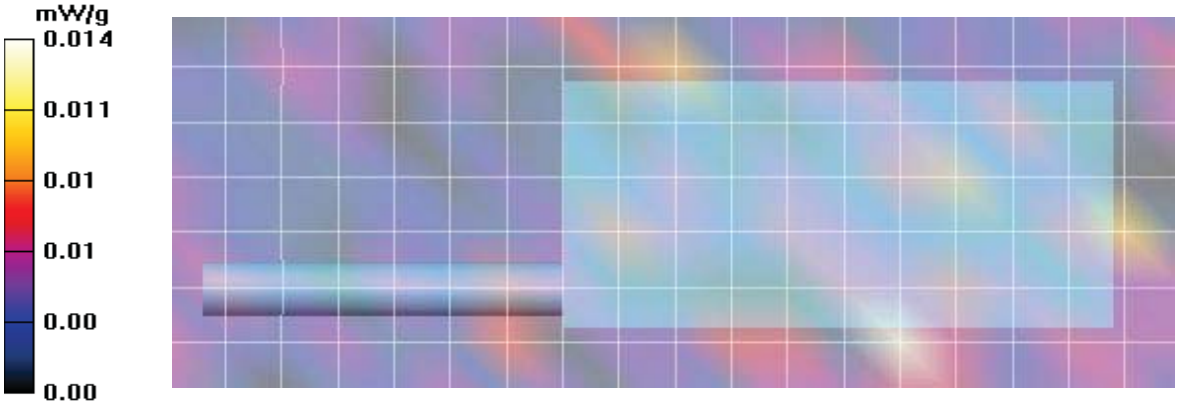
DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(6.55, 6.55, 6.55); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

B48 XL-185,w/c 5300 MHz, ant 4450-02, bat 4010-01,LUE/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.014 mW/g

B48 XL-185,w/c 5300 MHz, ant 4450-02, bat 4010-01,LUE/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.627 V/m; Power Drift = 9.75 dB
Peak SAR (extrapolated) = 0.012 W/kg
SAR(1 g) = 0.000615 mW/g; SAR(10 g) = 0.000155 mW/g

Info: Interpolated medium parameters used for SAR evaluation!
Maximum value of SAR (measured) = 0.012 mW/g



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Plot H40

Date/Time: 16/01/2017 3:36:34 PM

Test Laboratory: Celltech Labs

DUT: Harris XL-185; Type: PTT Radio Transceiver; Serial: 789-E00006 & 789-E00008
Program Name: 5250B

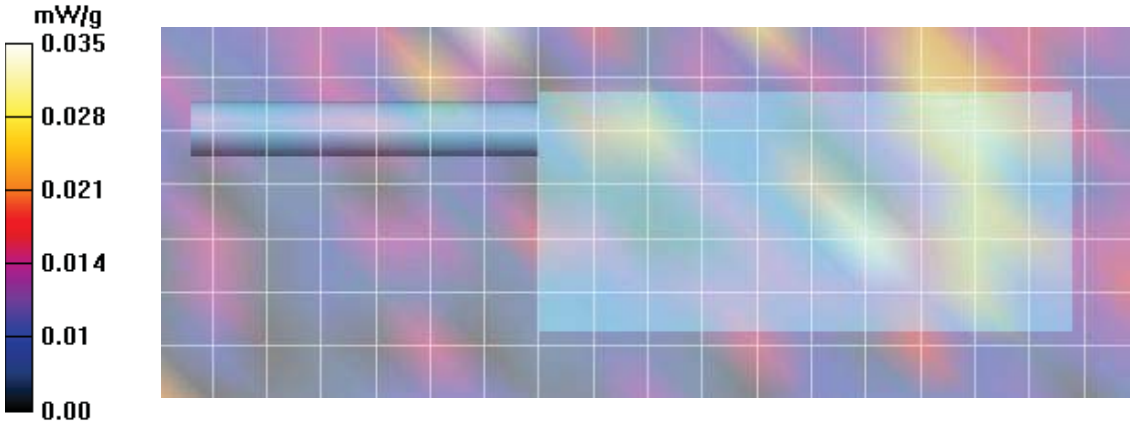
Communication System: 5250 MHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.92 mho/m; ε_r = 36.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3600 2016; ConvF(4.41, 4.41, 4.41); Calibrated: 27/04/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353 2016; Calibrated: 20/04/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

H40 XL-185,5180 MHz, ant 4450-02, bat 4010-04, Lotus/Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.035 mW/g

H40 XL-185,5180 MHz, ant 4450-02, bat 4010-04, Lotus/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.49 V/m; Power Drift = 2.93 dB
Peak SAR (extrapolated) = 0.075 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.010 mW/g

Maximum value of SAR (measured) = 0.056 mW/g



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