DECLARATION OF COMPLIANCE

SAR RF EXPOSURE EVALUATION - FCC / IC Class II Permissive Change

TEST LAB INFORMATION	Name	CELLTECH LABS INC.		
	Address	21-364 Lougheed Road, Kelowna, B.C. V1X 7R8 Canada		
TEST LAB ACCREDITATION	Type	ISO / IEC 17025	Accreditation	A2LA Test Lab Certificate No. 2470.01
APPLICANT INFORMATION	Name	HARRIS CORPORATION		
	Address	221 Jefferson Ridge Parkway, Lynchburg, VA 24501 U.S.A.		
STANDARDS APPLIED	FCC	47 CFR §2.1093	IC	Health Canada Safety Code 6
PROCEDURES APPLIED	FCC	KDB 447498 D01v05r02, KDB 865664 D01v01r03	IC	RSS 102 Issue 4
	FCC	KDB 865664 D02v01r01, KDB 643646 D01v01r01	IEC	
	IEEE	IEEE 1528-2013	IEC	
DEVICE CLASSIFICATION	FCC	Part 15 DTS, DSS, NII		
	IC	DTS, LE-LAN		
DEVICE DESCRIPTION	Portable Multi-Band Digital Push-To-Talk (PTT) Radio Transceiver			
APPLICATION TYPE	Class II Permissive Change – Addition of WiFi and BlueTooth			
DATE(S) OF EVALUATION	March 2 – 10, 2015		SAMPLES RECEIVED	December 18, 2014

Devices Evaluated

FCC ID	IC Certification	Model	Type	Frequency Range	Manufacturer's Rated Output Power
OWDTR-0133-E	3636B-0133	XL-200P	System & Scan	2412-2462MHz WLAN 5150-5850MHz WLAN 2402-2480 BT	234mW PK 15mW Avg 18.6mW Avg

Maximum SAR Evaluated 2.4GHz WiFi	Head	<0.10	W/kg	Maximum Simultaneous SAR W/kg	FCC	
	Body	<0.10			Head	<0.10*
Maximum SAR Evaluated 5GHz WiFi	Head	<0.10			Body	<0.10*
	Body	<0.10			ISEDC	
Maximum SAR Evaluated BlueTooth	Head	<0.10			Head	<0.10*
	Body	<0.10			Body	<0.10*
FCC / IC Spatial Peak SAR Limit	Head /Body	1.6		Limit 1g	1.6 W/kg	General Pop.

*See Table 6.6 and Table 7.0

Statement of Compliance

Celltech Labs Inc. declares under its sole responsibility that the Harris Corporation Model XL-200P Portable PTT Transceiver has demonstrated compliance with the Specific Absorption Rate (SAR) RF exposure requirements specified in FCC 47 CFR §2.1093 and Health Canada Safety Code 6 for the Occupational/Controlled Exposure environment. The device was tested in accordance with the measurement procedures specified in FCC OET Bulletin 65, Supplement C (Edition 01-01), Industry Canada RSS-102 Issue 4, IEEE Standard 1528-2013 and International Standard IEC 62209-2:2010. All measurements were performed in accordance with the SAR system manufacturer recommendations.

The results and statements contained in this report pertain only to the device(s) evaluated

I attest to the accuracy of data. All measurements were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Test Report Approved By		Art Voss, P.Eng.	Senior Engineer	Celltech Labs Inc.

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1.0 DOCUMENT CONTROL

REVISION HISTORY			
REVISION NO.	**DESCRIPTION**	**IMPLEMENTED BY**	**RELEASE DATE**
1.0	1st Release	Art Voss	March 17, 2015
1.2	Correction to SAR Reporting	Art Voss	September 18, 2016
1.3	Removed Part 90 SAR Reference	Art Voss	4 October 2016

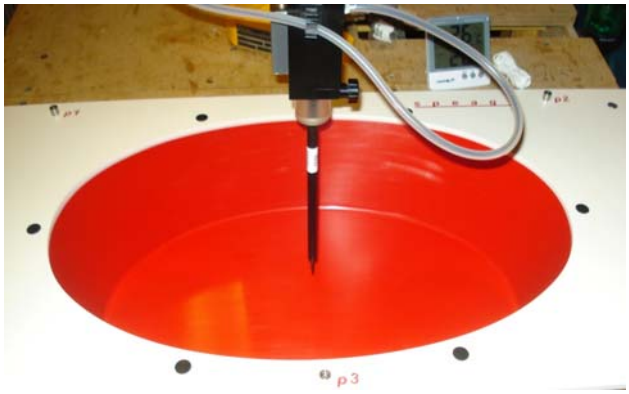
TEST REPORT SIGN-OFF			
DEVICE TESTED BY	**REPORT PREPARED BY**	**QA REVIEW BY**	**REPORT APPROVED BY**
Art Voss/Jasmeet Gill	Art Voss	Art Voss	Art Voss

2.0 INTRODUCTION

This measurement report demonstrates that the HARRIS Corporation XL-200P Portable PTT Radio Transceivers complies with the SAR (Specific Absorption Rate) RF exposure requirements specified in FCC 47 CFR §2.1093 and Health Canada's Safety Code 6 for the Occupational / Controlled Exposure environment. The measurement procedures were in accordance of KDB 447498; KDB 865664; IC RSS-102 Issue 4 and IEEE Standard 1528-2013. A description of the device, operating configuration, detailed summary of the test results, methodology and procedures used in the evaluation, equipment used and the various provisions of the rules are included within this test report. Subsequent addendums were applied to the following Radio Transceivers:

3.0 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 ELI Planar Phantom

DASY4 Measurement Server

4.0 NUMBER OF TEST CHANNELS (N_C)

Table 4.0

Number of Test Channels (N_c)

Antenna P/N	Antenna Type	Frequency Range (MHz)	N_c (1)	N_c (2)
14035-4000-01	Whip	2412-2484(wifi) (3)	3	3
14035-4000-01	Whip	2402-2480(BT)	1	1
14035-4000-01	Whip	5180-5300	4	4

Notes

(1) In accordance with FCC KDB 447498

(2) In accordance with IEC 62209-1. Maximum number of test channels was used.

(3) This is a full spectrum antenna. Channel selection was based on individual radio bands

5.0 MANUFACTURER'S ACCESSORY LIST

Table 5.0

Manufacturer's Accessory List

Test Report ID Number	Manufacturer's Part Number	Description	SAR Evaluated
		Antenna	
T1	KRE1011506/1	1/2 wave whip antenna, (764-870 MHz)	
T2	KRE1011506/2	1/4 wave whip antenna, (764-870 MHz)	
T3	KRE1011219/2	Helical VHF	
T4	14035-4000-01	Full spectrum whip antenna	X
		Battery	
P1	14034-4010-01	Li-Ion Battery 7.2VDC, 3300mAh	X
		Audio Accessory	
A1	12082-0600-01	Standard Speaker Microphone	X
A2	12082-0600-02	Storm Speaker Microphone	
A3	12150-1000-01	Premium Speaker MIC, Fire, NC, Hirose	
A4	12082-0650-01	Microphone, Palm, 2-Wire Black	
A5	12082-0650-03	Microphone, Mini Lapel, 3-Wire Black	
A25	14002-0197-01	Hirose to Unity Adapter	
		Body-Worn Accessory	
B1	12082-1290-01	Belt Clip	X
B2	14002-0218-01	Premium Belt Loop	
B3	KRY 1011609/1	Leather Belt Loop	

B2	12082-3230-01	D-Swivel (Used w/ B2, B3)	
B14	CC103333V1	Shoulder Strap	

6.0 SAR MEASUREMENT SUMMARY

Table 6.0

2.4GHz 802.11 Band - FACE SAR Evaluation Results (FCC/IC)

Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
02 Mar 2015	XL-200P	System	F48	2412	P1	T4	n/a	n/a	25	52	234*	**0.004**
02 Mar 2015	XL-200P	System	F49	2437	P1	T4	n/a	n/a	25	52	234*	0.004
02 Mar 2015	XL-200P	System	F50	2462	P1	T4	n/a	n/a	25	52	234*	0.003
03 Mar 2015	XL-200P	System	F51	2472	P1	T4	n/a	n/a	25	52	234*	0.002
03 Mar 2015	XL-200P	Scan	F52	2412	P1	T4	n/a	n/a	25	52	234*	0.004

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

*Provided by EMC test lab.

Table 6.1

2.4GHz Bluetooth Band - FACE SAR Evaluation Results (FCC/IC)

Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
03 Mar 2015	XL-200P	System	F53	2480	P1	T4	n/a	n/a	25	52	18.6*	**0.003**

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

*Provided by EMC test lab.

Table 6.2

2.4GHz 802.11 Band - BODY SAR Evaluation Results (FCC/IC)												
Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
04 Mar 2015	XL-200P	System	B53	2412	P1	T4	B1	A1	20	22	234*	0.004
04 Mar 2015	XL-200P	System	B54	2437	P1	T4	B1	A1	20	22	234*	**0.005**
05 Mar 2015	XL-200P	System	B55	2462	P1	T4	B1	A1	20	22	234*	0.004
05 Mar 2015	XL-200P	System	B56	2472	P1	T4	B1	A1	20	22	234*	0.005
05 Mar 2015	XL-200P	SCAN	B57	2437	P1	T4	B1	A1	20	22	234*	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			

*Provided by EMC test lab.

Table 6.3

2.4GHz Bluetooth - BODY SAR Evaluation Results (FCC/IC)												
Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
05 Mar 2015	XL-200P	System	B58	2480	P1	T4	B1	A1	20	22	18.6*	**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			

*Provided by EMC test lab.

Table 6.4

5GHz 802.11 Band – FACE SAR Evaluation Results (FCC/IC)												
Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
09 Mar 2015	XL-200P	System	F54	5180	P1	T4	n/a	n/a	25	52	15*	0.017
09 Mar 2015	XL-200P	System	F55	5240	P1	T4	n/a	n/a	25	52	15*	**0.020**
09 Mar 2015	XL-200P	System	F56	5260	P1	T4	n/a	n/a	25	52	15*	0.014
09 Mar 2015	XL-200P	System	F57	5300	P1	T4	n/a	n/a	25	52	15*	0.015
09 Mar 2015	XL-200P	SCAN	F58	5240	P1	T4	n/a	n/a	25	52	15*	0.018
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		

*Provided by EMC test lab.

Table 6.5

5GHz 802.11 Band - BODY SAR Evaluation Results (FCC/IC)												
Date	Radio Model		Plot #	Freq	Batt. Type	Antenna	Accessories		DUT Spacing		Conducted	Measured SAR 1g (W/kg)
	M/N	Type		(MHz)			Body	Audio	DUT (mm)	ANT (mm)	Power (mW)	PTT Duty Cycle 100%
10 Mar 2015	XL-200P	System	B59	5180	P1	T4	B1	A1	20	22	15*	0.017
10 Mar 2015	XL-200P	System	B60	5240	P1	T4	B1	A1	20	22	15*	0.016
10 Mar 2015	XL-200P	System	B61	5260	P1	T4	B1	A1	20	22	15*	0.019
10 Mar 2015	XL-200P	System	B62	5300	P1	T4	B1	A1	20	22	15*	0.018
10 Mar 2015	XL-200P	SCAN	B63	5260	P1	T4	B1	A1	20	22	15*	**0.031**
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		

*Provided by EMC test lab.

Table 6.6

SUMMARY of MAXIMUM MEASURED SAR*				
Transmission		Configuration	Plot ID	Measure SAR (W/kg)
Mode	Frequency (MHZ)			
WiFi	2412	Head	F48	0.004
WiFi	2437	Body	B54	0.005
WiFi	5240	Head	F55	0.02
WiFi	5260	Body	B63	0.031
BT	2480	Head	F53	0.006
BT	2480	Body	B58	0.006
Limit				
1.6W/kg	1g Average			General Population

*To support the test results, tests were conducted with the each surface of the DUT placed in direct contact with the phantom surface, with the maximum points of contact touching the phantom and with no accessories attached. These surfaces included the Front, Back, Left Side, Right Side, Top (with antenna removed) and Bottom. The DUT was subsequently returned to the appropriate typical Head and Body configurations and retested. The resulting measurements were similar to those shown above. With 2450MHz BODY TSL at 2412MHz, the highest SAR measured was 0.354 W/kg and was found on the lower Right Side. See below. This is not a typical use configuration.

7.0 MAXIMUM SIMULTANEOUS SAR

Table 7.0

Scaling for WiFi and BlueTooth			
Configuration	**WiFi SAR (W/kg)**	**BlueTooth SAR (W/kg)**	**Scaled SAR (W/kg)**
FCC			
Head	0.020	0.003	0.023
Body	0.031	0.006	0.037
IC			
Head	0.020	0.003	0.023
Body	0.031	0.006	0.037

8.0 SAR EXPOSURE LIMITS

Table 8.0

SAR RF EXPOSURE LIMITS			
FCC 47 CFR 2.1093	**Health Canada Safety Code 6**	**(General Population / Uncontrolled Exposure)**	**(Occupational / Controlled Exposure)**
Spatial Average (averaged over the whole body)		0.08 W/kg	0.4 W/kg
Spatial Peak (averaged over any 1 g of tissue)		**1.6 W/kg**	8.0 W/kg
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)		4.0 W/kg	20.0 W/kg
The Spatial Average value of the SAR averaged over the whole body.			
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.			
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.			
Uncontrolled environments are defined as locations where there is potential exposure to individuals who have no knowledge or control of their potential exposure.			
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.			

9.0 DETAILS OF SAR EVALUATION

EVALUATION DETAILS	
1	The test channels selected for the SAR evaluations were based test procedures FCC KDB 447498 and IEC 62209-1. The procedure yielding the highest channel count was applied.
2	The DUT was evaluated for SAR in accordance with the procedures described in FCC KDB 643646.
3	The Scan radio model differs from the System radio model in front keypad only. The scan radio was evaluated for the worst case configuration of the SAR evaluation.
4	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.
5	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).
6	Each SAR evaluations were performed with a fully charged battery.
7	The fluid temperature remained within +/-2°C from the time of the fluid dielectric parameter measurement to the completion of the SAR evaluation.
8	The fluid temperature remained within +/-0.5°C throughout the test day.

10.0 MEASUREMENT UNCERTAINTIES

Table 10.0

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

Table 10.1

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

11.0 TISSUE SIMULATING LIQUID (TSL) RECIPE

Table 11.0

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
2450 MHz	**HEAD**
Ingredient	**% by Weight**
Water	52.0
Glycol	48.0
Salt	0
HEC	0
Bacteriacide	0

Table 11.1

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
2450MHz	**BODY**
Ingredient	**% by Weight**
Water	69.98
Glycol	30.0
Salt	0.02
HEC	0
Bacteriacide	0

Table 11.2

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
5000 MHz	**HEAD**
SPEAG HBBL-5800V5 Part Number: SL AAH 502AC	
Proprietary	

Table 11.3

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
5000 MHz	**BODY**
SPEAG MBBL3500-5800V5 Part Number: SL AAM 501EA	
Proprietary	

12.0 FLUID DIELECTRIC PARAMETERS

Table 12.0

FLUID DIELECTRIC PARAMETERS							Interpolated
Date:	26 Feb 2015		Frequency:	2450MHz	Tissue:	Head	
Freq (MHz)	Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity	
2350.0000	39.97	1.84	39.38	1.71	1.50%	7.60%	
2360.0000	39.92	1.84	39.36	1.72	1.42%	6.98%	
2370.0000	39.69	1.82	39.34	1.73	0.89%	5.20%	
2380.0000	39.65	1.83	39.32	1.74	0.84%	5.17%	
2390.0000	39.53	1.85	39.31	1.75	0.56%	5.71%	
2400.0000	39.40	1.88	39.29	1.76	0.28%	6.82%	
2410.0000	39.32	1.90	39.27	1.76	0.13%	7.95%	
2412.0000	39.31	1.90	39.27	1.76	0.11%	7.95%	X
2420.0000	39.26	1.91	39.25	1.77	0.03%	7.91%	
2430.0000	39.22	1.94	39.24	1.78	-0.05%	8.99%	
2437.0000	39.16	1.97	39.23	1.79	-0.16%	10.13%	X
2440.0000	39.14	1.98	39.22	1.79	-0.20%	10.61%	
2450.0000	38.93	1.94	39.20	1.80	-0.69%	7.78%	
2460.0000	39.35	1.93	39.19	1.81	0.41%	6.63%	
2470.0000	39.33	1.98	39.17	1.82	0.41%	8.79%	
2472.0000	39.31	1.98	39.17	1.82	0.37%	8.45%	X
2480.0000	39.24	1.96	39.16	1.83	0.20%	7.10%	
2482.0000	39.24	1.96	39.16	1.83	0.20%	6.88%	X
2490.0000	39.22	1.95	39.15	1.84	0.18%	5.98%	
2500.0000	39.05	1.98	39.14	1.85	-0.23%	7.03%	
2510.0000	38.68	1.99	39.12	1.87	-1.12%	6.42%	
2520.0000	38.63	2.01	39.11	1.88	-1.23%	6.91%	
2530.0000	38.69	2.05	39.10	1.89	-1.05%	8.47%	
2540.0000	38.83	2.09	39.09	1.90	-0.67%	10.00%	
2550.0000	38.78	2.07	39.07	1.91	-0.74%	8.38%	

X = Interpolated by DASY 4 System

= Test Channel Used

Table 12.1

FLUID DIELECTRIC PARAMETERS

Date:	04 Mar 2015		Frequency:	2450MHz	Tissue:	Body	Interpolated
Freq (MHz)	**Test_e**	**Test_s**	**Target_e**	**Target_s**	**Deviation Permittivity**	**Deviation Conductivity**	
2350.0000	51.56	1.86	52.83	1.85	-2.40%	0.54%	
2360.0000	51.78	1.88	52.82	1.86	-1.97%	1.08%	
2370.0000	51.53	1.87	52.81	1.87	-2.42%	0.00%	
2380.0000	51.56	1.88	52.79	1.88	-2.33%	0.00%	
2390.0000	51.43	1.90	52.78	1.89	-2.56%	0.53%	
2400.0000	51.19	1.93	52.77	1.90	-2.99%	1.58%	
2410.0000	51.38	1.94	52.75	1.91	-2.60%	1.57%	
2412.0000	51.34	1.94	52.75	1.91	-2.66%	1.67%	X
2420.0000	51.20	1.96	52.74	1.92	-2.92%	2.08%	
2430.0000	50.97	1.96	52.73	1.93	-3.34%	1.55%	
2437.0000	51.22	1.99	52.72	1.94	-2.85%	2.63%	X
2440.0000	51.32	2.00	52.71	1.94	-2.64%	3.09%	
2450.0000	51.17	1.99	52.70	1.95	-2.90%	2.05%	
2460.0000	51.09	2.03	52.69	1.96	-3.04%	3.57%	
2470.0000	50.96	2.01	52.67	1.98	-3.25%	1.52%	
2472.0000	50.99	2.02	52.67	1.98	-3.19%	1.72%	X
2480.0000	51.10	2.04	52.66	1.99	-2.96%	2.51%	
2482.0000	51.07	2.04	52.66	1.99	-3.02%	2.31%	X
2490.0000	50.93	2.04	52.65	2.01	-3.27%	1.49%	
2500.0000	51.13	2.05	52.64	2.02	-2.87%	1.49%	
2510.0000	50.86	2.08	52.62	2.04	-3.34%	1.96%	
2520.0000	50.86	2.08	52.61	2.05	-3.33%	1.46%	
2530.0000	50.87	2.09	52.60	2.06	-3.29%	1.46%	
2540.0000	50.82	2.12	52.59	2.08	-3.37%	1.92%	
2550.0000	50.81	2.13	52.57	2.09	-3.35%	1.91%	

X = Interpolated by DASY 4 System

= Test Channel Used

Table 12.2

FLUID DIELECTRIC PARAMETERS

Date:	06 Mar 2015		Frequency:	5200MHz	Tissue:	Head	Interpolated
Freq (MHz)	**Test_e**	**Test_s**	**Target_e**	**Target_s**	**Deviation Permittivity**	**Deviation Conductivity**	
5100.0000	34.27	4.36	36.10	4.55	-5.07%	-4.18%	
5110.0000	34.16	4.32	36.09	4.56	-5.35%	-5.26%	
5120.0000	34.02	4.39	36.08	4.57	-5.71%	-3.94%	
5130.0000	33.84	4.43	36.07	4.58	-6.18%	-3.28%	
5140.0000	33.96	4.37	36.05	4.59	-5.80%	-4.79%	
5150.0000	34.16	4.48	36.04	4.60	-5.22%	-2.61%	
5160.0000	33.87	4.44	36.03	4.61	-6.00%	-3.69%	
5170.0000	33.82	4.50	36.02	4.62	-6.11%	-2.60%	
5180.0000	33.81	4.41	36.01	4.63	-6.11%	-4.75%	X
5190.0000	33.80	4.54	36.00	4.64	-6.11%	-2.16%	
5200.0000	33.92	4.49	35.99	4.65	-5.75%	-3.44%	
5210.0000	33.89	4.60	35.97	4.67	-5.78%	-1.50%	
5220.0000	33.99	4.55	35.96	4.68	-5.48%	-2.78%	
5230.0000	33.83	4.59	35.95	4.69	-5.90%	-2.13%	
5240.0000	33.72	4.58	35.94	4.70	-6.18%	-2.55%	X
5250.0000	33.68	4.57	35.93	4.71	-6.26%	-2.97%	
5260.0000	33.68	4.61	35.92	4.72	-6.24%	-2.33%	X
5270.0000	33.72	4.52	35.91	4.73	-6.10%	-4.44%	
5280.0000	33.52	4.62	35.89	4.74	-6.60%	-2.53%	
5290.0000	33.46	4.58	35.88	4.75	-6.74%	-3.58%	
5300.0000	33.81	4.65	35.87	4.76	-5.74%	-2.31%	X

X = Interpolated by DASY 4 System

= Test Channel Used

Table 12.3

FLUID DIELECTRIC PARAMETERS

Date:	10 Mar 2015		Frequency:	5200MHz	Tissue:	Body	Interpolated
Freq (MHz)	**Test_e**	**Test_s**	**Target_e**	**Target_s**	**Deviation Permittivity**	**Deviation Conductivity**	
5100.0000	48.28	5.37	49.15	5.18	-1.77%	3.67%	
5110.0000	48.34	5.45	49.14	5.19	-1.63%	5.01%	
5120.0000	48.38	5.45	49.12	5.21	-1.51%	4.61%	
5130.0000	48.61	5.32	49.11	5.22	-1.02%	1.92%	
5140.0000	48.64	5.49	49.10	5.23	-0.94%	4.97%	
5150.0000	48.11	5.45	49.08	5.24	-1.98%	4.01%	
5160.0000	48.37	5.52	49.07	5.25	-1.43%	5.14%	
5170.0000	48.27	5.47	49.06	5.26	-1.61%	3.99%	
5180.0000	48.26	5.55	49.04	5.28	-1.59%	5.11%	X
5190.0000	48.59	5.56	49.03	5.29	-0.90%	5.10%	
5200.0000	48.35	5.59	49.01	5.30	-1.35%	5.47%	
5210.0000	48.37	5.60	49.00	5.31	-1.29%	5.46%	
5220.0000	47.92	5.53	48.99	5.32	-2.18%	3.95%	
5230.0000	47.94	5.66	48.97	5.33	-2.10%	6.19%	
5240.0000	47.87	5.55	48.96	5.35	-2.23%	3.74%	X
5250.0000	48.01	5.75	48.95	5.36	-1.92%	7.28%	
5260.0000	48.01	5.62	48.93	5.37	-1.88%	4.66%	X
5270.0000	48.03	5.73	48.92	5.38	-1.82%	6.51%	
5280.0000	48.17	5.65	48.91	5.39	-1.51%	4.82%	
5290.0000	48.24	5.67	48.89	5.40	-1.33%	5.00%	
5300.0000	48.02	5.68	48.88	5.42	-1.76%	4.80%	X

X = Interpolated by DASY 4 System

= Test Channel Used

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Thu 26/Feb/2015 14:05:52
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	39.97	1.84
2.3600	39.36	1.72	39.92	1.84
2.3700	39.34	1.73	39.69	1.82
2.3800	39.32	1.74	39.65	1.83
2.3900	39.31	1.75	39.53	1.85
2.4000	39.29	1.76	39.40	1.88
2.4100	39.27	1.76	39.32	1.90
2.4200	39.25	1.77	39.26	1.91
2.4300	39.24	1.78	39.22	1.94
2.4400	39.22	1.79	39.14	1.98
2.4500	39.20	1.80	38.93	1.94
2.4600	39.19	1.81	39.35	1.93
2.4700	39.17	1.82	39.33	1.98
2.4800	39.16	1.83	39.24	1.96
2.4900	39.15	1.84	39.22	1.95
2.5000	39.14	1.85	39.05	1.98
2.5100	39.12	1.87	38.68	1.99
2.5200	39.11	1.88	38.63	2.01
2.5300	39.10	1.89	38.69	2.05
2.5400	39.09	1.90	38.83	2.09
2.5500	39.07	1.91	38.78	2.07

****

Aprel Laboratory
Test Result for UIM Dielectric Parameter
Wed 04/Mar/2015 12:33:42
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	51.56	1.86
2.3600	52.82	1.86	51.78	1.88
2.3700	52.81	1.87	51.53	1.87
2.3800	52.79	1.88	51.56	1.88
2.3900	52.78	1.89	51.43	1.90
2.4000	52.77	1.90	51.19	1.93
2.4100	52.75	1.91	51.38	1.94
2.4200	52.74	1.92	51.20	1.96
2.4300	52.73	1.93	50.97	1.96
2.4400	52.71	1.94	51.32	2.00
2.4500	52.70	1.95	51.17	1.99
2.4600	52.69	1.96	51.09	2.03
2.4700	52.67	1.98	50.96	2.01
2.4800	52.66	1.99	51.10	2.04
2.4900	52.65	2.01	50.93	2.04
2.5000	52.64	2.02	51.13	2.05
2.5100	52.62	2.04	50.86	2.08
2.5200	52.61	2.05	50.86	2.08
2.5300	52.60	2.06	50.87	2.09
2.5400	52.59	2.08	50.82	2.12
2.5500	52.57	2.09	50.81	2.13

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Aprel Laboratory
Test Result for UIM Dielectric Parameter
Fri 06/Mar/2015 11:09:55
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
5.1000	36.10	4.55	34.27	4.36
5.1100	36.09	4.56	34.16	4.32
5.1200	36.08	4.57	34.02	4.39
5.1300	36.07	4.58	33.84	4.43
5.1400	36.05	4.59	33.96	4.37
5.1500	36.04	4.60	34.16	4.48
5.1600	36.03	4.61	33.87	4.44
5.1700	36.02	4.62	33.82	4.50
5.1800	36.01	4.63	33.81	4.41
5.1900	36.00	4.64	33.80	4.54
5.2000	35.99	4.65	33.92	4.49
5.2100	35.97	4.67	33.89	4.60
5.2200	35.96	4.68	33.99	4.55
5.2300	35.95	4.69	33.83	4.59
5.2400	35.94	4.70	33.72	4.58
5.2500	35.93	4.71	33.68	4.57
5.2600	35.92	4.72	33.68	4.61
5.2700	35.91	4.73	33.72	4.52
5.2800	35.89	4.74	33.52	4.62
5.2900	35.88	4.75	33.46	4.58
5.3000	35.87	4.76	33.81	4.65

****

Aprel Laboratory
Test Result for UIM Dielectric Parameter
Tue 10/Mar/2015 11:23:14
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
5.1000	49.15	5.18	48.28	5.37
5.1100	49.14	5.19	48.34	5.45
5.1200	49.12	5.21	48.38	5.45
5.1300	49.11	5.22	48.61	5.32
5.1400	49.10	5.23	48.64	5.49
5.1500	49.08	5.24	48.11	5.45
5.1600	49.07	5.25	48.37	5.52
5.1700	49.06	5.26	48.27	5.47
5.1800	49.04	5.28	48.26	5.55
5.1900	49.03	5.29	48.59	5.56
5.2000	49.01	5.30	48.35	5.59
5.2100	49.00	5.31	48.37	5.60
5.2200	48.99	5.32	47.92	5.53
5.2300	48.97	5.33	47.94	5.66
5.2400	48.96	5.35	47.87	5.55
5.2500	48.95	5.36	48.01	5.75
5.2600	48.93	5.37	48.01	5.62
5.2700	48.92	5.38	48.03	5.73
5.2800	48.91	5.39	48.17	5.65
5.2900	48.89	5.40	48.24	5.67
5.3000	48.88	5.42	48.02	5.68

13.0 SYSTEM VERIFICATION TEST RESULTS

Table 13.0

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	
26 Feb 2015	2450	Head	22.2	23	13%	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
11.90	12.70	-6.30%	**5.40**	5.90	-8.47%	38.93	39.20	-0.69%	1.94	1.80	7.78%

Table 13.1

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	
4 March 2015	2450	Body	21.0	23	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
11.80	12.70	-7.09%	**5.41**	5.91	-8.46%	51.17	52.70	-2.90%	1.99	1.95	2.05%

Table 13.2

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		S/N	
6 March 2015	5200	Head	21.7	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
7.69	4.29%	**2.35**	2.20	6.82%	33.92	35.99	-5.75%	4.49	4.65	-3.44%	7.69

Table 13.3

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
10 March 2015	5200	Body	21.2	24	1300%	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
6.90	7.32	-5.74%	1.99	2.05	-2.93%	48.35	49.01	-1.35%	5.59	5.30	5.47%

14.0 MEASUREMENT SYSTEM SPECIFICATIONS

Table 14.0

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	±)ζΗΓ 3 οτ ζΗΜ 03(Βδ 2.0
Phantom	
Type	ELI Elliptical Planar Phantom
Shell Material	Fiberglass
Thickness	2mm +/- .2mm
Volume	> 30 Liter

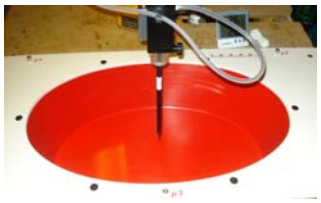
Table 14.1

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 Elliptical Planar 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°. 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**

15.0 TEST EQUIPMENT LIST

Table 15.0

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	9 April 2014	Biennial
-EX3DV6 E-Field Probe	00017	3600	15 April 2014	Annual
-D450V3 Validation Dipole	00221	1068	27 April 2014	Triennial
ELI Elliptical Planar Phantom	00247	-	CNR	CNR
HP 85070C Dielectric Probe Kit	00033	none	CNR	CNR
Gigatronics 8652A Power Meter	00110	1835801	17 March 2014	Biennial
Gigatronics 80701A Power Sensor	00249	1834473	17 March 2014	Biennial
Gigatronics 80701A Power Sensor	00248	1833687	17 March 2014	Biennial
HP 8753ET Network Analyzer	00134	US39170292	22 Oct 2014	Biennial
Rohde & Schwarz SMR20 Signal Generator	00006	100104	8 May 2014	Biennial
Amplifier Research 5S1G4 Power Amplifier	00106	26235	CNR	CNR

CNR = Calibration Not Required

APPENDIX A - SAR MEASUREMENT PLOTS

Plot F48

Date/Time: 02/03/2015 3:57:30 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

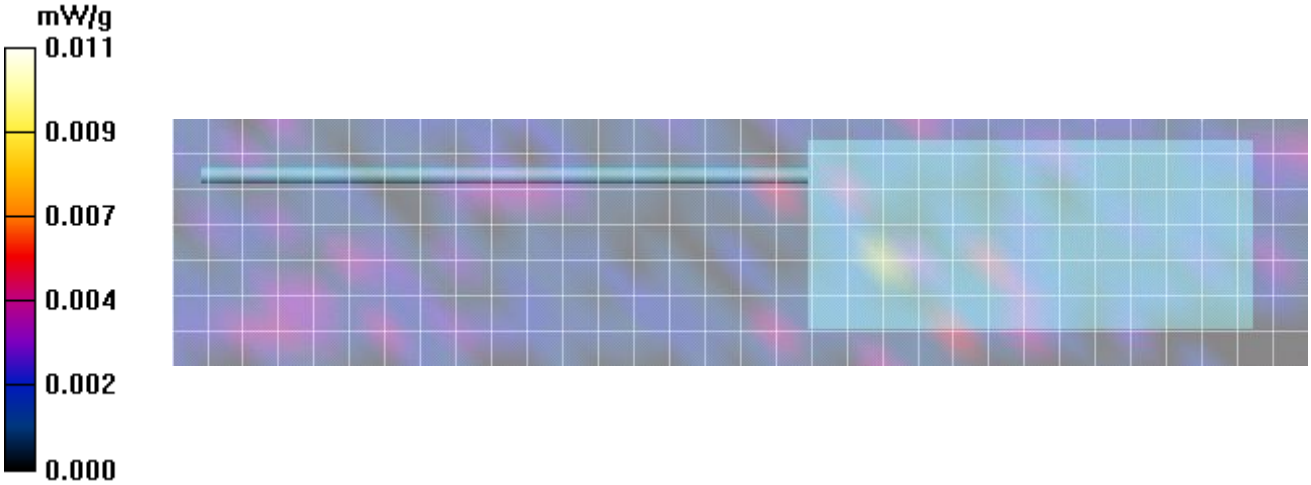
F48 Head XL-200, 2412MHz ch1 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.007 mW/g

F48 Head XL-200, 2412MHz ch1 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.000 V/m; Power Drift = 999.0 dB
Peak SAR (extrapolated) = 0.026 W/kg
SAR(1 g) = 0.00361 mW/g; SAR(10 g) = 0.00165 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.011 mW/g



Plot F49

Date/Time: 02/03/2015 4:29:01 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2437 MHz; σ = 1.97 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

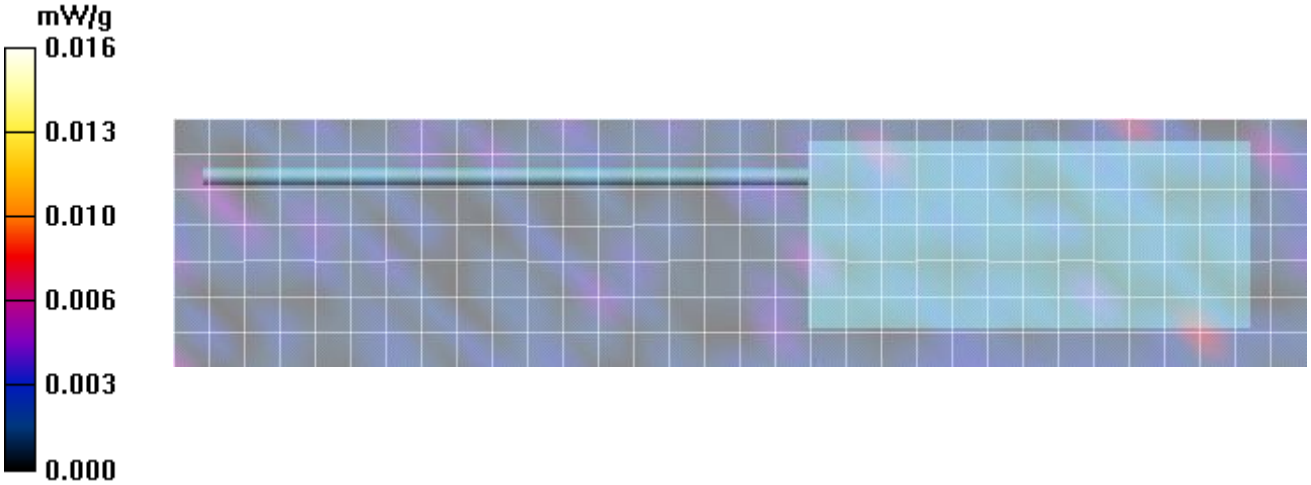
F49 Head XL-200, 2437MHz ch6 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

F49 Head XL-200, 2437MHz ch6 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.17 V/m; Power Drift = -7.39 dB
Peak SAR (extrapolated) = 0.017 W/kg
SAR(1 g) = 0.00355 mW/g; SAR(10 g) = 0.00146 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.016 mW/g



Plot F50

Date/Time: 02/03/2015 5:04:56 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2462 MHz; σ = 1.94 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

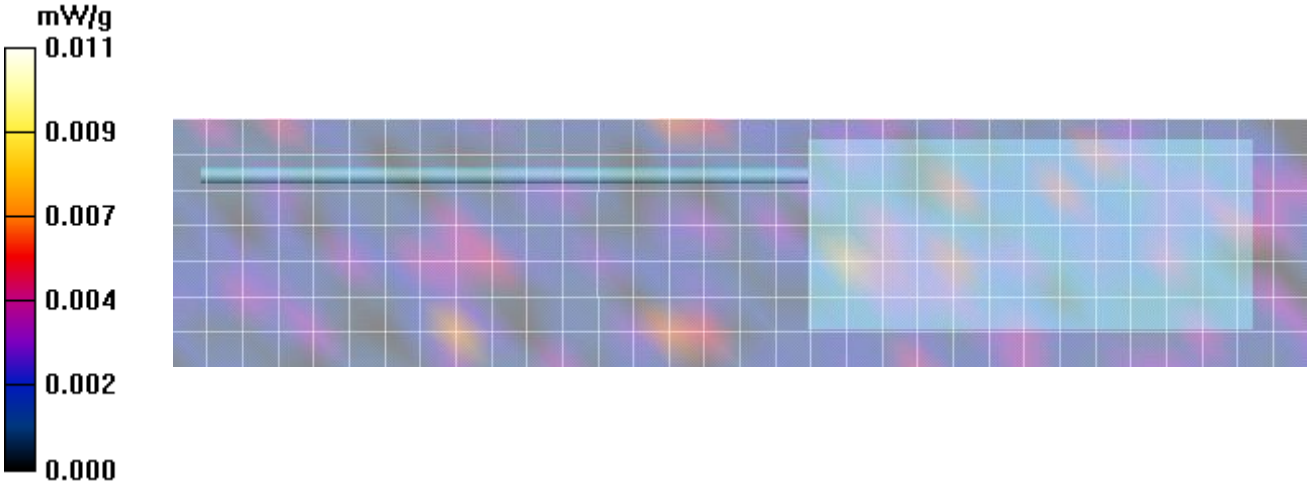
F50 Head XL-200, 2462MHz ch11 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.007 mW/g

F50 Head XL-200, 2462MHz ch11 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.16 V/m; Power Drift = -9.34 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.00296 mW/g; SAR(10 g) = 0.00117 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.011 mW/g



Plot F51

Date/Time: 02/03/2015 5:36:45 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2472 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2472 MHz; σ = 1.98 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

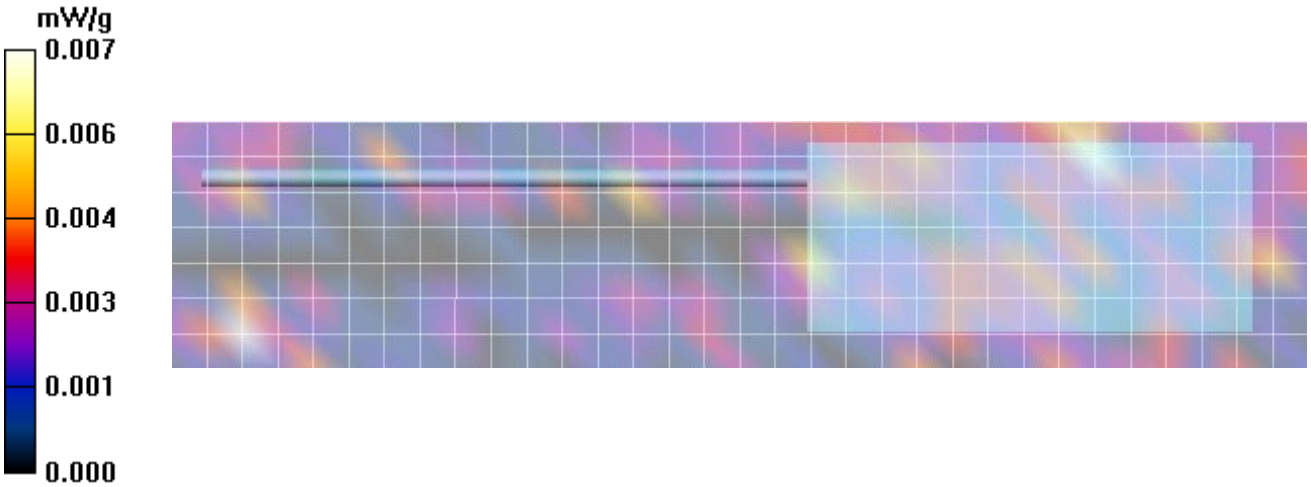
F51 Head XL-200, 2472MHz ch13 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

F51 Head XL-200, 2472MHz ch13 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.869 V/m; Power Drift = -2.95 dB
Peak SAR (extrapolated) = 0.011 W/kg
SAR(1 g) = 0.00203 mW/g; SAR(10 g) = 0.000949 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.007 mW/g



Plot F52

Date/Time: 03/03/2015 11:06:56 AM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

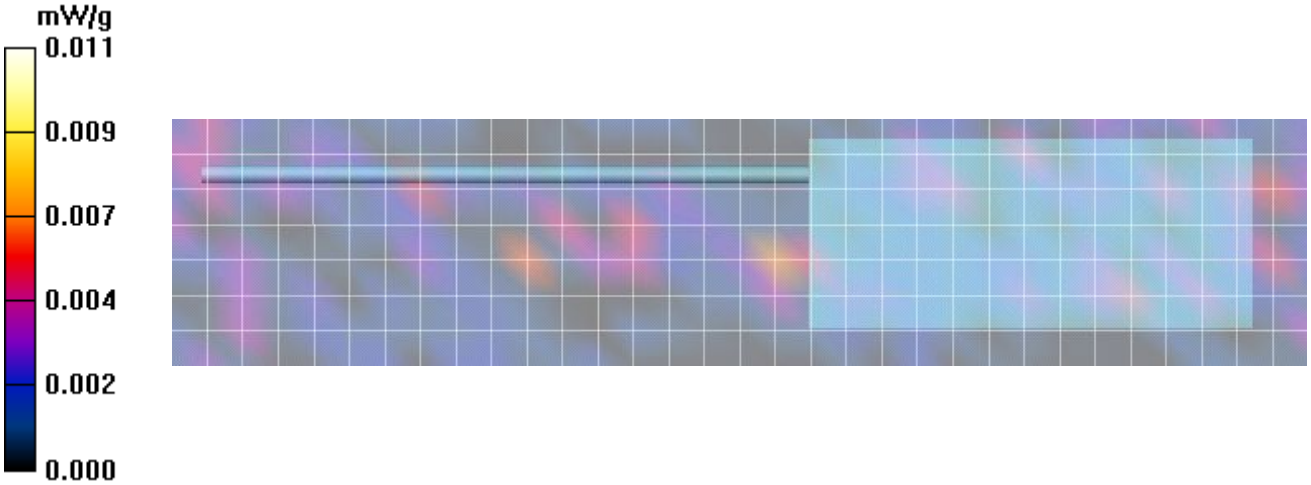
F52 Head XL-200, 2412MHz ch1 4000-1 SCAN/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.007 mW/g

F52 Head XL-200, 2412MHz ch1 4000-1 SCAN/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.781 V/m; Power Drift = -0.580 dB
Peak SAR (extrapolated) = 0.026 W/kg
SAR(1 g) = 0.00375 mW/g; SAR(10 g) = 0.002 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.011 mW/g



Plot F53

Date/Time: 03/03/2015 2:35:45 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2480 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used: f = 2480 MHz; σ = 1.96 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F53 Head XL-200, 2480MHz BT 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.007 mW/g

F53 Head XL-200, 2480MHz BT 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.861 V/m; Power Drift = -7.22 dB
Peak SAR (extrapolated) = 0.018 W/kg
SAR(1 g) = 0.0034 mW/g; SAR(10 g) = 0.00145 mW/g

Maximum value of SAR (measured) = 0.012 mW/g

Plot B53EU

Date/Time: 03/03/2015 11:39:14 AM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

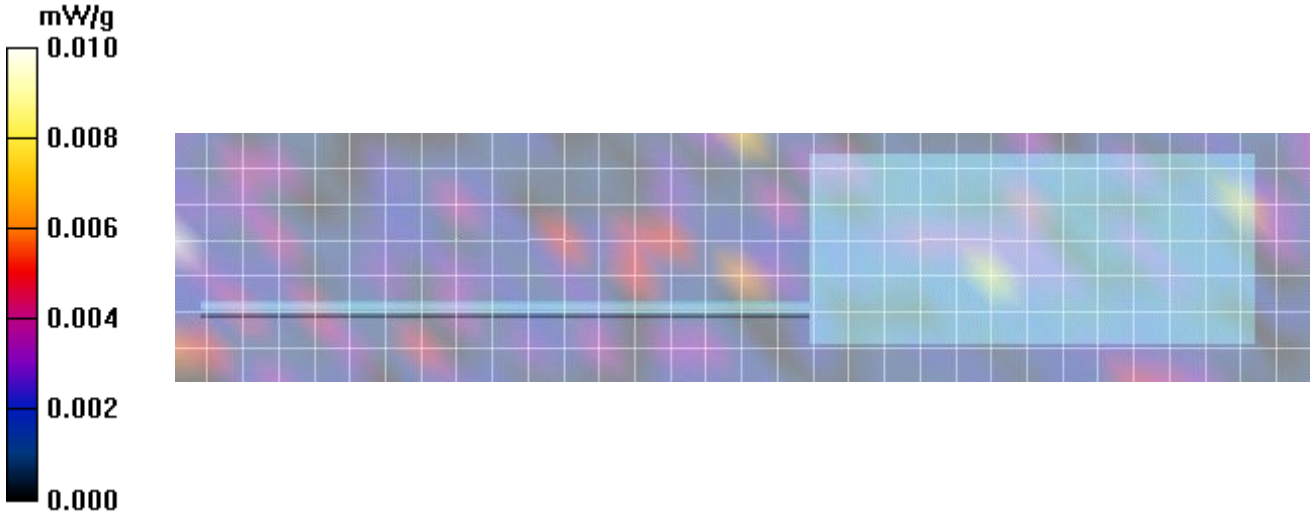
B53EU BodyEU XL-200, 2412MHz ch1 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

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

B53EU BodyEU XL-200, 2412MHz ch1 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.711 V/m; Power Drift = 3.89 dB
Peak SAR (extrapolated) = 0.014 W/kg
SAR(1 g) = 0.00315 mW/g; SAR(10 g) = 0.00137 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.010 mW/g



Plot B54EU

Date/Time: 03/03/2015 12:16:57 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2437 MHz; σ = 1.97 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

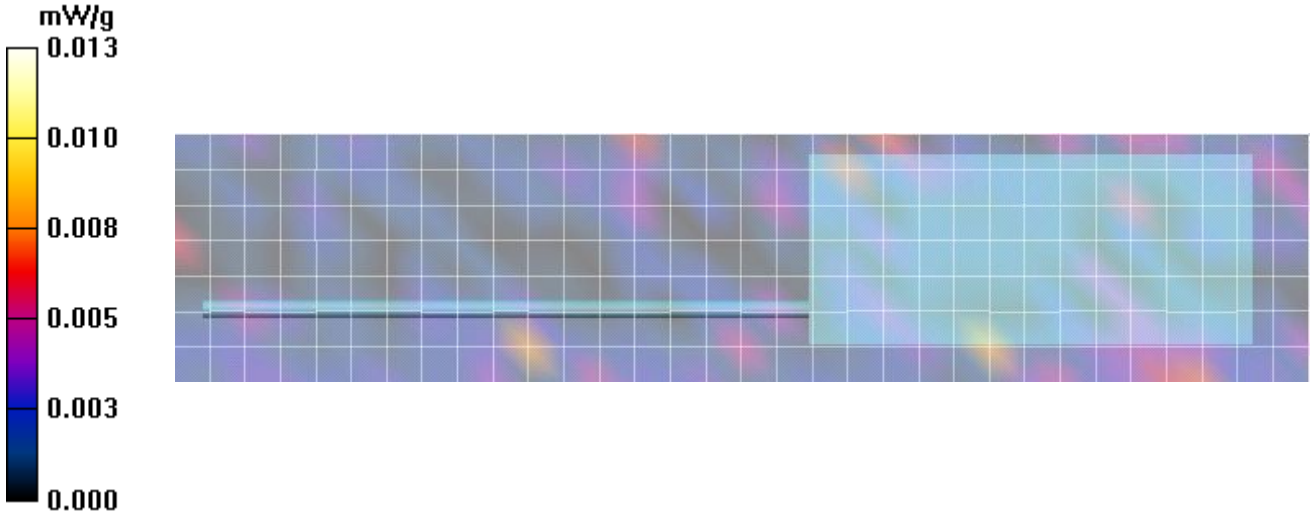
B54EU BodyEU XL-200, 2437MHz ch6 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B54EU BodyEU XL-200, 2437MHz ch6 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.512 V/m; Power Drift = -0.217 dB
Peak SAR (extrapolated) = 0.018 W/kg
SAR(1 g) = 0.00587 mW/g; SAR(10 g) = 0.00221 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.013 mW/g



Plot B55EU

Date/Time: 03/03/2015 12:46:03 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2462 MHz; σ = 1.94 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

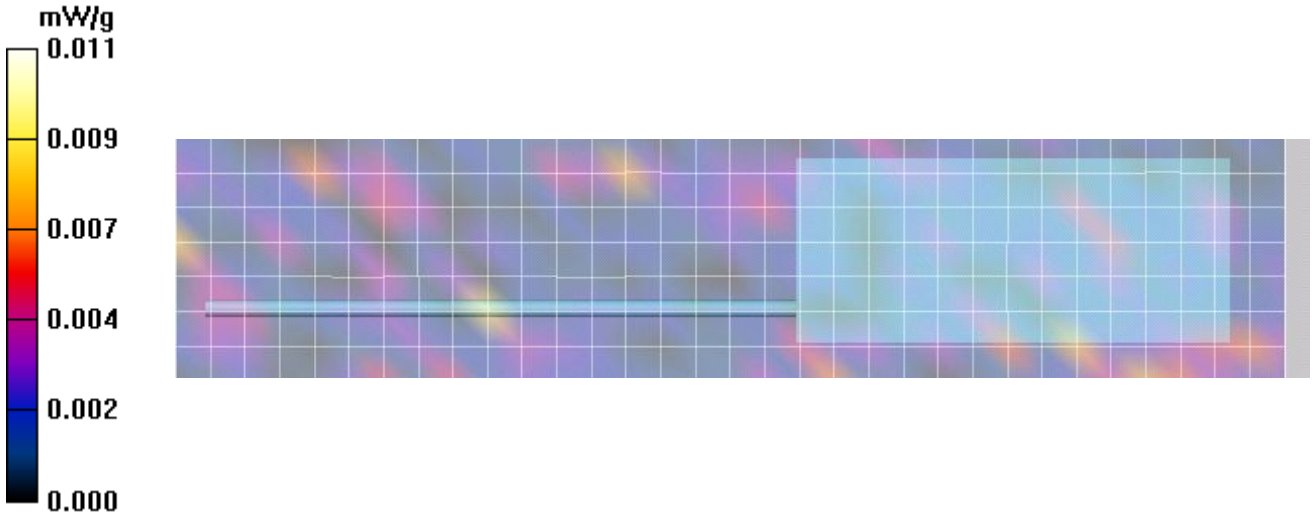
B55EU BodyEU XL-200, 2462MHz ch11 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B55EU BodyEU XL-200, 2462MHz ch11 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.792 V/m; Power Drift = -8.36 dB
Peak SAR (extrapolated) = 0.024 W/kg
SAR(1 g) = 0.00299 mW/g; SAR(10 g) = 0.00143 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.011 mW/g



Plot B56EU

Date/Time: 03/03/2015 1:22:52 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2472 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2472 MHz; σ = 1.98 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

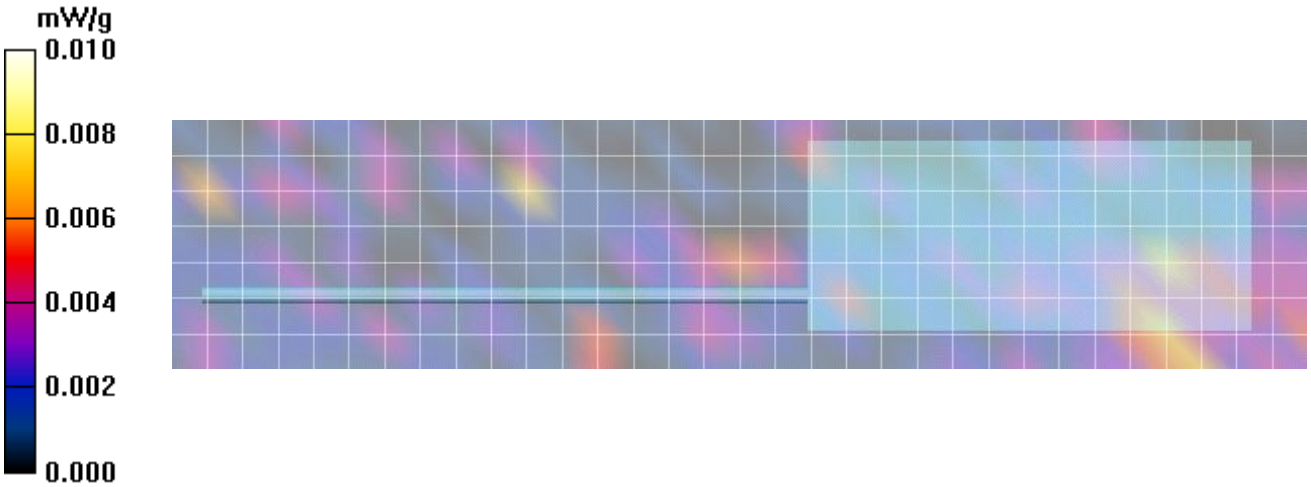
B56EU BodyEU XL-200, 2472MHz ch13 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B56EU BodyEU XL-200, 2472MHz ch13 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.31 V/m; Power Drift = -1.40 dB
Peak SAR (extrapolated) = 0.015 W/kg
SAR(1 g) = 0.00505 mW/g; SAR(10 g) = 0.00163 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.010 mW/g



Plot B57EU

Date/Time: 03/03/2015 1:58:37 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2437 MHz; σ = 1.97 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

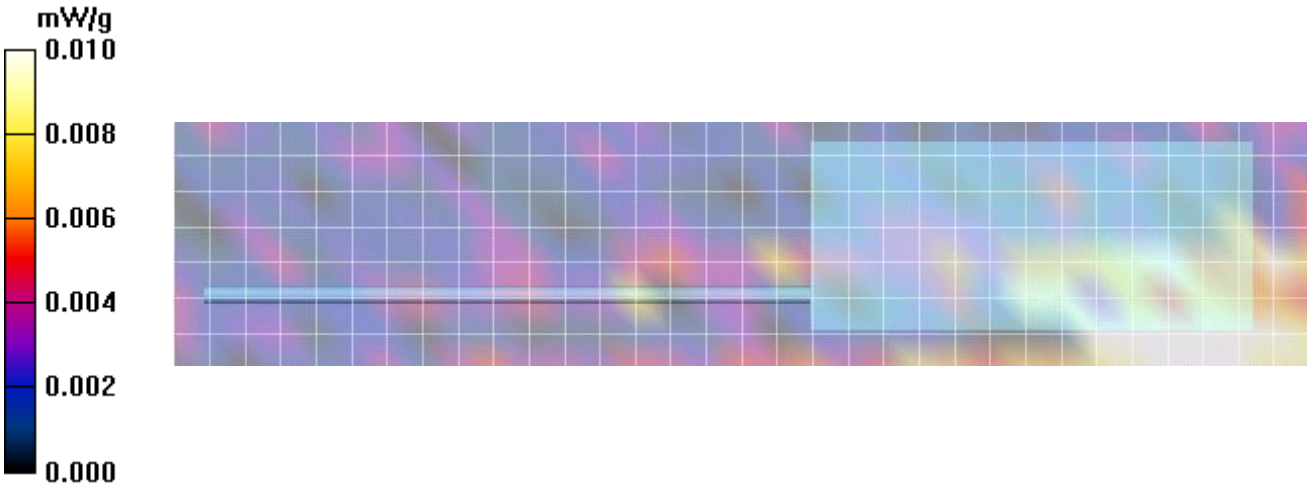
B57EU BodyEU XL-200, 2437MHz ch6 4000-1 SCAN/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.015 mW/g

B57EU BodyEU XL-200, 2437MHz ch6 4000-1 SCAN/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.625 V/m; Power Drift = 4.49 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.0039 mW/g; SAR(10 g) = 0.00134 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.010 mW/g



Plot B58EU

Date/Time: 03/03/2015 3:11:30 PM

2450 Head 3 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 3March 2015 Ambient Temp: 22C; Fluid Temp: 20.1C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2480 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used: f = 2480 MHz; σ = 1.96 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3

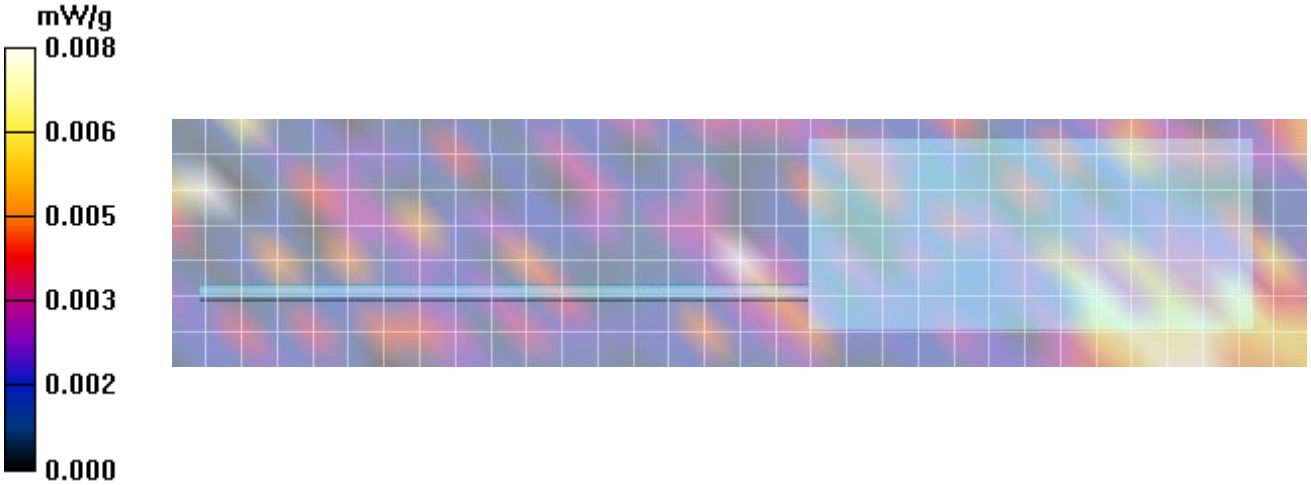
- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B58EU BodyEU XL-200, 2480MHz BT 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.008 mW/g

B58EU BodyEU XL-200, 2480MHz BT 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.000 V/m; Power Drift = 999.0 dB
Peak SAR (extrapolated) = 0.032 W/kg
SAR(1 g) = 0.00276 mW/g; SAR(10 g) = 0.00113 mW/g



Plot B53

Date/Time: 04/03/2015 4:42:57 PM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2412 MHz; σ = 1.81 mho/m; ε_r = 50.5; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

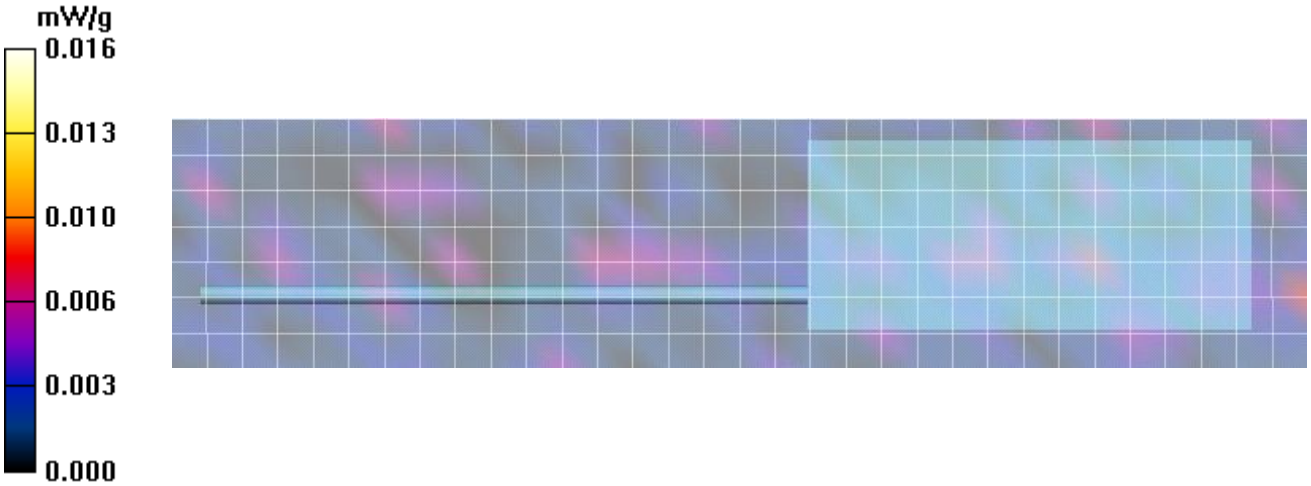
B53 Body XL-200, 2412MHz ch1 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B53 Body XL-200, 2412MHz ch1 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.839 V/m; Power Drift = -3.73 dB
Peak SAR (extrapolated) = 0.018 W/kg
SAR(1 g) = 0.00382 mW/g; SAR(10 g) = 0.00244 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.016 mW/g



Plot B54

Date/Time: 04/03/2015 5:11:44 PM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; ε_r = 50.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

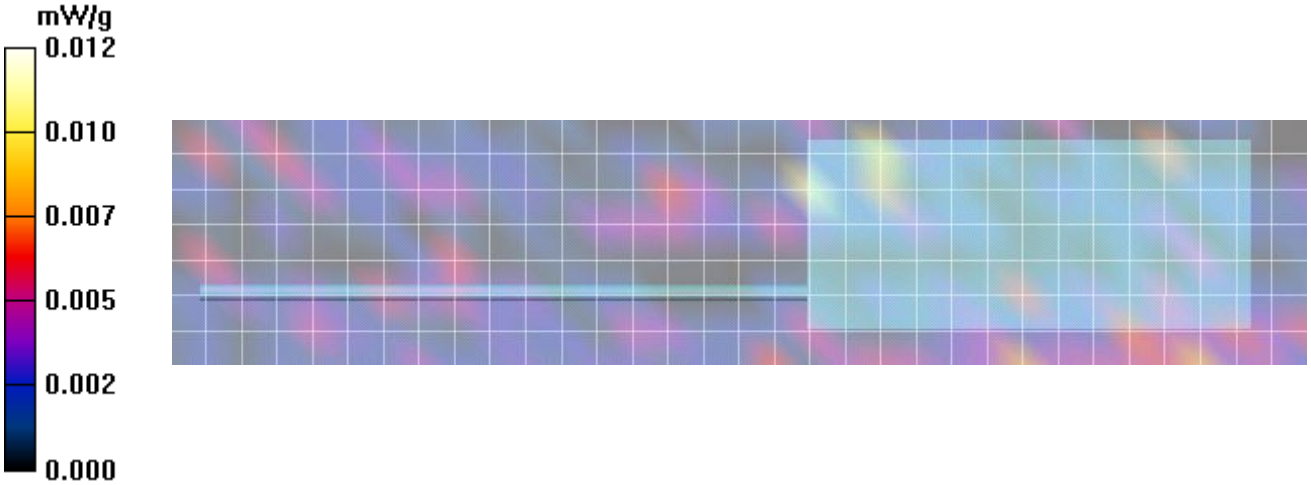
B54 Body XL-200, 2437MHz ch6 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.010 mW/g

B54 Body XL-200, 2437MHz ch6 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.49 V/m; Power Drift = 1.32 dB
Peak SAR (extrapolated) = 0.015 W/kg
SAR(1 g) = 0.00506 mW/g; SAR(10 g) = 0.00256 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.012 mW/g



Plot B55

Date/Time: 05/03/2015 11:02:15 AM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2462 MHz; σ = 1.87 mho/m; ε_r = 50.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

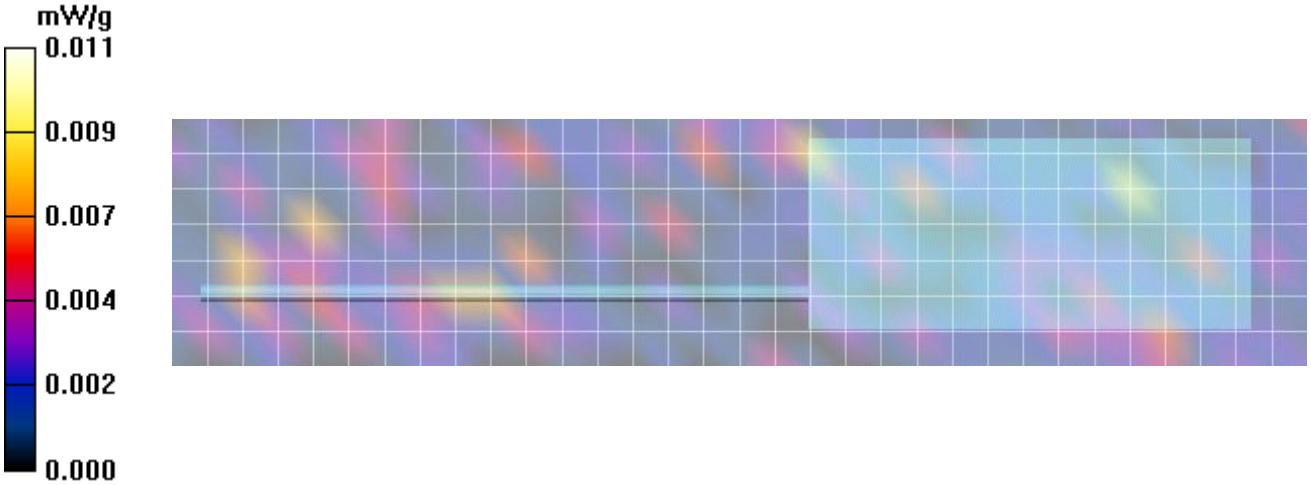
B55 Body XL-200, 2462MHz ch11 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B55 Body XL-200, 2462MHz ch11 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.757 V/m; Power Drift = 6.15 dB
Peak SAR (extrapolated) = 0.033 W/kg
SAR(1 g) = 0.00356 mW/g; SAR(10 g) = 0.0017 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.011 mW/g



Plot B56

Date/Time: 05/03/2015 11:32:07 AM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2474 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2474 MHz; σ = 1.87 mho/m; ε_r = 50.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

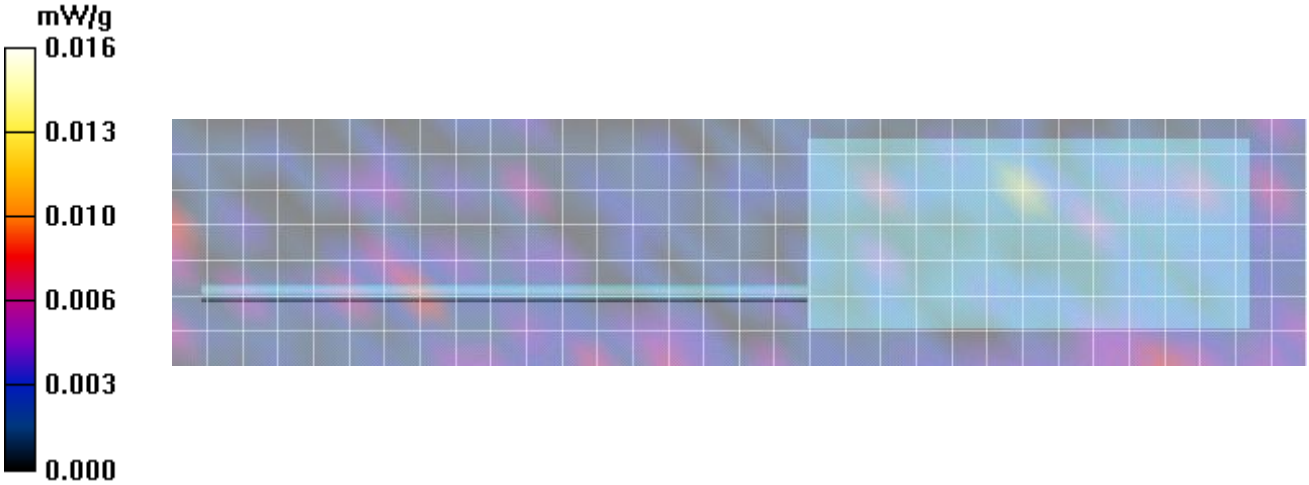
B56 Body XL-200, 2472MHz ch134000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.010 mW/g

B56 Body XL-200, 2472MHz ch134000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.28 V/m; Power Drift = -2.92 dB
Peak SAR (extrapolated) = 0.031 W/kg
SAR(1 g) = 0.00451 mW/g; SAR(10 g) = 0.00251 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.016 mW/g



Plot B57

Date/Time: 05/03/2015 12:43:54 PM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; ε_r = 50.3; ρ = 1000 kg/m^3

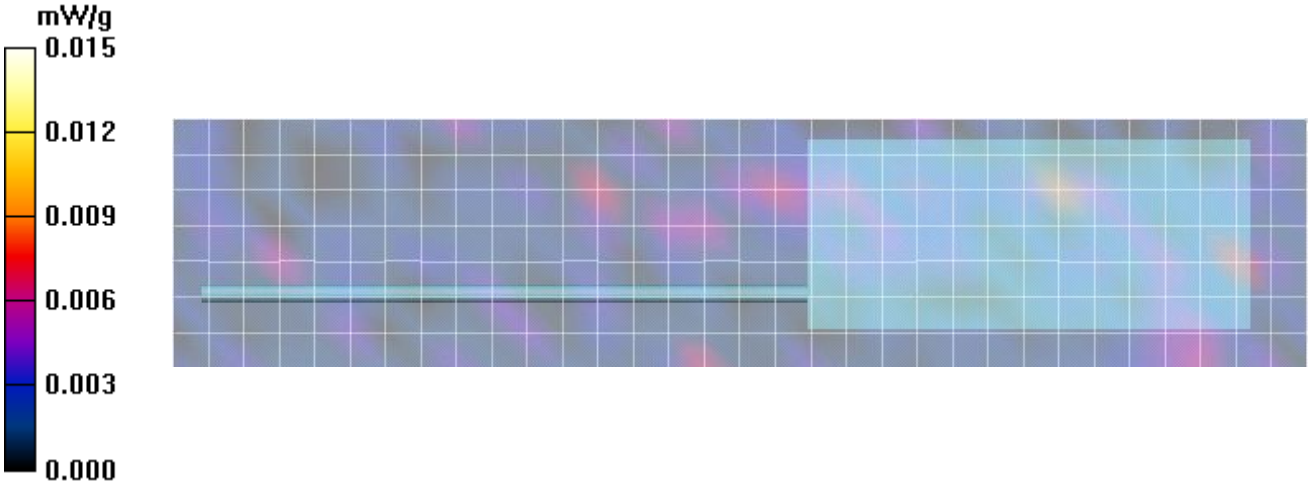
- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B57 Body XL-200, 2437MHz ch6 4000-1 SCAN/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.008 mW/g

B57 Body XL-200, 2437MHz ch6 4000-1 SCAN/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.971 V/m; Power Drift = -4.99 dB
Peak SAR (extrapolated) = 0.023 W/kg
SAR(1 g) = 0.00451 mW/g; SAR(10 g) = 0.00234 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
.
Maximum value of SAR (measured) = 0.015 mW/g



Plot B58

Date/Time: 05/03/2015 1:23:17 PM

2450 Body 5 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 5 March 2015 Ambient Temp: 22C; Fluid Temp: 20.6C; Humidity: 11%

Procedure Notes:

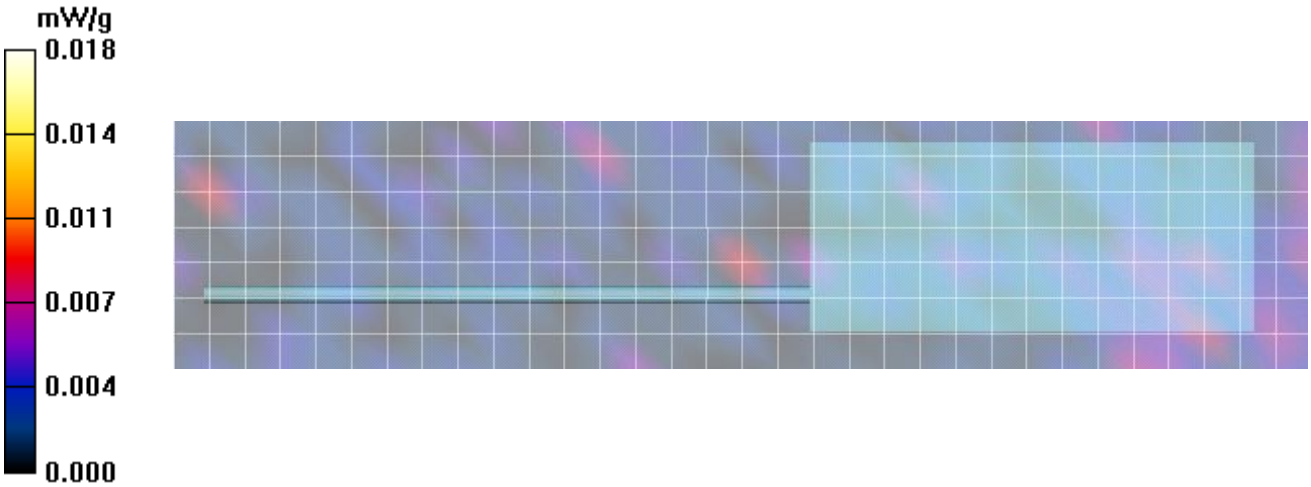
Communication System: CW
Frequency: 2480 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used: f = 2480 MHz; σ = 1.86 mho/m; ε_r = 50.4; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B58 Body XL-200, 2480MHz BT 4000-1 SYS/Area Scan (8x33x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.009 mW/g

B58 Body XL-200, 2480MHz BT 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.549 V/m; Power Drift = -2.37 dB
Peak SAR (extrapolated) = 0.018 W/kg
SAR(1 g) = 0.00639 mW/g; SAR(10 g) = 0.00332 mW/g

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



Plot F54

Date/Time: 09/03/2015 1:20:07 PM

5200 Head 9 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

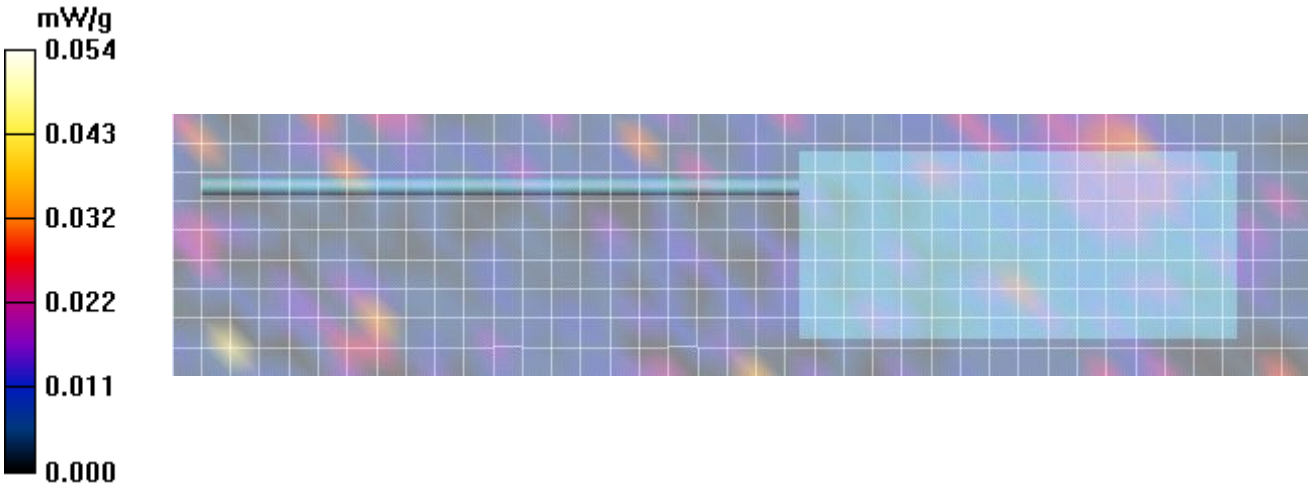
Communication System: CW
Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5180 MHz; σ = 4.41 mho/m; ε_r = 33.8; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F54 Face XL-200, 5180MHz ch36 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.044 mW/g

F54 Face XL-200, 5180MHz ch36 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.802 V/m; Power Drift = -999.0 dB
Peak SAR (extrapolated) = 0.060 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.010 mW/g

Maximum value of SAR (measured) = 0.054 mW/g



Plot F55

Date/Time: 09/03/2015 2:00:18 PM

5200 Head 9 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

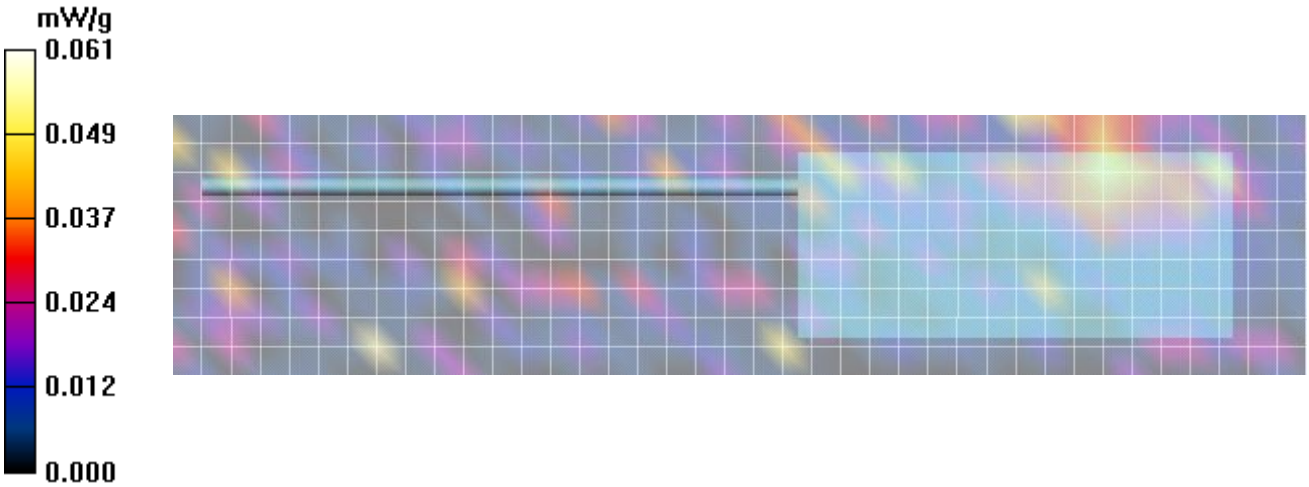
Communication System: CW
Frequency: 5240 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5240 MHz; σ = 4.58 mho/m; ε_r = 33.7; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F55 Face XL-200, 5240MHz ch48 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.053 mW/g

F55 Face XL-200, 5240MHz ch48 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.13 V/m; Power Drift = -9.11 dB
Peak SAR (extrapolated) = 0.061 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.00807 mW/g

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



Plot F56

Date/Time: 09/03/2015 2:37:20 PM

5200 Head 9 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

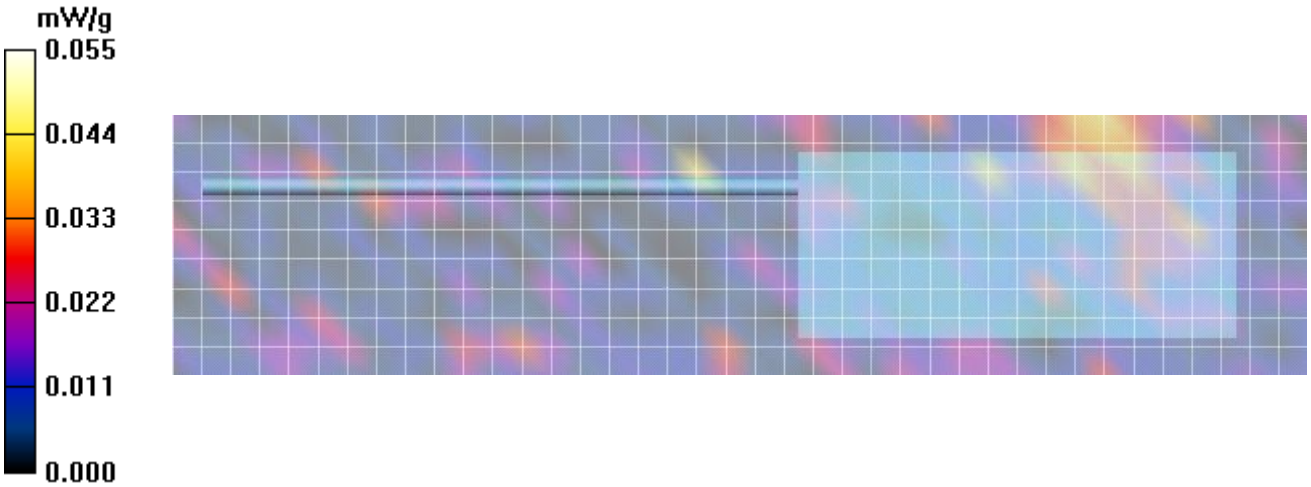
Communication System: CW
Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5260 MHz; σ = 4.61 mho/m; ε_r = 33.7; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F56 Face XL-200, 5260MHz ch52 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.045 mW/g

F56 Face XL-200, 5260MHz ch52 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.76 V/m; Power Drift = 0.187 dB
Peak SAR (extrapolated) = 0.055 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00795 mW/g

Maximum value of SAR (measured) = 0.055 mW/g



Plot F57

Date/Time: 09/03/2015 3:20:41 PM

5200 Head 9 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

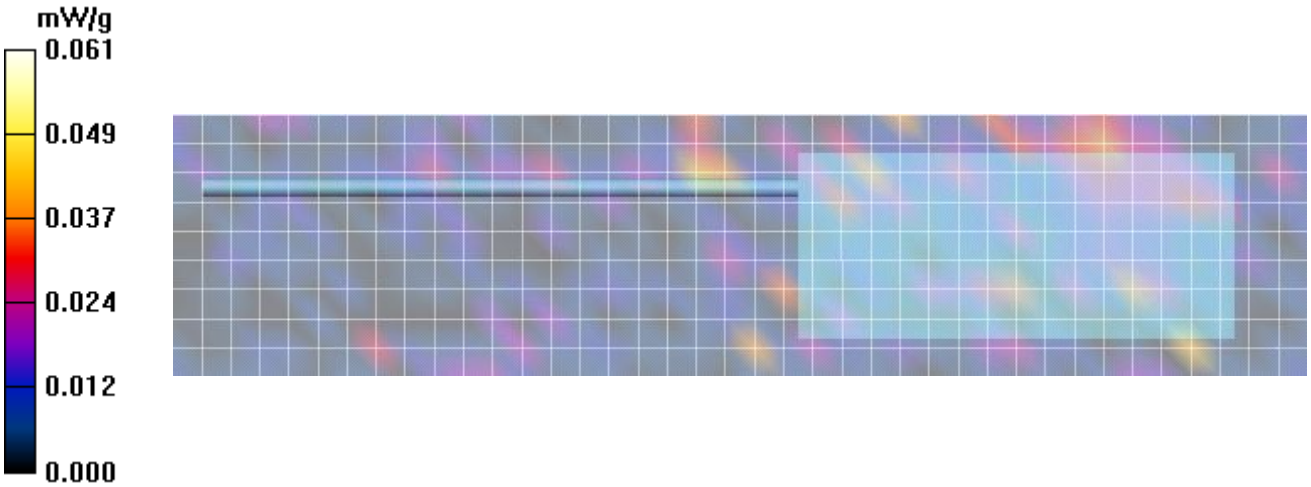
Communication System: CW
Frequency: 5300 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5300 MHz; σ = 4.65 mho/m; ε_r = 33.8; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F57 Face XL-200, 5300MHz ch60 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.043 mW/g

F57 Face XL-200, 5300MHz ch60 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.545 V/m; Power Drift = 4.87 dB
Peak SAR (extrapolated) = 0.076 W/kg
SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00878 mW/g

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



Plot F58

Date/Time: 09/03/2015 4:16:36 PM

5200 Head 9 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

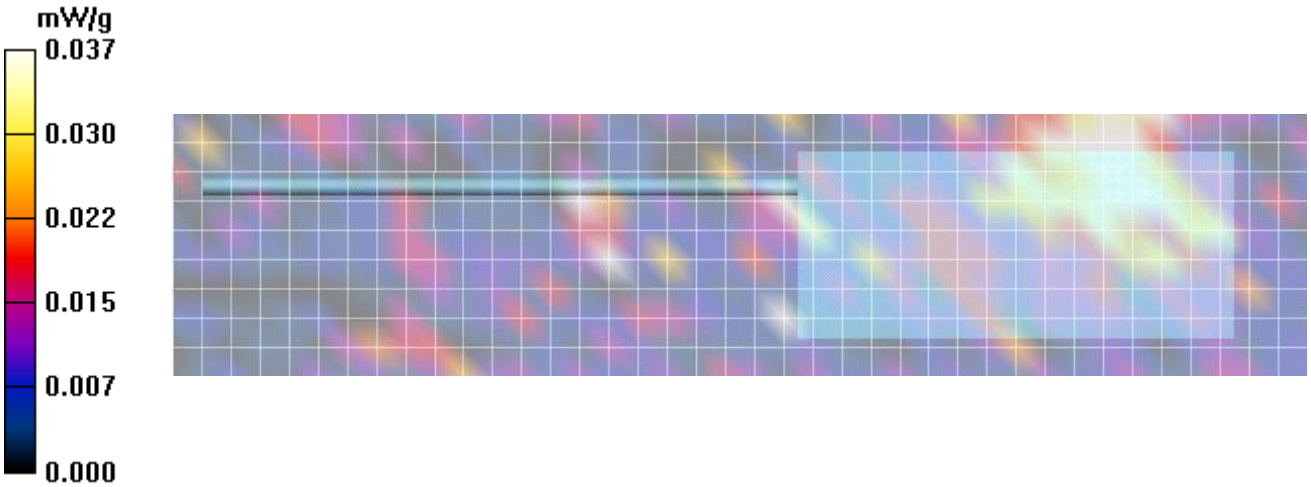
Procedure Notes:

Communication System: CW
Frequency: 5240 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5240 MHz; σ = 4.58 mho/m; ε_r = 33.7; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F58 Face XL-200, 5240MHz ch48 4000-1 SCAN/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.047 mW/g

F58 Face XL-200, 5240MHz ch48 4000-1 SCAN/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.38 V/m; Power Drift = -1.98 dB
Peak SAR (extrapolated) = 0.053 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00836 mW/g
.
Maximum value of SAR (measured) = 0.037 mW/g



Plot B59

Date/Time: 10/03/2015 1:20:48 PM

5200 Body 10 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

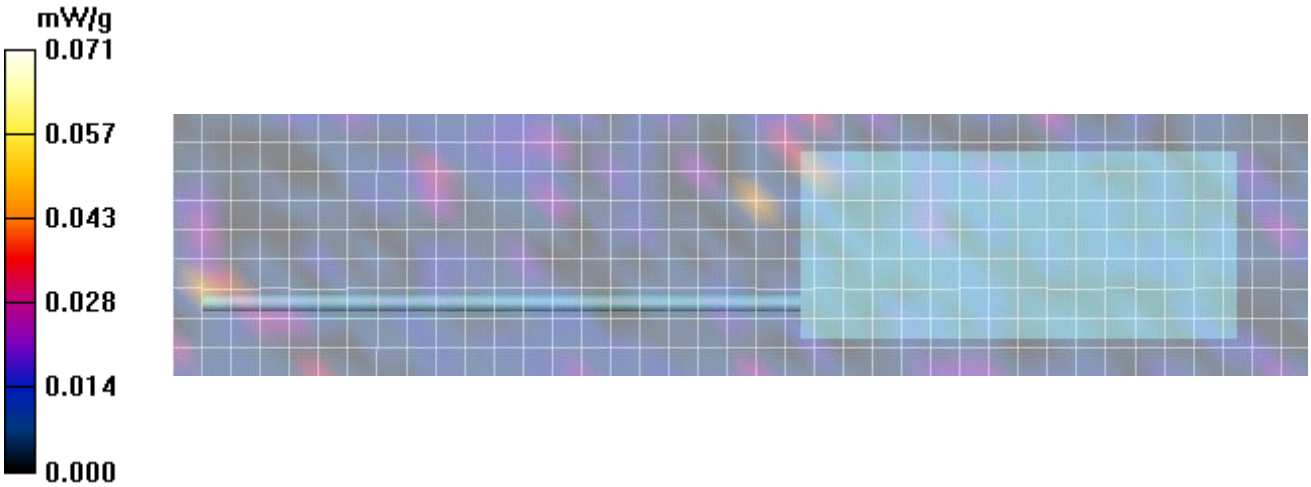
Procedure Notes:

Communication System: CW
Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5180 MHz; σ = 5.55 mho/m; ε_r = 48.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B59 Body XL-200, 5180MHz ch36 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.046 mW/g

B59 Body XL-200, 5180MHz ch36 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.881 V/m; Power Drift = -10.1 dB
Peak SAR (extrapolated) = 0.076 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00889 mW/g
.
Maximum value of SAR (measured) = 0.071 mW/g



Plot B60

Date/Time: 10/03/2015 1:59:54 PM

5200 Body 10 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

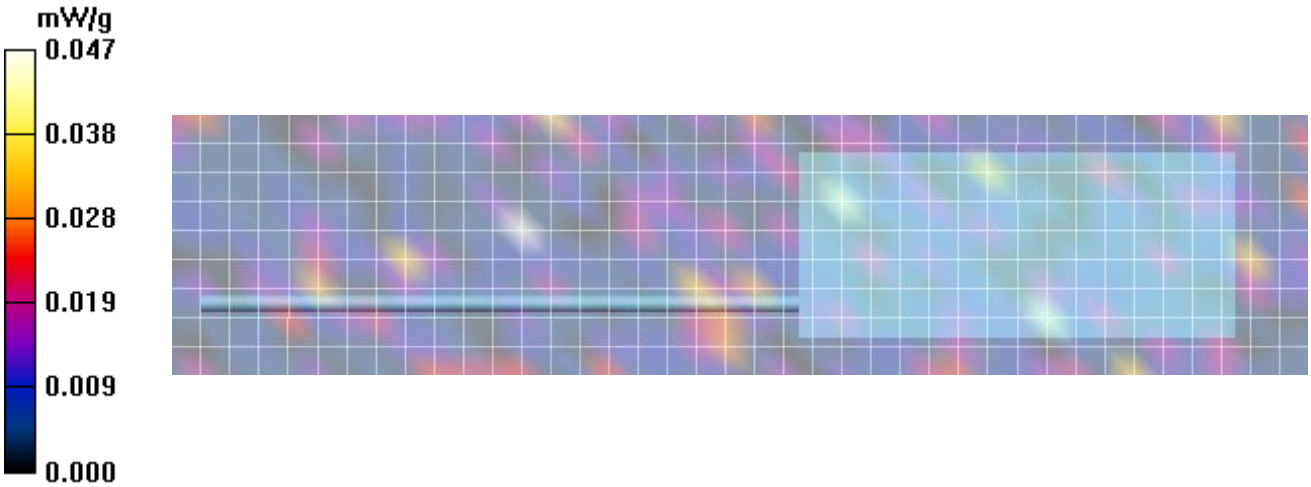
Communication System: CW
Frequency: 5240 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5240 MHz; σ = 5.55 mho/m; ε_r = 47.9; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B60 Body XL-200, 5240MHz ch48 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.049 mW/g

B60 Body XL-200, 5240MHz ch48 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.08 V/m; Power Drift = -0.533 dB
Peak SAR (extrapolated) = 0.088 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00799 mW/g

Maximum value of SAR (measured) = 0.047 mW/g



Plot B61

Date/Time: 10/03/2015 2:42:22 PM

5200 Body 10 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

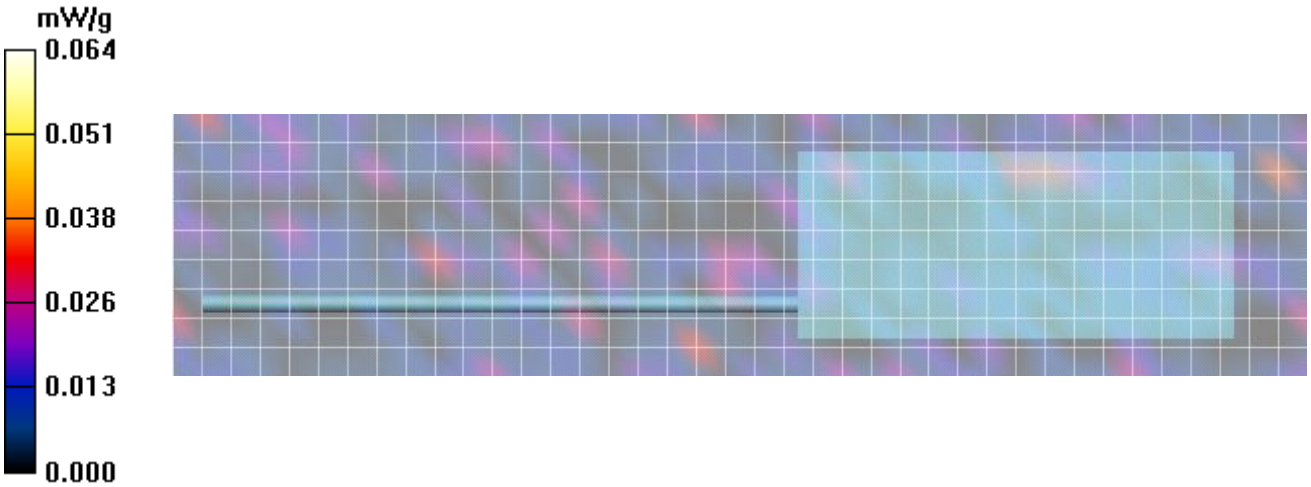
Procedure Notes:

Communication System: CW
Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5260 MHz; σ = 5.62 mho/m; ε_r = 48; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B61 Body XL-200, 5260MHz ch52 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.036 mW/g

B61 Body XL-200, 5260MHz ch52 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.849 V/m; Power Drift = 1.19 dB
Peak SAR (extrapolated) = 0.069 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.013 mW/g
.
Maximum value of SAR (measured) = 0.064 mW/g



Plot B62

Date/Time: 10/03/2015 3:18:37 PM

5200 Body 10 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

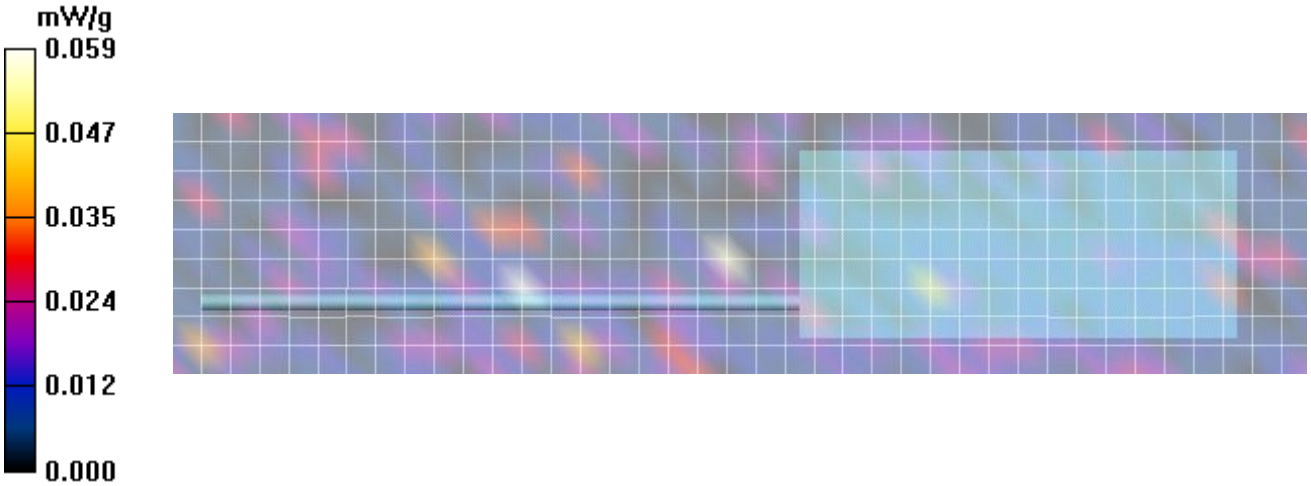
Communication System: CW
Frequency: 5300 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5300 MHz; σ = 5.68 mho/m; ε_r = 48; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B62 Body XL-200, 5300MHz ch60 4000-1 SYS/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.064 mW/g

B62 Body XL-200, 5300MHz ch60 4000-1 SYS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.42 V/m; Power Drift = -5.90 dB
Peak SAR (extrapolated) = 0.088 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.0082 mW/g

Maximum value of SAR (measured) = 0.059 mW/g



Plot B63

Date/Time: 10/03/2015 3:55:38 PM

5200 Body 10 March 2015

DUT: Harris; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 9 March 2015 Ambient Temp: 22C; Fluid Temp: 19.5C; Humidity: 14%

Procedure Notes:

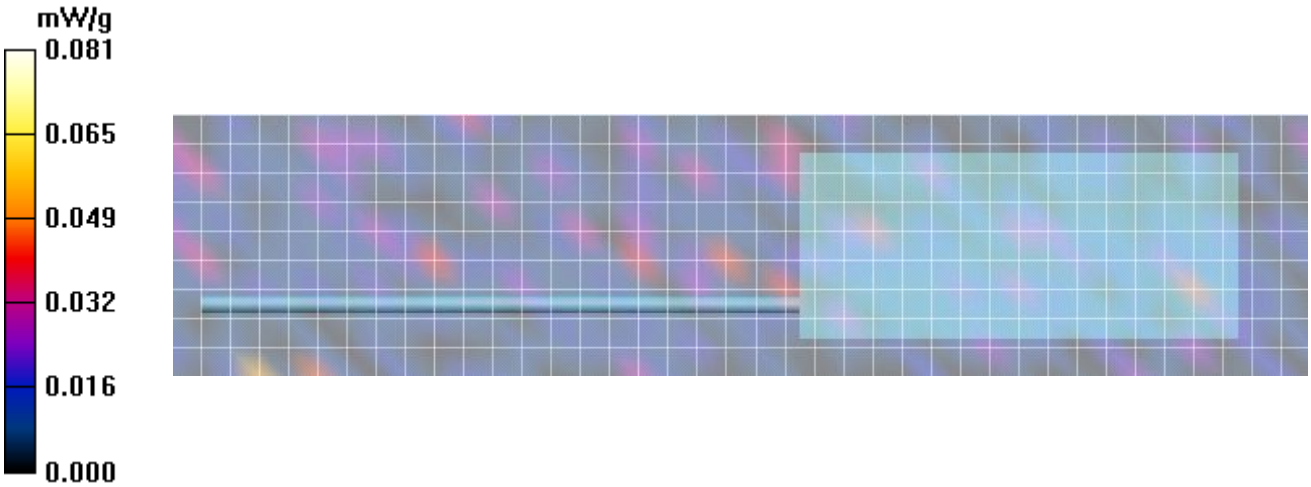
Communication System: CW
Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5260 MHz; σ = 5.62 mho/m; ε_r = 48; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B63 Body XL-200, 5260MHz ch52 4000-1 SCAN/Area Scan (10x40x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.055 mW/g

B63 Body XL-200, 5260MHz ch52 4000-1 SCAN/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.44 V/m; Power Drift = -8.22 dB
Peak SAR (extrapolated) = 0.099 W/kg
SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.020 mW/g

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



APPENDIX B - SYSTEM VERIFICATION MEASUREMENT PLOTS

Date/Time: 26/02/2015 2:12:18 PM

SPC 2450H 26 Feb 2015

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 825; Calibrated: 25/04/2012

Program Notes: 26 Feb 2015 Ambient Temp: 23C; Fluid Temp: 22.2C; Humidity: 13%

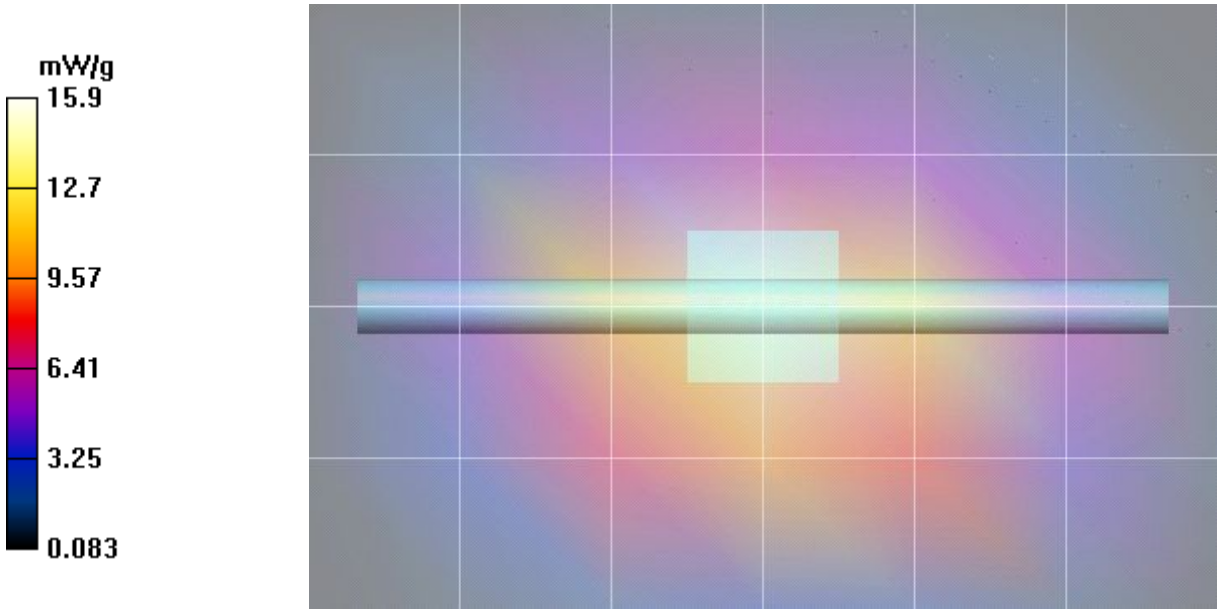
Procedure Notes:

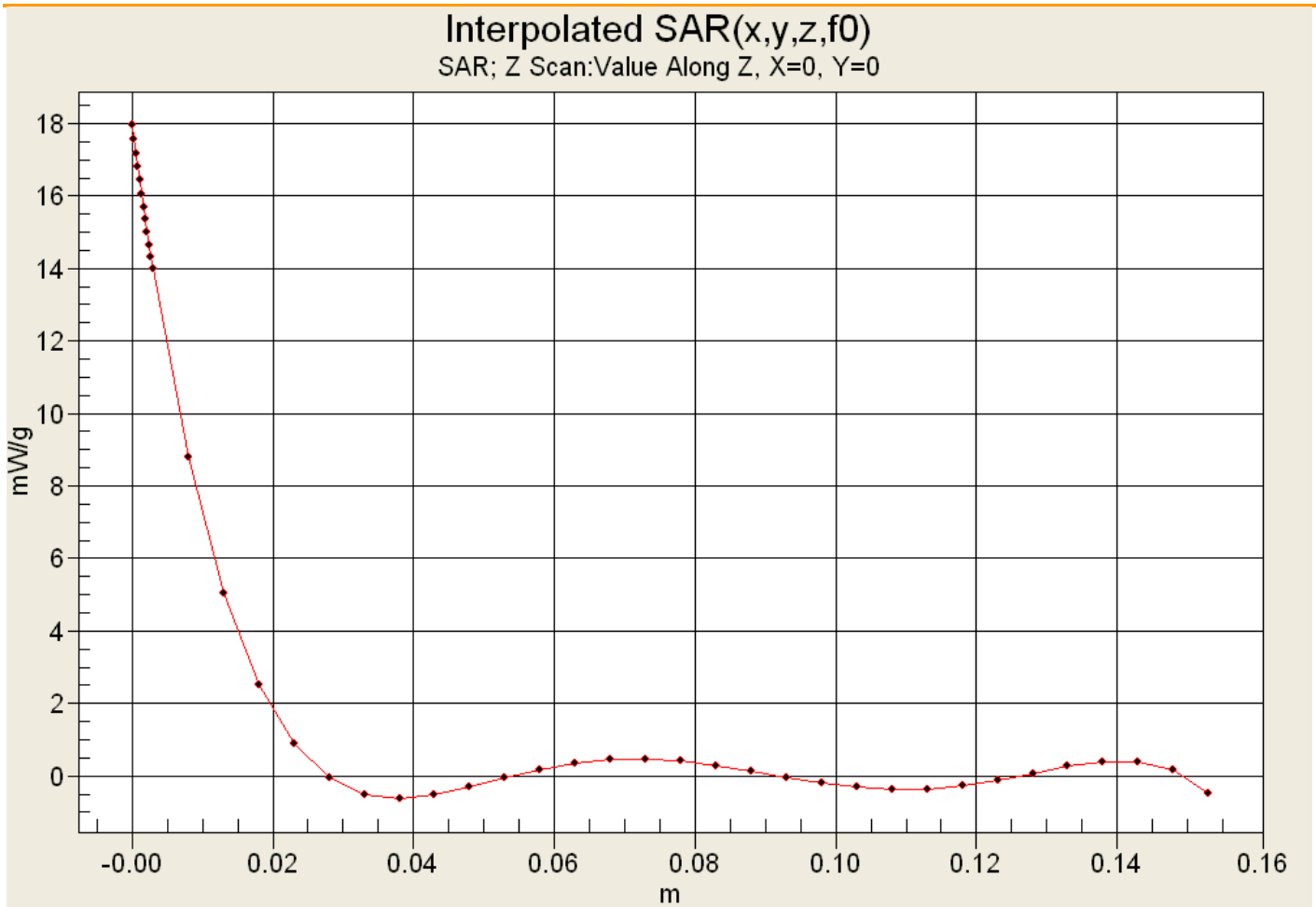
Communication System: CW
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used: f = 2450 MHz; σ = 1.94 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 15/04/2014
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

2450 MHz Head Dipole d=10mm P=250mW TS=[11.43][12.70][13.97]/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 14.8 mW/g

2450 MHz Head Dipole d=10mm P=250mW TS=[11.43][12.70][13.97]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.8 V/m; Power Drift = 0.125 dB
Peak SAR (extrapolated) = 26.6 W/kg
SAR(1 g) = 11.9 mW/g; SAR(10 g) = 5.4 mW/g
Maximum value of SAR (measured) = 15.9 mW/g




Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
18
16
14
12
10
8
6
4
2
0
-0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Date/Time: 04/03/2015 1:36:26 PM

SPC 2450B 4 March 2015

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 825; Calibrated: 25/04/2012

Program Notes: 4 March 2015 Ambient Temp: 23C; Fluid Temp: 21C; Humidity: 11%

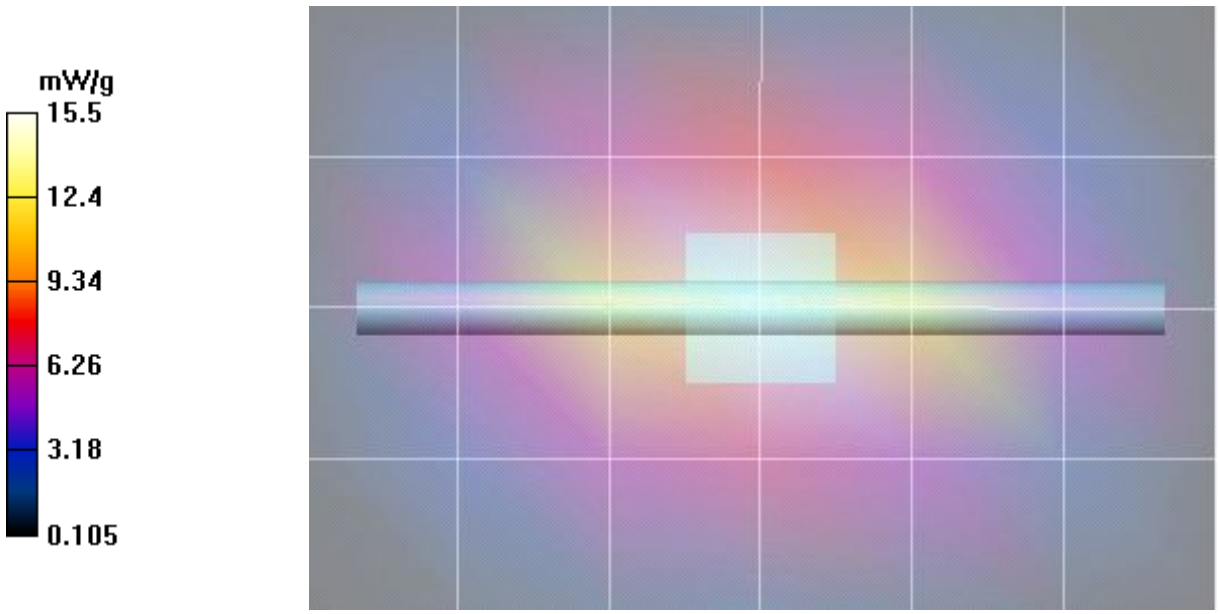
Procedure Notes:

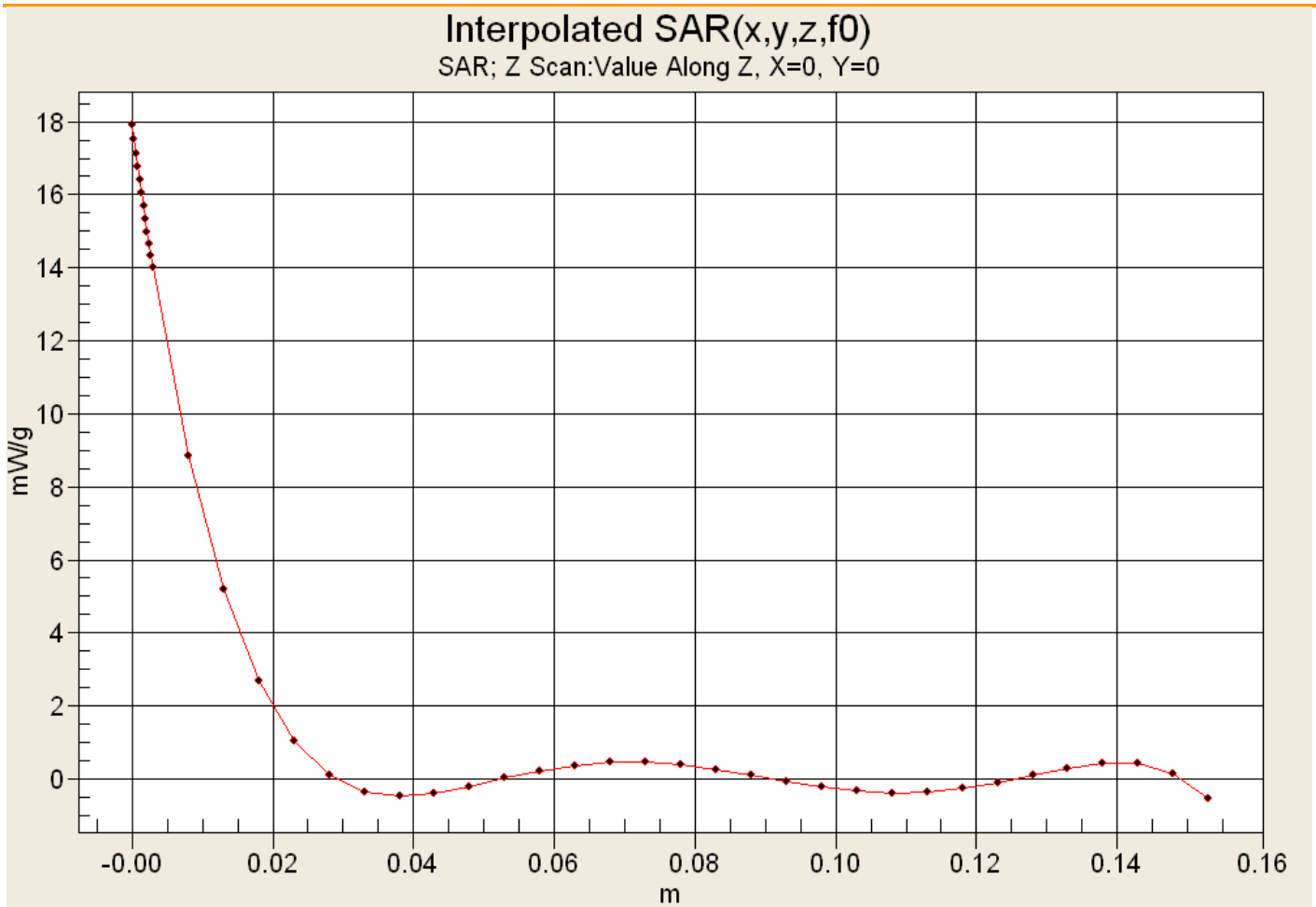
Communication System: CW
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used: f = 2450 MHz; σ = 1.81 mho/m; ε_r = 50.1; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.26, 6.26, 6.26); Calibrated: 15/04/2014
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

2450 MHz Body Dipole d=10mm P=250mW TS=[11.43][12.70][13.97]/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 15.6 mW/g

2450 MHz Body Dipole d=10mm P=250mW TS=[11.43][12.70][13.97]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.8 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 25.5 W/kg
SAR(1 g) = 11.8 mW/g; SAR(10 g) = 5.41 mW/g
Maximum value of SAR (measured) = 15.5 mW/g




Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
18
16
14
12
10
8
6
4
2
0
-0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Date/Time: 06/03/2015 12:23:04 PM

SPC 5200H 6 March 2015

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: 1031; Calibrated: 04/29/2009

Program Notes: March 6, 2014 Ambient Temp: 24C Fluid Temp: 21.7C Humidity: 10%

Procedure Notes:

Communication System: CW
Frequency: 5200 MHz; Duty Cycle: 1:1
Medium: TSL_5200H Medium parameters used: f = 5200 MHz; σ = 4.49 mho/m; ε_r = 33.9; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(4.56, 4.56, 4.56); Calibrated: 15/04/2014
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

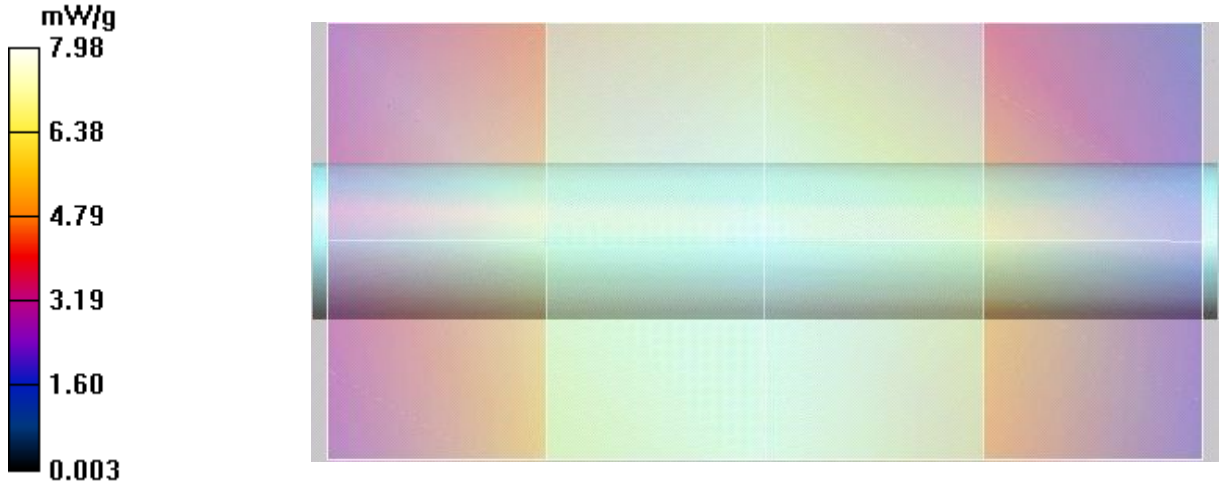
5200-5800 MHz Dipole d=10mm P=51mW, TS=7.69/Area Scan (3x5x1): Measurement grid: dx=5mm, dy=5mm

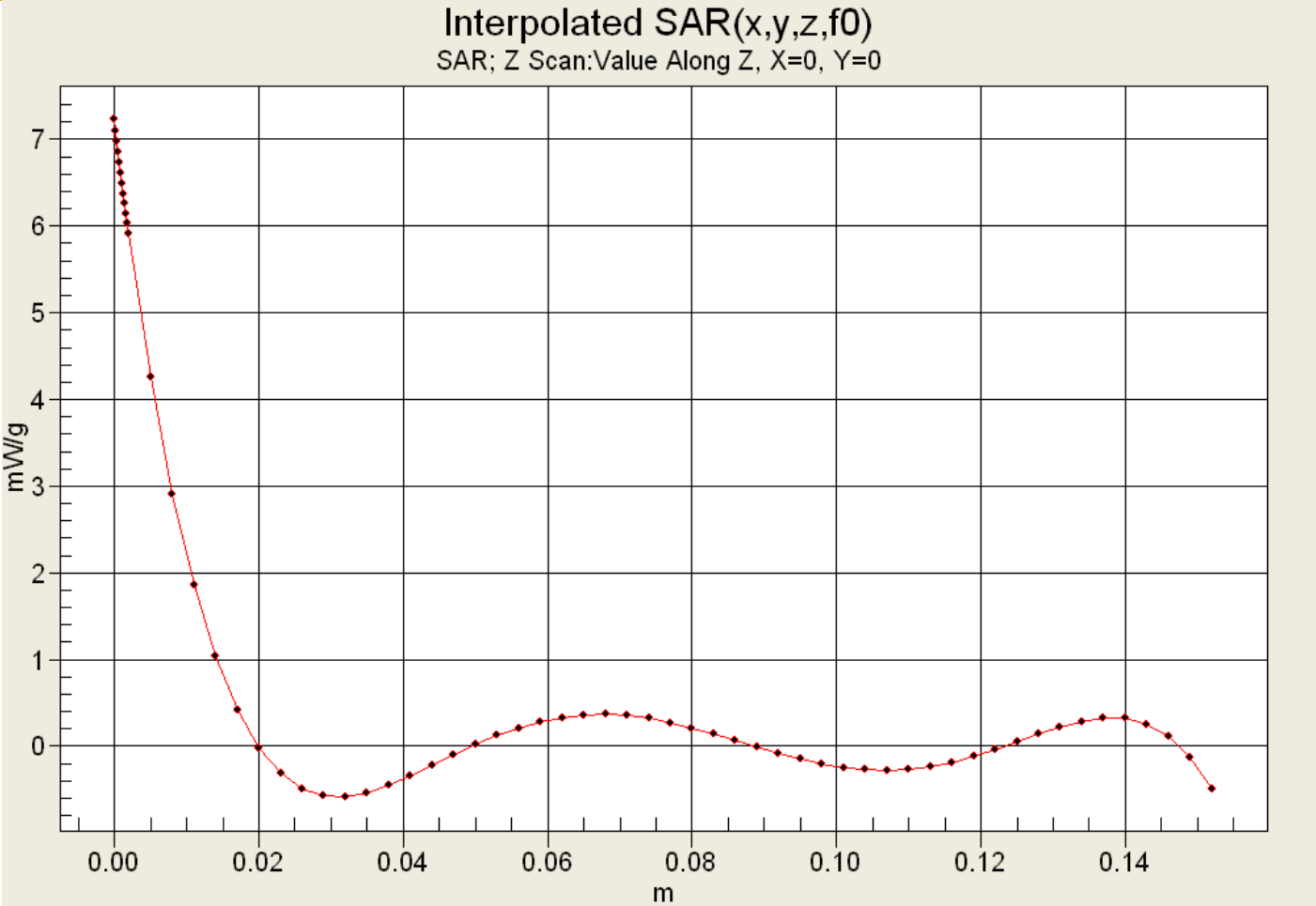
Maximum value of SAR (measured) = 8.24 mW/g

5200-5800 MHz Dipole d=10mm P=51mW, TS=7.69/Zoom Scan (7x7x9)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 46.0 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 16.0 W/kg
SAR(1 g) = 4.09 mW/g; SAR(10 g) = 1.2 mW/g

Maximum value of SAR (measured) = 7.98 mW/g




Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
7
6
5
4
3
2
1
0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
m

Date/Time: 10/03/2015 12:32:30 PM

SPC 5200B 10 March 2015

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: 1031; Calibrated: 04/29/2009

Program Notes: March 10, 2014 Ambient Temp: 24C Fluid Temp: 21.2C Humidity: 13%

Procedure Notes:

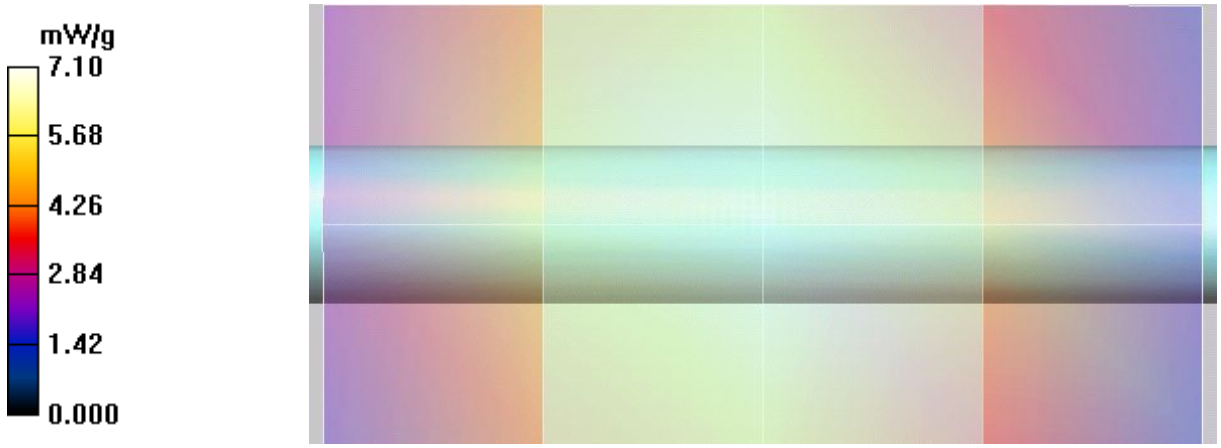
Communication System: CW
Frequency: 5200 MHz; Duty Cycle: 1:1
Medium: TSL_5200B Medium parameters used: f = 5200 MHz; σ = 5.59 mho/m; ε_r = 48.4; ρ = 1000 kg/m^3

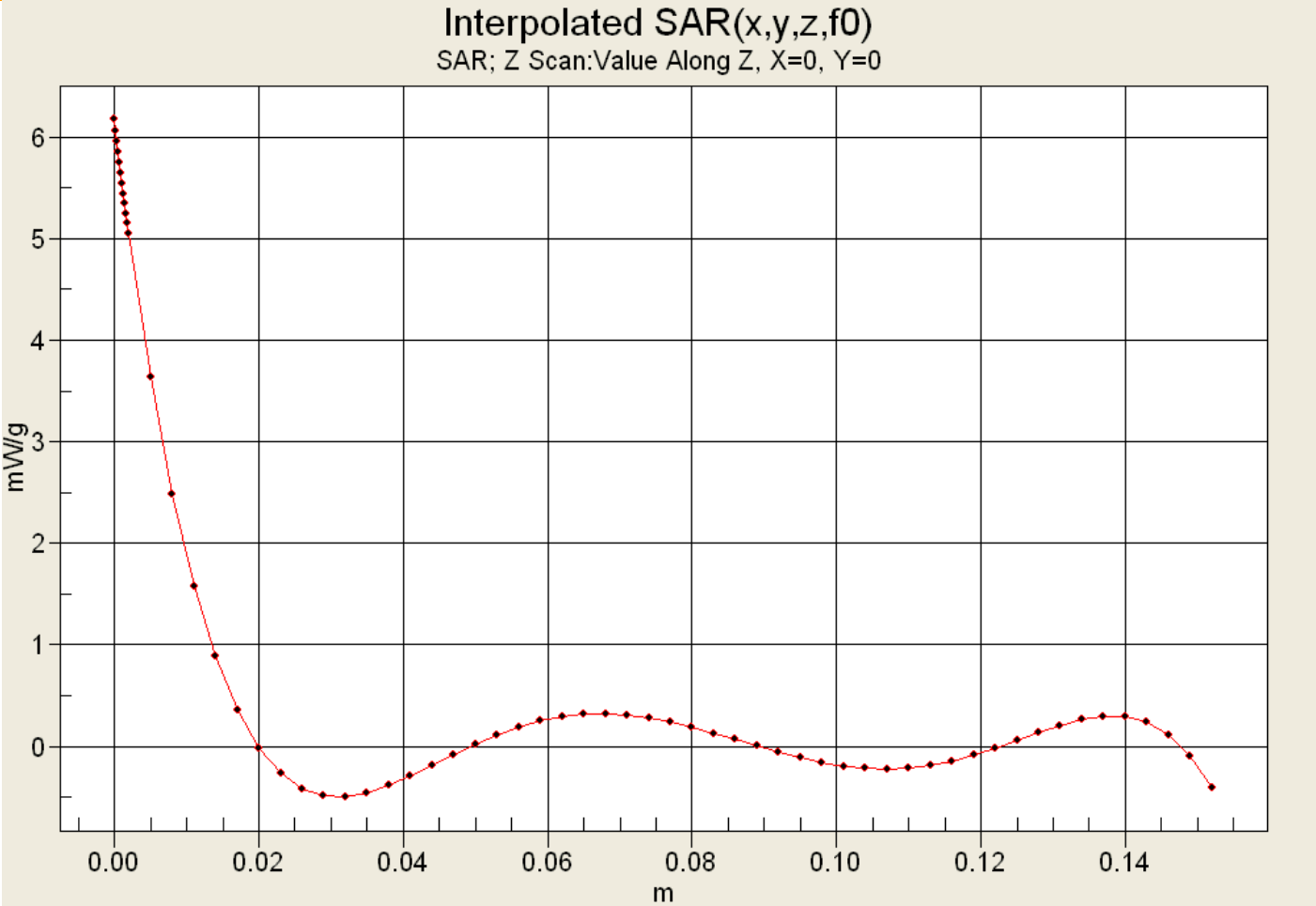
- Probe: EX3DV4 - SN3600; ConvF(4.06, 4.06, 4.06); Calibrated: 15/04/2014
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

5200-5800 MHz Dipole d=10mm P=50mW, TS=7.32/Area Scan (3x5x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of SAR (measured) = 6.96 mW/g

5200-5800 MHz Dipole d=10mm P=50mW, TS=7.32/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 37.9 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 13.6 W/kg
SAR(1 g) = 3.45 mW/g; SAR(10 g) = 0.995 mW/g

Maximum value of SAR (measured) = 7.10 mW/g




Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
6
5
4
3
2
1
0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
m