


	<u>Date(s) of Evaluation</u> Sep 14-21, 2015	<u>Test Report Serial No.</u> 091015OWD-1332-S	<u>Test Report Revision No.</u> Rev. 1.2	 Test Lab Certificate No. 2470.01
	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

DECLARATION OF COMPLIANCE

SAR RF EXPOSURE EVALUATION - FCC / IC New Filing

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 5			
		KDB 865664 D02v01r01, KDB 643646 D01v01r01	IEEE	IEEE 1528 - 2013			
PROCEDURES APPLIED	FCC	Licensed Non-Broadcast Transmitter Held to Face (TNF) - FCC Part 90					
	IC	Land Mobile Radio Transmitter/Receiver (27.41-960 MHz) - RSS-119					
DEVICE DESCRIPTION	Portable Digital Push-To-Talk (PTT) Radio Transceiver						
APPLICATION TYPE	New Filing						
DATE(S) OF EVALUATION	September 14-20, 2015			SAMPLES RECEIVED	10 Sep 2015		
Device(s) Evaluated							
FCC ID	IC Certification	Device Model	Device Part Number	Device Type	Band	Operating Frequency	Rated Output Power
OWDTR-0136E	3636B-0136	XG-15P SYS 440-512 GRY	RU-144772-001	System	UHF BlueTooth	440-512MHz 2.4Ghz	5.0W (37dBm) 3dBm (2mW)
Accessories Tested		See Section 6.0		Duty Cycle	Exposure Category		
Maximum SAR Level Evaluated FCC	Face	3.25	W/kg	1g	50% PTT	Occupational / Controlled	
	Body	6.62					
Maximum SAR Level Evaluated IC	Face	3.40					
	Body	6.62					
FCC / IC Spatial Peak SAR Limit	Face/Body	8.0					
Statement of Compliance							
Celltech Labs Inc. declares under its sole responsibility that this device has demonstrated compliance with the Specific Absorption Rate (SAR) RF exposure limits 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 KDB 865664 D01v01r03, Industry Canada RSS-102 Issue 5 and IEEE Standard 1528-2013.							
The results and statements contained in this report pertain only to the device(s) indicated.							
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	Senior Engineer	21 Sep 2015	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	September 21, 2015
1.1	2nd Release Corrected Accessory List	Art Voss	September 23, 2015
1.2	3rd Release Changed Reference to 14002-2015-01 Bluetooth Adapter	Art Voss	September 30, 2015

TEST REPORT SIGN-OFF			
DEVICE TESTED BY	REPORT PREPARED BY	QA REVIEW BY	REPORT APPROVED BY
Art Voss/Daniel Guerrero	Art Voss	Art Voss	Art Voss

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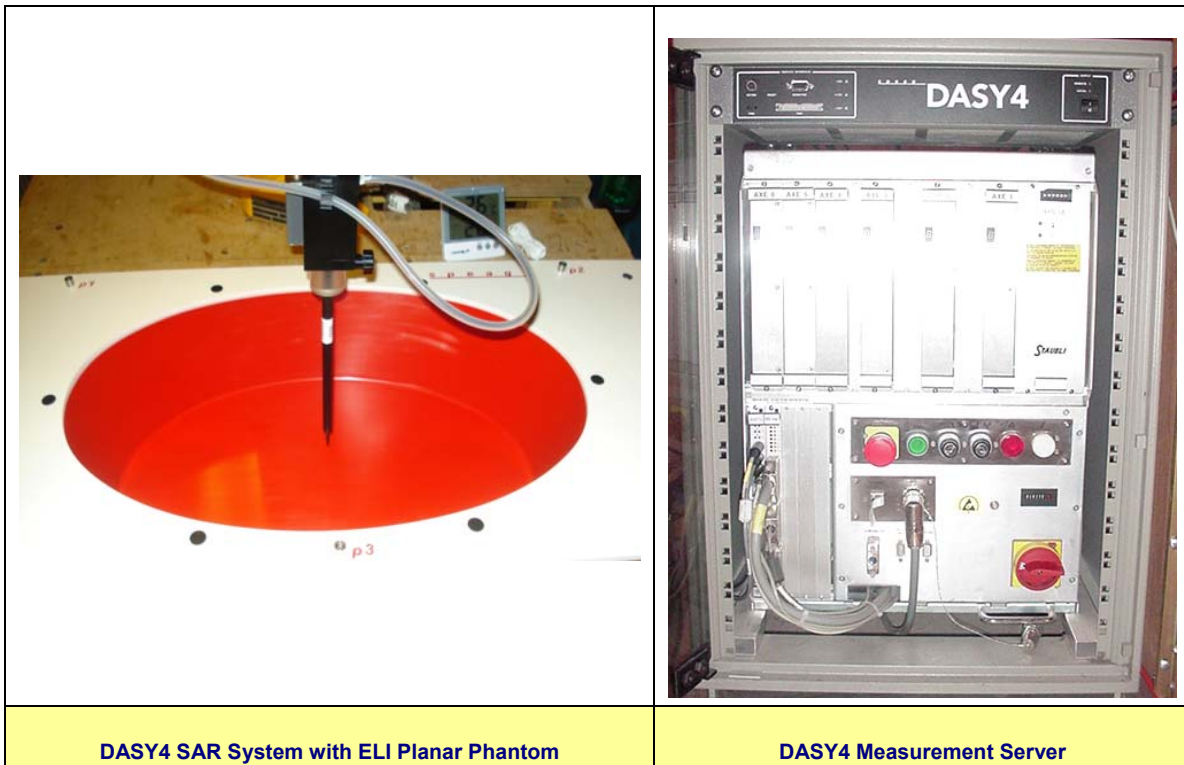
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2.0 INTRODUCTION



This measurement report demonstrates that the HARRIS Corporation XR-PFU1B (XG-15P UHF-H) 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 5 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.



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4.0 RF CONDUCTED POWER MEASUREMENT




Table 4.0

RF Conducted Power Measurement						
Average Conducted Power ⁽¹⁾						
Frequency Band	Frequency (MHz)	System Radio				Test Channel ⁽²⁾
		Measured Power		Rated Power		
		(dBm)	(W)	(dBm)	(W)	
UHF	440.00	37.00	5.01	37.00	5.00	X
	459.00	36.80	4.79	37.00	5.00	X
	470.00	36.80	4.79	37.00	5.00	X
	476.00	36.80	4.79	37.00	5.00	X
	494.00	36.90	4.90	37.00	5.00	X
	512.00	37.00	5.01	37.00	5.00	X

(1) The RF conducted output power levels of the DUT were measured by Celltech Labs prior to the SAR evaluations using a Gigatronics 8652A Universal Power Meter at the external antenna connector of the radio in accordance with requirements of FCC 47 CFR §2.1046 and IC RSS-Gen.

(2) See Section 4.0

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5.0 NUMBER OF TEST CHANNELS (N_C)

Table 5.0

Number of Test Channels (N_C) ⁽³⁾				
Antenna Part Number	Antenna Type	Frequency Range (MHz)	N_C ⁽¹⁾	N_C ⁽²⁾
KRE 1011219/12	Helical Stub	440-494	4	4
KRE 1011219/14	Helical Stub	470-512	4	4
KRE 1011223/12	Spring Whip	440-512	5	5

(1) In accordance with KDB 447498

(2) In accordance with IEC 62209-1

(3) The total number of unique channels tested was 6 for the entire band of 440MHz - 512MHz

6.0 MANUFACTURER'S ACCESSORY LIST

Table 6.0


Change History



Change ID	Date	Change Type	Description of Change
1	21 Sep 2015	New	New Filing

Table 6.1


Manufacturer's Accessory List



Test Report ID Number	Manufacturer's Part Number	Description	Change ID ⁽¹⁾	UDC Group ⁽²⁾	Type II Group ⁽³⁾	SAR ⁽⁴⁾ Evaluated
Antenna						
T1	KRE 1011219/12	Helical Stub Antenna (440-494 MHz)	1			Y
T2	KRE 1011219/14	Helical Stub Antenna (470-512 MHz)	1			Y
T3	KRE 1011223/12	1/4 Wave Whip (440-512 MHz)	1			Y
Battery						
P1	BT-023436-001	Lithium-polymer Battery, immersible, non-IS (7.4V, 3600mAh)	1			Y
P2	BT-023406-003	Ni-MH Battery, immersible, non-IS (7.5V, 2400mAh)	1			Y
P3	14002-0214-01	Li-Ion Battery, immersible, non-IS (7.4V, 2400mAh)	1			Y
Audio Accessory						
A1	EA-009580-001	Earphone Kit, Black	1	P5A	n/a	Y
A2	EA-009580-002	Earphone Kit, Beige	1	P5A	n/a	Y
A3	EA-009580-003	2-Wire Kit, Palm mic, Black	1	P7A	PM	Y
A4	EA-009580-004	2-Wire Kit, Palm mic, Beige	1	P7A	PM	Y

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A5	EA-009580-005	3-Wire Kit, Mini-Lapel Mic, Black	1	P7A	LM	Y	
A6	EA-009580-006	3-Wire Kit, Mini-Lapel Mic, Beige	1	P7A	LM	Y	
A7	EA-009580-007	Explorer Headset w/ PTT	1	P7A	IL	Y	
A8	EA-009580-008	Lightweight headset single speaker w/ PTT	1	P7A	IL	Y	
A9	EA-009580-009	Breeze Headset w/ PTT	1	P7A	IL	Y	
A10	EA-009580-010	Headset, heavy duty, N/C behind the head w/ PTT	1	P7A	IL	Y	
A11	EA-009580-011	Ranger Headset w/ PTT	1	P7A	IL	Y	
A12	EA-009580-012	Skull mic w/ body PTT & earcup	1	P7C	BB	Y	
A13	EA-009580-013	Headset, heavy duty, N/C over the head w/ PTT	1	P7A	IL	Y	
A14	EA-009580-014	Throat mic w/ acoustic tube & body PTT	1	P8B	BB	Y	
A15	EA-009580-015	Throat mic w/ acoustic tube, body PTT, & ring PTT	1	P8B	BB	Y	
A16	EA-009580-016	Breeze headset w/ PTT & pigtail jack	1	P7A	IL	Y	
A17	EA-009580-017	Hurricane headset w/ PTT	1	P7A	IL	Y	
A18	EA-009580-018	Hurricane headset w/ PTT & pigtail jack	1	P7A	ILPT	Y	
A19	EA-009580-031	Tac4 Headset	1	P7A	IL	Y	
A20	LS103239V1	Earphone for speaker/mic	1	n/a	J	Y	
A21	LS103239V2	Earphone for speaker/mic	1	n/a	J	Y	
A22	MC-009104-002	GPS Speaker-Microphone	1	P11A	PB	Y	
A23	MC-023933-501	Speaker-Microphone with Noise-Canceling	1	P8A	PB	Y	
A24	MC-011617-601	Speaker-Microphone	1	P8A	PB	Y	
A25	MC-011617-611	Speaker-Microphone	1	P9A	PB	Y	
A26	MC-011617-651	Rugged Speaker-Microphone w/ man-down	1	P9A	PB	Y	
A27	MC-011617-701	Speaker-Microphone	1	P8A	PB	Y	
A28	MC-023933-001	Speaker-Microphone Non-Antenna Version	1	P8A	PB	Y	
A29	MC-023933-003	Speaker-Mic (SML), black, no ant.	1	P8A	PB	Y	
A30	12150-4001-03	Fire Speaker MIC	1	P15A	PB	Y	
A31	12150-4001-04	Fire Speaker MIC	1	P15A	PB	Y	
A32	14002-0197-02	UDC to 6-pin Hirose adapter	1	HR	n/a	Y	
A33	14002-2014-01	UDC Adapter - GPS	1	GPS	n/a	Y	
A34(5)	14002-2015-01	UDC Adapter - BlueTooth		BT	n/a		
A35	V1-10168	Requires UDC to 6-pin Hirose adapter	1 Wire Earphone Kit Black (Receive only no transmit)	1	HR	n/a	Y
A36	V1-10167		1 Wire Earphone Kit Beige (Receive only no transmit)	1	HR	n/a	Y
A37	V1-10166		2 Wire Palm Microphone Kit Black	1	HR	n/a	Y
A38	V1-10165		2 Wire Palm Microphone Kit Beige	1	HR	n/a	Y
A39	V1-10164		3 Wire Mini Lapel Microphone Kit Black	1	HR	n/a	Y
A40	V1-10163		3 Wire Mini Lapel Microphone Kit Beige	1	HR	n/a	Y
A41	V4-BA2MD1		Breeze, lightweight, behind-the-head, single spkr with std PTT	1	HR	n/a	Y
A42	V4-BA2MD3B		Breeze, lightweight, behind-the-head, single spkr w/std. PTT & 2.5mm pigtail for PTT	1	HR	n/a	Y

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A43	V4-10190		Lightweight Single Spkr Padded Headband with std PTT	1	HR	n/a	Y
A44	V4-NR2MD1		Ranger Single Speaker behind-the-head with std PTT	1	HR	n/a	Y
A45	V4-10148		Over-the-head Dual Speaker Heavy Duty with std PTT	1	HR	n/a	Y
A46	V4-10148-S		Over-the-head Dual Speaker Heavy Duty with std PTT-IS/ATEX	1	HR	n/a	Y
A47	V4-10001		Behind-the-Head Dual Speaker Heavy Duty with std PTT	1	HR	n/a	Y
A48	V4-10001-S		Behind-the-Head Dual Speaker Heavy Duty with std PTT-IS/ATEX	1	HR	n/a	Y
A49	V1-T12MD137		Professional Throat Mic with Acoustic Tube & 80mm PTT	1	HR	n/a	Y
A50	V4-10279		Professional Skull Mic with Earcup, Aviation Quality & 80 MM PTT	1	HR	n/a	Y
Body-Worn Accessory							
B1	CC-011318		Metal Belt Clip (alternate)	1			Y
B2	CC-014524-001		Bee Shoulder Strap (used with Leather Cases with D-Rings)	1			Y
B3	CC-014524-002		Bee Short Leather Retaining Strap (used with Shoulder Strap)	1			Y
B4	CC-014527		Bee Leather Belt Loop	1			Y
B5	CC-014528-001		Bee Leather Case with Swivel	1			Y
B6	CC-014528-002		Bee Leather Case with Swivel, D-Rings for Shoulder Strap	1			Y
B7	CC-014534-001		Bee Nylon Case (Black) with Swivel	1			Y
B8	CC-014534-002		Bee Nylon Case (Black) with Integral Belt-Clip	1			Y
B9	CC-023931-002		Leather Case w/ D-rings, Elastic Strap (P/N: FM-011820), Shoulder Strap (P/N: CC103333V1)	1			Y
B10	CC-023931-003		Leather Case Kit 1: Leather Case w/o D-rings (P/N: CC-023931-001), Swivel-Mount (P/N: KRY 1011608/2), Elastic Strap (P/N: FM-011820) and Belt Loop (P/N: KRY 101 1609/1)	1			Y
B11	CC-023931-004		Leather Case Kit 2: Leather Case w/ D-rings (P/N: CC-023931-002), Swivel-Mount (P/N: KRY 1011608/2), Elastic Strap (P/N: FM-011820) and Belt Loop (P/N: KRY 101 1609/1)	1			Y
B12	CC-023932-001		Nylon (black) Case (w/ swivel) and Belt Loop (P/N: KRY 101 1609/1)	1			Y
B13	CC-023932-002		Nylon Case (Orange) w/ Leather Belt Loop (P/N: KRY 101 1609/1)	1			Y
B14	CC-023894		Metal Belt-Clip (standard)	1			Y
B15	14002-0217-01		Nylon Case (Olive Drab)	1			Y
B16	14002-0218-01		Merzon Belt Loop	1			Y
B17	KRY 1011608/2		Metal Swivel Mount	1			Y
B18	KRY 1011609/1		Leather Belt Loop and Metal Swivel Mount (P/N:KRY 1011608/2)	1			Y
B19	KRY 1011656/1		Nylon "T" Strap Holder	1			Y
B19	KRY1011609/1	Merzon	Merzon Leather Belt-Loop	1			Y
	CC-014534-001	Combo	Bee Nylon Case (Black) with Swivel	1			Y
B20	KRY1011609/1	Merzon	Merzon Leather Belt-Loop	1			Y
	CC-014528-001		Leather Case	1			Y
	FM-017262-01	Combo	Swivel Mount	1			Y



(1) From Table 1.0 - Indicates which change the item was introduced or tested.

(2) UDC Group: P = Series, Number = Number of Pins, A/B/C = Configuration, HR = Hirose, BT = BlueTooth,

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


(4) Accessories are categorized into groups of similar design and construction. Samples of individual groups are evaluated.

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(5) The 14002-2015-01 Bluetooth Module is pending approval. SAR was evaluated using this module as it resulted in a more Conservative SAR.

NOTE: All Audio and Body Worn Accessories were evaluated by test or results from previous evaluations.

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Occupational (Controlled)



7.0 SAR MEASUREMENT SUMMARY

Table 7.0

Measured SAR Results (1g)- FACE Configuration (FCC/IC)														
Date	Plot ID	DUT		Test Frequency (MHz)	Modulation	Accessories				DUT Spacing		Measured SAR (1g)		SAR Drift (dB)
		M/N	Type			Antenna ID	Battery ID	Body ID	Audio ID	DUT (mm)	Antenna (mm)	100% DC (W/kg)	50% DC (W/kg)	
14 Sep 2015	F1	XG-15P	System	440	CW	T1	P3	n/a	n/a	25	57	2.880	1.440	-0.085
	F2			459		T1	P3	n/a	n/a			2.710	1.355	-0.198
	F3			476		T1	P3	n/a	n/a			2.340	1.170	-0.124
	F4			494		T1	P3	n/a	n/a			1.670	0.835	-0.146
	F5			470		T2	P3	n/a	n/a			2.790	1.395	0.206
	F6			476		T2	P3	n/a	n/a			3.410	1.705	0.121
	F7			494		T2	P3	n/a	n/a			4.190	2.095	-0.195
	F8			512		T2	P3	n/a	n/a			3.810	1.905	-0.144
16 Sep 2015	F9			440		T3	P3	n/a	n/a			2.790	1.395	-0.184
	F10			459		T3	P3	n/a	n/a			3.230	1.615	0.038
	F11			476		T3	P3	n/a	n/a			3.140	1.570	-0.084
	F12			494		T3	P3	n/a	n/a			2.660	1.330	-0.167
	F13			512		T3	P3	n/a	n/a			2.680	1.340	-0.118
	F14			494		T1	P2 ⁽¹⁾	n/a	n/a			4.040	2.020	-0.134
	F15			494		T1	P1 ⁽¹⁾	n/a	n/a			4.440	2.220	-0.170
	F16			494		T1	P1	n/a	A34 ⁽²⁾			5.710	2.855	-0.198
	F17			494		T1	P1	n/a	A33 ⁽²⁾			6.190	3.095	-0.195
SAR Limit						Head/Body				Spatial Peak		RF Exposure Category		
FCC 47 CFR 2.1093						Health Canada Safety Code 6				1 Gram Average		Occupational		

(1) Test to the worst case results - F7

(2) Test to the worst case results - F7 - See also Note (5) of Table 6.0

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Table 7.1

Measured SAR Results (1g)- BODY Configuration (FCC/IC)															
Date	Plot ID	DUT		Test Frequency (MHz)	Modulation	Accessories				DUT Spacing		Measured SAR (1g)		SAR Drift (dB)	
		M/N	Type			Antenna ID	Battery ID	Body ID	Audio ID (3)	DUT (mm)	Antenna (mm)	100% DC (W/kg)	50% DC (W/kg)		
19 Sep 2015	B1	XG-15P	System	440	CW	T1	P3	B19	A34	0	25	9.640	4.820	-0.093	
	B2			459		T1	P3	B19	A34			7.430	3.715	-0.165	
	B3			476		T1	P3	B19	A34			5.830	2.915	-0.160	
	B4			494		T1	P3	B19	A34			4.500	2.250	-0.194	
	B5			470		T2	P3	B19	A34			9.450	4.725	0.123	
	B6			476		T2	P3	B19	A34			11.100	5.550	0.024	
	B7			494		T2	P3	B19	A34			9.670	4.835	-0.202	
	B8			512		T2	P3	B19	A34			7.600	3.800	-0.161	
20 Sep 2015	B9			440		T3	P3	B19	A34			7.580	3.790	-0.126	
	B10			459		T3	P3	B19	A34			7.780	3.890	-0.067	
	B11			476		T3	P3	B19	A34			7.190	3.595	-0.156	
	B12			494		T3	P3	B19	A34			6.830	3.415	-0.121	
	B13			512		T3	P3	B19	A34			5.360	2.680	-0.063	
	B14			476		T2	P1 ⁽¹⁾	B19	A34			8.480	4.240	0.158	
	B15			476		T2	P2 ⁽¹⁾	B19	A34			12.200	6.100	0.182	
	B16			476		T2	P2	B19	A33 ⁽²⁾			11.600	5.800	0.118	
	B17			476		T2	P2	B19	A22 ⁽²⁾			10.900	5.450	-0.054	
	B18			476		T2	P2	B15	A34			10.800	5.400	-0.029	
	B19			476		T2	P2	B1	A34			12.500	6.250	0.050	
SAR Limit						Head/Body		Spatial Peak		RF Exposure Category					
FCC 47 CFR 2.1093						Health Canada Safety Code 6		8.0 W/kg		1 Gram Average		Occupational			

- (1) Test to the worst case results - B6
(2) Test to the worst case results - B15
(3) See Note (5) of Table 6.0

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8.0 SCALING OF MAXIMUM MEASURE SAR

Table 8.0

Scaling of Maximum Measured SAR

Plot ID	Configuration	Freq (MHz)	Measured Fluid Deviation		Measured Conducted Power (dBm)	Measured Drift (dB)	Measured SAR (1g) (W/kg)
			Permittivity	Conductivity			
F17	Face	494	0.29%	4.6%	36.9	-0.195	3.095
B19	Body	476	-4.24%	3.19%	36.8	0.050	6.25

Step 1(5)

Fluid Sensitivity Adjustment (1)

Plot ID	Scale Factor	X	Measured SAR	=	Adjusted SAR (1g)
	(%)		(W/kg)		(W/kg)
F17	n/a	X	3.095	=	3.095
B19	n/a	X	6.25	=	6.25

Step 2

Manufacturer's Tune-Up Tolerance (2)

Plot ID	Measured Conducted Power	Rated Power	Delta	+	Adjusted SAR	=	Reported SAR (1g)
	(dBm)	(dBm)	(dB)		(W/kg)		(W/kg)
F17	36.9	37.0	-0.1	+	3.095	=	3.167
B19	36.8	37.0	-0.2	+	6.25	=	6.54

Step 3

Simultaneous Transmission (3) - Bluetooth

Plot ID	Rated Output Power (Pmax)	Freq (GHz)	Separation Distance (mm)	Estimated SAR (W/kg)	+	Reported SAR	=	Simultaneous Reported SAR
	(mW)					(W/kg)		(W/kg)
F17	2.0	2.4	5.0	0.083	+	3.167	=	3.25
B19	2.0	2.4	5.0	0.083	+	6.54	=	6.62


Step 4 (IC/EU/AU)



Drift Adjustment (4)

Plot ID	Measured Drift	+	Reported or Simultaneous Reported SAR	=	Scaled SAR (1g)
	(dB)		(W/kg)		(W/kg)
F17	-0.195	+	3.25	=	3.40
B19	0.050	+	6.62	=	6.62

Notes


See Notes Below



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Notes

- (1) Per IEC-62209-1. Scaling required only when Measured Fluid Deviation is greater than 5% and only when the Scale Factor is (+) Positive. See Table 8.1
- (2) Per KDB 447498. Scaling required only when Delta is (-) Negative. The absolute value of Delta is added to Adjusted SAR.
- (3) Per KDB 447498 4.3.2.
- (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.
- (5) Not Required. Fluid deviations were less than 5% of Target


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9.0 SAR EXPOSURE LIMITS

Table 9.0

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.			

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10.0 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 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° ± 1°
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	Elliptical Planar (ELI)
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-average SAR	

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11.0 MEASUREMENT UNCERTAINTIES



IEEE 1528 Table E.9

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

Source of Uncertainty	IEEE 1528 Section	Toler ±%	Prob Dist	Div	c _i	c _i	Stand Unct ±%	Stand Unct ±%	V _i or V _{eff}
Measurement System					(1g)	(10g)	(1g)	(10g)	
EX3DV4 Probe Calibration** (k=1)	E.2.1		N	1	1	1	6.6	6.6	∞
Axial Isotropy** (k=1)	E.2.2		R	√3	0.7	0.7	0.3	0.3	∞
Hemispherical Isotropy** (k=1)	E.2.2		R	√3	0.7	0.7	1.3	1.3	∞
Boundary Effect*	E.2.3	1.0	R	√3	1	1	0.6	0.6	∞
Linearity** (k=1)	E.2.4		R	√3	1	1	0.3	0.3	∞
System Detection Limits*	E.2.4	1.0	R	√3	1	1	0.6	0.6	∞
Modulation Response** (k=1)	E.2.5		R	√3	1	1	1.4	1.4	∞
Readout Electronics*	E.2.6	0.0	N	1	1	1	0.0	0.0	∞
Response Time*	E.2.7	0.8	R	√3	1	1	0.5	0.5	∞
Integration Time*	E.2.8	2.6	R	√3	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	1.3	R	√3	1	1	0.7	0.7	10
RF Ambient Conditions - Reflection	E.6.1	0.0	R	√3	1	1	0.0	0.0	10
Probe Positioner Mechanical Tolerance*	E.6.2	0.4	R	√3	1	1	0.2	0.2	∞
Probe Positioning wrt Phantom Shell*	E.6.3	2.9	R	√3	1	1	1.7	1.7	∞
Post-processing*	E.5	3.9	R	√3	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	0.3	N	1	1	1	0.3	0.3	5
Device Holder Uncertainty*	E.4.1	3.6	N	1	1	1	3.6	3.6	∞
SAR Drift Measurement ⁽²⁾	E.2.9	0.0	R	√3	1	1	0.0	0.0	∞
SAR Power Scaling ⁽³⁾	E.6.5	0.0	R	√3	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty*	E.3.1	4.0	R	√3	1	1	2.3	2.3	∞
SAR Correction Uncertainty	E.3.2	1.2	N	1	1	0.84	1.2	1.0	∞
Liquid Conductivity (measurement)	E.3.3	5.0	N	1	0.78	0.71	3.9	3.6	10
Liquid Permittivity (measurement)	E.3.3	5.0	N	1	0.23	0.26	1.2	1.3	10
Liquid Conductivity (Temperature)	E.3.2	0.1	R	√3	0.78	0.71	0.0	0.0	10
Liquid Permittivity Temperature)	E.3.2	0.1	R	√3	0.23	0.26	0.0	0.0	10
Effective Degrees of Freedom⁽¹⁾								V_{eff} =	1057
Combined Standard Uncertainty			RSS				9.8	9.6	
Expanded Uncertainty (95% Confidence Interval)			k=2				19.5	19.3	

Measurement Uncertainty Table in accordance with IEEE Standard 1528-2003

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- (1) The Effective Degrees of Freedom is > 30
 Therefore a coverage factor of k=2 represents an approximate confidence level of 95%.
- (2) The SAR Value is compensated for Drift
- (3) SAR Power Scaling not Required
- * Provided by SPEAG for DASY4
- ** Standard Uncertainty Calibration Data Provided by SPEAG for EX3DEV4 Probe

Table 11.1	
Calculation of the Degrees and Effective Degrees of Freedom	
$v_i = n - 1$	$v_{\text{eff}} = \frac{u_c^4}{m \sum_{i=1} \frac{c_i^4 u_i^4}{v_i}}$

12.0 TISSUE SIMULATING LIQUID (TSL) RECIPE



Table 12.0

Simulated Tissue Mixture	
Frequency:	Fluid Type
450 MHz	HEAD
Ingredient	% by Weight
Water	38.56
Sugar	56.32
Salt	3.95
HEC	0.98
Bacteriacide	0.19

Table 12.1

Simulated Tissue Mixture	
Frequency:	Fluid Type
450 MHz	BODY
Ingredient	% by Weight
Water	52
Sugar	45.65
Salt	1.75
HEC	0.5
Bacteriacide	0.1

The simulated equivalent tissue recipes in the table below are derived from the SAR system manufacturer's suggested recipes in the DASY4 manual (see references [10] and [11]) in accordance with the procedures and requirements specified in IEEE Standard 1528-2013, IEC 62209-1 and RSS 102. The ingredient percentage may have been adjusted minimally in order to achieve the appropriate target dielectric parameters within the specified tolerance.

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13.0 FLUID DIELECTRIC PARAMETERS

Table 13.0

FLUID DIELECTRIC PARAMETERS						
Date:	14 Sep 2015	Frequency:		450MHz	Tissue:	Head
Freq (MHz)	Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
350.0000	46.21	0.78	44.70	0.87	3.38%	-10.34%
360.0000	46.95	0.81	44.58	0.87	5.32%	-6.90%
370.0000	45.57	0.81	44.46	0.87	2.50%	-6.90%
380.0000	45.41	0.81	44.34	0.87	2.41%	-6.90%
390.0000	44.57	0.82	44.22	0.87	0.79%	-5.75%
400.0000	45.21	0.82	44.10	0.87	2.52%	-5.75%
410.0000	45.31	0.84	43.98	0.87	3.02%	-3.45%
420.0000	45.10	0.85	43.86	0.87	2.83%	-2.30%
430.0000	44.78	0.84	43.74	0.87	2.38%	-3.45%
440.0000	45.10	0.86	43.62	0.87	3.39%	-1.15%
450.0000	44.66	0.88	43.50	0.87	2.67%	1.15%
459.0000	43.85	0.89	43.46	0.87	0.91%	2.18%
460.0000	43.76	0.89	43.45	0.87	0.71%	2.30%
470.0000	44.00	0.89	43.40	0.87	1.38%	2.30%
476.0000	43.69	0.90	43.36	0.87	0.76%	3.68%
480.0000	43.49	0.91	43.34	0.87	0.35%	4.60%
490.0000	43.39	0.91	43.29	0.87	0.23%	4.60%
494.0000	43.39	0.91	43.27	0.87	0.29%	4.60%
500.0000	43.40	0.91	43.24	0.87	0.37%	4.60%
510.0000	42.81	0.93	43.19	0.87	-0.88%	6.90%
512.0000	42.82	0.93	43.18	0.87	-0.82%	6.65%
520.0000	42.88	0.93	43.14	0.88	-0.60%	5.68%
530.0000	42.29	0.94	43.08	0.88	-1.83%	6.82%
540.0000	42.83	0.95	43.03	0.88	-0.46%	7.95%
550.0000	42.17	0.97	42.98	0.88	-1.88%	10.23%






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Table 13.1


FLUID DIELECTRIC PARAMETERS



Date:	18 Sep 2015	Frequency:			450MHz	Tissue:	Body
Freq (MHz)	Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity	
350.0000	55.90	0.87	57.70	0.93	-3.12%	-6.45%	
360.0000	55.74	0.88	57.60	0.93	-3.23%	-5.38%	
370.0000	55.42	0.88	57.50	0.93	-3.62%	-5.38%	
380.0000	55.44	0.88	57.40	0.93	-3.41%	-5.38%	
390.0000	55.24	0.89	57.30	0.93	-3.60%	-4.30%	
400.0000	54.64	0.91	57.20	0.93	-4.48%	-2.15%	
410.0000	55.17	0.92	57.10	0.93	-3.38%	-1.08%	
420.0000	55.11	0.93	57.00	0.94	-3.32%	-1.06%	
430.0000	55.06	0.94	56.90	0.94	-3.23%	0.00%	
440.0000	54.27	0.95	56.80	0.94	-4.45%	1.06%	
450.0000	55.09	0.96	56.70	0.94	-2.84%	2.13%	
459.0000	54.16	0.98	56.66	0.94	-4.41%	4.04%	
460.0000	54.06	0.98	56.66	0.94	-4.59%	4.26%	
470.0000	54.41	0.97	56.62	0.94	-3.90%	3.19%	
476.0000	54.19	0.97	56.60	0.94	-4.24%	3.19%	
480.0000	54.05	0.97	56.58	0.94	-4.47%	3.19%	
490.0000	54.16	1.00	56.54	0.94	-4.21%	6.38%	
494.0000	54.18	1.00	56.53	0.94	-4.16%	6.38%	
500.0000	54.20	1.00	56.51	0.94	-4.09%	6.38%	
510.0000	53.10	1.00	56.47	0.94	-5.97%	6.38%	
512.0000	53.17	1.00	56.46	0.94	-5.84%	6.58%	
520.0000	53.43	1.02	56.43	0.95	-5.32%	7.37%	
530.0000	52.98	1.02	56.39	0.95	-6.05%	7.37%	
540.0000	53.03	1.04	56.35	0.95	-5.89%	9.47%	
550.0000	53.33	1.03	56.31	0.95	-5.29%	8.42%	

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Aprel Laboratory
 Test Result for UIM Dielectric Parameter
 Mon 14/Sep/2015 11:35:53
 Freq Frequency(GHz)
 FCC_eHFCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
 FCC_sHFCC OET 65 Supplement C (June 2001) Limits for Head Sigma
 Test_e Epsilon of UIM
 Test_s Sigma of UIM


Freq	FCC_eHFCC_sH	Test_e	Test_s
0.3500	44.70	0.87	46.21
0.3600	44.58	0.87	46.95
0.3700	44.46	0.87	45.57
0.3800	44.34	0.87	45.41
0.3900	44.22	0.87	44.57
0.4000	44.10	0.87	45.21
0.4100	43.98	0.87	45.31
0.4200	43.86	0.87	45.10
0.4300	43.74	0.87	44.78
0.4400	43.62	0.87	45.10
0.4500	43.50	0.87	44.66
0.4600	43.45	0.87	43.76
0.4700	43.40	0.87	44.00
0.4800	43.34	0.87	43.49
0.4900	43.29	0.87	43.39
0.5000	43.24	0.87	43.40
0.5100	43.19	0.87	42.81
0.5200	43.14	0.88	42.88
0.5300	43.08	0.88	42.29
0.5400	43.03	0.88	42.83
0.5500	42.98	0.88	42.17



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Aprel Laboratory
 Test Result for UIM Dielectric Parameter
 Fri 18/Sep/2015 14:08:13
 Freq Frequency(GHz)
 FCC_eHFCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
 FCC_sHFCC 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
0.3500	57.70	0.93	55.90	0.87
0.3600	57.60	0.93	55.74	0.88
0.3700	57.50	0.93	55.42	0.88
0.3800	57.40	0.93	55.44	0.88
0.3900	57.30	0.93	55.24	0.89
0.4000	57.20	0.93	54.64	0.91
0.4100	57.10	0.93	55.17	0.92
0.4200	57.00	0.94	55.11	0.93
0.4300	56.90	0.94	55.06	0.94
0.4400	56.80	0.94	54.27	0.95
0.4500	56.70	0.94	55.09	0.96
0.4600	56.66	0.94	54.06	0.98
0.4700	56.62	0.94	54.41	0.97
0.4800	56.58	0.94	54.05	0.97
0.4900	56.54	0.94	54.16	1.00
0.5000	56.51	0.94	54.20	1.00
0.5100	56.47	0.94	53.10	1.00
0.5200	56.43	0.95	53.43	1.02
0.5300	56.39	0.95	52.98	1.02
0.5400	56.35	0.95	53.03	1.04
0.5500	56.31	0.95	53.33	1.03

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14.0 SYSTEM VERIFICATION TEST RESULTS

Table 14.0




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	
								14 Sept 2015	450	Head	21.4
SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
1.16	1.16	0.00%	0.79	0.78	2.06%	44.66	43.50	2.67%	0.88	0.87	1.15%

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

Table 14.1

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	
								19 Sep 2015	450	Body	24.0
SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
1.21	1.12	8.04%	0.82	0.74	11.52%	55.09	56.70	-2.84%	0.96	0.94	2.13%

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

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15.0 MEASUREMENT SYSTEM SPECIFICATIONS

Table 15.0

Measurement System Specification	
<u>Specifications</u>	
Positioner	Stäubli Unimation Corp. Robot Model: RX60L
Repeatability	0.02 mm
No. of axis	6
<u>Data Acquisition Electronic (DAE) System</u>	
<u>Cell Controller</u>	
Processor	AMD Athlon XP 2400+
Clock Speed	2.0 GHz
Operating System	Windows XP Professional
<u>Data Converter</u>	
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
<u>DASY4 Measurement Server</u>	
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
<u>E-Field Probe</u>	
Model	EX3DV4
Serial No.	3600
Construction	Triangular core fiber optic detection system
Frequency	10 MHz to 6 GHz
Linearity	± 0.2dB (30MHz – 3GHz)
<u>Phantom</u>	
Type	ELI Elliptical Planar Phantom
Shell Material	Fiberglass
Thickness	2mm +/- .2mm
Volume	> 30 Liter



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Table 15.1

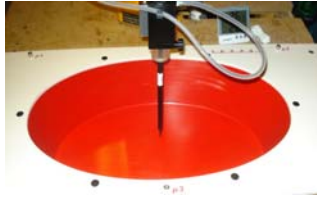
Measurement System Specification (Continued)

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



<p>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.</p>	
--	---

ELI Elliptical Planar Phantom

Device Positioner Specification

<p>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.</p>	
--	---

Device Positioner

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16.0 TEST EQUIPMENT LIST



Table 16.0

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
-DAE3	00018	370	23 April 2015	Biennial
-EX3DV6 E-Field Probe	00017	3600	23 April 2015	Annual
-D450V3 Validation Dipole	00221	1068	21 April 2015	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

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APPENDIX A - SAR MEASUREMENT PLOTS

Plot F1

Date/Time: 14/09/2015 2:08:51 PM

450 Head 14 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 14 Sep 2015 Ambient Temp: 24C; Fluid Temp: 21.4C; Humidity: 35%

Procedure Notes:

Communication System: CW

Frequency: 440 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.86 \text{ mho/m}$; $\epsilon_r = 45.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F1 Head XG-15-UHF, 440MHz 1219/12, -23436/Area Scan (7x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 3.07 mW/g

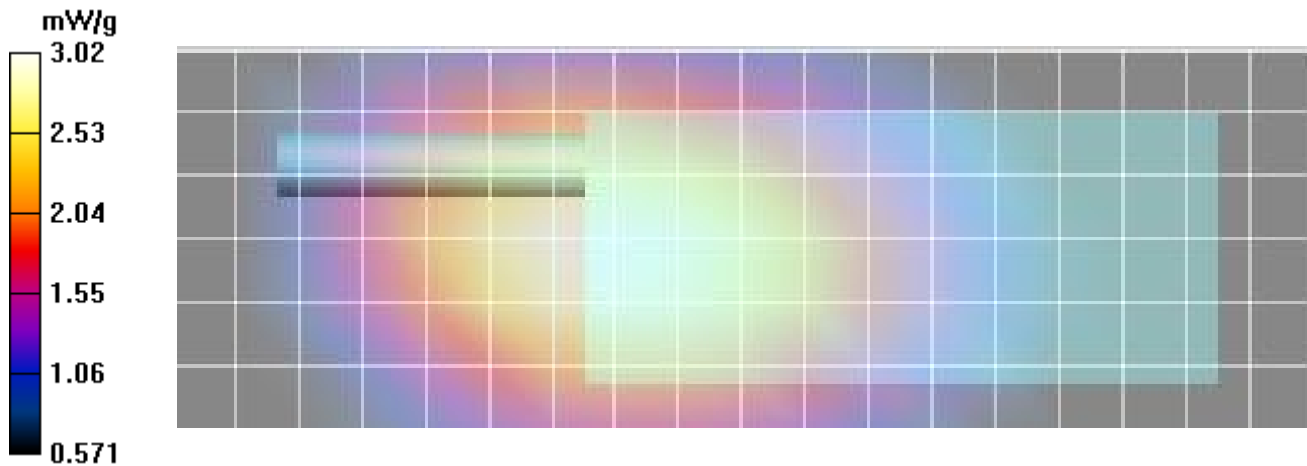
F1 Head XG-15-UHF, 440MHz 1219/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$


Reference Value = 59.9 V/m; Power Drift = -0.085 dB




Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 2.88 mW/g; SAR(10 g) = 2.2 mW/g

Maximum value of SAR (measured) = 3.02 mW/g



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DUT Type:	XG-15P UHF-H Band Portable PTT Transceiver		
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Plot F2

Date/Time: 14/09/2015 2:31:40 PM

450 Head 14 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 14 Sep 2015 Ambient Temp: 24C; Fluid Temp: 21.4C; Humidity: 35%

Procedure Notes:

Communication System: CW

Frequency: 459 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 459 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 43.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F2 Head XG-15-UHF, 459MHz 1219/12, -23436/Area Scan (7x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.91 mW/g

F2 Head XG-15-UHF, 459MHz 1219/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

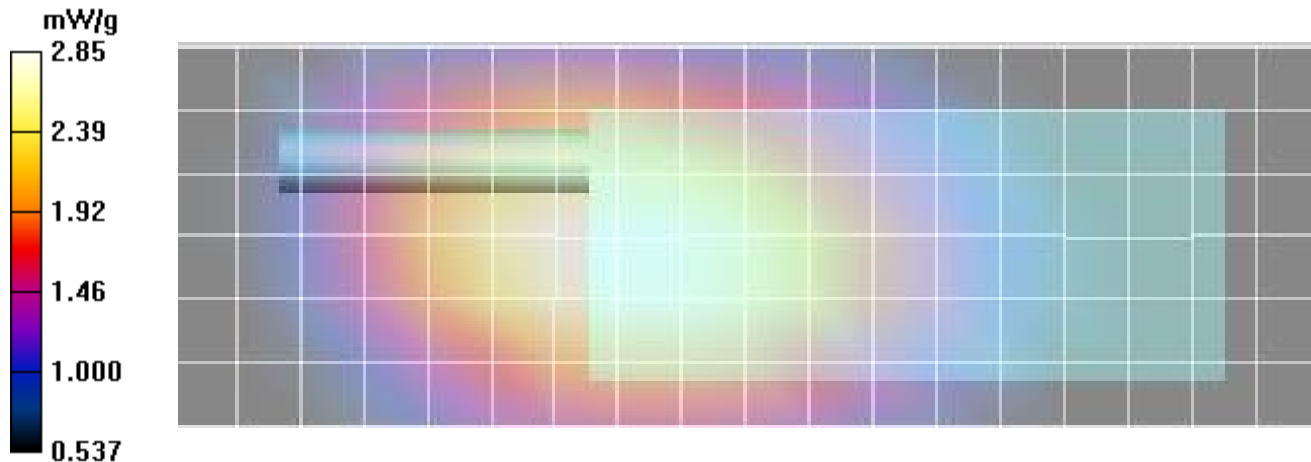
Reference Value = 58.6 V/m; Power Drift = -0.198 dB


Peak SAR (extrapolated) = 3.39 W/kg



SAR(1 g) = 2.71 mW/g; SAR(10 g) = 2.08 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.85 mW/g



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Plot F3

Date/Time: 16/09/2015 9:29:32 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.902 \text{ mho/m}$; $\epsilon_r = 43.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F3 Head XG-15-UHF, 476MHz, 1219/12, -23436/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.63 mW/g

F3 Head XG-15-UHF, 476MHz, 1219/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

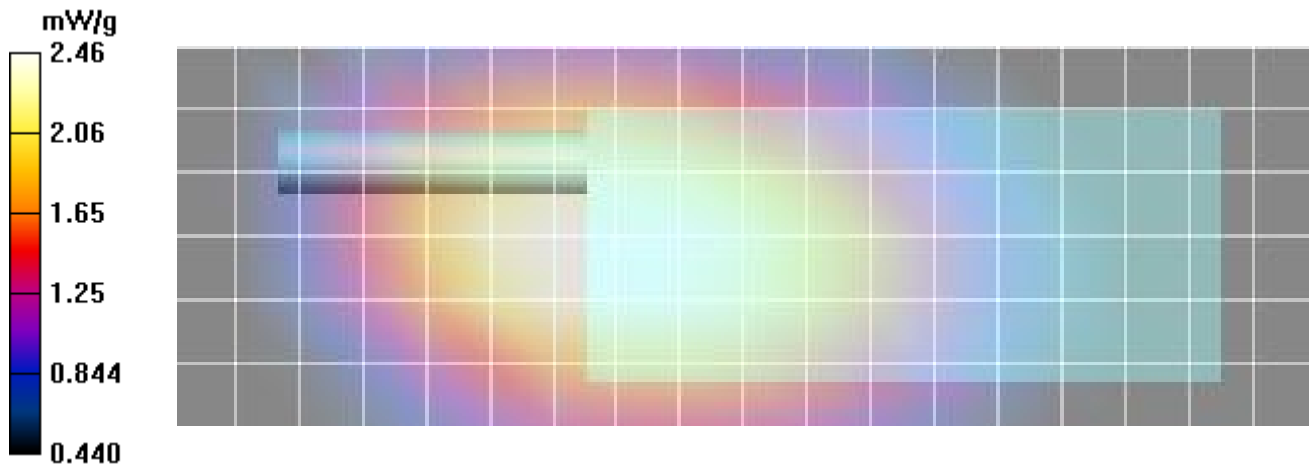
Reference Value = 56.1 V/m; Power Drift = -0.124 dB


Peak SAR (extrapolated) = 2.97 W/kg



SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.77 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.46 mW/g



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Plot F4

Date/Time: 16/09/2015 9:46:45 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F4 Head XG-15-UHF, 494MHz, 1219/12, -23436/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.86 mW/g

F4 Head XG-15-UHF, 494MHz, 1219/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

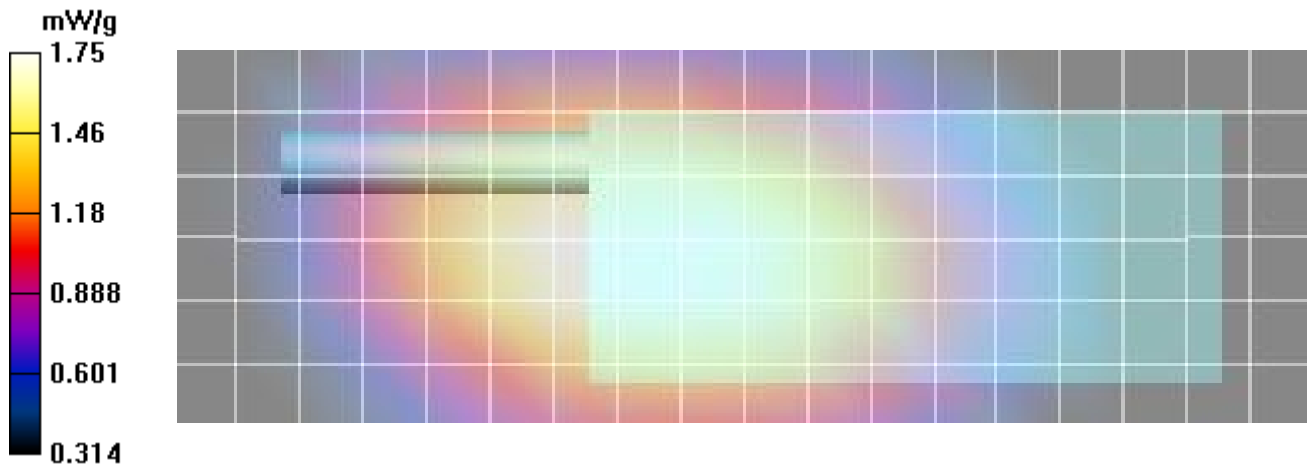
Reference Value = 46.6 V/m; Power Drift = -0.146 dB


Peak SAR (extrapolated) = 2.11 W/kg



SAR(1 g) = 1.67 mW/g; SAR(10 g) = 1.27 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.75 mW/g



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Plot F5

Date/Time: 16/09/2015 10:14:13 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 44$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F5 Head XG-15-UHF, 470MHz, 1219/14, -23436/Area Scan (7x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.92 mW/g

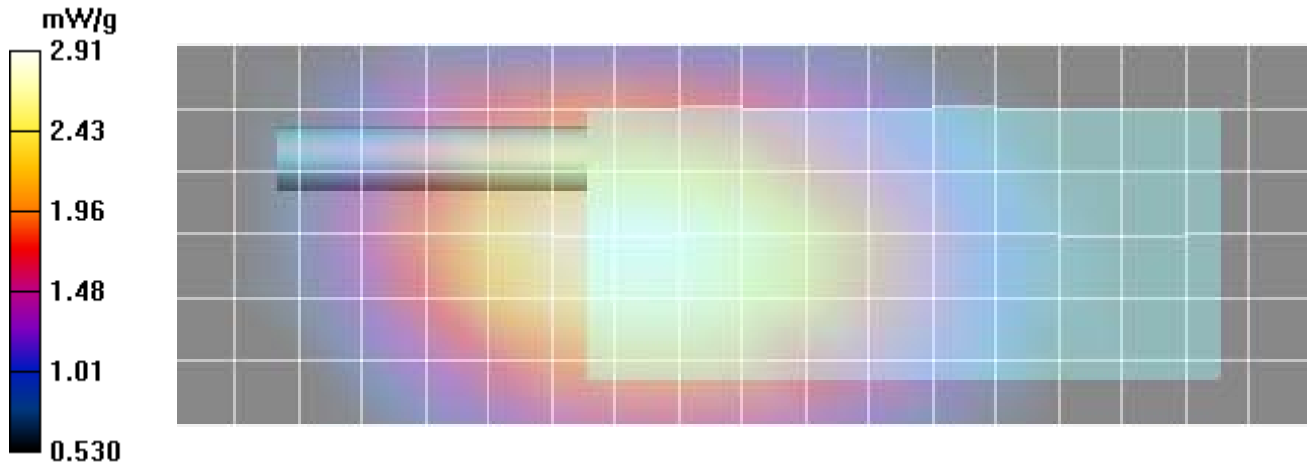
F5 Head XG-15-UHF, 470MHz, 1219/14, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$


Reference Value = 55.8 V/m; Power Drift = 0.206 dB



Peak SAR (extrapolated) = 3.53 W/kg

SAR(1 g) = 2.79 mW/g; SAR(10 g) = 2.13 mW/g

Maximum value of SAR (measured) = 2.91 mW/g



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Plot F6

Date/Time: 16/09/2015 10:47:22 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.902 \text{ mho/m}$; $\epsilon_r = 43.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F6 Head XG-15-UHF, 476MHz, 1219/14, -23436/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.43 mW/g

F6 Head XG-15-UHF, 476MHz, 1219/14, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

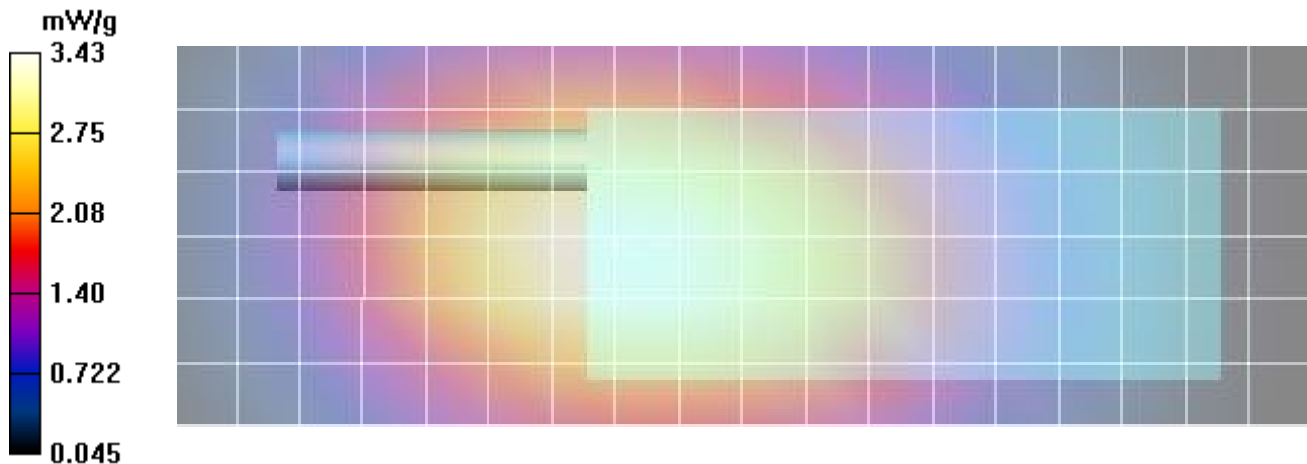
Reference Value = 62.0 V/m; Power Drift = 0.121 dB


Peak SAR (extrapolated) = 4.35 W/kg



SAR(1 g) = 3.41 mW/g; SAR(10 g) = 2.56 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.59 mW/g



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Plot F7

Date/Time: 16/09/2015 11:06:03 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F7 Head XG-15-UHF, 494MHz, 1219/14, -23436/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.43 mW/g

F7 Head XG-15-UHF, 494MHz, 1219/14, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

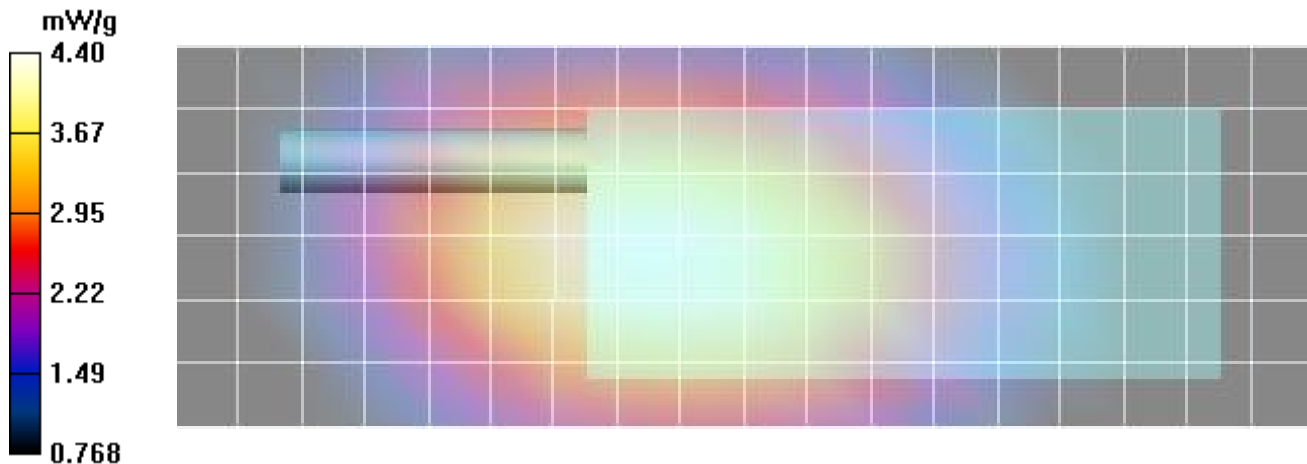
Reference Value = 70.6 V/m; Power Drift = -0.195 dB


Peak SAR (extrapolated) = 5.31 W/kg

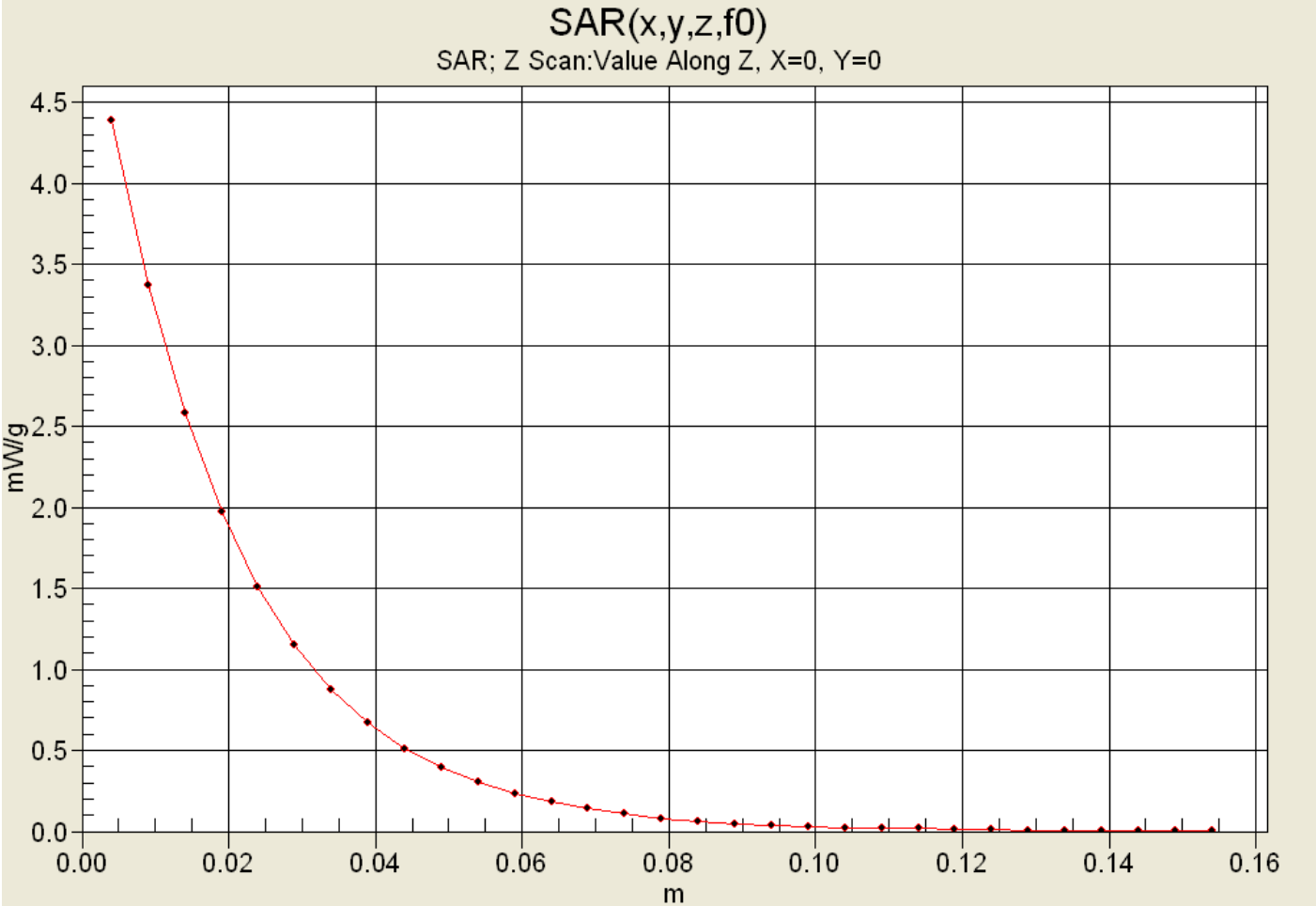
SAR(1 g) = 4.19 mW/g; SAR(10 g) = 3.17 mW/g



[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.40 mW/g



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Plot F8

Date/Time: 16/09/2015 11:22:37 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F8 Head XG-15-UHF, 512MHz, 1219/14, -23436/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.12 mW/g

F8 Head XG-15-UHF, 512MHz, 1219/14, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

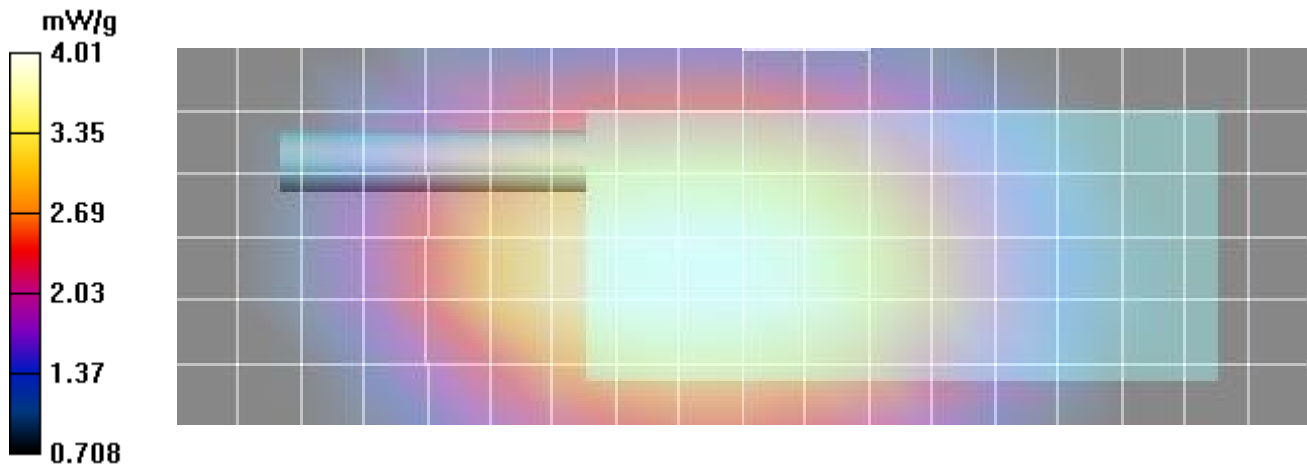
Reference Value = 66.1 V/m; Power Drift = -1.344 dB


Peak SAR (extrapolated) = 4.83 W/kg



SAR(1 g) = 3.81 mW/g; SAR(10 g) = 2.87 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.01 mW/g



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Plot F9

Date/Time: 16/09/2015 11:47:10 AM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 440 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.86 \text{ mho/m}$; $\epsilon_r = 45.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F9 Head XG-15-UHF, 440MHz, 1223/12, -23436/Area Scan (7x23x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 3.01 mW/g

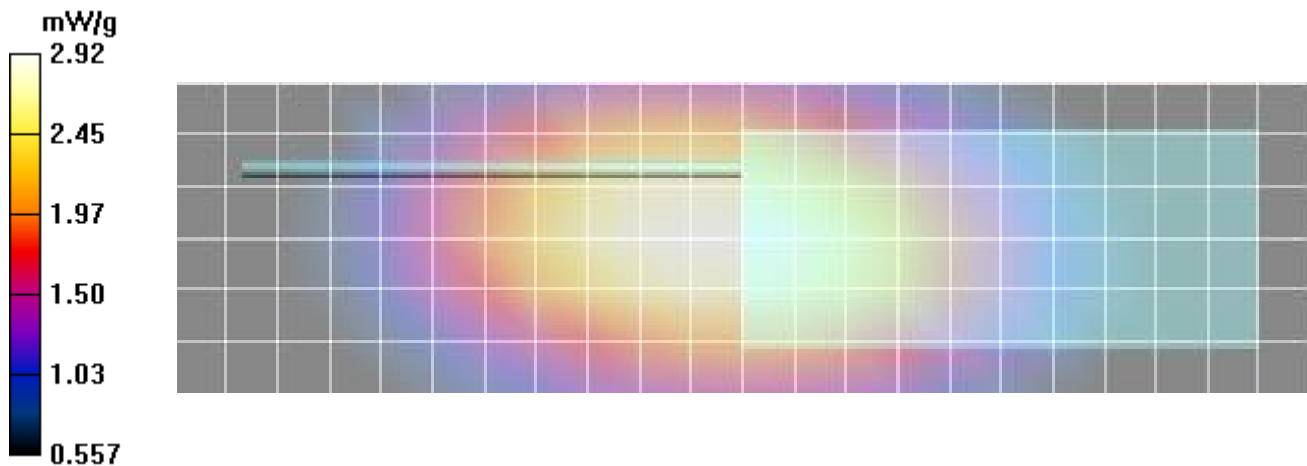
F9 Head XG-15-UHF, 440MHz, 1223/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$


Reference Value = 60.1 V/m; Power Drift = -0.184 dB



Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 2.79 mW/g; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (measured) = 2.92 mW/g



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Plot F10

Date/Time: 16/09/2015 12:13:51 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 459 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 459 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 43.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F10 Head XG-15-UHF, 459MHz, 1223/12, -23436/Area Scan (7x23x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.35 mW/g

F10 Head XG-15-UHF, 459MHz, 1223/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

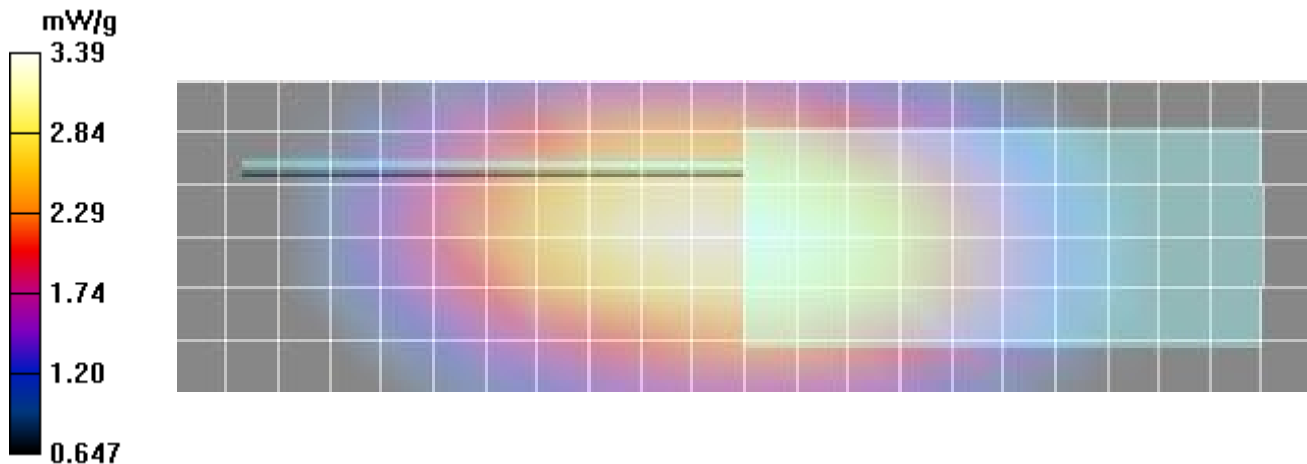
Reference Value = 61.9 V/m; Power Drift = 0.038 dB


Peak SAR (extrapolated) = 4.09 W/kg



SAR(1 g) = 3.23 mW/g; SAR(10 g) = 2.45 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.39 mW/g



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Plot F11

Date/Time: 16/09/2015 12:38:14 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.902 \text{ mho/m}$; $\epsilon_r = 43.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F11 Head XG-15-UHF, 476MHz, 1223/12, -23436/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.32 mW/g

F11 Head XG-15-UHF, 476MHz, 1223/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 61.4 V/m; Power Drift = -0.084 dB


Peak SAR (extrapolated) = 3.96 W/kg



SAR(1 g) = 3.14 mW/g; SAR(10 g) = 2.39 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 3.29 mW/g



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Plot F12

Date/Time: 16/09/2015 12:57:42 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F12 Head XG-15-UHF, 494MHz, 1223/12, -23436/Area Scan (7x23x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.81 mW/g

F12 Head XG-15-UHF, 494MHz, 1223/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

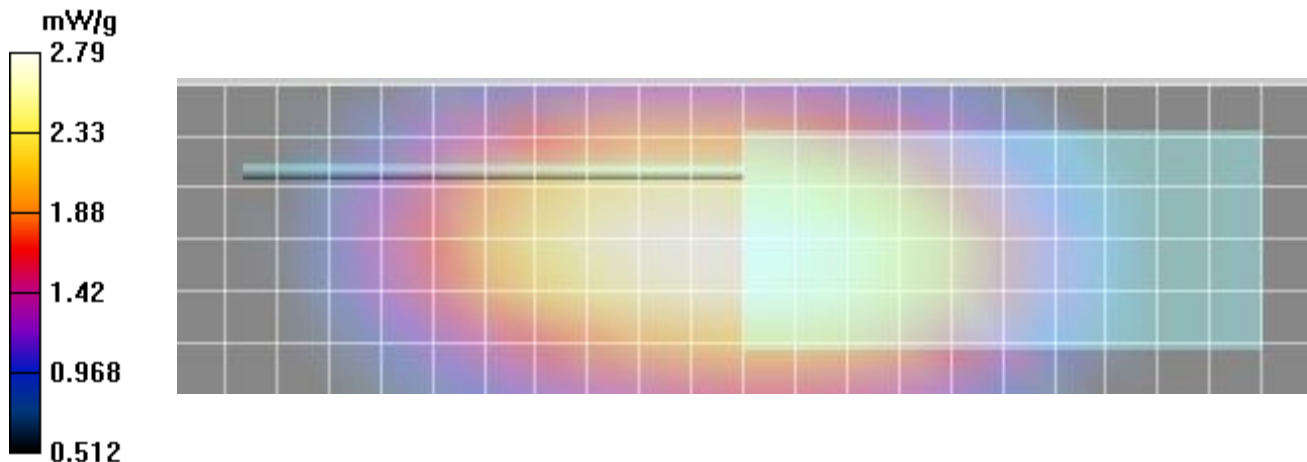
Reference Value = 56.6 V/m; Power Drift = -0.167 dB


Peak SAR (extrapolated) = 3.37 W/kg



SAR(1 g) = 2.66 mW/g; SAR(10 g) = 2.02 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.79 mW/g



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Plot F13

Date/Time: 16/09/2015 1:28:00 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F13 Head XG-15-UHF, 512MHz, 1223/12, -23436/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.89 mW/g

F13 Head XG-15-UHF, 512MHz, 1223/12, -23436/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

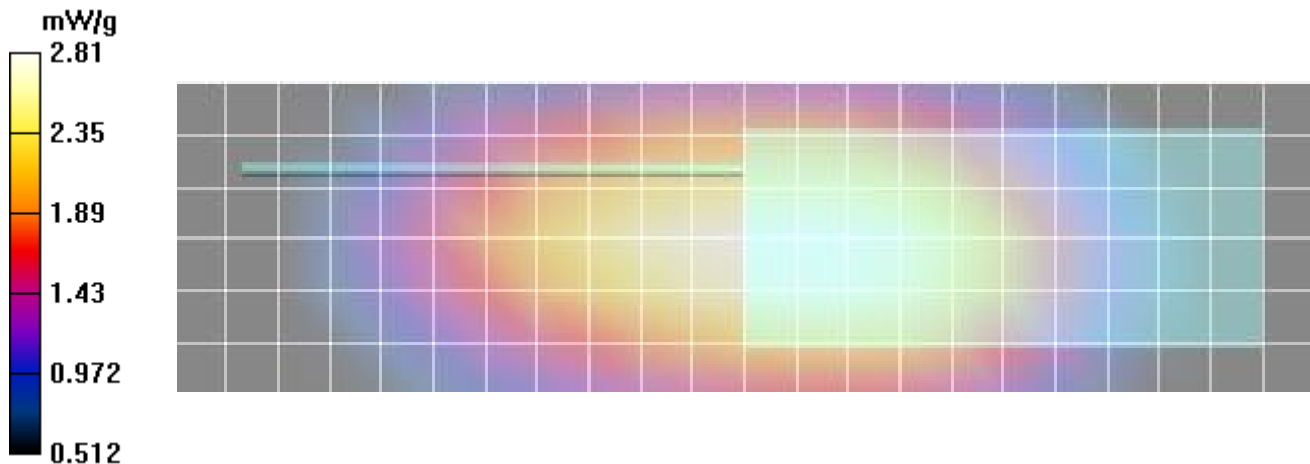
Reference Value = 56.4 V/m; Power Drift = -0.118 dB


Peak SAR (extrapolated) = 3.37 W/kg



SAR(1 g) = 2.68 mW/g; SAR(10 g) = 2.04 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.81 mW/g



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Plot F14

Date/Time: 16/09/2015 2:22:43 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F14 Head XG-15-UHF, 494MHz, 1219/14, -23406/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.58 mW/g

F14 Head XG-15-UHF, 494MHz, 1219/14, -23406/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

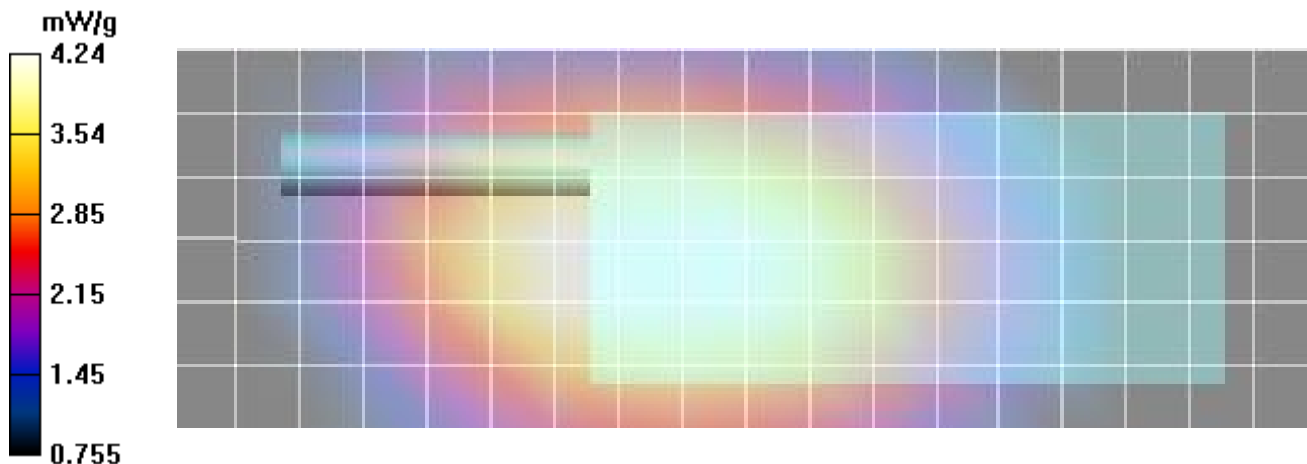
Reference Value = 72.8 V/m; Power Drift = -0.134 dB


Peak SAR (extrapolated) = 5.11 W/kg



SAR(1 g) = 4.04 mW/g; SAR(10 g) = 3.07 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.24 mW/g



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Plot F15

Date/Time: 16/09/2015 2:44:20 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F15 Head XG-15-UHF, 494MHz, 1219/14, -0214/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.69 mW/g

F15 Head XG-15-UHF, 494MHz, 1219/14, -0214/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

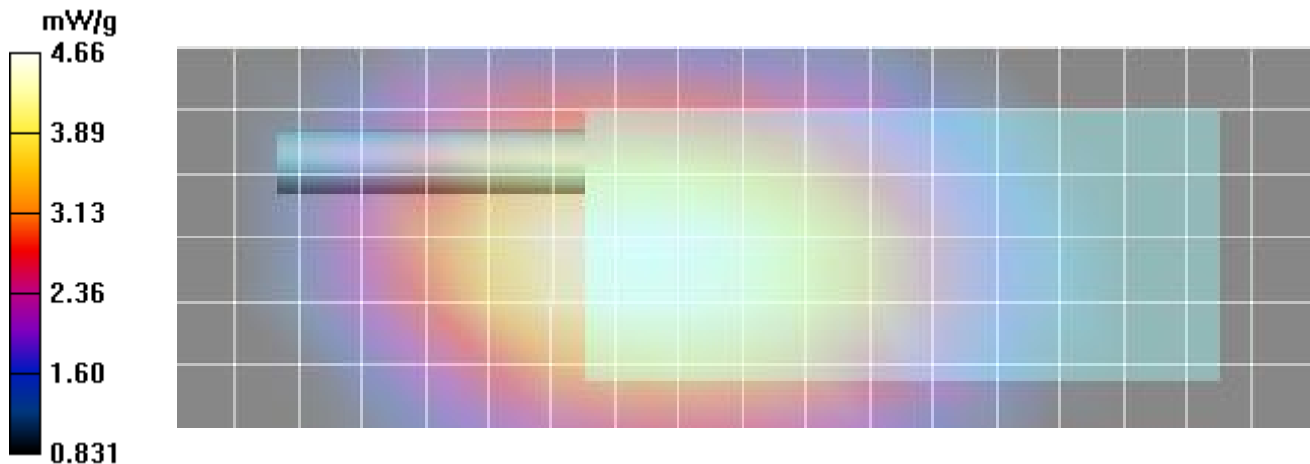
Reference Value = 72.5 V/m; Power Drift = -0.170 dB


Peak SAR (extrapolated) = 5.61 W/kg




SAR(1 g) = 4.44 mW/g; SAR(10 g) = 3.36 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.66 mW/g



Applicant:	Harris Corporation	Original Filing	
DUT Type:	XG-15P UHF-H Band Portable PTT Transceiver		
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	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Plot F16

Date/Time: 16/09/2015 3:03:15 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F16 Head XG-15-UHF, 494MHz, 1219/14, -0214, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 6.08 mW/g

F16 Head XG-15-UHF, 494MHz, 1219/14, -0214, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

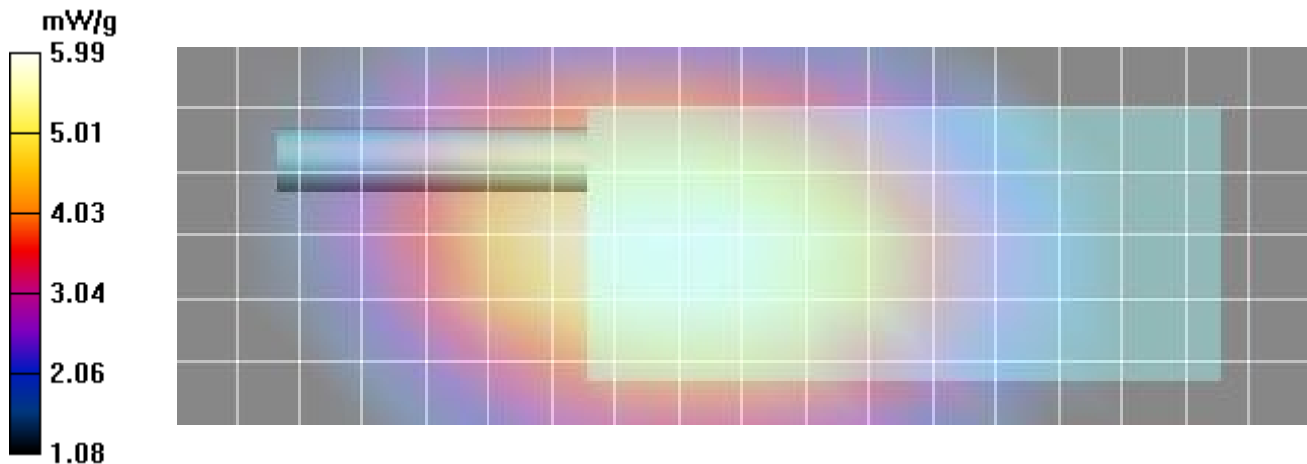
Reference Value = 80.9 V/m; Power Drift = -0.198 dB


Peak SAR (extrapolated) = 7.24 W/kg



SAR(1 g) = 5.71 mW/g; SAR(10 g) = 4.31 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 5.99 mW/g



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Plot F17

Date/Time: 16/09/2015 3:40:21 PM

450 Head 16 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 16 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.2C; Humidity: 25%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

F17 Head XG-15-UHF, 494MHz, 1219/14, -0214, GPS/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 6.70 mW/g

F17 Head XG-15-UHF, 494MHz, 1219/14, -0214, GPS/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

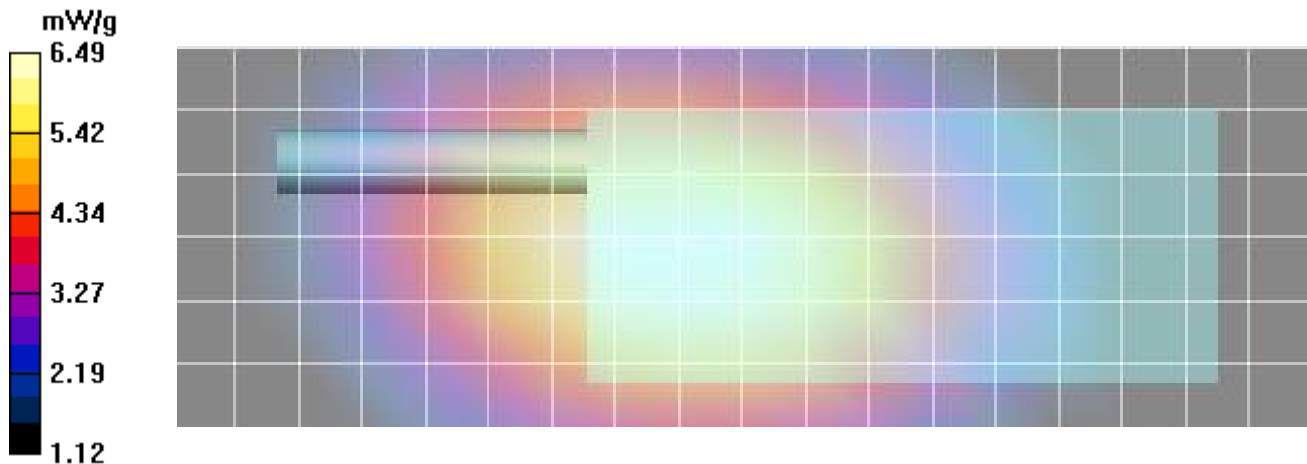
Reference Value = 84.1 V/m; Power Drift = -0.195 dB


Peak SAR (extrapolated) = 7.77 W/kg

SAR(1 g) = 6.19 mW/g; SAR(10 g) = 4.70 mW/g

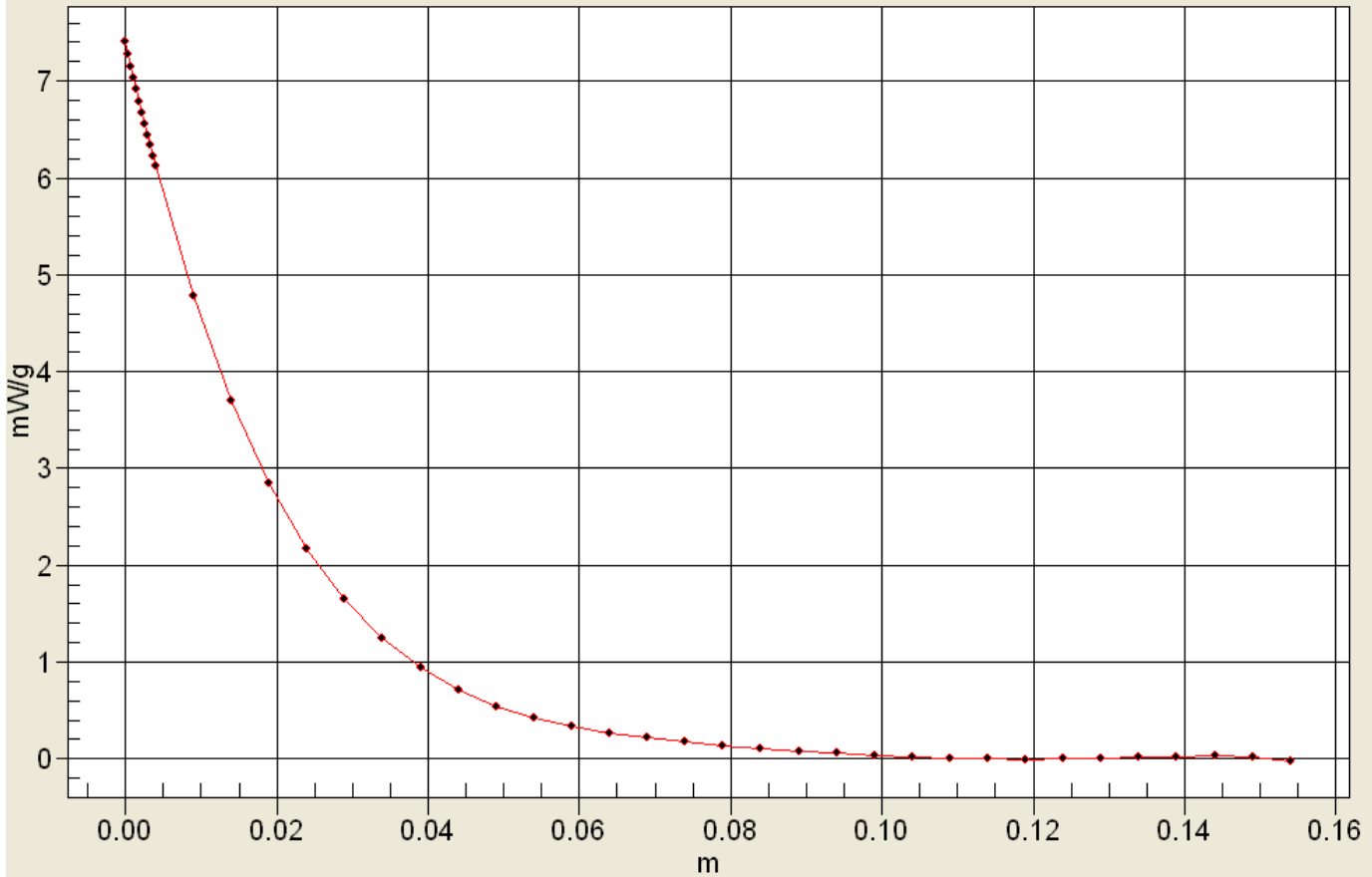
[Info: Interpolated medium parameters used for SAR evaluation.](#)



Maximum value of SAR (measured) = 6.49 mW/g



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Interpolated SAR(x,y,z,f0)
 SAR; Z Scan: Value Along Z, X=0, Y=0



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Plot B1

Date/Time: 19/09/2015 12:15:22 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 440 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

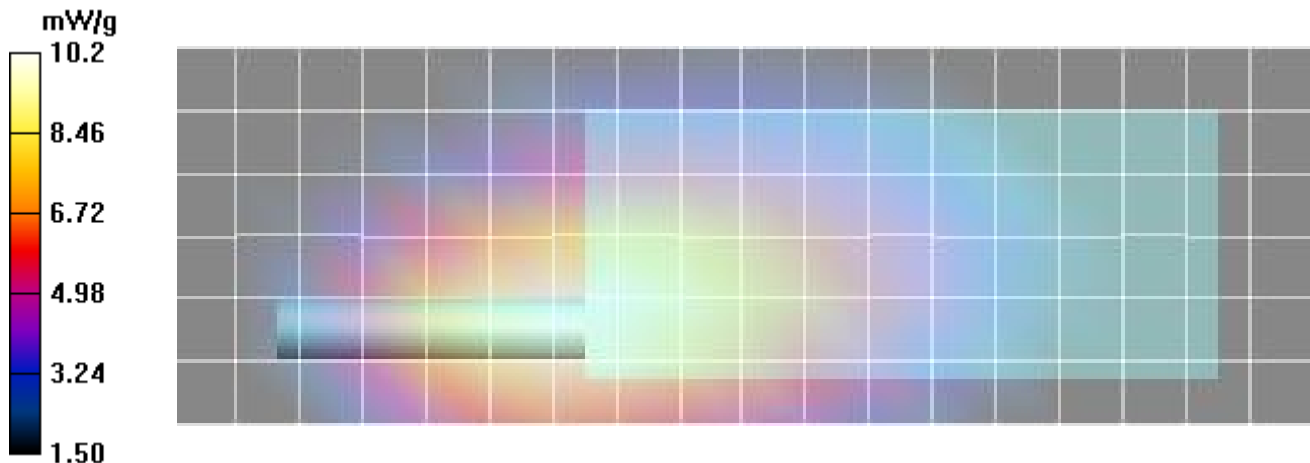
B1 Body XG-15-UHF, 440MHz, 1219/12, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 10.2 mW/g


B1 Body XG-15-UHF, 440MHz, 1219/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$




Reference Value = 94.0 V/m; Power Drift = -0.093 dB

Peak SAR (extrapolated) = 13.0 W/kg

SAR(1 g) = 9.64 mW/g; SAR(10 g) = 7.05 mW/g



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Plot B2

Date/Time: 19/09/2015 12:38:03 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 459 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 459 \text{ MHz}$; $\sigma = 0.978 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B2 Body XG-15-UHF, 459MHz, 1219/12, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.89 mW/g

B2 Body XG-15-UHF, 459MHz, 1219/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

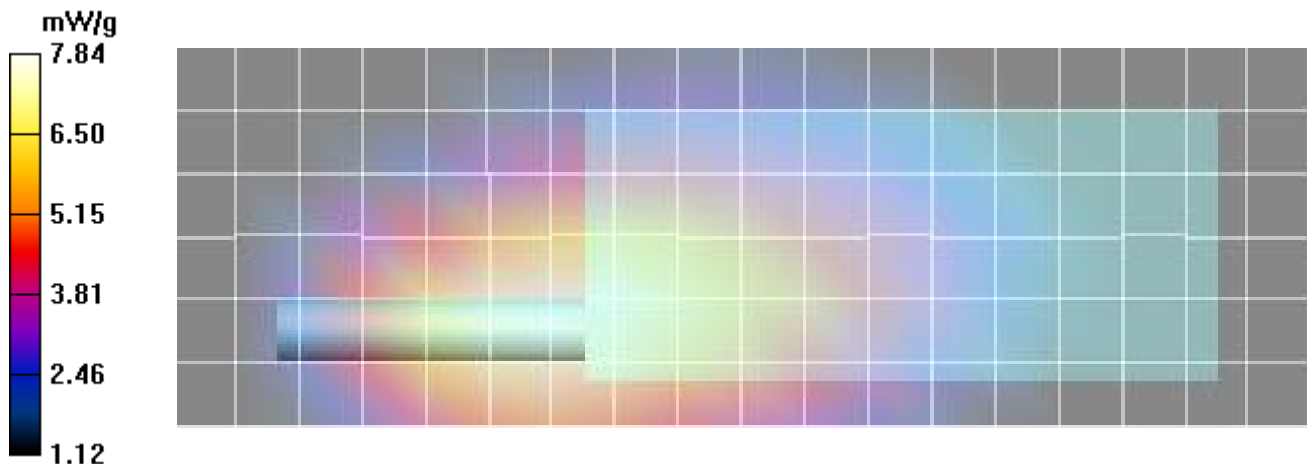
Reference Value = 82.0 V/m; Power Drift = -0.165 dB


Peak SAR (extrapolated) = 10.1 W/kg




SAR(1 g) = 7.43 mW/g; SAR(10 g) = 5.39 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.84 mW/g



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Plot B3

Date/Time: 19/09/2015 1:32:13 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B3 Body XG-15-UHF, 476MHz, 1219/12, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 6.90 mW/g

B3 Body XG-15-UHF, 476MHz, 1219/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

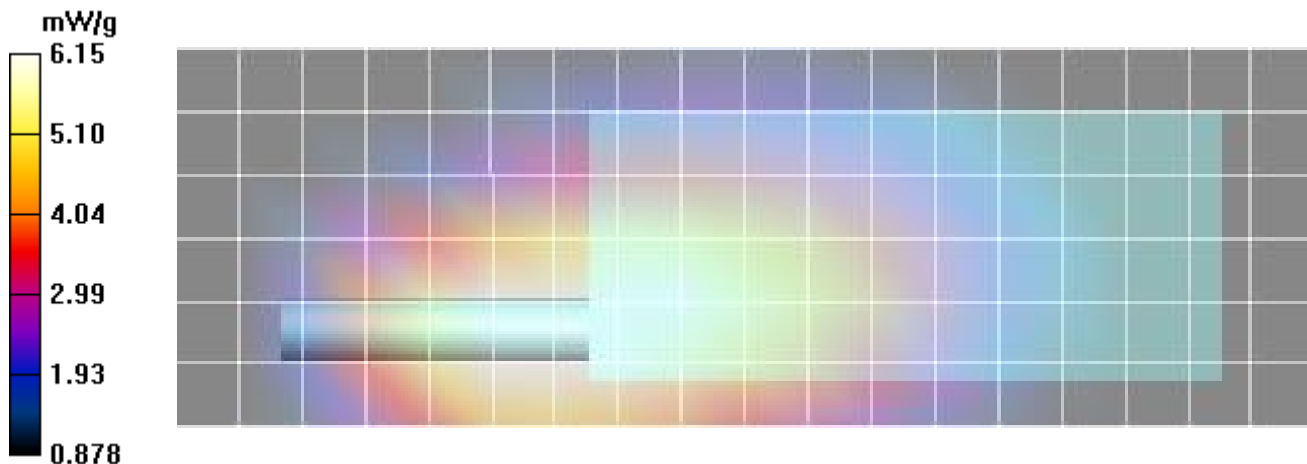
Reference Value = 79.2 V/m; Power Drift = -0.106 dB


Peak SAR (extrapolated) = 7.93 W/kg




SAR(1 g) = 5.83 mW/g; SAR(10 g) = 4.23 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 6.15 mW/g



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Plot B4

Date/Time: 19/09/2015 1:53:31 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B4 Body XG-15-UHF, 494MHz, 1219/12, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 5.20 mW/g

B4 Body XG-15-UHF, 494MHz, 1219/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

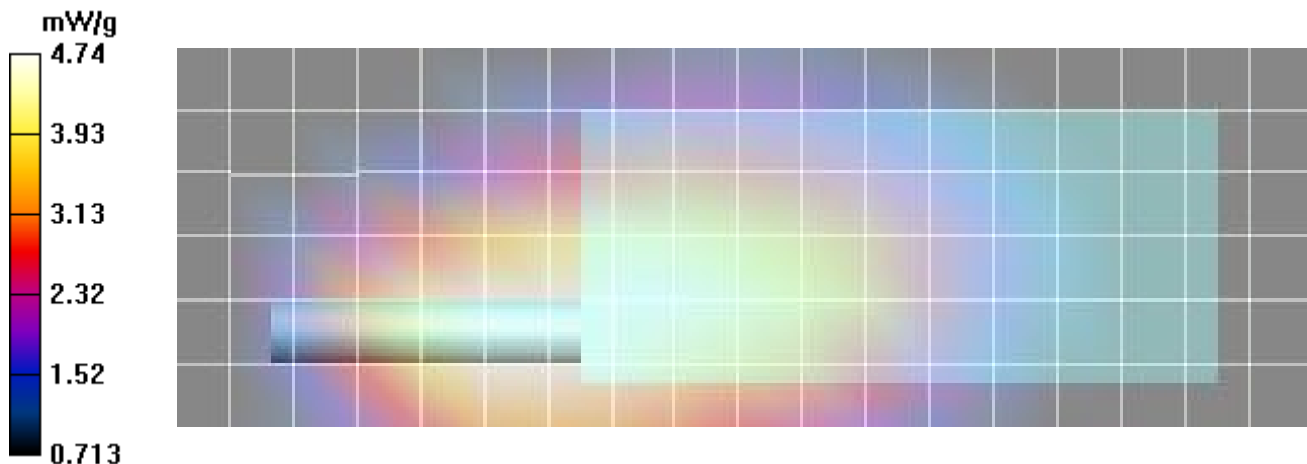
Reference Value = 67.4 V/m; Power Drift = -0.194 dB


Peak SAR (extrapolated) = 6.10 W/kg



SAR(1 g) = 4.5 mW/g; SAR(10 g) = 3.28 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.74 mW/g



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Plot B5

Date/Time: 19/09/2015 2:22:02 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B5 Body XG-15-UHF, 470MHz, 1219/14, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 9.77 mW/g

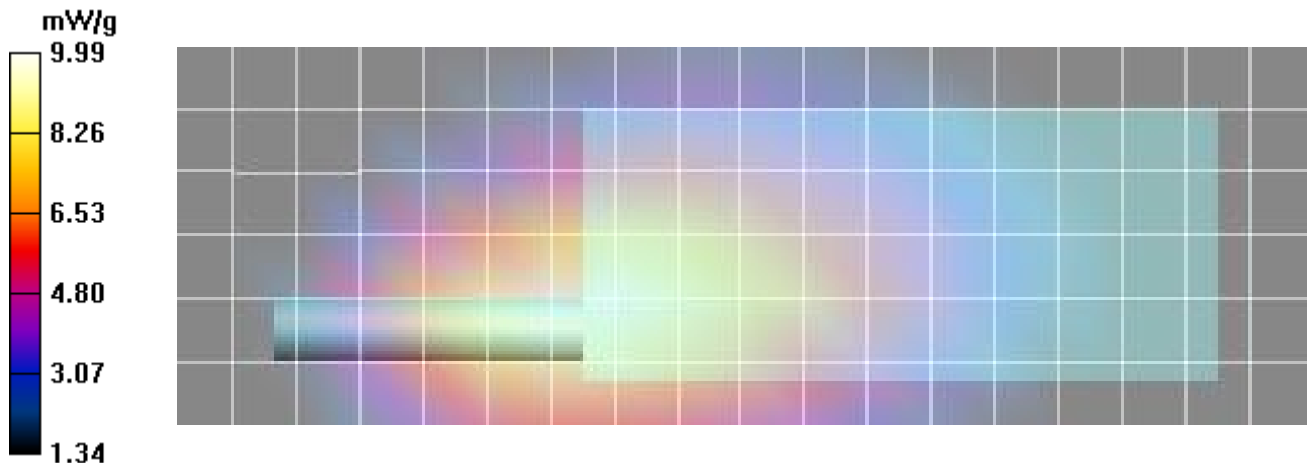
B5 Body XG-15-UHF, 470MHz, 1219/14, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$


Reference Value = 89.9 V/m; Power Drift = 0.123 dB




Peak SAR (extrapolated) = 12.8 W/kg

SAR(1 g) = 9.45 mW/g; SAR(10 g) = 6.83 mW/g

Maximum value of SAR (measured) = 9.99 mW/g



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Plot B6

Date/Time: 19/09/2015 2:42:56 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B6 Body XG-15-UHF, 476MHz, 1219/14, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 11.6 mW/g

B6 Body XG-15-UHF, 476MHz, 1219/14, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

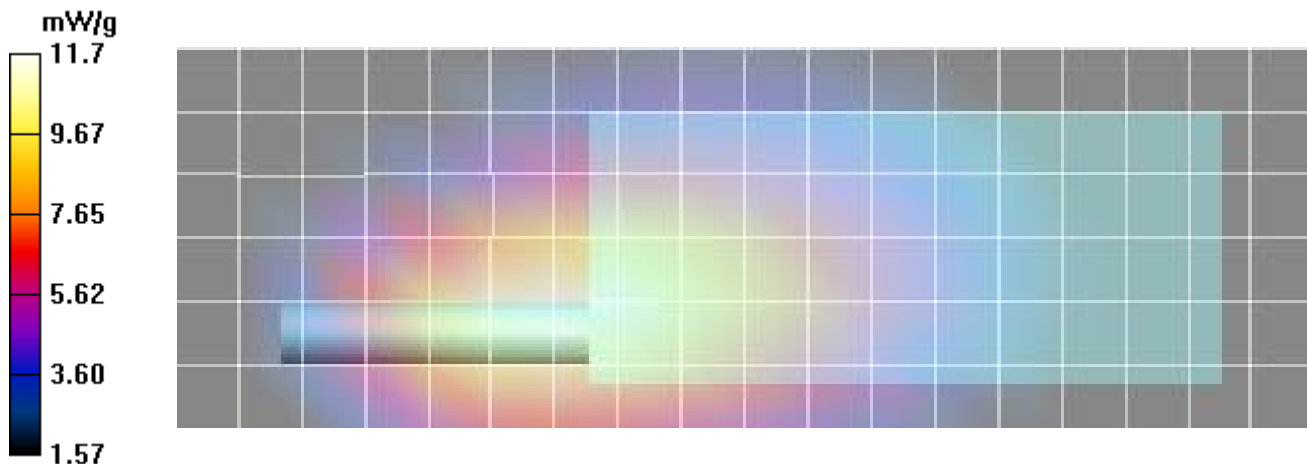
Reference Value = 99.8 V/m; Power Drift = 0.024 dB


Peak SAR (extrapolated) = 15.1 W/kg

SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.98 mW/g

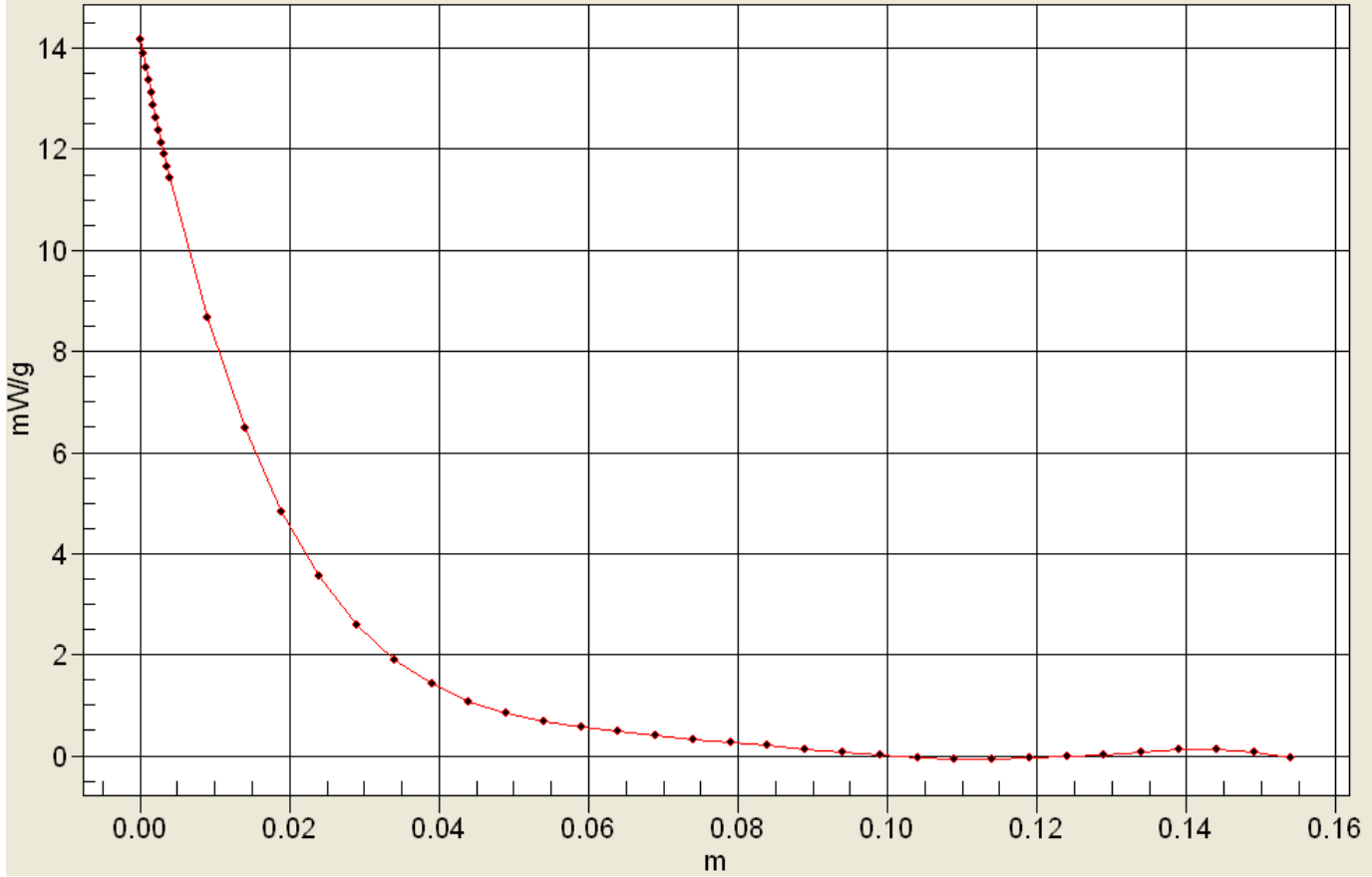
[Info: Interpolated medium parameters used for SAR evaluation.](#)




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



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Interpolated SAR(x,y,z,f0)
 SAR; Z Scan: Value Along Z, X=0, Y=0



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Plot B7

Date/Time: 19/09/2015 3:09:09 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B7 Body XG-15-UHF, 494MHz, 1219/14, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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

B7 Body XG-15-UHF, 494MHz, 1219/14, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

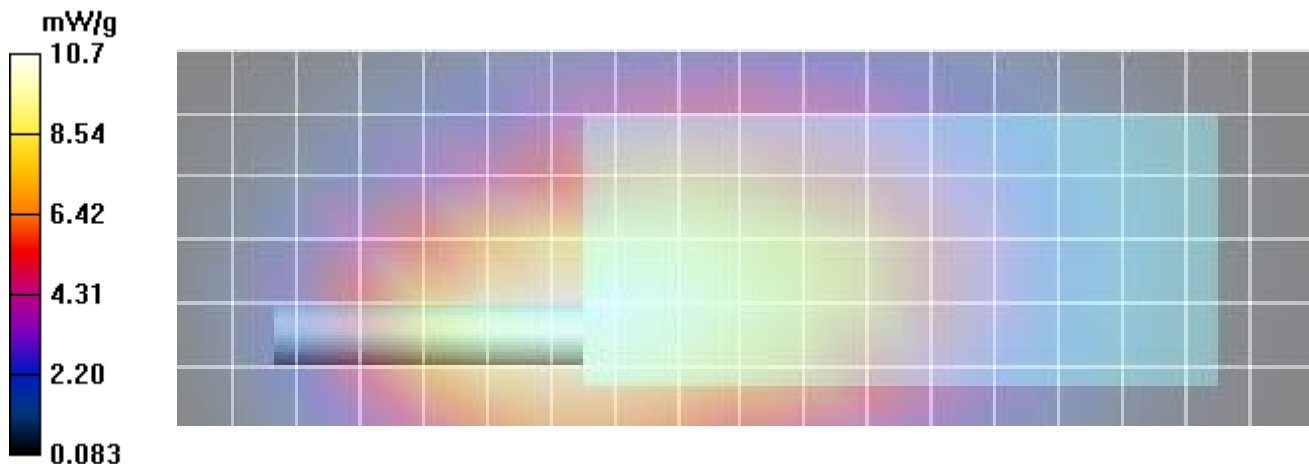
Reference Value = 98.4 V/m; Power Drift = -0.202 dB


Peak SAR (extrapolated) = 13.1 W/kg



SAR(1 g) = 9.67 mW/g; SAR(10 g) = 7.07 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 10.2 mW/g



Applicant:	Harris Corporation	Original Filing	
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Plot B8

Date/Time: 19/09/2015 3:32:05 PM

450 Body 19 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 19 Sep 2015 Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B8 Body XG-15-UHF, 512MHz, 1219/14, -0214, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.85 mW/g

B8 Body XG-15-UHF, 512MHz, 1219/14, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

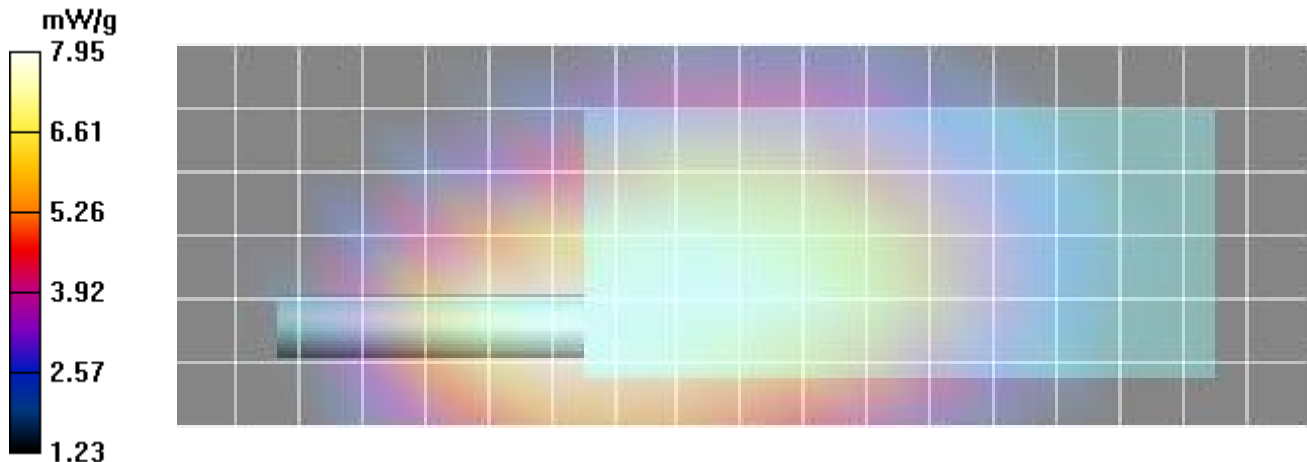
Reference Value = 85.9 V/m; Power Drift = -0.161 dB


Peak SAR (extrapolated) = 10.4 W/kg



SAR(1 g) = 7.6 mW/g; SAR(10 g) = 5.59 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.95 mW/g



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DUT Type:	XG-15P UHF-H Band Portable PTT Transceiver		
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Plot B9

Date/Time: 20/09/2015 8:58:18 AM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 440 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used: $f = 440 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B9 Body EU XG-15-UHF, 440MHz, 1223/12, -0214, T-Strap, BT/Area Scan (7x23x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 7.99 mW/g

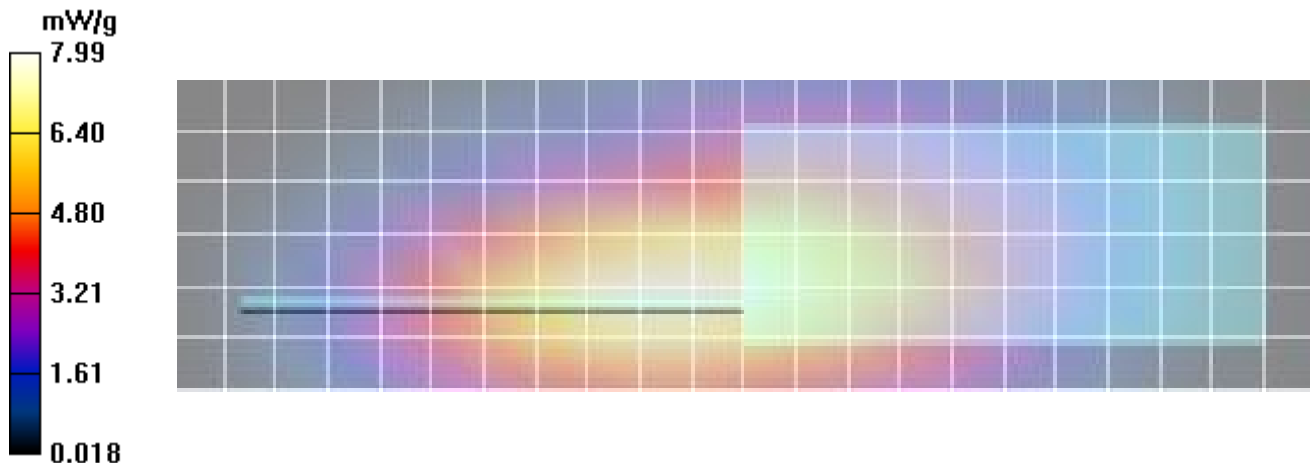
B9 Body EU XG-15-UHF, 440MHz, 1223/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$


Reference Value = 81.8 V/m; Power Drift = -0.126 dB




Peak SAR (extrapolated) = 10.3 W/kg

SAR(1 g) = 7.58 mW/g; SAR(10 g) = 5.48 mW/g

Maximum value of SAR (measured) = 8.02 mW/g



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Plot B10

Date/Time: 20/09/2015 9:23:36 AM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 459 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 459 \text{ MHz}$; $\sigma = 0.978 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B10 Body EU XG-15-UHF, 459MHz, 1223/12, -0214, T-Strap, BT/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.26 mW/g

B10 Body EU XG-15-UHF, 459MHz, 1223/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

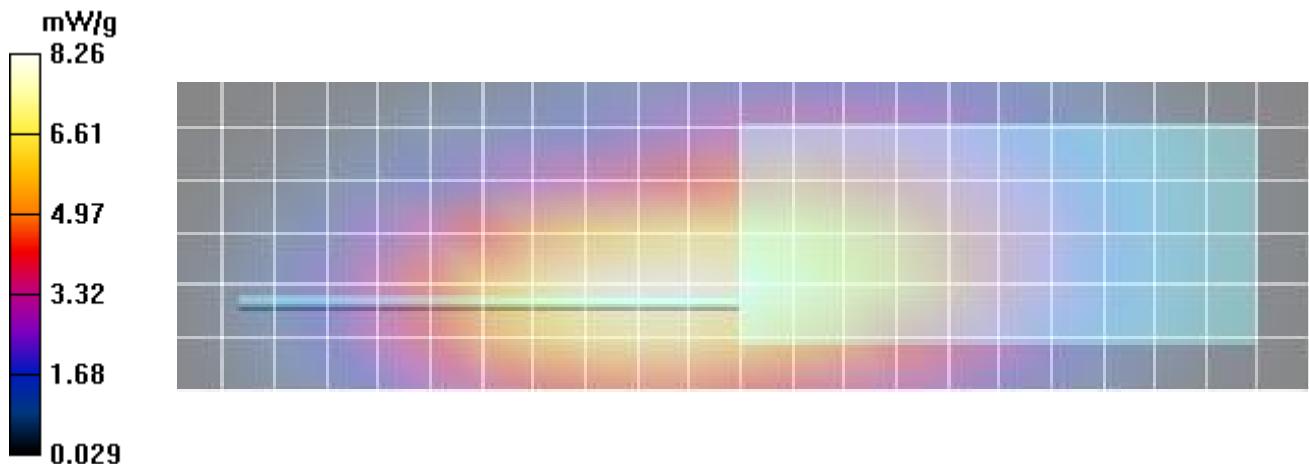
Reference Value = 82.4 V/m; Power Drift = -0.068 dB


Peak SAR (extrapolated) = 10.5 W/kg




SAR(1 g) = 7.78 mW/g; SAR(10 g) = 5.65 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.21 mW/g



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Plot B11

Date/Time: 20/09/2015 9:57:19 AM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B11 Body EU XG-15-UHF, 476MHz, 1223/12, -0214, T-Strap, BT/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.18 mW/g

B11 Body EU XG-15-UHF, 476MHz, 1223/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

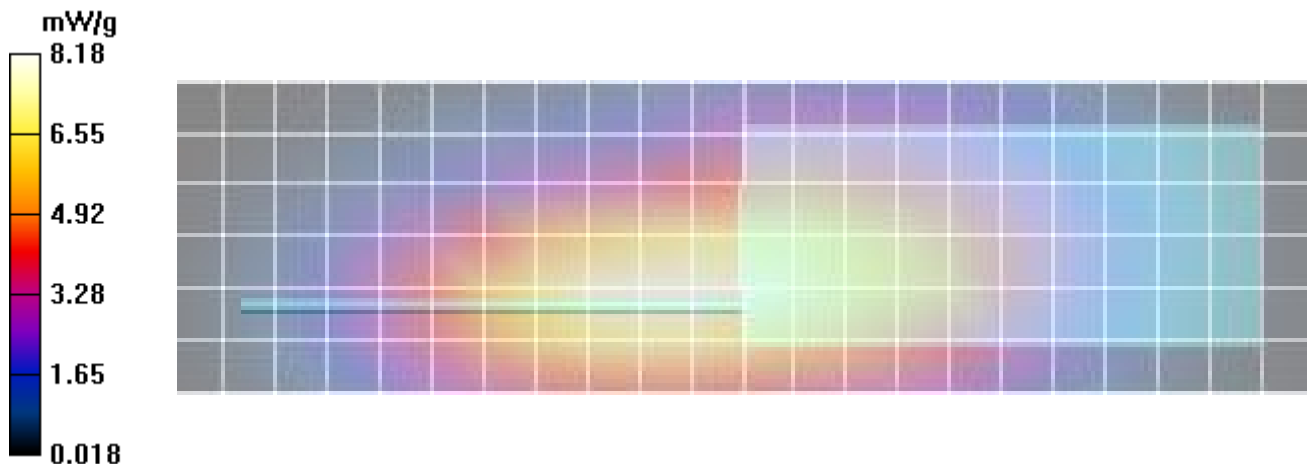
Reference Value = 83.3 V/m; Power Drift = -0.156 dB


Peak SAR (extrapolated) = 9.78 W/kg




SAR(1 g) = 7.19 mW/g; SAR(10 g) = 5.19 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.58 mW/g



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Plot B12

Date/Time: 20/09/2015 10:24:38 AM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 494 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 494 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B12 Body EU XG-15-UHF, 494MHz, 1223/12, -0214, T-Strap, BT/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.50 mW/g

B12 Body EU XG-15-UHF, 494MHz, 1223/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

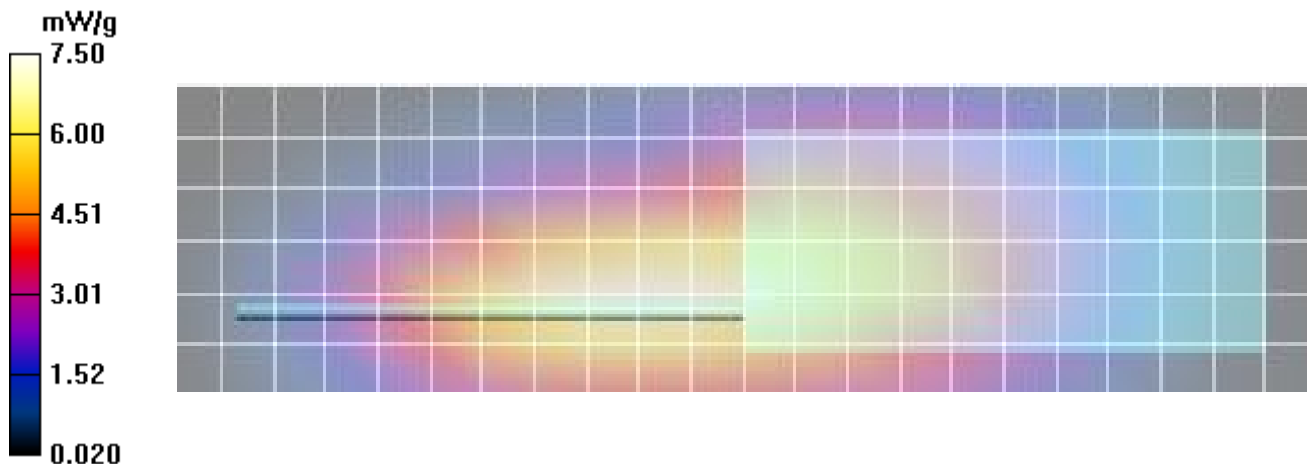
Reference Value = 77.3 V/m; Power Drift = -0.121 dB


Peak SAR (extrapolated) = 9.39 W/kg



SAR(1 g) = 6.83 mW/g; SAR(10 g) = 4.88 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 7.26 mW/g



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Plot B13

Date/Time: 20/09/2015 11:39:11 AM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B13 Body EU XG-15-UHF, 512MHz, 1223/12, -0214, T-Strap, BT/Area Scan (7x23x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 5.77 mW/g

B13 Body EU XG-15-UHF, 512MHz, 1223/12, -0214, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

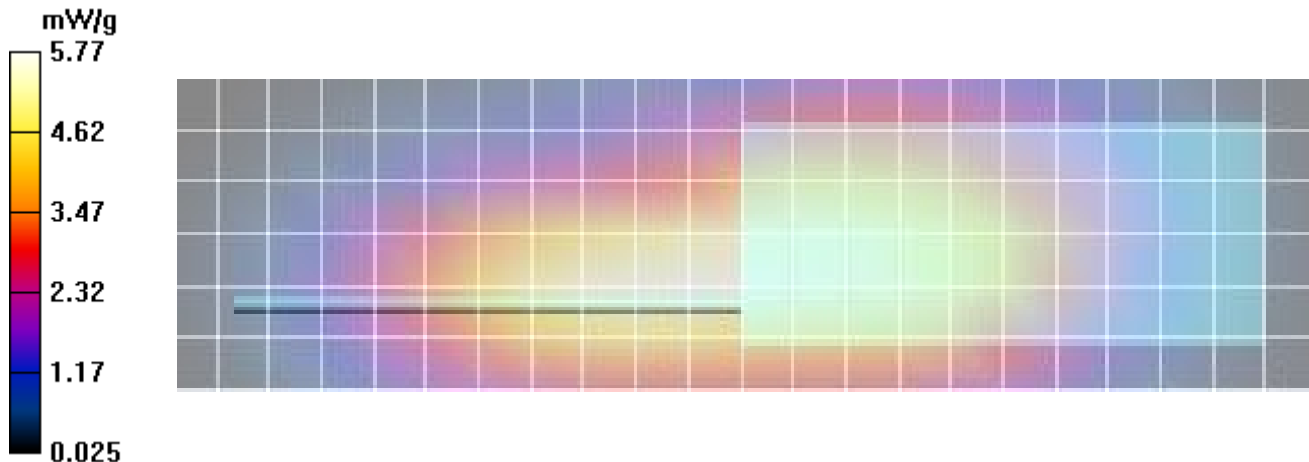
Reference Value = 71.8 V/m; Power Drift = -0.063 dB


Peak SAR (extrapolated) = 7.31 W/kg



SAR(1 g) = 5.36 mW/g; SAR(10 g) = 3.86 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 5.66 mW/g



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Plot B14

Date/Time: 20/09/2015 12:04:55 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B14 Body XG-15-UHF, 476MHz, 1219/14, -23436, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.73 mW/g

B14 Body XG-15-UHF, 476MHz, 1219/14, -23436, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

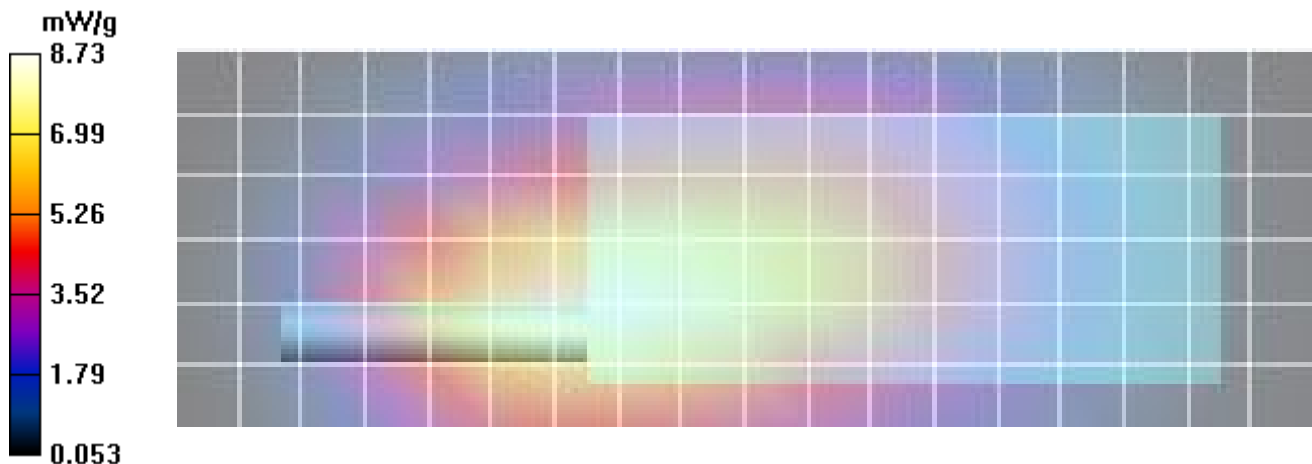
Reference Value = 86.4 V/m; Power Drift = 0.158 dB


Peak SAR (extrapolated) = 11.4 W/kg




SAR(1 g) = 8.48 mW/g; SAR(10 g) = 6.17 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.93 mW/g



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Plot B15

Date/Time: 20/09/2015 12:31:40 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B15 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 12.9 mW/g

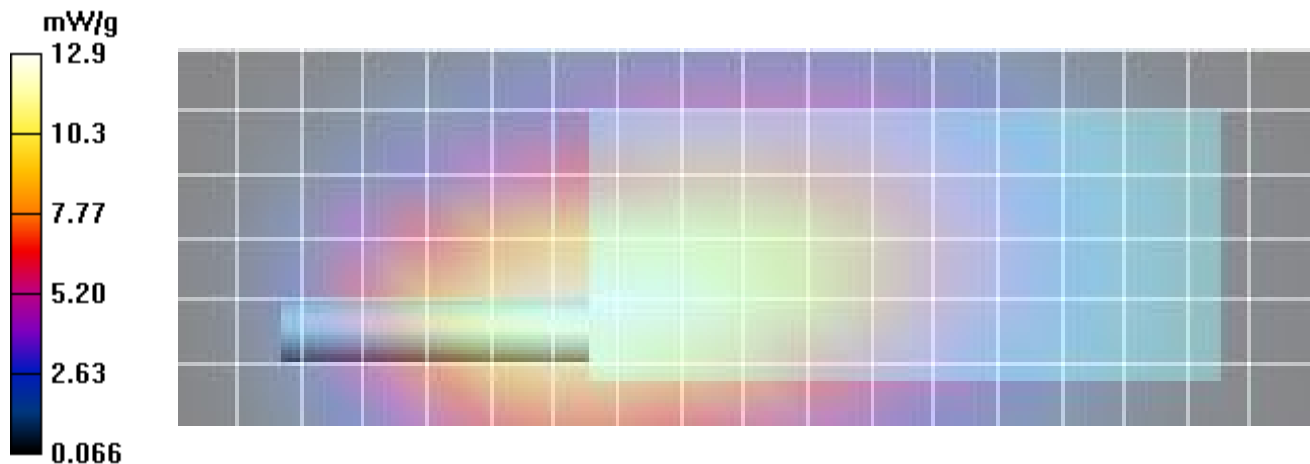
B15 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm


Reference Value = 102.8 V/m; Power Drift = 0.182 dB



Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 12.2 mW/g; SAR(10 g) = 8.9 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)



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Plot B16

Date/Time: 20/09/2015 1:18:39 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B16 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, GPS/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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

B16 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, GPS/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

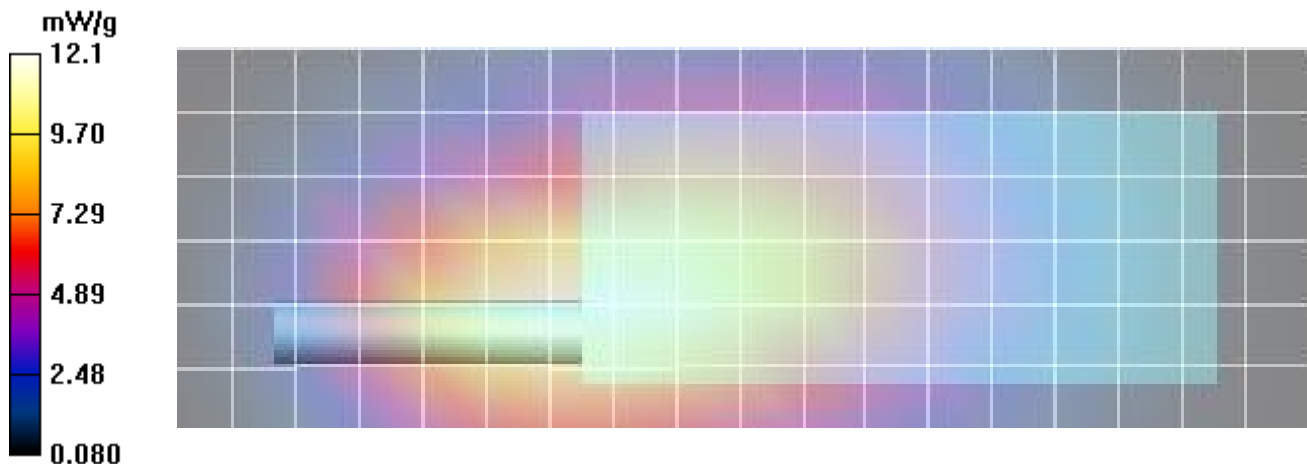
Reference Value = 103.4 V/m; Power Drift = 0.118 dB


Peak SAR (extrapolated) = 15.7 W/kg



SAR(1 g) = 11.6 mW/g; SAR(10 g) = 8.5 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 12.3 mW/g



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Plot B17

Date/Time: 20/09/2015 2:04:48 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B17 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, Spk-MIC/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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

B17 Body XG-15-UHF, 476MHz, 1219/14, -23406, T-Strap, Spk-MIC/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

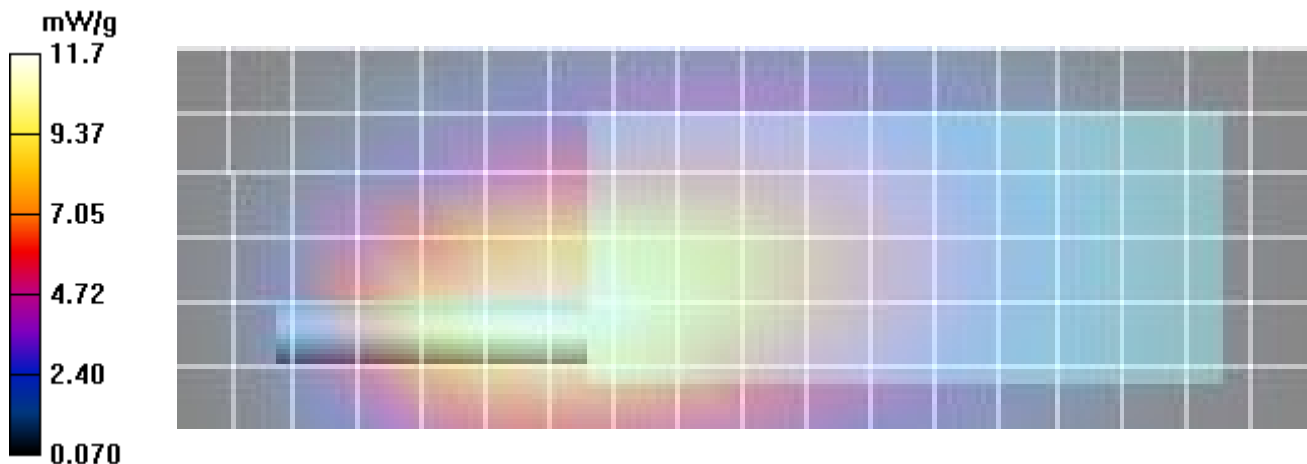
Reference Value = 98.6 V/m; Power Drift = -0.054 dB


Peak SAR (extrapolated) = 15.2 W/kg




SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.8 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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



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DUT Type:	XG-15P UHF-H Band Portable PTT Transceiver		
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	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Plot B18

Date/Time: 20/09/2015 3:27:14 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B18 Body XG-15-UHF, 476MHz, 1219/14, -23406, B1, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 13.0 mW/g

B18 Body XG-15-UHF, 476MHz, 1219/14, -23406, B1, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

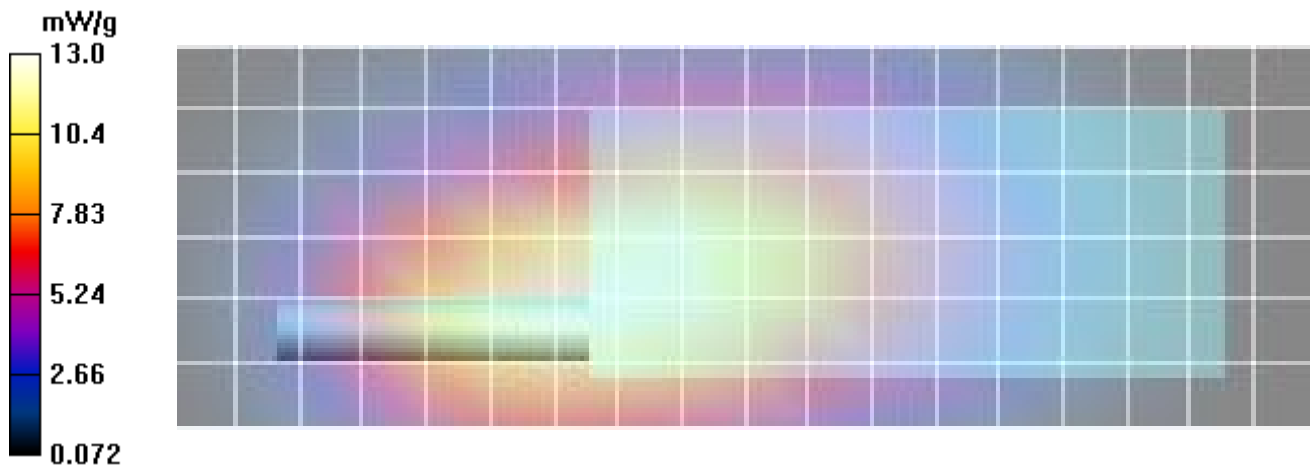
Reference Value = 108.7 V/m; Power Drift = 0.050 dB


Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 12.5 mW/g; SAR(10 g) = 9.14 mW/g

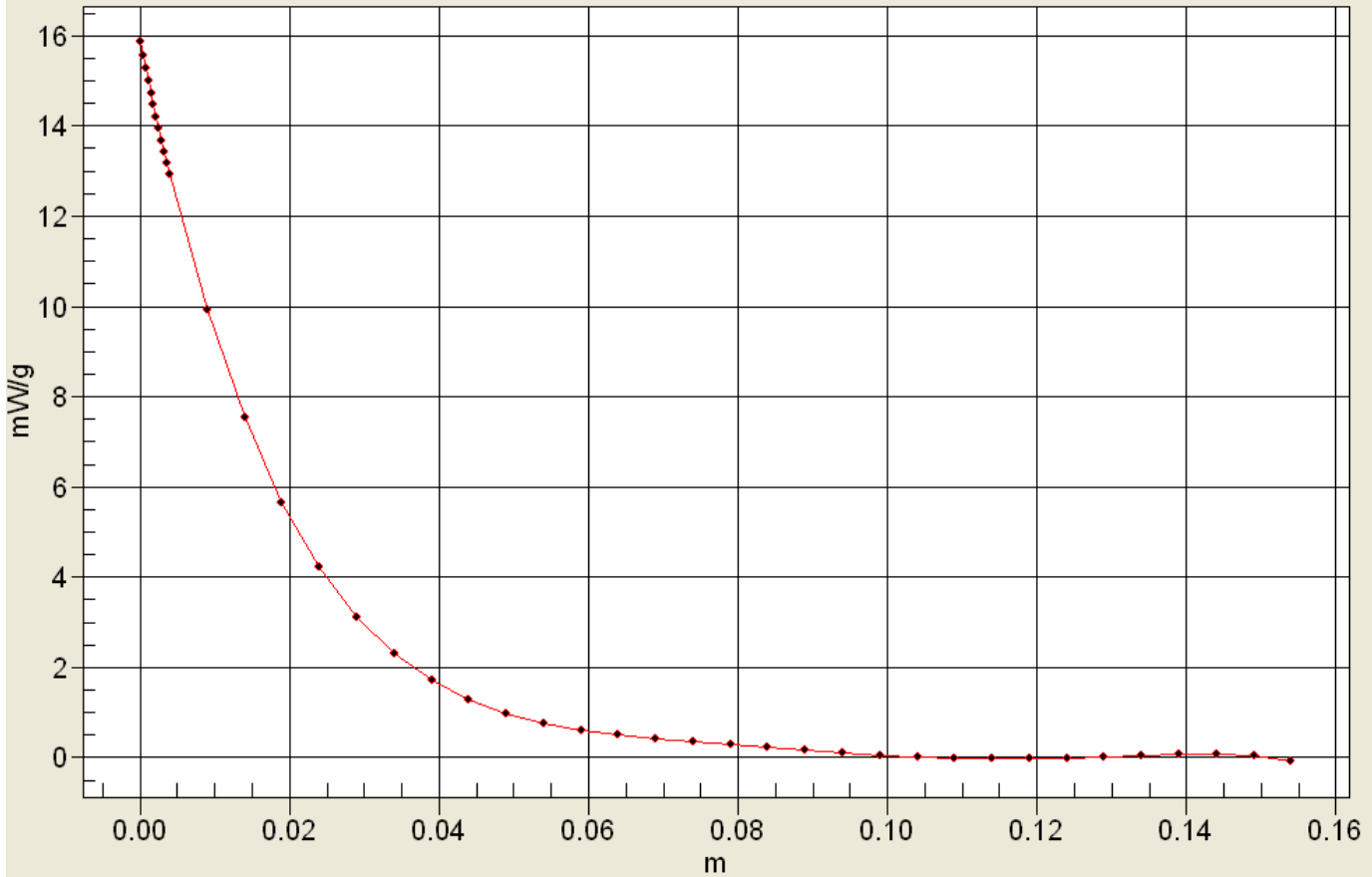
[Info: Interpolated medium parameters used for SAR evaluation.](#)



Maximum value of SAR (measured) = 13.2 mW/g



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Interpolated SAR(x,y,z,f0)
 SAR; Z Scan: Value Along Z, X=0, Y=0



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	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Plot B19

Date/Time: 20/09/2015 2:57:21 PM

450 Body 20 Sep 2015

DUT: Harris XG-15; Type: PTT Radio Transceiver; Serial: Not Specified

Program Notes: 20 Sep 2015 Ambient Temp: 24C; Fluid Temp: 24.1C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 476 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used (interpolated): $f = 476 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

B19 Body XG-15-UHF, 476MHz, 1219/14, -23406, B15, BT/Area Scan (7x19x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 11.4 mW/g

B19 Body XG-15-UHF, 476MHz, 1219/14, -23406, B15, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

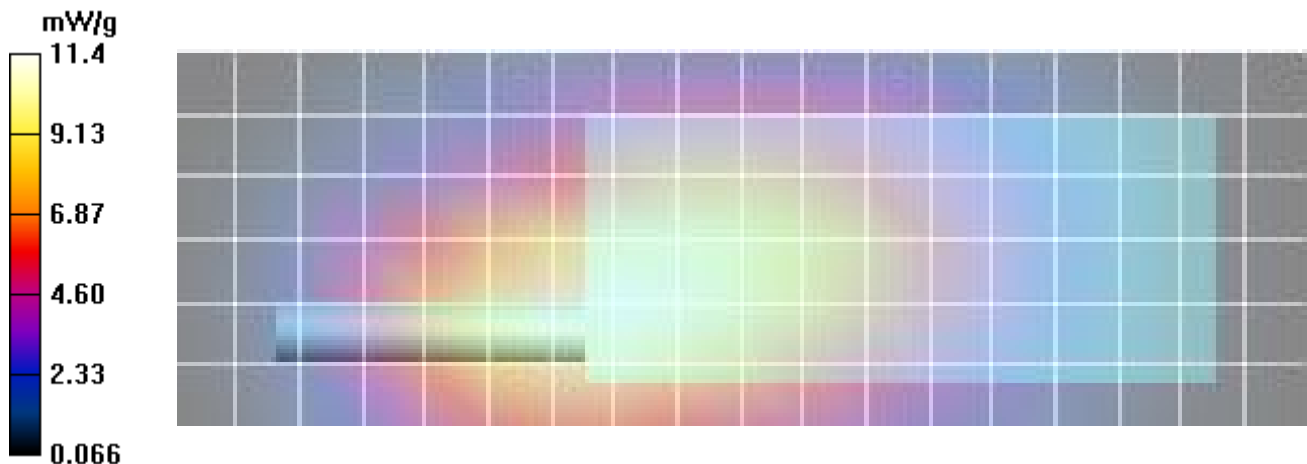
Reference Value = 100.4 V/m; Power Drift = -0.029 dB


Peak SAR (extrapolated) = 14.4 W/kg




SAR(1 g) = 10.8 mW/g; SAR(10 g) = 7.94 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 11.3 mW/g



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	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

APPENDIX B – SYSTEM VERIFICATION PLOTS

Date/Time: 14/09/2015 12:43:53 PM

SPC 450H - 14 Sep 2015

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1068; Calibrated: 04/27/2012

Program Notes: 14 Sep 2015, Ambient Temp: 24C; Fluid Temp: 21.4C; Humidity: 35%

Procedure Notes:

Communication System: CW

Frequency: 450 MHz; Duty Cycle: 1:1

Medium: TSL_450H Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 44.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(9.03, 9.03, 9.03); Calibrated: 23/04/2015
- Sensor-Surface: 5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Head d=15mm Pin=250mW, TS=[1.044][1.16][1.276]/Area Scan (3x5x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.12 mW/g

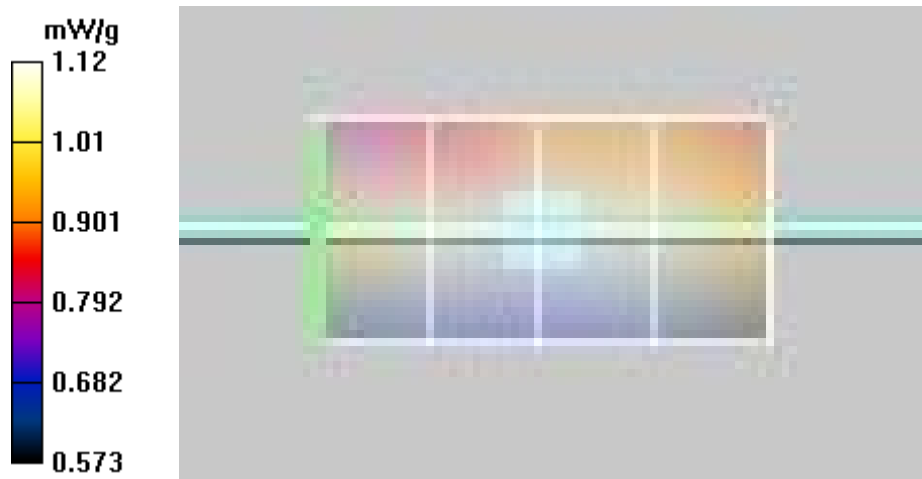
Head d=15mm Pin=250mW, TS=[1.044][1.16][1.276]/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm


Reference Value = 35.9 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 1.67 W/kg

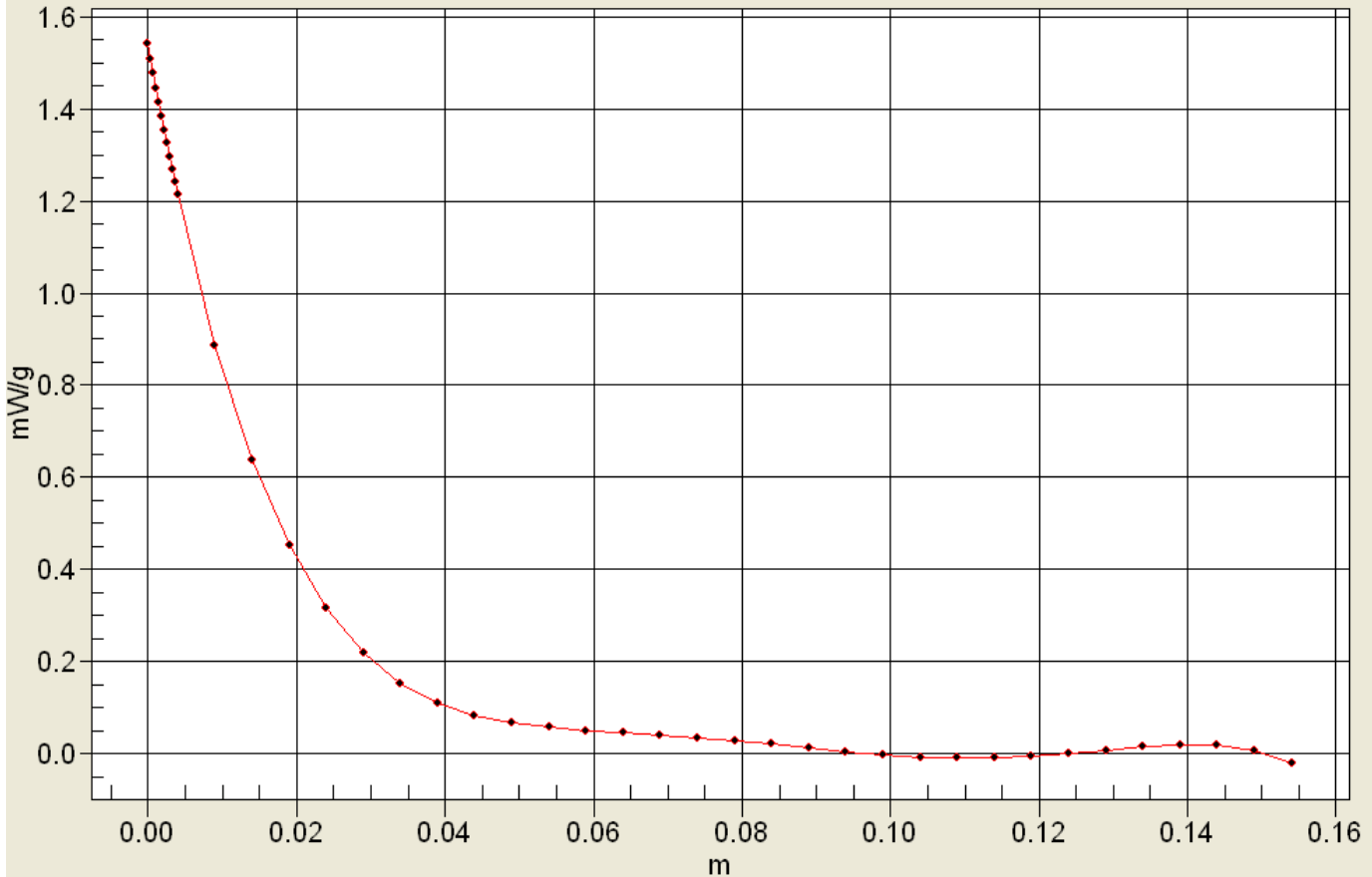
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.794 mW/g



Maximum value of SAR (measured) = 1.15 mW/g



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DUT Type:	XG-15P UHF-H Band Portable PTT Transceiver		
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Interpolated SAR(x,y,z,f0)
 SAR; Z Scan: Value Along Z, X=0, Y=0



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	<u>Test Report Issue Date</u> September 30, 2015	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Date/Time: 19/09/2015 11:34:43 AM

SPC 450B - 19 Sep 2015

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1068; Calibrated: 04/27/2012

Program Notes: 19 Sep 2015, Ambient Temp: 23C; Fluid Temp: 24.0C; Humidity: 24%

Procedure Notes:

Communication System: CW

Frequency: 450 MHz; Duty Cycle: 1:1

Medium: TSL_450B Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: EX3DV4 - SN3600 2015; ConvF(8.8, 8.8, 8.8); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370 2015; Calibrated: 23/04/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body d=15mm Pin=398mW, TS=[1.008[1.12][1.232]/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 1.28 mW/g

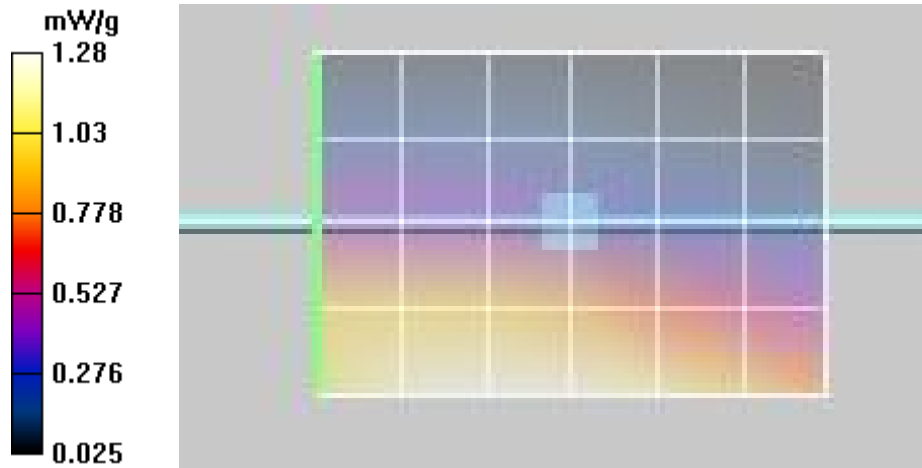
Body d=15mm Pin=398mW, TS=[1.008[1.12][1.232]/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm


Reference Value = 20.3 V/m; Power Drift = -0.314 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.823 mW/g

Maximum value of SAR (measured) = 1.30 mW/g



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Interpolated SAR(x,y,z,f0)
 SAR; Z Scan: Value Along Z, X=0, Y=0

