DECLARATION OF COMPLIANCE

SAR RF EXPOSURE EVALUATION - FCC / IC Original 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**	**GARMIN INTERNATIONAL INC.**			
	Address	1200, East 151st Street, Olathe, KS, 66062 USA			
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**
	FCC	**KDB 248227D01v02**		**IEC**	
	IEEE	**IEEE 1528-2013**		**IEC**	
DEVICE CLASSIFICATION	**FCC**	Digital Transmission System (DTS) - §15 Subpart C			
	IC	Low Power License-Exempt Radiocommunication Device (RSS-210 Issue 8)			
DEVICE DESCRIPTION	Portable Wireless WiFi Transceiver				
APPLICATION TYPE	**Original Filing**				
DATE(S) OF EVALUATION	April 15 – May 5, 2015		**SAMPLES RECEIVED**	**March 27, 2015**	

Devices Evaluated

FCC ID	IC Certification	Model	Type	Frequency Range	Manufacturer's Rated Output Power
IPH-02567	1792A-02567	O5AHGT01	System	WLAN 2412MHz – 2484MHz Bluetooth 2402MHz – 2480 MHz BLE/ANT 2402MHz – 2480MHz	16.0dBm 4.0dBm 4.0dBm

Antenna Type(s) Tested	n/a						
Battery Type(s) Tested	3.8V, 980mAh Li-Ion						
Body-worn Accessories Tested	See Section 6.0						
Audio Accessories Tested	See Section 6.0						
Maximum SAR Level Evaluated FCC	**Head**	**0.090**	**W/kg**	**1g**	**100% Duty Factor**	**General Population (Uncontrolled)**
	Body	**0.035**				
Maximum SAR Level Evaluated IC	**Head**	**0.090**				
	Body	**0.035**				
FCC / IC Spatial Peak SAR Limit	**Head /Body**	**1.6**	**W/kg**	**1g**	**100% Duty Factor**	**General Population (Uncontrolled)**

Statement of Compliance

Celltech Labs Inc. declares under its sole responsibility that the Garmin O5AHGT01 Transceiver has demonstrated compliance with the Specific Absorption Rate (SAR) RF exposure requirements specified in FCC 47 CFR §2.1093 and Health Canada Safety Code 6 for the General Population/Uncontrolled Exposure environment. The device was tested in accordance with the measurement procedures specified in FCC OET Bulletin 65, Supplement C (Edition 01-01), Industry Canada RSS-102 Issue 5, IEEE Standard 1528-2013 and International Standard IEC 62209-2:2010. All measurements were performed in accordance with the SAR system manufacturer recommendations.

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

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

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

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1.0 DOCUMENT CONTROL

REVISION HISTORY			
REVISION NO.	**DESCRIPTION**	**IMPLEMENTED BY**	**RELEASE DATE**
1.0	1st Release	Art Voss	May 8, 2015
1.1	2nd Release – Corrected Bluetooth Rated Power	Art Voss	May 14, 2015
1.2	3rd Release – Corrected WiFi Rated Power	Art Voss	May 22, 2015
1.3	4thRelease – Corrections per TCB	Art Voss	June 5, 2015

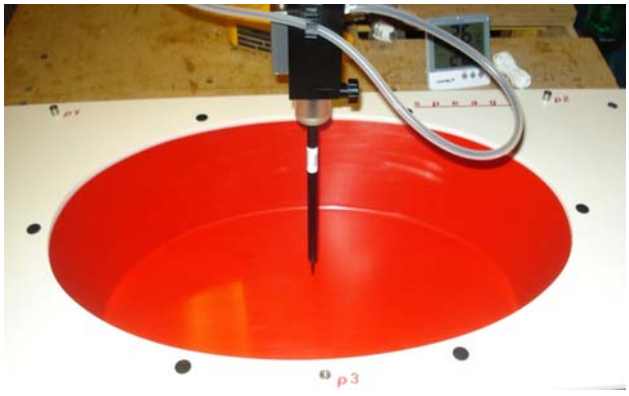
TEST REPORT SIGN-OFF			
DEVICE TESTED BY	**REPORT PREPARED BY**	**QA REVIEW BY**	**REPORT APPROVED BY**
Art Voss/Jasmeet Gill	Jasmeet Gill	Art Voss	Art Voss

2.0 INTRODUCTION

This measurement report demonstrates that the Garmin International Inc. O5AHGT01 Portable WiFi Transceiver 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 General Population/Uncontrolled Exposure environment. The measurement procedures were in accordance of KDB 447498; KDB 865664; KDB 248227, 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.

3.0 SAR MEASUREMENT SYSTEM

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



DASY4 SAR System with ELI Planar Phantom

DASY4 Measurement Server

4.0 RF CONDUCTED POWER MEASUREMENT

Table 4.0

RF Conducted Power Measurement

Average Conducted Power(1)

Frequency Band	Frequency (MHz)	System Radio Measured Power (3) (dBM)	System Radio Measured Power (3) (mW)	Rated Power (dBm)	Rated Power (mW)	Test Channel(2)
2450MHz	2412	16.4	43.7	16	39.8	X
	2437	16.4	43.7	16	39.8	
	2462	16.4	43.7	16	39.8	X
	2472	16.4	43.7	16	39.8	X
	2457	4.0	2.5	4	2.5	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

(3) The Maximum achievable Transmit Duty Cycle was 50% for the WiFi Channels. The Measured Conducted power was 17dBm. Scaling to 100% Transmit Duty Cycle yields the rated 20dBm.

5.0 NUMBER OF TEST CHANNELS (N_C)

Table 5.0

Number of Test Channels (N_c)

Antenna P/N	Antenna Type	Frequency Range (MHz)	N_c (1)	N_c (2)
n/a	n/a	2412-2472	3	3
n/a	n/a	2457	1	1

Notes

(1) In accordance with FCC KDB 447498 and KDB 248227

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

6.0 MANUFACTURER'S ACCESSORY LIST

Table 6.0

Manufacturer's Accessory List

Test Report ID Number	Manufacturer's Part Number	Description	SAR Evaluated
Antennas			
-	n/a	Internal Printed Inverted F	X
Batteries			
-	010-12256-01	3.8V, 908mAh Li-Ion GPN: 361-000800-00	X
Audio Accessories			
-	-	There a no audio accessories supplied with this product	
Body-Worn Accessories			
B1	010-12256-04	Vented Helmet Strap Mount	
B2	010-12256-05	Head Strap Mount	X
B3	010-12256-06	Chest Strap Mount	X
B4	010-12256-08	Wrist Strap Mount	X
B5	010-12256-19	Life Jack Float	
B6	010-12256-24	Dog Harness, Short	
B7	010-12256-25	Dog Harness, Long	

7.0 SAR MEASUREMENT SUMMARY

Table 7.0

Test Date	Plot	Test Type	Freq	Mod	Acc ID	DUT Spacing	SAR (W/kg)	SAR * (W/kg)	Power Drift
						DUT	50% DC	100% DC	
			MHz		Body	*mm*	1g	1g	*dB*
May.4/15	H1	Head	2412	Wifi	B2	10	0.016	0.031	1.770
May.4/15	H2	Head	2437	Wifi	B2	10	0.020	0.040	0.643
May.4/15	H3	Head	2462	Wifi	B2	10	0.016	0.032	1.300
May.4/15	H4	Head	2472	Wifi	B2	10	0.019	0.038	-0.657
May.5/15	B1	Body	2437	Wifi	B3	30	0.008	0.015	1.850
May.5/15	B2	Body	2472	Wifi	B3	30	0.006	0.012	2.830
May.5/15	W2	Wrist	2437	Wifi	B4	20	0.007	0.014	-0.278

*Scaled to 100% Transmit Duty Cycle

Table 7.1

Test Date	Plot	Test Type	Freq	Mod	Acc ID	DUT Spacing	SAR (W/kg)	Power Drift
						DUT	100% DC	
			MHz		Body	*mm*	1g	*dB*
May.4/15	H5	Head	2457	BT	B2	10	0.005	0.009
May.5/15	B3	Body	2457	BT	B3	30	0.001	0.003

8.0 SCALING OF MAXIMUM MEASURE SAR

Table 8.0

Scaling of Maximum Measured SAR

Plot ID	Configuration	Freq	Measured Fluid Deviation		Measured Conducted Power	Measured Drift	Measured SAR (1g)
		(MHz)	Permittivity	Conductivity	(dBm)	(dB)	(W/kg)
H2	Head	2437	-4.76%	-0.95%	16.4	0.643	0.040
B1	Body	2437	--0.67%	-2.43%	16.4	1.850	0.015

Step 1(5)

Fluid Sensitivity Adjustment (1)

Plot ID	Scale Factor		Measured SAR		Adjusted SAR (1g)
	(%)	x	(W/kg)	=	(W/kg)
H2	n/a (5)	x	0.040	=	0.040
B1	n/a (5)	x	0.015	=	0.015

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)
H2	16.4	16.0	+0.4	+	0.040	=	0.040
B1	16.4	16.0	+0.4	+	0.015	=	0.015

Step 3(6)

Simultaneous Transmission (3) - Bluetooth

Plot ID	Rated Output Power (Pmax)	Freq	Separation Distance	Estimated SAR		Reported SAR		Simultaneous Reported SAR (5)
	(mW)	(GHz)	(mm)	(W/kg)	+	(W/kg)	=	(W/kg)
H2,H5	2.5	2457	10	0.05	+	**0.040**	=	**0.090**
B1,B3	2.5	2457	30	0.02	+	**0.015**	=	**0.035**

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)
H2	0.6432	+	0.090	=	0.090
B1	1.850	+	0.035	=	0.035

Notes

See Notes Below

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.
(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) Scaling not required. Fluid tolerances were within +/- 5%
(6) The Measure SAR for Bluetooth was measured w/ CW at 100% Duty Cycle, B3&B5. The rated power is 4.0dBm which is below the SAR Test Exclusion threshold of KDB 447498 Appendix A. The Bluetooth SAR contribution was calculated as per KDB 447498 Section 4.3.2.The calculated SAR yielded a more conservative estimate.

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.			

10.0 DETAILS OF SAR EVALUATION

EVALUATION DETAILS	
1	The test channels selected for the SAR evaluations were based test procedures FCC KDB 447498, KDB 248227 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, at a transmission duty cycle of 50% for the WiFi Channels. The Bluetooth option was tested at the maximum output power setting at 100% CW.
4	A single point SAR measurement was taken prior to the Area Scan and after the Zoom Scan and the SAR drift of the DUT was evaluated. The measured SAR drift was added to the measured SAR levels of the Maximum ***reported*** SAR (IC/EU only).
5	Each SAR evaluations were performed with a fully charged battery.
6	The fluid temperature remained within +/-2°C from the time of the fluid dielectric parameter measurement to the completion of the SAR evaluation.
7	The fluid temperature remained within +/-0.5°C throughout the test day.

SCAN PROCEDURE	
Maximum distance from the closest measurement point to phantom surface.	4 ± 1mm
Maximum probe angle normal to phantom surface.	5^o ± 1^o
Area Scan Spatial Resolution ΔX, ΔY	12mm
Zoom Scan Spatial Resolution ΔX, ΔY	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	

11.0 MEASUREMENT UNCERTAINTIES

Table 11.0

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

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

Measurement Uncertainty Table in accordance with IEEE Standard 1528-2003

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

* Provided by SPEAG

Table 11.1

Calculation of the Degrees and Effective Degrees of Freedom

$v_i = n - 1$	$v_{eff} = \frac{u_c^4}{\sum_{i=1}^{m} \frac{c_i^4 u_i^4}{v_i}}$

12.0 TISSUE SIMULATING LIQUID (TSL) RECIPE

Table 12.0

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
2450MHz	**HEAD**
Ingredient	**% by Weight**
Water	**52.0**
Glycol	**48.0**
Salt	**0.0**
HEC	**0.0**
Bacteriacide	**0.0**

Table 12.1

Simulated Tissue Mixture	
Frequency:	**Fluid Type**
2450MHz	**BODY**
Ingredient	**% by Weight**
Water	**69.98**
Glycol	**30.00**
Salt	**0.02**
HEC	**0.0**
Bacteriacide	**0.0**

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.

13.0 FLUID DIELECTRIC PARAMETERS

Table 13.0

FLUID DIELECTRIC PARAMETERS

Date:	30 Apr 2015		Frequency:	2450MHz	Tissue:	Head
Freq (MHz)	Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
2350.0000	37.46	1.69	39.38	1.71	-4.88%	-1.17%
2360.0000	37.57	1.69	39.36	1.72	-4.55%	-1.74%
2370.0000	37.47	1.69	39.34	1.73	-4.75%	-2.31%
2380.0000	37.63	1.69	39.32	1.74	-4.30%	-2.87%
2390.0000	37.66	1.73	39.31	1.75	-4.20%	-1.14%
2400.0000	37.58	1.74	39.29	1.76	-4.35%	-1.14%
2410.0000	37.79	1.73	39.27	1.76	-3.77%	-1.70%
2412.0000	37.75	1.74	39.27	1.76	-3.87%	-1.48%
2420.0000	37.57	1.76	39.25	1.77	-4.28%	-0.56%
2430.0000	37.33	1.77	39.24	1.78	-4.87%	-0.56%
2437.0000	37.36	1.77	39.23	1.79	-4.76%	-0.95%
2440.0000	37.37	1.77	39.22	1.79	-4.72%	-1.12%
2442.0000	37.35	1.78	39.22	1.79	-4.76%	-0.78%
2450.0000	37.26	1.81	39.20	1.80	-4.95%	0.56%
2460.0000	37.14	1.79	39.19	1.81	-5.23%	-1.10%
2462.0000	37.10	1.79	39.19	1.81	-5.31%	-0.99%
2470.0000	36.96	1.81	39.17	1.82	-5.64%	-0.55%
2472.0000	36.96	1.82	39.17	1.82	-5.63%	-0.33%
2480.0000	36.98	1.84	39.16	1.83	-5.57%	0.55%
2490.0000	37.06	1.83	39.15	1.84	-5.34%	-0.54%
2500.0000	37.10	1.85	39.14	1.85	-5.21%	0.00%
2510.0000	37.04	1.85	39.12	1.87	-5.32%	-1.07%
2520.0000	36.96	1.89	39.11	1.88	-5.50%	0.53%
2530.0000	37.02	1.88	39.10	1.89	-5.32%	-0.53%
2540.0000	36.95	1.91	39.09	1.90	-5.47%	0.53%
2550.0000	36.99	1.92	39.07	1.91	-5.32%	0.52%

Table 13.1

FLUID DIELECTRIC PARAMETERS

Date:	05 May 2015		Frequency:	2450MHz	Tissue:	Body
Freq (MHz)	Test_e	Test_s	Target_e	Target_s	Deviation Permittivity	Deviation Conductivity
2350.0000	53.00	1.77	52.83	1.85	0.32%	-4.32%
2360.0000	52.79	1.78	52.82	1.86	-0.06%	-4.30%
2370.0000	52.75	1.78	52.81	1.87	-0.11%	-4.81%
2380.0000	52.76	1.82	52.79	1.88	-0.06%	-3.19%
2390.0000	52.60	1.79	52.78	1.89	-0.34%	-5.29%
2400.0000	52.42	1.81	52.77	1.90	-0.66%	-4.74%
2410.0000	52.48	1.84	52.75	1.91	-0.51%	-3.66%
2412.0000	52.46	1.84	52.75	1.91	-0.55%	-3.66%
2420.0000	52.37	1.85	52.74	1.92	-0.70%	-3.65%
2430.0000	52.47	1.89	52.73	1.93	-0.49%	-2.07%
2437.0000	52.37	1.89	52.72	1.94	-0.67%	-2.43%
2440.0000	52.32	1.89	52.71	1.94	-0.74%	-2.58%
2442.0000	52.29	1.89	52.71	1.94	-0.79%	-2.47%
2450.0000	52.18	1.91	52.70	1.95	-0.99%	-2.05%
2460.0000	52.62	1.90	52.69	1.96	-0.13%	-3.06%
2462.0000	52.61	1.91	52.69	1.96	-0.14%	-2.95%
2470.0000	52.58	1.93	52.67	1.98	-0.17%	-2.53%
2472.0000	52.56	1.93	52.67	1.98	-0.21%	-2.52%
2480.0000	52.46	1.94	52.66	1.99	-0.38%	-2.51%
2490.0000	52.26	1.94	52.65	2.01	-0.74%	-3.48%
2500.0000	52.09	1.96	52.64	2.02	-1.04%	-2.97%
2510.0000	52.09	1.97	52.62	2.04	-1.01%	-3.43%
2520.0000	52.06	1.97	52.61	2.05	-1.05%	-3.90%
2530.0000	51.79	1.97	52.60	2.06	-1.54%	-4.37%
2540.0000	51.92	2.00	52.59	2.08	-1.27%	-3.85%
2550.0000	51.90	2.04	52.57	2.09	-1.27%	-2.39%

****

Aprel Laboratory
Test Result for UIM Dielectric Parameter
Thu 30/Apr/2015 10:15:28
Freq Frequency(GHz)
FCC_eH FCC OET 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC OET 65 Supplement C (June 2001) Limits for Head Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eH	FCC_sH	Test_e	Test_s
2.3500	39.38	1.71	37.46	1.69
2.3600	39.36	1.72	37.57	1.69
2.3700	39.34	1.73	37.47	1.69
2.3800	39.32	1.74	37.63	1.69
2.3900	39.31	1.75	37.66	1.73
2.4000	39.29	1.76	37.58	1.74
2.4100	39.27	1.76	37.79	1.73
2.4200	39.25	1.77	37.57	1.76
2.4300	39.24	1.78	37.33	1.77
2.4400	39.22	1.79	37.37	1.77
2.4500	39.20	1.80	37.26	1.81
2.4600	39.19	1.81	37.14	1.79
2.4700	39.17	1.82	36.96	1.81
2.4800	39.16	1.83	36.98	1.84
2.4900	39.15	1.84	37.06	1.83
2.5000	39.14	1.85	37.10	1.85
2.5100	39.12	1.87	37.04	1.85
2.5200	39.11	1.88	36.96	1.89
2.5300	39.10	1.89	37.02	1.88
2.5400	39.09	1.90	36.95	1.91
2.5500	39.07	1.91	36.99	1.92

****

Aprel Laboratory
Test Result for UIM Dielectric Parameter
Tue 05/May/2015 11:15:56
Freq Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

****

Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.3500	52.83	1.85	53.00	1.77
2.3600	52.82	1.86	52.79	1.78
2.3700	52.81	1.87	52.75	1.78
2.3800	52.79	1.88	52.76	1.82
2.3900	52.78	1.89	52.60	1.79
2.4000	52.77	1.90	52.42	1.81
2.4100	52.75	1.91	52.48	1.84
2.4200	52.74	1.92	52.37	1.85
2.4300	52.73	1.93	52.47	1.89
2.4400	52.71	1.94	52.32	1.89
2.4500	52.70	1.95	52.18	1.91
2.4600	52.69	1.96	52.62	1.90
2.4700	52.67	1.98	52.58	1.93
2.4800	52.66	1.99	52.46	1.94
2.4900	52.65	2.01	52.26	1.94
2.5000	52.64	2.02	52.09	1.96
2.5100	52.62	2.04	52.09	1.97
2.5200	52.61	2.05	52.06	1.97
2.5300	52.60	2.06	51.79	1.97
2.5400	52.59	2.08	51.92	2.00
2.5500	52.57	2.09	51.90	2.04

14.0 SYSTEM VERIFICATION TEST RESULTS

Table 14.0

System Verification Test Resluts

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Input Power (mW)	Dipole Spacing (mm)	Validation Source P/N	Validation Source S/N
4 May 2015	2450	Head	21.5	23	13%	250	10	D2450V2	825

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
13.40	13.10	2.29%	**6.09**	6.06	0.50%	37.26	39.20	-4.95%	1.81	1.80	0.56%

Table 14.1

System Verification Test Resluts

Date	Frequency (MHz)	Fluid Type	Fluid Temp °C	Ambient Temp °C	Ambient Humidity (%)	Input Power (mW)	Dipole Spacing (mm)	Validation Source P/N	Validation Source S/N
5 May 2015	2450	Body	24.0	25	13%	250	10	D2450V2	825

SAR						Fluid Parameters					
1 gram			10 gram			Permittivity			Conductivity		
Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation	Measured	Target	Deviation
13.20	13.00	1.54%	**6.23**	6.05	2.98%	52.18	52.70	-0.99%	1.91	1.95	-2.05%

15.0 MEASUREMENT SYSTEM SPECIFICATIONS

Table 15.0

Measurement System Specification	
Specifications	
Positioner	Stäubli Unimation Corp. Robot Model: RX60L
Repeatability	0.02 mm
No. of axis	6
Data Acquisition Electronic (DAE) System	
Cell Controller	
Processor	AMD Athlon XP 2400+
Clock Speed	2.0 GHz
Operating System	Windows XP Professional
Data Converter	
Features	Signal Amplifier, multiplexer, A/D converter, and control logic
Software	Measurement Software: DASY4, V4.7 Build 80
	Postprocessing Software: SEMCAD, V1.8 Build 186
Connecting Lines	Optical downlink for data and status info., Optical uplink for commands and clock
DASY4 Measurement Server	
Function	Real-time data evaluation for field measurements and surface detection
Hardware	PC/104 166MHz Pentium CPU; 32 MB chipdisk; 64 MB RAM
Connections	COM1, COM2, DAE, Robot, Ethernet, Service Interface
E-Field Probe	
Model	EX3DV4
Serial No.	3600
Construction	Triangular core fiber optic detection system
Frequency	10 MHz to 6 GHz
Linearity	±)ζΗΓ 3 οτ ζΗΜ 03(Βδ 2.0
Phantom	
Type	ELI Elliptical Planar Phantom
Shell Material	Fiberglass
Thickness	2mm +/- .2mm
Volume	> 30 Liter

Table 15.1

Measurement System Specification (Continued)

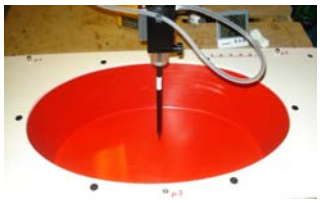
Probe Specification

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

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



ELI Elliptical Planar Phantom

Device Positioner Specification

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

Device Positioner

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
-EX3DV6 E-Field Probe	00017	3600	23 April 2015	Annual
-D450V3 Validation Dipole	00221	1068	22 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

APPENDIX A - SAR MEASUREMENT PLOTS

Plot H1

Date/Time: 04/05/2015 1:25:02 PM

2450 Head May 4

DUT: Garmin O5AHGT01

Program Notes: 4 May 2015 Ambient Temp: 23C; Fluid Temp: 21.5C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2412 MHz; Duty Cycle: 1:2
Medium: TSL_2450H Medium parameters used (interpolated): f = 2412 MHz; σ = 1.74 mho/m; ε_r = 37.7; ρ = 1000 kg/m^3

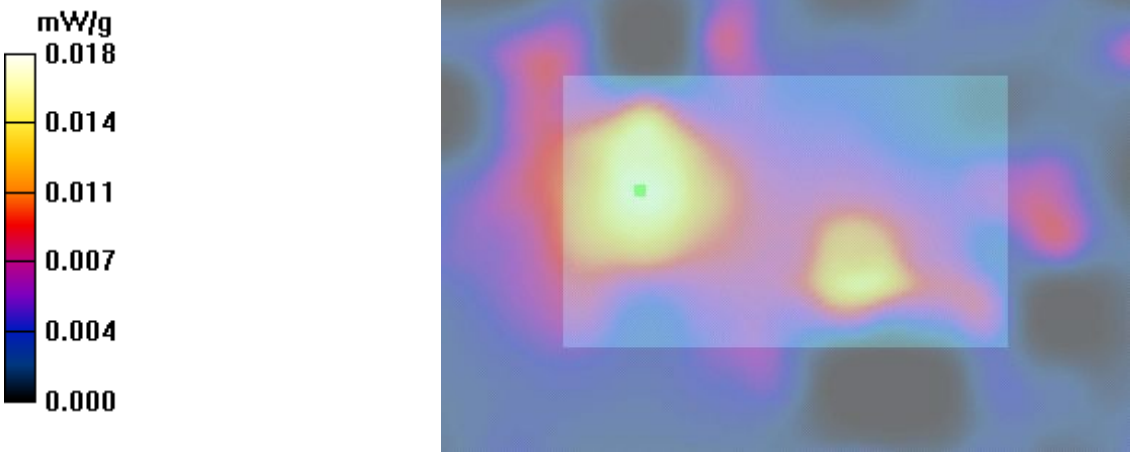
- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2412MHz wifi ModB/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.017 mW/g

Garmin Test 2412MHz wifi ModB/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.39 V/m; Power Drift = 1.77 dB
Peak SAR (extrapolated) = 0.045 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00742 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.018 mW/g



Plot H2

Date/Time: 04/05/2015 10:16:23 AM

2450 Head May 4

DUT: Garmin O5AHGT01

Program Notes: 4 May 2015 Ambient Temp: 23C; Fluid Temp: 21.5C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:2
Medium: TSL_2450H Medium parameters used (interpolated): f = 2437 MHz; σ = 1.77 mho/m; ε_r = 37.4; ρ = 1000 kg/m^3

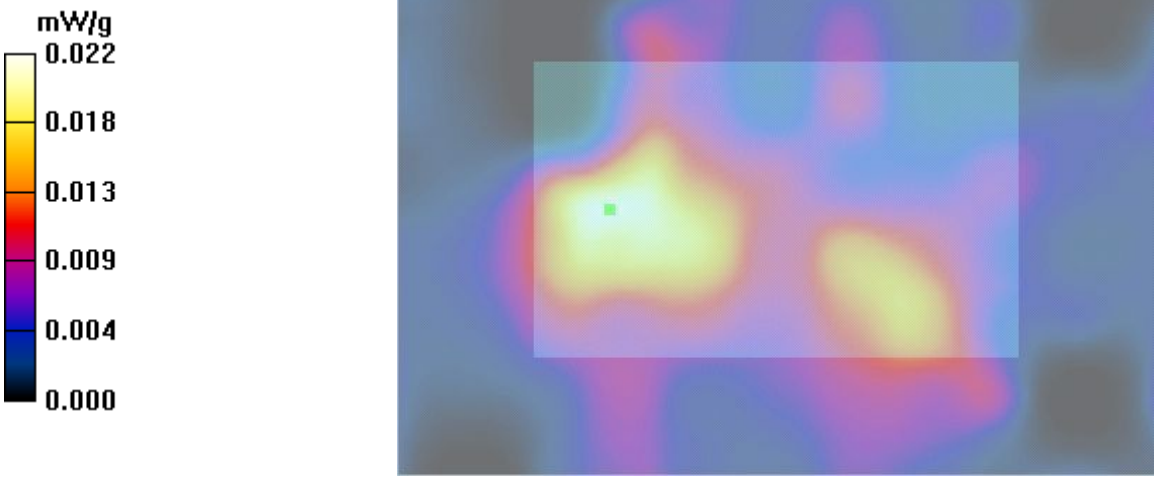
- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

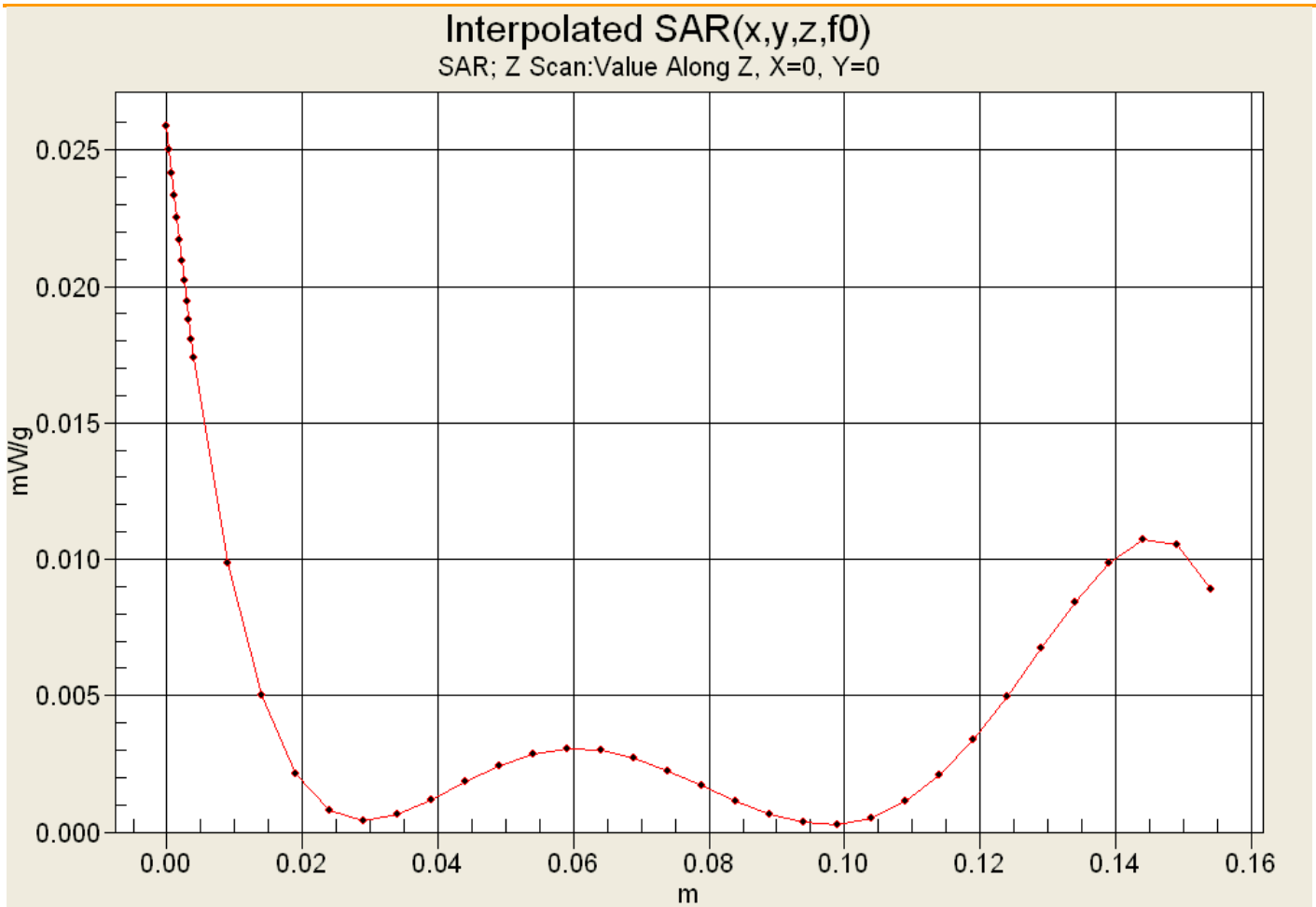
Garmin Test 2437MHz wifi modB/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.022 mW/g

Garmin Test 2437MHz wifi modB/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.38 V/m; Power Drift = 0.643 dB
Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.011 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.022 mW/g




Interpolated SAR(x,y,z,f0)
SAR; Z Scan:Value Along Z, X=0, Y=0
mW/g
0.025
0.020
0.015
0.010
0.005
0.000
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Plot H3

Date/Time: 04/05/2015 1:48:29 PM

2450 Head May 4

DUT: Garmin O5AHGT01

Program Notes: 4 May 2015 Ambient Temp: 23C; Fluid Temp: 21.5C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2462 MHz; Duty Cycle: 1:2
Medium: TSL_2450H Medium parameters used (interpolated): f = 2462 MHz; σ = 1.79 mho/m; ε_r = 37.1; ρ = 1000 kg/m^3

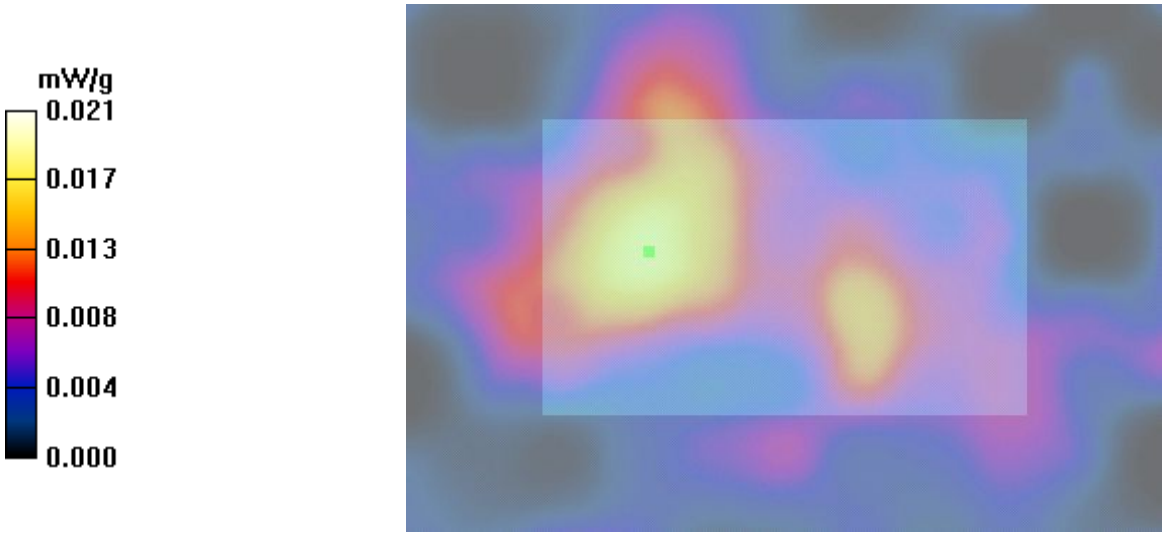
- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2462MHz wifi ModB/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.018 mW/g

Garmin Test 2462MHz wifi ModB/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.04 V/m; Power Drift = 1.30 dB
Peak SAR (extrapolated) = 0.037 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00832 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.021 mW/g



Plot H4

Date/Time: 04/05/2015 10:39:09 AM

2450 Head May 4

DUT: Garmin O5AHGT01

Program Notes: 4 May 2015 Ambient Temp: 23C; Fluid Temp: 21.5C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2472 MHz; Duty Cycle: 1:2
Medium: TSL_2450H Medium parameters used (interpolated): f = 2472 MHz; σ = 1.82 mho/m; ε_r = 37; ρ = 1000 kg/m^3

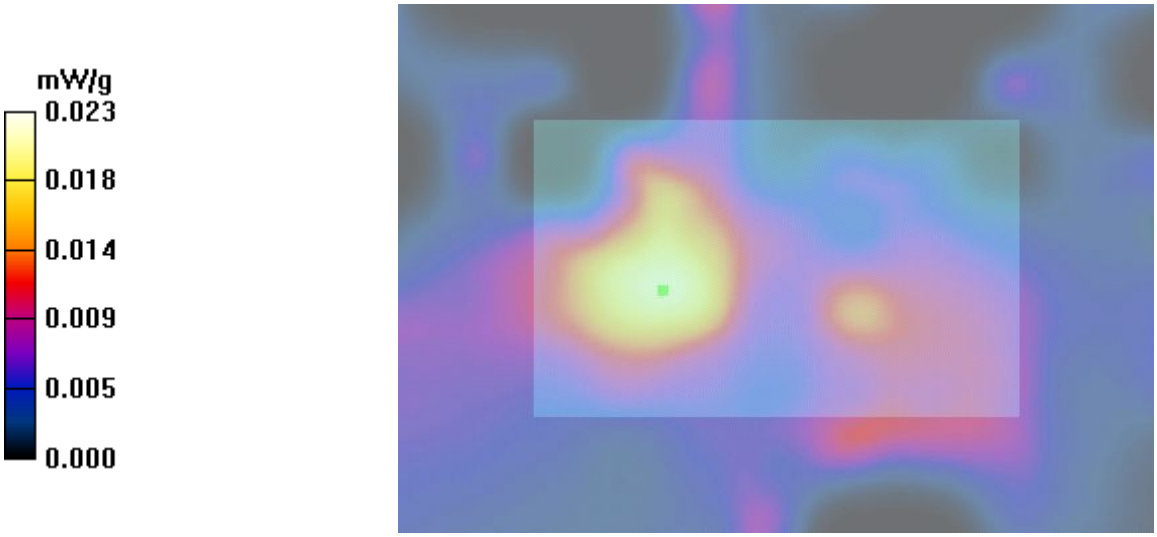
- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2472MHz modB/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.021 mW/g

Garmin Test 2472MHz modB/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.30 V/m; Power Drift = -0.657 dB
Peak SAR (extrapolated) = 0.039 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00934 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.023 mW/g



Plot H5

Date/Time: 04/05/2015 3:35:20 PM

2450 Head May 4

DUT: Garmin O5AHGT01

Program Notes: 4 May 2015 Ambient Temp: 23C; Fluid Temp: 21.5C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2457 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used (interpolated): f = 2457 MHz; σ = 1.8 mho/m; ε_r = 37.2; ρ = 1000 kg/m^3

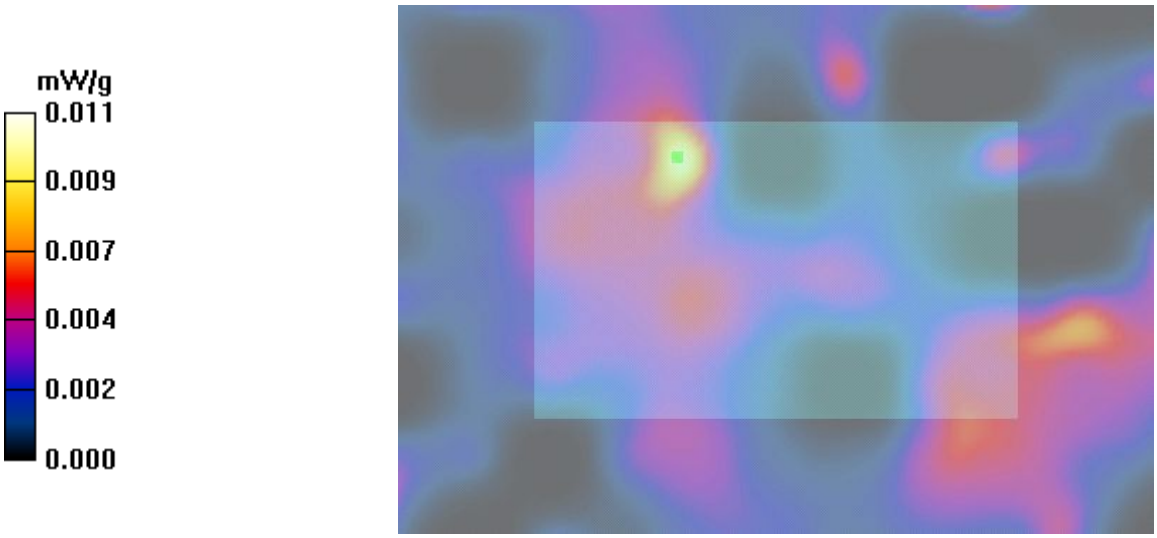
- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2457MHz cw/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

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

Garmin Test 2457MHz cw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.997 V/m; Power Drift = 4.82 dB
Peak SAR (extrapolated) = 0.018 W/kg
SAR(1 g) = 0.00462 mW/g; SAR(10 g) = 0.00189 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.011 mW/g



Plot B1

Date/Time: 05/05/2015 11:56:40 AM

2450 Body May 5

DUT: Garmin O5AHGT01

Program Notes: 5 May 2015 Ambient Temp: 25C; Fluid Temp: 24C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:2
Medium: TSL_2450B Medium parameters used (interpolated): f = 2437 MHz; σ = 1.89 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3

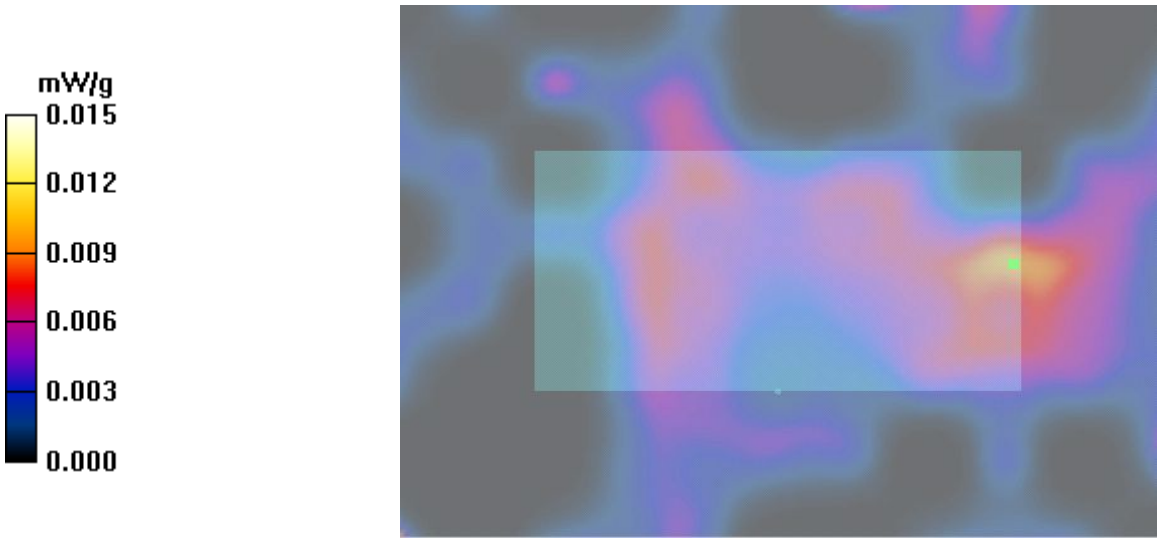
- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2437MHz modB Body/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.009 mW/g

Garmin Test 2437MHz modB Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.61 V/m; Power Drift = 1.85 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.00771 mW/g; SAR(10 g) = 0.00334 mW/g

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



Plot B2

Date/Time: 05/05/2015 12:16:43 PM

2450 Body May 5

DUT: Garmin O5AHGT01

Program Notes: 5 May 2015 Ambient Temp: 25C; Fluid Temp: 24C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2472 MHz; Duty Cycle: 1:2
Medium: TSL_2450B Medium parameters used (interpolated): f = 2472 MHz; σ = 1.93 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

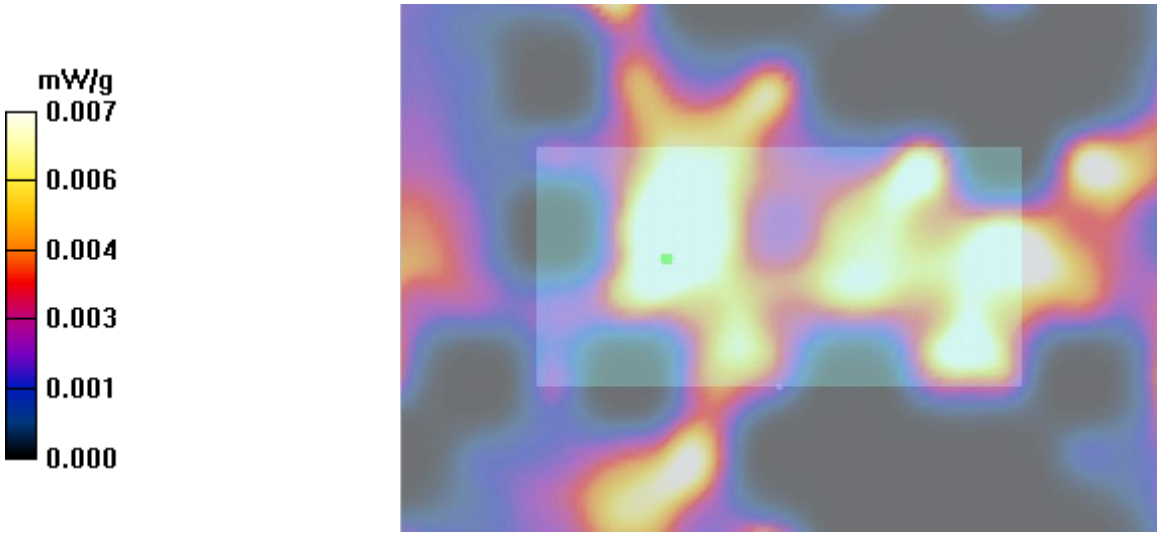
- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2472MHz modB Body/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.011 mW/g

Garmin Test 2472MHz modB Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.34 V/m; Power Drift = 2.83 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.00577 mW/g; SAR(10 g) = 0.00326 mW/g

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



Plot W2

Date/Time: 05/05/2015 12:57:02 PM

2450 Body May 5

DUT: Garmin O5AHGT01

Program Notes: 5 May 2015 Ambient Temp: 25C; Fluid Temp: 24C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2437 MHz; Duty Cycle: 1:2
Medium: TSL_2450B Medium parameters used (interpolated): f = 2437 MHz; σ = 1.89 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3

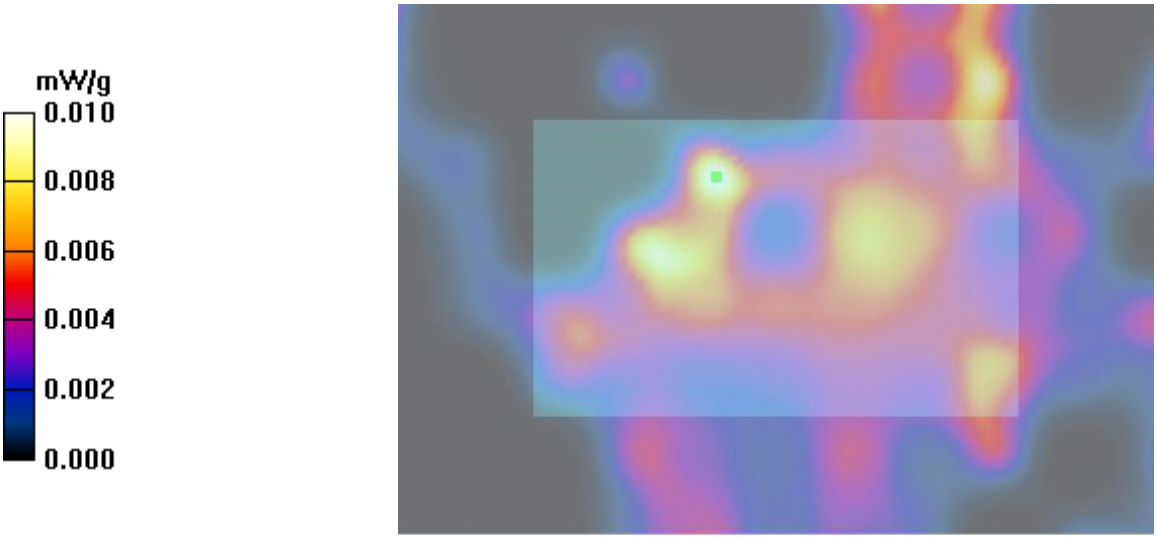
- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2437MHz modB wrist/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

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

Garmin Test 2437MHz modB wrist/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.68 V/m; Power Drift = -0.278 dB
Peak SAR (extrapolated) = 0.024 W/kg
SAR(1 g) = 0.00682 mW/g; SAR(10 g) = 0.00388 mW/g

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



Plot B3

Date/Time: 05/05/2015 1:18:34 PM

2450 Body May 5

DUT: Garmin O5AHGT01

Program Notes: 5 May 2015 Ambient Temp: 25C; Fluid Temp: 24C; Humidity: 13%

Procedure Notes:

Communication System: CW
Frequency: 2457 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used (interpolated): f = 2457 MHz; σ = 1.9 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

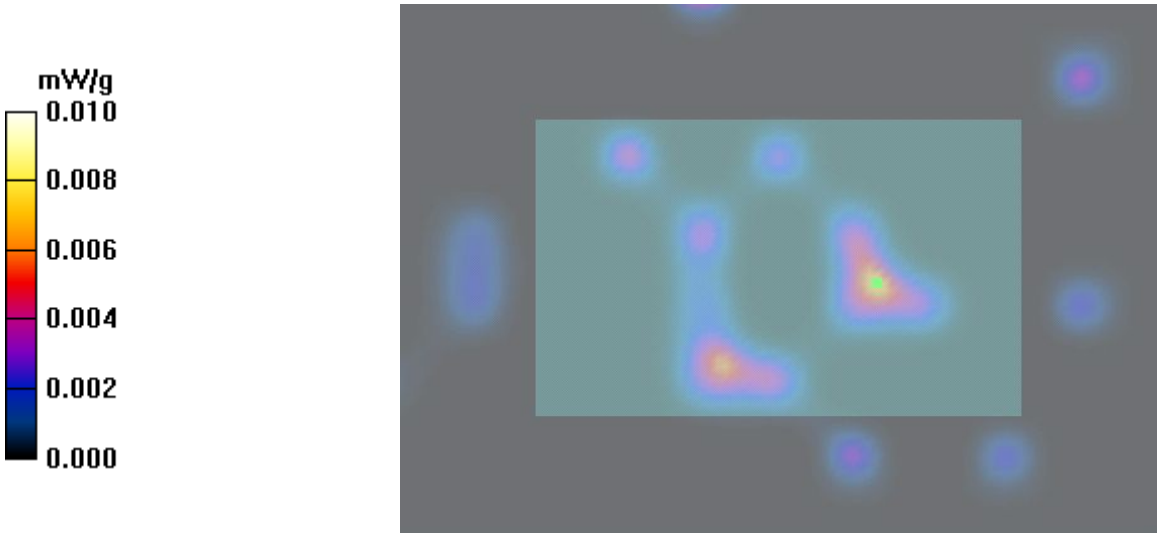
- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Garmin Test 2457MHz cw/Area Scan (101x71x1): Measurement grid: dx=12mm, dy=12mm

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

Garmin Test 2457MHz cw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.589 V/m; Power Drift = 9.43 dB
Peak SAR (extrapolated) = 0.013 W/kg
SAR(1 g) = 0.00136 mW/g; SAR(10 g) = 0.000433 mW/g

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



APPENDIX B - SYSTEM VERIFICATION MEASUREMENT PLOTS

Date/Time: 05/05/2015 11:18:36 AM

SPC 2450B 5 May 2015

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

Program Notes: 30 March 2015 Ambient Temp: 23C; Fluid Temp: 20.9C; Humidity: 22%

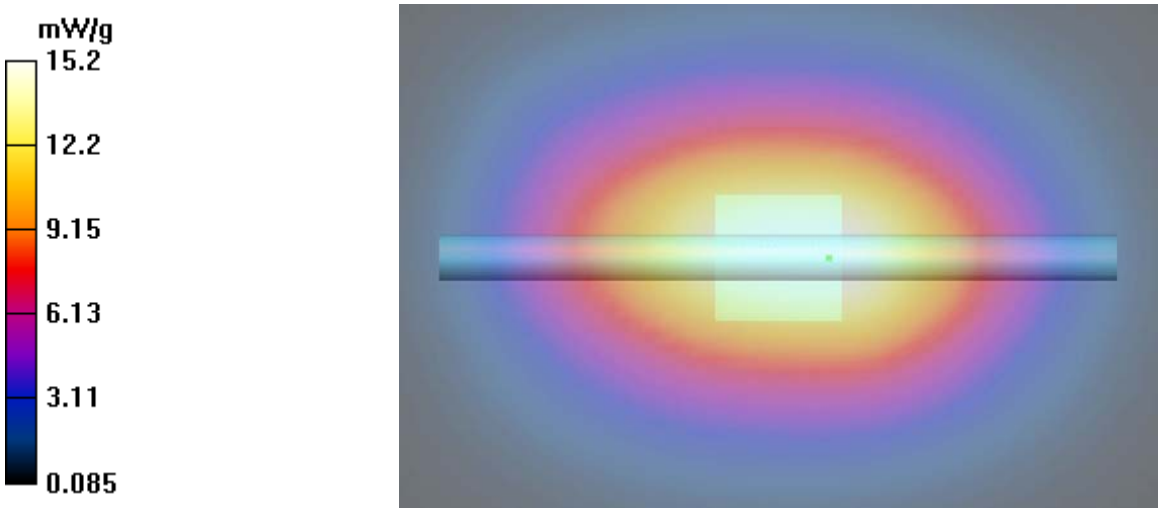
Procedure Notes:

Communication System: CW
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: TSL_2450B Medium parameters used: f = 2450 MHz; σ = 1.91 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.19, 6.19, 6.19); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

2450 MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Area Scan (61x41x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.5 mW/g

2450 MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.4 V/m; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 26.3 W/kg
SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.23 mW/g
Maximum value of SAR (measured) = 15.2 mW/g



Date/Time: 01/05/2015 1:04:17 PM

System Validation 2450 Head May 4

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

Program Notes: Ambient Temp: 23C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Procedure Notes:

Communication System: CW
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: TSL_2450H Medium parameters used: f = 2450 MHz; σ = 1.81 mho/m; ε_r = 37.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3600; ConvF(6.06, 6.06, 6.06); Calibrated: 23/04/2015
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 09/04/2014
- Phantom: SAM with CRP; Type: SAM; Serial: Not Specified
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

SAR Eval Input=248mW 2/Area Scan (61x21x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.3 mW/g

SAR Eval Input=248mW 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.0 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 29.1 W/kg
SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.09 mW/g
Maximum value of SAR (measured) = 15.2 mW/g