



*Mobile Devices business  
iDEN Mobile Devices Operations*

# Supplemental RF Exposure Report (Lapdock Accessory)

FCC Rule Parts: 90S and 24D

Industry Canada: RSS-Gen, RSS-119,  
RSS-134

**FCC ID: IHDP56LS2**

## Test Report Details

Tests Performed by: Motorola Mobility, Inc. – Product Safety & Compliance Laboratory  
600 N. US Highway 45  
Libertyville, IL 60048

---

Product Type: Cellular Phone & Lapdock Accessory

FCC ID: IHDP56LS2

## Applicable Standards

All tests and measurements indicated in this document were performed in accordance with the United States Code of Federal Regulations, Title 47 Part 2, Sub-part J, as well as the following parts:

- |              |   |
|--------------|---|
| <u>  X  </u> | IEC 62209-1.                                  |
| <u>  X  </u> | RSS-102.                                      |
| <u>  X  </u> | IEEE 1528-2003.                               |
| <u>  X  </u> | FCC OET Bulletin 65 (including Supplement C). |

## 1. Description of Product.

The Lapdock accessory has docking plate that fits the ATRIX phone (FCC ID: IHDP56LS2). The Lapdock features a QWERTY keyboard, an 11.6" display, stereo speakers, and two USB ports to give user a PC-like interface. The Lapdock charges the handset while it is docked. There are no transmitters integrated into the Lapdock.

## 2. SAR Results.

Results for this combination of transmitter and accessory are summarized below:

Mode	1-g SAR	10-g SAR
GSM 850	0.31 W/kg	0.18 W/kg
WCDMA 850	0.19 W/kg	0.13 W/kg
GSM 1900	0.07 W/kg	0.04 W/kg
WCDMA 1900	0.13 W/kg	0.08 W/kg
Wi-Fi 2.4 GHz	0.02 W/kg	0.01 W/kg
Wi-Fi 5.2 GHz	0.001 W/kg	0.0002 W/kg
Wi-Fi 5.8 GHz	0.003 W/kg	0.001 W/kg

### 3. Test Set-up Photographs.

The following photograph shows the Lapdock with the host transceiver in place, the spacing the accessory presents between the lowest edge and the phantom. It also shows the approximate location of the active transmitter antennas. Note that the spacing between the closest edge and the phantom is 18.9-mm.



#### **4. SAR Plots.**

The SAR plots for this configuration follow.

Date/Time: 4/26/2011 9:22:12 PM

## Test Laboratory: Motorola - GSM 850 with Accessory

**DUT: TA014000R5; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: 5; Antenna Position: Internal; Battery Model #: SNN5865A

Accessory Model: SJYN0737A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom

Communication System: GPRS 850 CI 10; Frequency: 836.6 MHz; Channel Number: 190; Duty Cycle: 1:4.15

Medium: Low Freq Body

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(5.86, 5.86, 5.86); Calibrated: 8/11/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn434; Calibrated: 1/13/2011
- Phantom: R#4 Glycol SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1250;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (15mm) (21x6x1):

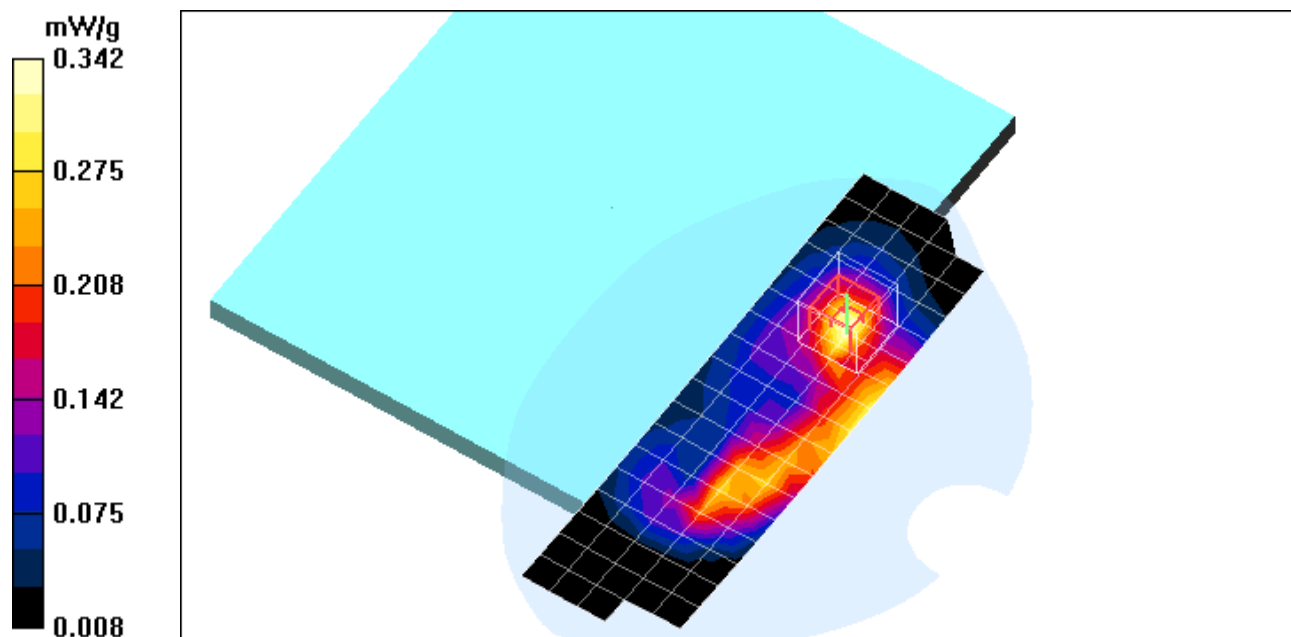
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.330 mW/g

### SAM DUT Against Flat Section/5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = -0.128 dB; Peak SAR (extrapolated) = 0.572 W/kg

**SAR(1 g) = 0.314 mW/g; SAR(10 g) = 0.176 mW/g; Maximum value of SAR (measured) = 0.342 mW/g**



Date/Time: 4/26/2011 10:55:07 PM

## Test Laboratory: Motorola - WCDMA 850 with Accessory

**DUT: TA014000R5; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: All Up Bits; Antenna Position: Internal; Battery Model #: SNN5893A  
Accessory Model: SJYN0737A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom  
Communication System: WCDMA 850; Frequency: 836 MHz; Channel Number: 4180; Duty Cycle: 1:1

Medium: Low Freq Body

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(5.86, 5.86, 5.86); Calibrated: 8/11/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn434; Calibrated: 1/13/2011
- Phantom: R#4 Glycol SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1250;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (15mm) (21x6x1):

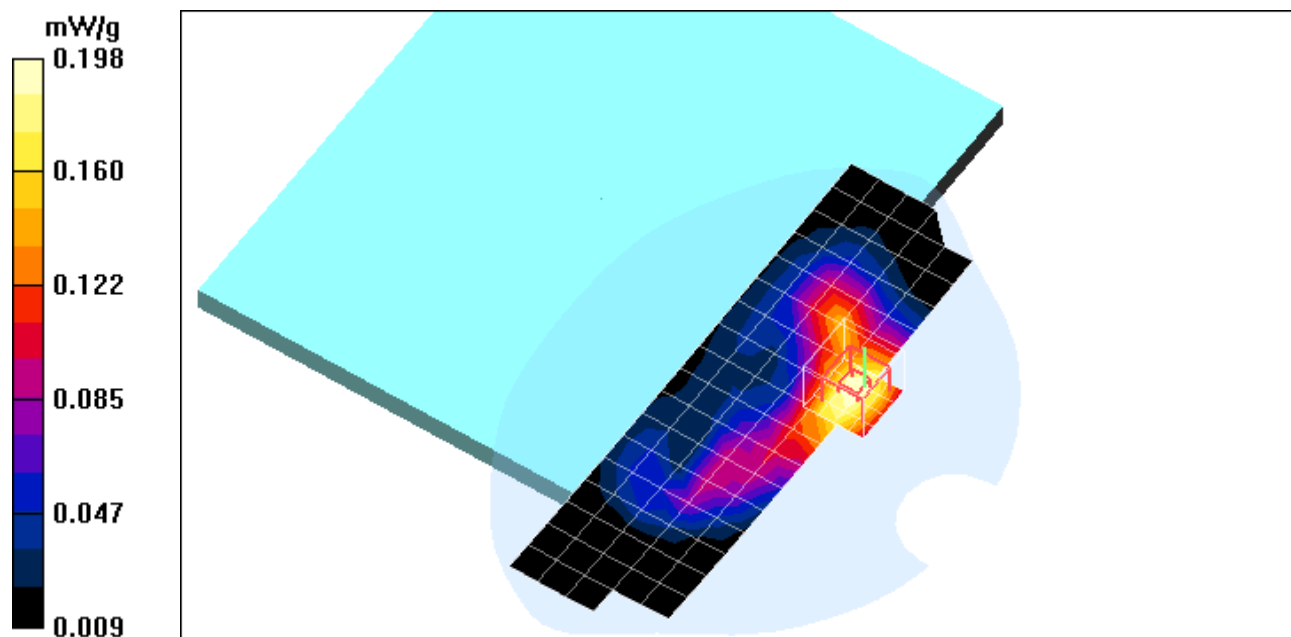
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.192 mW/g

### SAM DUT Against Flat Section/5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = 0.037 dB; Peak SAR (extrapolated) = 0.250 W/kg

**SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.128 mW/g; Maximum value of SAR (measured) = 0.198 mW/g**



Date/Time: 4/26/2011 11:56:22 PM

## Test Laboratory: Motorola - GSM 1900 with Accessory

**DUT: TA014000R5; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: 0; Antenna Position: Internal; Battery Model #: SNN5893A

Accessory Model: SJYN7037A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom

Communication System: GPRS 1900 CI 10; Frequency: 1880 MHz; Channel Number: 661; Duty Cycle: 1:4.15

Medium: Regular Glycol Body 1750/1880

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: ES3DV3 - SN3183; ConvF(4.84, 4.84, 4.84); Calibrated: 7/14/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn702; Calibrated: 4/14/2011
- Phantom: R1\_Glycol, SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1139;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (15mm) (21x6x1):

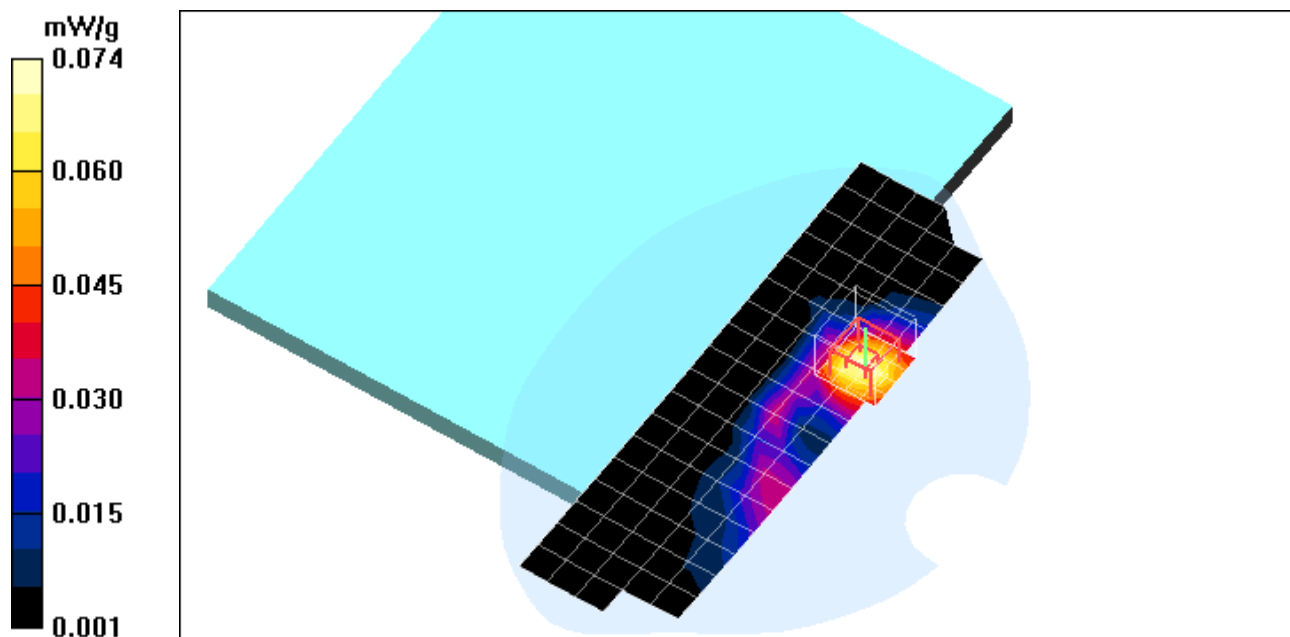
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.070 mW/g

### SAM DUT Against Flat Section/5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.21 V/m; Power Drift = 0.249 dB; Peak SAR (extrapolated) = 0.107 W/kg

**SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.041 mW/g; Maximum value of SAR (measured) = 0.074 mW/g**



Date/Time: 4/27/2011 12:56:27 AM

## Test Laboratory: Motorola - WCDMA 1900 with Accessory

**DUT: TA014000R5; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: All Up Bits; Antenna Position: Internal; Battery Model #: SNN5865A  
Accessory Model: SJYN7037A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom  
Communication System: WCDMA 1900; Frequency: 1880 MHz; Channel Number: 9400; Duty Cycle: 1:1

Medium: Regular Glycol Body 1750/1880

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: ES3DV3 - SN3183; ConvF(4.84, 4.84, 4.84); Calibrated: 7/14/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn702; Calibrated: 4/14/2011
- Phantom: R1\_Glycol, SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1139;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (15mm) (21x6x1):

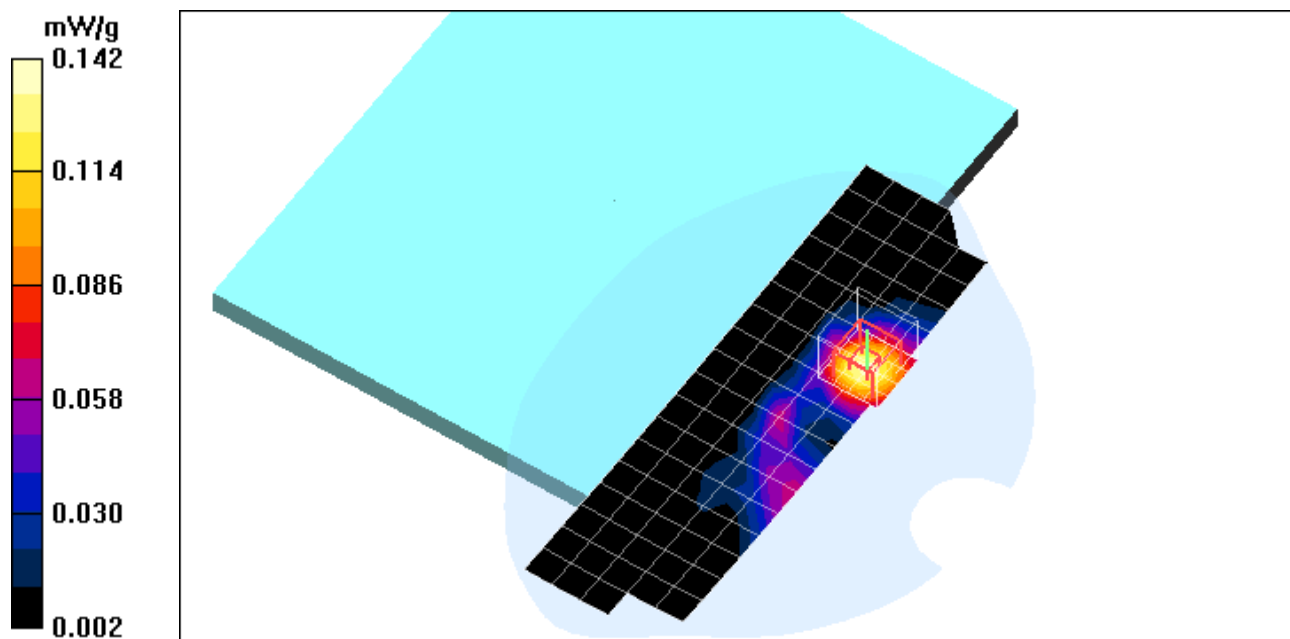
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.143 mW/g

### SAM DUT Against Flat Section/5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.31 V/m; Power Drift = 0.001 dB; Peak SAR (extrapolated) = 0.210 W/kg

**SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.077 mW/g; Maximum value of SAR (measured) = 0.142 mW/g**



Date/Time: 4/26/2011 6:04:16 PM

## Test Laboratory: Motorola - Wi-Fi 2450 with Accessory

**DUT: TA0140008Z; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: SNN5893A

Accessory Model: SJYN7037A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom

Device Mode: 802.11b mode, 5.5 Mbps data rate

Communication System: Wi-Fi 2450; Frequency: 2462 MHz; Channel Number: 11; Duty Cycle: 1:1

Medium: 2450 Glycol Body

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.03$  mho/m;  $\epsilon_r = 47.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: ES3DV3 - SN3184; ConvF(4.33, 4.33, 4.33); Calibrated: 3/11/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn699; Calibrated: 9/20/2010
- Phantom: R#2 Glycol SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1136;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (15mm) (21x6x1):

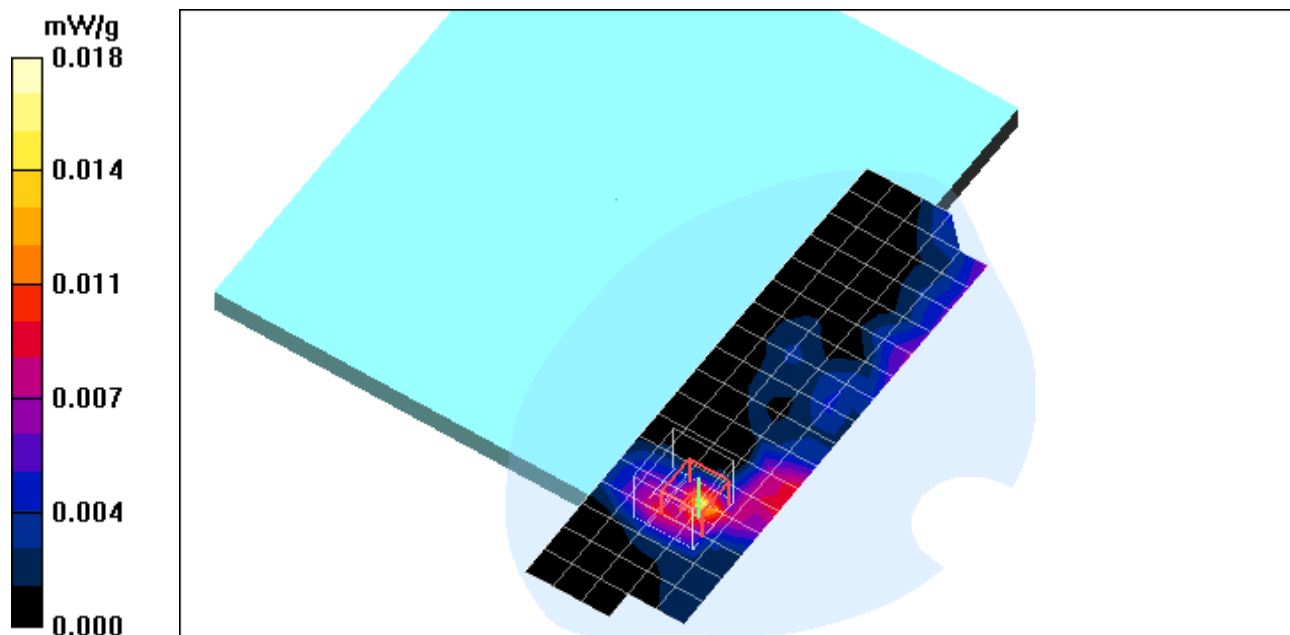
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.015 mW/g

### SAM DUT Against Flat Section/5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.50 V/m; Power Drift = -0.933 dB; Peak SAR (extrapolated) = 0.027 W/kg

**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00639 mW/g; Maximum value of SAR (measured) = 0.018 mW/g**



Date/Time: 4/27/2011 11:33:12 AM

## Test Laboratory: Motorola - Wi-Fi 5210 with Accessory

**DUT: TA0140008Z; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: SNN5893A

Accessory Model: SJYN7037A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom

Device Mode: 802.11a mode, 54 Mbps data rate

Communication System: 5210MHz Band; Frequency: 5200 MHz; Channel Number: 40; Duty Cycle: 1:1

Medium: 5-6 GHz SPEAG Tissue BODY

Medium parameters used:  $f = 5210$  MHz;  $\sigma = 5.93$  mho/m;  $\epsilon_r = 46.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: EX3DV4 - SN3730; ConvF(4.07, 4.07, 4.07); Calibrated: 7/16/2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 11/11/2010
- Phantom: R#3 5Ghz BODY SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1106;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (10mm) (31x8x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.028 mW/g

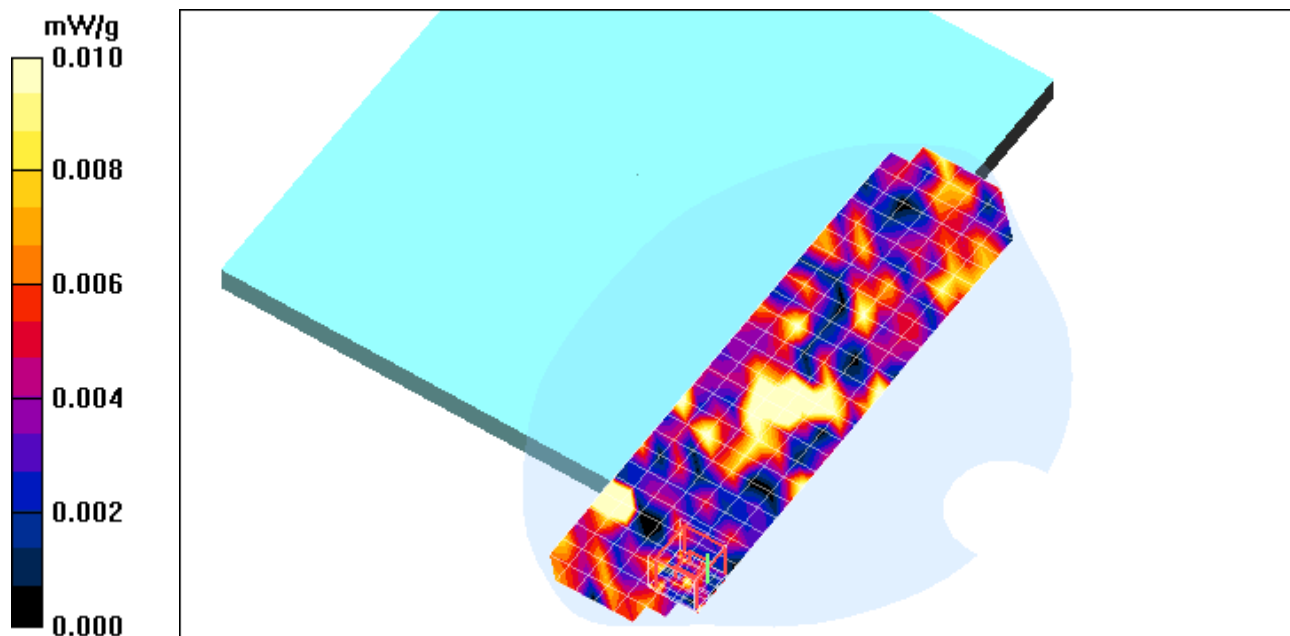
### SAM DUT Against Flat Section/7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.14 V/m; Power Drift = 0.458 dB; Peak SAR (extrapolated) = 0.023 W/kg

**SAR(1 g) = 0.000769 mW/g; SAR(10 g) = 0.00024 mW/g;**

Maximum value of SAR (measured) = 0.015 mW/g



Date/Time: 4/27/2011 12:53:59 PM

## Test Laboratory: Motorola - Wi-Fi 5785 with Accessory

**DUT: TA0140008Z; FCC ID: IHDP56LS2**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: SNN5893A

Accessory Model: SJYN7037A (S/N AC023B66D)

Device Position: Body Worn, Bottom Surface of Accessory with DUT attached, 0 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: 5785MHz Band; Frequency: 5765 MHz; Channel Number: 153; Duty Cycle: 1:1

Medium: 5-6 GHz SPEAG Tissue BODY

Medium parameters used:  $f = 5785$  MHz;  $\sigma = 6.78$  mho/m;  $\epsilon_r = 45.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY4 Configuration:

- Probe: EX3DV4 - SN3730; ConvF(3.53, 3.53, 3.53); Calibrated: 7/16/2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 11/11/2010
- Phantom: R#3 5Ghz BODY SAM (extended range), Rev.1 (25-Mar-05); Type: SAM v4.0; Serial: TP-1106;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

### SAM DUT Against Flat Section/Area Scan - Normal Body (10mm) (31x8x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.033 mW/g

### SAM DUT Against Flat Section/7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.17 V/m; Power Drift = -0.364 dB; Peak SAR (extrapolated) = 0.032 W/kg

**SAR(1 g) = 0.00317 mW/g; SAR(10 g) = 0.000803 mW/g;**

Maximum value of SAR (measured) = 0.034 mW/g

