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Author Data <b>Shahriar Ninad</b>	Dates of Test <b>July 16-29, 2008</b>	Test Report No <b>RTS-1115-0807-21 Rev1</b>	FCC ID: <b>L6ARBZ40GW</b>

**APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION**

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Date/Time: 25/07/2008 5:37:24 PM

Test Laboratory: RTS

File Name: [DipoleValidation\\_835MHz\\_Amb\\_Tem\\_23\\_0\\_Liq\\_Tem\\_22\\_1\\_C.da4](#)

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446**  
**Program Name: System Performance Check at 835 MHz**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $s = 0.858$  mho/m;  $\epsilon_r = 42.3$ ; density =  $1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

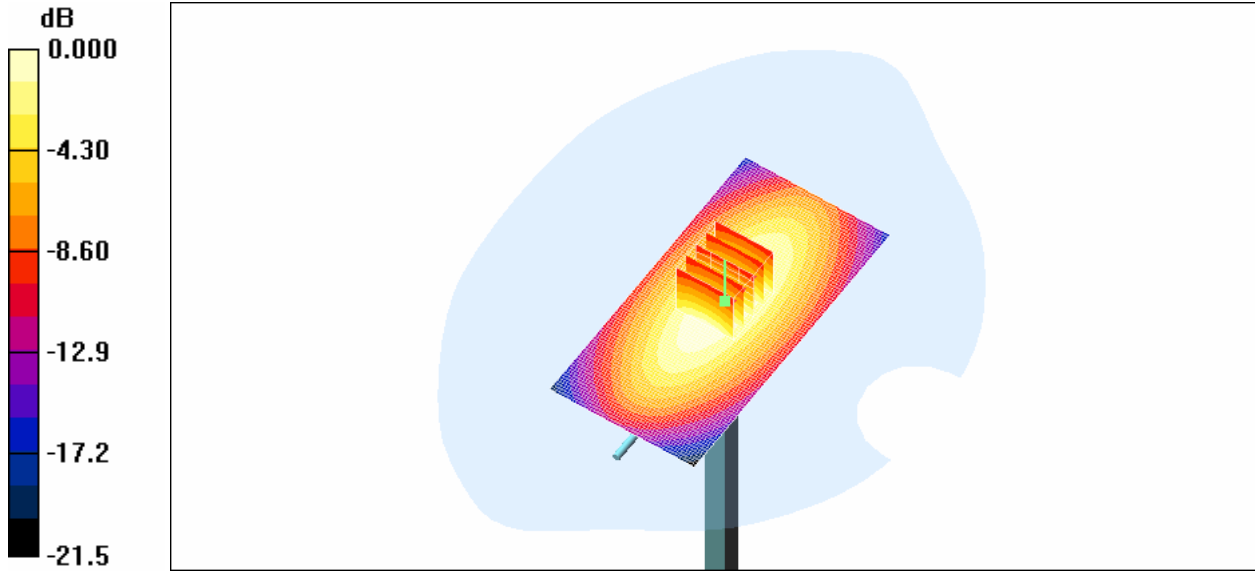
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
Reference Value = 109.0 V/m; Power Drift = 0.010 dB  
Peak SAR (extrapolated) = 12.5 W/kg  
**SAR(1 g) = 8.68 mW/g; SAR(10 g) = 5.72 mW/g**  
Maximum value of SAR (measured) = 9.44 mW/g

**d=15mm, Pin=1000mW/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 9.34 mW/g

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0 dB = 9.34mW/g

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Date/Time: 28/07/2008 11:01:16 AM

Test Laboratory: RTS

File Name: [DipoleValidation\\_835MHz\\_Amb\\_Tem\\_22\\_9\\_Liq\\_Tem\\_22\\_4C\\_07\\_28\\_08.da4](#)

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446**  
**Program Name: System Performance Check at 835 MHz**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $s = 0.871 \text{ mho/m}$ ;  $\epsilon_r = 42.2$ ; density =  $1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 110.2 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 13.0 W/kg

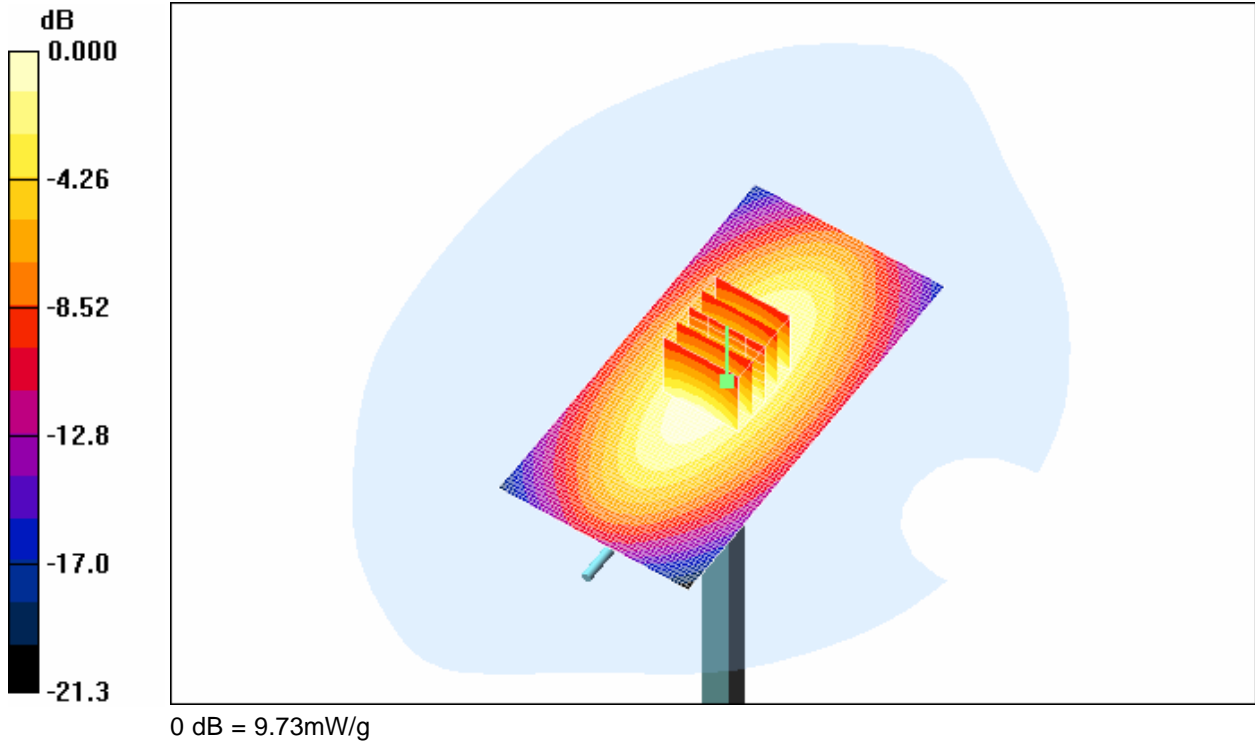
**SAR(1 g) = 9.05 mW/g; SAR(10 g) = 5.95 mW/g**

Maximum value of SAR (measured) = 9.80 mW/g

**d=15mm, Pin=1000mW/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 9.73 mW/g

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Date/Time: 23/07/2008 4:46:52 PM

Test Laboratory: RTS

File Name: [DipoleValidation 1900MHz Amb Tem 23.0 Liq Tem 22.2 C.da4](#)

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545**  
**Program Name: System Performance Check at 1900 MHz**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $s = 1.47$  mho/m;  $\epsilon_r = 38.2$ ; density =  $1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.15, 5.15, 5.15); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 190.0 V/m; Power Drift = -0.117 dB

Peak SAR (extrapolated) = 68.0 W/kg

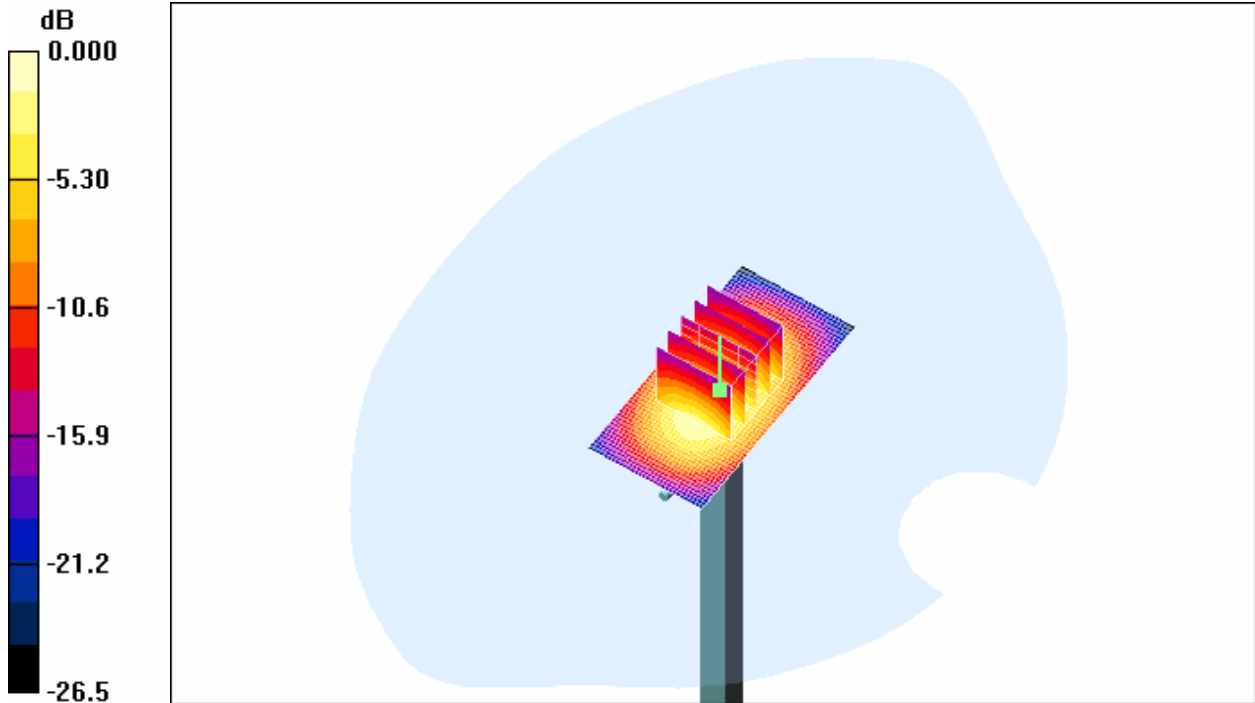
**SAR(1 g) = 40 mW/g; SAR(10 g) = 21 mW/g**

Maximum value of SAR (measured) = 45.4 mW/g

**d=15mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 46.9 mW/g

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0 dB = 46.9mW/g

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Date/Time: 18/07/2008 4:36:11 PM

Test Laboratory: RTS

File Name: [DipoleValidation 2450MHz Amb Tem 23.8 Liq Tem 22.9 C.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx**  
**Program Name: System Performance Check at 2450 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used: f = 2450 MHz; s = 1.92 mho/m;  $\epsilon_r = 37.6$ ; density = 1000 kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 190.2 V/m; Power Drift = -0.016 dB

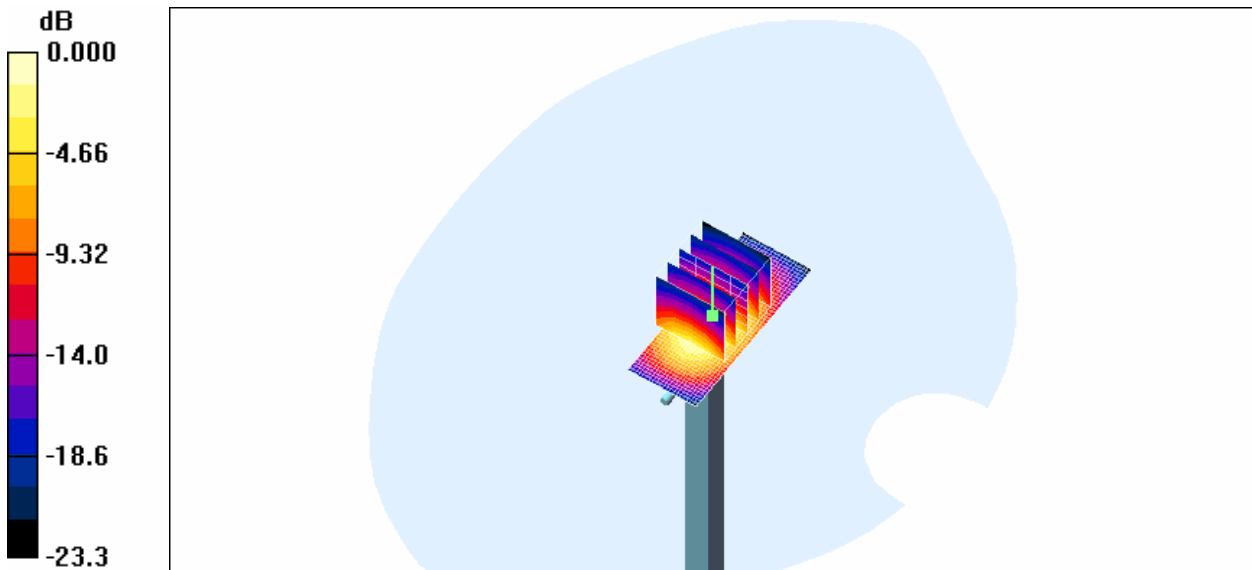
Peak SAR (extrapolated) = 128.2 W/kg

**SAR(1 g) = 56.8 mW/g; SAR(10 g) = 26 mW/g**

Maximum value of SAR (measured) = 62.9 mW/g

**d=15mm, Pin=1000mW/Area Scan (21x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 64.6 mW/g





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0 dB = 64.6mW/g

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Date/Time: 21/07/2008 11:41:58 AM

Test Laboratory: RTS

File Name: [DipoleValidation 2450MHz Amb Tem 23.3 Liq Tem 22.6C 07 21 08.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx**  
**Program Name: System Performance Check at 2450 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $s = 1.93$  mho/m;  $\epsilon_r = 37.5$ ; density =  $1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 193.1 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 133.4 W/kg

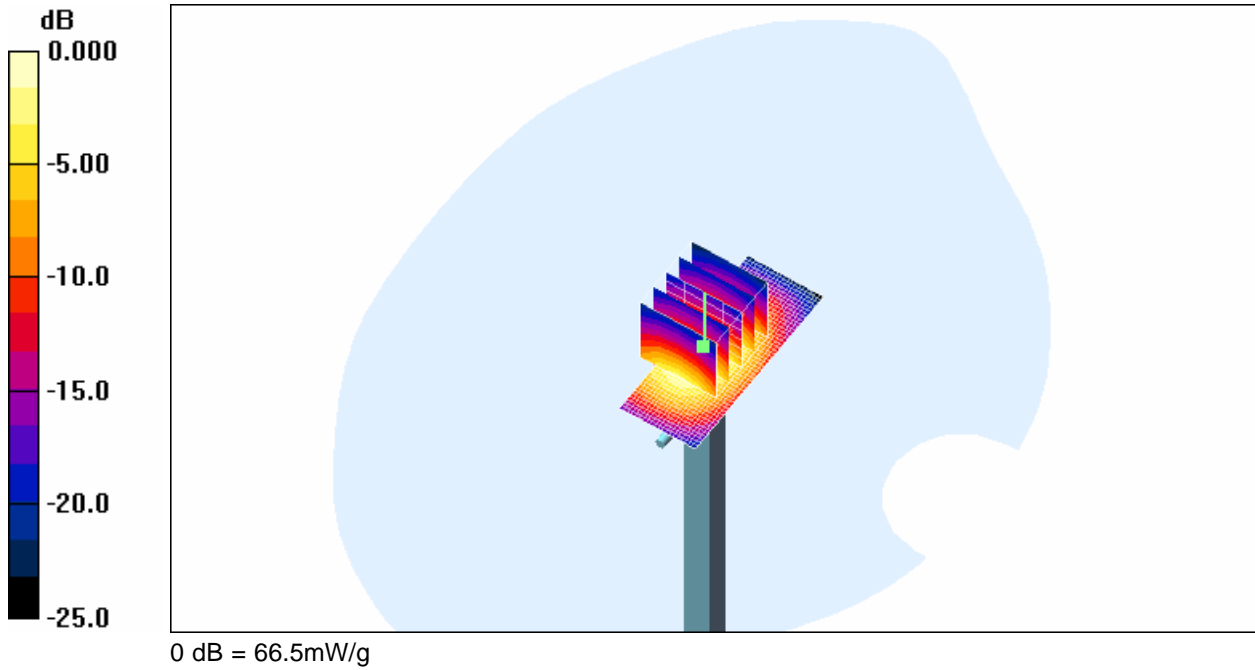
**SAR(1 g) = 58 mW/g; SAR(10 g) = 26.4 mW/g**

Maximum value of SAR (measured) = 63.9 mW/g

**d=15mm, Pin=1000mW/Area Scan (21x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 66.5 mW/g

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Date/Time: 29/07/2008 12:47:25 PM

Test Laboratory: RTS

File Name: [DipoleValidation 2450MHz Amb Tem 23.0 Liq Tem 22.4C 07 29 08.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx**  
**Program Name: System Performance Check at 2450 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $s = 1.92$  mho/m;  $\epsilon_r = 37.6$ ; density =  $1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 190.9 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 130.0 W/kg

**SAR(1 g) = 57.8 mW/g; SAR(10 g) = 26.4 mW/g**

Maximum value of SAR (measured) = 64.2 mW/g

**d=15mm, Pin=1000mW/Area Scan (21x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 65.3 mW/g

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