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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

## APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

|                                                                                  |                                                                                                 |                                           |                              |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 08/02/2010 6:15:47 PM

Test Laboratory: RIM TESTING SERVICES

File Name:

[DipoleValidation\\_835MHz\\_Amb\\_Tem\\_22.2\\_Liq\\_Tem\\_21.3\\_C\\_02\\_08\\_10.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:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.867 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(6.08, 6.08, 6.08); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $112.9 \text{ V/m}$ ; Power Drift =  $0.020 \text{ dB}$

Peak SAR (extrapolated) =  $13.9 \text{ W/kg}$

**SAR(1 g) =  $9.57 \text{ mW/g}$ ; SAR(10 g) =  $6.3 \text{ mW/g}$**

Maximum value of SAR (measured) =  $10.3 \text{ mW/g}$

**d=15mm, Pin=1000mW/Area Scan (31x121x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $10.3 \text{ mW/g}$

Author Data

**Andrew Becker**

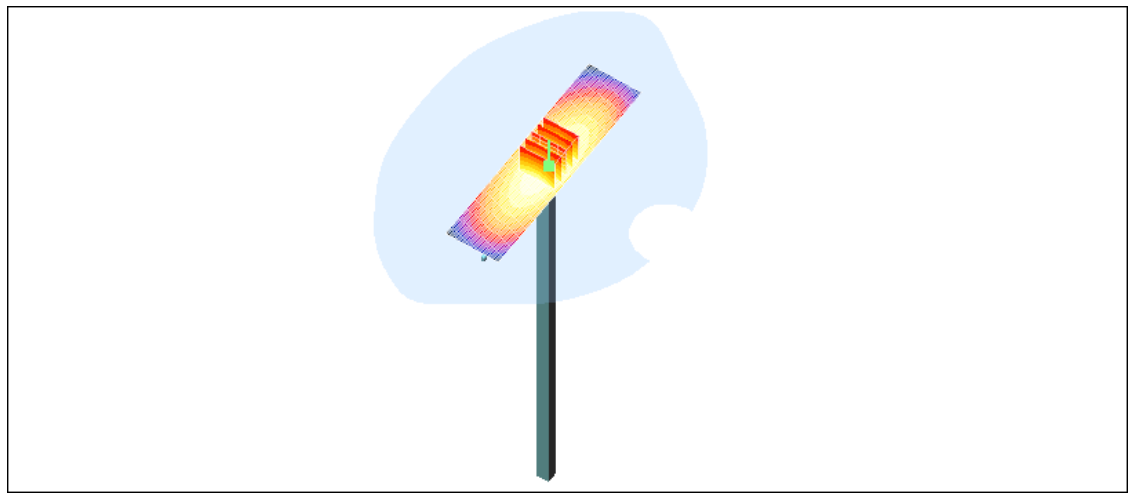
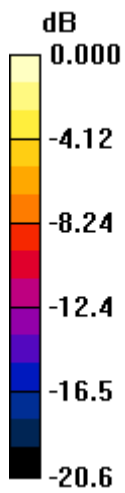
Dates of Test

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Test Report No

**RTS-2474-1002-41**

FCC ID:

**L6ARCX70UW**


0 dB = 10.3mW/g

|                                                                                  |                                                                                                 |                                           |                              |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 16/02/2010 2:25:40 PM

Test Laboratory: RIM TESTING SERVICES

## DipoleValidation\_835MHz\_Amb\_Tem\_22.5\_Liq\_Tem\_20.4C\_02\_16\_10

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.874 \text{ mho/m}$ ;  $\epsilon_r = 40.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(6.08, 6.08, 6.08); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $112.8 \text{ V/m}$ ; Power Drift =  $0.047 \text{ dB}$

Peak SAR (extrapolated) =  $14.2 \text{ W/kg}$

**SAR(1 g) =  $9.82 \text{ mW/g}$ ; SAR(10 g) =  $6.47 \text{ mW/g}$**

Maximum value of SAR (measured) =  $10.6 \text{ mW/g}$

**d=15mm, Pin=1000mW/Area Scan (31x121x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $10.6 \text{ mW/g}$

Author Data

**Andrew Becker**

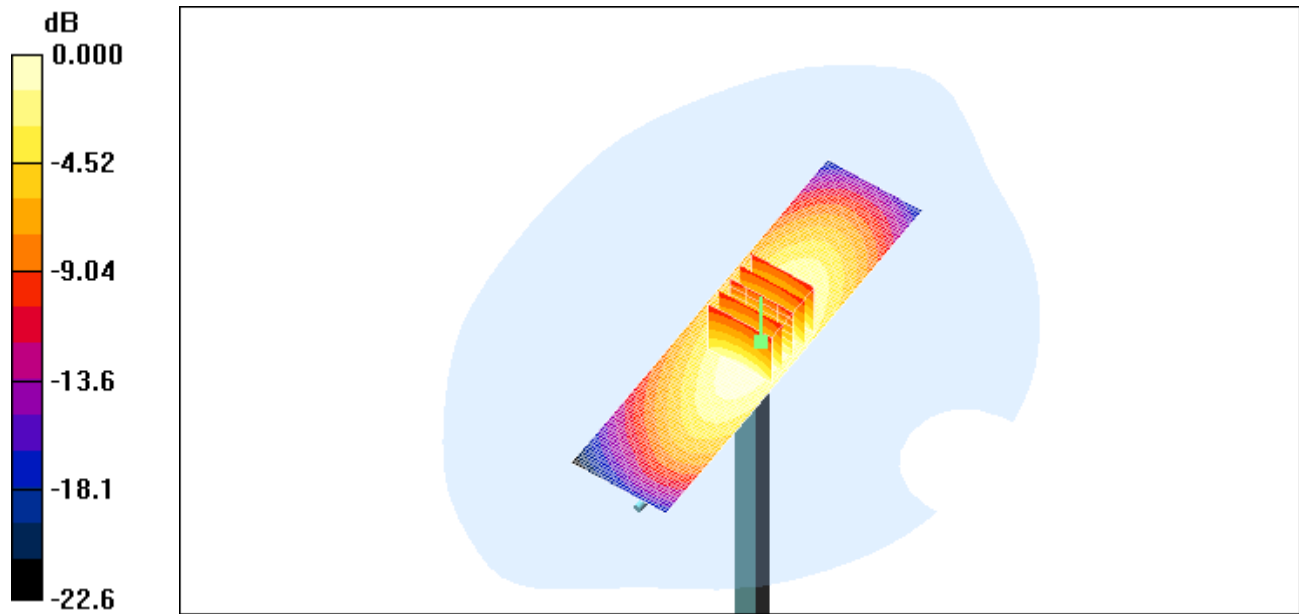
Dates of Test

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**RTS-2474-1002-41**

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**L6ARCX70UW**


0 dB = 10.6mW/g

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Date/Time: 10/02/2010 2:23:10 PM

Test Laboratory: RIM TESTING SERVICES

## DipoleValidation\_1800MHz\_Amb\_Tem\_23.4\_Liq\_Tem\_22.0C

**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020**

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.36 \text{ mho/m}$ ;  $\epsilon_r = 38.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.17, 5.17, 5.17); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $177.9 \text{ V/m}$ ; Power Drift =  $0.018 \text{ dB}$

Peak SAR (extrapolated) =  $61.2 \text{ W/kg}$

**SAR(1 g) =  $35.6 \text{ mW/g}$ ; SAR(10 g) =  $19 \text{ mW/g}$**

Maximum value of SAR (measured) =  $40.1 \text{ mW/g}$

**d=10mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $40.8 \text{ mW/g}$

Author Data

**Andrew Becker**

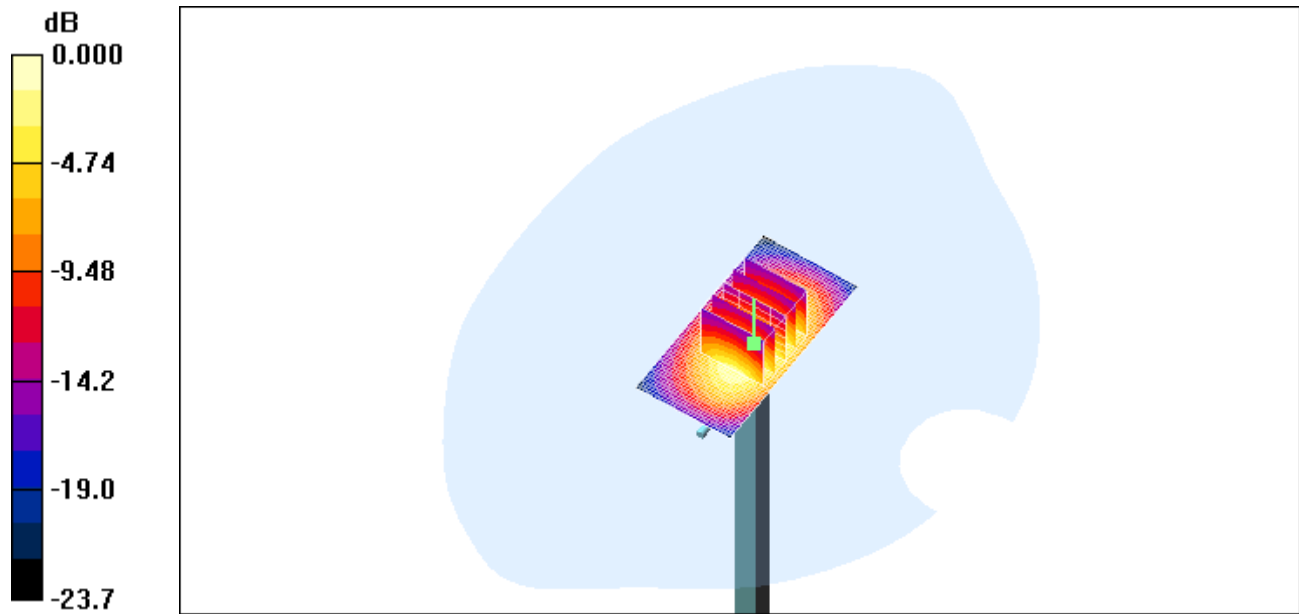
Dates of Test

**February 02 – March 03, 2010**

Test Report No

**RTS-2474-1002-41**

FCC ID:

**L6ARCX70UW**


0 dB = 40.8mW/g

|                                                                                  |                                                                                                 |                                           |                              |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 11/02/2010 7:03:04 PM

Test Laboratory: RIM TESTING SERVICES

File Name:

[DipoleValidation 1900MHz Amb Tem 23.0 Liq Tem 21.6 C 02\\_11\\_10.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:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.44 \text{ mho/m}$ ;  $\epsilon_r = 40.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.17, 5.17, 5.17); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $179.5 \text{ V/m}$ ; Power Drift =  $0.049 \text{ dB}$

Peak SAR (extrapolated) =  $67.8 \text{ W/kg}$

**SAR(1 g) =  $38.4 \text{ mW/g}$ ; SAR(10 g) =  $20.1 \text{ mW/g}$**

Maximum value of SAR (measured) =  $43.1 \text{ mW/g}$

**d=10mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $44.8 \text{ mW/g}$

Author Data

**Andrew Becker**

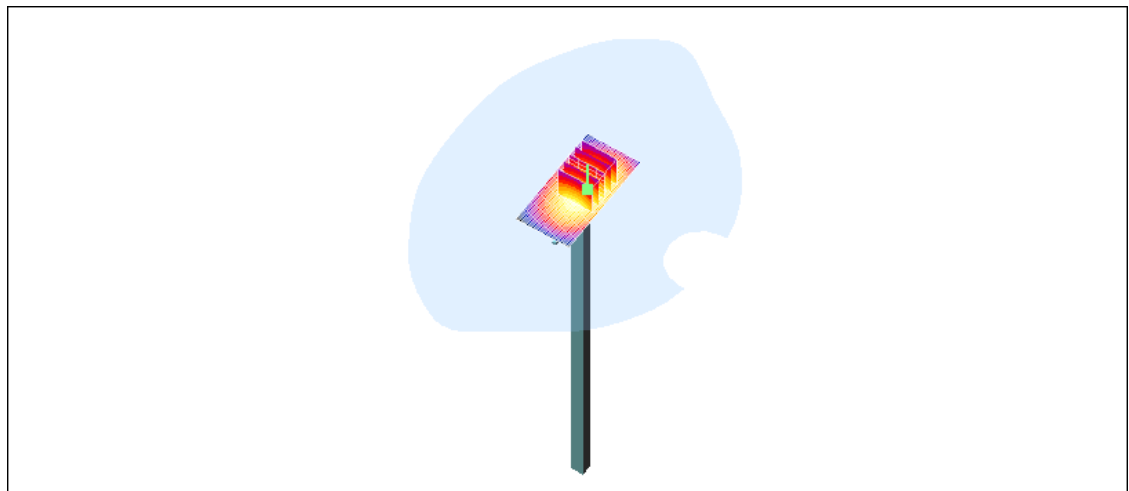
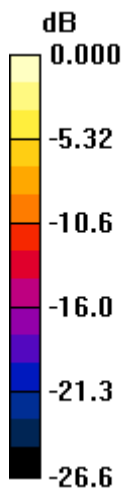
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FCC ID:

**L6ARCX70UW**


0 dB = 44.8mW/g

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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 2/2/2010 7:18:47 PM

Test Laboratory: RIM TESTING SERVICES

File Name:

[DipoleValidation 2450MHz Amb Tem 23.3 Liq Tem 21.6 C 02\\_02\\_10.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747**

**Program Name: System Performance Check at 1900 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.88 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/3/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $188.1 \text{ V/m}$ ; Power Drift =  $-0.011 \text{ dB}$

Peak SAR (extrapolated) =  $134.6 \text{ W/kg}$

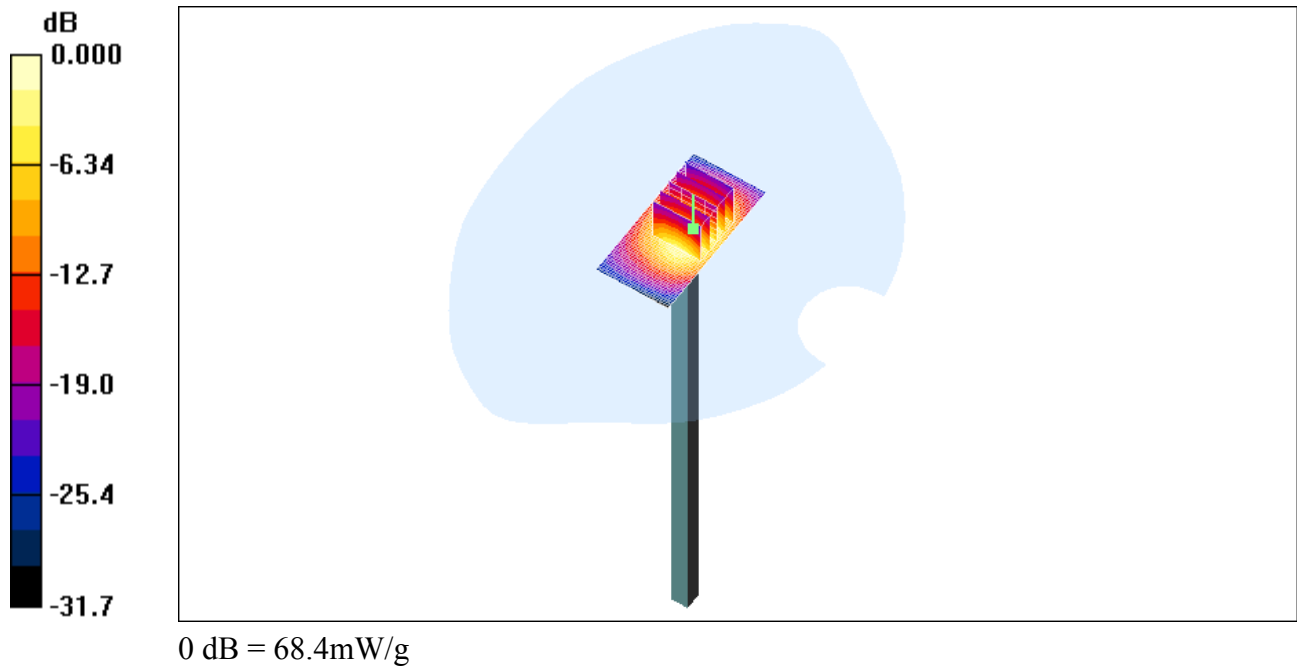
**SAR(1 g) =  $57.8 \text{ mW/g}$ ; SAR(10 g) =  $26.2 \text{ mW/g}$**

Maximum value of SAR (measured) =  $63.7 \text{ mW/g}$

**d=10mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $68.4 \text{ mW/g}$



|                                                                                  |                                                                                                 |                                           |                              |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 2/25/2010 7:48:57 PM

Test Laboratory: RIM TESTING SERVICES

File Name:

[DipoleValidation 2450MHz Amb Tem 23.9 Liq Tem 20.6 C 02 25 10.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747**

**Program Name: System Performance Check at 1900 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $183.0 \text{ V/m}$ ; Power Drift =  $0.039 \text{ dB}$

Peak SAR (extrapolated) =  $123.4 \text{ W/kg}$

**SAR(1 g) =  $53.3 \text{ mW/g}$ ; SAR(10 g) =  $24.3 \text{ mW/g}$**

Maximum value of SAR (measured) =  $57.8 \text{ mW/g}$

**d=10mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $61.8 \text{ mW/g}$

Author Data

**Andrew Becker**

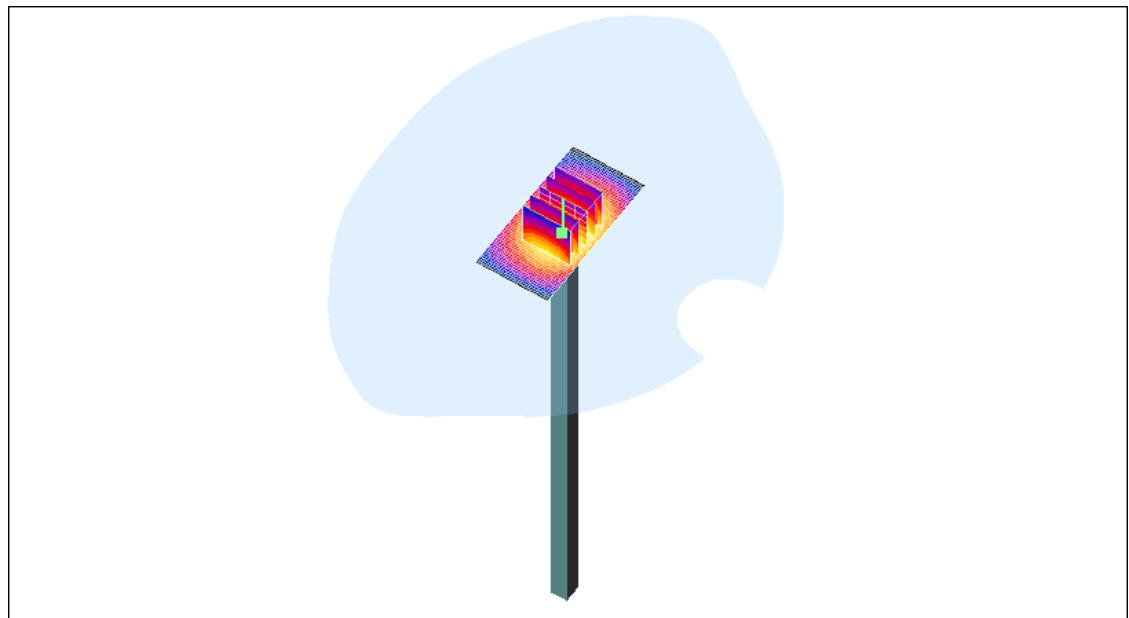
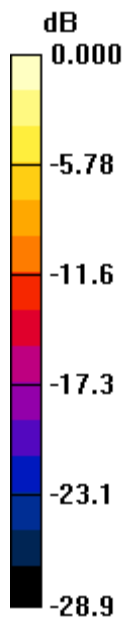
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**February 02 – March 03, 2010**

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**RTS-2474-1002-41**

FCC ID:

**L6ARCX70UW**


0 dB = 61.8mW/g

|                                                                                  |                                                                                                 |                                           |                              |
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| Author Data<br><b>Andrew Becker</b>                                              | Dates of Test<br><b>February 02 – March 03, 2010</b>                                            | Test Report No<br><b>RTS-2474-1002-41</b> | FCC ID:<br><b>L6ARCX70UW</b> |

Date/Time: 3/3/2010 5:25:20 PM

Test Laboratory: RIM TESTING SERVICES

File Name:

[DipoleValidation 2450MHz Amb Tem 23.4 Liq Tem 22.2 C 03 03 10.da4](#)

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747**

**Program Name: System Performance Check at 1900 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.88 \text{ mho/m}$ ;  $\epsilon_r = 37.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $183.4 \text{ V/m}$ ; Power Drift =  $-0.006 \text{ dB}$

Peak SAR (extrapolated) =  $125.2 \text{ W/kg}$

**SAR(1 g) =  $54.9 \text{ mW/g}$ ; SAR(10 g) =  $25.2 \text{ mW/g}$**

Maximum value of SAR (measured) =  $59.1 \text{ mW/g}$

**d=15mm, Pin=1000mW/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $64.7 \text{ mW/g}$

Author Data

**Andrew Becker**

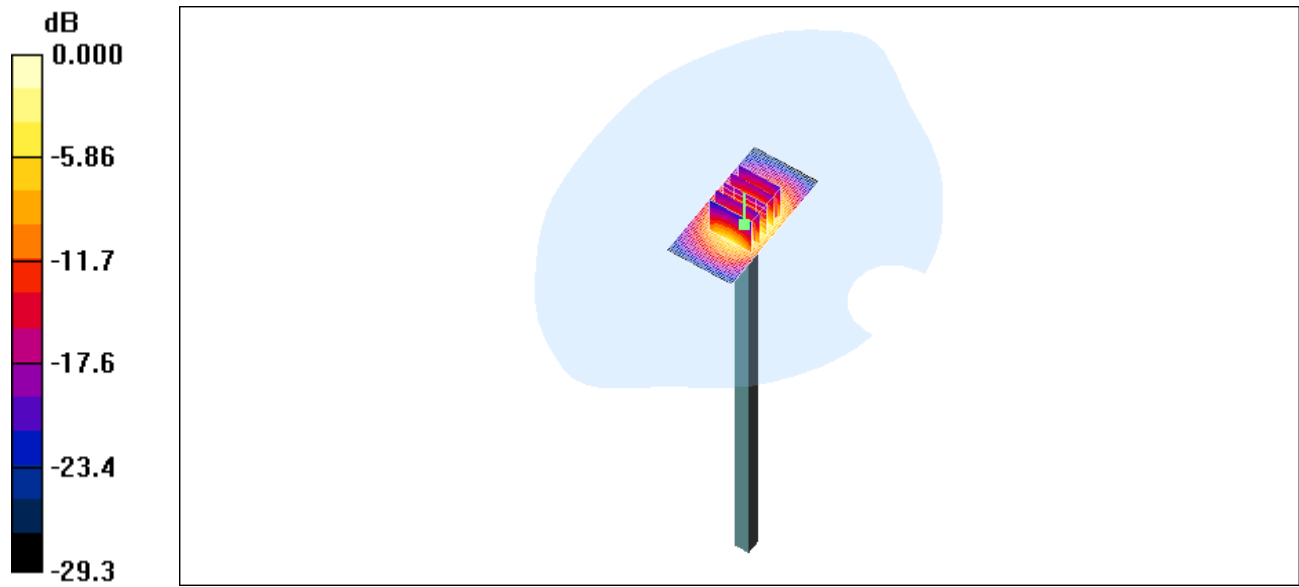
Dates of Test

**February 02 – March 03, 2010**

Test Report No

**RTS-2474-1002-41**

FCC ID:

**L6ARCX70UW**


0 dB = 64.7mW/g