

## **Appendix 1 – System Performance Check Plots**

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## System Performance Check

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d081**

Frequency: 835 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.985 \text{ S/m}$ ;  $\epsilon_r = 55.268$ ;  $\rho = 1000 \text{ kg/m}^3$

DASY5 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.04, 6.04, 6.04); Calibrated: 8/16/2013;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 11/27/2013
- Phantom: SAM v4.0 SN1194; Type: QD000P40CA; Serial: TP 1194
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

**Dipole/Input 250 mW/Area Scan (9x9x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (measured) = 2.57 W/kg

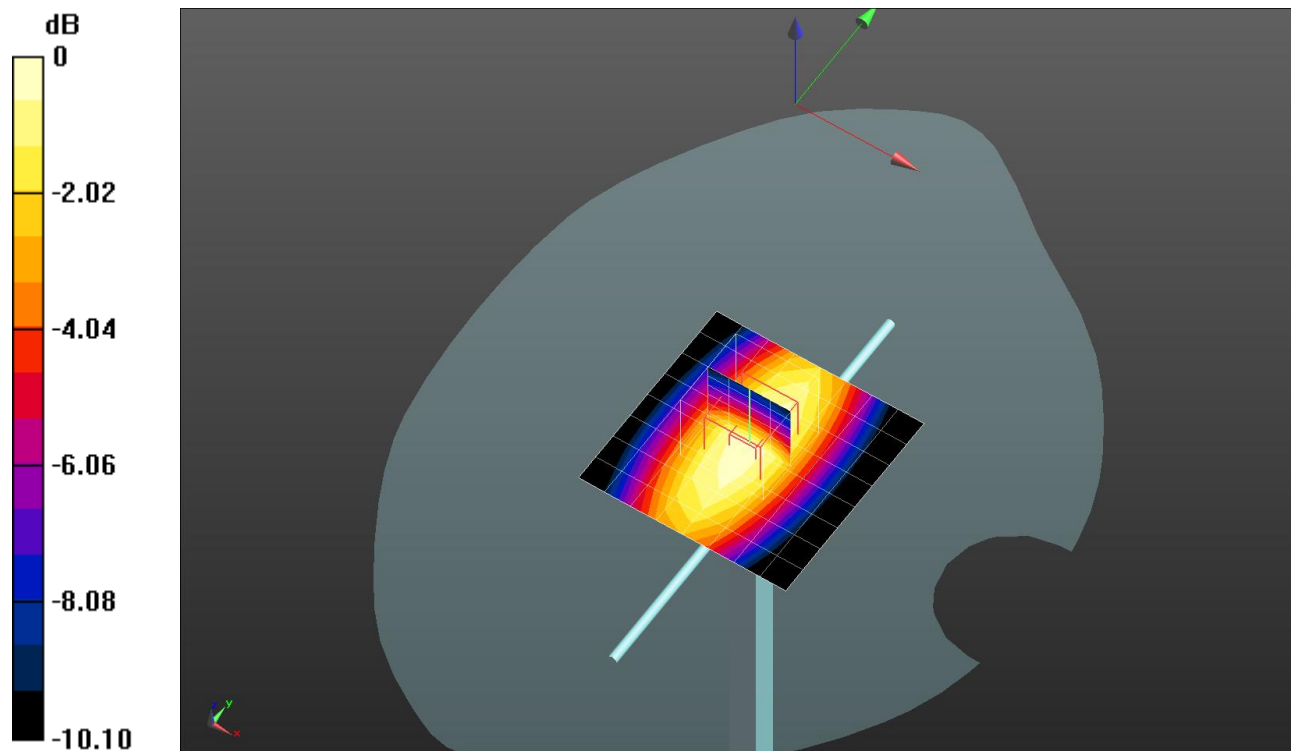
**Dipole/Input 250 mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 53.167 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.41 W/kg

**SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.59 W/kg**

Maximum value of SAR (measured) = 2.60 W/kg



0 dB = 2.60 W/kg = 4.15 dBW/kg

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## System Performance Check

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d081**

Frequency: 835 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.927 \text{ S/m}$ ;  $\epsilon_r = 41.619$ ;  $\rho = 1000 \text{ kg/m}^3$

DASY5 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.38, 6.38, 6.38); Calibrated: 8/16/2013;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 11/27/2013
- Phantom: SAM v4.0 SN1194; Type: QD000P40CA; Serial: TP 1194
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

**Dipole/Input 250 mW/Area Scan (9x9x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

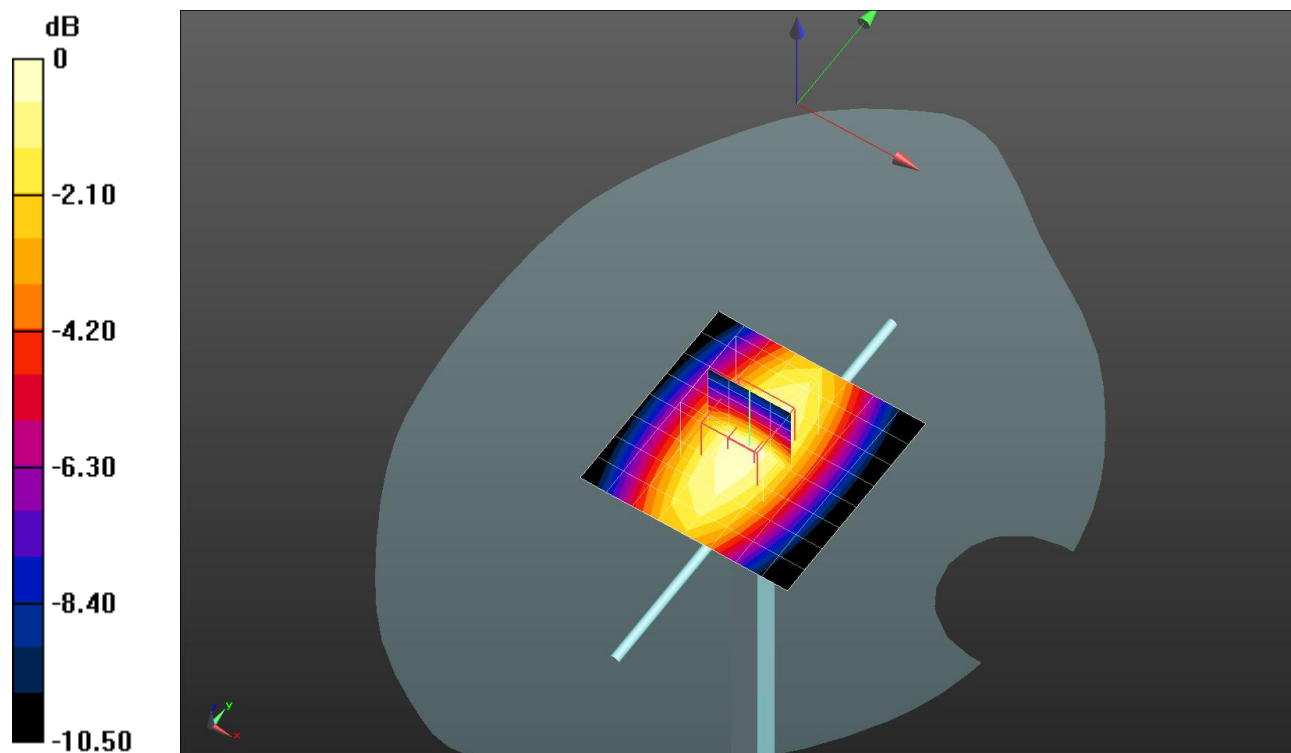
Maximum value of SAR (measured) = 2.49 W/kg

**Dipole/Input 250 mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 53.443 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.37 W/kg

**SAR(1 g) = 2.31 W/kg; SAR(10 g) = 1.51 W/kg**



0 dB = 2.49 W/kg = 3.96 dBW/kg

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## System Performance Check

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d112**

Frequency: 1900 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.435$  S/m;  $\epsilon_r = 39.345$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.04, 5.04, 5.04); Calibrated: 8/16/2013;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 11/27/2013
- Phantom: SAM v4.0 SN1194; Type: QD000P40CA; Serial: TP 1194
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

**Dipole/Input 250 mW/Area Scan (9x9x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 10.4 W/kg

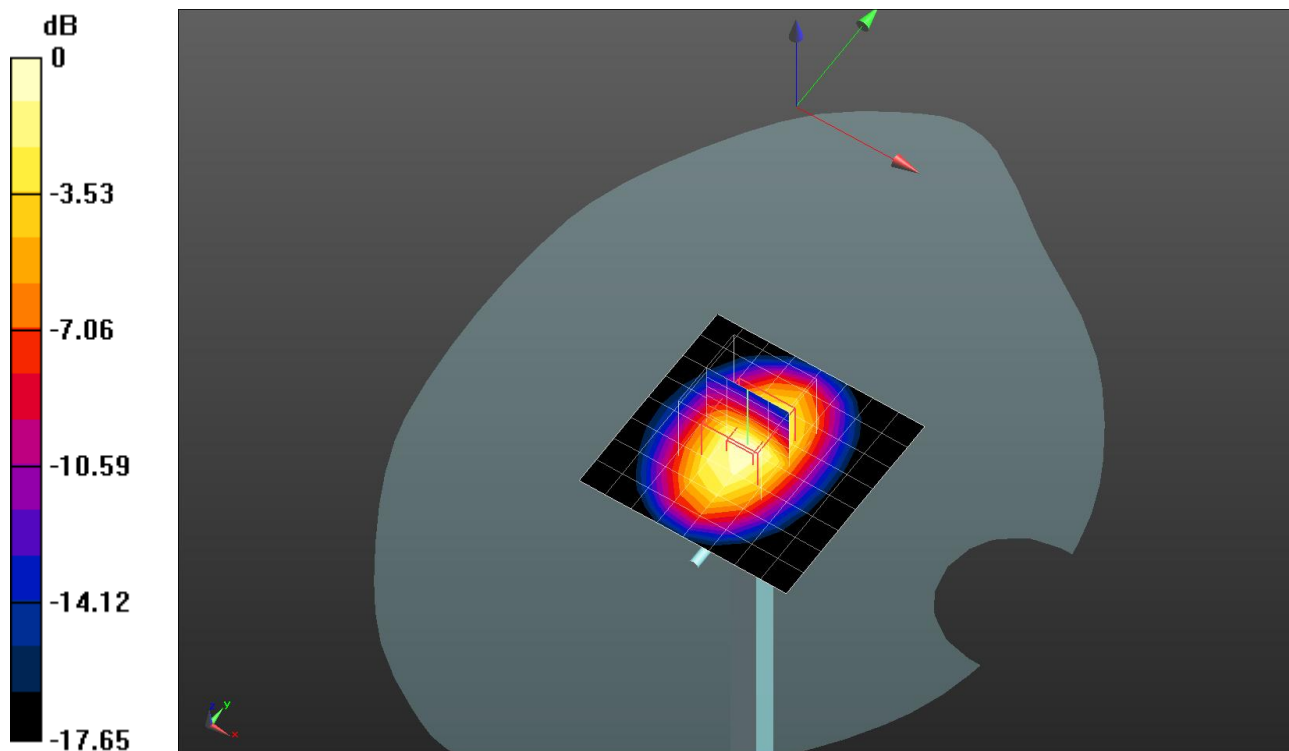
**Dipole/Input 250 mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.669 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 15.7 W/kg

**SAR(1 g) = 9.39 W/kg; SAR(10 g) = 5.01 W/kg**

Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## System Performance Check

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d112**

Frequency: 1900 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.57$  S/m;  $\epsilon_r = 52.402$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.48, 4.48, 4.48); Calibrated: 8/16/2013;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 11/27/2013
- Phantom: SAM v4.0 SN1194; Type: QD000P40CA; Serial: TP 1194
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

**Dipole/Input 250 mW/Area Scan (9x9x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 10.7 W/kg

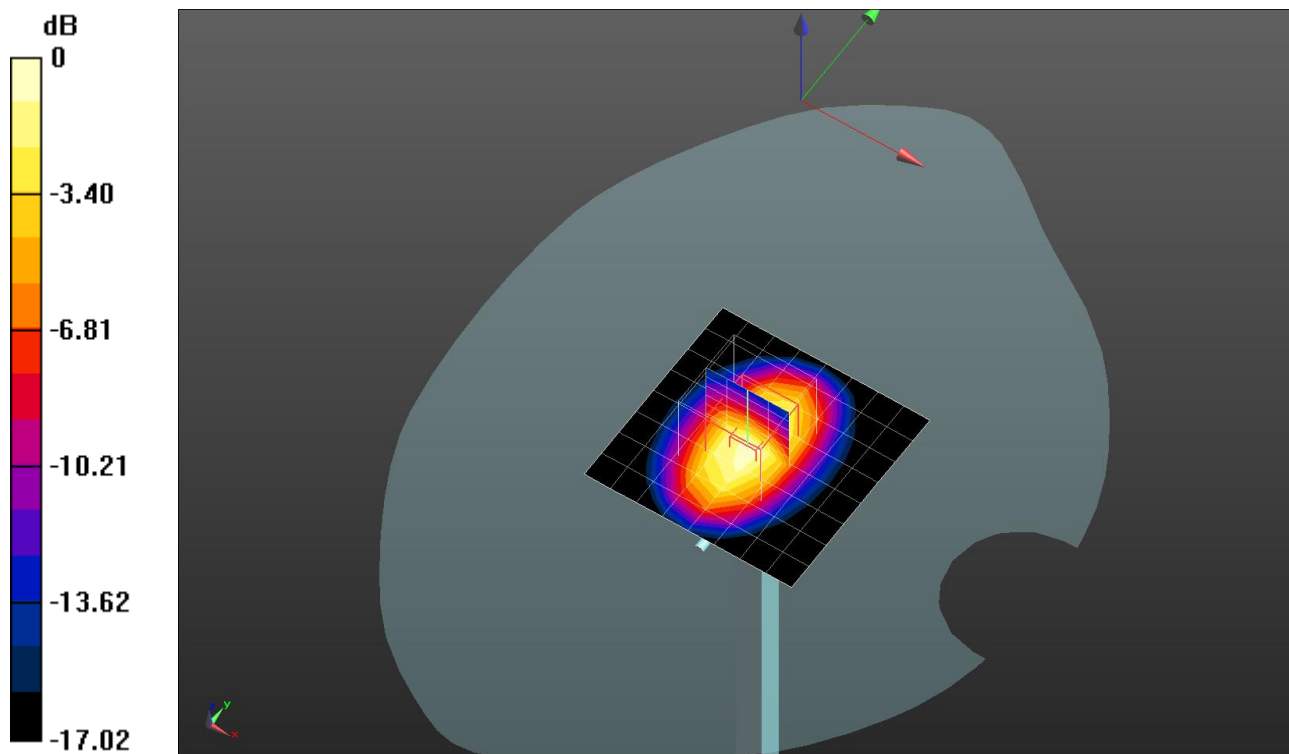
**Dipole/Input 250 mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.866 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 16.0 W/kg

**SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.22 W/kg**

Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg