

APPENDIX

Exhibit 1

System Validation Plots

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

File Name: [Validation_M1800_040921.da4](#)

System Validation

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 2d038

Program: Validation

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

Medium: M1800 ($\sigma = 1.482$ mho/m, $\epsilon_r = 53.89$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1678; ConvF(4.65, 4.65, 4.65); Calibrated: 2004/02/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2004/02/06
- Phantom: SAM 1194; Type: QD 000 P40 CA; Serial: 1194
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Antenna Input Power 250 mW/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 90 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 10.4 mW/g

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

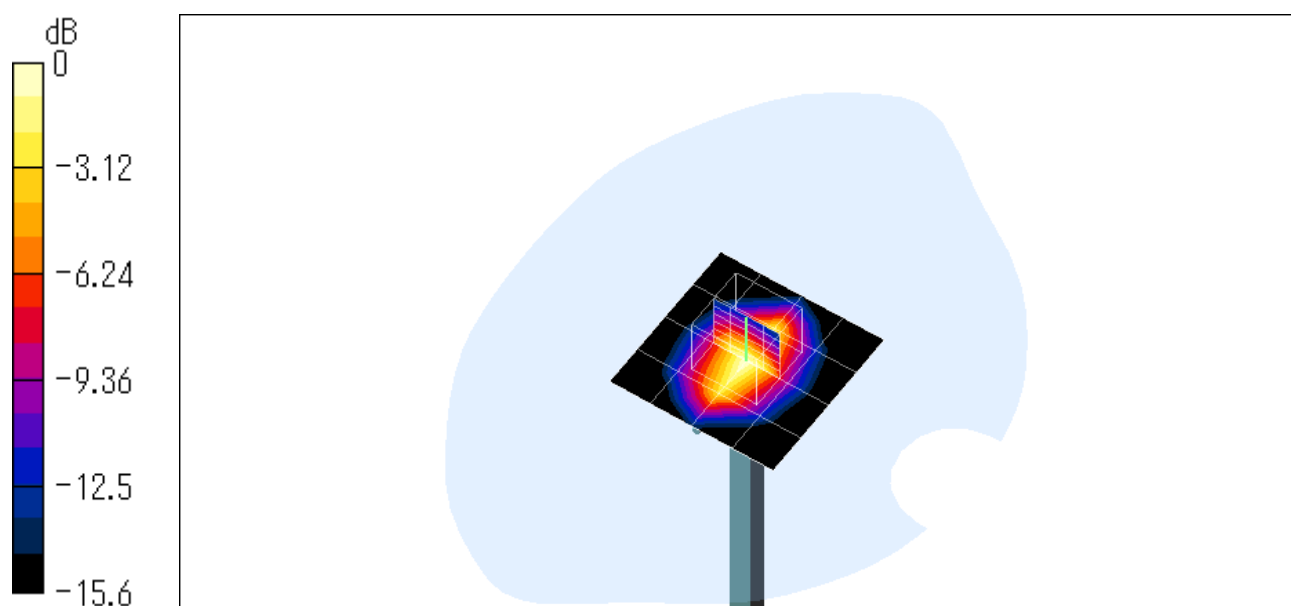
Peak SAR (extrapolated) = 14.9 W/kg

SAR(1 g) = 9.2 mW/g; SAR(10 g) = 5.01 mW/g

Reference Value = 90 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 10.3 mW/g



0 dB = 10.3mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

File Name: [Validation_M1800_040922.da4](#)

System Validation

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 2d038

Program: Validation

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

Medium: M1800 ($\sigma = 1.463$ mho/m, $\epsilon_r = 53.562$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1678; ConvF(4.65, 4.65, 4.65); Calibrated: 2004/02/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2004/02/06
- Phantom: SAM 1194; Type: QD 000 P40 CA; Serial: 1194
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Antenna Input Power 250 mW/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 89.2 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 10 mW/g

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

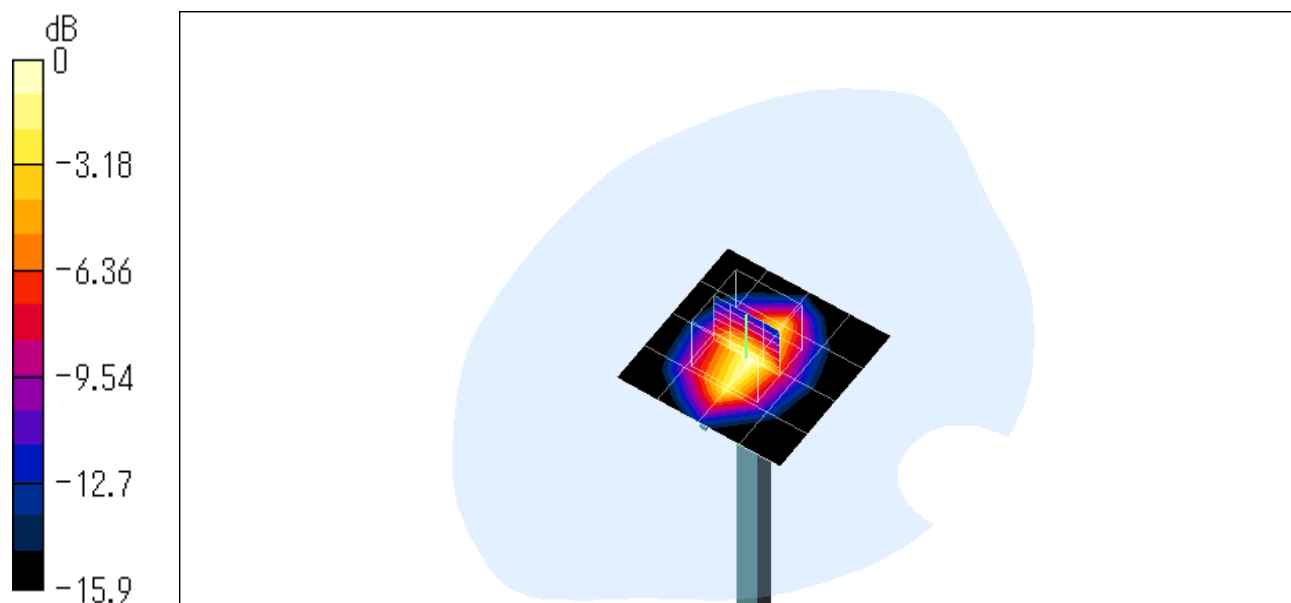
Peak SAR (extrapolated) = 15 W/kg

SAR(1 g) = 9.2 mW/g; SAR(10 g) = 4.99 mW/g

Reference Value = 89.2 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 10.4 mW/g



0 dB = 10.4mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

File Name: [Validation_HSL1800_040924.da4](#)

System Validation

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 2d038

Program: Validation

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

Medium: HSL1800 ($\sigma = 1.376$ mho/m, $\epsilon_r = 41.043$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1678; ConvF(5.15, 5.15, 5.15); Calibrated: 2004/02/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2004/02/06
- Phantom: SAM 1194; Type: QD 000 P40 CA; Serial: 1194
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Antenna Input Power 250 mW/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 92.5 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 10.5 mW/g

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

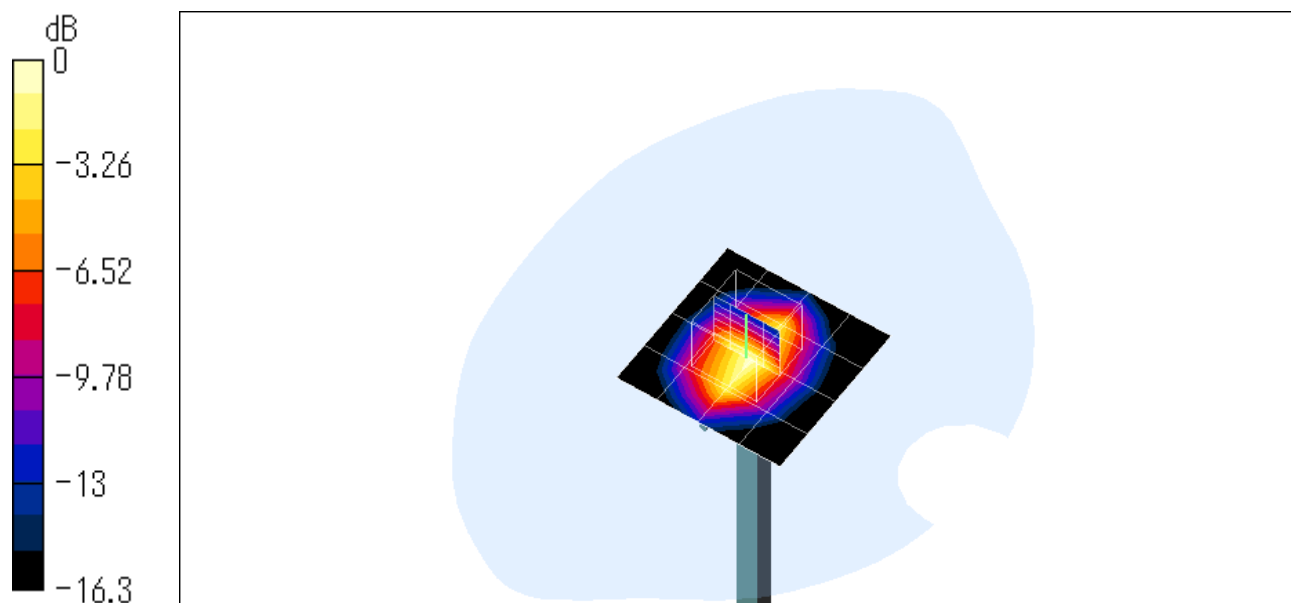
Peak SAR (extrapolated) = 16.2 W/kg

SAR(1 g) = 9.55 mW/g; SAR(10 g) = 5.11 mW/g

Reference Value = 92.5 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 10.7 mW/g



0 dB = 10.7mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

File Name: [Validation_HSL1800_041007.da4](#)

System Validation

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 2d038

Program: Validation

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

Medium: HSL1800 ($\sigma = 1.357$ mho/m, $\epsilon_r = 40.77$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1678; ConvF(5.15, 5.15, 5.15); Calibrated: 2004/02/15
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2004/02/06
- Phantom: SAM 1194; Type: QD 000 P40 CA; Serial: 1194
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Antenna Input Power 250 mW/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 91.8 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 10.3 mW/g

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

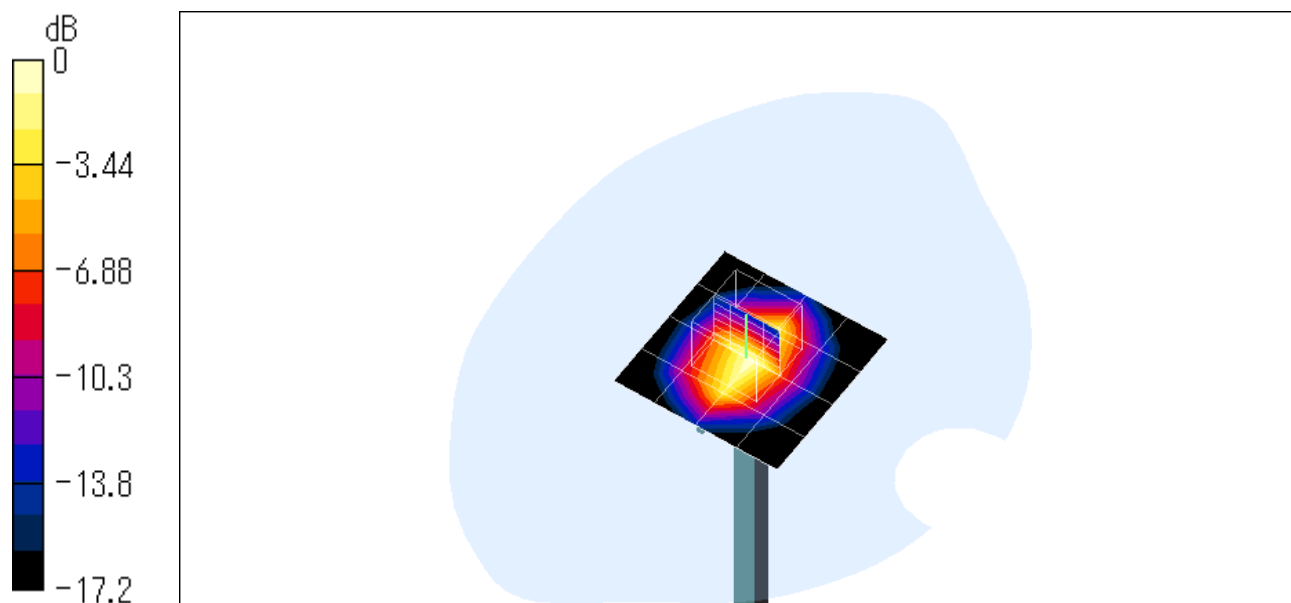
Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 9.38 mW/g; SAR(10 g) = 4.93 mW/g

Reference Value = 91.8 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 10.5 mW/g



0 dB = 10.5mW/g