

Test Laboratory: Compliance Certification Services

## 1\_Test Position 1 (Antenna A)

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**M-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.272 mW/g

**M-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

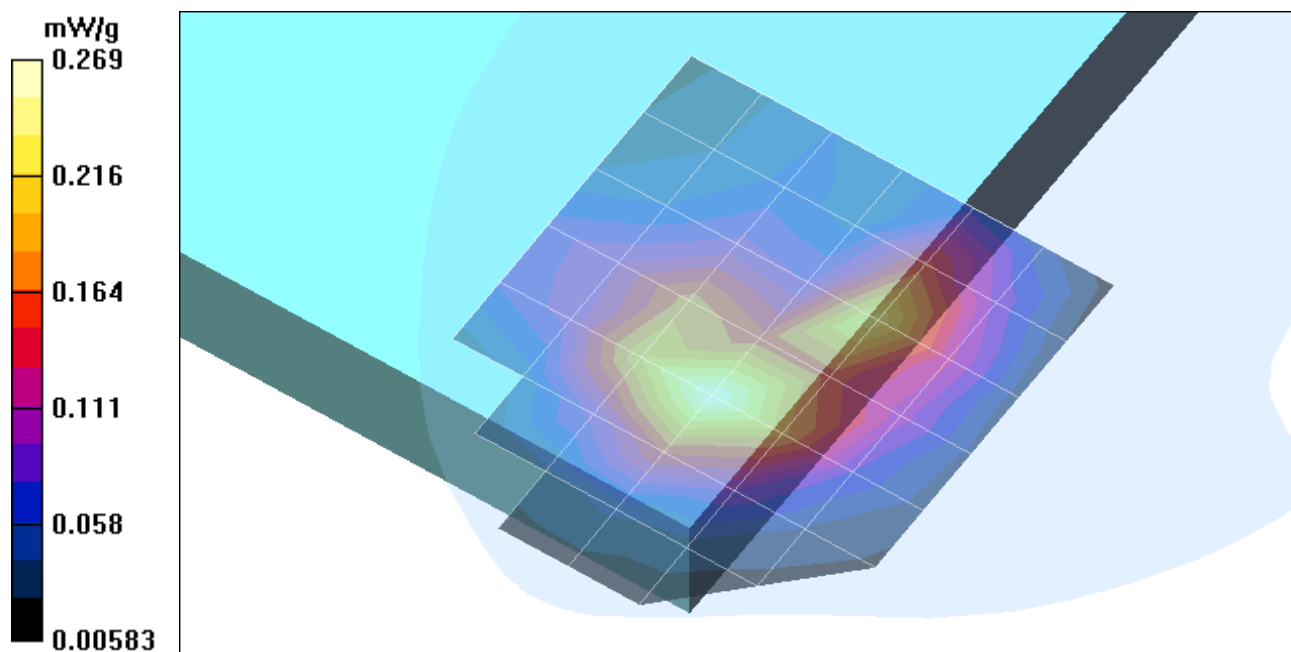
Reference Value = 5.21 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 0.375 W/kg

**SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.123 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.269 mW/g



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Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11 g M-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.122 mW/g

**802.11 g M-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

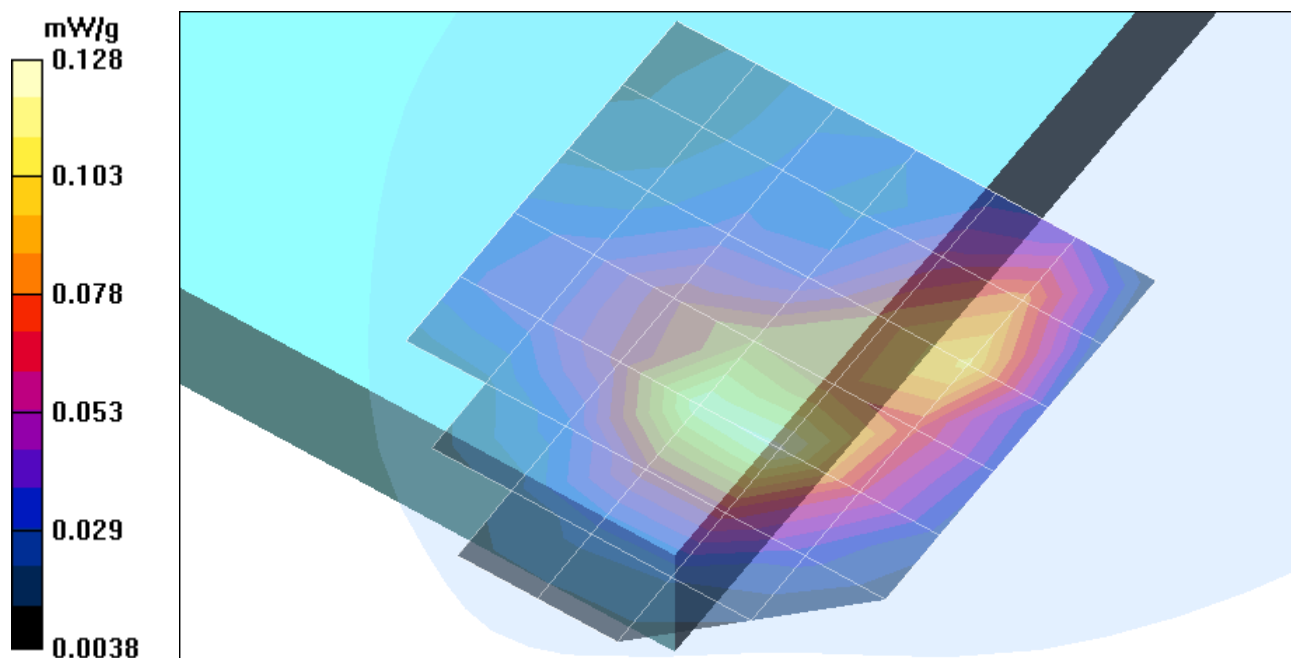
Reference Value = 3.71 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.178 W/kg

**SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.059 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.128 mW/g



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## 1\_Test Position 1 (Antenna A)

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11 g\_Turbo/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.142 mW/g

**802.11 g\_Turbo/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

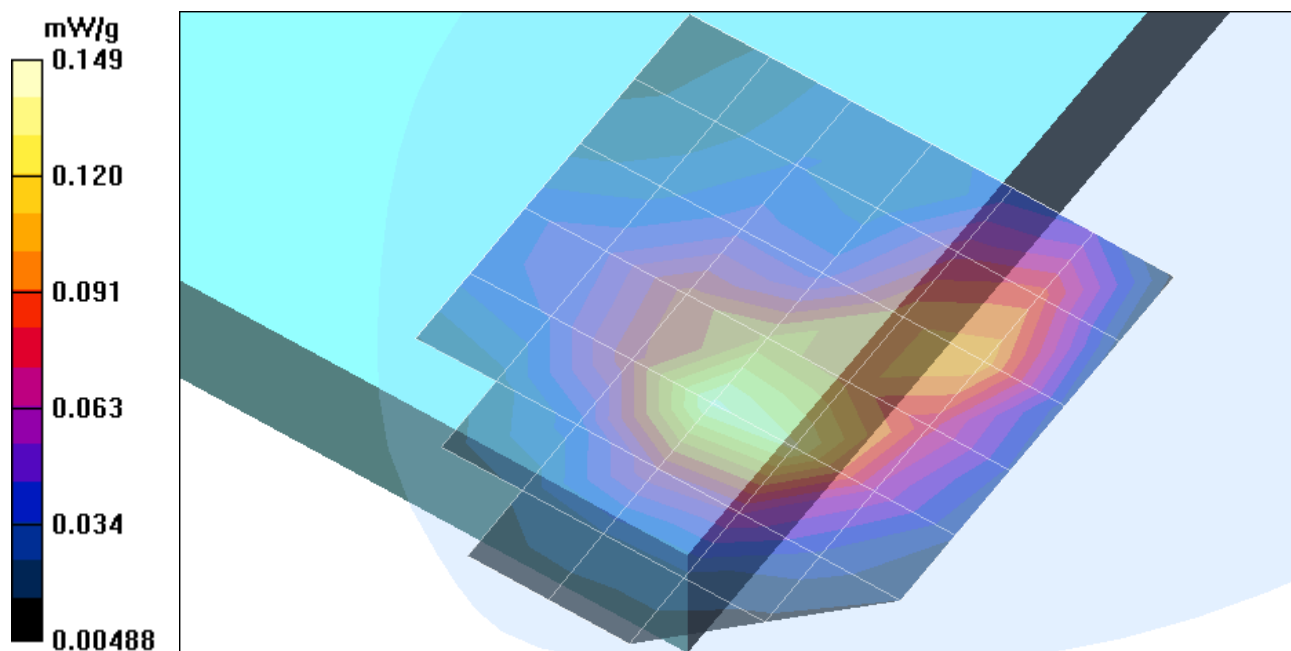
Reference Value = 3.88 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.209 W/kg

**SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.068 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.149 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.93$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11b\_L-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.219 mW/g

**802.11b\_L-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

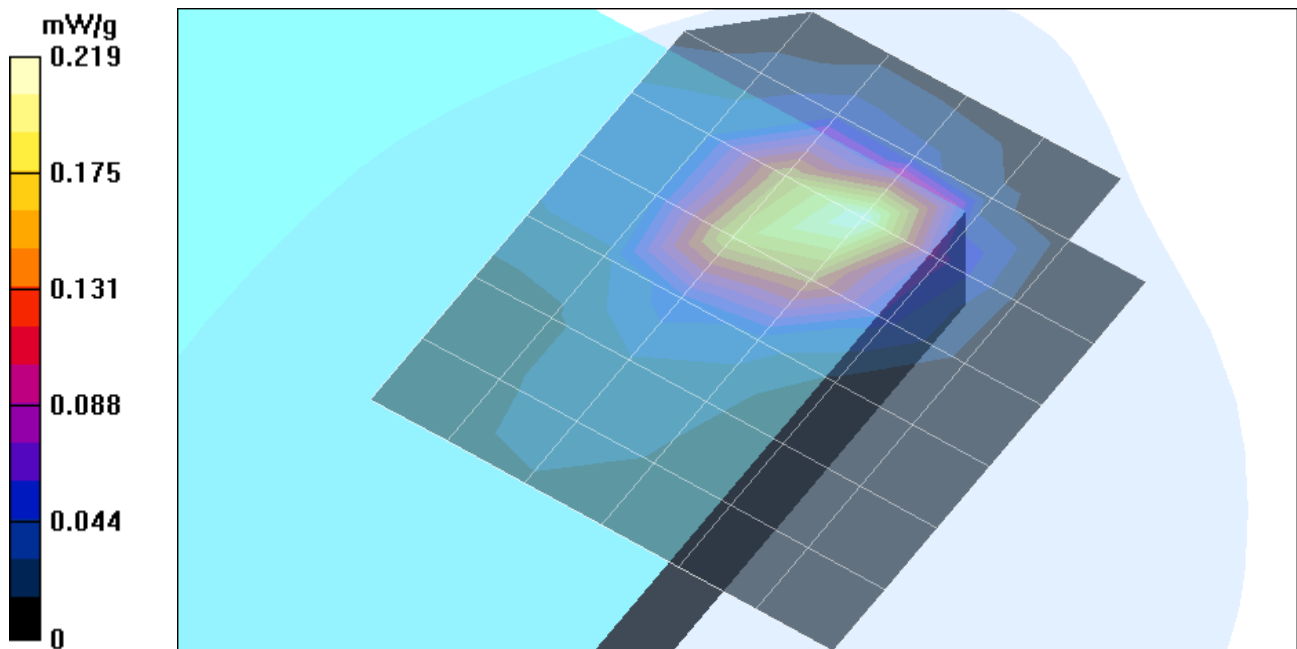
Reference Value = 2.03 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.425 W/kg

**SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.113 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.292 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11b\_M-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.314 mW/g

**802.11b\_M-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

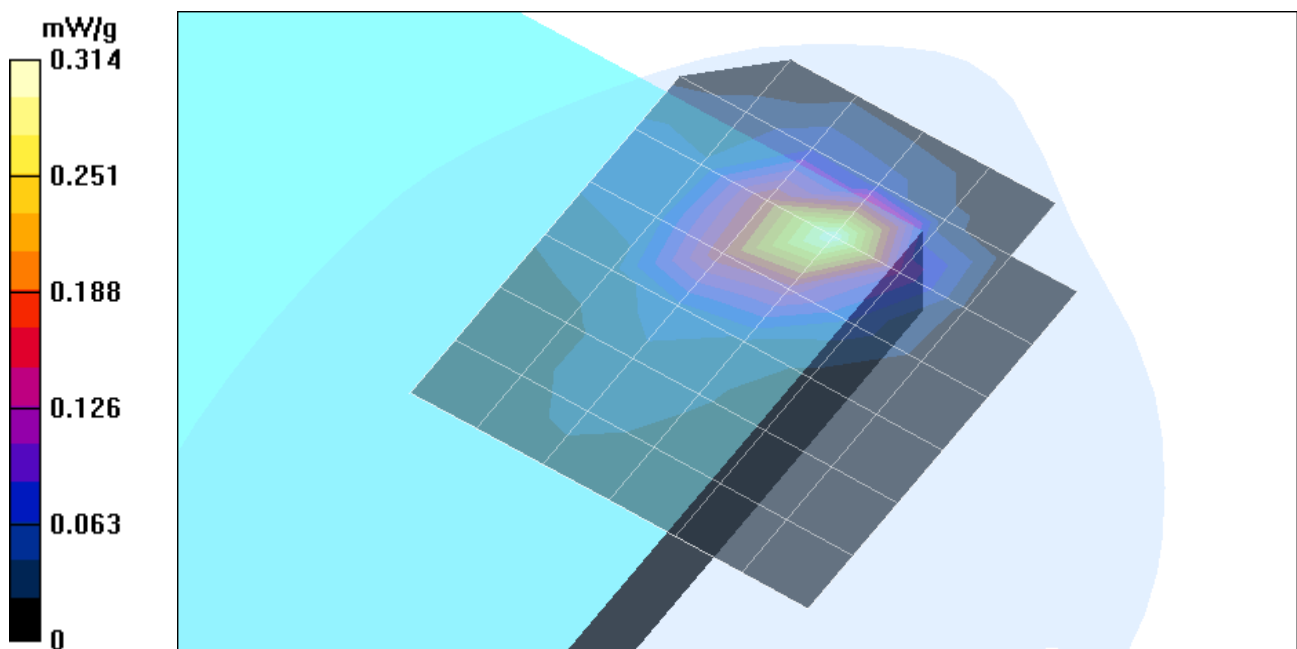
Reference Value = 2.27 V/m; Power Drift = 1.0 dB

Peak SAR (extrapolated) = 0.498 W/kg

**SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.134 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.346 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11b\_H-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.269 mW/g

**802.11b\_H-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

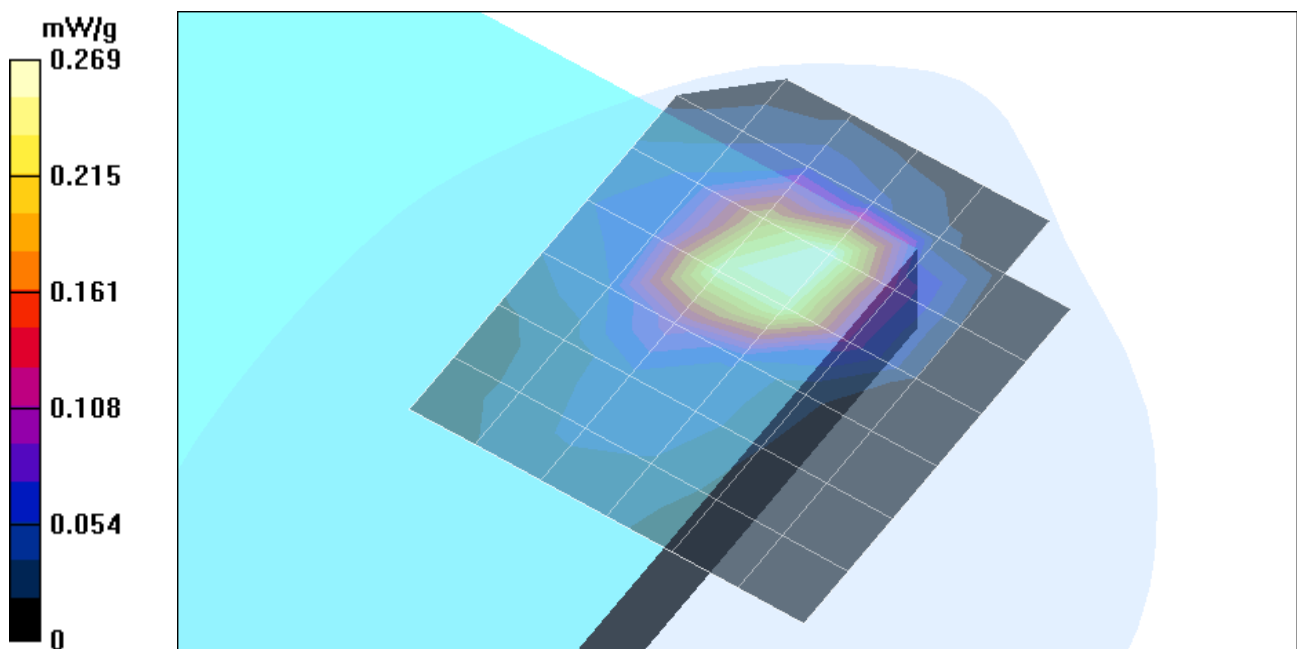
Reference Value = 2.49 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.589 W/kg

**SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.158 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.416 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

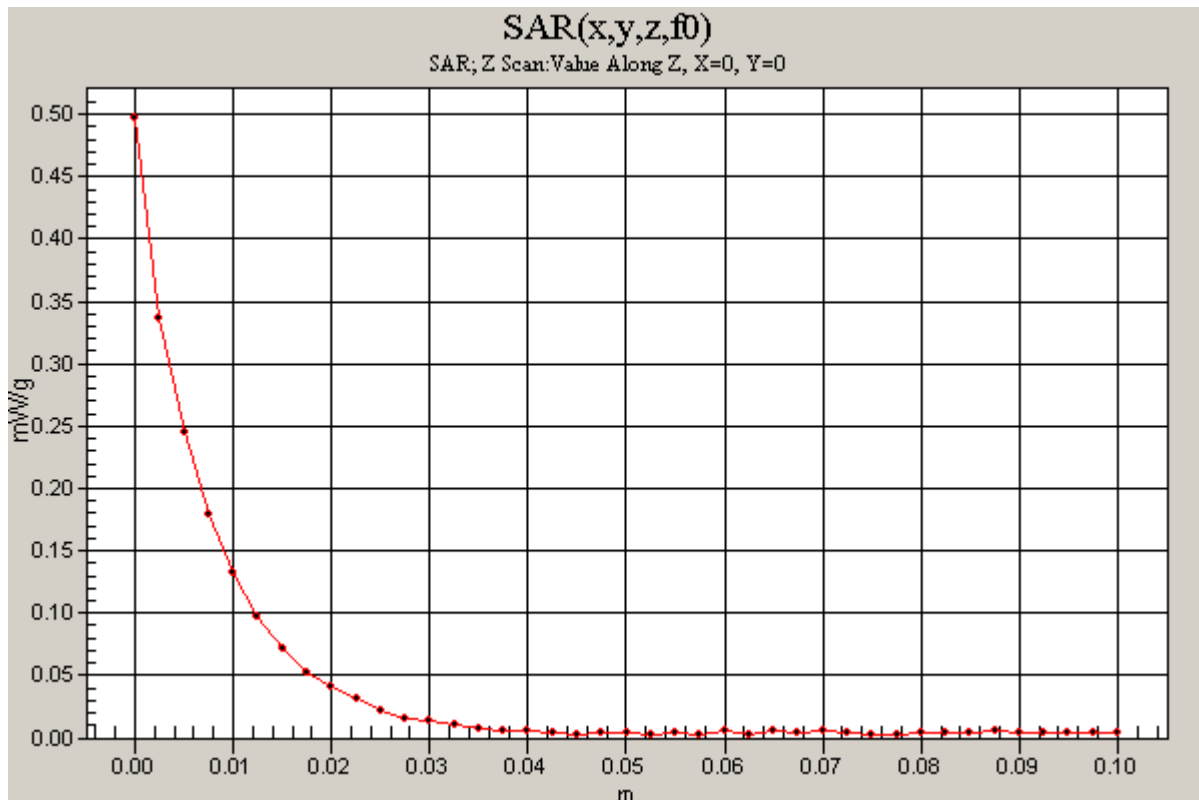
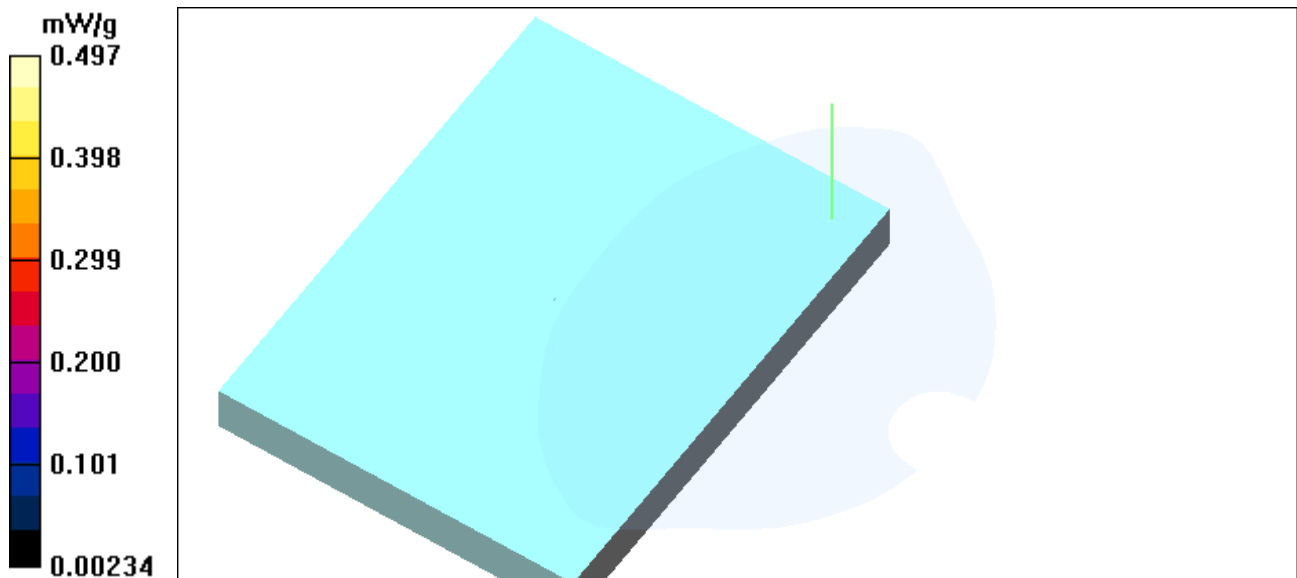
Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

**802.11b\_H-ch/Z Scan (1x1x41):** Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.497 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11g\_M-ch/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.128 mW/g

**802.11g\_M-ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

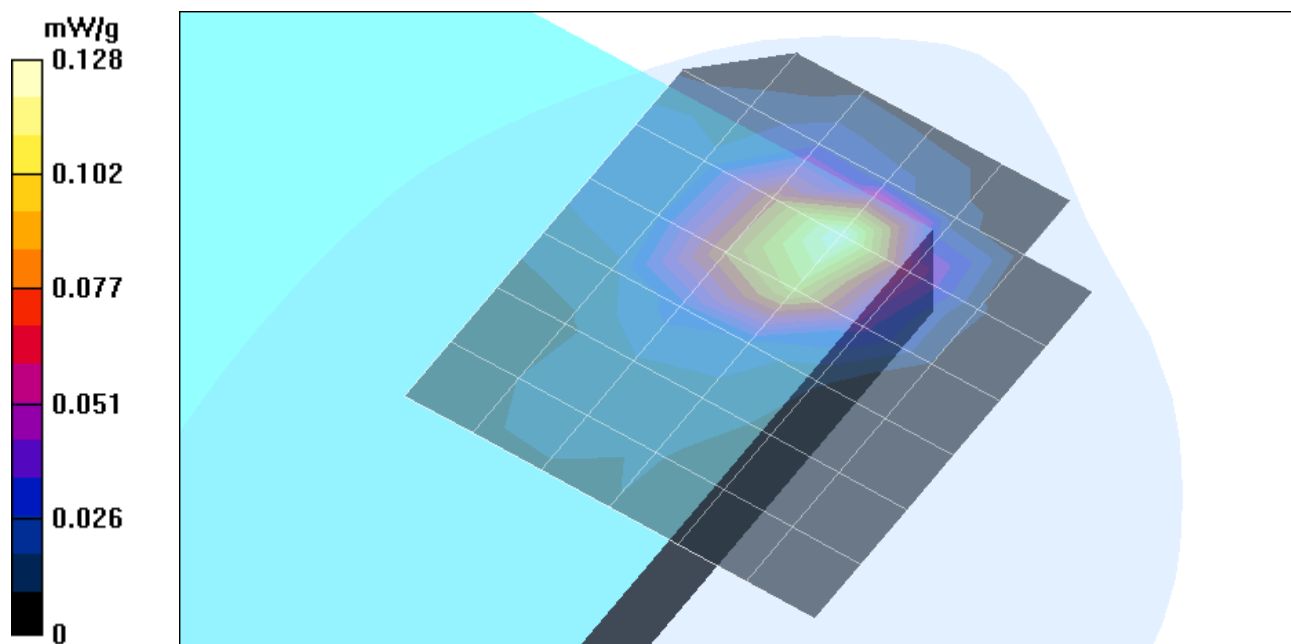
Reference Value = 1.66 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.247 W/kg

**SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.066 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.171 mW/g



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## 2\_Test Position 2 - Antenna B

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11g\_Turbo/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.133 mW/g

**802.11g\_Turbo/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

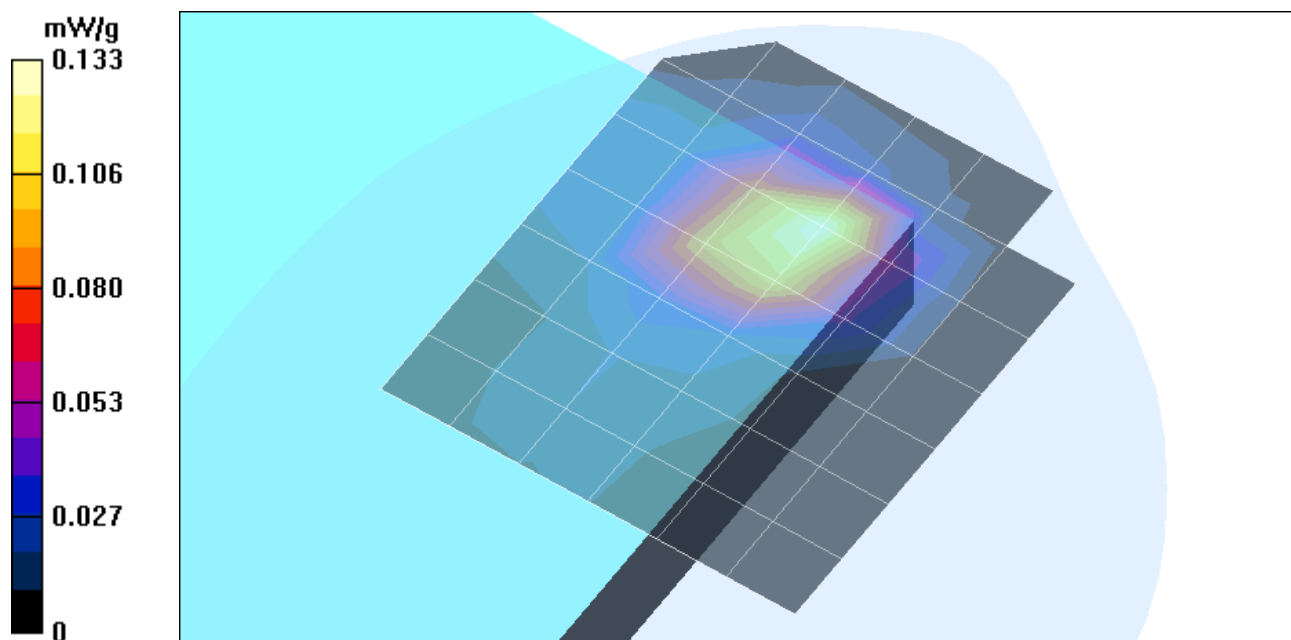
Reference Value = 1.64 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.259 W/kg

**SAR(1 g) = 0.136 mW/g; SAR(10 g) = 0.071 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.183 mW/g



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### 3\_Test Position 3 - Antenna B\_Thicker battery pack

**DUT: Hitachi Keiyo Engineering and Systems, Ltd; Type: PC5NR3-XXXXXXXXXX; Serial: N/A**

Phantom section: Flat Section

Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Measurement Standard: DASY4 (High Precision Assessment)

- **Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C**
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB (58.35%)
- Probe: EX3DV3 - SN3531; ConvF(8.32, 8.32, 8.32);
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 123

**802.11b\_(Thicker Battery Pack)/Area Scan (7x8x1):** Measurement grid: dx=18mm, dy=18mm

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.333 mW/g

**802.11b\_(Thicker Battery Pack)/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 2.45 V/m; Power Drift = 0.2 dB

Peak SAR (extrapolated) = 0.539 W/kg

**SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.146 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.377 mW/g

