



ESTECH Co., Ltd.

Rm.1015, World Venture Center II, TEL: 82-2-867-3201
426-5, Gasan-dong, Geumcheon-gu, FAX: 82-2-867-3204
Seoul, 153-803, Korea

– 5200 MHz 802.11a Body Front (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY FRONT 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

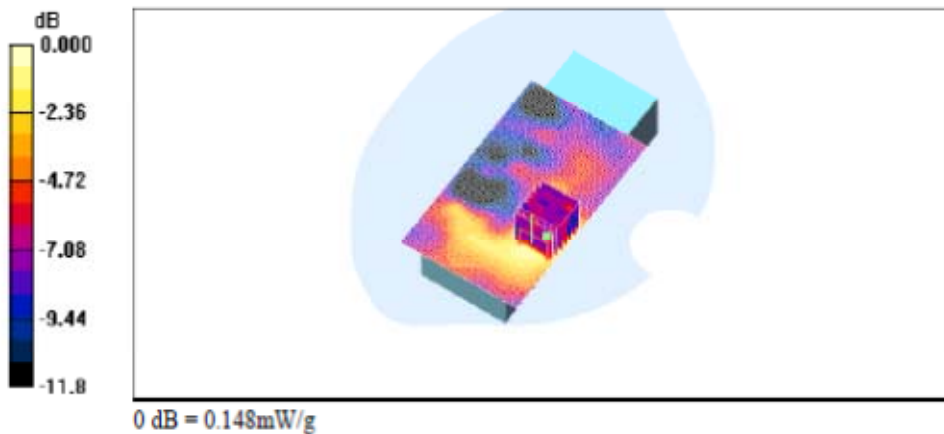
Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.138 mW/g

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.25 V/m; Power Drift = 0.110 dB
Peak SAR (extrapolated) = 0.323 W/kg
SAR(1 g) = 0.130 mW/g
Maximum value of SAR (measured) = 0.148 mW/g





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– 5200 MHz 802.11a Body Back (D1)

Date: 2013-08-07

Test Laboratory: ESTECH

BODY BACK 11n CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3882; ConvF(4.19, 4.19, 4.19); Calibrated: 2012-09-24
- Sensor-Surface: 1.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DAS4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x131x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.191 mW/g

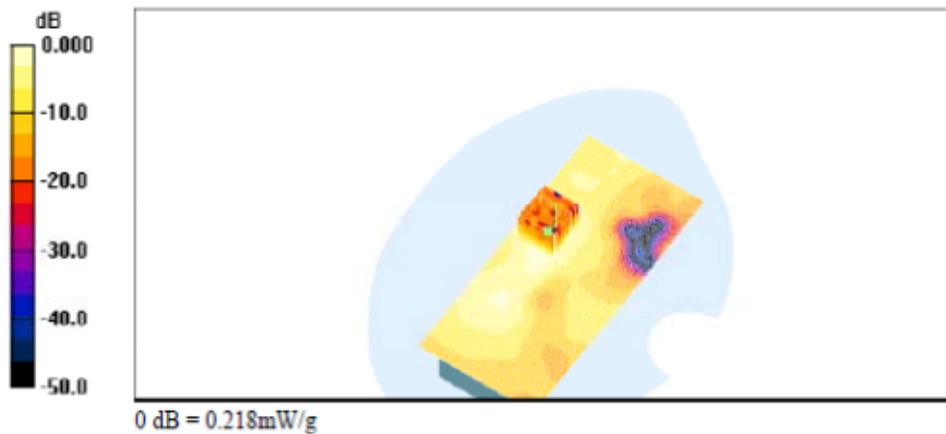
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 3.97 V/m; Power Drift = 0.238 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.218 mW/g



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– 5200 MHz 802.11a Body Side1 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DAS4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.428 mW/g

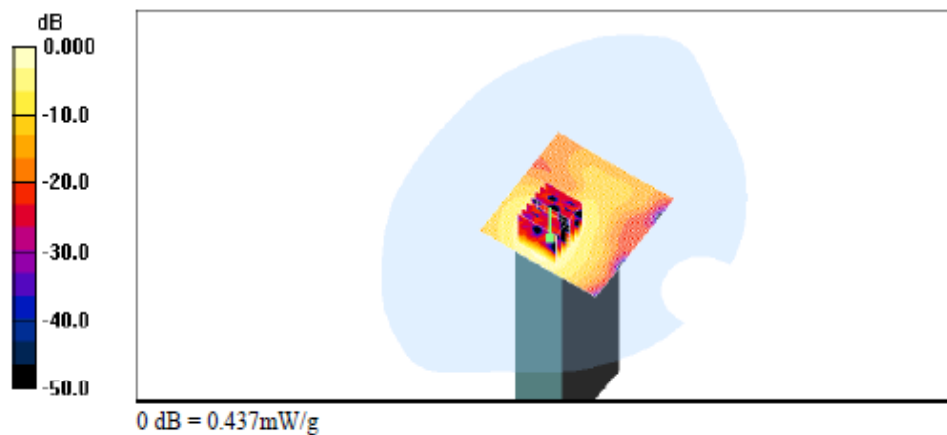
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 4.53 V/m; Power Drift = 0.223 dB

Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 0.476 mW/g

Maximum value of SAR (measured) = 0.437 mW/g





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– 5200 MHz 802.11a Body Side2 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE2 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (31x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.076 mW/g

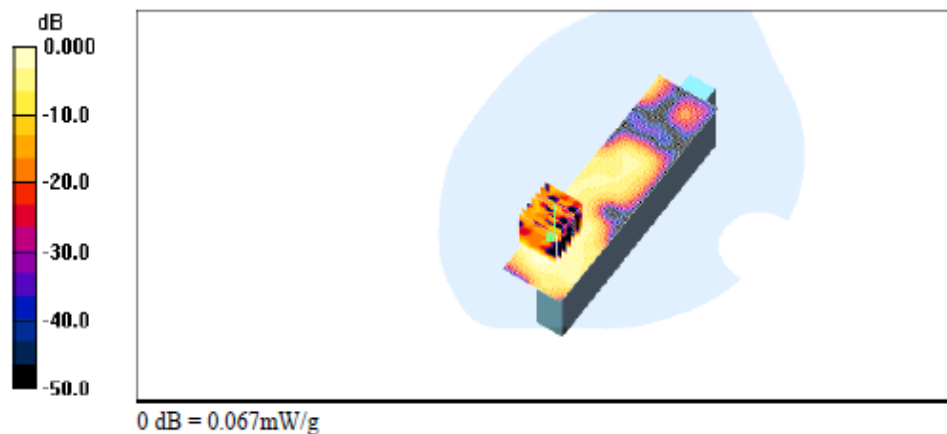
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.65 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 0.327 W/kg

SAR(1 g) = 0.069 mW/g

Maximum value of SAR (measured) = 0.067 mW/g





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– 5200 MHz 802.11a Body Side3 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE3 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (31x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.374 mW/g

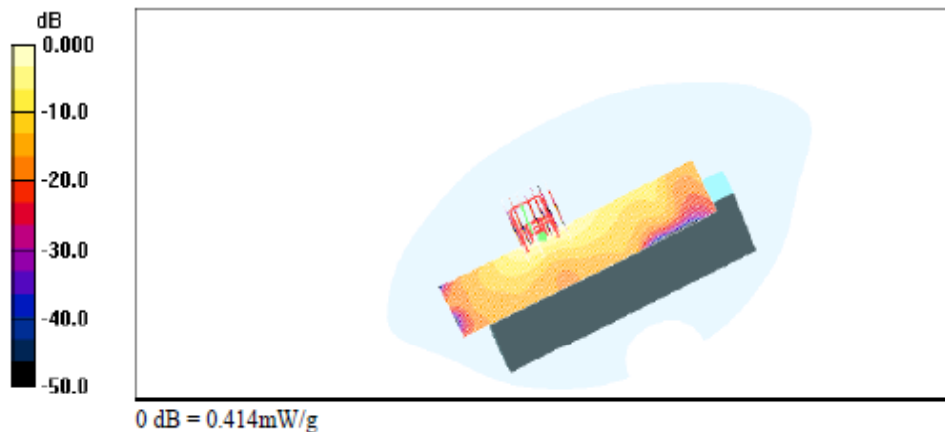
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.55 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.376 mW/g

Maximum value of SAR (measured) = 0.414 mW/g



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– 5200 MHz 802.11a Body Side4 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE4 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.054 mW/g

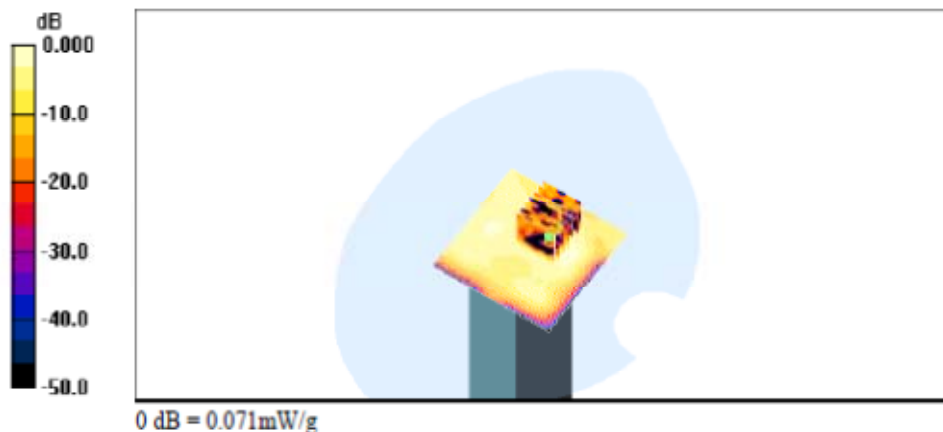
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.94 V/m; Power Drift = 0.484 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.071 mW/g





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– 5300 MHz 802.11a Body Side1 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH60

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5300 \text{ MHz}$; $\sigma = 5.53 \text{ mho/m}$; $\epsilon_r = 49.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.79, 4.79, 4.79); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.432 mW/g

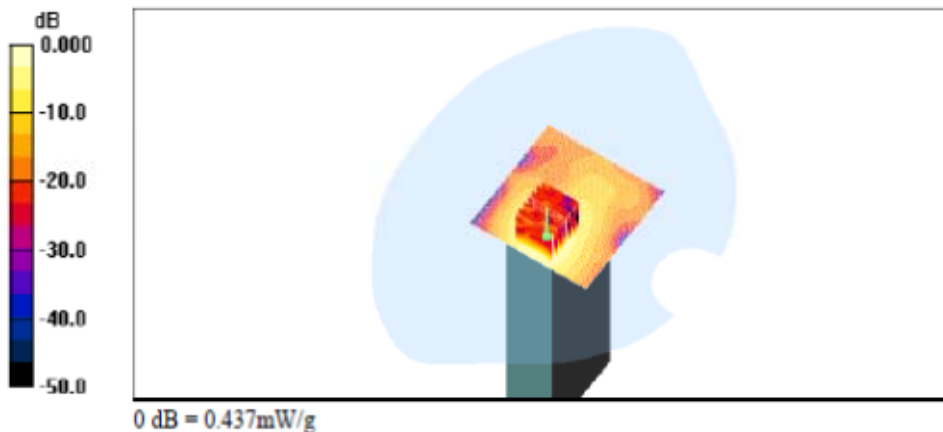
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 2.73 V/m ; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.396 mW/g

Maximum value of SAR (measured) = 0.437 mW/g





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– 5580 MHz 802.11a Body Side1 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH116-1

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5580$ MHz; $\sigma = 5.92$ mho/m; $\epsilon_r = 48.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.69, 4.69, 4.69); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.483 mW/g

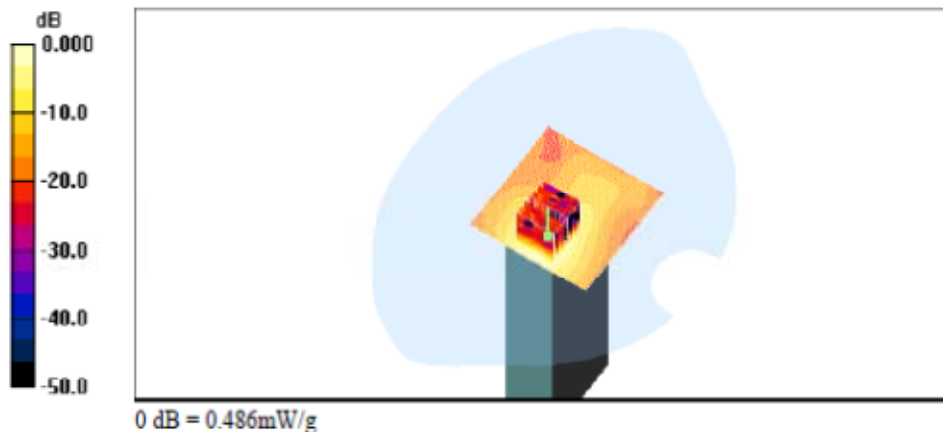
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.55 V/m; Power Drift = 0.431 dB

Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 0.510 mW/g

Maximum value of SAR (measured) = 0.486 mW/g





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– 5785 MHz 802.11a Body Side1 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CHI57

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785 \text{ MHz}$; $\sigma = 6.2 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.41, 4.41, 4.41); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.217 mW/g

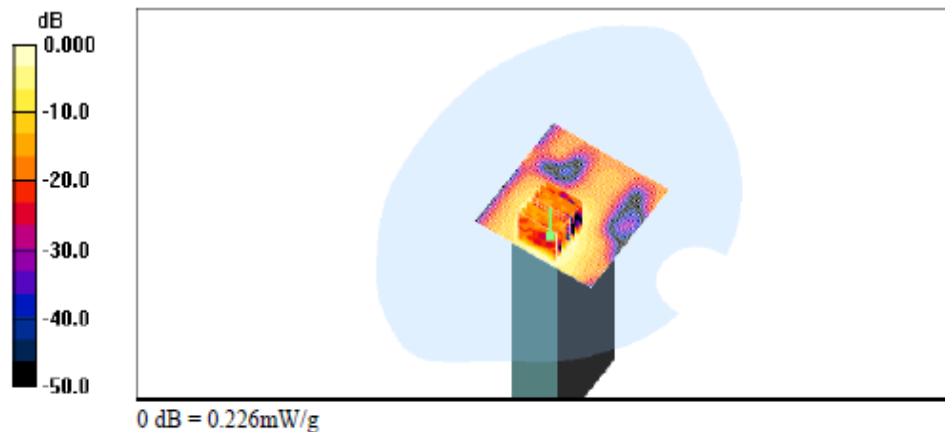
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 2.04 V/m; Power Drift = -0.384 dB

Peak SAR (extrapolated) = 0.644 W/kg

SAR(1 g) = 0.204 mW/g

Maximum value of SAR (measured) = 0.226 mW/g





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– 5500 MHz 802.11n Body Side1 (D1)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11n CH100

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.80$ mho/m; $\epsilon_r = 48.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.68, 4.68, 4.68); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.259 mW/g

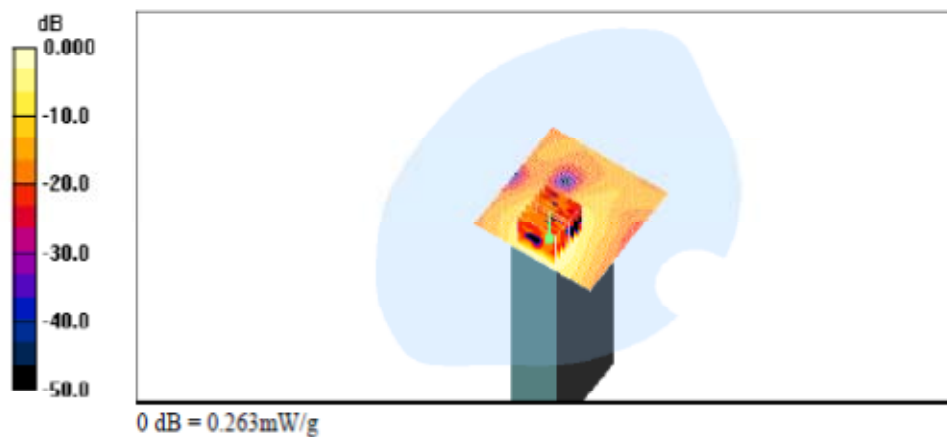
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.31 V/m; Power Drift = -0.733 dB

Peak SAR (extrapolated) = 0.687 W/kg

SAR(1 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.263 mW/g





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– 5200 MHz 802.11a Body Front (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY FRONT 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12 03 23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.148 mW/g

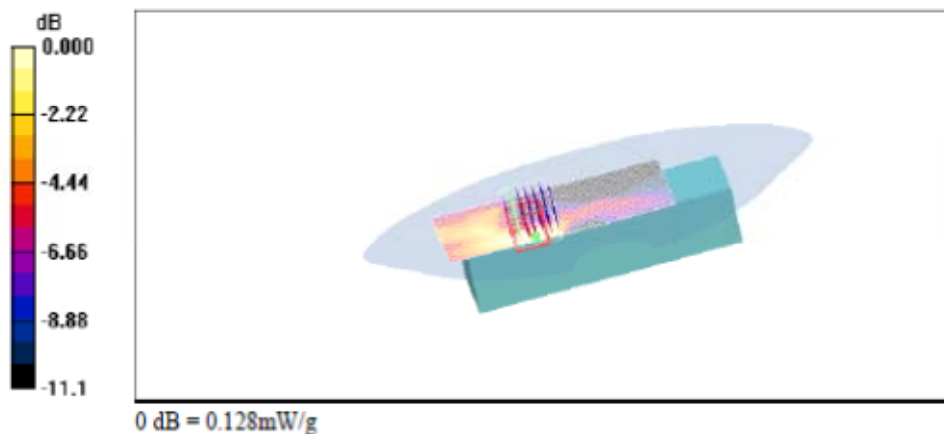
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.45 V/m; Power Drift = 0.478 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.115 mW/g

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





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Seoul, 153-803, Korea

– 5200 MHz 802.11a Body Back (D2)

Date: 2013-09-23

Test Laboratory: ESTECH

BODY BACK 11a CH40 6Mbps

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(5.23, 5.23, 5.23); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12 03 23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.110 mW/g

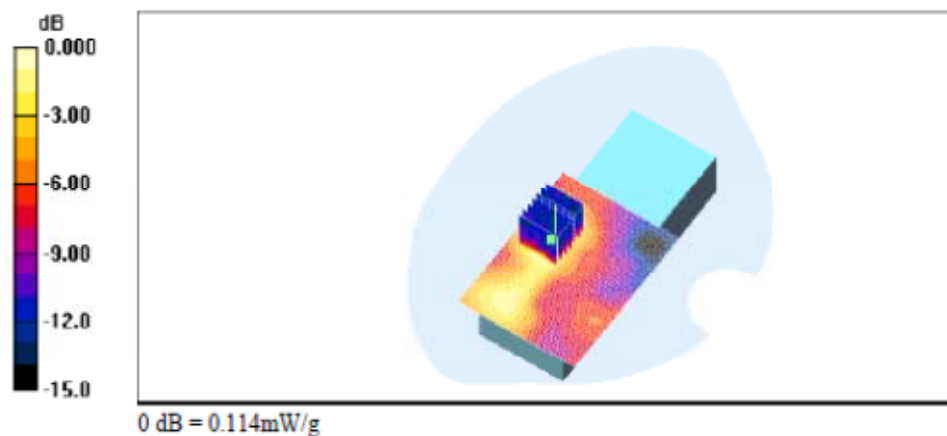
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.76 V/m; Power Drift = -0.526 dB

Peak SAR (extrapolated) = 0.292 W/kg

SAR(1 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.114 mW/g





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– 5200 MHz 802.11a Body Side1 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.442 mW/g

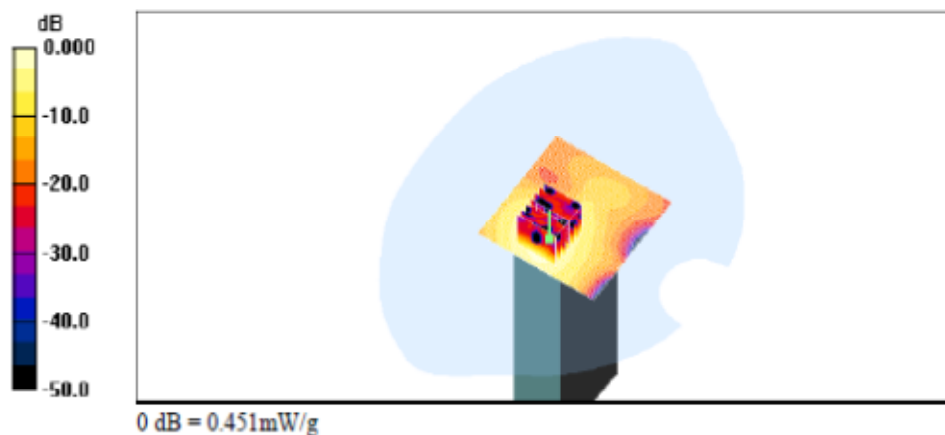
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 4.56 V/m; Power Drift = 0.109 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 0.516 mW/g

Maximum value of SAR (measured) = 0.451 mW/g





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– 5200 MHz 802.11a Body Side2 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE2 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (31x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.076 mW/g

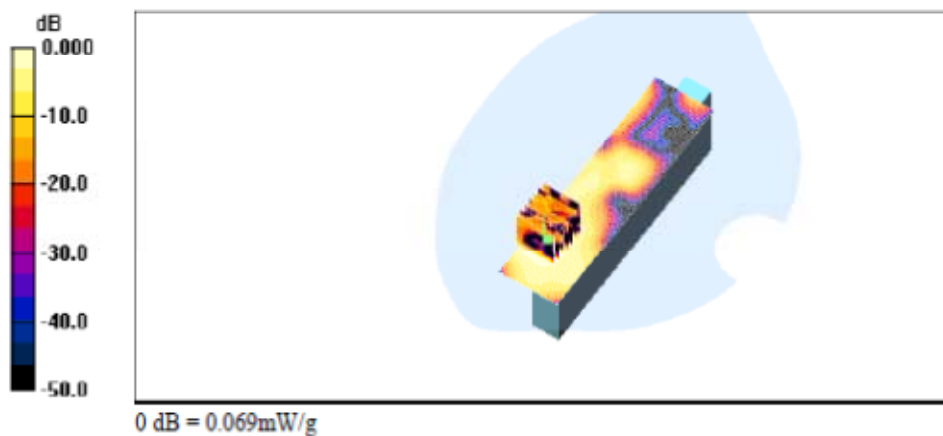
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.70 V/m; Power Drift = 0.243 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.078 mW/g

Maximum value of SAR (measured) = 0.069 mW/g



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– 5200 MHz 802.11a Body Side3 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE3 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (31x121x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.382 mW/g

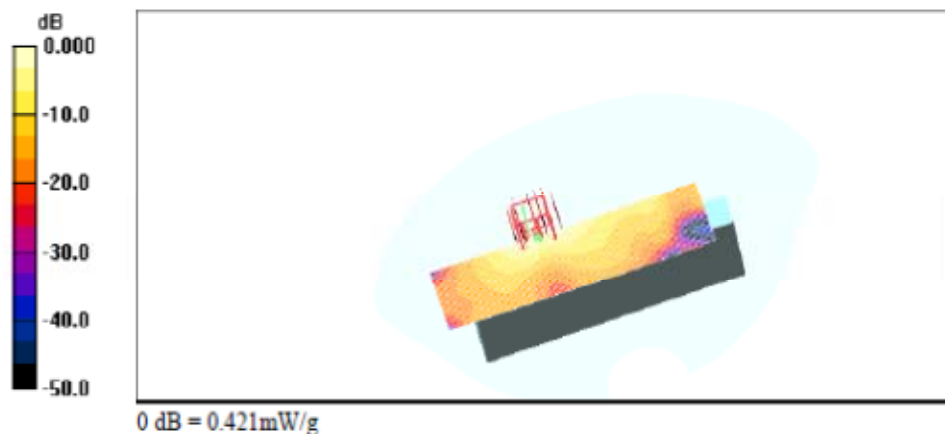
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 2.56 V/m; Power Drift = -0.180 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.380 mW/g

Maximum value of SAR (measured) = 0.421 mW/g





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– 5200 MHz 802.11a Body Side4 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE4 11a CH40

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.4$ mho/m; $\epsilon_r = 49.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.48, 4.48, 4.48); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.057 mW/g

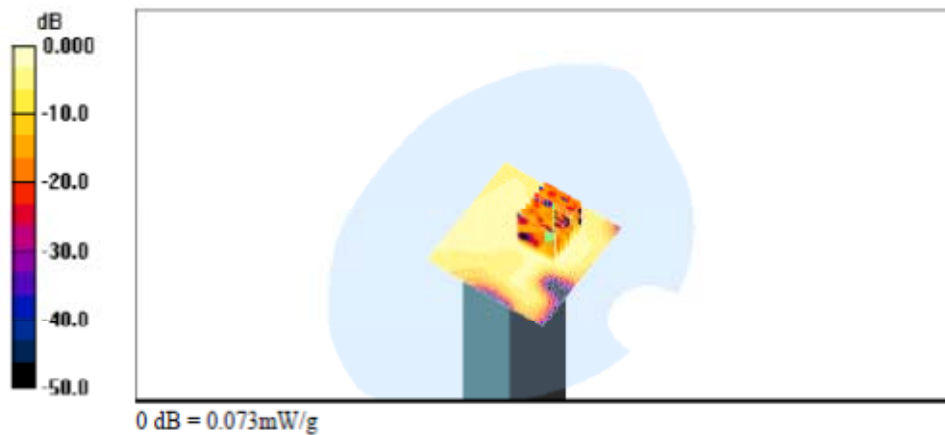
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.03 V/m; Power Drift = -0.088 dB

Peak SAR (extrapolated) = 0.191 W/kg

SAR(1 g) = 0.060 mW/g

Maximum value of SAR (measured) = 0.073 mW/g





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– 5300 MHz 802.11a Body Side1 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH60

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5300$ MHz; $\sigma = 5.53$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.79, 4.79, 4.79); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.438 mW/g

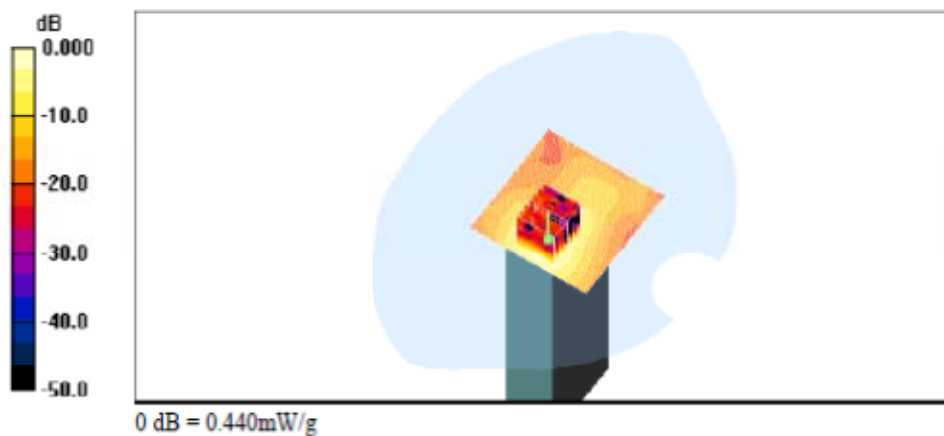
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.53 V/m; Power Drift = 0.431 dB

Peak SAR (extrapolated) = 2.08 W/kg

SAR(1 g) = 0.458 mW/g

Maximum value of SAR (measured) = 0.440 mW/g





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– 5580 MHz 802.11a Body Side1 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH116

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5580$ MHz; $\sigma = 5.92$ mho/m; $\epsilon_r = 48.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.69, 4.69, 4.69); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900 12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.248 mW/g

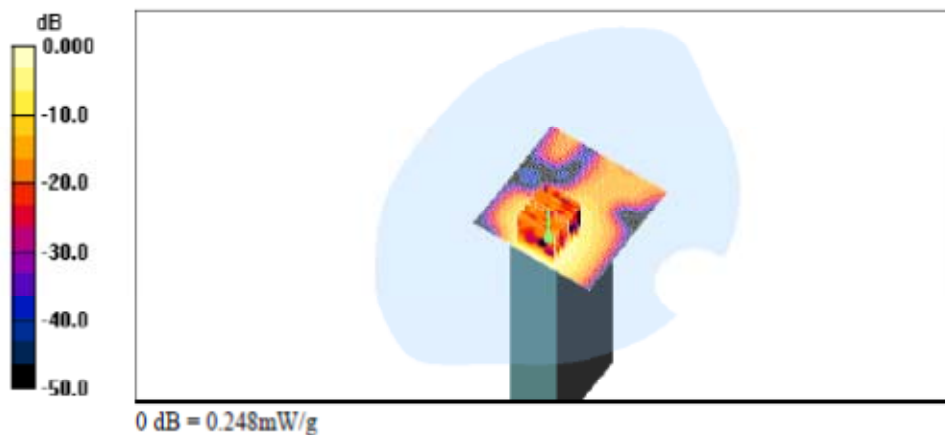
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.45 V/m; Power Drift = -0.983 dB

Peak SAR (extrapolated) = 0.662 W/kg

SAR(1 g) = 0.220 mW/g

Maximum value of SAR (measured) = 0.248 mW/g





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– 5785 MHz 802.11a Body Side1 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11a CH157

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785 \text{ MHz}$; $\sigma = 6.2 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.41, 4.41, 4.41); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.218 mW/g

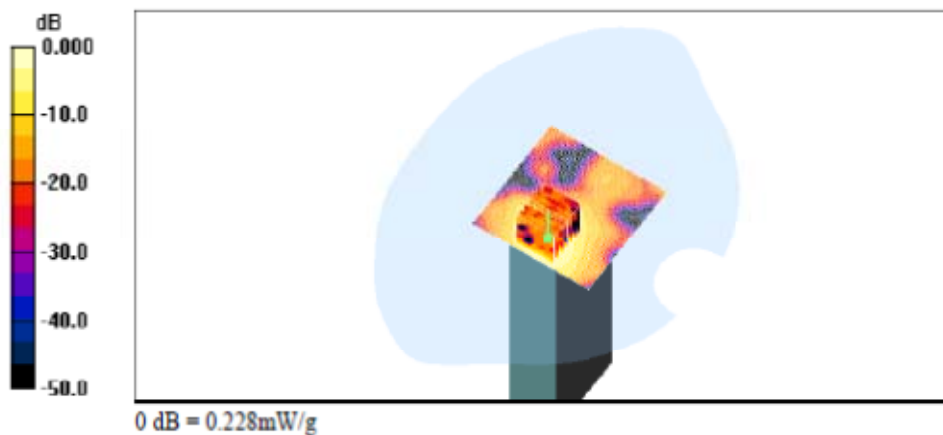
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 2.26 V/m ; Power Drift = 1.20 dB

Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.206 mW/g

Maximum value of SAR (measured) = 0.228 mW/g





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– 5500 MHz 802.11n Body Side1 (D2)

Date: 2013-09-24

Test Laboratory: ESTECH

BODY SIDE1 11n CH100

DUT: Dolphin 6110; Type: BAR TYPE; Serial: NONE

Communication System: Wireless 5GHz; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.80$ mho/m; $\epsilon_r = 48.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3916; ConvF(4.68, 4.68, 4.68); Calibrated: 2013-04-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn551; Calibrated: 2013-02-14
- Phantom: HSL900_12_03_23; Type: TP-1262
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.266 mW/g

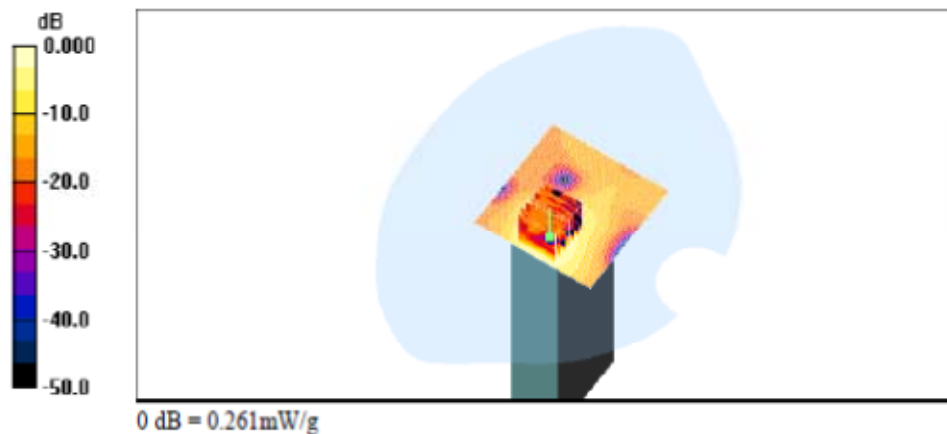
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.23 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 0.728 W/kg

SAR(1 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.261 mW/g





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APPENDIX D : Calibration Certificates



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APPENDIX E : Test Setup Photo

Front



Back





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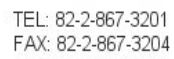
TEL: 82-2-867-3201
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Side 1



Side 2







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APPENDIX F : EUT Photo

