

12.2. System Check Plots

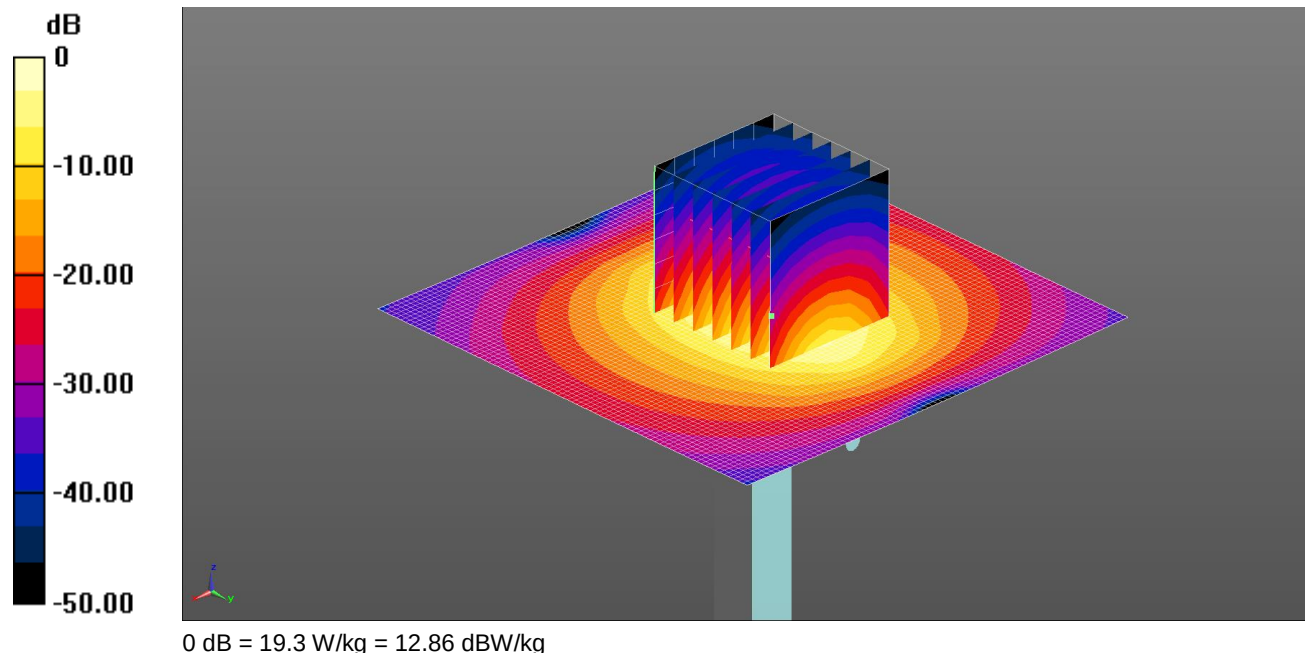
This appendix contains the following system validation distribution scans.

Scan Reference Number	Title
SYS/001	System Performance Check 2450MHz Body 22 08 16
SYS/002	System Performance Check 2450MHz Body 26 08 16
SYS/003	System Performance Check 2450MHz Body 30 08 16
SYS/004	System Performance Check 2450MHz Body 12 09 16
SYS/005	System Performance Check 5250 MHz Body 30 08 16
SYS/006	System Performance Check 5250 MHz Body 09 09 16
SYS/007	System Performance Check 5250 MHz Body 13 09 16
SYS/008	System Performance Check 5600 MHz Body 13 09 16
SYS/009	System Performance Check 5600 MHz Body 19 09 16
SYS/010	System Performance Check 5600 MHz Body 23 09 16
SYS/011	System Performance Check 5600 MHz Body 23 09 16
SYS/012	System Performance Check 5750 MHz Body 13 09 16

SYS/001: System Performance Check 2450MHz Body 22 08 16

Date: 22/08/2016

DUT: Dipole 2450 MHz; SN725; Type: D2440V2; Serial: D2440V2 - SN:701



Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.304$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=250mW 2 2 2 /Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
 Maximum value of SAR (interpolated) = 19.3 W/kg

Configuration/d=10mm, Pin=250mW 2 2 2 /Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.17 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 26.9 W/kg

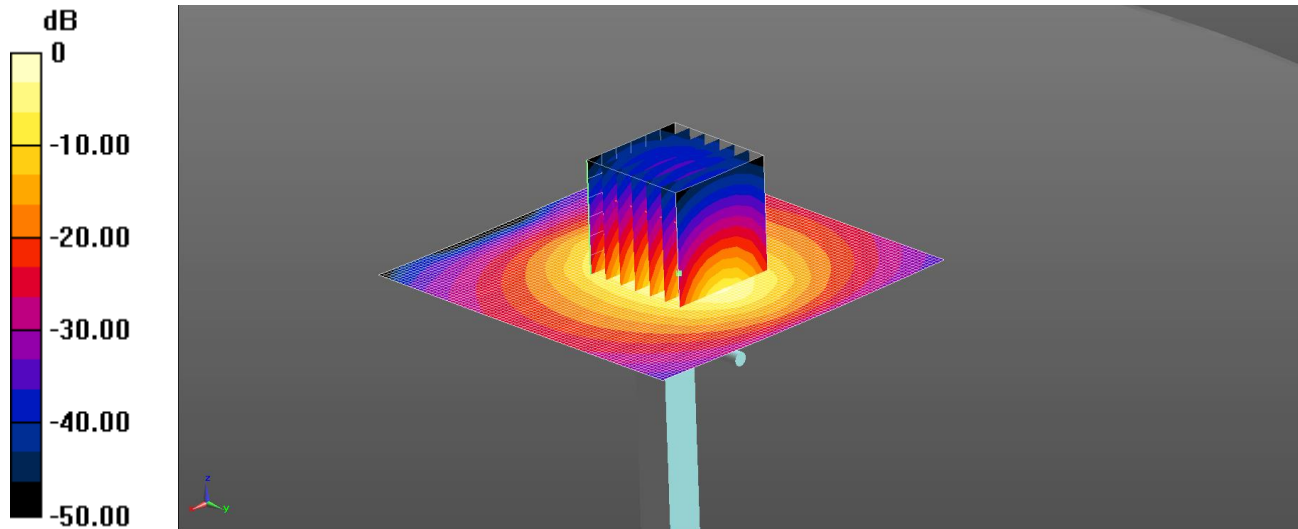
SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.75 W/kg

Maximum value of SAR (measured) = 19.7 W/kg

SYS/002: System Performance Check 2450MHz Body 26 08 16

Date: 26/08/2016

DUT: Dipole 2450 MHz; SN725; Type: D2450V2; Serial: D2450V2 - SN:725



0 dB = 20.0 W/kg = 13.01 dBW/kg

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used: $f = 2450$ MHz; $\sigma = 2.018$ S/m; $\epsilon_r = 50.275$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/dnu d=10mm, Pin=250mW 2 2 2/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
 Maximum value of SAR (interpolated) = 20.0 W/kg

Configuration/dnu d=10mm, Pin=250mW 2 2 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.29 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 26.9 W/kg

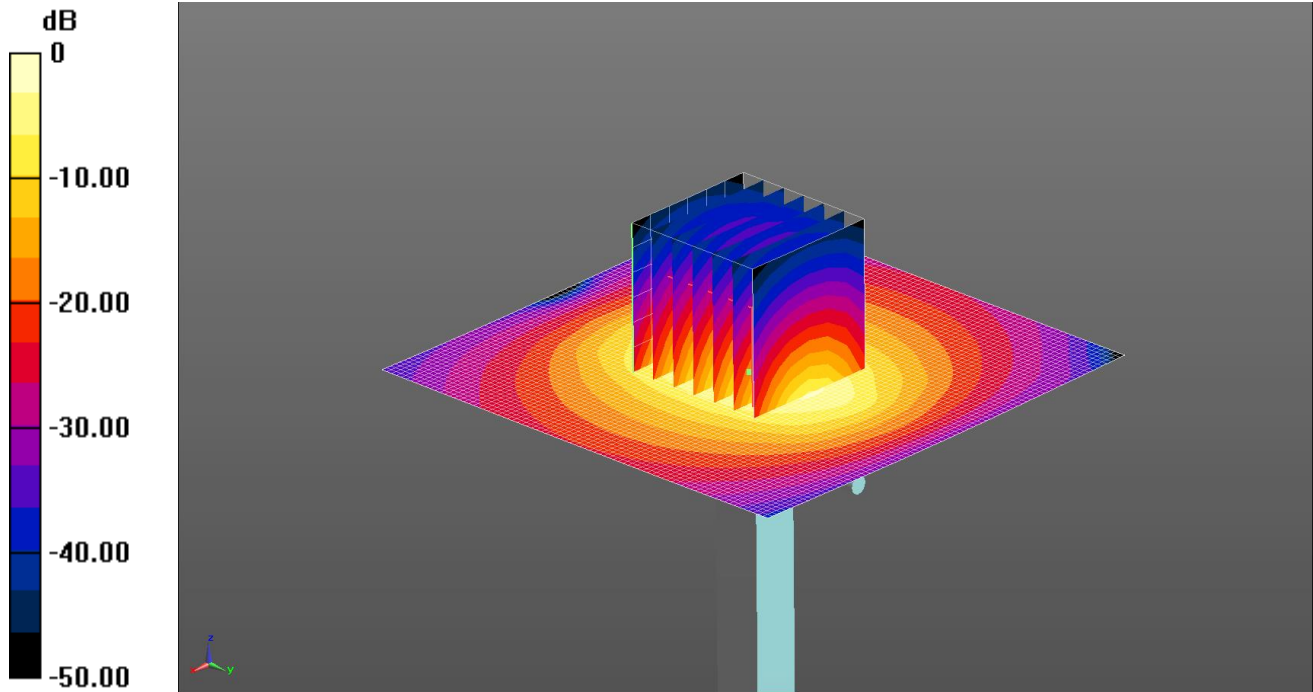
SAR(1 g) = 13 W/kg; SAR(10 g) = 6 W/kg

Maximum value of SAR (measured) = 19.9 W/kg

SYS/003: System Performance Check 2450MHz Body 30 08 16

Date: 30/08/2016

DUT: Dipole 2450 MHz; SN725; Type: D2450V2; Serial: D2450V2 - SN:725



0 dB = 19.6 W/kg = 12.91 dBW/kg

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used: $f = 2450$ MHz; $\sigma = 2.032$ S/m; $\epsilon_r = 51.624$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/dnu d=10mm, Pin=250mW 2 2/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
 Maximum value of SAR (interpolated) = 19.6 W/kg

Configuration/dnu d=10mm, Pin=250mW 2 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 26.9 W/kg

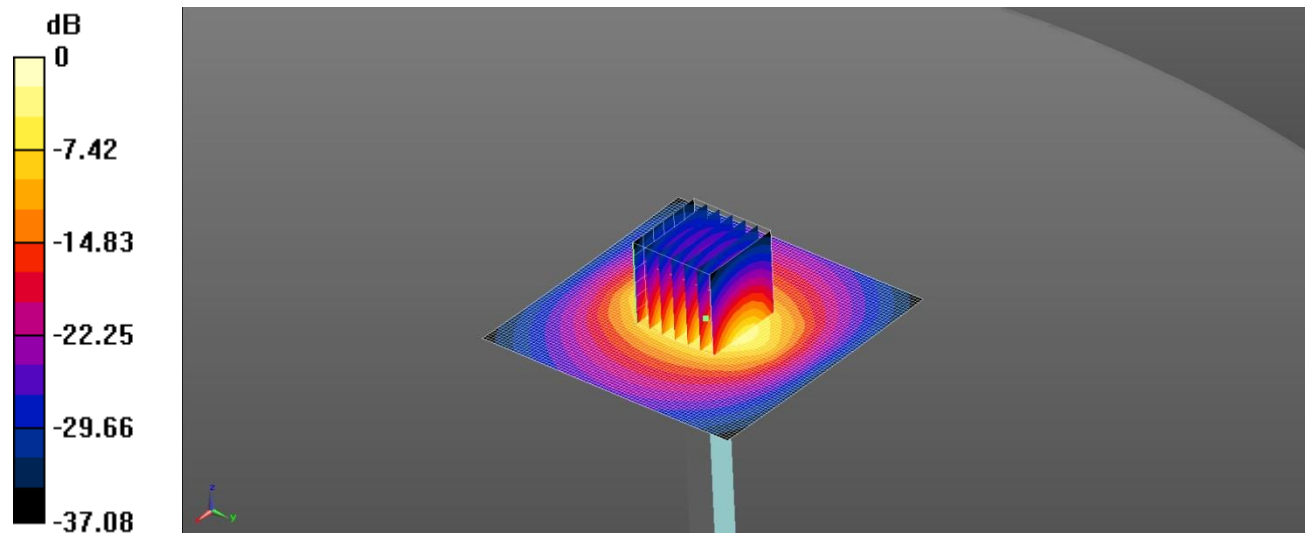
SAR(1 g) = 13 W/kg; SAR(10 g) = 6 W/kg

Maximum value of SAR (measured) = 20.0 W/kg

SYS/004: System Performance Check 2450MHz Body 12 09 16

Date: 12/09/2016

DUT: Dipole 2450 MHz; SN725; Type: D2450V2; Serial: D2450V2 - SN:725



0 dB = 19.7 W/kg = 12.93 dBW/kg

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used: $f = 2450$ MHz; $\sigma = 2.043$ S/m; $\epsilon_r = 50.208$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=250mW 2 2 2/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 19.7 W/kg

Configuration/d=10mm, Pin=250mW 2 2 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.01 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 26.9 W/kg

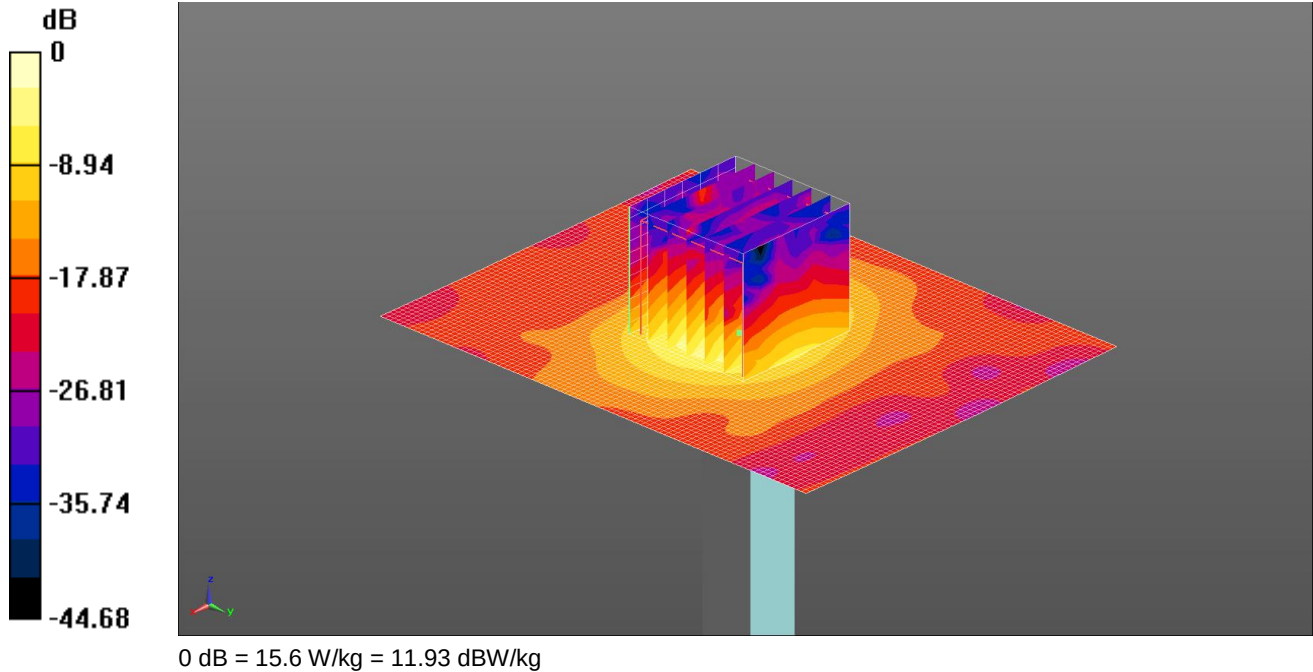
SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.96 W/kg

Maximum value of SAR (measured) = 19.8 W/kg

SYS/005: System Performance Check 5250 MHz Body 30 08 16

Date: 30/08/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5250$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 47.304$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(4.38, 4.38, 4.38); Calibrated: 21/03/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1438; Calibrated: 25/04/2016
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: 1253
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2 2 2 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 16.4 W/kg

Configuration/d=10mm, Pin=100mW 2 2 2 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 41.42 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 28.4 W/kg

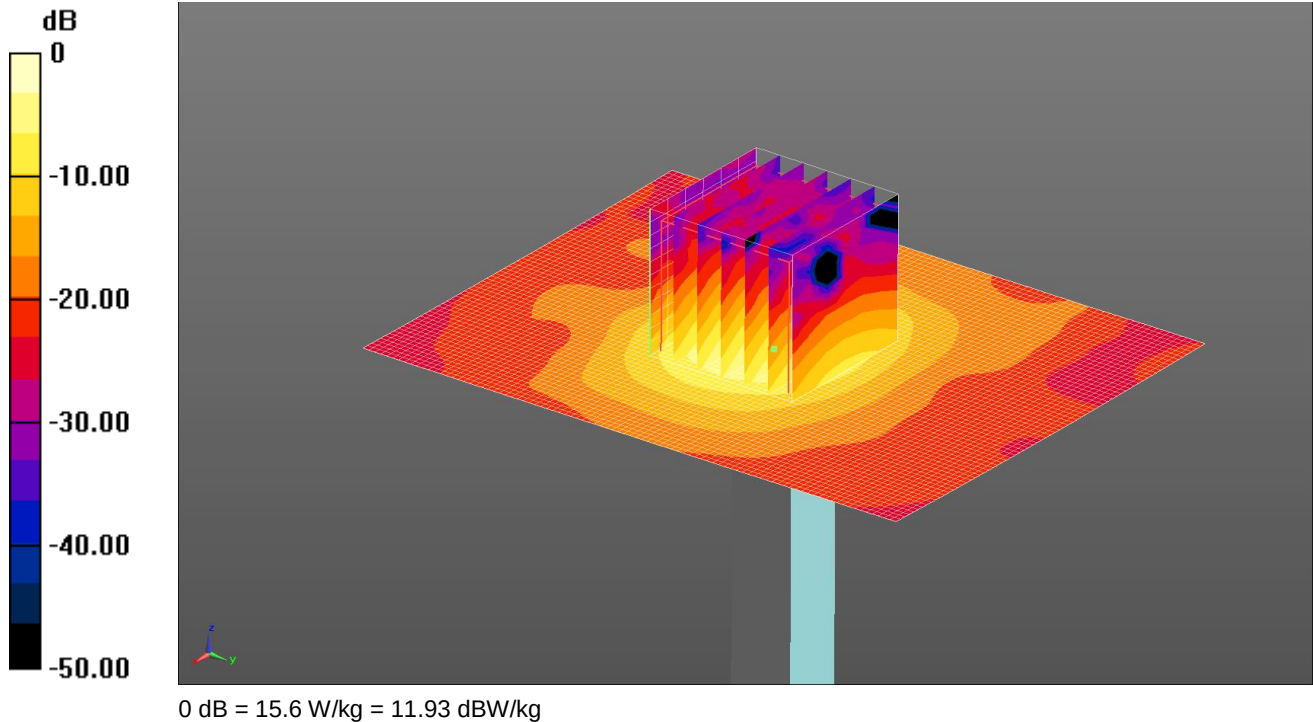
SAR(1 g) = 7.47 W/kg; SAR(10 g) = 2.08 W/kg

Maximum value of SAR (measured) = 15.6 W/kg

SYS/006: System Performance Check 5250 MHz Body 09 09 16

Date: 09/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5250$ MHz; $\sigma = 5.219$ S/m; $\epsilon_r = 50.485$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(4.38, 4.38, 4.38); Calibrated: 21/03/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1438; Calibrated: 25/04/2016
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: 1253
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.1 W/kg

Configuration/d=10mm, Pin=100mW 2 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 42.79 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 32.0 W/kg

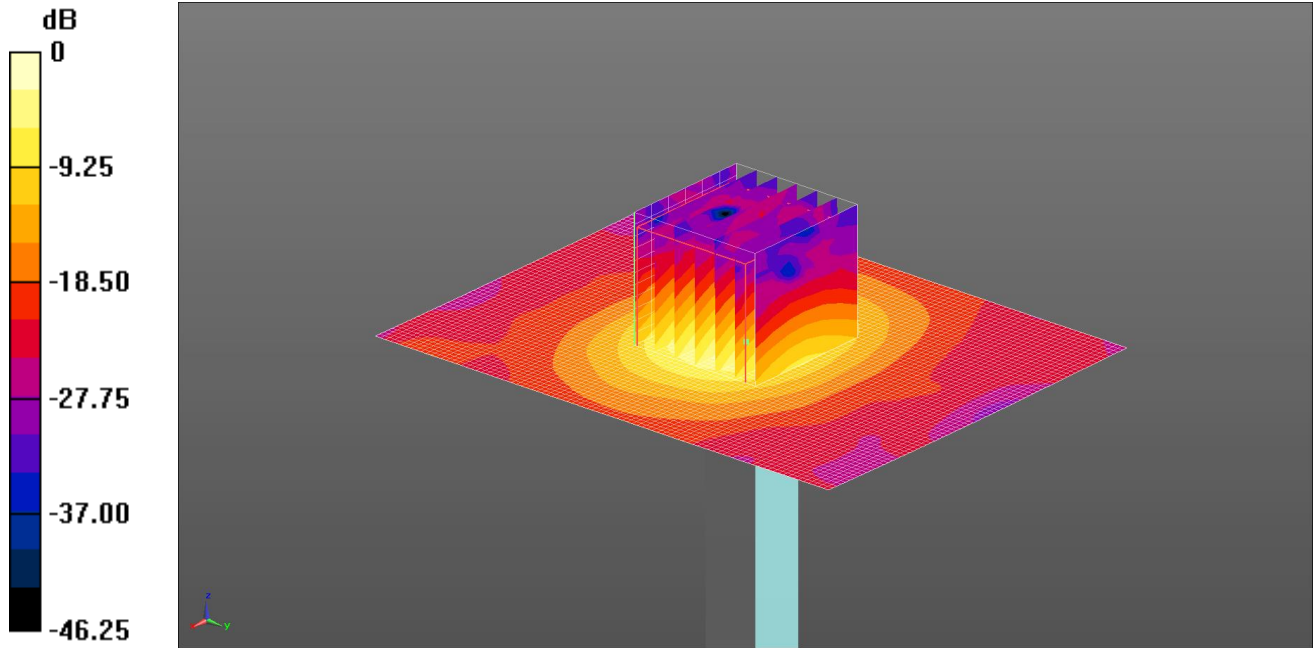
SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 15.6 W/kg

SYS/007: System Performance Check 5250 MHz Body 13 09 16

Date: 13/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



0 dB = 15.4 W/kg = 11.88 dBW/kg

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5250$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 48.224$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(4.38, 4.38, 4.38); Calibrated: 21/03/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1438; Calibrated: 25/04/2016
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: 1253
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.8 W/kg

Configuration/d=10mm, Pin=100mW 2 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 41.17 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 29.1 W/kg

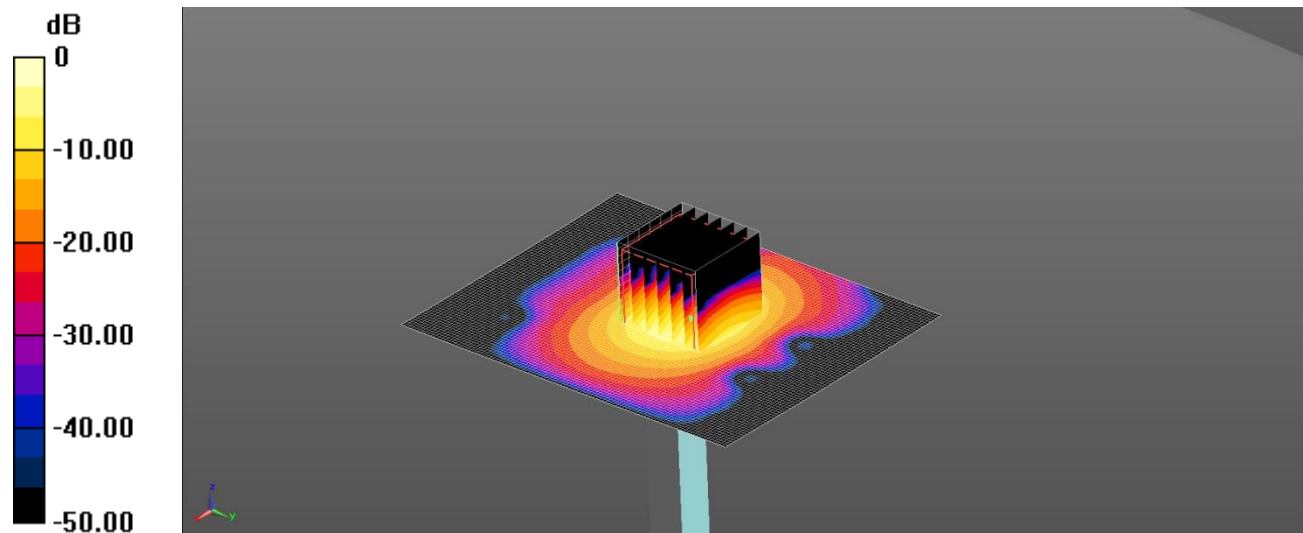
SAR(1 g) = 7.34 W/kg; SAR(10 g) = 2.05 W/kg

Maximum value of SAR (measured) = 15.4 W/kg

SYS/008: System Performance Check 5600 MHz Body 13 09 16

Date: 13/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



0 dB = 16.8 W/kg = 12.25 dBW/kg

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5600$ MHz; $\sigma = 5.919$ S/m; $\epsilon_r = 48.329$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(3.88, 3.88, 3.88); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.9 W/kg

Configuration/d=10mm, Pin=100mW 2/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 35.73 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 32.8 W/kg

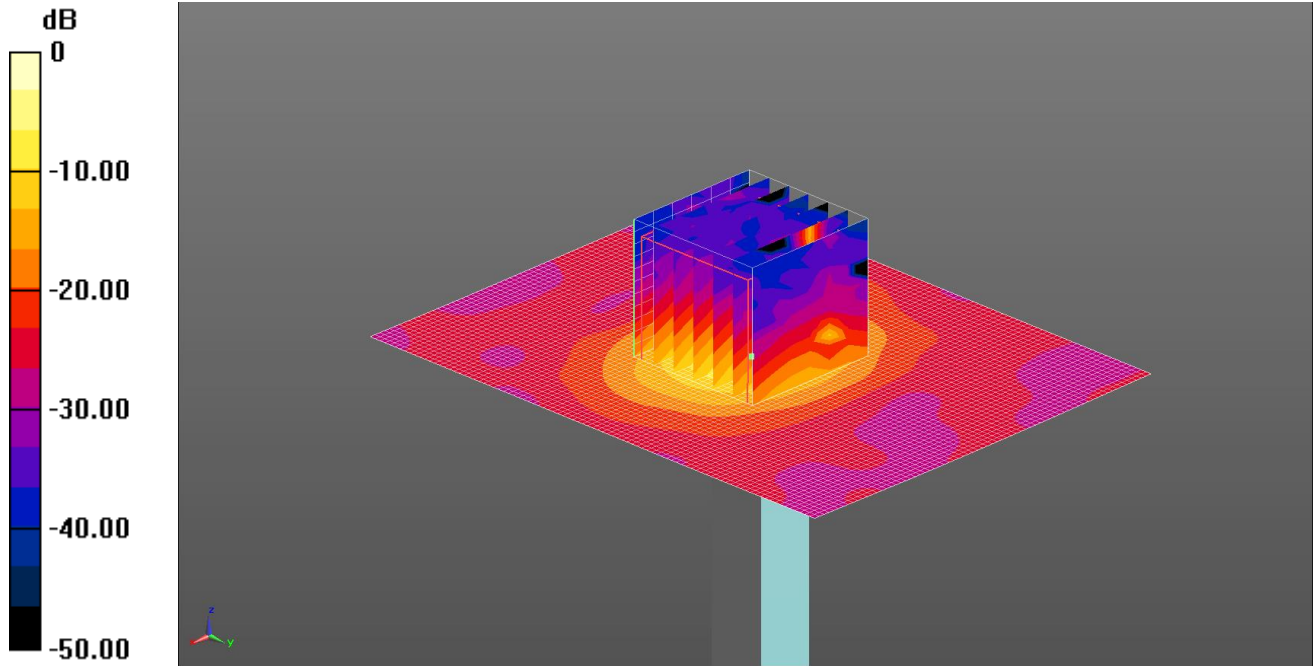
SAR(1 g) = 7.78 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 16.8 W/kg

SYS/009: System Performance Check 5600 MHz Body 19 09 16

Date: 19/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



0 dB = 69.3 W/kg = 18.41 dBW/kg

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5600$ MHz; $\sigma = 5.756$ S/m; $\epsilon_r = 47.272$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(3.76, 3.76, 3.76); Calibrated: 21/03/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1438; Calibrated: 25/04/2016
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: 1253
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.6 W/kg

Configuration/d=10mm, Pin=100mW 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 40.85 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 69.3 W/kg

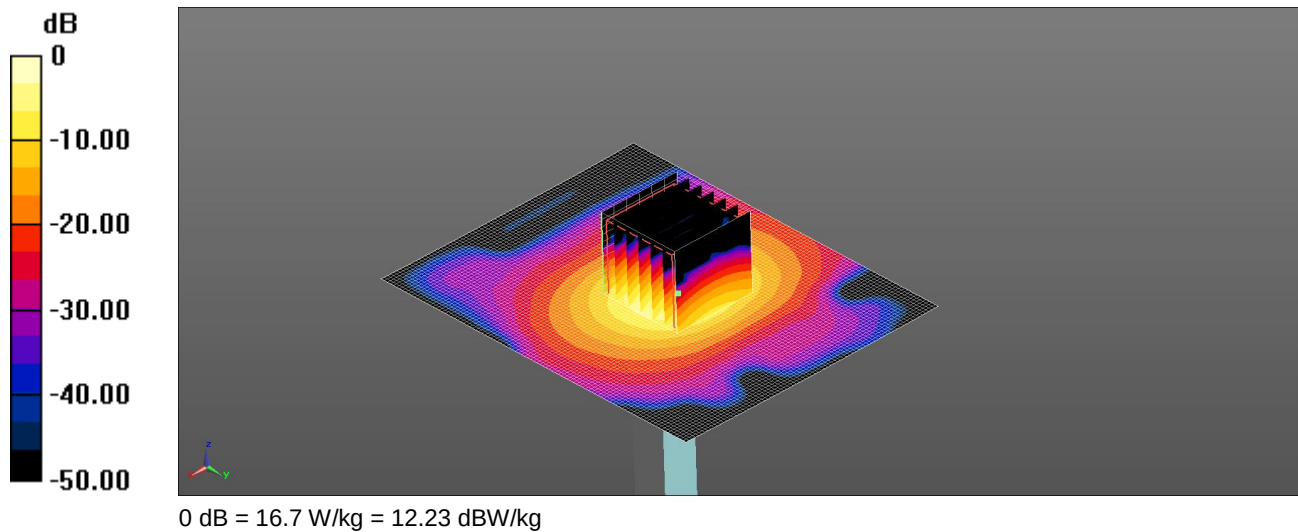
SAR(1 g) = 8.14 W/kg; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 69.3 W/kg

SYS/010: System Performance Check 5600 MHz Body 23 09 16

Date: 23/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5600$ MHz; $\sigma = 5.857$ S/m; $\epsilon_r = 47.259$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(3.88, 3.88, 3.88); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2 2 2 2/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 16.6 W/kg

Configuration/d=10mm, Pin=100mW 2 2 2 2/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 37.67 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 32.4 W/kg

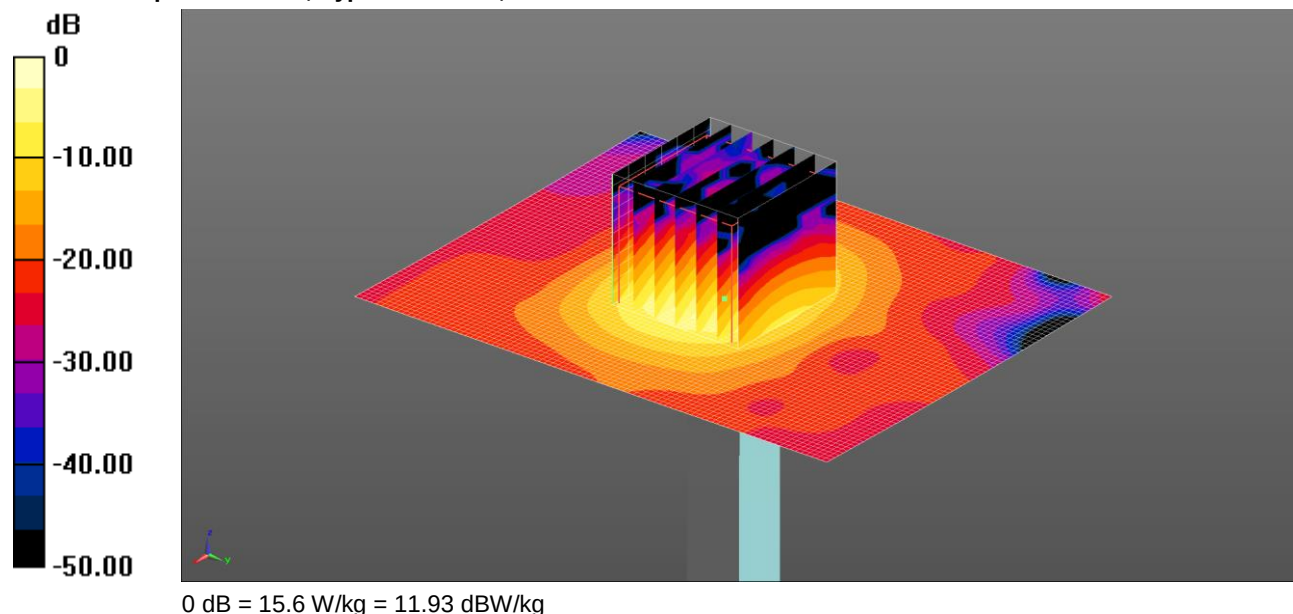
SAR(1 g) = 7.91 W/kg; SAR(10 g) = 2.2 W/kg

Maximum value of SAR (measured) = 16.7 W/kg

SYS/011: System Performance Check 5600 MHz Body 23 09 16

Date: 23/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5600$ MHz; $\sigma = 5.783$ S/m; $\epsilon_r = 47.274$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(3.76, 3.76, 3.76); Calibrated: 21/03/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1438; Calibrated: 25/04/2016
- Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: 1253
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.1 W/kg

Configuration/d=10mm, Pin=100mW 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 40.77 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 26.9 W/kg

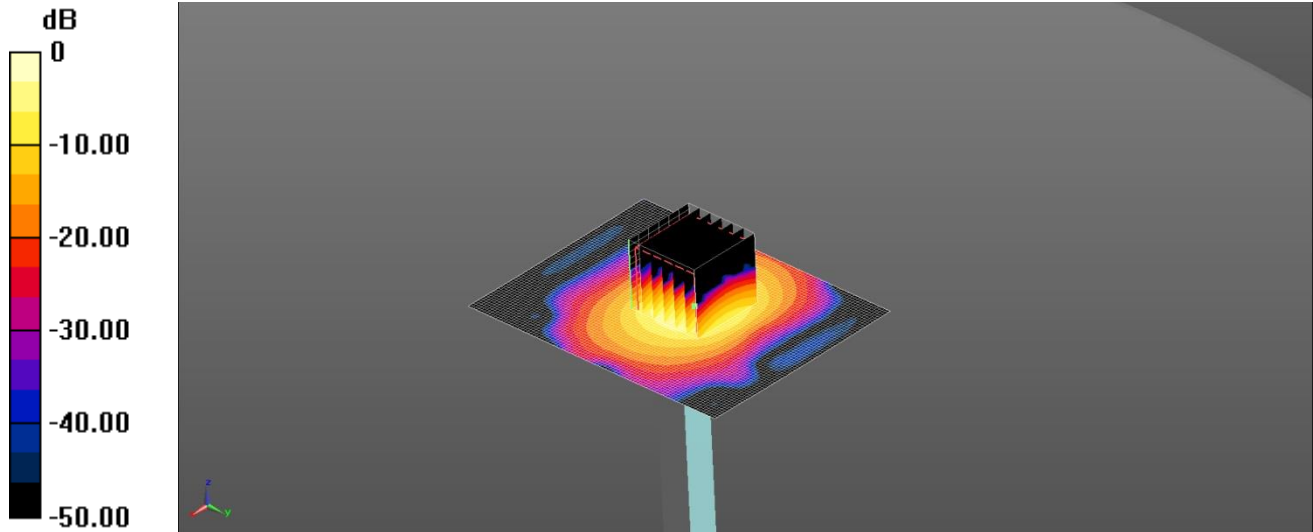
SAR(1 g) = 7.58 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (measured) = 15.6 W/kg

SYS/012: System Performance Check 5750 MHz Body 13 09 16

Date: 13/09/2016

DUT: 5GHz Dipole SN:1016; Type: D5GHzV2; Serial: SN 1016



0 dB = 16.6 W/kg = 12.20 dBW/kg

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5250/5600/5750 MHz MSL Medium parameters used: $f = 5750$ MHz; $\sigma = 6.171$ S/m; $\epsilon_r = 48.034$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(4.16, 4.16, 4.16); Calibrated: 26/04/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/d=10mm, Pin=100mW 2/Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.7 W/kg

Configuration/d=10mm, Pin=100mW 2/Zoom Scan (7x7x12) (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 34.31 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 33.2 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.13 W/kg

Maximum value of SAR (measured) = 16.6 W/kg

12.3. SAR Test Plots

This appendix contains the following SAR Distribution Plots:

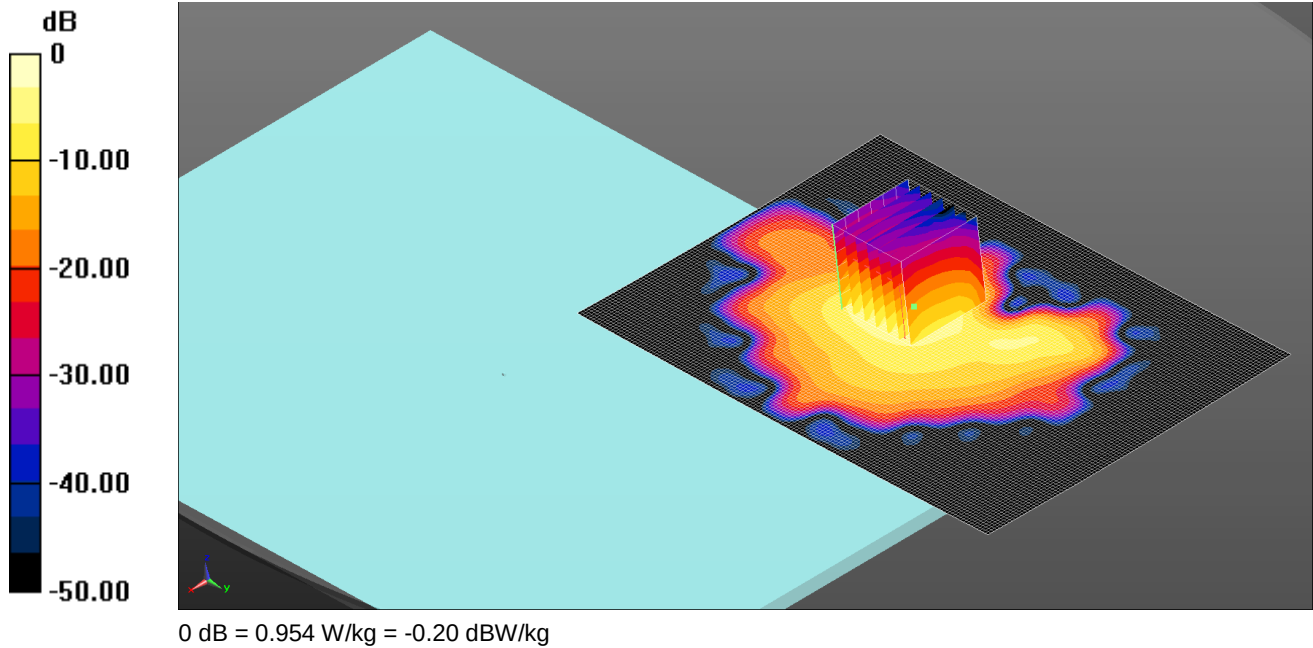
Scan Reference Number	Title
SAR/001	Back WLAN 2.4 SISO Ant WF1 CH6
SAR/002	Display WLAN 2.4 SISO Ant WF1 CH6
SAR/003	Back WLAN 2.4 SISO Ant WF2 CH11
SAR/004	Display WLAN 2.4 SISO Ant WF2 CH11
SAR/005	Back WLAN 2.4 SISO Ant WF3 CH11
SAR/006	Display WLAN 2.4 SISO Ant WF3 CH11
SAR/007	Back WLAN 2.4 MIMO Ant WF1 + WF2 CH6
SAR/008	Back WLAN 2.4 MIMO Ant WF1 + WF2 CH1
SAR/009	Back WLAN 2.4 MIMO Ant WF1 + WF2 CH10
SAR/010	Back WLAN 2.4 MIMO Ant WF2 + WF3 CH6
SAR/011	Back WLAN 2.4 MIMO Ant WF2 + WF3 CH1
SAR/012	Back WLAN 2.4 MIMO Ant WF2 + WF3 CH10
SAR/013	Back WLAN 2.4 MIMO Ant WF1 + WF3 CH1
SAR/014	Back WLAN 2.4 MIMO Ant WF1 + WF3 CH6
SAR/015	Back WLAN 2.4 MIMO Ant WF1 + WF3 CH10
SAR/016	Back WLAN 2.4 MIMO Ant WF1 + WF2 + WF3 CH6
SAR/017	Back WLAN 2.4 MIMO Ant WF1 + WF2 + WF3 CH1
SAR/018	Back WLAN 2.4 MIMO Ant WF1 + WF2 + WF3 CH10
SAR/019	Back WLAN 5 GHz 802.11ac VHT80 SISO Ant WF1 CH42
SAR/020	Display WLAN 5 GHz 802.11ac VHT80 SISO Ant WF1 CH42
SAR/021	Back WLAN 5 GHz 802.11ac VHT80 SISO Ant WF2 CH42
SAR/022	Display WLAN 5 GHz 802.11ac VHT80 SISO Ant WF2 CH42
SAR/023	Back WLAN 5 GHz 802.11ac VHT80 SISO Ant WF3 CH42
SAR/024	Display WLAN 5 GHz 802.11ac VHT80 SISO Ant WF3 CH42
SAR/025	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 CH46
SAR/026	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 CH38
SAR/027	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF2 + WF3 CH46
SAR/028	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF2 + WF3 CH38
SAR/029	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF3 CH38
SAR/030	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 + WF3 CH46
SAR/031	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 + WF3 CH38
SAR/032	Back WLAN 5 GHz 802.11a HT20 MIMO Ant WF1 + WF2 + WF3 CH40
SAR/033	Back WLAN 5 GHz 802.11a HT20 MIMO Ant WF1 + WF2 + WF3 CH44
SAR/034	Back WLAN 5GHz 802.11ac VHT40 SISO Ant WF1 CH138
SAR/035	Back WLAN 5GHz 802.11ac VHT40 SISO Ant WF1 CH122
SAR/036	Back WLAN 5GHz 802.11n HT40 SISO Ant WF1 CH134
SAR/037	Back WLAN 5GHz 802.11n HT40 SISO Ant WF1 CH110
SAR/038	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF2 CH138
SAR/039	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF2 CH122
SAR/040	Back WLAN 5GHz 802.11n HT40 SISO Ant WF2 CH134
SAR/041	Back WLAN 5GHz 802.11n HT40 SISO Ant WF2 CH102
SAR/042	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF3 CH138
SAR/043	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF3 CH122
SAR/044	Back WLAN 5GHz 802.11n HT40 SISO Ant WF3 CH134
SAR/045	Back WLAN 5GHz 802.11n HT40 SISO Ant WF3 CH110
SAR/046	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 CH138
SAR/047	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 CH12
SAR/048	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 CH142
SAR/049	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 CH110
SAR/050	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF2 + WF3 CH138
SAR/051	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF2 + WF3 CH122
SAR/052	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF2 + WF3 CH142
SAR/053	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF2 + WF3 CH134
SAR/054	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF3 CH138
SAR/055	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF3 CH122
SAR/056	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF3 CH142
SAR/057	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF3 CH134
SAR/058	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 + WF3 CH138
SAR/059	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 + WF3 CH122
SAR/060	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 + WF3 CH142

Scan Reference Number	Title
SAR/061	Back WLAN 5 GHz 802.11n HT40 MIMO Ant WF1 + WF2 + WF3 CH134
SAR/062	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF1 CH155
SAR/063	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF2 CH155
SAR/064	Back WLAN 5GHz 802.11ac VHT80 SISO Ant WF3 CH155
SAR/065	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 CH155
SAR/066	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF2 + WF3 CH155
SAR/067	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF3 CH155
SAR/068	Back WLAN 5 GHz 802.11ac VHT80 MIMO Ant WF1 + WF2 + WF3 CH155
SAR/069	Back Bluetooth BDR SISO Ant WF3 CH78
SAR/070	Display Bluetooth BDR SISO Ant WF3 CH78
SAR/071	Back Bluetooth BDR SISO Ant WF3 CH0
SAR/072	Back Bluetooth BDR SISO Ant WF3 CH39

SAR/001: Back WLAN 2.4 SISO Ant WF1 CH6

Date: 25/08/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



Communication System: UID 0, WLAN 802.11 (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 2.018$ S/m; $\epsilon_r = 51.319$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.954 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 23.18 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.99 W/kg

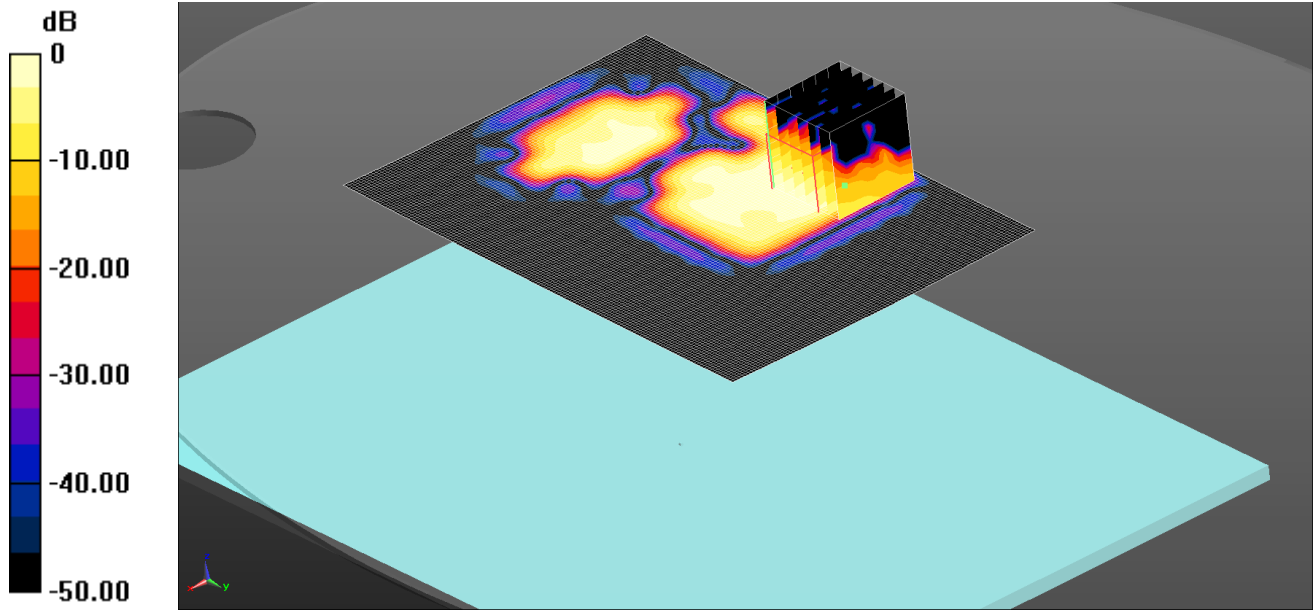
SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.247 W/kg

Maximum value of SAR (measured) = 1.00 W/kg

SAR/002: Display WLAN 2.4 SISO Ant WF1 CH6

Date: 26/08/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 0.0373 W/kg = -14.29 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 2.021$ S/m; $\epsilon_r = 51.633$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Display - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0373 W/kg

Configuration/Display - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.9180 V/m; Power Drift = -0.44 dB

Peak SAR (extrapolated) = 0.0430 W/kg

SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.00883 W/kg

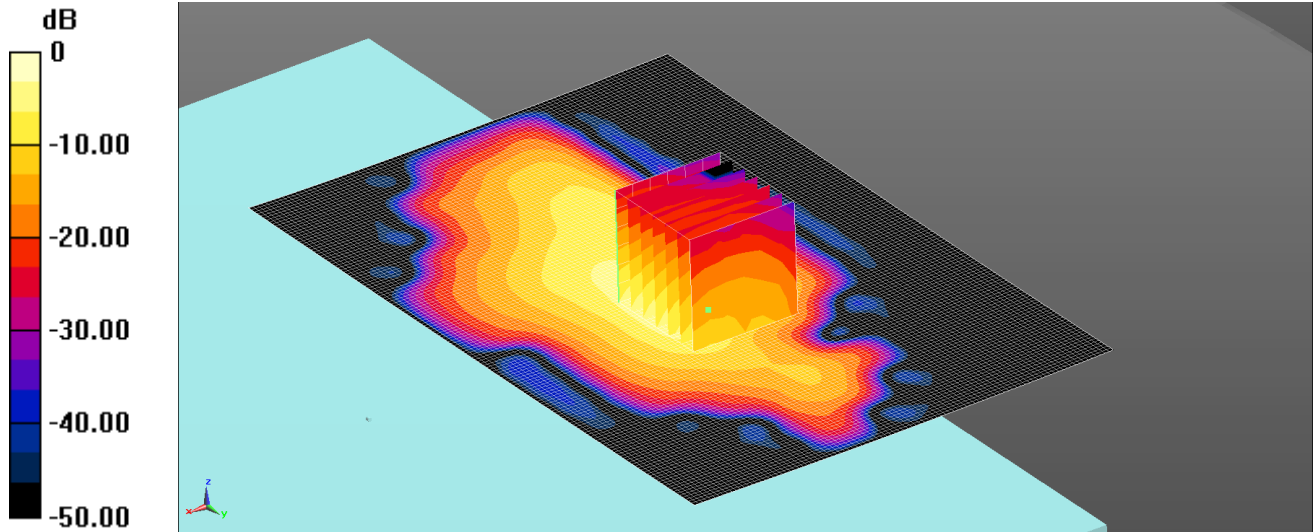
Maximum value of SAR (measured) = 0.0294 W/kg

Note: SAR level measured is very low as equivalent to noise floor.

SAR/003: Back WLAN 2.4 SISO Ant WF2 CH11

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 0.799 W/kg = -0.97 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.053$ S/m; $\epsilon_r = 50.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.799 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.04 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.88 W/kg

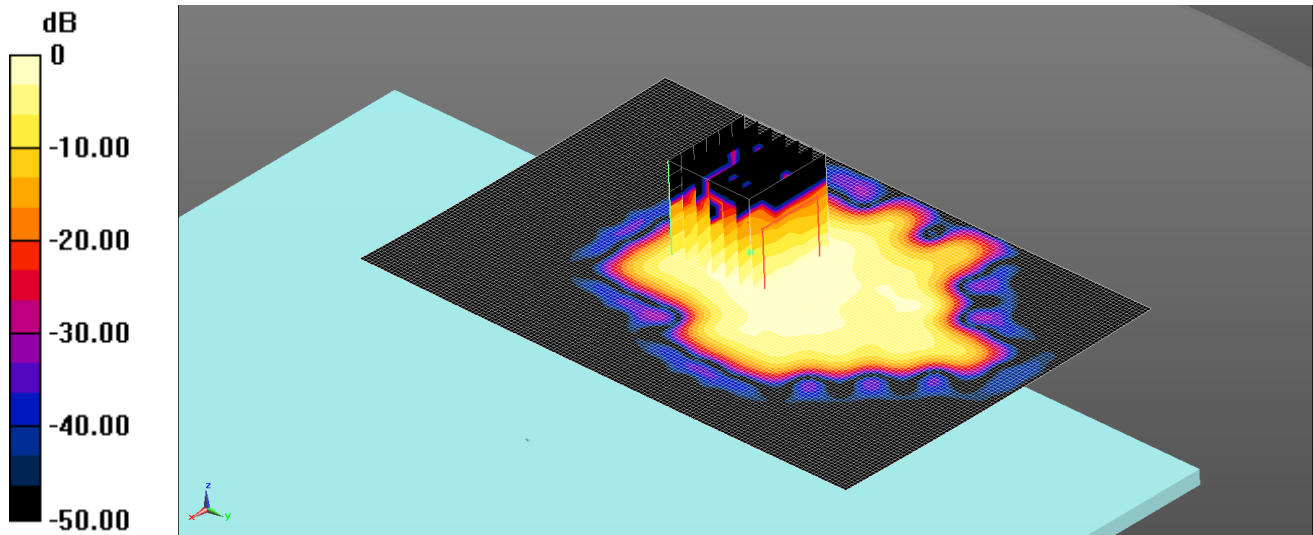
SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.233 W/kg

Maximum value of SAR (measured) = 0.892 W/kg

SAR/004: Display WLAN 2.4 SISO Ant WF2 CH11

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 0.0309 W/kg = -15.10 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.053$ S/m; $\epsilon_r = 50.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.0309 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.855 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.0580 W/kg

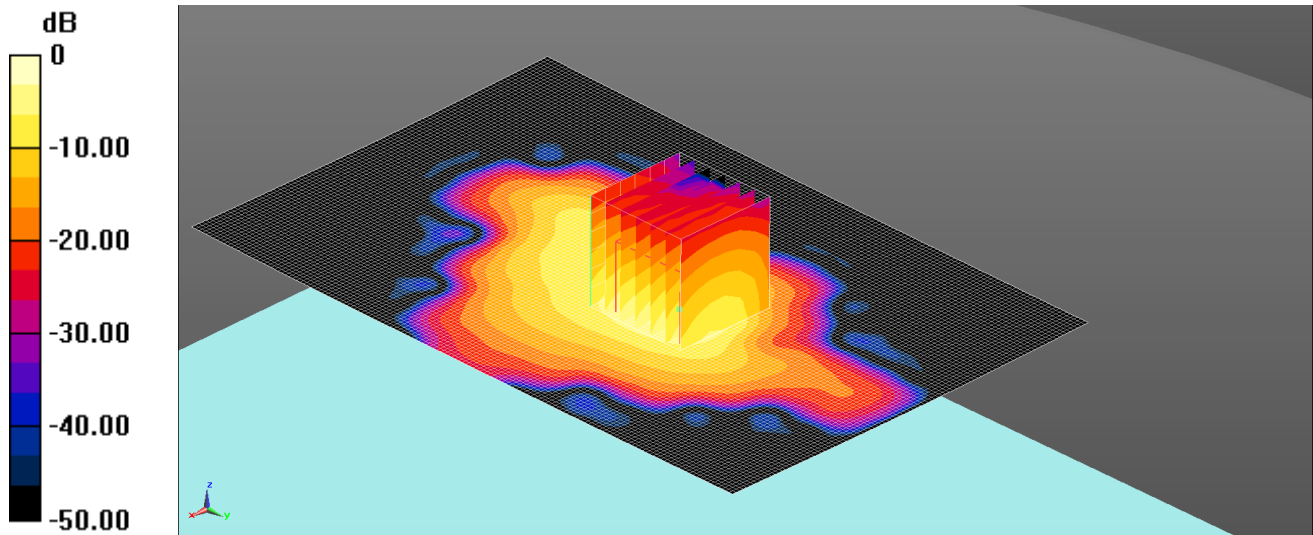
SAR(1 g) = 0.022 W/kg; SAR(10 g) = 0.00964 W/kg

Maximum value of SAR (measured) = 0.0295 W/kg

SAR/005: Back WLAN 2.4 SISO Ant WF3 CH11

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 1.05 W/kg = 0.21 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.053$ S/m; $\epsilon_r = 50.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.04 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.06 W/kg

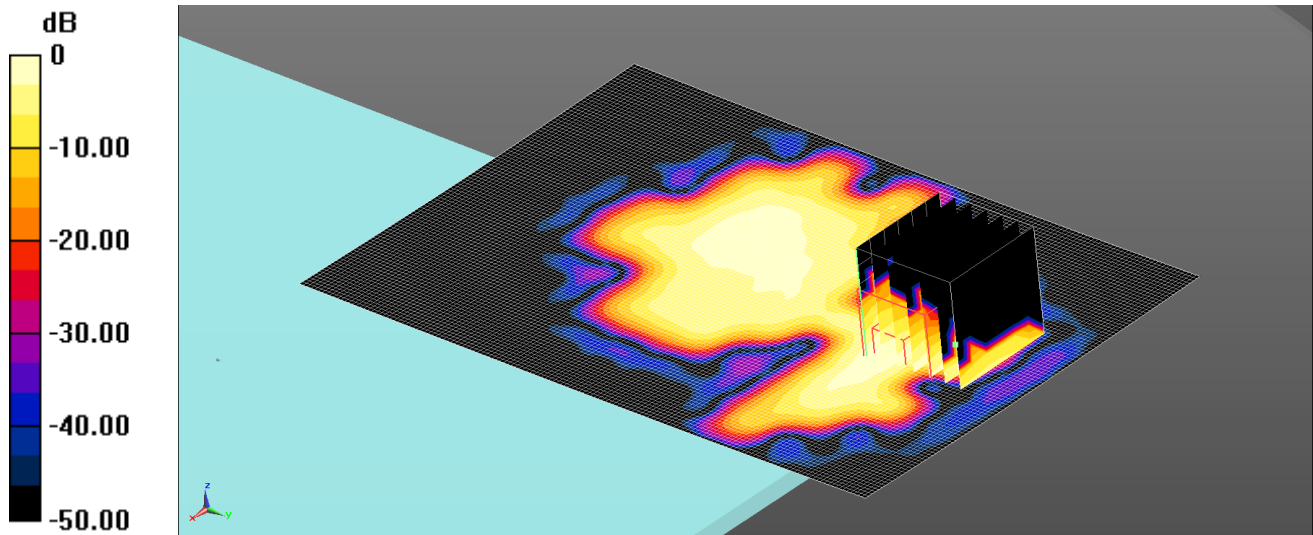
SAR(1 g) = 0.667 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 0.977 W/kg

SAR/006: Display WLAN 2.4 SISO Ant WF3 CH11

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



Communication System: UID 0, WLAN 802.11 (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.053$ S/m; $\epsilon_r = 50.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0462 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.0440 W/kg

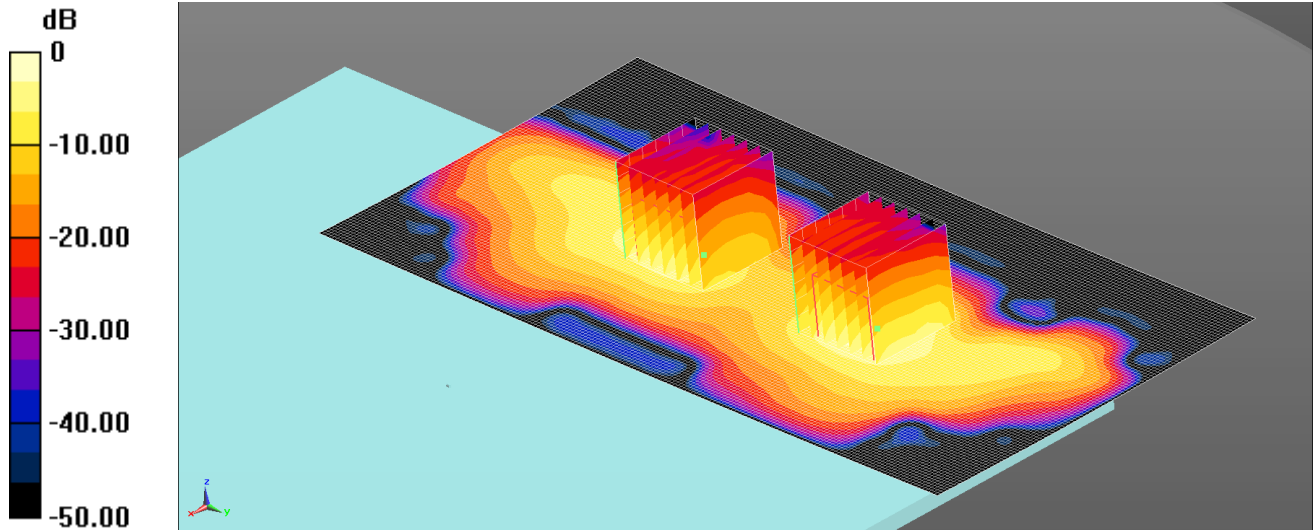
SAR(1 g) = 0.016 W/kg; SAR(10 g) = 0.00661 W/kg

Maximum value of SAR (measured) = 0.0214 W/kg

SAR/007: Back WLAN 2.4 MIMO Ant WF1 + WF2 CH6

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 1.08 W/kg = 0.33 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 2.032$ S/m; $\epsilon_r = 50.228$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.24 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.86 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 0.799 W/kg; SAR(10 g) = 0.295 W/kg

Maximum value of SAR (measured) = 1.26 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.86 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 2.15 W/kg

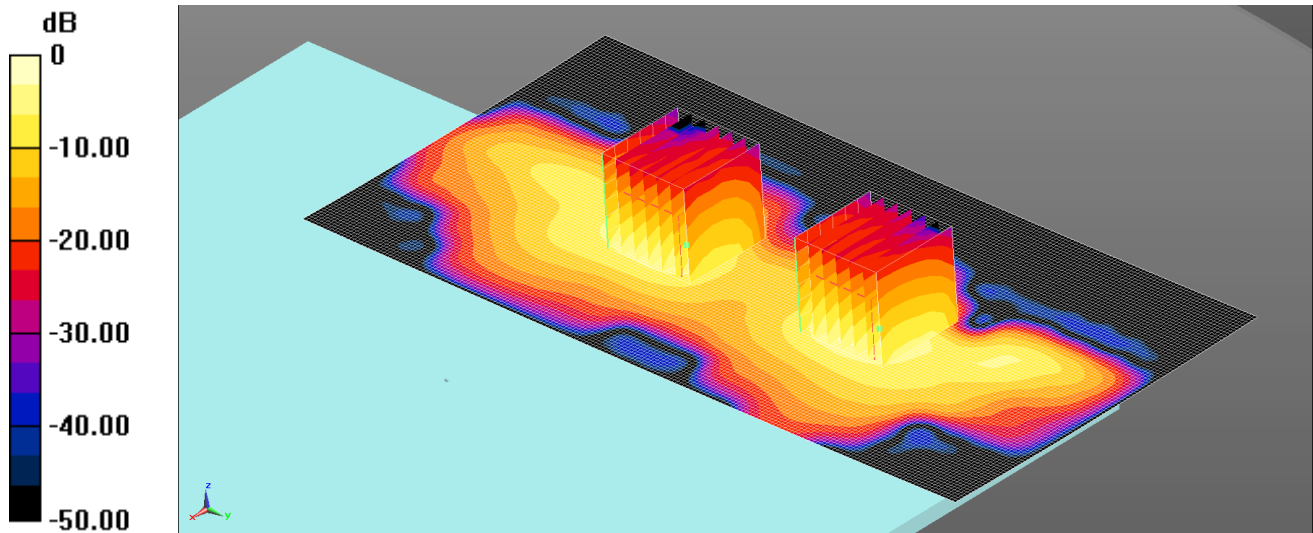
SAR(1 g) = 0.696 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

SAR/008: Back WLAN 2.4 MIMO Ant WF1 + WF2 CH1

Date: 12/09/2016

DUT: Apple Inc.; Type: FCC ID: BCGA1706; Model No: A1706



0 dB = 1.07 W/kg = 0.31 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: 2450 MHz MSL Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 50.267$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3995; ConvF(7.54, 7.54, 7.54); Calibrated: 26/04/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1435; Calibrated: 30/05/2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7372)

Configuration/Back - Bodyworn - PBx 2/Area Scan 2 (101x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.658 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.262 W/kg

Maximum value of SAR (measured) = 0.991 W/kg

Configuration/Back - Bodyworn - PBx 2/Zoom Scan (5x5x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.658 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.594 W/kg; SAR(10 g) = 0.226 W/kg

Maximum value of SAR (measured) = 0.889 W/kg