

Plot 1

Date/Time: 6/29/2015 5:48:44 PM

Test Laboratory: Microsoft EMC

DUT: 1703; Type: Portable Computing Device; Serial: 126552157

Communication System: UID 0, 802.11 2.4 GHz (0); Frequency: 2462 MHz

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.984$ S/m; $\epsilon_r = 52.732$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3939; ConvF(6.9, 6.9, 6.9); Calibrated: 7/17/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1383; Calibrated: 7/11/2014
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1218
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Flat-Section MSL 2 2/06/29/15 g mode Chain A Top 0mm 10 dBm Tune up 2462 MHz Full Area Scan/Area Scan (51x301x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Reference Value = 2.642 V/m; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 0.920 W/kg; SAR(10 g) = 0.304 W/kg

Maximum value of SAR (interpolated) = 2.09 W/kg

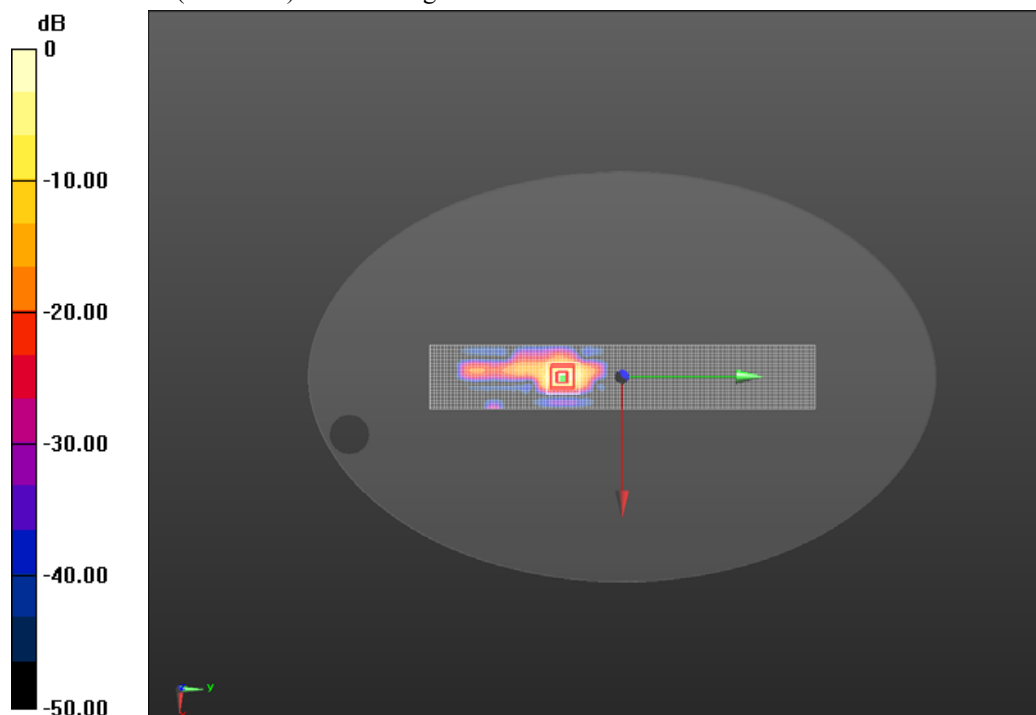
Flat-Section MSL 2 2/06/29/15 g mode Chain A Top 0mm 10 dBm Tune up 2462 MHz Full Area Scan/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.642 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.01 W/kg

SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.309 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



Plot 2

Date/Time: 8/31/2015 11:47:00 AM

Test Laboratory: Microsoft EMC

DUT: 1703; Type: Portable Computing Device; Serial: 126552157

Communication System: UID 0, CW (0); Frequency: 5230 MHz

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.541$ S/m; $\epsilon_r = 46.78$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3999; ConvF(5, 5, 5); Calibrated: 5/27/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1445; Calibrated: 5/22/2015
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Flat-Section MSL/08/31/2015 HT40 mode Chain A Top 0 mm 9 dBm Tune up 5230 MHz/Area Scan

(61x61x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 15.758 V/m; Power Drift = -0.28 dB

Fast SAR: SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (interpolated) = 1.19 W/kg

Flat-Section MSL/08/31/2015 HT40 mode Chain A Top 0 mm 9 dBm Tune up 5230 MHz/Zoom Scan

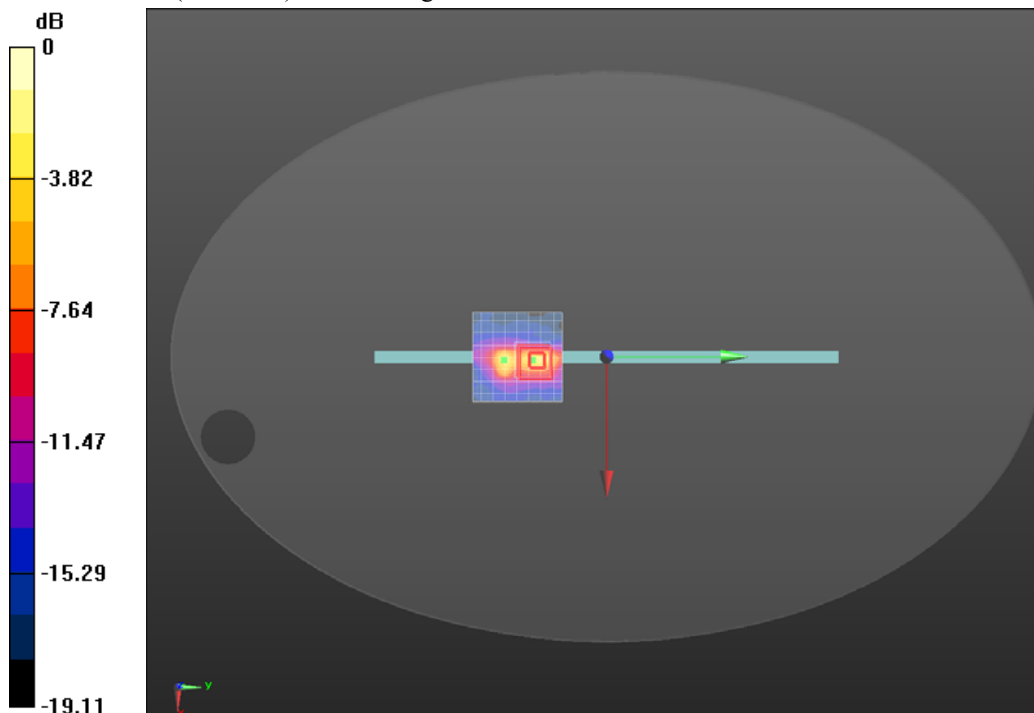
(7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 15.758 V/m; Power Drift = -0.28 dB

Peak SAR (extrapolated) = 5.02 W/kg

SAR(1 g) = 0.801 W/kg; SAR(10 g) = 0.206 W/kg

Maximum value of SAR (measured) = 2.05 W/kg



Plot 3

Date/Time: 7/1/2015 7:54:41 PM

Test Laboratory: Microsoft EMC

DUT: 1703; Type: Portable Computing Device; Serial: 118452157

Communication System: UID 0, 802.11 5GHz (0); Frequency: 5590 MHz

Medium parameters used: $f = 5590$ MHz; $\sigma = 5.924$ S/m; $\epsilon_r = 46.279$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3940; ConvF(3.77, 3.77, 3.77); Calibrated: 7/17/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1384; Calibrated: 7/11/2014
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1217
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Flat-Section MSL_Chain B/Chain B_802.11nHT40_Top 0mm_5590 MHz_Repeat/Area Scan (51x101x1):

Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 21.005 V/m; Power Drift = 0.18 dB

Fast SAR: SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (interpolated) = 2.40 W/kg

Flat-Section MSL_Chain B/Chain B_802.11nHT40_Top 0mm_5590 MHz_Repeat/Zoom Scan (7x7x12)/Cube

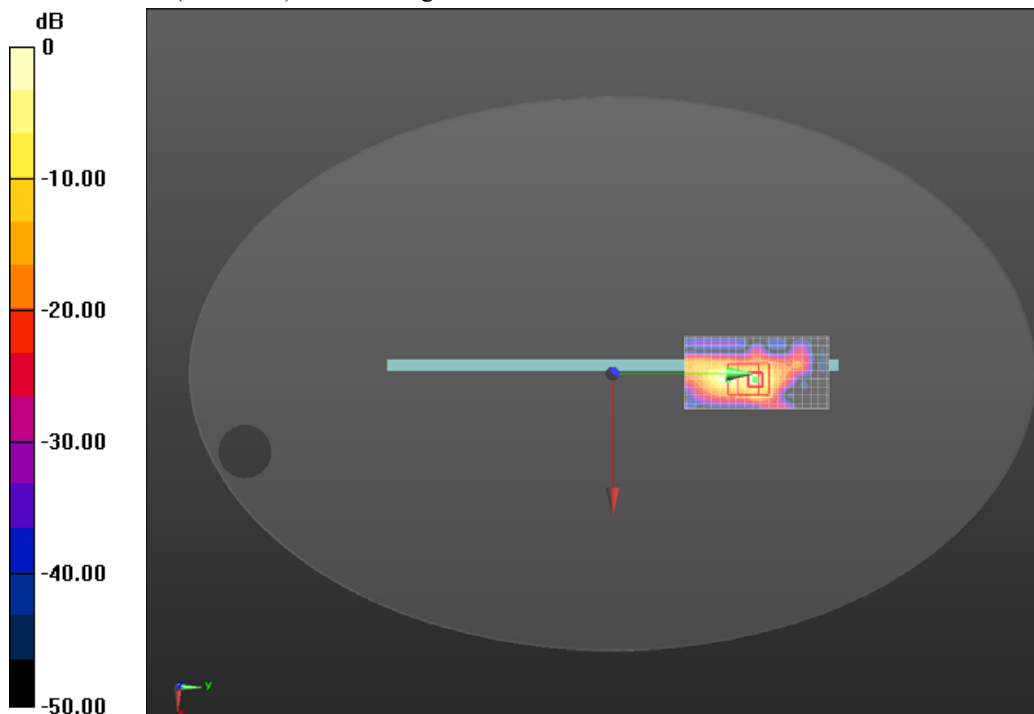
0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 21.005 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 6.29 W/kg

SAR(1 g) = 0.905 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 2.20 W/kg



Plot 4

Date/Time: 7/2/2015 1:59:54 PM

Test Laboratory: Microsoft EMC

DUT: 1703; Type: Portable Computing Device; Serial: 118452157

Communication System: UID 0, 802.11 5GHz (0); Frequency: 5680 MHz

Medium parameters used: $f = 5680$ MHz; $\sigma = 6.047$ S/m; $\epsilon_r = 46.127$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3940; ConvF(3.77, 3.77, 3.77); Calibrated: 7/17/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1384; Calibrated: 7/11/2014
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1217
- DASYS52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Flat-Section MSL_Chain B/Chain B_802.11a_Top 0mm_5680 MHz/Area Scan (51x101x1): Interpolated grid:

$dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 18.753 V/m; Power Drift = 0.13 dB

Fast SAR: SAR(1 g) = 0.789 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (interpolated) = 2.72 W/kg

Flat-Section MSL_Chain B/Chain B_802.11a_Top 0mm_5680 MHz/Zoom Scan (7x7x12)/Cube 0:

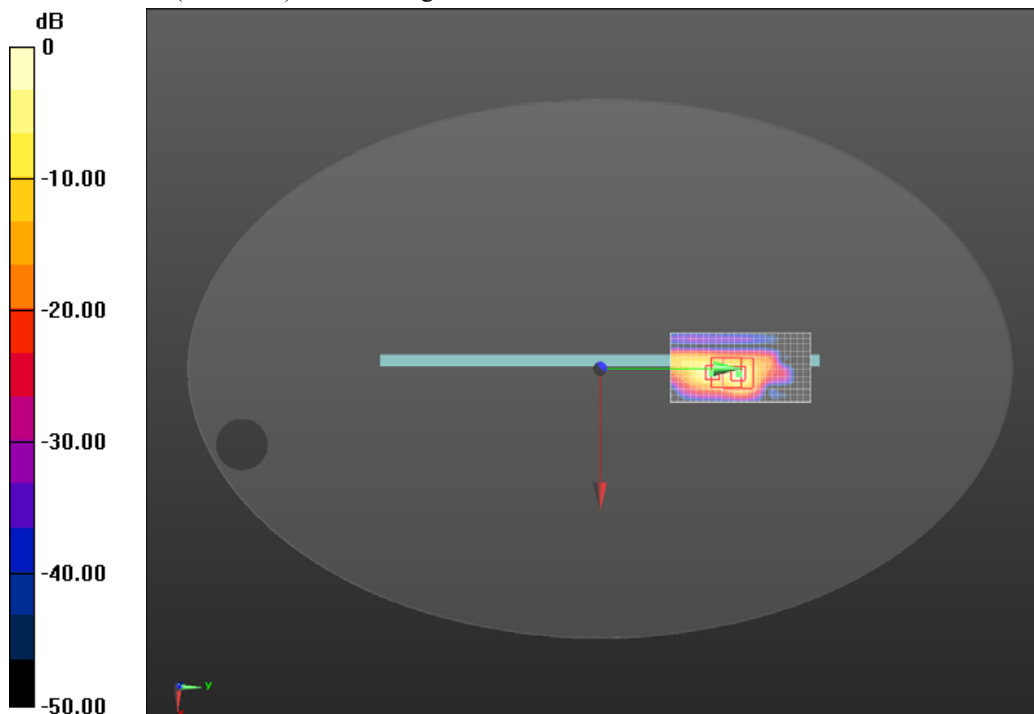
Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 18.753 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 7.93 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 2.44 W/kg



Plot 5

Date/Time: 8/14/2015 11:16:07 AM

Test Laboratory: Microsoft EMC

System Check 2.4GHz SN 917 08-14-2015

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:917

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.915$ S/m; $\epsilon_r = 50.653$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3999; ConvF(7.42, 7.42, 7.42); Calibrated: 5/27/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1445; Calibrated: 5/22/2015
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1218
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/System Check 2450 MHz; d=10mm, Pin=20 dBm, dist=2.0mm (EX-Probe)/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 59.978 V/m; Power Drift = 0.06 dB

Fast SAR: SAR(1 g) = 5.01 W/kg; SAR(10 g) = 2.26 W/kg

Maximum value of SAR (interpolated) = 7.54 W/kg

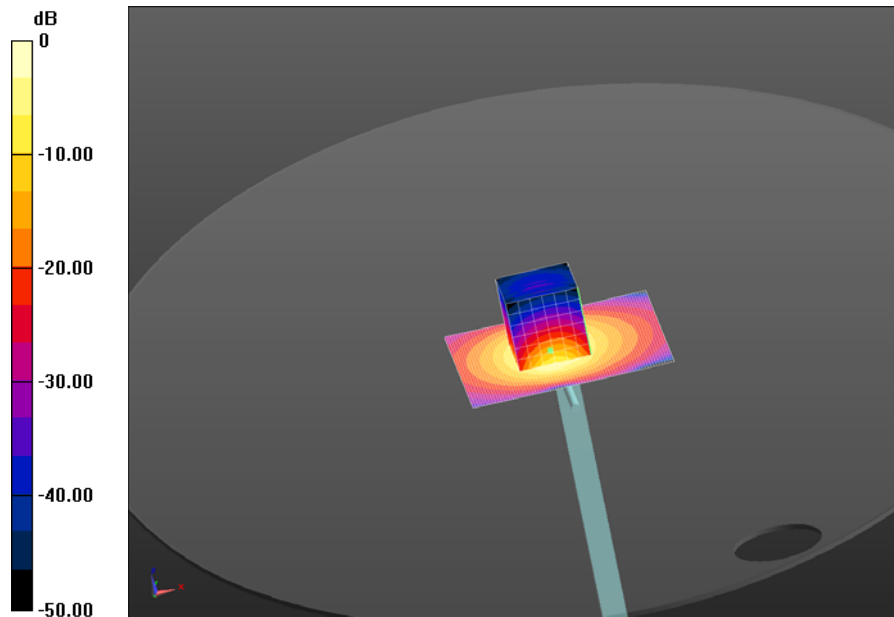
System Performance Check at Frequencies above 1 GHz/System Check 2450 MHz; d=10mm, Pin=20 dBm, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 59.978 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 9.92 W/kg

SAR(1 g) = 4.89 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 7.42 W/kg



Plot 6

Date/Time: 8/30/2015 2:59:10 PM

Test Laboratory: Microsoft EMC

System Check 5.2 GHz SN 1159 08-30-2015

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:917

Communication System: UID 0, CW (0); Frequency: 5200 MHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.499$ S/m; $\epsilon_r = 46.866$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3999; ConvF(5, 5, 5); Calibrated: 5/27/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1445; Calibrated: 5/22/2015
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:xxxx
- DASYS2 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/System Check 5200 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Area Scan (9x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 13.1 W/kg

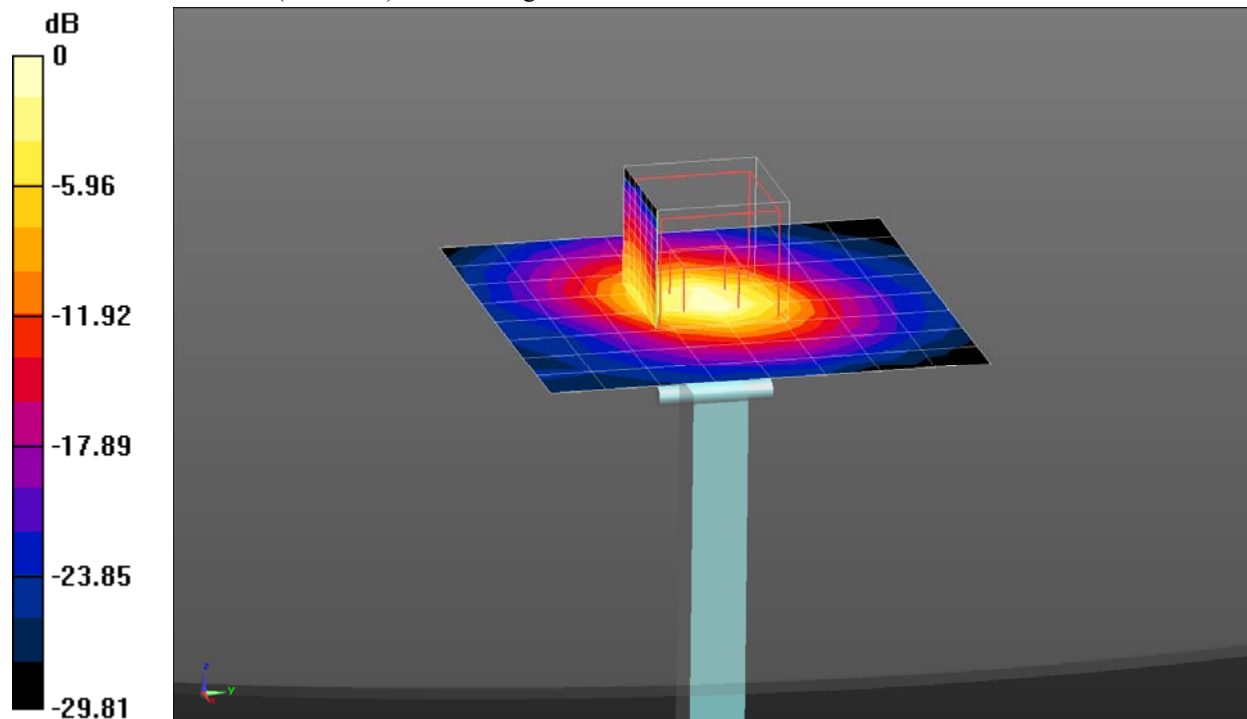
System Performance Check at Frequencies above 1 GHz/System Check 5200 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 53.589 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 32.1 W/kg

SAR(1 g) = 7.58 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 15.9 W/kg



0 dB = 13.1 W/kg = 11.16 dBW/kg

Plot 7

Date/Time: 6/30/2015 3:53:57 PM

Test Laboratory: Microsoft EMC

DUT: Dipole D5GHzV2_1158; Type: D5GHzV2; Serial: D5GHzV2 - SN:1158

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

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.937$ S/m; $\epsilon_r = 46.265$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3940; ConvF(3.77, 3.77, 3.77); Calibrated: 7/17/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1384; Calibrated: 7/11/2014
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1217
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/System Check 5600 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Area Scan (71x71x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 61.284 V/m; Power Drift = -0.00 dB

Fast SAR: SAR(1 g) = 8.27 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (interpolated) = 18.0 W/kg

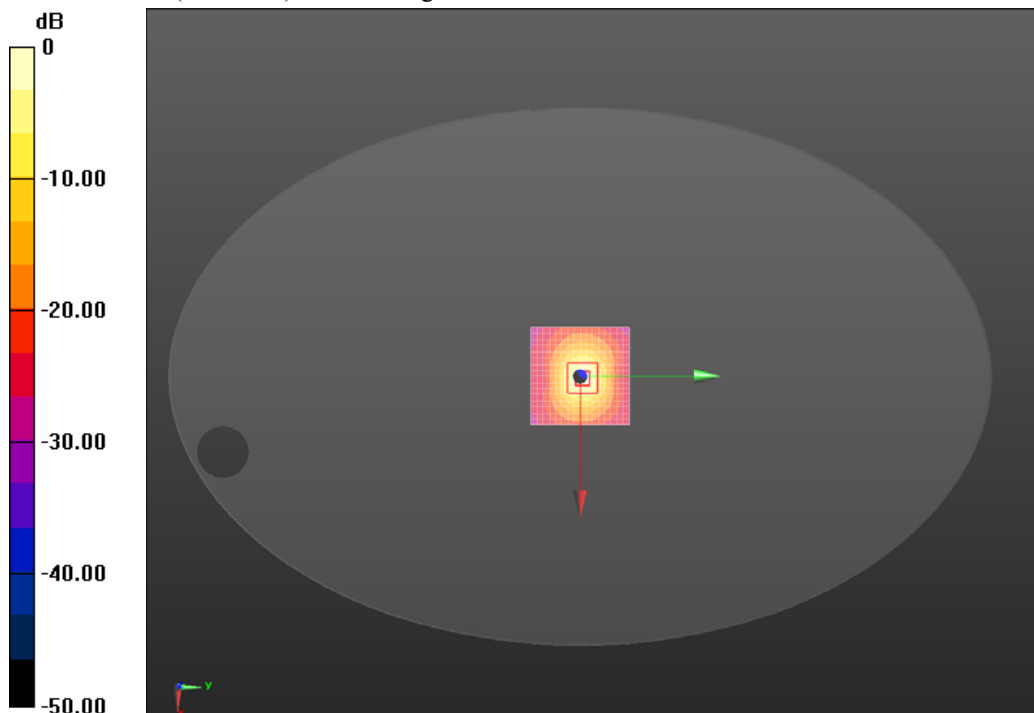
System Performance Check at Frequencies above 1 GHz/System Check 5600 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 61.284 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 38.5 W/kg

SAR(1 g) = 8.85 W/kg; SAR(10 g) = 2.45 W/kg

Maximum value of SAR (measured) = 19.0 W/kg



Plot 8

Date/Time: 7/5/2015 12:54:47 PM

Test Laboratory: Microsoft EMC

DUT: Dipole D5GHzV2_1158; Type: D5GHzV2; Serial: D5GHzV2 - SN:1158

Communication System: UID 0, CW (0); Frequency: 5800 MHz

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.272$ S/m; $\epsilon_r = 46.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3940; ConvF(3.93, 3.93, 3.93); Calibrated: 7/17/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1384; Calibrated: 7/11/2014
- Phantom: ELI v5.0 - Front; Type: QDOVA002AA; Serial: TP:1217
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/System Check 5800 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Area Scan (71x71x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 55.257 V/m; Power Drift = 0.18 dB

Fast SAR: SAR(1 g) = 7.08 W/kg; SAR(10 g) = 1.99 W/kg

Maximum value of SAR (interpolated) = 15.5 W/kg

System Performance Check at Frequencies above 1 GHz/System Check 5800 MHz; $d=10$ mm, $P_{in}=20$ dBm, $dist=2.0$ mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 55.257 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 36.0 W/kg

SAR(1 g) = 7.92 W/kg; SAR(10 g) = 2.19 W/kg

Maximum value of SAR (measured) = 17.1 W/kg

