

Appendix B

Detailed Test Results

1. GSM
GSM850 for Head & Body Worn & Hotspot
GSM1900 for Head & Body Worn & Hotspot
2. CDMA
CDMA BC0 for Head & Body Worn & Hotspot
3.LTE
LTE Band 2 for Head & Body Worn & Hotspot
LTE Band 4 for Head & Body Worn & Hotspot
LTE Band 5 for Head & Body Worn & Hotspot
LTE Band 7 for Head & Body Worn & Hotspot
LTE Band 26 for Head & Body Worn & Hotspot
LTE Band 38 for Head & Body Worn & Hotspot
LTE Band 40 for Head & Body Worn & Hotspot
LTE Band 41 for Head & Body Worn & Hotspot
4.WiFi
WiFi2.4G for Head & Body Worn & Hotspot

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

GSM850_GSM Ch190 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.83$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.46, 9.46, 9.46); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0897 W/kg

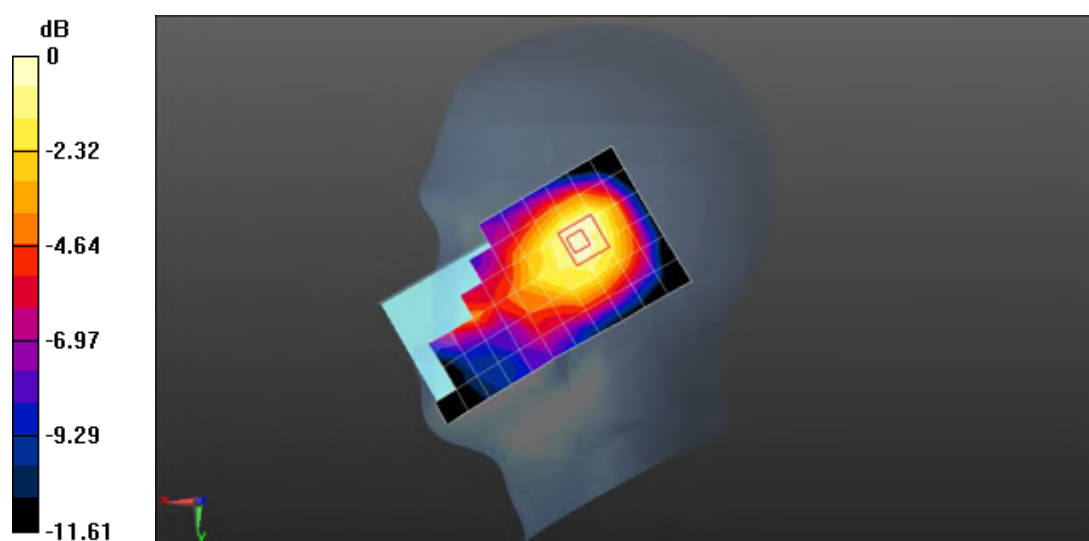
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.954 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.101 W/kg

SAR(1 g) = 0.081 W/kg; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.0936 W/kg



0 dB = 0.0936 W/kg = -10.29 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

GSM850_GSM Ch190 Back side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.415$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0799 W/kg

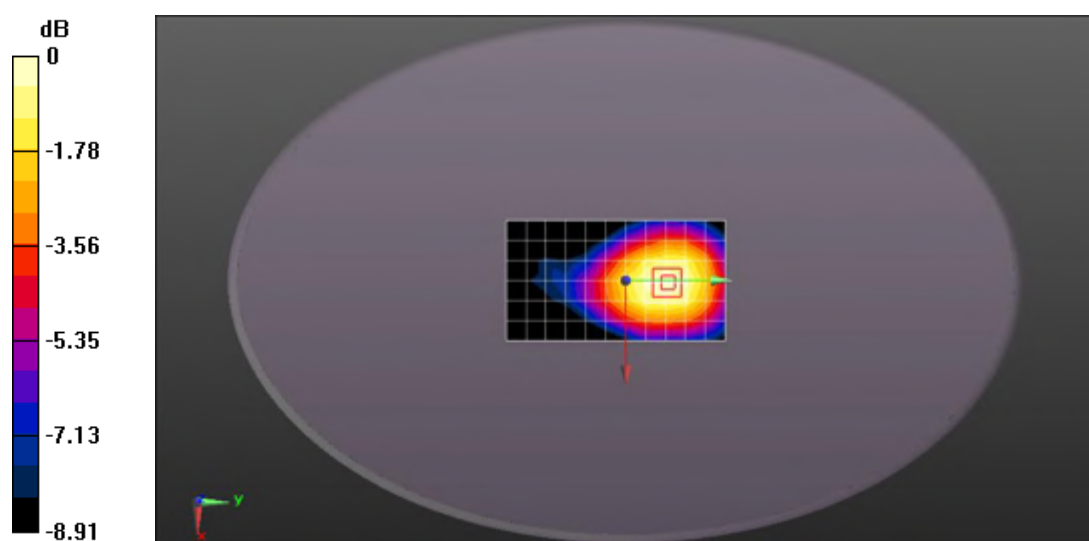
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.103 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0910 W/kg

SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.047 W/kg

Maximum value of SAR (measured) = 0.0805 W/kg



Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

GSM850_GPRS 2Ts Ch190 Back side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, GPRS/EGPRS 2TX Slots (0); Frequency: 836.6 MHz;
Duty Cycle: 1:2.07491

Medium parameters used: $f = 837$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.415$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.139 W/kg

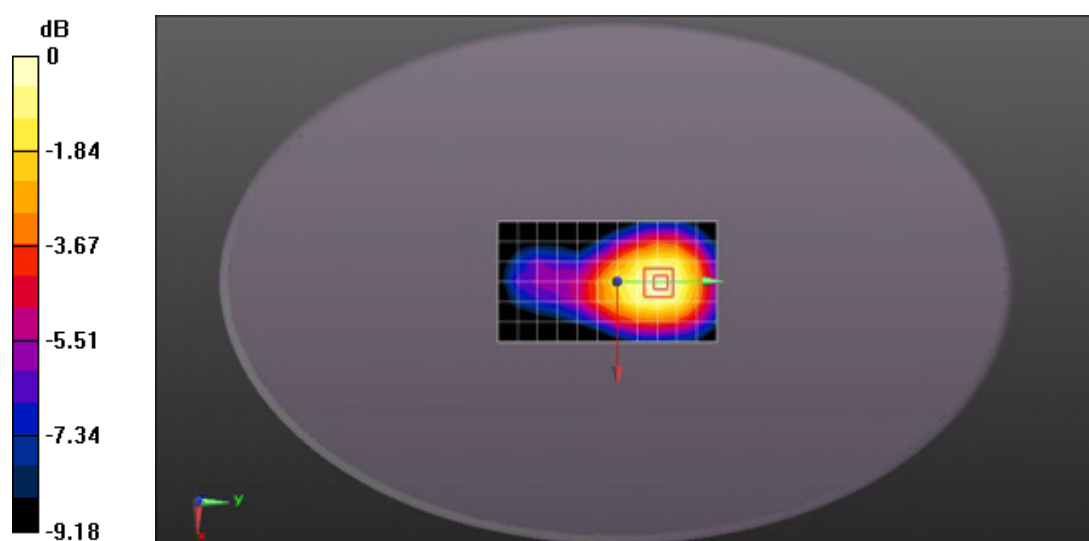
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.29 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.157 W/kg

SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.080 W/kg

Maximum value of SAR (measured) = 0.141 W/kg



0 dB = 0.141 W/kg = -8.51 dBW/kg

Date: 2019-06-25

Test Laboratory: Compliance Certification Services Inc.

GSM1900_GSM Ch661 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.36$ S/m; $\epsilon_r = 40.732$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.9, 7.9, 7.9); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.212 W/kg

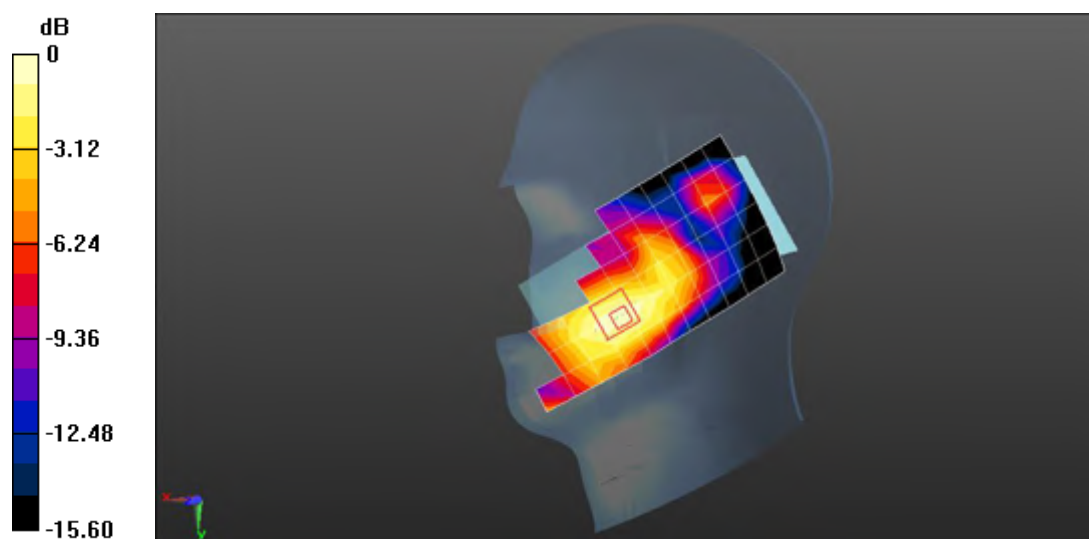
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.276 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.161 W/kg; SAR(10 g) = 0.100 W/kg

Maximum value of SAR (measured) = 0.216 W/kg



0 dB = 0.216 W/kg = -6.66 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

GSM1900_GSM Ch661 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.494$ S/m; $\epsilon_r = 53.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.66, 7.66, 7.66); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.153 W/kg

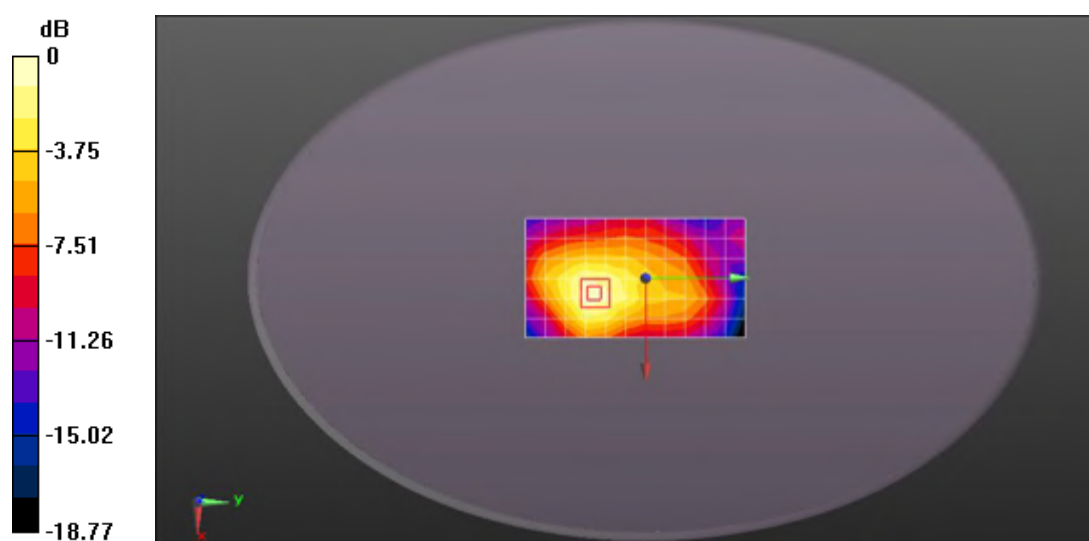
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.700 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.164 W/kg



0 dB = 0.164 W/kg = -7.85 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

GSM1900_GPRS 2Ts Ch661 Front side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, GPRS/EGPRS 2TX Slots (0); Frequency: 1880 MHz;
Duty Cycle: 1:2.07491

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.494$ S/m; $\epsilon_r = 53.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.66, 7.66, 7.66); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.490 W/kg

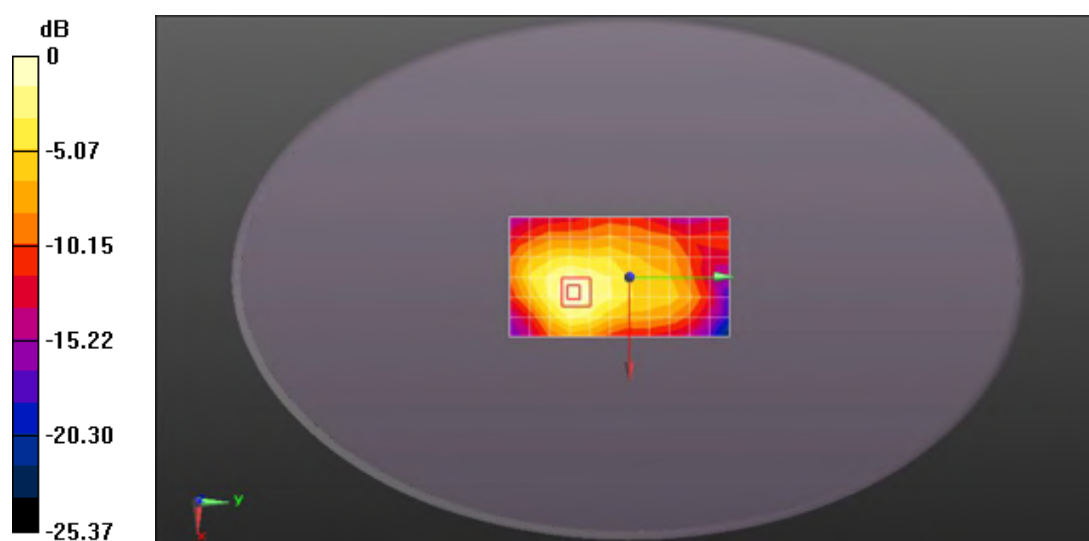
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.53 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.577 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.207 W/kg

Maximum value of SAR (measured) = 0.492 W/kg



0 dB = 0.492 W/kg = -3.08 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

CDMA BC0_RC3 SO55 Ch384 Left Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.83$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.46, 9.46, 9.46); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.155 W/kg

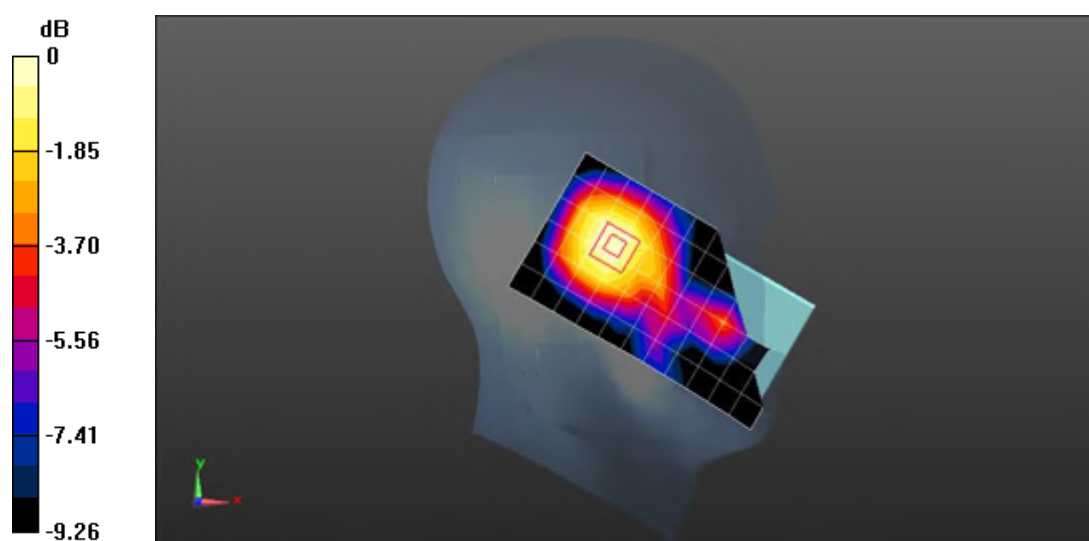
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 12.81 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.172 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.113 W/kg

Maximum value of SAR (measured) = 0.163 W/kg



0 dB = 0.163 W/kg = -7.88 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

CDMA BC0_RC3 SO32 Ch384 Back side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.415$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.159 W/kg

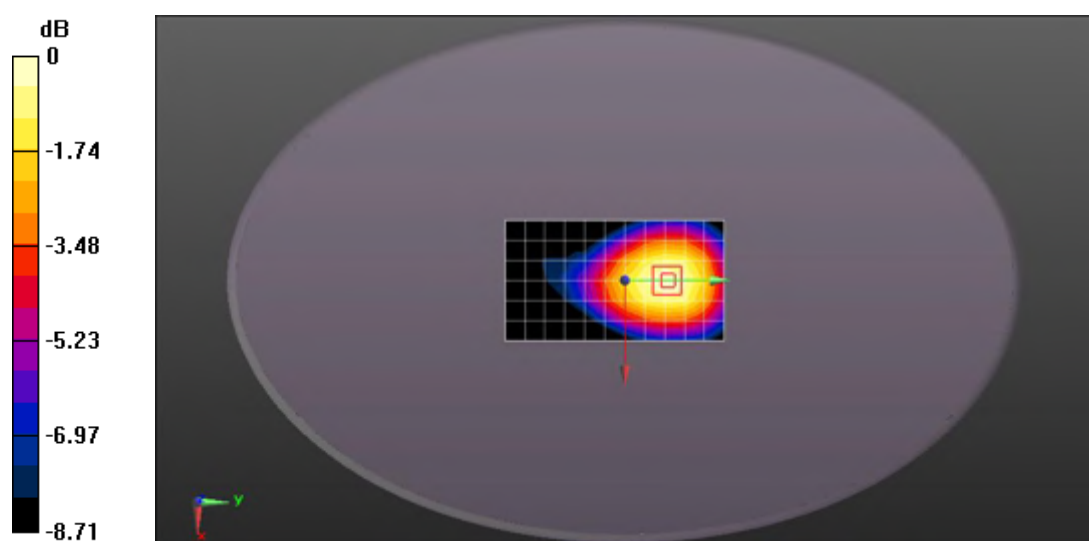
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.67 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.178 W/kg

SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.160 W/kg



0 dB = 0.160 W/kg = -7.96 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

CDMA BC0_RC3 SO32 Ch384 Back side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.415$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

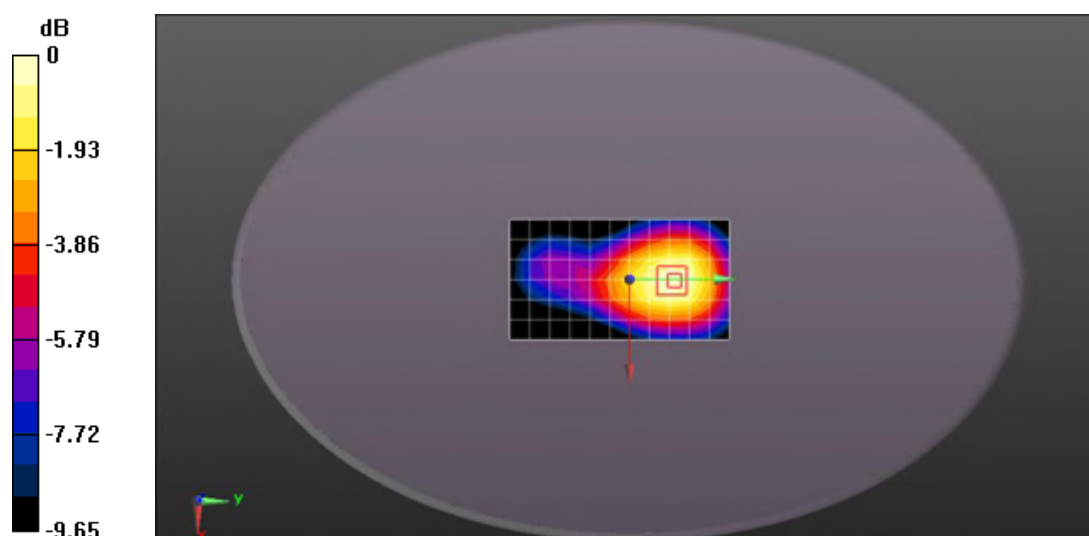
Maximum value of SAR (measured) = 0.191 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.71 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.110 W/kg



0 dB = 0.191 W/kg = -7.19 dBW/kg

Date: 2019-06-25

Test Laboratory: Compliance Certification Services Inc.

LTE Band 2_20M QPSK 1RB 50Offset Ch18900 Right cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.36$ S/m; $\epsilon_r = 40.732$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.9, 7.9, 7.9); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

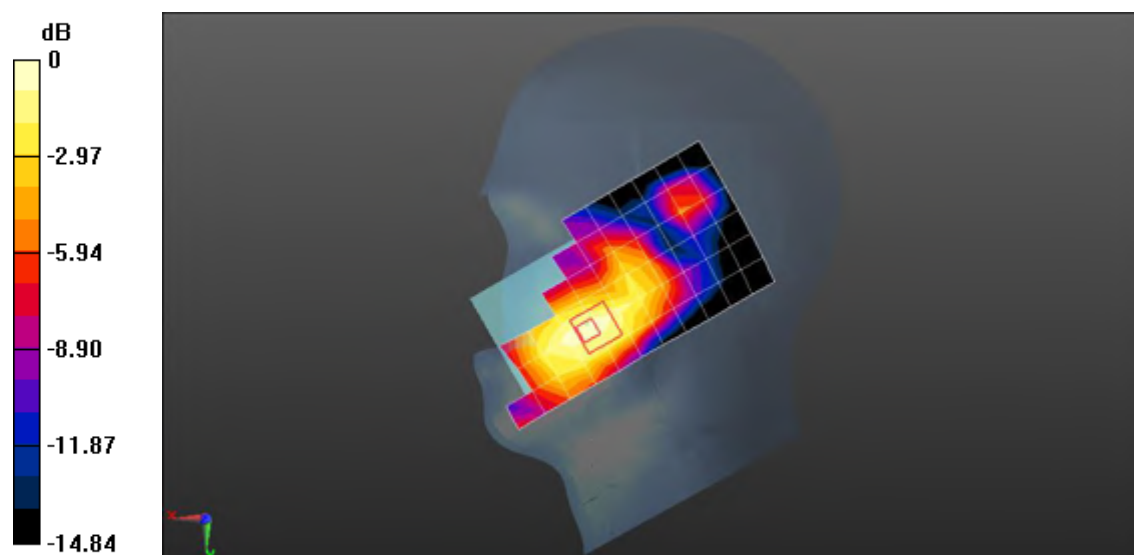
Maximum value of SAR (measured) = 0.346 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.298 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.164 W/kg



0 dB = 0.346 W/kg = -4.61 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

LTE Band 2_20M QPSK 1RB 50Offset Ch18900 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.494$ S/m; $\epsilon_r = 53.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.66, 7.66, 7.66); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.243 W/kg

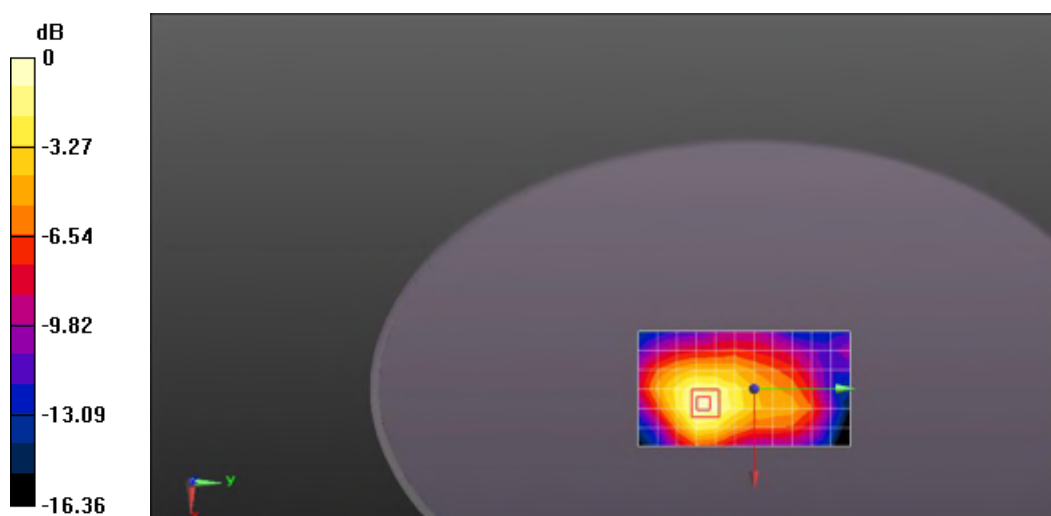
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.238 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.301 W/kg

SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.257 W/kg



0 dB = 0.257 W/kg = -5.90 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

LTE Band 2_20M QPSK 1RB 50Offset Ch18900 Bottom side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.494$ S/m; $\epsilon_r = 53.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.66, 7.66, 7.66); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.480 W/kg

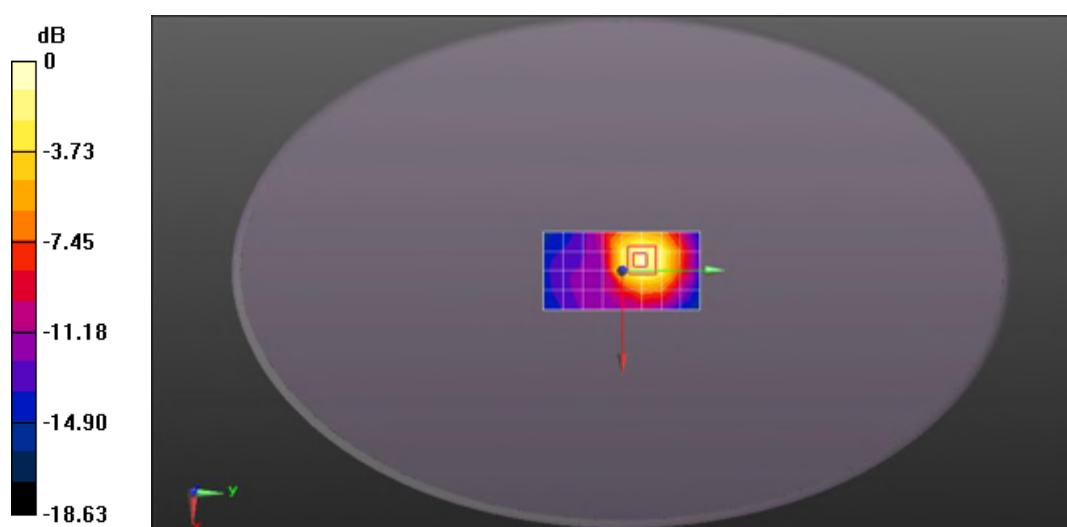
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 14.73 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.707 W/kg

SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.554 W/kg



0 dB = 0.554 W/kg = -2.56 dBW/kg

Date: 2019-06-25

Test Laboratory: Compliance Certification Services Inc.

LTE Band 4_20M QPSK 1RB 50Offset Ch20175 Right cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(8, 8, 8); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.332 W/kg

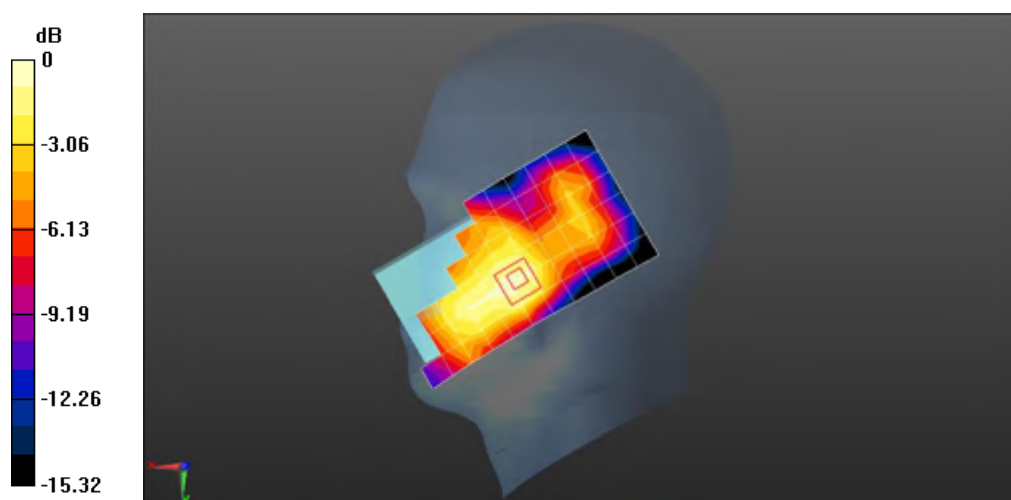
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.19 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.355 W/kg



0 dB = 0.355 W/kg = -4.50 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

LTE Band 4_20M QPSK 1RB 50Offset Ch20175 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.41$ S/m; $\epsilon_r = 51.212$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.81, 7.81, 7.81); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.229 W/kg

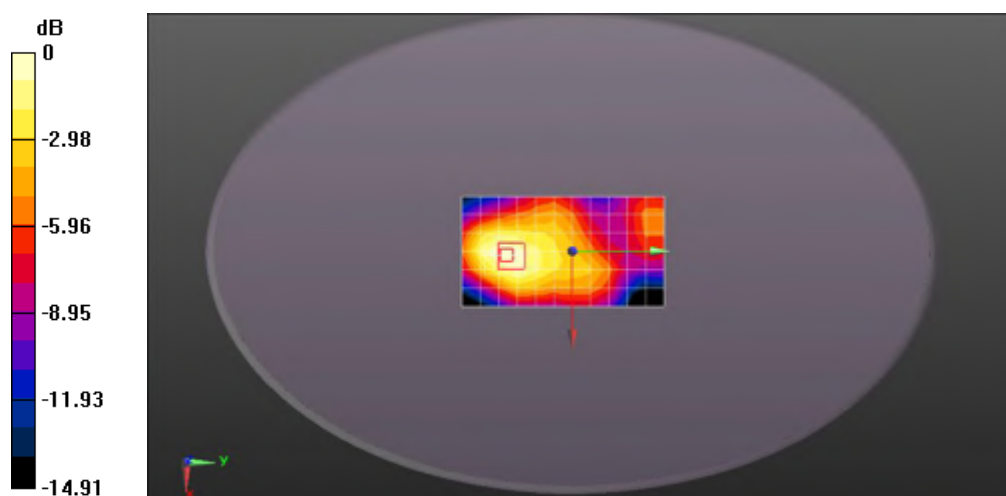
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.580 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.230 W/kg



0 dB = 0.230 W/kg = -6.38 dBW/kg

Date: 2019-06-23

Test Laboratory: Compliance Certification Services Inc.

LTE Band 4_20M QPSK 1RB 50Offset Ch20175 Bottom side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.41$ S/m; $\epsilon_r = 51.212$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.81, 7.81, 7.81); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.881 W/kg

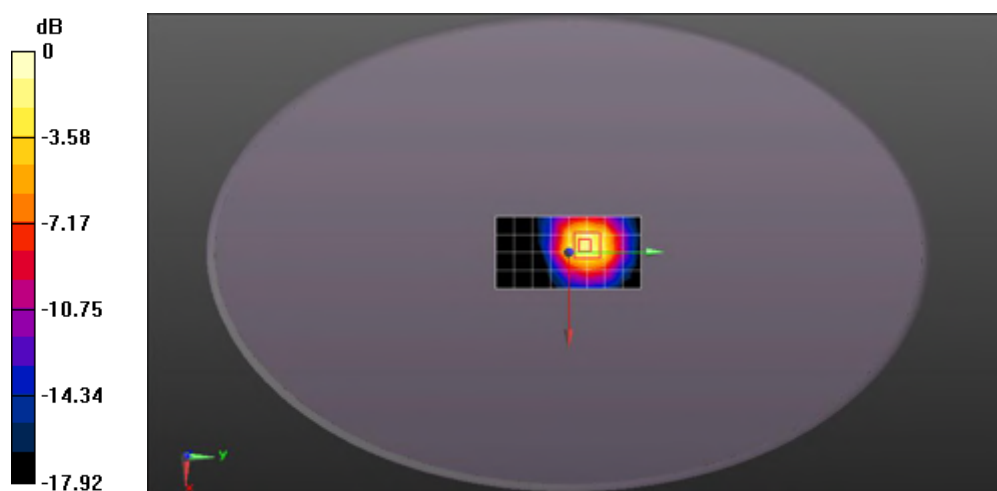
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 21.60 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.397 W/kg

Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 5_10M QPSK 1RB 25Offset Ch20525 Left Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.833$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.46, 9.46, 9.46); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.117 W/kg

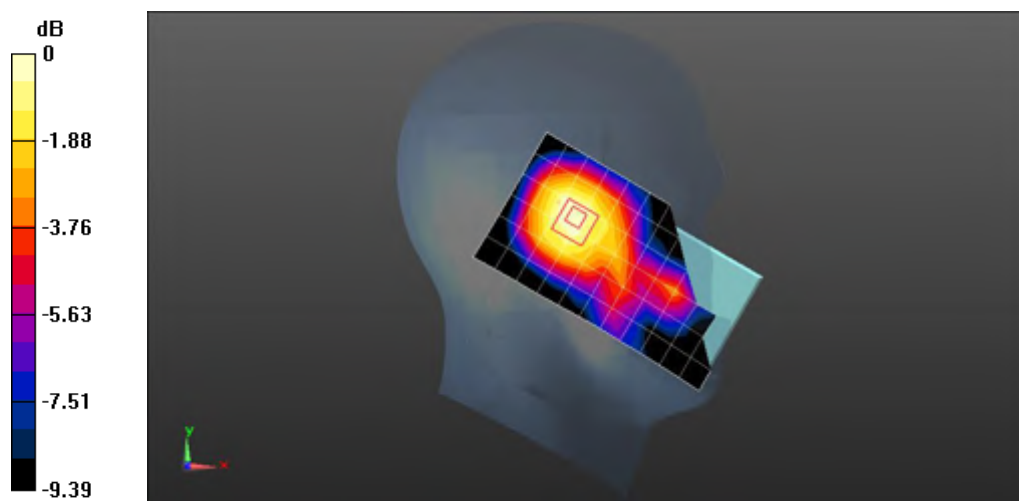
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.73 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.131 W/kg

SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.083 W/kg

Maximum value of SAR (measured) = 0.122 W/kg



0 dB = 0.122 W/kg = -9.14 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 5_10M QPSK 1RB 25Offset Ch20525 Back side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.416$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

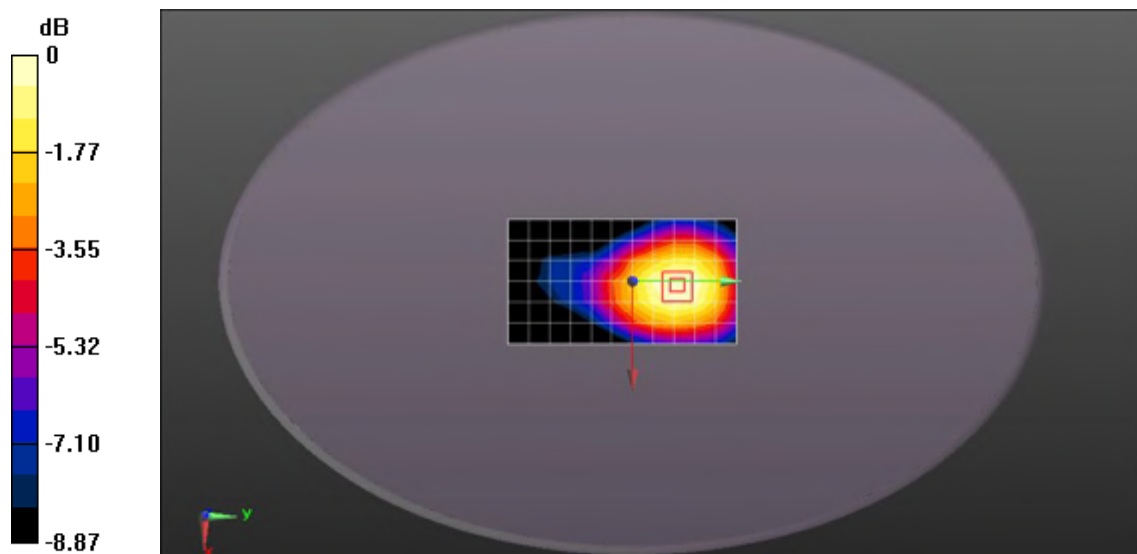
Maximum value of SAR (measured) = 0.104 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.740 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.116 W/kg

SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.061 W/kg



0 dB = 0.104 W/kg = -9.83 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 5_10M QPSK 1RB 25Offset Ch20525 Back side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 1.013$ S/m; $\epsilon_r = 54.416$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.128 W/kg

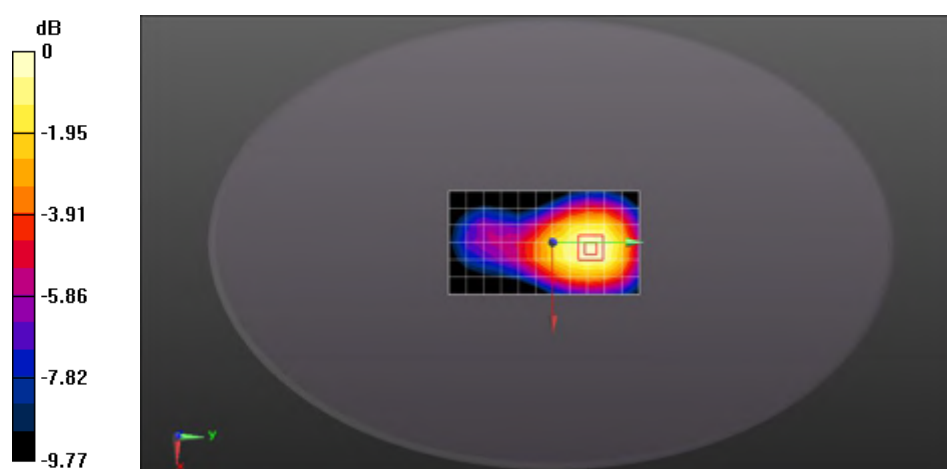
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.685 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.129 W/kg = -8.89 dBW/kg

Date: 2019-06-21

Test Laboratory: Compliance Certification Services Inc.

LTE Band 7_20M QPSK 1RB 50Offset Ch20850 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

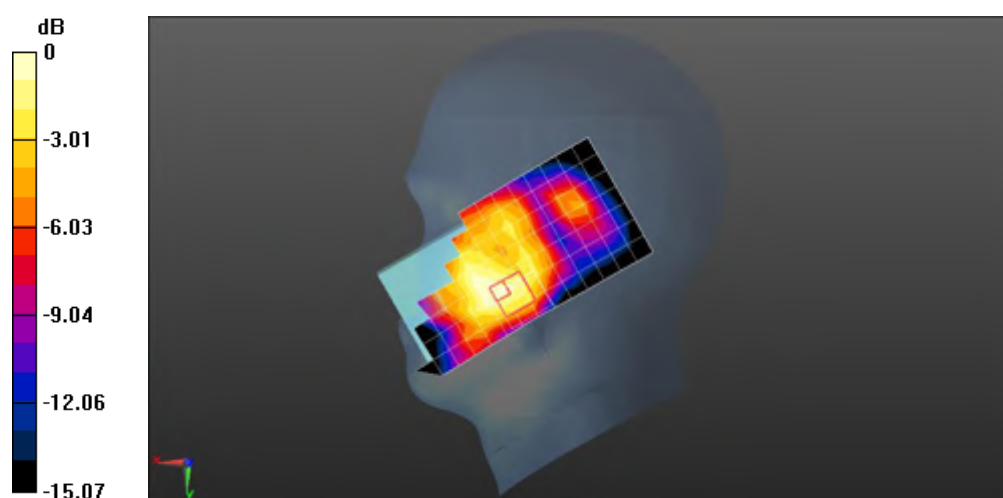
Communication System: UID 0, FDD_LTE (0); Frequency: 2510 MHz Duty Cycle: 1:1
Medium parameters used: $f = 2510$ MHz; $\sigma = 1.897$ S/m; $\epsilon_r = 39.731$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.11, 7.11, 7.11); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.354 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
 $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 8.122 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.442 W/kg
SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.117 W/kg
Maximum value of SAR (measured) = 0.359 W/kg



0 dB = 0.359 W/kg = -4.45 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 7_20M QPSK 1RB 50Offset Ch20850 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.046$ S/m; $\epsilon_r = 52.532$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.09, 7.09, 7.09); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.141 W/kg

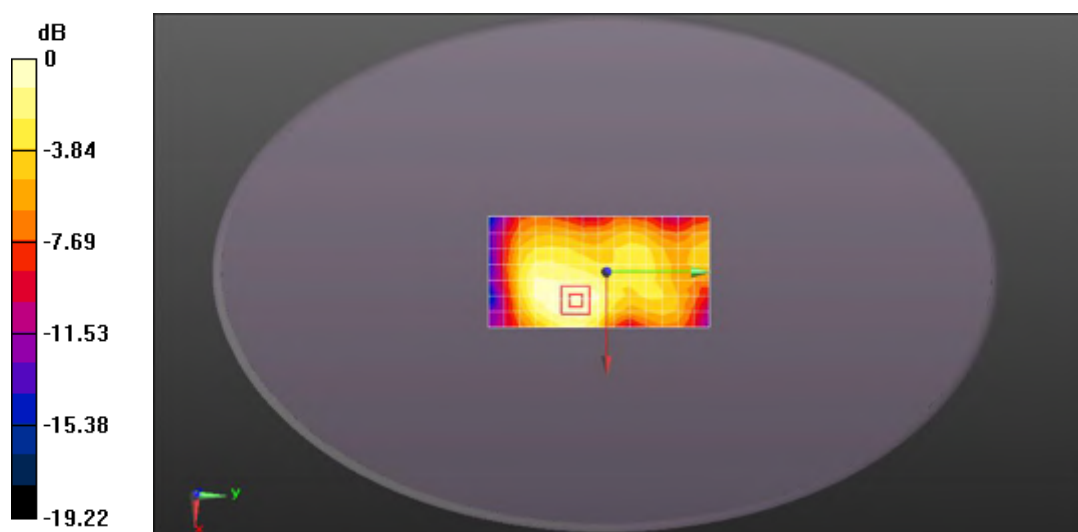
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.979 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.179 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.056 W/kg

Maximum value of SAR (measured) = 0.148 W/kg



0 dB = 0.165 W/kg = -7.83 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 7_20M QPSK 1RB 50Offset Ch20850 Right side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.046$ S/m; $\epsilon_r = 52.532$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.09, 7.09, 7.09); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.388 W/kg

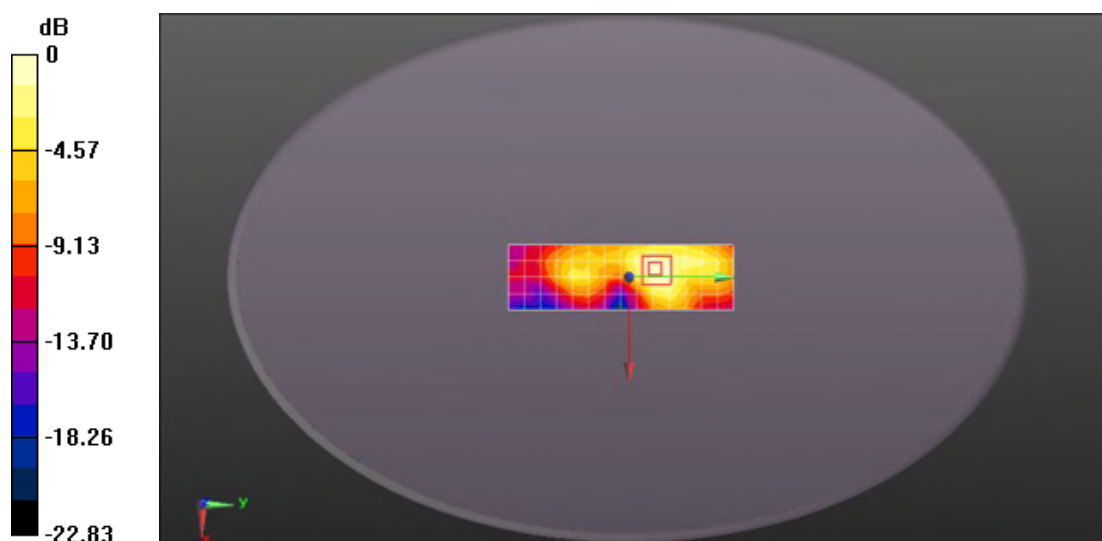
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 9.723 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.590 W/kg

SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.168 W/kg

Maximum value of SAR (measured) = 0.482 W/kg



0 dB = 0.180 W/kg = -7.45 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 26_15M QPSK 1RB 38Offset Ch26765 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.879$ S/m; $\epsilon_r = 40.932$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.46, 9.46, 9.46); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.132 W/kg

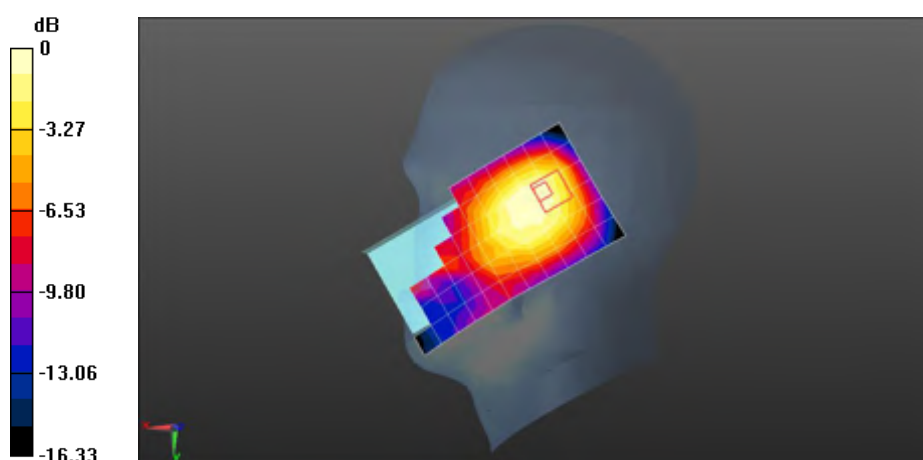
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.11 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.145 W/kg

SAR(1 g) = 0.107 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.134 W/kg



0 dB = 0.134 W/kg = -8.73 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 26_15M QPSK 1RB 38Offset Ch26765 Back side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 821.5$ MHz; $\sigma = 1.003$ S/m; $\epsilon_r = 54.489$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.107 W/kg

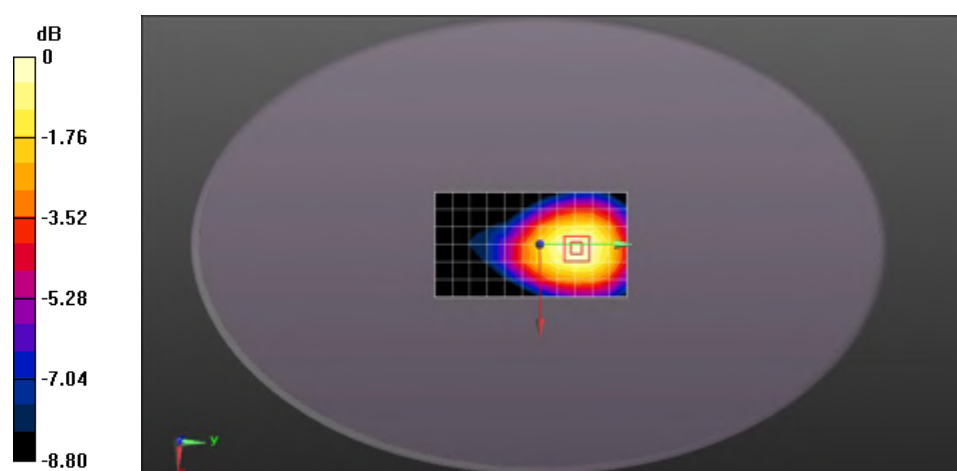
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.793 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.106 W/kg



0 dB = 0.106 W/kg = -9.75 dBW/kg

Date: 2019-06-24

Test Laboratory: Compliance Certification Services Inc.

LTE Band 26_15M QPSK 1RB 38Offset Ch26765 Right side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 821.5$ MHz; $\sigma = 1.003$ S/m; $\epsilon_r = 54.489$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(9.33, 9.33, 9.33); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.115 W/kg

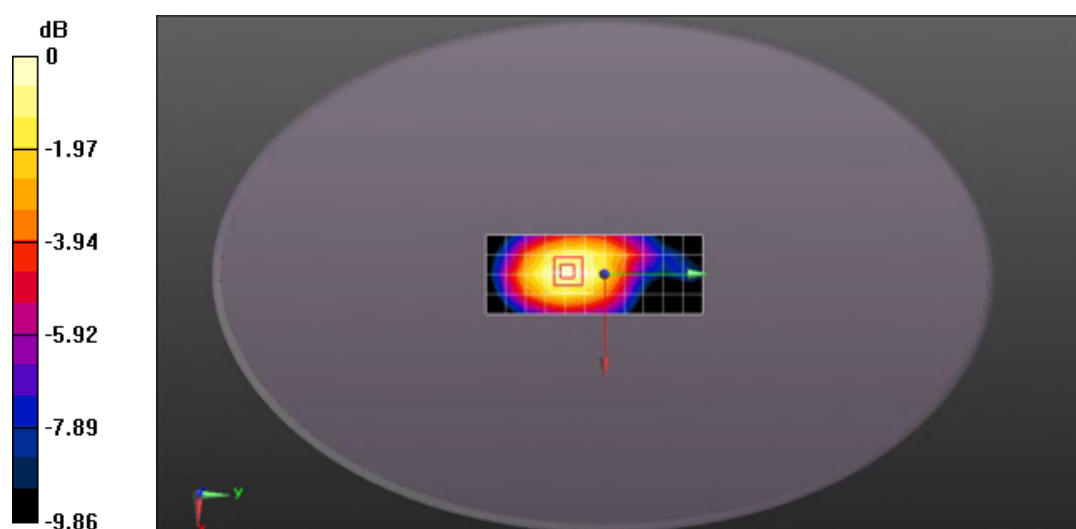
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.143 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.118 W/kg



0 dB = 0.118 W/kg = -9.28 dBW/kg

Date: 2019-06-21

Test Laboratory: Compliance Certification Services Inc.

LTE Band 38_20M QPSK 1RB 50Offset Ch38000 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

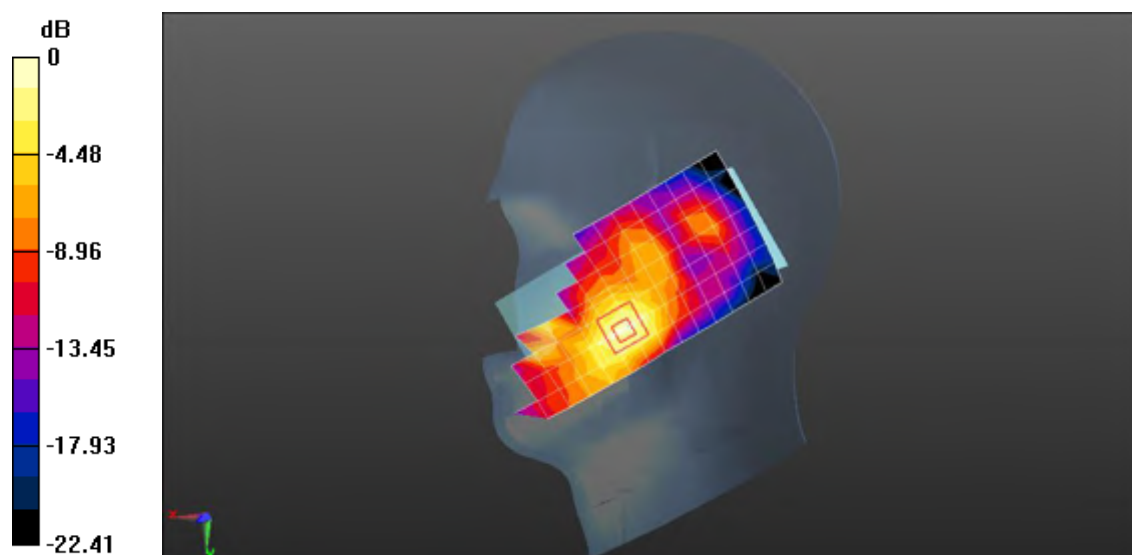
Communication System: UID 0, FDD_LTE (0); Frequency: 2595 MHz Duty Cycle: 1:1
Medium parameters used: $f = 2595$ MHz; $\sigma = 1.995$ S/m; $\epsilon_r = 39.405$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.11, 7.11, 7.11); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.338 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
 $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 5.884 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.482 W/kg
SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.128 W/kg
Maximum value of SAR (measured) = 0.383 W/kg



0 dB = 0.383 W/kg = -4.17 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 38_20M QPSK 1RB 50Offset Ch38000 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2595 MHz; Duty Cycle: 1:1.57943

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.995$ S/m; $\epsilon_r = 39.405$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.11, 7.11, 7.11); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.109 W/kg

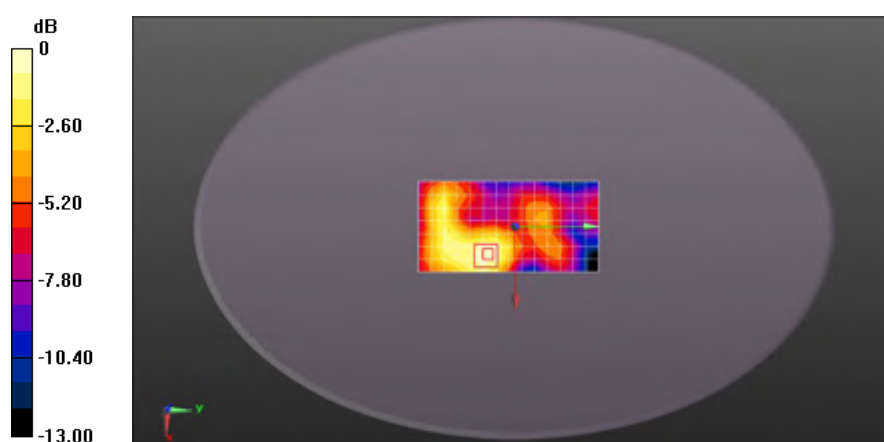
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.777 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.135 W/kg

SAR(1 g) = 0.080 W/kg; SAR(10 g) = 0.042 W/kg

Maximum value of SAR (measured) = 0.111 W/kg



0 dB = 0.111 W/kg = -9.55 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 38_20M QPSK 1RB 50Offset Ch38000 Right side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2595 MHz; Duty Cycle: 1:1.57943

Medium parameters used: $f = 2595$ MHz; $\sigma = 2.156$ S/m; $\epsilon_r = 52.249$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.09, 7.09, 7.09); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.266 W/kg

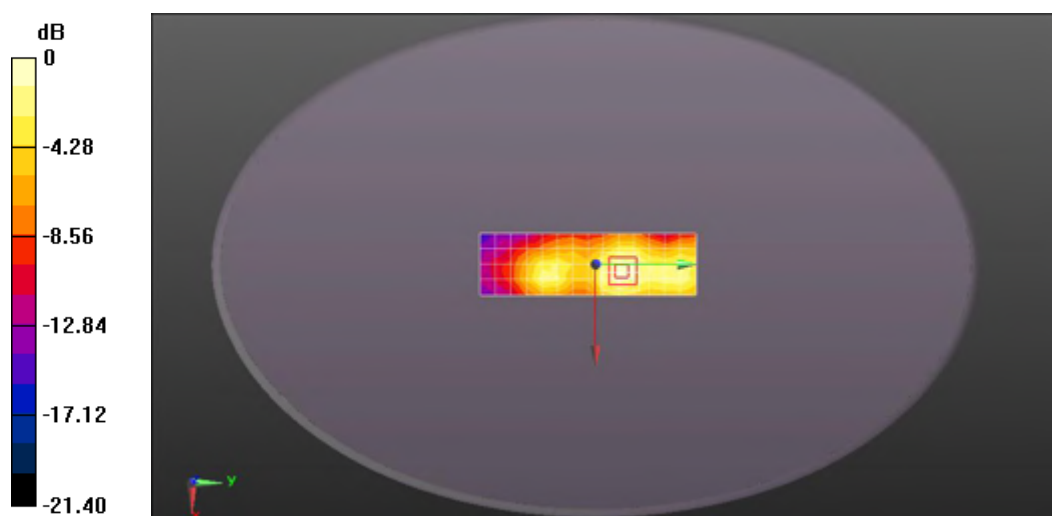
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.762 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.387 W/kg

SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.308 W/kg



0 dB = 0.308 W/kg = -5.11 dBW/kg

Date: 2019-06-21

Test Laboratory: Compliance Certification Services Inc.

LTE Band 40_20M QPSK 1RB 50Offset Ch39550 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, FDD_LTE (0); Frequency: 2390 MHzDuty Cycle: 1:1.57943

Medium parameters used: $f = 2390$ MHz; $\sigma = 1.758$ S/m; $\epsilon_r = 40.235$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.61, 7.61, 7.61); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.190 W/kg

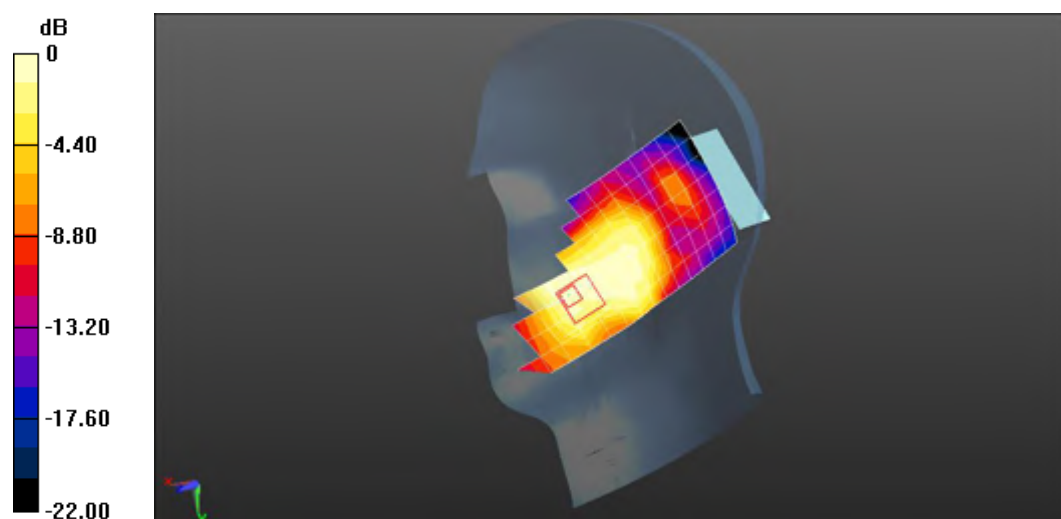
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.793 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.332 W/kg

SAR(1 g) = 0.137 W/kg; SAR(10 g) = 0.050 W/kg

Maximum value of SAR (measured) = 0.204 W/kg



0 dB = 0.204 W/kg = -6.90 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 40_20M QPSK 1RB 50Offset Ch39550 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2390 MHz; Duty Cycle: 1:1.57943

Medium parameters used: $f = 2390$ MHz; $\sigma = 1.758$ S/m; $\epsilon_r = 40.235$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.61, 7.61, 7.61); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.129 W/kg

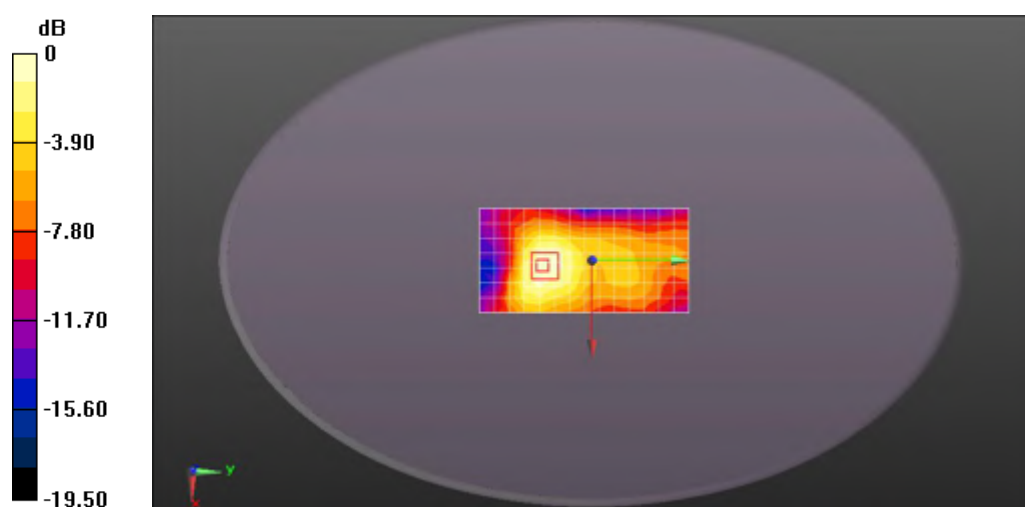
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.033 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.131 W/kg



0 dB = 0.131 W/kg = -8.83 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 40_20M QPSK 1RB 50Offset Ch39550 Right side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2390 MHz; Duty Cycle: 1:1.57943

Medium parameters used: $f = 2390$ MHz; $\sigma = 1.758$ S/m; $\epsilon_r = 40.235$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.61, 7.61, 7.61); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.163 W/kg

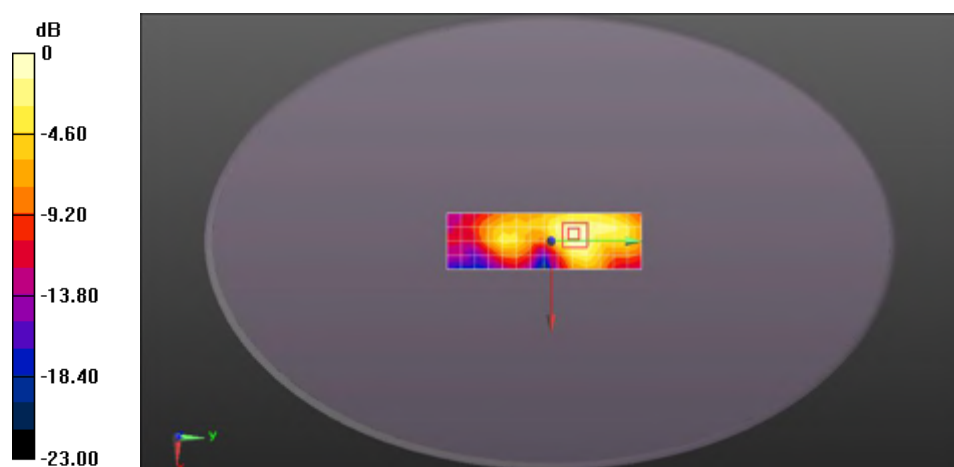
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.073 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.213 W/kg

SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.171 W/kg



0 dB = 0.171 W/kg = -7.67 dBW/kg

Date: 2019-06-21

Test Laboratory: Compliance Certification Services Inc.

LTE Band 41_20M QPSK 1RB 0Offset Ch40185 Right Cheek

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2549.5 MHz Duty Cycle: 1:1.57943

Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.937$ S/m; $\epsilon_r = 39.536$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.11, 7.11, 7.11); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.288 W/kg

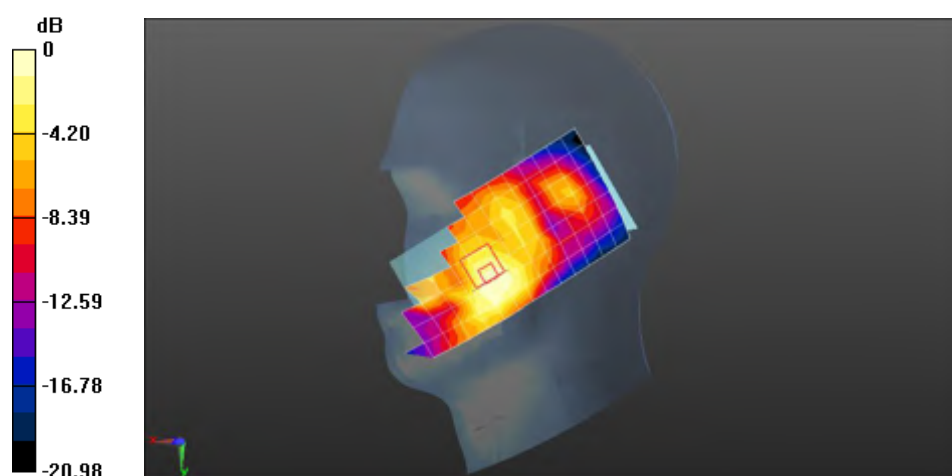
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.812 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.096 W/kg

Maximum value of SAR (measured) = 0.268 W/kg



0 dB = 0.268 W/kg = -5.72 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 41_20M QPSK 1RB 0Offset Ch40185 Front side 15mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.57943

Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.937$ S/m; $\epsilon_r = 39.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.11, 7.11, 7.11); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.0729 W/kg

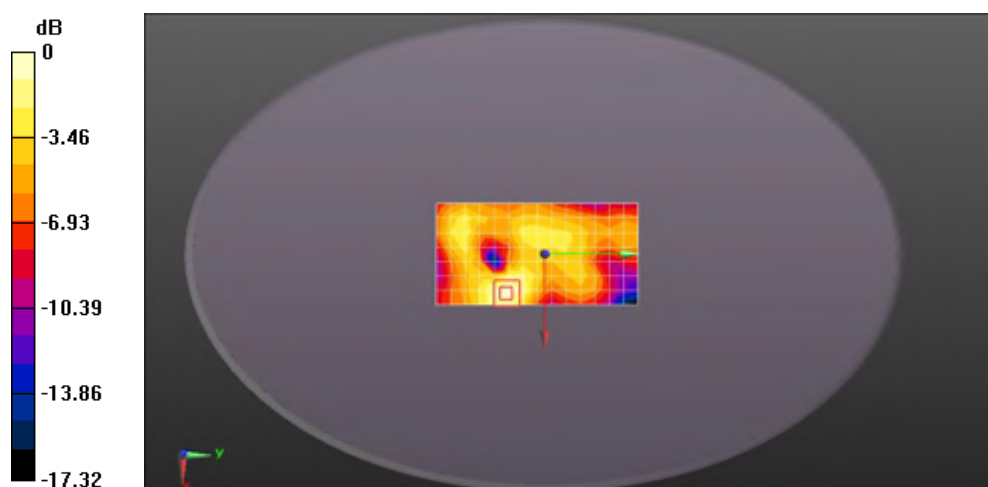
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.076 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0920 W/kg

SAR(1 g) = 0.054 W/kg; SAR(10 g) = 0.027 W/kg

Maximum value of SAR (measured) = 0.0761 W/kg



0 dB = 0.0761 W/kg = -11.19 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

LTE Band 41_20M QPSK 1RB 0Offset Ch40185 Right side 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, TDD_LTE (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.57943

Medium parameters used: $f = 2549.5$ MHz; $\sigma = 2.093$ S/m; $\epsilon_r = 52.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.09, 7.09, 7.09); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.302 W/kg

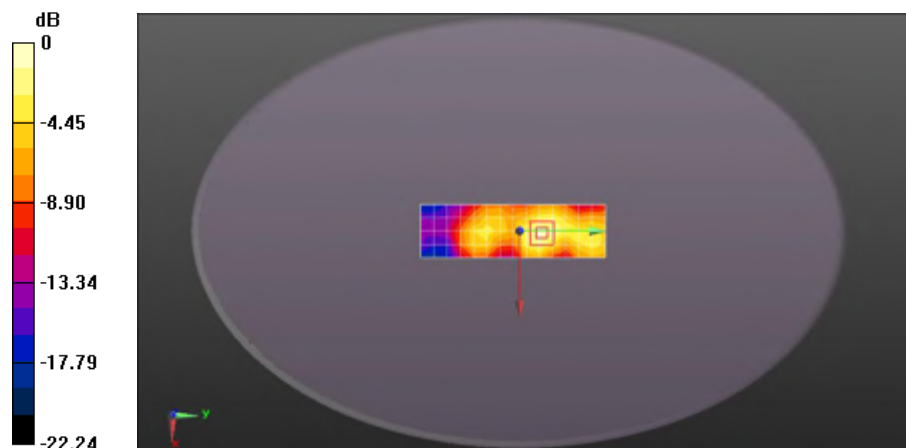
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.590 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.396 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.321 W/kg



0 dB = 0.321 W/kg = -4.93 dBW/kg

Date: 2019-06-21

Test Laboratory: Compliance Certification Services Inc.

WIFI 2.4G 802.11b 1Mbps Left cheek Ch11

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHzDuty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.842$ S/m; $\epsilon_r = 39.88$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.24, 7.24, 7.24); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.544 W/kg

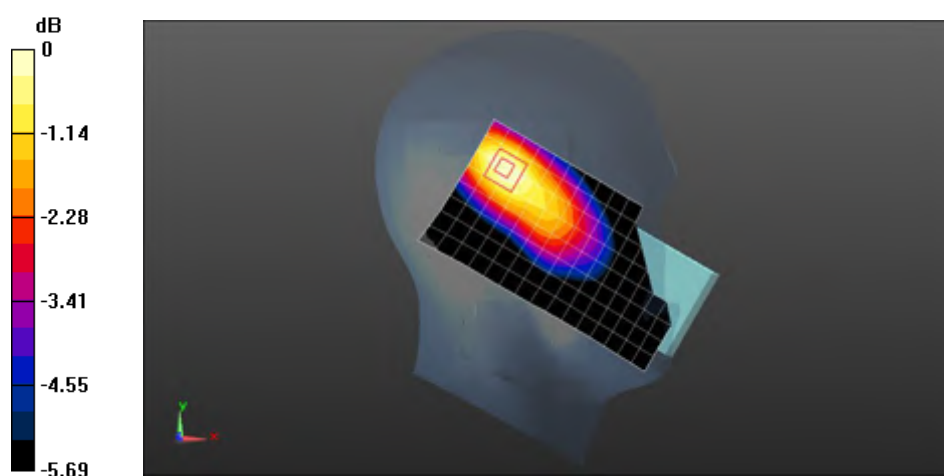
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 13.94 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.581 W/kg

SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.404 W/kg

Maximum value of SAR (measured) = 0.509 W/kg



0 dB = 0.509 W/kg = -2.93 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

WIFI 2.4G 802.11b 1Mbps Back side Ch11 0mm with Back Splint

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHzDuty Cycle: 1:1

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.987 \text{ S/m}$; $\epsilon_r = 52.675$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.37, 7.37, 7.37); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.0582 W/kg

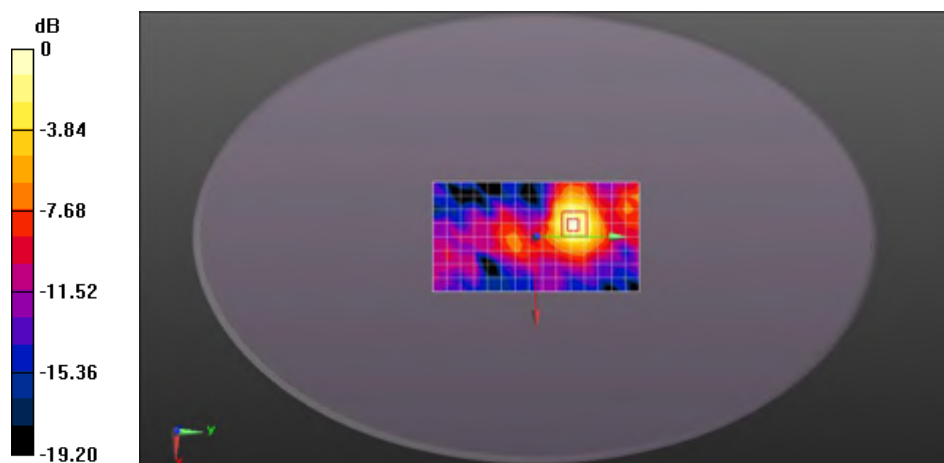
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.033 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.0770 W/kg

SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.020 W/kg

Maximum value of SAR (measured) = 0.0570 W/kg



0 dB = 0.0570 W/kg = -12.44 dBW/kg

Date: 2019-06-22

Test Laboratory: Compliance Certification Services Inc.

WIFI 2.4G 802.11b 1Mbps Right side Ch11 10mm

DUT: Multi-Mode Advanced Radio; Type: PDC680 UxB1; Serial: 0607RD1007

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHzDuty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.987$ S/m; $\epsilon_r = 52.675$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.37, 7.37, 7.37); Calibrated: 2019-05-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1245; Calibrated: 2019-05-21
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.0495 W/kg

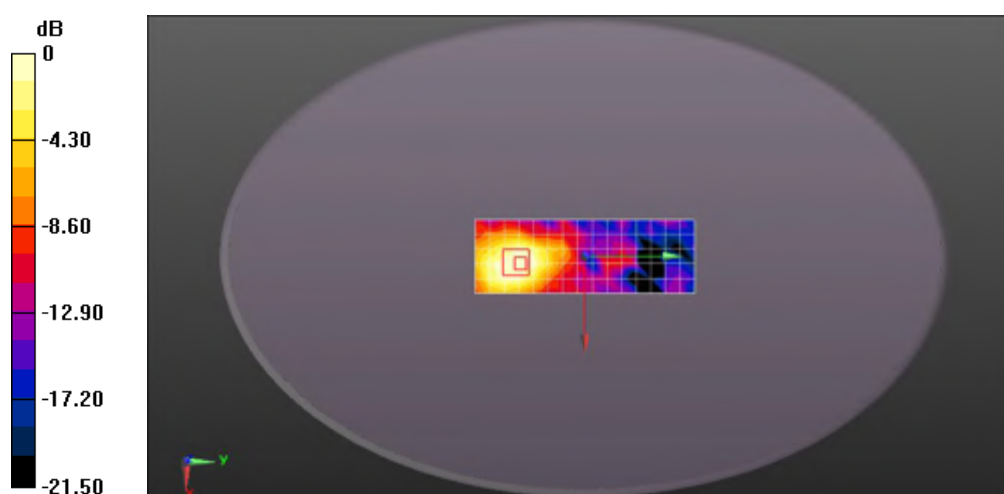
Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0.7290 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0580 W/kg

SAR(1 g) = 0.034 W/kg; SAR(10 g) = 0.018 W/kg

Maximum value of SAR (measured) = 0.0459 W/kg



0 dB = 0.0459 W/kg = -13.38 dBW/kg