

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1

Medium: 750 Head; Medium parameters used (interpolated):

$f = 793 \text{ MHz}$; $\sigma = 0.887 \text{ S/m}$; $\epsilon_r = 43.401$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 05/13/2020; Ambient Temp: 21.6°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 793 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 14, Left Head, Cheek, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

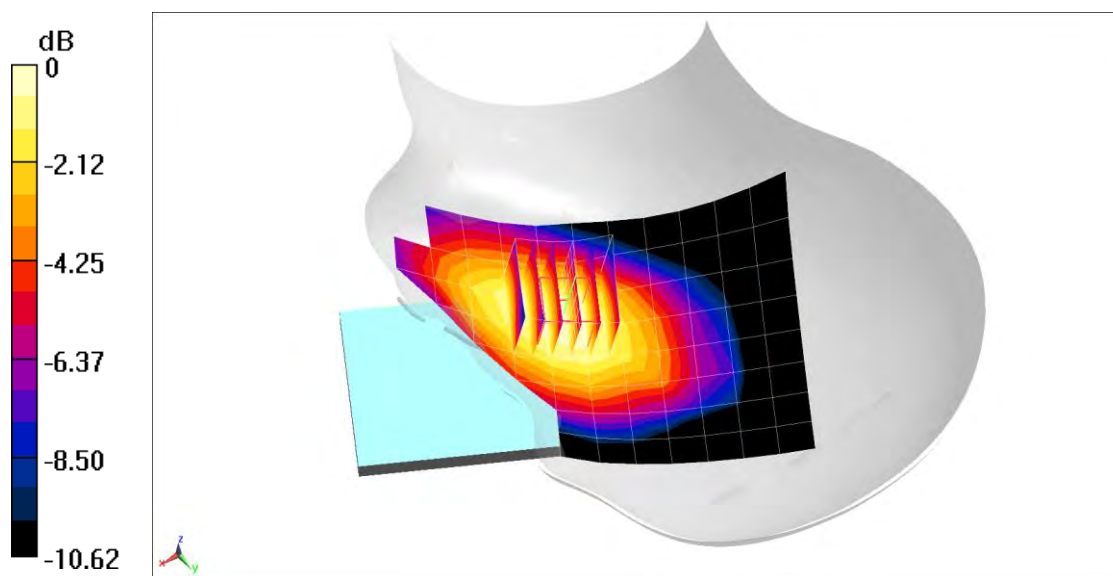
Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.05 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.206 W/kg

SAR(1 g) = 0.158 W/kg



0 dB = 0.188 W/kg = -7.26 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
 $f = 831.5 \text{ MHz}$; $\sigma = 0.872 \text{ S/m}$; $\epsilon_r = 41.956$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

Test Date: 05/06/2020; Ambient Temp: 21.3°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 831.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 26 (Cell.), Left Head, Cheek, Mid.ch
15 MHz Bandwidth, QPSK, 1 RB, 36 RB Offset

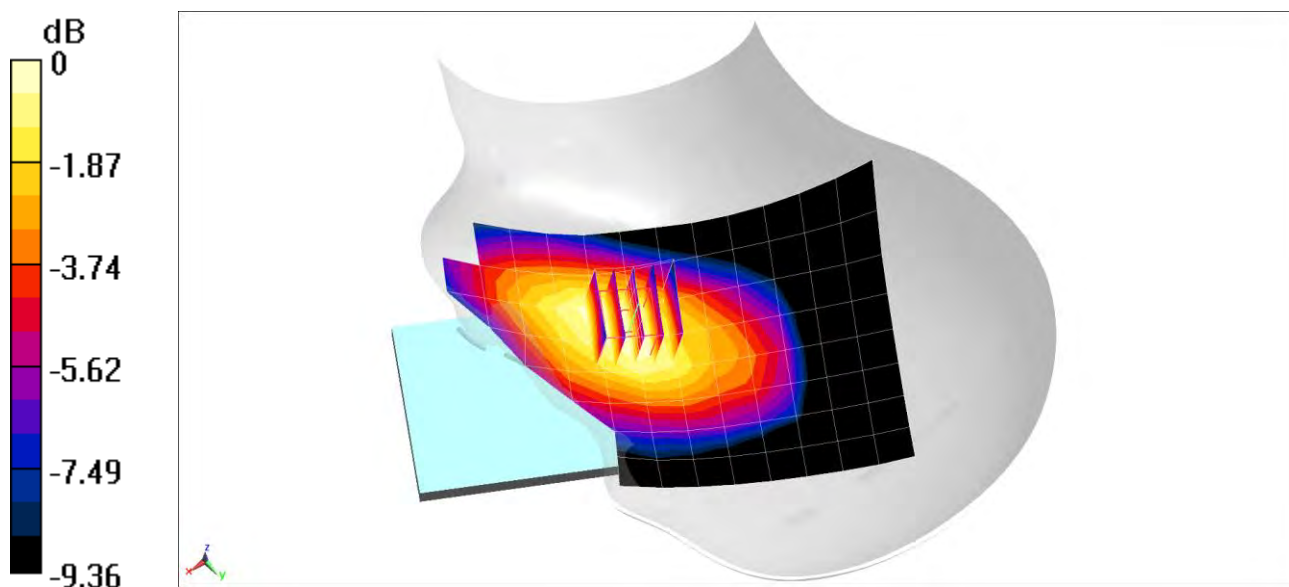
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.83 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.147 W/kg



0 dB = 0.175 W/kg = -7.57 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0086M

Communication System: UID 0, LTE Band 5 (Cell.); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.886$ S/m; $\epsilon_r = 40.617$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Test Date: 05/11/2020; Ambient Temp: 21.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.5 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 5 (Cell.), ULCA, Left Head, Cheek

PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset

SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset

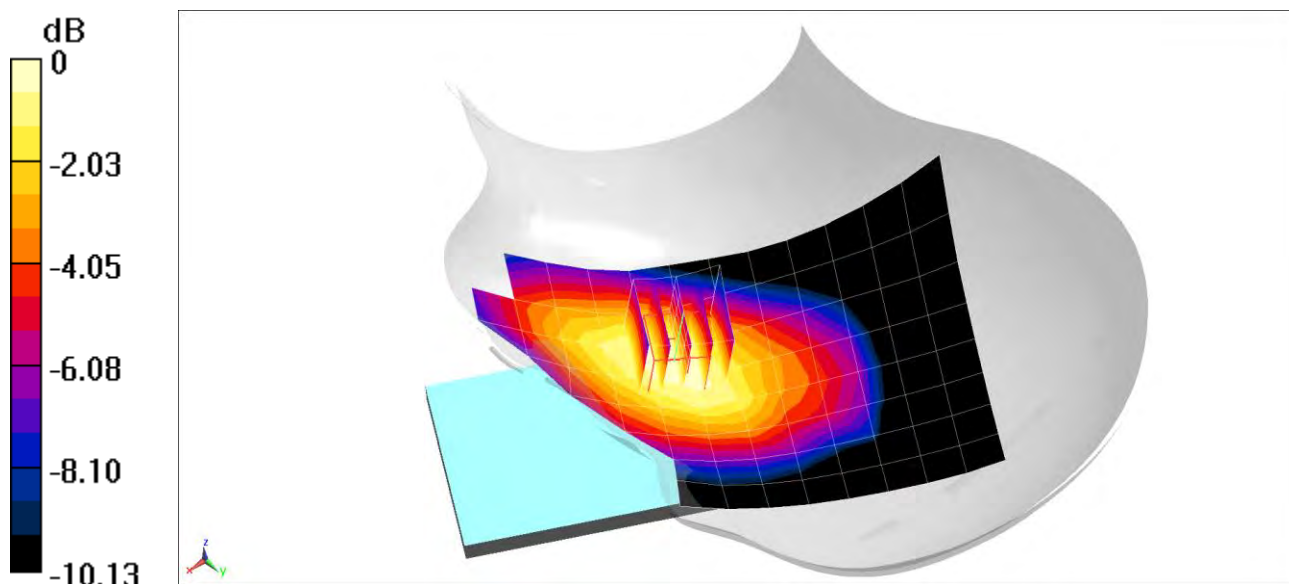
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 14.52 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.167 W/kg



0 dB = 0.200 W/kg = -6.99 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0071M

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1720$ MHz; $\sigma = 1.318$ S/m; $\epsilon_r = 40.656$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/13/2020; Ambient Temp: 23.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(8.46, 8.46, 8.46) @ 1720 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 66 (AWS), CA_66C ULCA, Right Head, Cheek

PCC: 20 MHz Bandwidth, Ch. 132072, QPSK, 1 RB, 99 RB Offset

SCC: 20 MHz Bandwidth, Ch. 132270, QPSK, 1 RB, 0 RB Offset

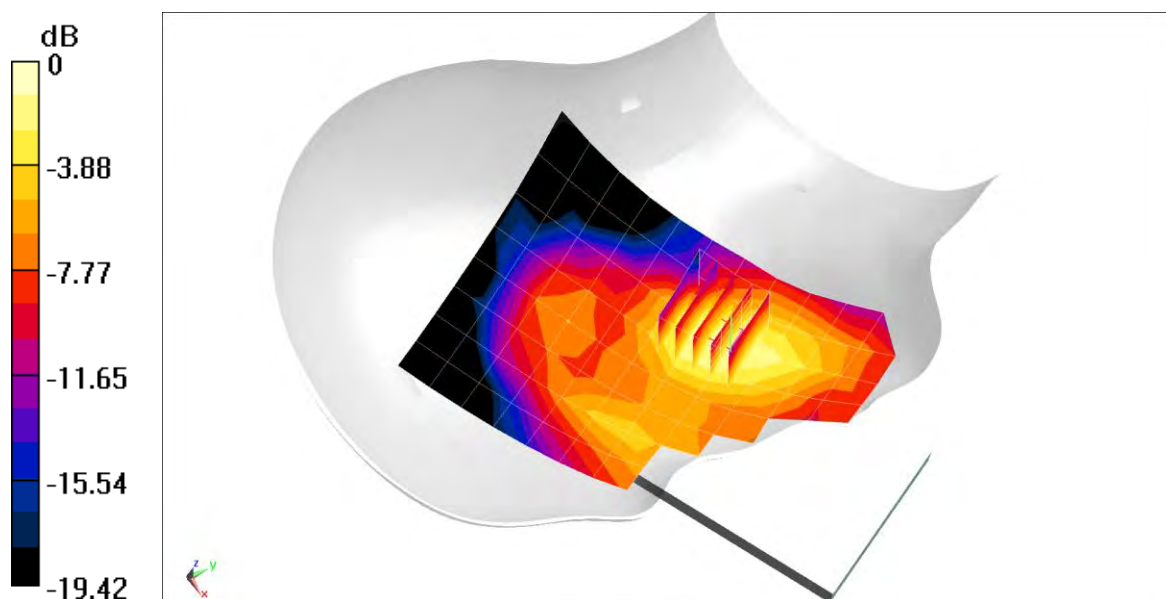
Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 10.62 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.199 W/kg

SAR(1 g) = 0.131 W/kg



0 dB = 0.169 W/kg = -7.72 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0121M

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1860$ MHz; $\sigma = 1.426$ S/m; $\epsilon_r = 40.998$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1860 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Right Head, Cheek, Low.ch
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset

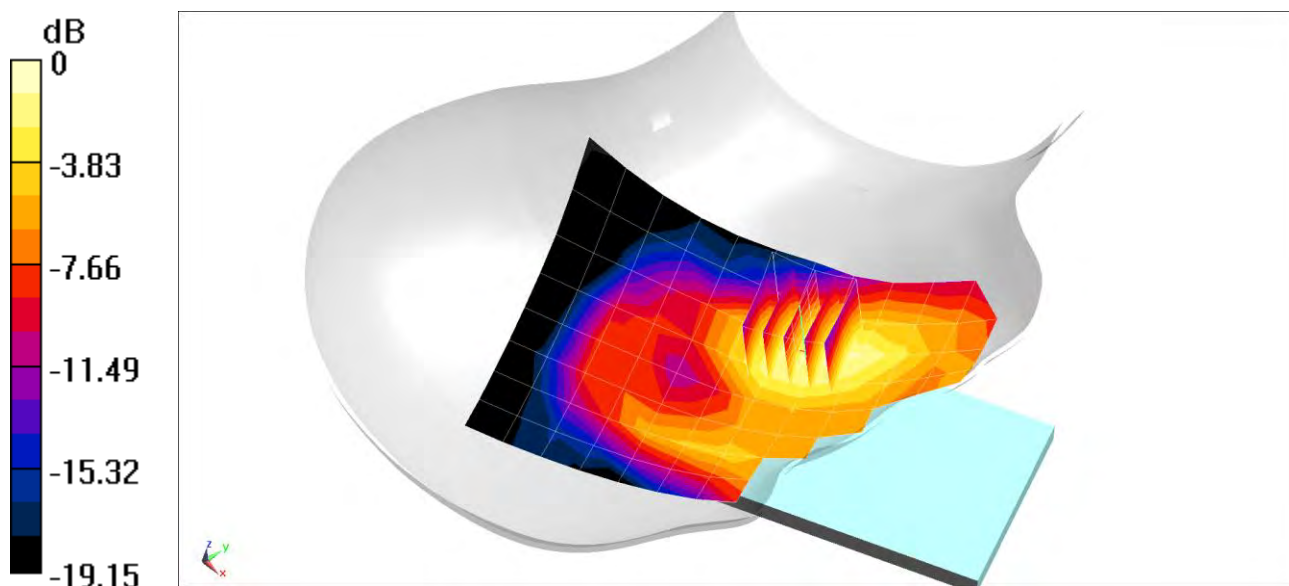
Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 9.398 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.166 W/kg

SAR(1 g) = 0.111 W/kg



0 dB = 0.147 W/kg = -8.33 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2310$ MHz; $\sigma = 1.689$ S/m; $\epsilon_r = 39.976$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Test Date: 04/29/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN3589; ConvF(7.11, 7.11, 7.11) @ 2310 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 30, Left Head, Cheek, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 49 RB Offset

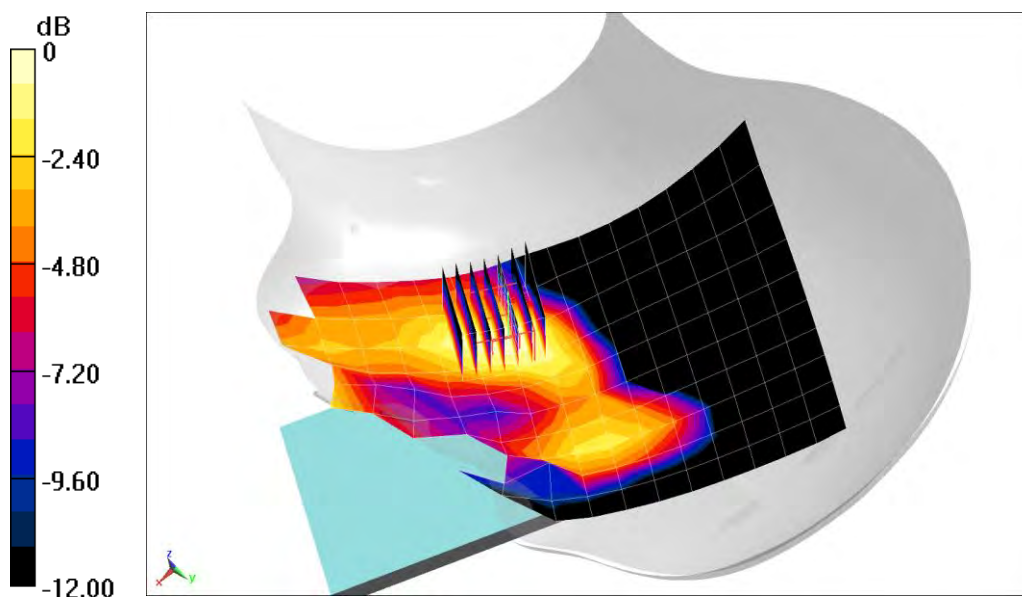
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 6.239 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.0850 W/kg

SAR(1 g) = 0.050 W/kg



0 dB = 0.0735 W/kg = -11.34 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0090M

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used:

$f = 2510$ MHz; $\sigma = 1.843$ S/m; $\epsilon_r = 38.311$; $\rho = 1000$ kg/m³

Phantom section: Right Section; Space: 1.0 cm

Test Date: 05/03/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2510 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 7, Right Head, Cheek, Low.ch
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

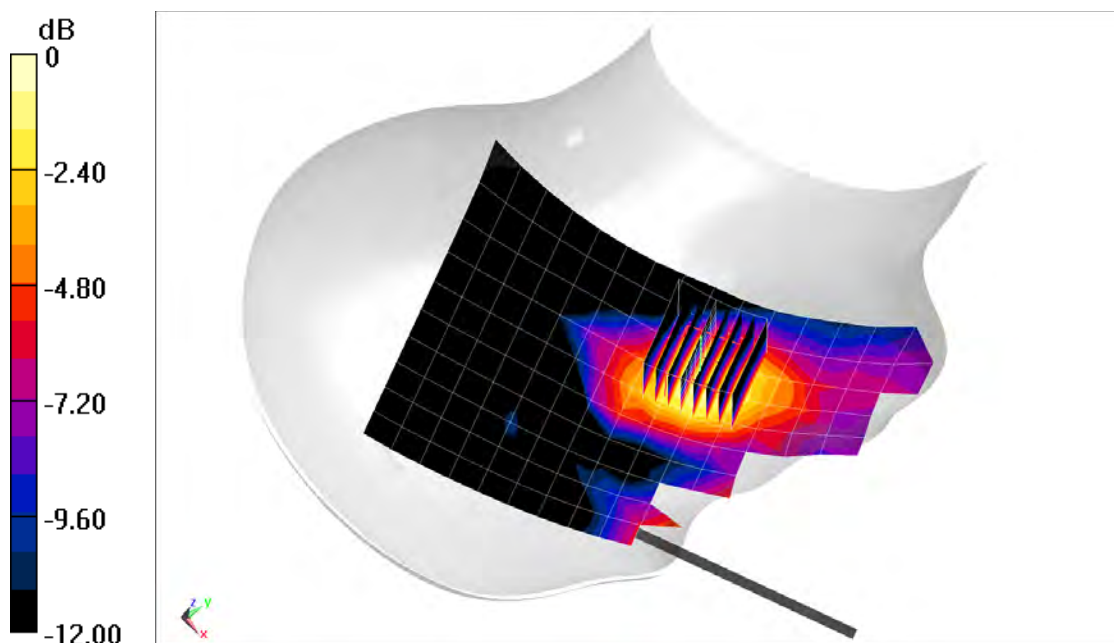
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.590 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.187 W/kg

SAR(1 g) = 0.106 W/kg



0 dB = 0.154 W/kg = -8.12 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1184M

Communication System: UID 0, LTE Band 48; Frequency: 3646.7 MHz; Duty Cycle: 1:1.58

Medium: 3600 Head; Medium parameters used (interpolated):

$f = 3646.7 \text{ MHz}$; $\sigma = 3.039 \text{ S/m}$; $\epsilon_r = 39.459$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 06/01/2020; Ambient Temp: 22.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(7.2, 7.2, 7.2) @ 3646.7 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 left 20; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 48, ULCA, Right Head, Tilt

PCC: 20 MHz Bandwidth, Ch. 56207, QPSK, 50 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 56009, QPSK, 50 RB, 50 RB Offset

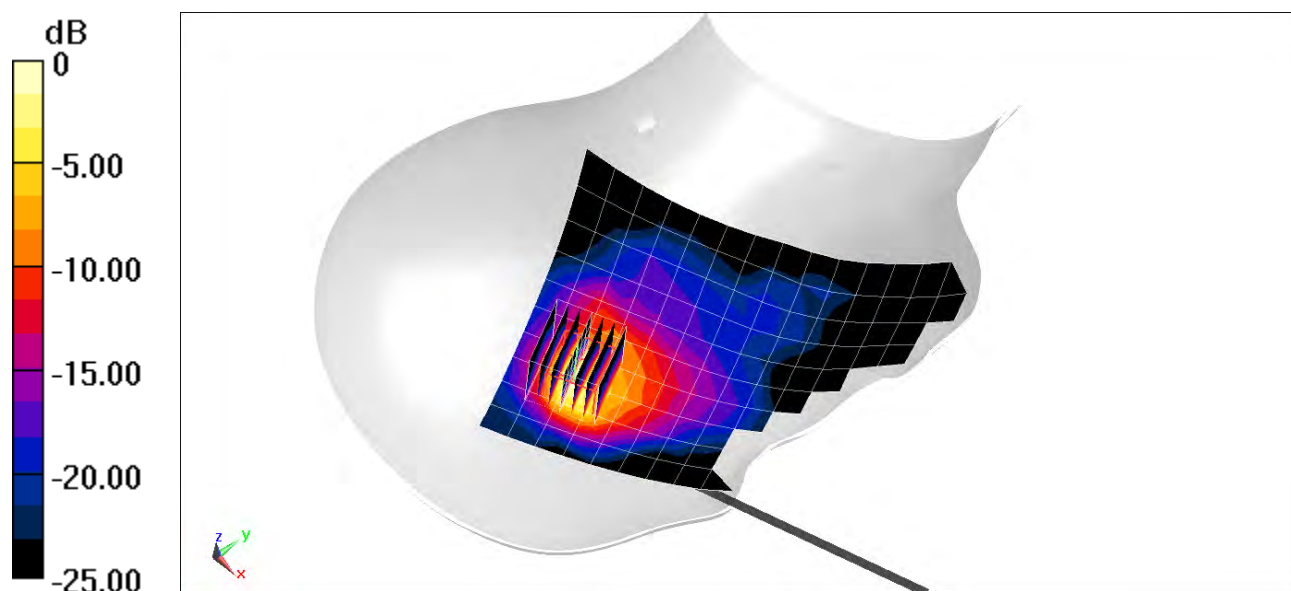
Area Scan (11x17x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Reference Value = 14.75 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.479 W/kg



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

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0085M

Communication System: UID 0, _LTE Band 41 (Class 2); Frequency: 2506 MHz; Duty Cycle: 1:2.31

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2506 \text{ MHz}$; $\sigma = 1.822 \text{ S/m}$; $\epsilon_r = 40.001$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 05/24/2020; Ambient Temp: 23.2°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2506 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 41 PC2, ULCA, Left Head, Cheek

PCC: 20 MHz Bandwidth, Ch. 39750, QPSK, 1 RB, 99 RB Offset

SCC: 20 MHz Bandwidth, Ch. 39948, QPSK, 1 RB, 0 RB Offset

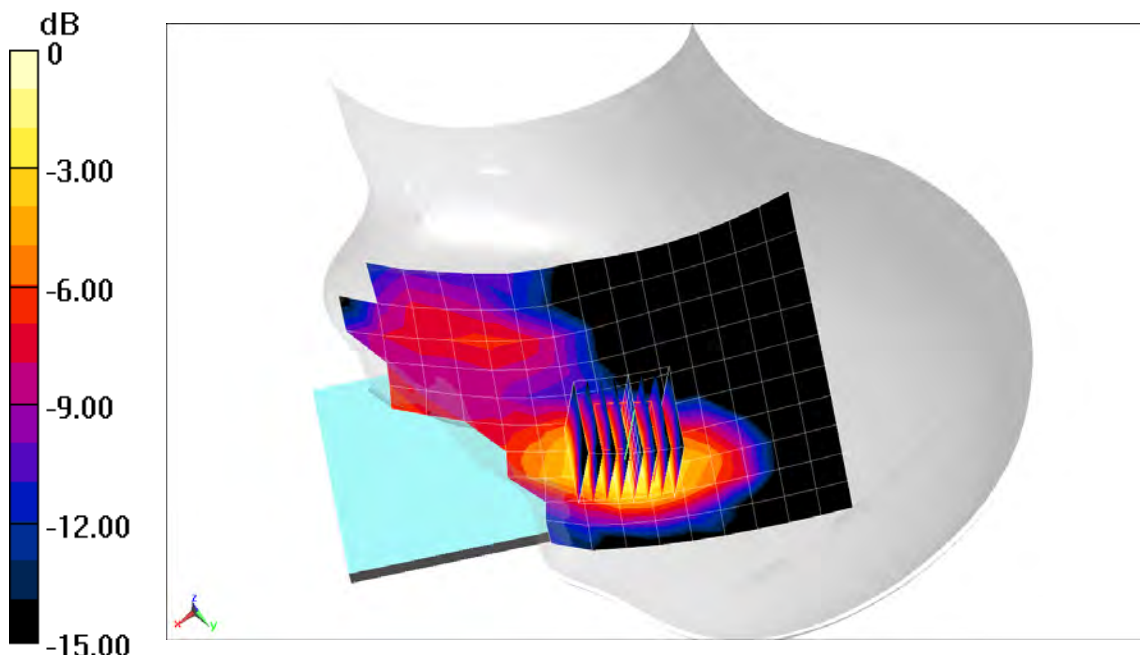
Area Scan (11x17x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.036 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 0.133 W/kg

SAR(1 g) = 0.077 W/kg



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

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0070M

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Head; Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$; $\sigma = 0.884 \text{ S/m}$; $\epsilon_r = 42.697$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 05/17/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 680.5 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n71, Left Head, Cheek, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 136100, 1 RB, 53 RB Offset

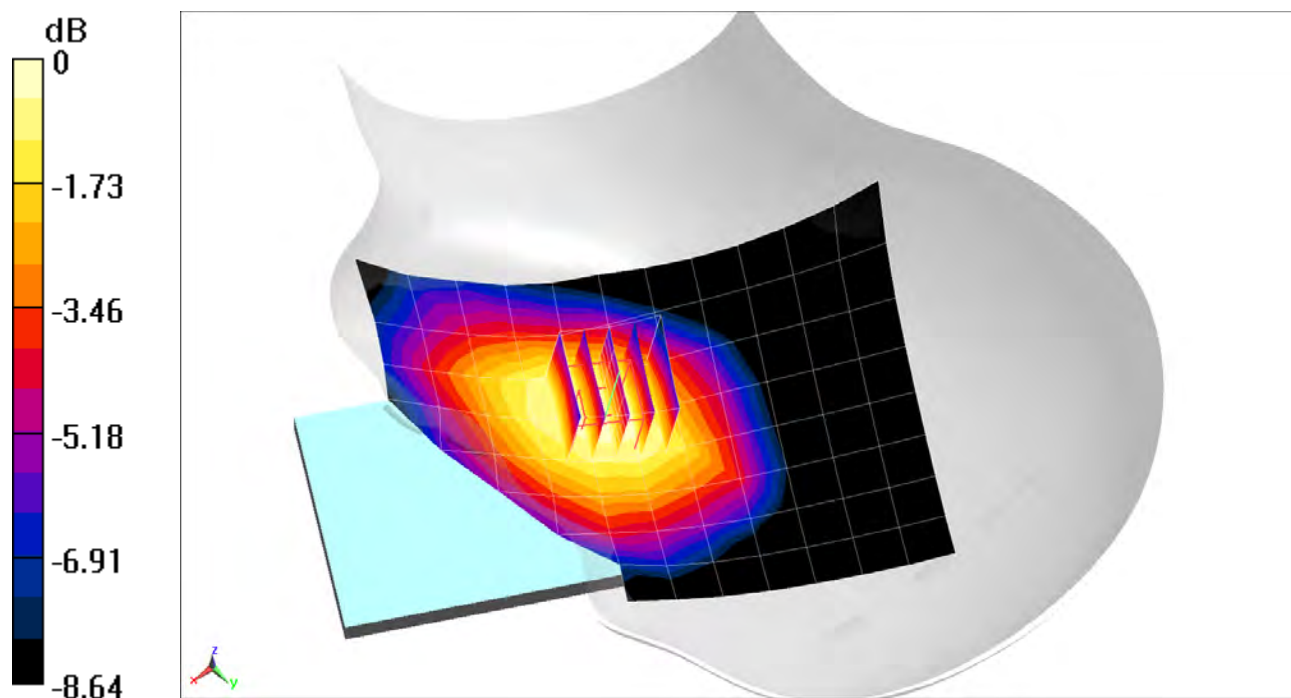
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.35 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.112 W/kg



0 dB = 0.132 W/kg = -8.79 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0095M

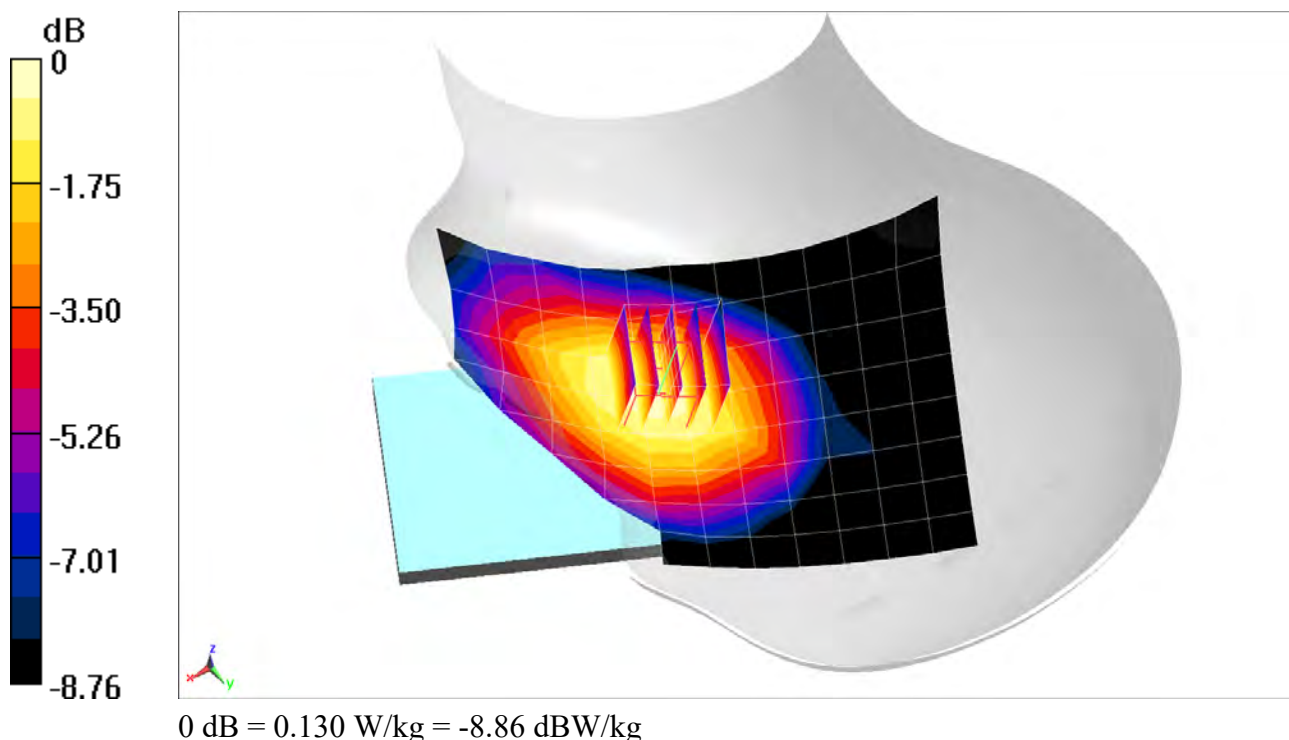
Communication System: UID 0, NR Band n12; Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
 $f = 707.5 \text{ MHz}$; $\sigma = 0.86 \text{ S/m}$; $\epsilon_r = 41.689$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

Test Date: 05/20/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 707.5 MHz; Calibrated: 1/21/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1558; Calibrated: 1/13/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n12, Left Head, Cheek, 15 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 141500, 1 RB, 77 RB Offset

Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.51 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.141 W/kg
SAR(1 g) = 0.110 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0089M

Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.907$ S/m; $\epsilon_r = 40.97$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Test Date: 05/13/2020; Ambient Temp: 21.5°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.5 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n5, Left Head, Cheek, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 167300, 1 RB, 53 RB Offset

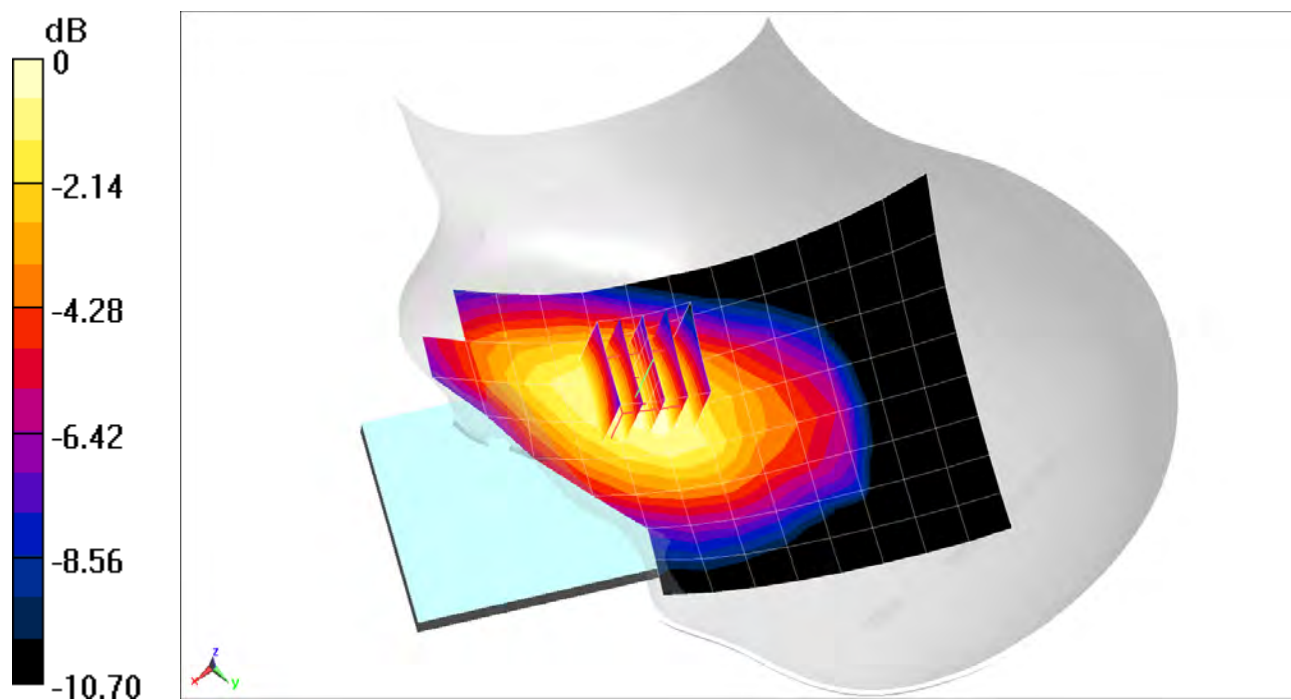
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 13.87 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.161 W/kg



0 dB = 0.196 W/kg = -7.08 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0066M

Communication System: UID 0, NR Band n66; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1720$ MHz; $\sigma = 1.318$ S/m; $\epsilon_r = 40.656$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/13/2020; Ambient Temp: 23.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(8.46, 8.46, 8.46) @ 1720 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n66, Right Head, Cheek, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 344000, 50 RB, 28 RB Offset

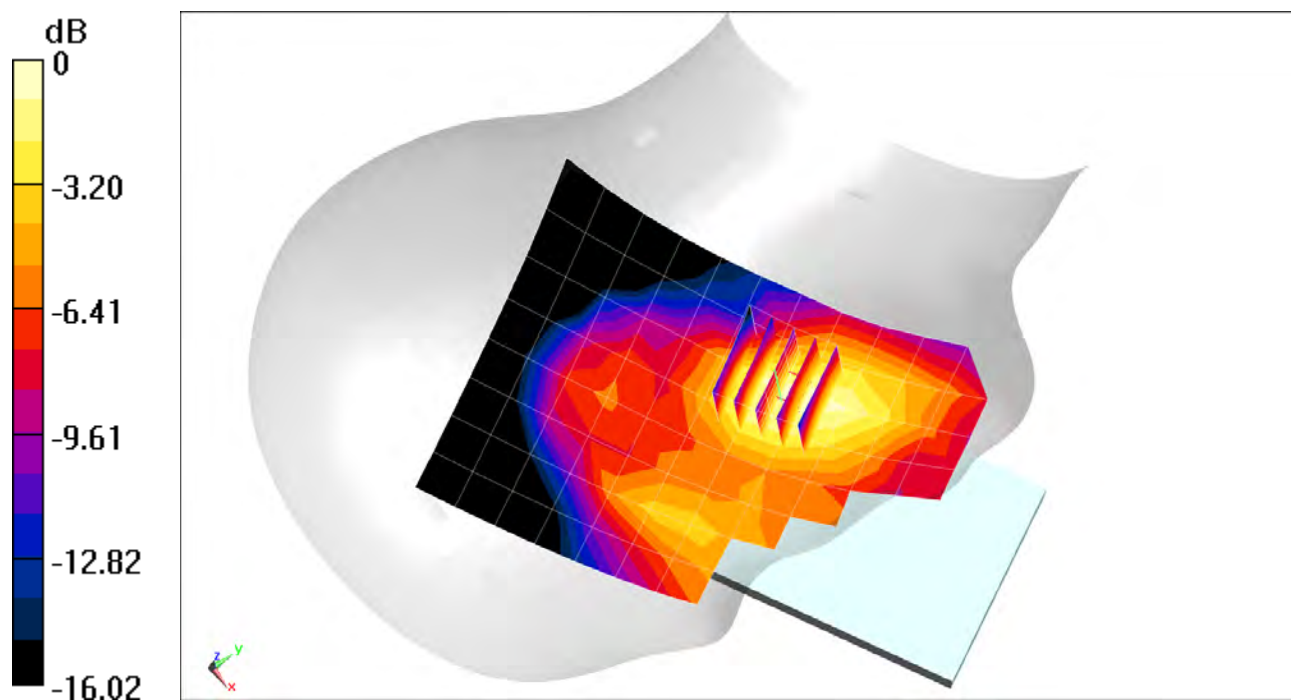
Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 10.22 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 0.180 W/kg

SAR(1 g) = 0.120 W/kg



0 dB = 0.154 W/kg = -8.12 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0065M

Communication System: UID 0, NR Band n25; Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1905 \text{ MHz}$; $\sigma = 1.453 \text{ S/m}$; $\epsilon_r = 40.952$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1905 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n25, Right Head, Cheek, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 381000, 50 RB, 28 RB Offset

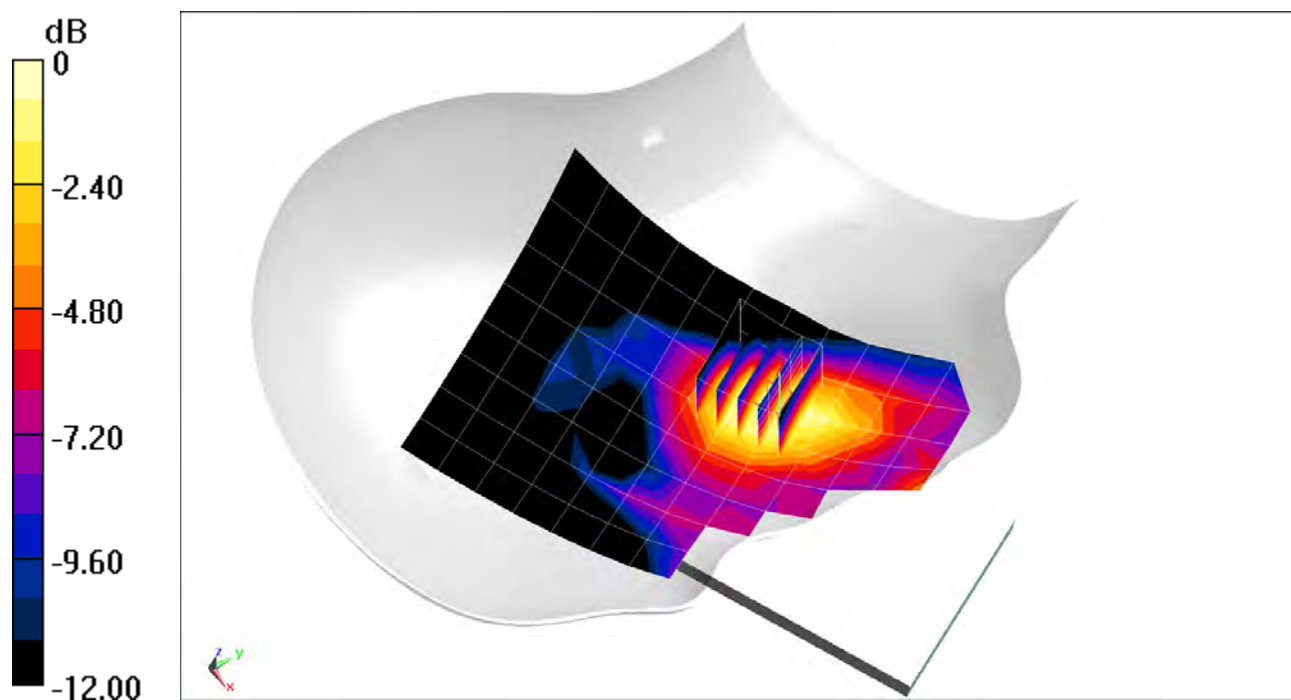
Area Scan (9x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.22 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.197 W/kg

SAR(1 g) = 0.129 W/kg



0 dB = 0.169 W/kg = -7.72 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1187M

Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2592.99$ MHz; $\sigma = 1.894$ S/m; $\epsilon_r = 40.482$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/31/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3589; ConvF(6.6, 6.6, 6.6) @ 2592.99 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n41, Right Head, Tilt, 100 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 518598, 1 RB, 1 RB Offset**

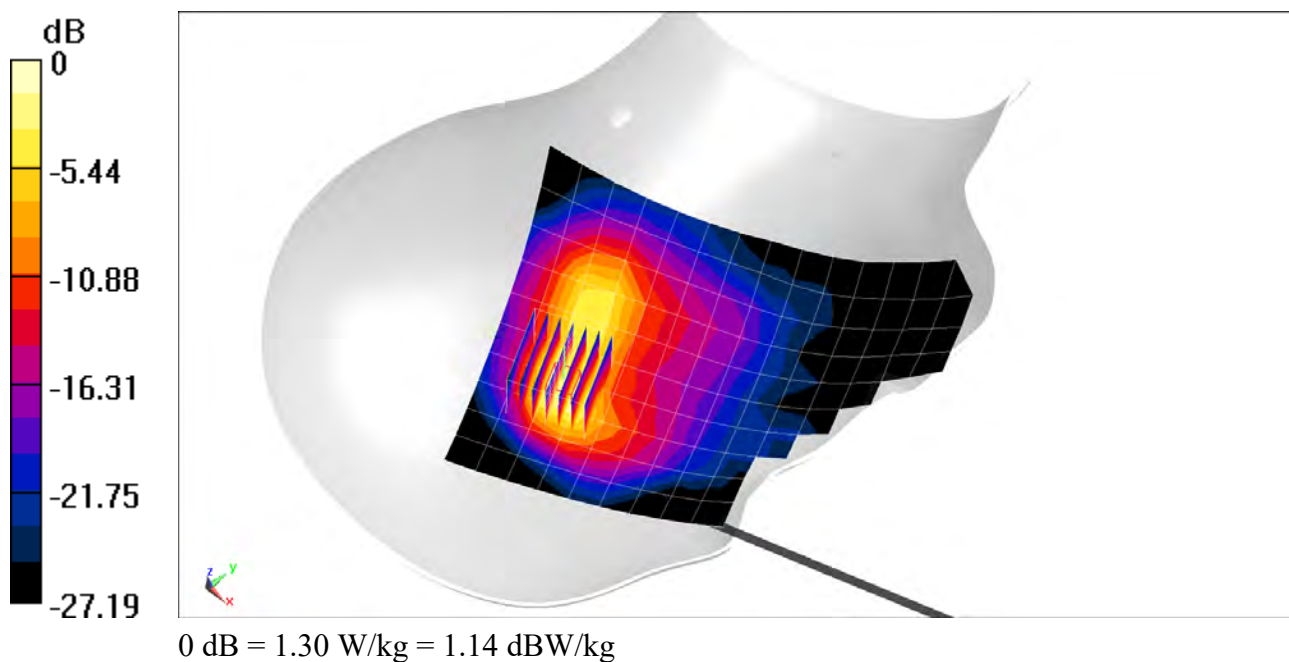
Area Scan (11x16x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 22.55 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.682 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0704M

Communication System: UID 0, 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2437 \text{ MHz}$; $\sigma = 1.783 \text{ S/m}$; $\epsilon_r = 39.55$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2437 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Antenna 1,
Right Head, Tilt, Ch 6, 1 Mbps**

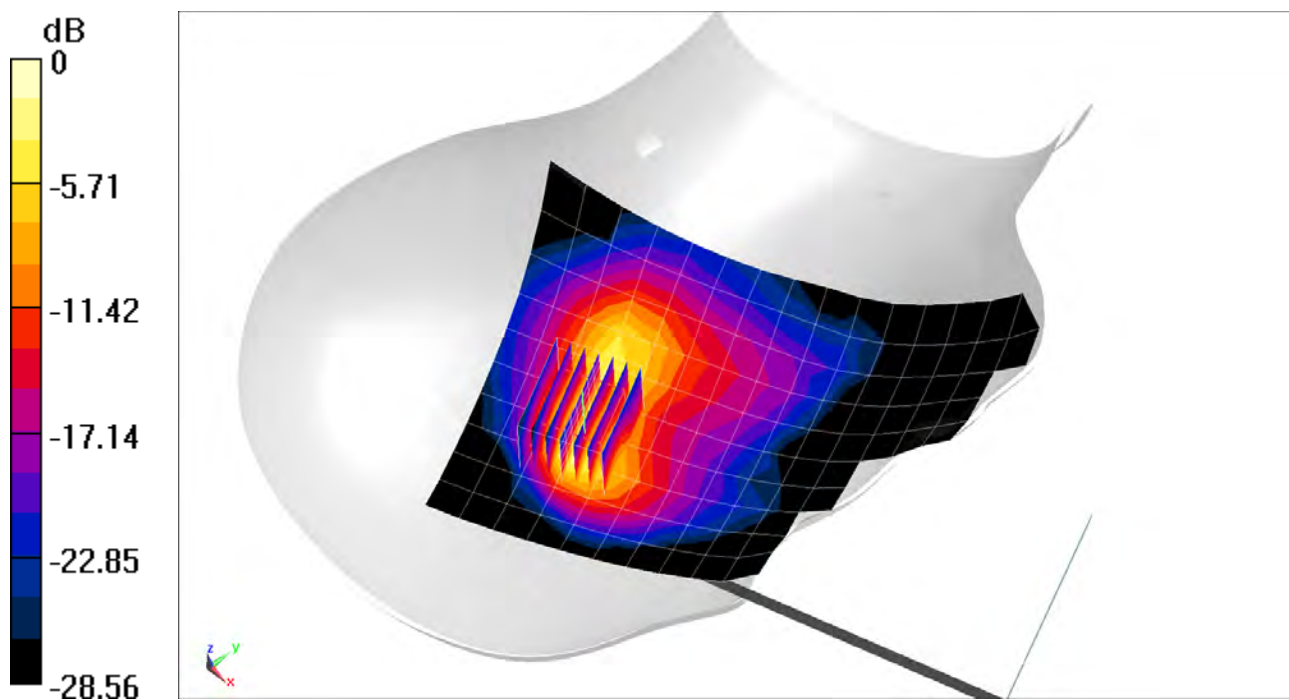
Area Scan (11x18x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (8x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.56 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 0.786 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0704M

Communication System: UID 0, IEEE 802.11ac; Frequency: 5775 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head; Medium parameters used:

$f = 5775$ MHz; $\sigma = 5.267$ S/m; $\epsilon_r = 33.975$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/28/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7357; ConvF(5.05, 5.05, 5.05) @ 5775 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: IEEE 802.11ac, U-NII-3, 80 MHz Bandwidth, Antenna 1
Right Head, Cheek, Ch 155, 29.3 Mbps

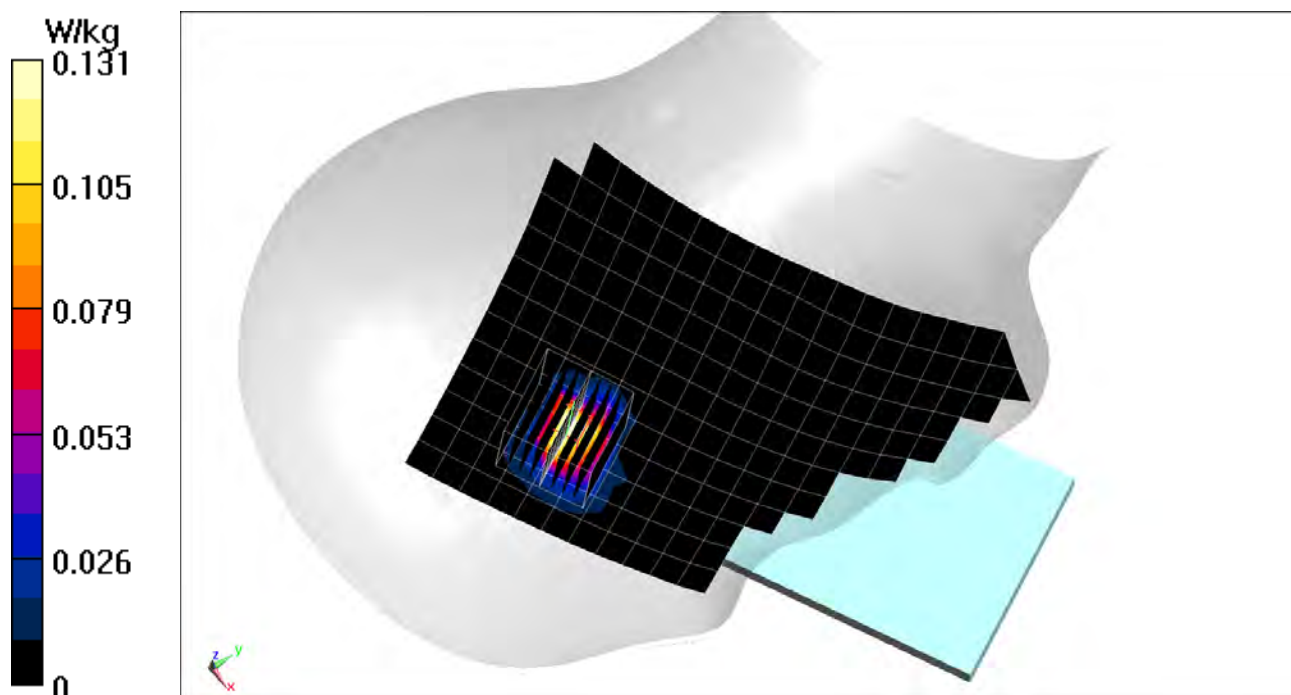
Area Scan (13x21x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 2.64 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.440 W/kg

SAR(1 g) = 0.039 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1175M

Communication System: UID 0, Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.294

Medium: 2450 Head; Medium parameters used:

$f = 2480$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.486$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2480 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: Bluetooth, Right Head, Tilt, Ch 78, 1 Mbps

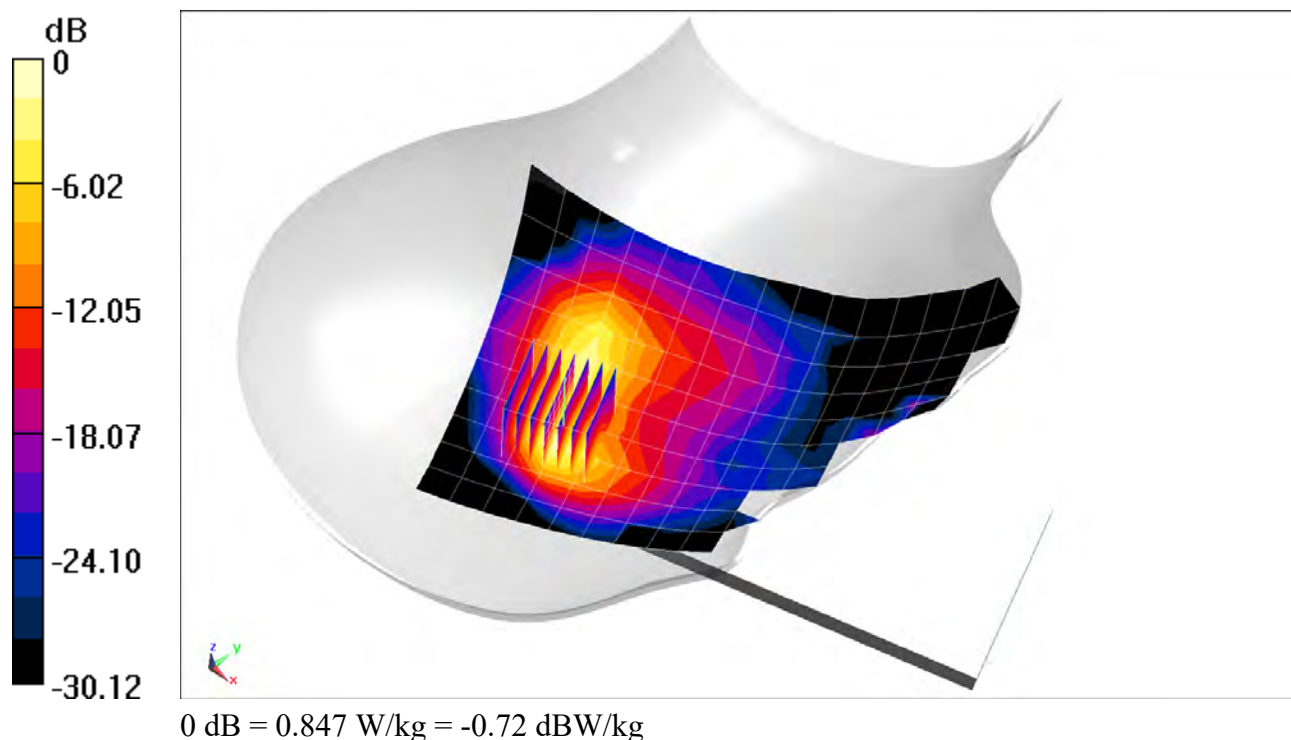
Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 15.12 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.432 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 820.1$ MHz; $\sigma = 0.929$ S/m; $\epsilon_r = 53.581$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 820.1 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. CDMA, Rule Part 90S, Body SAR, Back side, Mid.ch

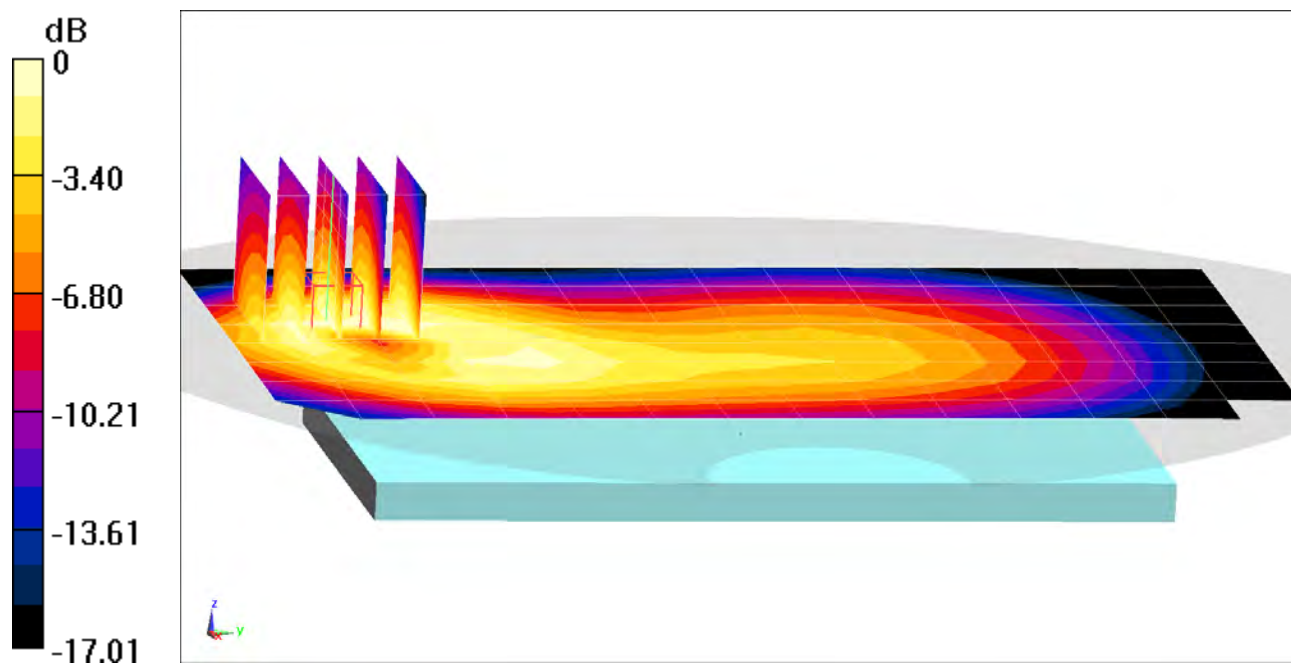
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 20.11 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.580 W/kg

SAR(1 g) = 0.349 W/kg



0 dB = 0.488 W/kg = -3.12 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 820.1$ MHz; $\sigma = 0.945$ S/m; $\epsilon_r = 54.644$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/13/2020; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 820.1 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: Cell. EVDO, Rule Part 90S, Body SAR, Back side, Mid.ch

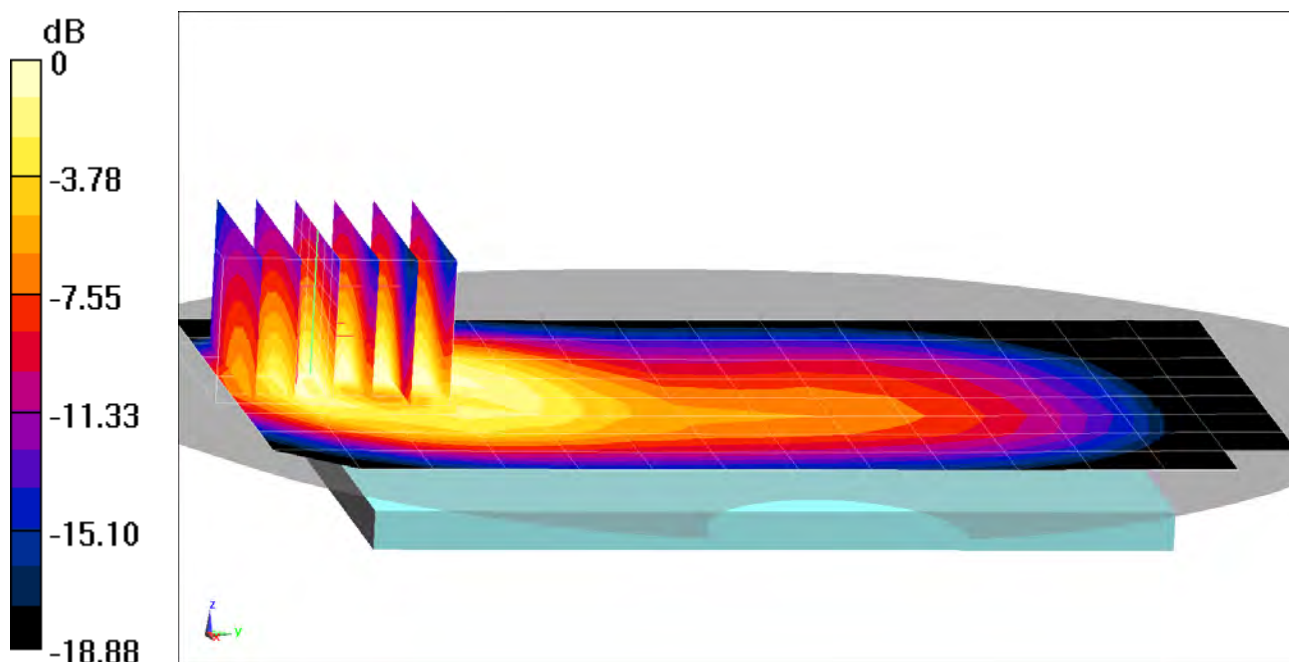
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.63 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.799 W/kg



0 dB = 1.12 W/kg = 0.49 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.52$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.414$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.52 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. CDMA, Rule Part 22H, Body SAR, Back side, Mid.ch

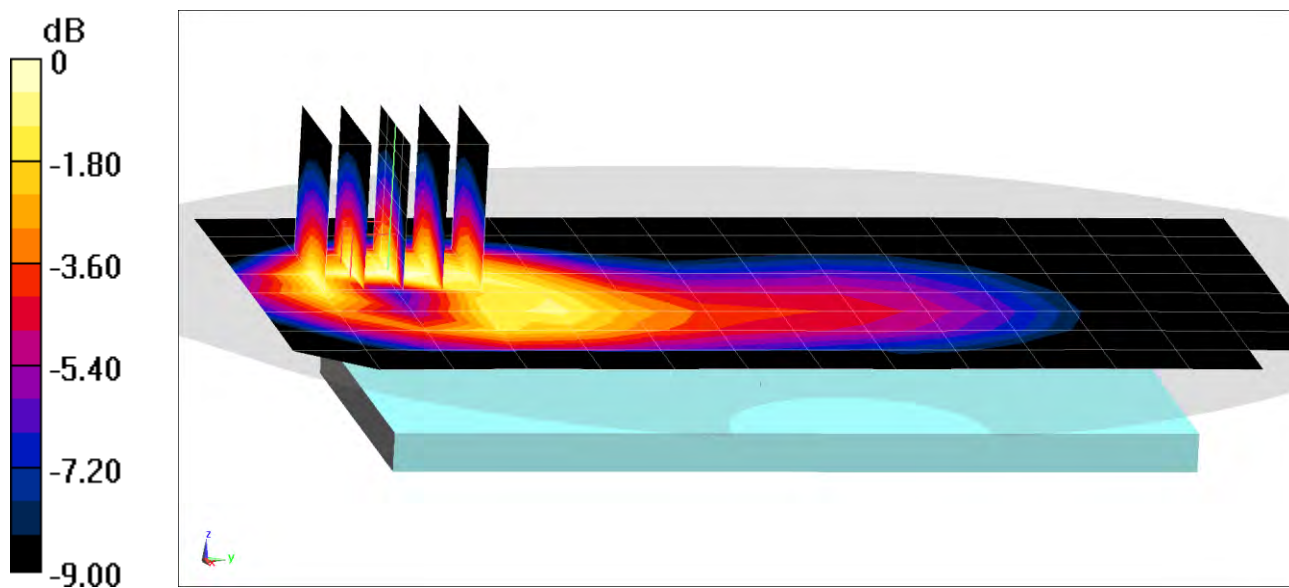
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.37 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.558 W/kg

SAR(1 g) = 0.335 W/kg



0 dB = 0.467 W/kg = -3.31 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.52$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.414$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.52 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. EVDO, Rule Part 22H, Body SAR, Back side, Mid.ch

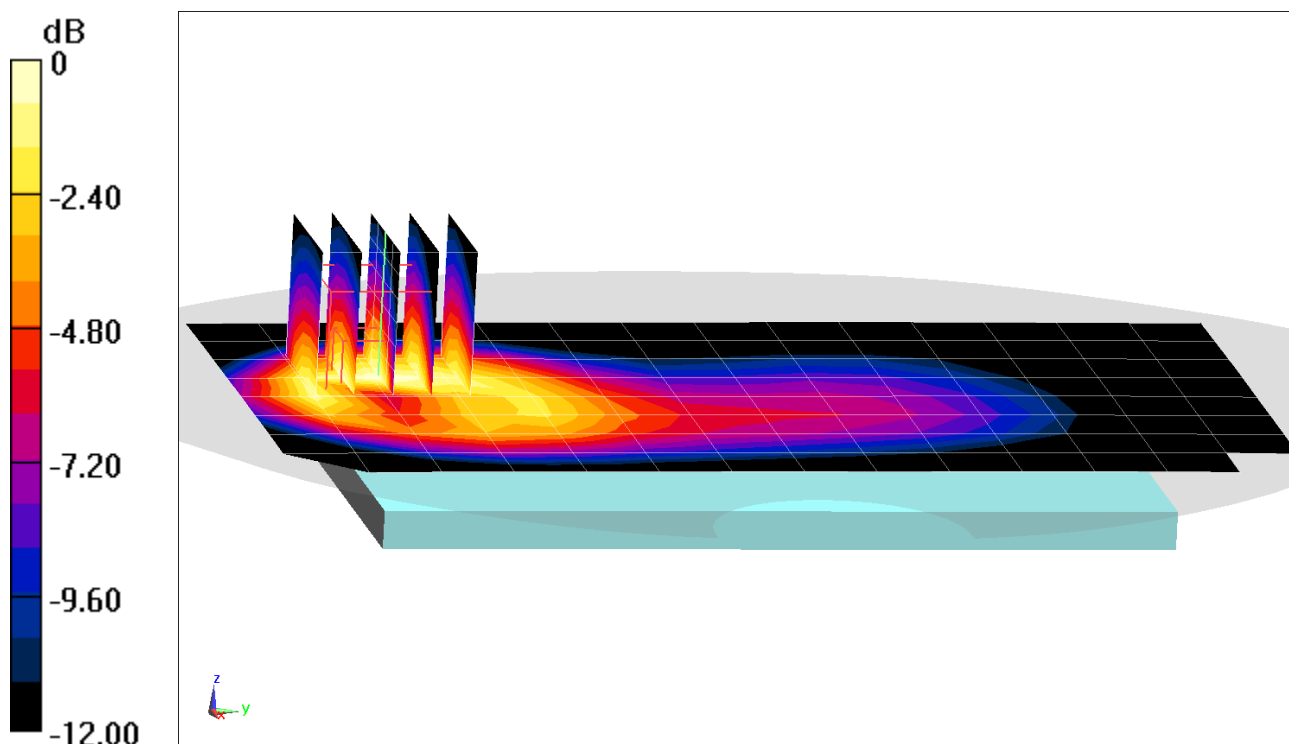
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 26.76 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.641 W/kg



0 dB = 0.921 W/kg = -0.36 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, CDMA; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1908.75$ MHz; $\sigma = 1.555$ S/m; $\epsilon_r = 54.587$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/17/2020; Ambient Temp: 22.5°C; Tissue Temp: 24.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1908.75 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: PCS CDMA, Body SAR, Back side, High.ch

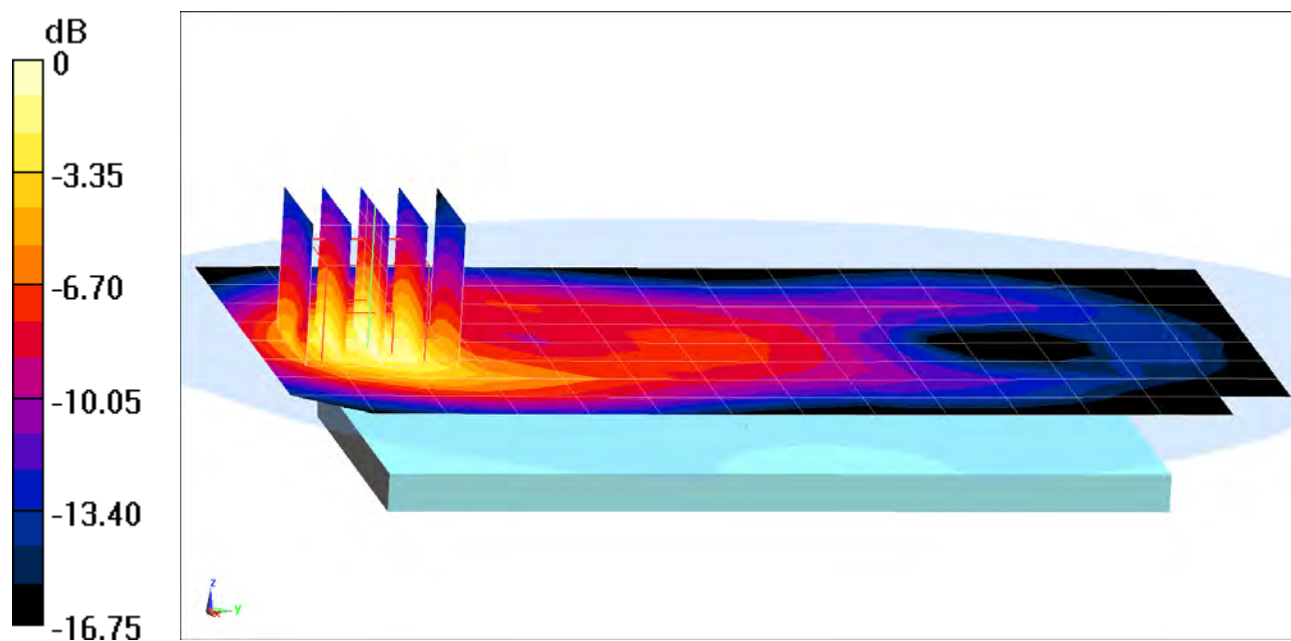
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.76 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.656 W/kg



0 dB = 0.926 W/kg = -0.33 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, CDMA; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1908.75$ MHz; $\sigma = 1.569$ S/m; $\epsilon_r = 52.998$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/26/2020; Ambient Temp: 24.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1908.75 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: PCS EVDO, Body SAR, Bottom Edge, High.ch

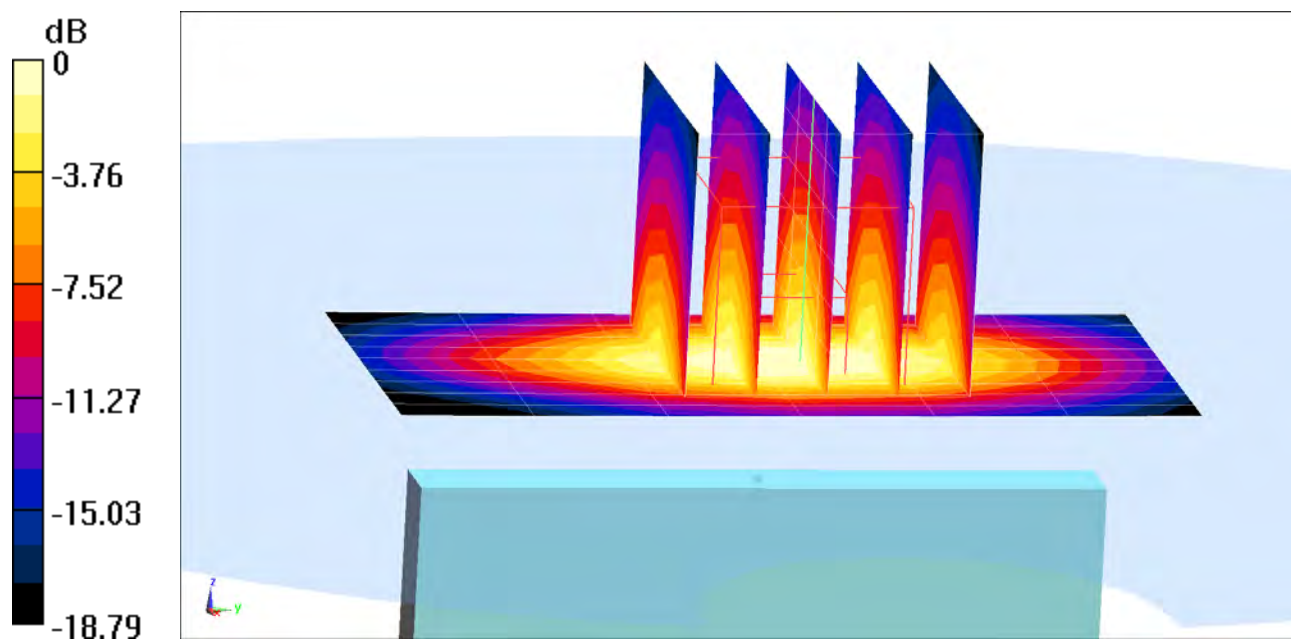
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 27.76 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 1.08 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.6 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GSM 850, Body SAR, Back side, Mid.ch

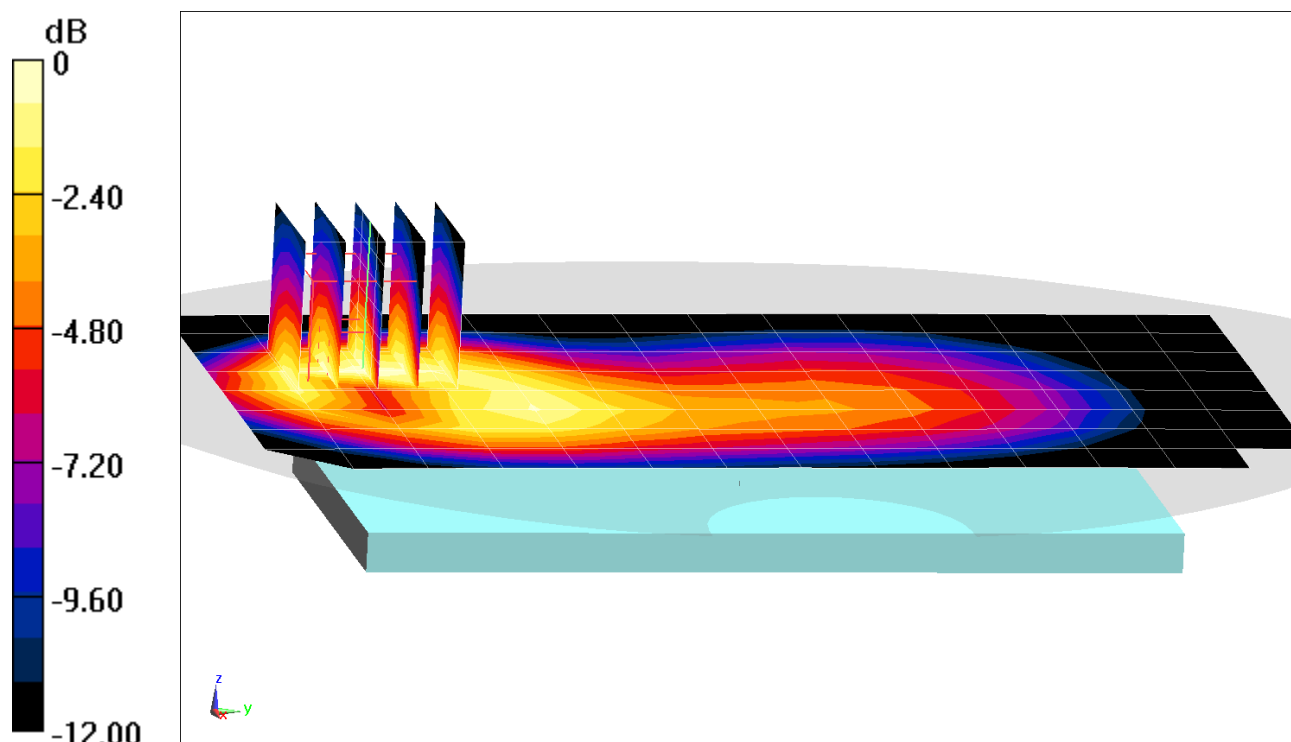
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 16.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.391 W/kg

SAR(1 g) = 0.238 W/kg



0 dB = 0.332 W/kg = -4.79 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, _GSM GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.6 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GPRS 850, Body SAR, Back side, Mid.ch, 3 Tx Slots

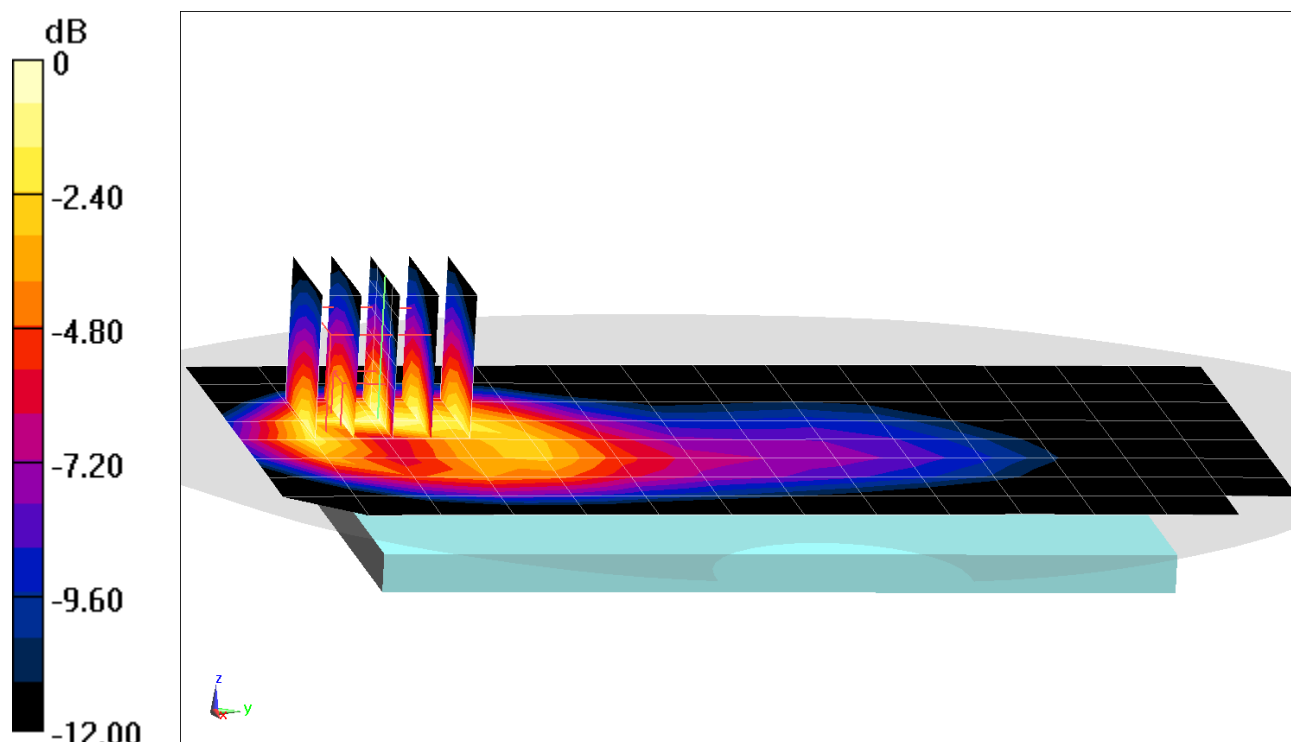
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.07 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.668 W/kg



0 dB = 0.959 W/kg = -0.18 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: 1900 Body; Medium parameters used:

$f = 1880$ MHz; $\sigma = 1.526$ S/m; $\epsilon_r = 53.339$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/10/2020; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1880 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: GSM 1900, Body SAR, Back side, Mid.ch

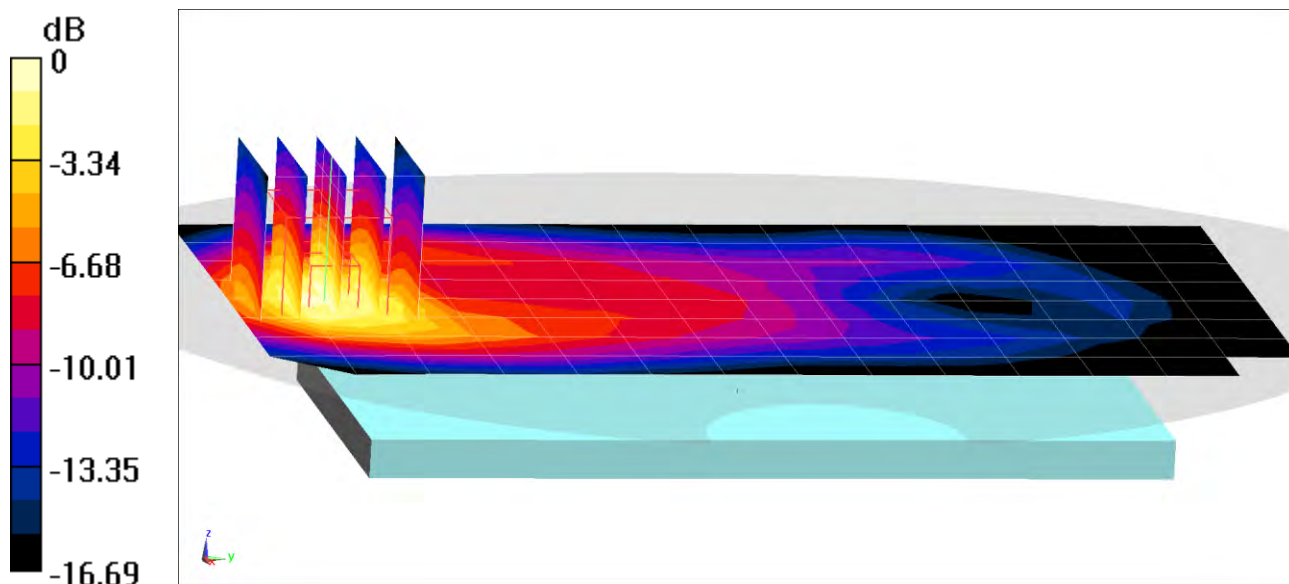
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.67 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.536 W/kg

SAR(1 g) = 0.334 W/kg



0 dB = 0.467 W/kg = -3.31 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, GSM GPRS; 4 Tx slots; Frequency: 1909.8 MHz; Duty Cycle: 1:2.076

Medium: 1900 Body; Medium parameters used:

$f = 1910 \text{ MHz}$; $\sigma = 1.56 \text{ S/m}$; $\epsilon_r = 53.267$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/10/2020; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1909.8 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: GPRS 1900, Body SAR, Bottom Edge, High.ch, 4 Tx Slots

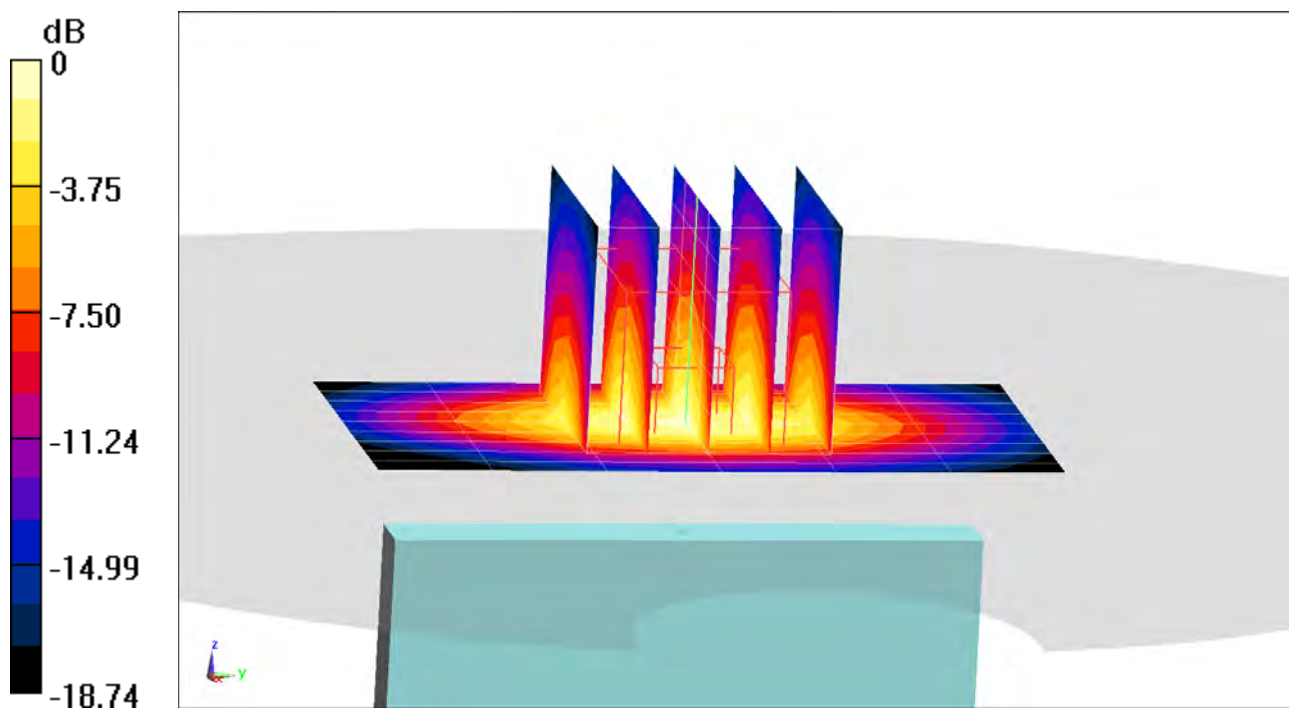
Area Scan (10x7x1): Measurement grid: $dx=5\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.60 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.708 W/kg



0 dB = 1.06 W/kg = 0.25 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.6 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Body SAR, Back side, Mid.ch

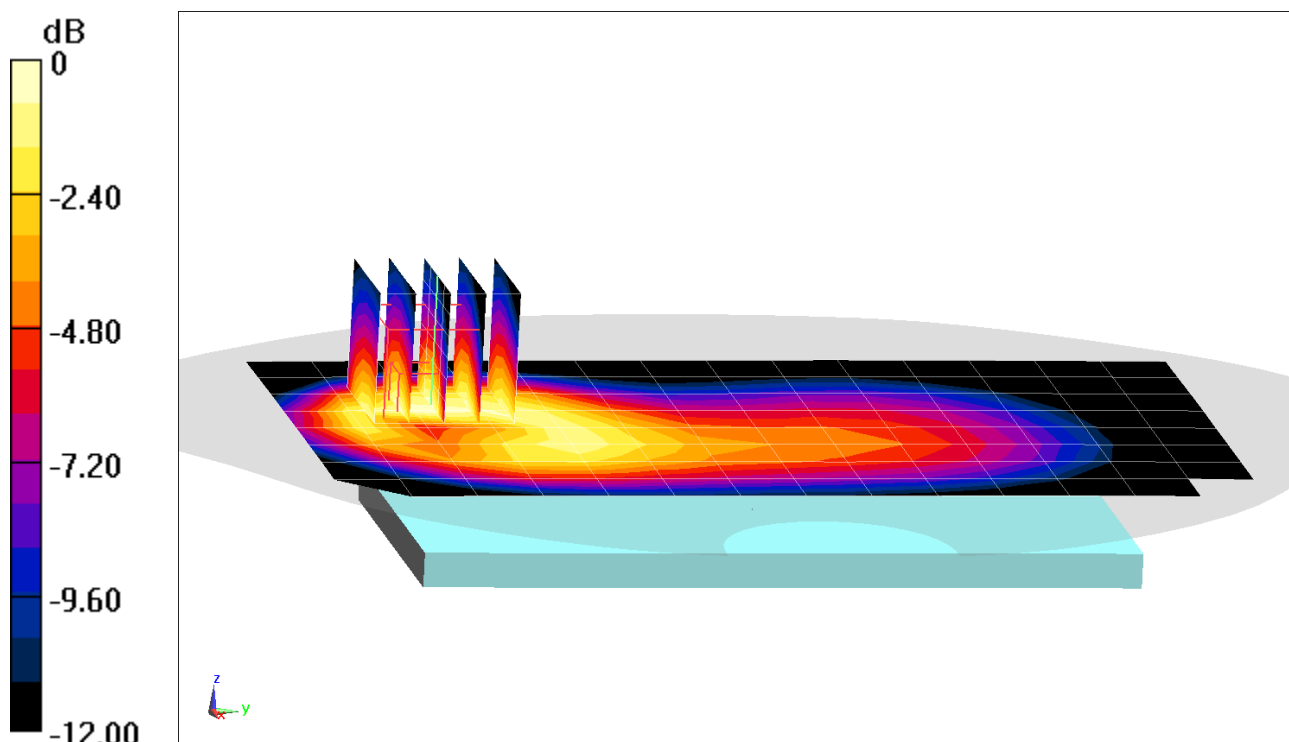
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.10 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.536 W/kg

SAR(1 g) = 0.324 W/kg



0 dB = 0.450 W/kg = -3.47 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 53.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 836.6 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Body SAR, Back side, Mid.ch

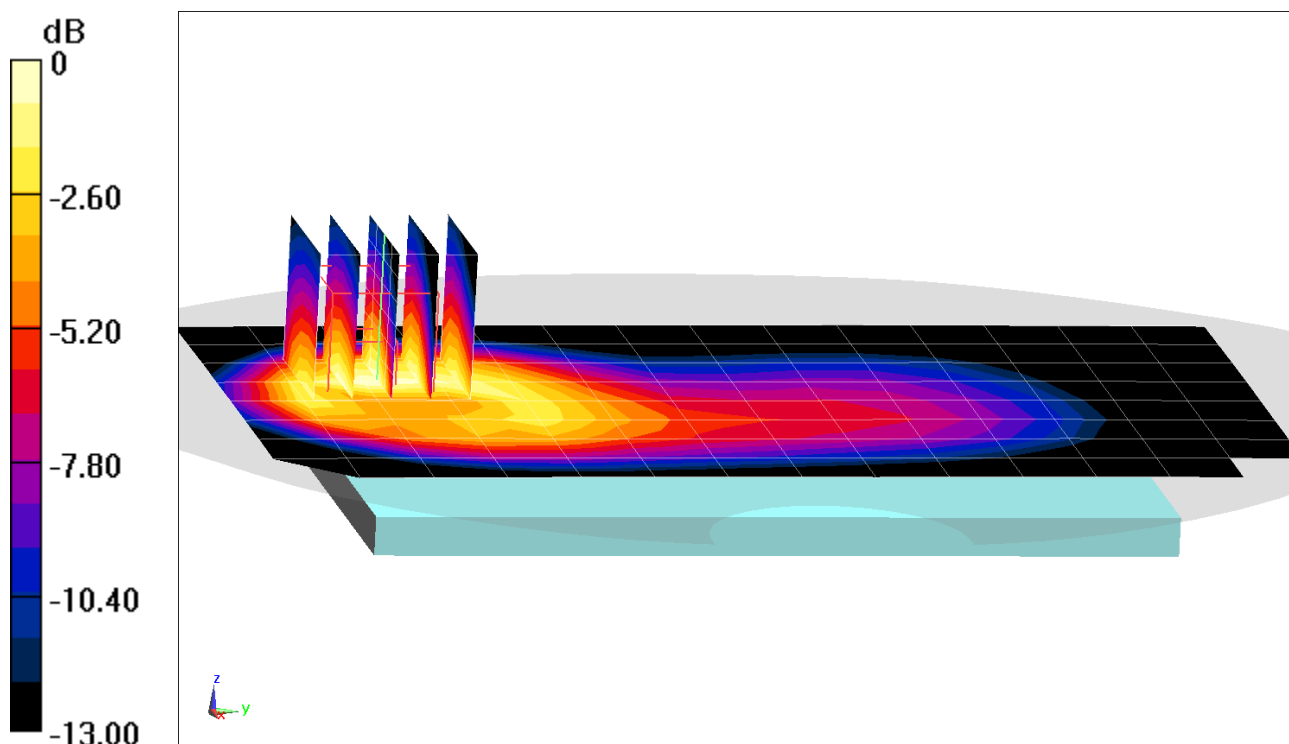
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 26.45 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.628 W/kg



0 dB = 0.896 W/kg = -0.48 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used (interpolated):

$f = 1732.4$ MHz; $\sigma = 1.512$ S/m; $\epsilon_r = 51.937$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/29/2020; Ambient Temp: 23.1°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1732.4 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Body SAR, Back side, Mid.ch

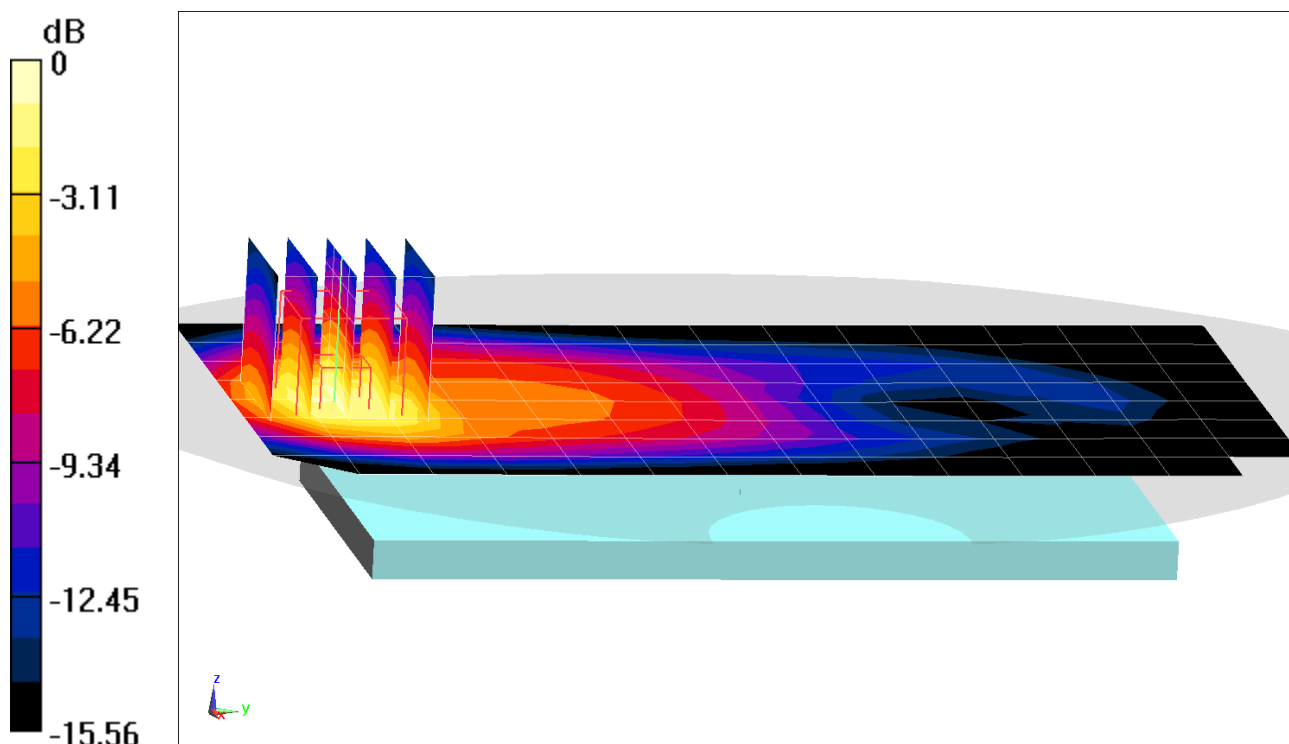
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 22.49 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.690 W/kg



0 dB = 0.960 W/kg = -0.18 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used (interpolated):

$f = 1732.4$ MHz; $\sigma = 1.492$ S/m; $\epsilon_r = 53.181$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/14/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1732.4 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Body SAR, Bottom Edge, Mid.ch

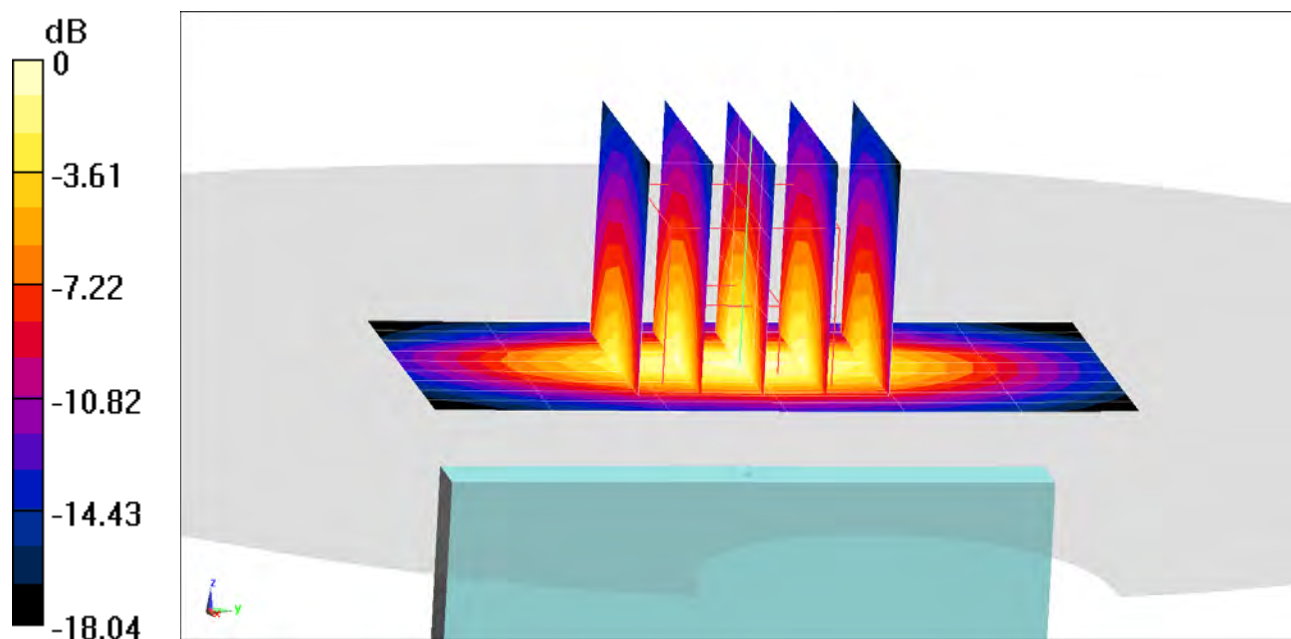
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 27.24 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 0.991 W/kg



0 dB = 1.46 W/kg = 1.64 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

Communication System: UID 0, UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1907.6$ MHz; $\sigma = 1.587$ S/m; $\epsilon_r = 52.684$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.9°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1907.6 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Body SAR, Back side, High.ch

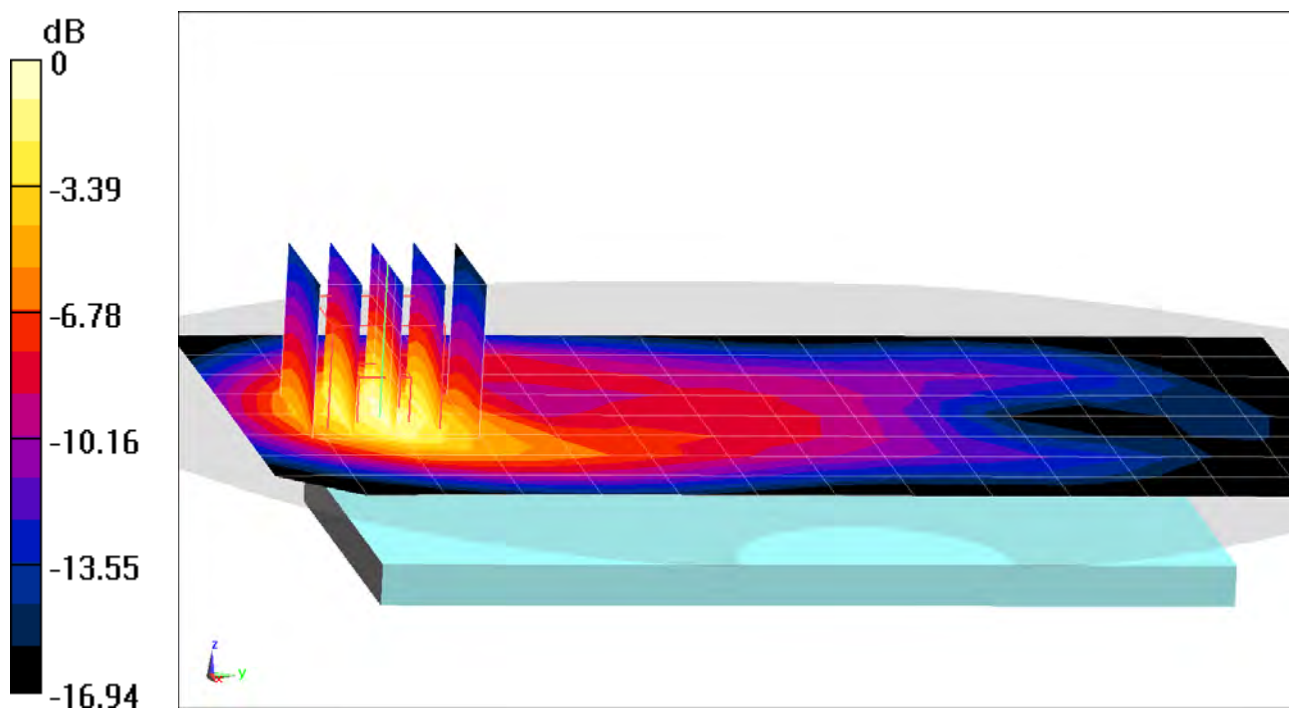
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 22.21 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.710 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

Communication System: UID 0, UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1907.6$ MHz; $\sigma = 1.587$ S/m; $\epsilon_r = 52.684$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.9°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1907.6 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Body SAR, Bottom Edge, High.ch

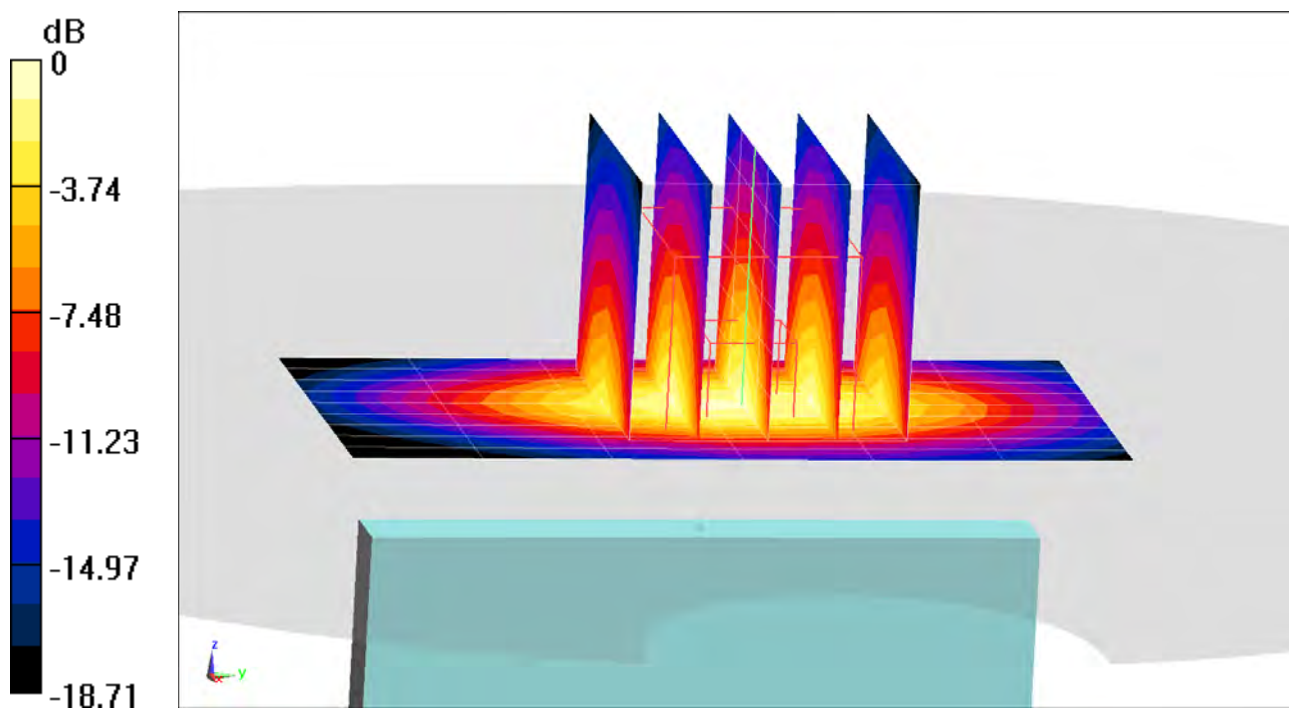
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 26.22 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.975 W/kg



0 dB = 1.49 W/kg = 1.73 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 53.654$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 71, Body SAR, Back side, Mid.ch
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

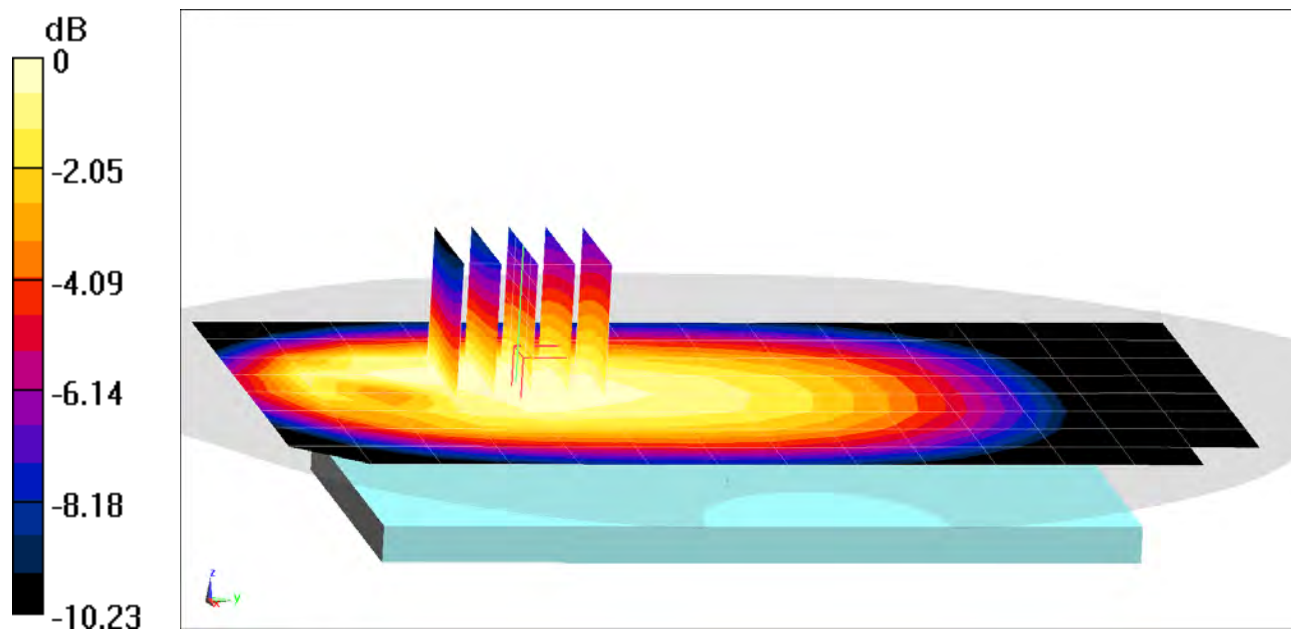
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.32 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.282 W/kg

SAR(1 g) = 0.213 W/kg



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

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 53.654$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 71, Body SAR, Back side, Mid.ch
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

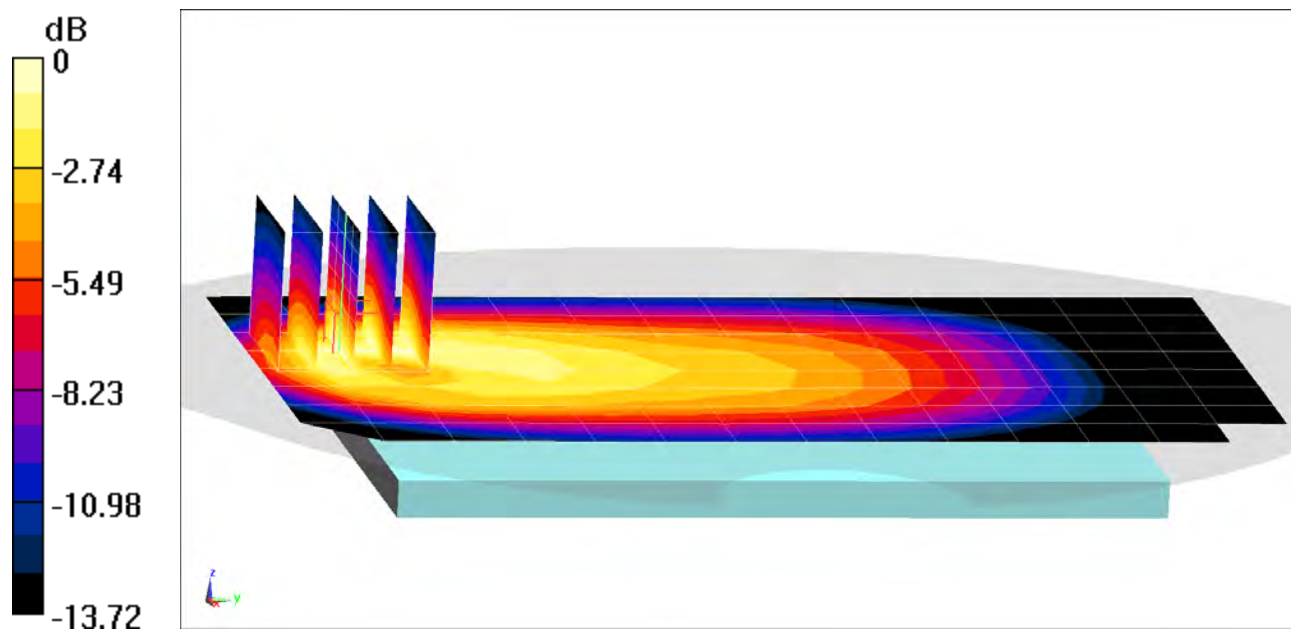
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.89 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.602 W/kg

SAR(1 g) = 0.333 W/kg



0 dB = 0.499 W/kg = -3.02 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 53.576$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 12, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

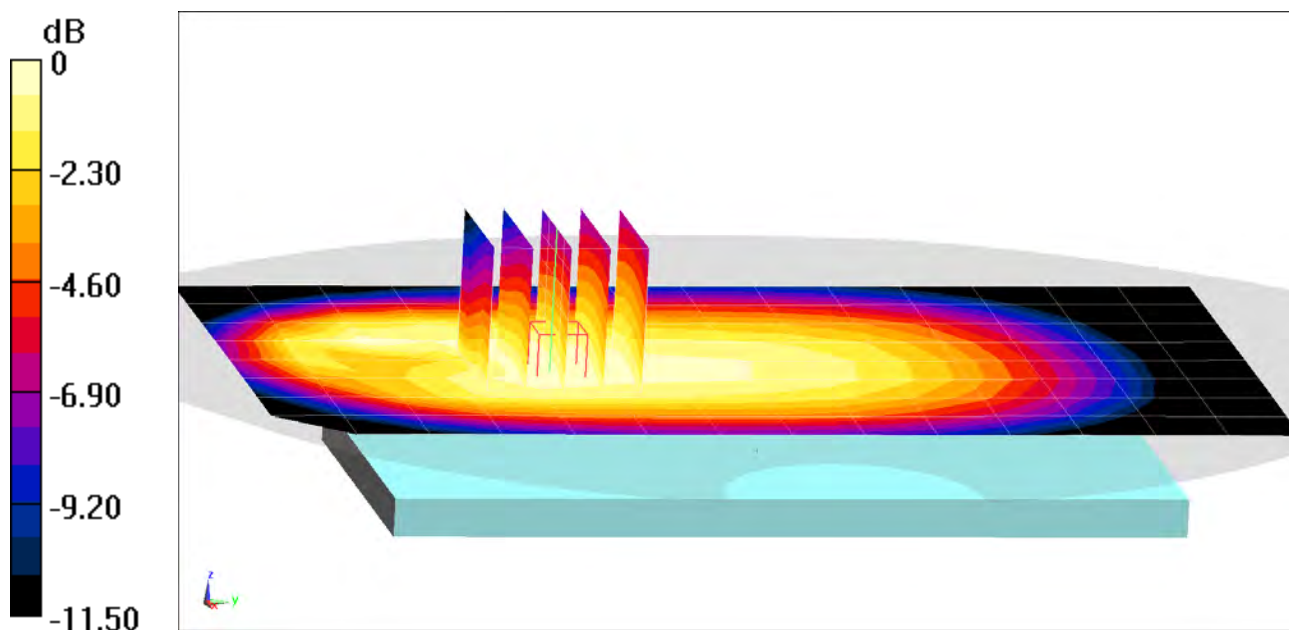
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.56 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.220 W/kg



0 dB = 0.264 W/kg = -5.78 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 53.576$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 12, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

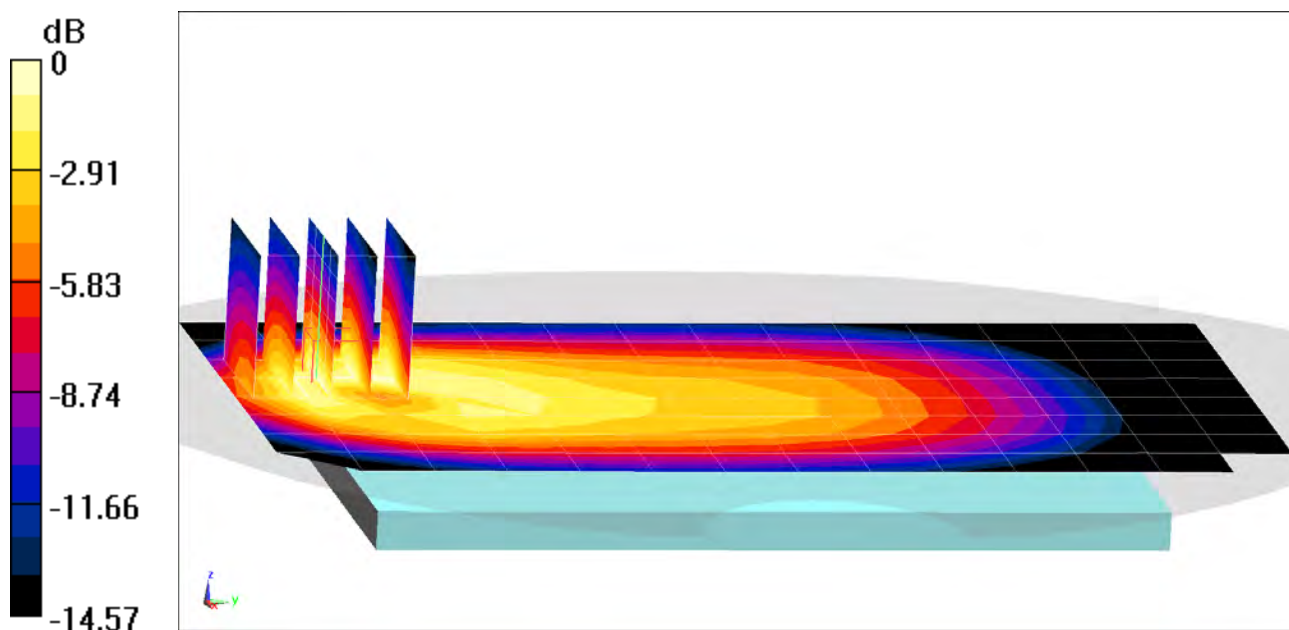
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 20.57 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.661 W/kg

SAR(1 g) = 0.368 W/kg



0 dB = 0.547 W/kg = -2.62 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 782 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 53.36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 782 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 13, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset

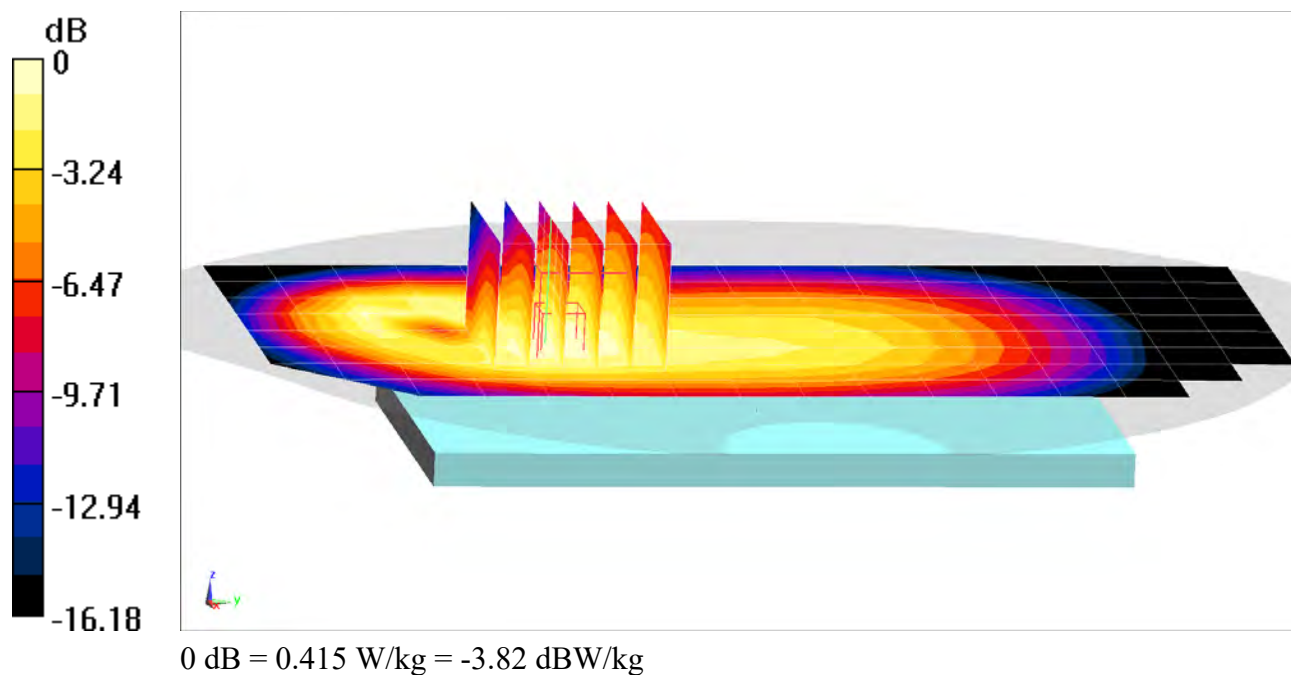
Area Scan (9x17x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.93 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.457 W/kg

SAR(1 g) = 0.335 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 782 \text{ MHz}$; $\sigma = 0.969 \text{ S/m}$; $\epsilon_r = 53.508$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/27/2020; Ambient Temp: 21.4°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 782 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 13, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset

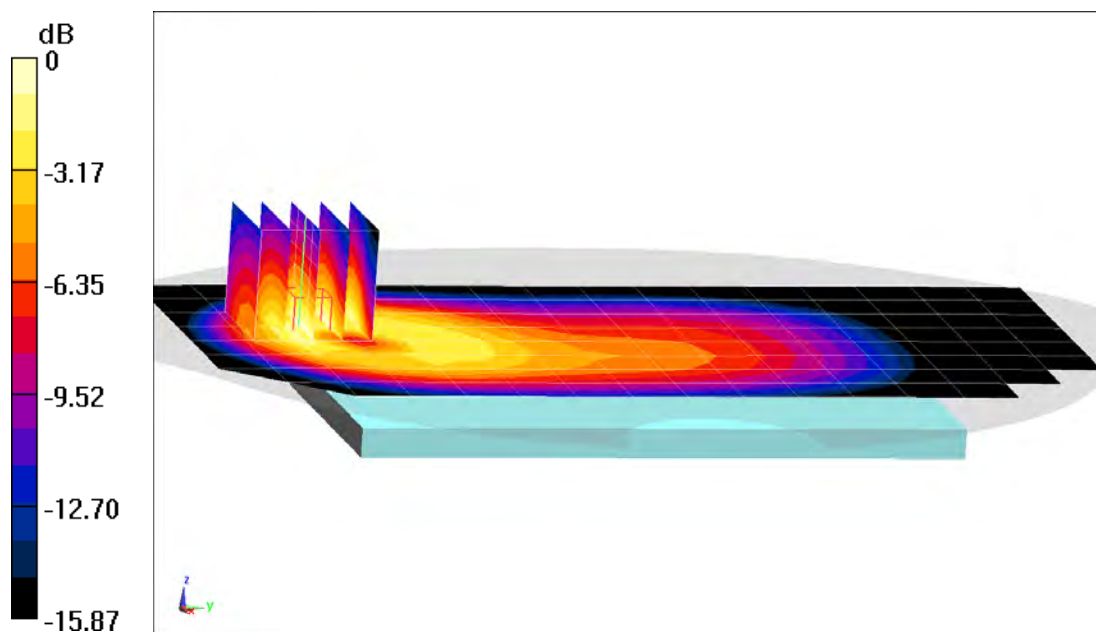
Area Scan (9x17x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.10 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.648 W/kg



0 dB = 0.925 W/kg = -0.34 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 793 \text{ MHz}$; $\sigma = 0.983 \text{ S/m}$; $\epsilon_r = 53.333$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 793 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 14, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

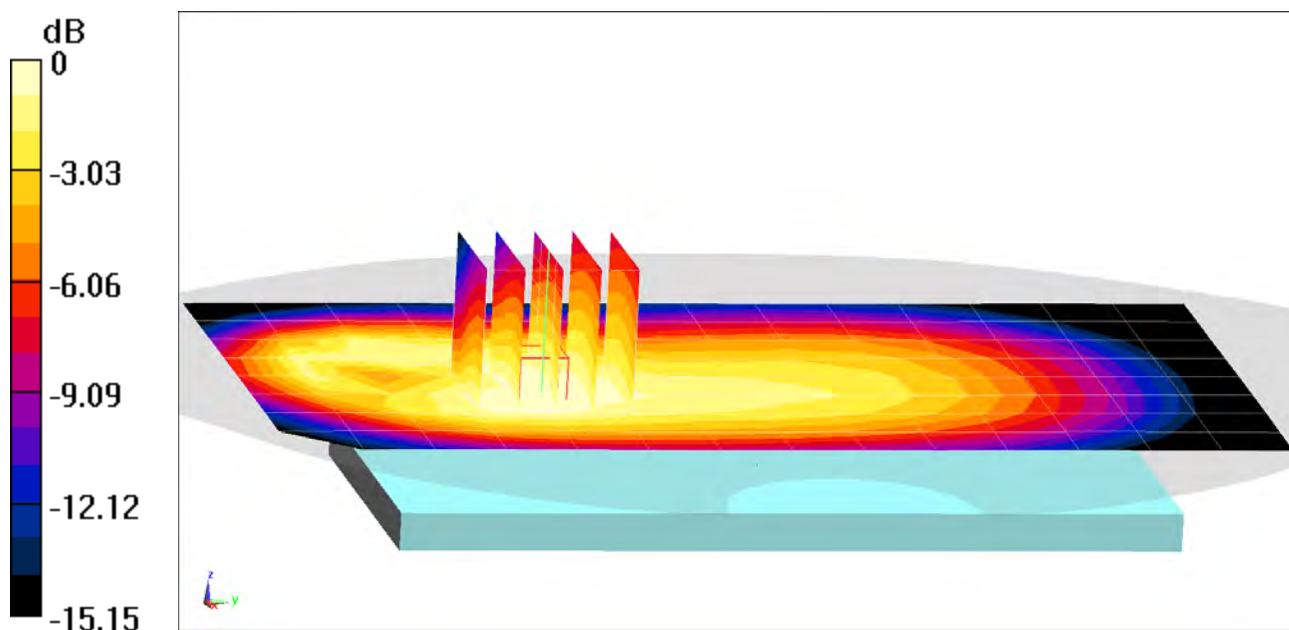
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.38 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.483 W/kg

SAR(1 g) = 0.361 W/kg



0 dB = 0.439 W/kg = -3.58 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 793 \text{ MHz}$; $\sigma = 0.983 \text{ S/m}$; $\epsilon_r = 53.333$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 793 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 14, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

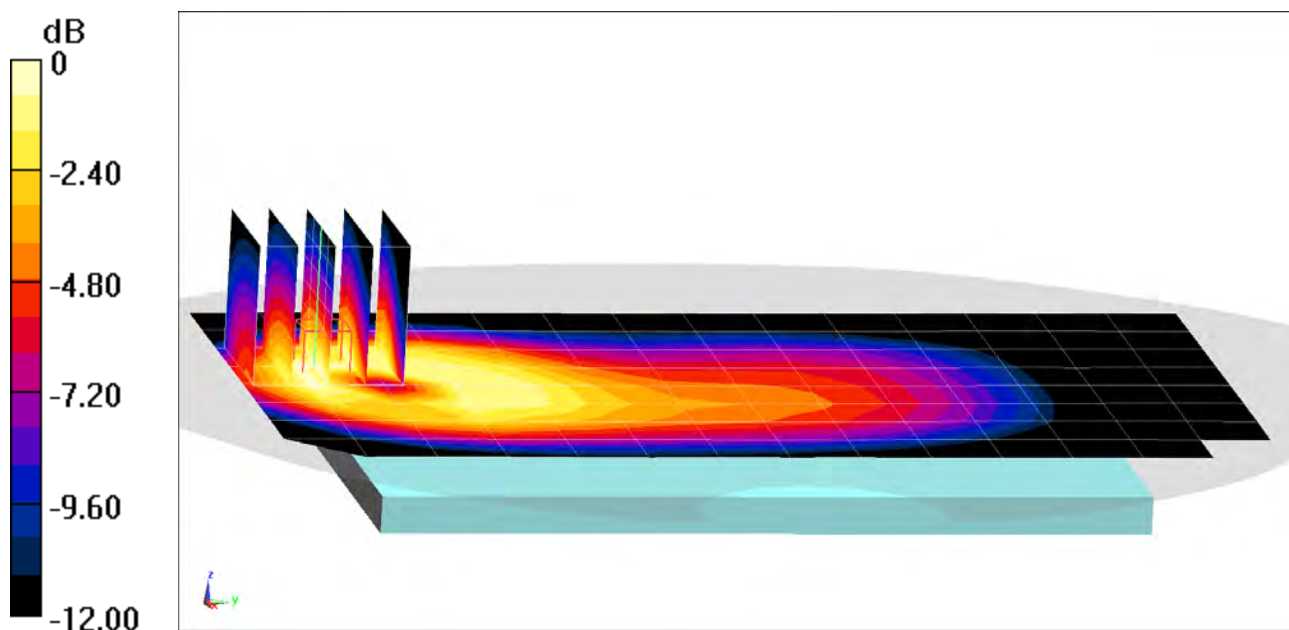
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.45 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.975 W/kg

SAR(1 g) = 0.574 W/kg



0 dB = 0.828 W/kg = -0.82 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 831.5$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 52.801$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/08/2020; Ambient Temp: 22.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 831.5 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch
15 MHz Bandwidth, QPSK, 1 RB, 36 RB Offset

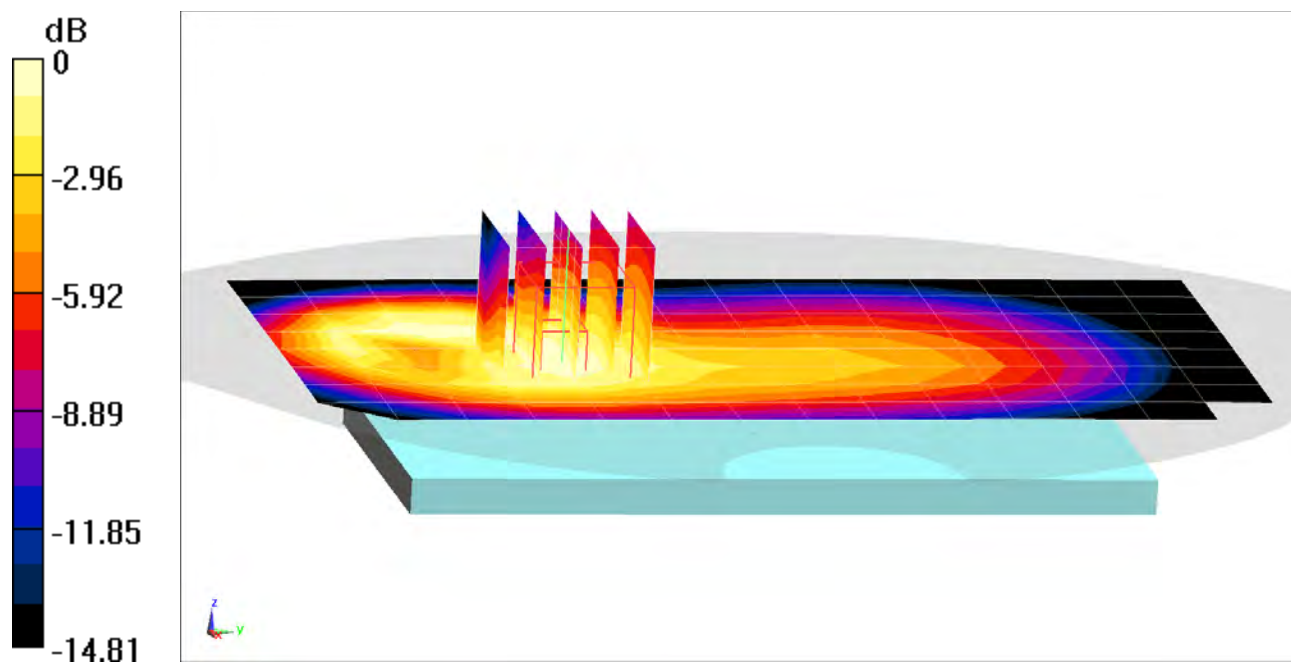
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 18.10 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.422 W/kg

SAR(1 g) = 0.295 W/kg



0 dB = 0.373 W/kg = -4.28 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 831.5$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 52.801$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/08/2020; Ambient Temp: 22.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 831.5 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch

15 MHz Bandwidth, QPSK, 1 RB, 36 RB Offset

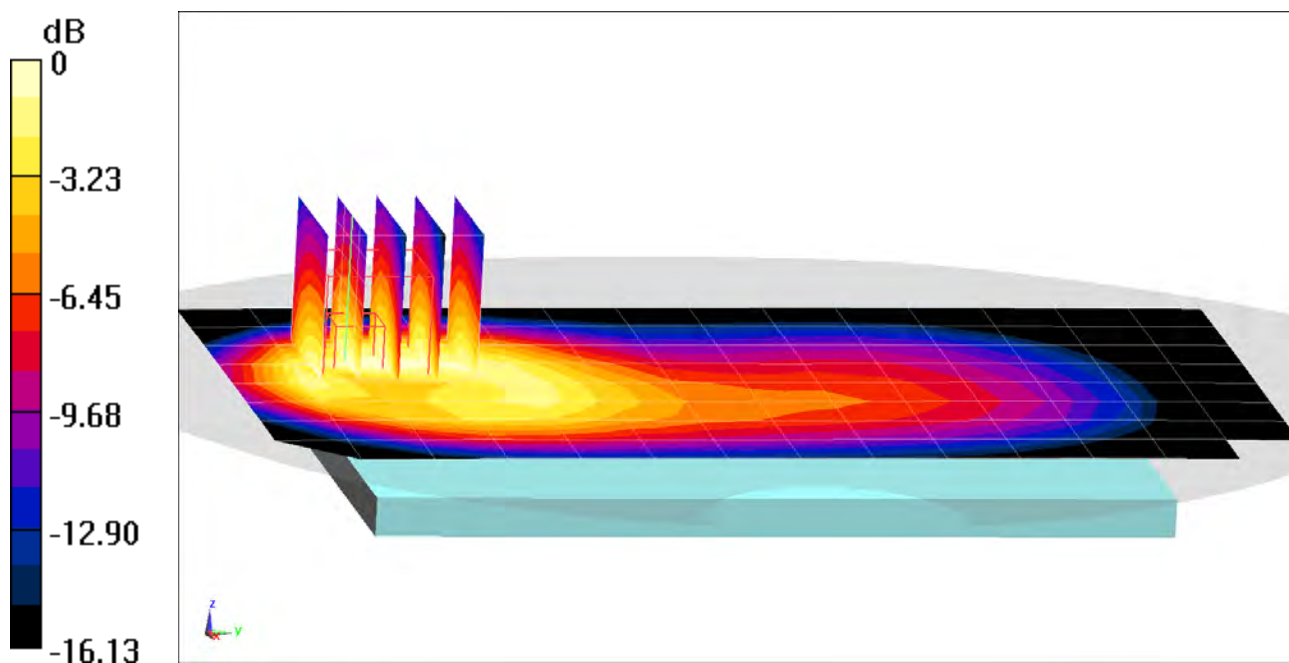
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.88 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.611 W/kg



0 dB = 0.852 W/kg = -0.70 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0086M

Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.967$ S/m; $\epsilon_r = 53.053$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/11/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 836.5 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 5 (Cell.), ULCA, Body SAR, Back side

PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset

SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset

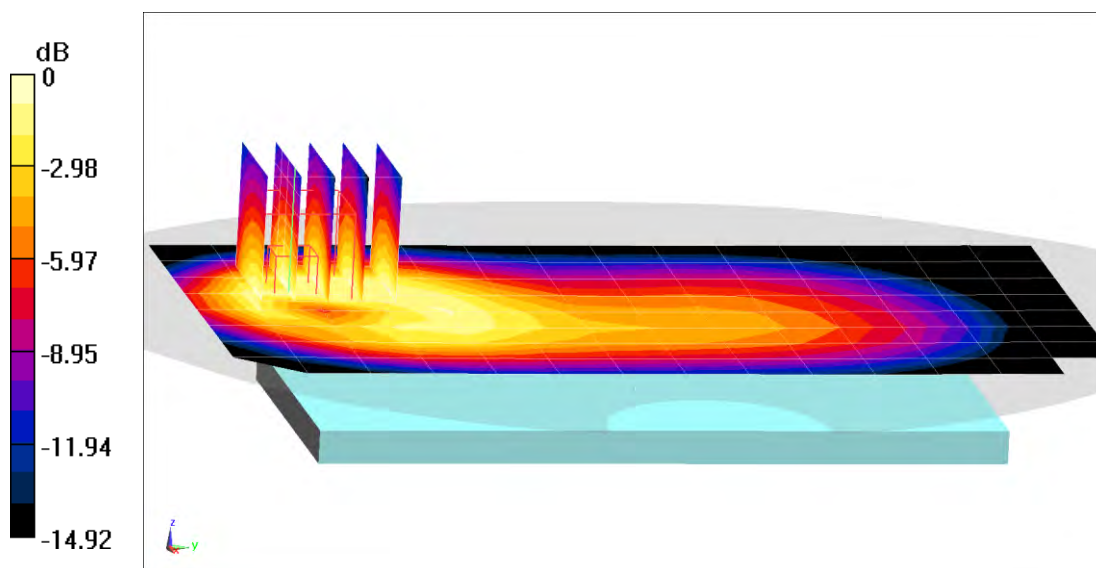
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.49 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.572 W/kg

SAR(1 g) = 0.350 W/kg



0 dB = 0.480 W/kg = -3.19 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0086M

Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.967$ S/m; $\epsilon_r = 53.053$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/11/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 836.5 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 5 (Cell.), ULCA, Body SAR, Back side

PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset

SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset

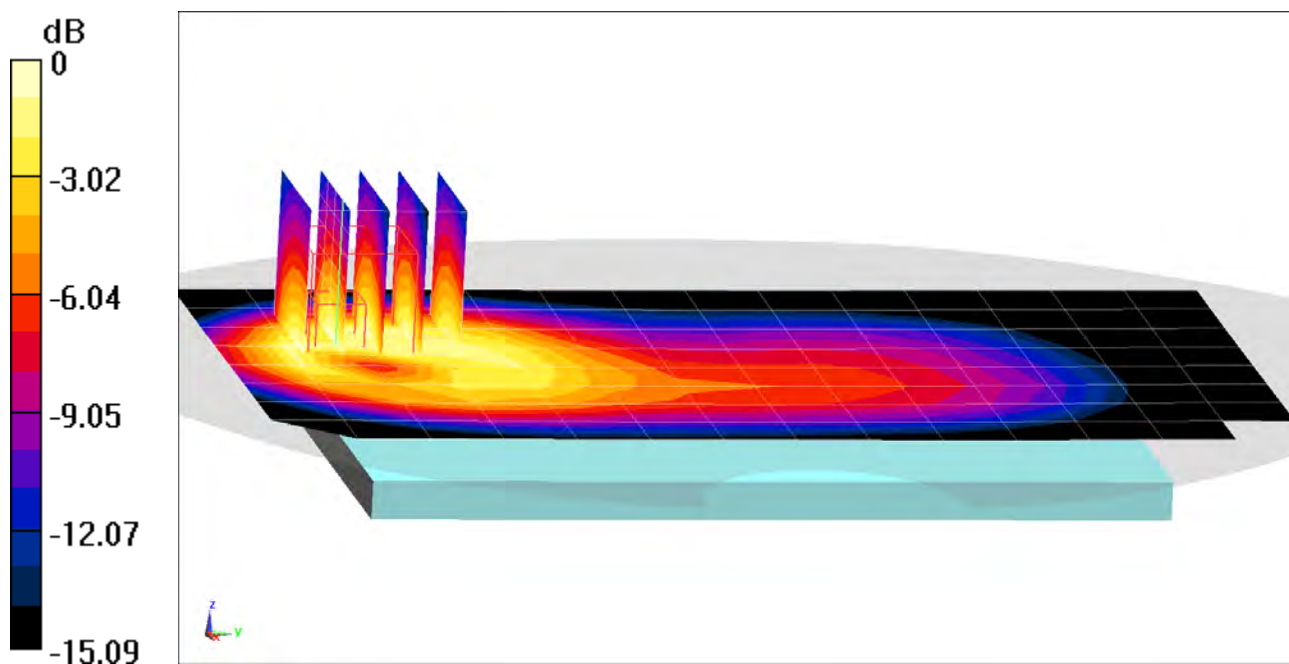
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.71 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.613 W/kg



0 dB = 0.865 W/kg = -0.63 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0071M

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1745 \text{ MHz}$; $\sigma = 1.518 \text{ S/m}$; $\epsilon_r = 52.107$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/03/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1745 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 66 (AWS), CA_66C ULCA, Body SAR, Back side

PCC: 20 Bandwidth, Ch. 132322, QPSK, 1 RB, 0 RB Offset

SCC: 20 Bandwidth, Ch. 132124, QPSK, 1 RB, 99 RB Offset

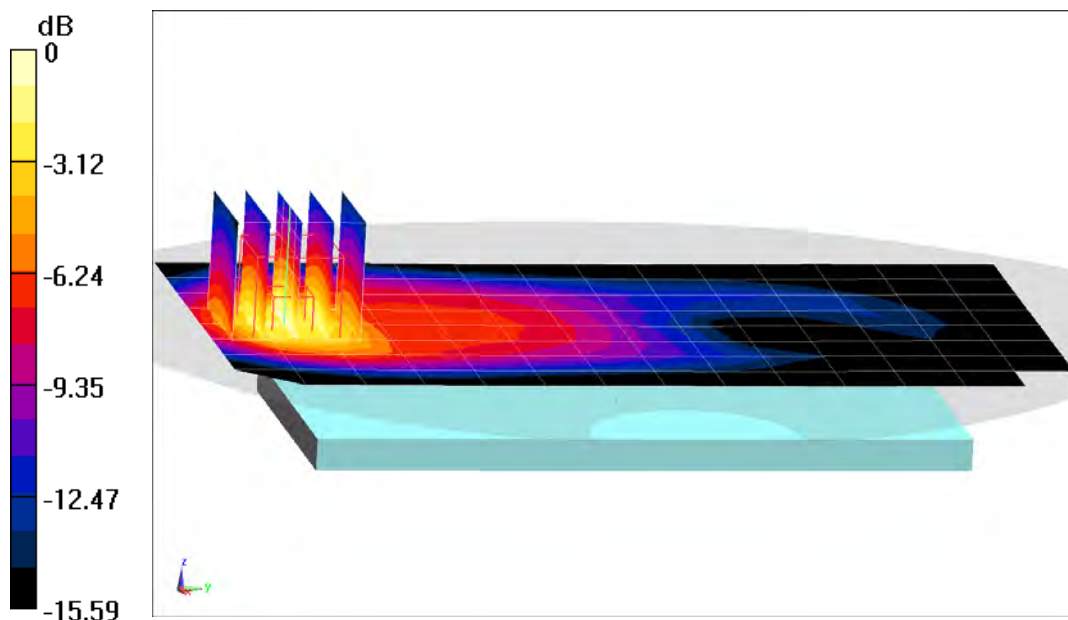
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.77 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.922 W/kg



0 dB = 1.26 W/kg = 1.00 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0071M

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770$ MHz; $\sigma = 1.519$ S/m; $\epsilon_r = 52.547$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1770 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 66 (AWS), CA_66C ULCA, Body SAR, Bottom Edge

PCC: 20 MHz Bandwidth, Ch. 132572, QPSK, 1 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 132374, QPSK, 1 RB, 99 RB Offset

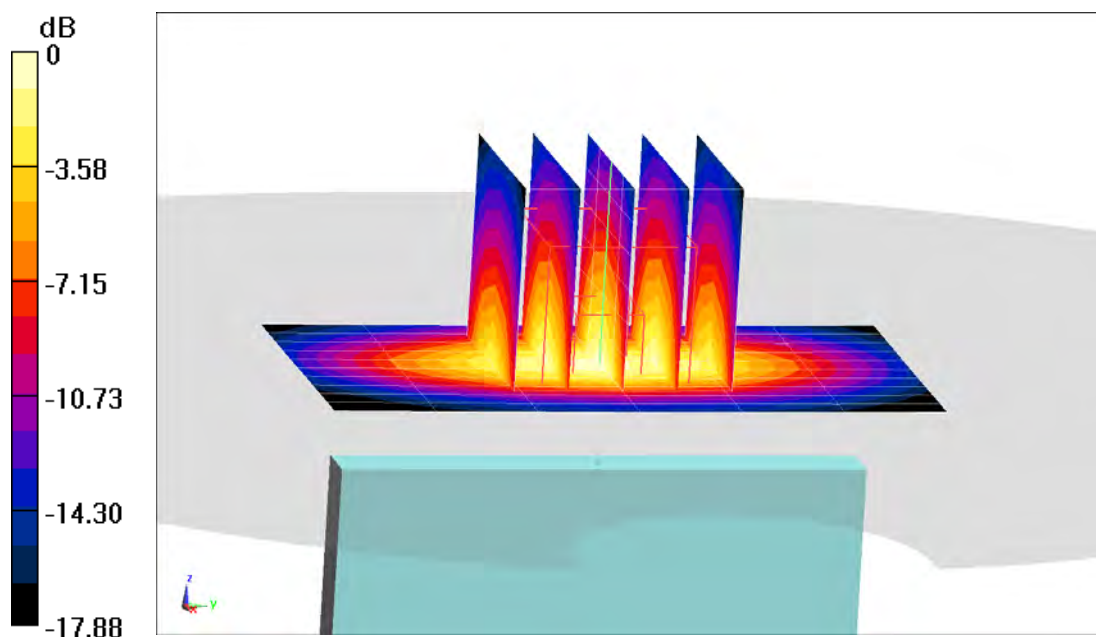
Area Scan (11x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 27.58 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 1.02 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905 \text{ MHz}$; $\sigma = 1.578 \text{ S/m}$; $\epsilon_r = 55.16$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/03/2020; Ambient Temp: 21.1°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Body SAR, Back side, High.ch
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset

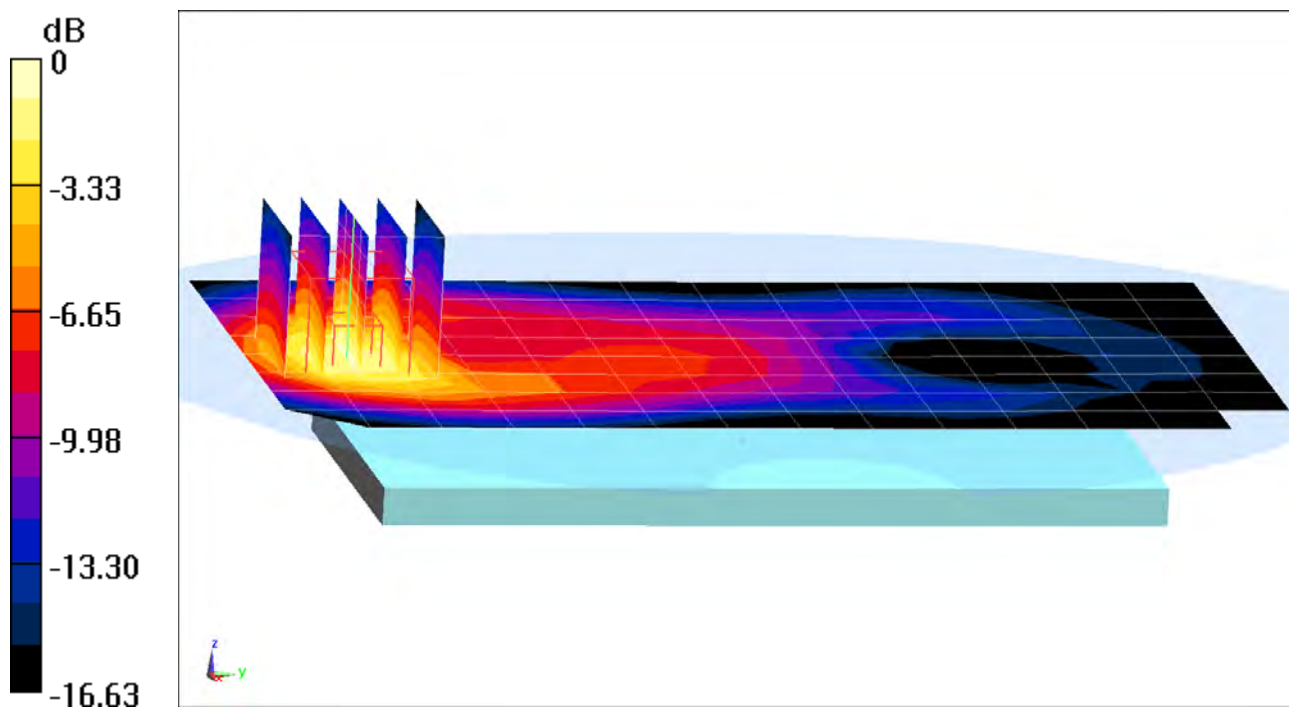
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.03 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.684 W/kg



0 dB = 0.974 W/kg = -0.11 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905$ MHz; $\sigma = 1.565$ S/m; $\epsilon_r = 52.998$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/26/2020; Ambient Temp: 24.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Body SAR, Bottom Edge, High.ch
20 MHz Bandwidth, QPSK, 50 RB, 25 RB Offset

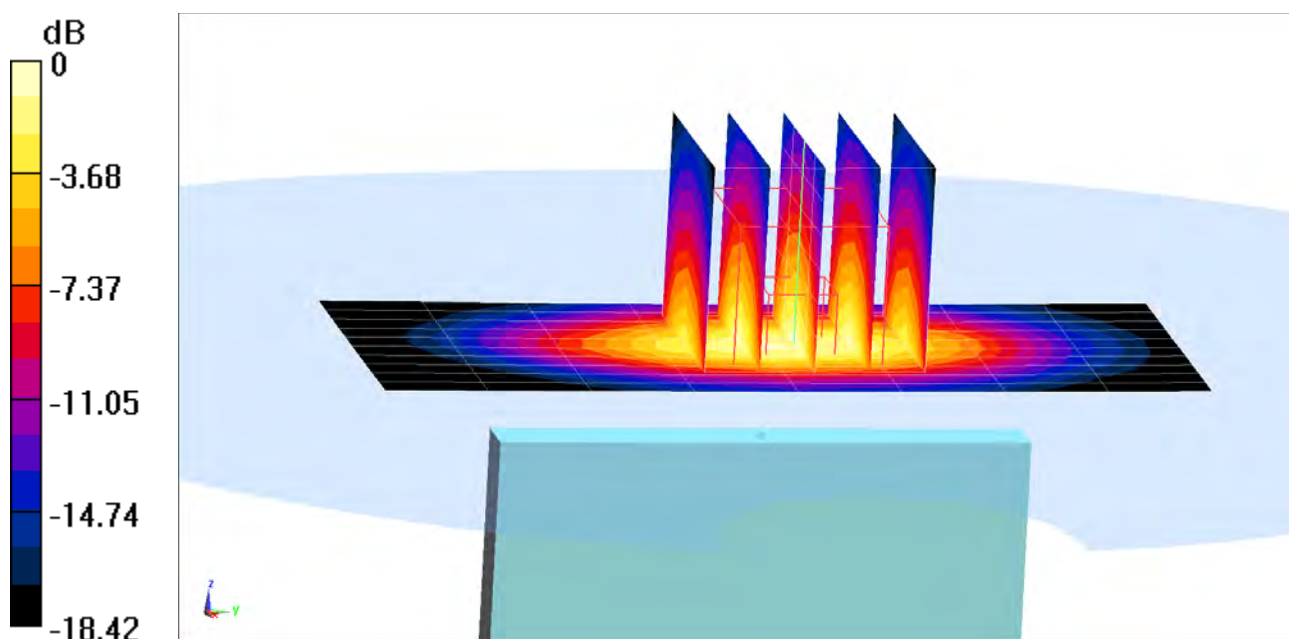
Area Scan (11x9x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 27.97 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 1.09 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2310$ MHz; $\sigma = 1.857$ S/m; $\epsilon_r = 53.097$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/04/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 30, Body SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 49 RB Offset

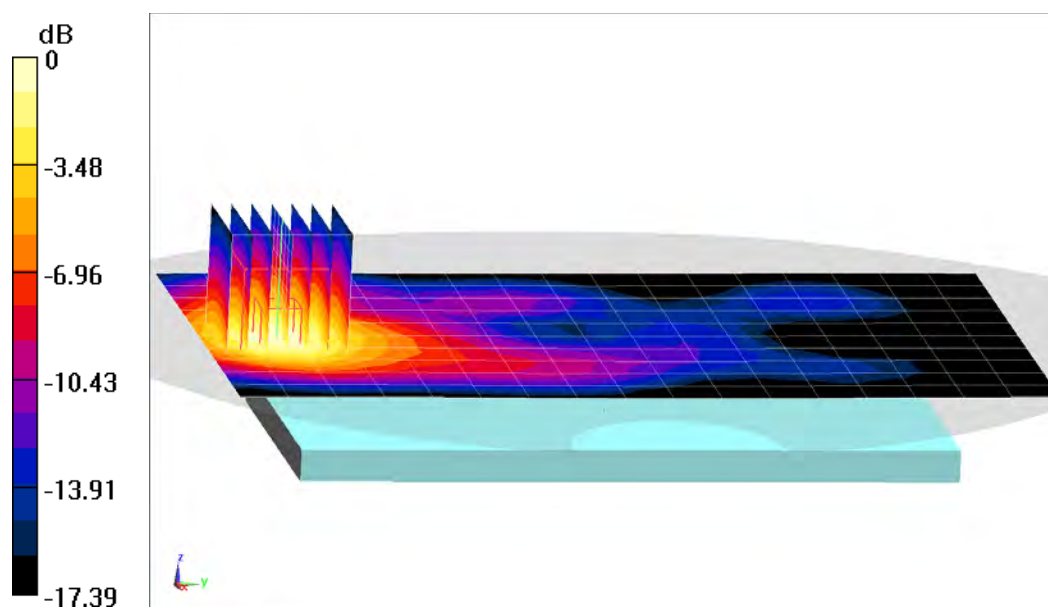
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 16.95 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.851 W/kg

SAR(1 g) = 0.481 W/kg



0 dB = 0.716 W/kg = -1.45 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2310$ MHz; $\sigma = 1.857$ S/m; $\epsilon_r = 53.097$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/04/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 30, Body SAR, Bottom Edge, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

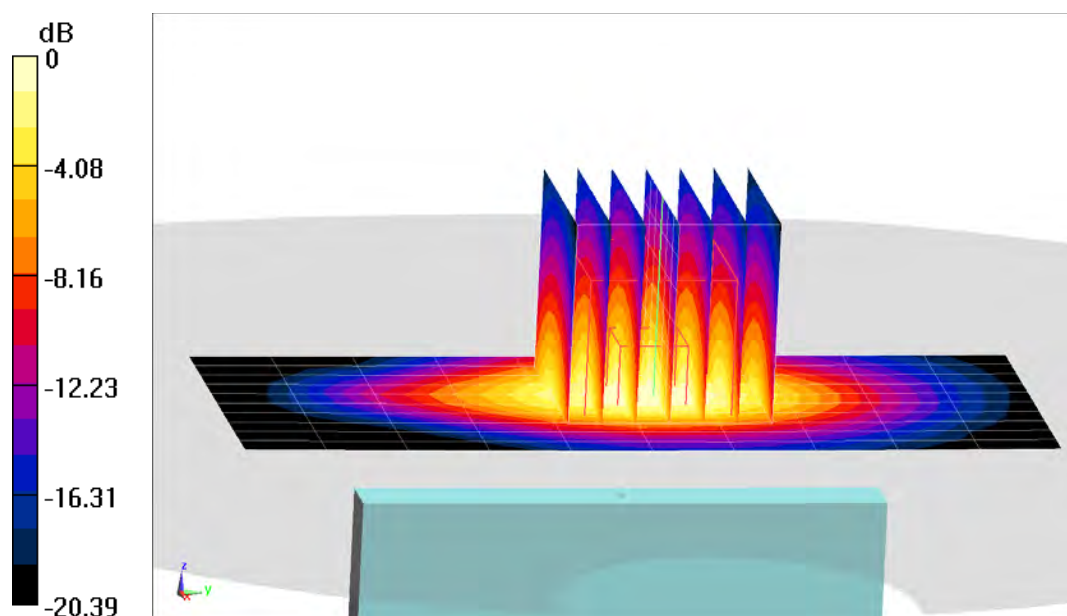
Area Scan (11x11x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 23.65 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.911 W/kg



0 dB = 1.44 W/kg = 1.58 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0090M

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2510$ MHz; $\sigma = 2.118$ S/m; $\epsilon_r = 51.421$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/13/2020; Ambient Temp: 24.0°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2510 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 7, Body SAR, Back side, Low.ch
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

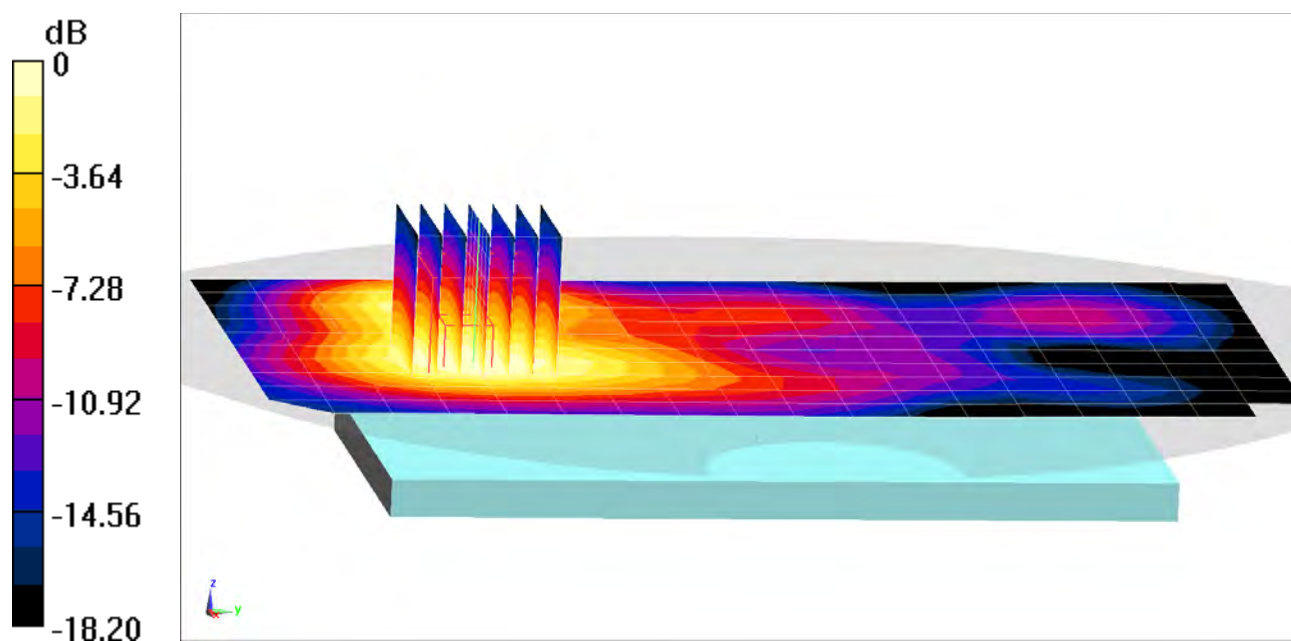
Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 14.03 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.697 W/kg

SAR(1 g) = 0.387 W/kg



0 dB = 0.576 W/kg = -2.40 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0090M

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2510$ MHz; $\sigma = 2.118$ S/m; $\epsilon_r = 51.421$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/13/2020; Ambient Temp: 24.0°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2510 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 7, Body SAR, Bottom Edge, Low.ch
20 MHz Bandwidth, QPSK, 50 RB, 50 RB Offset

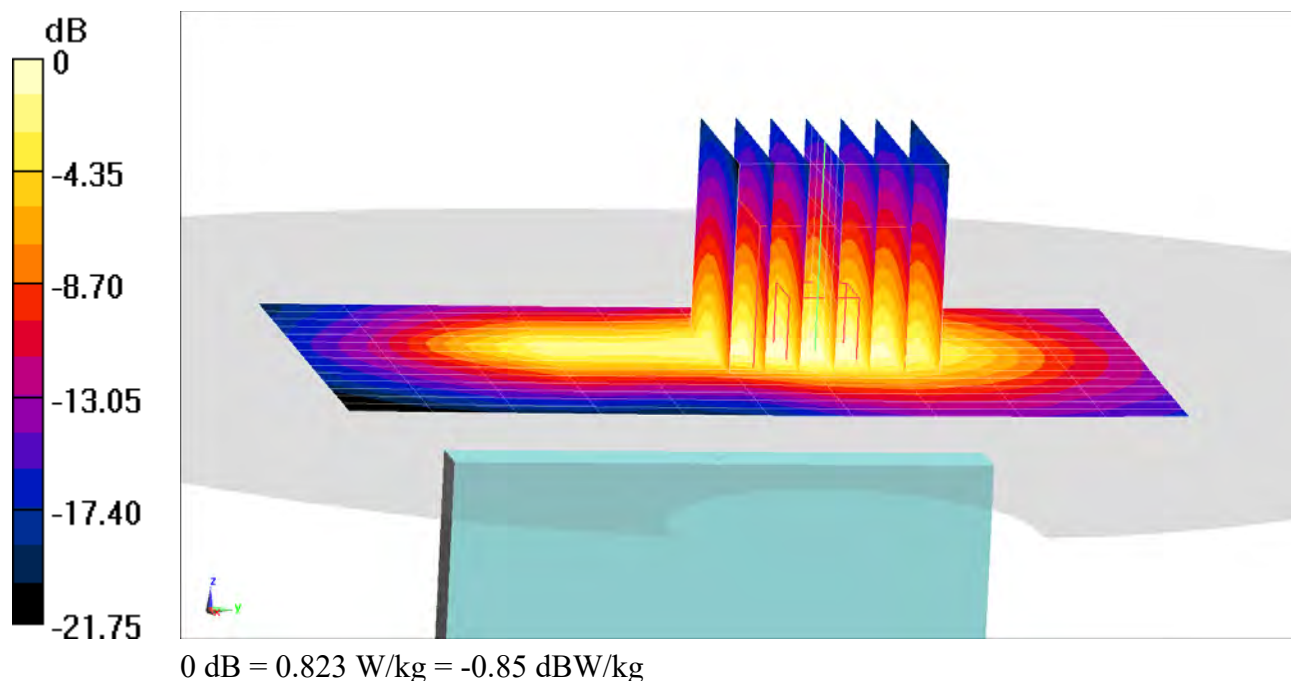
Area Scan (15x11x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 16.54 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.520 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1184M

Communication System: UID 0, LTE Band 48; Frequency: 3603.3 MHz; Duty Cycle: 1:1.58

Medium: 3600 Body; Medium parameters used (interpolated):

$f = 3603.3$ MHz; $\sigma = 3.496$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/03/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7488; ConvF(6.85, 6.85, 6.85) @ 3603.3 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 48, ULCA, Body SAR, Back side

PCC: 20 MHz Bandwidth, Ch. 55773, QPSK, 1 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 55575, QPSK, 1 RB, 99 RB Offset

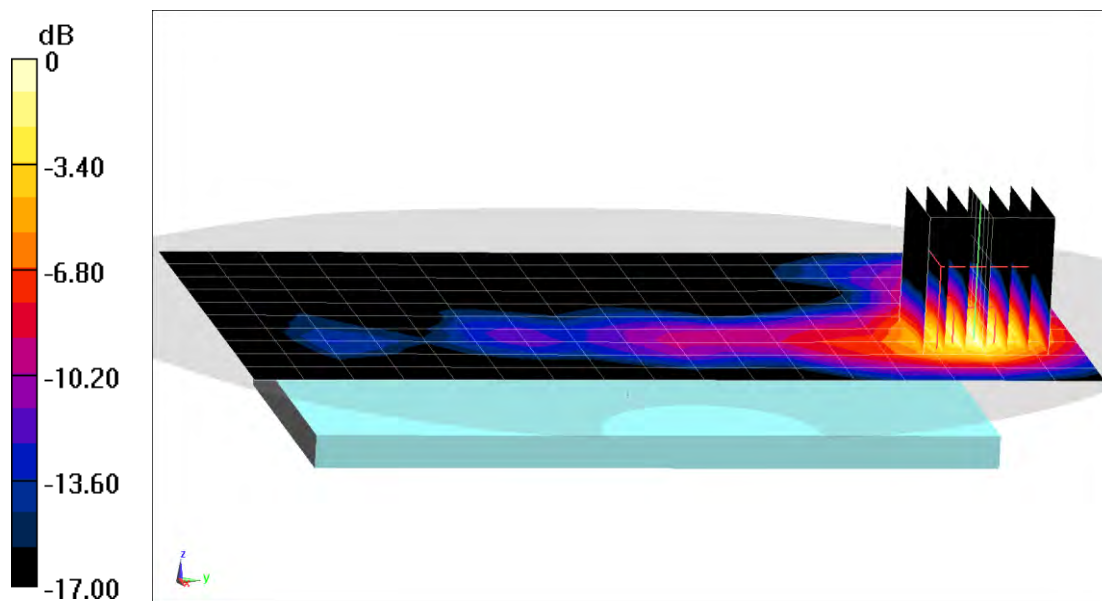
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 10.64 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.823 W/kg

SAR(1 g) = 0.348 W/kg



0 dB = 0.627 W/kg = -2.03 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1184M

Communication System: UID 0, LTE Band 48; Frequency: 3690 MHz; Duty Cycle: 1:1.58

Medium: 3600 Body; Medium parameters used:

$f = 3690 \text{ MHz}$; $\sigma = 3.587 \text{ S/m}$; $\epsilon_r = 49.254$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/03/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7488; ConvF(6.85, 6.85, 6.85) @ 3690 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 48, ULCA, Body SAR, Top Edge

PCC: 20 MHz Bandwidth, Ch. 56640, QPSK, 1 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 56442, QPSK, 1 RB, 99 RB Offset

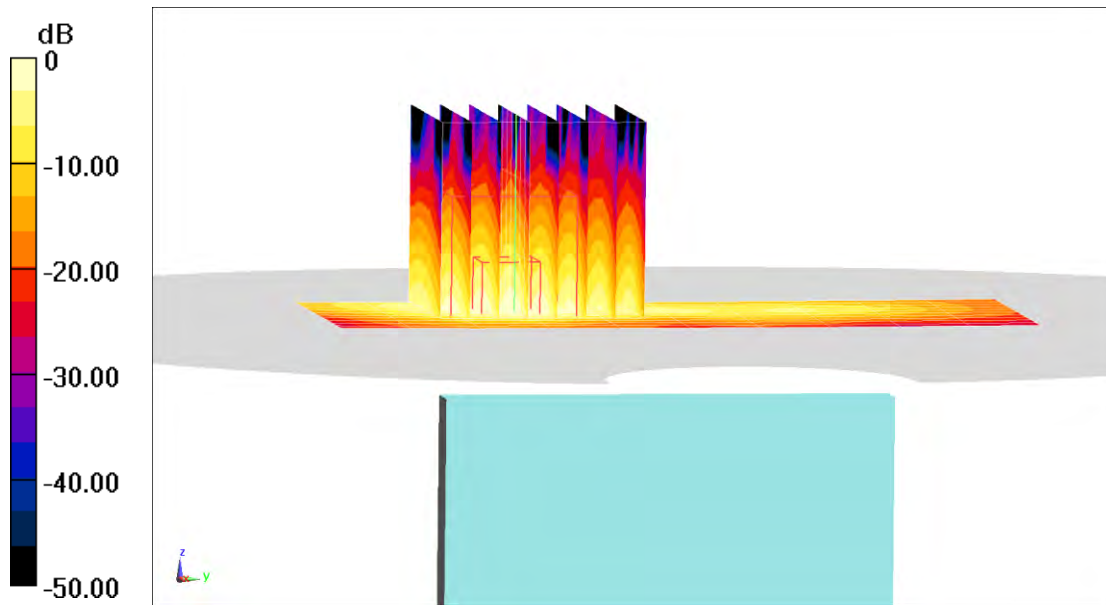
Area Scan (11x11x1): Measurement grid: dx=5mm, dy=12mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 15.72 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.10 W/kg

SAR(1 g) = 0.806 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0085M

Communication System: UID 0, _LTE Band 41 (Class 2); Frequency: 2506 MHz; Duty Cycle: 1:2.31

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2506$ MHz; $\sigma = 2.077$ S/m; $\epsilon_r = 52.478$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/18/2020; Ambient Temp: 22.2°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2506 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 41 PC2, ULCA, Body SAR, Back side

PCC: 20 MHz Bandwidth, Ch. 39750, QPSK, 1 RB, 99 RB Offset

SCC: 20 MHz Bandwidth, Ch. 39948, QPSK, 1 RB, 0 RB Offset

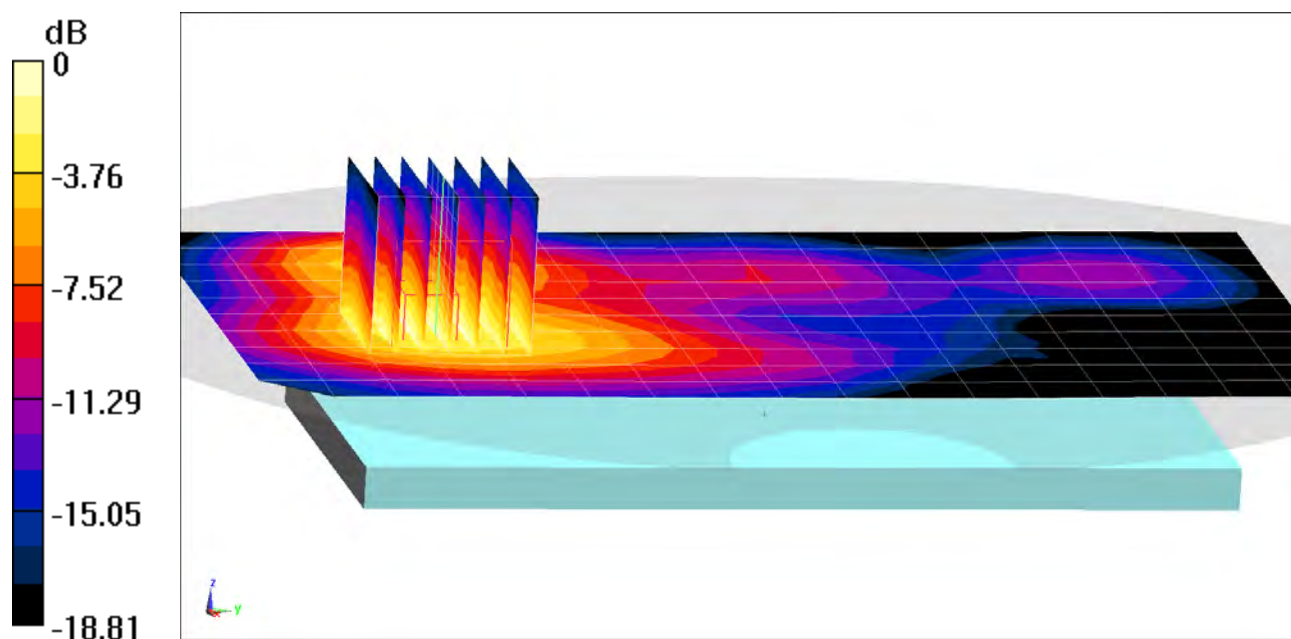
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 12.64 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.557 W/kg

SAR(1 g) = 0.291 W/kg



0 dB = 0.461 W/kg = -3.36 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0085M

Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2506 MHz; Duty Cycle: 1:1.58

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2506 \text{ MHz}$; $\sigma = 2.098 \text{ S/m}$; $\epsilon_r = 50.859$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2506 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 41 PC3, ULCA, Body SAR, Bottom Edge

PCC: 20 MHz Bandwidth, Ch. 39750, QPSK, 1 RB, 99 RB Offset

SCC: 20 MHz Bandwidth, Ch. 39948, QPSK, 1 RB, 0 RB Offset

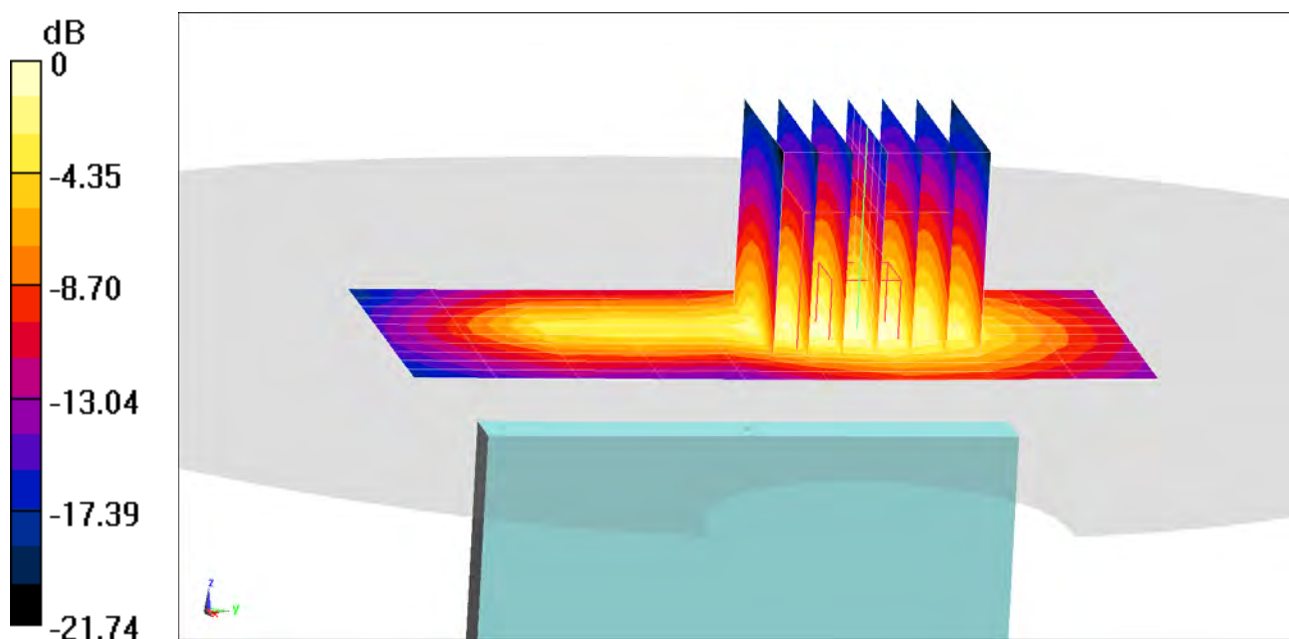
Area Scan (11x10x1): Measurement grid: $dx=5\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.49 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.763 W/kg

SAR(1 g) = 0.393 W/kg



0 dB = 0.622 W/kg = -2.06 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0070M

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 53.654$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n71, Body SAR, Back Side, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 136100, 1 RB, 53 RB Offset

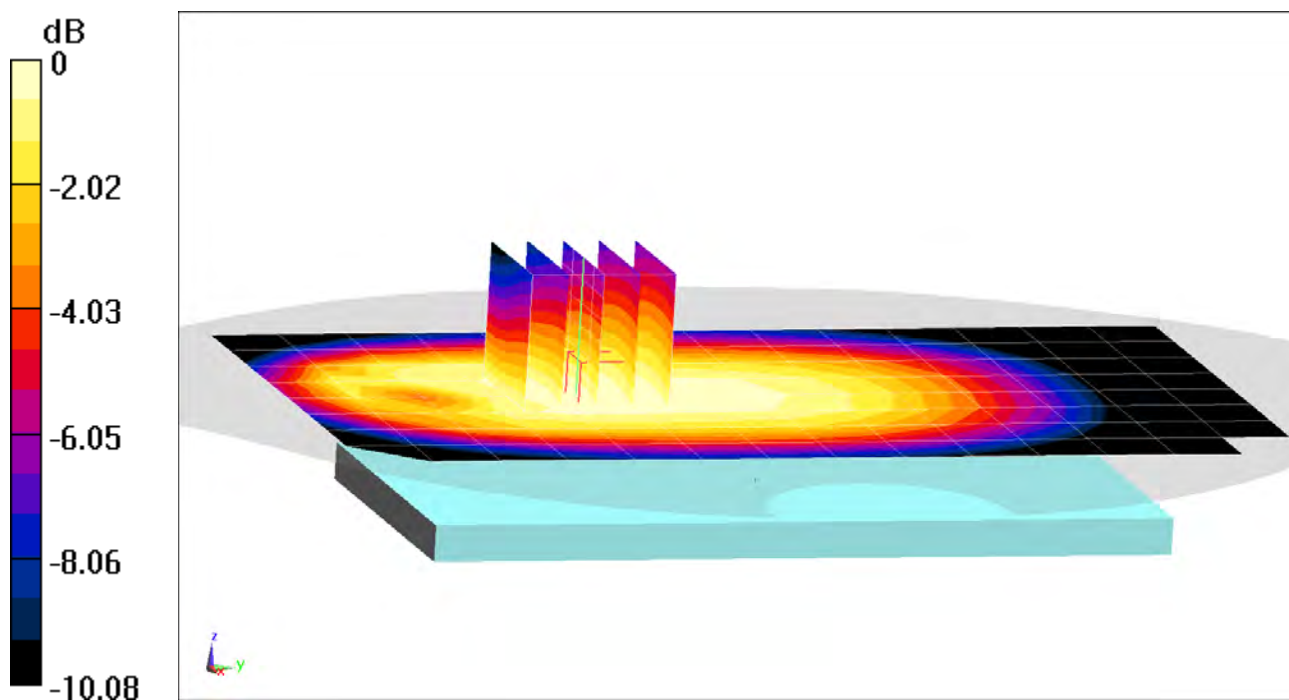
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 13.98 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.205 W/kg



0 dB = 0.243 W/kg = -6.14 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0070M

Communication System: UID 0, NR Band n71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 53.654$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 680.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n71, Body SAR, Back Side, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 136100, 1 RB, 53 RB Offset

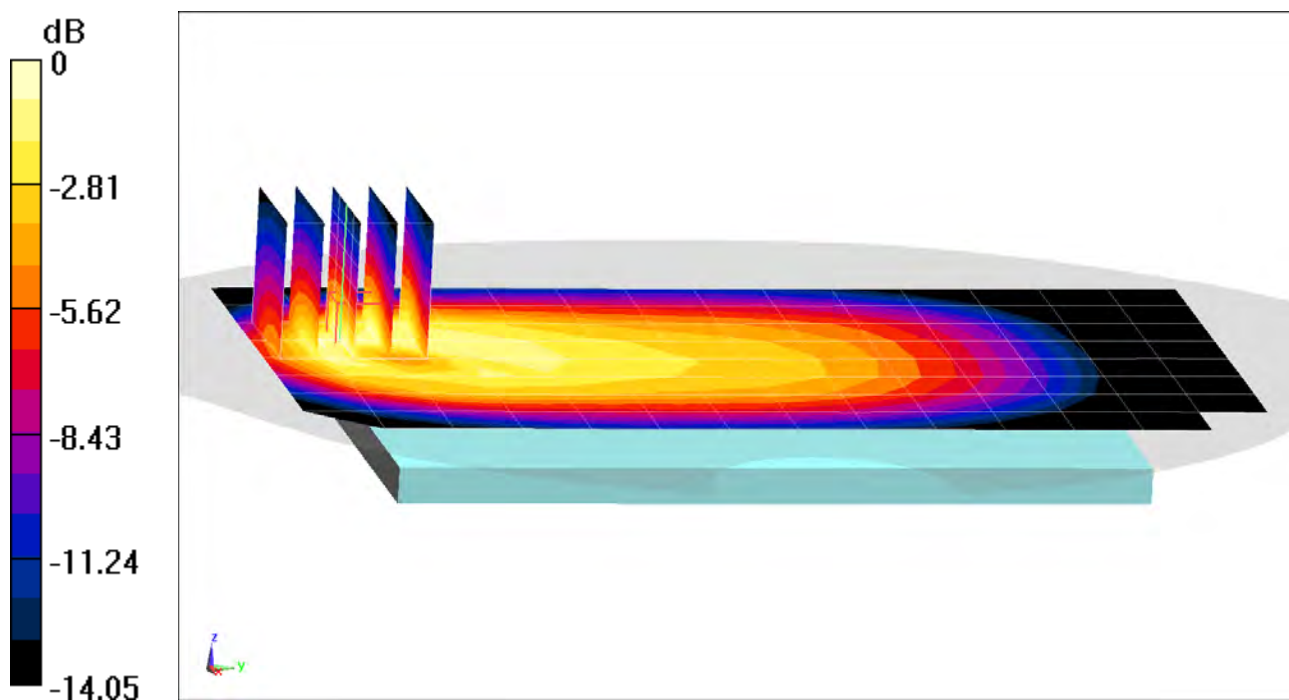
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 17.68 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.310 W/kg



0 dB = 0.466 W/kg = -3.32 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0095M

Communication System: UID 0, NR Band n12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 53.576$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n12, Body SAR, Back Side, 15 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 141500, 1 RB, 77 RB Offset**

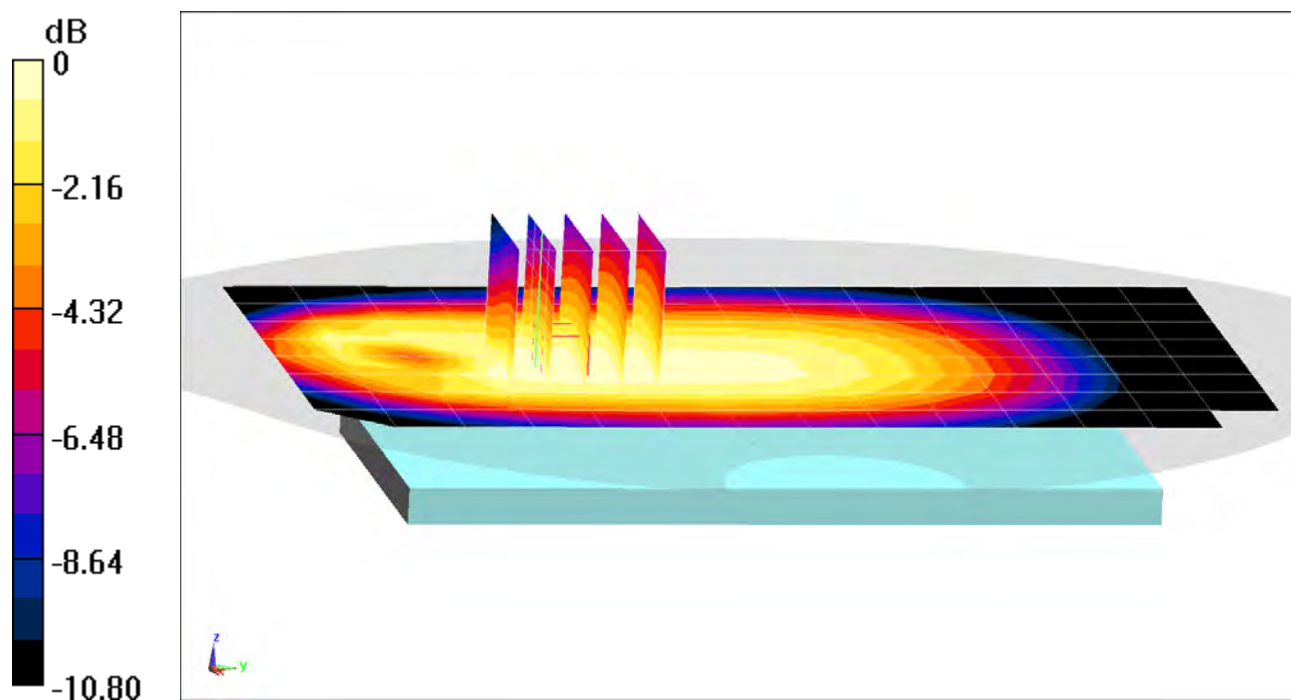
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 14.54 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.192 W/kg



0 dB = 0.231 W/kg = -6.36 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0095M

Communication System: UID 0, NR Band n12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5$ MHz; $\sigma = 0.951$ S/m; $\epsilon_r = 53.576$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 707.5 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n12, Body SAR, Back Side, 15 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 141500, 1 RB, 77 RB Offset

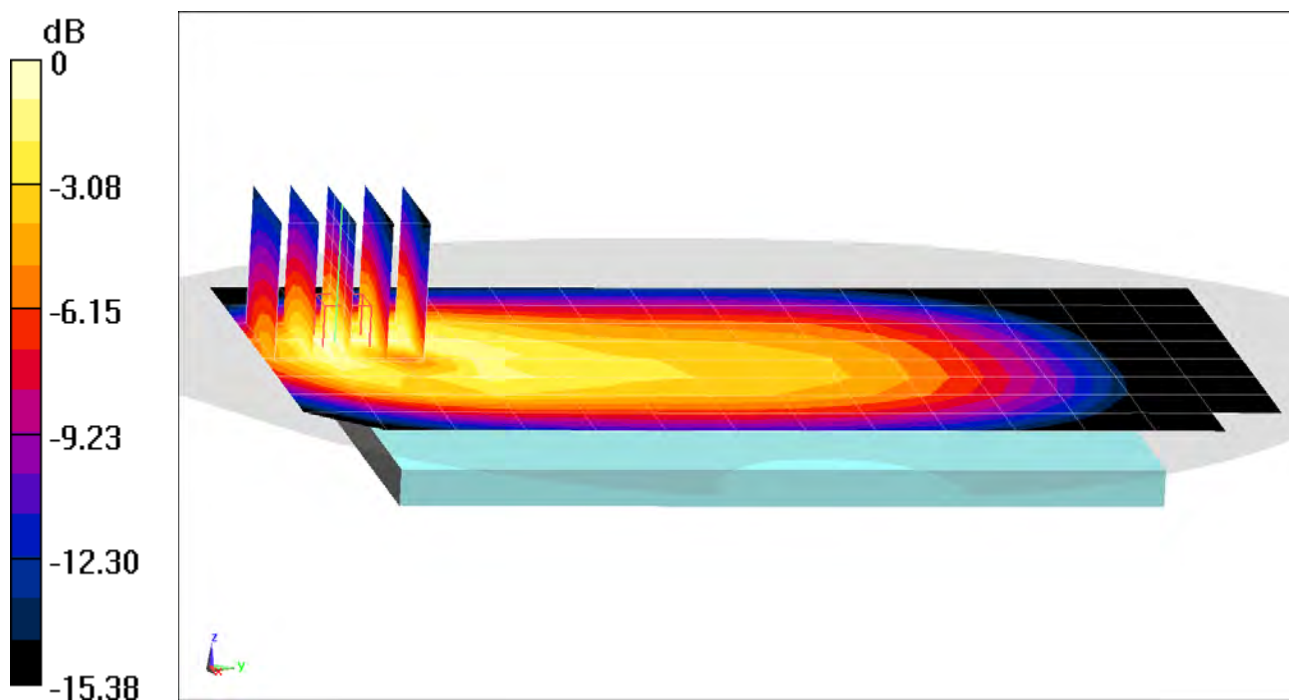
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.27 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.619 W/kg

SAR(1 g) = 0.340 W/kg



0 dB = 0.516 W/kg = -2.87 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0089M

Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.961$ S/m; $\epsilon_r = 54.105$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/18/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 836.5 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n5, Body SAR, Back Side, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 167300, 1 RB, 53 RB Offset**

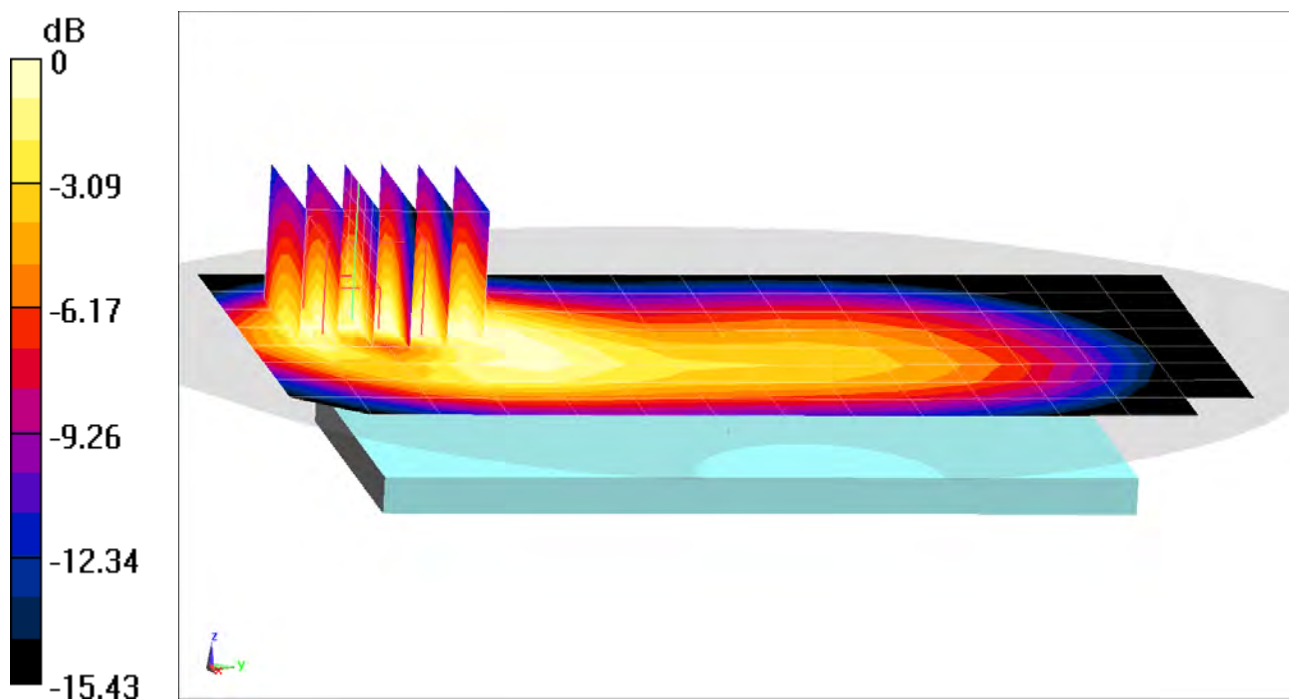
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.88 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.264 W/kg



0 dB = 0.353 W/kg = -4.52 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0089M

Communication System: UID 0, NR Band n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.5$ MHz; $\sigma = 0.961$ S/m; $\epsilon_r = 54.105$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/18/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 836.5 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n5, Body SAR, Back Side, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 167300, 1 RB, 53 RB Offset

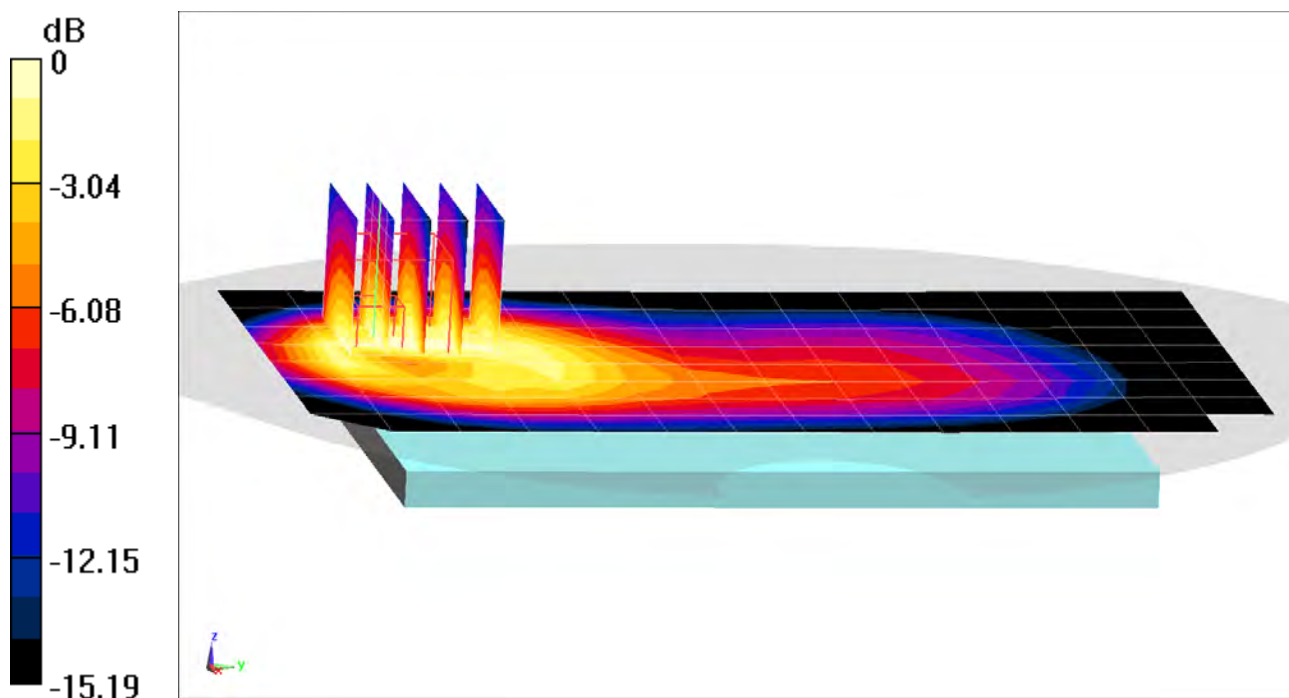
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 24.81 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.965 W/kg

SAR(1 g) = 0.570 W/kg



0 dB = 0.782 W/kg = -1.07 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0066M

Communication System: UID 0, NR Band n66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1745$ MHz; $\sigma = 1.538$ S/m; $\epsilon_r = 52.409$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/20/2020; Ambient Temp: 21.4°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1745 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n66, Body SAR, Back Side, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 349000, 1 RB, 53 RB Offset**

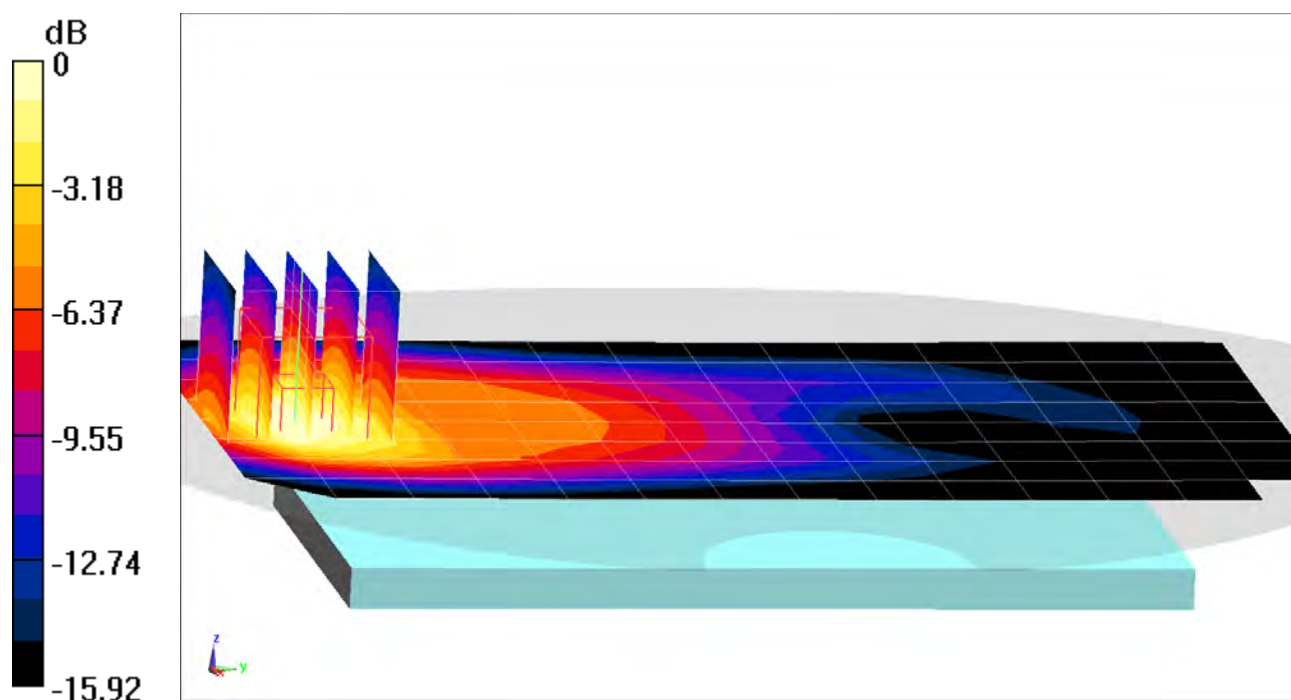
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 24.90 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.860 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0066M

Communication System: UID 0, NR Band n66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770$ MHz; $\sigma = 1.565$ S/m; $\epsilon_r = 52.938$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 21.4°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1770 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n66, Body SAR, Bottom Edge, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 354000, 1 RB, 1 RB Offset**

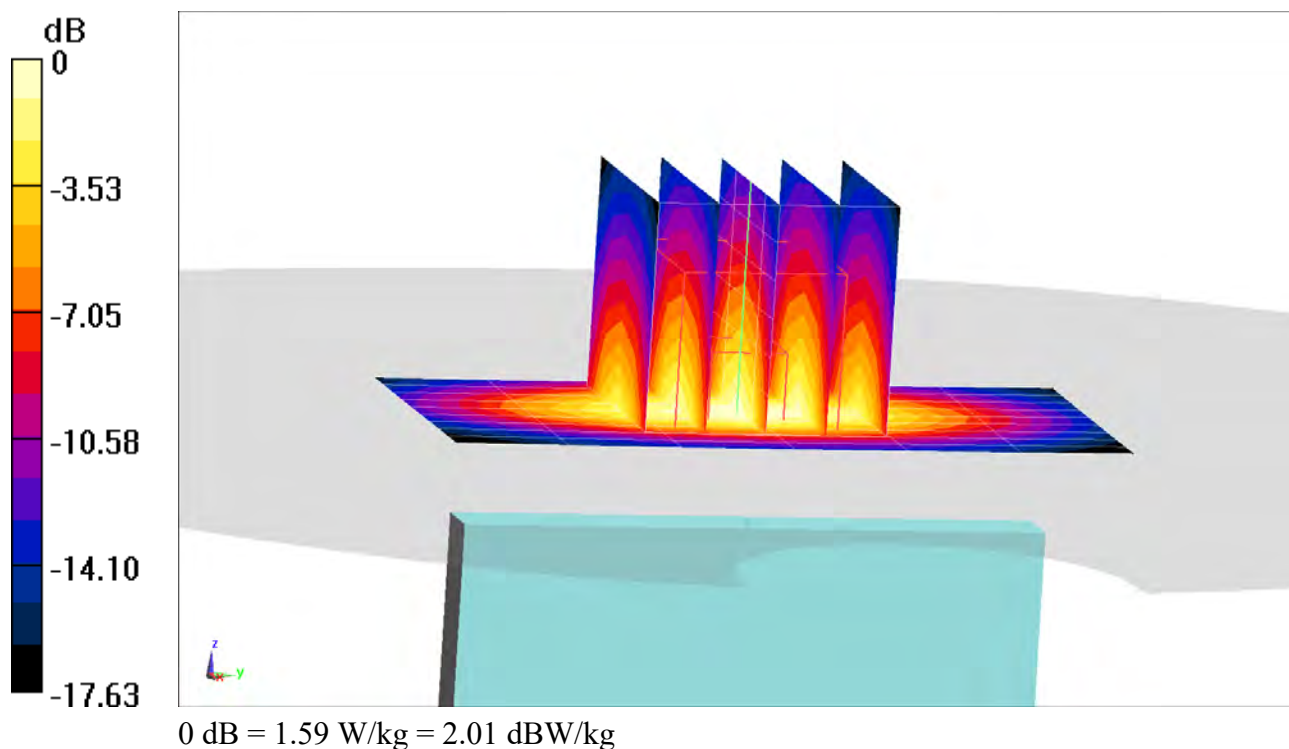
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 27.89 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 1.08 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0065M

Communication System: UID 0, NR Band n25; Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905$ MHz; $\sigma = 1.583$ S/m; $\epsilon_r = 54.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n25, Body SAR, Back Side, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 381000, 1 RB, 53 RB Offset

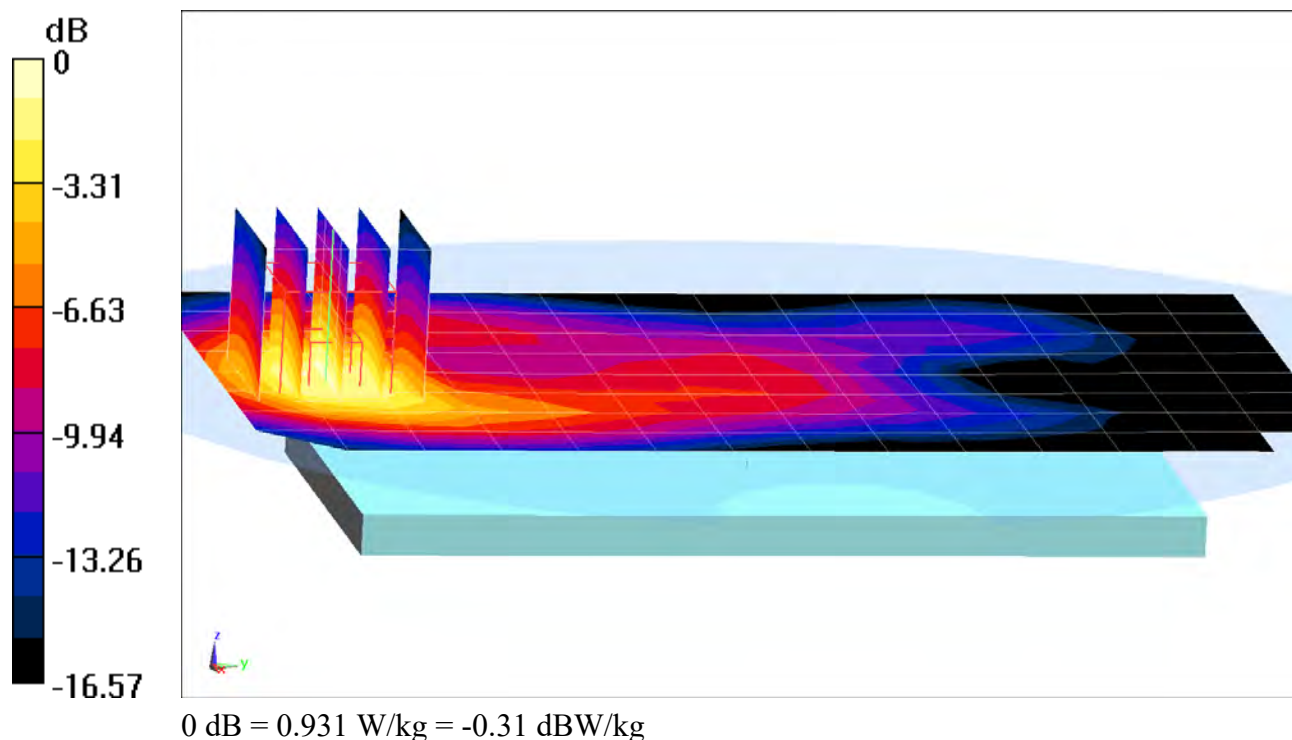
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 20.93 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.659 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0065M

Communication System: UID 0, NR Band n25; Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905$ MHz; $\sigma = 1.549$ S/m; $\epsilon_r = 53.538$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2020; Ambient Temp: 23.1°C; Tissue Temp: 23.9°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n25, Body SAR, Bottom Edge, 20 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 381000, 1 RB, 53 RB Offset**

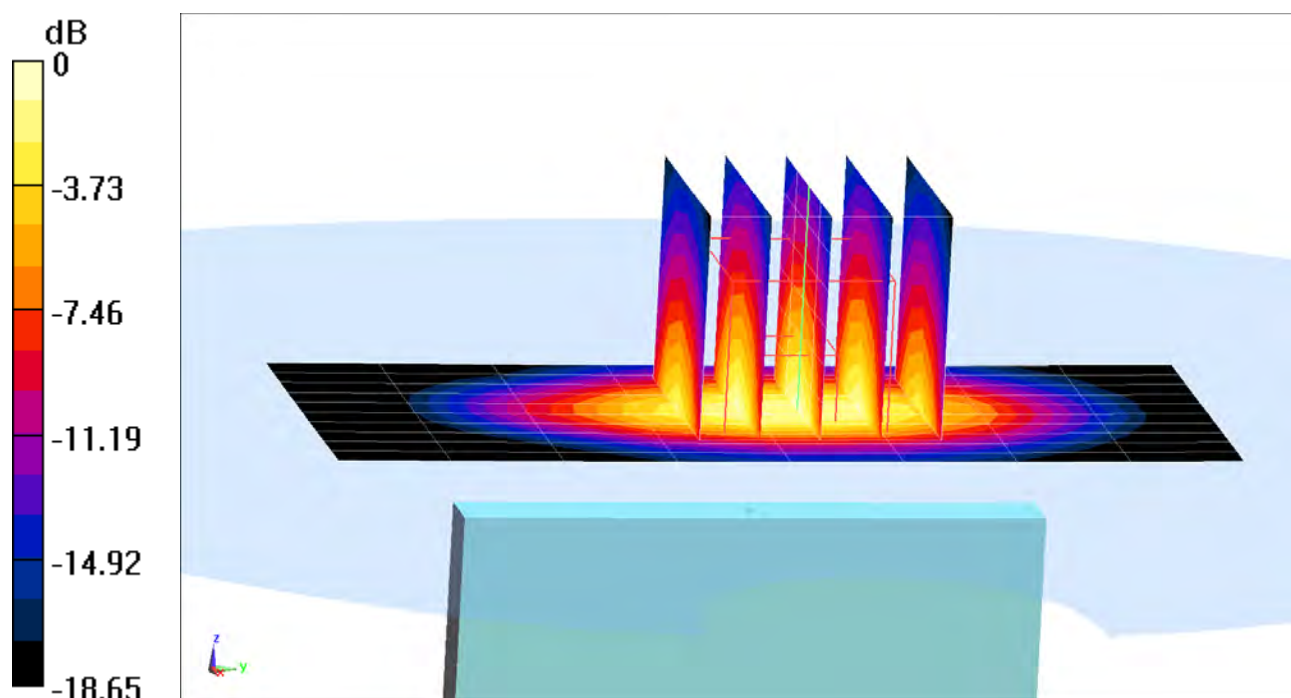
Area Scan (11x9x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 29.06 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 1.15 W/kg



0 dB = 1.74 W/kg = 2.41 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1187M

Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2592.99$ MHz; $\sigma = 2.212$ S/m; $\epsilon_r = 50.346$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2592.99 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n41, Body SAR, Back Side, 100 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 518598, 1 RB, 137 RB Offset

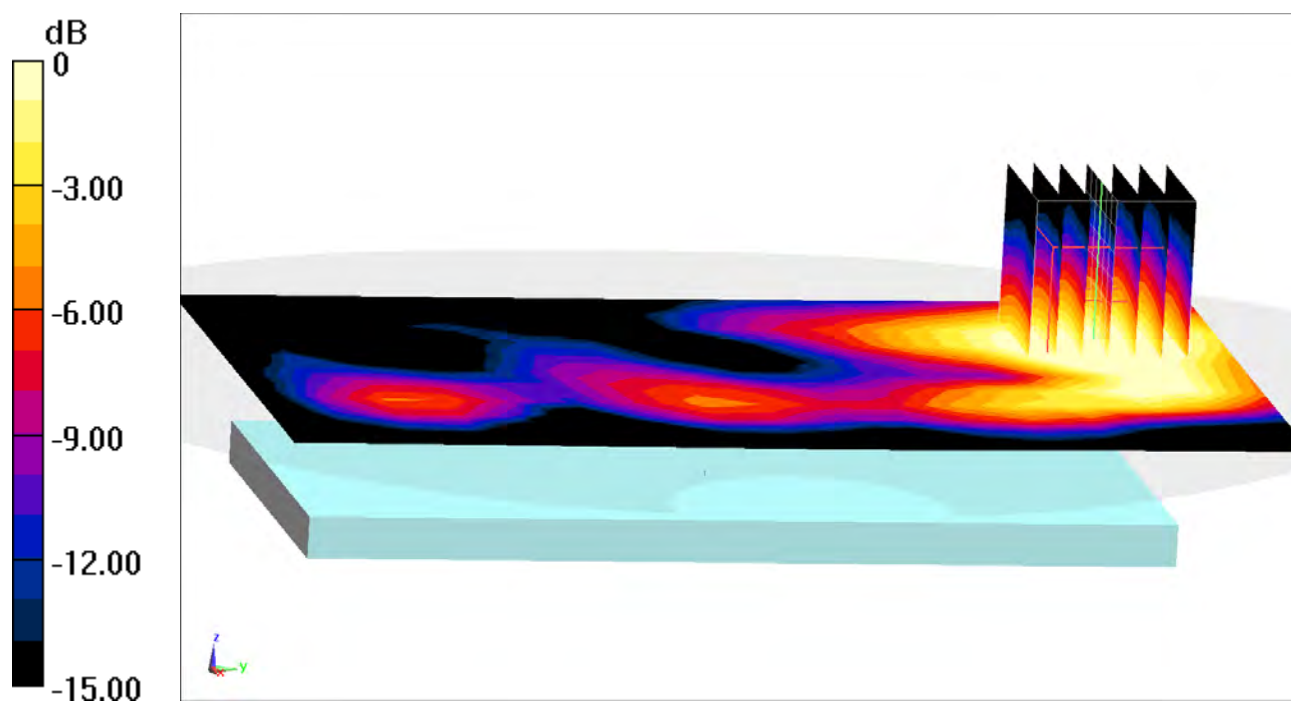
Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 6.266 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.081 W/kg



0 dB = 0.124 W/kg = -9.07 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1187M

Communication System: UID 0, NR Band n41; Frequency: 2592.99 MHz; Duty Cycle: 1:4

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2592.99$ MHz; $\sigma = 2.212$ S/m; $\epsilon_r = 50.346$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2592.99 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: NR Band n41, Body SAR, Top Edge, 100 MHz Bandwidth
DFT-s-OFDM QPSK, Ch. 518598, 1 RB, 137 RB Offset**

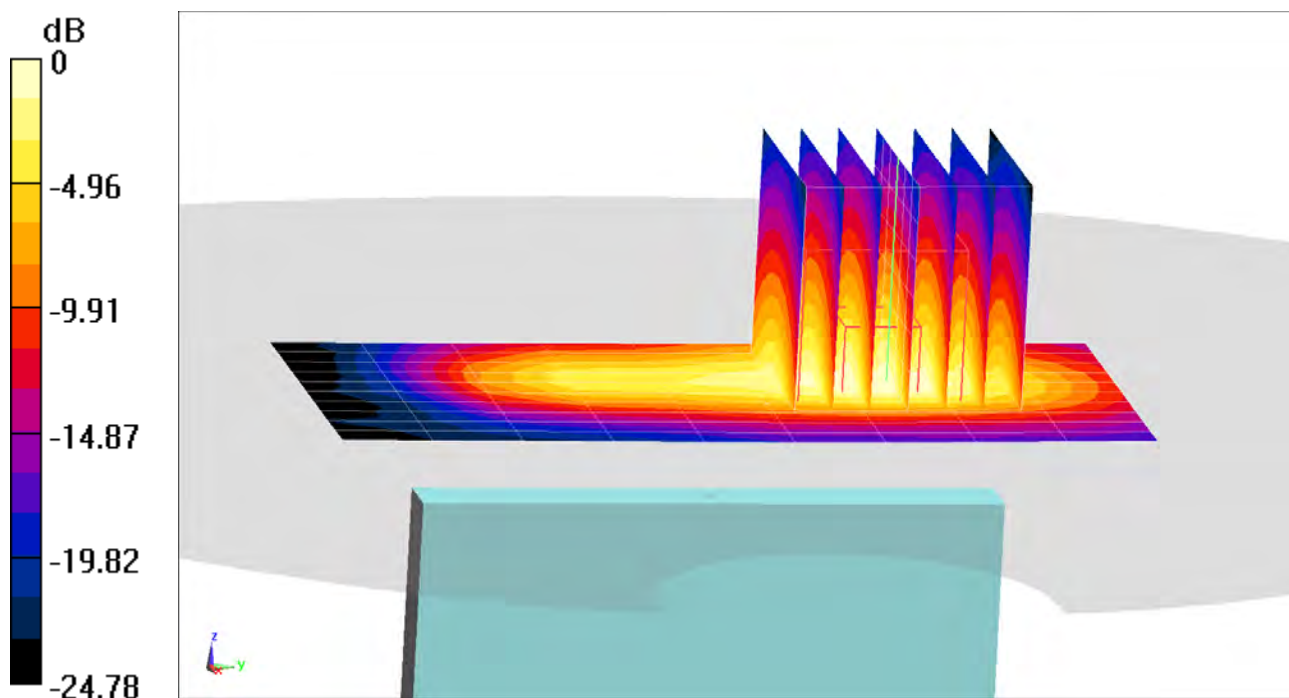
Area Scan (11x10x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 14.52 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.839 W/kg

SAR(1 g) = 0.406 W/kg



0 dB = 0.671 W/kg = -1.73 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0697M

Communication System: UID 0, IEEE 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2462 \text{ MHz}$; $\sigma = 2.059 \text{ S/m}$; $\epsilon_r = 50.745$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2462 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Antenna 1,
Body SAR, Ch 11, 1 Mbps, Back Side**

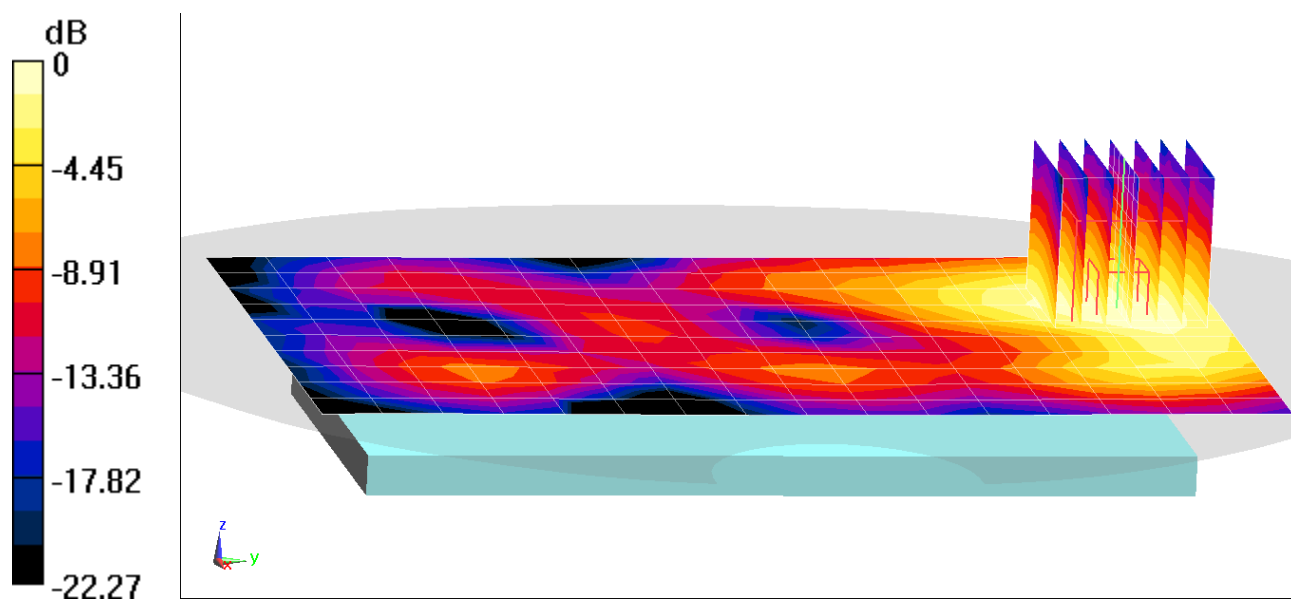
Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 7.417 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.188 W/kg

SAR(1 g) = 0.104 W/kg



0 dB = 0.155 W/kg = -8.10 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0697M

Communication System: UID 0, 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2462 \text{ MHz}$; $\sigma = 2.059 \text{ S/m}$; $\epsilon_r = 50.745$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2462 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: IEEE 802.11b, 22 MHz Bandwidth, Antenna 1
Body SAR, Ch 11, 1 Mbps, Top Edge

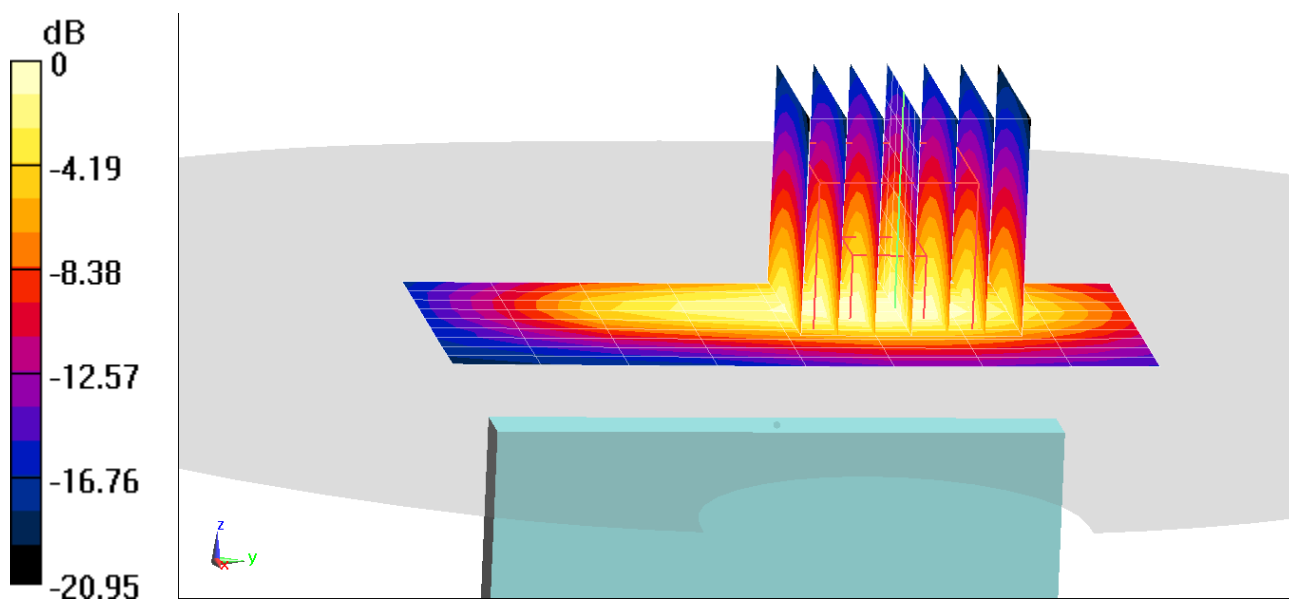
Area Scan (10x9x1): Measurement grid: $dx=5\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.83 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.943 W/kg

SAR(1 g) = 0.488 W/kg



0 dB = 0.772 W/kg = -1.12 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0697M

Communication System: UID 0, _IEEE 802.11n; Frequency: 5720 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5720$ MHz; $\sigma = 6.148$ S/m; $\epsilon_r = 46.06$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/24/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5720 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11n, UNII-2C MIMO, 20 MHz Bandwidth, Body SAR
Ch 144, 13 Mbps, Back Side**

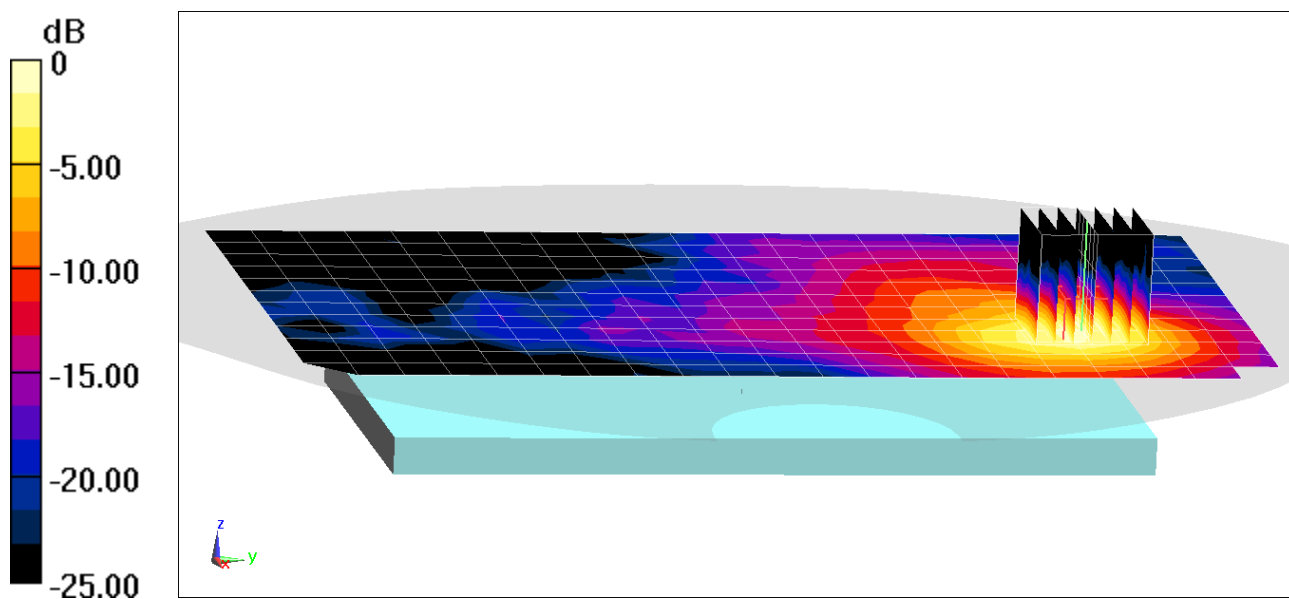
Area Scan (13x22x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 11.56 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.23 W/kg

SAR(1 g) = 0.787 W/kg



PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0697M

Communication System: UID 0, _IEEE 802.11n; Frequency: 5795 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5795 \text{ MHz}$; $\sigma = 6.257 \text{ S/m}$; $\epsilon_r = 45.933$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5795 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11n, UNII-3 MIMO, 40 MHz Bandwidth, Body SAR
Ch 159, 27 Mbps, Back Side**

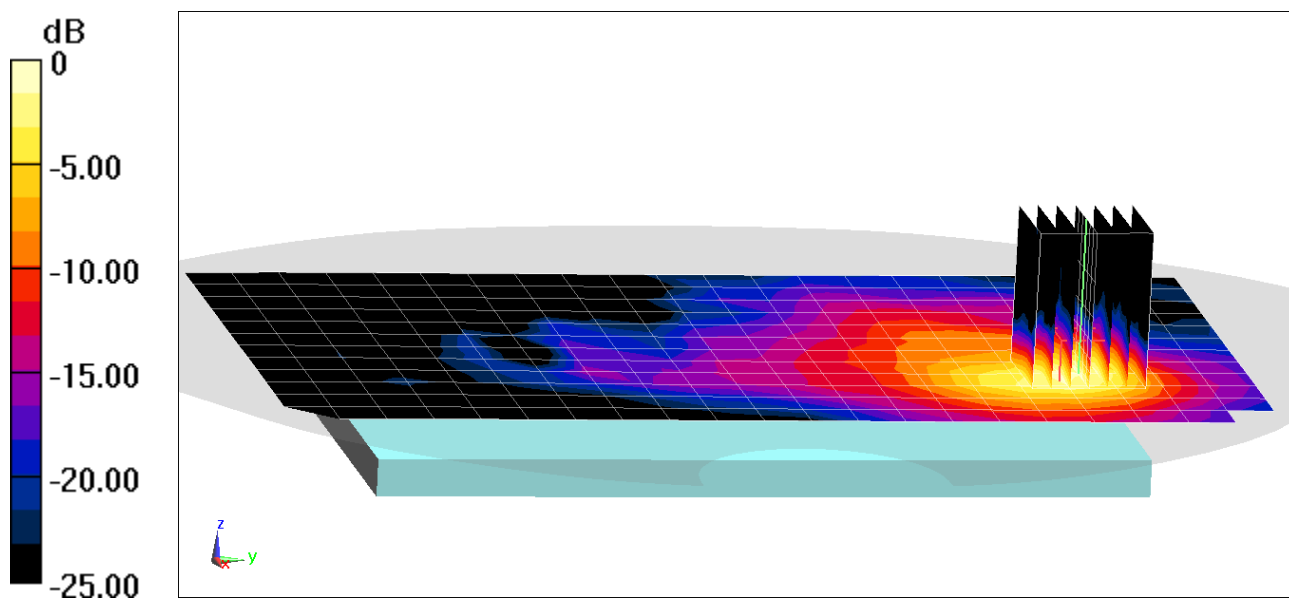
Area Scan (13x22x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 2.027 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 0.854 W/kg



0 dB = 2.13 W/kg = 3.28 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1175M

Communication System: UID 0, Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.294

Medium: 2450 Body; Medium parameters used:

$f = 2480$ MHz; $\sigma = 2.079$ S/m; $\epsilon_r = 50.688$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2480 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Bluetooth, Body SAR, Ch 78, 1 Mbps, Back Side

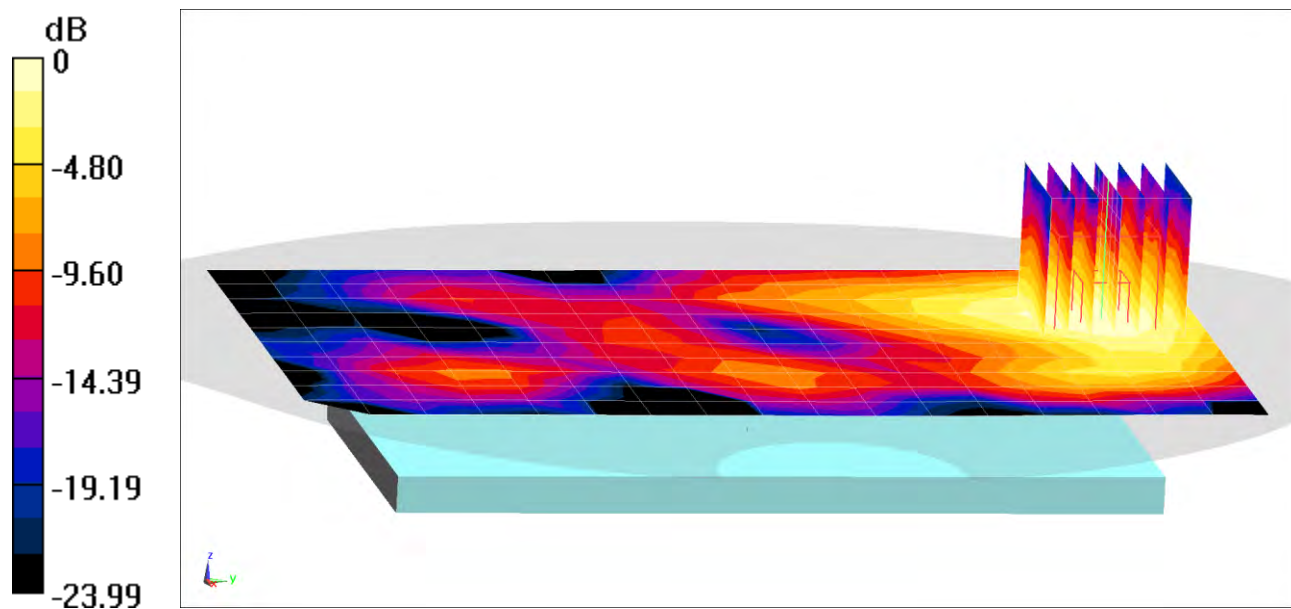
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 4.203 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.0630 W/kg

SAR(1 g) = 0.033 W/kg



0 dB = 0.0504 W/kg = -12.98 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 1175M

Communication System: UID 0, Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.294

Medium: 2450 Body; Medium parameters used:

$f = 2480$ MHz; $\sigma = 2.079$ S/m; $\epsilon_r = 50.688$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2480 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Bluetooth, Body SAR, Ch 78, 1 Mbps, Top Edge

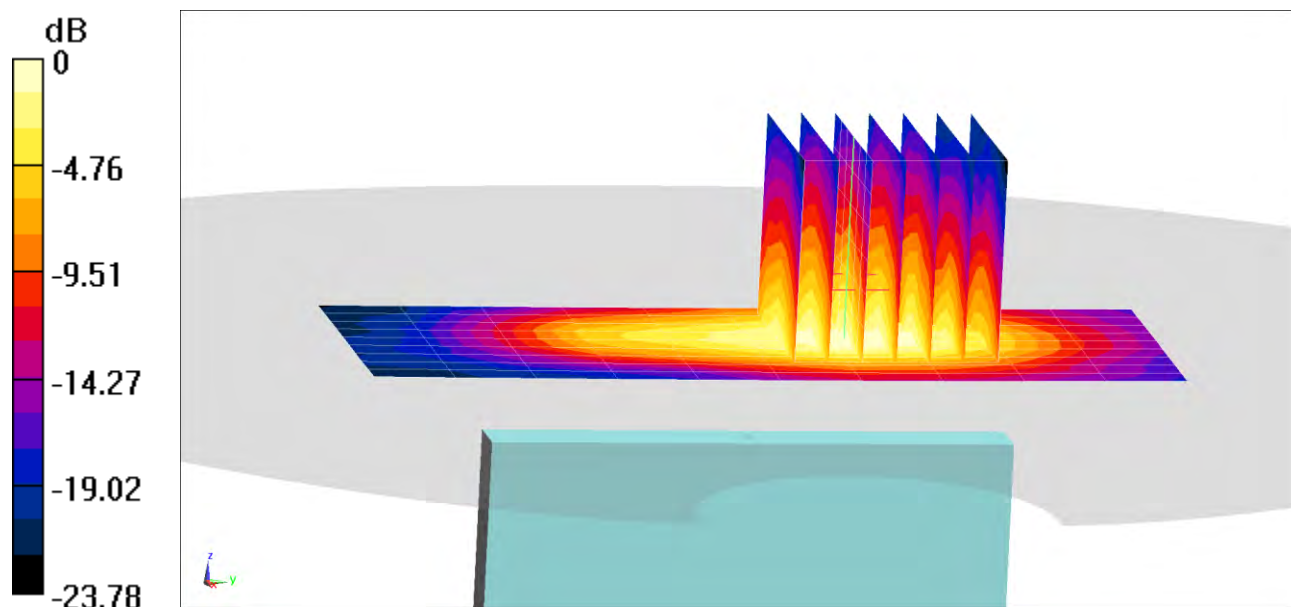
Area Scan (10x11x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 10.20 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.182 W/kg



0 dB = 0.322 W/kg = -4.92 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, CDMA; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1908.75$ MHz; $\sigma = 1.555$ S/m; $\epsilon_r = 54.587$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/17/2020; Ambient Temp: 22.5°C; Tissue Temp: 24.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1908.75 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: PCS EVDO, Phablet SAR, Bottom Edge, High.ch

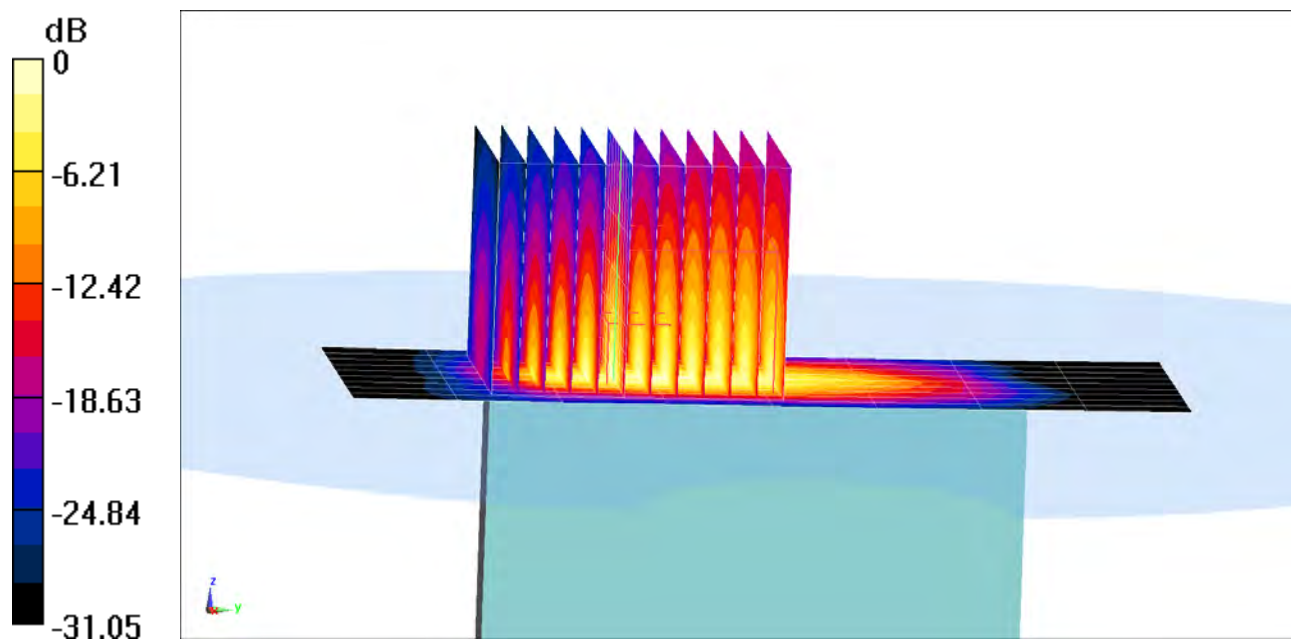
Area Scan (10x9x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (10x12x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 66.95 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 25.2 W/kg

SAR(10 g) = 2.88 W/kg



0 dB = 13.5 W/kg = 11.30 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, GSM GPRS; 4 Tx slots; Frequency: 1909.8 MHz; Duty Cycle: 1:2.076

Medium: 1900 Body; Medium parameters used:

$f = 1910$ MHz; $\sigma = 1.579$ S/m; $\epsilon_r = 52.606$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/12/2020; Ambient Temp: 24.9°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1909.8 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: GPRS 1900, Phablet SAR, Back side, High.ch, 4 Tx Slots

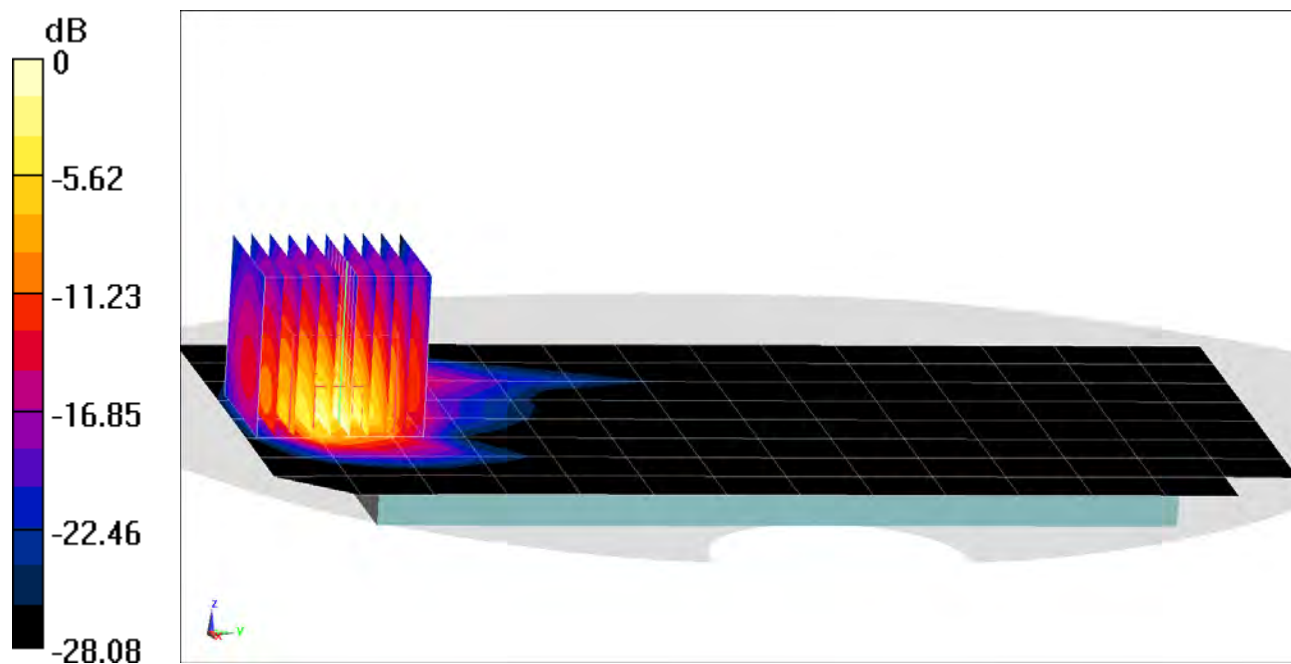
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 47.97 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 9.24 W/kg

SAR(10 g) = 1.46 W/kg



0 dB = 6.50 W/kg = 8.13 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, UMTS; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used (interpolated):

$f = 1712.4$ MHz; $\sigma = 1.501$ S/m; $\epsilon_r = 52.531$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/20/2020; Ambient Temp: 21.4°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1712.4 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Phablet SAR, Bottom Edge, Low.ch

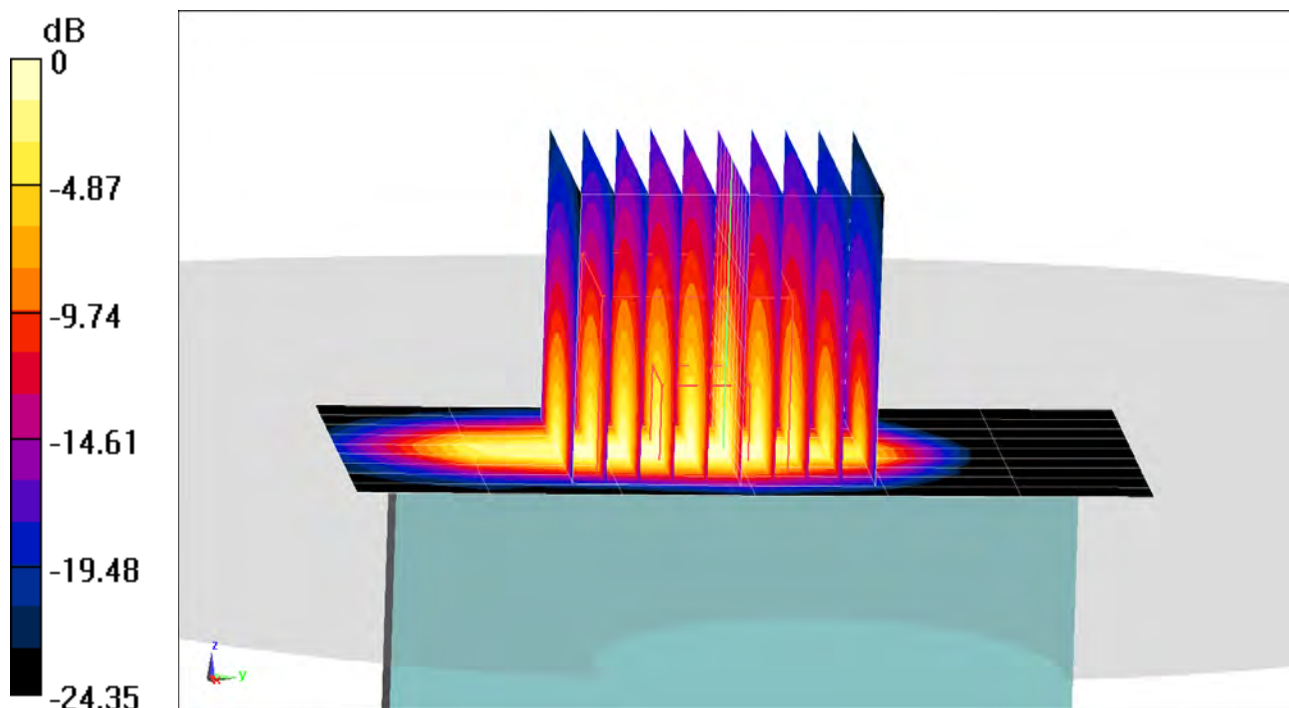
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 70.20 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 14.9 W/kg

SAR(10 g) = 2.84 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0100M

Communication System: UID 0, UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used (interpolated):

$f = 1907.6$ MHz; $\sigma = 1.587$ S/m; $\epsilon_r = 52.684$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.9°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1907.6 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Phablet SAR, Back side, High.ch

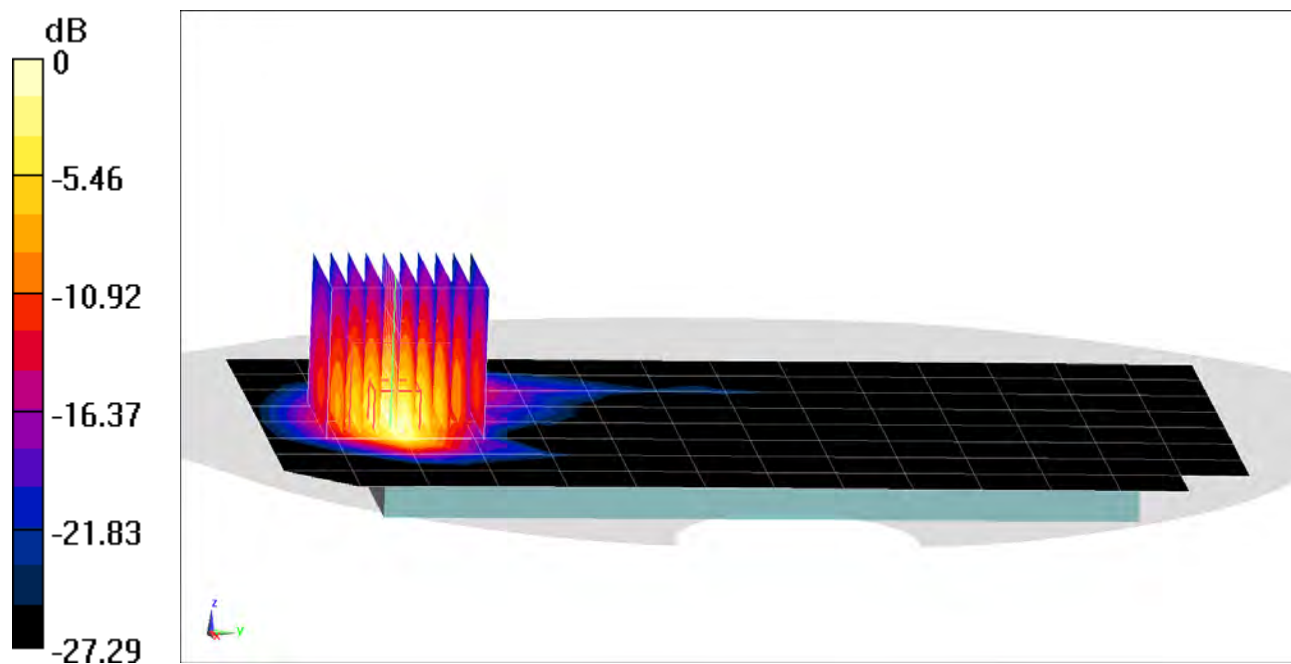
Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 61.96 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 14.9 W/kg

SAR(10 g) = 2.38 W/kg



0 dB = 10.1 W/kg = 10.04 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0071M

Communication System: UID 0, LTE Band 66 (AWS),; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1720 \text{ MHz}$; $\sigma = 1.477 \text{ S/m}$; $\epsilon_r = 52.609$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/29/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1720 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 66 (AWS), CA_66C ULCA, Phablet SAR, Bottom Edge

PCC: 20 MHz Bandwidth, Ch. 132072, 100 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 132270, 100 RB, 0 RB Offset

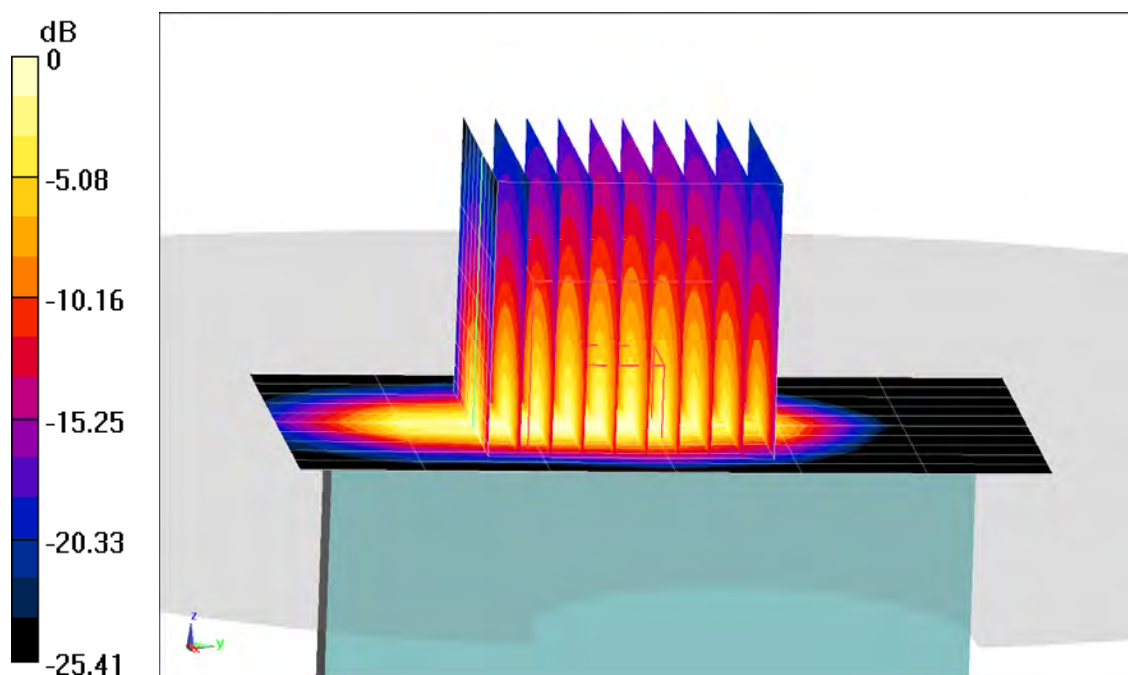
Area Scan (11x7x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 71.31 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 20.1 W/kg

SAR(10 g) = 2.98 W/kg



0 dB = 11.8 W/kg = 10.72 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905 \text{ MHz}$; $\sigma = 1.55 \text{ S/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/17/2020; Ambient Temp: 22.5°C; Tissue Temp: 24.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 25 (PCS), Phablet SAR, Bottom Edge, High.ch
20 MHz Bandwidth, QPSK, 50 RB, 25 RB Offset

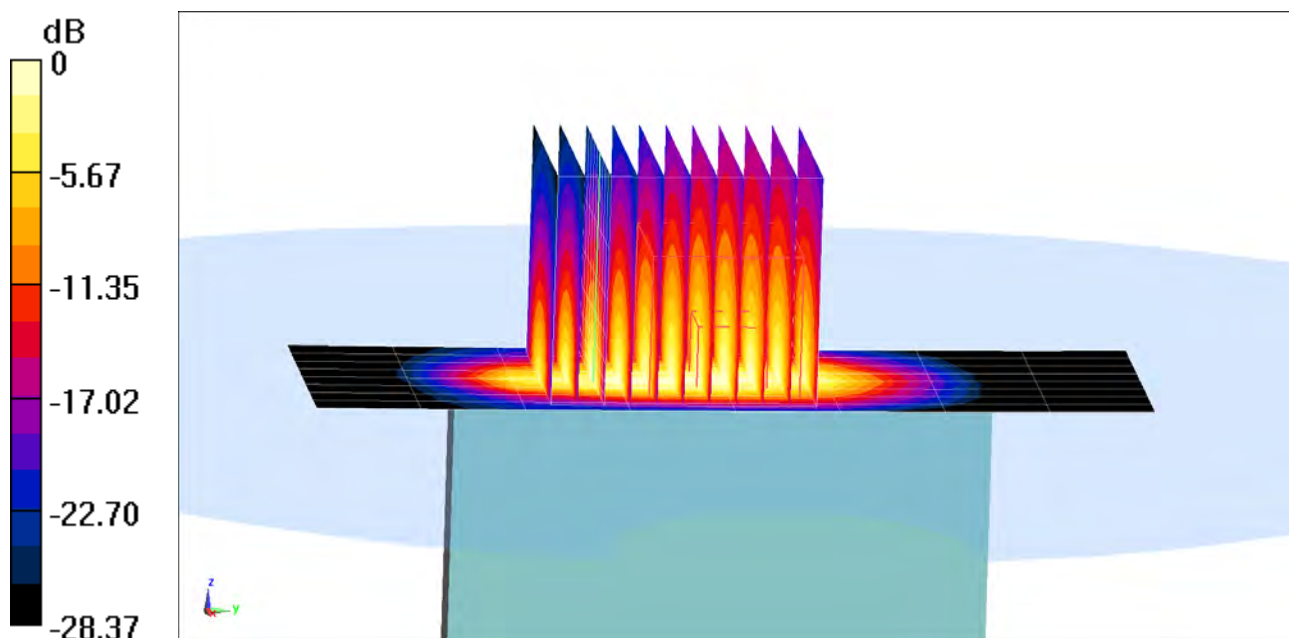
Area Scan (9x9x1): Measurement grid: $dx=5\text{mm}$, $dy=15\text{mm}$

Zoom Scan (10x11x8)/Cube 0: Measurement grid: $dx=3.8\text{mm}$, $dy=3.8\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Reference Value = 66.90 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 24.0 W/kg

SAR(10 g) = 3.05 W/kg



0 dB = 12.5 W/kg = 10.97 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0060M

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2310$ MHz; $\sigma = 1.884$ S/m; $\epsilon_r = 53.055$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06/07/2020; Ambient Temp: 23.6°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2310 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 30, Phablet SAR, Back side, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 49 RB Offset

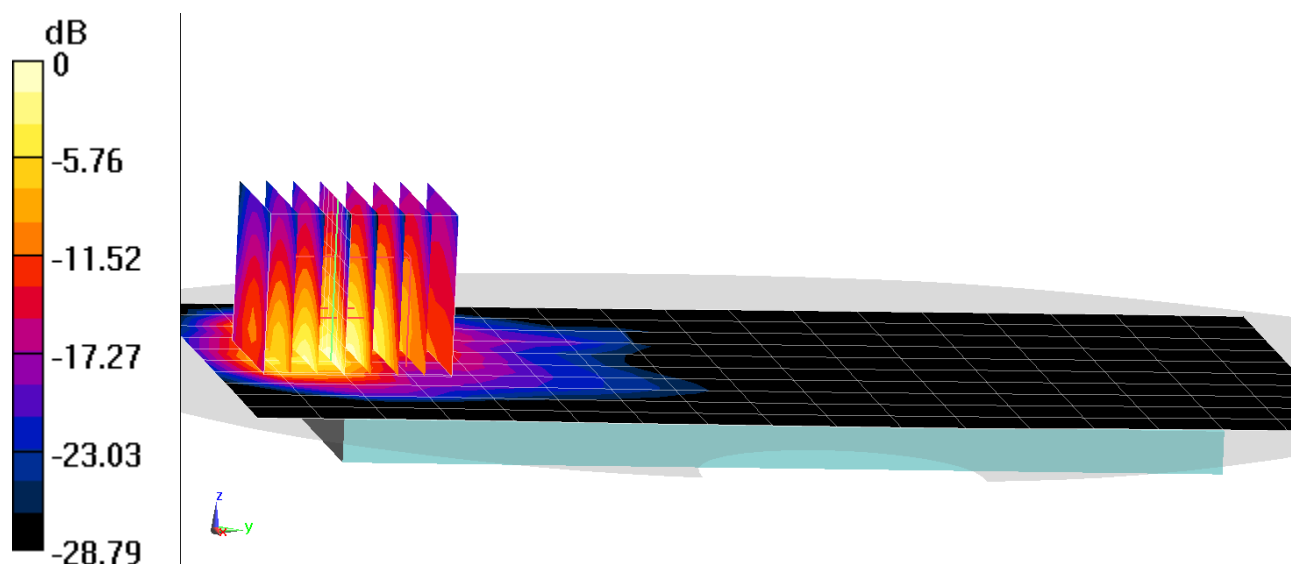
Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.48 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 15.1 W/kg

SAR(10 g) = 2.64 W/kg



0 dB = 11.0 W/kg = 10.41 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0090M

Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2510 \text{ MHz}$; $\sigma = 2.103 \text{ S/m}$; $\epsilon_r = 52.408$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06/01/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2510 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 7, Phablet SAR, Bottom Edge, Low.ch
20 MHz Bandwidth, QPSK, 50 RB, 50 RB Offset

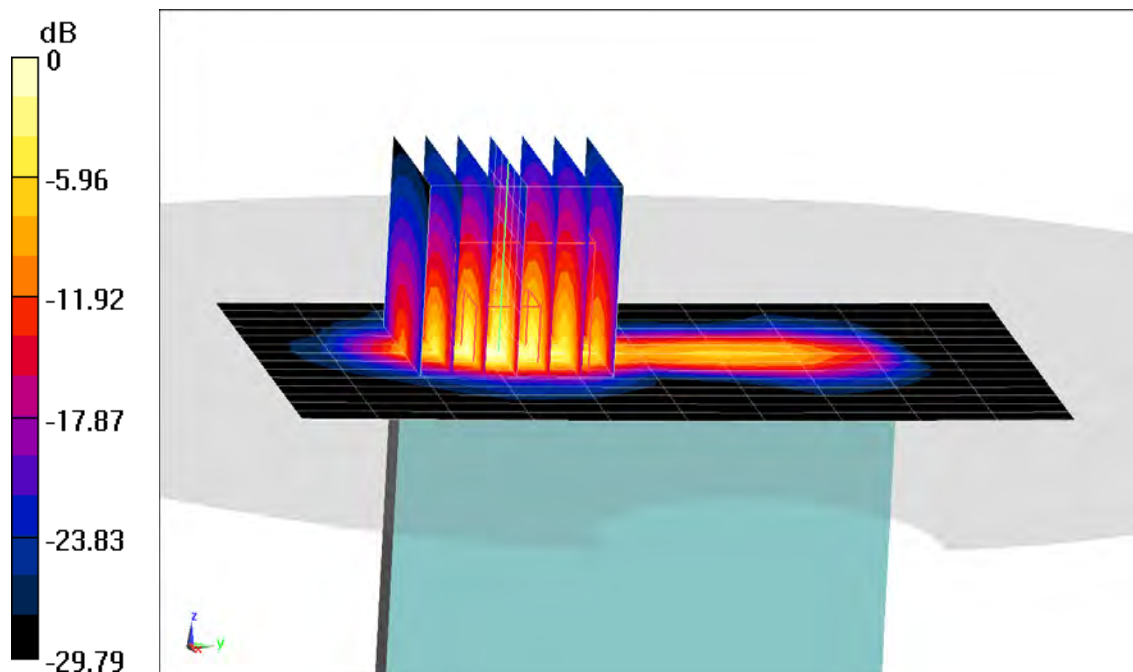
Area Scan (15x11x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 56.15 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 16.7 W/kg

SAR(10 g) = 1.66 W/kg



0 dB = 12.0 W/kg = 10.79 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0085M

Communication System: UID 0, _LTE Band 41 (Class 2); Frequency: 2636.5 MHz; Duty Cycle: 1:2.31

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2636.5$ MHz; $\sigma = 2.257$ S/m; $\epsilon_r = 50.468$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2636.5 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 41 PC2, ULCA, Phablet SAR, Bottom Edge

PCC: 20 MHz Bandwidth, Ch. 41055, QPSK, 50 RB, 0 RB Offset

SCC: 20 MHz Bandwidth, Ch. 40857, QPSK, 50 RB, 50 RB Offset

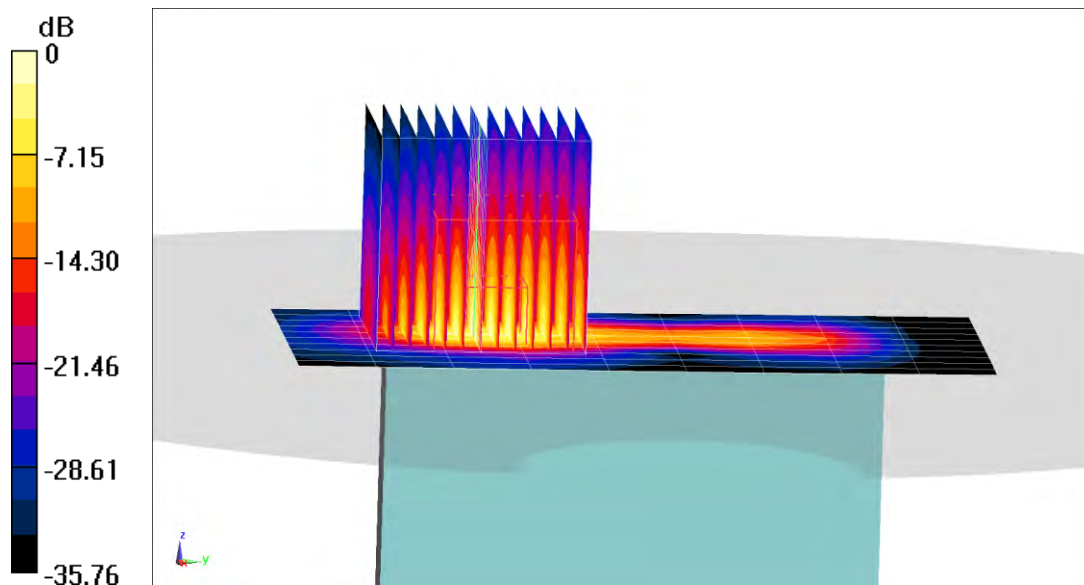
Area Scan (11x10x1): Measurement grid: dx=5mm, dy=12mm

Zoom Scan (12x13x8)/Cube 0: Measurement grid: dx=2.7mm, dy=2.7mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 62.05 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 41.0 W/kg

SAR(10 g) = 2.53 W/kg



0 dB = 22.3 W/kg = 13.48 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0066M

Communication System: UID 0, NR Band n66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770 \text{ MHz}$; $\sigma = 1.565 \text{ S/m}$; $\epsilon_r = 52.938$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06/01/2020; Ambient Temp: 21.4°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1770 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n66, Phablet SAR, Back Side, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 354000, 1 RB, 53 RB Offset

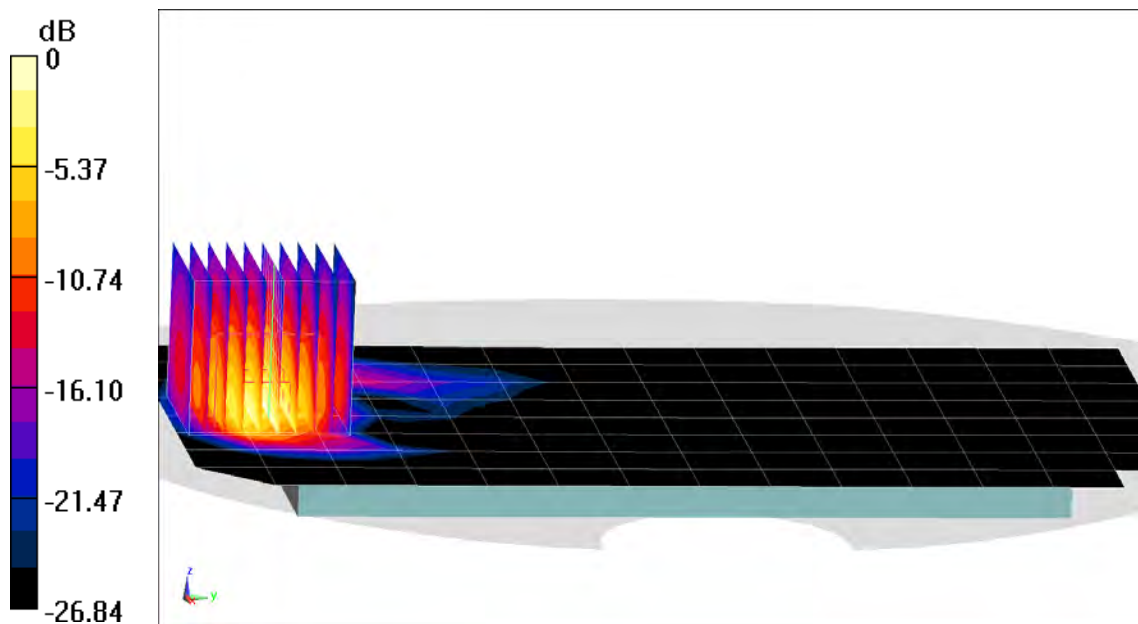
Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (10x10x8)/Cube 0: Measurement grid: $dx=3.8\text{mm}$, $dy=3.8\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Reference Value = 62.68 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 14.3 W/kg

SAR(10 g) = 2.45 W/kg



0 dB = 10.5 W/kg = 10.21 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0065M

Communication System: UID 0, NR Band n25; Frequency: 1905 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1905$ MHz; $\sigma = 1.549$ S/m; $\epsilon_r = 53.538$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05/23/2020; Ambient Temp: 23.1°C; Tissue Temp: 23.9°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1905 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: NR Band n25, Phablet SAR, Bottom Edge, 20 MHz Bandwidth

DFT-s-OFDM QPSK, Ch. 381000, 100 RB, 0 RB Offset

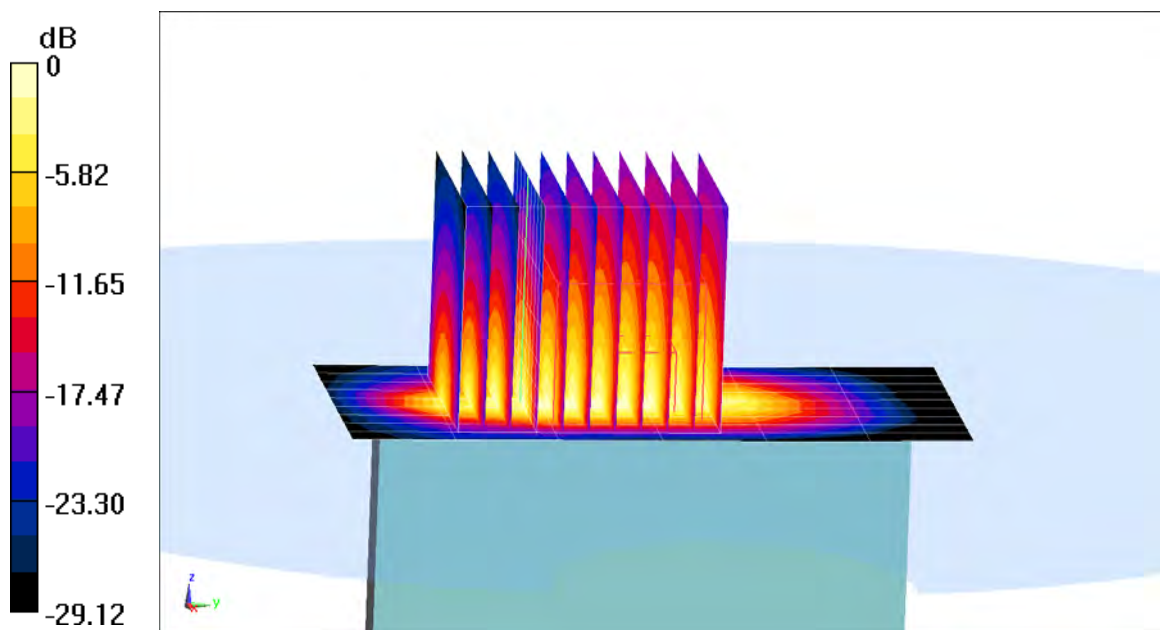
Area Scan (10x7x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (10x11x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 58.59 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 19.1 W/kg

SAR(10 g) = 2.27 W/kg



0 dB = 10.3 W/kg = 10.13 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0697M

Communication System: UID 0, _IEEE 802.11n; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5300 \text{ MHz}$; $\sigma = 5.589 \text{ S/m}$; $\epsilon_r = 46.775$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 05-24-2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5300 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: IEEE 802.11n, UNII-2A MIMO, 20 MHz Bandwidth
Phablet SAR, Ch 60, 13 Mbps, Back Side

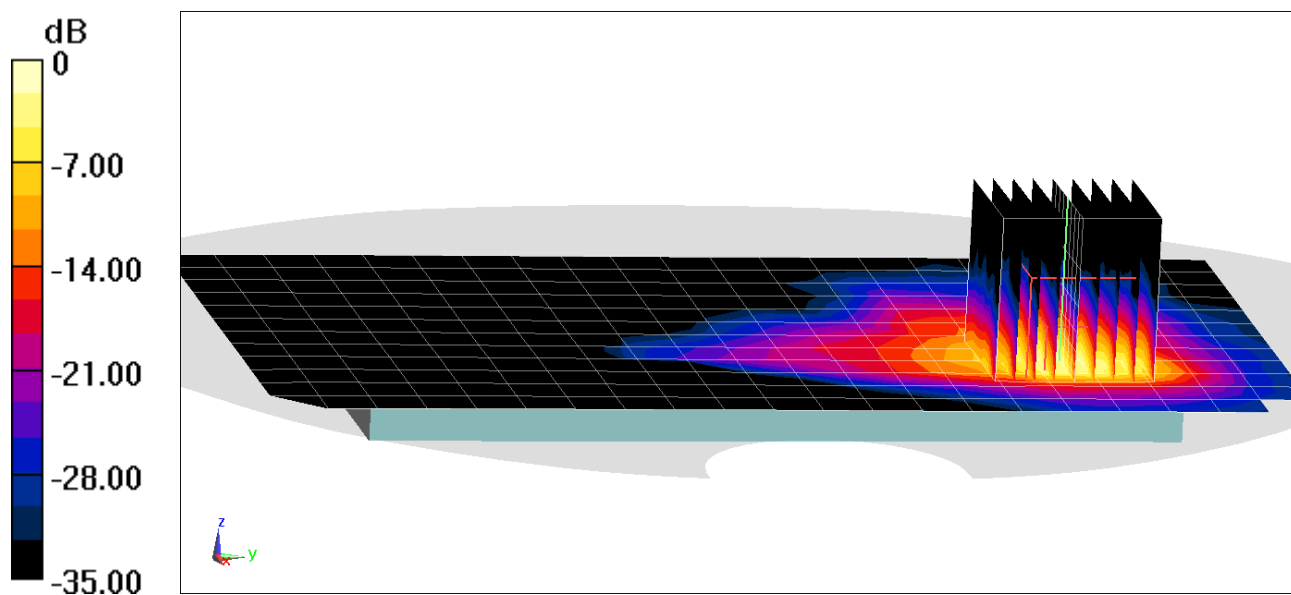
Area Scan (13x22x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Reference Value = 5.639 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 46.1 W/kg

SAR(10 g) = 2.52 W/kg



0 dB = 25.4 W/kg = 14.05 dBW/kg

APPENDIX B: SYSTEM VERIFICATION

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.871 \text{ S/m}$; $\epsilon_r = 43.529$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/13/2020; Ambient Temp: 21.6°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 750 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

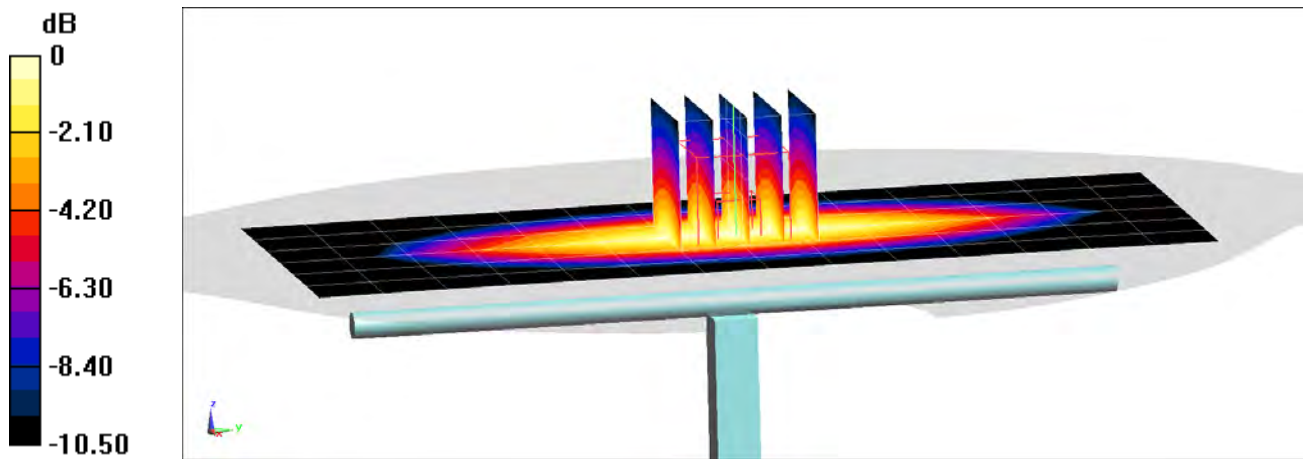
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 1.63 W/kg

Deviation(1 g) = -7.18%



0 dB = 2.20 W/kg = 3.42 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.487$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/17/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 750 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

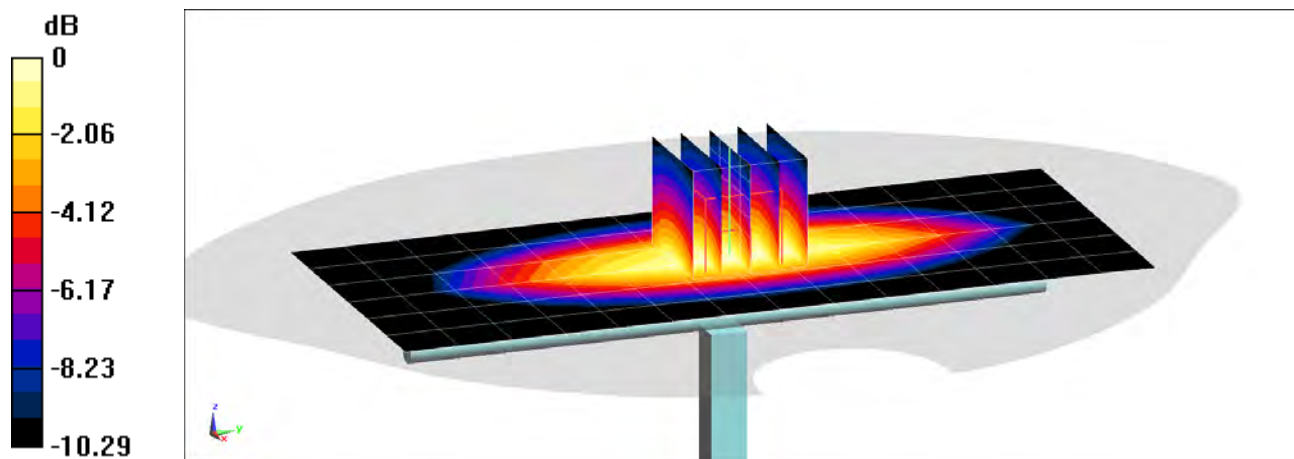
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.87 W/kg

SAR(1 g) = 1.83 W/kg

Deviation(1 g) = 4.21%



0 dB = 2.49 W/kg = 3.96 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.875 \text{ S/m}$; $\epsilon_r = 41.554$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/20/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 750 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

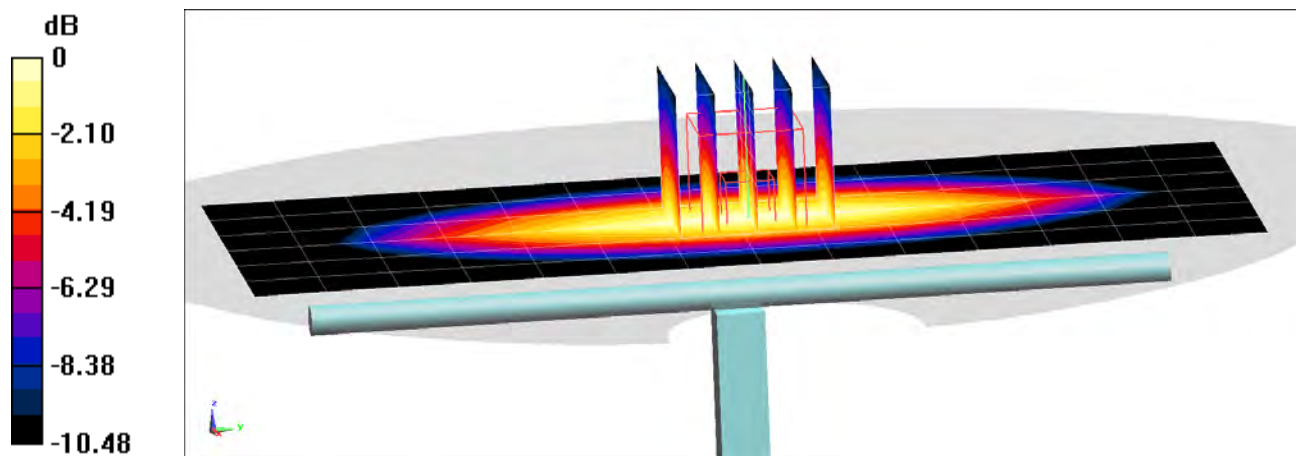
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.58 W/kg

SAR(1 g) = 1.67 W/kg

Deviation(1 g) = -4.90%



0 dB = 2.26 W/kg = 3.54 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.873 \text{ S/m}$; $\epsilon_r = 41.945$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.3°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

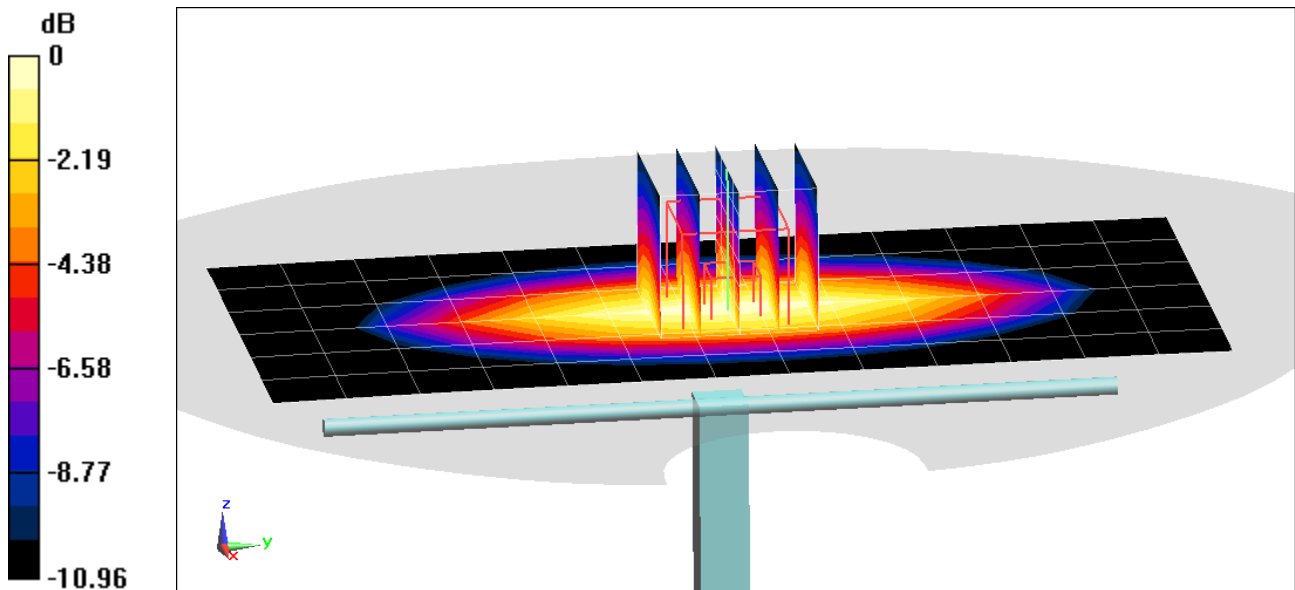
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.92 W/kg

SAR(1 g) = 1.89 W/kg

Deviation(1 g) = 0.21%



0 dB = 2.56 W/kg = 4.08 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.885 \text{ S/m}$; $\epsilon_r = 40.622$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/11/2020; Ambient Temp: 21.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

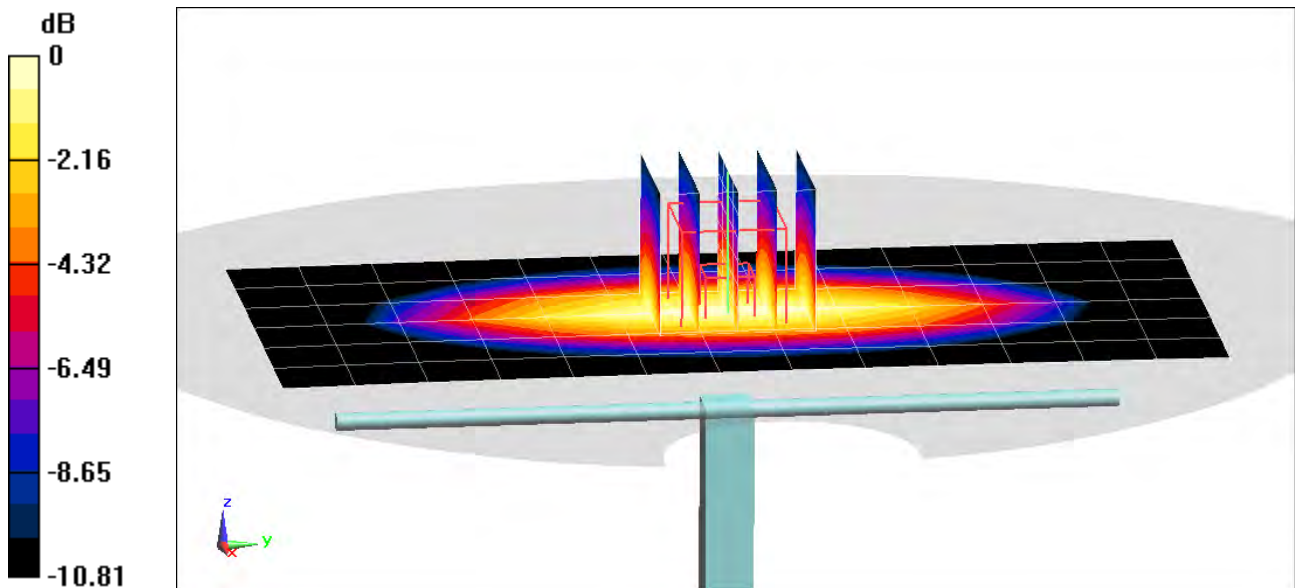
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.83 W/kg

SAR(1 g) = 1.87 W/kg

Deviation(1 g) = -0.74%



0 dB = 2.51 W/kg = 4.00 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 40.974$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/13/2020; Ambient Temp: 21.5°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 835 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 9/17/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

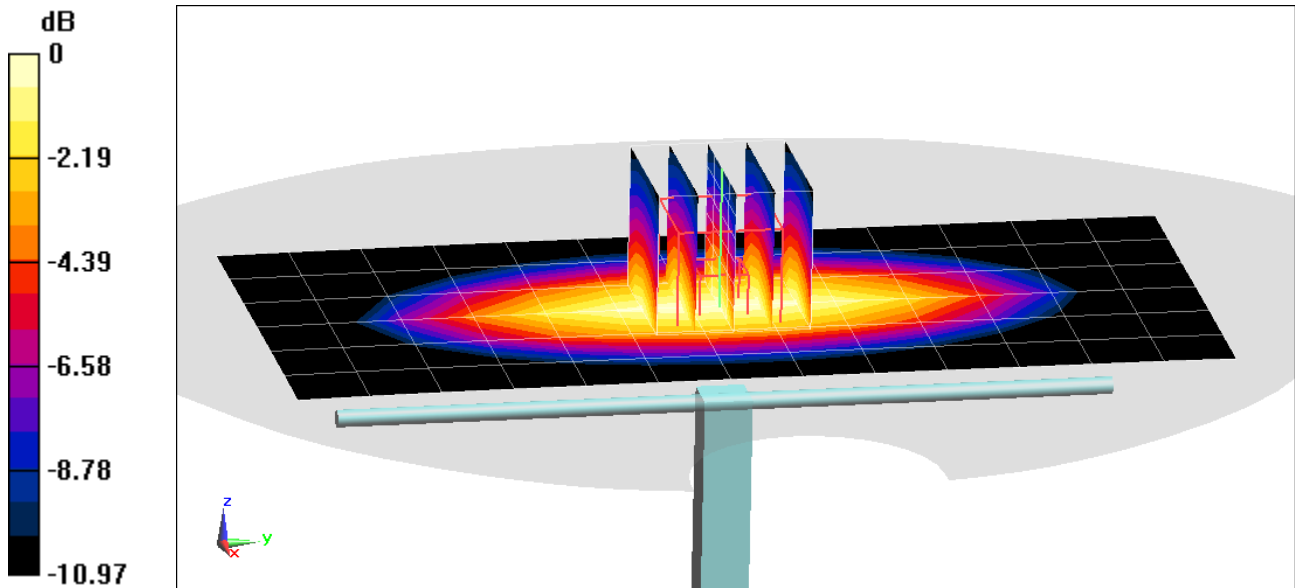
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.98 W/kg

SAR(1 g) = 1.9 W/kg

Deviation(1 g) = -1.55%



PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.338 \text{ S/m}$; $\epsilon_r = 40.62$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/13/2020; Ambient Temp: 23.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(8.46, 8.46, 8.46) @ 1750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

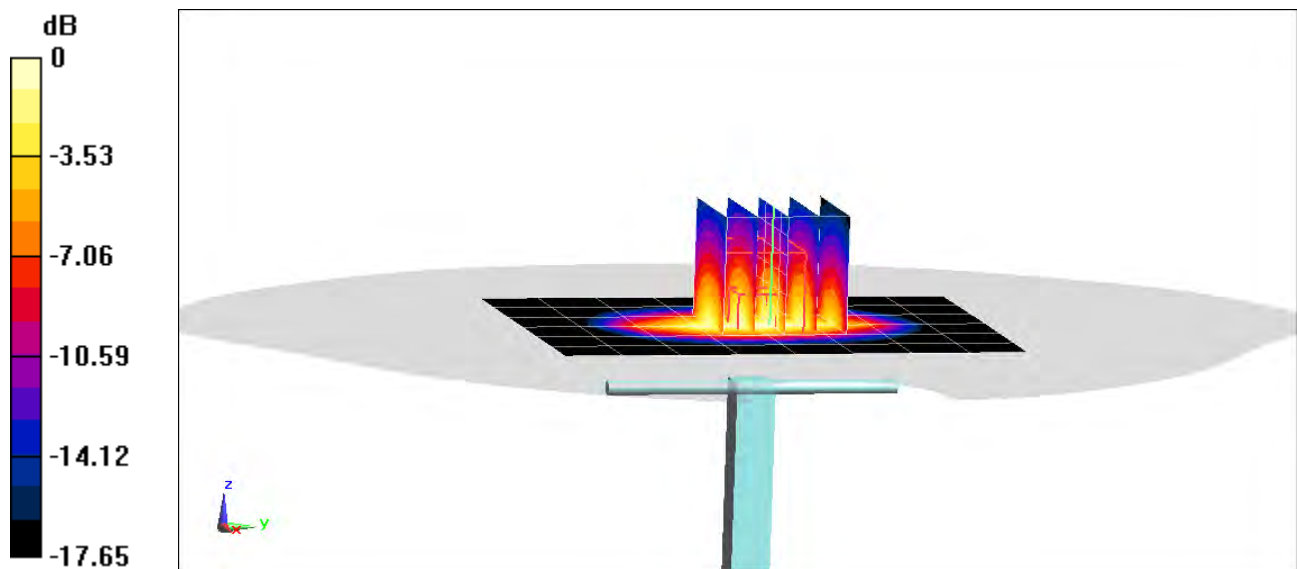
Area Scan (7x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 6.55 W/kg

SAR(1 g) = 3.61 W/kg

Deviation(1 g) = -1.10%



0 dB = 5.44 W/kg = 7.36 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.45 \text{ S/m}$; $\epsilon_r = 40.959$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1900 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

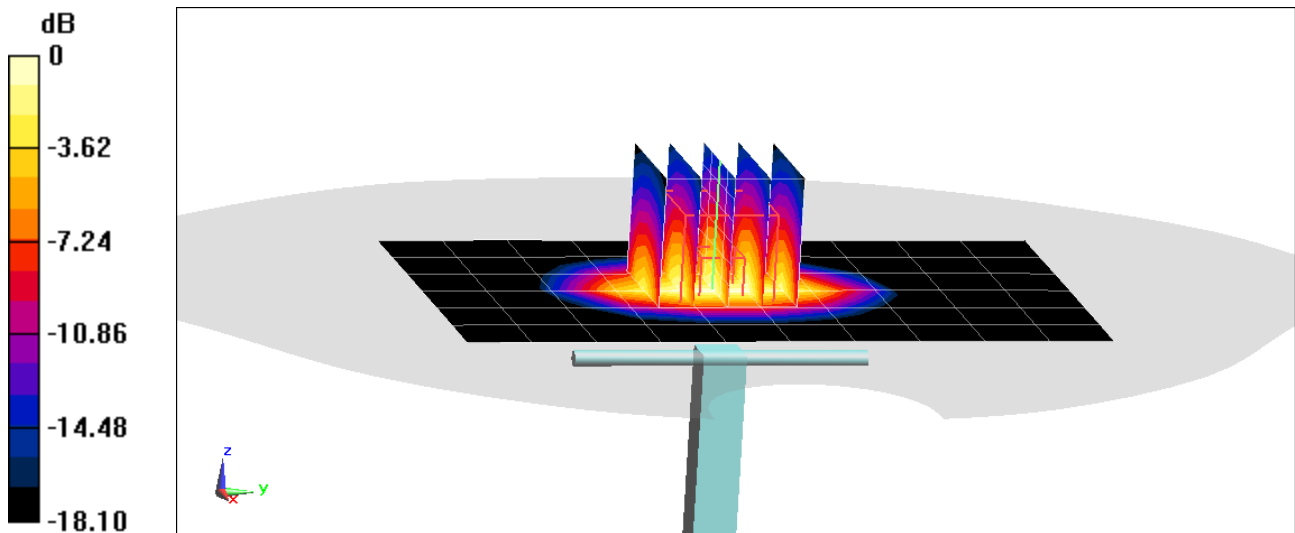
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.95 W/kg

SAR(1 g) = 4.29 W/kg

Deviation(1 g) = 7.79%



0 dB = 6.68 W/kg = 8.25 dBW/kg

PCTEST

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1073

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2300 \text{ MHz}$; $\sigma = 1.683 \text{ S/m}$; $\epsilon_r = 39.993$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/29/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN3589; ConvF(7.11, 7.11, 7.11) @ 2300 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2300 MHz System Verification at 20.0 dBm (100 mW)

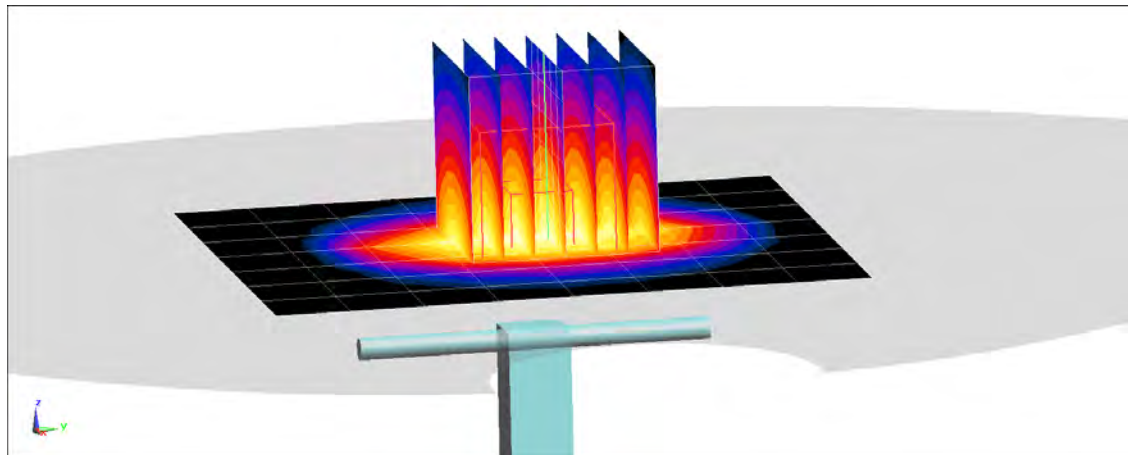
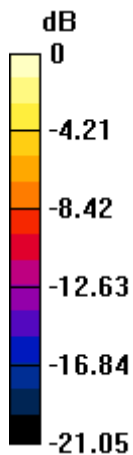
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 9.51 W/kg

SAR(1 g) = 4.73 W/kg

Deviation(1 g) = -3.86%



0 dB = 7.73 W/kg = 8.88 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Head Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 1.799 \text{ S/m}$; $\epsilon_r = 38.404$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/03/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2450 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

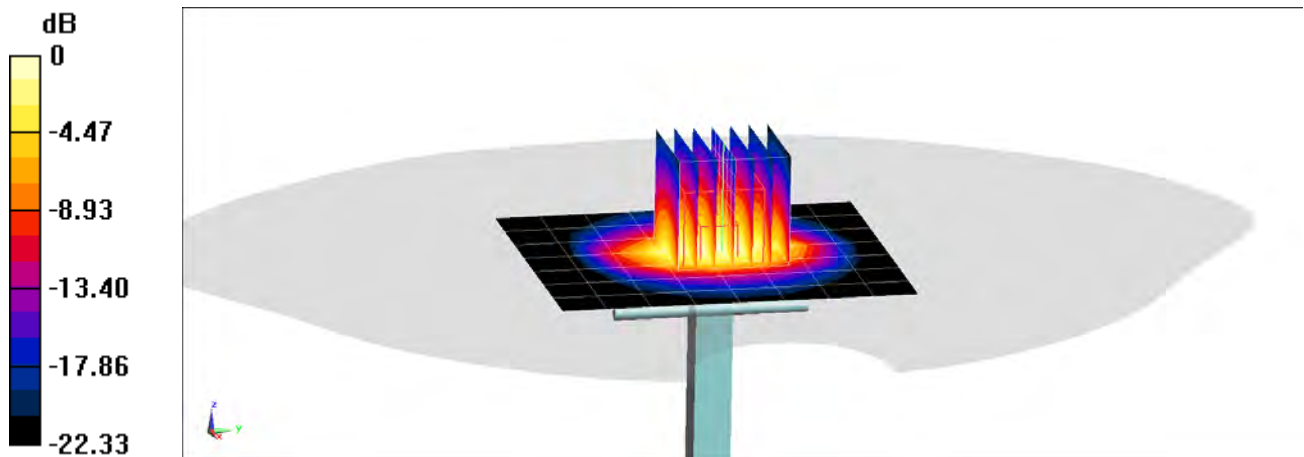
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.24 W/kg

Deviation(1 g) = -1.32%



0 dB = 8.74 W/kg = 9.42 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Head Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 1.781 \text{ S/m}$; $\epsilon_r = 40.093$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2020; Ambient Temp: 23.2°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2450 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

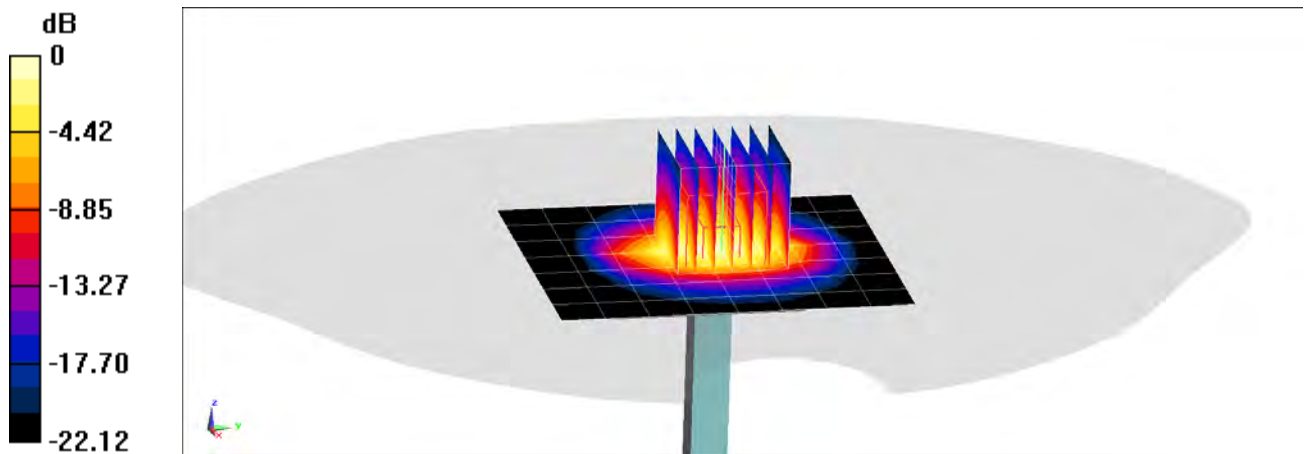
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 5.34 W/kg

Deviation(1 g) = 0.56%



0 dB = 8.91 W/kg = 9.50 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797

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

Medium: 2450 Head Medium parameters used:

$f = 2450$ MHz; $\sigma = 1.793$ S/m; $\epsilon_r = 39.534$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2450 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

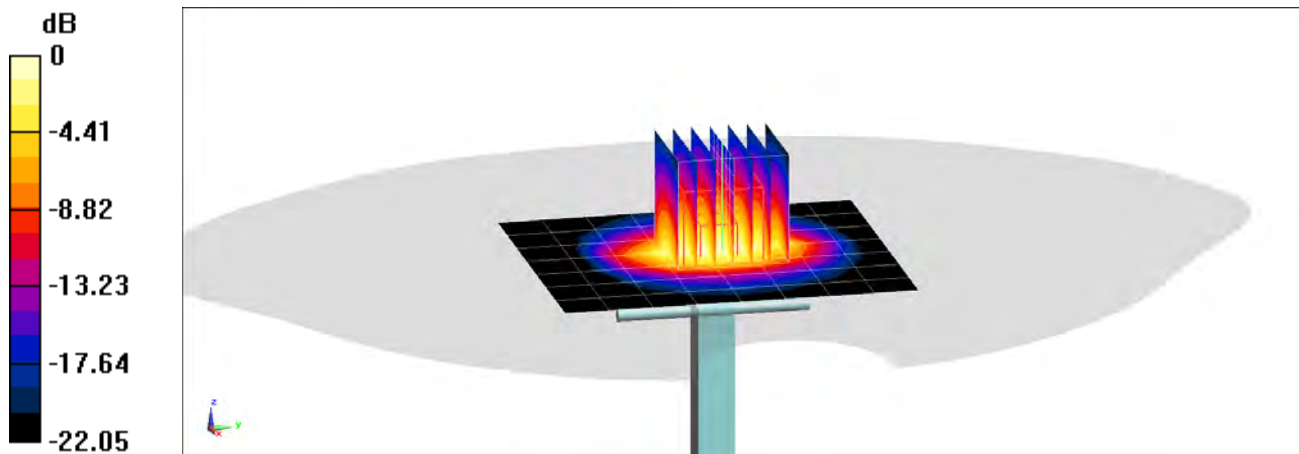
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.5 W/kg

SAR(1 g) = 5.12 W/kg

Deviation(1 g) = -2.85%



0 dB = 8.48 W/kg = 9.28 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Head Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 1.789 \text{ S/m}$; $\epsilon_r = 40.669$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/31/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3589; ConvF(6.85, 6.85, 6.85) @ 2450 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

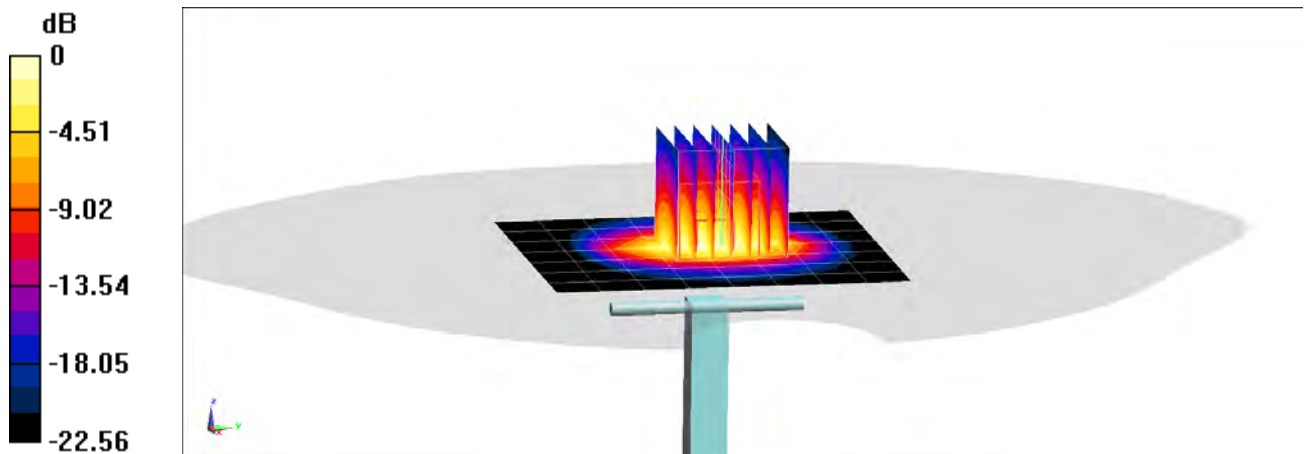
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.21 W/kg

Deviation(1 g) = -1.88%



0 dB = 8.66 W/kg = 9.38 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600 \text{ MHz}$; $\sigma = 1.899 \text{ S/m}$; $\epsilon_r = 40.473$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/31/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN3589; ConvF(6.6, 6.6, 6.6) @ 2600 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

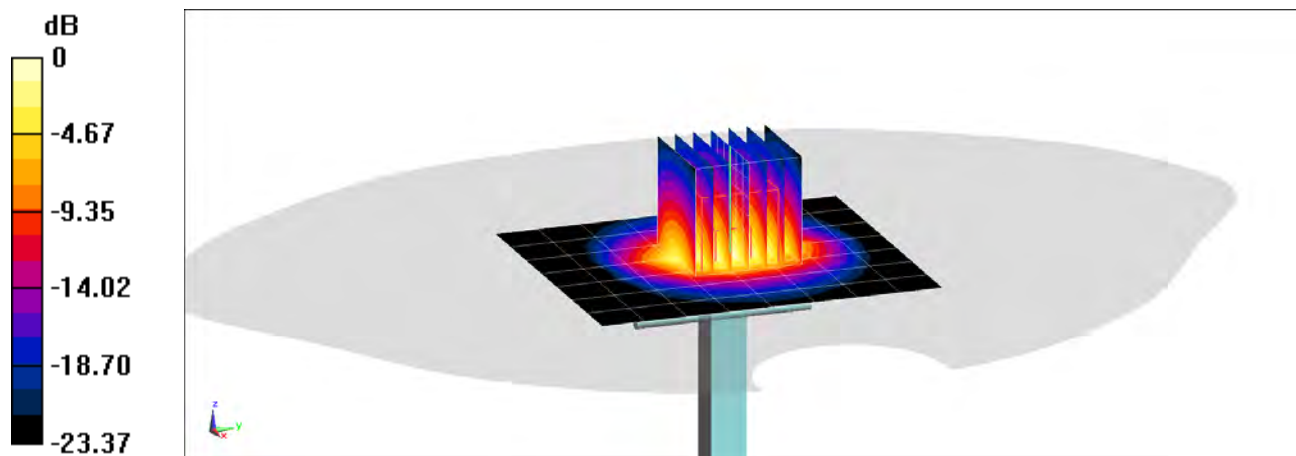
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 12.5 W/kg

SAR(1 g) = 5.81 W/kg

Deviation(1 g) = 0.00%



0 dB = 9.95 W/kg = 9.98 dBW/kg

PCTEST

DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3600 Head Medium parameters used:

$f = 3500$ MHz; $\sigma = 2.918$ S/m; $\epsilon_r = 39.665$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 22.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(7.3, 7.3, 7.3) @ 3500 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 left 20; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

3500 MHz System Verification at 20.0 dBm (100 mW)

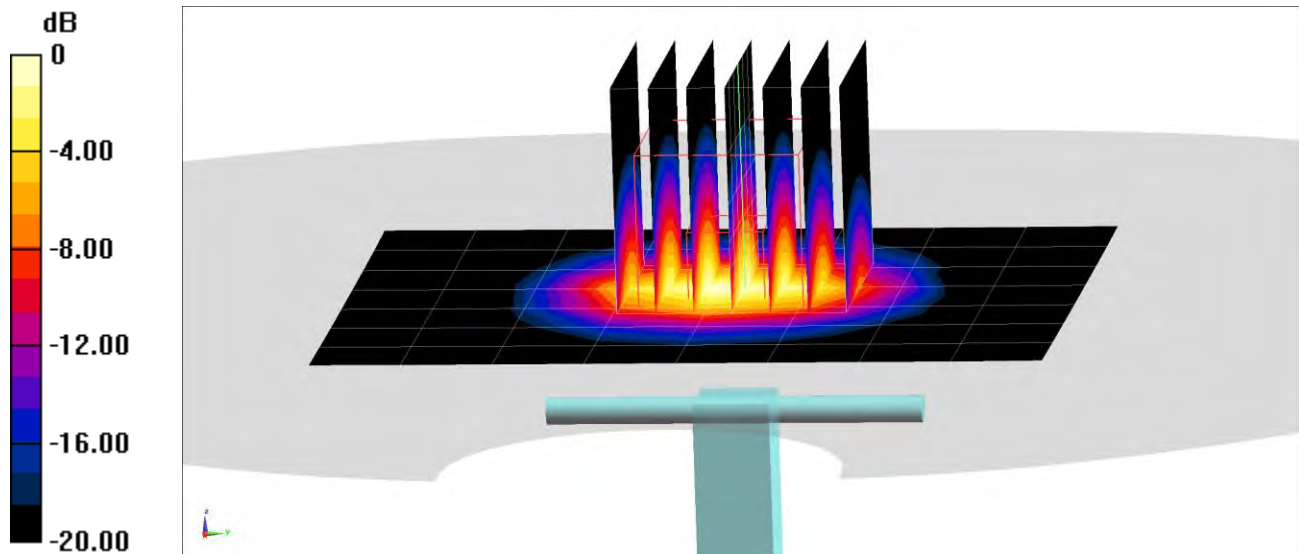
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 6.19 W/kg

Deviation(1 g) = -4.18%



0 dB = 12.1 W/kg = 10.83 dBW/kg

PCTEST

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3600 Head Medium parameters used:

$f = 3700 \text{ MHz}$; $\sigma = 3.084 \text{ S/m}$; $\epsilon_r = 39.355$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 22.3°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(7.2, 7.2, 7.2) @ 3700 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 left 20; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

3700 MHz System Verification at 20.0 dBm (100 mW)

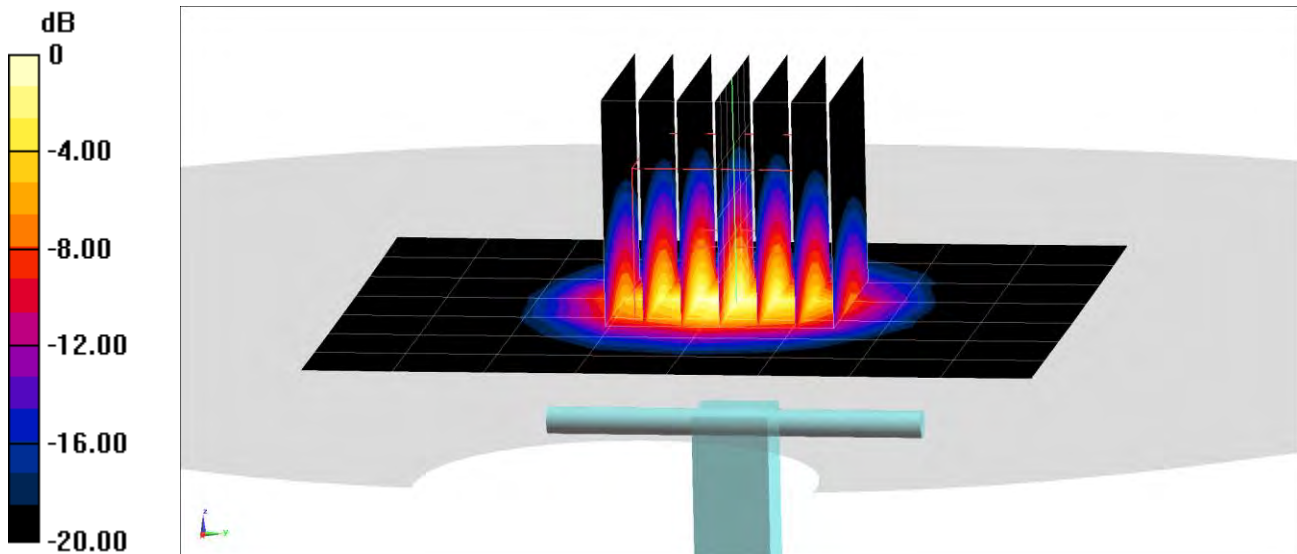
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 6.15 W/kg

Deviation(1 g) = -6.53%



PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191

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

Medium: 5200-5800 Head Medium parameters used:

$f = 5250 \text{ MHz}$; $\sigma = 4.667 \text{ S/m}$; $\epsilon_r = 34.962$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/28/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7357; ConvF(5.5, 5.5, 5.5) @ 5250 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

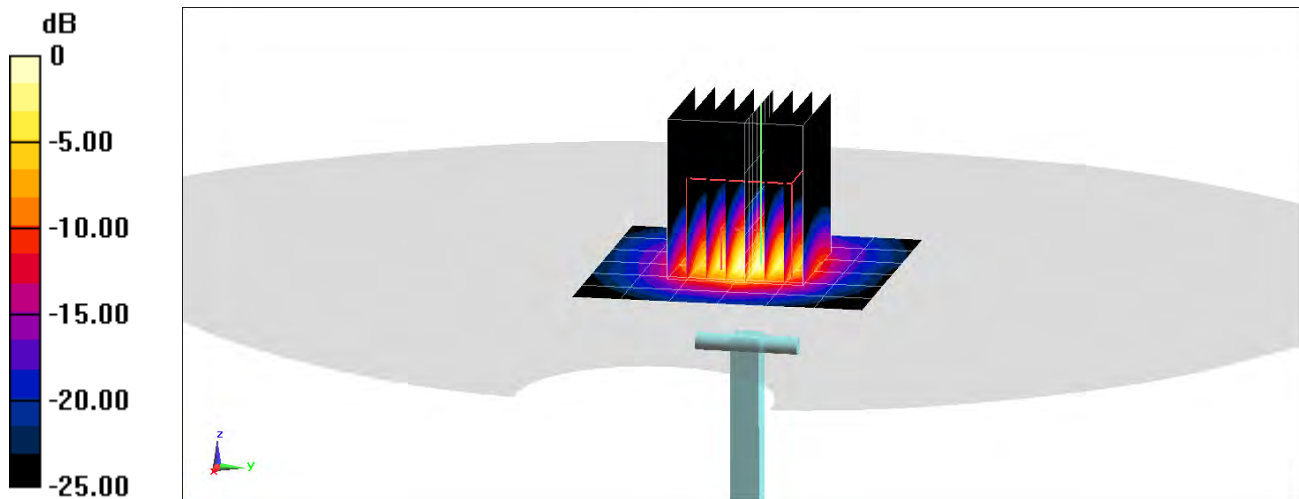
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (8x8x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Peak SAR (extrapolated) = 14.7 W/kg

SAR(1 g) = 3.73 W/kg

Deviation(1 g) = -7.67%



0 dB = 8.96 W/kg = 9.52 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191

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

Medium: 5200-5800 Head Medium parameters used:

$f = 5600$ MHz; $\sigma = 5.063$ S/m; $\epsilon_r = 34.248$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/28/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7357; ConvF(4.93, 4.93, 4.93) @ 5600 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

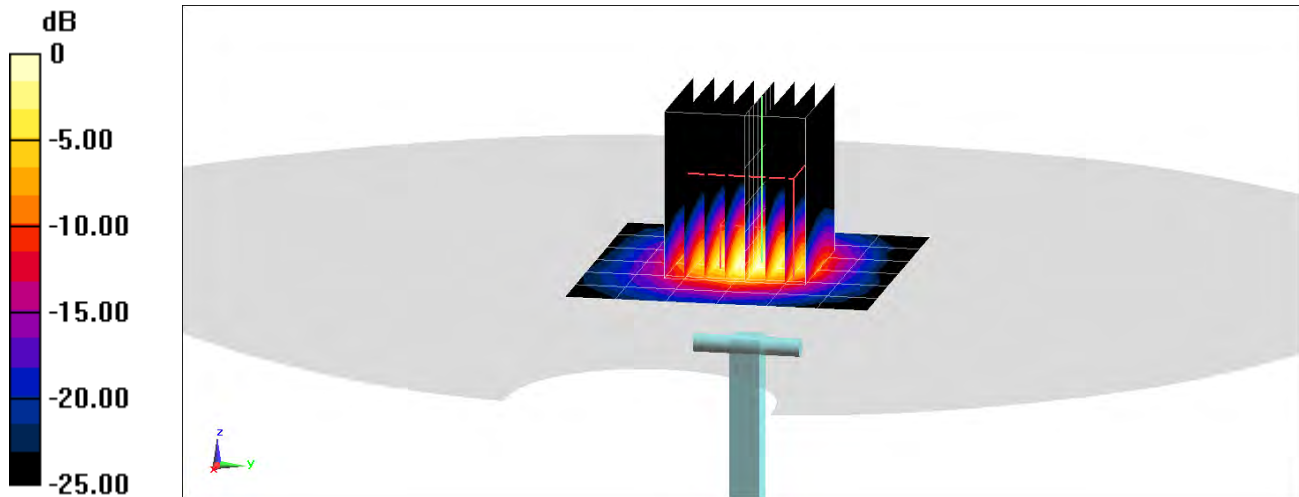
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 3.93 W/kg

Deviation(1 g) = -4.96%



0 dB = 9.55 W/kg = 9.80 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191

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

Medium: 5200-5800 Head Medium parameters used:

$f = 5750 \text{ MHz}$; $\sigma = 5.24 \text{ S/m}$; $\epsilon_r = 34.024$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/28/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7357; ConvF(5.05, 5.05, 5.05) @ 5750 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

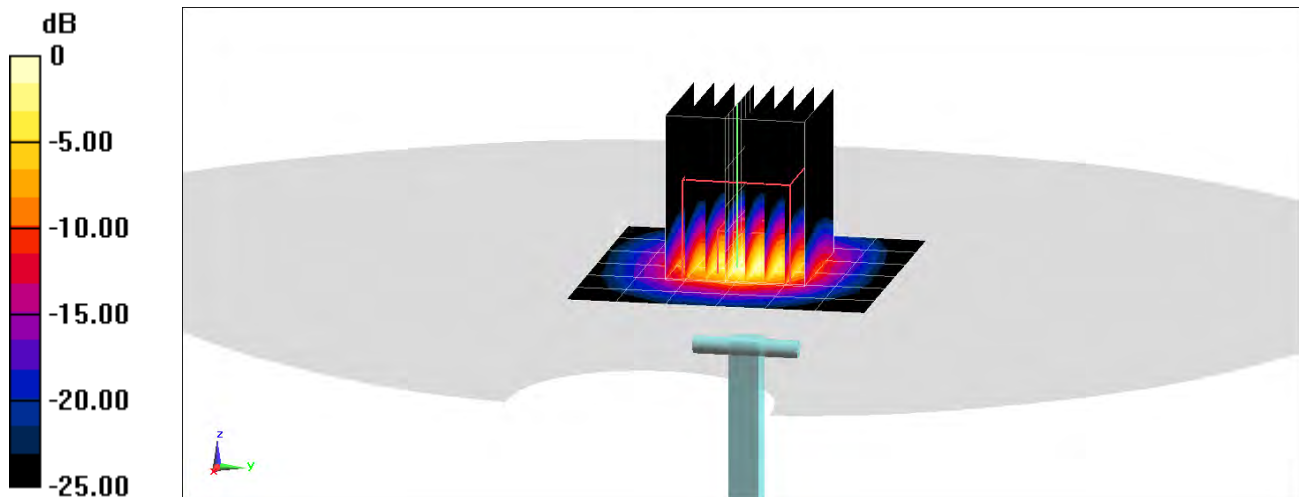
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Zoom Scan (8x8x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 3.71 W/kg

Deviation(1 g) = -7.48%



0 dB = 9.35 W/kg = 9.71 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1161

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.967 \text{ S/m}$; $\epsilon_r = 53.449$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/22/2020; Ambient Temp: 21.2°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

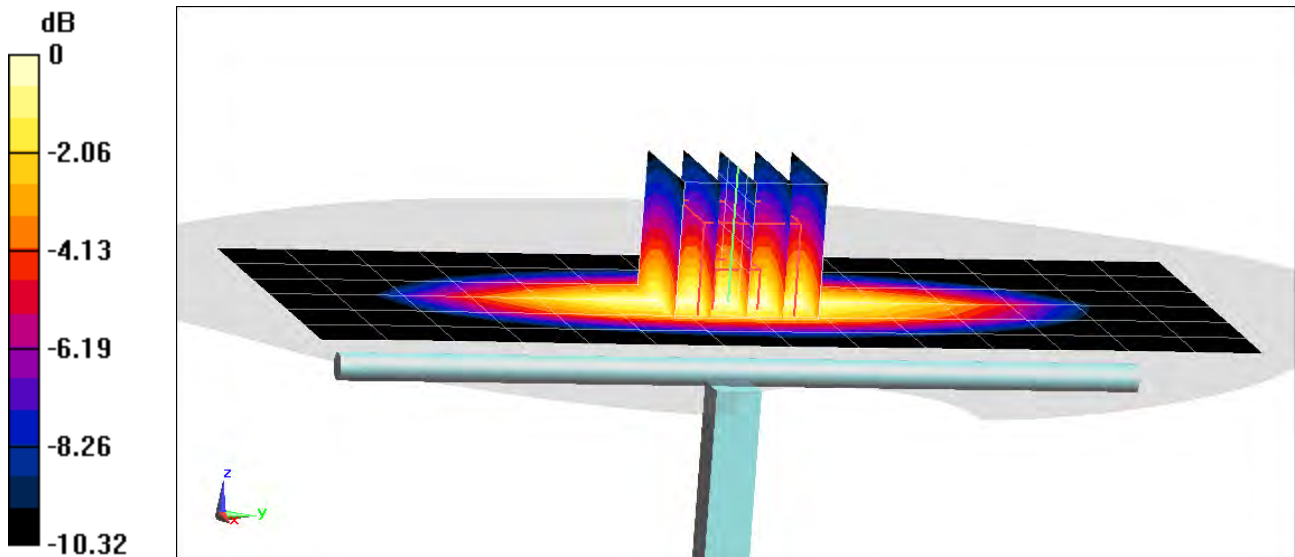
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.73 W/kg

SAR(1 g) = 1.82 W/kg

Deviation(1 g) = 7.95%



0 dB = 2.43 W/kg = 3.86 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1161

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.957 \text{ S/m}$; $\epsilon_r = 53.587$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/27/2020; Ambient Temp: 21.4°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7410; ConvF(10.01, 10.01, 10.01) @ 750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

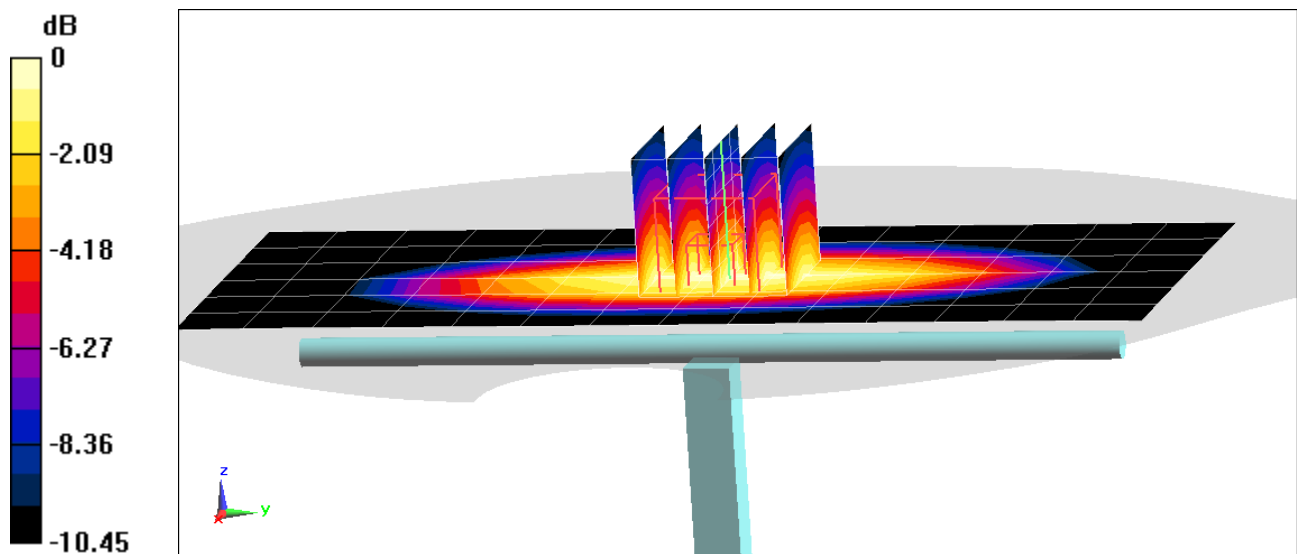
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.60 W/kg

SAR(1 g) = 1.75 W/kg

Deviation(1 g) = 3.80%



0 dB = 2.32 W/kg = 3.65 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.944 \text{ S/m}$; $\epsilon_r = 53.429$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/06/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 835 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

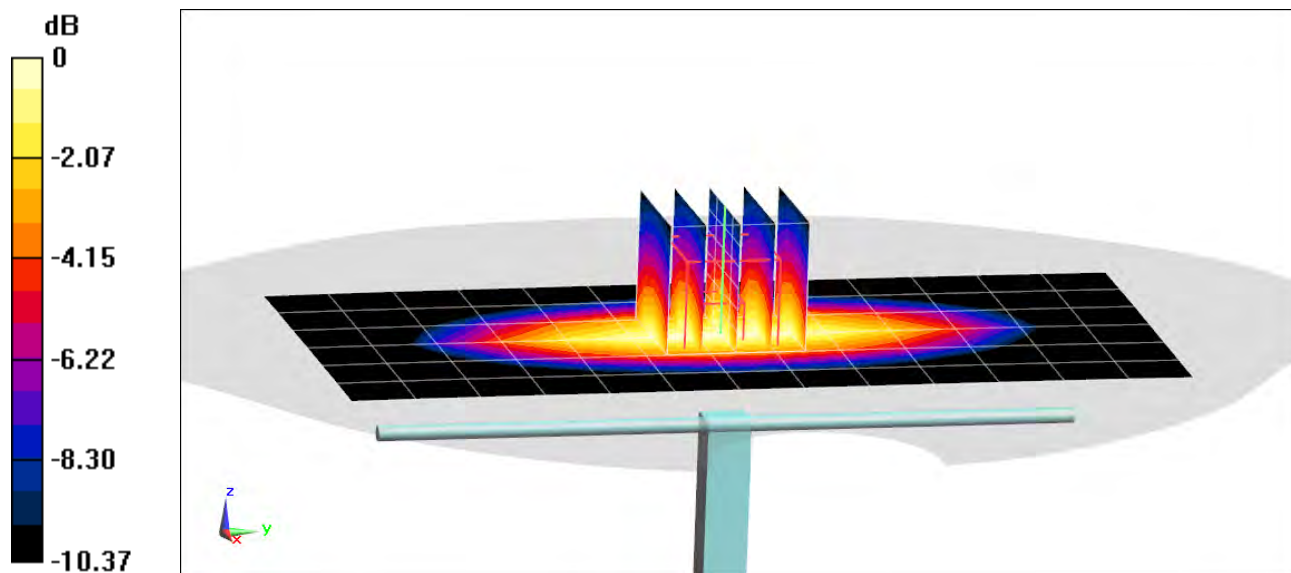
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.92 W/kg

SAR(1 g) = 1.93 W/kg

Deviation(1 g) = -1.03%



0 dB = 2.58 W/kg = 4.12 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.948 \text{ S/m}$; $\epsilon_r = 52.764$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/08/2020; Ambient Temp: 22.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7570; ConvF(9.83, 9.83, 9.83) @ 835 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn859; Calibrated: 12/18/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1964

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

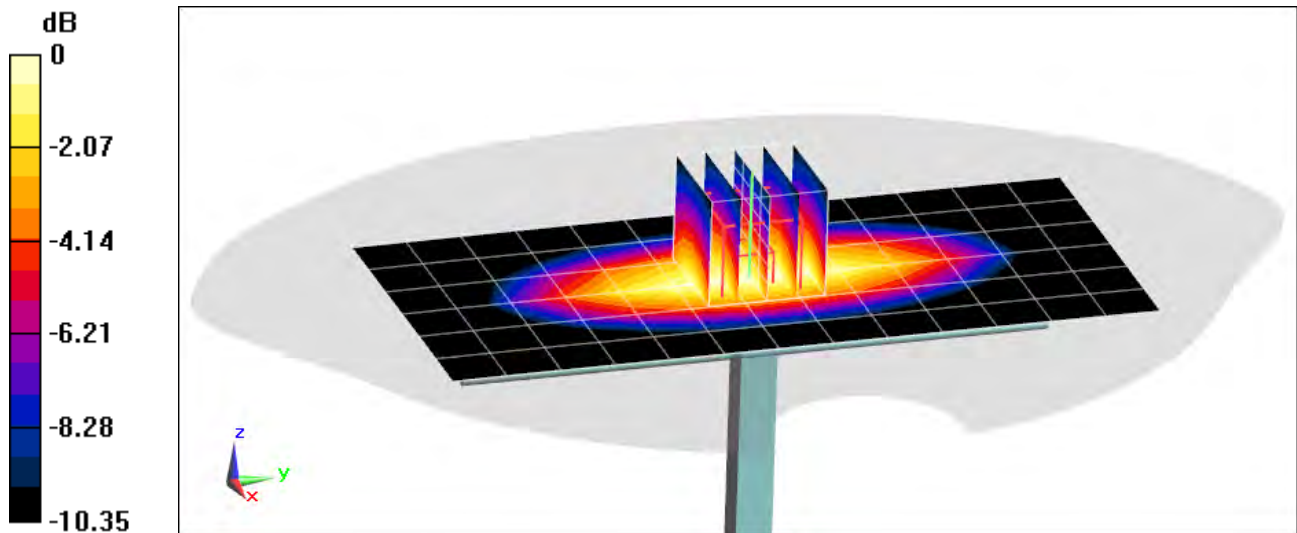
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 1.93 W/kg

Deviation(1 g) = -1.03%



0 dB = 2.58 W/kg = 4.12 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.965 \text{ S/m}$; $\epsilon_r = 53.068$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/11/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 835 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

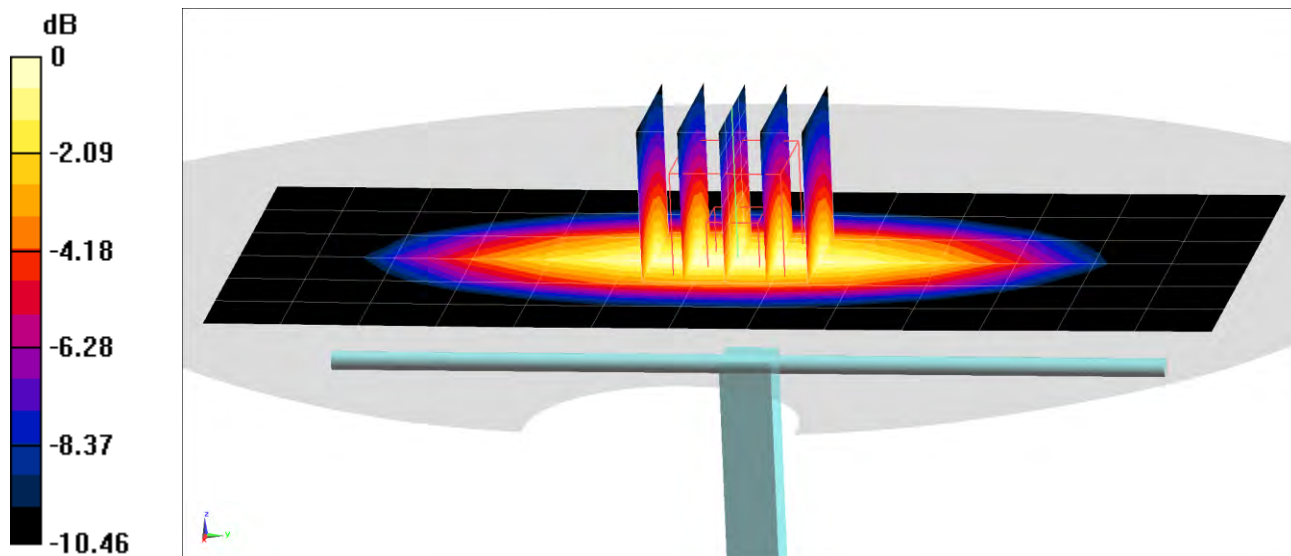
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.90 W/kg

SAR(1 g) = 1.91 W/kg

Deviation(1 g) = 0.84%



0 dB = 2.56 W/kg = 4.08 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.961 \text{ S/m}$; $\epsilon_r = 54.496$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/13/2020; Ambient Temp: 22.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 835 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

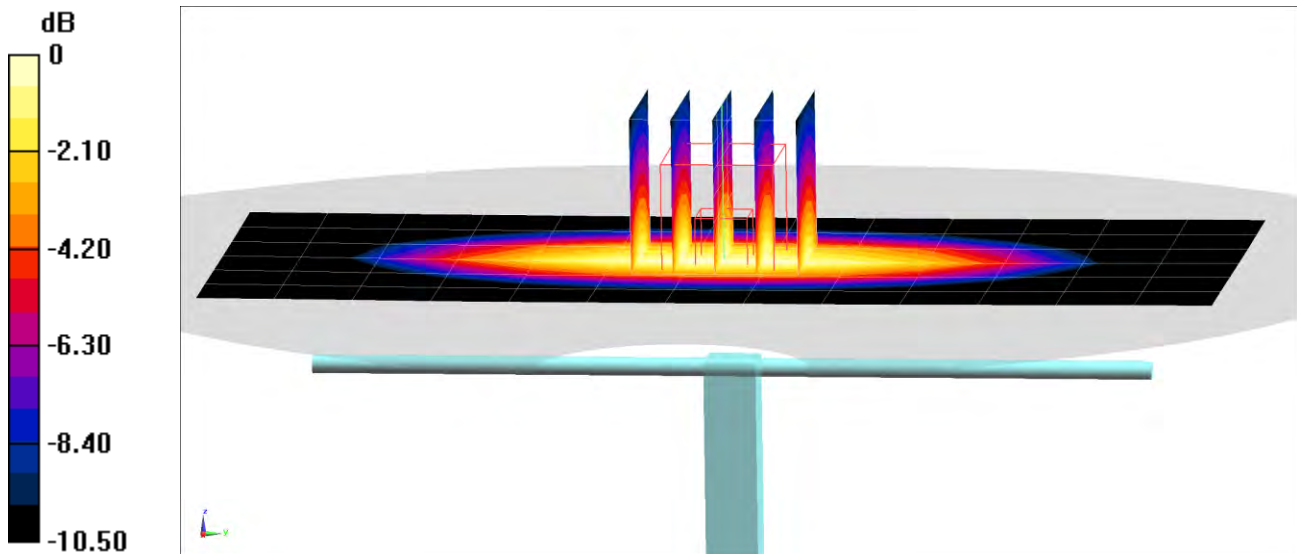
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 1.91 W/kg

Deviation(1 g) = 0.84%



0 dB = 2.55 W/kg = 4.07 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.96 \text{ S/m}$; $\epsilon_r = 54.12$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/18/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7488; ConvF(11.04, 11.04, 11.04) @ 835 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

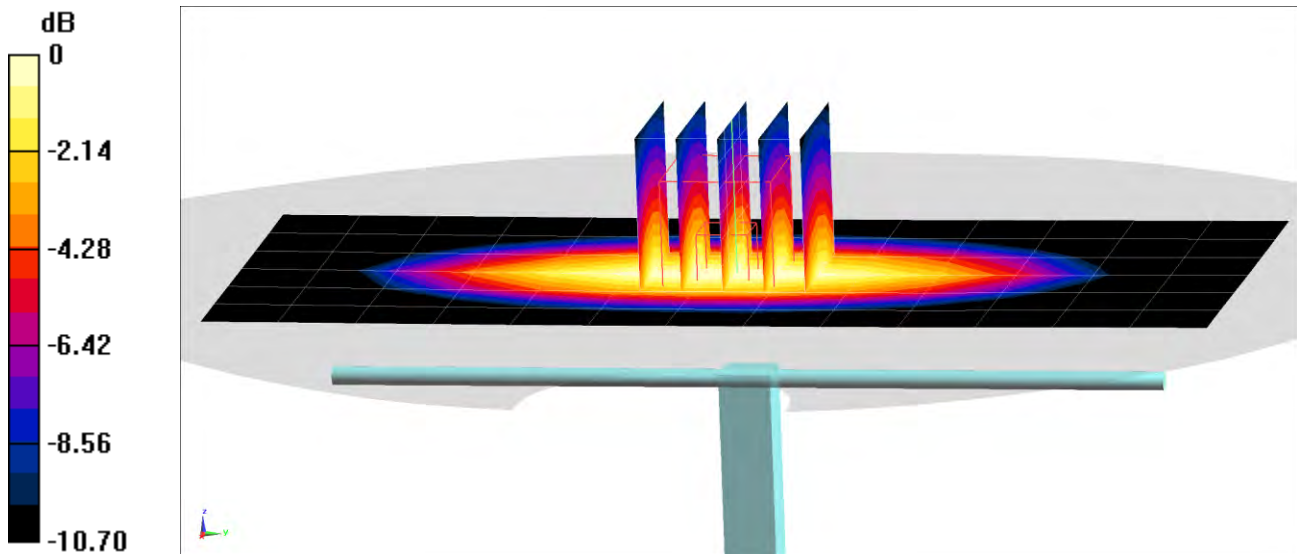
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.95 W/kg

SAR(1 g) = 1.9 W/kg

Deviation(1 g) = 0.32%



PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.532 \text{ S/m}$; $\epsilon_r = 51.86$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/29/2020; Ambient Temp: 23.1°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

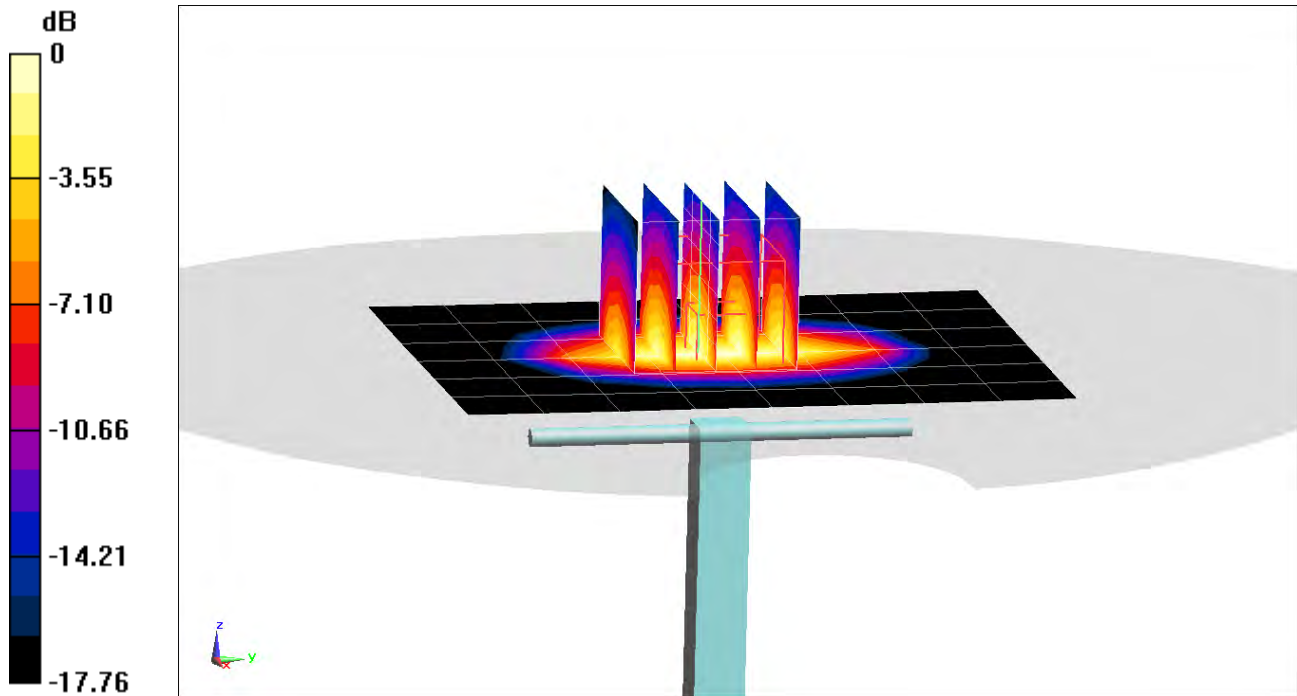
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.82 W/kg

SAR(1 g) = 3.82 W/kg

Deviation(1 g) = 4.37%



0 dB = 5.74 W/kg = 7.59 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.523 \text{ S/m}$; $\epsilon_r = 52.088$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/03/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

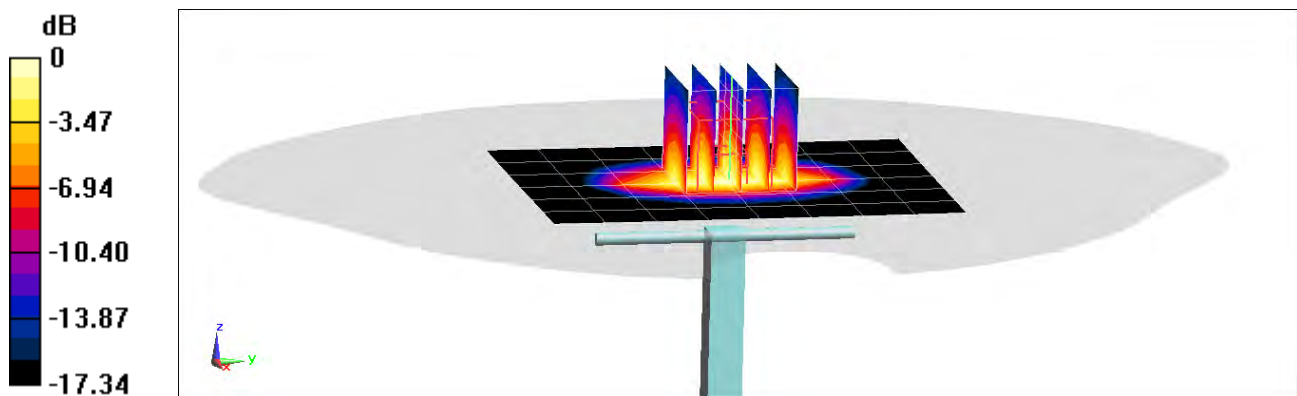
Area Scan (7x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 6.97 W/kg

SAR(1 g) = 3.88 W/kg

Deviation(1 g) = 6.01%



0 dB = 5.95 W/kg = 7.75 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.498 \text{ S/m}$; $\epsilon_r = 52.627$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

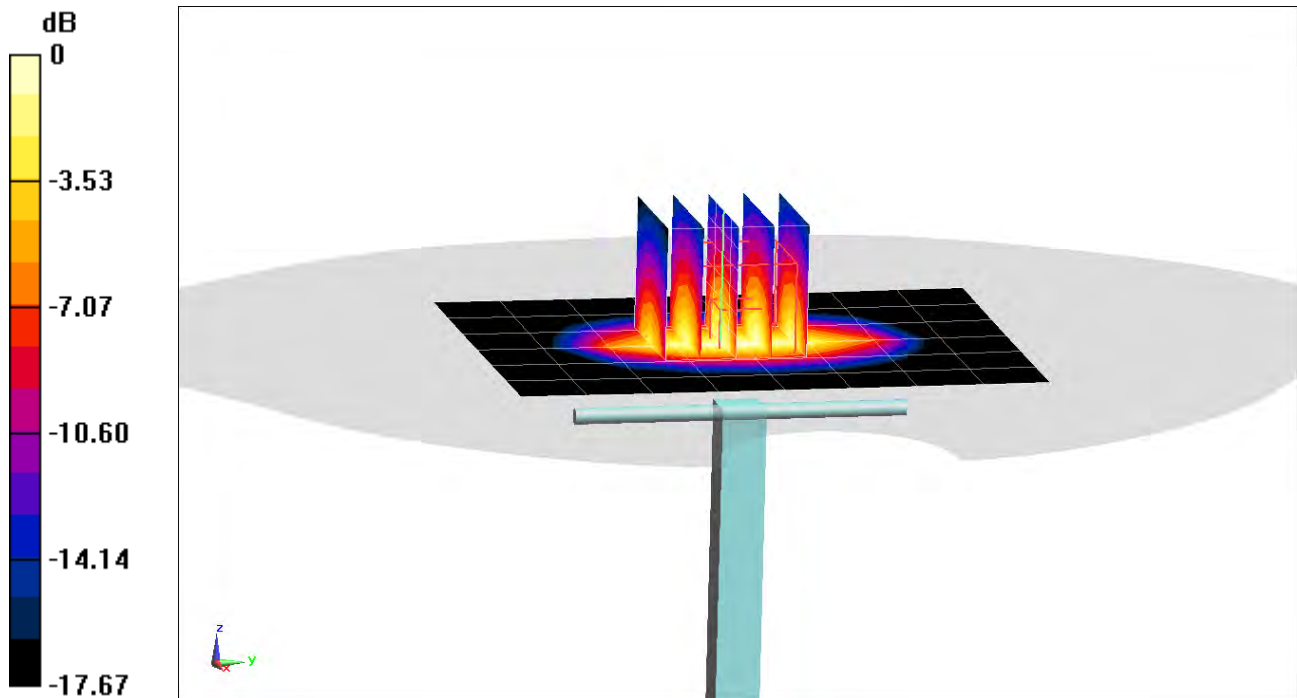
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.36 W/kg

SAR(1 g) = 3.51 W/kg

Deviation(1 g) = -4.10%



0 dB = 5.31 W/kg = 7.25 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.513 \text{ S/m}$; $\epsilon_r = 53.115$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/14/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

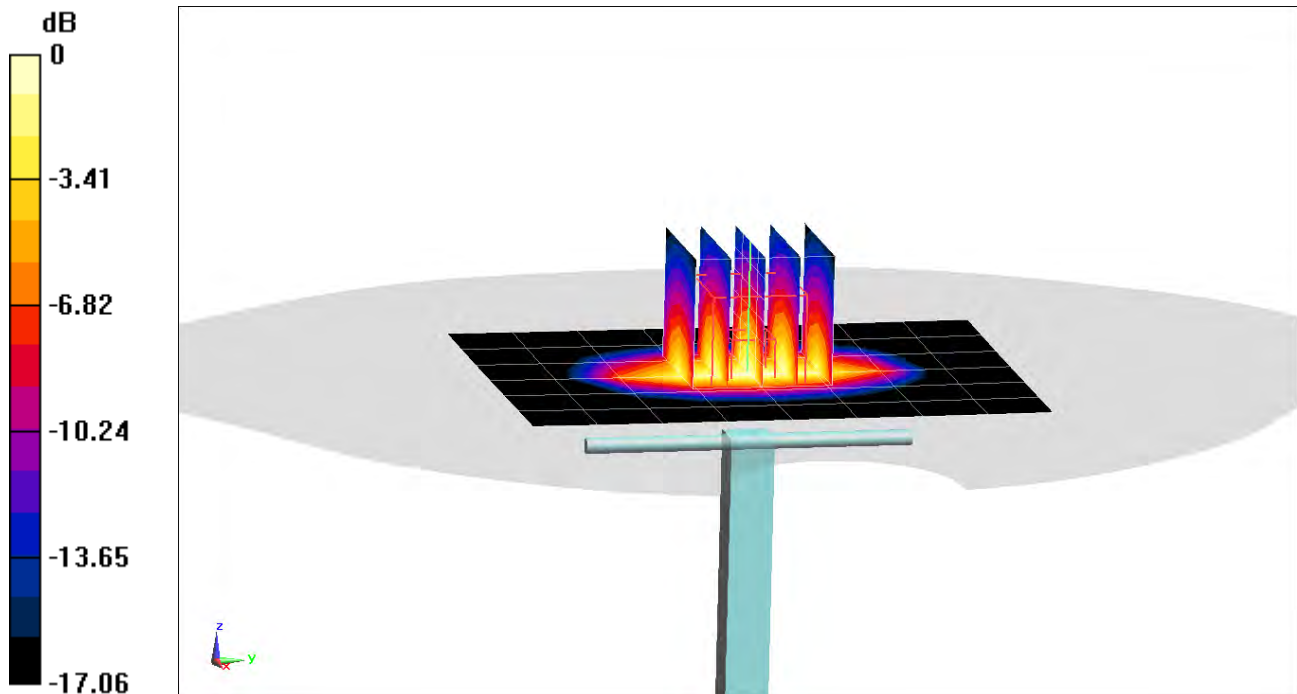
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.83 W/kg

SAR(1 g) = 3.75 W/kg

Deviation(1 g) = 2.46%



0 dB = 5.79 W/kg = 7.63 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.544 \text{ S/m}$; $\epsilon_r = 52.389$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/20/2020; Ambient Temp: 21.4°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

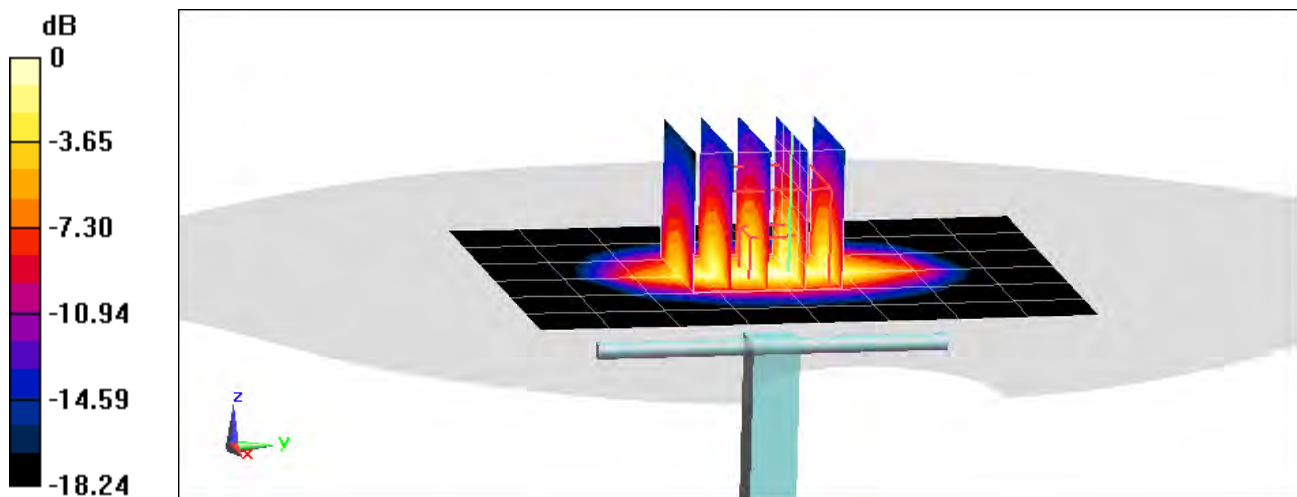
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.83 W/kg

SAR(1 g) = 3.83 W/kg; SAR(10 g) = 2.01 W/kg

Deviation(1 g) = 2.41%; Deviation(10 g) = 1.01%



PCTEST

DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.513$ S/m; $\epsilon_r = 52.524$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/29/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

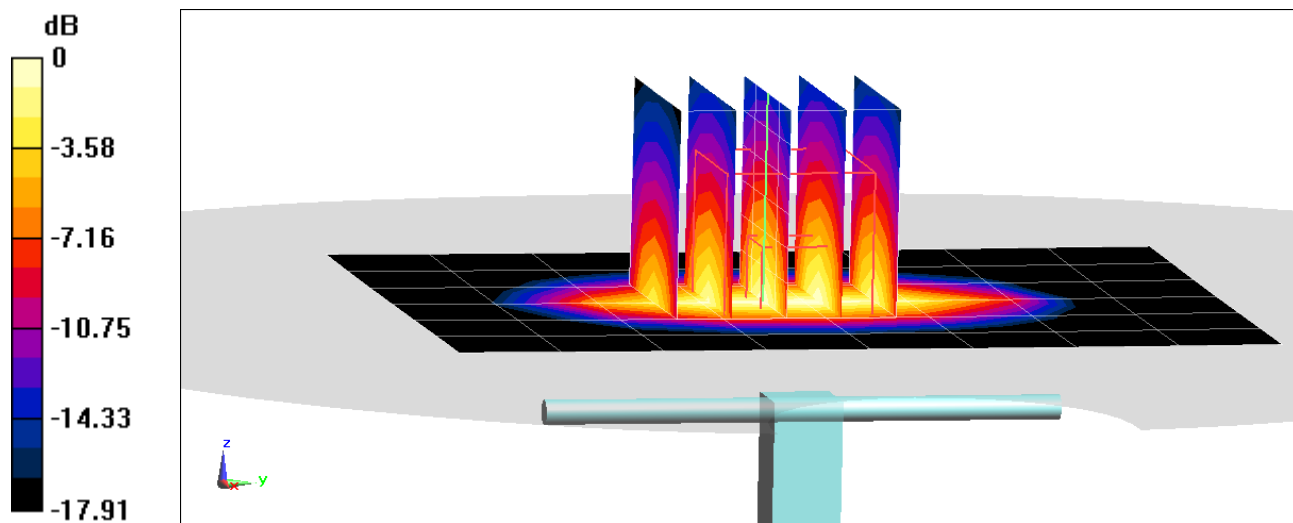
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.77 W/kg

SAR(10 g) = 1.94 W/kg;

Deviation(10 g) = -2.51%



0 dB = 5.64 W/kg = 7.51 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.546$ S/m; $\epsilon_r = 53.012$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 21.4°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7527; ConvF(8.1, 8.1, 8.1) @ 1750 MHz; Calibrated: 3/17/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1368; Calibrated: 3/12/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

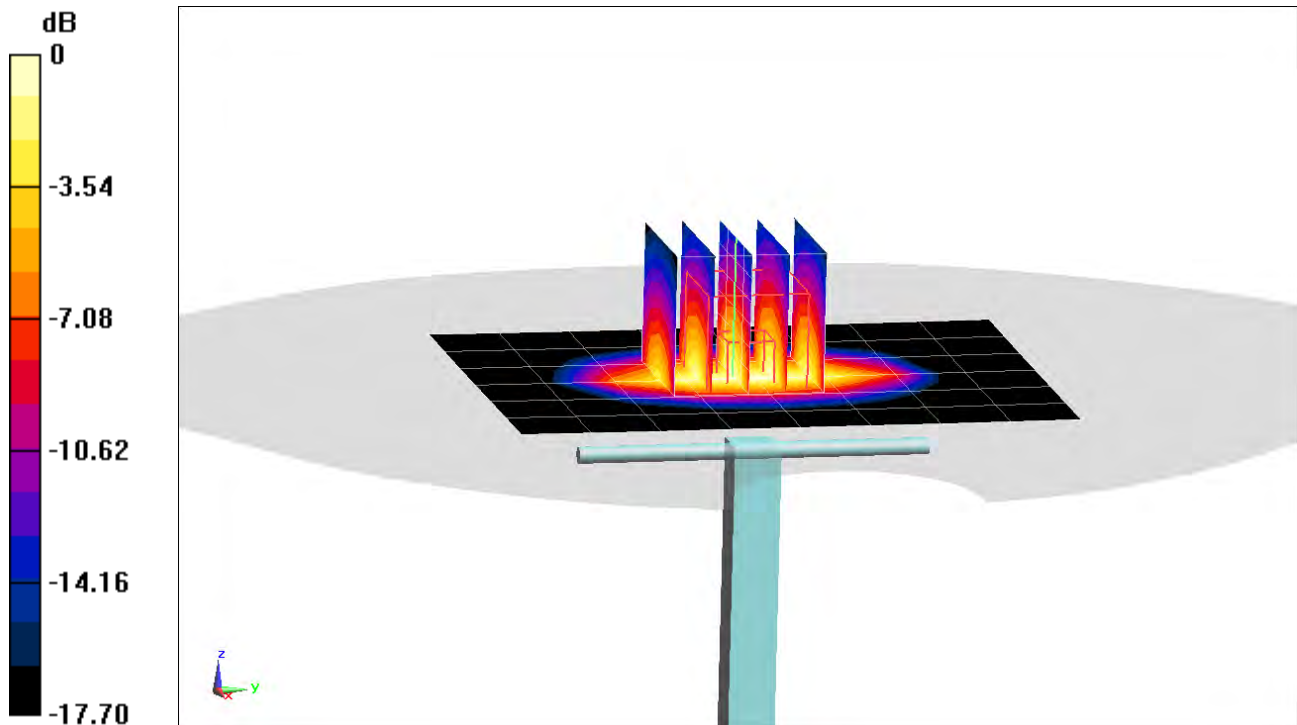
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.17 W/kg

SAR(1 g) = 4.01 W/kg; SAR(10 g) = 2.11 W/kg

Deviation(1 g) = 7.22%; Deviation(10 g) = 6.03%



0 dB = 6.07 W/kg = 7.83 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.573 \text{ S/m}$; $\epsilon_r = 55.175$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/03/2020; Ambient Temp: 21.1°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

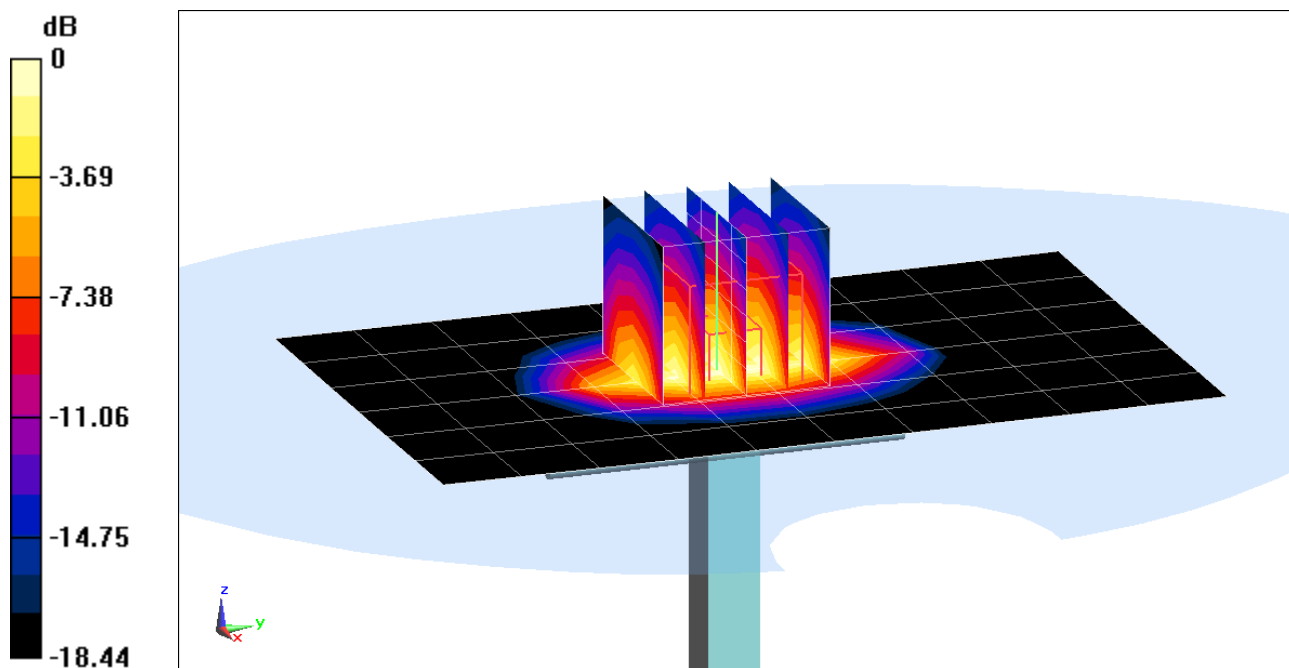
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.73 W/kg

SAR(1 g) = 4.21 W/kg

Deviation(1 g) = 7.40%



0 dB = 6.50 W/kg = 8.13 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.578 \text{ S/m}$; $\epsilon_r = 52.713$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/06/2020; Ambient Temp: 21.9°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

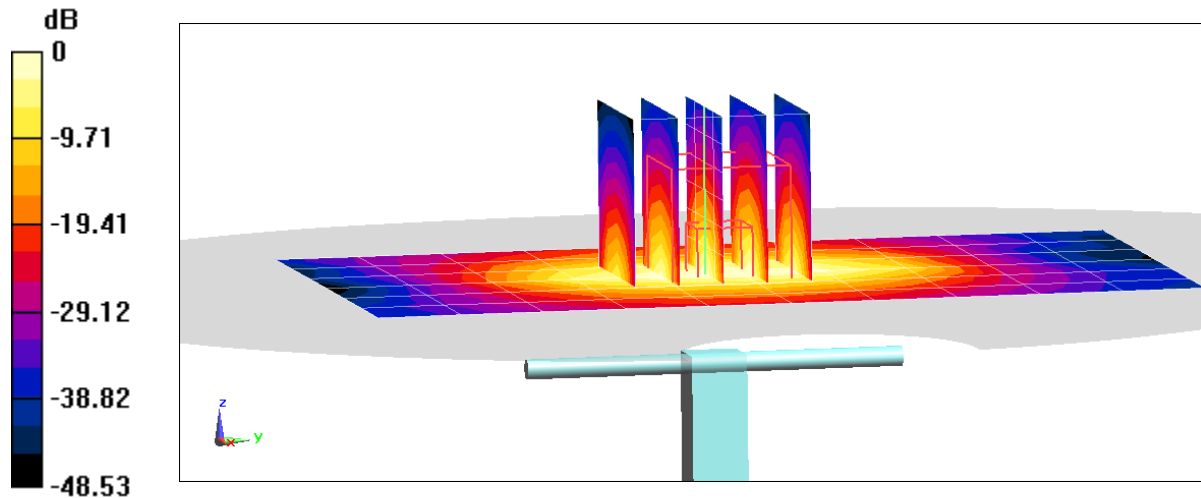
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.17 W/kg

SAR(1 g) = 3.91 W/kg; SAR(10 g) = 2.02 W/kg

Deviation(1 g) = 0.00%; Deviation(10 g) = -1.46%



0 dB = 5.72 W/kg = 7.57 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.548 \text{ S/m}$; $\epsilon_r = 53.291$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/10/2020; Ambient Temp: 22.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

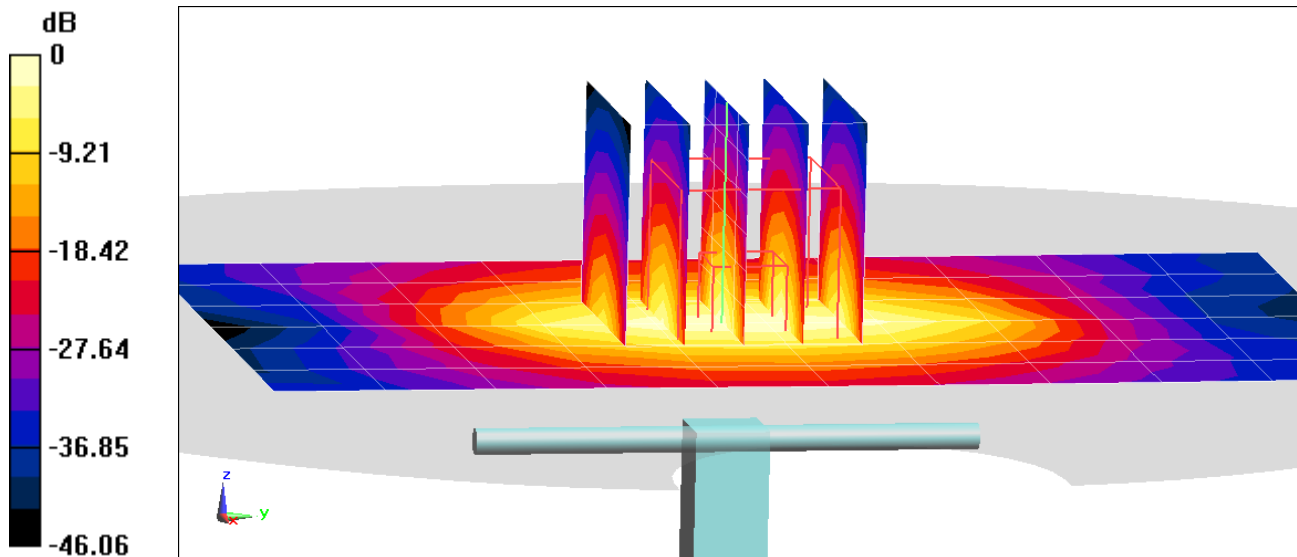
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.67 W/kg

SAR(1 g) = 4.13 W/kg

Deviation(1 g) = 5.63%



PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.568 \text{ S/m}$; $\epsilon_r = 52.646$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/12/2020; Ambient Temp: 24.9°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7552; ConvF(7.58, 7.58, 7.58) @ 1900 MHz; Calibrated: 9/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/12/2019

Phantom: Left Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

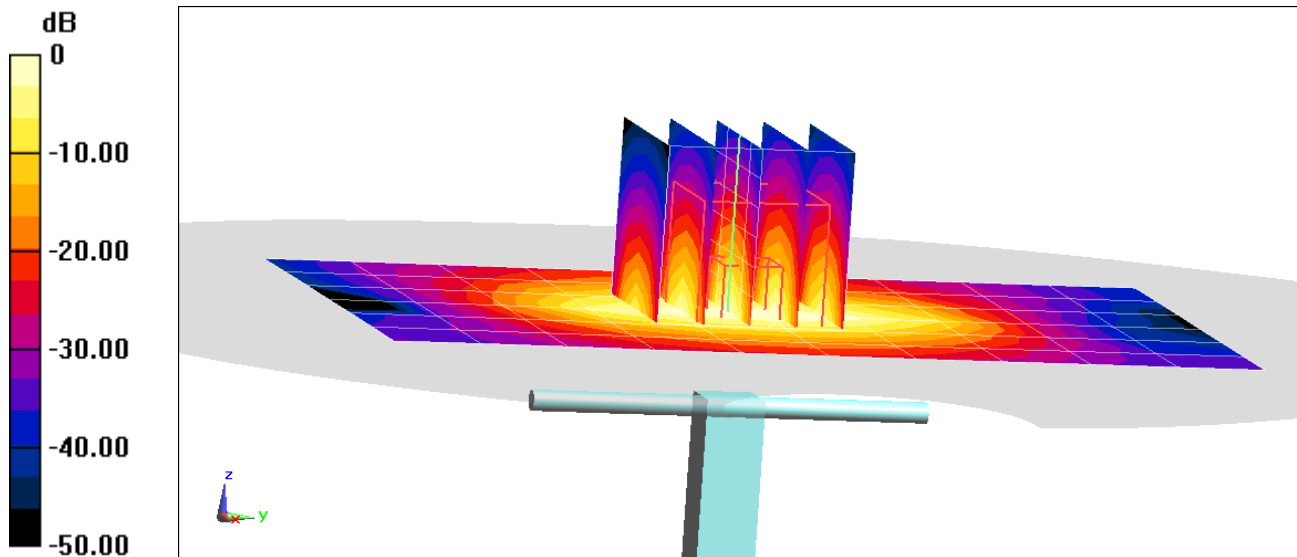
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.69 W/kg

SAR(10 g) = 2.16 W/kg

Deviation(10 g) = 5.37%



0 dB = 6.46 W/kg = 8.10 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.545 \text{ S/m}$; $\epsilon_r = 54.617$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/17/2020; Ambient Temp: 22.5°C; Tissue Temp: 24.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

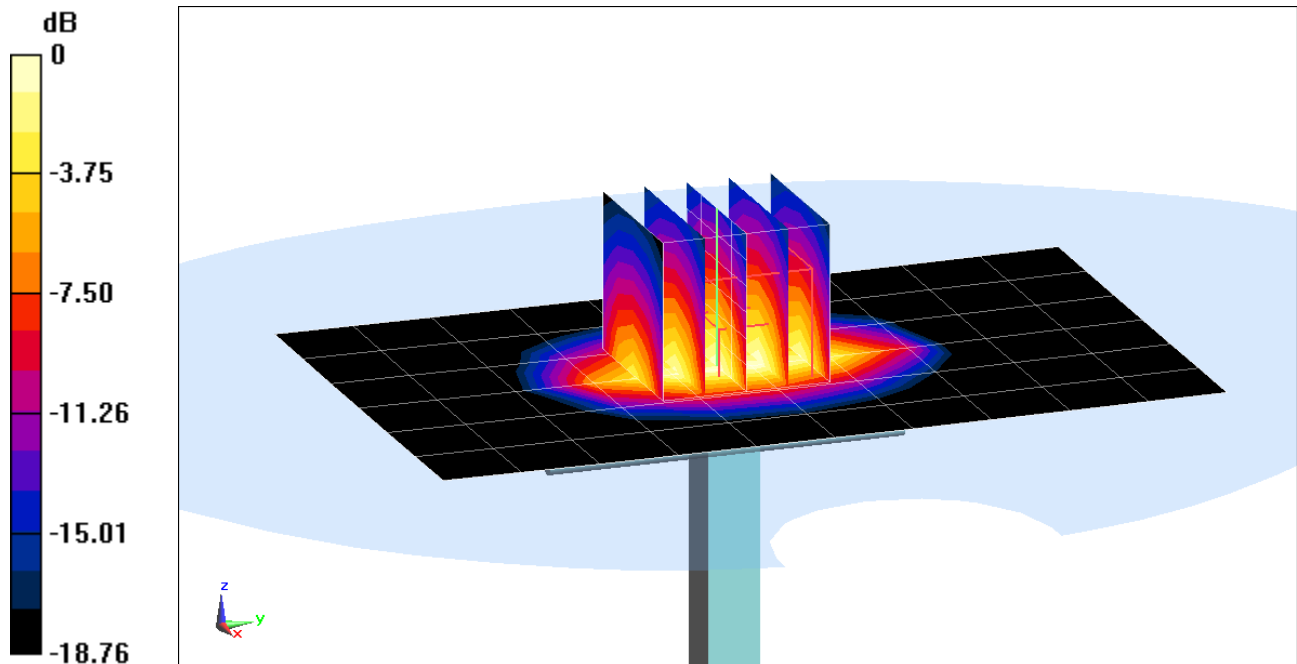
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.54 W/kg

SAR(1 g) = 4.04 W/kg; SAR(10 g) = 2.07 W/kg

Deviation(1 g) = 3.06%; Deviation(10 g) = 0.49%



PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.577 \text{ S/m}$; $\epsilon_r = 54.055$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

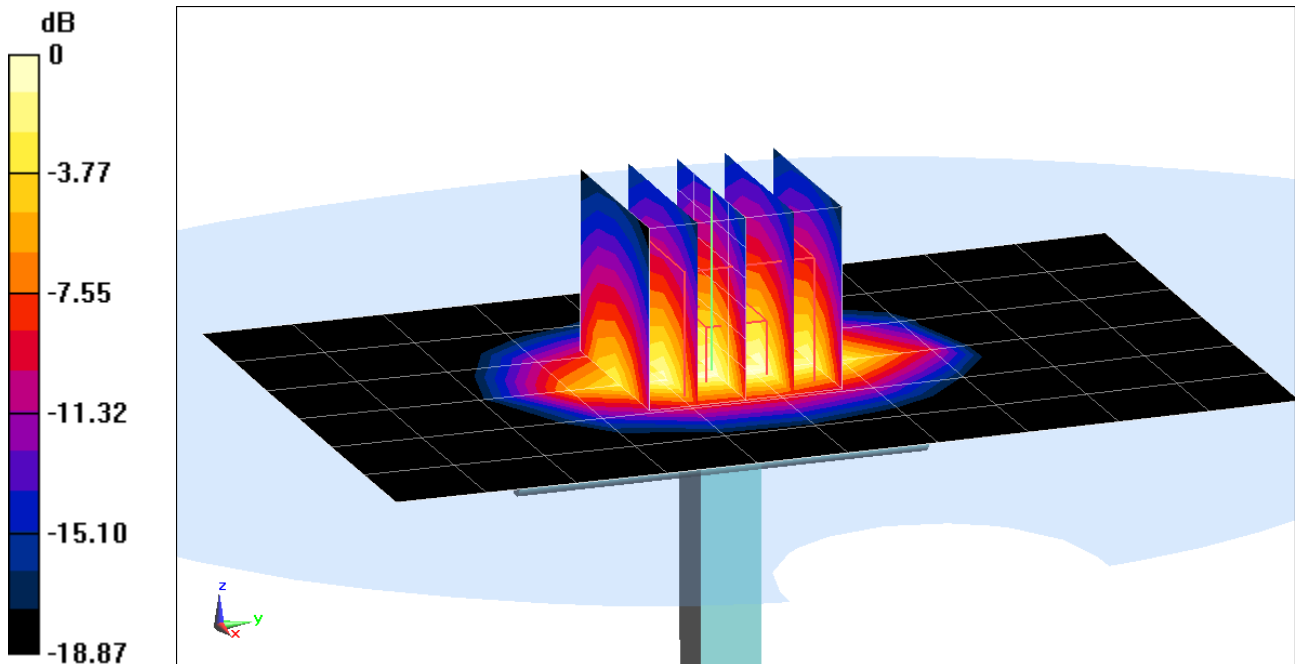
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.59 W/kg

SAR(1 g) = 4.02 W/kg

Deviation(1 g) = 2.55%



0 dB = 6.20 W/kg = 7.92 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.544 \text{ S/m}$; $\epsilon_r = 53.552$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2020; Ambient Temp: 23.1°C; Tissue Temp: 23.9°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

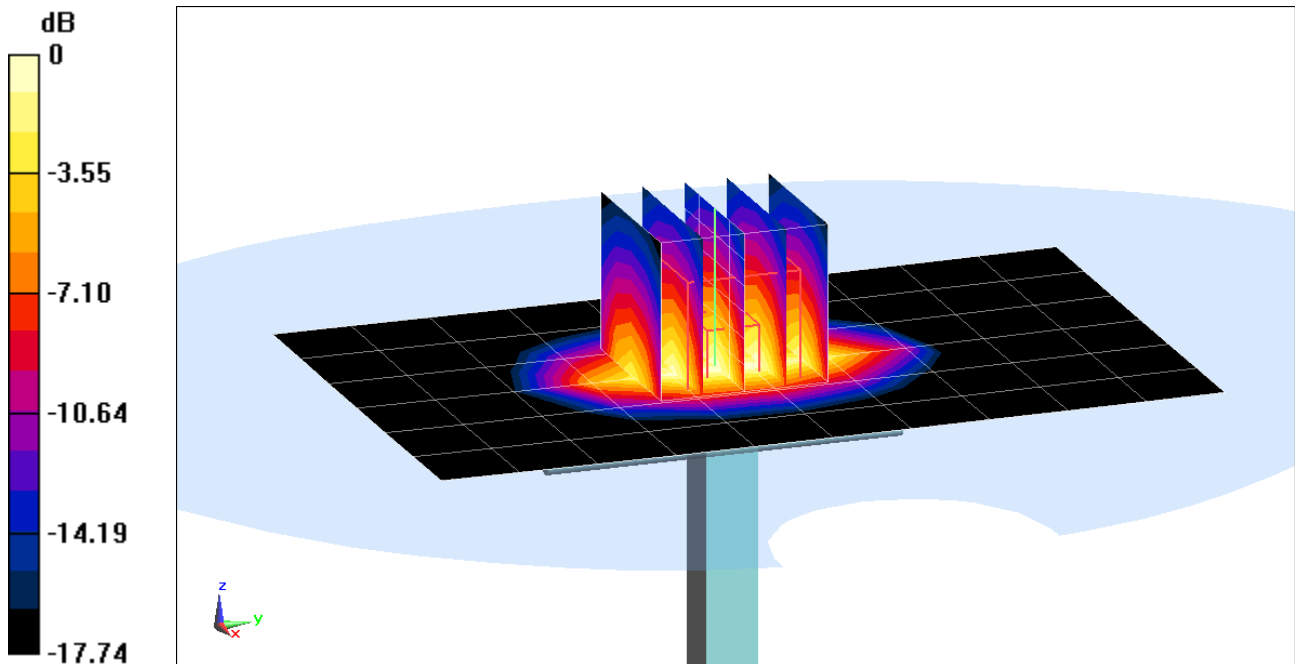
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.50 W/kg

SAR(1 g) = 4.15 W/kg; SAR(10 g) = 2.16 W/kg

Deviation(1 g) = 5.87%; Deviation(10 g) = 4.85%



0 dB = 6.36 W/kg = 8.03 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.558 \text{ S/m}$; $\epsilon_r = 53.035$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/26/2020; Ambient Temp: 24.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7571; ConvF(7.56, 7.56, 7.56) @ 1900 MHz; Calibrated: 12/11/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/5/2019

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

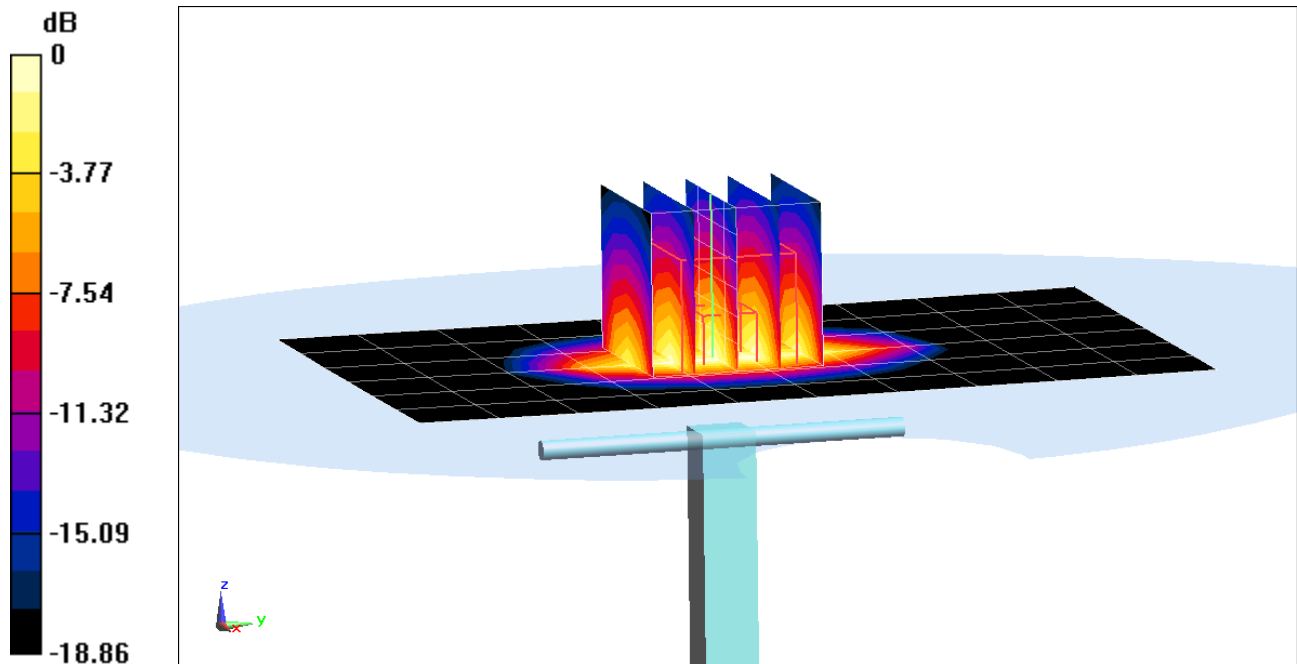
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.82 W/kg

SAR(1 g) = 4.05 W/kg

Deviation(1 g) = 3.32%



0 dB = 6.45 W/kg = 8.10 dBW/kg

PCTEST

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1073

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2300 \text{ MHz}$; $\sigma = 1.846 \text{ S/m}$; $\epsilon_r = 53.12$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/04/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2300 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2300 MHz System Verification at 20.0 dBm (100 mW)

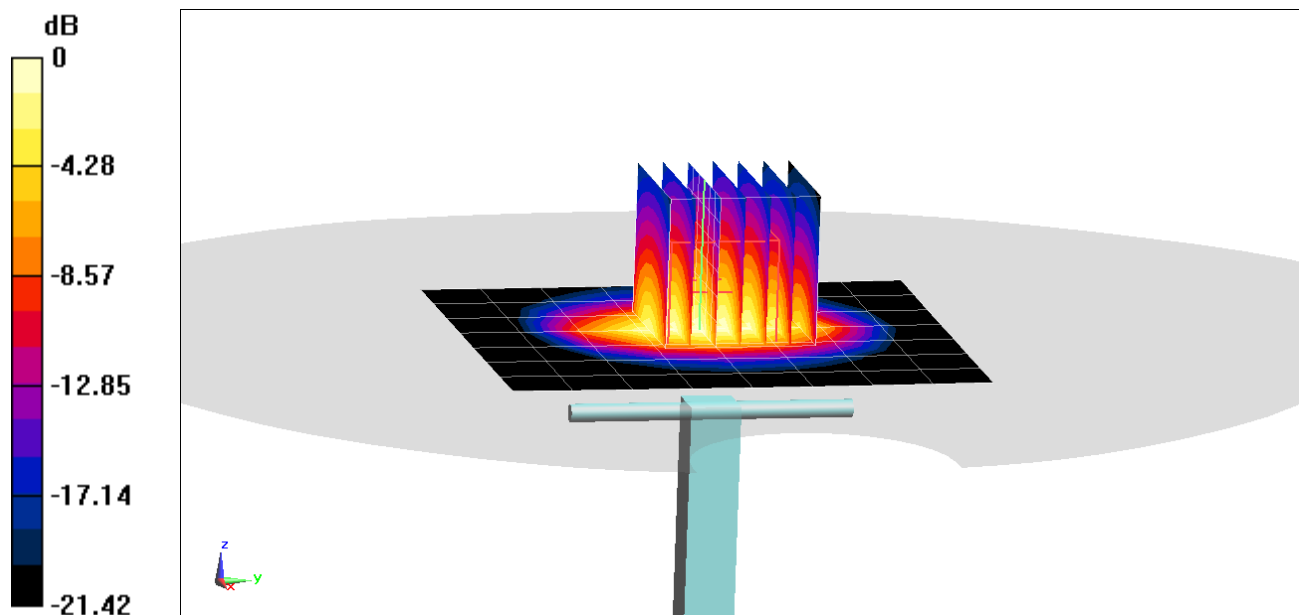
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.3 W/kg

SAR(1 g) = 5.13 W/kg

Deviation(1 g) = 7.55%



PCTEST

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: 1073

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2300 \text{ MHz}$; $\sigma = 1.873 \text{ S/m}$; $\epsilon_r = 53.083$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/07/2020; Ambient Temp: 23.6°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7547; ConvF(7.47, 7.47, 7.47) @ 2300 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2300 MHz System Verification at 20.0 dBm (100 mW)

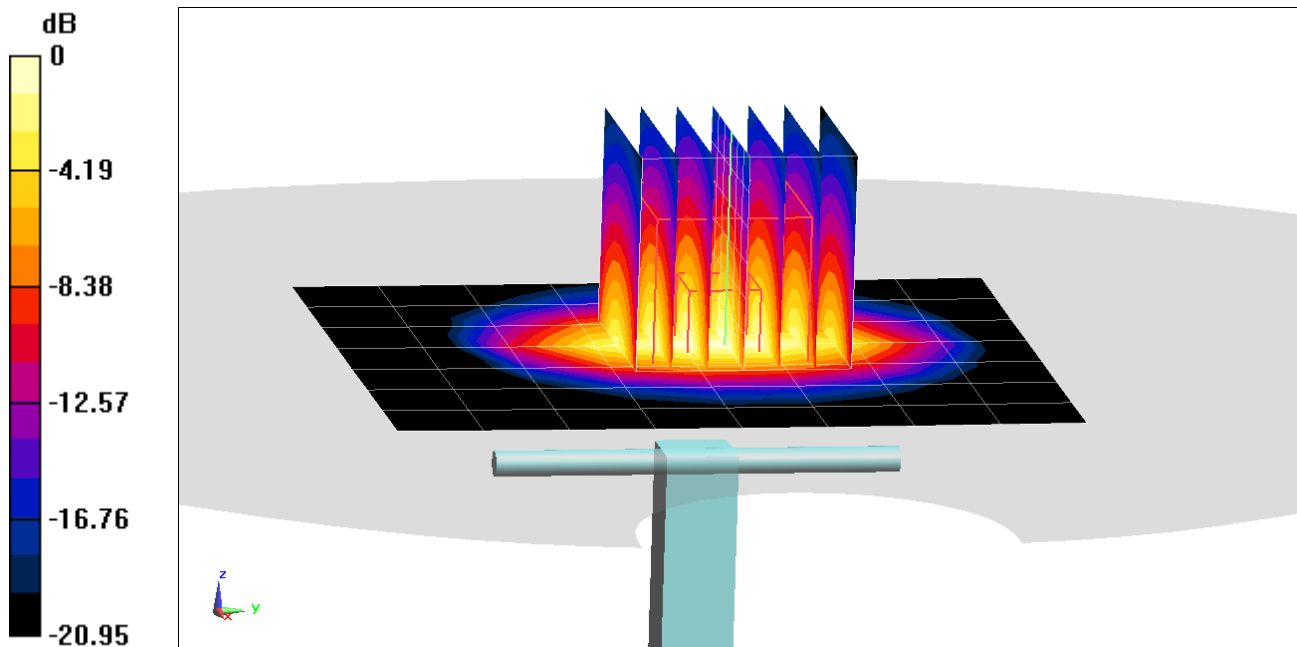
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.3 W/kg

SAR(10 g) = 2.46 W/kg

Deviation(10 g) = 6.03%



0 dB = 8.46 W/kg = 9.27 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.047 \text{ S/m}$; $\epsilon_r = 51.61$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/13/2020; Ambient Temp: 24.0°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

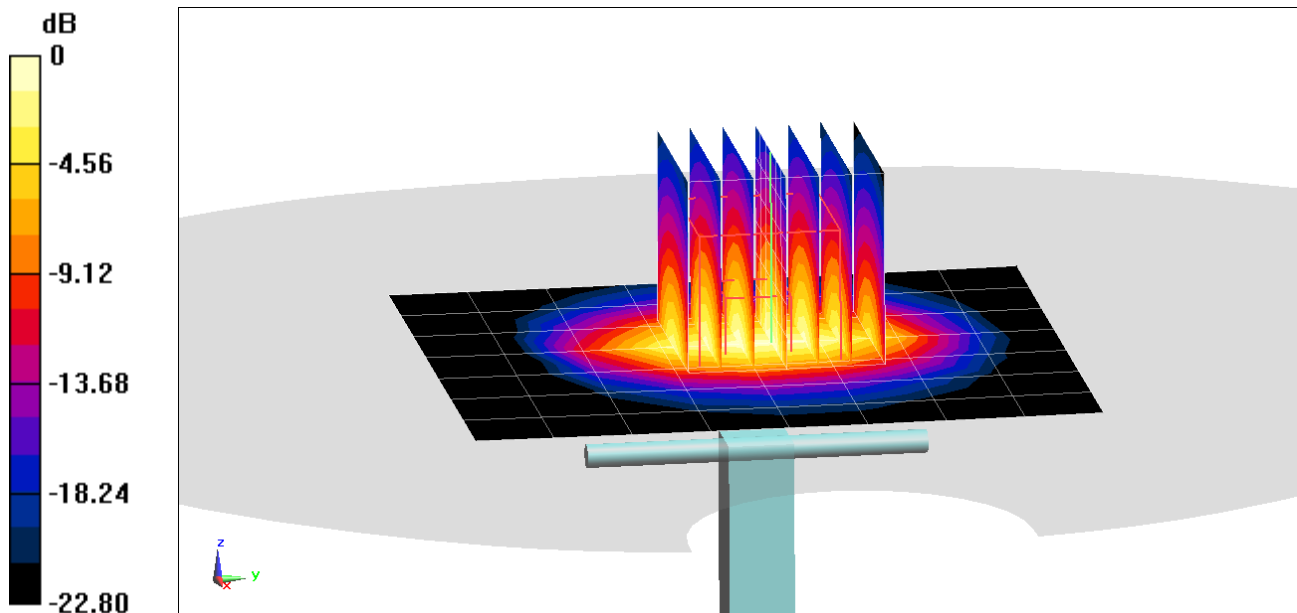
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.5 W/kg

SAR(1 g) = 5 W/kg

Deviation(1 g) = -2.15%



0 dB = 8.33 W/kg = 9.21 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.011 \text{ S/m}$; $\epsilon_r = 52.642$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/18/2020; Ambient Temp: 22.2°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

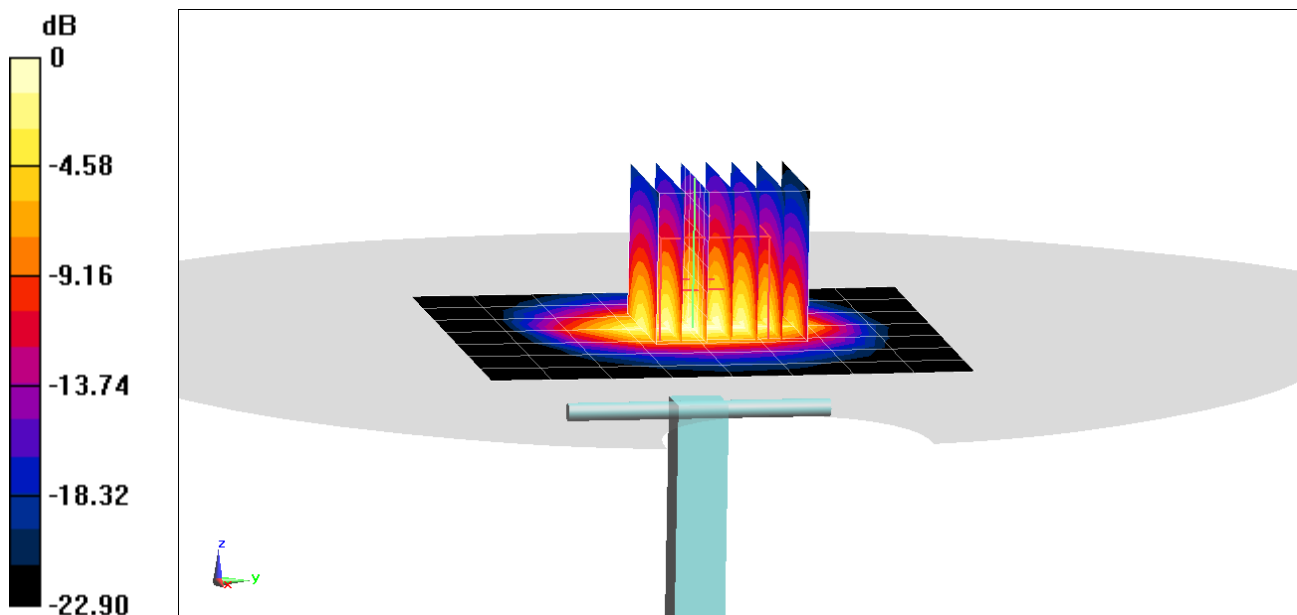
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.25 W/kg

Deviation(1 g) = 3.35%



0 dB = 8.72 W/kg = 9.41 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.033 \text{ S/m}$; $\epsilon_r = 51.036$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

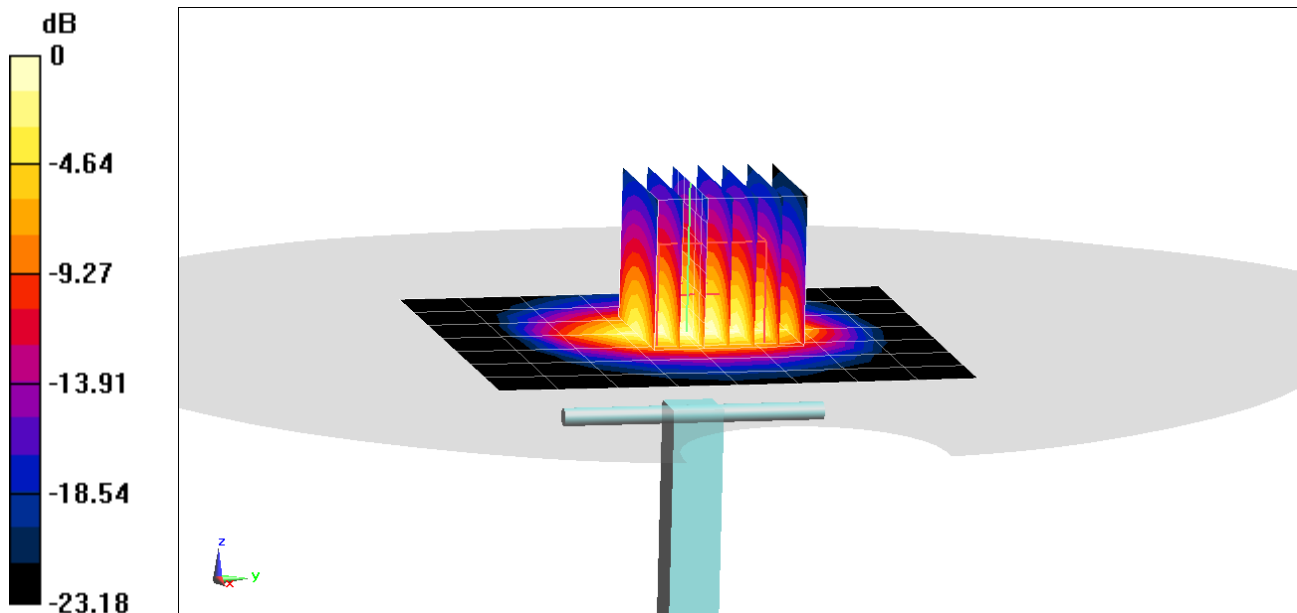
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.6 W/kg

SAR(1 g) = 5.09 W/kg; SAR(10 g) = 2.33 W/kg

Deviation(1 g) = 0.20%; Deviation(10 g) = -2.92%



0 dB = 8.46 W/kg = 9.27 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$ MHz; $\sigma = 2.211$ S/m; $\epsilon_r = 50.595$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/20/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

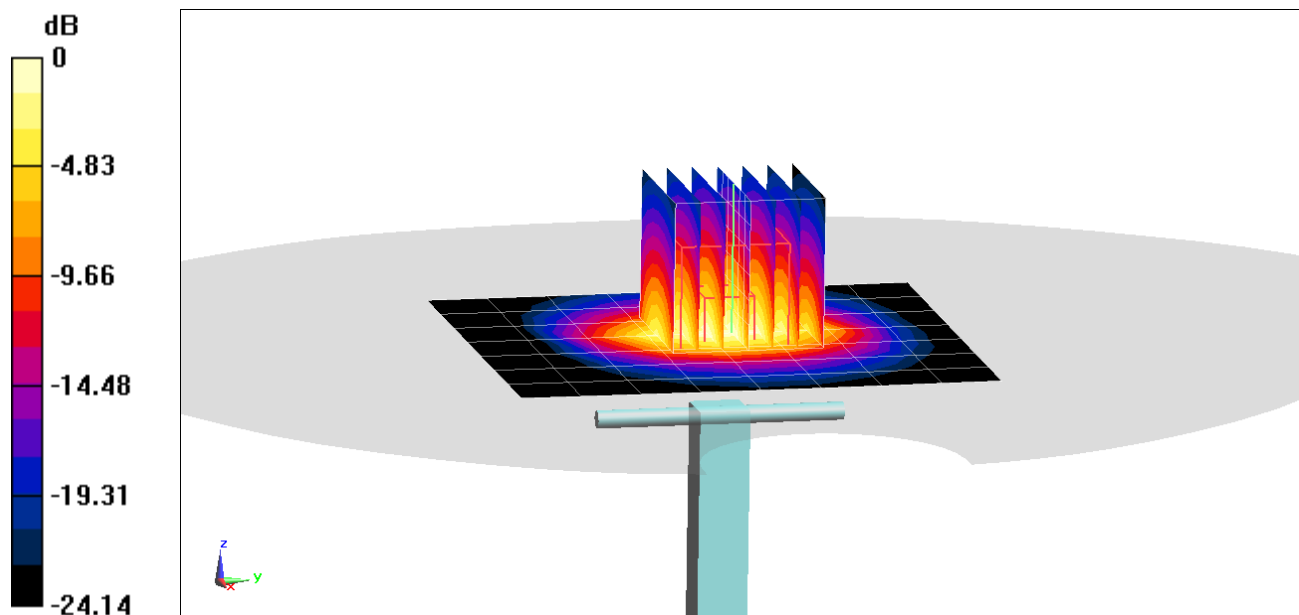
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.2 W/kg

SAR(10 g) = 2.45 W/kg

Deviation(10 g) = -2.00%



0 dB = 9.57 W/kg = 9.81 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.045 \text{ S/m}$; $\epsilon_r = 50.783$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

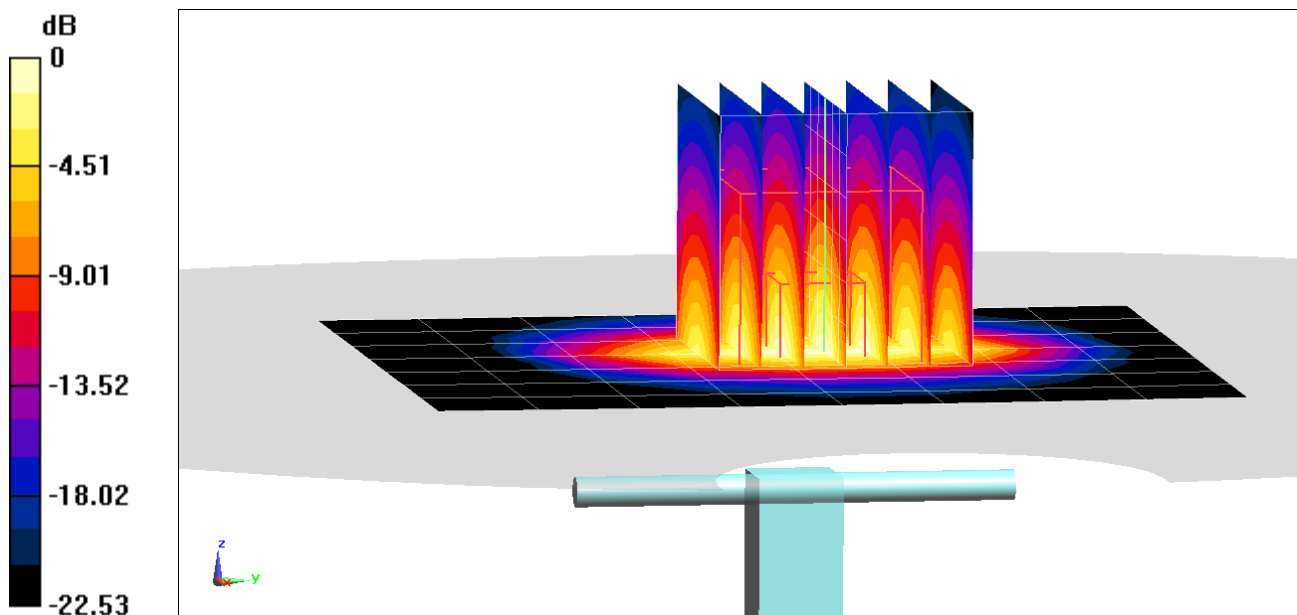
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.25 W/kg

Deviation(1 g) = 3.35%



PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600 \text{ MHz}$; $\sigma = 2.22 \text{ S/m}$; $\epsilon_r = 50.325$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/27/2020; Ambient Temp: 22.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

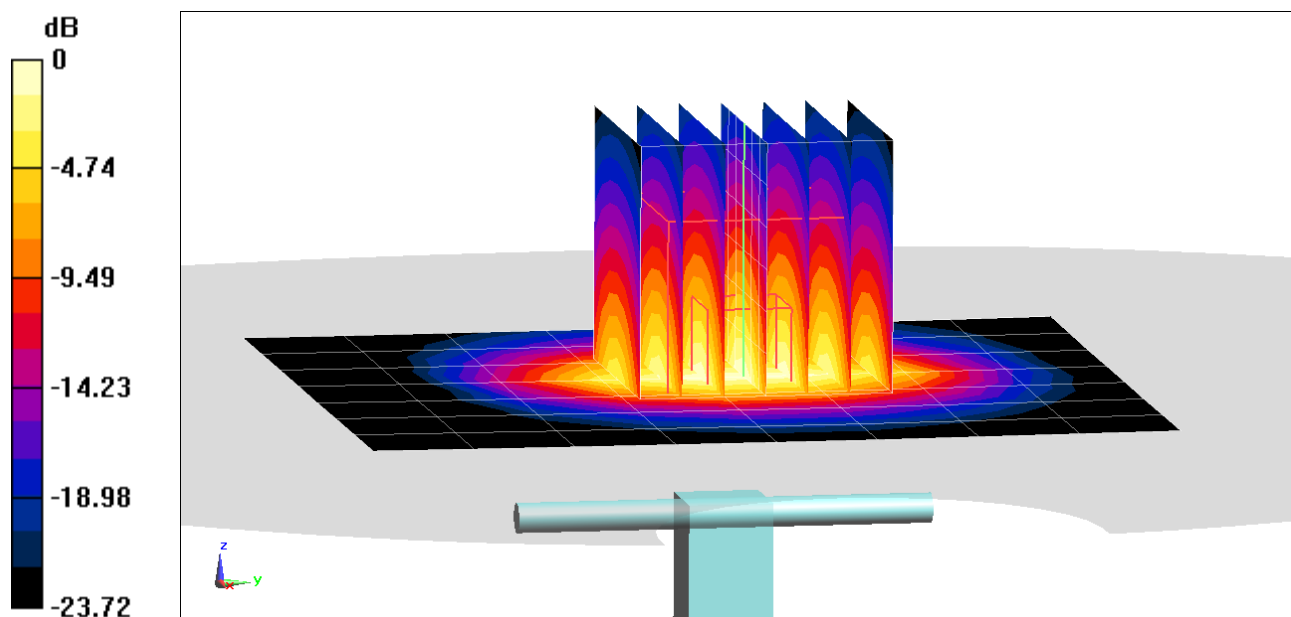
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 12.2 W/kg

SAR(1 g) = 5.43 W/kg

Deviation(1 g) = -2.34%



PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.031 \text{ S/m}$; $\epsilon_r = 52.584$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7547; ConvF(7.3, 7.3, 7.3) @ 2450 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

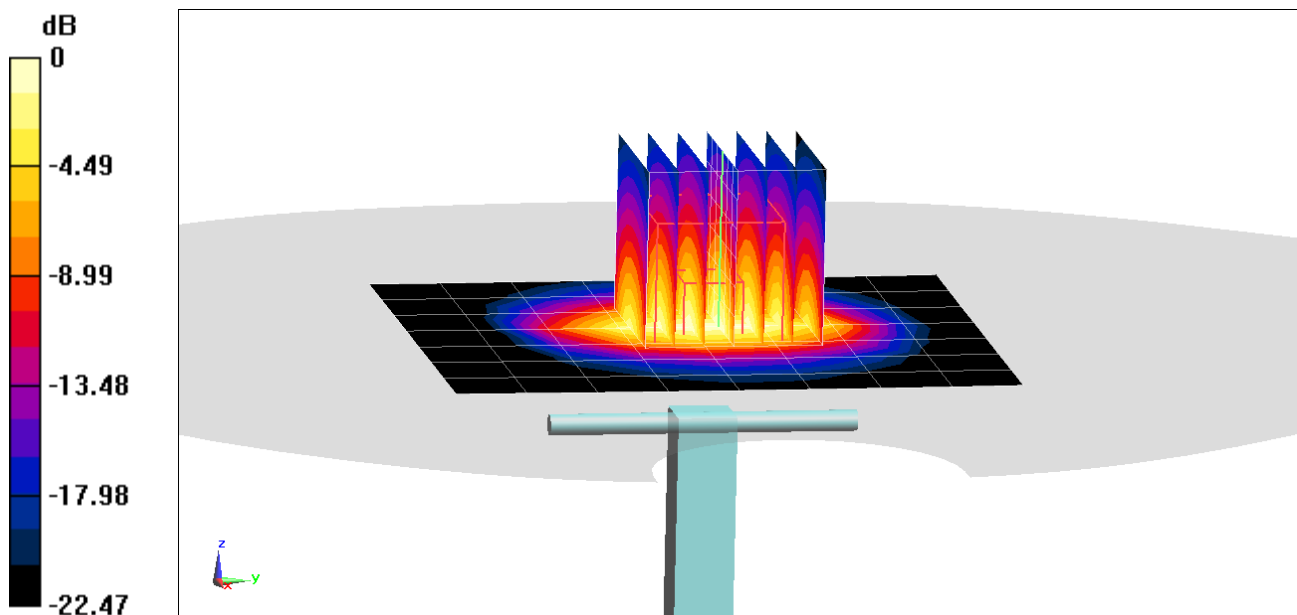
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 10.8 W/kg

SAR(10 g) = 2.4 W/kg

Deviation(10 g) = 0.00%



0 dB = 8.69 W/kg = 9.39 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600 \text{ MHz}$; $\sigma = 2.211 \text{ S/m}$; $\epsilon_r = 52.13$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2020; Ambient Temp: 22.5°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7547; ConvF(7.18, 7.18, 7.18) @ 2600 MHz; Calibrated: 7/15/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1323; Calibrated: 7/11/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

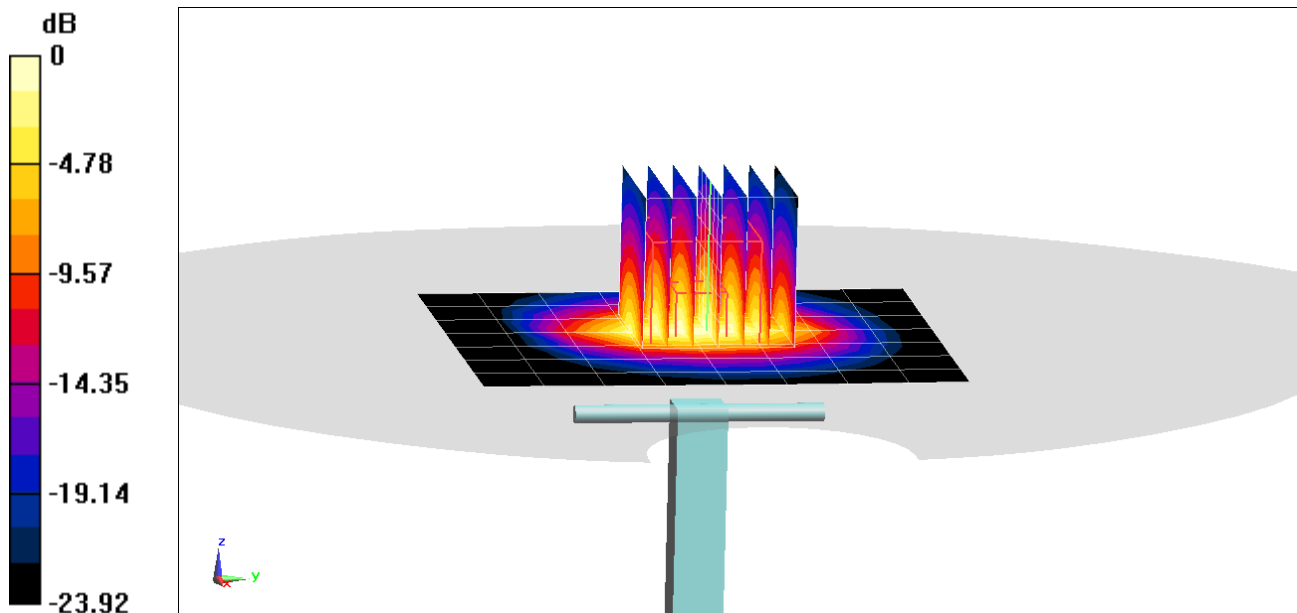
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 11.9 W/kg

SAR(10 g) = 2.4 W/kg

Deviation(10 g) = -4.00%



PCTEST

DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1059

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3600 Body Medium parameters used:

$f = 3500$ MHz; $\sigma = 3.39$ S/m; $\epsilon_r = 49.566$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/03/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7488; ConvF(7, 7, 7) @ 3500 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

3500 MHz System Verification at 20.0 dBm (100 mW)

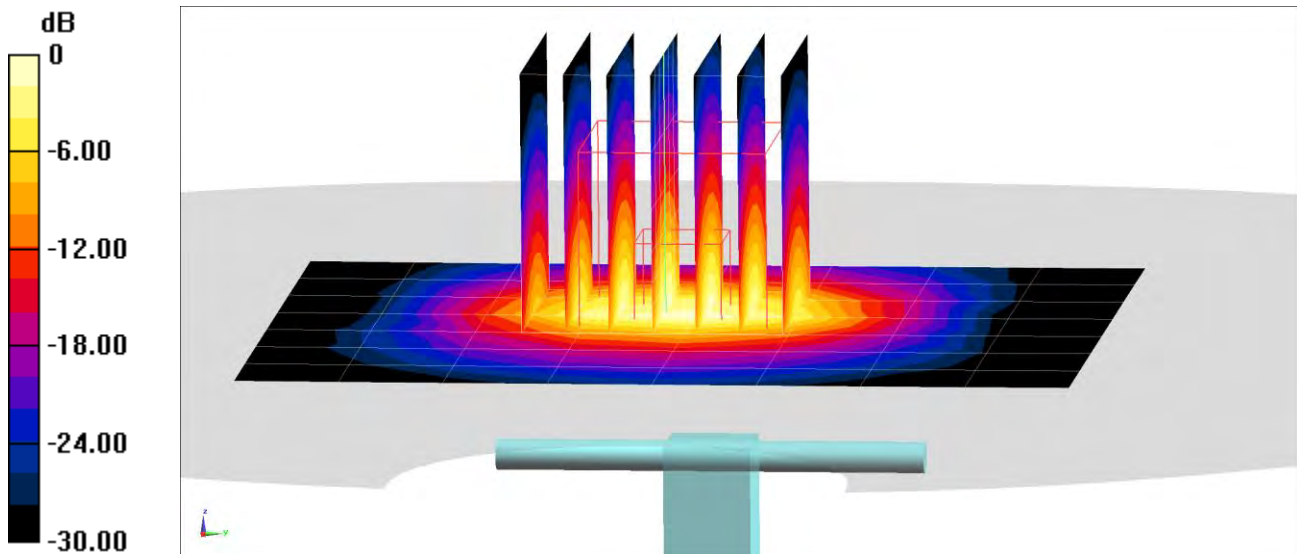
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 6.52 W/kg

Deviation(1 g) = 0.15%



0 dB = 12.6 W/kg = 11.00 dBW/kg

PCTEST

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1018

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3600 Body Medium parameters used:

$f = 3700 \text{ MHz}$; $\sigma = 3.603 \text{ S/m}$; $\epsilon_r = 49.25$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/03/2020; Ambient Temp: 22.1°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7488; ConvF(6.85, 6.85, 6.85) @ 3700 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

3700 MHz System Verification at 20.0 dBm (100 mW)

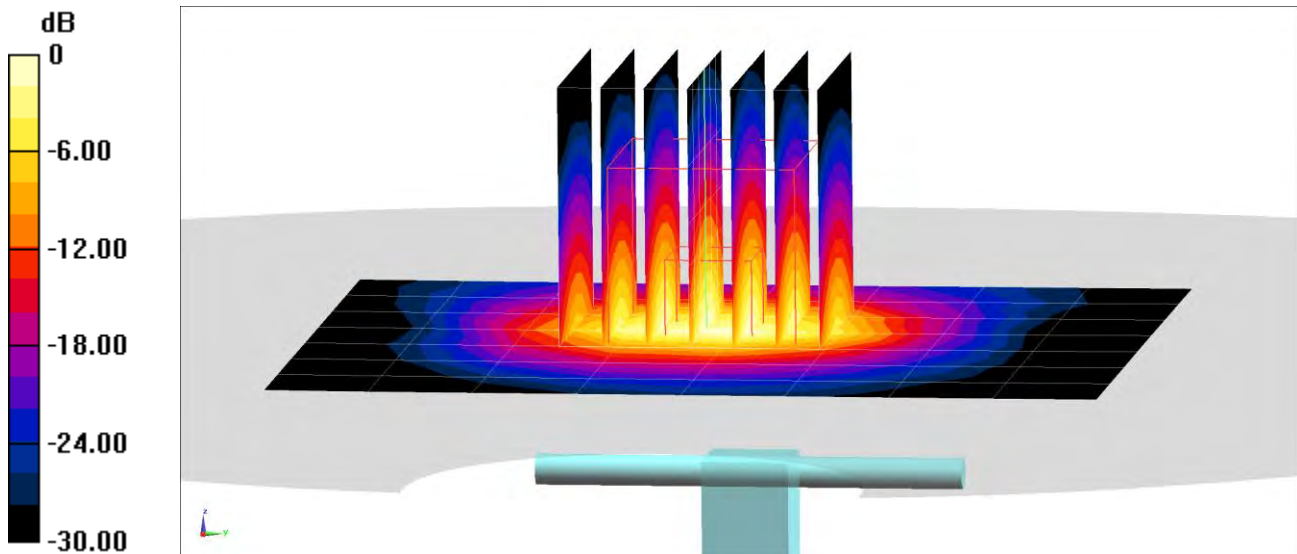
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 6.64 W/kg

Deviation(1 g) = 3.27%



PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057

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

Medium: 5200-5800 Body Medium parameters used:

$f = 5250$ MHz; $\sigma = 5.522$ S/m; $\epsilon_r = 46.842$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.7, 4.7, 4.7) @ 5250 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

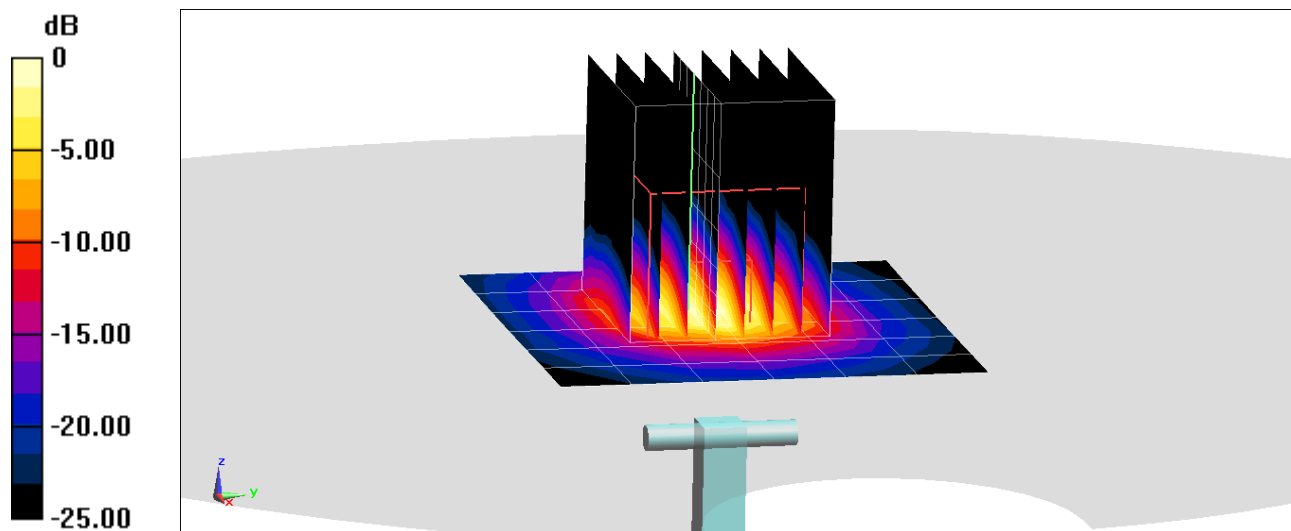
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 3.67 W/kg; SAR(10 g) = 1.02 W/kg

Deviation(1 g) = -3.29%; Deviation(10 g) = -3.32%



0 dB = 8.62 W/kg = 9.36 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057

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

Medium: 5200-5800 Body Medium parameters used:

$f = 5600$ MHz; $\sigma = 5.985$ S/m; $\epsilon_r = 46.274$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.22, 4.22, 4.22) @ 5600 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

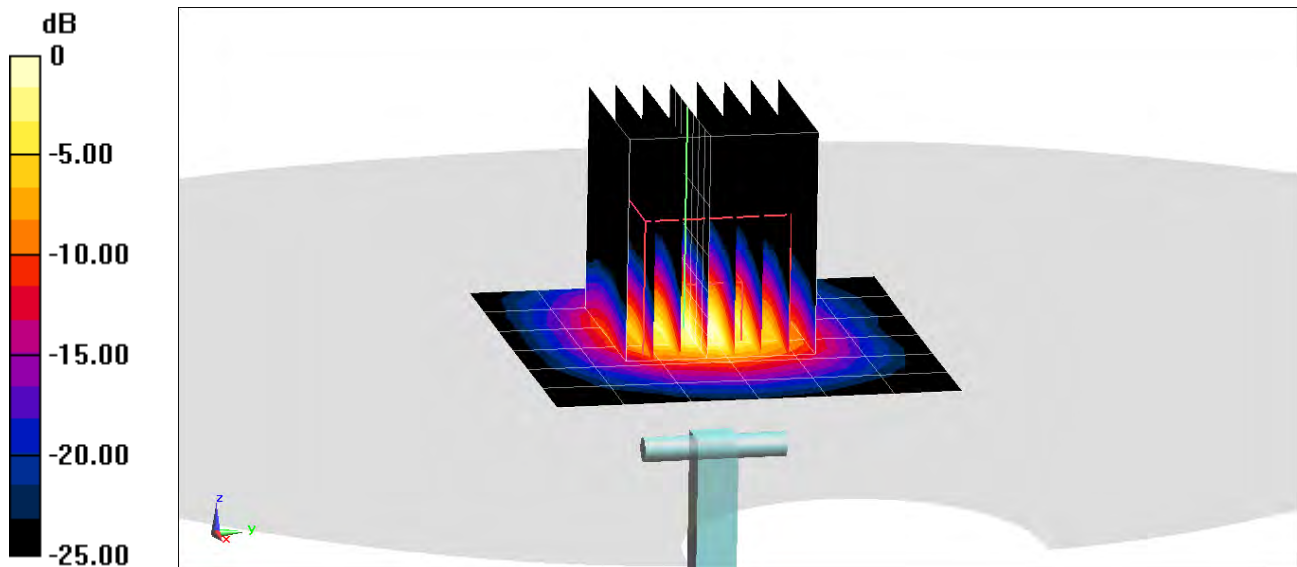
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 4.09 W/kg; SAR(10 g) = 1.13 W/kg

Deviation(1 g) = 2.38%; Deviation(10 g) = 1.35%



0 dB = 9.81 W/kg = 9.92 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057

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

Medium: 5200-5800 Body Medium parameters used:

$f = 5750$ MHz; $\sigma = 6.191$ S/m; $\epsilon_r = 46.023$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7409; ConvF(4.23, 4.23, 4.23) @ 5750 MHz; Calibrated: 6/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/20/2019

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

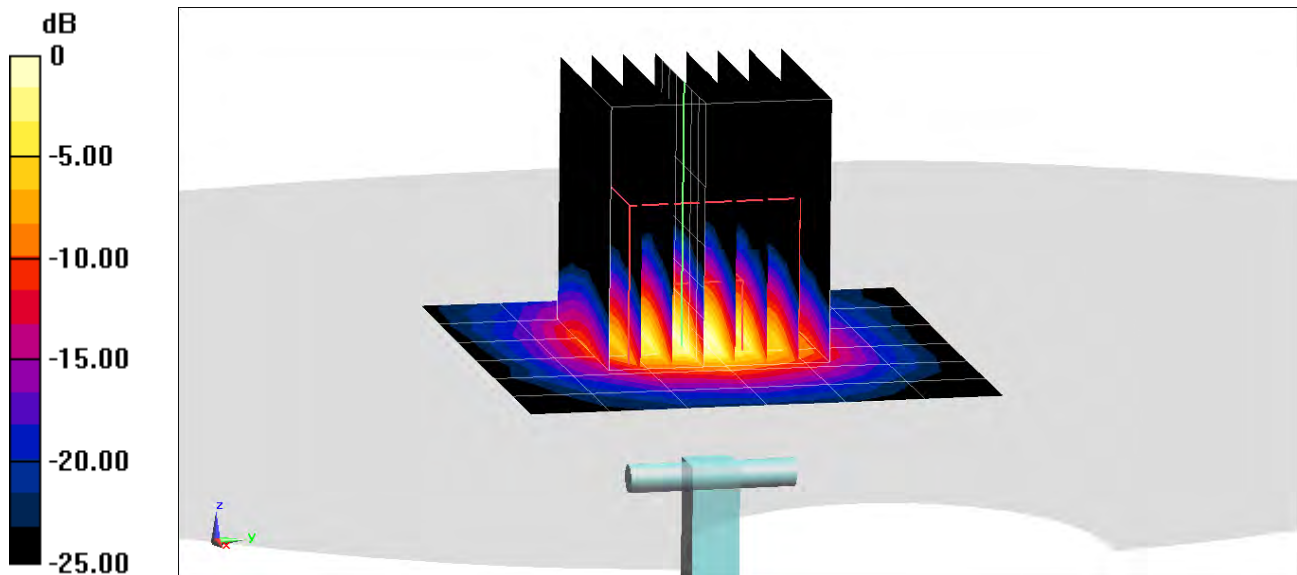
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.9 W/kg

SAR(1 g) = 3.92 W/kg; SAR(10 g) = 1.07 W/kg

Deviation(1 g) = 2.22%; Deviation(10 g) = 0.94%



0 dB = 9.74 W/kg = 9.89 dBW/kg

APPENDIX C: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity ϵ' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r'\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

3 Composition / Information on ingredients

3.2 Mixtures

Description: Aqueous solution with surfactants and inhibitors

Declarable, or hazardous components:

CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000	Ethanediol STOT RE 2, H373; Acute Tox. 4, H302	>1.0-4.9%
CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000	Sodium petroleum sulfonate Eye Irrit. 2, H319	< 2.9%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000	Hexylene Glycol / 2-Methyl-pentane-2,4-diol Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.9%
CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000	Alkoxylated alcohol, > C₁₈ Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.0%

Additional information:

For the wording of the listed risk phrases refer to section 16.

Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.

The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

Figure C-1

Note: Liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

FCC ID: A3LSMN986U	 PCTEST Prüfung für das Personal	SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/22/20 - 06/07/20	DUT Type: Portable Handset			APPENDIX C: Page 1 of 3

Measurement Certificate / Material Test

Item Name **Body Tissue Simulating Liquid (MBBL600-6000V6)**
 Product No. SL AAM U16 BC (Batch: 181029-1)
 Manufacturer SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the KDB 865864 compliance standard.

Test Condition

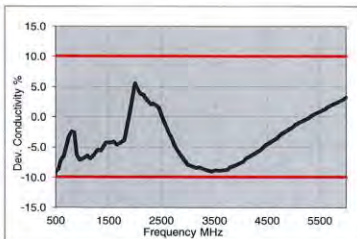
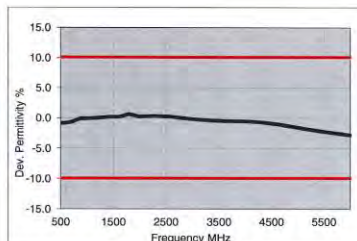
Ambient Condition 22°C ; 30% humidity
 TSL Temperature 22°C
 Test Date 30-Oct-18
 Operator CL

Additional Information

TSL Density
 TSL Heat-capacity

Results

f [MHz]	Measured			Target		Diff. to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
800	55.1	21.3	0.95	55.3	0.97	-0.4	-2.1
825	55.1	20.8	0.96	55.2	0.98	-0.3	-2.0
835	55.1	20.6	0.96	55.1	0.99	0.0	-2.5
850	55.1	20.4	0.96	55.2	0.99	-0.1	-3.0
900	55.0	19.7	0.98	55.0	1.05	0.0	-6.7
1400	54.2	15.6	1.22	54.1	1.28	0.2	-4.7
1450	54.1	15.4	1.24	54.0	1.30	0.2	-4.6
1500	54.1	15.3	1.27	53.9	1.33	0.3	-4.5
1550	54.0	15.1	1.30	53.9	1.36	0.2	-4.4
1600	53.9	15.0	1.33	53.8	1.39	0.2	-4.3
1625	53.9	14.9	1.35	53.8	1.41	0.3	-4.3
1640	53.9	14.9	1.36	53.7	1.42	0.3	-4.2
1650	53.8	14.9	1.36	53.7	1.43	0.2	-4.9
1700	53.8	14.8	1.40	53.6	1.46	0.4	-4.1
1750	53.7	14.7	1.43	53.4	1.49	0.5	-4.0
1800	53.7	14.6	1.46	53.3	1.52	0.8	-3.9
1810	53.7	14.6	1.47	53.3	1.52	0.8	-3.3
1825	53.7	14.6	1.48	53.3	1.52	0.8	-2.6
1850	53.6	14.5	1.50	53.3	1.52	0.6	-1.3
1900	53.5	14.5	1.53	53.3	1.52	0.4	0.7
1950	53.5	14.5	1.57	53.3	1.52	0.4	3.3
2000	53.4	14.4	1.60	53.3	1.52	0.2	5.3
2050	53.4	14.4	1.64	53.2	1.57	0.3	4.5
2100	53.3	14.4	1.68	53.2	1.62	0.2	3.7
2150	53.3	14.4	1.72	53.1	1.66	0.4	3.6
2200	53.2	14.4	1.76	53.0	1.71	0.3	2.9
2250	53.1	14.4	1.81	53.0	1.76	0.2	2.8
2300	53.1	14.4	1.85	52.9	1.81	0.4	2.2
2350	53.0	14.5	1.89	52.8	1.85	0.3	2.2
2400	52.9	14.5	1.94	52.8	1.90	0.2	2.1
2450	52.9	14.5	1.98	52.7	1.95	0.4	1.5
2500	52.8	14.6	2.03	52.6	2.02	0.3	0.5
2550	52.7	14.6	2.07	52.6	2.09	0.2	-1.0
2600	52.6	14.7	2.12	52.5	2.16	0.2	-1.9



3500	51.1	15.5	3.02	51.3	3.31	-0.4	-8.8
3700	50.8	15.7	3.24	51.1	3.55	-0.5	-8.8
5200	48.1	18.2	5.27	49.0	5.30	-1.8	-0.6
5250	48.0	18.3	5.34	49.0	5.36	-1.9	-0.4
5300	47.9	18.4	5.41	48.9	5.42	-2.0	-0.2
5500	47.5	18.6	5.70	48.6	5.65	-2.2	0.8
5600	47.3	18.8	5.84	48.5	5.77	-2.3	1.3
5700	47.1	18.9	5.99	48.3	5.88	-2.5	1.8
5800	47.0	19.0	6.14	48.2	6.00	-2.6	2.3

TSL Dielectric Parameters

1

Figure C-2
 600 – 5800 MHz Body Tissue Equivalent Matter

FCC ID: A3LSMN986U		SAR EVALUATION REPORT		Approved by: Quality Manager
Test Dates: 04/22/20 - 06/07/20	DUT Type: Portable Handset			APPENDIX C: Page 2 of 3

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HBBL600-10000V6)
Product No.	SL AAH U16 BC (Batch: 181031-2)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

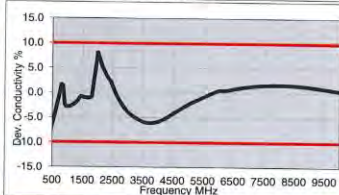
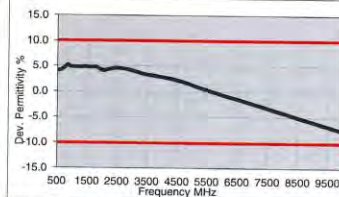
Ambient Condition	22°C ; 30% humidity
TSL Temperature	22°C
Test Date	31-Oct-18
Operator	CL

Additional Information

TSL Density
TSL Heat-capacity

Results

f [MHz]	Measured			Target		Diff.to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
800	43.8	20.5	0.91	41.7	0.90	5.1	1.4
825	43.8	20.1	0.92	41.6	0.91	5.3	1.5
835	43.8	19.9	0.93	41.5	0.91	5.4	2.0
850	43.7	19.7	0.93	41.5	0.92	5.3	1.5
900	43.5	18.9	0.95	41.5	0.97	4.8	-2.1
1400	42.5	15.0	1.17	40.6	1.18	4.7	-0.8
1450	42.5	14.8	1.19	40.5	1.20	4.9	-0.8
1600	42.2	14.3	1.27	40.3	1.28	4.7	-1.1
1625	42.2	14.2	1.29	40.3	1.30	4.8	-0.7
1640	42.2	14.2	1.30	40.3	1.31	4.8	-0.5
1650	42.1	14.2	1.30	40.2	1.31	4.6	-1.0
1700	42.1	14.0	1.33	40.2	1.34	4.8	-0.9
1750	42.0	13.9	1.36	40.1	1.37	4.8	-0.8
1800	41.9	13.9	1.39	40.0	1.40	4.7	-0.7
1810	41.9	13.8	1.40	40.0	1.40	4.7	0.0
1825	41.9	13.8	1.41	40.0	1.40	4.7	0.7
1850	41.8	13.8	1.42	40.0	1.40	4.5	1.4
1900	41.8	13.7	1.45	40.0	1.40	4.5	3.6
1950	41.7	13.7	1.48	40.0	1.40	4.3	5.7
2000	41.6	13.6	1.51	40.0	1.40	4.0	7.9
2050	41.6	13.6	1.55	39.9	1.44	4.2	7.3
2100	41.5	13.5	1.58	39.8	1.49	4.2	6.1
2150	41.4	13.5	1.62	39.7	1.53	4.2	5.7
2200	41.4	13.5	1.65	39.6	1.58	4.4	4.6
2250	41.3	13.5	1.69	39.6	1.62	4.4	4.2
2300	41.2	13.5	1.72	39.5	1.67	4.4	3.2
2350	41.1	13.5	1.76	39.4	1.71	4.4	2.9
2400	41.1	13.5	1.80	39.3	1.76	4.6	2.5
2450	41.0	13.5	1.84	39.2	1.80	4.6	2.2
2500	40.9	13.5	1.88	39.1	1.85	4.5	1.4
2550	40.8	13.5	1.92	39.1	1.91	4.4	0.6
2600	40.8	13.6	1.95	39.0	1.96	4.6	-0.2
3500	39.2	14.1	2.74	37.9	2.91	3.3	-5.8
3700	38.9	14.2	2.93	37.7	3.12	3.1	-6.1



5200	36.3	15.8	4.57	35.0	4.66	0.9	-1.7
5250	36.2	15.9	4.63	35.9	4.71	0.8	-1.6
5300	36.1	15.9	4.69	35.9	4.76	0.7	-1.4
5500	35.8	16.1	4.92	35.6	4.96	0.3	-0.9
5600	35.6	16.2	5.04	35.5	5.07	0.1	-0.6
5700	35.4	16.2	5.15	35.4	5.17	0.0	-0.3
5800	35.2	16.3	5.27	35.3	5.27	-0.2	0.0
6000	34.9	16.5	5.50	35.1	5.48	-0.6	0.5
6500	34.0	16.9	6.12	34.5	6.07	-1.4	0.9
7000	33.1	17.3	6.74	33.9	6.65	-2.3	1.3
7500	32.2	17.6	7.36	33.3	7.24	-3.2	1.6
8000	31.4	17.9	7.97	32.7	7.84	-4.1	1.7
8500	30.5	18.2	8.59	32.1	8.45	-5.0	1.6
9000	29.7	18.4	9.20	31.5	9.08	-5.9	1.3
9500	28.9	18.5	9.80	31.0	9.71	-6.8	0.9
10000	28.1	18.7	10.40	30.4	10.36	-7.6	0.4

TSL Dielectric Parameters

1

Figure C-3
600 – 5800 MHz Head Tissue Equivalent Matter

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APPENDIX D: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table D-1
SAR System Validation Summary – 1g

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE CAL. POINT	COND.	PERM.	CW VALIDATION			MOD. VALIDATION		
					(σ)	(ε _r)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
E	750	2/20/2020	3589	750	Head	0.889	43.647	PASS	PASS	PASS	N/A	N/A
P	835	10/1/2019	7551	835	Head	0.918	41.180	PASS	PASS	PASS	GMSK	PASS
L	1750	9/24/2019	7410	1750	Head	1.351	40.190	PASS	PASS	PASS	N/A	N/A
L	1900	9/24/2019	7410	1900	Head	1.442	39.947	PASS	PASS	PASS	GMSK	PASS
E	2300	2/5/2020	3589	2300	Head	1.717	39.033	PASS	PASS	PASS	N/A	N/A
E	2450	2/5/2020	3589	2450	Head	1.823	38.835	PASS	PASS	PASS	OFDM/TDD	PASS
E	2600	2/5/2020	3589	2600	Head	1.933	38.635	PASS	PASS	PASS	TDD	PASS
D	3500	2/4/2020	7488	3500	Head	2.882	36.886	PASS	PASS	PASS	TDD	PASS
D	3700	2/4/2020	7488	3700	Head	3.037	36.597	PASS	PASS	PASS	TDD	PASS
H	5250	5/7/2020	7357	5250	Head	4.644	35.120	PASS	PASS	PASS	OFDM	N/A
H	5600	5/7/2020	7357	5600	Head	5.030	34.510	PASS	PASS	PASS	OFDM	N/A
H	5750	5/7/2020	7357	5750	Head	5.207	34.260	PASS	PASS	PASS	OFDM	N/A
L	750	8/20/2019	7410	750	Body	0.941	54.921	PASS	PASS	PASS	N/A	N/A
M	835	4/20/2020	7570	835	Body	0.956	54.580	PASS	PASS	PASS	GMSK	PASS
D	835	2/20/2020	7488	835	Body	1.001	53.450	PASS	PASS	PASS	GMSK	PASS
I	1750	4/7/2020	7527	1750	Body	1.506	54.990	PASS	PASS	PASS	N/A	N/A
J	1900	1/1/2020	7571	1900	Body	1.579	51.919	PASS	PASS	PASS	GMSK	PASS
O	1900	2/14/2020	7552	1900	Body	1.564	51.850	PASS	PASS	PASS	GMSK	PASS
K	2300	9/5/2019	7547	2300	Body	1.893	52.450	PASS	PASS	PASS	N/A	N/A
K	2450	9/6/2019	7547	2450	Body	1.996	51.898	PASS	PASS	PASS	OFDM/TDD	PASS
K	2600	9/5/2019	7547	2600	Body	2.176	52.040	PASS	PASS	PASS	TDD	PASS
D	3500	2/12/2020	7488	3500	Body	3.373	50.003	PASS	PASS	PASS	TDD	PASS
D	3700	2/12/2020	7488	3700	Body	3.585	49.719	PASS	PASS	PASS	TDD	PASS
G	5250	10/4/2019	7409	5250	Body	5.223	47.070	PASS	PASS	PASS	OFDM	N/A
G	5600	10/7/2019	7409	5600	Body	5.884	47.080	PASS	PASS	PASS	OFDM	N/A
G	5750	10/7/2019	7409	5750	Body	6.111	46.780	PASS	PASS	PASS	OFDM	N/A

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Table D-2
SAR System Validation Summary – 10g

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE CAL. POINT	COND.	PERM.	CW VALIDATION			MOD. VALIDATION		
					(σ)	(ε _r)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
I	1750	4/7/2020	7527	1750	Body	1.506	54.990	PASS	PASS	PASS	N/A	N/A
O	1900	2/14/2020	7552	1900	Body	1.564	51.850	PASS	PASS	PASS	GMSK	PASS
J	1900	1/1/2020	7571	1900	Body	1.579	51.919	PASS	PASS	PASS	GMSK	PASS
K	2300	9/5/2019	7547	2300	Body	1.893	52.450	PASS	PASS	PASS	N/A	N/A
K	2450	9/6/2019	7547	2450	Body	1.996	51.898	PASS	PASS	PASS	OFDM/TDD	PASS
K	2600	9/5/2019	7547	2600	Body	2.176	52.040	PASS	PASS	PASS	TDD	PASS
G	5250	10/4/2019	7409	5250	Body	5.223	47.070	PASS	PASS	PASS	OFDM	N/A
G	5600	10/7/2019	7409	5600	Body	5.884	47.080	PASS	PASS	PASS	OFDM	N/A
G	5750	10/7/2019	7409	5750	Body	6.111	46.780	PASS	PASS	PASS	OFDM	N/A

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

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APPENDIX F: DOWNLINK LTE CA RF CONDUCTED POWERS

1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table 1 – Example of Exclusion Table for SISO Configurations

[illegible]

Table 2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations

Index	ACC	Supported Channel Bandwidth (MHz)			Restriction	Completely Covered by Measurement Superset
		CC1	CC2	CC3		
2CC RM1	CA [2C]	5, 10, 15, 20	5, 10, 15, 20		ICC RM6	No
2CC RM2	CA [2A, 2B]	5, 10, 15, 20	5, 10, 15, 20		ICC RM1	No
2CC RM3	CA [2A, 2D]	5, 10, 15, 20	5, 10, 15, 20		ICC RM8	No
2CC RM4	CA [2A, 4A] (2)	5, 10, 15, 20	5, 10, 15, 20		ICC RM1	No
2CC RM5	CA [2A, 4A] (2)	5, 10, 15, 20	5, 10, 15, 20		ICC RM5	No
2CC RM6	CA [2A, 5A]	5, 10, 15, 20	5, 10		ICC RM3	No
2CC RM7	CA [2A, 32A] (1)	5, 10, 15, 20	3, 10		No	No
2CC RM8	CA [2A, 32A]	5, 10, 15, 20	10		ICC RM4	No
2CC RM9	CA [2A, 37A]	5, 10			ICC RM1	No
2CC RM10	CA [2A, 28A] (2)	5, 10, 15, 20	5, 10		B29 SCC Only	No
2CC RM11	CA [2A, 28A]	5, 10, 15, 20	5, 10		ICC RM2	No
2CC RM12	CA [2A, 66A] (2)	5, 10, 15, 20	5, 10, 15, 20		ACC RM1	No
2CC RM13	CA [2A, 66A] (2)	5, 10, 15, 20	5, 10, 15, 20		ACC RM2	No
2CC RM14	CA [2A, 128A] (6A) (1)	5, 10, 15, 20	5, 10, 15, 20		ICC RM1	No
2CC RM15	CA [2A, 71A]	5, 10, 15, 20	5, 10, 15, 20		ICC RM1	No
2CC RM16	CA 5A (66A)	5, 10	5, 10, 15, 20		ICC RM16	No
2CC RM17	CA 13A (66A) (6)	5, 10, 15, 20	5, 10, 15, 20		ICC RM17	No
2CC RM18	CA 13A (66A)	5, 10	5, 10, 15, 20		ICC RM18	No
2CC RM19	CA 30A (66A)	5, 10	5, 10, 15, 20		ICC RM20	No
2CC RM20	CA 10A (66A)	5, 10, 15, 20	5, 10, 15		ICC RM20	No
2CC RM21	CA (66C)	5, 10, 15, 20	5, 10, 15, 20		ACC RM6	No
2CC RM22	CA (66A) (66A)	5, 10, 15, 20	5, 10, 15, 20		ICC RM20	No
2CC RM23	CA (66A) (66A)	5, 10, 15, 20	5, 10, 15, 20		No	No

Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration

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1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

This device supports LAA with downlink carrier aggregation only. It uses carrier aggregation in the downlink to combine LTE in the unlicensed spectrum (i.e. LTE Band 46) with LTE in the licensed band (served as PCC). All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)iii) of KDB 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

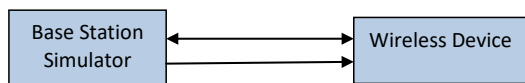


Figure 1
DL CA Power Measurement Setup

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1.3.3 LTE Band 13 as PCC

Table 3
Maximum Output Powers

[illegible]

1.3.4 LTE Band 14 as PCC

Table 4
Maximum Output Powers

Combination	PCC Band	PCC										SCC 1		SCC 2		SCC 3		SCC 4		Power							
		PCC BW [MHz]	PCC [DL] Channel	PCC [UL] Freq. [MHz]	Modulation	PCC UL RB Util	PCC UL RB Offset	PCC [DL] Channel	PCC [DL] Freq. [MHz]	PCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	Single Carrier Tx Power (dBm)							
CA_2A_2A-1A4_30A-30A	LTE B14	10	23130	793	QPSK	1	0	5330	763	LTE B12	20	900	1960	LTE B2	20	900	1940	LTE B30	10	6820	2155	LTE B06	20	6878	2145	25.15	25.06
CA_2A_2A-1A4_66A-66A	LTE B14	10	23130	793	QPSK	1	0	5330	763	LTE B12	20	900	1960	LTE B2	20	900	1940	LTE B30	10	6820	2155	LTE B06	20	6878	2145	25.15	25.06
CA_2A_1A4_30A-66A-66A	LTE B14	10	23130	793	QPSK	1	0	5330	763	LTE B12	20	900	1960	LTE B2	20	900	1940	LTE B30	10	6820	2155	LTE B06	20	6878	2145	25.15	25.06

1.3.5 LTE Band 26 as PCC

Table 5
Maximum Output Powers

Combination	PCC Band	PCC										SCC 1			SCC 2			SCC 3				Power	
		SCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	PCC (DL) Channel	PCC (DL) Freq. [MHz]	LTE Tx Power (dBm)	LTE Single Carrier Tx Power (dBm)
CA 25A-26A-28A	LTE B26	3	26865	831.5	QPSK	1	14	8865	876.5	LTE B25	20	6365	1962.5	LTE B25	20	8595	1985	-	-	-	-	25.10	25.08
CA 25A-26A-28A	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	LTE B25	20	6365	1962.5	LTE B25	20	8595	1985	-	-	-	-	25.10	25.08
CA 26A-41A	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	LTE B41	20	40620	2593.2	LTE B41	20	40422	2573.2	-	-	-	-	25.34	25.30
CA 26A-41C	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	LTE B25	20	8140	1940	LTE B41	20	40620	2593.2	LTE B41	20	40422	2573.2	25.32	25.30

1.3.6 LTE Band 5 as PCC

Table 6
Maximum Output Powers

[illegible]

FCC ID: A3LSMN986U	 PCTEST Presented by the port of the FCC	SAR EVALUATION REPORT		Reviewed by: Quality Manager
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1.3.10 LTE Band 41 as PCC

Table 10
Maximum Output Powers

Combination	PCC										SCC 1				SCC 2				SCC 3				SCC 4				Power	
	PCC Band	PCC BW [MHz]	PCC [UL] Ch.	PCC [UL] Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC [DL] Channel	PCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 41A-41A (1)	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	41490	2506	LTE B41	20	41490	2506	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.11	24.11	
CA 41A-41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	41490	2506.2	LTE B41	20	41490	2506	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.11	24.11	
CA 41C-41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	41490	2506	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.10	24.11	
CA 41A-41D	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	41094	2504.4	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.12	24.11	
CA 41D-41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.10	24.11	
CA 41C-41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	LTE B41	20	41490	2506	24.08	24.11	
CA 41E	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	41094	2504.4	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	24.10	24.11	
CA 41C-41D	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	41094	2504.4	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	24.14	24.11	
CA 41D-41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2505.8	LTE B41	20	40146	2545.6	LTE B41	20	41292	2505.2	LTE B41	20	41490	2506	24.10	24.11	

1.3.11 LTE Band 48 as PCC

Table 11
Maximum Output Powers

Combination	PCC Band	PCC										SCC 1				SCC 2				SCC 3				SCC 4				Power	
		PCC BW [MHz]	PCC [UL] Ch.	PCC [UL] Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC [DL] Channel	PCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC [DL] Channel	SCC [DL] Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)		
CA 48A-48A	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	24.76	24.80		
CA 48A-48C	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	24.87	24.80		
CA 48C-48A	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.82	24.80		
CA 48A-48D	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	LTE B48	20	56640	3600	24.89	24.80		
CA 48D-48A	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.82	24.80		
CA 48C-48C	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.84	24.80		
CA 48E	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.89	24.80		
CA 48C-48D	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.91	24.80		
CA 48F	LTE B48	20	55773	3603.3	QPSK	1	50	55773	3603.3	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	LTE B48	20	55071	3603.1	24.83	24.80		

1.4 DL CA with DL 4x4 MIMO RF Conduction Powers

This device supports downlink 4x4 MIMO operations for some LTE bands. Uplink transmission is limited to a single output stream. When carrier aggregation was applicable, the general test selection and setup procedures described in Section 1.2 were applied.

Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

1.4.1 LTE 4x4 MIMO DL Standalone Powers

Table 12
Maximum Output Powers

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]
66	10	132022	1715	QPSK	1	25	23.90	23.91
25	20	26140	1860	QPSK	1	50	23.81	23.75
30	5	27710	2310	QPSK	1	24	23.70	23.80
41	20	39750	2506	QPSK	1	99	24.21	24.11
48	20	55773	3603.3	QPSK	1	50	24.84	24.80

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1.4.2 LTE Band 71 as PCC

Table 13
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC				DL Ant. Config.	SCC 1				DL Ant. Config.	SCC 2				DL Ant. Config.	SCC 3				DL Ant. Config.	Power	
						PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA {A1}-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	10	2350	2150	2x2	-	-	-	-	-	25.32	25.29
CA {A4}-A1-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	10	2350	2150	2x2	-	-	-	-	-	25.30	25.29
CA {2A}-2A-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	2x2	25.34	25.29
CA 2A-2A-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	4x4	25.30	25.29
CA {2A}-2A-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B4	20	2175	2132.5	2x2	25.25	25.29
CA {2A}-2A-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	4x4	25.28	25.29
CA {2A}-2A-A4-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B4	20	2175	2132.5	4x4	25.29	25.29
CA {2A}-2A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	2x2	25.22	25.29
CA 2A-2A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	25.27	25.29
CA {2A}-2A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	2x2	25.31	25.29
CA {2A}-2A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	25.36	25.29
CA {2A}-2A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	4x4	25.26	25.29
CA {2A}-66A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	67236	2190	2x2	25.40	25.29
CA 2A-66A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	25.35	25.29
CA {2A}-66A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	25.35	25.29
CA {2A}-66A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	25.36	25.29
CA {2A}-66A-66A-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	25.33	25.29
CA {2A}-66C-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	66984	2164.8	2x2	25.24	25.29
CA {2A}-66C-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66984	2164.8	4x4	25.35	25.29
CA {2A}-66C-71A	LTE B71	5	133147	665.5	QPSK	1	24	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66984	2164.8	4x4	25.34	25.29

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SAR EVALUATION REPORT



Reviewed by:
Quality Manager

Test Dates:

04/22/20 – 06/07/20

DUT Type:

Portable Handset

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1.4.3 LTE Band 12 as PCC

Table 14
Maximum Output Powers

[illegible]

FCC ID: A3LSMN986U	 PCTEST Prepared for the purpose of FCC compliance	SAR EVALUATION REPORT		Reviewed by: Quality Manager
Test Dates: 04/22/20 – 06/07/20	DUT Type: Portable Handset	APPENDIX F: Page 8 of 17		

1.4.4 LTE Band 13 as PCC

Table 15
Maximum Output Powers

[illegible]

1.4.5 LTE Band 14 as PCC

Table 16
Maximum Output Powers

Combination	PCC										SC1				SC2				SC3				SC4				Power				
	PCC Band	PCC BW [MHz]	PCC [UL] Ch. Freq.	PCC [UL] RB	PCC [UL] RB Offset	PCC [DL] Ch. Freq.	PCC [DL] Freq. [MHz]	DL Ant. Config.	SCC BW [MHz]	SCC [DL] Ch. Freq.	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch. Freq.	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch. Freq.	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch. Freq.	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch. Freq.	DL Ant. Config.	LTE Tx Power [dBm]	LTE Single Carrier Tx Power [dBm]		
CA (2A, 2A, 1A, 3A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	2d2	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	2d2	LTE B2	20	1900	1960	2d2	LTE B30	10	9620	2355	44d	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE B30	10	9620	2355	2d2	LTE B30	20	9620	2355	2d2	23.97	23.97
CA (2A, 2A, 1A, 3A, 6A)	LTE B14	20	25330	793	QPSK	1	5330	763	2d2	LTE B2	20	1900	1960	44d	LTE B2	20	1900	1960	44d	LTE											

FCC ID: A3LSMN986U



SAR EVALUATION REPORT



Reviewed by:

Quality Manage

Test Dates:
04/22/20 – 06/07/20

DUT Type:
Portable Handset

APPENDIX F:
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REV 21.3 M
02/15/2019

1.4.6 LTE Band 5 as PCC

Table 17
Maximum Output Powers

Combination		PCC										SCC 1										SCC 2										SCC 3										SCC 4										Power	
		PCC Band	PCC BW [MHz]	PCC [DL/UL]	PCC [UL Freq. [MHz]]	Mod.	PCC UL RE offset	PCC [DL/UL]	PCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL/UL]	SCC [UL Freq. [MHz]]	DL Ant. Config.	LTE Tx Power with Enb-DCA (dBm)	LTE Single Carrier Tx Power (dBm)											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524	881.5	2x2	LTE B20	20	8360	1862.5	4x4	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	LTE B40	20	8360	1862.5	2x2	25.02	25.15											
CA SA-25A	LTE BS	10	20524	836.5	QPSK	1	0	2524																																													

FCC ID: A3LSMN986U



SAR EVALUATION REPORT



Reviewed by:	Quality Manager
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Test Dates:
04/22/20 – 06/07/20

DUT Type:
Portable HandsetAPPENDIX F:
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REV 21.3 M
02/15/2019

1.4.7 LTE Band 26 as PCC

Table 18
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Freq. [MHz]	PCC				PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC 1				SCC Band	SCC BW [MHz]	SCC 2				SCC Band	SCC BW [MHz]	SCC 3				Power			
				Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.			SCC Band	SCC BW [MHz]	SCC (DL) Freq. [MHz]	DL Ant. Config.			SCC Band	SCC BW [MHz]	SCC (DL) Freq. [MHz]	DL Ant. Config.			SCC Band	SCC BW [MHz]	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)		
CA [25A]-25A-26A	LTE B26	3	26865	831.5	QPSK	1	14	8865	876.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8365	1962.5	4x4	-	-	25.00	25.08
CA [25A]-25A-26A	LTE B26	3	26865	831.5	QPSK	1	14	8865	876.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8365	1962.5	4x4	-	-	25.06	25.08
CA [25A]-26A-41A	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B41	20	40620	2593	2x2	-	-	-	-	-	-	25.41	25.30	
CA [25A]-26A-41A	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8365	1962.5	2x2	LTE B41	20	40620	2593	4x4	-	-	-	-	-	-	25.37	25.30	
CA [25A]-26A-41A	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B41	20	40620	2593	4x4	-	-	-	-	-	-	25.29	25.30	
CA [26A]-41C	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	-	-	-	-	-	-	25.19	25.30	
CA [25A]-26A-41C	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8140	1940	4x4	LTE B41	20	40620	2593	2x2	LTE B41	20	40422	2573.2	2x2	25.39	25.30		
CA [25A]-26A-41C	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8140	1940	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	25.28	25.30		
CA [25A]-26A-41C	LTE B26	10	26865	831.5	QPSK	1	0	8865	876.5	2x2	LTE B25	20	8140	1940	4x4	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	25.43	25.30		

FCC ID: A3LSMN986U		SAR EVALUATION REPORT		Reviewed by: Quality Manager
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1.4.8 LTE Band 66 as PCC

Table 19
Maximum Output Powers

[illegible]

FCC ID: A3LSMN986U		SAR EVALUATION REPORT		Reviewed by:
Test Dates: 04/22/20 – 06/07/20	DUT Type: Portable Handset	Quality Manager APPENDIX F: Page 13 of 17		

Combination	ACC Band	PCB Band	PCB Rate	SSC										SSC 1										SSC 2										SSC 3										SSC 4										SSC 5										SSC 6										Power																																																																																																																																																																																																																																																																																																																																																																																																																																									
				ACC (MHz)	PCB (MHz)	PCB Rate (Mbps)	Max. Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)		PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)	PCB Rate (Mbps)

1.4.10 LTE Band 30 as PCC

Table 21
Maximum Output Powers

[illegible]

FCC ID: A3LSMN986U	 PCTEST Proud to be part of the  eSolutions	SAR EVALUATION REPORT		Reviewed by: Quality Manager
Test Dates: 04/22/20 – 06/07/20	DUT Type: Portable Handset	APPENDIX F: Page 15 of 17		

1.4.11 LTE Band 41 as PCC

Table 22
Maximum Output Powers

[illegible]

1.4.12 LTE Band 48 as PCC

Table 23
Maximum Output Powers

Combination	PCC Band	PCC										SCC 1				SCC 2				SCC 3				SCC 4				Power					
		PCC BW [MHz]	PCC [MHz] CH	PCC [LA] Freq. [MHz]	Mod.	PCC UL BW	PCC UL RIG offset	PCC [DL] CH	PCC [DL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] CH	SCC [DL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] CH	SCC [DL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] CH	SCC [DL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] CH	SCC [DL] Freq. [MHz]	DL Ant. Config.	LTE Tx Power with CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	2x2	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4	LTE B4B	20	56640	3600	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	2x2	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CA 4B4A(4B)	LTE B4B	20	53773	3603.3	QPSK	1	50	53773	3603.3	4x4	LTE B4B	20	56640	3600	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-</			

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1.5 Downlink Carrier Aggregation with Uplink Carrier Aggregation enabled

This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

Per FCC Guidance, additional SAR measurements for these configurations were not required since their maximum output power was not more than 0.25 dB higher than the maximum output power for with only ULCA active.

1.5.1 DL Carrier Aggregation RF Conducted Powers

Table 24
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL# RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (UL) Freq. [MHz]	Mod.	SCC UL# RB	SCC UL# RB Offset	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA 41C/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	41860	2680	-	-	-	-	-	-	-	-	24.43	24.43
CA 41D	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	40146	2545.6	-	-	-	-	-	-	-	-	24.43	24.43
CA 41D/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	40146	2545.6	LTE B41	20	41860	2680	-	-	-	-	24.43	24.43
CA 41C/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	41860	2680	-	-	-	-	-	-	-	-	24.43	24.43
CA 41E	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	40146	2545.6	LTE B41	20	40344	2565.4	-	-	-	-	24.38	24.43
CA 41C/41D	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	41860	2680	-	-	-	-	-	-	-	-	24.43	24.43
CA 41D/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	LTE B41	20	40146	2545.6	LTE B41	20	41292	2660.2	LTE B41	20	41490	2680	24.37	24.43

1.5.2 DL Carrier Aggregation with DL 4x4 MIMO RF Conducted Powers

Note: 4x4 DL MIMO is only operating in the downlink. Uplink transmission is limited to a single output stream for each component carrier of ULCA.

Table 25
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL# RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (UL) Ch.	SCC (UL) Freq. [MHz]	Mod.	SCC UL# RB	SCC UL# RB Offset	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA [66B]	LTE B66	10	132022	1715	QPSK	1	49	66486	2115	4x4	LTE B66	10	132121	1724.9	QPSK	1	0	66585	2124.9	4x4	24.16	24.13
CA [66C]	LTE B66	20	132072	1720	QPSK	1	99	66536	2120	4x4	LTE B66	20	132270	1739.8	QPSK	1	0	66734	2139.8	4x4	24.18	24.15

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL# RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (UL) Ch.	SCC (UL) Freq. [MHz]	Mod.	SCC UL# RB	SCC UL# RB Offset	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA 41H	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41C/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	2x2	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	2x2	-	-
CA 41C/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41D	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41D/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	2x2	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	2x2	-	-
CA 41D/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41D/41A	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41D/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41C/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41C/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41C/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41E	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41E/41C	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-
CA 41E	LTE B41	20	39750	2506	QPSK	1	99	39750	2506	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	39948	2525.8	4x4	-	-

Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL# RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL# RB Offset	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA [48C]	LTE B48	20	55773	3603.3	QPSK	1	0	55773	3603.3	4x4	LTE B48	20	55575	3583.5	QPSK	1	99	55575	3583.5	4x4	24.96	24.89

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APPENDIX G POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

G.1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered. For licensed modes, the device state index as displayed on the device UI was recorded before and after the mechanism was triggered.
2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.
3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

G.2 Distance Verification Procedure

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom. For licensed modes, the device state index on the device UI was monitored to determine the triggering state.
2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 and FCC Guidance. Each applicable test position was evaluated. The distances were confirmed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.
3. Steps 1 and 2 were repeated for low, mid, and high bands, as appropriate (see note below Table G-2 for more details).
4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.

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G.3 Main Antenna Verification Summary

Table G-1
Power Measurement Verification for Main Antenna

Mechanism(s)		Mode/Band	Conducted Power (dBm)		
1st	2nd		Un-triggered (Max)	Mechanism #1 (Reduced)	Mechanism #2 (Reduced)
Hotspot On		GPRS 1900	0	3	
Hotspot On	Grip	GPRS 1900	0	3	3
Grip		GPRS 1900	0	1	
Grip	Hotspot On	GPRS 1900	0	1	3
Hotspot On		UMTS 1750	0	3	
Hotspot On	Grip	UMTS 1750	0	3	3
Grip		UMTS 1750	0	1	
Grip	Hotspot On	UMTS 1750	0	1	3
Hotspot On		UMTS 1900	0	3	
Hotspot On	Grip	UMTS 1900	0	3	3
Grip		UMTS 1900	0	1	
Grip	Hotspot On	UMTS 1900	0	1	3
Hotspot On		PCS EVDO	0	3	
Hotspot On	Grip	PCS EVDO	0	3	3
Grip		PCS EVDO	0	1	
Grip	Hotspot On	PCS EVDO	0	1	3
Hotspot On		LTE FDD Band 4	0	3	
Hotspot On	Grip	LTE FDD Band 4	0	3	3
Grip		LTE FDD Band 4	0	1	
Grip	Hotspot On	LTE FDD Band 4	0	1	3
Hotspot On		LTE FDD Band 66	0	3	
Hotspot On	Grip	LTE FDD Band 66	0	3	3
Grip		LTE FDD Band 66	0	1	
Grip	Hotspot On	LTE FDD Band 66	0	1	3
Hotspot On		LTE FDD Band 2	0	3	
Hotspot On	Grip	LTE FDD Band 2	0	3	3
Grip		LTE FDD Band 2	0	1	
Grip	Hotspot On	LTE FDD Band 2	0	1	3
Hotspot On		LTE FDD Band 25	0	3	
Hotspot On	Grip	LTE FDD Band 25	0	3	3
Grip		LTE FDD Band 25	0	1	
Grip	Hotspot On	LTE FDD Band 25	0	1	3
Hotspot On		LTE FDD Band 30	0	3	
Hotspot On		LTE FDD Band 7	0	3	
Hotspot On	Grip	LTE FDD Band 7	0	3	3
Grip		LTE FDD Band 7	0	1	
Grip	Hotspot On	LTE FDD Band 7	0	1	3
Hotspot On		LTE TDD Band 41 (PC3)	0	3	
Hotspot On	Grip	LTE TDD Band 41 (PC3)	0	3	3
Grip		LTE TDD Band 41 (PC3)	0	1	
Grip	Hotspot On	LTE TDD Band 41 (PC3)	0	1	3
Hotspot On		LTE TDD Band 41 (PC2)	0	3	
Hotspot On	Grip	LTE TDD Band 41 (PC2)	0	3	3
Grip		LTE TDD Band 41 (PC2)	0	1	
Grip	Hotspot On	LTE TDD Band 41 (PC2)	0	1	3
Hotspot On		LTE TDD Band 38	0	3	
Hotspot On	Grip	LTE TDD Band 38	0	3	3
Grip		LTE TDD Band 38	0	1	
Grip	Hotspot On	LTE TDD Band 38	0	1	3
Held-to-Ear		LTE TDD Band 48	0	2	
Hotspot On		NR Band n66	0	3	
Hotspot On	Grip	NR Band n66	0	3	3
Grip		NR Band n66	0	1	
Grip	Hotspot On	NR Band n66	0	1	3
Hotspot On		NR Band n2	0	3	
Hotspot On	Grip	NR Band n2	0	3	3
Grip		NR Band n2	0	1	
Grip	Hotspot On	NR Band n2	0	1	3
Hotspot On		NR Band n25	0	3	
Hotspot On	Grip	NR Band n25	0	3	3
Grip		NR Band n25	0	1	
Grip	Hotspot On	NR Band n25	0	1	3
Held-to-ear		NR Band n41	0	2	

*Note: This device uses different Device State Indices (DSI) to configure different time averaged power levels based on certain exposure scenarios. For this device, DSI = 1 represents the case when the grip sensor is active, DSI = 2 represents the case where the device is held to ear, and DSI = 3 represents the case when hotspot mode is active. DSI = 0 is configured at max power when the device cannot detect the use condition.

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Table G-2
Distance Measurement Verification for Main Antenna

Mechanism(s)	Test Condition	Band	Distance Measurements (mm)		Minimum Distance per Manufacturer (mm)
			Moving Toward	Moving Away	
Grip	Phablet - Back Side	Mid	13	14	9
Grip	Phablet - Back Side	High	13	14	9
Grip	Phablet - Front Side	Mid	11	12	7
Grip	Phablet - Front Side	High	11	12	7
Grip	Phablet - Bottom Edge	Mid	17	18	13
Grip	Phablet - Bottom Edge	High	17	18	13

*Note: Mid band refers to: CDMA BC1, GSM1900, UMTS B2/4, LTE B2/4/25/66, NR Band n2/25/66; High band refers to: LTE B7/38/41 PC3 and PC2

G.4 WIFI Verification Summary

Table G-3
Power Measurement Verification WIFI – Antenna 1

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
		Un-triggered (Max)	Mechanism #1 (Reduced)
1st			
Held-to-Ear	802.11b	20.42	14.49
Held-to-Ear	802.11g	17.75	15.36
Held-to-Ear	802.11n (2.4GHz)	18.02	15.40
Held-to-Ear	802.11a	17.28	12.99
Held-to-Ear	802.11n (5GHz, 20MHz BW)	16.99	12.96
Held-to-Ear	802.11ac (20MHz BW)	17.08	12.78
Held-to-Ear	802.11n (5GHz, 40MHz BW)	15.84	12.87
Held-to-Ear	802.11ac (40MHz BW)	15.91	12.99
Held-to-Ear	802.11ac (80MHz BW)	14.52	11.97

*Note: MIMO and 802.11ax WIFI modes were not evaluated due to equipment limitations.

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Table G-4
Power Measurement Verification WIFI – Antenna 2

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
1st		Un-triggered (Max)	Mechanism #1 (Reduced)
Held-to-Ear	802.11b	20.31	14.77
Held-to-Ear	802.11g	17.69	15.29
Held-to-Ear	802.11n (2.4GHz)	17.92	15.43
Held-to-Ear	802.11a	16.58	12.17
Held-to-Ear	802.11n (5GHz, 20MHz BW)	16.79	12.58
Held-to-Ear	802.11ac (20MHz BW)	16.88	12.95
Held-to-Ear	802.11n (5GHz, 40MHz BW)	16.23	12.99
Held-to-Ear	802.11ac (40MHz BW)	16.08	12.96
Held-to-Ear	802.11ac (80MHz BW)	14.73	12.35

*Note: MIMO and 802.11ax WIFI modes were not evaluated due to equipment limitations.

Table G-5
Power Measurement Verification WIFI with NR Active – Antenna 1

Mode/Band	Conducted Power (dBm)		
	Un-triggered (Max)	Mechanism #1 NR Active (Reduced)	Mechanism #2 RCV and NR Active (Reduced)
802.11b	19.12	15.20	12.20
802.11g	17.53	15.19	11.43
802.11n (2.4GHz)	17.11	15.25	11.19
802.11a	16.80	11.20	11.44
802.11n (5GHz, 20MHz BW)	16.79	11.02	11.54
802.11ac (20MHz BW)	16.71	11.17	11.45
802.11n (5GHz, 40MHz BW)	15.93	11.31	11.33
802.11ac (40MHz BW)	15.88	11.46	11.21
802.11ac (80MHz BW)	14.96	11.11	11.38

*Note: MIMO and 802.11ax WIFI modes were not evaluated due to equipment limitations.

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Table G-6
Power Measurement Verification WIFI with NR Active – Antenna 2

Mode/Band	Conducted Power (dBm)		
	Un-triggered (Max)	Mechanism #1 NR Active (Reduced)	Mechanism #2 RCV and NR Active (Reduced)
802.11b	19.35	14.94	11.89
802.11g	17.39	14.98	11.74
802.11n (2.4GHz)	17.48	14.76	11.61
802.11a	17.22	12.15	12.83
802.11n (5GHz, 20MHz BW)	17.24	12.13	12.76
802.11ac (20MHz BW)	17.24	12.15	12.77
802.11n (5GHz, 40MHz BW)	16.70	12.50	12.49
802.11ac (40MHz BW)	16.63	12.37	12.53
802.11ac (80MHz BW)	15.41	12.36	12.27

*Note: MIMO and 802.11ax WIFI modes were not evaluated due to equipment limitations.

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