

APPENDIX A: SAR TEST DATA

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV01BPQLD

Communication System: UID 0, _GSM GPRS; 2 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium: 835 Body Medium parameters used (interpolated):

$f = 824.2$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 54.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.4°C; Tissue Temp: 18.8°C

Probe: EX3DV4 - SN7427; ConvF(10.18, 10.18, 10.18) @ 824.2 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: GPRS 850, Antenna 1, Body SAR, Left Edge, Low.ch, 2 Tx Slots

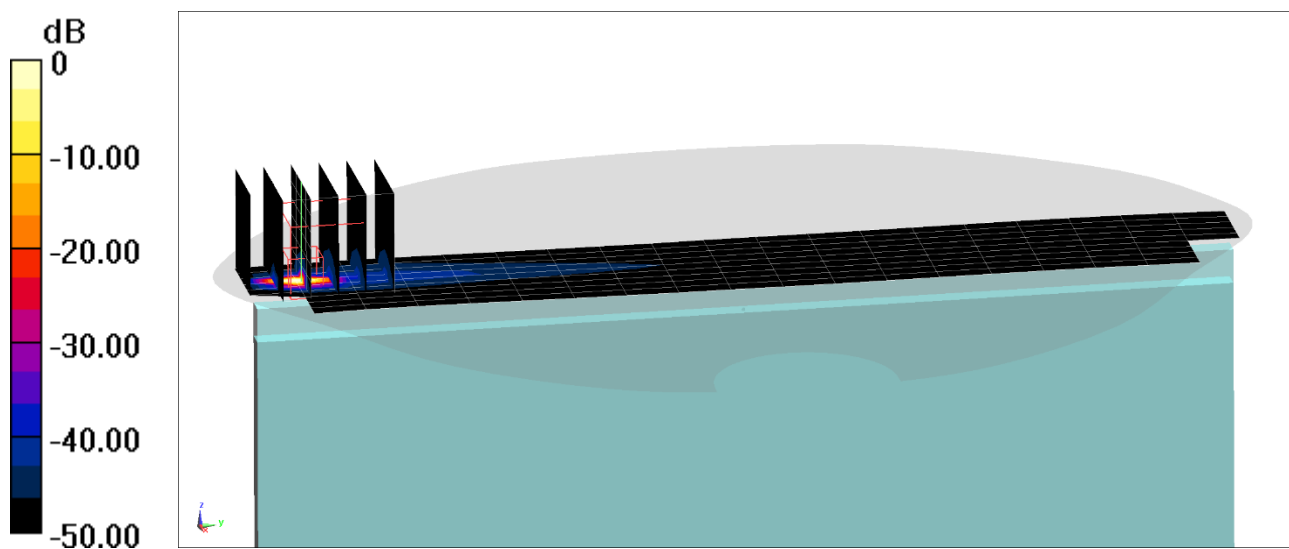
Area Scan (10x22x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.56 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.54 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.360 W/kg



0 dB = 4.30 W/kg = 6.33 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00BPQLD

Communication System: UID 0, GSM GPRS; 2 Tx slots; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15

Medium: 1900 Body Medium parameters used:

$f = 1910$ MHz; $\sigma = 1.585$ S/m; $\epsilon_r = 52.264$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-20-2020; Ambient Temp: 22.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1909.8 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: GPRS 1900, Antenna 4b, Body SAR, Back side, High.ch, 2 Tx Slots

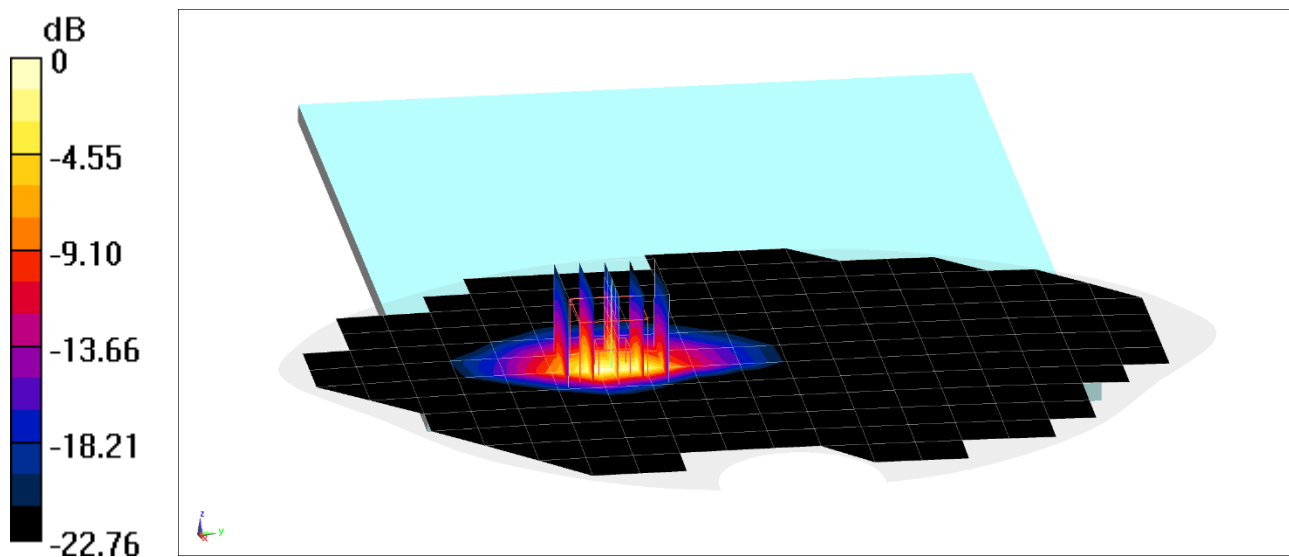
Area Scan (15x19x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.00 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.00 W/kg

SAR(1 g) = 0.983 W/kg; SAR(10 g) = 0.385 W/kg



0 dB = 2.02 W/kg = 3.05 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV01BPQLD

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

Medium: 835 Body Medium parameters used (interpolated):

$f = 836.6 \text{ MHz}$; $\sigma = 0.98 \text{ S/m}$; $\epsilon_r = 54.527$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.4°C; Tissue Temp: 18.8°C

Probe: EX3DV4 - SN7427; ConvF(10.18, 10.18, 10.18) @ 836.6 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: UMTS 850, Antenna 1, Body SAR, Left Edge, Mid.ch

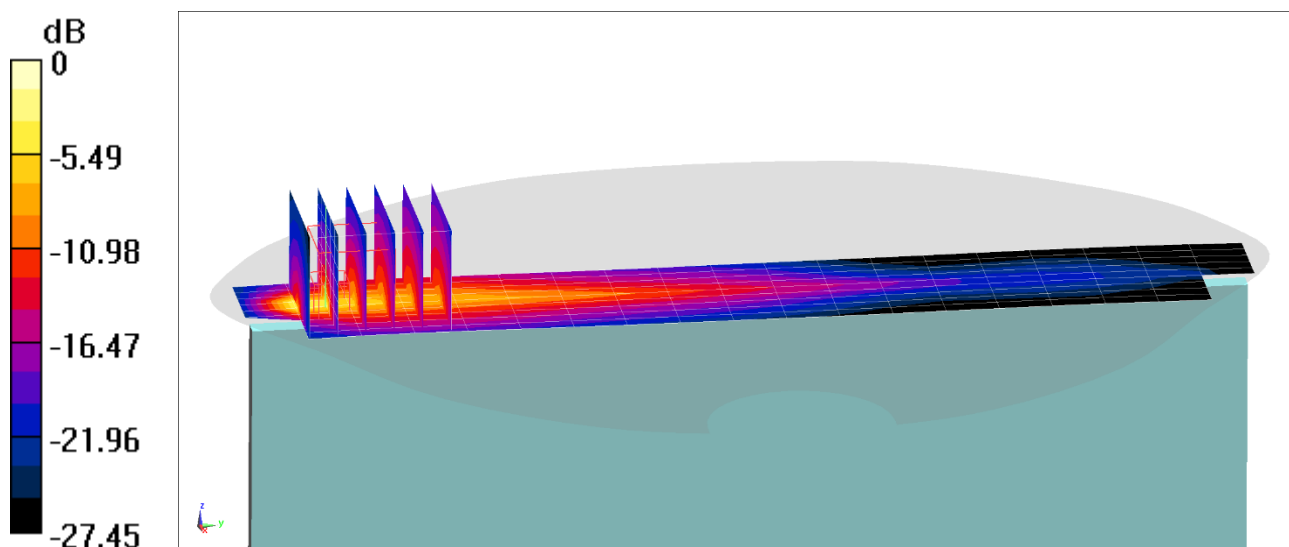
Area Scan (10x22x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 37.64 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 7.29 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.376 W/kg



0 dB = 5.02 W/kg = 7.01 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV01JPQLD

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

Medium: 1750 Body Medium parameters used (interpolated):

$f = 1732.4 \text{ MHz}$; $\sigma = 1.49 \text{ S/m}$; $\epsilon_r = 51.377$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-28-2020; Ambient Temp: 21.9°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1732.4 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: UMTS 1750, Antenna 2a, Body SAR, Back side, Mid.ch

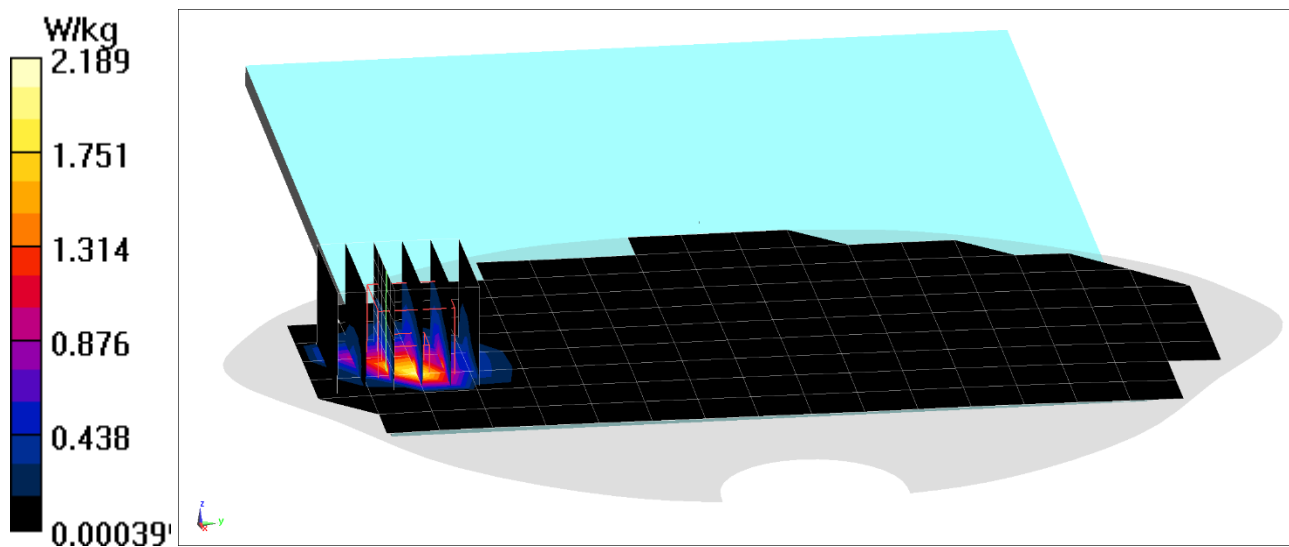
Area Scan (11x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Reference Value = 29.87 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 3.33 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.555 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV01JPQLD

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1852.4 \text{ MHz}$; $\sigma = 1.55 \text{ S/m}$; $\epsilon_r = 51.683$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-22-2020; Ambient Temp: 21.1°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1852.4 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: UMTS 1900, Antenna 4a, Body SAR, Back side, Low.ch

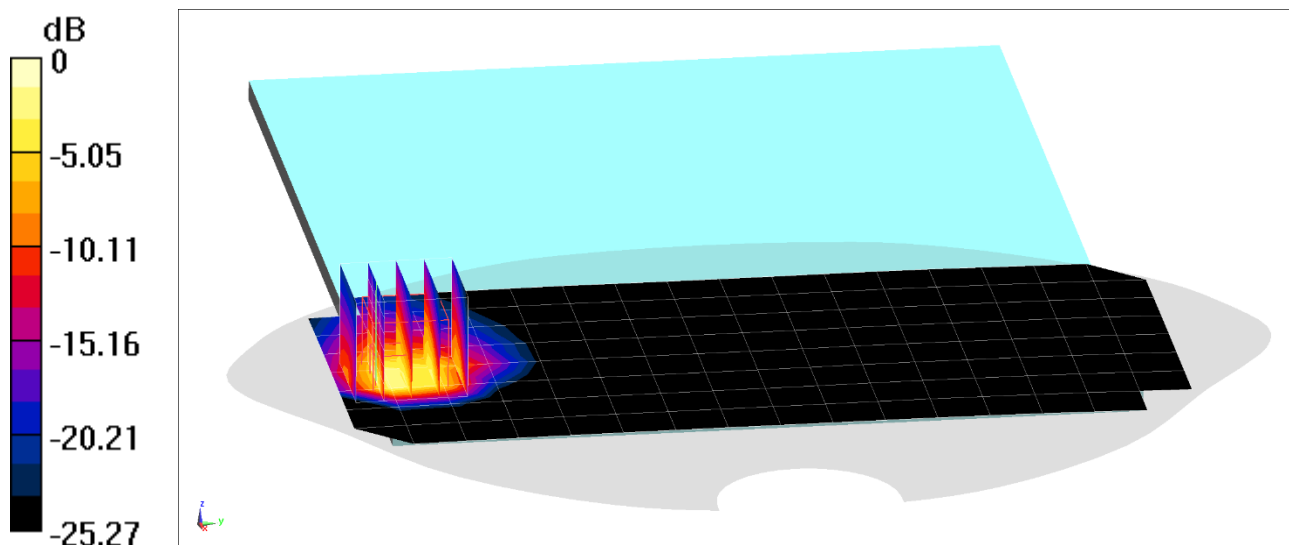
Area Scan (9x17x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Reference Value = 26.24 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 4.20 W/kg

SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.572 W/kg



0 dB = 2.62 W/kg = 4.18 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00QPQLD

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; $\sigma = 0.911$ S/m; $\epsilon_r = 54.421$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.7°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 680.5 MHz; Calibrated: 3/18/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn604; Calibrated: 3/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 71, Antenna 1, Body SAR, Left Edge, Mid.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

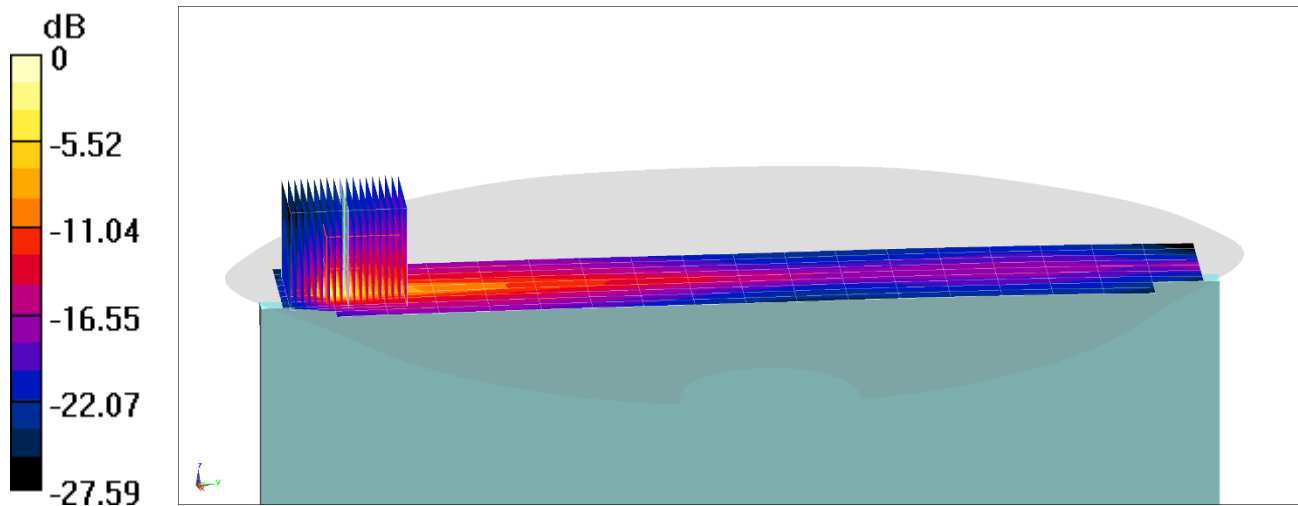
Area Scan (10x21x1): Measurement grid: dx=5mm, dy=15mm

Zoom Scan (17x19x8)/Cube 0: Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 32.08 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 22.7 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.297 W/kg



0 dB = 4.48 W/kg = 6.51 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00BPQLD

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; $\sigma = 0.928$ S/m; $\epsilon_r = 54.629$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.7°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 707.5 MHz; Calibrated: 3/18/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn604; Calibrated: 3/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 12, Antenna 1, Body SAR, Left Edge, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

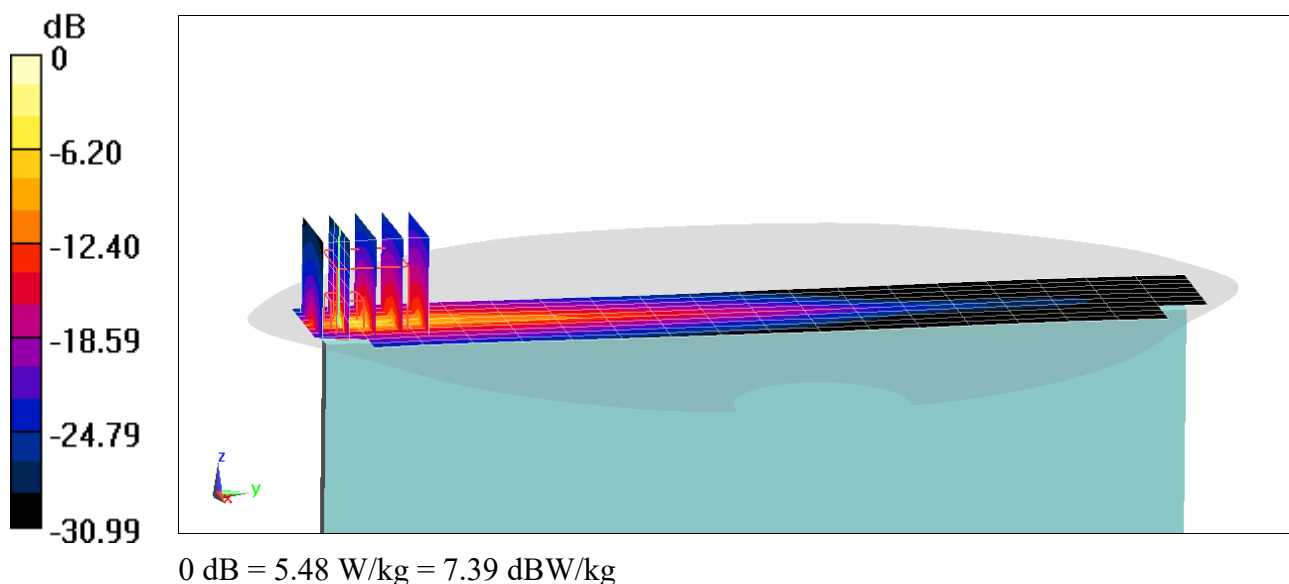
Area Scan (11x7x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 33.50 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 8.44 W/kg

SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.352 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00JPQLD

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

Medium: 750 Body Medium parameters used (interpolated):

$f = 782 \text{ MHz}$; $\sigma = 1.008 \text{ S/m}$; $\epsilon_r = 53.413$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.7°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 782 MHz; Calibrated: 3/18/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn604; Calibrated: 3/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 13, Antenna 3, Body SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

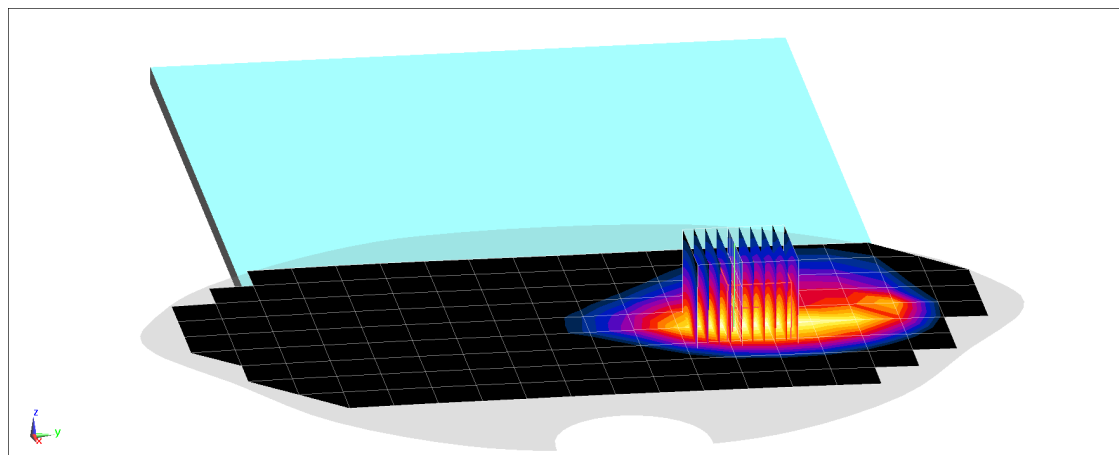
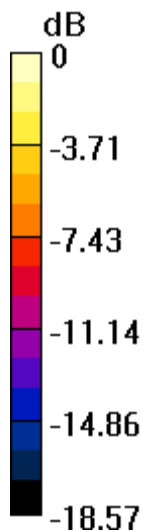
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (10x10x8)/Cube 0: Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 31.07 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.80 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.545 W/kg



0 dB = 1.91 W/kg = 2.81 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV01EPQLD

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

Medium: 750 Body Medium parameters used (interpolated):

$f = 793 \text{ MHz}$; $\sigma = 1.014 \text{ S/m}$; $\epsilon_r = 53.426$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.7°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 793 MHz; Calibrated: 3/18/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn604; Calibrated: 3/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 14, Antenna 3, Body SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

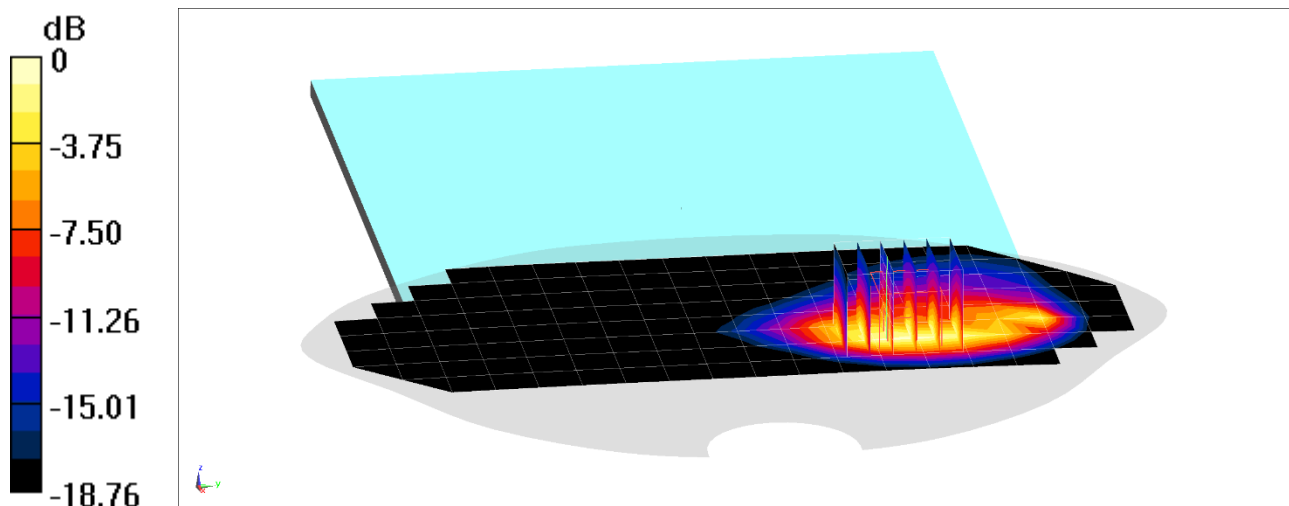
Area Scan (9x21x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.98 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.65 W/kg

SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.581 W/kg



0 dB = 1.97 W/kg = 2.94 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV007PQLD

Communication System: UID 0, _LTE Band 26; Frequency: 819 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 819 \text{ MHz}$; $\sigma = 0.96 \text{ S/m}$; $\epsilon_r = 54.799$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.4°C; Tissue Temp: 18.8°C

Probe: EX3DV4 - SN7427; ConvF(10.18, 10.18, 10.18) @ 819 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 26 (Cell.), Antenna 1, Body SAR, Left Edge, Low.ch,
10 MHz Bandwidth, QPSK, 25 RB, 25 RB Offset**

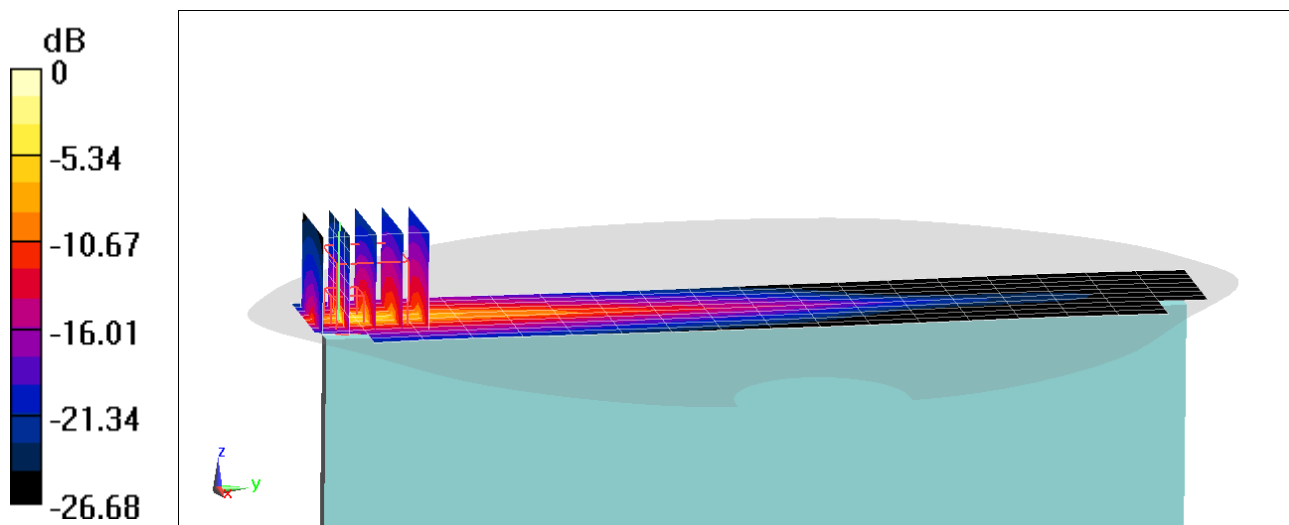
Area Scan (10x21x1): Measurement grid: $dx=5\text{mm}$, $dy=15\text{mm}$

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

Reference Value = 36.53 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 5.19 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.410 W/kg



0 dB = 3.41 W/kg = 5.33 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00RPQLD

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

Medium: 835 Body Medium parameters used (interpolated):

$f = 836.5 \text{ MHz}$; $\sigma = 0.98 \text{ S/m}$; $\epsilon_r = 54.528$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-16-2020; Ambient Temp: 20.4°C; Tissue Temp: 18.8°C

Probe: EX3DV4 - SN7427; ConvF(10.18, 10.18, 10.18) @ 836.5 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 5 (Cell.), Antenna 1, Body SAR, Left Edge, Mid.ch,
10 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

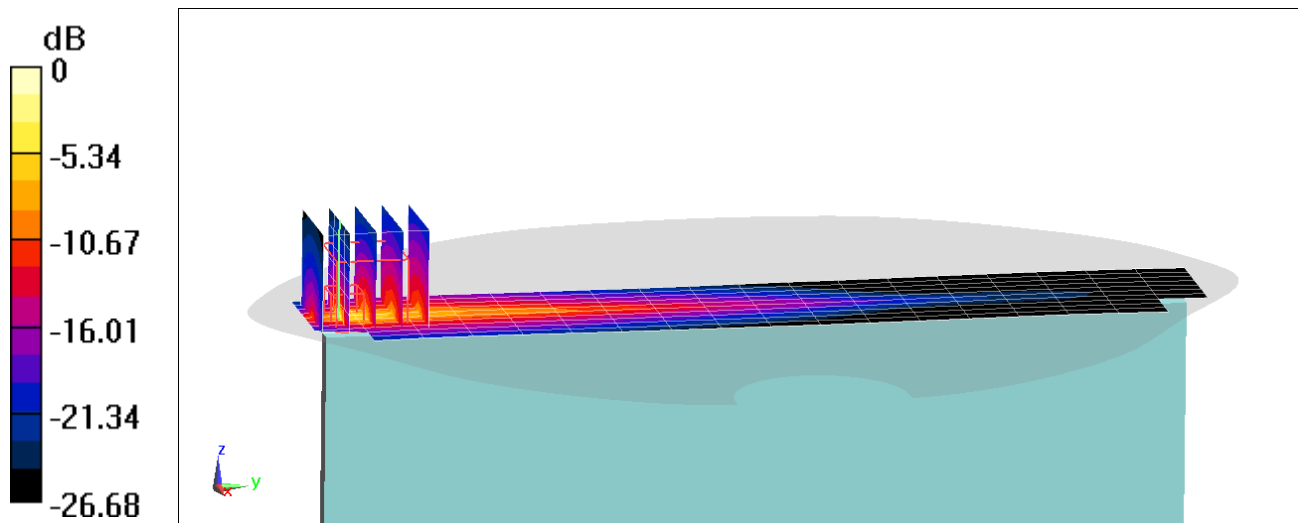
Area Scan (10x21x1): Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 35.71 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 7.39 W/kg

SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.405 W/kg



0 dB = 4.82 W/kg = 6.83 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV011PQLD

Communication System: UID 0, LTE Band 4 (AWS); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used (interpolated):

$f = 1732.5 \text{ MHz}$; $\sigma = 1.5 \text{ S/m}$; $\epsilon_r = 51.345$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-26-2020; Ambient Temp: 19.8°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1732.5 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 4 (AWS), Antenna 4a, Body SAR, Back side, Mid.ch,
20 MHz Bandwidth, QPSK, 100 RB, 0 RB Offset**

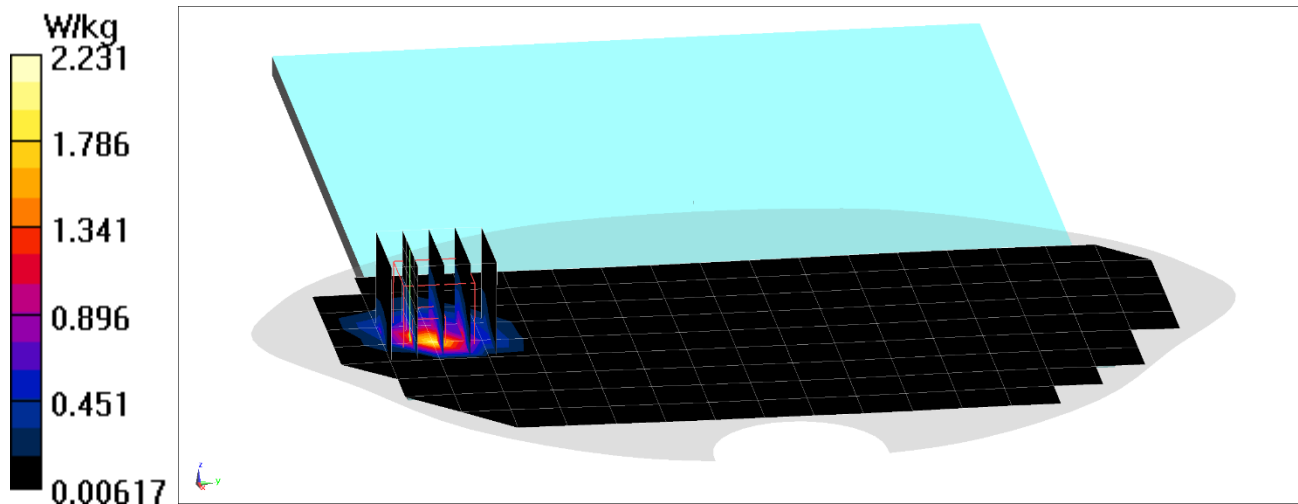
Area Scan (10x18x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 27.09 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.19 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.507 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV011PQLD

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

Medium: 1750 Body Medium parameters used (interpolated):

$f = 1770 \text{ MHz}$; $\sigma = 1.539 \text{ S/m}$; $\epsilon_r = 51.216$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-26-2020; Ambient Temp: 19.8°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1770 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 66 (AWS), Antenna 4a, Body SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

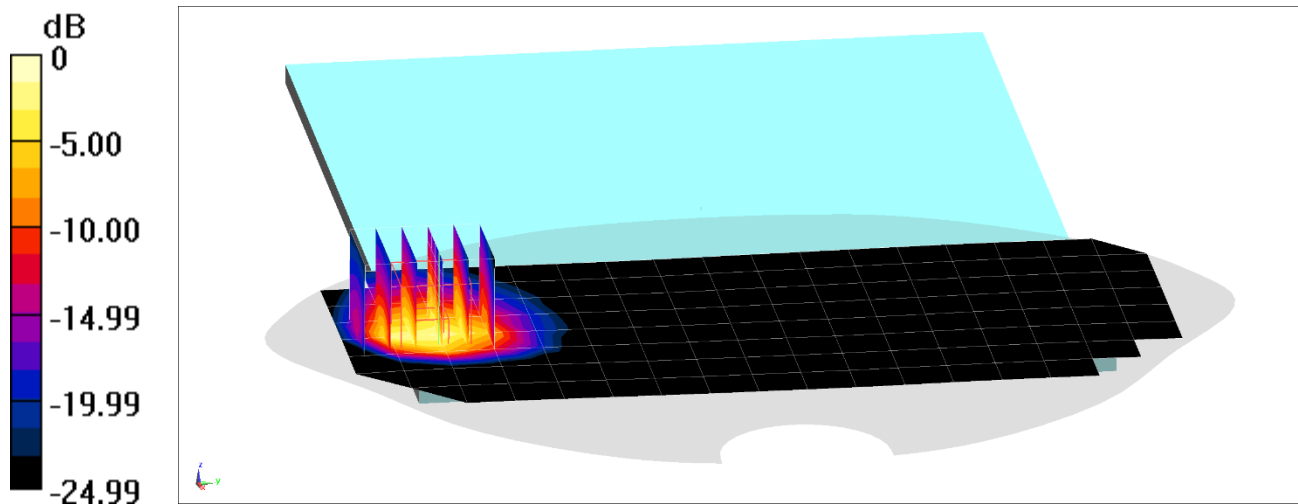
Area Scan (9x18x1): Measurement grid: dx=15mm, dy=15mm

Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.31 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 3.06 W/kg

SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.518 W/kg



0 dB = 2.04 W/kg = 3.10 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV0GPQLD

Communication System: UID 0, LTE Band 2 (PCS), Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$; $\sigma = 1.578 \text{ S/m}$; $\epsilon_r = 52.272$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-20-2020; Ambient Temp: 22.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1900 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 2 (PCS), Antenna 4a, Body SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 100 RB, 0 RB Offset**

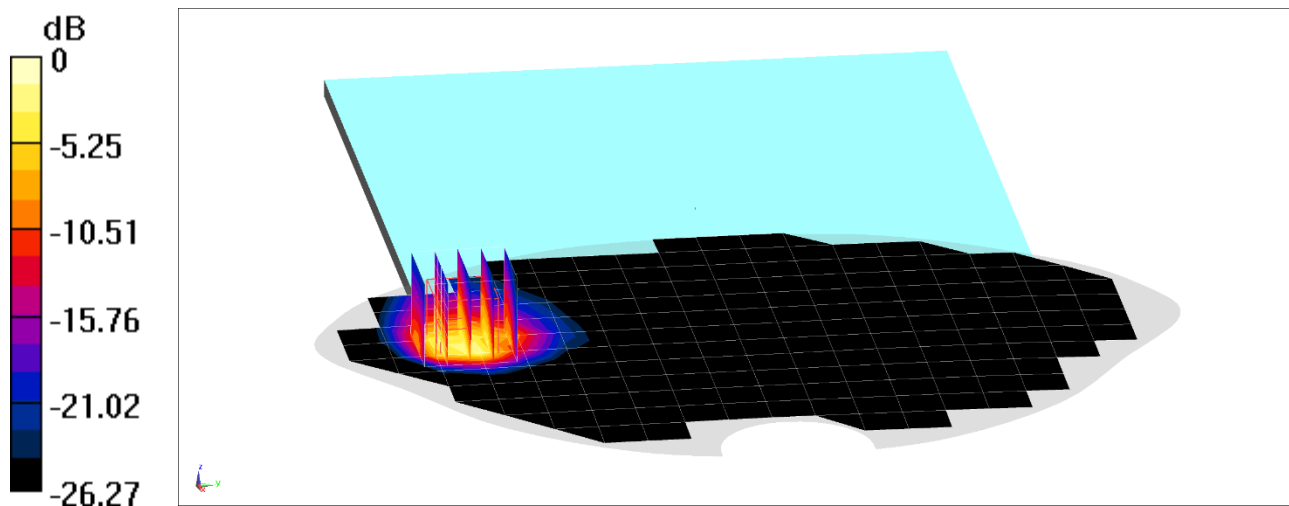
Area Scan (15x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Reference Value = 26.12 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 4.04 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.538 W/kg



0 dB = 2.60 W/kg = 4.15 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV0GPQLD

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

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1905 \text{ MHz}$; $\sigma = 1.584 \text{ S/m}$; $\epsilon_r = 52.223$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-18-2020; Ambient Temp: 19.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1905 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 25 (PCS), Antenna 4a, Body SAR, Back side, High.ch,
20 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

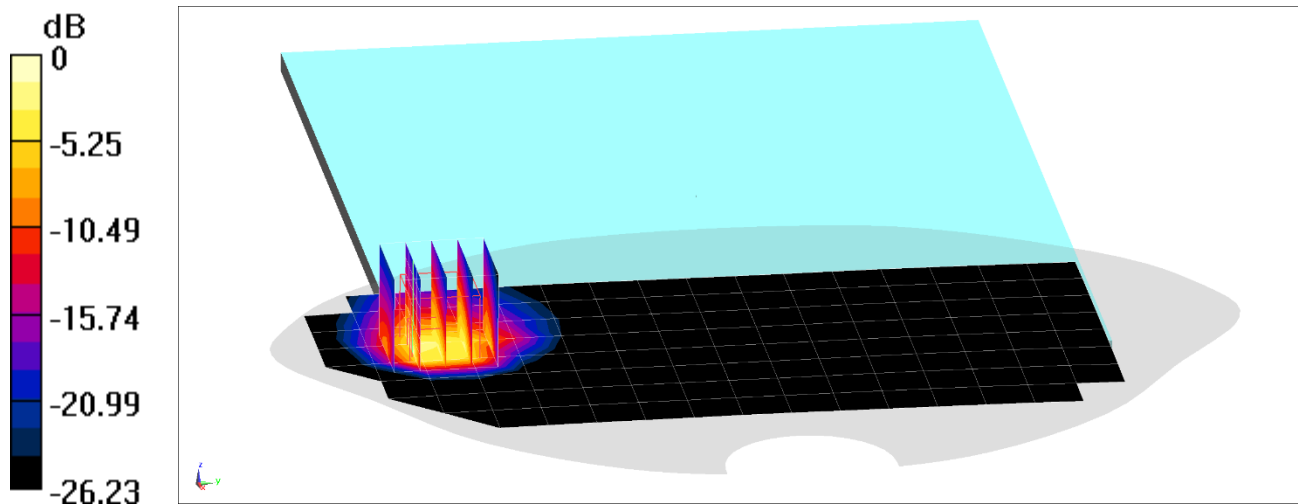
Area Scan (9x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 26.21 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 4.20 W/kg

SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.553 W/kg



0 dB = 2.61 W/kg = 4.17 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV0GPQLD

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

Medium: 2300 Body Medium parameters used:

$f = 2310 \text{ MHz}$; $\sigma = 1.843 \text{ S/m}$; $\epsilon_r = 52.593$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-26-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(7.93, 7.93, 7.93) @ 2310 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 30, Antenna 4a, Body SAR, Back side, Mid.ch,
10 MHz Bandwidth, QPSK, 25 RB, 0 RB Offset**

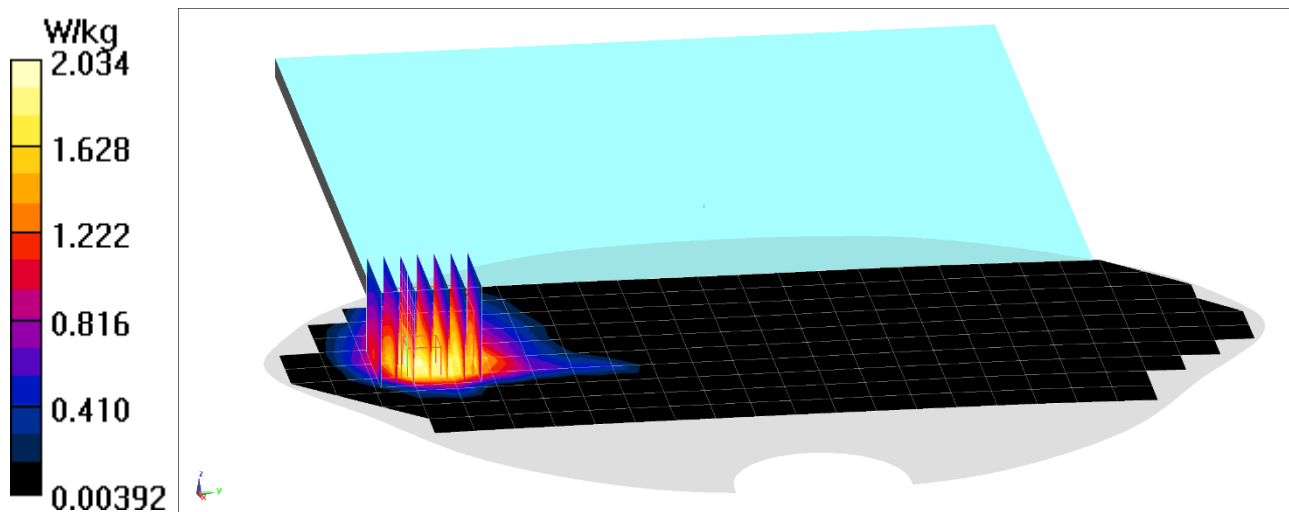
Area Scan (11x11x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 24.93 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.28 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.398 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00BPQLD

Communication System: UID 0, LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2535 \text{ MHz}$; $\sigma = 2.149 \text{ S/m}$; $\epsilon_r = 51.543$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-24-2020; Ambient Temp: 22.5°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF(7.47, 7.47, 7.47) @ 2535 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 7, Antenna 4b, Body SAR, Back side, Mid.ch,
20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

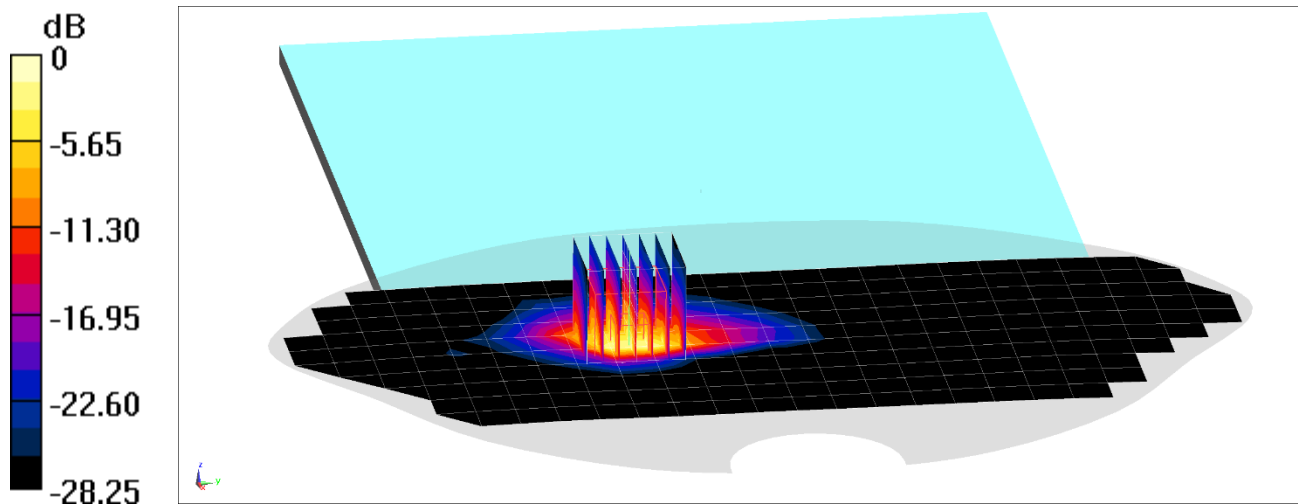
Area Scan (11x25x1): Measurement grid: dx=12mm, dy=12mm

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

Reference Value = 24.76 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 4.03 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.392 W/kg



0 dB = 2.65 W/kg = 4.23 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00BPQLD

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

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2506 \text{ MHz}$; $\sigma = 2.085 \text{ S/m}$; $\epsilon_r = 52.875$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-27-2020; Ambient Temp: 21.9°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2506 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 41, Antenna 4b, Body SAR, Back side, Low.ch,
20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

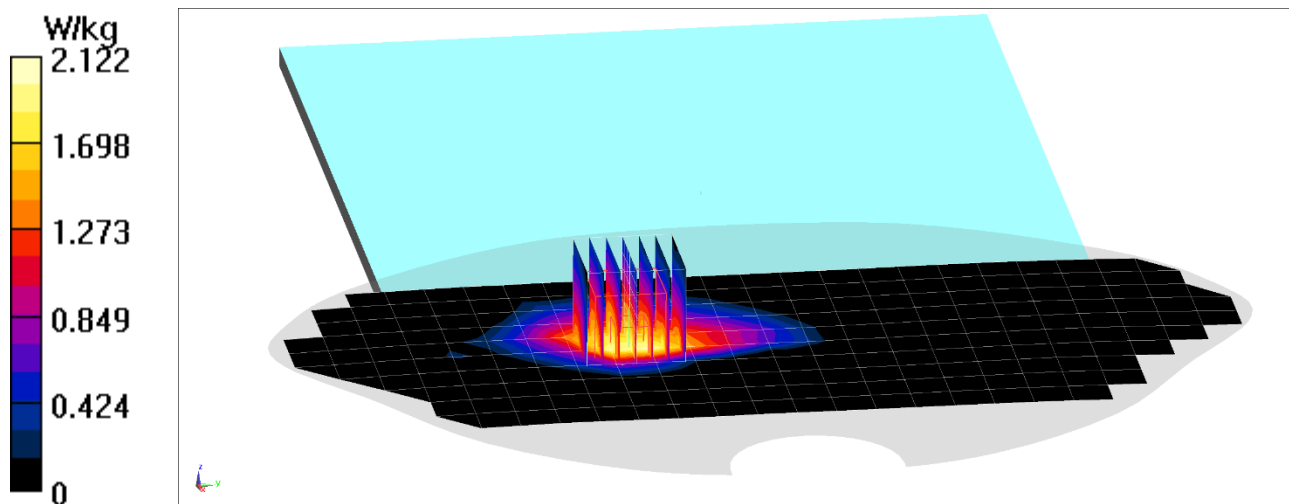
Area Scan (11x25x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Reference Value = 24.32 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 3.22 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.407 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV00QPQLD

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

Medium: 3500 - 3700 Body Medium parameters used (interpolated):

$f = 3603.3$ MHz; $\sigma = 3.497$ S/m; $\epsilon_r = 49.265$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-20-2020; Ambient Temp: 21.4°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3949; ConvF(6.78, 6.78, 6.78) @ 3603.3 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 48, Antenna 3, Body SAR, Right Edge, Low-Mid.ch,
20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

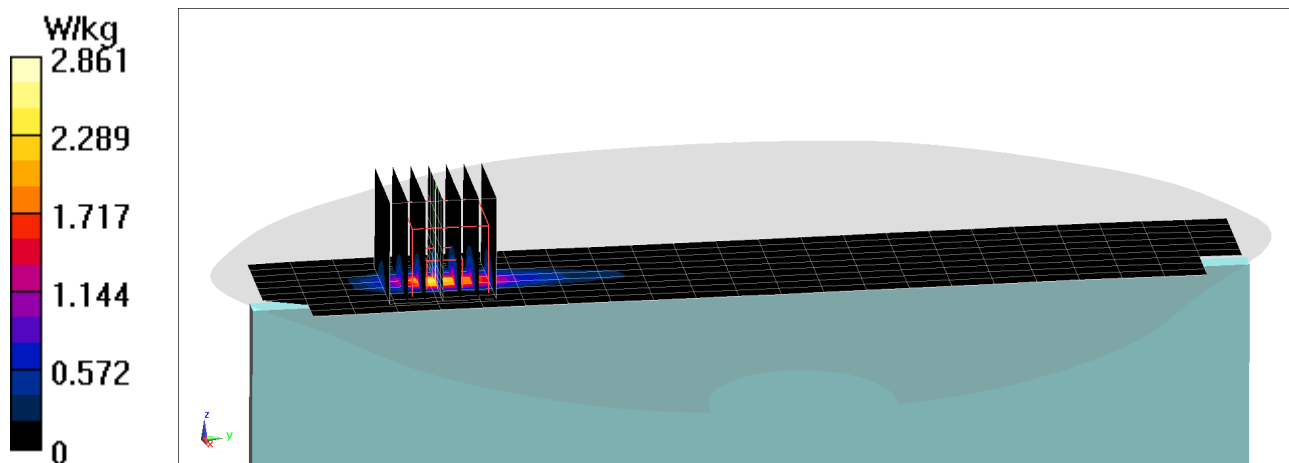
Area Scan (10x26x1): Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 20.19 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 4.46 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.309 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZN00LP57T

Communication System: UID 0, IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2412 \text{ MHz}$; $\sigma = 1.979 \text{ S/m}$; $\epsilon_r = 50.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-18-2019; Ambient Temp: 20.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2412 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Mode: IEEE 802.11b, Antenna 2A, Variant 1, 22 MHz Bandwidth,
Body SAR, Ch 1, 1 Mbps, Back Side**

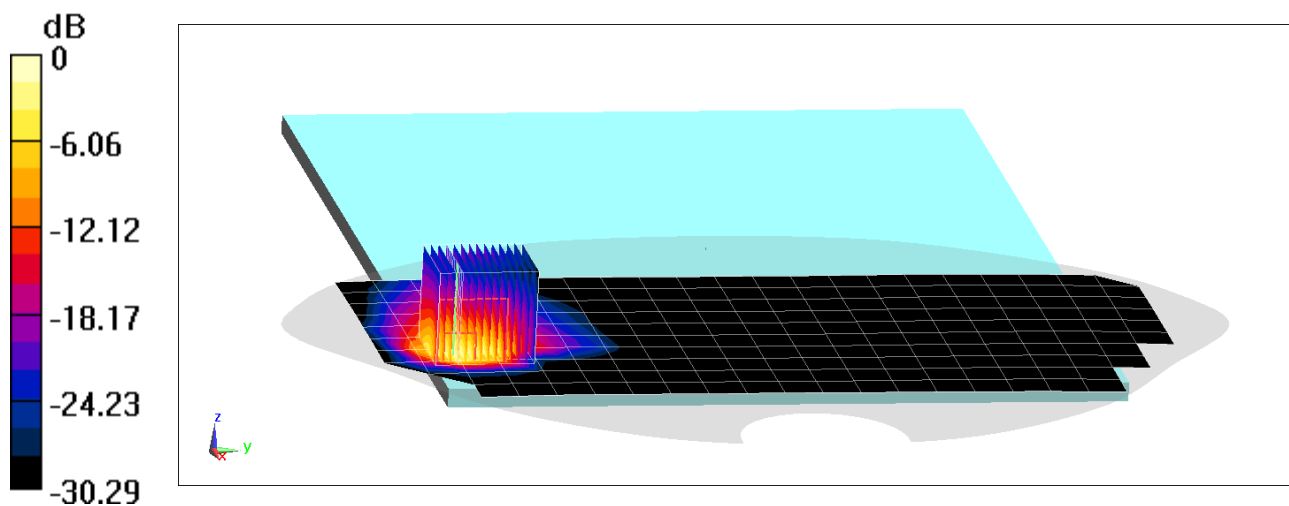
Area Scan (11x22x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Zoom Scan (13x14x8)/Cube 0: Measurement grid: $dx=2.4\text{mm}$, $dy=2.4\text{mm}$, $dz=1.4\text{mm}$; Graded Ratio: 1.4

Reference Value = 20.34 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 4.74 W/kg

SAR(1 g) = 0.983 W/kg; SAR(10 g) = 0.429 W/kg



0 dB = 2.58 W/kg = 4.12 dBW/kg

PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZN00LP57T

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

Medium: 5GHz Body Medium parameters used (interpolated):

$f = 5775 \text{ MHz}$; $\sigma = 5.935 \text{ S/m}$; $\epsilon_r = 46.573$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-23-2019; Ambient Temp: 21.1°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7491; ConvF(4.32, 4.32, 4.32) @ 5775 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1402; Calibrated: 7/10/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: IEEE 802.11ac, 5 GHz ANTupper, Variant 1, U-NII-3, 80 MHz Bandwidth,
Body SAR, Ch 155, 29.3 Mbps, Right Edge**

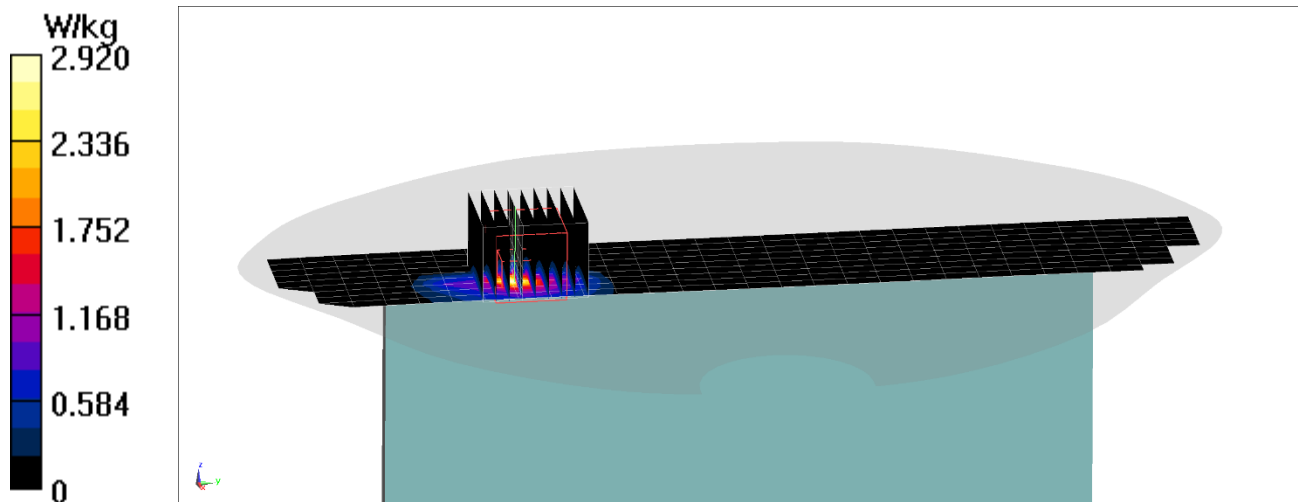
Area Scan (10x31x1): Measurement grid: dx=5mm, dy=10mm

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 14.77 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 5.13 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.294 W/kg



PCTEST

DUT: BCGA2069; Type: Tablet Device; Serial: DLXZV011PQLD

Communication System: UID 0, Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.302

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2480 \text{ MHz}$; $\sigma = 1.992 \text{ S/m}$; $\epsilon_r = 50.709$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-14-2020; Ambient Temp: 22.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2480 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

Mode: Bluetooth, Antenna 2a, Body SAR, Ch 78, 1 Mbps, Back Side, Variant 2

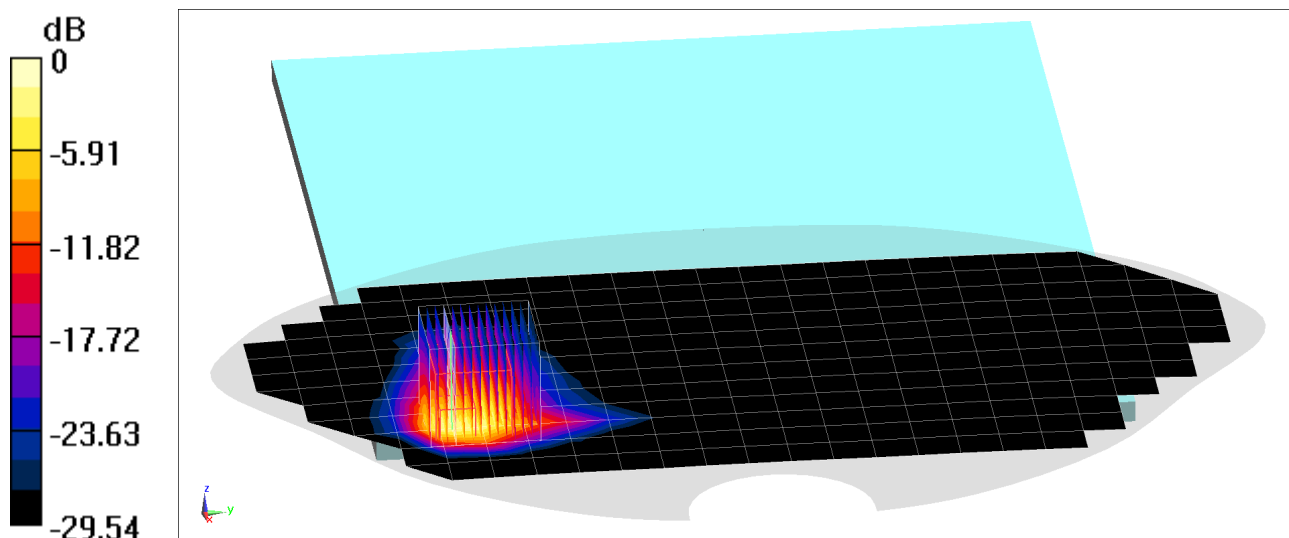
Area Scan (13x26x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (14x14x8)/Cube 0: Measurement grid: dx=2.4mm, dy=2.4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 19.37 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.45 W/kg

SAR(1 g) = 0.906 W/kg; SAR(10 g) = 0.382 W/kg



0 dB = 2.42 W/kg = 3.84 dBW/kg

APPENDIX B: SYSTEM VERIFICATION

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1034

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 750 \text{ MHz}$; $\sigma = 0.956 \text{ S/m}$; $\epsilon_r = 53.72$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-16-2020; Ambient Temp: 20.7°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 750 MHz; Calibrated: 3/18/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn604; Calibrated: 3/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

750 MHz System Verification at 23.0 dBm (200 mW)

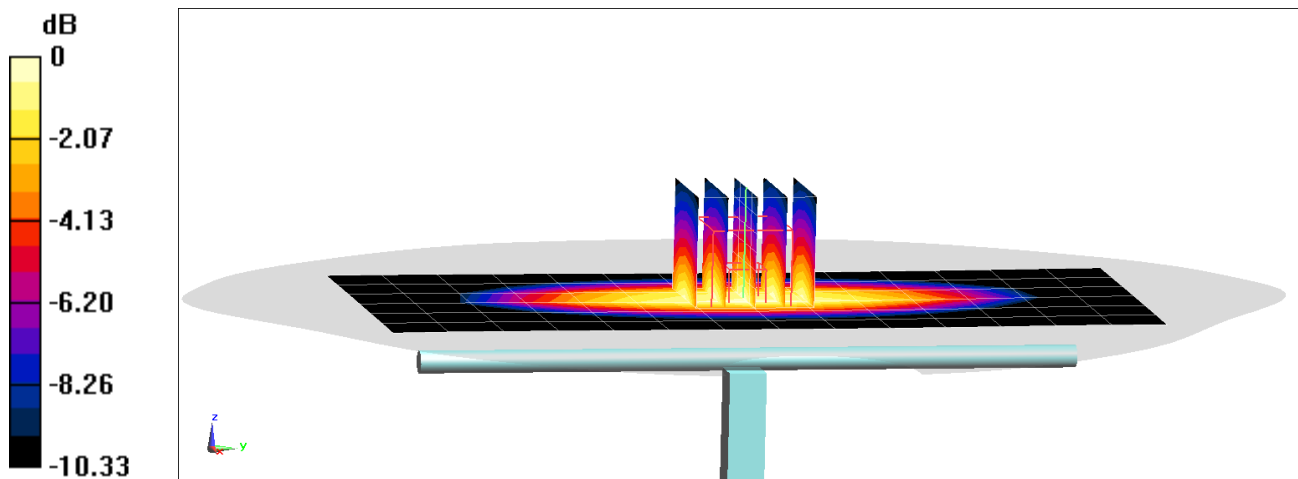
Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.71 W/kg

SAR(1 g) = 1.8 W/kg; SAR(10 g) = 1.19 W/kg

Deviation(1 g) = 5.02%



0 dB = 2.40 W/kg = 3.80 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.978 \text{ S/m}$; $\epsilon_r = 54.548$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-16-2020; Ambient Temp: 20.4°C; Tissue Temp: 18.8°C

Probe: EX3DV4 - SN7427; ConvF(10.18, 10.18, 10.18) @ 835 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

835 MHz System Verification at 23.0 dBm (200 mW)

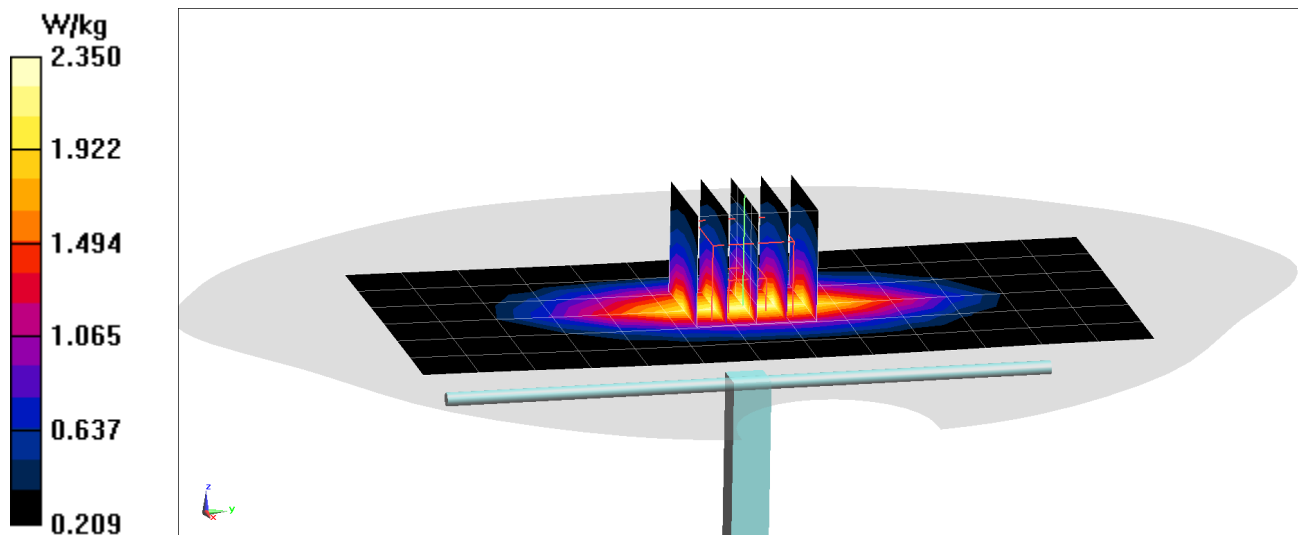
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.65 W/kg

SAR(1 g) = 1.77 W/kg; SAR(10 g) = 1.17 W/kg

Deviation(1 g) = -7.14%



PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.514 \text{ S/m}$; $\epsilon_r = 51.328$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-26-2020; Ambient Temp: 19.8°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1750 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

1750 MHz System Verification at 20.0 dBm (100 mW)

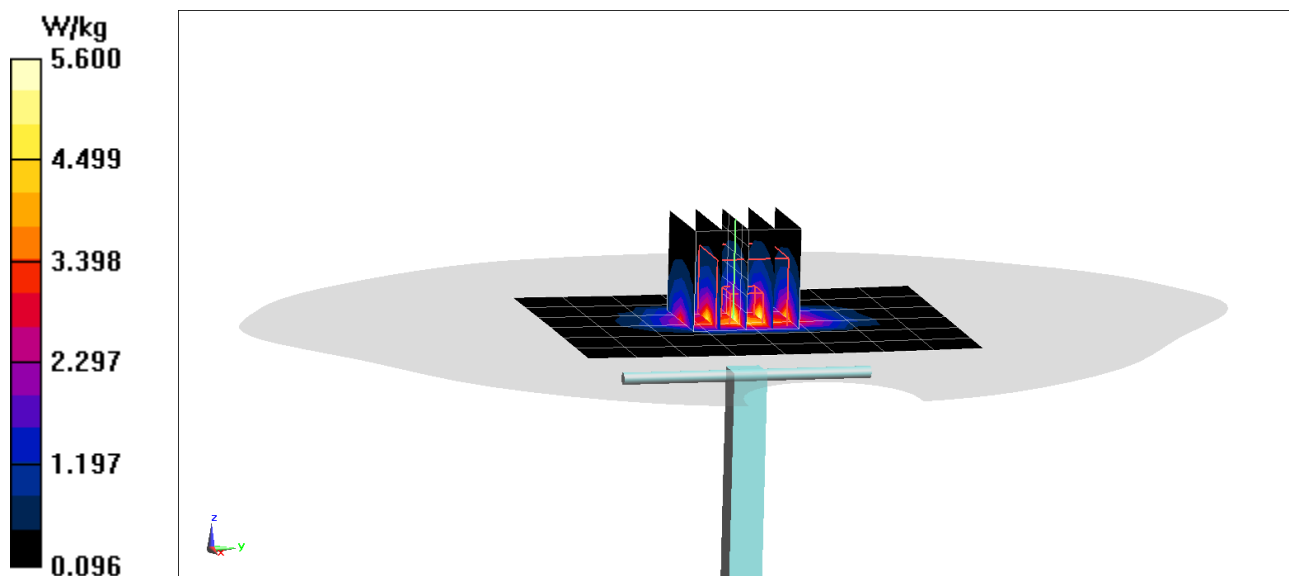
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.62 W/kg

SAR(1 g) = 3.69 W/kg; SAR(10 g) = 1.95 W/kg

Deviation(1 g) = -0.54%



PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.509 \text{ S/m}$; $\epsilon_r = 51.325$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-28-2020; Ambient Temp: 21.9°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1750 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1403; Calibrated: 2/13/2019

Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

1750 MHz System Verification at 20.0 dBm (100 mW)

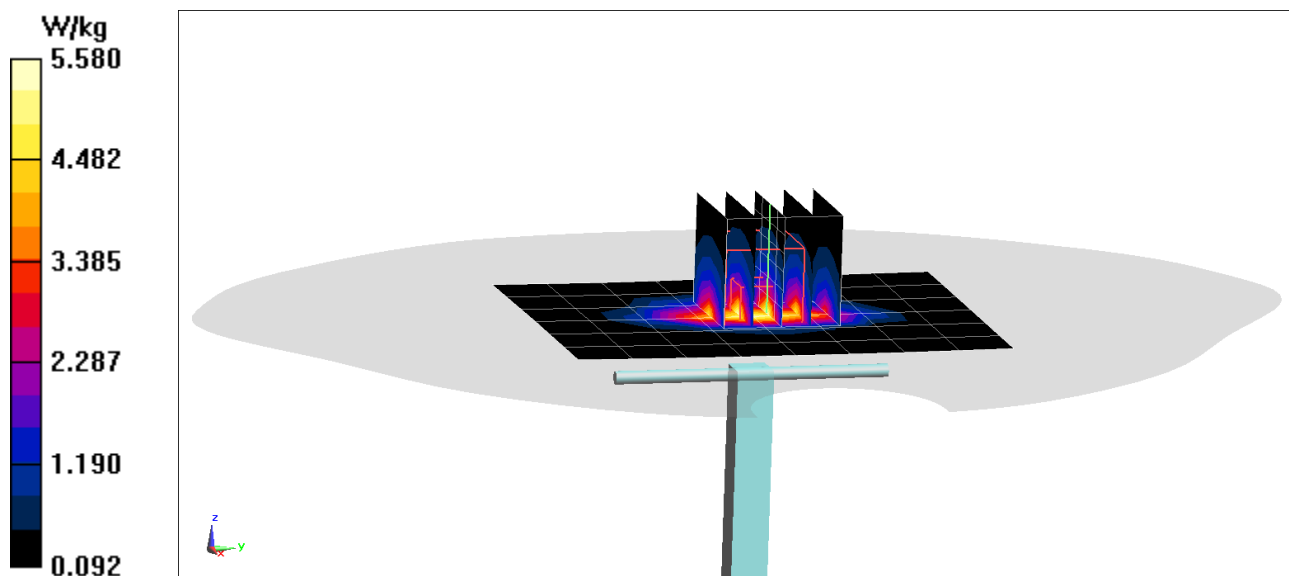
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.66 W/kg

SAR(1 g) = 3.7 W/kg; SAR(10 g) = 1.96 W/kg

Deviation(1 g) = -0.27%



PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$; $\sigma = 1.58 \text{ S/m}$; $\epsilon_r = 52.228$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-18-2020; Ambient Temp: 19.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1900 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

1900 MHz System Verification at 20.0 dBm (100 mW)

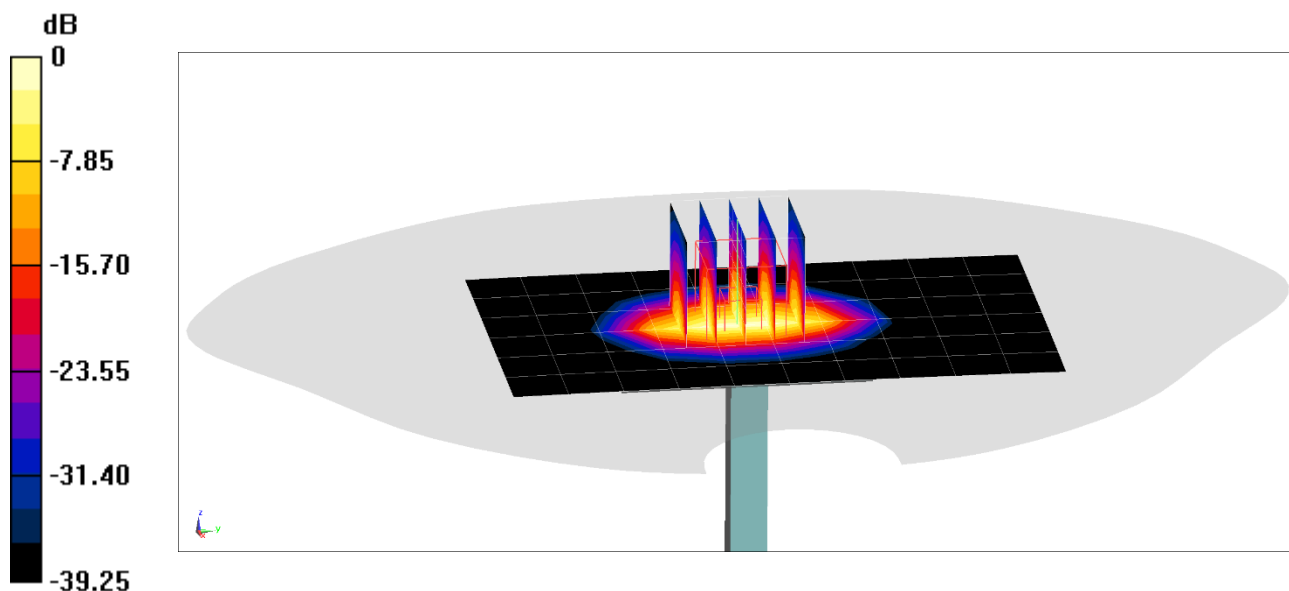
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.66 W/kg

SAR(1 g) = 4.19 W/kg; SAR(10 g) = 2.16 W/kg

Deviation(1 g) = 5.01%



0 dB = 6.11 W/kg = 7.86 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$; $\sigma = 1.578 \text{ S/m}$; $\epsilon_r = 52.272$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-20-2020; Ambient Temp: 22.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1900 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

1900 MHz System Verification at 20.0 dBm (100 mW)

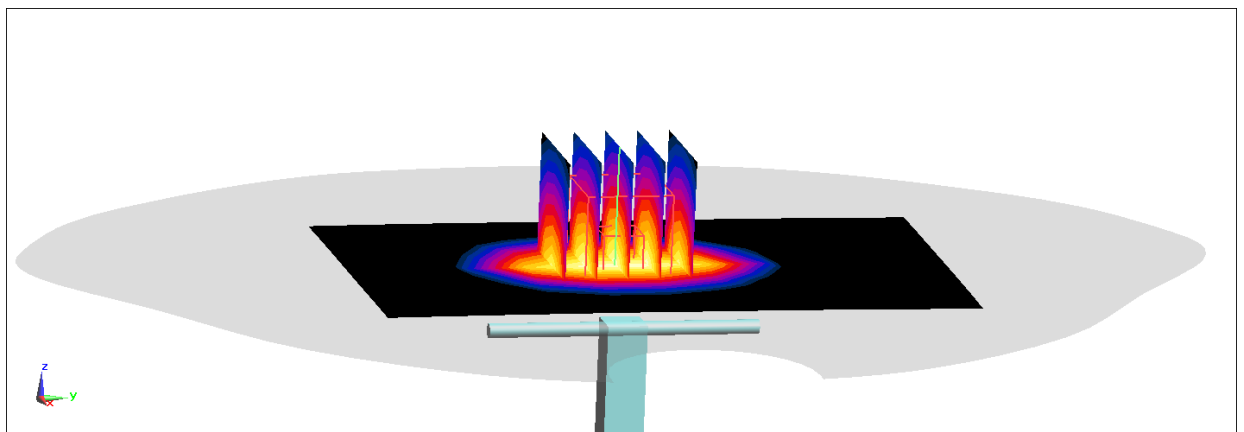
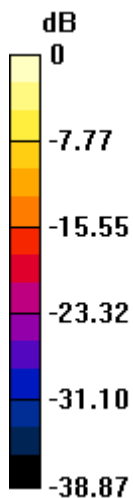
Area Scan (7x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.37 W/kg

SAR(1 g) = 4.02 W/kg; SAR(10 g) = 2.07 W/kg

Deviation(1 g) = 0.75%



0 dB = 5.98 W/kg = 7.77 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$; $\sigma = 1.58 \text{ S/m}$; $\epsilon_r = 51.599$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-22-2020; Ambient Temp: 21.1°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1900 MHz; Calibrated: 11/21/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1213; Calibrated: 11/13/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

1900 MHz System Verification at 20.0 dBm (100 mW)

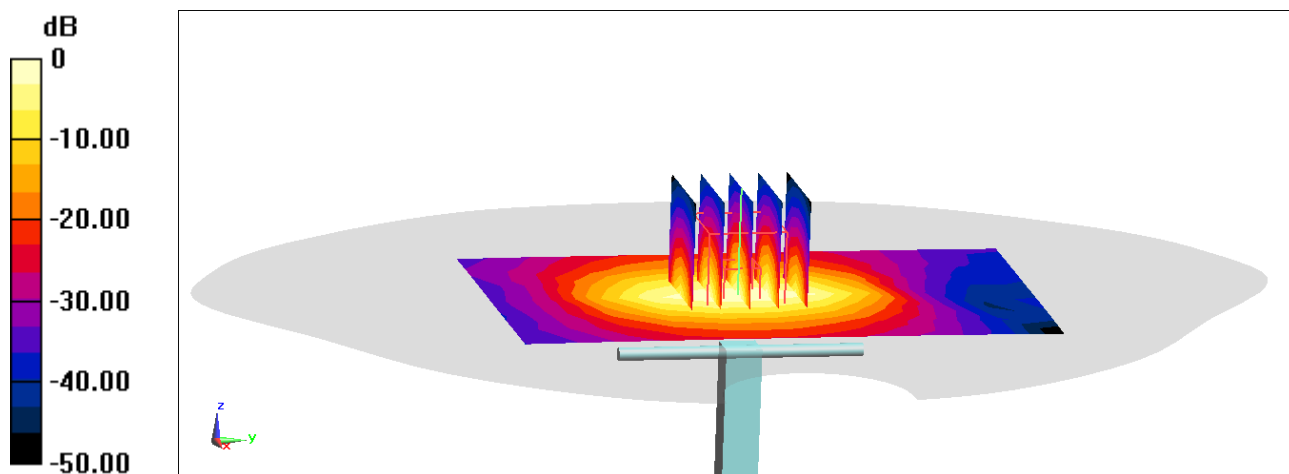
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.51 W/kg

SAR(1 g) = 4.08 W/kg; SAR(10 g) = 2.1 W/kg

Deviation(1 g) = 2.26%



0 dB = 5.99 W/kg = 7.77 dBW/kg

PCTEST

DUT: Dipole 2300 MHz; Type: D2300V3; Serial: 1038

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: 2300 MHz Body Medium parameters used:

$f = 2300 \text{ MHz}$; $\sigma = 1.829 \text{ S/m}$; $\epsilon_r = 52.614$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-26-2020; Ambient Temp: 23.1°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7532; ConvF(7.93, 7.93, 7.93) @ 2300 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2300 MHz System Verification at 20.0 dBm (100 mW)

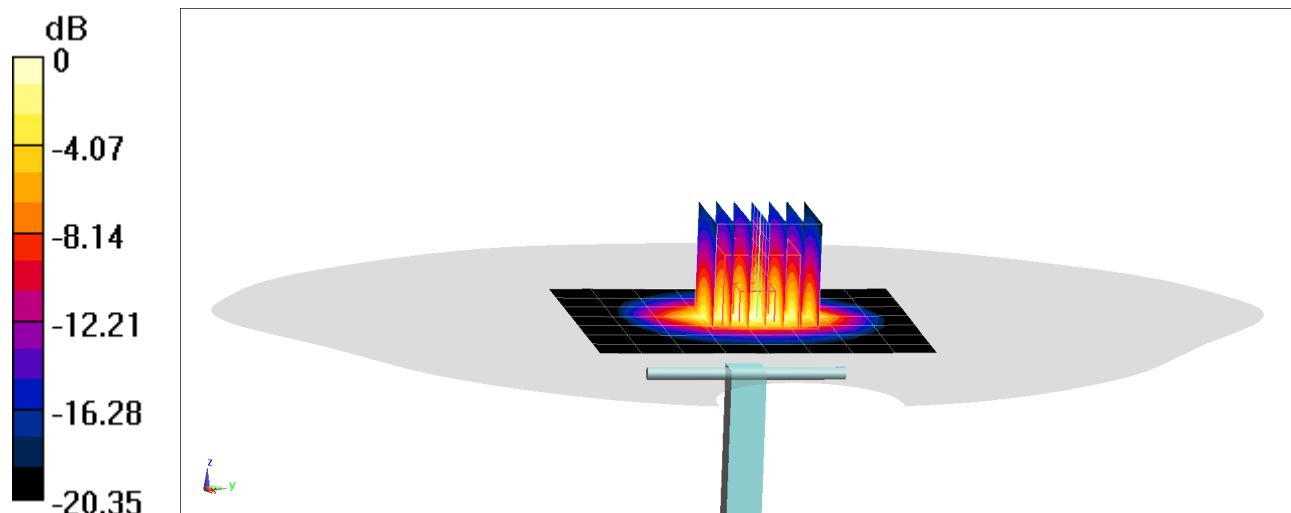
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Peak SAR (extrapolated) = 8.62 W/kg

SAR(1 g) = 4.41 W/kg; SAR(10 g) = 2.11 W/kg

Deviation(1 g) = -5.57%



PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 921

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.022 \text{ S/m}$; $\epsilon_r = 50.678$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12-18-2019; Ambient Temp: 20.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2450 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2450 MHz System Verification at 20.0 dBm (100 mW)

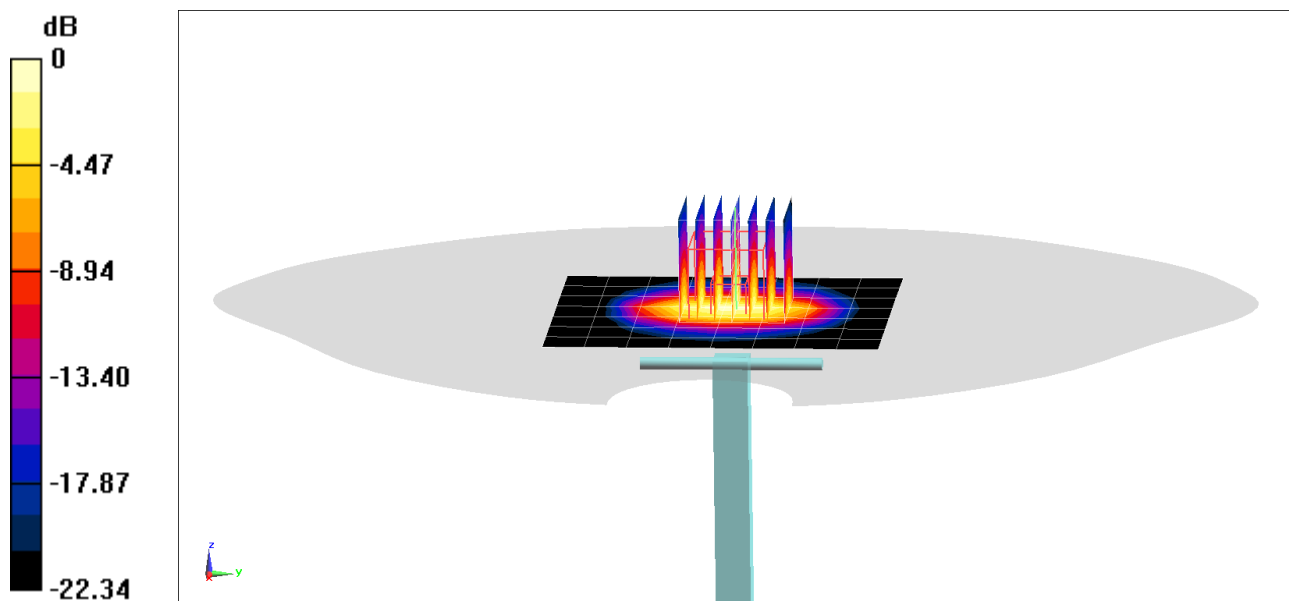
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.32 W/kg; SAR(10 g) = 2.45 W/kg

Deviation(1 g) = 4.72%



0 dB = 8.82 W/kg = 9.45 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 921

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 1.948 \text{ S/m}$; $\epsilon_r = 50.877$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-14-2020; Ambient Temp: 22.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2450 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2450 MHz System Verification at 20.0 dBm (100 mW)

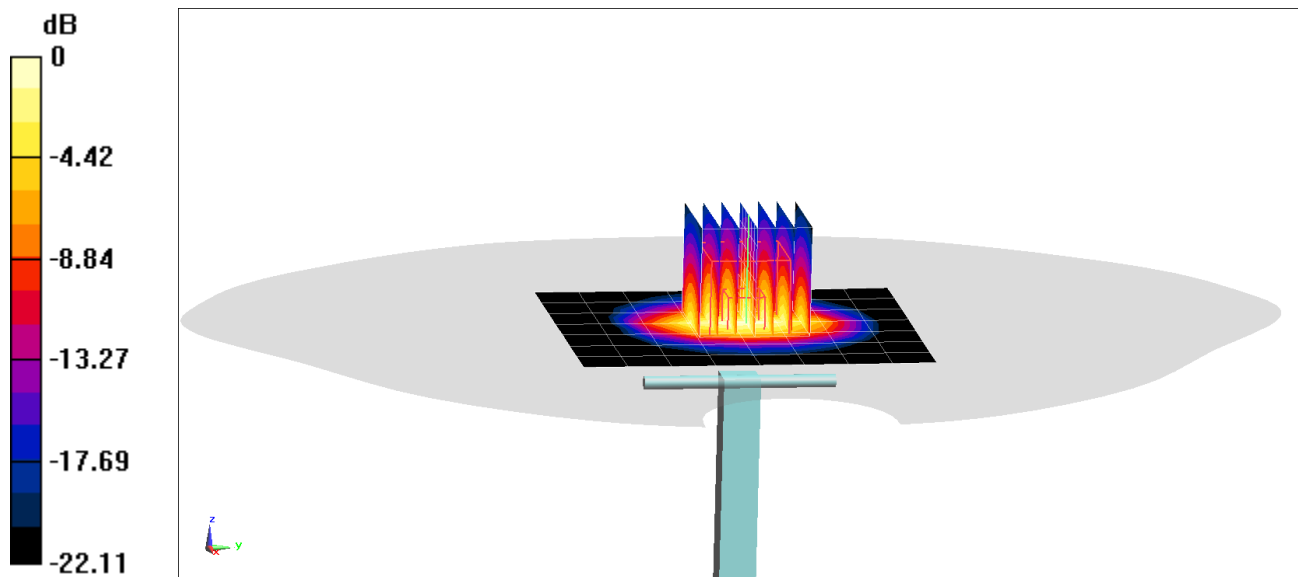
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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) = 5.12 W/kg; SAR(10 g) = 2.36 W/kg

Deviation(1 g) = 0.79%



PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 945

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

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.032 \text{ S/m}$; $\epsilon_r = 51.895$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-24-2020; Ambient Temp: 22.5°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2450 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2450 MHz System Verification at 20.0 dBm (100 mW)

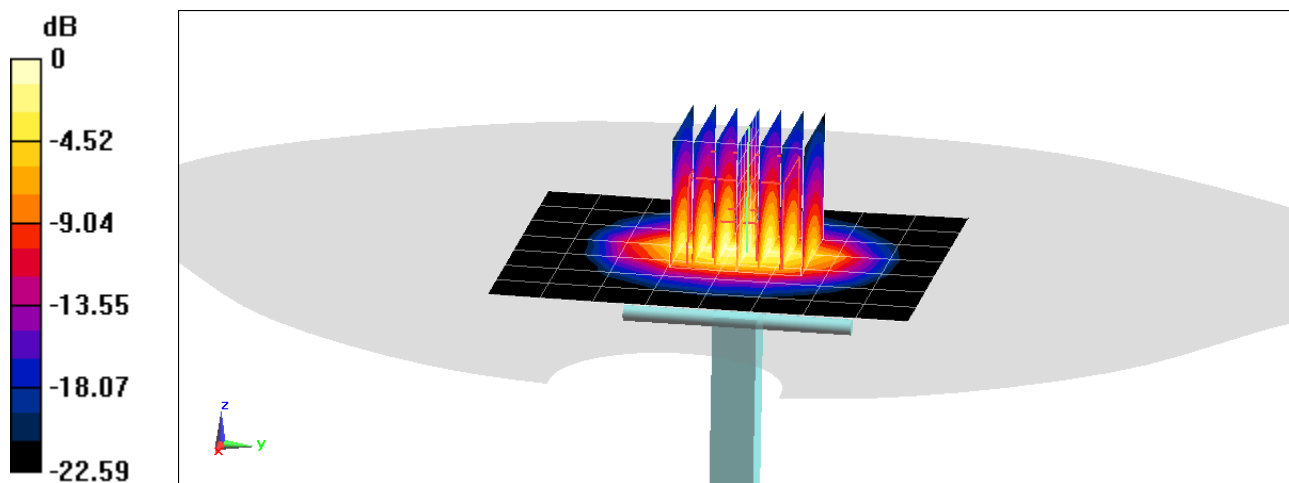
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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) = 5.22 W/kg; SAR(10 g) = 2.38 W/kg

Deviation(1 g) = 5.67%



0 dB = 8.68 W/kg = 9.39 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 945

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

Medium: 2450 MHz Body Medium parameters used:

$f = 2450 \text{ MHz}$; $\sigma = 2.023 \text{ S/m}$; $\epsilon_r = 53.116$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-27-2020; Ambient Temp: 21.9°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3949; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2450 MHz System Verification at 20.0 dBm (100 mW)

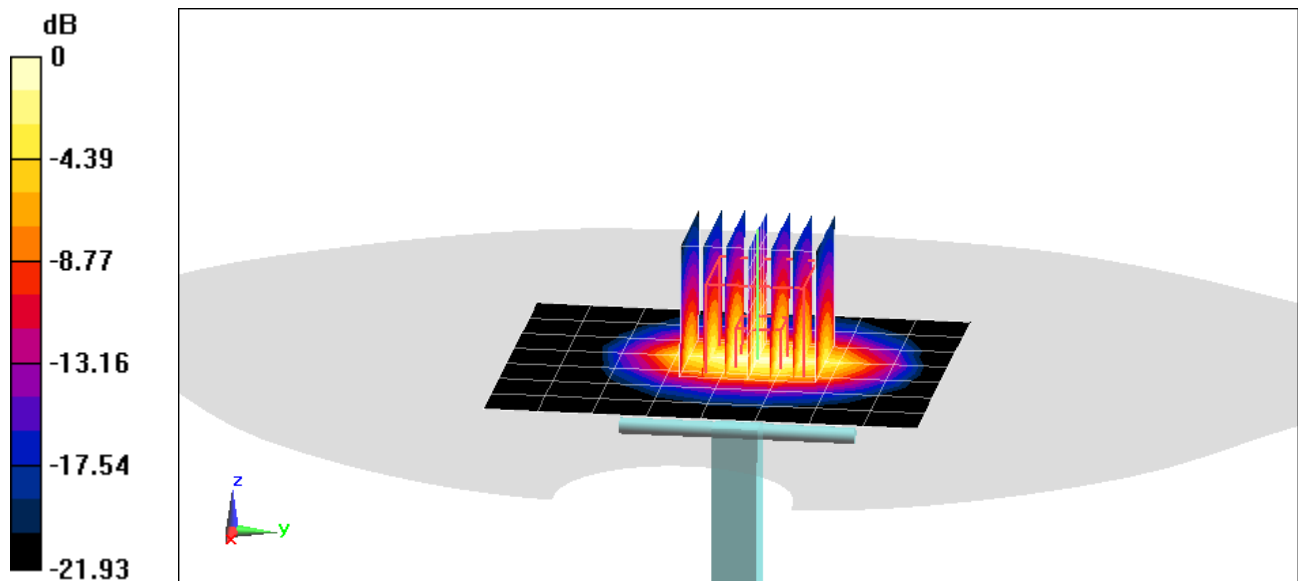
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.29 W/kg; SAR(10 g) = 2.46 W/kg

Deviation(1 g) = 7.09%



0 dB = 8.80 W/kg = 9.44 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1009

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600 \text{ MHz}$; $\sigma = 2.245 \text{ S/m}$; $\epsilon_r = 51.234$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-24-2020; Ambient Temp: 22.5°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF(7.47, 7.47, 7.47) @ 2600 MHz; Calibrated: 4/12/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn501; Calibrated: 4/17/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2600 MHz System Verification at 20.0 dBm (100 mW)

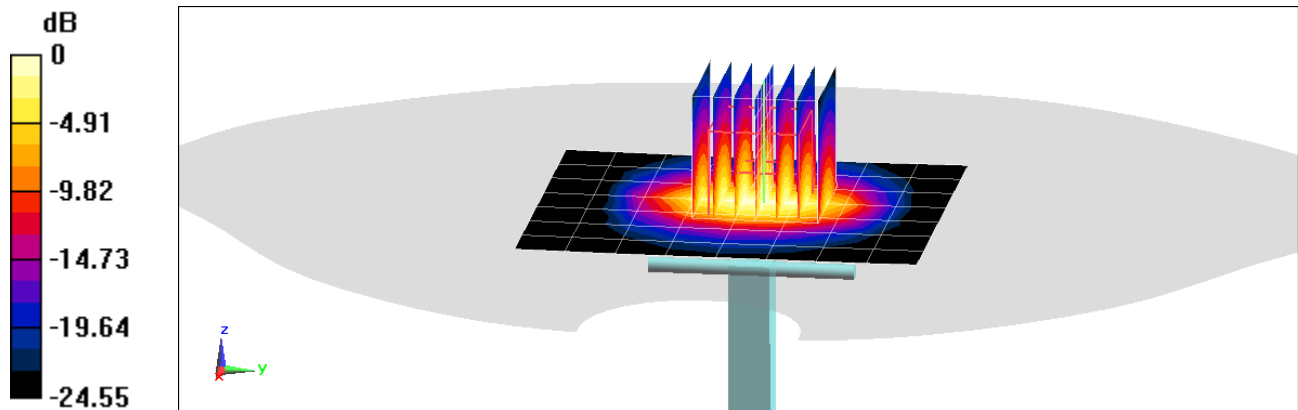
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.7 W/kg; SAR(10 g) = 2.47 W/kg

Deviation(1 g) = 2.70%



0 dB = 9.90 W/kg = 9.96 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1009

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 MHz Body Medium parameters used:

$f = 2600 \text{ MHz}$; $\sigma = 2.198 \text{ S/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-27-2020; Ambient Temp: 21.9°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3949; ConvF(7.69, 7.69, 7.69) @ 2600 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

2600 MHz System Verification at 20.0 dBm (100 mW)

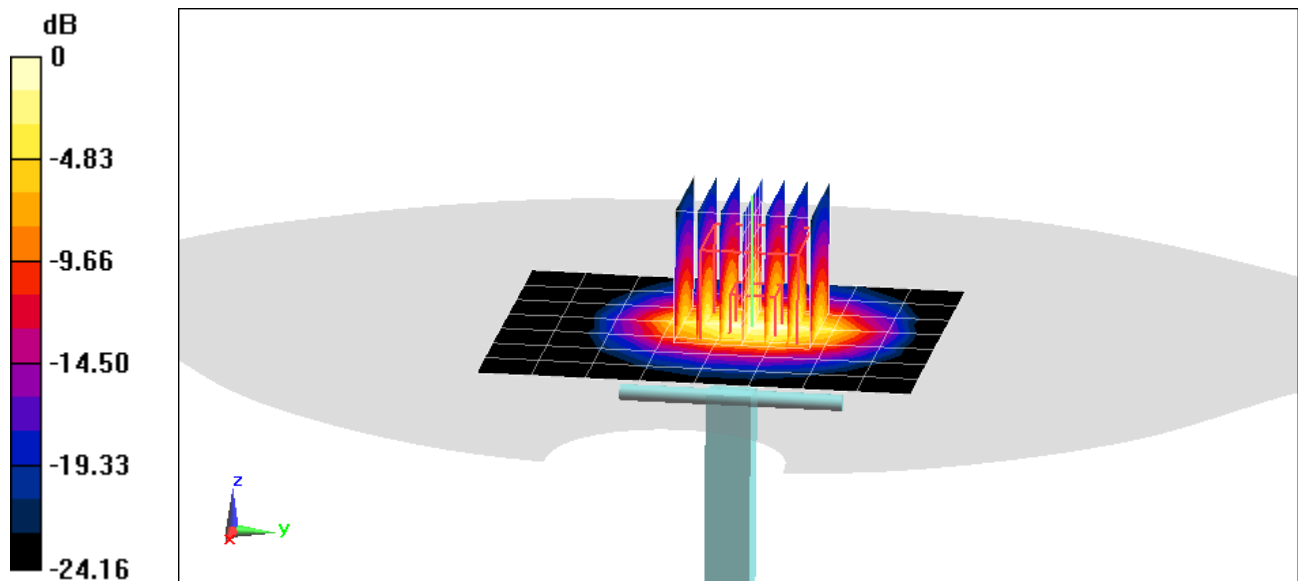
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.7 W/kg

SAR(1 g) = 5.34 W/kg; SAR(10 g) = 2.34 W/kg

Deviation(1 g) = -3.78%



0 dB = 9.27 W/kg = 9.67 dBW/kg

PCTEST

DUT: Dipole 3500 MHz; Type: D3500V2; Serial: 1068

Communication System: UID 0, CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: 3500 - 3700 MHz Body Medium parameters used:

$f = 3500$ MHz; $\sigma = 3.361$ S/m; $\epsilon_r = 49.551$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-20-2019; Ambient Temp: 21.4°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3949; ConvF(6.88, 6.88, 6.88) @ 3500 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

3500 MHz System Verification at 20.0 dBm (100 mW)

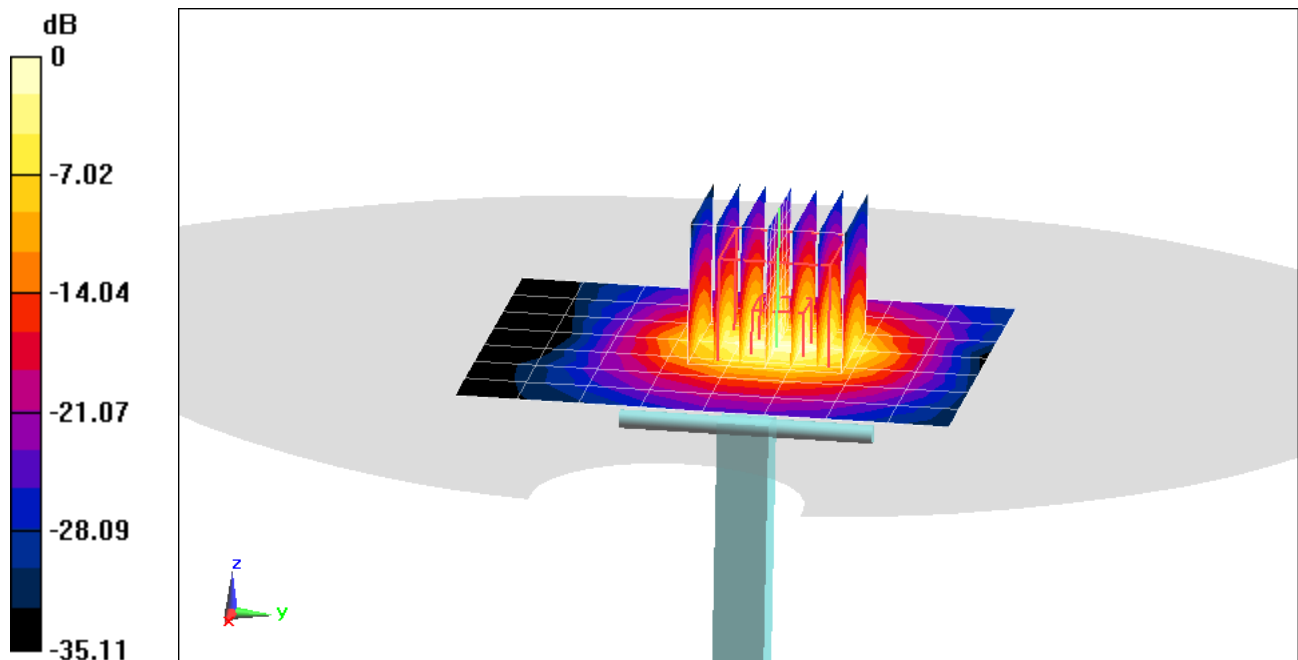
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Peak SAR (extrapolated) = 15.9 W/kg

SAR(1 g) = 6.16 W/kg; SAR(10 g) = 2.28 W/kg

Deviation(1 g) = -5.67%



0 dB = 12.0 W/kg = 10.79 dBW/kg

PCTEST

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: 1029

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: 3500 - 3700 MHz Body Medium parameters used (interpolated):

$f = 3700 \text{ MHz}$; $\sigma = 3.628 \text{ S/m}$; $\epsilon_r = 48.993$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-20-2019; Ambient Temp: 21.4°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN3949; ConvF(6.78, 6.78, 6.78) @ 3700 MHz; Calibrated: 8/29/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1408; Calibrated: 8/12/2019

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

3700 MHz System Verification at 20.0 dBm (100 mW)

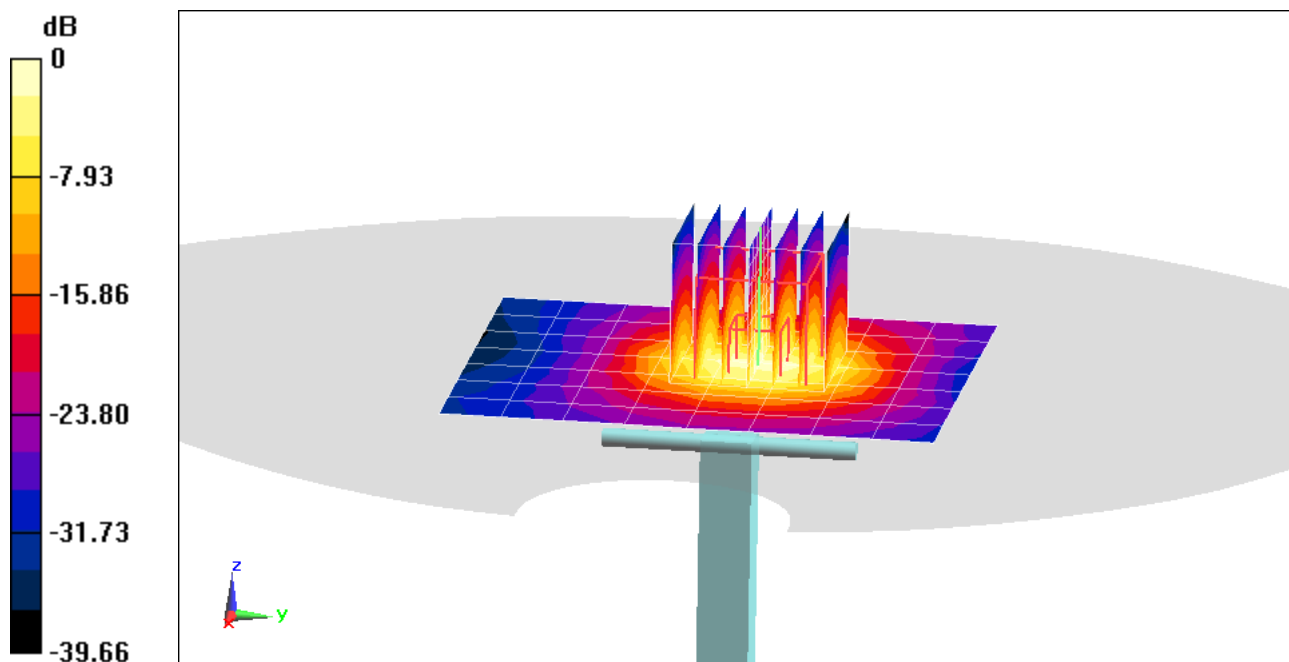
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 6.28 W/kg; SAR(10 g) = 2.22 W/kg

Deviation(1 g) = -3.24%



0 dB = 12.7 W/kg = 11.04 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

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

Medium: 5GHz Body Medium parameters used (interpolated):

$f = 5250 \text{ MHz}$; $\sigma = 5.186 \text{ S/m}$; $\epsilon_r = 47.606$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12-23-2019; Ambient Temp: 21.1°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7491; ConvF(4.87, 4.87, 4.87) @ 5250 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1402; Calibrated: 7/10/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

5250 MHz System Verification at 17.0 dBm (50 mW)

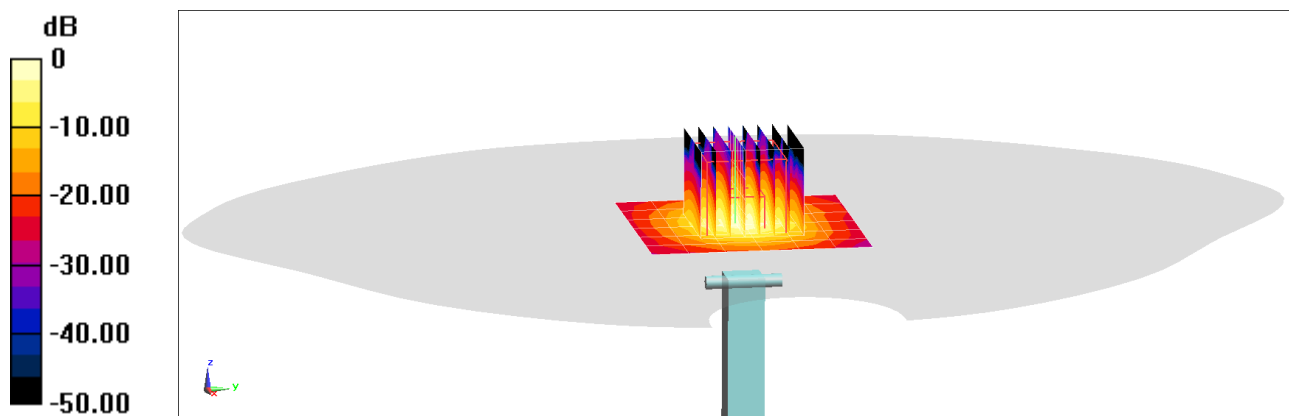
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

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

Peak SAR (extrapolated) = 14.0 W/kg

SAR(1 g) = 3.75 W/kg; SAR(10 g) = 1.04 W/kg

Deviation(1 g) = 1.35%



PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

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

Medium: 5GHz Body Medium parameters used:

$f = 5600 \text{ MHz}$; $\sigma = 5.674 \text{ S/m}$; $\epsilon_r = 46.932$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12-23-2019; Ambient Temp: 21.1°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7491; ConvF(4.23, 4.23, 4.23) @ 5600 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1402; Calibrated: 7/10/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

5600 MHz System Verification at 17.0 dBm (50 mW)

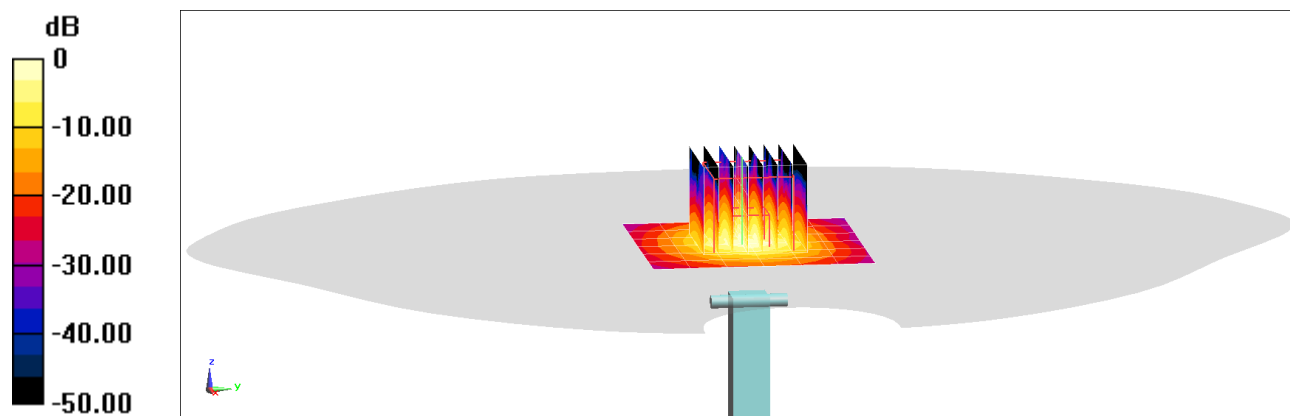
Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 4.02 W/kg; SAR(10 g) = 1.1 W/kg

Deviation(1 g) = 3.61%



0 dB = 9.56 W/kg = 9.80 dBW/kg

PCTEST

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1123

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

Medium: 5GHz Body Medium parameters used (interpolated):

$f = 5750 \text{ MHz}$; $\sigma = 5.901 \text{ S/m}$; $\epsilon_r = 46.627$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12-23-2019; Ambient Temp: 21.1°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7491; ConvF(4.32, 4.32, 4.32) @ 5750 MHz; Calibrated: 7/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1402; Calibrated: 7/10/2019

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

5750 MHz System Verification at 17.0 dBm (50 mW)

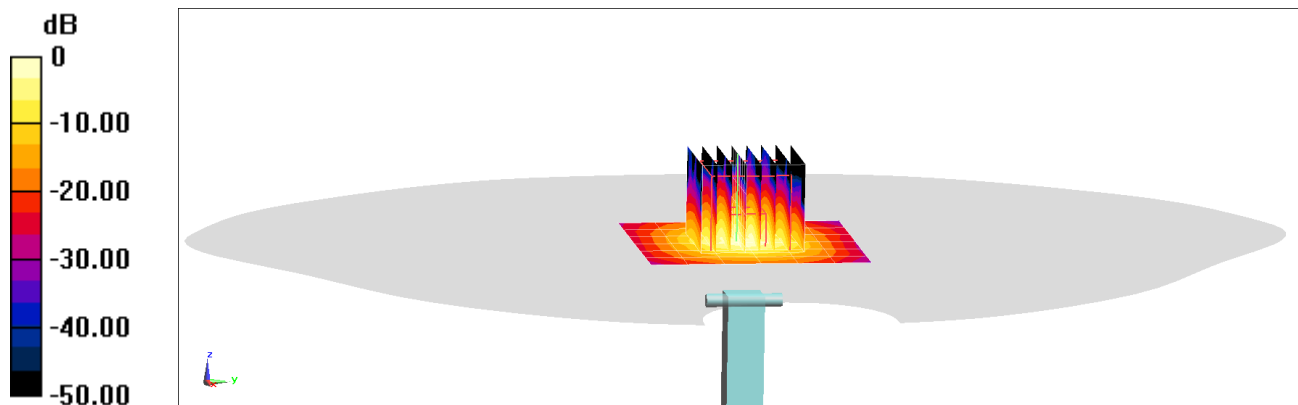
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/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) = 3.58 W/kg; SAR(10 g) = 0.992 W/kg

Deviation(1 g) = -4.15%



0 dB = 8.79 W/kg = 9.44 dBW/kg

APPENDIX C: SAR TISSUE SPECIFICATIONS

FCC ID: BCGA2069	 PCTEST	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 12/18/2019 – 01/28/2020	DUT Type: Tablet Device		APPENDIX C: Page 1 of 3

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	Ethanedial 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	Alkoxyated alcohol, > C₁₆ 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: BCGA2069	 PCTEST	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 12/18/2019 – 01/28/2020	DUT Type: Tablet Device		APPENDIX C: Page 2 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 865664 compliance standard.

Test Condition

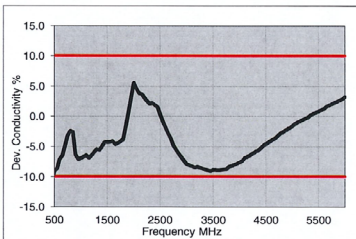
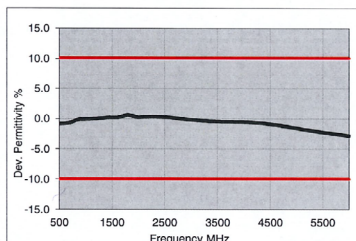
Ambient Condition 22°C ; 30% humidity
TSL Temperature 22°C
Test Date 30-Oct-18
Operator CL

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: BCGA2069		SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 12/18/2019 – 01/28/2020	DUT Type: Tablet Device		APPENDIX C: Page 3 of 3

APPENDIX D: SAR SYSTEM VALIDATION

FCC ID: BCGA2069	 PCTEST	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 12/18/2019 – 01/28/2020	DUT Type: Tablet Device		APPENDIX D: Page 1 of 2

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. (σ)	Perm. (ϵ_r)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
AM1	750	7/15/2019	7421	750	Body	0.93	53.942	PASS	PASS	PASS	N/A	N/A	N/A
AM6	835	8/7/2019	7427	835	Body	0.959	54.066	PASS	PASS	PASS	GMSK	PASS	N/A
AM6	1750	3/12/2019	7427	1750	Body	1.456	51.525	PASS	PASS	PASS	N/A	N/A	N/A
AM2	1900	12/5/2019	7420	1900	Body	1.49	52.56	PASS	PASS	PASS	GMSK	PASS	N/A
AM4	2300	4/23/2019	7532	2300	Body	1.897	50.974	PASS	PASS	PASS	N/A	N/A	N/A
AM4	2450	4/23/2019	7532	2450	Body	2.027	50.762	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM3	2450	9/4/2019	3949	2450	Body	1.955	52.22	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM4	2600	4/23/2019	7532	2600	Body	2.167	50.527	PASS	PASS	PASS	TDD	PASS	N/A
AM3	2600	9/4/2019	3949	2600	Body	2.096	51.97	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3500	12/11/2019	3949	3500	Body	3.448	50.786	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3700	12/11/2019	3949	3700	Body	3.67	50.471	PASS	PASS	PASS	TDD	PASS	N/A
AM5	5250	8/27/2019	7491	5250	Body	5.352	47.481	PASS	PASS	PASS	OFDM	N/A	PASS
AM5	5600	8/14/2019	7491	5600	Body	5.897	46.808	PASS	PASS	PASS	OFDM	N/A	PASS
AM5	5750	8/14/2019	7491	5750	Body	6.122	46.512	PASS	PASS	PASS	OFDM	N/A	PASS

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.

FCC ID: BCGA2069	 PCTEST	SAR EVALUATION REPORT	Approved by: Quality Manager
Test Dates: 12/18/2019 – 01/28/2020	DUT Type: Tablet Device		APPENDIX D: Page 2 of 2

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.
- The antenna with highest maximum output power for each LTE Band was selected for the PCC configurations of DLCA power measurements.

Table 1 – Example of Exclusion Table for SISO Configurations

Index	ACC	Supported Channel Bandwidth (MHz)	Restriction	Completely Covered by Measurement Superset
222-41	CA 2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-42	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-43	CA 2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-44	CA 2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-45	CA 2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-46	CA 2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-47	CA 2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-48	CA 2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-49	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-50	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-51	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-52	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-53	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-54	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-55	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-56	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-57	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-58	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-59	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-60	CA 2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-61	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-62	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-63	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-64	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-65	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-66	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-67	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-68	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-69	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-70	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-71	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-72	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-73	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-74	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-75	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-76	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-77	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-78	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-79	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-80	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-81	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-82	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-83	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-84	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-85	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-86	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-87	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-88	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-89	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-90	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-91	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-92	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-93	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-94	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-95	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-96	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-97	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-98	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-99	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41
222-100	CA 2A-2A	5, 10, 15, 20	5, 10, 15, 20	222-41

Table 2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations

Index	ACC	Supported Channel Bandwidth (MHz)			Restriction	Completely Covered by Measurement Superset	Index	ACC	Supported Channel Bandwidth (MHz)				Restriction	Completely Covered by Measurement Superset					
		CC1	CC2	CC3					CC4	CC5									
ACC #M01	CA 2A1	5, 10, 15, 20	5, 10, 15, 20		ACC #M06	CA 2A1	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M11	CA 2A1-5A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M02	CA 2A1-2A	5, 10, 15, 20	5, 10, 15, 20		ACC #M07	CA 2A1-2A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M12	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M03	CA 2A1-2A-2A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M08	CA 2A1-2A-12A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M13	CA 2A1-5A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M04	CA 2A1-2A-12A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M09	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M14	CA 2A1-5A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M05	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M10	CA 2A1-2A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M15	CA 2A1-5A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M06	CA 2A1-2A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M11	CA 2A1-2A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M16	CA 2A1-5A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M07	CA 2A1-2A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M12	CA 2A1-2A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M17	CA 2A1-5A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M08	CA 2A1-2A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M13	CA 2A1-2A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M18	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M09	CA 2A1-2A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M14	CA 2A1-2A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M19	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M10	CA 2A1-2A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M15	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M20	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M11	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M16	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M21	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M12	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M17	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M22	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M13	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M18	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M23	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M14	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M19	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M24	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M15	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M20	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M25	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M16	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M21	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M26	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M17	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M22	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M27	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M18	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M23	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M28	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M19	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M24	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M29	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M20	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M25	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M30	CA 2A1-5A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M21	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M26	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M31	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M22	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M27	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M32	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M23	CA 2A1-2A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M28	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M33	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M24	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M29	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M34	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M25	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M30	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M35	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M26	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M31	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M36	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M27	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M32	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M37	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M28	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M33	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M38	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M29	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M34	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M39	CA 2A1-5A-6A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	No
ACC #M30	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20		No	ACC #M35	CA 2A1-2A-13A	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		ACC #M40	CA 2A1-5A-6A-6A-6A-6A-6A-6A						

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)ii) 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.

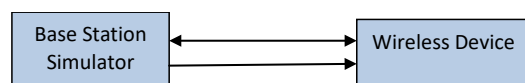


Figure 1
DL CA Power Measurement Setup

FCC ID: BCGA2069	 SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device	APPENDIX F: Page 2 of 16

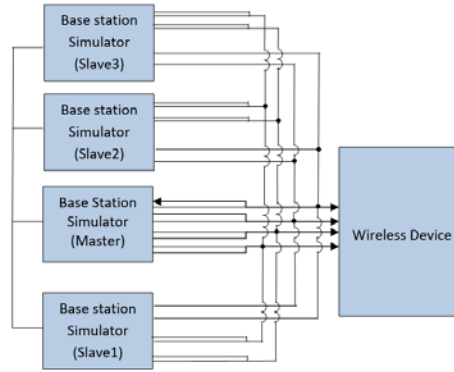


Figure 2
DL CA with DL 4x4 MIMO Power Measurement Setup

1.3 Downlink Carrier Aggregation RF Conducted Powers

1.3.1 LTE Band 71 as PCC

Table 1
Output Powers – Ant 3

Combination	PCC								SCC 1				SCC 2				SCC 3				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]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 4A-4A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	23.00	23.00
CA 2A-4A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B2	20	900	1560	LTE B4	20	2175	2132.5	-	-	-	-	22.99	23.00
CA 2A-2A-66A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B2	20	900	1560	LTE B2	20	700	1940	LTE B66	20	66765	2145	23.00	23.00
CA 2A-66A-66A-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B2	20	900	1560	LTE B66	20	66765	2145	LTE B66	20	66765	2150	23.00	23.00
CA 2A-66C-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	LTE B2	20	900	1560	LTE B66	20	66765	2145	LTE B66	20	66964	2164.8	22.99	23.00

FCC ID: BCGA2069	 PCTEST Proud to be part of  TEKST	SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device		APPENDIX F: Page 3 of 16

1.3.2 LTE Band 12 as PCC

Table 2
Output Powers – Ant 3

Combination	PCC Band	PCC BW [MHz]	PCC				Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC 1			SCC 2			SCC 3			SCC 4			Power						
			PCC (UL) Ch.	PCC (UL) Freq. [MHz]	PCC (UL) RB	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 2A-12A (1)	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.77	21.77	
CA 4A-12A (1)	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.71	21.77	
CA 4A-12A (2)	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.72	21.77	
CA 12A-25A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B05	20	8065	1952.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.73	21.77	
CA 12A-66A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B06	20	50655	5337.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.77	21.77	
CA 12A-66A (1)	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B06	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.70	21.77	
CA 13A-66A (2)	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B06	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.70	21.77	
CA 2C-12A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B2	20	702	1940.2	-	-	-	-	-	-	-	-	-	-	21.61	21.77	
CA 2A-2A-12B	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B12	10	5083	736.3	LTE B2	20	900	1960	LTE B2	20	700	1940	-	-	-	-	-	-	-	21.58	21.77
CA 4A-4A-12B	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B12	10	5083	736.3	LTE B4	20	2175	2132.5	LTE B4	10	2360	2140	-	-	-	-	-	-	-	21.54	21.77
CA 2A-2A-12A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	21.50	21.77
CA 2A-4A-4A-12A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B02	20	900	1960	LTE B4	20	2175	2132.5	LTE B4	10	2360	2140	-	-	-	-	-	-	-	21.50	21.77
CA 2A-4A-12B	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B12	10	5083	736.3	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	21.53	21.77
CA 2A-13A-66C	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B06	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	21.57	21.77
CA 4A-4A-12A-30A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B4	20	2175	2132.5	LTE B4	20	2360	2150	LTE B30	10	6620	2355	-	-	-	-	-	-	-	21.68	21.77
CA 2A-4A-7A-12A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B7	20	3100	2095	-	-	-	-	-	-	-	21.58	21.77
CA 2A-4A-12A-30A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B30	10	6620	2355	-	-	-	-	-	-	-	21.63	21.77
CA 2A-7A-12A-66A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B7	20	3100	2095	LTE B06	20	66786	2145	-	-	-	-	-	-	-	21.57	21.77
CA 2A-2A-12A-66A-66A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B06	20	66786	2145	-	-	-	-	-	-	-	21.52	21.77
CA 2A-2A-12A-30A-66A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	6620	2355	-	-	-	-	-	-	-	21.61	21.77
CA 2A-13A-30A-66A-66A	LTE B12	5	23155	713.5	64QAM	1	24	5155	743.5	LTE B2	20	900	1960	LTE B30	10	6620	2355	LTE B06	20	66786	2145	-	-	-	-	-	-	-	21.51	21.77

1.3.3 LTE Band 13 as PCC

Table 3
Output Powers – Ant 3

Combination	PCC Band	PCC BW [MHz]	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power						
			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 4A-4A-13A	LTE B13	10	23230	762	64QAM	1	0	5230	753	LTE B4	20	2175	2132.5	LTE B4	20	2360	2150										21.44	21.64	
CA 4A-4A-13A	LTE B13	10	23230	762	64QAM	1	0	5230	753	LTE B2	20	900	1960	LTE B4	20	2175	2132.5		-	-	-	-	-	-	-	-	21.58	21.64	
CA 2A-13A-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B46	20	50665	5537.5		-	-	-	-	-	-	-	-	21.54	21.80	
CA 13A-66A-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B06	20	66786	2145		-	-	-	-	-	-	-	-	21.61	21.80	
CA 13A-66A-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B06	20	66786	2145		-	-	-	-	-	-	-	-	21.75	21.80	
CA 13A-66A-66C	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B06	20	66786	2145	LTE B06	5	67261	2192.5	15	67261	2192.5		-	-	-	-	-	21.53	21.80	
CA 13A-66A-66C	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B06	20	66786	2145	LTE B06	20	67038	2170.2		-	-	-	-	-	-	-	-	21.56	21.80	
CA 2A-2A-13A-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B06	20	66786	2145		-	-	-	-	-	21.47	21.80
CA 2A-13A-66C	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7		-	-	-	-	-	21.65	21.80
CA 2A-13A-66A-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B06	20	66786	2145	LTE B06	20	67236	2150		-	-	-	-	-	21.40	21.80
CA 2A-13A-66C	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B06	15	66979	2144.8	LTE B06	5	66979	2144.8		-	-	-	-	-	21.57	21.80
CA 13A-66C-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7	LTE B06	20	66984	2144.8		-	-	-	-	-	21.54	21.80
CA 13A-66C-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7	LTE B06	20	66984	2144.8		-	-	-	-	-	21.57	21.80
CA 13A-46C-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7	LTE B06	20	66786	2145		-	-	-	-	-	21.74	21.80
CA 13A-46C-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7	LTE B06	20	66786	2145		-	-	-	-	-	21.58	21.80
CA 2A-13A-46D	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B2	20	900	1960	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7		-	-	-	-	-	21.45	21.80
CA 13A-46D-66A	LTE B13	5	23230	762	64QAM	1	12	5230	753	LTE B46	20	50665	5537.5	LTE B46	20	50467	5517.7	LTE B46	20	50665	5537.5		-	-	-	-	-	21.51	21.80

1.3.4 LTE Band 14 as PCC

Table 4
Output Powers – Ant 3

Combination	PCC Band	PCC BW [MHz]	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power				
			PCC (UL) Ch. Freq. [MHz]	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 2A-2A-14A-66A-66A	LTE B14	5	23130	793	16QAM	1	24	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B06	20	66786	2145	LTE B06	20	67236	2150	21.53	21.69
CA 2A-2A-14A-30A-66A	LTE B14	5	23130	793	16QAM	1	24	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	6620	2355	LTE B06	20	66786	2145	21.28	21.69
CA 2A-14A-30A-66A-66A	LTE B14	5	23130	793	16QAM	1	24	5330	763	LTE B2	20	900	1960	LTE B30	10	6620	2355	LTE B06	20	66786	2145	LTE B06	20	67236	2150	21.50	21.69

1.3.5

LTE Band 5 as PCC

Table 5
Output Powers – Ant 3

Combination	PCC Band	PCC BW [MHz]	PCC										SCC 1				SCC 2				SCC 3				SCC 4				Power		
			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 5A-7A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B7	20	3100	2655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.19	21.20	
CA 5A-25A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.19	21.20	
CA 5A-41A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.19	21.20	
CA 5A-46A (1)	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B46	20	50065	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.20	21.20	
CA 5A-46A	LTE B5	5	20925	846.5	64QAM	2	0	2625	891.5	LTE B46	20	50065	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.18	21.20	
CA 2C-5A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	792	1940.2	-	-	-	-	-	-	-	-	-	-	-	-	20.98	21.20
CA 4A-5B (1)	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	5	2577	886.7	LTE B4	20	2175	2132.5	LTE B4	20	2250	2150	-	-	-	-	-	-	-	-	20.97	21.20
CA 5A-7A-7A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B7	20	3100	2655	LTE B7	20	2950	2930	-	-	-	-	-	-	-	-	-	-	-	-	20.94	21.20
CA 5A-7C	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B7	20	3100	2655	LTE B7	20	2902	2935.2	-	-	-	-	-	-	-	-	-	-	-	-	21.03	21.20
CA 5A-40C (1)	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B40	20	50065	5537.5	LTE B40	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	20.97	21.20
CA 2A-5A-46A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B46	20	50065	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	21.08	21.20
CA 5A-46A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B46	20	50065	5537.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	20.96	21.20
CA 4A-5B	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B4	20	2175	2132.5	LTE B4	10	2250	2150	-	-	-	-	-	-	-	-	21.01	21.20
CA 5A-46D (1)	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B46	20	50065	5537.5	LTE B46	20	50467	5517.7	LTE B46	20	50863	5557.3	-	-	-	-	-	-	-	-	21.07	21.20
CA 5A-66A-66B	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B66	20	66786	2145	LTE B66	5	67169	2183.2	LTE B66	15	67251	2192.9	-	-	-	-	-	-	-	-	21.01	21.20
CA 5A-66A-66C	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B66	20	66786	2145	LTE B66	20	67038	2170.2	LTE B66	20	67236	2190	-	-	-	-	-	-	-	-	20.99	21.20
CA 2A-2A-4A-5A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	790	1940	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	20.98	21.20
CA 2A-4A-4A-5A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B4	20	2175	2132.5	LTE B4	20	2350	2150	-	-	-	-	-	-	-	-	20.97	21.20
CA 2A-5B	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B2	20	800	1960	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	21.01	21.20
CA 2A-5B-66C	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B46	20	50065	5537.5	LTE B46	20	50467	5517.7	-	-	-	-	-	-	-	-	21.07	21.20
CA 4A-4A-5A-30A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	LTE B30	10	8620	2395	-	-	-	-	-	-	-	-	21.05	21.20
CA 5A-40C-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B40	20	50065	5537.5	LTE B40	20	50467	5517.7	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	21.03	21.20
CA 2A-4A-5A-30A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B4	20	2175	2132.5	LTE B30	10	8620	2395	-	-	-	-	-	-	-	-	21.05	21.20
CA 2A-2A-5A-66A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	790	1940	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	-	-	20.97	21.20
CA 2A-5A-66B	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	790	1940	LTE B66	15	66786	2145	LTE B66	5	66879	2154.3	-	-	-	-	20.92	21.20
CA 2A-2A-5A-66C	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	790	1940	LTE B66	20	66786	2145	LTE B66	20	66984	2168.8	-	-	-	-	20.98	21.20
CA 2A-5A-46D	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B46	20	50065	5537.5	LTE B46	20	50467	5517.7	LTE B46	20	50863	5557.3	-	-	-	-	20.99	21.20
CA 2A-5B-66B	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B2	20	800	1960	LTE B66	15	66786	2145	LTE B66	5	66879	2154.3	-	-	-	-	21.20	21.20
CA 2A-5B-66C	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B2	20	800	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2168.8	-	-	-	-	20.93	21.20
CA 2A-5B-66A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B2	20	800	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	-	-	20.94	21.20
CA 4A-40C-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B40	20	50065	5537.5	LTE B40	20	50467	5517.7	LTE B40	20	50863	5557.3	LTE B66	20	66786	2145	-	-	-	-	20.91	21.20
CA 5B-30A-66A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B30	20	8620	2395	LTE B30	20	8620	2395	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	-	-	20.95	21.20
CA 2A-2A-5A-30A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	20	790	1940	LTE B30	10	8620	2395	LTE B66	20	66786	2145	-	-	-	-	20.87	21.20
CA 2A-5A-30A-66A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B2	20	800	1960	LTE B2	10	8620	2395	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	-	-	20.83	21.20
CA 2A-5B-30A-66A	LTE B5	5	20925	846.5	64QAM	1	0	2625	891.5	LTE B5	10	2553	884.3	LTE B2	20	800	1960	LTE B30	10	8620	2395	LTE B66	20	66786	2145	-	-	-	-	20.92	21.20

1.3.6

LTE Band 26 as PCC

Table 6
Output Powers – Ant 3

Combination	PCC										SCC 1				SCC 2				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]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 7A-26A	LTE B26	10	26990	844	QPSK	25	12	8990	889	LTE B7	20	3100	2655	-	-	-	-	21.48	21.50	
CA 25A-26A	LTE B26	10	26990	844	QPSK	25	12	8990	889	LTE B25	20	8365	1962.5	-	-	-	-	21.50	21.50	
CA 26A-41A	LTE B26	10	26990	844	QPSK	25	12	8990	889	LTE B41	20	40620	2593	-	-	-	-	21.49	21.50	
CA 7A-7A-26A	LTE B26	10	26990	844	QPSK	25	12	8990	889	LTE B7	20	3100	2655	LTE B7	20	2850	2630	21.48	21.50	
CA 25A-25A-26A	LTE B26	5	27015	846.5	64QAM	1	0	9015	891.5	LTE B25	20	8365	1962.5	LTE B25	20	8590	1985	21.14	21.50	
CA 26A-41C	LTE B26	10	26990	844	QPSK	25	12	8990	889	LTE B41	20	40620	2593	LTE B41	20	40422	2573.2	21.39	21.50	

Table 7
Output Powers – Ant 2B

FCC ID: BCGA2069	 SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device	APPENDIX F: Page 6 of 16

1.3.8 LTE Band 25 as PCC

Table 8
Output Powers – Ant 2A

Combination	PCC Band	PCC BW [MHz]	PCC [UL] Ch Freq. [MHz]	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power						
				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 5A-25A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	15.00	15.00		
CA 12A-25A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.98	15.00		
CA 25A-26A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B25	10	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.95	15.00		
CA 25A-46A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B46	20	9005	937.5	-	-	-	-	-	-	-	-	-	-	-	-	-	15.00	15.00		
CA 25A-25A-25A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B25	20	8900	1960	LTE B25	10	8865	876.5	-	-	-	-	-	-	-	-	-	-	14.98	15.00	
CA 25A-25A-41A	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B25	20	8900	1960	LTE B41	20	40620	2093	-	-	-	-	-	-	-	-	-	-	14.67	15.00	
CA 25A-41C	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B41	20	40620	2093	LTE B41	20	40620	2093	-	-	-	-	-	-	-	-	-	-	14.92	15.00	
CA 25A-46C	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B46	20	9005	937.5	LTE B46	20	9005	937.5	-	-	-	-	-	-	-	-	-	-	14.91	15.00	
CA 25A-25A-41C	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B25	20	8900	1960	LTE B41	20	40620	2093	LTE B41	20	40620	2093	-	-	-	-	-	-	-	14.42	15.00
CA 25A-46C	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B46	20	9005	937.5	LTE B46	20	9005	937.5	LTE B46	20	9005	937.5	-	-	-	-	-	-	-	14.91	15.00
CA 25A-25A-41D	LTE B25	20	26140	1860	64QAM	1	99	8140	1940	LTE B25	20	8390	1965	LTE B41	20	40422	2573.2	LTE B41	20	40620	2093	LTE B41	20	40620	2093	-	-	14.49	15.00	

1.3.9 LTE Band 30 as PCC

Table 9
Output Powers – Ant 2A

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 3C-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B2	10	702	1940.2	-	-	-	-	-	-	-	-	-	-	13.59	13.60	
CA 2A-2A-30A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B2	10	700	1940	LTE B29	10	9715	722.5	-	-	-	-	-	-	-	13.46	13.60
CA 4A-4A-30A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B4	10	2175	2132.5	LTE B4	10	2160	2160	LTE B5	10	2625	881.5	-	-	-	-	-	-	-	13.55	13.60
CA 4A-4A-12A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B4	10	2175	2132.5	LTE B4	10	2160	2160	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	13.40	13.60
CA 2A-4A-30A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B4	10	2175	2132.5	LTE B5	10	2625	881.5	-	-	-	-	-	-	-	13.58	13.60
CA 2A-4A-12A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B4	10	2175	2132.5	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	13.57	13.60
CA 2A-4A-25A-30A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B4	10	2175	2132.5	LTE B29	10	9715	722.5	-	-	-	-	-	-	-	13.40	13.60
CA 2A-2A-30A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	13.59	13.60
CA 5B-30A-66A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B5	10	2525	881.5	LTE B5	10	2453	874.3	LTE B66	20	66786	2145	LTE B66	20	66786	2145	-	-	13.45	13.60	
CA 2A-2A-30A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B2	10	700	1940	LTE B5	10	2625	881.5	LTE B66	20	66786	2145	-	-	13.47	13.60	
CA 2A-2A-12A-30A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B2	10	700	1940	LTE B12	10	5095	737.5	LTE B66	20	66786	2145	-	-	13.48	13.60	
CA 2A-2A-14A-30A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B2	10	700	1940	LTE B14	10	5330	763	LTE B66	20	66786	2145	-	-	13.57	13.60	
CA 2A-2A-30A-66A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B5	10	2625	881.5	LTE B66	20	66786	2145	LTE B66	20	66786	2145	-	-	13.60	13.60	
CA 2A-5B-30A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B5	10	2525	881.5	LTE B5	10	2453	874.3	LTE B66	20	66786	2145	-	-	13.48	13.60	
CA 2A-12A-30A-66A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B12	10	5095	737.5	LTE B66	20	66786	2145	LTE B66	20	66786	2145	-	-	13.57	13.60	
CA 2A-14A-30A-66A-66A	LTE B30	10	27710	2310	16QAM	1	25	9820	2395	LTE B2	10	900	1960	LTE B14	10	5330	763	LTE B66	20	66786	2145	LTE B66	20	66786	2145	-	-	13.56	13.60	

1.3.10 LTE Band 7 as PCC

Table 10
Output Powers – Ant 4A

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 7B	LTE B7	15	20625	2507.5	64QAM	1	74	2625	2627.5	LTE B7	5	2618	2636.8	-	-	-	-	-	-	-	-	-	-	-	-	-	14.87	14.87	
CA 5A-7A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.16	14.57	
CA 7A-25A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B25	10	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.18	14.57	
CA 7A-46A (1)	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B46	20	9005	937.5	-	-	-	-	-	-	-	-	-	-	-	-	-	14.13	14.57	
CA 4A-4A-7A (1)	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B4	10	2175	2132.5	LTE B4	10	2160	2160	-	-	-	-	-	-	-	-	-	-	14.49	14.57
CA 5A-7A-7A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	14.15	14.57
CA 5A-7C	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	14.16	14.57
CA 7A-7A-25A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B25	10	8865	876.5	-	-	-	-	-	-	-	-	-	-	14.20	14.57
CA 7A-46C (1)	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B46	20	9005	937.5	LTE B46	20	9005	937.7	-	-	-	-	-	-	-	-	-	-	14.48	14.57
CA 7C-46A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	3152	3060.2	LTE B46	20	9005	937.5	-	-	-	-	-	-	-	-	-	-	14.18	14.57
CA 7A-46D (1)	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B46	20	9005	937.5	LTE B46	20	9005	937.7	LTE B46	20	9005	937.7	-	-	-	-	-	-	14.13	14.57
CA 7C-46C	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	3152	3060.2	LTE B46	20	9005	937.8	LTE B46	20	9005	937.7	-	-	-	-	-	-	14.13	14.57
CA 2A-4A-7A-7A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B4	10	2175	2132.5	-	-	-	-	-	-	-	-	-	-	14.47	14.57
CA 2A-4A-7C	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	3152	3060.2	LTE B2	10	5095	1960	LTE B4	10	2175	2132.5	-	-	-	-	-	-	14.41	14.57
CA 2A-4A-7A-12A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B4	10	2175	2132.5	LTE B4	10	2175	2132.5	-	-	-	-	-	-	14.49	14.57
CA 2A-7A-46A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B25	10	8865	876.5	-	-	-	-	-	-	-	-	-	14.17	14.57	
CA 2A-7A-12A-46A	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	2690	2690	LTE B25	10	8865	876.5	LTE B46	20	9005	937.5	-	-	-	-	-	-	14.49	14.57
CA 7A-7A-46C	LTE B7	20	21350	2560	QPSK	1	0	3350	2680	LTE B7	20	3152	3060.2	LTE B46	20	9005	937.7	LTE B46	20	9005	937.7	LTE B46	20	9005	937.3	-	14.30	14.57	

1.3.11

LTE Band 41 as PCC

Table 11
Output Powers – Ant 4A

Combination	PCC Band	PCC BW [MHz]	PCC				PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq [MHz]	SCC 1			SCC 2			SCC 3			SCC 4			LTE Tx Power with DL CA Enabled [dBm]	LTE Single Carrier Tx Power [dBm]				
			PCC (UL) Ch	PCC (UL) Freq [MHz]	Mod.	PCC UL RB				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]						
CA 41A-41A (1)	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	41490	2680	-	-	-	-	-	-	-	-	16.82	16.80				
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B5	10	25275	881.5	-	-	-	-	-	-	-	-	16.82	16.80				
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B26	10	8895	876.5	-	-	-	-	-	-	-	-	16.82	16.80				
CA 41A-41C	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	41290	2660.2	LTE B41	20	41490	2680	-	-	-	-	-	16.80	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	41490	2680	-	-	-	-	-	16.80	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B26	20	8895	1862.5	LTE B26	20	8890	1885	-	-	-	-	-	16.80	16.80			
CA 26A-26A-41A	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B26	20	8895	1862.5	LTE B26	20	8890	1885	-	-	-	-	-	16.80	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B26	20	8895	1862.5	-	-	-	-	-	16.80	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B26	10	8895	876.5	-	-	-	-	-	16.80	16.80			
CA 26A-41C	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B26	20	8895	1862.5	LTE B41	20	40344	2565.4	-	16.72	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	41290	2660.2	-	-	-	-	-	16.72	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	40146	2545.6	-	-	-	-	-	16.72	16.80			
CA 41D-41A	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	40146	2545.6	LTE B41	20	41490	2680	-	16.72	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	41290	2660.2	LTE B41	20	41490	2680	-	16.72	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	40146	2545.6	LTE B41	20	41290	2660.2	LTE B41	20	41490	2680	16.72	16.80
CA 26A-26A-41C	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B26	20	8895	1862.5	LTE B26	20	8890	1885	-	16.80	16.80			
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	41290	2640.4	LTE B41	20	41290	2660.2	LTE B41	20	41490	2680	16.77	16.80
	LTE B41	20	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39948	2525.8	LTE B41	20	40146	2545.6	LTE B26	20	8895	1862.5	-	16.82	16.80			

1.3.12

LTE Band 41 PC2 as PCC

Table 12
Output Powers – Ant 4A

Combination	PCC Band	PCC BW [MHz]	PCC					Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq [MHz]	SCC 1			SCC Band	SCC 2			SCC Band	SCC 3			SCC Band	SCC 4			LTE Tx Power with DL CA Enabled [dBm]	LTE Single Carrier Tx Power [dBm]			
			PCC (UL) Ch	PCC (UL) Freq [MHz]	PCC (UL) 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]							
CA 41A-41A (1)	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	41490	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.79	16.80	
CA 5A-41A	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B5	10	25275	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.78	16.80	
CA 26A-41A	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B26	10	8895	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.78	16.80	
CA 41A-41C	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	16.79	16.80
CA 41C-41A	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	41490	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	16.79	16.80
CA 26A-26A-41A	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B26	20	8895	1862.5	LTE B26	20	8890	1885	-	-	-	-	-	-	-	-	-	-	-	-	-	16.80	16.80
CA 26A-41C	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B26	20	8895	1862.5	-	-	-	-	-	-	-	-	-	-	-	-	-	16.80	16.80
CA 41E	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	40146	2545.6	LTE B41 PC2	20	40344	2565.4	-	-	-	-	-	-	-	-	-	16.79	16.80
CA 41A-41D	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	41290	2640.4	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	-	-	-	-	16.79	16.80
CA 41D-41A	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	40146	2545.6	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	16.77	16.80
CA 41C-41C	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	-	-	-	-	16.80	16.80
CA 26A-26A-41C	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B26	20	8895	1862.5	LTE B26	20	8890	1885	-	-	-	-	-	-	-	-	-	16.80	16.80
CA 41C-41D	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	40146	2545.6	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	16.74	16.80
CA 41D-41C	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	40146	2545.6	LTE B41 PC2	20	41290	2660.2	LTE B41 PC2	20	41490	2680	-	-	-	-	-	16.74	16.80
CA 26A-26A-41D	LTE B41 PC2	20	39750	2506	QPSK	1	0	39750	2506	LTE B41 PC2	20	39948	2525.8	LTE B41 PC2	20	40146	2545.6	LTE B26	20	8895	1862.5	-	-	-	-	-	-	-	-	-	16.80	16.80

1.3.13

LTE Band 48 as PCC

Table 13
Output Powers – Ant 3

Combination	PCC Band	PCC BW [MHz]	PCC				PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC 1			SCC 2			SCC 3			SCC 4			LTE Tx Power (dBm)	LTE Single Carrier Power (dBm)	
			PCC (UL) Ch	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB				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]			
CA 5A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B5	10	2520	881.5	-	-	-	-	-	-	-	-	17.14	17.40	
CA 2A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B2	20	880	1880	-	-	-	-	17.12	17.40	
CA 13A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 13A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 2A-48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B2	20	880	1880	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	17.12	17.40
CA 2A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 5A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 2A-48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	
CA 2A-48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B2	20	880	1880	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	17.12	17.40
CA 2A-48A-48A-48A	LTE B48	20	55725	3603.3	QPSK	1	0	55725	3603.3	LTE B48	20	56840	3680	LTE B48	20	56840	3680	-	-	-	-	17.12	17.40	

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 14
Output Powers – Ant 3

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Max Allowed Power [dBm]
48	20	55773	3603.3	64QAM	1	99	17.46	17.44	17.50

Table 15
Output Powers – Ant 2A

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Max Allowed Power [dBm]
25	20	26140	1860	64QAM	1	99	15.00	15.00	15.00
30	10	27710	2310	16QAM	1	25	13.61	13.60	14.00

Table 16
Output Powers – Ant 2B

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Max Allowed Power [dBm]
66	20	132322	1745	64QAM	1	0	15.04	15.05	15.10

FCC ID: BCGA2069	 PCTEST Ready for the next step in compliance	SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device		APPENDIX F: Page 9 of 16

Output Powers – Ant 4A

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Max Allowed Power [dBm]
7	20	21350	2560	QPSK	1	0	14.59	14.57	14.60
41	20	39750	2506	QPSK	1	0	16.90	16.90	16.90
41 PC2	20	39750	2506	QPSK	1	0	16.90	16.90	16.90

1.4.2

LTE Band 71 as PCC

Table 18
Output Powers – Ant 3

Combination	PCC Band	PCC										SSC 1				SSC 2				SSC 3				Power								
		PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	Mod.	PCC UL RB	PCC UL on Offset	PCC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SSC Band	SSC BW [MHz]	SSC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SSC Band	SSC BW [MHz]	SSC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SSC Band	SSC BW [MHz]	SSC (DL) Ch. Freq. [MHz]	DL Ant. Config.	LTE Tx Power with CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)										
CA [4A]-[4A]-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	10	2350	2150	4x4	-	-	-	21.00	23.00							
CA [2A]-[4A]-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	2x2	LTE B2	20	900	1960	4x4	LTE B4	10	2350	2132.5	4x4	-	-	-	21.00	23.00							
CA [2A]-[2A]-[66A]-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	21.00	23.00
CA [2A]-[66A]-[66A]-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	23.00	23.00
CA [2A]-[66C]-71A	LTE B71	20	133297	680.5	QPSK	1	0	68761	634.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.99	23.00

1.4.3

LTE Band 12 as PCC

Table 19
Output Powers – Ant 3

Combination	PC Band	PC RB [MHz]	PC [DL] Freq. [MHz]	Mod.	PC UL RB	PC UL BBO Offset	PCC				SCC1				SCC2				SCC3				SCC4				Power					
							PCC [DL] Freq. [MHz]	DL Ant. Config.	UL Ant. Config.	SCC Band	SCC [DL] Freq. [MHz]	SCC [DL] Ch.	DL Ant. Config.	UL Ant. Config.	SCC Band	SCC [DL] Freq. [MHz]	SCC [DL] Ch.	DL Ant. Config.	UL Ant. Config.	SCC Band	SCC [DL] Freq. [MHz]	SCC [DL] Ch.	DL Ant. Config.	UL Ant. Config.	SCC Band	SCC [DL] Freq. [MHz]	SCC [DL] Ch.	DL Ant. Config.	UL Ant. Config.	LTE Tx Power (dBm)	LTE Single Carrier Tx Power (dBm)	
CA (2A) 12A (1)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (4A) 12A (1)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B4	20	2175	2312.5	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (4A) 12A (2)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	2175	2312.5	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (2A) 22A (1)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B20	20	1960	1960	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (2A) 66A (1)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B86	20	66786	2445	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (2A) 66A (2)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B86	20	66786	2445	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (2A) 12A (1)	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CA (2A) 22A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B12	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (4A) 4A 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B12	20	900	1960	4x4	LTE B82	20	2175	2312.5	4x4	LTE B4	10	2350	2350	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	LTE B82	20	900	1960	4x4	-	-	-	-	-	-	-
CA (2A) 12A 12B	LTE B12	5	23155	73.5	4GDM	1	24	5135	745.5	2x2	LTE B82	20	900	1960	4x4	LTE B82	20	900	1													

1.4.4

LTE Band 13 as PCC

Table 20
Output Powers – Ant 3

[illegible]

FCC ID: BCGA2069	 SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device	APPENDIX F: Page 10 of 16

LTE Band 14 as PCC

Table 21
Output Powers – Ant 3

[illegible]

LTE Band 5 as PCC

Table 22
Output Powers – Ant 3

[illegible]

LTE Band 26 as PCC

Table 23
Output Powers – Ant 3

Combination	PCC Band	PCC										SCC 1				SCC 2				Power		
		PCC BW [MHz]	PCC UL Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC Ch. [DL]	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.	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA [7A]-26A	LTE B26	10	26990	844	QPSK	25	12	8990	889	2x2	LTE B7	20	3100	2655	4x4	-	-	-	-	-	21.46	21.50
CA [25A]-26A	LTE B26	10	26990	844	QPSK	25	12	8990	889	2x2	LTE B25	20	8365	1962.5	4x4	-	-	-	-	-	21.49	21.50
CA 26A-[41A]	LTE B26	10	26990	844	QPSK	25	12	8990	889	2x2	LTE B41	20	40620	2593	4x4	-	-	-	-	-	21.47	21.50
CA [7A]-[7A]-26A	LTE B25	10	26990	844	QPSK	25	12	8990	889	2x2	LTE B7	20	3100	2655	4x4	LTE B7	20	2850	2630	4x4	21.45	21.50
CA [25A]-[25A]-26A	LTE B26	5	27015	846.5	64QAM	1	0	9015	891.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8590	1985	4x4	21.13	21.30
CA 26A-[41C]	LTE B26	10	26990	844	QPSK	25	12	8990	889	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	21.46	21.50

FCC ID: BCGA2069	 SAR EVALUATION REPORT	Reviewed by: Quality Manager
Test Dates: 12/18/2019-1/28/2020	DUT Type: Tablet Device	APPENDIX F: Page 11 of 16