Appendix B. – SAR Test Plots

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.2 ℃
Test Date:	06/18/2020
Plot No.:	1

DUT: SM-A516U; Type: Bar

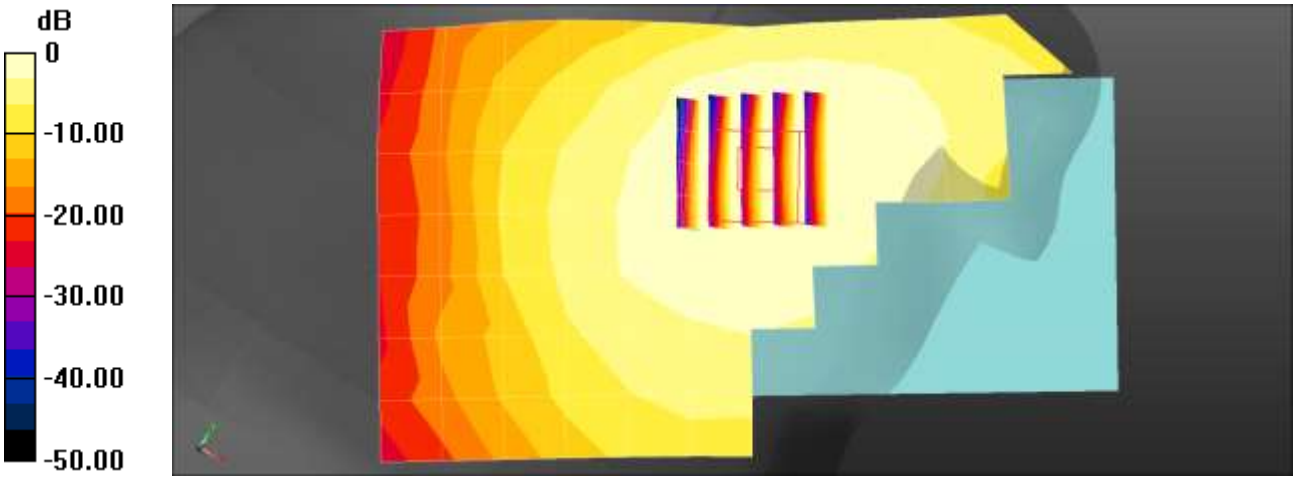
Communication System: UID 0, CDMA (0); Frequency: 820 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 820.1 MHz; σ = 0.904 S/m; ε_r = 41.973; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC10 Head Right Touch 560ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.252 W/kg

CDMA BC10 Head Right Touch 560ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.039 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.279 W/kg
SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.171 W/kg
Maximum value of SAR (measured) = 0.261 W/kg



0 dB = 0.252 W/kg = −5.99 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/22/2020
Plot No.:	2

DUT: SM-A516U; Type: Bar

Communication System: UID 0, CDMA (0); Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.947 S/m; ε_r = 41.673; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

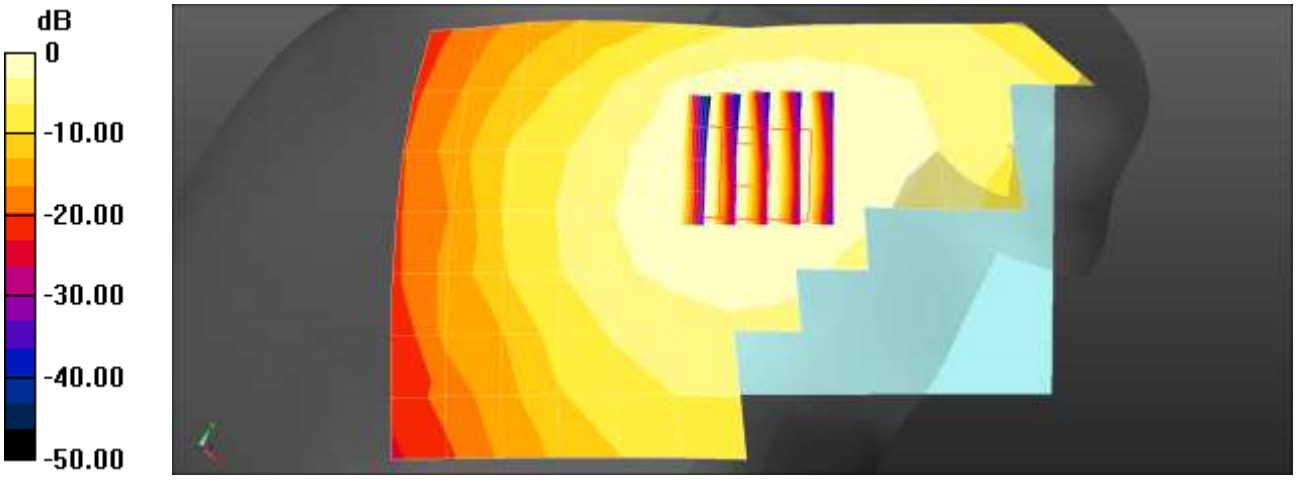
- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC0 Head Right Touch 384ch/Area Scan (8x13x1): Measurement grid:

dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.367 W/kg

CDMA BC0 Head Right Touch 384ch/Zoom Scan (5x5x7)/Cube 0: Measurement

grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.326 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.395 W/kg
SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.237 W/kg
Maximum value of SAR (measured) = 0.368 W/kg



0 dB = 0.367 W/kg = −4.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.9 ℃
Ambient Temperature:	20.0 ℃
Test Date:	06/18/2020
Plot No.:	3

DUT: SM-A516U; Type: Bar

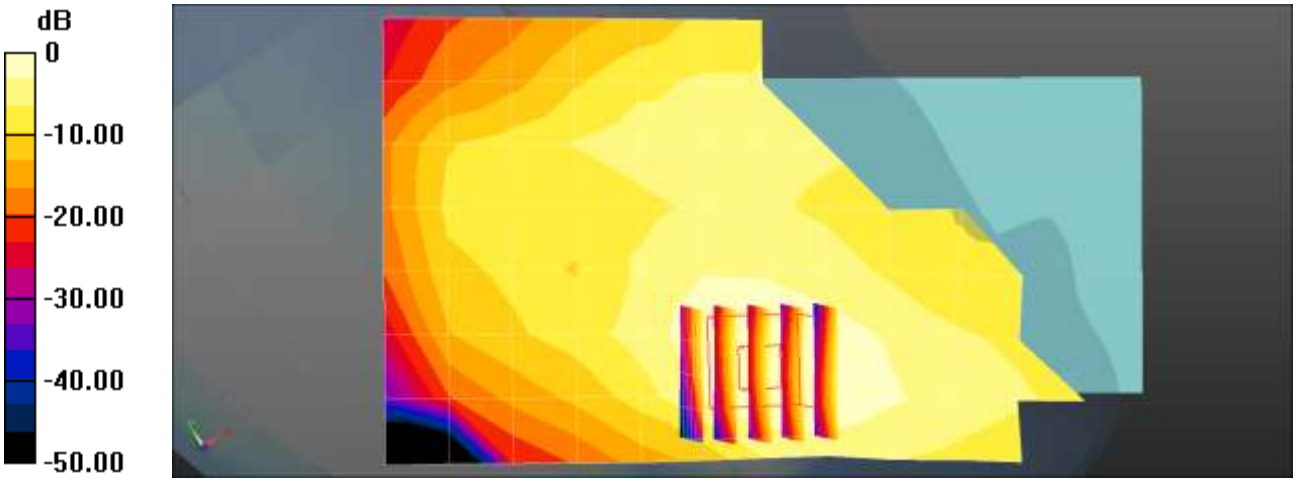
Communication System: UID 0, CDMA; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.427 S/m; ε_r = 38.276; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

CDMA1900 Head Left Touch EvDO Rev A 600ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.405 W/kg

CDMA1900 Head Left Touch EvDO Rev A 600ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.933 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.482 W/kg
SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.187 W/kg
Smallest distance from peaks to all points 3 dB below = 11.4 mm
Ratio of SAR at M2 to SAR at M1 = 64.5%
Maximum value of SAR (measured) = 0.410 W/kg



0 dB = 0.405 W/kg = −3.93 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	4

DUT: SM-A516U; Type: Bar;

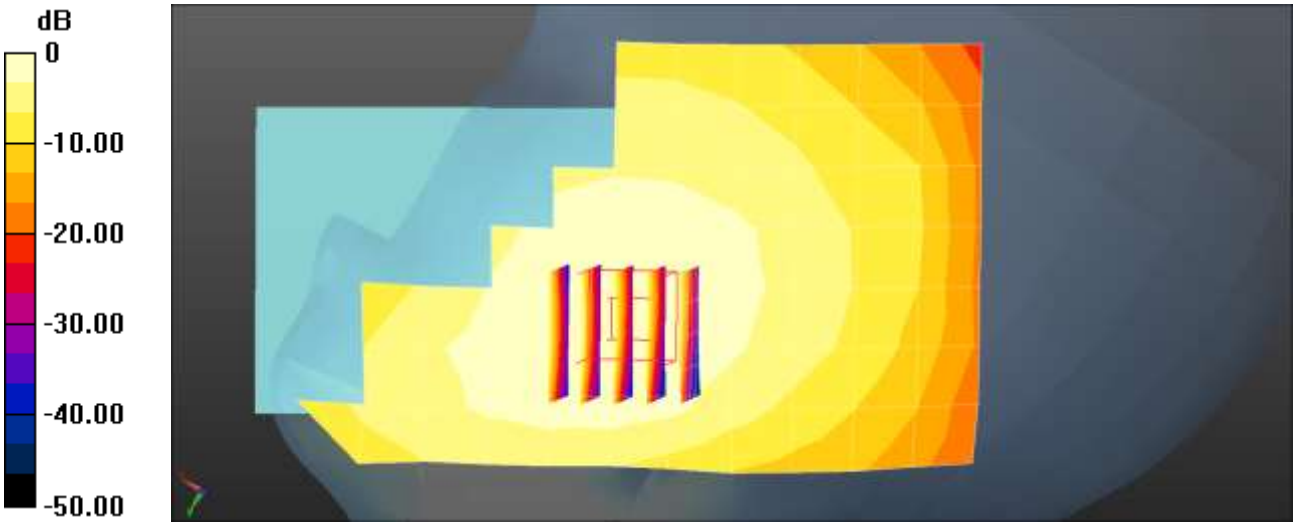
Communication System: UID 0, GSM850 GPRS 3TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.77013
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 42.58; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 836.6 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2020-05-25
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GSM850 Head Right Touch 3Tx 190ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.226 W/kg

GSM850 Head Right Touch 3Tx 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.039 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.259 W/kg
SAR(1 g) = 0.205 W/kg; SAR(10 g) = 0.155 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 78.9%
Maximum value of SAR (measured) = 0.223 W/kg



0 dB = 0.226 W/kg = −6.47 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.3 ℃
Test Date:	05/27/2020
Plot No.:	5

DUT: SM-A516U; Type: Bar

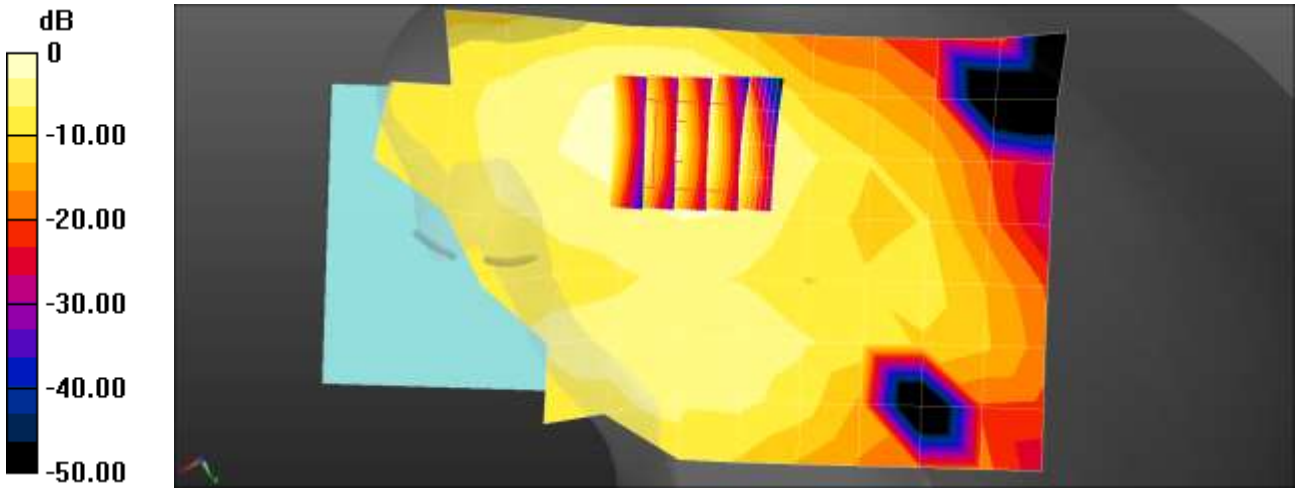
Communication System: UID 0, GSM 1900 3Tx (0); Frequency: 1880 MHz;Duty Cycle: 1:2.77013
Medium parameters used: f = 1880 MHz; σ = 1.38 S/m; ε_r = 39.275; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

GSM1900 Head Left Touch 3Tx 661ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.130 W/kg

GSM1900 Head Left Touch 3Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.357 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.156 W/kg
SAR(1 g) = 0.101 W/kg; SAR(10 g) = 0.063 W/kg
Maximum value of SAR (measured) = 0.136 W/kg



0 dB = 0.130 W/kg = −8.87 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	6

DUT: SM-A516U; Type: Bar

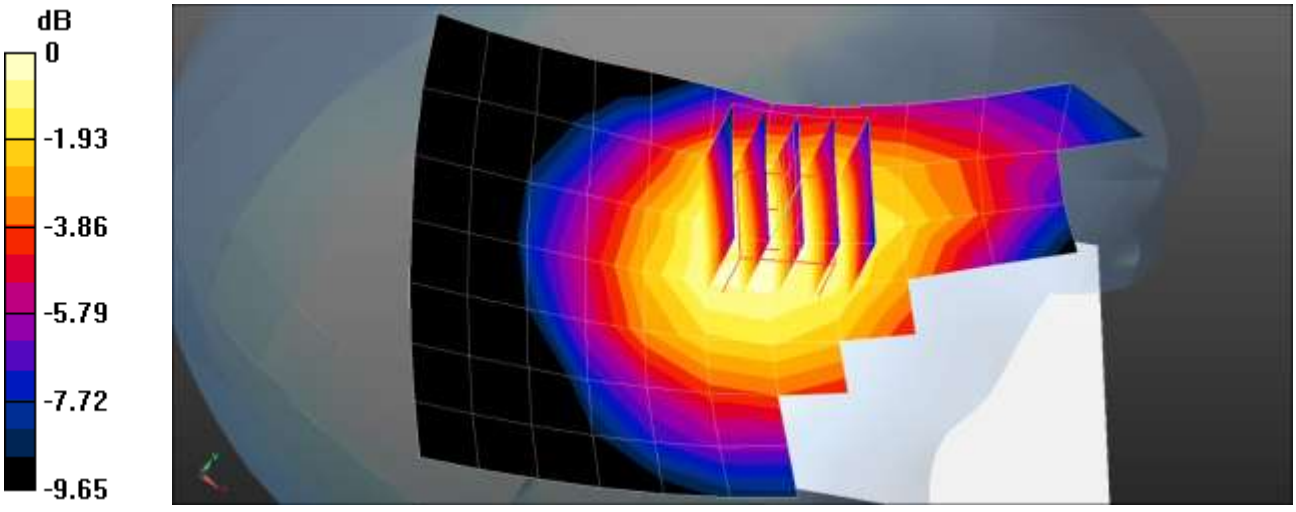
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 42.58; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 836.6 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

UMTS band 5 Head Right Touch 4183ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.158 W/kg

UMTS band 5 Head Right Touch 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.551 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.162 W/kg



0 dB = 0.162 W/kg = −7.90 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/25/2020
Plot No.:	7

DUT: SM-A516U; Type: Bar

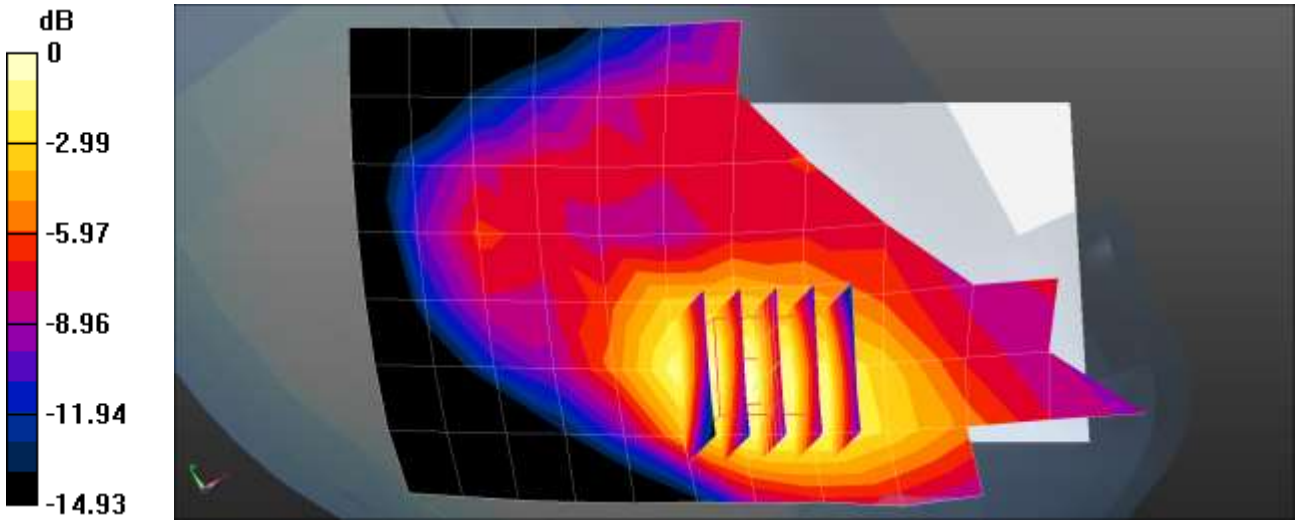
Communication System: UID 0, UMTS 1700 (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.33 S/m; ε_r = 40.39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B4 Head Left Touch 1412ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.102 W/kg

UMTS B4 Head Left Touch 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.250 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.133 W/kg
SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.062 W/kg
Maximum value of SAR (measured) = 0.108 W/kg



0 dB = 0.108 W/kg = −9.67 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.4 ℃
Test Date:	06/08/2020
Plot No.:	8

DUT: SM-A516U; Type: Bar

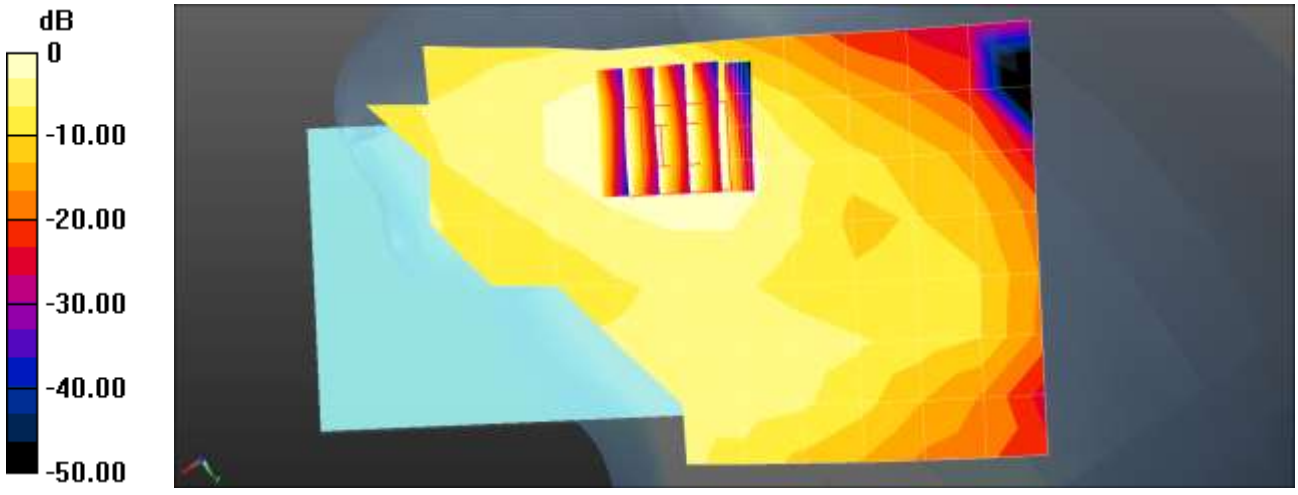
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.394 S/m; ε_r = 39.31; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.75, 7.75, 7.75); Calibrated: 2019-11-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B2 Head Left Touch 9400ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.260 W/kg

UMTS B2 Head Left Touch 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.206 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.357 W/kg
SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.132 W/kg
Maximum value of SAR (measured) = 0.291 W/kg



0 dB = 0.260 W/kg = −5.85 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.5 ℃
Ambient Temperature:	23.8 ℃
Test Date:	06/04/2020
Plot No.:	9

DUT: SM-A516U; Type: Bar

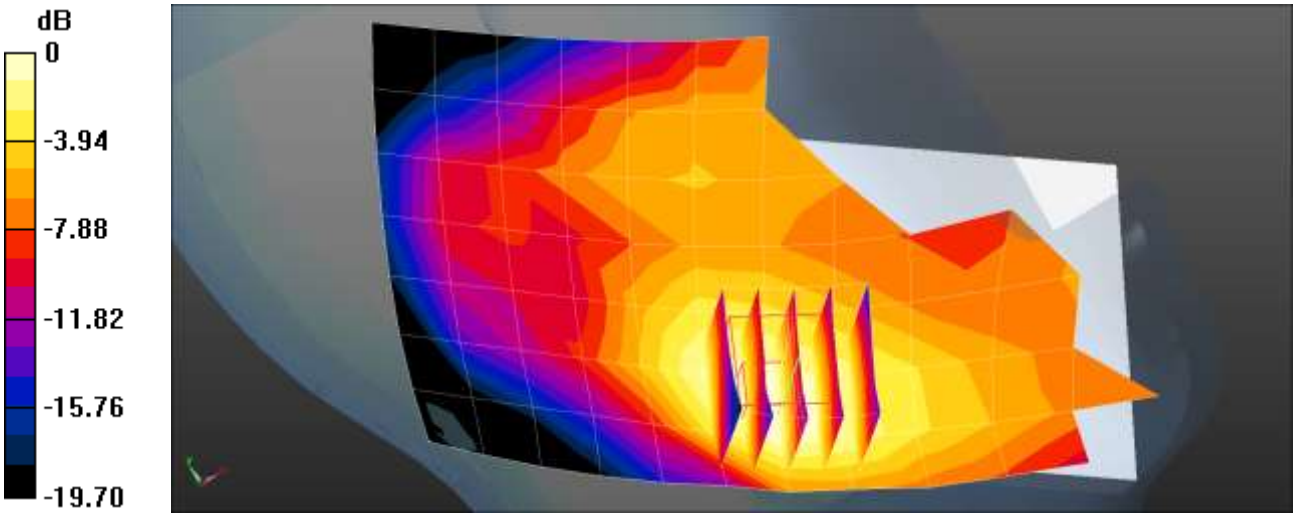
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.415 S/m; ε_r = 39.437; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.75, 7.75, 7.75) @ 1900 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 2 Head Left Touch QPSK 20MHz 1RB 0offset 19100ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.316 W/kg

LTE band 2 Head Left Touch QPSK 20MHz 1RB 0offset 19100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.070 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.163 W/kg
Maximum value of SAR (measured) = 0.358 W/kg



0 dB = 0.358 W/kg = −4.46 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.4 ℃
Test Date:	05/20/2020
Plot No.:	10

DUT: SM-A516U; Type: Bar

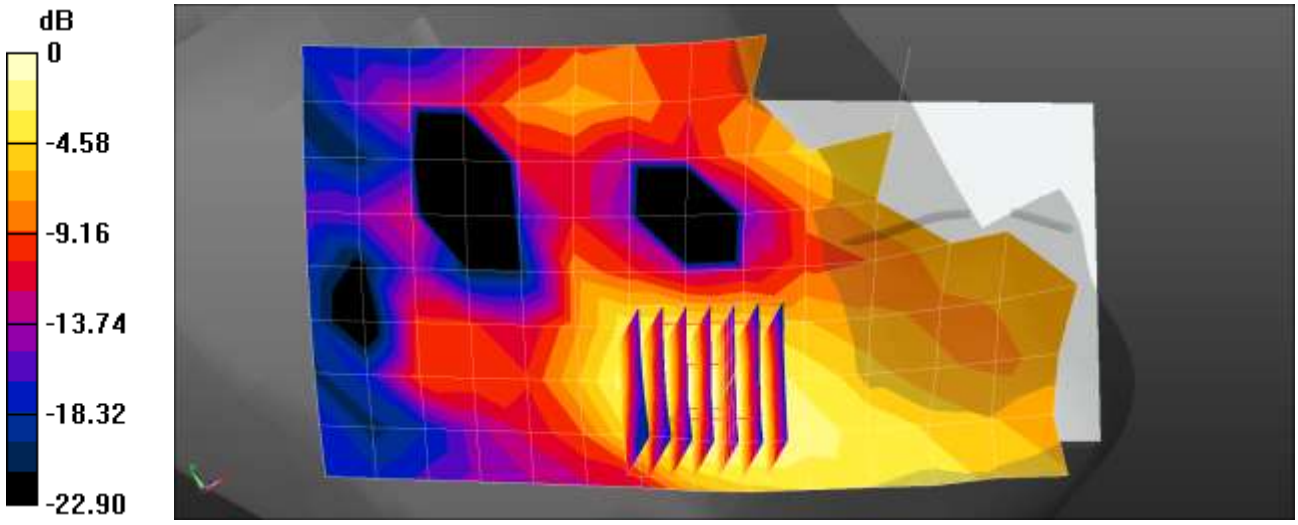
Communication System: UID 0, LTE Band7 (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.867 S/m; ε_r = 38.233; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.49, 7.49, 7.49) @ 2510 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 7 Head Left Touch QPSK 20MHz 1RB 0offset 20850ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.127 W/kg

LTE Band 7 Head Left Touch QPSK 20MHz 1RB 0offset 20850ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.016 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.167 W/kg
SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.048 W/kg
Maximum value of SAR (measured) = 0.135 W/kg



0 dB = 0.135 W/kg = −8.70 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3 ℃
Ambient Temperature:	21.5 ℃
Test Date:	05/11/2020
Plot No.:	11

DUT: SM-A516U; Type: Bar

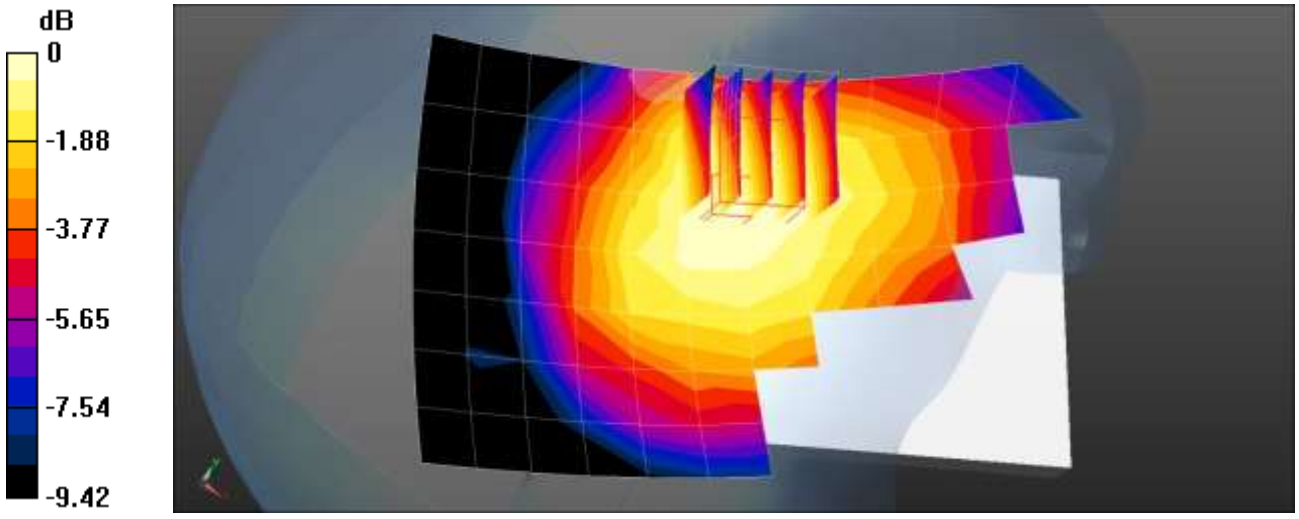
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.863 S/m; ε_r = 44.033; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 707.5 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.115 W/kg

LTE band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.318 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.122 W/kg
SAR(1 g) = 0.102 W/kg; SAR(10 g) = 0.080 W/kg
Maximum value of SAR (measured) = 0.116 W/kg



0 dB = 0.116 W/kg = −9.36 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/12/2020
Plot No.:	12

DUT: SM-A516U; Type: Bar

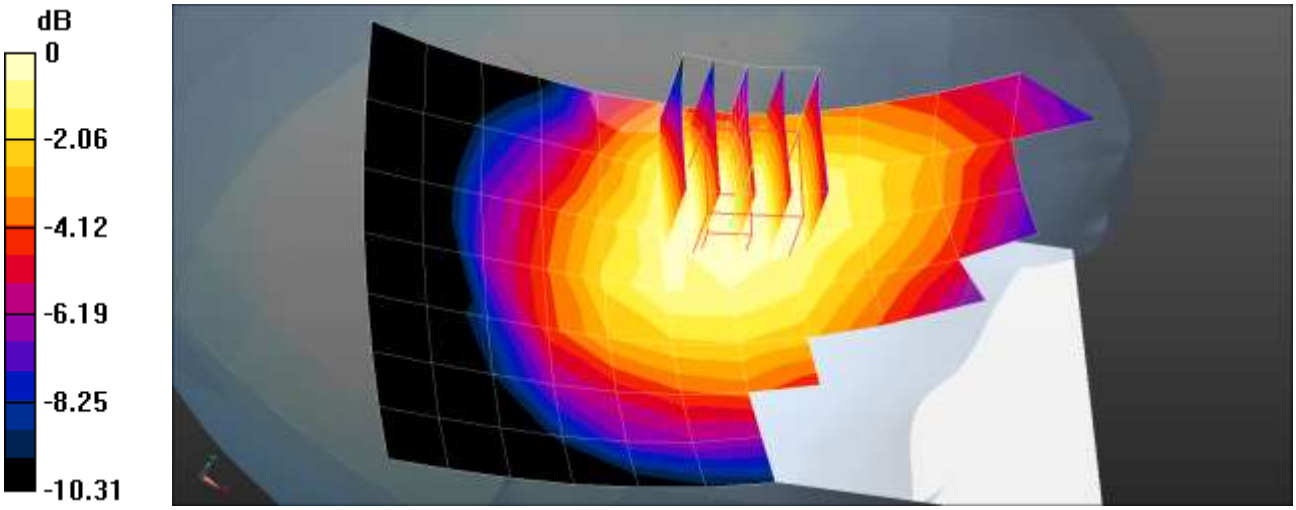
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.933 S/m; ε_r = 42.007; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 782 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 13 Head Right Touch QPSK 10MHz 1RB 0offset 23230ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.193 W/kg

LTE band 13 Head Right Touch QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.078 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.206 W/kg
SAR(1 g) = 0.168 W/kg; SAR(10 g) = 0.132 W/kg
Maximum value of SAR (measured) = 0.193 W/kg



0 dB = 0.193 W/kg = −7.14 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/13/2020
Plot No.:	13

DUT: SM-A516U; Type: Bar

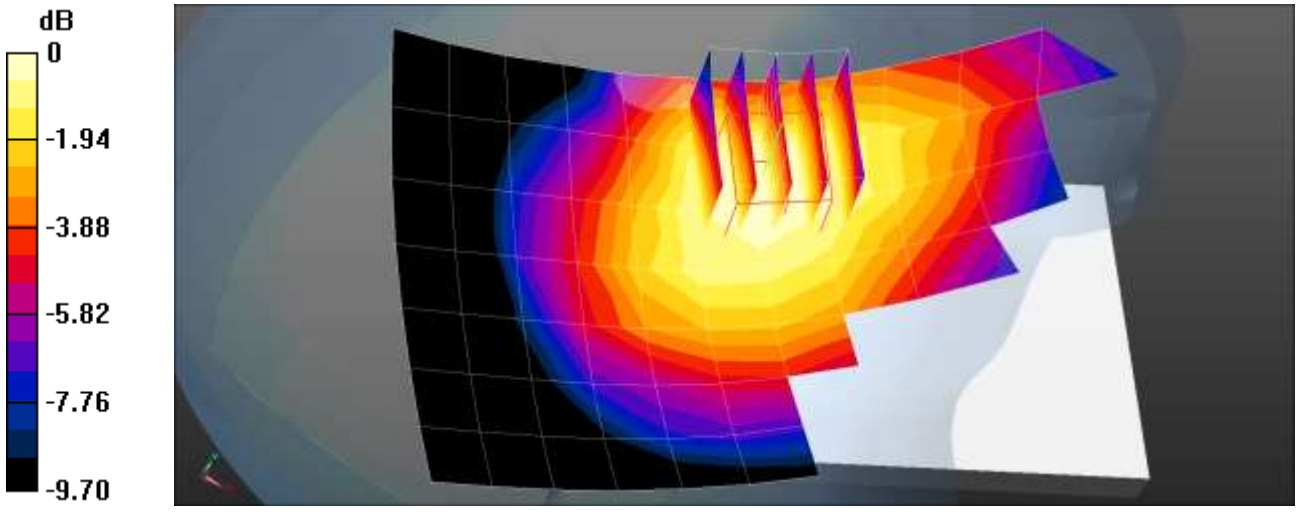
Communication System: UID 0, LTE 14 (0); Frequency: 793 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 793 MHz; σ = 0.911 S/m; ε_r = 41.249; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 793 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 14 Head Right Touch QPSK 10MHz 1RB 0offset 23330ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.186 W/kg

LTE band 14 Head Right Touch QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.864 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.202 W/kg
SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.127 W/kg
Maximum value of SAR (measured) = 0.186 W/kg



0 dB = 0.186 W/kg = −7.30 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.7 ℃
Ambient Temperature:	20.9 ℃
Test Date:	05/18/2020
Plot No.:	14

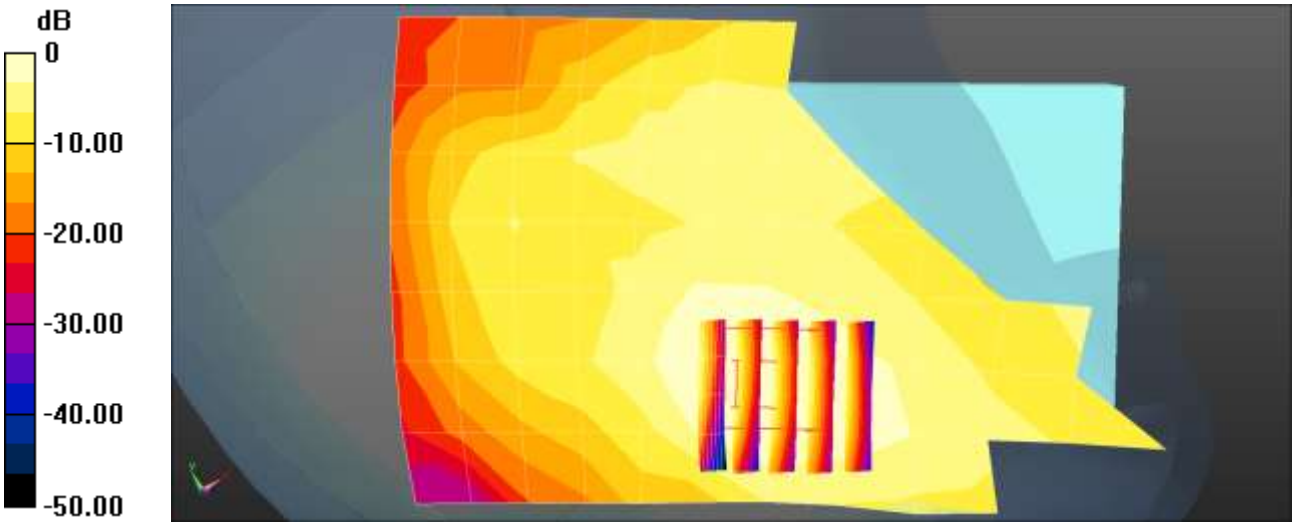
DUT: SM-A516U; Type: Bar
Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.367 S/m; ε_r = 40.006; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1882.5 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 25 Head Left Touch QPSK 20MHz 1RB 99offset 26365ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.256 W/kg

LTE Band 25 Head Left Touch QPSK 20MHz 1RB 99offset 26365ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.452 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.354 W/kg
SAR(1 g) = 0.245 W/kg; SAR(10 g) = 0.156 W/kg
Smallest distance from peaks to all points 3 dB below = 13.1 mm
Ratio of SAR at M2 to SAR at M1 = 69.3%
Maximum value of SAR (measured) = 0.281 W/kg



0 dB = 0.256 W/kg = −5.91 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.7 ℃
Test Date:	05/07/2020
Plot No.:	15

DUT: SM-A516U; Type: Bar

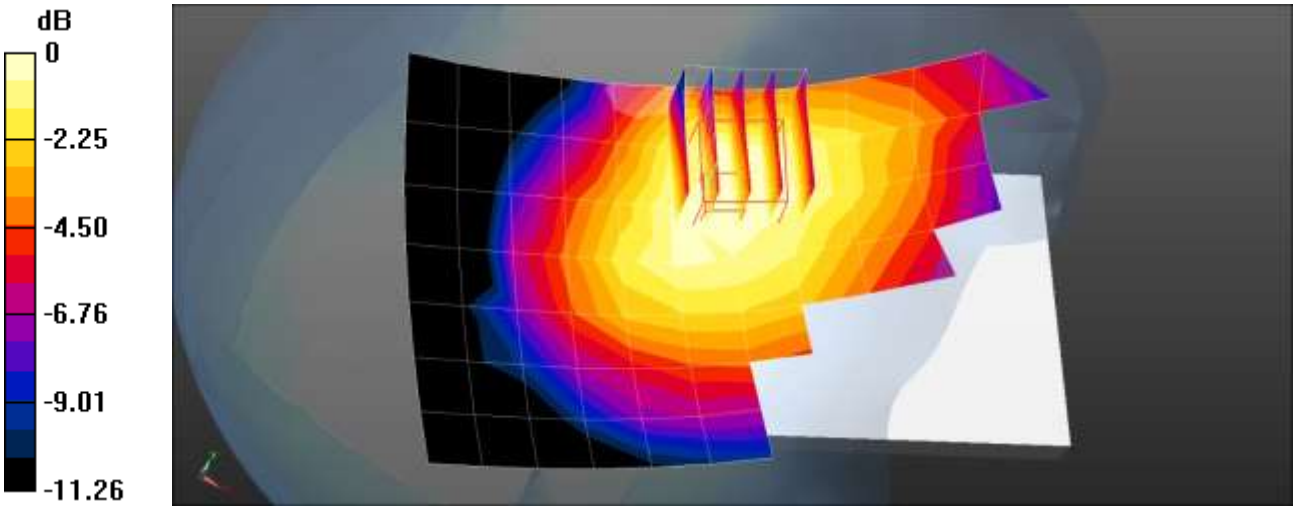
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.923 S/m; ε_r = 42.355; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.03, 9.03, 9.03) @ 831.5 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.190 W/kg

LTE band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.482 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.204 W/kg
SAR(1 g) = 0.161 W/kg; SAR(10 g) = 0.122 W/kg
Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = −7.24 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.4 ℃
Test Date:	05/13/2020
Plot No.:	16

DUT: SM-A516U; Type: Bar

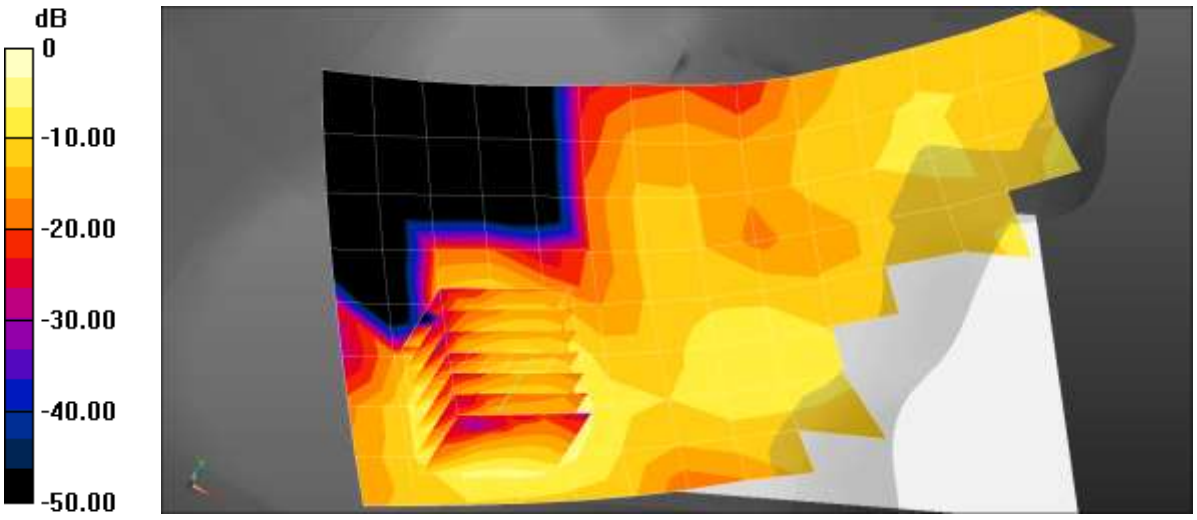
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.641 S/m; ε_r = 40.223; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 30 Head Right Tilt QPSK 10MHz 1RB 0offset 27710ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.146 W/kg

LTE Band 30 Head Right Tilt QPSK 10MHz 1RB 0offset 27710ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.183 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.185 W/kg
SAR(1 g) = 0.102 W/kg; SAR(10 g) = 0.051 W/kg
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 56.9%
Maximum value of SAR (measured) = 0.154 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.8 ℃
Test Date:	06/15/2020
Plot No.:	17

DUT: SM-A516U; Type: Bar

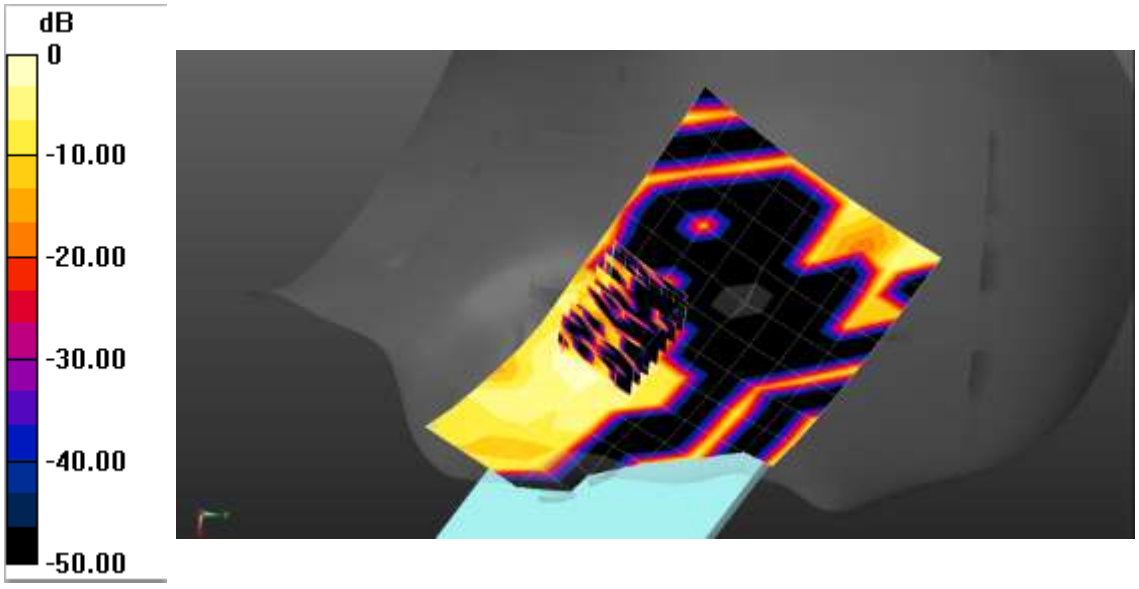
Communication System: UID 0, LTE Band 40 (0); Frequency: 2310 MHz;Duty Cycle: 1:1.58125
Medium parameters used: f = 2310 MHz; σ = 1.65 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 Head Left Touch QPSK 10MHz 25RB 0offset 38750ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.00491 W/kg

LTE Band 40 Head Left Touch QPSK 10MHz 25RB 0offset 38750ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.00872 W/kg
SAR(1 g) = 0.00128 W/kg; SAR(10 g) = 0.000359 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 26.4%
Maximum value of SAR (measured) = 0.00429 W/kg



0 dB = 0.00491 W/kg = −23.09 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/16/2020
Plot No.:	18

DUT: SM-A516U; Type: Bar

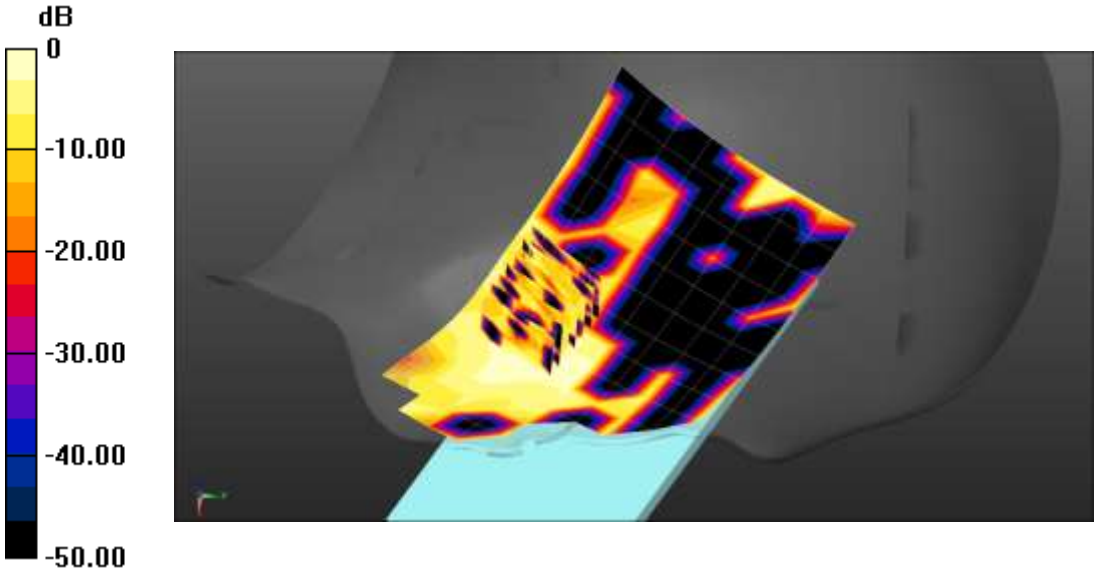
Communication System: UID 0, LTE Band 40 (0); Frequency: 2355 MHz;Duty Cycle: 1:1.58125
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.705 S/m; ε_r = 39.961; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2355 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 Head Left Touch QPSK 10MHz 25RB 0offset 39200ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.00474 W/kg

LTE Band 40 Head Left Touch QPSK 10MHz 25RB 0offset 39200ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.00905 W/kg
SAR(1 g) = 0.0014 W/kg; SAR(10 g) = 0.000425 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 31.3%
Maximum value of SAR (measured) = 0.00425 W/kg



0 dB = 0.00474 W/kg = −23.24 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.2 ℃
Test Date:	06/23/2020
Plot No.:	19

DUT: SM-A516U; Type: Bar

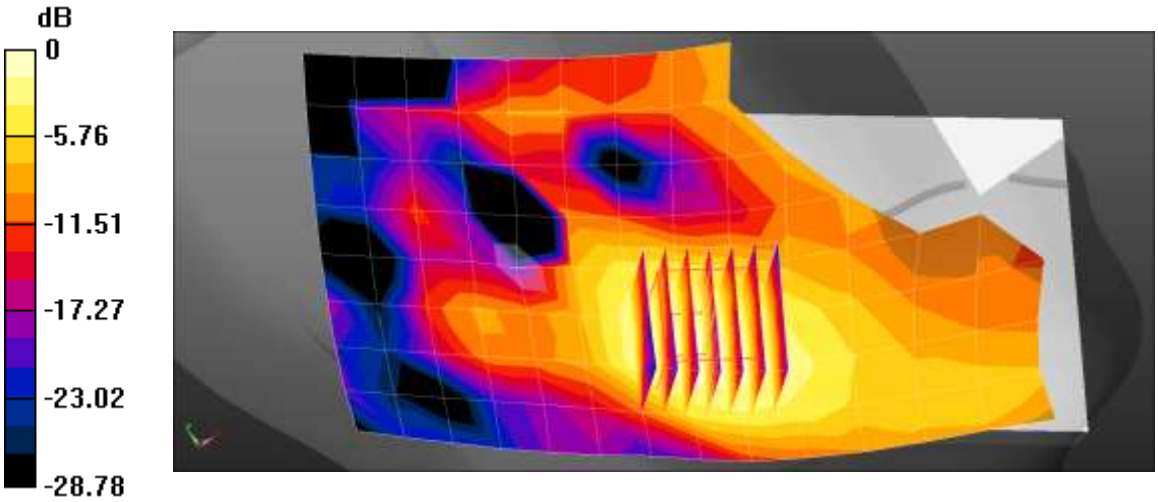
Communication System: UID 0, LTE Band41 (0); Frequency: 2506 MHz;Duty Cycle: 1:1.58
Medium parameters used (interpolated): f = 2506 MHz; σ = 1.862 S/m; ε_r = 38.284; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2506 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 0offset 39750ch HPUE/Area Scan (9x16x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0911 W/kg

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 0offset 39750ch HPUE/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.4570 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.115 W/kg
SAR(1 g) = 0.066 W/kg; SAR(10 g) = 0.035 W/kg
Maximum value of SAR (measured) = 0.0971 W/kg



0 dB = 0.0971 W/kg = −10.13 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/28/2020
Plot No.:	20

DUT: SM-A516U; Type: Bar

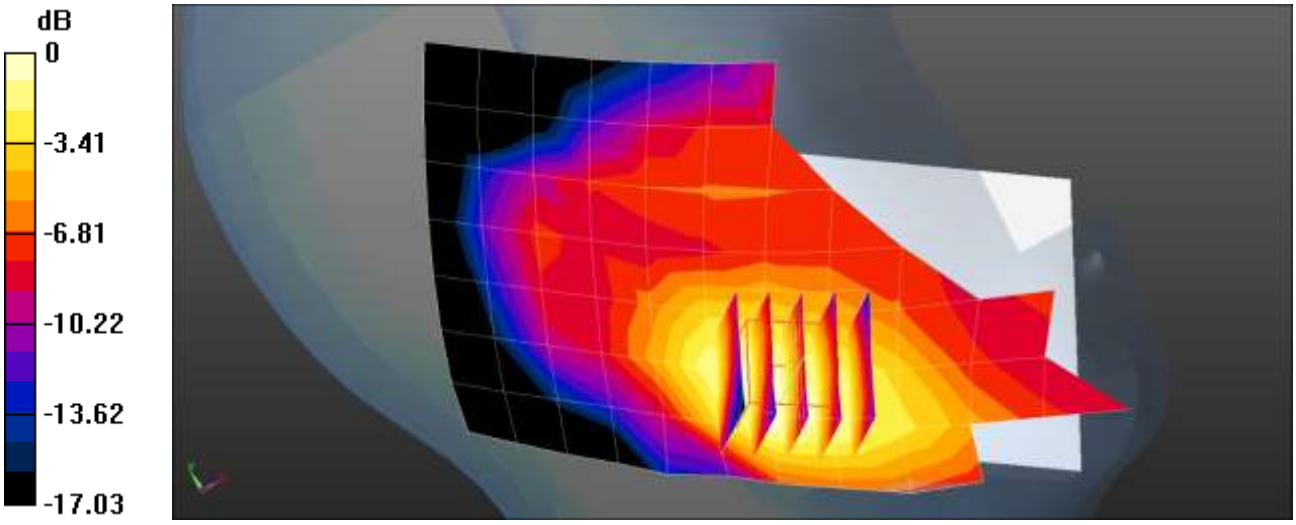
Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.386 S/m; ε_r = 39.833; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1745 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 99offset 132322ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.185 W/kg

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 99offset 132322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.874 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.251 W/kg
SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.113 W/kg
Maximum value of SAR (measured) = 0.203 W/kg



0 dB = 0.203 W/kg = −6.93 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/08/2020
Plot No.:	21

DUT: SM-A516U; Type: Bar

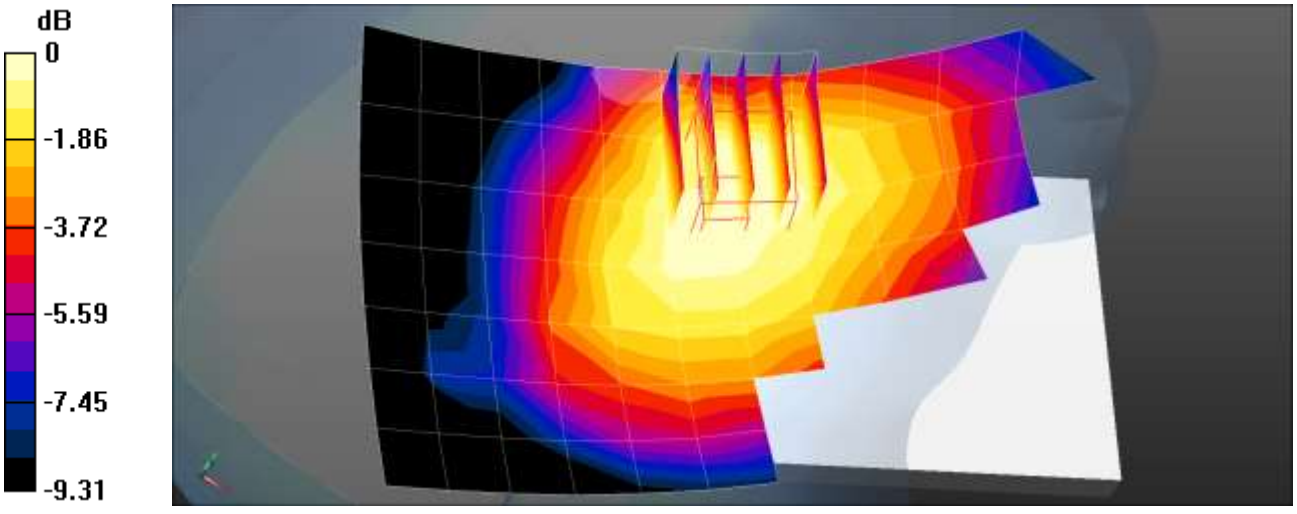
Communication System: UID 0, LTE Band 71 (0); Frequency: 683 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 683 MHz; σ = 0.867 S/m; ε_r = 43.706; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 683 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 71 Head Right Touch QPSK 20MHz 1RB 99offset 133322ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.200 W/kg

LTE band 71 Head Right Touch QPSK 20MHz 1RB 99offset 133322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.521 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.143 W/kg
Maximum value of SAR (measured) = 0.202 W/kg



0 dB = 0.202 W/kg = −6.95 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.7 ℃
Test Date:	06/19/2020
Plot No.:	22

DUT: SM-A516U; Type: Bar

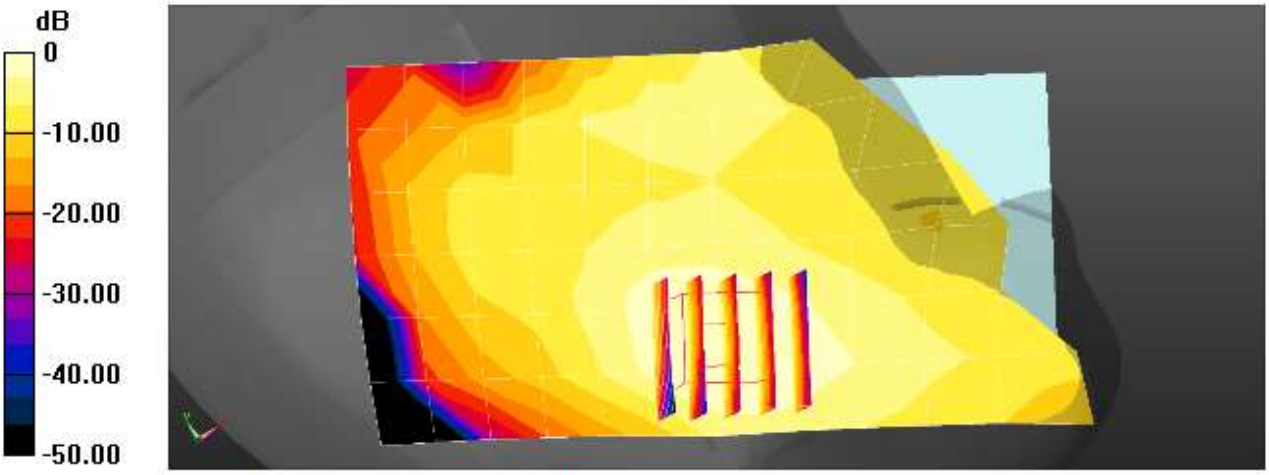
Communication System: UID 0, NR Band n2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.436 S/m; ε_r = 38.43; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n2 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 380000ch/Area Scan (7x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.303 W/kg

NR Band n2 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 380000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.531 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.359 W/kg
SAR(1 g) = 0.232 W/kg; SAR(10 g) = 0.144 W/kg
Smallest distance from peaks to all points 3 dB below = 13.5 mm
Ratio of SAR at M2 to SAR at M1 = 65.9%
Maximum value of SAR (measured) = 0.313 W/kg



0 dB = 0.303 W/kg = -5.19 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.5 ℃
Ambient Temperature:	22.8 ℃
Test Date:	06/08/2020
Plot No.:	23

DUT: SM-A516U; Type: Bar

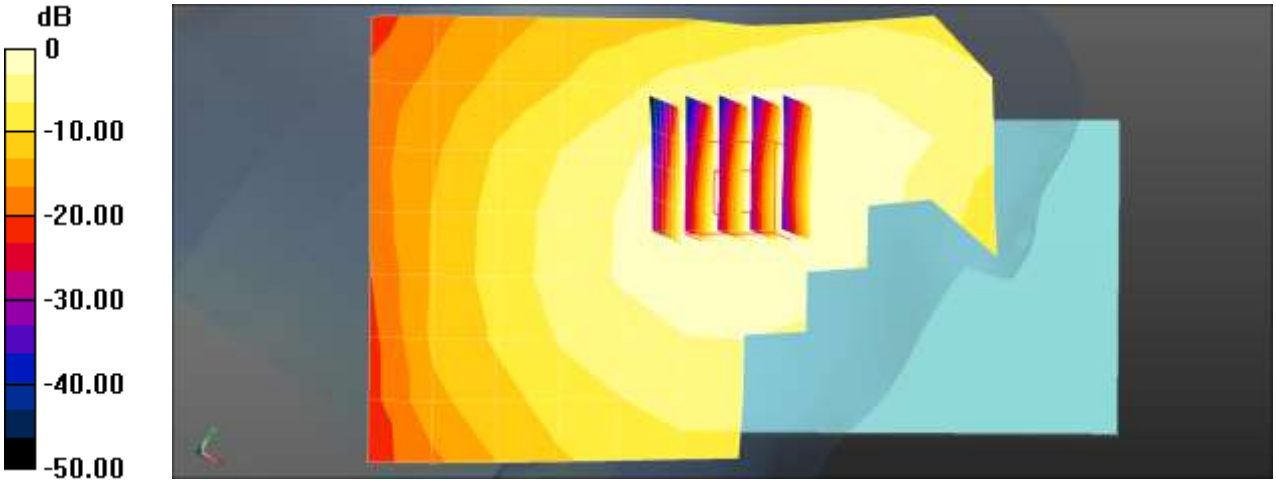
Communication System: UID 0, NR Band n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.923 S/m; ε_r = 42.72; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22); Calibrated: 2019-07-23;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n5 Head Right Touch DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.266 W/kg

NR band n5 Head Right Touch DFT-s QPSK 20MHz 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.848 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.324 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.186 W/kg
Maximum value of SAR (measured) = 0.272 W/kg



0 dB = 0.266 W/kg = −5.75 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/04/2020
Plot No.:	24

DUT: SM-A516U; Type: Bar

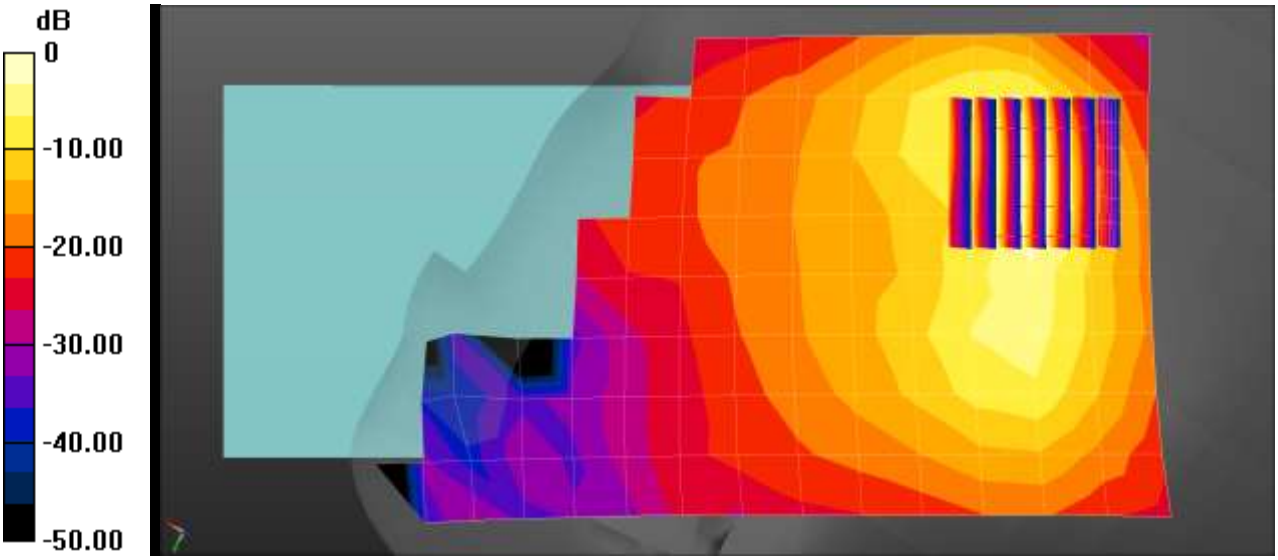
Communication System: UID 0, NR band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.94 S/m; ε_r = 37.847; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.49, 7.49, 7.49); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n41 Head Right Tilt DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.81 W/kg

NR Band n41 Head Right Tilt DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.26 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 2.98 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.370 W/kg
Maximum value of SAR (measured) = 2.19 W/kg



0 dB = 0.265 W/kg = −5.77 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.6 ℃
Ambient Temperature:	19.7 ℃
Test Date:	06/11/2020
Plot No.:	25

DUT: SM-A516U; Type: Bar

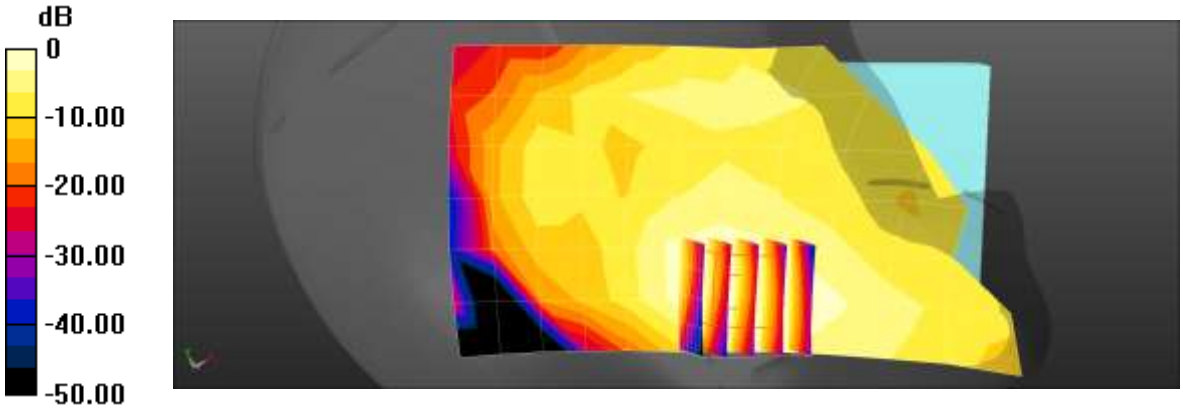
Communication System: UID 0, NR Band n66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.311 S/m; ε_r = 40.35; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.62, 8.62, 8.62); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 344000ch/Area Scan (7x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.130 W/kg

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 344000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.056 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.155 W/kg
SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.067 W/kg
Maximum value of SAR (measured) = 0.138 W/kg



0 dB = 0.130 W/kg = −8.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/09/2020
Plot No.:	26

DUT: SM-A516U; Type: Bar

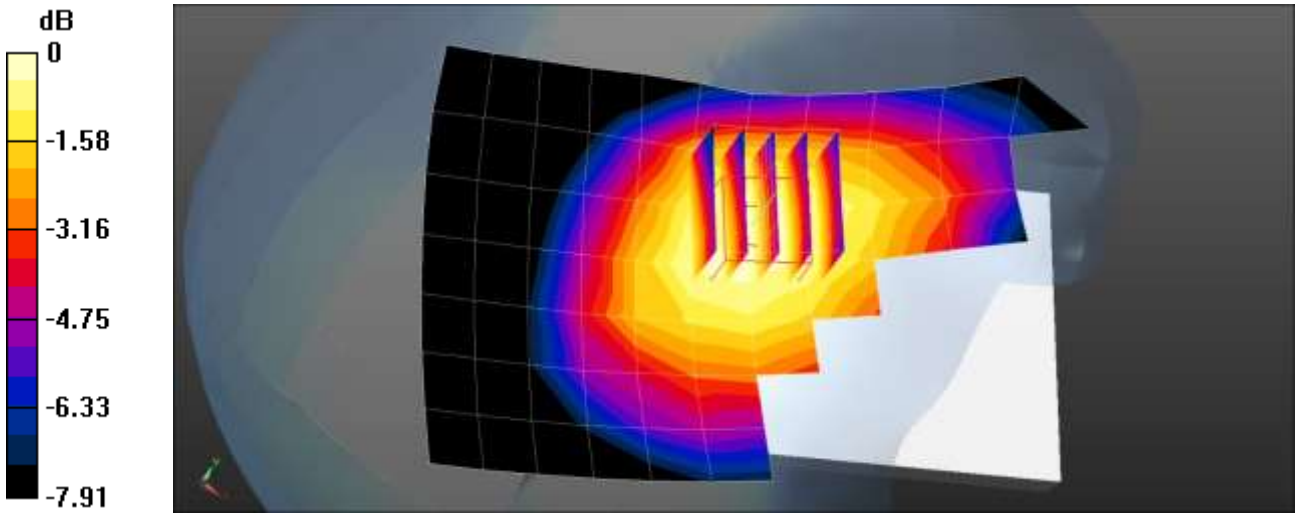
Communication System: UID 0, NR Band n71 (0); Frequency: 680.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 680.5 MHz; σ = 0.841 S/m; ε_r = 42.913; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.52, 6.52, 6.52) @ 680.5 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n71 Head Right Touch DFT-s QPSK 20MHz 1RB 104offset 136100ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.164 W/kg

NR band n71 Head Right Touch DFT-s QPSK 20MHz 1RB 104offset 136100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.196 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.187 W/kg
SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.126 W/kg
Maximum value of SAR (measured) = 0.169 W/kg



0 dB = 0.169 W/kg = −7.72 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	27

DUT: SM-A516U; Type: Bar

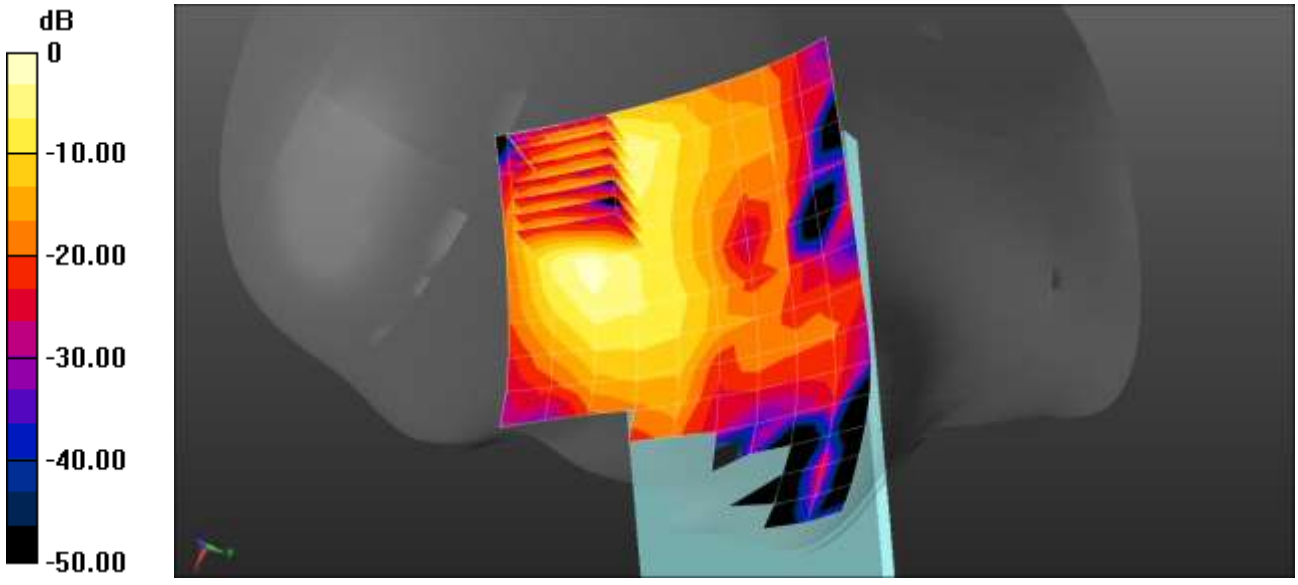
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.829 S/m; ε_r = 39.213; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2462 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

802.11b Head Right Touch 1Mbps 11ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.311 W/kg

802.11b Head Right Touch 1Mbps 11ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.975 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.466 W/kg
SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.068 W/kg
Smallest distance from peaks to all points 3 dB below = 5 mm
Ratio of SAR at M2 to SAR at M1 = 36.9%
Maximum value of SAR (measured) = 0.310 W/kg



0 dB = 0.311 W/kg = −5.07 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.6 ℃
Ambient Temperature:	19.7 ℃
Test Date:	06/11/2020
Plot No.:	28

DUT: SM-A516U; Type: Bar

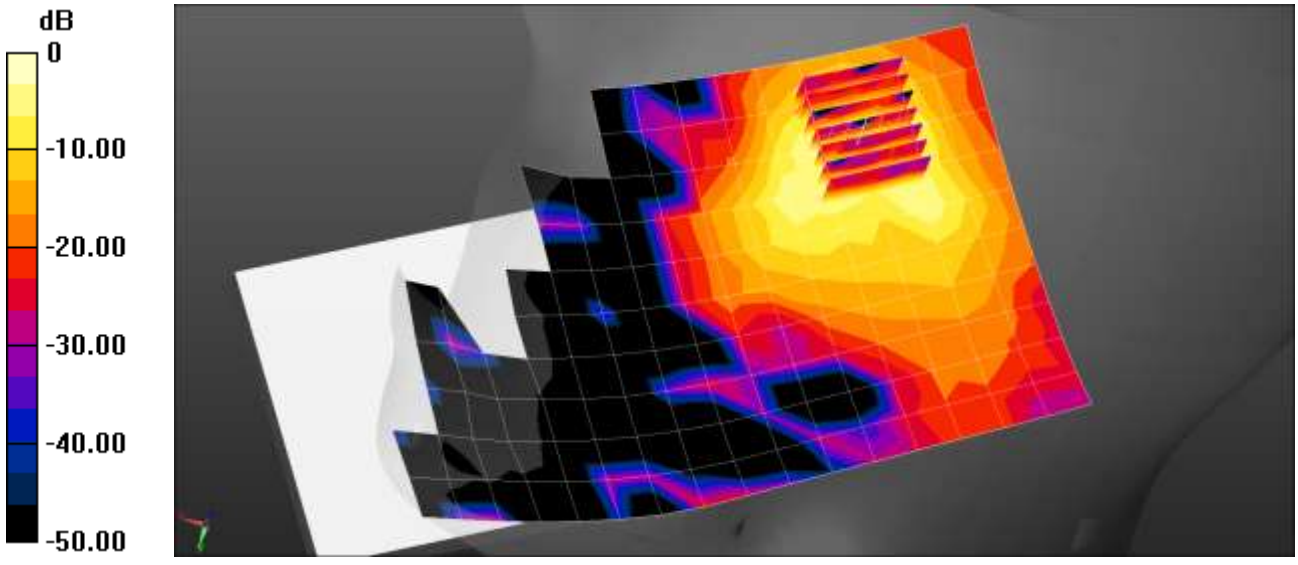
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5290 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5290 MHz; σ = 4.637 S/m; ε_r = 36.955; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.57, 5.57, 5.57) @ 5290 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

802.11ac80 Head Right Touch MCS0 58ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.665 W/kg

802.11ac80 Head Right Touch MCS0 58ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.221 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.074 W/kg
Smallest distance from peaks to all points 3 dB below = 4.4 mm
Ratio of SAR at M2 to SAR at M1 = 57%
Maximum value of SAR (measured) = 0.587 W/kg



0 dB = 0.587 W/kg = -2.31 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	29

DUT: SM-A516U; Type: Bar

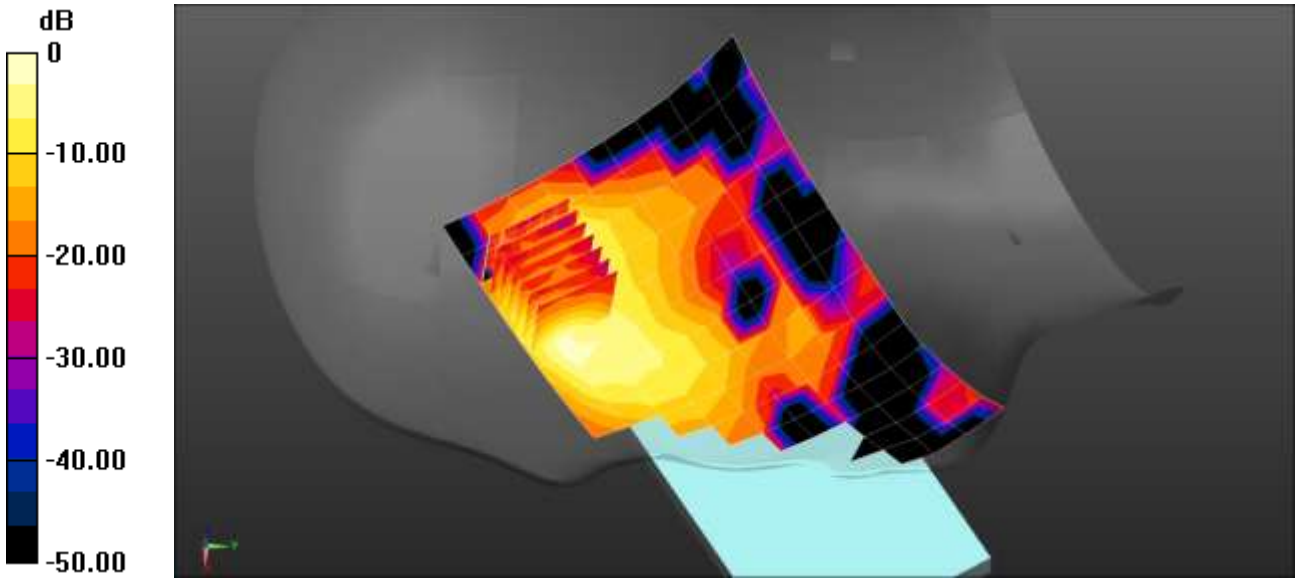
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.302
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.809 S/m; ε_r = 39.286; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2441 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

BT Head Right Touch DH5 39ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.123 W/kg

BT Head Right Touch DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.067 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.029 W/kg
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 34.8%
Maximum value of SAR (measured) = 0.148 W/kg



0 dB = 0.123 W/kg = −9.08 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.2 ℃
Test Date:	06/18/2020
Plot No.:	30

DUT: SM-A516U; Type: Bar

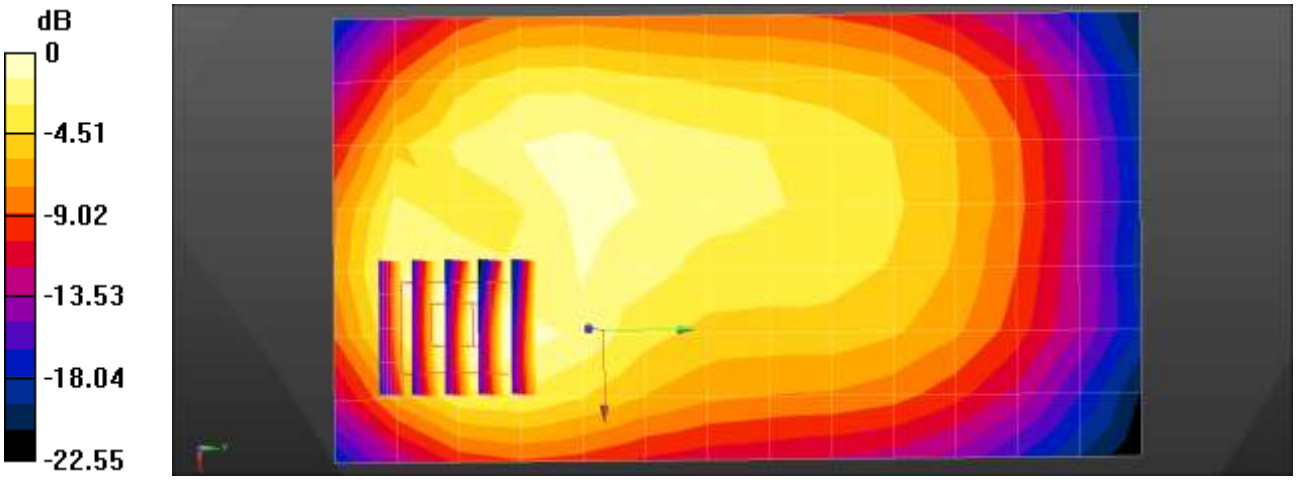
Communication System: UID 0, CDMA (0); Frequency: 820 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 820.1 MHz; σ = 0.904 S/m; ε_r = 41.973; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC10 Body worn Rear 560ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.533 W/kg

CDMA BC10 Body worn Rear 560ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.50 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.645 W/kg
SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.225 W/kg
Maximum value of SAR (measured) = 0.527 W/kg



0 dB = 0.533 W/kg = −2.74 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/22/2020
Plot No.:	31

DUT: SM-A516U; Type: Bar

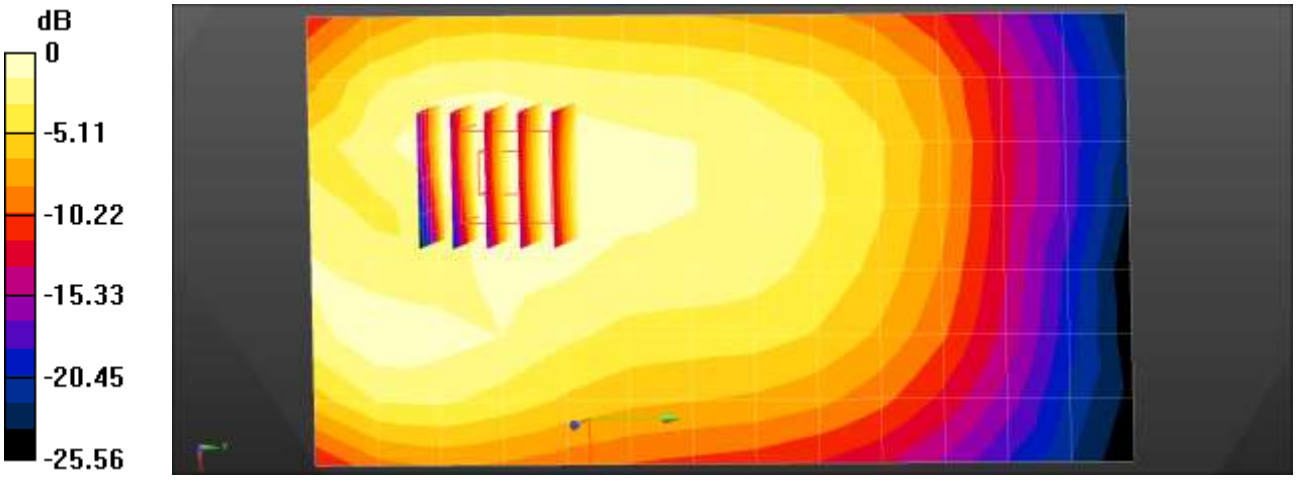
Communication System: UID 0, CDMA (0); Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.947 S/m; ε_r = 41.673; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC0 Body worn Rear 384ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.452 W/kg

CDMA BC0 Body worn Rear 384ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.11 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.532 W/kg
SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.264 W/kg
Maximum value of SAR (measured) = 0.472 W/kg



0 dB = 0.452 W/kg = −3.45 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.9 ℃
Ambient Temperature:	20.0 ℃
Test Date:	06/18/2020
Plot No.:	32

DUT: SM-A516U; Type: Bar

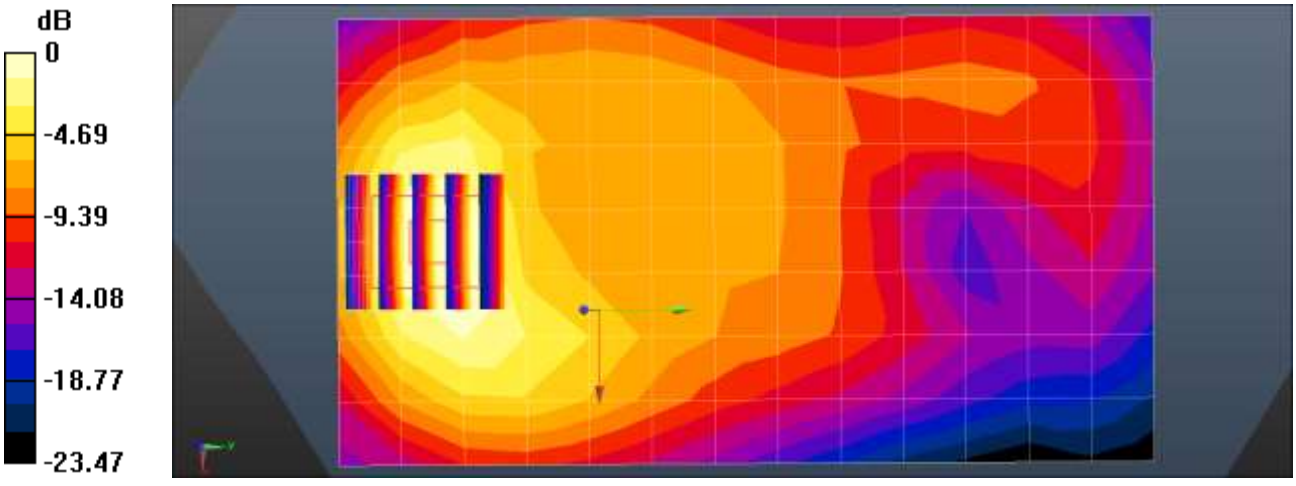
Communication System: UID 0, CDMA PCS EVDO(1900MHz) (0); Frequency: 1908.75 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.422 S/m; ε_r = 38.487; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

CDMA1900 BodyWorn Front RC3 SO55 1175ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.31 W/kg

CDMA1900 BodyWorn Front RC3 SO55 1175ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.16 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.93 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.619 W/kg
Smallest distance from peaks to all points 3 dB below = 12.8 mm
Ratio of SAR at M2 to SAR at M1 = 58%
Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	33

DUT: SM-A516U; Type: Bar

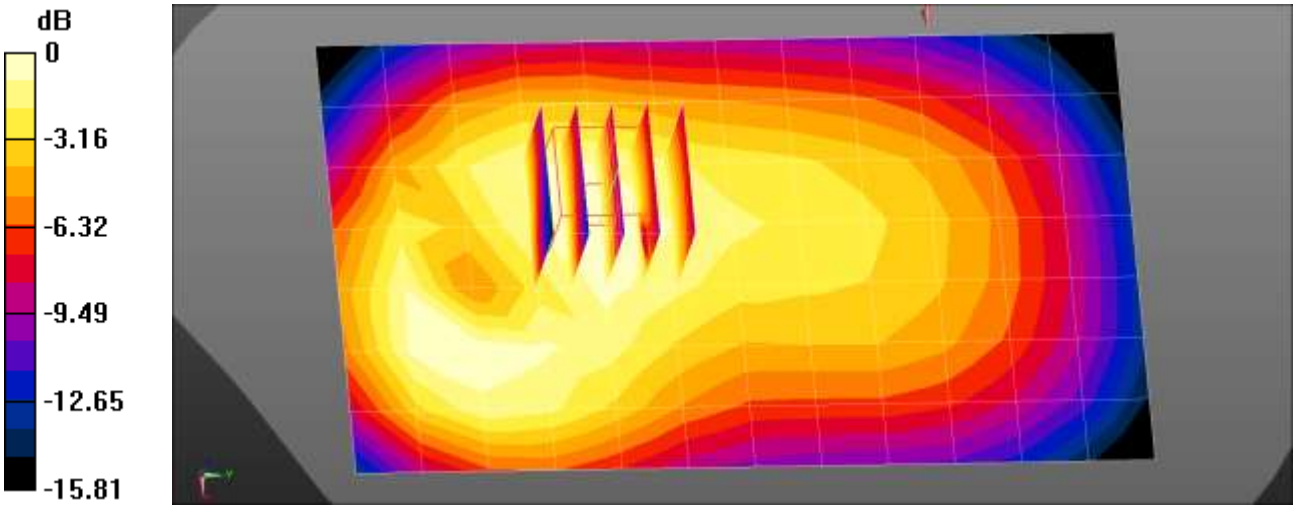
Communication System: UID 0, GSM850 GPRS 3TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.77013
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 42.58; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 836.6 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

GSM850 Body Rear 3Tx Bodyworn 190ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.427 W/kg

GSM850 Body Rear 3Tx Bodyworn 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.52 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.527 W/kg
SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.250 W/kg
Maximum value of SAR (measured) = 0.423 W/kg



0 dB = 0.423 W/kg = −3.74 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.3 ℃
Test Date:	05/27/2020
Plot No.:	34

DUT: SM-A516U; Type: Bar

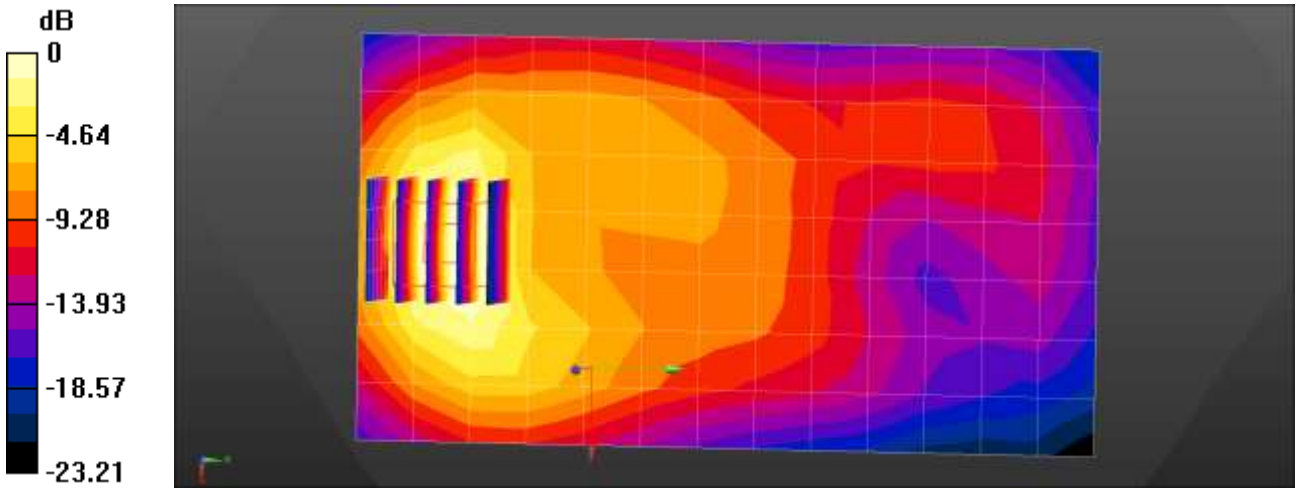
Communication System: UID 0, GSM 1900 3Tx (0); Frequency: 1880 MHz;Duty Cycle: 1:2.77013
Medium parameters used: f = 1880 MHz; σ = 1.38 S/m; ε_r = 39.275; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

GSM1900 BodyWorn Front 3Tx 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.517 W/kg

GSM1900 BodyWorn Front 3Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.619 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.755 W/kg
SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.247 W/kg
Maximum value of SAR (measured) = 0.641 W/kg



0 dB = 0.517 W/kg = −2.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	35

DUT: SM-A516U; Type: Bar

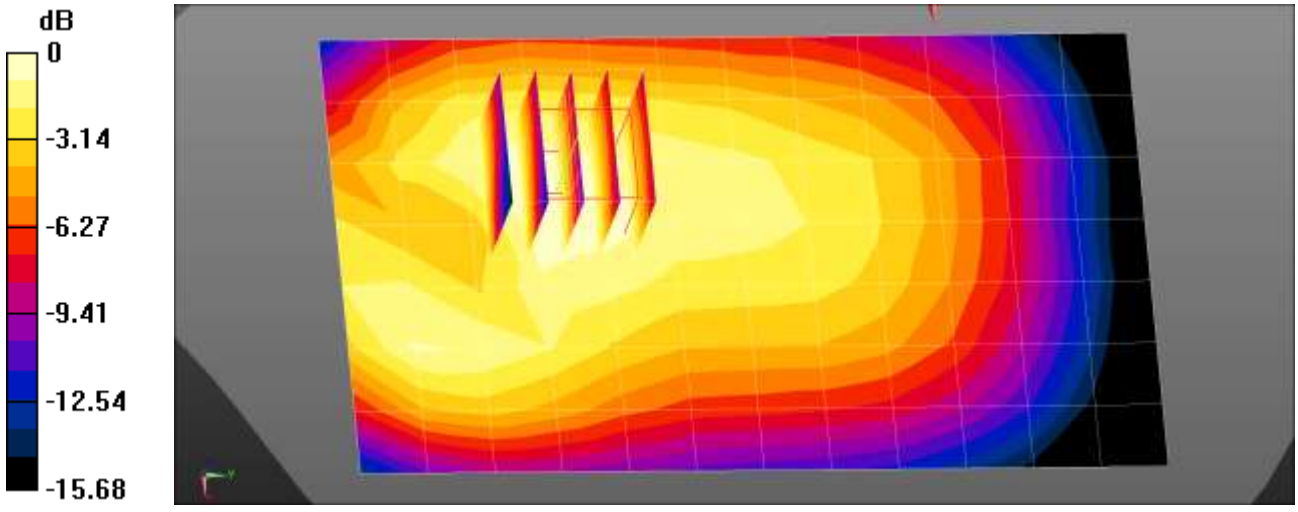
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 42.58; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 836.6 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

UMTS band 5 Body Rear 4183ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.259 W/kg

UMTS band 5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.88 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.338 W/kg
SAR(1 g) = 0.244 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.276 W/kg



0 dB = 0.276 W/kg = −5.59 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/25/2020
Plot No.:	36

DUT: SM-A516U; Type: Bar

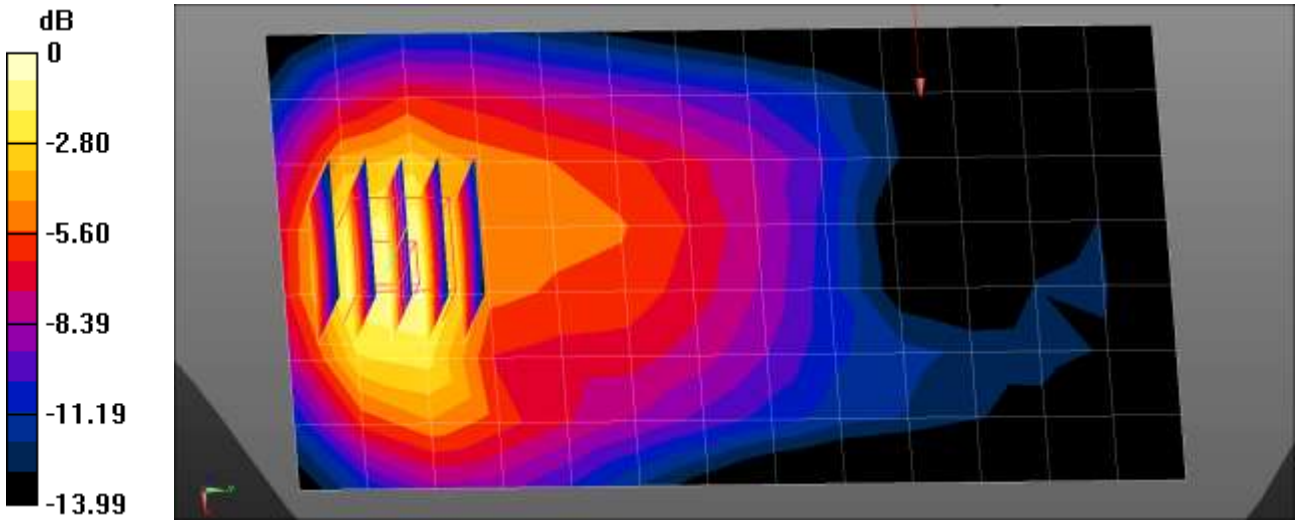
Communication System: UID 0, UMTS 1700 (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.33 S/m; ε_r = 40.39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B4 Body Rear 1412ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.291 W/kg

UMTS B4 Body Rear 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.449 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.444 W/kg
SAR(1 g) = 0.293 W/kg; SAR(10 g) = 0.179 W/kg
Maximum value of SAR (measured) = 0.349 W/kg



0 dB = 0.349 W/kg = −4.57 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.4 ℃
Test Date:	06/08/2020
Plot No.:	37

DUT: SM-A516U; Type: Bar

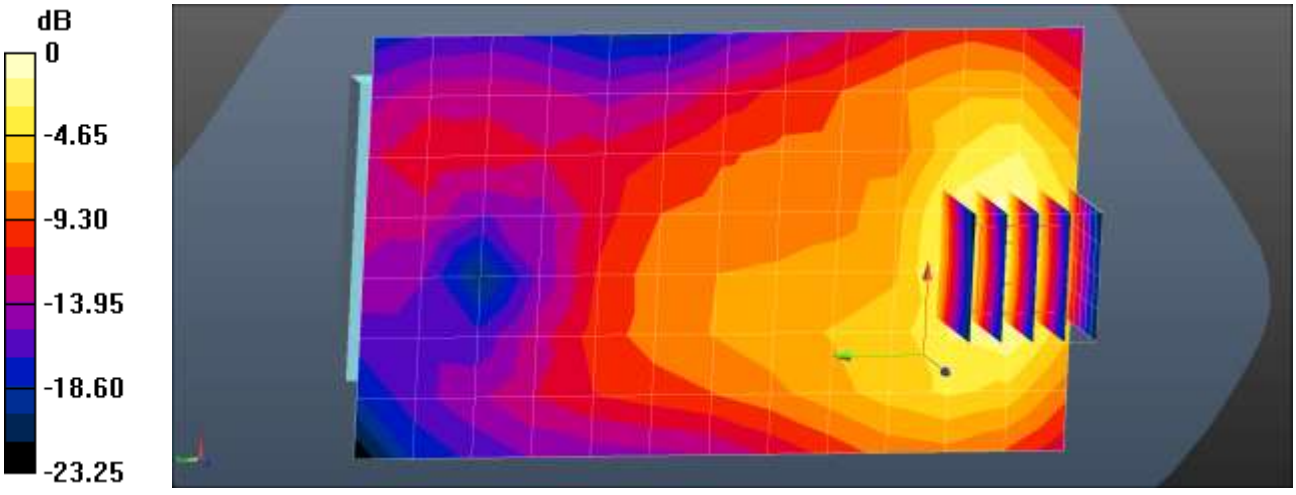
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.394 S/m; ε_r = 39.31; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.75, 7.75, 7.75); Calibrated: 2019-11-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B2 Body Rear 9400ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.554 W/kg

UMTS B2 Body Rear 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.860 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.707 W/kg
SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.241 W/kg
Maximum value of SAR (measured) = 0.601 W/kg



0 dB = 0.554 W/kg = −2.56 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.5 ℃
Ambient Temperature:	23.8 ℃
Test Date:	06/04/2020
Plot No.:	38

DUT: SM-A516U; Type: Bar

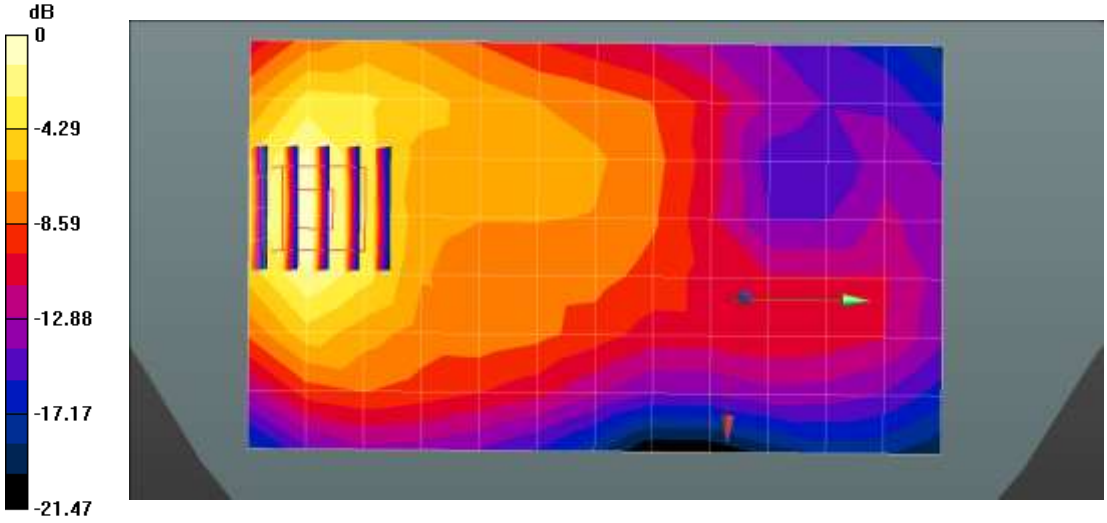
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.362 S/m; ε_r = 39.437; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 2 Body Rear QPSK 20MHz 1RB 0offset 19100ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.38 W/kg

LTE band 2 Body Rear QPSK 20MHz 1RB 0offset 19100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.46 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.545 W/kg
Smallest distance from peaks to all points 3 dB below = 14.3 mm
Ratio of SAR at M2 to SAR at M1 = 58.6%
Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.39 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.4 ℃
Ambient Temperature:	21.6 ℃
Test Date:	05/20/2020
Plot No.:	39

DUT: SM-A516U; Type: Bar

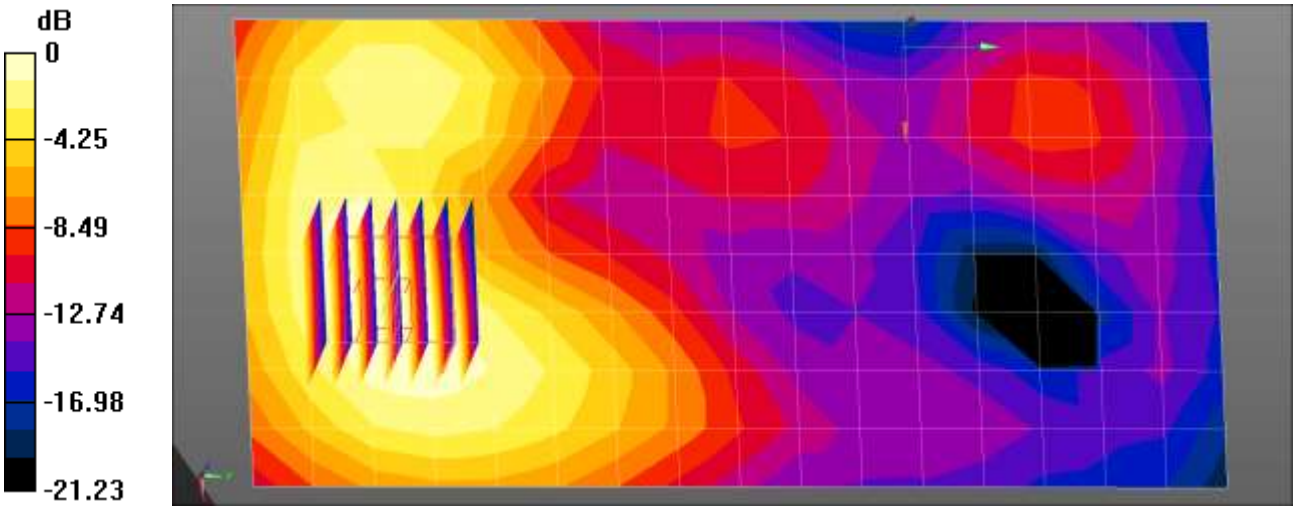
Communication System: UID 0, LTE Band7 (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.865 S/m; ε_r = 38.288; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2510 MHz; Calibrated: 2019-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 7 Body Front QPSK 20MHz 1RB 0offset 20850ch Bodyworn/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.464 W/kg

LTE Band 7 Body Front QPSK 20MHz 1RB 0offset 20850ch Bodyworn/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.278 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.557 W/kg
SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.171 W/kg
Maximum value of SAR (measured) = 0.462 W/kg



0 dB = 0.462 W/kg = −3.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3 ℃
Ambient Temperature:	21.5 ℃
Test Date:	05/11/2020
Plot No.:	40

DUT: SM-A516U; Type: Bar

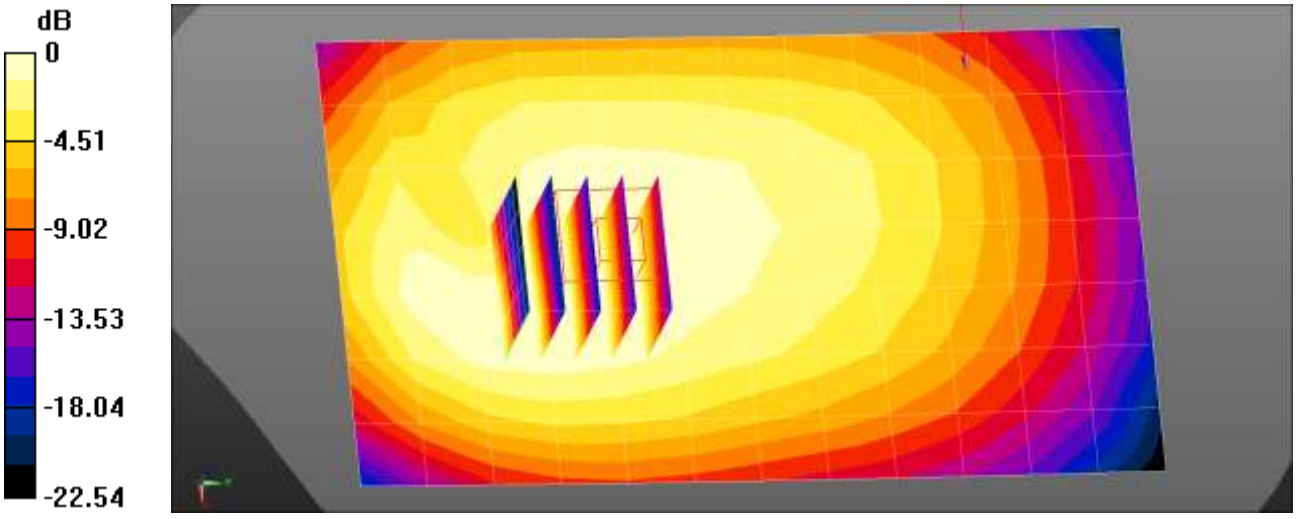
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.863 S/m; ε_r = 44.033; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 707.5 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.260 W/kg

LTE band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.40 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.149 W/kg
Maximum value of SAR (measured) = 0.265 W/kg



0 dB = 0.260 W/kg = −5.85 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/12/2020
Plot No.:	41

DUT: SM-A516U; Type: Bar

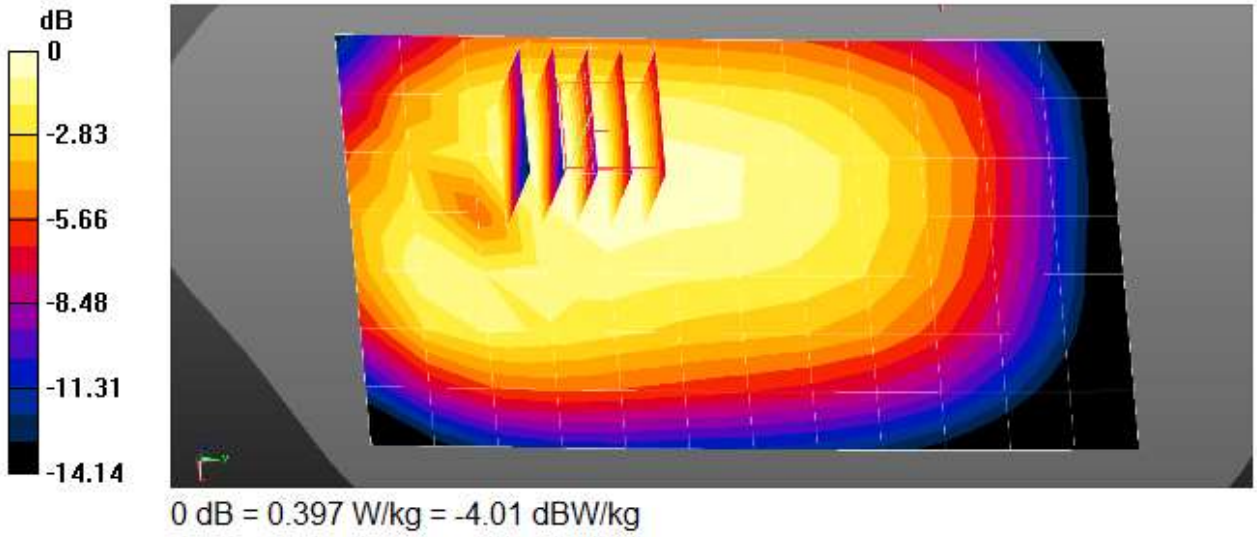
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.933 S/m; ε_r = 42.007; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 782 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.387 W/kg

LTE band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.47 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.437 W/kg
SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.236 W/kg
Maximum value of SAR (measured) = 0.397 W/kg



0 dB = 0.397 W/kg = -4.01 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/13/2020
Plot No.:	42

DUT: SM-A516U; Type: Bar

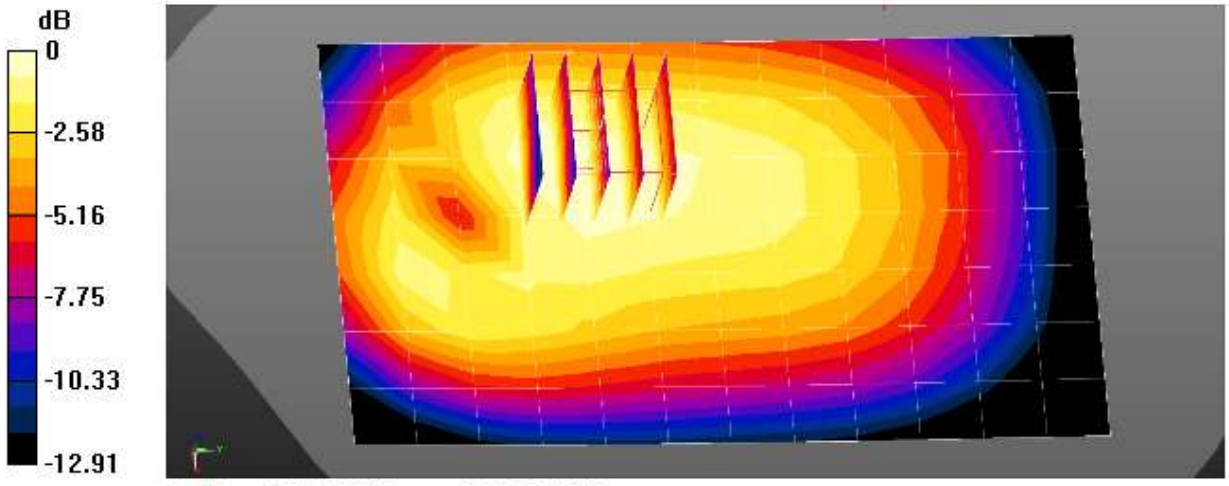
Communication System: UID 0, LTE 14 (0); Frequency: 793 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 793 MHz; σ = 0.911 S/m; ε_r = 41.249; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 793 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 14 Body Rear QPSK 10MHz 1RB 0offset 23330ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.396 W/kg

LTE band 14 Body Rear QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.54 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.439 W/kg
SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.238 W/kg
Maximum value of SAR (measured) = 0.398 W/kg



0 dB = 0.398 W/kg = -4.00 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.7 ℃
Ambient Temperature:	20.9 ℃
Test Date:	05/18/2020
Plot No.:	43

DUT: SM-A516U; Type: Bar

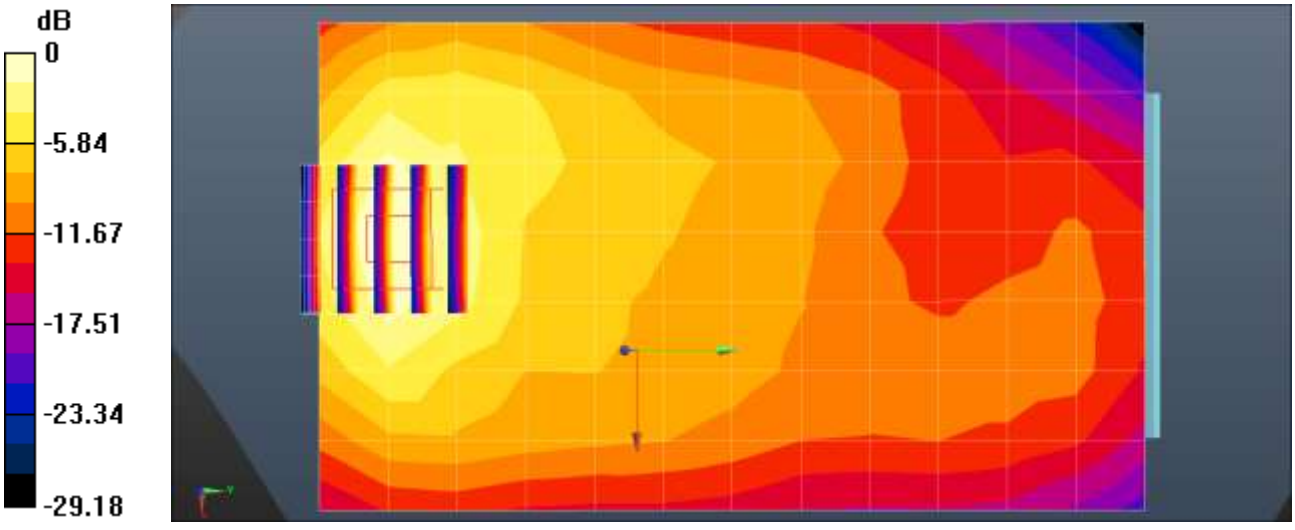
Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.367 S/m; ε_r = 40.006; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1882.5 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 25 Body Rear QPSK 20MHz 1RB 99offset 26365ch body worn/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.892 W/kg

LTE Band 25 Body Rear QPSK 20MHz 1RB 99offset 26365ch body worn/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.285 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.746 W/kg; SAR(10 g) = 0.440 W/kg
Smallest distance from peaks to all points 3 dB below = 14.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.8%
Maximum value of SAR (measured) = 0.901 W/kg



0 dB = 0.892 W/kg = −0.50 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.7 ℃
Test Date:	05/07/2020
Plot No.:	44

DUT: SM-A516U; Type: Bar

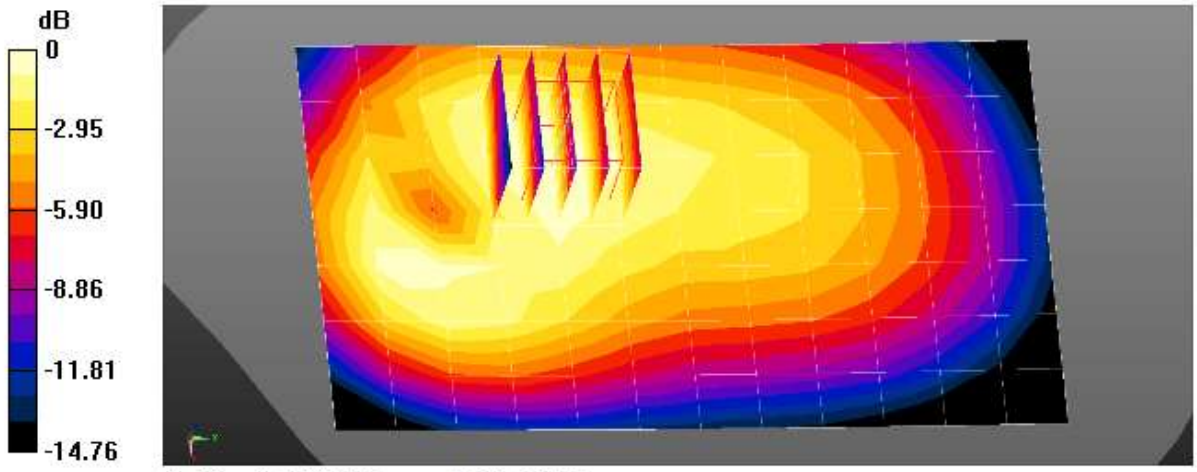
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.923 S/m; ε_r = 42.355; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.03, 9.03, 9.03) @ 831.5 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.376 W/kg

LTE band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.36 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.430 W/kg
SAR(1 g) = 0.303 W/kg; SAR(10 g) = 0.213 W/kg
Maximum value of SAR (measured) = 0.381 W/kg



0 dB = 0.381 W/kg = -4.19 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.4 ℃
Test Date:	05/13/2020
Plot No.:	45

DUT: SM-A516U; Type: Bar

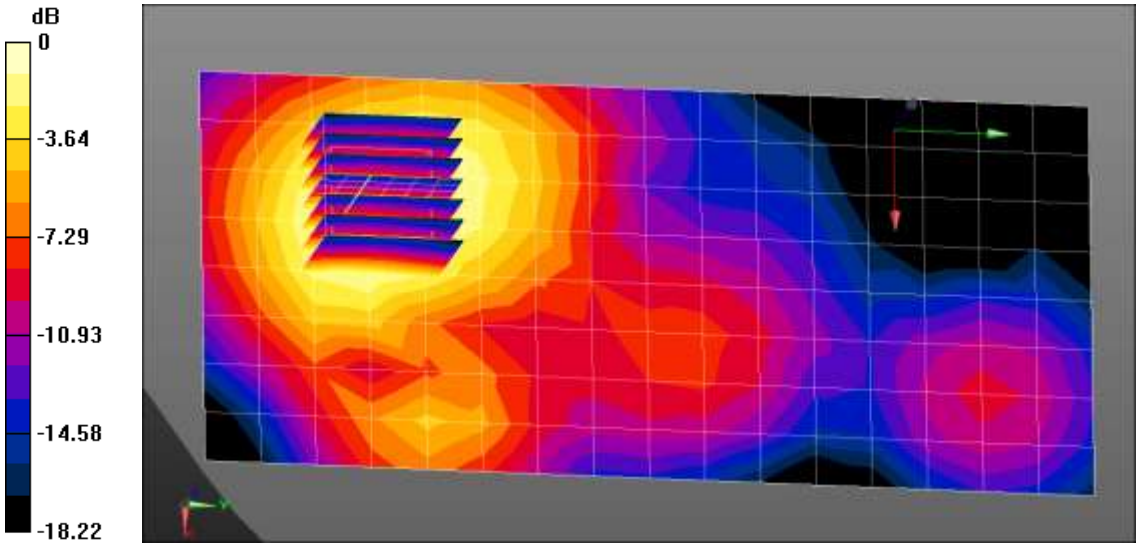
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.641 S/m; ε_r = 40.223; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 30 Body Rear QPSK 10MHz 1RB 0offset 27710ch body worn/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.446 W/kg

LTE Band 30 Body Rear QPSK 10MHz 1RB 0offset 27710ch body worn/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.545 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.543 W/kg
SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.168 W/kg
Smallest distance from peaks to all points 3 dB below = 16.3 mm
Ratio of SAR at M2 to SAR at M1 = 53.9%
Maximum value of SAR (measured) = 0.448 W/kg



0 dB = 0.448 W/kg = -3.49 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.8 ℃
Test Date:	06/15/2020
Plot No.:	46

DUT: SM-A516U; Type: Bar

Communication System: UID 0, LTE Band 40 (0); Frequency: 2310 MHz;Duty Cycle: 1:1.58125
Medium parameters used: f = 2310 MHz; σ = 1.65 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Flat Section

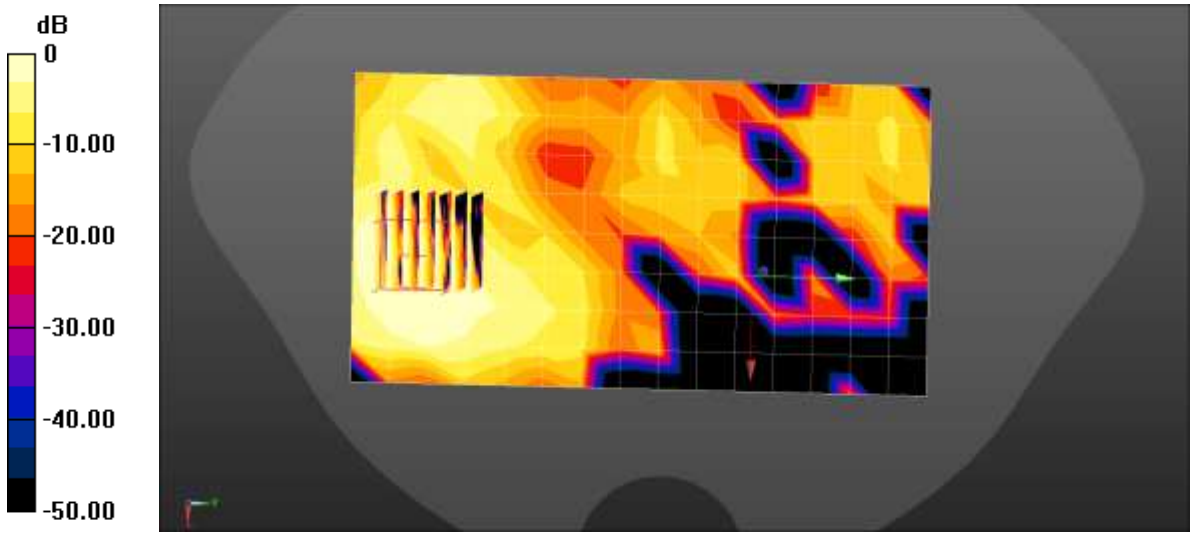
DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 BodyWorn Front QPSK 10MHz 1RB 0offset 38750ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0135 W/kg

LTE Band 40 BodyWorn Front QPSK 10MHz 1RB 0offset 38750ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0390 W/kg
SAR(1 g) = 0.00741 W/kg; SAR(10 g) = 0.00311 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 42.9%

Maximum value of SAR (measured) = 0.0133 W/kg



0 dB = 0.0135 W/kg = −18.70 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/16/2020
Plot No.:	47

DUT: SM-A516U; Type: Bar

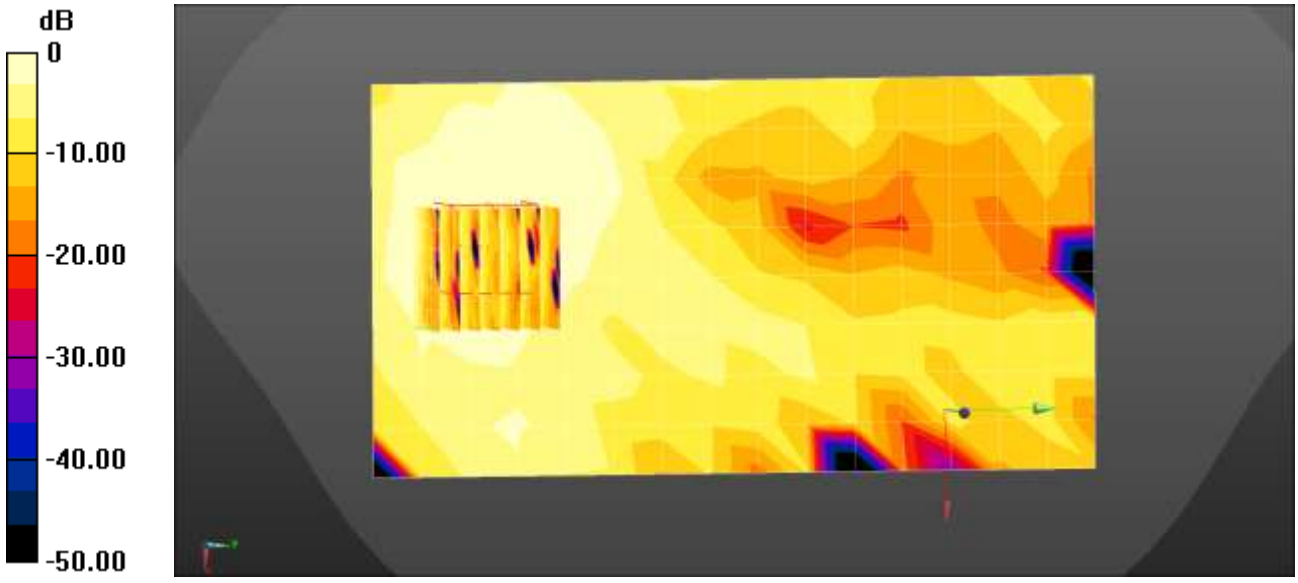
Communication System: UID 0, LTE Band 40 (0); Frequency: 2355 MHz;Duty Cycle: 1:1.58125
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.705 S/m; ε_r = 39.961; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2355 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 BodyWorn Rear QPSK 10MHz 1RB 0offset 39200ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0137 W/kg

LTE Band 40 BodyWorn Rear QPSK 10MHz 1RB 0offset 39200ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0180 W/kg
SAR(1 g) = 0.00865 W/kg; SAR(10 g) = 0.00429 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 44.2%
Maximum value of SAR (measured) = 0.0143 W/kg



0 dB = 0.0137 W/kg = −18.62 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.0 ℃
Ambient Temperature: 21.1 ℃
Test Date: 06/22/2020
Plot No.: 48

DUT: SM-A516U; Type: Bar

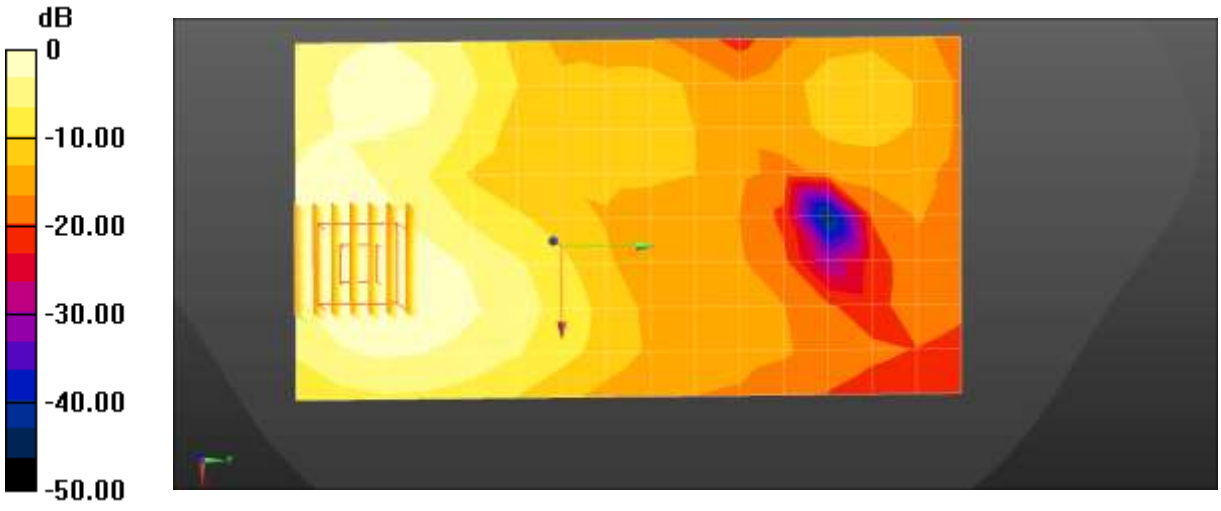
Communication System: UID 0, LTE Band41 (0); Frequency: 2506 MHz;Duty Cycle: 1:1.58016
Medium parameters used (interpolated): f = 2506 MHz; σ = 1.862 S/m; ε_r = 38.284; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2506 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 41 Body Front QPSK 20MHz 1RB 99offset 39750ch Bodyworn/Area Scan (9x16x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.368 W/kg

LTE Band 41 Body Front QPSK 20MHz 1RB 99offset 39750ch Bodyworn/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.589 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.466 W/kg
SAR(1 g) = 0.251 W/kg; SAR(10 g) = 0.139 W/kg
Smallest distance from peaks to all points 3 dB below = 16.6 mm
Ratio of SAR at M2 to SAR at M1 = 51.8%
Maximum value of SAR (measured) = 0.383 W/kg



0 dB = 0.383 W/kg = −4.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/28/2020
Plot No.:	49

DUT: SM-A516U; Type: Bar

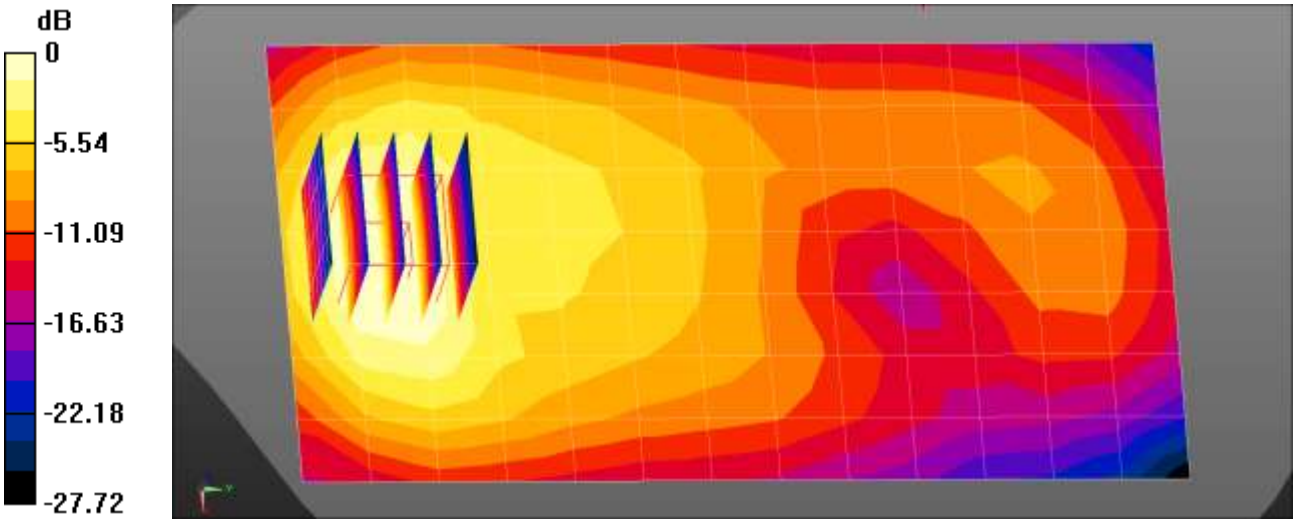
Communication System: UID 0, LTE Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.386 S/m; ε_r = 39.833; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1745 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 66 Body Front QPSK 20MHz 1RB 99offset 132322ch body worn/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.439 W/kg

LTE Band 66 Body Front QPSK 20MHz 1RB 99offset 132322ch body worn/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.004 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.764 W/kg
SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.292 W/kg
Maximum value of SAR (measured) = 0.591 W/kg



0 dB = 0.439 W/kg = −3.57 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/08/2020
Plot No.:	50

DUT: SM-A516U; Type: Bar

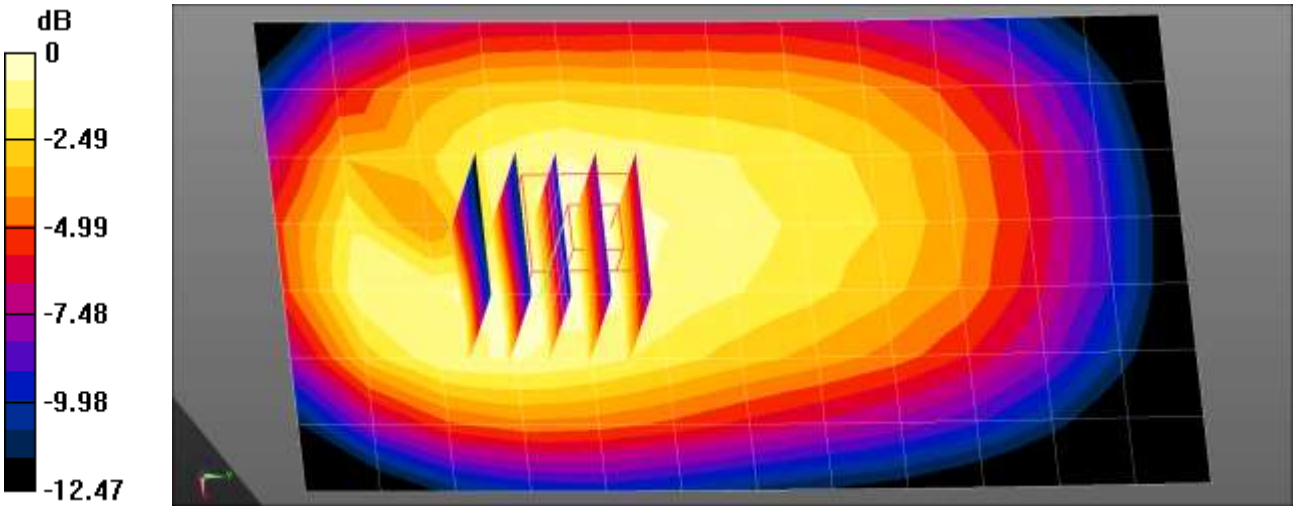
Communication System: UID 0, LTE Band 71 (0); Frequency: 683 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 683 MHz; σ = 0.867 S/m; ε_r = 43.706; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 683 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 71 Body Rear QPSK 20MHz 1RB 99offset 133322ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.439 W/kg

LTE band 71 Body Rear QPSK 20MHz 1RB 99offset 133322ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.04 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.536 W/kg
SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.247 W/kg
Maximum value of SAR (measured) = 0.462 W/kg



0 dB = 0.462 W/kg = −3.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.7 ℃
Test Date:	06/16/2020
Plot No.:	51

DUT: SM-A516U; Type: Bar

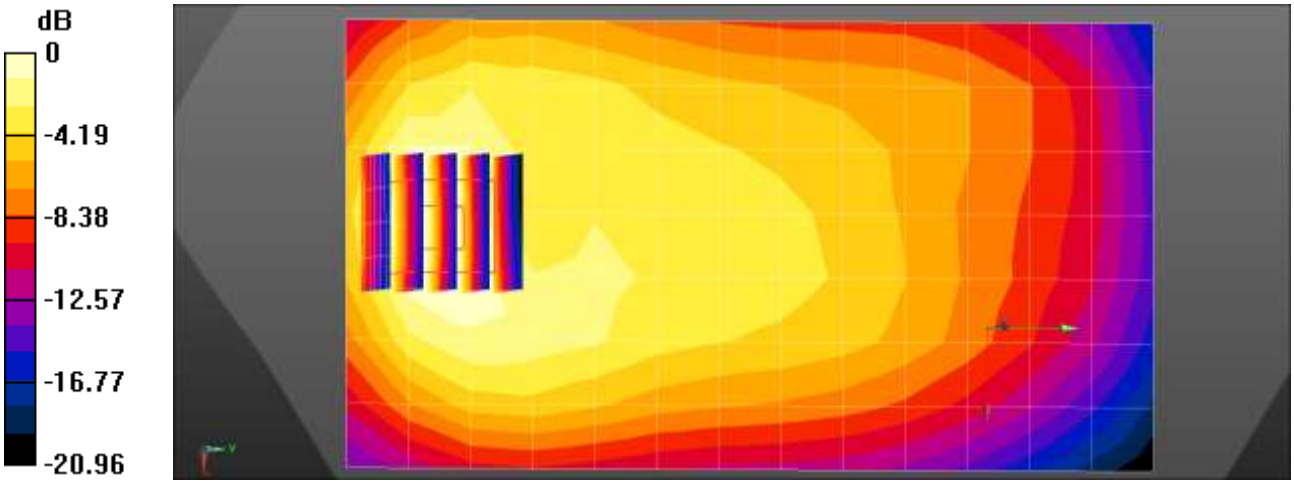
Communication System: UID 0, NR Band n2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.393 S/m; ε_r = 38.608; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n2 Body Front DFT-s QPSK 20MHz 1RB 104offset 372000ch body worn/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.07 W/kg

NR Band n2 Body Front DFT-s QPSK 20MHz 1RB 104offset 372000ch body worn/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.39 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 0.937 W/kg; SAR(10 g) = 0.558 W/kg
Smallest distance from peaks to all points 3 dB below = 12.8 mm
Ratio of SAR at M2 to SAR at M1 = 63%
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.07 W/kg = 0.30 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.5 ℃
Ambient Temperature:	22.8 ℃
Test Date:	06/08/2020
Plot No.:	52

DUT: SM-A516U; Type: Bar

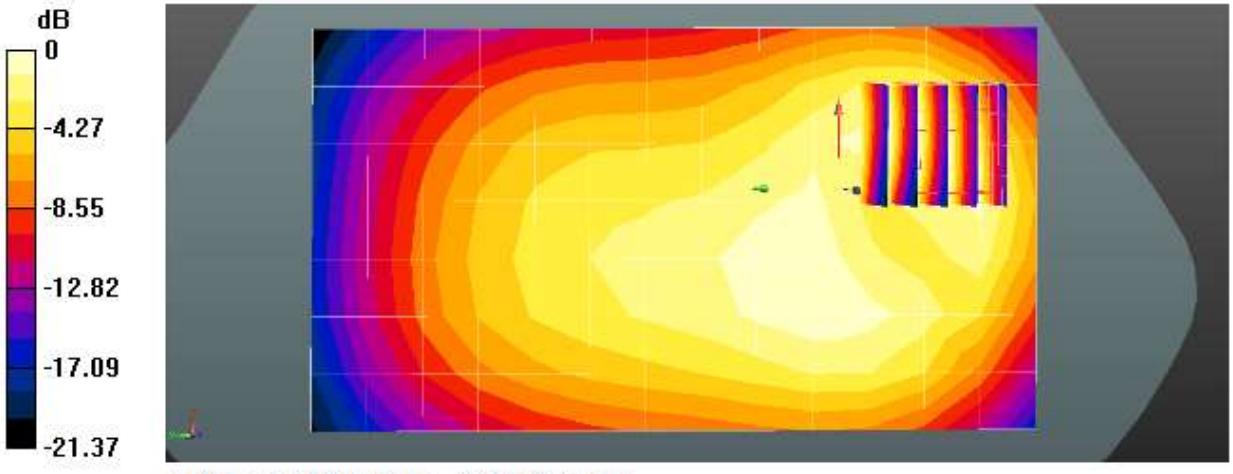
Communication System: UID 0, NR Band n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.923 S/m; ε_r = 42.72; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22); Calibrated: 2019-07-23;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.467 W/kg

NR band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.22 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.646 W/kg
SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.234 W/kg
Maximum value of SAR (measured) = 0.465 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/04/2020
Plot No.:	53

DUT: SM-A516U; Type: Bar

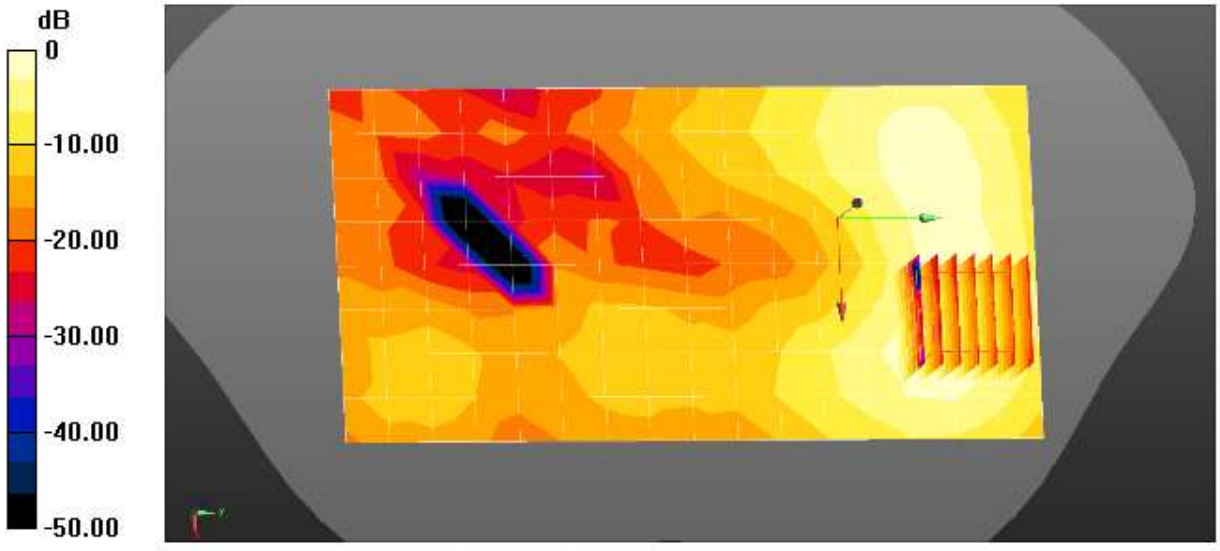
Communication System: UID 0, NR band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.94 S/m; ε_r = 37.847; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.49, 7.49, 7.49) @ 2592.99 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n41 BodyWorn Rear DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.267 W/kg

NR Band n41 BodyWorn Rear DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.347 W/kg
SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.080 W/kg
Smallest distance from peaks to all points 3 dB below = 12.1 mm
Ratio of SAR at M2 to SAR at M1 = 46.1%
Maximum value of SAR (measured) = 0.275 W/kg



0 dB = 0.267 W/kg = -5.73 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/11/2020
Plot No.:	54

DUT: SM-A516U; Type: Bar

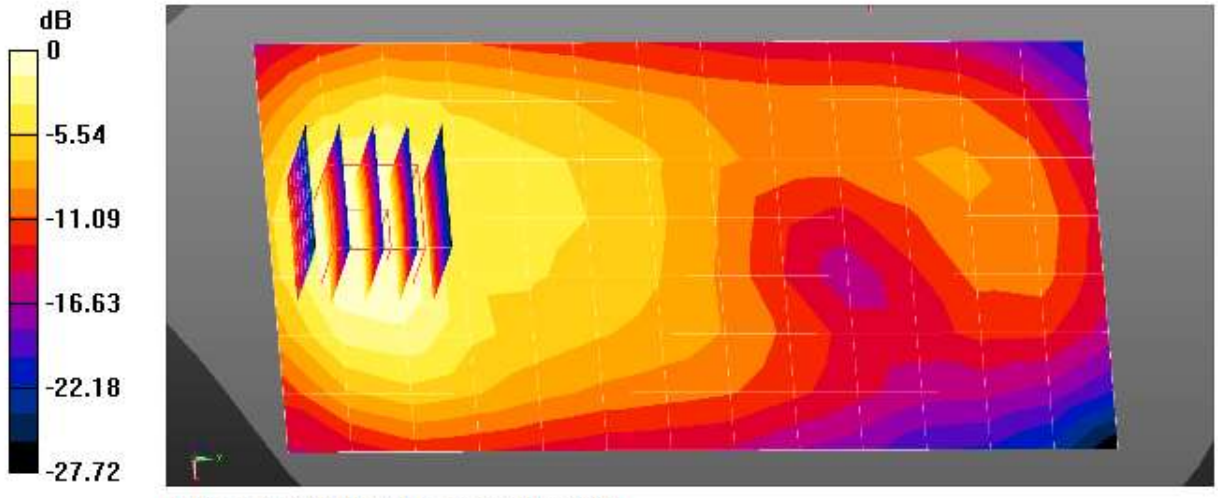
Communication System: UID 0, NR Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.349 S/m; ε_r = 40.083; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

NR band n66 Body Rear DFT-s QPSK 20MHz 1RB 53offset 344000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.592 W/kg

NR band n66 Body Rear DFT-s QPSK 20MHz 1RB 53offset 344000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.705 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.770 W/kg
SAR(1 g) = 0.459 W/kg; SAR(10 g) = 0.270 W/kg
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 59.4%
Maximum value of SAR (measured) = 0.661 W/kg



0 dB = 0.439 W/kg = -3.57 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/09/2020
Plot No.:	55

DUT: SM-A516U; Type: Bar

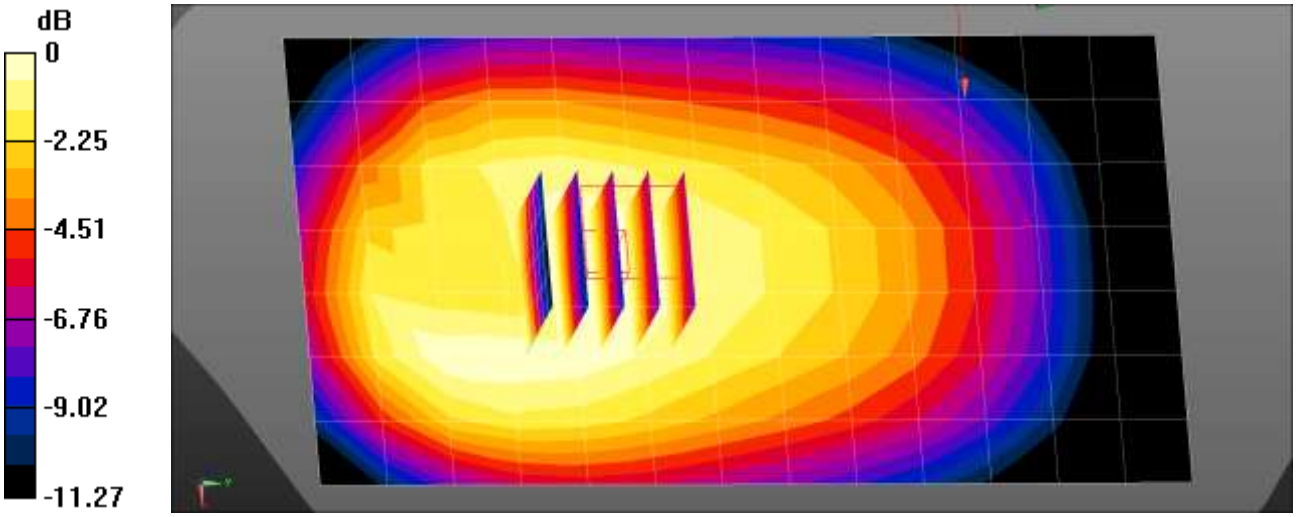
Communication System: UID 0, NR Band n71 (0); Frequency: 680.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 680.5 MHz; σ = 0.841 S/m; ε_r = 42.913; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.52, 6.52, 6.52) @ 680.5 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.279 W/kg

NR band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.01 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.387 W/kg
SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.188 W/kg
Maximum value of SAR (measured) = 0.284 W/kg



0 dB = 0.284 W/kg = −5.47 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	56

DUT: SM-A516U; Type: Bar

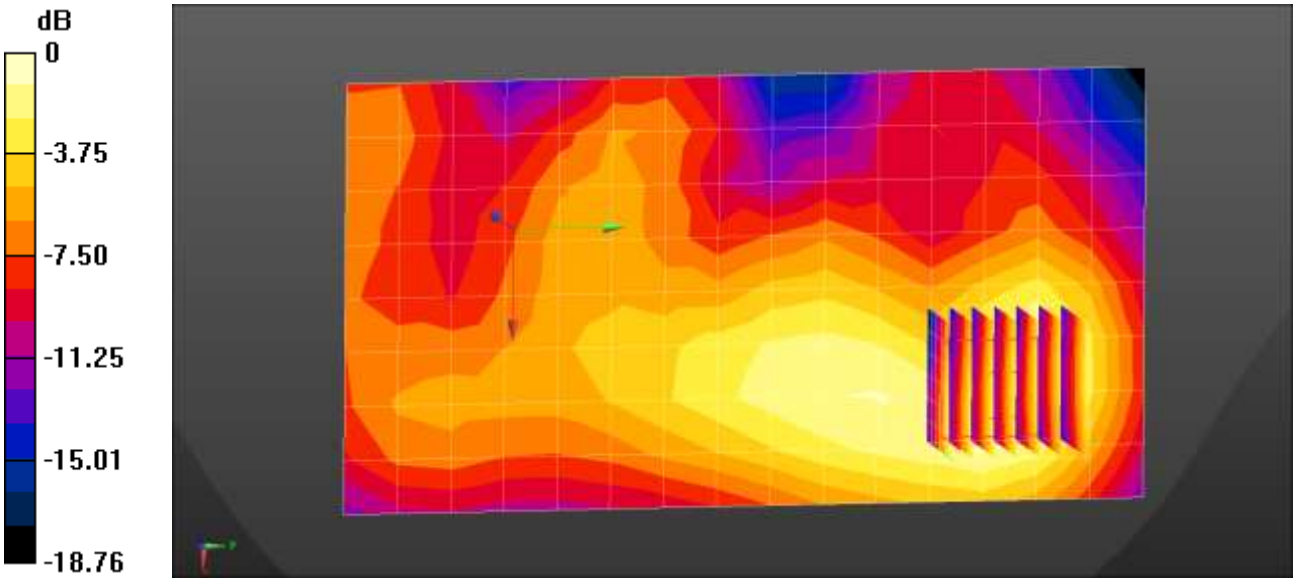
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.806 S/m; ε_r = 39.304; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2437 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

802.11b Body-Worn Rear 1Mbps 6ch/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.232 W/kg

802.11b Body-Worn Rear 1Mbps 6ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.512 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.299 W/kg
SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.079 W/kg
Smallest distance from peaks to all points 3 dB below = 13.9 mm
Ratio of SAR at M2 to SAR at M1 = 49.9%
Maximum value of SAR (measured) = 0.240 W/kg



0 dB = 0.232 W/kg = −6.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/12/2020
Plot No.:	57

DUT: SM-A516U; Type: Bar

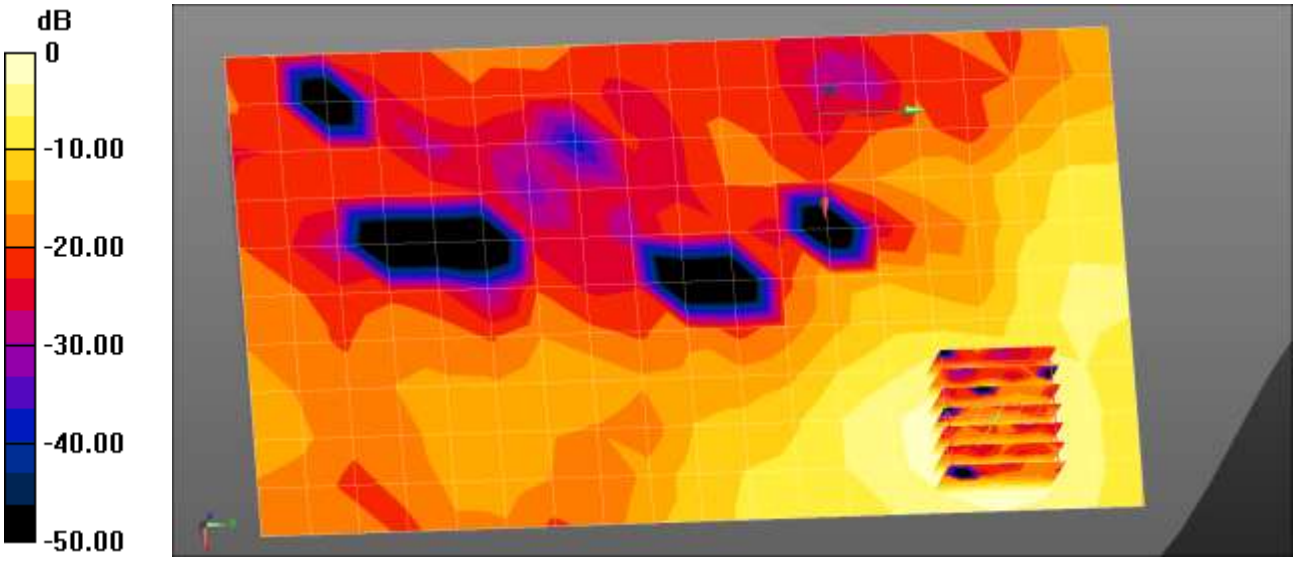
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.876 S/m; ε_r = 36.635; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(4.84, 4.84, 4.84) @ 5500 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

802.11a BodyWorn Rear 6Mbps 100ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.216 W/kg

802.11a BodyWorn Rear 6Mbps 100ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.2720 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.416 W/kg
SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.042 W/kg
Smallest distance from peaks to all points 3 dB below = 12 mm
Ratio of SAR at M2 to SAR at M1 = 60.6%
Maximum value of SAR (measured) = 0.239 W/kg



0 dB = 0.239 W/kg = -6.22 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	58

DUT: SM-A516U; Type: Bar

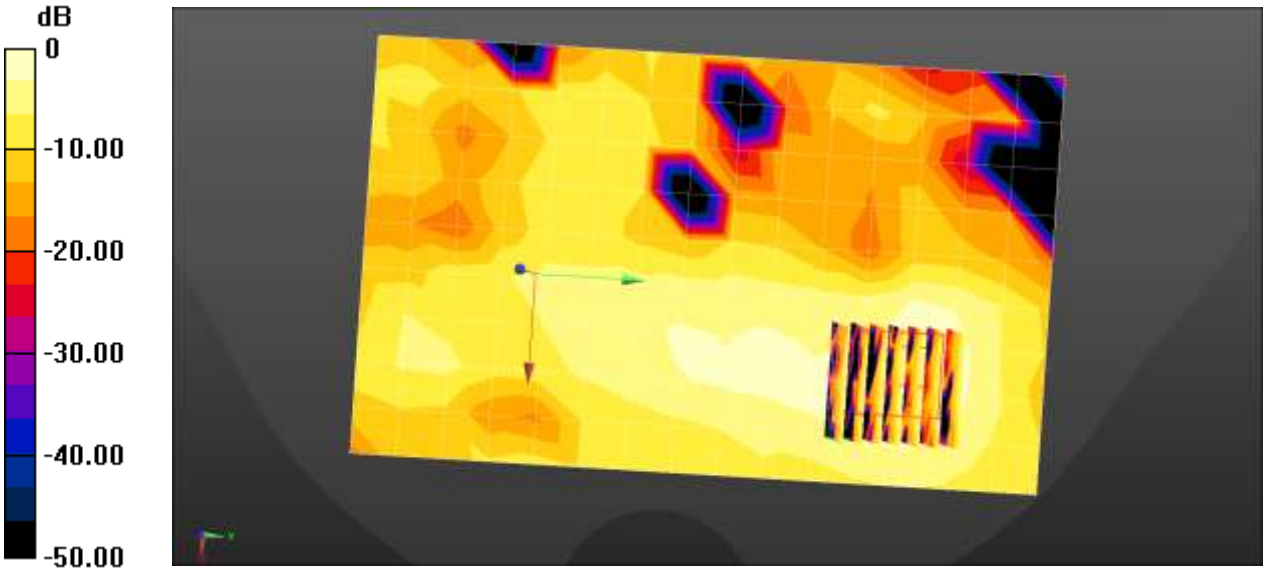
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.302
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.809 S/m; ε_r = 39.286; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2441 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

BT Body Rear Body Worn DH5 39ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0169 W/kg

BT Body Rear Body Worn DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.2690 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.0190 W/kg
SAR(1 g) = 0.00919 W/kg; SAR(10 g) = 0.00393 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 40.3%
Maximum value of SAR (measured) = 0.0152 W/kg



0 dB = 0.0169 W/kg = −17.71 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.2 ℃
Test Date:	06/18/2020
Plot No.:	59

DUT: SM-A516U; Type: Bar

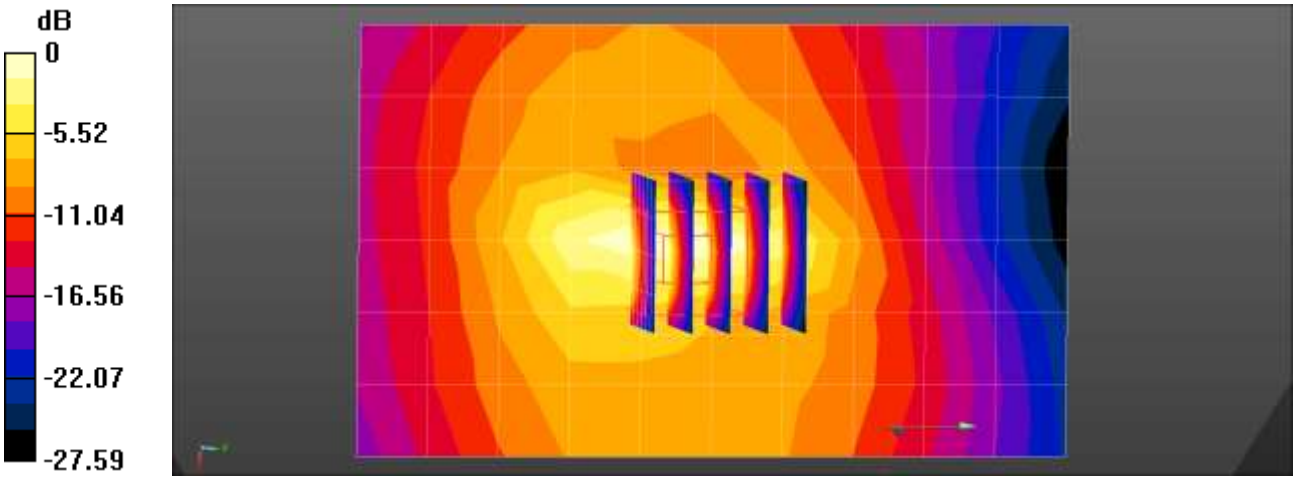
Communication System: UID 0, CDMA (0); Frequency: 822.75 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 822.75 MHz; σ = 0.906 S/m; ε_r = 41.938; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC10 Body Bottom 670ch/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.12 W/kg

CDMA BC10 Body Bottom 670ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 37.21 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 0.791 W/kg; SAR(10 g) = 0.394 W/kg
Maximum value of SAR (measured) = 1.24 W/kg



0 dB = 1.12 W/kg = 0.50 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/22/2020
Plot No.:	60

DUT: SM-A516U; Type: Bar

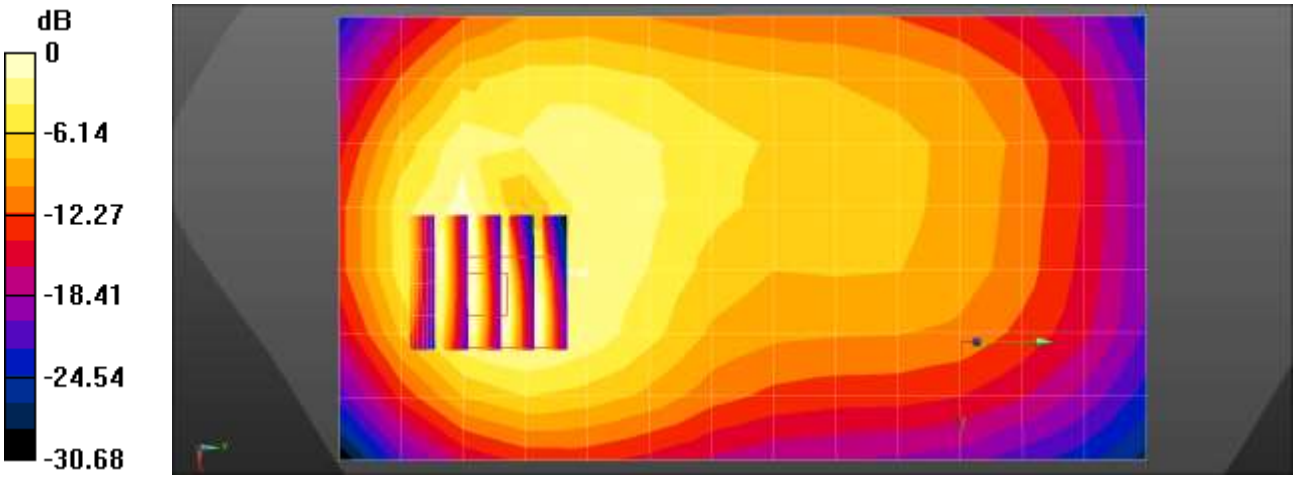
Communication System: UID 0, CDMA (0); Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.947 S/m; ε_r = 41.673; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

CDMA BC0 Body Rear 384ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.53 W/kg

CDMA BC0 Body Rear 384ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.27 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 0.992 W/kg; SAR(10 g) = 0.574 W/kg
Maximum value of SAR (measured) = 1.45 W/kg



0 dB = 1.53 W/kg = 1.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.9 ℃
Ambient Temperature:	20.0 ℃
Test Date:	06/18/2020
Plot No.:	61

DUT: SM-A516U; Type: Bar

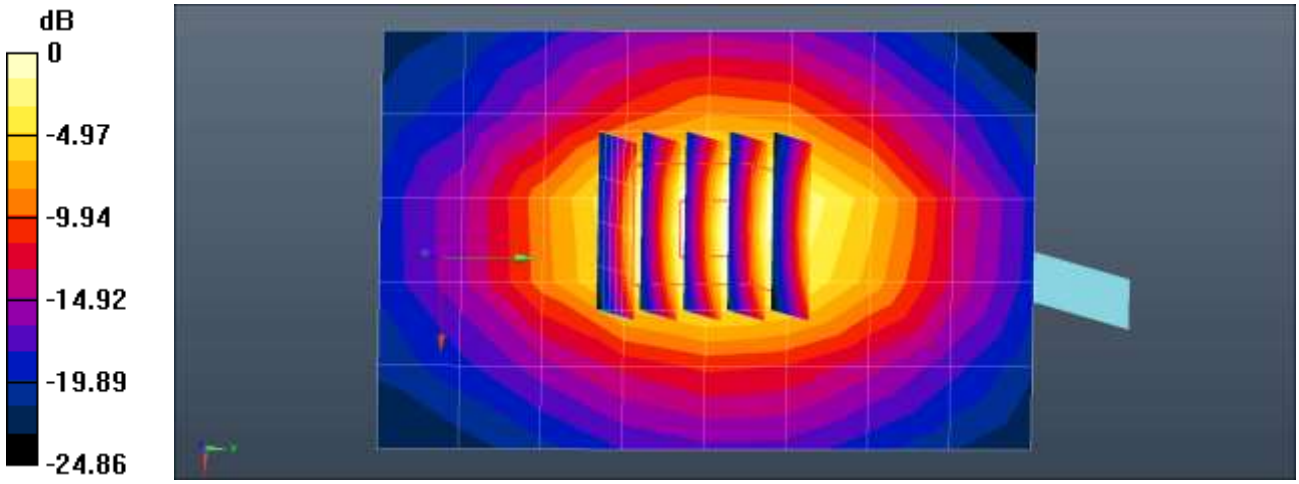
Communication System: UID 0, CDMA; Frequency: 1908.75 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.422 S/m; ε_r = 38.487; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

CDMA1900 Body Bottom EvDO Rev 0 1175ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.09 W/kg

CDMA1900 Body Bottom EvDO Rev 0 1175ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 0.904 W/kg; SAR(10 g) = 0.470 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 55.3%
Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.09 W/kg = 0.37 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	62

DUT: SM-A516U; Type: Bar

Communication System: UID 0, GSM850 GPRS 3TX (0); Frequency: 848.8 MHz;Duty Cycle: 1:2.77013
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.951 S/m; ε_r = 42.437; ρ = 1000 kg/m^3
Phantom section: Flat Section

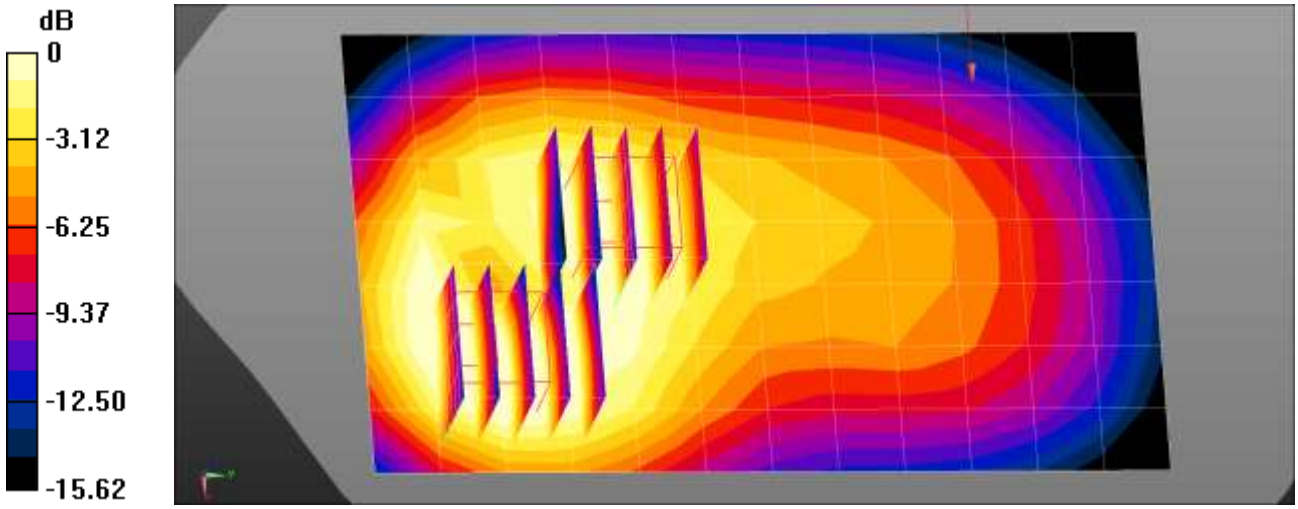
DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 848.8 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

GSM850 Body Rear 3Tx 251ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.748 W/kg

GSM850 Body Rear 3Tx 251ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.10 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.716 W/kg; SAR(10 g) = 0.415 W/kg
Maximum value of SAR (measured) = 0.874 W/kg

GSM850 Body Rear 3Tx 251ch/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.10 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.863 W/kg
SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.350 W/kg
Maximum value of SAR (measured) = 0.619 W/kg



0 dB = 0.619 W/kg = −2.08 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.3 ℃
Test Date:	05/27/2020
Plot No.:	63

DUT: SM-A516U; Type: Bar

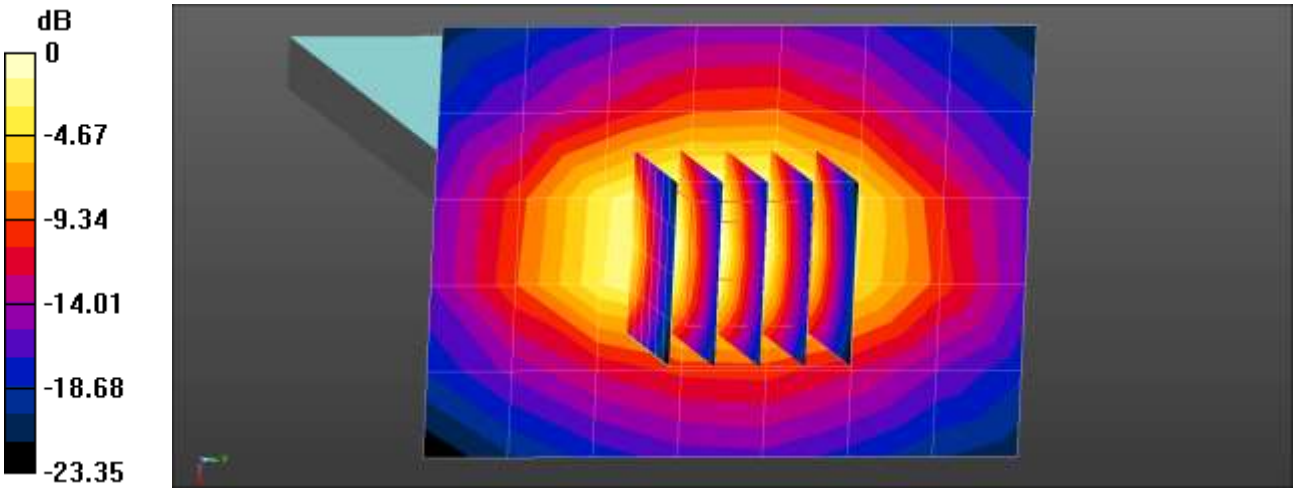
Communication System: UID 0, GSM 1900 4Tx (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.07491
Medium parameters used: f = 1910 MHz; σ = 1.413 S/m; ε_r = 39.036; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

GSM1900 Body Bottom 4Tx 810ch/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.872 W/kg

GSM1900 Body Bottom 4Tx 810ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.87 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 0.918 W/kg; SAR(10 g) = 0.474 W/kg
Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 0.872 W/kg = −0.60 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/11/2020
Plot No.:	64

DUT: SM-A516U; Type: Bar

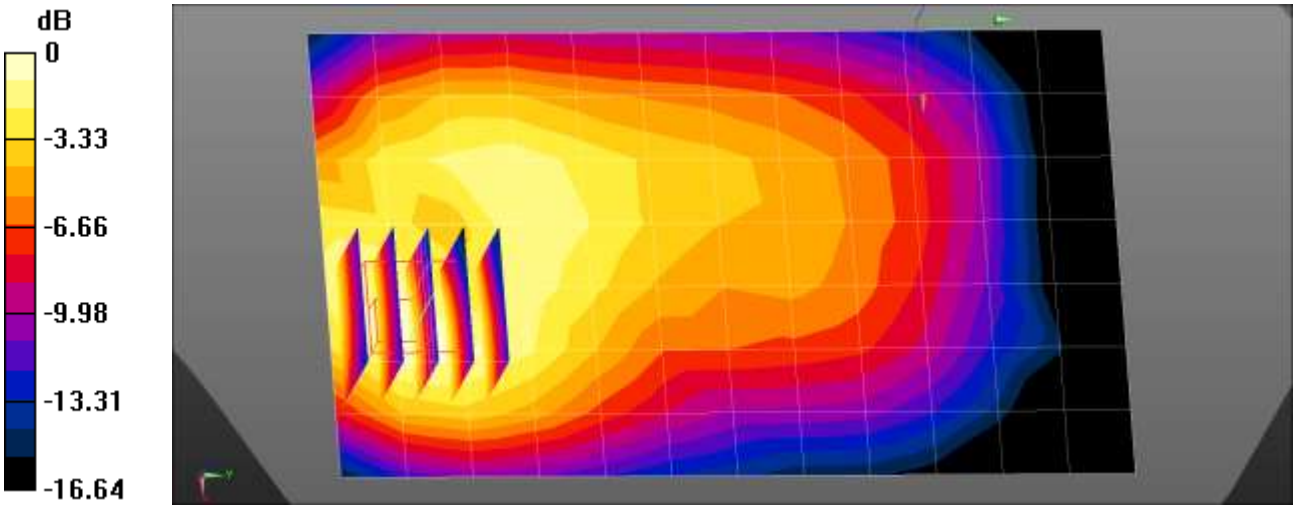
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 42.58; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 836.6 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

UMTS band 5 Body Rear 4183ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.492 W/kg

UMTS band 5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.47 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.760 W/kg
SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.248 W/kg
Maximum value of SAR (measured) = 0.520 W/kg



0 dB = 0.520 W/kg = −2.84 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/25/2020
Plot No.:	65

DUT: SM-A516U; Type: Bar

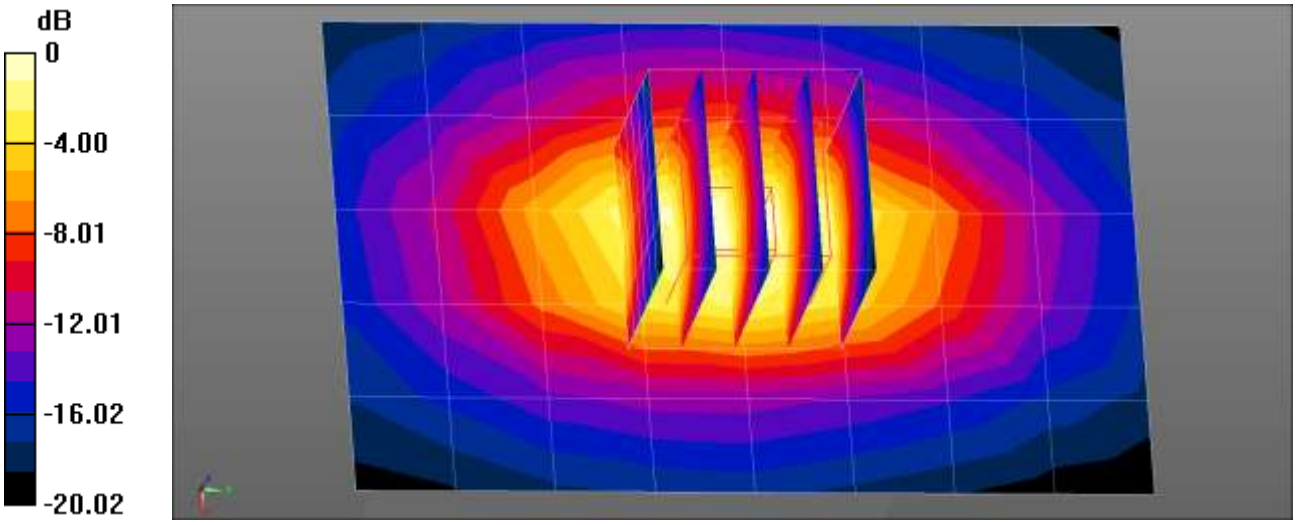
Communication System: UID 0, UMTS IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.33 S/m; ε_r = 40.39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B2 Body Bottom 1412ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.504 W/kg

UMTS B2 Body Bottom 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.14 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.783 W/kg
SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.261 W/kg
Maximum value of SAR (measured) = 0.585 W/kg



0 dB = 0.504 W/kg = −2.98 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.4 ℃
Test Date:	06/08/2020
Plot No.:	66

DUT: SM-A516U; Type: Bar

Communication System: UID 0, UMTS1900 (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.425 S/m; ε_r = 39.132; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

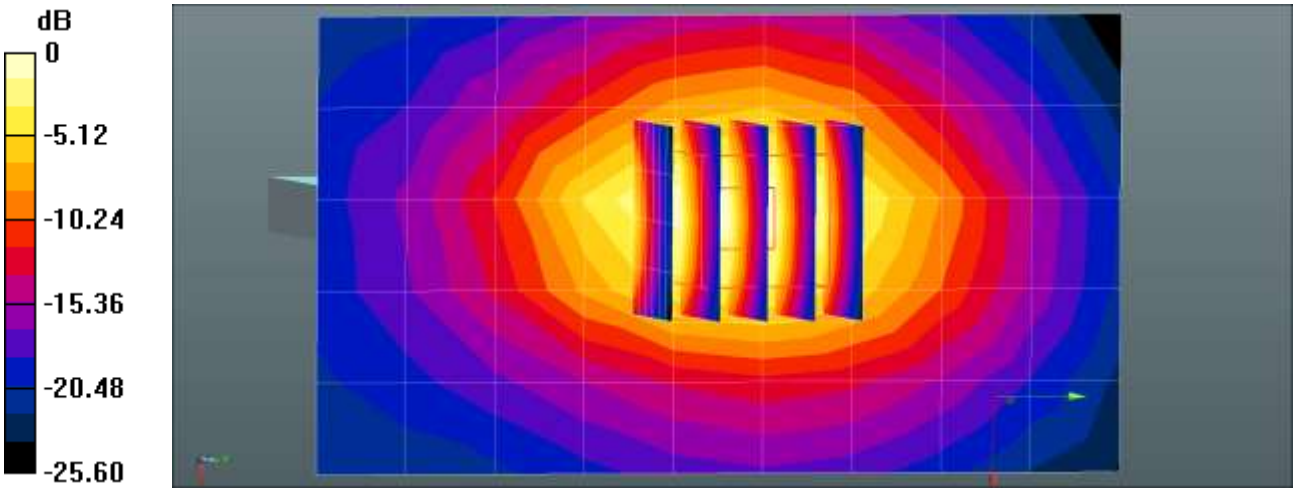
- Probe: EX3DV4 - SN3797; ConvF(7.75, 7.75, 7.75); Calibrated: 2019-11-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B2 Body Bottom 9538ch/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.25 W/kg

UMTS B2 Body Bottom 9538ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.46 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.919 W/kg; SAR(10 g) = 0.482 W/kg

Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.5 ℃
Ambient Temperature:	23.8 ℃
Test Date:	06/04/2020
Plot No.:	67

DUT: SM-A516U; Type: Bar

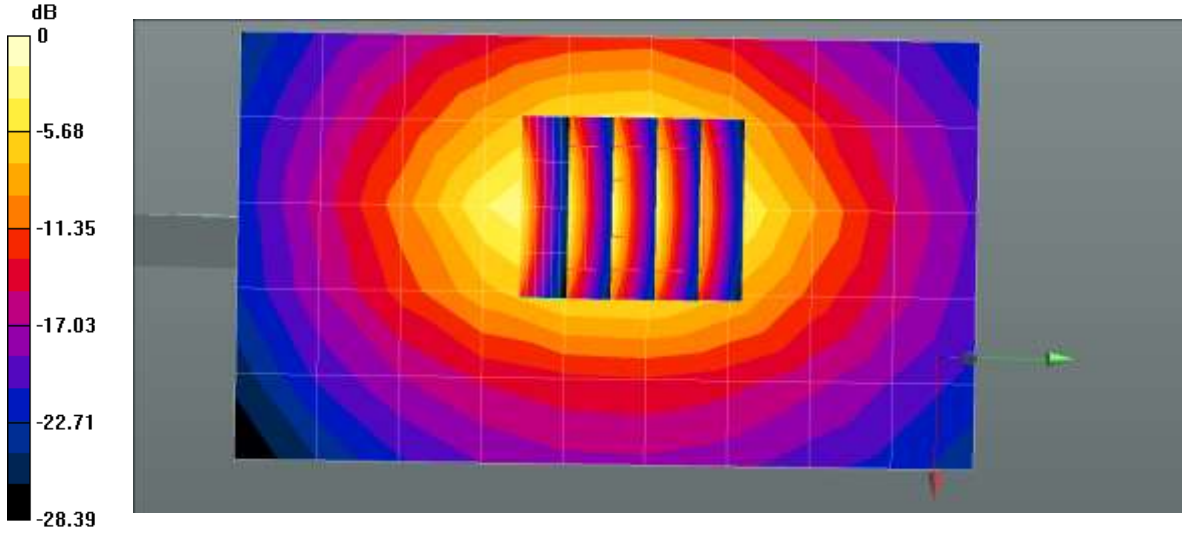
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.442 S/m; ε_r = 39.158; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 2 Body Bottom QPSK 20MHz 1RB 99offset 19100ch/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.72 W/kg

LTE band 2 Body Bottom QPSK 20MHz 1RB 99offset 19100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.38 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.23 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.623 W/kg
Smallest distance from peaks to all points 3 dB below = 11.3 mm
Ratio of SAR at M2 to SAR at M1 = 53.5%
Maximum value of SAR (measured) = 1.84 W/kg



0 dB = 1.72 W/kg = 2.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.4 ℃
Ambient Temperature:	21.6 ℃
Test Date:	05/20/2020
Plot No.:	68

DUT: SM-A516U; Type: Bar

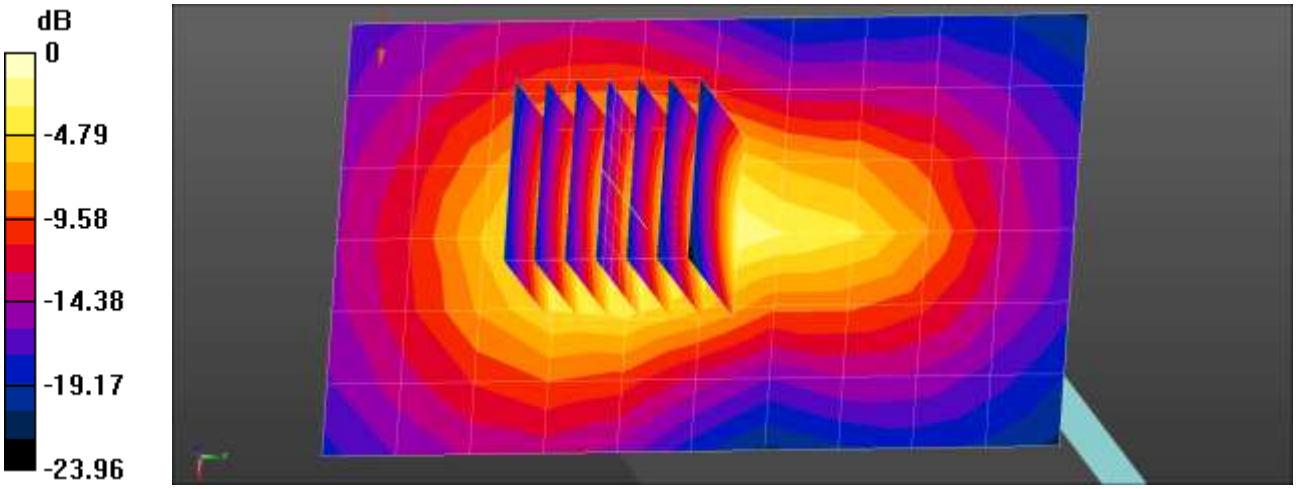
Communication System: UID 0, LTE Band7 (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2535 MHz; σ = 1.884 S/m; ε_r = 38.179; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 7 Body Bottom QPSK 20MHz 50RB 0offset 21100ch/Area Scan (7x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.51 W/kg

LTE Band 7 Body Bottom QPSK 20MHz 50RB 0offset 21100ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.63 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 0.922 W/kg; SAR(10 g) = 0.449 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3 ℃
Ambient Temperature:	21.5 ℃
Test Date:	05/11/2020
Plot No.:	69

DUT: SM-A516U; Type: Bar

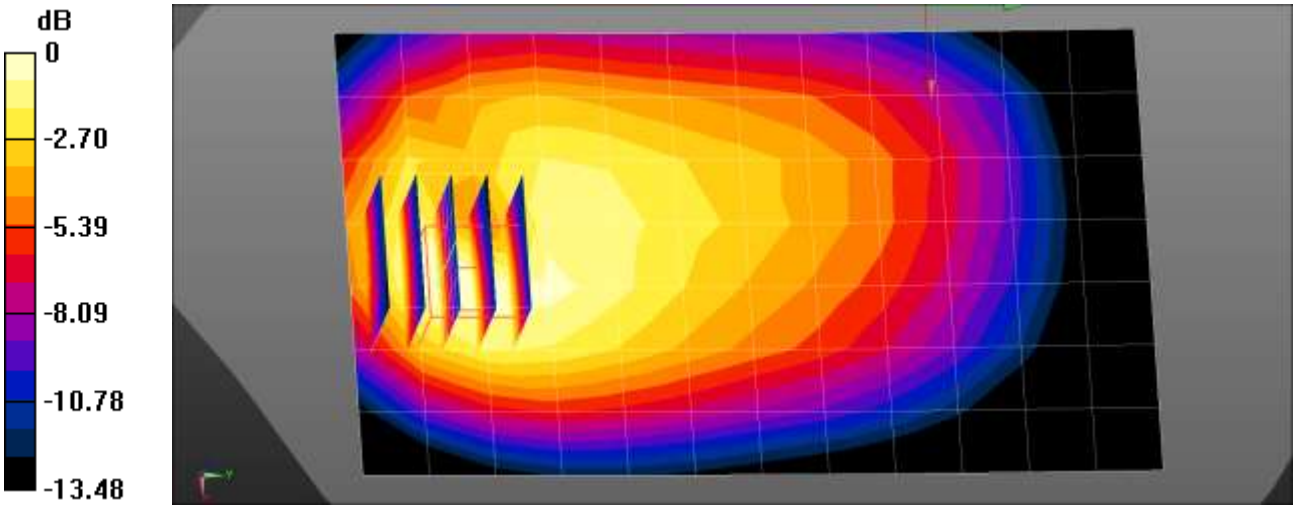
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.812 S/m; ε_r = 44.033; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 707.5 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.370 W/kg

LTE band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.93 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.469 W/kg
SAR(1 g) = 0.269 W/kg; SAR(10 g) = 0.162 W/kg
Maximum value of SAR (measured) = 0.386 W/kg



0 dB = 0.386 W/kg = −4.13 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/12/2020
Plot No.:	70

DUT: SM-A516U; Type: Bar

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.933 S/m; ε_r = 42.007; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

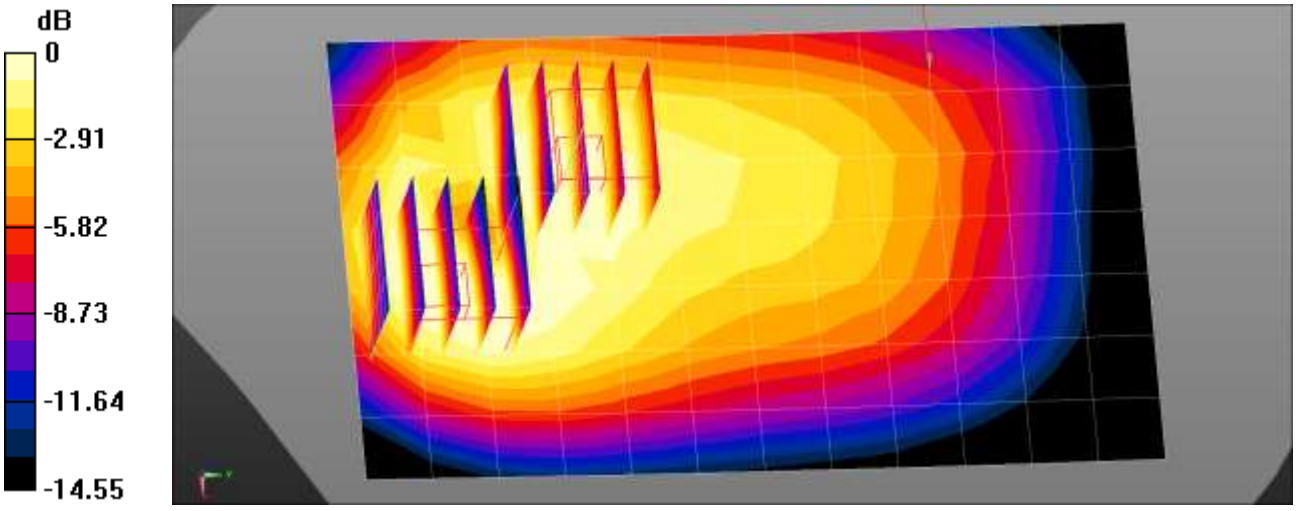
- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 782 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.584 W/kg

LTE band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.01 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.741 W/kg
SAR(1 g) = 0.422 W/kg; SAR(10 g) = 0.247 W/kg
Maximum value of SAR (measured) = 0.621 W/kg

LTE band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.01 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.561 W/kg
SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.285 W/kg
Maximum value of SAR (measured) = 0.506 W/kg



0 dB = 0.506 W/kg = −2.96 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/13/2020
Plot No.:	71

DUT: SM-A516U; Type: Bar

Communication System: UID 0, LTE 14 (0); Frequency: 793 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 793 MHz; σ = 0.911 S/m; ε_r = 41.249; ρ = 1000 kg/m^3
Phantom section: Flat Section

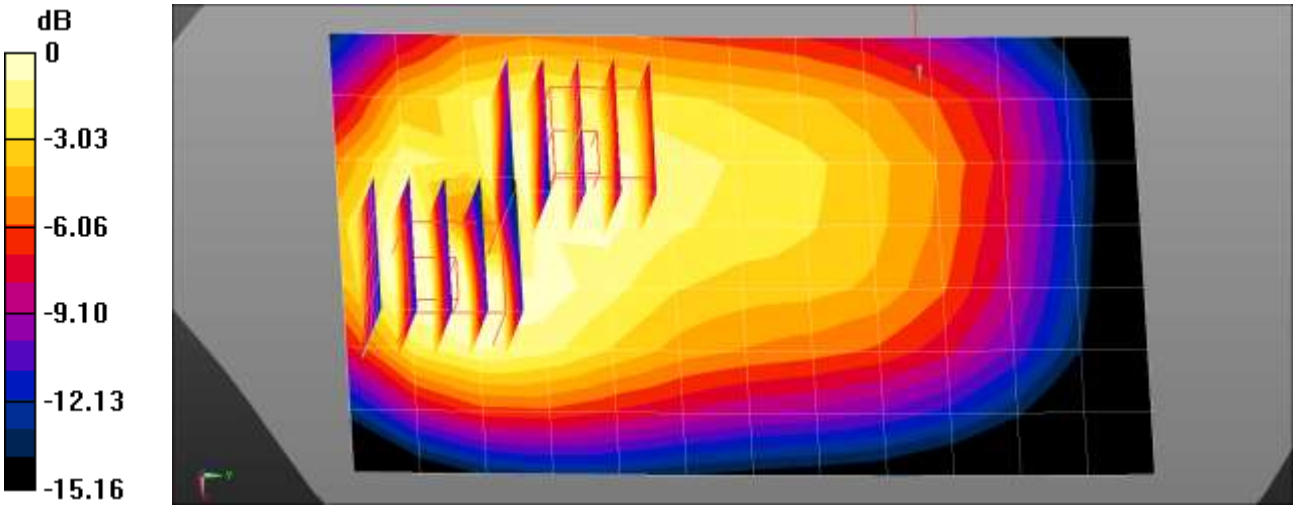
DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 793 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 14 Body Rear QPSK 10MHz 1RB 0offset 23330ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.616 W/kg

LTE band 14 Body Rear QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.21 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.786 W/kg
SAR(1 g) = 0.448 W/kg; SAR(10 g) = 0.262 W/kg
Maximum value of SAR (measured) = 0.658 W/kg

LTE band 14 Body Rear QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.21 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.599 W/kg
SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.299 W/kg
Maximum value of SAR (measured) = 0.540 W/kg



0 dB = 0.540 W/kg = −2.68 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6 ℃
Ambient Temperature:	20.8 ℃
Test Date:	05/19/2020
Plot No.:	72

DUT: SM-A516U; Type: Bar

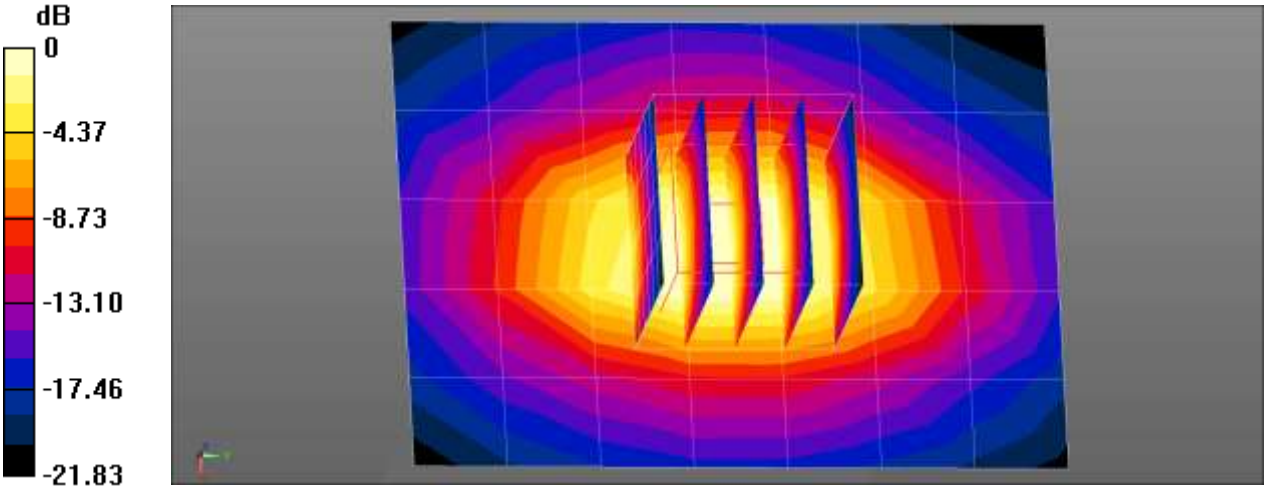
Communication System: UID 0, LTE Band 25 (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1905 MHz; σ = 1.446 S/m; ε_r = 38.934; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1905 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 25 Body Bottom QPSK 20MHz 1RB 99offset 26590ch/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.769 W/kg

LTE Band 25 Body Bottom QPSK 20MHz 1RB 99offset 26590ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.69 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 0.882 W/kg; SAR(10 g) = 0.456 W/kg
Maximum value of SAR (measured) = 1.11 W/kg



0 dB = 0.769 W/kg = −1.14 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.7 ℃
Test Date:	05/07/2020
Plot No.:	73

DUT: SM-A516U; Type: Bar

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.923 S/m; ε_r = 42.355; ρ = 1000 kg/m^3
Phantom section: Flat Section

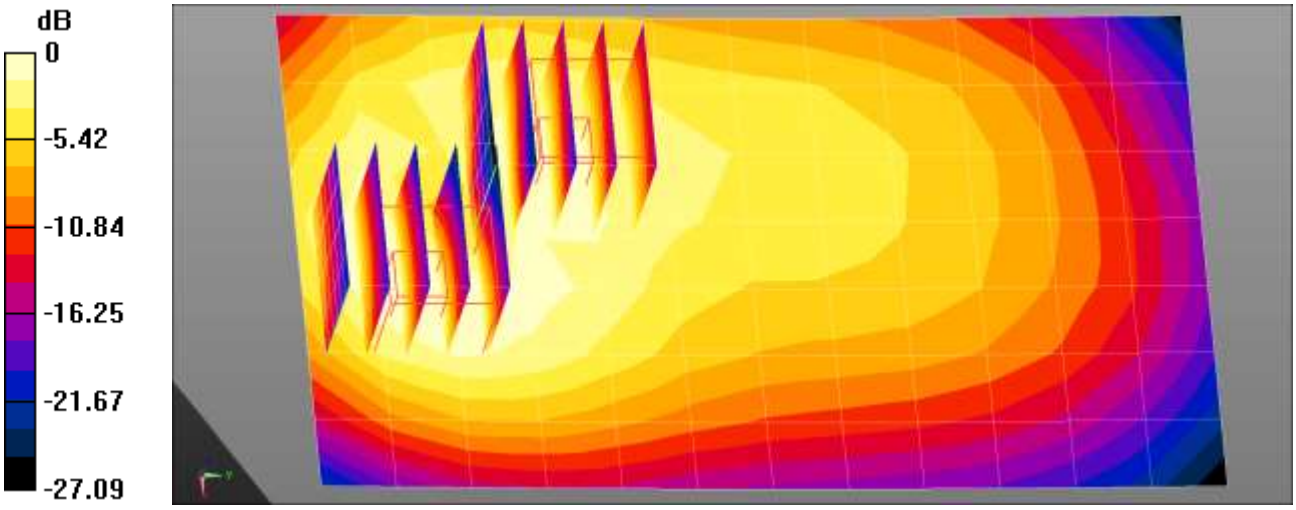
DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.03, 9.03, 9.03) @ 831.5 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.660 W/kg

LTE band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.74 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.877 W/kg
SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.294 W/kg
Maximum value of SAR (measured) = 0.734 W/kg

LTE band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.74 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.615 W/kg
SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 0.545 W/kg



0 dB = 0.660 W/kg = −1.81 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.4 ℃
Test Date:	05/13/2020
Plot No.:	74

DUT: SM-A516U; Type: Bar

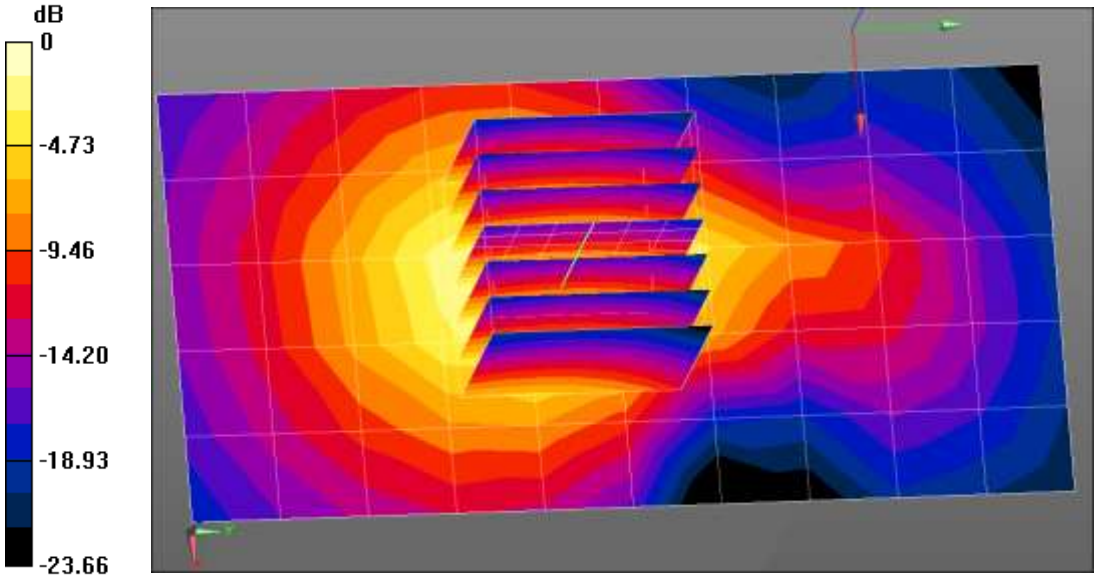
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.641 S/m; ε_r = 40.223; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 30 Body Bottom QPSK 10MHz 1RB 0offset 27710ch/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.19 W/kg

LTE Band 30 Body Bottom QPSK 10MHz 1RB 0offset 27710ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.29 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.419 W/kg
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 50.7%
Maximum value of SAR (measured) = 1.36 W/kg



0 dB = 1.36 W/kg = 1.34 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.8 ℃
Test Date:	06/15/2020
Plot No.:	75

DUT: SM-A516U; Type: Bar

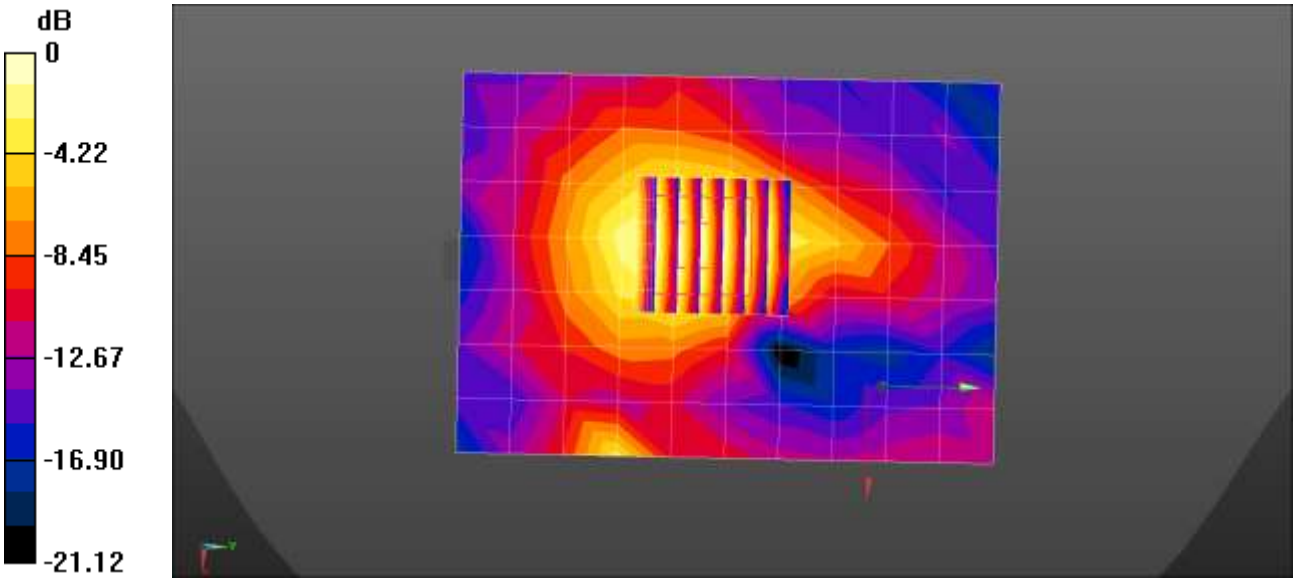
Communication System: UID 0, LTE Band 40 (0); Frequency: 2310 MHz;Duty Cycle: 1:1.58125
Medium parameters used: f = 2310 MHz; σ = 1.65 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 Body Bottom QPSK 10MHz 1RB 0offset 38750ch/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0852 W/kg

LTE Band 40 Body Bottom QPSK 10MHz 1RB 0offset 38750ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.822 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.027 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 48.7%
Maximum value of SAR (measured) = 0.0895 W/kg



0 dB = 0.0852 W/kg = −10.69 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/16/2020
Plot No.:	76

DUT: SM-A516U; Type: Bar

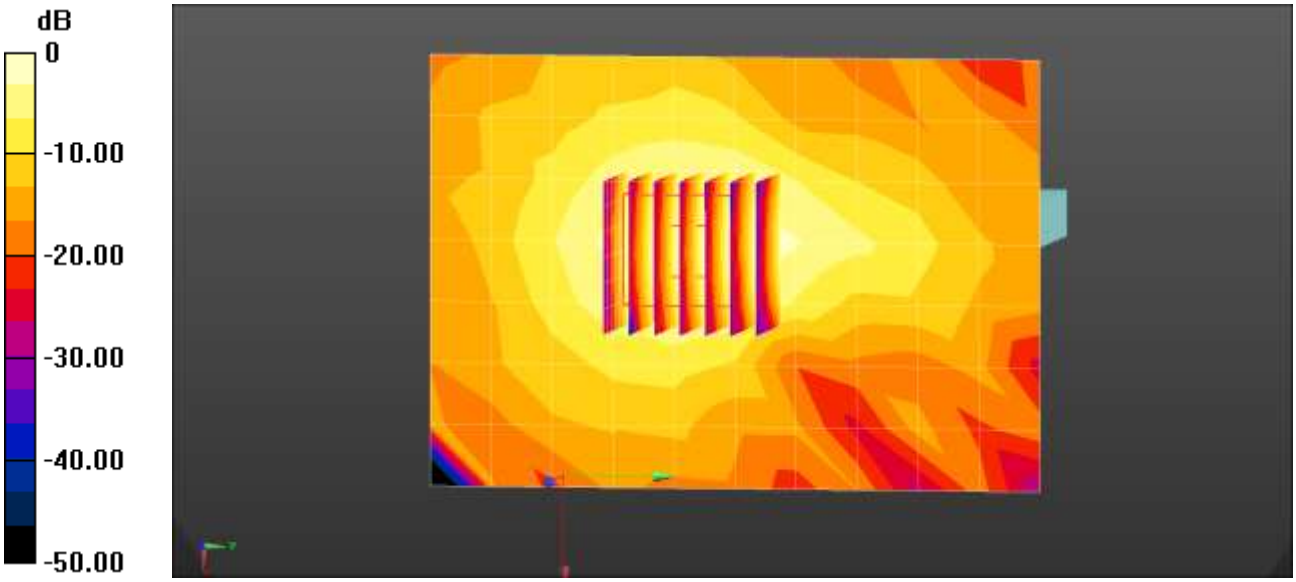
Communication System: UID 0, LTE Band 40 (0); Frequency: 2355 MHz;Duty Cycle: 1:1.58125
Medium parameters used (interpolated): f = 2355 MHz; σ = 1.705 S/m; ε_r = 39.961; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2355 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 40 Body Bottom QPSK 10MHz 1RB 0offset 39200ch/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.106 W/kg

LTE Band 40 Body Bottom QPSK 10MHz 1RB 0offset 39200ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.094 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.032 W/kg
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 48.3%
Maximum value of SAR (measured) = 0.110 W/kg



0 dB = 0.106 W/kg = −9.73 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.2 ℃
Test Date:	06/23/2020
Plot No.:	77

DUT: SM-A516U; Type: Bar

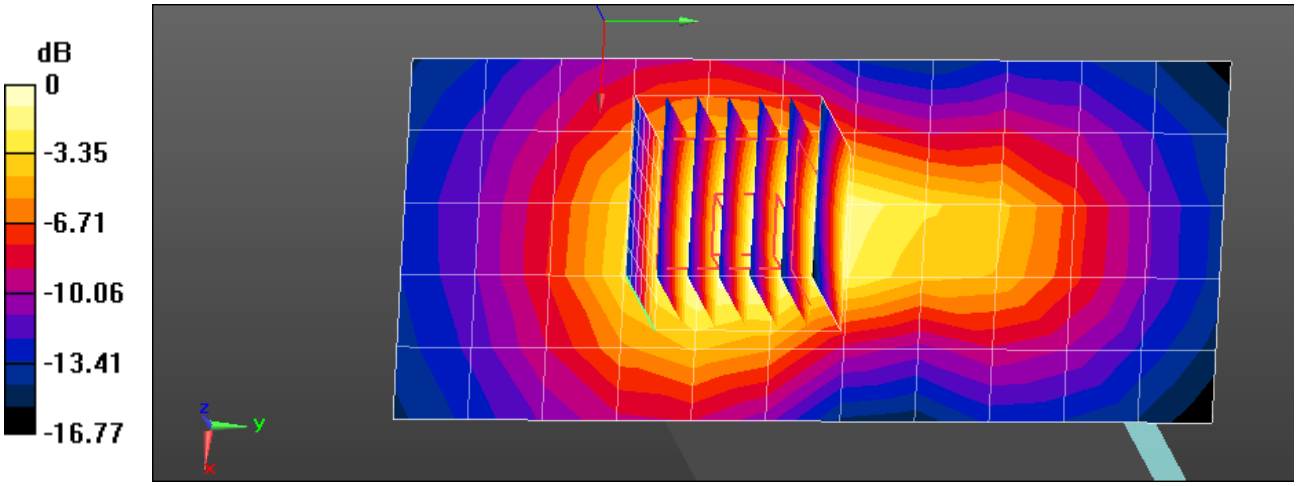
Communication System: UID 0, LTE Band41 (0); Frequency: 2506 MHz;Duty Cycle: 1:1.58016
Medium parameters used (interpolated): f = 2506 MHz; σ = 1.862 S/m; ε_r = 38.284; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2506 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 41 Body Bottom QPSK 20MHz 50RB 49offset 39750ch ULCA/Area Scan (6x12x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.603 W/kg

LTE Band 41 Body Bottom QPSK 20MHz 50RB 49offset 39750ch ULCA/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.39 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.910 W/kg
SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.238 W/kg
Smallest distance from peaks to all points 3 dB below = 12.2 mm
Ratio of SAR at M2 to SAR at M1 = 51.1%
Maximum value of SAR (measured) = 0.740 W/kg



0 dB = 0.603 W/kg = −2.20 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	05/28/2020
Plot No.:	78

DUT: SM-A516U; Type: Bar

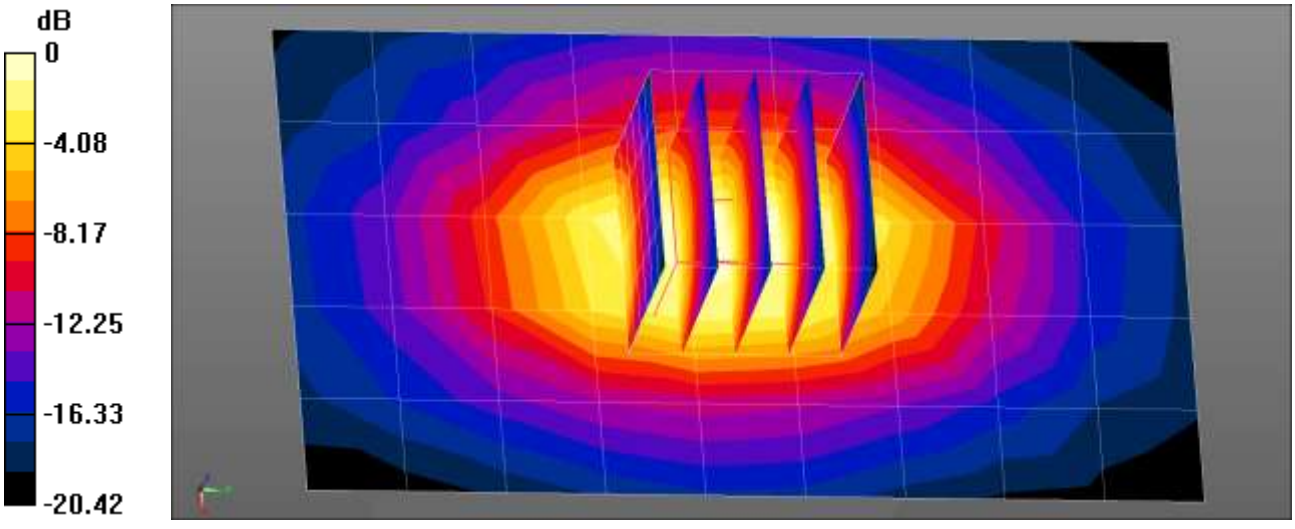
Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.421 S/m; ε_r = 39.976; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1770 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 66 Body Bottom QPSK 20MHz 50RB 25offset 132572ch/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.520 W/kg

LTE Band 66 Body Bottom QPSK 20MHz 50RB 25offset 132572ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.01 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.877 W/kg
SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.291 W/kg
Maximum value of SAR (measured) = 0.661 W/kg



0 dB = 0.520 W/kg = −2.84 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	05/08/2020
Plot No.:	79

DUT: SM-A516U; Type: Bar

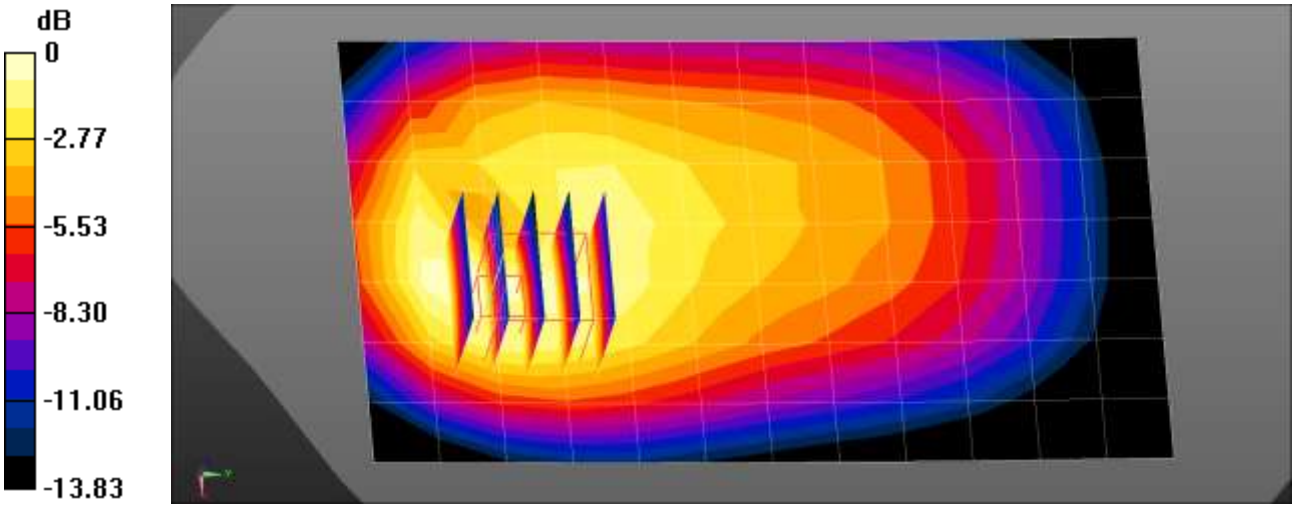
Communication System: UID 0, LTE Band 71 (0); Frequency: 683 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 683 MHz; σ = 0.867 S/m; ε_r = 43.706; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 683 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 71 Body Rear QPSK 20MHz 1RB 99offset 133322ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.660 W/kg

LTE band 71 Body Rear QPSK 20MHz 1RB 99offset 133322ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.90 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.870 W/kg
SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.302 W/kg
Maximum value of SAR (measured) = 0.725 W/kg



0 dB = 0.725 W/kg = −1.40 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.7 ℃
Ambient Temperature:	19.8 ℃
Test Date:	06/16/2020
Plot No.:	80

DUT: SM-A516U; Type: Bar

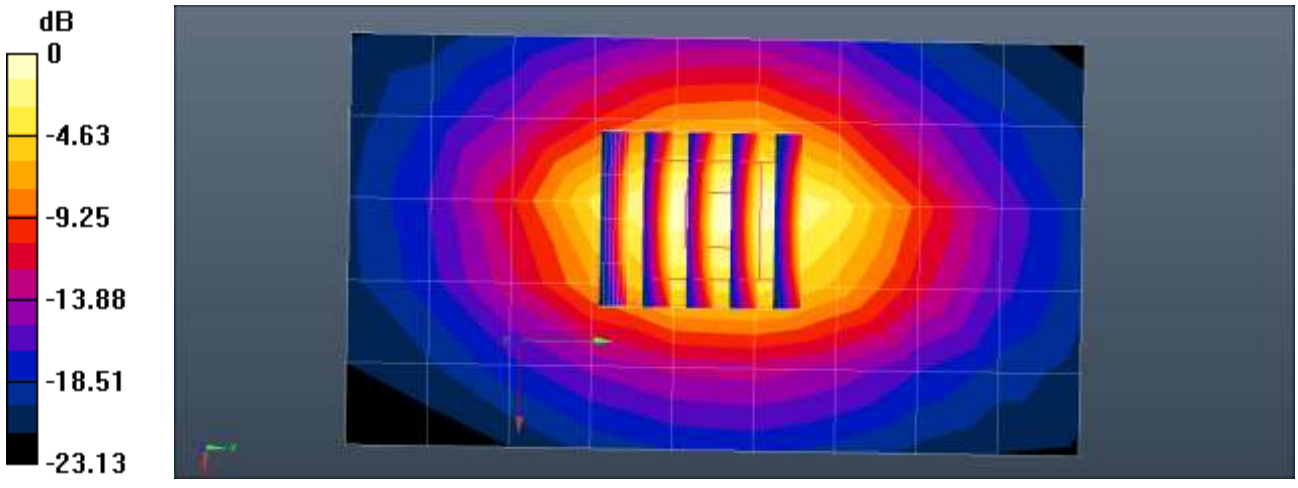
Communication System: UID 0, 5G NR n2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.412 S/m; ε_r = 39.646; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

NR n2 Body Bottom DFTs QPSK 20MHz 1RB 53offset 380000ch/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.53 W/kg

NR n2 Body Bottom DFTs QPSK 20MHz 1RB 53offset 380000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 34.35 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 2.17 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.594 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 54%
Maximum value of SAR (measured) = 1.80 W/kg



0 dB = 1.53 W/kg = 1.85 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.5 ℃
Ambient Temperature:	22.8 ℃
Test Date:	06/08/2020
Plot No.:	81

DUT: SM-A516U; Type: Bar

Communication System: UID 0, NR Band n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.923 S/m; ε_r = 42.72; ρ = 1000 kg/m^3
Phantom section: Flat Section

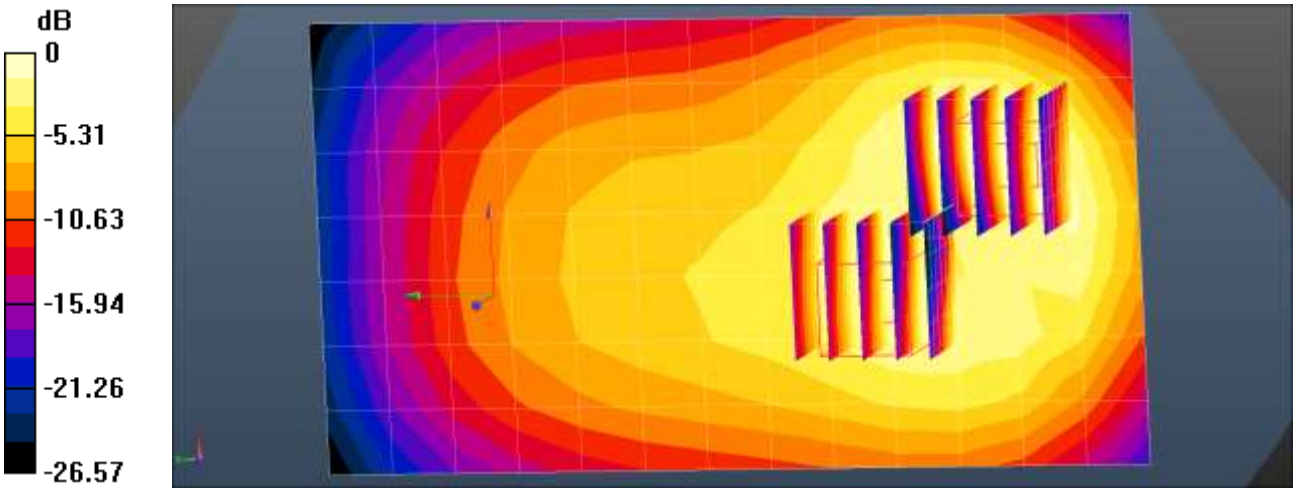
DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22); Calibrated: 2019-07-23;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.919 W/kg

NR band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.42 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.36 W/kg
SAR(1 g) = 0.775 W/kg; SAR(10 g) = 0.445 W/kg
Maximum value of SAR (measured) = 0.935 W/kg

NR band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.42 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.826 W/kg
SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.372 W/kg
Maximum value of SAR (measured) = 0.629 W/kg



0 dB = 0.919 W/kg = −0.37 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/04/2020
Plot No.:	82

DUT: SM-A516U; Type: Bar

Communication System: UID 0, NR band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.94 S/m; ε_r = 37.847; ρ = 1000 kg/m^3
Phantom section: Flat Section

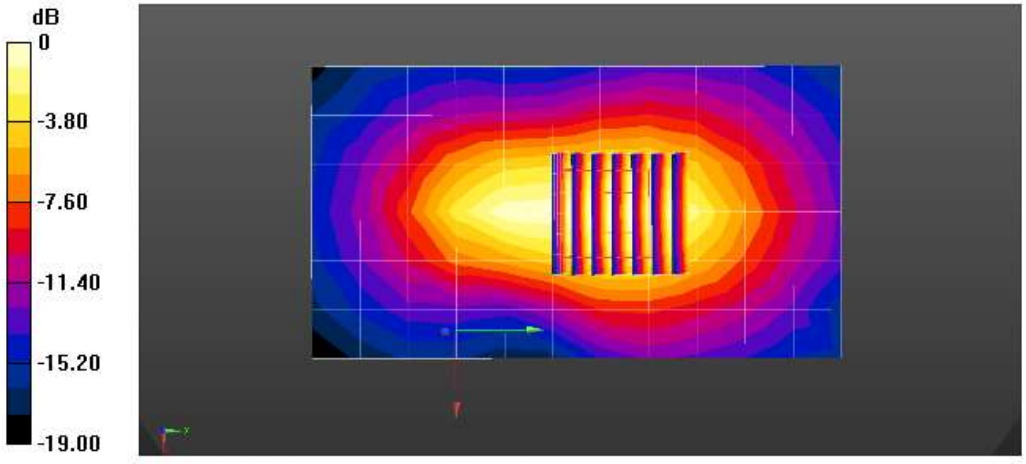
DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.49, 7.49, 7.49); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

NR Band n41 Body Top DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (7x12x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.890 W/kg

NR Band n41 Body Top DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.74 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.266 W/kg
Maximum value of SAR (measured) = 0.899 W/kg

NR Band n41 Body Top DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.74 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.230 W/kg
Maximum value of SAR (measured) = 0.845 W/kg



0 dB = 0.890 W/kg = -0.50 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	06/11/2020
Plot No.:	83

DUT: SM-A516U; Type: Bar

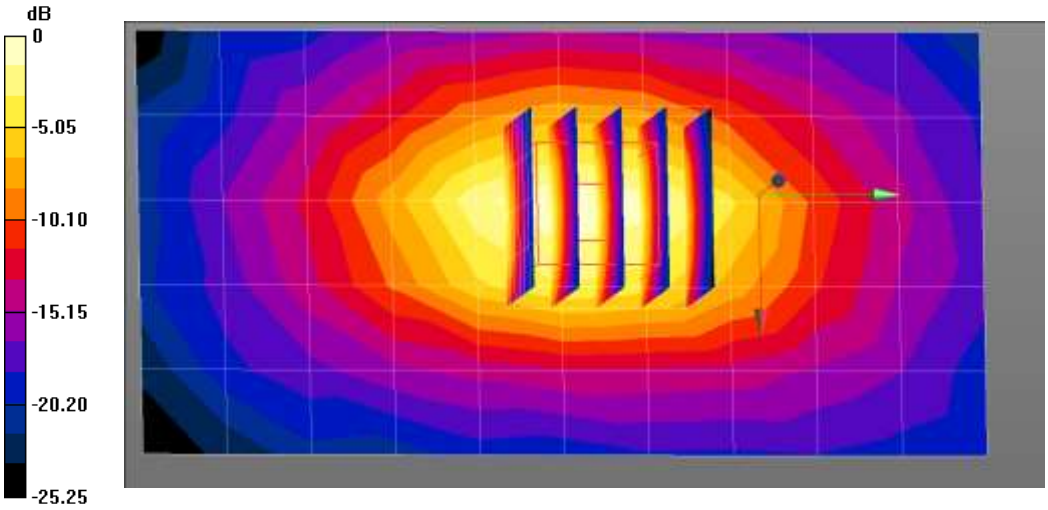
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.367 S/m; ε_r = 39.985; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

NR band n66 Body Bottom DFT-s QPSK 20MHz 50RB 28offset 349000ch/Area Scan (6x11x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.831 W/kg

NR band n66 Body Bottom DFT-s QPSK 20MHz 50RB 28offset 349000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.93 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.595 W/kg; SAR(10 g) = 0.314 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 54.7%
Maximum value of SAR (measured) = 0.904 W/kg



0 dB = 0.831 W/kg = −0.80 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/09/2020
Plot No.:	84

DUT: SM-A516U; Type: Bar

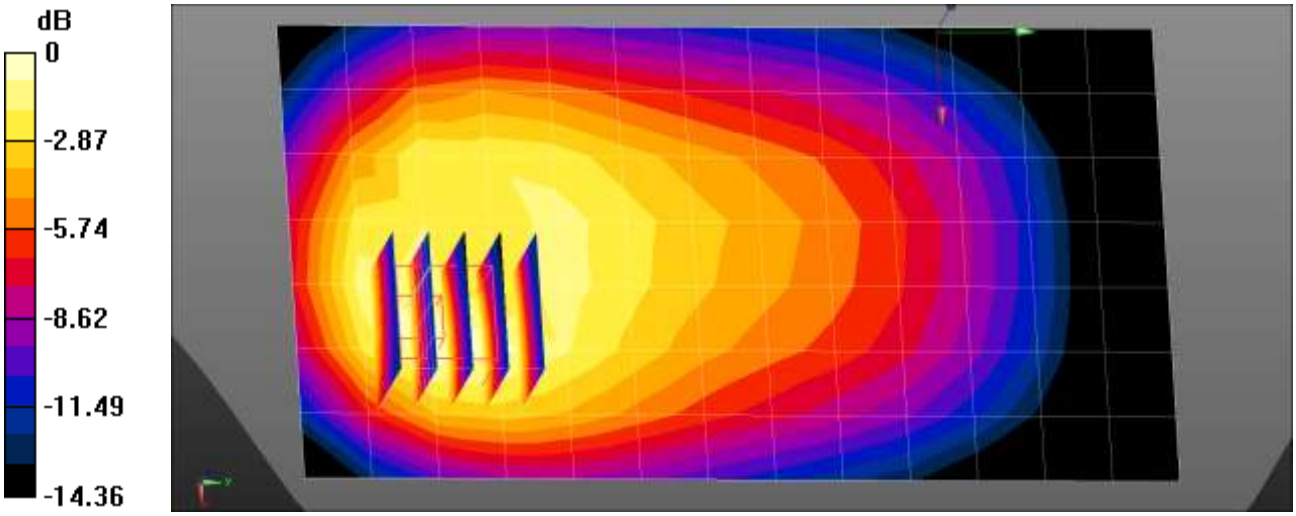
Communication System: UID 0, NR Band n71 (0); Frequency: 680.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 680.5 MHz; σ = 0.841 S/m; ε_r = 42.913; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.52, 6.52, 6.52) @ 680.5 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

NR band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.551 W/kg

NR band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.41 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.862 W/kg
SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 0.565 W/kg



0 dB = 0.565 W/kg = −2.48 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	85

DUT: SM-A516U; Type: Bar

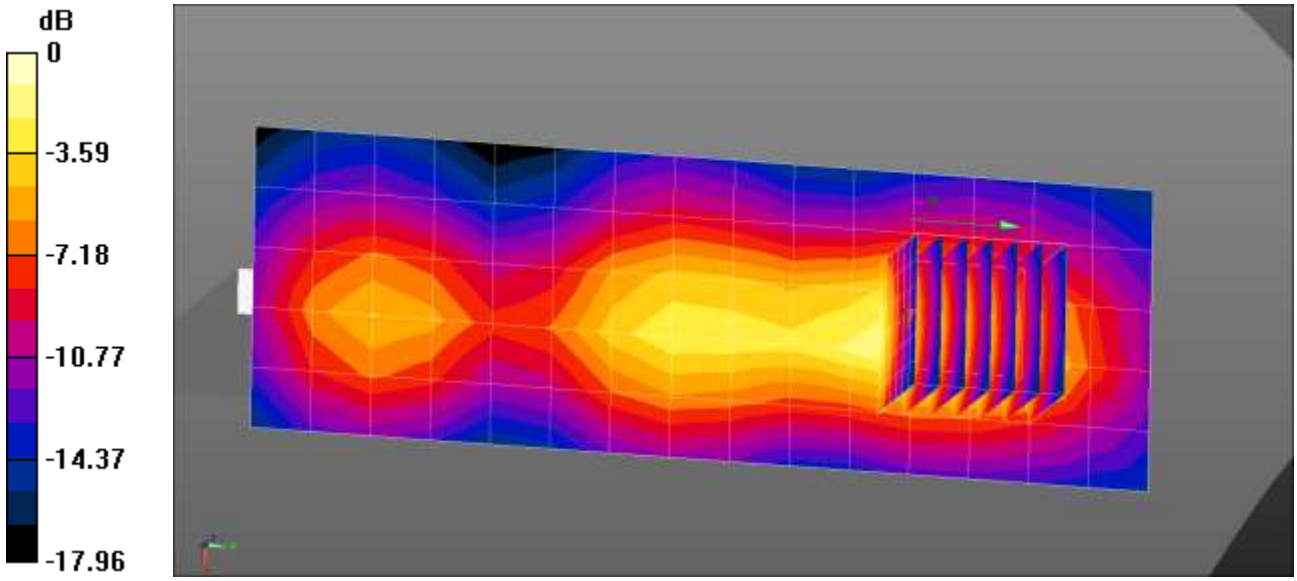
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.806 S/m; ε_r = 39.304; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2437 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

802.11b Body Left 1Mbps 6ch/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.06 W/kg

802.11b Body Left 1Mbps 6ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.50 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.313 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 45.8%
Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.06 W/kg = 0.24 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/12/2020
Plot No.:	86

DUT: SM-A516U; Type: Bar

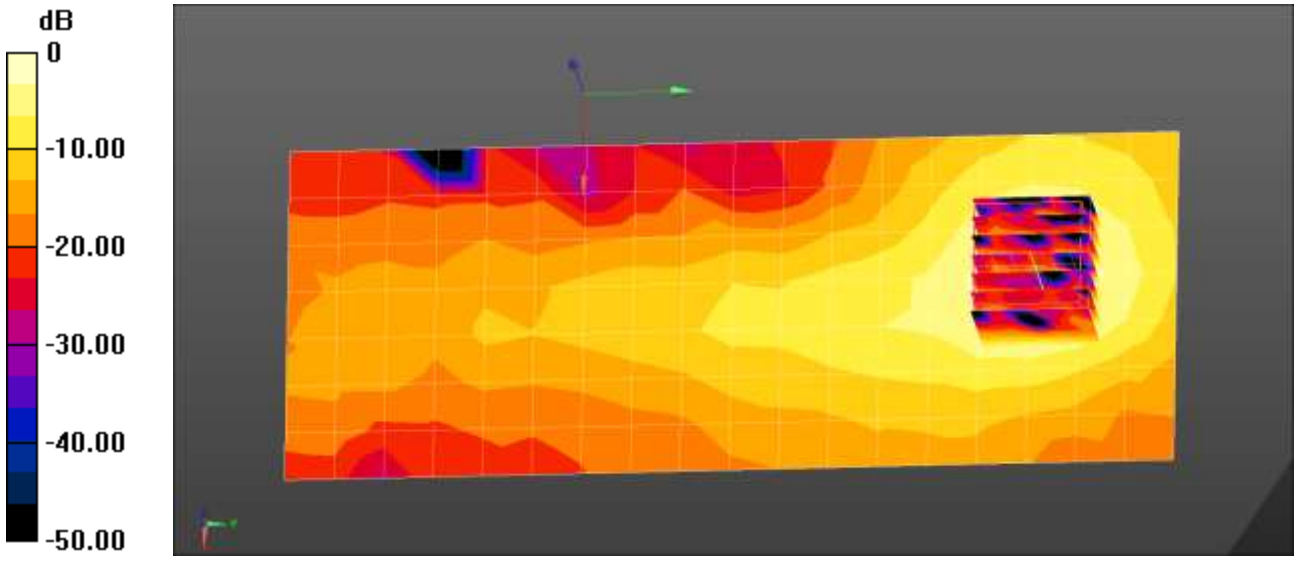
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 5.167 S/m; ε_r = 36.278; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.1, 5.1, 5.1) @ 5745 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

802.11a Body Left 6Mbps 149ch/Area Scan (8x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.422 W/kg

802.11a Body Left 6Mbps 149ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.408 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.833 W/kg
SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.069 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 59%
Maximum value of SAR (measured) = 0.451 W/kg



0 dB = 0.451 W/kg = -3.46 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.6 ℃
Test Date:	06/10/2020
Plot No.:	87

DUT: SM-A516U; Type: Bar

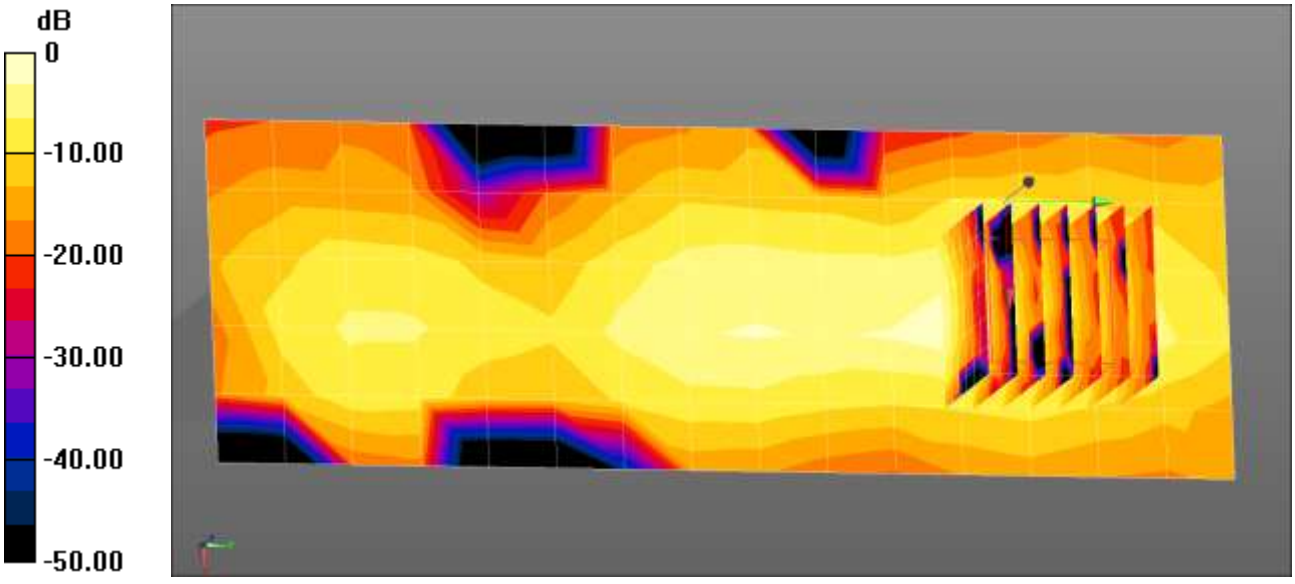
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.302
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.809 S/m; ε_r = 39.286; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2441 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

BT Body Left DH5 39ch/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0636 W/kg

BT Body Left DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.646 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.0880 W/kg
SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.016 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 43.3%
Maximum value of SAR (measured) = 0.0685 W/kg



0 dB = 0.0636 W/kg = −11.96 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.4 ℃
Ambient Temperature:	20.6 ℃
Test Date:	06/19/2020
Plot No.:	88

DUT: SM-A516U; Type: Bar

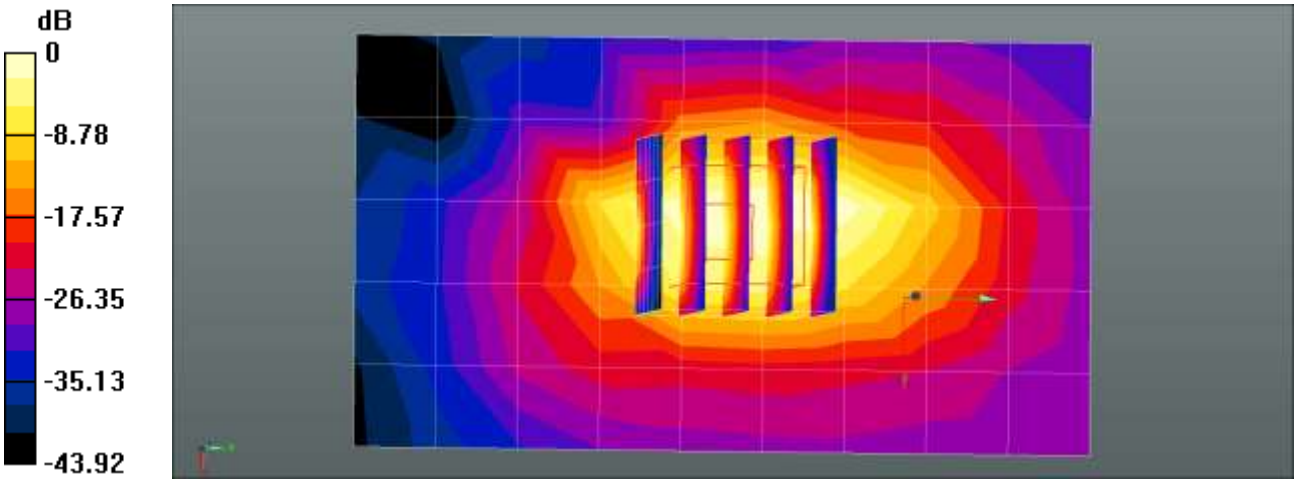
Communication System: UID 0, CDMA; Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1851.25 MHz; σ = 1.42 S/m; ε_r = 38.162; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

CDMA1900 Body Bottom EvDO Rev 0 25ch/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 6.82 W/kg

CDMA1900 Body Bottom EvDO Rev 0 25ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 88.64 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 15.0 W/kg
SAR(1 g) = 6.18 W/kg; SAR(10 g) = 2.73 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 44.4%
Maximum value of SAR (measured) = 11.2 W/kg



0 dB = 6.82 W/kg = 8.34 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	05/28/2020
Plot No.:	89

DUT: SM-A516U; Type: Bar

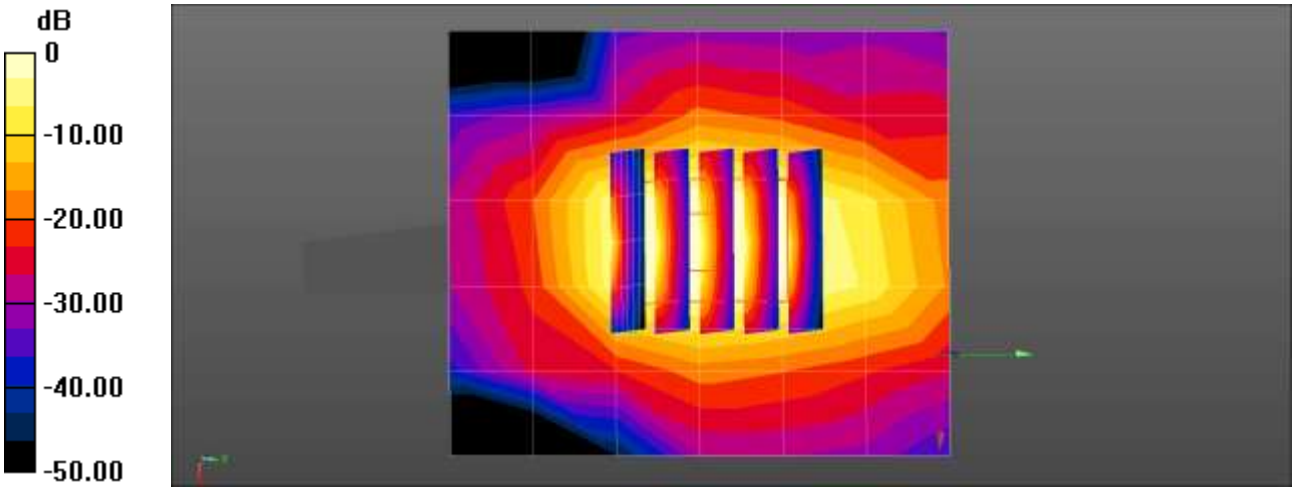
Communication System: UID 0, GSM 1900 4Tx (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07491
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 39.119; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

GSM1900 Body Bottom 4Tx 661ch Grip 0mm/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.84 W/kg

GSM1900 Body Bottom 4Tx 661ch Grip 0mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 60.78 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 5.75 W/kg
SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 4.71 W/kg



0 dB = 1.84 W/kg = 2.64 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.6 ℃
Test Date:	05/26/2020
Plot No.:	90

DUT: SM-A516U; Type: Bar

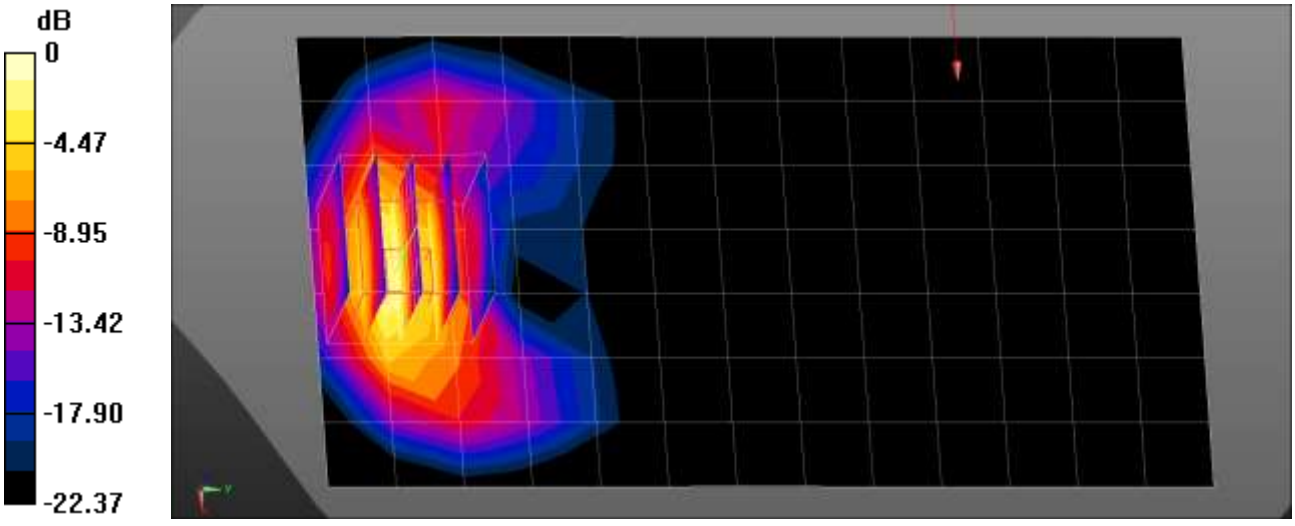
Communication System: UID 0, UMTS 1700 (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.317 S/m; ε_r = 40.217; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B4 Body Front 1412ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.77 W/kg

UMTS B4 Body Front 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.7530 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 7.11 W/kg
SAR(1 g) = 3.19 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (measured) = 3.89 W/kg



0 dB = 3.89 W/kg = 5.90 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.3 ℃
Ambient Temperature:	20.5 ℃
Test Date:	06/09/2020
Plot No.:	91

DUT: SM-A516U; Type: Bar

Communication System: UID 0, UMTS1900 (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.399 S/m; ε_r = 39.418; ρ = 1000 kg/m^3
Phantom section: Flat Section

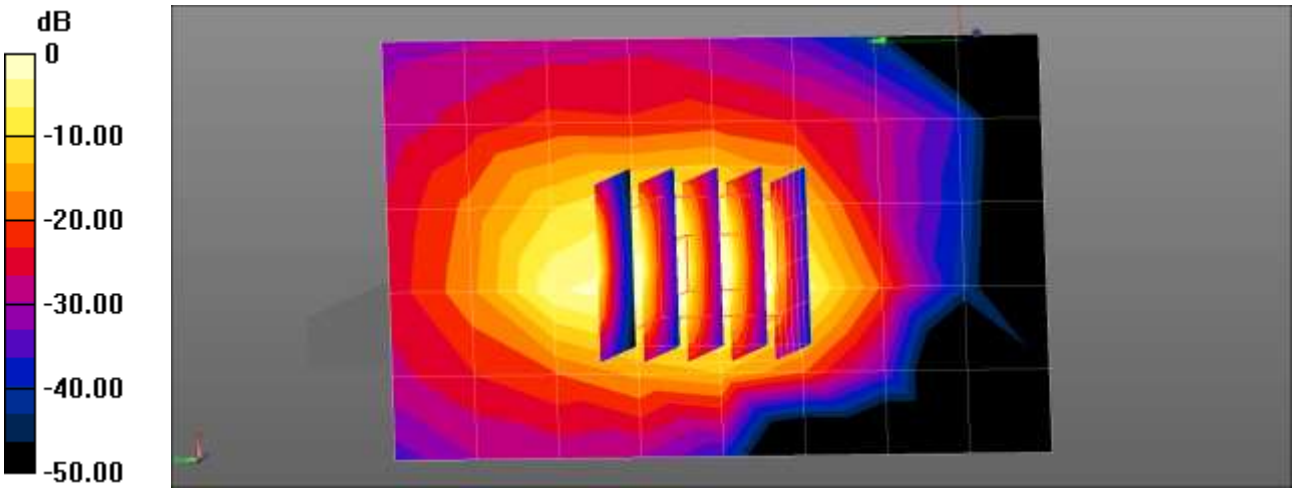
DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.75, 7.75, 7.75); Calibrated: 2019-11-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

UMTS B2 Body Bottom 9262ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.36 W/kg

UMTS B2 Body Bottom 9262ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 70.74 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 9.51 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.85 W/kg
Maximum value of SAR (measured) = 7.39 W/kg



0 dB = 5.36 W/kg = 7.29 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.2 ℃
Ambient Temperature:	23.5 ℃
Test Date:	06/05/2020
Plot No.:	92

DUT: SM-A516U; Type: Bar

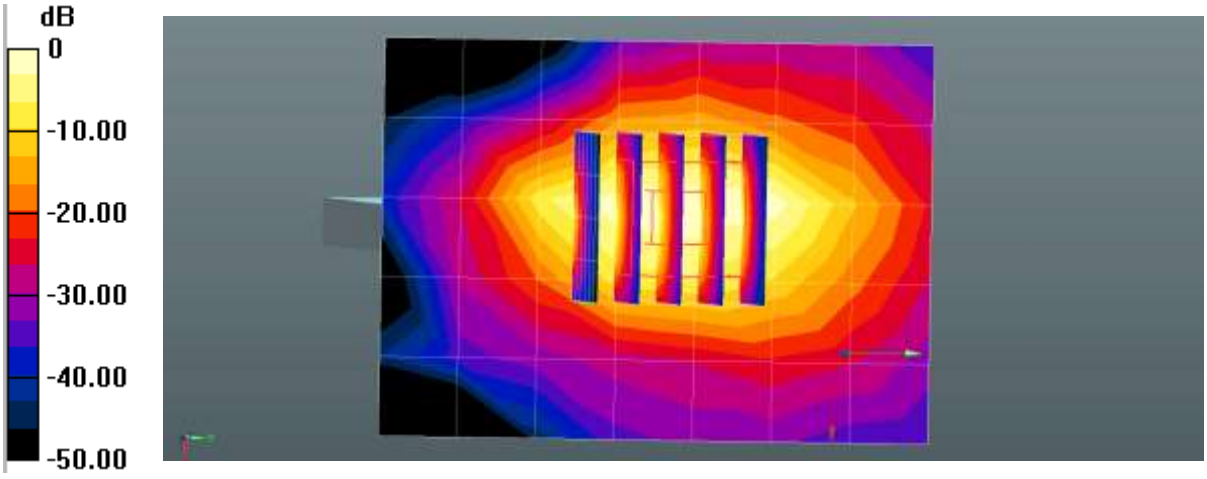
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.358 S/m; ε_r = 39.341; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

LTE band 2 Body Bottom QPSK 20MHz 50RB 25offset 18700ch Phablet Grip 0mm/Area Scan (6x8x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 7.36 W/kg

LTE band 2 Body Bottom QPSK 20MHz 50RB 25offset 18700ch Phablet Grip 0mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 78.35 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 12.9 W/kg
SAR(1 g) = 5.42 W/kg; SAR(10 g) = 2.38 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 42.6%
Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 7.36 W/kg = 8.67 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5 ℃
Ambient Temperature:	21.7 ℃
Test Date:	05/21/2020
Plot No.:	93

DUT: SM-A516U; Type: Bar

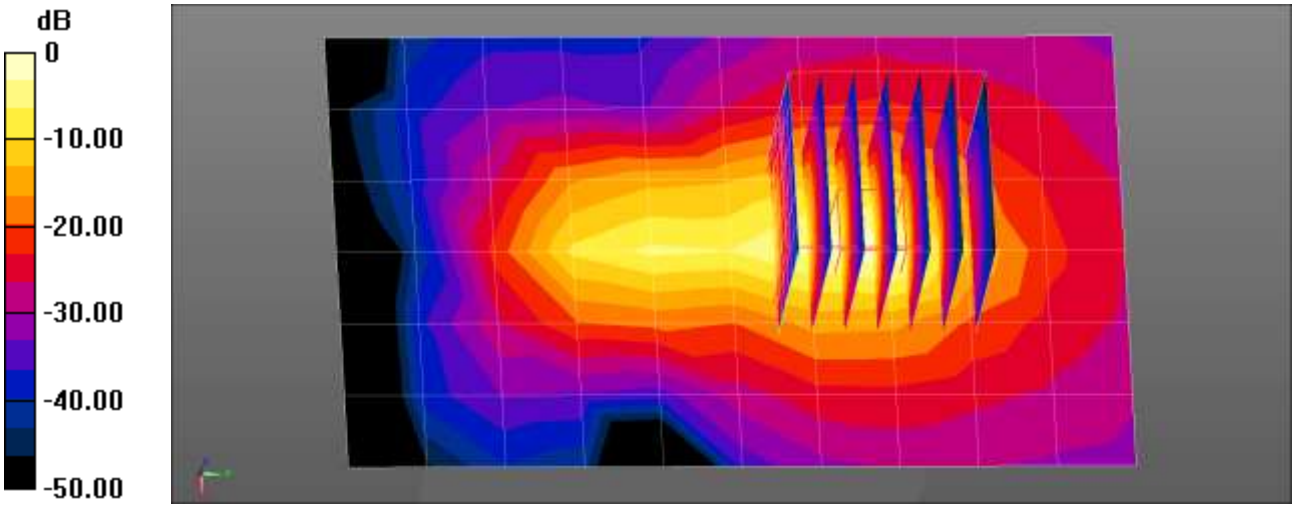
Communication System: UID 0, LTE Band7 (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 1.907 S/m; ε_r = 37.979; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2560 MHz; Calibrated: 2019-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 7 Body Bottom QPSK 20MHz 50RB 0offset 21350ch Grip 0mm Phablet/Area Scan (7x11x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 13.3 W/kg

LTE Band 7 Body Bottom QPSK 20MHz 50RB 0offset 21350ch Grip 0mm Phablet/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 41.30 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 21.7 W/kg
SAR(1 g) = 5.29 W/kg; SAR(10 g) = 1.67 W/kg
Maximum value of SAR (measured) = 14.2 W/kg



0 dB = 13.3 W/kg = 11.24 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.8 ℃
Ambient Temperature:	21.9 ℃
Test Date:	05/20/2020
Plot No.:	94

Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.422 S/m; ε_r = 40.222; ρ = 1000 kg/m^3
Phantom section: Flat Section

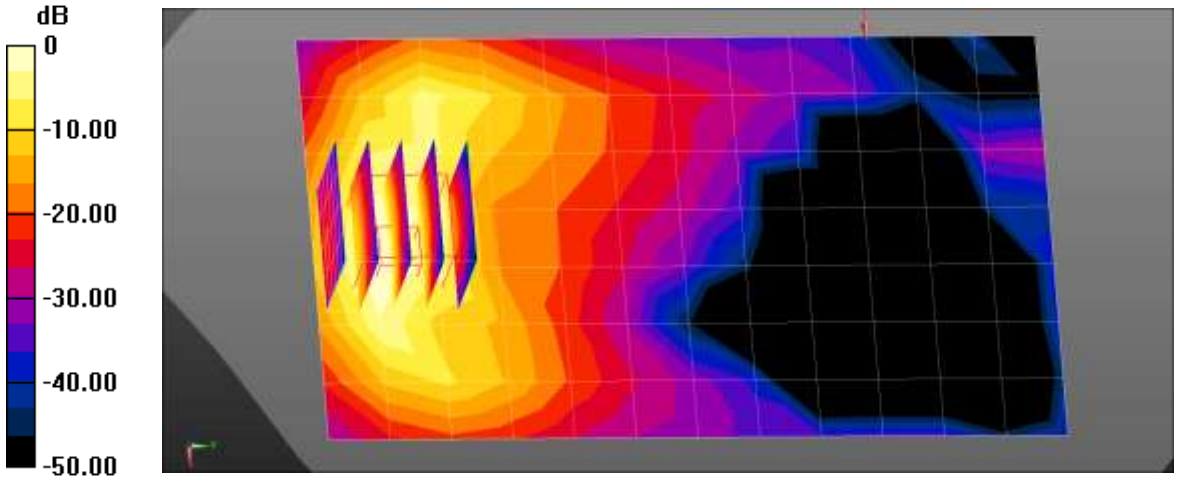
DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1882.5 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 25 Body Front QPSK 20MHz 50RB 49offset 26365ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mmMaximum value of SAR (measured) = 4.66 W/kg

LTE Band 25 Body Front QPSK 20MHz 50RB 49offset 26365ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.101 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 11.0 W/kg
SAR(1 g) = 5.05 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 6.40 W/kg



0 dB = 4.66 W/kg = 6.69 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.3 ℃
Test Date:	05/14/2020
Plot No.:	95

DUT: SM-A516U; Type: Bar

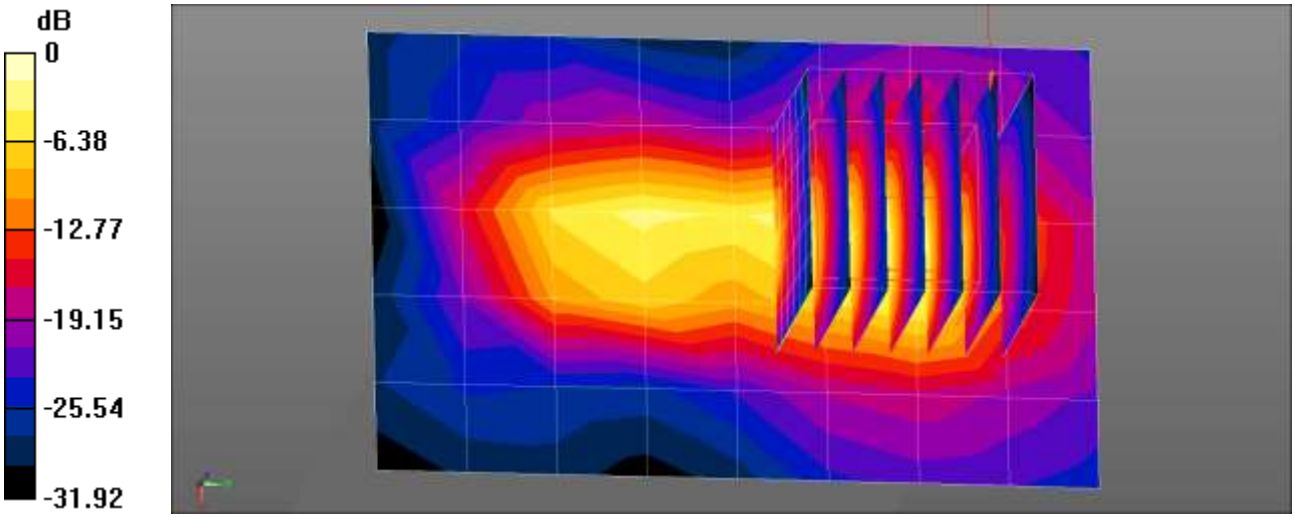
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.654 S/m; ε_r = 40.114; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2310 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

LTE Band 30 Body Bottom QPSK 10MHz 50RB 0offset 27710ch/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 7.62 W/kg

LTE Band 30 Body Bottom QPSK 10MHz 50RB 0offset 27710ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 47.59 V/m; Power Drift = 0.23 dB
Peak SAR (extrapolated) = 26.5 W/kg
SAR(1 g) = 5.44 W/kg; SAR(10 g) = 1.67 W/kg
Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 7.62 W/kg = 8.82 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0 ℃
Ambient Temperature:	22.2 ℃
Test Date:	05/29/2020
Plot No.:	96

DUT: SM-A516U; Type: Bar;

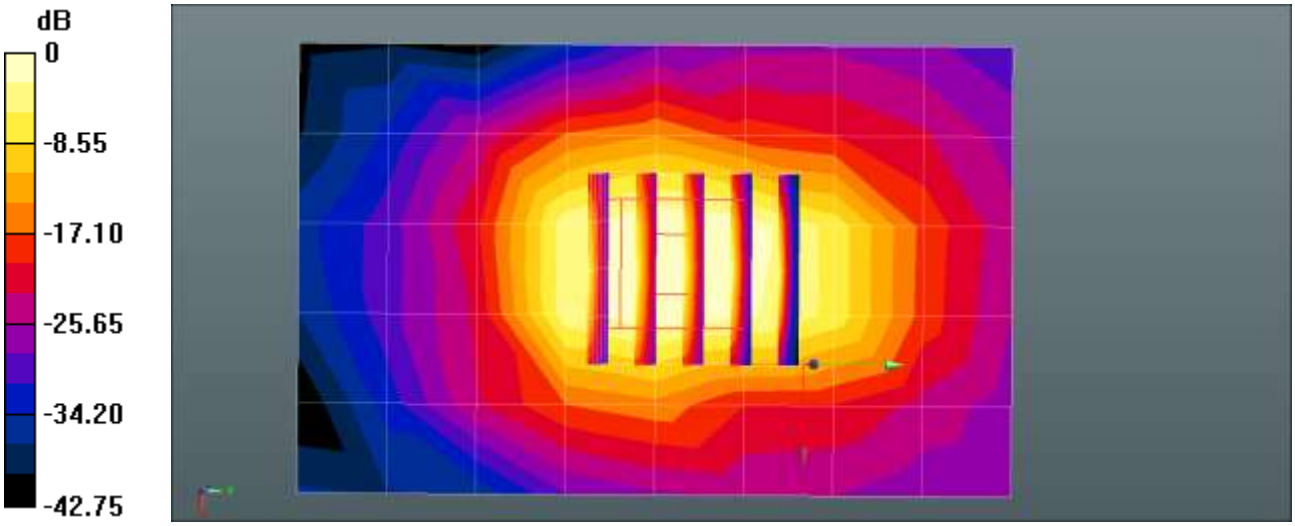
Communication System: UID 0, LTE Band 66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.394 S/m; εr = 40.039; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1770 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 Body Bottom QPSK 20MHz 50RB 0offset 132572ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.94 W/kg

LTE Band 66 Body Bottom QPSK 20MHz 50RB 0offset 132572ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 74.57 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 5.34 W/kg; SAR(10 g) = 2.52 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 40.8%
Maximum value of SAR (measured) = 8.00 W/kg



0 dB = 3.94 W/kg = 5.95 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.2 ℃
Test Date:	06/17/2020
Plot No.:	97

DUT: SM-A516U; Type: Bar

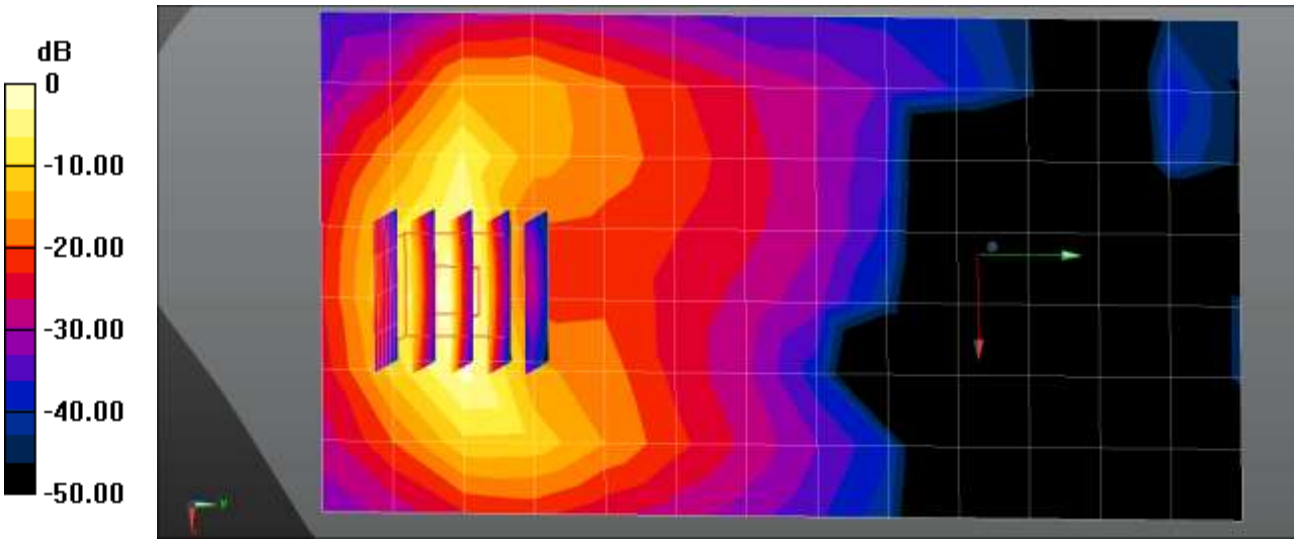
Communication System: UID 0, 5G NR n2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.39 S/m; ε_r = 39.089; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

NR n2 Body Front DFTs QPSK 20MHz 50RB 28offset 380000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.0 W/kg

NR n2 Body Front DFTs QPSK 20MHz 50RB 28offset 380000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.225 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 6.36 W/kg; SAR(10 g) = 2.61 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 39.7%
Maximum value of SAR (measured) = 12.7 W/kg



0 dB = 13.0 W/kg = 11.15 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.6 ℃
Ambient Temperature:	19.7 ℃
Test Date:	06/12/2020
Plot No.:	98

DUT: SM-A516U; Type: Bar

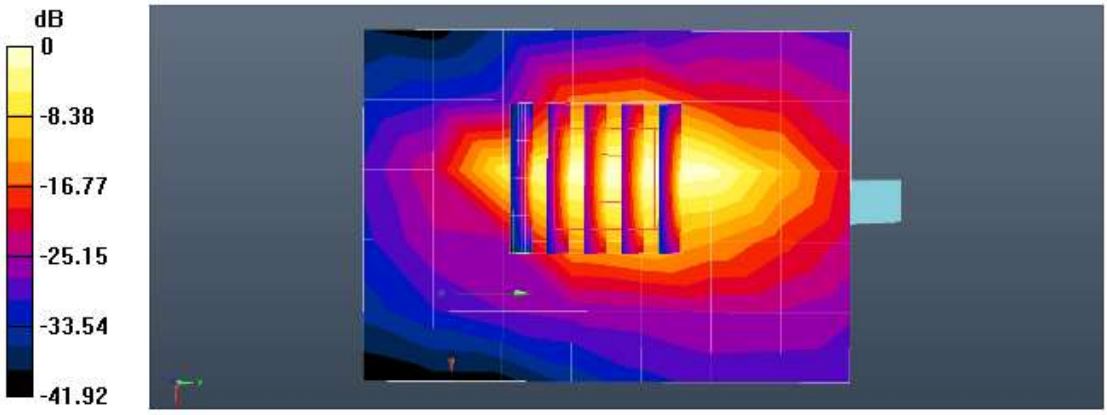
Communication System: UID 0, NR Band 66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.361 S/m; ε_r = 40.136; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

NR band n66 Body Bottom DFT-s QPSK 20MHz 1RB 1offset 354000ch/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.2 W/kg

NR band n66 Body Bottom DFT-s QPSK 20MHz 1RB 1offset 354000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 72.27 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 14.5 W/kg
SAR(1 g) = 6.45 W/kg; SAR(10 g) = 2.87 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 45.1%
Maximum value of SAR (measured) = 11.7 W/kg



0 dB = 10.2 W/kg = 10.10 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.4 ℃
Test Date:	06/12/2020
Plot No.:	99

DUT: SM-A516U; Type: Bar

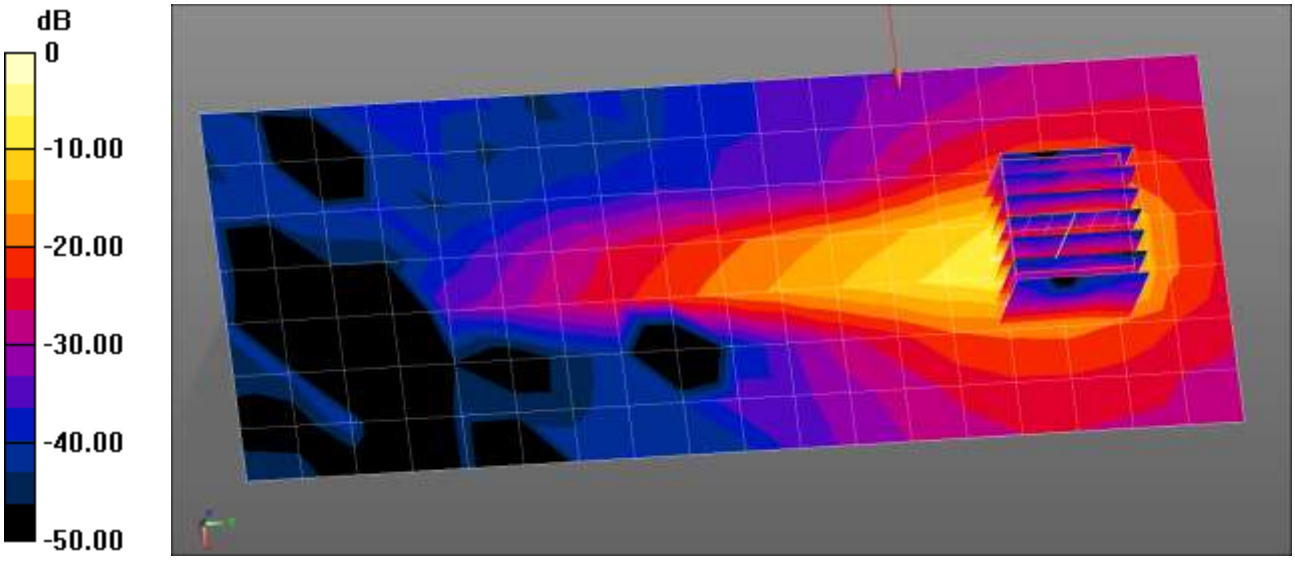
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.876 S/m; ε_r = 36.635; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(4.84, 4.84, 4.84) @ 5500 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

802.11a Body Left 6Mbps 100ch/Area Scan (8x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 8.03 W/kg

802.11a Body Left 6Mbps 100ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 10.09 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 46.2 W/kg
SAR(1 g) = 5.9 W/kg; SAR(10 g) = 1.28 W/kg
Smallest distance from peaks to all points 3 dB below = 3.2 mm
Ratio of SAR at M2 to SAR at M1 = 53.1%
Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg = 13.03 dBW/kg

Appendix C. – Dipole Verification Plots

■ **Verification Data (750 ㎒ Head) LTE12**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.3 ℃
Test Date:	05/11/2020
Plot	100

DUT: Dipole 750 MHz D750V3; Type: D750V3

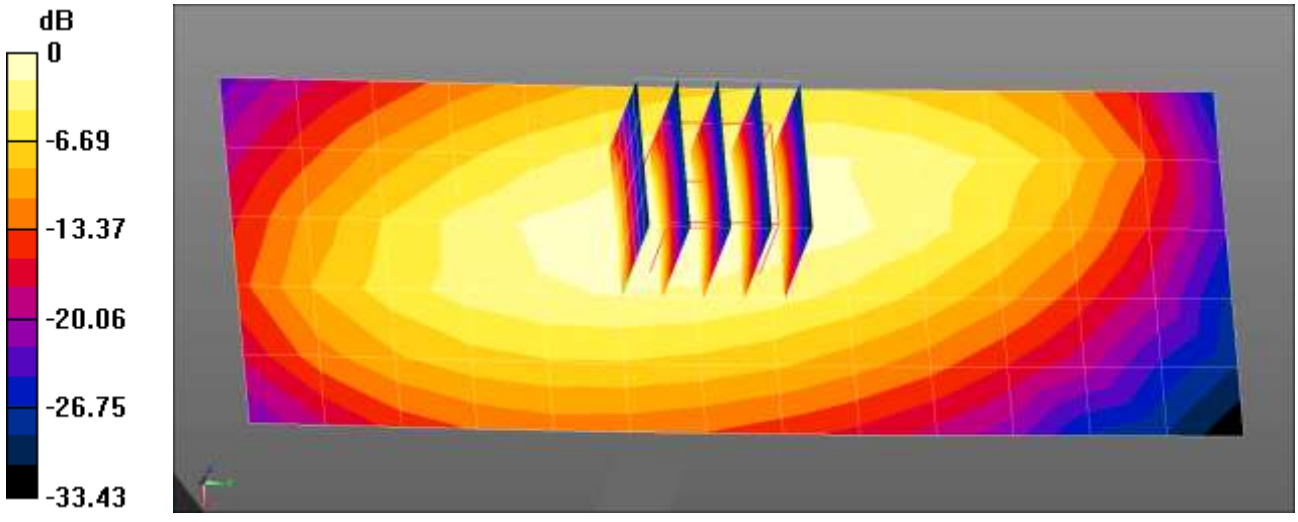
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.903 S/m; ε_r = 43.502; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 750 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

750 MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.571 W/kg

750 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.77 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.648 W/kg
SAR(1 g) = 0.432 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 0.576 W/kg



0 dB = 0.571 W/kg = −2.44 dBW/kg

■ **Verification Data (750 ㎒ Head) LTE13**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	05/12/2020
Plot	101

DUT: Dipole 750 MHz D750V3; Type: D750V3

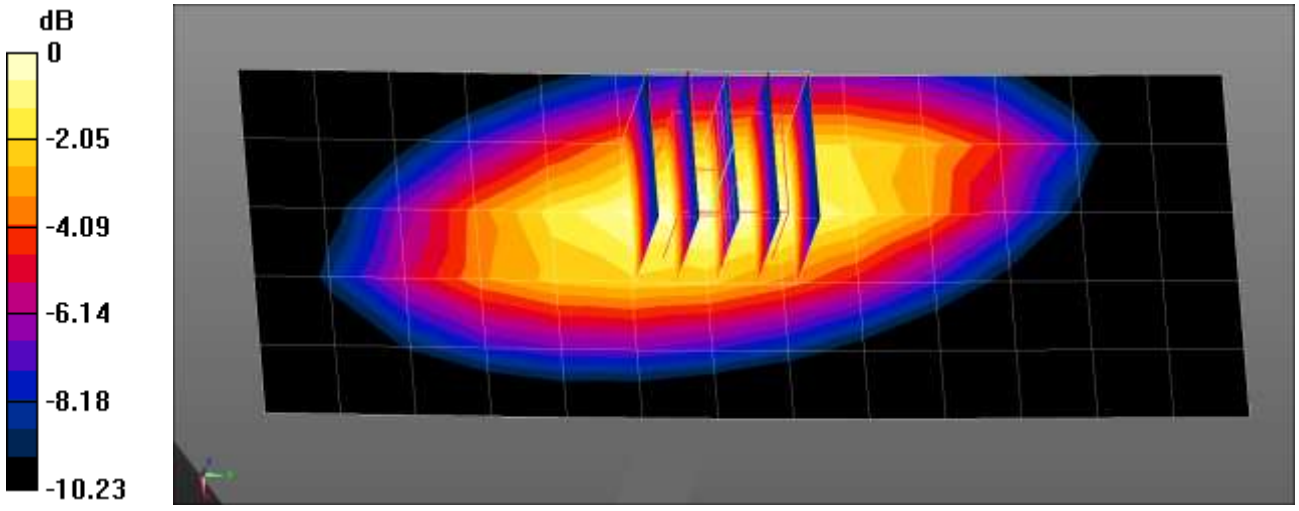
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.903 S/m; ε_r = 42.465; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 750 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

750MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.575 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.67 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.644 W/kg
SAR(1 g) = 0.432 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 0.574 W/kg



0 dB = 0.574 W/kg = −2.41 dBW/kg

■ **Verification Data (750 ㎒ Head) LTE14**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	05/13/2020
Plot	102

DUT: Dipole 750 MHz D750V3; Type: D750V3

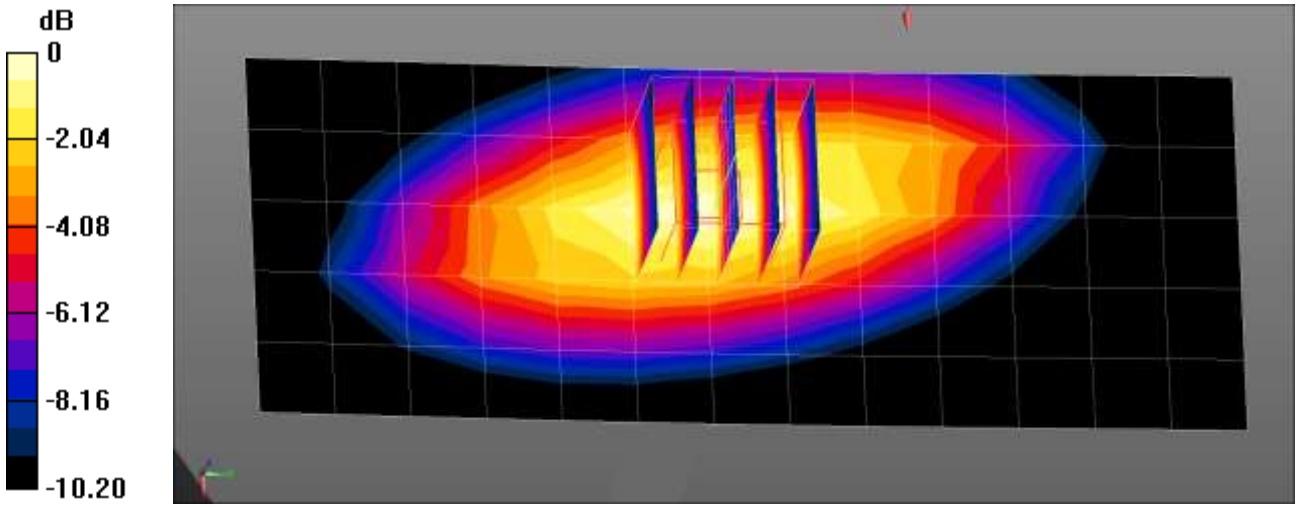
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.869 S/m; ε_r = 41.859; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.26, 9.26, 9.26) @ 750 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

750MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.549 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.57 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.617 W/kg
SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.276 W/kg
Maximum value of SAR (measured) = 0.550 W/kg



0 dB = 0.550 W/kg = −2.60 dBW/kg

■ **Verification Data (750 ㎒ Head) N71**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	06/09/2020
Plot	103

DUT: Dipole 750 MHz D750V3; Type: D750V3

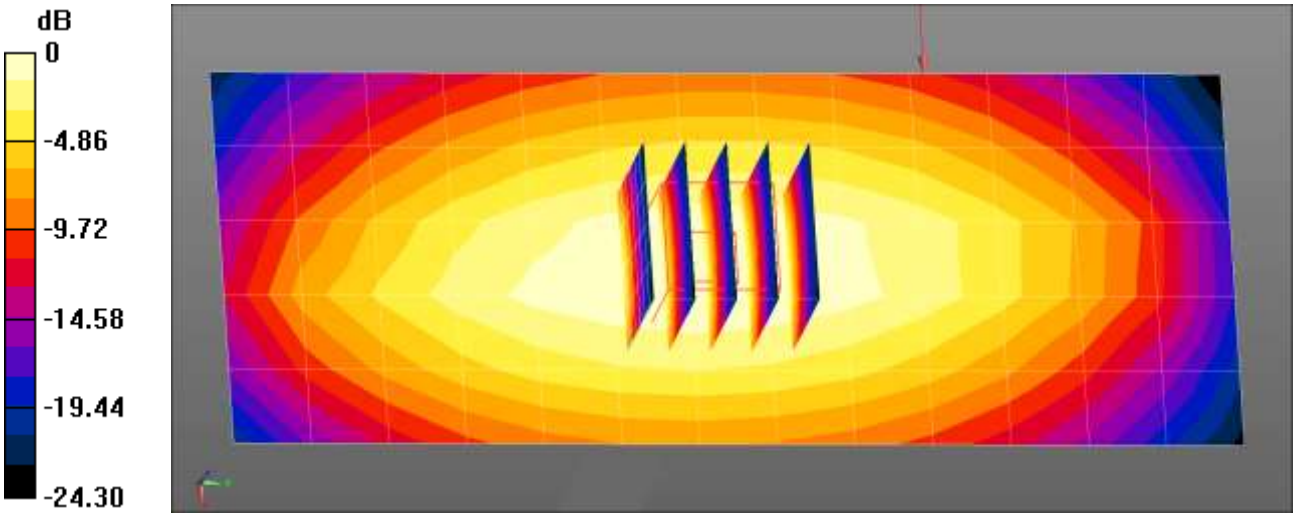
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.913 S/m; ε_r = 42.062; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.52, 6.52, 6.52) @ 750 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

750 MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.451 W/kg

750 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.73 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.609 W/kg
SAR(1 g) = 0.421 W/kg; SAR(10 g) = 0.283 W/kg
Maximum value of SAR (measured) = 0.487 W/kg



0 dB = 0.451 W/kg = −3.45 dBW/kg

■ **Verification Data (750 ㎒ Head) LTE71**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	05/08/2020
Plot	104

DUT: Dipole 750 MHz D750V3; Type: D750V3

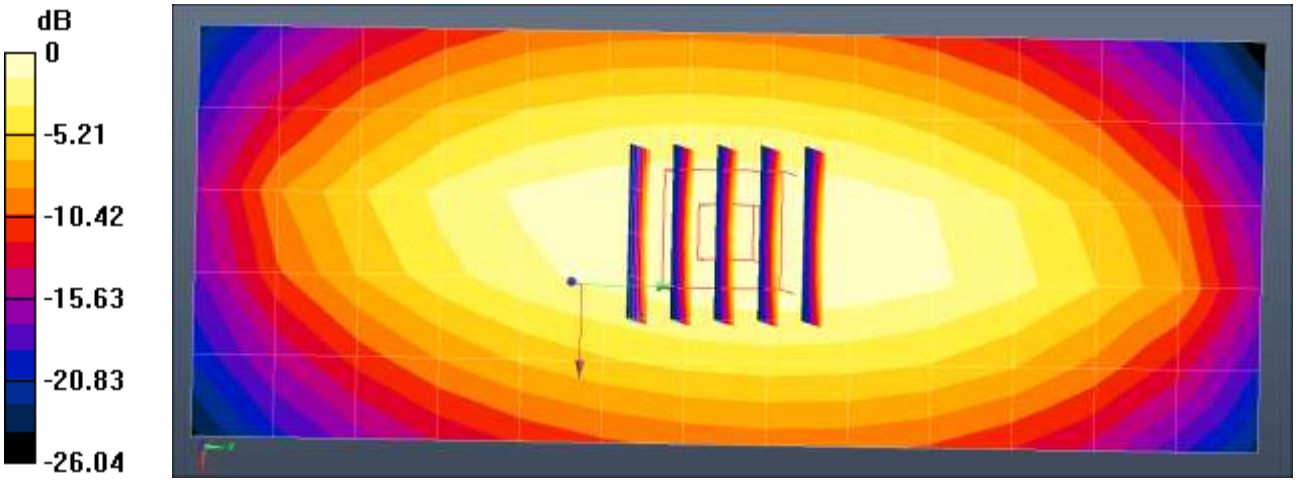
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.932 S/m; ε_r = 42.502; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/750MHz Head Verification (LTE B71)/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.495 W/kg

Dipole/750MHz Head Verification (LTE B71)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.27 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.640 W/kg
SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.287 W/kg
Smallest distance from peaks to all points 3 dB below = 17.7 mm
Ratio of SAR at M2 to SAR at M1 = 67.1%
Maximum value of SAR (measured) = 0.569 W/kg



0 dB = 0.495 W/kg = −3.05 dBW/kg

■ **Verification Data (835 ㎒ Head) CDMA BC0**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	06/22/2020
Plot	105

DUT: Dipole 835 MHz D835V2; Type: D835V2

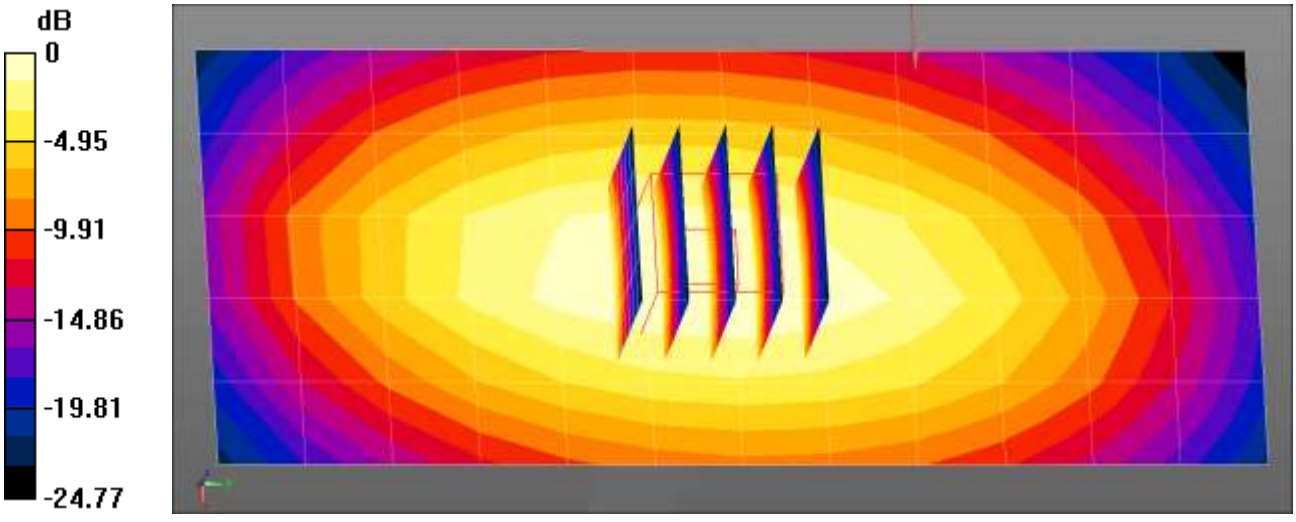
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.945 S/m; ε_r = 41.691; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85) @ 835 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.633 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.32 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.766 W/kg
SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.329 W/kg
Maximum value of SAR (measured) = 0.673 W/kg



0 dB = 0.633 W/kg = −1.99 dBW/kg

■ **Verification Data (835 ㎒ Head) CDMA BC10**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	06/18/2020
Plot	106

DUT: Dipole 835 MHz D835V2; Type: D835V2

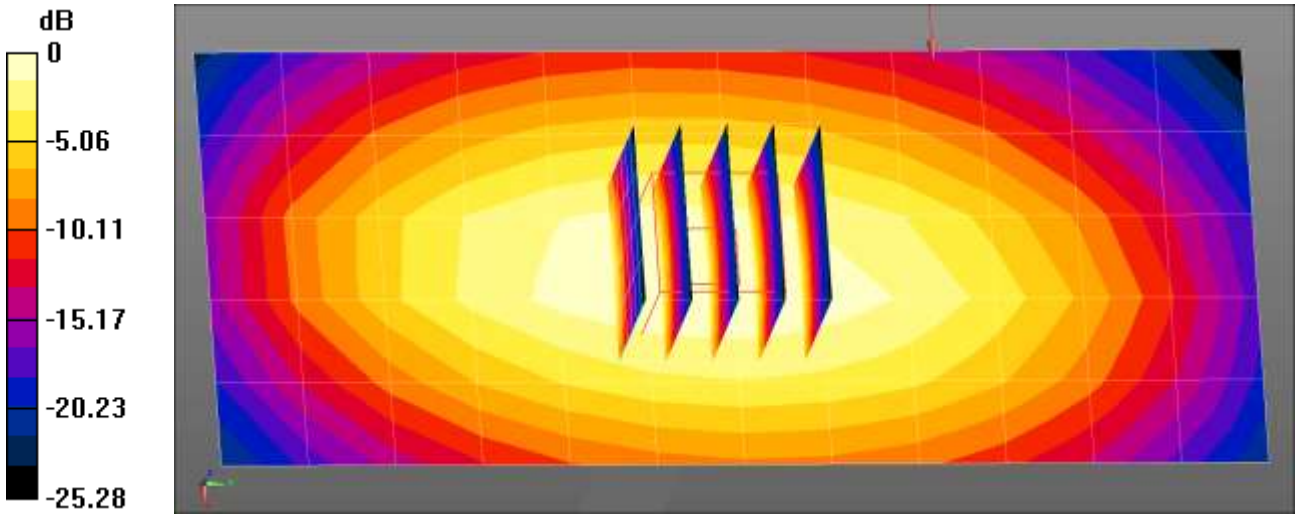
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.918 S/m; ε_r = 41.779; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.85, 9.85, 9.85) @ 835 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V5.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.614 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.39 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.734 W/kg
SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.319 W/kg
Maximum value of SAR (measured) = 0.645 W/kg



0 dB = 0.614 W/kg = −2.12 dBW/kg

■ **Verification Data (835 ㎒ Head) GSM850,WCDMA5**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.0 ℃
Test Date:	05/11/2020
Plot	107

DUT: Dipole 835 MHz D835V2; Type: D835V2

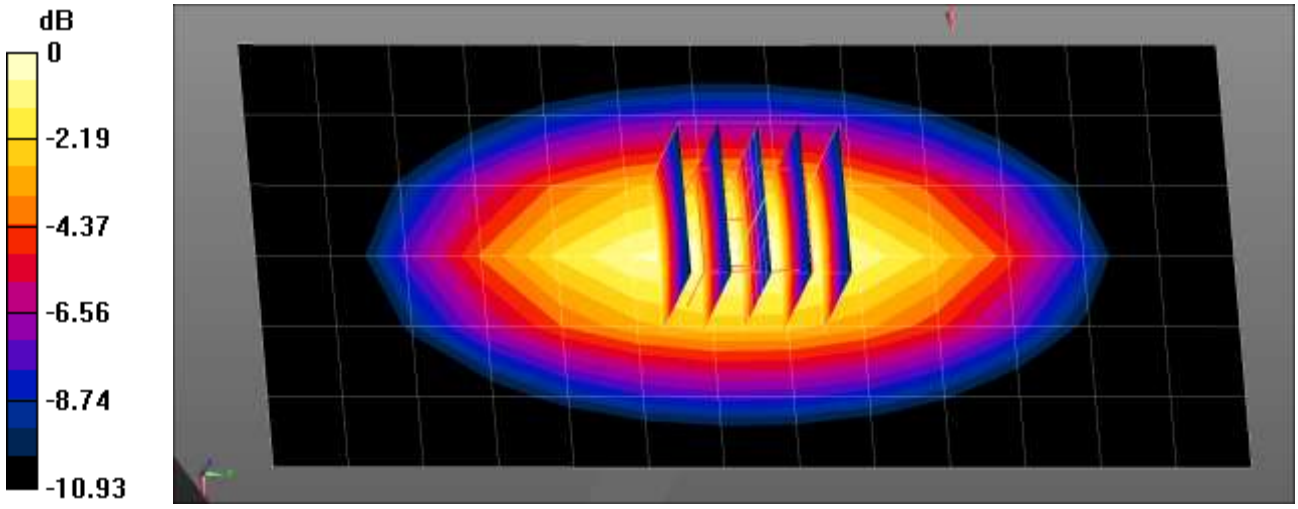
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.938 S/m; ε_r = 42.599; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22) @ 835 MHz; Calibrated: 2019-07-23
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2019-05-23
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

835MHz Head Verification/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.559 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.28 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.728 W/kg
SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.312 W/kg
Maximum value of SAR (measured) = 0.567 W/kg



0 dB = 0.567 W/kg = −2.46 dBW/kg

■ **Verification Data (835 ㎒ Head) LTE 26**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	05/07/2020
Plot	108

DUT: Dipole 835 MHz D835V2; Type: D835V2

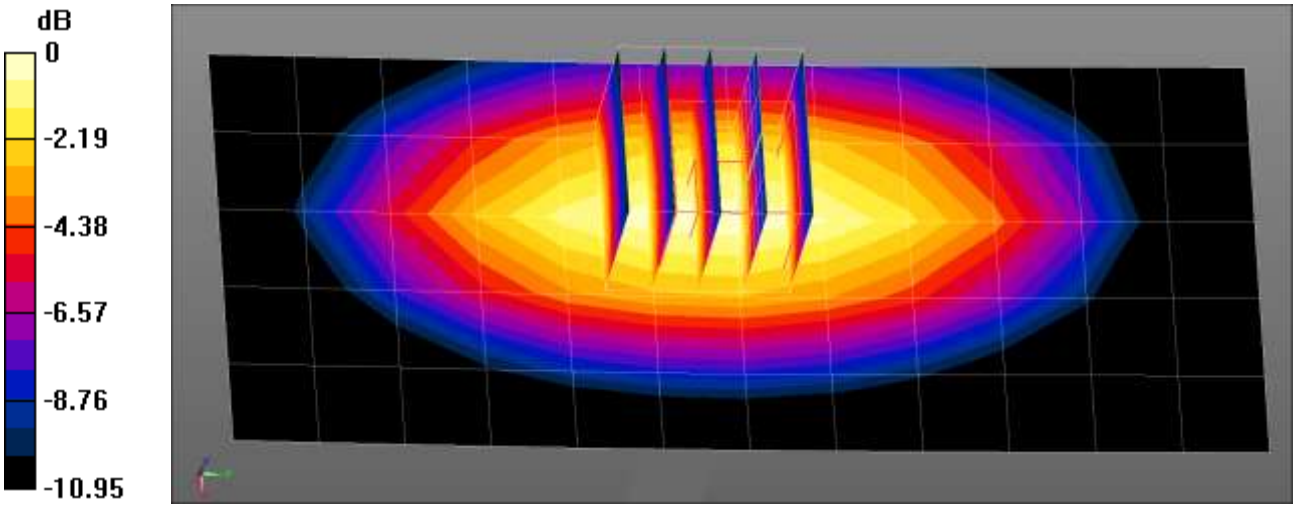
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.927 S/m; ε_r = 42.308; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.03, 9.03, 9.03) @ 835 MHz; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4);

835MHz Head Verification (LTE Band 26)/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.583 W/kg

835MHz Head Verification (LTE Band 26)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.07 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.687 W/kg
SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.299 W/kg
Maximum value of SAR (measured) = 0.608 W/kg



0 dB = 0.608 W/kg = −2.16 dBW/kg

■ **Verification Data (835 ㎒ Head) NR5**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.5 ℃
Test Date:	06/08/2020
Plot	109

DUT: Dipole 835 MHz D835V2; Type: D835V2

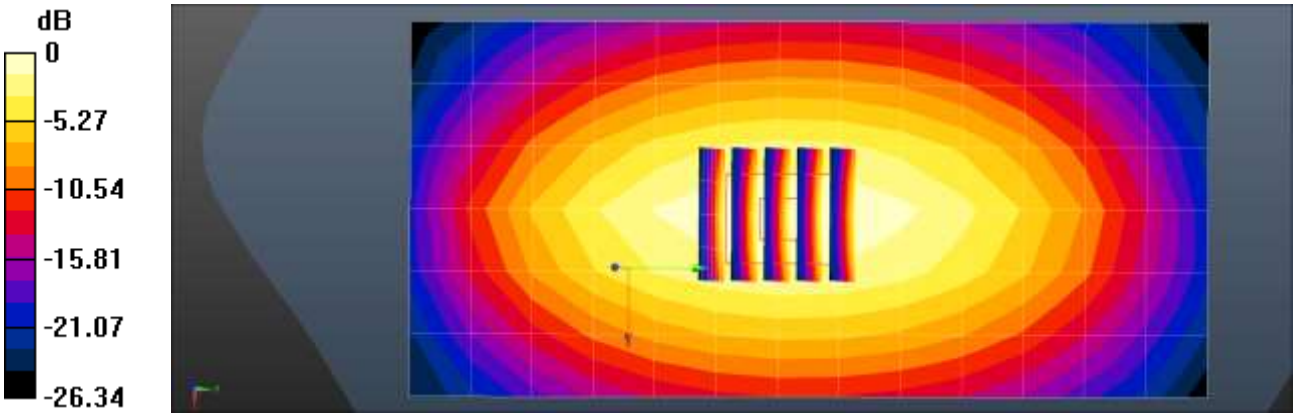
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.922 S/m; ε_r = 42.739; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.22, 6.22, 6.22); Calibrated: 2019-07-23;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Right
- Measurement SW: DASY52, Version 52.10 (4);

835MHz Head Verification/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.573 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.61 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.734 W/kg
SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.321 W/kg
Maximum value of SAR (measured) = 0.578 W/kg



0 dB = 0.573 W/kg = −2.42 dBW/kg

■ **Verification Data (1 800 ㎒ Head) NR66**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	06/11/2020
Plot	110

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

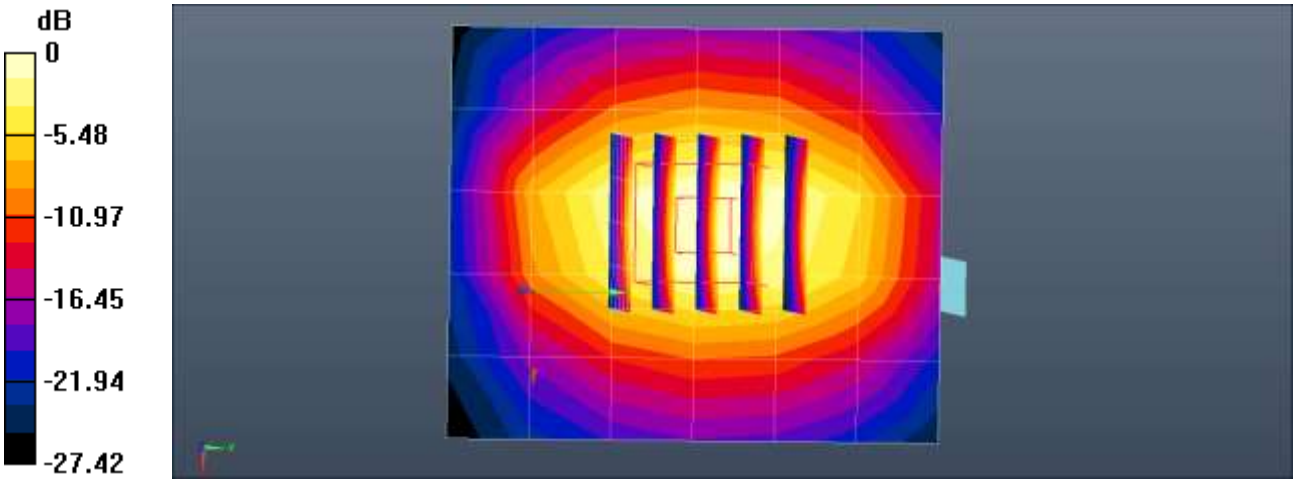
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.42 S/m; ε_r = 39.861; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1800MHz Head Verification (NR n66)/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.37 W/kg

Dipole/1800MHz Head Verification (NR n66)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.01 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.70 W/kg
SAR(1 g) = 1.93 W/kg; SAR(10 g) = 1 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 51.9%
Maximum value of SAR (measured) = 3.03 W/kg



0 dB = 2.37 W/kg = 3.75 dBW/kg

■ **Verification Data (1 800 ㎒ Head) NR66 Head**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.6 ℃
Test Date:	06/11/2020
Plot	111

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

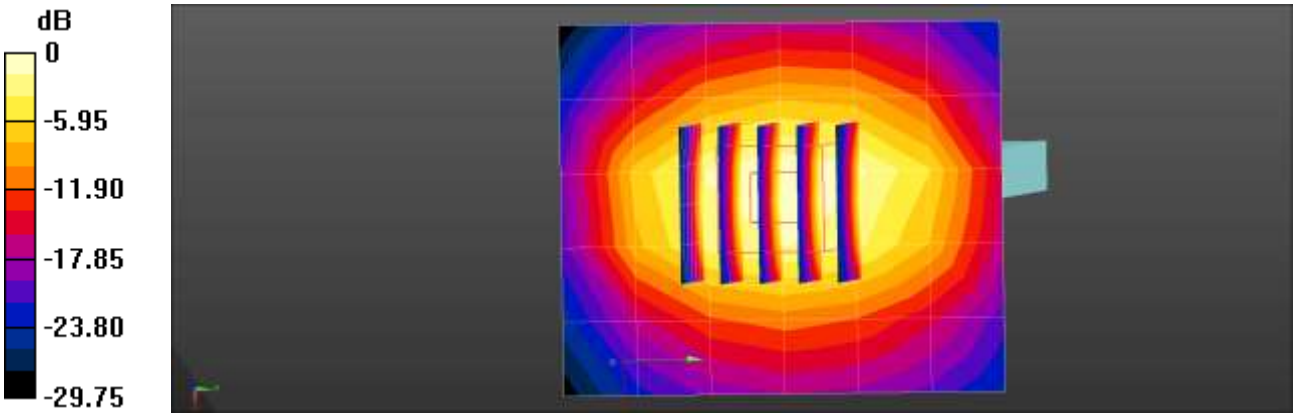
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.383 S/m; ε_r = 40.143; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.62, 8.62, 8.62); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.36 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.65 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 1.83 W/kg; SAR(10 g) = 0.965 W/kg
Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.36 W/kg = 3.72 dBW/kg

■ **Verification Data (1 800 ㎒ Head) NR66 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.6 ℃
Test Date:	06/12/2020
Plot	112

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

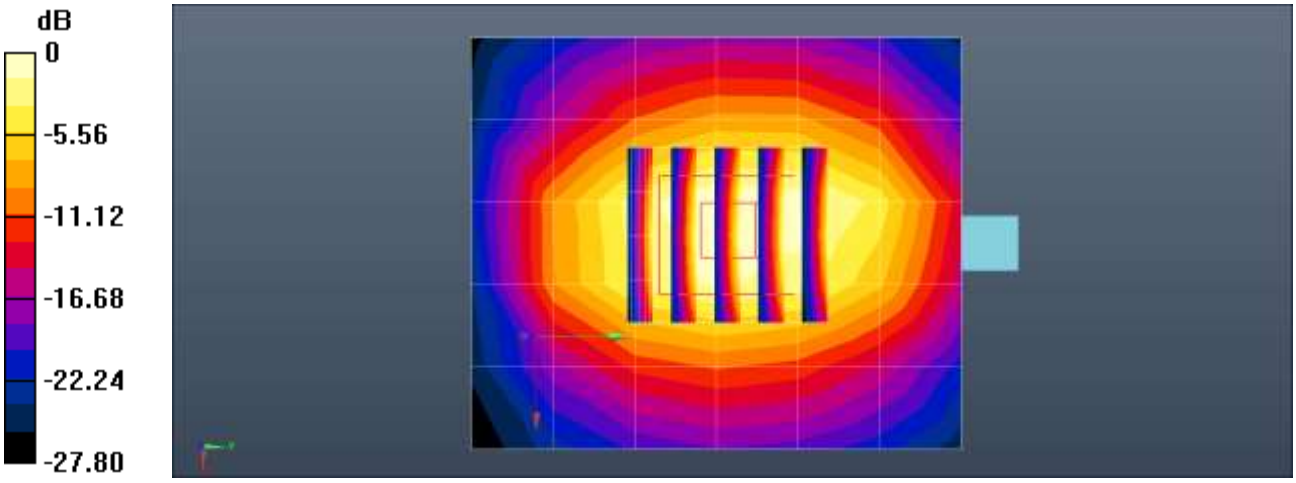
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.389 S/m; ε_r = 40.047; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1800MHz Head Verification (NR n66 Phablet)/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.29 W/kg

Dipole/1800MHz Head Verification (NR n66 Phablet)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.32 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 1.85 W/kg; SAR(10 g) = 0.966 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 52.3%
Maximum value of SAR (measured) = 2.93 W/kg



0 dB = 2.29 W/kg = 3.59 dBW/kg

■ **Verification Data (1 800 ㎒ Head) WCDMA4**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	05/25/2020
Plot	113

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

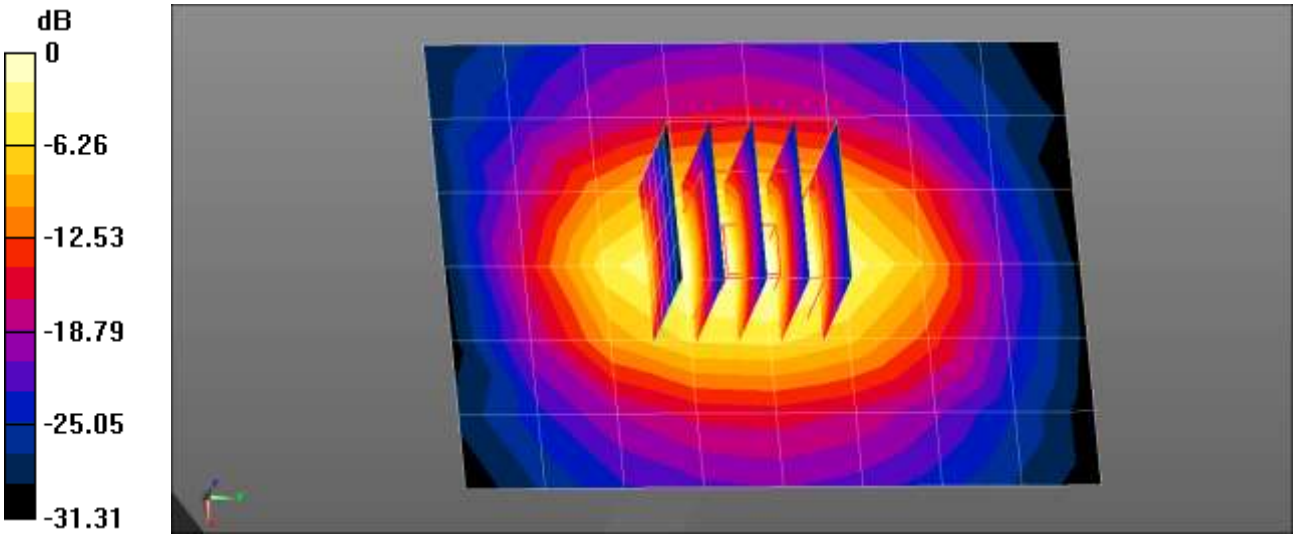
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.389 S/m; ε_r = 40.231; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1800 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1700MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.31 W/kg

1700MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.27 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.21 W/kg
SAR(1 g) = 1.87 W/kg; SAR(10 g) = 1.01 W/kg
Maximum value of SAR (measured) = 2.32 W/kg



0 dB = 2.31 W/kg = 3.63 dBW/kg

■ **Verification Data (1 800 ㎒ Head) LTE66 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0 ℃
Test Date:	05/29/2020
Plot	114

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

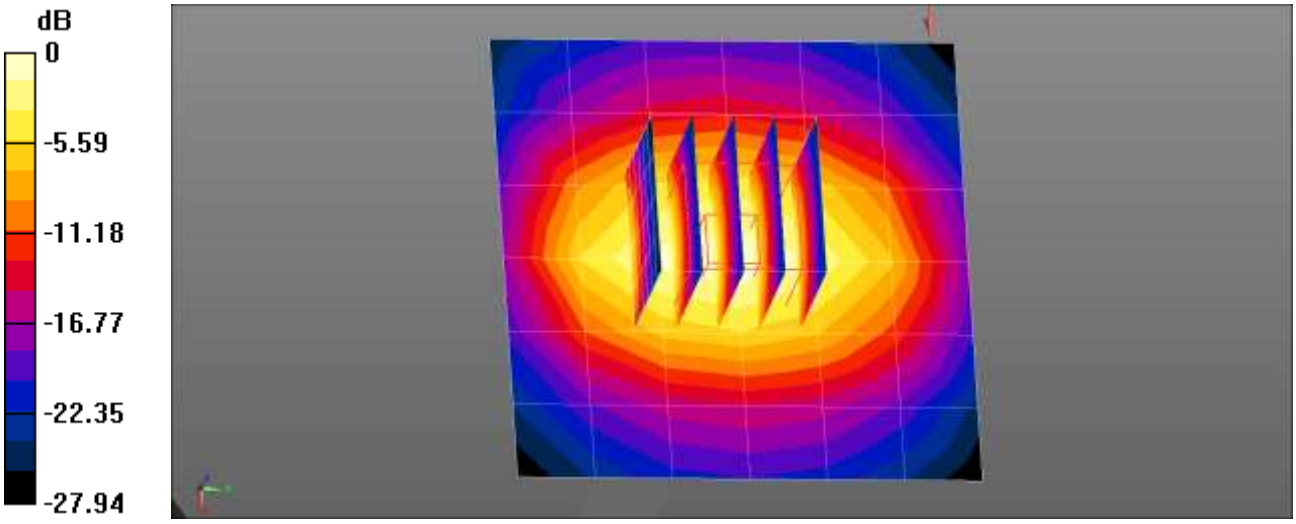
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.429 S/m; ε_r = 40.035; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1800 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 800 MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.47 W/kg

1 800 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.90 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.06 W/kg
Maximum value of SAR (measured) = 2.47 W/kg



0 dB = 2.47 W/kg = 3.93 dBW/kg

■ **Verification Data (1 800 ㎒ Head) LTE66**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	05/28/2020
Plot	115

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

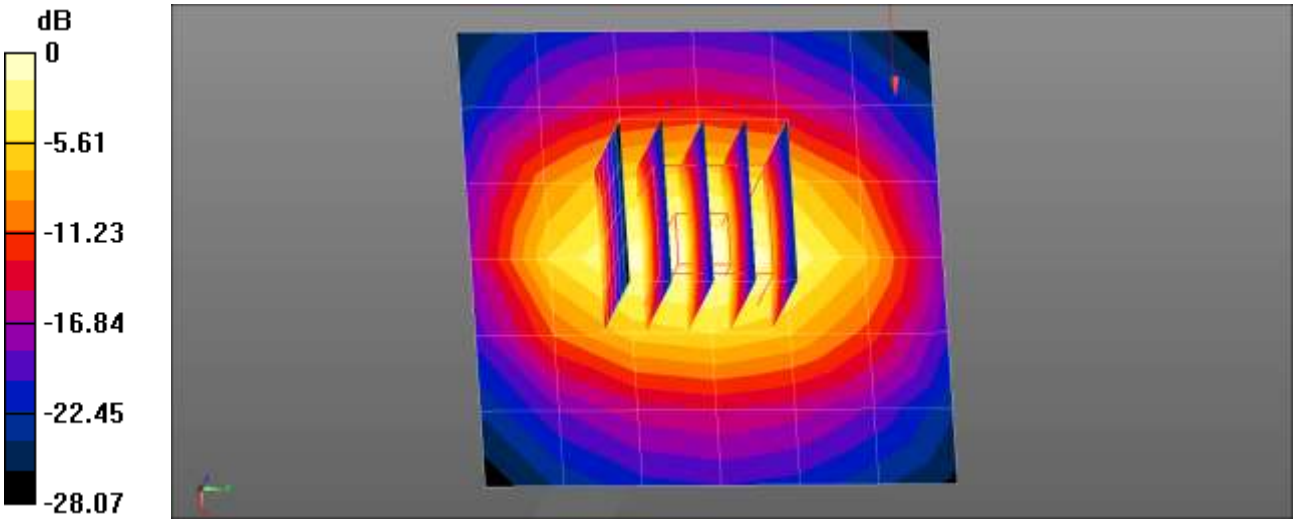
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.456 S/m; ε_r = 39.857; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1800 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 800 MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.52 W/kg

1 800 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.91 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 3.57 W/kg
SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 2.52 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

■ **Verification Data (1 800 ㎒ Head) WCDMA4 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	05/26/2020
Plot	116

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2

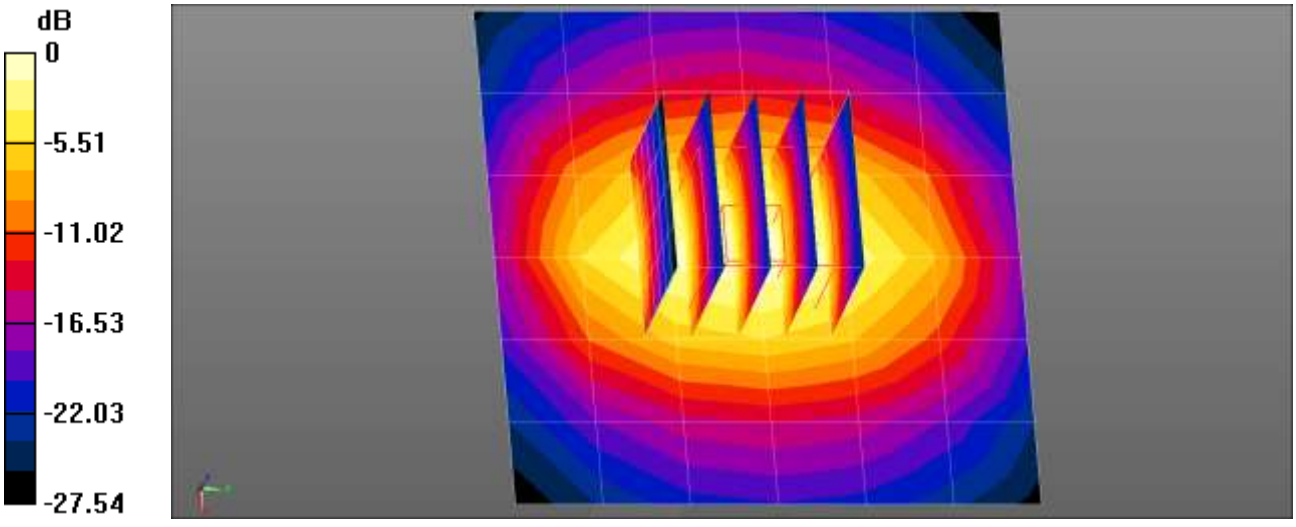
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.378 S/m; ε_r = 40.013; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.34, 5.34, 5.34) @ 1800 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 800 MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.32 W/kg

1 800 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.21 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.26 W/kg
SAR(1 g) = 1.85 W/kg; SAR(10 g) = 0.992 W/kg
Maximum value of SAR (measured) = 2.31 W/kg



0 dB = 2.32 W/kg = 3.65 dBW/kg

■ **Verification Data (1 900 ㎒ Head) CDMA BC1**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.9 ℃
Test Date:	06/18/2020
plot	117

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

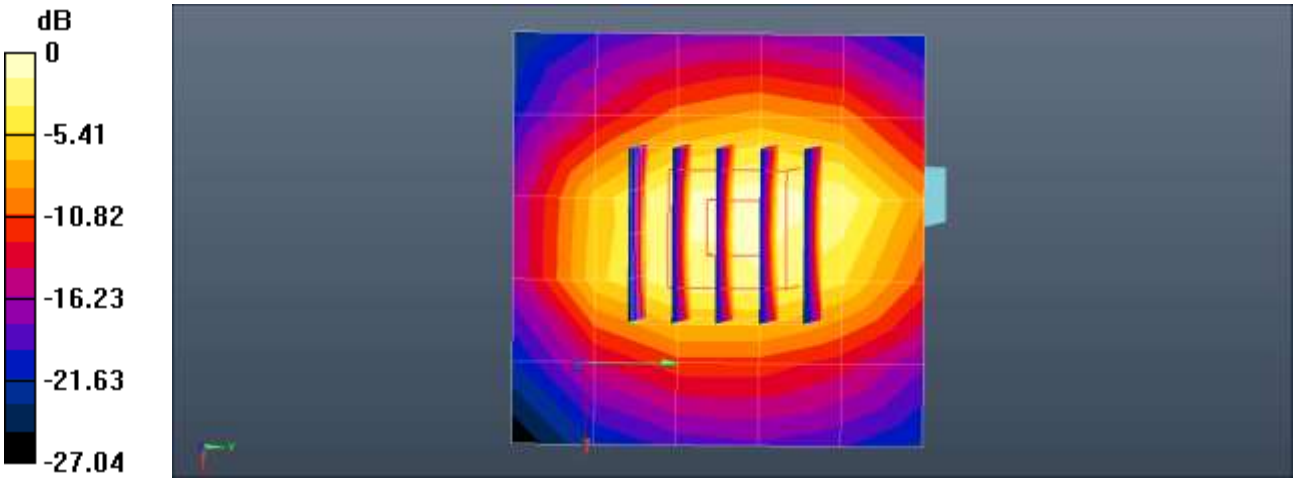
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.422 S/m; ε_r = 38.424; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (CDMA BC1)/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.65 W/kg

Dipole/1900MHz Head Verification (CDMA BC1)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.37 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.06 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.01 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49%
Maximum value of SAR (measured) = 3.27 W/kg



0 dB = 2.65 W/kg = 4.22 dBW/kg

■ **Verification Data (1 900 ㎒ Head) CDMA BC1 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.4 ℃
Test Date:	06/19/2020
plot	118

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

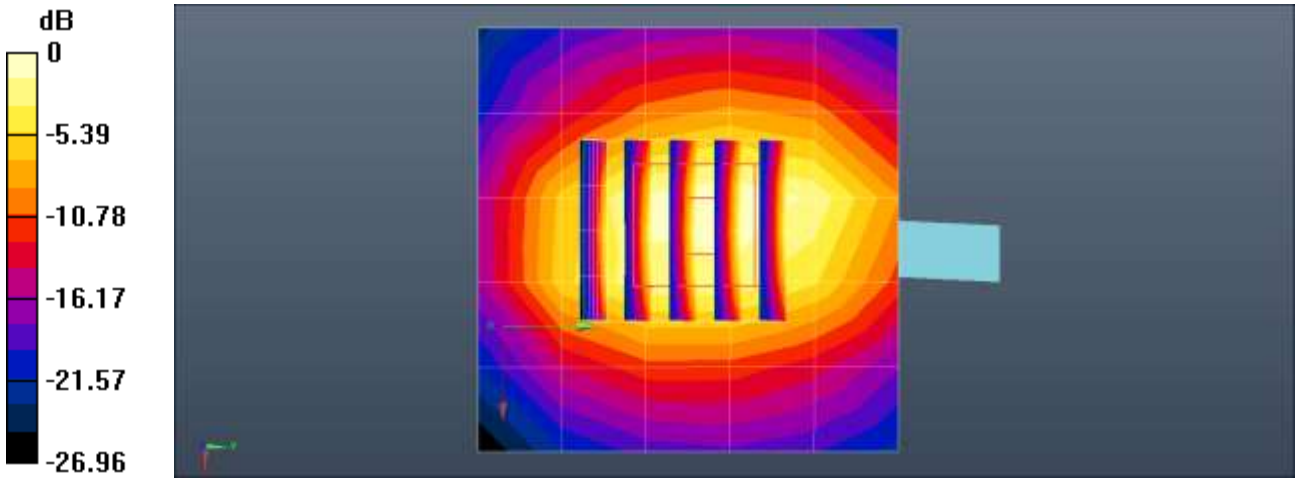
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.422 S/m; ε_r = 38.459; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (CDMA BC1 Phablet)/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.66 W/kg

Dipole/1900MHz Head Verification (CDMA BC1 Phablet)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.37 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 4.09 W/kg
SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.02 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 48.8%
Maximum value of SAR (measured) = 3.28 W/kg



0 dB = 2.66 W/kg = 4.24 dBW/kg

■ **Verification Data (1 900 ㎒ Head) GSM1900 Head Body**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/27/2020
Plot	119

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

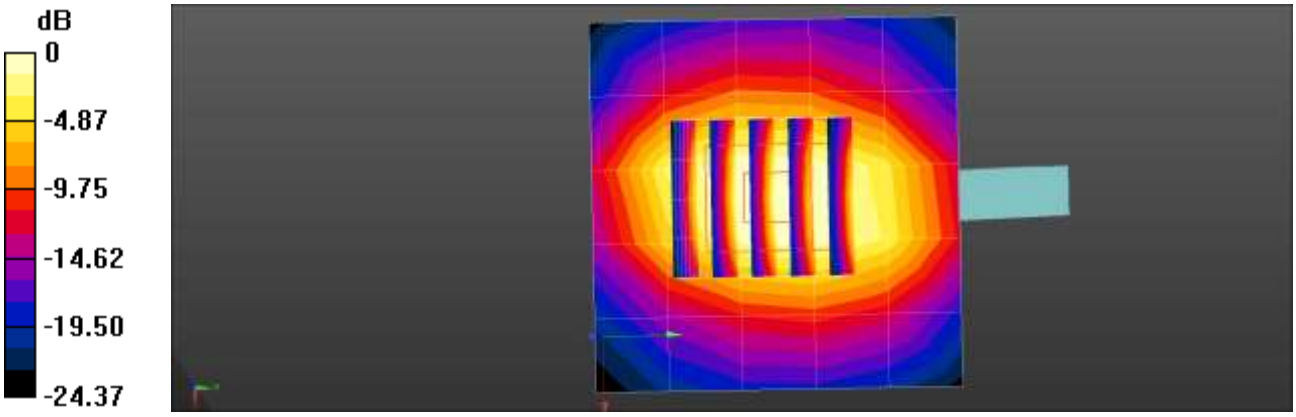
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.4 S/m; ε_r = 39.144; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

1900MHz Head Verification/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.08 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.70 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 3.59 W/kg
SAR(1 g) = 1.91 W/kg; SAR(10 g) = 0.988 W/kg
Maximum value of SAR (measured) = 3.00 W/kg



0 dB = 2.08 W/kg = 3.17 dBW/kg

■ **Verification Data (1 900 ㎒ Head) GSM1900 phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	05/28/2020
Plot	120

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

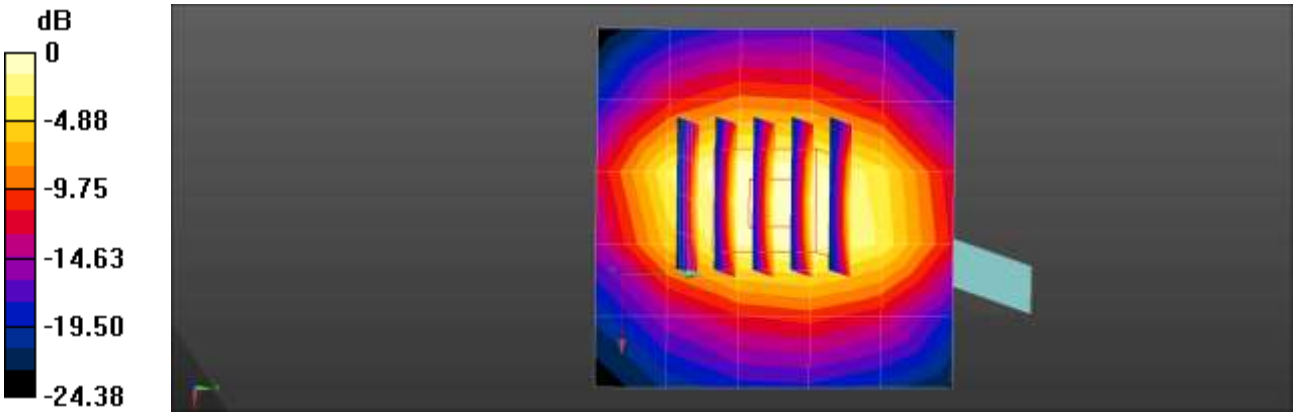
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.395 S/m; ε_r = 38.963; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.31, 8.31, 8.31); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V8.0_20171017 (Right1)
- Measurement SW: DASY52, Version 52.10 (4);

1900MHz Head Verification/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.09 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.80 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 3.59 W/kg
SAR(1 g) = 1.91 W/kg; SAR(10 g) = 0.986 W/kg
Maximum value of SAR (measured) = 3.00 W/kg



0 dB = 2.09 W/kg = 3.20 dBW/kg

■ **Verification Data (1 900 ㎒ Head) WCDMA2**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.2 ℃
Test Date:	06/08/2020
Plot	121

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

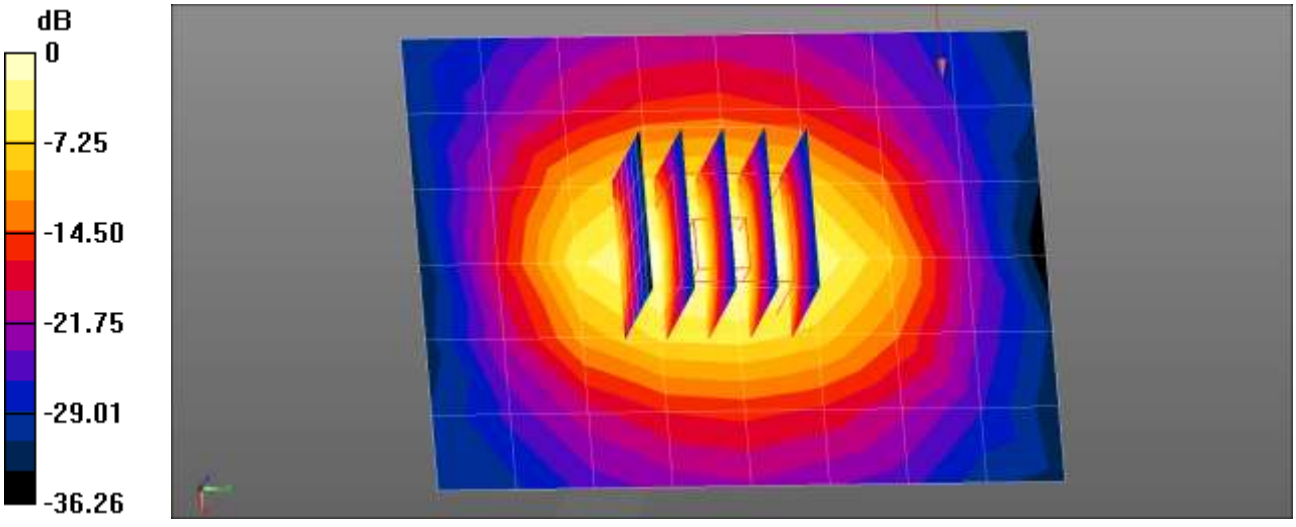
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.437 S/m; ε_r = 38.799; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1900 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 900 MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.63 W/kg

1 900 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.59 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 3.56 W/kg
SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 2.49 W/kg



0 dB = 2.63 W/kg = 4.21 dBW/kg

■ **Verification Data (1 900 ㎒ Head) WCDMA2 phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	06/09/2020
Plot	122

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

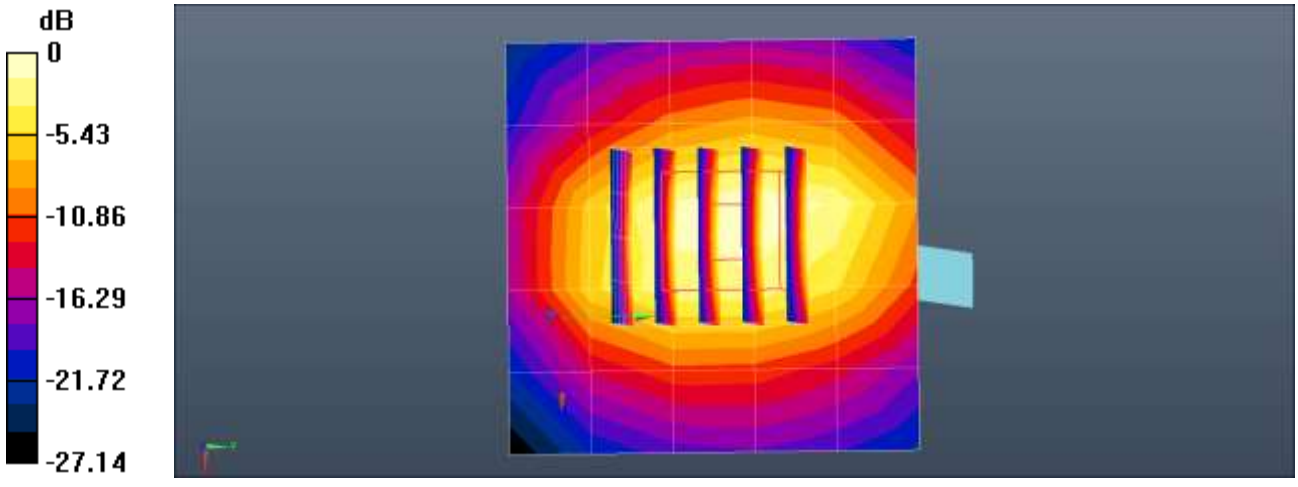
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.449 S/m; ε_r = 39.19; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (WCDMA B2 Phablet)/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.68 W/kg

Dipole/1900MHz Head Verification (WCDMA B2 Phablet)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.32 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 4.12 W/kg
SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.1%
Maximum value of SAR (measured) = 3.31 W/kg



0 dB = 2.68 W/kg = 4.29 dBW/kg

■ **Verification Data (1 900 ㎒ Head) LTE2**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.5 ℃
Test Date:	06/04/2020
Plot	123

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

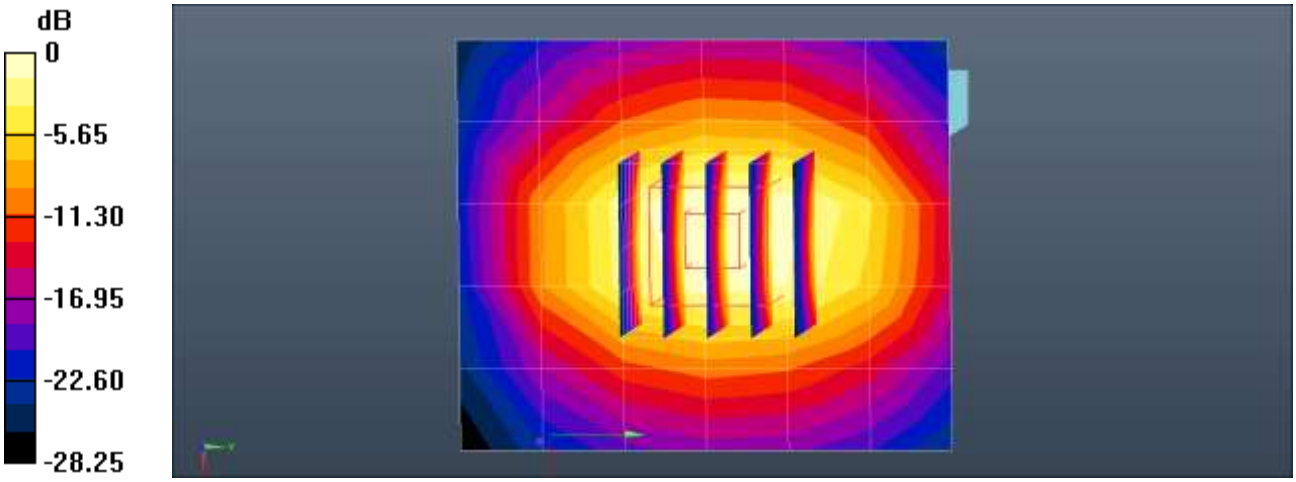
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.415 S/m; ε_r = 39.437; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (LTE B2)/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.37 W/kg

Dipole/1900MHz Head Verification (LTE B2)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.37 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 4.14 W/kg
SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 48.9%
Maximum value of SAR (measured) = 3.34 W/kg



0 dB = 2.37 W/kg = 3.75 dBW/kg

■ **Verification Data (1 900 ㎒ Head) LTE2 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.5 ℃
Test Date:	06/04/2020
Plot	124

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

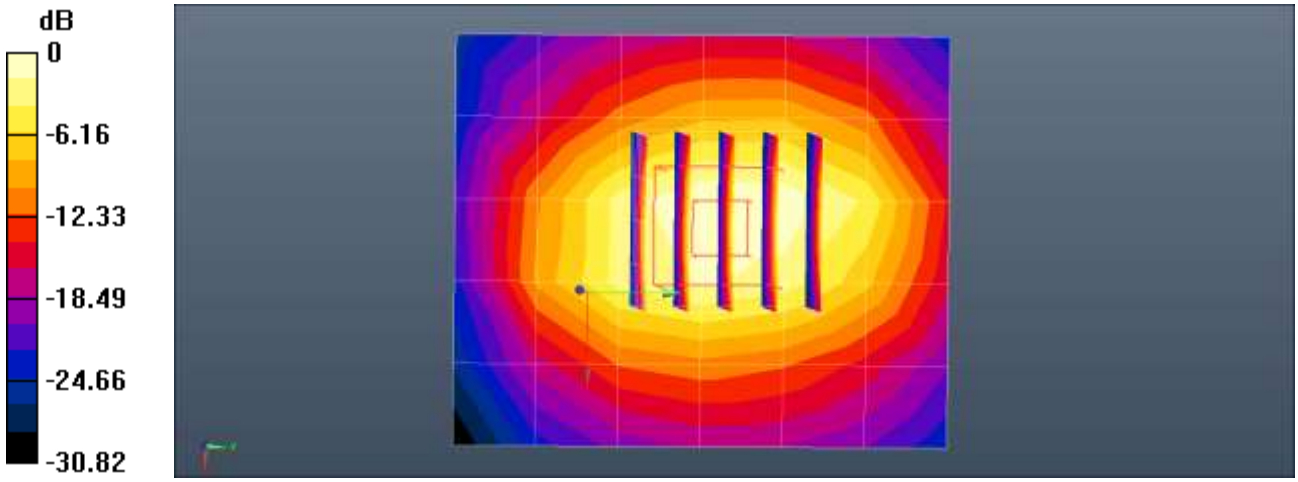
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.442 S/m; ε_r = 39.158; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (LTE B2 Hotspot)/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.52 W/kg

Dipole/1900MHz Head Verification (LTE B2 Hotspot)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.12 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 4.10 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.2%
Maximum value of SAR (measured) = 3.30 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

■ **Verification Data (1 900 ㎒ Head) nr2**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	06/16/2020
Plot	125

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

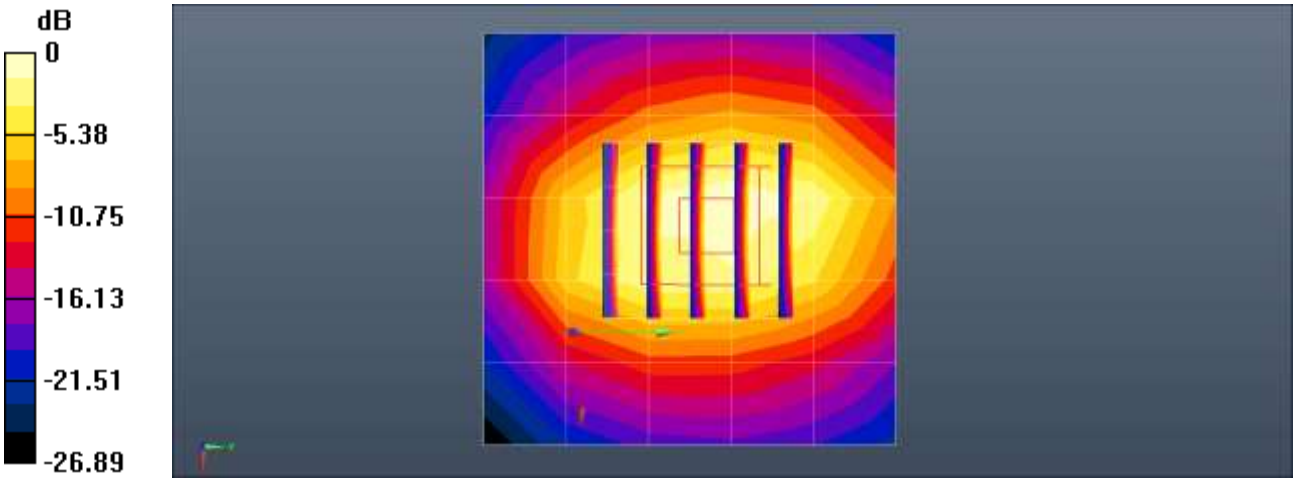
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.412 S/m; ε_r = 39.646; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (NR n2)/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.64 W/kg

Dipole/1900MHz Head Verification (NR n2)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.51 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 4.02 W/kg
SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.01 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.1%
Maximum value of SAR (measured) = 3.25 W/kg



0 dB = 2.64 W/kg = 4.22 dBW/kg

■ **Verification Data (1 900 ㎒ Head) nr2 Hotspot**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.7 ℃
Test Date:	06/16/2020
Plot	126

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

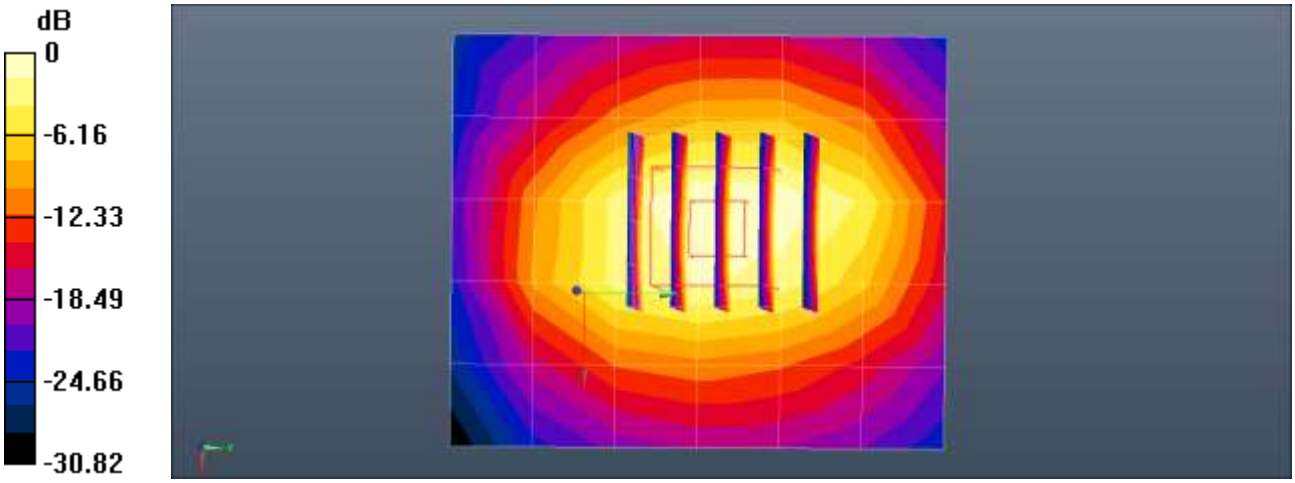
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.442 S/m; ε_r = 39.158; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (LTE B2 Hotspot)/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.52 W/kg

Dipole/1900MHz Head Verification (LTE B2 Hotspot)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.12 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 4.10 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.2%
Maximum value of SAR (measured) = 3.30 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

■ **Verification Data (1 900 ㎒ Head) nr2 phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.0 ℃
Test Date:	06/17/2020
Plot	127

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

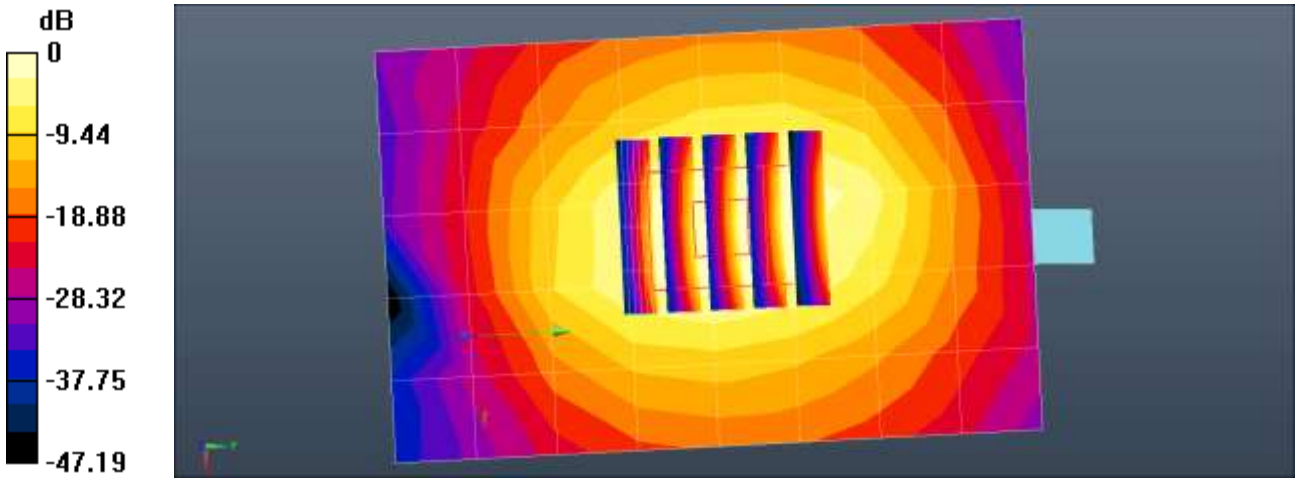
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.39 S/m; ε_r = 39.089; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ; Calibrated: 2019-11-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2019-07-18
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/1900MHz Head Verification (NR n2 Phablet)/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.44 W/kg

Dipole/1900MHz Head Verification (NR n2 Phablet)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.15 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.97 W/kg
SAR(1 g) = 1.96 W/kg; SAR(10 g) = 0.994 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.1%
Maximum value of SAR (measured) = 3.19 W/kg



0 dB = 2.44 W/kg = 3.88 dBW/kg

■ **Verification Data (1 900 ㎒ Head) LTE25 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.8 ℃
Test Date:	05/20/2020
Plot	128

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

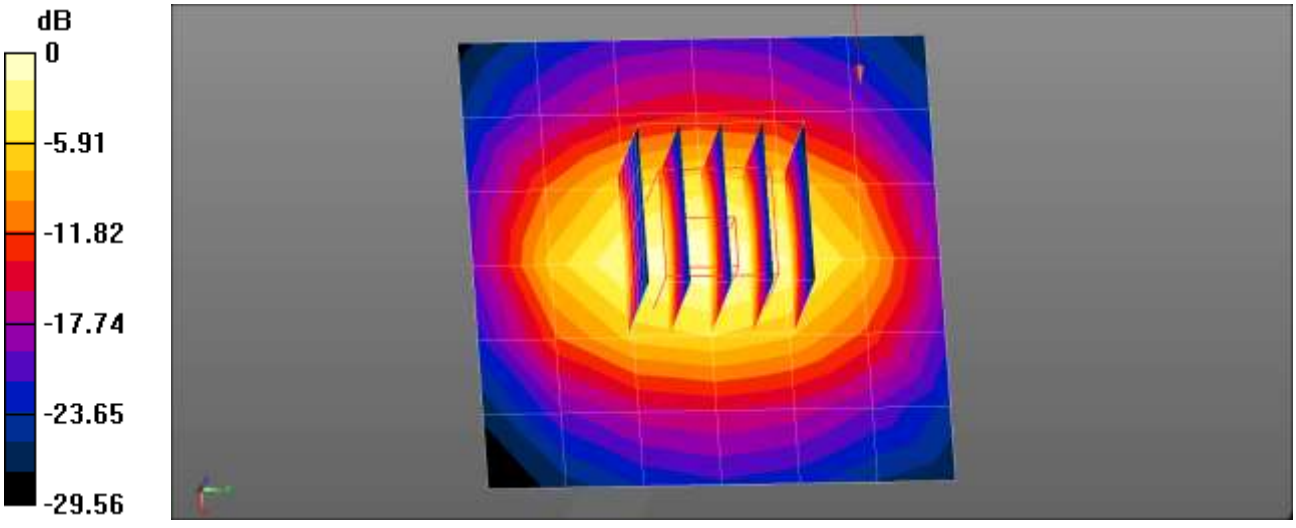
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.446 S/m; ε_r = 40.109; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1900 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 900 MHz Head Verification(LTE 25 Phablet)/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.52 W/kg

1 900 MHz Head Verification(LTE 25 Phablet)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.01 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 3.64 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 2.56 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

■ **Verification Data (1 900 ㎒ Head) LTE25**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/18/2020
Plot	129

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

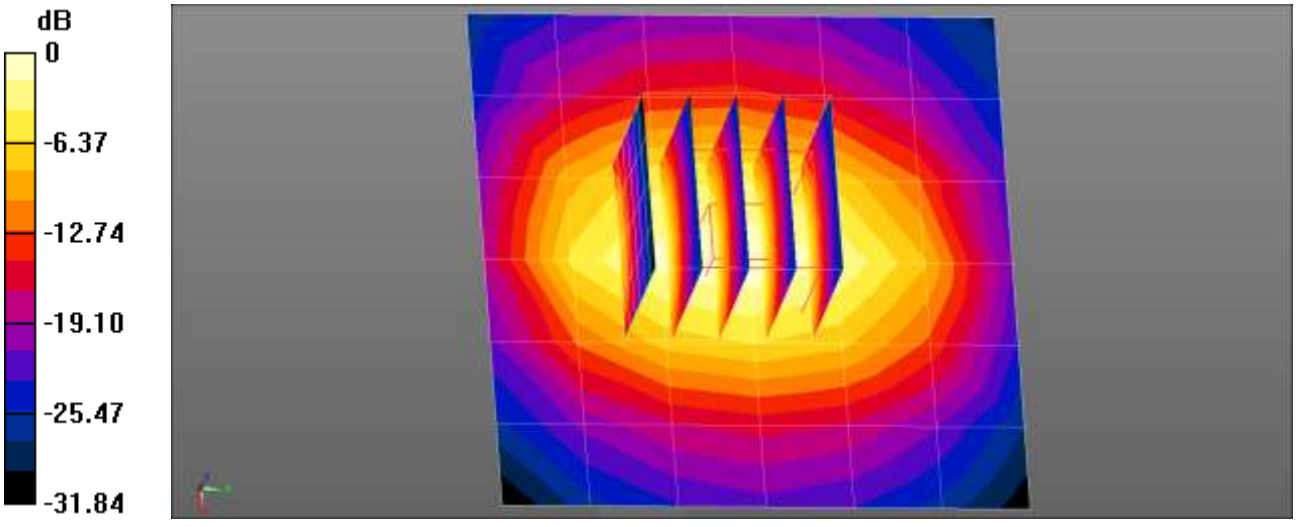
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.44 S/m; ε_r = 38.964; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.1, 5.1, 5.1) @ 1900 MHz;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4);

1 900 MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.70 W/kg

1 900 MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.73 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.95 W/kg
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 2.70 W/kg



0 dB = 2.70 W/kg = 4.31 dBW/kg

■ **Verification Data (2 300 ㎒ Head) LTE30 Head body**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	05/13/2020
Plot	130

DUT: Dipole 2300 MHz D2300V2; Type: D2300V3

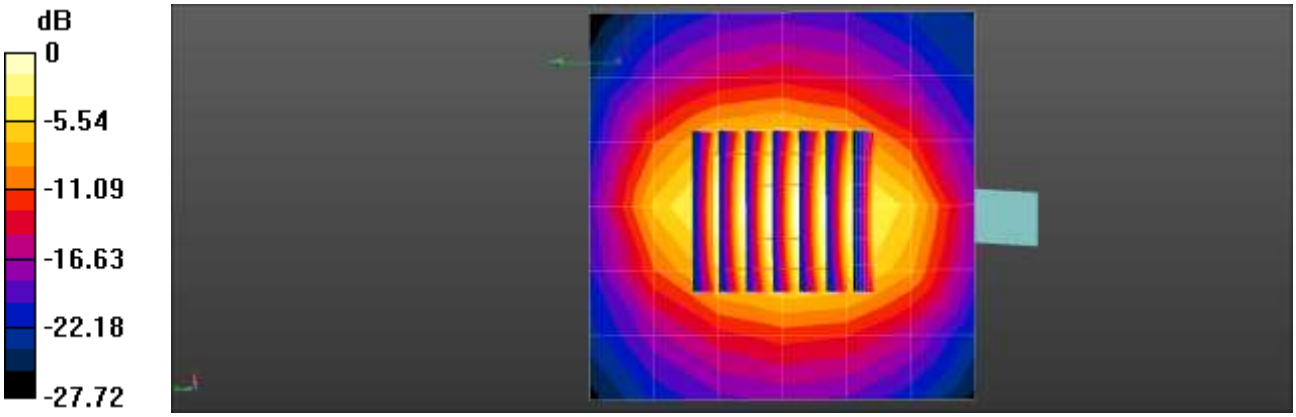
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.634 S/m; ε_r = 40.251; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

2300MHz Head Verification (LTE Band 30)/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.86 W/kg

2300MHz Head Verification (LTE Band 30)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.69 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 4.99 W/kg
SAR(1 g) = 2.31 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 3.93 W/kg



0 dB = 3.86 W/kg = 5.86 dBW/kg

■ **Verification Data (2 300 ㎒ Head) LTE30 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	05/14/2020
Plot	131

DUT: Dipole 2300 MHz D2300V2; Type: D2300V3

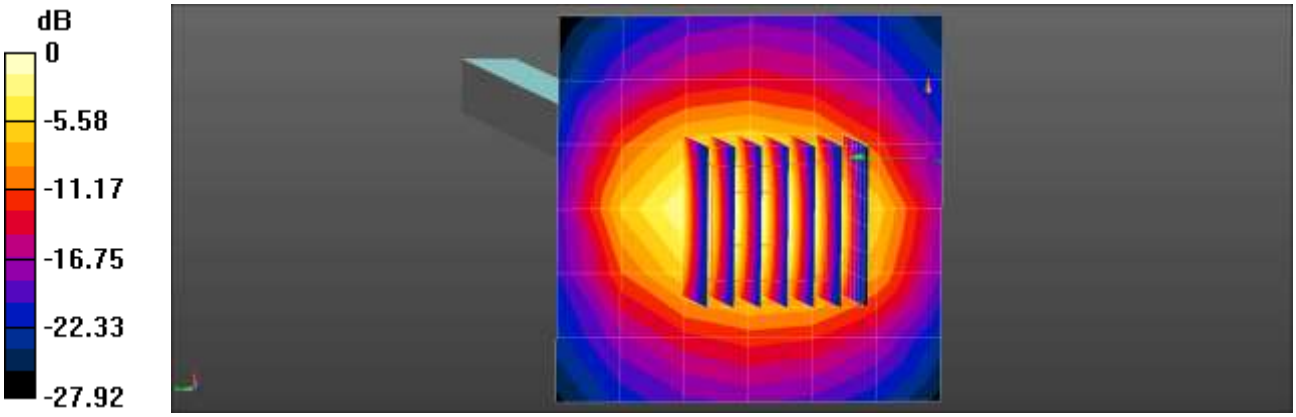
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.642 S/m; ε_r = 40.094; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0(Left-Left)
- Measurement SW: DASY52, Version 52.10 (4);

2300MHz Head Verification (LTE Band 30)/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.88 W/kg

2300MHz Head Verification (LTE Band 30)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.97 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 5.02 W/kg
SAR(1 g) = 2.32 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 3.95 W/kg



0 dB = 3.88 W/kg = 5.89 dBW/kg

■ **Verification Data (2 300 ㎒ Head) LTE40 Low**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.5 ℃
Test Date:	06/15/2020
Plot	132

DUT: Dipole 2300 MHz D2300V2; Type: D2300V3

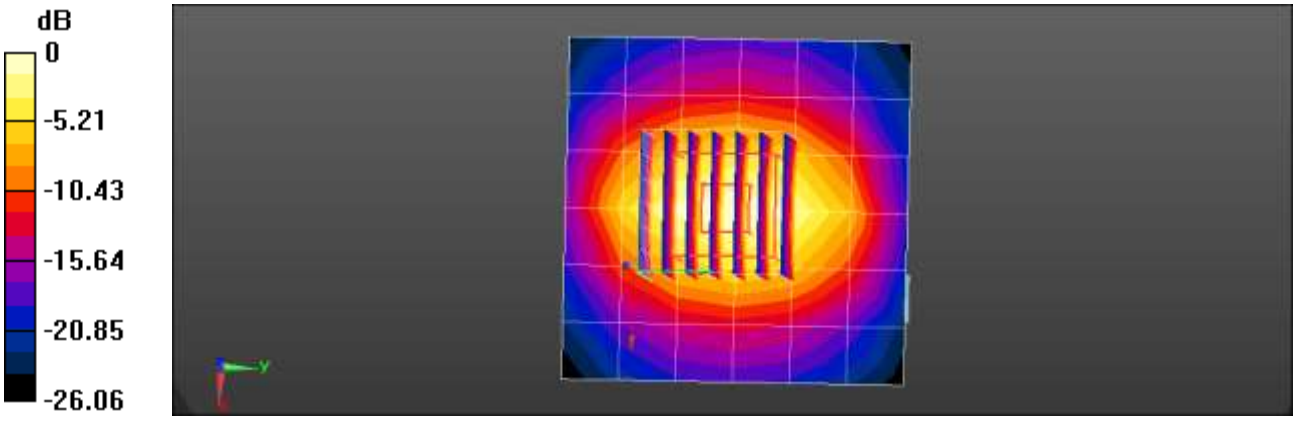
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.643 S/m; ε_r = 40.256; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2300 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.04 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.91 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 5.06 W/kg
SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.12 W/kg
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 47.1%
Maximum value of SAR (measured) = 4.03 W/kg



0 dB = 4.04 W/kg = 6.06 dBW/kg

■ **Verification Data (2 300 ㎒ Head) LTE40 Upper**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	06/16/2020
Plot	133

DUT: Dipole 2300 MHz D2300V2; Type: D2300V3

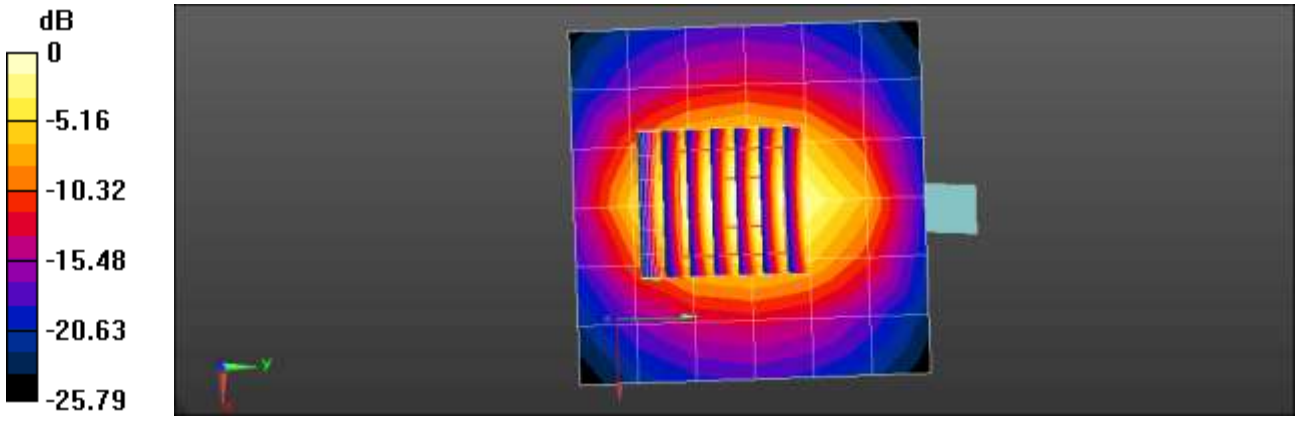
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.643 S/m; ε_r = 40.064; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.91, 7.91, 7.91) @ 2300 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.04 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.73 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 5.05 W/kg
SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.12 W/kg
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 47.2%
Maximum value of SAR (measured) = 3.98 W/kg



0 dB = 4.04 W/kg = 6.06 dBW/kg

■ **Verification Data (2 450 MHz Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.5 ℃
Test Date:	06/10/2020
Plot	134

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2

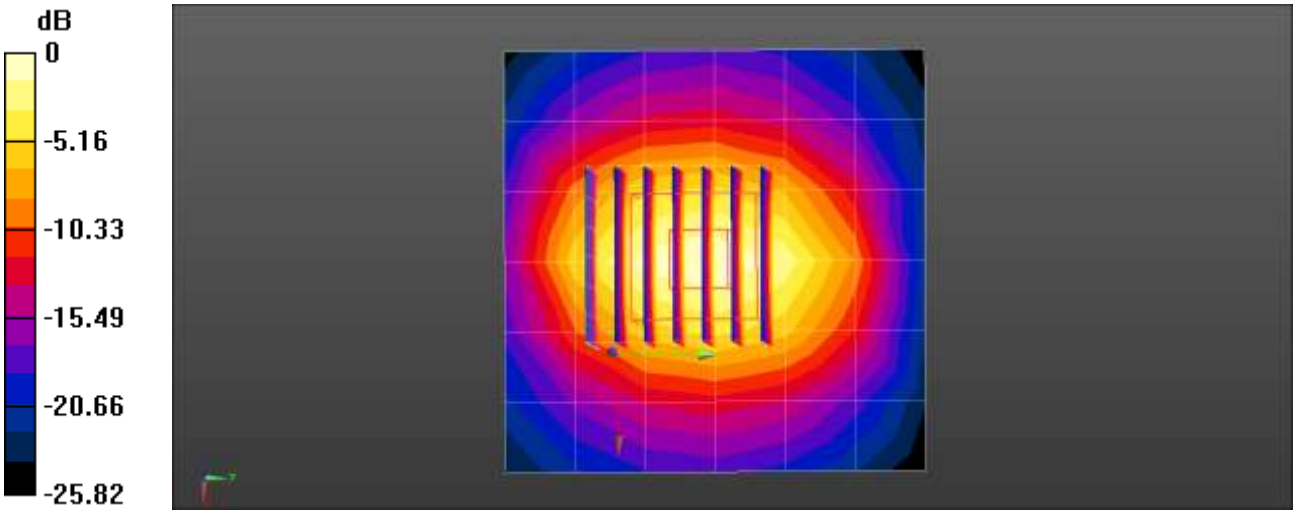
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.82 S/m; ε_r = 39.241; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.65, 7.65, 7.65) @ 2450 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 9/19/2019
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/2450MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.41 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.00 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 5.64 W/kg
SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.17 W/kg
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 45.1%
Maximum value of SAR (measured) = 4.40 W/kg



0 dB = 4.41 W/kg = 6.44 dBW/kg

■ **Verification Data (2 600 ㎒ Head) nr41**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	06/04/2020
Plot	135

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

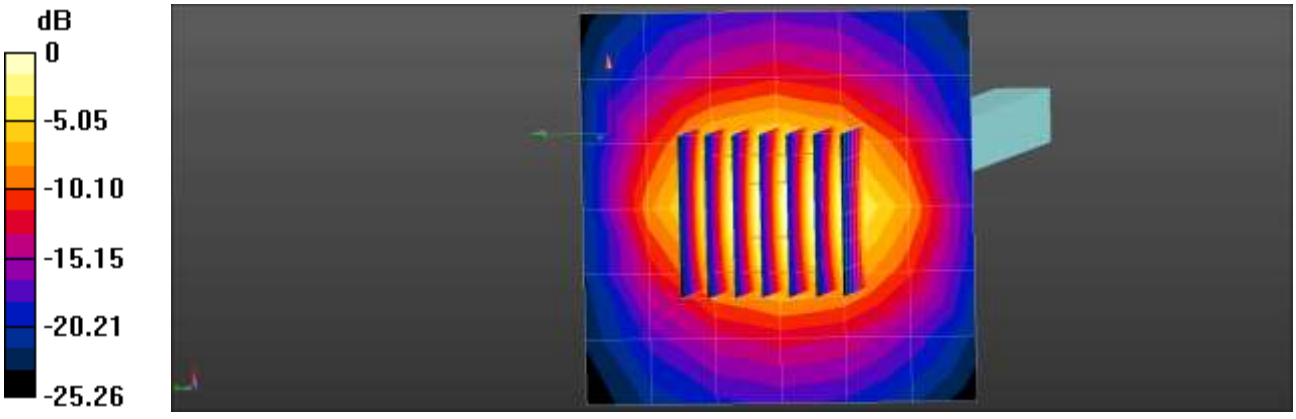
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.944 S/m; ε_r = 37.858; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.49, 7.49, 7.49); Calibrated: 2020-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2019-09-19
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.89 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.43 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 6.12 W/kg
SAR(1 g) = 2.7 W/kg; SAR(10 g) = 1.19 W/kg
Maximum value of SAR (measured) = 4.78 W/kg



0 dB = 4.89 W/kg = 6.89 dBW/kg

■ **Verification Data (2 600 ㎒ Head) LTE7**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.4 ℃
Test Date:	05/20/2020
Plot	136

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

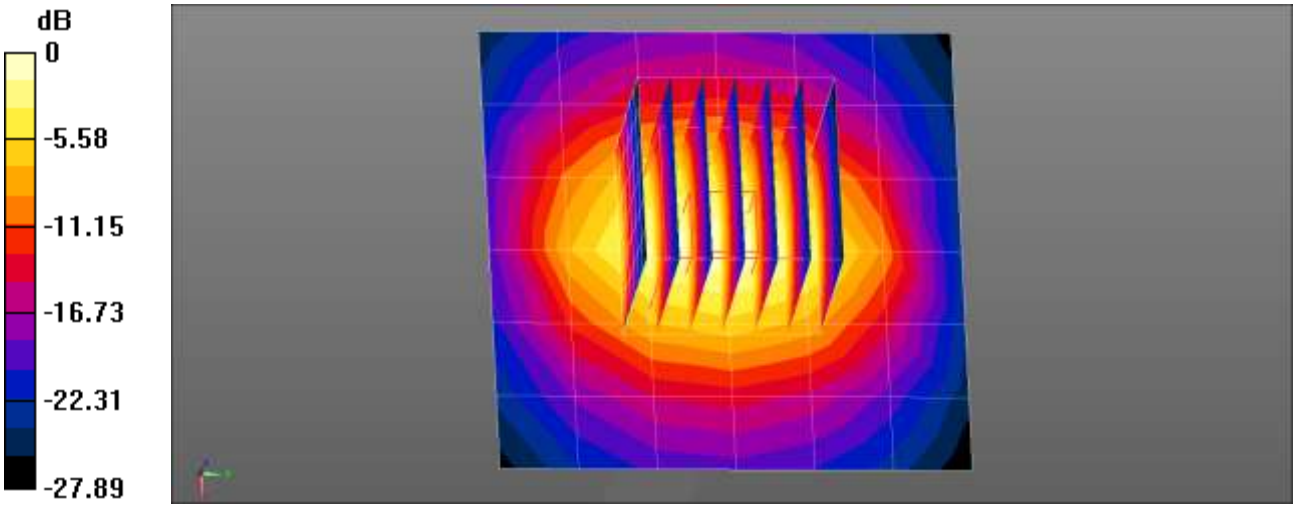
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.94 S/m; ε_r = 37.842; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 2019-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.04 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.31 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 6.58 W/kg
SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 5.10 W/kg



0 dB = 5.04 W/kg = 7.03 dBW/kg

■ **Verification Data (2 600 ㎒ Head) LTE7 Phablet**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.5 ℃
Test Date:	05/21/2020
Plot	137

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

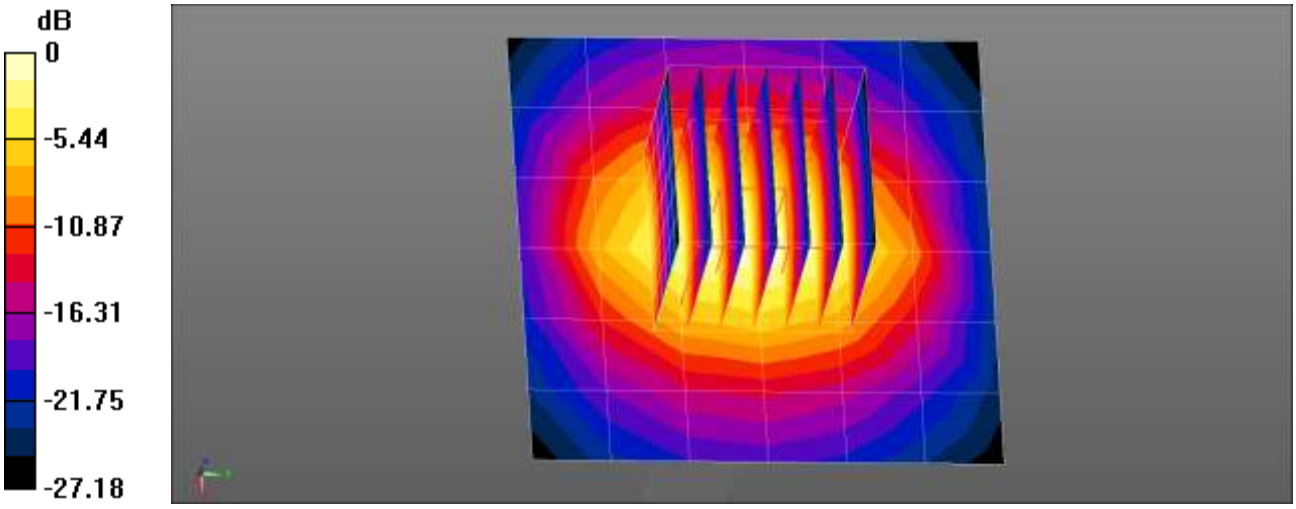
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.949 S/m; ε_r = 37.764; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 2019-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.06 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.49 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 6.63 W/kg
SAR(1 g) = 2.87 W/kg; SAR(10 g) = 1.26 W/kg
Maximum value of SAR (measured) = 5.14 W/kg



0 dB = 5.06 W/kg = 7.04 dBW/kg

■ **Verification Data (2 600 ㎒ Head) LTE41**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	06/22/2020
Plot	138

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

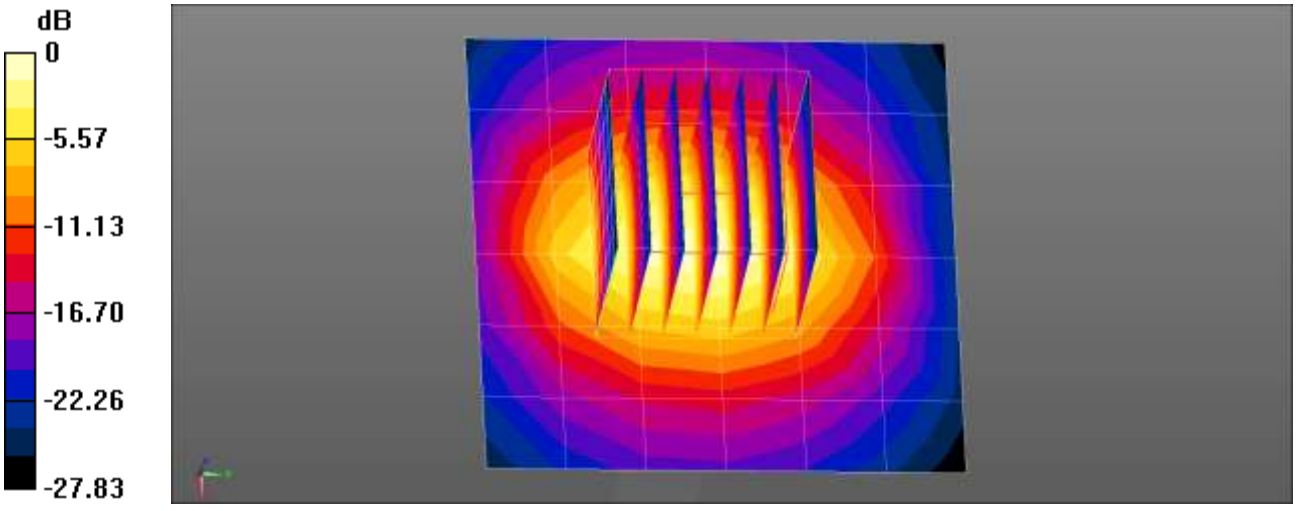
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.943 S/m; ε_r = 37.836; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 2019-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.81 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.06 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.41 W/kg
SAR(1 g) = 2.81 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 5.02 W/kg



0 dB = 4.81 W/kg = 6.83 dBW/kg

■ **Verification Data (2 600 ㎒ Head) LTE41 HUPE+ULCA**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	06/23/2020
Plot	139

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

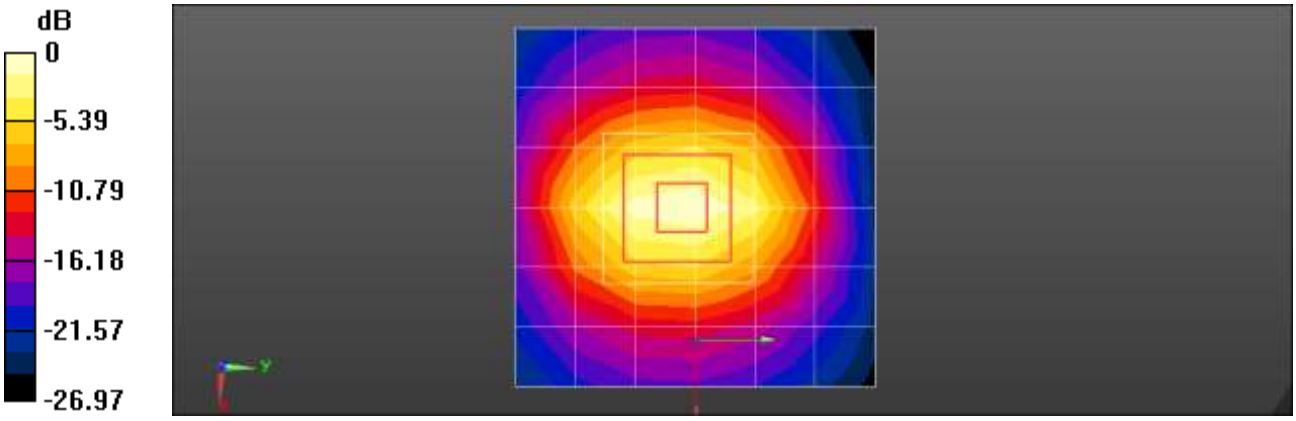
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.946 S/m; ε_r = 37.881; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.41, 7.41, 7.41) @ 2600 MHz;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 4/22/2020
- Phantom: Twin-SAM V4.0 (20deg probe tilt)_1588_20200429
- Measurement SW: DASY52, Version 52.10 (4);

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.81 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.30 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.41 W/kg
SAR(1 g) = 2.79 W/kg; SAR(10 g) = 1.23 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 43.5%
Maximum value of SAR (measured) = 4.98 W/kg



0 dB = 4.81 W/kg = 6.83 dBW/kg

■ **Verification Data (5 250 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.6 ℃
Test Date:	06/11/2020
Plot	140

DUT: Dipole D5GHzV2; Type: D5GHzV2

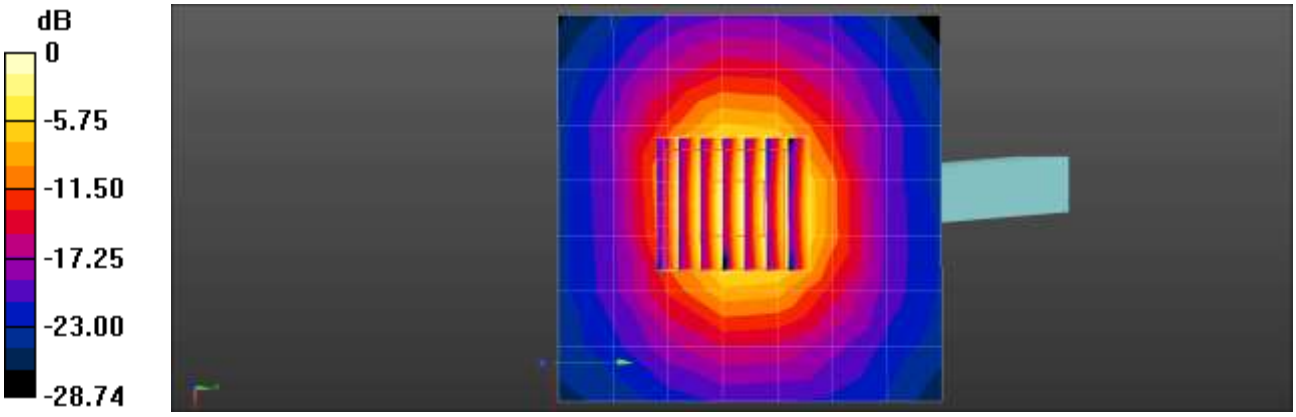
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.6 S/m; ε_r = 37.014; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.57, 5.57, 5.57); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5250MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.49 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.27 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 19.0 W/kg
SAR(1 g) = 4.03 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 10.5 W/kg



0 dB = 6.49 W/kg = 8.12 dBW/kg

■ **Verification Data (5 250 MHz Body)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	06/12/2020
Plot	141

DUT: Dipole D5GHzV2; Type: D5GHzV2

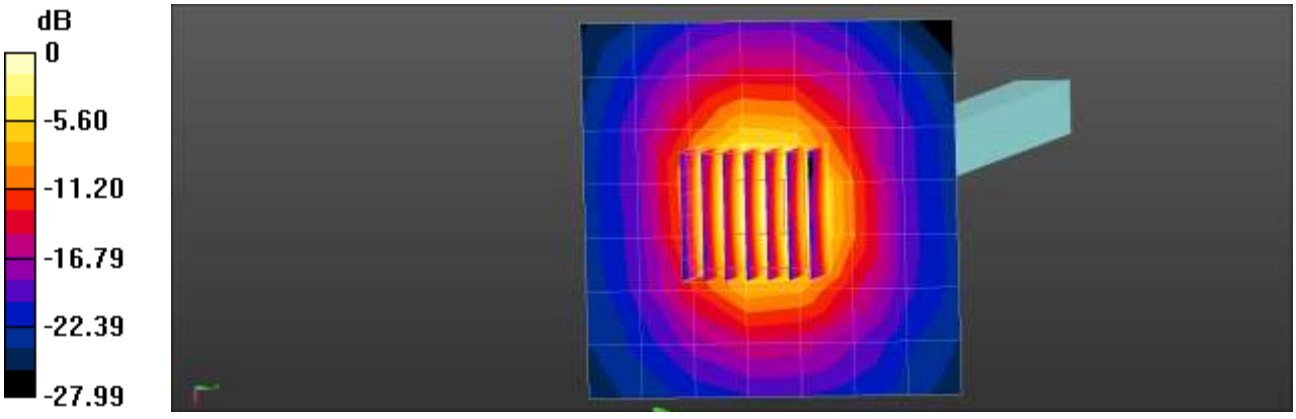
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.6 S/m; ε_r = 37.014; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.57, 5.57, 5.57); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5250MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.40 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.76 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 19.4 W/kg
SAR(1 g) = 4.04 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 10.7 W/kg



0 dB = 6.40 W/kg = 8.06 dBW/kg

■ **Verification Data (5 600 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.6 ℃
Test Date:	06/11/2020
Plot	142

DUT: Dipole D5GHzV2; Type: D5GHzV2

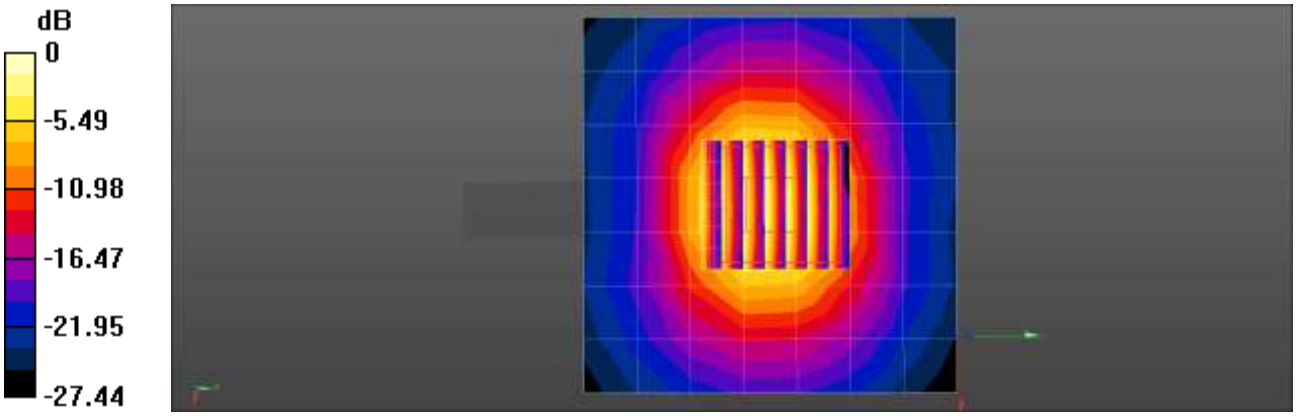
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.994 S/m; ε_r = 36.492; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(4.84, 4.84, 4.84); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.82 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.28 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 21.6 W/kg
SAR(1 g) = 4.24 W/kg; SAR(10 g) = 1.19 W/kg
Maximum value of SAR (measured) = 11.3 W/kg



0 dB = 6.82 W/kg = 8.34 dBW/kg

■ **Verification Data (5 600 ㎒ Body)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	06/12/2020
Plot	143

DUT: Dipole D5GHzV2; Type: D5GHzV2

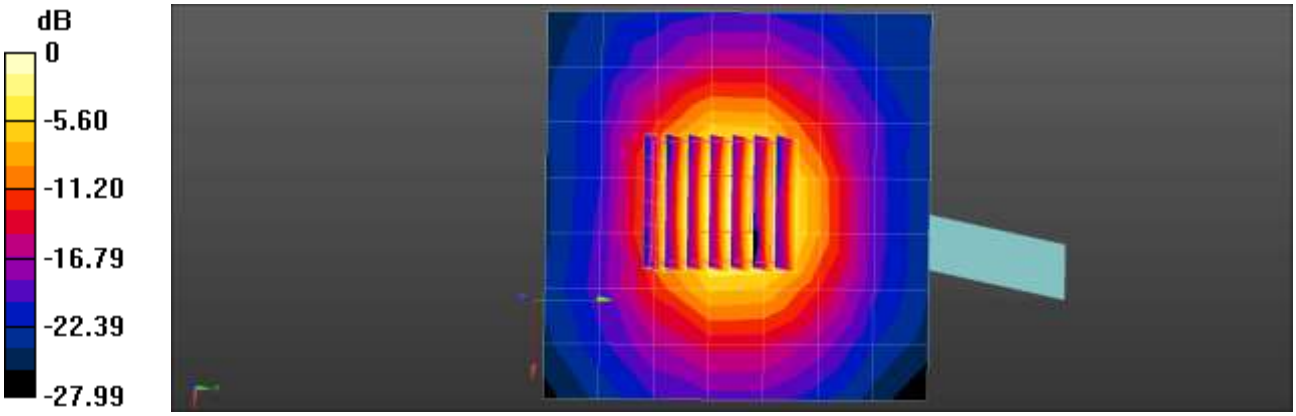
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.994 S/m; ε_r = 36.492; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(4.84, 4.84, 4.84); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.77 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.48 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 21.9 W/kg
SAR(1 g) = 4.26 W/kg; SAR(10 g) = 1.19 W/kg
Maximum value of SAR (measured) = 11.4 W/kg



0 dB = 6.77 W/kg = 8.31 dBW/kg

■ **Verification Data (5 750 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.6 ℃
Test Date:	06/11/2020
Plot	144

DUT: Dipole D5GHzV2; Type: D5GHzV2

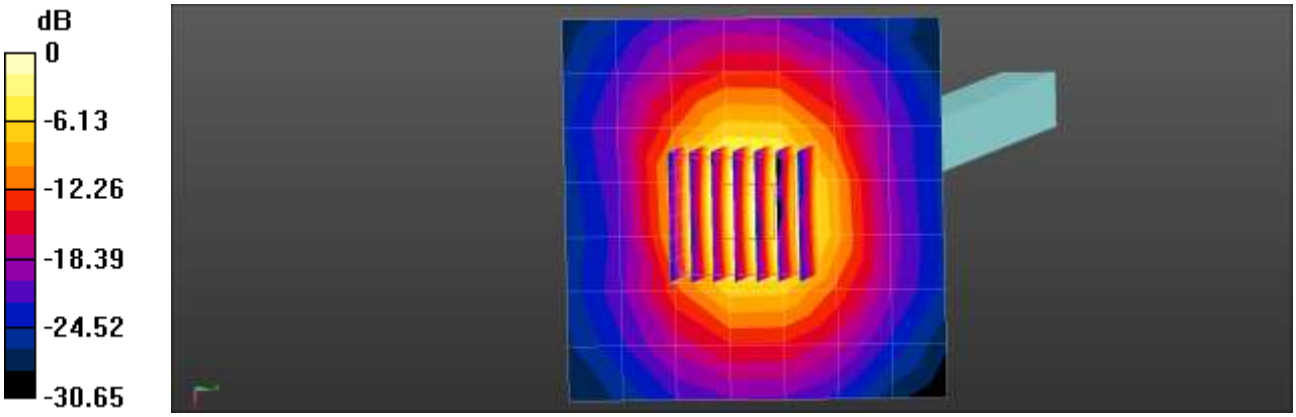
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.172 S/m; ε_r = 36.269; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.1, 5.1, 5.1); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5750MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.34 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 51.87 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 21.6 W/kg
SAR(1 g) = 4.17 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 6.34 W/kg = 8.02 dBW/kg

■ **Verification Data (5 750 ㎒ Body)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	06/12/2020
Plot	145

DUT: Dipole D5GHzV2; Type: D5GHzV2

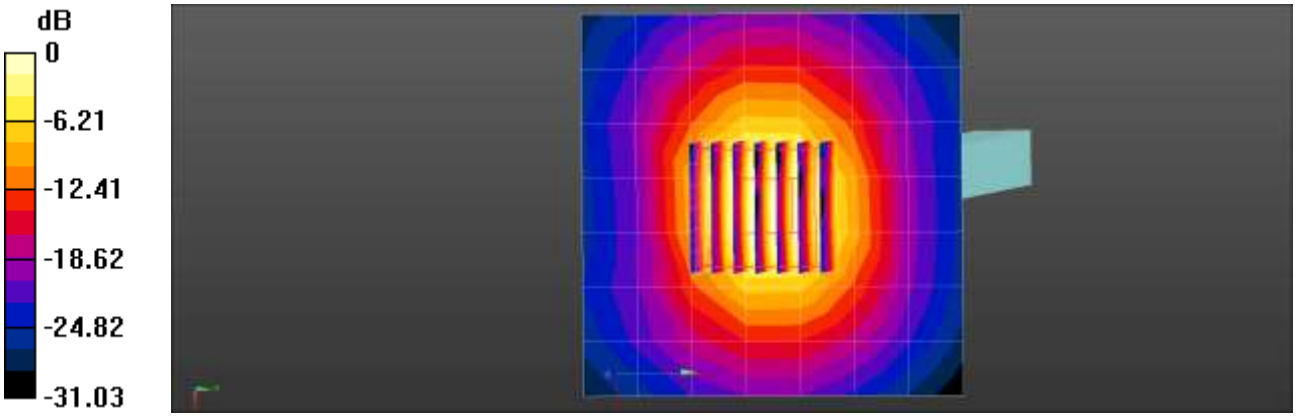
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.172 S/m; ε_r = 36.269; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3968; ConvF(5.1, 5.1, 5.1); Calibrated: 2019-09-27;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4);

5750MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.40 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 51.73 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 21.9 W/kg
SAR(1 g) = 4.15 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 11.2 W/kg



0 dB = 6.40 W/kg = 8.06 dBW/kg

Appendix D. – SAR Tissue Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

Ingredients (% by weight)	Frequency (MHz)											
	750		835		1 750		1 900		2 450 – 2 700		3500 - 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	41.1	51.7	40.45	53.06	52.6	68.8	54.9	70.17	71.88	73.2	65.52	78.66
Salt (NaCl)	1.4	0.9	1.45	0.94	0.4	0.2	0.18	0.39	0.16	0.1	0.0	0.0
Sugar	57.0	47.2	57.0	44.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
HEC	0.2	0	1.0	1.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Bactericide	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.97	0.0	17.24	10.67
DGBE	0.0	0.0	0.0	0.0	47	31	44.92	29.44	7.99	26.7	0.0	0.0
Diethylene glycol hexyl ether	-	-	-	-	-	-	-	-	-	-	-	-

Salt:	99 % Pure Sodium Chloride	Sugar:	98 % Pure Sucrose
Water:	De-ionized, 16M resistivity	HEC:	Hydroxyethyl Cellulose
DGBE:	99 % Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy) ethanol]		
Triton X-100(ultra-pure):	Polyethylene glycol mono[4-(1,1,3,3-tetramethylbutyl)phenyl] ether		

Composition of the Tissue Equivalent Matter

Appendix E. – SAR Tissue Characterization

Per FCC KCB 865664 D02v01r02, SAR system validation status should be document 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 IEEE 1528-2013 and FCC KDB 865664 D01v01r04. 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.

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
12	7370	EX3DV4	Head	750	1014	2019-09-11	41.7	0.87	PASS	PASS	PASS	N/A	N/A	N/A
1	3863	EX3DV4	Head	750	1014	2019-09-11	41.7	0.87	PASS	PASS	PASS	N/A	N/A	N/A
12	7370	EX3DV4	Head	835	441	2019-09-11	41.6	0.91	PASS	PASS	PASS	N/A	N/A	N/A
12	7370	EX3DV4	Head	835	441	2019-09-11	41.6	0.91	PASS	PASS	PASS	GMSK	PASS	N/A
3	3797	EX3DV4	Head	835	441	2019-12-10	41.5	0.91	PASS	PASS	PASS	GMSK	PASS	N/A
11	3076	ES3DV3	Head	835	441	2019-09-03	41.6	0.91	PASS	PASS	PASS	GMSK	PASS	N/A
1	3863	EX3DV4	Head	835	441	2019-09-03	41.6	0.92	PASS	PASS	PASS	N/A	N/A	N/A
11	3076	ES3DV3	Head	1750	2d015	2019-10-01	40.1	1.39	PASS	PASS	PASS	N/A	N/A	N/A
1	3863	EX3DV4	Head	1750	2d015	2019-10-01	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
9	3968	EX3DV4	Head	1750	2d015	2019-10-11	40.1	1.38	PASS	PASS	PASS	N/A	N/A	N/A
3	3797	EX3DV4	Head	1900	5d061	2020-01-31	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
3	3797	EX3DV4	Head	1900	5d061	2020-01-31	40.1	1.41	PASS	PASS	PASS	GMSK	PASS	N/A
9	3968	EX3DV4	Head	2450	743	2020-03-02	39.4	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
1	3863	EX3DV4	Head	2450	743	2020-03-02	39.4	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
9	3968	EX3DV4	Head	2450	743	2020-03-02	39.4	1.82	PASS	PASS	PASS	OFDM	N/A	PASS
1	3863	EX3DV4	Head	2450	743	2020-03-02	39.4	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
1	3863	EX3DV4	Head	2600	1106	2019-09-28	39.2	1.96	PASS	PASS	PASS	TDD	PASS	N/A
1	3863	EX3DV4	Head	2600	1106	2019-09-28	39.2	1.96	PASS	PASS	PASS	TDD	PASS	N/A
12	7370	EX3DV4	Head	5250	1107	2019-10-11	35.6	4.71	PASS	PASS	PASS	OFDM	N/A	PASS
12	7370	EX3DV4	Head	5600	1107	2019-10-11	35.3	5.04	PASS	PASS	PASS	OFDM	N/A	PASS
12	7370	EX3DV4	Head	5750	1107	2019-10-11	35.8	5.25	PASS	PASS	PASS	OFDM	N/A	PASS
8	3967	EX3DV4	Head	5250	1107	2020-03-11	35.6	4.71	PASS	PASS	PASS	OFDM	N/A	PASS
8	3967	EX3DV4	Head	5600	1107	2020-03-11	35.3	5.04	PASS	PASS	PASS	OFDM	N/A	PASS
8	3967	EX3DV4	Head	5750	1107	2020-03-11	35.8	5.25	PASS	PASS	PASS	OFDM	N/A	PASS

SAR System Validation Summary 1g

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
9	3968	EX3DV4	Head	1750	2d015	2019-10-11	40.1	1.38	PASS	PASS	PASS	N/A	N/A	N/A
3	3797	EX3DV4	Head	1900	5d061	2020-01-31	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
8	3967	EX3DV4	Head	5250	1107	2020-03-11	35.6	4.71	PASS	PASS	PASS	OFDM	N/A	PASS
8	3967	EX3DV4	Head	5600	1107	2020-03-11	35.3	5.04	PASS	PASS	PASS	OFDM	N/A	PASS

SAR System Validation Summary – Extremity SAR Considerations

Note;

All measurement were performed using probes calibrated for CW signal only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04. SAR system 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 KDB 865664 D01v01r04.