Appendix B. – SAR Test Plots

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 23.1℃
Ambient Temperature: 23.2℃
Test Date: 09/10/2021
Plot No.: 1
DUT: SM-G990E/DS; Type: Bar;

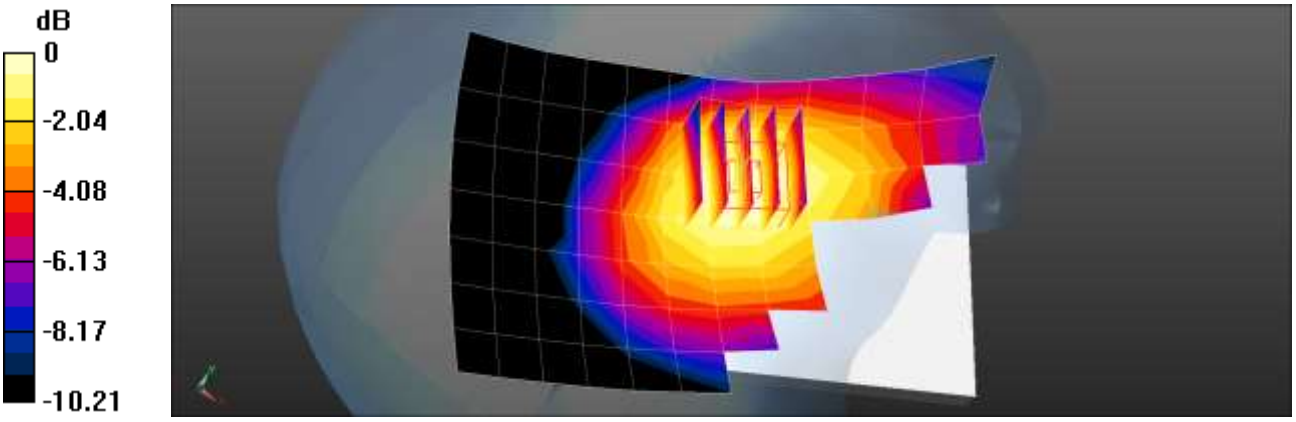
Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.916 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM850 Head Right Touch 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.171 W/kg

GSM850 Head Right Touch 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.263 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.202 W/kg
SAR(1 g) = 0.159 W/kg; SAR(10 g) = 0.122 W/kg
Maximum value of SAR (measured) = 0.174 W/kg



0 dB = 0.174 W/kg = -7.59 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 23.1℃
Ambient Temperature: 23.2℃
Test Date: 09/10/2021
Plot No.: 2
DUT: SM-G990E/DS; Type: Bar;

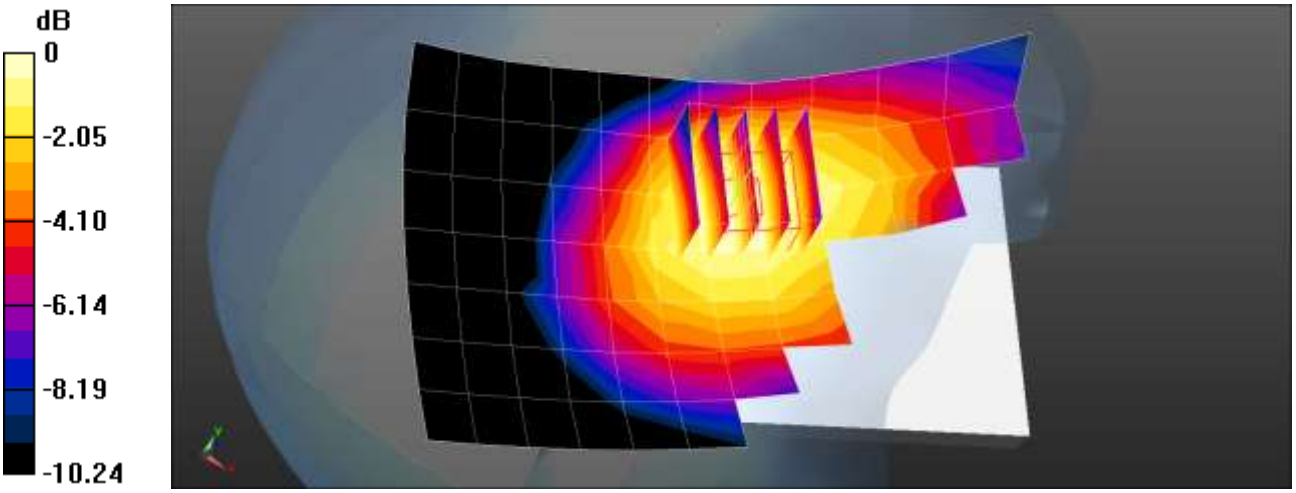
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.916 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM850 Head Right Touch 2Tx 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.185 W/kg

GSM850 Head Right Touch 2Tx 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.460 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.222 W/kg
SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.132 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:	22.7℃
Ambient Temperature:	22.8℃
Test Date:	09/03/2021
Plot No.:	3

DUT: SM-G990E/DS; Type: Bar;

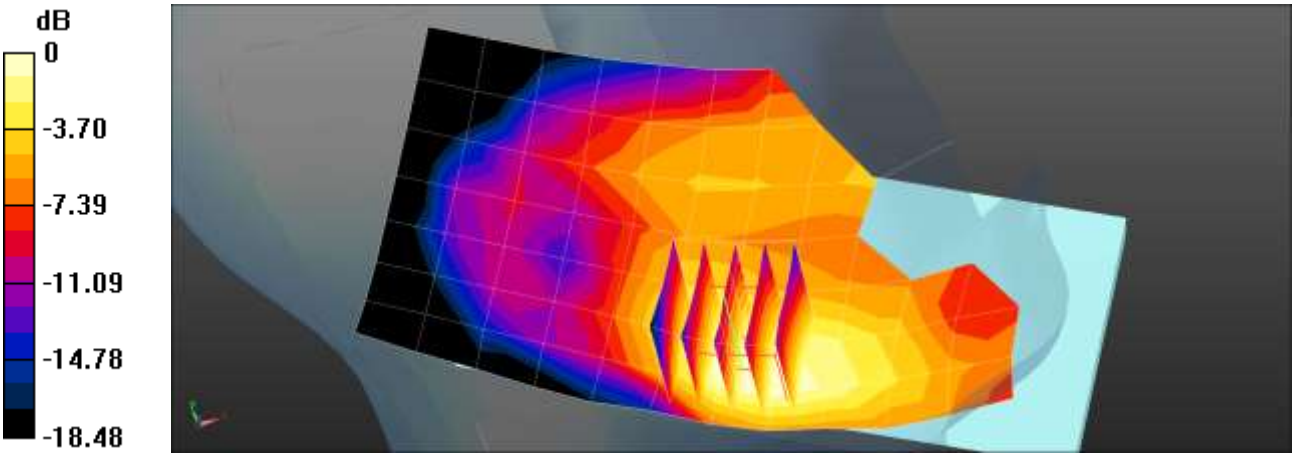
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.37 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM1900 Head Left Touch 2Tx 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0950 W/kg

GSM1900 Head Left Touch 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.100 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.137 W/kg
SAR(1 g) = 0.090 W/kg; SAR(10 g) = 0.057 W/kg
Maximum value of SAR (measured) = 0.105 W/kg



0 dB = 0.105 W/kg = -9.79 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	4

DUT: SM-G990E/DS; Type: Bar;

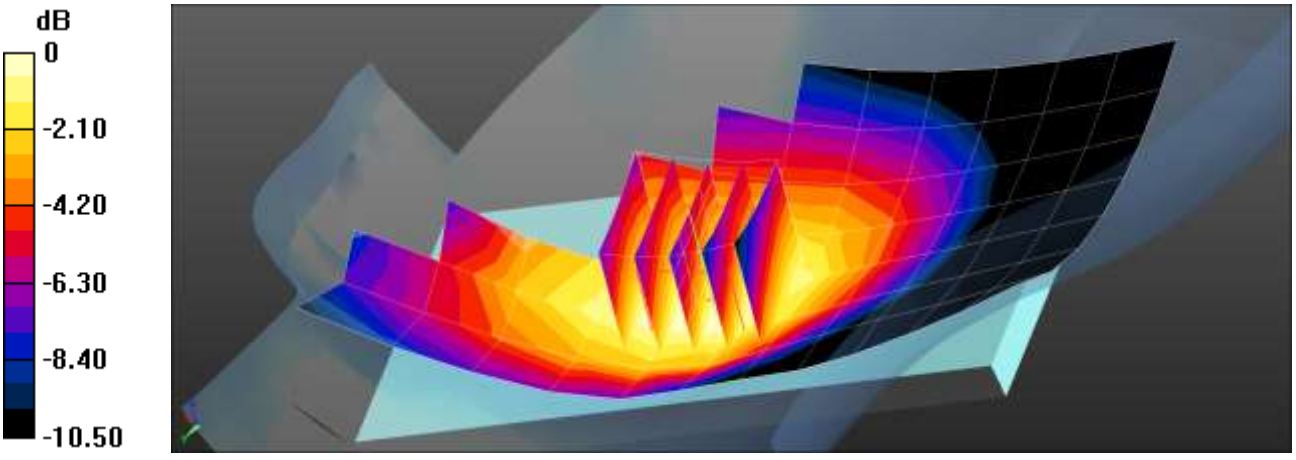
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.93 S/m; ε_r = 42.283; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 5 Head Right Touch 4183ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.218 W/kg

UMTS Band 5 Head Right Touch 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.828 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.272 W/kg
SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.160 W/kg
Maximum value of SAR (measured) = 0.231 W/kg



0 dB = 0.231 W/kg = -6.36 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	5

DUT: SM-G990E/DS; Type: Bar;

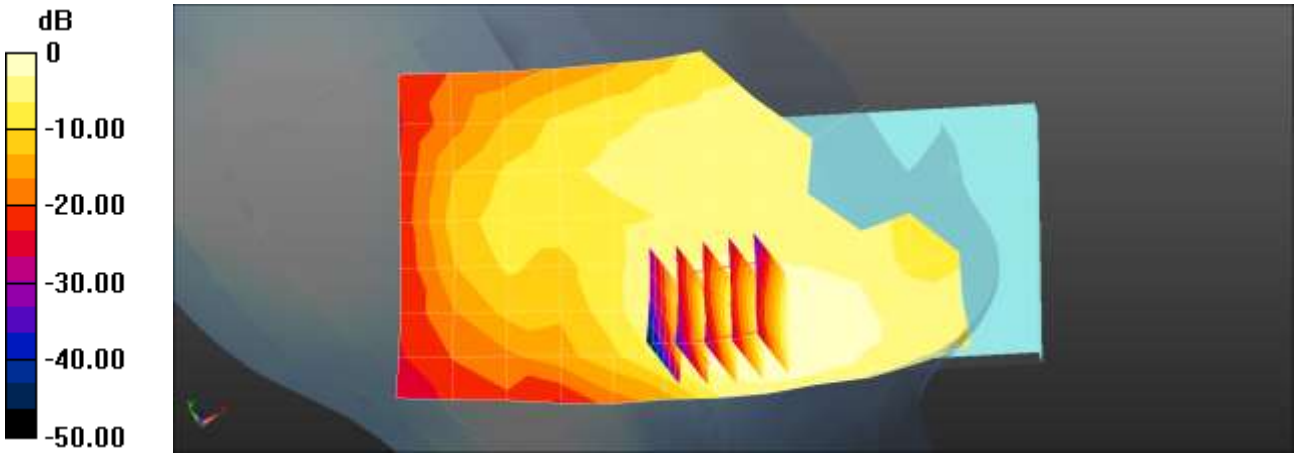
Communication System: UID 0, UMTS IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.347 S/m; ε_r = 41.422; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1732.4 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 4 Head Left Touch 1412ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.187 W/kg

UMTS Band 4 Head Left Touch 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.535 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.273 W/kg
SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.219 W/kg



0 dB = 0.187 W/kg = -7.28 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	6

DUT: SM-G990E/DS; Type: Bar;

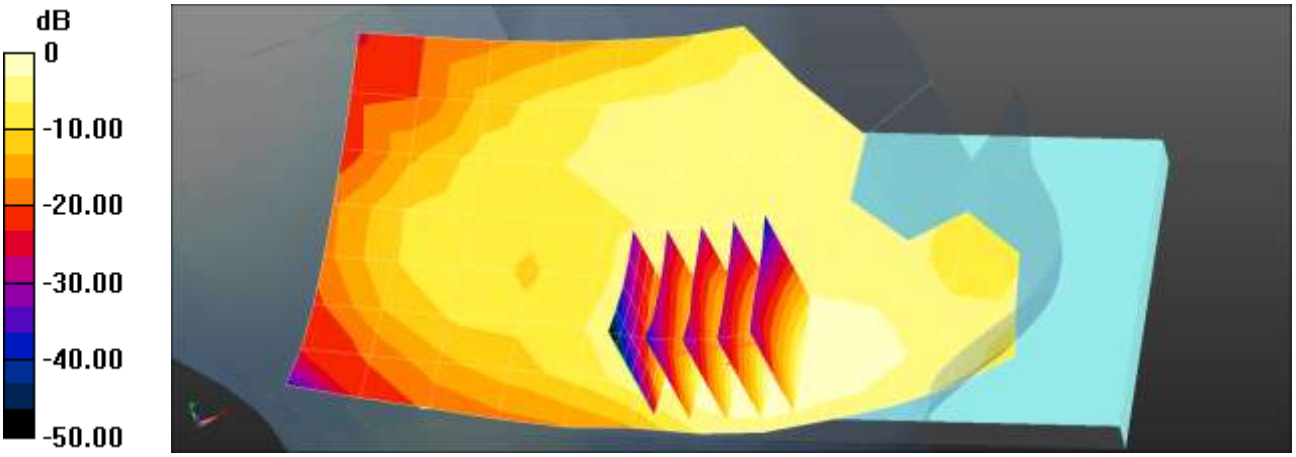
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.373 S/m; ε_r = 41.297; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 Head Left Touch 9400ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.161 W/kg

UMTS Band 2 Head Left Touch 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.968 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.236 W/kg
SAR(1 g) = 0.159 W/kg; SAR(10 g) = 0.101 W/kg
Maximum value of SAR (measured) = 0.186 W/kg



0 dB = 0.161 W/kg = -7.93 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.4℃
Ambient Temperature: 20.5℃
Test Date: 09/09/2021
Plot No.: 7
DUT: SM-G990E/DS; Type: Bar;

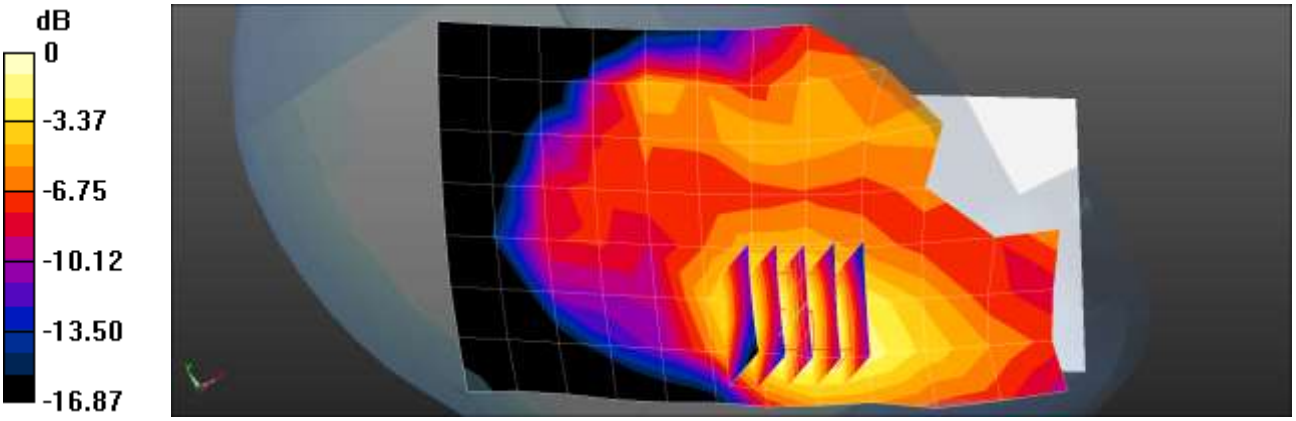
Communication System: UID 0, LTE2 (20MHz) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.404 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 2 Head Left Touch QPSK 20MHz 1RB 49offset 18900ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.102 W/kg

LTE Band 2 Head Left Touch QPSK 20MHz 1RB 49offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.756 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.146 W/kg
SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.061 W/kg
Maximum value of SAR (measured) = 0.114 W/kg



0 dB = 0.114 W/kg = -9.43 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3℃
Ambient Temperature:	21.4℃
Test Date:	08/18/2021
Plot No.:	8

DUT: SM-G990E/DS; Type: Bar;

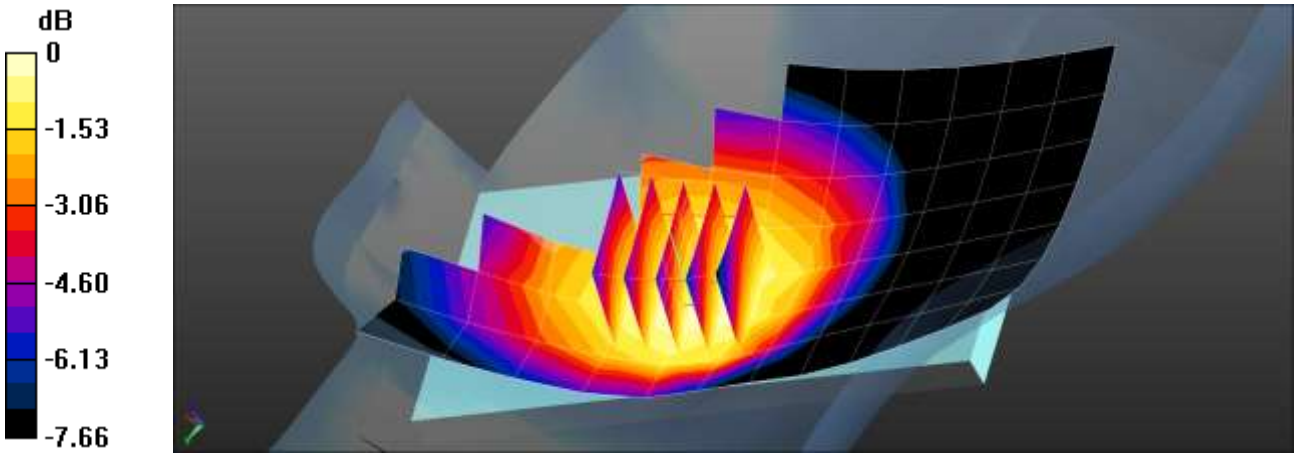
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.882 S/m; ε_r = 43.127; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.33, 6.33, 6.33) @ 707.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.110 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 = 2.646 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.124 W/kg
SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.087 W/kg
Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5℃
Ambient Temperature:	21.6℃
Test Date:	08/19/2021
Plot No.:	9

DUT: SM-G990E/DS; Type: Bar;

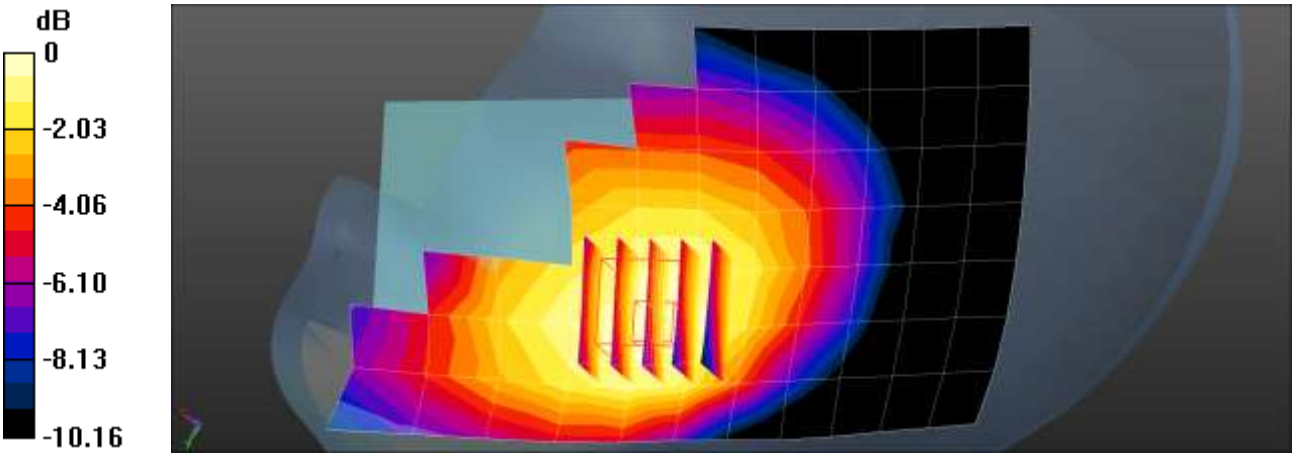
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.926 S/m; ε_r = 42.373; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 831.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.164 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 = 3.736 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.191 W/kg
SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.121 W/kg
Maximum value of SAR (measured) = 0.166 W/kg



0 dB = 0.166 W/kg = -7.80 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1℃
Ambient Temperature:	20.3℃
Test Date:	09/09/2021
Plot No.:	10

DUT: SM-G990E/DS; Type: Bar;

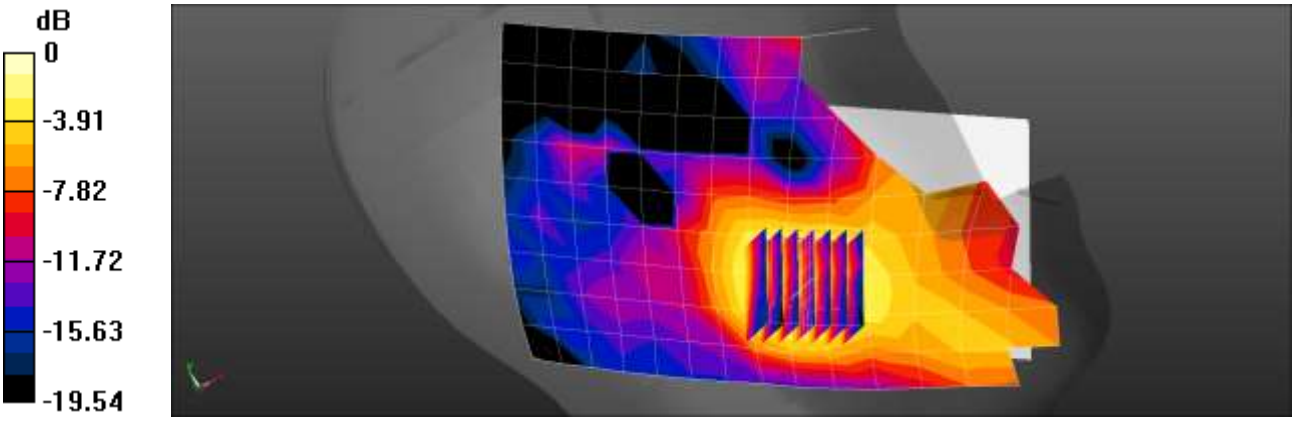
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:2.30728
Medium parameters used: f = 2680 MHz; σ = 2.048 S/m; ε_r = 38.188; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.6, 7.6, 7.6) @ 2680 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1422; Calibrated: 2021-05-19
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 49offset 41490ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.106 W/kg

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.391 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.077 W/kg; SAR(10 g) = 0.041 W/kg
Maximum value of SAR (measured) = 0.115 W/kg



0 dB = 0.115 W/kg = -9.39 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 22.0℃
Ambient Temperature: 22.1℃
Test Date: 09/07/2021
Plot No.: 11
DUT: SM-G990E/DS; Type: Bar;

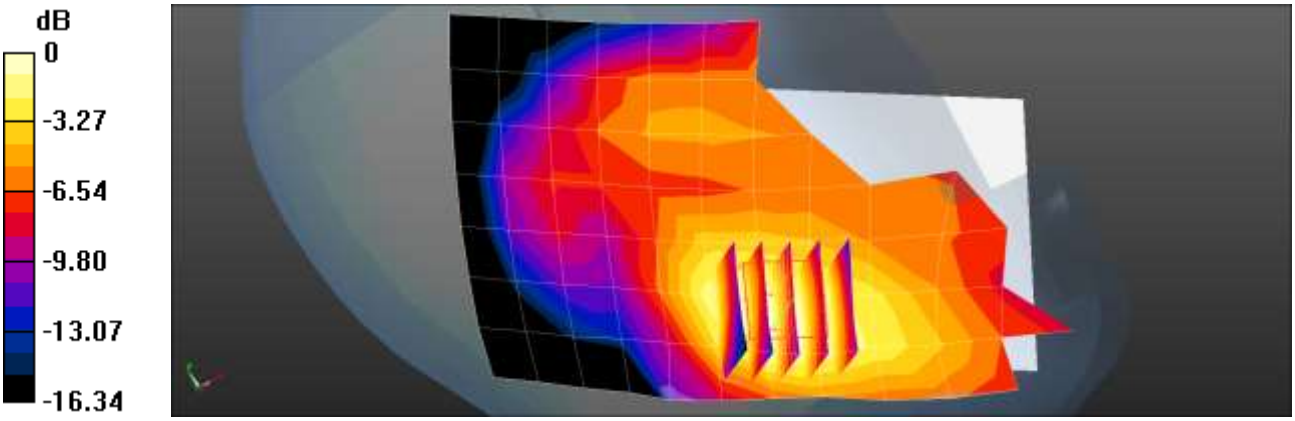
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 41.508; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1720 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.164 W/kg

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.578 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.224 W/kg
SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.102 W/kg
Maximum value of SAR (measured) = 0.180 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.0℃
Ambient Temperature:	23.1℃
Test Date:	09/06/2021
Plot No.:	12

DUT: SM-G990E/DS; Type: Bar;

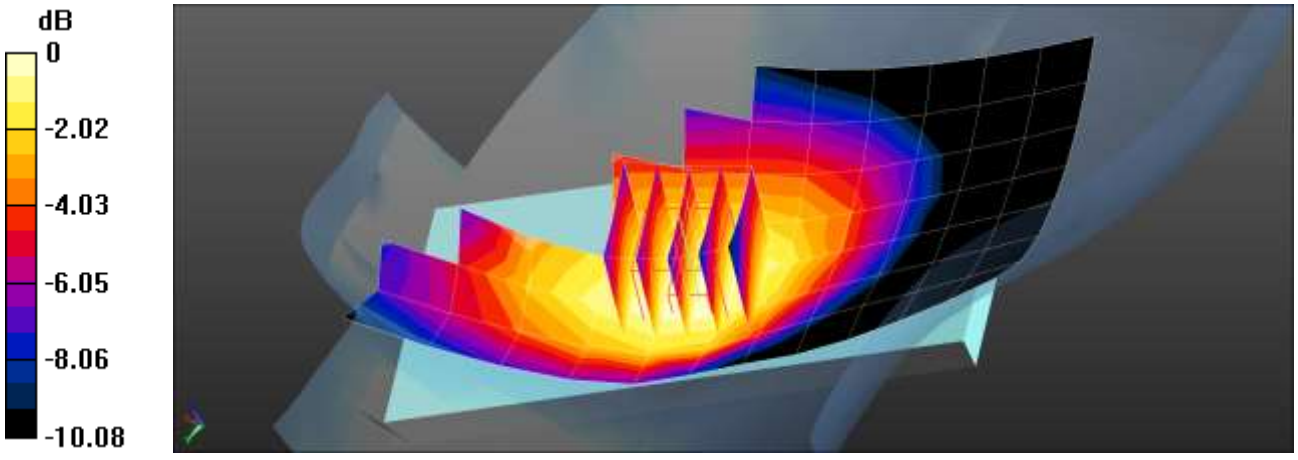
Communication System: UID 0, NR n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.917 S/m; ε_r = 42.055; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n5 Head Right Touch DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.214 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 = 3.668 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.259 W/kg
SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.156 W/kg
Maximum value of SAR (measured) = 0.223 W/kg



0 dB = 0.223 W/kg = -6.52 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.8℃
Ambient Temperature: 22.0℃
Test Date: 09/08/2021
Plot No.: 13
DUT: SM-G990E/DS; Type: Bar;

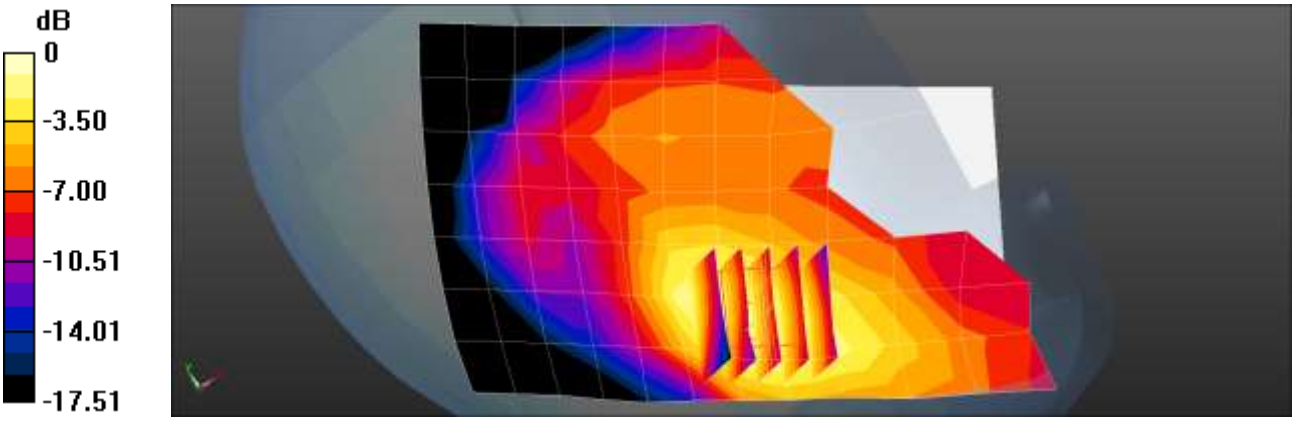
Communication System: UID 0, n66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.386 S/m; ε_r = 41.179; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1770 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 354000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.230 W/kg

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 354000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.278 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.326 W/kg
SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.151 W/kg
Maximum value of SAR (measured) = 0.264 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.8℃
Ambient Temperature: 21.0℃
Test Date: 09/03/2021
Plot No.: 14
DUT: SM-G990E/DS; Type: Bar;

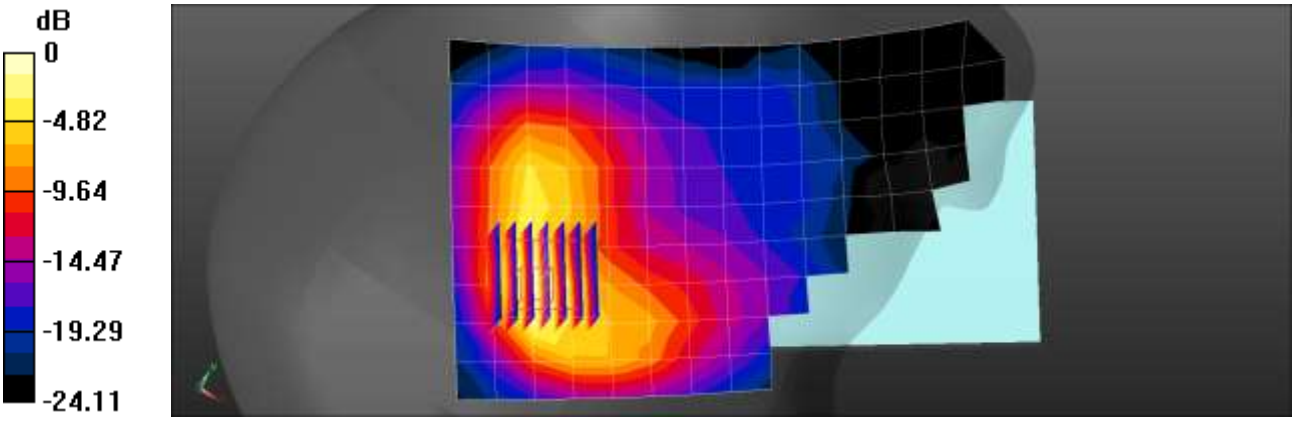
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.789 S/m; ε_r = 38.959; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11g Head Right Tilt 6Mbps 1ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.916 W/kg

802.11g Head Right Tilt 6Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.49 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.202 W/kg
Maximum value of SAR (measured) = 0.886 W/kg



0 dB = 0.886 W/kg = -0.53 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.8℃
Ambient Temperature: 21.0℃
Test Date: 09/03/2021
Plot No.: 15
DUT: SM-G990E/DS; Type: Bar;

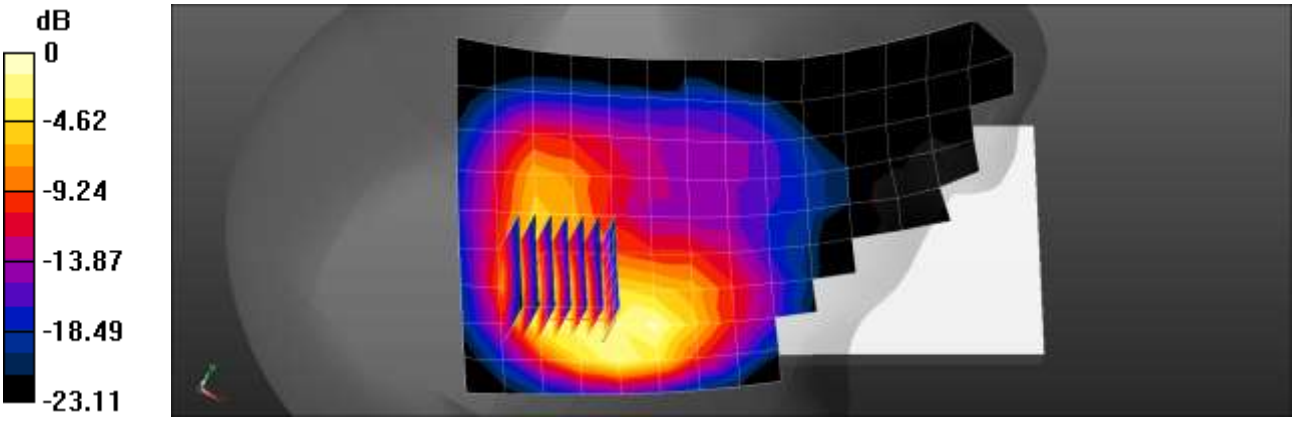
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.789 S/m; ε_r = 38.959; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11g Head Right Touch 6Mbps 1ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.695 W/kg

802.11g Head Right Touch 6Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.41 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.413 W/kg; SAR(10 g) = 0.195 W/kg
Maximum value of SAR (measured) = 0.781 W/kg



0 dB = 0.781 W/kg = -1.07 dBW/kg

‘

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.5℃
Ambient Temperature: 21.6℃
Test Date: 09/07/2021
Plot No.: 16
DUT: SM-G990E/DS; Type: Bar;

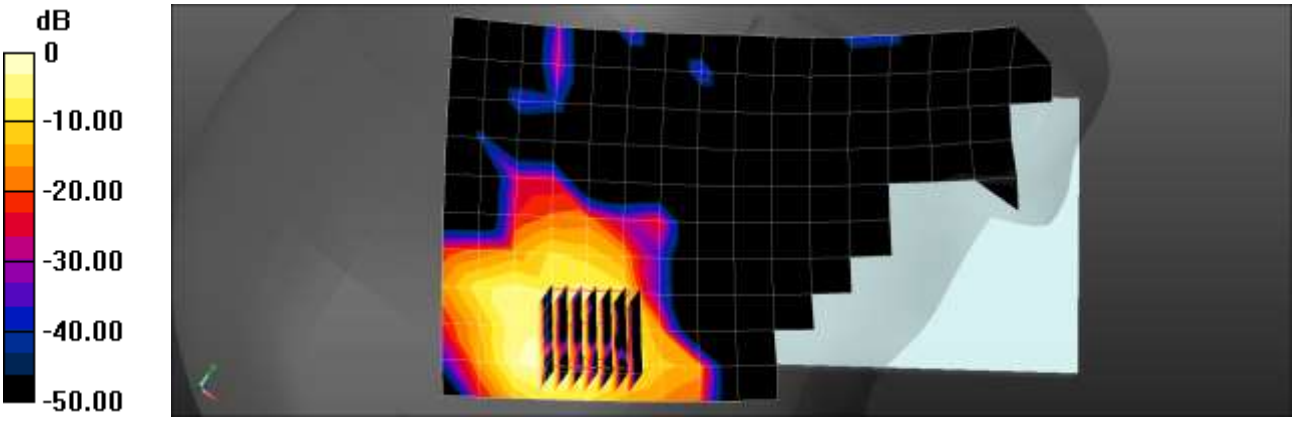
Communication System: UID 0, WiFI5GHz ac80 (0); Frequency: 5610 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5610 MHz; σ = 5.217 S/m; ε_r = 36.397; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.4, 5.4, 5.4) @ 5610 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11ac80 Head Right Touch MCS0 122ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.985 W/kg

802.11ac80 Head Right Touch MCS0 122ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.781 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.95 W/kg
SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.133 W/kg
Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 0.985 W/kg = -0.06 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.3℃
Ambient Temperature: 21.4℃
Test Date: 09/08/2021
Plot No.: 17
DUT: SM-G990E/DS; Type: Bar;

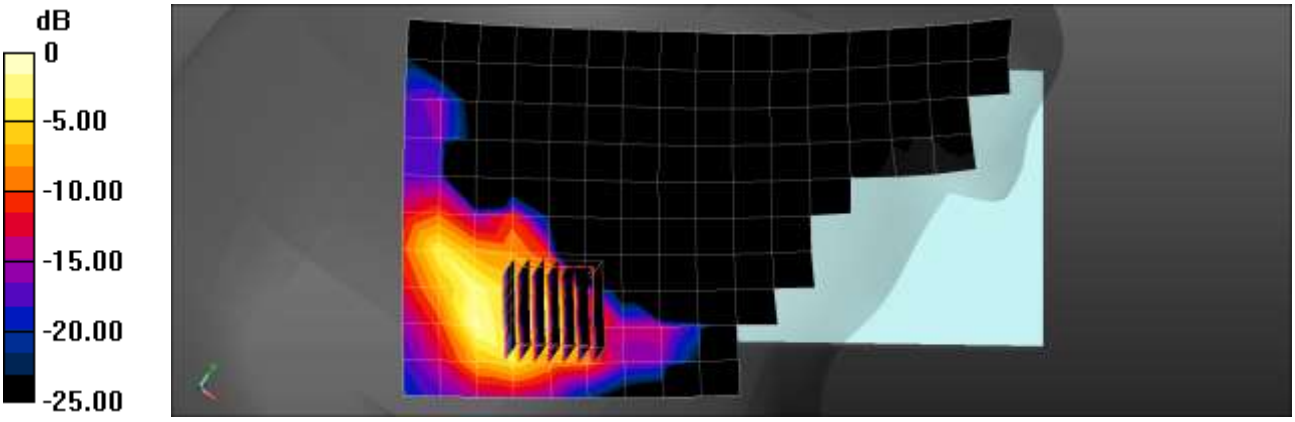
Communication System: UID 0, WiFI5GHz ac80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5775 MHz; σ = 5.396 S/m; ε_r = 36.116; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5775 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11ac80 Head Right Touch MCS0 155ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.07 W/kg

802.11ac80 Head Right Touch MCS0 155ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.669 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 3.11 W/kg
SAR(1 g) = 0.371 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 1.17 W/kg



0 dB = 1.17 W/kg = 0.68 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6℃
Ambient Temperature:	20.8℃
Test Date:	09/06/2021
Plot No.:	18

DUT: SM-G990E/DS; Type: Bar;

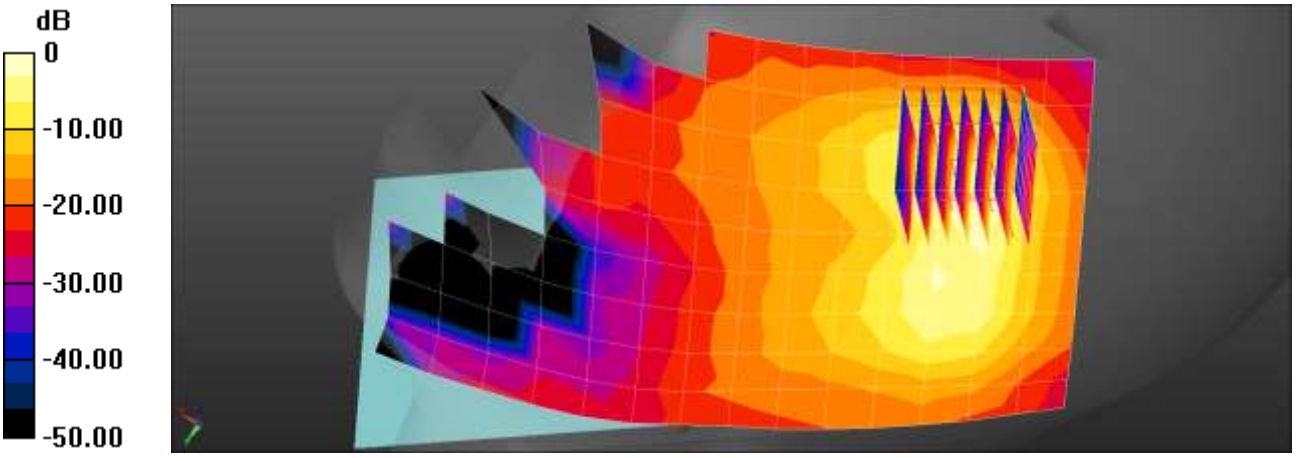
Communication System: UID 0, Bluetooth (0); Frequency: 2480 MHz;Duty Cycle: 1:1.299
Medium parameters used: f = 2480 MHz; σ = 1.877 S/m; ε_r = 37.657; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2480 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

Bluetooth Head Right Tilt DH5 78ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.702 W/kg

Bluetooth Head Right Tilt DH5 78ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.37 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.188 W/kg
Maximum value of SAR (measured) = 0.948 W/kg



0 dB = 0.702 W/kg = -1.54 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.1℃
Ambient Temperature:	23.2℃
Test Date:	09/10/2021
Plot No.:	19

DUT: SM-G990E/DS; Type: Bar;

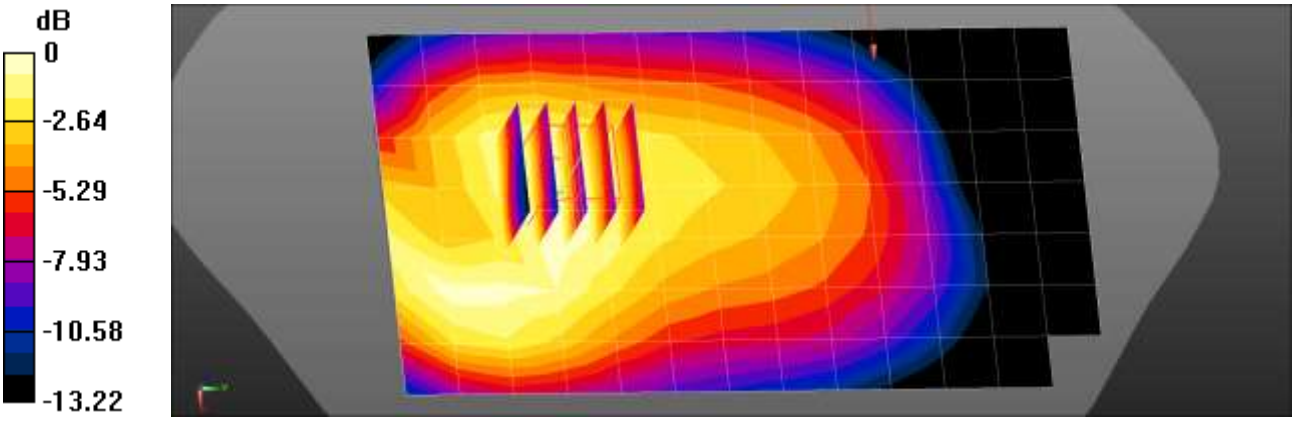
Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.916 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM850 BodyWorn Rear 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.280 W/kg

GSM850 BodyWorn Rear 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.38 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.340 W/kg
SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.177 W/kg
Maximum value of SAR (measured) = 0.279 W/kg



0 dB = 0.279 W/kg = -5.54 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 23.1℃
Ambient Temperature: 23.2℃
Test Date: 09/10/2021
Plot No.: 20
DUT: SM-G990E/DS; Type: Bar;

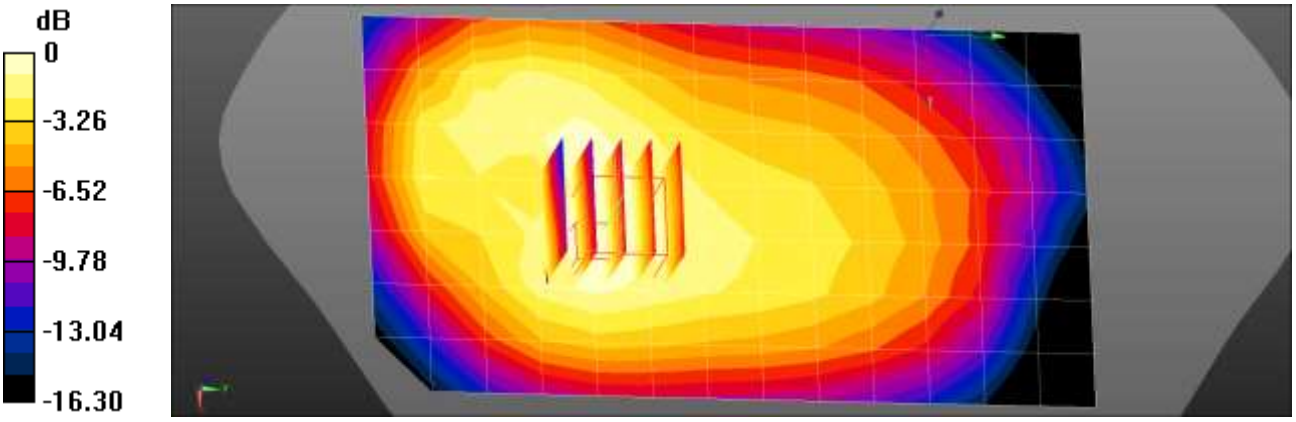
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.916 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM850 2Tx BodyWorn Front 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.314 W/kg

GSM850 2Tx BodyWorn Front 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.20 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.416 W/kg
SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.199 W/kg
Maximum value of SAR (measured) = 0.307 W/kg



0 dB = 0.307 W/kg = -5.13 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.7℃
Ambient Temperature:	22.8℃
Test Date:	09/03/2021
Plot No.:	21

DUT: SM-G990E/DS; Type: Bar;

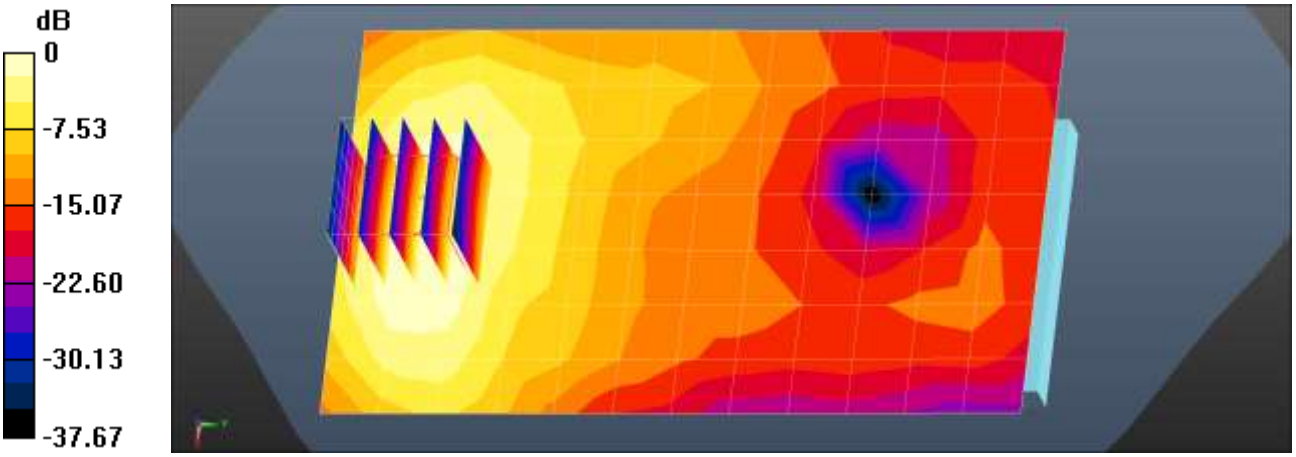
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.37 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM1900 BodyWorn Rear 2Tx 661ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.372 W/kg

GSM1900 BodyWorn Rear 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.186 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.381 W/kg; SAR(10 g) = 0.223 W/kg
Maximum value of SAR (measured) = 0.461 W/kg



0 dB = 0.372 W/kg = -4.29 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	22

DUT: SM-G990E/DS; Type: Bar;

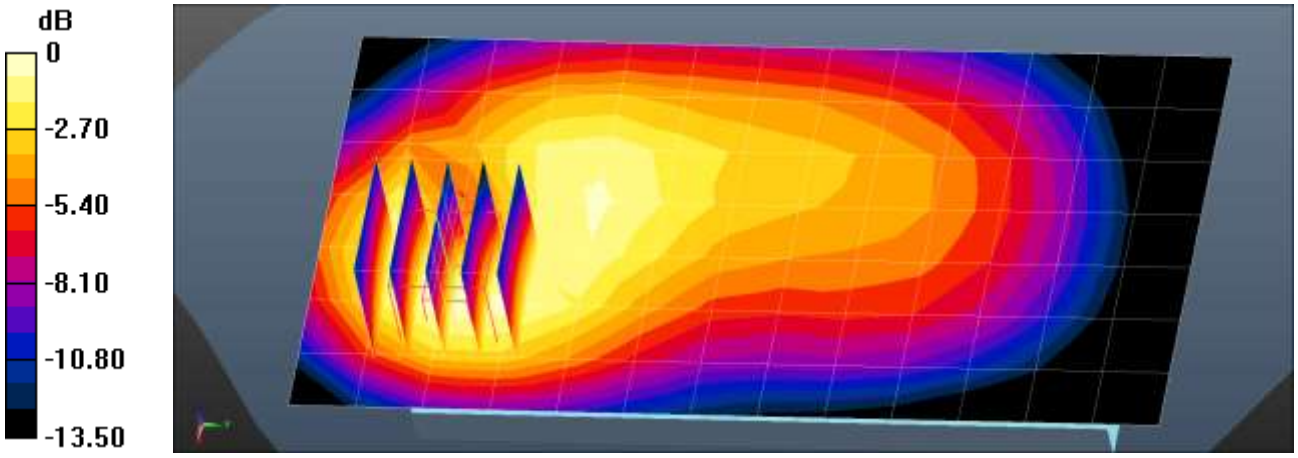
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.93 S/m; ε_r = 42.283; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 5 BodyWorn Rear 4183ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.328 W/kg

UMTS Band 5 BodyWorn Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.40 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.434 W/kg
SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.172 W/kg
Maximum value of SAR (measured) = 0.328 W/kg



0 dB = 0.328 W/kg = -4.84 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	23

DUT: SM-G990E/DS; Type: Bar;

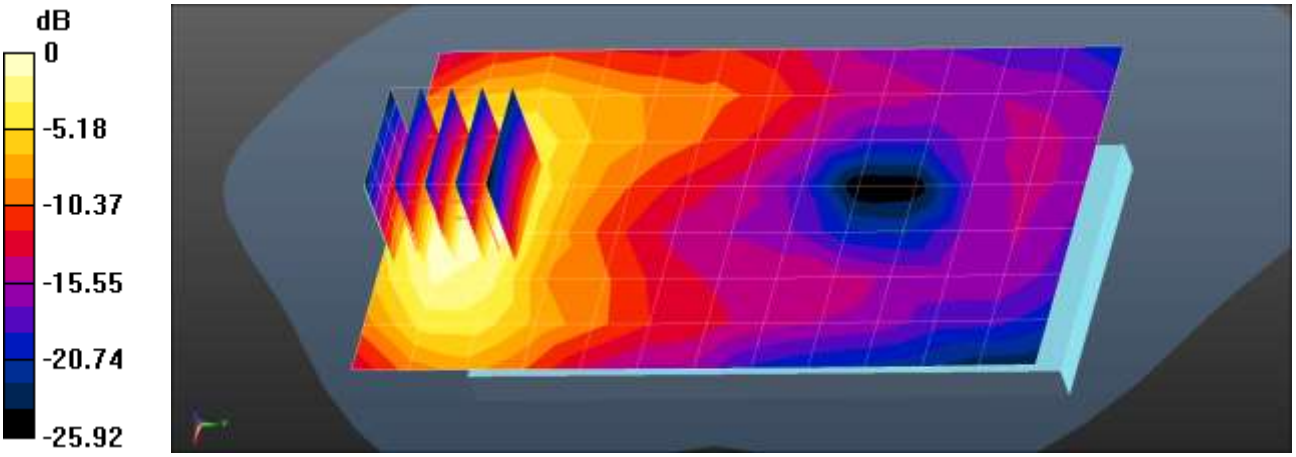
Communication System: UID 0, UMTS IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.347 S/m; ε_r = 41.422; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1732.4 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 4 BodyWorn Rear 1412ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.706 W/kg

UMTS Band 4 BodyWorn Rear 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.355 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.392 W/kg
Maximum value of SAR (measured) = 0.784 W/kg



0 dB = 0.706 W/kg = -1.51 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	24

DUT: SM-G990E/DS; Type: Bar;

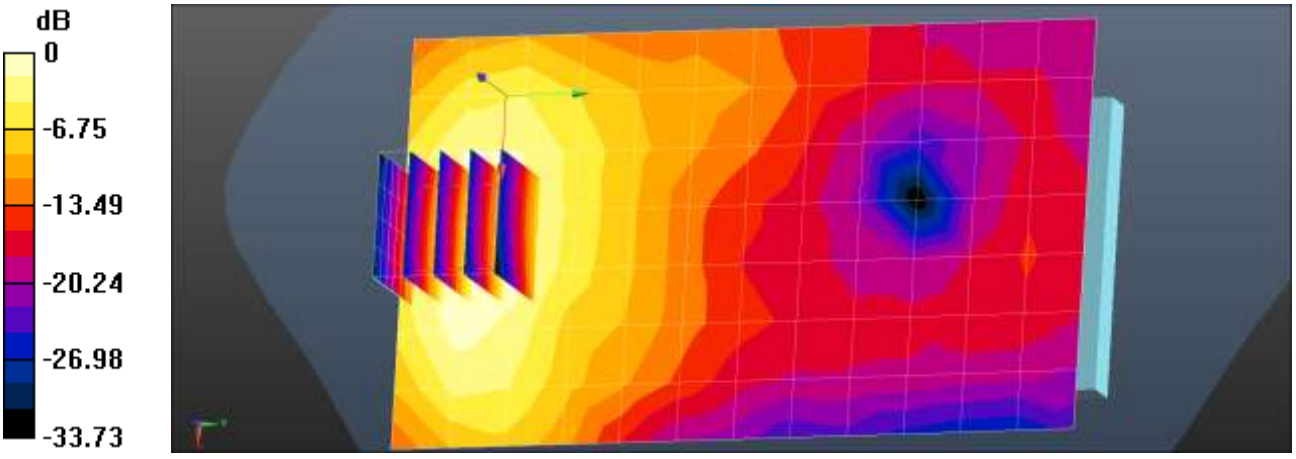
Communication System: UID 0, UMTS1900 (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.392 S/m; ε_r = 41.214; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1907.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 BodyWorn Rear 9538ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.847 W/kg

UMTS Band 2 BodyWorn Rear 9538ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.692 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.791 W/kg; SAR(10 g) = 0.467 W/kg
Maximum value of SAR (measured) = 0.960 W/kg



0 dB = 0.847 W/kg = -0.72 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.4℃
Ambient Temperature: 20.5℃
Test Date: 09/09/2021
Plot No.: 25
DUT: SM-G990E/DS; Type: Bar;

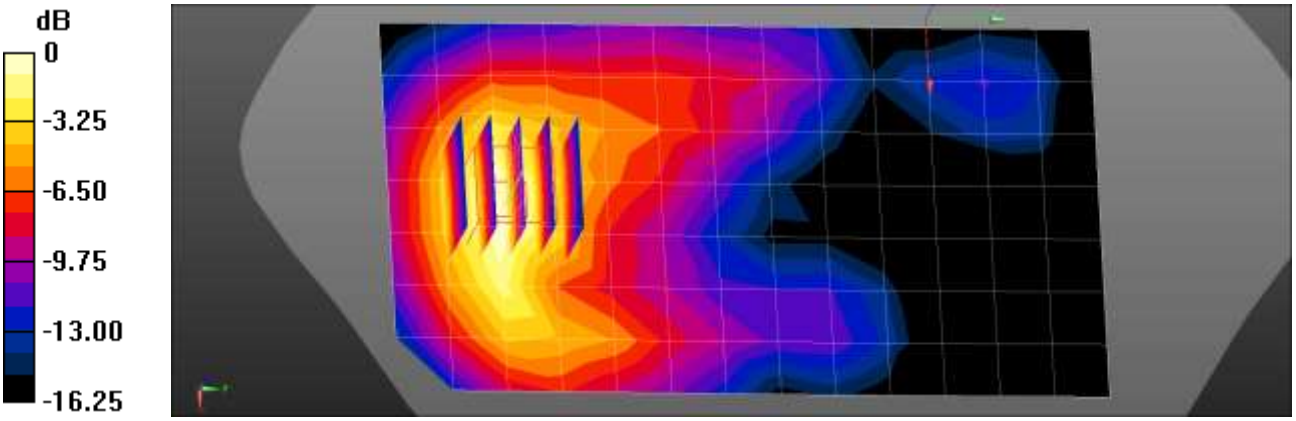
Communication System: UID 0, LTE2 (20MHz) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.404 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 2 BodyWorn Rear QPSK 20MHz 1RB 49offset 18900ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.452 W/kg

LTE Band 2 BodyWorn Rear QPSK 20MHz 1RB 49offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.959 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.641 W/kg
SAR(1 g) = 0.395 W/kg; SAR(10 g) = 0.234 W/kg
Maximum value of SAR (measured) = 0.479 W/kg



0 dB = 0.479 W/kg = -3.20 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3℃
Ambient Temperature:	21.4℃
Test Date:	08/18/2021
Plot No.:	26

DUT: SM-G990E/DS; Type: Bar;

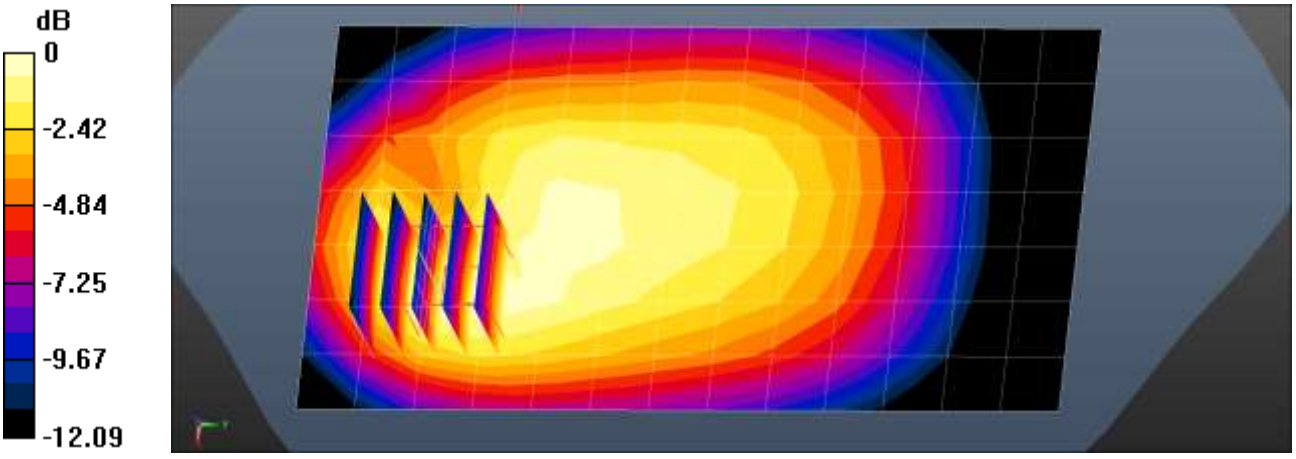
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.882 S/m; ε_r = 43.127; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.33, 6.33, 6.33) @ 707.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 12 BodyWorn Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.192 W/kg

LTE Band 12 BodyWorn Rear QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.19 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.261 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.108 W/kg
Maximum value of SAR (measured) = 0.196 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5℃
Ambient Temperature:	21.6℃
Test Date:	08/19/2021
Plot No.:	27

DUT: SM-G990E/DS; Type: Bar;

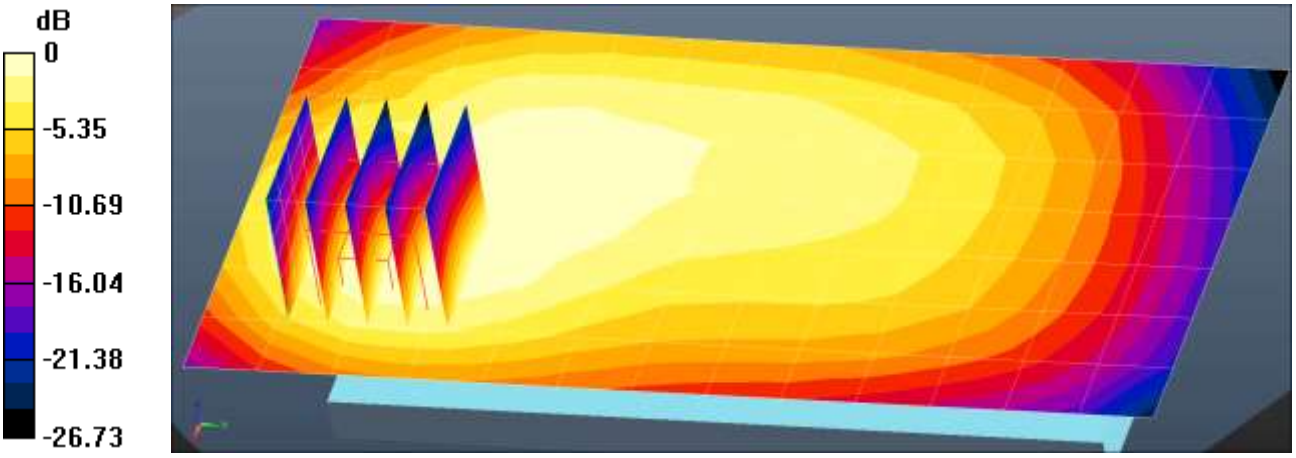
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.926 S/m; ε_r = 42.373; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 831.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 26 BodyWorn Rear QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.273 W/kg

LTE Band 26 BodyWorn Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.86 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.361 W/kg
SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.144 W/kg
Maximum value of SAR (measured) = 0.270 W/kg



0 dB = 0.273 W/kg = -5.64 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1℃
Ambient Temperature:	20.3℃
Test Date:	09/09/2021
Plot No.:	28

DUT: SM-G990E/DS; Type: Bar;

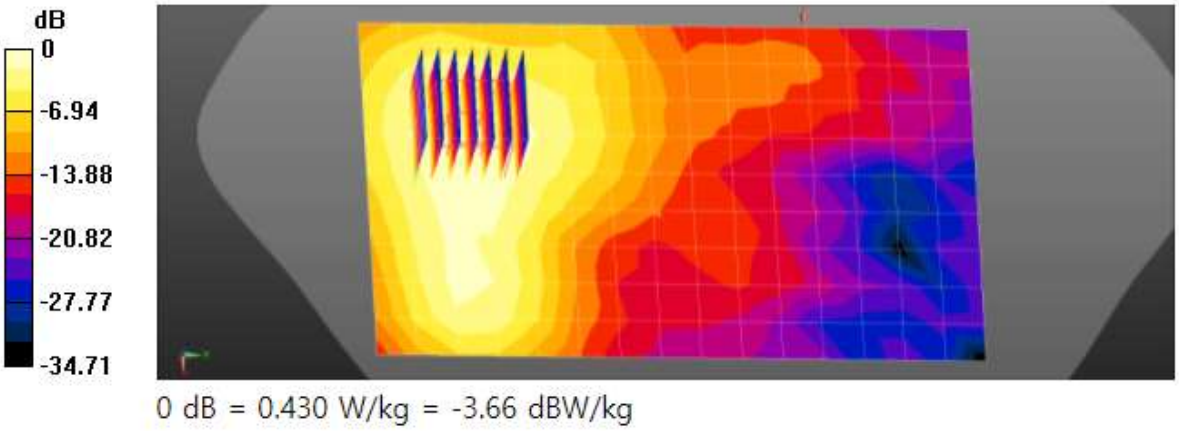
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:2.30728
Medium parameters used: f = 2680 MHz; σ = 2.048 S/m; ε_r = 38.188; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.6, 7.6, 7.6) @ 2680 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1422; Calibrated: 2021-05-19
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 41 BodyWorn Rear QPSK 20MHz 1RB 49offset 41490ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.430 W/kg

LTE Band 41 BodyWorn Rear QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.338 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.551 W/kg
SAR(1 g) = 0.293 W/kg; SAR(10 g) = 0.161 W/kg
Maximum value of SAR (measured) = 0.452 W/kg



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	29

DUT: SM-G990E/DS; Type: Bar;

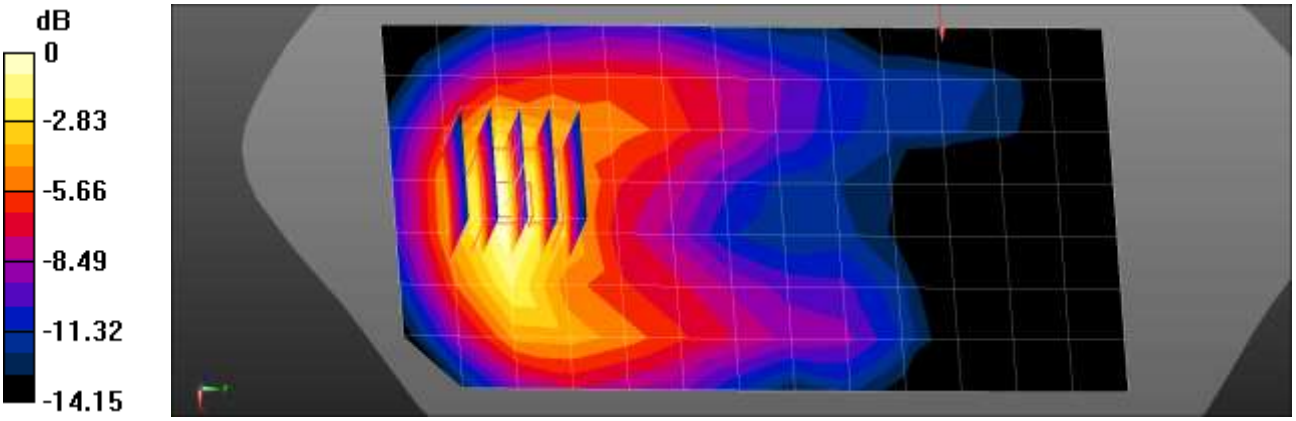
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 41.508; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1720 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 66 BodyWorn Rear QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.568 W/kg

LTE Band 66 BodyWorn Rear QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.366 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.769 W/kg
SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.302 W/kg
Maximum value of SAR (measured) = 0.596 W/kg



0 dB = 0.596 W/kg = -2.25 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.0℃
Ambient Temperature:	23.1℃
Test Date:	09/06/2021
Plot No.:	30

DUT: SM-G990E/DS; Type: Bar;

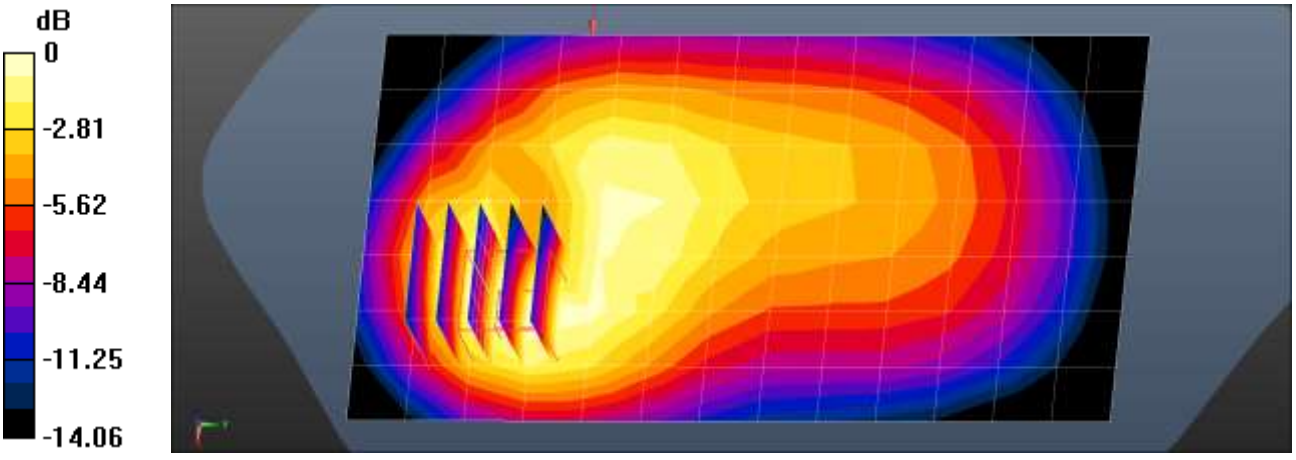
Communication System: UID 0, NR n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.917 S/m; ε_r = 42.055; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n5 BodyWorn Rear DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.342 W/kg

NR Band n5 BodyWorn Rear DFT-s QPSK 20MHz 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.23 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.296 W/kg; SAR(10 g) = 0.183 W/kg
Maximum value of SAR (measured) = 0.346 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.8℃
Ambient Temperature:	22.0℃
Test Date:	09/08/2021
Plot No.:	31

DUT: SM-G990E/DS; Type: Bar;

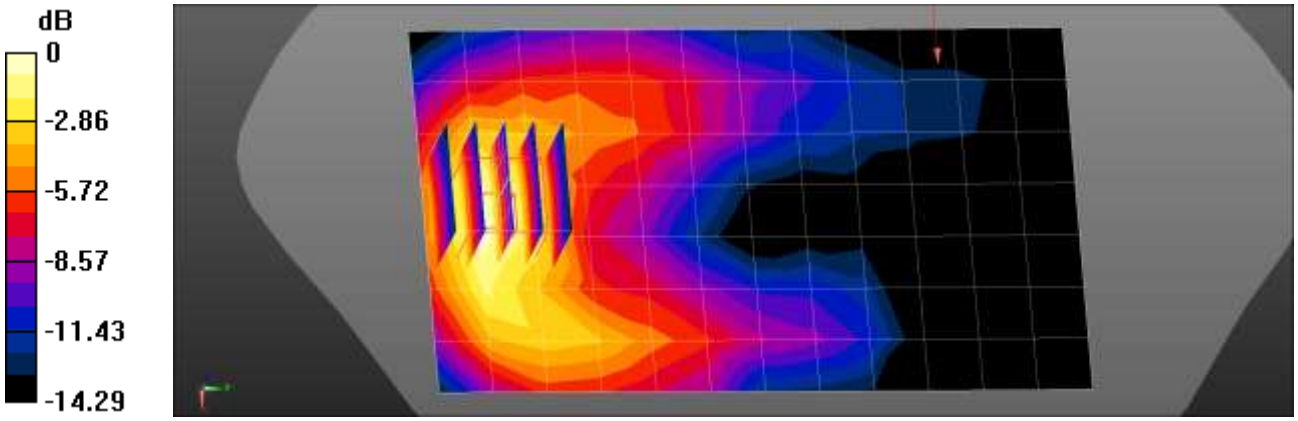
Communication System: UID 0, n66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.386 S/m; ε_r = 41.179; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1770 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n66 BodyWorn Rear DFT-s QPSK 20MHz 1RB 53offset 354000ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.597 W/kg

NR Band n66 BodyWorn Rear DFT-s QPSK 20MHz 1RB 53offset 354000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.841 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.859 W/kg
SAR(1 g) = 0.554 W/kg; SAR(10 g) = 0.335 W/kg
Maximum value of SAR (measured) = 0.659 W/kg



0 dB = 0.659 W/kg = -1.81 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.0℃
Ambient Temperature:	23.1℃
Test Date:	09/06/2021
Plot No.:	32

DUT: SM-G990E/DS; Type: Bar;

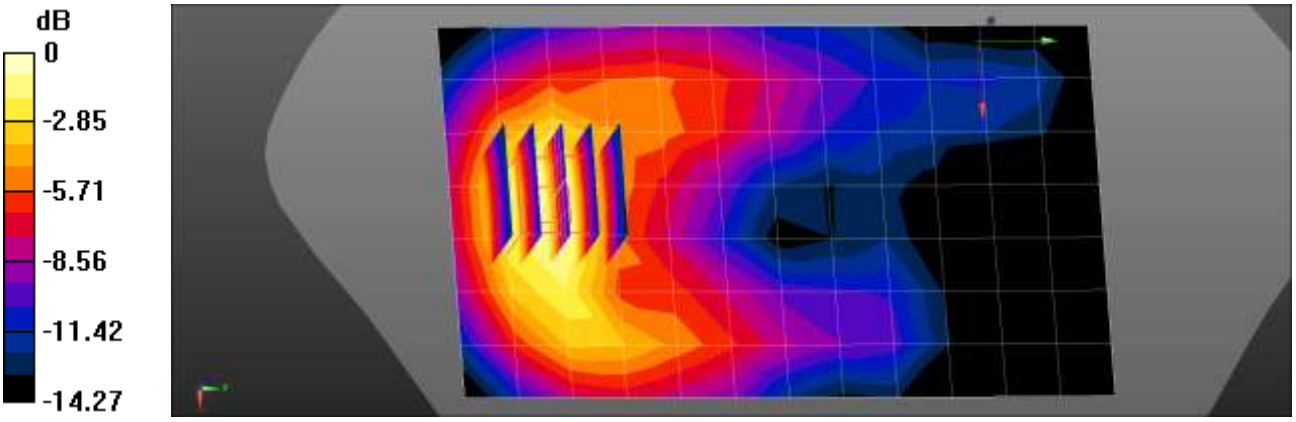
Communication System: UID 0, n66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.386 S/m; ε_r = 41.179; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1770 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n66 BodyWorn Rear DFT-s QPSK 20MHz 50RB 28offset 354000ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.576 W/kg

NR Band n66 BodyWorn Rear DFT-s QPSK 20MHz 50RB 28offset 354000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.132 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.844 W/kg
SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.331 W/kg
Maximum value of SAR (measured) = 0.652 W/kg



0 dB = 0.652 W/kg = -1.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3℃
Ambient Temperature:	21.5℃
Test Date:	09/07/2021
Plot No.:	33

DUT: SM-G990E/DS; Type: Bar;

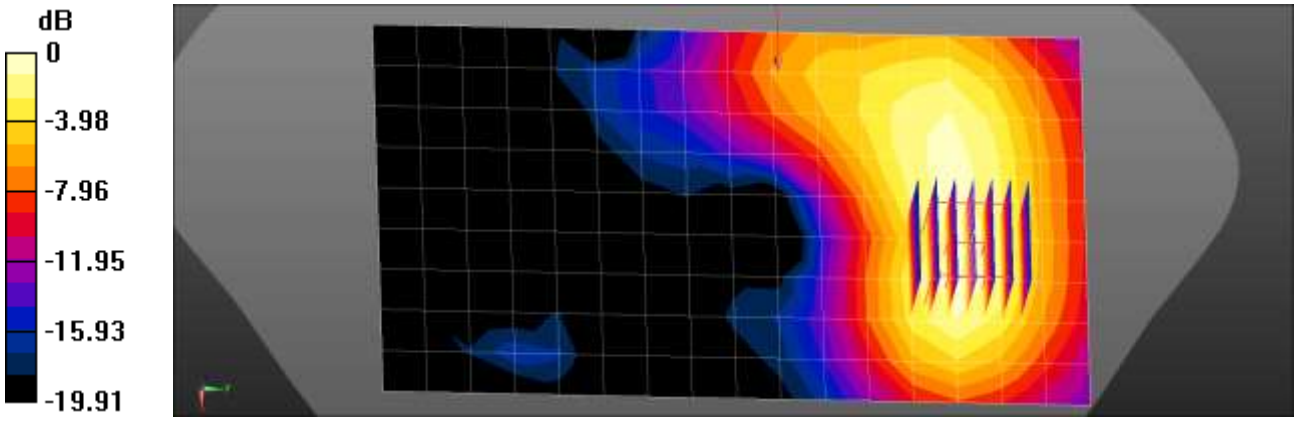
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.792 S/m; ε_r = 37.96; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11b BodyWorn Rear 1Mbps 1ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.364 W/kg

802.11b BodyWorn Rear 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.515 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.456 W/kg
SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.129 W/kg
Maximum value of SAR (measured) = 0.376 W/kg



0 dB = 0.376 W/kg = -4.25 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.3℃
Ambient Temperature: 21.5℃
Test Date: 09/07/2021
Plot No.: 34
DUT: SM-G990E/DS; Type: Bar;

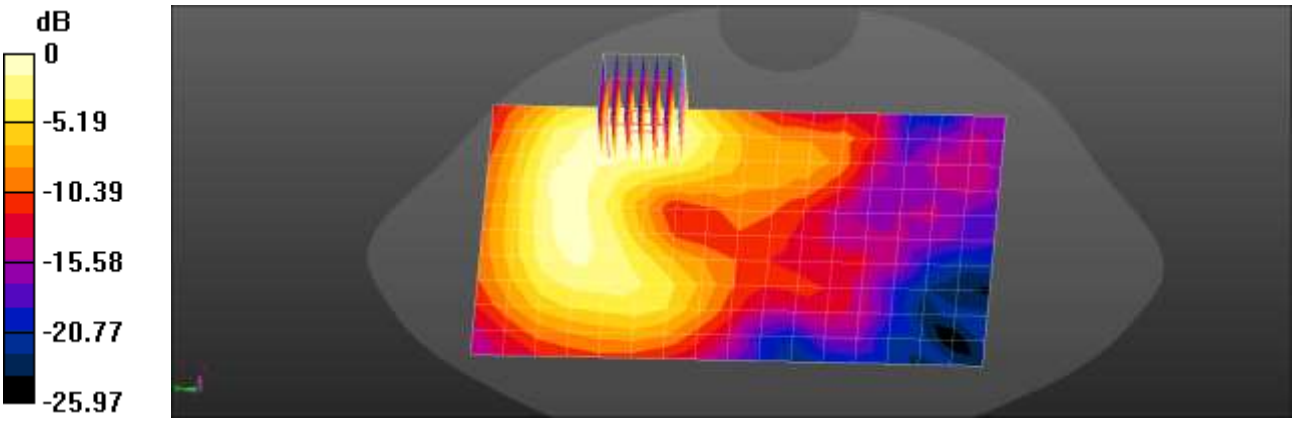
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.818 S/m; ε_r = 37.855; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2437 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11g BodyWorn Rear 6Mbps 6ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.298 W/kg

802.11g BodyWorn Rear 6Mbps 6ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.035 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.362 W/kg
SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.106 W/kg
Maximum value of SAR (measured) = 0.300 W/kg



0 dB = 0.298 W/kg = -5.26 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.3℃
Ambient Temperature: 21.5℃
Test Date: 09/07/2021
Plot No.: 35
DUT: SM-G990E/DS; Type: Bar;

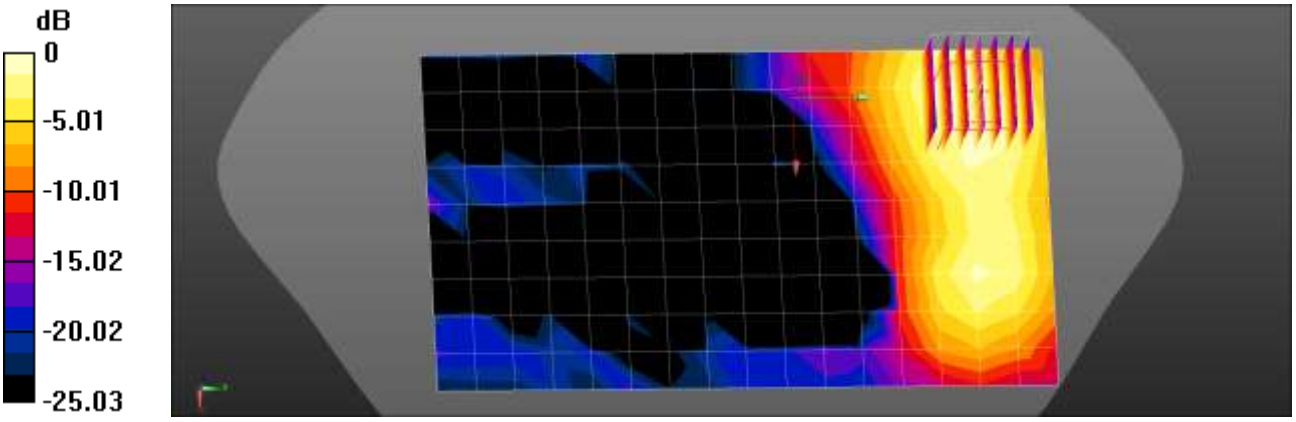
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.818 S/m; ε_r = 37.855; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2437 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11b BodyWorn Rear 1Mbps 6ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0904 W/kg

802.11b BodyWorn Rear 1Mbps 6ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.111 W/kg
SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.034 W/kg
Maximum value of SAR (measured) = 0.0916 W/kg



0 dB = 0.0916 W/kg = -10.38 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.3℃
Ambient Temperature: 21.5℃
Test Date: 09/07/2021
Plot No.: 36
DUT: SM-G990E/DS; Type: Bar;

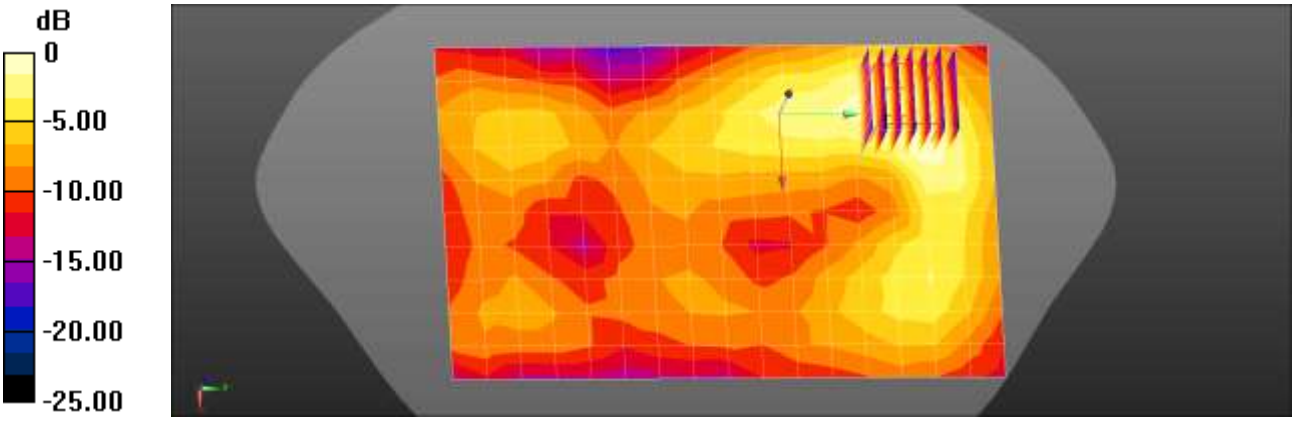
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.792 S/m; ε_r = 37.96; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11g BodyWorn Front 6Mbps 1ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0821 W/kg

802.11g BodyWorn Front 6Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.812 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.100 W/kg
SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.030 W/kg
Maximum value of SAR (measured) = 0.0826 W/kg



0 dB = 0.0826 W/kg = −10.83 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.0℃
Ambient Temperature: 20.1℃
Test Date: 09/11/2021
Plot No.: 37
DUT: SM-G990E/DS; Type: Bar;

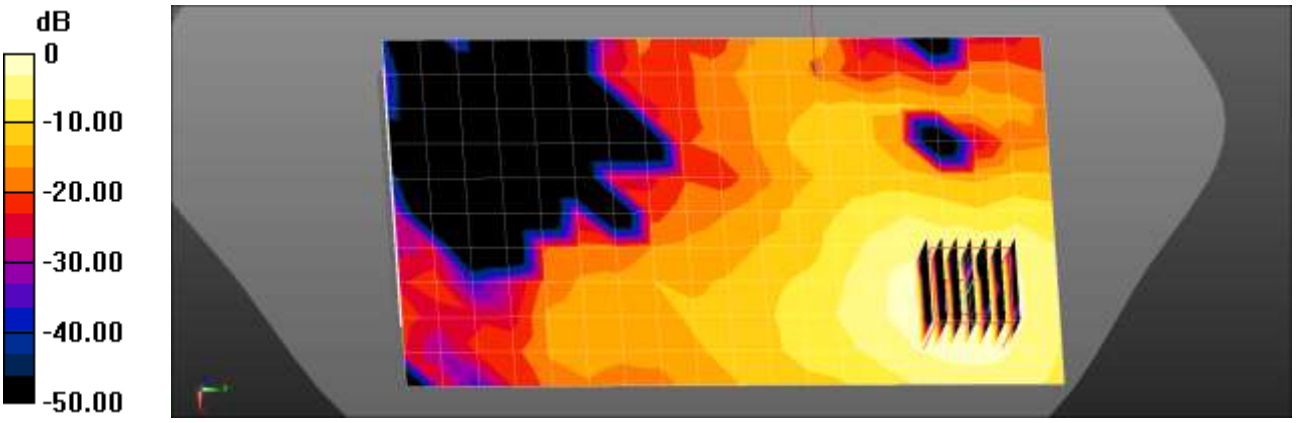
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5825 MHz; σ = 5.216 S/m; ε_r = 36.584; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5825 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11a BodyWorn Rear 6Mbps 165ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.537 W/kg

802.11a BodyWorn Rear 6Mbps 165ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.181 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.919 W/kg
SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.088 W/kg
Maximum value of SAR (measured) = 0.541 W/kg



0 dB = 0.541 W/kg = -2.67 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.4℃
Ambient Temperature: 19.5℃
Test Date: 09/13/2021
Plot No.: 38
DUT: SM-G990E/DS; Type: Bar;

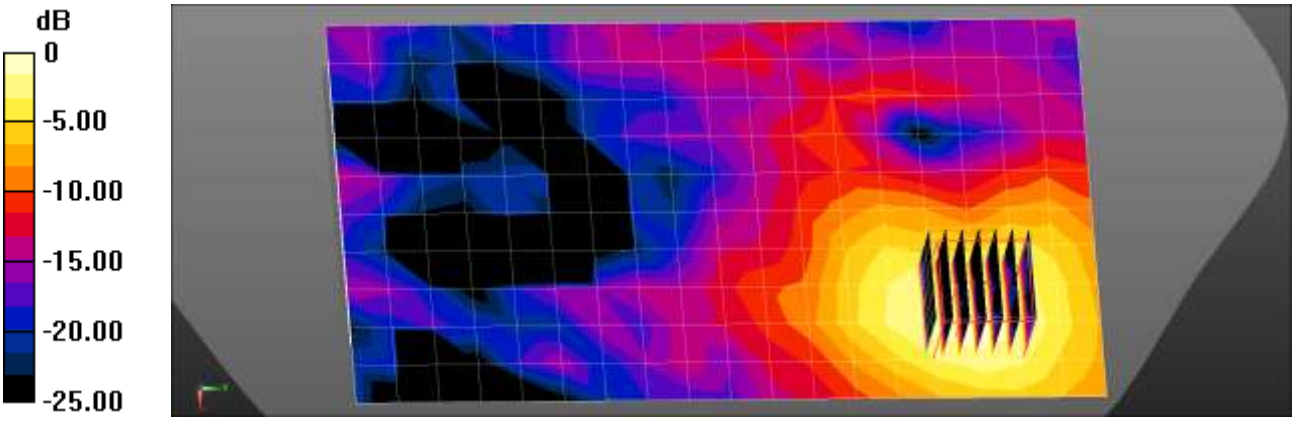
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5775 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5775 MHz; σ = 5.268 S/m; ε_r = 35.157; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5775 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11ac80 BodyWorn Rear MCS0 155ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.191 W/kg

802.11ac80 BodyWorn Rear MCS0 155ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.3520 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.329 W/kg
SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.030 W/kg
Maximum value of SAR (measured) = 0.195 W/kg



0 dB = 0.195 W/kg = -7.10 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.4℃
Ambient Temperature: 19.5℃
Test Date: 09/13/2021
Plot No.: 39
DUT: SM-G990E/DS; Type: Bar;

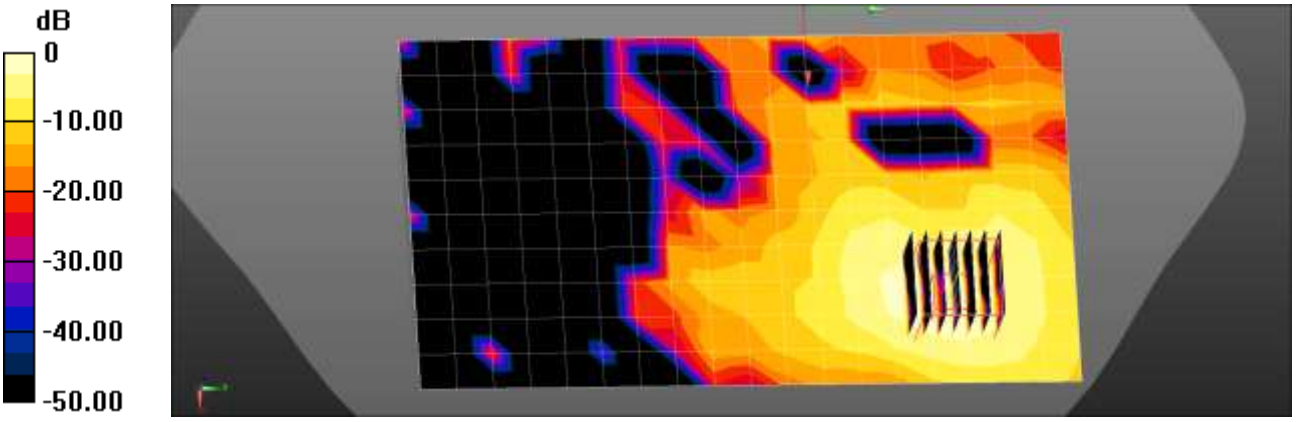
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5775 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5775 MHz; σ = 5.268 S/m; ε_r = 35.157; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5775 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11ac80 BodyWorn Rear MCS0 155ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.143 W/kg

802.11ac80 BodyWorn Rear MCS0 155ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.317 W/kg
SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.024 W/kg
Maximum value of SAR (measured) = 0.178 W/kg



0 dB = 0.178 W/kg = -7.50 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6℃
Ambient Temperature:	20.8℃
Test Date:	09/06/2021
Plot No.:	40

DUT: SM-G990E/DS; Type: Bar;

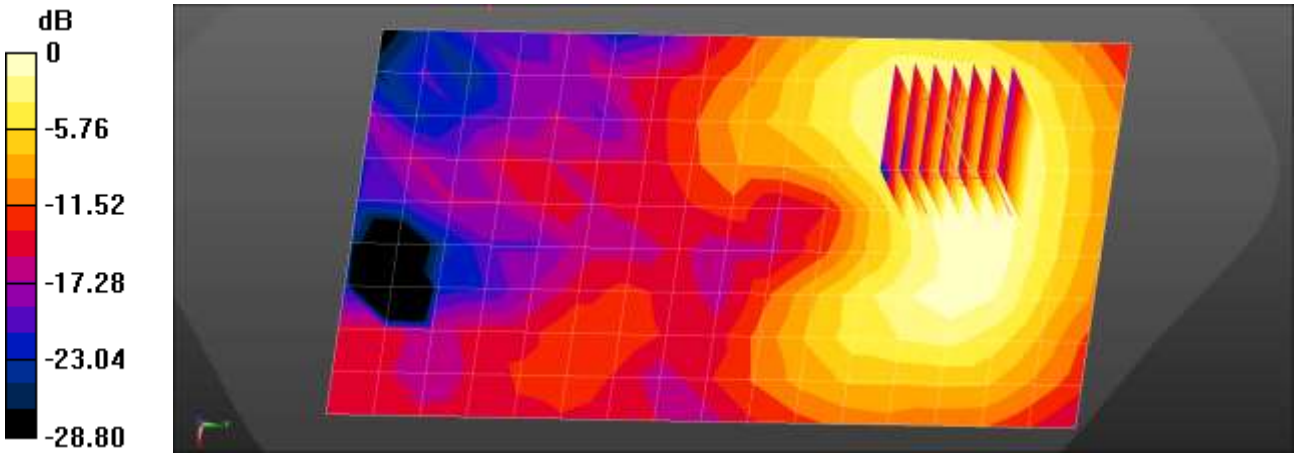
Communication System: UID 0, Bluetooth (0); Frequency: 2480 MHz;Duty Cycle: 1:1.299
Medium parameters used: f = 2480 MHz; σ = 1.877 S/m; ε_r = 37.657; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2480 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

Bluetooth Body Worn Rear DH5 78ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.101 W/kg

Bluetooth Body Worn Rear DH5 78ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.807 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.037 W/kg
Maximum value of SAR (measured) = 0.0984 W/kg



0 dB = 0.0984 W/kg = -10.07 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.1℃
Ambient Temperature:	23.2℃
Test Date:	09/10/2021
Plot No.:	41

DUT: SM-G990E/DS; Type: Bar;

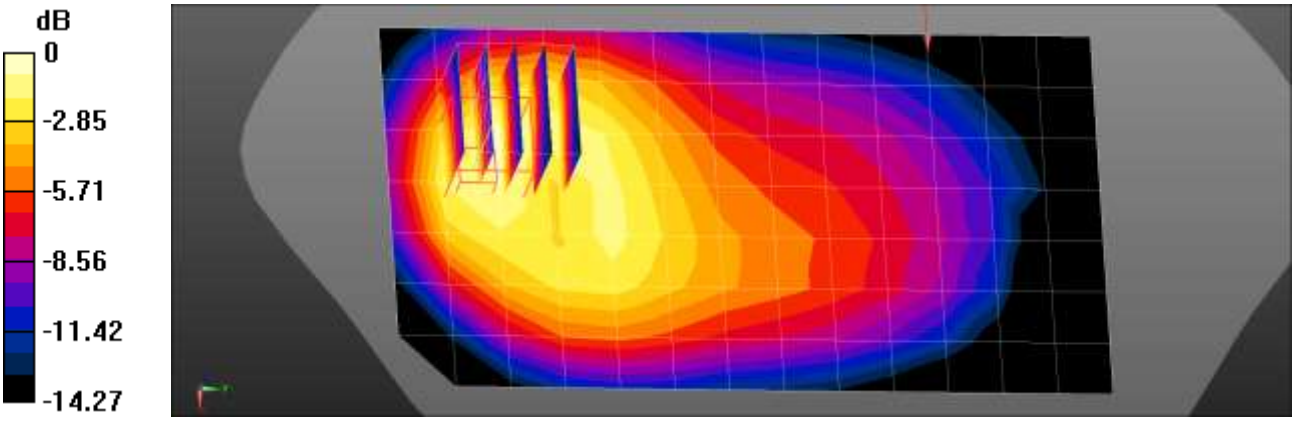
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cy Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.916 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM850 Body Front 2Tx 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.542 W/kg

GSM850 Body Front 2Tx 190ch/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) = 0.850 W/kg
SAR(1 g) = 0.505 W/kg; SAR(10 g) = 0.293 W/kg
Maximum value of SAR (measured) = 0.616 W/kg



0 dB = 0.616 W/kg = -2.10 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.7℃
Ambient Temperature:	22.8℃
Test Date:	09/03/2021
Plot No.:	42

DUT: SM-G990E/DS; Type: Bar;

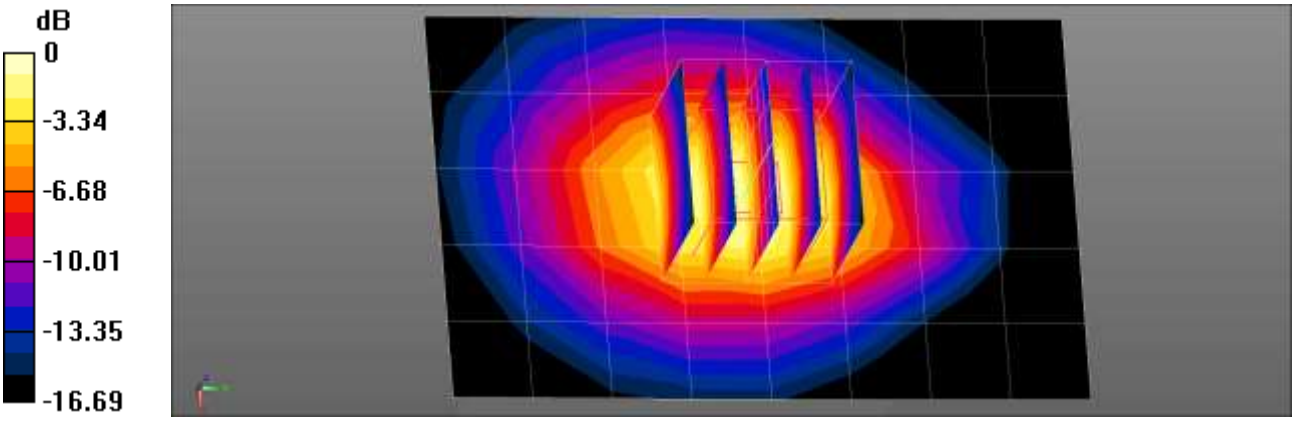
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.37 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

GSM1900 Body Bottom 2Tx 661ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.265 W/kg

GSM1900 Body Bottom 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.53 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.431 W/kg
SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.144 W/kg
Maximum value of SAR (measured) = 0.316 W/kg



0 dB = 0.316 W/kg = -5.00 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	43

DUT: SM-G990E/DS; Type: Bar;

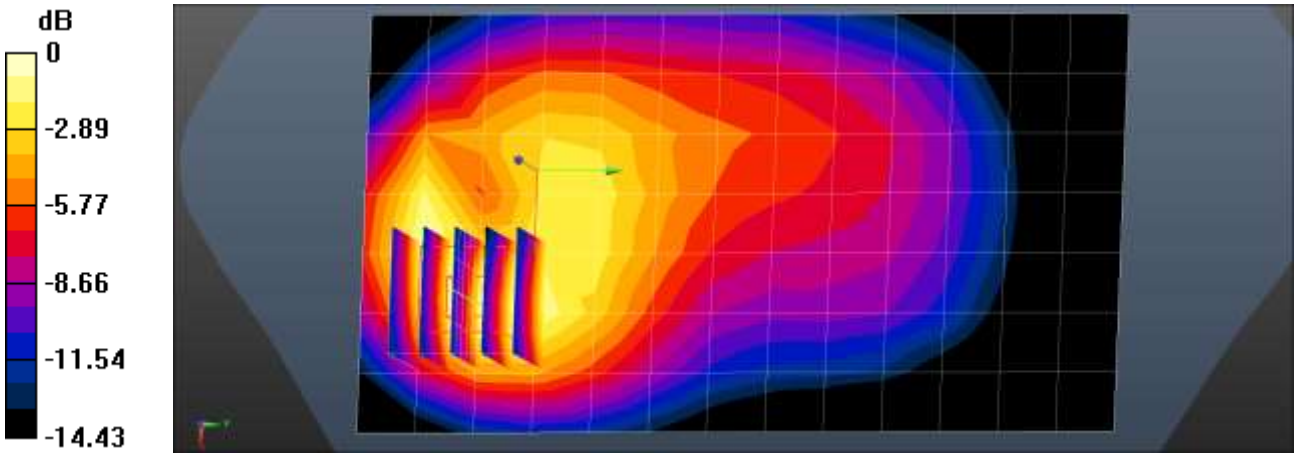
Communication System: UID 0, UMTS850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.93 S/m; ε_r = 42.283; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 5 Body Rear 4183ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.655 W/kg

UMTS Band 5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.78 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.968 W/kg
SAR(1 g) = 0.569 W/kg; SAR(10 g) = 0.337 W/kg
Maximum value of SAR (measured) = 0.689 W/kg



0 dB = 0.689 W/kg = -1.62 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.9℃
Ambient Temperature:	23.0℃
Test Date:	09/02/2021
Plot No.:	44

DUT: SM-G990E/DS; Type: Bar;

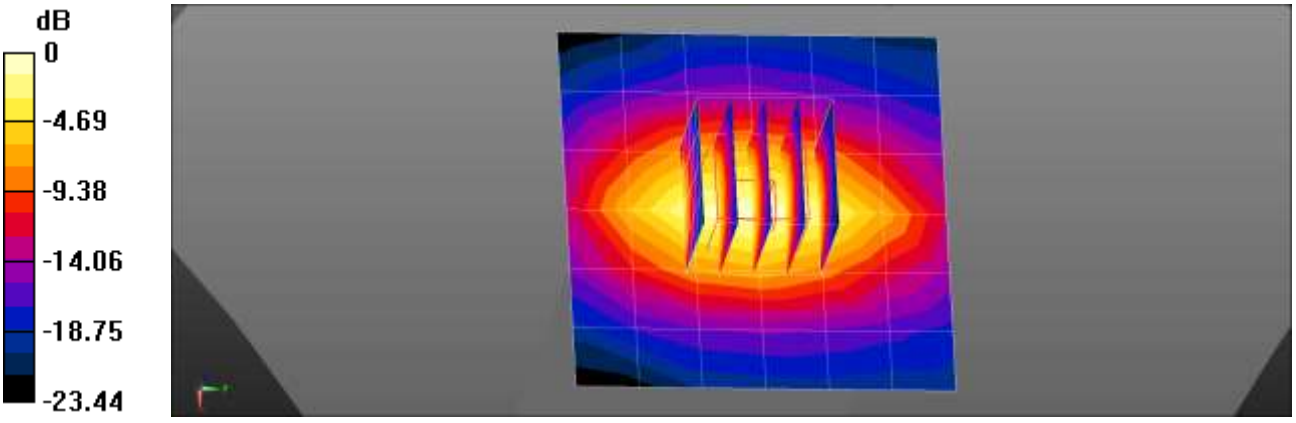
Communication System: UID 0, UMTS IV (0); Frequency: 1752.8 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1752.8 MHz; σ = 1.371 S/m; ε_r = 41.339; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1752.8 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 4 Body Bottom 1513ch/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.09 W/kg

UMTS Band 4 Body Bottom 1513ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.14 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.878 W/kg; SAR(10 g) = 0.474 W/kg
Maximum value of SAR (measured) = 1.10 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	45

DUT: SM-G990E/DS; Type: Bar;

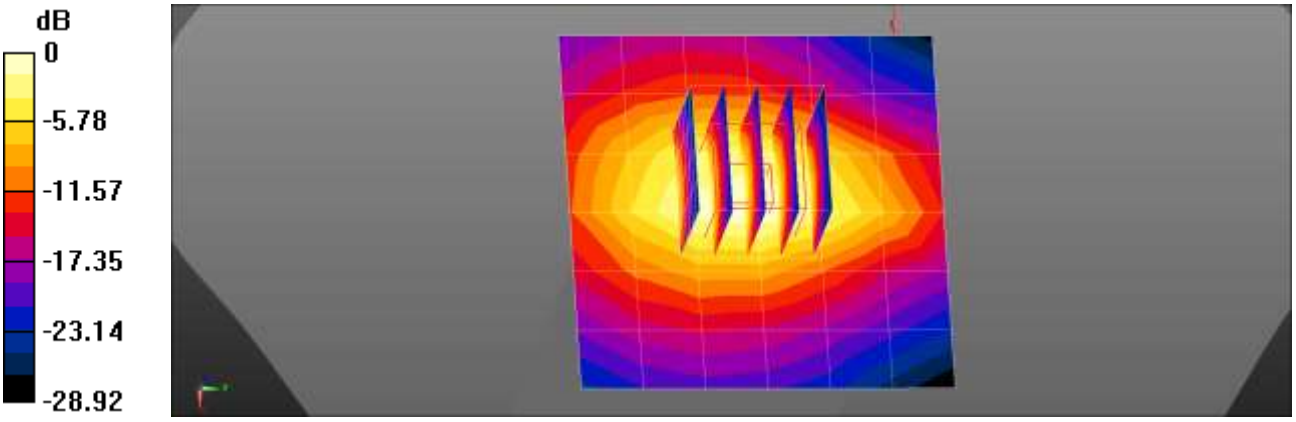
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.373 S/m; ε_r = 41.297; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 Body Bottom 9400ch/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.850 W/kg

UMTS Band 2 Body Bottom 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.07 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.412 W/kg
Maximum value of SAR (measured) = 0.959 W/kg



0 dB = 0.850 W/kg = -0.71 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	46

DUT: SM-G990E/DS; Type: Bar;

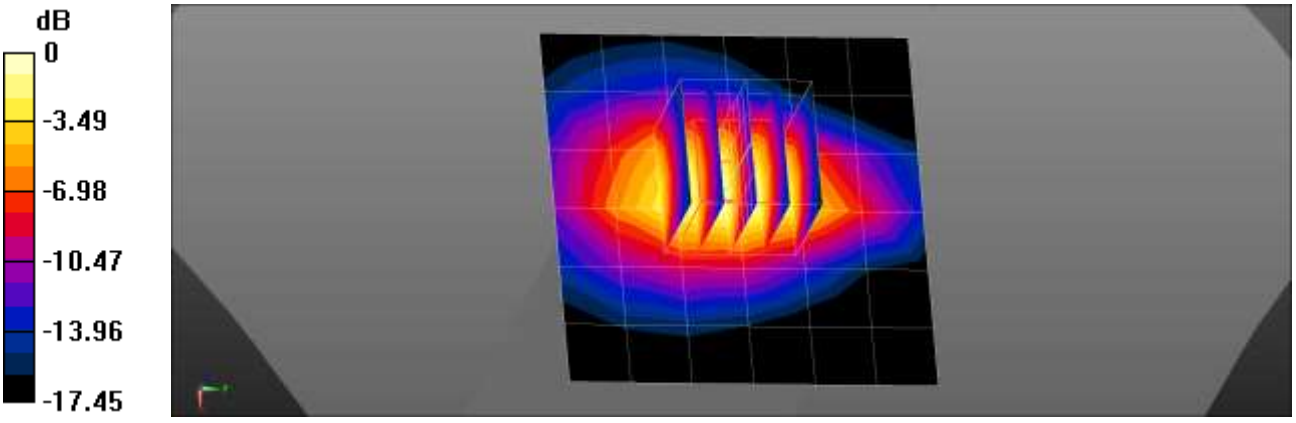
Communication System: UID 0, UMTS1900 (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.392 S/m; ε_r = 41.214; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1907.6 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 Body Bottom 9538ch/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.768 W/kg

UMTS Band 2 Body Bottom 9538ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.18 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.702 W/kg; SAR(10 g) = 0.373 W/kg
Maximum value of SAR (measured) = 0.881 W/kg



0 dB = 0.881 W/kg = -0.55 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.4℃
Ambient Temperature: 20.5℃
Test Date: 09/09/2021
Plot No.: 47
DUT: SM-G990E/DS; Type: Bar;

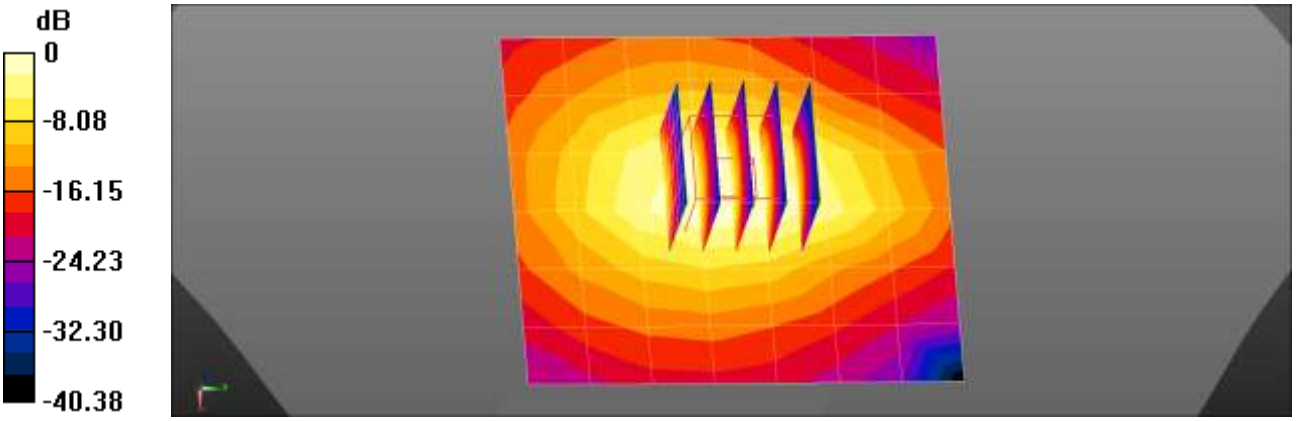
Communication System: UID 0, LTE2 (20MHz) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.404 S/m; ε_r = 41.311; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 2 Body Bottom QPSK 20MHz 1RB 99offset 18900ch/Area Scan (7x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.722 W/kg

LTE Band 2 Body Bottom QPSK 20MHz 1RB 99offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.27 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.739 W/kg; SAR(10 g) = 0.393 W/kg
Maximum value of SAR (measured) = 0.925 W/kg



0 dB = 0.722 W/kg = -1.41 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.3℃
Ambient Temperature:	21.4℃
Test Date:	08/18/2021
Plot No.:	48

DUT: SM-G990E/DS; Type: Bar;

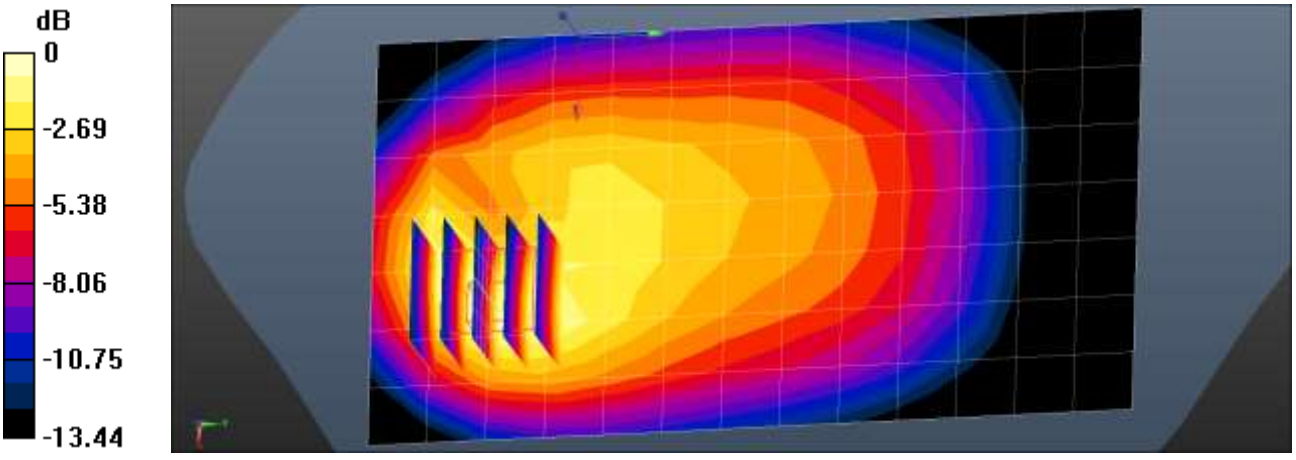
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.882 S/m; ε_r = 43.127; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.33, 6.33, 6.33) @ 707.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.323 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 = 13.36 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.502 W/kg
SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.170 W/kg
Maximum value of SAR (measured) = 0.351 W/kg



0 dB = 0.351 W/kg = -4.55 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5℃
Ambient Temperature:	21.6℃
Test Date:	08/19/2021
Plot No.:	49

DUT: SM-G990E/DS; Type: Bar;

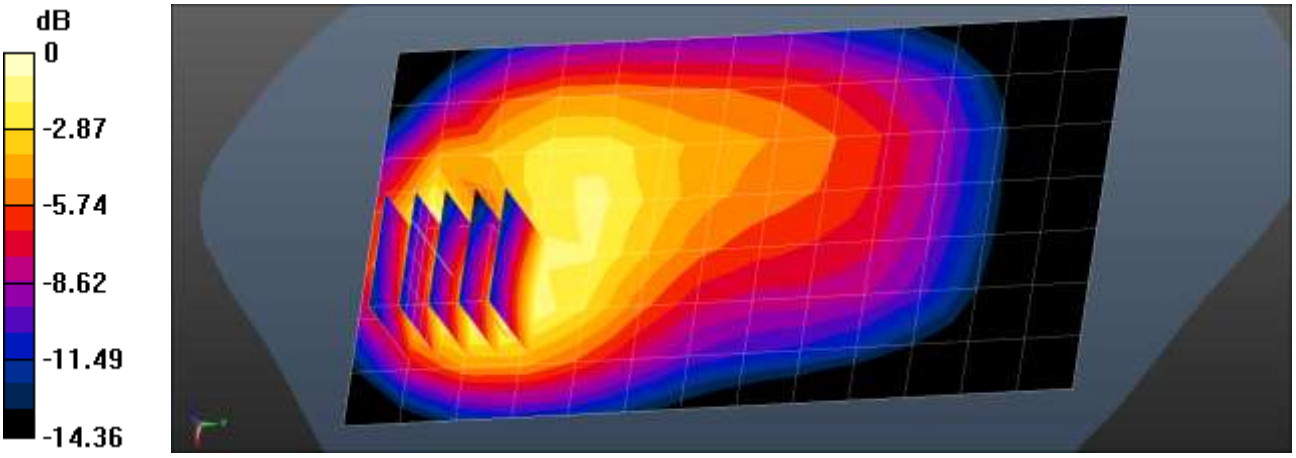
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.926 S/m; ε_r = 42.373; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 831.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.496 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 = 13.21 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.762 W/kg
SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 0.539 W/kg



0 dB = 0.539 W/kg = -2.68 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.5℃
Ambient Temperature:	19.6℃
Test Date:	09/10/2021
Plot No.:	50

DUT: SM-G990E/DS; Type: Bar;

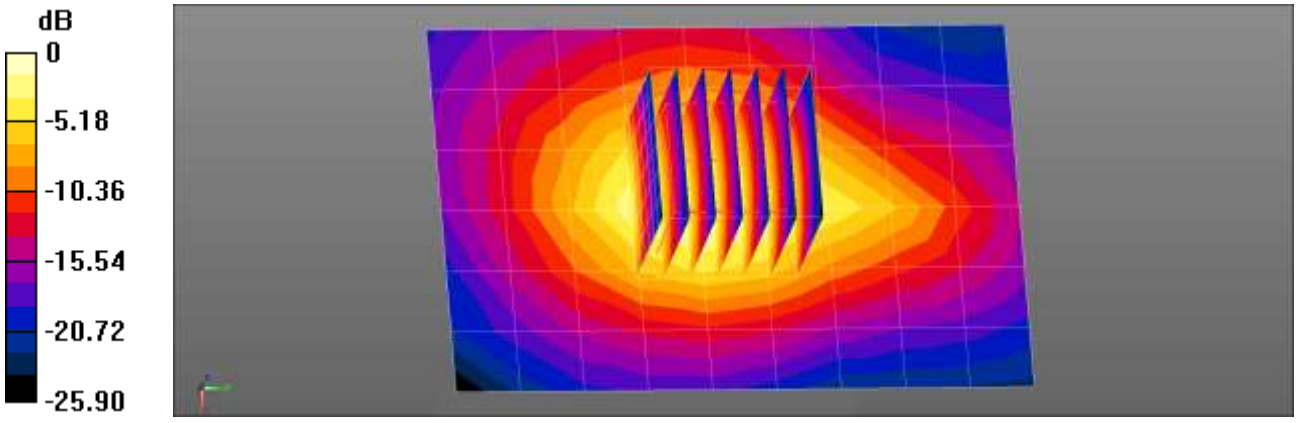
Communication System: UID 0, LTE Band 41 (FCC) (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58052
Medium parameters used: f = 2680 MHz; σ = 2.028 S/m; ε_r = 37.535; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.28, 8.28, 8.28) @ 2680 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 41 Body Bottom QPSK 20MHz 1RB 0offset 41490ch/Area Scan (7x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.736 W/kg

LTE Band 41 Body Bottom QPSK 20MHz 1RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.09 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.923 W/kg
SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.219 W/kg
Maximum value of SAR (measured) = 0.744 W/kg



0 dB = 0.736 W/kg = -1.33 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.0℃
Ambient Temperature:	22.1℃
Test Date:	09/07/2021
Plot No.:	51

DUT: SM-G990E/DS; Type: Bar;

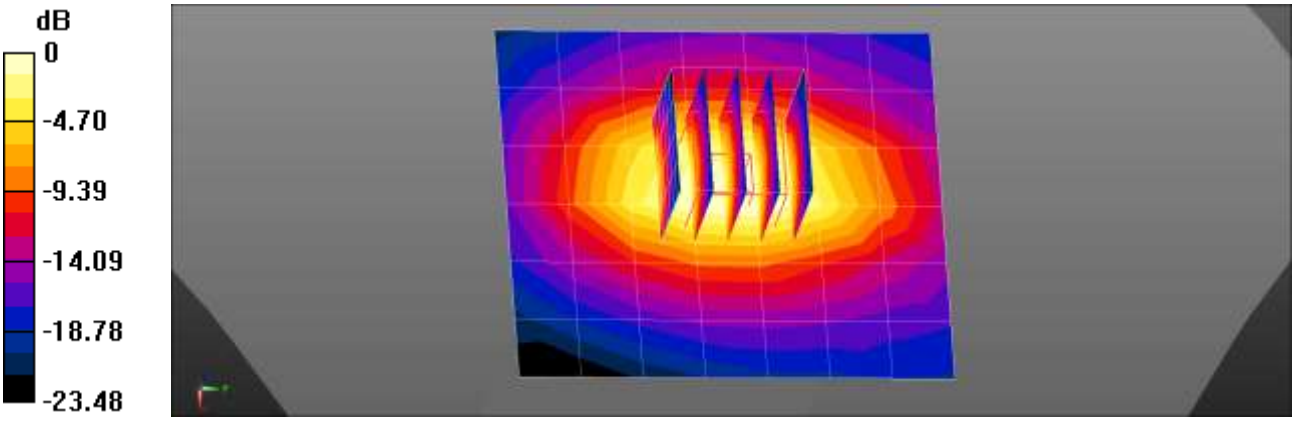
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 41.508; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1720 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 66 Body Bottom QPSK 20MHz 1RB 99offset 132072ch/Area Scan (7x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.663 W/kg

LTE Band 66 Body Bottom QPSK 20MHz 1RB 99offset 132072ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.08 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.377 W/kg
Maximum value of SAR (measured) = 0.851 W/kg



0 dB = 0.663 W/kg = -1.79 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 22.0℃
Ambient Temperature: 22.1℃
Test Date: 09/07/2021
Plot No.: 52
DUT: SM-G990E/DS; Type: Bar;

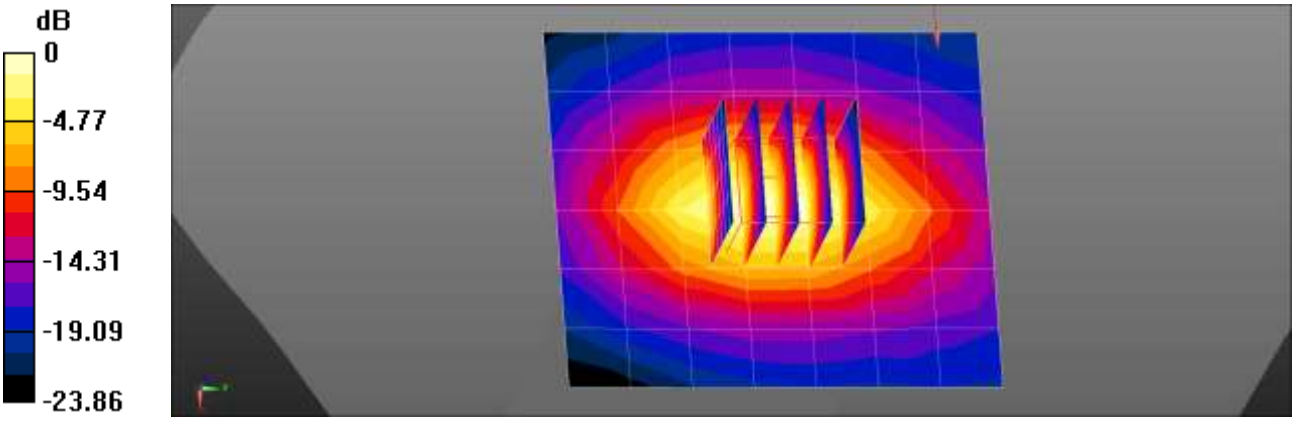
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 41.508; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1720 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 66 Body Bottom QPSK 20MHz 50RB 25offset 132072ch/Area Scan (7x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.813 W/kg

LTE Band 66 Body Bottom QPSK 20MHz 50RB 25offset 132072ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.80 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.703 W/kg; SAR(10 g) = 0.380 W/kg
Maximum value of SAR (measured) = 0.868 W/kg



0 dB = 0.813 W/kg = -0.90 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 23.0℃
Ambient Temperature: 23.1℃
Test Date: 09/06/2021
Plot No.: 53
DUT: SM-G990E/DS; Type: Bar;

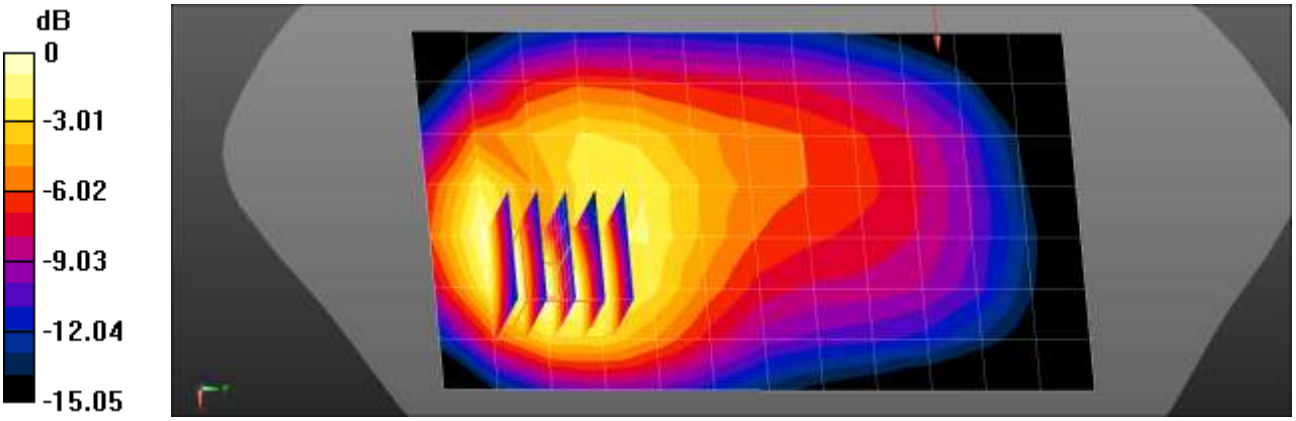
Communication System: UID 0, NR n5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.917 S/m; ε_r = 42.055; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 836.5 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n5 Body Rear DFT-s QPSK 20MHz 1RB 1offset 167300ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.691 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 = 14.35 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.964 W/kg
SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.333 W/kg
Maximum value of SAR (measured) = 0.684 W/kg



0 dB = 0.684 W/kg = -1.65 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.8℃
Ambient Temperature: 22.0℃
Test Date: 09/08/2021
Plot No.: 54
DUT: SM-G990E/DS; Type: Bar;

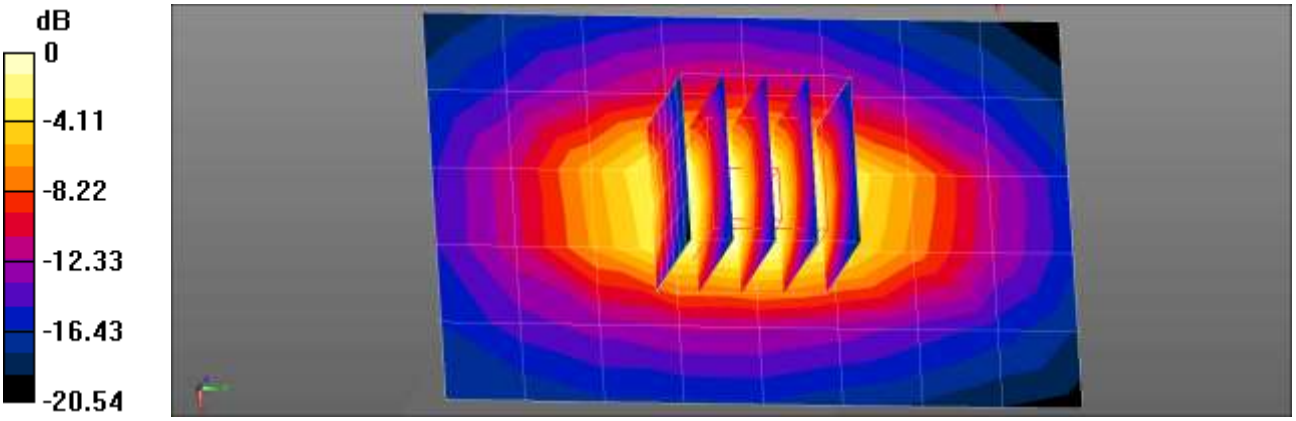
Communication System: UID 0, n66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.339 S/m; ε_r = 41.554; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1720 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n66 Body Bottom DFT-s QPSK 20MHz 1RB 53offset 344000ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.609 W/kg

NR Band n66 Body Bottom DFT-s QPSK 20MHz 1RB 53offset 344000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.52 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.668 W/kg; SAR(10 g) = 0.361 W/kg
Maximum value of SAR (measured) = 0.824 W/kg



0 dB = 0.609 W/kg = -2.15 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.3℃
Ambient Temperature: 21.5℃
Test Date: 09/07/2021
Plot No.: 55
DUT: SM-G990E/DS; Type: Bar;

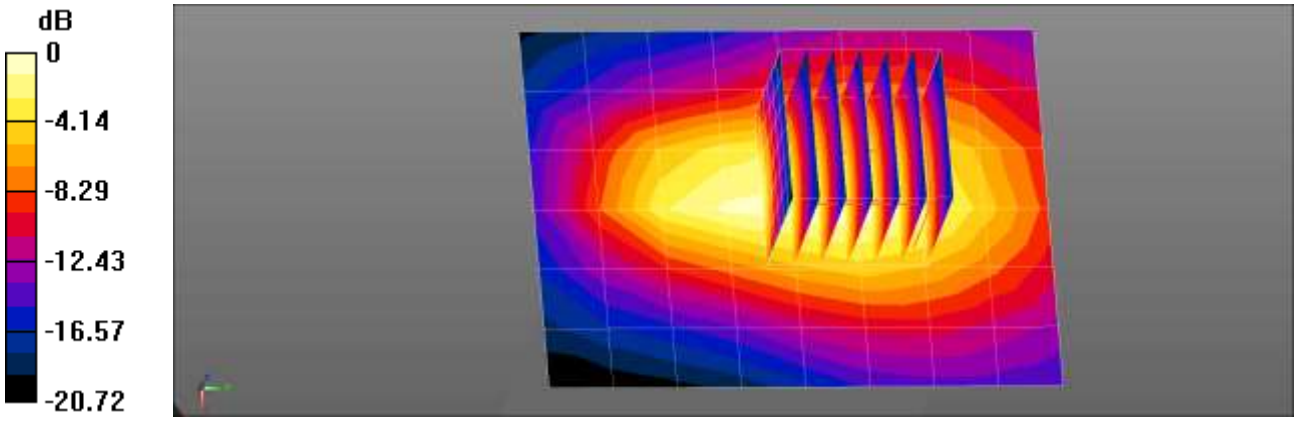
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.792 S/m; ε_r = 37.96; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11b Body Top 1Mbps 1ch/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.36 W/kg

802.11b Body Top 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.80 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.927 W/kg; SAR(10 g) = 0.478 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.36 W/kg = 1.33 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.3℃
Ambient Temperature: 21.5℃
Test Date: 09/07/2021
Plot No.: 56
DUT: SM-G990E/DS; Type: Bar;

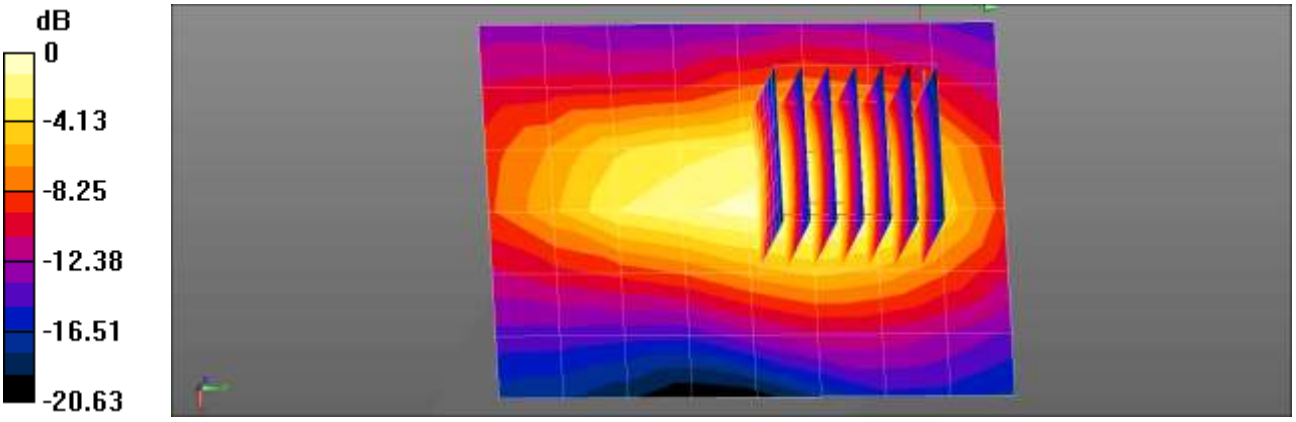
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.792 S/m; ε_r = 37.96; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2412 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

802.11g Body Top 6Mbps 1ch/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.316 W/kg

802.11g Body Top 6Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.15 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.415 W/kg
SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.111 W/kg
Maximum value of SAR (measured) = 0.344 W/kg



0 dB = 0.316 W/kg = -5.00 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.0℃
Ambient Temperature: 20.1℃
Test Date: 09/11/2021
Plot No.: 57
DUT: SM-G990E/DS; Type: Bar;

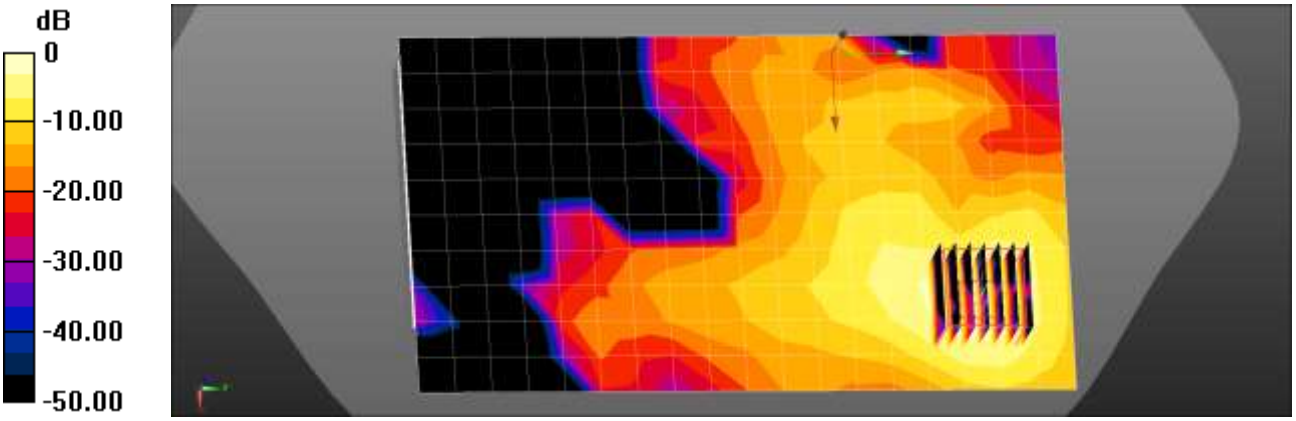
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5825 MHz; σ = 5.216 S/m; ε_r = 36.584; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5825 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11a Body Rear 6Mbps 165ch/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.02 W/kg

802.11a Body Rear 6Mbps 165ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 0.485 W/kg; SAR(10 g) = 0.170 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.0℃
Ambient Temperature: 20.1℃
Test Date: 09/11/2021
Plot No.: 58
DUT: SM-G990E/DS; Type: Bar;

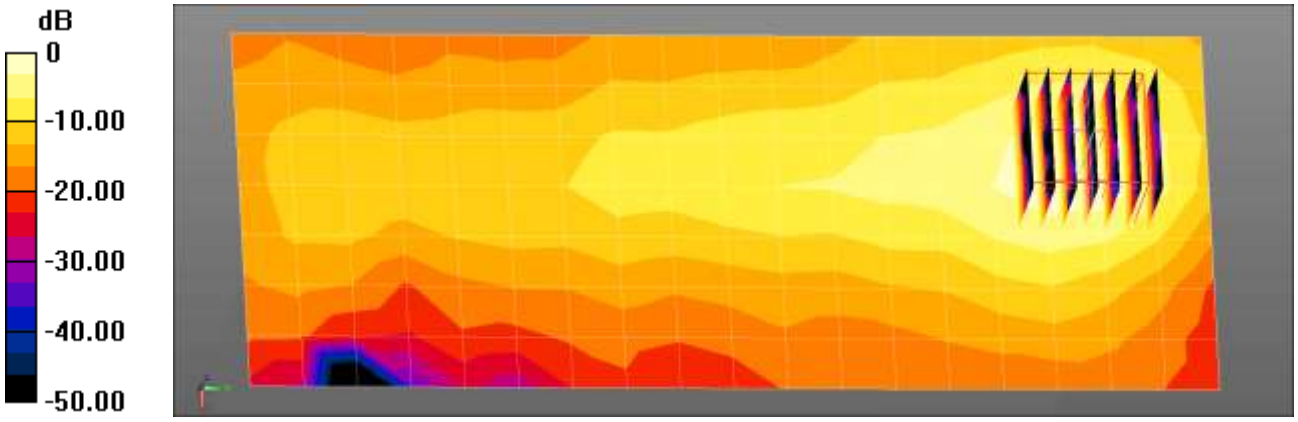
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5825 MHz; σ = 5.216 S/m; ε_r = 36.584; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5825 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11a Body Left 6Mbps 165ch/Area Scan (8x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.894 W/kg

802.11a Body Left 6Mbps 165ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 5.523 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 0.445 W/kg; SAR(10 g) = 0.158 W/kg
Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.4℃
Ambient Temperature: 19.5℃
Test Date: 09/13/2021
Plot No.: 59
DUT: SM-G990E/DS; Type: Bar;

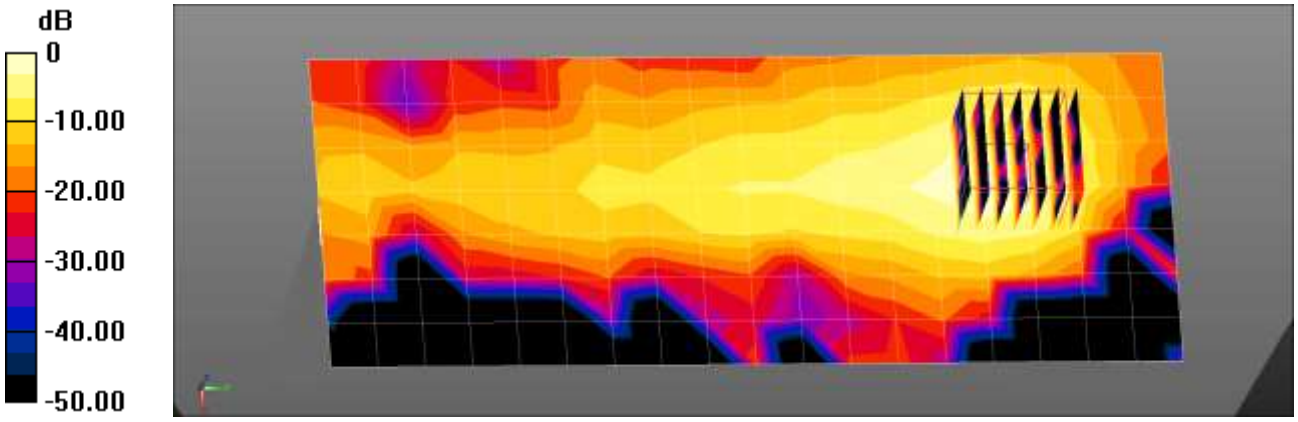
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5775 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5775 MHz; σ = 5.268 S/m; ε_r = 35.157; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5775 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11ac80 Body Left MCS0 155ch/Area Scan (8x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.358 W/kg

802.11ac80 Body Left MCS0 155ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.073 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.690 W/kg
SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.051 W/kg
Maximum value of SAR (measured) = 0.390 W/kg



0 dB = 0.358 W/kg = -4.46 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 20.6℃
Ambient Temperature: 20.8℃
Test Date: 09/06/2021
Plot No.: 60
DUT: SM-G990E/DS; Type: Bar;

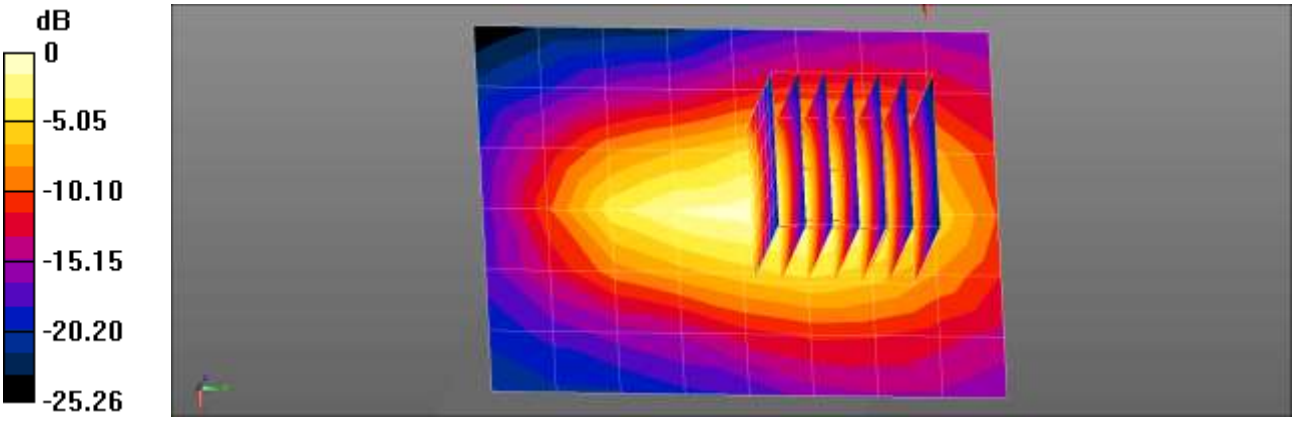
Communication System: UID 0, Bluetooth (0); Frequency: 2480 MHz;Duty Cycle: 1:1.299
Medium parameters used: f = 2480 MHz; σ = 1.877 S/m; ε_r = 37.657; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2480 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

Bluetooth Body Top DH5 78ch/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.540 W/kg

Bluetooth Body Top DH5 78ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.91 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.655 W/kg
SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.166 W/kg
Maximum value of SAR (measured) = 0.534 W/kg



0 dB = 0.540 W/kg = -2.68 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.5℃
Ambient Temperature:	21.6℃
Test Date:	09/04/2021
Plot No.:	61

DUT: SM-G990E/DS; Type: Bar;

Communication System: UID 0, UMTS IV (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.328 S/m; ε_r = 41.52; ρ = 1000 kg/m^3

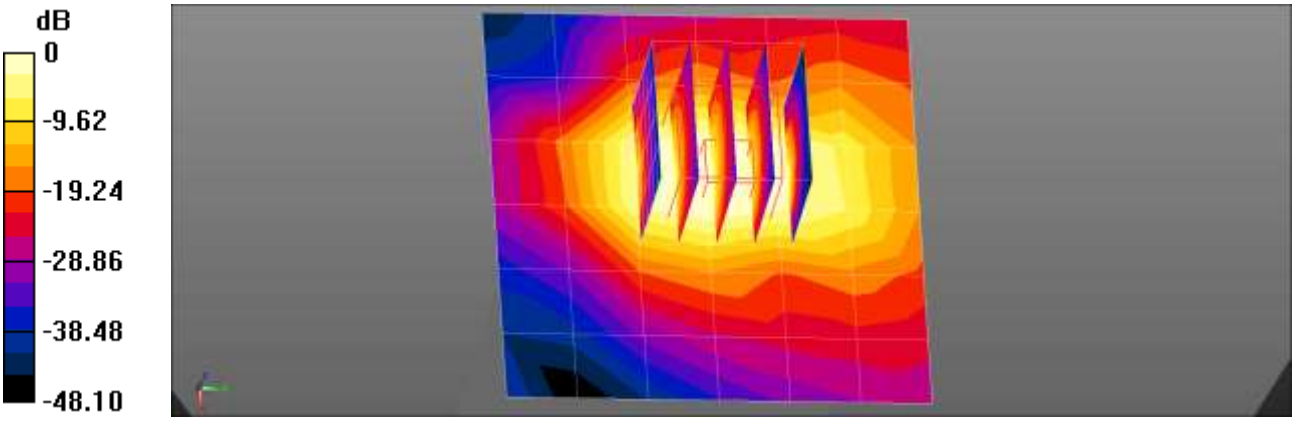
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1712.4 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 4 Body Bottom 1312ch/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.07 W/kg

UMTS Band 4 Body Bottom 1312ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.86 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 10.6 W/kg
SAR(1 g) = 4.75 W/kg; SAR(10 g) = 2.21 W/kg
Maximum value of SAR (measured) = 6.93 W/kg



0 dB = 3.07 W/kg = 4.87 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.9℃
Ambient Temperature:	22.0℃
Test Date:	09/08/2021
Plot No.:	62

DUT: SM-G990E/DS; Type: Bar;

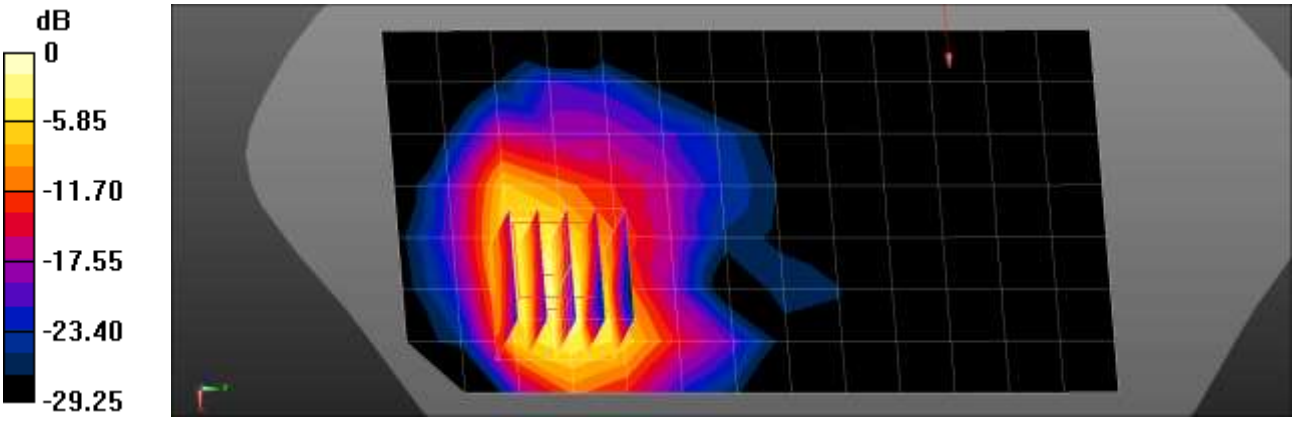
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 40.457; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 Body Rear 9400ch Grip/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.89 W/kg

UMTS Band 2 Body Rear 9400ch Grip/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.533 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 4.81 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.787 W/kg
Maximum value of SAR (measured) = 2.81 W/kg



0 dB = 2.81 W/kg = 4.49 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.9℃
Ambient Temperature:	22.0℃
Test Date:	09/08/2021
Plot No.:	63

DUT: SM-G990E/DS; Type: Bar;

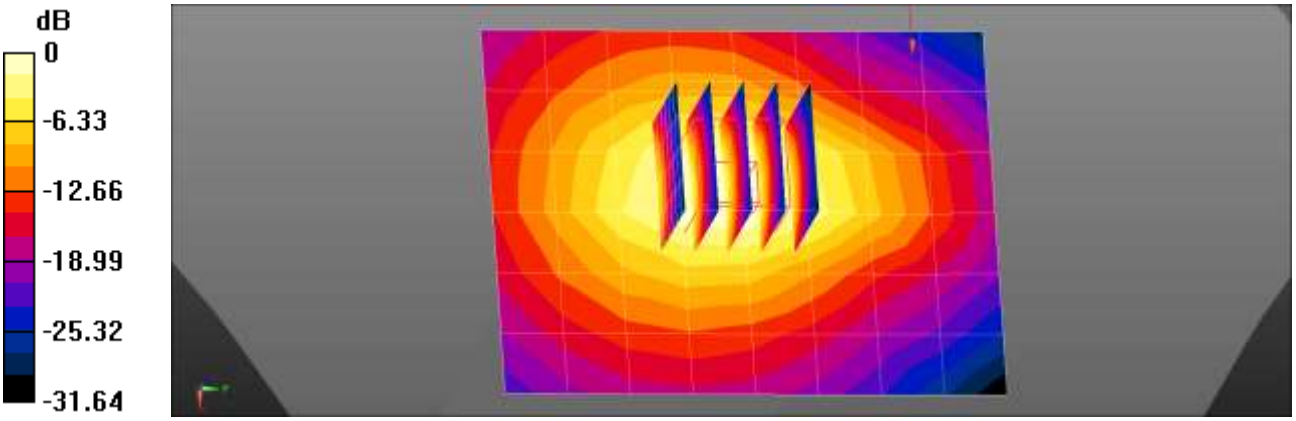
Communication System: UID 0, UMTS1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 40.457; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1880 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

UMTS Band 2 Body Bottom 9400ch Max/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.44 W/kg

UMTS Band 2 Body Bottom 9400ch Max/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.37 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 2.38 W/kg
SAR(1 g) = 1.42 W/kg; SAR(10 g) = 0.784 W/kg
Maximum value of SAR (measured) = 1.74 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.0℃
Ambient Temperature: 19.1℃
Test Date: 09/14/2021
Plot No.: 64
DUT: SM-G990E/DS; Type: Bar;

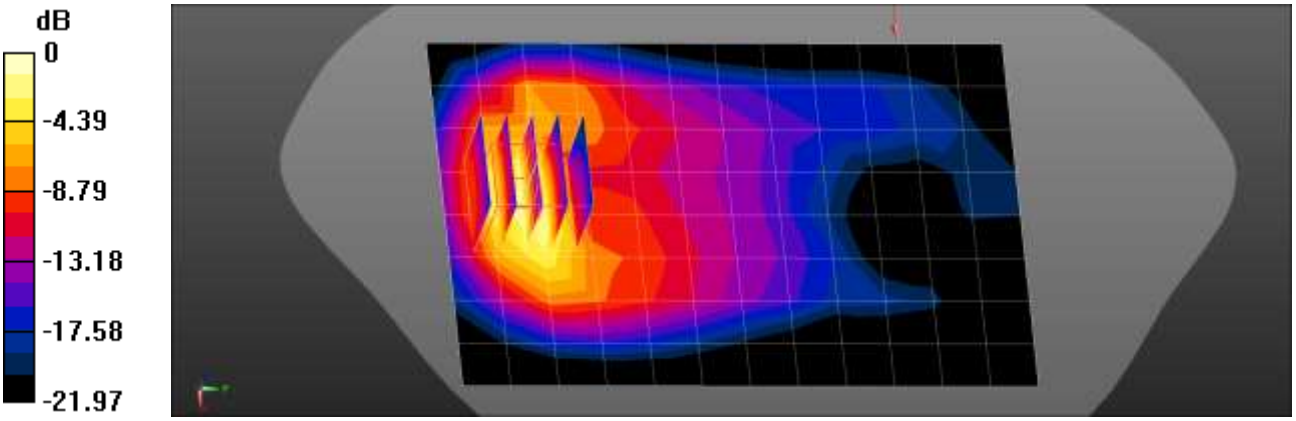
Communication System: UID 0, LTE Band 2 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.371 S/m; ε_r = 41.298; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.15, 9.15, 9.15) @ 1880 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 2 Phablet Front QPSK 20MHz 1RB 49offset 18900ch Max/Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.76 W/kg

LTE Band 2 Phablet Front QPSK 20MHz 1RB 49offset 18900ch Max/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.203 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 2.98 W/kg
SAR(1 g) = 1.54 W/kg; SAR(10 g) = 0.759 W/kg
Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg = 4.00 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.4℃
Ambient Temperature: 19.5℃
Test Date: 09/15/2021
Plot No.: 65
DUT: SM-G990E/DS; Type: Bar;

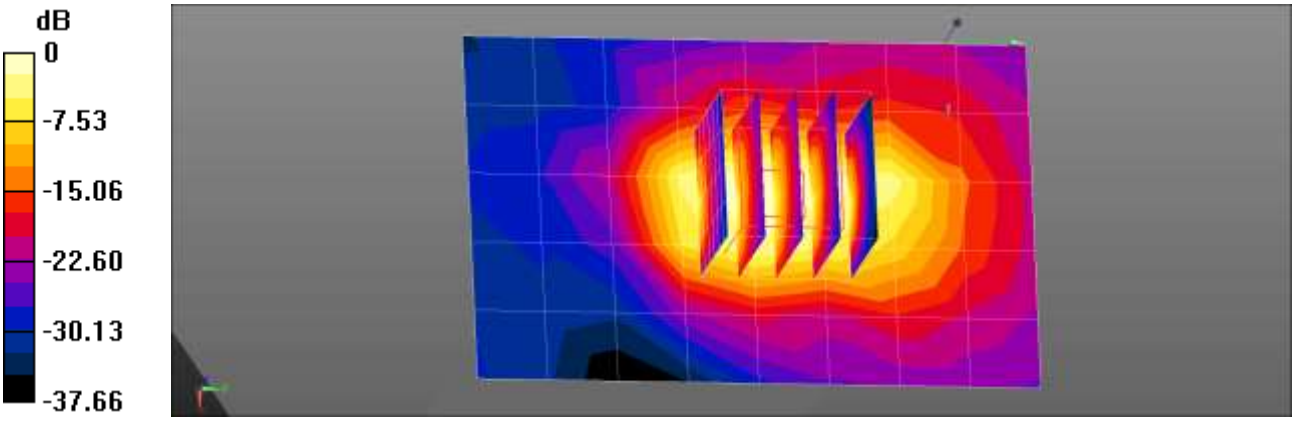
Communication System: UID 0, LTE 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.289 S/m; ε_r = 41.49; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.4, 9.4, 9.4) @ 1720 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 66 Phablet Bottom QPSK 20MHz 50RB 0offset 132072ch Grip/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.73 W/kg

LTE Band 66 Phablet Bottom QPSK 20MHz 50RB 0offset 132072ch Grip/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 65.40 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 8.17 W/kg
SAR(1 g) = 2.87 W/kg; SAR(10 g) = 1.31 W/kg
Maximum value of SAR (measured) = 6.21 W/kg



0 dB = 2.73 W/kg = 4.36 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.4℃
Ambient Temperature: 21.6℃
Test Date: 09/10/2021
Plot No.: 66
DUT: SM-G990E/DS; Type: Bar;

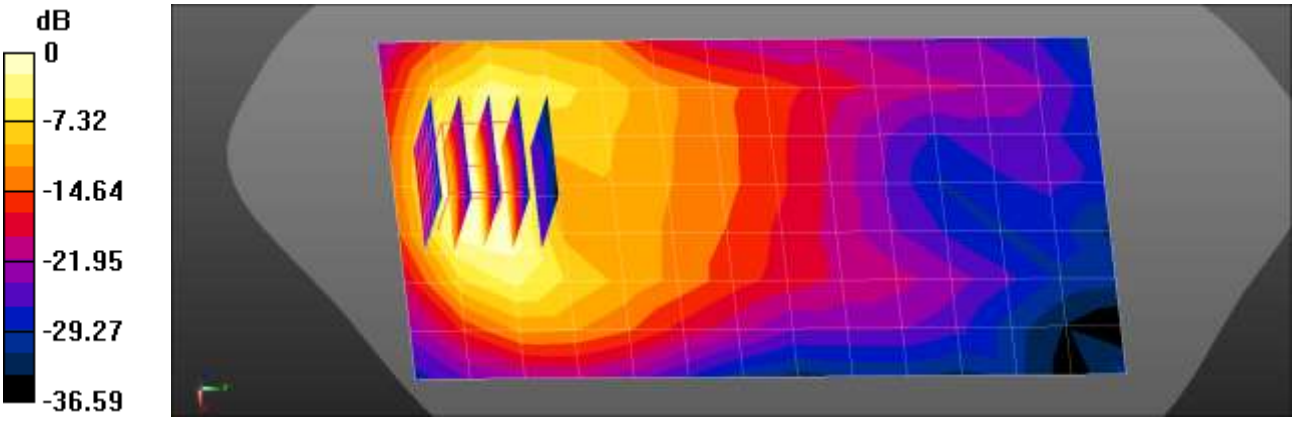
Communication System: UID 0, NR n66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.386 S/m; ε_r = 41.176; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(8.8, 8.8, 8.8) @ 1770 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1422; Calibrated: 2021-05-19
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

NR Band n66 Body Front DFT-s QPSK 20MHz 50RB 28offset 354000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.61 W/kg

NR Band n66 Body Front DFT-s QPSK 20MHz 50RB 28offset 354000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.295 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 6.31 W/kg
SAR(1 g) = 3.09 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 5.18 W/kg



0 dB = 2.61 W/kg = 4.16 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 19.9℃
Ambient Temperature: 20.0℃
Test Date: 09/09/2021
Plot No.: 67
DUT: SM-G990E/DS; Type: Bar;

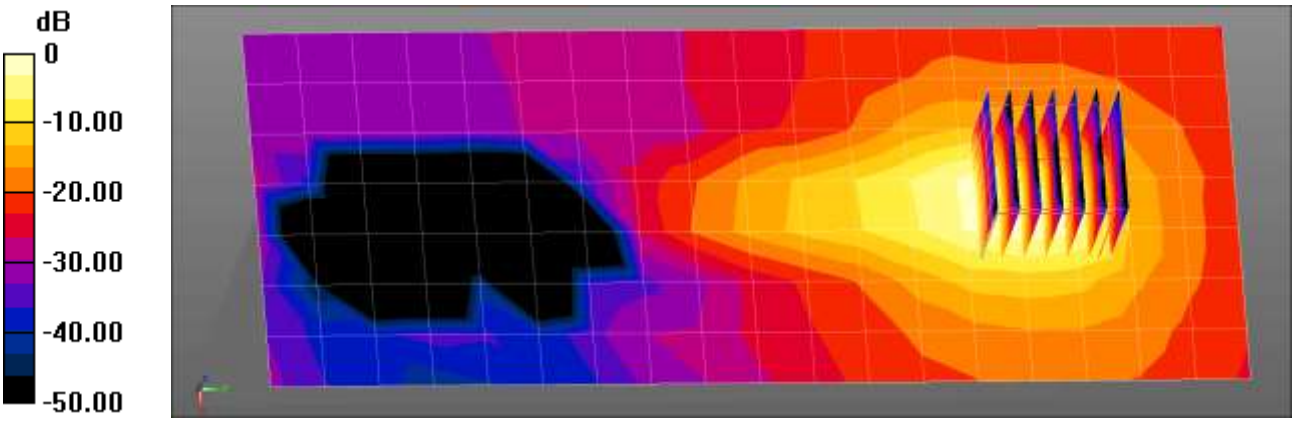
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5300 MHz; σ = 4.819 S/m; ε_r = 36.354; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.1, 6.1, 6.1) @ 5300 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

802.11a Body Left 6Mbps 60ch/Area Scan (8x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 7.54 W/kg

802.11a Body Left 6Mbps 60ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 8.235 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 47.2 W/kg
SAR(1 g) = 6.8 W/kg; SAR(10 g) = 1.6 W/kg
Maximum value of SAR (measured) = 23.0 W/kg



0 dB = 7.54 W/kg = 8.78 dBW/kg

Appendix C. – Dipole Verification Plots

Verification Data (750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.3 ℃
Test Date:	08/18/2021

DUT: Dipole 750 MHz D750V3; Type: D750V3;

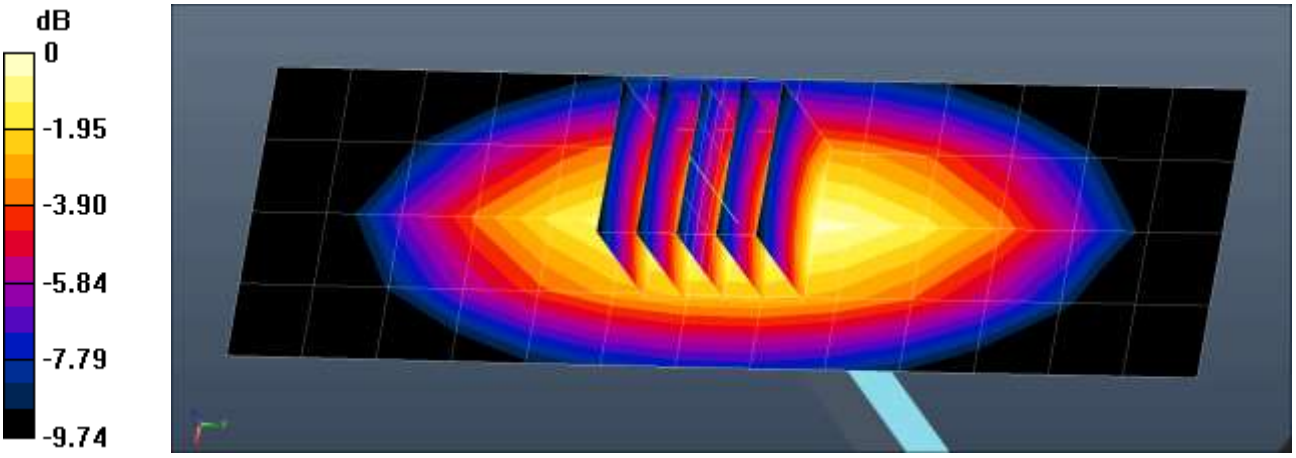
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.885 S/m; ε_r = 42.549; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(6.33, 6.33, 6.33) @ 750 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.444 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.39 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.566 W/kg
SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.262 W/kg
Maximum value of SAR (measured) = 0.453 W/kg



0 dB = 0.453 W/kg = −3.44 dBW/kg

Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.1 ℃
Test Date:	09/10/2021

DUT: Dipole 835 MHz D835V2; Type: D835V2;

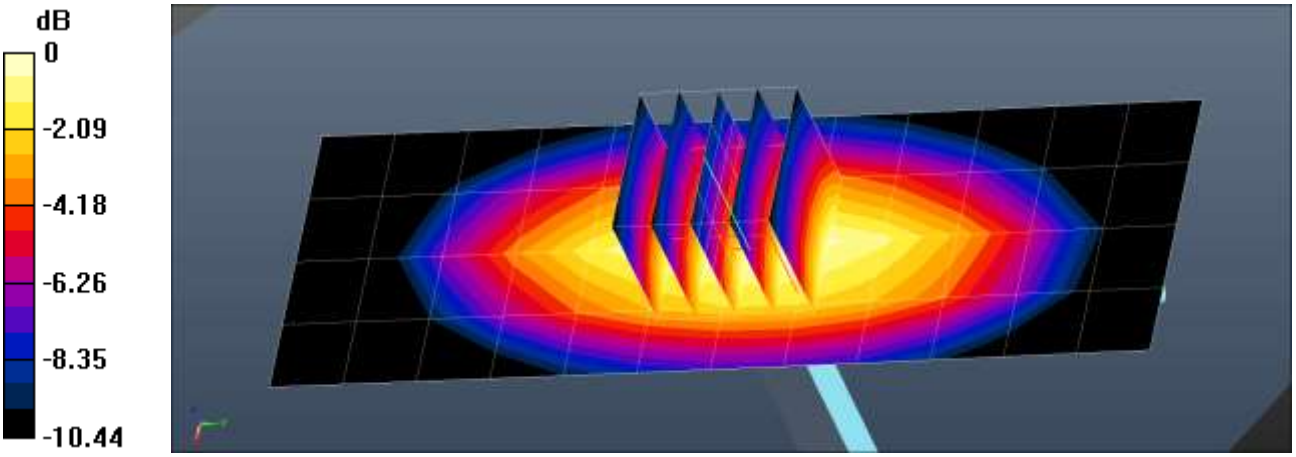
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.915 S/m; ε_r = 40.253; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 835 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.541 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.22 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.697 W/kg
SAR(1 g) = 0.473 W/kg; SAR(10 g) = 0.311 W/kg
Maximum value of SAR (measured) = 0.551 W/kg



0 dB = 0.551 W/kg = −2.59 dBW/kg

Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.9 ℃
Test Date:	09/02/2021

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 = 0.928 S/m; ε_r = 42.302; ρ = 1000 kg/m^3
Phantom section: Flat Section

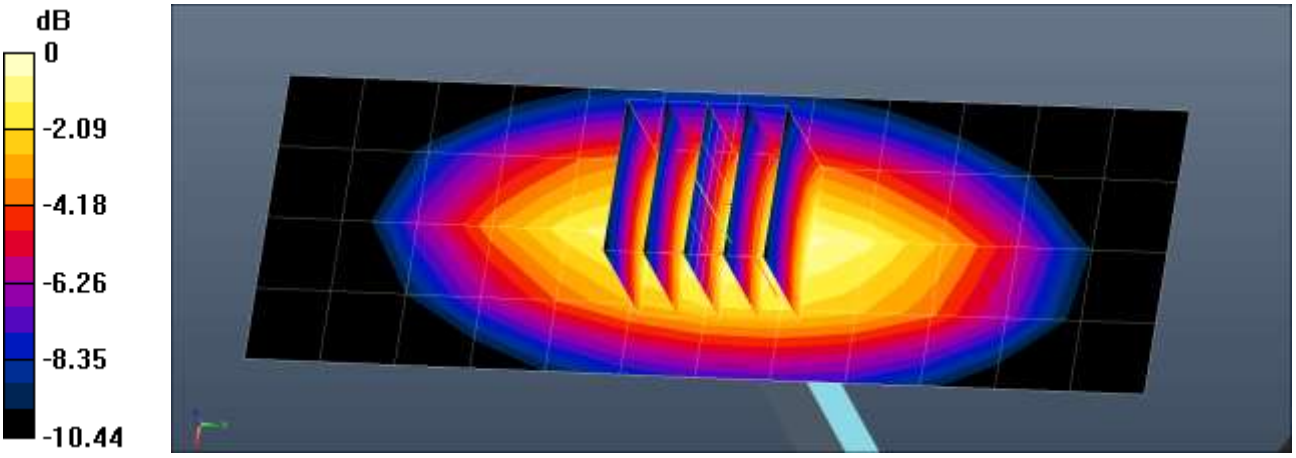
DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 835 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.555 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.25 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.709 W/kg
SAR(1 g) = 0.480 W/kg; SAR(10 g) = 0.315 W/kg
Maximum value of SAR (measured) = 0.560 W/kg



0 dB = 0.560 W/kg = −2.52 dBW/kg

Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.5 ℃
Test Date:	08/19/2021

DUT: Dipole 835 MHz D835V2; Type: D835V2;

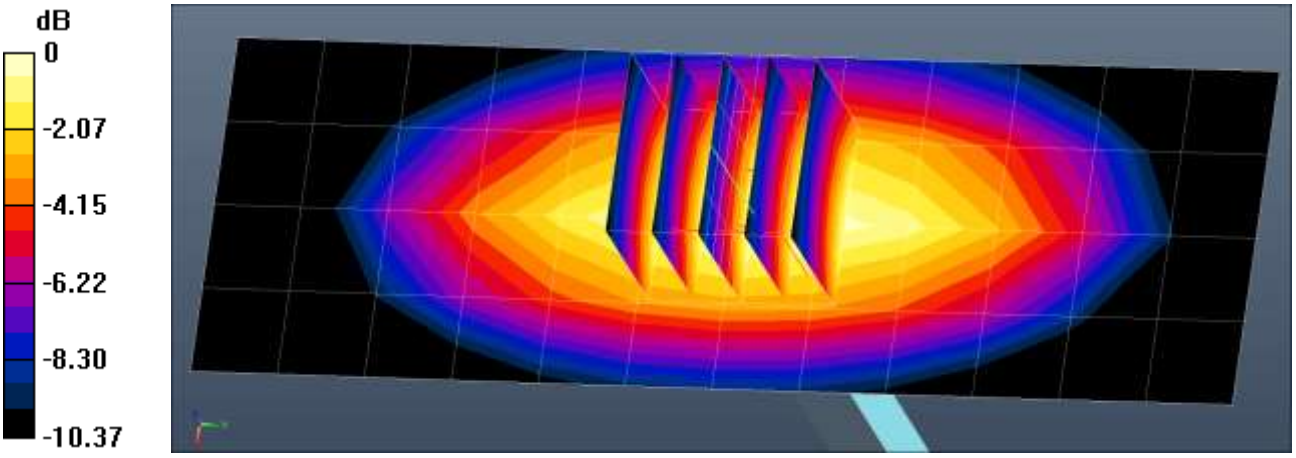
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.93 S/m; ε_r = 42.312; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 835 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.561 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.32 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.708 W/kg
SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 0.563 W/kg



0 dB = 0.563 W/kg = −2.49 dBW/kg

Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.0 ℃
Test Date:	09/06/2021

DUT: Dipole 835 MHz D835V2; Type: D835V2;

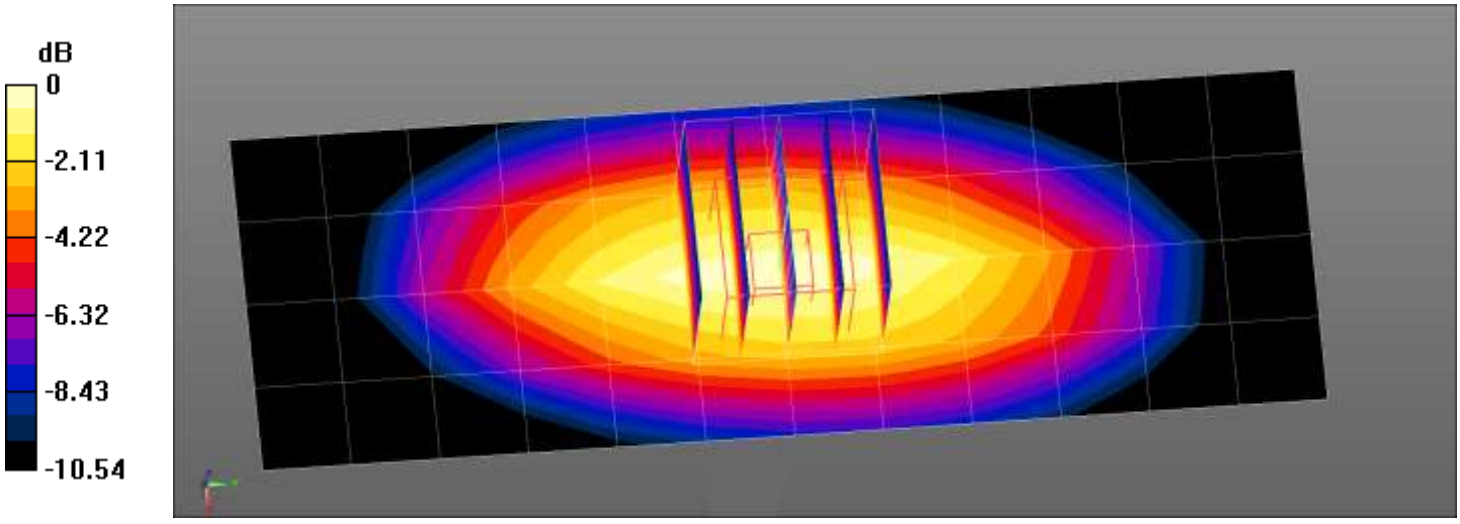
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.915 S/m; ε_r = 42.061; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.98, 5.98, 5.98) @ 835 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Right_20170913
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.561 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.57 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.707 W/kg
SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.315 W/kg
Maximum value of SAR (measured) = 0.562 W/kg



0 dB = 0.562 W/kg = −2.50 dBW/kg

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.9 ℃
Test Date:	09/02/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

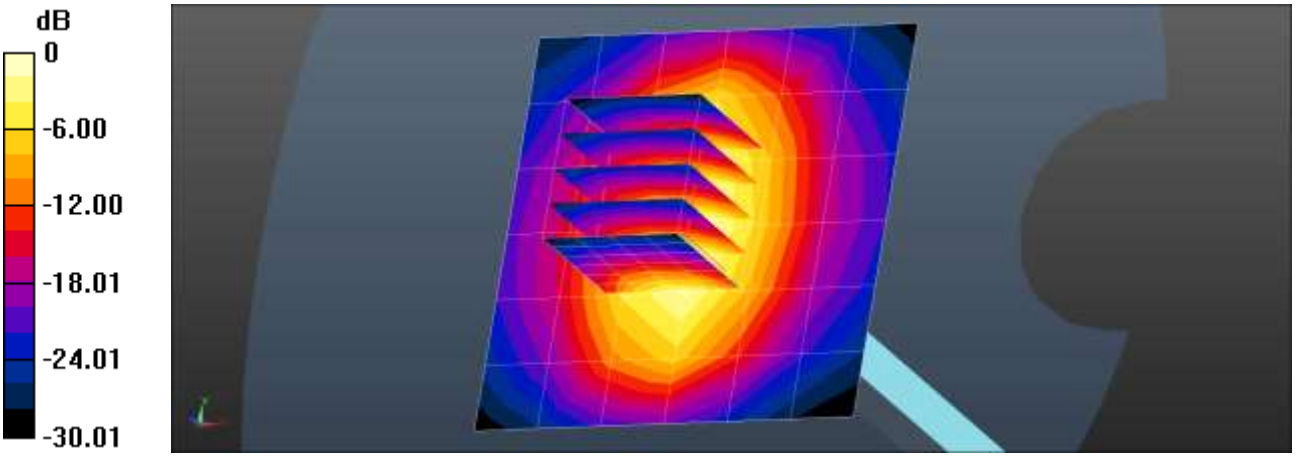
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.418 S/m; ε_r = 41.127; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1800 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.43 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.89 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.56 W/kg
SAR(1 g) = 1.96 W/kg; SAR(10 g) = 1.03 W/kg
Maximum value of SAR (measured) = 2.48 W/kg



0 dB = 2.43 W/kg = 3.86 dBW/kg

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0 ℃
Test Date:	09/07/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

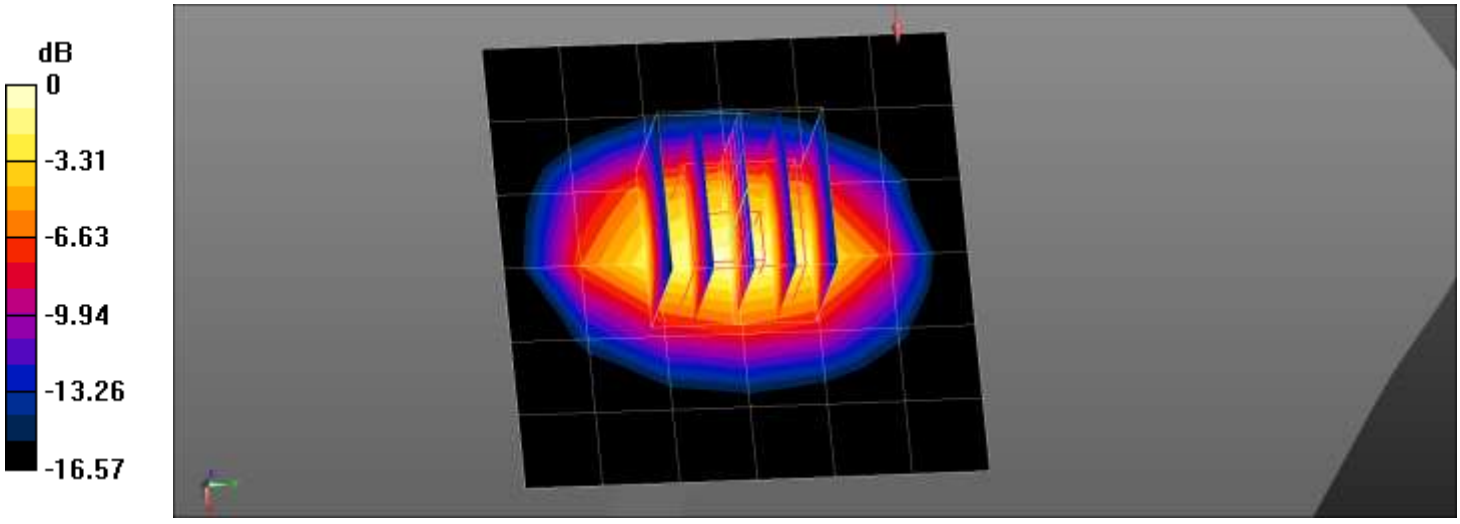
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.373 S/m; ε_r = 41.145; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1800 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.15 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.77 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 3.10 W/kg
SAR(1 g) = 1.77 W/kg; SAR(10 g) = 0.941 W/kg
Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.22 W/kg = 3.46 dBW/kg

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.0 ℃
Test Date:	09/06/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

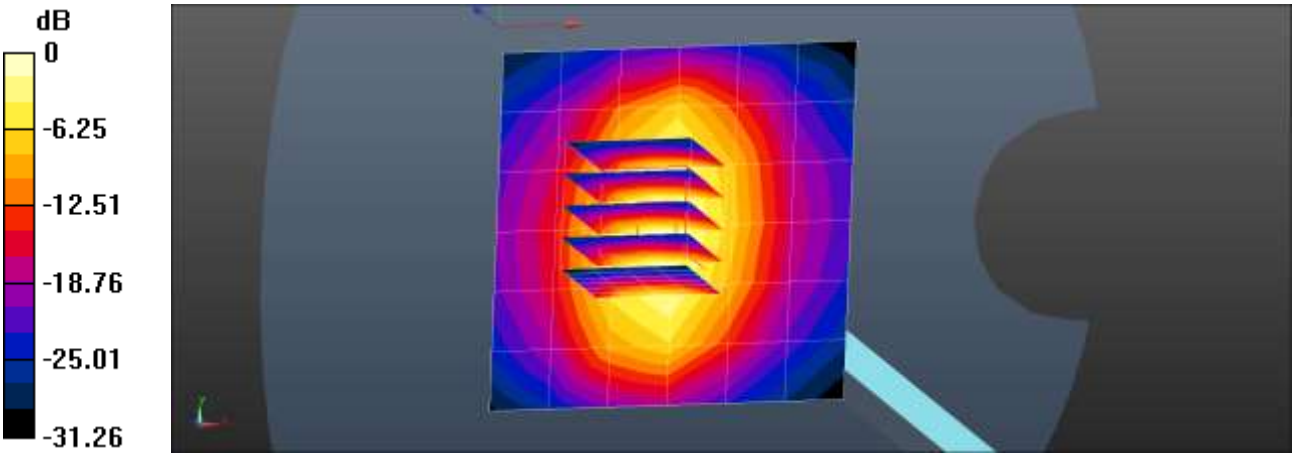
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.414 S/m; ε_r = 41.17; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1800 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.21 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.73 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 3.20 W/kg
SAR(1 g) = 1.82 W/kg; SAR(10 g) = 0.968 W/kg
Maximum value of SAR (measured) = 2.29 W/kg



0 dB = 2.21 W/kg = 3.44 dBW/kg

Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.7 ℃
Test Date:	09/03/2021

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

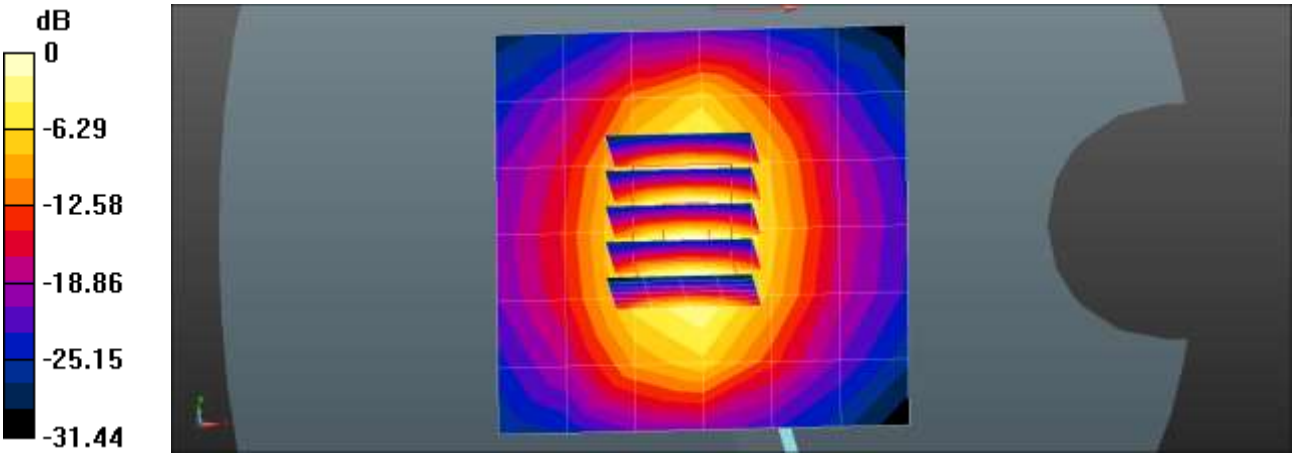
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.386 S/m; ε_r = 41.24; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1900 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.49 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.76 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.76 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.05 W/kg
Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.49 W/kg = 3.96 dBW/kg

Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0 ℃
Test Date:	09/07/2021

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

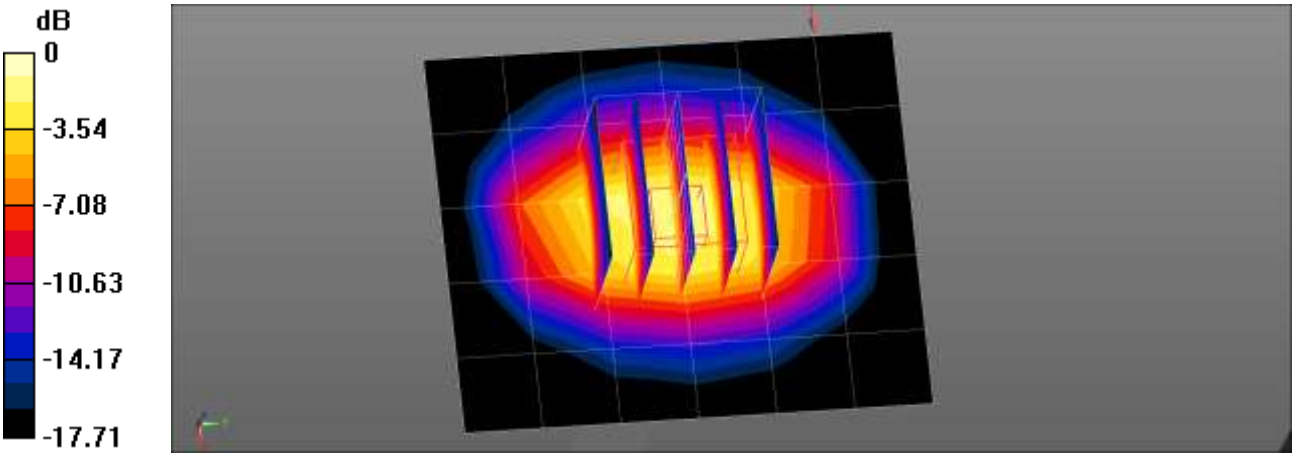
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.416 S/m; ε_r = 41.238; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1900 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.99 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.95 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg = 4.00 dBW/kg

Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.0 ℃
Test Date:	09/07/2021

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

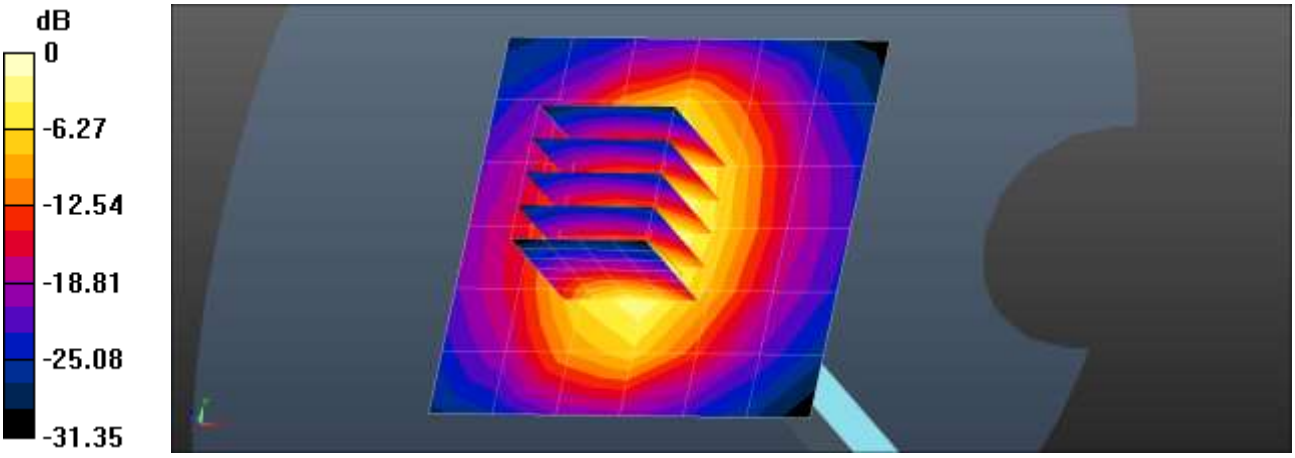
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.384 S/m; ε_r = 41.233; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.05, 5.05, 5.05) @ 1900 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.49 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.56 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.77 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.49 W/kg = 3.96 dBW/kg

Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.8 ℃
Test Date:	09/03/2021

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2;

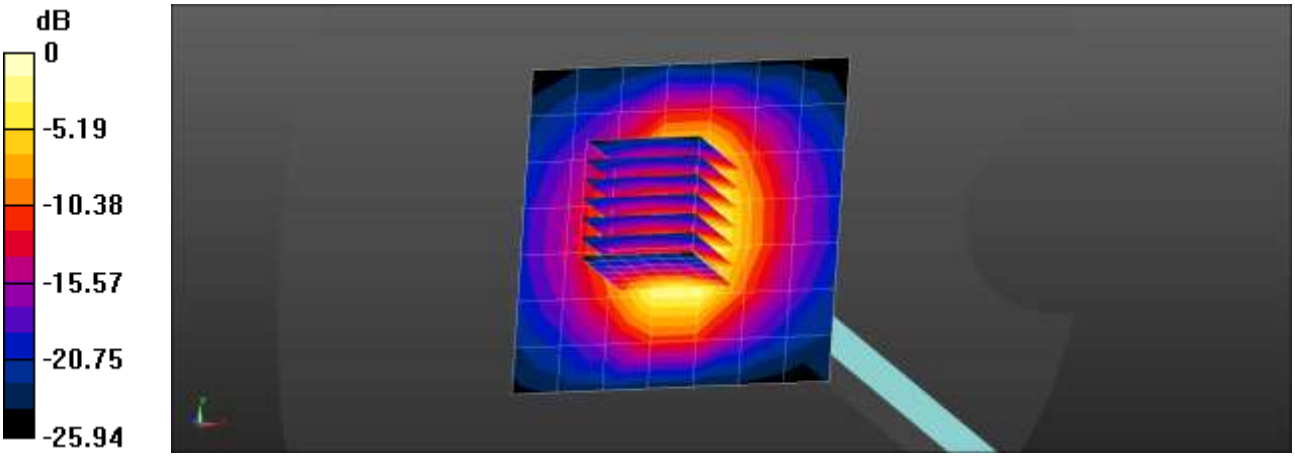
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.822 S/m; ε_r = 38.795; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

2450MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.98 W/kg

2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.96 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 5.17 W/kg
SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 4.24 W/kg



0 dB = 2.98 W/kg = 4.74 dBW/kg

Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.3 ℃
Test Date:	09/07/2021

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2;

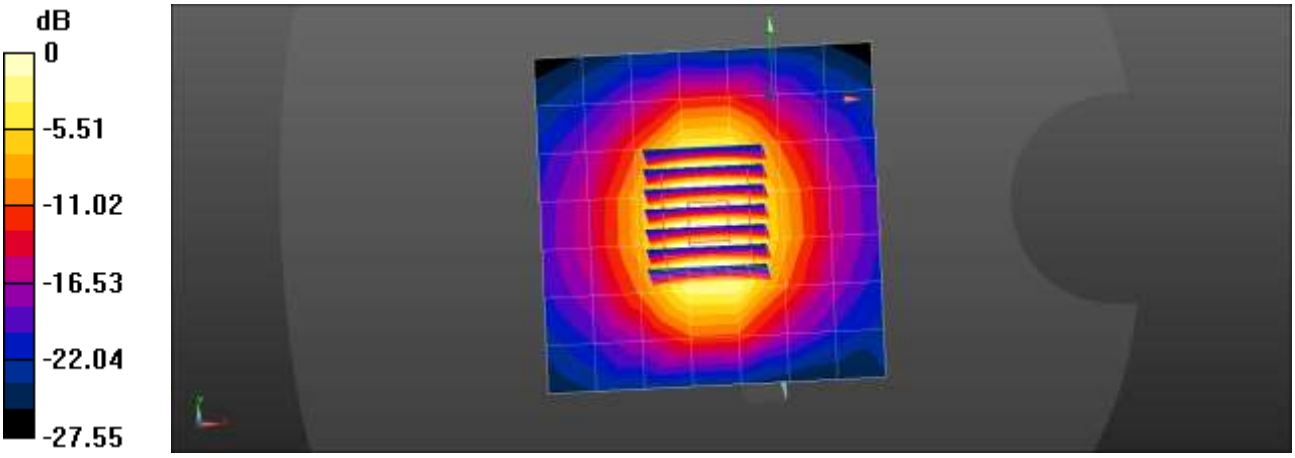
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.839 S/m; ε_r = 37.803; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

2450MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.99 W/kg

2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.86 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 5.20 W/kg
SAR(1 g) = 2.59 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 4.27 W/kg



0 dB = 2.99 W/kg = 4.76 dBW/kg

Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	09/06/2021

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2;

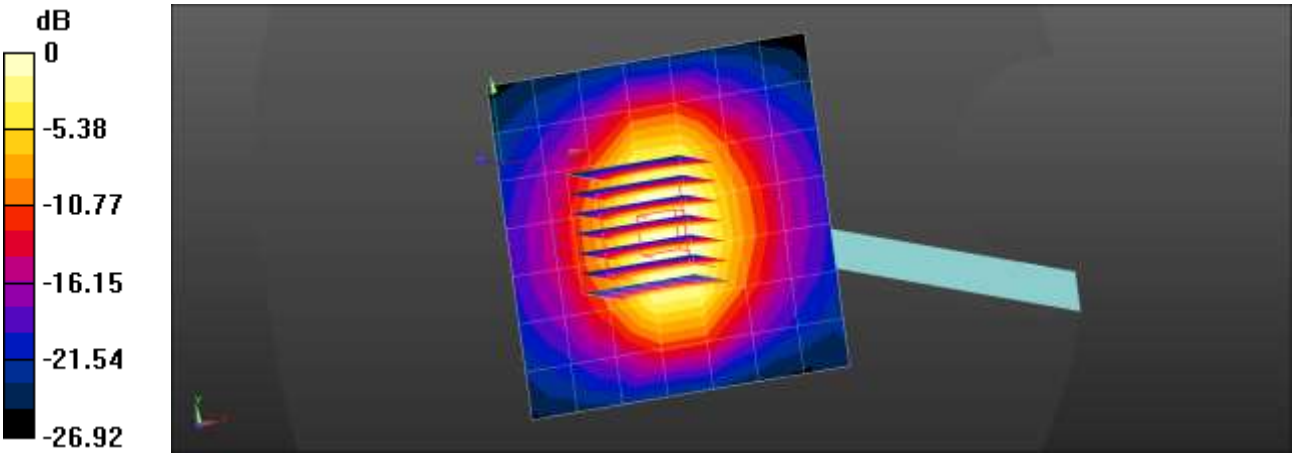
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.835 S/m; ε_r = 37.831; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7651; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 2021-05-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2021-06-02
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

2450MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.18 W/kg

2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.92 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 5.21 W/kg
SAR(1 g) = 2.59 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 4.28 W/kg



0 dB = 3.18 W/kg = 5.03 dBW/kg

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	09/09/2021

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

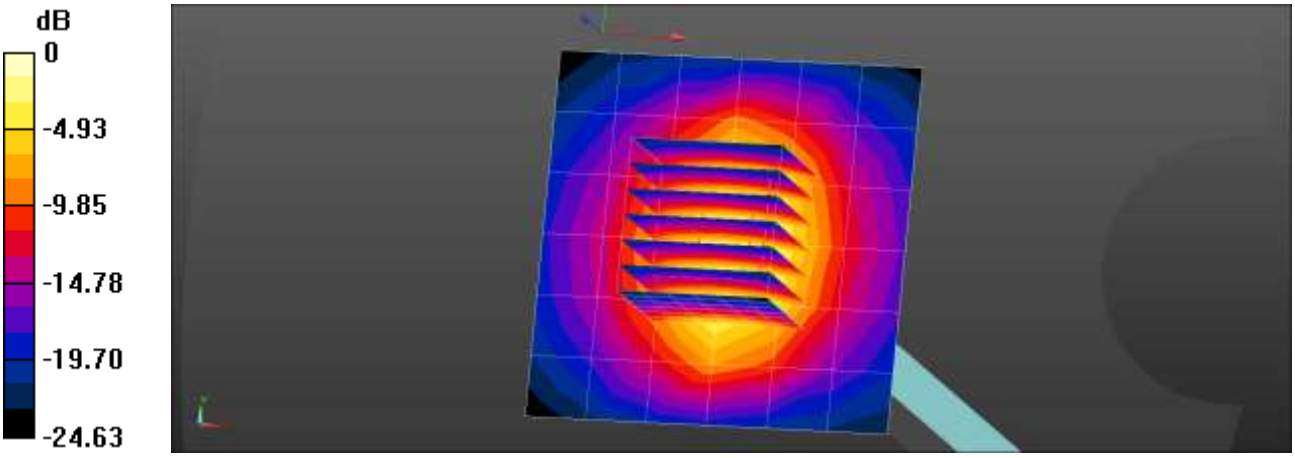
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.965 S/m; ε_r = 38.448; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN3903; ConvF(7.6, 7.6, 7.6) @ 2600 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1422; Calibrated: 2021-05-19
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.82 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.53 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 6.07 W/kg
SAR(1 g) = 2.82 W/kg; SAR(10 g) = 1.28 W/kg
Maximum value of SAR (measured) = 4.85 W/kg



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

Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	05/28/2021

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2;

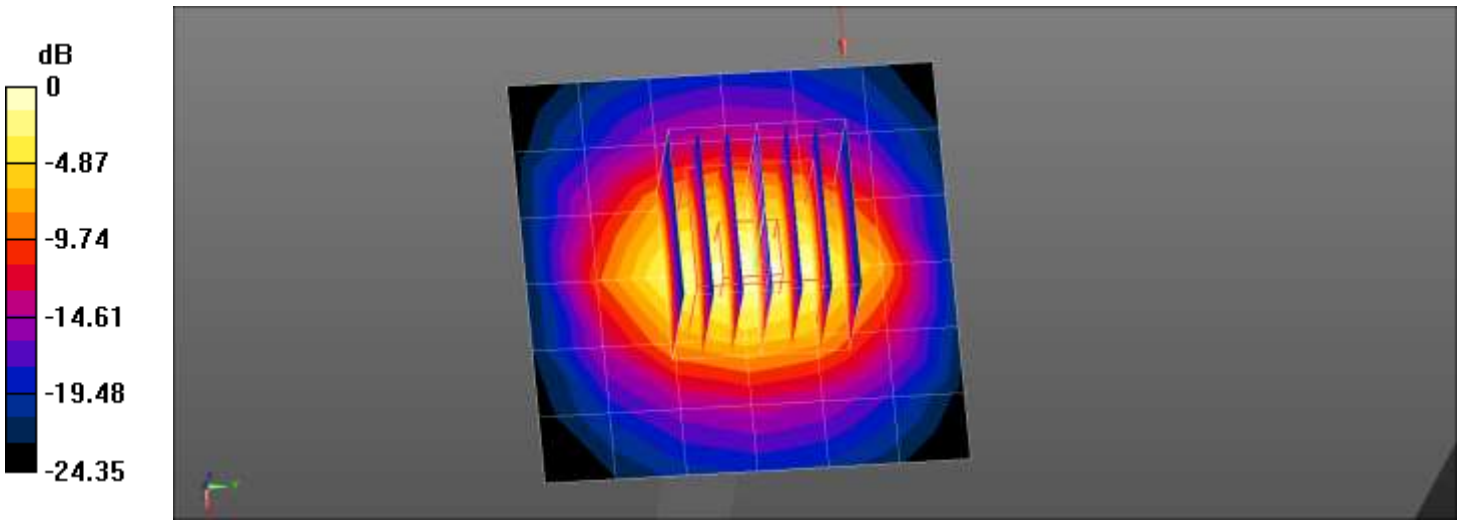
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.938 S/m; ε_r = 37.785; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN7654; ConvF(8.28, 8.28, 8.28) @ 2600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.79 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.56 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.11 W/kg
SAR(1 g) = 2.74 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 4.79 W/kg



0 dB = 4.79 W/kg = 6.80 dBW/kg

Verification Data (5 250 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.7 ℃
Test Date:	09/06/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

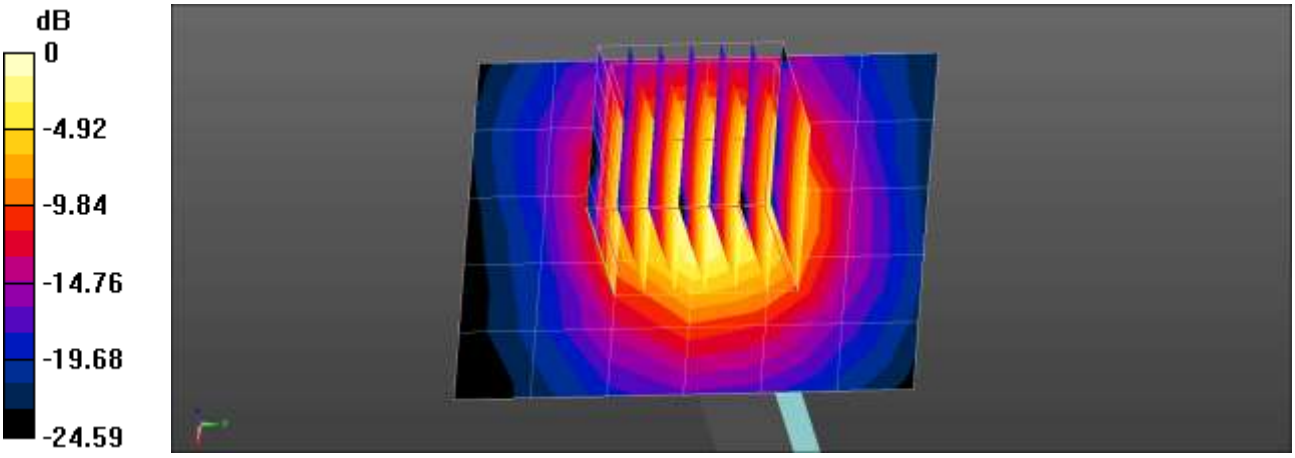
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.78 S/m; ε_r = 37.186; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.1, 6.1, 6.1) @ 5250 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5250MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 8.54 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.39 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 3.8 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 9.81 W/kg



0 dB = 8.54 W/kg = 9.31 dBW/kg

Verification Data (5 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	09/07/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

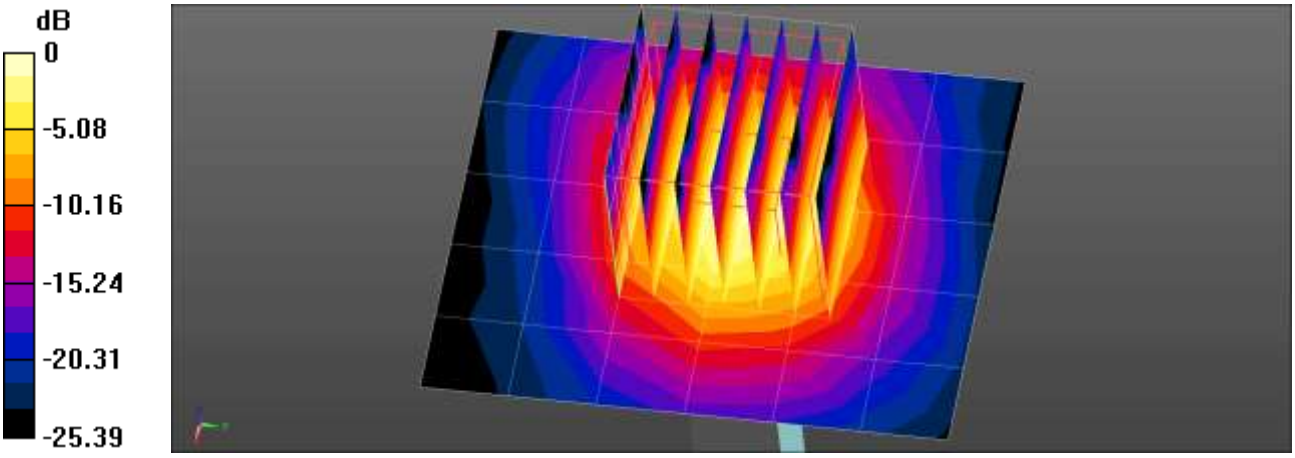
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.183 S/m; ε_r = 36.513; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.4, 5.4, 5.4) @ 5600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5600MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.88 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.20 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 18.8 W/kg
SAR(1 g) = 4.17 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 10.9 W/kg



0 dB = 9.88 W/kg = 9.95 dBW/kg

Verification Data (5 750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	09/08/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

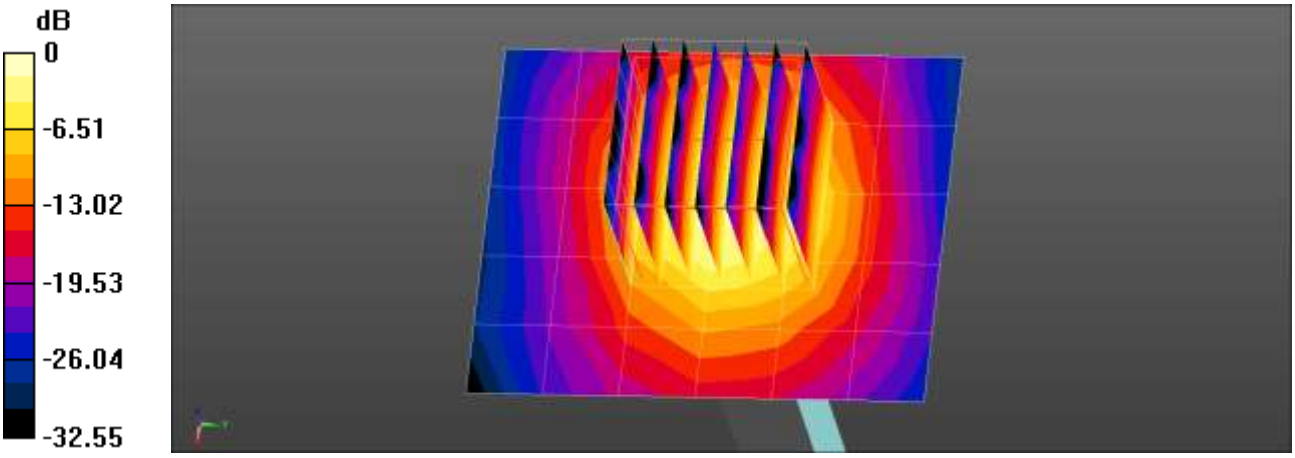
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.272 S/m; ε_r = 36.768; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5750 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5750MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.37 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 45.10 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 18.1 W/kg
SAR(1 g) = 3.82 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 9.37 W/kg = 9.72 dBW/kg

Verification Data (5 250 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.9 ℃
Test Date:	09/09/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

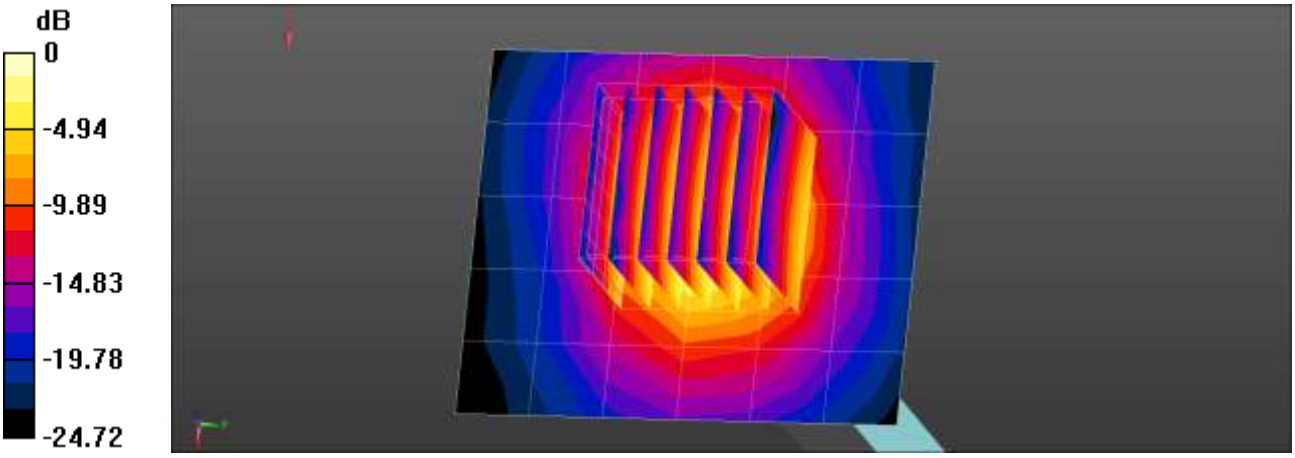
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.78 S/m; ε_r = 37.186; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.1, 6.1, 6.1) @ 5250 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5250MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.20 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 49.45 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 16.5 W/kg
SAR(1 g) = 3.93 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 9.97 W/kg



0 dB = 9.20 W/kg = 9.64 dBW/kg

Verification Data (5 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.5 ℃
Test Date:	09/10/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

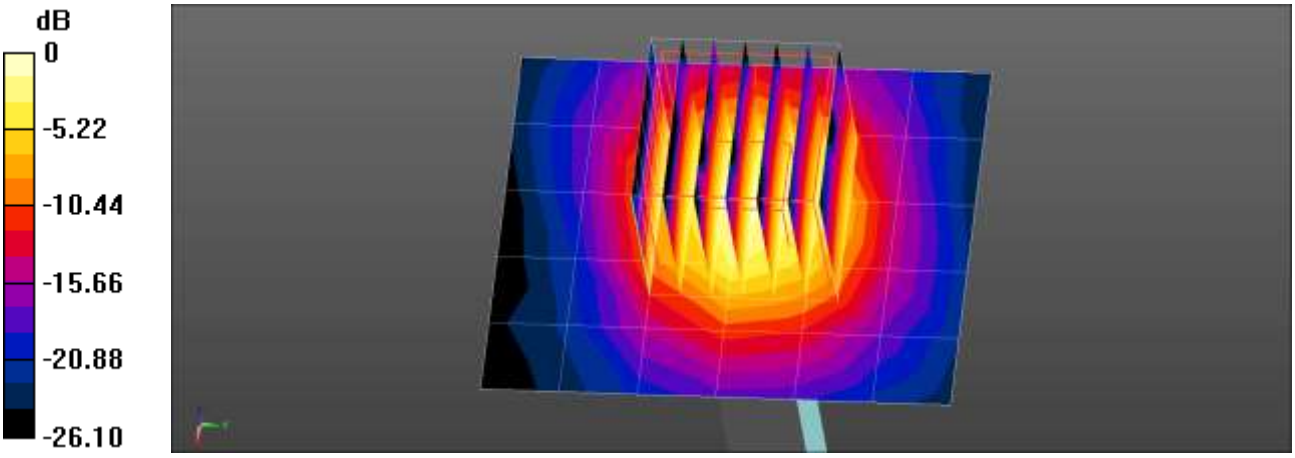
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.195 S/m; ε_r = 36.834; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.4, 5.4, 5.4) @ 5600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5600MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.1 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.03 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 19.0 W/kg
SAR(1 g) = 4.16 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 11.0 W/kg



0 dB = 10.1 W/kg = 10.03 dBW/kg

Verification Data (5 750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.0 ℃
Test Date:	09/11/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

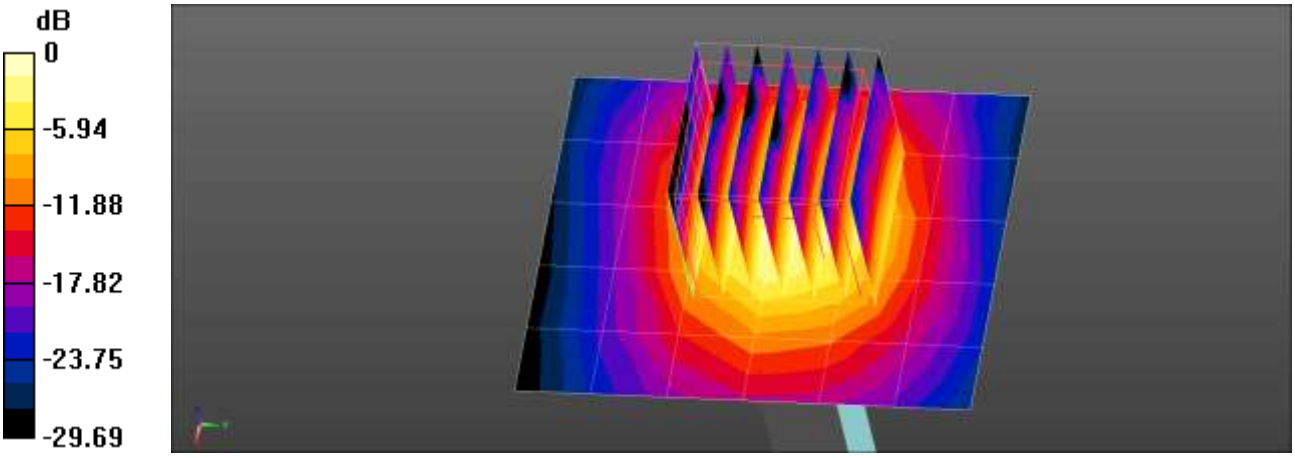
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.268 S/m; ε_r = 36.871; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5750 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5750MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.20 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 45.08 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 17.9 W/kg
SAR(1 g) = 3.81 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 9.20 W/kg = 9.64 dBW/kg

Verification Data (5 750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.4 ℃
Test Date:	09/13/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

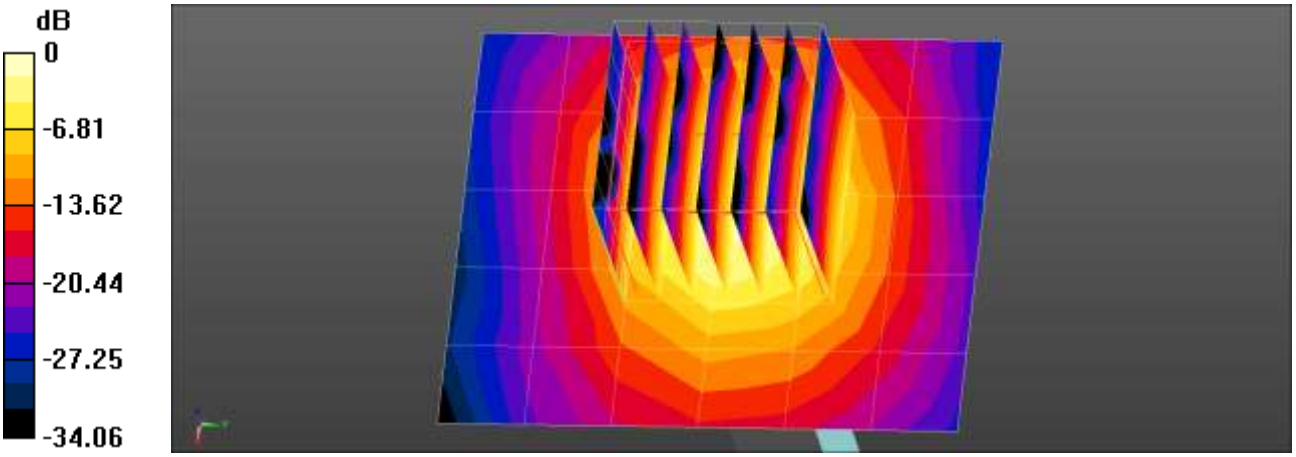
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.28 S/m; ε_r = 35.131; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.37, 5.37, 5.37) @ 5750 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5750MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.17 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 45.11 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 18.2 W/kg
SAR(1 g) = 3.83 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 9.17 W/kg = 9.62 dBW/kg

Extremity SAR

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.5 ℃
Test Date:	09/04/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

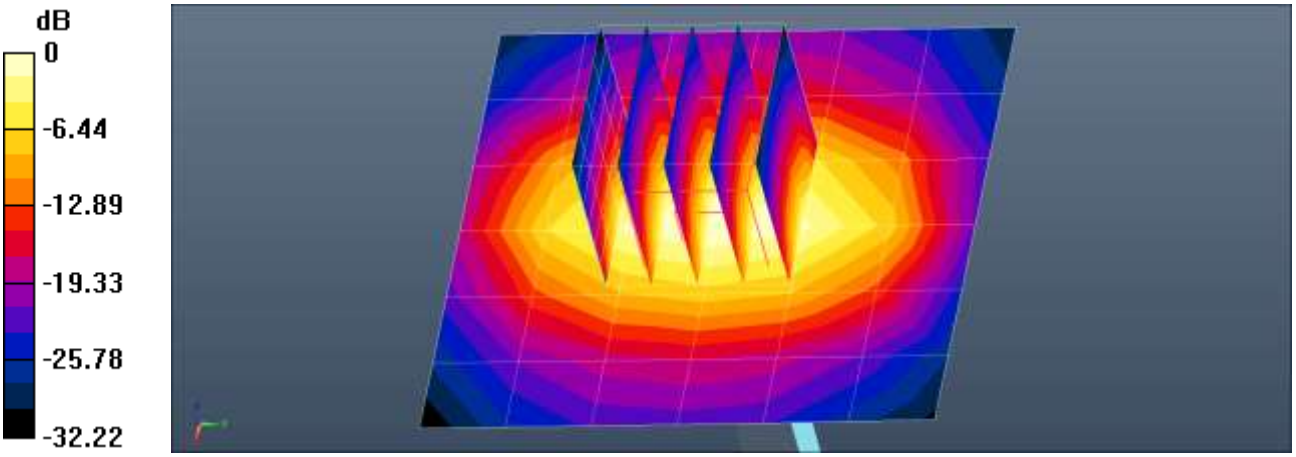
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.43 S/m; ε_r = 41.126; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.27, 5.27, 5.27) @ 1800 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.24 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.99 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.23 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.981 W/kg
Maximum value of SAR (measured) = 2.31 W/kg



0 dB = 2.24 W/kg = 3.50 dBW/kg

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.4 ℃
Test Date:	09/15/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

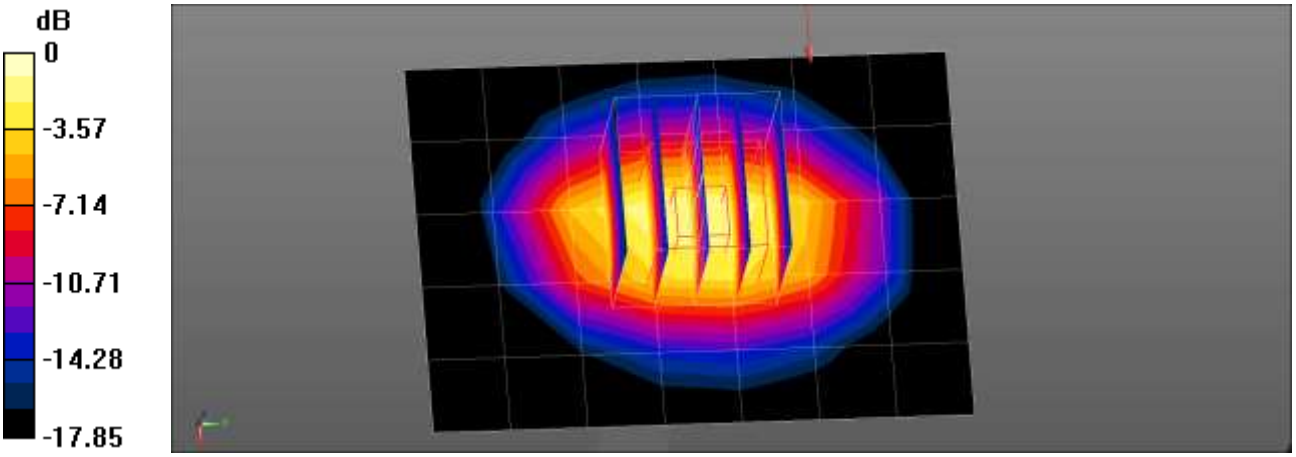
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.366 S/m; ε_r = 41.128; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN7654; ConvF(9.4, 9.4, 9.4) @ 1800 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.17 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.64 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.45 W/kg
SAR(1 g) = 1.81 W/kg; SAR(10 g) = 0.944 W/kg
Maximum value of SAR (measured) = 2.85 W/kg



0 dB = 2.85 W/kg = 4.55 dBW/kg

Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.4 ℃
Test Date:	09/10/2021

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;

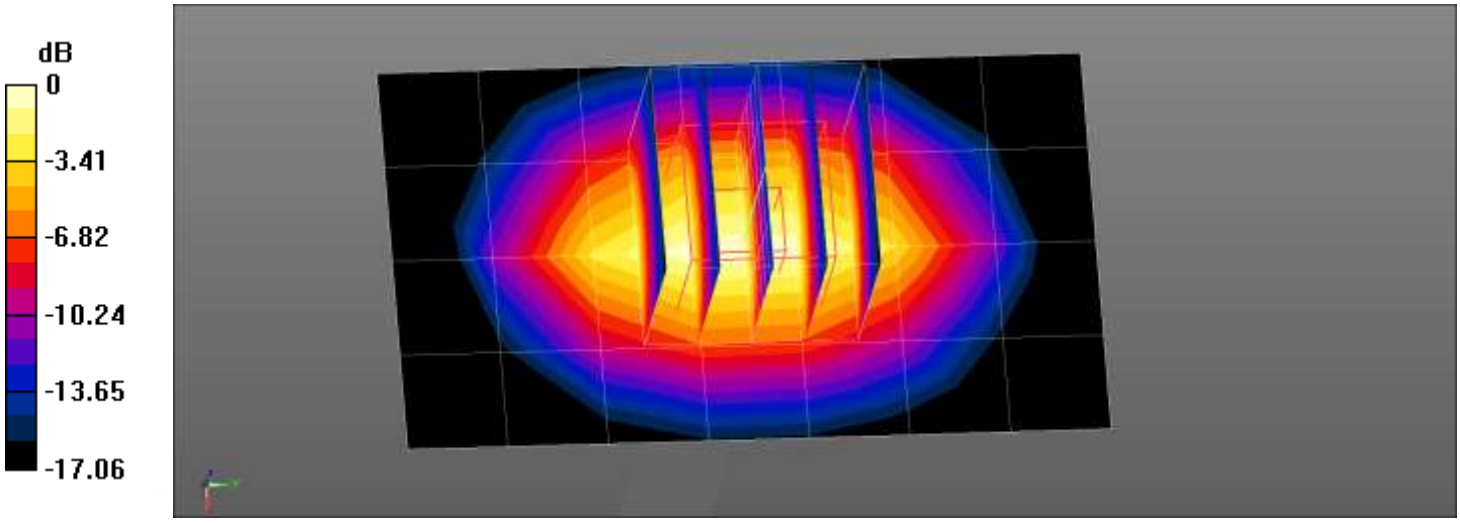
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.42 S/m; ε_r = 41.129; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN3903; ConvF(8.8, 8.8, 8.8) @ 1800 MHz; Calibrated: 2021-03-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1422; Calibrated: 2021-05-19
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4)

1800MHz Head Verification/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.96 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.03 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 3.74 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.05 W/kg
Maximum value of SAR (measured) = 3.12 W/kg



0 dB = 3.12 W/kg = 4.94 dBW/kg

Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.9 ℃
Test Date:	09/08/2021

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

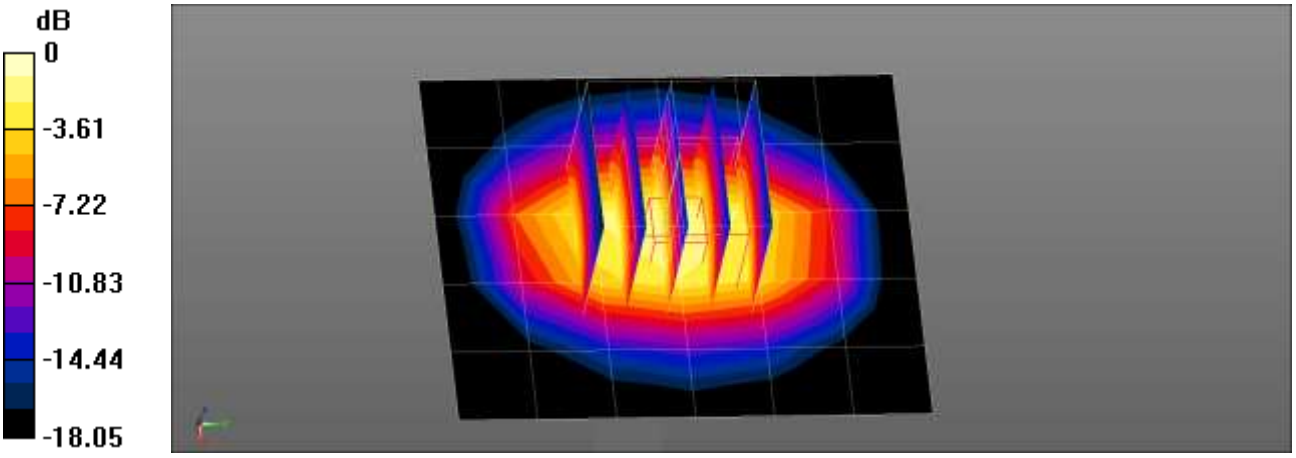
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.449 S/m; ε_r = 40.394; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 – SN3076; ConvF(5.05, 5.05, 5.05) @ 1900 MHz; Calibrated: 2021-07-28
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1686; Calibrated: 2021-06-21
- Phantom: SAM_Left_20170913
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.03 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.02 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.69 W/kg
SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 2.54 W/kg



0 dB = 2.54 W/kg = 4.05 dBW/kg

Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.0 ℃
Test Date:	09/14/2021

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;

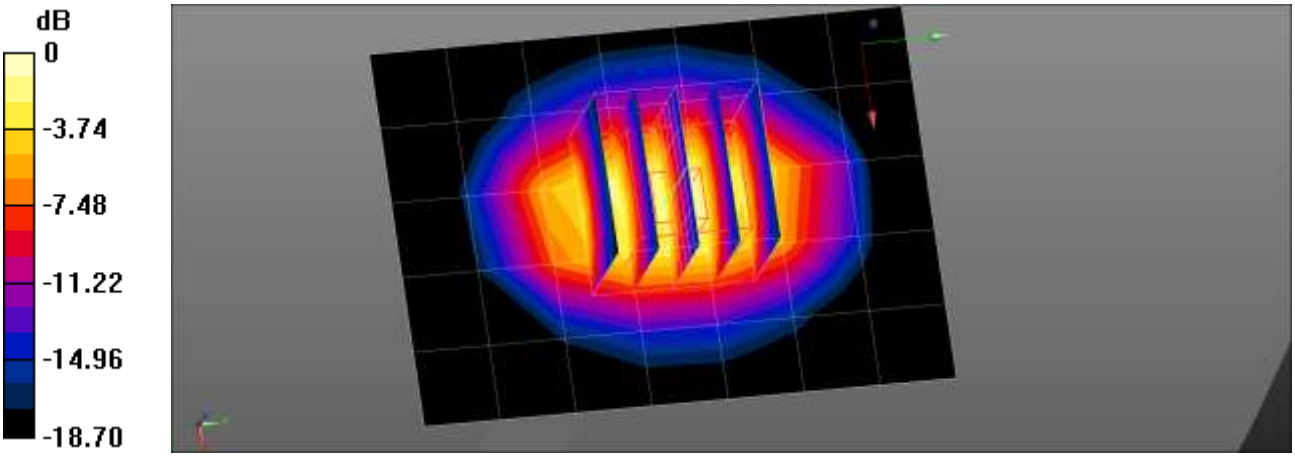
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.389 S/m; ε_r = 41.244; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN3076; ConvF(9.15, 9.15, 9.15) @ 1900 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

1900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.31 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.40 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.84 W/kg
SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 3.16 W/kg



0 dB = 3.16 W/kg = 5.00 dBW/kg

Verification Data (5 250 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.9 ℃
Test Date:	09/09/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

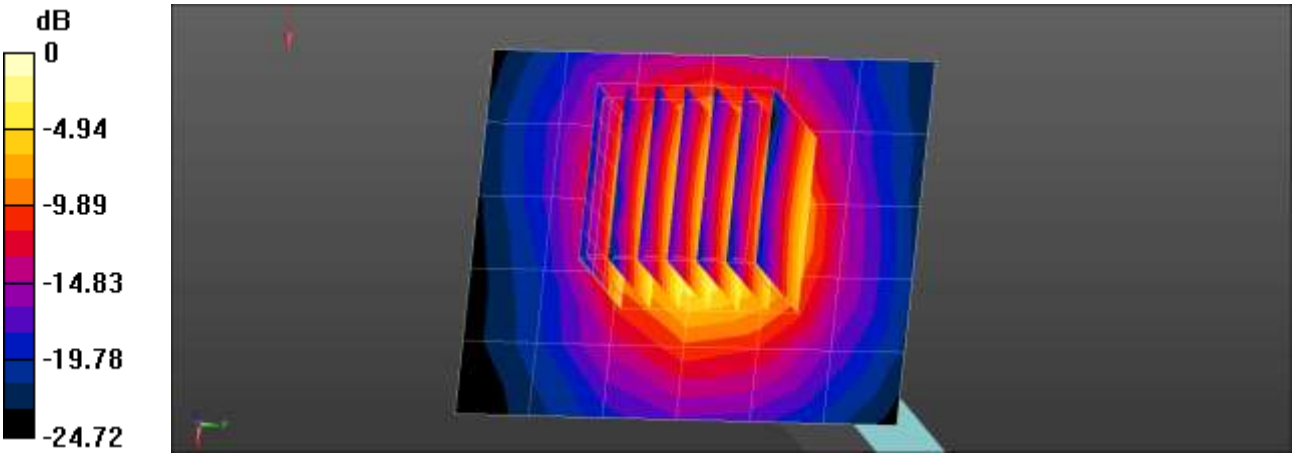
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.78 S/m; ε_r = 37.186; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.1, 6.1, 6.1) @ 5250 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5250MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.20 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 49.45 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 16.5 W/kg
SAR(1 g) = 3.93 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 9.97 W/kg



0 dB = 9.20 W/kg = 9.64 dBW/kg

Verification Data (5 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.5 ℃
Test Date:	09/10/2021

DUT: Dipole D5GHzV2; Type: D5GHzV2;

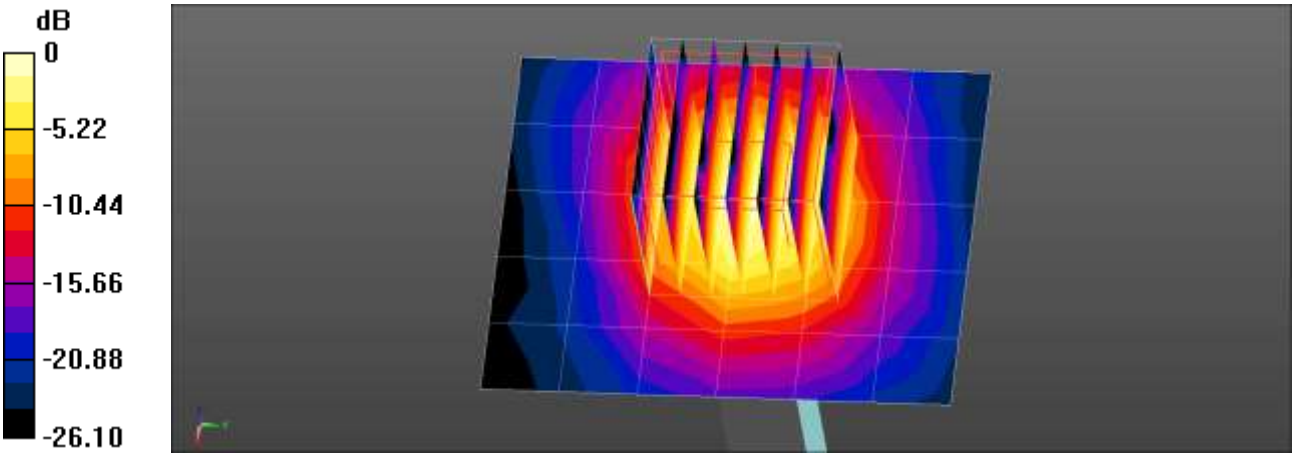
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.195 S/m; ε_r = 36.834; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.4, 5.4, 5.4) @ 5600 MHz; Calibrated: 2021-05-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2021-06-21
- Phantom: Twin-SAM V8.0 (Left)
- Measurement SW: DASY52, Version 52.10 (4)

5600MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.1 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.03 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 19.0 W/kg
SAR(1 g) = 4.16 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 11.0 W/kg



0 dB = 10.1 W/kg = 10.03 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 (㎒)											
	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
5	3076	ES3DV3	Head	750	1014	2021-08-09	41.7	0.87	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	835	4d165	2021-08-09	41.6	0.92	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	835	4d165	2021-08-09	41.6	0.92	PASS	PASS	PASS	GMSK	PASS	N/A
5	3076	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	GMSK	PASS	N/A
11	7654	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
11	7654	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	GMSK	PASS	N/A
5	3076	ES3DV3	Head	1900	5d032	2021-08-09	39.8	1.41	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	1900	5d032	2021-08-09	39.8	1.41	PASS	PASS	PASS	GMSK	PASS	N/A
5	3076	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
10	7651	EX3DV4	Head	2450	965	2021-08-09	39.4	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
3	3903	EX3DV4	Head	2600	1106	2021-08-11	39.1	1.94	PASS	PASS	PASS	NA	N/A	NA
3	3903	EX3DV4	Head	2600	1106	2021-08-11	39.1	1.94	PASS	PASS	PASS	TDD	PASS	NA
11	7654	EX3DV4	Head	2600	1106	2021-08-11	39.1	1.94	PASS	PASS	PASS	NA	N/A	NA
11	7654	EX3DV4	Head	2600	1106	2021-08-11	39.1	1.94	PASS	PASS	PASS	TDD	PASS	NA
11	7654	EX3DV4	Head	5250	1107	2021-07-30	35.8	4.65	PASS	PASS	PASS	OFDM	N/A	PASS
11	7654	EX3DV4	Head	5600	1107	2021-07-30	35.4	5.02	PASS	PASS	PASS	OFDM	N/A	PASS
11	7654	EX3DV4	Head	5750	1107	2021-07-30	35.3	5.18	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
5	3076	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
11	7654	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	N/A	N/A	N/A
11	7654	ES3DV3	Head	1750	2d015	2021-08-09	40.2	1.39	PASS	PASS	PASS	GMSK	PASS	N/A
3	3903	EX3DV4	Head	1750	2d015	2021-08-12	40.1	1.41	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	1900	5d032	2021-08-09	39.8	1.41	PASS	PASS	PASS	N/A	N/A	N/A
11	7654	EX3DV4	Head	5250	1107	2021-07-30	35.8	4.65	PASS	PASS	PASS	OFDM	N/A	PASS
11	7654	EX3DV4	Head	5600	1107	2021-07-30	35.4	5.02	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.