Appendix B. – SAR Test Plots

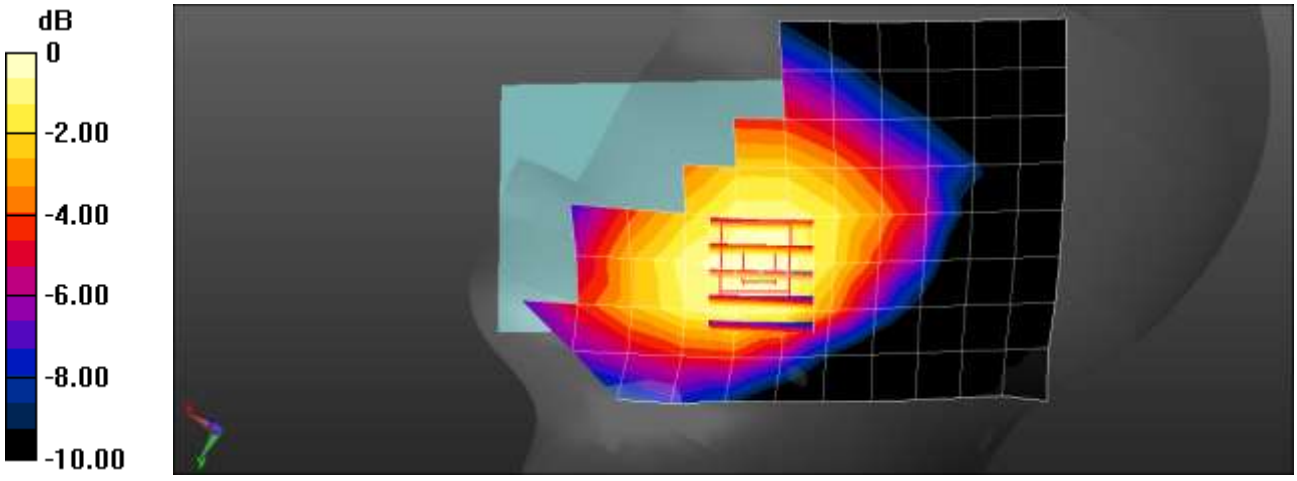
Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**21.8 ℃**
Liquid Temperature:	**21.7 ℃**
Test Date:	**06/04/2024**
Plot No.:	**A1**
Band:	**GSM850 Head SAR**

DUT: SM-S721U
Communication System: UID 0, GSM 850 3Tx (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.77013
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.925 S/m; ε_r = 41.216; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 836.6 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

GSM850 3Tx Head Right Touch 190ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.150 W/kg
GSM850 3Tx Head Right Touch 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.981 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.107 W/kg
Maximum value of SAR (measured) = 0.150 W/kg



0 dB = 0.150 W/kg = -8.24 dBW/kg

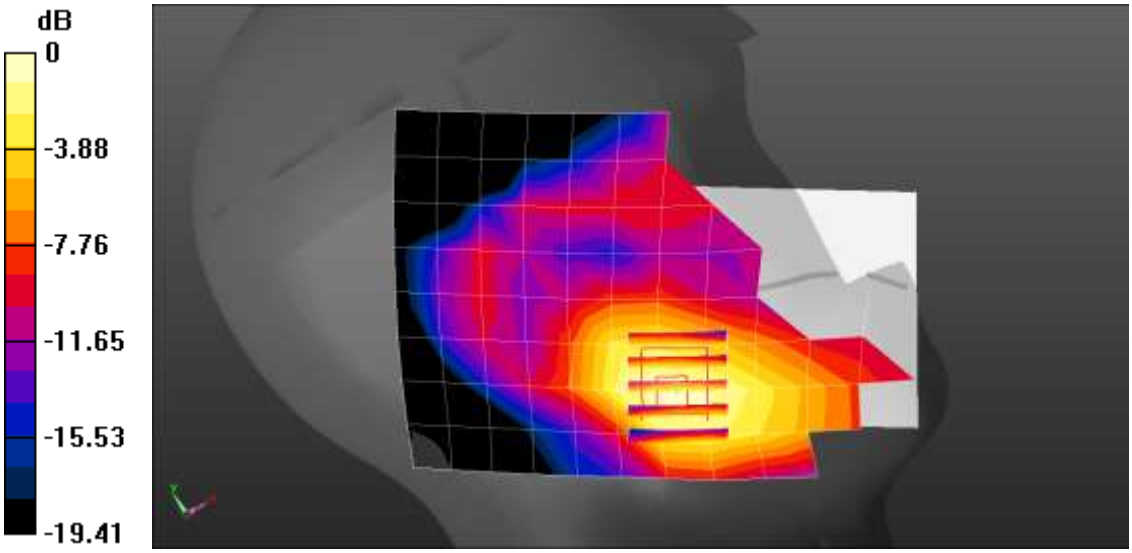
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.0 ℃
Liquid Temperature: 21.9 ℃
Test Date: 06/05/2024
Plot No.: A2
Band: GSM1900 Head SAR

DUT: SM-S721U
Procedure Name: GSM1900 2Tx Head Left Touch 661ch
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; εr = 39.234; ρ = 1000 kg/m3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1880 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

GSM1900 2Tx Head Left Touch 661ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.103 W/kg
GSM1900 2Tx Head Left Touch 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.093 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.123 W/kg
SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.053 W/kg
Maximum value of SAR (measured) = 0.110 W/kg



0 dB = 0.110 W/kg = -9.59 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.2 ℃
Liquid Temperature: 21.0 ℃
Test Date: 06/10/2024
Plot No.: A3
Band: UMTS Band 5 Head SAR

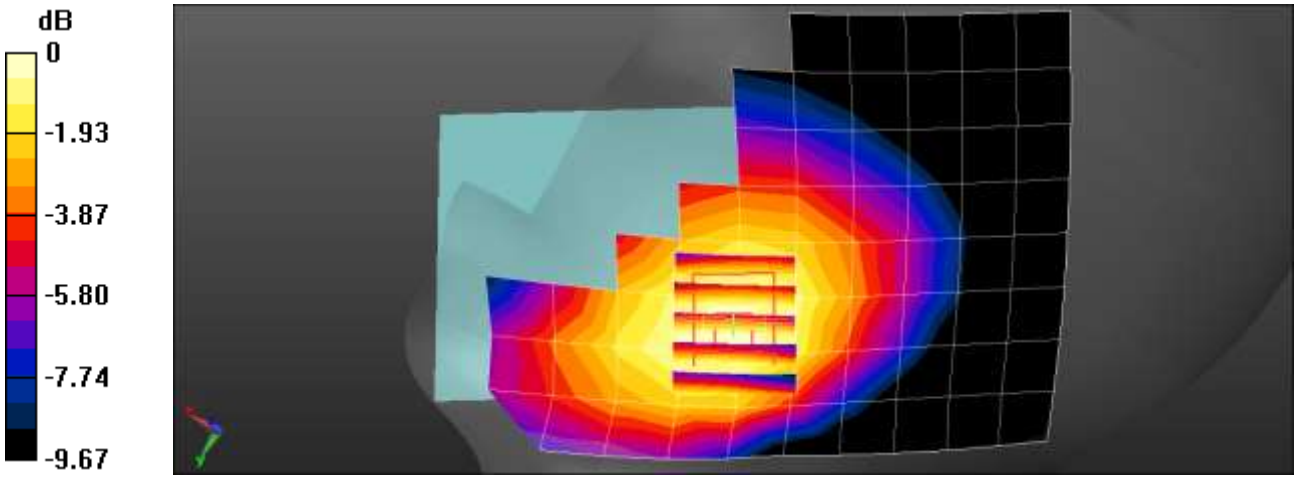
DUT: SM-S721U
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.926 S/m; ε_r = 40.206; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 836.6 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 5 Head Right Touch 4183ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.162 W/kg

UMTS Band 5 Head Right Touch 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.089 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.172 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.114 W/kg
Maximum value of SAR (measured) = 0.165 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.7 ℃
Liquid Temperature: 22.7 ℃
Test Date: 07/04/2024
Plot No.: A4
Band: UMTS Band 4 Head SAR

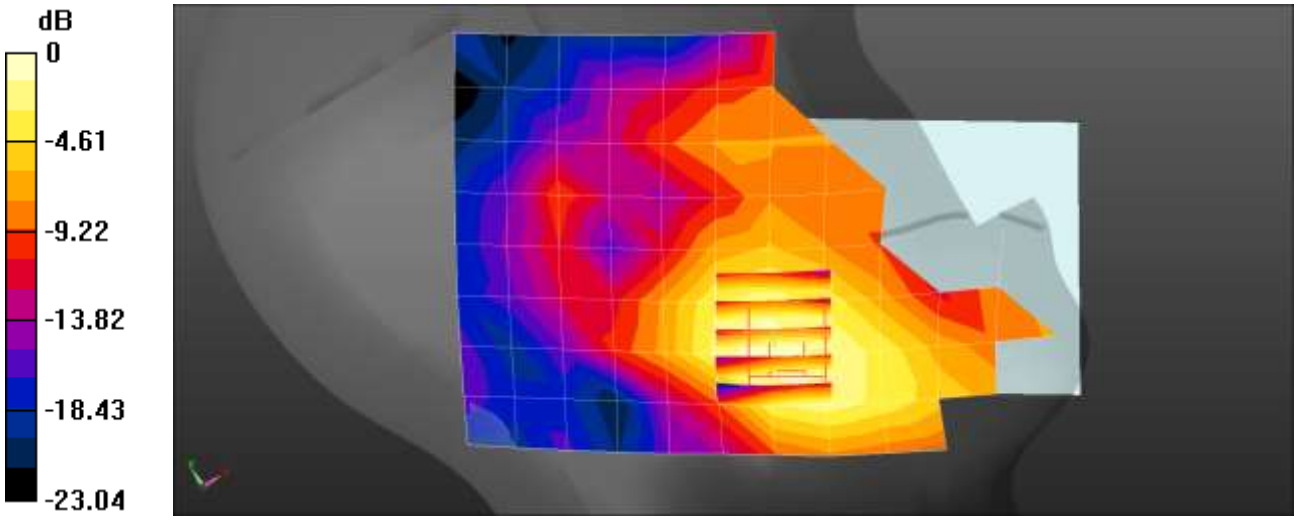
DUT: SM-S721U
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.346 S/m; ε_r = 41.422; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.49, 8.77, 7.91) @ 1732.4 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 4 Head Left Touch 1412ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0437 W/kg

UMTS Band 4 Head Left Touch 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.402 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.0510 W/kg
SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.022 W/kg
Maximum value of SAR (measured) = 0.0448 W/kg



0 dB = 0.0448 W/kg = -13.49 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.1 ℃
Liquid Temperature: 22.0 ℃
Test Date: 07/03/2024
Plot No.: A5
Band: UMTS Band 2 Head SAR

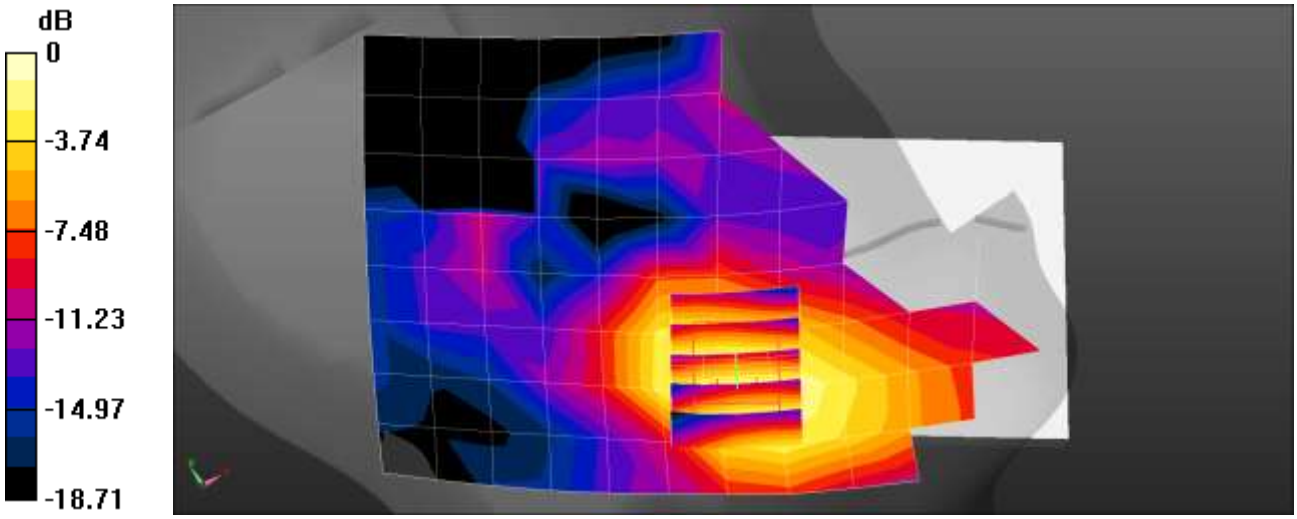
DUT: SM-S721U
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 39.231; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1880 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 2 Head Left Touch 9400ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0556 W/kg

UMTS Band 2 Head Left Touch 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.716 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.0660 W/kg
SAR(1 g) = 0.045 W/kg; SAR(10 g) = 0.028 W/kg
Maximum value of SAR (measured) = 0.0582 W/kg



0 dB = 0.0582 W/kg = -12.35 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.9 ℃
Liquid Temperature: 20.9 ℃
Test Date: 06/26/2024
Plot No.: A6
Band: LTE FDD Band 7 Head SAR

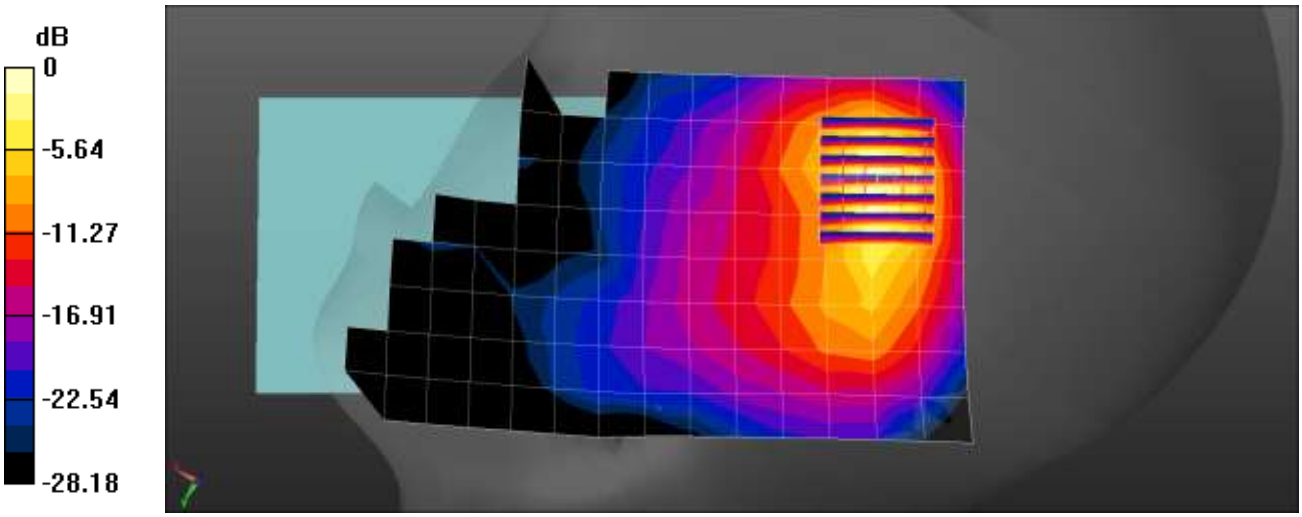
DUT: SM-S721U
Communication System: UID 0, LTE Band 7 (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 1.895 S/m; ε_r = 38.664; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2560 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 7 Head Right Tilt QPSK 20MHz 100RB 0offset 21350ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.09 W/kg

LTE Band 7 Head Right Tilt QPSK 20MHz 100RB 0offset 21350ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.32 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 0.671 W/kg; SAR(10 g) = 0.255 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.0 ℃
Liquid Temperature: 18.9 ℃
Test Date: 06/11/2024
Plot No.: A7
Band: LTE FDD Band 12 Head SAR

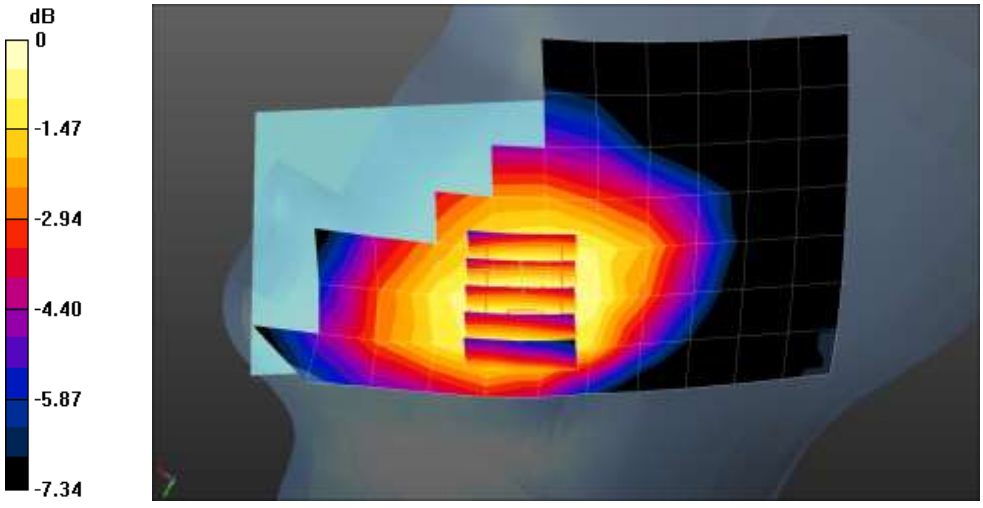
DUT: SM-S721U
Communication System: UID 0, LTE Band12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.857 S/m; ε_r = 43.446; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 707.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 Head Right Touch QPSK 10MHz 1RB 24offset 23095ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.129 W/kg

LTE Band 12 Head Right Touch QPSK 10MHz 1RB 24offset 23095ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.312 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.130 W/kg
SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.103 W/kg
Maximum value of SAR (measured) = 0.129 W/kg



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

Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**18.5 ℃**
Liquid Temperature:	**18.4 ℃**
Test Date:	**06/12/2024**
Plot No.:	**A8**
Band:	**LTE FDD Band 13 Head SAR**

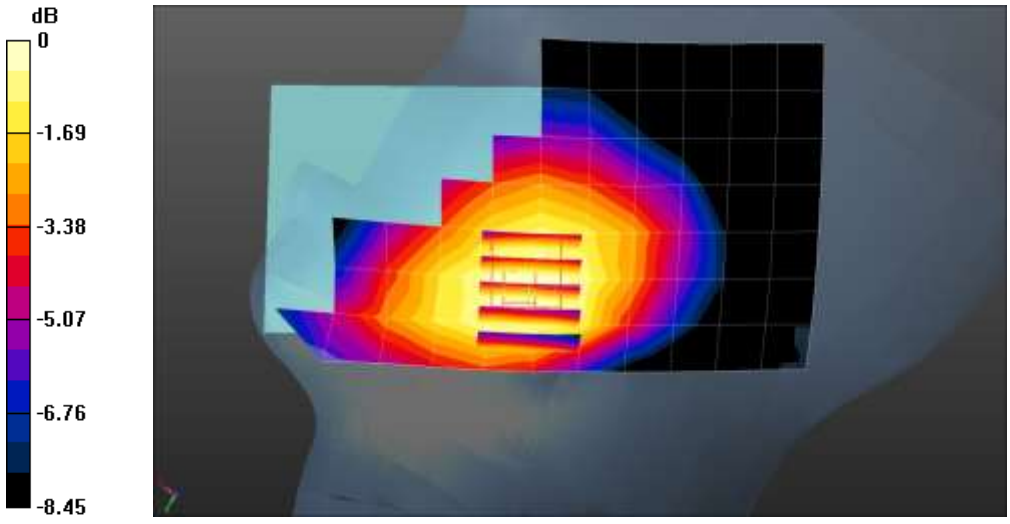
DUT: SM-S721U
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.929 S/m; ε_r = 42.36; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 782 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 13 Head Right Touch QPSK 10MHz 1RB 0offset 23230ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.179 W/kg

LTE Band 13 Head Right Touch QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.070 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.182 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.134 W/kg
Maximum value of SAR (measured) = 0.179 W/kg



0 dB = 0.179 W/kg = -7.47 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.5 ℃
Liquid Temperature: 19.4 ℃
Test Date: 06/13/2024
Plot No.: A9
Band: LTE FDD Band 14 Head SAR

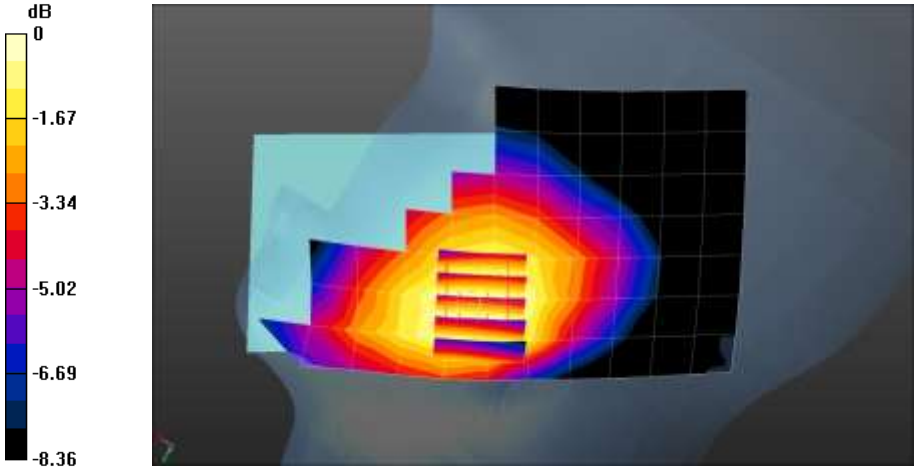
DUT: SM-S721U
Communication System: UID 0, LTE Band 14 (0); Frequency: 793 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 793 MHz; σ = 0.941 S/m; ε_r = 42.189; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 793 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 14 Head Right Touch QPSK 10MHz 1RB 0offset 23330ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.176 W/kg

LTE Band 14 Head Right Touch QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.561 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.181 W/kg
SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.133 W/kg
Maximum value of SAR (measured) = 0.177 W/kg



0 dB = 0.177 W/kg = -7.52 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 06/26/2024
Plot No.: A10
Band: LTE FDD Band 25 Head SAR

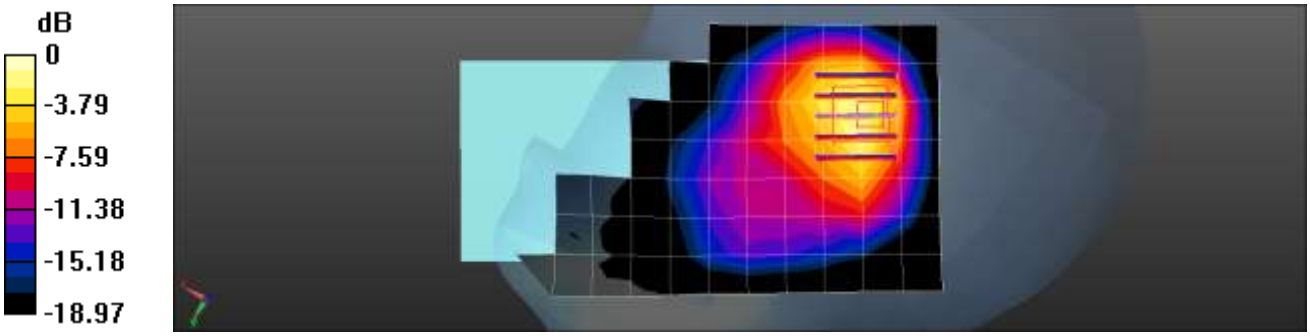
DUT: SM-S721U
Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.387 S/m; ε_r = 38.787; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1882.5 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 25 Head Right Touch QPSK 20MHz 50RB 0offset 26365ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.688 W/kg

LTE Band 25 Head Right Touch QPSK 20MHz 50RB 0offset 26365ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.42 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.574 W/kg; SAR(10 g) = 0.293 W/kg
Maximum value of SAR (measured) = 0.940 W/kg



0 dB = 0.940 W/kg = -0.27 dBW/kg

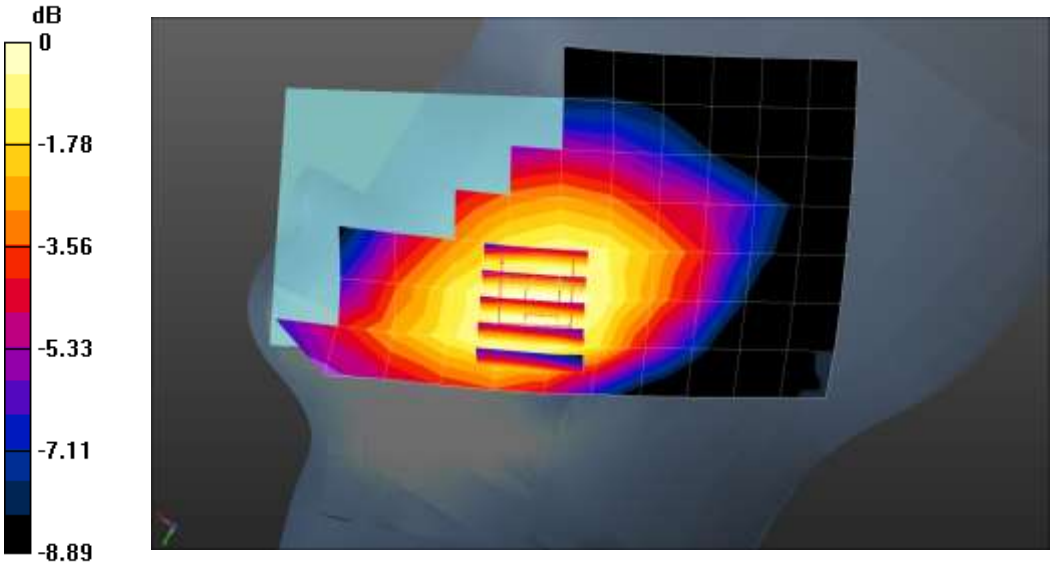
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.2 ℃
Liquid Temperature: 20.0 ℃
Test Date: 06/14/2024
Plot No.: A11
Band: LTE FDD Band 26 Head SAR

DUT: SM-S721U
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 = 0.933 S/m; ε_r = 42.872; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 831.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.171 W/kg
LTE Band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.694 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.177 W/kg
SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.170 W/kg



0 dB = 0.170 W/kg = -7.70 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.8 ℃
Liquid Temperature: 20.7 ℃
Test Date: 06/28/2024
Plot No.: A12
Band: LTE FDD Band 30 Head SAR

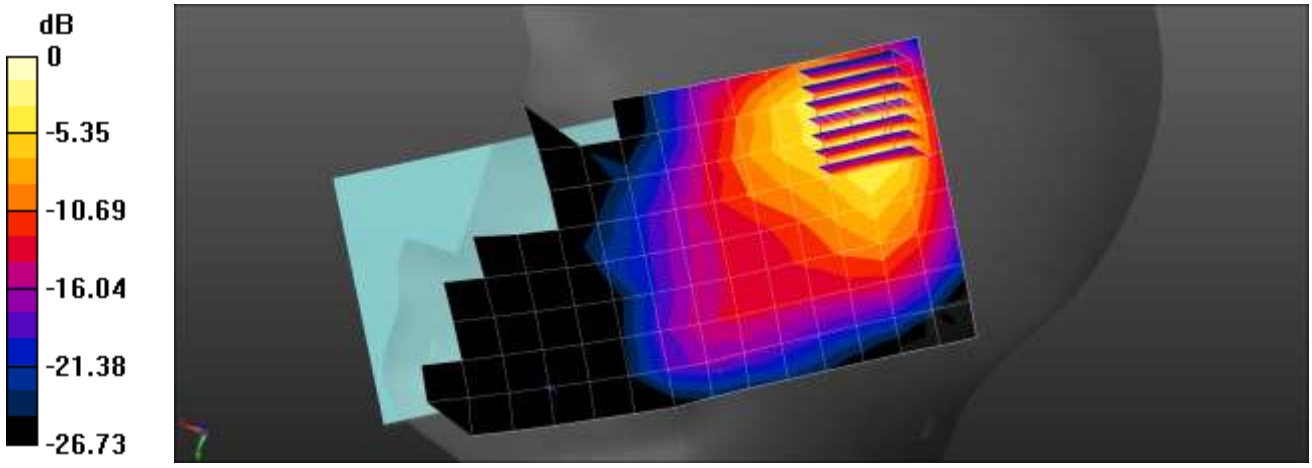
DUT: SM-S721U
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.726 S/m; ε_r = 39.264; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2310 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 30 Head Right Touch QPSK 10MHz 25RB 24offset 27710ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.871 W/kg

LTE Band 30 Head Right Touch QPSK 10MHz 25RB 24offset 27710ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.45 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.295 W/kg
Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 07/01/2024
Plot No.: A13
Band: LTE TDD Band 41 (Power Class 3) Head SAR

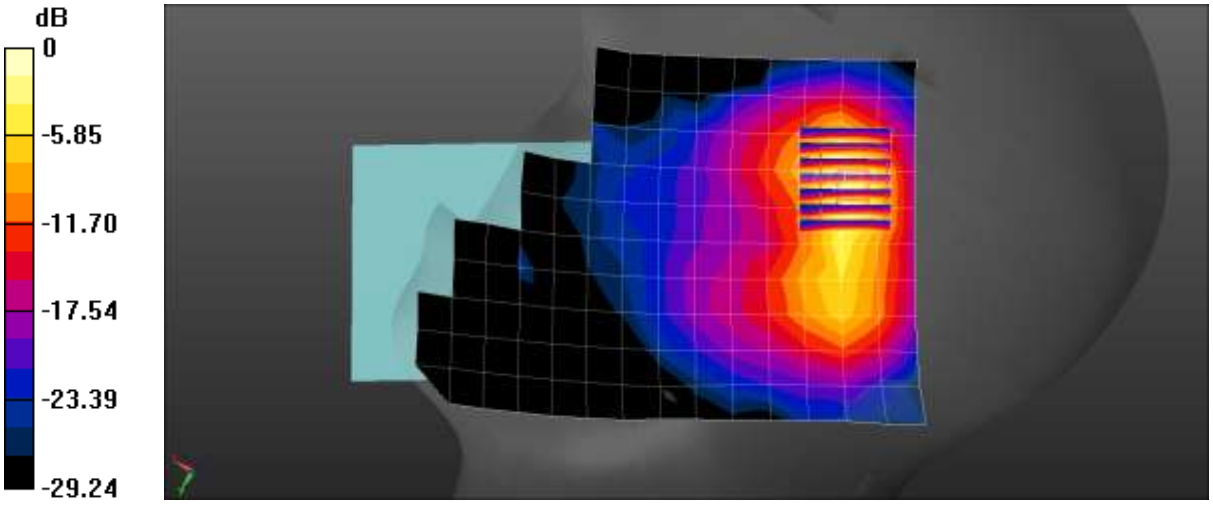
DUT: SM-S721U
Communication System: UID 0, LTE Band41 (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1.58052
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 1.978 S/m; ε_r = 38.507; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2636.5 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 Head Right Tilt QPSK 20MHz 1RB 0offset 41055ch/Area Scan (11x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.12 W/kg

LTE Band 41 Head Right Tilt QPSK 20MHz 1RB 0offset 41055ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.51 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.90 W/kg
SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.262 W/kg
Maximum value of SAR (measured) = 1.33 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

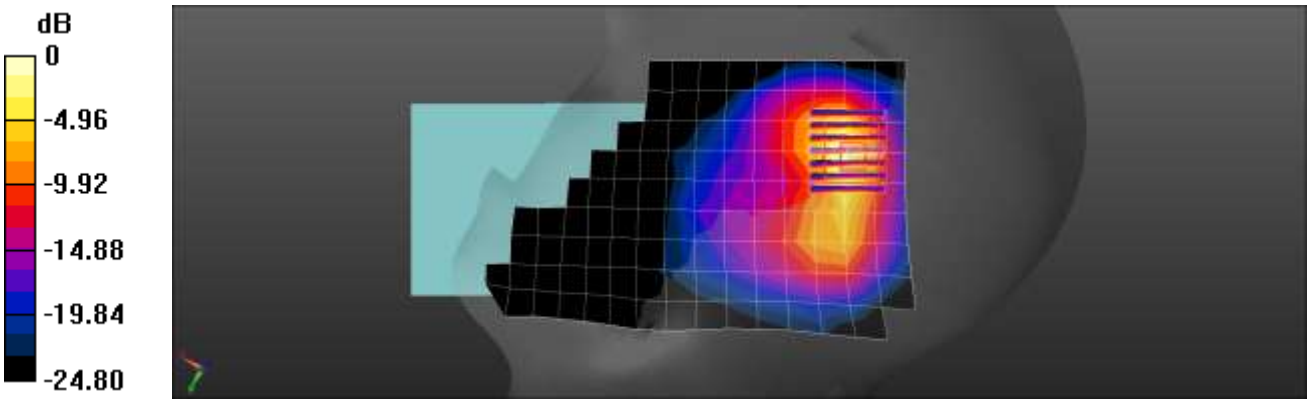
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.0 ℃
Liquid Temperature: 22.0 ℃
Test Date: 07/05/2024
Plot No.: A14
Band: LTE TDD Band 41 (Power Class 2) Head SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band41 (0); Frequency: 2593 MHz;Duty Cycle: 1:2.30728
Medium parameters used (interpolated): f = 2593 MHz; σ = 1.996 S/m; ε_r = 39.199; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2593 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 41 Head Right Tilt QPSK 20MHz 1RB 0offset 40620ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.05 W/kg
LTE Band 41 Head Right Tilt QPSK 20MHz 1RB 0offset 40620ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.854 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.217 W/kg
Maximum value of SAR (measured) = 0.997 W/kg



0 dB = 0.997 W/kg = -0.01 dBW/kg

Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**23.1 ℃**
Liquid Temperature:	**23.0 ℃**
Test Date:	**07/08/2024**
Plot No.:	**A15**
Band:	**LTE TDD Band 48 Head SAR**

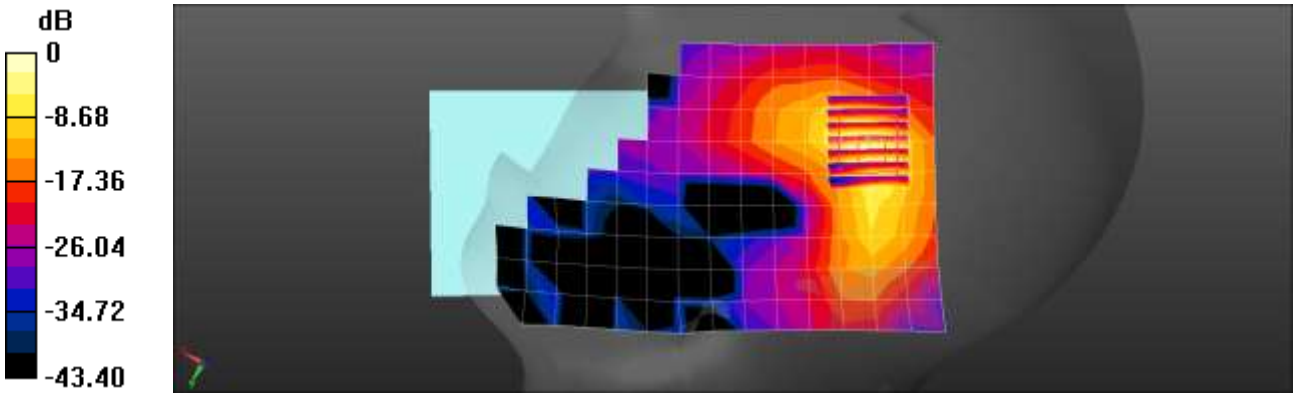
DUT: SM-S721U
Communication System: UID 0, LTE 48(FCC) (0); Frequency: 3690 MHz;Duty Cycle: 1:1.58016
Medium parameters used: f = 3690 MHz; σ = 3.065 S/m; ε_r = 35.982; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3690 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 48 Head Right Tilt QPSK 20MHz 1RB 0offset 56640ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.40 W/kg

LTE Band 48 Head Right Tilt QPSK 20MHz 1RB 0offset 56640ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 7.418 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.35 W/kg
SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.228 W/kg
Maximum value of SAR (measured) = 1.58 W/kg



0 dB = 1.58 W/kg = 1.99 dBW/kg

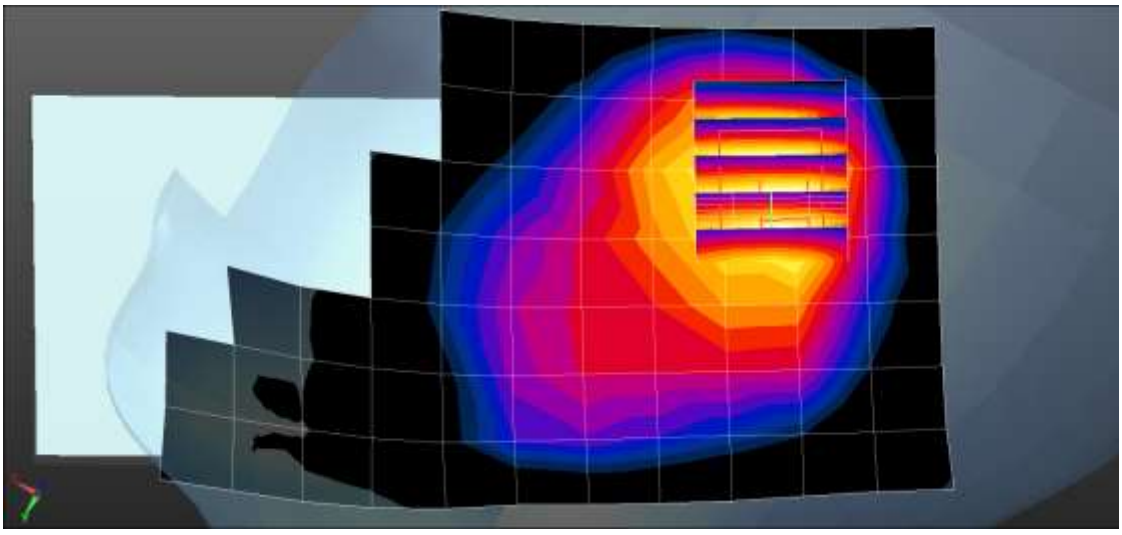
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.8 ℃
Liquid Temperature: 21.7 ℃
Test Date: 06/27/2024
Plot No.: A16
Band: LTE FDD Band 66 Head SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.351 S/m; εr = 41.158; ρ = 1000 kg/m3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1745 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 66 Head Right Touch QPSK 15MHz 36RB 0offset 132322ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.870 W/kg
LTE Band 66 Head Right Touch QPSK 15MHz 36RB 0offset 132322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.61 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.305 W/kg
aximum value of SAR (measured) = 0.849 W/kg



0 dB = 0.849 W/kg = -0.71 dBW/kg

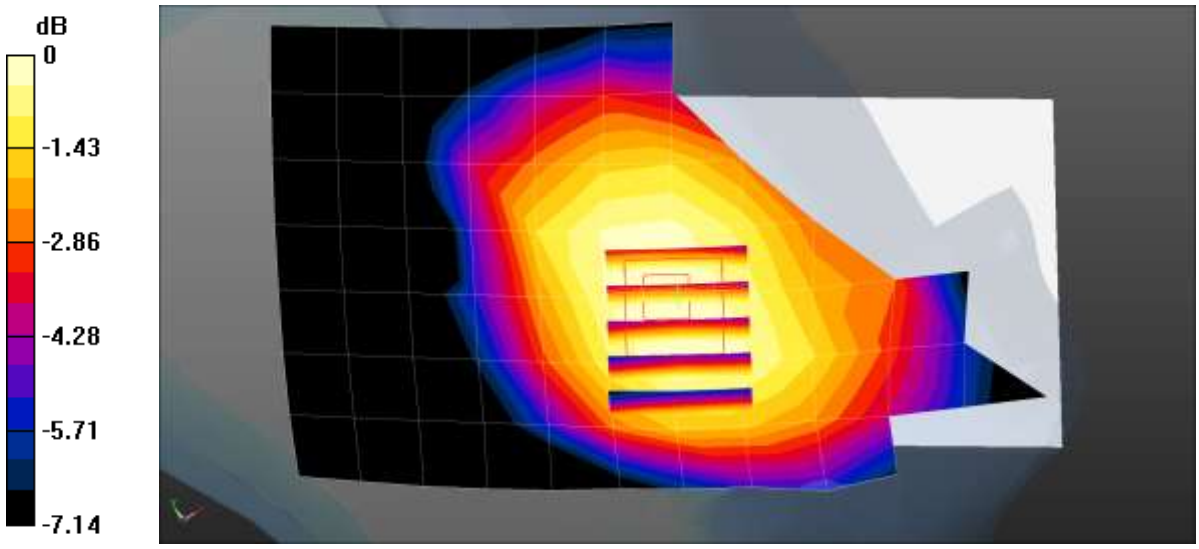
Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**19.1 ℃**
Liquid Temperature:	**19.0 ℃**
Test Date:	**06/20/2024**
Plot No.:	**A17**
Band:	**LTE FDD Band 71 Head SAR**

DUT: SM-S721U
Communication System: UID 0, LTE Band 71 (0); Frequency: 683 MHz;Duty Cycle: 1:1
Medium parameters used (extrapolated): f = 683 MHz; σ = 0.874 S/m; ε_r = 43.507; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 683 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 71 Head Left Touch QPSK 20MHz 1RB 0offset 133322ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.129 W/kg
LTE Band 71 Head Left Touch QPSK 20MHz 1RB 0offset 133322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.996 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.129 W/kg
SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.101 W/kg
Maximum value of SAR (measured) = 0.129 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.3 ℃
Test Date: 07/02/2024
Plot No.: A18
Band: NR FDD Band n7 Head SAR

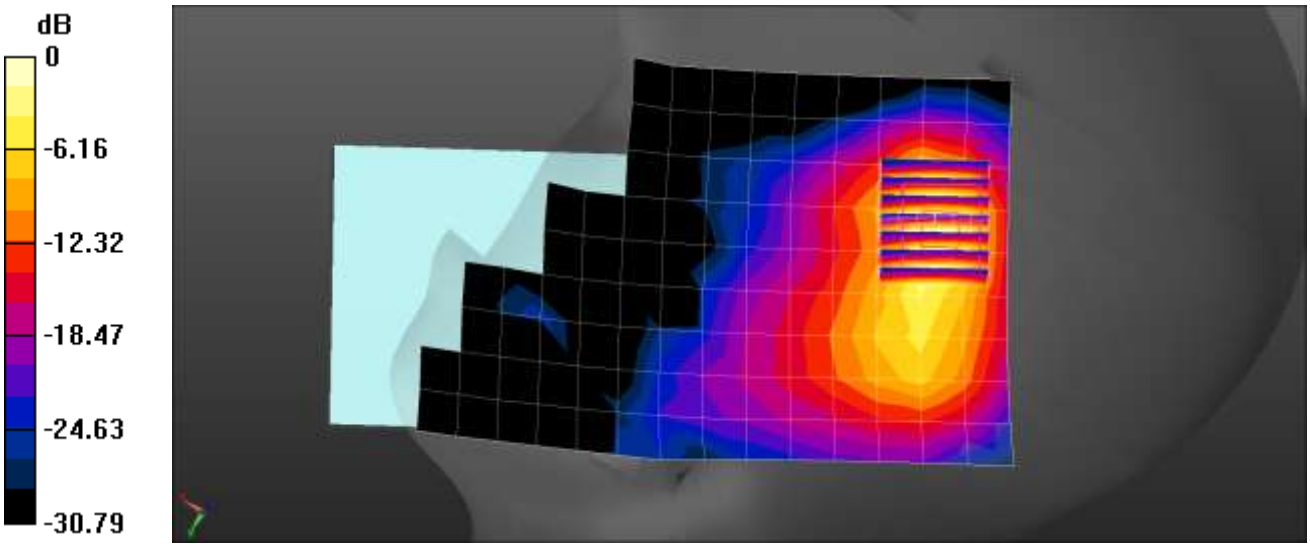
DUT: SM-S721U
Communication System: UID 0, NR n7 (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2535 MHz; σ = 1.935 S/m; ε_r = 38.838; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2535 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band 7 Head Right Tilt CP QPSK 40MHz 108RB 108offset 507000ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.941 W/kg

NR Band 7 Head Right Tilt CP QPSK 40MHz 108RB 108offset 507000ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.37 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.671 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

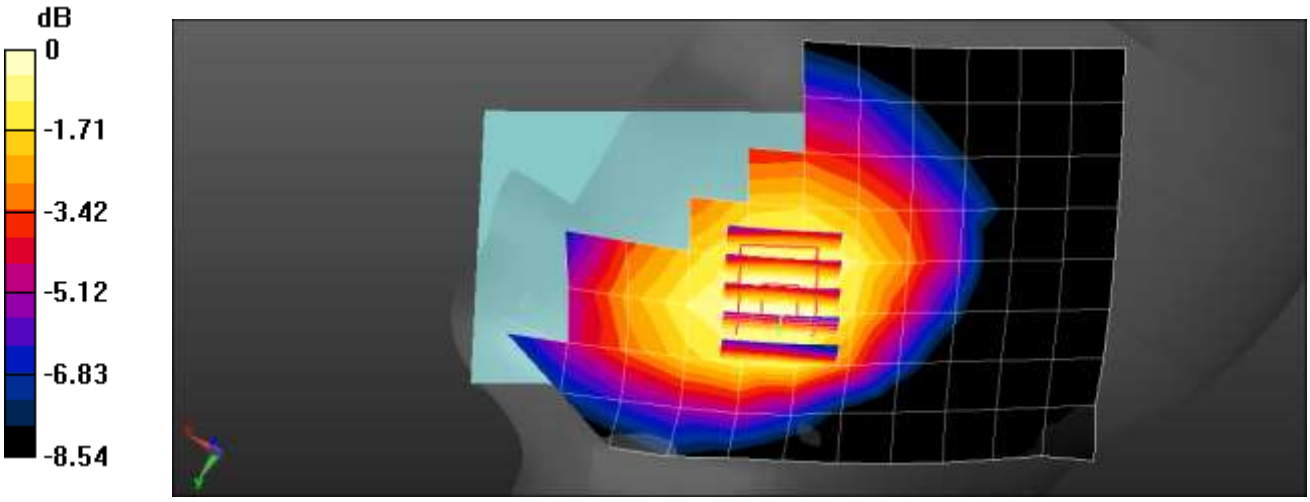
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.6 ℃
Test Date: 06/18/2024
Plot No.: A19
Band: NR FDD Band n12 Head SAR

DUT: SM-S721U
Communication System: UID 0, NR FDD (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.864 S/m; ε_r = 41.629; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.65, 10.07, 8.84) @ 707.5 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n12 Head Right Touch DFT-s QPSK 15MHz 1RB 77offset 141500ch/Area Scan (9x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.135 W/kg
NR Band n12 Head Right Touch DFT-s QPSK 15MHz 1RB 77offset 141500ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.709 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.150 W/kg
SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.099 W/kg
Maximum value of SAR (measured) = 0.141 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.2 ℃
Liquid Temperature: 23.0 ℃
Test Date: 07/01/2024
Plot No.: A20
Band: NR FDD Band n25 Head SAR

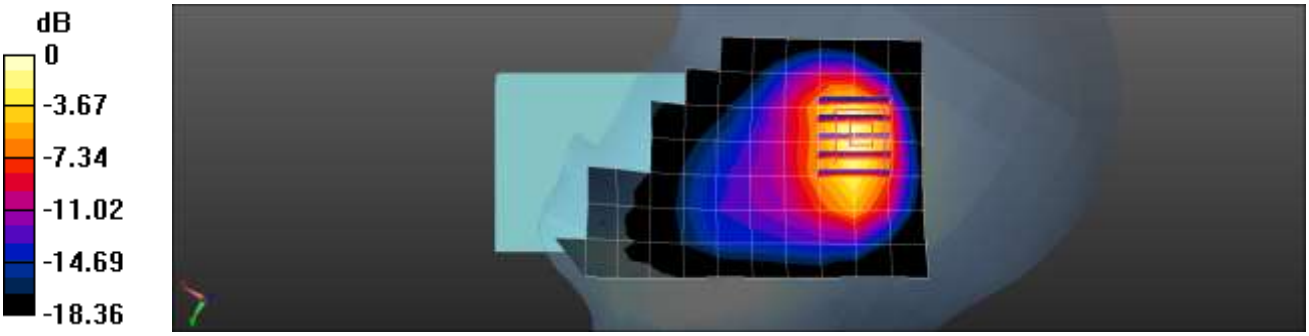
DUT: SM-S721U
Communication System: UID 0, NR Band 2,25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.374 S/m; ε_r = 38.87; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1882.5 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band 25 Head Right Tilt QPSK 40MHz 108RB 108offset 376500ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.912 W/kg

NR Band 25 Head Right Tilt QPSK 40MHz 108RB 108offset 376500ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.49 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.604 W/kg; SAR(10 g) = 0.297 W/kg
Maximum value of SAR (measured) = 0.889 W/kg



0 dB = 0.889 W/kg = -0.51 dBW/kg

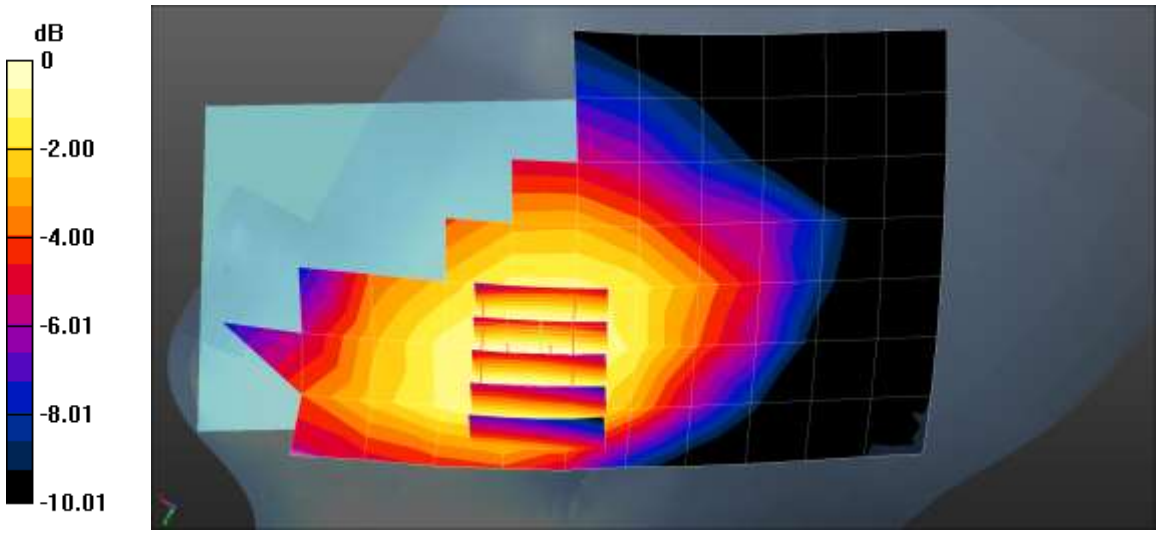
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.0 ℃
Liquid Temperature: 21.0 ℃
Test Date: 06/19/2024
Plot No.: A21
Band: NR FDD Band n26 Head SAR

DUT: SM-S721U
Communication System: UID 0, NR Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.922 S/m; ε_r = 42.667; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 831.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n26 Head Right Touch DFT-s QPSK 20MHz 1RB 53offset 166300ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.149 W/kg
NR Band n26 Head Right Touch DFT-s QPSK 20MHz 1RB 53offset 166300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.783 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.156 W/kg
SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.109 W/kg
Maximum value of SAR (measured) = 0.152 W/kg



0 dB = 0.152 W/kg = -8.18 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.8 ℃
Liquid Temperature: 19.8 ℃
Test Date: 06/25/2024
Plot No.: A22
Band: NR FDD Band n30 Head SAR

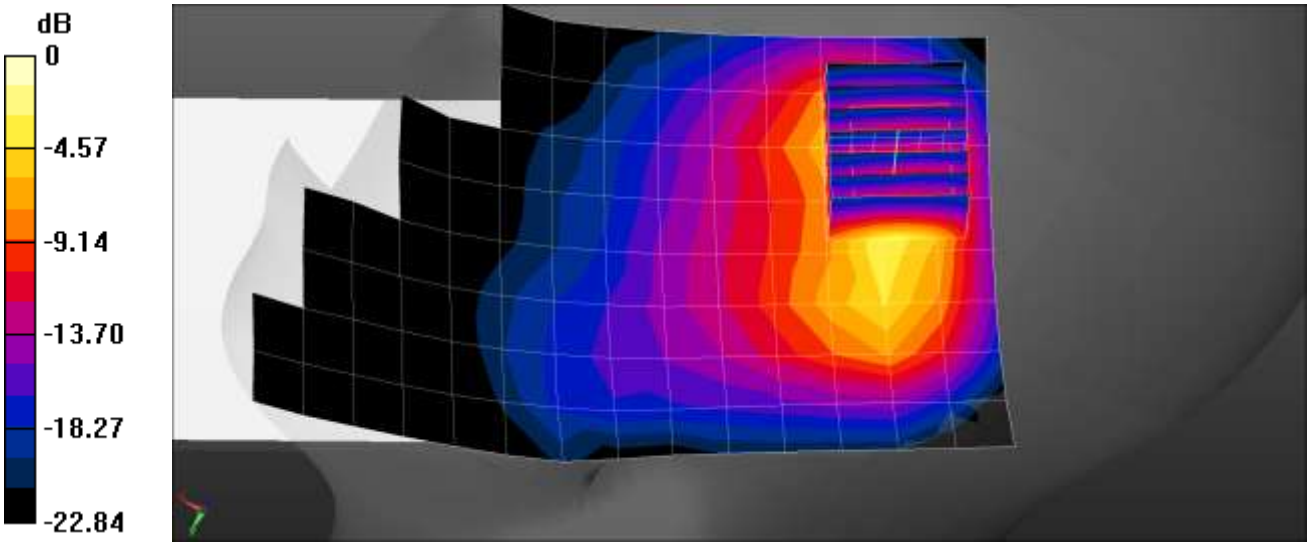
DUT: SM-S721U
Communication System: UID 0, n30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.675 S/m; ε_r = 39.284; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2310 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band 30 Head Right Tilt CP QPSK 10MHz 1RB 1offset 462000ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.876 W/kg

NR Band 30 Head Right Tilt CP QPSK 10MHz 1RB 1offset 462000ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.45 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.703 W/kg; SAR(10 g) = 0.291 W/kg
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.30 W/kg = 1.14 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.8 ℃
Liquid Temperature: 19.6 ℃
Test Date: 06/20/2024
Plot No.: A23
Band: NR TDD Band n38 Head SAR

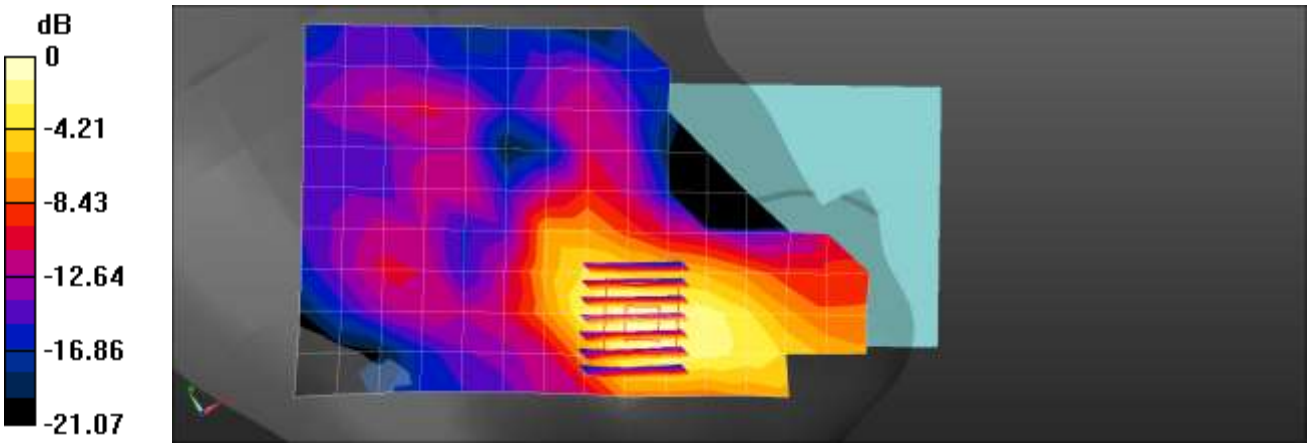
DUT: SM-S721U
Communication System: UID 0, NR n38 (0); Frequency: 2595 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2595 MHz; σ = 2.026 S/m; ε_r = 38.052; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2595 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n38 Head Left Touch DFT-s QPSK 40MHz 1RB 1offset 519000ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.213 W/kg

NR Band n38 Head Left Touch DFT-s QPSK 40MHz 1RB 1offset 519000ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.316 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.291 W/kg
SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.087 W/kg
Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -6.13 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.2 ℃
Liquid Temperature: 22.2 ℃
Test Date: 08/08/2024
Plot No.: A24
Band: NR TDD Band n41 Head SAR

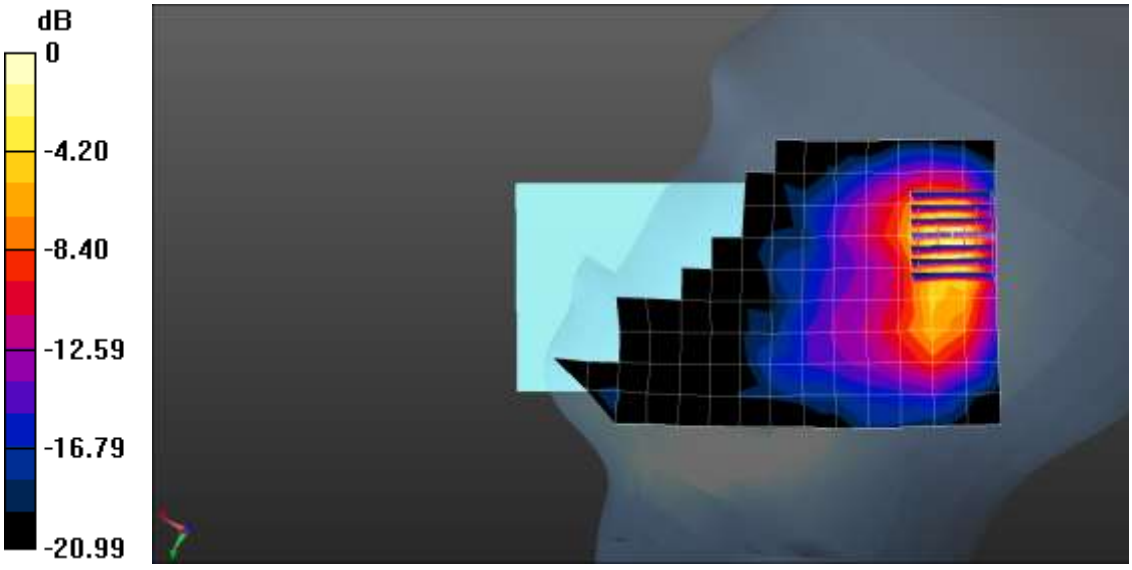
Communication System: UID 0, NR Band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.023 S/m; εr = 38.063; ρ = 1000 kg/m3
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.32, 4.65, 4.64) @ 2592.99 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2024-07-12
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n41 SRS CW Head Right Tilt 100MHz 518598ch/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm.
Maximum value of SAR (measured) = 0.628 W/kg

NR Band n41 SRS CW Head Right Tilt 100MHz 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.71 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 0.915 W/kg



0 dB = 0.915 W/kg = -0.39 dBW/kg

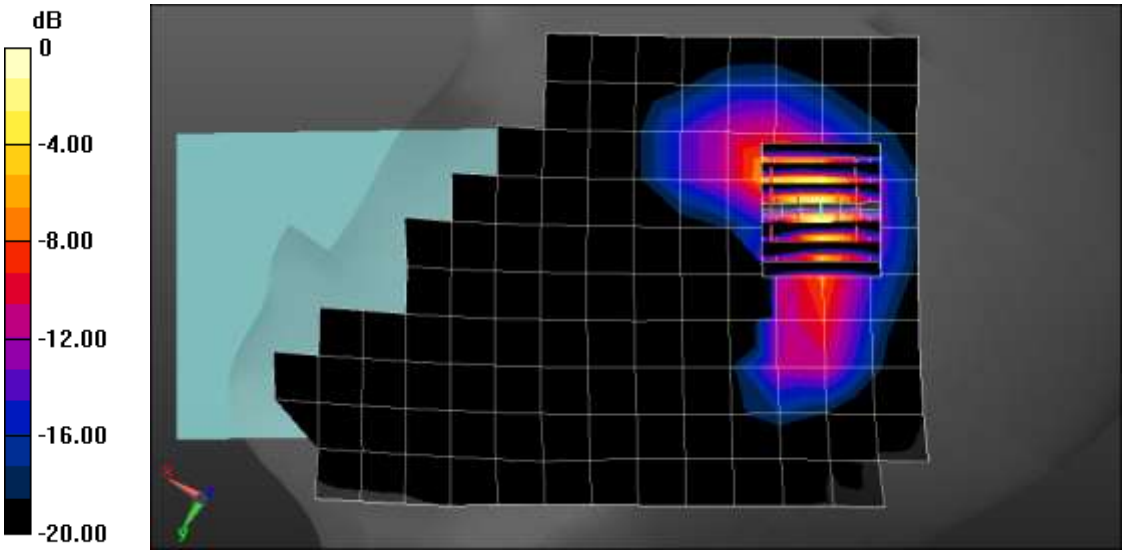
Test Laboratory: HCT CO.,LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.1 ℃
Liquid Temperature: 23.0 ℃
Test Date: 07/08/2024
Plot No.: A25
Band: NR TDD Band n48 Head SAR

DUT: SM-S721U
Communication System: UID 0, n48 (0); Frequency: 3624.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3624.99 MHz; σ = 3.03 S/m; ε_r = 36.488; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3624.99 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n48 Head Right Tilt DFT-s QPSK 40MHz 50RB 28offset 641666ch/Area Scan (11x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.947 W/kg
NR Band n48 Head Right Tilt DFT-s QPSK 40MHz 50RB 28offset 641666ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 9.192 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.559 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 1.25 W/kg



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

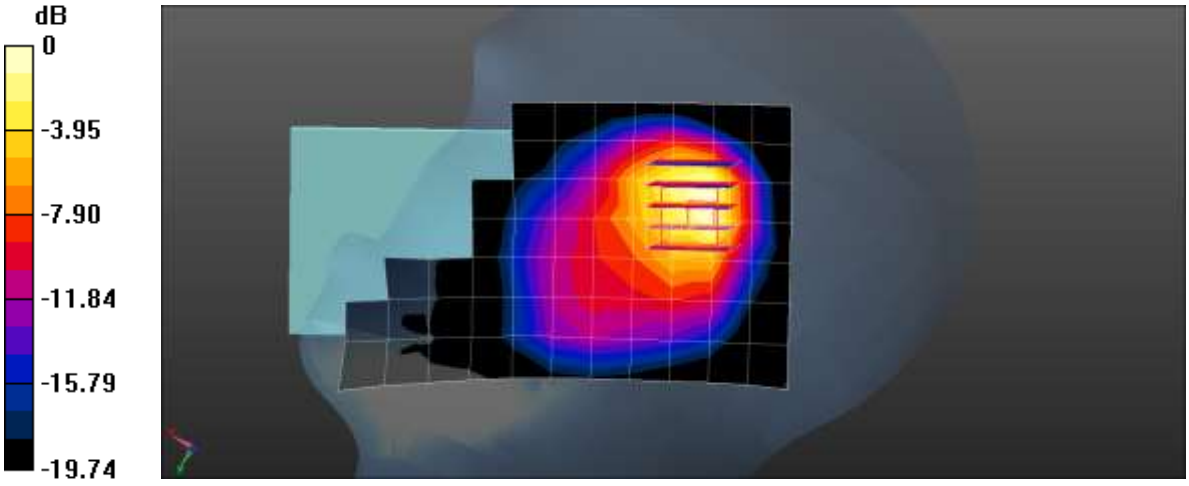
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.1 ℃
Liquid Temperature: 23.0 ℃
Test Date: 07/02/2024
Plot No.: A26
Band: NR FDD Band n66 Head SAR

DUT: SM-S721U
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.33 S/m; ε_r = 41.363; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1745 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

NR Band 66 Head Right Touch CP QPSK 40MHz 1RB 1offset 349000ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.997 W/kg
NR Band 66 Head Right Touch CP QPSK 40MHz 1RB 1offset 349000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.80 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.348 W/kg
Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 ℃
Liquid Temperature: 21.8 ℃
Test Date: 06/17/2024
Plot No.: A27
Band: NR FDD Band n70 Head SAR

DUT: SM-S721U
Procedure Name: NR Band 70 Head Left Touch DFT-s QPSK 15MHz 1RB 77offset 340500ch

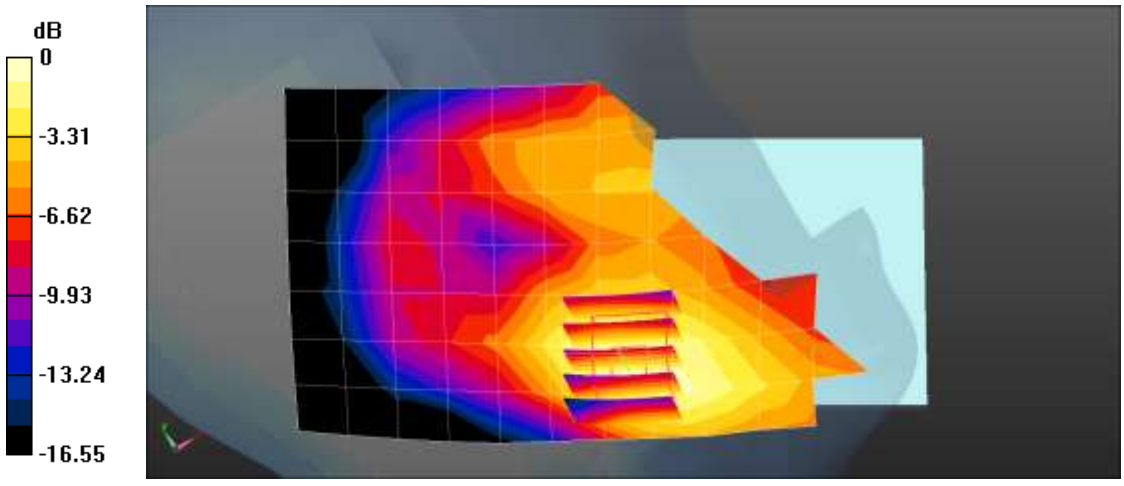
Communication System: UID 0, NR Band n70 (0); Frequency: 1702.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1702.5 MHz; σ = 1.309 S/m; εr = 41.102; ρ = 1000 kg/m3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.49, 8.77, 7.91) @ 1702.5 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band 70 Head Left Touch DFT-s QPSK 15MHz 1RB 77offset 340500ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.106 W/kg

NR Band 70 Head Left Touch DFT-s QPSK 15MHz 1RB 77offset 340500ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.486 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.127 W/kg
SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.061 W/kg
Maximum value of SAR (measured) = 0.115 W/kg



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

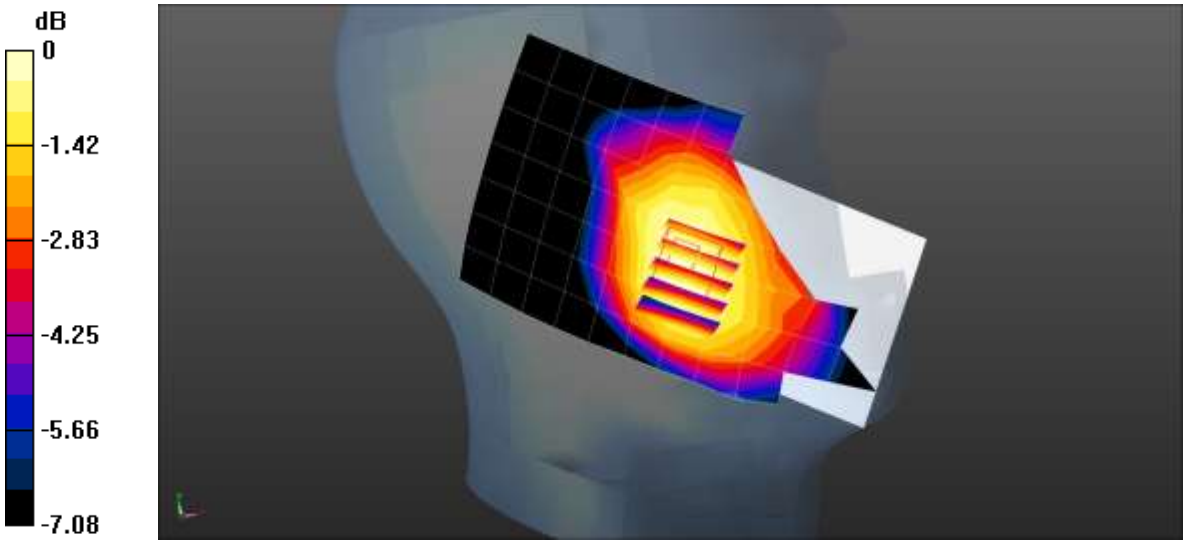
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.4 ℃
Liquid Temperature: 19.3 ℃
Test Date: 06/17/2024
Plot No.: A28
Band: NR FDD Band n71 Head SAR

DUT: SM-S721U
Communication System: UID 0, NR Band 71 (0); Frequency: 680.5 MHz;Duty Cycle: 1:1
Medium parameters used (extrapolated): f = 680.5 MHz; σ = 0.832 S/m; ε_r = 41.677; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 680.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n71 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 136100ch/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0984 W/kg
NR Band n71 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 136100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.213 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.0990 W/kg
SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.079 W/kg
Maximum value of SAR (measured) = 0.0983 W/kg



0 dB = 0.0983 W/kg = -10.07 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.8 ℃
Liquid Temperature: 20.6 ℃
Test Date: 06/17/2024
Plot No.: A29
Band: NR TDD Band n77 Head SAR

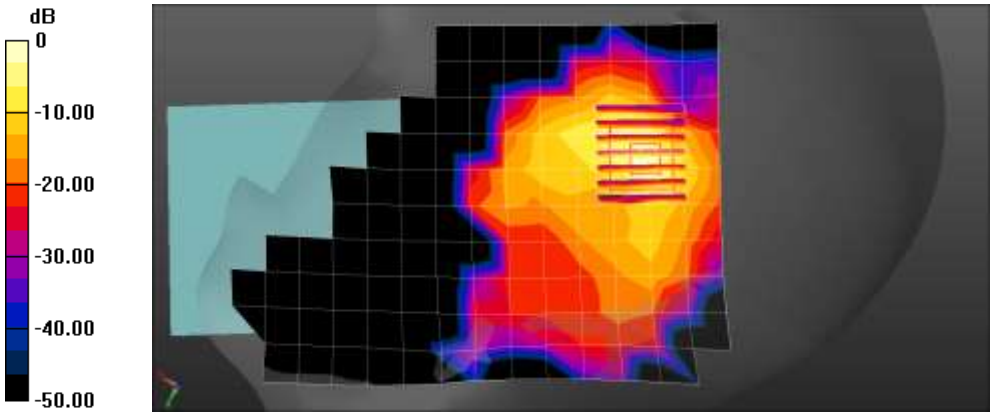
DUT: SM-S721U
Procedure Name: NR Band n77 Head Right Tilt DFT-s QPSK 100MHz 135RB 0offset 662000ch
Communication System: UID 0, n77 (0); Frequency: 3930 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3930 MHz; σ = 3.385 S/m; εr = 36.319; ρ = 1000 kg/m3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3930 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n77 Head Right Tilt DFT-s QPSK 100MHz 135RB 0offset 662000ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.36 W/kg

NR Band n77 Head Right Tilt DFT-s QPSK 100MHz 135RB 0offset 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 2.821 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 2.55 W/kg
SAR(1 g) = 0.777 W/kg; SAR(10 g) = 0.229 W/kg
Maximum value of SAR (measured) = 1.69 W/kg



0 dB = 1.69 W/kg = 2.28 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.7 ℃
Liquid Temperature: 21.6 ℃
Test Date: 07/03/2024
Plot No.: A30
Band: 2.4 ㎓ WLAN Head SAR

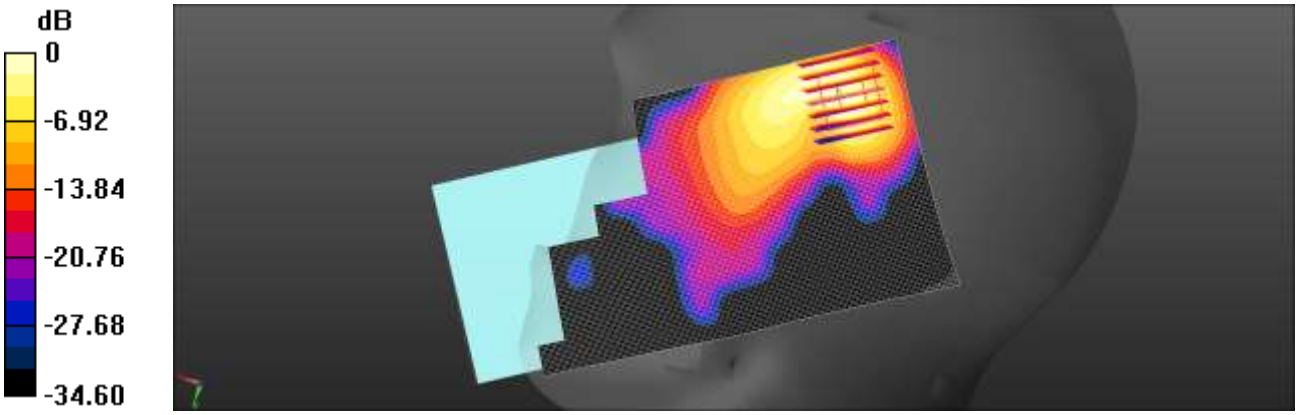
DUT: SM-S721U
Communication System: UID 0, 2450MHz (0); Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.837 S/m; ε_r = 39.608; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.41, 7.17, 7.14) @ 2462 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

802.11b Head Right Touch 1Mbps 11ch/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.695 W/kg

802.11b Head Right Touch 1Mbps 11ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.059 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.849 W/kg
SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.128 W/kg
Maximum value of SAR (measured) = 0.609 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.3 ℃
Liquid Temperature: 20.3 ℃
Test Date: 06/28/2024
Plot No.: A31
Band: 5 ㎓ WLAN Head SAR
Measurement Report for Device, CHEEK, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), Channel 155 (5775.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	U-NII-4	WLAN, 10544-AAD	5855.000, 171	4.76	5.21	36.3

Hardware Setup

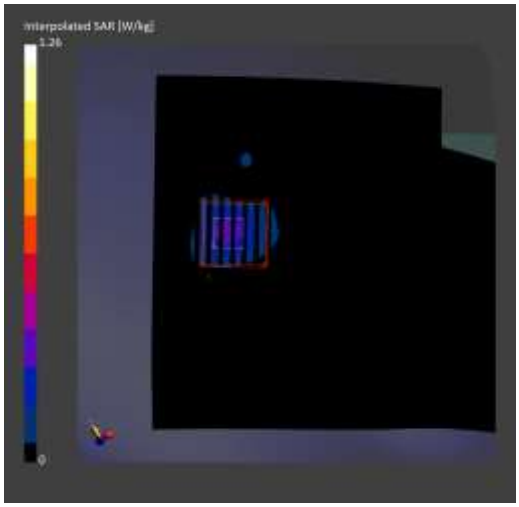
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.254	0.304
psSAR10g [W/Kg]	0.086	0.083
Power Drift [dB]	-0.07	-0.05
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		6.7



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: A32
Band: 6 ㎓ WLAN Head SAR

Measurement Report for Device, CHEEK, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 175 (6825.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-7	WLAN, 10755-AAC	6825.000, 175	5.6	6.63	33.4

Hardware Setup

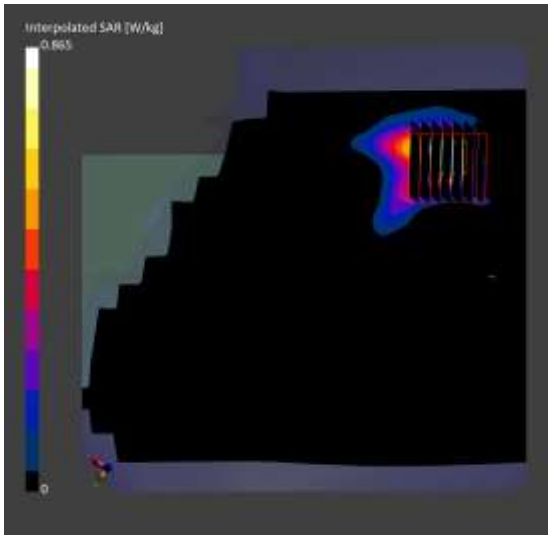
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	119.0 x 204.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.118	0.140
psSAR10g [W/Kg]	0.039	0.042
psAPD (1.0cm2, sq) [W/m2]		12.1
psAPD (4.0cm2, sq) [W/m2]		5.94
Power Drift [dB]	-0.17	0.17
M2/M1 [%]		51.3
Dist 3dB Peak [mm]		5.7



Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**21.1 ℃**
Liquid Temperature:	**21.0 ℃**
Test Date:	**06/25/2024**
Plot No.:	**A33**
Band:	**Bluetooth Head SAR**

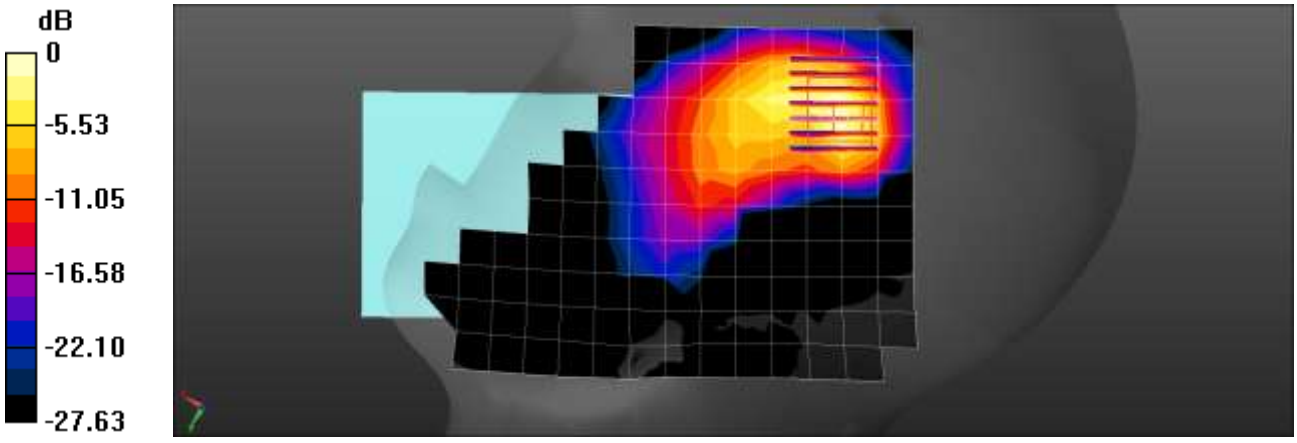
DUT: SM-S721U
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.738 S/m; ε_r = 38.953; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF (7.85, 8.15, 7.38) @ 2441 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Bluetooth Head Right Touch DH5 39ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.512 W/kg

Bluetooth Head Right Touch DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.754 W/kg
SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.125 W/kg
Maximum value of SAR (measured) = 0.584 W/kg



0 dB = 0.584 W/kg = -2.34 dBW/kg

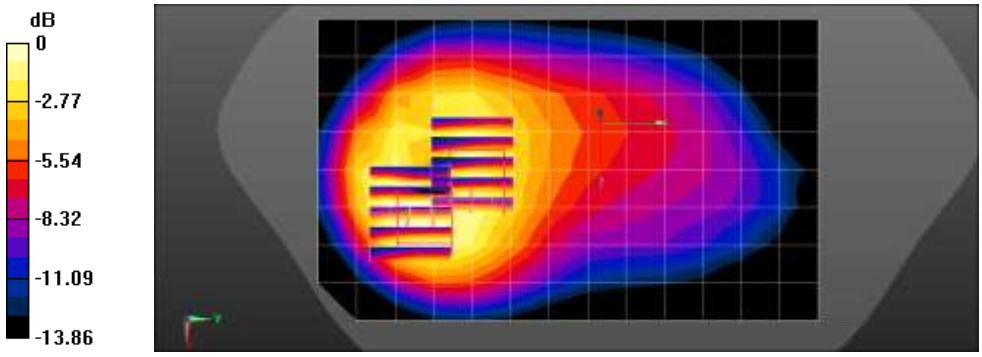
Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**21.8 ℃**
Liquid Temperature:	**21.7 ℃**
Test Date:	**06/04/2024**
Plot No.:	**B1**
Band:	**GSM850 Body/Hotspot SAR**

DUT: SM-S721U
Communication System: UID 0, GSM 850 3Tx (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.77013
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.925 S/m; ε_r = 41.216; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 836.6 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

GSM850 Body Rear 3Tx 190ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.718 W/kg
GSM850 Body Rear 3Tx 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.29 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.867 W/kg
SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.360 W/kg
Maximum value of SAR (measured) = 0.773 W/kg
GSM850 Body Rear 3Tx 190ch/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.29 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.292 W/kg
Maximum value of SAR (measured) = 0.703 W/kg



0 dB = 0.703 W/kg = -1.53 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.0 ℃
Liquid Temperature: 21.9 ℃
Test Date: 06/05/2024
Plot No.: B2
Band: GSM1900 Body/Hotspot SAR

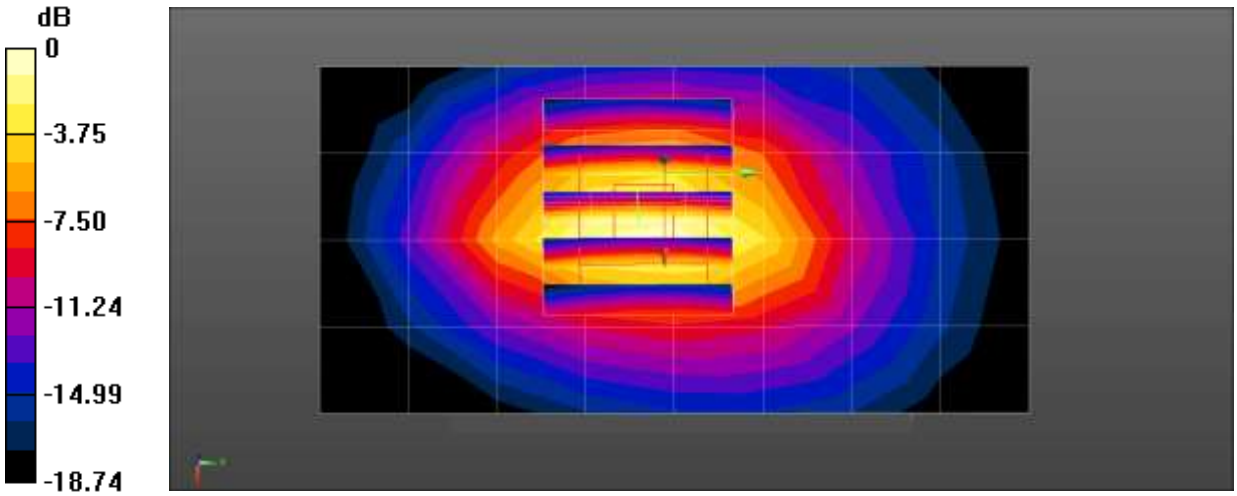
DUT: SM-S721U
Communication System: UID 0, GSM 1900 2Tx (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 39.234; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1880 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

GSM1900 2Tx Body Bottom 661ch/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.525 W/kg

GSM1900 2Tx Body Bottom 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.47 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.667 W/kg
SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.202 W/kg
Maximum value of SAR (measured) = 0.577 W/kg



0 dB = 0.577 W/kg = -2.39 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.2 ℃
Liquid Temperature: 21.0 ℃
Test Date: 06/10/2024
Plot No.: B3
Band: UMTS Band 5 Body/Hotspot SAR

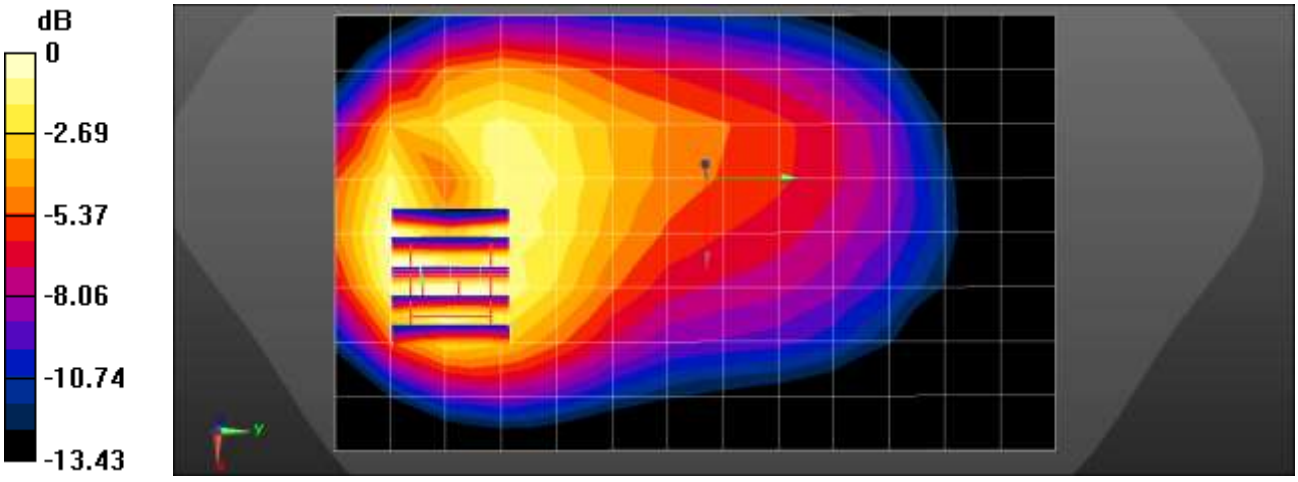
DUT: SM-S721U
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.926 S/m; ε_r = 40.206; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 836.6 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 5 Body Rear 4183ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.335 W/kg

UMTS Band 5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.09 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.379 W/kg
SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.161 W/kg
Maximum value of SAR (measured) = 0.335 W/kg



0 dB = 0.335 W/kg = -4.75 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.7 ℃
Liquid Temperature: 22.7 ℃
Test Date: 07/04/2024
Plot No.: B4
Band: UMTS Band 4 Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.346 S/m; εr = 41.422; ρ = 1000 kg/m3
Phantom section: Flat Section

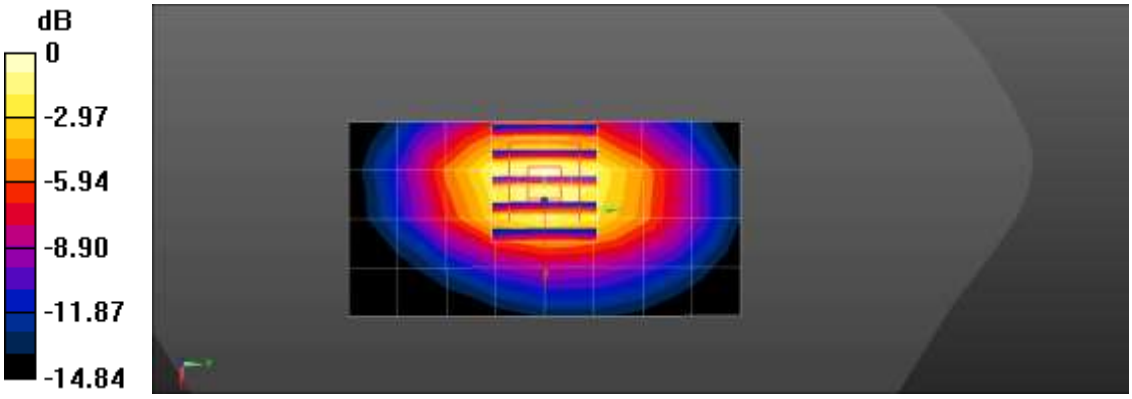
DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.49, 8.77, 7.91) @ 1732.4 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 4 Body Bottom 1412ch/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.867 W/kg

UMTS Band 4 Body Bottom 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.95 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.705 W/kg; SAR(10 g) = 0.418 W/kg
Maximum value of SAR (measured) = 0.973 W/kg



0 dB = 0.973 W/kg = -0.12 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.1 ℃
Liquid Temperature: 22.0 ℃
Test Date: 07/03/2024
Plot No.: B5
Band: UMTS Band 2 Body/Hotspot SAR

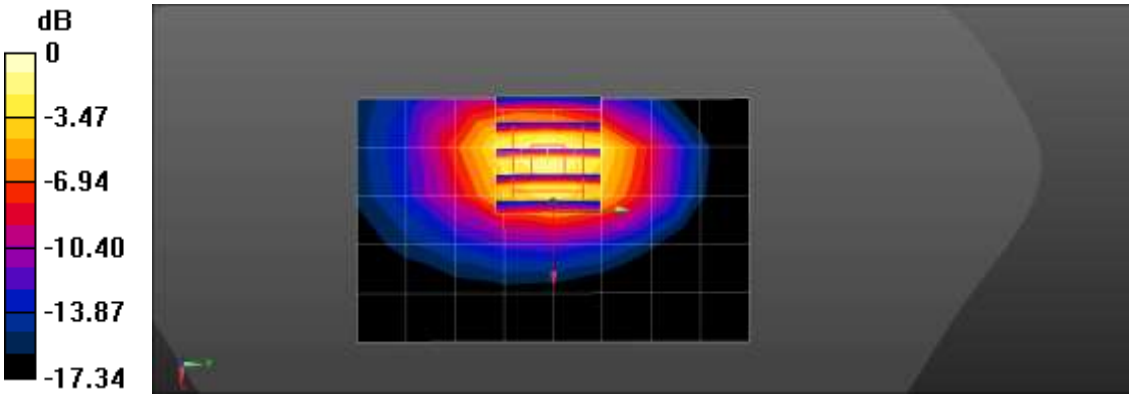
DUT: SM-S721U
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; εr = 39.231; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1880 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

UMTS Band 2 Body Bottom 9400ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.849 W/kg

UMTS Band 2 Body Bottom 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.17 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.381 W/kg
Maximum value of SAR (measured) = 1.02 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.9 ℃
Liquid Temperature: 20.9 ℃
Test Date: 06/26/2024
Plot No.: B6
Band: LTE FDD Band 7 Body/Hotspot SAR

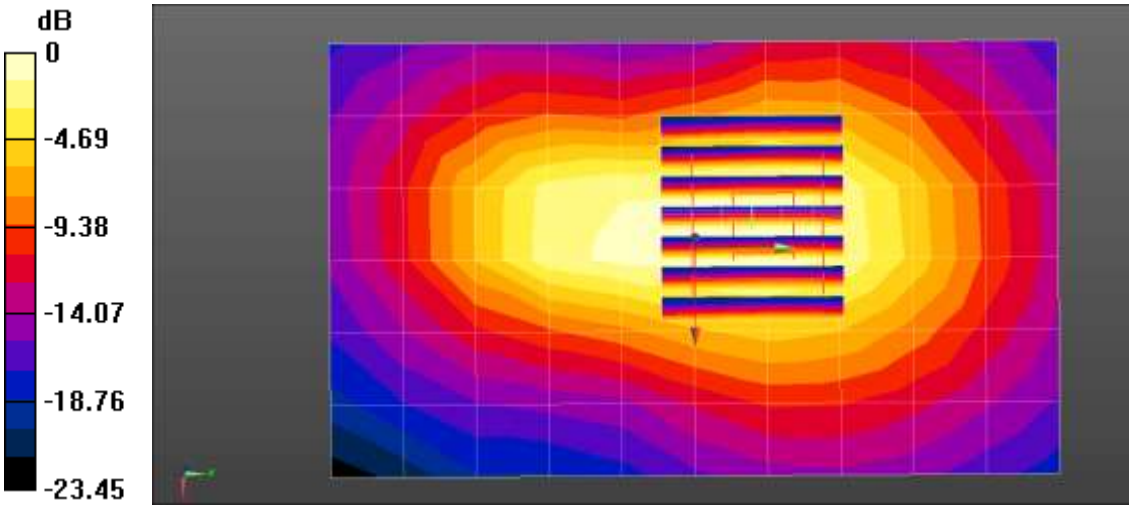
DUT: SM-S721U
Communication System: UID 0, LTE Band 7 (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 1.895 S/m; εr = 38.664; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2560 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 7 Body Top QPSK 20MHz 1RB 0offset 21350ch/Area Scan (7x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.681 W/kg

LTE Band 7 Body Top QPSK 20MHz 1RB 0offset 21350ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.38 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.994 W/kg
SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.241 W/kg
Maximum value of SAR (measured) = 0.797 W/kg



0 dB = 0.797 W/kg = -0.99 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.0 ℃
Liquid Temperature: 18.9 ℃
Test Date: 06/11/2024
Plot No.: B7
Band: LTE FDD Band 12 Body/Hotspot SAR

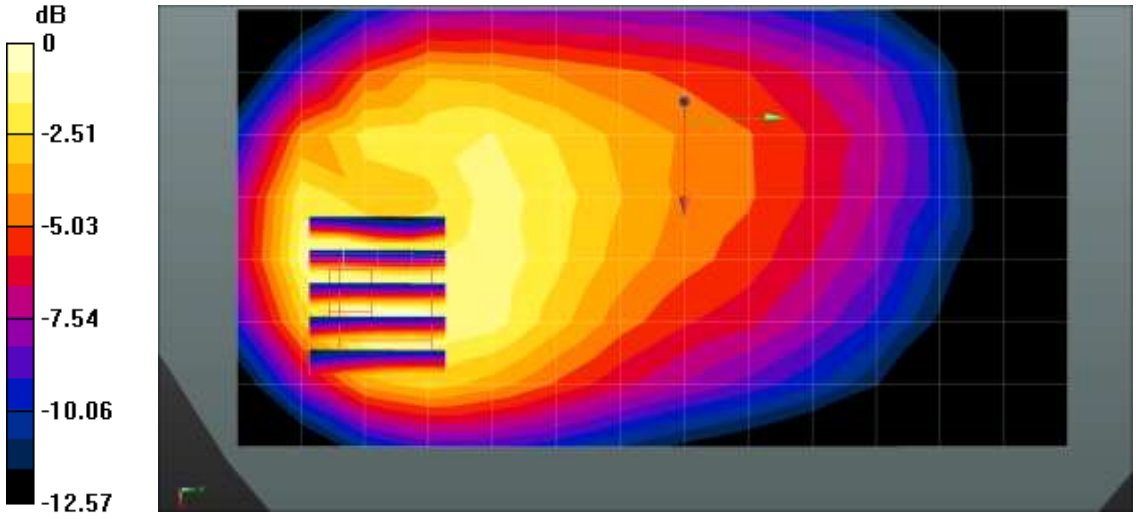
DUT: SM-S721U
Communication System: UID 0, LTE Band12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.857 S/m; ε_r = 43.446; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 707.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 Body Rear QPSK 10MHz 1RB 24offset 23095ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.466 W/kg

LTE Band 12 Body Rear QPSK 10MHz 1RB 24offset 23095ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.05 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.555 W/kg
SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.231 W/kg
Maximum value of SAR (measured) = 0.499 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 18.5 ℃
Liquid Temperature: 18.4 ℃
Test Date: 06/12/2024
Plot No.: B8
Band: LTE FDD Band 13 Body/Hotspot SAR

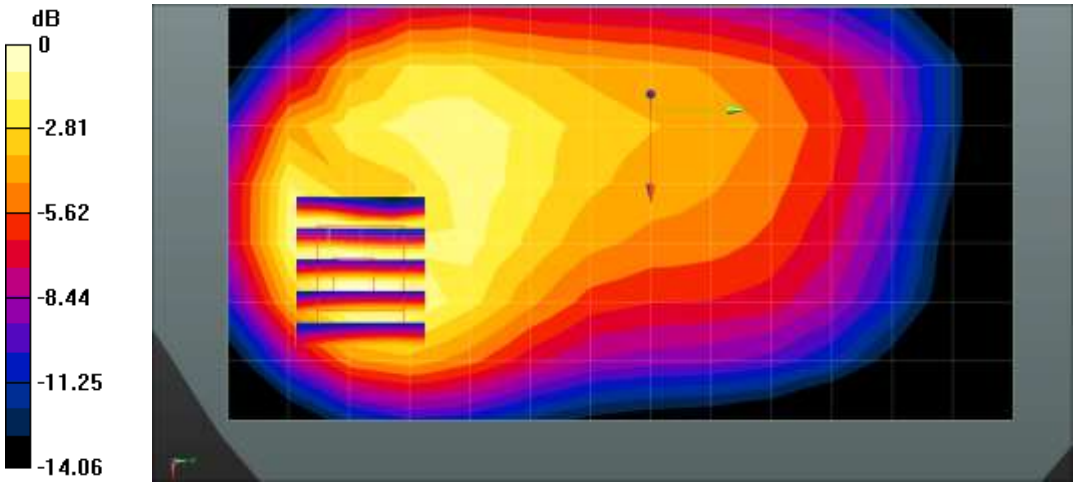
DUT: SM-S721U

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.929 S/m; ε_r = 42.36; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 782 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.554 W/kg
LTE Band 13 Body Rear QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.82 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.681 W/kg
SAR(1 g) = 0.457 W/kg; SAR(10 g) = 0.282 W/kg
Maximum value of SAR (measured) = 0.610 W/kg



0 dB = 0.610 W/kg = -2.15 dBW/kg

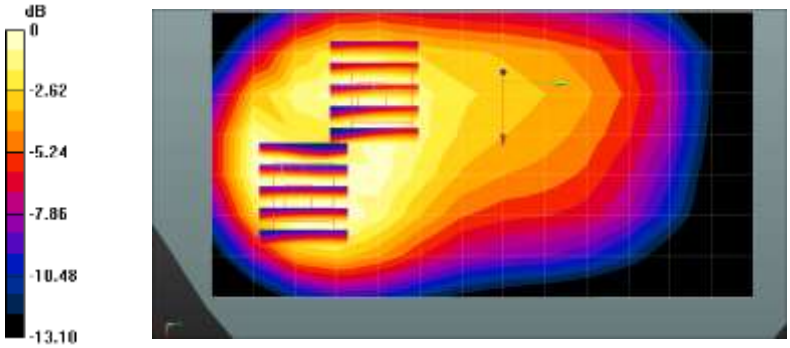
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.5 ℃
Liquid Temperature: 19.4 ℃
Test Date: 06/13/2024
Plot No.: B9
Band: LTE FDD Band 14 Body SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band 14 (0); Frequency: 793 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 793 MHz; σ = 0.941 S/m; ε_r = 42.189; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 793 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 14 Head Body Rear QPSK 10MHz 1RB 0offset 23330ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.624 W/kg
LTE Band 14 Head Body Rear QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.86 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.774 W/kg
SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.320 W/kg
Maximum value of SAR (measured) = 0.694 W/kg
LTE Band 14 Head Body Rear QPSK 10MHz 1RB 0offset 23330ch/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.86 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.564 W/kg
SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.326 W/kg
Maximum value of SAR (measured) = 0.532 W/kg



0 dB = 0.532 W/kg = -2.74 dBW/kg

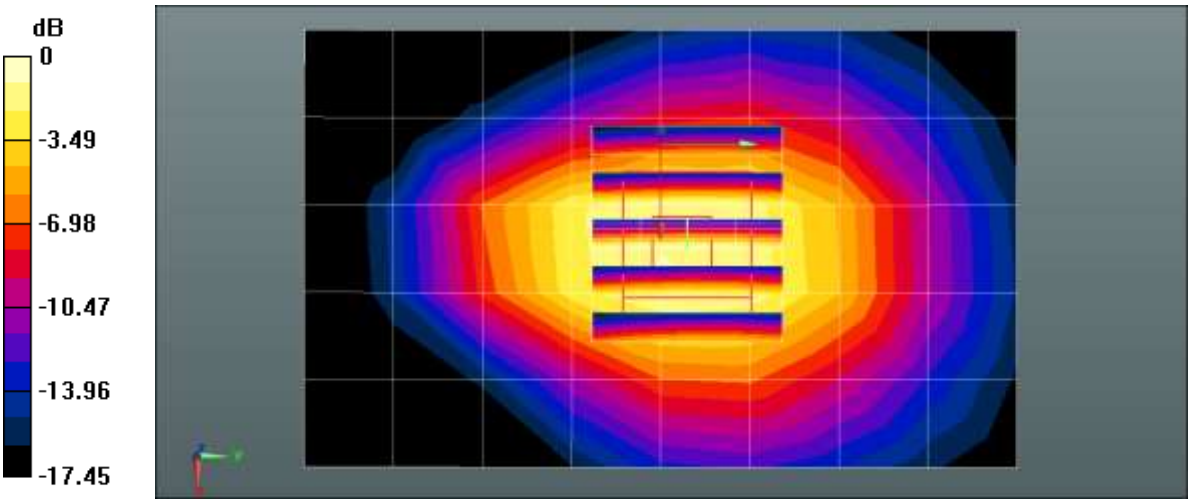
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 06/26/2024
Plot No.: B10
Band: LTE FDD Band 25 Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band 25 (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1905 MHz; σ = 1.408 S/m; ε_r = 38.691; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1905 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 25 Body Top QPSK 20MHz 1RB 99offset 26590ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.746 W/kg
LTE Band 25 Body Top QPSK 20MHz 1RB 99offset 26590ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.34 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.644 W/kg; SAR(10 g) = 0.362 W/kg
Maximum value of SAR (measured) = 0.933 W/kg



0 dB = 0.933 W/kg = -0.30 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.2 ℃
Liquid Temperature: 20.0 ℃
Test Date: 06/14/2024
Plot No.: B11
Band: LTE FDD Band 26 Body/Hotspot SAR

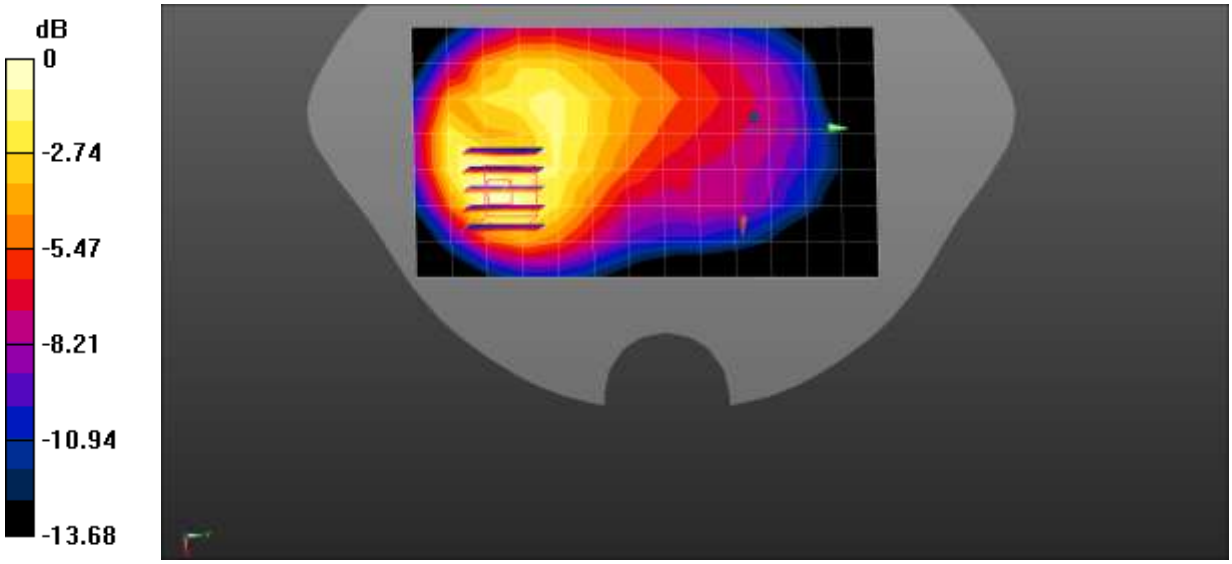
DUT: SM-S721U
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.933 S/m; ε_r = 42.872; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 831.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.554 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 = 14.28 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.706 W/kg
SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.310 W/kg
Maximum value of SAR (measured) = 0.647 W/kg



0 dB = 0.647 W/kg = -1.89 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.4 ℃
Liquid Temperature: 20.3 ℃
Test Date: 06/27/2024
Plot No.: B12
Band: LTE FDD Band 30 Body/Hotspot SAR

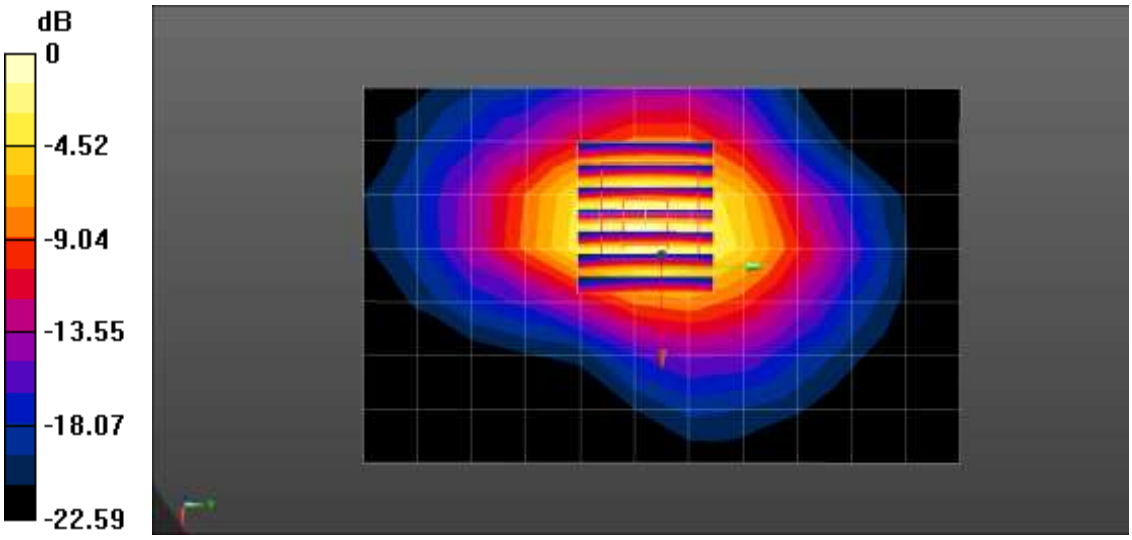
DUT: SM-S721U
Communication System: UID 0, LTE Band 30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.717 S/m; εr = 39.955; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2310 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 30 Body Bottom QPSK 10MHz 1RB 0offset 27710ch/Area Scan (8x12x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.698 W/kg

LTE Band 30 Body Bottom QPSK 10MHz 1RB 0offset 27710ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.20 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.253 W/kg
Maximum value of SAR (measured) = 0.867 W/kg



0 dB = 0.867 W/kg = -0.62 dBW/kg

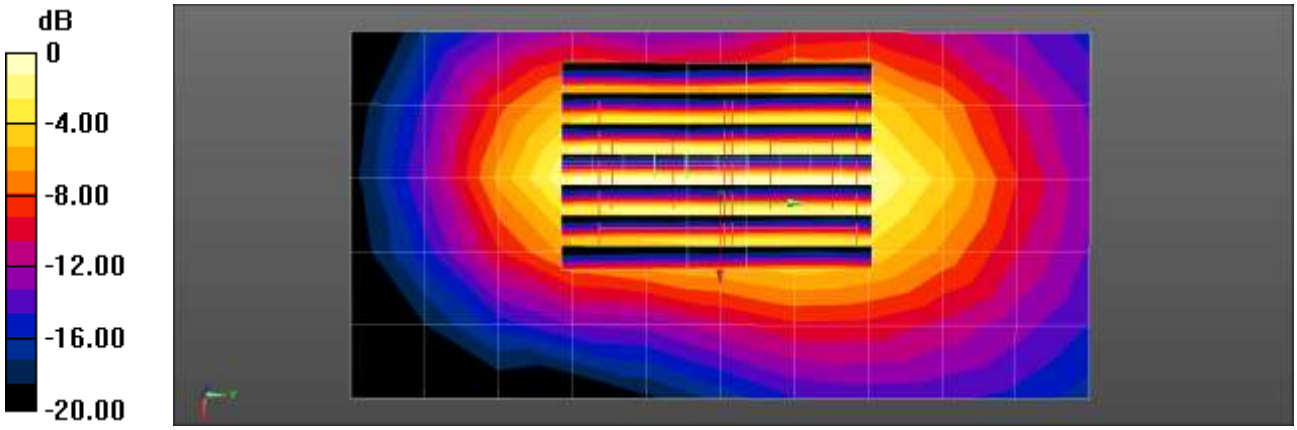
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 07/01/2024
Plot No.: B13
Band: LTE TDD Band 41 (Power Class 3) Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58052
Medium parameters used: f = 2680 MHz; σ = 1.98 S/m; ε_r = 38.559; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2680 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 Body Top QPSK 20MHz 50RB 0offset 41490ch/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.688 W/kg
LTE Band 41 Body Top QPSK 20MHz 50RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.18 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.909 W/kg
SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.168 W/kg
Maximum value of SAR (measured) = 0.691 W/kg
LTE Band 41 Body Top QPSK 20MHz 50RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.18 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.841 W/kg
SAR(1 g) = 0.365 W/kg; SAR(10 g) = 0.176 W/kg
Maximum value of SAR (measured) = 0.642 W/kg



0 dB = 0.642 W/kg = -1.92 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.0 ℃
Liquid Temperature: 22.0 ℃
Test Date: 07/05/2024
Plot No.: B14
Band: LTE TDD Band 41 (Power Class 2) Body/Hotspot SAR

DUT: SM-S721U

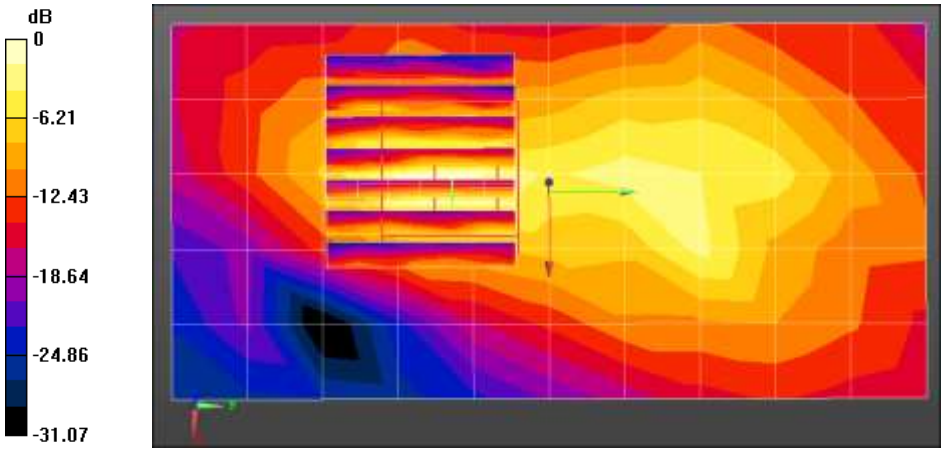
Communication System: UID 0, LTE Band41 (0); Frequency: 2593 MHz;Duty Cycle: 1:2.30728
Medium parameters used (interpolated): f = 2593 MHz; σ = 1.996 S/m; ε_r = 39.199; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2593 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 41 Body Top QPSK 20MHz 1RB 0offset 40620ch/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.395 W/kg

LTE Band 41 Body Top QPSK 20MHz 1RB 0offset 40620ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.51 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.815 W/kg
SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.562 W/kg



0 dB = 0.562 W/kg = -2.50 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.1 ℃
Liquid Temperature: 23.0 ℃
Test Date: 07/08/2024
Plot No.: B15
Band: LTE TDD Band 48 Body/Hotspot SAR

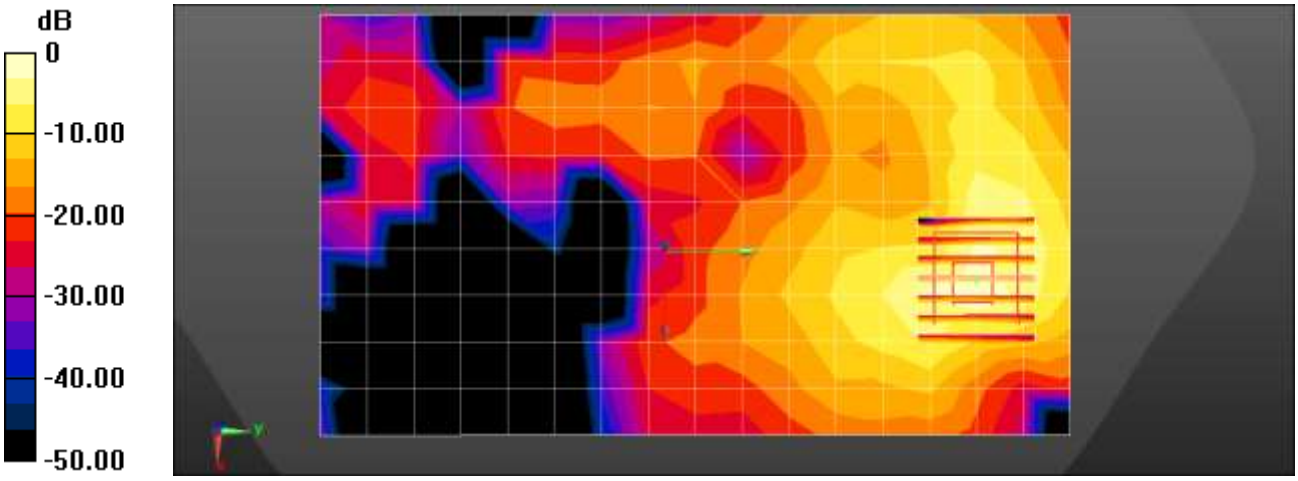
DUT: SM-S721U
Communication System: UID 0, LTE 48(FCC) (0); Frequency: 3560 MHz;Duty Cycle: 1:1.58016
Medium parameters used: f = 3560 MHz; σ = 2.967 S/m; ε_r = 36.172; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3560 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 48 Body Rear QPSK 20MHz 50RB 0offset 55340ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.637 W/kg

LTE Band 48 Body Rear QPSK 20MHz 50RB 0offset 55340ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 1.167 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.882 W/kg
SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.133 W/kg
Maximum value of SAR (measured) = 0.664 W/kg



0 dB = 0.664 W/kg = -1.78 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.8 ℃
Liquid Temperature: 23.7 ℃
Test Date: 06/05/2024
Plot No.: B16
Band: LTE FDD Band 66 Body/Hotspot SAR

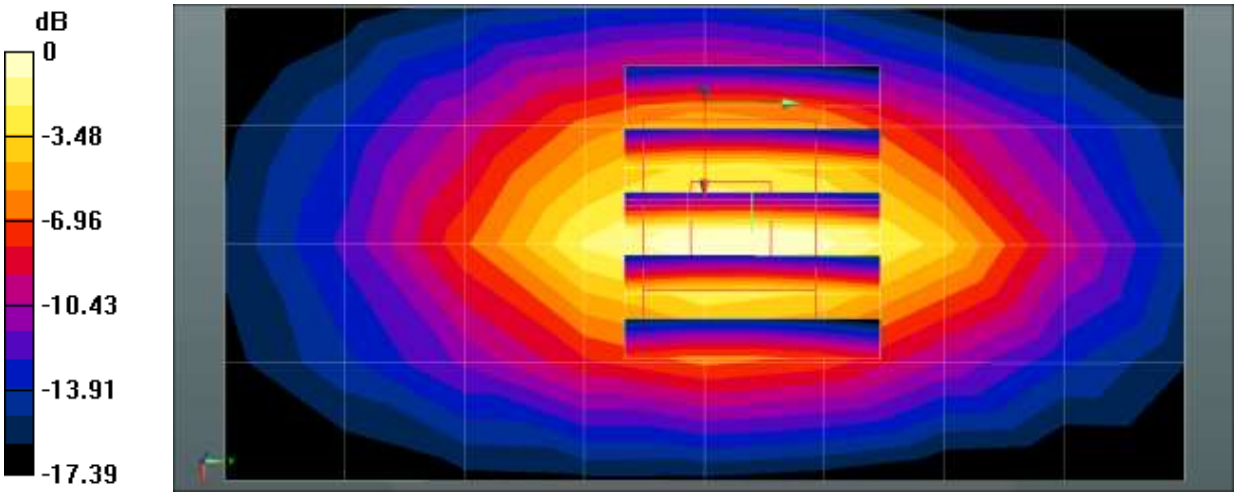
DUT: SM-S721U
Communication System: UID 0, LTE Band 66 (0); Frequency: 1772.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1772.5 MHz; σ = 1.386 S/m; ε_r = 41.226; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1772.5 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Body Bottom QPSK 15MHz 1RB 0offset 132597ch/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.05 W/kg

LTE Band 66 Body Bottom QPSK 15MHz 1RB 0offset 132597ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.81 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.726 W/kg; SAR(10 g) = 0.397 W/kg
Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

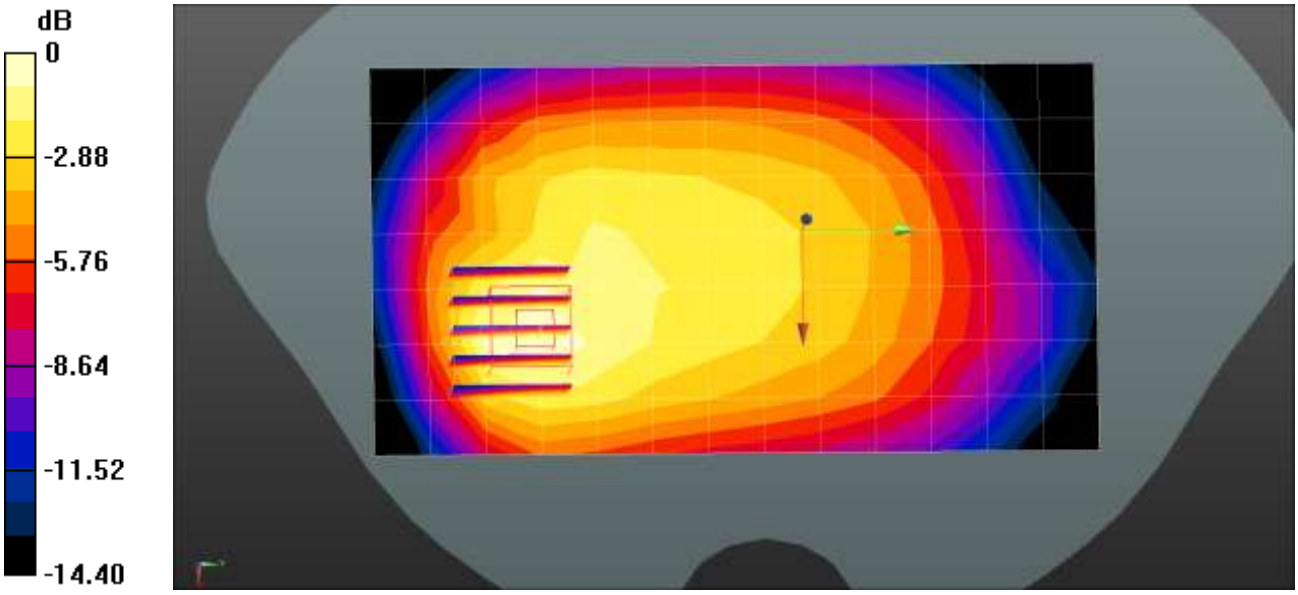
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.1 ℃
Liquid Temperature: 19.0 ℃
Test Date: 06/20/2024
Plot No.: B17
Band: LTE FDD Band 71 Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, LTE Band 71 (0); Frequency: 683 MHz;Duty Cycle: 1:1
Medium parameters used (extrapolated): f = 683 MHz; σ = 0.874 S/m; ε_r = 43.507; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 683 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 71 Body Rear QPSK 20MHz 1RB 0offset 133322ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.372 W/kg
LTE Band 71 Body Rear QPSK 20MHz 1RB 0offset 133322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.44 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.431 W/kg
SAR(1 g) = 0.303 W/kg; SAR(10 g) = 0.196 W/kg
Maximum value of SAR (measured) = 0.384 W/kg



0 dB = 0.384 W/kg = -4.16 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.3 ℃
Test Date: 07/02/2024
Plot No.: B18
Band: NR FDD Band n7 Body/Hotspot SAR

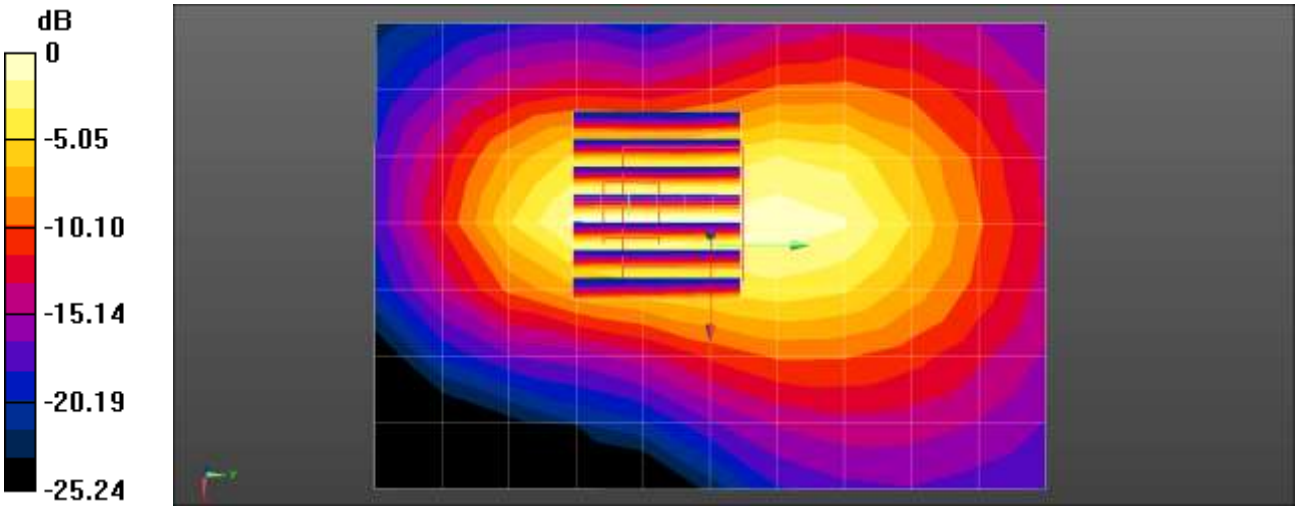
DUT: SM-S721U
Communication System: UID 0, NR n7 (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2535 MHz; σ = 1.935 S/m; ε_r = 38.838; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2535 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band 7 Body Top CP QPSK 40MHz 1RB 1offset 507000ch/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.963 W/kg

NR Band 7 Body Top CP QPSK 40MHz 1RB 1offset 507000ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.13 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 0.979 W/kg



0 dB = 0.979 W/kg = -0.09 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.6 ℃
Test Date: 06/18/2024
Plot No.: B19
Band: NR FDD Band n12 Body/Hotspot SAR

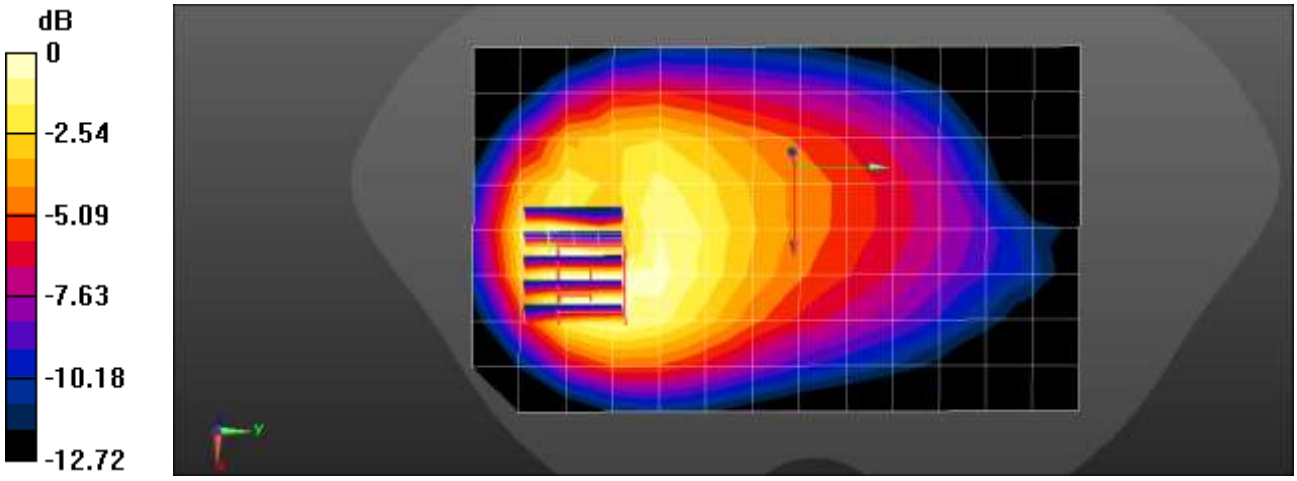
DUT: SM-S721U
Communication System: UID 0, NR FDD (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.864 S/m; ε_r = 41.629; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.65, 10.07, 8.84) @ 707.5 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n12 Body Rear DFT-s QPSK 15MHz 1RB 77offset 141500ch/Area Scan (9x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.497 W/kg

NR Band n12 Body Rear DFT-s QPSK 15MHz 1RB 77offset 141500ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.20 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.547 W/kg
SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.218 W/kg
Maximum value of SAR (measured) = 0.470 W/kg



0 dB = 0.470 W/kg = -3.28 dBW/kg

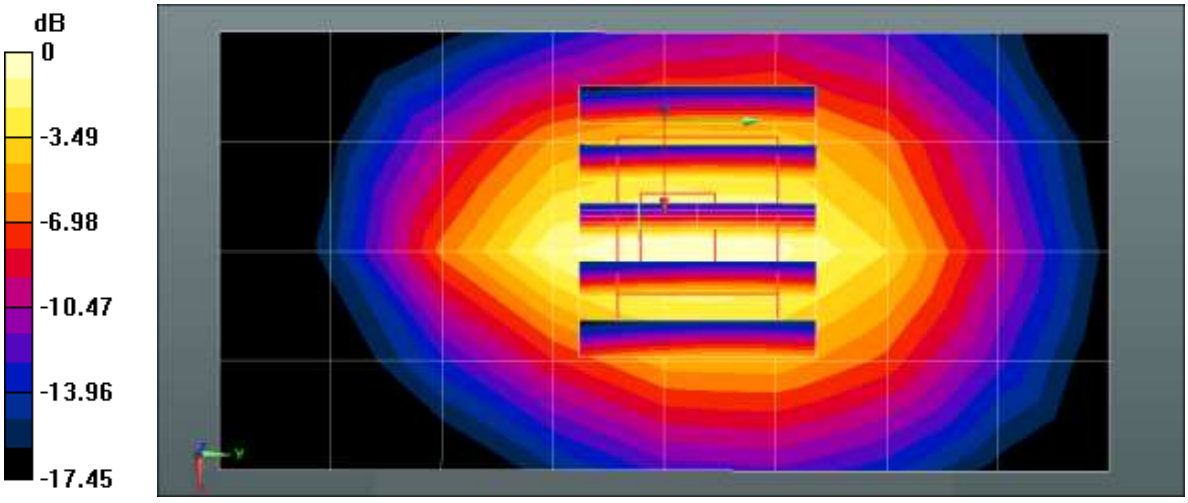
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.2 ℃
Liquid Temperature: 23.0 ℃
Test Date: 07/01/2024
Plot No.: B20
Band: NR FDD Band n25 Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, NR Band 2,25 (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.374 S/m; ε_r = 38.87; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1882.5 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band 25 Body Top DFT-s QPSK 40MHz 1RB 108offset 376500ch/Area Scan (5x9x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.01 W/kg
NR Band 25 Body Top DFT-s QPSK 40MHz 1RB 108offset 376500ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.77 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.21 W/kg
SAR(1 g) = 0.691 W/kg; SAR(10 g) = 0.386 W/kg
Maximum value of SAR (measured) = 1.02 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.0 ℃
Liquid Temperature: 21.0 ℃
Test Date: 06/19/2024
Plot No.: B21
Band: NR FDD Band n26 Body/Hotspot SAR

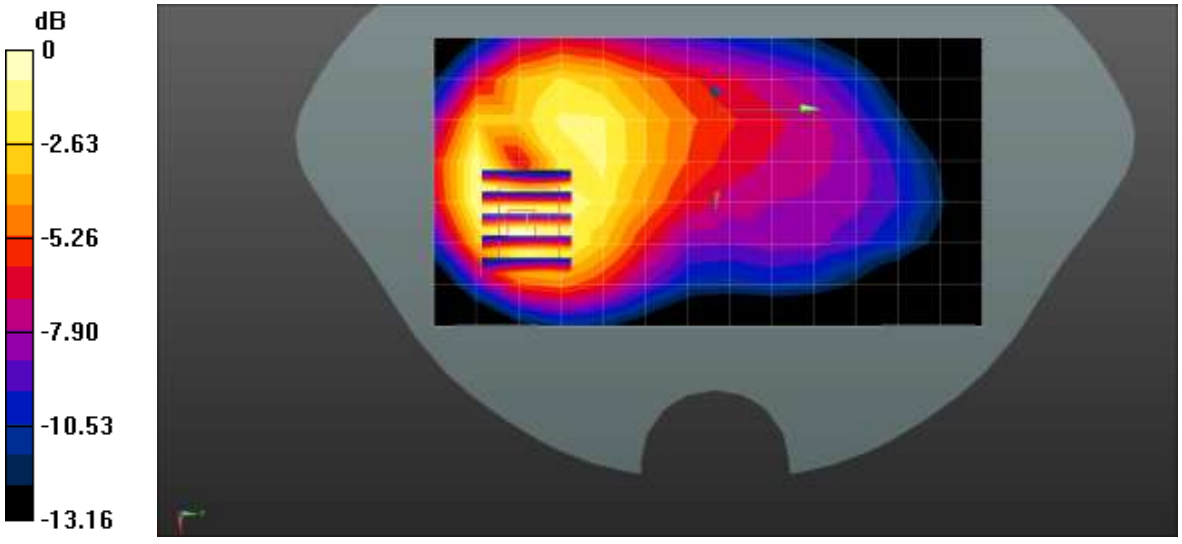
DUT: SM-S721U
Communication System: UID 0, NR Band 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.922 S/m; ε_r = 42.667; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 831.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n26 Body Rear DFT-s QPSK 20MHz 50RB 28offset 166300ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.526 W/kg

NR Band n26 Body Rear DFT-s QPSK 20MHz 50RB 28offset 166300ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.96 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.651 W/kg
SAR(1 g) = 0.458 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 0.583 W/kg



0 dB = 0.583 W/kg = -2.34 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.8 ℃
Liquid Temperature: 19.8 ℃
Test Date: 06/25/2024
Plot No.: B22
Band: NR FDD Band n30 Body/Hotspot SAR

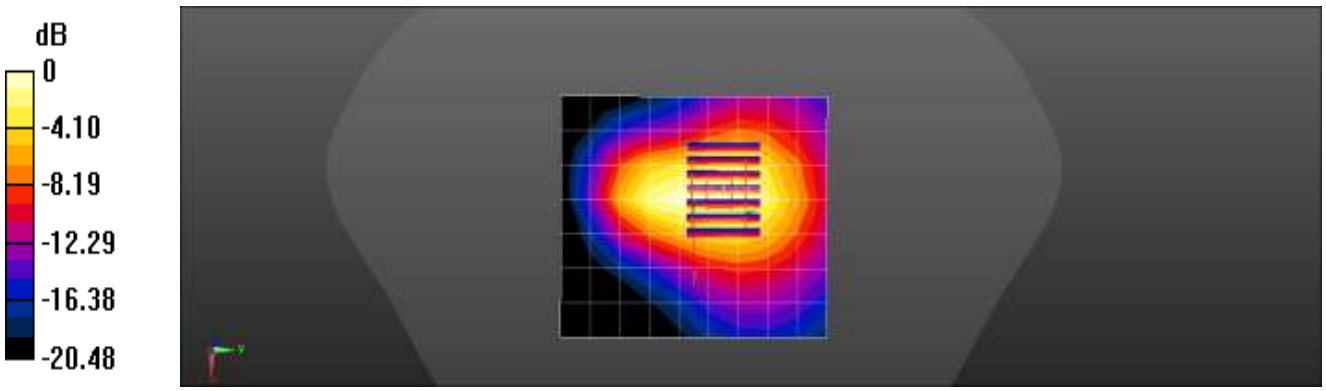
DUT: SM-S721U
Communication System: UID 0, n30 (0); Frequency: 2310 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2310 MHz; σ = 1.675 S/m; ε_r = 39.284; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2310 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band 30 Body Top QPSK 10MHz 1RB 50offset 462000ch/Area Scan (8x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.09 W/kg

NR Band 30 Body Top QPSK 10MHz 1RB 50offset 462000ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.07 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.709 W/kg; SAR(10 g) = 0.364 W/kg
Maximum value of SAR (measured) = 1.12 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.8 ℃
Liquid Temperature: 19.6 ℃
Test Date: 06/20/2024
Plot No.: B23
Band: NR TDD Band n38 Body/Hotspot SAR

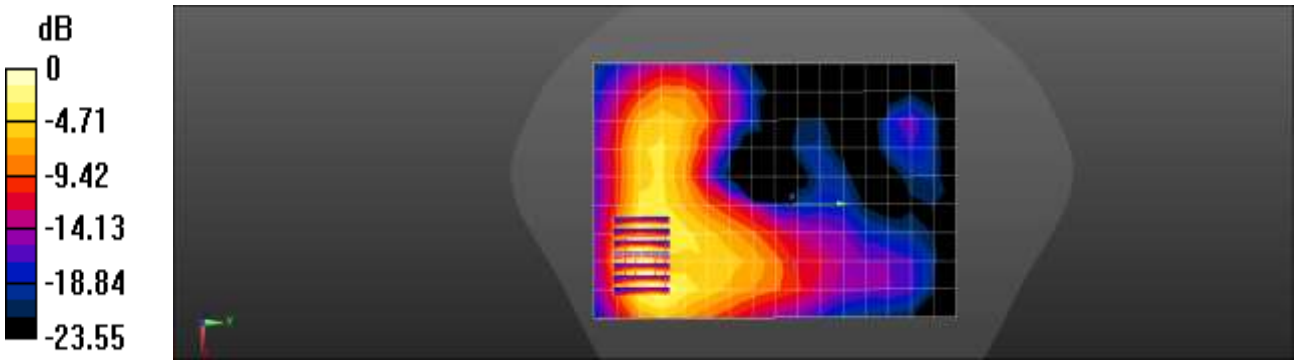
DUT: SM-S721U
Communication System: UID 0, NR n38 (0); Frequency: 2595 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2595 MHz; σ = 2.026 S/m; ε_r = 38.052; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2595 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n38 Body Front DFT-s QPSK 40MHz 50RB 0offset 519000ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.570 W/kg

NR Band n38 Body Front DFT-s QPSK 40MHz 50RB 0offset 519000ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.754 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.761 W/kg
SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.168 W/kg
Maximum value of SAR (measured) = 0.594 W/kg



0 dB = 0.594 W/kg = -2.26 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.3 ℃
Liquid Temperature: 20.3 ℃
Test Date: 06/13/2024
Plot No.: B24
Band: NR TDD Band n41 Body/Hotspot SAR

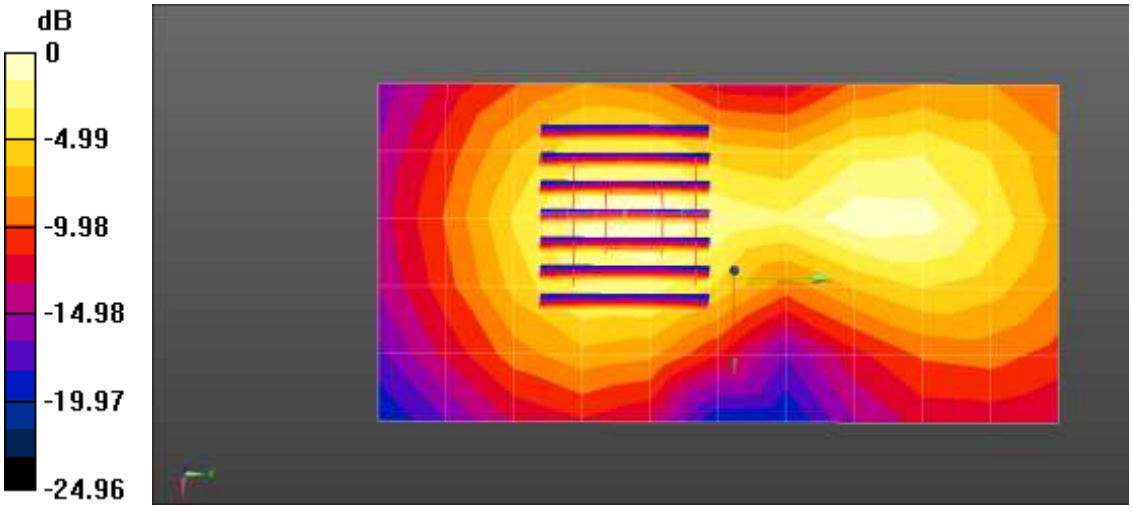
DUT: SM-S721U;
Communication System: UID 0, n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.958 S/m; εr = 38.779; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2592.99 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band 41 Body Bottom DFT-s QPSK 100MHz 1RB 1offset 518598ch/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.320 W/kg

NR Band 41 Body Bottom DFT-s QPSK 100MHz 1RB 1offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.760 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.399 W/kg
SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.097 W/kg
Maximum value of SAR (measured) = 0.325 W/kg



0 dB = 0.325 W/kg = -4.88 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.0 ℃
Liquid Temperature: 22.8 ℃
Test Date: 07/11/2024
Plot No.: B25
Band: NR TDD Band n48 Body/Hotspot SAR

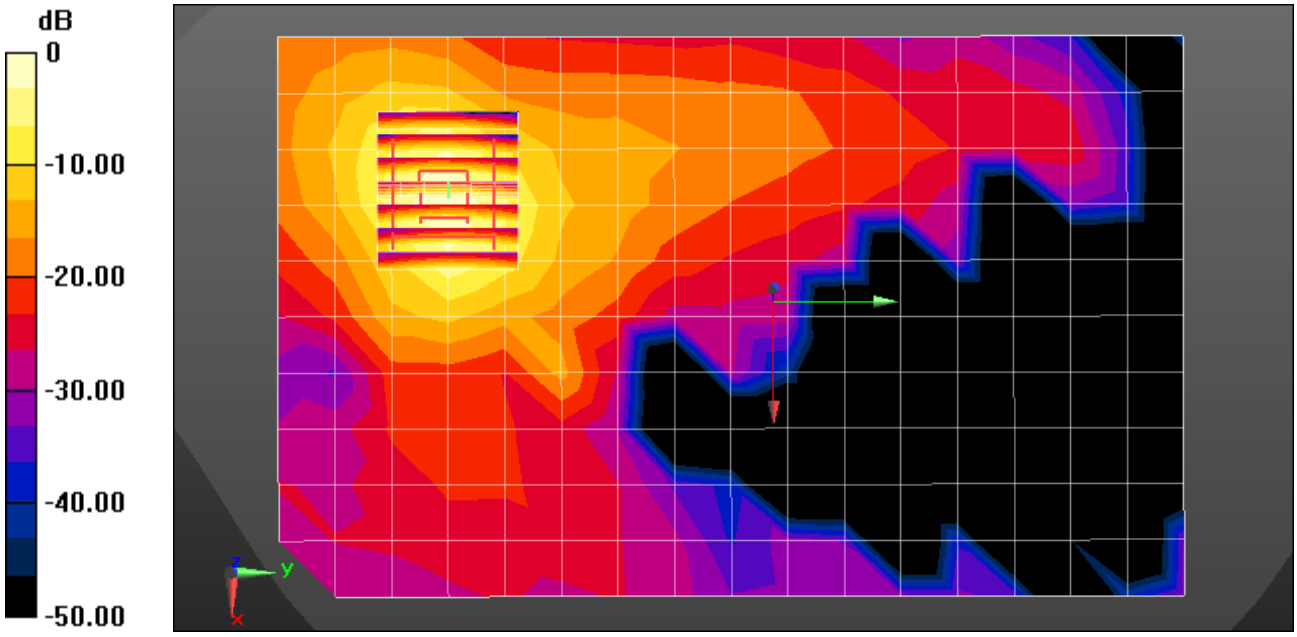
DUT: SM-S721U
Communication System: UID 0, n48 (0); Frequency: 3680 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3680 MHz; σ = 3.071 S/m; εr = 36.449; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3680 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n48 Body Rear CW 40MHz 6453334ch/Area Scan (11x17x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.05 W/kg

NR Band n48 Body Rear CW 40MHz 6453334ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=4mm
Reference Value = 1.143 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.40 W/kg
SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.201 W/kg
Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.3 ℃
Test Date: 06/19/2024
Plot No.: B26
Band: NR FDD Band n66 Body/Hotspot SAR

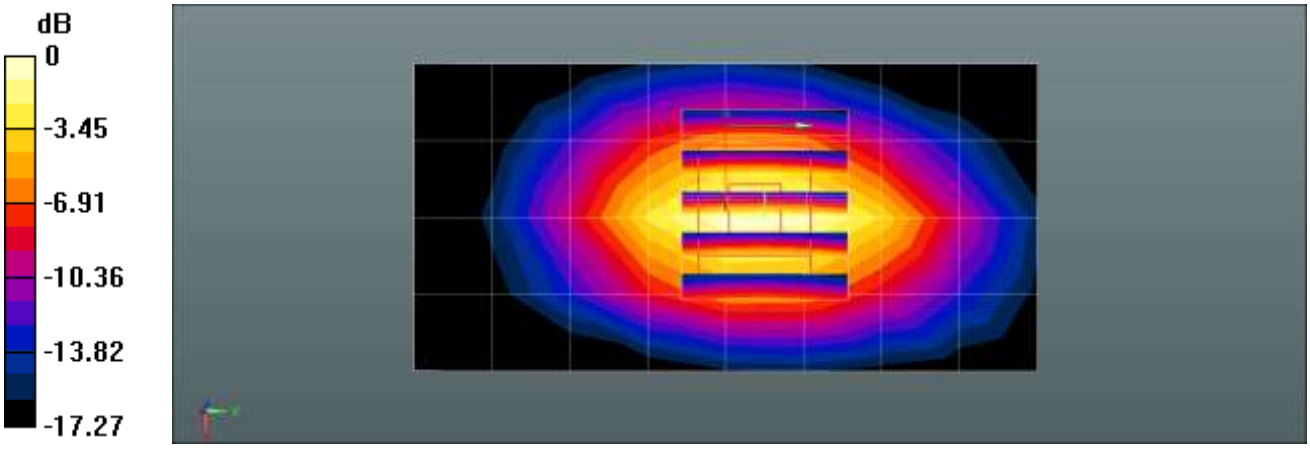
DUT: SM-S721U
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.336 S/m; ε_r = 41.318; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1745 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band 66 Body Bottom DFT-s QPSK 40MHz 108RB 0offset 349000ch/Area Scan (5x9x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.01 W/kg

NR Band 66 Body Bottom DFT-s QPSK 40MHz 108RB 0offset 349000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.89 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.721 W/kg; SAR(10 g) = 0.392 W/kg
Maximum value of SAR (measured) = 1.06 W/kg



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

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 ℃
Liquid Temperature: 21.8 ℃
Test Date: 06/17/2024
Plot No.: B27
Band: NR FDD Band n70 Body/Hotspot SAR

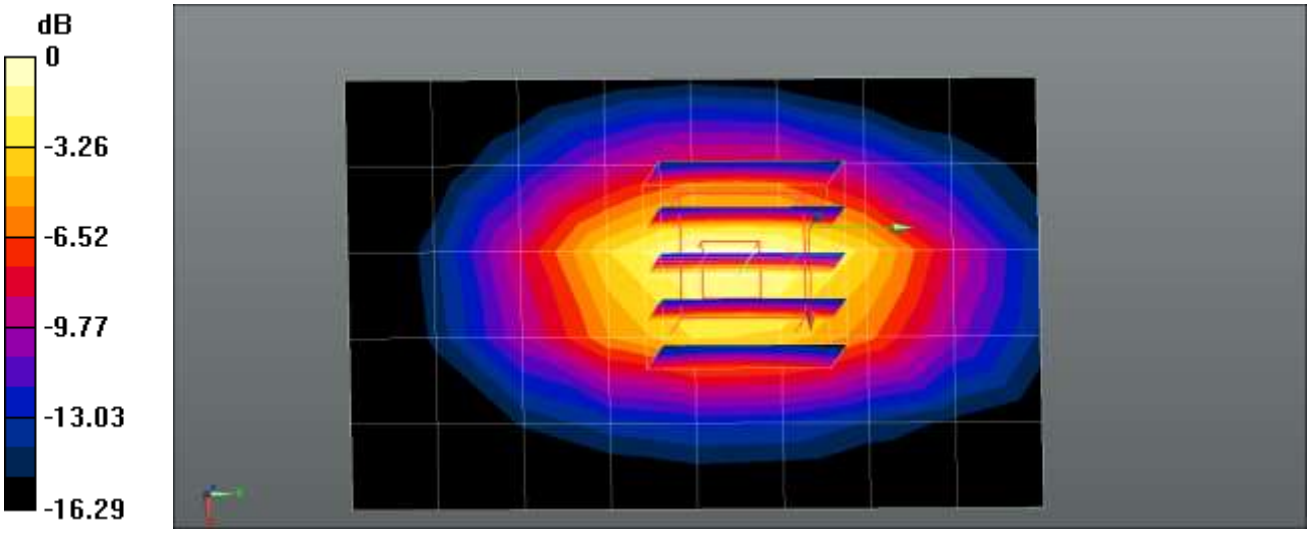
DUT: SM-S721U
Communication System: UID 0, NR Band n70 (0); Frequency: 1702.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1702.5 MHz; σ = 1.309 S/m; ε_r = 41.102; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.49, 8.77, 7.91) @ 1702.5 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band 70 Body Bottom DFT-s QPSK 15MHz 36RB 0offset 340500ch/Area Scan (6x9x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.844 W/kg

NR Band 70 Body Bottom DFT-s QPSK 15MHz 36RB 0offset 340500ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.29 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.683 W/kg; SAR(10 g) = 0.381 W/kg
Maximum value of SAR (measured) = 0.991 W/kg



0 dB = 0.991 W/kg = -0.04 dBW/kg

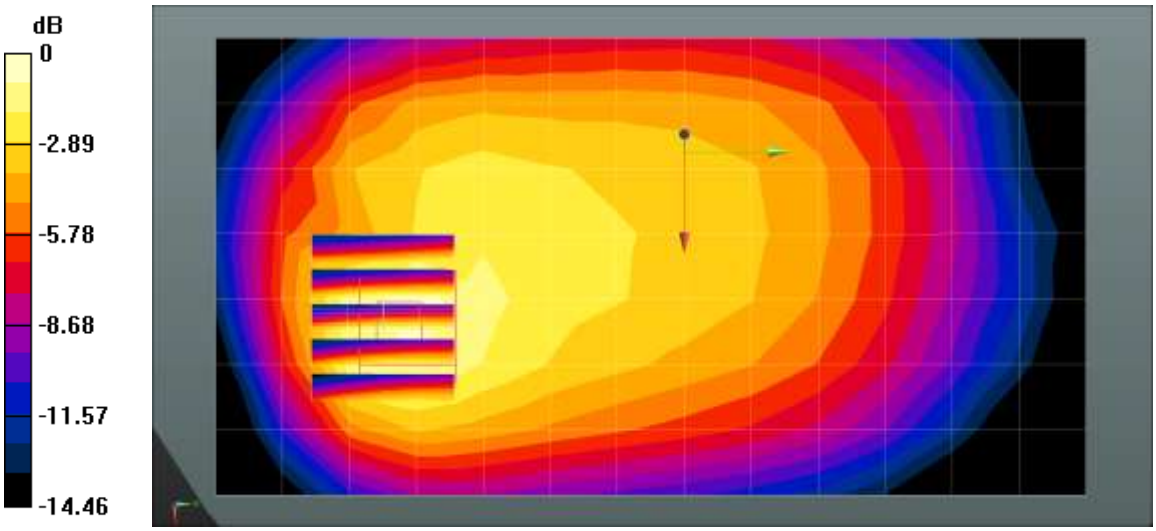
Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.4 ℃
Liquid Temperature: 19.3 ℃
Test Date: 06/17/2024
Plot No.: B28
Band: NR FDD Band n71 Body/Hotspot SAR

DUT: SM-S721U
Communication System: UID 0, NR Band 71 (0); Frequency: 680.5 MHz;Duty Cycle: 1:1
Medium parameters used (extrapolated): f = 680.5 MHz; σ = 0.832 S/m; ε_r = 41.677; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 680.5 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.242 W/kg
NR Band n71 Body Rear DFT-s QPSK 20MHz 50RB 28offset 136100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.08 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.305 W/kg
SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.128 W/kg
Maximum value of SAR (measured) = 0.274 W/kg



0 dB = 0.274 W/kg = -5.62 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.8 ℃
Liquid Temperature: 20.6 ℃
Test Date: 06/17/2024
Plot No.: B29
Band: NR TDD Band n77 Body/Hotspot SAR

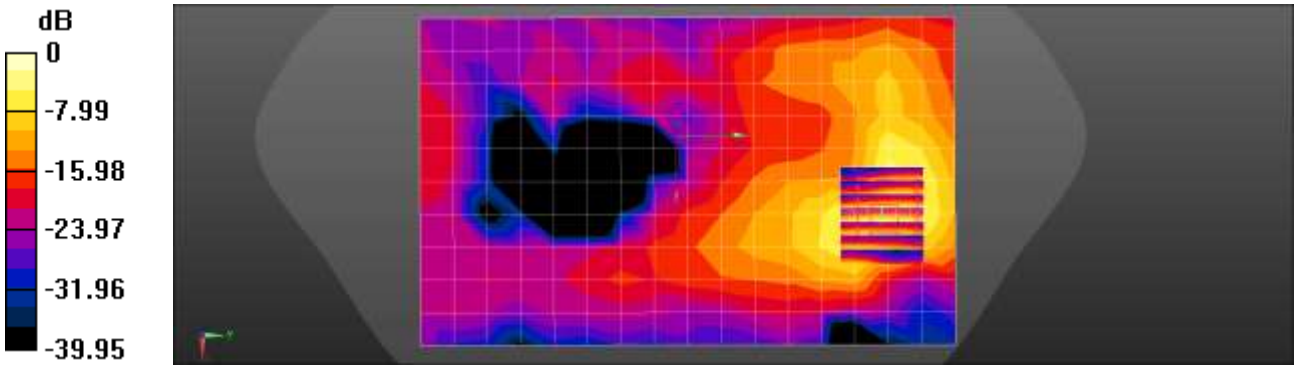
DUT: SM-S721U
Communication System: UID 0, n77 (0); Frequency: 3930 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3930 MHz; σ = 3.385 S/m; ε_r = 36.319; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3930 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n77 Body Rear DFT-s QPSK 100MHz 1RB 271offset 662000ch/Area Scan (11x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.822 W/kg

NR Band n77 Body Rear DFT-s QPSK 100MHz 1RB 271offset 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 0.7010 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.166 W/kg
Maximum value of SAR (measured) = 0.932 W/kg



0 dB = 0.932 W/kg = -0.31 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.3 ℃
Test Date: 06/24/2024
Plot No.: B30
Band: 2.4 ㎓ Body/Hotspot SAR

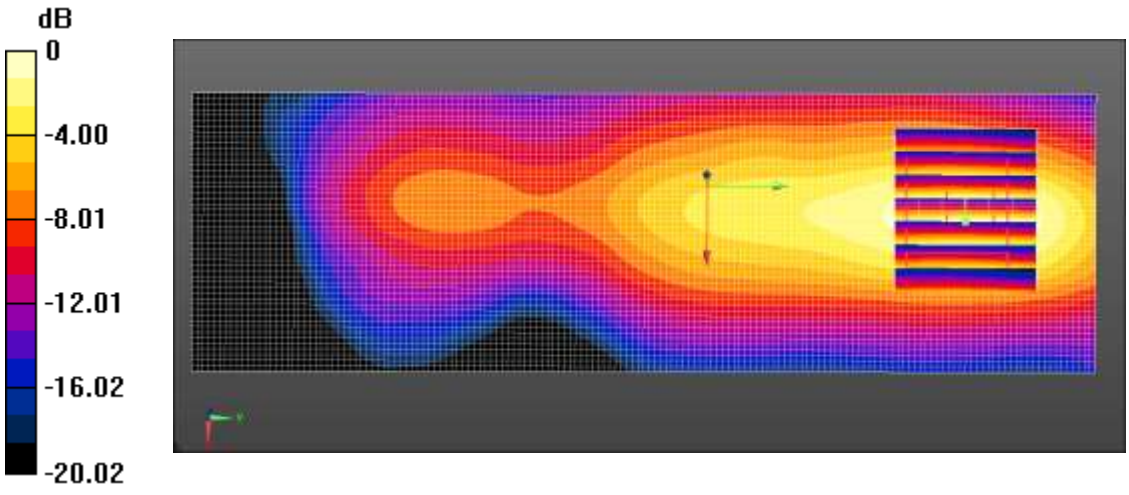
DUT: SM-S721U
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.751 S/m; εr = 38.779; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2437 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.14 (7501)

802.11b Body Left 1Mbps 6ch/Area Scan (51x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.288 W/kg

802.11b Body Left 1Mbps 6ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.294 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.345 W/kg
SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.095 W/kg
Maximum value of SAR (measured) = 0.285 W/kg



0 dB = 0.285 W/kg = -5.45 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.3 ℃
Liquid Temperature: 19.1 ℃
Test Date: 06/25/2024
Plot No.: B31
Band: 5 ㎓ Body/Hotspot SAR
Measurement Report for Device, BACK, WLAN 5GHz, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), Channel 58 (5290.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	WLAN 5GHz	WLAN, 10544-AAD	5290.000, 58	5.24	4.64	36.9

Hardware Setup

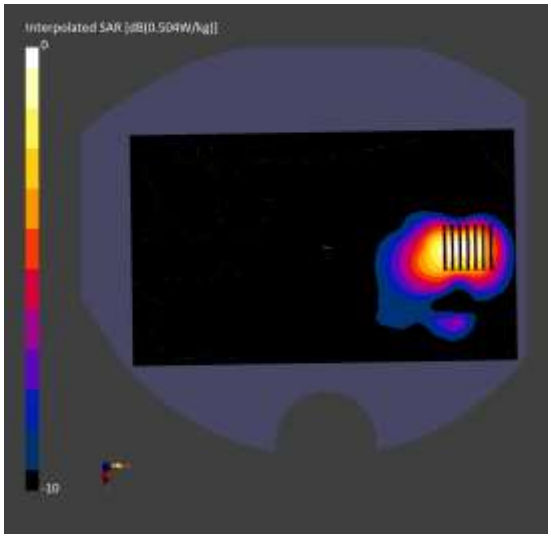
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.349	0.386
psSAR10g [W/Kg]	0.131	0.138
Power Drift [dB]	1.13	-0.15
M2/M1 [%]		66.8
Dist 3dB Peak [mm]		8.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: B32
Band: 6 ㎓ Body-worn SAR

Measurement Report for Device, BACK, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 111 (6505.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	U-NII-6	WLAN, 10755-AAC	6505.000, 111	5.6	6.22	34.0

Hardware Setup

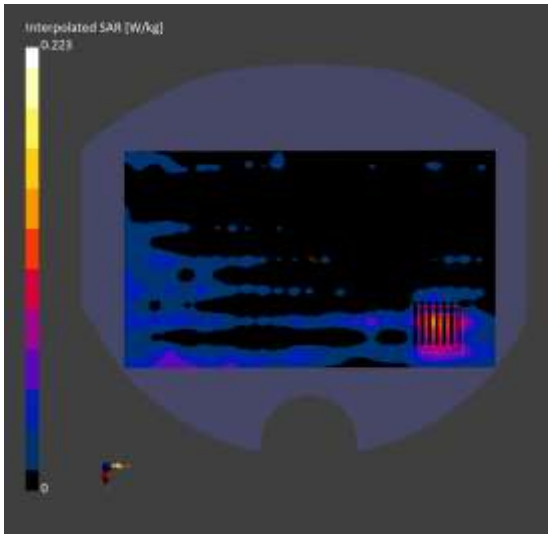
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	119.0 x 204.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.046	0.052
psSAR10g [W/Kg]	0.016	0.018
psAPD (1.0cm2, sq) [W/m2]		2.73
psAPD (4.0cm2, sq) [W/m2]		1.64
Power Drift [dB]	-0.52	0.04
M2/M1 [%]		60.3
Dist 3dB Peak [mm]		9.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.1 ℃
Liquid Temperature: 21.0 ℃
Test Date: 06/25/2024
Plot No.: B33
Band: Bluetooth Body/Hotspot SAR

DUT: SM-S721U;

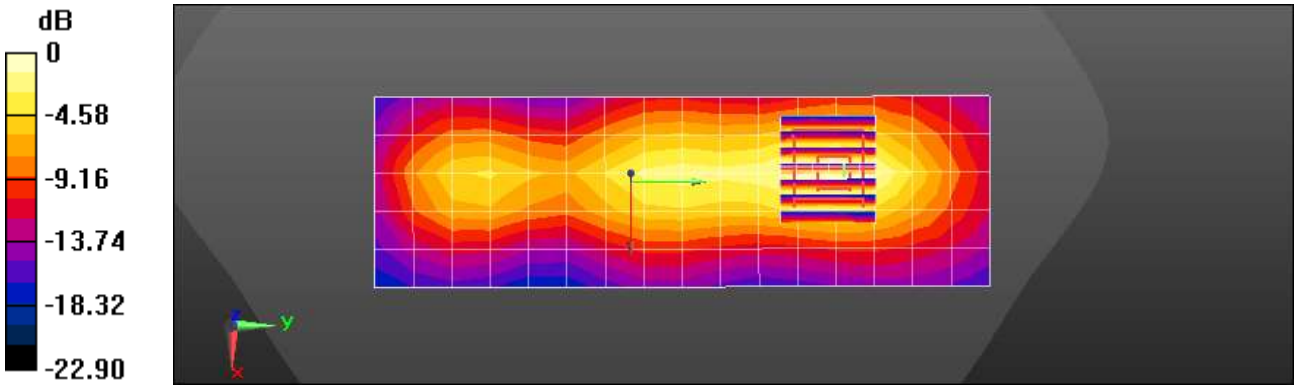
Communication System: UID 0, Bluetooth (0); Frequency: 2440 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2440 MHz; σ = 1.737 S/m; ε_r = 38.936; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2440 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Bluetooth Body Left 1M 255 17ch/Area Scan (6x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.522 W/kg

Bluetooth Body Left 1M 255 17ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.29 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.163 W/kg
Maximum value of SAR (measured) = 0.524 W/kg



0 dB = 0.524 W/kg = -2.81 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 203. ℃
Liquid Temperature: 20.3 ℃
Test Date: 06/28/2024
Plot No.: C1
Band: 5 ㎓ Phablet SAR

Measurement Report for Device, EDGE LEFT, U-NII-4, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle), Channel 171 (5855.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 0.00	U-NII-4	WLAN, 10544-AAD	5855.000, 171	4.76	5.21	36.3

Hardware Setup

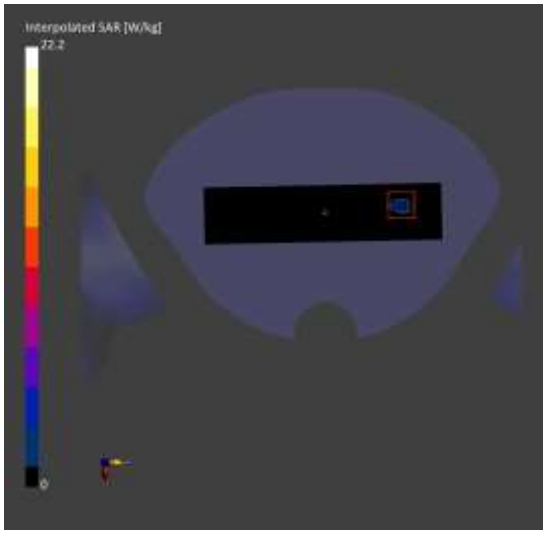
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.0 x 10.0	2.5 x 2.5 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.67	3.59
psSAR10g [W/Kg]	0.694	0.741
Power Drift [dB]	0.16	-0.14
M2/M1 [%]		60.0
Dist 3dB Peak [mm]		4.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: C2
Band: 6 ㎓ Phablet SAR
Measurement Report for Device, EDGE LEFT, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 175 (6825.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 0.00	U-NII-7	WLAN, 10755-AAC	6825.000, 175	5.6	6.63	33.4

Hardware Setup

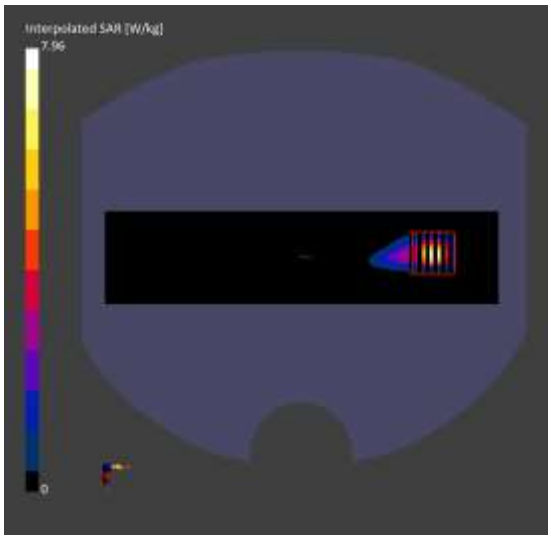
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 204.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	8.0 x 8.5	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.773	1.21
psSAR10g [W/Kg]	0.192	0.248
Power Drift [dB]	-1.58	-2.18
M2/M1 [%]		48.0
Dist 3dB Peak [mm]		3.3



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 23.6 ℃
Liquid Temperature: 23.6 ℃
Test Date: 06/18/2024
Plot No.: C3
Band: NFC Phablet SAR

DUT: SM-S721U
Communication System: UID 0, NFC; Frequency: 13.56 MHz;Duty Cycle: 1:1
Medium parameters used: f = 14 MHz; σ = 0.756 S/m; ε_r = 54.328; ρ = 1000 kg/m^3

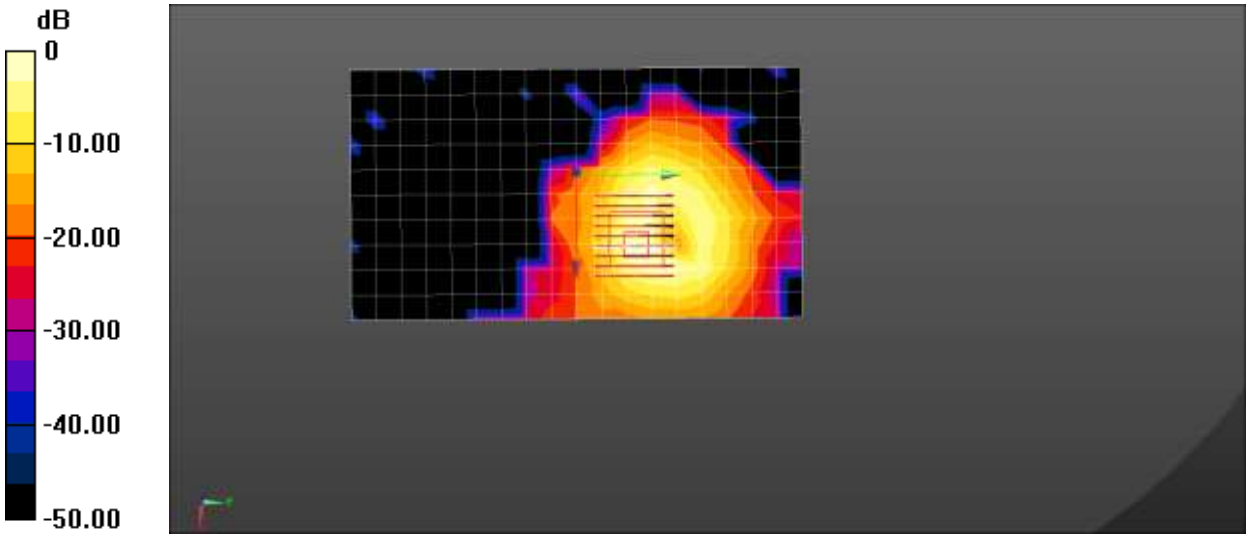
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.8, 5.8, 5.8) @ 13.56 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1225; Calibrated: 2024-02-15
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 Bx; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NFC Phablet Rear Type B 106kbps/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.0636 W/kg

NFC Phablet Rear Type B 106kbps/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.440 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.337 W/kg
SAR(1 g) = 0.066 W/kg; SAR(10 g) = 0.022 W/kg
Maximum value of SAR (measured) = 0.0901 W/kg



0 dB = 0.0901 W/kg = -10.45 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: D1
Band: 6 ㎓ Head APD
Measurement Report for Device, CHEEK, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 207 (6985.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-8	WLAN, 10755-AAC	6985.000, 207	5.6	6.80	33.0

Hardware Setup

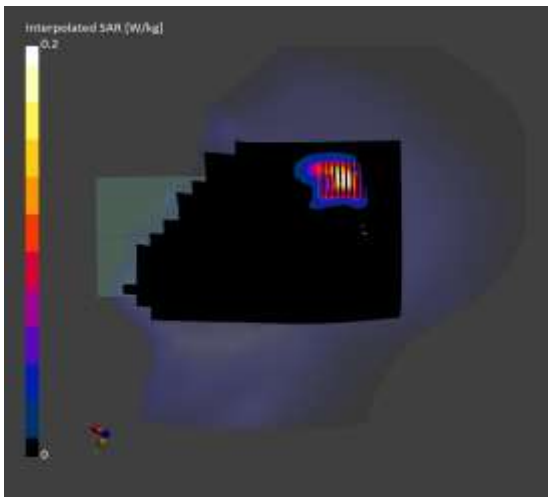
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	119.0 x 204.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.152	0.166
psSAR10g [W/Kg]	0.046	0.042
psAPD (1.0cm2, sq) [W/m2]		1.66
psAPD (4.0cm2, sq) [W/m2]		1.07
Power Drift [dB]	0.32	0.14
M2/M1 [%]		49.4
Dist 3dB Peak [mm]		5.4



EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: D2
Band: 6 ㎓ Phablet APD
Measurement Report for Device, EDGE LEFT, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 111 (6505.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 0.00	U-NII-6	WLAN, 10755-AAC	6505.000, 111	5.6	6.22	34.0

Hardware Setup

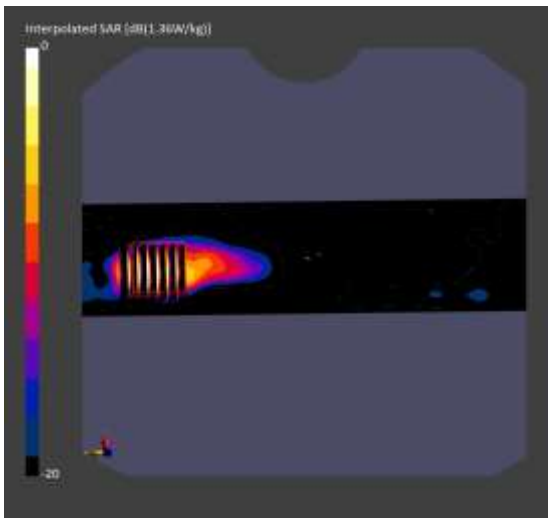
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 204.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	8.0 x 8.5	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-21, 16:50	2024-06-21, 16:59
psSAR1g [W/Kg]	0.836	1.23
psSAR10g [W/Kg]	0.207	0.260
psAPD (1.0cm2, sq) [W/m2]		12.3
psAPD (4.0cm2, sq) [W/m2]		6.22
Power Drift [dB]	-0.16	-0.14
M2/M1 [%]		48.6
Dist 3dB Peak [mm]		4.0



EUT Type: Mobile Phone
Ambient Temperature: 19.6 ℃
Liquid Temperature: 19.5 ℃
Test Date: 07/02/2024
Plot No.: D3
Band: 6 GHz WLAN PD
Measurement Report for Device, EDGE LEFT, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 111 (6505.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE LEFT, 2.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	1.0

Hardware Setup

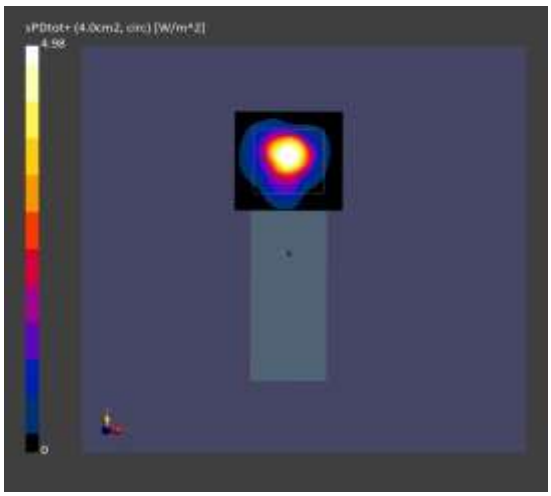
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9464_F1-55GHz, 2024-02-19	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.04429156002095672 x 0.04429156002095672
Sensor Surface [mm]	2.0
MAIA	Y

Measurement Results

Scan Type	5G Scan
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	2.42
psPDtot+ [W/m^2]	4.98
psPDmod+ [W/m^2]	5.84
E_{max} [V/m]	101
Power Drift [dB]	-0.09



Appendix C. – Dipole Verification Plots

■ **Verification Data (750 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 18.9 ℃
Test Date: 06/11/2024
Band: LTE FDD Band 12 _ Ant.A

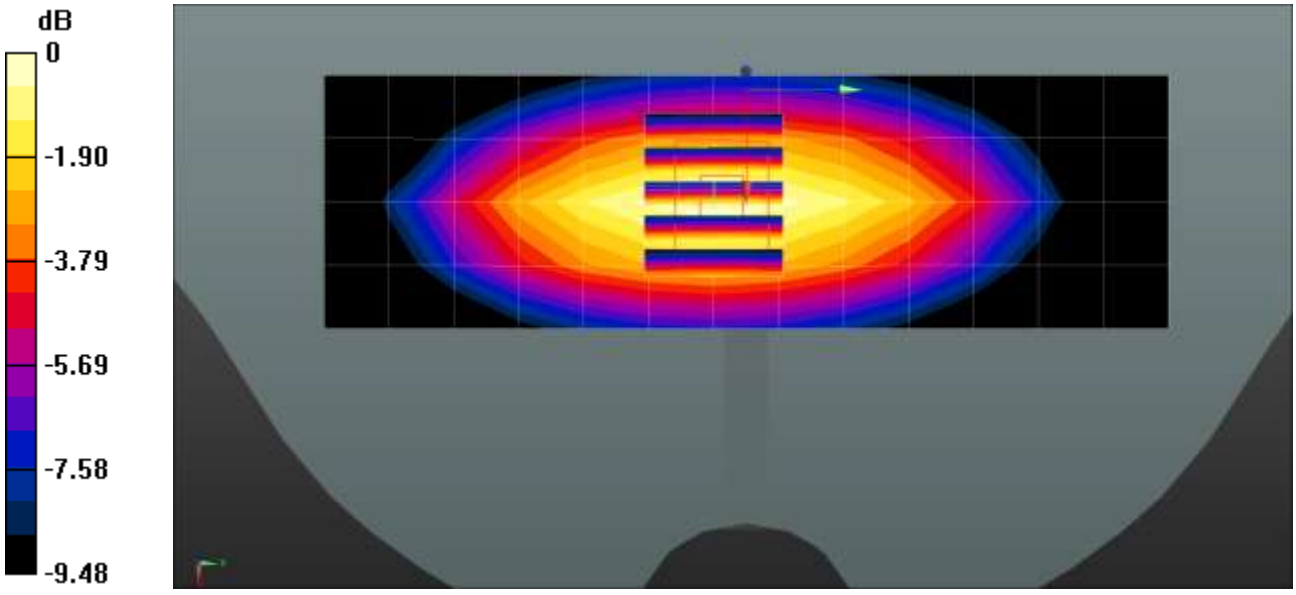
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.895 S/m; ε_r = 42.827; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 750 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.505 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.17 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.543 W/kg
SAR(1 g) = 0.406 W/kg; SAR(10 g) = 0.276 W/kg
Maximum value of SAR (measured) = 0.511 W/kg



0 dB = 0.511 W/kg = -2.92 dBW/kg

■ **Verification Data (750 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.0 ℃**
Test Date:	**06/20/2024**
Band:	**LTE FDD Band 71 Ant.A**

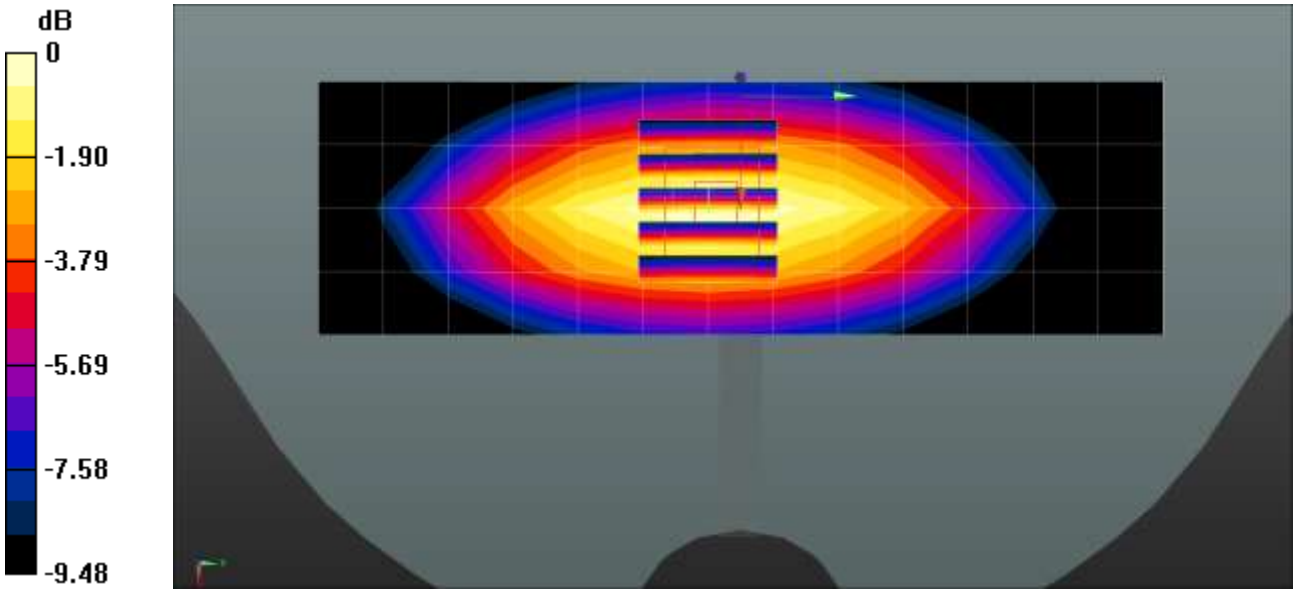
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.9 S/m; ε_r = 43.234; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 750 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.514 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.07 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.547 W/kg
SAR(1 g) = 0.409 W/kg; SAR(10 g) = 0.278 W/kg
Maximum value of SAR (measured) = 0.515 W/kg



0 dB = 0.515 W/kg = -2.88 dBW/kg

■ **Verification Data (750 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**18.4 ℃**
Test Date:	**06/12/2024**
Band:	**LTE FDD Band 13 Ant.A**

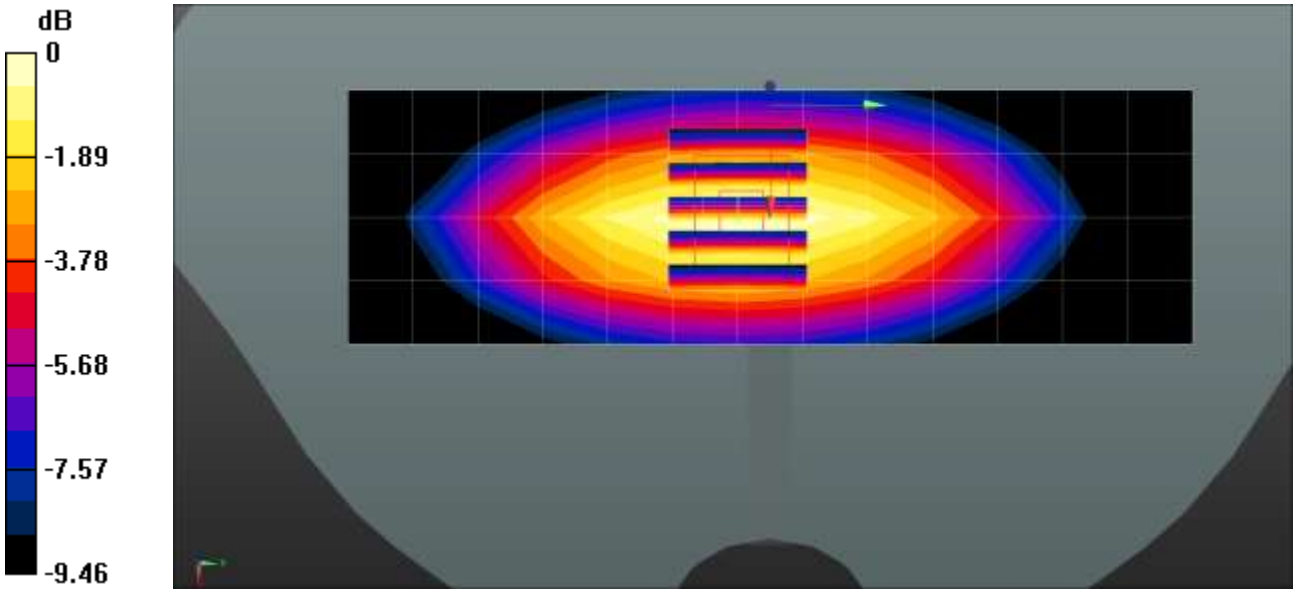
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.895 S/m; ε_r = 42.83; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 750 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.506 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.99 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.536 W/kg
SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.275 W/kg
Maximum value of SAR (measured) = 0.506 W/kg



0 dB = 0.506 W/kg = -2.96 dBW/kg

■ **Verification Data (750 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.4 ℃
Test Date: 06/13/2024
Band: LTE FDD Band 14 Ant.A

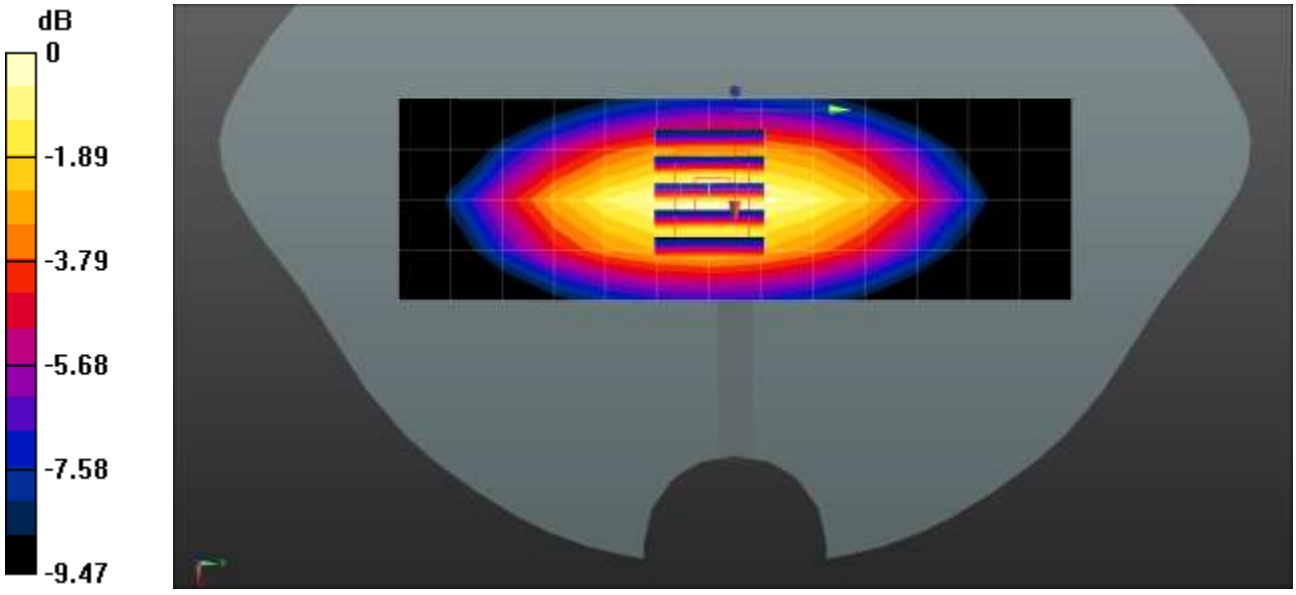
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.895 S/m; ε_r = 42.812; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 750 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.513 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.14 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.543 W/kg
SAR(1 g) = 0.406 W/kg; SAR(10 g) = 0.276 W/kg
Maximum value of SAR (measured) = 0.511 W/kg



0 dB = 0.511 W/kg = -2.92 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.7 ℃
Test Date: 06/04/2024
Band: GSM 850 Ant.A

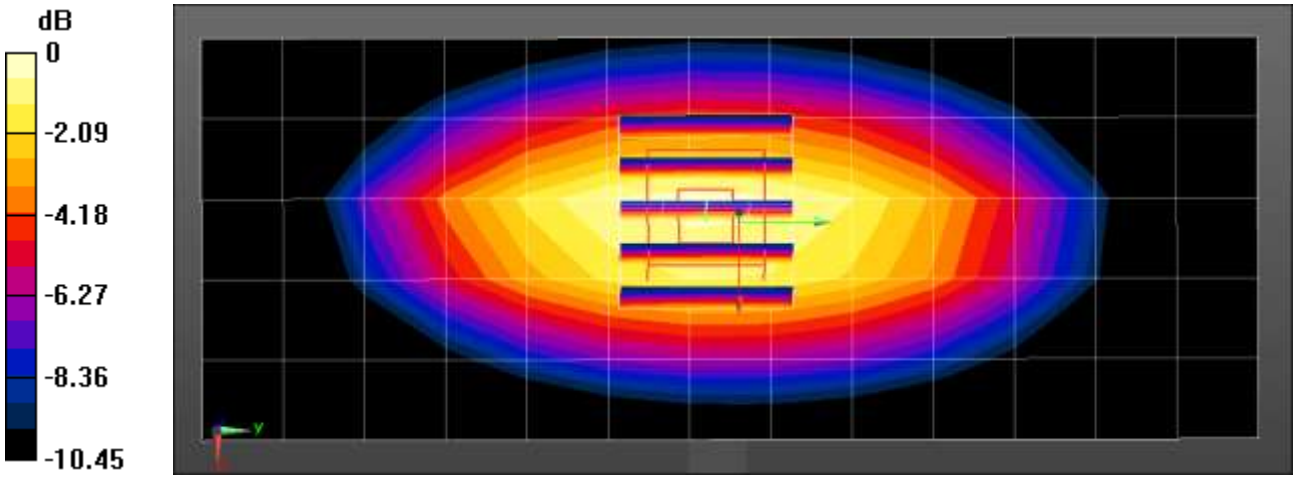
DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.923 S/m; ε_r = 41.241; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 835 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/835MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.623 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.99 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.733 W/kg
SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.339 W/kg
Maximum value of SAR (measured) = 0.669 W/kg



0 dB = 0.669 W/kg = -1.75 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.0 ℃**
Test Date:	**06/10/2024**
Band:	**UMTS Band 5 Ant.A**

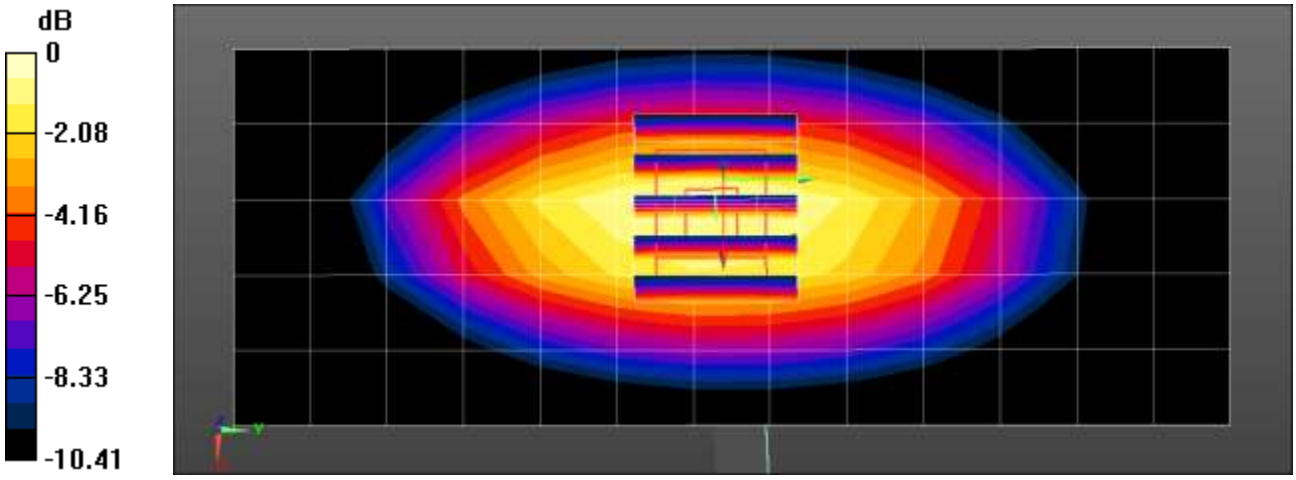
DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.924 S/m; ε_r = 40.23; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.78, 10.51, 9.13) @ 835 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/835MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.619 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.50 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.735 W/kg
SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.340 W/kg
Maximum value of SAR (measured) = 0.671 W/kg



0 dB = 0.671 W/kg = -1.73 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.0 ℃**
Test Date:	**06/14/2024**
Band:	**LTE FDD Band 26 Ant.A**

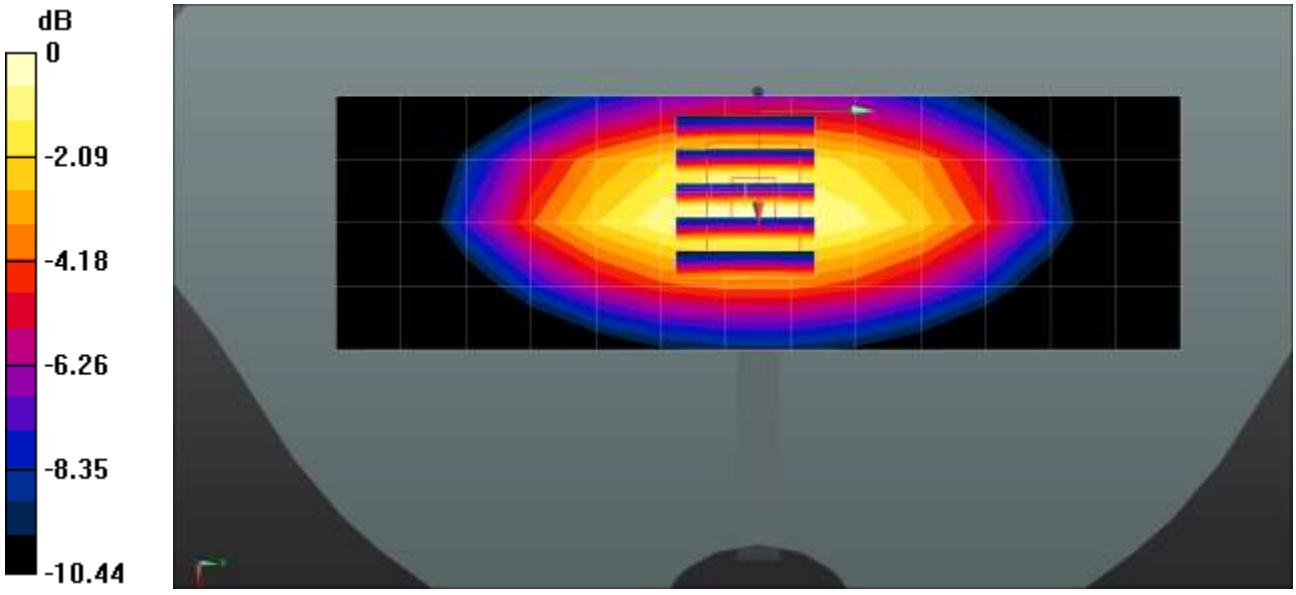
DUT: D835V2 - SN441; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.937 S/m; ε_r = 42.825; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 835 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.605 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.21 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.680 W/kg
SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.339 W/kg
Maximum value of SAR (measured) = 0.641 W/kg



0 dB = 0.641 W/kg = -1.93 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.7 ℃**
Test Date:	**07/04/2024**
Band:	**UMTS Band 4 Ant.A**

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007

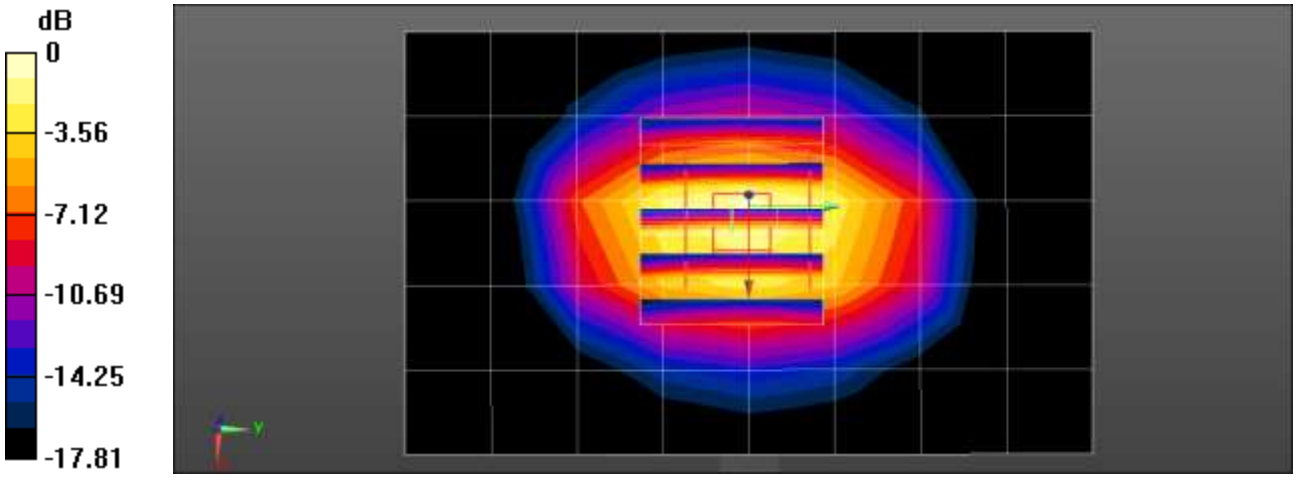
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.416 S/m; ε_r = 41.183; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.49, 8.77, 7.91) @ 1800 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/1800MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.38 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.53 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 1.9 W/kg; SAR(10 g) = 1 W/kg
Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.87 W/kg = 4.58 dBW/kg

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

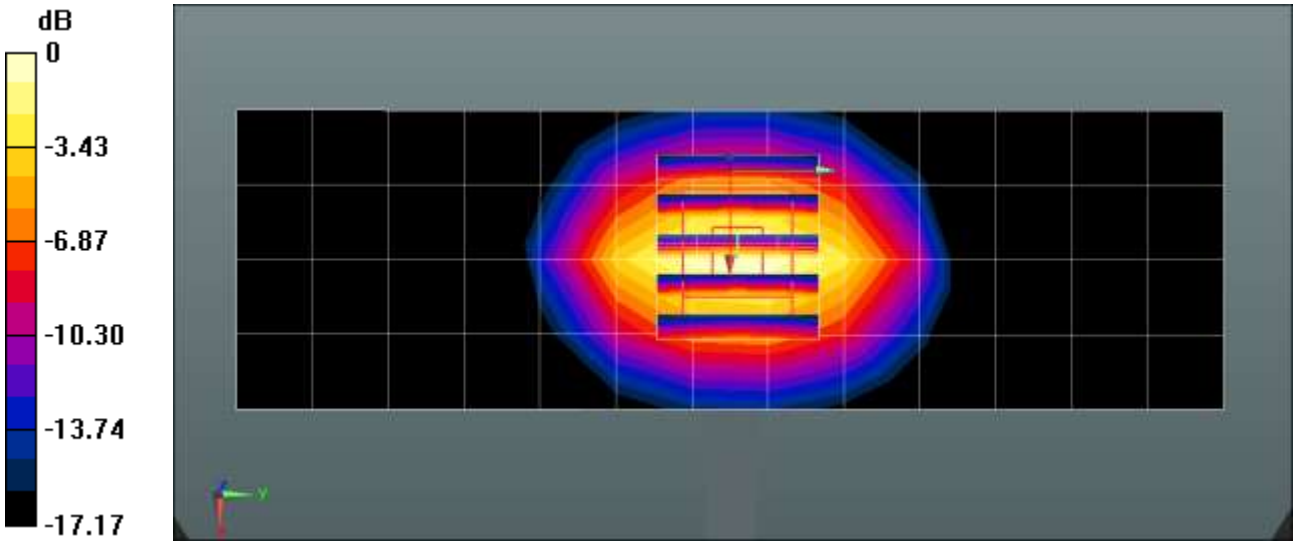
Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.7 ℃**
Test Date:	**06/05/2024**
Band:	**LTE FDD Band 66 Ant.A**

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.419 S/m; ε_r = 41.099; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1800 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.99 W/kg
Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.93 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 3.68 W/kg
SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.09 W/kg
Maximum value of SAR (measured) = 3.15 W/kg



0 dB = 3.15 W/kg = 4.98 dBW/kg

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

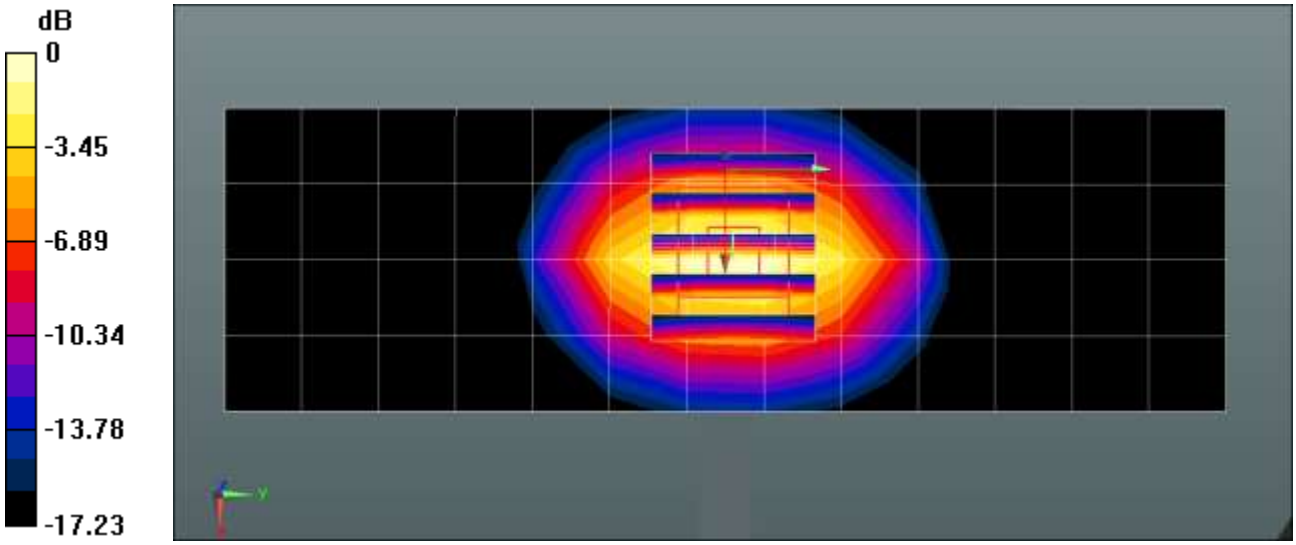
Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.7 ℃**
Test Date:	**06/27/2024**
Band:	**LTE FDD Band 66 Ant.F**

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.406 S/m; ε_r = 40.884; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1800 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.96 W/kg
Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.66 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.67 W/kg
SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 3.13 W/kg



0 dB = 3.13 W/kg = 4.96 dBW/kg

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.9 ℃
Test Date: 06/05/2024
Band: GSM 1900 Ant.A

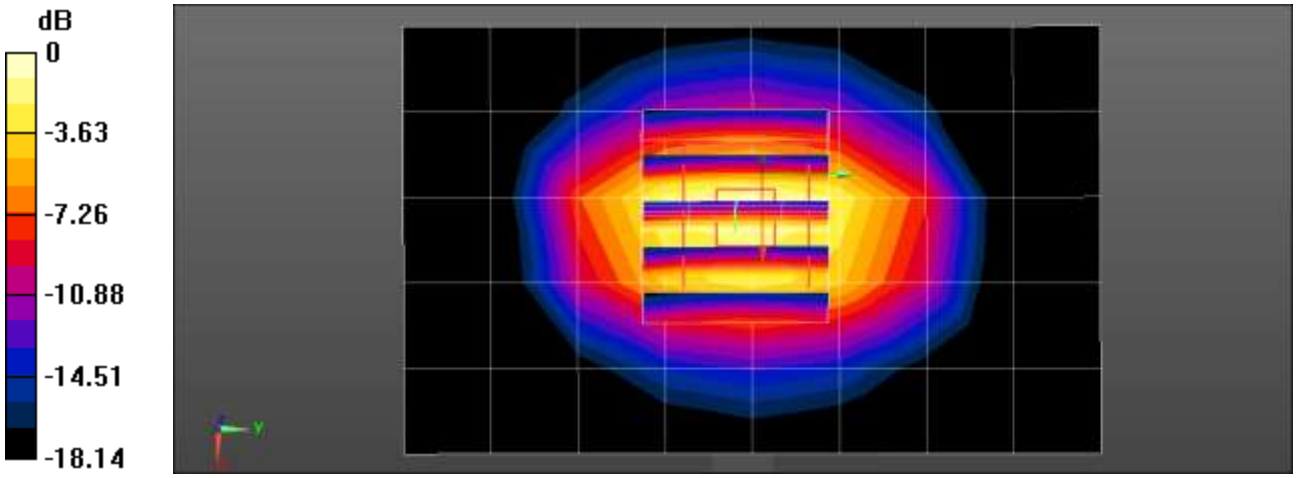
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.391 S/m; ε_r = 39.146; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.34 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.59 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.40 W/kg
SAR(1 g) = 1.89 W/kg; SAR(10 g) = 0.995 W/kg
Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.87 W/kg = 4.58 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.0 ℃**
Test Date:	**07/03/2024**
Band:	**UMTS Band 2 Ant.A**

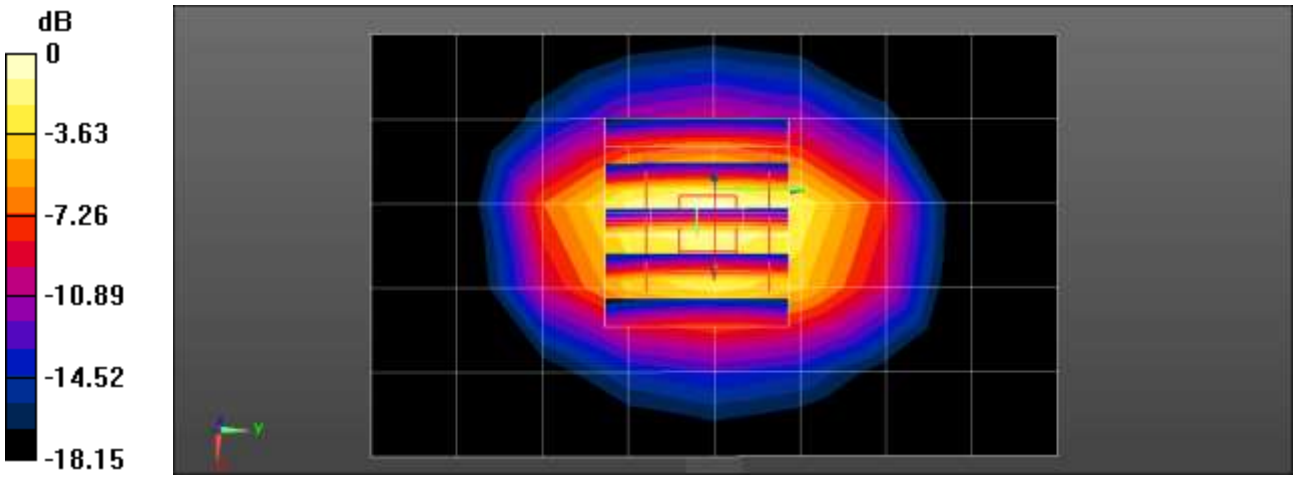
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.391 S/m; ε_r = 39.146; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.13, 8.45, 7.61) @ 1900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.36 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.69 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 3.38 W/kg
SAR(1 g) = 1.89 W/kg; SAR(10 g) = 0.992 W/kg
Maximum value of SAR (measured) = 2.85 W/kg



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

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**24.0 ℃**
Test Date:	**06/03/2024**
Band:	**LTE FDD Band 25 Ant.A**

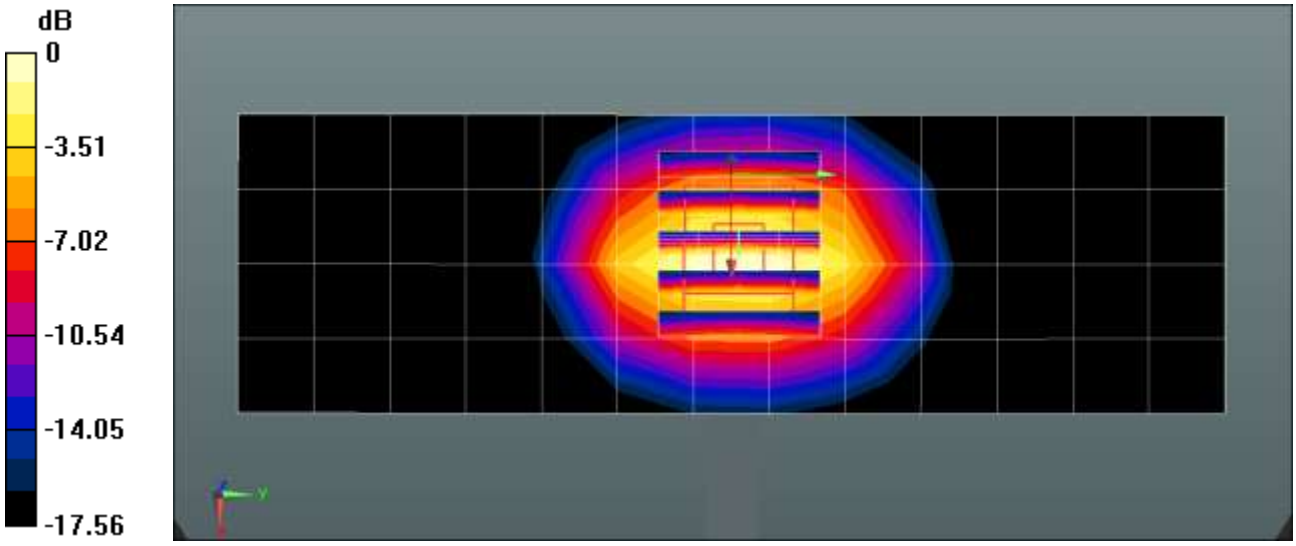
DUT: D1900V2 - SN5d032; Type: D1900V2; Serial: SN5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.39 S/m; ε_r = 39.144; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1900 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.01 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.39 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 3.72 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.1 W/kg
Maximum value of SAR (measured) = 3.18 W/kg



0 dB = 3.18 W/kg = 5.02 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.2 ℃**
Test Date:	**06/26/2024**
Band:	**LTE FDD Band 25 Ant.F**

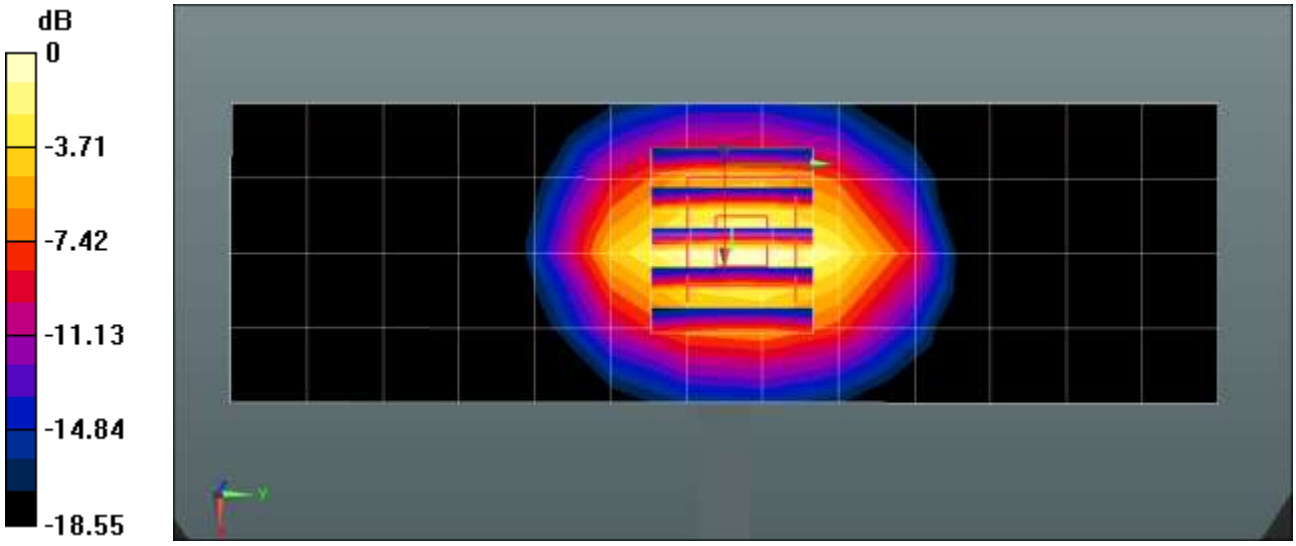
DUT: D1900V2 - SN5d032; Type: D1900V2; Serial: SN5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.404 S/m; ε_r = 38.713; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1900 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.26 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 51.07 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 3.92 W/kg
SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.13 W/kg
Maximum value of SAR (measured) = 3.33 W/kg



0 dB = 3.33 W/kg = 5.22 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.3 ℃**
Test Date:	**06/27/2024**
Band:	**LTE FDD Band 30 Ant.A**

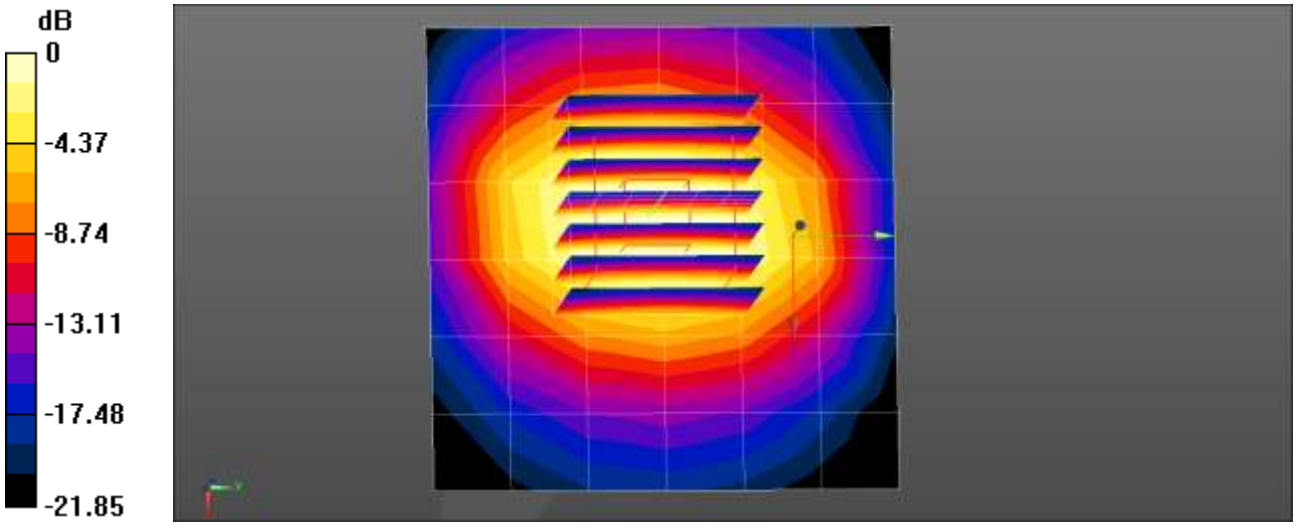
DUT: Dipole 2300 MHz D2300V2; Type: D2300V3; Serial: D2300V3 - SN:1010
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.709 S/m; ε_r = 39.979; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2300 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.31 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.47 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 5.35 W/kg
SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 2.90 W/kg



0 dB = 2.90 W/kg = 4.62 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.7 ℃**
Test Date:	**06/28/2024**
Band:	**LTE FDD Band 30 Ant.F**

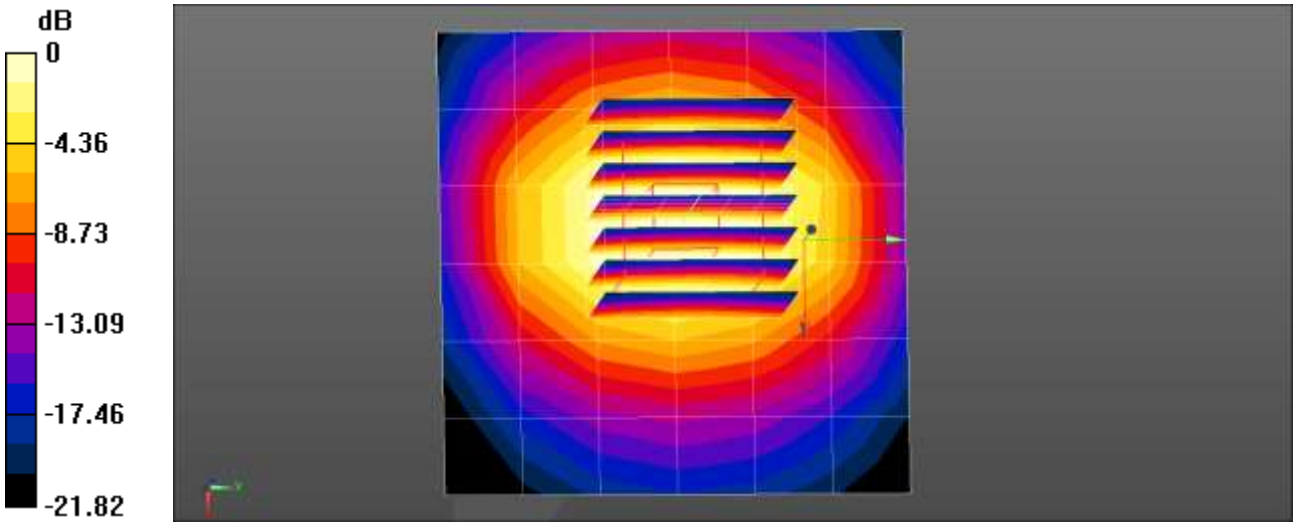
DUT: Dipole 2300 MHz D2300V2; Type: D2300V3; Serial: D2300V3 - SN:1010
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.718 S/m; ε_r = 39.301; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2300 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.19 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.53 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 5.11 W/kg
SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 2.73 W/kg



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

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.6 ℃
Test Date: 07/03/2024
Band: 2 ㎓ WLAN Head

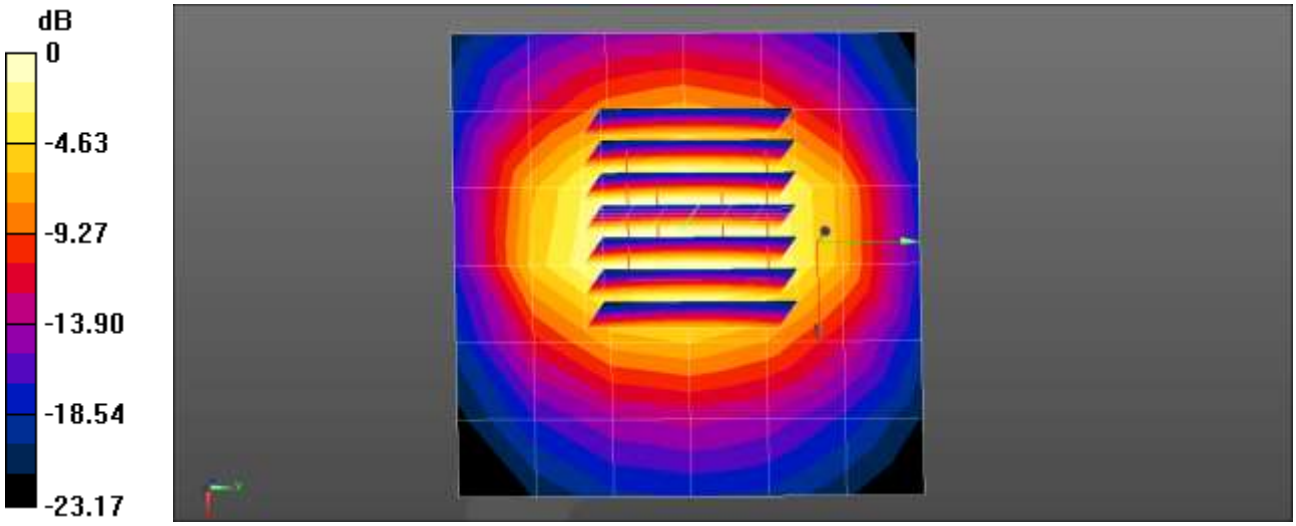
DUT: D2450V2 – SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.826 S/m; ε_r = 39.587; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.41, 7.17, 7.14) @ 2450 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2450MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.60 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.69 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 5.85 W/kg
SAR(1 g) = 2.66 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 3.01 W/kg



0 dB = 3.01 W/kg = 4.79 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.3 ℃**
Test Date:	**06/24/2024**
Band:	**2 ㎓ WLAN Body**

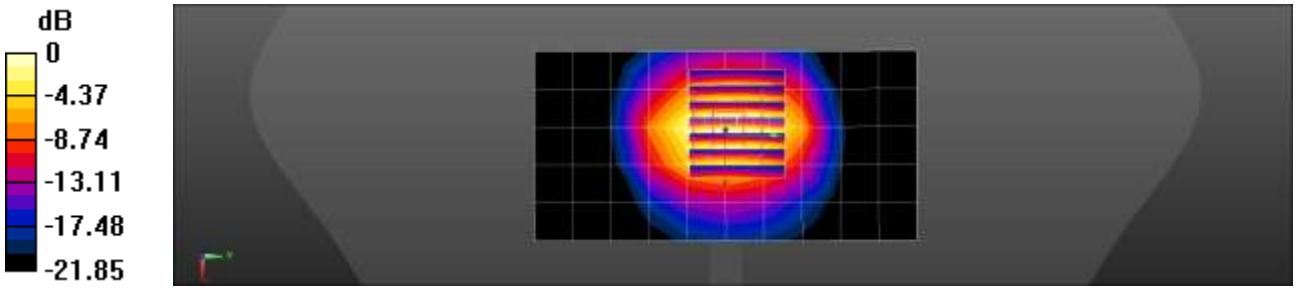
DUT: D2450V2 – SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.773 S/m; ε_r = 38.957; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2450 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2450MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.12 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 45.54 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 5.11 W/kg
SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.19 W/kg
Maximum value of SAR (measured) = 4.12 W/kg



0 dB = 4.12 W/kg = 6.15 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.0 ℃**
Test Date:	**06/24/2024**
Band:	**Bluetooth**

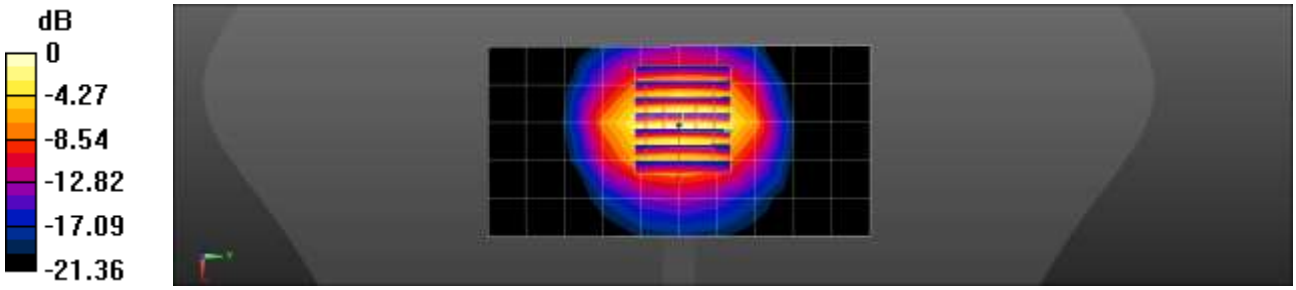
DUT: D2450V2 – SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.752 S/m; ε_r = 39.107; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2450 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2450MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.01 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.71 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.91 W/kg
SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 4.04 W/kg



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

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/26/2024**
Band:	**Bluetooth LE**

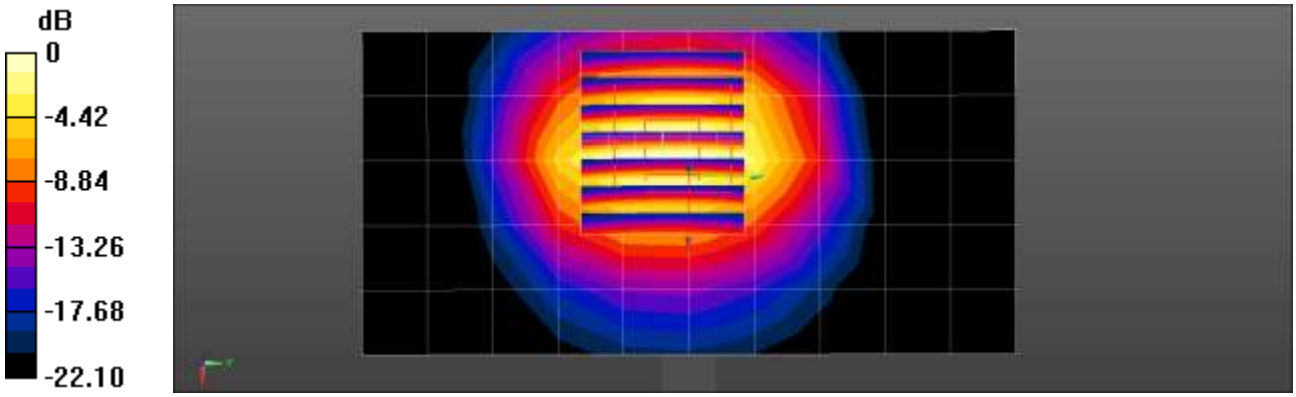
DUT: D2450V2 – SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.833 S/m; ε_r = 39.205; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2450 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2450MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.77 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 37.07 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 4.78 W/kg
SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 3.92 W/kg



0 dB = 3.92 W/kg = 5.93 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.2 ℃**
Test Date:	**06/27/2024**
Band:	**Bluetooth Dual**

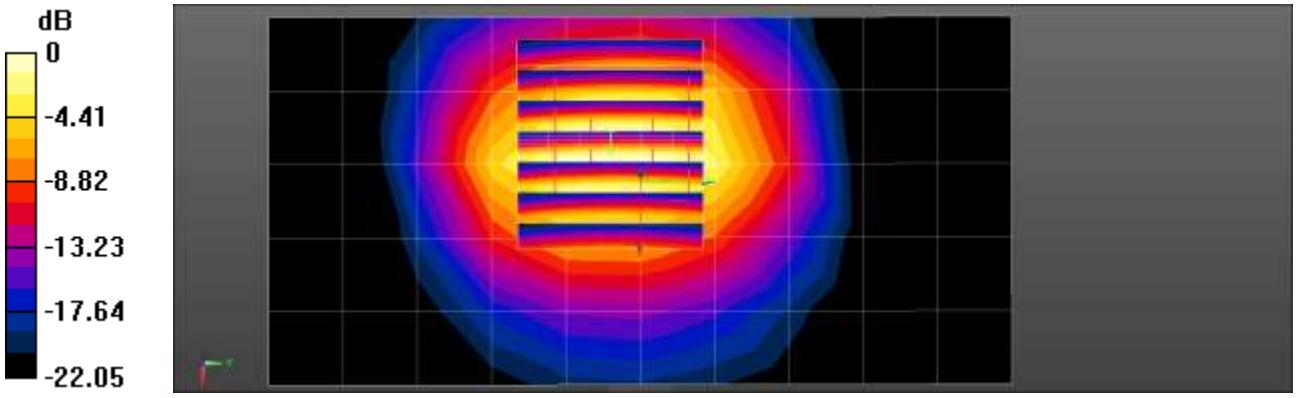
DUT: D2450V2 – SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.833 S/m; ε_r = 39.207; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.85, 8.15, 7.38) @ 2450 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2450MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.95 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 37.95 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 4.85 W/kg
SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.13 W/kg
Maximum value of SAR (measured) = 3.94 W/kg



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

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.1 ℃**
Test Date:	**06/04/2024**
Band:	**LTE FDD Band 7 Ant.B**

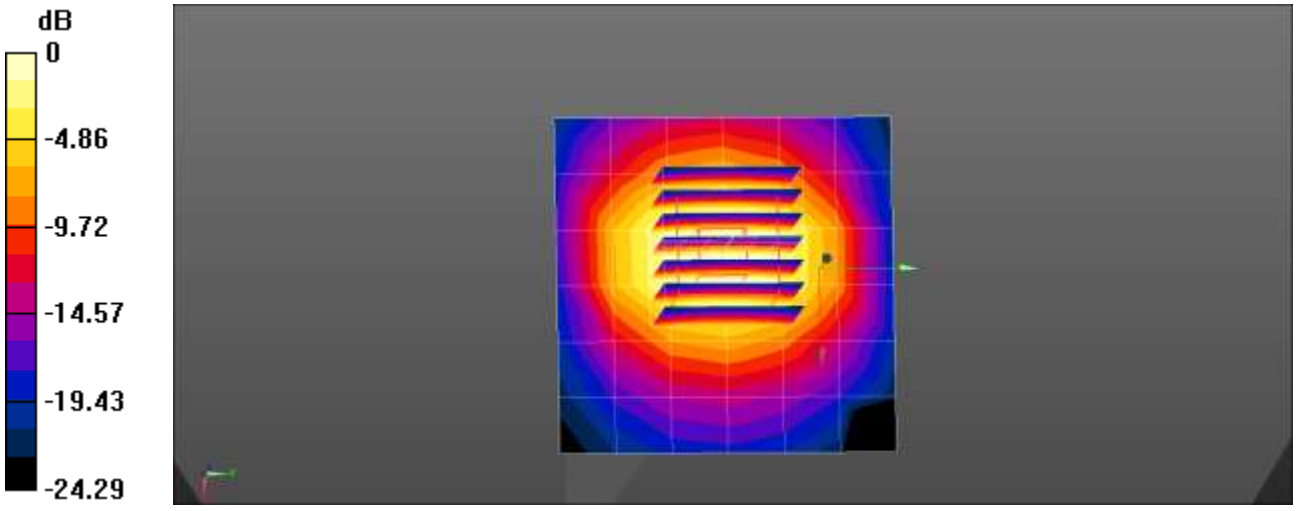
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.032 S/m; ε_r = 38.029; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.75 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.96 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 6.63 W/kg
SAR(1 g) = 2.91 W/kg; SAR(10 g) = 1.29 W/kg
Maximum value of SAR (measured) = 3.33 W/kg



0 dB = 3.33 W/kg = 5.22 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.9 ℃**
Test Date:	**06/26/2024**
Band:	**LTE FDD Band 7 Ant.F**

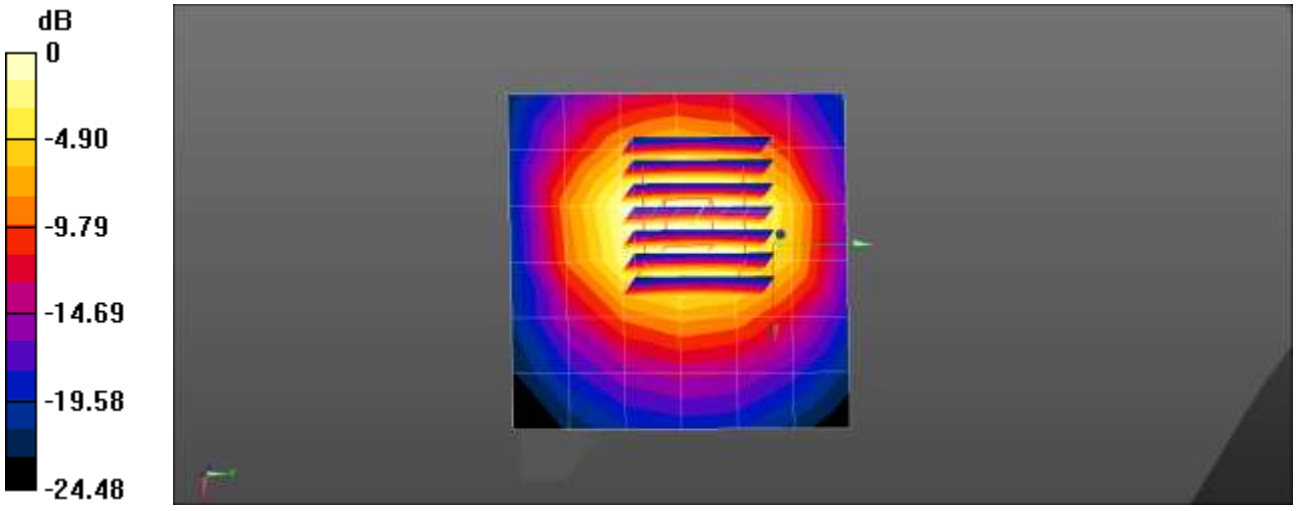
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.939 S/m; ε_r = 38.492; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.15 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.34 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 6.52 W/kg
SAR(1 g) = 2.83 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 3.19 W/kg



0 dB = 3.19 W/kg = 5.04 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.4 ℃**
Test Date:	**06/05/2024**
Band:	**LTE TDD Band 41 (PC3) Ant.B**

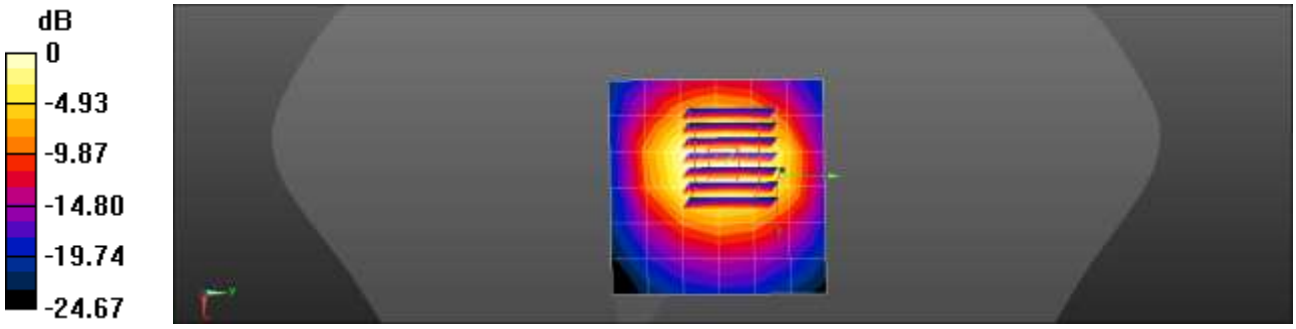
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 – SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.939 S/m; ε_r = 38.787; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.13 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.35 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 6.51 W/kg
SAR(1 g) = 2.83 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 3.21 W/kg



0 dB = 3.21 W/kg = 5.07 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.2 ℃**
Test Date:	**07/01/2024**
Band:	**LTE TDD Band 41 (PC3) Ant.F**

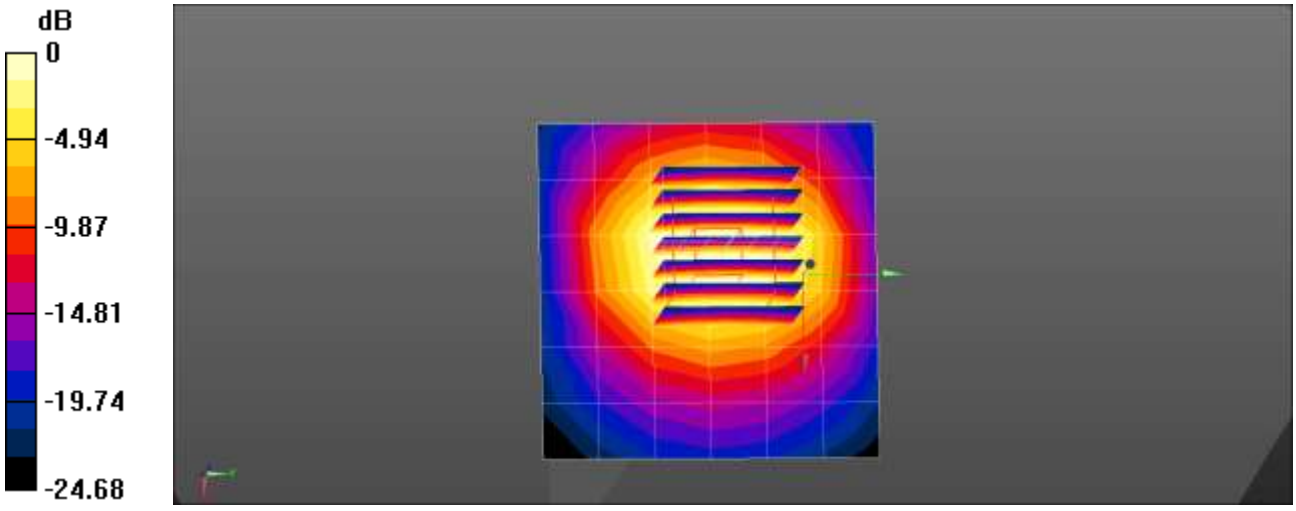
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.908 S/m; ε_r = 38.941; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.08 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.25 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.43 W/kg
SAR(1 g) = 2.78 W/kg; SAR(10 g) = 1.23 W/kg
Maximum value of SAR (measured) = 3.15 W/kg



0 dB = 3.15 W/kg = 4.98 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/17/2024**
Band:	**LTE TDD Band 41 (PC2) Ant.B**

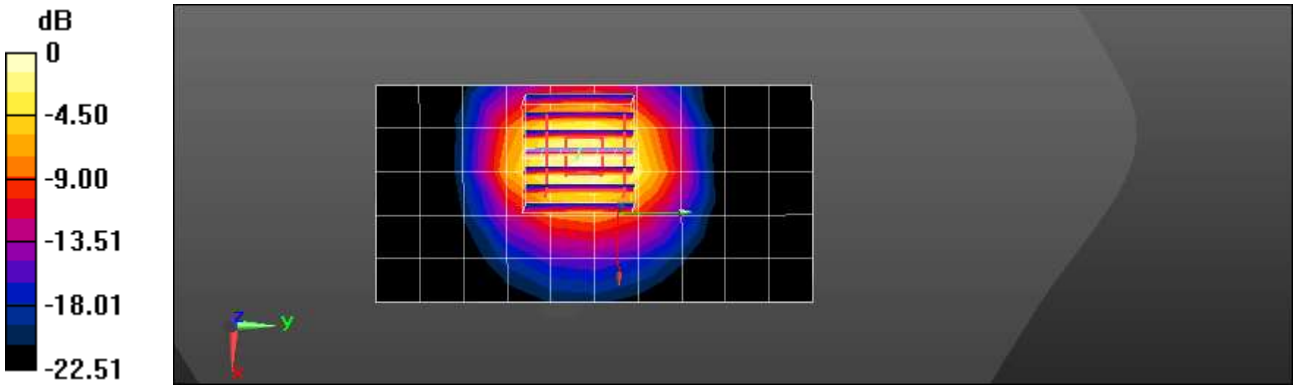
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.007 S/m; ε_r = 39.182; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2600 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.27 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.34 V/m; Power Drift = 0.32 dB
Peak SAR (extrapolated) = 6.06 W/kg
SAR(1 g) = 2.98 W/kg; SAR(10 g) = 1.37 W/kg
Maximum value of SAR (measured) = 4.94 W/kg



0 dB = 4.94 W/kg = 6.94 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.0 ℃**
Test Date:	**07/05/2024**
Band:	**LTE TDD Band 41 (PC2) Ant.F**

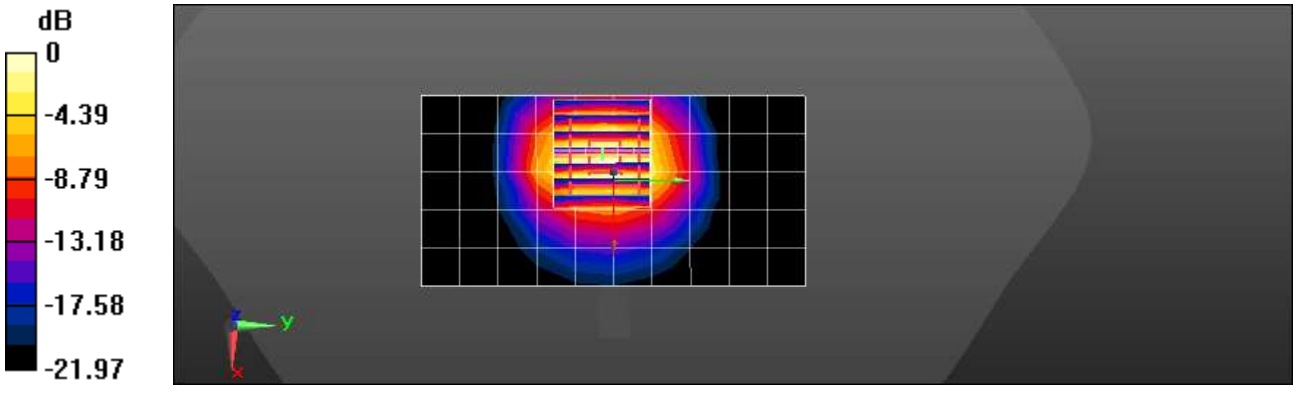
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.007 S/m; ε_r = 39.185; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2600 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.32 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.06 V/m; Power Drift = 0.43 dB
Peak SAR (extrapolated) = 5.98 W/kg
SAR(1 g) = 2.96 W/kg; SAR(10 g) = 1.36 W/kg
Maximum value of SAR (measured) = 4.92 W/kg



0 dB = 4.92 W/kg = 6.92 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/08/2024**
Band:	**LTE TDD Band 48 Ant.F**

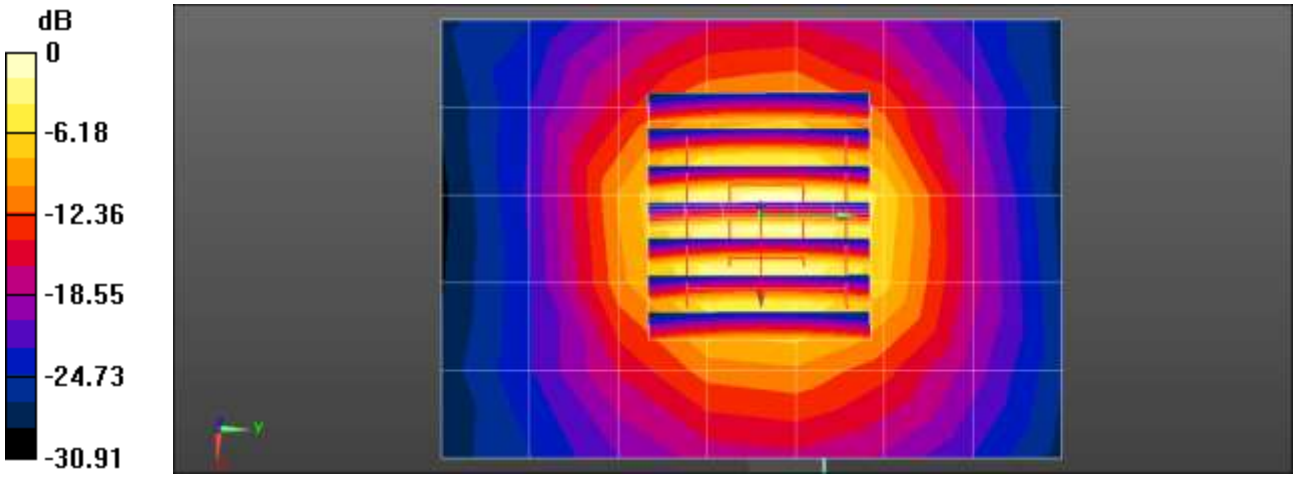
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.921 S/m; ε_r = 36.254; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.41 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 48.03 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 8.14 W/kg
SAR(1 g) = 3.19 W/kg; SAR(10 g) = 1.23 W/kg
Maximum value of SAR (measured) = 6.15 W/kg



0 dB = 6.15 W/kg = 7.89 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

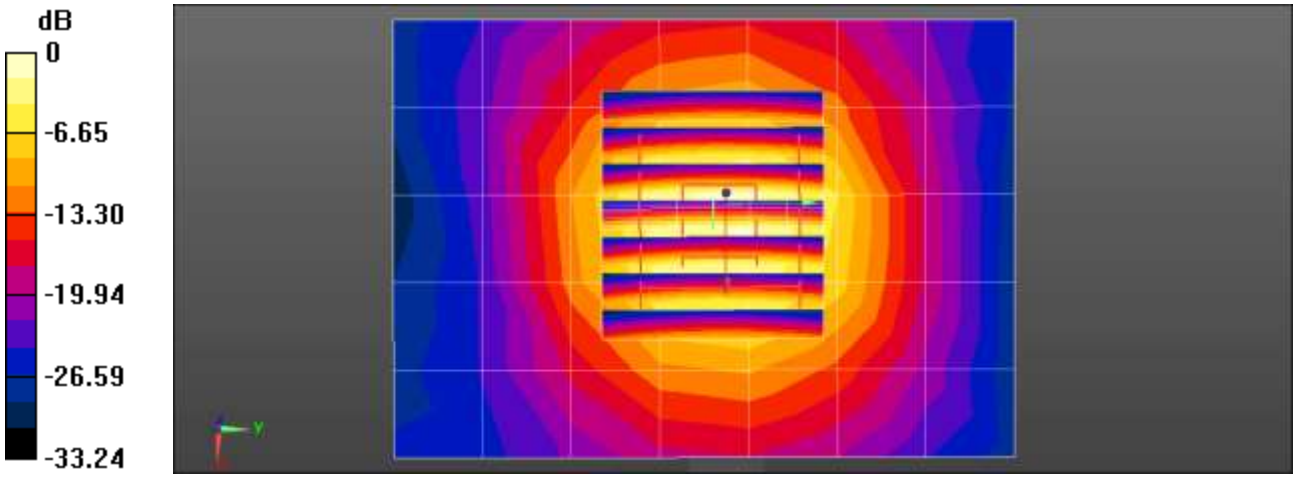
Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/08/2024**
Band:	**LTE TDD Band 48 Ant.F**

DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.072 S/m; ε_r = 35.955; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.58 W/kg
Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 47.40 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 8.45 W/kg
SAR(1 g) = 3.14 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 6.21 W/kg



0 dB = 6.21 W/kg = 7.93 dBW/kg

■ **Verification Data (5 250 ㎒ Head)**

Test Laboratory: **HCT CO., LTD**
Input Power **0.05 W**
Liquid Temp: **24.0 ℃**
Test Date: **06/19/2024**
Band **U-NII-2A**

Measurement Report for Device, , , CW, Channel 0 (5250.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5250.000, 0	5.24	4.58	37.0

Hardware Setup

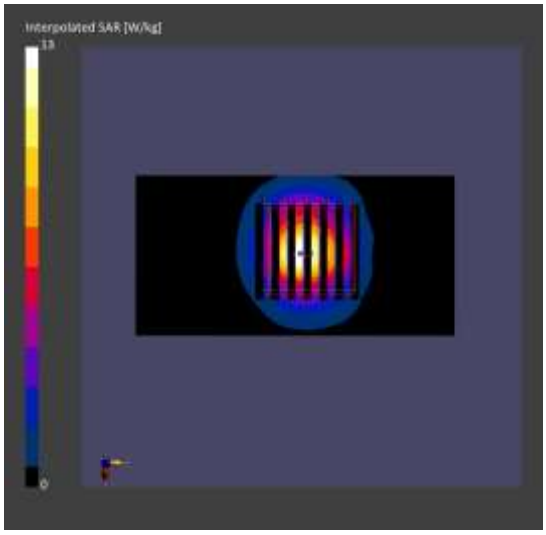
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.58	3.93
psSAR10g [W/Kg]	1.11	1.22
Power Drift [dB]	-0.03	-0.03
M2/M1 [%]		68.8
Dist 3dB Peak [mm]		7.9



■ Verification Data (5 600 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 23.0 ℃
Test Date: 06/20/2024
Band U-NII-2C

Measurement Report for Device, , , CW, Channel 0 (5600.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5600.000, 0	4.63	4.87	36.9

Hardware Setup

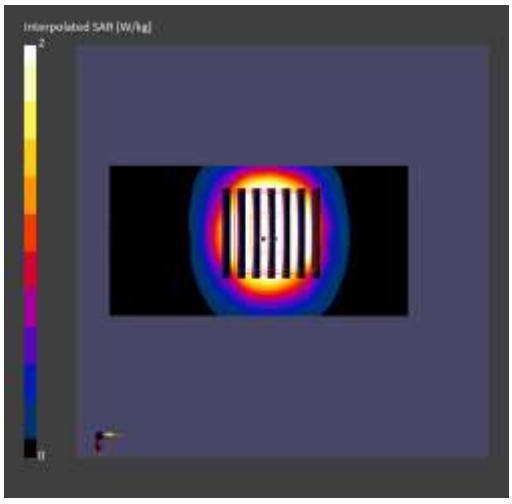
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.67	4.17
psSAR10g [W/Kg]	1.10	1.18
Power Drift [dB]	-0.02	-0.01
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		7.2



■ Verification Data (5 750 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 24.1 ℃
Test Date: 06/21/2024
Band U-NII-3
Measurement Report for Device, , , CW, Channel 0 (5750.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5750.000, 0	4.81	5.04	36.8

Hardware Setup

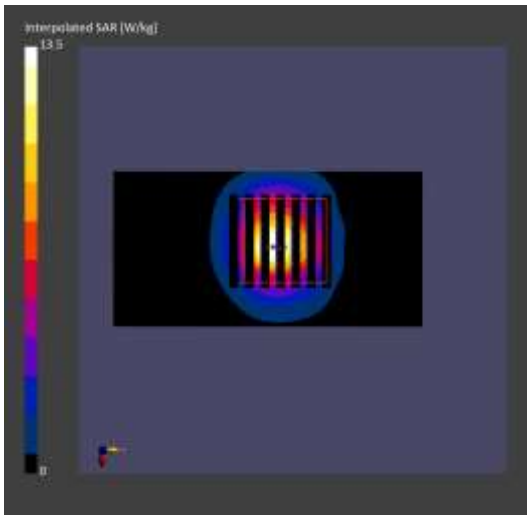
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.46	3.76
psSAR10g [W/Kg]	1.07	1.16
Power Drift [dB]	-0.01	0.02
M2/M1 [%]		65.8
Dist 3dB Peak [mm]		8.2



■ Verification Data (5 800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.0 ℃
Test Date: 06/24/2024
Band: U-NII-4

Measurement Report for Device, , , CW, Channel 0 (5800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5800.000, 0	4.76	5.08	36.8

Hardware Setup

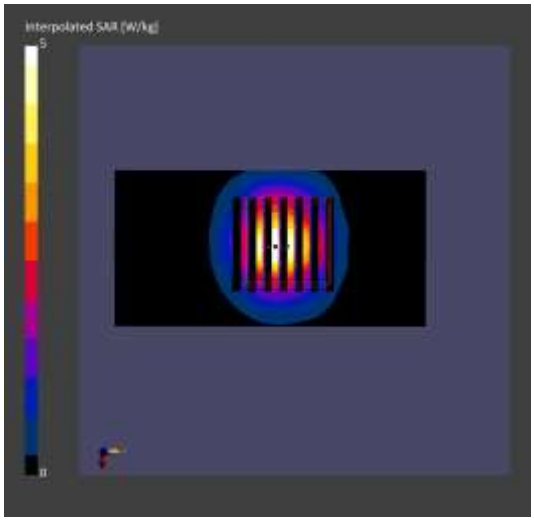
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.62	3.90
psSAR10g [W/Kg]	1.11	1.20
Power Drift [dB]	-0.01	0.01
M2/M1 [%]		65.3
Dist 3dB Peak [mm]		7.9



■ **Verification Data (5 250 ㎒ Head)**

Test Laboratory: **HCT CO., LTD**
Input Power **0.05 W**
Liquid Temp: **19.1 ℃**
Test Date: **06/25/2024**
Band **U-NII-2A MIMO**

Measurement Report for Device, , , CW, Channel 0 (5250.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	5250.000, 0	5.24	4.58	37.0

Hardware Setup

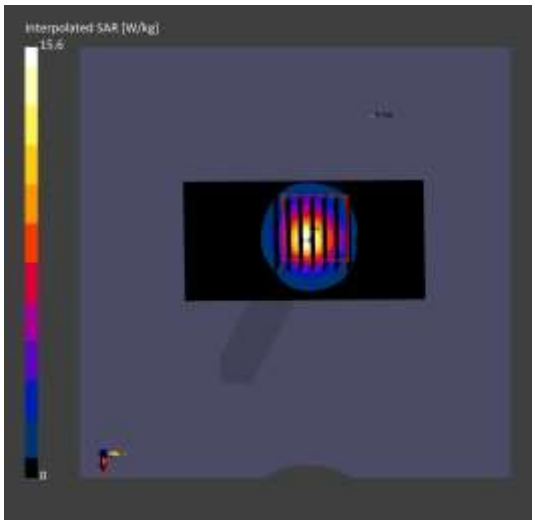
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.94	4.27
psSAR10g [W/Kg]	1.13	1.22
Power Drift [dB]	-0.02	0.03
M2/M1 [%]		66.6
Dist 3dB Peak [mm]		7.2



■ Verification Data (5 600 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.5 ℃
Test Date: 06/26/2024
Band U-NII-2C MIMO

Measurement Report for Device, , , CW, Channel 0 (5600.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5600.000, 0	4.63	4.87	36.7

Hardware Setup

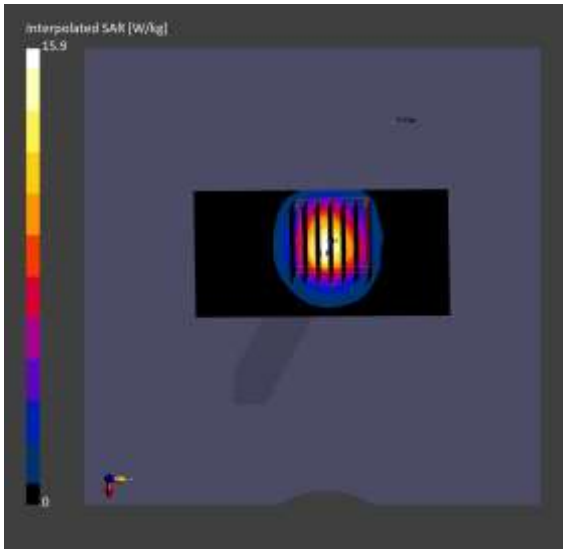
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.55	4.08
psSAR10g [W/Kg]	1.12	1.21
Power Drift [dB]	0.01	0.02
M2/M1 [%]		63.0
Dist 3dB Peak [mm]		7.6



■ Verification Data (5 750 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.9 ℃
Test Date: 06/27/2024
Band U-NII-3 MIMO

Measurement Report for Device, , , CW, Channel 0 (5750.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5750.000, 0	4.81	5.24	36.5

Hardware Setup

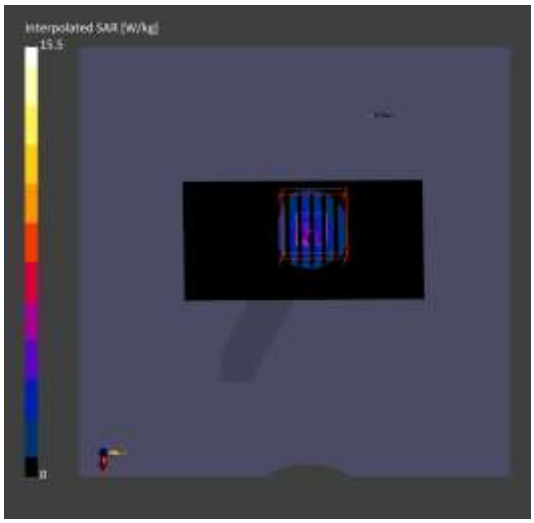
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.23	3.75
psSAR10g [W/Kg]	1.01	1.10
Power Drift [dB]	-0.00	0.05
M2/M1 [%]		60.5
Dist 3dB Peak [mm]		7.6



■ Verification Data (5 800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.3 ℃
Test Date: 06/28/2024
Band: U-NII-4 MIMO

Measurement Report for Device, , , CW, Channel 0 (5800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	5800.000, 0	4.76	5.20	36.5

Hardware Setup

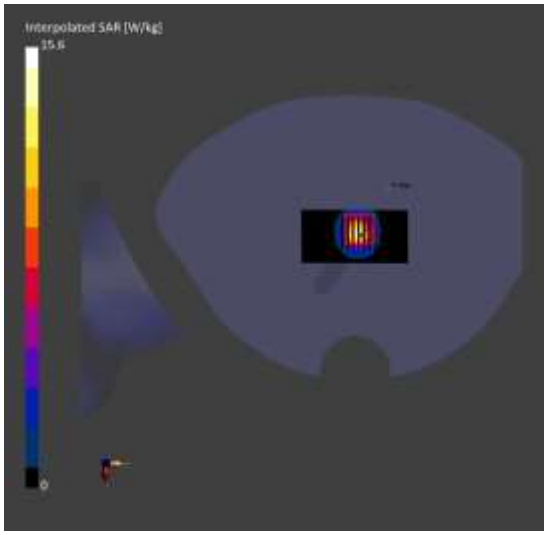
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.30	3.80
psSAR10g [W/Kg]	1.04	1.12
Power Drift [dB]	0.04	0.02
M2/M1 [%]		61.3
Dist 3dB Peak [mm]		7.9



Test Laboratory: HCT CO., LTD
Input Power 0.01 W
Liquid Temp: 19.5 ℃
Test Date: 07/02/2024
Band: 6 GHz Ant.1
Measurement Report for Device, , , CW, Channel 0 (6500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	6500.000, 0	5.6	6.22	34.0

Hardware Setup

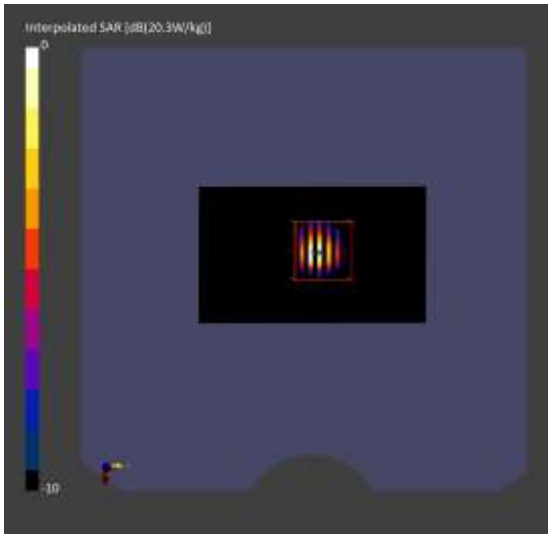
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.51	3.14
psSAR10g [W/Kg]	0.509	0.565
Power Drift [dB]	-0.01	-0.09
M2/M1 [%]		50.2
Dist 3dB Peak [mm]		4.8



Test Laboratory: HCT CO., LTD
Input Power 0.01 W
Liquid Temp: 19.0 ℃
Test Date: 07/03/2024
Band: 6 GHz Ant.2
Measurement Report for Device, , , CW, Channel 0 (6500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0- -	6500.000, 0	5.6	6.24	34.0

Hardware Setup

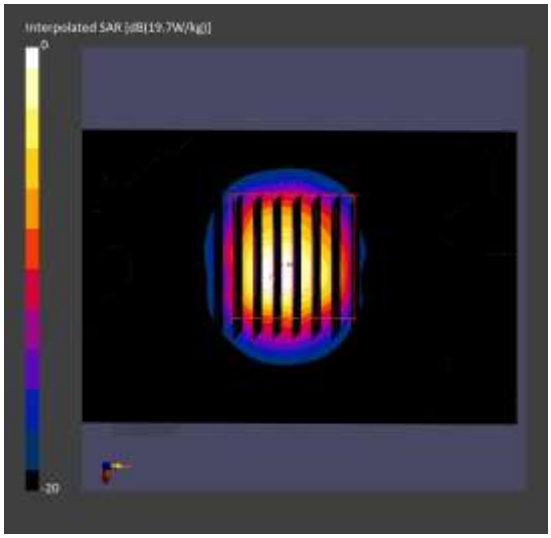
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7370, 2023-08-24	DAE4 Sn868, 2023-09-20

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.41	3.03
psSAR10g [W/Kg]	0.487	0.544
Power Drift [dB]	-0.01	-0.06
M2/M1 [%]		50.0
Dist 3dB Peak [mm]		4.8



◆ 5G NR SUB 6

■ Verification Data (750 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 06/17/2024
Band: NR FDD Band n71 Ant.A

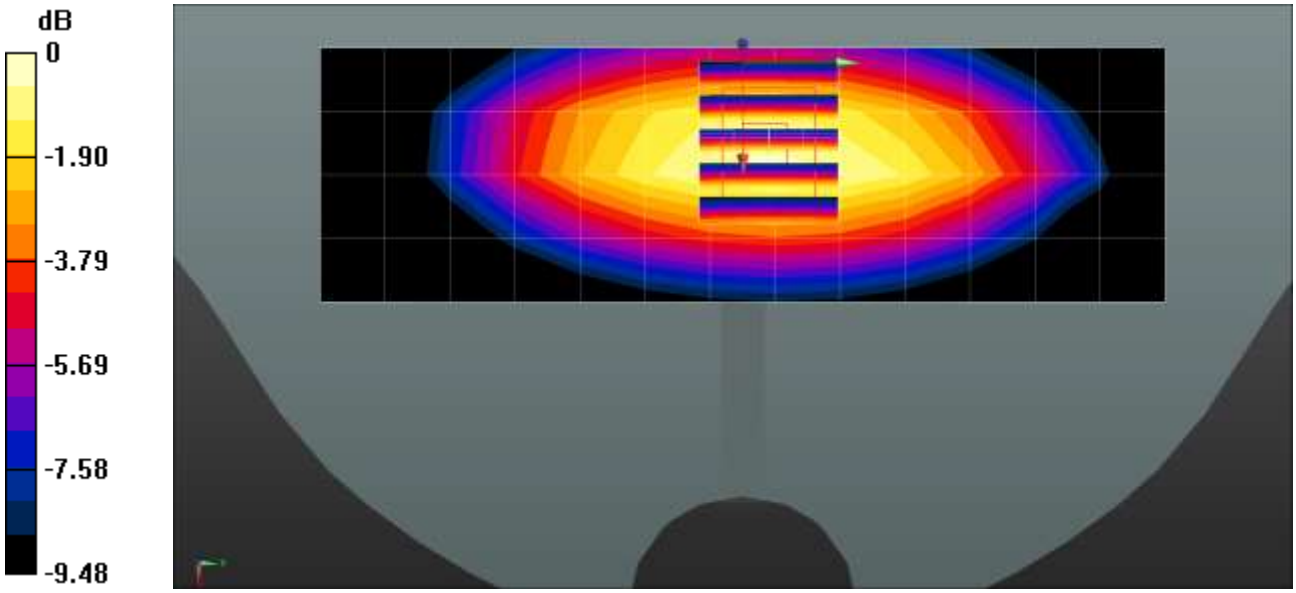
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.914 S/m; ε_r = 40.566; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.34, 9.29, 9.81) @ 750 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.472 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.11 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.532 W/kg
SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.280 W/kg
Maximum value of SAR (measured) = 0.508 W/kg



0 dB = 0.508 W/kg = -2.94 dBW/kg

■ **Verification Data (750 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.6 ℃
Test Date: 06/18/2024
Band: NR FDD Band n12 Ant.A

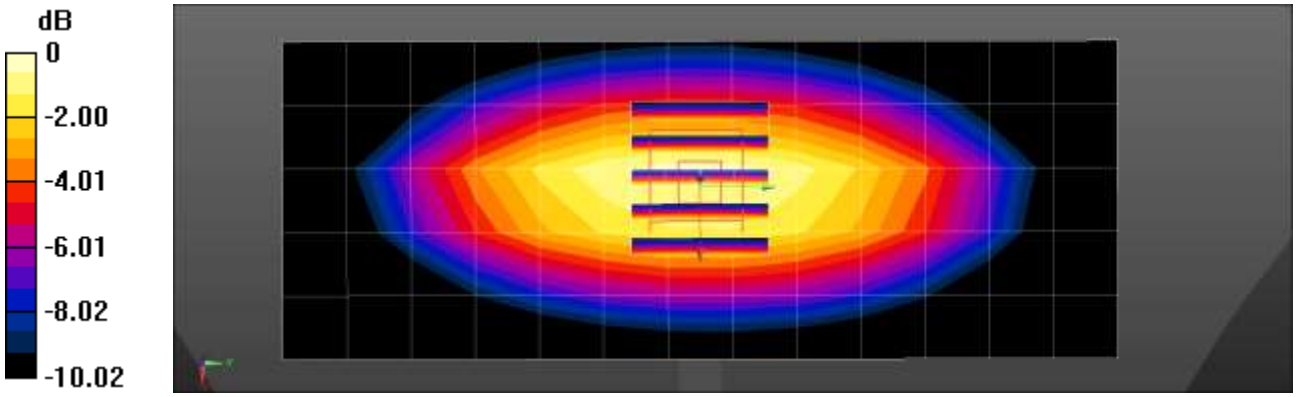
DUT: D750V3 - SN1014; Type: D750V3; Serial: SN1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.914 S/m; ε_r = 40.967; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.65, 10.07, 8.84) @ 750 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/750MHz Head Verification/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.514 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.40 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.611 W/kg
SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.293 W/kg
Maximum value of SAR (measured) = 0.562 W/kg



0 dB = 0.562 W/kg = -2.50 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.0 ℃**
Test Date:	**06/19/2024**
Band:	**NR FDD Band n26 Ant.A**

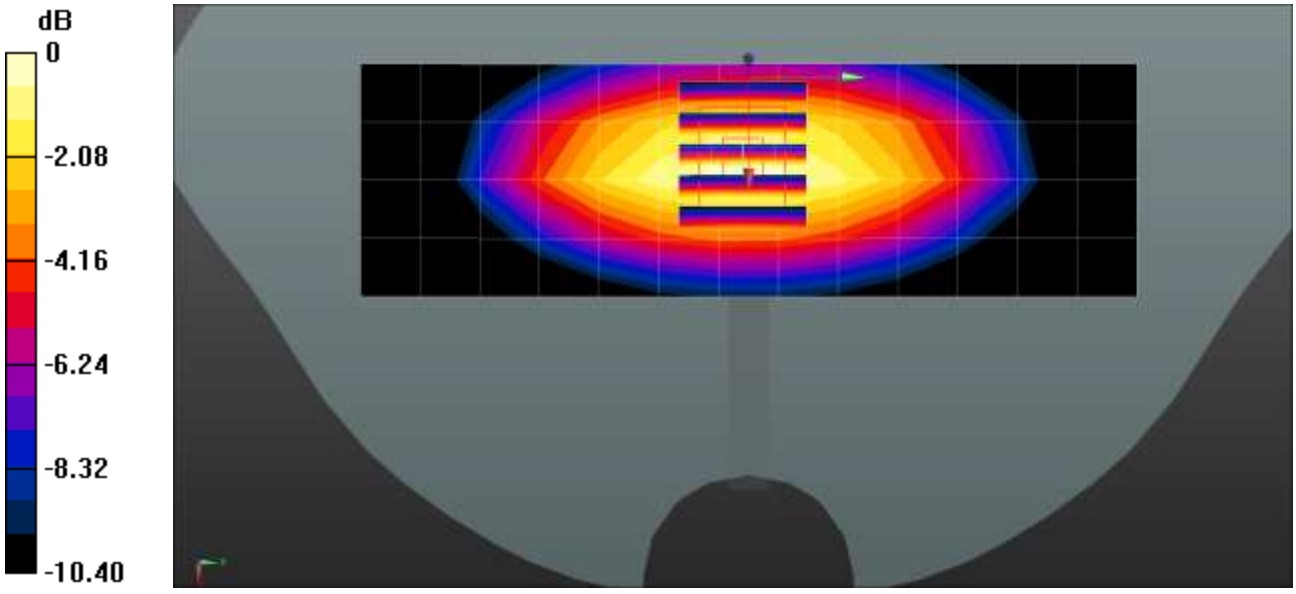
DUT: D835V2 - SN441; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.926 S/m; ε_r = 42.619; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 835 MHz; Calibrated: 2023-11-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.589 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.95 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.674 W/kg
SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.334 W/kg
Maximum value of SAR (measured) = 0.635 W/kg



0 dB = 0.635 W/kg = -1.97 dBW/kg

■ **Verification Data (1 640 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.8 ℃**
Test Date:	**06/17/2024**
Band:	**NR FDD Band n70 Ant.A**

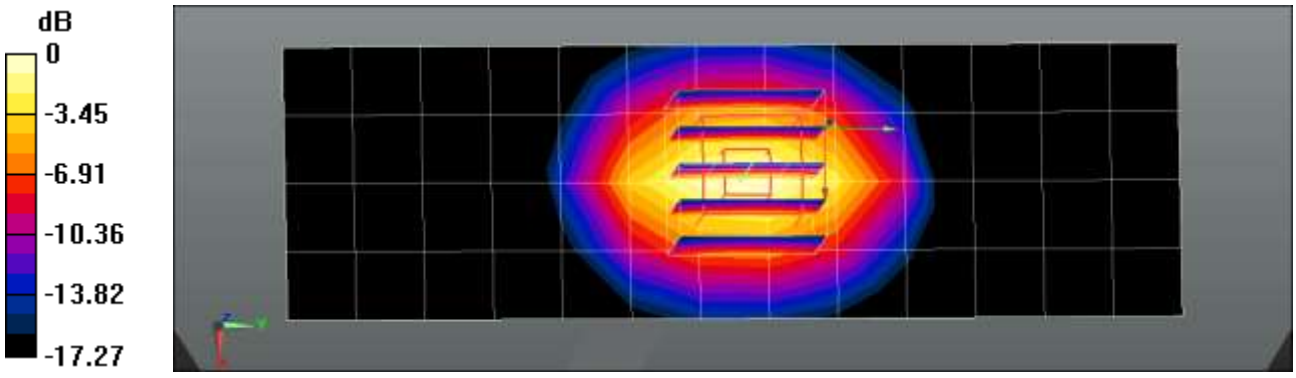
DUT: Dipole 1640 MHz D1640V2; Type: D1640V2; Serial: D1640V2 - SN:345
Communication System: UID 0, CW (0); Frequency: 1640 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1640 MHz; σ = 1.269 S/m; ε_r = 41.168; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.99, 8.29, 7.49) @ 1640 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/1640MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.28 W/kg

Dipole/1640MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.01 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.72 W/kg
SAR(1 g) = 1.61 W/kg; SAR(10 g) = 0.863 W/kg
Maximum value of SAR (measured) = 2.39 W/kg



0 dB = 2.39 W/kg = 3.78 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.3 ℃**
Test Date:	**06/19/2024**
Band:	**NR FDD Band n66 Ant.A**

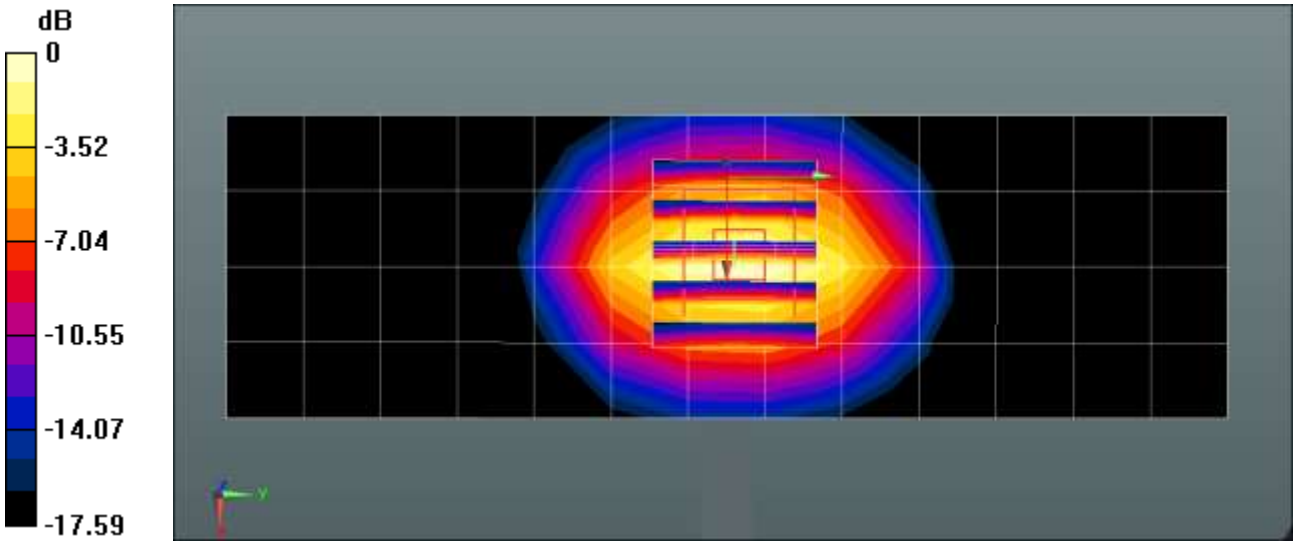
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.39 S/m; ε_r = 41.009; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1800 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.94 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.53 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 3.09 W/kg



0 dB = 3.09 W/kg = 4.90 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/02/2024**
Band:	**NR FDD Band n66 Ant.F**

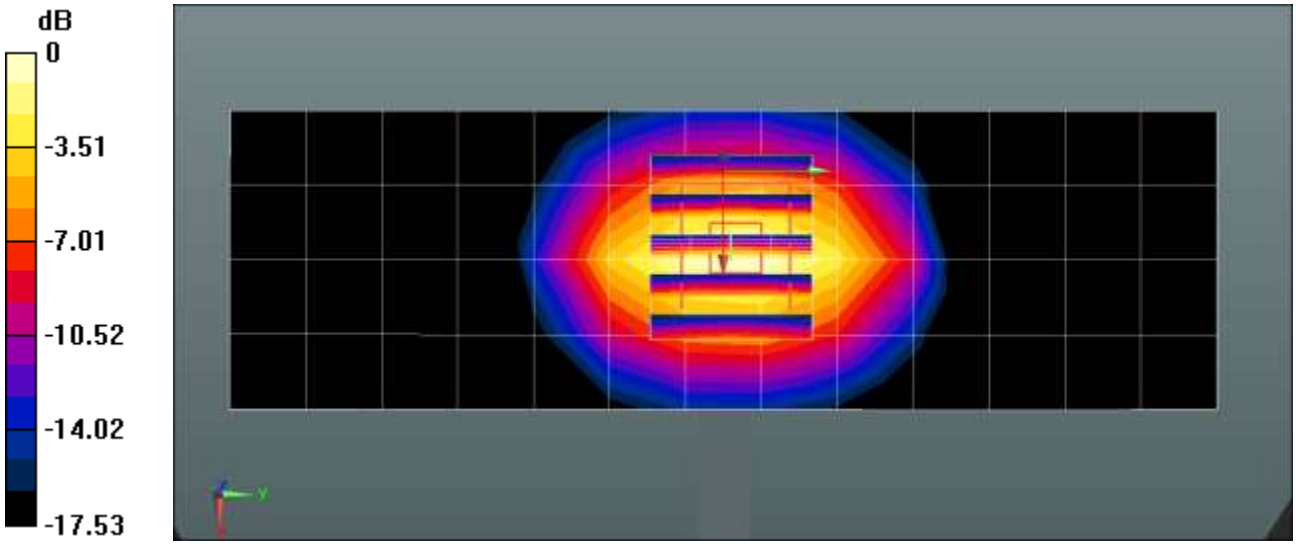
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.385 S/m; ε_r = 41.049; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(9.17, 8.32, 8.06) @ 1800 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.93 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.51 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.60 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 3.07 W/kg



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

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.3 ℃**
Test Date:	**06/28/2024**
Band:	**NR FDD Band n25 Ant.A**

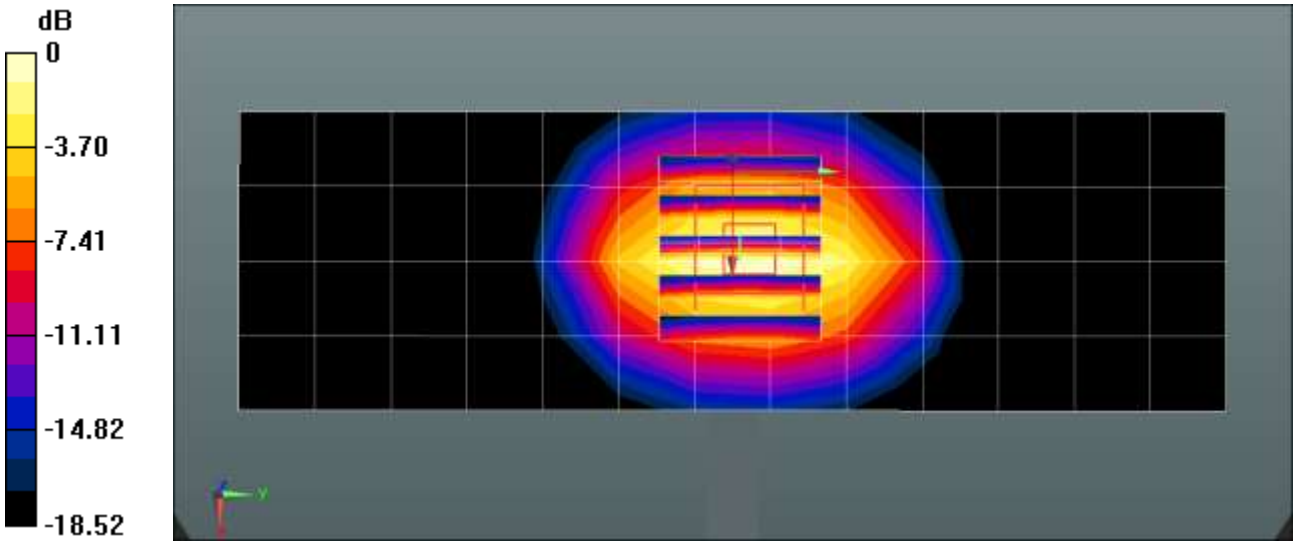
DUT: D1900V2 - SN5d032; Type: D1900V2; Serial: SN5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.398 S/m; ε_r = 38.768; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1900 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.26 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 51.26 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.91 W/kg
SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.13 W/kg
Maximum value of SAR (measured) = 3.32 W/kg



0 dB = 3.32 W/kg = 5.21 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/01/2024**
Band:	**NR FDD Band n25 Ant.F**

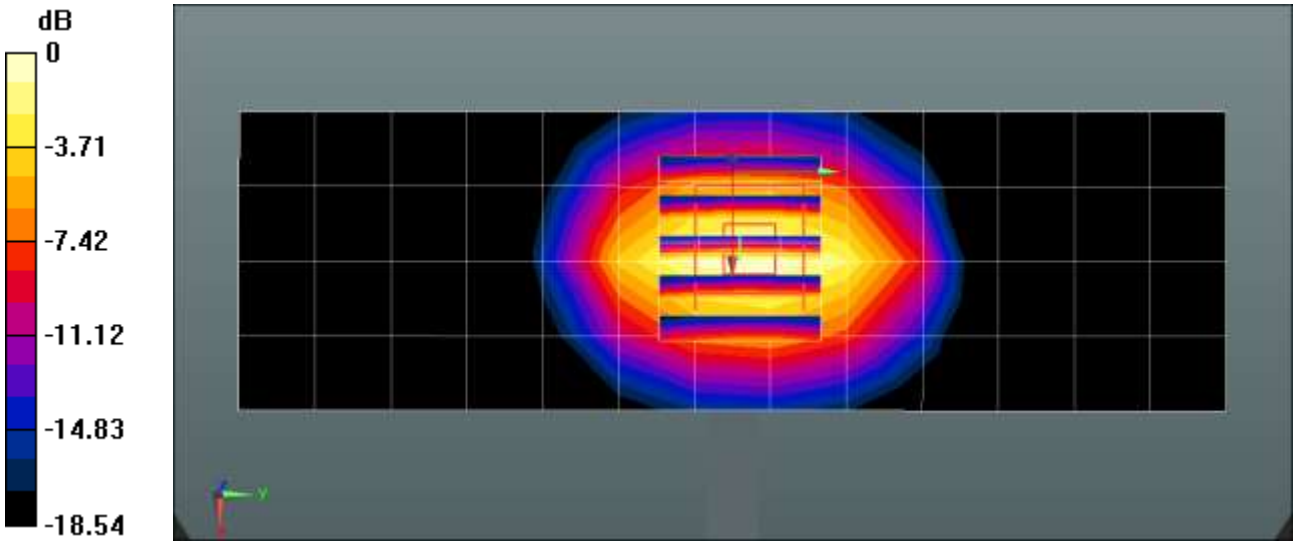
DUT: D1900V2 - SN5d032; Type: D1900V2; Serial: SN5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.392 S/m; ε_r = 38.818; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(8.81, 8.04, 7.78) @ 1900 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1750; Calibrated: 2023-09-19
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.25 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 51.10 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.90 W/kg
SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 3.31 W/kg



0 dB = 3.31 W/kg = 5.20 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.7 ℃**
Test Date:	**06/24/2024**
Band:	**NR FDD Band n30 Ant.A**

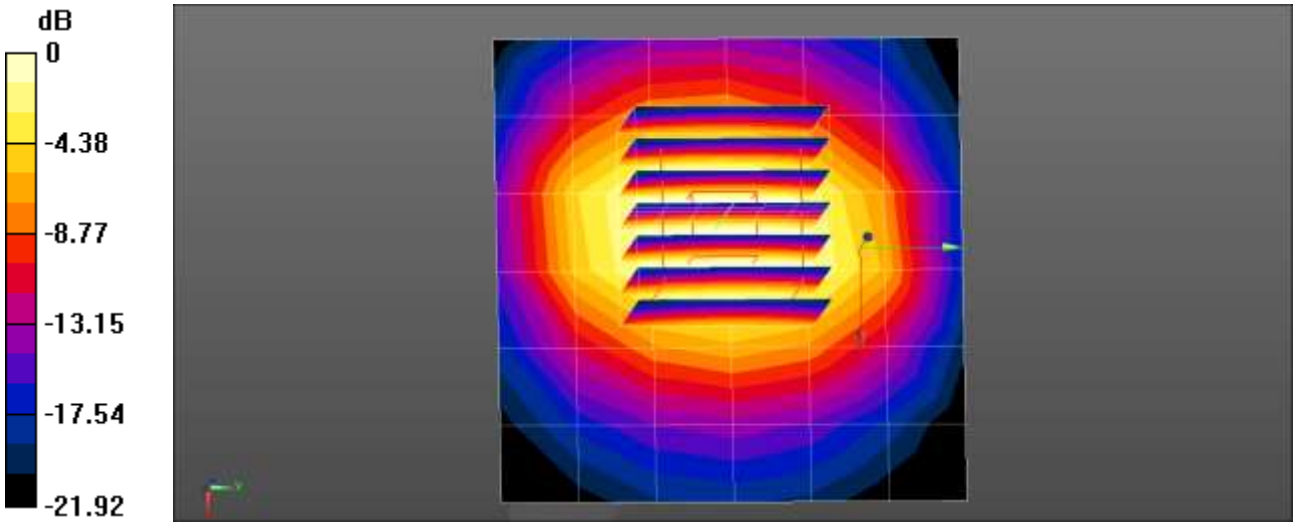
DUT: Dipole 2300 MHz D2300V2; Type: D2300V3; Serial: D2300V3 - SN:1010
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.699 S/m; ε_r = 39.671; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2300 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.28 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.39 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 5.34 W/kg
SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.19 W/kg
Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.87 W/kg = 4.58 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.8 ℃**
Test Date:	**06/25/2024**
Band:	**NR FDD Band n30 Ant.F**

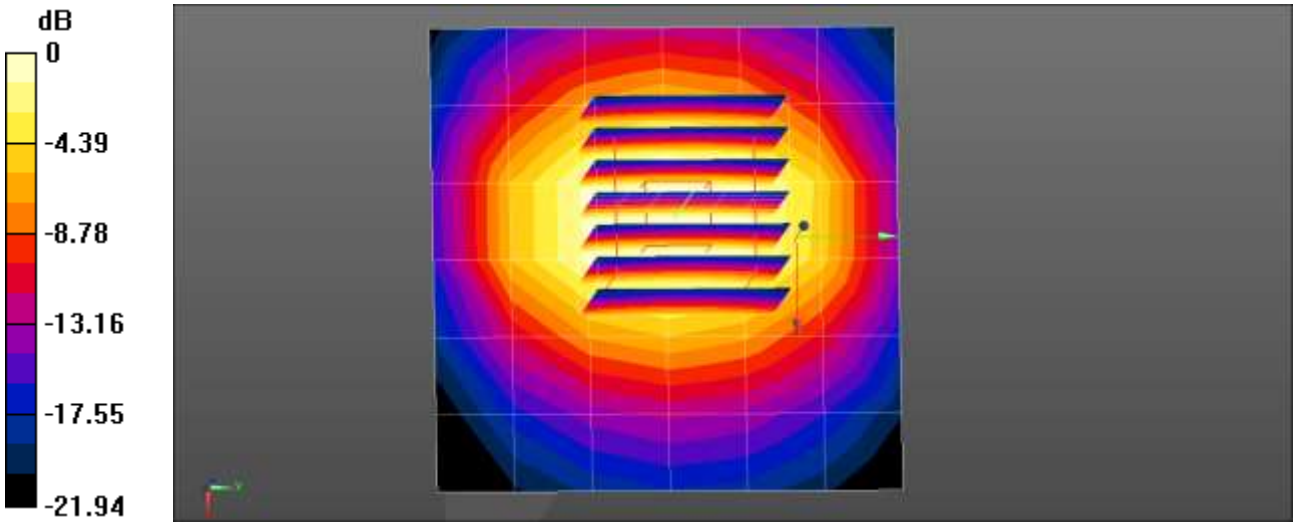
DUT: Dipole 2300 MHz D2300V2; Type: D2300V3; Serial: D2300V3 - SN:1010
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.667 S/m; ε_r = 39.321; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.49, 7.24, 7.21) @ 2300 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2300MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.11 W/kg

Dipole/2300MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.77 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 4.96 W/kg
SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.12 W/kg
Maximum value of SAR (measured) = 2.65 W/kg



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

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/12/2024**
Band:	**NR FDD Band n7 Ant.B**

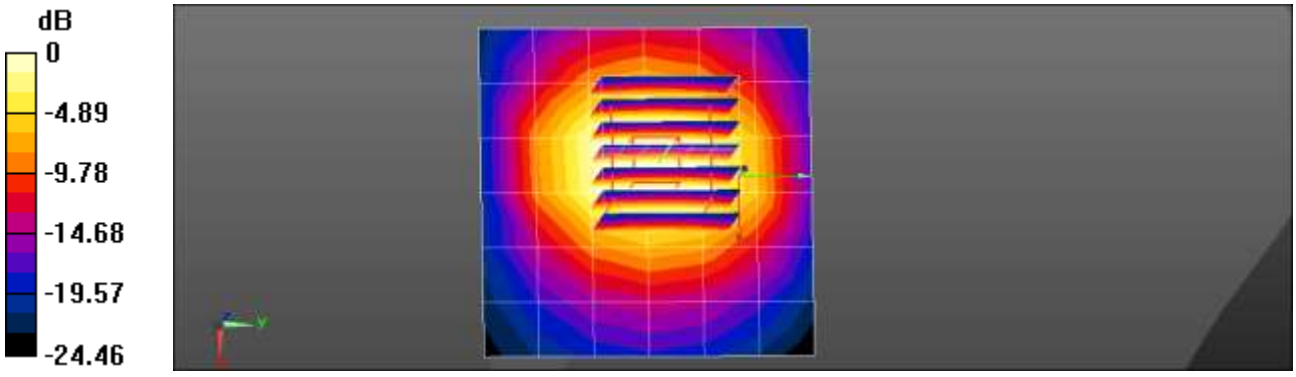
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.001 S/m; ε_r = 38.511; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.59 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 43.98 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 6.42 W/kg
SAR(1 g) = 2.81 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.3 ℃**
Test Date:	**07/02/2024**
Band:	**NR FDD Band n7 Ant.F**

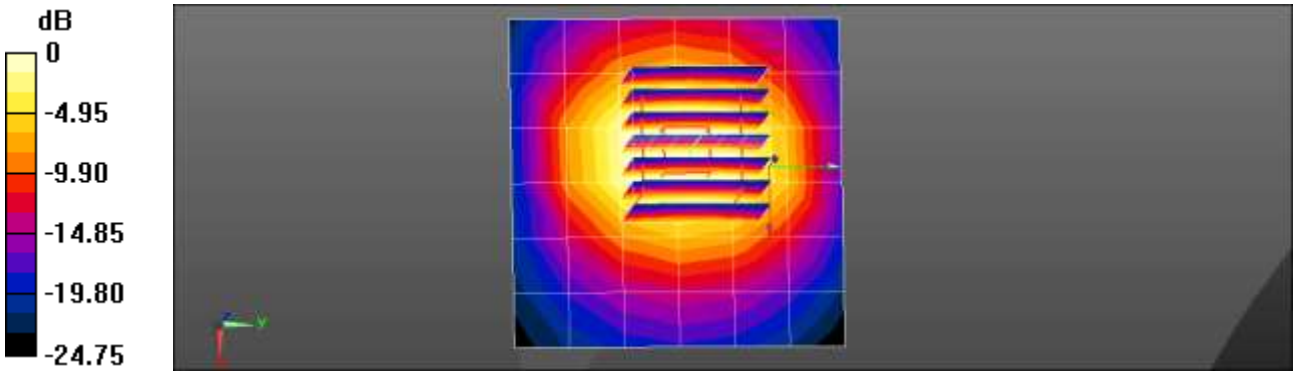
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.997 S/m; ε_r = 38.556; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.63 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.73 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 6.36 W/kg
SAR(1 g) = 2.8 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/20/2024**
Band:	**NR TDD Band n38 Ant.B**

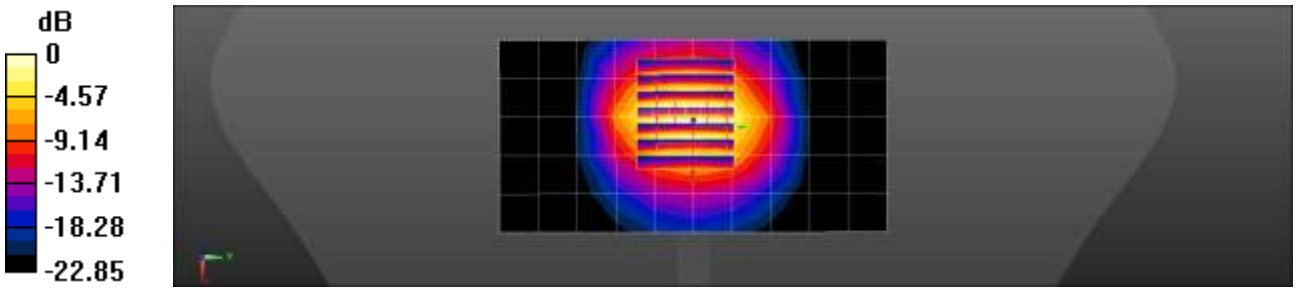
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.032 S/m; ε_r = 38.03; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.48, 7.77, 7.04) @ 2600 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.75 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.07 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 5.87 W/kg
SAR(1 g) = 2.85 W/kg; SAR(10 g) = 1.3 W/kg
Maximum value of SAR (measured) = 4.74 W/kg



0 dB = 4.74 W/kg = 6.76 dBW/kg

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.3 ℃
Test Date: 06/13/2024
Band: NR TDD Band n41 Ant.B

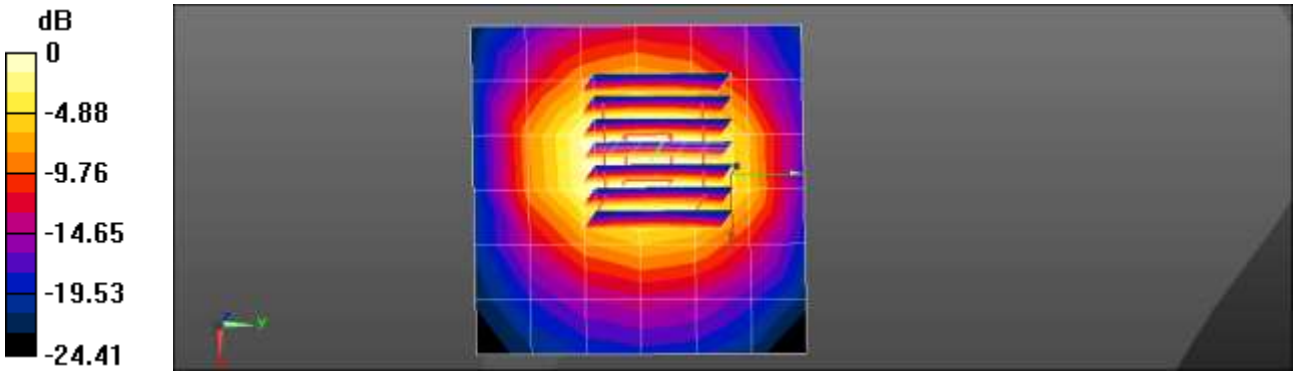
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.964 S/m; ε_r = 38.746; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.34, 7.07, 7.07) @ 2600 MHz; Calibrated: 2024-01-23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.57 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.68 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 6.26 W/kg
SAR(1 g) = 2.76 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 3.13 W/kg



0 dB = 3.13 W/kg = 4.96 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.2 ℃**
Test Date:	**08/08/2024**
Band:	**NR TDD Band n41 Head**

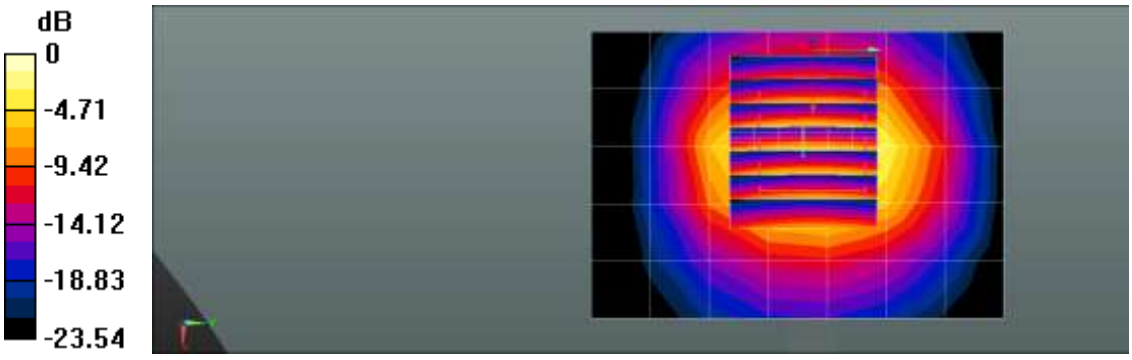
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.031 S/m; εr = 38.031; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.32, 4.65, 4.64) @ 2600 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1687; Calibrated: 2024-07-12
- Phantom: SAM with CRP v5.0(Front); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2600MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.42 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 41.25 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 5.95 W/kg
SAR(1 g) = 2.72 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 3.60 W/kg



0 dB = 3.60 W/kg = 5.56 dBW/kg

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

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.2 ℃**
Test Date:	**08/08/2024**
Band:	**NR TDD Band n41 Body**

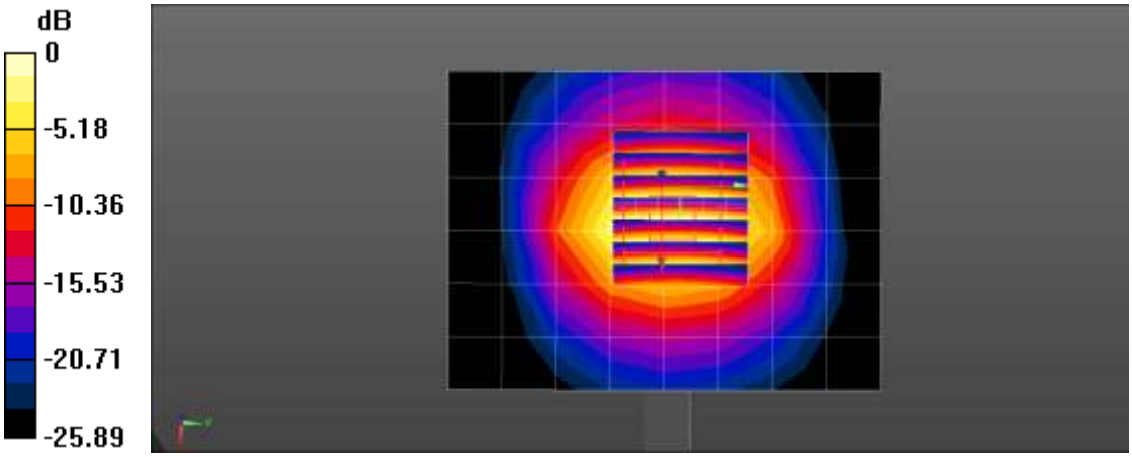
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.959 S/m; εr = 38.531; ρ = 1000 kg/m3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(7.47, 7.47, 7.47) @ 2600 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2024-05-16
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/2600MHz Head Verification/Area Scan (7x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.63 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.03 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 6.39 W/kg
SAR(1 g) = 2.79 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 4.94 W/kg



0 dB = 4.94 W/kg = 6.94 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/08/2024**
Band:	**NR TDD Band n48 Ant.F**

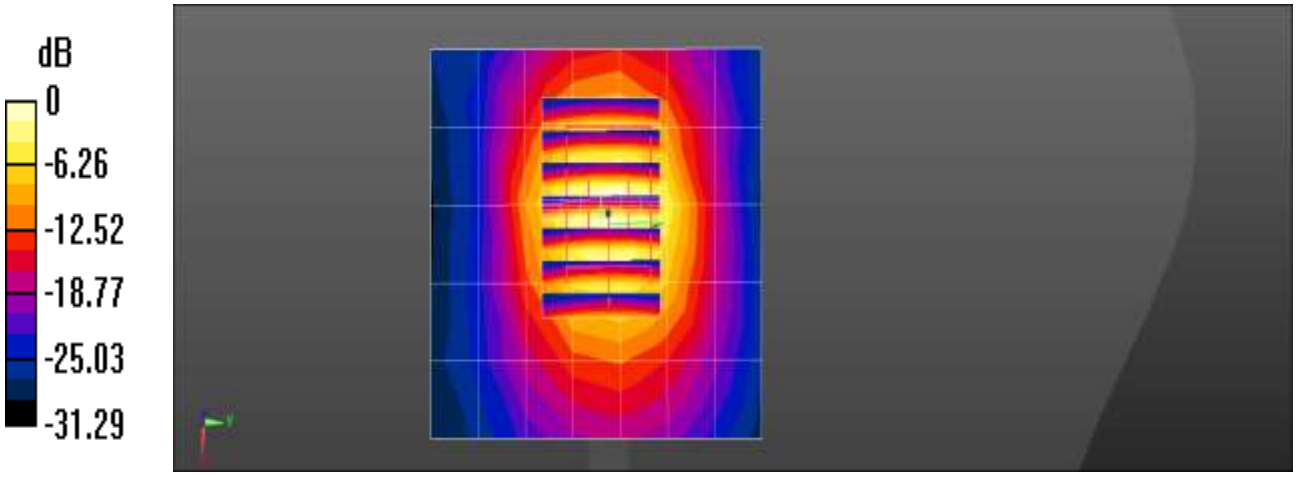
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.933 S/m; ε_r = 36.595; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.87 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 44.57 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 8.23 W/kg
SAR(1 g) = 3.26 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 6.14 W/kg



0 dB = 6.14 W/kg = 7.88 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.9 ℃**
Test Date:	**07/09/2024**
Band:	**NR TDD Band n48 Ant.C**

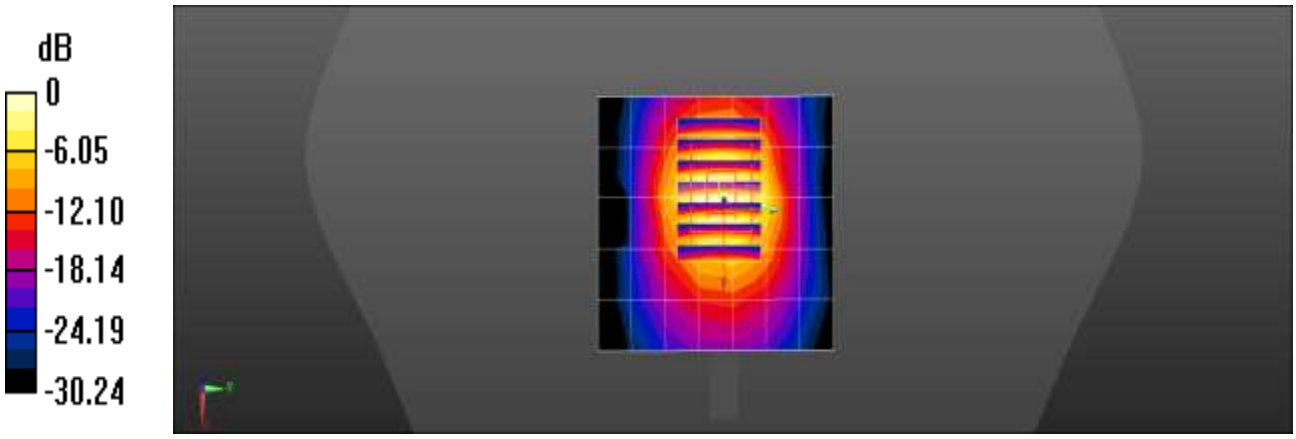
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132 Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.934 S/m; ε_r = 36.621; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.95 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.46 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 8.31 W/kg
SAR(1 g) = 3.36 W/kg; SAR(10 g) = 1.3 W/kg
Maximum value of SAR (measured) = 6.33 W/kg



0 dB = 6.33 W/kg = 8.01 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.8 ℃**
Test Date:	**07/11/2024**
Band:	**NR TDD Band n48 Ant.D**

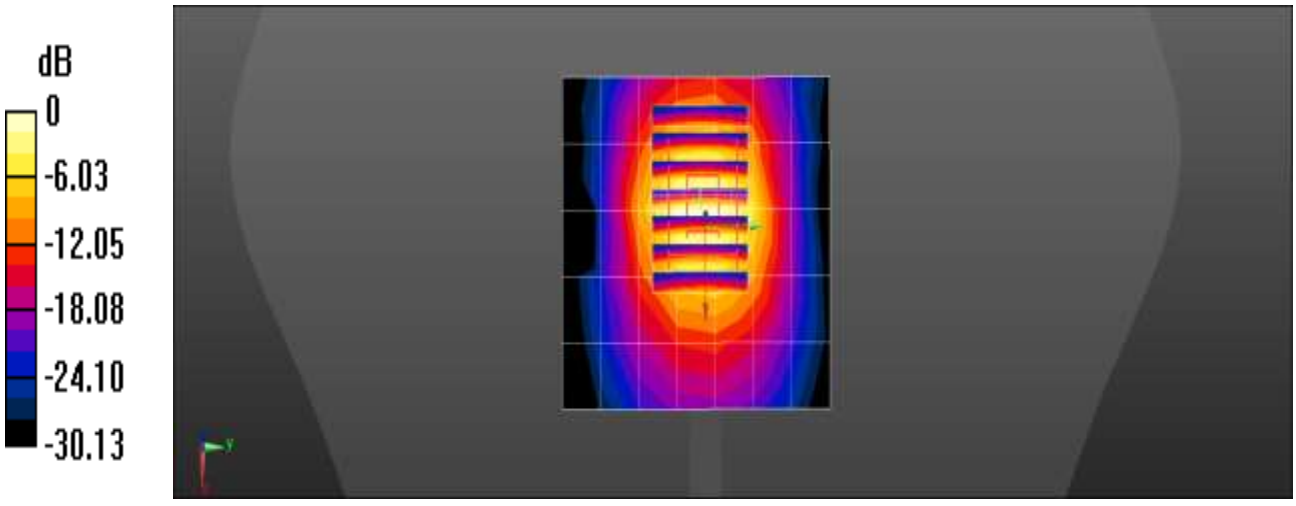
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.934 S/m; ε_r = 36.633; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.95 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.75 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 8.33 W/kg
SAR(1 g) = 3.36 W/kg; SAR(10 g) = 1.3 W/kg
Maximum value of SAR (measured) = 6.36 W/kg



0 dB = 6.36 W/kg = 8.03 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.8 ℃**
Test Date:	**07/10/2024**
Band:	**NR TDD Band n48 Ant.I**

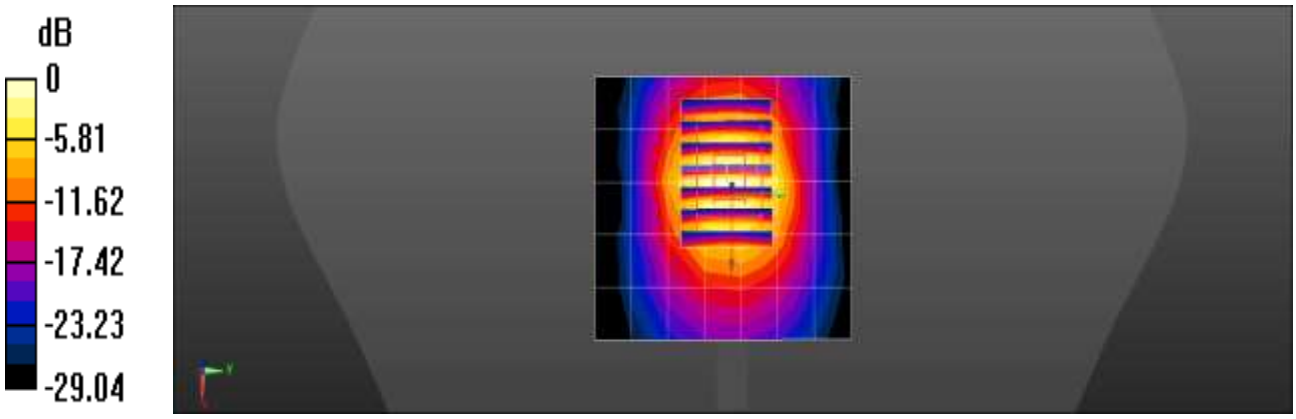
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.934 S/m; ε_r = 36.626; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.93 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.80 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.31 W/kg
SAR(1 g) = 3.35 W/kg; SAR(10 g) = 1.3 W/kg
Maximum value of SAR (measured) = 6.34 W/kg



0 dB = 6.34 W/kg = 8.02 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/17/2024**
Band:	**NR TDD Band n77 Ant.F**

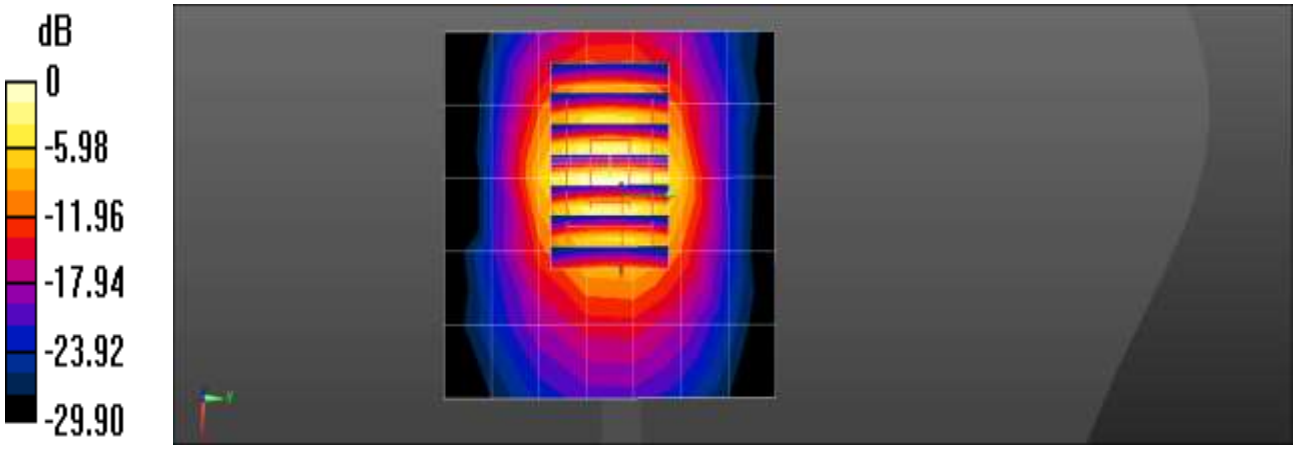
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.99 S/m; ε_r = 36.877; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.43 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 38.84 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 8.54 W/kg
SAR(1 g) = 3.2 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 6.29 W/kg



0 dB = 6.29 W/kg = 7.99 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/18/2024**
Band:	**NR TDD Band n77 Ant.C**

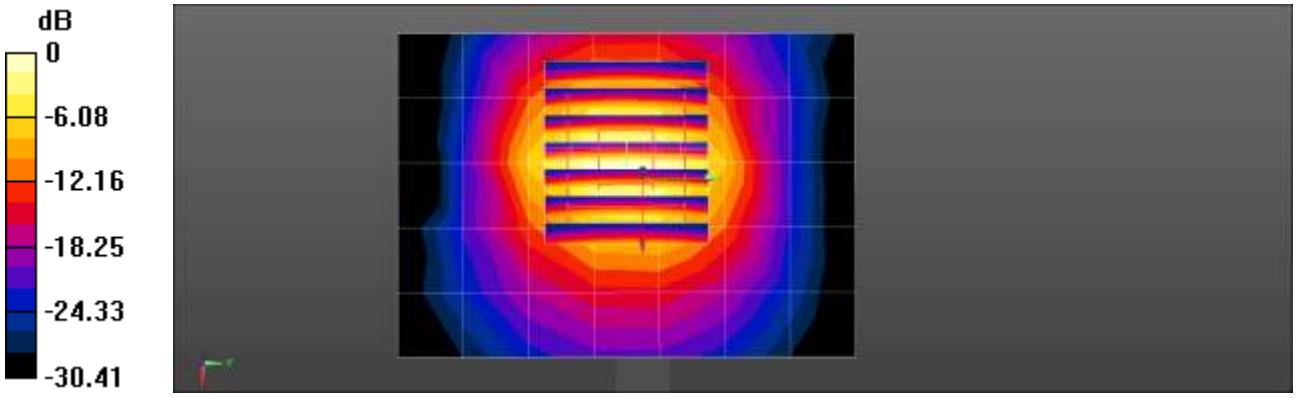
DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.933 S/m; ε_r = 36.603; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.28 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 38.30 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.37 W/kg
SAR(1 g) = 3.11 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 6.13 W/kg



0 dB = 6.13 W/kg = 7.87 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/20/2024**
Band:	**NR TDD Band n77 Ant.D**

DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132

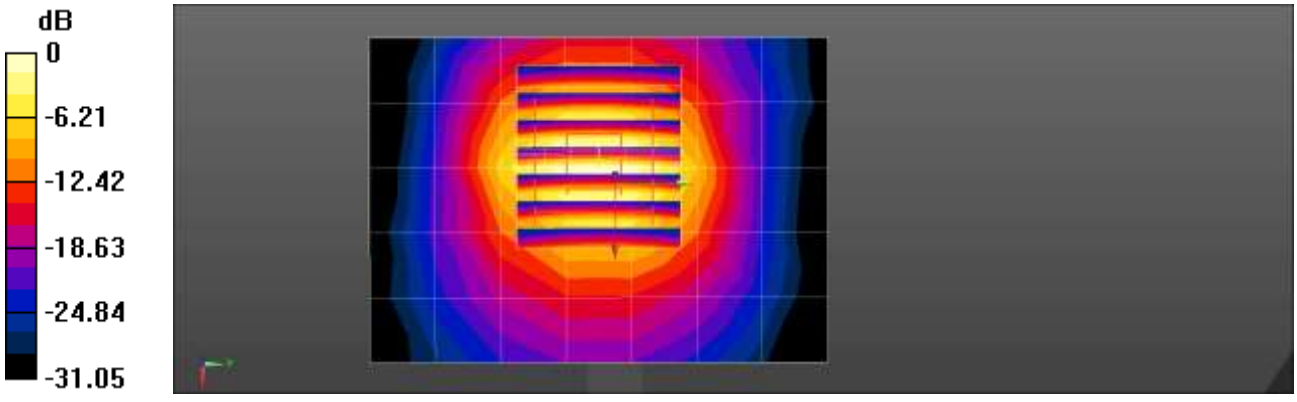
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.933 S/m; ε_r = 36.616; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.37 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 38.41 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.39 W/kg
SAR(1 g) = 3.13 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 6.15 W/kg



0 dB = 6.15 W/kg = 7.89 dBW/kg

■ **Verification Data (3 500 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.0 ℃
Test Date: 06/19/2024
Band: NR TDD Band n77 Ant.I

DUT: Dipole 3500 MHz D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1132

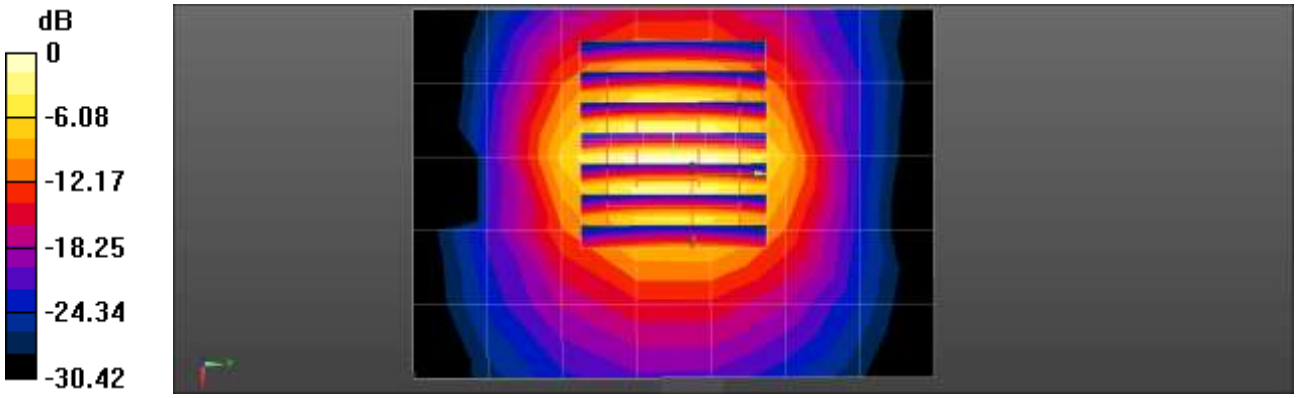
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.933 S/m; ε_r = 36.609; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.04, 7.25, 6.6) @ 3500 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3500MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.37 W/kg

Dipole/3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 38.74 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.42 W/kg
SAR(1 g) = 3.17 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 6.21 W/kg



0 dB = 6.21 W/kg = 7.93 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**23.0 ℃**
Test Date:	**07/08/2024**
Band:	**NR TDD Band n48 Ant.F**

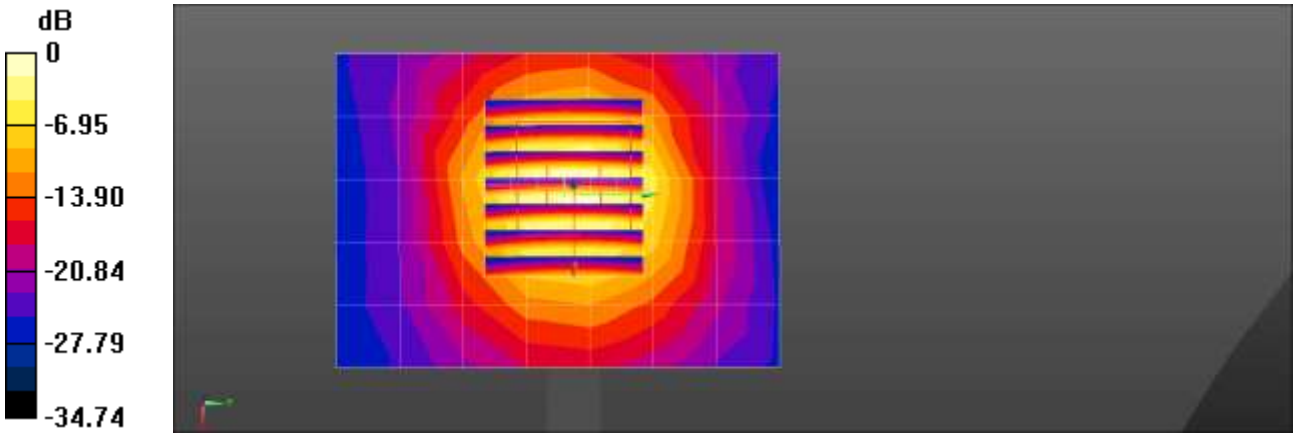
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.083 S/m; ε_r = 36.362; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.23 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 45.14 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 8.26 W/kg
SAR(1 g) = 3.09 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 6.04 W/kg



0 dB = 6.04 W/kg = 7.81 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.9 ℃**
Test Date:	**07/09/2024**
Band:	**NR TDD Band n48 Ant.C**

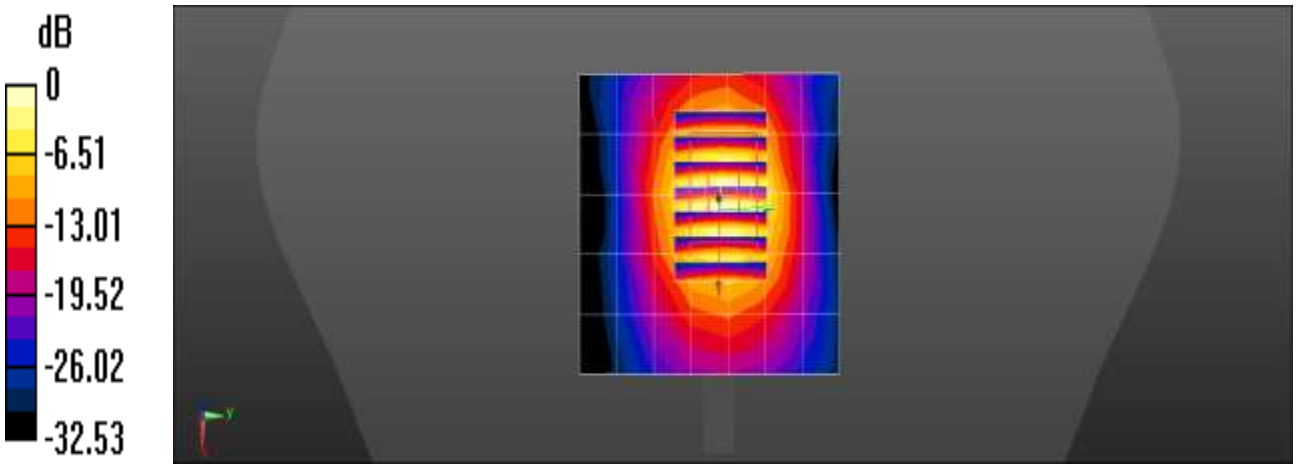
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.084 S/m; ε_r = 36.39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 6.16 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 43.53 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 8.68 W/kg
SAR(1 g) = 3.31 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 6.39 W/kg



0 dB = 6.39 W/kg = 8.06 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.8 ℃**
Test Date:	**07/11/2024**
Band:	**NR TDD Band n48 Ant.D**

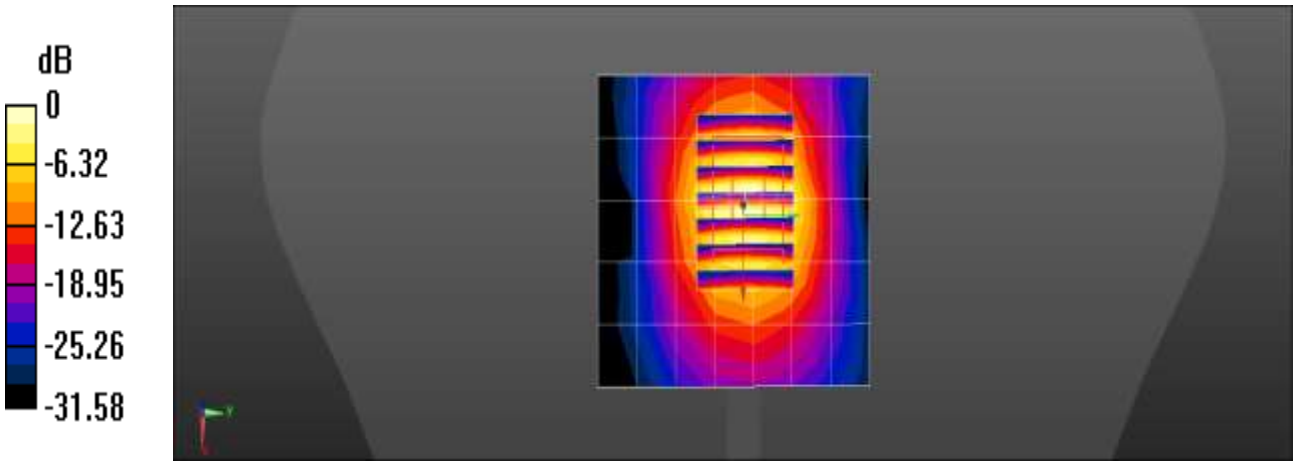
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.085 S/m; ε_r = 36.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 6.24 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 43.48 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 8.75 W/kg
SAR(1 g) = 3.32 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 6.44 W/kg



0 dB = 6.44 W/kg = 8.09 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.8 ℃**
Test Date:	**07/10/2024**
Band:	**NR TDD Band n48 Ant.I**

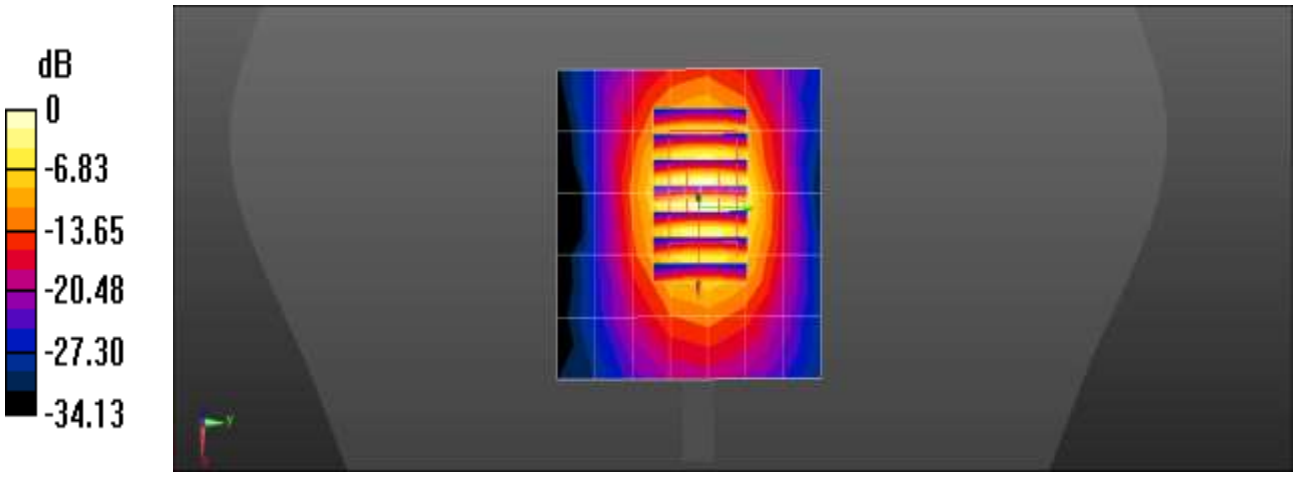
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.085 S/m; ε_r = 36.395; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 6.22 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 43.36 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 8.66 W/kg
SAR(1 g) = 3.31 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 6.38 W/kg



0 dB = 6.38 W/kg = 8.05 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/17/2024**
Band:	**NR TDD Band n77 Ant.F**

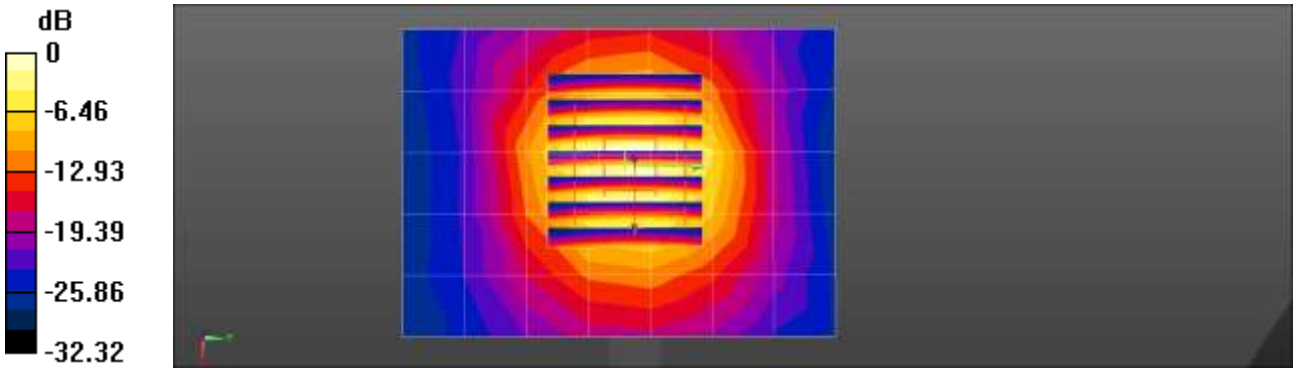
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.152 S/m; ε_r = 36.634; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.21 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 45.17 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 8.39 W/kg
SAR(1 g) = 3.15 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 6.16 W/kg



0 dB = 6.16 W/kg = 7.90 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/18/2024**
Band:	**NR TDD Band n77 Ant.C**

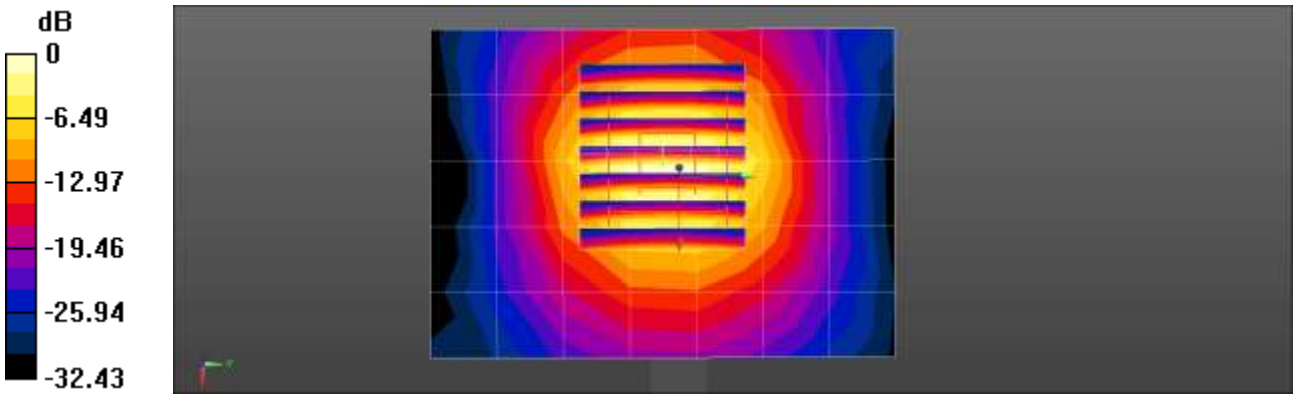
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.084 S/m; ε_r = 36.371; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.57 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 42.11 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 8.84 W/kg
SAR(1 g) = 3.22 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 6.35 W/kg



0 dB = 6.35 W/kg = 8.03 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/20/2024**
Band:	**NR TDD Band n77 Ant.D**

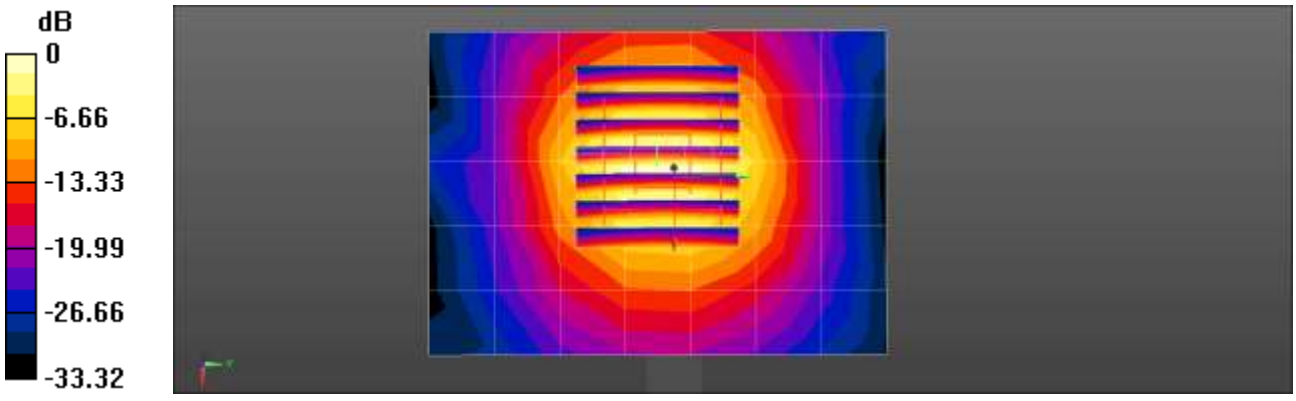
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.084 S/m; ε_r = 36.385; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.54 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 42.17 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 8.84 W/kg
SAR(1 g) = 3.17 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 6.35 W/kg



0 dB = 6.35 W/kg = 8.03 dBW/kg

■ **Verification Data (3 700 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.0 ℃**
Test Date:	**06/19/2024**
Band:	**NR TDD Band n77 Ant.I**

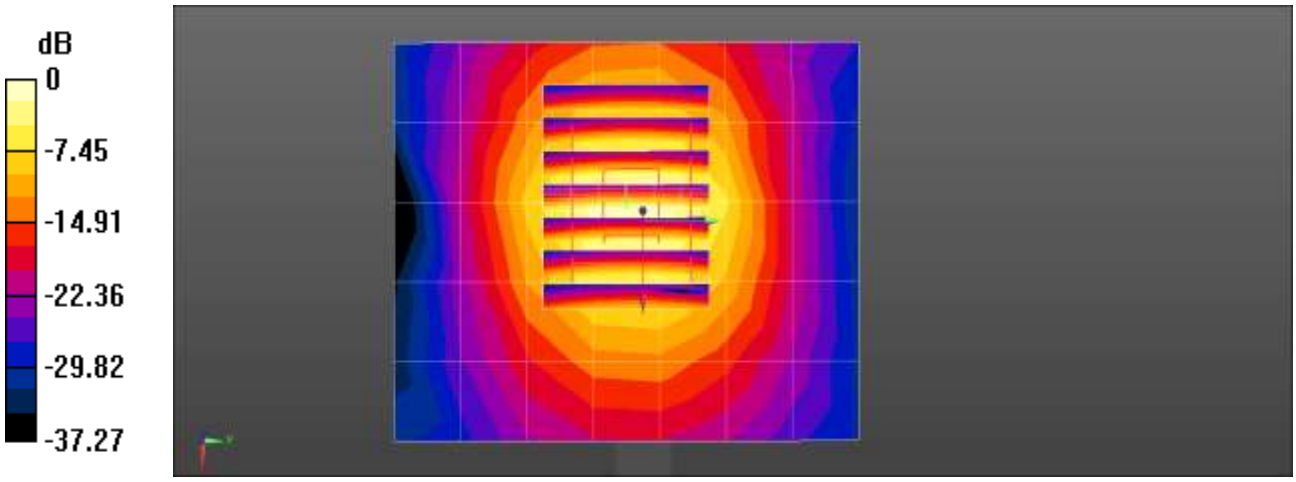
DUT: Dipole 3700 MHz D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1105
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.084 S/m; ε_r = 36.377; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.98, 7.19, 6.58) @ 3700 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3700MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.53 W/kg

Dipole/3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 42.44 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 8.87 W/kg
SAR(1 g) = 3.19 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 6.38 W/kg



0 dB = 6.38 W/kg = 8.05 dBW/kg

■ **Verification Data (3 900 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**20.6 ℃**
Test Date:	**06/17/2024**
Band:	**NR TDD Band n77 Ant.F**

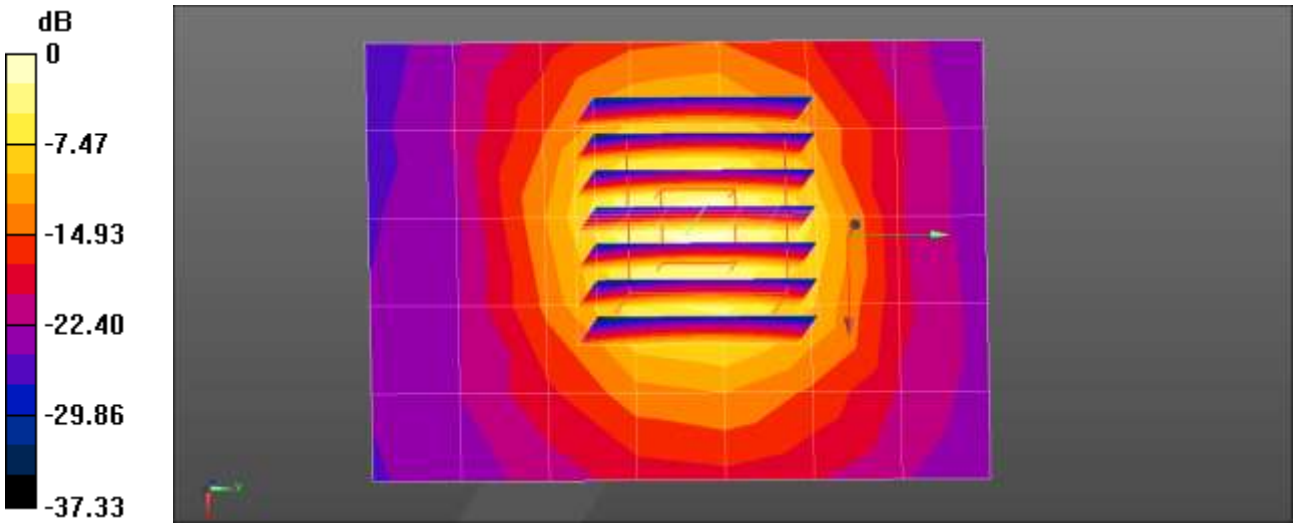
DUT: Dipole 3900 MHz D3900V2; Type: D3900V2; Serial: D3900V2 - SN:1086
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.392 S/m; ε_r = 36.506; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.52 W/kg

Dipole/3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 44.04 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 8.96 W/kg
SAR(1 g) = 3.14 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 6.47 W/kg



0 dB = 6.47 W/kg = 8.11 dBW/kg

■ **Verification Data (3 900 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/18/2024**
Band:	**NR TDD Band n77 Ant.C**

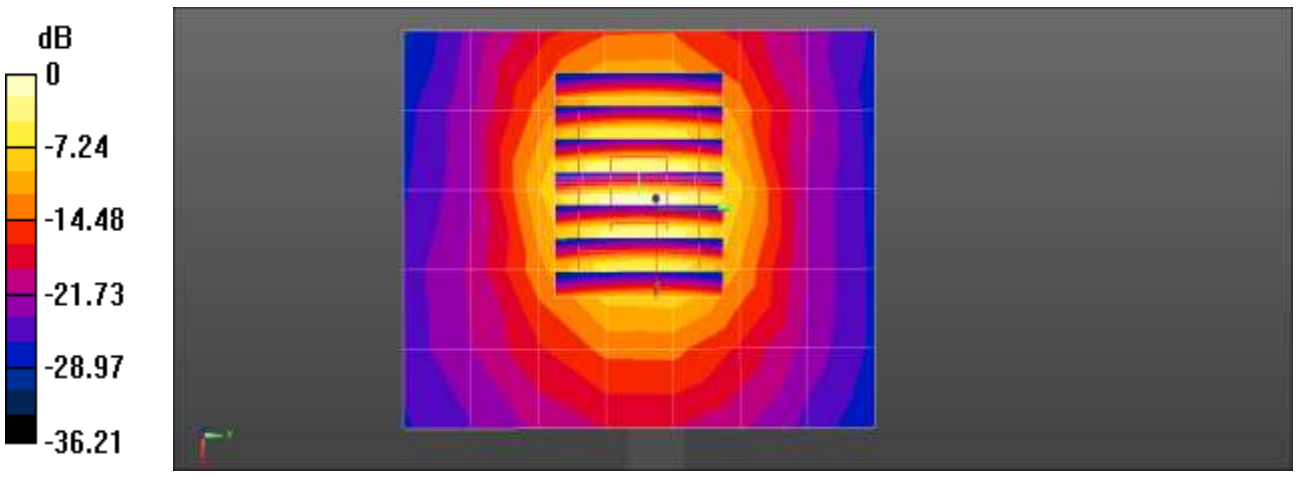
DUT: Dipole 3900 MHz D3900V2; Type: D3900V2; Serial: D3900V2 - SN:1086
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.355 S/m; ε_r = 36.208; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.48 W/kg

Dipole/3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 40.92 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 9.66 W/kg
SAR(1 g) = 3.26 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.84 W/kg



0 dB = 6.84 W/kg = 8.35 dBW/kg

■ **Verification Data (3 900 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**19.6 ℃**
Test Date:	**06/20/2024**
Band:	**NR TDD Band n77 Ant.D**

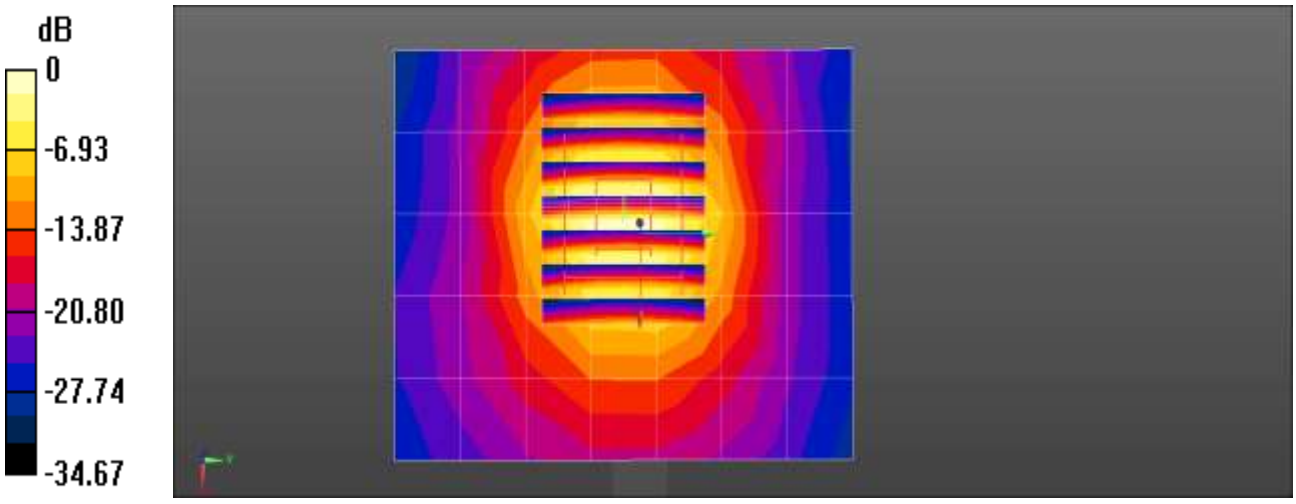
DUT: Dipole 3900 MHz D3900V2; Type: D3900V2; Serial: D3900V2 - SN:1086
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.355 S/m; ε_r = 36.222; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.42 W/kg

Dipole/3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.23 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 9.55 W/kg
SAR(1 g) = 3.24 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.77 W/kg



0 dB = 6.77 W/kg = 8.31 dBW/kg

■ **Verification Data (3 900 ㎒ Head)**

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**21.0 ℃**
Test Date:	**06/19/2024**
Band:	**NR TDD Band n77 Ant.I**

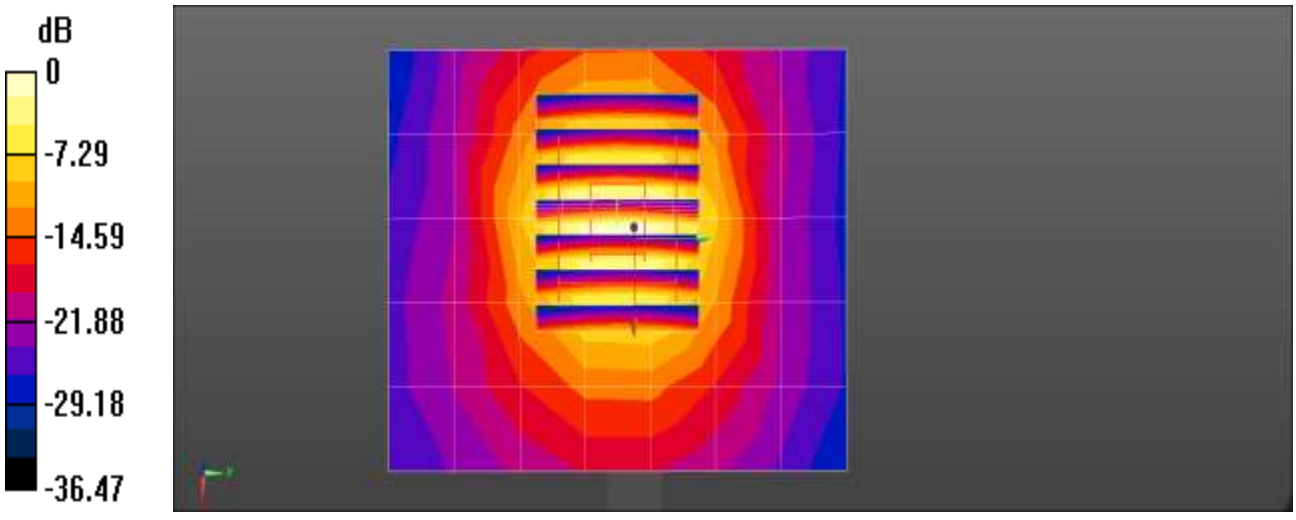
DUT: Dipole 3900 MHz D3900V2; Type: D3900V2; Serial: D3900V2 - SN:1086
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.355 S/m; ε_r = 36.215; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(6.77, 6.96, 6.39) @ 3900 MHz; Calibrated: 2024-01-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/3900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.45 W/kg

Dipole/3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.09 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 9.58 W/kg
SAR(1 g) = 3.24 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 6.82 W/kg



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

◆ Extremity SAR

■ Verification Data (13 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 23.6 ℃
Test Date: 06/18/2024
Band: NFC

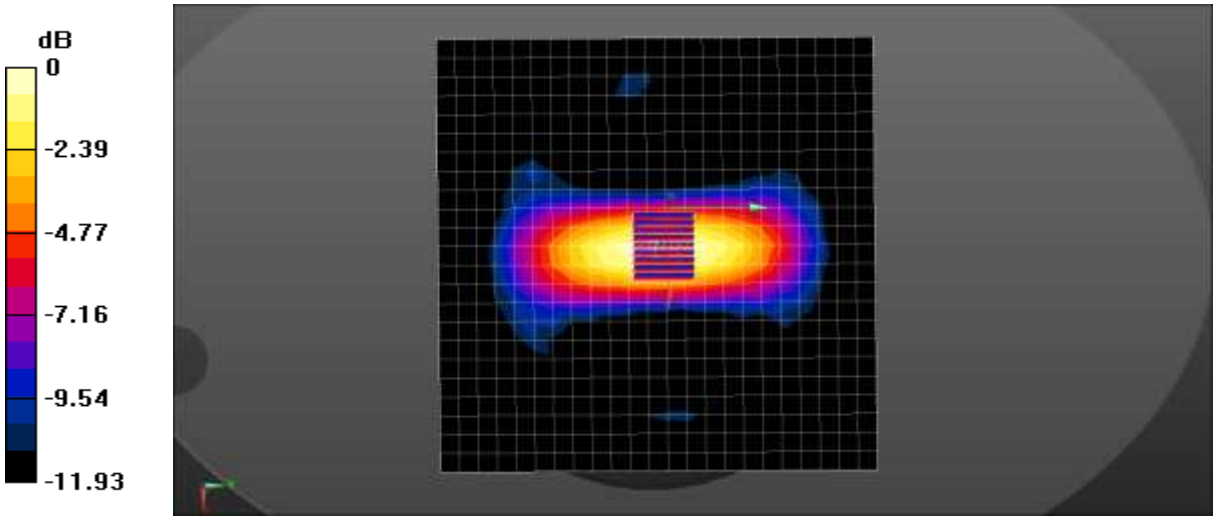
DUT: CLA-13 - SN1016; Type: CLA-13; Serial: SN1016
Communication System: UID 0, RFID (0); Frequency: 13 MHz;Duty Cycle: 1:1
Medium parameters used: f = 13 MHz; σ = 0.724 S/m; ε_r = 54.346; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.8, 5.8, 5.8) @ 13 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1225; Calibrated: 2024-02-15
- Phantom: ELI V4.0 (20deg probe tilt); Type: QD OVA 001 Bx; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

CLA-13/13MHz Head Verification/Area Scan (24x24x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.0316 W/kg

CLA-13/13MHz Head Verification/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.620 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.0570 W/kg
SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.017 W/kg
Maximum value of SAR (measured) = 0.0327 W/kg



0 dB = 0.0327 W/kg = -14.85 dBW/kg

◆ Power Density

■ Verification Data (10 ㎓)

Test Laboratory: **HCT CO., LTD**
Input Power **0.01 W**
Test Date: **06/21/2024**
Band: **6 ㎓ WLAN**
Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

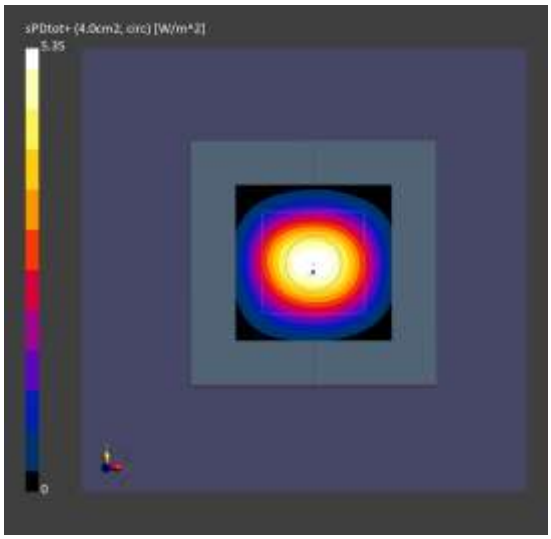
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9464_F1-55GHz, 2024-02-19	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	5.23
psPDtot+ [W/m^2]	5.35
E_{max} [V/m]	47.1
Power Drift [dB]	0.09



■ **Verification Data (10 ㎓)**

Test Laboratory: **HCT CO., LTD**
Input Power **0.01 W**
Test Date: **06/24/2024**
Band: 6 ㎓ WLAN
Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

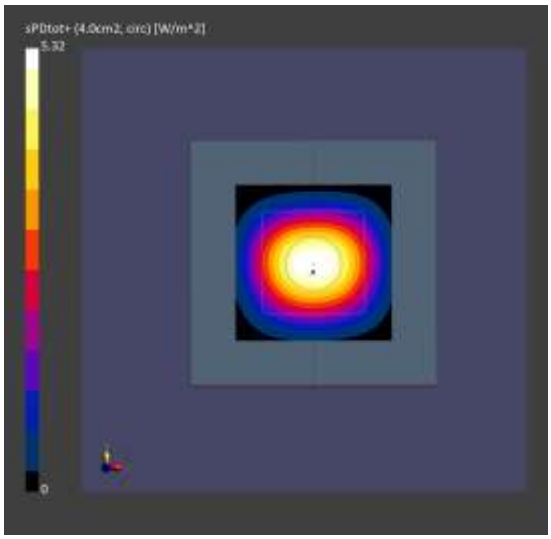
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9464_F1-55GHz, 2024-02-19	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	5.19
psPDtot+ [W/m^2]	5.32
E_{max} [V/m]	46.7
Power Drift [dB]	-0.06



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		1 900		2 450 – 2 700		3500 - 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	41.1	51.7	40.45	53.06	54.9	70.17	71.88	73.2	65.52	78.66
Salt (NaCl)	1.4	0.9	1.45	0.94	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
HEC	0.2	0	1.0	1.0	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
Triton X-100	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	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 System Validation

Per FCC KDB 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
17	7681	EX3DV4	Head	750	1014	2024-06-14	41.7	0.89	PASS	PASS	PASS	N/A	N/A	N/A
19	7702	EX3DV4	Head	750	1014	2024-06-28	41.7	0.89	PASS	PASS	PASS	N/A	N/A	N/A
19	7702	EX3DV4	Head	835	441	2024-05-24	41.6	0.91	PASS	PASS	PASS	GMSK	PASS	N/A
19	7702	EX3DV4	Head	835	441	2024-05-24	41.6	0.91	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	835	441	2024-05-24	41.6	0.90	PASS	PASS	PASS	N/A	N/A	N/A
4	3968	EX3DV4	Head	1640	345	2023-10-27	40.1	1.37	PASS	PASS	PASS	N/A	N/A	N/A
19	7702	EX3DV4	Head	1750	2d007	2024-05-24	40.2	1.40	PASS	PASS	PASS	N/A	N/A	N/A
4	3968	EX3DV4	Head	1750	2d007	2024-05-24	40.1	1.40	PASS	PASS	PASS	N/A	N/A	N/A
19	7702	EX3DV4	Head	1900	5d032	2024-02-16	40.2	1.41	PASS	PASS	PASS	GMSK	PASS	N/A
19	7702	EX3DV4	Head	1900	5d032	2024-02-23	40.2	1.41	PASS	PASS	PASS	N/A	N/A	N/A
4	3968	EX3DV4	Head	1900	5d032	2024-02-23	40.1	1.41	PASS	PASS	PASS	N/A	N/A	N/A
2	3797	EX3DV4	Head	2300	1010	2024-02-23	39.4	1.72	PASS	PASS	PASS	N/A	N/A	N/A
19	7702	EX3DV4	Head	2450	743	2024-04-19	39.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS
2	3797	EX3DV4	Head	2600	1015	2024-05-24	38.8	1.97	PASS	PASS	PASS	N/A	N/A	N/A
2	3797	EX3DV4	Head	2600	1015	2024-05-24	39.2	1.95	PASS	PASS	PASS	TDD	PASS	N/A
19	7702	EX3DV4	Head	2600	1015	2024-05-24	39.1	1.94	PASS	PASS	PASS	TDD	PASS	N/A
6	7370	EX3DV4	Head	2600	1015	2024-05-24	39.1	1.95	PASS	PASS	PASS	TDD	PASS	N/A
19	7702	EX3DV4	Head	3500	1132	2024-02-16	38.0	2.93	PASS	PASS	PASS	TDD	PASS	NA
19	7702	EX3DV4	Head	3700	1105	2024-05-24	37.8	3.12	PASS	PASS	PASS	TDD	PASS	NA
19	7702	EX3DV4	Head	3900	1086	2024-06-28	37.5	3.25	PASS	PASS	PASS	TDD	PASS	NA
6	7370	EX3DV4	Head	5250	1107	2024-05-24	36.0	4.72	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5600	1107	2024-05-24	35.6	5.08	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5750	1107	2024-05-24	35.4	5.25	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5800	1107	2024-05-24	35.2	5.30	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	6500	1012	2023-10-05	34.4	6.19	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	13	1016	2023-09-25	52.5	0.77	PASS	PASS	PASS	N/A	N/A	N/A

SAR System Validation Summary 10g

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.