Appendix B. – SAR Test Plots

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/15/2024
Plot No.:	A1

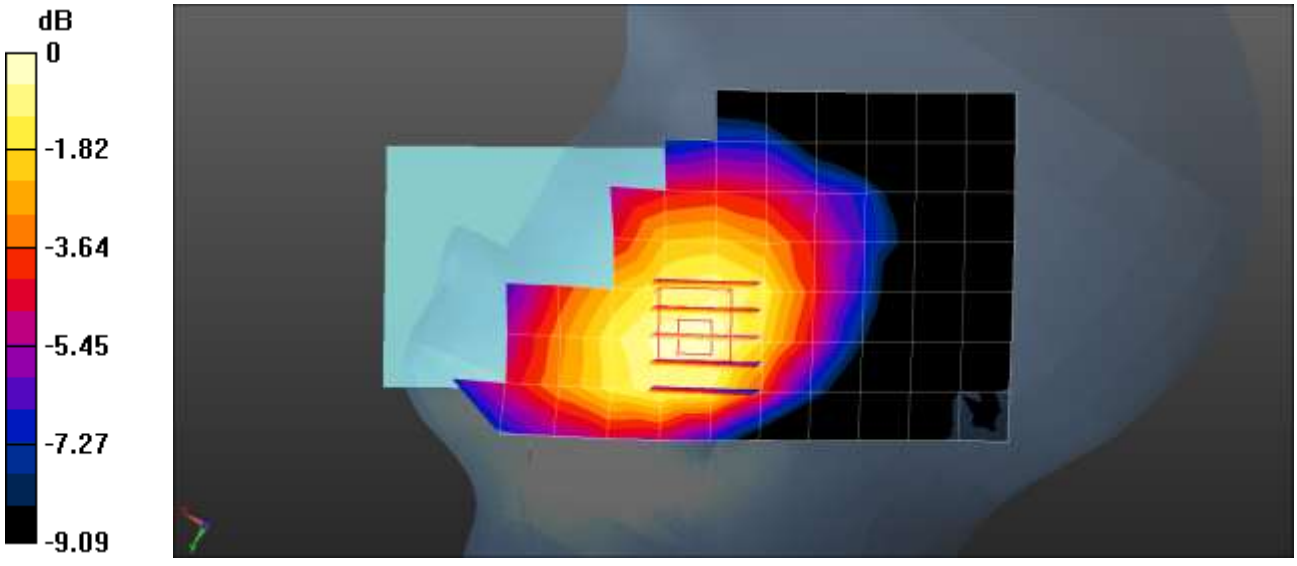
DUT: SC-54E
Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 41.256; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

GSM850 Head Right Touch 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.135 W/kg

GSM850 Head Right Touch 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.192 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.098 W/kg
Maximum value of SAR (measured) = 0.137 W/kg



0 dB = 0.137 W/kg = -8.63 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.2 ℃
Liquid Temperature:	20.1 ℃
Test Date:	05/16/2024
Plot No.:	A2

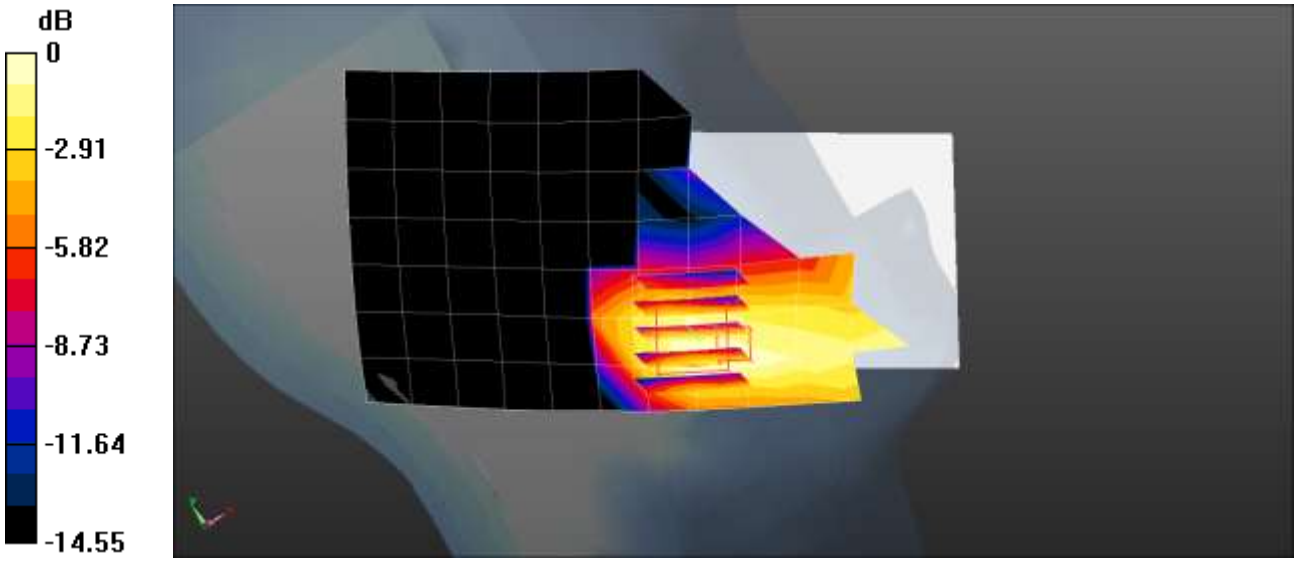
DUT: SC-54E
Communication System: UID 0, GSM 1900 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07491
Medium parameters used: f = 1880 MHz; σ = 1.352 S/m; ε_r = 39.25; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.94, 8.33, 8.49) @ 1880 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)

GSM1900 Head Left Touch 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0142 W/kg

GSM1900 Head Left Touch 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0150 W/kg
SAR(1 g) = 0.00964 W/kg; SAR(10 g) = 0.00657 W/kg
Maximum value of SAR (measured) = 0.0138 W/kg



0 dB = 0.0138 W/kg = -18.60 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.7 ℃
Liquid Temperature:	20.7 ℃
Test Date:	05/14/2024
Plot No.:	A3

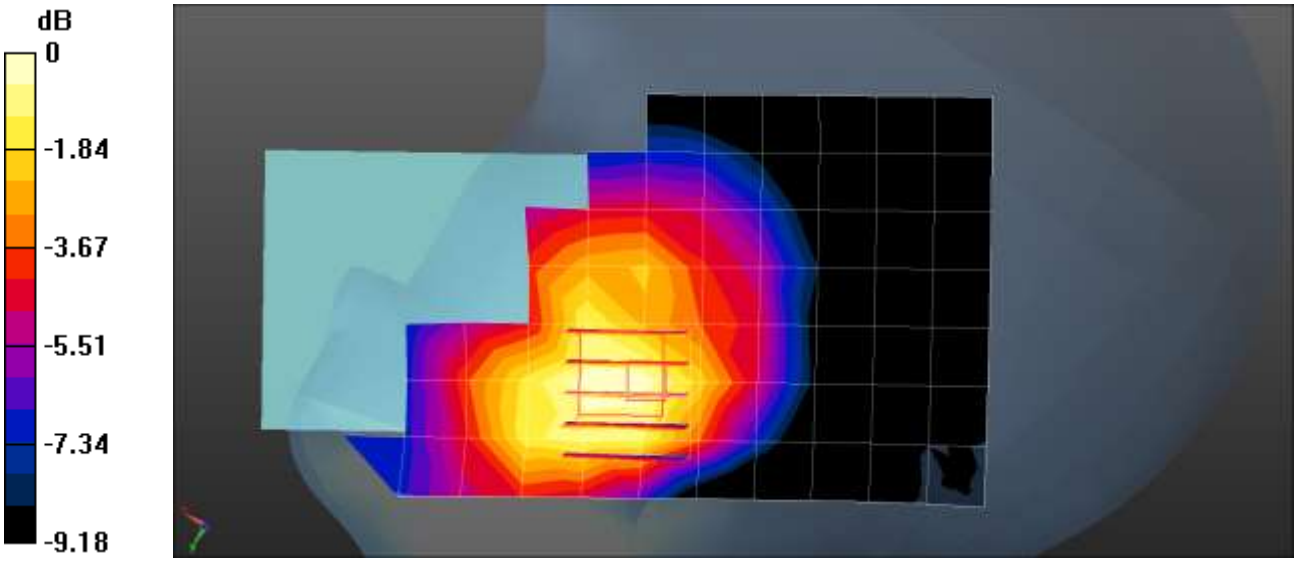
DUT: SC-54E
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.937 S/m; ε_r = 41.106; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

UMTS Band 5 Head Right Touch 4183ch/Area Scan (8x14x1): 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 = 1.391 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.189 W/kg
SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.170 W/kg



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

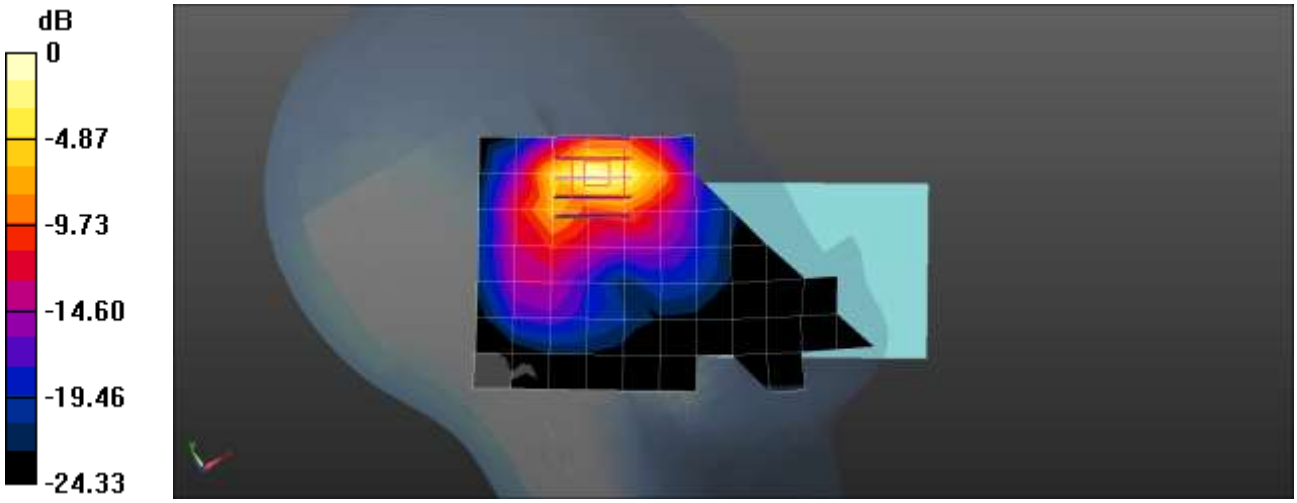
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.7 ℃
Liquid Temperature:	20.6 ℃
Test Date:	05/09/2024
Plot No.:	A4

DUT: SC-54E
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.374 S/m; ε_r = 39.314; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1860 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Head Left Touch QPSK 20MHz 50RB 25offset 18700ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.998 W/kg
LTE Band 2 Head Left Touch QPSK 20MHz 50RB 25offset 18700ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.373 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.236 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.5 ℃
Liquid Temperature:	19.5 ℃
Test Date:	05/07/2024
Plot No.:	A5

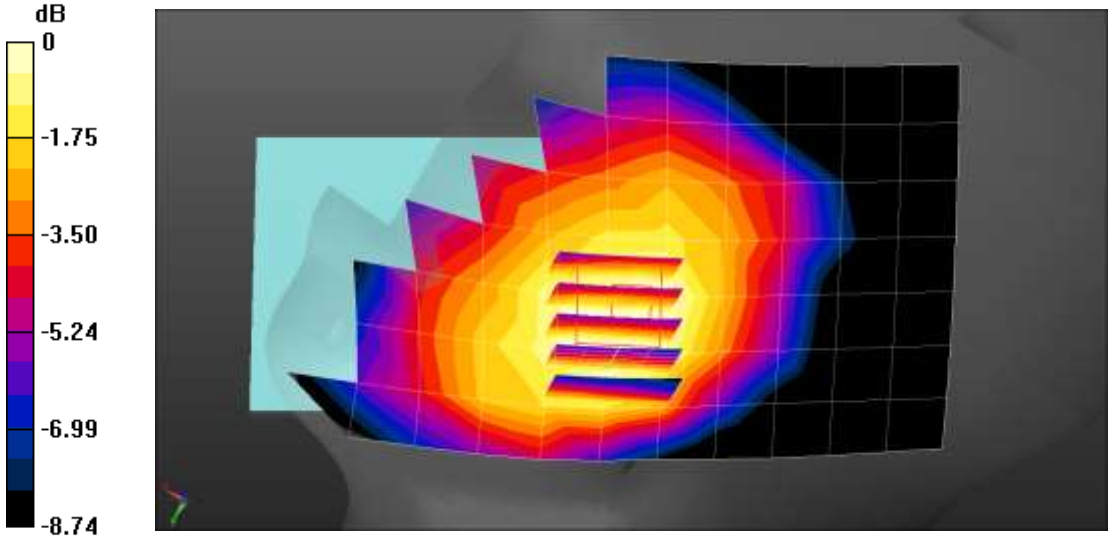
DUT: SC-54E
Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.936 S/m; ε_r = 41.893; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.51, 9.51, 9.51) @ 836.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 Head Right Touch QPSK 10MHz 1RB 0offset 20525ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.151 W/kg

LTE Band 5 Head Right Touch QPSK 10MHz 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.708 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.155 W/kg
SAR(1 g) = 0.116 W/kg; SAR(10 g) = 0.092 W/kg
Maximum value of SAR (measured) = 0.137 W/kg



0 dB = 0.137 W/kg = -8.63 dBW/kg

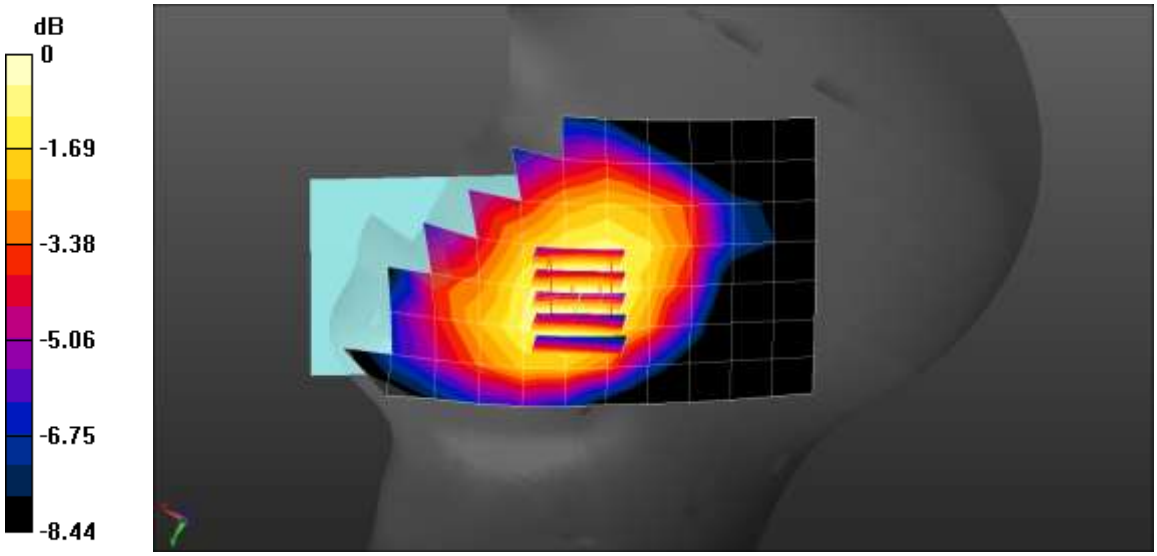
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.9 ℃
Liquid Temperature:	19.8 ℃
Test Date:	05/08/2024
Plot No.:	A6

DUT: SC-54E
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.857 S/m; ε_r = 43.811; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 707.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.115 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 = 4.303 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.083 W/kg
Maximum value of SAR (measured) = 0.121 W/kg



0 dB = 0.121 W/kg = -9.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.4 ℃
Liquid Temperature:	20.4 ℃
Test Date:	05/10/2024
Plot No.:	A7

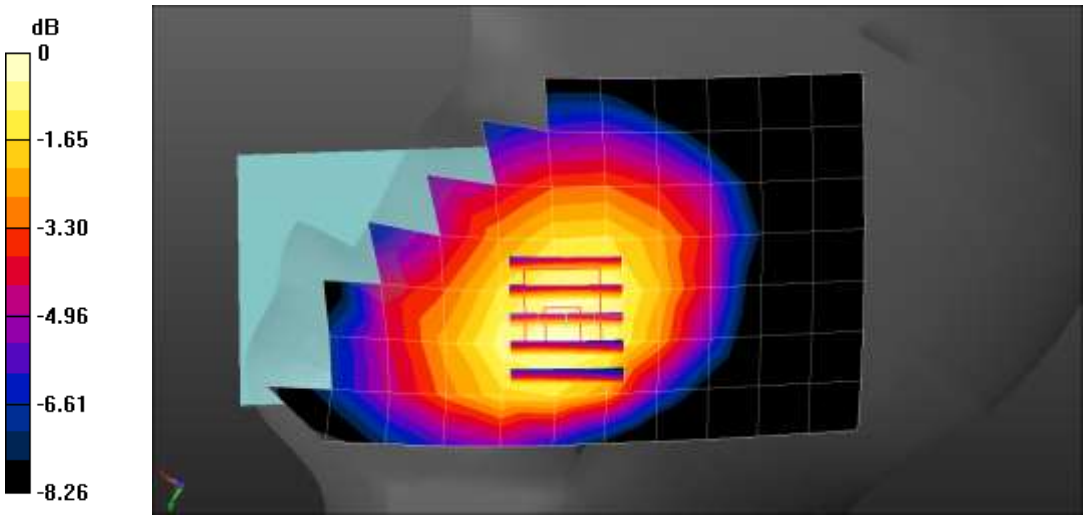
DUT: SC-54E
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.906 S/m; ε_r = 42.657; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 782 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.115 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 = 3.314 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.129 W/kg
SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.077 W/kg
Maximum value of SAR (measured) = 0.117 W/kg



0 dB = 0.117 W/kg = -9.32 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	23.7 ℃
Liquid Temperature:	23.7 ℃
Test Date:	05/02/2024
Plot No.:	A8

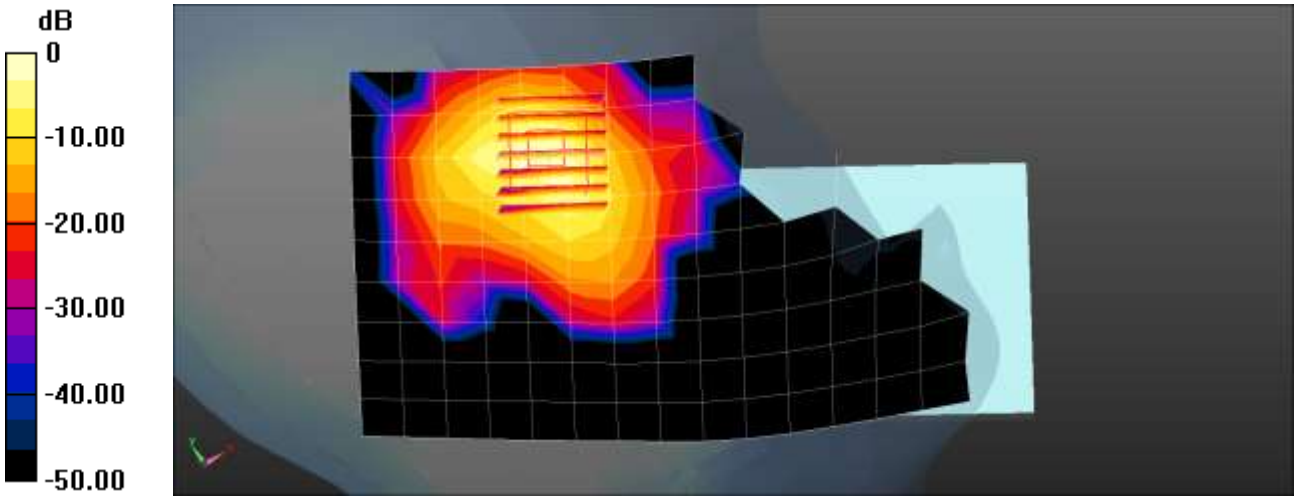
DUT: SC-54E
Communication System: UID 0, LTE Band 41 (FCC) (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58052
Medium parameters used: f = 2680 MHz; σ = 2.111 S/m; ε_r = 38.502; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2680 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 41 Head Left Touch QPSK 20MHz 50RB 0offset 41490ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.14 W/kg

LTE Band 41 Head Left Touch QPSK 20MHz 50RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.820 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.693 W/kg; SAR(10 g) = 0.249 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.4 ℃
Liquid Temperature:	20.3 ℃
Test Date:	05/07/2024
Plot No.:	A9

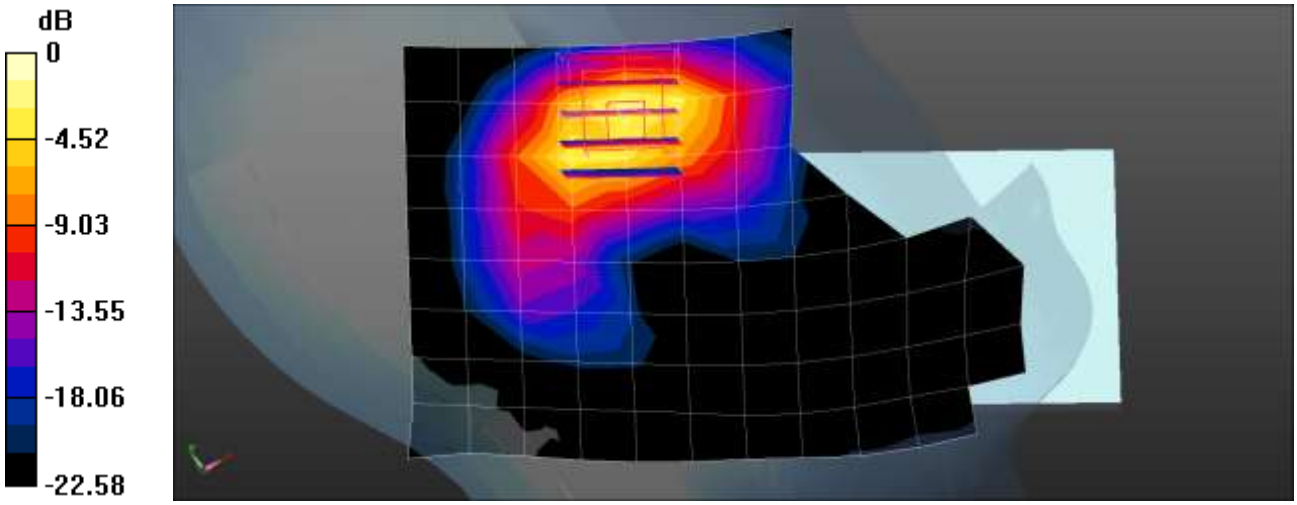
DUT: SC-54E
Communication System: UID 0, LTE Band66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.363 S/m; ε_r = 38.662; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1770 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Head Left Touch QPSK 20MHz 50RB 49offset 132572ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.747 W/kg

LTE Band 66 Head Left Touch QPSK 20MHz 50RB 49offset 132572ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.217 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 0.764 W/kg; SAR(10 g) = 0.346 W/kg
Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	18.9 ℃
Liquid Temperature:	18.8 ℃
Test Date:	05/17/2024
Plot No.:	A10

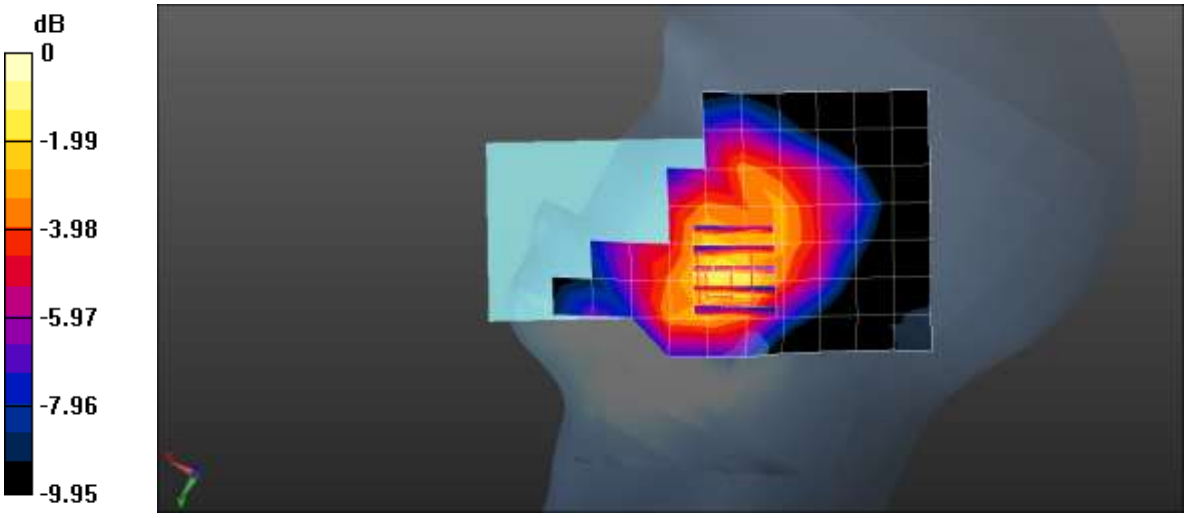
DUT: SC-54E
Communication System: UID 0, NR Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.912 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7309; ConvF(9.82, 8.7, 9.76) @ 836.5 MHz; Calibrated: 2023-06-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1464; Calibrated: 2023-06-16
- Phantom: SAM (20deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n5 Head Right Touch DFT-s QPSK 1RB 1offset 167300ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.136 W/kg

NR Band n5 Head Right Touch DFT-s QPSK 1RB 1offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.988 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.228 W/kg
SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.115 W/kg
Maximum value of SAR (measured) = 0.196 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.1 ℃
Test Date:	05/19/2024
Plot No.:	A11

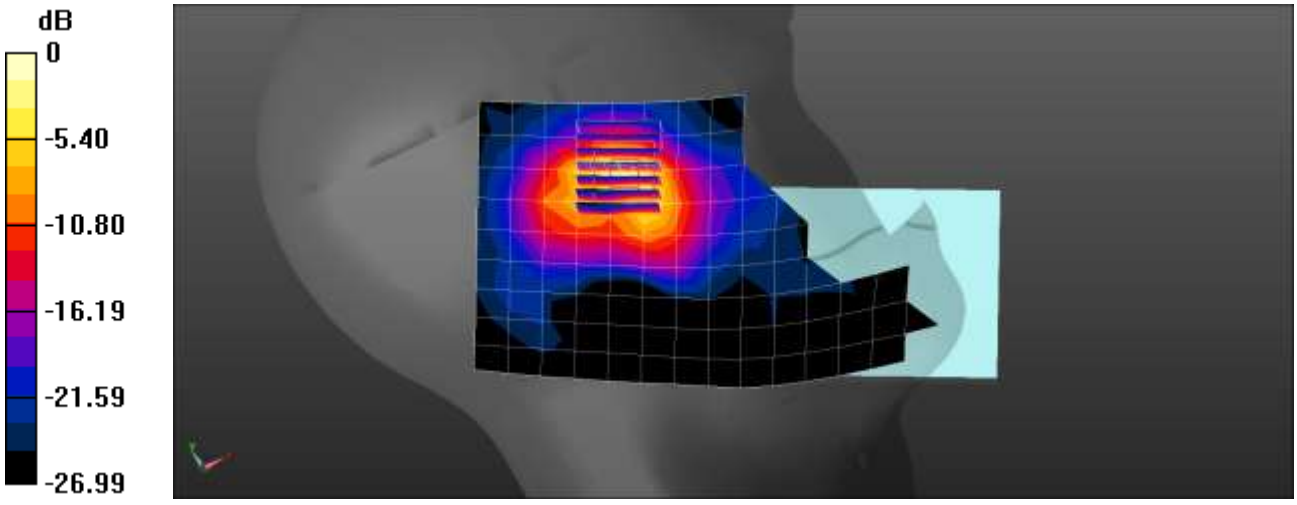
DUT: SC-54E
Communication System: UID 0, NR Band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.001 S/m; ε_r = 39.201; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.57, 7.57, 7.57) @ 2592.99 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- 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)

NR Band n41 Head Left Touch DFT-s QPSK 100MHz 1RB 1offset 518598ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.21 W/kg

NR Band n41 Head Left Touch DFT-s QPSK 100MHz 1RB 1offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.375 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 2.14 W/kg
SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.237 W/kg
Maximum value of SAR (measured) = 1.47 W/kg



0 dB = 1.47 W/kg = 1.67 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/17/2024
Plot No.:	A12

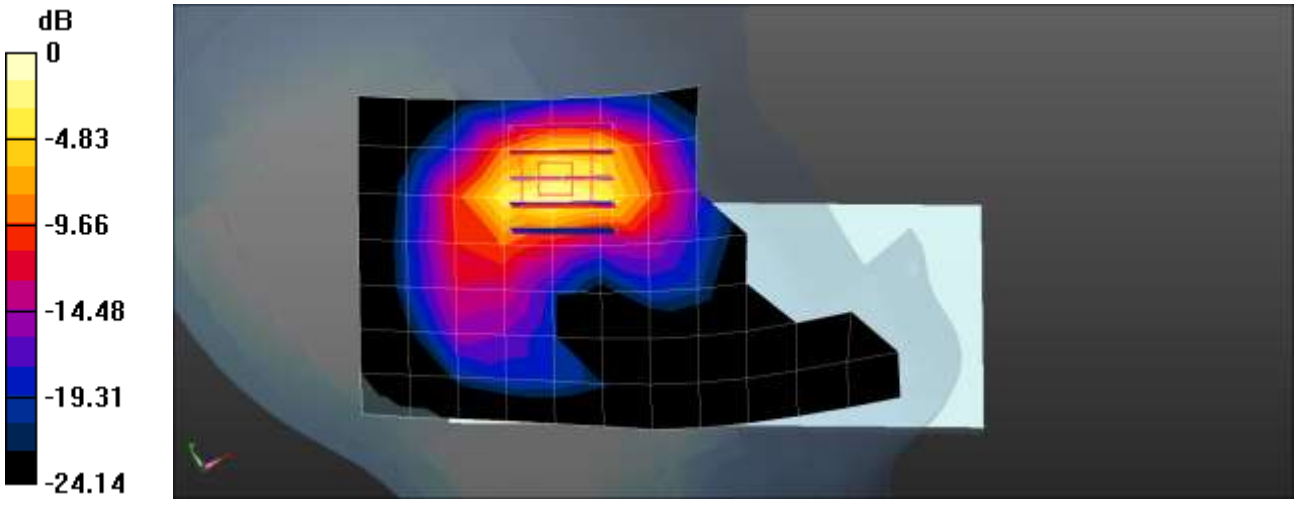
DUT: SC-54E
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.39 S/m; ε_r = 39.636; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1745 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band 66 Head Left Touch DFT-s QPSK 40MHz 1RB 214offset 349000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.957 W/kg

NR Band 66 Head Left Touch DFT-s QPSK 40MHz 1RB 214offset 349000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.955 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.748 W/kg; SAR(10 g) = 0.334 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



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

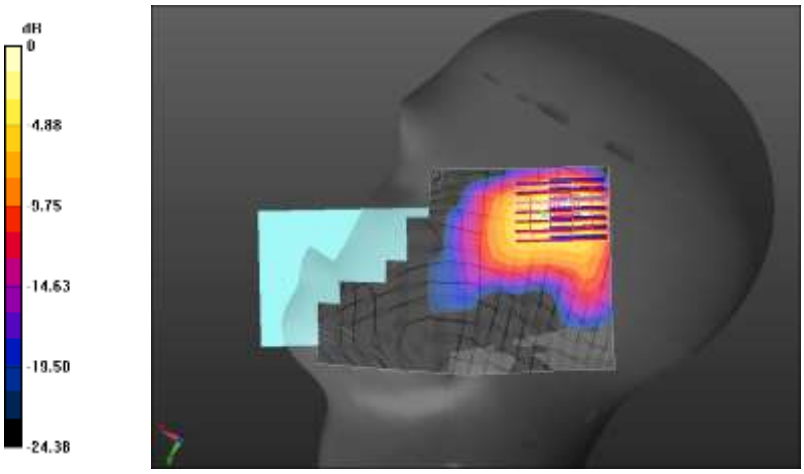
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.0 ℃
Test Date:	05/01/2024
Plot No.:	A13

DUT: SC-54E
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.762 S/m; ε_r = 40.334; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.94, 7.91, 8.56) @ 2412 MHz; Calibrated: 2023-05-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); 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 1ch/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.19 W/kg
802.11b Head Right Touch 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.506 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.686 W/kg; SAR(10 g) = 0.294 W/kg
Maximum value of SAR (measured) = 1.28 W/kg
802.11b Head Right Touch 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.506 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.298 W/kg
Maximum value of SAR (measured) = 1.31 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.9 ℃
Liquid Temperature:	19.9 ℃
Test Date:	05/03/2024
Plot No.:	A14

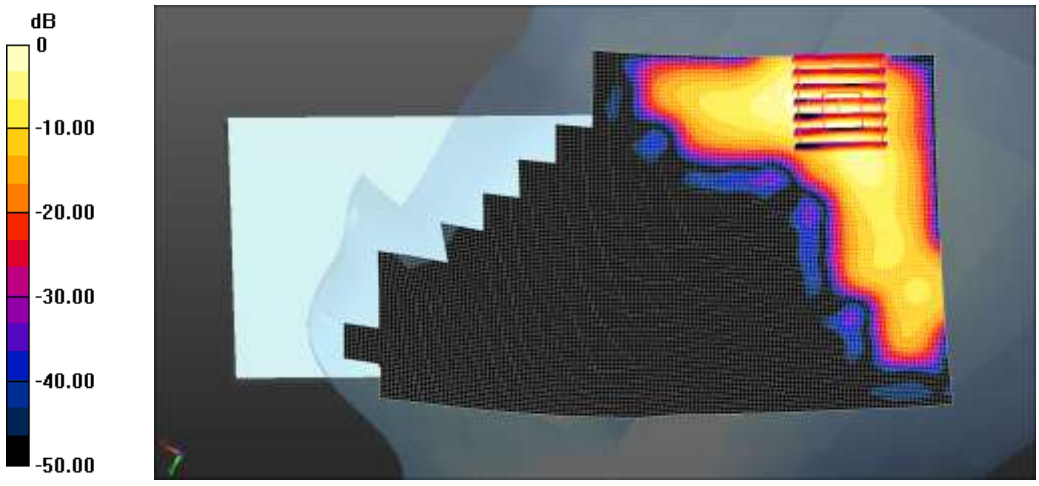
DUT: SC-54E
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.77 S/m; ε_r = 36.89; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(5.2, 5.2, 5.2) @ 5260 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

802.11a Head Right Touch 6Mbps 52ch/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.22 W/kg

802.11a Head Right Touch 6Mbps 52ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.344 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.22 W/kg
SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.143 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.1 ℃
Test Date:	05/10/2024
Plot No.:	A15

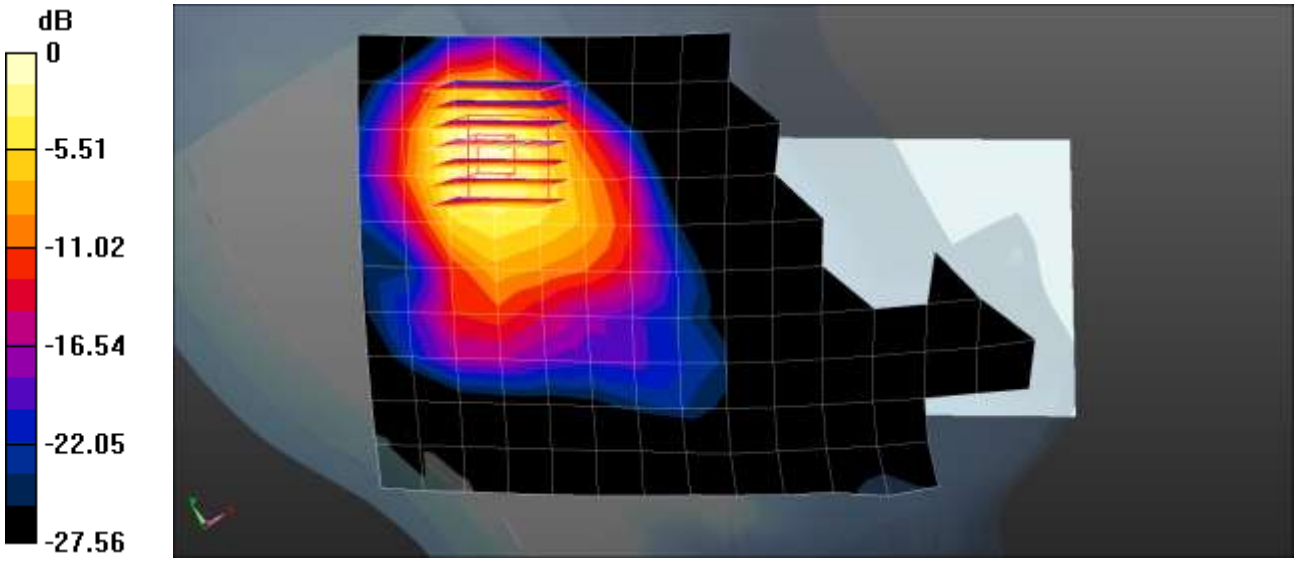
DUT: SC-54E
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.83 S/m; ε_r = 39.123; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2441 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)

Bluetooth Head Left Touch DH5 39ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.781 W/kg

Bluetooth Head Left Touch DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.372 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.293 W/kg
Maximum value of SAR (measured) = 0.899 W/kg



0 dB = 0.899 W/kg = -0.46 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/15/2024
Plot No.:	B1

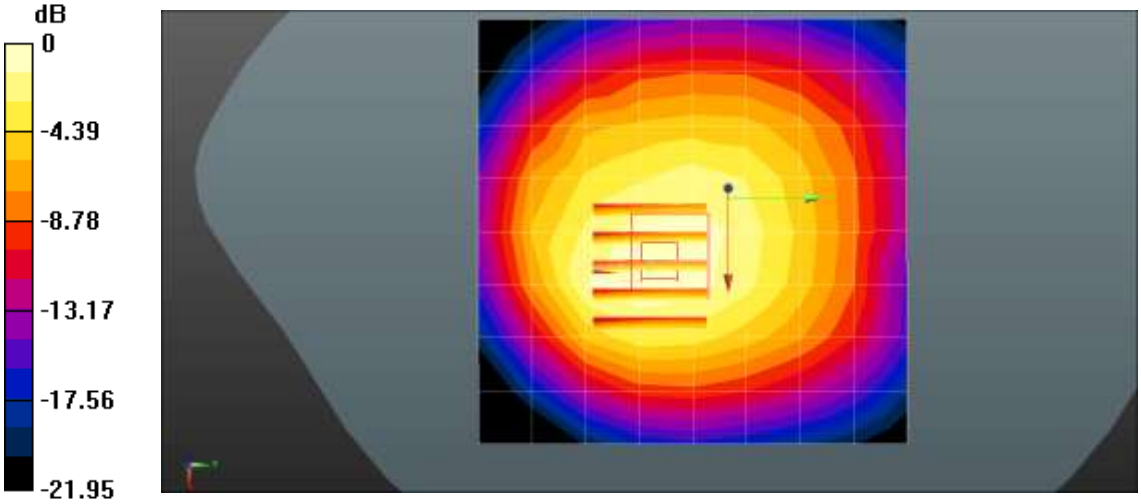
DUT: SC-54E
Communication System: UID 0, GSM850 GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07491
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 41.256; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

GSM850 4Tx BodyWorn Rear 190ch/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.653 W/kg

GSM850 4Tx BodyWorn Rear 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.79 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.770 W/kg
SAR(1 g) = 0.522 W/kg; SAR(10 g) = 0.352 W/kg
Maximum value of SAR (measured) = 0.656 W/kg



0 dB = 0.656 W/kg = -1.83 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.2 ℃
Liquid Temperature:	20.1 ℃
Test Date:	05/16/2024
Plot No.:	B2

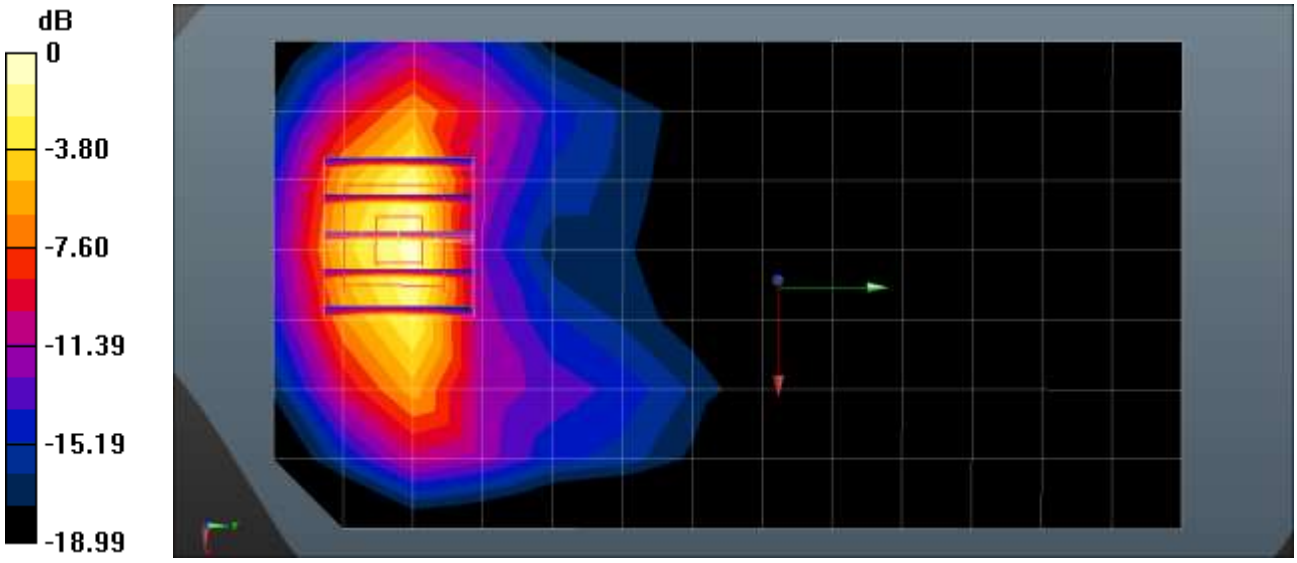
DUT: SC-54E
Communication System: UID 0, GSM 1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.352 S/m; ε_r = 39.25; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.94, 8.33, 8.49) @ 1880 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)

GSM1900 BodyWorn Rear 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.875 W/kg

GSM1900 BodyWorn Rear 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.584 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.664 W/kg; SAR(10 g) = 0.350 W/kg
Maximum value of SAR (measured) = 0.969 W/kg



0 dB = 0.969 W/kg = -0.14 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.7 ℃
Liquid Temperature:	20.7 ℃
Test Date:	05/14/2024
Plot No.:	B3

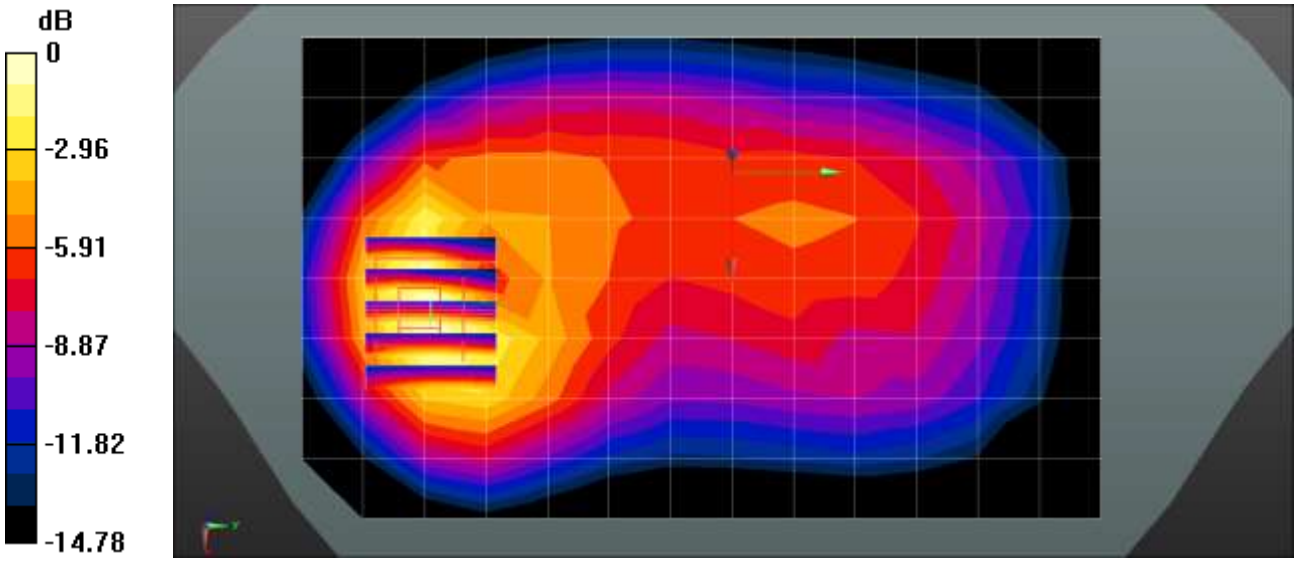
DUT: SC-54E
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.937 S/m; ε_r = 41.106; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

UMTS Band 5 BodyWorn Rear 4183ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.666 W/kg

UMTS Band 5 BodyWorn Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.25 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.787 W/kg
SAR(1 g) = 0.504 W/kg; SAR(10 g) = 0.295 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:	20.7 ℃
Liquid Temperature:	20.6 ℃
Test Date:	05/22/2024
Plot No.:	B4

DUT: SC-54E

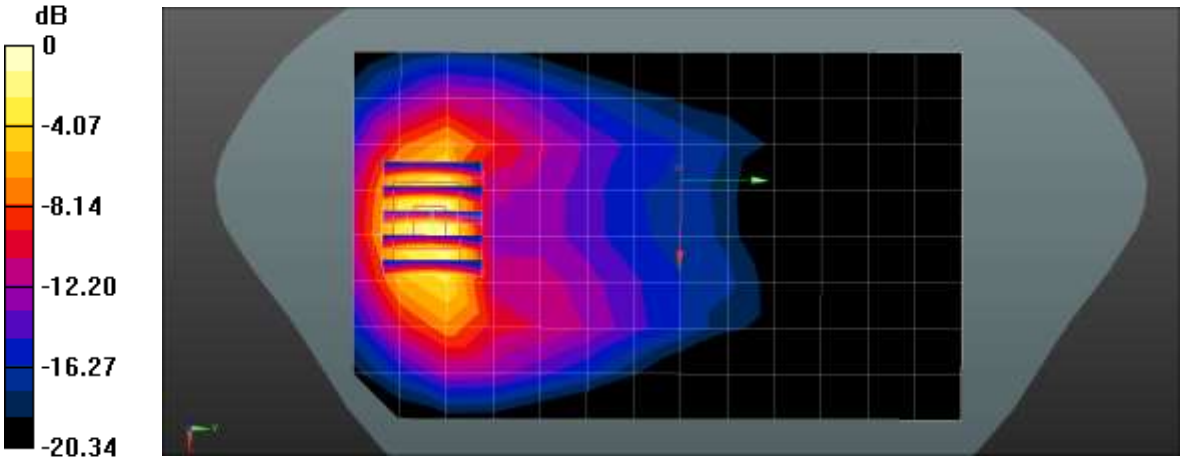
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.274; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 BodyWorn Rear QPSK 20MHz 50RB 49offset 19100ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.13 W/kg

LTE Band 2 BodyWorn Rear QPSK 20MHz 50RB 49offset 19100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.639 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.875 W/kg; SAR(10 g) = 0.435 W/kg
Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.5 ℃
Liquid Temperature:	19.5 ℃
Test Date:	05/07/2024
Plot No.:	B5

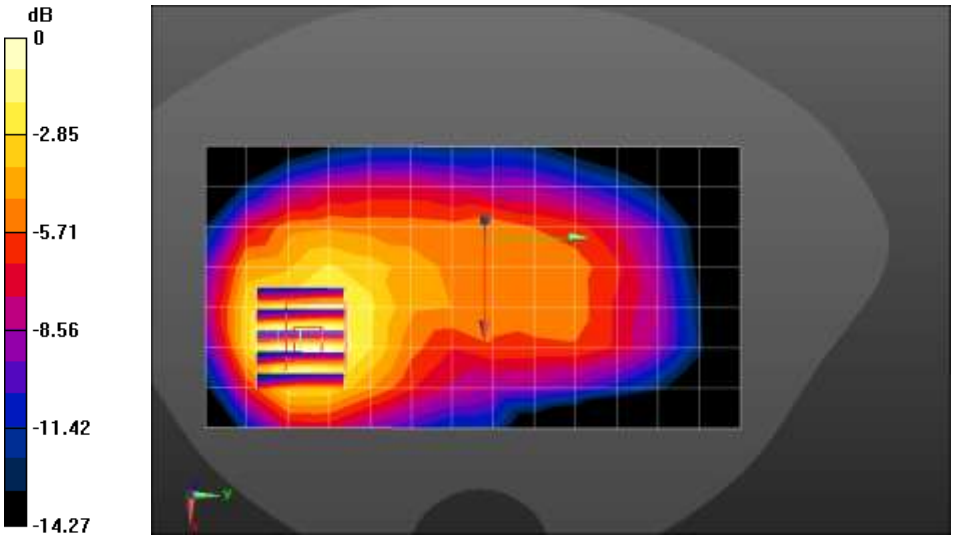
DUT: SC-54E
Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.936 S/m; ε_r = 41.893; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.51, 9.51, 9.51) @ 836.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 Body Rear QPSK 10MHz 1RB 0offset 20525ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.546 W/kg

LTE Band 5 Body Rear QPSK 10MHz 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.97 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.696 W/kg
SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.266 W/kg
Maximum value of SAR (measured) = 0.600 W/kg



0 dB = 0.600 W/kg = -2.22 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.5 ℃
Liquid Temperature:	19.5 ℃
Test Date:	05/07/2024
Plot No.:	B6

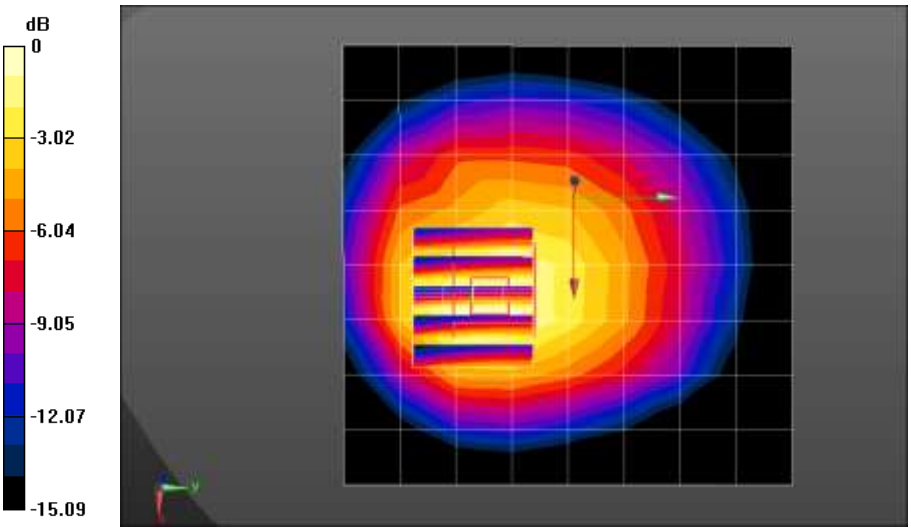
DUT: SC-54E
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.856 S/m; ε_r = 43.703; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 707.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 Bodyworn Rear QPSK 10MHz 1RB 24offset 23095ch/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.334 W/kg

LTE Band 12 Bodyworn Rear QPSK 10MHz 1RB 24offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.50 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.430 W/kg
SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.154 W/kg.
Maximum value of SAR (measured) = 0.360 W/kg



0 dB = 0.360 W/kg = -4.44 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.1 ℃
Liquid Temperature:	20.1 ℃
Test Date:	05/09/2024
Plot No.:	B7

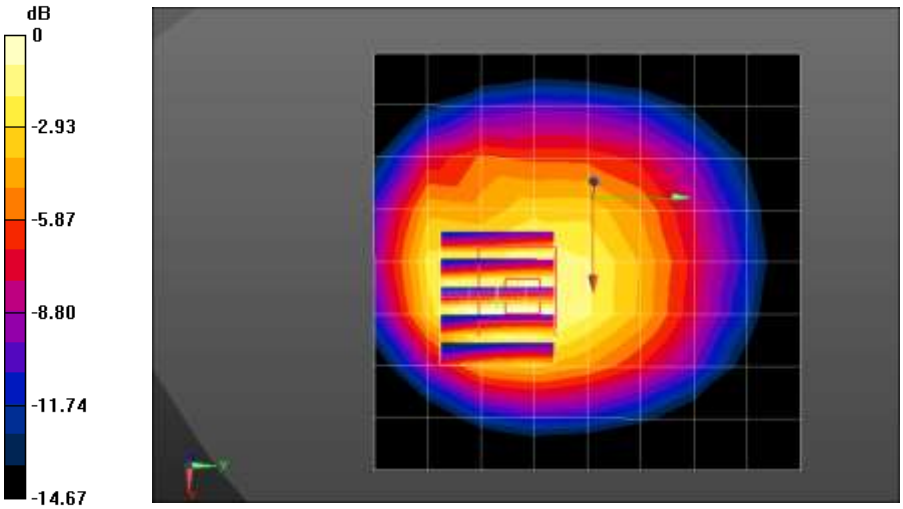
DUT: SC-54E
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.906 S/m; ε_r = 42.532; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 782 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 13 Bodyworn Rear QPSK 10MHz 1RB 0offset 23230ch/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.445 W/kg

LTE Band 13 Bodyworn Rear QPSK 10MHz 1RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.37 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.555 W/kg
SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.212 W/kg
Maximum value of SAR (measured) = 0.465 W/kg



0 dB = 0.465 W/kg = -3.33 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/23/2024
Plot No.:	B8

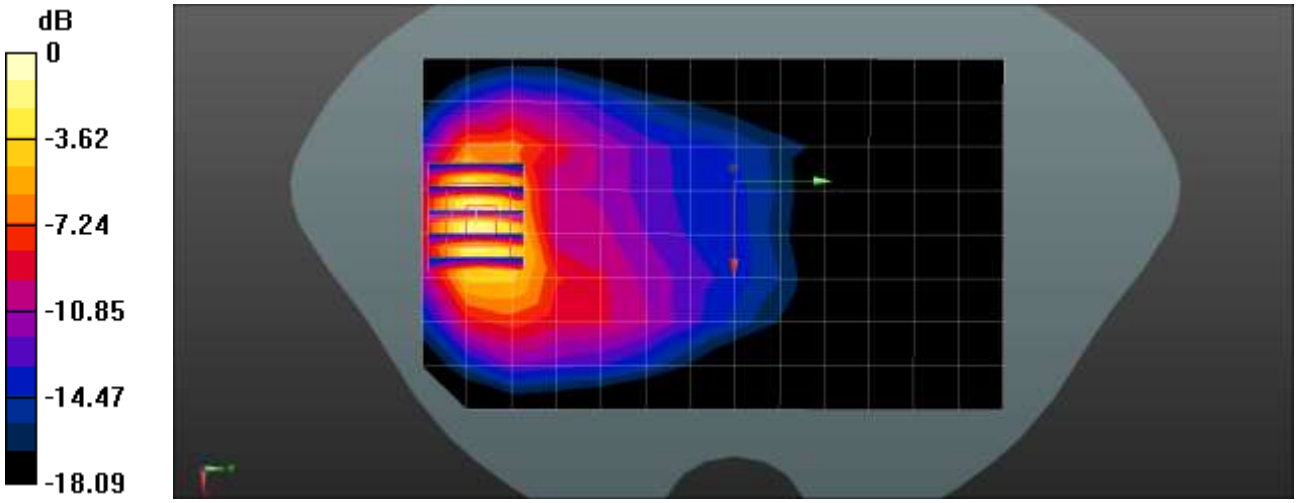
DUT: SC-54E
Communication System: UID 0, LTE Band66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.369 S/m; ε_r = 39.533; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1770 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 49offset 132572ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.992 W/kg

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 49offset 132572ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.297 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.821 W/kg; SAR(10 g) = 0.419 W/kg
aximum value of SAR (measured) = 1.22 W/kg



0 dB = 1.22 W/kg = 0.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	23.7 ℃
Liquid Temperature:	23.7 ℃
Test Date:	05/02/2024
Plot No.:	B9

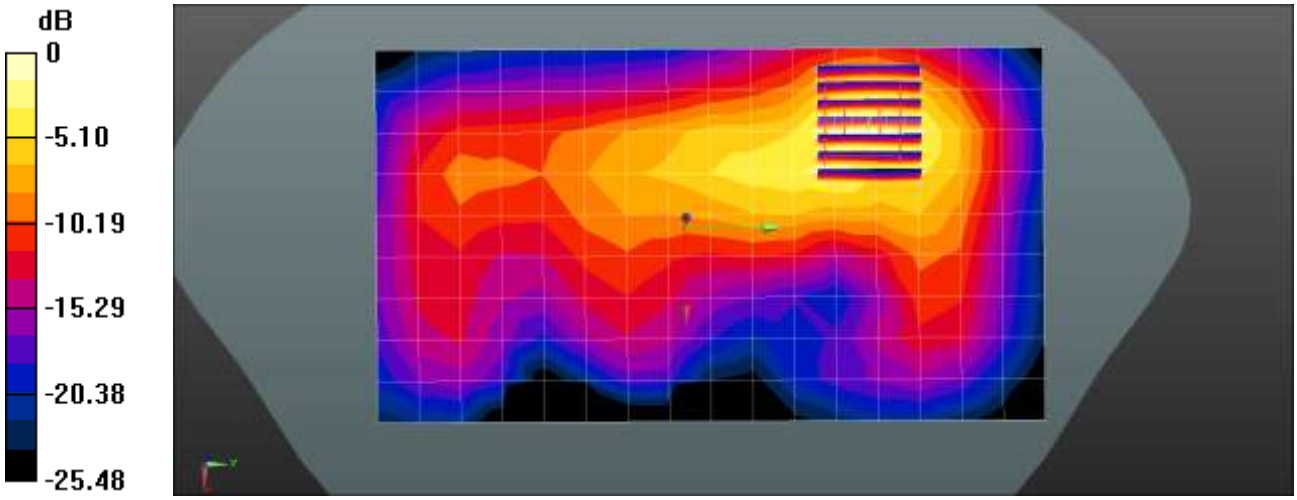
DUT: SC-54E
Communication System: UID 0, LTE Band 41 (FCC) (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58052
Medium parameters used: f = 2680 MHz; σ = 2.111 S/m; ε_r = 38.502; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2680 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 41 Bodyworn Rear QPSK 20MHz 100RB 0offset 41490ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.13 W/kg

LTE Band 41 Bodyworn Rear QPSK 20MHz 100RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.097 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.53 W/kg
SAR(1 g) = 0.687 W/kg; SAR(10 g) = 0.303 W/kg
Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	18.9 ℃
Liquid Temperature:	18.8 ℃
Test Date:	05/17/2024
Plot No.:	B10

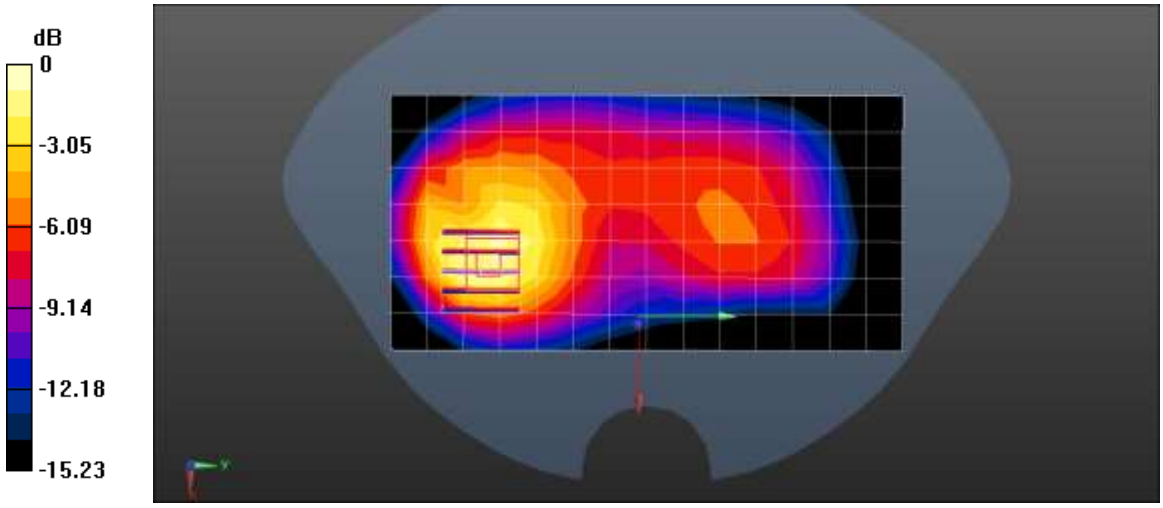
DUT: SC-54E
Communication System: UID 0, NR Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.912 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7309; ConvF(9.82, 8.7, 9.76) @ 836.5 MHz; Calibrated: 2023-06-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1464; Calibrated: 2023-06-16
- Phantom: SAM (20deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n5 Body Rear DFT-s QPSK 50RB 28offset 167300ch/Area Scan (8x15x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.518 W/kg

NR Band n5 Body Rear DFT-s QPSK 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.93 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.693 W/kg
SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.258 W/kg
Maximum value of SAR (measured) = 0.599 W/kg



0 dB = 0.599 W/kg = -2.23 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.4 ℃
Liquid Temperature:	20.2 ℃
Test Date:	05/23/2024
Plot No.:	B11

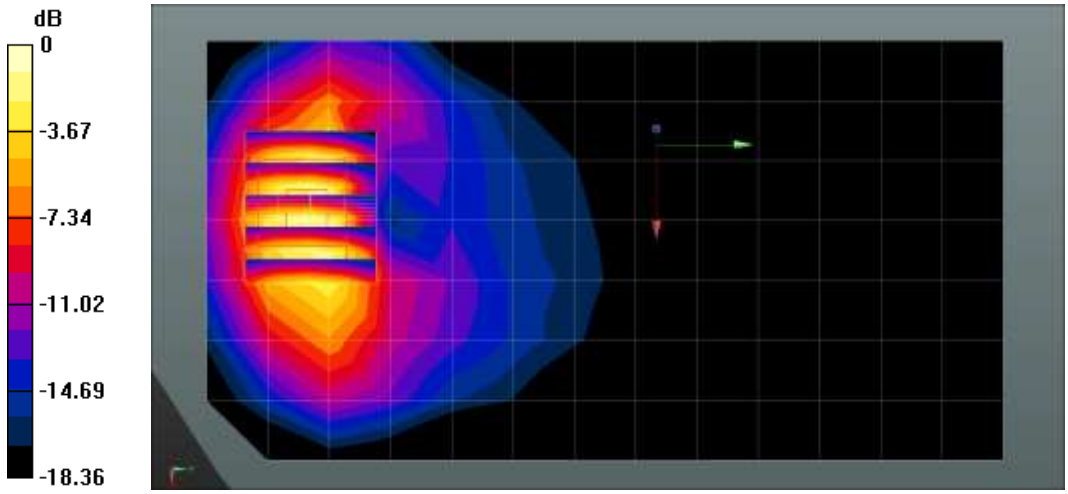
DUT: SC-54E
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.363 S/m; ε_r = 41.622; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.29, 8.71, 8.9) @ 1745 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 n66 Bodyworn Rear CP QPSK 40MHz 1RB 1offset 349000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.10 W/kg

NR Band n66 Bodyworn Rear CP QPSK 40MHz 1RB 1offset 349000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.877 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.60 W/kg
SAR(1 g) = 0.952 W/kg; SAR(10 g) = 0.506 W/kg
Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/23/2024
Plot No.:	B12

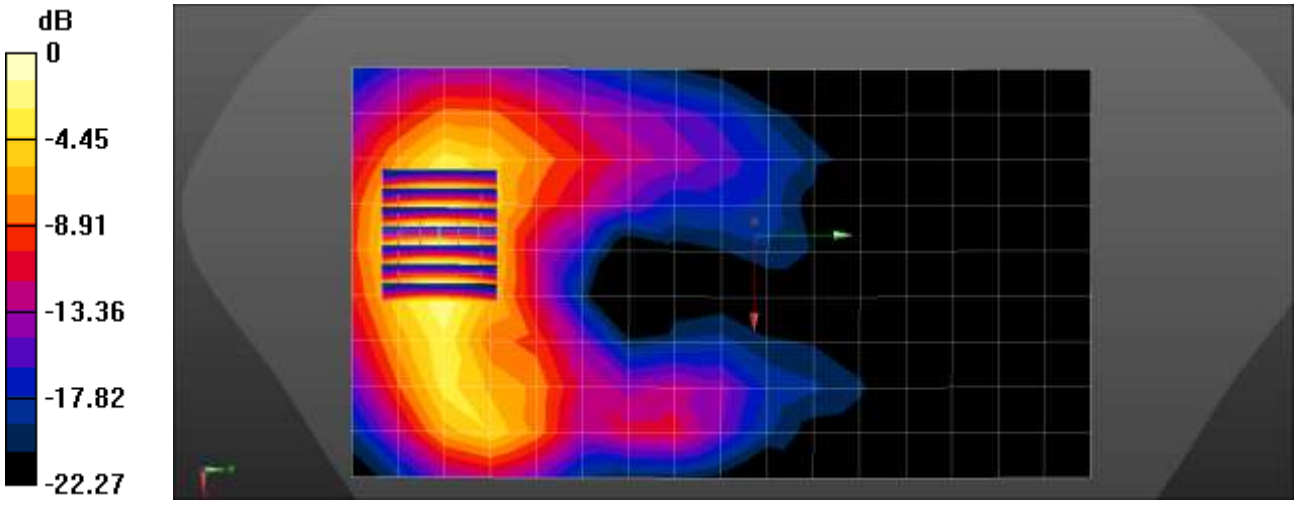
DUT: SC-54E
Communication System: UID 0, NR Band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.025 S/m; ε_r = 37.867; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.57, 7.57, 7.57) @ 2592.99 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- 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)

NR Band n41 Bodyworn Rear CP QPSK 100MHz 1RB 1offset 518598ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.923 W/kg

NR Band n41 Bodyworn Rear CP QPSK 100MHz 1RB 1offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.692 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.253 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:	21.1 ℃
Liquid Temperature:	21.0 ℃
Test Date:	05/01/2024
Plot No.:	B13

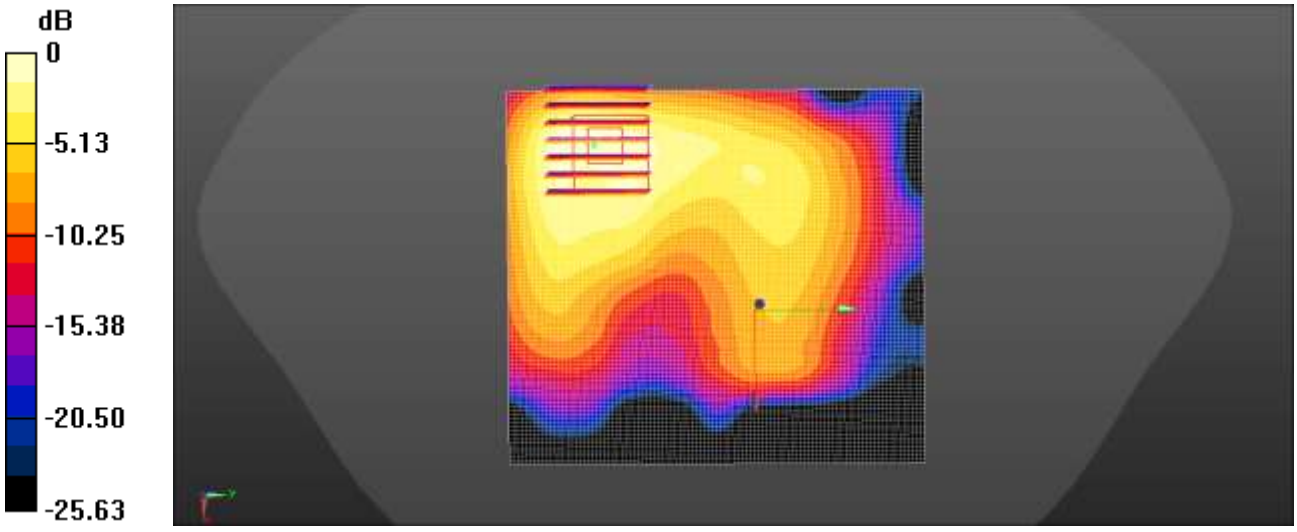
DUT: SC-54E
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.823 S/m; ε_r = 40.729; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.98, 7.3, 7.04) @ 2412 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

802.11b Body Front 1Mbps 1ch/Area Scan (91x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.301 W/kg

802.11b Body Front 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.937 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.345 W/kg
SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.091 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:	19.9 ℃
Liquid Temperature:	19.9 ℃
Test Date:	05/03/2024
Plot No.:	B14

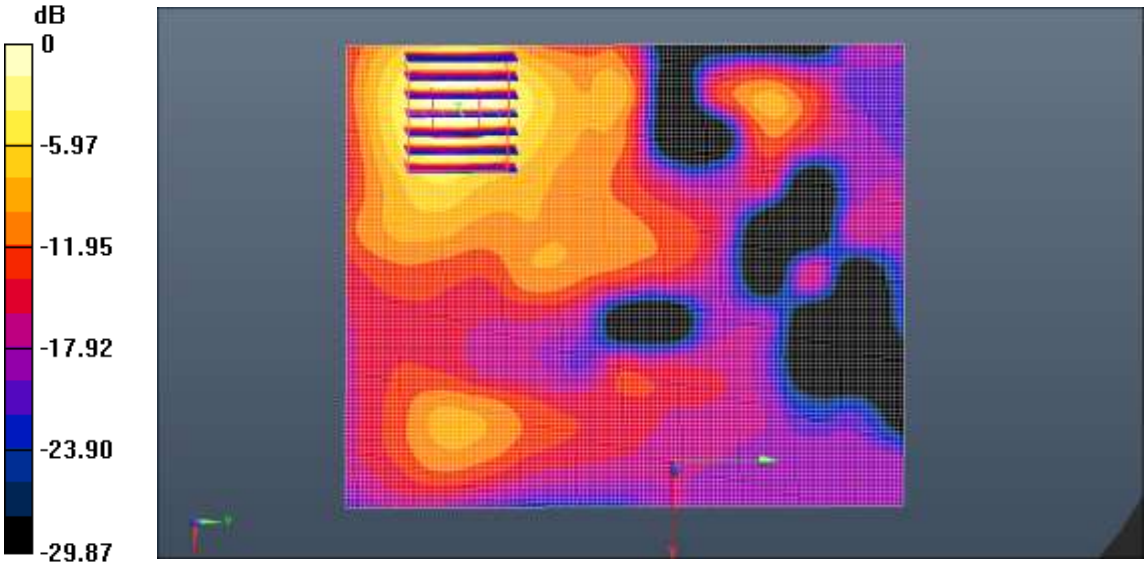
DUT: SC-54E
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.77 S/m; ε_r = 36.89; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(5.2, 5.2, 5.2) @ 5260 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

802.11a Bodyworn Front 6Mbps 52ch/Area Scan (101x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.561 W/kg

802.11a Bodyworn Front 6Mbps 52ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.745 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.946 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.083 W/kg
Maximum value of SAR (measured) = 0.580 W/kg



0 dB = 0.580 W/kg = -2.37 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.0 ℃
Liquid Temperature:	21.0 ℃
Test Date:	05/11/2024
Plot No.:	B15

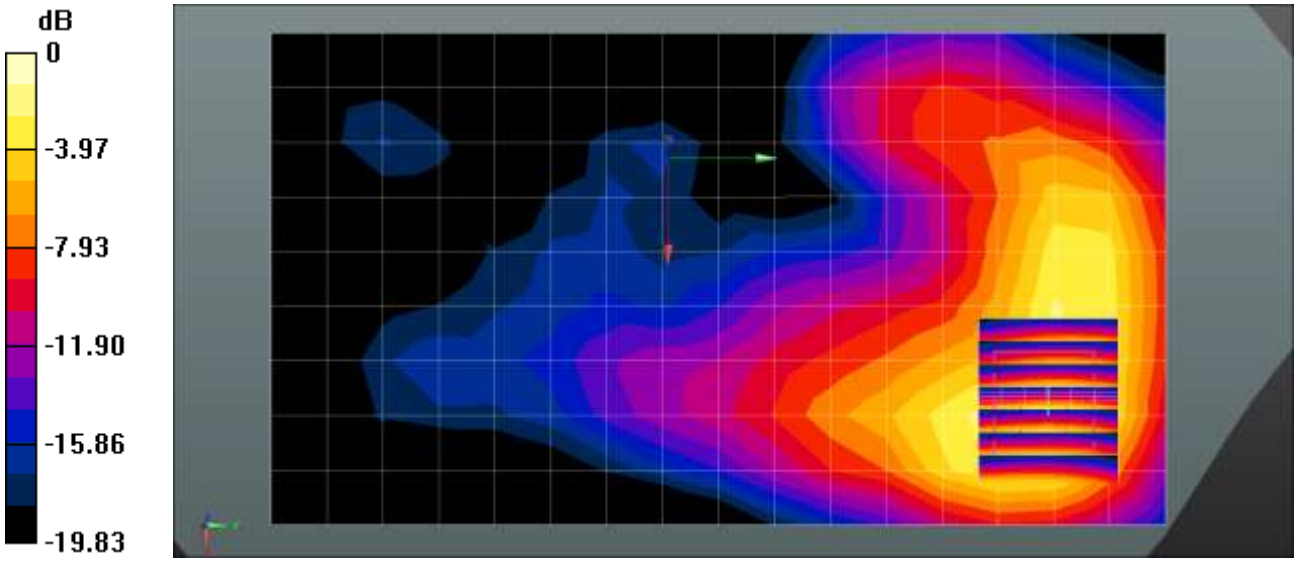
DUT: SC-54E
Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2402 MHz; σ = 1.799 S/m; ε_r = 39.081; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2402 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)

Bluetooth Body Rear DH5 0ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.397 W/kg

Bluetooth Body Rear DH5 0ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.168 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.499 W/kg
SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.135 W/kg
Maximum value of SAR (measured) = 0.410 W/kg



0 dB = 0.410 W/kg = -3.87 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.9 ℃
Test Date:	05/15/2024
Plot No.:	C1

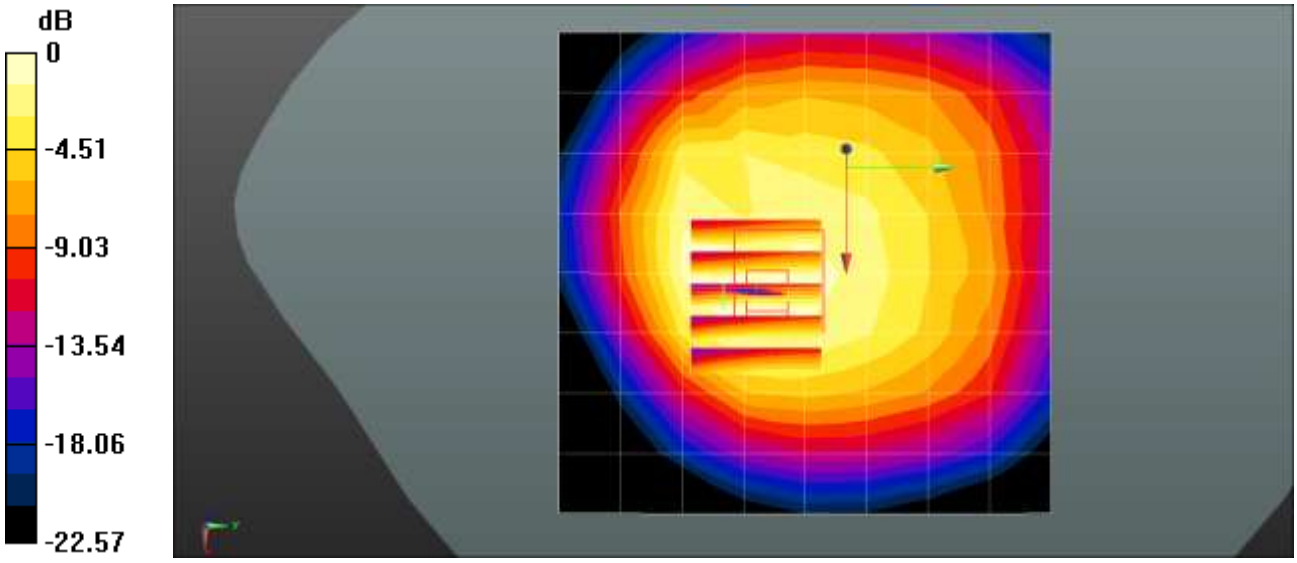
DUT: SC-54E
Communication System: UID 0, GSM850 GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07491
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 S/m; ε_r = 41.256; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

GSM850 4Tx Body Rear 190ch/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.373 W/kg

GSM850 4Tx Body Rear 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.15 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.514 W/kg
SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 0.439 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.2 ℃
Liquid Temperature:	20.1 ℃
Test Date:	05/16/2024
Plot No.:	C2

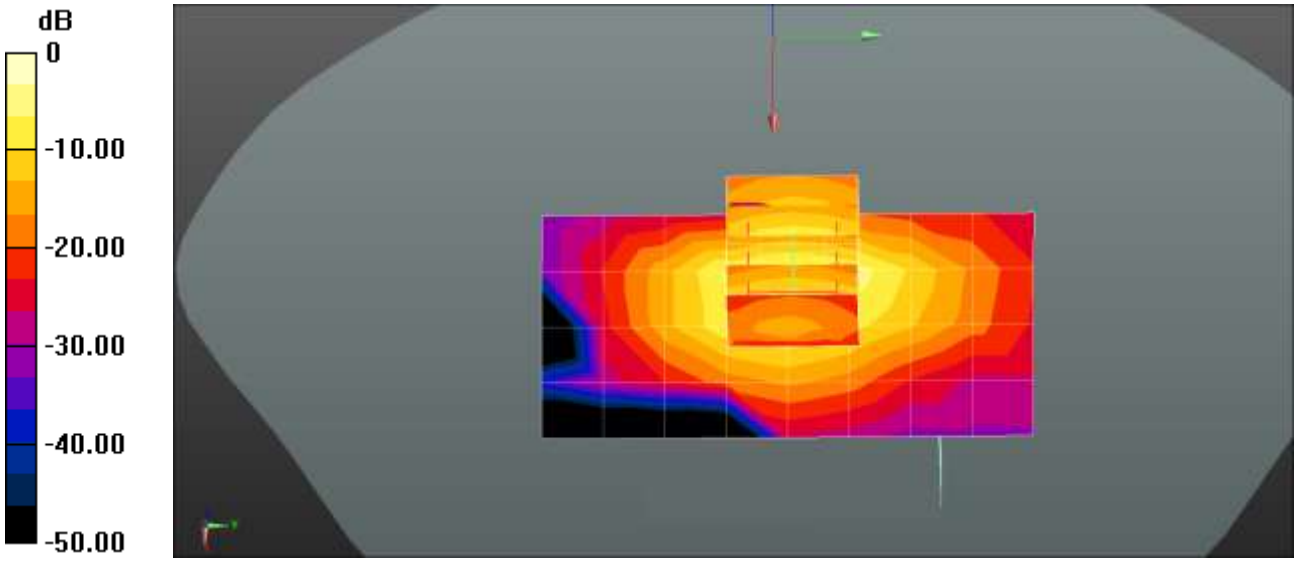
DUT: SC-54E
Communication System: UID 0, GSM1900 3TX (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.77013
Medium parameters used: f = 1910 MHz; σ = 1.379 S/m; ε_r = 39.117; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.94, 8.33, 8.49) @ 1909.8 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)

GSM1900 Body Bottom 3Tx 810ch/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.531 W/kg

GSM1900 Body Bottom 3Tx 810ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.881 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.279 W/kg
Maximum value of SAR (measured) = 0.970 W/kg



0 dB = 0.970 W/kg = -0.13 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.7 ℃
Liquid Temperature:	20.7 ℃
Test Date:	05/14/2024
Plot No.:	C3

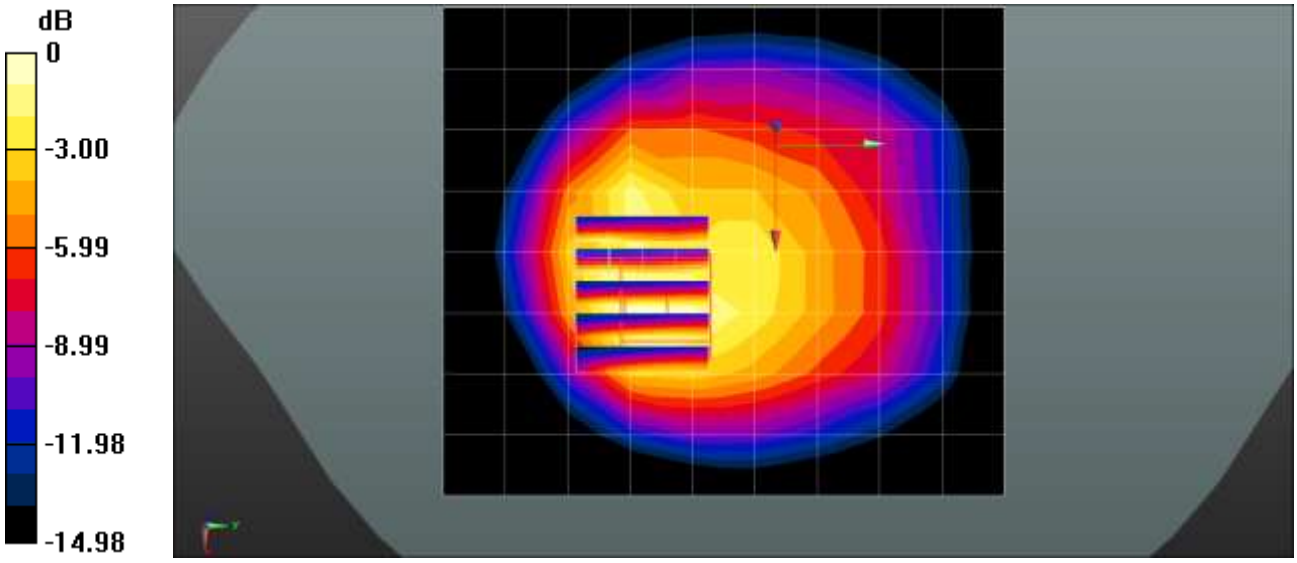
DUT: SC-54E
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.937 S/m; ε_r = 41.106; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(9.17, 9.37, 9.66) @ 836.6 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)

UMTS Band 5 Body Rear 4183ch/Area Scan (9x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.743 W/kg

UMTS Band 5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.24 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.854 W/kg
SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.293 W/kg
Maximum value of SAR (measured) = 0.735 W/kg



0 dB = 0.735 W/kg = -1.34 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.7 ℃
Liquid Temperature:	20.7 ℃
Test Date:	05/15/2024
Plot No.:	C4

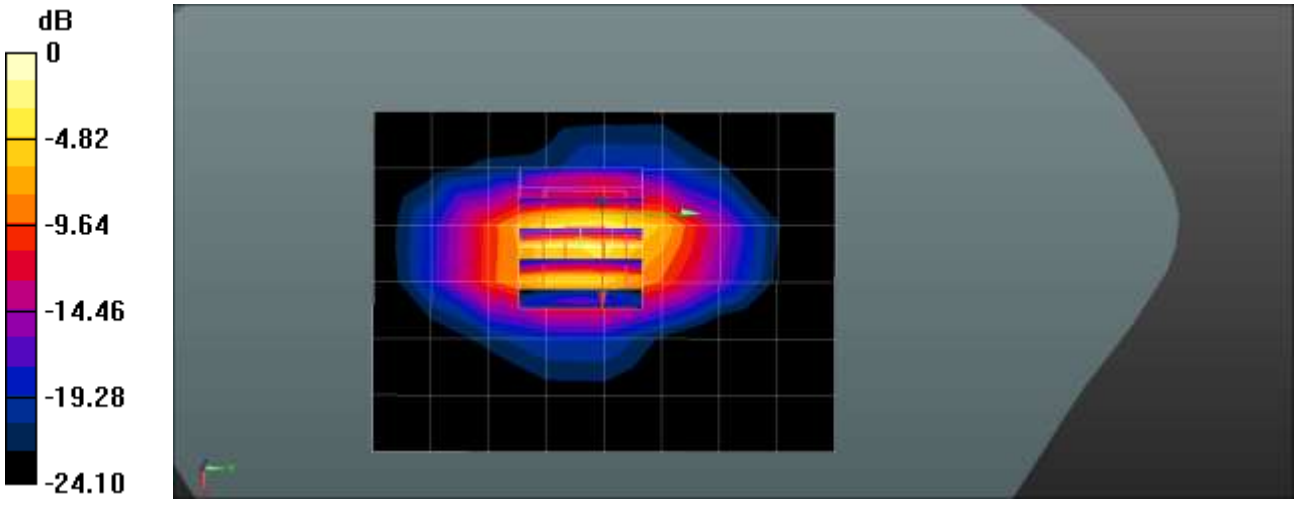
DUT: SC-54E
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.274; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Body Bottom QPSK 20MHz 50RB 0offset 19100ch/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.809 W/kg

LTE Band 2 Body Bottom QPSK 20MHz 50RB 0offset 19100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.99 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.26 W/kg
SAR(1 g) = 0.979 W/kg; SAR(10 g) = 0.407 W/kg
Maximum value of SAR (measured) = 1.70 W/kg



0 dB = 1.70 W/kg = 2.30 dBW/kg

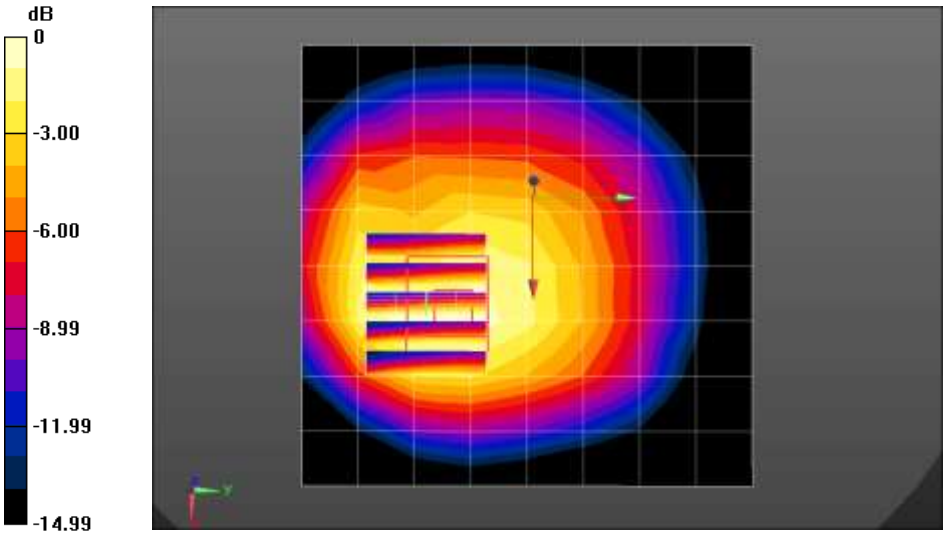
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.9 ℃
Liquid Temperature:	19.8 ℃
Test Date:	05/08/2024
Plot No.:	C5

DUT: SC-54E
Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.932 S/m; ε_r = 41.894; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.51, 9.51, 9.51) @ 836.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 Body Rear QPSK 10MHz 1RB 0offset 20525ch/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.653 W/kg
LTE Band 5 Body Rear QPSK 10MHz 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.83 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.311 W/kg
Maximum value of SAR (measured) = 0.669 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.5 ℃
Liquid Temperature:	19.5 ℃
Test Date:	05/07/2024
Plot No.:	C6

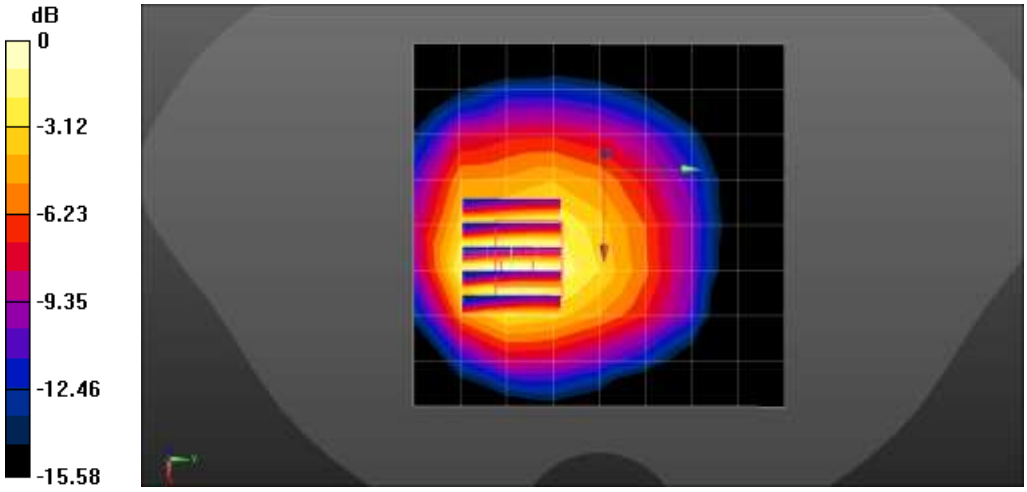
DUT: SC-54E
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.856 S/m; ε_r = 43.703; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 707.5 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: 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 (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.436 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 = 15.61 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.523 W/kg
SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.181 W/kg
Maximum value of SAR (measured) = 0.436 W/kg



0 dB = 0.436 W/kg = -3.61 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.1 ℃
Liquid Temperature:	20.1 ℃
Test Date:	05/09/2024
Plot No.:	C7

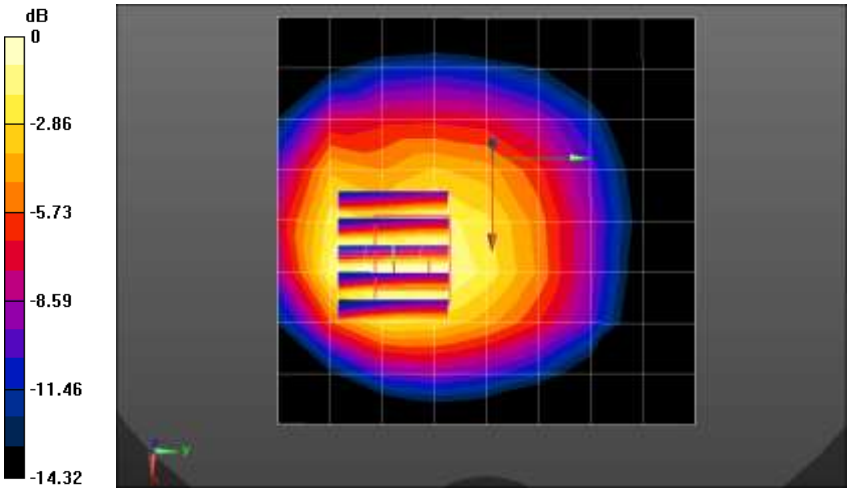
DUT: SC-54E
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 782 MHz; σ = 0.906 S/m; ε_r = 42.532; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 782 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: 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 (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.559 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 = 19.46 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.678 W/kg
SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.260 W/kg
Maximum value of SAR (measured) = 0.569 W/kg



0 dB = 0.569 W/kg = -2.45 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	23.6 ℃
Liquid Temperature:	23.5 ℃
Test Date:	05/03/2024
Plot No.:	C8

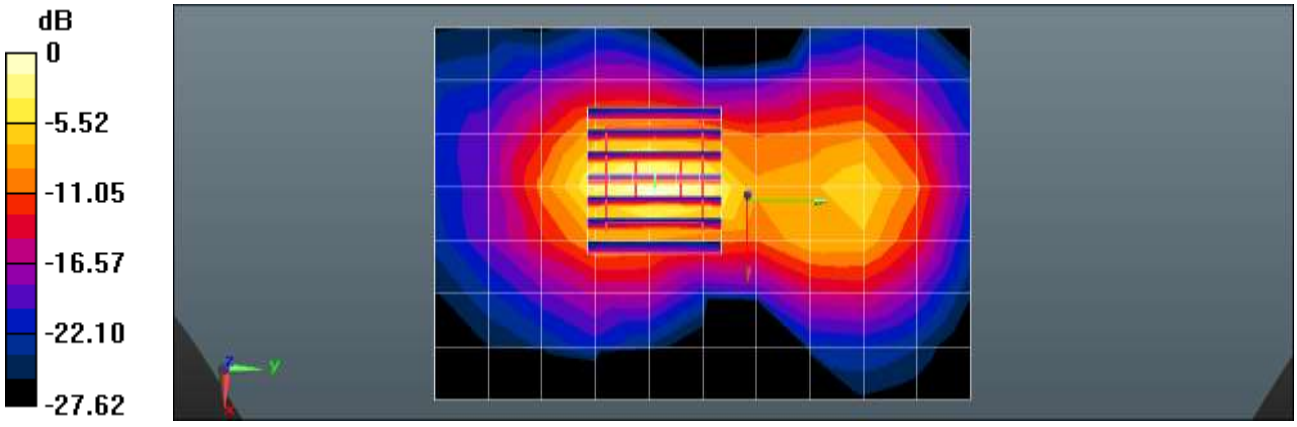
DUT: SC-54E
Communication System: UID 0, LTE Band 41 (FCC) (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58052
Medium parameters used: f = 2680 MHz; σ = 2.11 S/m; ε_r = 38.502; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2680 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

LTE Band 41 Body Right QPSK 20MHz 100RB 0offset 41490ch/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.65 W/kg

LTE Band 41 Body Right QPSK 20MHz 100RB 0offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.94 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.19 W/kg
SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.341 W/kg
Maximum value of SAR (measured) = 1.67 W/kg



0 dB = 1.67 W/kg = 2.23 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.7 ℃
Test Date:	05/08/2024
Plot No.:	C9

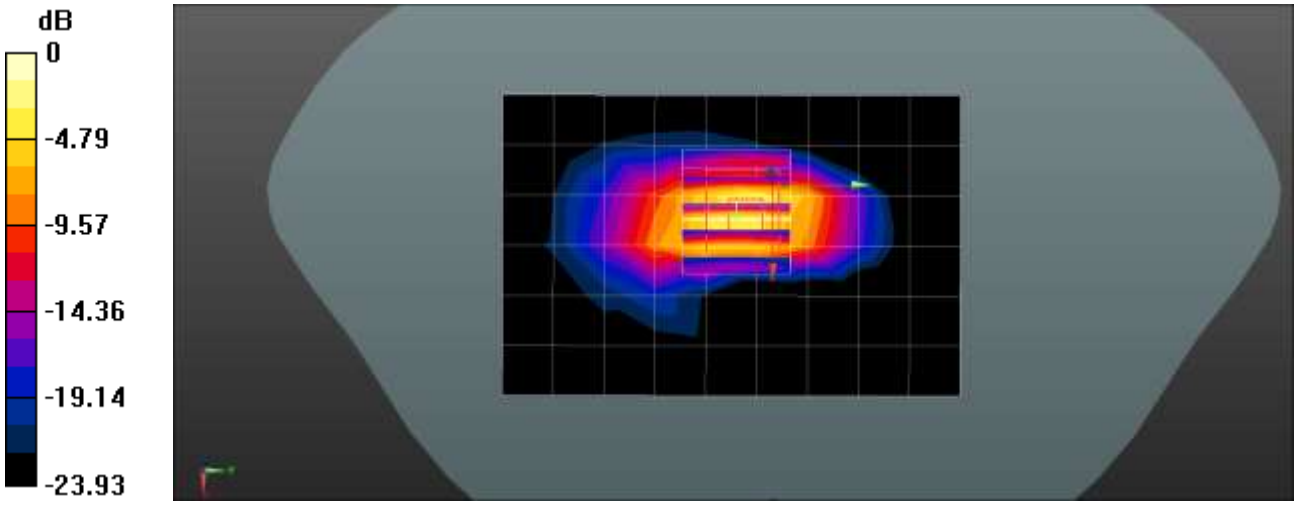
DUT: SC-54E
Communication System: UID 0, LTE Band66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.364 S/m; ε_r = 38.661; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1770 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Body Right QPSK 20MHz 50RB 49offset 132572ch/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.685 W/kg

LTE Band 66 Body Right QPSK 20MHz 50RB 49offset 132572ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.37 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 2.06 W/kg
SAR(1 g) = 0.911 W/kg; SAR(10 g) = 0.397 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:	19.3 ℃
Liquid Temperature:	19.3 ℃
Test Date:	05/18/2024
Plot No.:	C10

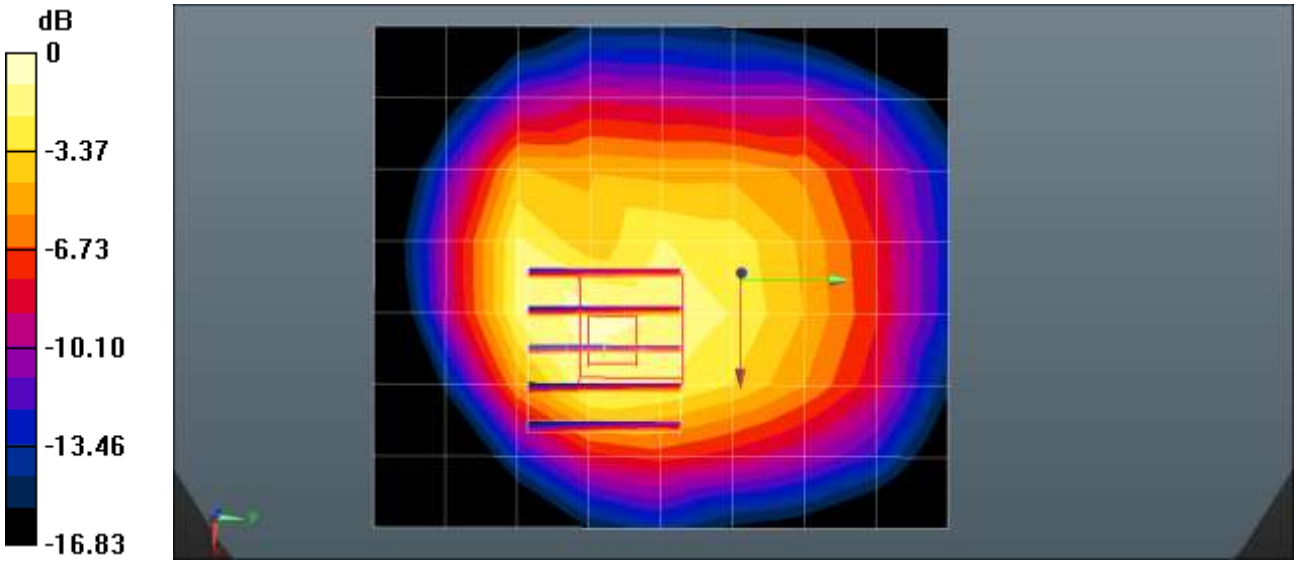
DUT: SC-54E
Communication System: UID 0, NR Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.916 S/m; ε_r = 40.813; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7309; ConvF(9.82, 8.7, 9.76) @ 836.5 MHz; Calibrated: 2023-06-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1464; Calibrated: 2023-06-16
- Phantom: SAM (20deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NR Band n5 Body Rear DFT-s QPSK 50RB 28offset 167300ch/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.801 W/kg

NR Band n5 Body Rear DFT-s QPSK 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.13 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.670 W/kg; SAR(10 g) = 0.411 W/kg
Maximum value of SAR (measured) = 0.939 W/kg



0 dB = 0.939 W/kg = -0.27 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.9 ℃
Liquid Temperature:	20.8 ℃
Test Date:	05/20/2024
Plot No.:	C11

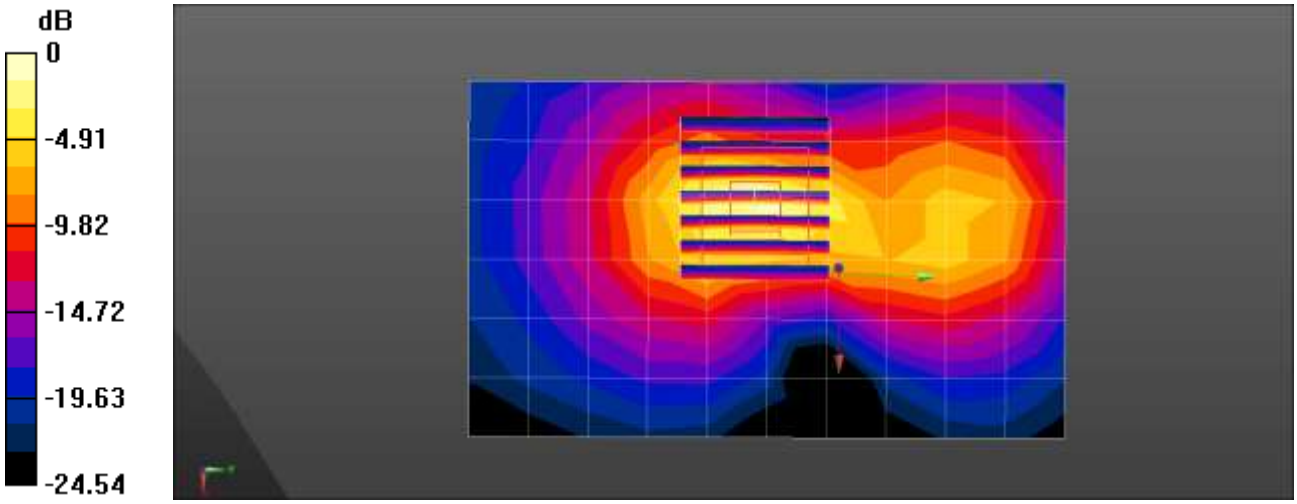
DUT: SC-54E
Communication System: UID 0, NR Band n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.003 S/m; ε_r = 39.208; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.57, 7.57, 7.57) @ 2592.99 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- 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)

NR Band n41 Body Right CP QPSK 100MHz 1RB 1offset 518598ch/Area Scan (7x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.29 W/kg

NR Band n41 Body Right CP QPSK 100MHz 1RB 1offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.98 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.91 W/kg
SAR(1 g) = 0.739 W/kg; SAR(10 g) = 0.285 W/kg
Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.3 ℃
Liquid Temperature:	20.2 ℃
Test Date:	05/18/2024
Plot No.:	C12

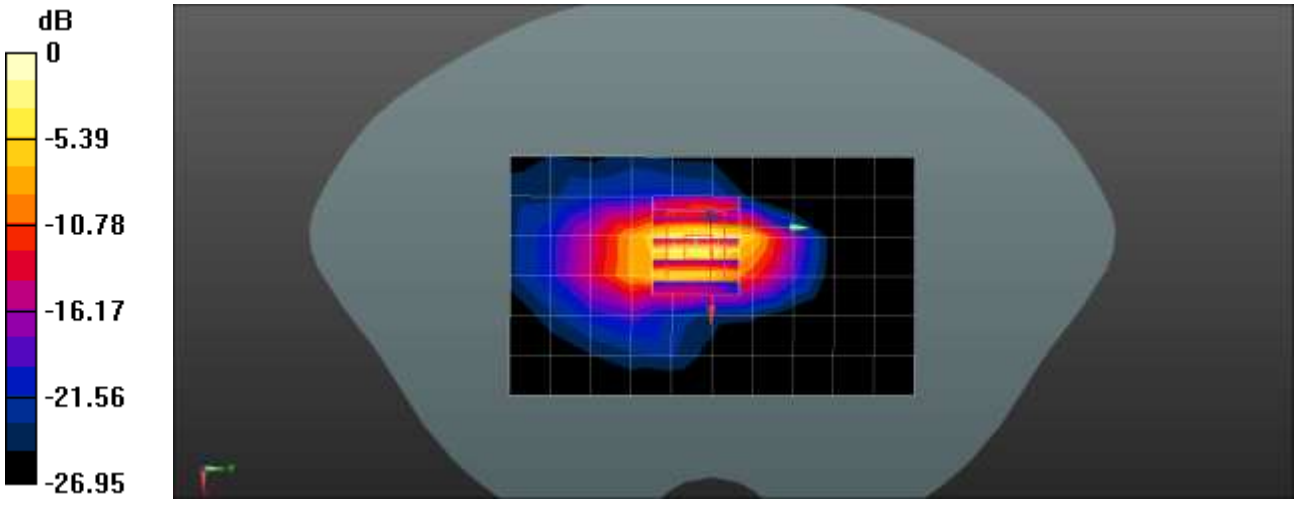
DUT: SC-54E
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.385 S/m; ε_r = 40.053; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1745 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band 66 Body Right DFT-s QPSK 40MHz 1RB 214offset 349000ch/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.873 W/kg

NR Band 66 Body Right DFT-s QPSK 40MHz 1RB 214offset 349000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.62 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 2.20 W/kg
SAR(1 g) = 0.980 W/kg; SAR(10 g) = 0.422 W/kg
Maximum value of SAR (measured) = 1.77 W/kg



0 dB = 1.77 W/kg = 2.48 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.0 ℃
Test Date:	05/01/2024
Plot No.:	C13

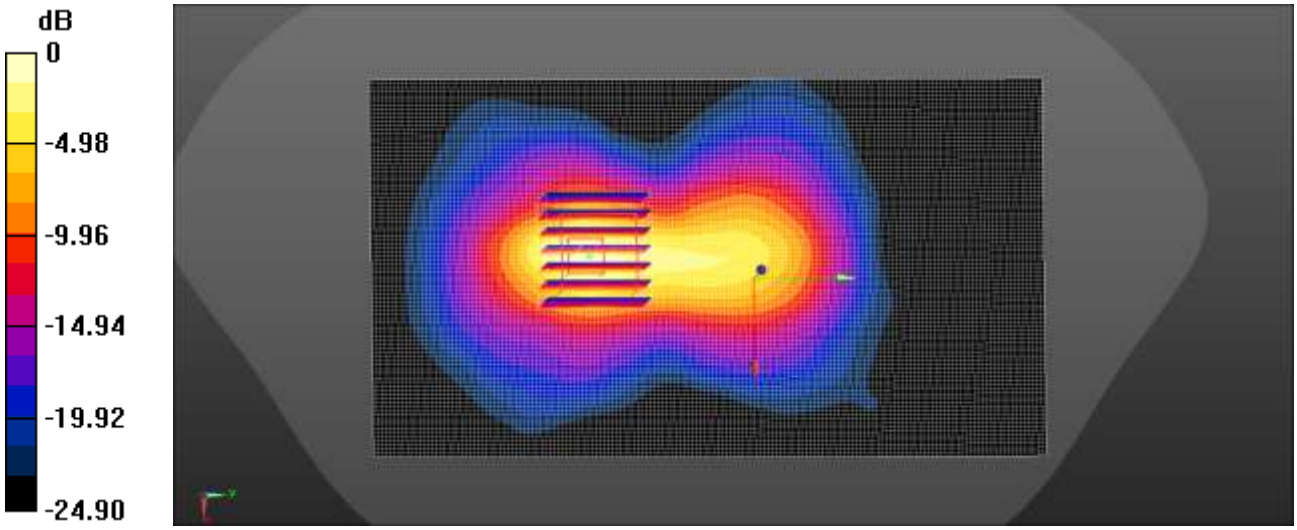
DUT: SC-54E
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.823 S/m; ε_r = 40.729; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.98, 7.3, 7.04) @ 2412 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

802.11b Body Left 1Mbps 1ch/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.994 W/kg

802.11b Body Left 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.98 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.564 W/kg; SAR(10 g) = 0.240 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: 23.5 ℃
Liquid Temperature: 23.5 ℃
Test Date: 05/02/2024
Plot No.: C14

DUT: SC-54E
Measurement Report for Device, FRONT, U-NII-3 Standalone, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps), Channel 149 (5745.0 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	FRONT, 5.00	U-NII-3 Standalone	WLAN, 10062-CAD	5745.0, 149	5.34	5.35	36.7

Hardware Setup

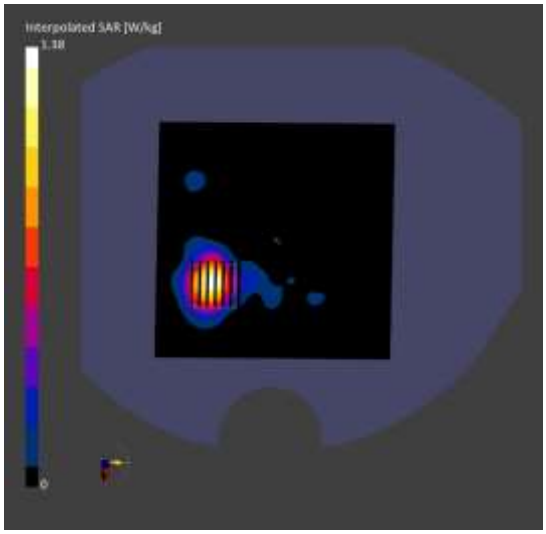
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt)	EX3DV4 - SN7732, 2023-06-20	DAE4 Sn504, 2024-01-30

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 120.0	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]	0.369	0.373
psSAR10g [W/Kg]	0.123	0.117
Power Drift [dB]	0.10	0.14



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.1 ℃
Test Date:	05/10/2024
Plot No.:	C15

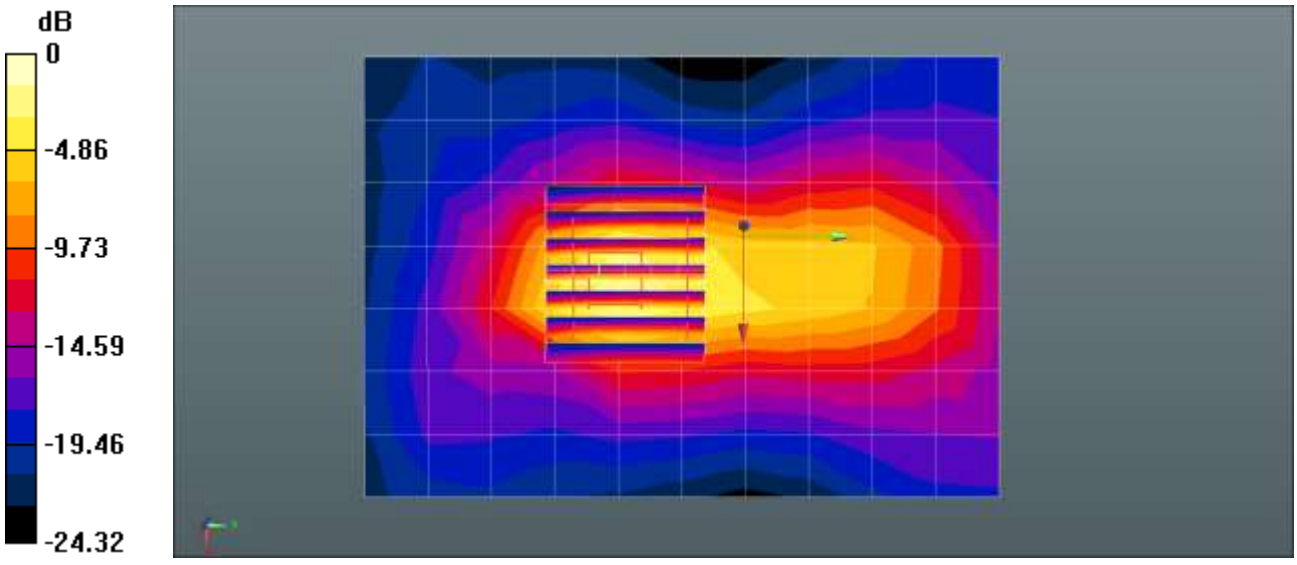
DUT: SC-54E
Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2402 MHz; σ = 1.799 S/m; ε_r = 39.081; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2402 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)

Bluetooth Body Left DH5 0ch/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.776 W/kg

Bluetooth Body Left DH5 0ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.23 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.604 W/kg; SAR(10 g) = 0.258 W/kg
Maximum value of SAR (measured) = 1.09 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.6 ℃
Liquid Temperature:	20.5 ℃
Test Date:	05/14/2024
Plot No.:	D1

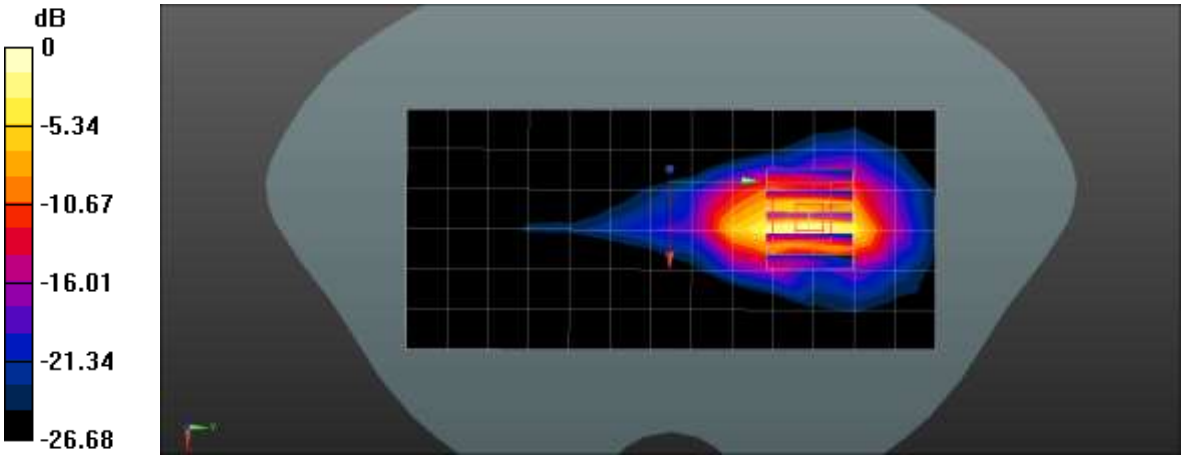
DUT: SC-54E
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.38 S/m; ε_r = 41.418; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1860 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Phablet Right QPSK 20MHz 50RB 49offset 18700ch/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 6.23 W/kg

LTE Band 2 Phablet Right QPSK 20MHz 50RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.546 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 11.3 W/kg
SAR(1 g) = 4.35 W/kg; SAR(10 g) = 1.72 W/kg
Maximum value of SAR (measured) = 8.36 W/kg



0 dB = 8.36 W/kg = 9.22 dBW/kg

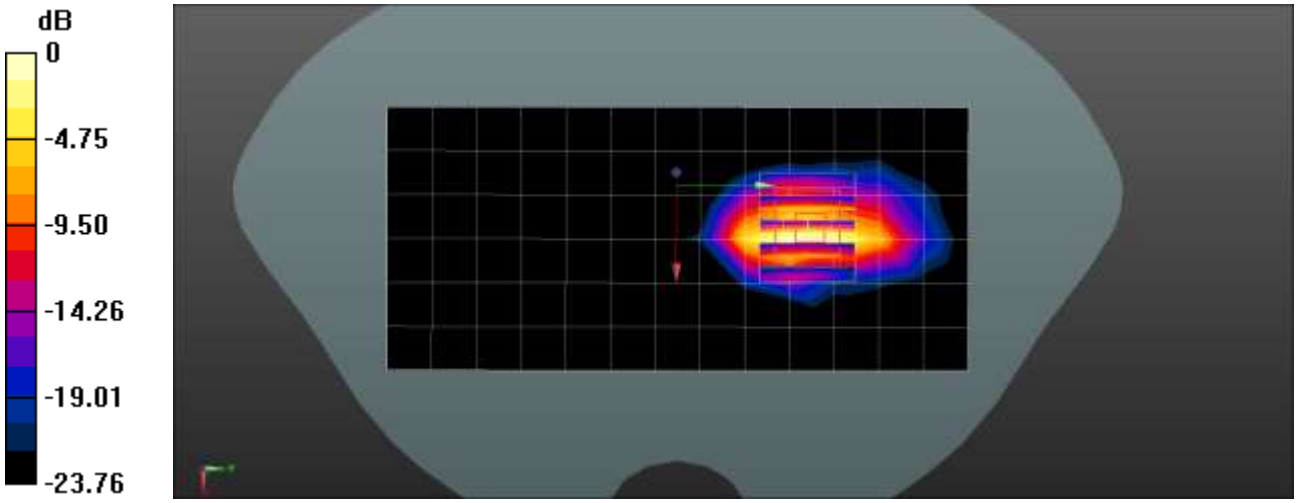
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.6 ℃
Liquid Temperature:	20.5 ℃
Test Date:	05/14/2024
Plot No.:	D2

DUT: SC-54E
Communication System: UID 0, LTE Band66 (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1770 MHz; σ = 1.389 S/m; ε_r = 41.078; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1770 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Phablet Right QPSK 20MHz 50RB 49offset 132572ch/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.49 W/kg
LTE Band 66 Phablet Right QPSK 20MHz 50RB 49offset 132572ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.818 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 13.5 W/kg
SAR(1 g) = 5.64 W/kg; SAR(10 g) = 2.37 W/kg
Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	20.4 ℃
Liquid Temperature:	20.2 ℃
Test Date:	05/23/2024
Plot No.:	D3

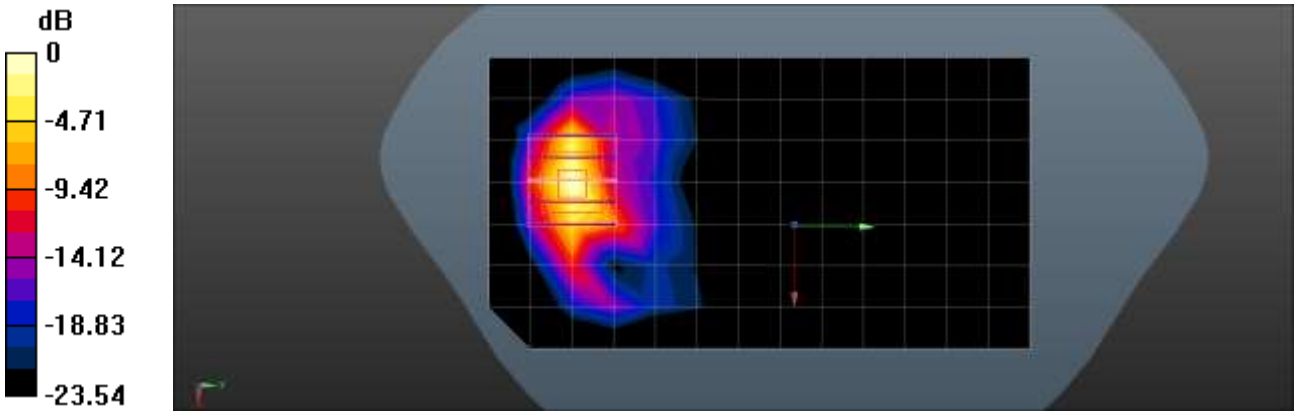
DUT: SC-54E
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.363 S/m; ε_r = 41.622; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.29, 8.71, 8.9) @ 1745 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 n66 Phablet Rear DFT-s QPSK 40MHz 108RB 0offset 349000ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.57 W/kg

NR Band n66 Phablet Rear DFT-s QPSK 40MHz 108RB 0offset 349000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 10.0 W/kg
SAR(1 g) = 4.61 W/kg; SAR(10 g) = 2.02 W/kg
Maximum value of SAR (measured) = 8.49 W/kg



0 dB = 8.49 W/kg = 9.29 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	19.9 ℃
Liquid Temperature:	19.9 ℃
Test Date:	05/03/2024
Plot No.:	D4

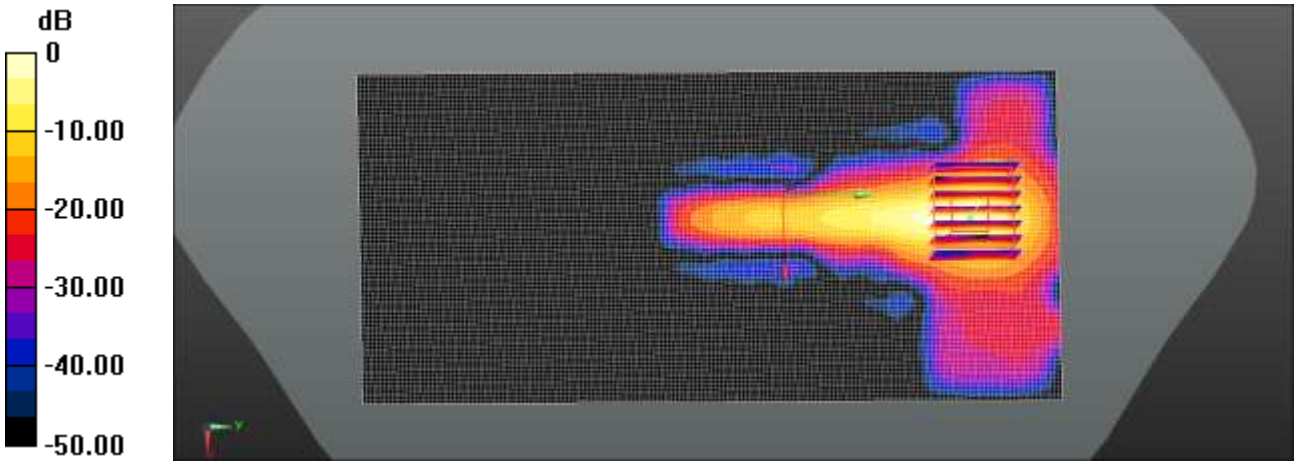
DUT: SC-54E
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5280 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5280 MHz; σ = 4.808 S/m; ε_r = 36.908; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(5.2, 5.2, 5.2) @ 5280 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.13 (7474)

802.11a Body Left 6Mbps 56ch/Area Scan (91x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 8.06 W/kg

802.11a Body Left 6Mbps 56ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.832 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 14.9 W/kg
SAR(1 g) = 2.69 W/kg; SAR(10 g) = 0.630 W/kg
Maximum value of SAR (measured) = 8.10 W/kg



0 dB = 8.10 W/kg = 9.08 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	21.1 ℃
Liquid Temperature:	21.1 ℃
Test Date:	05/10/2024
Plot No.:	D5

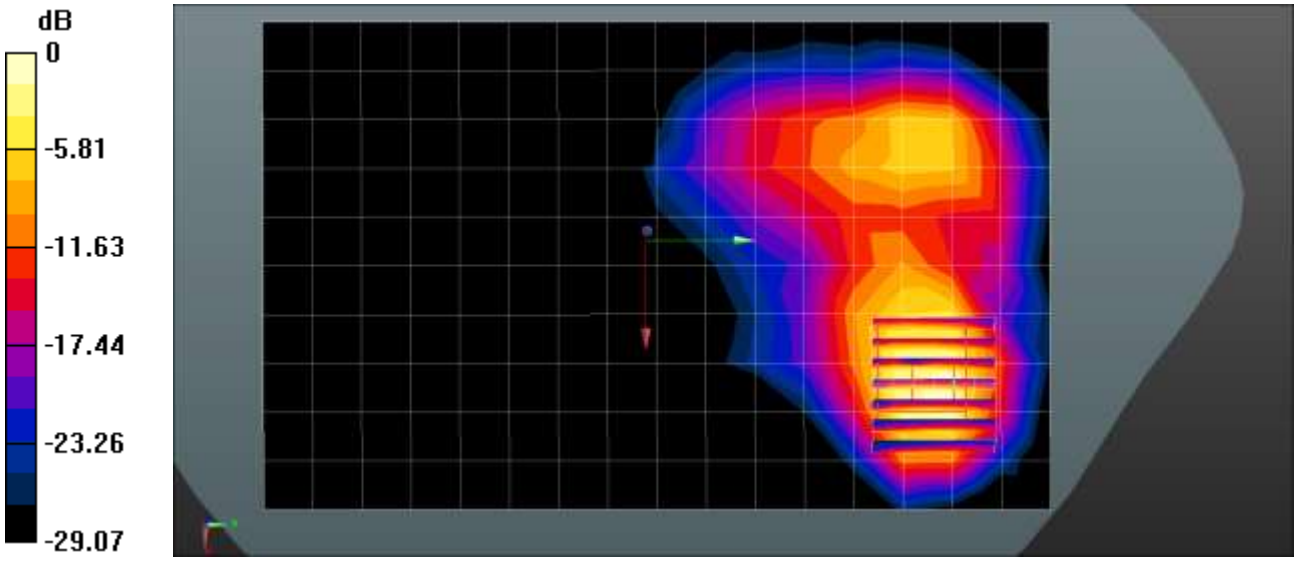
DUT: SC-54E
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.83 S/m; ε_r = 39.123; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2441 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)

Bluetooth Phablet Front DH5 39ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.53 W/kg

Bluetooth Phablet Front DH5 39ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.6230 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.86 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.498 W/kg
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.00 W/kg = 3.01 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Ambient Temperature:	18.8 ℃
Liquid Temperature:	18.8 ℃
Test Date:	05/11/2024
Plot No.:	D6

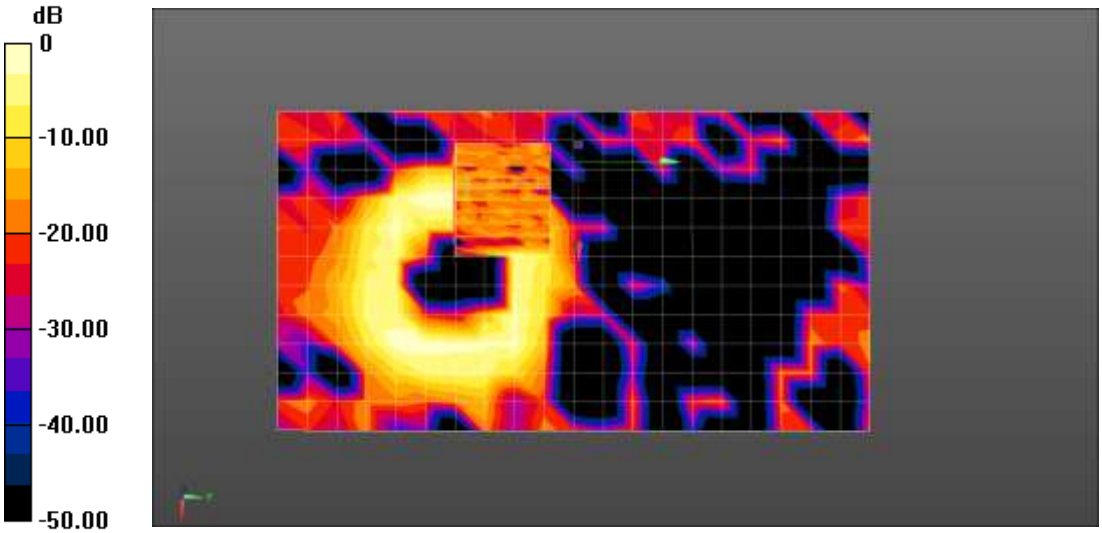
DUT: SC-54E
Communication System: UID 0, NFC (0); Frequency: 13.56 MHz;Duty Cycle: 1:1
Medium parameters used: f = 14 MHz; σ = 0.74 S/m; ε_r = 54.432; ρ = 1000 kg/m^3
Phantom section: Flat Section

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 Sn652; Calibrated: 2024-01-17
- 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 TypeB 106kbps/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.0300 W/kg

NFC Phablet Rear TypeB 106kbps/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.6650 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.0840 W/kg
SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.007 W/kg
Maximum value of SAR (measured) = 0.0306 W/kg



0 dB = 0.0306 W/kg = -15.14 dBW/kg

Appendix C. – Dipole Verification Plots

■ Verification Data (750 ㎒ Head)

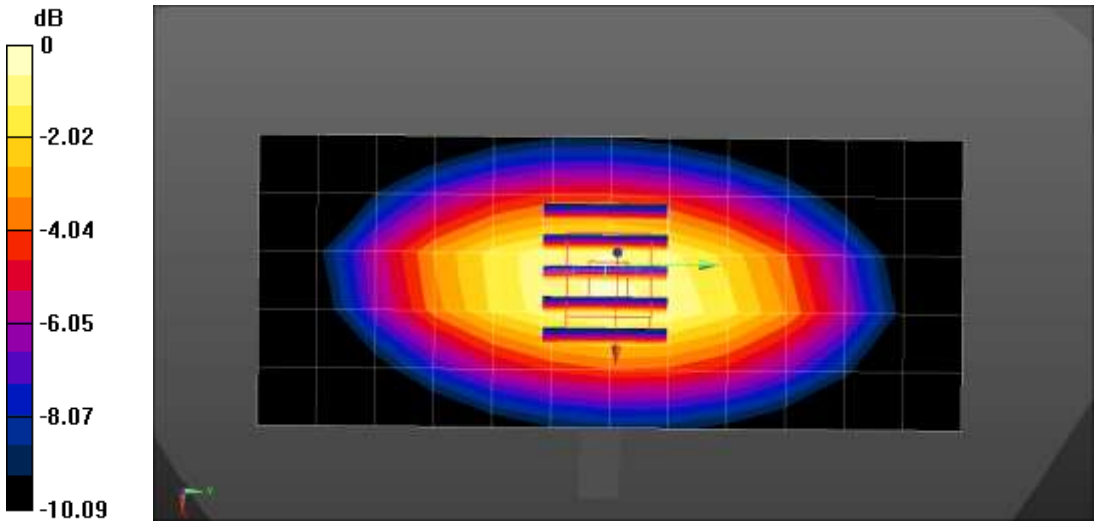
Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.5 ℃
Test Date:	05/07/2024
Band:	LTE FDD Band 12 Close

DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 43.089; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (6x13x1): 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 = 26.13 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.645 W/kg
SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.289 W/kg
Maximum value of SAR (measured) = 0.568 W/kg



0 dB = 0.568 W/kg = -2.46 dBW/kg

■ Verification Data (750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.8 ℃
Test Date:	05/08/2024
Band:	LTE FDD Band 12 Open

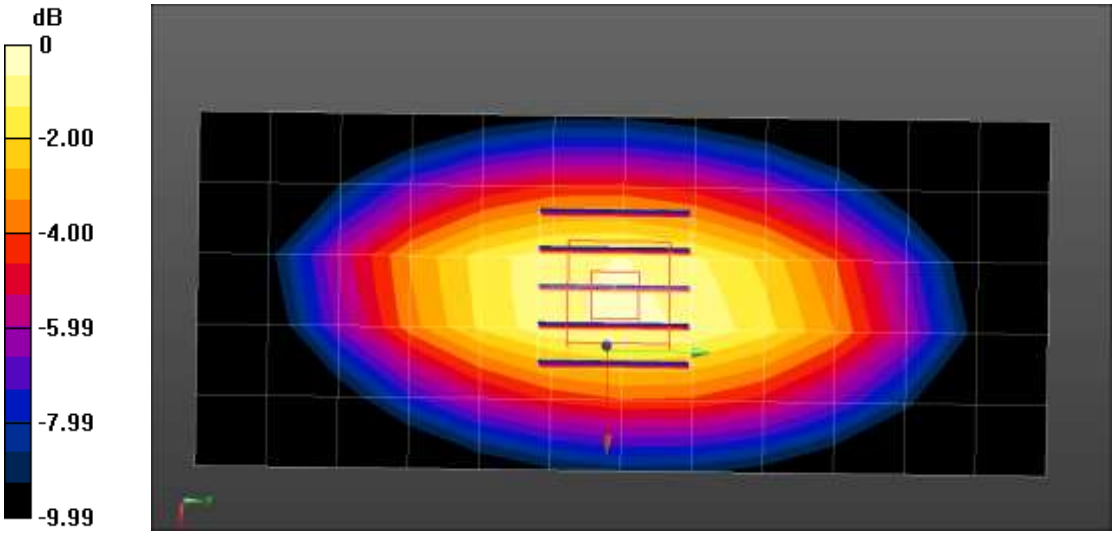
DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 43.195; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (6x13x1): 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 = 26.16 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.639 W/kg
SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 0.564 W/kg



0 dB = 0.564 W/kg = -2.49 dBW/kg

■ Verification Data (750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	05/09/2024
Band:	LTE FDD Band 13 Close

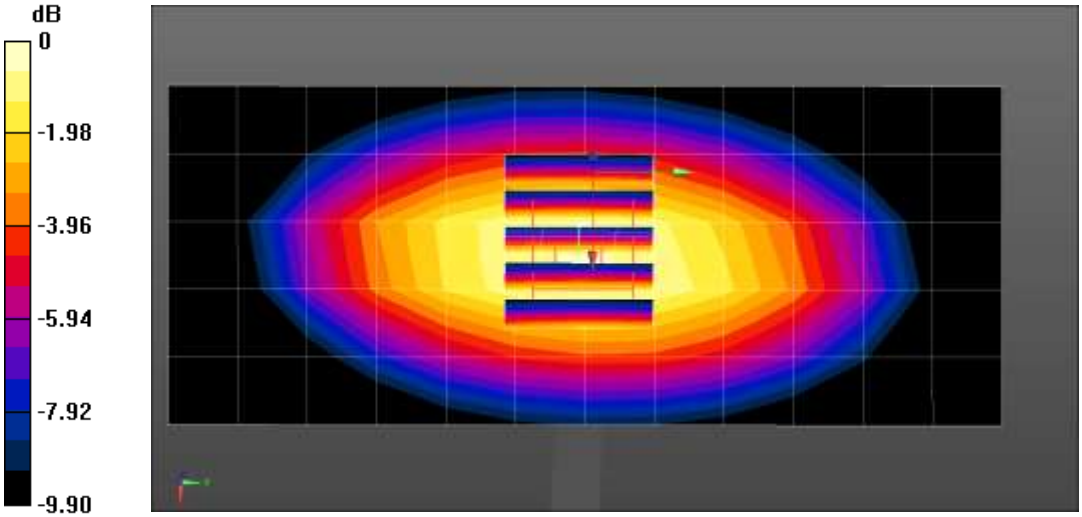
DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.873 S/m; ε_r = 42.988; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.488 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.21 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.415 W/kg; SAR(10 g) = 0.281 W/kg
Maximum value of SAR (measured) = 0.549 W/kg



0dB = 0.549 W/kg = -2.60 dBW/kg

■ Verification Data (750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.4 ℃
Test Date:	05/10/2024
Band:	LTE FDD Band 13 Open

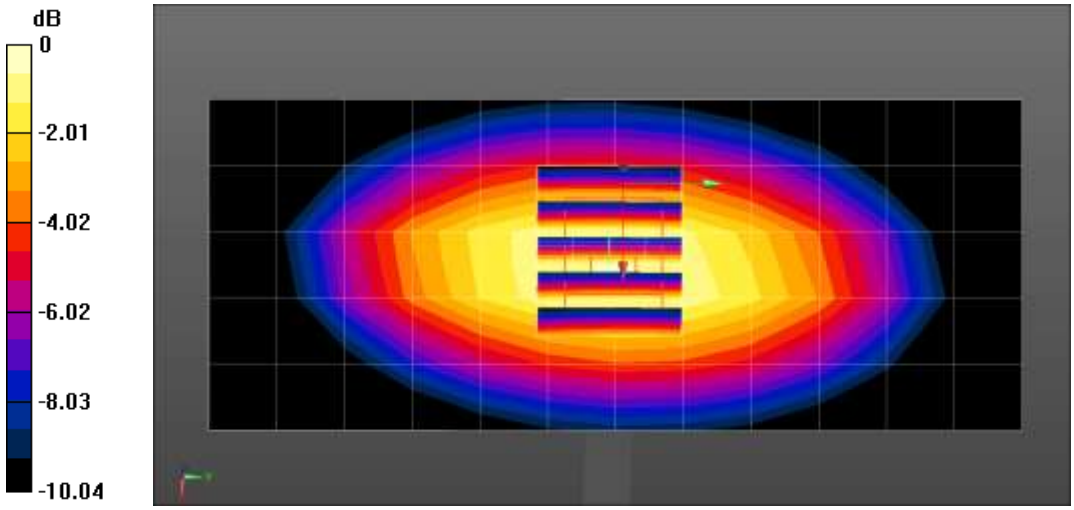
DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1014
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.873 S/m; ε_r = 43.115; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/750MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.487 W/kg

Dipole/750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.15 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.413 W/kg; SAR(10 g) = 0.279 W/kg
Maximum value of SAR (measured) = 0.551 W/kg



0 dB = 0.551 W/kg = -2.59 dBW/kg

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	05/15/2024
Band:	GSM850

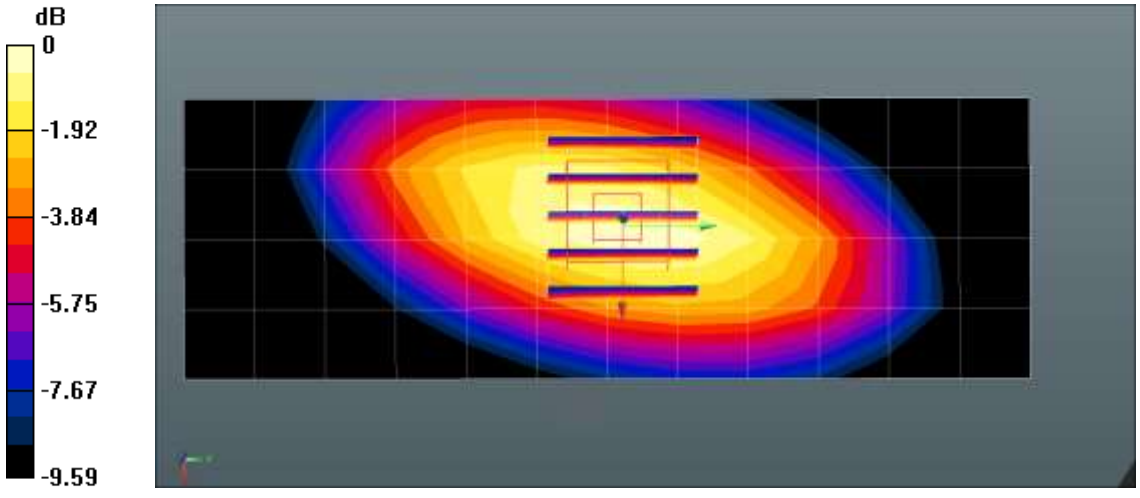
DUT: D835V2; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.937 S/m; ε_r = 41.279; ρ = 1000 kg/m^3
Phantom section: Flat Section

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 (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.557 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.87 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.612 W/kg
SAR(1 g) = 0.469 W/kg; SAR(10 g) = 0.324 W/kg
Maximum value of SAR (measured) = 0.577 W/kg



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

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/14/2024
Band:	UMTS Band 5

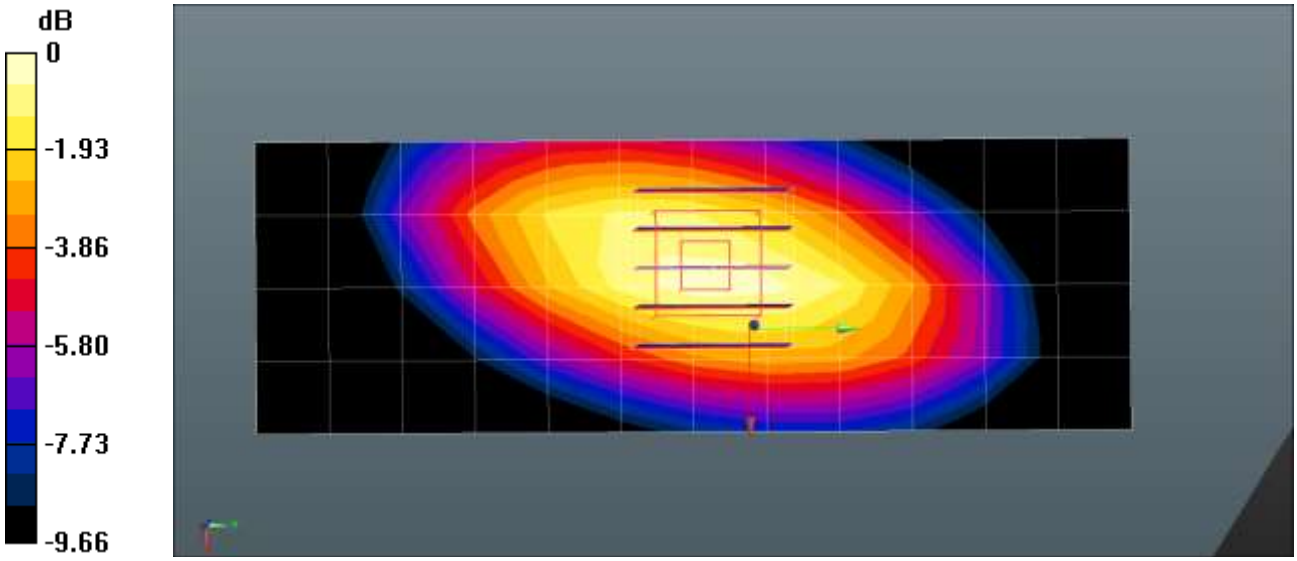
DUT: D835V2; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.936 S/m; ε_r = 41.131; ρ = 1000 kg/m^3
Phantom section: Flat Section

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 (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.551 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.73 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.620 W/kg
SAR(1 g) = 0.469 W/kg; SAR(10 g) = 0.323 W/kg
Maximum value of SAR (measured) = 0.584 W/kg



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

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.8 ℃
Test Date:	05/08/2024
Band:	LTE FDD Band 5 Close

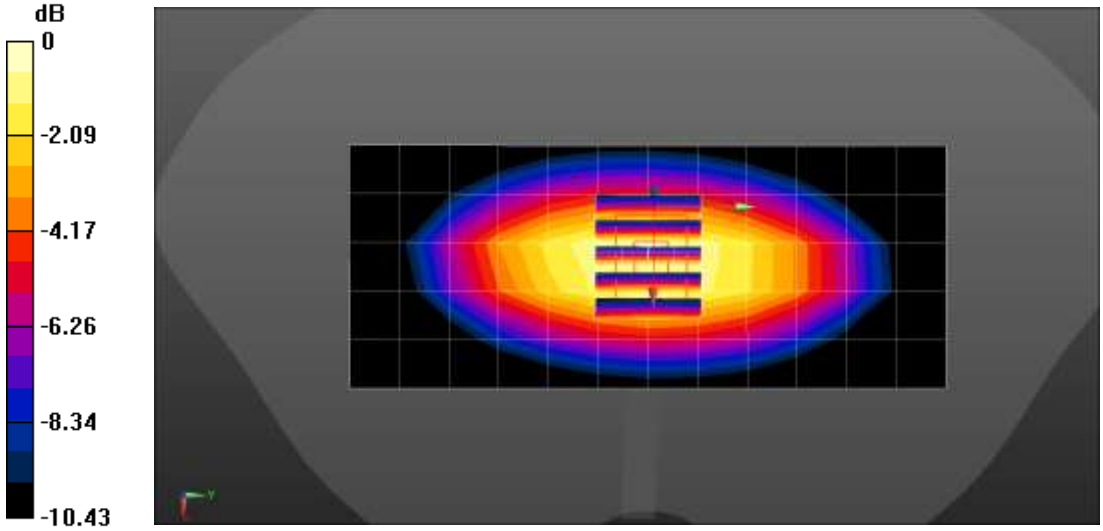
DUT: D835V2; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.93 S/m; ε_r = 41.914; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.51, 9.51, 9.51) @ 835 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.573 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.01 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.741 W/kg
SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.326 W/kg
Maximum value of SAR (measured) = 0.658 W/kg



0 dB = 0.658 W/kg = -1.82 dBW/kg

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.5 ℃
Test Date:	05/07/2024
Band:	LTE FDD Band 5 Open

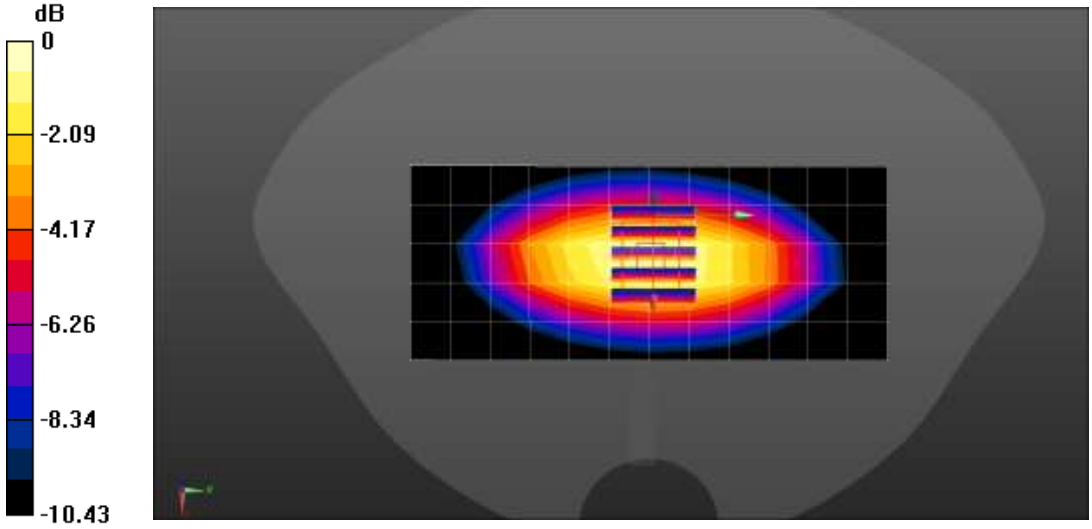
DUT: D835V2; Type: D835V2; Serial: SN441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.935 S/m; ε_r = 41.913; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(9.51, 9.51, 9.51) @ 835 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.574 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.81 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.742 W/kg
SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.327 W/kg
Maximum value of SAR (measured) = 0.659 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/15/2024
Band:	LTE FDD Band 66 Lower Close

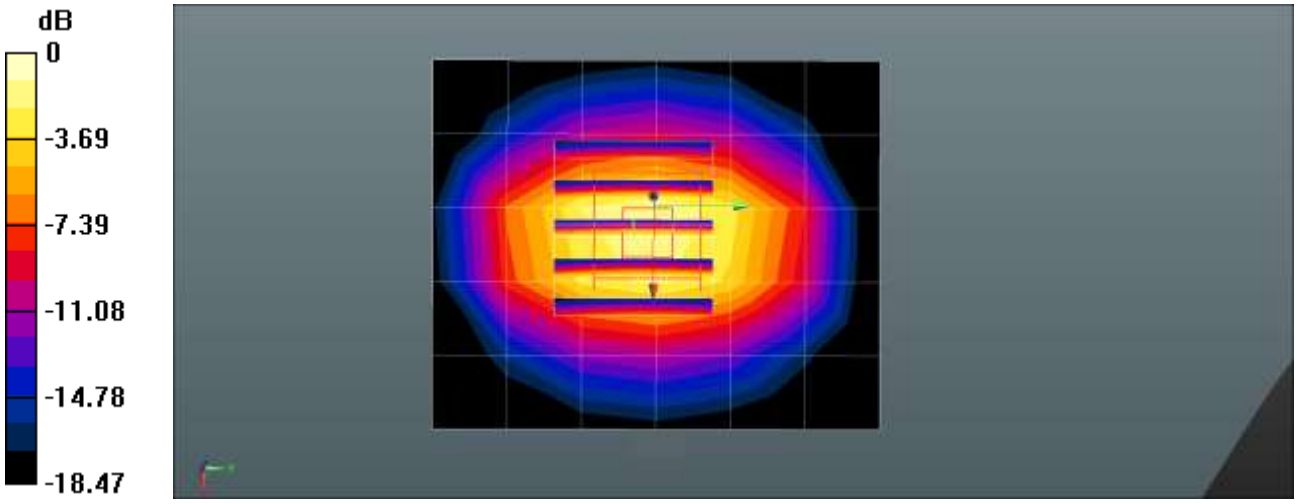
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 – SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.4 S/m; ε_r = 39.382; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.19 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.92 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.958 W/kg
Maximum value of SAR (measured) = 2.90 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	18.8 ℃
Test Date:	05/11/2024
Band:	LTE FDD Band 66 Lower Open

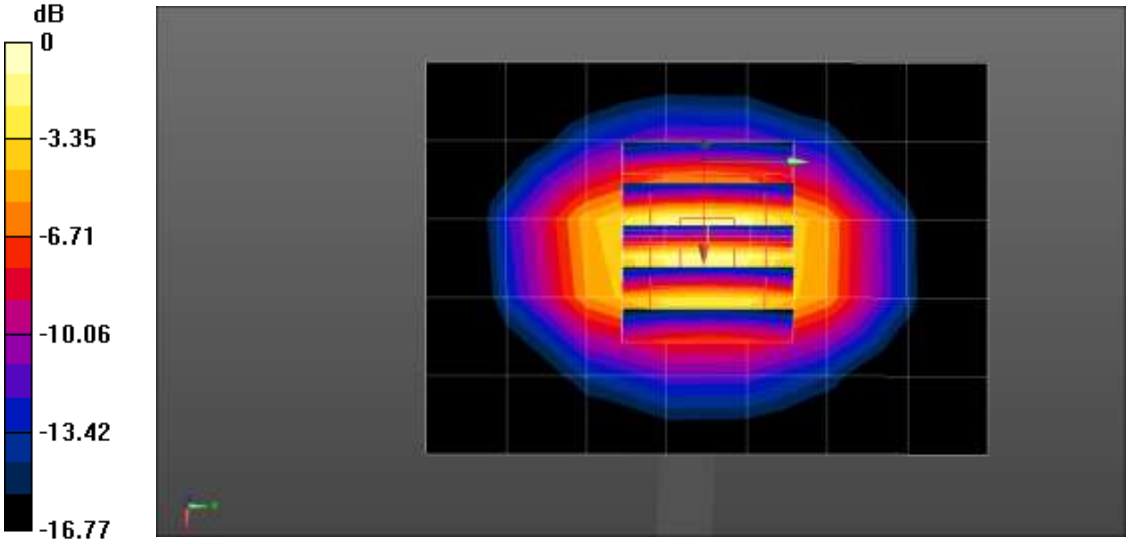
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 – SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.405 S/m; ε_r = 39.387; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.62, 8.62, 8.62) @ 1800 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/1800MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.95 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.99 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 1.9 W/kg; SAR(10 g) = 1.01 W/kg
Maximum value of SAR (measured) = 2.94 W/kg



0 dB = 2.94 W/kg = 4.68 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9℃
Test Date:	05/23/2024
Band:	LTE FDD Band 66 Lower Open/Close Body-Worn, Phablet

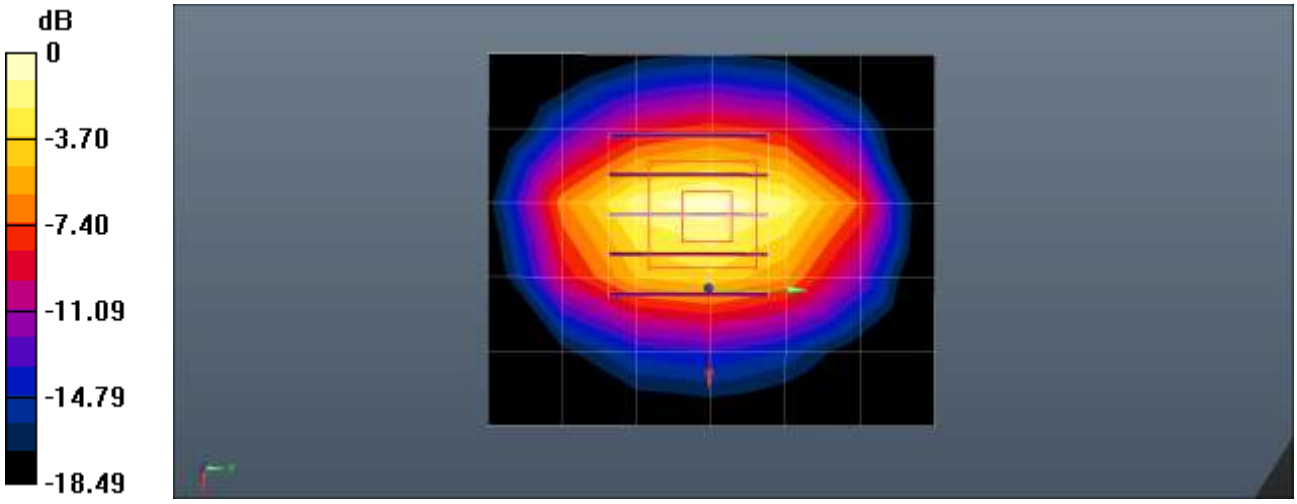
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 – SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.4 S/m; ε_r = 39.389; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.73 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.00 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.54 W/kg
SAR(1 g) = 1.85 W/kg; SAR(10 g) = 0.962 W/kg
Maximum value of SAR (measured) = 2.89 W/kg



0dB = 2.89 W/kg = 4.61 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/08/2024
Band:	LTE FDD Band 66 Upper Close

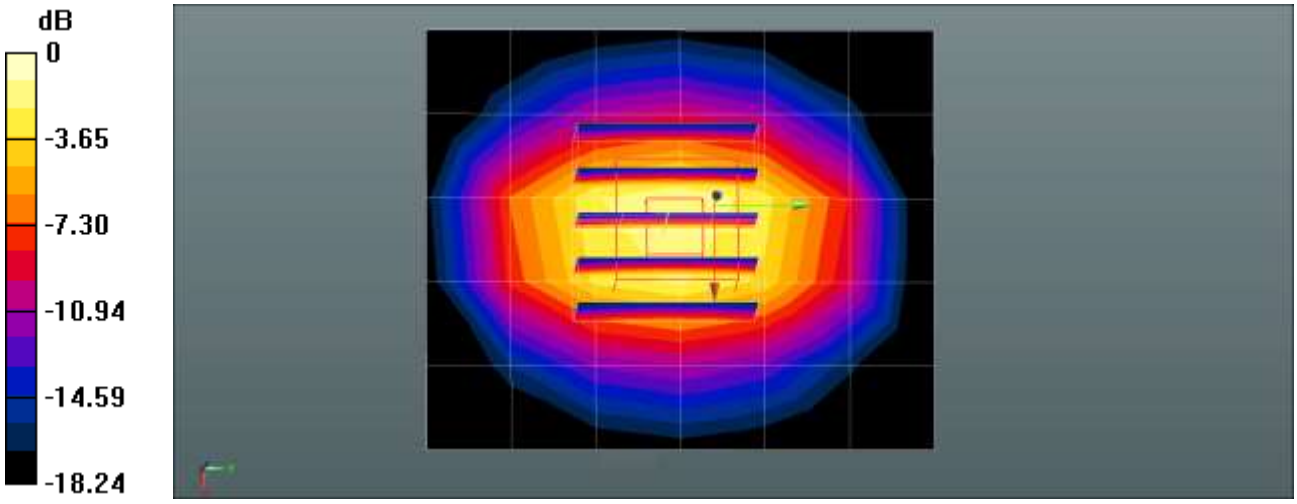
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 – SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.395 S/m; ε_r = 38.508; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.18 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.87 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 1.83 W/kg; SAR(10 g) = 0.954 W/kg
Maximum value of SAR (measured) = 2.90 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.3 ℃
Test Date:	05/07/2024
Band:	LTE FDD Band 66 Upper Open

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

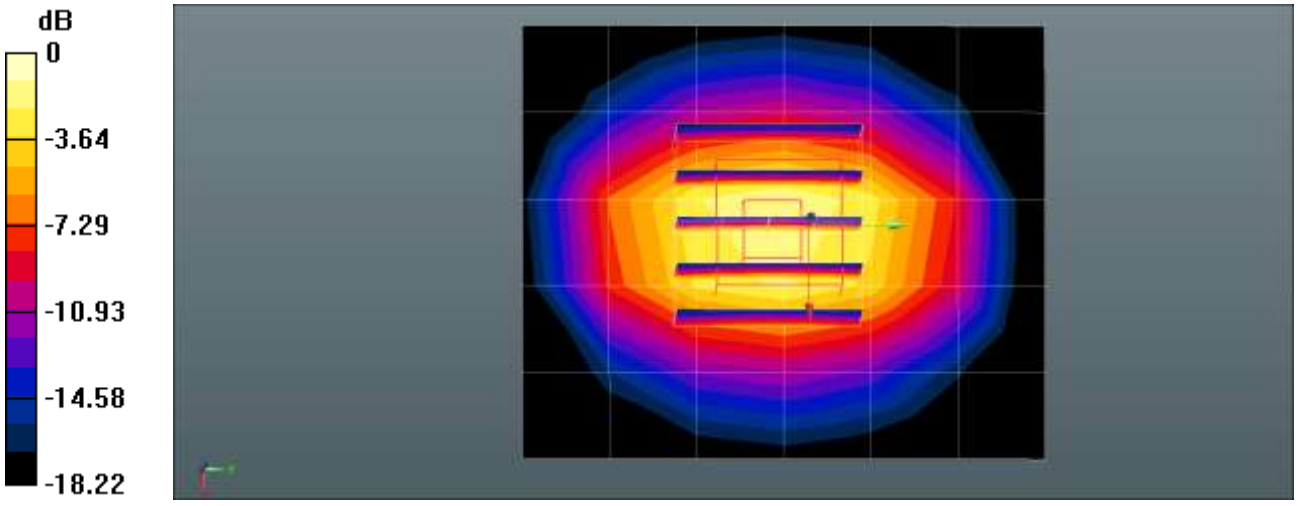
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.396 S/m; ε_r = 38.508; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.18 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.71 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 1.83 W/kg; SAR(10 g) = 0.954 W/kg
Maximum value of SAR (measured) = 2.90 W/kg



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

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	05/16/2024
Band:	GSM1900

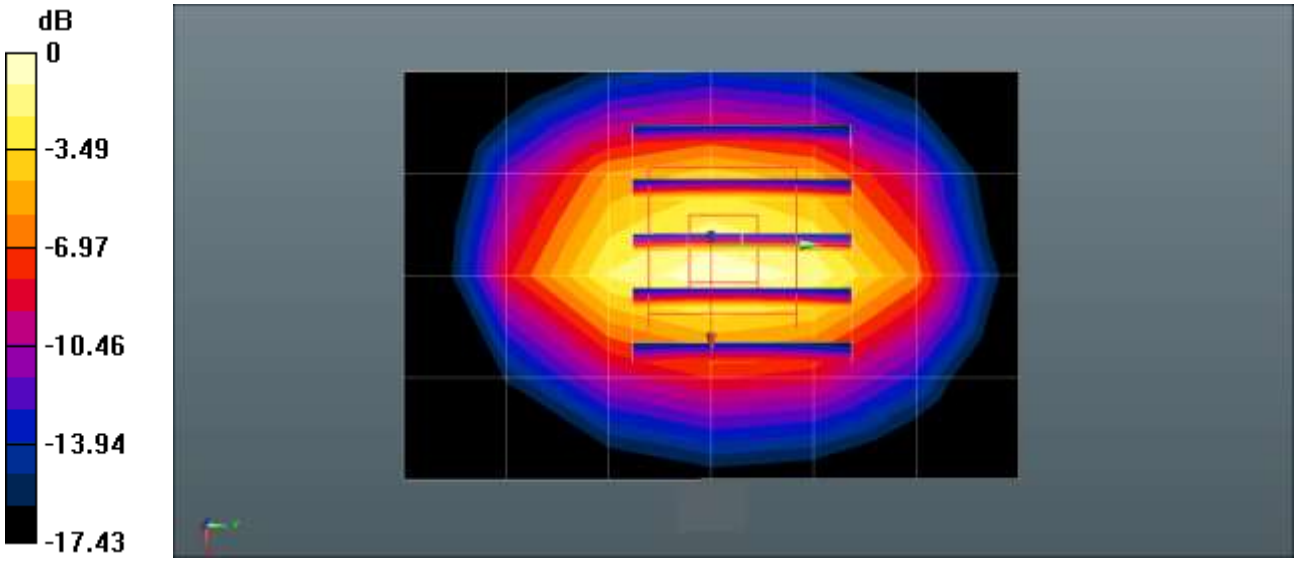
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.37 S/m; ε_r = 39.162; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.94, 8.33, 8.49) @ 1900 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/1900MHz Head Verification/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.70 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.06 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 3.35 W/kg
SAR(1 g) = 1.95 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 2.88 W/kg



0 dB = 2.88 W/kg = 4.59 dBW/kg

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/15/2024
Band:	LTE FDD Band 2 Lower Close

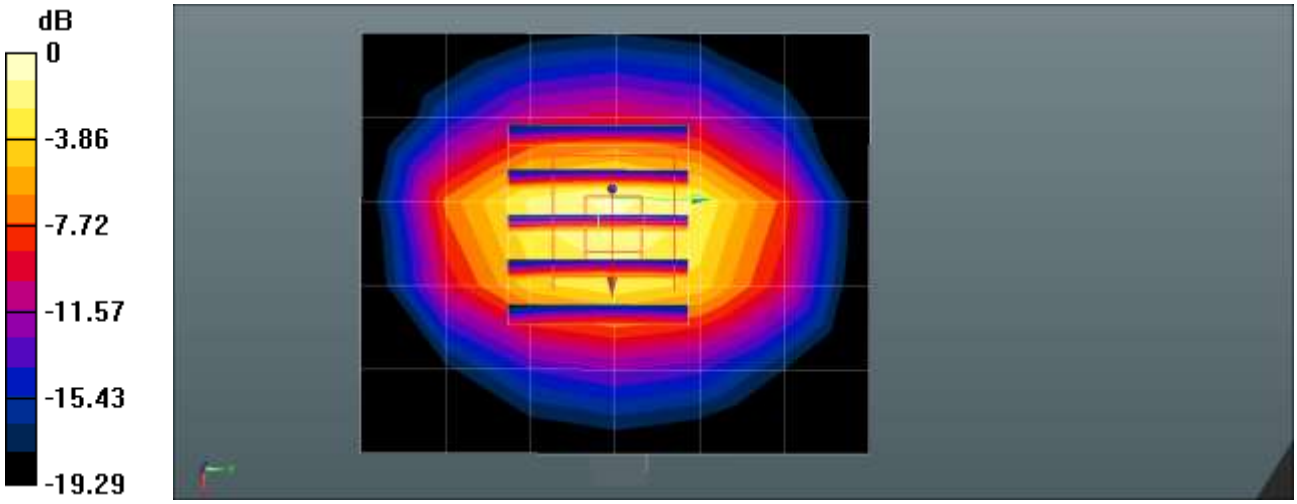
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.274; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.59 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.30 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 3.92 W/kg
SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.02 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:	18.8 ℃
Test Date:	05/11/2024
Band:	LTE FDD Band 2 Lower Open

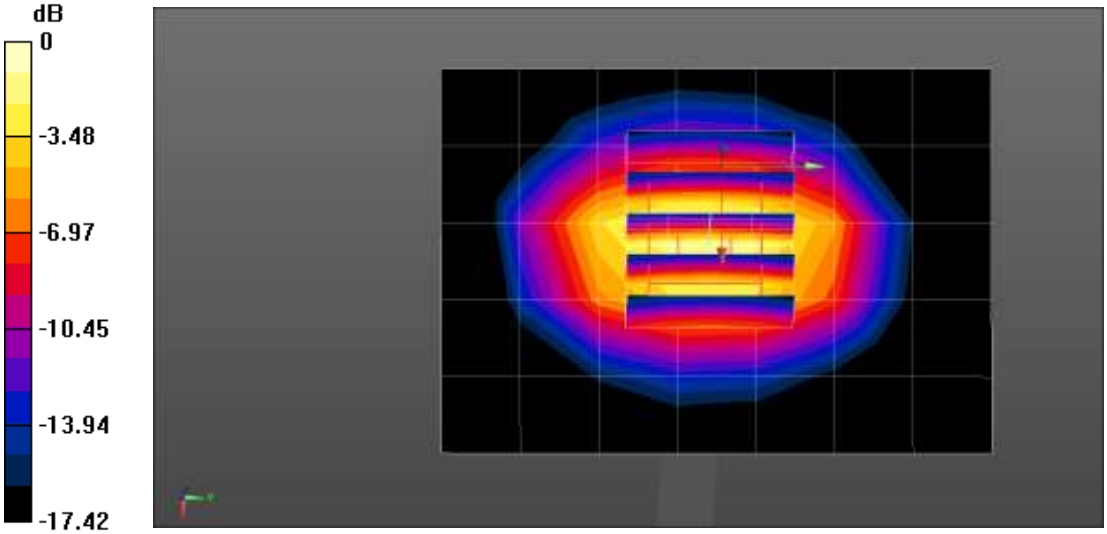
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.423 S/m; ε_r = 39.147; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.31, 8.31, 8.31) @ 1900 MHz; Calibrated: 2023-07-18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn868; Calibrated: 2023-09-20
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CE; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/1900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.50 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.40 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.77 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.06 W/kg
Maximum value of SAR (measured) = 3.15 W/kg



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

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	05/22/2024
Band:	LTE FDD Band 2 Lower Open/Close Body-worn, Phablet

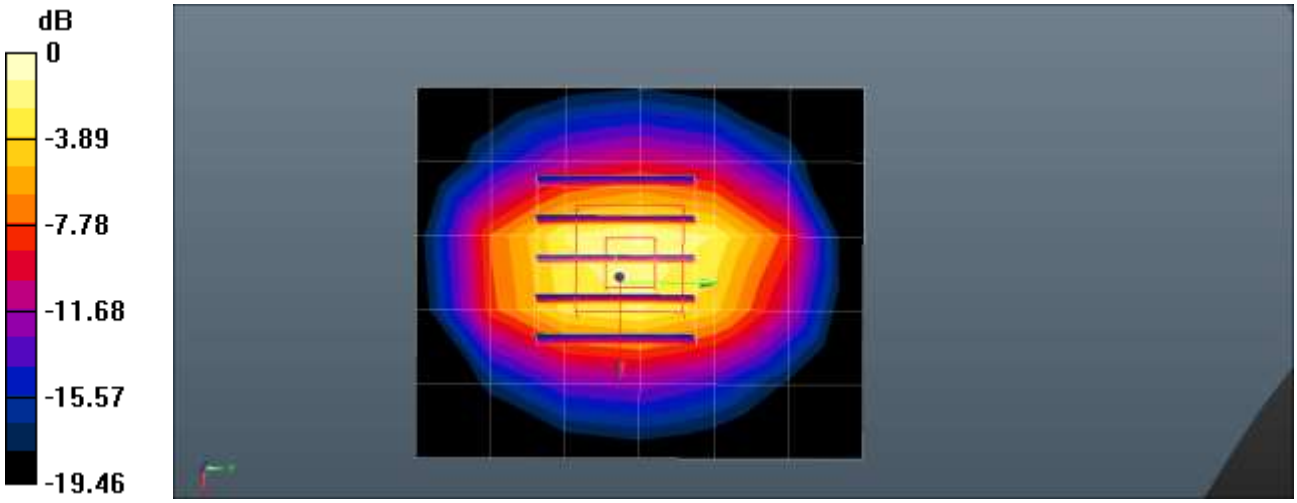
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.274; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.43 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.33 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.91 W/kg
SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.01 W/kg
Maximum value of SAR (measured) = 3.14 W/kg



0 dB = 3.14 W/kg = 4.97 dBW/kg

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.7 ℃
Test Date:	05/08/2024
Band:	LTE FDD Band 2 Upper Close

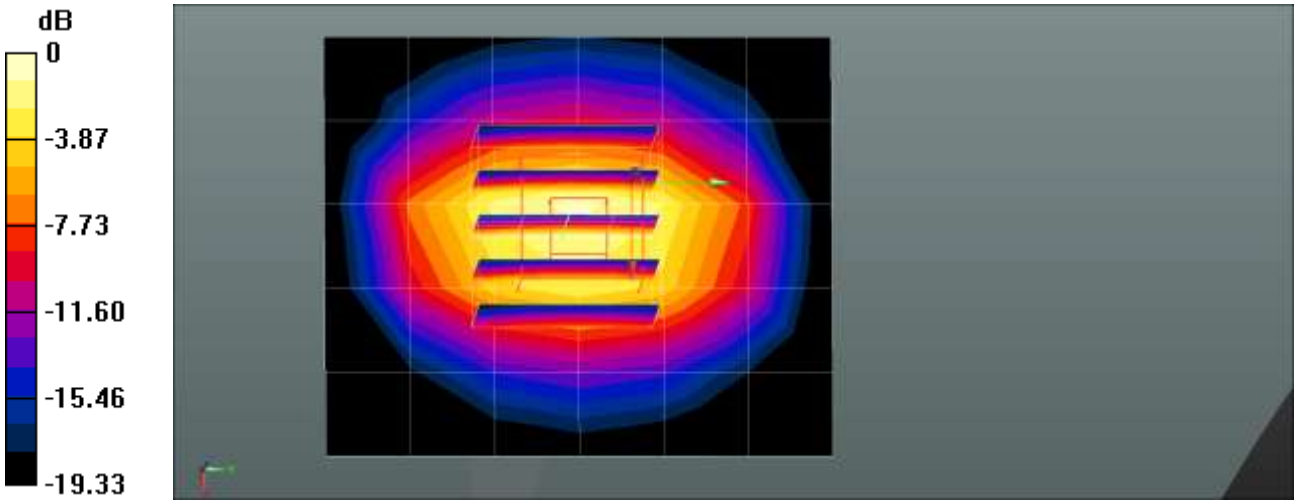
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.412 S/m; ε_r = 39.147; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.59 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.25 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.90 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 3.17 W/kg



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

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	05/09/2024
Band:	LTE FDD Band 2 Upper Open

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032

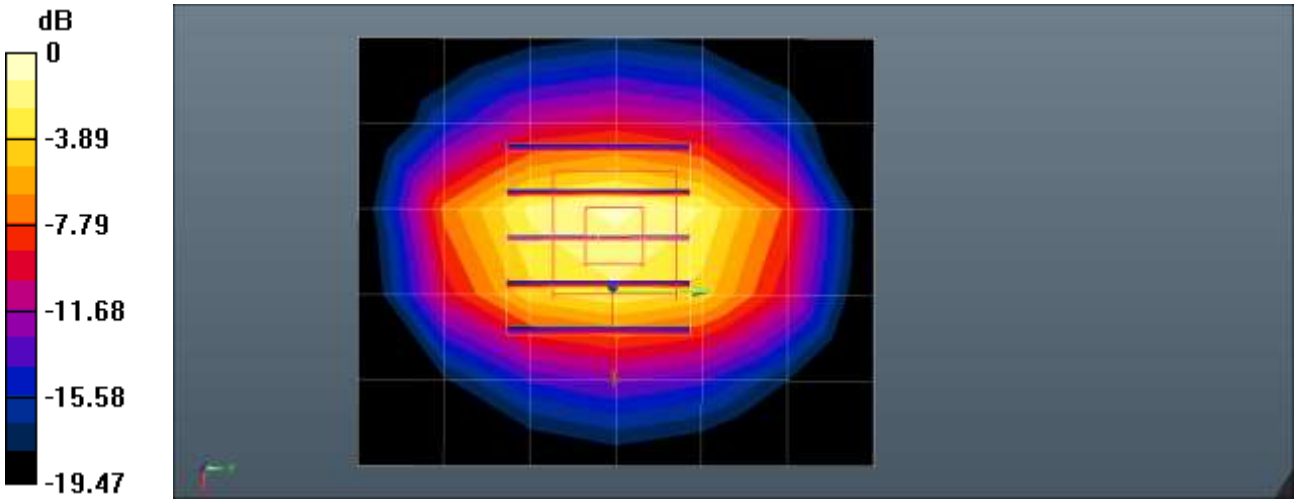
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.413 S/m; ε_r = 39.143; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.59 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.40 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.91 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 3.17 W/kg



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

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	05/01/2024
Band:	2.4 ㎓ WLAN Head Ant.1

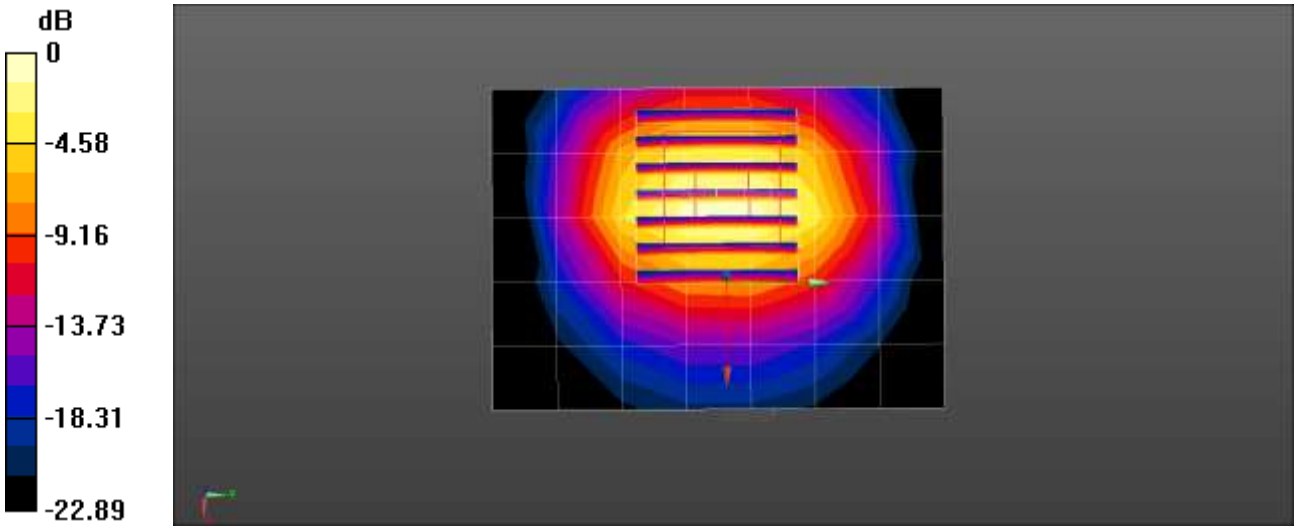
DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.81 S/m; ε_r = 40.18; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.94, 7.91, 8.56) @ 2450 MHz; Calibrated: 2023-05-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.68 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.71 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 5.18 W/kg
SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 4.26 W/kg



0 dB = 4.26 W/kg = 6.29 dBW/kg

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	05/01/2024
Band:	2.4 ㎓ WLAN Body Ant.1

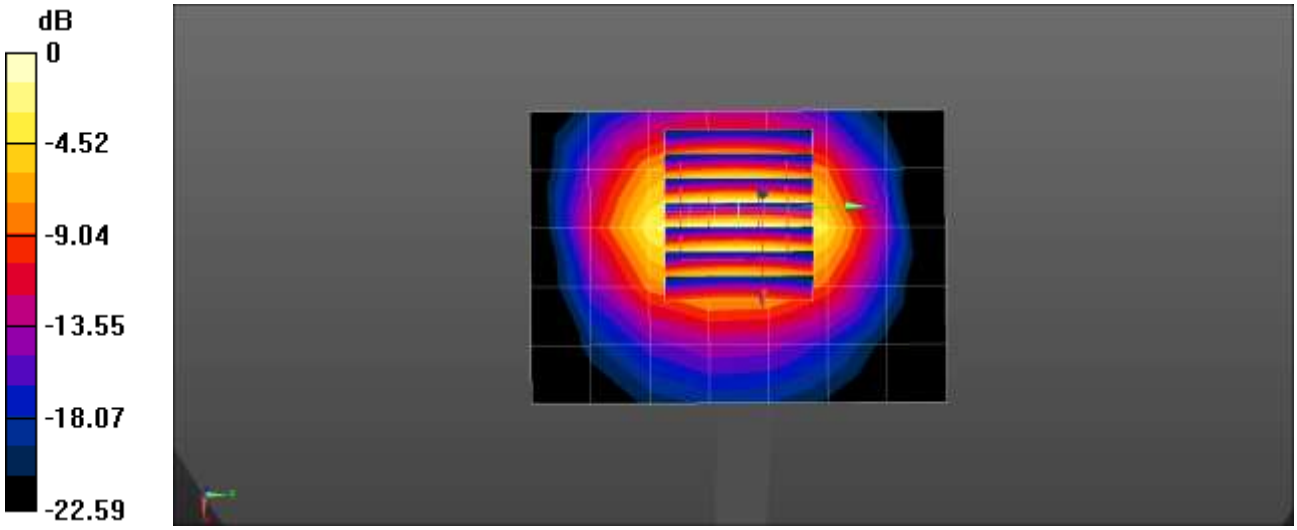
DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.868 S/m; ε_r = 40.627; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.98, 7.3, 7.04) @ 2450 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.24 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.36 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 5.52 W/kg
SAR(1 g) = 2.72 W/kg; SAR(10 g) = 1.26 W/kg
Maximum value of SAR (measured) = 4.54 W/kg



0 dB = 4.54 W/kg = 6.57 dBW/kg

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.8 ℃
Test Date:	05/02/2024
Band:	2.4 ㎓ WLAN Ant.2

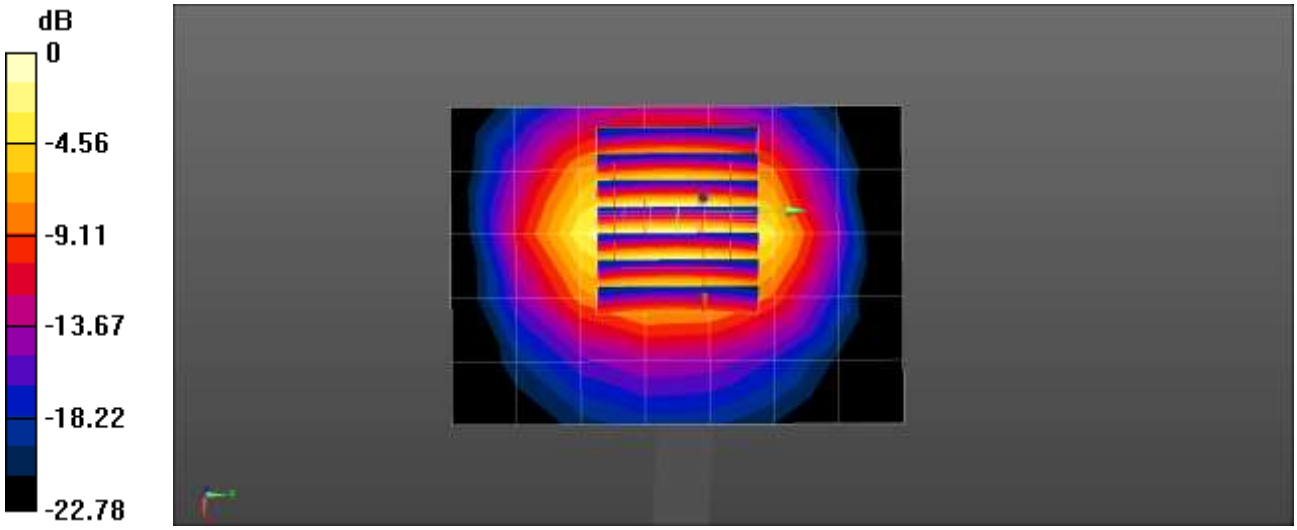
DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2450 MHz; σ = 1.812 S/m; ε_r = 40.82; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3968; ConvF(7.98, 7.3, 7.04) @ 2450 MHz; Calibrated: 2023-09-27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn652; Calibrated: 2024-01-17
- Phantom: Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.10 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.01 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 5.33 W/kg
SAR(1 g) = 2.64 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 4.37 W/kg



0 dB = 4.37 W/kg = 6.40 dBW/kg

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	05/11/2024
Band:	Bluetooth Ant.1

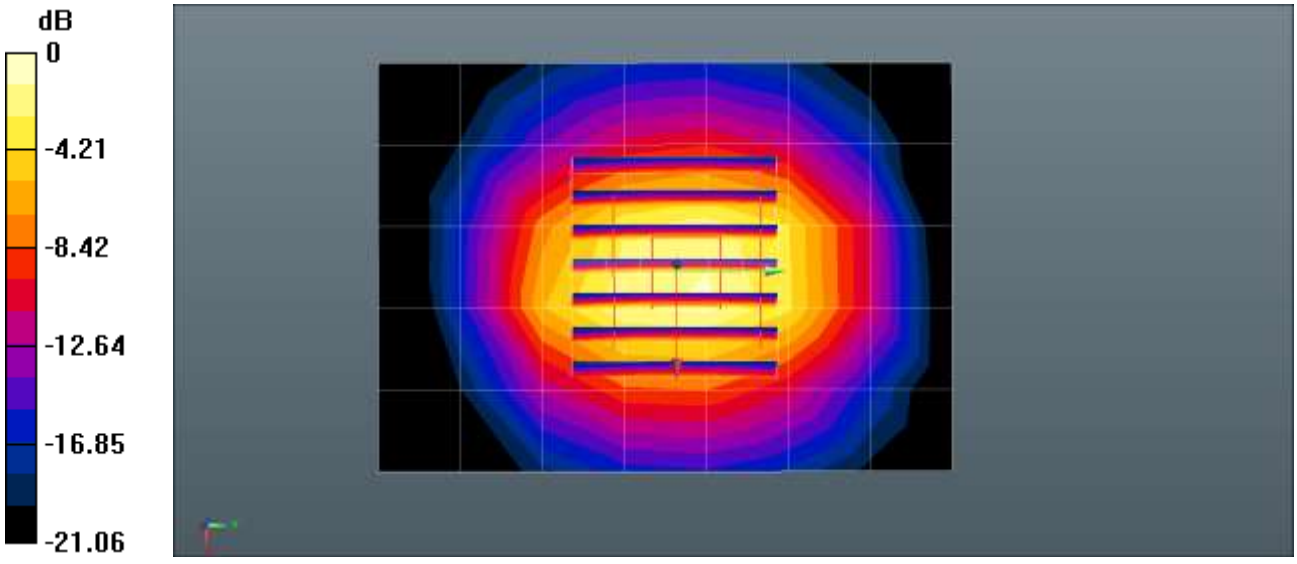
DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.837 S/m; ε_r = 39.156; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2450 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/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.38 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.72 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 5.10 W/kg
SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 4.23 W/kg



0 dB = 4.23 W/kg = 6.26 dBW/kg

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/10/2024
Band:	Bluetooth Ant.2

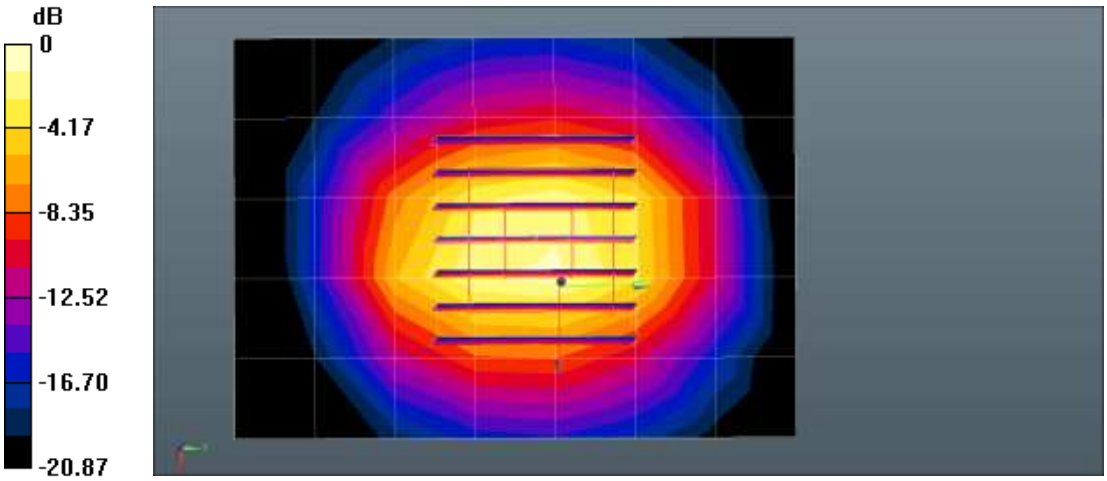
DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.838 S/m; ε_r = 39.141; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2450 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/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.40 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.83 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 5.11 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 4.23 W/kg



0 dB = 4.23 W/kg = 6.26 dBW/kg

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/03/2024
Band:	LTE TDD Band 41 Lower Close

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015

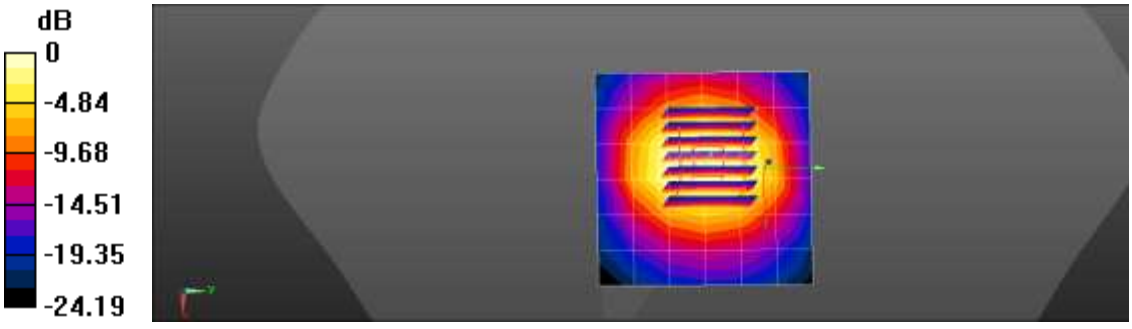
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.942 S/m; ε_r = 38.739; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7622; ConvF(7.89, 7.52, 7.77) @ 2600 MHz; Calibrated: 2023-11-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2023-08-21
- 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) = 4.12 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 48.34 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 6.71 W/kg
SAR(1 g) = 2.92 W/kg; SAR(10 g) = 1.29 W/kg
Maximum value of SAR (measured) = 3.30 W/kg



0dB = 3.30 W/kg = 5.19 dBW/kg

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/02/2024
Band:	LTE TDD Band 41 Lower Open

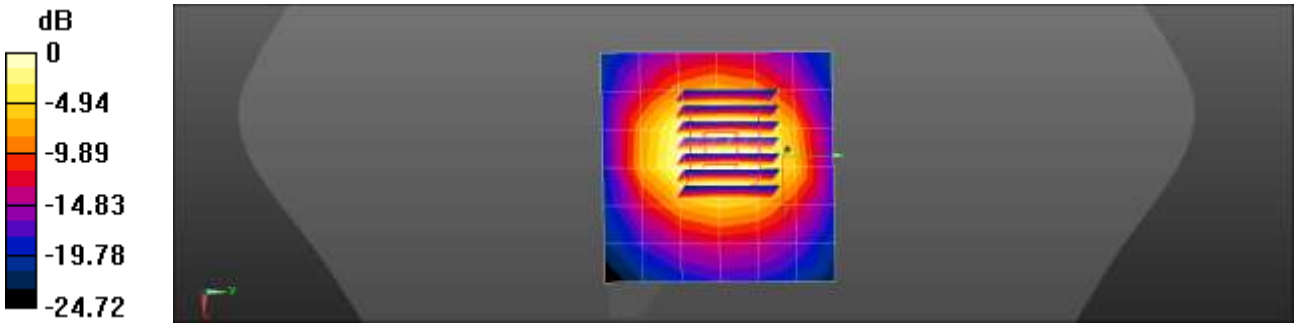
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.001 S/m; ε_r = 38.87; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7622; ConvF(7.89, 7.52, 7.77) @ 2600 MHz; Calibrated: 2023-11-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2023-08-21
- 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) = 4.26 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.02 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 7.00 W/kg
SAR(1 g) = 3.02 W/kg; SAR(10 g) = 1.33 W/kg
Maximum value of SAR (measured) = 3.41 W/kg



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

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.5 ℃
Test Date:	05/03/2024
Band:	LTE TDD Band 41 Upper Close

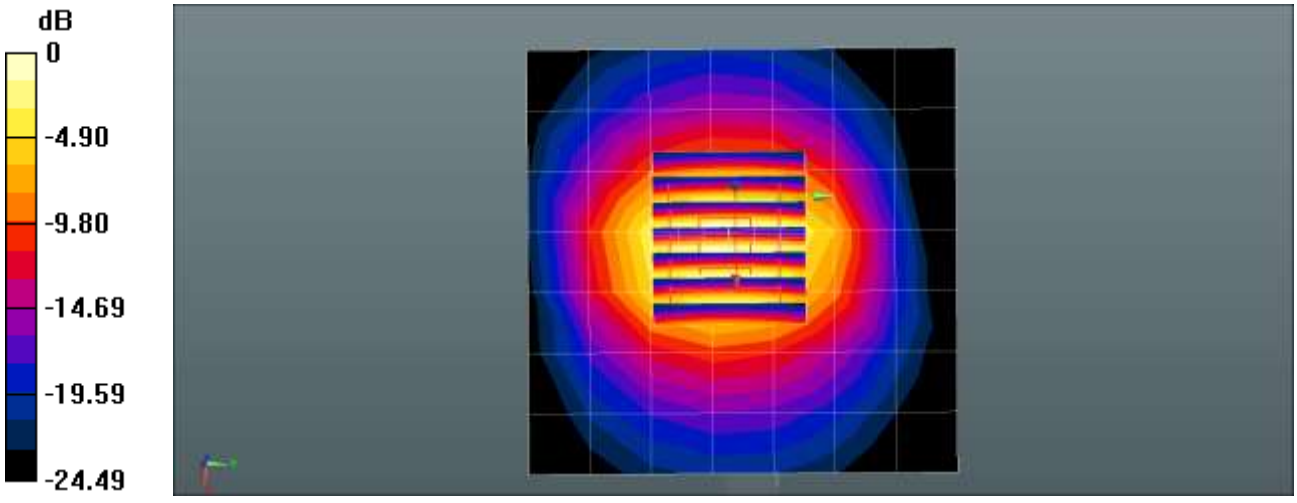
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.007 S/m; ε_r = 39.167; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2600 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.23 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.49 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 6.04 W/kg
SAR(1 g) = 2.78 W/kg; SAR(10 g) = 1.23 W/kg
Maximum value of SAR (measured) = 4.82 W/kg



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

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.7 ℃
Test Date:	05/02/2024
Band:	LTE TDD Band 41 Upper Open

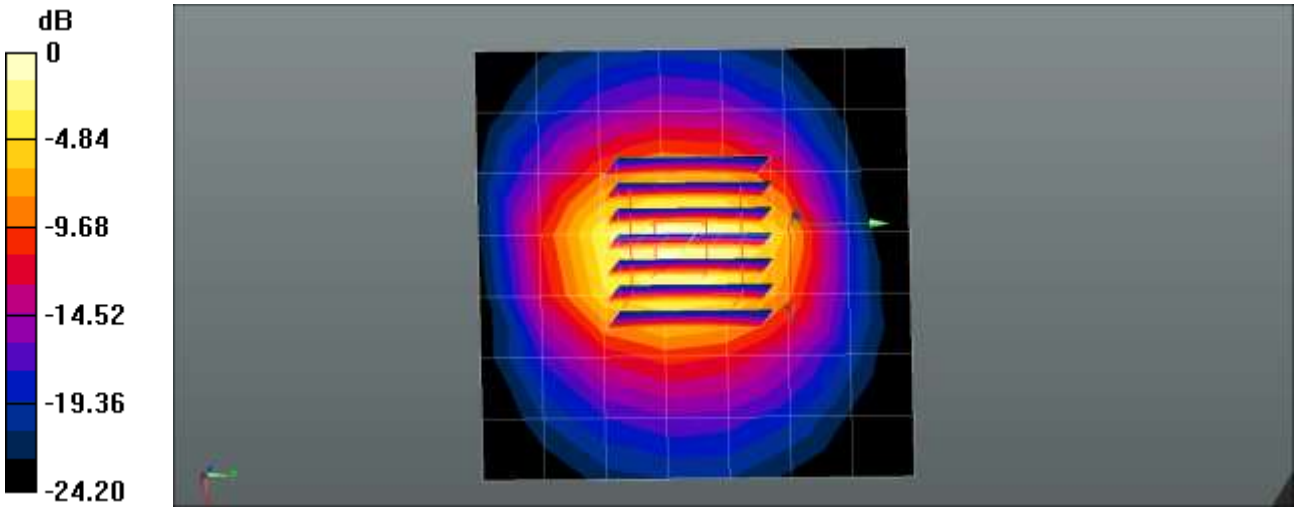
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.007 S/m; ε_r = 39.184; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2600 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.23 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.30 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 6.06 W/kg
SAR(1 g) = 2.78 W/kg; SAR(10 g) = 1.23 W/kg
Maximum value of SAR (measured) = 4.84 W/kg



0 dB = 4.84 W/kg = 6.85 dBW/kg

■ Verification Data (5 250 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.9 ℃
Test Date:	05/03/2024
Band:	5.25 ㎓ WLAN

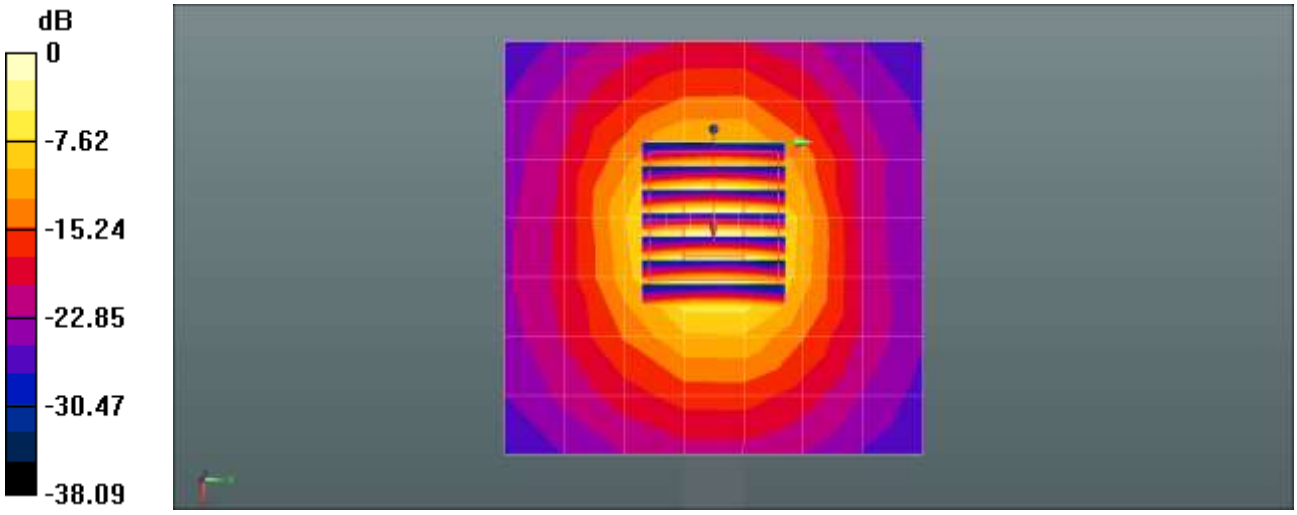
DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.748 S/m; ε_r = 36.903; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(5.2, 5.2, 5.2) @ 5250 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

Dipole/5250MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.63 W/kg

Dipole/5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.05 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 16.3 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 10.09 dBW/kg

■ Verification Data (5 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.6 ℃
Test Date:	05/02/2024
Band:	5.6 ㎓ WLAN

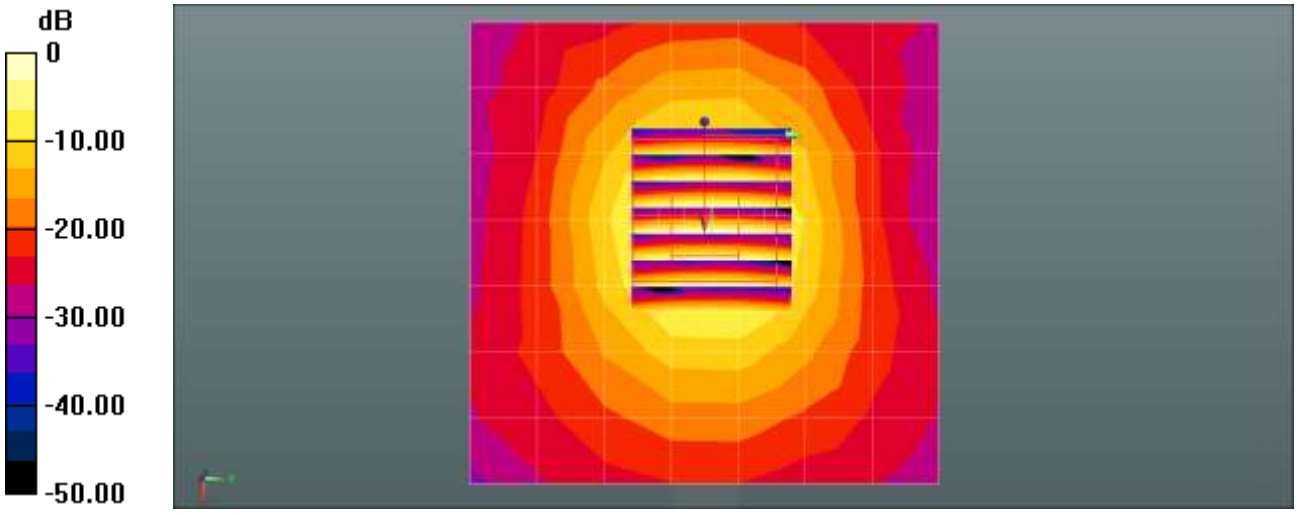
DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.118 S/m; ε_r = 36.747; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(4.51, 4.51, 4.51) @ 5600 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

Dipole/5600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 8.20 W/kg

Dipole/5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.55 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 18.7 W/kg
SAR(1 g) = 4.27 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg

■ Verification Data (5 750 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.5 ℃
Test Date:	05/02/2024
Band:	5.75 ㎓ WLAN

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Measurement Report for Device, , , CW, Channel 0 (5750.0 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--	5750.0, 0	5.34	5.35	36.7

Hardware Setup

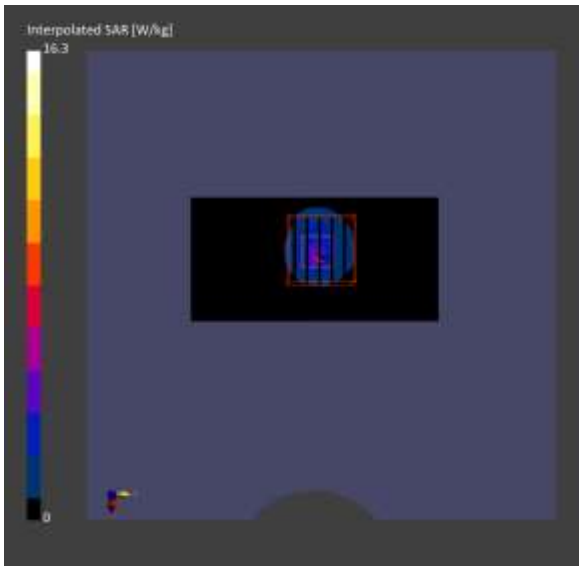
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt)	EX3DV4 - SN7732, 2023-06-20	DAE4 Sn504, 2024-01-30

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]	3.09	3.75
psSAR10g [W/Kg]	0.950	1.07
Power Drift [dB]	0.02	0.01



■ Verification Data (5 800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.1 ℃
Test Date: 05/03/2024
Band: 5.8 ㎓ WLAN

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Measurement Report for Device, , , CW, Channel 0 (5800.0 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--	5800.0, 0	5.24	5.34	36.4

Hardware Setup

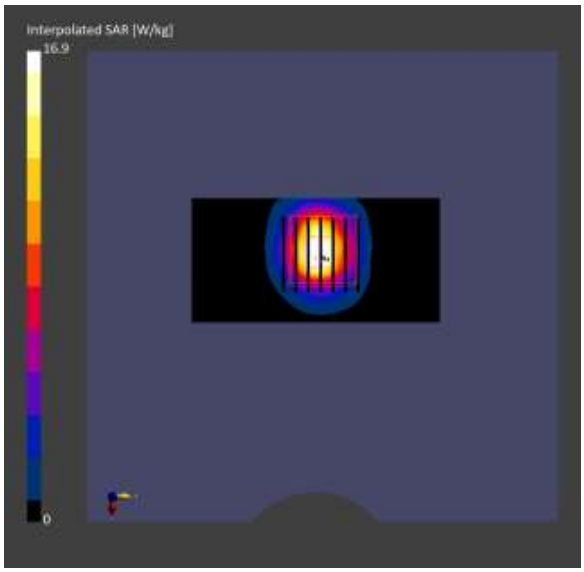
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt)	EX3DV4 - SN7732, 2023-06-20	DAE4 Sn504, 2024-01-30

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]	3.09	3.79
psSAR10g [W/Kg]	0.952	1.08
Power Drift [dB]	0.01	0.07



◆ 5G NR SUB 6

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.3 ℃
Test Date:	05/18/2024
Band:	NR Band n5 Close

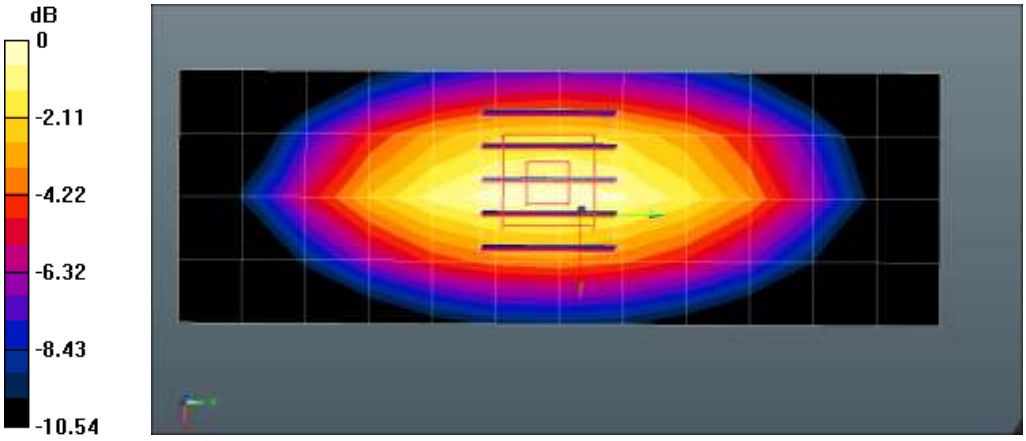
DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.914 S/m; ε_r = 40.837; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7309; ConvF(9.82, 8.7, 9.76) @ 835 MHz; Calibrated: 2023-06-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1464; Calibrated: 2023-06-16
- Phantom: SAM (20deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.651 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.69 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.737 W/kg
SAR(1 g) = 0.515 W/kg; SAR(10 g) = 0.339 W/kg
Maximum value of SAR (measured) = 0.673 W/kg



0 dB = 0.673 W/kg = -1.72 dBW/kg

■ Verification Data (835 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	18.8 ℃
Test Date:	05/17/2024
Band:	NR Band n5 Open

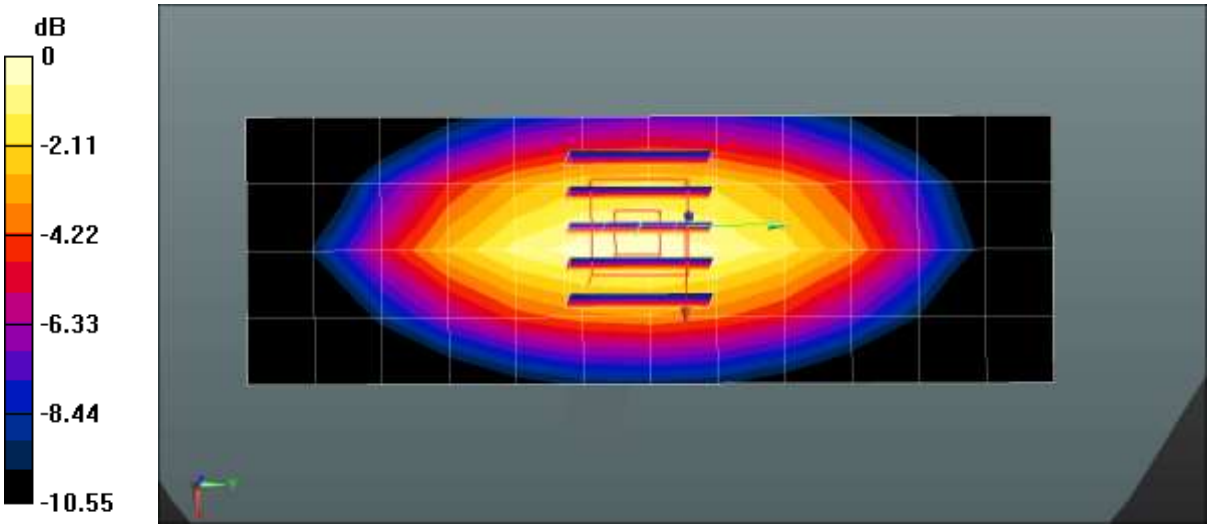
DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:441
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.91 S/m; ε_r = 42.226; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7309; ConvF(9.82, 8.7, 9.76) @ 835 MHz; Calibrated: 2023-06-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1464; Calibrated: 2023-06-16
- Phantom: SAM (20deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/835MHz Head Verification/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.649 W/kg

Dipole/835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.66 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.736 W/kg
SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.337 W/kg
Maximum value of SAR (measured) = 0.670 W/kg



0 dB = 0.670 W/kg = -1.74 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	05/17/2024
Band:	NR FDD Band n66 Lower Close

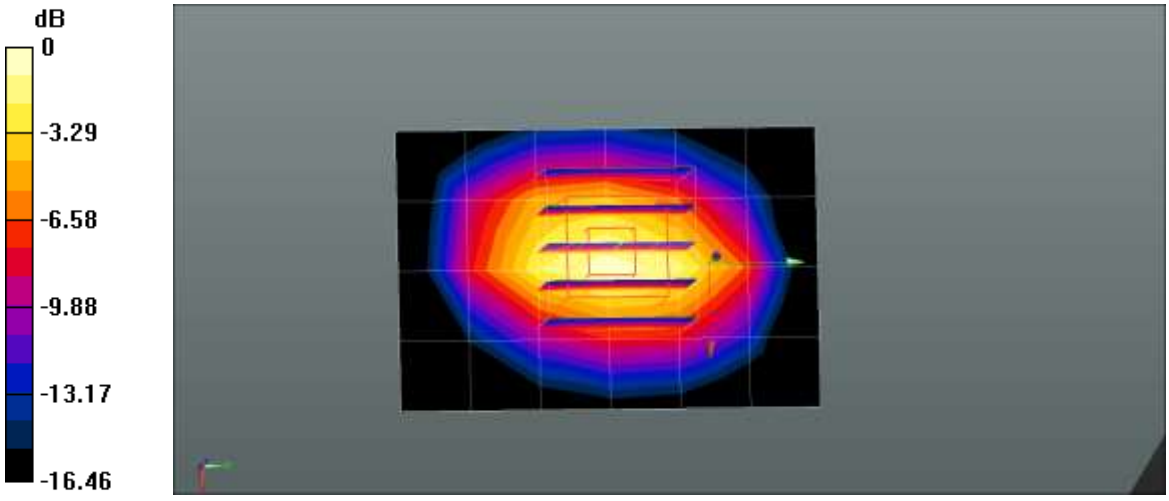
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.422 S/m; ε_r = 41.369; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.29, 8.71, 8.9) @ 1800 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/1800MHz Head Verification/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.67 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.84 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.29 W/kg
SAR(1 g) = 1.91 W/kg; SAR(10 g) = 1.03 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:	20.2 ℃
Test Date:	05/23/2024
Band:	NR FDD Band n66 Lower Close/Open Body-worn, Phablet

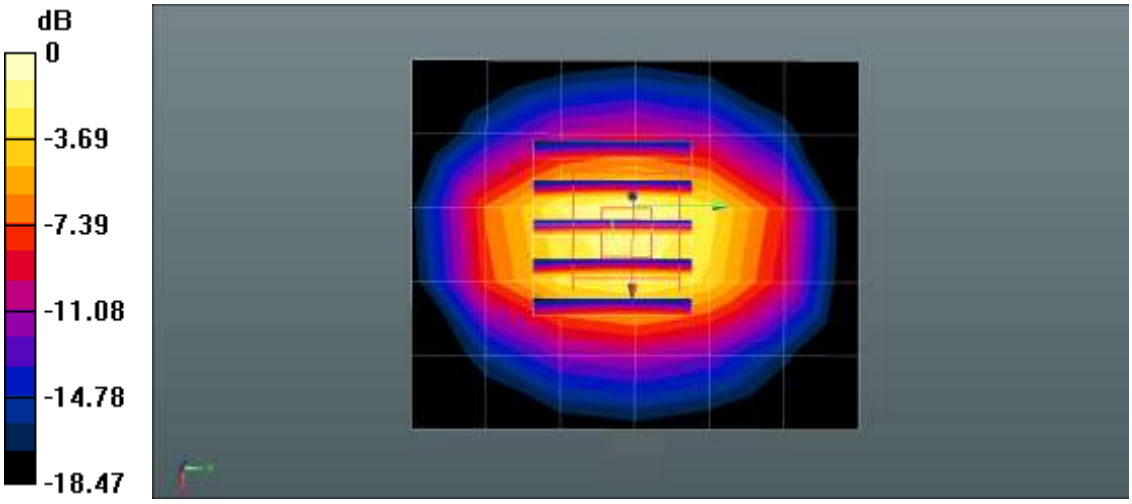
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.4 S/m; ε_r = 39.382; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.19 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.92 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.958 W/kg
Maximum value of SAR (measured) = 2.90 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	05/18/2024
Band:	NR FDD Band n66 Lower Open

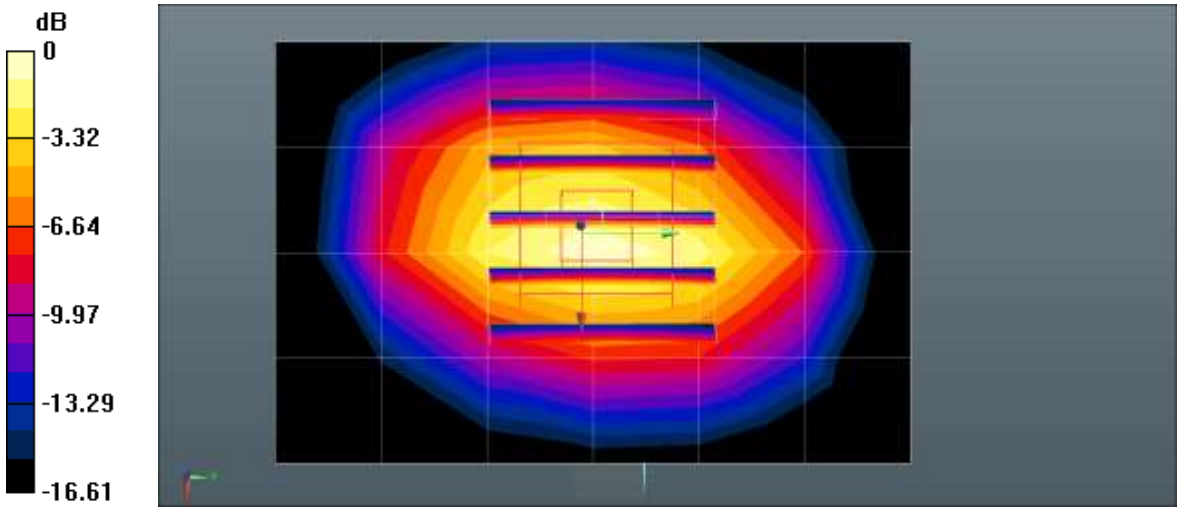
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.423 S/m; ε_r = 41.353; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.29, 8.71, 8.9) @ 1800 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/1800MHz Head Verification/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.68 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.79 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 3.29 W/kg
SAR(1 g) = 1.91 W/kg; SAR(10 g) = 1.03 W/kg
Maximum value of SAR (measured) = 2.85 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	05/18/2024
Band:	NR FDD Band n66 Upper Close

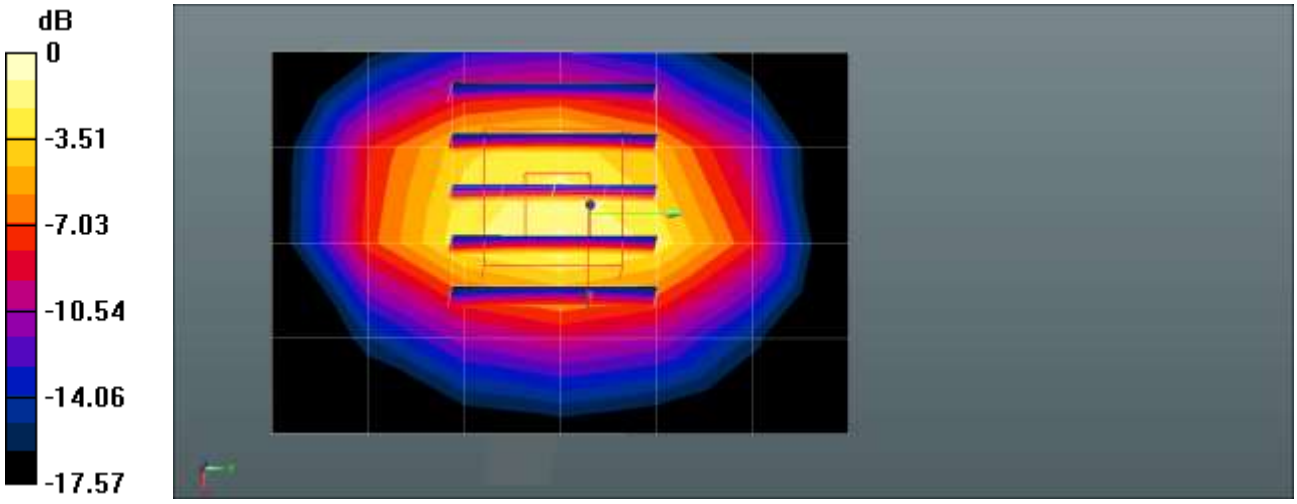
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.445 S/m; ε_r = 39.794; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.54 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.24 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 3.74 W/kg
SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 3.12 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	05/17/2024
Band:	NR FDD Band n66 Upper Open

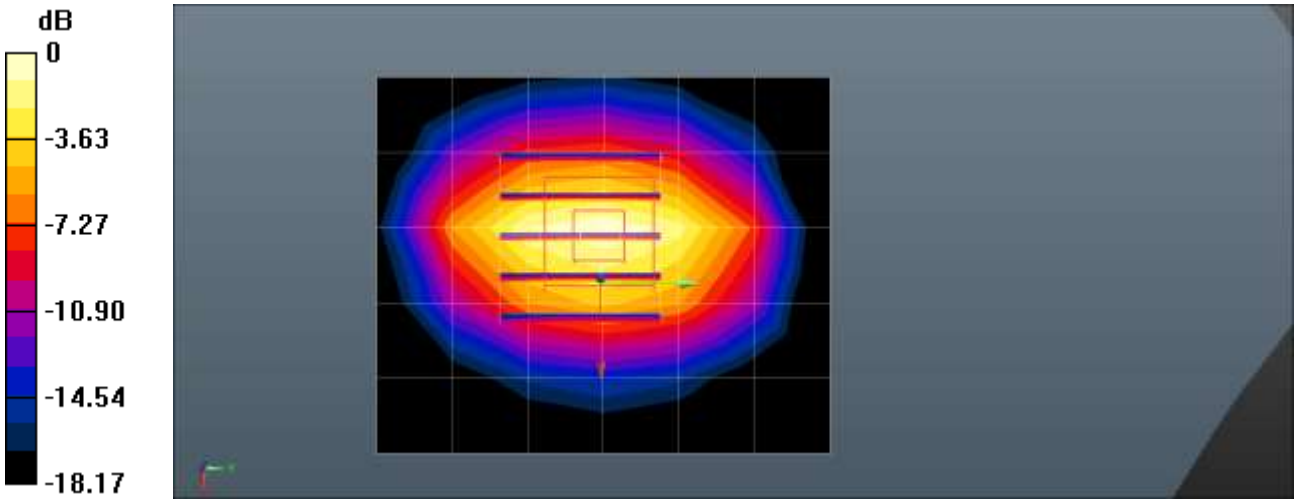
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.45 S/m; ε_r = 39.383; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.03 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.09 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.73 W/kg
SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 3.04 W/kg



0 dB = 3.04 W/kg = 4.83 dBW/kg

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/24/2024
Band:	NR TDD Band n41 Lower Close

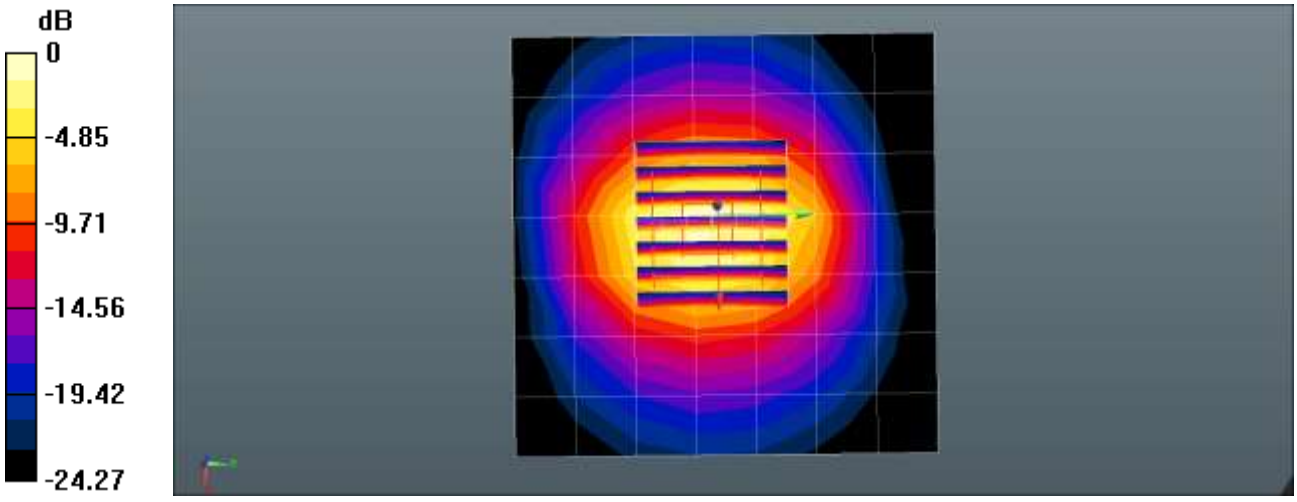
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 39.206; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2600 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.23 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.30 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 5.98 W/kg
SAR(1 g) = 2.77 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 4.79 W/kg



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

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	05/23/2024
Band:	NR TDD Band n41 Lower Open

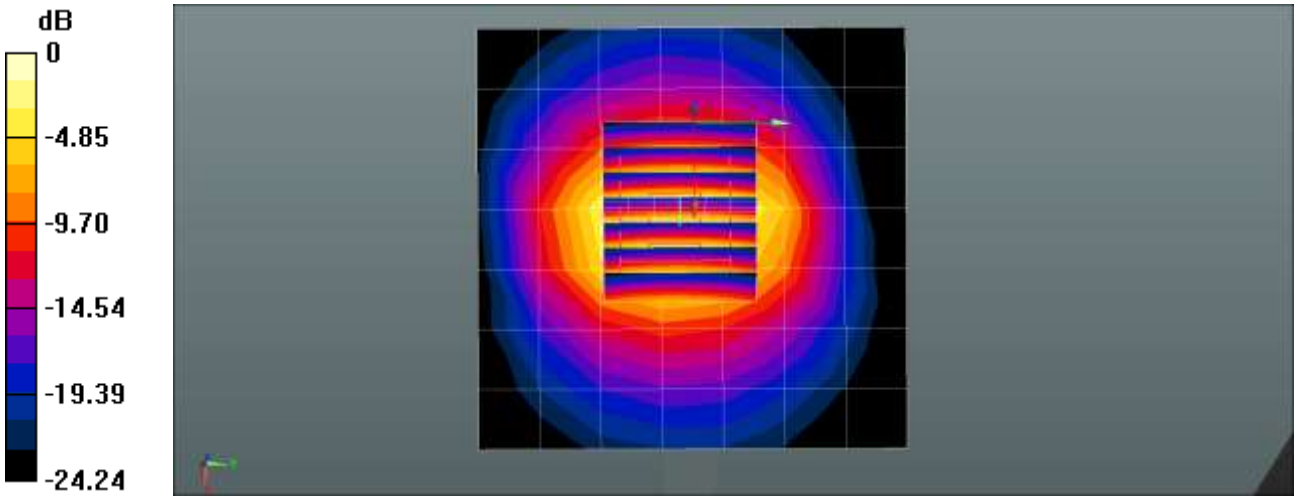
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.013 S/m; ε_r = 39.227; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(7.87, 7.41, 7.6) @ 2600 MHz; Calibrated: 2023-07-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM_Right_20170913; Type: QD000P40CC; Serial: 1070
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole/2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.25 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.41 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 6.05 W/kg
SAR(1 g) = 2.79 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 4.83 W/kg



0 dB = 4.83 W/kg = 6.84 dBW/kg

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.8 ℃
Test Date:	05/20/2024
Band:	NR TDD Band n41 Upper Close

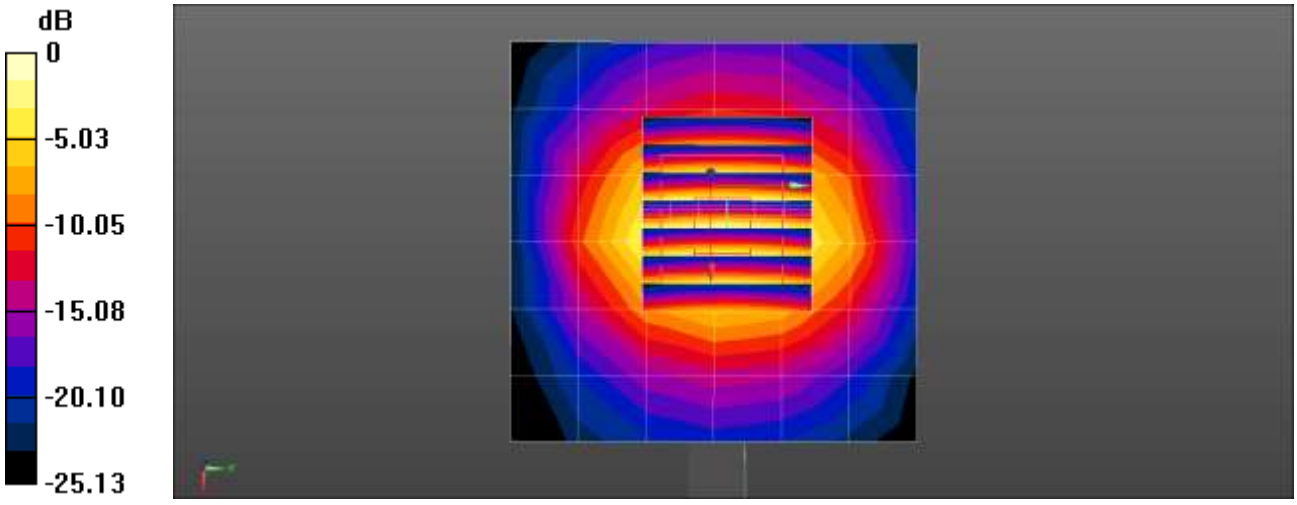
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.013 S/m; ε_r = 39.227; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.57, 7.57, 7.57) @ 2600 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- 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 (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.86 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.31 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 6.58 W/kg
SAR(1 g) = 2.81 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 5.01 W/kg



0 dB = 5.01 W/kg = 7.00 dBW/kg

■ Verification Data (2 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/19/2024
Band:	NR TDD Band n41 Upper Open

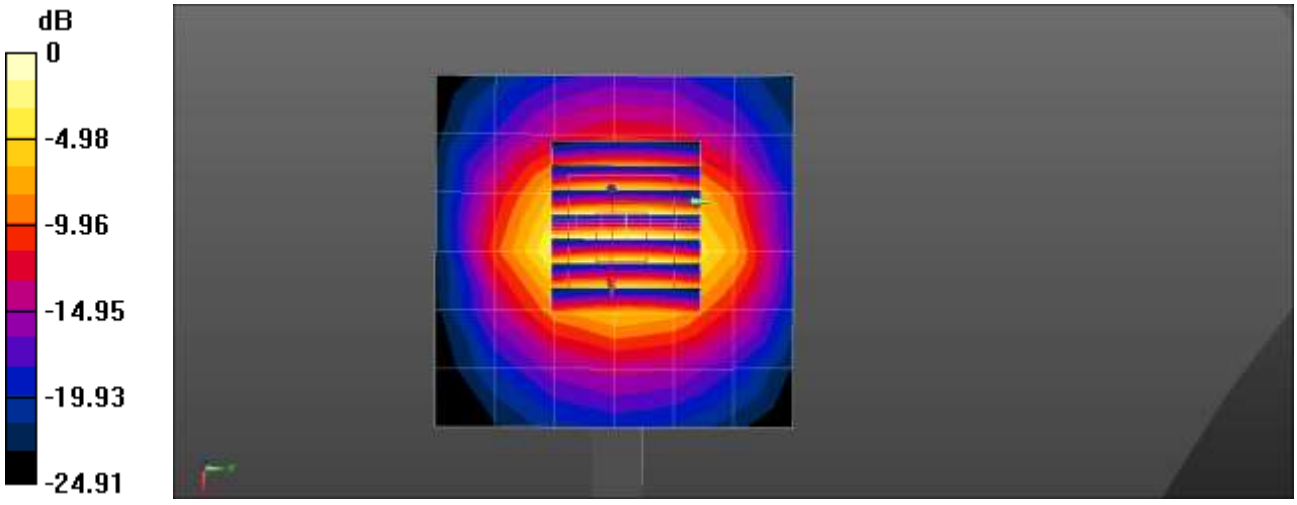
DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1015
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 39.206; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.57, 7.57, 7.57) @ 2600 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- 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 (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.81 W/kg

Dipole/2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.29 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 6.55 W/kg
SAR(1 g) = 2.8 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 4.99 W/kg



0 dB = 4.99 W/kg = 6.98 dBW/kg

◆ Extremity SAR

■ Verification Data (13 MHz Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	18.8 ℃
Test Date:	05/11/2024
Band:	NFC

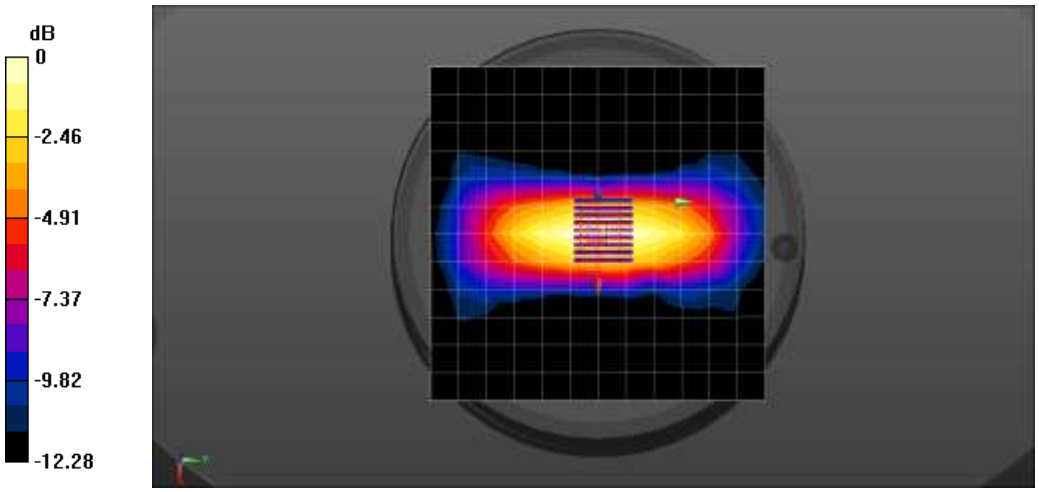
DUT: CLA-13; Type: CLA-13; Serial:1016
Communication System: UID 0, NFC (0); Frequency: 13 MHz;Duty Cycle: 1:1
Medium parameters used: f = 13 MHz; σ = 0.735 S/m; ε_r = 54.455; ρ = 1000 kg/m^3
Phantom section: Flat Section

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 Sn652; Calibrated: 2024-01-17
- 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)

Dipole/13MHz Head Verification/Area Scan (13x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0336 W/kg

Dipole/13MHz Head Verification/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.738 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.0580 W/kg
SAR(1 g) = 0.029 W/kg; SAR(10 g) = 0.018 W/kg
Maximum value of SAR (measured) = 0.0336 W/kg



0dB = 0.0336 W/kg = -14.74 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	05/23/2024
Band:	LTE FDD Band 66 Lower

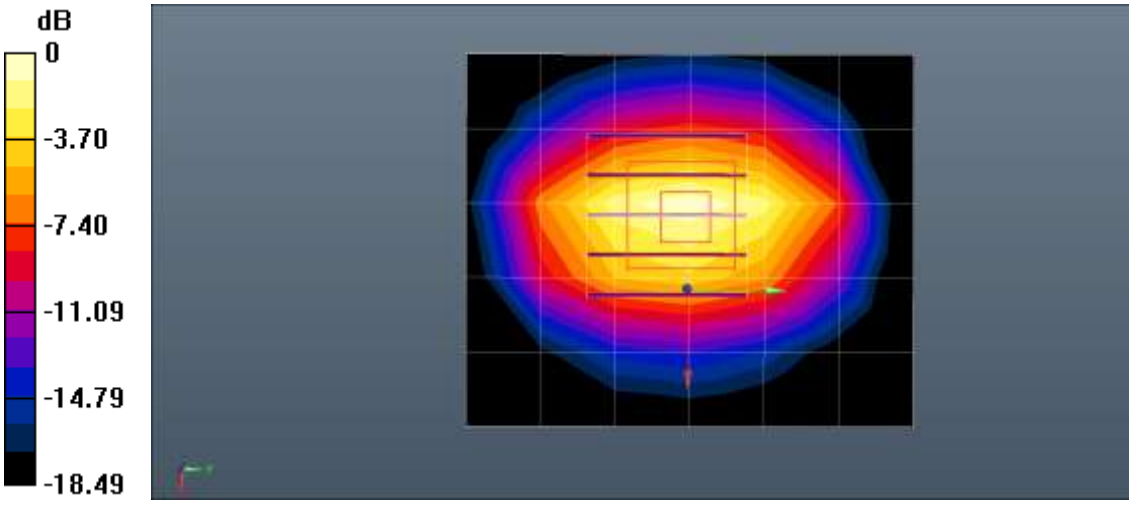
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.4 S/m; ε_r = 39.389; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.73 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.00 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.54 W/kg
SAR(1 g) = 1.85 W/kg; SAR(10 g) = 0.962 W/kg
Maximum value of SAR (measured) = 2.89 W/kg



0 dB = 2.89 W/kg = 4.61 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	05/14/2024
Band:	LTE FDD Band 66 Upper

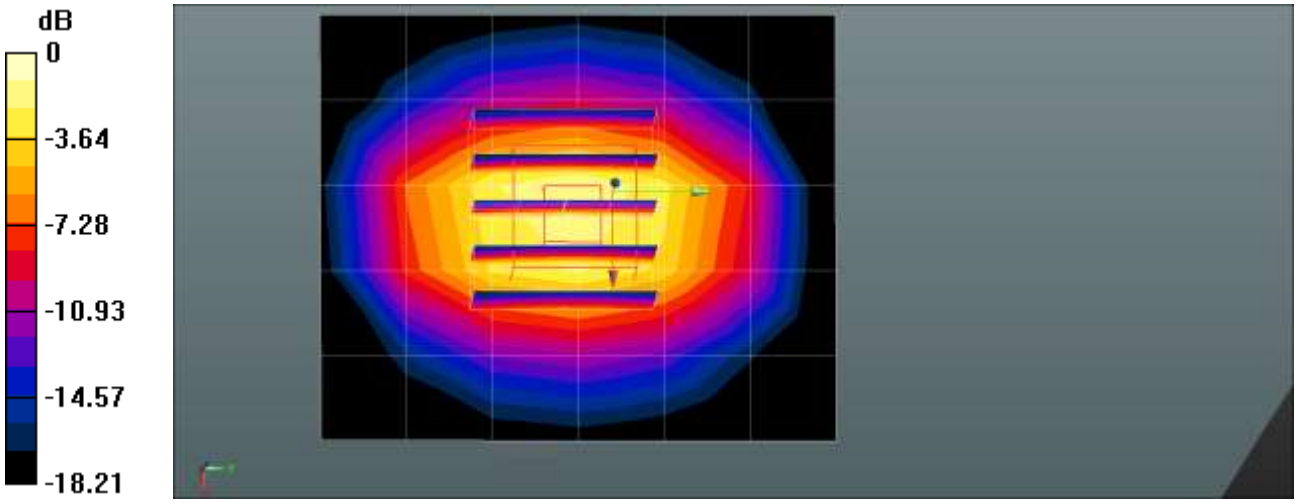
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.422 S/m; ε_r = 40.933; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.23 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.88 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 1.88 W/kg; SAR(10 g) = 0.975 W/kg
Maximum value of SAR (measured) = 2.98 W/kg



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

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	05/23/2024
Band:	NR FDD Band 66 Lower

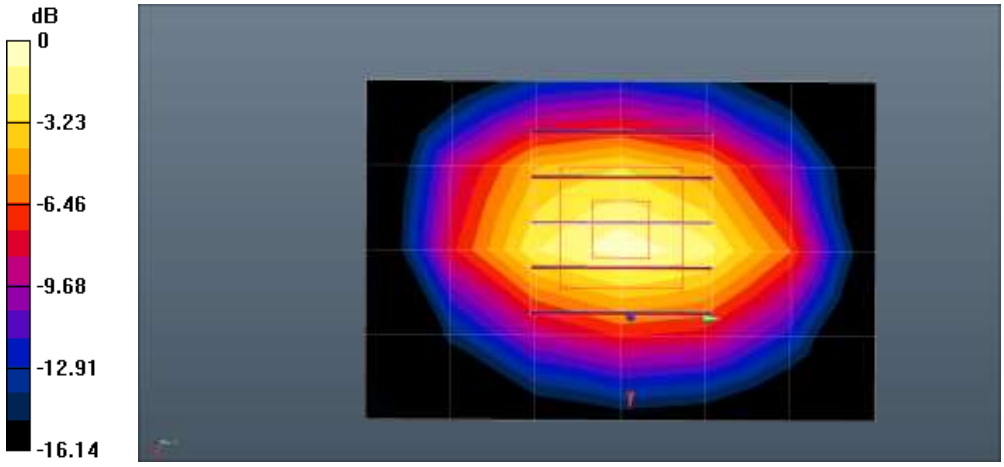
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.423 S/m; ε_r = 41.38; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(8.29, 8.71, 8.9) @ 1800 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/1800MHz Head Verification/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.53 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.34 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 3.13 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 2.71 W/kg



0 dB = 2.71 W/kg = 4.33 dBW/kg

■ Verification Data (1 800 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	05/18/2024
Band:	NR FDD Band 66 Upper

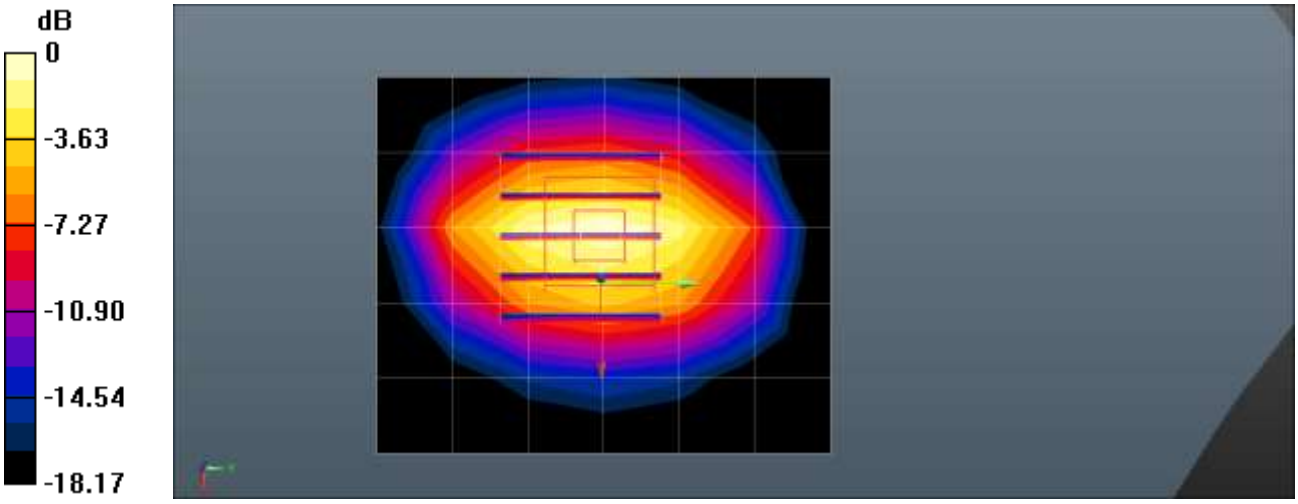
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d007
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.45 S/m; ε_r = 39.383; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.66, 8.66, 8.66) @ 1800 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1800MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.03 W/kg

Dipole/1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.09 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.73 W/kg
SAR(1 g) = 1.99 W/kg; SAR(10 g) = 1.04 W/kg
Maximum value of SAR (measured) = 3.04 W/kg



0 dB = 3.04 W/kg = 4.83 dBW/kg

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	05/22/2024
Band:	LTE FDD Band 2 Lower

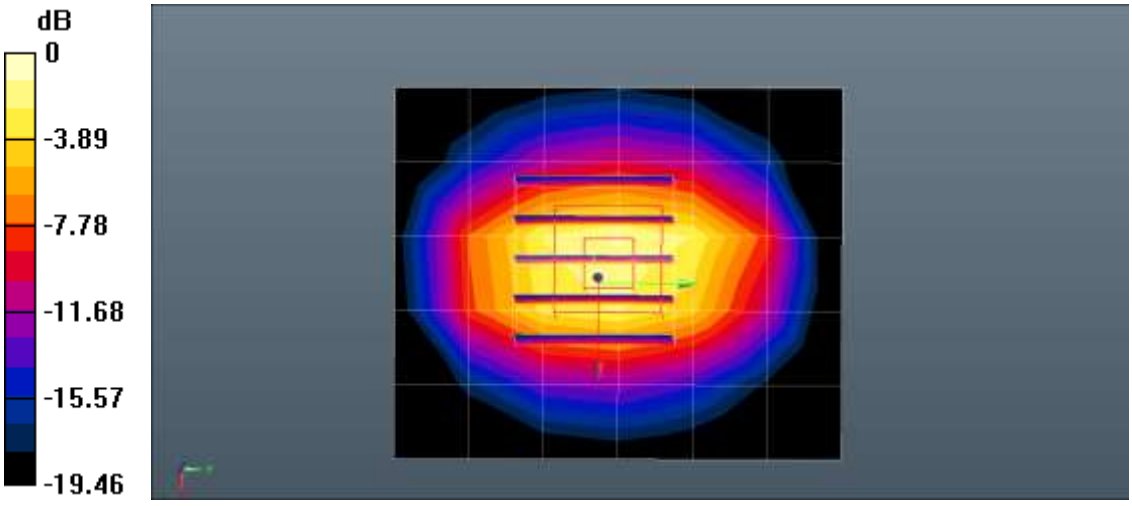
DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.274; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.43 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.33 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.91 W/kg
SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.01 W/kg
Maximum value of SAR (measured) = 3.14 W/kg



0 dB = 3.14 W/kg = 4.97 dBW/kg

■ Verification Data (1 900 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	05/14/2024
Band:	LTE FDD Band 2 Upper

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d032

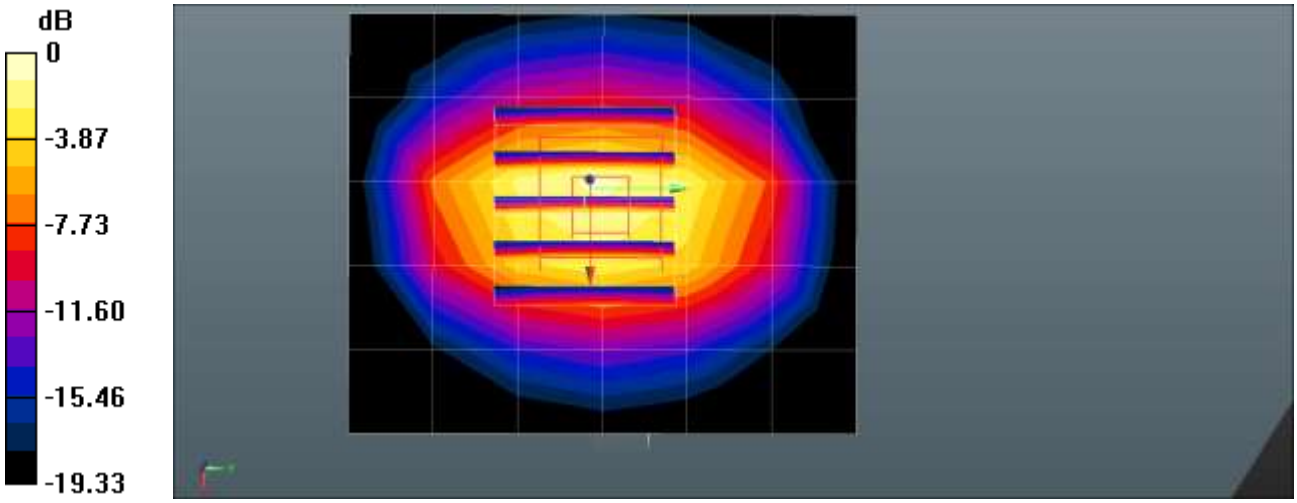
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 41.268; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(8.29, 8.29, 8.29) @ 1900 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn780; Calibrated: 2023-07-04
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/1900MHz Head Verification/Area Scan (6x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.59 W/kg

Dipole/1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.14 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 3.92 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 3.18 W/kg



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

■ Verification Data (2 450 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	05/10/2024
Band:	Bluetooth Ant 2

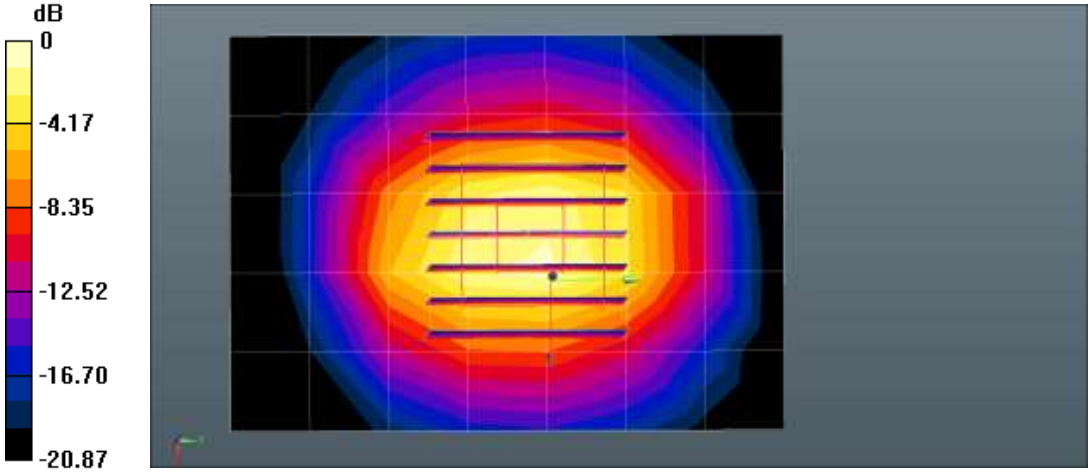
DUT: D2450V2 - SN743; Type: D2450V2; Serial: SN743
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.838 S/m; ε_r = 39.141; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7681; ConvF(7.46, 7.89, 8.02) @ 2450 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/2450MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.40 W/kg

Dipole/2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.83 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 5.11 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.25 W/kg
Maximum value of SAR (measured) = 4.23 W/kg



0 dB = 4.23 W/kg = 6.26 dBW/kg

■ Verification Data (5 250 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.9 ℃
Test Date:	05/03/2024
Band:	5.25 ㎓ WLAN

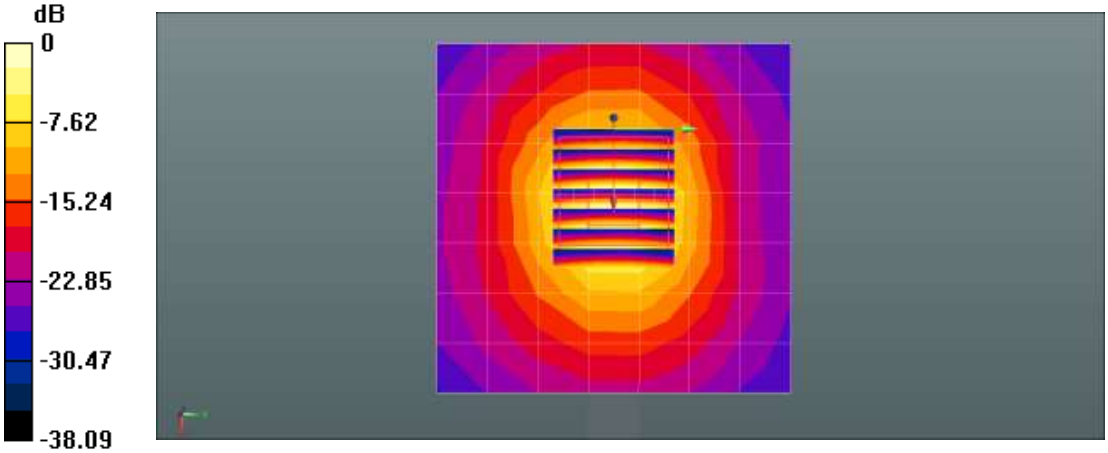
DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.748 S/m; ε_r = 36.903; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(5.2, 5.2, 5.2) @ 5250 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

Dipole/5250MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 6.63 W/kg

Dipole/5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.05 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 16.3 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 10.09 dBW/kg

■ Verification Data (5 600 ㎒ Head)

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	23.6 ℃
Test Date:	05/02/2024
Band:	5.6 ㎓ WLAN

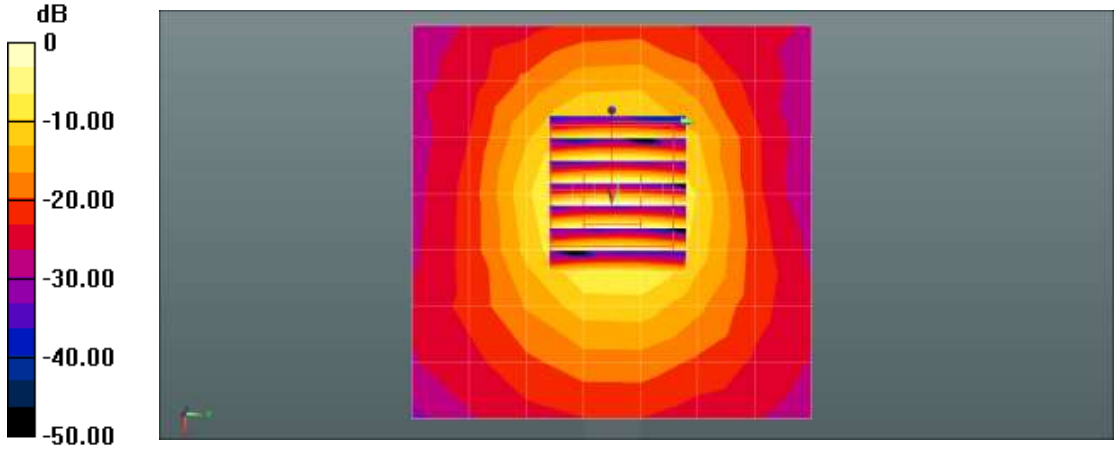
DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.118 S/m; ε_r = 36.747; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7751; ConvF(4.51, 4.51, 4.51) @ 5600 MHz; Calibrated: 2023-10-06
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn446; Calibrated: 2023-11-16
- 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 (7501)

Dipole/5600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 8.20 W/kg

Dipole/5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.55 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 18.7 W/kg
SAR(1 g) = 4.27 W/kg; SAR(10 g) = 1.22 W/kg
Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg

■ Verification Data (5 800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.1 ℃
Test Date: 05/03/2024
Band: 5.8 ㎓ WLAN

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 - SN:1107
Measurement Report for Device, , , CW, Channel 0 (5800.0 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--	5800.0, 0	5.24	5.34	36.4

Hardware Setup

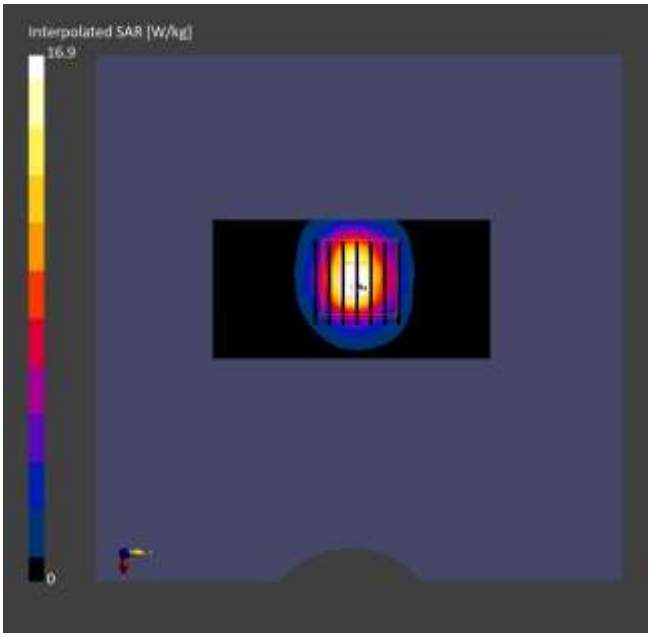
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt)	EX3DV4 - SN7732, 2023-06-20	DAE4 Sn504, 2024-01-30

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]	3.09	3.79
psSAR10g [W/Kg]	0.952	1.08
Power Drift [dB]	0.01	0.07



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
5	3076	ES3DV3	Head	13	1016	2023-09-25	52.5	0.77	PASS	PASS	PASS	N/A	N/A	N/A
22	3768	EX3DV4	Head	750	1014	2023-08-23	41.7	0.89	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	835	441	2024-04-21	41.6	0.91	PASS	PASS	PASS	GMSK	PASS	N/A
22	3768	EX3DV4	Head	835	441	2024-04-21	41.6	0.91	PASS	PASS	PASS	N/A	N/A	N/A
9	7309	EX3DV4	Head	835	441	2024-04-21	41.6	0.91	PASS	PASS	PASS	N/A	N/A	N/A
6	7370	EX3DV4	Head	1750	2d007	2024-04-18	40.2	1.49	PASS	PASS	PASS	N/A	N/A	N/A
22	3768	EX3DV4	Head	1750	2d007	2024-04-18	40.2	1.40	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	1750	2d007	2024-04-18	40.2	1.40	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	1900	5d032	2024-01-20	40.2	1.41	PASS	PASS	PASS	GMSK	PASS	N/A
6	7370	EX3DV4	Head	1900	5d032	2024-01-20	40.2	1.41	PASS	PASS	PASS	N/A	N/A	N/A
22	3768	EX3DV4	Head	1900	5d032	2024-01-20	40.2	1.41	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	2450	743	2024-04-26	39.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS
13	3968	EX3DV4	Head	2450	743	2024-04-26	39.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS
17	7681	EX3DV4	Head	2450	743	2024-04-26	39.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS
3	3903	EX3DV4	Head	2600	1015	2024-04-25	39.0	1.95	PASS	PASS	PASS	TDD	PASS	N/A
6	7370	EX3DV4	Head	2600	1015	2024-04-25	39.0	1.95	PASS	PASS	PASS	TDD	PASS	N/A
7	7622	EX3DV4	Head	2600	1015	2024-04-25	39.0	1.95	PASS	PASS	PASS	TDD	PASS	NA
21	7751	EX3DV4	Head	5250	1107	2024-04-22	36.0	4.72	PASS	PASS	PASS	TDD	PASS	N/A
21	7751	EX3DV4	Head	5600	1107	2024-04-22	35.6	5.08	PASS	PASS	PASS	TDD	PASS	N/A
20	7732	EX3DV4	Head	5750	1107	2024-04-22	35.4	5.25	PASS	PASS	PASS	TDD	PASS	N/A
20	7732	EX3DV4	Head	5800	1107	2024-04-22	35.2	5.30	PASS	PASS	PASS	TDD	PASS	N/A

SAR System Validation Summary 1g

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.

Appendix H. – Power reduction verification

Per the May 2017 TCBC Workshop notes, demonstration of proper functioning of the power reduction mechanism is required to support the corresponding SAR Configurations.

A Base station simulator was used to establish a conducted RF connection and output power was monitored. The power measurements were confirmed to be within expected tolerance for all DSI. before and after a power reduction mechanism was triggered. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated

1. Power Reduction Verification for Main ANT

This device utilizes a power reduction mechanism for some wireless modes under DSI(Device State Index).

For this device DSI = 0 is configured when the device cannot detect the use conditions, and DSI = 3 is configured when Hotspot mode activated. DSI = 2 is configured when receiver mode on.

Table 1.1 Power Reduction Verification for Antenna A

Mechanism		Band	DSI		
#1	#2		FREE	#1	#2
RCV ON	Hotspot On	GSM 850 Voice	0	2	2
Hotspot On	RCV ON	GSM 850 Voice	0	3	2
RCV ON	Hotspot On	GSM 850 1Tx	0	2	2
Hotspot On	RCV ON	GSM 850 1Tx	0	3	2
RCV ON	Hotspot On	GSM 850 2Tx	0	2	2
Hotspot On	RCV ON	GSM 850 2Tx	0	3	2
RCV ON	Hotspot On	GSM 850 3Tx	0	2	2
Hotspot On	RCV ON	GSM 850 3Tx	0	3	2
RCV ON	Hotspot On	GSM 850 4Tx	0	2	2
Hotspot On	RCV ON	GSM 850 4Tx	0	3	2
RCV ON	Hotspot On	GSM 1900 Voice	0	2	2
Hotspot On	RCV ON	GSM 1900 Voice	0	3	2
RCV ON	Hotspot On	GSM 1900 1Tx	0	2	2
Hotspot On	RCV ON	GSM 1900 1Tx	0	3	2
RCV ON	Hotspot On	GSM 1900 2Tx	0	2	2
Hotspot On	RCV ON	GSM 1900 2Tx	0	3	2
RCV ON	Hotspot On	GSM 1900 3Tx	0	2	2
Hotspot On	RCV ON	GSM 1900 3Tx	0	3	2
RCV ON	Hotspot On	GSM 1900 4Tx	0	2	2
Hotspot On	RCV ON	GSM 1900 4Tx	0	3	2
RCV ON	Hotspot On	UMTS Band 5	0	2	2
Hotspot On	RCV ON	UMTS Band 5	0	3	2
RCV ON	Hotspot On	LTE Band 12	0	2	2
Hotspot On	RCV ON	LTE Band 12	0	3	2
RCV ON	Hotspot On	LTE Band 13	0	2	2
Hotspot On	RCV ON	LTE Band 13	0	3	2
RCV ON	Hotspot On	LTE Band 5	0	2	2
Hotspot On	RCV ON	LTE Band 5	0	3	2
RCV ON	Hotspot On	LTE Band 66	0	2	2
Hotspot On	RCV ON	LTE Band 66	0	3	2
RCV ON	Hotspot On	LTE Band 4	0	2	2
Hotspot On	RCV ON	LTE Band 4	0	3	2
RCV ON	Hotspot On	LTE Band 2	0	2	2
Hotspot On	RCV ON	LTE Band 2	0	3	2
RCV ON	Hotspot On	NR Band n5	0	2	2
Hotspot On	RCV ON	NR Band n5	0	3	2
RCV ON	Hotspot On	NR Band n66	0	2	2
Hotspot On	RCV ON	NR Band n66	0	3	2

Table 1.2 Power Reduction Verification for Antenna B

Mechanism		Band	DSI		
#1	#2		FREE	#1	#2
RCV ON	Hotspot On	LTE Band 41	0	2	2
Hotspot On	RCV ON	LTE Band 41	0	3	2
RCV ON	Hotspot On	NR Band n41	0	2	2
Hotspot On	RCV ON	NR Band n41	0	3	2

Table 1.3 Power Reduction Verification for Antenna I

Mechanism		Band	DSI		
#1	#2		FREE	#1	#2
RCV ON	Hotspot On	LTE Band 2	0	2	2
Hotspot On	RCV ON	LTE Band 2	0	3	2
RCV ON	Hotspot On	LTE Band 4	0	2	2
Hotspot On	RCV ON	LTE Band 4	0	3	2
RCV ON	Hotspot On	LTE Band 41	0	2	2
Hotspot On	RCV ON	LTE Band 41	0	3	2
RCV ON	Hotspot On	LTE Band 66	0	2	2
Hotspot On	RCV ON	LTE Band 66	0	3	2
RCV ON	Hotspot On	NR Band n41	0	2	2
Hotspot On	RCV ON	NR Band n41	0	3	2
RCV ON	Hotspot On	NR Band n66	0	2	2
Hotspot On	RCV ON	NR Band n66	0	3	2

Appendix I. – Down-link CA Power Measurement / 5G NR Call Box Setup

1. LTE Down-link Carrier Aggregation Conducted Powers

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers(CCs) supported by test product implementation. For those configurations required by April 2018 TCBC Workshop notes, conducted power measurements with LTE Carrier Aggregation(CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s)(SCC) on the downlink only.

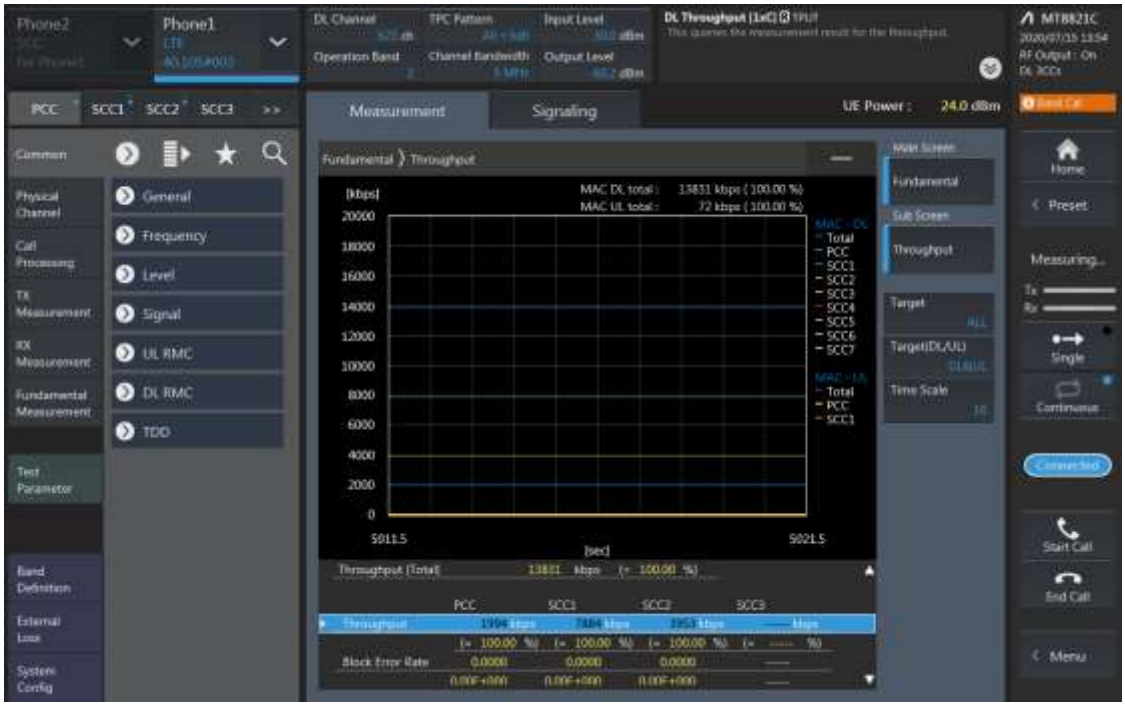
Downlink Carrier aggregation:

1. This device only supports downlink carrier aggregation. For every supported combination of downlink carrier aggregation, power measurements were performed with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.
2. All control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
3. Per FCC KDB publication 941225 D05A v01r02, Section C)3)b)ii), PCC uplink channel was selected at downlink carrier aggregation combinations. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
4. For continuous intra-band carrier aggregation, the downlink channel spacing between the component carriers was set to multiple of 300kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521.
5. For non-continuous intra-band carrier aggregation, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
6. All selected downlink channels remained fully within the downlink transmission band of the respective component carrier.

Power Measurement setup

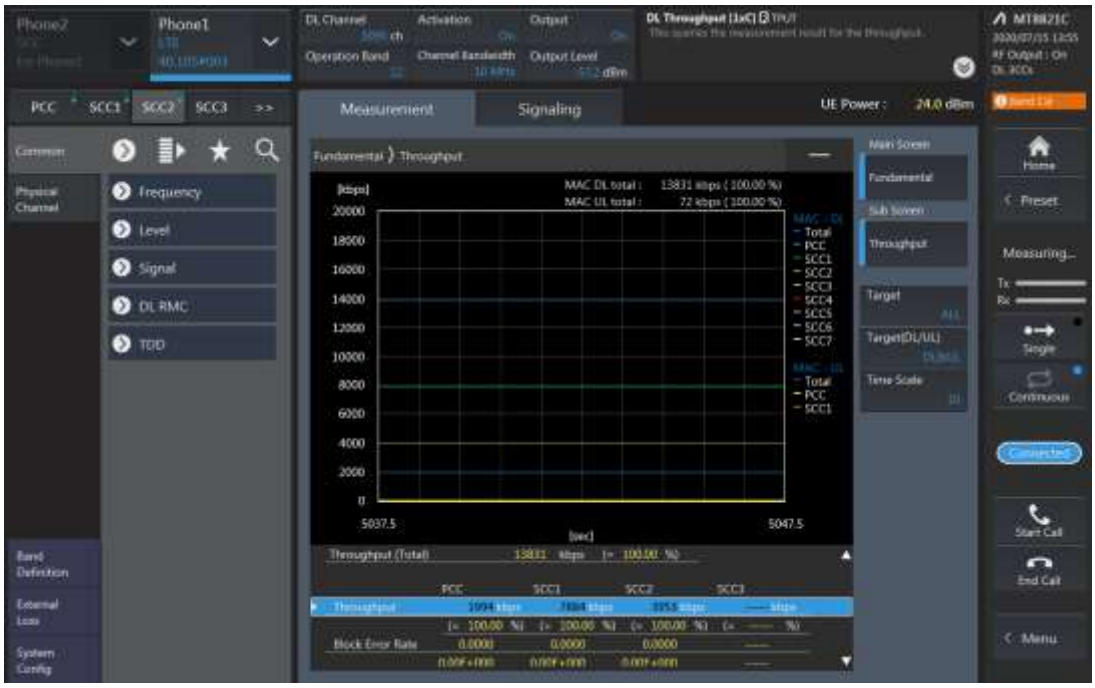
LTE Down Link 3CA Call Setup

PCC Setting (Channel/ RB/ BW/ Modulation)



SCC1 Setting (Channel/ RB/ BW/ Modulation) and call Connection

SCC2 Setting (Channel/ RB/ BW/ Modulation) and call Connection



Single 3CA Downlink Carrier aggregation conducted Power

Combination	PCC									SCC				SCC				Tx Power		
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled (dBm) (2)	Deviaion (dB) (2)-(1)
41D	41	20	39750	2506	39750	2506	QPSK	1	0	41	20	39948	2525.8	41	20	40146	2545.6	20.77	20.68	-0.09

4x4 MIMO 3CA Downlink Carrier aggregation conducted Power

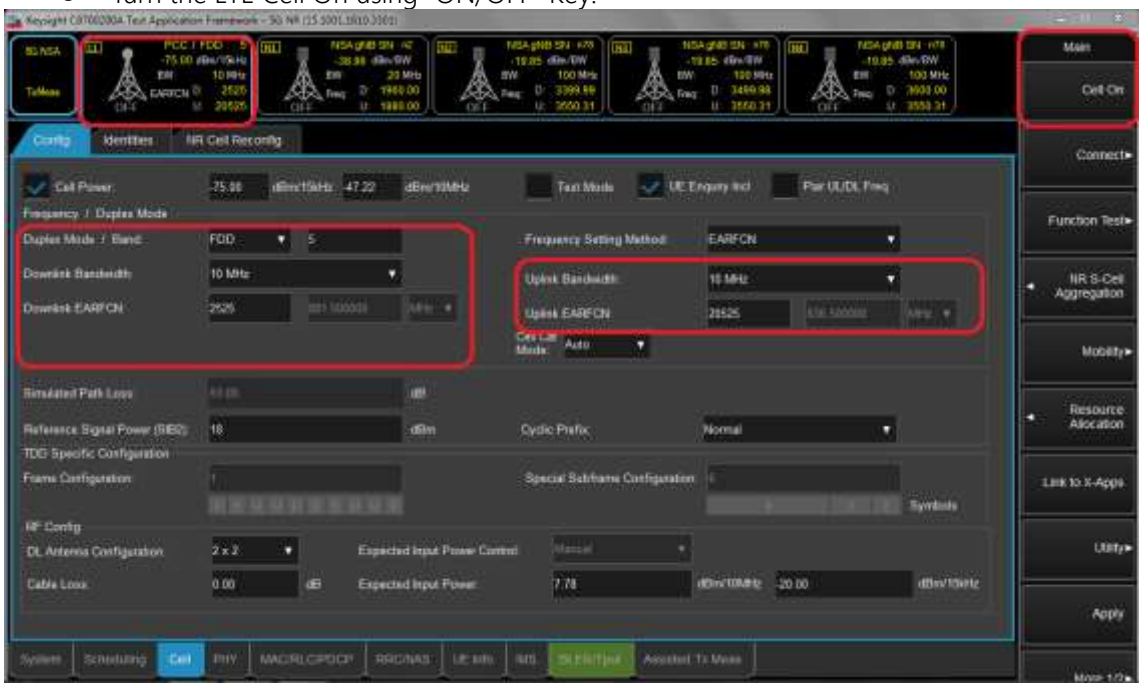
Combination	PCC									SCC				SCC				Tx Power		
	Band	BW	PCC UL Channel	PCC UL Frequency	PCC DL Channel	PCC DL Frequency	Modulation	RB	offset	Band	BW	SCC DL Channel	SCC DL Frequency	Band	BW	SCC DL Channel	SCC DL Frequency	LTE Single Carrier Tx Power (dBm) (1)	LTE Tx Power with DL CA Enabled (dBm) (2)	Deviaion (dB) (2)-(1)
[41D]	41	20	39750	2506	39750	2506	QPSK	1	49	41	20	39948	2525.8	41	20	40146	2545.6	20.77	20.70	-0.07

2. 5G NR Call Box Setup

Procedure used to establish output Power measurement for NR Bands

Select operating band, BW and Channel.

- Click Cell on button in the right of Test application screen.
- Turn the LTE Cell On using "ON/OFF" Key.

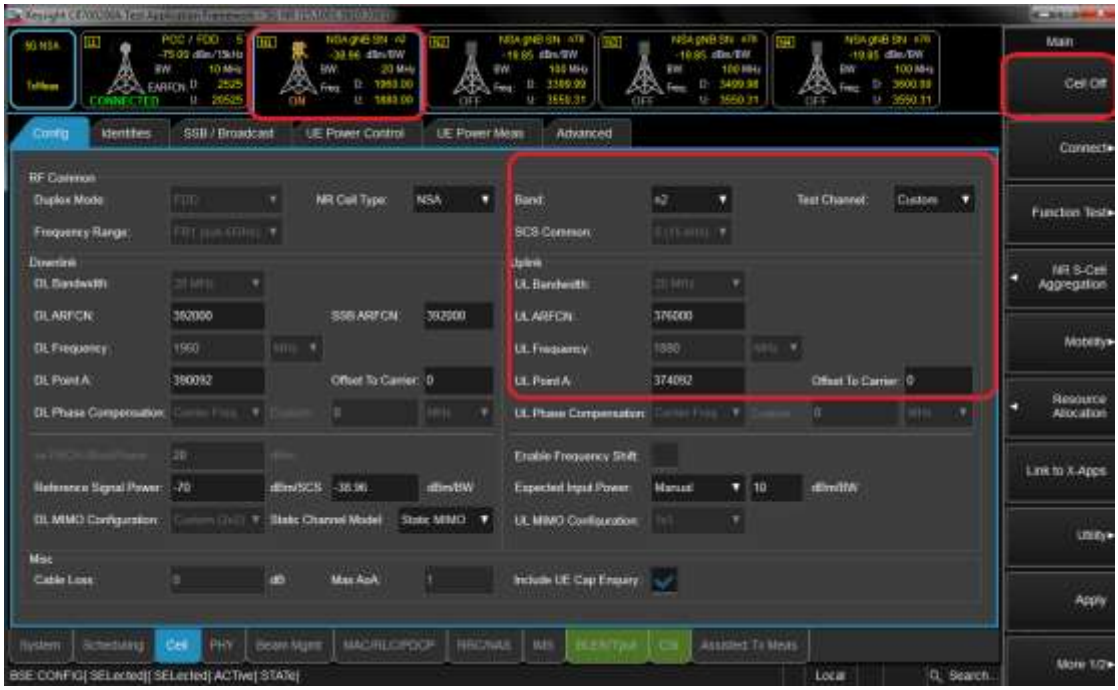


- Turn the Airplane Mode On and then turn the Airplane mode off.
- Select All down bits for UL Power control Mode in LTE.

Setup for NR Band

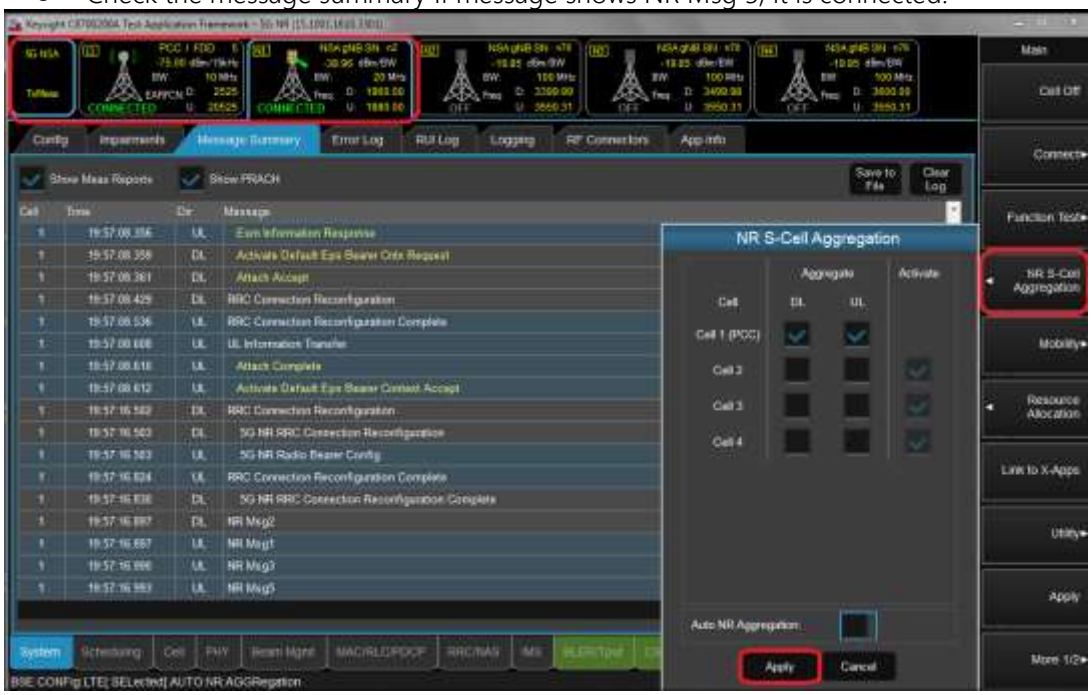
- Select waveform for Setting NR Band (PHY->PUSCH->Enable Transform Precoder)
  - Enable : DFT-s-OFDM, Disable : CP-OFDM

- Select operating band, BW, SCS and Channel.
- Turn the NR Cell On using “ON/OFF” Key.



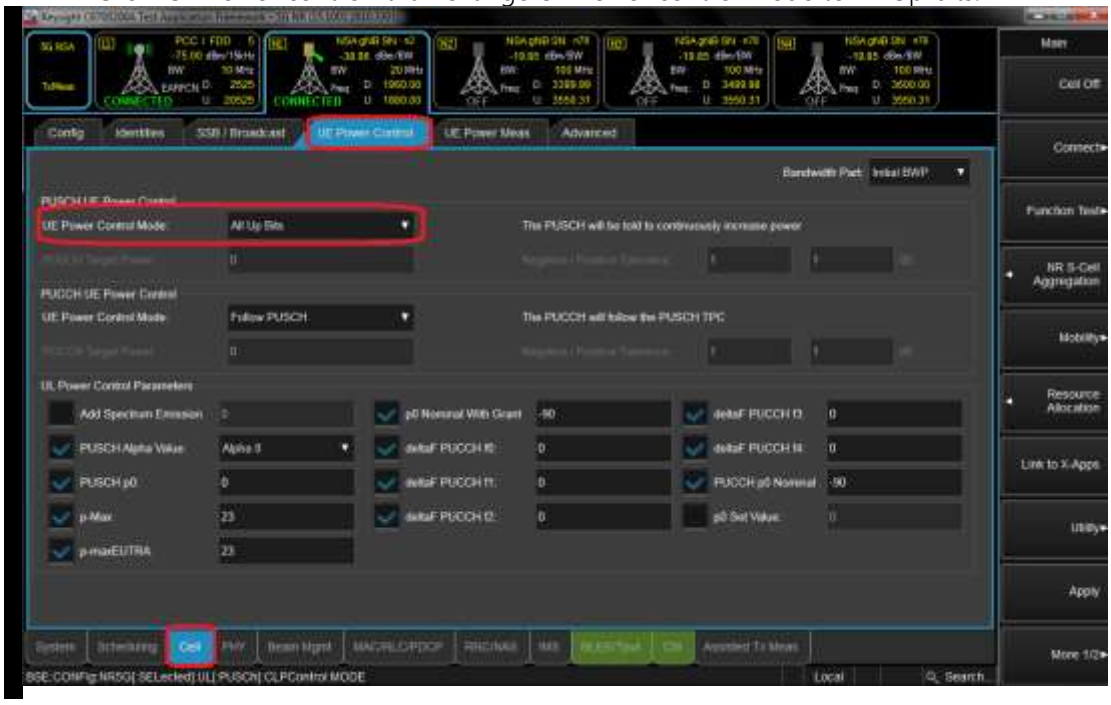
Connect NR S-Cell Aggregation

- Click NR S-Cell Aggregation
- Check the Cell 1's DL and UL box(PCC) and than Click Apply.
- Check the message summary If message shows NR Msg 5, It is connected.



Max Power setting

- Click "Cell in the bottom of screen.
- Click "UE Power control" than change UE Power control mode to All Up bits.



Selecting Start RB/Count/MCS

- Select the each test configurating (Start RB, Count, MCS).

View Tx Power

- Click "Link to X-Apps."(Please refer to Figure-7)
- Select "Channel Power".