

Appendix B. – SAR Test Plots

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.9 °C
 Liquid Temperature: 22.8 °C
 Test Date: 09/14/2024
 Plot No.: A1
 Band: GSM850 Head SAR

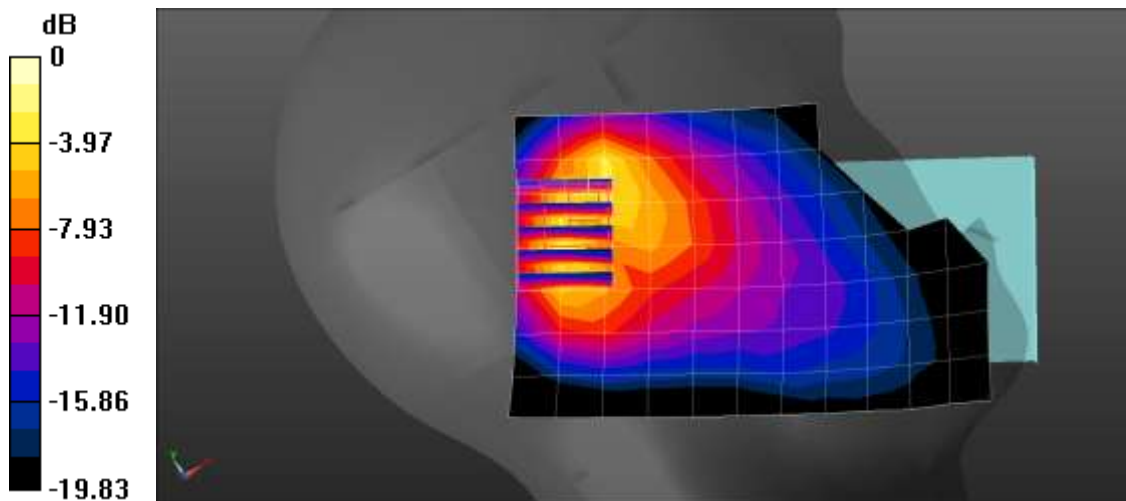
Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.919$ S/m; $\epsilon_r = 42.84$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 836.6 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GSM850 Head Left Tilt 190ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.395 W/kg

GSM850 Head Left Tilt 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 14.76 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.169 W/kg
 Maximum value of SAR (measured) = 0.761 W/kg



0 dB = 0.761 W/kg = -1.19 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.5 °C
 Liquid Temperature: 22.4 °C
 Test Date: 09/23/2024
 Plot No.: A2
 Band: GSM1900 Head SAR

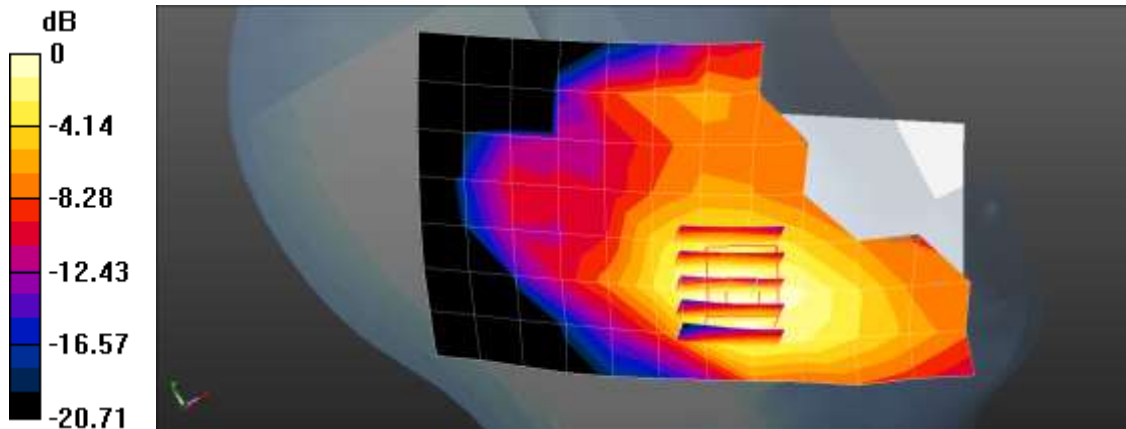
Communication System: UID 0, GSM 1900 3TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.77013
 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.373 \text{ S/m}$; $\epsilon_r = 39.245$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1880 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM1900 3Tx Head Left Touch 661ch/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.117 W/kg

GSM1900 3Tx Head Left Touch 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 3.389 V/m; Power Drift = -0.14 dB
 Peak SAR (extrapolated) = 0.136 W/kg
SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.057 W/kg
 Maximum value of SAR (measured) = 0.119 W/kg



0 dB = 0.119 W/kg = -9.24 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.6 °C
 Liquid Temperature: 22.6 °C
 Test Date: 09/11/2024
 Plot No.: A3
 Band: UMTS Band 5 Head SAR

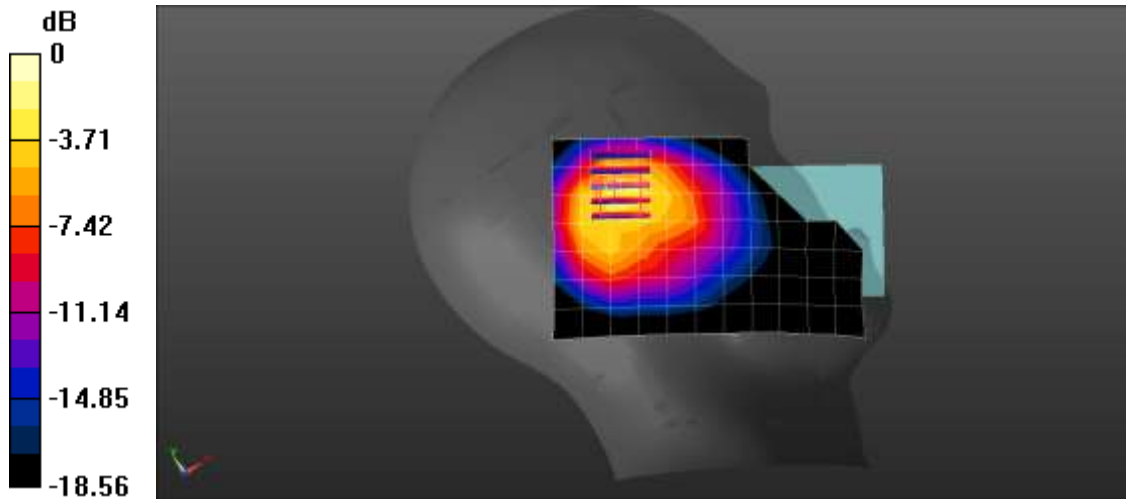
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.937 \text{ S/m}$; $\epsilon_r = 42.808$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 836.6 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

UMTS Band 5 Head Left Touch 4183ch/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.510 W/kg

UMTS Band 5 Head Left Touch 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 21.23 V/m; Power Drift = -0.12 dB
 Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.453 W/kg; SAR(10 g) = 0.236 W/kg
 Maximum value of SAR (measured) = 0.983 W/kg



0 dB = 0.983 W/kg = -0.07 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.8 °C
 Liquid Temperature: 21.7 °C
 Test Date: 09/11/2024
 Plot No.: A4
 Band: UMTS Band 4 Head SAR

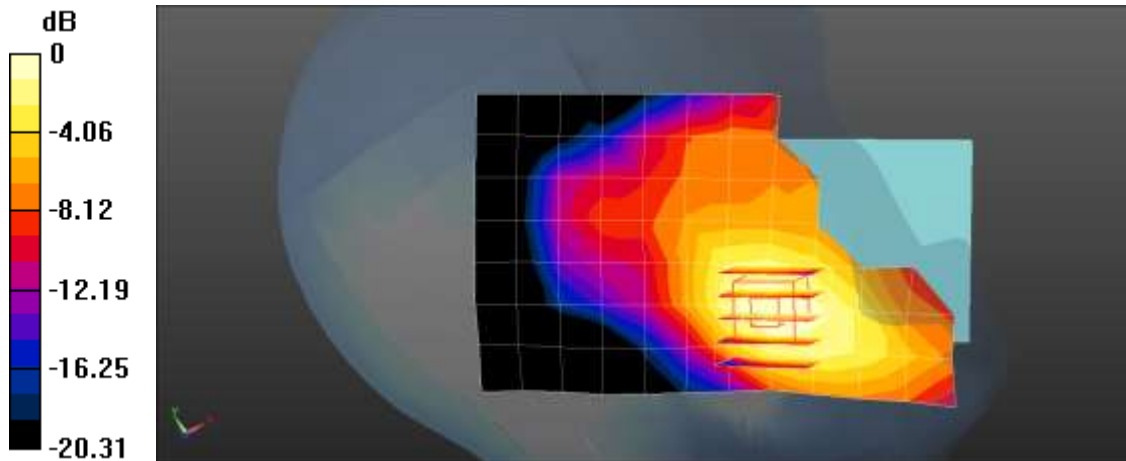
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.356$ S/m; $\epsilon_r = 39.379$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.8, 5.16, 5.15) @ 1732.4 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- 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)

UMTS Band 4 Head Left Touch 1412ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.175 W/kg

UMTS Band 4 Head Left Touch 1412ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 2.923 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 0.220 W/kg
SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.098 W/kg
 Maximum value of SAR (measured) = 0.174 W/kg



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

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.4 °C
 Liquid Temperature: 21.4 °C
 Test Date: 09/09/2024
 Plot No.: A5
 Band: UMTS Band 2 Head SAR

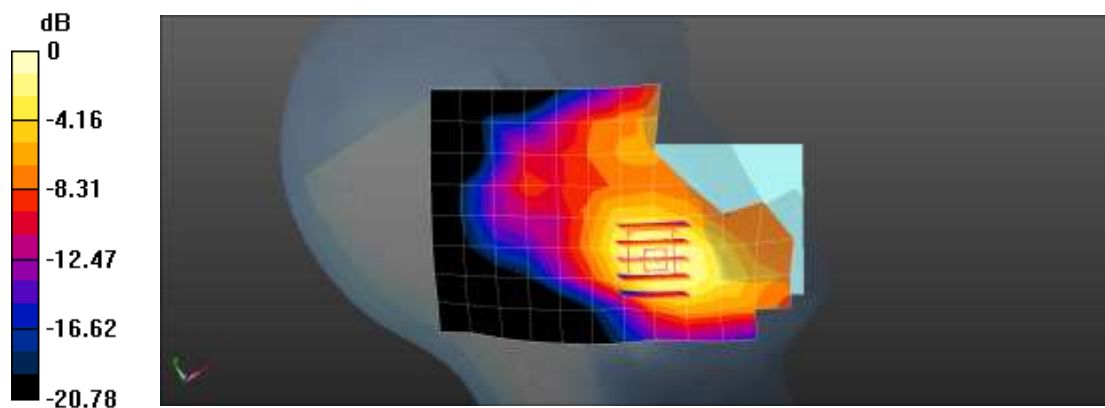
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.423 \text{ S/m}$; $\epsilon_r = 40.453$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.69, 5.04, 5.03) @ 1880 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- 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)

UMTS Band 2 Head Left Touch 9400ch/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.150 W/kg

UMTS Band 2 Head Left Touch 9400ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 2.458 V/m; Power Drift = 0.12 dB
 Peak SAR (extrapolated) = 0.222 W/kg
SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.083 W/kg
 Maximum value of SAR (measured) = 0.169 W/kg



0 dB = 0.169 W/kg = -7.72 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 23.0 °C
 Liquid Temperature: 22.9 °C
 Test Date: 09/12/2024
 Plot No.: A6
 Band: LTE FDD Band 12 Head SAR

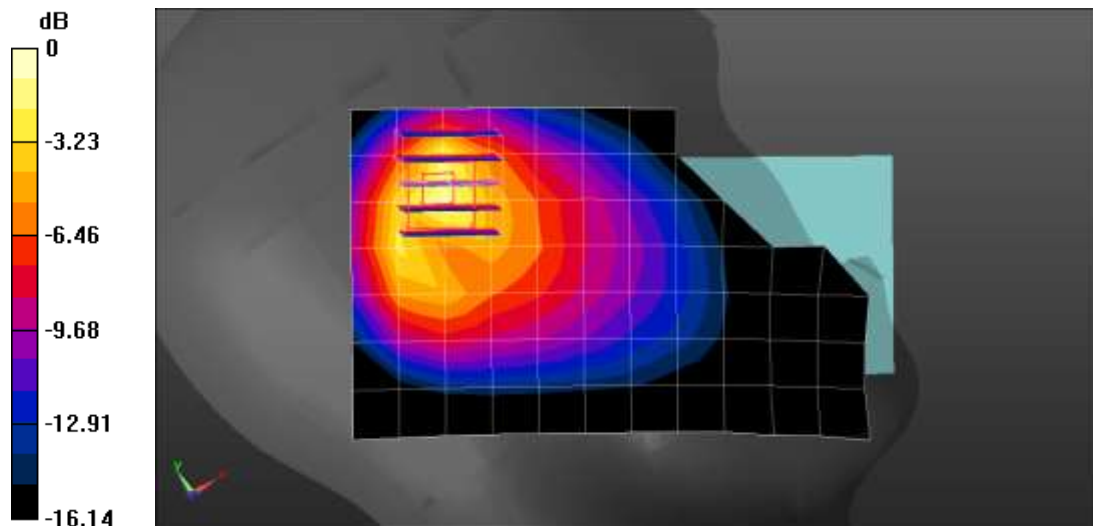
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 41.754$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 707.5 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 Head Left Tilt QPSK 10MHz 50RB 0offset 23095ch/Area Scan (8x13x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.878 W/kg

LTE Band 12 Head Left Tilt QPSK 10MHz 50RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement
 grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 19.98 V/m; Power Drift = -0.11 dB
 Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.306 W/kg
 Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 23.0 °C
 Liquid Temperature: 22.9 °C
 Test Date: 09/12/2024
 Plot No.: A7
 Band: LTE FDD Band 13 Head SAR

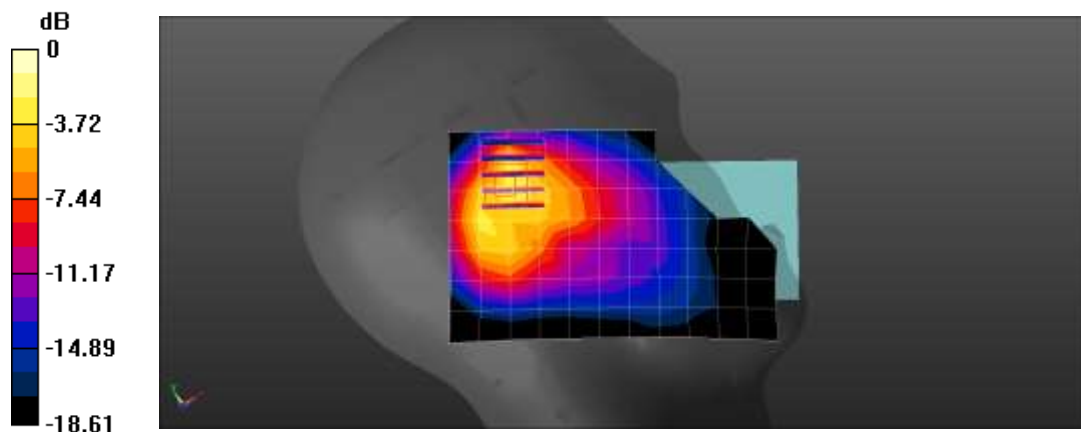
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.905 \text{ S/m}$; $\epsilon_r = 42.32$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 782 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 13 Head Left Tilt QPSK 10MHz 25RB 0offset 23230ch/Area Scan (8x13x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.437 W/kg

LTE Band 13 Head Left Tilt QPSK 10MHz 25RB 0offset 23230ch/Zoom Scan (5x5x7)/Cube 0: Measurement
 grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 10.93 V/m; Power Drift = 0.16 dB
 Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.213 W/kg
 Smallest distance from peaks to all points 3 dB below = 8.7 mm
 Maximum value of SAR (measured) = 0.767 W/kg



0 dB = 0.767 W/kg = -1.15 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.5 °C
 Liquid Temperature: 19.5 °C
 Test Date: 09/08/2024
 Plot No.: A8
 Band: LTE FDD Band 25 Head SAR

Measurement Report for Device, CHEEK, Band 25, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)
 RBPosition:Mid AntennaCfg:SISO, Channel 26590 (1905.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	Band 25	LTE-FDD, 10297-AAE	1905.000, 26590	7.94	1.40	40.1

Hardware Setup

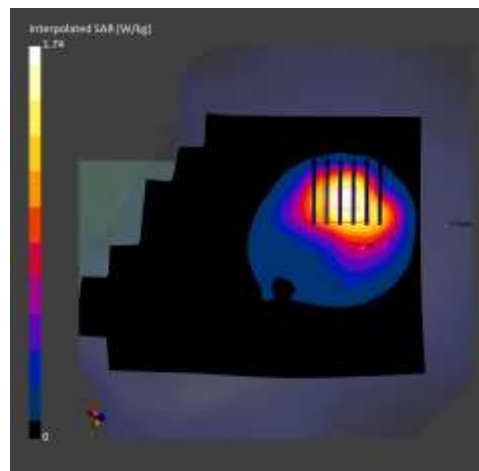
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.882	0.987
psSAR10g [W/Kg]	0.500	0.529
Power Drift [dB]	-0.18	0.05



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.9 °C
 Liquid Temperature: 21.8 °C
 Test Date: 09/08/2024
 Plot No.: A9
 Band: LTE FDD Band 26 Head SAR

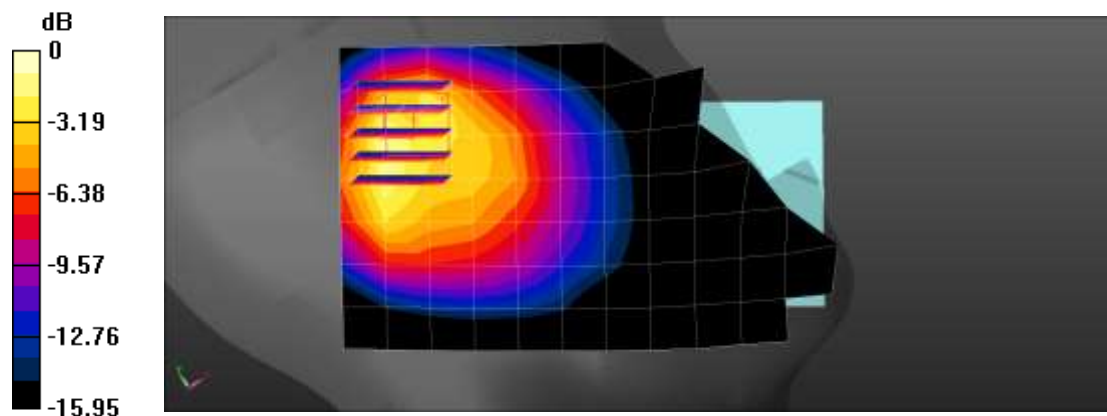
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 831.5 \text{ MHz}$; $\sigma = 0.917 \text{ S/m}$; $\epsilon_r = 42.117$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 831.5 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 26 Head Left Touch QPSK 15MHz 36RB 0offset 26865ch/Area Scan (8x13x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.689 W/kg

LTE Band 26 Head Left Touch QPSK 15MHz 36RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube
 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 18.85 V/m; Power Drift = -0.07 dB
 Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.248 W/kg
 Maximum value of SAR (measured) = 0.823 W/kg



0 dB = 0.823 W/kg = -0.85 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.1 °C
 Liquid Temperature: 22.0 °C
 Test Date: 10/18/2024
 Plot No.: A10
 Band: LTE TDD Band 41 (Power Class 3) Head SAR

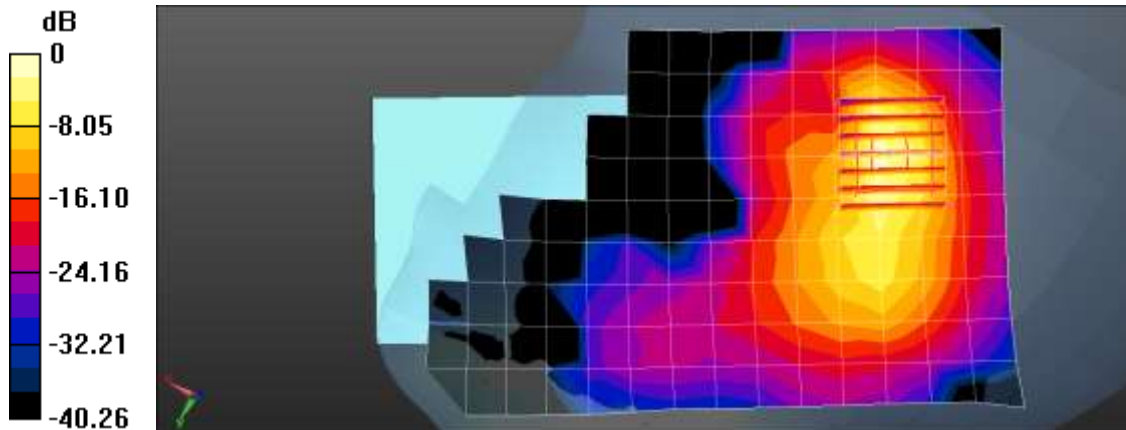
Communication System: UID 0, LTE Band 41 (FCC) (0); Frequency: 2506 MHz; Duty Cycle: 1:1.58052
 Medium parameters used (interpolated): $f = 2506$ MHz; $\sigma = 1.845$ S/m; $\epsilon_r = 39.586$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(6.55, 7.4, 7.17) @ 2506 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 41 Head Right Tilt QPSK 20MHz 50RB 0offset 39750ch/Area Scan (10x16x1): Measurement grid:
 dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 1.27 W/kg

LTE Band 41 Head Right Tilt QPSK 20MHz 50RB 0offset 39750ch/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 20.38 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 2.01 W/kg
SAR(1 g) = 0.856 W/kg; SAR(10 g) = 0.324 W/kg
 Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.1 °C
 Liquid Temperature: 19.0 °C
 Test Date: 09/09/2024
 Plot No.: A11
 Band: LTE FDD Band 66 Head SAR

Measurement Report for Device, TILT, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) RBPosition:Low
 AntennaCfg:SISO, Channel 132072 (1720.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band 66	LTE-FDD, 10169-CAF	1720.000, 132072	8.29	1.32	40.1

Hardware Setup

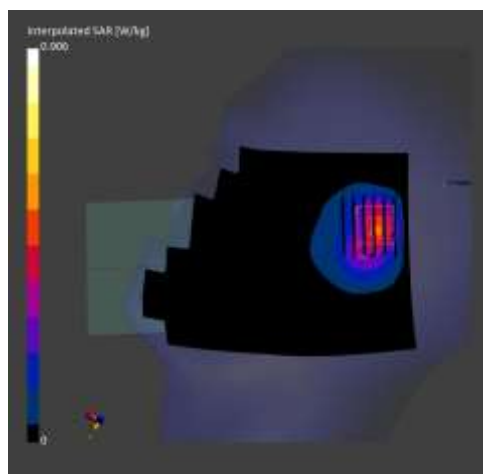
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	5.9 x 5.9 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.414	0.450
psSAR10g [W/Kg]	0.220	0.222
Power Drift [dB]	-0.06	0.01



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.9 °C
 Liquid Temperature: 22.8 °C
 Test Date: 09/26/2024
 Plot No.: A12
 Band: NR FDD Band n5 Head SAR

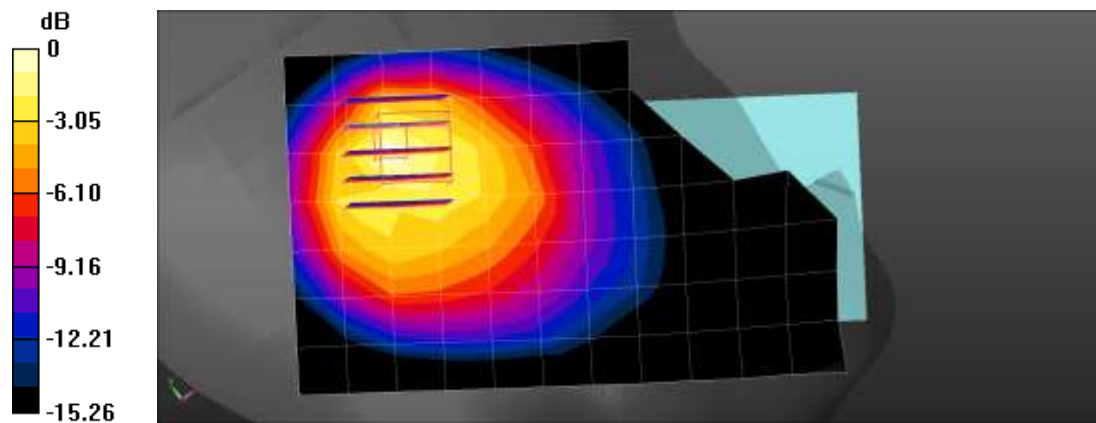
Communication System: UID 0, NR n5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.935$ S/m; $\epsilon_r = 41.497$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3882; ConvF(8.92, 8.92, 8.92) @ 836.5 MHz; Calibrated: 2023-11-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n5 Head Left Touch DFT-s QPSK 20MHz 1RB 1offset 167300ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.806 W/kg

NR Band n5 Head Left Touch DFT-s QPSK 20MHz 1RB 1offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 20.80 V/m; Power Drift = -0.12 dB
 Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.294 W/kg
 Maximum value of SAR (measured) = 0.824 W/kg



0 dB = 0.824 W/kg = -0.84 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.5 °C
 Liquid Temperature: 22.4 °C
 Test Date: 09/23/2024
 Plot No.: A13
 Band: NR FDD Band n25 Head SAR

Communication System: UID 0, NR Band 2,25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1882.5 \text{ MHz}$; $\sigma = 1.375 \text{ S/m}$; $\epsilon_r = 39.237$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

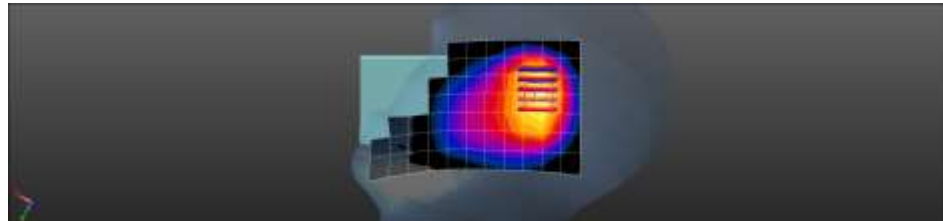
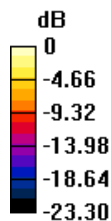
DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1882.5 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n25 Head Right Tilt CP QPSK 20MHz 1RB 1offset 376500ch/Area Scan (8x13x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 1.06 W/kg

NR Band n25 Head Right Tilt CP QPSK 20MHz 1RB 1offset 376500ch/Zoom Scan (5x5x7)/Cube

0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 25.20 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.600 W/kg; SAR(10 g) = 0.288 W/kg
 Maximum value of SAR (measured) = 1.01 W/kg



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

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.3 °C
 Liquid Temperature: 19.3 °C
 Test Date: 09/26/2024
 Plot No.: A14
 Band: NR TDD Band n41 Head SAR

Measurement Report for Device, TILT, Band n41, 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)
 RBPosition:Low AntennaCfg:SISO, Channel 518598 (2592.990 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n41	5G NR FR1 TDD, 10866-AAF	2592.990, 518598	7.38	1.98	38.9

Hardware Setup

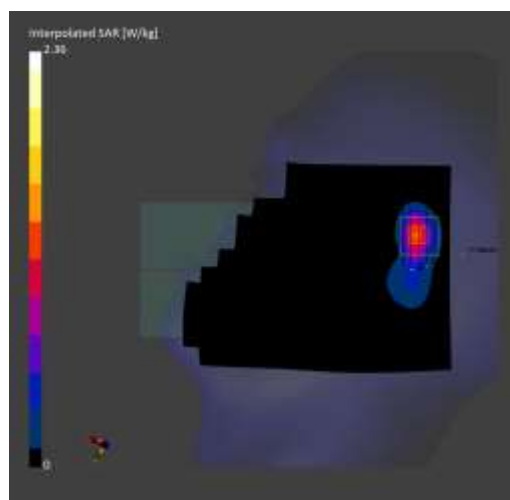
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	4.6 x 4.6 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.968	0.967
psSAR10g [W/Kg]	0.374	0.368
Power Drift [dB]	0.03	0.00



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.6 °C
 Liquid Temperature: 22.4 °C
 Test Date: 09/24/2024
 Plot No.: A15
 Band: NR FDD Band n66 Head SAR

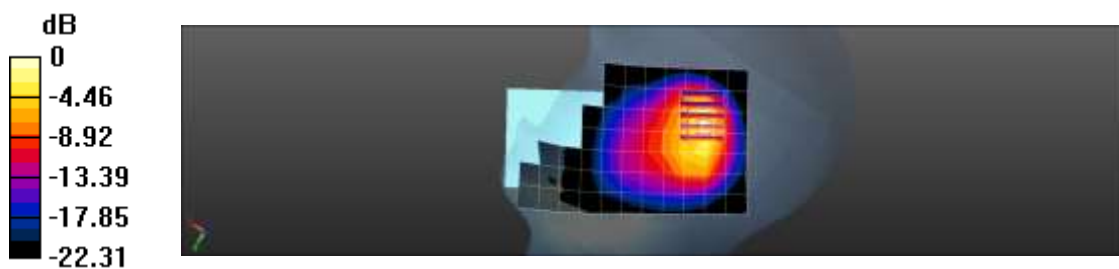
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1745 \text{ MHz}$; $\sigma = 1.366 \text{ S/m}$; $\epsilon_r = 39.274$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.25, 8.18, 7.93) @ 1745 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Head Right Tilt DFT-s QPSK 40MHz 1RB 1offset 349000ch/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 1.20 W/kg

NR Band n66 Head Right Tilt DFT-s QPSK 40MHz 1RB 1offset 349000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 25.89 V/m; Power Drift = 0.08 dB
 Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.696 W/kg; SAR(10 g) = 0.328 W/kg
 Maximum value of SAR (measured) = 1.25 W/kg



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

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.9 °C
 Liquid Temperature: 19.9 °C
 Test Date: 10/23/2024
 Plot No.: A16
 Band: NR TDD Band n77 Head SAR

Measurement Report for Device, TILT, Band n77, 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)
 RBPosition:High AntennaCfg:SISO, Channel 650000 (3750.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	Band n77	5G NR FR1 TDD, 10917-AAD	3750.000, 650000	6.59	3.09	37.9

Hardware Setup

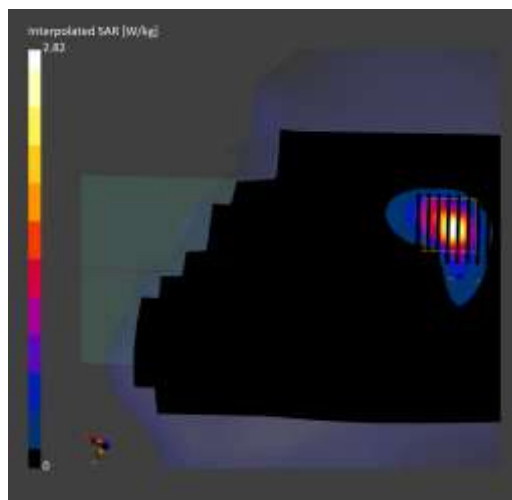
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	4.1 x 4.1 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.871	0.911
psSAR10g [W/Kg]	0.278	0.286
Power Drift [dB]	-0.02	0.01



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 19.0 °C
Liquid Temperature: 19.0 °C
Test Date: 10/03/2024
Plot No.: A17
Band: 2.4 GHz WLAN Head SAR

Measurement Report for Device, CHEEK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps), Channel 11 (2462.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	WLAN 2.4GHz	WLAN, 10012-CAB	2462.000, 11	7.46	1.85	39.2

Hardware Setup

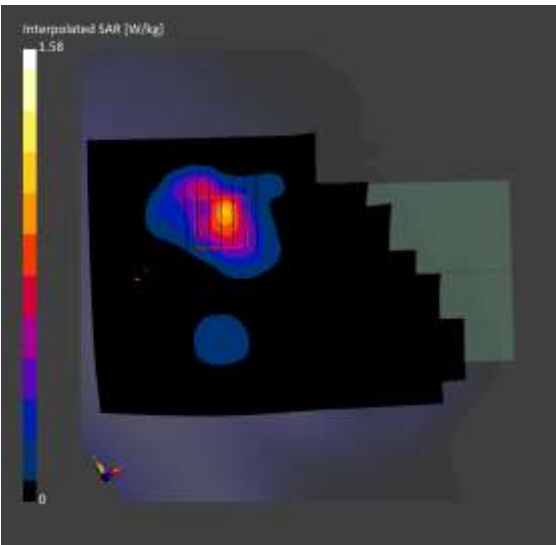
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.773	0.846
psSAR10g [W/Kg]	0.354	0.385
Power Drift [dB]	-0.17	0.18



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.4 °C
 Liquid Temperature: 22.3 °C
 Test Date: 09/26/2024
 Plot No.: A18
 Band: 5 GHz WLAN Head SAR

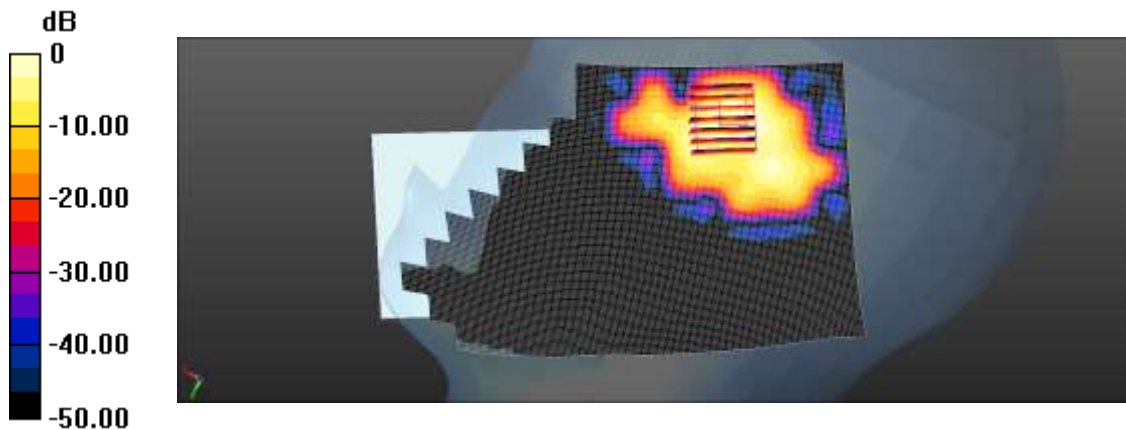
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5290 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5290$ MHz; $\sigma = 4.803$ S/m; $\epsilon_r = 35.581$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(5.03, 5.68, 5.51) @ 5290 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- 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)

802.11ac80 Head Right Touch MCS0 58ch/Area Scan (111x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 0.876 W/kg

802.11ac80 Head Right Touch MCS0 58ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
 Reference Value = 3.099 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 1.57 W/kg
SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.096 W/kg
 Maximum value of SAR (measured) = 0.873 W/kg



0 dB = 0.873 W/kg = -0.59 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.4 °C
 Liquid Temperature: 19.3 °C
 Test Date: 10/06/2024
 Plot No.: A19
 Band: 6 GHz WLAN Head SAR

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	U-NII-6	WLAN, 10755-AAC	6505.000, 111	5.56	6.25	34.0

Hardware Setup

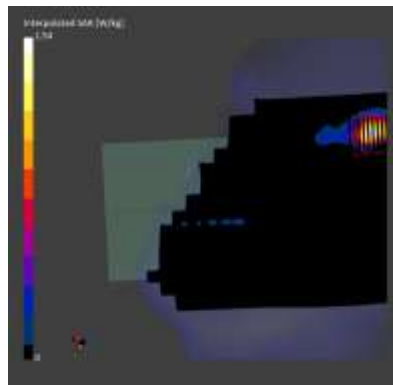
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	119.0 x 204.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	2.6 x 2.6 x 1.2
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.2

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/kg]	0.186	0.248
psSAR10g [W/kg]	0.053	0.057
psAPD (1.0cm ² , sq) [W/m ²]		2.48
psAPD (4.0cm ² , sq) [W/m ²]		1.37
Power Drift [dB]	0.16	-0.11



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.3 °C
 Liquid Temperature: 19.2 °C
 Test Date: 10/04/2024
 Plot No.: A20
 Band: Bluetooth/ LE Head SAR

Measurement Report for Device, CHEEK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 0 (2402.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.000, 0	7.46	1.80	39.1

Hardware Setup

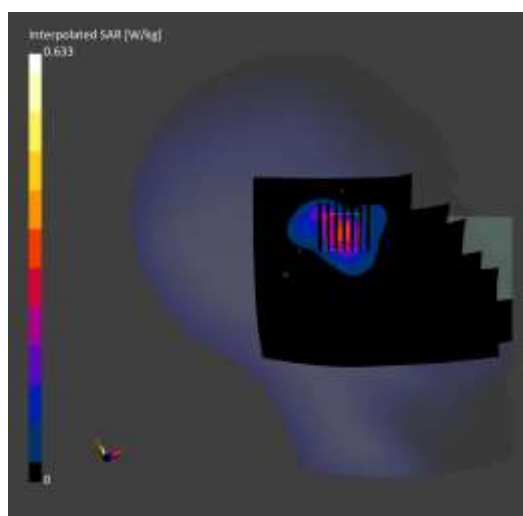
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/kg]	0.272	0.302
psSAR10g [W/kg]	0.128	0.134
Power Drift [dB]	0.12	-0.14



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.7 °C
 Liquid Temperature: 22.6 °C
 Test Date: 09/10/2024
 Plot No.: B1
 Band: GSM850 Body/Hotspot SAR

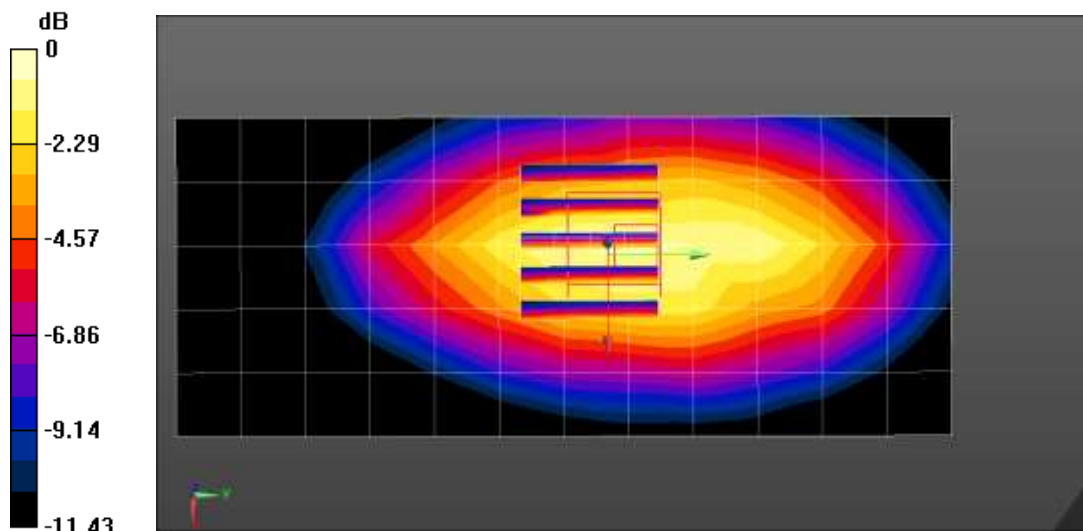
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.14954
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.919$ S/m; $\epsilon_r = 43.137$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 836.6 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GSM850 2Tx Body Right 190ch/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.307 W/kg

GSM850 2Tx Body Right 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 18.45 V/m; Power Drift = 0.19 dB
 Peak SAR (extrapolated) = 0.388 W/kg
SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.169 W/kg
 Maximum value of SAR (measured) = 0.349 W/kg



0 dB = 0.349 W/kg = -4.57 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.5 °C
 Liquid Temperature: 22.4 °C
 Test Date: 09/23/2024
 Plot No.: B2
 Band: GSM1900 Body/Hotspot SAR

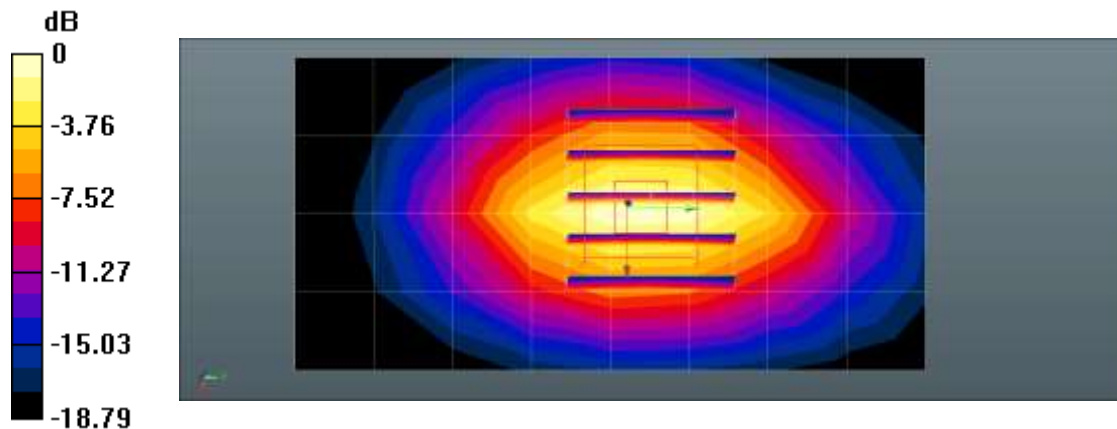
Communication System: UID 0, GSM 1900 4TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07491
 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.373 \text{ S/m}$; $\epsilon_r = 39.245$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1880 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM1900 Body Bottom 4Tx 661ch/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 1.16 W/kg

GSM1900 Body Bottom 4Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 31.45 V/m; Power Drift = -0.08 dB
 Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.825 W/kg; SAR(10 g) = 0.433 W/kg
 Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.7 °C
 Liquid Temperature: 22.6 °C
 Test Date: 09/10/2024
 Plot No.: B3
 Band: UMTS Band 5 Body/Hotspot SAR

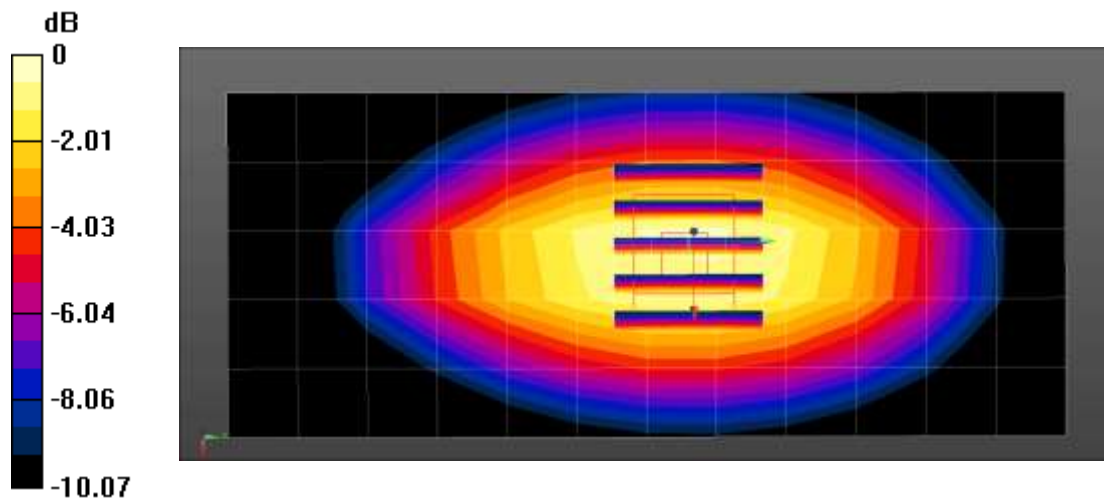
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 43.274$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 836.6 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

UMTS Band 5 Body Right 4183ch/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.364 W/kg

UMTS Band 5 Body Right 4183ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 22.32 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 0.462 W/kg
SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.211 W/kg
 Maximum value of SAR (measured) = 0.412 W/kg



0 dB = 0.412 W/kg = -3.85 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.8 °C
 Liquid Temperature: 21.7 °C
 Test Date: 09/11/2024
 Plot No.: B4
 Band: UMTS Band 4 Body/Hotspot SAR

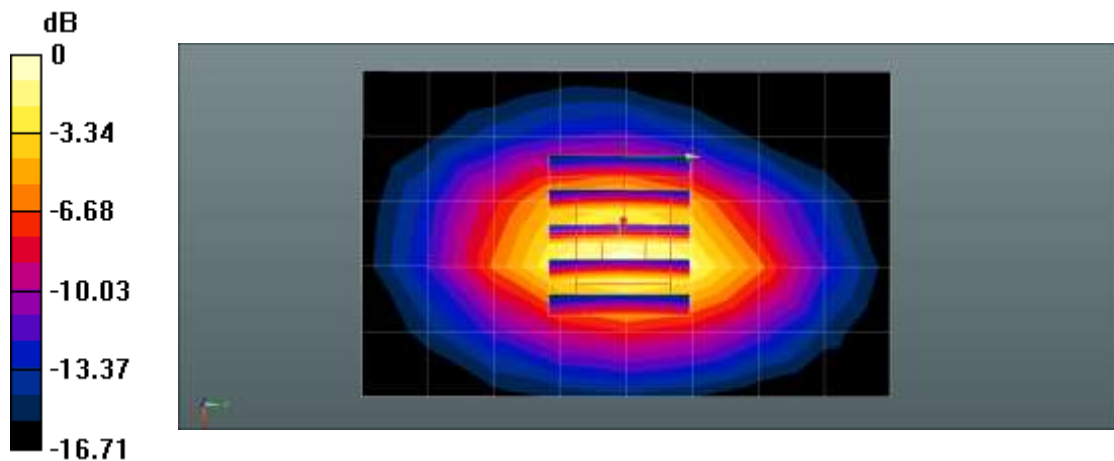
Communication System: UID 0, WCDMA IV (0); Frequency: 1752.6 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.378$ S/m; $\epsilon_r = 39.298$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.8, 5.16, 5.15) @ 1752.6 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- 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)

UMTS Band 4 Body Bottom 1513ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.749 W/kg

UMTS Band 4 Body Bottom 1513ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 23.83 V/m; Power Drift = -0.19 dB
 Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.361 W/kg
 Maximum value of SAR (measured) = 0.802 W/kg



0 dB = 0.802 W/kg = -0.96 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.4 °C
 Liquid Temperature: 21.4 °C
 Test Date: 09/09/2024
 Plot No.: B5
 Band: UMTS Band 2 Body/Hotspot SAR

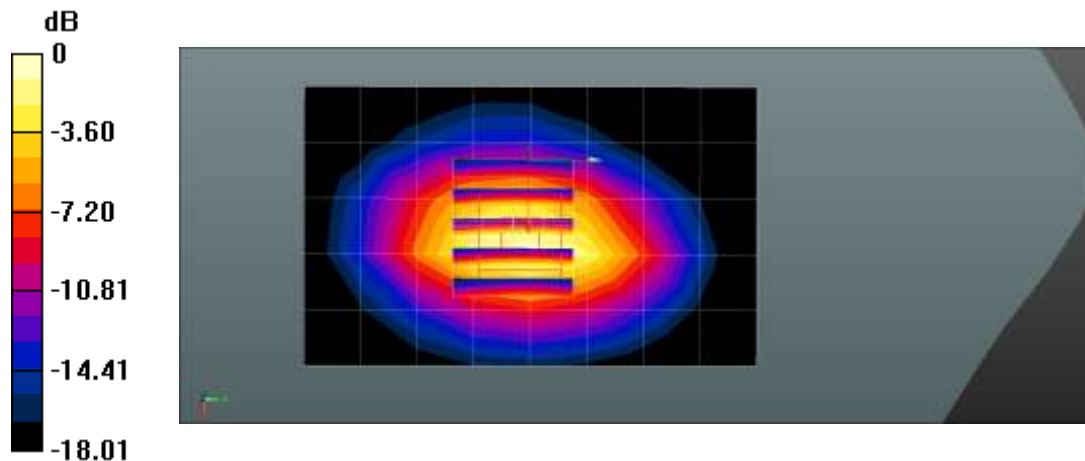
Communication System: UID 0, WCDMA1900 (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.406$ S/m; $\epsilon_r = 40.532$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.69, 5.04, 5.03) @ 1852.4 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- 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)

UMTS Band 2 Body Bottom 9262ch/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.940 W/kg

UMTS Band 2 Body Bottom 9262ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 28.23 V/m; Power Drift = -0.15 dB
 Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.819 W/kg; SAR(10 g) = 0.434 W/kg
 Maximum value of SAR (measured) = 1.01 W/kg



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

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.7 °C
 Liquid Temperature: 21.6 °C
 Test Date: 09/05/2024
 Plot No.: B6
 Band: LTE FDD Band 12 Body/Hotspot SAR

Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 707.5 \text{ MHz}$; $\sigma = 0.896 \text{ S/m}$; $\epsilon_r = 42.79$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 707.5 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 Body Rear QPSK 10MHz 1RB 49offset 23095ch/Area Scan (8x13x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.389 W/kg

LTE Band 12 Body Rear QPSK 10MHz 1RB 49offset 23095ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

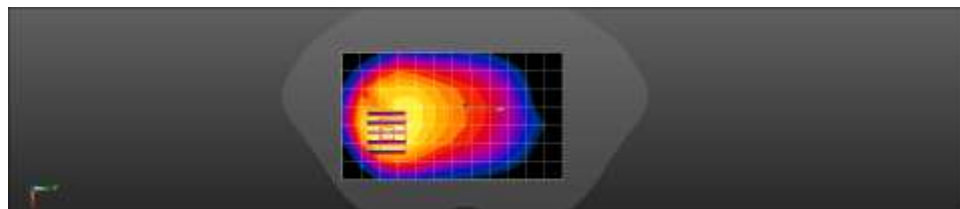
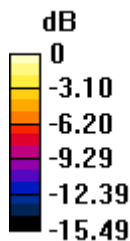
$dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.24 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.574 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (measured) = 0.477 W/kg



0 dB = 0.477 W/kg = -3.21 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.7 °C
 Liquid Temperature: 21.6 °C
 Test Date: 09/05/2024
 Plot No.: B7
 Band: LTE FDD Band 13 Body/Hotspot SAR

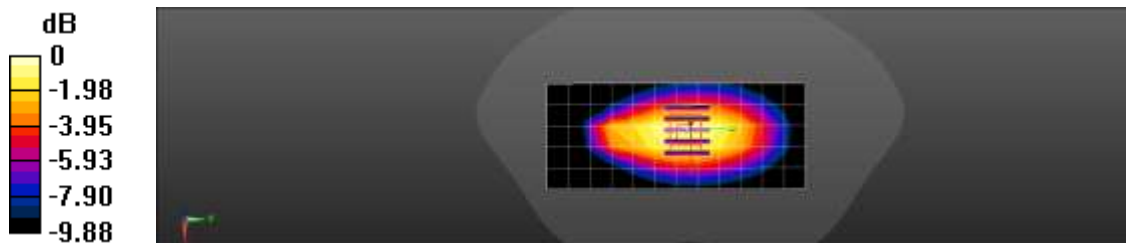
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 41.523$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 782 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 13 Body Left QPSK 10MHz 1RB 24offset 23230ch/Area Scan (6x13x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.287 W/kg

LTE Band 13 Body Left QPSK 10MHz 1RB 24offset 23230ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:
 $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 19.96 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 0.371 W/kg
SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.168 W/kg
 Maximum value of SAR (measured) = 0.331 W/kg



0 dB = 0.331 W/kg = -4.80 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.5 °C
 Liquid Temperature: 19.5 °C
 Test Date: 09/06/2024
 Plot No.: B8
 Band: LTE FDD Band 25 Body/Hotspot SAR

Measurement Report for Device, EDGE BOTTOM, Band 25, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)
 RBPosition:Low AntennaCfg:SISO, Channel 26365 (1882.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 25	LTE-FDD, 10169-CAF	1882.500, 26365	7.94	1.39	40.0

Hardware Setup

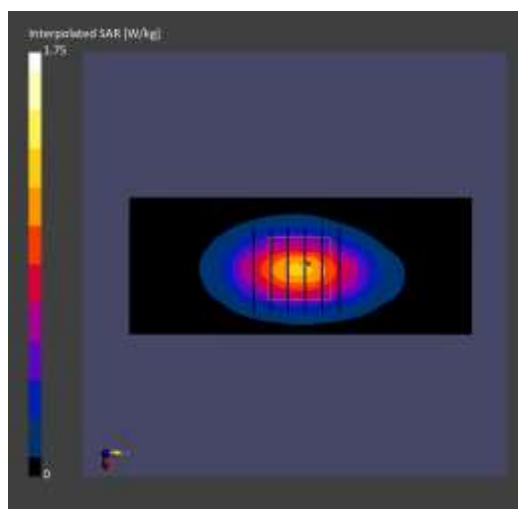
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.961	0.992
psSAR10g [W/Kg]	0.494	0.525
Power Drift [dB]	-0.02	-0.06



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.6 °C
 Liquid Temperature: 22.4 °C
 Test Date: 09/06/2024
 Plot No.: B9
 Band: LTE FDD Band 26 Body/Hotspot SAR

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.922$ S/m; $\epsilon_r = 42.328$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 831.5 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 26 Body Rear QPSK 15MHz 1RB 74offset 26865ch/Area Scan (8x13x1): Measurement grid:
 dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.573 W/kg

LTE Band 26 Body Rear QPSK 15MHz 1RB 74offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

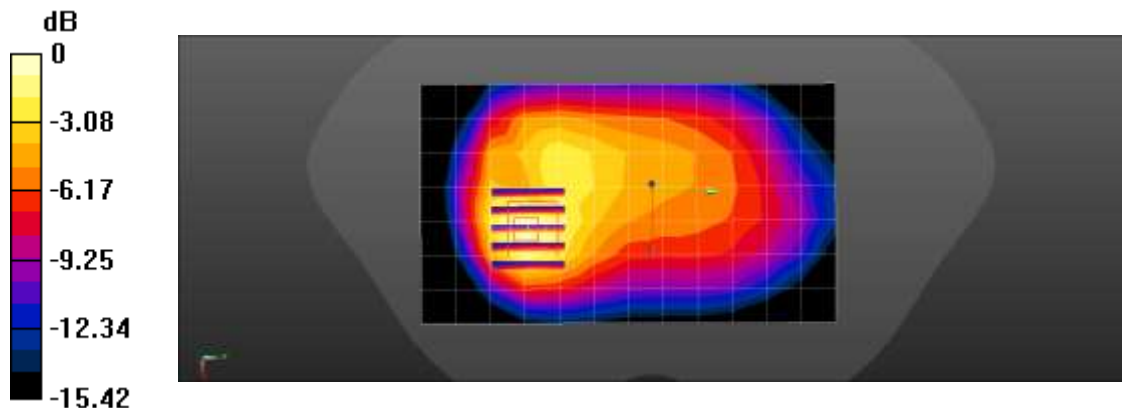
dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.11 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.715 W/kg

SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 0.609 W/kg



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.1 °C
 Liquid Temperature: 22.0 °C
 Test Date: 09/12/2024
 Plot No.: B10
 Band: LTE TDD Band 41 (Power Class 3) Body/Hotspot SAR

Communication System: UID 0, LTE Band 41 (0); Frequency: 2680 MHz; Duty Cycle: 1:1.58016
 Medium parameters used: $f = 2680$ MHz; $\sigma = 2.082$ S/m; $\epsilon_r = 38.828$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.32, 4.65, 4.64) @ 2680 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: SAM with CRP v5.0(Left); Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 41 Body Top QPSK 20MHz 1RB 49offset 41490ch/Area Scan (7x10x1): Measurement grid:
 $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.462 W/kg

LTE Band 41 Body Top QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

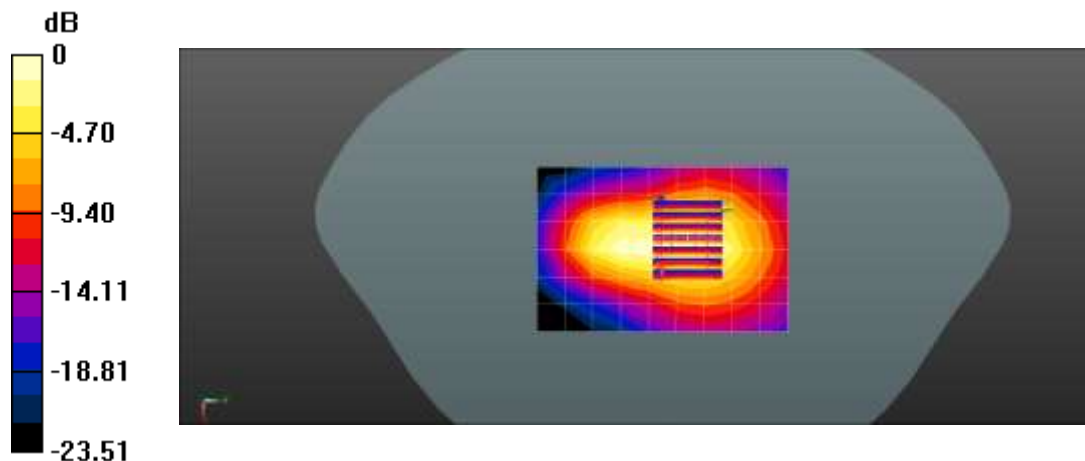
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 14.91 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.753 W/kg

SAR(1 g) = 0.365 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (measured) = 0.469 W/kg



0 dB = 0.469 W/kg = -3.29 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.6 °C
 Liquid Temperature: 19.5 °C
 Test Date: 09/07/2024
 Plot No.: B11
 Band: LTE FDD Band 66 Body/Hotspot SAR

Measurement Report for Device, EDGE BOTTOM, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)
 RBPosition:Mid AntennaCfg:SISO, Channel 132072 (1720.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 10.00	Band 66	LTE-FDD, 10169-CAF	1720.000, 132072	8.29	1.28	40.3

Hardware Setup

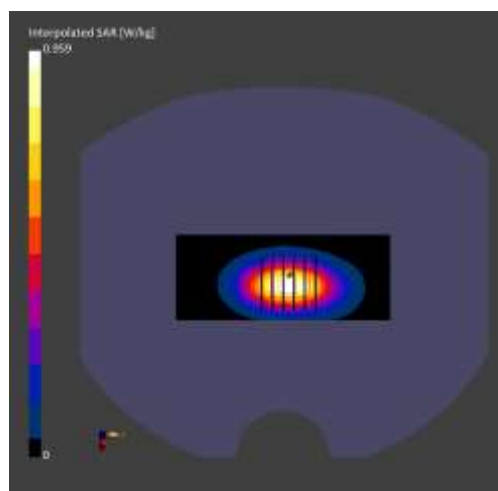
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.504	0.528
psSAR10g [W/Kg]	0.267	0.264
Power Drift [dB]	-0.02	0.00



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.3 °C
 Liquid Temperature: 19.3 °C
 Test Date: 09/26/2024
 Plot No.: B12
 Band: NR FDD Band n5 Body/Hotspot SAR

Communication System: UID 0, NR n5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.935$ S/m; $\epsilon_r = 41.497$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3882; ConvF(8.92, 8.92, 8.92) @ 836.5 MHz; Calibrated: 2023-11-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR Band n5 Body Right DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (5x13x1): Measurement grid:
 $dx=15$ mm, $dy=15$ mm.

Maximum value of SAR (measured) = 0.256 W/kg

NR Band n5 Body Right DFT-s QPSK 20MHz 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0:

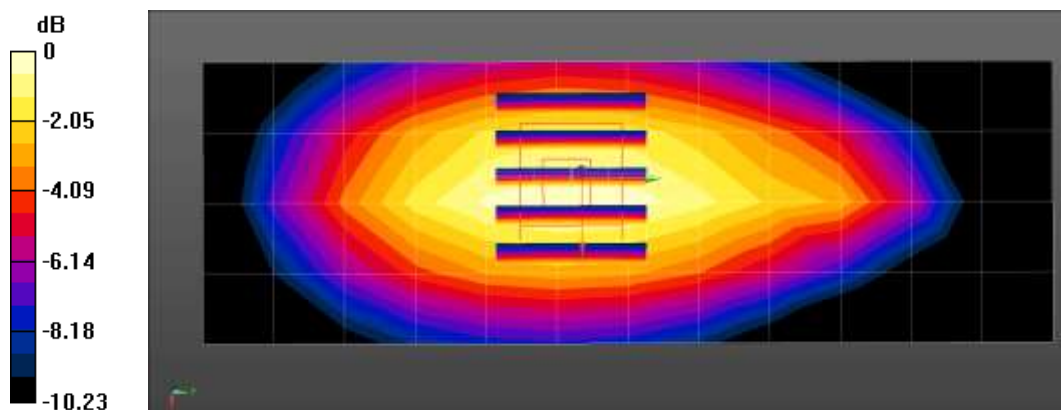
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 17.25 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.264 W/kg



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

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.9 °C
 Liquid Temperature: 22.8 °C
 Test Date: 09/19/2024
 Plot No.: B13
 Band: NR FDD Band n25 Body/Hotspot SAR

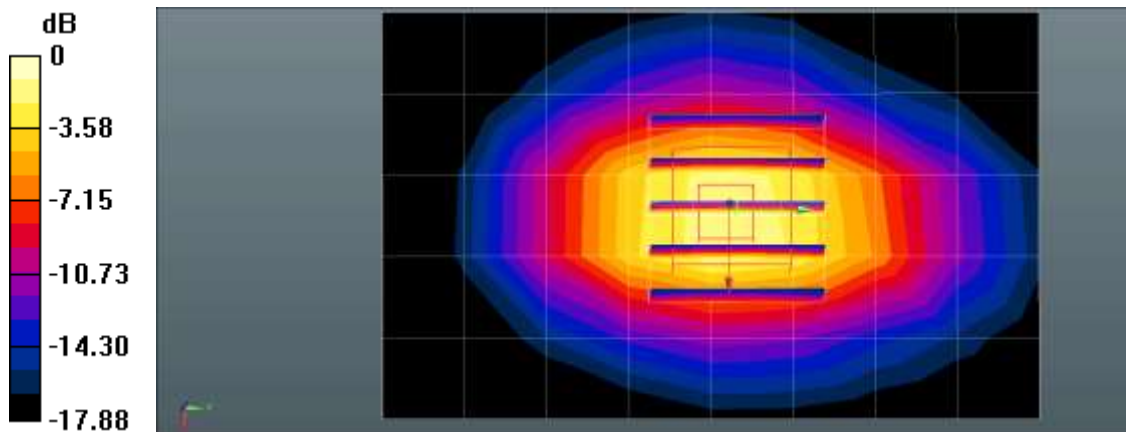
Communication System: UID 0, NR Band 2,25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1882.5$ MHz; $\sigma = 1.375$ S/m; $\epsilon_r = 39.239$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1882.5 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n25 Body Bottom CP QPSK 20MHz 1RB 1offset 376500ch/Area Scan (6x9x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.881 W/kg

NR Band n25 Body Bottom CP QPSK 20MHz 1RB 1offset 376500ch/Zoom Scan (5x5x7)/Cube
 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 32.29 V/m; Power Drift = -0.06 dB
 Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 0.869 W/kg; SAR(10 g) = 0.464 W/kg
 Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.3 °C
 Liquid Temperature: 19.3 °C
 Test Date: 09/26/2024
 Plot No.: B14
 Band: NR TDD Band n41 Body/Hotspot SAR

Measurement Report for Device, EDGE TOP, Band n41, 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)
 RBPosition:Low AntennaCfg:SISO, Channel 518598 (2592.990 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE TOP, 10.00	Band n41	5G NR FR1 TDD, 10803-AAF	2592.990, 518598	7.38	1.98	38.9

Hardware Setup

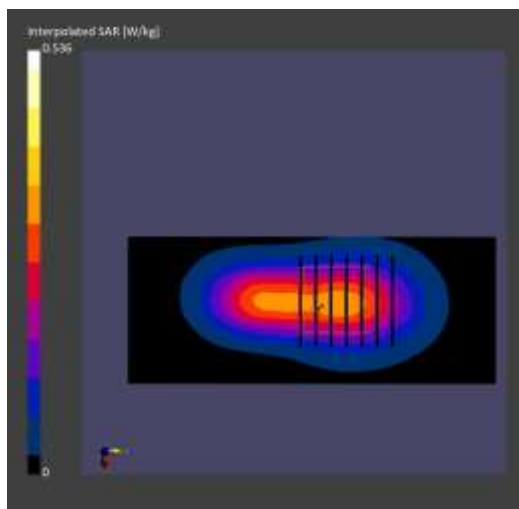
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.270	0.278
psSAR10g [W/Kg]	0.136	0.141
Power Drift [dB]	-0.02	0.02



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.7 °C
 Liquid Temperature: 22.7 °C
 Test Date: 09/20/2024
 Plot No.: B15
 Band: NR FDD Band n66 Body/Hotspot SAR

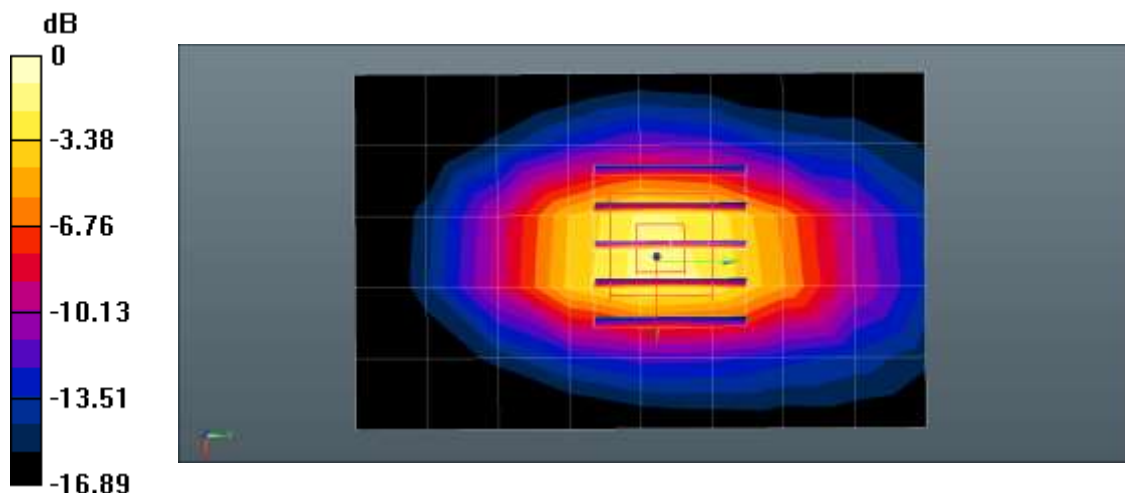
Communication System: UID 0, NR Band 66 (0); Frequency: 1745 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 1745 \text{ MHz}$; $\sigma = 1.368 \text{ S/m}$; $\epsilon_r = 39.29$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.25, 8.18, 7.93) @ 1745 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Body Bottom DFT-s QPSK 40MHz 216RB 0offset 349000ch/Area Scan (6x9x1): Measurement
 grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.695 W/kg

NR Band n66 Body Bottom DFT-s QPSK 40MHz 216RB 0offset 349000ch/Zoom Scan (5x5x7)/Cube
 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 28.94 V/m; Power Drift = 0.06 dB
 Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.716 W/kg; SAR(10 g) = 0.390 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: 19.9 °C
 Liquid Temperature: 19.9 °C
 Test Date: 10/23/2024
 Plot No.: B16
 Band: NR TDD Band n77 Body/Hotspot SAR

Measurement Report for Device, BACK, Band n77, 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)
 RBPosition:Low AntennaCfg:SISO, Channel 662000 (3930.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	Band n77	5G NR FR1 TDD, 10803-AAF	3930.000, 662000	6.52	3.38	37.4

Hardware Setup

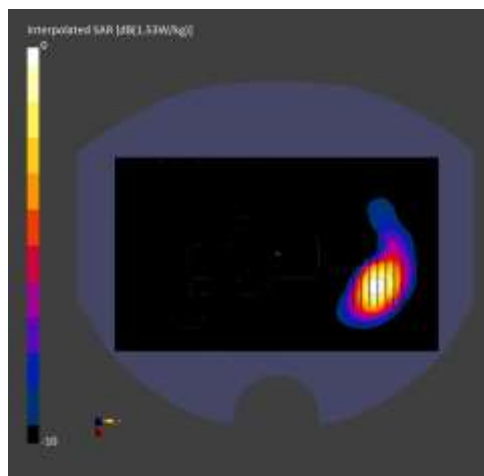
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.576	0.613
psSAR10g [W/Kg]	0.222	0.235
Power Drift [dB]	-0.17	0.13



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.0 °C
 Liquid Temperature: 19.0 °C
 Test Date: 10/03/2024
 Plot No.: B17
 Band: 2.4 GHz WLAN Body/Hotspot SAR

Measurement Report for Device, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps), Channel 6 (2437.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.000, 6	7.46	1.83	39.1

Hardware Setup

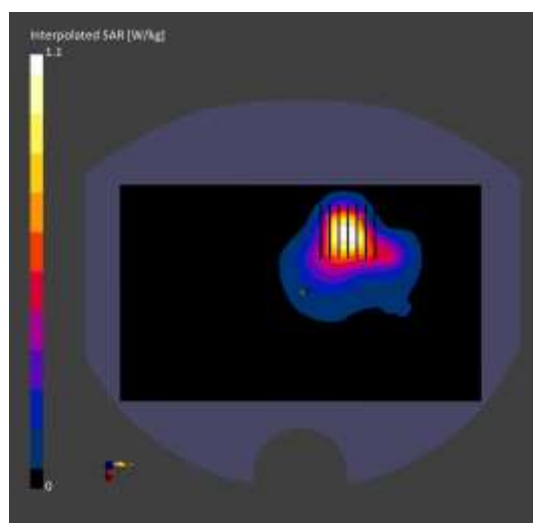
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.524	0.551
psSAR10g [W/Kg]	0.256	0.266
Power Drift [dB]	0.03	0.02



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.7 °C
 Liquid Temperature: 21.7 °C
 Test Date: 10/02/2024
 Plot No.: B18
 Band: 5 GHz WLAN Body/Hotspot SAR

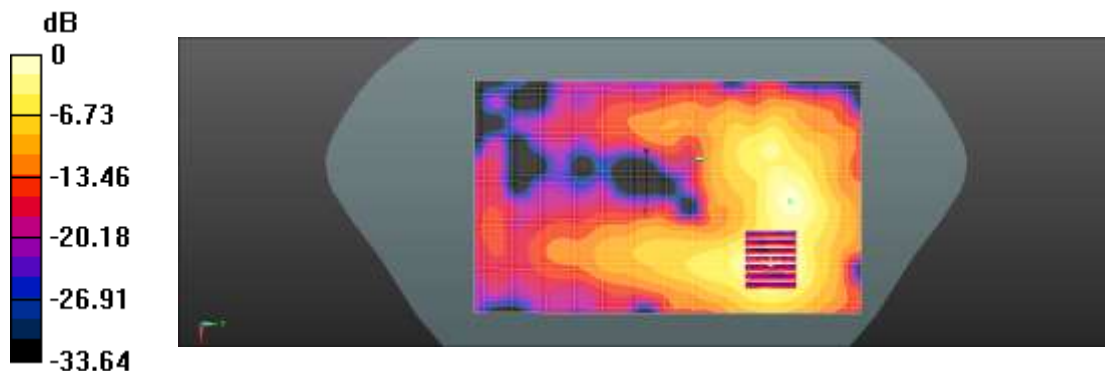
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5745 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 5745 \text{ MHz}$; $\sigma = 5.352 \text{ S/m}$; $\epsilon_r = 35.896$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(5.02, 5.22, 5.07) @ 5745 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- 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)

802.11a Body Rear 6Mbps 149ch/Area Scan (111x181x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
 Maximum value of SAR (interpolated) = 1.00 W/kg

802.11a Body Rear 6Mbps 149ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 0 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 1.90 W/kg
SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.152 W/kg
 Maximum value of SAR (measured) = 0.996 W/kg



0 dB = 0.996 W/kg = -0.02 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.1 °C
 Liquid Temperature: 19.0 °C
 Test Date: 10/05/2024
 Plot No.: B19
 Band: 6 GHz WLAN Hotspot SAR

Measurement Report for Device, EDGE LEFT, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 143 (6665.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 10.00	U-NII-7	WLAN, 10755-AAC	6665.000, 143	5.56	6.44	33.4

Hardware Setup

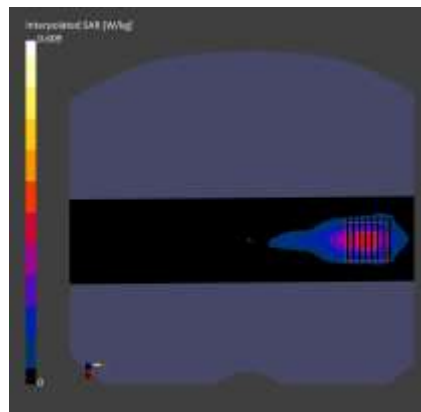
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 204.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.0 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/kg]	0.110	0.126
psSAR10g [W/kg]	0.038	0.042
psAPD (1.0cm2, sq) [W/m2]		1.26
psAPD (4.0cm2, sq) [W/m2]		0.959
Power Drift [dB]	-0.15	0.11



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.3 °C
 Liquid Temperature: 19.2 °C
 Test Date: 10/04/2024
 Plot No.: B20
 Band: Bluetooth/ LE Body/Hotspot SAR

Measurement Report for Device, EDGE RIGHT, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE RIGHT, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.000, 39	7.46	1.83	39.1

Hardware Setup

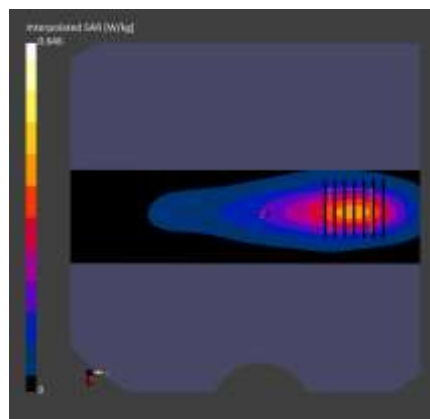
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt)	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.321	0.326
psSAR10g [W/Kg]	0.161	0.162
Power Drift [dB]	-0.11	0.03



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 21.4 °C
 Liquid Temperature: 21.4 °C
 Test Date: 09/30/2024
 Plot No.: C1
 Band: 5 GHz WLAN Phablet SAR

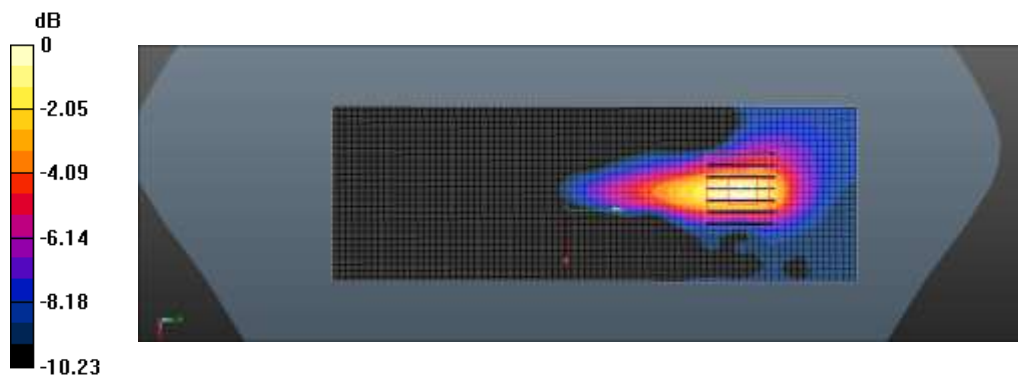
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.139$ S/m; $\epsilon_r = 35.731$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(4.93, 5.12, 4.98) @ 5600 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- 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)

802.11a Phablet Left 6Mbps 120ch/Area Scan (61x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 23.0 W/kg

802.11a Phablet Left 6Mbps 120ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
 Reference Value = 2.664 V/m; Power Drift = 0.13 dB
 Peak SAR (extrapolated) = 64.6 W/kg
SAR(1 g) = 7.36 W/kg; SAR(10 g) = 1.55 W/kg
 Maximum value of SAR (measured) = 24.5 W/kg



0 dB = 24.5 W/kg = 13.89 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 19.4 °C
 Liquid Temperature: 19.3 °C
 Test Date: 10/06/2024
 Plot No.: C2
 Band: 6 GHz WLAN Phablet SAR

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 0.00	U-NII-6	WLAN, 10755-AAC	6505.000, 111	5.56	6.25	34.0

Hardware Setup

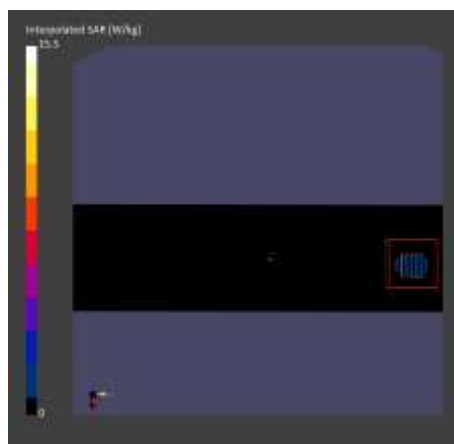
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 204.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.0 x 8.5	2.2 x 2.2 x 1.2
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.2

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/kg]	1.47	2.16
psSAR10g [W/kg]	0.347	0.396
psAPD (1.0cm2, sq) [W/m2]		21.6
psAPD (4.0cm2, sq) [W/m2]		9.68
Power Drift [dB]	0.11	0.19



Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Ambient Temperature: 22.4 °C
 Liquid Temperature: 22.3 °C
 Test Date: 10/03/2024
 Plot No.: C3
 Band: NFC Phablet SAR

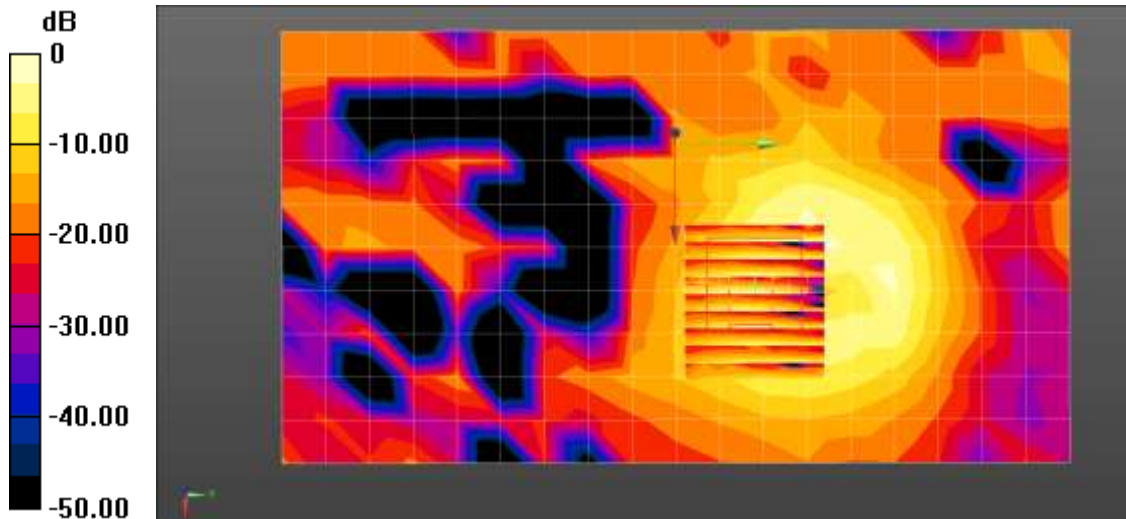
Communication System: UID 0, NFC (0); Frequency: 13.56 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 14 \text{ MHz}$; $\sigma = 0.74 \text{ S/m}$; $\epsilon_r = 54.495$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.39, 5.7, 6.16) @ 13.56 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

NFC Phablet Rear Type B 106kbps/Area Scan (11x19x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 0.0598 W/kg

NFC Phablet Rear Type B 106kbps/Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 1.766 V/m; Power Drift = 0.17 dB
 Peak SAR (extrapolated) = 0.293 W/kg
SAR(1 g) = 0.051 W/kg; SAR(10 g) = 0.018 W/kg
 Maximum value of SAR (measured) = 0.0668 W/kg



0 dB = 0.0668 W/kg = -11.75 dBW/kg

Test Laboratory: HCT CO., LTD
 EUT Type: Mobile Phone
 Liquid Temperature: 19.7 °C
 Test Date: 09/30/2024
 Plot No.: D1
 Band: 6 GHz WLAN PD

Measurement Report for Device, EDGE LEFT, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 111 (6505.0 MHz)

Exposure Conditions

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

Hardware Setup

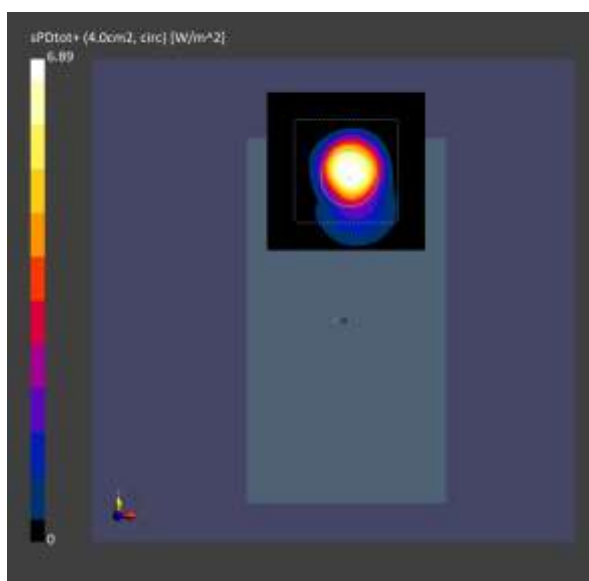
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave -	Air -	EUmmWV4 - SN9528_F1-55GHz, 2024-05-17	DAE4 Sn446, 2023-11-16

Scans Setup

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

Measurement Results

Scan Type	5G Scan
Date	2024-09-30, 17:49
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.46
psPDtot+ [W/m ²]	6.89
Power Drift [dB]	-0.13



Appendix C. – Dipole Verification Plots

■ Verification Data (750 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.6 °C
 Test Date: 09/05/2024
 Band: LTE FDD Band 12 _MAIN1 ANT.

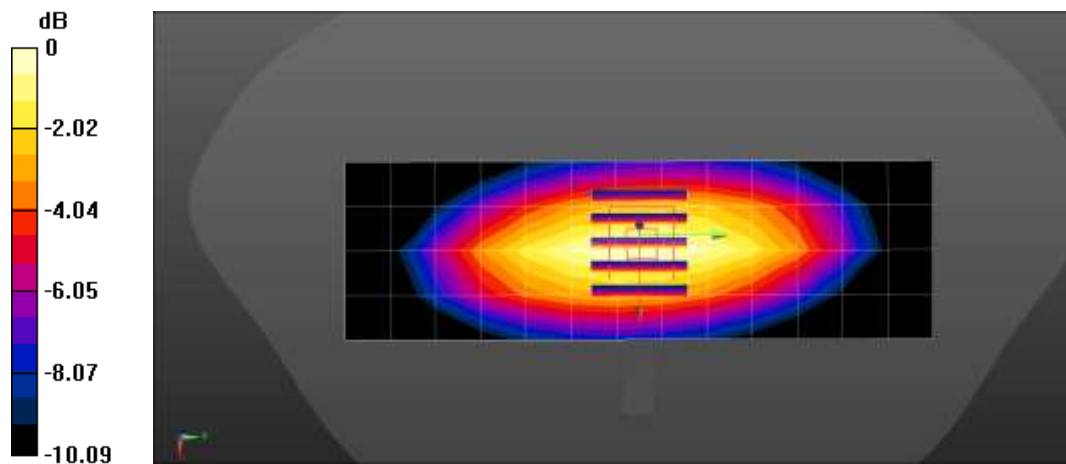
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.913 \text{ S/m}$; $\epsilon_r = 42.648$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 750 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.549 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 26.12 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 0.615 W/kg
SAR(1 g) = 0.425 W/kg; SAR(10 g) = 0.285 W/kg
 Maximum value of SAR (measured) = 0.556 W/kg



0 dB = 0.556 W/kg = -2.55 dBW/kg

■ Verification Data (750 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.9 °C
 Test Date: 09/12/2024
 Band: LTE FDD Band 12 _SUB1 ANT.

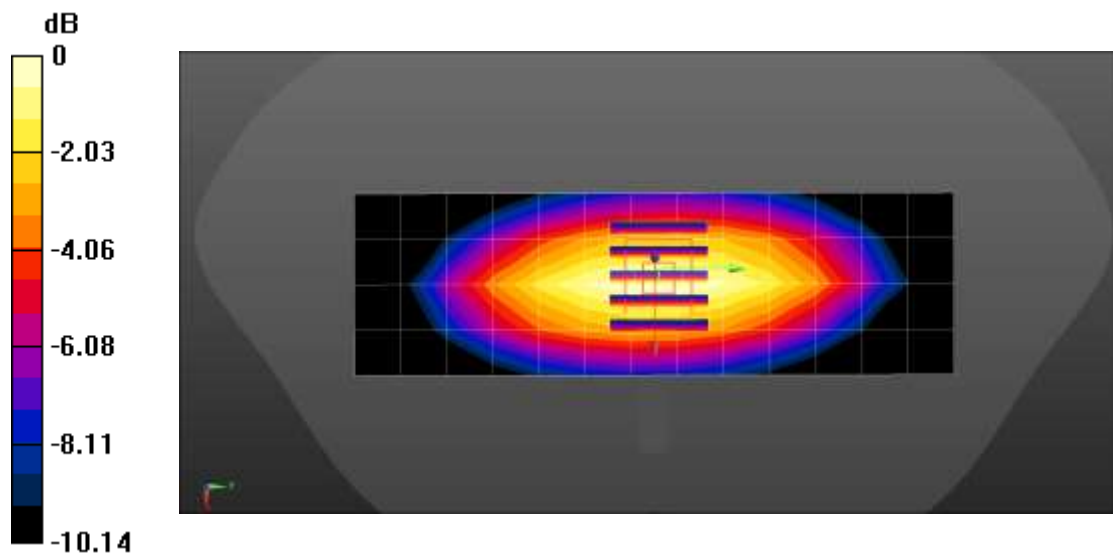
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 41.618$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 750 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.545 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 26.26 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 0.614 W/kg
SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.282 W/kg
 Maximum value of SAR (measured) = 0.554 W/kg



0 dB = 0.554 W/kg = -2.56 dBW/kg

■ Verification Data (750 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.6 °C
 Test Date: 09/05/2024
 Band: LTE FDD Band 13_MAIN1 ANT.

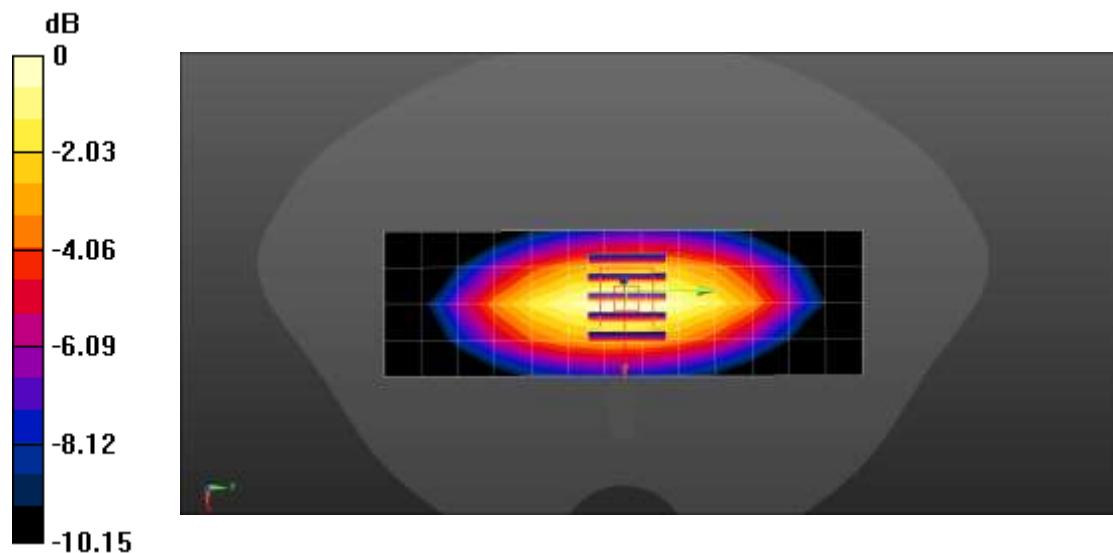
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 42.139$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 750 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.529 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 26.27 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 0.591 W/kg
SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.273 W/kg
 Maximum value of SAR (measured) = 0.534 W/kg



0 dB = 0.534 W/kg = -2.72 dBW/kg

■ Verification Data (750 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.9 °C
 Test Date: 09/12/2024
 Band: LTE FDD Band 13_SUB1 ANT.

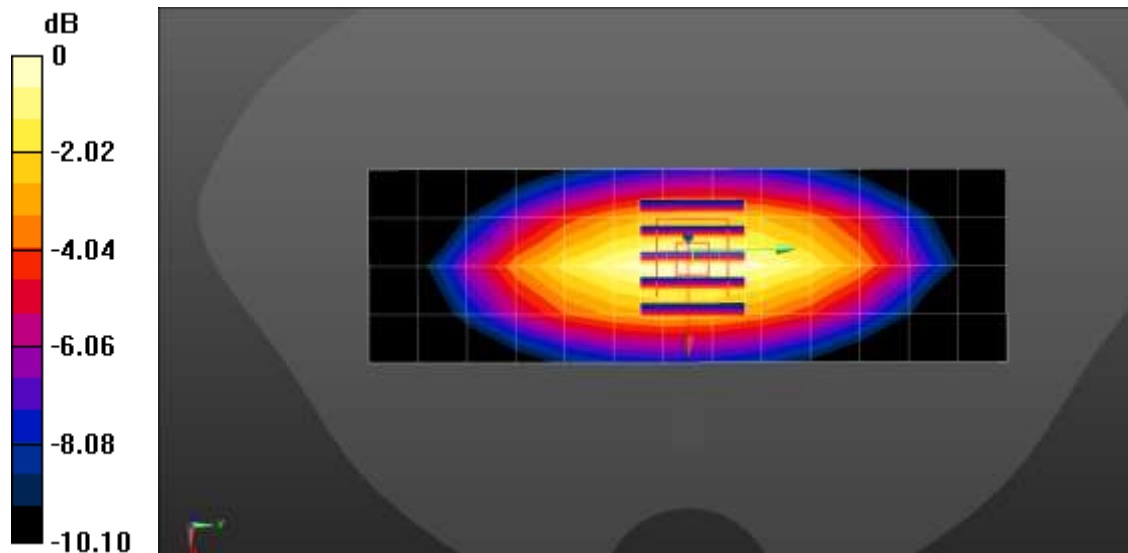
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.869 \text{ S/m}$; $\epsilon_r = 42.928$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.88, 9.39, 8.99) @ 750 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.526 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 26.30 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 0.594 W/kg
SAR(1 g) = 0.409 W/kg; SAR(10 g) = 0.273 W/kg
 Maximum value of SAR (measured) = 0.536 W/kg



0 dB = 0.536 W/kg = -2.71 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.6 °C
 Test Date: 09/10/2024
 Band: GSM 850 _MAIN1 ANT.

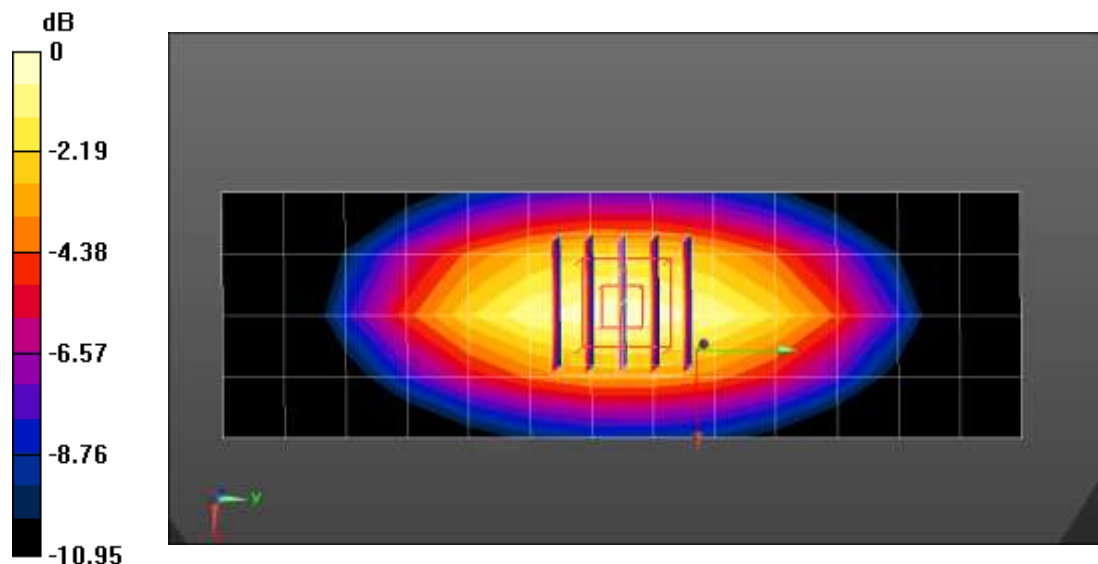
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.918 \text{ S/m}$; $\epsilon_r = 43.142$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.652 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 28.59 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 0.751 W/kg
SAR(1 g) = 0.506 W/kg; SAR(10 g) = 0.330 W/kg
 Maximum value of SAR (measured) = 0.674 W/kg



0 dB = 0.674 W/kg = -1.71 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.8 °C
 Test Date: 09/14/2024
 Band: GSM 850 _SUB1 ANT.

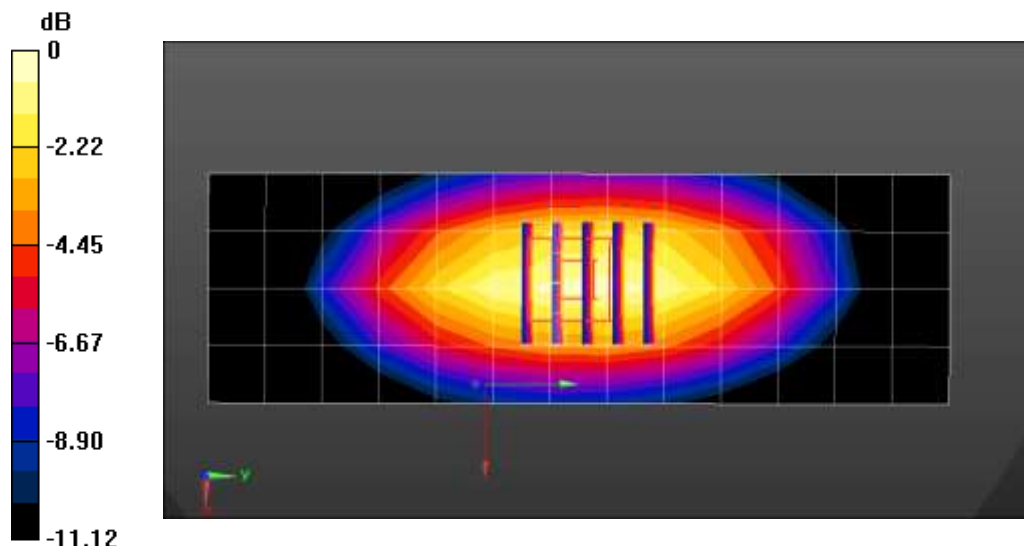
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.918$ S/m; $\epsilon_r = 42.846$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.634 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 30.03 V/m; Power Drift = -0.14 dB
 Peak SAR (extrapolated) = 0.776 W/kg
SAR(1 g) = 0.519 W/kg; SAR(10 g) = 0.338 W/kg
 Maximum value of SAR (measured) = 0.688 W/kg



0 dB = 0.688 W/kg = -1.62 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.6 °C
 Test Date: 09/10/2024
 Band: UMTS Band 5 _MAIN1 ANT

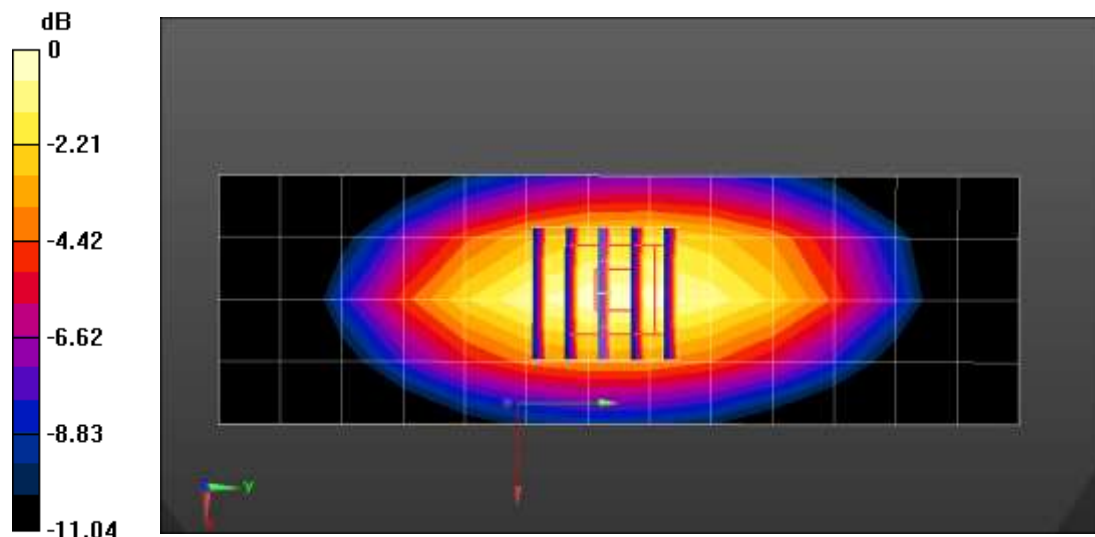
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 42.538$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.672 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 28.93 V/m; Power Drift = -0.00 dB
 Peak SAR (extrapolated) = 0.785 W/kg
SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.342 W/kg
 Maximum value of SAR (measured) = 0.702 W/kg



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

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.6 °C
 Test Date: 09/11/2024
 Band: UMTS Band 5 _MAIN1 ANT

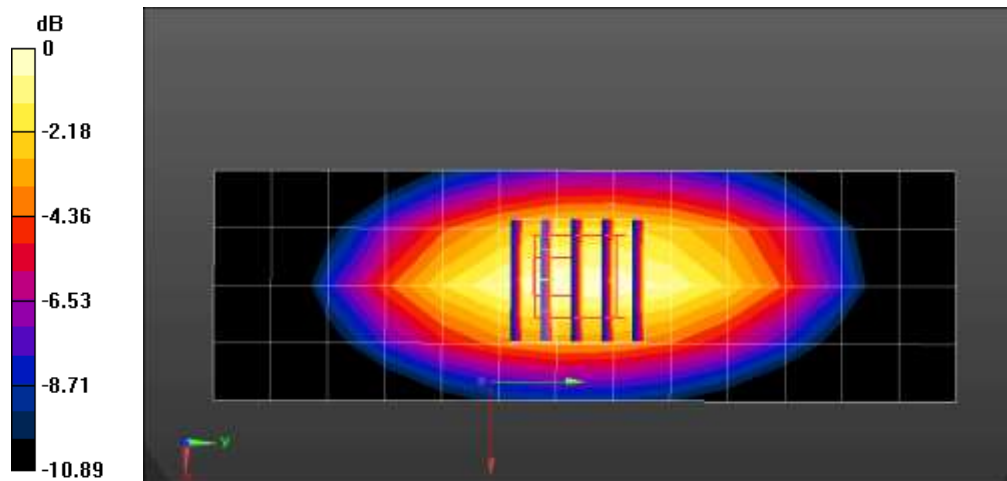
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.765$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.675 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 28.88 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 0.762 W/kg
SAR(1 g) = 0.507 W/kg; SAR(10 g) = 0.337 W/kg
 Maximum value of SAR (measured) = 0.683 W/kg



0 dB = 0.683 W/kg = -1.66 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.1 °C
 Test Date: 09/06/2024
 Band: LTE FDD Band 26 _MAIN1 ANT.

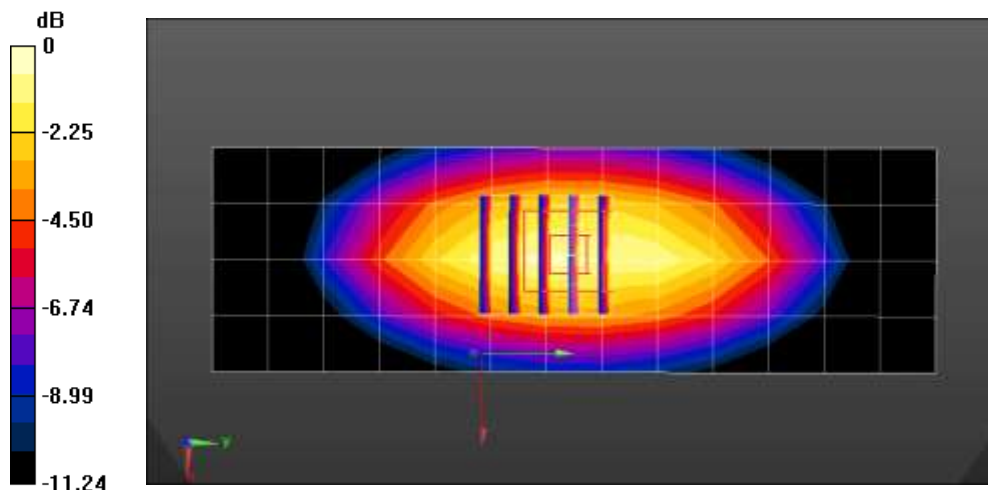
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.316$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.616 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 27.14 V/m; Power Drift = 0.14 dB
 Peak SAR (extrapolated) = 0.762 W/kg
SAR(1 g) = 0.510 W/kg; SAR(10 g) = 0.331 W/kg
 Maximum value of SAR (measured) = 0.681 W/kg



0 dB = 0.681 W/kg = -1.67 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.8 °C
 Test Date: 09/08/2024
 Band: LTE FDD Band 26 _SUB1 ANT.

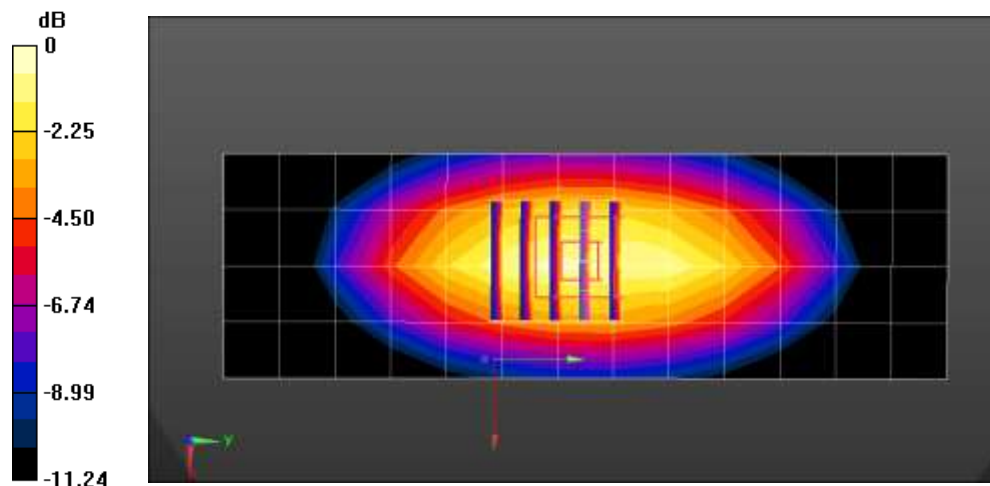
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.918 \text{ S/m}$; $\epsilon_r = 42.104$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3768; ConvF(8.52, 9.01, 8.62) @ 835 MHz; Calibrated: 2024-08-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.613 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 27.14 V/m; Power Drift = 0.14 dB
 Peak SAR (extrapolated) = 0.758 W/kg
SAR(1 g) = 0.507 W/kg; SAR(10 g) = 0.330 W/kg
 Maximum value of SAR (measured) = 0.678 W/kg



0 dB = 0.678 W/kg = -1.69 dBW/kg

■ Verification Data (1 800 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.7 °C
 Test Date: 09/11/2024
 Band: UMTS Band 4 _MAIN1 ANT.

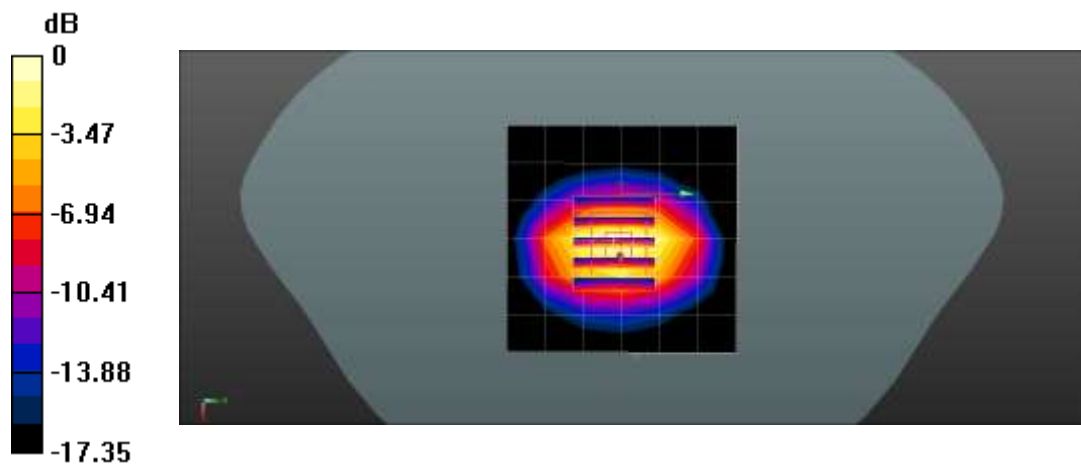
Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1800$ MHz; $\sigma = 1.429$ S/m; $\epsilon_r = 39.069$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.8, 5.16, 5.15) @ 1800 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1800Mhz Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.27 W/kg

1800Mhz Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 41.28 V/m; Power Drift = -0.14 dB
 Peak SAR (extrapolated) = 3.39 W/kg
SAR(1 g) = 1.94 W/kg; SAR(10 g) = 1.03 W/kg
 Maximum value of SAR (measured) = 2.42 W/kg



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

■ Verification Data (1 800 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.5 °C
 Test Date: 09/07/2024
 Band: LTE FDD Band 66 _MAIN1 ANT.

Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	1800.000, 0	8.29	1.42	40.1

Hardware Setup

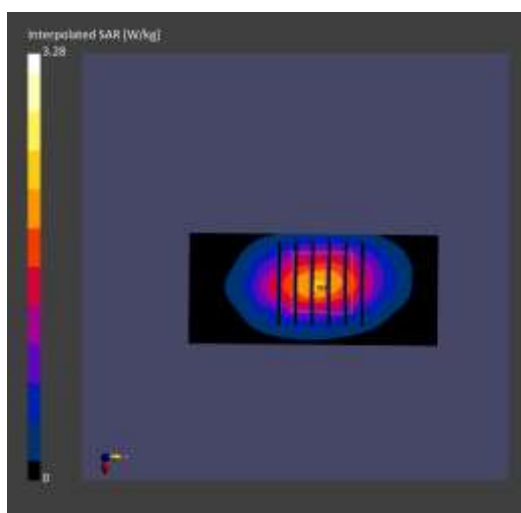
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.80	1.81
psSAR10g [W/Kg]	0.955	0.961
Power Drift [dB]	-0.07	0.01



■ Verification Data (1 800 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.05 W
Liquid Temp: 19.0 °C
Test Date: 09/09/2024
Band: LTE FDD Band 66 _SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	1800.000, 0	8.29	1.41	39.7

Hardware Setup

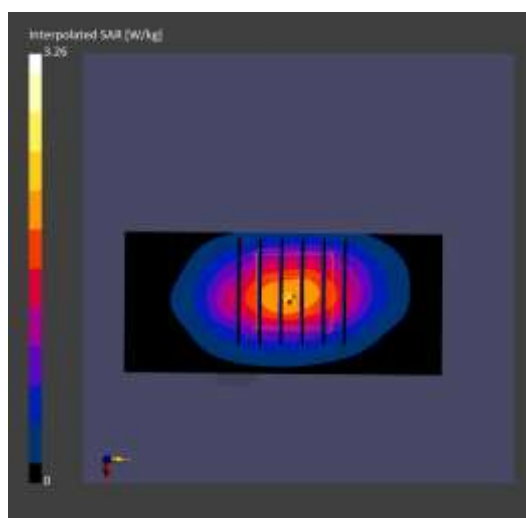
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.77	1.80
psSAR10g [W/Kg]	0.942	0.953
Power Drift [dB]	0.00	0.01



■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.4 °C
 Test Date: 09/23/2024
 Band: GSM 1900 _MAIN1 ANT.

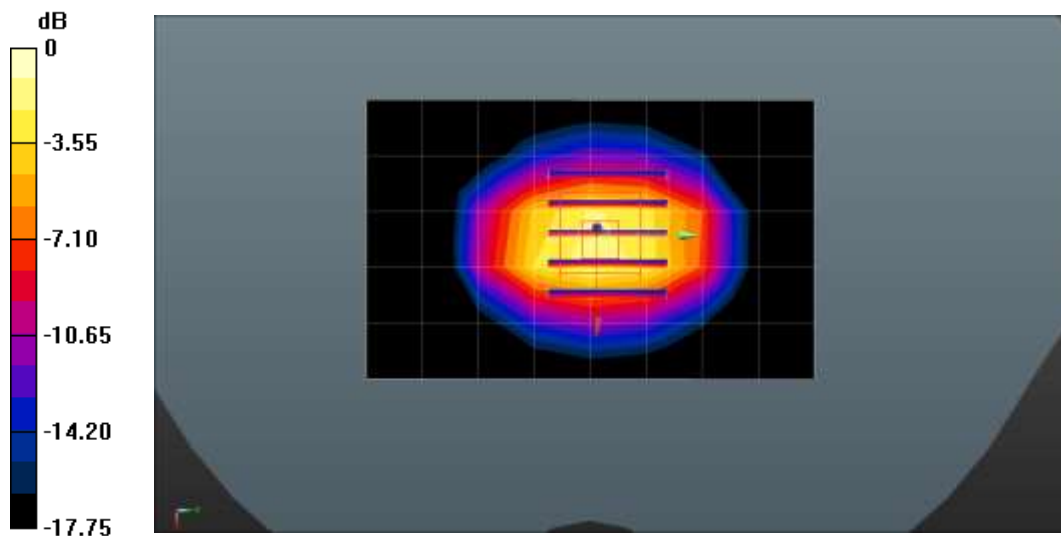
Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.391$ S/m; $\epsilon_r = 39.159$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1900 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.21 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 51.18 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 3.66 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.09 W/kg
 Maximum value of SAR (measured) = 3.15 W/kg



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

■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.4 °C
 Test Date: 09/09/2024
 Band: UMTS Band 2 _MAIN1 ANT.

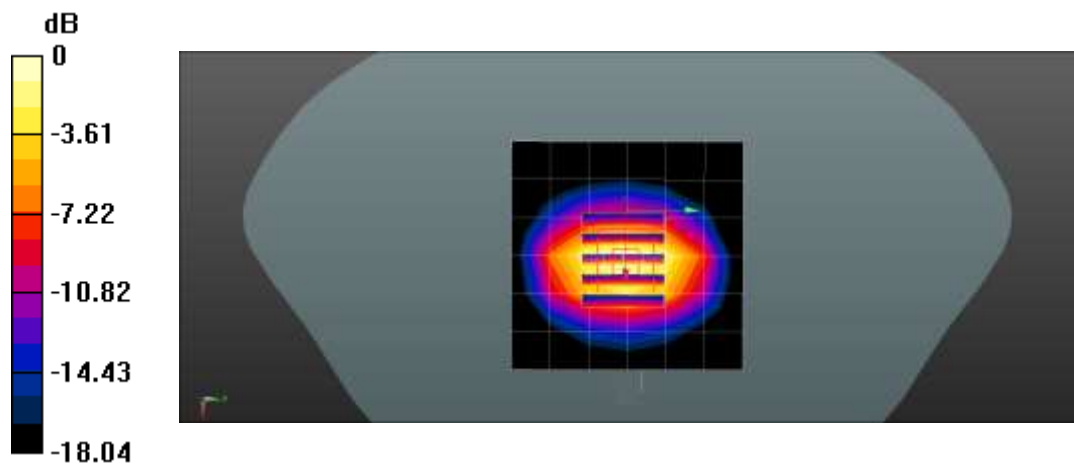
Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.432$ S/m; $\epsilon_r = 40.404$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.69, 5.04, 5.03) @ 1900 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: SAM with CRP v5.0(Right); Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.36 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 41.97 V/m; Power Drift = -0.06 dB
 Peak SAR (extrapolated) = 3.72 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.05 W/kg
 Maximum value of SAR (measured) = 2.57 W/kg



0 dB = 2.57 W/kg = 4.10 dBW/kg

■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.05 W
Liquid Temp: 19.5 °C
Test Date: 09/06/2024
Band: LTE FDD Band 25 _MAIN1 ANT.

Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	1900.000, 0	7.94	1.40	40.0

Hardware Setup

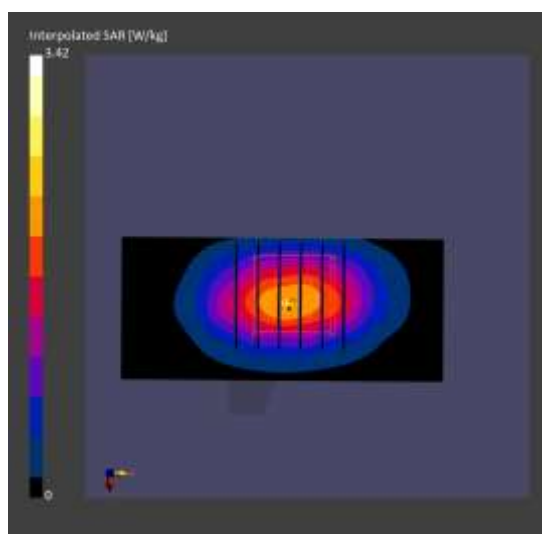
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.85	1.90
psSAR10g [W/Kg]	0.975	0.999
Power Drift [dB]	-0.00	0.00



■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.5 °C
 Test Date: 09/08/2024
 Band: LTE FDD Band 25 _SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	1900.000, 0	7.94	1.40	40.1

Hardware Setup

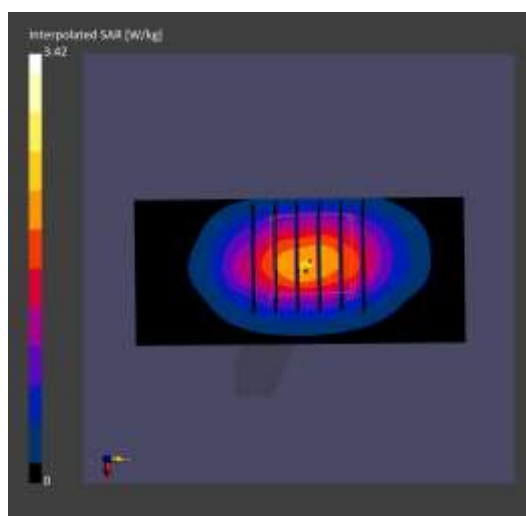
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.86	1.90
psSAR10g [W/Kg]	0.978	1.00
Power Drift [dB]	0.01	0.00



■ Verification Data (2 450 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.0 °C
 Test Date: 10/03/2024
 Band: 2.4 GHz WLAN

Measurement Report for Device, , , CW, Channel 0 (2450.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	2450.000, 0	7.46	1.84	39.1

Hardware Setup

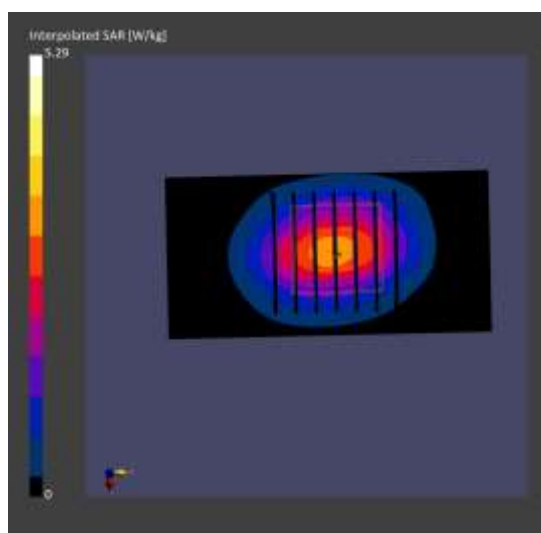
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.65	2.64
psSAR10g [W/Kg]	1.24	1.24
Power Drift [dB]	-0.04	-0.13



■ Verification Data (2 450 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.05 W
Liquid Temp: 19.2 °C
Test Date: 10/04/2024
Band: Bluetooth

Measurement Report for Device, , , CW, Channel 0 (2450.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	2450.000, 0	7.46	1.84	39.1

Hardware Setup

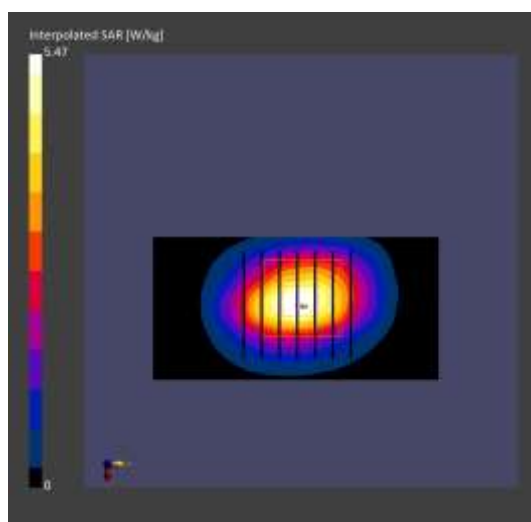
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.63	2.67
psSAR10g [W/Kg]	1.24	1.23
Power Drift [dB]	-0.01	0.00



■ Verification Data (2 600 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 20.5 °C
 Test Date: 09/05/2024
 Band: LTE TDD Band 41 (PC3) _MAIN2 ANT.

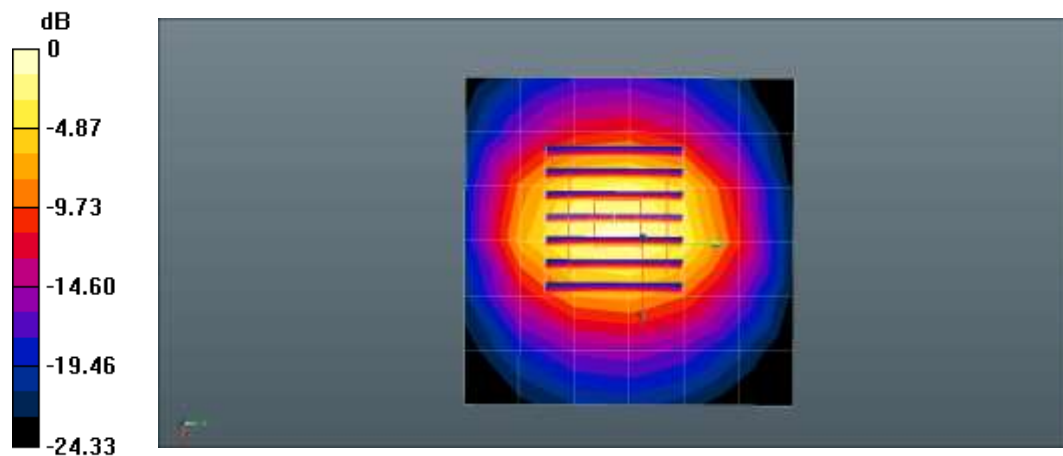
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.98$ S/m; $\epsilon_r = 39.16$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.32, 4.65, 4.64) @ 2600 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: SAM with CRP v5.0(Left); Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 3.40 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 42.61 V/m; Power Drift = 0.09 dB
 Peak SAR (extrapolated) = 6.45 W/kg
SAR(1 g) = 2.85 W/kg; SAR(10 g) = 1.25 W/kg
 Maximum value of SAR (measured) = 3.84 W/kg



0 dB = 3.84 W/kg = 5.84 dBW/kg

■ Verification Data (2 600 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.1 °C
 Test Date: 10/18/2024
 Band: LTE TDD Band 41 (PC3) Head _SUB2 ANT.

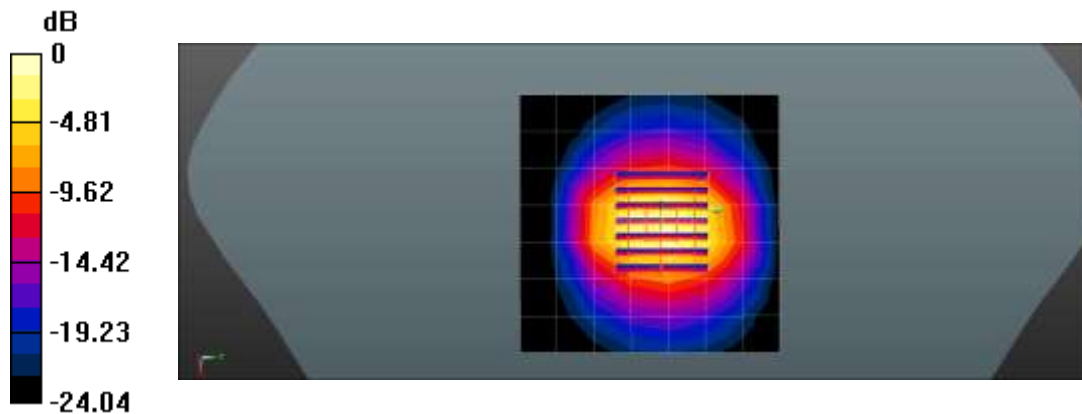
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 39.466$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(6.55, 7.4, 7.17) @ 2600 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 3.67 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 50.71 V/m; Power Drift = -0.17 dB
 Peak SAR (extrapolated) = 5.71 W/kg
SAR(1 g) = 2.72 W/kg; SAR(10 g) = 1.21 W/kg
 Maximum value of SAR (measured) = 4.65 W/kg



0 dB = 4.65 W/kg = 6.67 dBW/kg

■ Verification Data (2 600 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.0 °C
 Test Date: 09/12/2024
 Band: LTE TDD Band 41 (PC3) Body _SUB2 ANT.

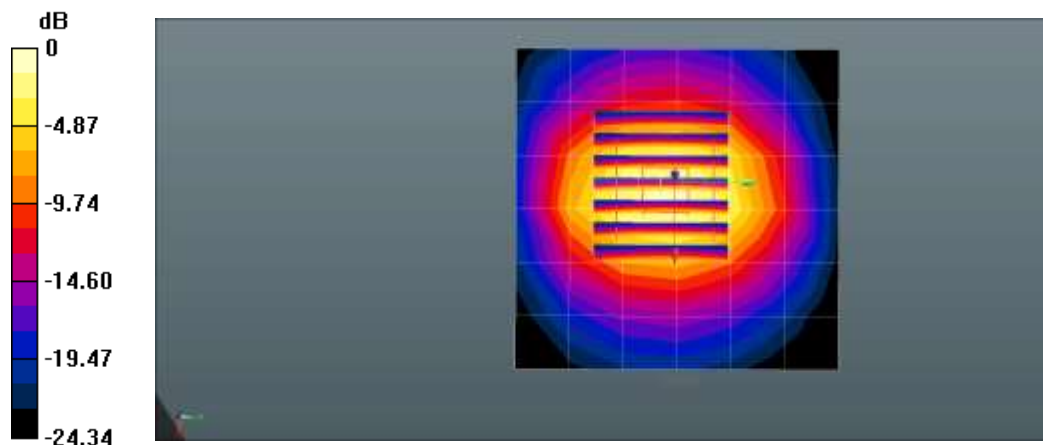
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.985$ S/m; $\epsilon_r = 39.502$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.32, 4.65, 4.64) @ 2600 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: SAM with CRP v5.0(Left); Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 3.41 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 42.76 V/m; Power Drift = 0.09 dB
 Peak SAR (extrapolated) = 6.46 W/kg
SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.26 W/kg
 Maximum value of SAR (measured) = 3.84 W/kg



0 dB = 3.84 W/kg = 5.84 dBW/kg

■ Verification Data (5 250 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.05 W
Liquid Temp: 22.3 °C
Test Date: 09/26/2024
Band: U-NII-2A Head

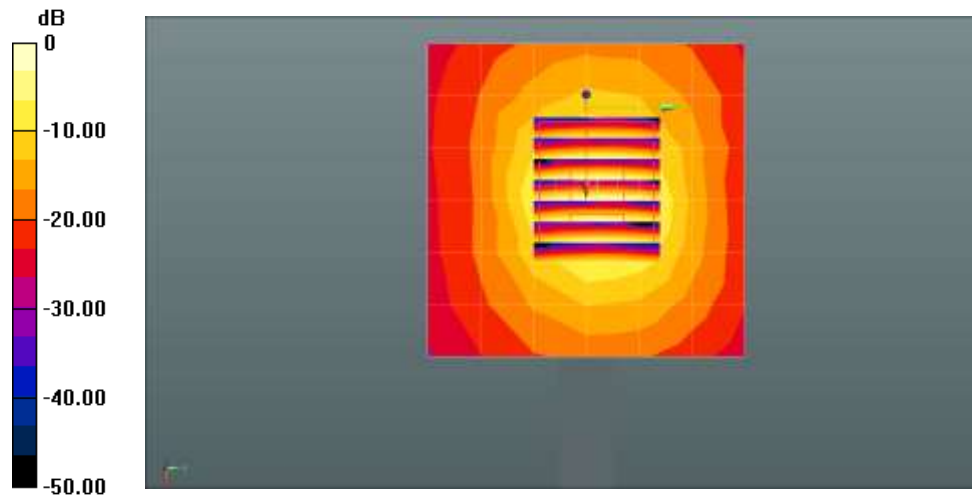
Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5250 \text{ MHz}$; $\sigma = 4.743 \text{ S/m}$; $\epsilon_r = 35.661$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(5.03, 5.68, 5.51) @ 5250 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5250MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 9.89 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 48.23 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 18.8 W/kg
SAR(1 g) = 4.11 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 10.6 W/kg



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

■ Verification Data (5 250 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.9 °C
 Test Date: 09/29/2024
 Band: U-NII-2A Body

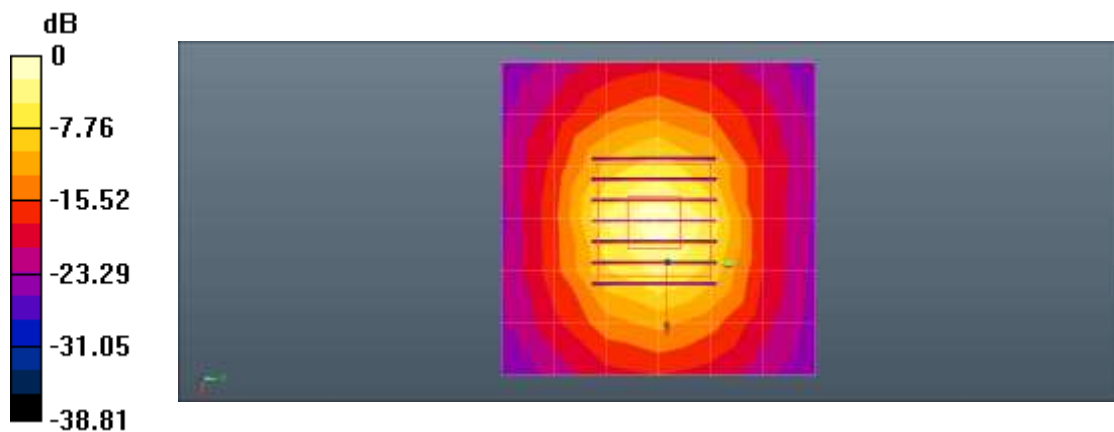
Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5250 \text{ MHz}$; $\sigma = 4.746 \text{ S/m}$; $\epsilon_r = 35.657$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(5.41, 5.62, 5.46) @ 5250 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5250MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 10.7 W/kg

5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 50.08 V/m; Power Drift = -0.11 dB
 Peak SAR (extrapolated) = 18.5 W/kg
SAR(1 g) = 4.26 W/kg; SAR(10 g) = 1.21 W/kg
 Maximum value of SAR (measured) = 10.8 W/kg



0 dB = 10.8 W/kg = 10.33 dBW/kg

■ Verification Data (5 600 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.3 °C
 Test Date: 09/26/2024
 Band: U-NII-2C Head

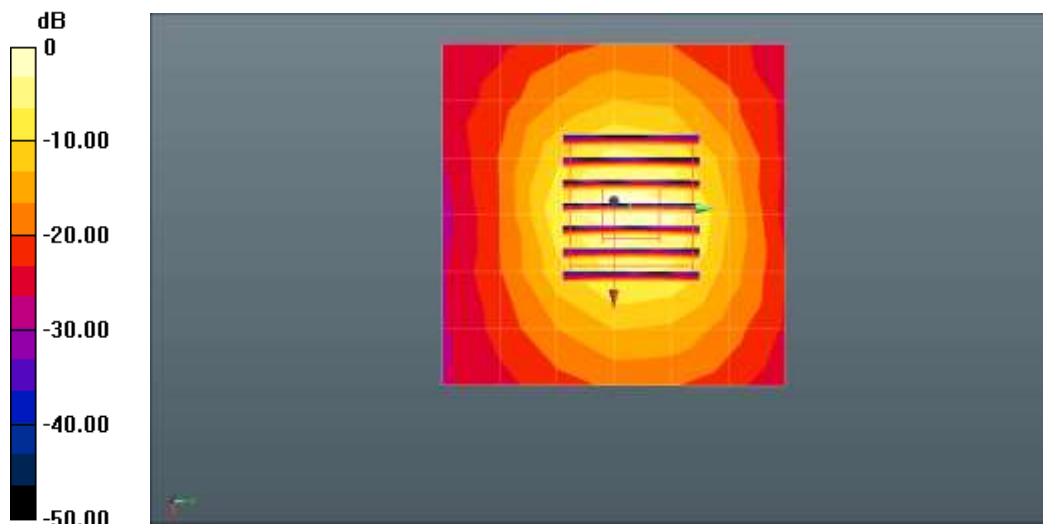
Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.135$ S/m; $\epsilon_r = 35.722$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(4.63, 5.23, 5.07) @ 5600 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (measured) = 10.6 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
 Reference Value = 47.66 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 22.0 W/kg
SAR(1 g) = 4.33 W/kg; SAR(10 g) = 1.22 W/kg
 Maximum value of SAR (measured) = 11.5 W/kg



0 dB = 11.5 W/kg = 10.61 dBW/kg

■ Verification Data (5 600 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.4 °C
 Test Date: 09/30/2024
 Band: U-NII-2C Body

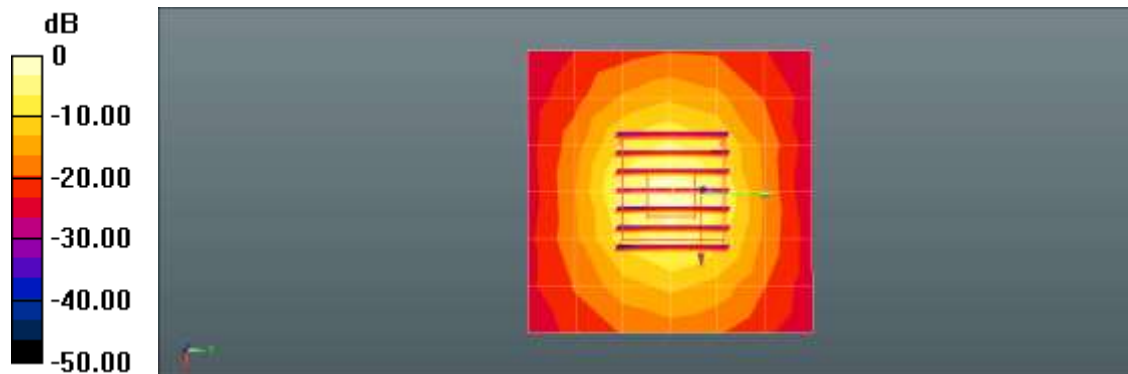
Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.139$ S/m; $\epsilon_r = 35.731$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(4.93, 5.12, 4.98) @ 5600 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (measured) = 11.4 W/kg

5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
 Reference Value = 49.98 V/m; Power Drift = -0.13 dB
 Peak SAR (extrapolated) = 21.5 W/kg
SAR(1 g) = 4.42 W/kg; SAR(10 g) = 1.24 W/kg
 Maximum value of SAR (measured) = 11.7 W/kg



0 dB = 11.7 W/kg = 10.68 dBW/kg

■ Verification Data (5 750 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.9 °C
 Test Date: 09/27/2024
 Band: U-NII-3 Head

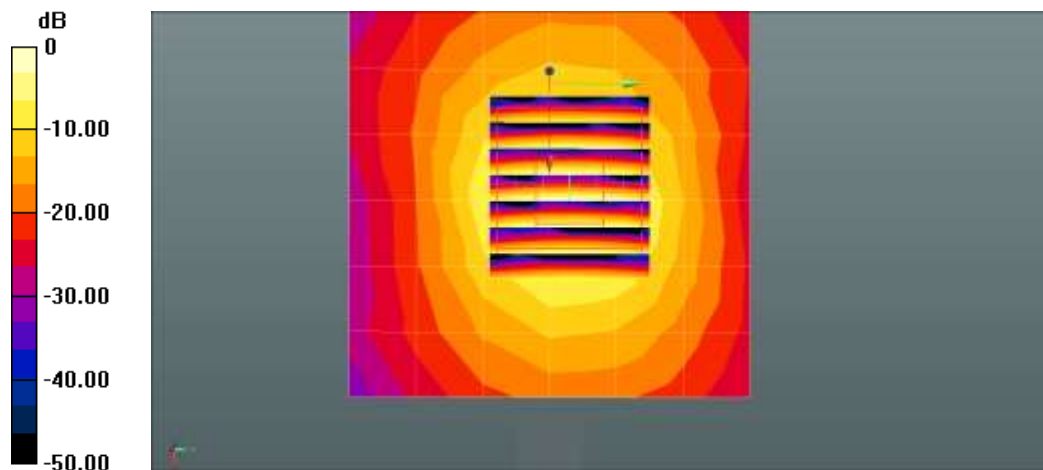
Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.348 \text{ S/m}$; $\epsilon_r = 35.889$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(4.63, 5.22, 5.06) @ 5750 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5750MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 9.34 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 43.92 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 20.0 W/kg
SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.06 W/kg
 Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 10.1 W/kg = 10.04 dBW/kg

■ Verification Data (5 750 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power 0.05 W
 Liquid Temp: 21.7 °C
 Test Date: 10/02/2024
 Band U-NII-3 Body

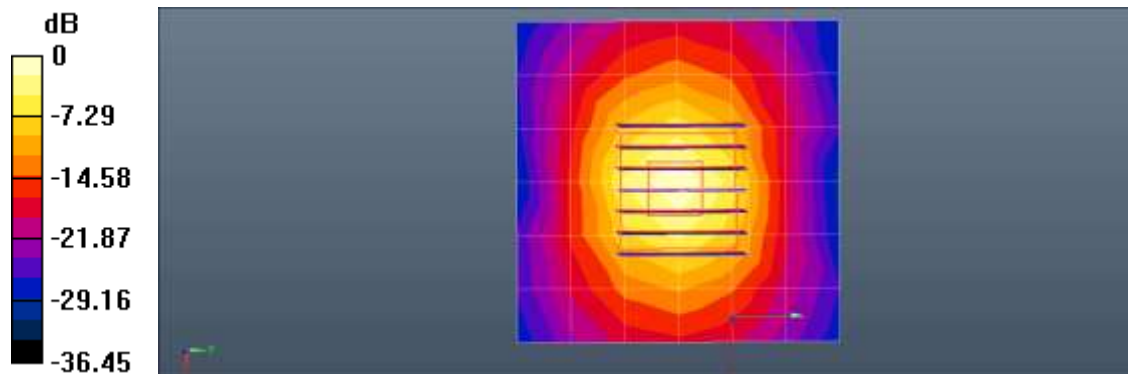
Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.349 \text{ S/m}$; $\epsilon_r = 35.895$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(5.02, 5.22, 5.07) @ 5750 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5750MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 10.9 W/kg

5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 46.93 V/m; Power Drift = -0.12 dB
 Peak SAR (extrapolated) = 21.4 W/kg
SAR(1 g) = 4.13 W/kg; SAR(10 g) = 1.16 W/kg
 Maximum value of SAR (measured) = 11.0 W/kg



0 dB = 11.0 W/kg = 10.41 dBW/kg

■ Verification Data (5 800 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.9 °C
 Test Date: 09/27/2024
 Band: U-NII-4 Head

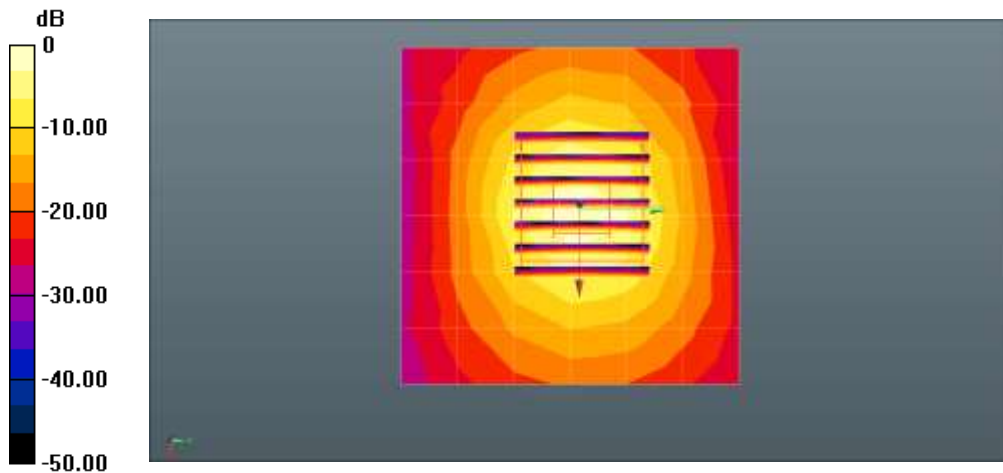
Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.261 \text{ S/m}$; $\epsilon_r = 35.614$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(4.66, 5.26, 5.1) @ 5800 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5800MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 9.74 W/kg

5800MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 45.31 V/m; Power Drift = -0.12 dB
 Peak SAR (extrapolated) = 20.1 W/kg
SAR(1 g) = 3.72 W/kg; SAR(10 g) = 1.05 W/kg
 Maximum value of SAR (measured) = 9.97 W/kg



0 dB = 9.97 W/kg = 9.99 dBW/kg

■ Verification Data (5 800 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.4 °C
 Test Date: 10/03/2024
 Band: U-NII-4 Body

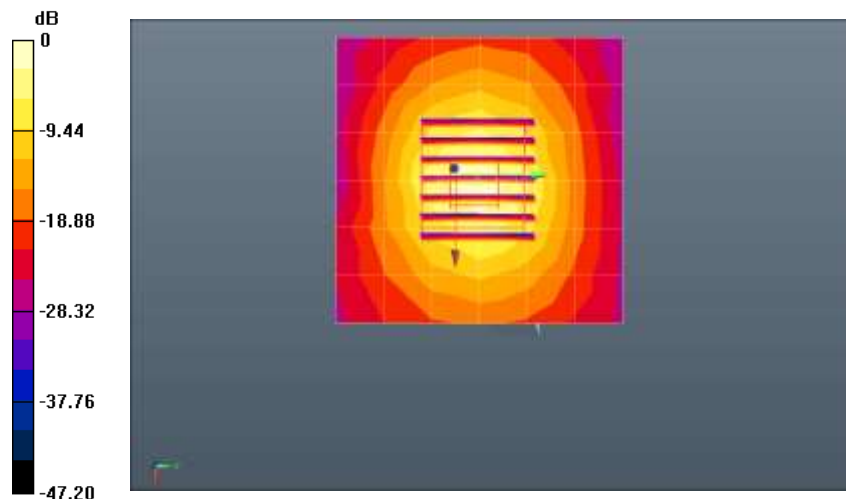
Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.264 \text{ S/m}$; $\epsilon_r = 35.622$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3903; ConvF(4.93, 5.13, 4.98) @ 5800 MHz; Calibrated: 2024-07-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2024-04-19
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

5800MHz Head Verification/Area Scan (7x7x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 10.6 W/kg

5800MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 47.48 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 20.9 W/kg
SAR(1 g) = 4.03 W/kg; SAR(10 g) = 1.14 W/kg
 Maximum value of SAR (measured) = 10.8 W/kg



0 dB = 10.8 W/kg = 10.33 dBW/kg

■ Verification Data (6 500 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.01 W
Liquid Temp: 19.0 °C
Test Date: 10/05/2024
Band: 6 GHz WLAN SISO

Measurement Report for Device, , , CW, Channel 0 (6500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	6500.000, 0	5.56	6.22	34.0
			-				

Hardware Setup

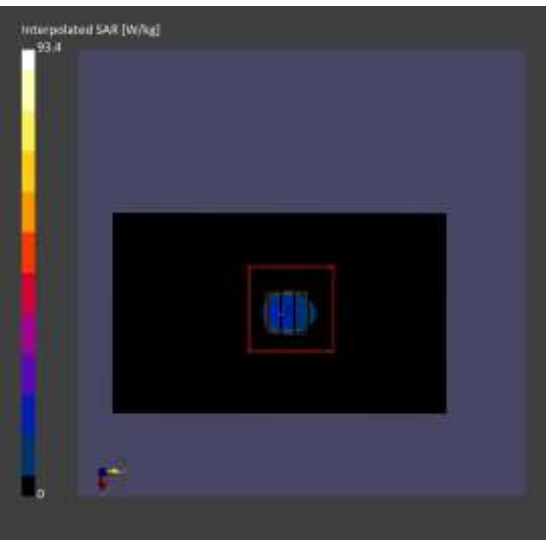
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	12.0	14.0
psSAR10g [W/Kg]	2.32	2.47
Power Drift [dB]	-0.03	-0.02



■ Verification Data (6 500 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power: 0.01 W
Liquid Temp: 19.3 °C
Test Date: 10/06/2024
Band: 6 GHz WLAN MIMO

Measurement Report for Device, , , CW, Channel 0 (6500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	6500.000, 0	5.56	6.24	34.0

Hardware Setup

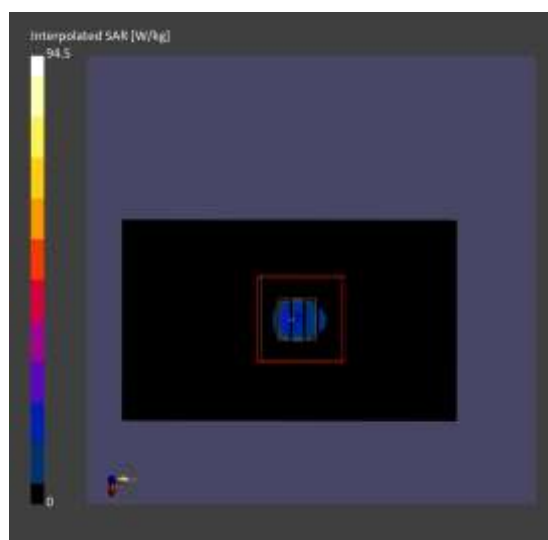
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	12.1	14.1
psSAR10g [W/Kg]	2.33	2.49
Power Drift [dB]	-0.02	-0.00



◆ 5G NR SUB 6

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 23.2 °C
 Test Date: 09/27/2024
 Band: NR FDD Band n5 _ MAIN1 ANT.

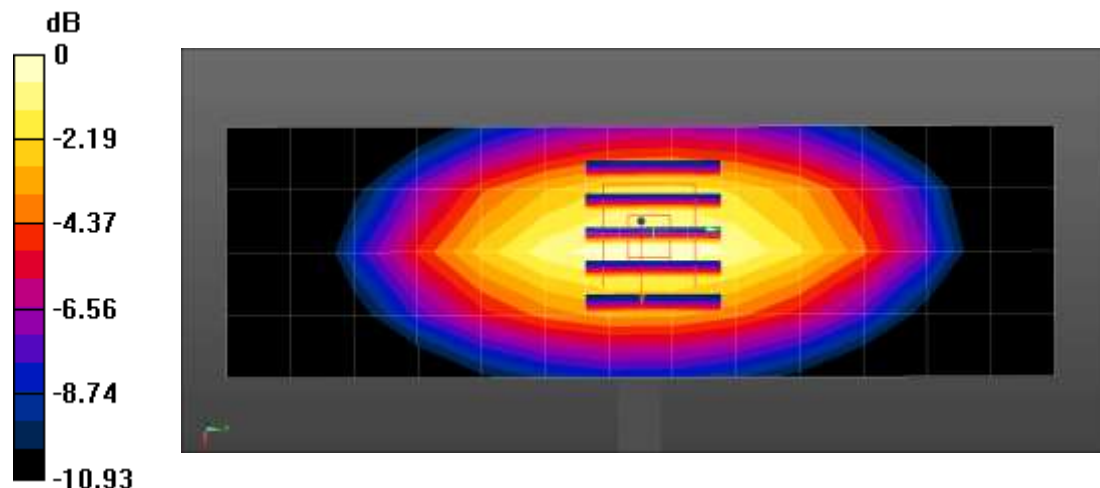
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.935$ S/m; $\epsilon_r = 42.203$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3882; ConvF(8.92, 8.92, 8.92) @ 835 MHz; Calibrated: 2023-11-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.679 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 27.93 V/m; Power Drift = 0.08 dB
 Peak SAR (extrapolated) = 0.794 W/kg
SAR(1 g) = 0.519 W/kg; SAR(10 g) = 0.339 W/kg
 Maximum value of SAR (measured) = 0.698 W/kg



0 dB = 0.698 W/kg = -1.56 dBW/kg

■ Verification Data (835 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.8 °C
 Test Date: 09/26/2024
 Band: NR FDD Band n5 _ SUB1 ANT.

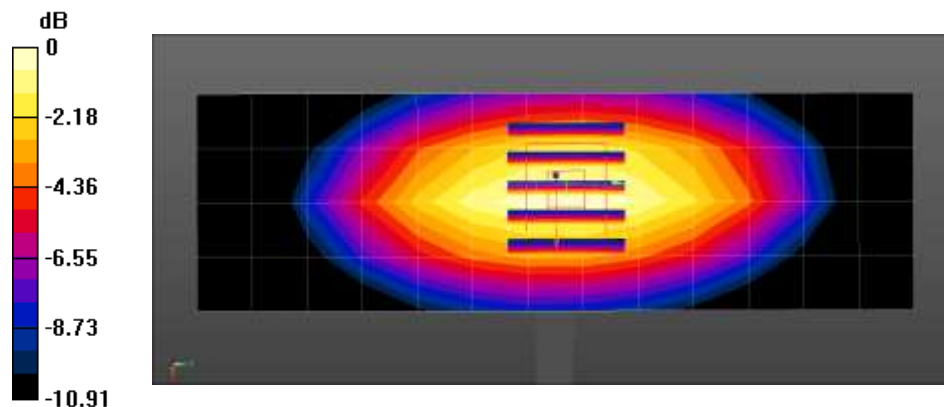
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835 \text{ MHz}$; $\sigma = 0.935 \text{ S/m}$; $\epsilon_r = 41.503$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3882; ConvF(8.92, 8.92, 8.92) @ 835 MHz; Calibrated: 2023-11-21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1720; Calibrated: 2024-04-19
- Phantom: Twin-SAM V4.0 Right; Type: QD 000 P40 CC; Serial:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

835MHz Head Verification/Area Scan (5x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.680 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 28.15 V/m; Power Drift = 0.05 dB
 Peak SAR (extrapolated) = 0.796 W/kg
SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.341 W/kg
 Maximum value of SAR (measured) = 0.701 W/kg



0 dB = 0.701 W/kg = -1.54 dBW/kg

■ Verification Data (1 800 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.7 °C
 Test Date: 09/20/2024
 Band: NR FDD Band n66 _ MAIN1 ANT.

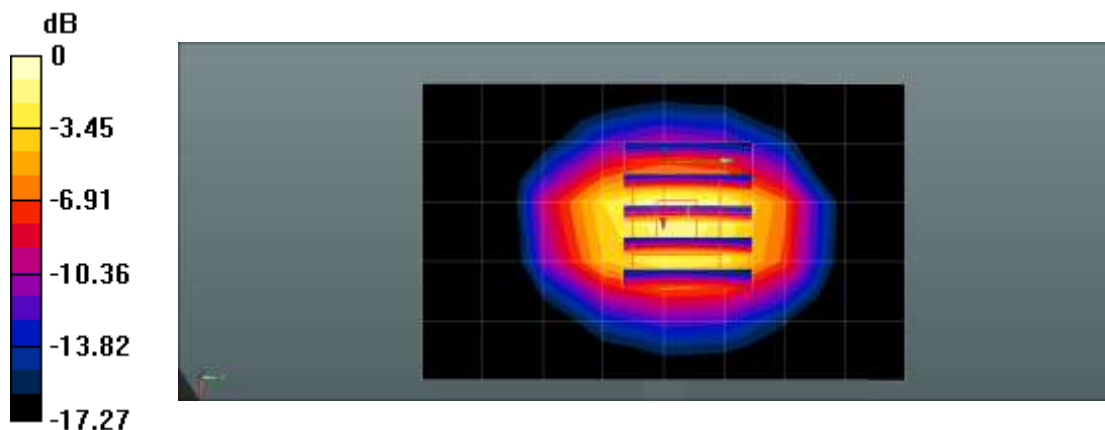
Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.427 \text{ S/m}$; $\epsilon_r = 39.026$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.25, 8.18, 7.93) @ 1800 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1800MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.21 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 48.60 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 3.46 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.07 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 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.4 °C
 Test Date: 09/24/2024
 Band: NR FDD Band n66 _SUB2 ANT.

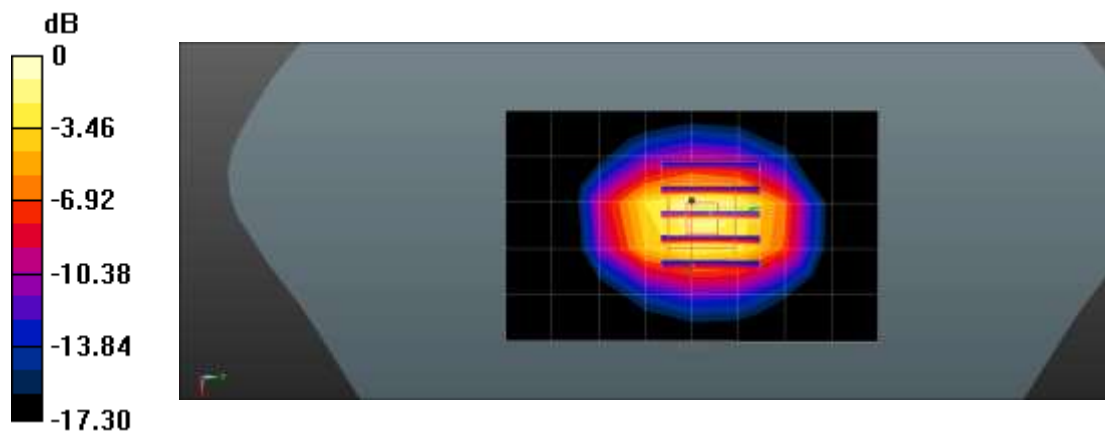
Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.426 \text{ S/m}$; $\epsilon_r = 39.01$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.25, 8.18, 7.93) @ 1800 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1800MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.21 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 48.49 V/m; Power Drift = 0.04 dB
 Peak SAR (extrapolated) = 3.47 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.07 W/kg
 Maximum value of SAR (measured) = 2.97 W/kg



0 dB = 2.97 W/kg = 4.73 dBW/kg

■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.8 °C
 Test Date: 09/19/2024
 Band: NR FDD Band n25 Head _ MAIN1 ANT.

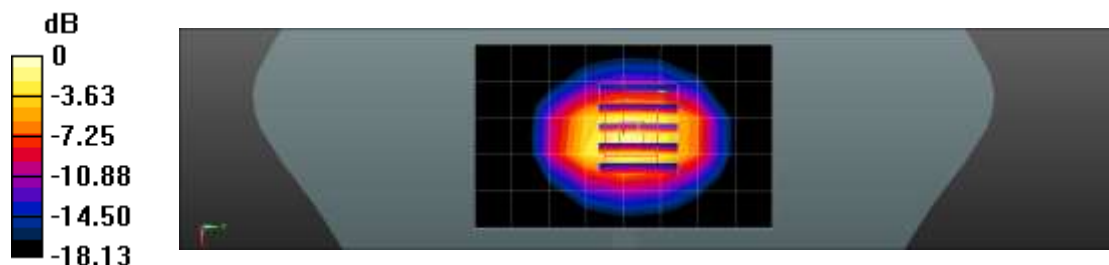
Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.39 \text{ S/m}$; $\epsilon_r = 39.161$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1900 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 2.20 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
 Reference Value = 50.68 V/m; Power Drift = -0.07 dB
 Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.09 W/kg
 Maximum value of SAR (measured) = 3.10 W/kg



0 dB = 3.10 W/kg = 4.91 dBW/kg

■ Verification Data (1 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.4 °C
 Test Date: 09/23/2024
 Band: NR FDD Band n25 Body _ SUB2 ANT.

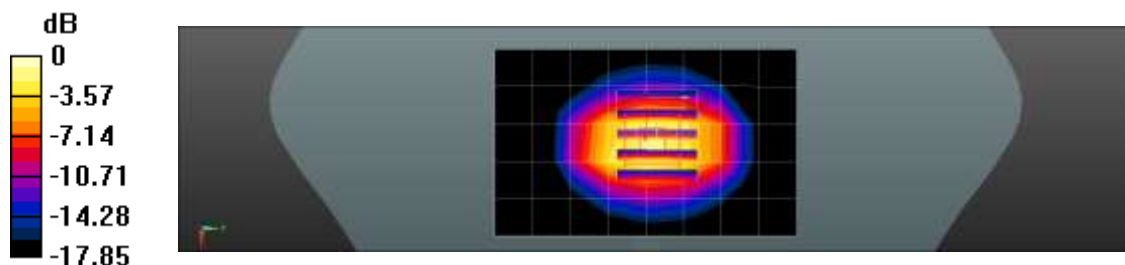
Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 39.162$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.1, 8.02, 7.77) @ 1900 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.21 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 50.67 V/m; Power Drift = -0.09 dB
 Peak SAR (extrapolated) = 3.65 W/kg
SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.09 W/kg
 Maximum value of SAR (measured) = 3.15 W/kg



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

■ Verification Data (2 600 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.7 °C
 Test Date: 09/30/2024
 Band: NR FDD Band n41_ MAIN2 ANT.

Measurement Report for Device, , , CW, Channel 0 (2600.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	2600.000, 0	7.38	1.99	38.9

Hardware Setup

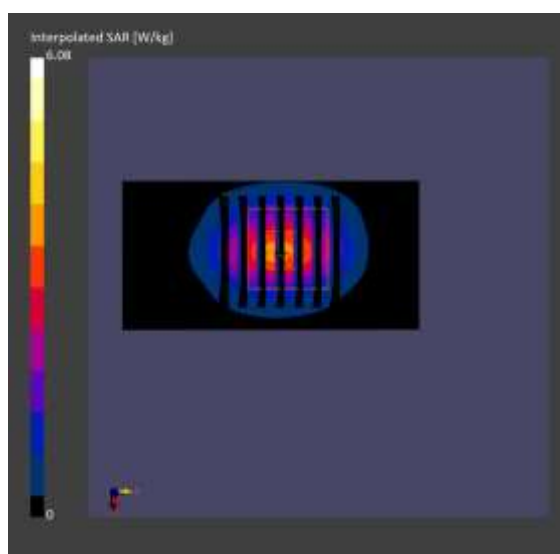
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.87	2.91
psSAR10g [W/Kg]	1.30	1.31
Power Drift [dB]	-0.00	0.00



■ Verification Data (2 600 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 °C
Test Date: 09/26/2024
Band: NR FDD Band n41_SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (2600.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	2600.000, 0	7.38	1.99	38.9

Hardware Setup

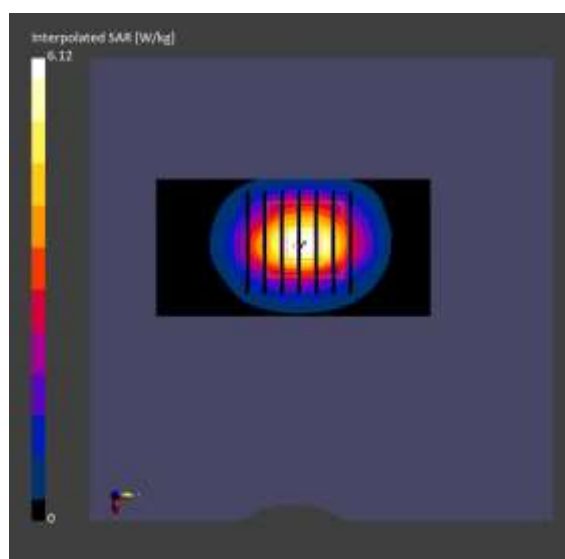
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.90	2.92
psSAR10g [W/Kg]	1.31	1.32
Power Drift [dB]	-0.00	-0.02



■ Verification Data (2 600 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 21.6 °C
 Test Date: 10/21/2024
 Band: NR TDD Band n41 _SUB5 ANT.

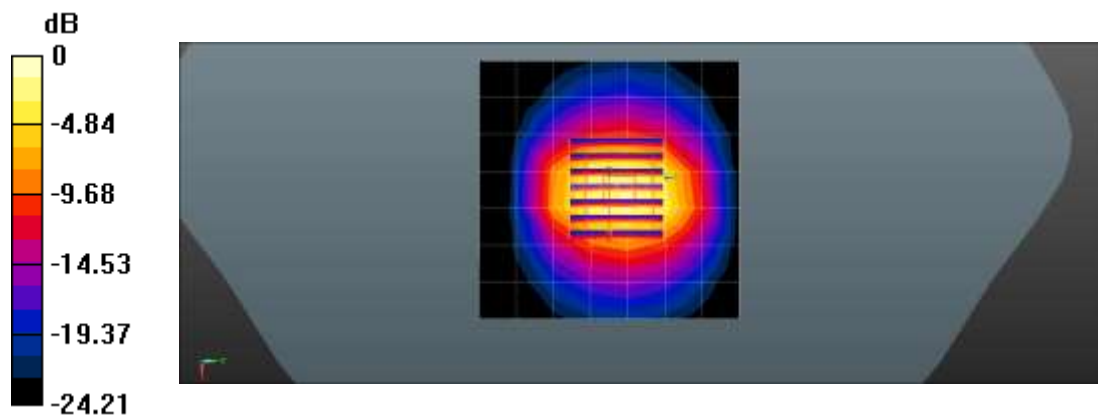
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 39.467$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(6.55, 7.4, 7.17) @ 2600 MHz; Calibrated: 2024-08-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1629; Calibrated: 2024-08-16
- Phantom: SAM with CRP v5.0_Left; Type: QD000P40CD; Serial: TP:
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
 Maximum value of SAR (measured) = 3.62 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 50.78 V/m; Power Drift = -0.16 dB
 Peak SAR (extrapolated) = 5.70 W/kg
SAR(1 g) = 2.71 W/kg; SAR(10 g) = 1.21 W/kg
 Maximum value of SAR (measured) = 4.61 W/kg



0 dB = 4.61 W/kg = 6.64 dBW/kg

■ Verification Data (2 600 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.8 °C
Test Date: 09/30/2024
Band: NR TDD Band n41 _MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (2600.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	2600.000, 0	7.38	1.99	38.9

Hardware Setup

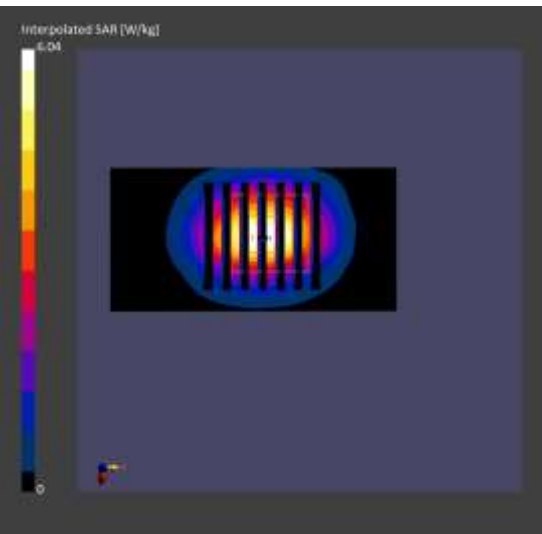
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.87	2.90
psSAR10g [W/Kg]	1.30	1.31
Power Drift [dB]	-0.00	-0.01



■ Verification Data (3 500 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.9 °C
Test Date: 10/23/2024
Band: NR TDD Band n77 SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (3500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3500.000, 0	6.63	2.97	38.0

Hardware Setup

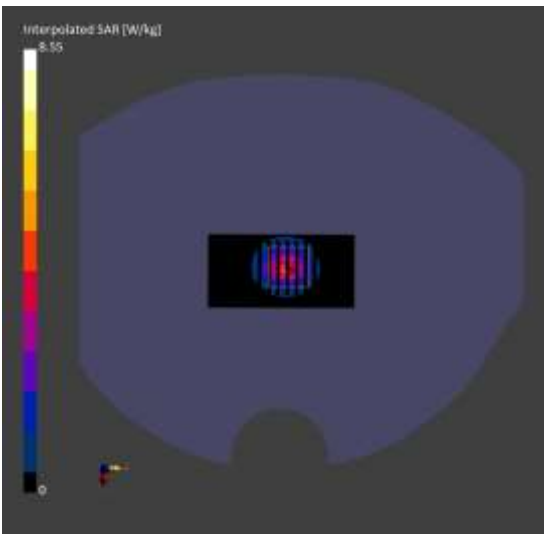
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.22	3.36
psSAR10g [W/Kg]	1.24	1.27
Power Drift [dB]	0.00	0.01



■ Verification Data (3 500 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 °C
Test Date: 09/24/2024
Band: NR TDD Band n77 SRS Head MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3500.000, 0	6.63	2.96	38.2

Hardware Setup

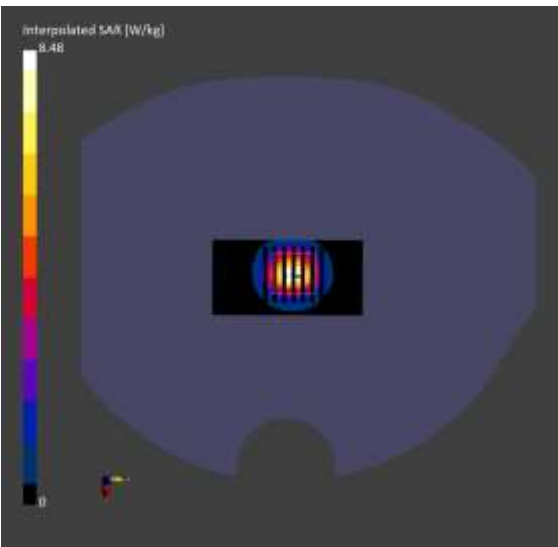
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.21	3.36
psSAR10g [W/Kg]	1.24	1.27
Power Drift [dB]	0.00	0.01



■ Verification Data (3 500 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power 0.05 W
 Liquid Temp: 19.7 °C
 Test Date: 10/24/2024
 Band: NR TDD Band n77 SRS Body MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3500.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3500.000, 0	6.63	2.98	37.3

Hardware Setup

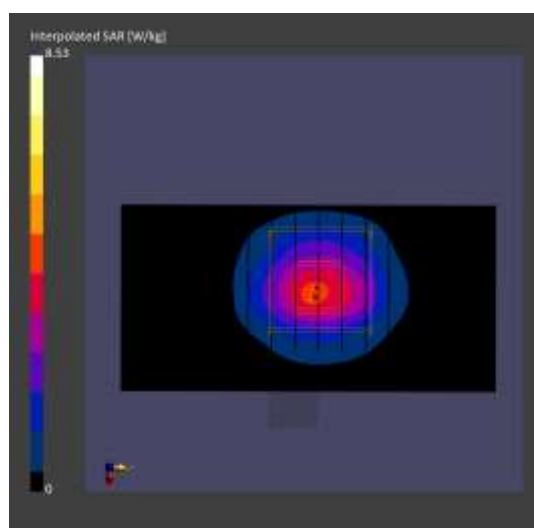
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.23	3.37
psSAR10g [W/Kg]	1.25	1.28
Power Drift [dB]	-0.00	-0.01



■ Verification Data (3 700 Mhz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.9 °C
Test Date: 10/23/2024
Band: NR TDD Band n77 SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (3700.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3700.000, 0	6.59	3.05	38.2

Hardware Setup

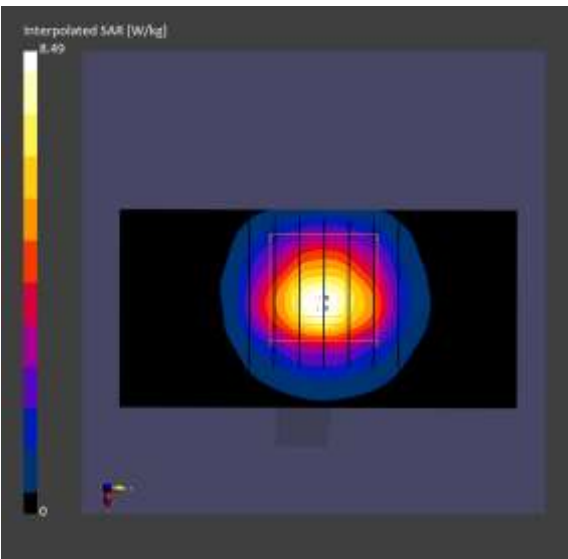
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.99	3.15
psSAR10g [W/Kg]	1.12	1.17
Power Drift [dB]	0.01	-0.01



■ Verification Data (3 700 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power 0.05 W
 Liquid Temp: 19.3 °C
 Test Date: 09/24/2024
 Band: NR TDD Band n77 SRS Head MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3700.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3700.000, 0	6.59	3.05	38.4

Hardware Setup

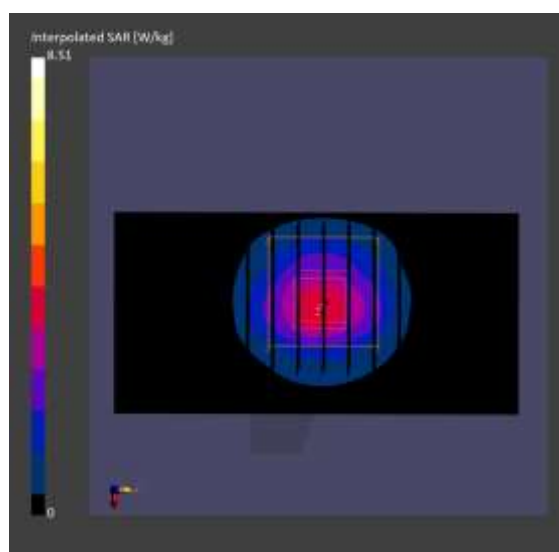
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.98	3.14
psSAR10g [W/Kg]	1.12	1.17
Power Drift [dB]	-0.00	-0.00



■ Verification Data (3 700 Mhz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.7 °C
 Test Date: 10/24/2024
 Band: NR TDD Band n77 SRS Body MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3700.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3700.000, 0	6.59	3.06	37.6

Hardware Setup

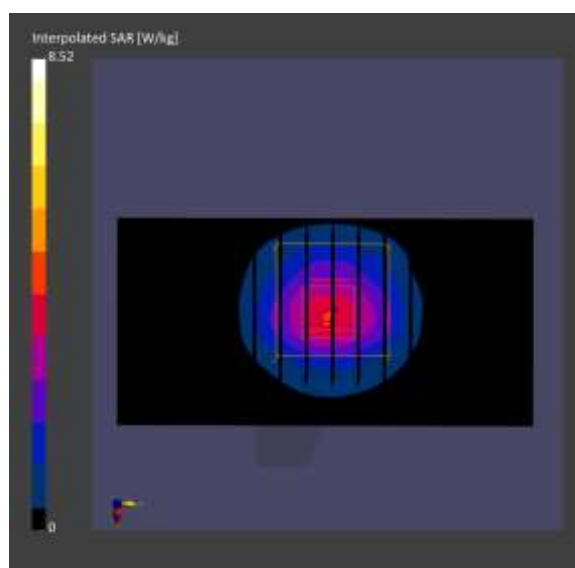
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.99	3.16
psSAR10g [W/Kg]	1.13	1.17
Power Drift [dB]	-0.01	0.02



■ Verification Data (3 900 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.9 °C
Test Date: 10/23/2024
Band: NR TDD Band n77 SUB2 ANT.

Measurement Report for Device, , , CW, Channel 0 (3900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3900.000, 0	6.52	3.33	37.4

Hardware Setup

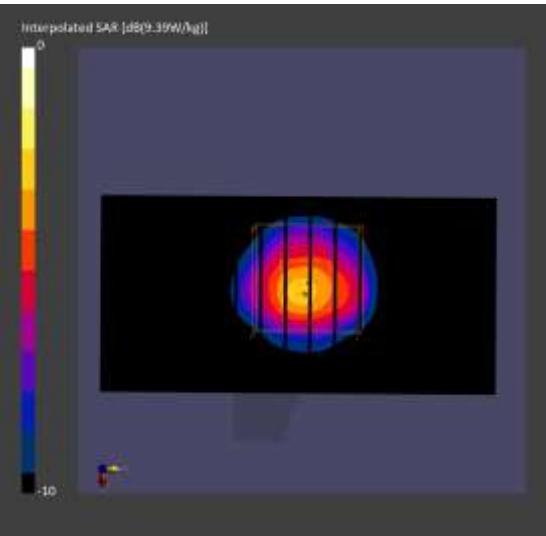
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.22	3.35
psSAR10g [W/Kg]	1.14	1.17
Power Drift [dB]	-0.00	-0.02



■ Verification Data (3 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.3 °C
 Test Date: 09/24/2024
 Band: NR TDD Band n77 SRS Head MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3900.000, 0	6.52	3.32	37.6

Hardware Setup

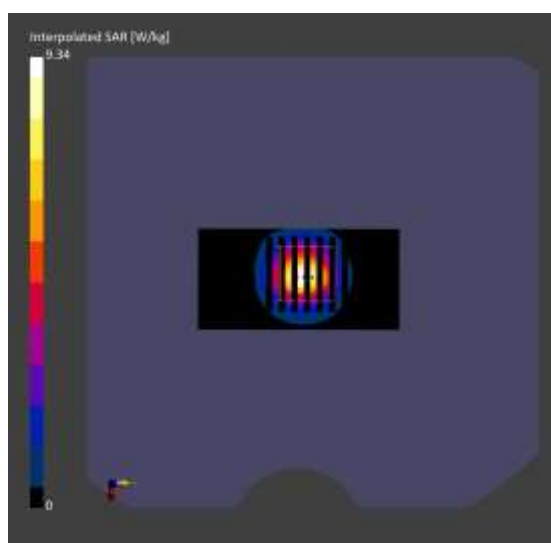
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.20	3.35
psSAR10g [W/Kg]	1.13	1.17
Power Drift [dB]	0.00	-0.01



■ Verification Data (3 900 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 19.7 °C
 Test Date: 10/24/2024
 Band: NR TDD Band n77 SRS Body MAIN3 ANT/ SUB5 ANT / MAIN4 ANT.

Measurement Report for Device, , , CW, Channel 0 (3900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0-	3900.000, 0	6.52	3.34	36.7

Hardware Setup

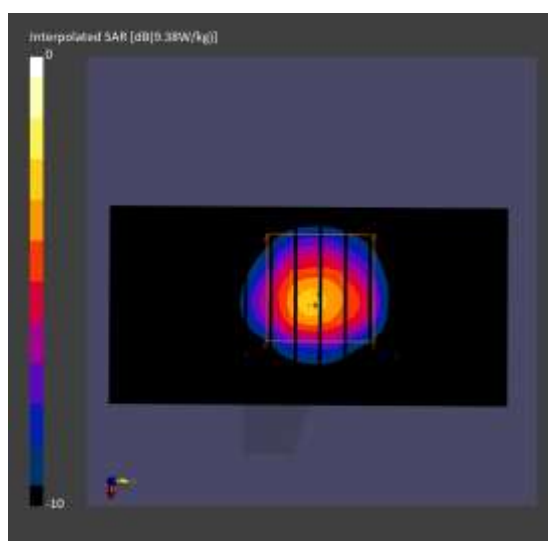
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V4.0 (30deg probe tilt) -	EX3DV4 - SN7681, 2023-11-27	DAE4 Sn780, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	N/A	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	3.21	3.36
psSAR10g [W/Kg]	1.14	1.18
Power Drift [dB]	-0.01	0.00



◆ Extremity SAR

■ Verification Data (13 MHz Head)

Test Laboratory: HCT CO., LTD
 Input Power: 0.05 W
 Liquid Temp: 22.3 °C
 Test Date: 10/03/2024
 Band: NFC

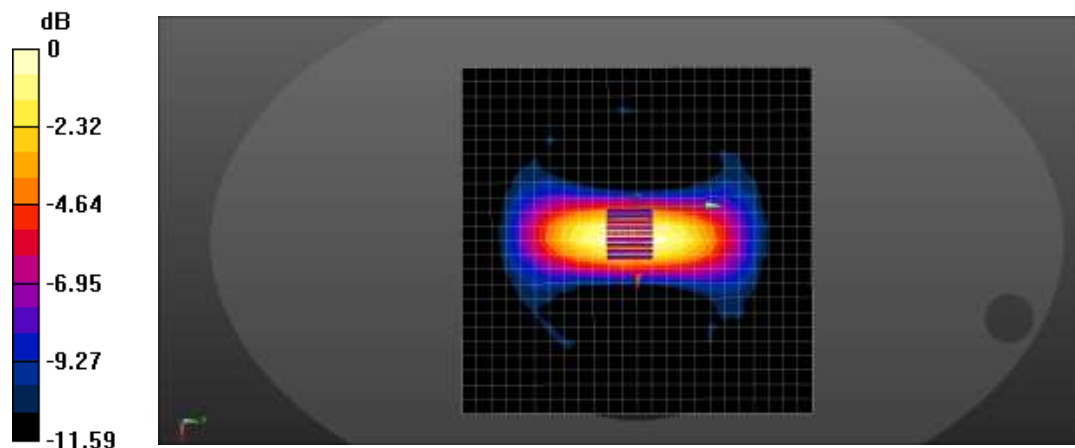
Communication System: UID 0, NFC (0); Frequency: 13 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 13 \text{ MHz}$; $\sigma = 0.735 \text{ S/m}$; $\epsilon_r = 54.507$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.39, 5.7, 6.16) @ 13 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial:
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

13MHz Head Verification/Area Scan (25x25x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 0.0345 W/kg

13MHz Head Verification/Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
 Reference Value = 6.855 V/m; Power Drift = 0.08 dB
 Peak SAR (extrapolated) = 0.0620 W/kg
SAR(1 g) = 0.030 W/kg; SAR(10 g) = 0.018 W/kg
 Maximum value of SAR (measured) = 0.0352 W/kg



0 dB = 0.0352 W/kg = -14.53 dBW/kg

◆ Power Density

■ Verification Data (10 GHz)

Test Laboratory: HCT CO., LTD
 Input Power: 0.01 W
 Liquid Temp: 19.7 °C
 Test Date: 09/30/2024
 Band: 6 GHz WLAN Power Density

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

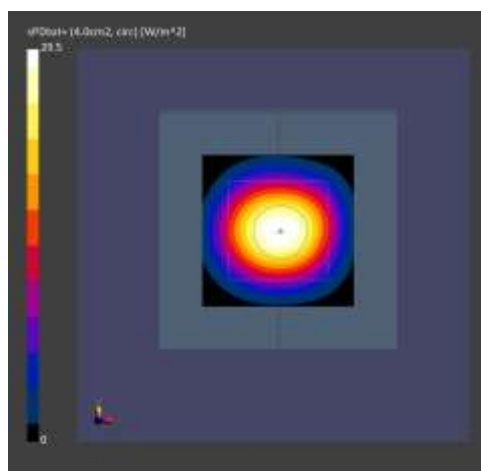
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave -	Air -	EUmmWV4 - SN9528_F1-55GHz, 2024-05-17	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	29.0
psPDtot+ [W/m ²]	29.5
Power Drift [dB]	0.03



■ Verification Data (10 GHz)

Test Laboratory: HCT CO., LTD
Input Power 0.01 W
Liquid Temp: 19.5 °C
Test Date: 10/01/2024
Band: 6 GHz WLAN Power Density

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

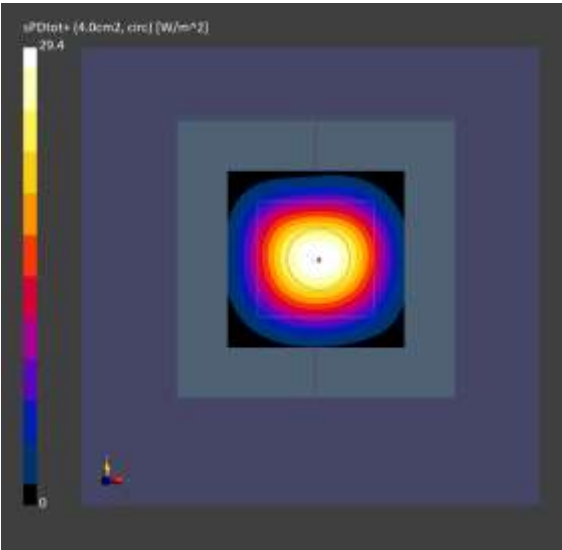
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave -	Air -	EUmmWV4 - SN9528_F1-55GHz, 2024-05-17	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	28.7
psPDtot+ [W/m ²]	29.4
Power Drift [dB]	±0.01



■ Verification Data (10 GHz)

Test Laboratory: HCT CO., LTD
Input Power: 0.01 W
Liquid Temp: 19.1 °C
Test Date: 10/02/2024
Band: 6 GHz WLAN Power Density

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

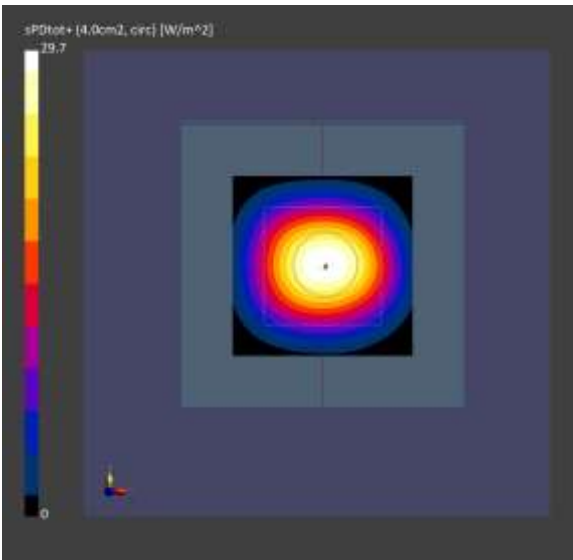
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave -	Air -	EUmmWV4 - SN9528_F1-55GHz, 2024-05-17	DAE4 Sn446, 2023-11-16

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	29.5
psPDtot+ [W/m ²]	29.7
Power Drift [dB]	-0.02



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 bactericide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

Ingredients (% by weight)	Frequency (MHz)									
	750		835		1 900		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
22	3768	EX3DV4	Head	750	1014	2024-08-21	41.7	0.87	PASS	PASS	PASS	N/A	N/A	N/A
22	3768	EX3DV4	Head	835	441	2024-08-21	41.6	0.89	PASS	PASS	PASS	GMSK	PASS	N/A
22	3768	EX3DV4	Head	835	441	2024-08-21	41.6	0.89	PASS	PASS	PASS	N/A	N/A	N/A
23	3882	EX3DV4	Head	835	441	2024-09-30	41.6	0.89	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	1750	2d007	2024-07-18	40.1	1.39	PASS	PASS	PASS	N/A	N/A	N/A
6	7370	EX3DV4	Head	1750	2d007	2024-08-23	40.1	1.40	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	1750	2d007	2024-04-17	40.1	1.39	PASS	PASS	PASS	N/A	N/A	N/A
5	3076	ES3DV3	Head	1900	5d032	2024-07-18	40.0	1.41	PASS	PASS	PASS	N/A	N/A	N/A
6	7370	EX3DV4	Head	1900	5d032	2024-08-23	40.1	1.41	PASS	PASS	PASS	N/A	N/A	N/A
6	7370	EX3DV4	Head	1900	5d032	2024-08-23	40.1	1.41	PASS	PASS	PASS	GMSK	PASS	N/A
17	7681	EX3DV4	Head	1900	5d032	2024-01-20	40.2	1.41	PASS	PASS	PASS	N/A	N/A	N/A
17	7681	EX3DV4	Head	2450	743	2024-03-15	39.2	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	2600	1015	2024-08-23	39.1	1.94	PASS	PASS	PASS	NA	N/A	NA
10	3076	ES3DV3	Head	2600	1015	2024-04-23	39.1	1.94	PASS	PASS	PASS	TDD	PASS	NA
17	7681	EX3DV4	Head	2600	1015	2024-04-23	39.1	1.94	PASS	PASS	PASS	NA	N/A	NA
17	7681	EX3DV4	Head	2600	1015	2024-04-23	39.1	1.94	PASS	PASS	PASS	TDD	PASS	NA
17	7681	EX3DV4	Head	3500	1132	2024-01-24	37.9	2.92	PASS	PASS	PASS	TDD	PASS	NA
17	7681	EX3DV4	Head	3700	1105	2023-11-30	37.5	3.13	PASS	PASS	PASS	TDD	PASS	NA
17	7681	EX3DV4	Head	3900	1019	2023-11-30	37.2	3.31	PASS	PASS	PASS	TDD	PASS	NA
3	3903	EX3DV4	Head	5250	1107	2024-08-01	35.9	4.71	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5250	1107	2024-08-24	35.8	4.70	PASS	PASS	PASS	OFDM	N/A	PASS
3	3903	EX3DV4	Head	5600	1107	2024-08-01	35.5	5.09	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5600	1107	2024-08-24	35.6	5.06	PASS	PASS	PASS	OFDM	N/A	PASS
3	3903	EX3DV4	Head	5750	1107	2024-08-01	35.4	5.22	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5750	1107	2024-08-24	35.5	5.22	PASS	PASS	PASS	OFDM	N/A	PASS
3	3903	EX3DV4	Head	5800	1107	2024-08-01	35.3	5.23	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5800	1107	2024-08-24	35.4	5.24	PASS	PASS	PASS	OFDM	N/A	PASS
17	7681	EX3DV4	Head	6500	1012	2024-09-18	34.3	6.08	PASS	PASS	PASS	OFDM	N/A	PASS

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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	2024-09-22	54.9	0.74	PASS	PASS	PASS	N/A	N/A	N/A
6	7370	EX3DV4	Head	5250	1107	2024-08-24	35.8	4.70	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5600	1107	2024-08-24	35.6	5.06	PASS	PASS	PASS	OFDM	N/A	PASS
6	7370	EX3DV4	Head	5800	1107	2024-08-24	35.4	5.24	PASS	PASS	PASS	OFDM	N/A	PASS

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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.