Appendix B. – SAR Test Plots

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.1 ℃
Test Date:	11/22/2022
Plot No.:	A1

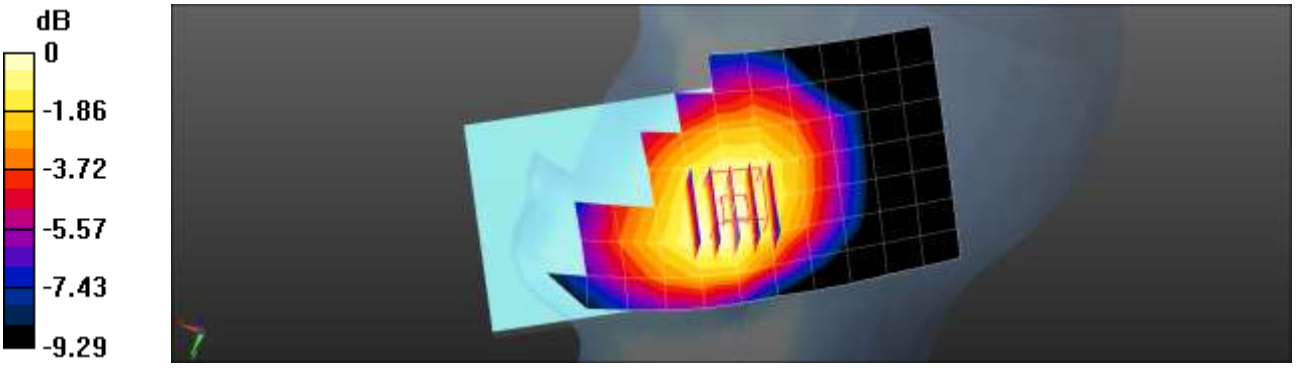
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.884 S/m; ε_r = 41.898; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.6 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM850 2Tx Head Right Touch 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.367 W/kg

GSM850 2Tx Head Right Touch 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.811 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.387 W/kg
SAR(1 g) = 0.308 W/kg; SAR(10 g) = 0.235 W/kg
Maximum value of SAR (measured) = 0.361 W/kg



0 dB = 0.361 W/kg = -4.42 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	11/23/2022
Plot No.:	A2

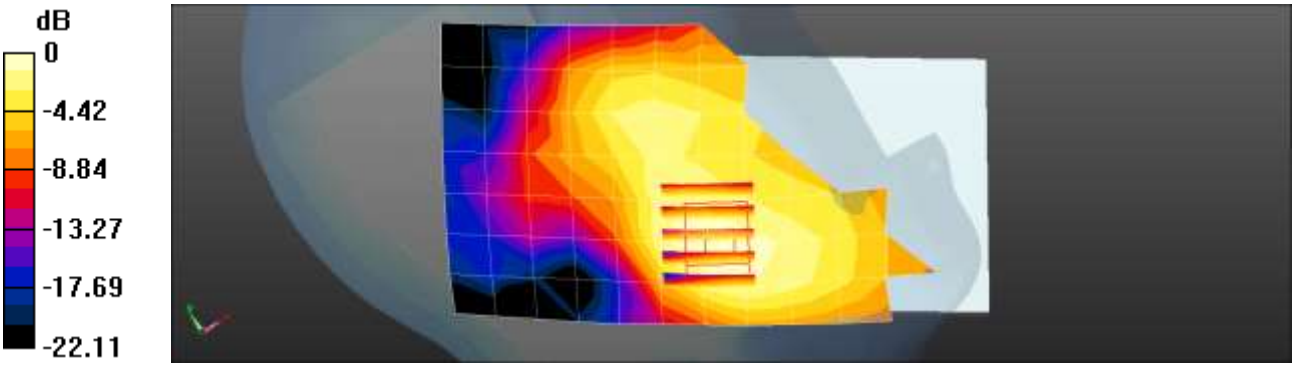
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 40.371; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1880 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM1900 Head Left Touch 2Tx 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.234 W/kg

GSM1900 Head Left Touch 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.722 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.276 W/kg
SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.233 W/kg



0 dB = 0.233 W/kg = -6.33 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.1 ℃
Ambient Temperature:	23.2 ℃
Test Date:	12/12/2022
Plot No.:	A3

Measurement Report for Device, CHEEK, Band 2, UTRA/FDD, UMTS-FDD (WCDMA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	Band 2, UTRA/FDD	1880.0, 9400	8.21	1.39	40.7

Hardware Setup

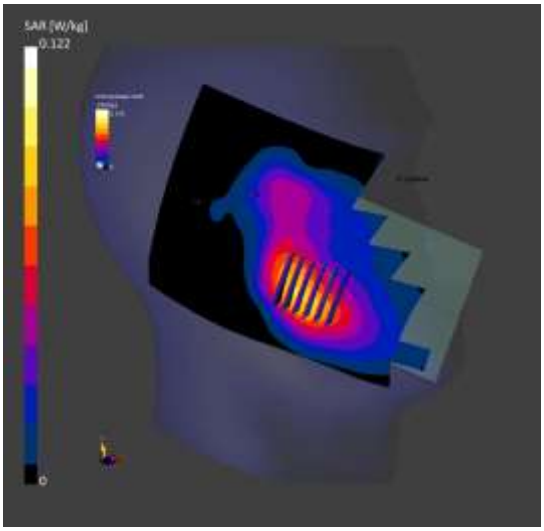
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

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	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.089	0.092
psSAR10g [W/Kg]	0.053	0.059
Power Drift [dB]	0.14	0.18



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.4 ℃
Ambient Temperature:	22.4 ℃
Test Date:	12/13/2022
Plot No.:	A4

Measurement Report for Device, CHEEK, Band 4, UTRA/FDD, UMTS-FDD (WCDMA), Channel 1412 (1732.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	Band 4, UTRA/FDD	1732.4, 1412	8.62	1.34	41.5

Hardware Setup

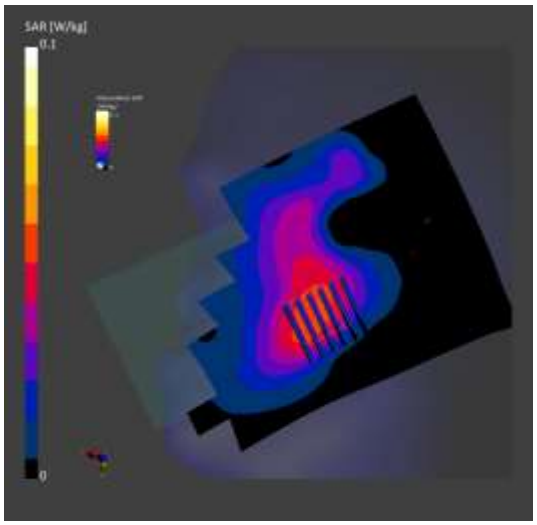
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

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	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.048	0.055
psSAR10g [W/Kg]	0.030	0.035
Power Drift [dB]	-0.11	-0.14



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.4 ℃
Ambient Temperature:	20.5 ℃
Test Date:	12/09/2022
Plot No.:	A5

Measurement Report for Device, CHEEK, Band 5, UTRA/FDD, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	Band 5, UTRA/FDD	836.6, 4183	9.53	0.888	41.8

Hardware Setup

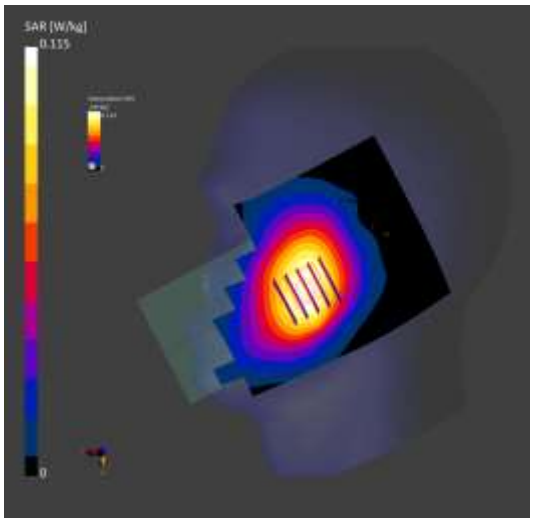
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.091	0.096
psSAR10g [W/Kg]	0.062	0.074
Power Drift [dB]	0.36	-0.09



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.1 ℃
Ambient Temperature:	22.2 ℃
Test Date:	11/22/2022
Plot No.:	A6

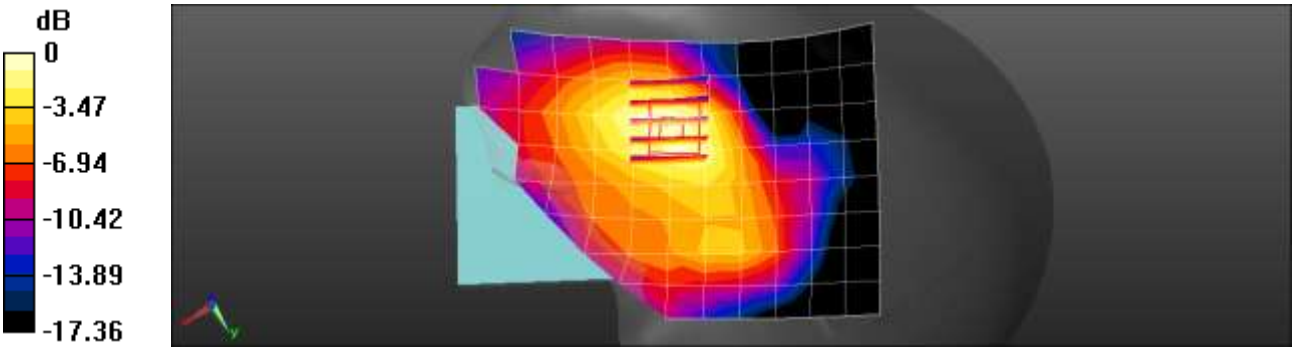
Communication System: UID 0, LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.383 S/m; ε_r = 38.944; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.78, 8.78, 8.78) @ 1860 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 Head Left Touch QPSK 20MHz 1RB 49offset 18700ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.420 W/kg

LTE Band 2 Head Left Touch QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.911 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.519 W/kg
SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.214 W/kg
Maximum value of SAR (measured) = 0.449 W/kg



0 dB = 0.449 W/kg = -3.48 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	12/13/2022
Plot No.:	A7

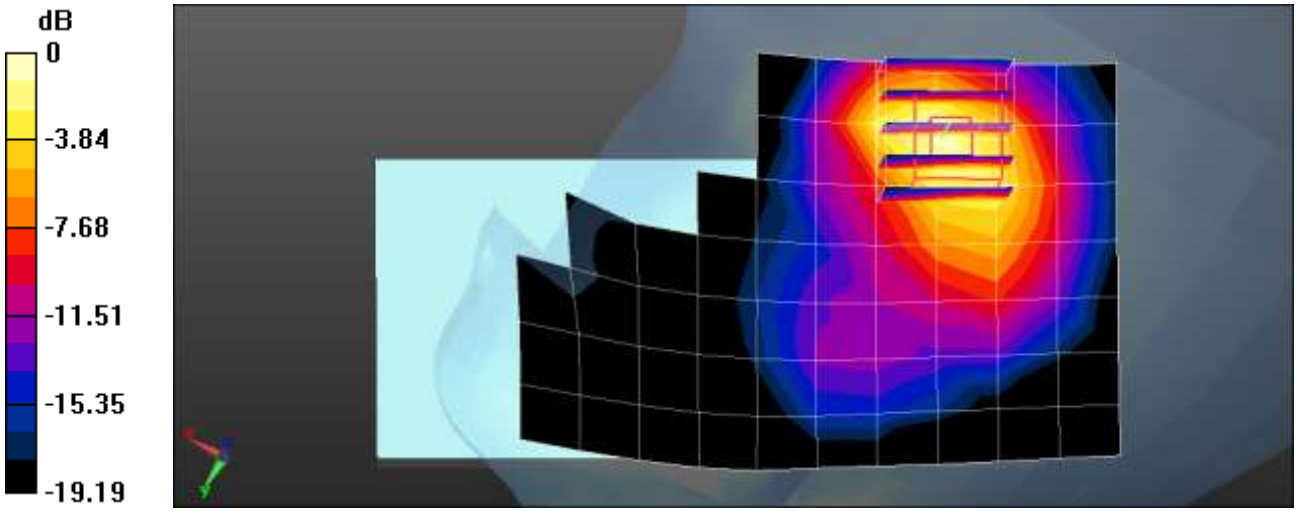
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.436 S/m; ε_r = 38.965; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Head Right Touch QPSK 20MHz 1RB 0offset 19100ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.06 W/kg

LTE Band 2 Head Right Touch QPSK 20MHz 1RB 0offset 19100ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.963 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.702 W/kg; SAR(10 g) = 0.356 W/kg
Maximum value of SAR (measured) = 1.16 W/kg



0 dB = 1.16 W/kg = 0.64 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.3 ℃
Test Date:	12/16/2022
Plot No.:	A8

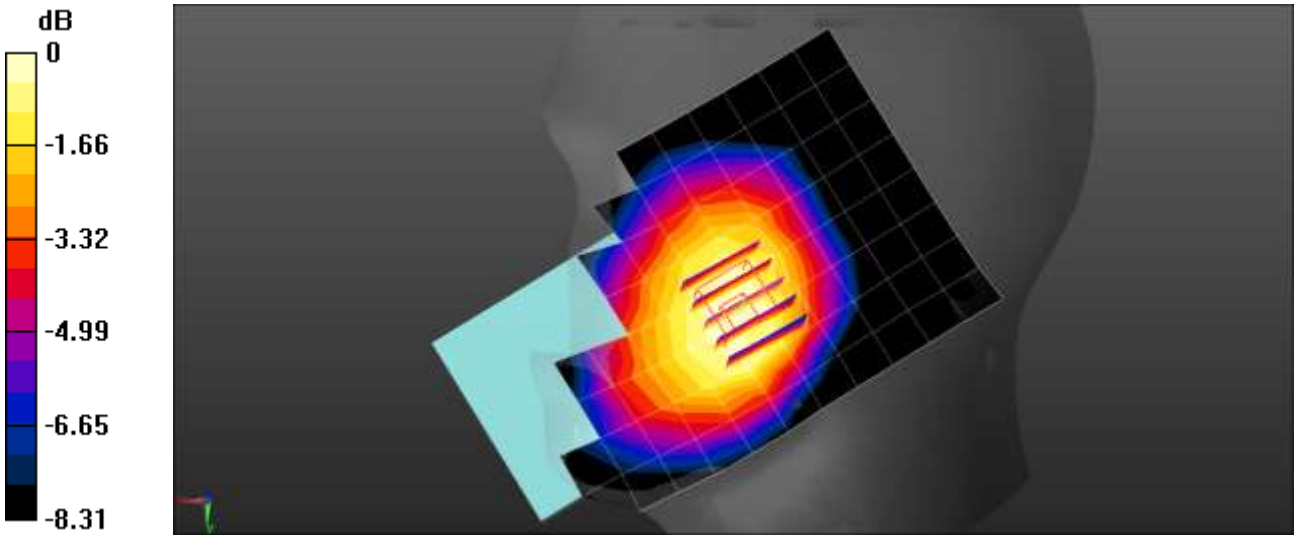
Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 840 MHz; σ = 0.919 S/m; ε_r = 41.971; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 836.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 Head Right Touch QPSK 10MHz 1RB 0offset 20525ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.294 W/kg

LTE Band 5 Head Right Touch QPSK 10MHz 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.761 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.319 W/kg
SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.197 W/kg
Maximum value of SAR (measured) = 0.292 W/kg



0 dB = 0.292 W/kg = -5.35 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.9 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/23/2022
Plot No.:	A9

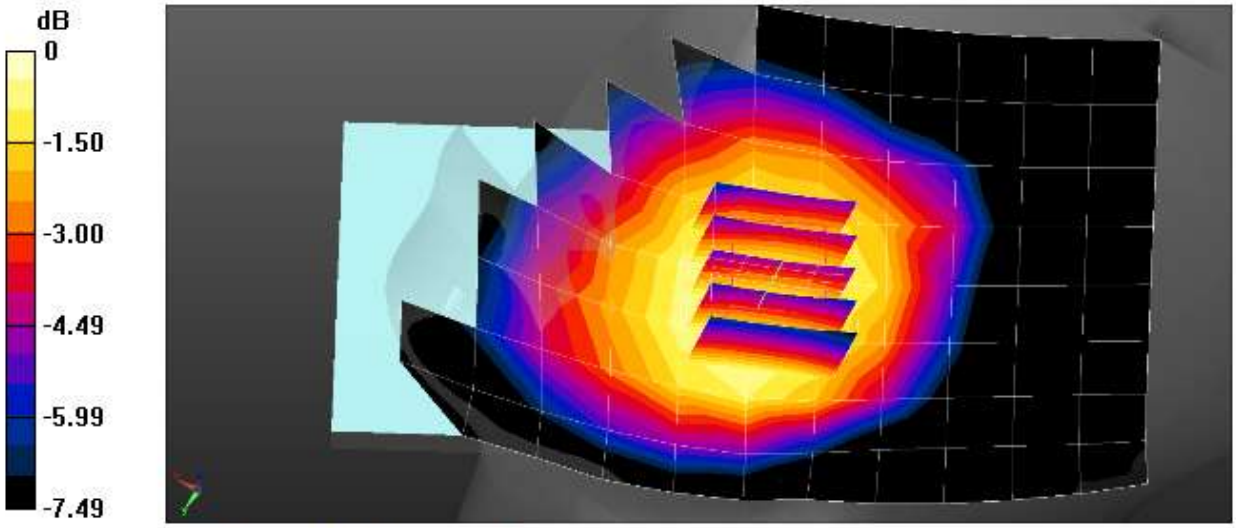
Communication System: UID 0, LTE 12 (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used: f = 700 MHz; σ = 0.849 S/m; ε_r = 43.619; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.49, 10.49, 10.49) @ 704 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 Right Touch QPSK 10MHz 1RB 0offset 23060ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.114 W/kg

LTE Band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23060ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.007 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.101 W/kg; SAR(10 g) = 0.082 W/kg
Maximum value of SAR (measured) = 0.113 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/24/2022
Plot No.:	A10

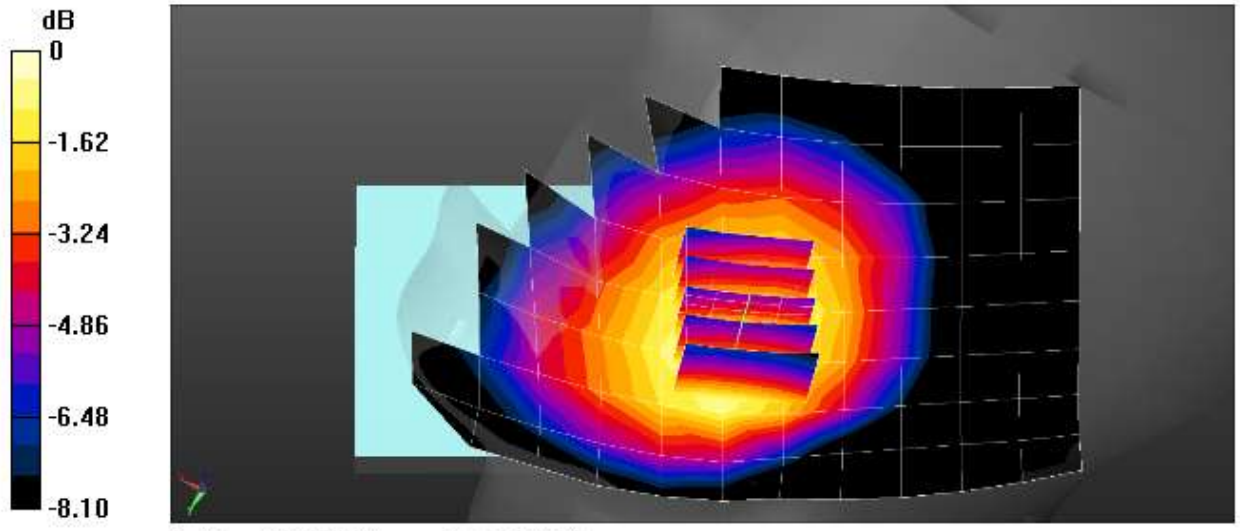
Communication System: UID 0, LTE 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 830 MHz; σ = 0.912 S/m; ε_r = 42.011; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 831.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 Right Touch QPSK 15MHz 1RB 0offset 26865ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.205 W/kg

LTE Band 26 Head Right Touch QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.390 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.222 W/kg
SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.138 W/kg
Maximum value of SAR (measured) = 0.208 W/kg



0 dB = 0.208 W/kg = -6.82 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.3 ℃
Test Date:	11/29/2022
Plot No.:	A11

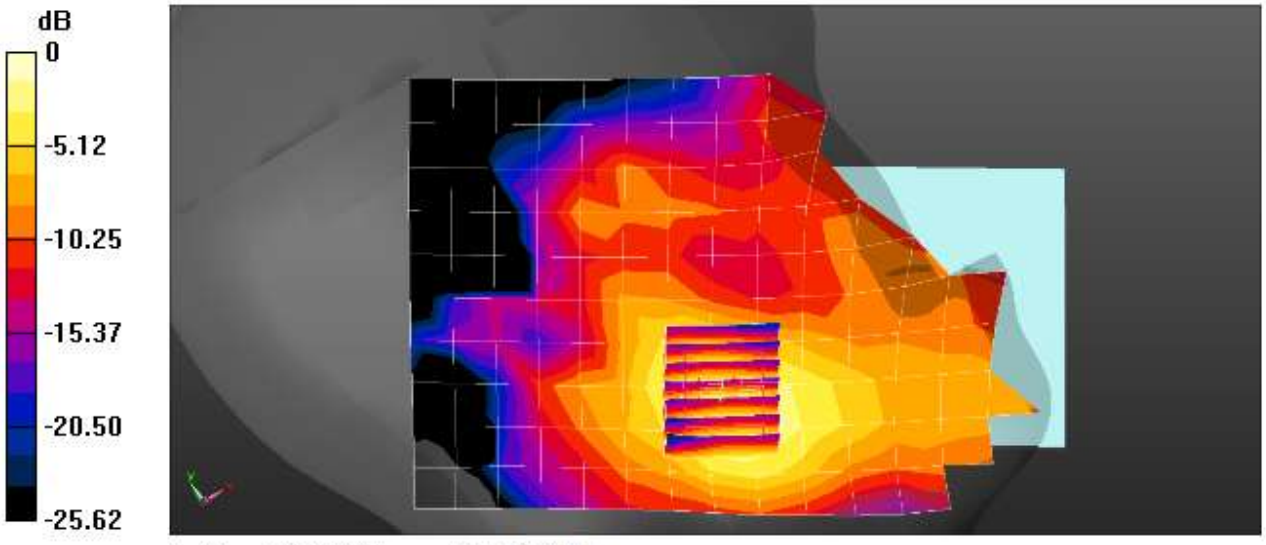
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58016
Medium parameters used: f = 2680 MHz; σ = 2.055 S/m; ε_r = 38.243; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.93, 7.93, 7.93) @ 2680 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 49offset 41490ch/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.291 W/kg

LTE Band 41 Head Left Touch QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.473 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.372 W/kg
SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.100 W/kg
Maximum value of SAR (measured) = 0.306 W/kg



0 dB = 0.306 W/kg = -5.14 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.2 ℃
Test Date:	11/21/2022
Plot No.:	A12

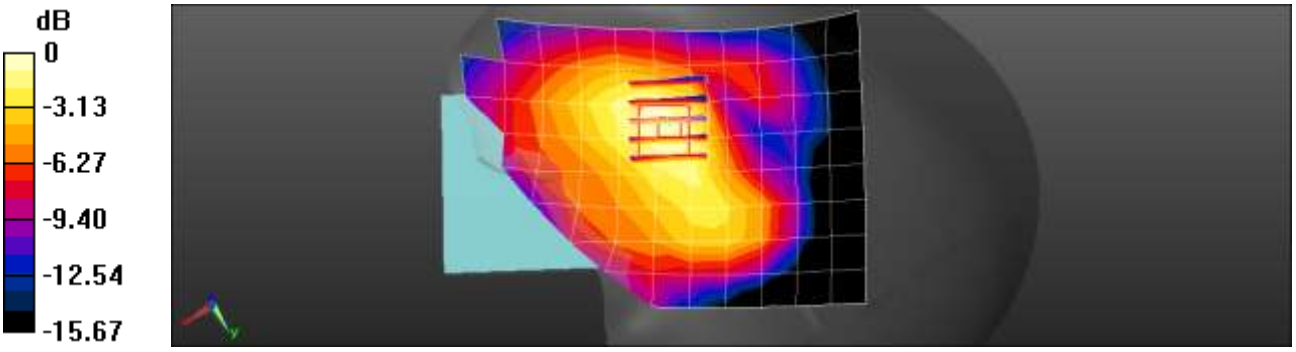
Communication System: UID 0, LTE Band (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1740 MHz; σ = 1.341 S/m; ε_r = 39.735; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.07, 9.07, 9.07) @ 1745 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 0offset 132322ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.270 W/kg

LTE Band 66 Head Left Touch QPSK 20MHz 1RB 0offset 132322ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.714 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.344 W/kg
SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.162 W/kg
Maximum value of SAR (measured) = 0.304 W/kg



0 dB = 0.304 W/kg = -5.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6 ℃
Ambient Temperature:	20.7 ℃
Test Date:	12/14/2022
Plot No.:	A13

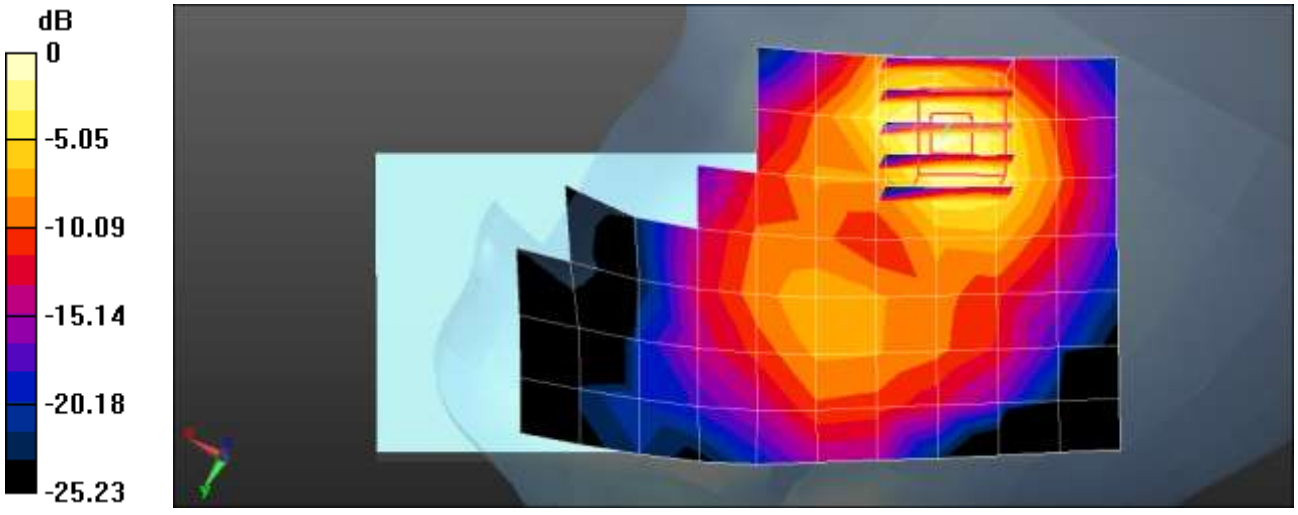
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.328 S/m; ε_r = 39.889; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Head Right Touch QPSK 20MHz 50RB 0offset 132072ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.345 W/kg

LTE Band 66 Head Right Touch QPSK 20MHz 50RB 0offset 132072ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.685 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.489 W/kg
SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.399 W/kg



0 dB = 0.399 W/kg = -3.99 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.6 ℃
Test Date:	11/28/2022
Plot No.:	A14

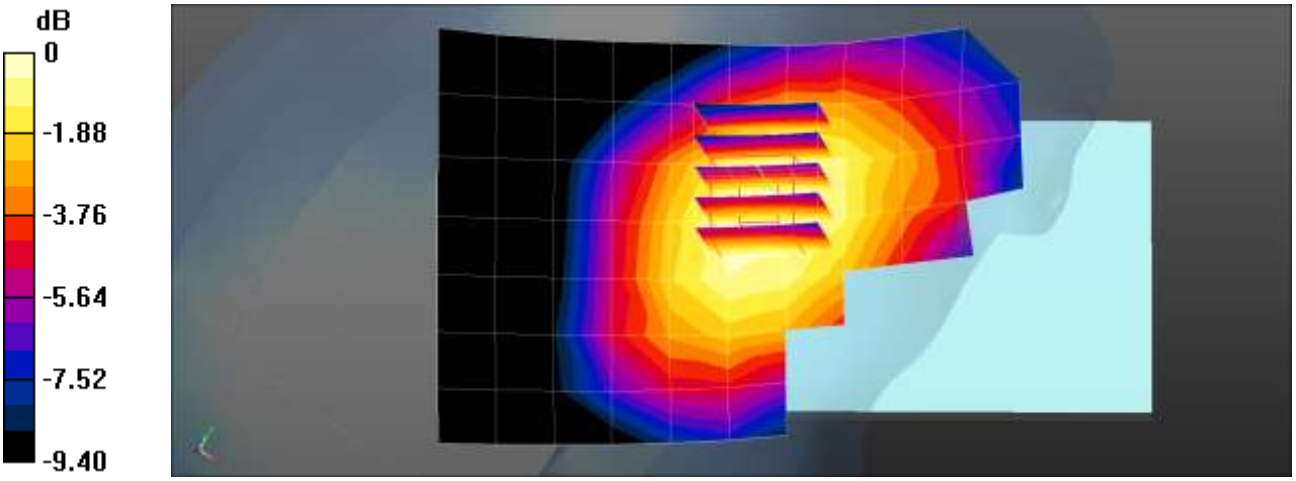
Communication System: UID 0, 5G NR (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.882 S/m; ε_r = 41.869; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.5 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n5 Head Right Touch DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.293 W/kg

NR Band n5 Head Right Touch DFT-s QPSK 20MHz 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.559 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.324 W/kg
SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.194 W/kg
Maximum value of SAR (measured) = 0.301 W/kg



0 dB = 0.301 W/kg = -5.21 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.1 ℃
Ambient Temperature:	19.2 ℃
Test Date:	11/30/2022
Plot No.:	A15

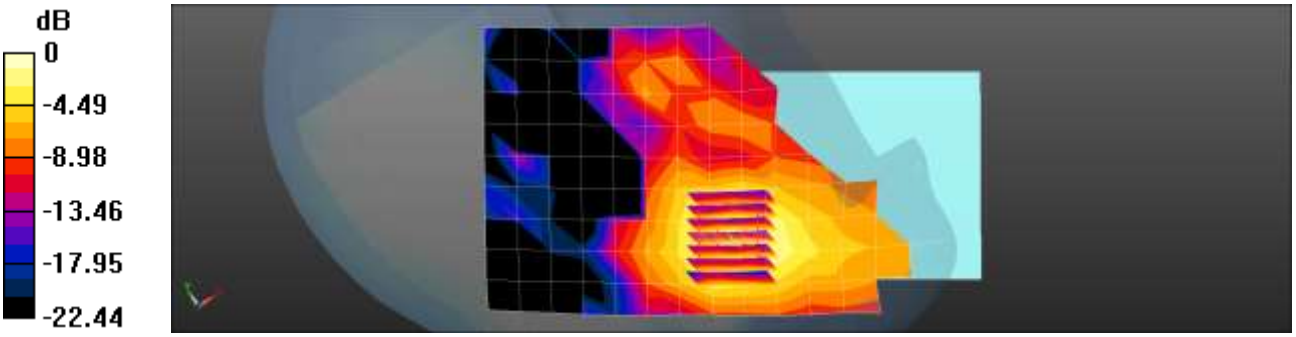
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.973 S/m; ε_r = 38.036; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Head Left Touch DFT-s QPSK 100MHz 135RB 69offset 518598ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0659 W/kg

NR Band n41 Head Left Touch DFT-s QPSK 100MHz 135RB 69offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0800 W/kg
SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.023 W/kg
Maximum value of SAR (measured) = 0.0655 W/kg



0 dB = 0.0655 W/kg = -11.84 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.7 ℃
Ambient Temperature:	20.6 ℃
Test Date:	12/20/2022
Plot No.:	A16

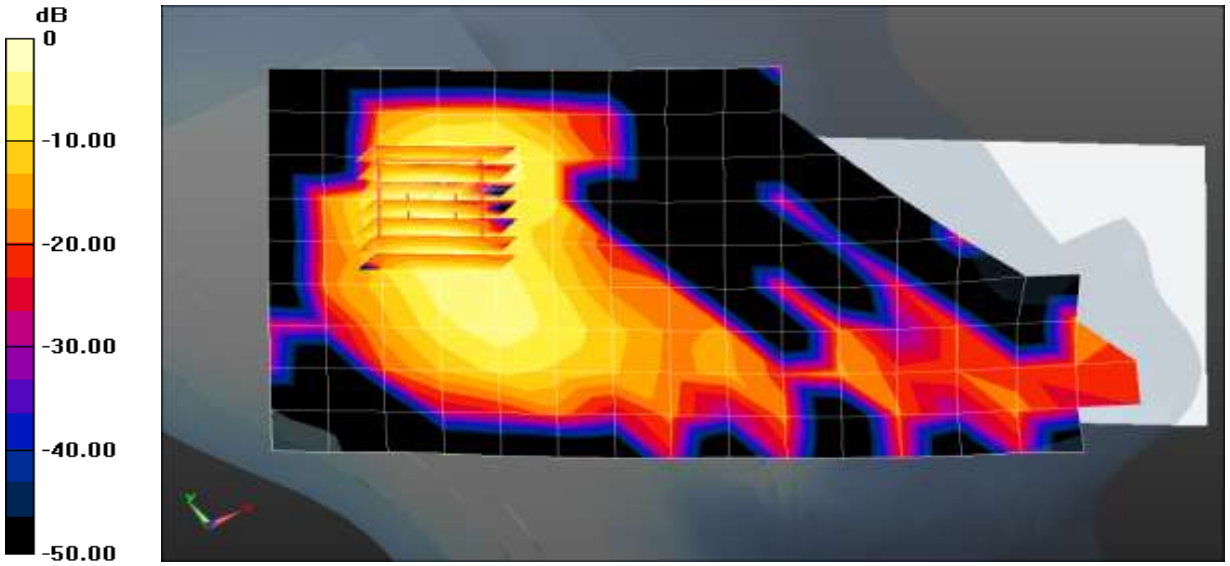
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.994 S/m; ε_r = 38.176; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Head Left Tilt DFT-s QPSK 100MHz 1RB 137offset 518598ch/Area Scan (10x19x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.161 W/kg

NR Band n41 Head Left Tilt DFT-s QPSK 100MHz 1RB 137offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.548 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.086 W/kg; SAR(10 g) = 0.033 W/kg
Maximum value of SAR (measured) = 0.153 W/kg



0 dB = 0.153 W/kg = -8.15 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.7 ℃
Ambient Temperature:	19.8 ℃
Test Date:	11/29/2022
Plot No.:	A17

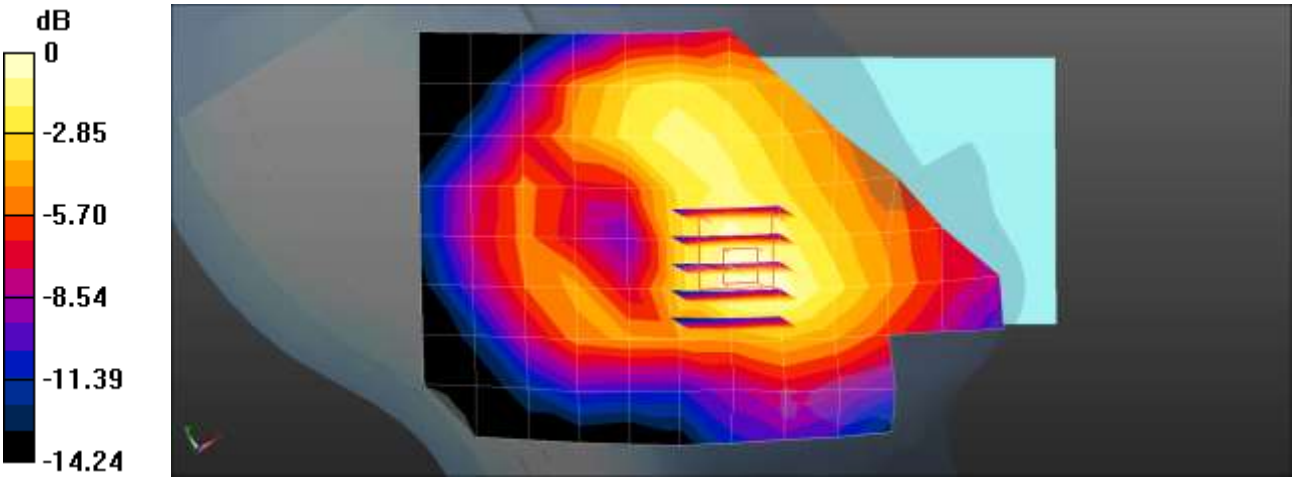
Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.309 S/m; ε_r = 41.522; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 344000ch/Area Scan (9x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.244 W/kg

NR Band n66 Head Left Touch DFT-s QPSK 20MHz 50RB 28offset 344000ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.957 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.135 W/kg
Maximum value of SAR (measured) = 0.265 W/kg



0 dB = 0.265 W/kg = -5.77 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.2 ℃
Test Date:	12/06/2022
Plot No.:	A18

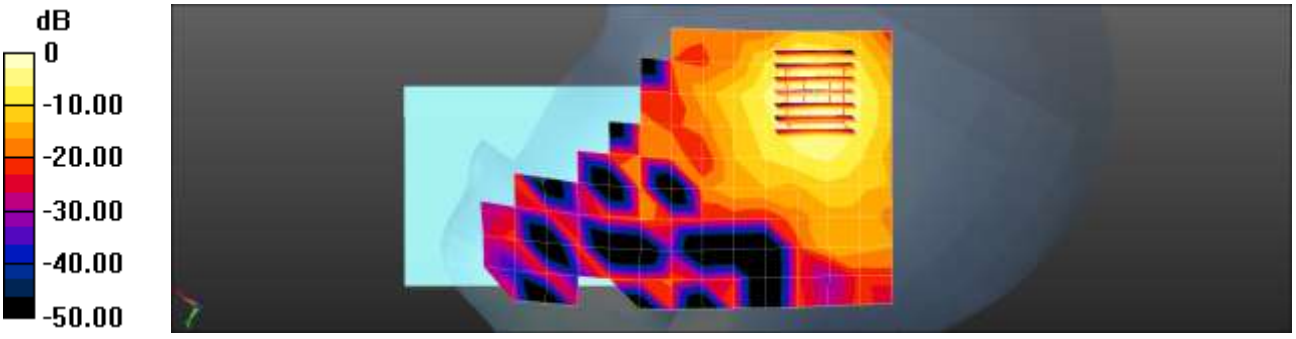
Communication System: UID 0, NR Band 77 (0); Frequency: 3930 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3930 MHz; σ = 3.329 S/m; ε_r = 38.391; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.22, 7.22, 7.22) @ 3930 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 Head Right Touch DFT-s QPSK 100MHz 135RB 69offset 662000ch/Area Scan (10x18x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.569 W/kg

NR Band n77 Head Right Touch DFT-s QPSK 100MHz 135RB 69offset 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 5.245 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.795 W/kg
SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.126 W/kg
Maximum value of SAR (measured) = 0.605 W/kg



0 dB = 0.605 W/kg = -2.18 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	12/08/2022
Plot No.:	A19

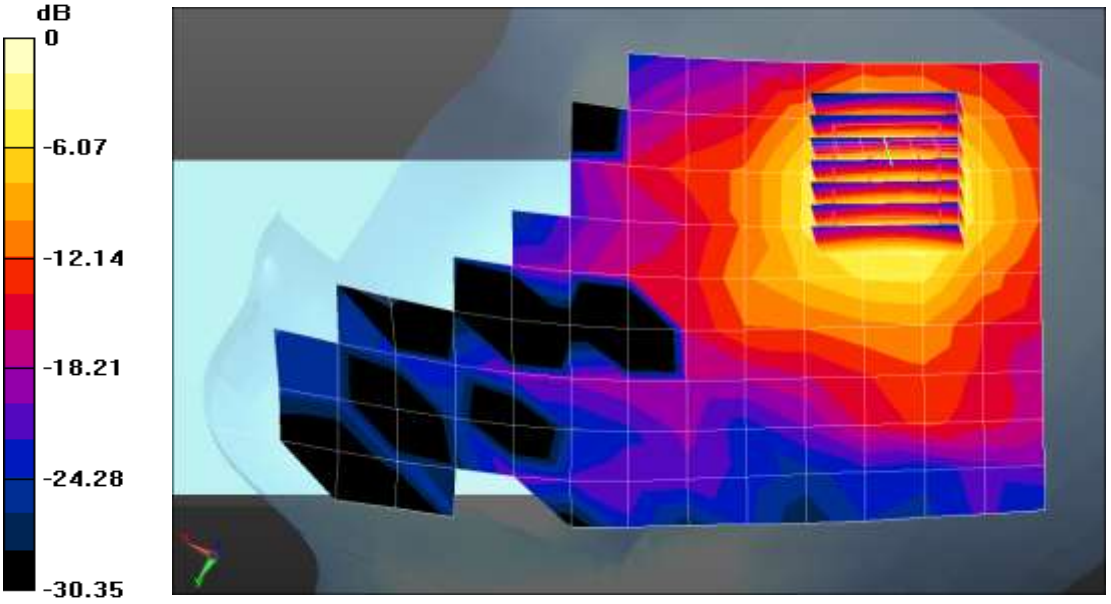
Communication System: UID 0, NR n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 3.023 S/m; ε_r = 38.769; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.75, 7.75, 7.75) @ 3500.01 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 DoD Head Right Touch DFT-s QPSK 100MHz 135RB 69offset 633334ch/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.14 W/kg

NR Band n77 DoD Head Right Touch DFT-s QPSK 100MHz 135RB 69offset 633334ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 6.809 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 0.733 W/kg; SAR(10 g) = 0.324 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
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	A20

Measurement Report for Device, CHEEK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle), Channel 1 (2412.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	WLAN 2.4GHz	2412.0, 1	7.73	1.78	39.4

Hardware Setup

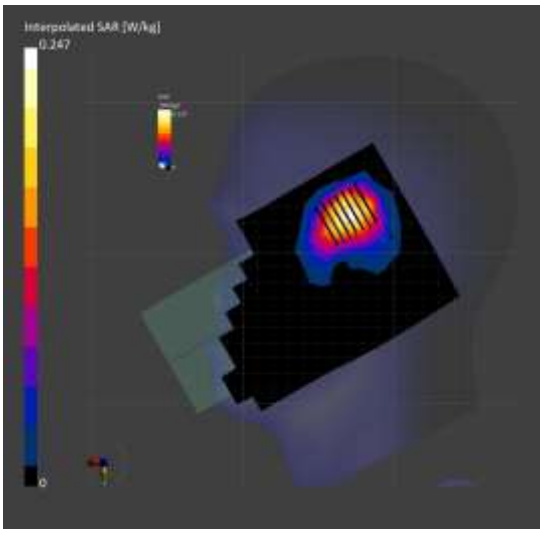
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.113	0.127
psSAR10g [W/Kg]	0.060	0.064
Power Drift [dB]	-0.03	0.13



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.3 ℃
Ambient Temperature:	19.3 ℃
Test Date:	12/15/2022
Plot No.:	A21

Measurement Report for Device, TILT, WLAN 5GHz, IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle), Channel 54 (5270.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	TILT, 0.00	WLAN 5GHz	5270.0, 54	5.29	4.69	36.0

Hardware Setup

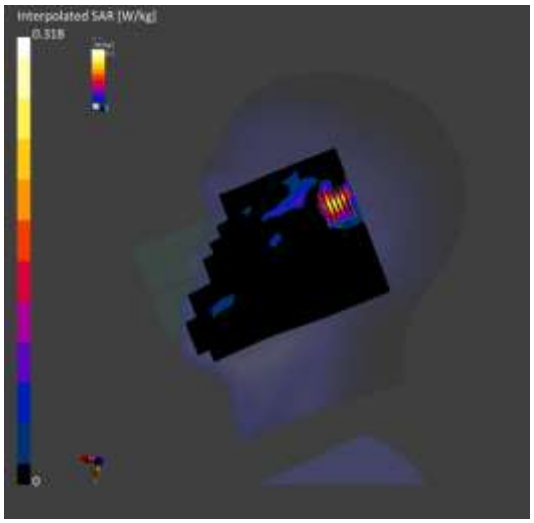
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.065	0.068
psSAR10g [W/Kg]	0.019	0.017
Power Drift [dB]	2.83	1.64



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	A22

Measurement Report for Device, CHEEK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	2441.0, 39	7.73	1.82	39.3

Hardware Setup

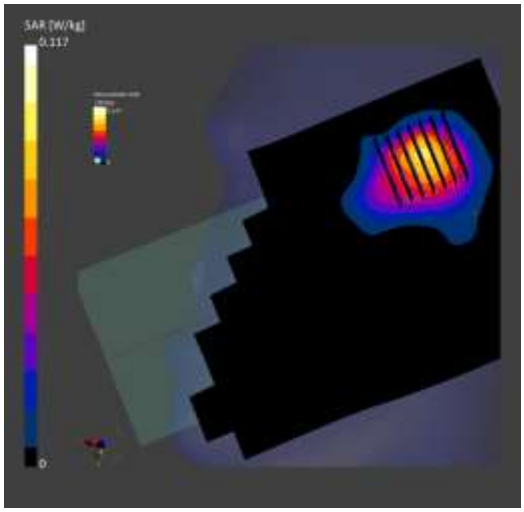
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.061	0.072
psSAR10g [W/Kg]	0.031	0.035
Power Drift [dB]	0.16	0.15



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.1 ℃
Test Date:	11/22/2022
Plot No.:	B1

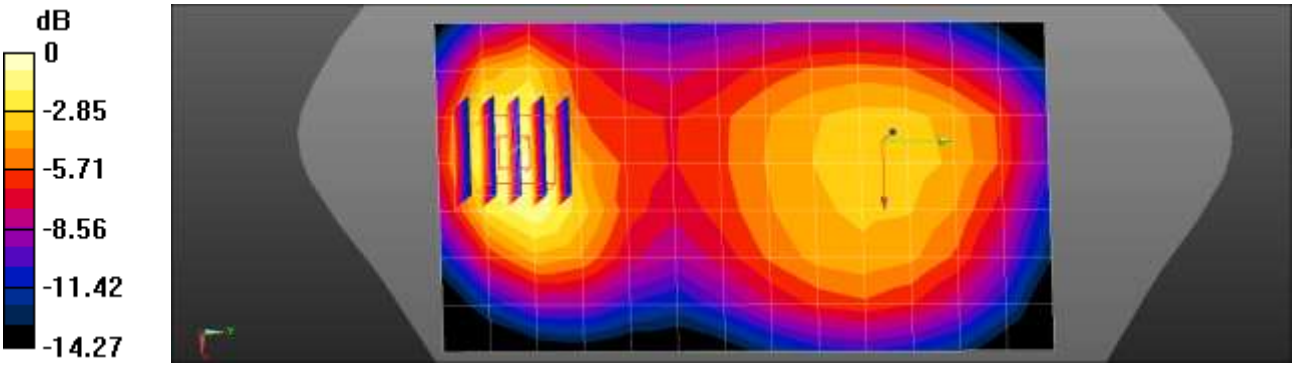
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.884 S/m; ε_r = 41.898; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.6 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM850 2Tx BodyWorn Rear 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.548 W/kg

GSM850 2Tx BodyWorn Rear 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.16 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.792 W/kg
SAR(1 g) = 0.458 W/kg; SAR(10 g) = 0.272 W/kg
Maximum value of SAR (measured) = 0.660 W/kg



0 dB = 0.660 W/kg = -1.80 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	11/23/2022
Plot No.:	B2

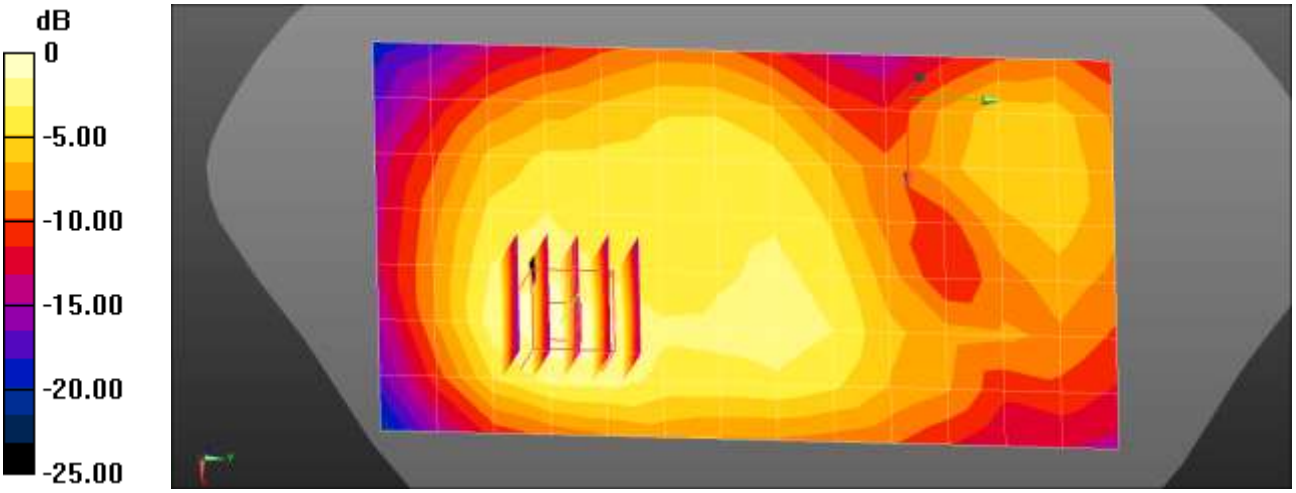
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 40.371; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1880 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4)

GSM1900 BodyWorn Rear 2Tx 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.433 W/kg

GSM1900 BodyWorn Rear 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.81 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.529 W/kg
SAR(1 g) = 0.298 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.441 W/kg



0 dB = 0.441 W/kg = -3.56 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.1 ℃
Ambient Temperature:	23.2 ℃
Test Date:	12/12/2022
Plot No.:	B3

Measurement Report for Device, BACK, Band 2, UTRA/FDD, UMTS-FDD (WCDMA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 15.00	Band 2, UTRA/FDD	1880.0, 9400	8.21	1.39	40.7

Hardware Setup

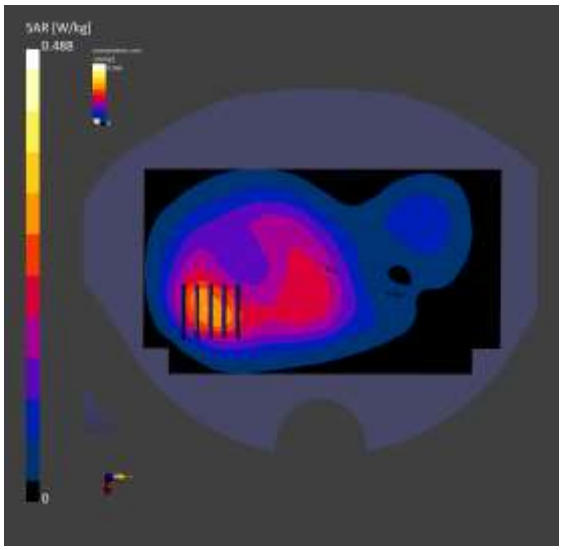
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.322	0.337
psSAR10g [W/Kg]	0.193	0.197
Power Drift [dB]	-0.03	-0.03



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.4 ℃
Ambient Temperature:	22.4 ℃
Test Date:	12/13/2022
Plot No.:	B4

Measurement Report for Device, FRONT, Band 4, UTRA/FDD, UMTS-FDD (WCDMA), Channel 1412 (1732.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 15.00	Band 4, UTRA/FDD	1732.4, 1412	8.62	1.34	41.5

Hardware Setup

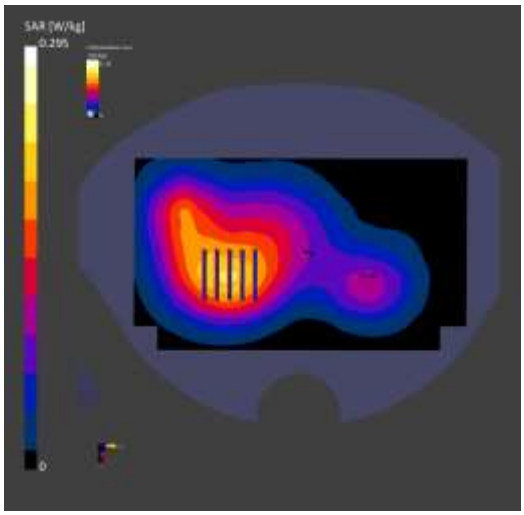
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.221	0.225
psSAR10g [W/Kg]	0.140	0.151
Power Drift [dB]	-0.00	-0.01



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.4 ℃
Ambient Temperature:	20.5 ℃
Test Date:	12/09/2022
Plot No.:	B5

Measurement Report for Device, BACK, Band 5, UTRA/FDD, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 15.00	Band 5, UTRA/FDD	836.6, 4183	9.53	0.888	41.8

Hardware Setup

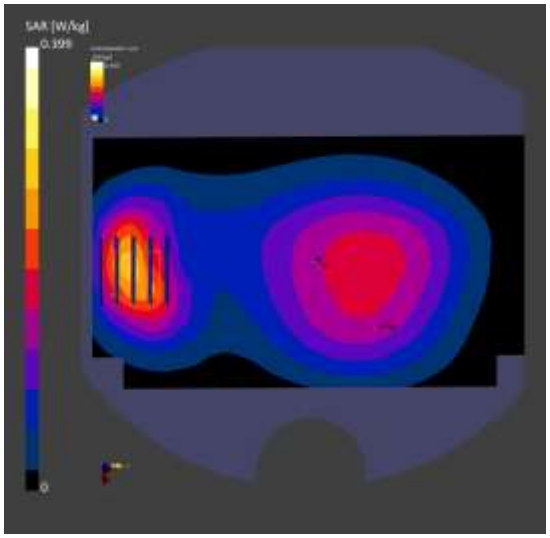
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.277	0.283
psSAR10g [W/Kg]	0.180	0.174
Power Drift [dB]	0.02	-0.02



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.1 ℃
Ambient Temperature:	22.2 ℃
Test Date:	11/22/2022
Plot No.:	B6

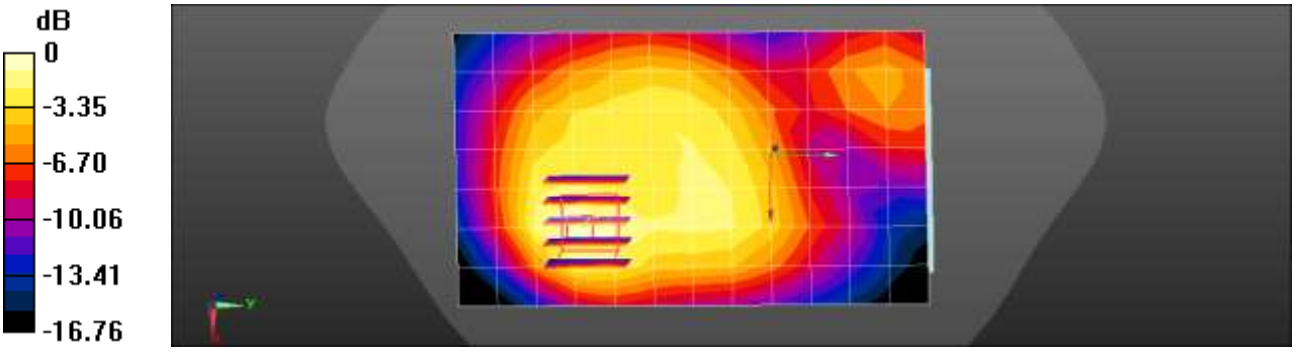
Communication System: UID 0, LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.383 S/m; ε_r = 38.944; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.78, 8.78, 8.78) @ 1860 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 Bodyworn Rear QPSK 20MHz 1RB 49offset 18700ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.522 W/kg

LTE Band 2 Bodyworn Rear QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.37 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.639 W/kg
SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.214 W/kg
Maximum value of SAR (measured) = 0.524 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	12/13/2022
Plot No.:	B7

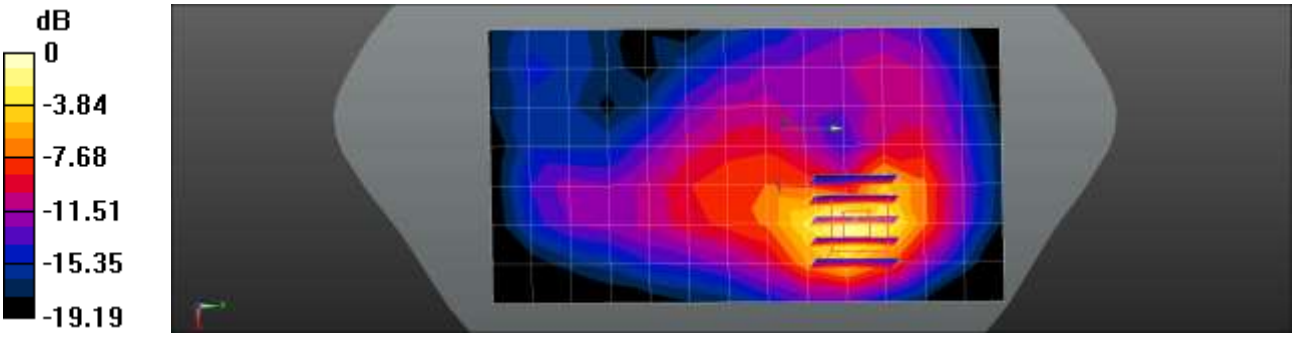
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.397 S/m; ε_r = 39.084; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1860 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Bodyworn Rear QPSK 20MHz 1RB 49offset 18700ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.909 W/kg

LTE Band 2 Bodyworn Rear QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.371 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.617 W/kg; SAR(10 g) = 0.318 W/kg
Maximum value of SAR (measured) = 0.946 W/kg



0 dB = 0.946 W/kg = -0.24 dBW/kg

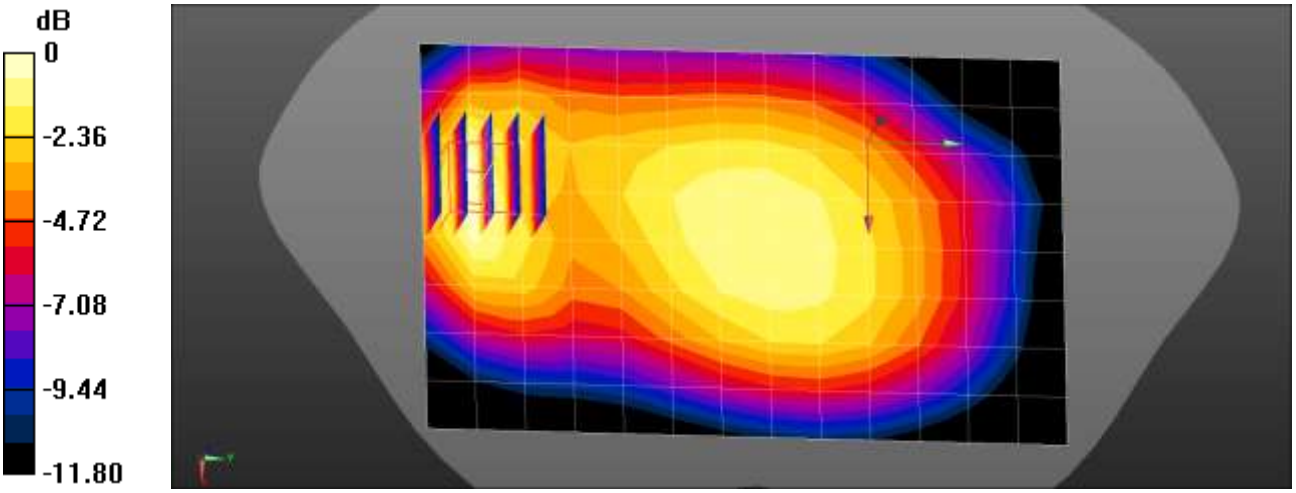
Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.3 ℃
Test Date:	12/16/2022
Plot No.:	B8

Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 840 MHz; σ = 0.919 S/m; ε_r = 41.971; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 836.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4)

LTE Band 5 BodyWorn Rear QPSK 10MHz 1RB 0offset 20525ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.458 W/kg

LTE Band 5 BodyWorn Rear QPSK 10MHz 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.23 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.524 W/kg
SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 0.455 W/kg



0 dB = 0.455 W/kg = -3.42 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.9 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/23/2022
Plot No.:	B9

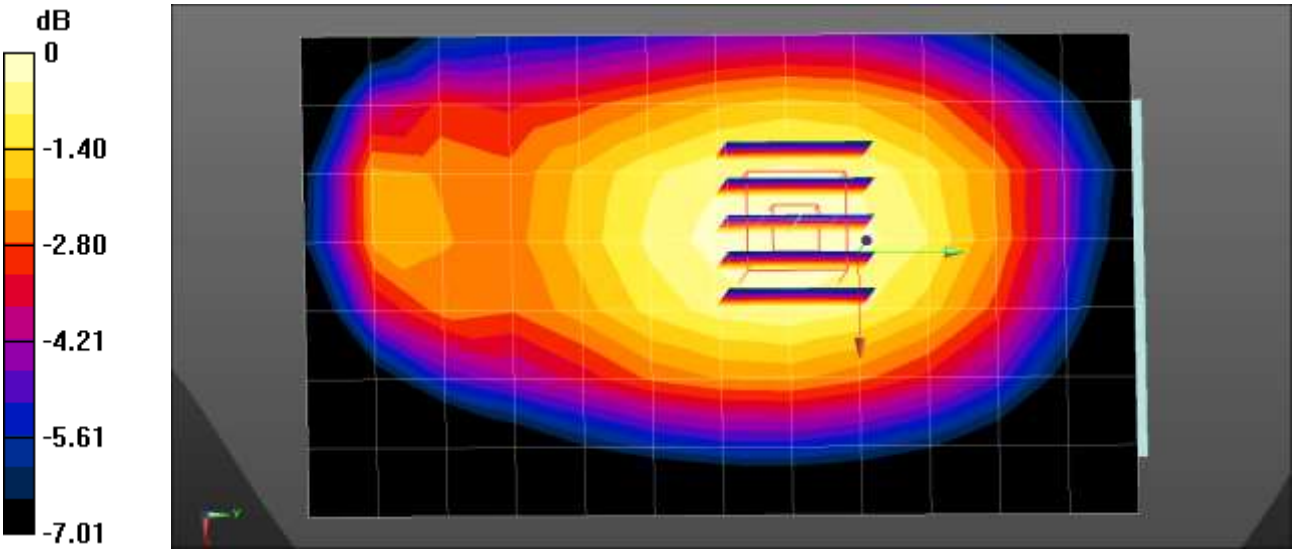
Communication System: UID 0, LTE 12 (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 704 MHz; σ = 0.853 S/m; ε_r = 43.559; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.49, 10.49, 10.49) @ 704 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 Bodyworn Rear QPSK 10MHz 1RB 0offset 23060ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.197 W/kg

LTE Band 12 Bodyworn Rear QPSK 10MHz 1RB 0offset 23060ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.89 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.212 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.129 W/kg
Maximum value of SAR (measured) = 0.198 W/kg



0 dB = 0.198 W/kg = -7.03 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/24/2022
Plot No.:	B10

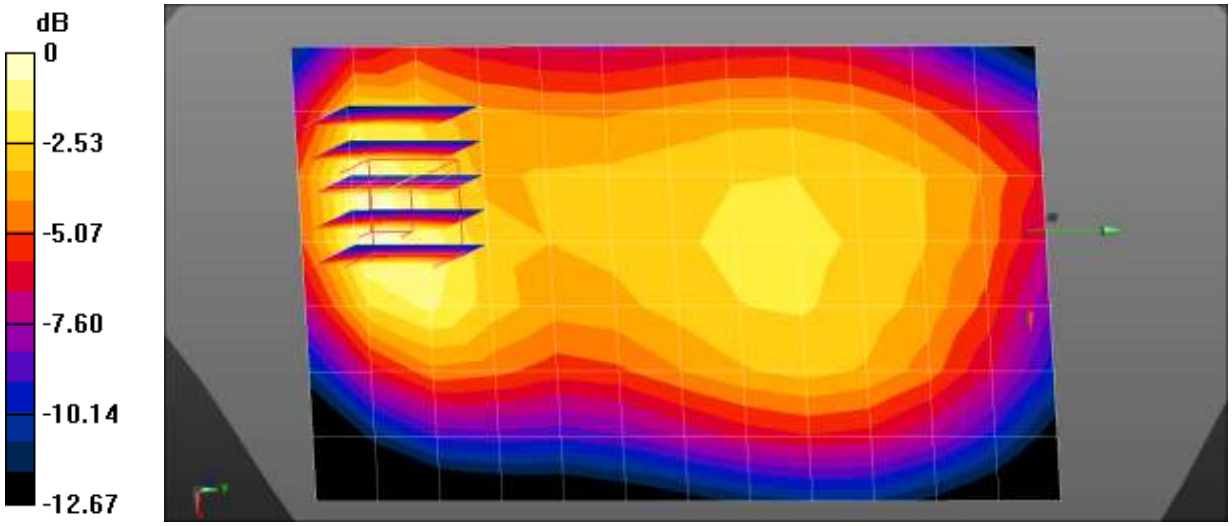
Communication System: UID 0, LTE 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.913 S/m; ε_r = 42.002; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 831.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 0offset 26865ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.312 W/kg

LTE Band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.26 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.397 W/kg
SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.156 W/kg
Maximum value of SAR (measured) = 0.342 W/kg



0 dB = 0.342 W/kg = -4.66 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.2 ℃
Ambient Temperature:	21.3 ℃
Test Date:	11/29/2022
Plot No.:	B11

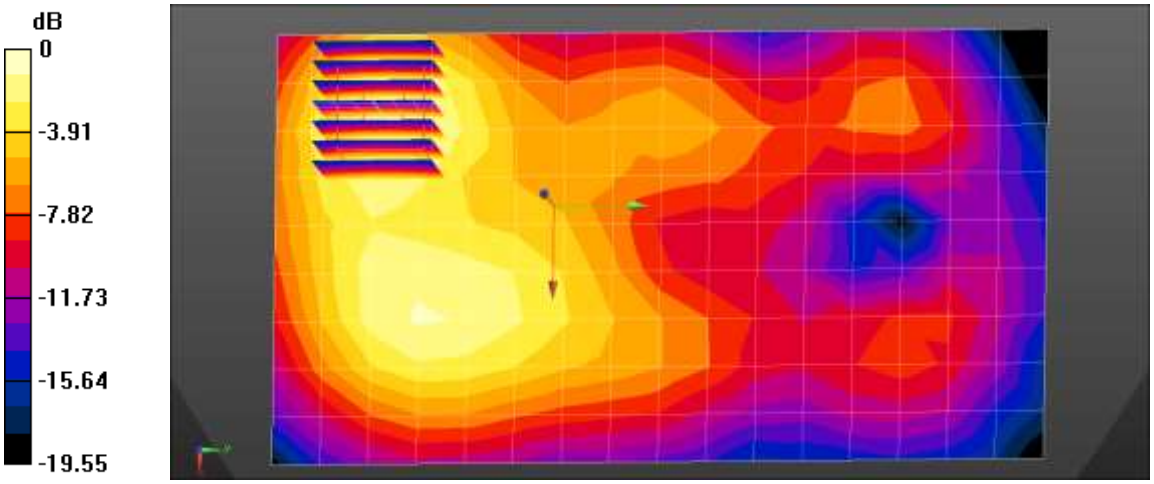
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58016
Medium parameters used: f = 2680 MHz; σ = 2.055 S/m; ε_r = 38.243; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.93, 7.93, 7.93) @ 2680 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 Bodyworn Front QPSK 20MHz 50RB 25offset 41490ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.297 W/kg

LTE Band 41 Bodyworn Front QPSK 20MHz 50RB 25offset 41490ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.462 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.367 W/kg
SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.107 W/kg
Maximum value of SAR (measured) = 0.303 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.2 ℃
Test Date:	11/21/2022
Plot No.:	B12

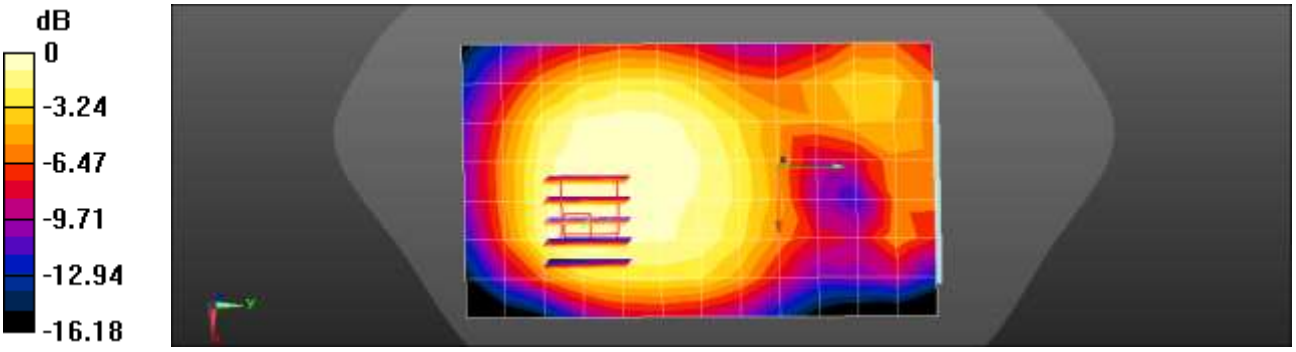
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.32 S/m; ε_r = 39.809; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.07, 9.07, 9.07) @ 1720 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 0offset 132332ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.341 W/kg

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 0offset 132332ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.40 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.420 W/kg
SAR(1 g) = 0.245 W/kg; SAR(10 g) = 0.159 W/kg
Maximum value of SAR (measured) = 0.339 W/kg



0 dB = 0.339 W/kg = -4.70 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6 ℃
Ambient Temperature:	20.7 ℃
Test Date:	12/14/2022
Plot No.:	B13

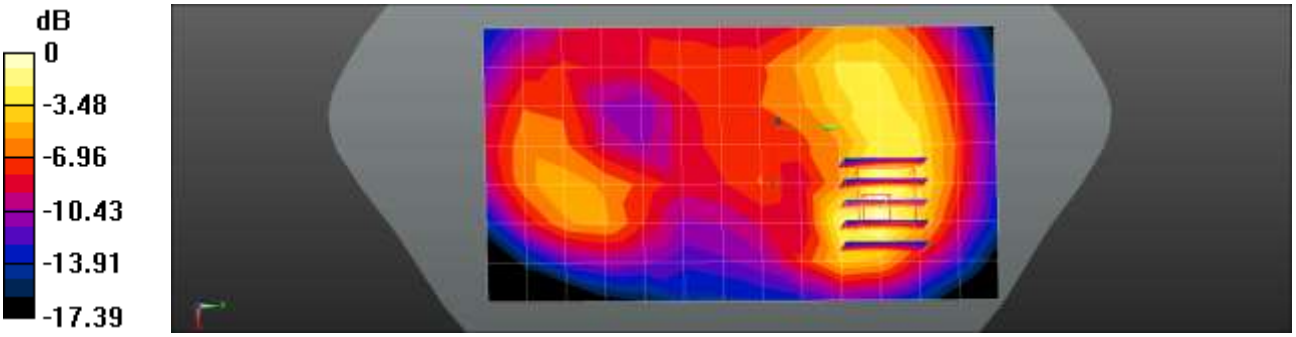
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.328 S/m; ε_r = 39.889; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.370 W/kg

LTE Band 66 Bodyworn Rear QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.798 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.496 W/kg
SAR(1 g) = 0.282 W/kg; SAR(10 g) = 0.160 W/kg
Maximum value of SAR (measured) = 0.413 W/kg



0 dB = 0.413 W/kg = -3.84 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.6 ℃
Test Date:	11/28/2022
Plot No.:	B14

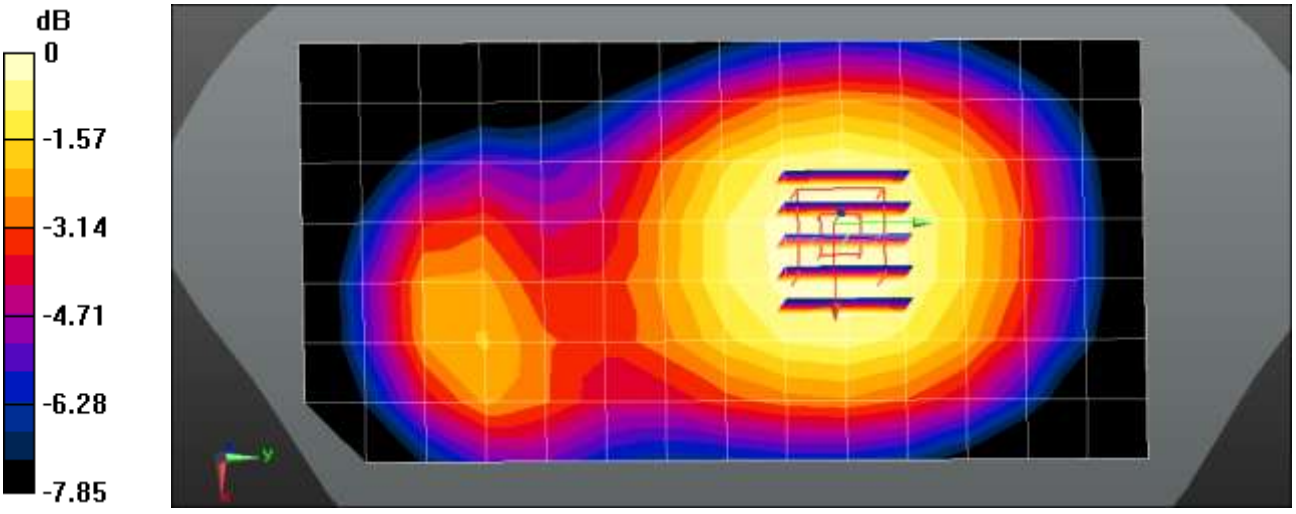
Communication System: UID 0, 5G NR (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.882 S/m; ε_r = 41.869; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.5 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n5 Bodyworn Front DFT-s QPSK 20MHz 50RB 28offset 167300ch/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.374 W/kg

NR Band n5 Bodyworn Front DFT-s QPSK 20MHz 50RB 28offset 167300ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.25 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.241 W/kg
Maximum value of SAR (measured) = 0.378 W/kg



0 dB = 0.378 W/kg = -4.23 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.1 ℃
Ambient Temperature:	19.2 ℃
Test Date:	11/30/2022
Plot No.:	B15

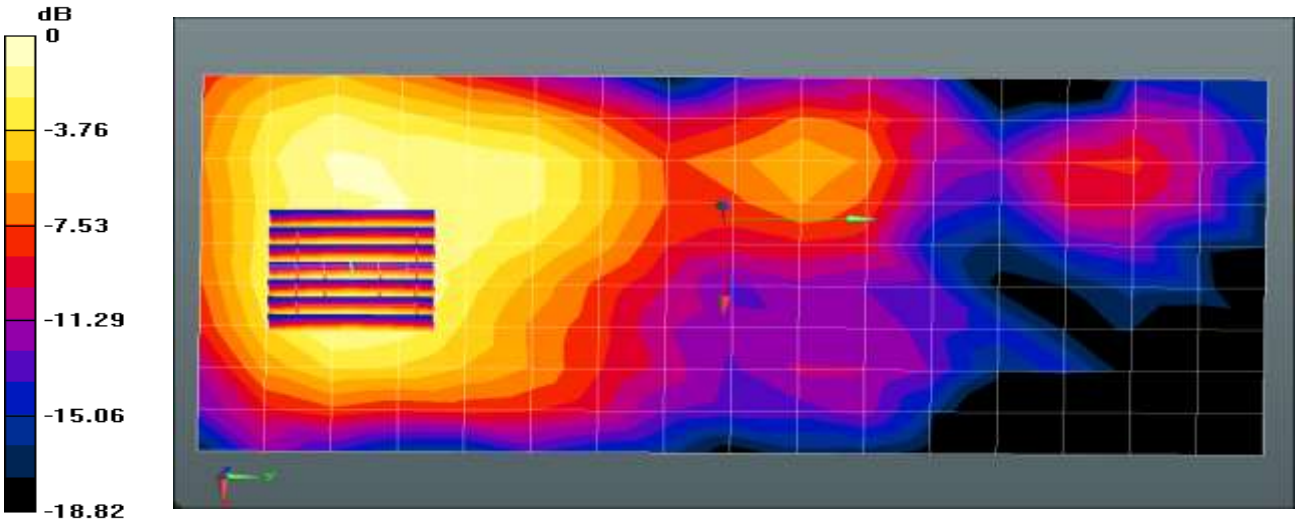
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.973 S/m; ε_r = 38.036; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Bodyworn Front DFT-s QPSK 100MHz 1RB 137offset 518598ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.185 W/kg

NR Band n41 Bodyworn Front DFT-s QPSK 100MHz 1RB 137offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.487 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.230 W/kg
SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.073 W/kg
Smallest distance from peaks to all points 3 dB below = 16.6 mm
Maximum value of SAR (measured) = 0.192 W/kg



0 dB = 0.192 W/kg = −7.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.4 ℃
Test Date:	12/21/2022
Plot No.:	B16

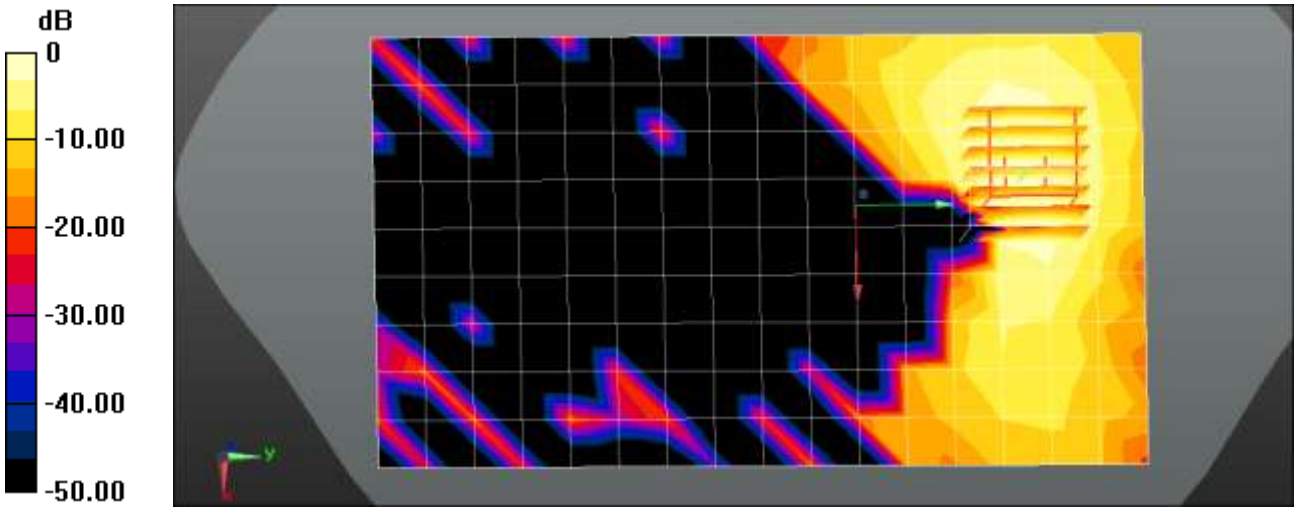
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.943 S/m; ε_r = 37.826; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 1RB 137offset 518598ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0845 W/kg

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 1RB 137offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.115 W/kg
SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.028 W/kg
Maximum value of SAR (measured) = 0.0914 W/kg



0 dB = 0.0914 W/kg = -10.39 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.7 ℃
Ambient Temperature:	19.8 ℃
Test Date:	11/29/2022
Plot No.:	B17

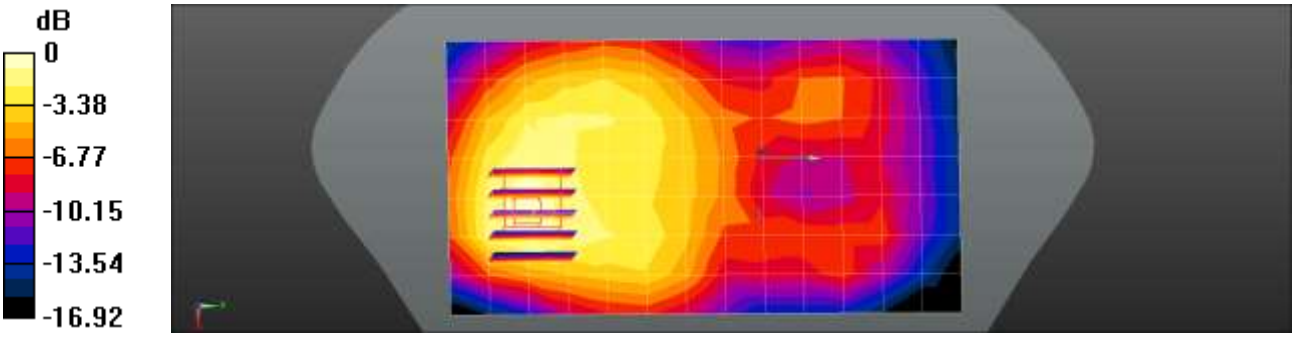
Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.309 S/m; ε_r = 41.522; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Bodyworn Rear DFT-s QPSK 20MHz 1RB 53offset 344000ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.460 W/kg

NR Band n66 Bodyworn Rear DFT-s QPSK 20MHz 1RB 53offset 344000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.18 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.570 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.209 W/kg
Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg = -3.15 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.2 ℃
Test Date:	12/06/2022
Plot No.:	B18

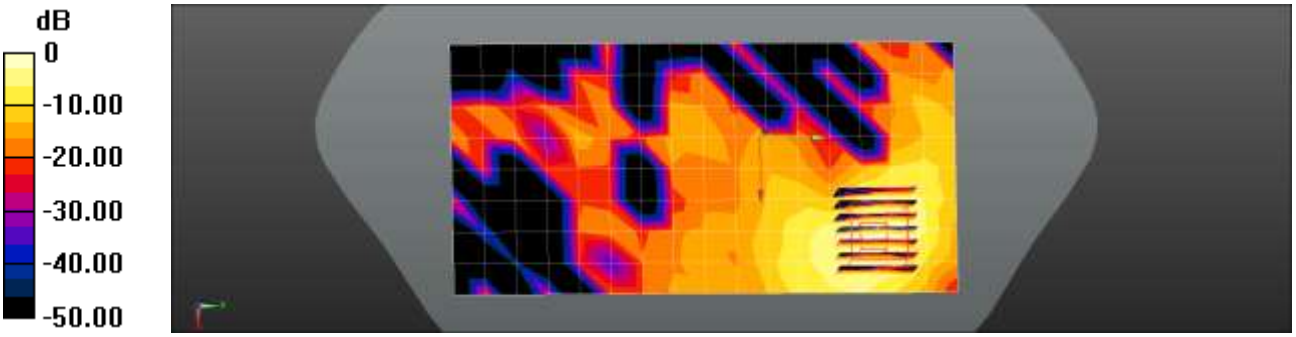
Communication System: UID 0, NR Band 77 (0); Frequency: 3930 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3930 MHz; σ = 3.329 S/m; ε_r = 38.391; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.22, 7.22, 7.22) @ 3930 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 662000ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.166 W/kg

NR Band n77 Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 662000ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.220 W/kg
SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.038 W/kg
Maximum value of SAR (measured) = 0.174 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	12/08/2022
Plot No.:	B19

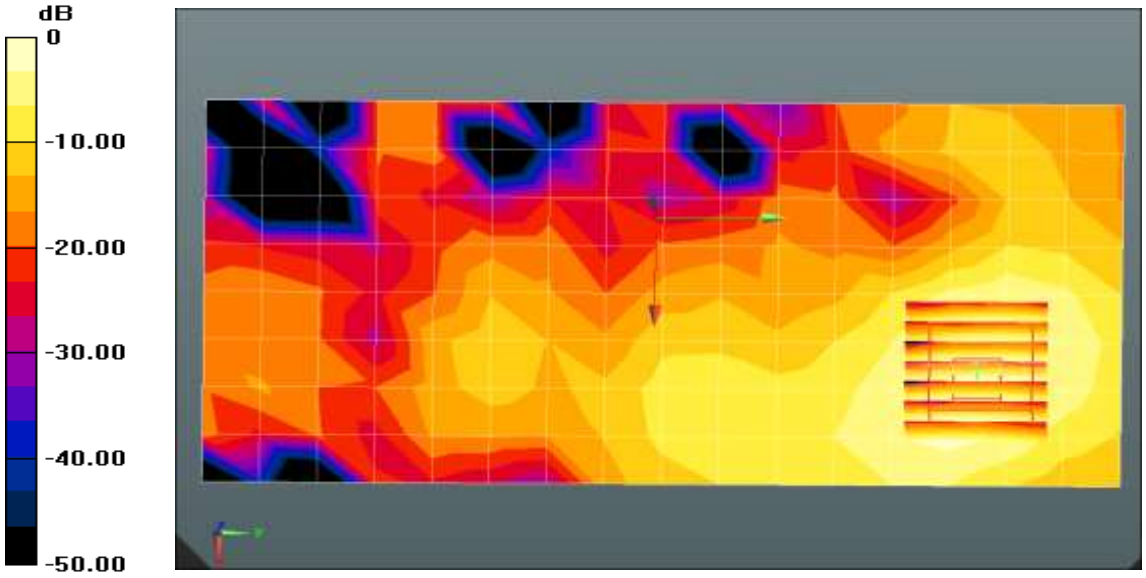
Communication System: UID 0, NR n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 3.023 S/m; ε_r = 38.769; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.75, 7.75, 7.75) @ 3500.01 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 DoD Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 633334ch/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.306 W/kg

NR Band n77 DoD Bodyworn Rear DFT-s QPSK 100MHz 135RB 69offset 633334ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 1.523 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.417 W/kg
SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.091 W/kg
Maximum value of SAR (measured) = 0.329 W/kg



0 dB = 0.329 W/kg = -4.83 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	B20

Measurement Report for Device, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle), Channel 1 (2412.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 15.00	WLAN 2.4GHz	2412.0, 1	7.73	1.78	39.4

Hardware Setup

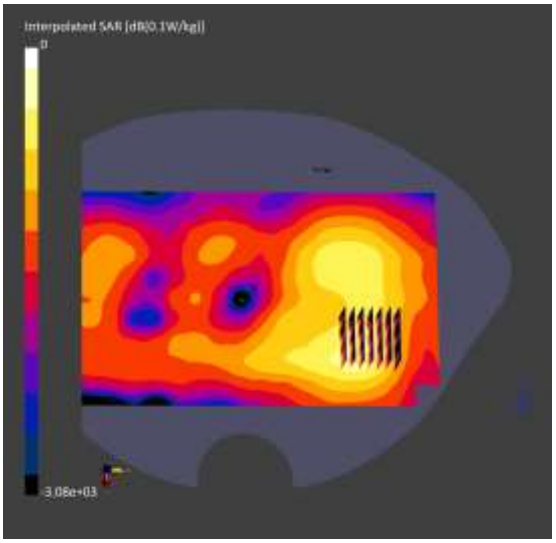
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.047	0.039
psSAR10g [W/Kg]	0.025	0.018
Power Drift [dB]	-0.19	0.13



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.3 ℃
Ambient Temperature:	19.4 ℃
Test Date:	12/14/2022
Plot No.:	B21

Measurement Report for Device, BACK, WLAN 5GHz, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps), Channel 60 (5300.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 15.00	WLAN 5GHz	5300.0, 60	5.29	4.75	35.9

Hardware Setup

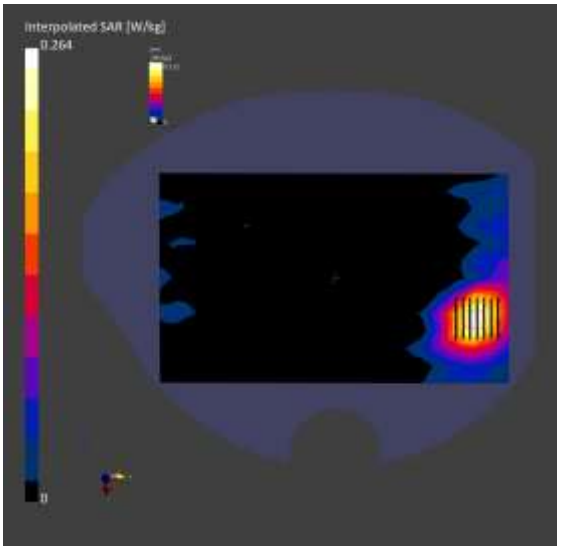
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.086	0.071
psSAR10g [W/Kg]	0.035	0.024
Power Drift [dB]	0.17	0.18



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	B22

Measurement Report for Device, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 15.00	ISM 2.4 GHz Band	2441.0, 39	7.73	1.82	39.3

Hardware Setup

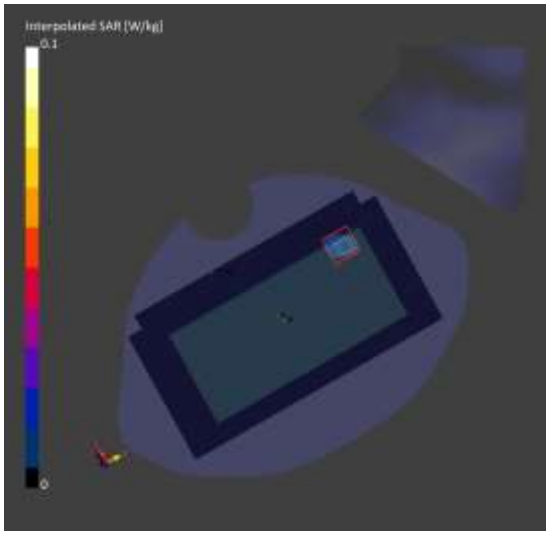
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.01	0.008
psSAR10g [W/Kg]	0.005	0.004
Power Drift [dB]	-0.12	0.14



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.0 ℃
Ambient Temperature:	20.1 ℃
Test Date:	11/22/2022
Plot No.:	C1

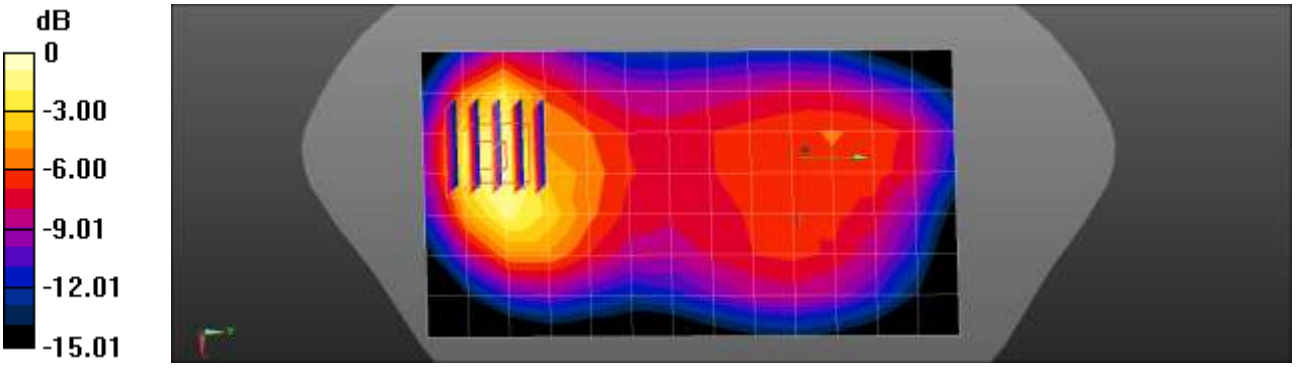
Communication System: UID 0, GSM850 GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.884 S/m; ε_r = 41.898; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.6 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

GSM850 2Tx Body Rear 190ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.480 W/kg

GSM850 2Tx Body Rear 190ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.27 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.709 W/kg
SAR(1 g) = 0.380 W/kg; SAR(10 g) = 0.215 W/kg
Maximum value of SAR (measured) = 0.590 W/kg



0 dB = 0.590 W/kg = -2.29 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	11/23/2022
Plot No.:	C2

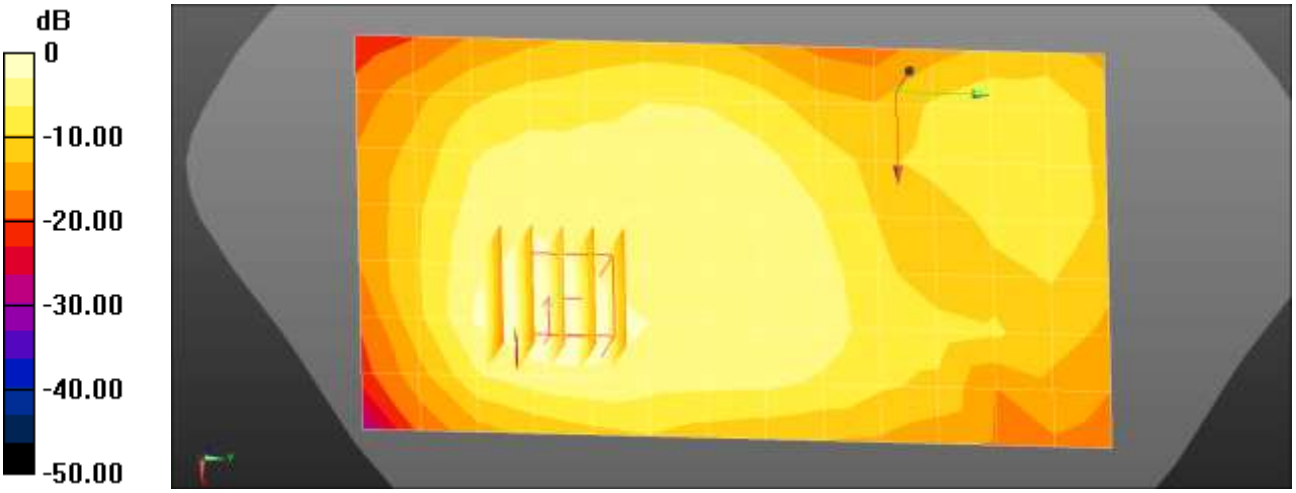
Communication System: UID 0, GSM 1900 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954
Medium parameters used: f = 1880 MHz; σ = 1.372 S/m; ε_r = 40.371; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1880 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front
- Measurement SW: DASY52, Version 52.10 (4)

GSM1900 Body Rear 2Tx 661ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.412 W/kg

GSM1900 Body Rear 2Tx 661ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.55 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.498 W/kg
SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.141 W/kg
Maximum value of SAR (measured) = 0.411 W/kg



0 dB = 0.411 W/kg = -3.86 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	23.1 ℃
Ambient Temperature:	23.2 ℃
Test Date:	12/12/2022
Plot No.:	C3

Measurement Report for Device, BACK, Band 2, UTRA/FDD, UMTS-FDD (WCDMA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	Band 2, UTRA/FDD	1880.0, 9400	8.21	1.39	40.7

Hardware Setup

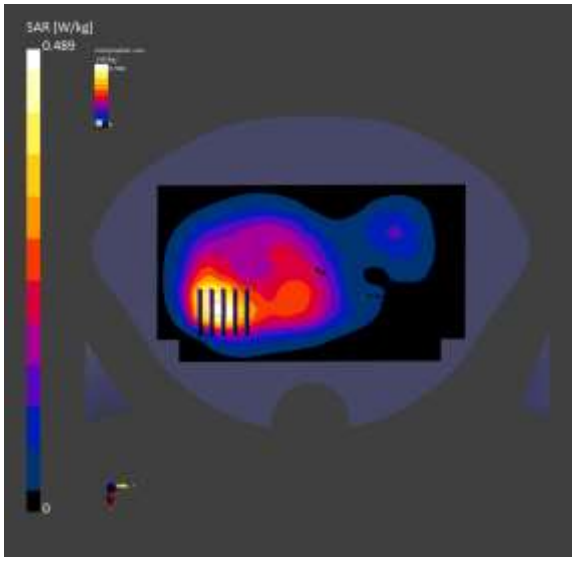
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.310	0.332
psSAR10g [W/Kg]	0.182	0.186
Power Drift [dB]	0.00	-0.04



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.4 ℃
Ambient Temperature:	22.4 ℃
Test Date:	12/13/2022
Plot No.:	C4

Measurement Report for Device, BACK, Band 4, UTRA/FDD, UMTS-FDD (WCDMA), Channel 1412 (1732.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	Band 4, UTRA/FDD	1732.4, 1412	8.62	1.34	41.5

Hardware Setup

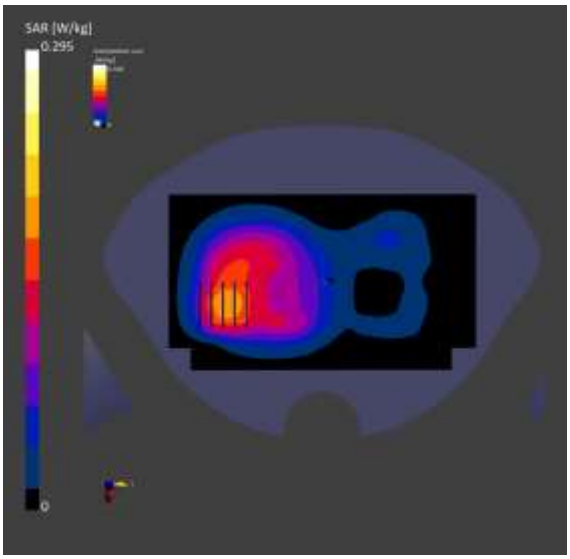
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.190	0.197
psSAR10g [W/Kg]	0.119	0.118
Power Drift [dB]	0.03	-0.10



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.4 ℃
Ambient Temperature:	20.5 ℃
Test Date:	12/09/2022
Plot No.:	C5

Measurement Report for Device, BACK, Band 5, UTRA/FDD, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	Band 5, UTRA/FDD	836.6, 4183	9.53	0.888	41.8

Hardware Setup

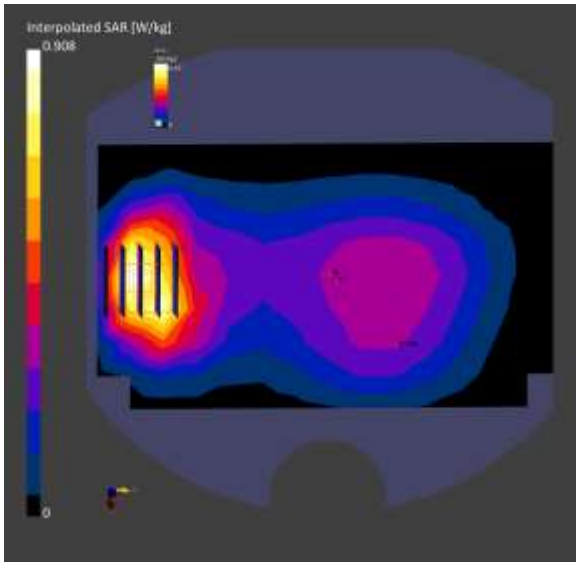
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.504	0.539
psSAR10g [W/Kg]	0.329	0.319
Power Drift [dB]	0.01	0.00



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.1 ℃
Ambient Temperature:	22.2 ℃
Test Date:	11/22/2022
Plot No.:	C6

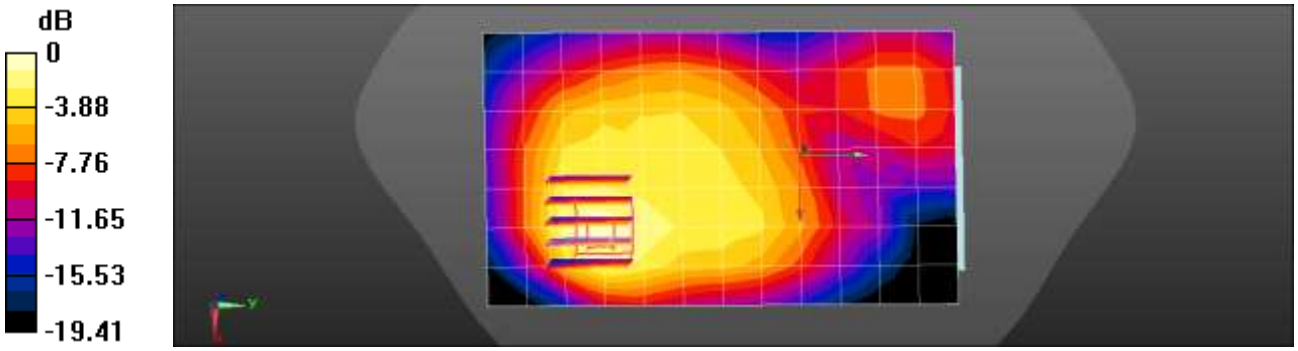
Communication System: UID 0, LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.402 S/m; ε_r = 38.883; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.78, 8.78, 8.78) @ 1880 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 Body Rear QPSK 20MHz 50RB 0offset 18900ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.408 W/kg

LTE Band 2 Body Rear QPSK 20MHz 50RB 0offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.98 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.558 W/kg
SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.172 W/kg
Maximum value of SAR (measured) = 0.425 W/kg



0 dB = 0.425 W/kg = -3.72 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.8 ℃
Ambient Temperature:	20.9 ℃
Test Date:	12/13/2022
Plot No.:	C7

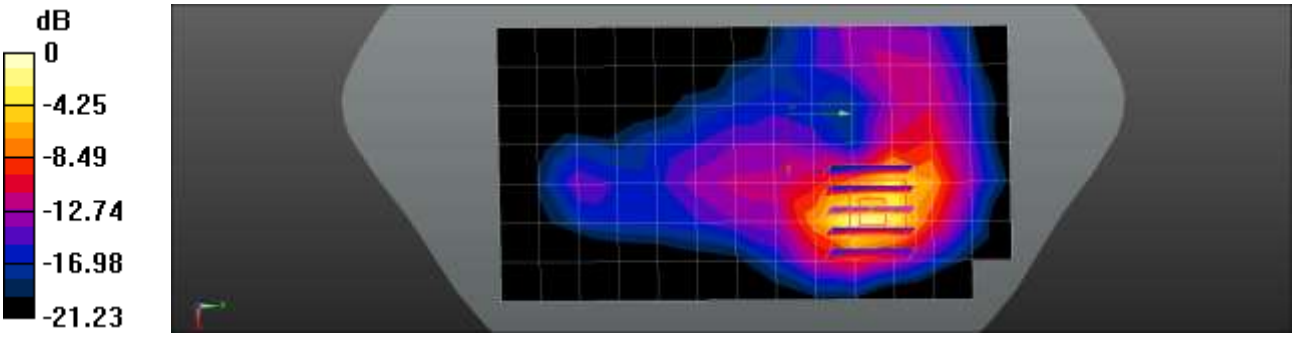
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.436 S/m; ε_r = 38.965; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Body Rear QPSK 20MHz 1RB 0offset 19100ch/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.788 W/kg

LTE Band 2 Body Rear QPSK 20MHz 1RB 0offset 19100ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.374 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.318 W/kg
Maximum value of SAR (measured) = 1.09 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	22.2 ℃
Ambient Temperature:	22.3 ℃
Test Date:	12/16/2022
Plot No.:	C8

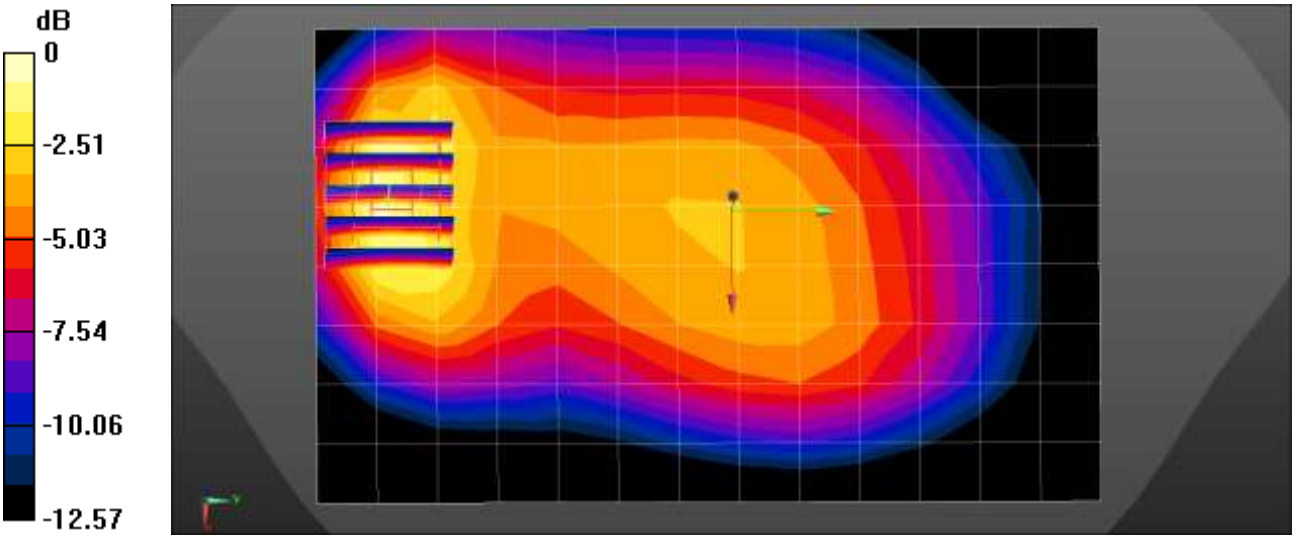
Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 840 MHz; σ = 0.919 S/m; ε_r = 41.971; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 836.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 Body Rear QPSK 10MHz 25RB 0offset 20525ch/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.443 W/kg

LTE Band 5 Body Rear QPSK 10MHz 25RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.46 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.579 W/kg
SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.202 W/kg
Maximum value of SAR (measured) = 0.482 W/kg



0 dB = 0.482 W/kg = -3.17 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.9 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/23/2022
Plot No.:	C9

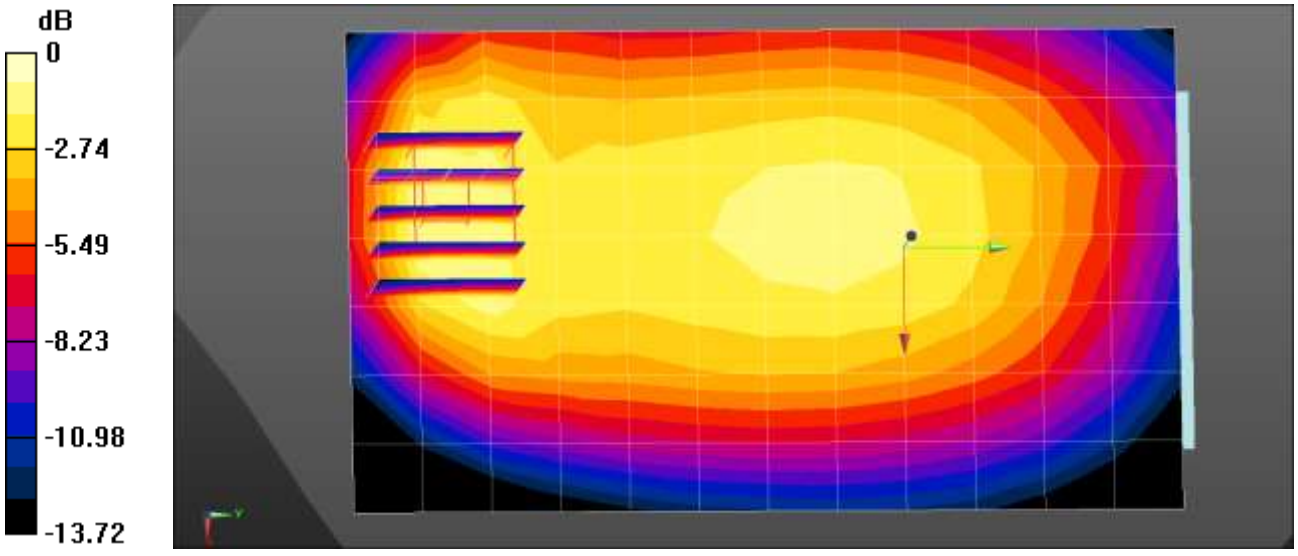
Communication System: UID 0, LTE 12 (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 704 MHz; σ = 0.853 S/m; ε_r = 43.559; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.49, 10.49, 10.49) @ 704 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 0offset 23060ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.238 W/kg

LTE Band 12 Body Rear QPSK 10MHz 1RB 0offset 23060ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.47 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.350 W/kg
SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.122 W/kg
Maximum value of SAR (measured) = 0.293 W/kg



0 dB = 0.293 W/kg = -5.33 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.0 ℃
Test Date:	11/24/2022
Plot No.:	C10

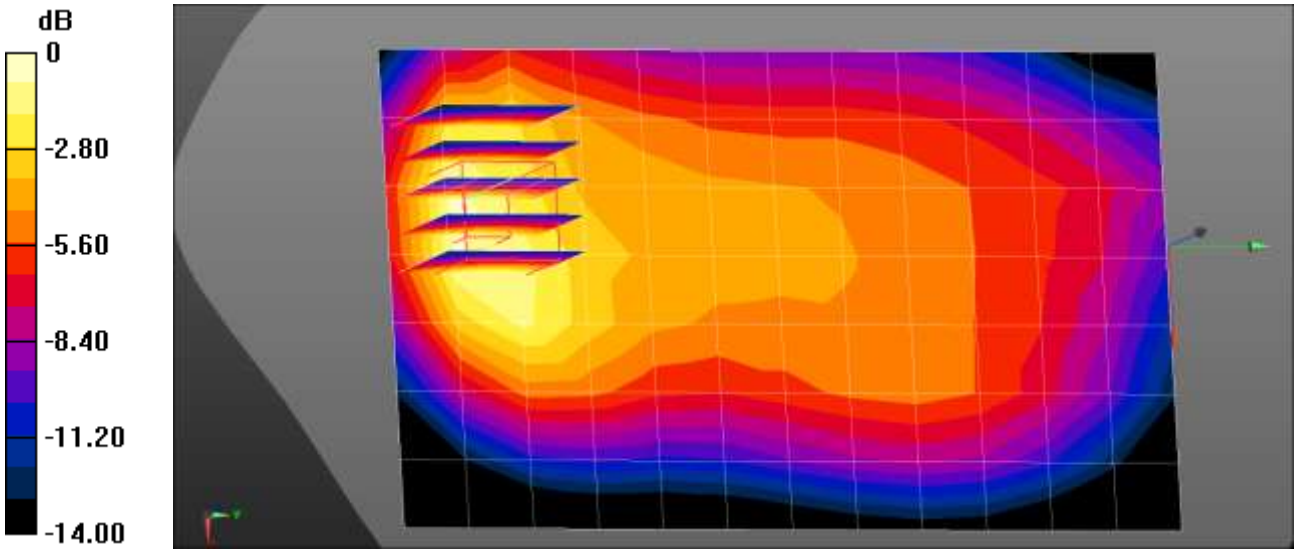
Communication System: UID 0, LTE 26 (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.913 S/m; ε_r = 42.002; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 831.5 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-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 0offset 26865ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.604 W/kg

LTE Band 26 Body Rear QPSK 15MHz 1RB 0offset 26865ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.10 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.841 W/kg
SAR(1 g) = 0.484 W/kg; SAR(10 g) = 0.290 W/kg
Maximum value of SAR (measured) = 0.696 W/kg



0 dB = 0.696 W/kg = -1.57 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Liquid Temperature: 21.2 ℃
Ambient Temperature: 21.3 ℃
Test Date: 11/29/2022
Plot No.: C11
Communication System: UID 0, LTE Band41 (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58016
Medium parameters used: f = 2680 MHz; σ = 2.055 S/m; ε_r = 38.243; ρ = 1000 kg/m^3
Phantom section: Flat Section

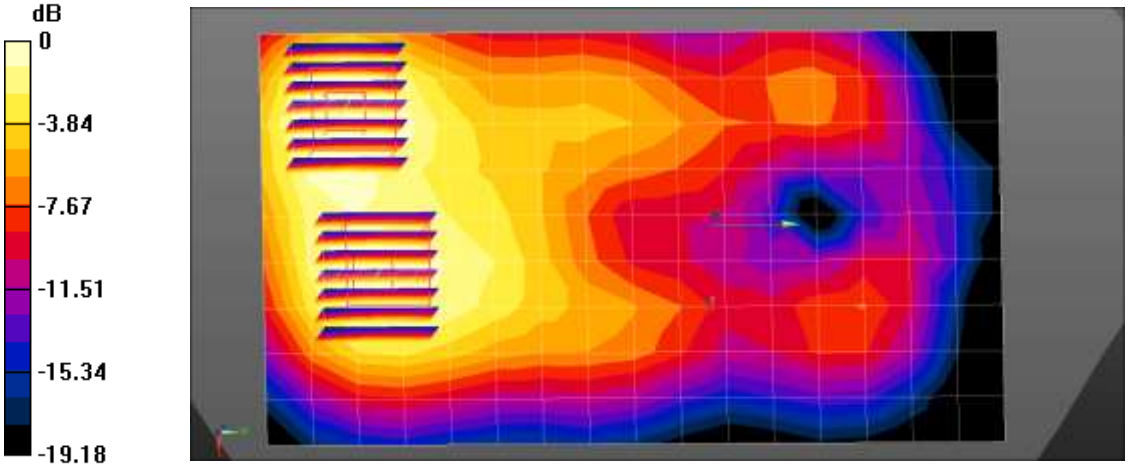
DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.93, 7.93, 7.93) @ 2680 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 Body Front QPSK 20MHz 1RB 49offset 41490ch/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.734 W/kg

LTE Band 41 Body Front QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.966 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.956 W/kg
SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.260 W/kg
Maximum value of SAR (measured) = 0.786 W/kg

LTE Band 41 Body Front QPSK 20MHz 1RB 49offset 41490ch/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.966 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.633 W/kg
SAR(1 g) = 0.363 W/kg; SAR(10 g) = 0.209 W/kg
Maximum value of SAR (measured) = 0.528 W/kg



0 dB = 0.528 W/kg = -2.77 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.1 ℃
Ambient Temperature:	21.2 ℃
Test Date:	11/21/2022
Plot No.:	C12

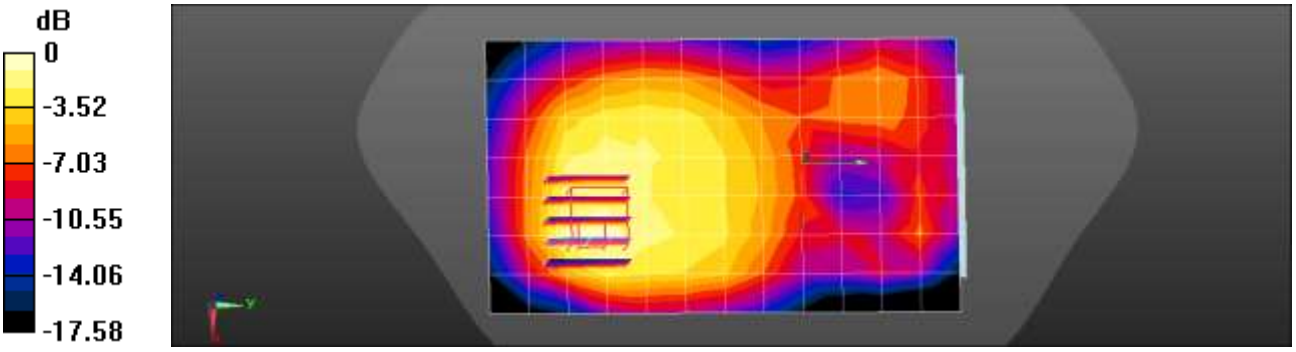
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.32 S/m; ε_r = 39.809; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.07, 9.07, 9.07) @ 1720 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 Body Rear QPSK 20MHz 1RB 0offset 132072ch/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.330 W/kg

LTE Band 66 Body Rear QPSK 20MHz 1RB 0offset 132072ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.75 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.475 W/kg
SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.150 W/kg
Maximum value of SAR (measured) = 0.377 W/kg



0 dB = 0.377 W/kg = -4.24 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.6 ℃
Ambient Temperature:	20.7 ℃
Test Date:	12/14/2022
Plot No.:	C13

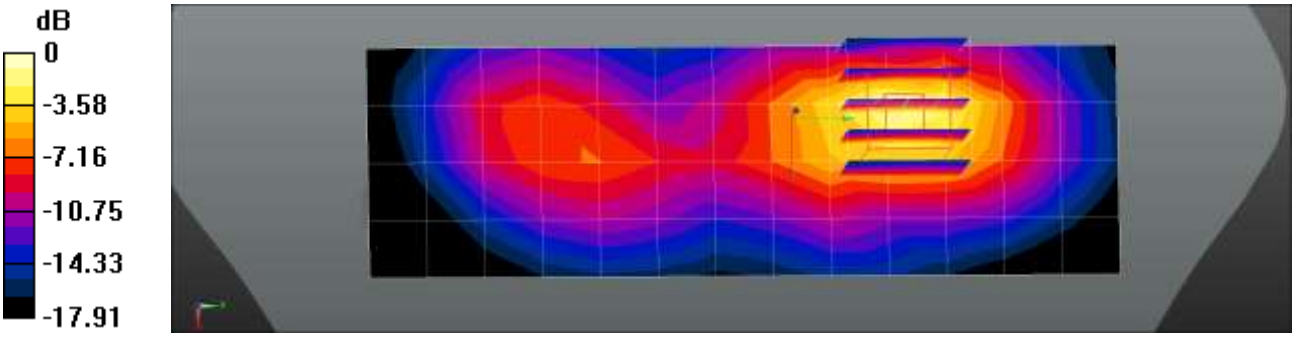
Communication System: UID 0, LTE Band 66 (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.328 S/m; ε_r = 39.889; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 66 Body Left QPSK 20MHz 1RB 49offset 132072ch/Area Scan (5x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.439 W/kg

LTE Band 66 Body Left QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.238 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.655 W/kg
SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.181 W/kg
Maximum value of SAR (measured) = 0.538 W/kg



0 dB = 0.538 W/kg = -2.69 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.6 ℃
Test Date:	11/28/2022
Plot No.:	C14

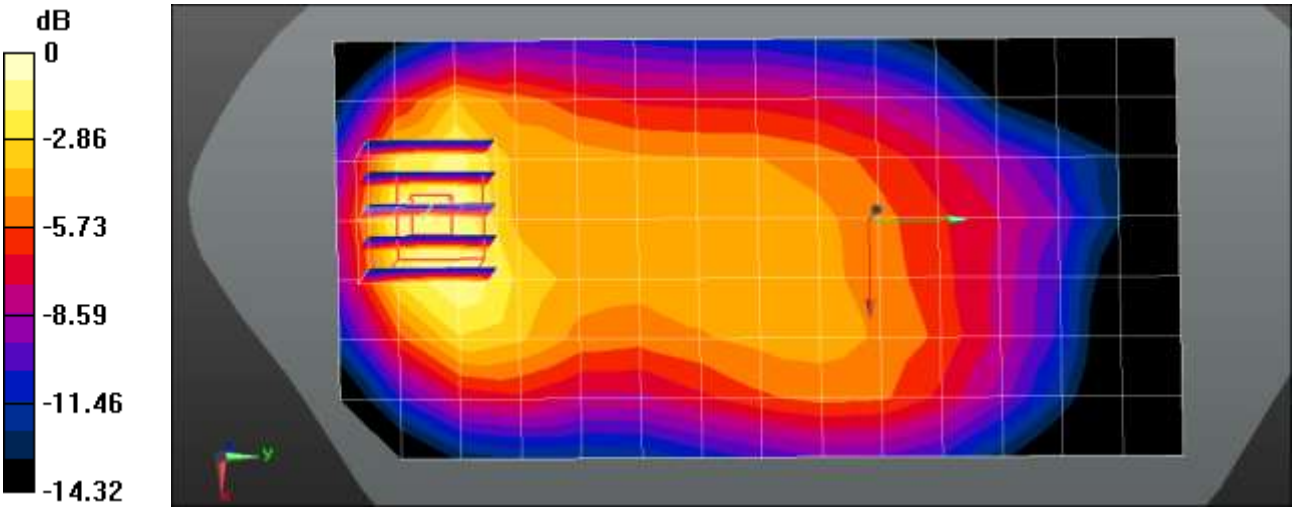
Communication System: UID 0, 5G NR (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.882 S/m; ε_r = 41.869; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 836.5 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n5 Body Rear DFT-s QPSK 20MHz 50RB 0offset 167300ch/Area Scan (8x15x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.338 W/kg

NR Band n5 Body Rear DFT-s QPSK 20MHz 50RB 0offset 167300ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.78 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.501 W/kg
SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.164 W/kg
Maximum value of SAR (measured) = 0.414 W/kg



0 dB = 0.414 W/kg = -3.83 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.1 ℃
Ambient Temperature:	19.2 ℃
Test Date:	11/30/2022
Plot No.:	C15

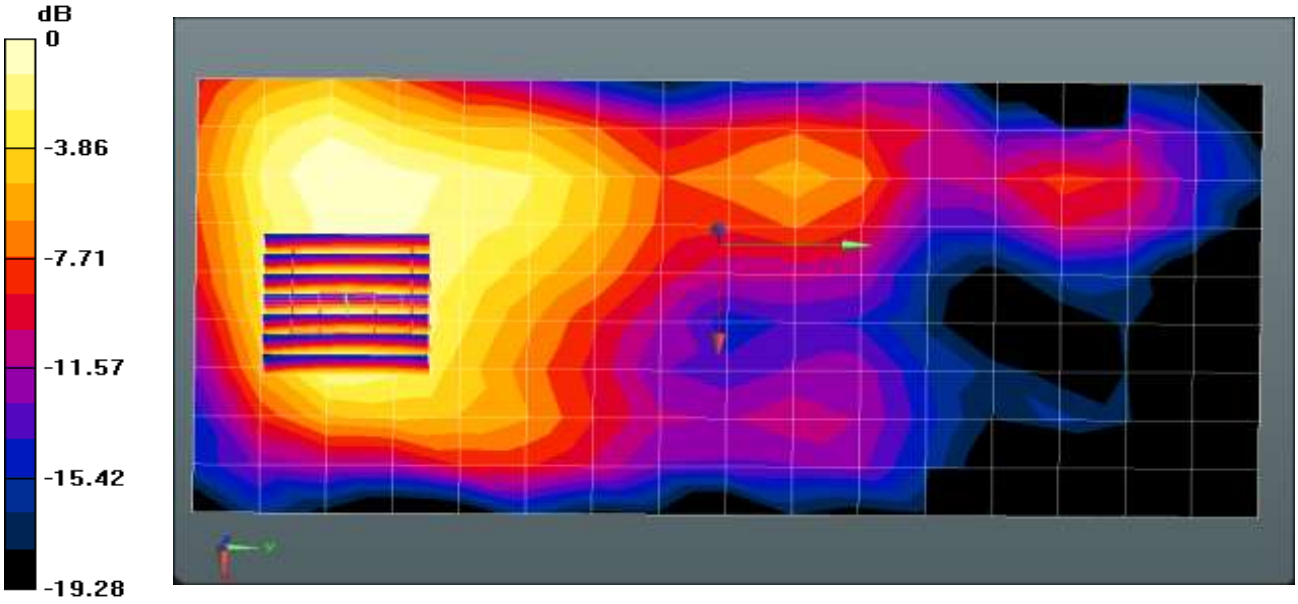
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.973 S/m; ε_r = 38.036; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Body Front DFT-s QPSK 100MHz 1RB 137offset 518598ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.345 W/kg

NR Band n41 Body Front DFT-s QPSK 100MHz 1RB 137offset 518598ch/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.049 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.401 W/kg
SAR(1 g) = 0.225 W/kg; SAR(10 g) = 0.126 W/kg
Maximum value of SAR (measured) = 0.335 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.5 ℃
Ambient Temperature:	20.4 ℃
Test Date:	12/21/2022
Plot No.:	C16

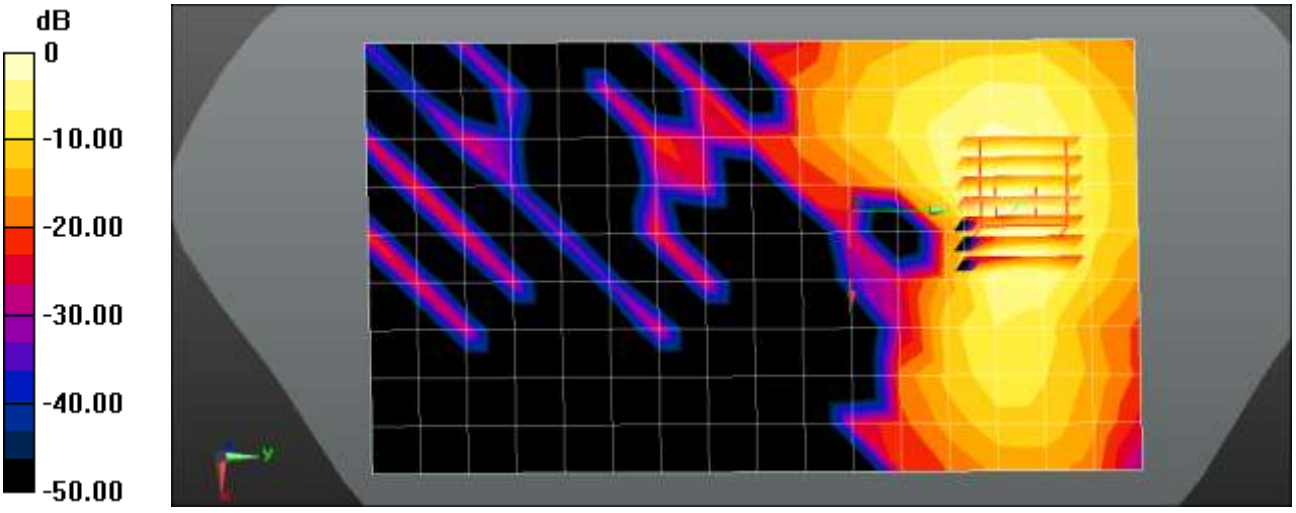
Communication System: UID 0, NR n41 (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.943 S/m; ε_r = 37.826; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2592.99 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 1RB 137offset 518598ch/Area Scan (10x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.179 W/kg

NR Band n41 Bodyworn Rear DFT-s QPSK 100MHz 1RB 137offset 518598ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.265 W/kg
SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.056 W/kg
Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg = -6.80 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.7 ℃
Ambient Temperature:	19.8 ℃
Test Date:	11/29/2022
Plot No.:	C17

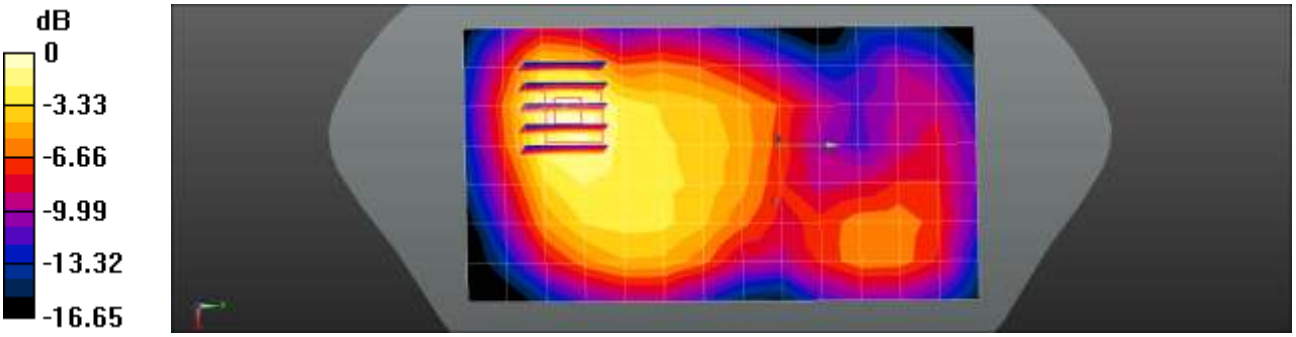
Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.309 S/m; ε_r = 41.522; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Body Front DFT-s QPSK 20MHz 1RB 1offset 344000ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.428 W/kg

NR Band n66 Body Front DFT-s QPSK 20MHz 1RB 1offset 344000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.16 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.565 W/kg
SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.199 W/kg
Maximum value of SAR (measured) = 0.475 W/kg



0 dB = 0.475 W/kg = -3.23 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.7 ℃
Ambient Temperature:	19.8 ℃
Test Date:	11/29/2022
Plot No.:	C18

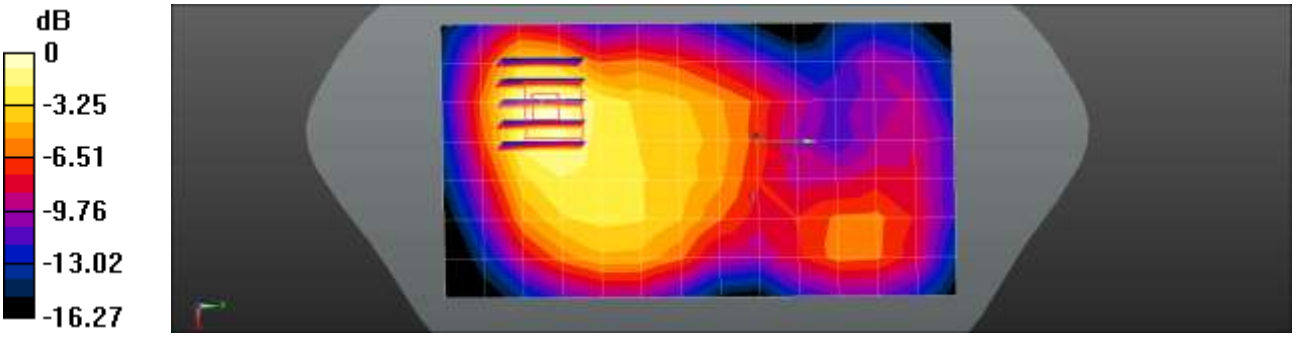
Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.309 S/m; ε_r = 41.522; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1720 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n66 Body Front DFT-s QPSK 20MHz 50RB 0offset 344000ch/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.429 W/kg

NR Band n66 Body Front DFT-s QPSK 20MHz 50RB 0offset 344000ch/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.08 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.554 W/kg
SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.198 W/kg
Maximum value of SAR (measured) = 0.470 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.1 ℃
Ambient Temperature:	20.2 ℃
Test Date:	12/06/2022
Plot No.:	C19

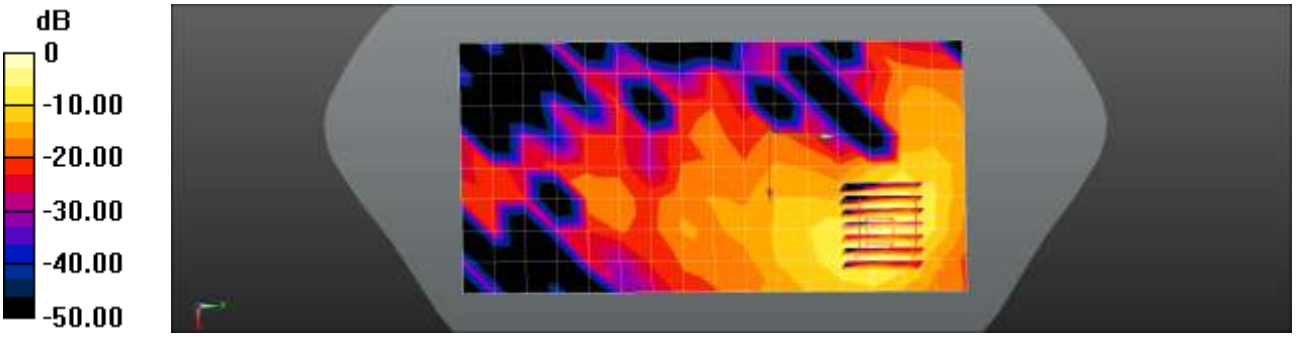
Communication System: UID 0, NR Band 77 (0); Frequency: 3930 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3930 MHz; σ = 3.329 S/m; ε_r = 38.391; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.22, 7.22, 7.22) @ 3930 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 Body Rear DFT-s QPSK 100MHz 135RB 69offset 662000ch/Area Scan (9x17x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.378 W/kg

NR Band n77 Body Rear DFT-s QPSK 100MHz 135RB 69offset 662000ch/Zoom Scan (7x7x8)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 0.6330 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.615 W/kg
SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.089 W/kg
Maximum value of SAR (measured) = 0.479 W/kg



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

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	21.0 ℃
Ambient Temperature:	21.1 ℃
Test Date:	12/08/2022
Plot No.:	C20

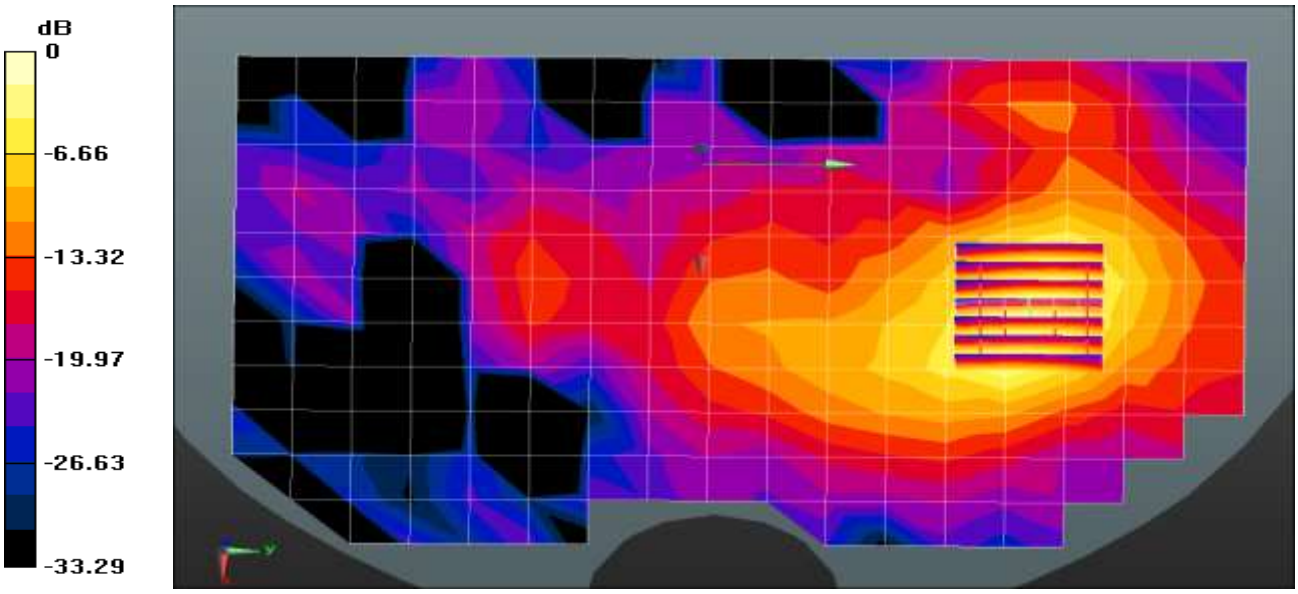
Communication System: UID 0, NR n77 (0); Frequency: 3500.01 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 3.023 S/m; ε_r = 38.769; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.75, 7.75, 7.75) @ 3500.01 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

NR Band n77 DoD Body Rear DFT-s QPSK 100MHz 135RB 69offset 633334ch/Area Scan (12x18x1):
Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.772 W/kg

NR Band n77 DoD Body Rear DFT-s QPSK 100MHz 135RB 69offset 633334ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 2.537 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.210 W/kg
Maximum value of SAR (measured) = 0.863 W/kg



0 dB = 0.863 W/kg = -0.64 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	C21

Measurement Report for Device, BACK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle), Channel 1 (2412.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	WLAN 2.4GHz	2412.0, 1	7.73	1.78	39.4

Hardware Setup

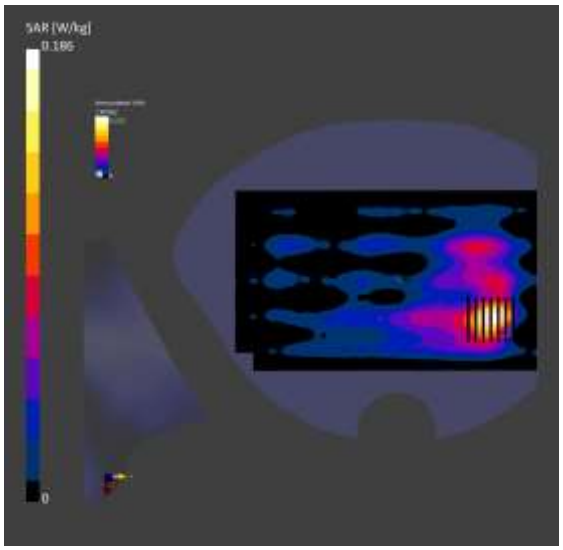
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.109	0.105
psSAR10g [W/Kg]	0.052	0.048
Power Drift [dB]	-0.17	-0.14



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.3 ℃
Ambient Temperature:	19.4 ℃
Test Date:	12/14/2022
Plot No.:	C22

Measurement Report for Device, BACK, WLAN 5GHz, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps), Channel 149 (5745.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	WLAN 5GHz	5745.0, 149	4.8	5.27	35.2

Hardware Setup

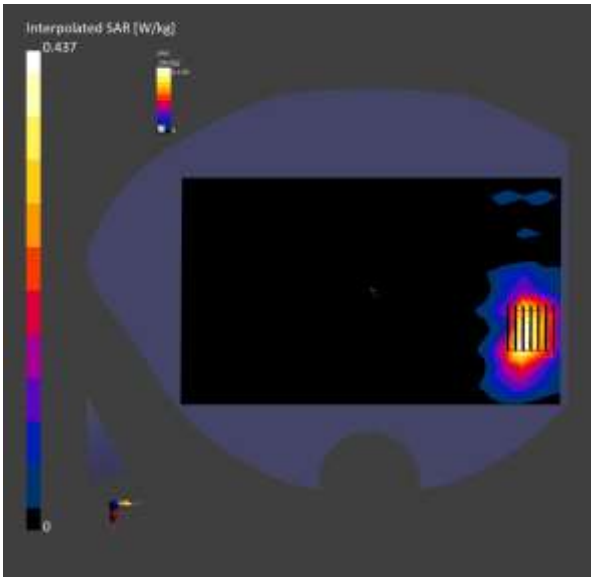
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.102	0.102
psSAR10g [W/Kg]	0.040	0.034
Power Drift [dB]	-0.15	0.19



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	20.2 ℃
Ambient Temperature:	20.3 ℃
Test Date:	12/16/2022
Plot No.:	C23

Measurement Report for Device, BACK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 10.00	ISM 2.4 GHz Band	2441.0, 39	7.73	1.82	39.3

Hardware Setup

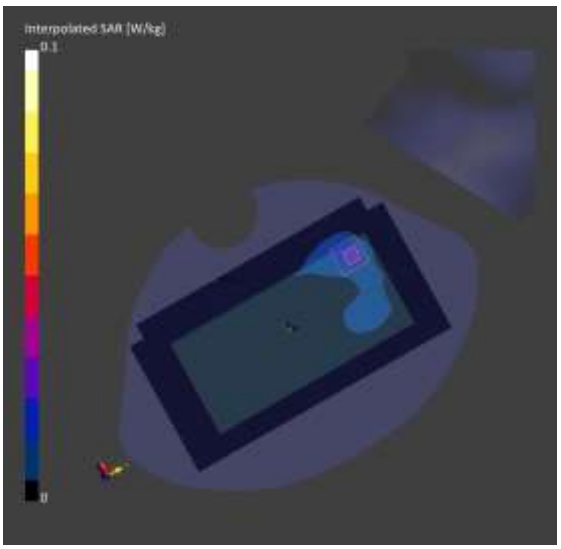
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.023	0.020
psSAR10g [W/Kg]	0.011	0.009
Power Drift [dB]	-0.12	0.15



Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.6 ℃
Ambient Temperature:	19.7 ℃
Test Date:	12/15/2022
Plot No.:	C24

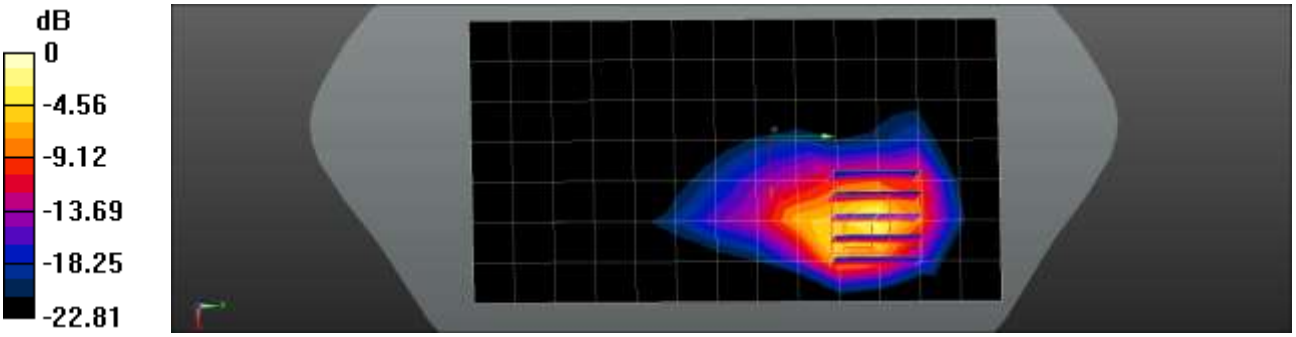
Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.44 S/m; ε_r = 39.005; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

LTE Band 2 Phablet(Limb) Rear QPSK 20MHz 1RB 0offset 19100ch Grip/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 5.26 W/kg

LTE Band 2 Phablet(Limb) Rear QPSK 20MHz 1RB 0offset 19100ch Grip/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.614 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 11.0 W/kg
SAR(1 g) = 4.2 W/kg; SAR(10 g) = 1.77 W/kg
Maximum value of SAR (measured) = 7.85 W/kg



0 dB = 7.85 W/kg = 8.95 dBW/kg

Test Laboratory:	HCT CO., LTD
EUT Type:	Mobile Phone
Liquid Temperature:	19.3 ℃
Ambient Temperature:	19.4 ℃
Test Date:	12/14/2022
Plot No.:	C25

Measurement Report for Device, BACK, WLAN 5GHz, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps), Channel 120 (5600.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	WLAN 5GHz	5600.0, 120	4.75	4.98	35.4

Hardware Setup

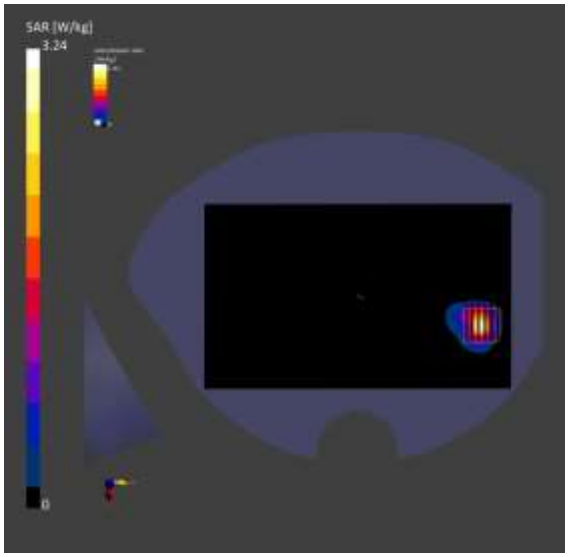
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.802	0.945
psSAR10g [W/Kg]	0.229	0.220
Power Drift [dB]	0.11	0.12



Appendix C. – Dipole Verification Plots

■ **Verification Data (750 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	11/23/2022

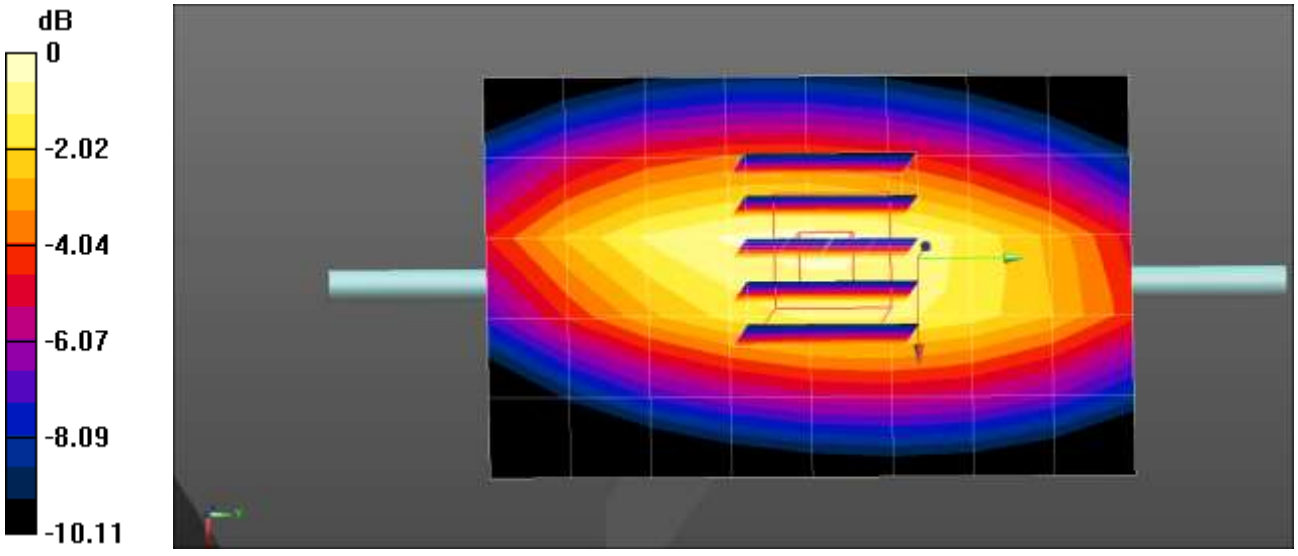
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.901 S/m; ε_r = 42.872; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.49, 10.49, 10.49) @ 750 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

750MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.515 W/kg

750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.12 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.612 W/kg
SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.281 W/kg
Maximum value of SAR (measured) = 0.551 W/kg



0 dB = 0.551 W/kg = −2.59 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.0 ℃
Test Date:	11/22/2022

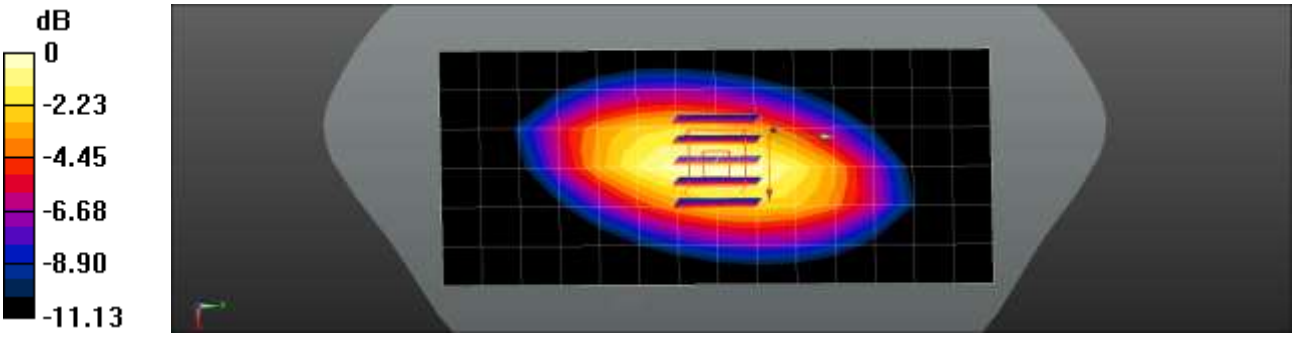
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.882 S/m; ε_r = 41.905; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 835 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

835MHz Head Verification/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.655 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.63 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.744 W/kg
SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.321 W/kg
Maximum value of SAR (measured) = 0.662 W/kg



0 dB = 0.662 W/kg = -1.79 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	11/24/2022

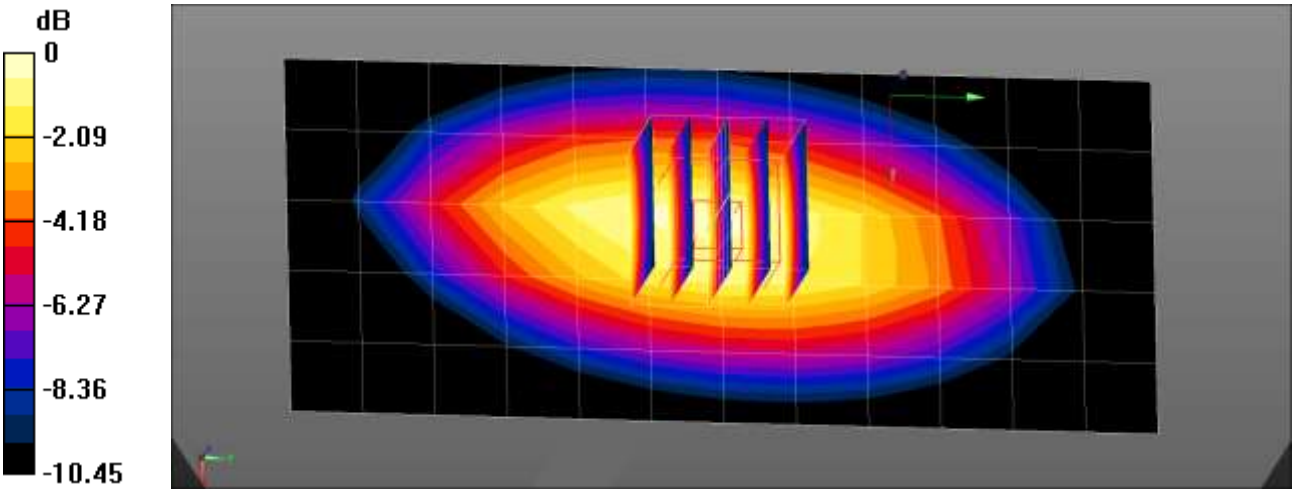
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.916 S/m; ε_r = 41.981; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 835 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.628 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.53 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.762 W/kg
SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.339 W/kg
Maximum value of SAR (measured) = 0.680 W/kg



0 dB = 0.680 W/kg = -1.67 dBW/kg

■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.5 ℃
Test Date:	11/28/2022

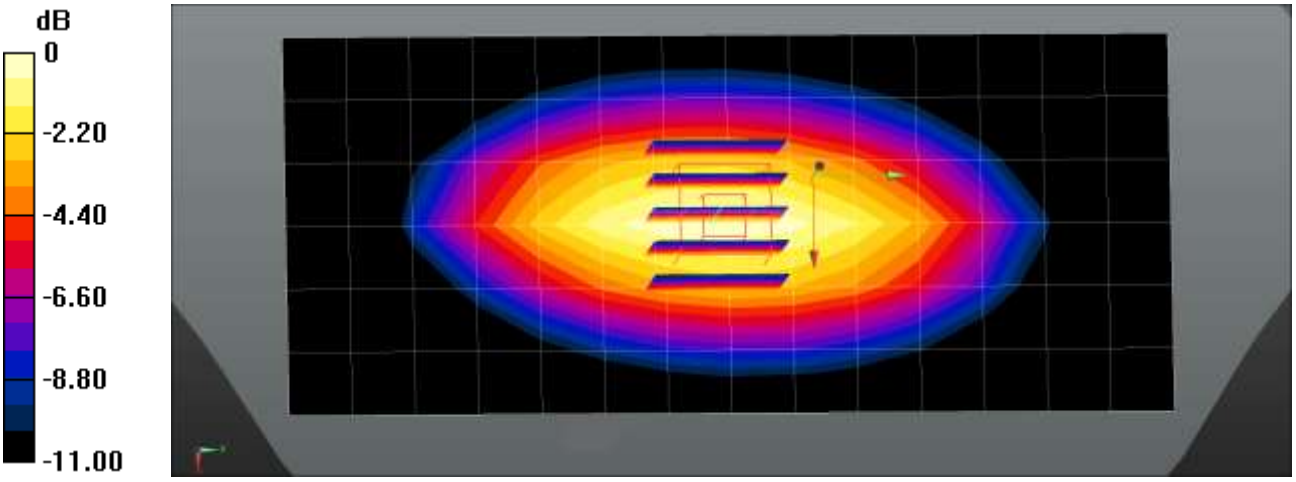
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.881 S/m; ε_r = 41.875; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(10.48, 10.48, 10.48) @ 835 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

835MHz Head Verification/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.654 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.35 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.736 W/kg
SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.321 W/kg
Maximum value of SAR (measured) = 0.656 W/kg



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

■ **Verification Data (835 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.4 ℃
Test Date: 12/09/2022

Measurement Report for Device, CW, Channel 0 (835.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	835.0, 0	9.53	0.886	41.8

Hardware Setup

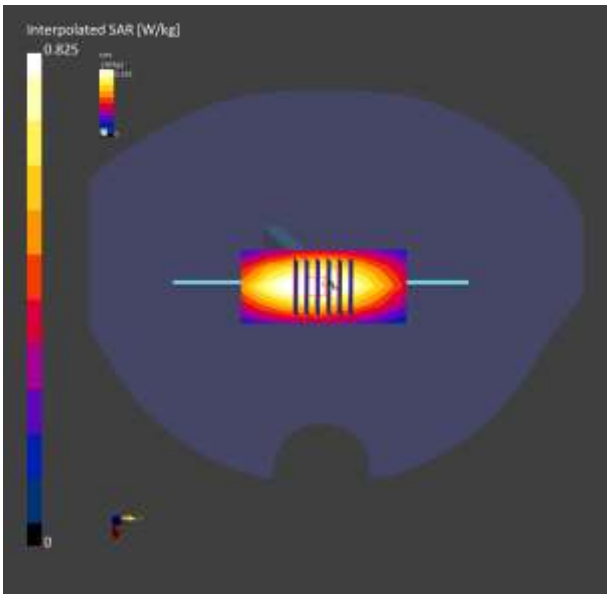
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

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	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-09	2022-12-09
psSAR1g [W/Kg]	0.501	0.505
psSAR10g [W/Kg]	0.327	0.327
Power Drift [dB]	0.00	-0.01



■ **Verification Data (835 ㎒ Head)**

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.2 ℃
Test Date:	12/16/2022

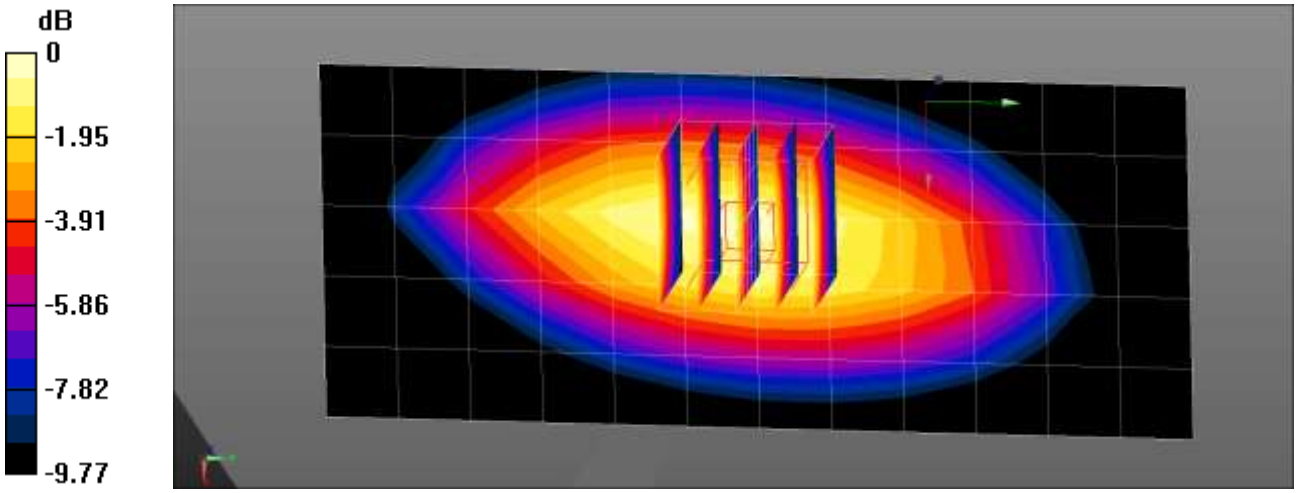
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 835 MHz; σ = 0.913 S/m; ε_r = 42.024; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(10.23, 10.23, 10.23) @ 835 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right)
- Measurement SW: DASY52, Version 52.10 (4)

835MHz Head Verification/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.629 W/kg

835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.04 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.747 W/kg
SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.347 W/kg
Maximum value of SAR (measured) = 0.671 W/kg



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

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.1 ℃
Test Date:	11/21/2022

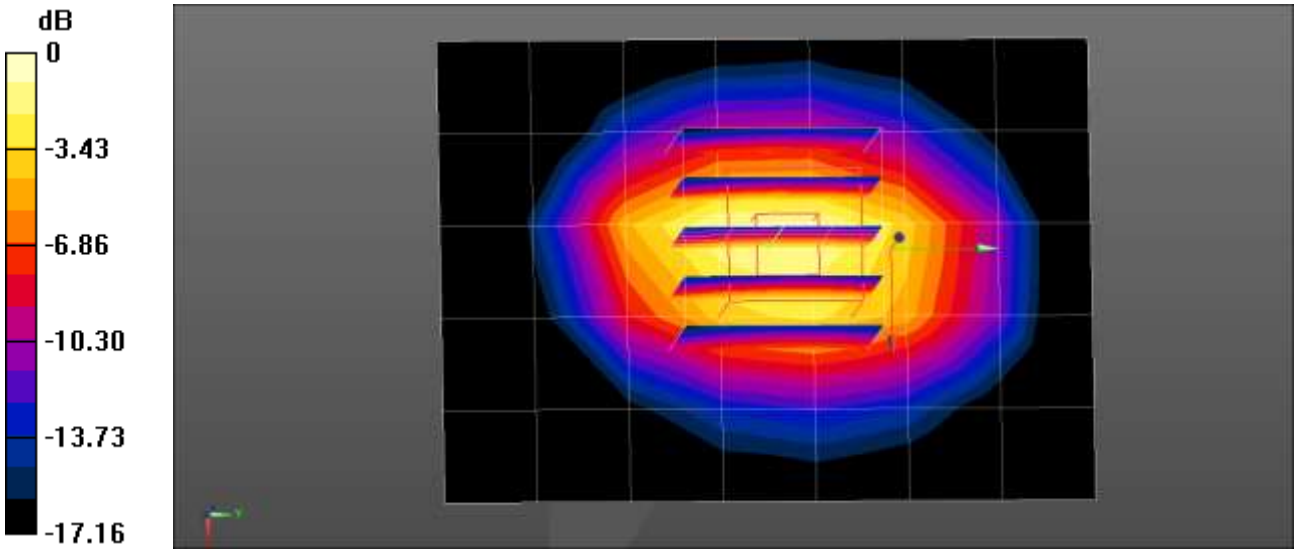
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.406 S/m; ε_r = 39.461; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(9.07, 9.07, 9.07) @ 1800 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1800MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.27 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.45 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.38 W/kg
SAR(1 g) = 1.88 W/kg; SAR(10 g) = 1.01 W/kg
Maximum value of SAR (measured) = 2.84 W/kg



0 dB = 2.84 W/kg = 4.53 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	12/14/2022

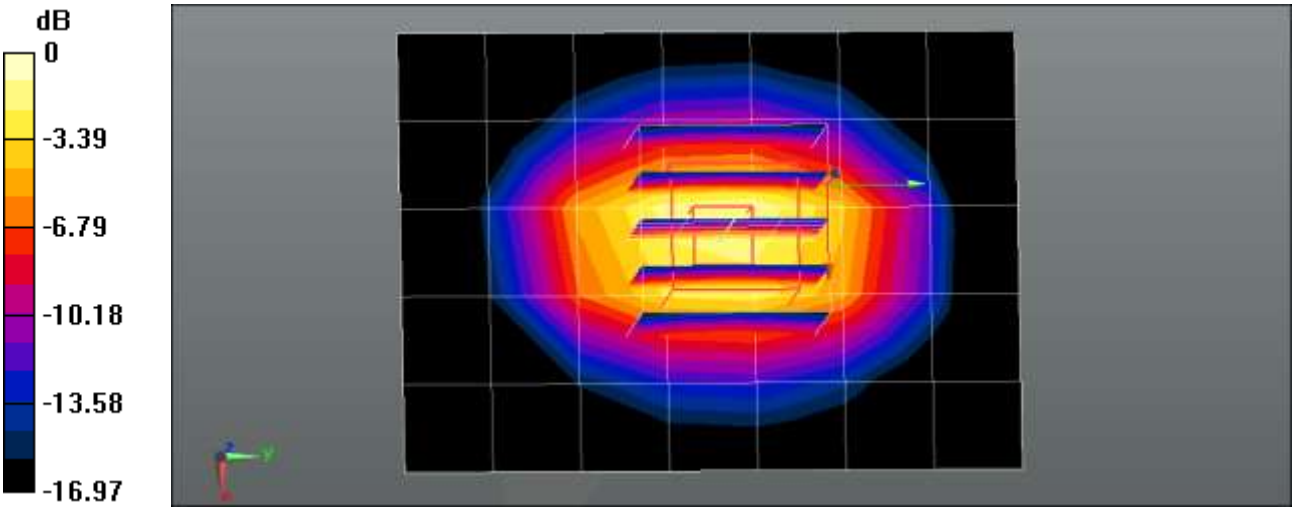
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.414 S/m; ε_r = 39.541; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1800 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1800MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.26 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.55 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.69 W/kg
SAR(1 g) = 2 W/kg; SAR(10 g) = 1.06 W/kg
Maximum value of SAR (measured) = 3.11 W/kg



0 dB = 3.11 W/kg = 4.93 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.7 ℃
Test Date:	11/29/2022

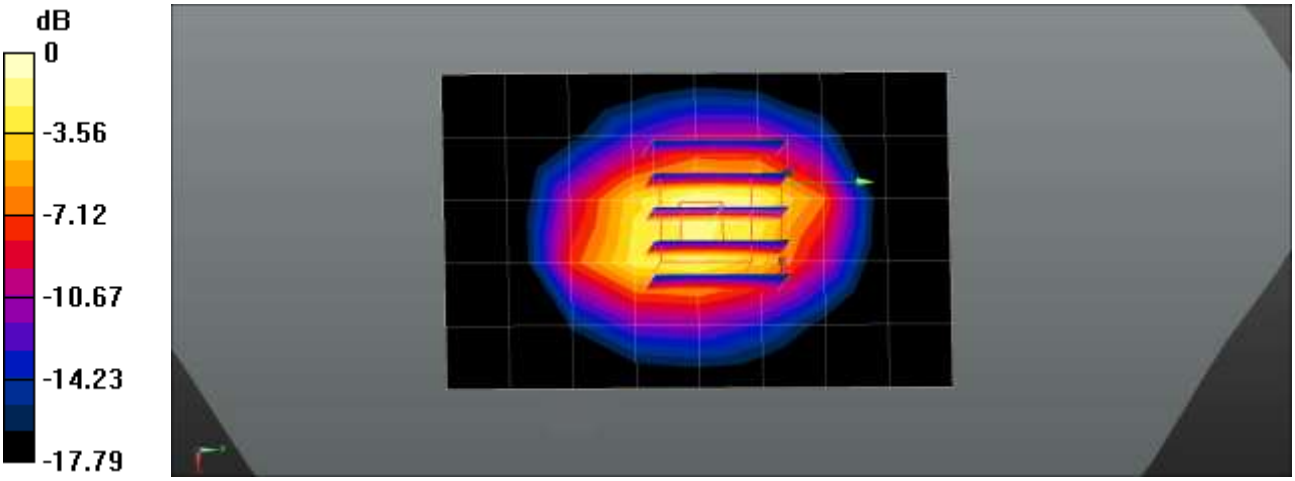
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.393 S/m; ε_r = 41.179; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.48, 9.48, 9.48) @ 1800 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1800MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.28 W/kg

1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.83 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.76 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.07 W/kg
Maximum value of SAR (measured) = 3.13 W/kg



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

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.4 ℃
Test Date: 12/13/2022

Measurement Report for Device, CW, Channel 0 (1800.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	1800.0, 0	8.62	1.41	41.2

Hardware Setup

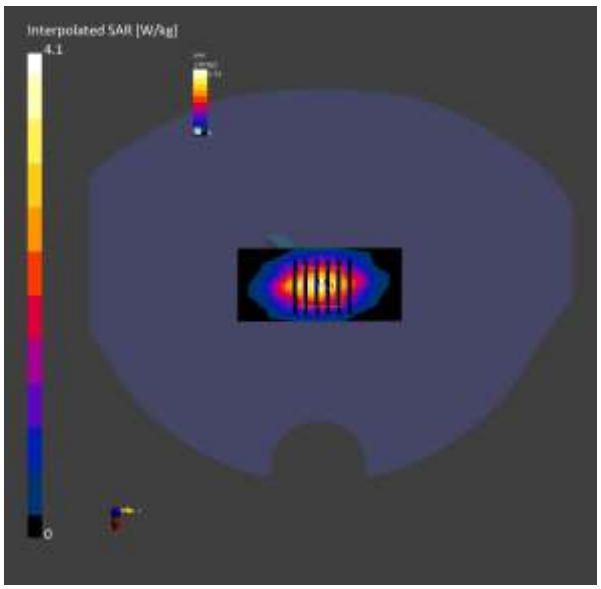
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

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	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-13	2022-12-13
psSAR1g [W/Kg]	1.98	2.00
psSAR10g [W/Kg]	1.01	1.02
Power Drift [dB]	-0.01	0.00



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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	22.1 ℃
Test Date:	11/22/2022

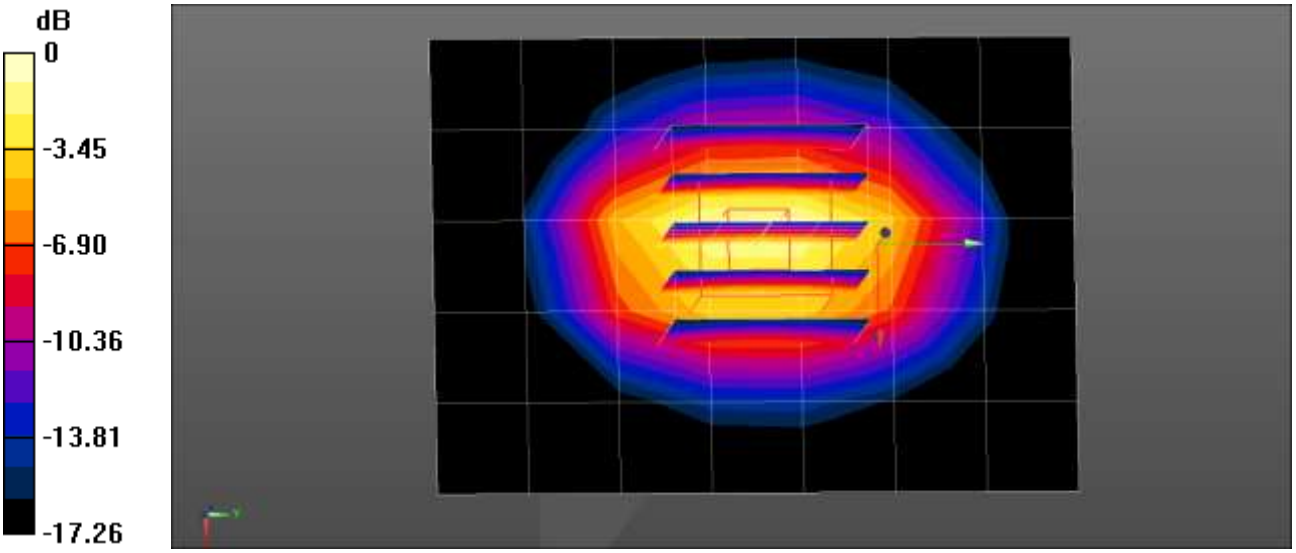
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 38.825; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(8.78, 8.78, 8.78) @ 1900 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.38 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.52 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 3.65 W/kg
SAR(1 g) = 1.96 W/kg; SAR(10 g) = 1.03 W/kg
Maximum value of SAR (measured) = 3.05 W/kg



0 dB = 3.05 W/kg = 4.84 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.8 ℃
Test Date:	12/13/2022

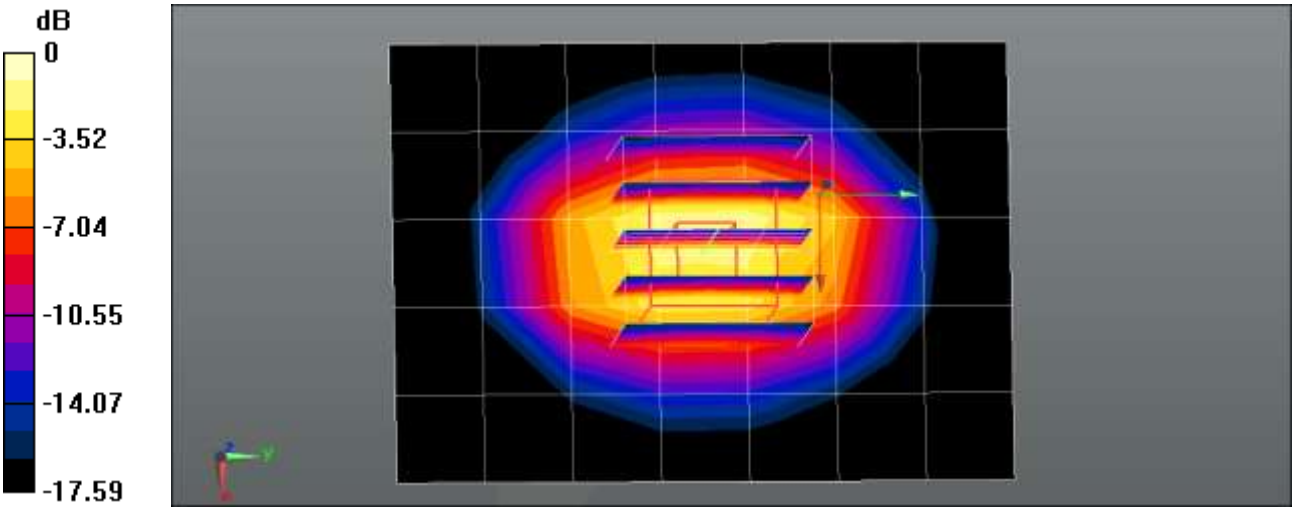
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.436 S/m; ε_r = 38.965; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x8x1): 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 = 49.71 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 4.04 W/kg
SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.11 W/kg
Maximum value of SAR (measured) = 3.33 W/kg



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

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.8 ℃
Test Date:	11/23/2022

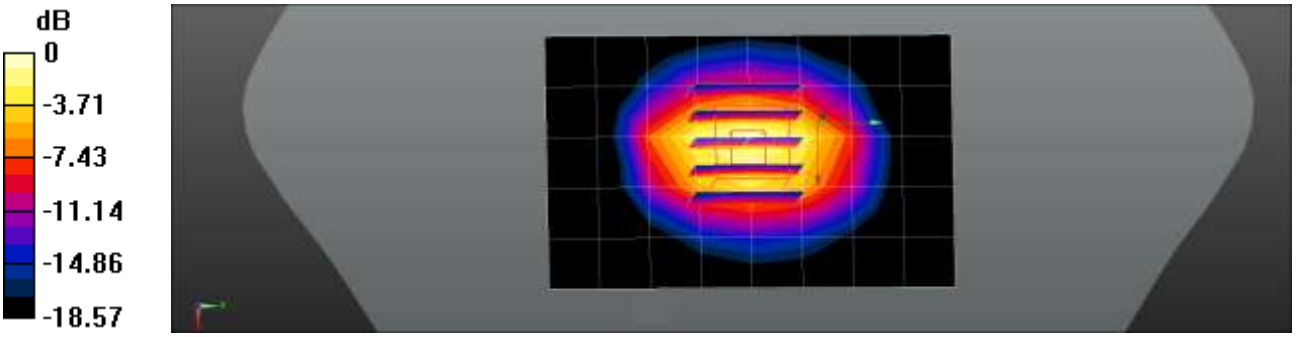
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.393 S/m; ε_r = 40.259; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.72 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.10 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.73 W/kg
SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 3.08 W/kg



0 dB = 3.08 W/kg = 4.89 dBW/kg

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 23.1 ℃
Test Date: 12/12/2022

Measurement Report for Device, CW, Channel 0 (1900.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	1900.0, 0	8.21	1.41	40.7

Hardware Setup

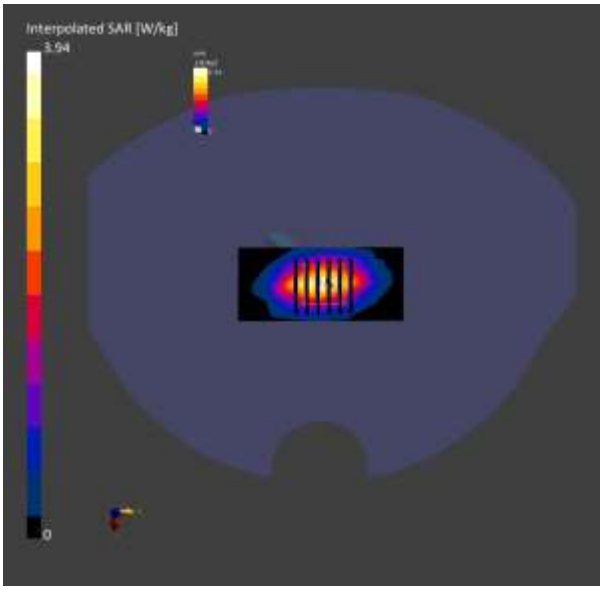
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

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	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-12	2022-12-12
psSAR1g [W/Kg]	1.97	1.99
psSAR10g [W/Kg]	0.998	1.01
Power Drift [dB]	-0.01	-0.01



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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.2 ℃
Test Date:	12/16/2022

Measurement Report for Device, CW, Channel 0 (2450.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	2450.0, 0	7.73	1.83	39.3

Hardware Setup

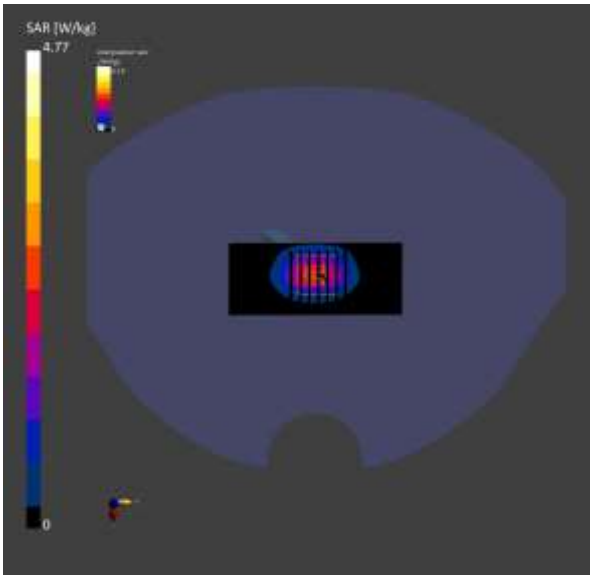
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 96.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.5

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-16	2022-12-16
psSAR1g [W/Kg]	2.65	2.77
psSAR10g [W/Kg]	1.23	1.24
Power Drift [dB]	-0.01	-0.01



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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.2 ℃
Test Date:	11/29/2022

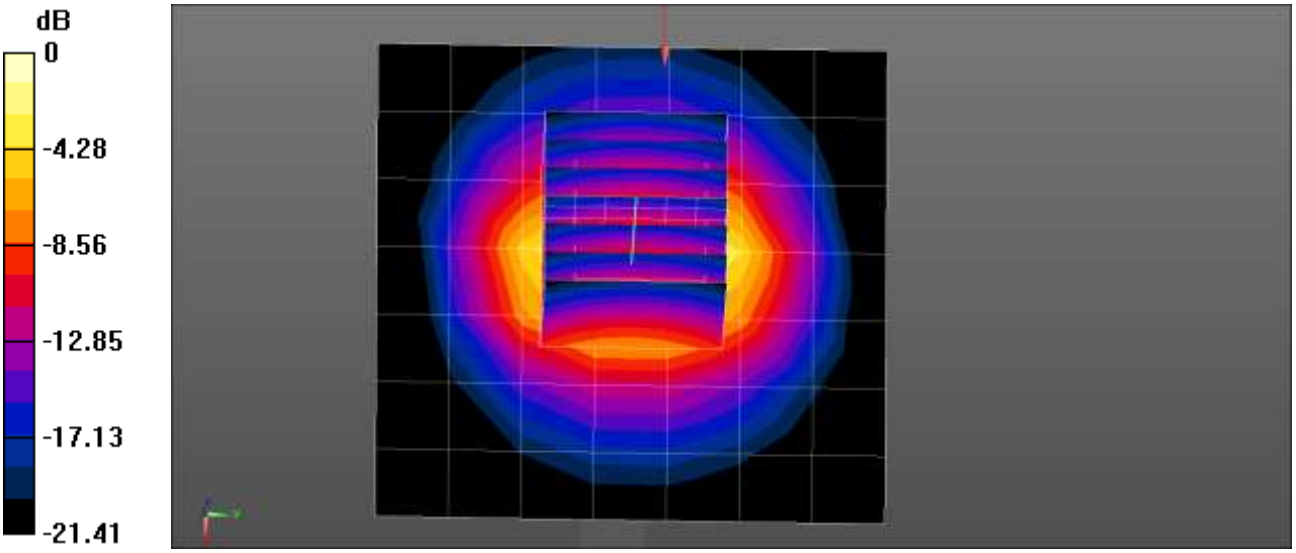
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.963 S/m; ε_r = 38.549; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7702; ConvF(7.93, 7.93, 7.93) @ 2600 MHz; Calibrated: 2022-01-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2022-05-02
- Phantom: Twin-SAM V4.0 (Left-Right); Type: QD 000 P40 CC; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2600MHz Head Verification/Area Scan (8x8x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.17 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 48.58 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 5.92 W/kg
SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.33 W/kg
Maximum value of SAR (measured) = 4.77 W/kg



0 dB = 4.77 W/kg = 6.79 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	19.1 ℃
Test Date:	11/30/2022

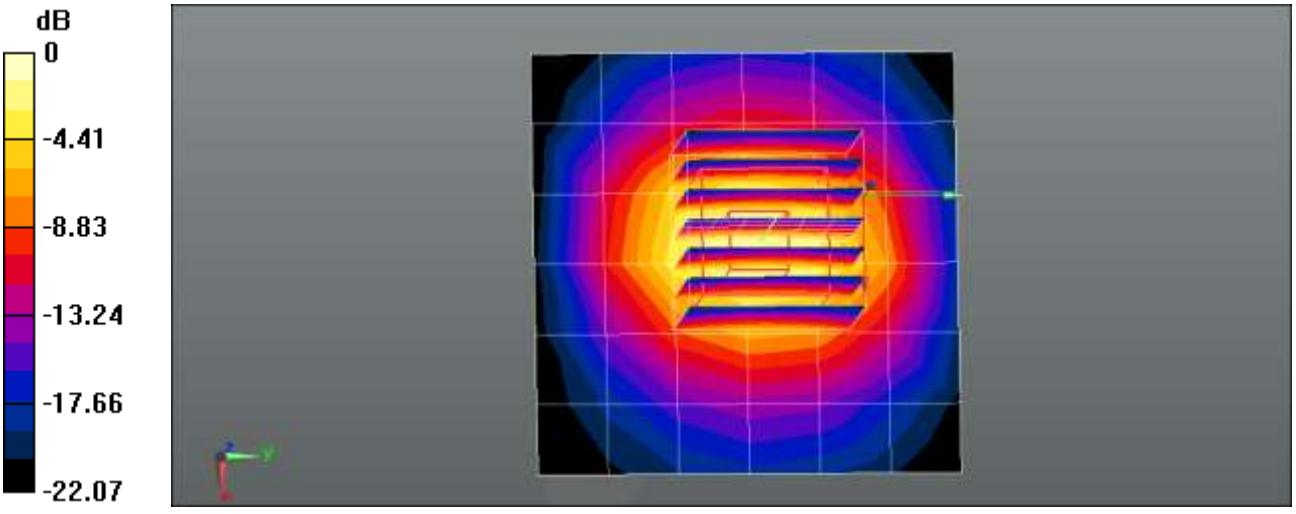
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.98 S/m; ε_r = 38.003; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2600 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.71 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.75 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 5.62 W/kg
SAR(1 g) = 2.71 W/kg; SAR(10 g) = 1.27 W/kg
Maximum value of SAR (measured) = 4.51 W/kg



0 dB = 4.51 W/kg = 6.54 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.6 ℃
Test Date:	12/20/2022

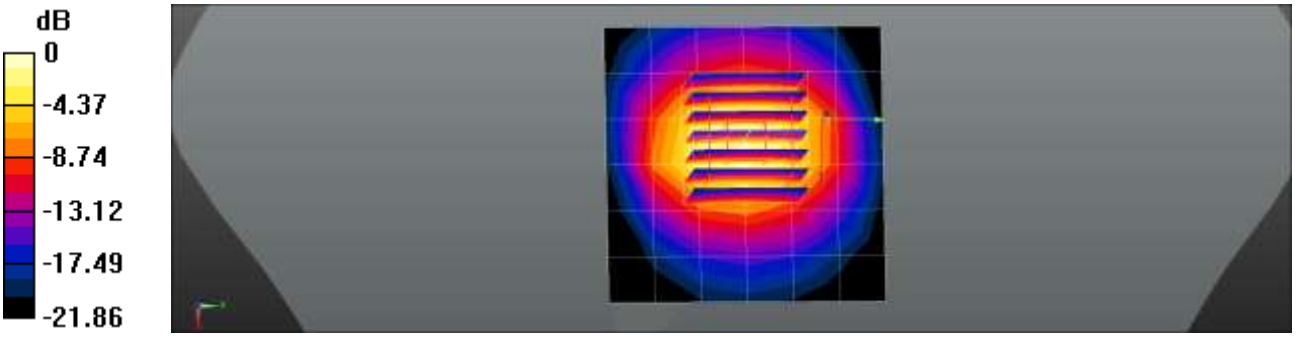
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 2 S/m; ε_r = 38.143; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2600 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.61 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 43.76 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 5.54 W/kg
SAR(1 g) = 2.69 W/kg; SAR(10 g) = 1.27 W/kg
Maximum value of SAR (measured) = 4.47 W/kg



0 dB = 4.47 W/kg = 6.50 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.4 ℃
Test Date:	12/21/2022

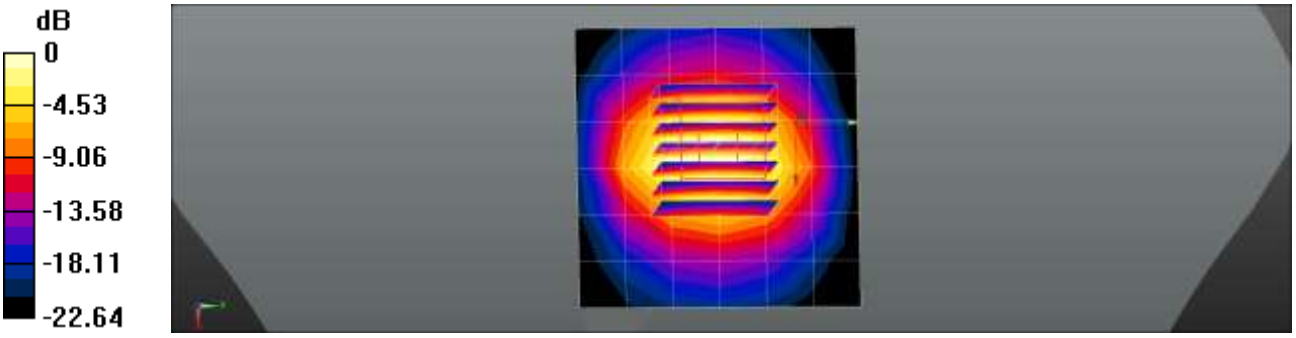
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.949 S/m; ε_r = 37.793; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(8.32, 8.32, 8.32) @ 2600 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.03 W/kg

2600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.82 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.24 W/kg
Maximum value of SAR (measured) = 4.09 W/kg



0 dB = 4.09 W/kg = 6.12 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	21.0 ℃
Test Date:	12/08/2022

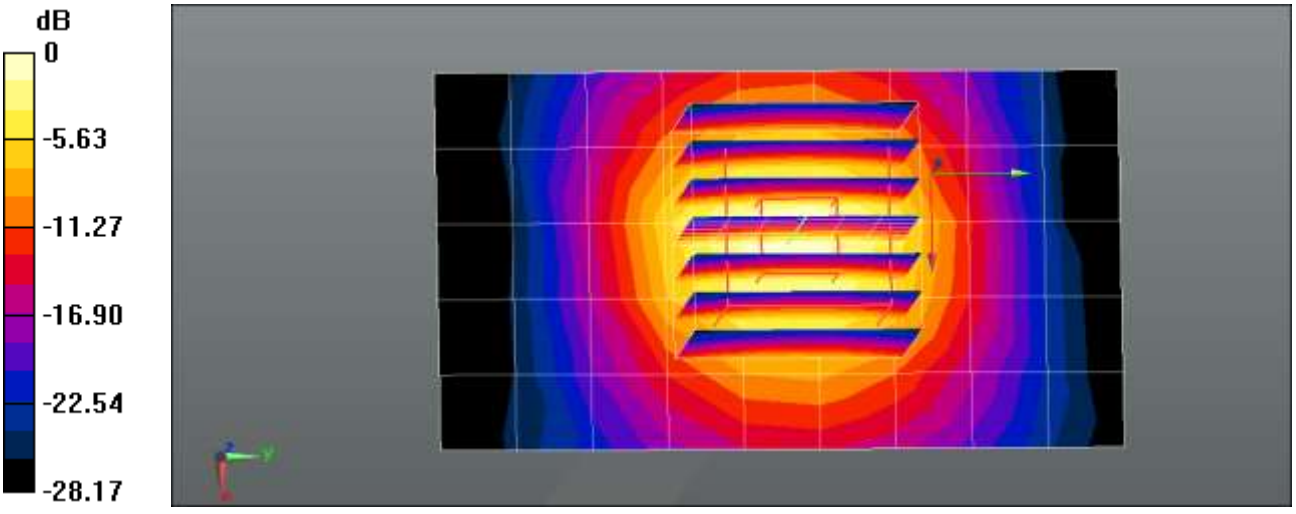
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 3.023 S/m; ε_r = 38.77; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.75, 7.75, 7.75) @ 3500 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

3500MHz Head Verification/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 5.27 W/kg

3500MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 46.39 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 8.08 W/kg
SAR(1 g) = 3.26 W/kg; SAR(10 g) = 1.3 W/kg
Maximum value of SAR (measured) = 6.13 W/kg



0 dB = 6.13 W/kg = 7.87 dBW/kg

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.1 ℃
Test Date:	12/06/2022

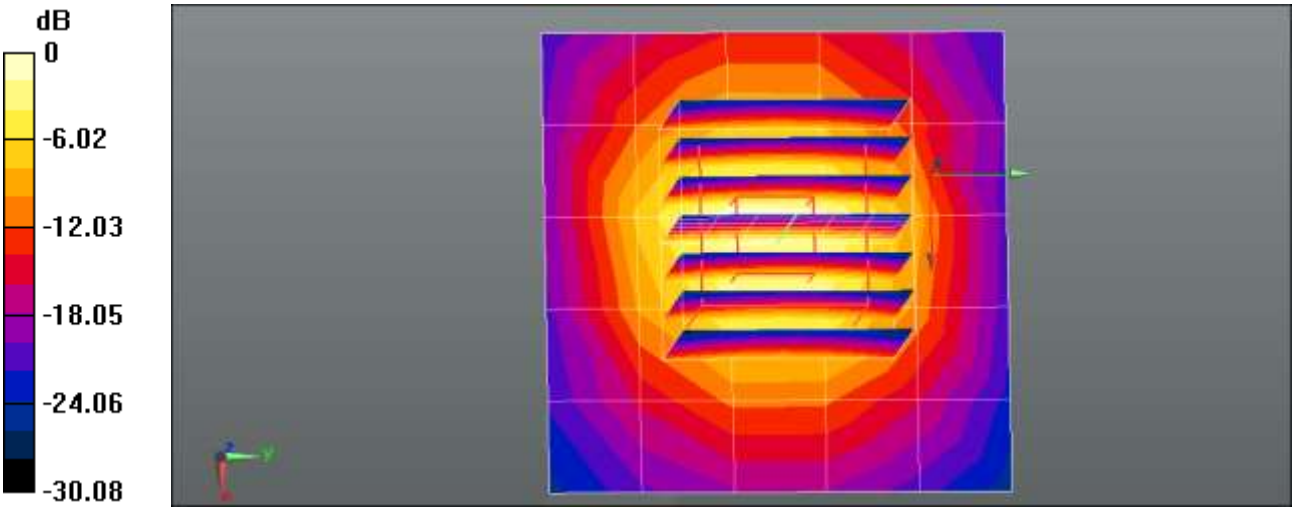
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.159 S/m; ε_r = 38.349; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.6, 7.6, 7.6) @ 3700 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

3700MHz Head Verification/Area Scan (6x6x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 4.89 W/kg

3700MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 45.74 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 8.52 W/kg
SAR(1 g) = 3.3 W/kg; SAR(10 g) = 1.27 W/kg
Maximum value of SAR (measured) = 6.36 W/kg



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

■ **Verification Data (3 900 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.1 ℃
Test Date: 12/06/2022

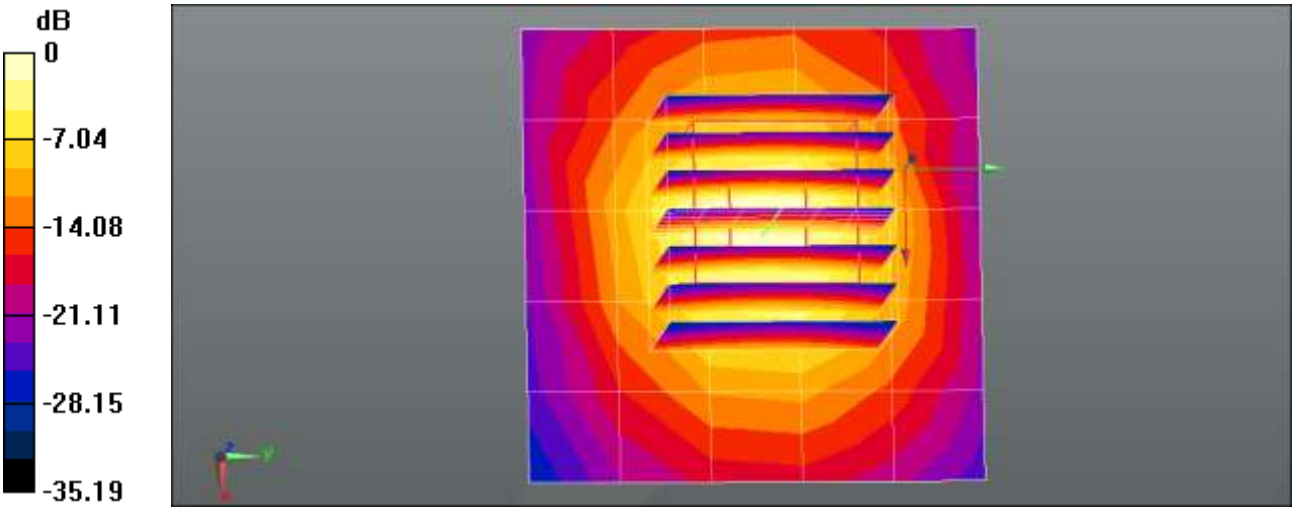
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.323 S/m; ε_r = 38.416; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(7.22, 7.22, 7.22) @ 3900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

3900MHz Head Verification/Area Scan (6x6x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 5.16 W/kg

3900MHz Head Verification/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 48.77 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 8.74 W/kg
SAR(1 g) = 3.47 W/kg; SAR(10 g) = 1.29 W/kg
Maximum value of SAR (measured) = 6.44 W/kg



0 dB = 6.44 W/kg = 8.09 dBW/kg

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/15/2022

Measurement Report for Device, CW, Channel 0 (5250.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5250.0, 0	5.29	4.67	36.0

Hardware Setup

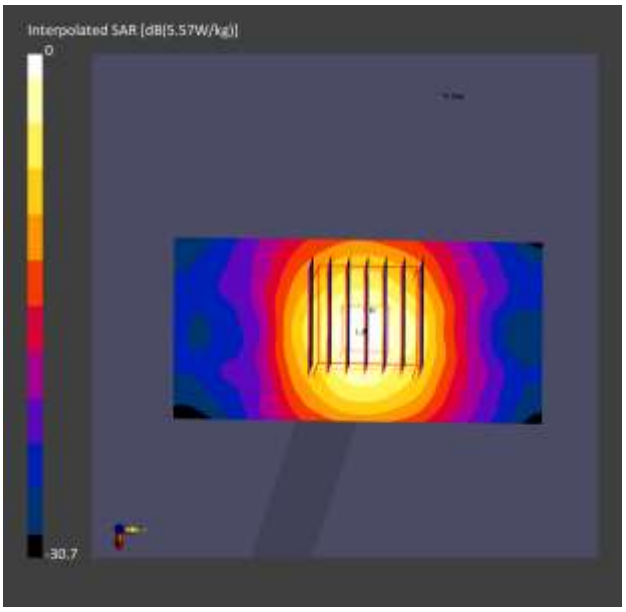
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-15	2022-12-15
psSAR1g [W/Kg]	3.44	3.78
psSAR10g [W/Kg]	0.986	1.07
Power Drift [dB]	-0.02	-0.02



■ **Verification Data (5 600 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/15/2022

Measurement Report for Device, CW, Channel 0 (5600.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5600.0, 0	4.75	4.97	35.4

Hardware Setup

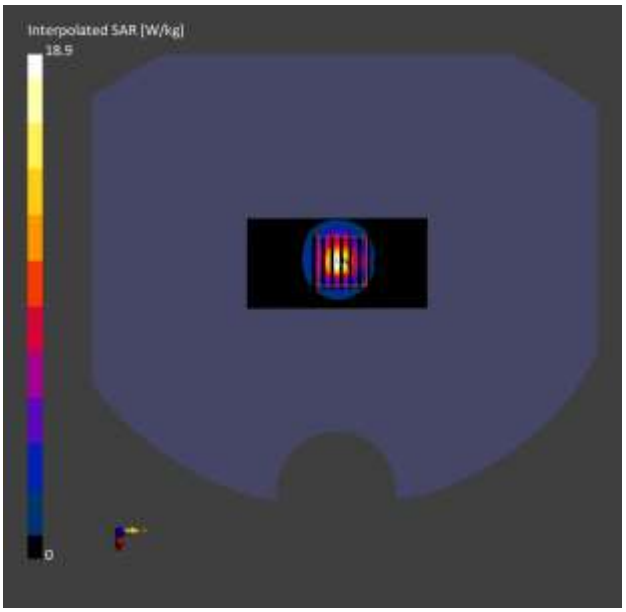
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-15	2022-12-15
psSAR1g [W/Kg]	3.86	4.35
psSAR10g [W/Kg]	1.09	1.21
Power Drift [dB]	-0.01	0.01



■ **Verification Data (5 750 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/15/2022
Measurement Report for Device, CW, Channel 0 (5750.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5750.0, 0	4.8	5.25	35.1

Hardware Setup

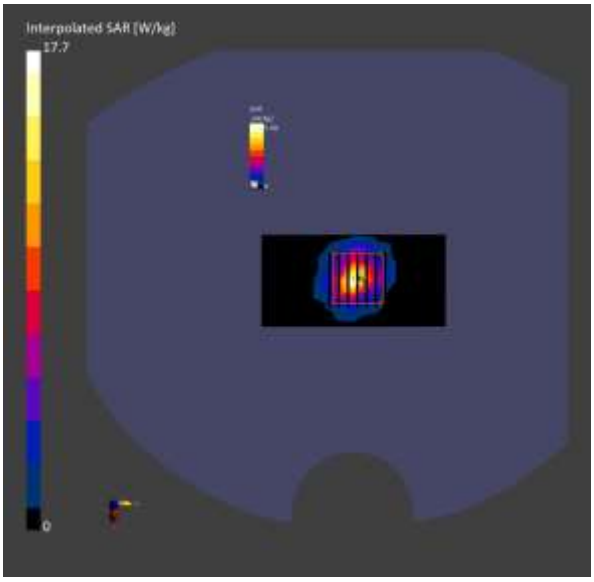
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-16, 09:40	2022-12-16, 09:46
psSAR1g [W/Kg]	3.55	3.96
psSAR10g [W/Kg]	1.00	1.11
Power Drift [dB]	0.01	-0.06



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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/14/2022

Measurement Report for Device, CW, Channel 0 (5250.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5250.0, 0	5.29	4.68	36.0

Hardware Setup

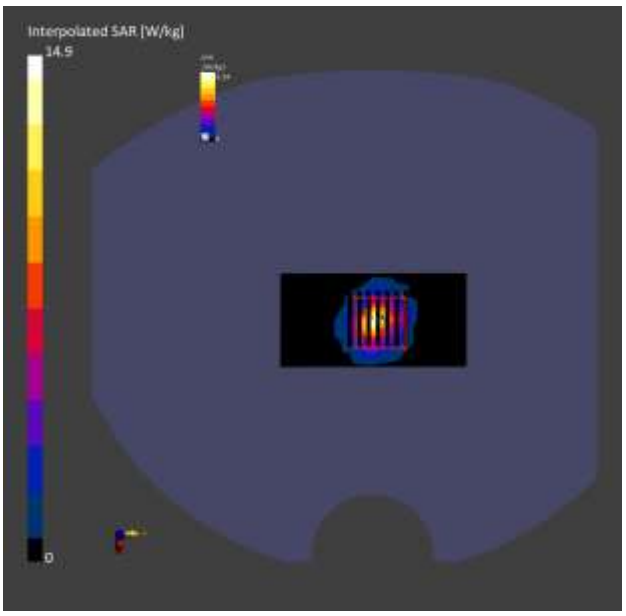
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-14	2022-12-14
psSAR1g [W/Kg]	3.42	3.74
psSAR10g [W/Kg]	0.979	1.06
Power Drift [dB]	-0.01	-0.06



■ **Verification Data (5 600 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/14/2022

Measurement Report for Device, CW, Channel 0 (5600.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5600.0, 0	4.75	4.98	35.4

Hardware Setup

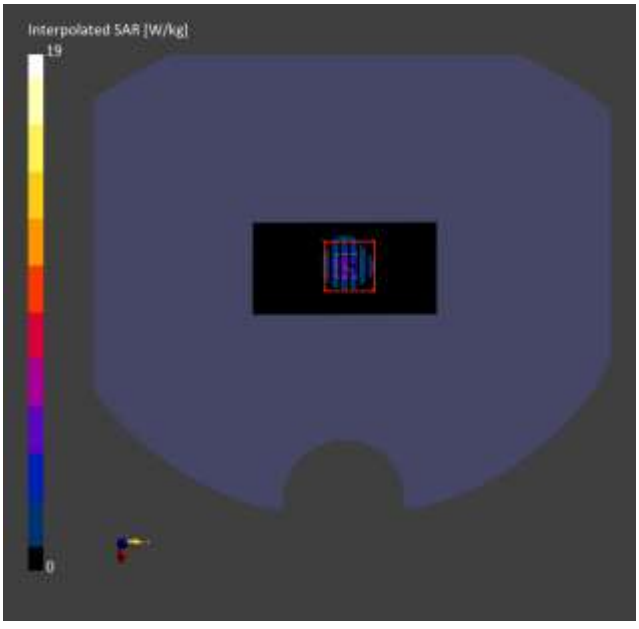
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-14	2022-12-14
psSAR1g [W/Kg]	3.85	4.37
psSAR10g [W/Kg]	1.08	1.21
Power Drift [dB]	-0.02	-0.03



■ **Verification Data (5 750 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/14/2022

Measurement Report for Device, CW, Channel 0 (5750.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5750.0, 0	4.8	5.27	35.2

Hardware Setup

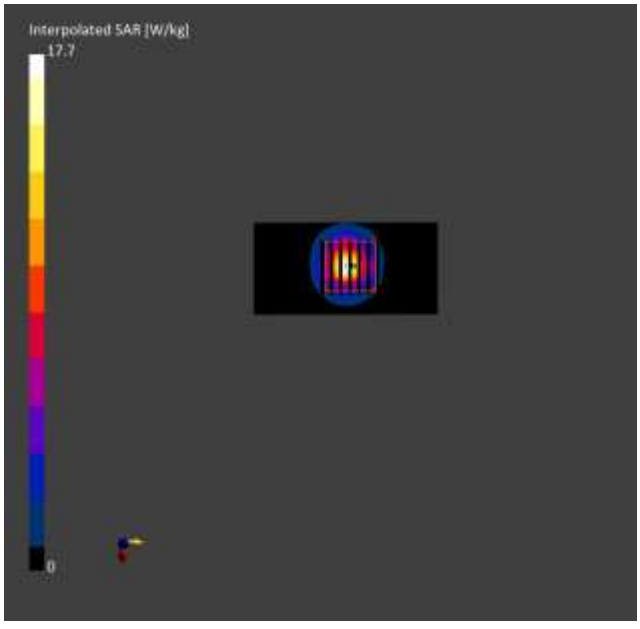
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-14	2022-12-14
psSAR1g [W/Kg]	3.47	3.94
psSAR10g [W/Kg]	0.980	1.10
Power Drift [dB]	-0.01	0.02



– Extremity

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

Test Laboratory:	HCT CO., LTD
Input Power	0.05 W
Liquid Temp:	20.9 ℃
Test Date:	12/15/2022

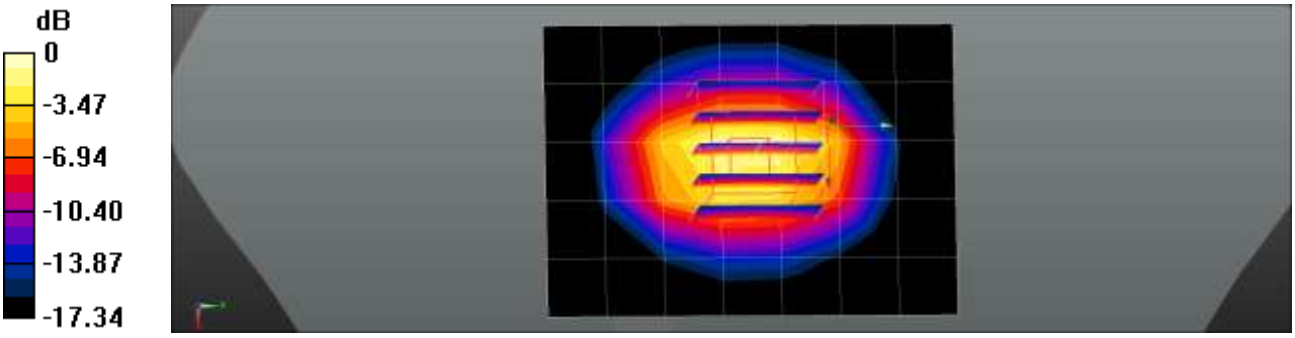
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.44 S/m; ε_r = 39.005; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(9.09, 9.09, 9.09) @ 1900 MHz; Calibrated: 2022-05-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1254; Calibrated: 2022-06-15
- Phantom: SAM with CRP v5.0_Front; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

1900MHz Head Verification/Area Scan (6x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.48 W/kg

1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.53 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.94 W/kg
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.14 W/kg
Maximum value of SAR (measured) = 3.32 W/kg



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

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

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/14/2022

Measurement Report for Device, CW, Channel 0 (5250.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5250.0, 0	5.29	4.68	36.0

Hardware Setup

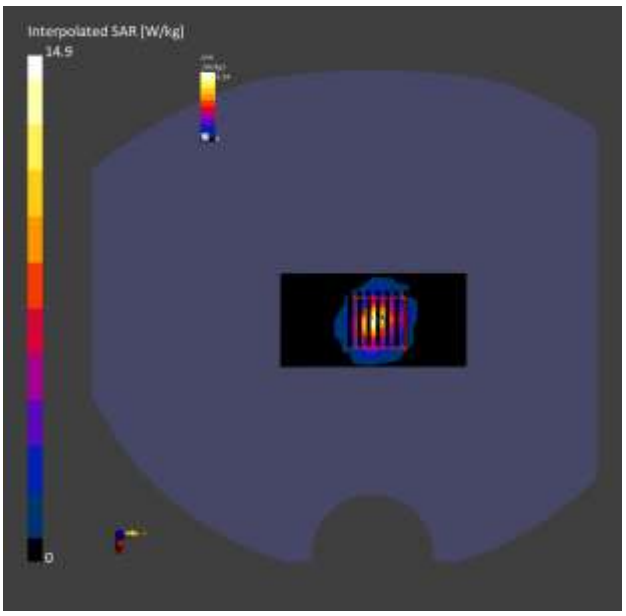
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-14	2022-12-14
psSAR1g [W/Kg]	3.42	3.74
psSAR10g [W/Kg]	0.979	1.06
Power Drift [dB]	-0.01	-0.06



■ **Verification Data (5 600 ㎒ Head)**

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 19.3 ℃
Test Date: 12/14/2022

Measurement Report for Device, CW, Channel 0 (5600.0 MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	5600.0, 0	4.75	4.98	35.4

Hardware Setup

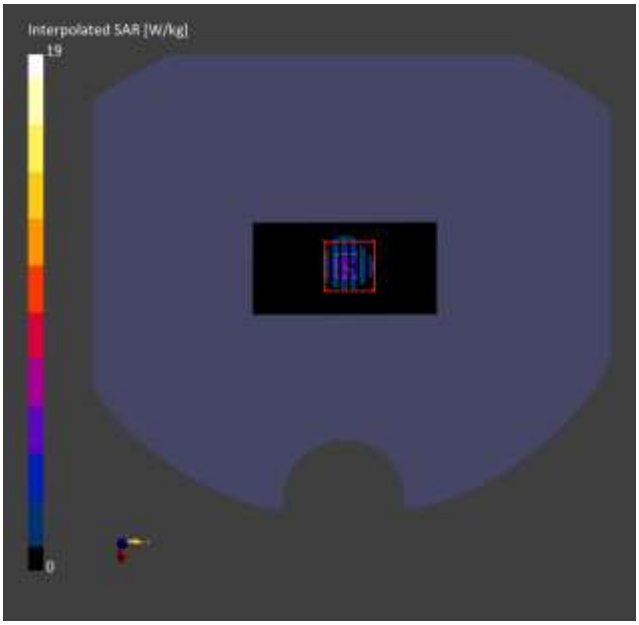
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2050	EX3DV4 - SN3768, 2022-06-30	DAE4 Sn1629, 2022-08-17

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Grading Ratio	1.5	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-12-14	2022-12-14
psSAR1g [W/Kg]	3.85	4.37
psSAR10g [W/Kg]	1.08	1.21
Power Drift [dB]	-0.02	-0.03



Appendix D. – SAR Tissue Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

Ingredients (% by weight)	Frequency (MHz)											
	750		835		1 750		1 900		2 450 – 2 700		3500 - 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	41.1	51.7	40.45	53.06	52.6	68.8	54.9	70.17	71.88	73.2	65.52	78.66
Salt (NaCl)	1.4	0.9	1.45	0.94	0.4	0.2	0.18	0.39	0.16	0.1	0.0	0.0
Sugar	57.0	47.2	57.0	44.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
HEC	0.2	0	1.0	1.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Bactericide	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.97	0.0	17.24	10.67
DGBE	0.0	0.0	0.0	0.0	47	31	44.92	29.44	7.99	26.7	0.0	0.0
Diethylene glycol hexyl ether	-	-	-	-	-	-	-	-	-	-	-	-

Salt:	99 % Pure Sodium Chloride	Sugar:	98 % Pure Sucrose
Water:	De-ionized, 16M resistivity	HEC:	Hydroxyethyl Cellulose
DGBE:	99 % Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy) ethanol]		
Triton X-100(ultra-pure):	Polyethylene glycol mono[4-(1,1,3,3-tetramethylbutyl)phenyl] ether		

Composition of the Tissue Equivalent Matter

Appendix E. – SAR System Validation

Per FCC KCB 865664 D02v01r02, SAR system validation status should be document to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2013 and FCC KDB 865664 D01v01r04. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
20	7702	EX3DV4	Head	750	1014	2022-09-10	41.8	0.89	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	835	441	2022-08-15	41.5	0.89	PASS	PASS	PASS	N/A	N/A	N/A
8	3768	EX3DV4	Head	835	441	2022-08-15	41.5	0.89	PASS	PASS	PASS	GMSK	PASS	N/A
20	7702	EX3DV4	Head	835	441	2022-09-10	41.8	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
9	7309	EX3DV4	Head	1750	2d007	2022-08-14	40.1	1.41	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	1750	2d007	2022-09-10	40.1	1.41	PASS	PASS	PASS	N/A	N/A	N/A
10	7702	EX3DV4	Head	1750	2d007	2022-09-10	41.8	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	1900	5d032	2021-12-10	40.1	1.42	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	1900	5d032	2021-12-10	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
10	7702	ES3DV3	Head	1900	5d032	2022-08-14	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
20	3768	EX3DV4	Head	2450	743	2022-07-06	39.2	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	2450	743	2022-06-28	39.2	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	2600	1106	2021-08-14	39.1	1.94	PASS	PASS	PASS	NA	N/A	NA
8	7654	EX3DV4	Head	2600	1106	2021-08-14	39.1	1.94	PASS	PASS	PASS	TDD	PASS	NA
8	7654	EX3DV4	Head	3500	1040	2021-06-04	37.9	2.92	PASS	PASS	PASS	TDD	PASS	NA
8	7654	EX3DV4	Head	3700	1105	2021-12-04	37.5	3.13	PASS	PASS	PASS	TDD	PASS	NA
8	7654	EX3DV4	Head	3900	1019	2021-06-20	37.2	3.31	PASS	PASS	PASS	TDD	PASS	NA
8	7654	EX3DV4	Head	5250	1253	2022-08-04	35.7	4.70	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5600	1253	2022-08-04	35.3	5.05	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5750	1253	2022-08-04	35.6	5.24	PASS	PASS	PASS	OFDM	N/A	PASS
20	7732	EX3DV4	Head	5250	1253	2022-07-05	35.7	4.70	PASS	PASS	PASS	OFDM	N/A	PASS
20	7732	EX3DV4	Head	5600	1253	2022-07-05	35.3	5.05	PASS	PASS	PASS	OFDM	N/A	PASS
20	7732	EX3DV4	Head	5750	1253	2022-07-05	35.6	5.24	PASS	PASS	PASS	OFDM	N/A	PASS

SAR System Validation Summary 1g

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
8	7654	EX3DV4	Head	1900	5d032	2021-12-10	40.1	1.42	PASS	PASS	PASS	N/A	N/A	N/A
8	7654	EX3DV4	Head	1900	5d032	2021-12-10	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
8	7654	EX3DV4	Head	1900	5d032	2022-12-10	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
8	7654	EX3DV4	Head	5250	1253	2022-08-04	35.7	4.70	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5600	1253	2022-08-04	35.3	5.05	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5750	1253	2022-08-04	35.6	5.24	PASS	PASS	PASS	OFDM	N/A	PASS

SAR System Validation Summary – Extremity SAR Considerations

Note;

All measurement were performed using probes calibrated for CW signal only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04. SAR system were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to KDB 865664 D01v01r04.