

## Appendix B. – SAR Test Plots

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.8°C  
Ambient Temperature: 20.7°C  
Test Date: 12/16/2020  
Plot No.: 1

Communication System: UID 0, GSM850 GPRS 4TX (0); Frequency: 824.2 MHz;Duty Cycle: 1:2.07491  
Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 42.873$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 824.2 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**GSM850 Head Right Touch 4Tx 128ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.454 W/kg

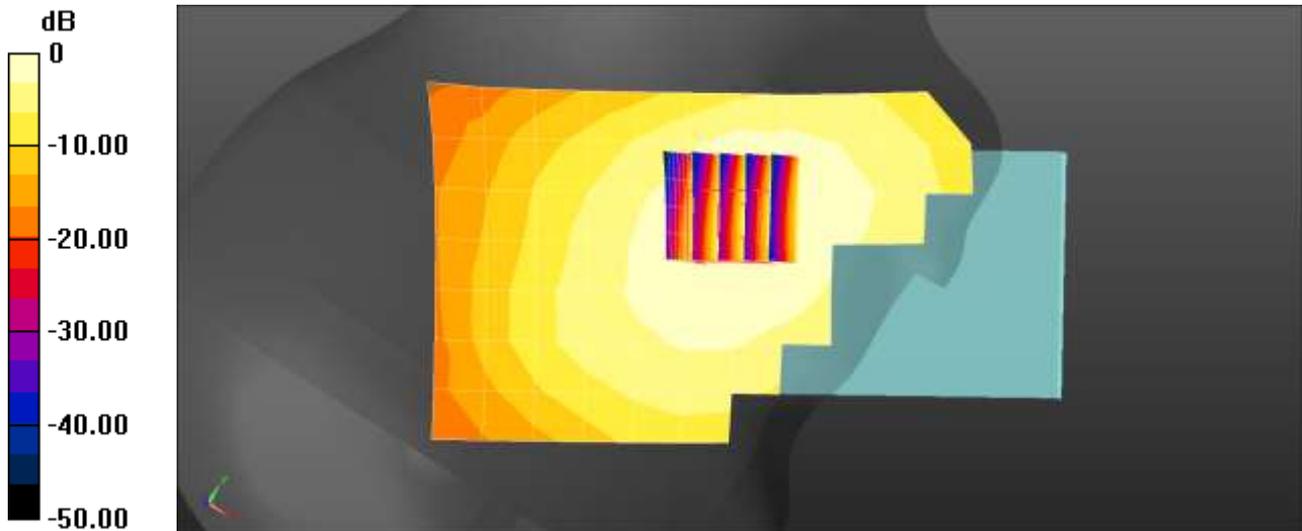
**GSM850 Head Right Touch 4Tx 128ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.185 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.526 W/kg

**SAR(1 g) = 0.394 W/kg; SAR(10 g) = 0.294 W/kg**

Maximum value of SAR (measured) = 0.480 W/kg



0 dB = 0.454 W/kg = -3.43 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 22.3°C  
Ambient Temperature: 22.3°C  
Test Date: 12/21/2020  
Plot No.: 2

Communication System: UID 0, GSM 1900 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07491  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 39.005$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913;
- Measurement SW: DASY52, Version 52.10 (4);

**GSM1900 Head Left Touch 4Tx 661ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.117 W/kg

**GSM1900 Head Left Touch 4Tx 661ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 4.747 V/m; Power Drift = -0.11 dB  
Peak SAR (extrapolated) = 0.107 W/kg  
**SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.071 W/kg**  
Maximum value of SAR (measured) = 0.105 W/kg



0 dB = 0.117 W/kg = -9.30 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 24.3°C  
Ambient Temperature: 24.3°C  
Test Date: 12/17/2020  
Plot No.: 3

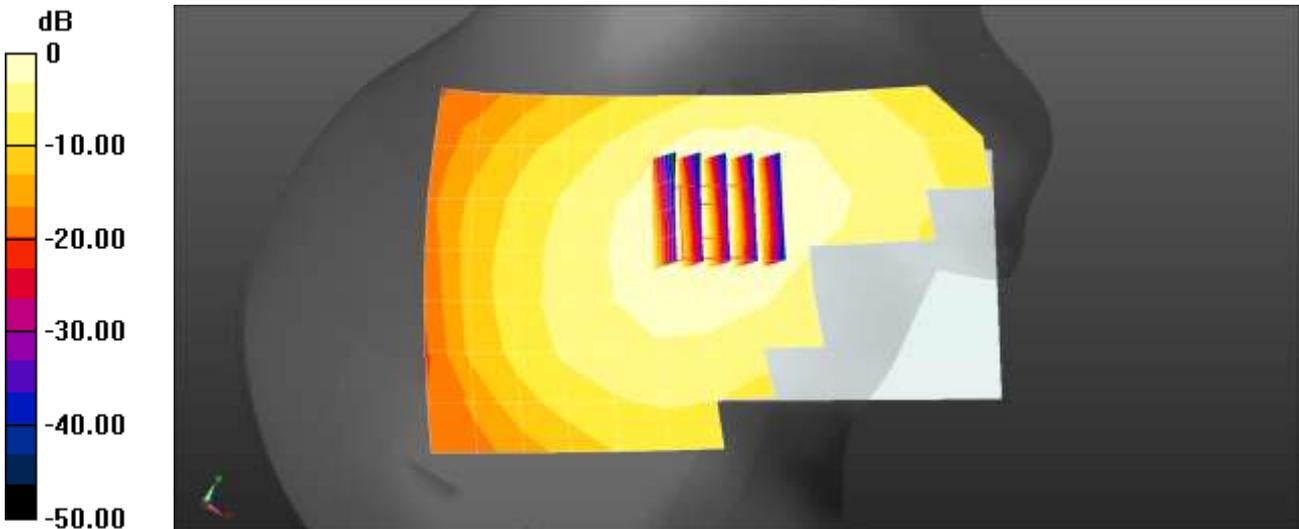
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.922$  S/m;  $\epsilon_r = 42.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.6 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA Band5 Head Right Touch 4183ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.367 W/kg

**WCDMA Band5 Head Right Touch 4183ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.357 V/m; Power Drift = -0.12 dB  
Peak SAR (extrapolated) = 0.414 W/kg  
**SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.224 W/kg**  
Maximum value of SAR (measured) = 0.374 W/kg



0 dB = 0.367 W/kg = -4.35 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.5°C  
Test Date: 12/23/2020  
Plot No.: 4

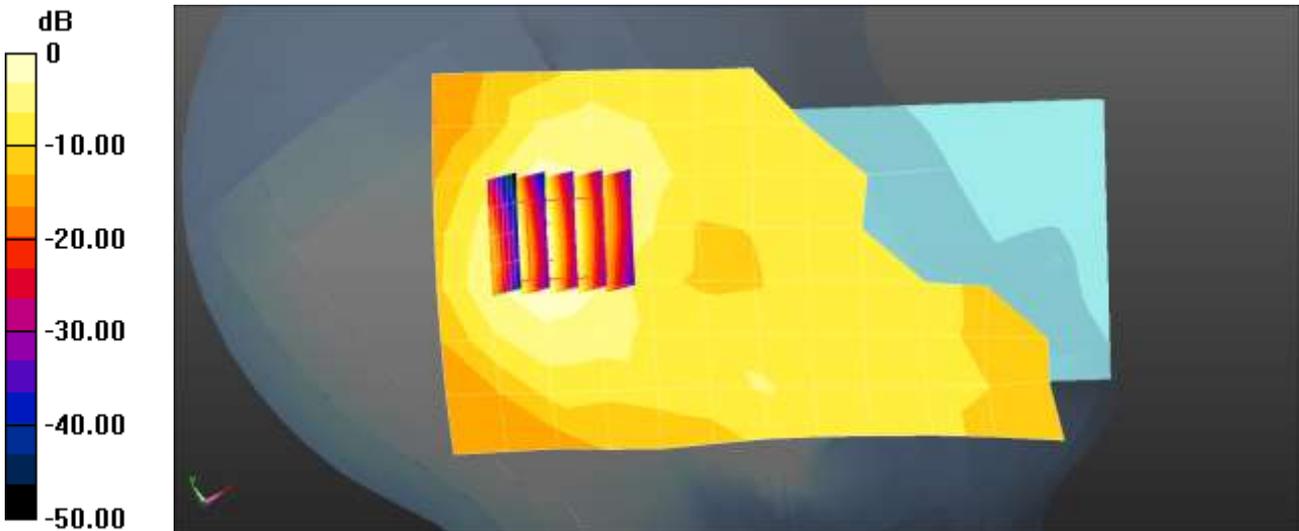
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.322$  S/m;  $\epsilon_r = 40.491$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.91, 5.91, 5.91) @ 1732.4 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 4 Head Left Tilt 1412ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.133 W/kg

**WCDMA 4 Head Left Tilt 1412ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.557 V/m; Power Drift = -0.15 dB  
Peak SAR (extrapolated) = 0.118 W/kg  
**SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.076 W/kg**  
Maximum value of SAR (measured) = 0.117 W/kg



0 dB = 0.133 W/kg = -8.77 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.5°C  
Test Date: 12/23/2020  
Plot No.: 5

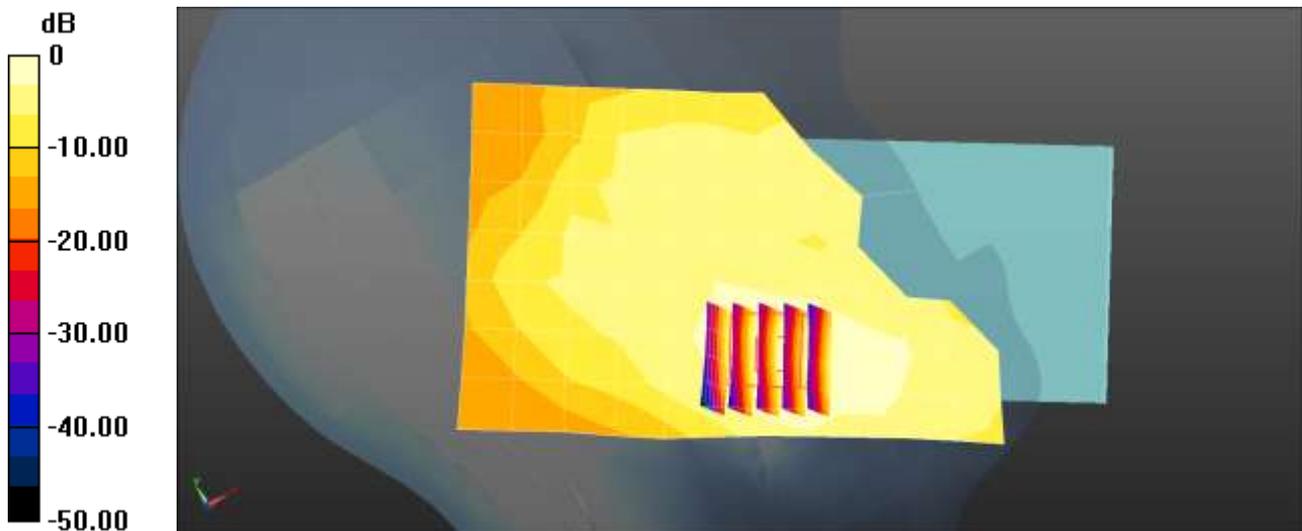
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.414$  S/m;  $\epsilon_r = 39.027$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 2 Head Left Touch 9400ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.111 W/kg

**WCDMA 2 Head Left Touch 9400ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 4.590 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 0.115 W/kg  
**SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.073 W/kg**  
Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.111 W/kg = -9.53 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.3°C  
Ambient Temperature: 20.2°C  
Test Date: 12/23/2020  
Plot No.: 6

Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.398$  S/m;  $\epsilon_r = 39.054$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.08, 5.08, 5.08) @ 1860 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 2 Head Right Tilt QPSK 20MHz 1RB 49offset 18700ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.242 W/kg

**LTE Band 2 Head Right Tilt QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 10.93 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 0.343 W/kg  
**SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.126 W/kg**  
Maximum value of SAR (measured) = 0.255 W/kg



0 dB = 0.242 W/kg = -6.17 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.3°C  
Ambient Temperature: 20.2°C  
Test Date: 12/23/2020  
Plot No.: 7

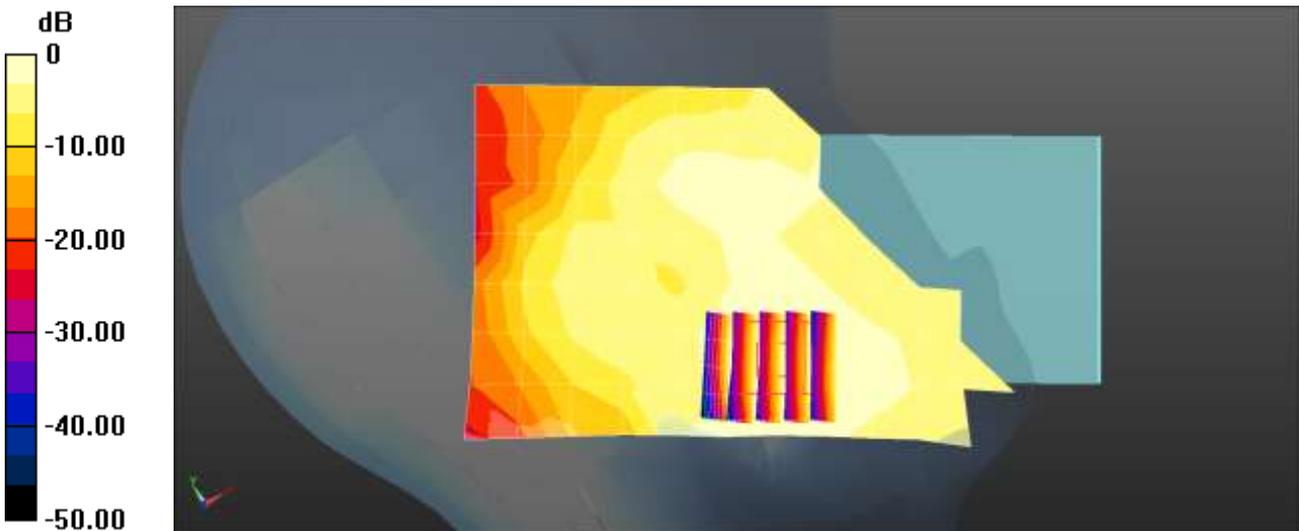
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.398$  S/m;  $\epsilon_r = 39.054$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.08, 5.08, 5.08) @ 1860 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 2 Head Left Touch QPSK 20MHz 1RB 49offset 18700ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.214 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 = 6.578 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 0.320 W/kg  
**SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.127 W/kg**  
Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.214 W/kg = -6.70 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.4°C  
Ambient Temperature: 20.4°C  
Test Date: 12/14/2020  
Plot No.: 8

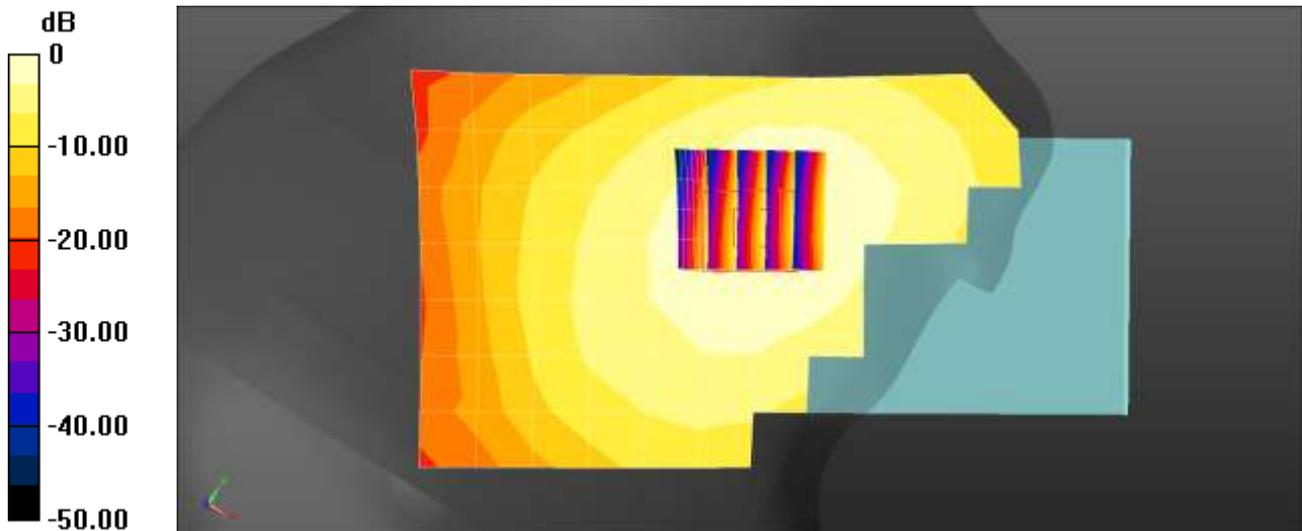
Communication System: UID 0, LTE 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.681$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 5 Head Right Touch QPSK 10MHz 1RB 24offset 20525ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.286 W/kg

**LTE Band 5 Head Right Touch QPSK 10MHz 1RB 24offset 20525ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.451 V/m; Power Drift = -0.19 dB  
Peak SAR (extrapolated) = 0.319 W/kg  
**SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.173 W/kg**  
Maximum value of SAR (measured) = 0.290 W/kg



0 dB = 0.286 W/kg = -5.44 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.4°C  
Ambient Temperature: 21.4°C  
Test Date: 12/15/2020  
Plot No.: 9

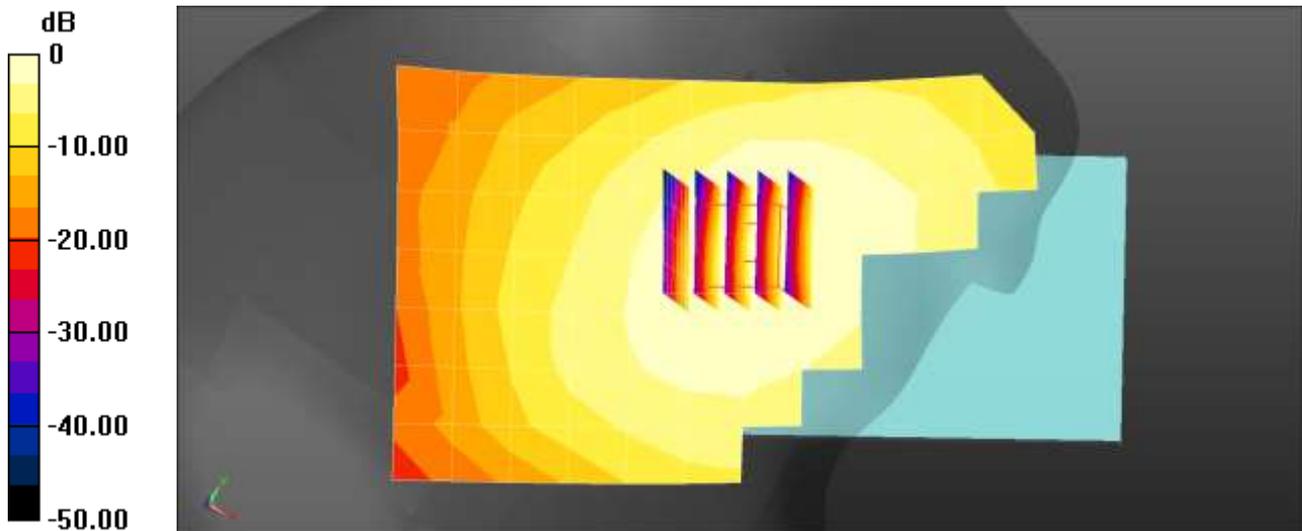
Communication System: UID 0, LTE 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 42.88$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.86, 9.86, 9.86) @ 707.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.168 W/kg

**LTE Band 12 Head Right Touch QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.400 V/m; Power Drift = -0.10 dB  
Peak SAR (extrapolated) = 0.170 W/kg  
**SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.106 W/kg**  
Maximum value of SAR (measured) = 0.156 W/kg



0 dB = 0.168 W/kg = -7.75 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.3°C  
Ambient Temperature: 20.2°C  
Test Date: 12/23/2020  
Plot No.: 10

Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1720 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.316$  S/m;  $\epsilon_r = 40.517$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

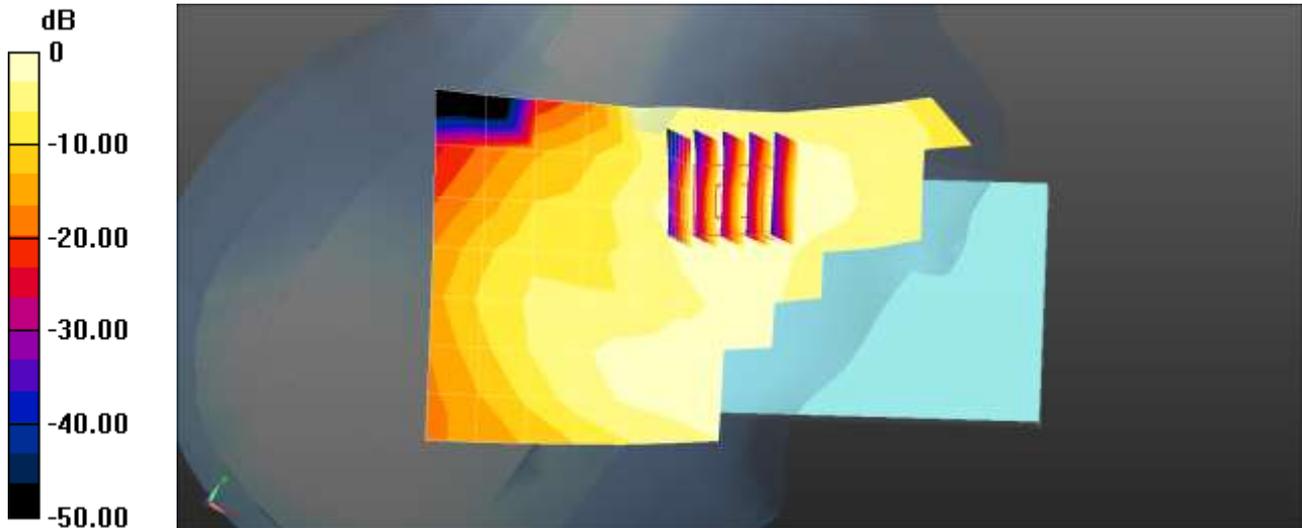
- Probe: ES3DV3 - SN3076; ConvF(5.24, 5.24, 5.24) @ 1720 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 66 Head Right Touch QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x14x1):**

Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.267 W/kg

**LTE Band 66 Head Right Touch QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0:**

Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.331 V/m; Power Drift = 0.18 dB  
Peak SAR (extrapolated) = 0.349 W/kg  
**SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.151 W/kg**  
Maximum value of SAR (measured) = 0.271 W/kg



0 dB = 0.267 W/kg = -5.74 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.5°C  
Ambient Temperature: 20.5°C  
Test Date: 12/28/2020  
Plot No.: 11

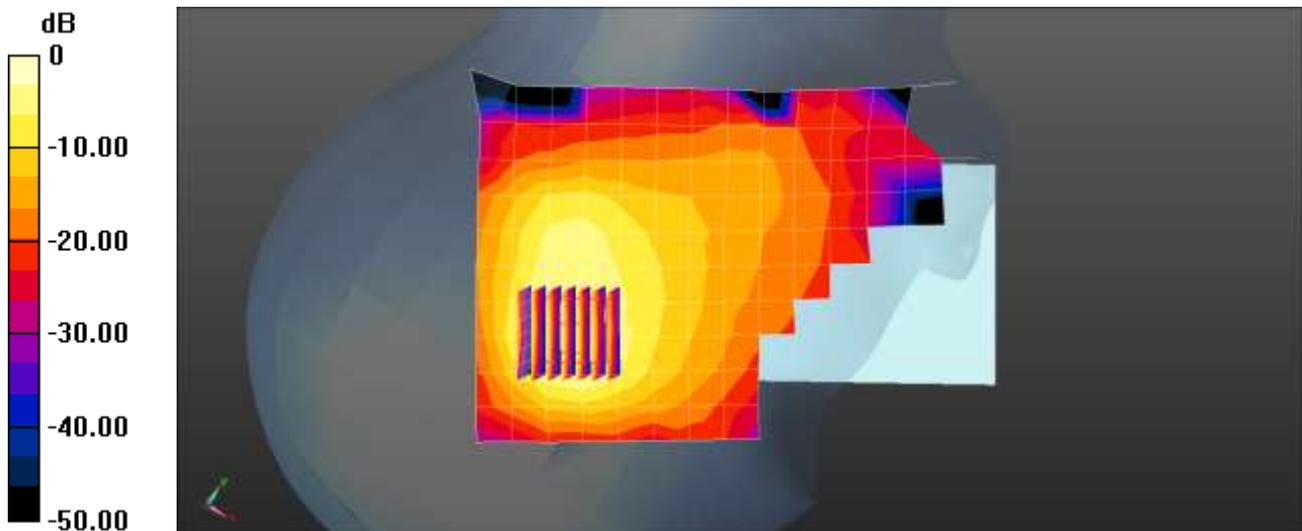
Communication System: UID 0, 2450MHz FCC (0); Frequency: 2462 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.849$  S/m;  $\epsilon_r = 40.169$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2462 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**802.11b Head Right Tilt 1Mbps 11ch/Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 0.346 W/kg

**802.11b Head Right Tilt 1Mbps 11ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 9.179 V/m; Power Drift = -0.10 dB  
Peak SAR (extrapolated) = 0.808 W/kg  
**SAR(1 g) = 0.308 W/kg; SAR(10 g) = 0.132 W/kg**  
Maximum value of SAR (measured) = 0.415 W/kg



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

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.2°C  
Test Date: 12/24/2020  
Plot No.: 12

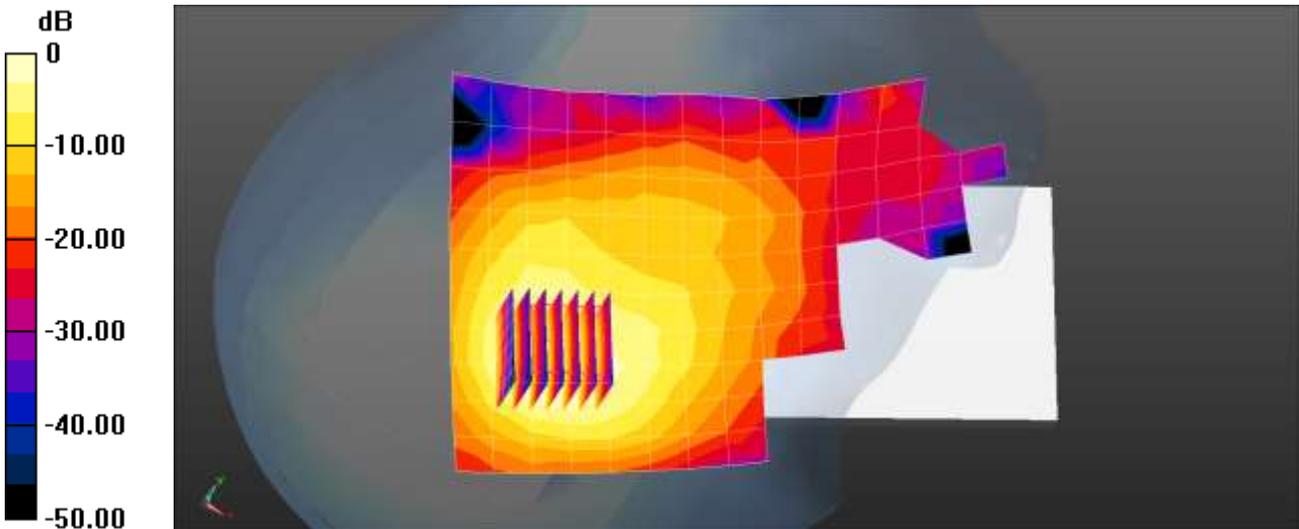
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.304  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.826$  S/m;  $\epsilon_r = 40.287$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2441 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right
- Measurement SW: DASY52, Version 52.10 (4);

**Bluetooth Head Right Touch DH5 39ch/Area Scan (11x17x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 0.308 W/kg

**Bluetooth Head Right Touch DH5 39ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 8.033 V/m; Power Drift = 0.11 dB  
Peak SAR (extrapolated) = 0.555 W/kg  
**SAR(1 g) = 0.267 W/kg; SAR(10 g) = 0.131 W/kg**  
Maximum value of SAR (measured) = 0.346 W/kg



0 dB = 0.308 W/kg = -5.12 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 20.8°C  
 Ambient Temperature: 20.7°C  
 Test Date: 12/16/2020  
 Plot No.: 13

Communication System: UID 0, GSM850 GPRS 4TX (0); Frequency: 824.2 MHz;Duty Cycle: 1:2.07491  
 Medium parameters used (interpolated):  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.906 \text{ S/m}$ ;  $\epsilon_r = 42.873$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

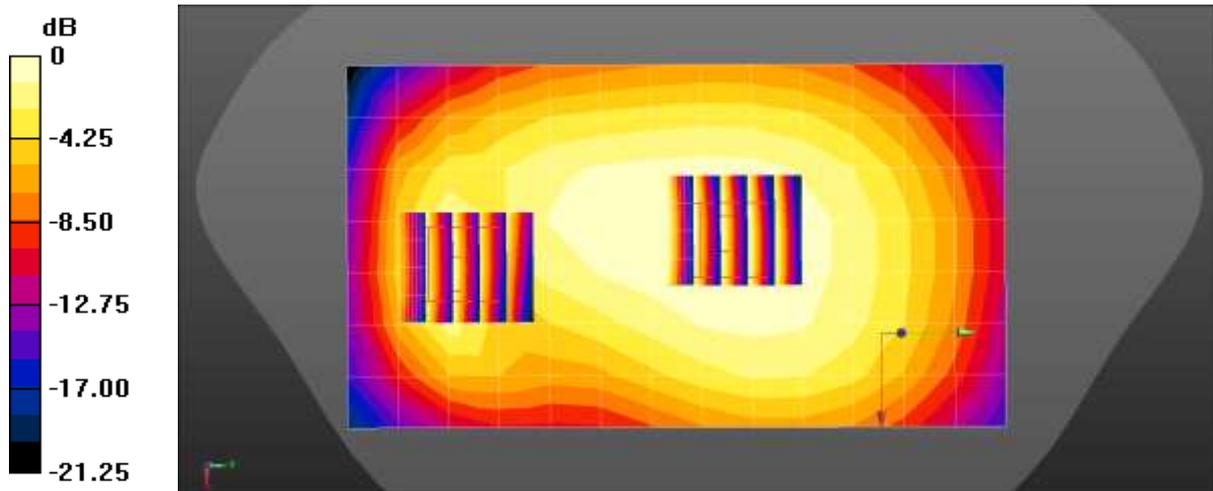
DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 824.2 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**GSM850 Body Worn Rear 4Tx 128ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.660 W/kg

**GSM850 Body Worn Rear 4Tx 128ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 28.31 V/m; Power Drift = -0.09 dB  
 Peak SAR (extrapolated) = 0.708 W/kg  
**SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.421 W/kg**  
 Maximum value of SAR (measured) = 0.658 W/kg

**GSM850 Body Worn Rear 4Tx 128ch/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 28.31 V/m; Power Drift = -0.09 dB  
 Peak SAR (extrapolated) = 0.629 W/kg  
**SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.214 W/kg**  
 Maximum value of SAR (measured) = 0.535 W/kg



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

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 22.3°C  
Ambient Temperature: 22.3°C  
Test Date: 12/21/2020  
Plot No.: 14

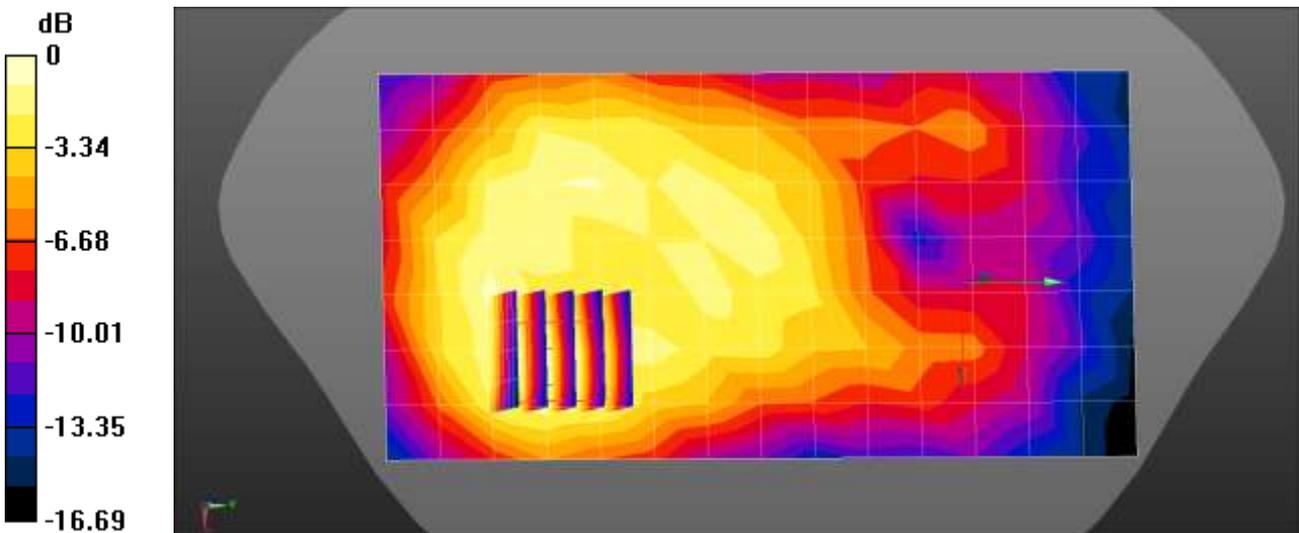
Communication System: UID 0, GSM 1900 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07491  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 39.005$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**GSM1900 Body Worn Rear 4Tx 661ch/Area Scan (8x15x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.190 W/kg

**GSM1900 Body Worn Rear 4Tx 661ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.251 V/m; Power Drift = -0.10 dB  
Peak SAR (extrapolated) = 0.178 W/kg  
**SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.103 W/kg**  
Maximum value of SAR (measured) = 0.165 W/kg



0 dB = 0.190 W/kg = -7.21 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 24.3°C  
Ambient Temperature: 24.3°C  
Test Date: 12/17/2020  
Plot No.: 15

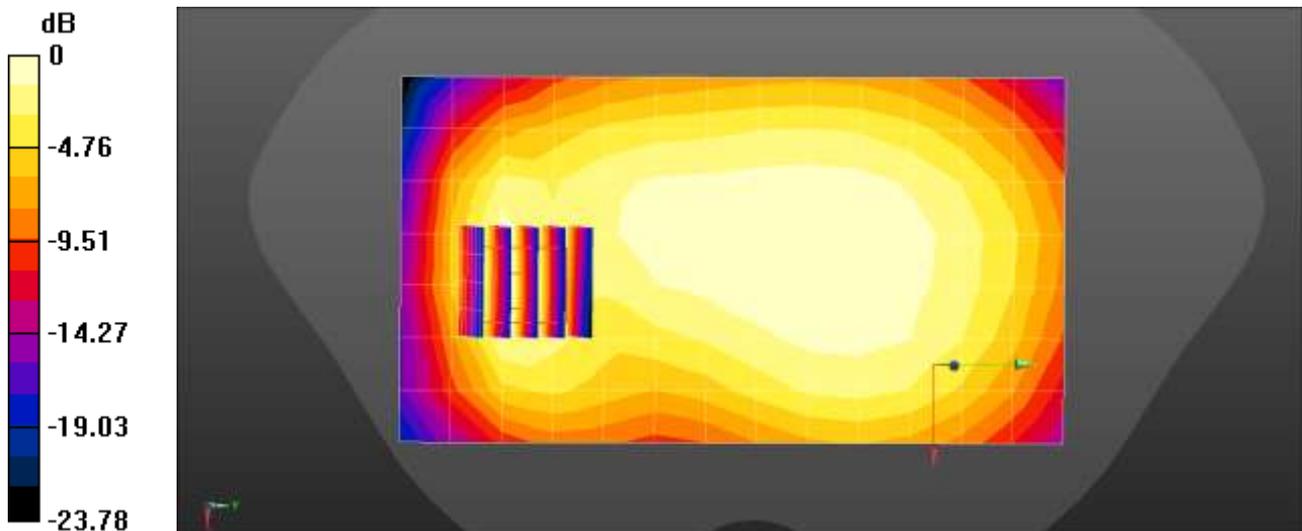
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.922$  S/m;  $\epsilon_r = 42.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.6 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA Band5 Body Worn Rear 4183ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.398 W/kg

**WCDMA Band5 Body Worn Rear 4183ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.09 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 0.495 W/kg  
**SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.165 W/kg**  
Maximum value of SAR (measured) = 0.414 W/kg



0 dB = 0.398 W/kg = -4.00 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 21.5°C  
 Ambient Temperature: 21.5°C  
 Test Date: 12/23/2020  
 Plot No.: 16

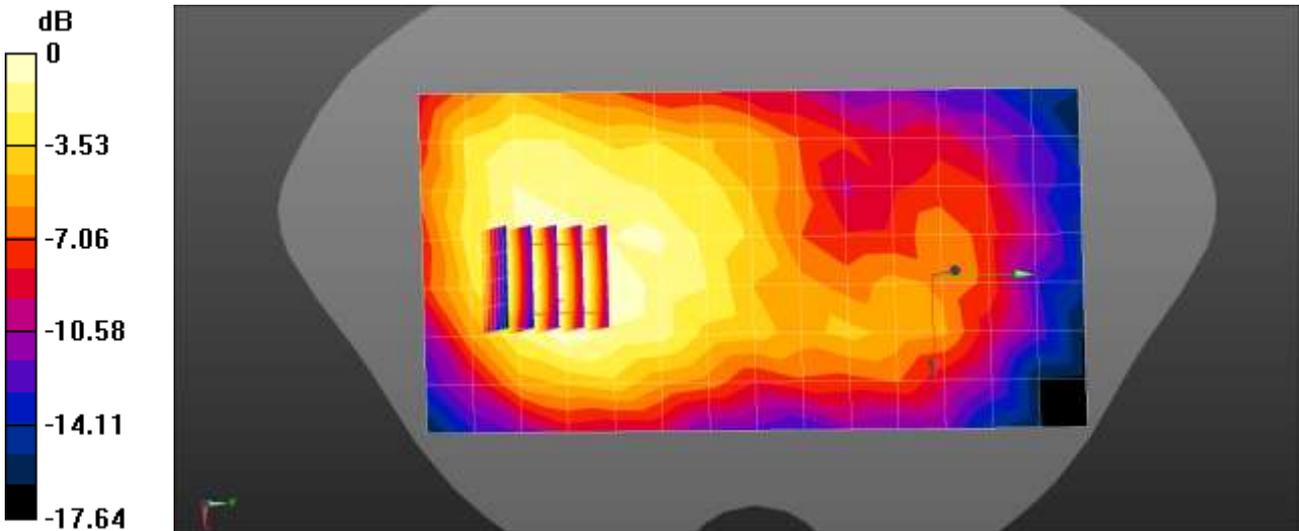
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.322$  S/m;  $\epsilon_r = 40.491$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.91, 5.91, 5.91) @ 1732.4 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 4 Body Worn Front 1412ch/Area Scan (8x15x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.203 W/kg

**WCDMA 4 Body Worn Front 1412ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 7.449 V/m; Power Drift = -0.09 dB  
 Peak SAR (extrapolated) = 0.194 W/kg  
**SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.138 W/kg**  
 Maximum value of SAR (measured) = 0.194 W/kg



0 dB = 0.203 W/kg = -6.93 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 21.5°C  
 Ambient Temperature: 21.5°C  
 Test Date: 12/23/2020  
 Plot No.: 17

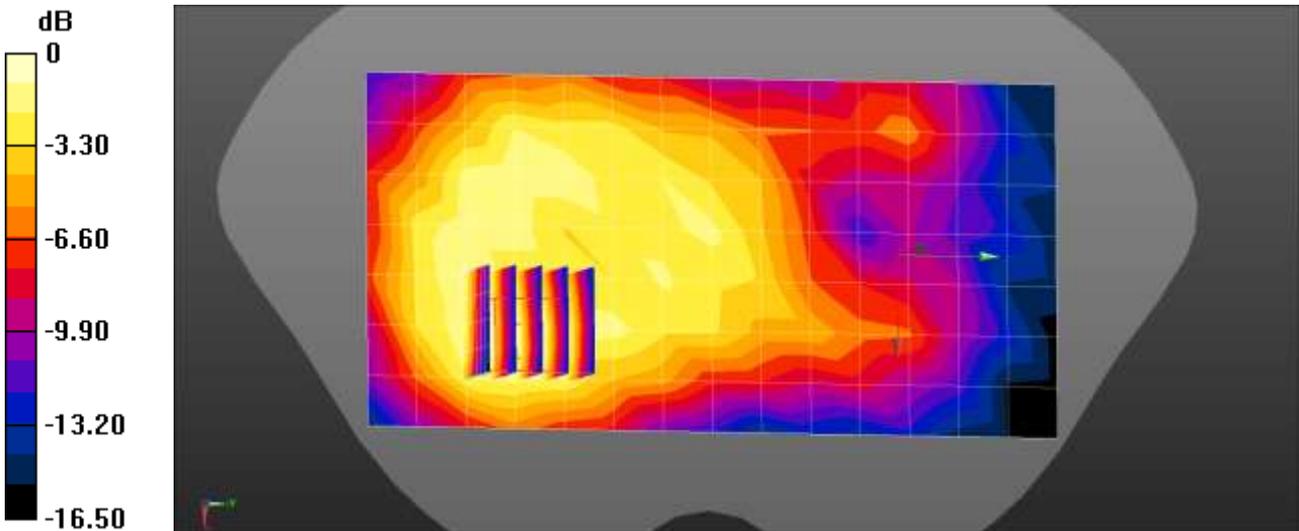
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1  
 Medium parameters used: f = 1880 MHz;  $\sigma = 1.414$  S/m;  $\epsilon_r = 39.027$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 2 Body Worn Rear 9400ch/Area Scan (8x15x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.169 W/kg

**WCDMA 2 Body Worn Rear 9400ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 8.180 V/m; Power Drift = -0.17 dB  
 Peak SAR (extrapolated) = 0.156 W/kg  
**SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.090 W/kg**  
 Maximum value of SAR (measured) = 0.143 W/kg



0 dB = 0.169 W/kg = -7.73 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 24.3°C  
 Ambient Temperature: 24.3°C  
 Test Date: 12/17/2020  
 Plot No.: 18

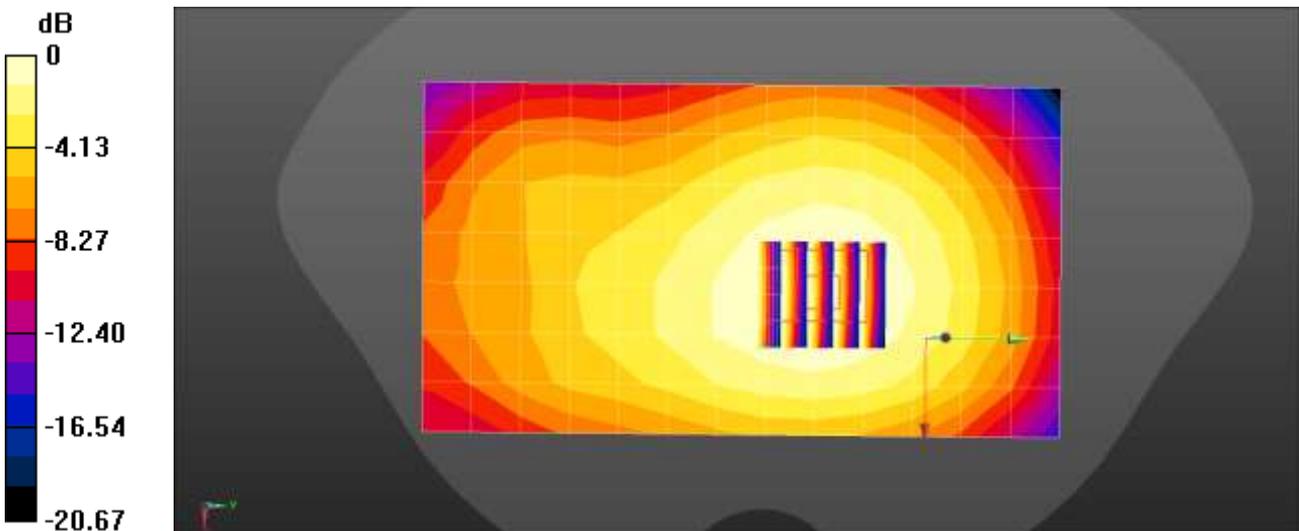
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.922$  S/m;  $\epsilon_r = 42.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.6 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA Band5 Body Worn Front 4183ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.292 W/kg

**WCDMA Band5 Body Worn Front 4183ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 17.66 V/m; Power Drift = 0.03 dB  
 Peak SAR (extrapolated) = 0.309 W/kg  
**SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.184 W/kg**  
 Maximum value of SAR (measured) = 0.286 W/kg



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

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.3°C  
Ambient Temperature: 20.2°C  
Test Date: 12/23/2020  
Plot No.: 19

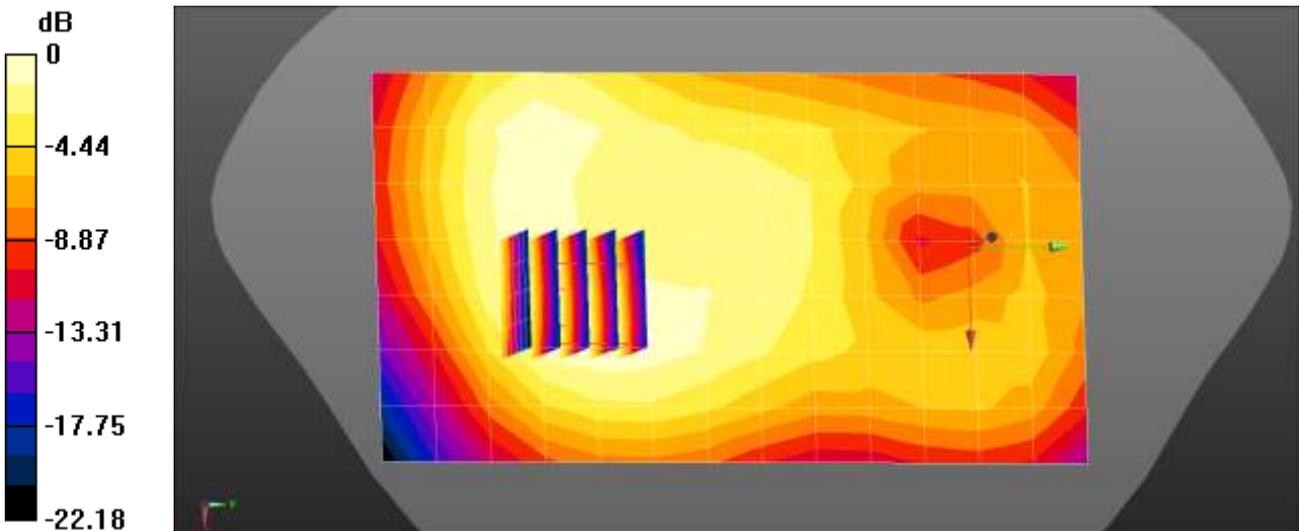
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.398$  S/m;  $\epsilon_r = 39.054$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.08, 5.08, 5.08) @ 1860 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 2 Bodyworn Front QPSK 20MHz 1RB 49offset 18700ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.380 W/kg

**LTE Band 2 Bodyworn Front QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.92 V/m; Power Drift = -0.11 dB  
Peak SAR (extrapolated) = 0.499 W/kg  
**SAR(1 g) = 0.318 W/kg; SAR(10 g) = 0.199 W/kg**  
Maximum value of SAR (measured) = 0.375 W/kg



0 dB = 0.380 W/kg = -4.20 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 20.4°C  
 Ambient Temperature: 20.4°C  
 Test Date: 12/14/2020  
 Plot No.: 20

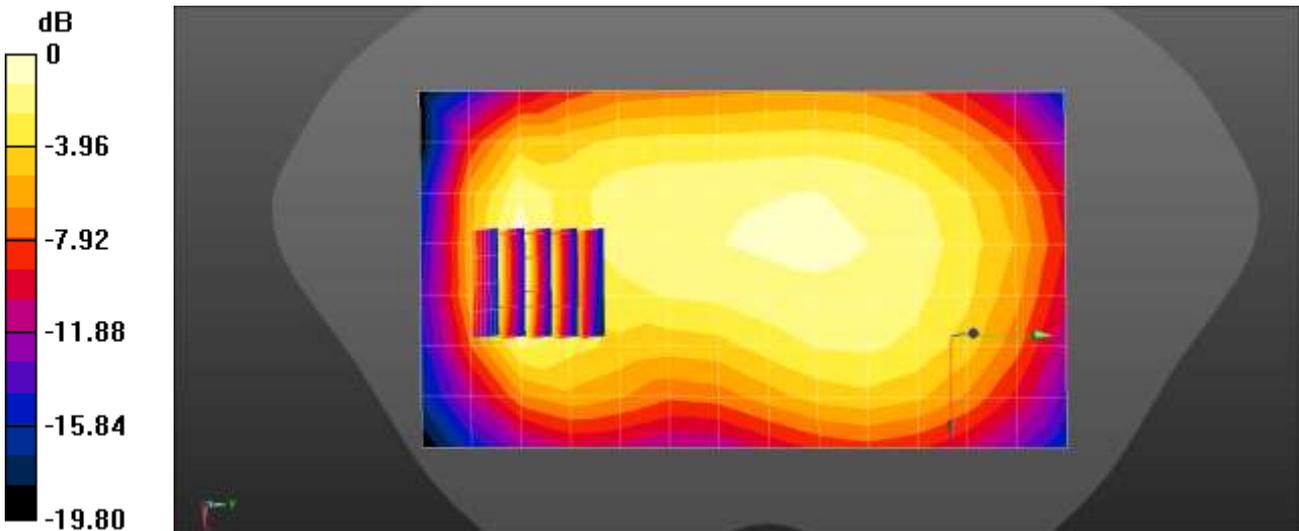
Communication System: UID 0, LTE 5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.912 \text{ S/m}$ ;  $\epsilon_r = 41.681$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 5 Body Worn Rear QPSK 10MHz 1RB 24offset 20525ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.396 W/kg

**LTE Band 5 Body Worn Rear QPSK 10MHz 1RB 24offset 20525ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 18.79 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 0.486 W/kg  
**SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.160 W/kg**  
 Maximum value of SAR (measured) = 0.413 W/kg



0 dB = 0.396 W/kg = -4.02 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.4°C  
Ambient Temperature: 21.4°C  
Test Date: 12/15/2020  
Plot No.: 21

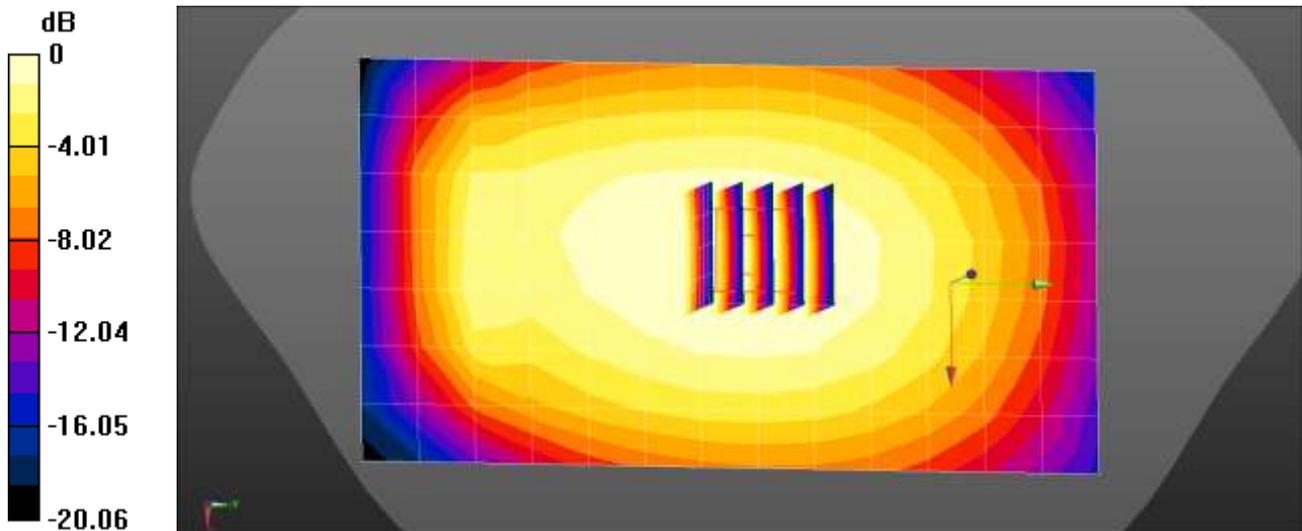
Communication System: UID 0, LTE 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 42.88$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.86, 9.86, 9.86) @ 707.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 12 Body Worn Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.296 W/kg

**LTE Band 12 Body Worn Rear QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 19.60 V/m; Power Drift = -0.14 dB  
Peak SAR (extrapolated) = 0.324 W/kg  
**SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.203 W/kg**  
Maximum value of SAR (measured) = 0.304 W/kg



0 dB = 0.296 W/kg = -5.29 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 20.3°C  
 Ambient Temperature: 20.2°C  
 Test Date: 12/23/2020  
 Plot No.: 22

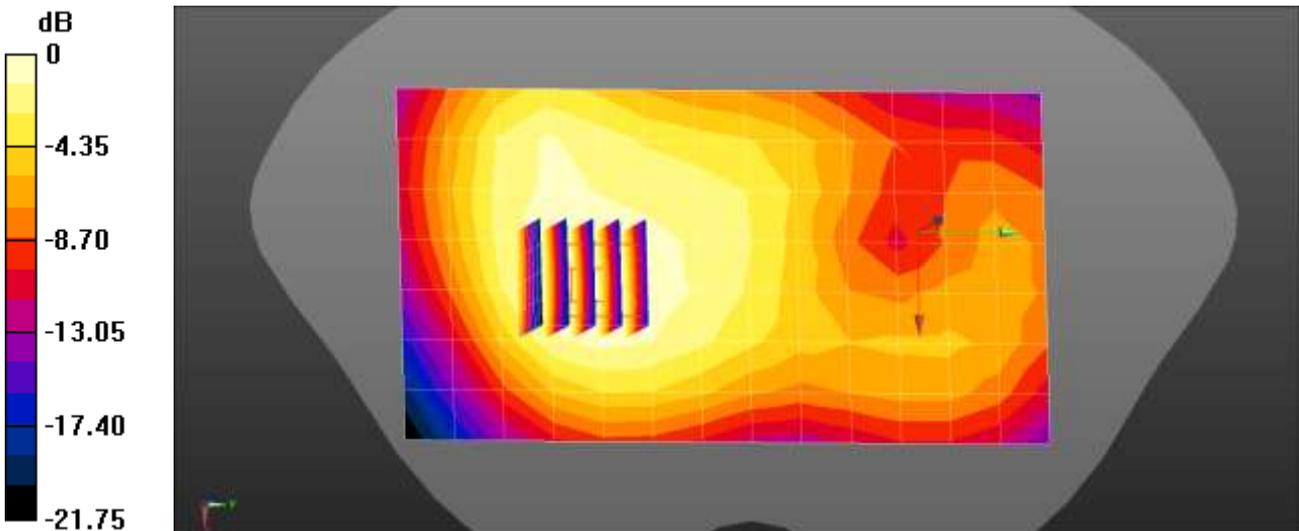
Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1720 MHz;Duty Cycle: 1:1  
 Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.316$  S/m;  $\epsilon_r = 40.517$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.24, 5.24, 5.24) @ 1720 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 66 Bodyworn Front QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.560 W/kg

**LTE Band 66 Bodyworn Front QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0:**  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 15.39 V/m; Power Drift = 0.05 dB  
 Peak SAR (extrapolated) = 0.733 W/kg  
**SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.326 W/kg**  
 Maximum value of SAR (measured) = 0.578 W/kg



0 dB = 0.560 W/kg = -2.52 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.5°C  
Ambient Temperature: 20.5°C  
Test Date: 12/28/2020  
Plot No.: 23

Communication System: UID 0, 2450MHz FCC (0); Frequency: 2462 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.849$  S/m;  $\epsilon_r = 40.169$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2462 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**802.11b Bodyworn Rear 1Mbps 11ch/Area Scan (10x17x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 0.138 W/kg

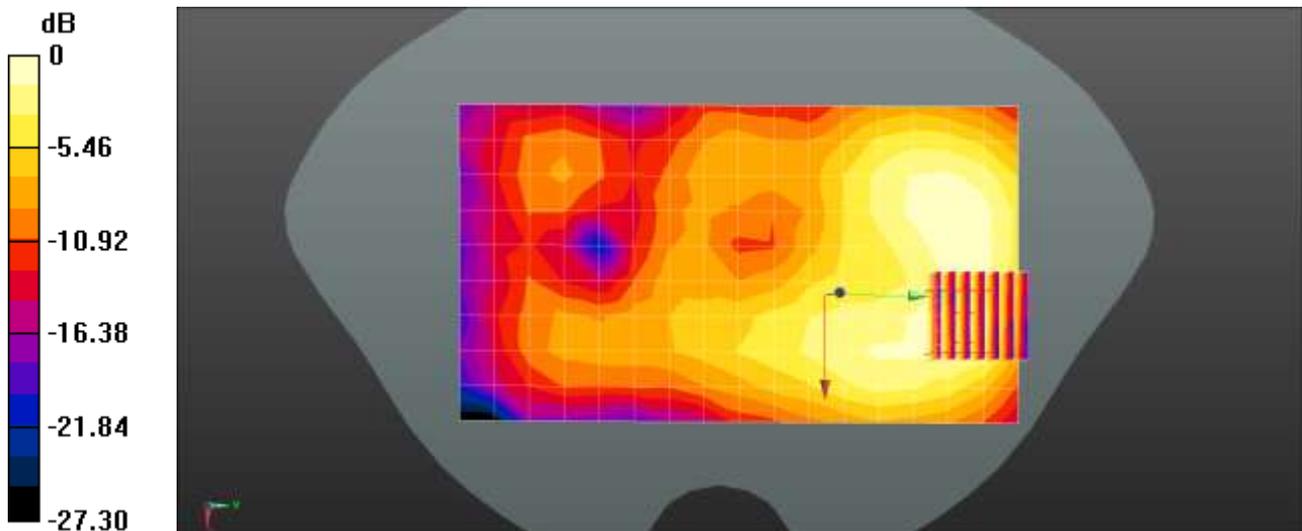
**802.11b Bodyworn Rear 1Mbps 11ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.102 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.251 W/kg

**SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.055 W/kg**

Maximum value of SAR (measured) = 0.145 W/kg



0 dB = 0.138 W/kg = -8.60 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.2°C  
Test Date: 12/24/2020  
Plot No.: 24

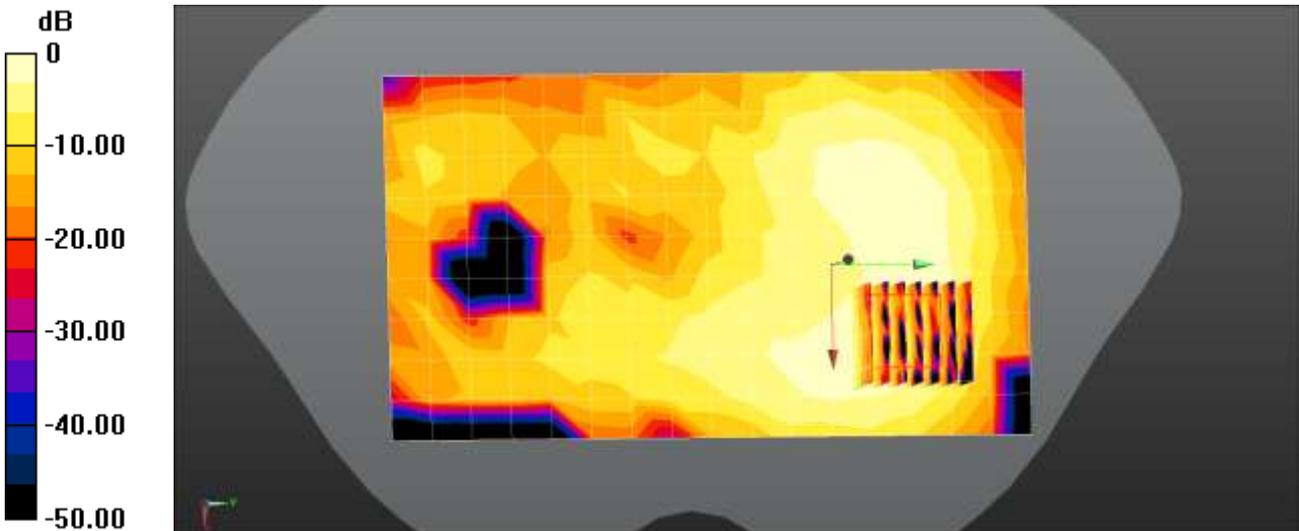
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.304  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.826$  S/m;  $\epsilon_r = 40.287$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2441 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right
- Measurement SW: DASY52, Version 52.10 (4);

**Bluetooth Bodyworn Rear DH5 39ch/Area Scan (10x17x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 0.0240 W/kg

**Bluetooth Bodyworn Rear DH5 39ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 0.4640 V/m; Power Drift = 0.13 dB  
Peak SAR (extrapolated) = 0.0470 W/kg  
**SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.0092 W/kg**  
Maximum value of SAR (measured) = 0.0287 W/kg



0 dB = 0.0240 W/kg = -16.19 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.8°C  
Ambient Temperature: 20.7°C  
Test Date: 12/16/2020  
Plot No.: 25

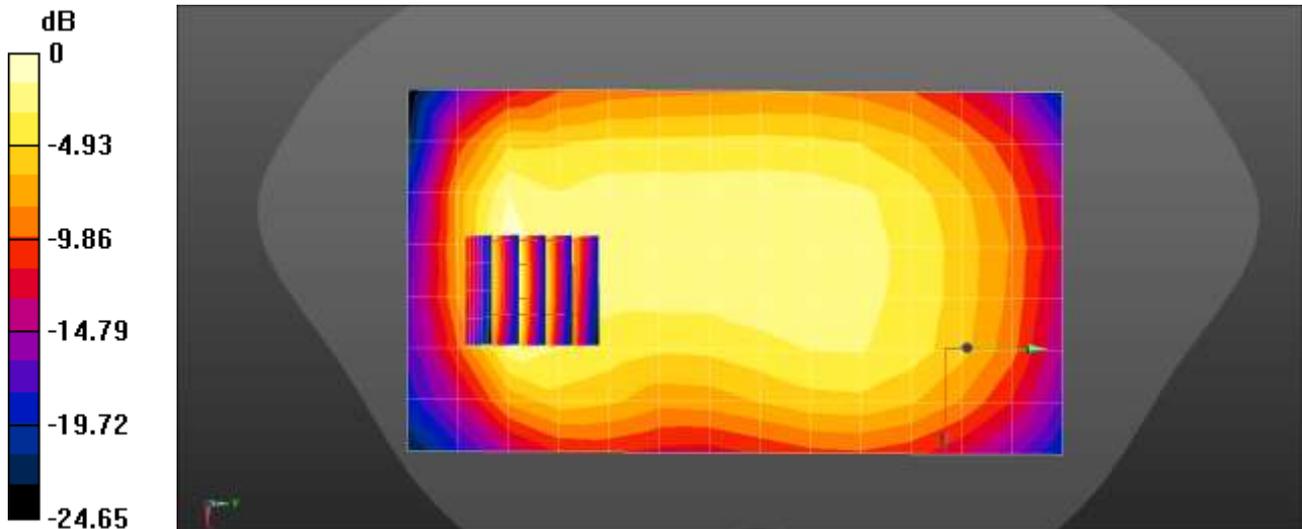
Communication System: UID 0, GSM850 GPRS 4TX (0); Frequency: 824.2 MHz;Duty Cycle: 1:2.07491  
Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 42.873$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 824.2 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**GSM850 Body Rear 4Tx 128ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.16 W/kg

**GSM850 Body Rear 4Tx 128ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.53 V/m; Power Drift = 0.04 dB  
Peak SAR (extrapolated) = 1.55 W/kg  
**SAR(1 g) = 0.808 W/kg; SAR(10 g) = 0.447 W/kg**  
Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.16 W/kg = 0.63 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 22.3°C  
 Ambient Temperature: 22.3°C  
 Test Date: 12/21/2020  
 Plot No.: 26

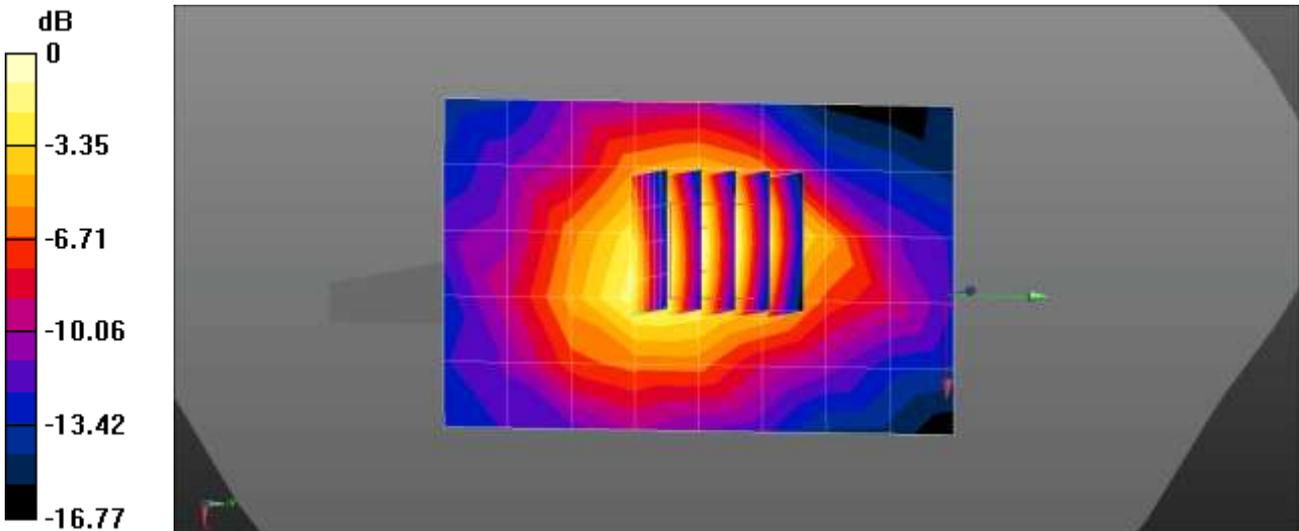
Communication System: UID 0, GSM 1900 4TX (0); Frequency: 1880 MHz;Duty Cycle: 1:2.07491  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 39.005$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**GSM1900 Body Bottom 4Tx 661ch/Area Scan (6x9x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.405 W/kg

**GSM1900 Body Bottom 4Tx 661ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 16.35 V/m; Power Drift = -0.18 dB  
 Peak SAR (extrapolated) = 0.370 W/kg  
**SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.213 W/kg**  
 Maximum value of SAR (measured) = 0.361 W/kg



0 dB = 0.405 W/kg = -3.93 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 24.3°C  
Ambient Temperature: 24.3°C  
Test Date: 12/17/2020  
Plot No.: 27

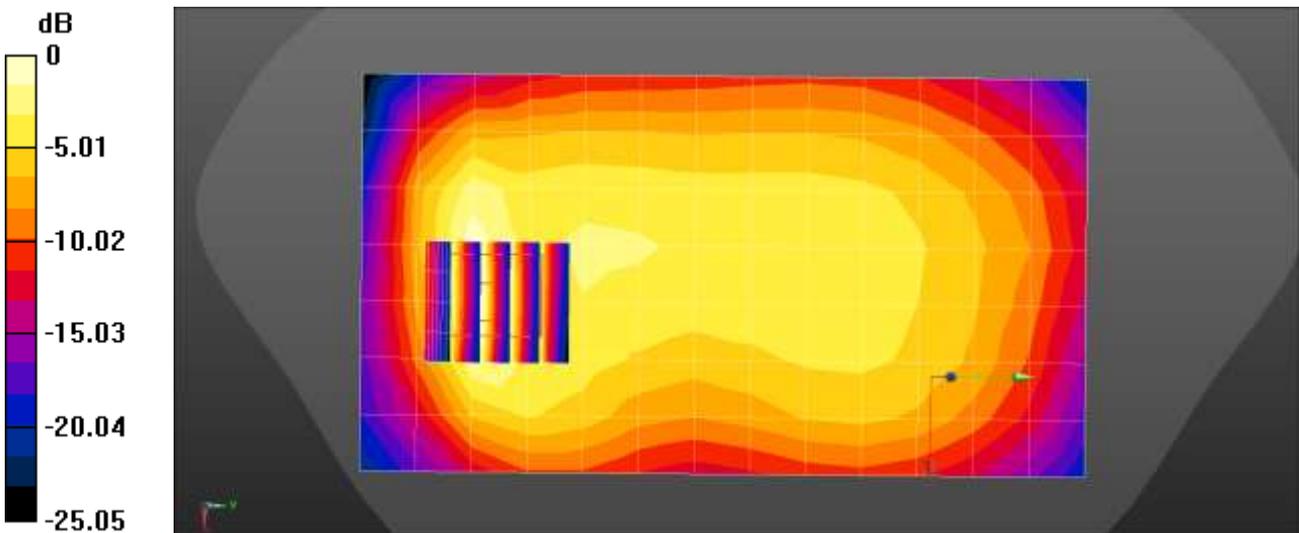
Communication System: UID 0, WCDMA850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.922$  S/m;  $\epsilon_r = 42.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.6 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA Band5 Body Rear 4183ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.02 W/kg

**WCDMA Band5 Body Rear 4183ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.71 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 1.33 W/kg  
**SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.375 W/kg**  
Maximum value of SAR (measured) = 1.11 W/kg



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

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.5°C  
Test Date: 12/23/2020  
Plot No.: 28

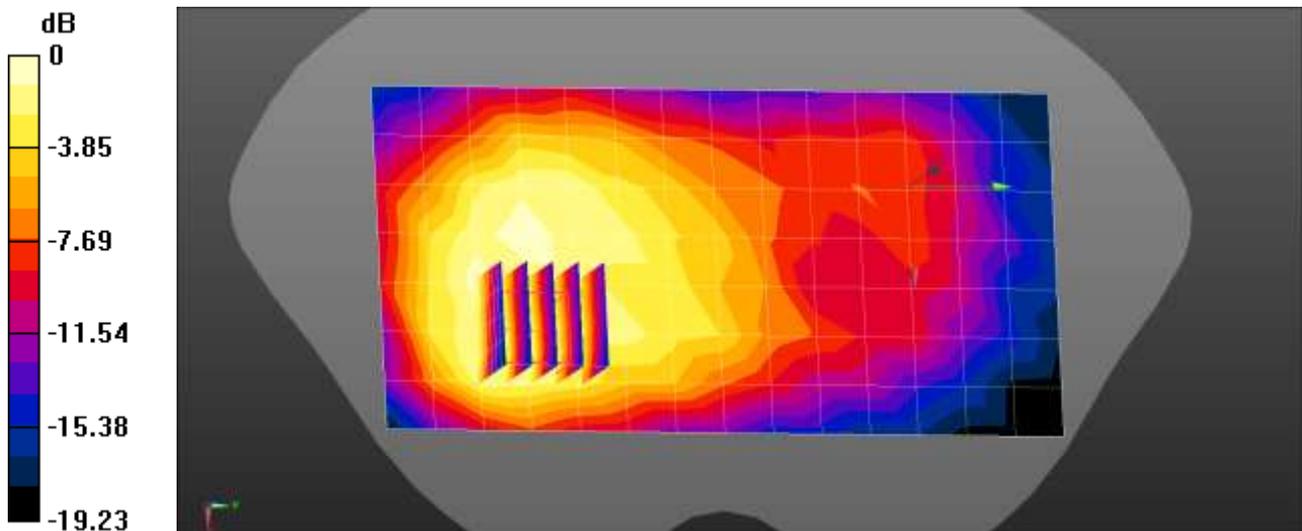
Communication System: UID 0, WCDMA IV (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.322$  S/m;  $\epsilon_r = 40.491$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.91, 5.91, 5.91) @ 1732.4 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 4 Body Rear 1412ch/Area Scan (8x15x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.350 W/kg

**WCDMA 4 Body Rear 1412ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.278 V/m; Power Drift = -0.14 dB  
Peak SAR (extrapolated) = 0.340 W/kg  
**SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.189 W/kg**  
Maximum value of SAR (measured) = 0.316 W/kg



0 dB = 0.350 W/kg = -4.56 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 21.5°C  
Ambient Temperature: 21.5°C  
Test Date: 12/23/2020  
Plot No.: 29

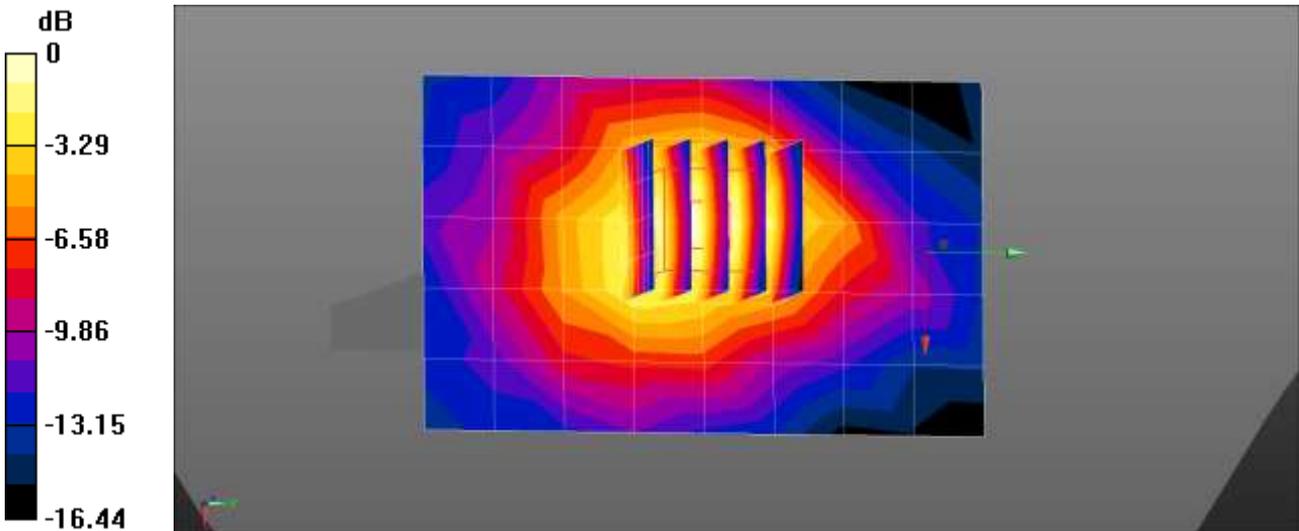
Communication System: UID 0, WCDMA1900 (0); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.414$  S/m;  $\epsilon_r = 39.027$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1880 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**WCDMA 2 Body Bottom 9400ch/Area Scan (6x9x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.399 W/kg

**WCDMA 2 Body Bottom 9400ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.32 V/m; Power Drift = -0.18 dB  
Peak SAR (extrapolated) = 0.353 W/kg  
**SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.206 W/kg**  
Maximum value of SAR (measured) = 0.345 W/kg



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

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.3°C  
Ambient Temperature: 20.2°C  
Test Date: 12/23/2020  
Plot No.: 30

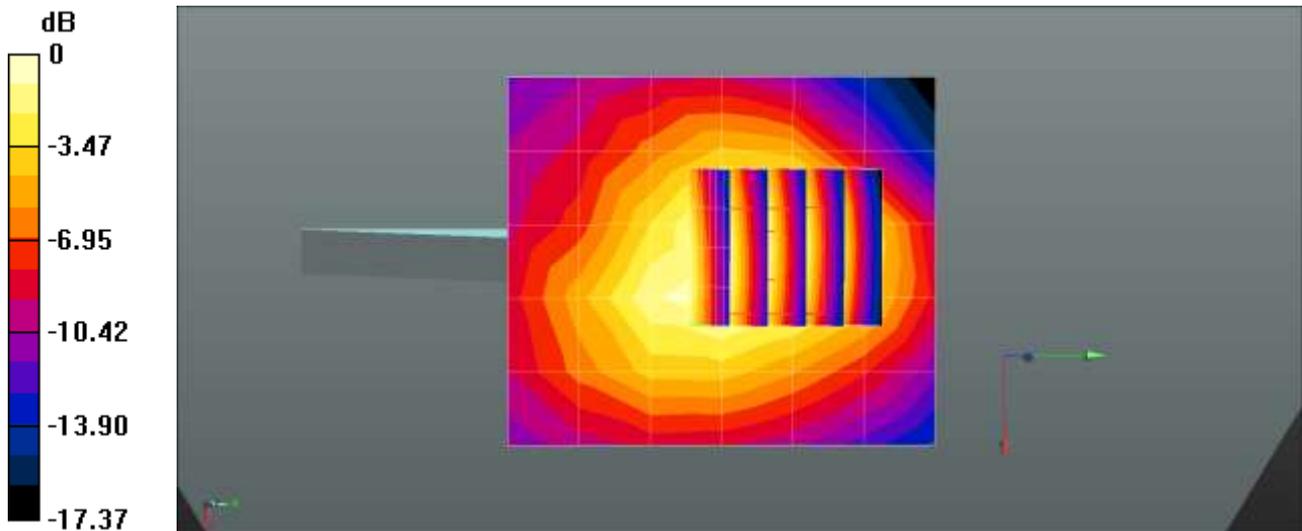
Communication System: UID 0, LTE Band 2 (0); Frequency: 1860 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.398$  S/m;  $\epsilon_r = 39.054$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.08, 5.08, 5.08) @ 1860 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 2 Body Bottom QPSK 20MHz 1RB 49offset 18700ch/Area Scan (6x7x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.593 W/kg

**LTE Band 2 Body Bottom QPSK 20MHz 1RB 49offset 18700ch/Zoom Scan (5x5x7)/Cube 0:**  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.51 V/m; Power Drift = -0.06 dB  
Peak SAR (extrapolated) = 0.957 W/kg  
**SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.319 W/kg**  
Maximum value of SAR (measured) = 0.687 W/kg



0 dB = 0.593 W/kg = -2.27 dBW/kg

Test Laboratory: HCT CO., LTD  
EUT Type: Mobile Phone  
Liquid Temperature: 20.4°C  
Ambient Temperature: 20.4°C  
Test Date: 12/14/2020  
Plot No.: 31

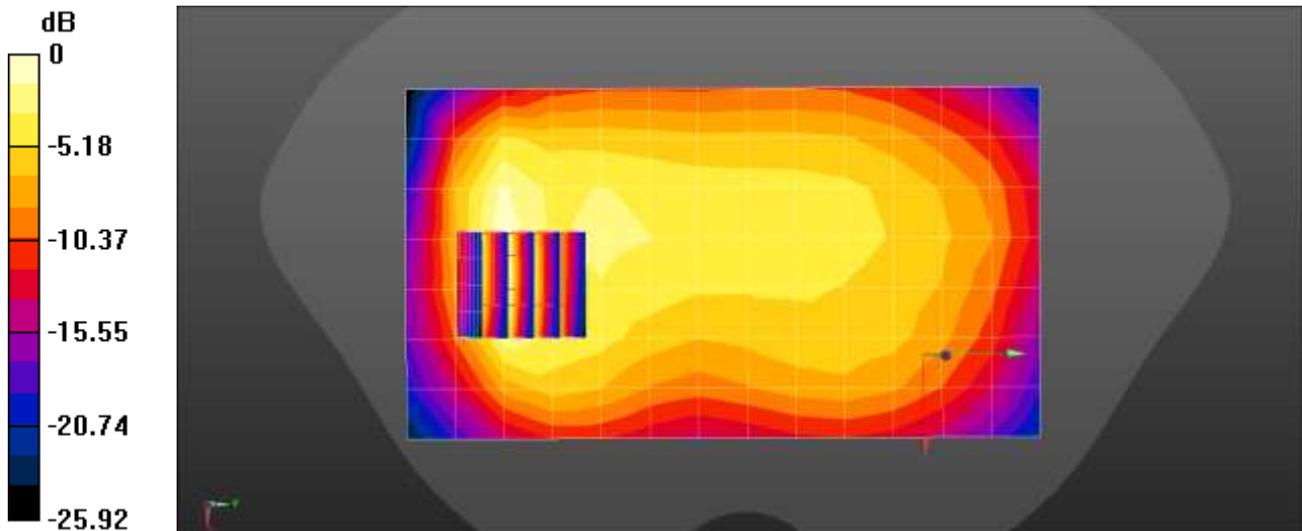
Communication System: UID 0, LTE 5 (0); Frequency: 836.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.681$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 836.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 5 Body Rear QPSK 10MHz 1RB 24offset 20525ch/Area Scan (8x14x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.970 W/kg

**LTE Band 5 Body Rear QPSK 10MHz 1RB 24offset 20525ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.47 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 1.24 W/kg  
**SAR(1 g) = 0.642 W/kg; SAR(10 g) = 0.350 W/kg**  
Maximum value of SAR (measured) = 1.02 W/kg



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

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 21.4°C  
 Ambient Temperature: 21.4°C  
 Test Date: 12/15/2020  
 Plot No.: 32

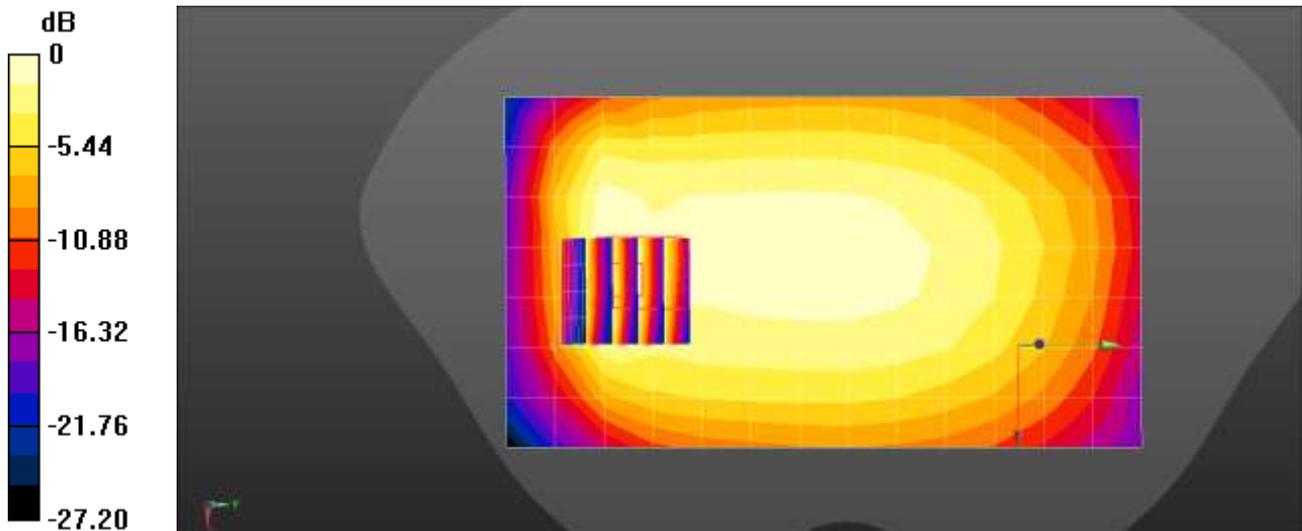
Communication System: UID 0, LTE 12 (0); Frequency: 707.5 MHz;Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 707.5 \text{ MHz}$ ;  $\sigma = 0.879 \text{ S/m}$ ;  $\epsilon_r = 42.88$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.86, 9.86, 9.86) @ 707.5 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Area Scan (8x14x1):** Measurement grid:  
 $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 0.431 W/kg

**LTE Band 12 Body Rear QPSK 10MHz 1RB 0offset 23095ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 21.01 V/m; Power Drift = -0.19 dB  
 Peak SAR (extrapolated) = 0.541 W/kg  
**SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.172 W/kg**  
 Maximum value of SAR (measured) = 0.441 W/kg



0 dB = 0.431 W/kg = -3.66 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 20.3°C  
 Ambient Temperature: 20.2°C  
 Test Date: 12/23/2020  
 Plot No.: 33

Communication System: UID 0, LTE Band 66(20MHz FCC) (0); Frequency: 1720 MHz;Duty Cycle: 1:1  
 Medium parameters used:  $f = 1720 \text{ MHz}$ ;  $\sigma = 1.316 \text{ S/m}$ ;  $\epsilon_r = 40.517$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

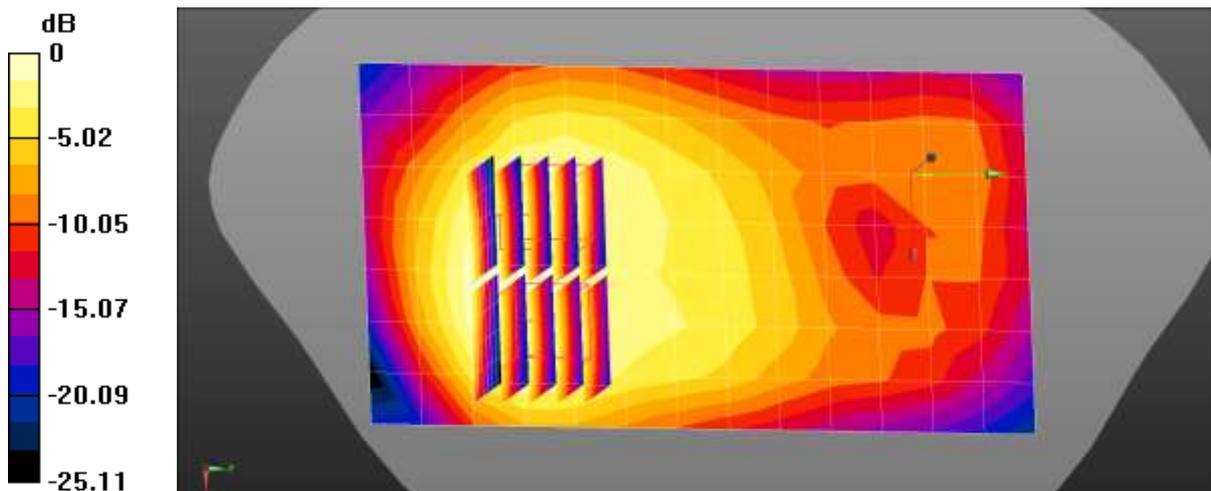
DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.24, 5.24, 5.24) @ 1720 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4);

**LTE Band 66 Body Rear QPSK 20MHz 1RB 49offset 132072ch/Area Scan (8x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.647 W/kg

**LTE Band 66 Body Rear QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 13.90 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 1.04 W/kg  
**SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.314 W/kg**  
 Maximum value of SAR (measured) = 0.701 W/kg

**LTE Band 66 Body Rear QPSK 20MHz 1RB 49offset 132072ch/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 13.90 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 0.722 W/kg  
**SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.301 W/kg**  
 Maximum value of SAR (measured) = 0.546 W/kg



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

Test Laboratory: HCT CO., LTD

EUT Type: Mobile Phone  
 Liquid Temperature: 20.5°C  
 Ambient Temperature: 20.5°C  
 Test Date: 12/28/2020  
 Plot No.: 34

Communication System: UID 0, 2450MHz FCC (0); Frequency: 2462 MHz;Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.849$  S/m;  $\epsilon_r = 40.169$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2462 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right; Type:
- Measurement SW: DASY52, Version 52.10 (4);

**802.11b Body Top 1Mbps 11ch/Area Scan (7x9x1):** Measurement grid: dx=12mm, dy=12mm  
 Maximum value of SAR (measured) = 0.290 W/kg

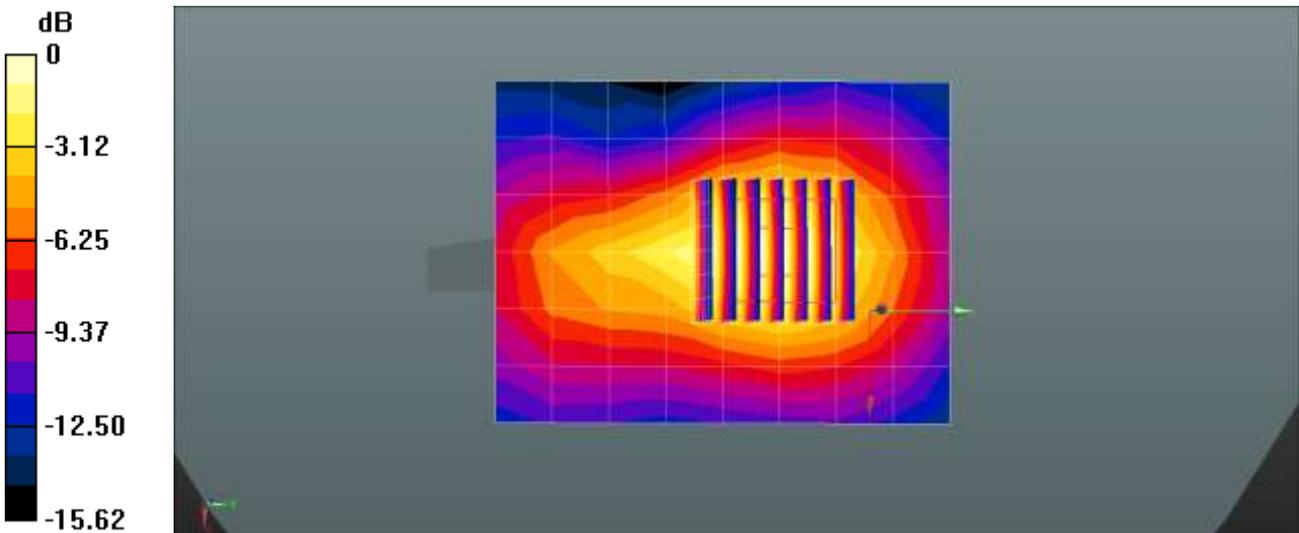
**802.11b Body Top 1Mbps 11ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.10 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.438 W/kg

**SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.117 W/kg**

Maximum value of SAR (measured) = 0.290 W/kg



0 dB = 0.290 W/kg = -5.38 dBW/kg

Test Laboratory: HCT CO., LTD  
 EUT Type: Mobile Phone  
 Liquid Temperature: 21.5°C  
 Ambient Temperature: 21.2°C  
 Test Date: 12/24/2020  
 Plot No.: 35

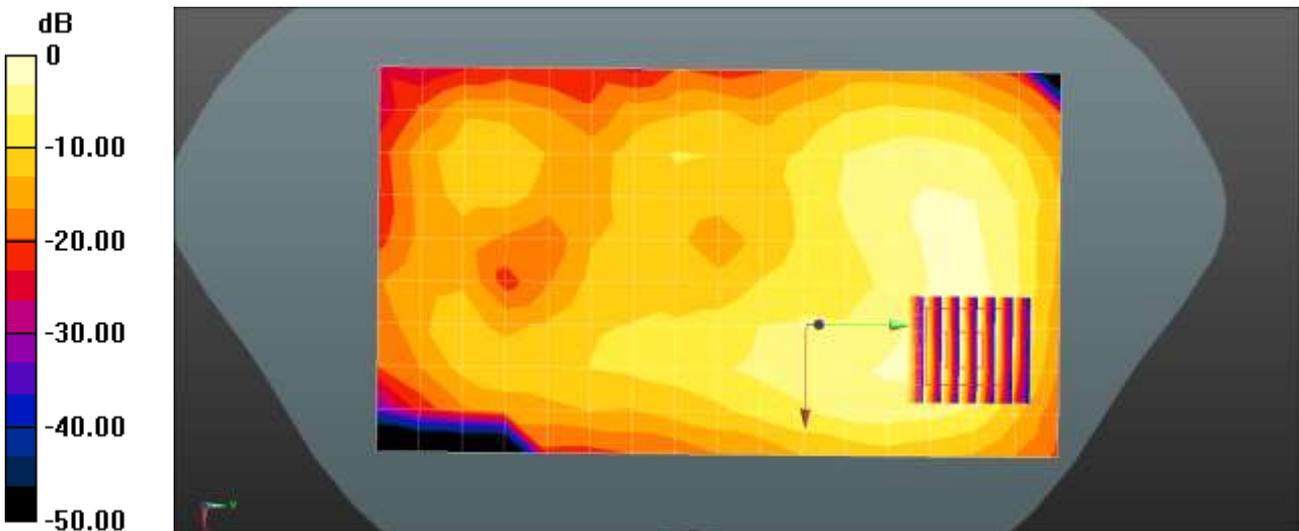
Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.304  
 Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.826$  S/m;  $\epsilon_r = 40.287$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2441 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right
- Measurement SW: DASY52, Version 52.10 (4);

**Bluetooth Body Rear DH5 39ch/Area Scan (10x17x1):** Measurement grid: dx=12mm, dy=12mm  
 Maximum value of SAR (measured) = 0.149 W/kg

**Bluetooth Body Rear DH5 39ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 1.903 V/m; Power Drift = 0.18 dB  
 Peak SAR (extrapolated) = 0.333 W/kg  
**SAR(1 g) = 0.137 W/kg; SAR(10 g) = 0.059 W/kg**  
 Maximum value of SAR (measured) = 0.188 W/kg



0 dB = 0.149 W/kg = -8.26 dBW/kg

## Appendix C. – Dipole Verification Plots

**Verification Data (750 MHz)**

Test Laboratory: HCT CO., LTD  
 Input Power: 0.05 W  
 Liquid Temp: 21.4 °C  
 Test Date: 12/15/2020

**DUT: Dipole 750 MHz D750V3; Type: D750V3**

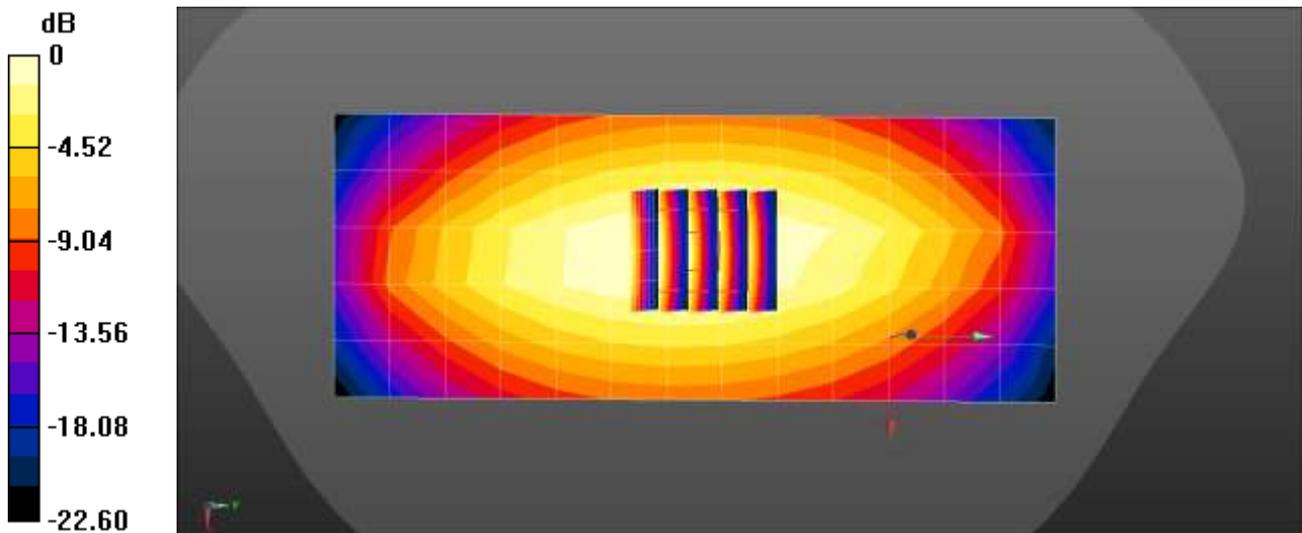
Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.924 \text{ S/m}$ ;  $\epsilon_r = 42.33$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.86, 9.86, 9.86) @ 750 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**750MHz Head Verification/Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 0.493 W/kg

**750MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 27.10 V/m; Power Drift = -0.16 dB  
 Peak SAR (extrapolated) = 0.634 W/kg  
**SAR(1 g) = 0.431 W/kg; SAR(10 g) = 0.289 W/kg**  
 Maximum value of SAR (measured) = 0.570 W/kg



0 dB = 0.493 W/kg = -3.07 dBW/kg

**Verification Data (835 MHz)**

Test Laboratory: HCT CO., LTD  
 Input Power 0.05 W  
 Liquid Temp: 20.7 °C  
 Test Date: 12/16/2020

**DUT: Dipole 835 MHz D835V2; Type: D835V2**

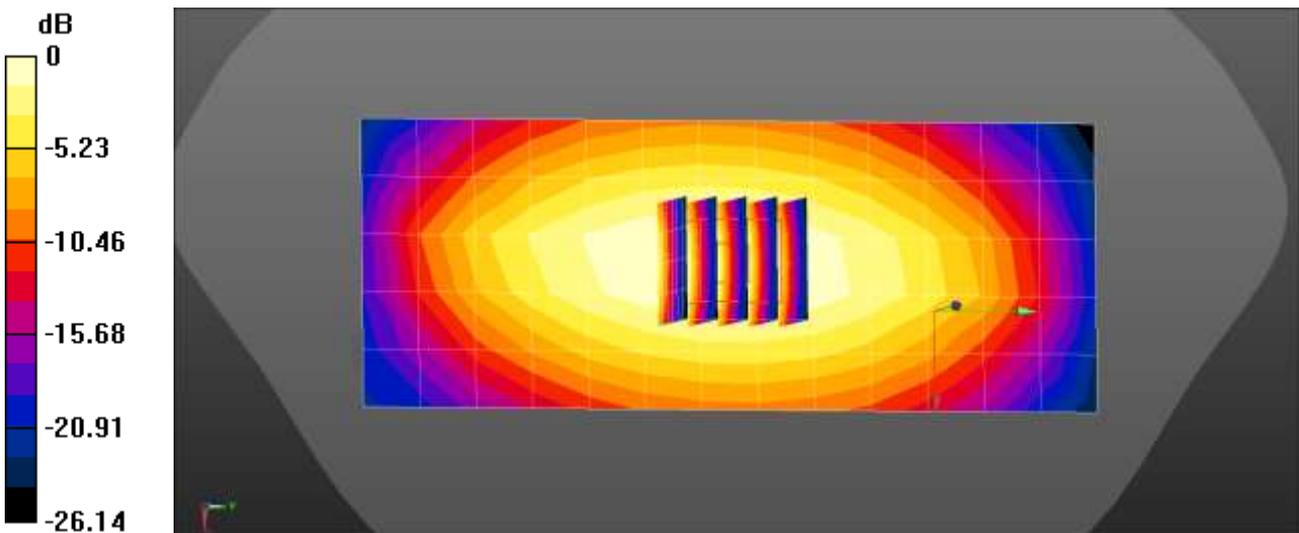
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 835 \text{ MHz}$ ;  $\sigma = 0.916 \text{ S/m}$ ;  $\epsilon_r = 42.748$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 835 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**835MHz Head Verification/Area Scan (6x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.585 W/kg

**835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 28.61 V/m; Power Drift = -0.02 dB  
 Peak SAR (extrapolated) = 0.759 W/kg  
**SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.336 W/kg**  
 Maximum value of SAR (measured) = 0.679 W/kg



0 dB = 0.585 W/kg = -2.33 dBW/kg

**Verification Data (835 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power: 0.05 W  
Liquid Temp: 24.3 °C  
Test Date: 12/17/2020

**DUT: Dipole 835 MHz D835V2; Type: D835V2**

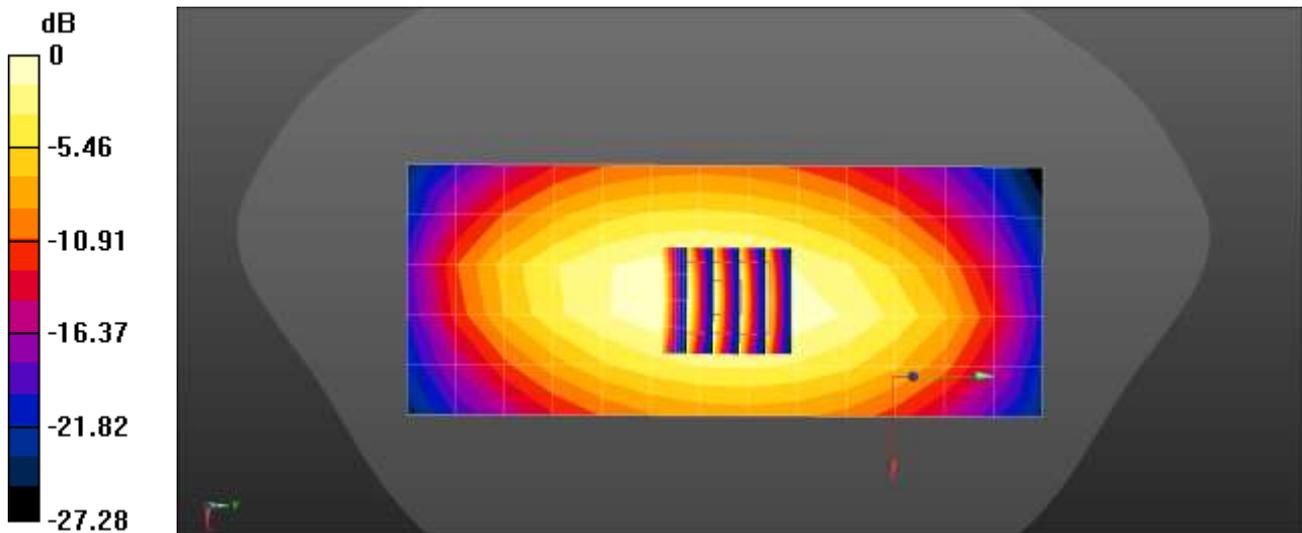
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 835 \text{ MHz}$ ;  $\sigma = 0.92 \text{ S/m}$ ;  $\epsilon_r = 42.697$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 835 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

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

**835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 28.47 V/m; Power Drift = -0.06 dB  
Peak SAR (extrapolated) = 0.763 W/kg  
**SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.335 W/kg**  
Maximum value of SAR (measured) = 0.676 W/kg



0 dB = 0.619 W/kg = -2.09 dBW/kg

**Verification Data (835 MHz)**

Test Laboratory: HCT CO., LTD  
 Input Power: 0.05 W  
 Liquid Temp: 20.4 °C  
 Test Date: 12/14/2020

**DUT: Dipole 835 MHz D835V2; Type: D835V2**

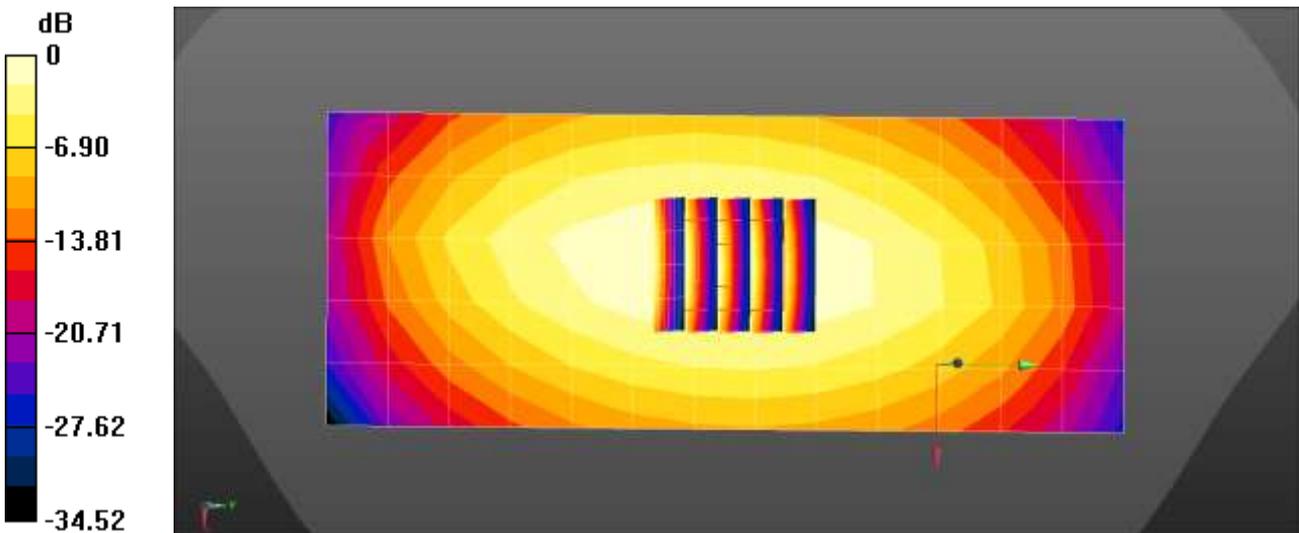
Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 835 \text{ MHz}$ ;  $\sigma = 0.911 \text{ S/m}$ ;  $\epsilon_r = 41.694$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3903; ConvF(9.61, 9.61, 9.61) @ 835 MHz; Calibrated: 2020-03-25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn466; Calibrated: 2020-04-22
- Phantom: Twin-SAM V4.0 (20deg probe tilt)
- Measurement SW: DASY52, Version 52.10 (4);

**835MHz Head Verification/Area Scan (6x14x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.571 W/kg

**835MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 27.69 V/m; Power Drift = -0.12 dB  
 Peak SAR (extrapolated) = 0.688 W/kg  
**SAR(1 g) = 0.476 W/kg; SAR(10 g) = 0.318 W/kg**  
 Maximum value of SAR (measured) = 0.622 W/kg



0 dB = 0.571 W/kg = -2.44 dBW/kg

**Verification Data (1800 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power 0.05 W  
Liquid Temp: 20.2 °C  
Test Date: 12/23/2020

**DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;**

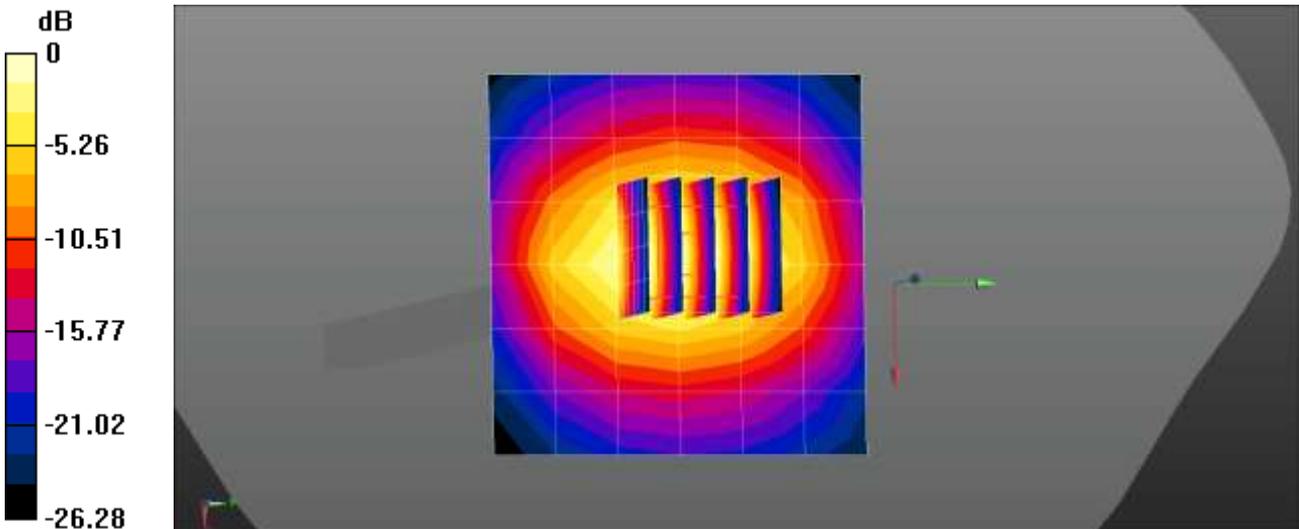
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.388$  S/m;  $\epsilon_r = 40.288$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.24, 5.24, 5.24) @ 1800 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4)

**1800MHz Head Verification/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.52 W/kg

**1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 44.17 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 3.71 W/kg  
**SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.09 W/kg**  
Maximum value of SAR (measured) = 2.58 W/kg



0 dB = 2.52 W/kg = 4.02 dBW/kg

**Verification Data (1800 MHz)**

Test Laboratory: HCT CO., LTD  
 Input Power 0.05 W  
 Liquid Temp: 21.5 °C  
 Test Date: 12/23/2020

**DUT: Dipole 1800 MHz D1800V2; Type: D1800V2;**

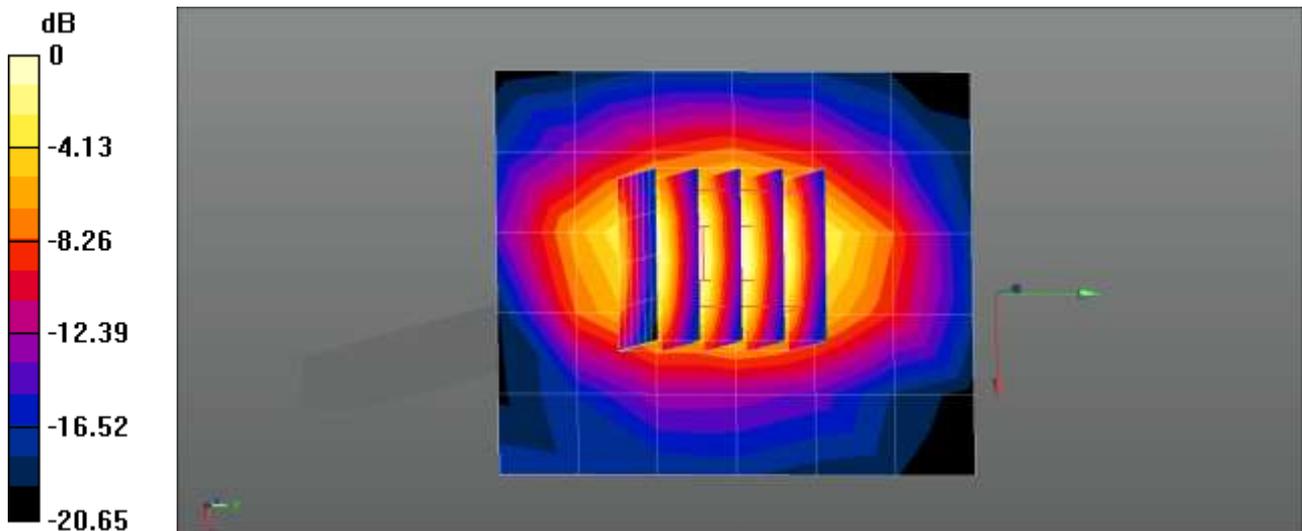
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1  
 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.383 \text{ S/m}$ ;  $\epsilon_r = 40.28$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.91, 5.91, 5.91) @ 1800 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913
- Measurement SW: DASY52, Version 52.10 (4)

**1800MHz Head Verification/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.95 W/kg

**1800MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 40.48 V/m; Power Drift = -0.11 dB  
 Peak SAR (extrapolated) = 2.56 W/kg  
**SAR(1 g) = 1.94 W/kg; SAR(10 g) = 1.1 W/kg**  
 Maximum value of SAR (measured) = 2.14 W/kg



0 dB = 1.95 W/kg = 2.89 dBW/kg

**Verification Data (1900 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power: 0.05 W  
Liquid Temp: 20.2 °C  
Test Date: 12/23/2020

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;**

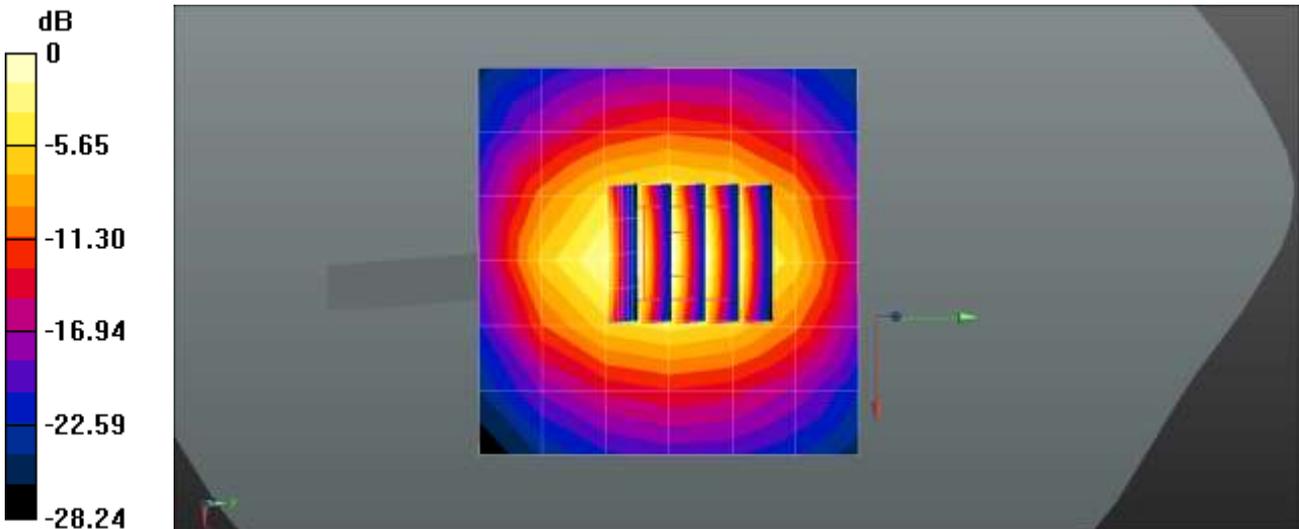
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 38.892$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.08, 5.08, 5.08) @ 1900 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Front
- Measurement SW: DASY52, Version 52.10 (4)

**1900MHz Head Verification/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.61 W/kg

**1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 43.57 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 3.90 W/kg  
**SAR(1 g) = 2.06 W/kg; SAR(10 g) = 1.08 W/kg**  
Maximum value of SAR (measured) = 2.63 W/kg



0 dB = 2.61 W/kg = 4.17 dBW/kg

**Verification Data (1900 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power 0.05 W  
Liquid Temp: 21.5 °C  
Test Date: 12/23/2020

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;**

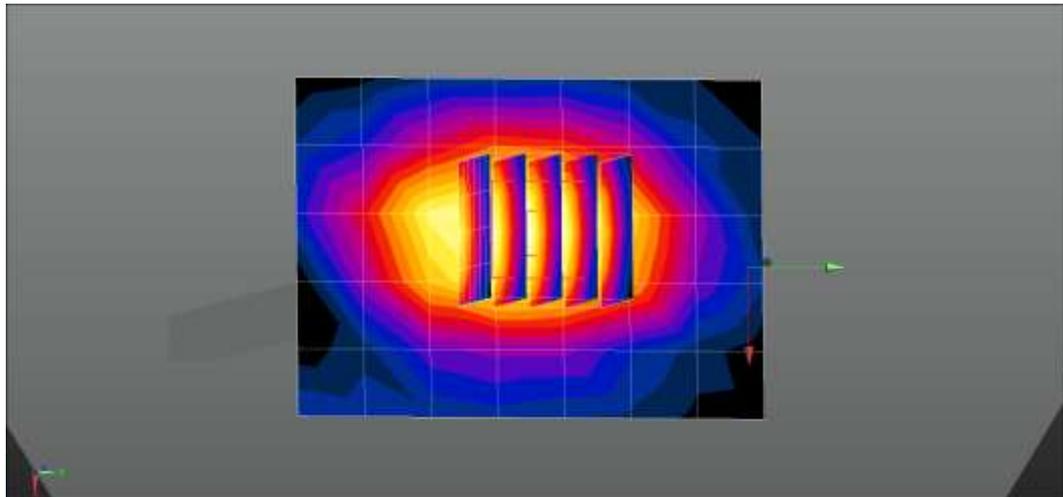
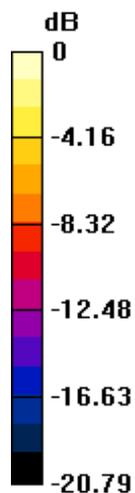
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1  
Medium parameters used: f = 1900 MHz;  $\sigma = 1.447$  S/m;  $\epsilon_r = 38.955$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1900 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913
- Measurement SW: DASY52, Version 52.10 (4)

**1900MHz Head Verification/Area Scan (6x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.02 W/kg

**1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 41.32 V/m; Power Drift = -0.18 dB  
Peak SAR (extrapolated) = 2.78 W/kg  
**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.16 W/kg**  
Maximum value of SAR (measured) = 2.41 W/kg



0 dB = 2.02 W/kg = 3.06 dBW/kg

**Verification Data (1900 MHz)**

Test Laboratory: HCT CO., LTD  
 Input Power: 0.05 W  
 Liquid Temp: 22.3 °C  
 Test Date: 12/21/2020

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2;**

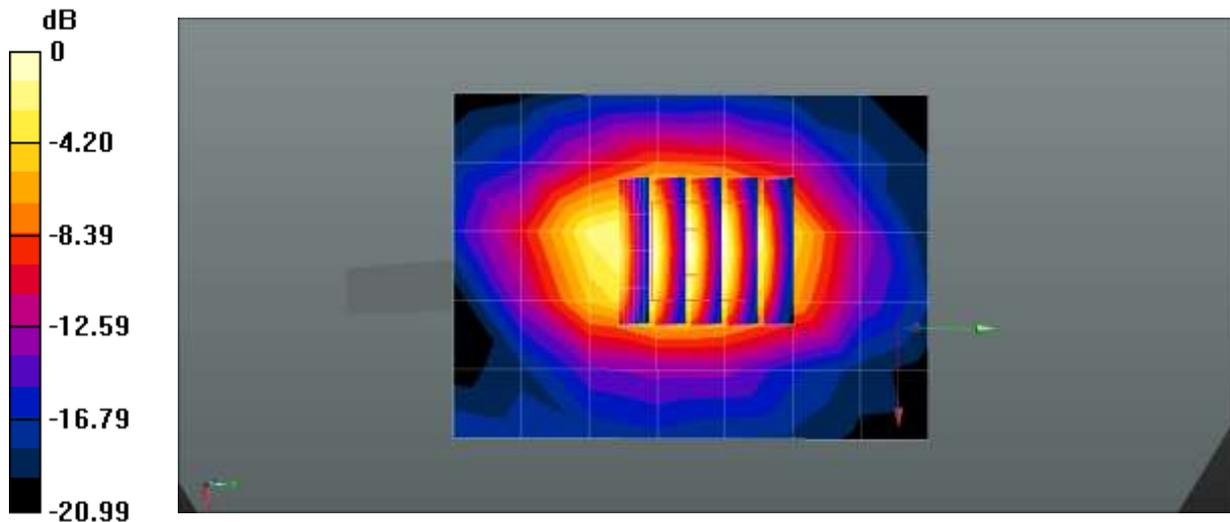
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1  
 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.446$  S/m;  $\epsilon_r = 38.96$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1630; ConvF(5.63, 5.63, 5.63) @ 1900 MHz; Calibrated: 2020-02-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2020-09-28
- Phantom: SAM\_Left\_20170913
- Measurement SW: DASY52, Version 52.10 (4)

**1900MHz Head Verification/Area Scan (6x8x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 2.03 W/kg

**1900MHz Head Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 41.32 V/m; Power Drift = -0.17 dB  
 Peak SAR (extrapolated) = 2.81 W/kg  
**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.17 W/kg**  
 Maximum value of SAR (measured) = 2.42 W/kg



0 dB = 2.03 W/kg = 3.08 dBW/kg

**Verification Data (2450 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power: 0.05 W  
Liquid Temp: 21.2 °C  
Test Date: 12/24/2020

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2;**

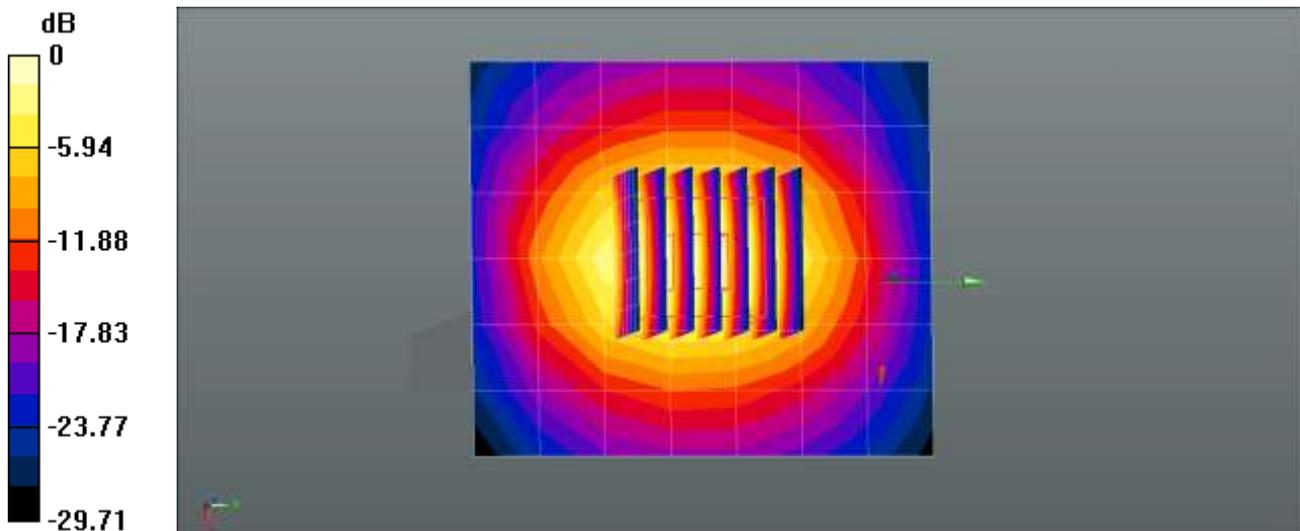
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.838$  S/m;  $\epsilon_r = 40.304$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2450 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right
- Measurement SW: DASY52, Version 52.10 (4)

**2450MHz Head Verification/Area Scan (7x8x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 3.25 W/kg

**2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 44.73 V/m; Power Drift = -0.07 dB  
Peak SAR (extrapolated) = 5.46 W/kg  
**SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.16 W/kg**  
Maximum value of SAR (measured) = 3.40 W/kg



0 dB = 3.25 W/kg = 5.12 dBW/kg

**Verification Data (2450 MHz)**

Test Laboratory: HCT CO., LTD  
Input Power 0.05 W  
Liquid Temp: 20.5 °C  
Test Date: 12/28/2020

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2;**

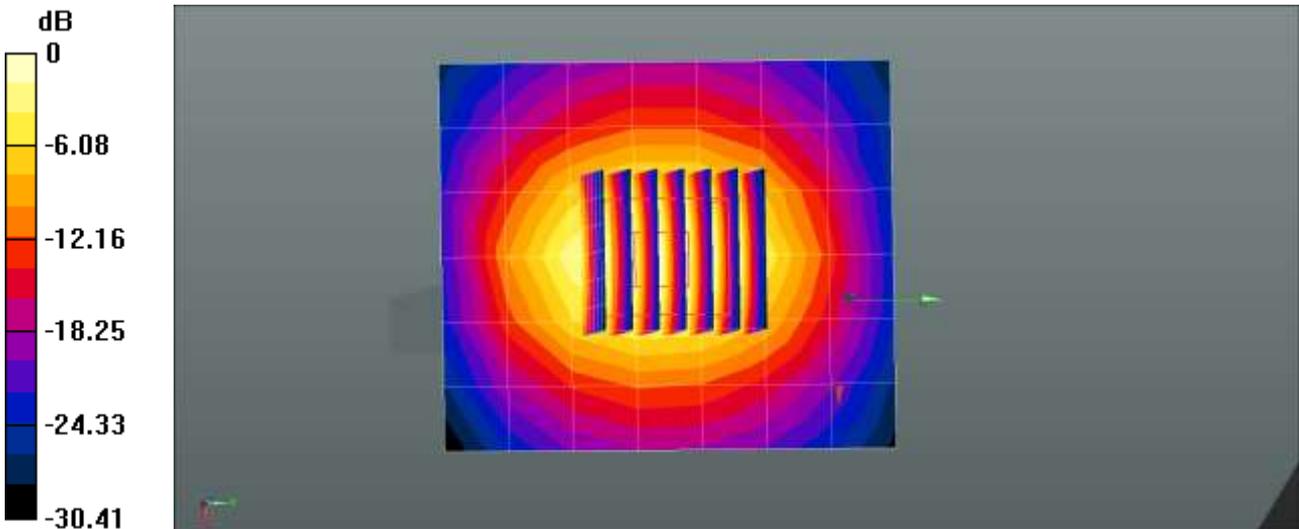
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.844$  S/m;  $\epsilon_r = 40.341$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(4.66, 4.66, 4.66) @ 2450 MHz; Calibrated: 2020-07-31
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2020-02-26
- Phantom: SAM with CRP v5.0\_Right
- Measurement SW: DASY52, Version 52.10 (4)

**2450MHz Head Verification/Area Scan (7x8x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 3.27 W/kg

**2450MHz Head Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 44.53 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 5.48 W/kg  
**SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.17 W/kg**  
Maximum value of SAR (measured) = 3.42 W/kg



0 dB = 3.27 W/kg = 5.14 dBW/kg

## Appendix D. – SAR Tissue Characterization

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

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

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

Composition of the Tissue Equivalent Matter

## Appendix E. – SAR Tissue Characterization

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

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

SAR System No.	Probe	Probe Type	Probe Calibration Point			Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
								Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
5	3903	EX3DV4	Head	750	1014	2020-05-19	42.3	0.92	PASS	PASS	PASS	N/A	N/A	N/A	
5	3903	EX3DV4	Head	835	4d165	2020-07-28	42.7	0.92	PASS	PASS	PASS	N/A	N/A	N/A	
5	3903	EX3DV4	Head	835	4d165	2020-07-28	42.7	0.92	PASS	PASS	PASS	N/A	N/A	N/A	
5	3903	EX3DV4	Head	835	4d165	2020-07-28	41.7	0.91	PASS	PASS	PASS	GMSK	PASS	N/A	
11	3076	EX3DV4	Head	1800	2d007	2020-08-26	40.3	1.39	PASS	PASS	PASS	N/A	N/A	N/A	
7	1630	ET3DV6	Head	1800	2d007	2020-08-26	40.3	1.38	PASS	PASS	PASS	N/A	N/A	N/A	
11	3076	EX3DV4	Head	1900	5d061	2020-07-31	38.9	1.45	PASS	PASS	PASS	N/A	N/A	N/A	
7	1630	ET3DV6	Head	1900	5d061	2020-02-26	39.0	1.45	PASS	PASS	PASS	N/A	N/A	N/A	
7	1630	ET3DV6	Head	1900	5d061	2020-02-26	39.0	1.45	PASS	PASS	PASS	GMSK	PASS	N/A	
11	3076	EX3DV4	Head	2450	743	2020-07-31	40.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS	
11	3076	EX3DV4	Head	2450	743	2020-07-31	40.3	1.84	PASS	PASS	PASS	OFDM	N/A	PASS	

SAR System Validation Summary 1g

**Note;**

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