

Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/6/2020

WCDMA Band II-Body

Communication System: UID 0, Generic UMTS (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.423$ S/m; $\epsilon_r = 41.027$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C; Liquid Temperature: 22.1°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.57, 8.57, 8.57) @ 1852.4 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

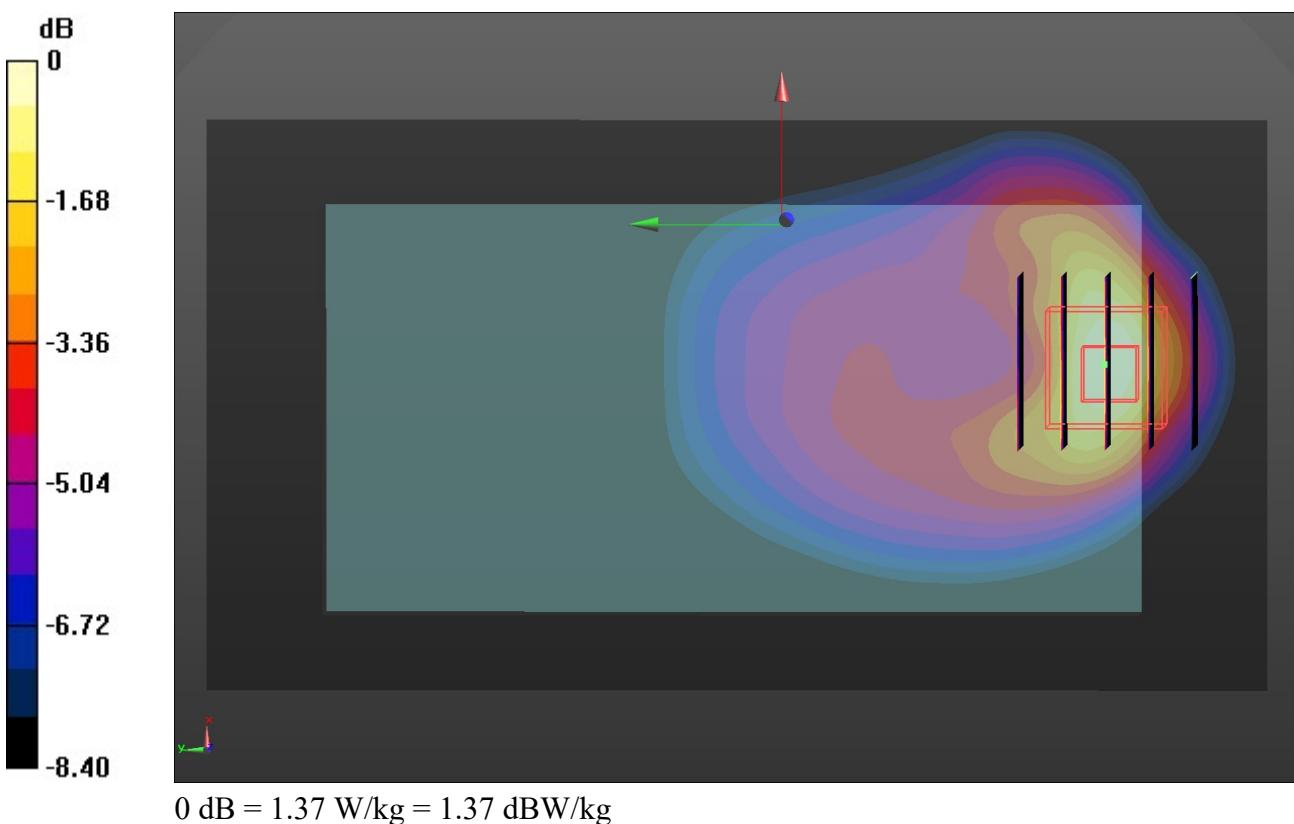
Rear/CH 9262/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.38 W/kg

Rear/CH 9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.35 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.940 W/kg; SAR(10 g) = 0.521 W/kg

Maximum value of SAR (measured) = 1.37 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/4/2020

WCDMA Band IV-Body

Communication System: UID 0, Generic UMTS (0); Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6 \text{ MHz}$; $\sigma = 1.365 \text{ S/m}$; $\epsilon_r = 41.181$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.1°C; Liquid Temperature: 21.9°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.91, 8.91, 8.91) @ 1752.6 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

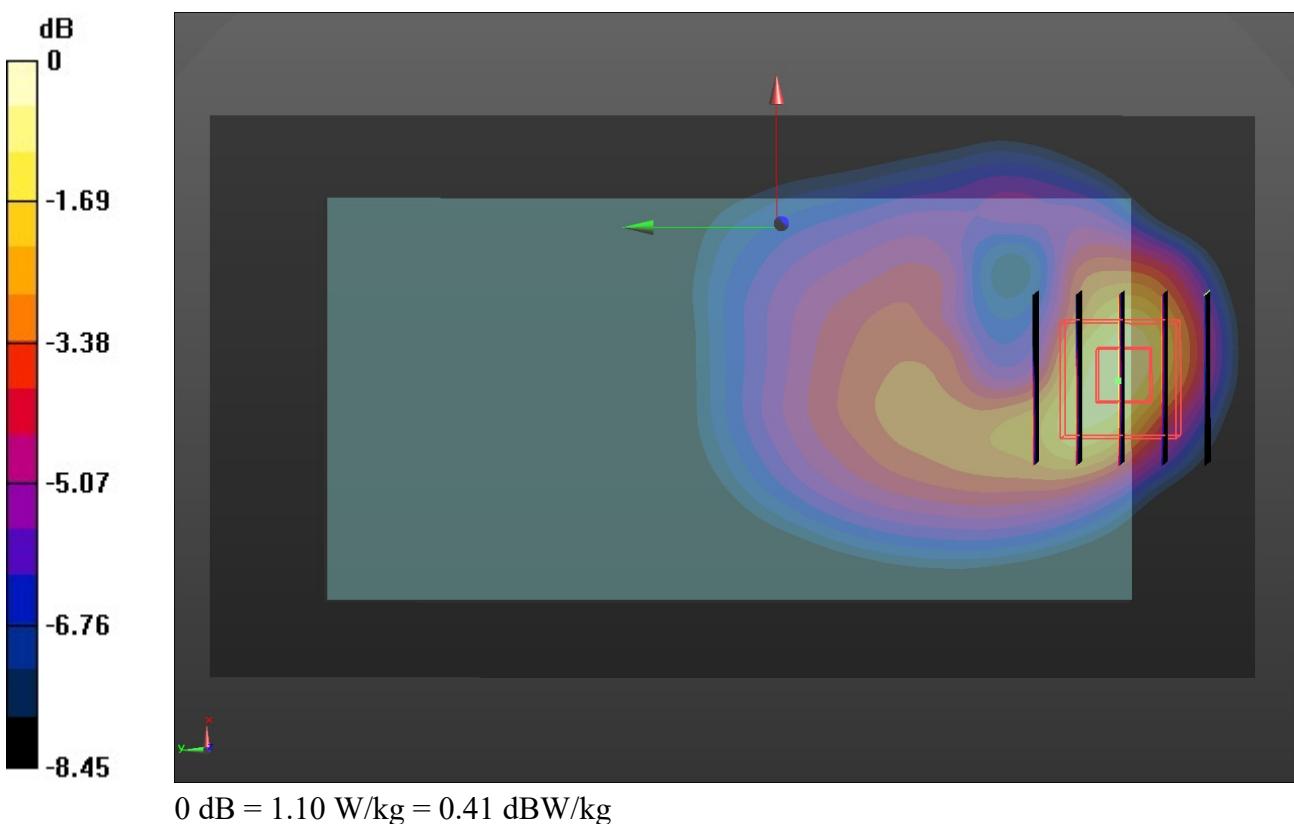
Rear/CH 1513/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.935 W/kg

Rear/CH 1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 13.72 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.374 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/3/2020

WCDMA Band V-Body

Communication System: UID 0, Generic UMTS (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 846.6 \text{ MHz}$; $\sigma = 0.939 \text{ S/m}$; $\epsilon_r = 42.953$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.2°C; Liquid Temperature: 22.0°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.41, 10.41, 10.41) @ 846.6 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

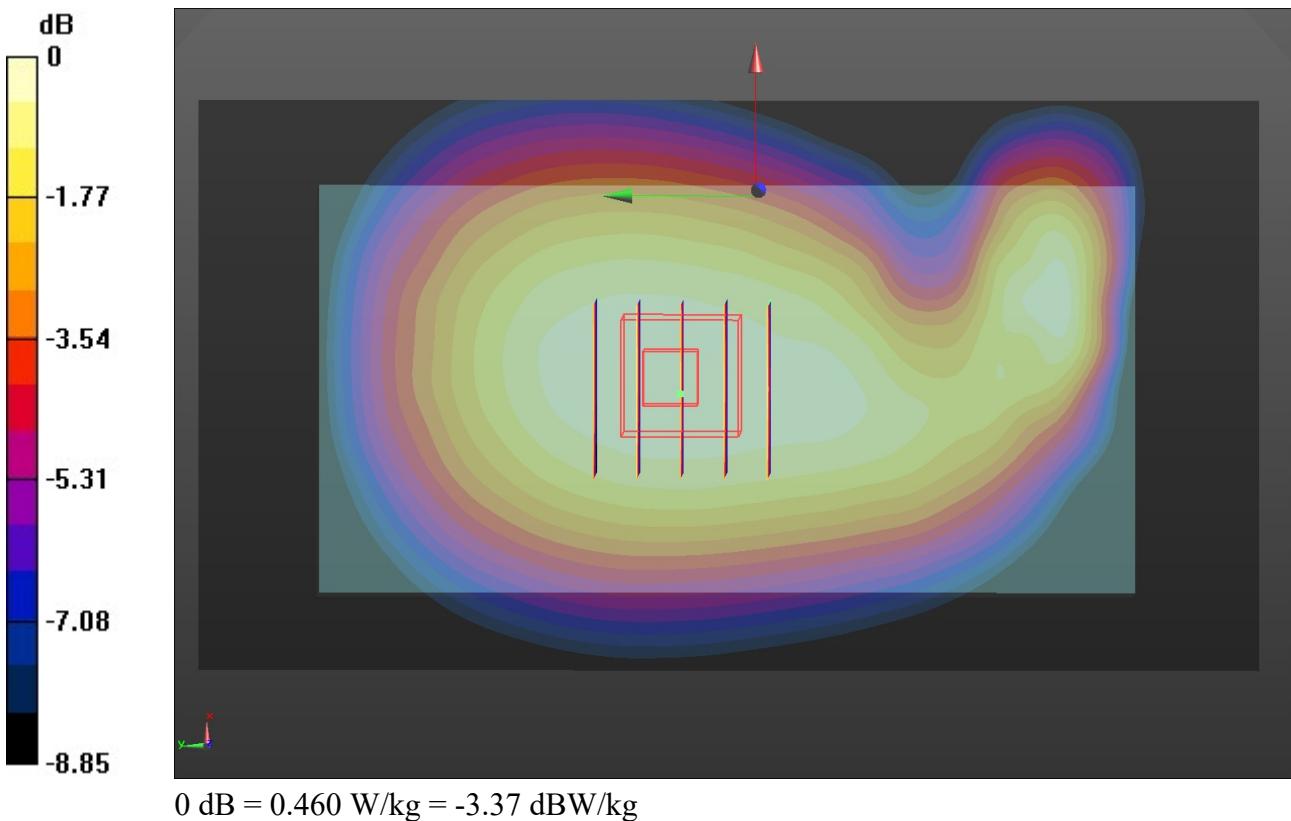
Rear/CH 4233/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.462 W/kg

Rear/CH 4233/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 22.37 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 0.460 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/6/2020

LTE Band 2-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ S/m; $\epsilon_r = 40.983$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C; Liquid Temperature: 22.2°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.57, 8.57, 8.57) @ 1880 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 18900/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 1.12 W/kg

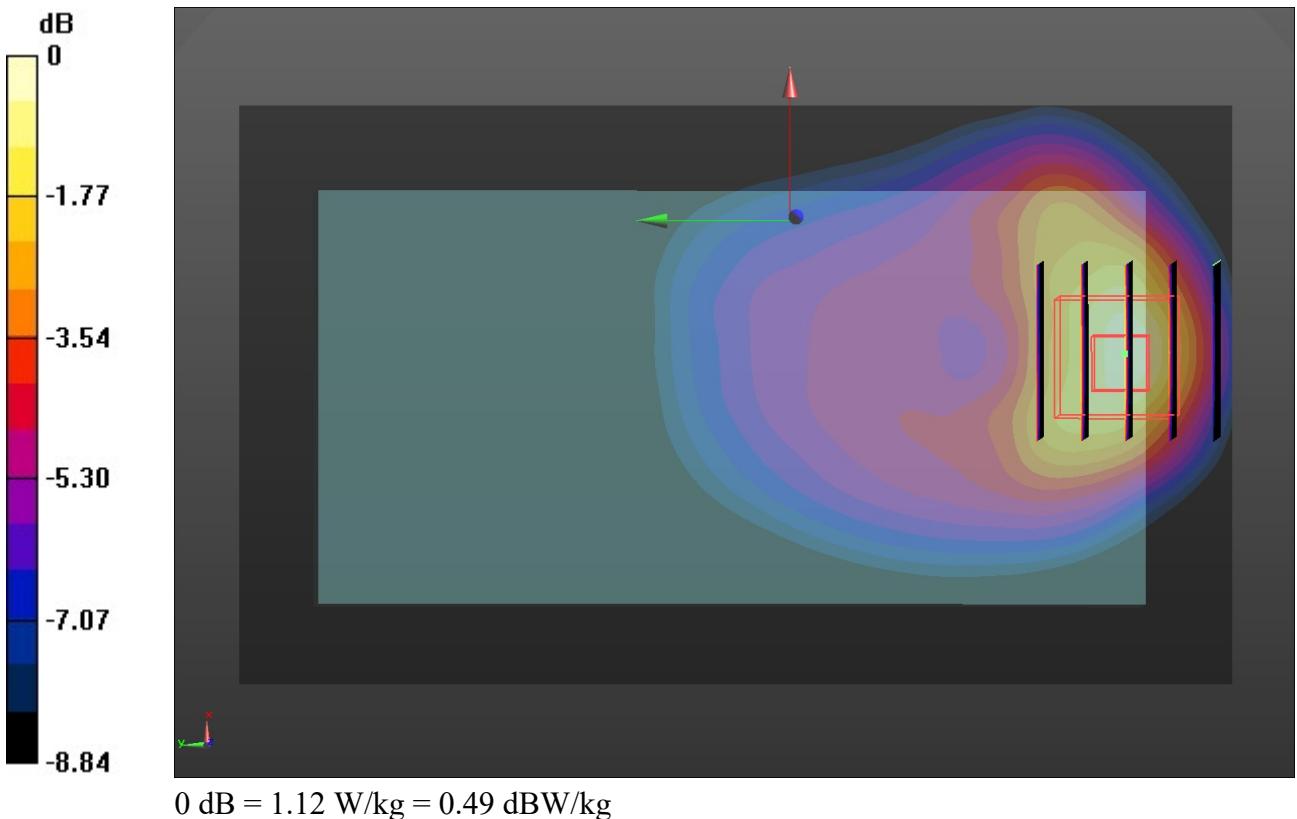
Rear/CH 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.96 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 1.12 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/4/2020

LTE Band 4-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1720 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1720 \text{ MHz}$; $\sigma = 1.348 \text{ S/m}$; $\epsilon_r = 41.23$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6°C; Liquid Temperature: 22.4°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.91, 8.91, 8.91) @ 1720 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 20050/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Maximum value of SAR (interpolated) = 0.437 W/kg

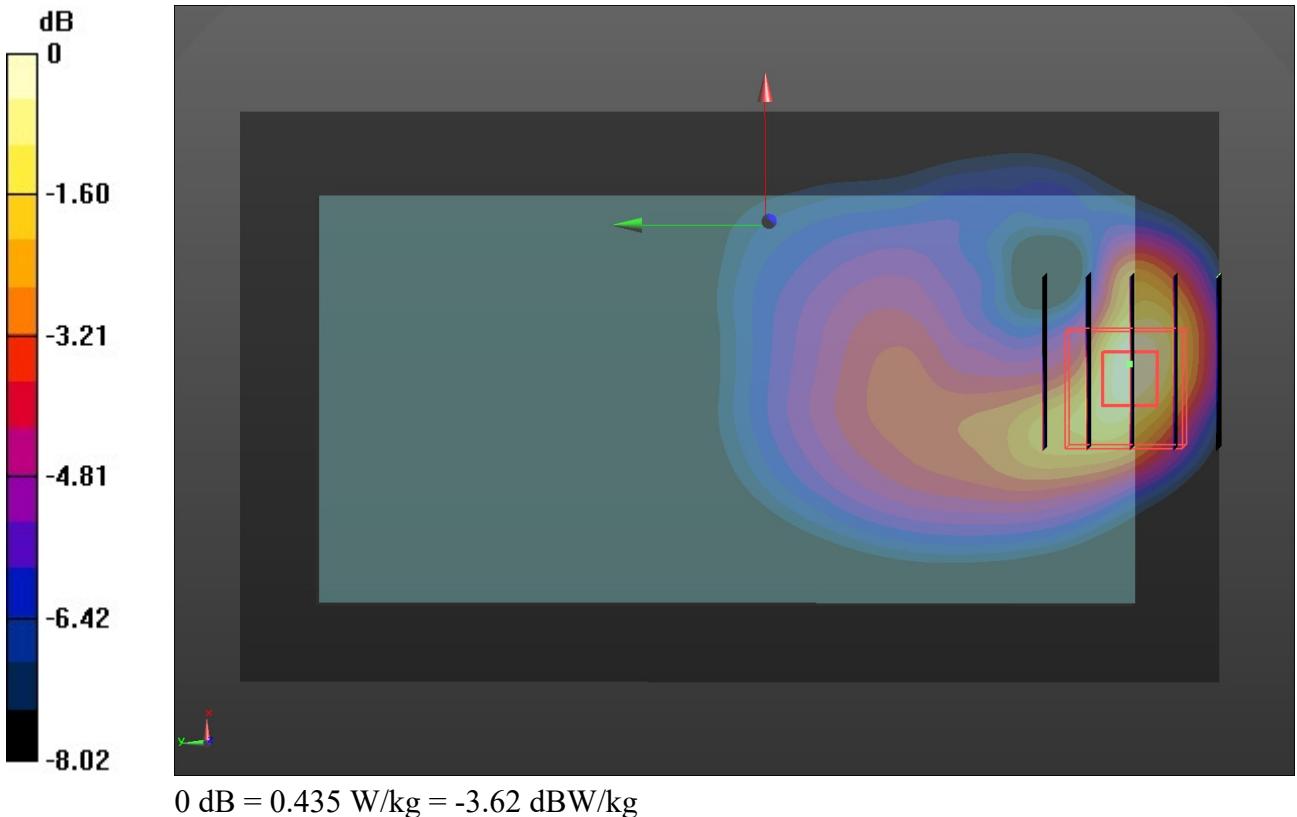
Rear/CH 20050/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.161 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.150 W/kg

Maximum value of SAR (measured) = 0.435 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/2/2020

LTE Band 5-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.935$ S/m; $\epsilon_r = 42.973$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C; Liquid Temperature: 22.6°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.41, 10.41, 10.41) @ 836.5 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 20525/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.120 W/kg

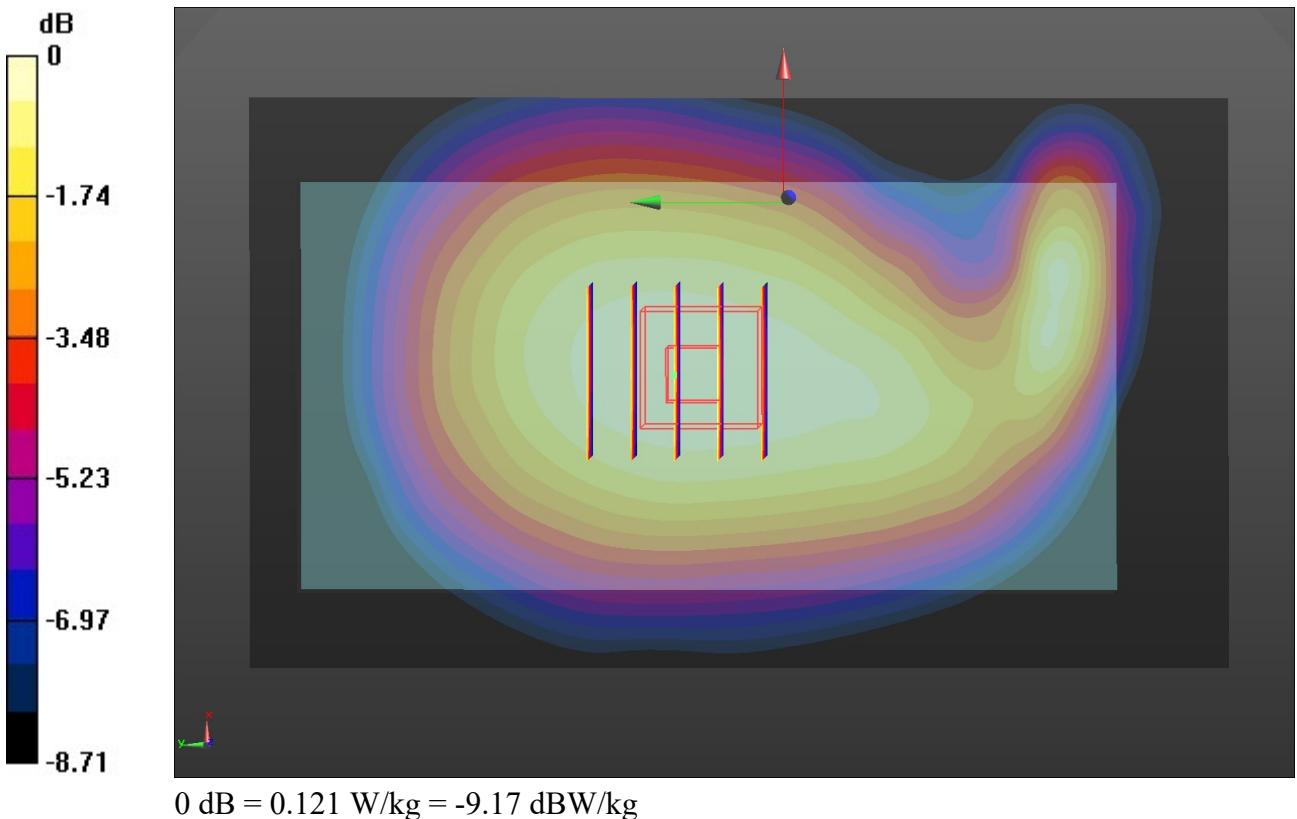
Rear/CH 20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.43 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.071 W/kg

Maximum value of SAR (measured) = 0.121 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/8/2020

LTE Band 7-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 2560 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2560 \text{ MHz}$; $\sigma = 1.919 \text{ S/m}$; $\epsilon_r = 40.046$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.7°C; Liquid Temperature: 22.5°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(7.69, 7.69, 7.69) @ 2560 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 21350/Area Scan (91x151x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 1.32 W/kg

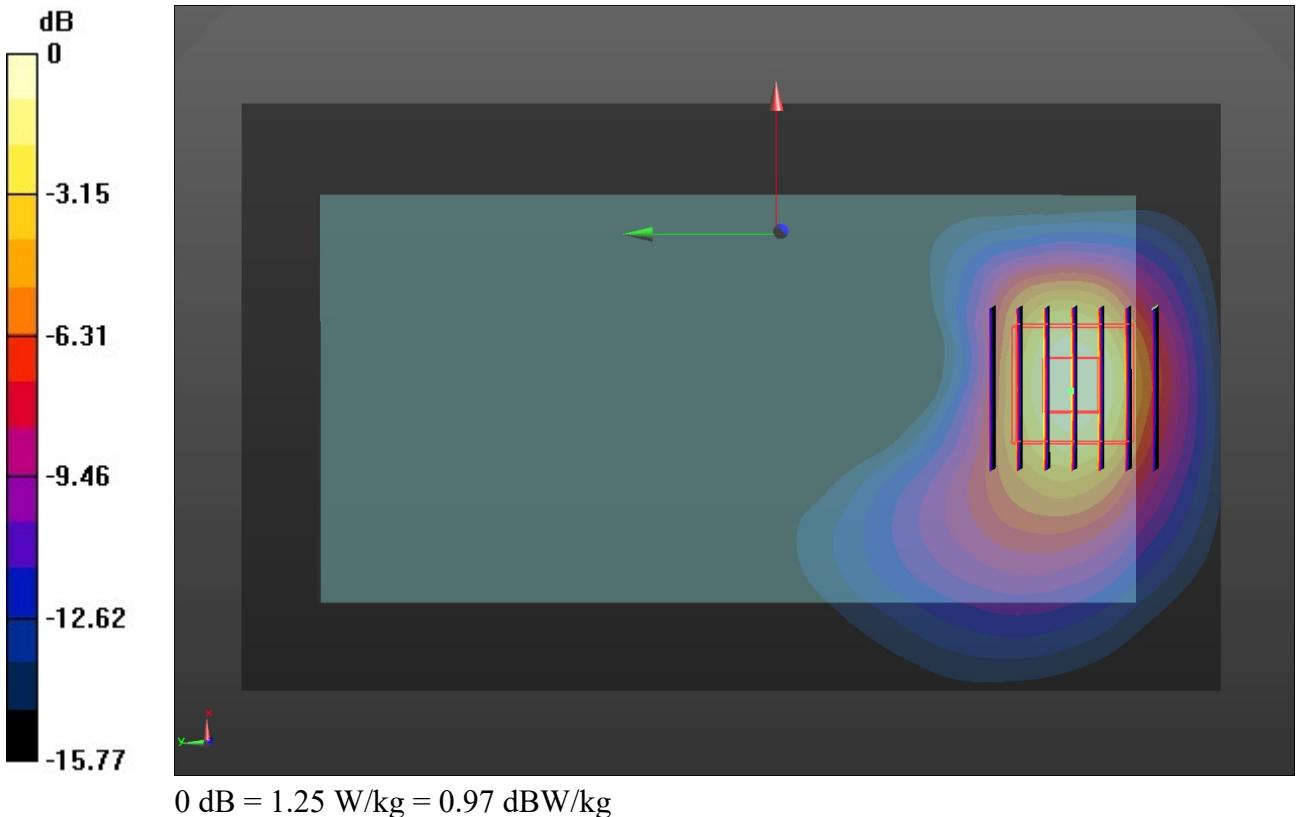
Rear/CH 21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5 \text{ mm}$, $dy=5 \text{ mm}$, $dz=5 \text{ mm}$

Reference Value = 2.686 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.353 W/kg

Maximum value of SAR (measured) = 1.25 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/2/2020

LTE Band 12-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 704 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 704 \text{ MHz}$; $\sigma = 0.889 \text{ S/m}$; $\epsilon_r = 43.384$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6°C; Liquid Temperature: 22.4°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.74, 10.74, 10.74) @ 704 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 23060/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Maximum value of SAR (interpolated) = 0.0542 W/kg

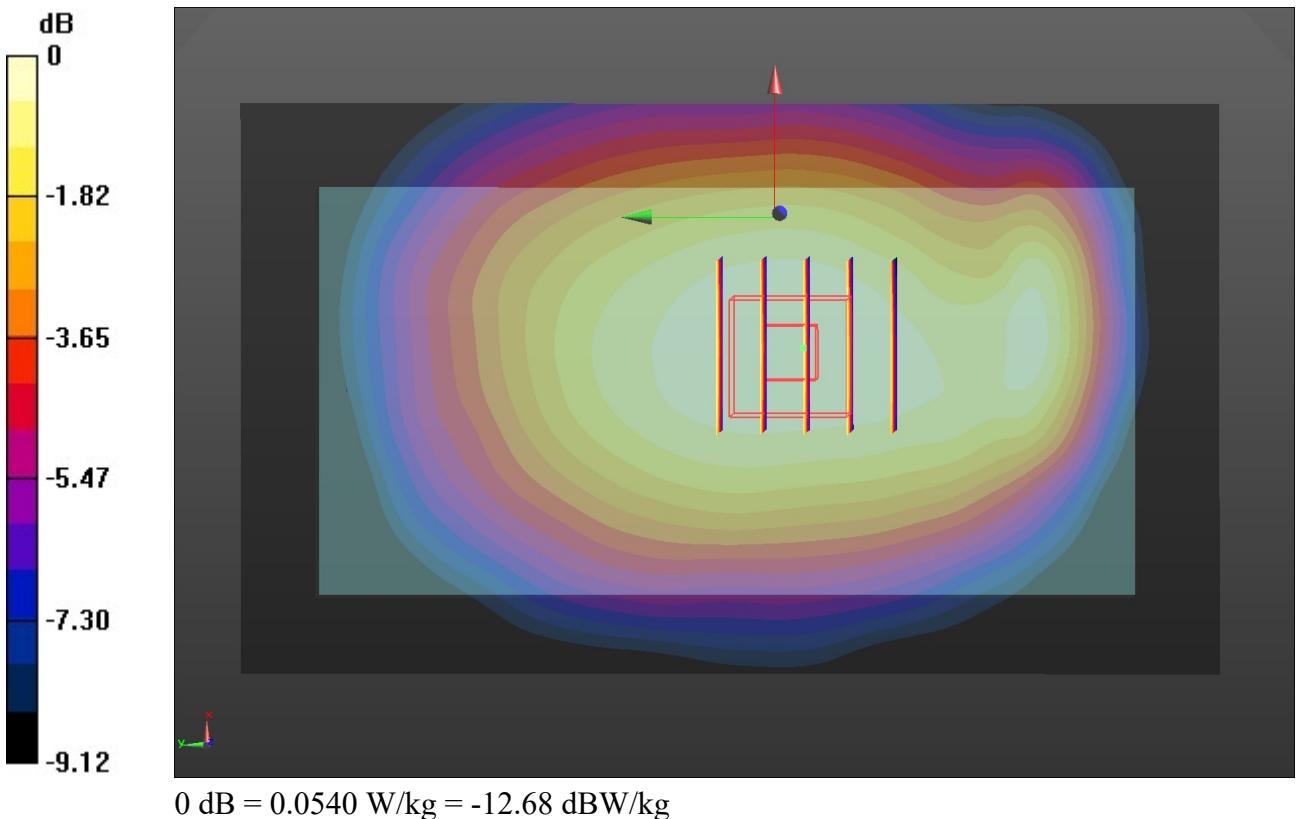
Rear/CH 23060/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.746 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.0600 W/kg

SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.0540 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/8/2020

LTE Band 41-Body

Communication System: UID 0, Generic LTE-TDD (0); Frequency: 2565 MHz; Duty Cycle: 1:1.57979
Medium parameters used (interpolated): $f = 2565 \text{ MHz}$; $\sigma = 1.922 \text{ S/m}$; $\epsilon_r = 40.039$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.4°C; Liquid Temperature: 22.2°C;

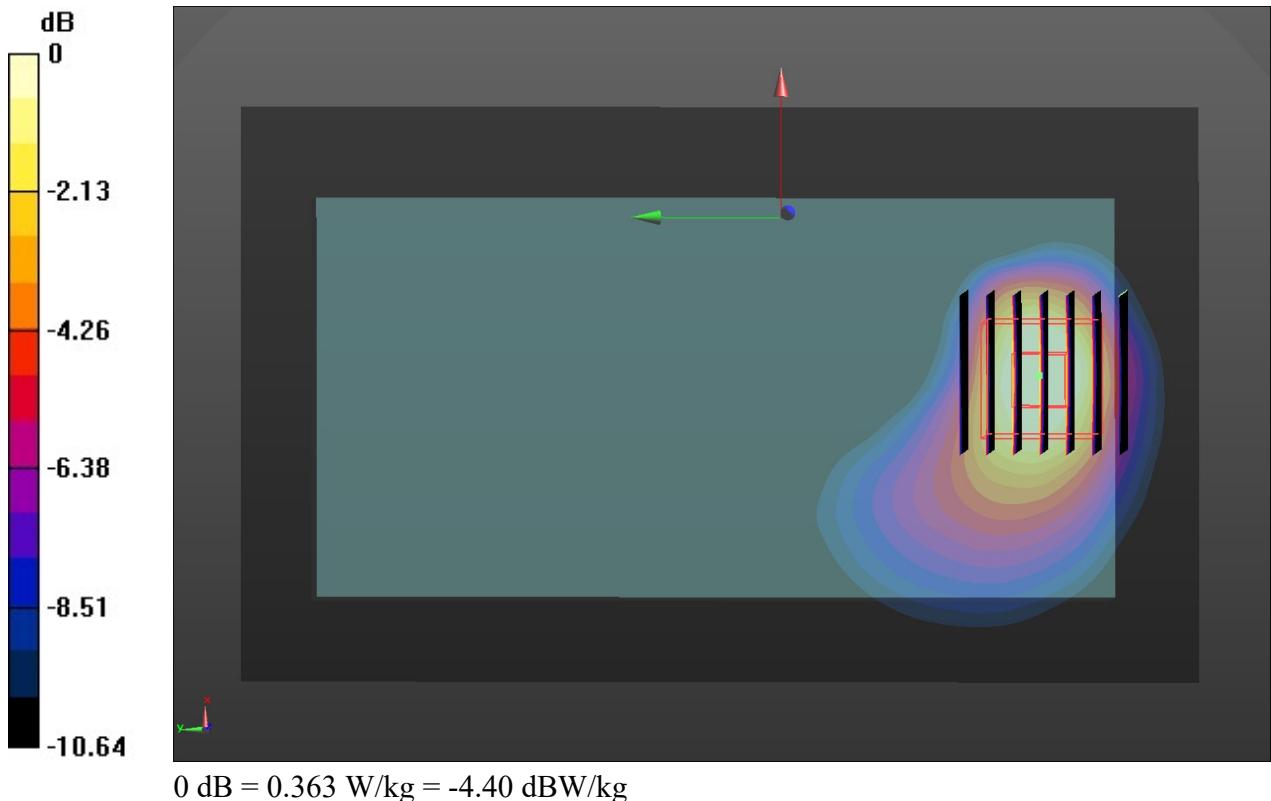
DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(7.69, 7.69, 7.69) @ 2565 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 40340/Area Scan (91x151x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 0.494 W/kg

Rear/CH 40340/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 1.966 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.444 W/kg
SAR(1 g) = 0.223 W/kg; SAR(10 g) = 0.103 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.363 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/7/2020

WiFi 2.4G-Body

Communication System: UID 0, Generic WIFI (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2412 \text{ MHz}$; $\sigma = 1.799 \text{ S/m}$; $\epsilon_r = 40.272$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.1°C; Liquid Temperature: 21.9°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(7.9, 7.9, 7.9) @ 2412 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 1/Area Scan (91x151x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 0.268 W/kg

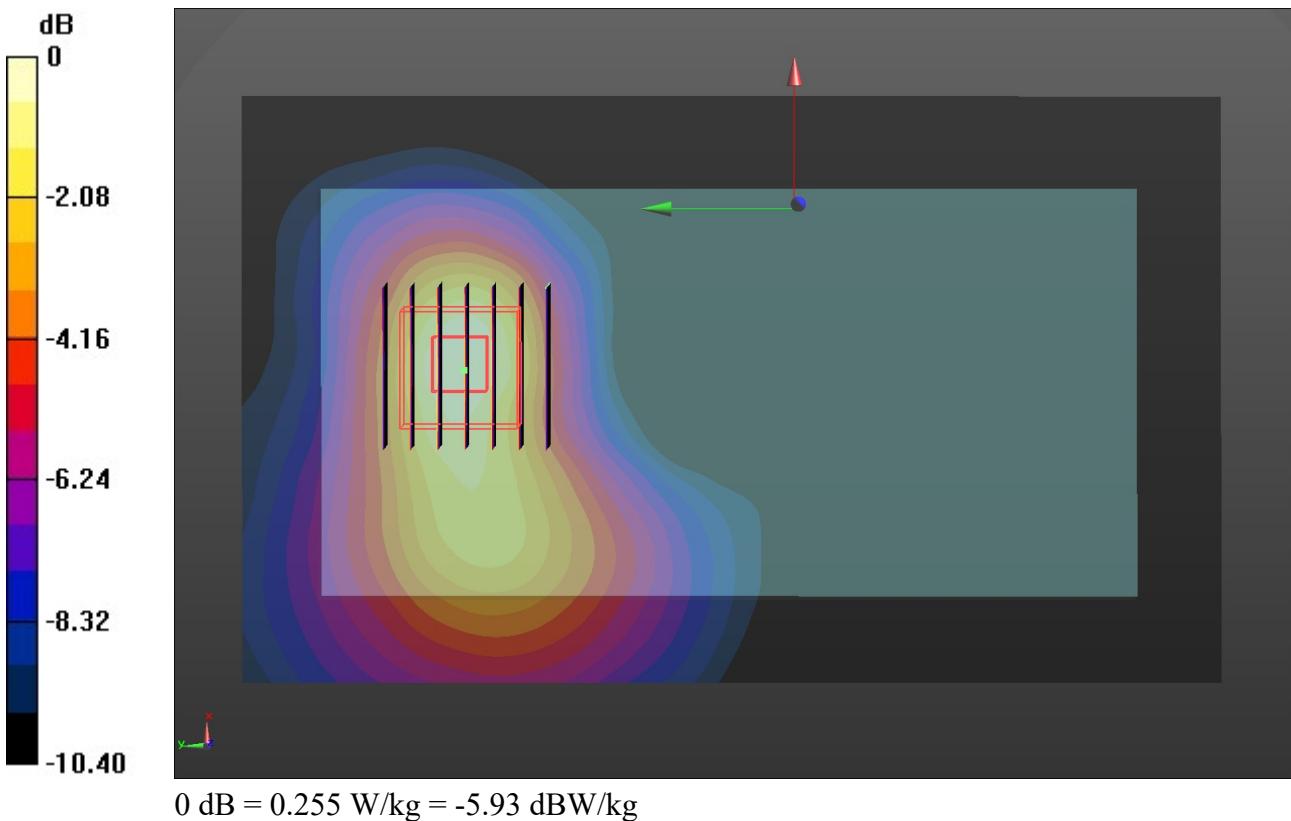
Rear/CH 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.963 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.309 W/kg

SAR(1 g) = 0.168 W/kg; SAR(10 g) = 0.089 W/kg

Maximum value of SAR (measured) = 0.255 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/9/2020

WiFi 5G U-NII-1-Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5220 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5220$ MHz; $\sigma = 4.516$ S/m; $\epsilon_r = 35.589$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C; Liquid Temperature: 22.0°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.56, 5.56, 5.56) @ 5220 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

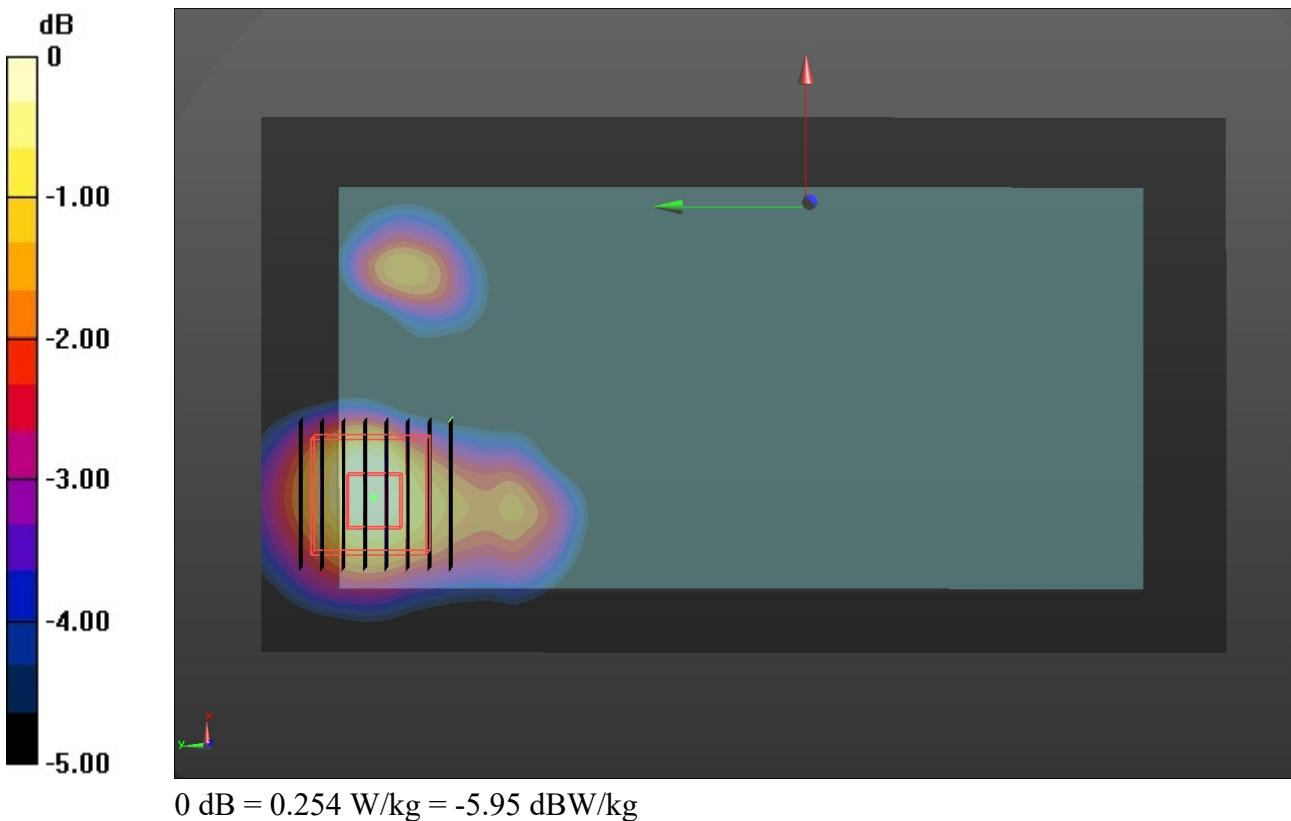
Rear/CH 44/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.257 W/kg

Rear/CH 44/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.051 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.118 W/kg; SAR(10 g) = 0.051 W/kg

Maximum value of SAR (measured) = 0.254 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/9/2020

WiFi 5G U-NII-2A-Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5310 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5310 \text{ MHz}$; $\sigma = 4.61 \text{ S/m}$; $\epsilon_r = 35.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.4°C; Liquid Temperature: 22.2°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.37, 5.37, 5.37) @ 5310 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

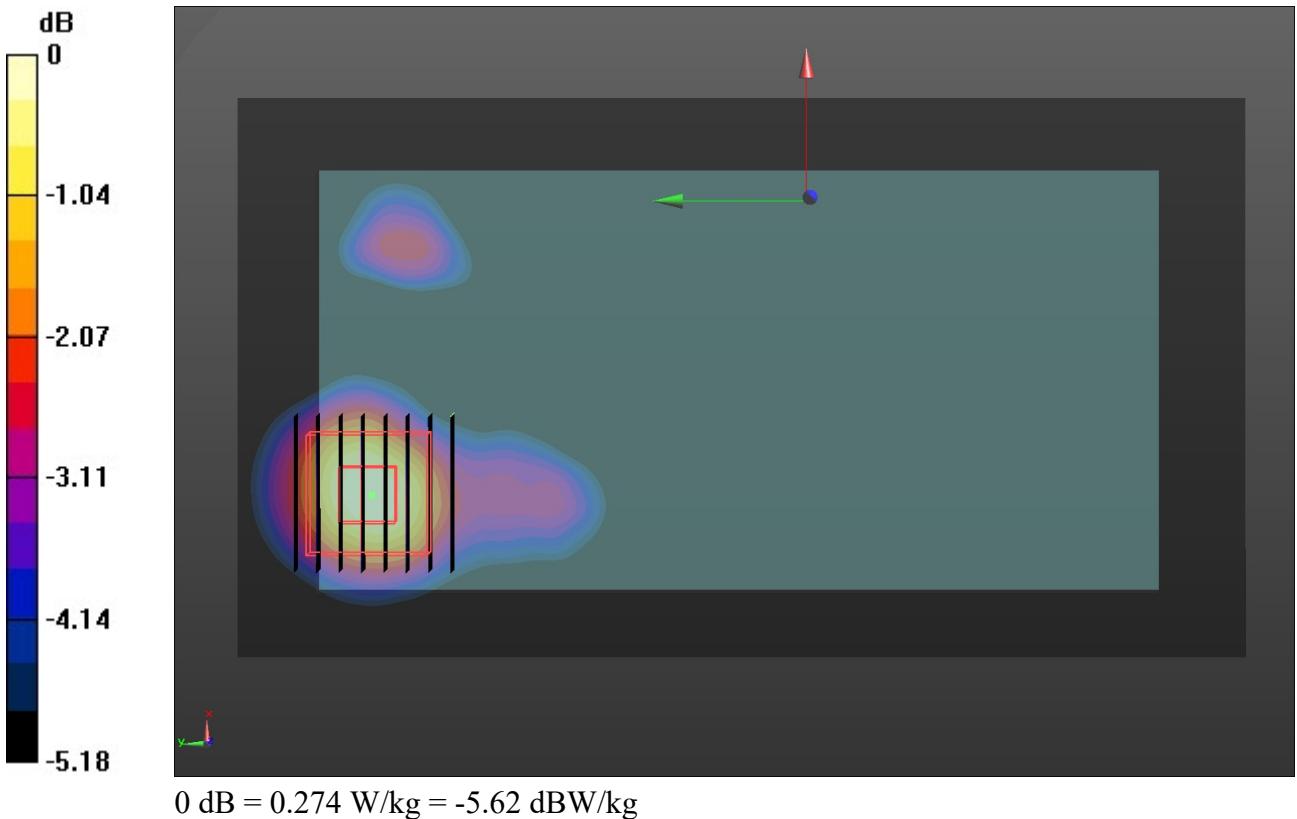
Rear/CH 62/Area Scan (101x181x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
Maximum value of SAR (interpolated) = 0.277 W/kg

Rear/CH 62/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 1.422 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.459 W/kg

SAR(1 g) = 0.127 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.274 W/kg



Appendix A:SAR Test Data Plots

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab

Date: 1/10/2020

WiFi 5G U-NII-3-Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5775 \text{ MHz}$; $\sigma = 5.127 \text{ S/m}$; $\epsilon_r = 34.604$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6°C; Liquid Temperature: 22.4°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(4.85, 4.85, 4.85) @ 5775 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0 ; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear/CH 155/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.306 W/kg

Rear/CH 155/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.048 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.525 W/kg

SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.292 W/kg

