

Appendix B - SAR Measurement

Test Laboratory: TUV Inc.

Date: 2024/4/30

09_eMTC B2_20M_QPSK_3_3_Left Side_0mm_Ch18700

DUT: Bot Talk

Communication System: eMTC; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: HSL1900_240430 Medium parameters used: $f = 1860$ MHz; $\sigma = 1.378$ S/m; $\epsilon_r = 39.809$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 22.7°C

DASY Configuration:

- Electronics: DAE4 Sn917; Calibrated: 2024/3/11
- Probe: EX3DV4 - SN7350; ConvF(8.27, 8.27, 8.27) @ 1860 MHz; Calibrated: 2023/12/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -29.0, 31.0$
- Phantom: Right_Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: TP-1467
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (6x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.535 W/kg

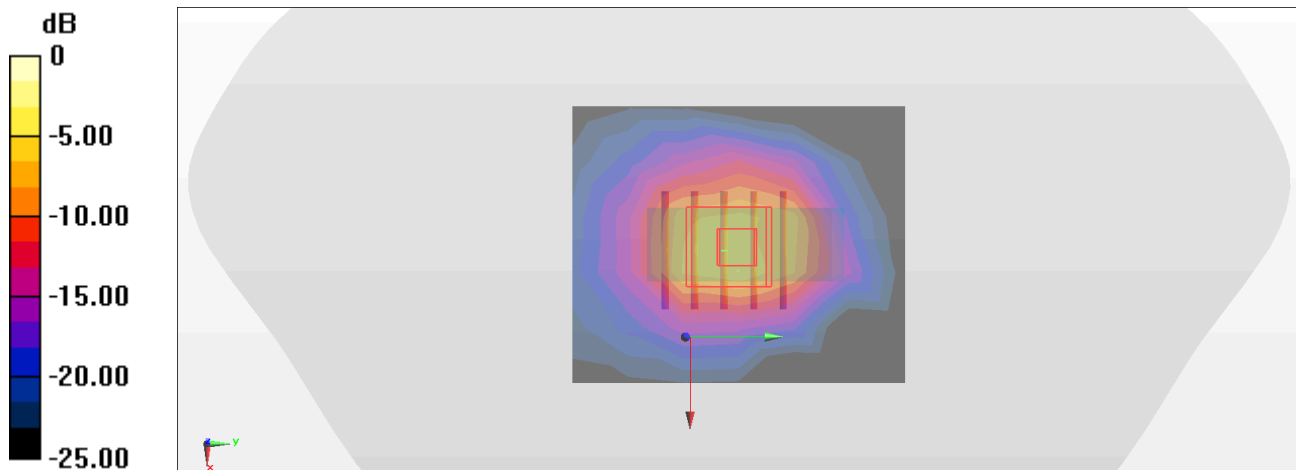
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 38.37 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 0.869 W/kg; SAR(10 g) = 0.356 W/kg

Maximum value of SAR (measured) = 1.65 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

40_eMTC B12_10M_QPSK_1_5_Front_0mm_Ch23095**DUT: Bot Talk**

Communication System: eMTC; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: HSL750_240502 Medium parameters used: $f = 708 \text{ MHz}$; $\sigma = 0.873 \text{ S/m}$; $\epsilon_r = 42.889$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn917; Calibrated: 2024/3/11
- Probe: EX3DV4 - SN7350; ConvF(9.8, 9.8, 9.8) @ 707.5 MHz; Calibrated: 2023/12/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -29.0, 31.0$
- Phantom: Right_Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: TP-1467
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (7x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.444 W/kg

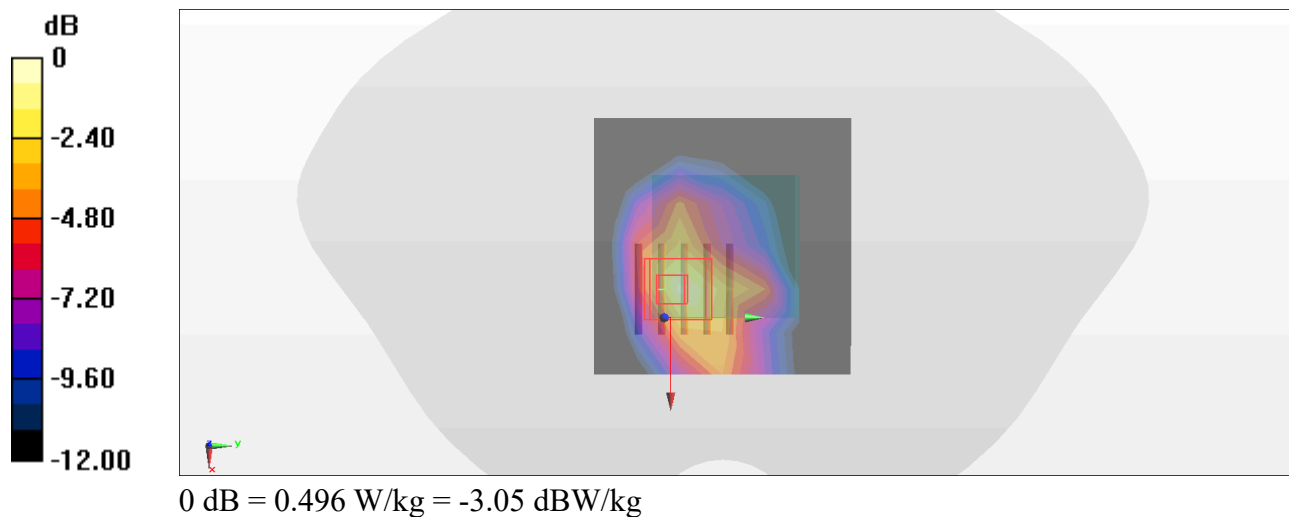
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.50 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.496 W/kg



38_eMTC B26_15M_QPSK_1_5_Front_0mm_Ch26865**DUT: Bot Talk**

Communication System: eMTC; Frequency: 831 MHz; Duty Cycle: 1:1

Medium: HSL835_240502 Medium parameters used: $f = 831$ MHz; $\sigma = 0.912$ S/m; $\epsilon_r = 42.392$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.3 °C

DASY Configuration:

- Electronics: DAE4 Sn917; Calibrated: 2024/3/11
- Probe: EX3DV4 - SN7350; ConvF(9.55, 9.55, 9.55) @ 831 MHz; Calibrated: 2023/12/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -29.0, 31.0$
- Phantom: Right_Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: TP-1467
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (7x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.309 W/kg

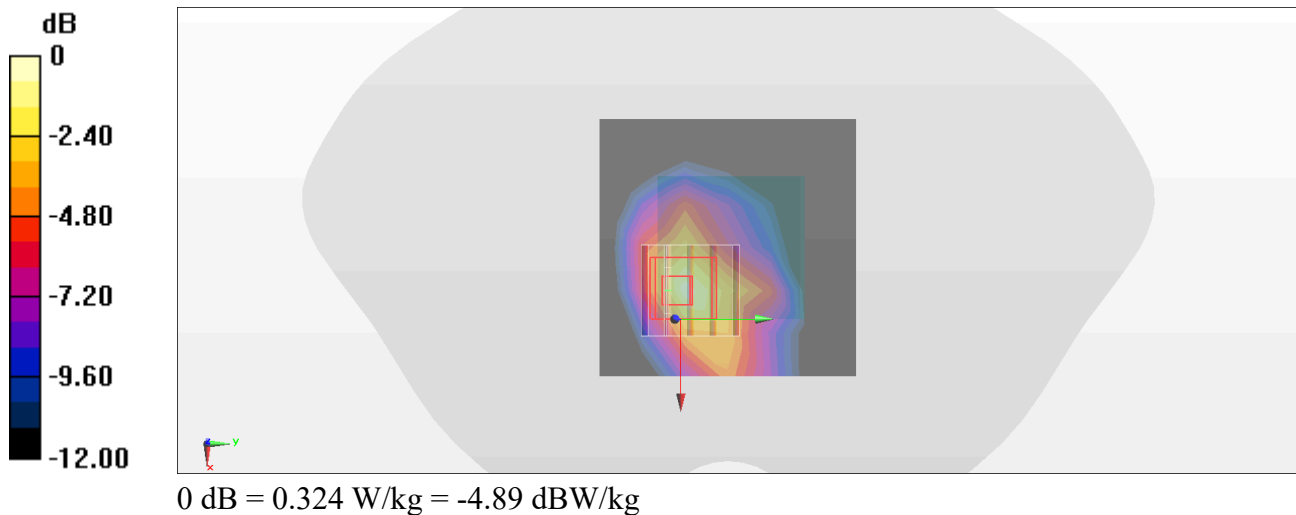
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 13.77 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.110 W/kg

Maximum value of SAR (measured) = 0.324 W/kg



13_eMTC B66_20M_QPSK_3_0_Left Side_0mm_Ch132322**DUT: Bot Talk**

Communication System: eMTC; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: HSL1800_240430 Medium parameters used: $f = 1745$ MHz; $\sigma = 1.313$ S/m; $\epsilon_r = 39.981$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 22.7°C

DASY Configuration:

- Electronics: DAE4 Sn917; Calibrated: 2024/3/11
- Probe: EX3DV4 - SN7350; ConvF(8.87, 8.87, 8.87) @ 1745 MHz; Calibrated: 2023/12/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -29.0, 31.0$
- Phantom: Right_Twin-SAM V4.0 (20deg probe tilt); Type: QD 000 P40 CC; Serial: TP-1467
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (6x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.492 W/kg

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

Reference Value = 39.65 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.38 W/kg

SAR(1 g) = 0.891 W/kg; SAR(10 g) = 0.371 W/kg

Maximum value of SAR (measured) = 1.97 W/kg

