

Appendix B - SAR Measurement

Test Laboratory: TUV Inc.

Date: 2024/9/2

04_NII-3_GFSK_Front Face_5mm_Ch2

DUT: 5.8GHz microphone

Communication System: NII-3; Frequency: 5787 MHz; Duty Cycle: 1:1.238

Medium: HSL5G_240902 Medium parameters used: $f = 5787$ MHz; $\sigma = 5.222$ S/m; $\epsilon_r = 34.976$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C; Liquid Temperature : 22.6°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.77, 4.77, 4.77) @ 5787 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -24.0, 23.0$
- 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 (13x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.76 W/kg

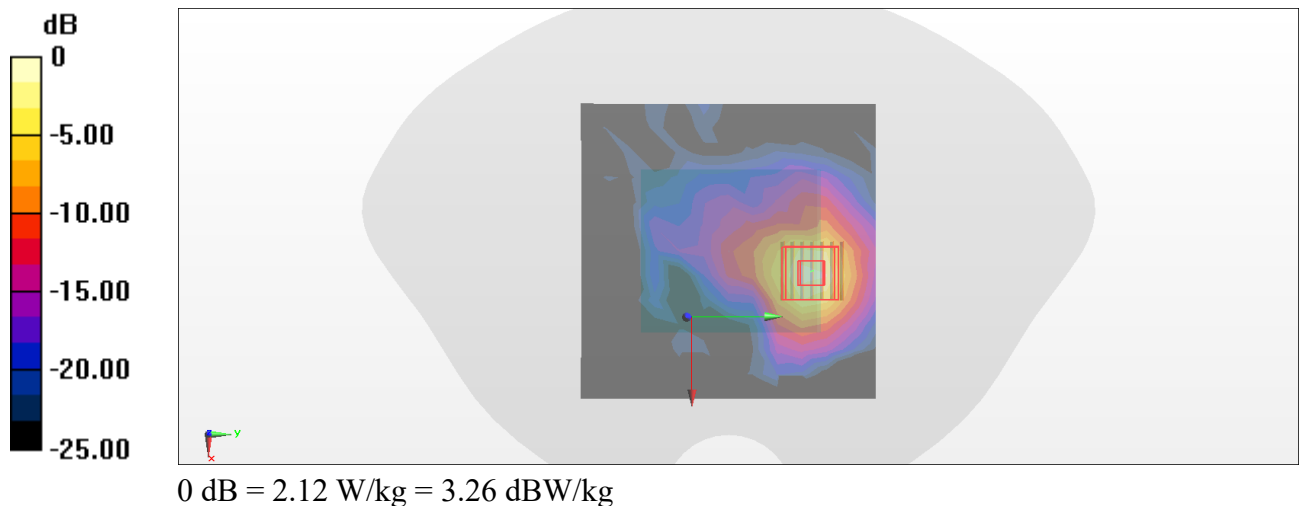
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 3.361 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.68 W/kg

SAR(1 g) = 0.882 W/kg; SAR(10 g) = 0.299 W/kg

Maximum value of SAR (measured) = 2.12 W/kg



01_NII-3_GFSK_Front Face_0mm_Ch1**DUT: 5.8GHz microphone**

Communication System: NII-3; Frequency: 5735 MHz; Duty Cycle: 1:1.238

Medium: HSL5G_240902 Medium parameters used: $f = 5735$ MHz; $\sigma = 5.173$ S/m; $\epsilon_r = 35.056$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C; Liquid Temperature : 22.6°C

DASY Configuration:

- Electronics: DAE4 Sn855; Calibrated: 2024/4/22
- Probe: EX3DV4 - SN7400; ConvF(4.77, 4.77, 4.77) @ 5735 MHz; Calibrated: 2024/4/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -24.0, 23.0$
- 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 (13x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 5.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 7.455 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 10.7 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 0.583 W/kg

Maximum value of SAR (measured) = 5.54 W/kg

