

Appendix B:SAR Measurement results Plots

Table of contents
2.4G WiFi - Body
5.2G WiFi - Body
5.8G WiFi - Body

Test Laboratory: CTI SAR Lab

WiFi 802.11b 11CH Right Side 0mm-Repeated**DUT: Intelligent Automotive Detection Tool ; Type: NA; Serial: NA**

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.885$ S/m; $\epsilon_r = 39.133$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.67, 7.67, 7.67); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

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

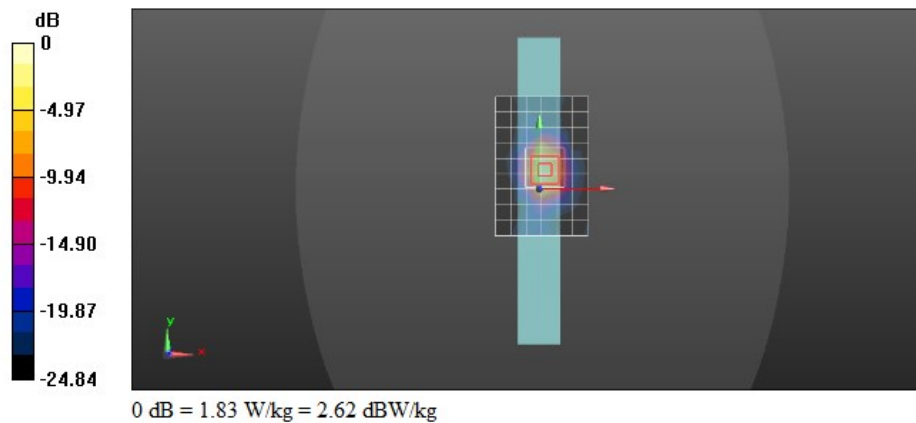
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 17.25 V/m; Power Drift = -0.33 dB

Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.414 W/kg

Maximum value of SAR (measured) = 1.83 W/kg



Test Laboratory: CTI SAR Lab

WiFi 802.11g 11CH Right Side 0mm**DUT: Intelligent Automotive Detection Tool ; Type: NA; Serial: NA**

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.885$ S/m; $\epsilon_r = 39.133$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.67, 7.67, 7.67); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.446 W/kg

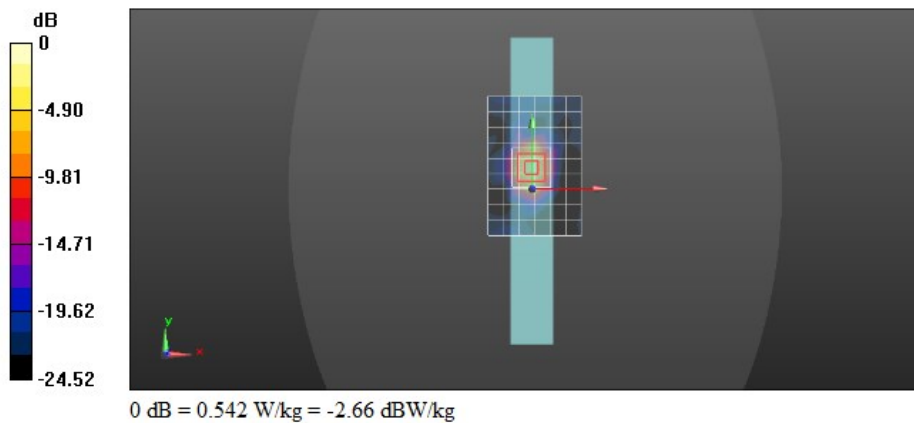
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 9.729 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.542 W/kg



Test Laboratory: CTI SAR Lab

802.11a 48CH Right Side 0mm-Repeated**DUT: Intelligent Automotive Detection Tool ; Type: NA; Serial: NA**

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi 5.2G; Frequency: 5240 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 4.595$ S/m; $\epsilon_r = 34.897$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.44, 5.44, 5.44); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x12x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 2.58 W/kg

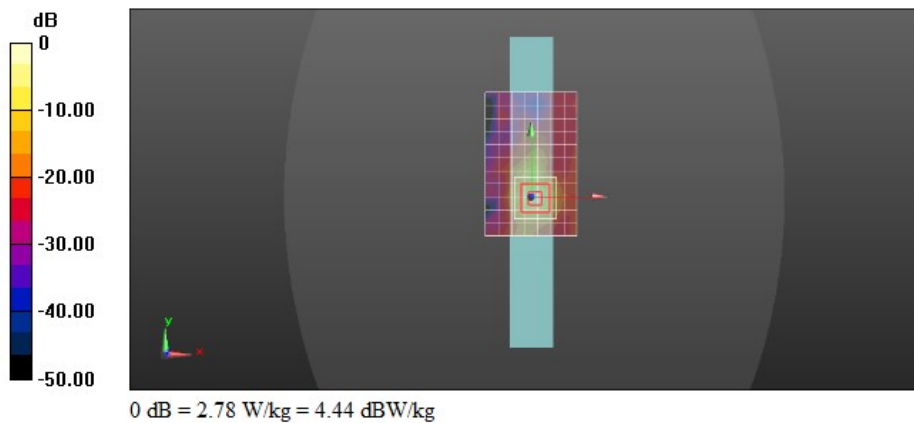
Configuration/Body/Zoom Scan (9x9x16)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 25.13 V/m; Power Drift = -0.31 dB

Peak SAR (extrapolated) = 4.31 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.265 W/kg

Maximum value of SAR (measured) = 2.78 W/kg



Test Laboratory: CTI SAR Lab

802.11a 149CH Right Side 0mm**DUT: Intelligent Automotive Detection Tool ; Type: NA; Serial: NA**

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi 5.8G; Frequency: 5745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5745$ MHz; $\sigma = 5.395$ S/m; $\epsilon_r = 34.87$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.85, 4.85, 4.85); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x12x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 2.04 W/kg

Configuration/Body/Zoom Scan (9x9x16)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 15.49 V/m; Power Drift = -0.24 dB

Peak SAR (extrapolated) = 3.76 W/kg

SAR(1 g) = 0.840 W/kg; SAR(10 g) = 0.290 W/kg

Maximum value of SAR (measured) = 2.24 W/kg

