

Appendix B:SAR Measurement results Plots

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Test Laboratory: CTI SAR Lab

Wifi 802.11b 6CH Left Side 0mm Ant1**DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; Type: NA; Serial: NA**

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi; Frequency: 2437 MHz; Communication System PAR: 0 dB; PMF: 1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.65, 7.65, 7.65) @ 2437 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (9x8x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.805 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.262 V/m; Power Drift = 0.15 dB

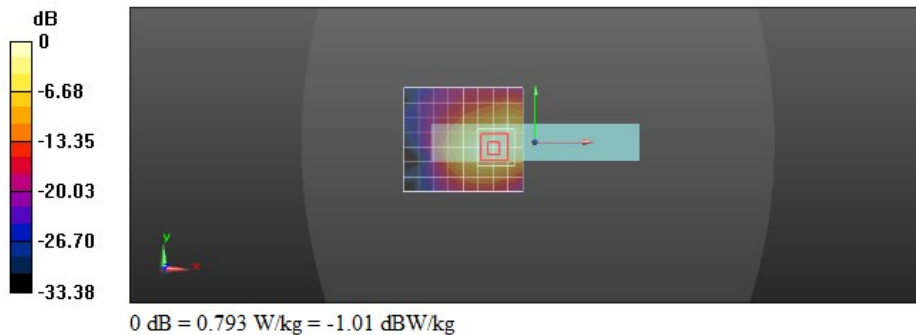
Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.231 W/kg

Smallest distance from peaks to all points 3 dB below = 11 mm

Ratio of SAR at M2 to SAR at M1 = 45.1%

Maximum value of SAR (measured) = 0.793 W/kg



Test Laboratory: CTI SAR Lab

Wifi 802.11b 6CH Right Side 0mm Ant2

DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; Type: NA; Serial: NA

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi; Frequency: 2437 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2437$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.65, 7.65, 7.65) @ 2437 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (9x8x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.882 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 12.41 V/m; Power Drift = -0.19 dB

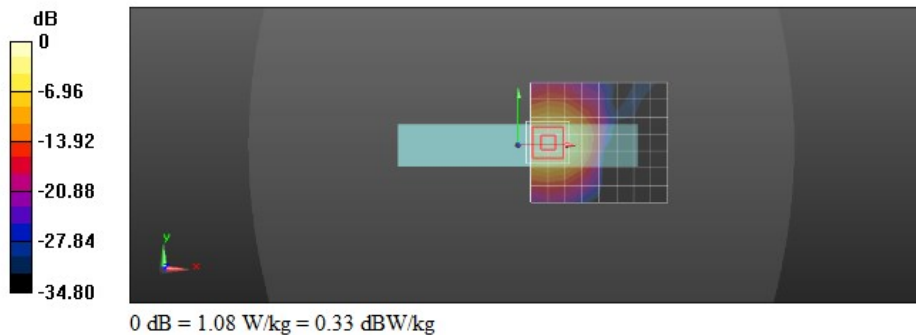
Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.301 W/kg

Smallest distance from peaks to all points 3 dB below = 11 mm

Ratio of SAR at M2 to SAR at M1 = 47.7%

Maximum value of SAR (measured) = 1.08 W/kg



Test Laboratory: CTI SAR Lab

Wifi 802.11a 36CH Back Side 0mm Ant1

DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; Type: NA; Serial: NA

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi 5.2G; Frequency: 5180 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.619$ S/m; $\epsilon_r = 34.462$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.37, 5.37, 5.37) @ 5180 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (10x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.713 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

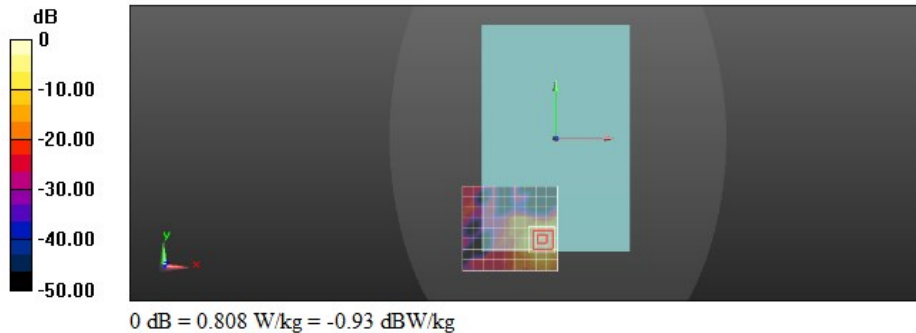
Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.121 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 41.9%

Maximum value of SAR (measured) = 0.808 W/kg



Test Laboratory: CTI SAR Lab

Wifi 802.11a 48CH Front Side 0mm Ant2

DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; 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;Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 4.729 \text{ S/m}$; $\epsilon_r = 34.334$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.37, 5.37, 5.37) @ 5240 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (9x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.550 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 0 V/m; Power Drift = 0.00 dB

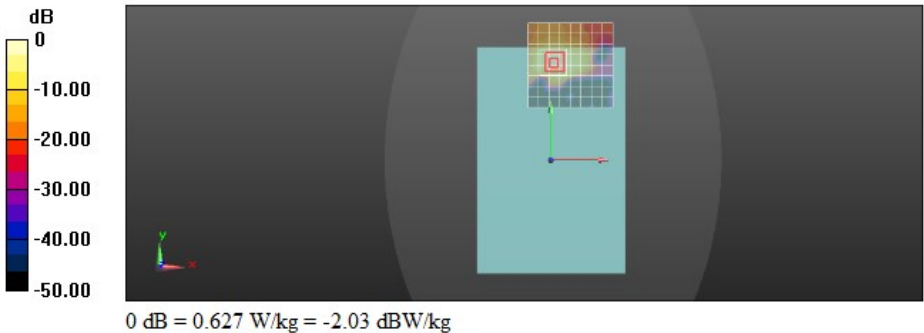
Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.102 W/kg

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 32.5%

Maximum value of SAR (measured) = 0.627 W/kg



Test Laboratory: CTI SAR Lab

Wifi 802.11a 157CH Back Side 0mm Ant1

DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; Type: NA; Serial: NA

Communication System: UID 0, WiFi 802.11 a/b/g/n/ac (0); Communication System Band: WiFi 5.8G; Frequency: 5785 MHz;Communication System PAR: 0 dB; PMF: 1

Medium parameters used: f = 5785 MHz; $\sigma = 5.247 \text{ S/m}$; $\epsilon_r = 34.526$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.96, 4.96, 4.96) @ 5785 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (10x9x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.21 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

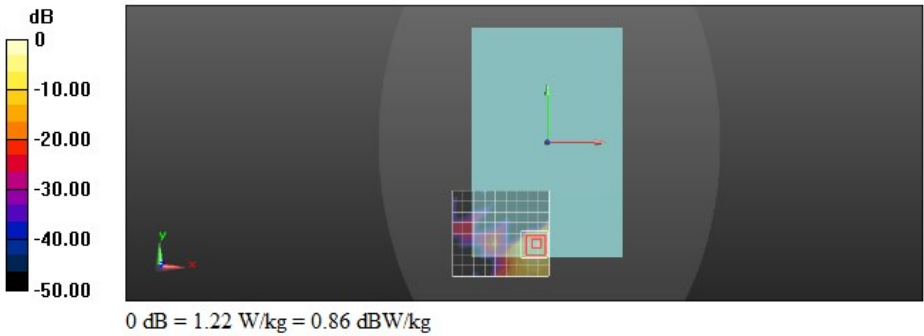
Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.171 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 36.7%

Maximum value of SAR (measured) = 1.22 W/kg



Test Laboratory: CTI SAR Lab

Wifi 802.11a 149CH Front Side 0mm Ant2**DUT: AUTOMOTIVE DIAGNOSIS & ANALYSIS SYSTEM; 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; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 5745$ MHz; $\sigma = 5.222$ S/m; $\epsilon_r = 35.099$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.96, 4.96, 4.96) @ 5745 MHz; Calibrated: 5/7/2025
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/20/2025
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (9x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.15 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 0.502 W/kg; SAR(10 g) = 0.167 W/kg

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

Maximum value of SAR (measured) = 1.14 W/kg

