

SAR And Power Density Validation Data

Date: 7/29/2025

System+Check_Head_13MHz

Communication System: UID 0, CW (0); Communication System Band: 13.56; Duty Cycle: 1:1; Frequency: 13 MHz;
Medium parameters used: $f = 13 \text{ MHz}$; $\sigma = 0.747 \text{ S/m}$; $\epsilon_r = 53.93$; $\rho = 1051 \text{ kg/m}^3$

Ambient temperature ($^{\circ}\text{C}$): 23.5, Liquid temperature ($^{\circ}\text{C}$): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(14.53, 14.51, 15.55); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.251 W/kg

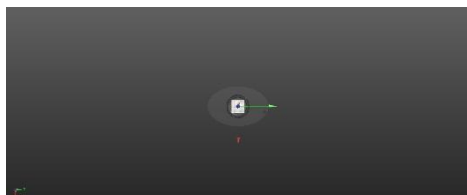
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.320 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.261 W/kg



0 dB = 0.261 W/kg = -15.11 dBW/kg

Date: 7/30/2025

System Check Head 2450MHz

Communication System: UID 0, CW; Communication System Band: D2450MHz; Duty Cycle: 1:1; Frequency: 2450 MHz;
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.869$ S/m; $\epsilon_r = 38.889$; $\rho = 1000$ kg/m³

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.03, 6.83, 6.91); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x101x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 21.3 W/kg

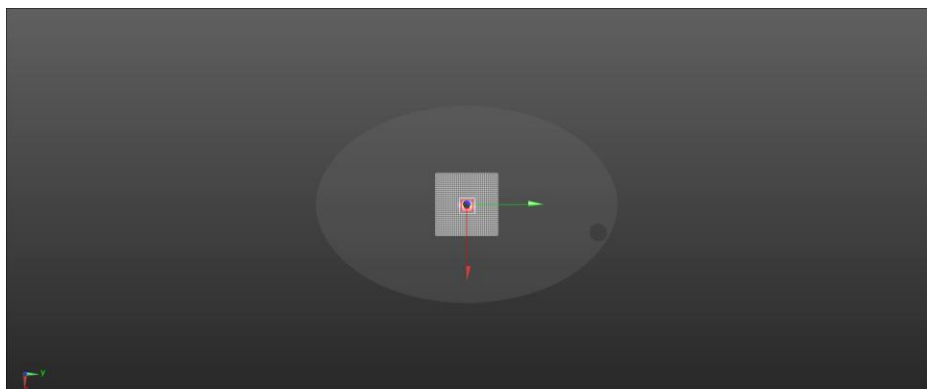
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 88.82 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 25.9 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.14 W/kg

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 dBW/kg

Date: 8/1/2025

System Check Head 5250MHz

Communication System: UID 0, CW (0); Communication System Band: 5250MHz; Duty Cycle: 1:1; Frequency: 5250 MHz;
Medium parameters used: $f = 5250 \text{ MHz}$; $\sigma = 4.842 \text{ S/m}$; $\epsilon_r = 36.481$; $\rho = 1000 \text{ kg/m}^3$

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.42, 5.27, 5.33); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 20.7 W/kg

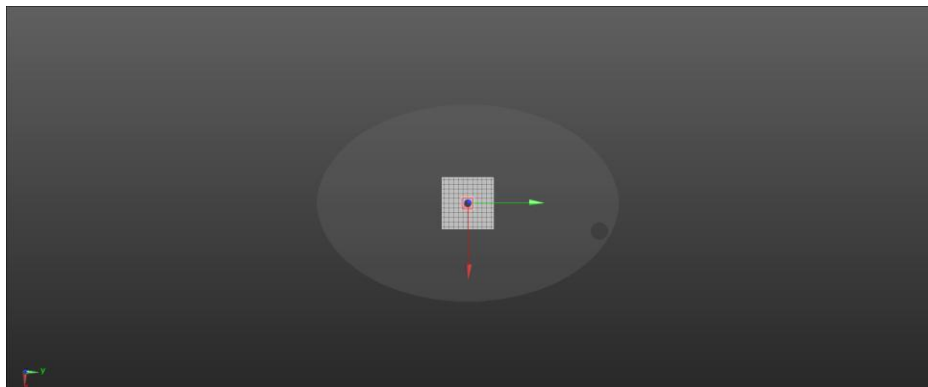
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 43.17 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 35.6 W/kg

SAR(1 g) = 8.38 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 21.3 W/kg



0 dB = 21.3 W/kg = 13.28 dBW/kg

Date: 8/3/2025

System Check Head 5600MHz

Communication System: UID 0, CW (0); Communication System Band: D5600MHz; Duty Cycle: 1:1; Frequency: 5600 MHz; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.212$ S/m; $\epsilon_r = 35.939$; $\rho = 1000$ kg/m³

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(4.64, 4.51, 4.56); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 21.8 W/kg

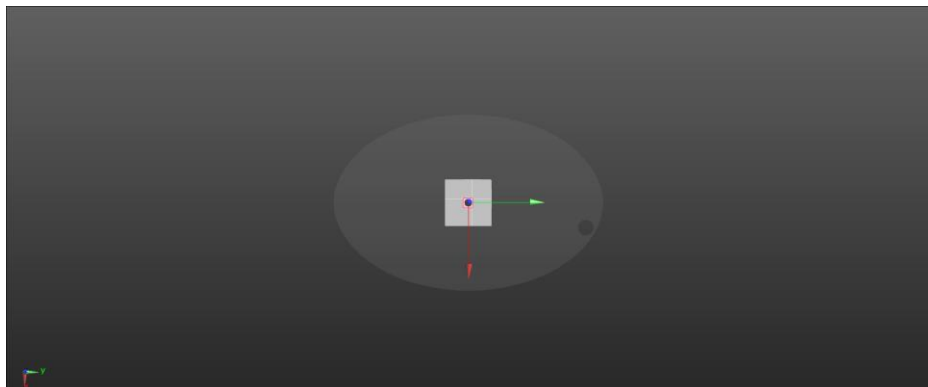
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.39 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 39.3 W/kg

SAR(1 g) = 8.59 W/kg; SAR(10 g) = 2.48 W/kg

Maximum value of SAR (measured) = 22.2 W/kg



0 dB = 22.2 W/kg = 13.46 dBW/kg

Date: 8/5/2025

System Check Head 5750MHz

Communication System: UID 0, CW (0); Communication System Band: D5750MHz; Duty Cycle: 1:1; Frequency: 5750 MHz; Medium parameters used: $f = 5750$ MHz; $\sigma = 5.375$ S/m; $\epsilon_r = 35.709$; $\rho = 1000$ kg/m³

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.4 W/kg

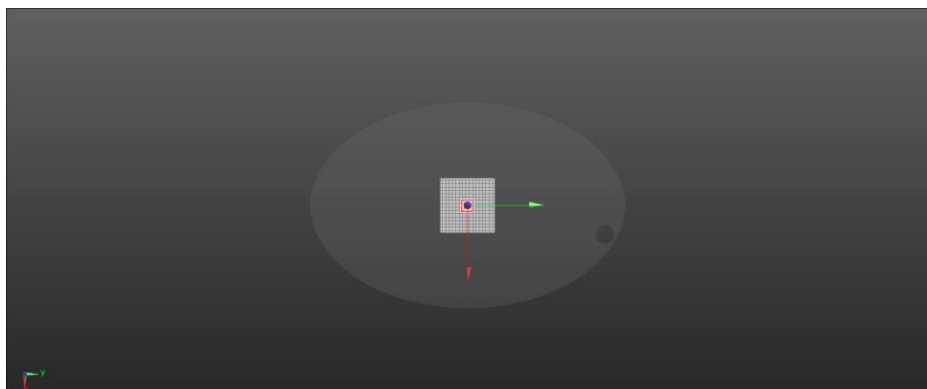
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 38.40 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 38.2 W/kg

SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



0 dB = 20.8 W/kg = 13.18 dBW/kg

Measurement Report for Device, CW, Channel 0 (6500MHz)

Exposure Conditions

Phantom Section, TSL	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	6500, 0	5.22	5.99	33.95

Hardware Setup

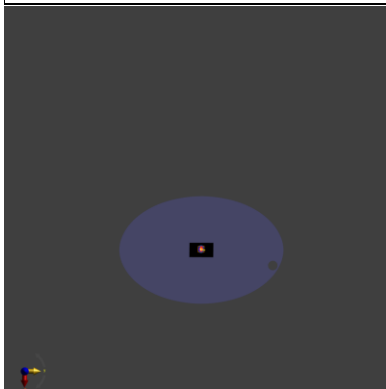
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt)	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2025-03-14

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2025-08-7	2025-08-7
psSAR1g [W/Kg]	27.1	29.0
psSAR10g [W/Kg]	5.61	5.93
Power Drift [dB]	-0.15	-0.14



Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 10.00	10000, 10000	1.0

Hardware Setup

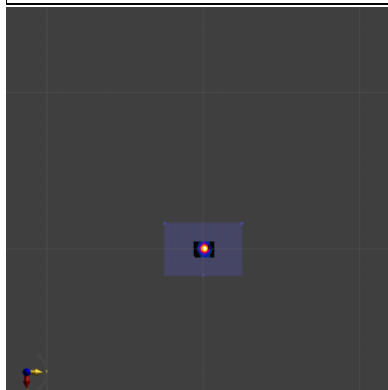
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2024-09-16	DAE4 Sn1220, 2025-03-14

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Date	2025-08-09
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	53.1
psPDtot+ [W/m ²]	53.2
psPDmod+ [W/m ²]	53.8
Power Drift [dB]	-0.02



SAR And Power Density Test Data

Date: 7/29/2025

Back side_NFC-13.56MHz_0mm

Communication System: UID 0, NFC (0); Communication System Band: NFC; Duty Cycle: 1:1.0; Frequency: 13.56 MHz;
Medium parameters used: $f = 13.56 \text{ MHz}$; $\sigma = 0.734 \text{ S/m}$; $\epsilon_r = 51.226$; $\rho = 1048 \text{ kg/m}^3$

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(14.53, 14.51, 15.55); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.78 W/kg

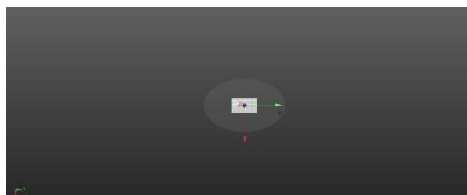
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 0 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.375 W/kg

SAR(1 g) = 0.007 W/kg; SAR(10 g) = 0.003 W/kg

Maximum value of SAR (measured) = 0.071 W/kg



0 dB = 0.071 W/kg = -1.45 dBW/kg

Date: 7/30/2025

Bluetooth DH5-Back Side-CH39-2441MHz

Communication System: UID 0, Bluetooth (0); Communication System Band: BDR+EDR; Duty Cycle: 1:1; Frequency: 2441 MHz; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.858$ S/m; $\epsilon_r = 38.923$; $\rho = 1000$ kg/m³

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.03, 6.83, 6.91); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x41x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.103 W/kg

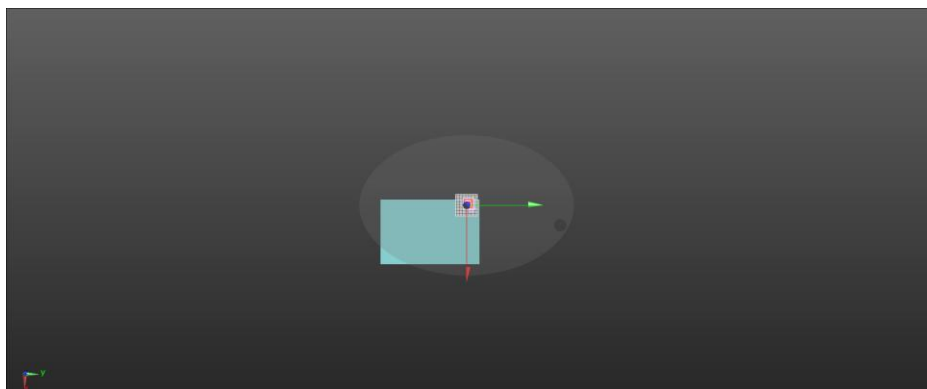
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.56 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.034 W/kg

Maximum value of SAR (measured) = 0.146 W/kg



0 dB = 0.146 W/kg = -1.10 dBW/kg

Date: 7/30/2025

WLAN2.4G 802.11b-Back Side-CH1-2412MHz

Communication System: UID 0, WIFI 2.4G (0); Communication System Band: 802.11b(20M); Duty Cycle: 1:1; Frequency: 2412 MHz; Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.823 \text{ S/m}$; $\epsilon_r = 39.052$; $\rho = 1000 \text{ kg/m}^3$

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.03, 6.83, 6.91); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x41x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.35 W/kg

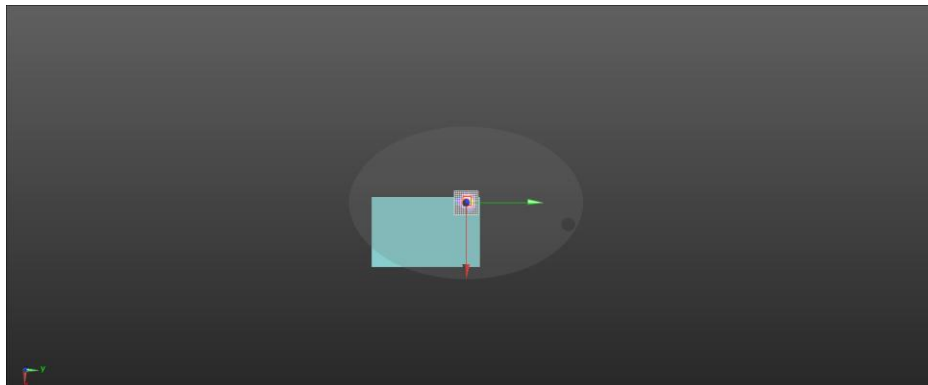
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.13 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.596 W/kg; SAR(10 g) = 0.264 W/kg

Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg

Date: 8/01/2025

WLAN5.3G 802.11a-Back Side-CH56-5280MHz

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1; Frequency: 5280 MHz; Medium parameters used: $f = 5280 \text{ MHz}$; $\sigma = 4.875 \text{ S/m}$; $\epsilon_r = 36.466$; $\rho = 1000 \text{ kg/m}^3$

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.42, 5.27, 5.33); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x41x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.836 W/kg

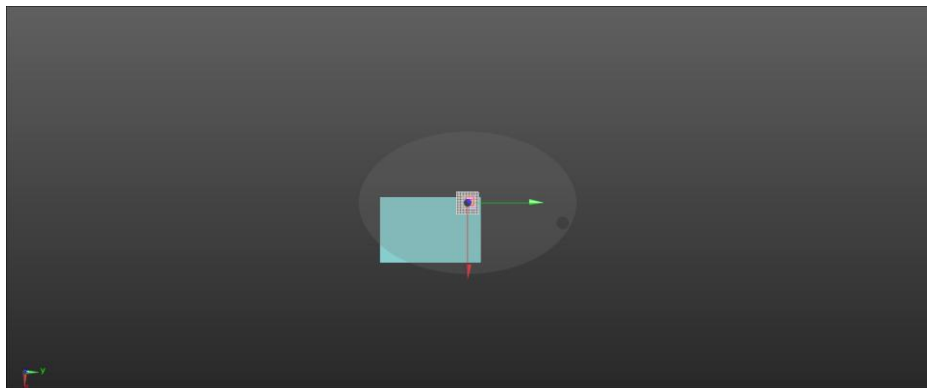
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.312 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.55 W/kg

SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 1.16 W/kg



0 dB = 1.16 W/kg = 0.64 dBW/kg

Date: 8/05/2025

WLAN5.6G 802.11a-Back Side-CH140-5700MHz

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1; Frequency: 5700 MHz; Medium parameters used: $f = 5700$ MHz; $\sigma = 5.32$ S/m; $\epsilon_r = 35.79$; $\rho = 1000$ kg/m³

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x41x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.750 W/kg

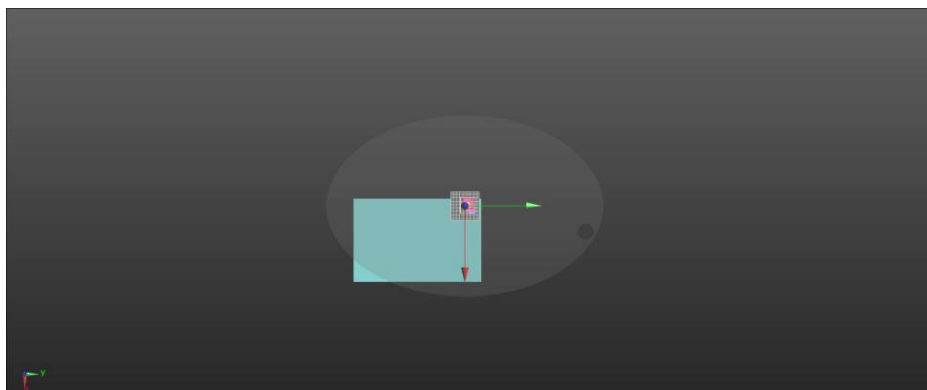
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.766 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.30 W/kg

SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 1.47 W/kg



0 dB = 1.47 W/kg = 1.67 dBW/kg

Date: 8/05/2025

WLAN5.6G 802.11a-Back Side-CH157-5785MHz

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1; Frequency: 5785 MHz; Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.412 \text{ S/m}$; $\epsilon_r = 35.679$; $\rho = 1000 \text{ kg/m}^3$

Ambient temperature (°C): 23.5, Liquid temperature (°C): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97); Calibrated: 9/19/2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 3/14/2025
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x41x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.816 W/kg

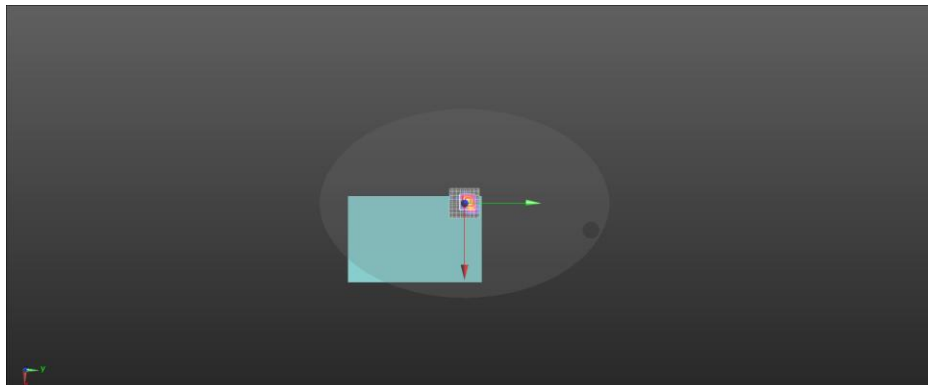
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.097 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.155 W/kg

Maximum value of SAR (measured) = 1.66 W/kg



0 dB = 1.66 W/kg = 2.20 dBW/kg

Measurement Report for Device, BACK, IEEE 802.11ax (160MHz, MCS0), Channel 47 (6185MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	BACK, 0.00	6185, 47	5.22	5.73	34.4

Hardware Setup

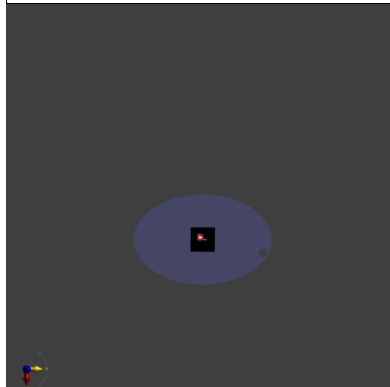
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt)	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2025-03-14

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 102.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2025-08-07	2025-08-07
psSAR1g [W/Kg]	0.412	0.438
psSAR10g [W/Kg]	0.097	0.103
Power Drift [dB]	0.07	0.06



Measurement Report for Device, BACK, IEEE 802.11ax (160MHz, MCS0), Channel 111 (6505MHz)

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	BACK, 2.00	6505, 111	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2024-09-16	DAE4 Sn1220, 2025-03-14

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-08-09
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.22
psPDtot+ [W/m ²]	5.41
psPDmod+ [W/m ²]	9.19
Power Drift [dB]	-0.01

