

Test Laboratory: UL CCS SAR Lab A

Head_5.2GHz

Communication System: IEEE 802.11 a/n 5 GHz Bands; Frequency: 5240 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 4.777$ mho/m; $\epsilon_r = 35.531$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(4.54, 4.54, 4.54); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: SAM with CRP v5.0 (B); Type: QD000P40CD; Serial: 1628
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11a_Ch 48/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.085 mW/g

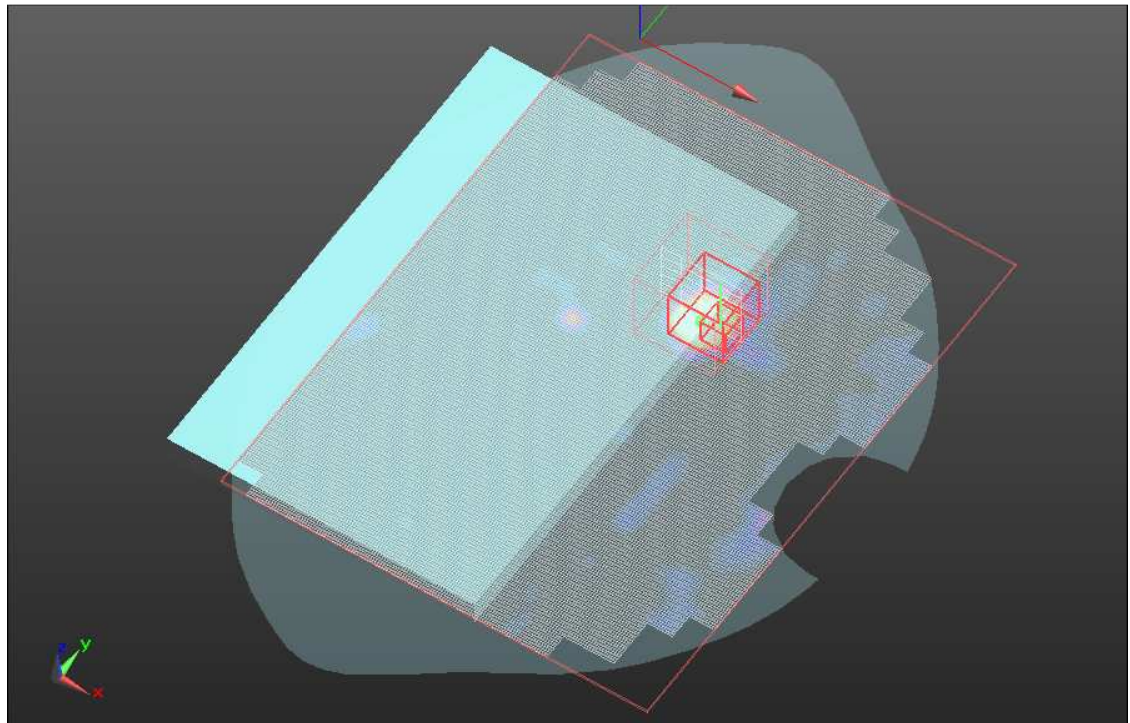
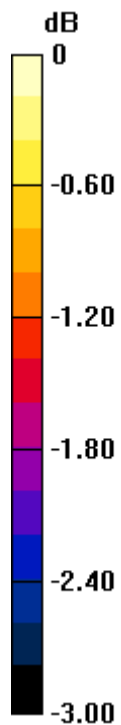
11a_Ch 48/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.901 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.075 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.035 mW/g

Maximum value of SAR (measured) = 0.058 mW/g



0 dB = 0.060mW/g

Test Laboratory: UL CCS SAR Lab A

Head_5.2 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5230 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5230$ MHz; $\sigma = 4.75$ mho/m; $\epsilon_r = 36.232$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(4.49, 4.49, 4.49); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: TP1632
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11n HT40_Ch 46/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.123 mW/g

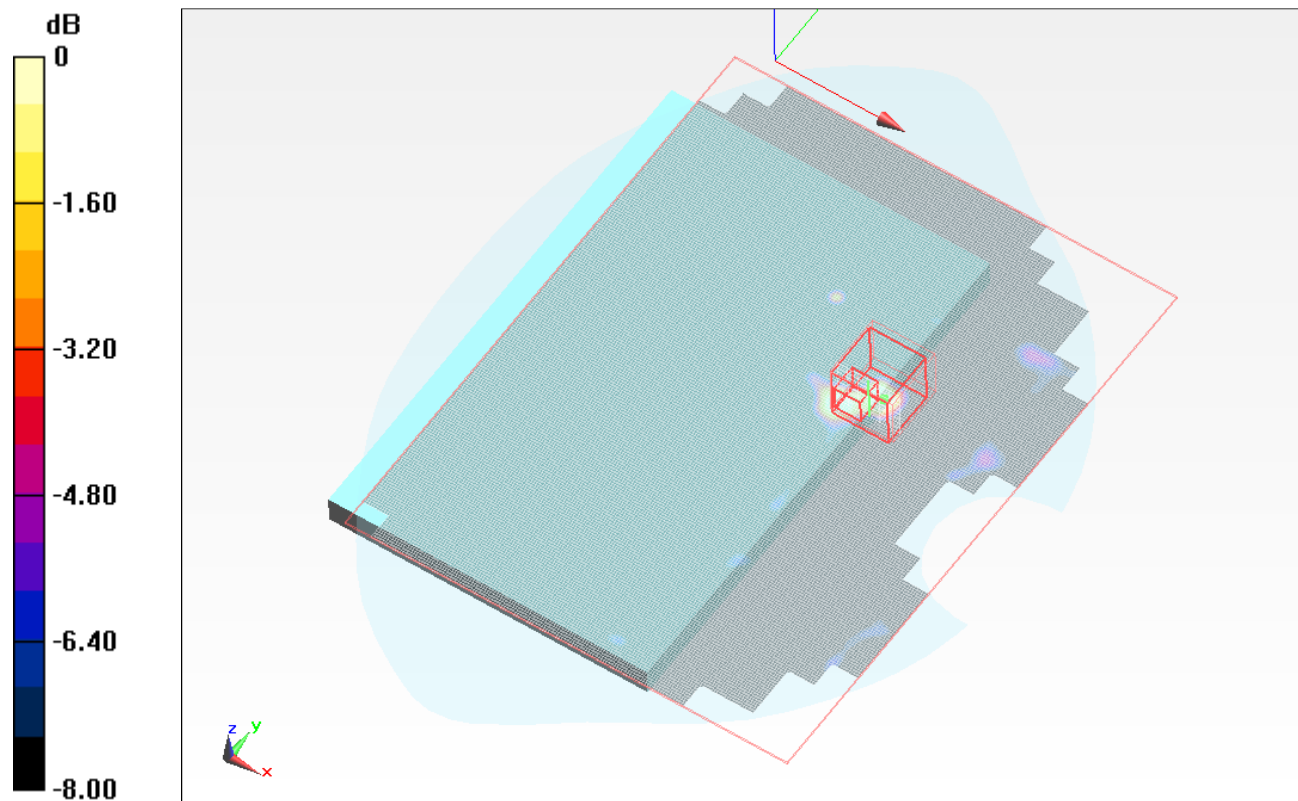
11n HT40_Ch 46/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.598 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.00577 mW/g

Maximum value of SAR (measured) = 0.061 mW/g



Test Laboratory: UL CCS SAR Lab A

Head_5.3GHz

Communication System: IEEE 802.11 a/n 5 GHz Bands; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.851$ mho/m; $\epsilon_r = 35.433$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(4.35, 4.35, 4.35); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: SAM with CRP v5.0 (B); Type: QD000P40CD; Serial: 1628
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11a_Ch 56/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.116 mW/g

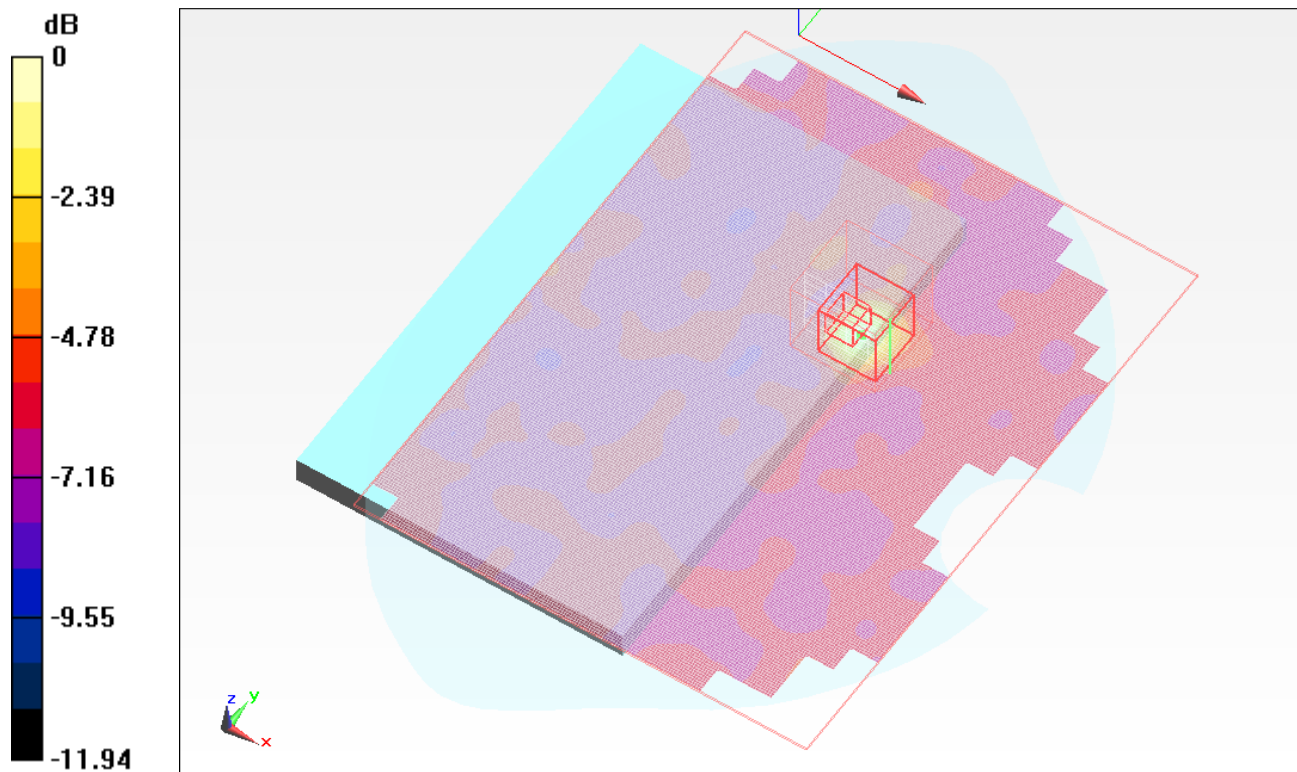
11a_Ch 56/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.139 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.116 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.116 mW/g



Test Laboratory: UL CCS SAR Lab A

Head_5.3 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5270 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5270$ MHz; $\sigma = 4.794$ mho/m; $\epsilon_r = 36.115$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(4.2, 4.2, 4.2); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: TP1632
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11n HT40_Ch 54/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.049 mW/g

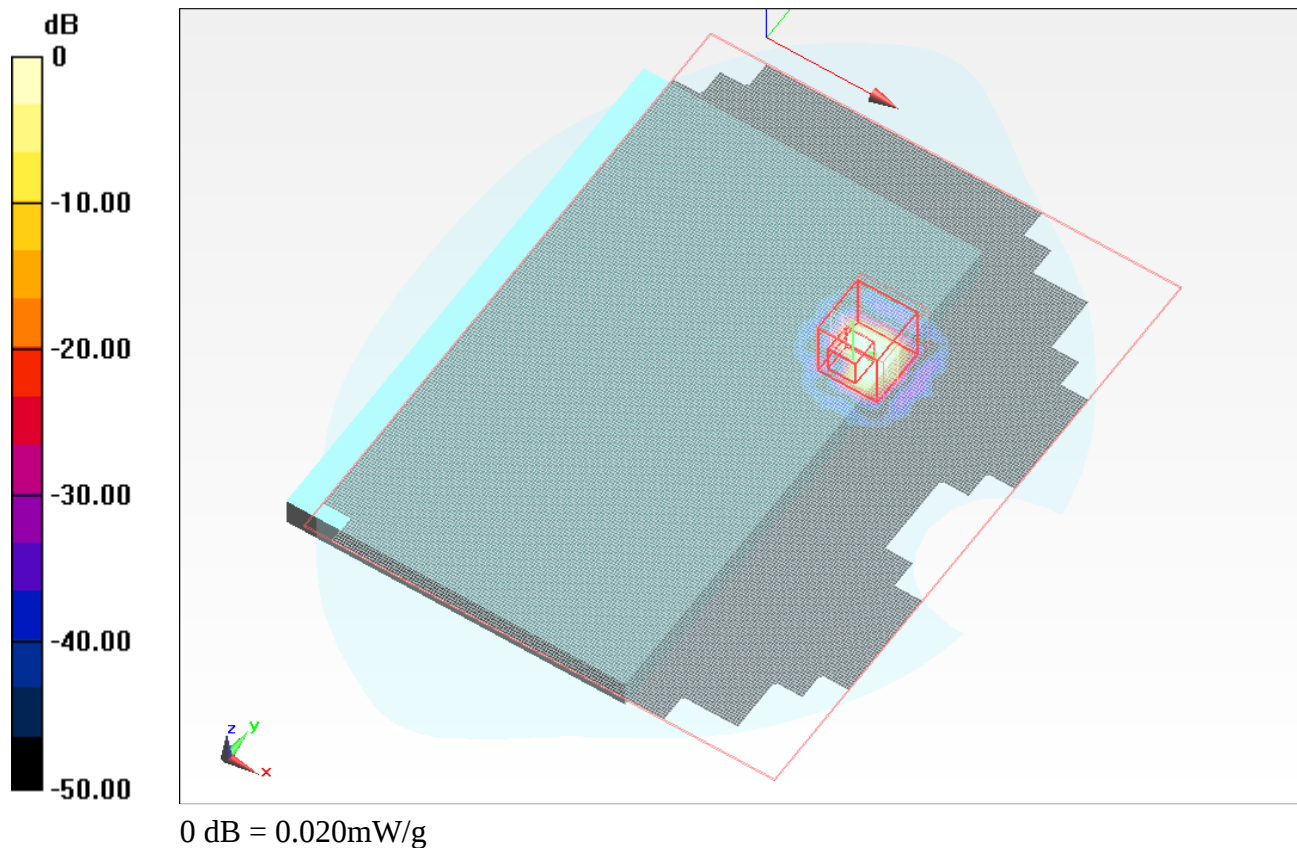
11n HT40_Ch 54/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.845 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.058 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00704 mW/g

Maximum value of SAR (measured) = 0.024 mW/g



Test Laboratory: UL CCS SAR Lab A

Head_5.5 GHz

Communication System: IEEE 802.11 a/n 5 GHz Bands; Frequency: 5700 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5700$ MHz; $\sigma = 5.306$ mho/m; $\epsilon_r = 34.746$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.96, 3.96, 3.96); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: SAM with CRP v5.0 (B); Type: QD000P40CD; Serial: 1628
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11a_Ch 140/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.076 mW/g

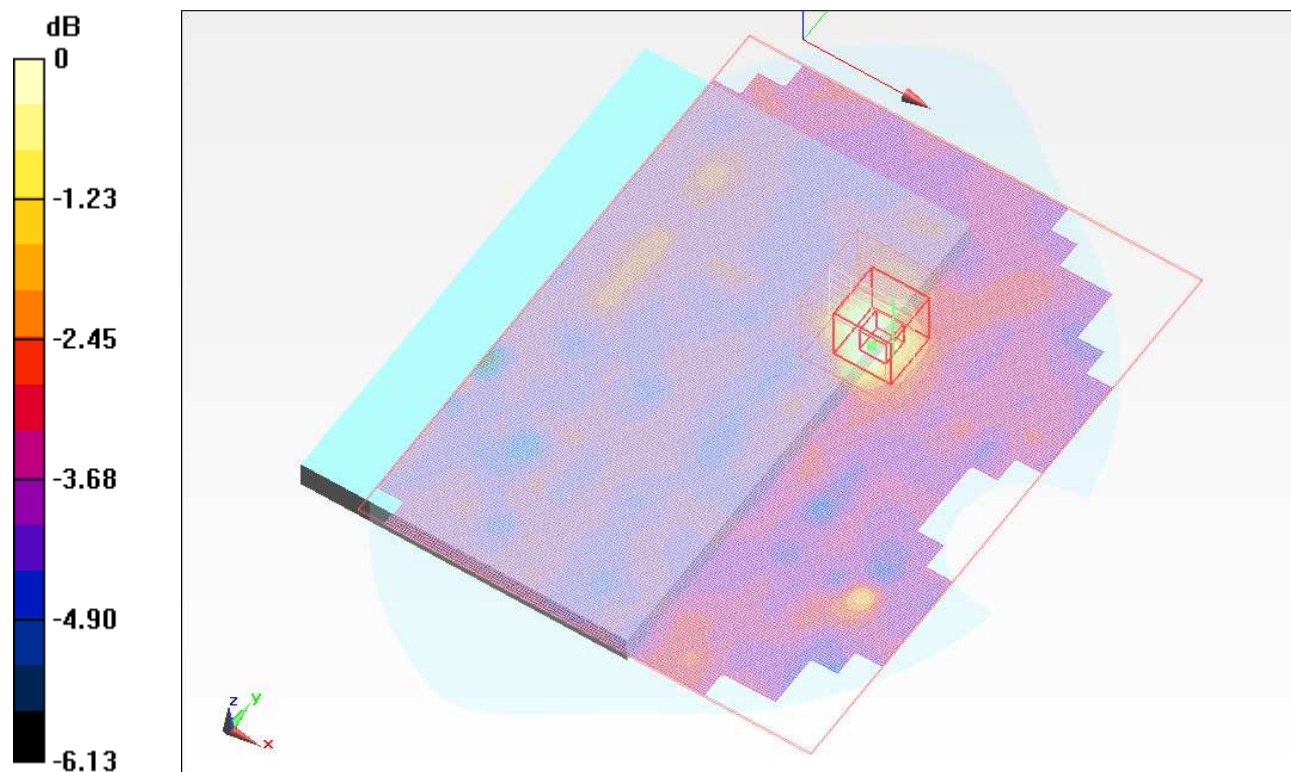
11a_Ch 140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.802 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.093 W/kg

SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.066 mW/g



Test Laboratory: UL CCS SAR Lab A

Head_5.5 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5670 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5670$ MHz; $\sigma = 5.228$ mho/m; $\epsilon_r = 35.513$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(3.88, 3.88, 3.88); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: TP1632
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11n HT40_Ch 134/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.079 mW/g

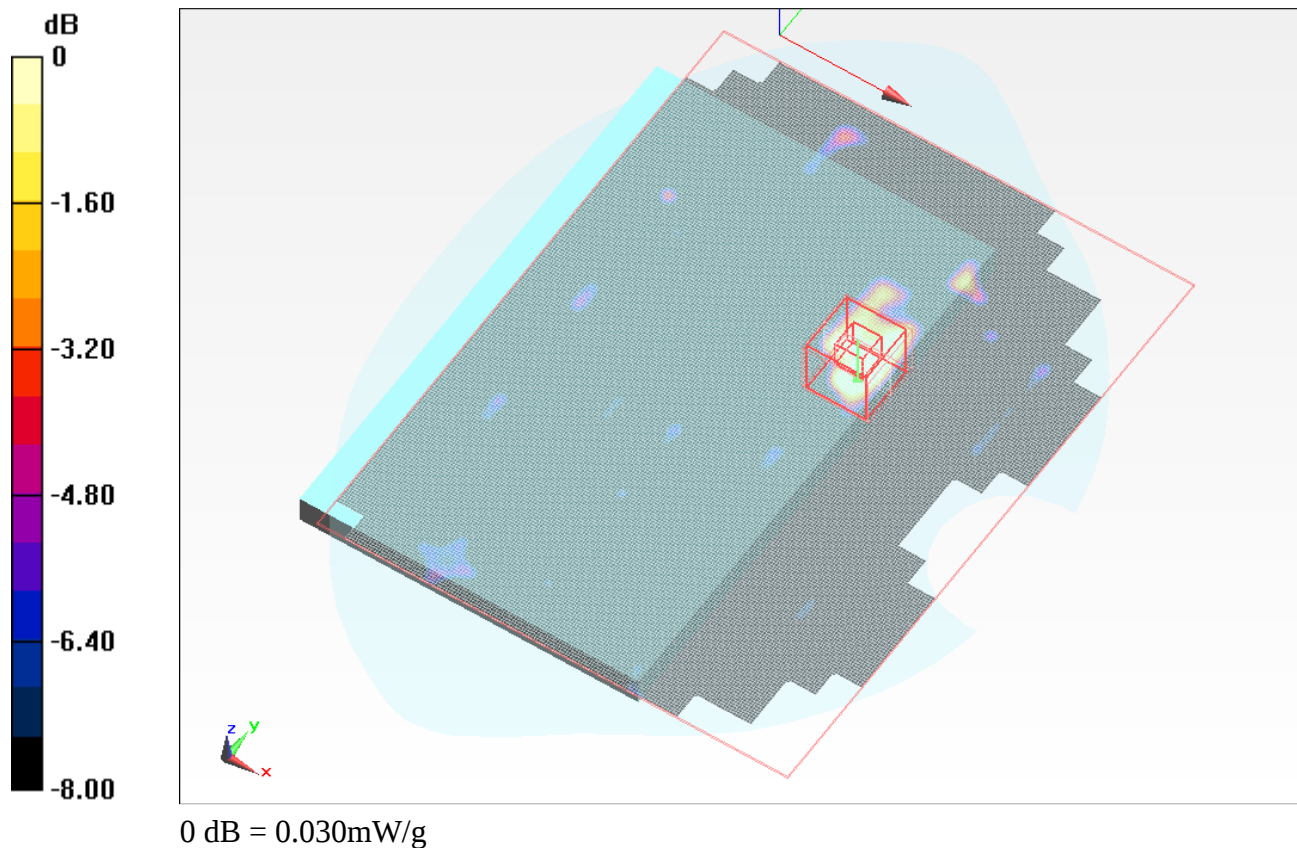
11n HT40_Ch 134/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.471 V/m; Power Drift = 0.0076 dB

Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.00485 mW/g

Maximum value of SAR (measured) = 0.034 mW/g



Test Laboratory: UL CCS SAR Lab C

Head_5.8 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5785 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 5.359$ mho/m; $\epsilon_r = 33.198$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(4.1, 4.1, 4.1); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: TP1632
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

11a_Ch 157/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.467 mW/g

11a_Ch 157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

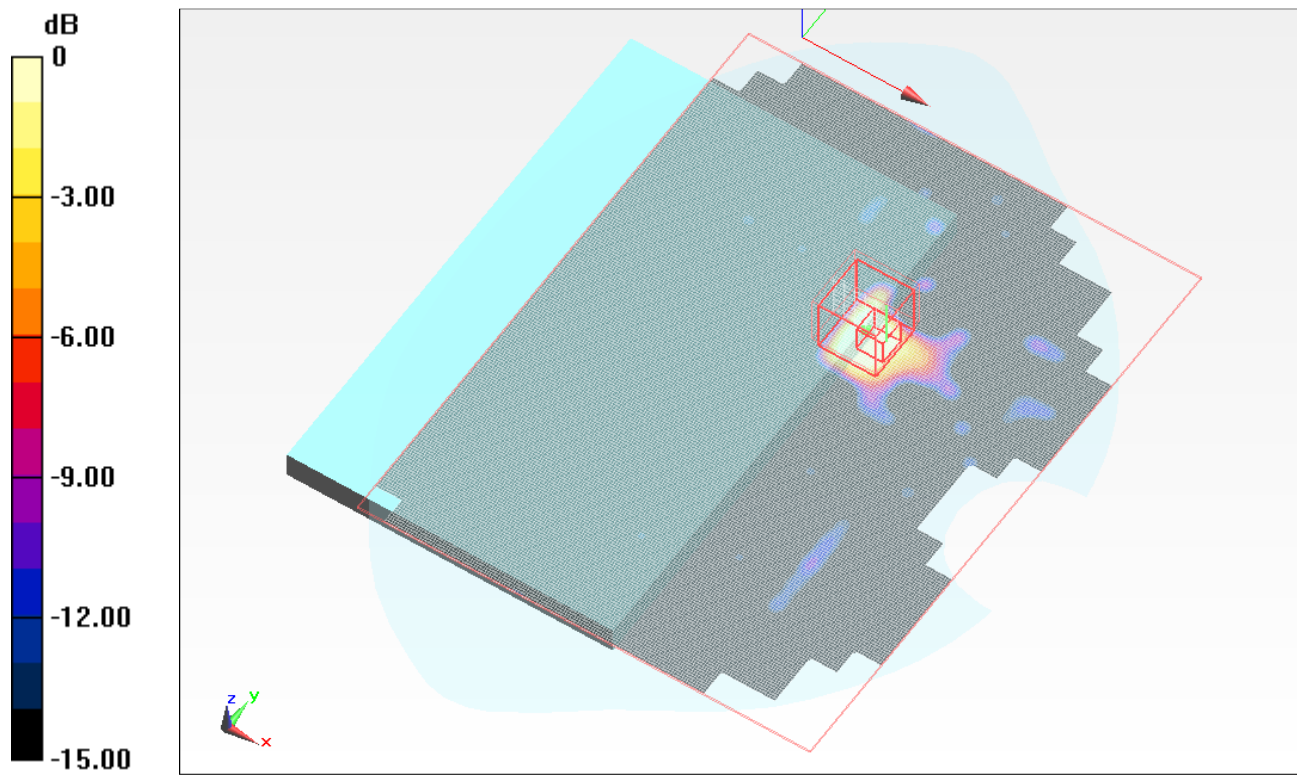
Reference Value = 5.517 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 0.414 W/kg

SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.032 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.151 mW/g



Test Laboratory: UL CCS SAR Lab C

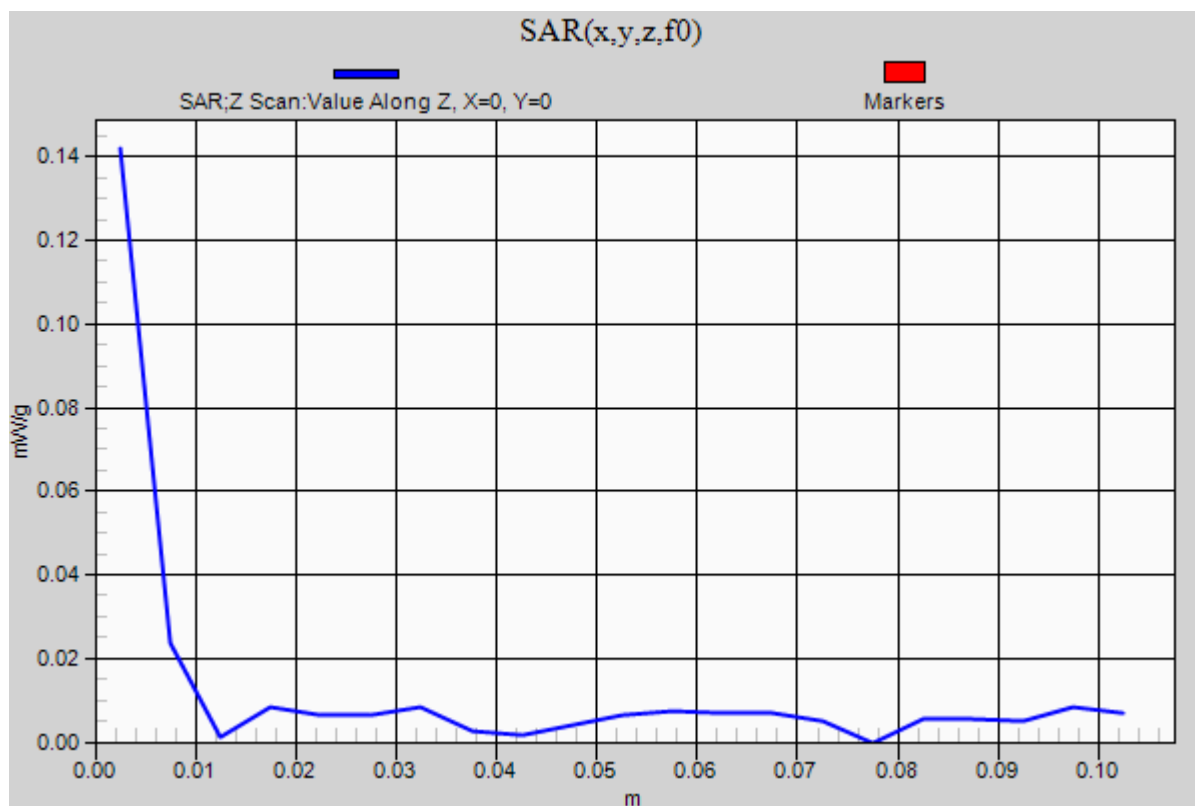
Head_5.8 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5785 MHz; Duty Cycle: 1:1

11a_Ch 157/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.142 mW/g



Test Laboratory: UL CCS SAR Lab A

Head_5.8 GHz

Communication System: IEEE 802.11a/n 5 GHz Band; Frequency: 5795 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 5795$ MHz; $\sigma = 5.37$ mho/m; $\epsilon_r = 35.324$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(4.1, 4.1, 4.1); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: SAM with CRP v5.0; Type: QD000P40CD; Serial: TP1632
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

11n HT40_Ch 159/Area Scan (171x221x1): Measurement grid: dx=10mm, dy=10mm

[Info: interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.067 mW/g

11n HT40_Ch 159/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

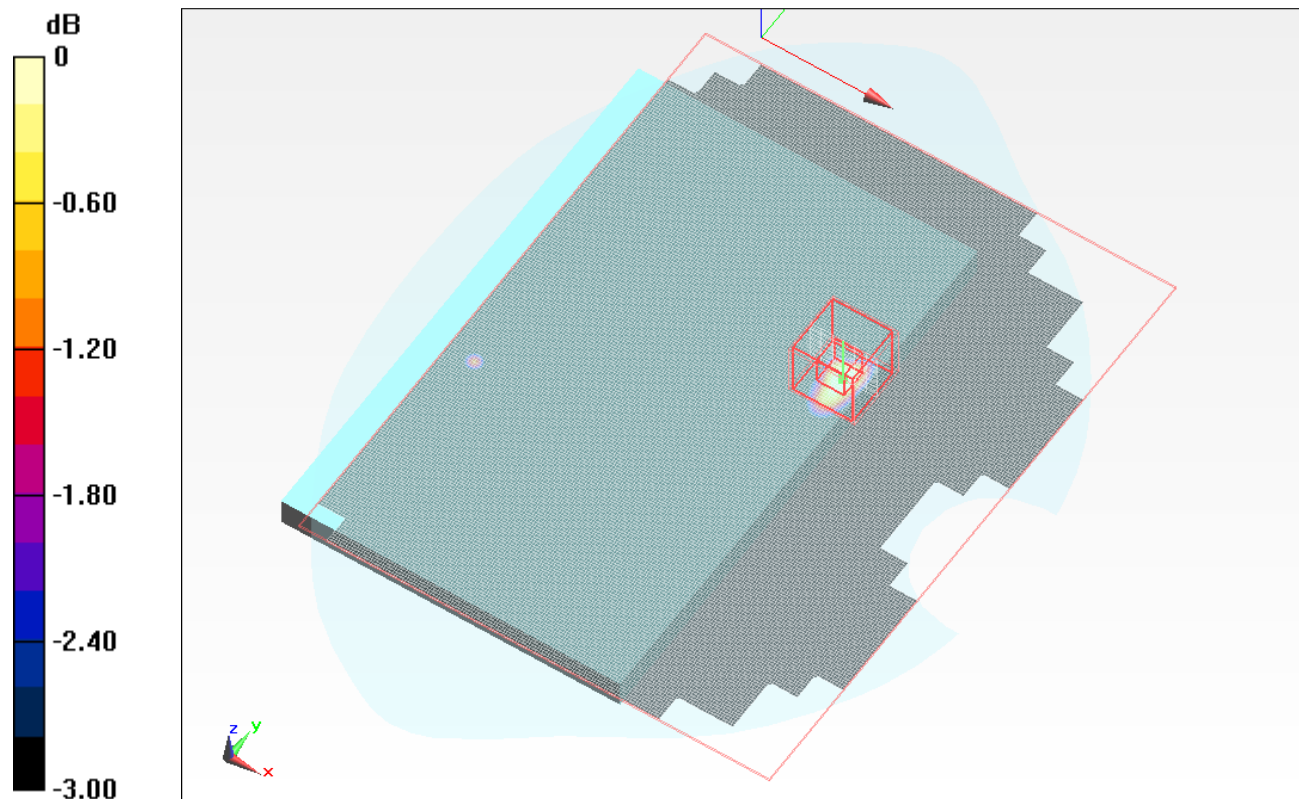
Reference Value = 2.916 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.142 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.016 mW/g

[Info: interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g