

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_USI

DUT: Apple; Type: NA; Serial: NA

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.9, 6.9, 6.9); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: SAM B (Twin); Type: SAM B; Serial: TP-105
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.032 mW/g

Front side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

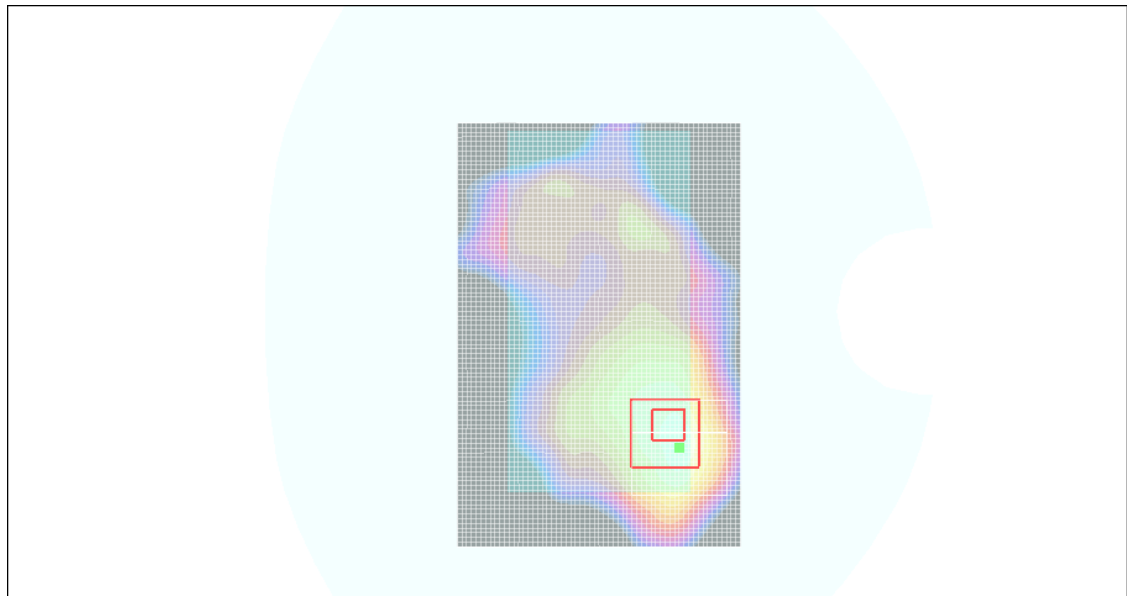
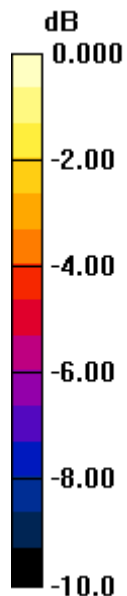
Reference Value = 3.70 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.011 mW/g

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

Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_USI

DUT: Apple; Type: NA; Serial: NA

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.9, 6.9, 6.9); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: SAM B (Twin); Type: SAM B; Serial: TP-105
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.070 mW/g

Back side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

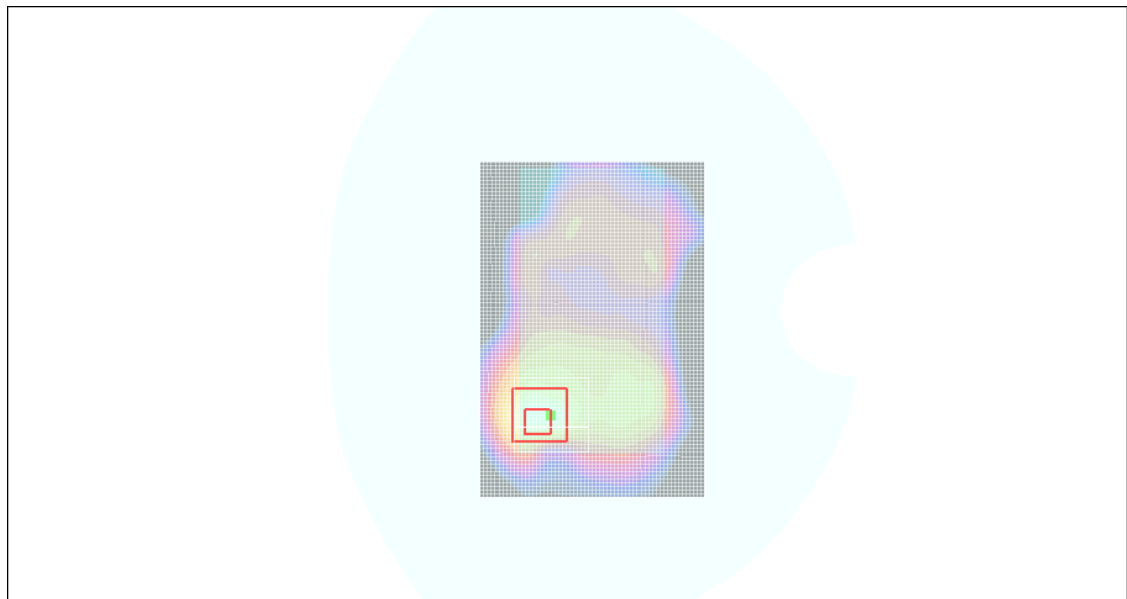
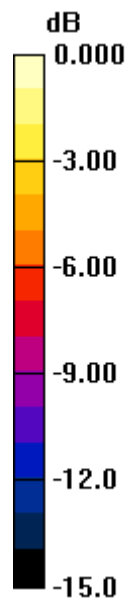
Reference Value = 5.40 V/m; Power Drift = 0.231 dB

Peak SAR (extrapolated) = 0.129 W/kg

SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.021 mW/g

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

Maximum value of SAR (measured) = 0.075 mW/g



0 dB = 0.075mW/g

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_Murata

DUT: Apple; Type: NA; Serial: NA

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.9, 6.9, 6.9); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: SAM B (Twin); Type: SAM B; Serial: TP-105
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.032 mW/g

Front side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

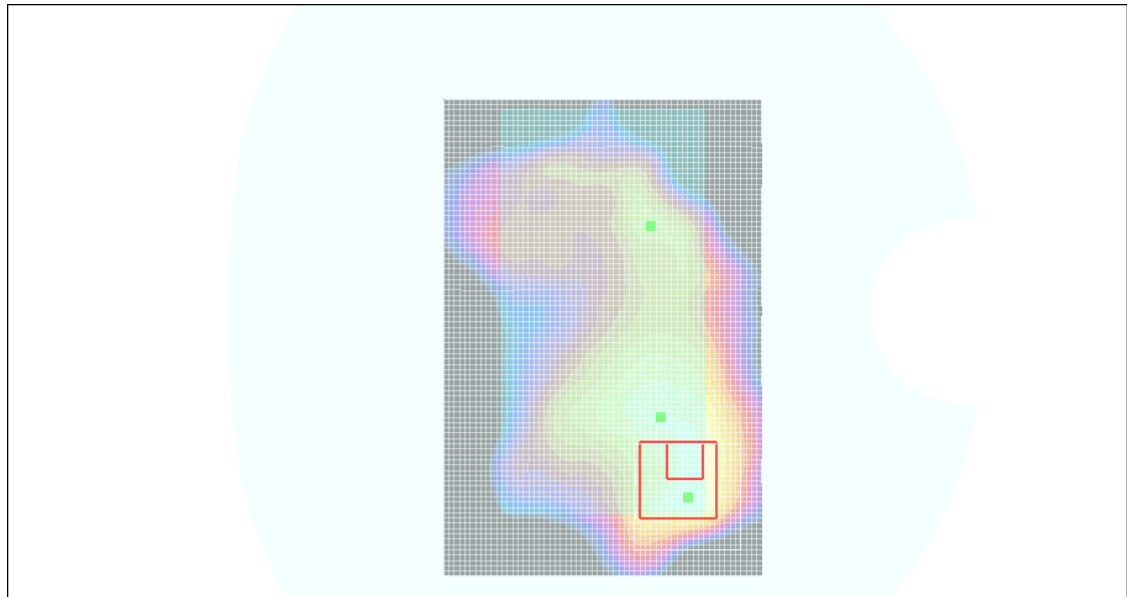
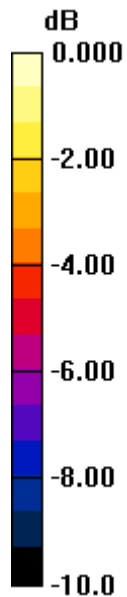
Reference Value = 3.91 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.049 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.00944 mW/g

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

Maximum value of SAR (measured) = 0.033 mW/g



0 dB = 0.033mW/g

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_Murata

DUT: Apple; Type: NA; Serial: NA

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.9, 6.9, 6.9); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: SAM B (Twin); Type: SAM B; Serial: TP-105
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.083 mW/g

Back side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

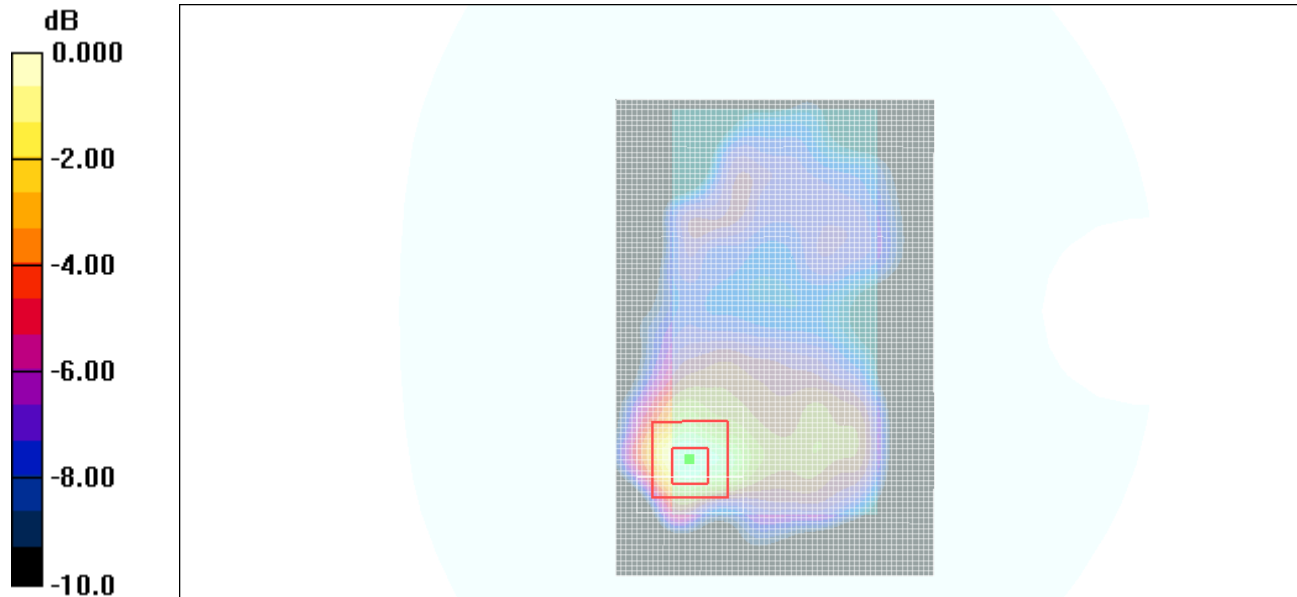
Reference Value = 5.46 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.023 mW/g

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

Maximum value of SAR (measured) = 0.077 mW/g



0 dB = 0.077mW/g

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_Murata

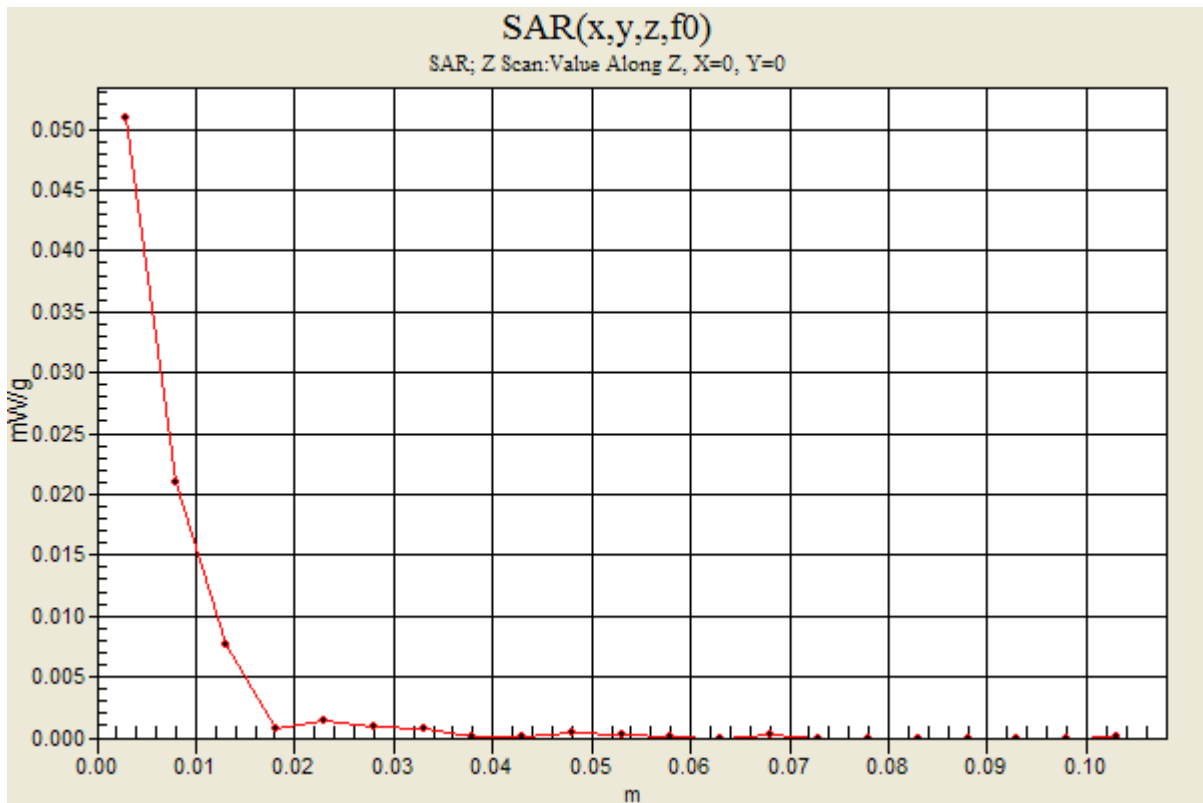
DUT: Apple; Type: NA; Serial: NA

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Back side M-ch/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

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

Maximum value of SAR (measured) = 0.051 mW/g



Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_Semco

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.69, 6.69, 6.69); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: 1017
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.031 mW/g

Front side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

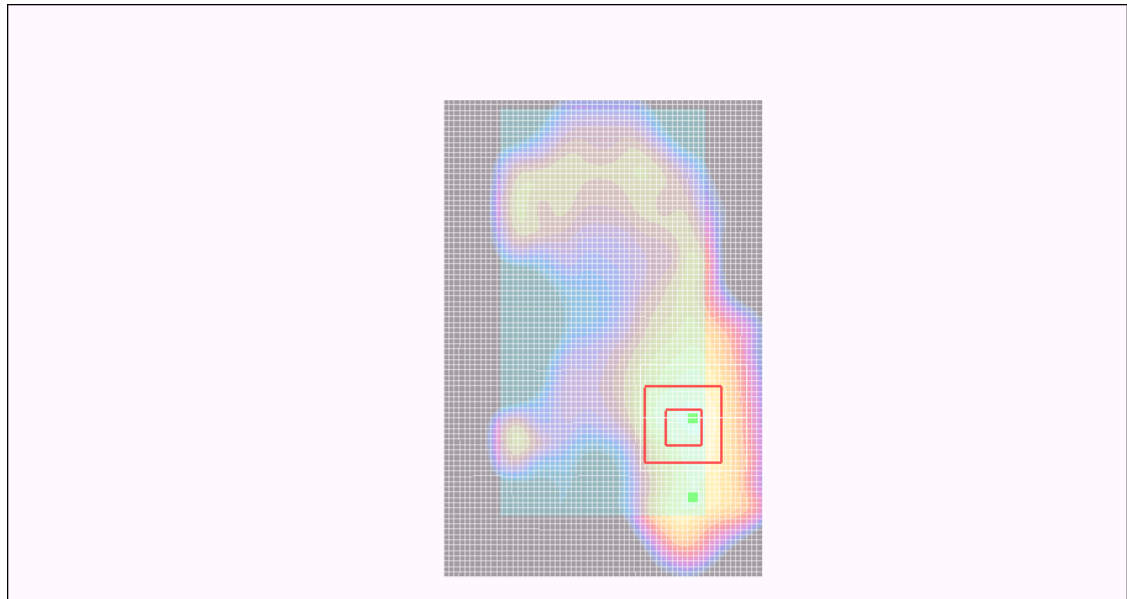
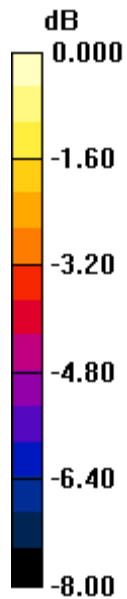
Reference Value = 3.80 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.048 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.011 mW/g

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

Maximum value of SAR (measured) = 0.033 mW/g



0 dB = 0.033mW/g

Test Laboratory: UL CCS SAR Lab D

Bluetooth_Body_Semco

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(6.69, 6.69, 6.69); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: 1017
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back side_M-ch/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.057 mW/g

Back side_M-ch/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=3mm

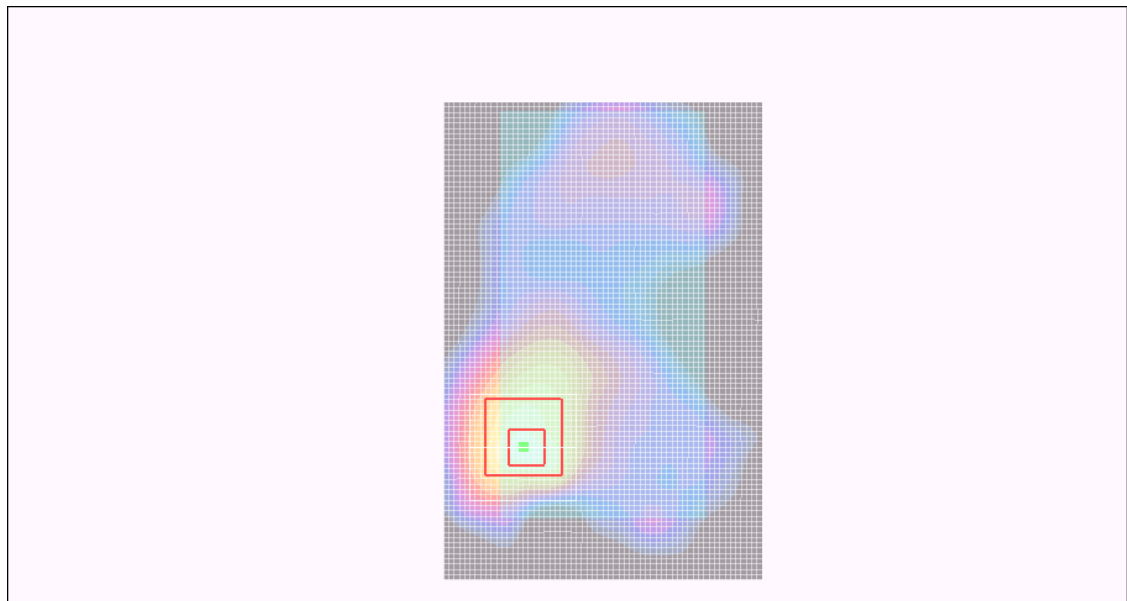
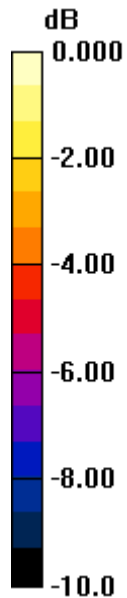
Reference Value = 4.77 V/m; Power Drift = 0.169 dB

Peak SAR (extrapolated) = 0.091 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.020 mW/g

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

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



0 dB = 0.061mW/g