

Bluetooth

Frequency: 2441 MHz; Duty Cycle: 1:1.29033; Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.843$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2441 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001

Rear/Bluetooth GFSK ch.39/Volume Scan (16x38x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

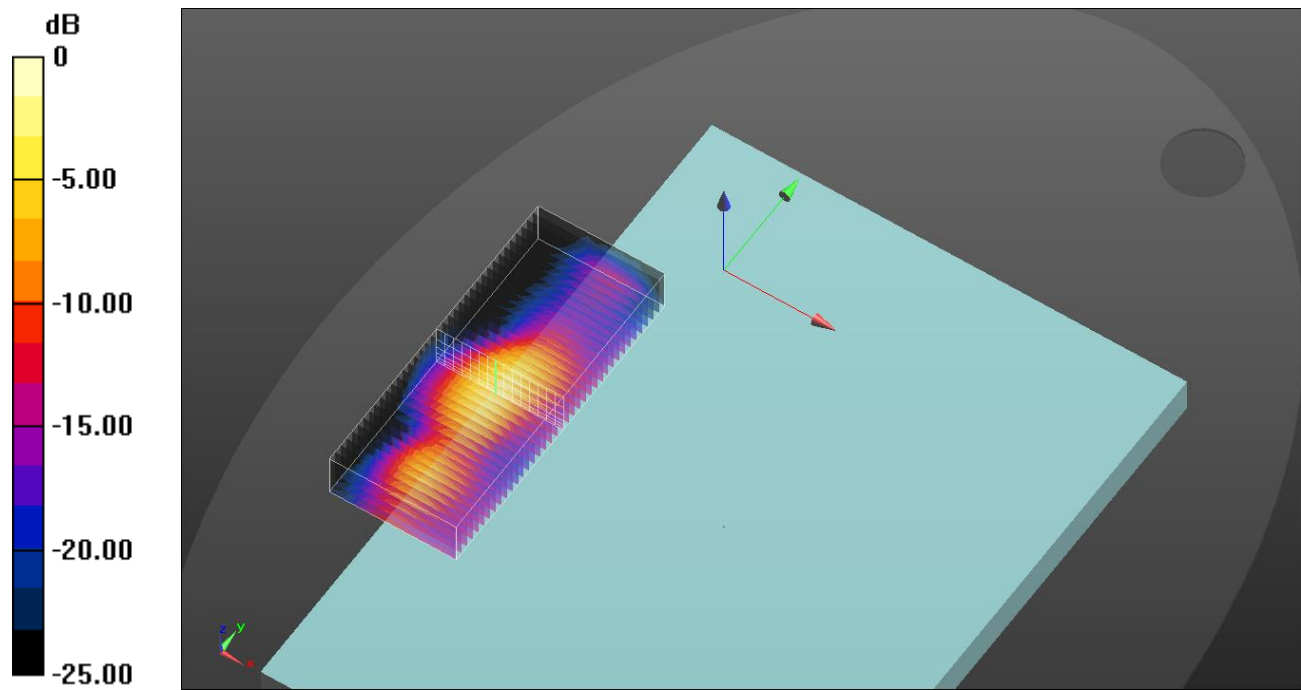
Reference Value = 13.33 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.475 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.106 W/kg

Total Absorbed Power = 0.00391 W

Maximum value of SAR (measured) = 0.377 W/kg



0 dB = 0.377 W/kg = -4.24 dBW/kg

WiFi 2.4GHz

Frequency: 2412 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.816$ S/m; $\epsilon_r = 38$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2412 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001

Rear/802.11 b mode ch.1 Ant2/Volume Scan (16x38x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

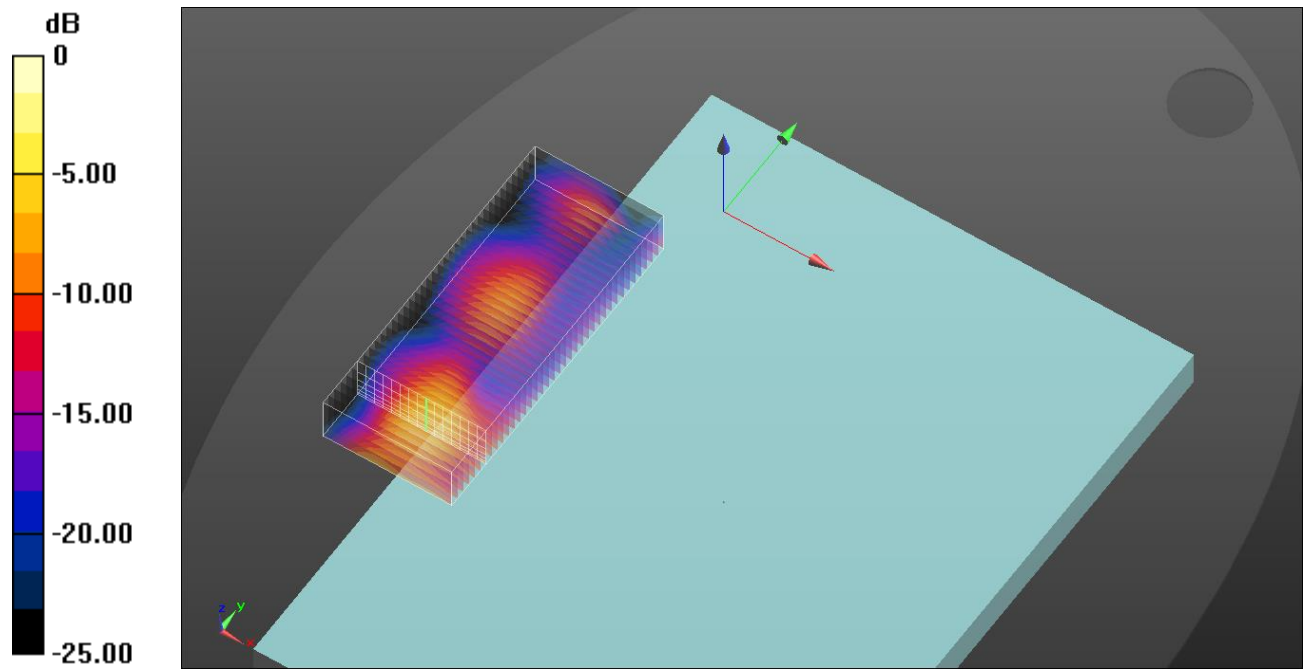
Reference Value = 16.66 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.728 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.148 W/kg

Total Absorbed Power = 0.00572 W

Maximum value of SAR (measured) = 0.572 W/kg



0 dB = 0.572 W/kg = -2.43 dBW/kg

WiFi 5GHz

Frequency: 5775 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
Medium parameters used: $f = 5775$ MHz; $\sigma = 5.138$ S/m; $\epsilon_r = 35.168$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001

Rear/802.11 ac mode ch.155 Ant 1/Volume Scan (16x38x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

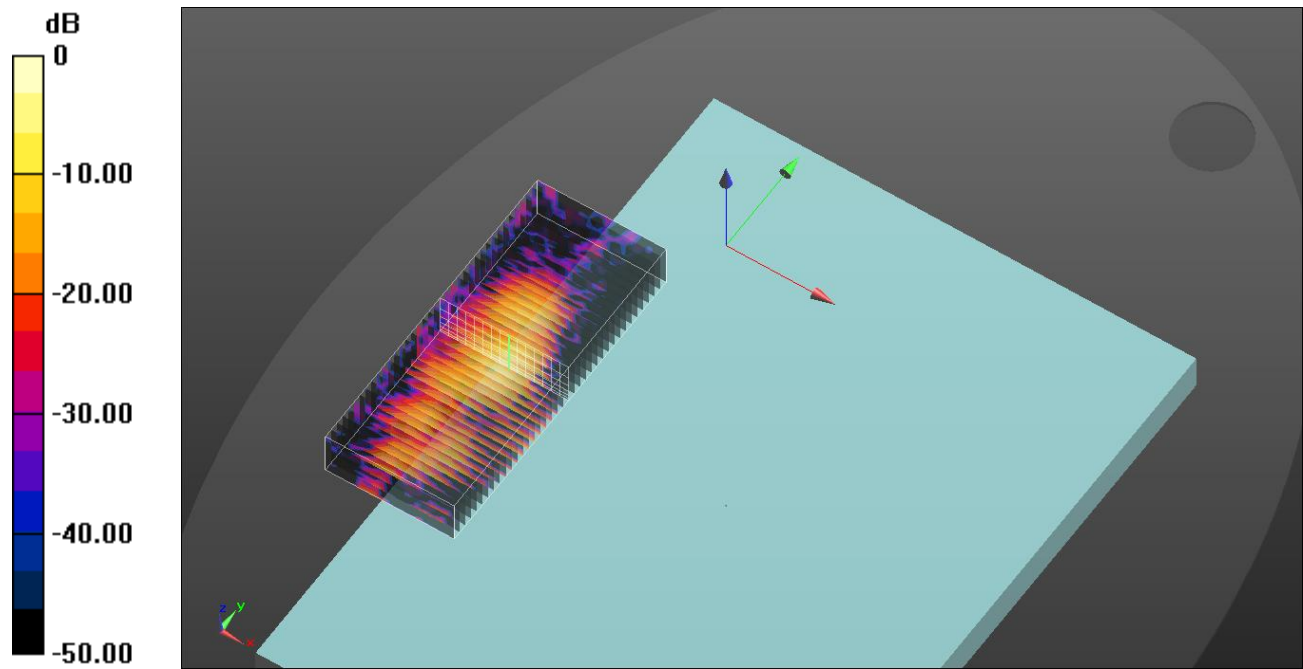
Reference Value = 10.51 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.074 W/kg

Total Absorbed Power = 0.00180 W

Maximum value of SAR (measured) = 0.683 W/kg



0 dB = 0.683 W/kg = -1.66 dBW/kg

WiFi 5GHz

Frequency: 5775 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
Medium parameters used: $f = 5775$ MHz; $\sigma = 5.196$ S/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001

Rear/802.11 ac mode ch.155 Ant 2/Volume Scan (16x38x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

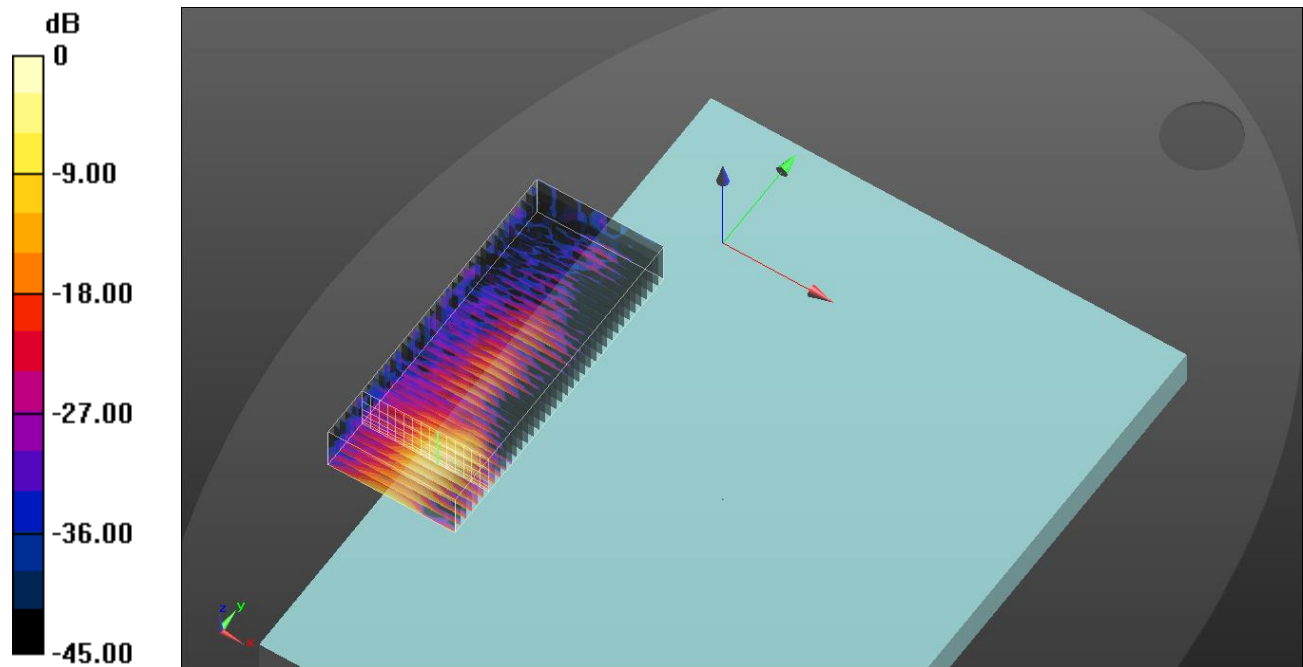
Reference Value = 14.31 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.26 W/kg

SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.161 W/kg

Total Absorbed Power = 0.00269 W

Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

WiFi 2.4GHz

Frequency: 2462 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 23.0°C; Liquid Temperature: 22.0°C
Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.859$ S/m; $\epsilon_r = 37.958$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.012W/kg
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2462 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001

Rear/802.11 b mode ch.11 Ant 1/Volume Scan (16x38x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

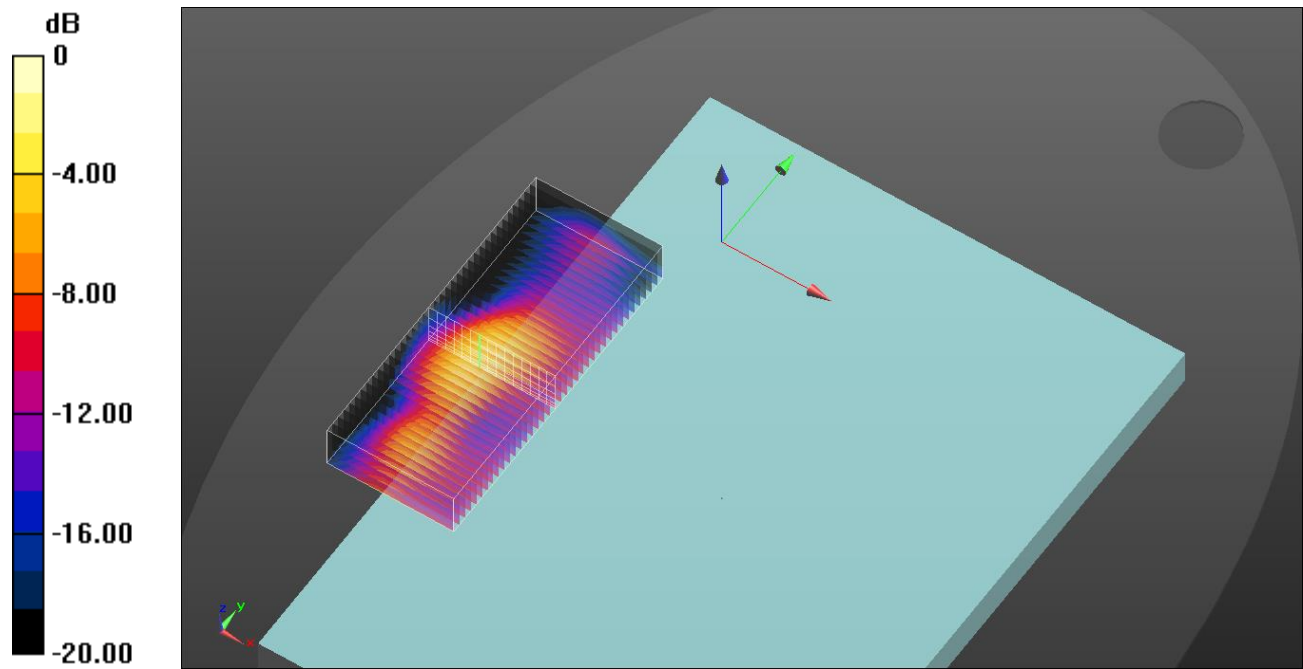
Reference Value = 16.22 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.351 W/kg; SAR(10 g) = 0.172 W/kg

Total Absorbed Power = 0.00858 W

Maximum value of SAR (measured) = 0.560 W/kg



0 dB = 0.560 W/kg = -2.52 dBW/kg

BT +DTS Ant 2+UNII MIMO

Multi-Band Average SAR Multi-Band Configurations:

DASY Configuration for Rear/Bluetooth GFSK ch.39/Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, Bluetooth (DH5) (0); Frequency: 2441 MHz; Duty Cycle: 1:1.29033; PMF: 1

Medium: HSL2450MHz Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.843$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2441 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

DASY Configuration for Rear/802.11b mode ch.1 Ant 2/Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2412 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2.4GHz Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.816$ S/m; $\epsilon_r = 38$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2412 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

DASY Configuration for Rear/802.11ac mode ch.155 Ant 1/Volume Scan:

Date/Time: 2021-06-04 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11a/n/ac 5 GHz Band (0); Frequency: 5775 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5GHz Medium parameters used: $f = 5775$ MHz; $\sigma = 5.138$ S/m; $\epsilon_r = 35.168$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
 - Sensor-Surface: 1.4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
 - Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
 - Measurement SW: DASY52, Version 52.10 (3)
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DASY Configuration for Rear/802.11ac mode ch.155 Ant 2/Volume Scan:

Date/Time: 2021-06-10 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11a/n/ac 5 GHz Band (0); Frequency: 5775 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5GHz Medium parameters used: $f = 5775$ MHz; $\sigma = 5.196$ S/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

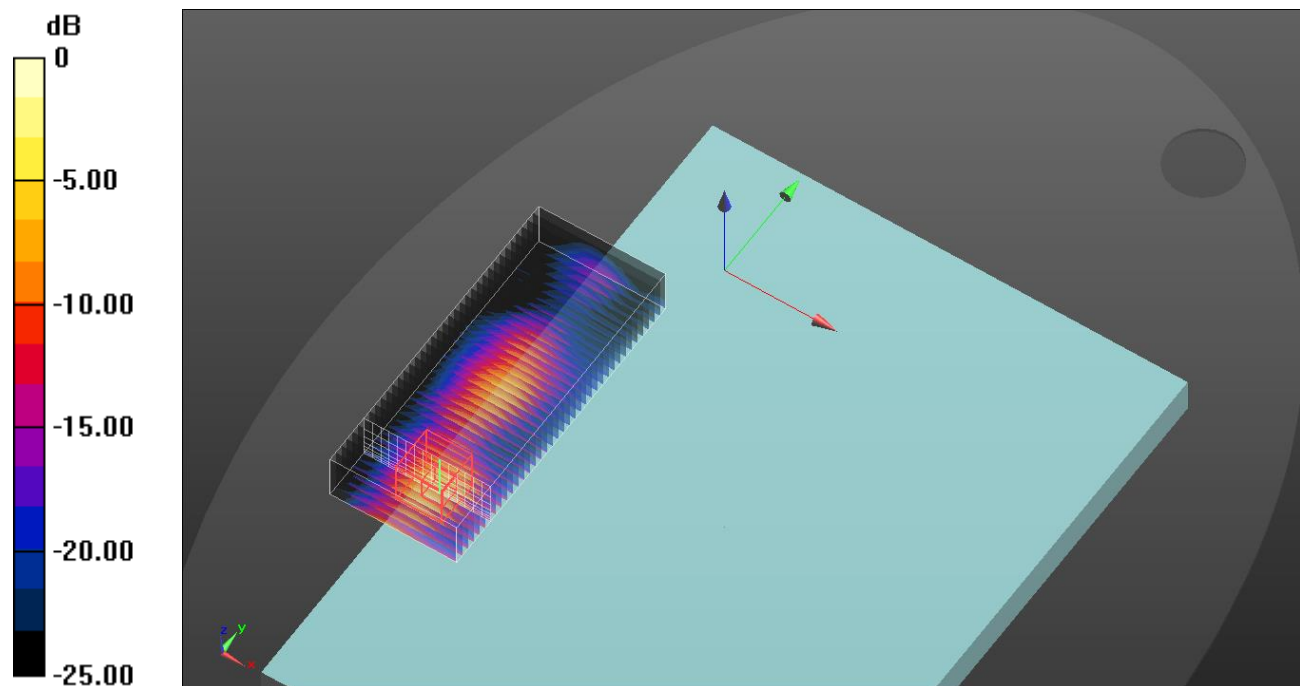
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

Multi Band Result:

SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.475 W/kg

Maximum value of SAR (interpolated) = 4.44 W/kg



0 dB = 4.44 W/kg = 6.47 dBW/kg

DTS MIMO+UNII MIMO

Multi-Band Average SAR Multi-Band Configurations:

DASY Configuration for Rear/802.11b mode ch 11 Ant 1/Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2462 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2450MHz Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.859$ S/m; $\epsilon_r = 37.958$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2462 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

DASY Configuration for Rear/802.11b mode ch.1 Ant2 2/Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2412 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2.4GHz Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.816$ S/m; $\epsilon_r = 38$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2412 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

DASY Configuration for Rear/802.11ac VHT80 mode ch 155 Ant 1/Volume Scan:

Date/Time: 2021-06-04 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11a/n/ac 5 GHz Band (0); Frequency: 5775 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5GHz Medium parameters used: $f = 5775$ MHz; $\sigma = 5.138$ S/m; $\epsilon_r = 35.168$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
 - Sensor-Surface: 1.4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
 - Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
 - Measurement SW: DASY52, Version 52.10 (3)
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DASY Configuration for Rear/802.11ac mode ch 155 Ant 2/Volume Scan:

Date/Time: 2021-06-10 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11a/n/ac 5 GHz Band (0); Frequency: 5775 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL5GHz Medium parameters used: $f = 5775$ MHz; $\sigma = 5.196$ S/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

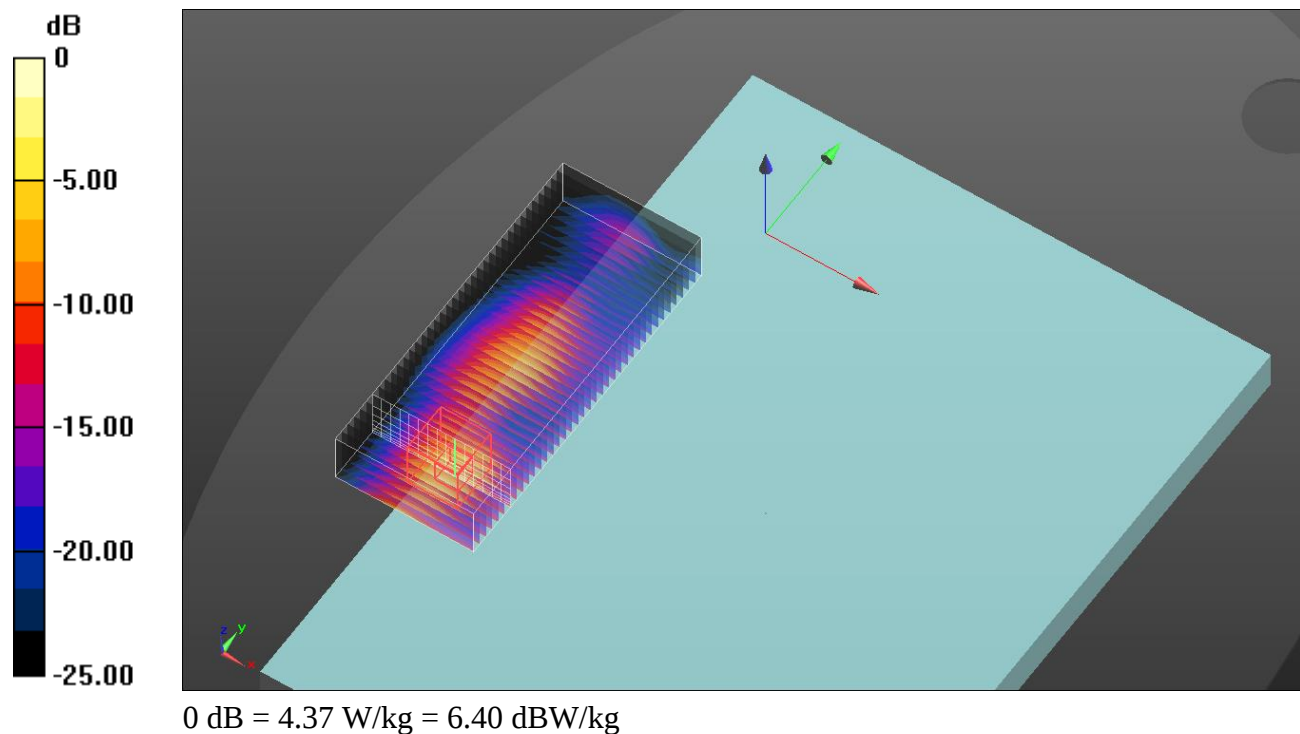
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(5.41, 5.41, 5.41) @ 5775 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

Multi Band Result:

SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.477 W/kg

Maximum value of SAR (interpolated) = 4.37 W/kg



Multi-Band Average SAR Multi-Band Configurations:

DASY Configuration for Rear/Bluetooth GFSK ch.39/Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, Bluetooth (DH5) (0); Frequency: 2441 MHz; Duty Cycle: 1:1.29033; PMF: 1

Medium: HSL2450MHz Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.843$ S/m; $\epsilon_r = 37.969$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2441 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

DASY Configuration for Rear/802.11b mode ch.1 Ant 2 /Volume Scan:

Date/Time: 2021-06-09 Test Laboratory: UL Korea, Ltd. Suwon Laboratory

Communication System: UID 0, IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2412 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2.4GHz Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.816$ S/m; $\epsilon_r = 38$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

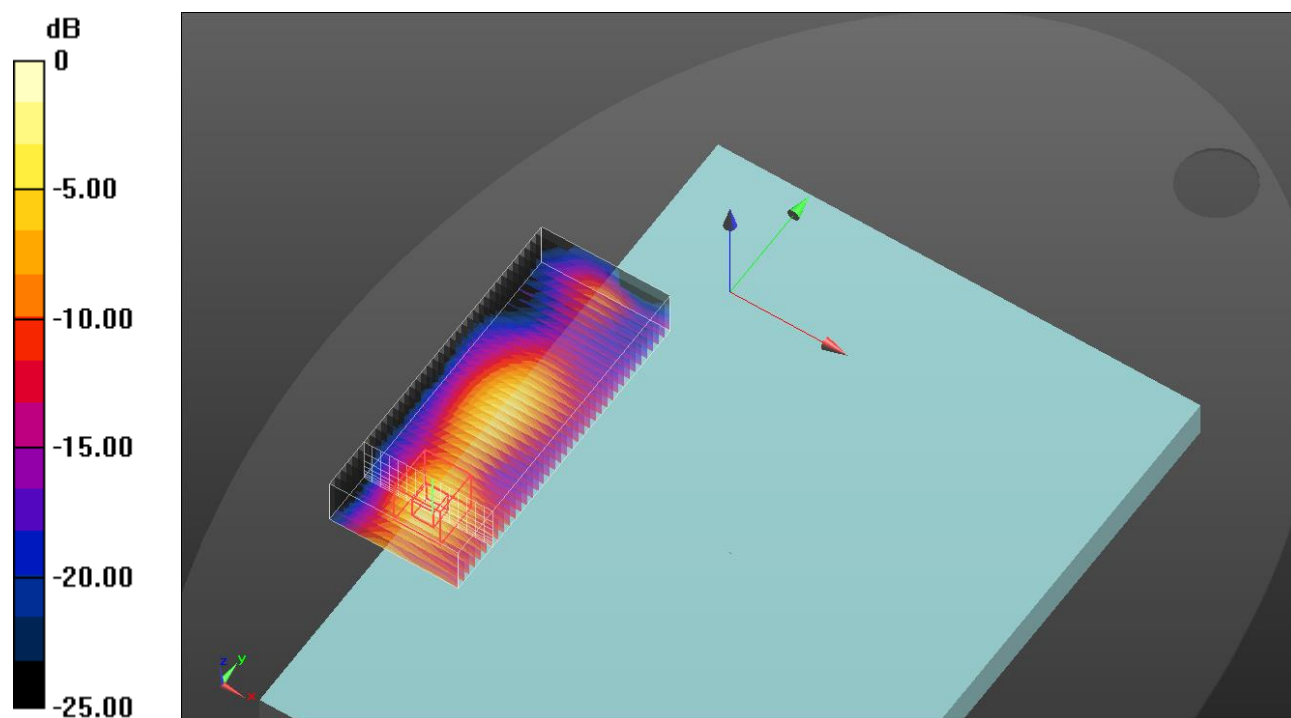
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

- Probe: EX3DV4 - SN7645; ConvF(8.26, 8.26, 8.26) @ 2412 MHz; Calibrated: 2021-04-15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1494; Calibrated: 2020-07-23
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2001
- Measurement SW: DASY52, Version 52.10 (3)

Multi Band Result:

SAR(1 g) = 0.478 W/kg; SAR(10 g) = 0.212 W/kg

Maximum value of SAR (interpolated) = 1.034 W/kg



0 dB = 1.034 W/kg = 0.21 dBW/kg