Appendix B

Detailed Test Results

1. WiFi
WiFi 2.4G for Body
WiFi 5G for Body

Date: 2019-10-30

Test Laboratory: SGS-SAR Lab

QCNFA324 WIFI 2.4G 802.11b 11CH Back side 0mm Ant 0

DUT: QCNFA324; Type: 2x2 802.11A/B/G/N/AC WiFi+Bluetooth Module; Serial: HGCDJZV0

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2462 MHz;Duty Cycle: 1:1.014

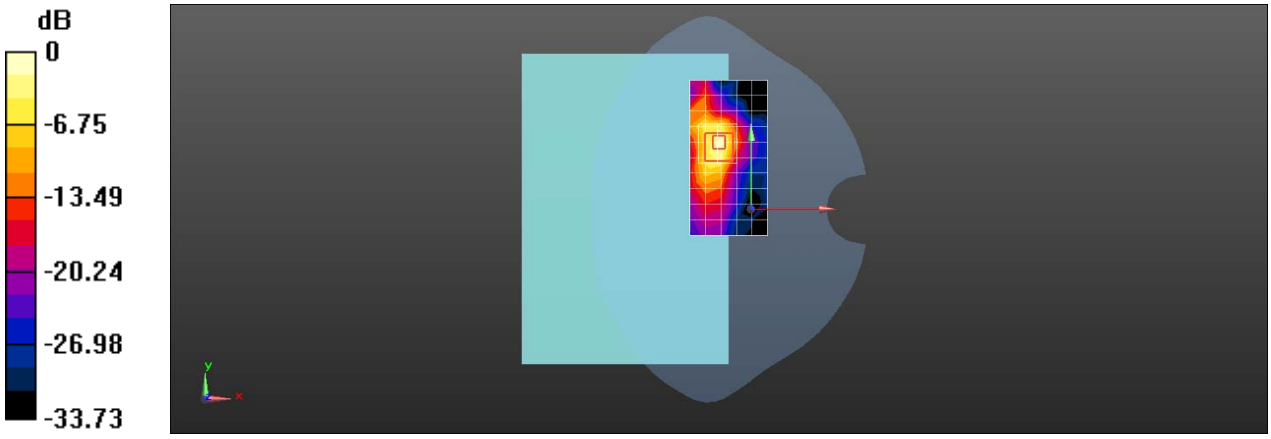
Medium: HSL2450;Medium parameters used: f = 2462 MHz; σ = 1.816 S/m; ε_r = 40.63; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.51 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.788 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 2.44 W/kg
SAR(1 g) = 0.795 W/kg; SAR(10 g) = 0.286 W/kg
Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

Date: 2019-10-30

Test Laboratory: SGS-SAR Lab

QCNFA324 WIFI 2.4G 802.11b 11CH Back side 0mm Ant 1

DUT: QCNFA324; Type: 2x2 802.11A/B/G/N/AC WiFi+Bluetooth Module; Serial: HGCDJZV0

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2462 MHz;Duty Cycle: 1:1.014

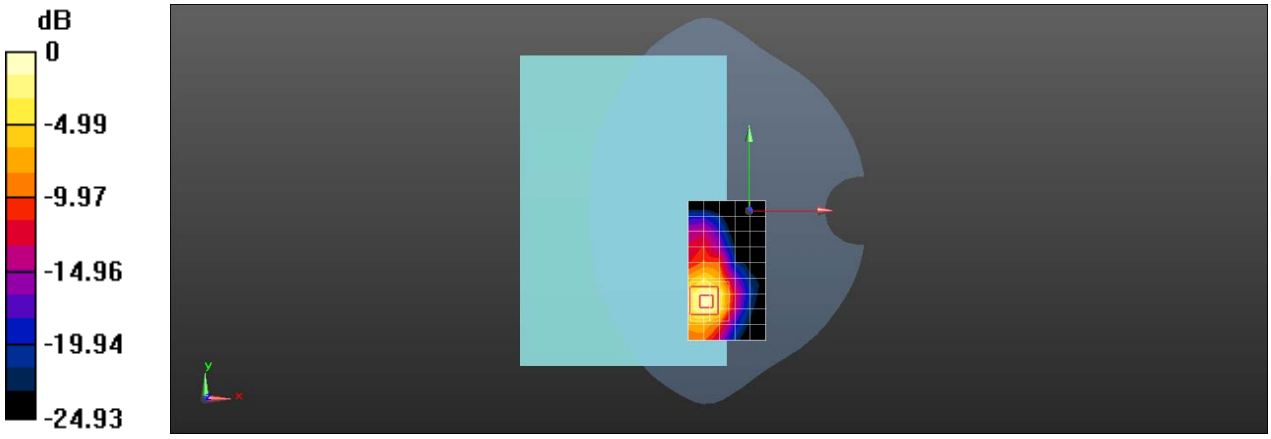
Medium: HSL2450;Medium parameters used: f = 2462 MHz; σ = 1.816 S/m; ε_r = 40.63; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.879 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.153 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.681 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

Date: 2019-11-29

Test Laboratory: SGS-SAR Lab

QCNFA324 WIFI 2.4G 802.11b 11CH Back side 0mm MIMO

DUT: QCNFA324; Type: 2x2 802.11A/B/G/N/AC WiFi+Bluetooth Module; Serial: HA11HT4R

Communication System: UID 0, wifi2.4G; Frequency: 2462 MHz;Duty Cycle: 1:1.014

Medium: HSL2450;Medium parameters used: f = 2462 MHz; σ = 1.814 S/m; ε_r = 40.145; ρ = 1000 kg/m^3
Phantom section: Flat Section

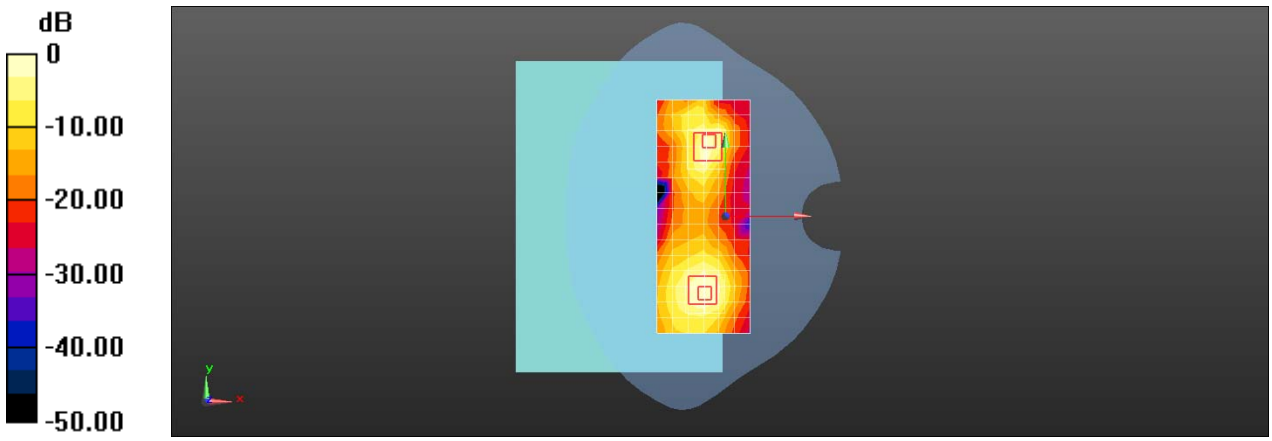
DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.93, 6.93, 6.93); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn871; Calibrated: 2019-06-27
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.22 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.295 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.915 W/kg; SAR(10 g) = 0.406 W/kg
Maximum value of SAR (measured) = 1.45 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.295 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.631 W/kg; SAR(10 g) = 0.226 W/kg
Maximum value of SAR (measured) = 1.16 W/kg



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

Date: 2019-10-11

Test Laboratory: SGS-SAR Lab

QCNFA324 WIFI 5G 802.11a 64CH Top side 0mm Ant 0

DUT: QCNFA324; Type: 2x2 802.11A/B/G/N/AC WiFi+Bluetooth Module; Serial: HGCDJZV0

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5320 MHz;Duty Cycle: 1:1.059

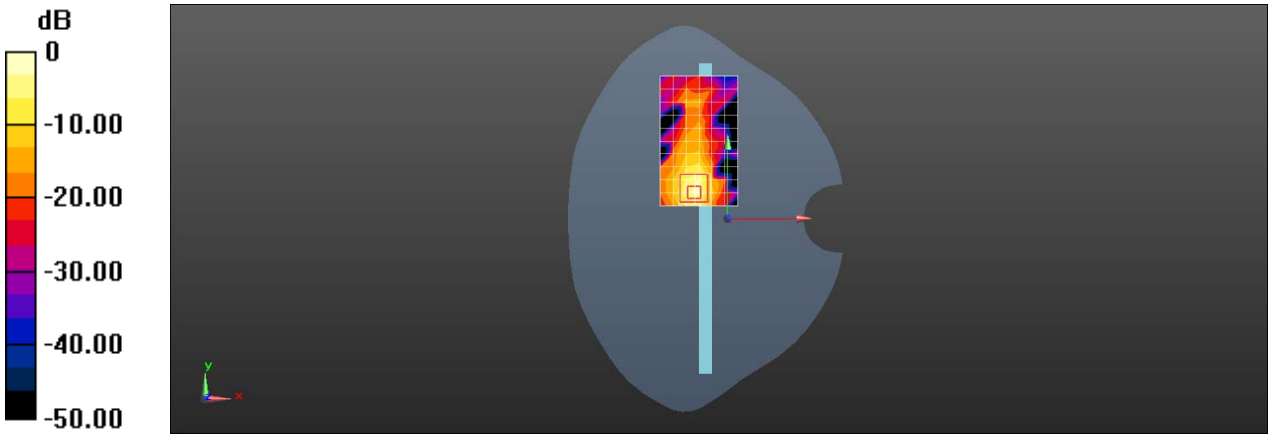
Medium: HSL5G;Medium parameters used: f = 5320 MHz; σ = 4.851 S/m; ε_r = 35.762; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(5, 5, 5); Calibrated: 2019-06-19;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.564 W/kg

Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.854 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.083 W/kg
Maximum value of SAR (measured) = 0.925 W/kg



0 dB = 0.925 W/kg = -0.34 dBW/kg

Date: 2019-10-11

Test Laboratory: SGS-SAR Lab

QCNFA324 WIFI 5G 802.11a 64CH Top side 0mm Ant 1

DUT: QCNFA324; Type: 2x2 802.11A/B/G/N/AC WiFi+Bluetooth Module; Serial: HGCDJZV0

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5320 MHz;Duty Cycle: 1:1.059

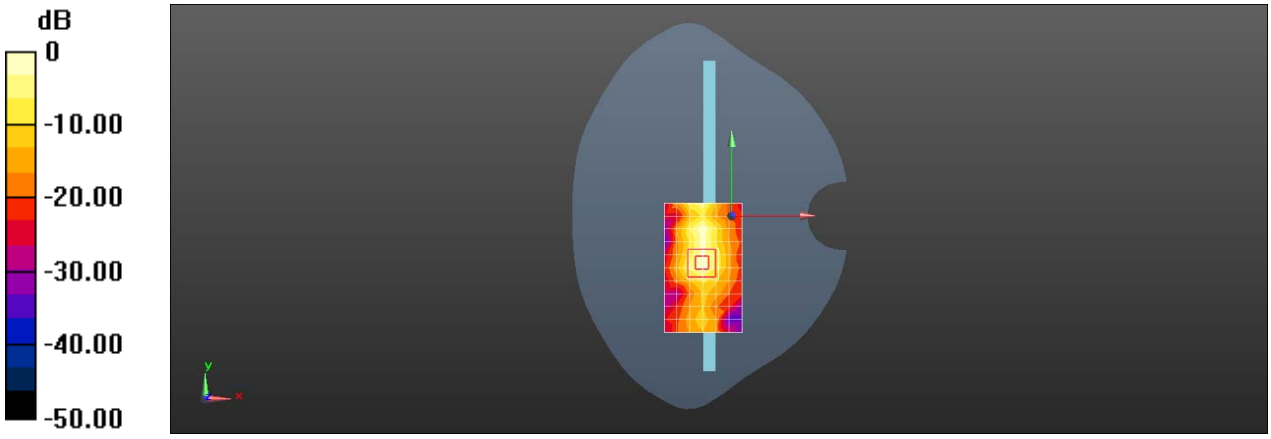
Medium: HSL5G;Medium parameters used: f = 5320 MHz; σ = 4.851 S/m; ε_r = 35.762; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(5, 5, 5); Calibrated: 2019-06-19;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.22 W/kg

Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.968 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 0.551 W/kg; SAR(10 g) = 0.152 W/kg
Maximum value of SAR (measured) = 1.40 W/kg



0 dB = 1.40 W/kg = 1.46 dBW/kg