



Appendix B. System Performance Check

Tissue Calibration Result :

6.1.3

| Frequency (MHz) | Liquid Temp | Measured Values (W/kg) | | Target Values (W/kg) | | Deviation[%] | | Limit % | Measured. Date |
|-----------------|-------------|------------------------|-------------------|----------------------|-------------------|--------------|--------|---------|----------------|
| | | σ | ϵ_r (e') | σ | ϵ_r (e') | 1g | 10g | | |
| 2450 | 22.2 | 1.860 | 40.665 | 1.8 | 39.2 | 3.33% | 3.74% | ±5% | 2022/6/7 |
| 5250 | 22.3 | 4.692 | 35.578 | 4.71 | 35.95 | -0.38% | -1.03% | ±5% | 2022/6/8 |
| 5600 | 22.4 | 5.104 | 34.886 | 5.07 | 35.5 | 0.67% | -1.73% | ±5% | 2022/6/8 |
| 5750 | 22.4 | 5.281 | 34.596 | 5.22 | 35.3 | 1.17% | -1.99% | ±5% | 2022/6/9 |

Result of System Performance Check :

6.1.7

| Frequency (MHz) | Dipole S/N | Measured SAR Values (W/kg) | | Target SAR Values (W/kg) | | Deviation[%] | | Limit % | Measured. Date |
|-----------------|------------|----------------------------|------|--------------------------|------|--------------|--------|---------|----------------|
| | | 1g | 10g | 1g | 10g | 1g | 10g | | |
| 2450 | 914 | 13.8 | 6.42 | 13 | 5.92 | 6.15% | 8.45% | ±10% | 2022/6/7 |
| 5250 | 1156 | 7.34 | 2.05 | 7.64 | 2.18 | -3.93% | -5.96% | ±10% | 2022/6/8 |
| 5600 | 1156 | 8.25 | 2.31 | 8.16 | 2.33 | 1.10% | -0.86% | ±10% | 2022/6/8 |
| 5750 | 1156 | 8.36 | 2.3 | 7.88 | 2.24 | 6.09% | 2.68% | ±10% | 2022/6/9 |



System Check_Head_2450MHz

Date: 2022/6/7

DUT: D2450V2; Serial: D2450V2 - SN:914

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.86$ S/m; $\epsilon_r = 40.665$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(7.75, 7.75, 7.75) @ 2450 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2450MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.8 W/kg

2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.4 V/m; Power Drift = -0.04 dB

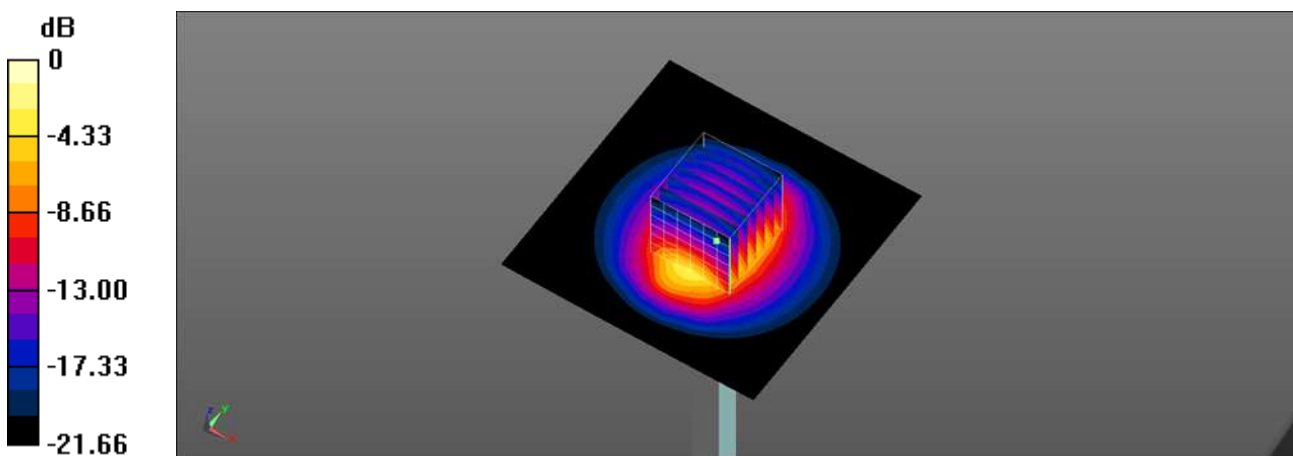
Peak SAR (extrapolated) = 28.9 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.42 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 48.1%

Maximum value of SAR (measured) = 23.2 W/kg



0 dB = 23.2 W/kg = 13.65 dBW/kg



System Check_Head_5250MHz

Date: 2022/6/8

DUT: D5GHzV2; Serial: D5GHzV2 - SN:1156

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1

Medium parameters used : $f = 5250$ MHz; $\sigma = 4.692$ S/m; $\epsilon_r = 35.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(5.45, 5.45, 5.45) @ 5250 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 17.8 W/kg

5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.30 V/m; Power Drift = 0.08 dB

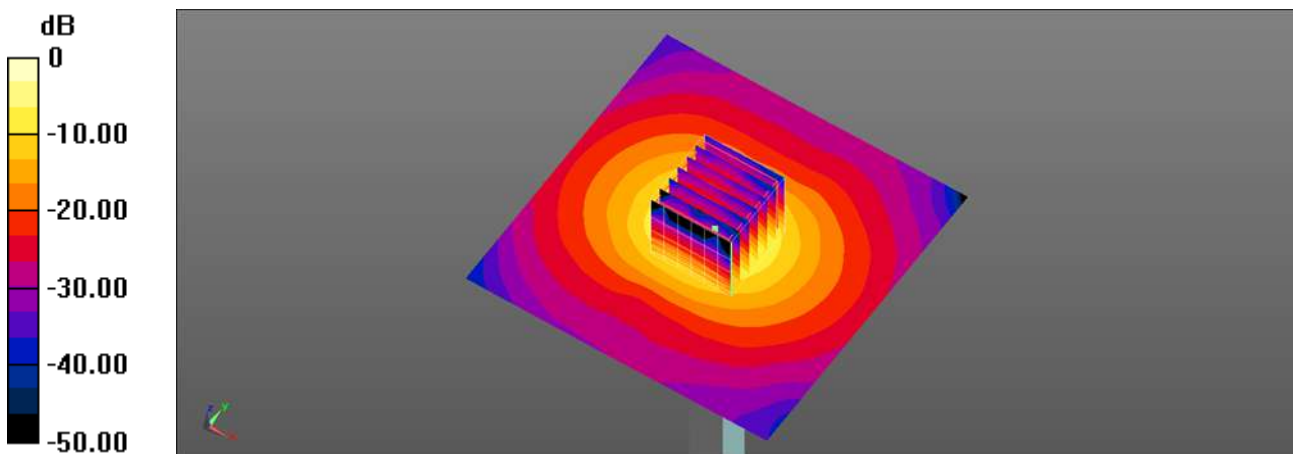
Peak SAR (extrapolated) = 30.0 W/kg

SAR(1 g) = 7.34 W/kg; SAR(10 g) = 2.05 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 64.6%

Maximum value of SAR (measured) = 17.7 W/kg



0 dB = 17.7 W/kg = 12.48 dBW/kg



System Check_Head_5600MHz

Date: 2022/6/8

DUT: D5GHzV2; Serial: D5GHzV2 - SN:1156

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.104$ S/m; $\epsilon_r = 34.886$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(4.42, 4.42, 4.42) @ 5600 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.6 W/kg

5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 71.20 V/m; Power Drift = -0.14 dB

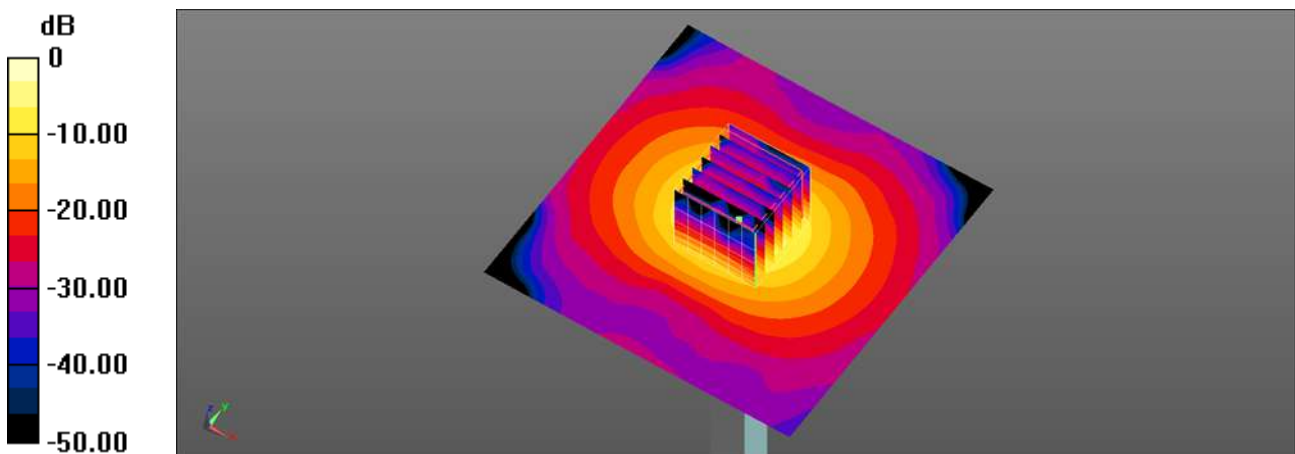
Peak SAR (extrapolated) = 36.9 W/kg

SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.31 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 61.8%

Maximum value of SAR (measured) = 20.5 W/kg



0 dB = 20.5 W/kg = 13.12 dBW/kg



System Check_Head_5750MHz

Date: 2022/6/8

DUT: D5GHzV2; Serial: D5GHzV2 - SN:1156

Communication System: CW ; Frequency: 5750 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.281$ S/m; $\epsilon_r = 34.596$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(4.98, 4.98, 4.98) @ 5750 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5750MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.6 W/kg

5750MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.65 V/m; Power Drift = -0.11 dB

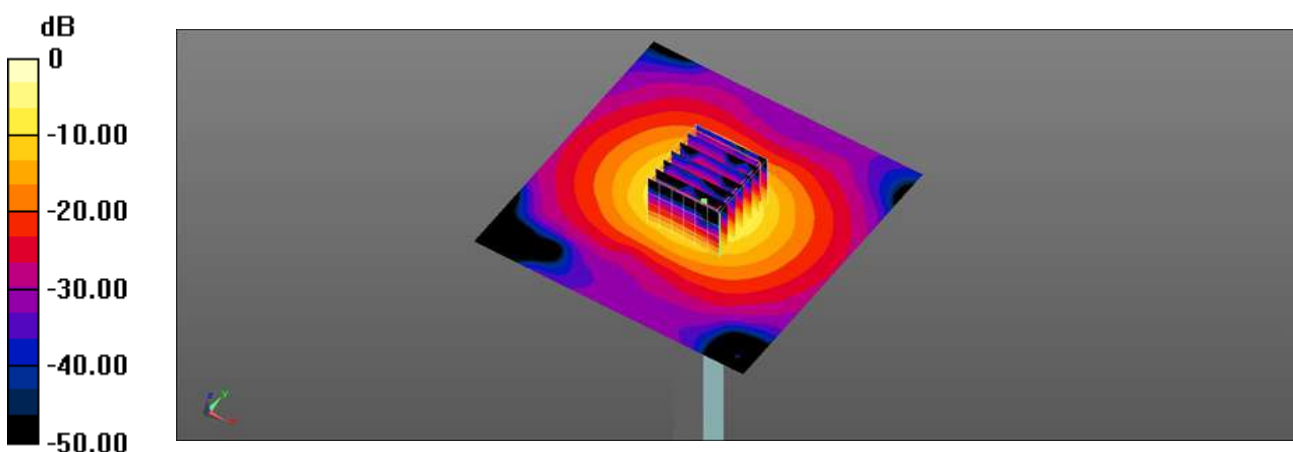
Peak SAR (extrapolated) = 36.7 W/kg

SAR(1 g) = 8.36 W/kg; SAR(10 g) = 2.3 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 62.1%

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



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

**Appendix C. Measured Conducted Power****WLAN 2.4G:**

| Data Rate | Modulation Mode | Channel | Frequency (MHz) | Conducted(average) output power | | Total AV power (dBm) | Avg Target power (dBm) |
|-----------|-----------------|---------|-----------------|---------------------------------|--------------|----------------------|------------------------|
| | | | | ANT A | ANT B | | |
| 1 | 11b | 1 | 2412 | 13.49 | 13.47 | 16.49 | 16.50 |
| | | 6 | 2437 | 13.29 | 13.26 | 16.29 | 16.50 |
| | | 11 | 2462 | 13.19 | 13.35 | 16.28 | 16.50 |
| 6 | 11g | 1 | 2412 | 13.47 | 13.30 | 16.40 | 16.50 |
| | | 6 | 2437 | 13.48 | 13.38 | 16.44 | 16.50 |
| | | 11 | 2462 | 13.34 | 13.46 | 16.41 | 16.50 |
| MCS0 | 11n HT20 | 1 | 2412 | 13.31 | 13.21 | 16.27 | 16.50 |
| | | 6 | 2437 | 13.35 | 13.40 | 16.39 | 16.50 |
| | | 11 | 2462 | 13.37 | 13.36 | 16.38 | 16.50 |
| MCS0 | 11n HT40 | 3 | 2422 | 12.90 | 13.24 | 16.08 | 16.50 |
| | | 6 | 2437 | 13.01 | 13.06 | 16.05 | 16.50 |
| | | 9 | 2452 | 12.91 | 13.17 | 16.05 | 16.50 |
| NSS1-MCS0 | 11ac VHT20 | 1 | 2412 | 13.34 | 13.26 | 16.31 | 16.50 |
| | | 6 | 2437 | 13.38 | 13.43 | 16.42 | 16.50 |
| | | 11 | 2462 | 13.41 | 13.38 | 16.41 | 16.50 |
| NSS1-MCS0 | 11ac VHT40 | 3 | 2422 | 12.93 | 13.27 | 16.11 | 16.50 |
| | | 6 | 2437 | 13.04 | 13.11 | 16.09 | 16.50 |
| | | 9 | 2452 | 12.95 | 13.21 | 16.09 | 16.50 |
| NSS1-MCS0 | 11ax HE20 | 1 | 2412 | 13.35 | 13.28 | 16.33 | 16.50 |
| | | 6 | 2437 | 13.42 | 13.44 | 16.44 | 16.50 |
| | | 11 | 2462 | 13.44 | 13.46 | 16.46 | 16.50 |
| NSS1-MCS0 | 11ax HE40 | 3 | 2422 | 13.07 | 13.43 | 16.26 | 16.50 |
| | | 6 | 2437 | 13.14 | 13.26 | 16.21 | 16.50 |
| | | 9 | 2452 | 13.08 | 13.36 | 16.23 | 16.50 |



WLAN 5G:

| Modulation Mode | Data Rate | Channel | Frequency (MHz) | Conducted(average) output power | | Total power (dBm) | Target power (dBm) |
|-----------------|-----------|---------|-----------------|---------------------------------|-------|-------------------|--------------------|
| | | | | ANT A | ANT B | | |
| 11a | 6 Mbps | 36 | 5180 | 13.45 | 13.46 | 16.47 | 16.50 |
| 11a | 6 Mbps | 40 | 5200 | 13.35 | 13.48 | 16.43 | 16.50 |
| 11a | 6 Mbps | 48 | 5240 | 13.43 | 13.44 | 16.45 | 16.50 |
| 11n HT20 | MCS 0 | 36 | 5180 | 13.24 | 13.38 | 16.32 | 16.50 |
| 11n HT20 | MCS 0 | 40 | 5200 | 13.24 | 13.36 | 16.31 | 16.50 |
| 11n HT20 | MCS 0 | 48 | 5240 | 13.32 | 13.37 | 16.36 | 16.50 |
| 11n HT40 | MCS 0 | 38 | 5190 | 12.87 | 13.25 | 16.07 | 16.50 |
| 11n HT40 | MCS 0 | 46 | 5230 | 12.95 | 13.34 | 16.16 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 36 | 5180 | 13.26 | 13.39 | 16.34 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 40 | 5200 | 13.25 | 13.37 | 16.32 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 48 | 5240 | 13.33 | 13.39 | 16.37 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 38 | 5190 | 12.89 | 13.26 | 16.09 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 46 | 5230 | 12.97 | 13.36 | 16.18 | 16.50 |
| 11ac VHT80 | NSS1-MCS0 | 42 | 5210 | 13.04 | 13.02 | 16.04 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 36 | 5180 | 13.32 | 13.41 | 16.38 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 40 | 5200 | 13.32 | 13.47 | 16.41 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 48 | 5240 | 13.34 | 13.45 | 16.41 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 38 | 5190 | 13.00 | 13.33 | 16.18 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 46 | 5230 | 13.09 | 13.41 | 16.26 | 16.50 |
| 11ax HE80 | NSS1-MCS0 | 42 | 5210 | 13.15 | 13.21 | 16.19 | 16.50 |
| 11a | 6 Mbps | 52 | 5260 | 13.50 | 13.46 | 16.49 | 16.50 |
| 11a | 6 Mbps | 60 | 5300 | 13.36 | 13.27 | 16.33 | 16.50 |
| 11a | 6 Mbps | 64 | 5320 | 13.47 | 13.36 | 16.43 | 16.50 |
| 11n HT20 | MCS 0 | 52 | 5260 | 13.29 | 13.13 | 16.22 | 16.50 |
| 11n HT20 | MCS 0 | 60 | 5300 | 13.15 | 13.20 | 16.19 | 16.50 |
| 11n HT20 | MCS 0 | 64 | 5320 | 13.28 | 13.22 | 16.26 | 16.50 |
| 11n HT40 | MCS 0 | 54 | 5270 | 13.30 | 13.15 | 16.24 | 16.50 |
| 11n HT40 | MCS 0 | 62 | 5310 | 13.43 | 13.23 | 16.34 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 52 | 5260 | 13.32 | 13.14 | 16.24 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 60 | 5300 | 13.16 | 13.21 | 16.20 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 64 | 5320 | 13.34 | 13.23 | 16.30 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 54 | 5270 | 13.31 | 13.27 | 16.30 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 62 | 5310 | 13.45 | 13.29 | 16.38 | 16.50 |
| 11ac VHT80 | NSS1-MCS0 | 58 | 5290 | 13.11 | 13.34 | 16.24 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 52 | 5260 | 13.35 | 13.33 | 16.35 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 60 | 5300 | 13.35 | 13.24 | 16.31 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 64 | 5320 | 13.38 | 13.25 | 16.33 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 54 | 5270 | 13.34 | 13.45 | 16.41 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 62 | 5310 | 13.46 | 13.38 | 16.43 | 16.50 |
| 11ax HE80 | NSS1-MCS0 | 58 | 5290 | 13.33 | 13.43 | 16.39 | 16.50 |



| Modulation Mode | Data Rate | Channel | Frequency (MHz) | Conducted(average) output power | | Total power (dBm) | Target power (dBm) |
|-----------------|-----------|---------|-----------------|---------------------------------|-------|-------------------|--------------------|
| | | | | ANT A | ANT B | | |
| 11a | 6 Mbps | 100 | 5500 | 13.46 | 13.47 | 16.48 | 16.50 |
| 11a | 6 Mbps | 116 | 5580 | 13.50 | 13.44 | 16.48 | 16.50 |
| 11a | 6 Mbps | 140 | 5700 | 13.43 | 13.49 | 16.47 | 16.50 |
| 11n HT20 | MCS 0 | 100 | 5500 | 13.23 | 13.29 | 16.27 | 16.50 |
| 11n HT20 | MCS 0 | 116 | 5580 | 13.03 | 13.29 | 16.17 | 16.50 |
| 11n HT20 | MCS 0 | 140 | 5700 | 13.21 | 13.39 | 16.31 | 16.50 |
| 11n HT40 | MCS 0 | 102 | 5510 | 13.09 | 13.21 | 16.16 | 16.50 |
| 11n HT40 | MCS 0 | 110 | 5550 | 13.10 | 13.25 | 16.19 | 16.50 |
| 11n HT40 | MCS 0 | 134 | 5670 | 12.86 | 13.31 | 16.10 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 100 | 5500 | 13.35 | 13.30 | 16.34 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 116 | 5580 | 13.17 | 13.35 | 16.27 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 140 | 5700 | 13.42 | 13.41 | 16.43 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 102 | 5510 | 13.19 | 13.25 | 16.23 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 110 | 5550 | 13.21 | 13.27 | 16.25 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 134 | 5670 | 12.89 | 13.38 | 16.15 | 16.50 |
| 11ac VHT80 | NSS1-MCS0 | 106 | 5530 | 13.38 | 13.43 | 16.42 | 16.50 |
| 11ac VHT80 | NSS1-MCS0 | 122 | 5610 | 13.13 | 13.32 | 16.24 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 100 | 5500 | 13.36 | 13.35 | 16.37 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 116 | 5580 | 13.46 | 13.36 | 16.42 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 140 | 5700 | 13.43 | 13.42 | 16.44 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 102 | 5510 | 13.34 | 13.26 | 16.31 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 110 | 5550 | 13.40 | 13.29 | 16.36 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 134 | 5670 | 13.00 | 13.41 | 16.22 | 16.50 |
| 11ax HE80 | NSS1-MCS0 | 106 | 5530 | 13.39 | 13.46 | 16.44 | 16.50 |
| 11ax HE80 | NSS1-MCS0 | 122 | 5610 | 13.15 | 13.34 | 16.26 | 16.50 |
| 11a | 6 Mbps | 149 | 5745 | 13.46 | 13.47 | 16.48 | 16.50 |
| 11a | 6 Mbps | 157 | 5785 | 13.06 | 13.49 | 16.29 | 16.50 |
| 11a | 6 Mbps | 165 | 5825 | 13.36 | 13.48 | 16.43 | 16.50 |
| 11n HT20 | MCS 0 | 149 | 5745 | 13.30 | 13.27 | 16.30 | 16.50 |
| 11n HT20 | MCS 0 | 157 | 5785 | 13.29 | 12.96 | 16.14 | 16.50 |
| 11n HT20 | MCS 0 | 165 | 5825 | 13.19 | 13.17 | 16.19 | 16.50 |
| 11n HT40 | MCS 0 | 151 | 5755 | 13.25 | 13.12 | 16.20 | 16.50 |
| 11n HT40 | MCS 0 | 159 | 5795 | 13.41 | 12.89 | 16.17 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 149 | 5745 | 13.31 | 13.30 | 16.32 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 157 | 5785 | 13.32 | 13.07 | 16.21 | 16.50 |
| 11ac VHT20 | NSS1-MCS0 | 165 | 5825 | 13.20 | 13.18 | 16.20 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 151 | 5755 | 13.28 | 13.06 | 16.18 | 16.50 |
| 11ac VHT40 | NSS1-MCS0 | 159 | 5795 | 13.43 | 12.95 | 16.21 | 16.50 |
| 11ac VHT80 | NSS1-MCS0 | 155 | 5775 | 12.99 | 13.19 | 16.10 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 149 | 5745 | 13.43 | 13.32 | 16.39 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 157 | 5785 | 13.37 | 13.46 | 16.43 | 16.50 |
| 11ax HE20 | NSS1-MCS0 | 165 | 5825 | 13.35 | 13.45 | 16.41 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 151 | 5755 | 13.21 | 13.44 | 16.34 | 16.50 |
| 11ax HE40 | NSS1-MCS0 | 159 | 5795 | 13.44 | 13.01 | 16.24 | 16.50 |
| 11ax HE80 | NSS1-MCS0 | 155 | 5775 | 13.17 | 13.48 | 16.34 | 16.50 |



Appendix D. SAR Measurement Data



Dongle

WLAN2.4G:

| Plot.No | Band | Mode | Channel | Frequency (MHz) | Data Rate | Test Position | Gap (mm) | Antenna Angle | Avg Power (dBm) | Tune-up (dBm) | SAR 1g (W/Kg) | Reported SAR 1 g (W/Kg) | Antenna |
|---------|-------------|---------|---------|-----------------|-----------|-----------------|----------|---------------|-----------------|---------------|---------------|-------------------------|---------|
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Up | 5 | 0 | 16.49 | 16.5 | 0.086 | 0.086 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Down | 5 | 0 | 16.49 | 16.5 | 0.943 | 0.945 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 6 | 2437 | 1M | Horizontal-Down | 5 | 0 | 16.29 | 16.5 | 1.090 | 1.145 | 1+2 |
| 1 | WLAN 2.4GHz | 802.11b | 11 | 2462 | 1M | Horizontal-Down | 5 | 0 | 16.28 | 16.5 | 1.110 | 1.167 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Forn | 5 | 0 | 16.49 | 16.5 | 0.303 | 0.304 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Back | 5 | 0 | 16.49 | 16.5 | 0.129 | 0.129 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Tip Mode | 5 | 0 | 16.49 | 16.5 | 0.049 | 0.049 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Up | 5 | 90 | 16.49 | 16.5 | 0.066 | 0.066 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Down | 5 | 90 | 16.49 | 16.5 | 0.055 | 0.055 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Forn | 5 | 90 | 16.49 | 16.5 | 0.244 | 0.245 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Back | 5 | 90 | 16.49 | 16.5 | 0.173 | 0.173 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Tip Mode | 5 | 90 | 16.49 | 16.5 | 0.664 | 0.665 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Up | 5 | 180 | 16.49 | 16.5 | 0.513 | 0.514 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Horizontal-Down | 5 | 180 | 16.49 | 16.5 | 0.414 | 0.415 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Forn | 5 | 180 | 16.49 | 16.5 | 0.394 | 0.395 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Vertical-Back | 5 | 180 | 16.49 | 16.5 | 0.284 | 0.285 | 1+2 |
| | WLAN 2.4GHz | 802.11b | 1 | 2437 | 1M | Top | 5 | 180 | 16.49 | 16.5 | 0.051 | 0.051 | 1+2 |



WLAN5G:

| Plot.No | Band | Mode | Channel | Frequency (MHz) | Data Rate | Test Position | Gap (mm) | Antenna Angle | Avg Power (dBm) | Tune-up (dBm) | SAR 1g (W/Kg) | Reported SAR 1 g (W/Kg) | Antenna |
|---------|-----------|---------|---------|-----------------|-----------|-----------------|----------|---------------|-----------------|---------------|---------------|-------------------------|---------|
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Up | 5 | 0 | 16.49 | 16.5 | 0.050 | 0.05 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Down | 5 | 0 | 16.49 | 16.5 | 0.879 | 0.881 | 1+2 |
| 2 | WLAN 5GHz | 802.11a | 60 | 5300 | 6M | Horizontal-Down | 5 | 0 | 16.33 | 16.5 | 1.050 | 1.093 | 1+2 |
| | WLAN 5GHz | 802.11a | 64 | 5320 | 6M | Horizontal-Down | 5 | 0 | 16.43 | 16.5 | 1.050 | 1.068 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Forn | 5 | 0 | 16.49 | 16.5 | 0.131 | 0.131 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Back | 5 | 0 | 16.49 | 16.5 | 0.083 | 0.083 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Tip Mode | 5 | 0 | 16.49 | 16.5 | 0.029 | 0.029 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Up | 5 | 90 | 16.49 | 16.5 | 0.025 | 0.025 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Down | 5 | 90 | 16.49 | 16.5 | 0.041 | 0.041 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Forn | 5 | 90 | 16.49 | 16.5 | 0.135 | 0.135 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Back | 5 | 90 | 16.49 | 16.5 | 0.053 | 0.053 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Tip Mode | 5 | 90 | 16.49 | 16.5 | 0.488 | 0.489 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Up | 5 | 180 | 16.49 | 16.5 | 0.371 | 0.372 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Horizontal-Down | 5 | 180 | 16.49 | 16.5 | 0.178 | 0.178 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Forn | 5 | 180 | 16.49 | 16.5 | 0.221 | 0.221 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Vertical-Back | 5 | 180 | 16.49 | 16.5 | 0.106 | 0.106 | 1+2 |
| | WLAN 5GHz | 802.11a | 52 | 5260 | 6M | Tip Mode | 5 | 180 | 16.49 | 16.5 | 0.030 | 0.03 | 1+2 |
| | | | | | | | | | | | | | |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Up | 5 | 0 | 16.48 | 16.5 | 0.018 | 0.018 | 1+2 |
| 3 | WLAN 5GHz | 802.11a | 100 | 5500 | 6M | Horizontal-Down | 5 | 0 | 16.48 | 16.5 | 0.843 | 0.848 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Down | 5 | 0 | 16.48 | 16.5 | 0.763 | 0.766 | 1+2 |
| | WLAN 5GHz | 802.11a | 140 | 5700 | 6M | Horizontal-Down | 5 | 0 | 16.47 | 16.5 | 0.761 | 0.766 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Forn | 5 | 0 | 16.48 | 16.5 | 0.131 | 0.132 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Back | 5 | 0 | 16.48 | 16.5 | 0.064 | 0.064 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Tip Mode | 5 | 0 | 16.48 | 16.5 | 0.011 | 0.011 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Up | 5 | 90 | 16.48 | 16.5 | 0.012 | 0.012 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Down | 5 | 90 | 16.48 | 16.5 | 0.014 | 0.014 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Forn | 5 | 90 | 16.48 | 16.5 | 0.110 | 0.111 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Back | 5 | 90 | 16.48 | 16.5 | 0.038 | 0.038 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Tip Mode | 5 | 90 | 16.48 | 16.5 | 0.359 | 0.361 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Up | 5 | 180 | 16.48 | 16.5 | 0.339 | 0.341 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Horizontal-Down | 5 | 180 | 16.48 | 16.5 | 0.175 | 0.176 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Forn | 5 | 180 | 16.48 | 16.5 | 0.254 | 0.255 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Vertical-Back | 5 | 180 | 16.48 | 16.5 | 0.045 | 0.045 | 1+2 |
| | WLAN 5GHz | 802.11a | 116 | 5580 | 6M | Tip Mode | 5 | 180 | 16.48 | 16.5 | 0.045 | 0.045 | 1+2 |
| | | | | | | | | | | | | | |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Up | 5 | 0 | 16.48 | 16.5 | 0.018 | 0.018 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Down | 5 | 0 | 16.48 | 16.5 | 0.762 | 0.766 | 1+2 |
| 4 | WLAN 5GHz | 802.11a | 157 | 5785 | 6M | Horizontal-Down | 5 | 0 | 16.29 | 16.5 | 0.947 | 0.994 | 1+2 |
| | WLAN 5GHz | 802.11a | 165 | 5825 | 6M | Horizontal-Down | 5 | 0 | 16.43 | 16.5 | 0.780 | 0.793 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Forn | 5 | 0 | 16.48 | 16.5 | 0.131 | 0.132 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Back | 5 | 0 | 16.48 | 16.5 | 0.055 | 0.055 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Tip Mode | 5 | 0 | 16.48 | 16.5 | 0.012 | 0.012 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Up | 5 | 90 | 16.48 | 16.5 | 0.013 | 0.013 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Down | 5 | 90 | 16.48 | 16.5 | 0.008 | 0.008 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Forn | 5 | 90 | 16.48 | 16.5 | 0.164 | 0.165 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Back | 5 | 90 | 16.48 | 16.5 | 0.033 | 0.033 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Tip Mode | 5 | 90 | 16.48 | 16.5 | 0.326 | 0.328 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Up | 5 | 180 | 16.48 | 16.5 | 0.285 | 0.287 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Horizontal-Down | 5 | 180 | 16.48 | 16.5 | 0.146 | 0.147 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Forn | 5 | 180 | 16.48 | 16.5 | 0.211 | 0.212 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Vertical-Back | 5 | 180 | 16.48 | 16.5 | 0.032 | 0.032 | 1+2 |
| | WLAN 5GHz | 802.11a | 149 | 5745 | 6M | Tip Mode | 5 | 180 | 16.48 | 16.5 | 0.047 | 0.047 | 1+2 |



01 IEEE 802.11b CH11_1M_Horizontal-Down_0mm_Ant 1+2_Angle 0

Communication System: UID 0, 2.4GHz Wi-Fi (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used : $f = 2462$ MHz; $\sigma = 1.869$ S/m; $\epsilon_r = 40.646$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(7.75, 7.75, 7.75) @ 2462 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (41x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.05 W/kg

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

Reference Value = 33.33 V/m; Power Drift = -0.01 dB

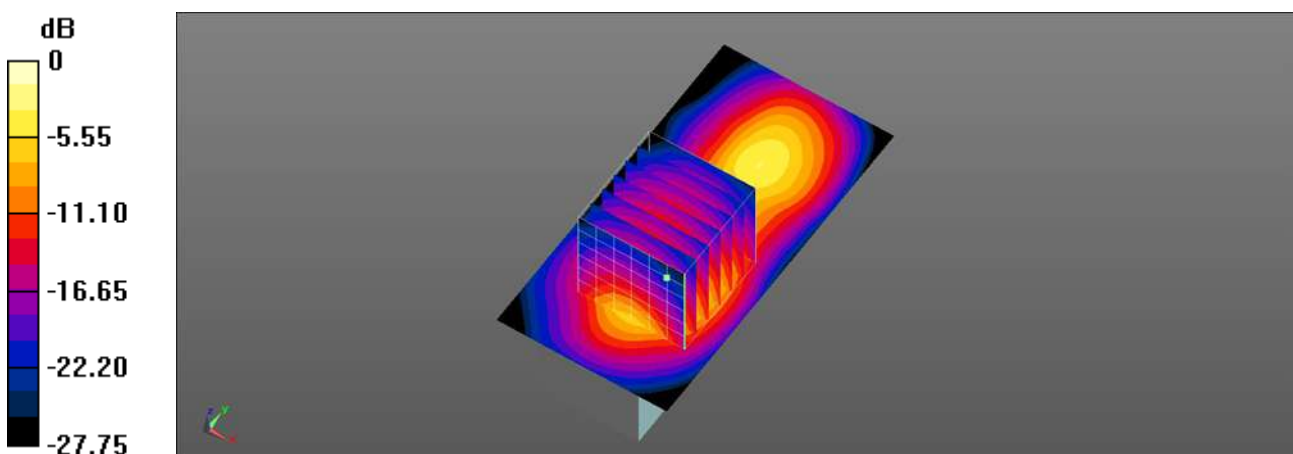
Peak SAR (extrapolated) = 2.46 W/kg

SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.444 W/kg

Smallest distance from peaks to all points 3 dB below = 7.3 mm

Ratio of SAR at M2 to SAR at M1 = 47.9%

Maximum value of SAR (measured) = 1.93 W/kg



0 dB = 1.93 W/kg = 2.86 dBW/kg



02 IEEE 802.11a CH60_6M_Horizontal-Down_0mm_Ant 1+2_Angle 0

Communication System: UID 0, 5GHz Wi-Fi (0); Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used : $f = 5300$ MHz; $\sigma = 4.764$ S/m; $\epsilon_r = 35.485$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(5.45, 5.45, 5.45) @ 5300 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.80 W/kg

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

Reference Value = 14.87 V/m; Power Drift = 0.06 dB

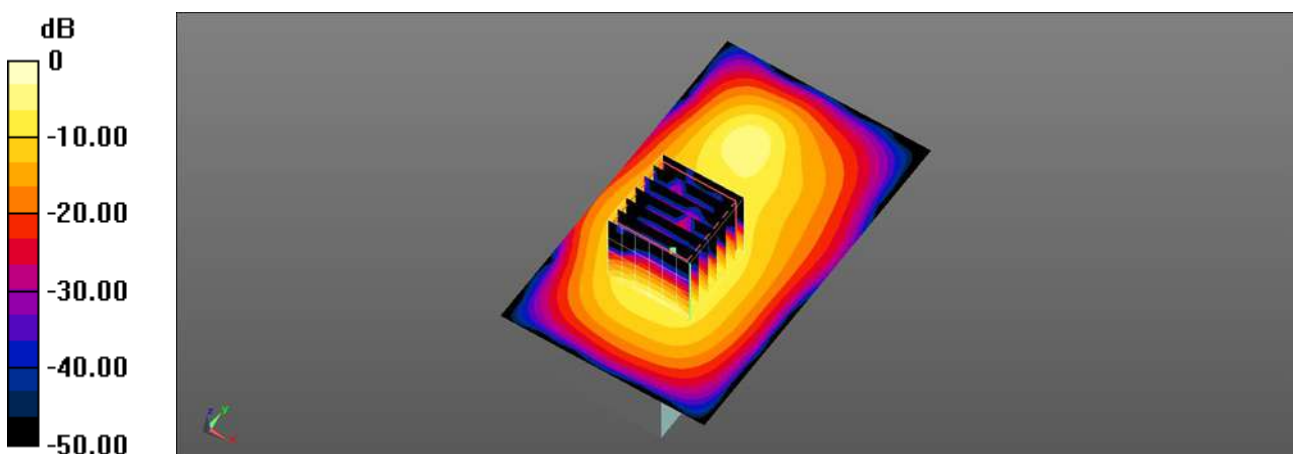
Peak SAR (extrapolated) = 4.46 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.315 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 62.8%

Maximum value of SAR (measured) = 2.56 W/kg



0 dB = 2.56 W/kg = 4.08 dBW/kg



03 IEEE 802.11a CH100_6M_Horizontal-Down_0mm_Ant 1+2_Angle 0

Communication System: 5GHz Wi-Fi (0); Frequency: 5640 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5640$ MHz; $\sigma = 5.158$ S/m; $\epsilon_r = 34.856$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(4.98, 4.98, 4.98) @ 5640 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.54 W/kg

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

Reference Value = 19.65 V/m; Power Drift = 0.12 dB

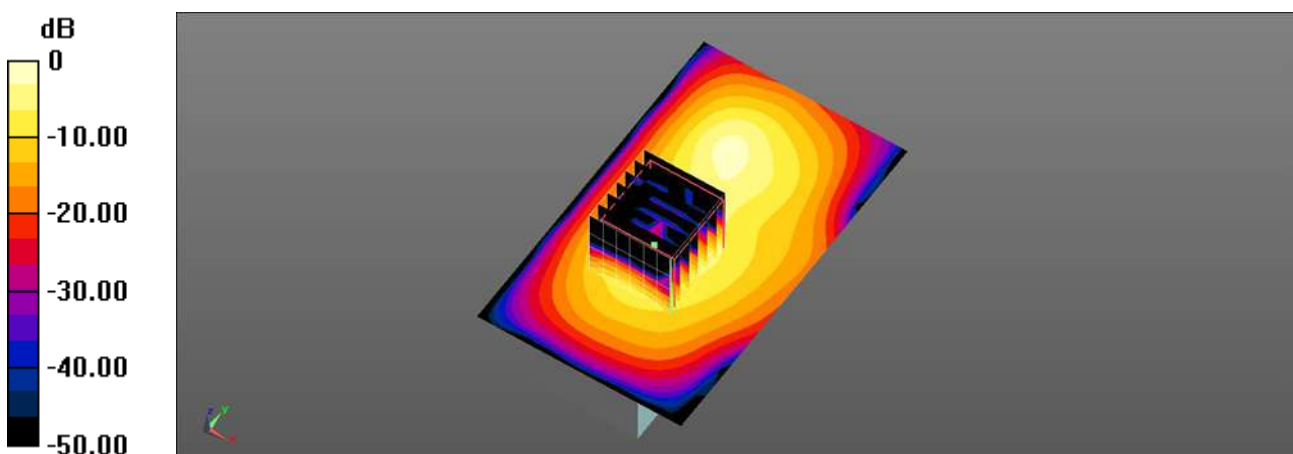
Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 0.843 W/kg; SAR(10 g) = 0.244 W/kg

Smallest distance from peaks to all points 3 dB below = 6.8 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 2.14 W/kg



0 dB = 2.14 W/kg = 3.30 dBW/kg



04 IEEE 802.11a CH157_6M_Horizontal-Down_0mm_Ant 1+2_Angle 0

Communication System: 5GHz Wi-Fi (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used : $f = 5785 \text{ MHz}$; $\sigma = 5.326 \text{ S/m}$; $\epsilon_r = 34.548$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3927; ConvF(4.98, 4.98, 4.98) @ 5785 MHz; Calibrated: 2021/7/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1379; Calibrated: 2021/7/19
- Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.12 W/kg

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

Reference Value = 12.20 V/m; Power Drift = -0.14 dB

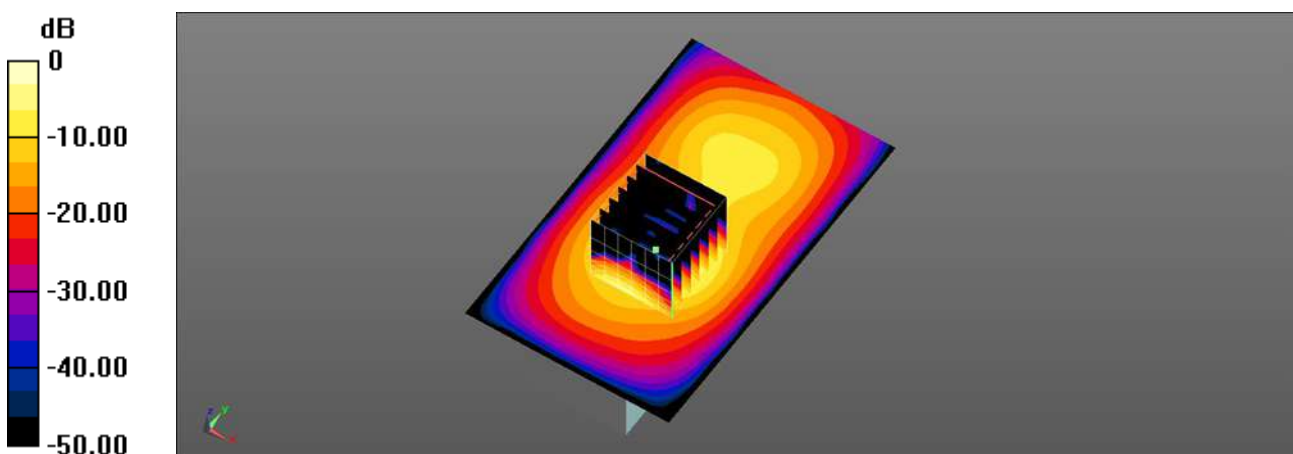
Peak SAR (extrapolated) = 4.34 W/kg

SAR(1 g) = 0.947 W/kg; SAR(10 g) = 0.257 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.4%

Maximum value of SAR (measured) = 2.32 W/kg



0 dB = 2.32 W/kg = 3.65 dBW/kg