

Date: 10/27/2018

Test Laboratory: Audix SAR Lab

### P31 802.11b CH6 2437MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 2.4G 802.11B (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz;  $\sigma = 1.977$  S/m;  $\varepsilon_r = 51.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(7.67, 7.67, 7.67); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258): SEMCAD X 14.6.10(7373)

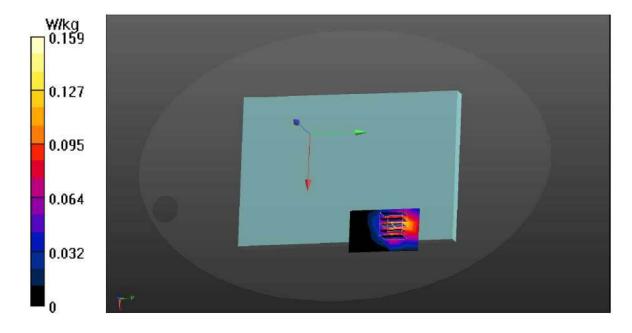
Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (measured) = 0.122 W/kg

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

Reference Value = 1.523 V/m; Power Drift = 0.59 dB

Peak SAR (extrapolated) - 0.235 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.057 W/kgMaximum value of SAR (measured) = 0.159 W/kg





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#### P32 802.11b CH6 2437MHz Aux

DUT: 13Z990

Communication System: UID 0, WIFI 2.4G 802.11B (0); Frequency: 2437 MHz:Duty Cycle:1:1

Medium parameters used: f = 2437 MIIz;  $\sigma = 1.977$  S/m;  $\varepsilon_r = 51.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(7.67, 7.67, 7.67); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

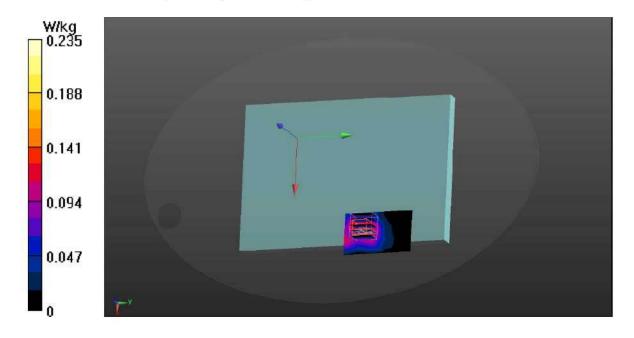
Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (measured) = 0.168 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx-8mm, dy-8mm, dz-5mm

Reference Value = 3.215 V/m; Power Drift = 1.52 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.078 W/kgMaximum value of SAR (measured) = 0.235 W/kg





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# P25 802.11n-HT20 CH6 2437MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 2.4G 802.11HT\_20 (0); Frequency: 2437 MHz; Duty

Cycle:1:1.046

Medium parameters used: f = 2437 MHz;  $\sigma = 1.977$  S/m;  $\varepsilon_r = 51.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY Configuration:

• Probe: EX3DV4 - SN3855; ConvF(7.67, 7.67, 7.67); Calibrated: 9/27/2018;

• Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0

• Electronics: DAE4 Sn1337; Calibrated: 9/19/2018

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

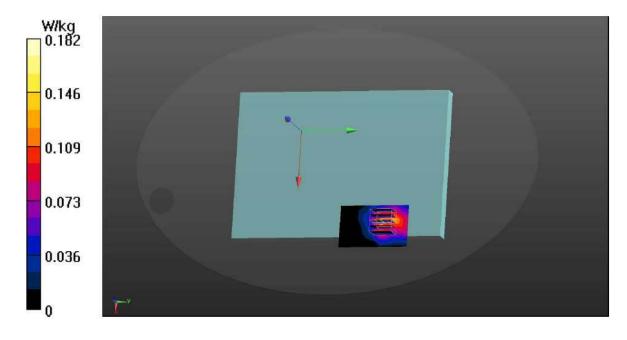
**Area Scan (4x6x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (measured) = 0.128 W/kg

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

Reference Value = 0.319 V/m; Power Drift = 0.30 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.062 W/kgMaximum value of SAR (measured) = 0.182 W/kg





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# P26 802.11n-HT20 CH6 2437MHz Aux

### DUT: 13Z990

Communication System: UID 0, WIFI 2.4G 802.11HT 20 (0); Frequency: 2437 MHz; Duty

Cycle:1:1.046

Medium parameters used: f = 2437 MHz;  $\sigma = 1.977$  S/m;  $\varepsilon_r = 51.669$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(7.67, 7.67, 7.67); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

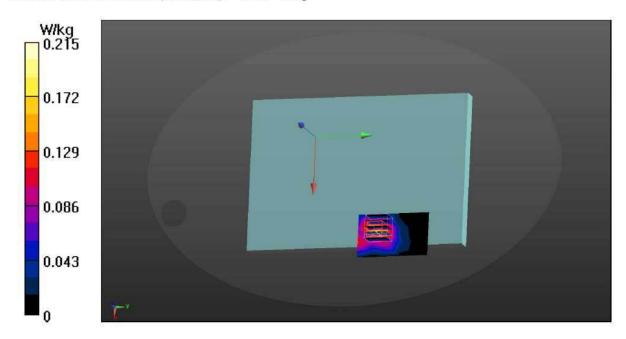
**Area Scan (4x6x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (measured) = 0.168 W/kg

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

Reference Value = 0.365 V/m; Power Drift = 1.10 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.084 W/kgMaximum value of SAR (measured) = 0.215 W/kg





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### P9 802.11a CH52 5260MHz Main

### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5260 MHz; Duty Cycle:1:1 Medium parameters used: f = 5260 MHz;  $\sigma = 5.419$  S/m;  $\epsilon_r = 47.514$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

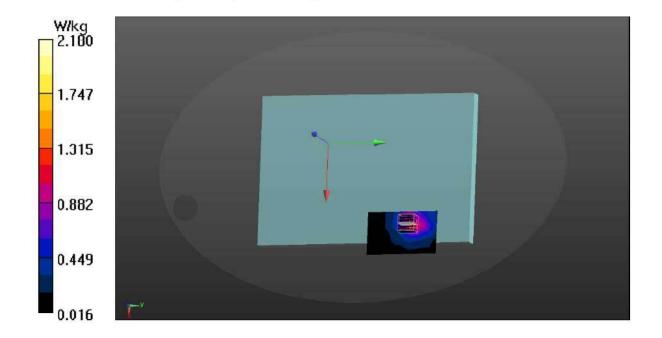
# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Maximum value of SAR (measured) = 2.18 W/kg

Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.31 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value = 3.752 V/m; Power Drift = 1.00 dB Peak SAR (extrapolated) = 3.66 W/kg SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.462 W/kg





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# P15 802.11a CH60 5300MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5300 MHz; Duty Cycle:1:1

Medium parameters used: f = 5300 MHz;  $\sigma$  = 5.488 S/m;  $\epsilon_r$  = 47.439;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

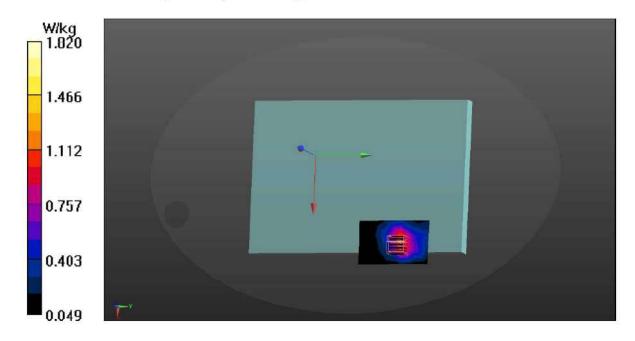
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.17 W/kg

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

Reference Value = 1.868 V/m; Power Drift = 1.33 dB

Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.416 W/kgMaximum value of SAR (measured) = 1.82 W/kg





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### P17 802.11a CH64 5320MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5320 MHz; Duty Cycle:1:1

Medium parameters used: f = 5320 MHz;  $\sigma = 5.51$  S/m;  $\varepsilon_r = 47.414$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

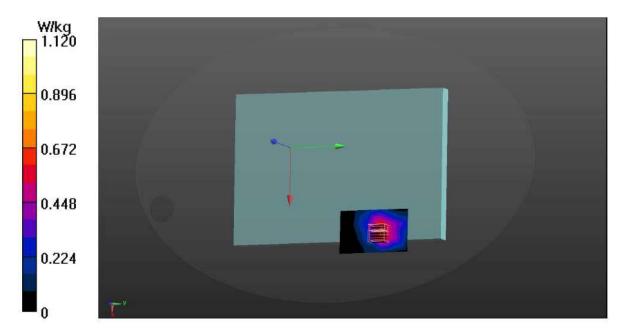
- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.657 W/kg

**Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value = 2.245 V/m; Power Drift = 0.80 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.596 W/kg; SAR(10 g) = 0.197 W/kgMaximum value of SAR (measured) = 1.12 W/kg



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### P10 802.11a CH52 5260MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5260 MHz; Duty Cycle:1:1

Medium parameters used: f = 5260 MHz;  $\sigma = 5.419$  S/m;  $\epsilon_r = 47.514$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

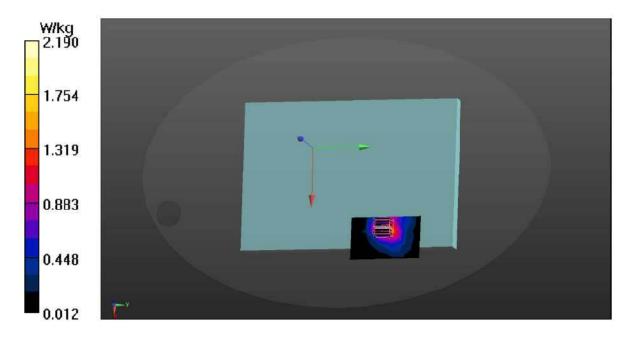
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.44 W/kg

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

Reference Value = 3.514 V/m; Power Drift = 0.55 dB

Peak SAR (extrapolated) - 4.08 W/kg

SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.509 W/kgMaximum value of SAR (measured) -2.19 W/kg





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#### P16 802.11a CH60 5300MHz Aux

#### DUT: 137.990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5300 MHz; Duty Cycle:1:1 Medium parameters used: f = 5300 MHz;  $\sigma = 5.488$  S/m;  $\varepsilon_r = 47.439$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

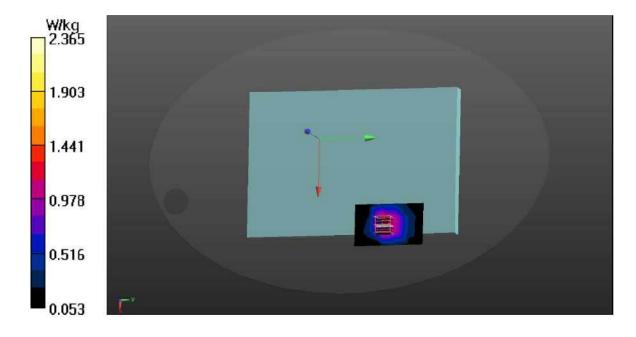
# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVΛ002ΛΛ; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.29 W/kg

**Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value = 0.9950 V/m; Power Drift = 1.23 dBPeak SAR (extrapolated) = 4.04 W/kgSAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.554 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.554 W/kgMaximum value of SAR (measured) = 2.37 W/kg



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### P18 802.11a CH64 5320MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5320 MHz; Duty Cycle:1:1 Medium parameters used: f = 5320 MHz;  $\sigma = 5.51$  S/m;  $\varepsilon_r = 47.414$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVΛ002ΛΛ; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

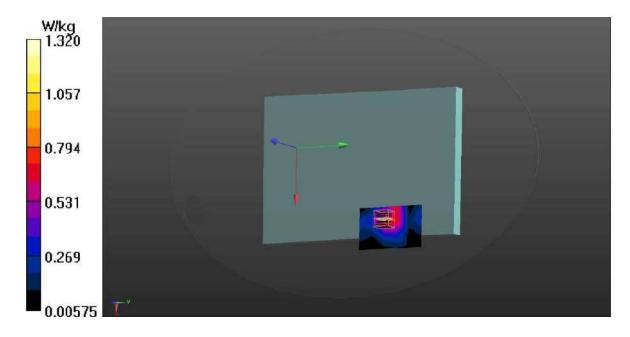
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.891 W/kg

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

Reference Value = 1.278 V/m; Power Drift = 0.75 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 0.691 W/kg; SAR(10 g) = 0.283 W/kgMaximum value of SAR (measured) = 1.32 W/kg





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# P11 802.11a CII116 5580MIIz Main

DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5580 MIIz; Duty Cycle:1:1

Medium parameters used: f = 5580 MHz;  $\sigma = 5.86 \text{ S/m}$ ;  $\varepsilon_n = 46.89$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### DASY Configuration:

Probe: EX3DV4 - SN3855; ConvF(4.07, 4.07, 4.07); Calibrated: 9/27/2018;

• Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0

• Electronics: DAE4 Sn1337; Calibrated: 9/19/2018

• Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

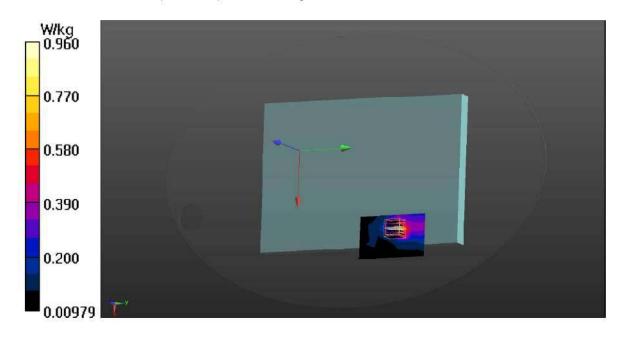
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.824 W/kg

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

Reference Value = 2.382 V/m; Power Drift = 1.23 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.182 W/kgMaximum value of SAR (measured) = 0.960 W/kg





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# P12 802.11a CH116 5580MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5580 MHz; Duty Cycle:1:1

Medium parameters used: f = 5580 MHz;  $\sigma = 5.86 \text{ S/m}$ ;  $\varepsilon_r = 46.89$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.07, 4.07, 4.07); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

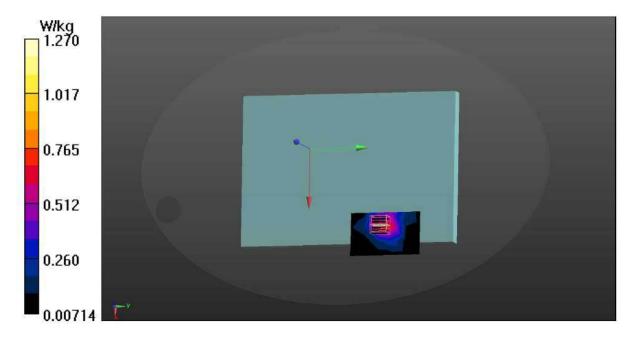
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.800 W/kg

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

Reference Value = 2.052 V/m; Power Drift = 0.25 dB

Peak SAR (extrapolated) = 2.27 W/kg

SAR(1 g) = 0.669 W/kg; SAR(10 g) = 0.275 W/kgMaximum value of SAR (measured) = 1.27 W/kg



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Test Laboratory: Audix\_SAR Lab

#### P13 802.11a CH149 5745MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5745 MHz; Duty Cycle:1:1 Medium parameters used: f = 5745 MHz;  $\sigma = 6.119$  S/m;  $\varepsilon_r = 46.579$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.3, 4.3, 4.3); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

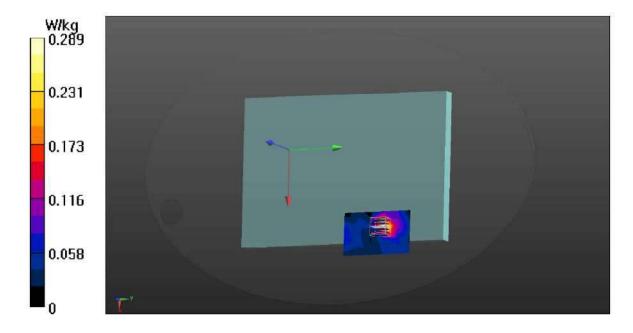
Area Scan (7x11x1): Measurement grid: dx-10mm, dy-10mm Maximum value of SAR (measured) = 0.288 W/kg

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

Reference Value = 2.897 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.520 W/kg

SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.067 W/kgMaximum value of SAR (measured) = 0.289 W/kg



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Test Laboratory: Audix SAR Lab

### P14 802.11a CH149 5745MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5745 MHz;Duty Cycle:1:1

Medium parameters used: f = 5745 MHz;  $\sigma = 6.119$  S/m;  $\varepsilon_r = 46.579$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.3, 4.3, 4.3); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

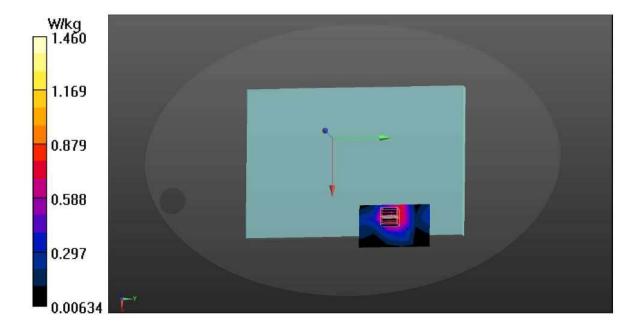
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.981 W/kg

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

Reference Value = 1.133 V/m; Power Drift = 1.27 dB

Peak SAR (extrapolated) = 2.60 W/kg

SAR(1 g) = 0.761 W/kg; SAR(10 g) = 0.315 W/kgMaximum value of SAR (measured) = 1.46 W/kg





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### P3 802.11n-HT40 CH54 5270MHz Main

## DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT\_40 (0); Frequency: 5270 MHz; Duty Cycle:1:1.087

Medium parameters used: f = 5270 MHz;  $\sigma = 5.435 \text{ S/m}$ ;  $\epsilon_r = 47.481$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

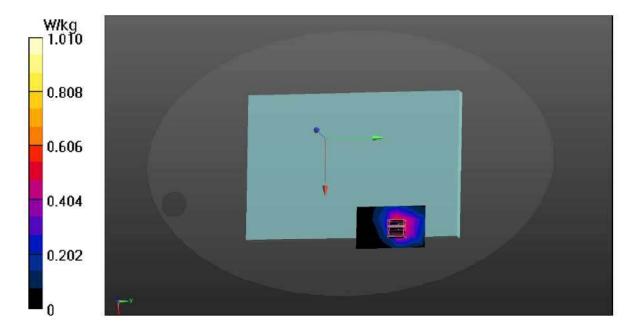
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.596 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx-4mm, dy-4mm, dz-2.5mm

Reference Value = 0.595 V/m; Power Drift = 1.00 dB

Peak SAR (extrapolated) - 1.89 W/kg

SAR(1 g) = 0.535 W/kg; SAR(10 g) = 0.171 W/kgMaximum value of SAR (measured) = 1.01 W/kg



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### P4 802.11n-HT40 CH54 5270MHz Aux

### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT 40 (0); Frequency: 5270 MHz; Duty Cycle:1:1.087

Medium parameters used: f = 5270 MIIz;  $\sigma = 5.435 \text{ S/m}$ ;  $\varepsilon_r = 47.481$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvΓ(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

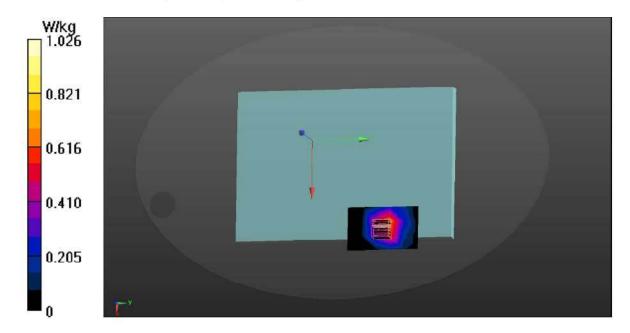
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.697 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx-4mm, dy-4mm, dz-2.5mm

Reference Value = 0.527 V/m; Power Drift = 0.99 dB

Peak SAR (extrapolated) - 2.23 W/kg

SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.199 W/kgMaximum value of SAR (measured) = 1.03 W/kg



Date: 10/29/2018

Test Laboratory: Audix SAR Lab

# P5 802.11n-HT20 CH116 5580MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT\_20 (0); Frequency: 5580 MHz; Duty Cycle:1:1.042

Medium parameters used: f = 5580 MHz;  $\sigma = 5.86 \text{ S/m}$ ;  $\varepsilon_r = 46.89$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.07, 4.07, 4.07); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Area Scan (7x8x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.347 W/kg

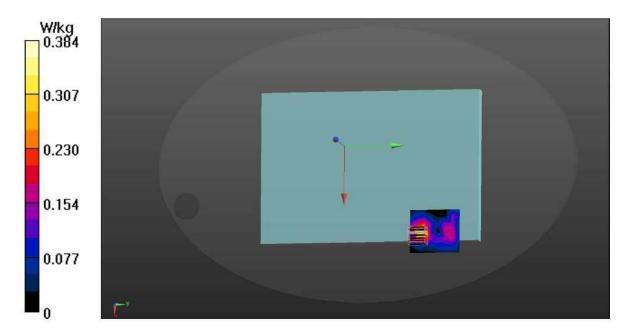
Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 0.574 V/m; Power Drift = 1.58 dB

Peak SAR (extrapolated) = 0.790 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.051 W/kg

Maximum value of SAR (measured) = 0.384 W/kg



Date: 10/29/2018

Test Laboratory: Audix\_SAR Lab

# P6 802.11n-HT20 CH116 5580MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT\_20 (0); Frequency: 5580 MHz; Duty Cycle:1:1.042

Medium parameters used: f = 5580 MHz;  $\sigma = 5.86 \text{ S/m}$ ;  $\varepsilon_r = 46.89$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.07, 4.07, 4.07); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

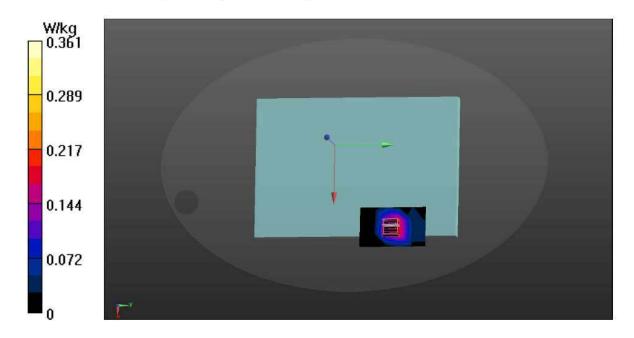
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.192 W/kg

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

Reference Value = 0.521 V/m; Power Drift = 1.52 dB

Peak SAR (extrapolated) = 0.821 W/kg

SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.057 W/kgMaximum value of SAR (measured) = 0.361 W/kg



Date: 10/30/2018

Test Laboratory: Audix SAR Lab

#### P8 802.11n-HT40 CH159 5795MHz Main

# DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT 40 (0); Frequency: 5795 MHz; Duty Cycle:1:1.087

Medium parameters used: f = 5795 MHz;  $\sigma = 6.166$  S/m;  $\varepsilon_r = 46.508$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.3, 4.3, 4.3); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

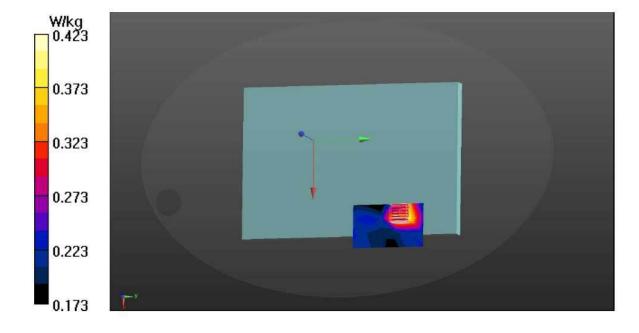
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.399 W/kg

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

Reference Value = 5.288 V/m; Power Drift = 1.85 dB

Peak SAR (extrapolated) = 0.703 W/kg

SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.273 W/kgMaximum value of SAR (measured) = 0.423 W/kg



Date: 10/30/2018

Test Laboratory: Audix\_SAR Lab

#### P7 802.11n-HT40 CH159 5795MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11HT\_40 (0); Frequency: 5795 MHz; Duty Cycle:1:1.087

Medium parameters used: f = 5795 MHz;  $\sigma = 6.166$  S/m;  $\varepsilon_r = 46.508$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.3, 4.3, 4.3); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

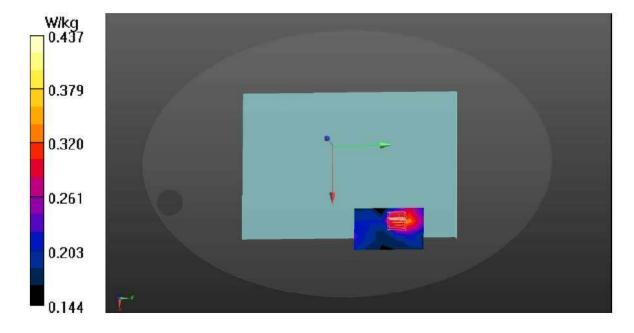
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.368 W/kg

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

Reference Value = 5.599 V/m; Power Drift = 1.28 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.360 W/kg; SAR(10 g) = 0.301 W/kgMaximum value of SAR (measured) = 0.437 W/kg





Date: 10/27/2018

Test Laboratory: Audix SAR Lab

### P33 GFSK CH78 2480MHz Main

#### DUT: 13Z990

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle:1:1.3 Medium parameters used: f = 2480 MHz;  $\sigma$  = 2.034 S/m;  $\epsilon_r$  = 51.509;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(7.67, 7.67, 7.67); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

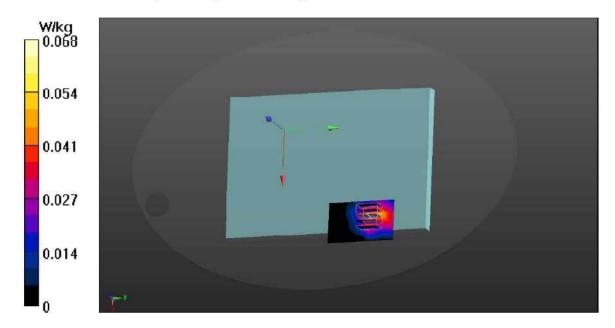
Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (measured) = 0.0483 W/kg

Zoom Scan (5x5x6)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value - 0.529 V/m; Power Drift - 1.02 dB

Peak SAR (extrapolated) = 0.0930 W/kg

SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.022 W/kgMaximum value of SAR (measured) = 0.0675 W/kg





Date: 10/28/2018

Test Laboratory: Audix\_SAR Lab

### P19 802.11a CH52 5260MHz Main

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5260 MIIz;Duty Cycle:1:1 Medium parameters used: f = 5260 MHz;  $\sigma = 5.419$  S/m;  $\epsilon_r = 47.514$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

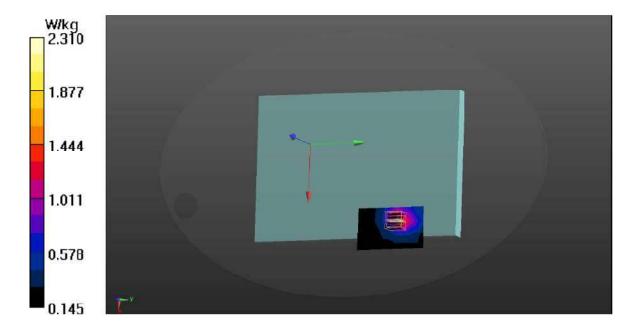
# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.79 W/kg

**Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value = 4.833 V/m; Power Drift = 0.10 dB Peak SAR (extrapolated) = 3.23 W/kg SAR(1g) = 1.17 W/kg: SAR(10g) = 0.470 W/kg

SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.470 W/kgMaximum value of SAR (measured) = 2.31 W/kg



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Date: 10/28/2018

Test Laboratory: Audix SAR Lab

# P22 802.11a CH60 5300MHz Main

DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5300 MHz; Duty Cycle:1:1

Medium parameters used: f = 5300 MHz;  $\sigma = 5.488$  S/m;  $\varepsilon_r = 47.439$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

### DASY Configuration.

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

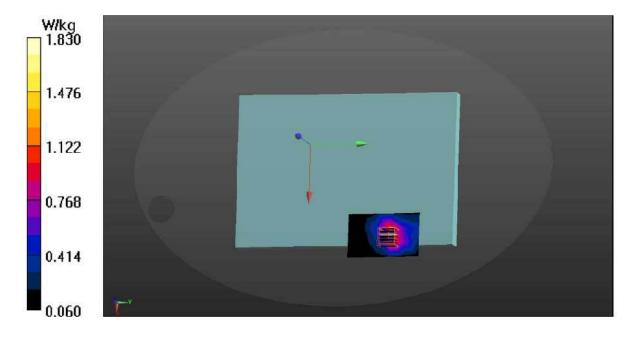
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.20 W/kg

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

Reference Value = 2.076 V/m; Power Drift = 1.88 dB

Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.421 W/kgMaximum value of SAR (measured) = 1.83 W/kg





Date: 10/22/2018

Test Laboratory: Audix SAR Lab

# P20 802.11a CH52 5260MHz Aux

#### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5260 MHz; Duty Cycle:1:1 Medium parameters used: f = 5260 MHz;  $\sigma = 5.419$  S/m;  $\varepsilon_r = 47.514$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

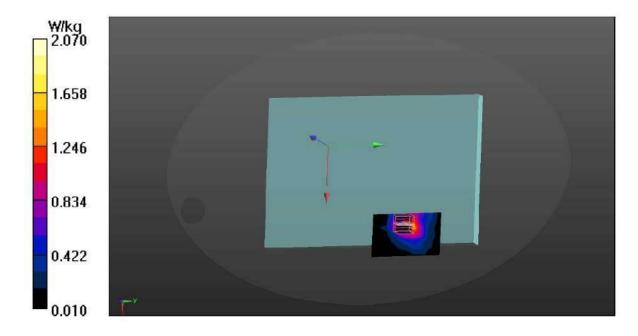
- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) - 1.44 W/kg

**Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value = 2.428 V/m; Power Drift = 0.89 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.488 W/kgMaximum value of SAR (measured) = 2.07 W/kg





Date: 10/28/2018

Test Laboratory: Audix\_SAR Lab

# P21 802.11a CH52 5260MHz Aux

DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5260 MHz; Duty Cycle:1:1 Medium parameters used: f = 5260 MHz;  $\sigma = 5.419$  S/m;  $\varepsilon_r = 47.514$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

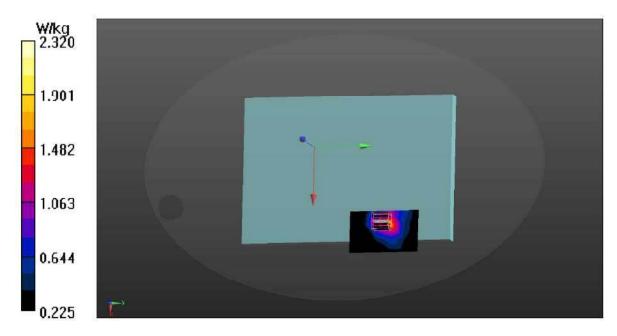
Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.67 W/kg

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

Reference Value = 3.429 V/m; Power Drift = 0.60 dB

Peak SAR (extrapolated) = 4.18 W/kg

SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.532 W/kgMaximum value of SAR (measured) = 2.32 W/kg





Date: 10/28/2018

Test Laboratory: Audix SAR Lab

### P23 802.11a CH60 5300MHz Aux

DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5300 MHz; Duty Cycle:1:1

Medium parameters used: f = 5300 MHz;  $\sigma = 5.488$  S/m;  $\varepsilon_r = 47.439$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

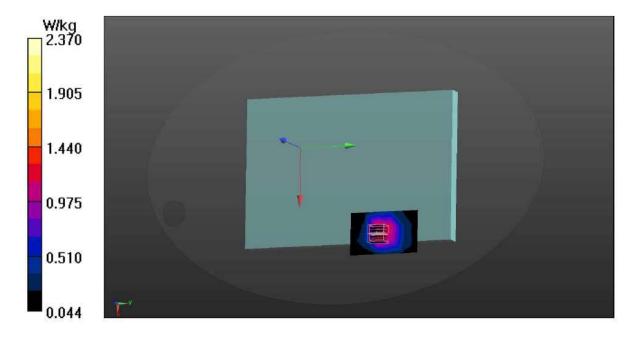
**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.29 W/kg

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

Reference Value = 2.697 V/m; Power Drift = 1.56 dB

Peak SAR (extrapolated) = 4.06 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.555 W/kgMaximum value of SAR (measured) = 2.37 W/kg





Date: 10/28/2018

Test Laboratory: Audix SAR Lab

# P24 802.11a CH60 5300MHz Aux

### DUT: 13Z990

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5300 MHz; Duty Cycle:1:1 Medium parameters used: f = 5300 MHz;  $\sigma = 5.488$  S/m;  $\varepsilon_r = 47.439$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

# DASY Configuration:

- Probe: EX3DV4 SN3855; ConvF(4.37, 4.37, 4.37); Calibrated: 9/27/2018;
- Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1337; Calibrated: 9/19/2018
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 1.29 W/kg

**Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm Reference Value – 2.481 V/m; Power Drift – 01.22 dB Peak SAR (extrapolated) = 4.06 W/kg

SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.529 W/kgMaximum value of SAR (measured) = 2.16 W/kg

