

## 20220808\_SystemPerformanceCheck-D835V2 SN 4d142

Frequency: 835 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.874 \text{ S/m}$ ;  $\epsilon_r = 39.894$ ;  $\rho = 1000 \text{ kg/m}^3$

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1546; Calibrated: 3/22/2022
- Probe: EX3DV4 - SN7501; ConvF(9.8, 9.8, 9.8) @ 835 MHz; Calibrated: 3/25/2022
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1948

**Head/Pin=100 mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.28 W/kg

**Head/Pin=100 mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.31 V/m; Power Drift = -0.09 dB

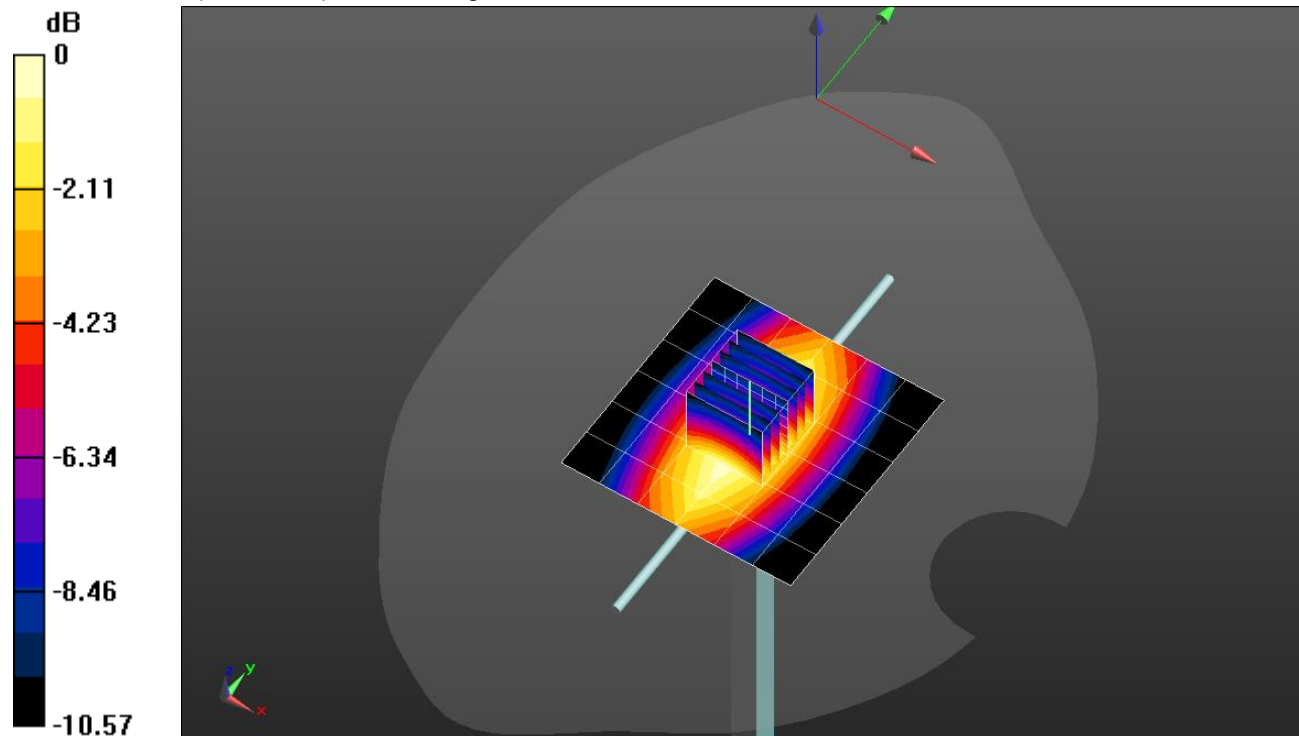
Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.984 W/kg; SAR(10 g) = 0.642 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 65.7%

Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

### 20220809\_SystemPerformanceCheck-D3500V2 SN 1060

Frequency: 3500 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used:  $f = 3500$  MHz;  $\sigma = 2.841$  S/m;  $\epsilon_r = 39.749$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Dasy Configuration:

- Area Scan Setting: Find Secondary Maximum within 2.0 dB and with a peak SAR value greater than 0.0012 W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/18/2022
- Probe: EX3DV4 - SN7356; ConvF(7.2, 7.2, 7.2) @ 3500 MHz; Calibrated: 3/24/2022
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1956

**Head/Pin=100 mW/Area Scan (8x8x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 8.56 W/kg

**Head/Pin=100 mW/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 59.52 V/m; Power Drift = -0.02 dB

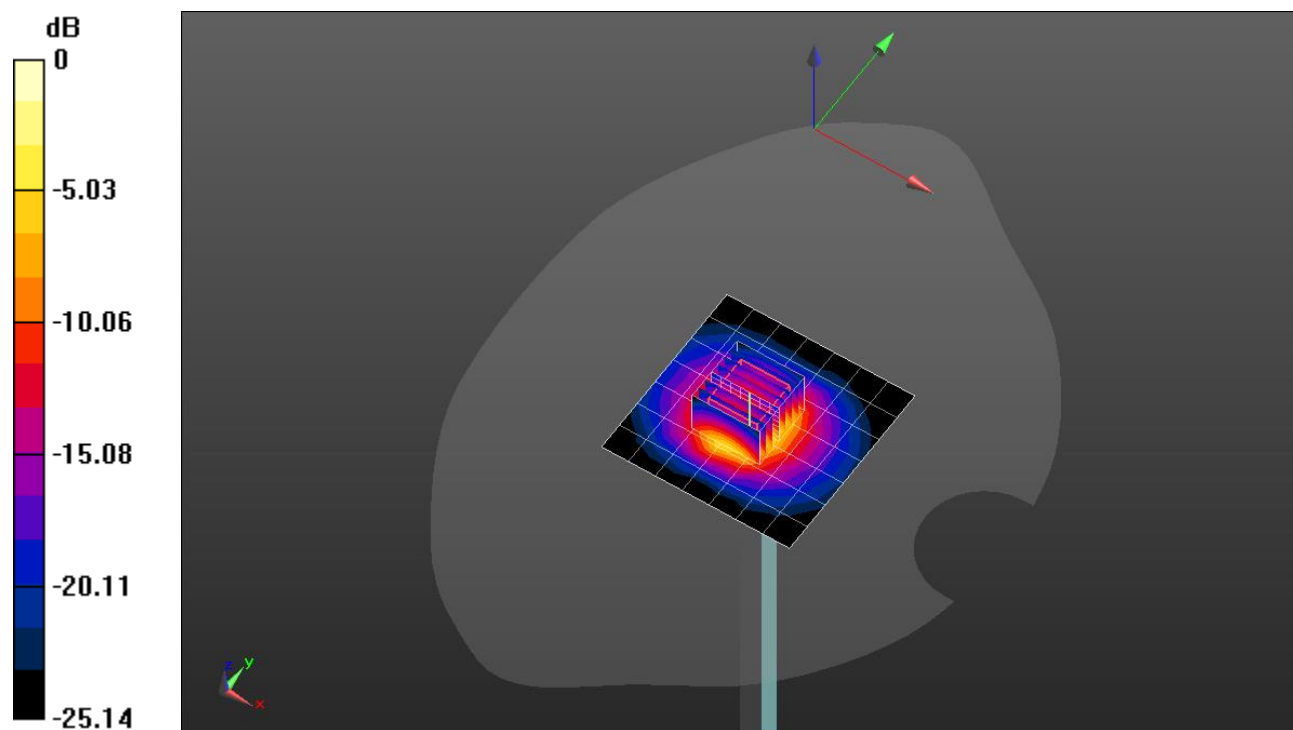
Peak SAR (extrapolated) = 16.2 W/kg

**SAR(1 g) = 6.43 W/kg; SAR(10 g) = 2.47 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 57.3%

Maximum value of SAR (measured) = 9.71 W/kg



0 dB = 9.71 W/kg = 9.87 dBW/kg

### 20220809\_SystemPerformanceCheck-D1900V3 SN 5d163

Frequency: 1900 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.408$  S/m;  $\epsilon_r = 38.313$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Dasy Configuration:

- Area Scan Setting: Find Secondary Maximum within 2.0 dB and with a peak SAR value greater than 0.0012 W/kg
- Electronics: DAE4 Sn1545; Calibrated: 2/23/2022
- Probe: EX3DV4 - SN7500; ConvF(8.1, 8.1, 8.1) @ 1900 MHz; Calibrated: 3/25/2022
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1948

**Head/Pin=100 mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.16 W/kg

**Head/Pin=100 mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 60.80 V/m; Power Drift = 0.02 dB

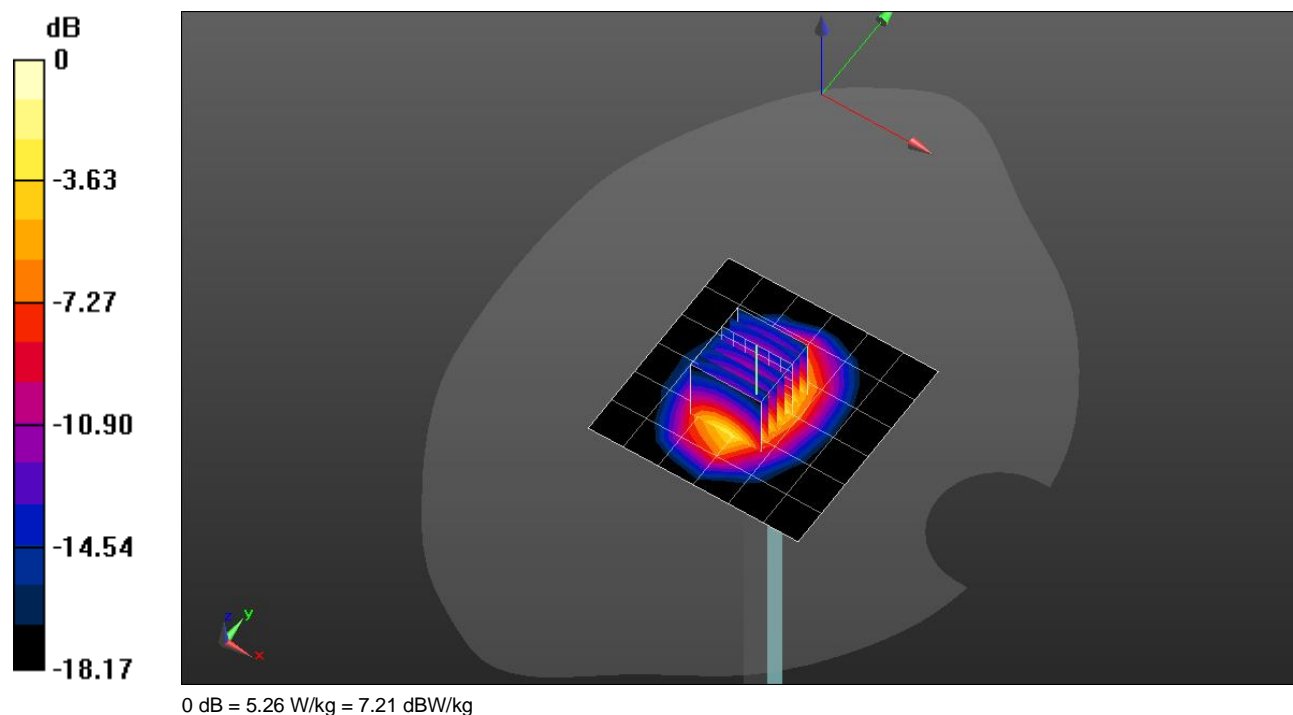
Peak SAR (extrapolated) = 7.57 W/kg

**SAR(1 g) = 3.9 W/kg; SAR(10 g) = 2 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.8%

Maximum value of SAR (measured) = 5.26 W/kg





## 20220808\_SystemPerformanceCheck-D2450V2 SN 748

Frequency: 2450 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.795$  S/m;  $\epsilon_r = 39.581$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Dasy Configuration:

- Area Scan Setting: Find Secondary Maximum within 2.0 dB and with a peak SAR value greater than 0.0012 W/kg
- Electronics: DAE4 Sn1377; Calibrated: 9/20/2021
- Probe: EX3DV4 - SN3885; ConvF(7.39, 7.39, 7.39) @ 2450 MHz; Calibrated: 9/23/2021
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: xxxx

**Head/Pin=100 mW/Area Scan (8x8x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 5.48 W/kg

**Head/Pin=100 mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 63.81 V/m; Power Drift = -0.06 dB

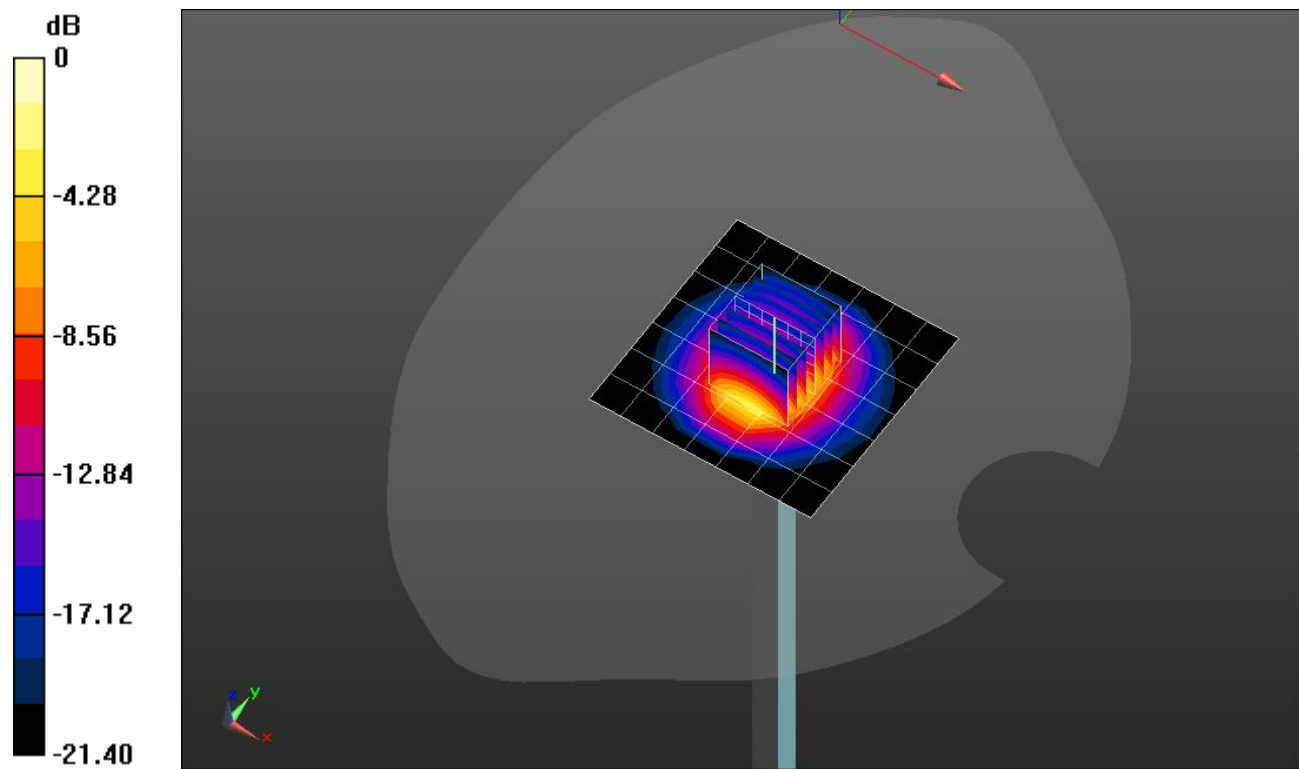
Peak SAR (extrapolated) = 10.4 W/kg

**SAR(1 g) = 5.05 W/kg; SAR(10 g) = 2.37 W/kg**

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 49.2%

Maximum value of SAR (measured) = 7.18 W/kg



0 dB = 7.18 W/kg = 8.56 dBW/kg

## 20220809\_SystemPerformanceCheck-D5GHzV2 SN 1003

Frequency: 5250 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.478$  S/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Dasy Configuration:

- Area Scan Setting: Find Secondary Maximum within 2.0 dB and with a peak SAR value greater than 0.0012 W/kg
- Electronics: DAE4 Sn1472; Calibrated: 1/7/2022
- Probe: EX3DV4 - SN7585; ConvF(5.3, 5.3, 5.3) @ 5250 MHz; Calibrated: 4/27/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: Twin-SAM V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: xxxx

**Head/5.25 GHz, Pin=100mW/Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 19.2 W/kg

**Head/5.25 GHz, Pin=100mW/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 60.40 V/m; Power Drift = -0.11 dB

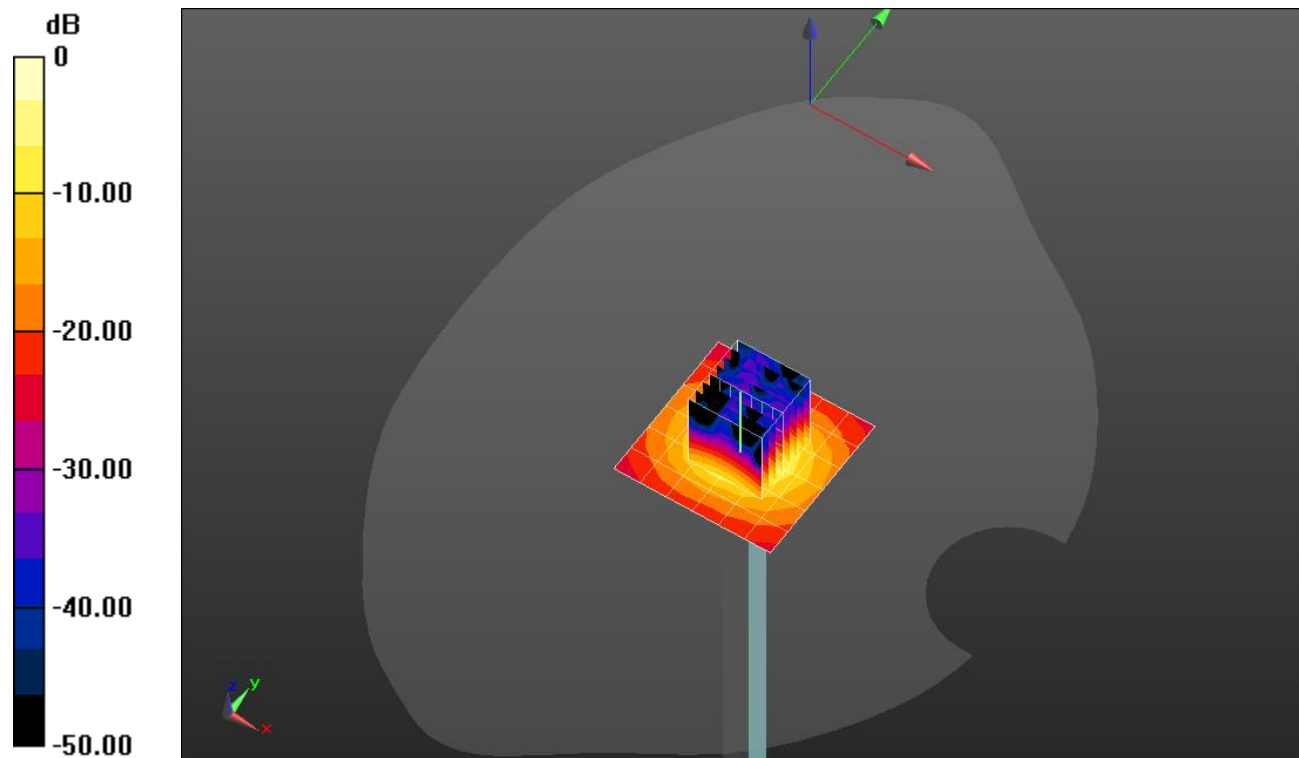
Peak SAR (extrapolated) = 31.7 W/kg

**SAR(1 g) = 8.61 W/kg; SAR(10 g) = 2.52 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 68%

Maximum value of SAR (measured) = 19.3 W/kg



0 dB = 19.3 W/kg = 12.86 dBW/kg

# Measurement Report for 30GHz Source SN: 1003, FRONT, Validation band, UID 0 -, Channel 30000 (30000.0MHz)

## Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
, 30GHz Source SN: 1003	100.0 x 100.0 x 100.0		Phone

## Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	FRONT, 5.55	Validation band	CW, 0--	30000.0, 30000	1.0

## Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- xxxx	---Air	EUmmWV4 - SN9496_F1-55GHz, 2022-02-24	DAE4ip Sn1619, 2022-04-21

## Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55
MAIA	N/A

## Measurement Results

	5G Scan
Date	2022-08-15, 11:04
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	33.2
psPDtot+ [W/m <sup>2</sup> ]	33.8
psPDmod+ [W/m <sup>2</sup> ]	35.1
E <sub>max</sub> [V/m]	131
Power Drift [dB]	-0.09

## Warning(s) / Error(s)

Details	5G Scan
Warning(s)	
Error(s)	

