

System Check_Head_835MHz

DUT: D835V2-4d167

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL_850_200126 Medium parameters used: $f = 835$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 42.016$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 22.6 °C

DASY5 Configuration

- Probe: EX3DV4 - SN3931; ConvF(9.8, 9.8, 9.8) @ 835 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2019/5/21
- Phantom: ELI V5.0; Type: QD OVA 002 Ax; Serial: 1191
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.07 W/kg

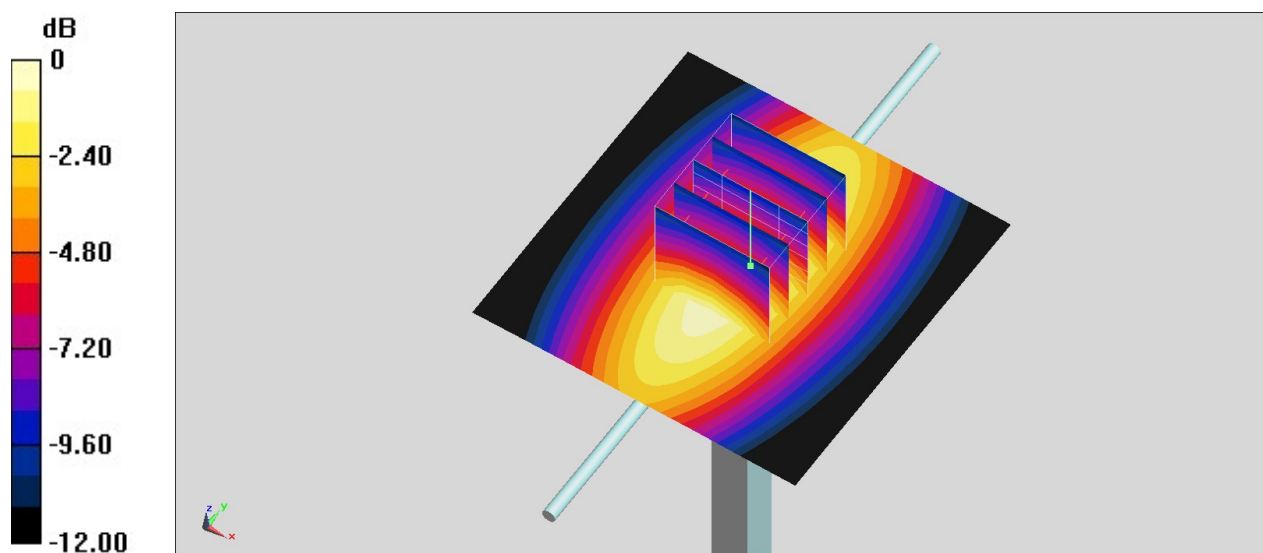
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 62.63 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 3.39 W/kg

SAR(1 g) = 2.32 W/kg; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (measured) = 3.07 W/kg



0 dB = 3.07 W/kg = 4.87 dBW/kg

System Check_Head_835MHz

DUT: D835V2-4d167

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL_850_200214 Medium parameters used: $f = 835$ MHz; $\sigma = 0.918$ S/m; $\epsilon_r = 41.502$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 22.4 °C

DASY5 Configuration

- Probe: ES3DV3 - SN3169; ConvF(6.42, 6.42, 6.42) @ 835 MHz; Calibrated: 2019/5/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2019/9/17
- Phantom: ELI V5.0; Type: QD OVA 002 Ax; Serial: 1191
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.65 W/kg

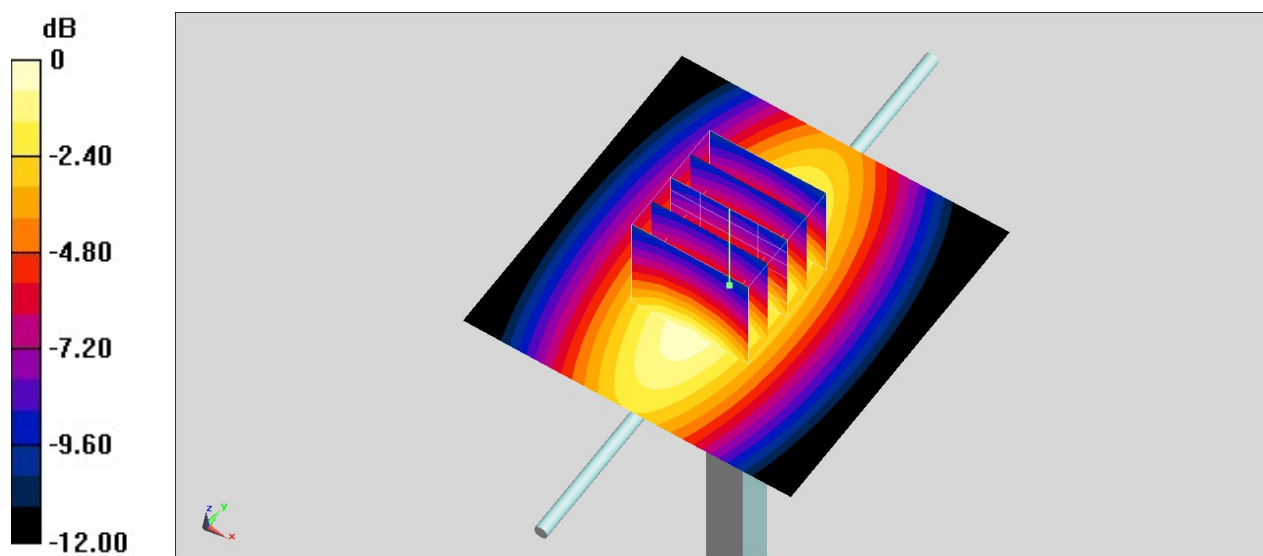
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.36 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.38 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 2.66 W/kg



0 dB = 2.66 W/kg = 4.25 dBW/kg

System Check_Head_1900MHz

DUT: D1900V2-5d041

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL_1900_200119 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.447$ S/m; $\epsilon_r = 40.783$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3169; ConvF(5.14, 5.14, 5.14) @ 1900 MHz; Calibrated: 2019/5/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2019/9/17
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1131
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 13.9 W/kg

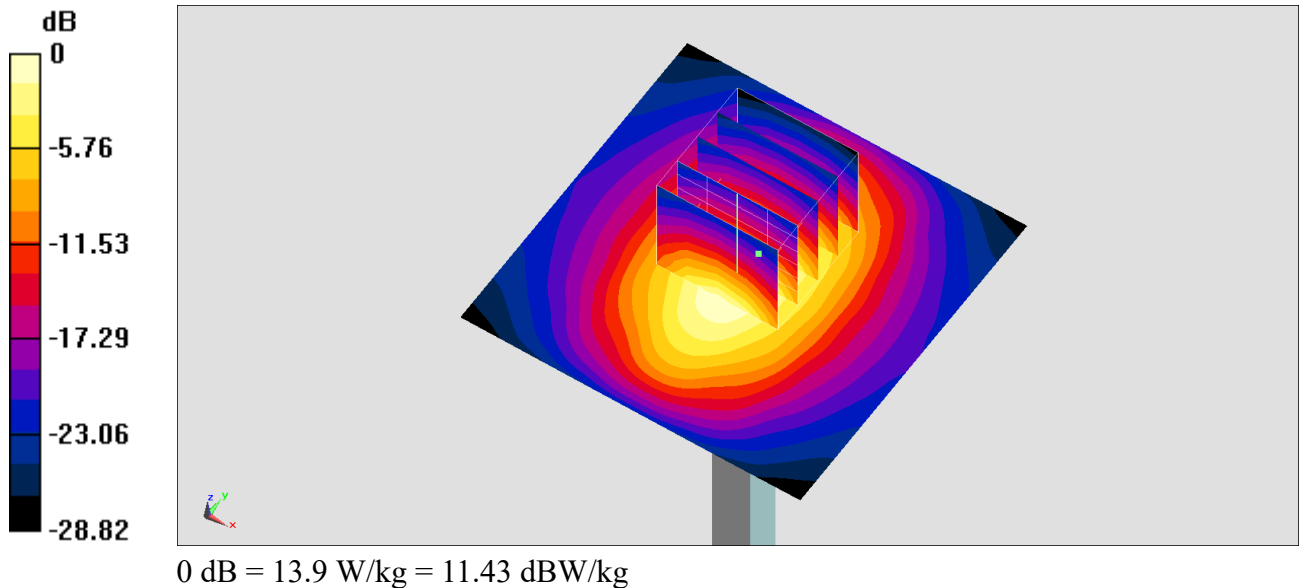
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 100.5 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 20.0 W/kg

SAR(1 g) = 10.8 W/kg; SAR(10 g) = 5.6 W/kg

Maximum value of SAR (measured) = 13.5 W/kg



System Check_Head_1900MHz

DUT: D1900V2-5d041

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL_1900_200128 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.449$ S/m; $\epsilon_r = 39.742$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 22.6 °C

DASY5 Configuration

- Probe: EX3DV4 - SN3931; ConvF(8.32, 8.32, 8.32) @ 1900 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2019/5/21
- Phantom: ELI V5.0; Type: QD OVA 002 Ax; Serial: 1191
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 15.8 W/kg

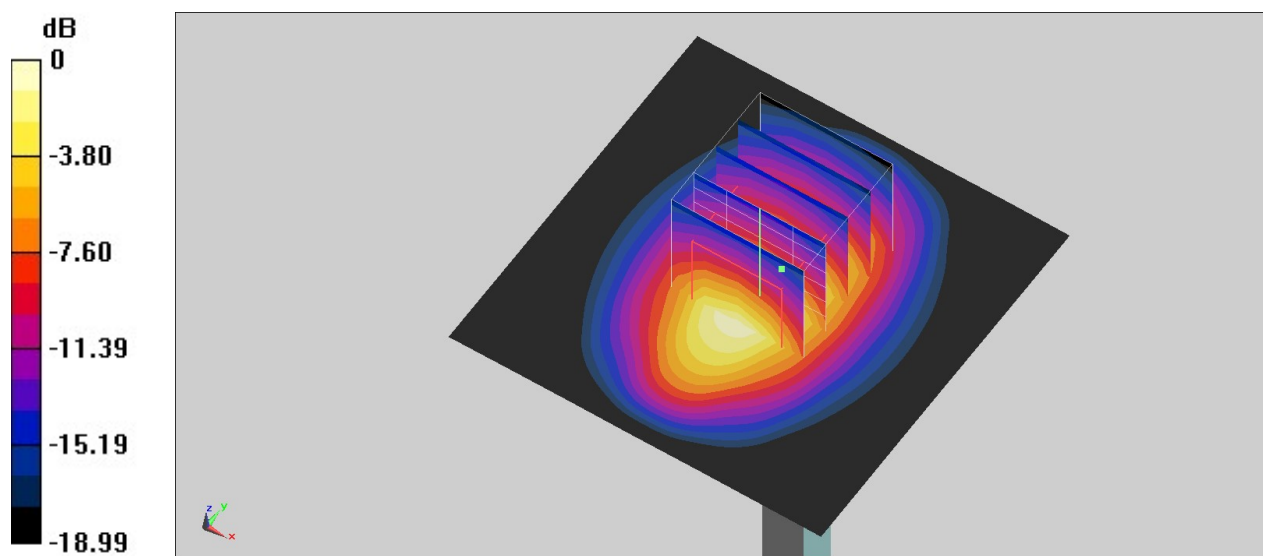
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 107.0 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 18.0 W/kg

SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.14 W/kg

Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2-1008

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL_2600_200118 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.92$ S/m; $\epsilon_r = 38.589$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3169; ConvF(4.38, 4.38, 4.38) @ 2600 MHz; Calibrated: 2019/5/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2019/9/17
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1131
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 20.0 W/kg

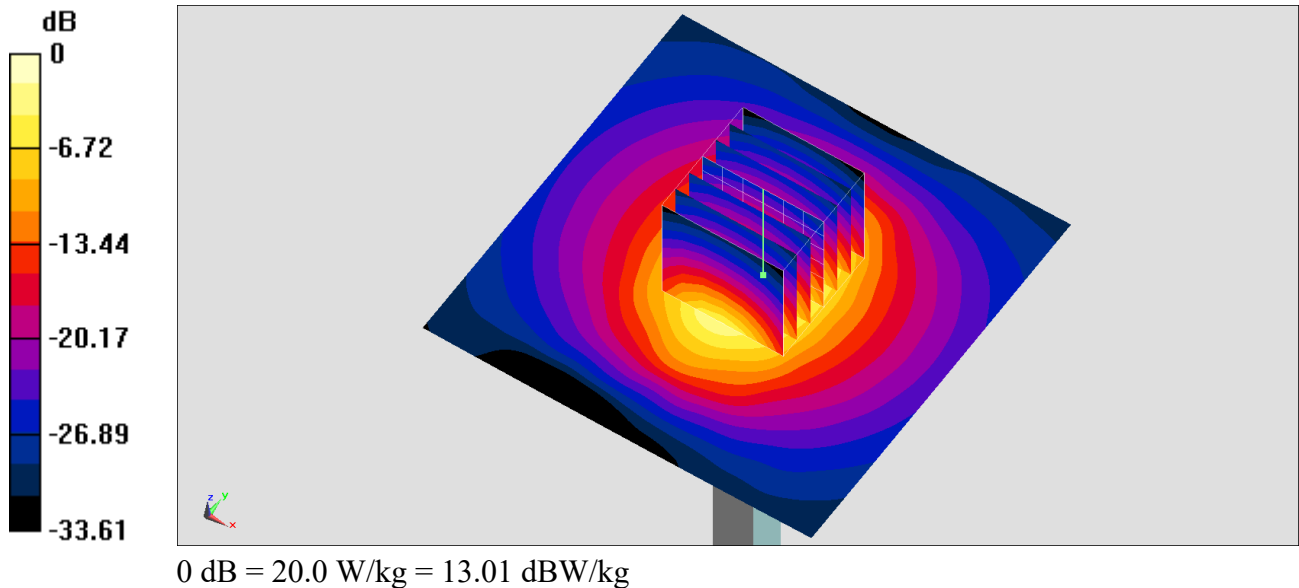
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 102.6 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 30.4 W/kg

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.61 W/kg

Maximum value of SAR (measured) = 19.4 W/kg



System Check_Head_2600MHz

DUT: D2600V2-1008

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL_2600_200127 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.982$ S/m; $\epsilon_r = 38.418$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 22.4 °C

DASY5 Configuration

- Probe: EX3DV4 - SN3931; ConvF(7.43, 7.43, 7.43) @ 2600 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2019/5/21
- Phantom: ELI V5.0; Type: QD OVA 002 Ax; Serial: 1191
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

Pin=250mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 26.0 W/kg

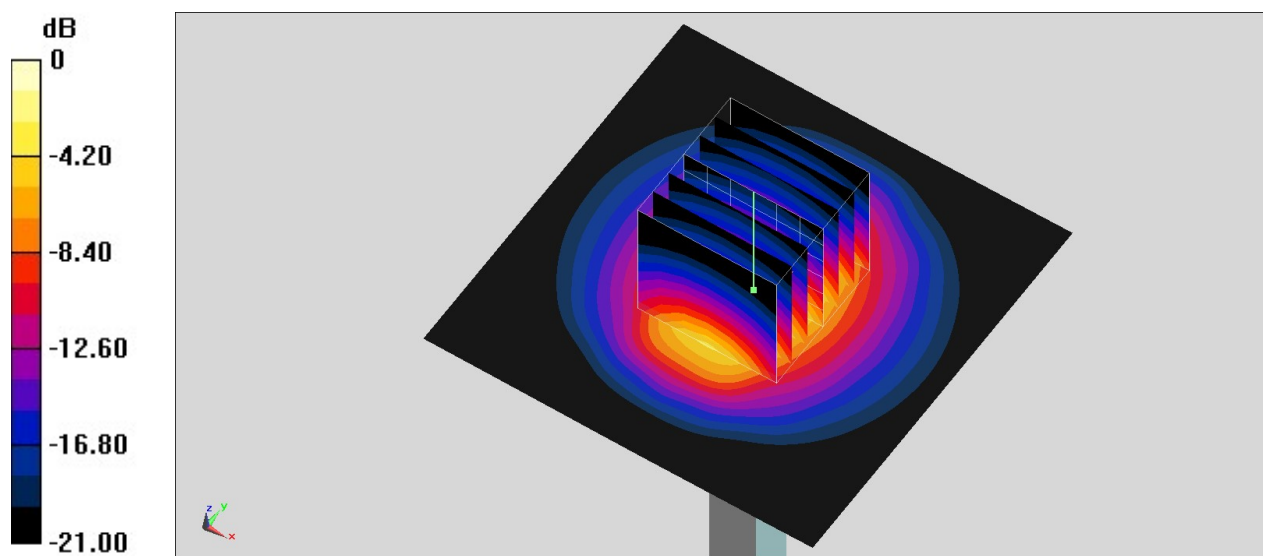
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.1 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 31.5 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.36 W/kg

Maximum value of SAR (measured) = 25.1 W/kg



0 dB = 25.1 W/kg = 14.00 dBW/kg

Test Laboratory: Sporton International Inc.

Device Under Test Properties

Manufacturer	Dimensions [mm]	IMEI	DUT Type
	100.0 x 100.0 x 100.0		Phone

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz]	Conversion Factor
5G	FRONT, 5.55	30000.0	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave – xxxx	Air –	EUmmWV4 – SN9461_F1–78GHz, 2019–11–05	DAE4 Sn854, 2019–05–21

Scans Setup

Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Measurement Results

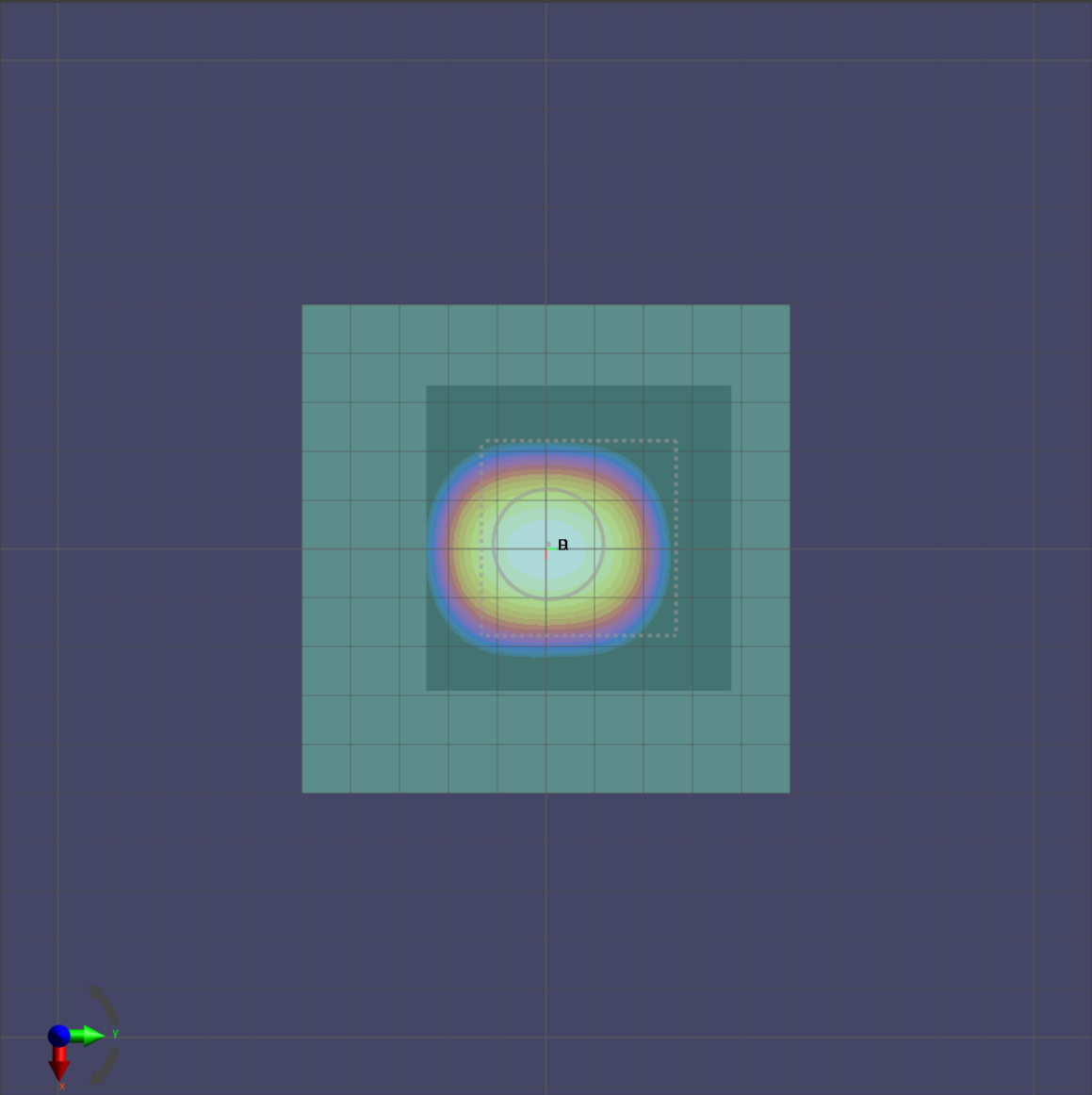
Date	2019–12–17, 00:12
Avg. Area [cm ²]	4.00
S _{avg inc} [W/m ²]	31.1
S _{avg tot} [W/m ²]	31.5
S _{peak} [W/m ²]	46.2
E _{peak} [V/m]	131
H _{peak} [A/m]	0.358
Power Drift [dB]	–0.07

Averaged [4.0 cm²] |Re{S}|(x,y,z,f0) [dB(31.5W/m²)]

0



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Test Laboratory: Sporton International Inc.

Device Under Test Properties

Manufacturer	Dimensions [mm]	IMEI	DUT Type
	100.0 x 100.0 x 100.0		Phone

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz]	Conversion Factor
5G	FRONT, 5.55	30000.0	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave – xxxx	Air –	EUmmWV4 – SN9461_F1–78GHz, 2019–11–05	DAE4 Sn854, 2019–05–21

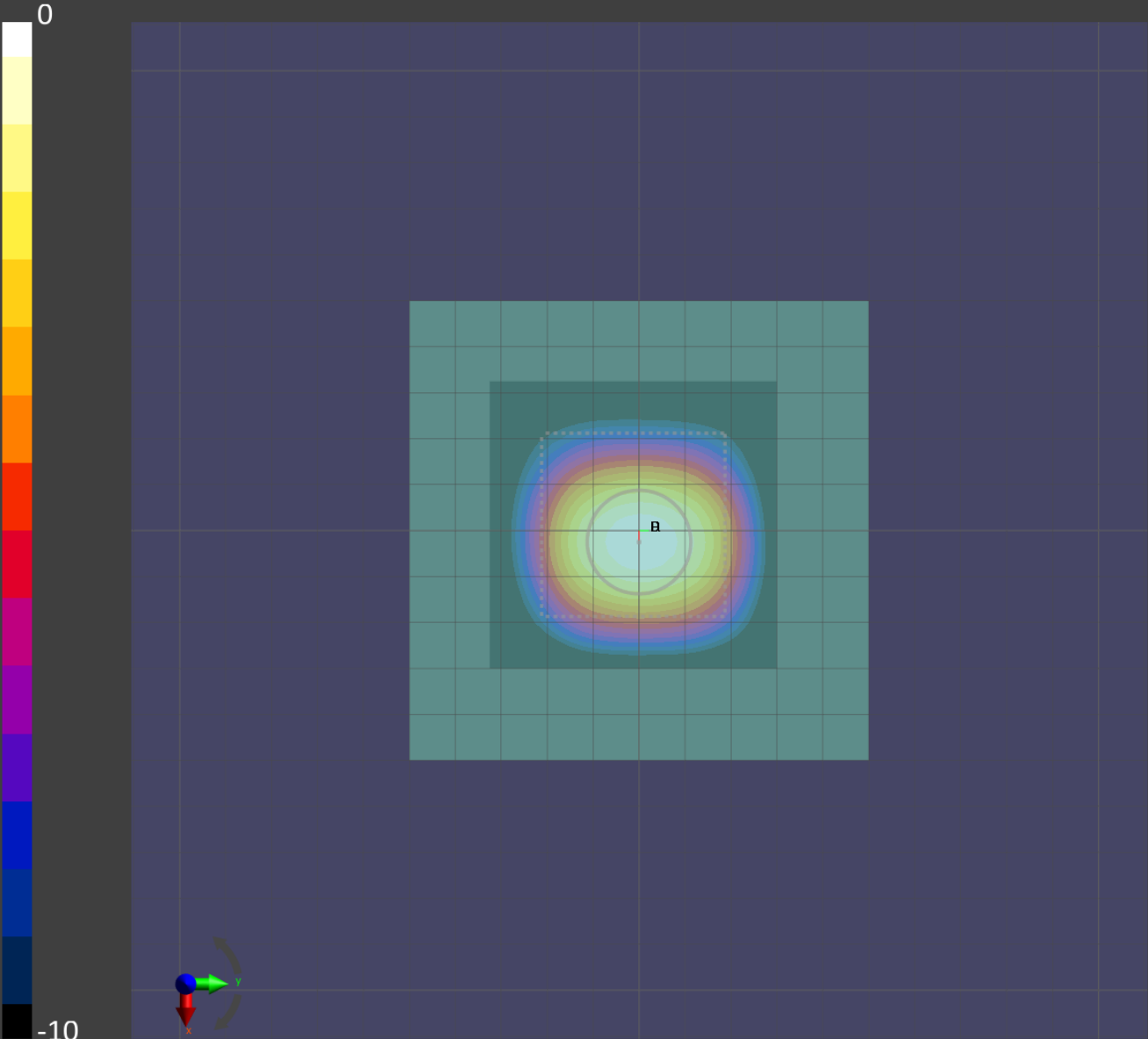
Scans Setup

Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Measurement Results

Date	2019–12–26, 00:29
Avg. Area [cm ²]	4.00
S _{avg inc} [W/m ²]	34.1
S _{avg tot} [W/m ²]	34.5
S _{peak} [W/m ²]	49.3
E _{peak} [V/m]	135
H _{peak} [A/m]	0.378
Power Drift [dB]	–0.13

Averaged [4.0 cm²] |Re{S}|(x,y,z,f0) [dB(34.5W/m²)]



Test Laboratory: Sporton International Inc.

Device Under Test Properties

Manufacturer	Dimensions [mm]	IMEI	DUT Type
	100.0 x 100.0 x 100.0		Phone

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz]	Conversion Factor
5G	FRONT, 5.55	30000.0	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave – xxxx	Air –	EUmmWV4 – SN9461_F1–78GHz, 2019–11–05	DAE4 Sn376, 2019–12–06

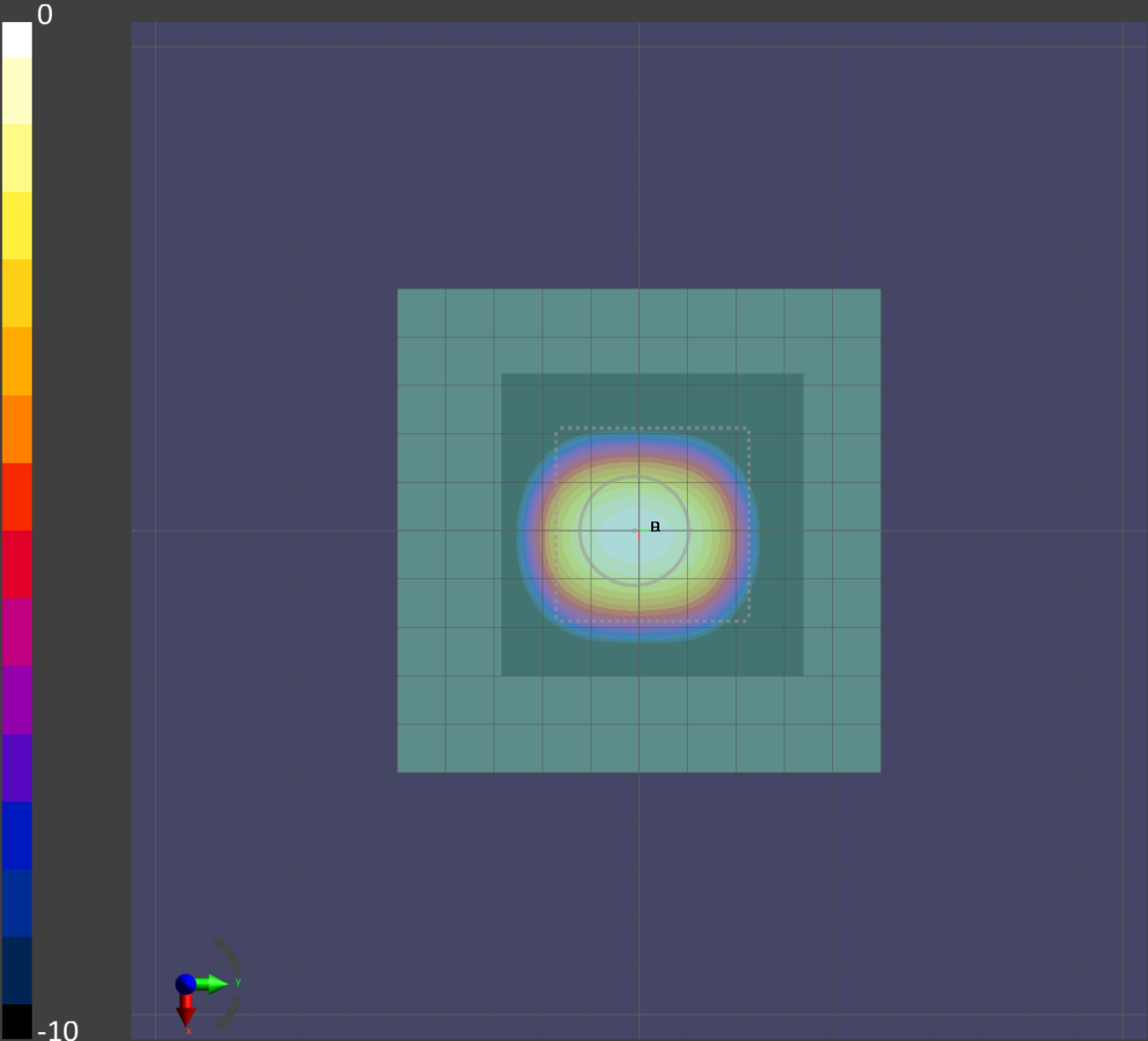
Scans Setup

Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Measurement Results

Date	2020–01–23, 00:03
Avg. Area [cm ²]	4.00
S _{avg inc} [W/m ²]	30.8
S _{avg tot} [W/m ²]	31.2
S _{peak} [W/m ²]	46.3
E _{peak} [V/m]	134
H _{peak} [A/m]	0.368
Power Drift [dB]	0.03

Averaged [4.0 cm²] |Re{S}|(x,y,z,f0) [dB(31.2W/m²)]



Test Laboratory: Sporton International Inc.

Device Under Test Properties

Manufacturer	Dimensions [mm]	IMEI	DUT Type
	100.0 x 100.0 x 100.0		Phone

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz]	Conversion Factor
5G	FRONT, 5.55	30000.0	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave – xxxx	Air –	EUmmWV4 – SN9441_F1–78GHz, 2019–11–20	DAE4 Sn778, 2019–05–21

Scans Setup

Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Measurement Results

Date	2020–02–12, 00:37
Avg. Area [cm ²]	4.00
S _{avg inc} [W/m ²]	30.4
S _{avg tot} [W/m ²]	30.9
S _{peak} [W/m ²]	44.8
E _{peak} [V/m]	130
H _{peak} [A/m]	0.353
Power Drift [dB]	–0.03

Averaged [4.0 cm²] |Re{S}|(x,y,z,f0) [dB(30.9W/m²)]

0



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