

APPENDIX 1

SAR Measurement Data

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EXHIBIT 1. HEAD SAR MEASUREMENT SUMMARY

Antenna	Power (dBm)	CH	CH. Freq	HEAD SAR 1g (W/Kg)
				BP-258
			(MHz)	1570mAh
FA-SC59V 156.025-163.275 MHz	37.11	01A	156.025	1.09
	37.17	74	156.725	1.10
	37.12	88	157.425	1.17

FILE NAME: ICOM-428Q BP-258 SC59V 156.025MHZ.DA52:0

DUT: IC-M93D; Type: Marine Transciever ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 156.05 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.756$ S/m; $\epsilon_r = 53.218$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.57, 7.57, 7.57); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (61x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.22 W/kg

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

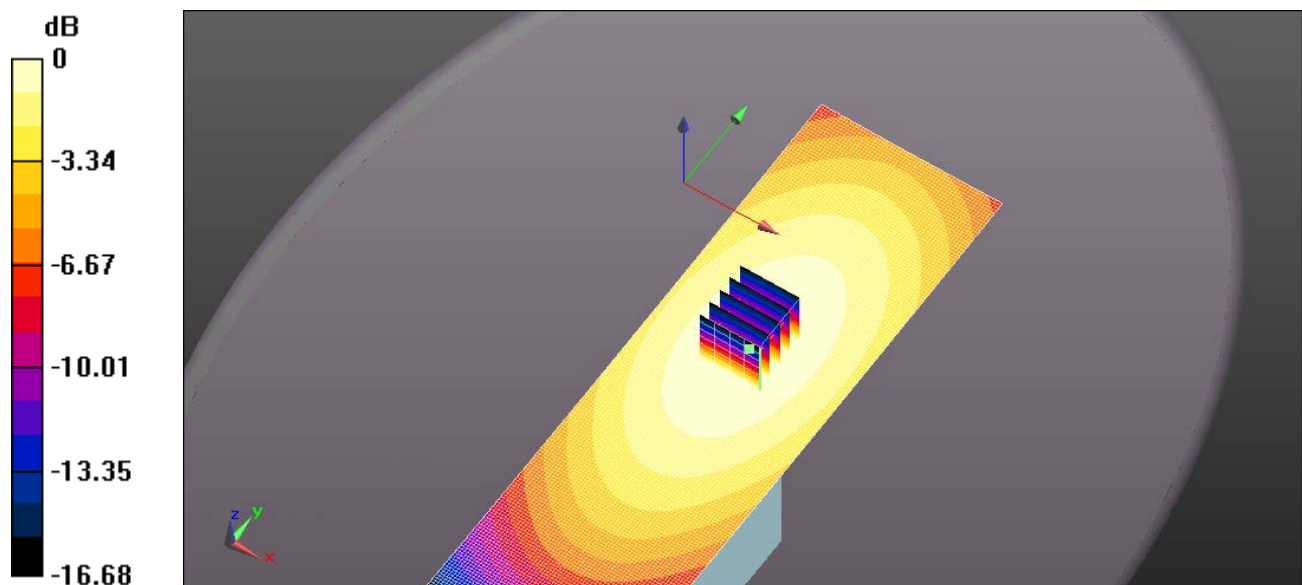
Reference Value = 36.07 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.841 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.20 W/kg



0 dB = 1.22 W/kg = 0.85 dBW/kg

FILE NAME: [ICOM-428Q BP-258 SC59V 156.725MHZ.DA52:0](#)

DUT: IC-M93D; Type: Marine Transciever ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 156.73 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 156.73$ MHz; $\sigma = 0.757$ S/m; $\epsilon_r = 53.243$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.57, 7.57, 7.57); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (81x191x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.25 W/kg

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

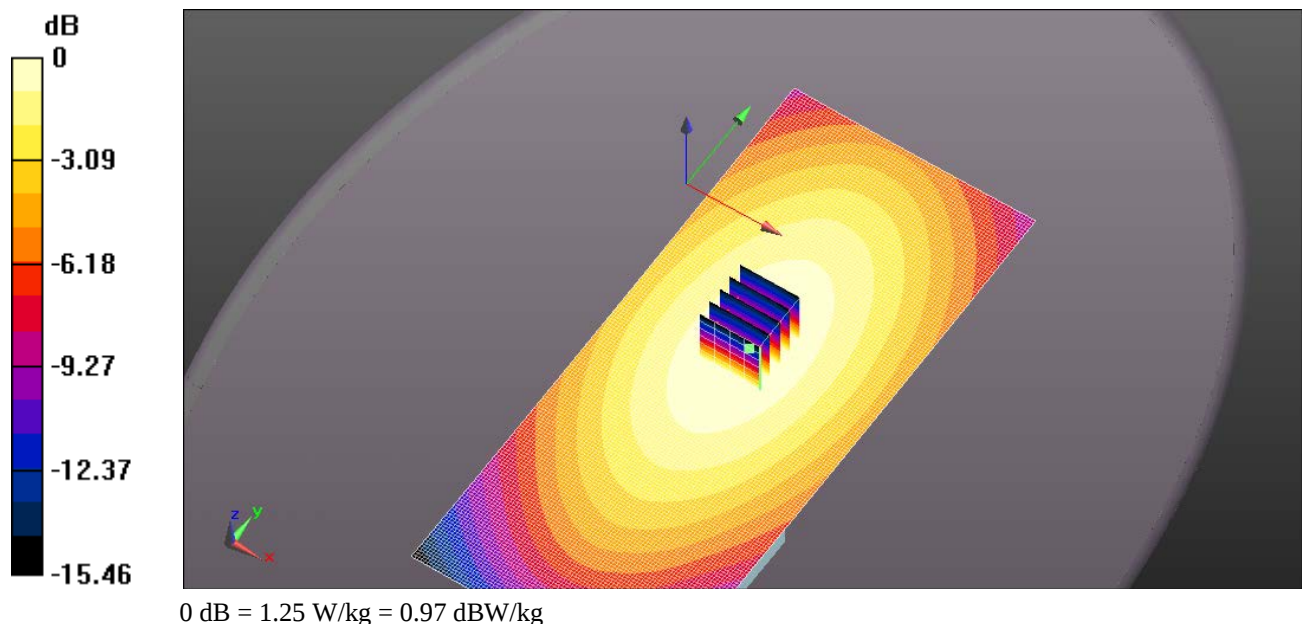
Reference Value = 37.10 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.850 W/kg (SAR corrected for target medium)

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.22 W/kg



FILE NAME: ICOM-428Q BP-258 SC59V 157.425MHZ.DA52:0

DUT: IC-M93D; Type: Marine Transciever ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158 \text{ MHz}$; $\sigma = 0.758 \text{ S/m}$; $\epsilon_r = 53.29$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.57, 7.57, 7.57); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (81x191x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 1.31 W/kg

Configuration_Head_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 37.73 V/m ; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.17 W/kg ; SAR(10 g) = 0.899 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.30 W/kg

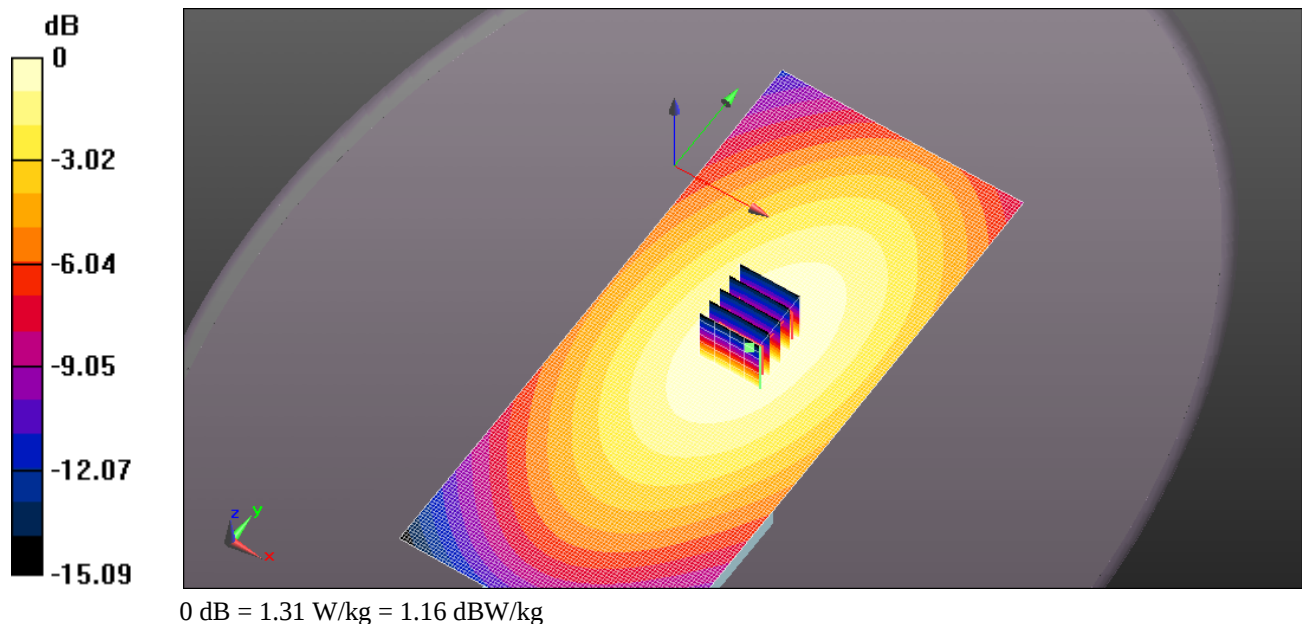


EXHIBIT 2. BODY SAR MEASUREMENT SUMMARY

Antenna	Power (dBm)	CH	CH. Freq	BODY SAR 1g (W/Kg)
				BP-258
			(MHz)	1570mAh
FA-SC59V 156.025-163.275 MHz	37.11	01A	156.025	0.477
	37.17	74	156.725	0.482
	37.12	88	157.425	0.509

FILE NAME: ICOM-428Q BP-258 SC59V 156.025MHz.da52:0

DUT: IC-M93D; Type: Marine Transceiver ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 156.05 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.781$ S/m; $\epsilon_r = 61.33$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.18, 7.18, 7.18); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (61x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.536 W/kg

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

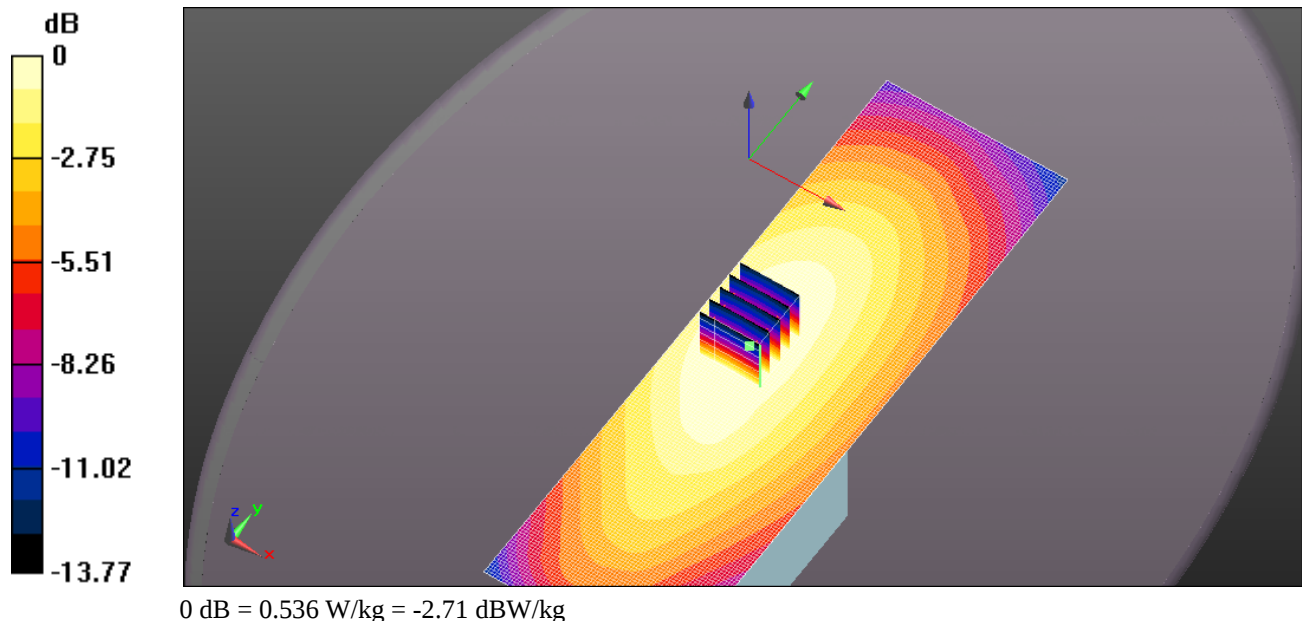
Reference Value = 25.54 V/m; Power Drift = -0.28 dB

Peak SAR (extrapolated) = 0.677 W/kg

SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.364 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.529 W/kg



FILE NAME: ICOM-428Q BP-258 SC59V 156.725MHz.da52:0

DUT: IC-M93D; Type: Marine Transciever ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 156.725 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 156.725$ MHz; $\sigma = 0.782$ S/m; $\epsilon_r = 61.34$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.18, 7.18, 7.18); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (61x181x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.538 W/kg

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

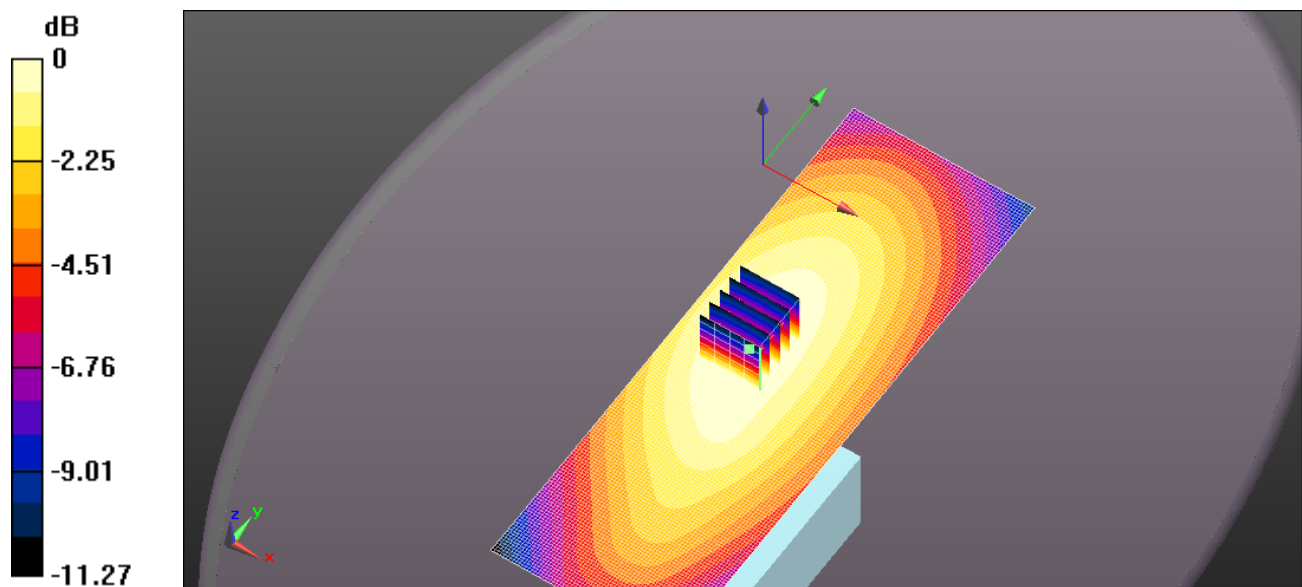
Reference Value = 23.99 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.482 W/kg; SAR(10 g) = 0.370 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.535 W/kg



0 dB = 0.538 W/kg = -2.69 dBW/kg

FILE NAME: ICOM-428Q BP-258 SC59V 157.425MHz.da52:0

DUT: IC-M93D; Type: Marine Transciever ; Serial: 00000035

Communication System: UID 0, CW; Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158 \text{ MHz}$; $\sigma = 0.784 \text{ S/m}$; $\epsilon_r = 61.359$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.18, 7.18, 7.18); Calibrated: 3/22/2016;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 24/8/2015
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Area Scan (61x181x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.562 W/kg

Configuration_Body_IC-M93D/Front to Face, P=6W, d=25mm/Zoom Scan (5x5x7)

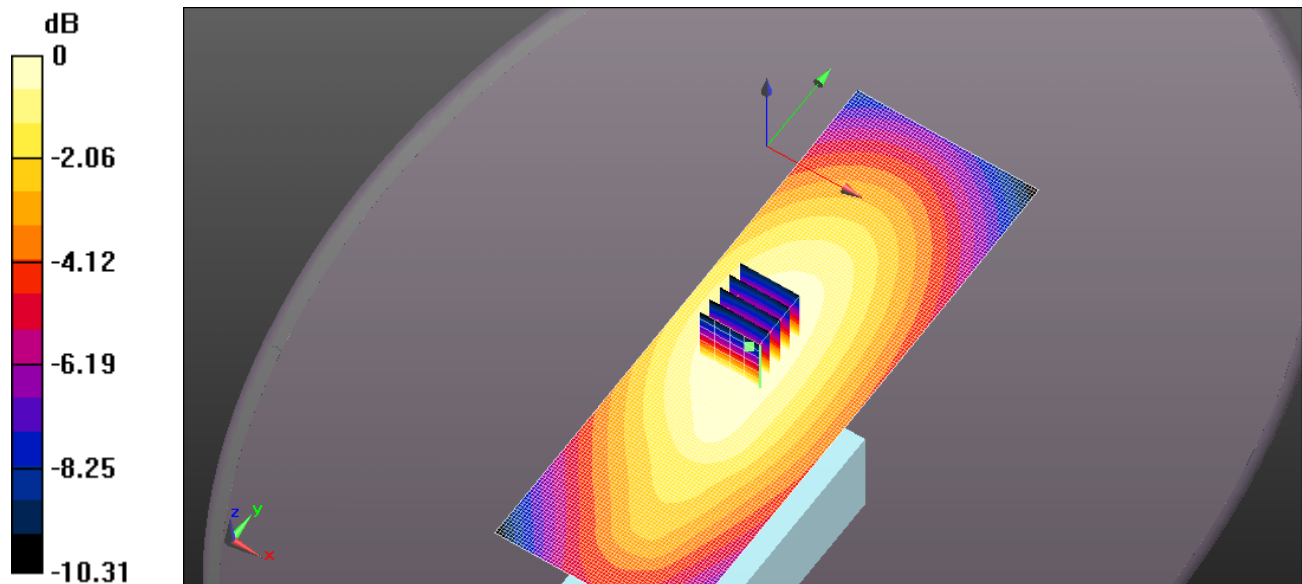
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.13 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.723 W/kg

SAR(1 g) = 0.509 W/kg ; SAR(10 g) = 0.390 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.566 W/kg



0 dB = 0.562 W/kg = -2.50 dBW/kg