

APPENDIX 1

SAR Measurement Data

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EXHIBIT 1. HEAD SAR MEASUREMENTS

Head SAR Measurement Summary

Antenna	Power (W)	CH	CH. Freq	HEAD SAR1g (W/Kg)	HEAD SAR10g (W/Kg)	Power Drift (dB)
				BP-306	BP-306	
			(MHz)	2400mAh	2400mAh	
FA-SC59V	5.59	60	156.025	3.2	2.42	-1.41
	5.52	74	157.425	**	**	**
	5.57	F2	161.45	1.88	1.42	-1.33
SD-IC001	5.59	60	156.025	2.45	1.85	-0.79
	5.52	74	157.425	**	**	**
	5.57	F2	161.45	1.74	1.32	-1.17

** SAR Test Reduction Applied For PTT Radio

FILE NAME: [ICOM-5480 HEAD SD-IC001 156.025 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW (0); Frequency: 156.025 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.025$ MHz; $\sigma = 0.767$ S/m; $\epsilon_r = 51.143$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

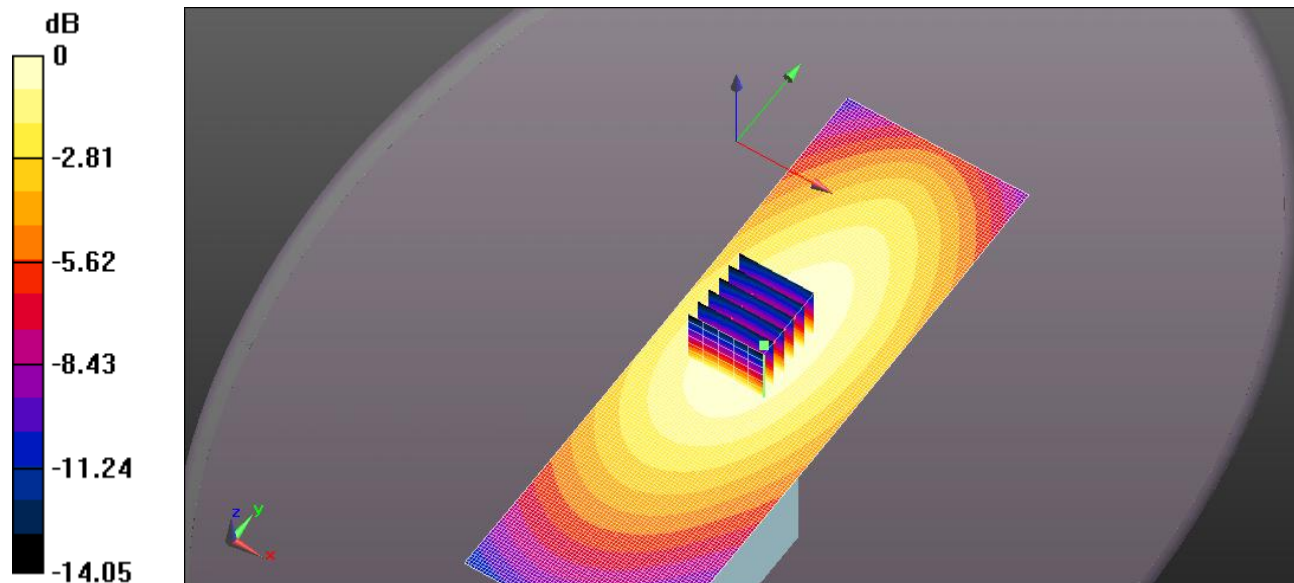
- Probe: ES3DV3 - SN3250; ConvF(7.68, 7.68, 7.68); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x191x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.86 W/kg

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Zoom Scan (5x5x7)

(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 62.05 V/m; Power Drift = -0.79 dB
Peak SAR (extrapolated) = 3.56 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.85 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.72 W/kg



0 dB = 2.86 W/kg = 4.56 dBW/kg

FILE NAME: [ICOM-5480 HEAD SD-IC001 161.450 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW (0); Frequency: 161.45 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 162$ MHz; $\sigma = 0.773$ S/m; $\epsilon_r = 50.816$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.68, 7.68, 7.68); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS2 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x191x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.14 W/kg

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Zoom Scan (5x5x7)

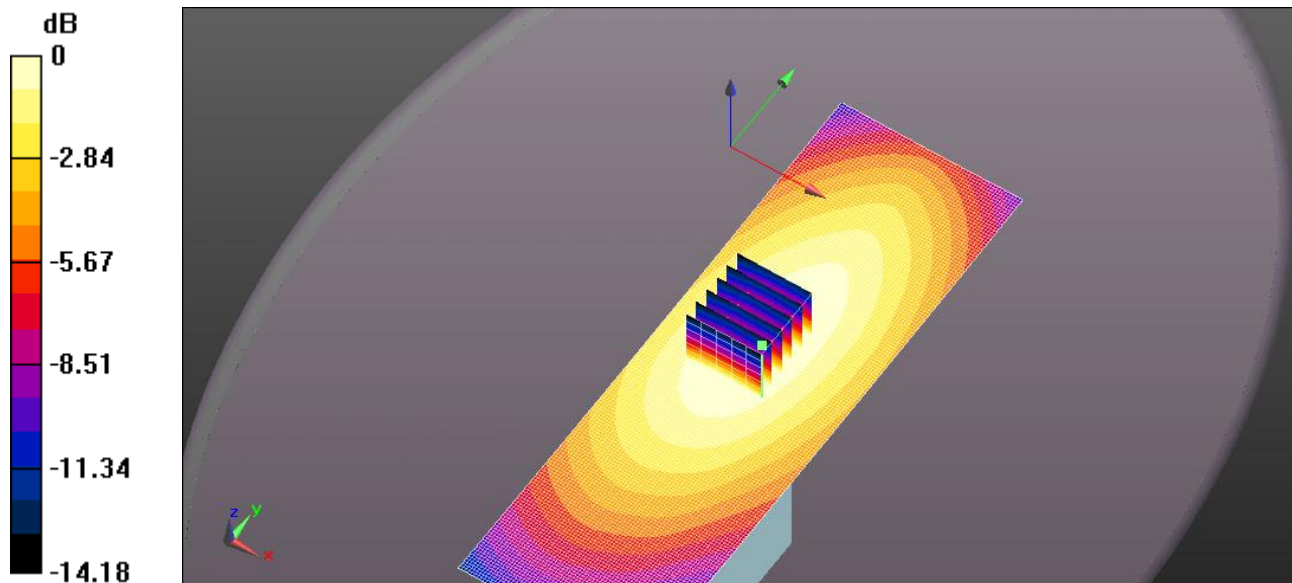
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 54.06 V/m; Power Drift = -1.17 dB

Peak SAR (extrapolated) = 2.58 W/kg

SAR(1 g) = 1.74 W/kg; SAR(10 g) = 1.32 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.94 W/kg



0 dB = 2.14 W/kg = 3.31 dBW/kg

FILE NAME: [ICOM-5480 HEAD FA-SC59V 156.025 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW (0); Frequency: 156.025 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.025$ MHz; $\sigma = 0.767$ S/m; $\epsilon_r = 51.143$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.68, 7.68, 7.68); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x191x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.76 W/kg

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Zoom Scan (5x5x7)

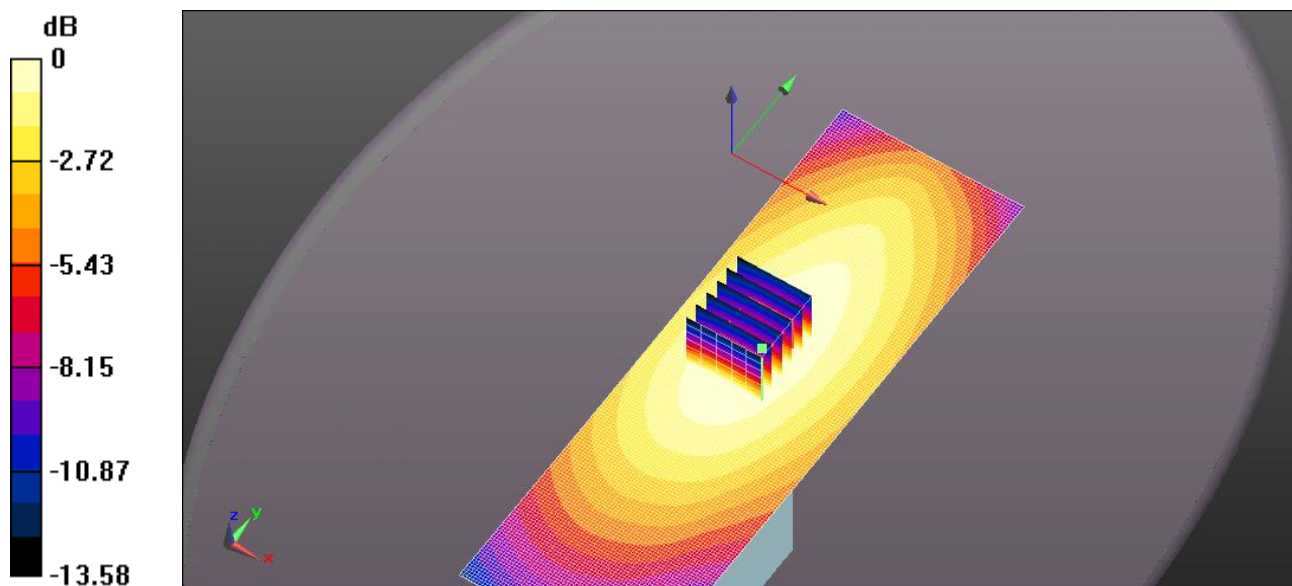
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 75.47 V/m; Power Drift = -1.41 dB

Peak SAR (extrapolated) = 4.64 W/kg

SAR(1 g) = 3.2 W/kg; SAR(10 g) = 2.42 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.57 W/kg



0 dB = 3.76 W/kg = 5.75 dBW/kg

FILE NAME: [ICOM-5480 HEAD FA-SC59V 161.450 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW (0); Frequency: 161.45 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 162$ MHz; $\sigma = 0.773$ S/m; $\epsilon_r = 50.816$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.68, 7.68, 7.68); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS2 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x191x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.32 W/kg

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Zoom Scan (5x5x7)

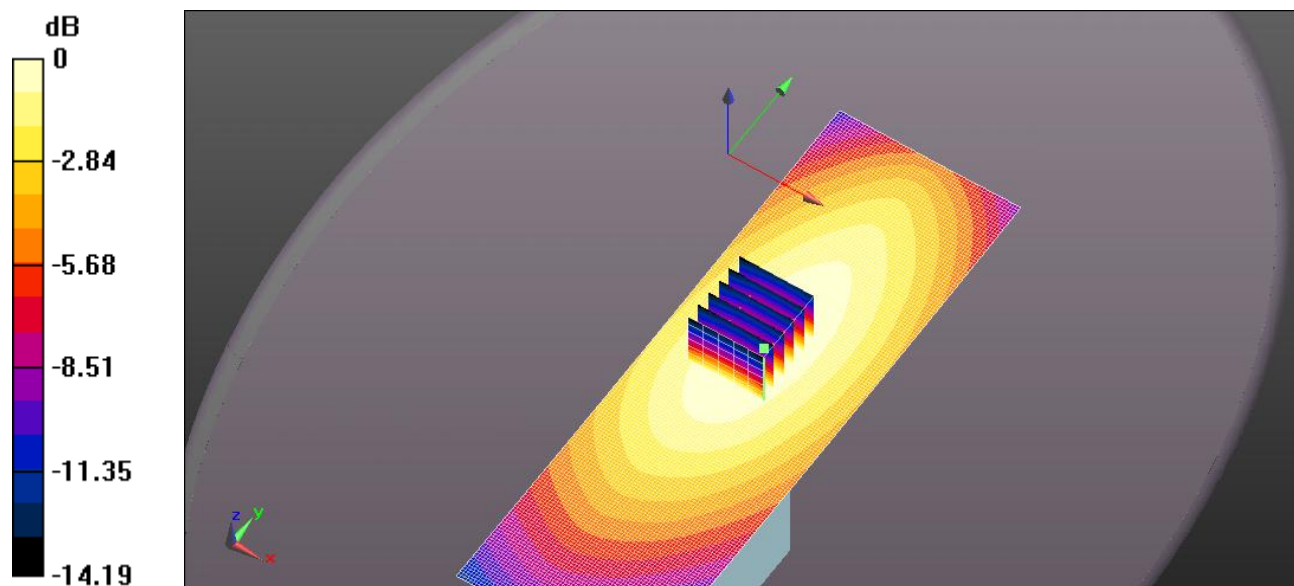
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 56.68 V/m; Power Drift = -1.33 dB

Peak SAR (extrapolated) = 2.75 W/kg

SAR(1 g) = 1.88 W/kg; SAR(10 g) = 1.42 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.10 W/kg



0 dB = 2.32 W/kg = 3.66 dBW/kg

EXHIBIT 2. BODY SAR MEASUREMENTS

Body SAR Measurements Summary

Antenna	Power (W)	CH	CH. Freq	Body SAR1g (W/Kg)	Body SAR10g (W/Kg)	Power Drift (dB)
				MB-133& HM-165	MB-133& HM-165	
			(MHz)	BP-306,2400mAh	BP-306,2400mAh	
FA-SC59V	5.59	60	156.025	1.48	1.15	-0.6
	5.52	74	157.425	**	**	**
	5.57	F2	161.45	0.58	0.448	-0.12
SD-IC001	5.59	60	156.025	1.04	0.798	-2.01
	5.52	74	157.425	**	**	**
	5.57	F2	161.45	0.469	0.361	-0.33

** SAR Test Reduction Applied For PTT Radio

FILE NAME: [ICOM-5480 BODY MB133 HM-165 FA-SC59V 156.025 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW; Frequency: 156.025 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.025$ MHz; $\sigma = 0.788$ S/m; $\epsilon_r = 59.48$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.52, 7.52, 7.52); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Area Scan (61x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.70 W/kg

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Zoom Scan (5x5x7)

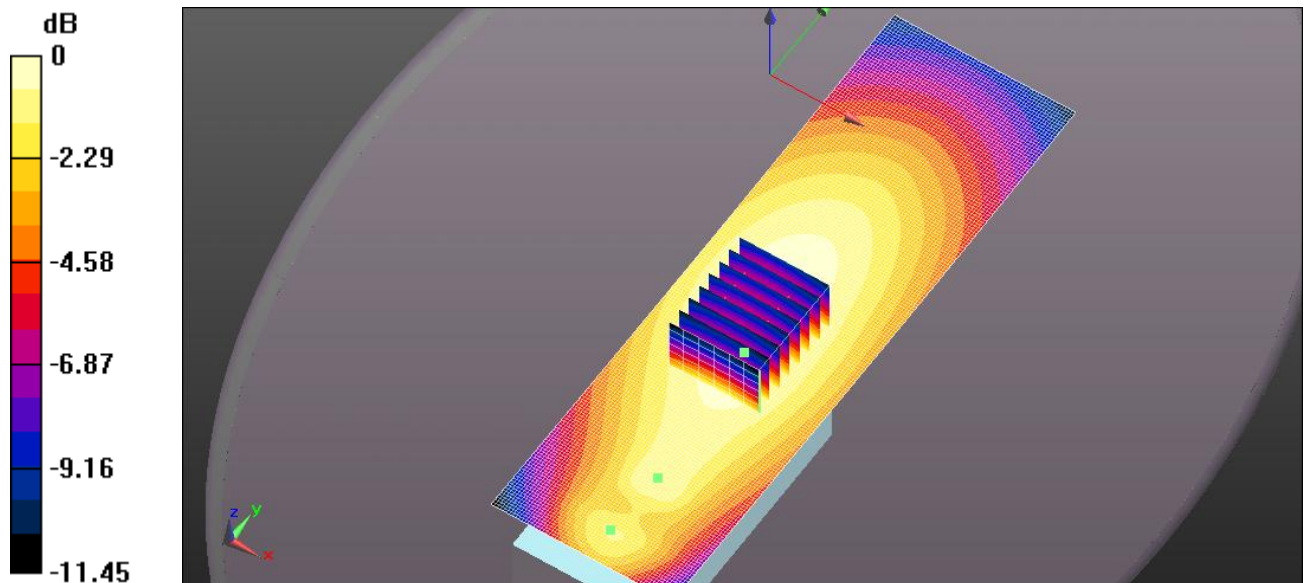
(7x8x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 48.47 V/m; Power Drift = -0.60 dB

Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 1.48 W/kg; SAR(10 g) = 1.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.65 W/kg



0 dB = 1.70 W/kg = 2.31 dBW/kg

FILE NAME: [ICOM-5480 BODY MB133 HM-165 FA-SC59V 161.450 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW; Frequency: 161.45 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 162$ MHz; $\sigma = 0.791$ S/m; $\epsilon_r = 59.291$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.52, 7.52, 7.52); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Area Scan (61x201x1):

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

Maximum value of SAR (interpolated) = 0.639 W/kg

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Zoom Scan (5x5x7)

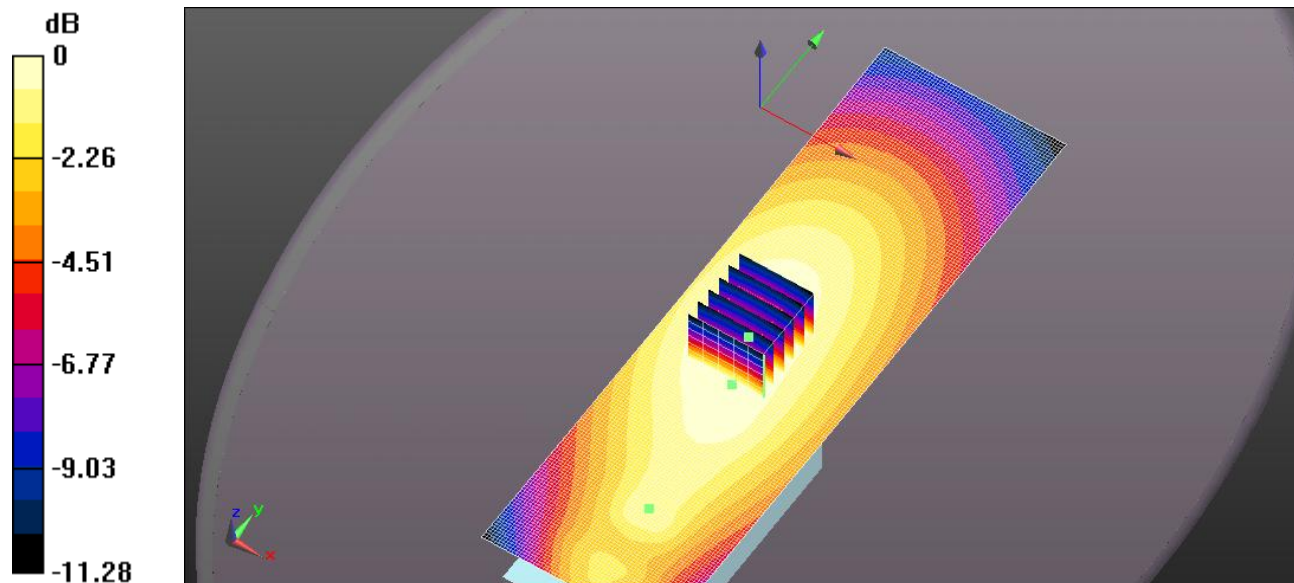
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 28.59 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.448 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.641 W/kg



0 dB = 0.639 W/kg = -1.94 dBW/kg

FILE NAME: [ICOM-5480 BODY MB133 HM-165 SD-IC001 156.025 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW; Frequency: 156.025 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.025$ MHz; $\sigma = 0.788$ S/m; $\epsilon_r = 59.48$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.52, 7.52, 7.52); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Area Scan (61x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Zoom Scan (5x5x7)

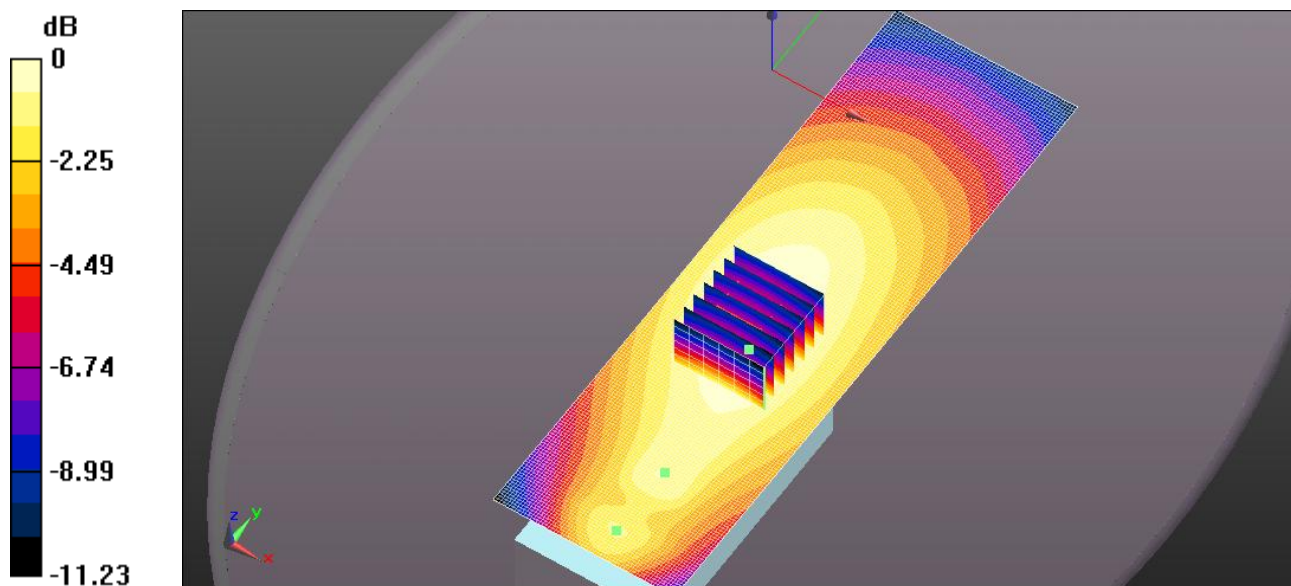
(7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 47.37 V/m; Power Drift = -2.01 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.798 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.20 W/kg = 0.79 dBW/kg

FILE NAME: [ICOM-5480 BODY MB133 HM-165 SD-IC001 161.450 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000312

Communication System: UID 0, CW; Frequency: 161.45 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 162$ MHz; $\sigma = 0.791$ S/m; $\epsilon_r = 59.291$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.52, 7.52, 7.52); Calibrated: 4/19/2021;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/11/2021
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Area Scan (61x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.522 W/kg

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Zoom Scan (5x5x7)

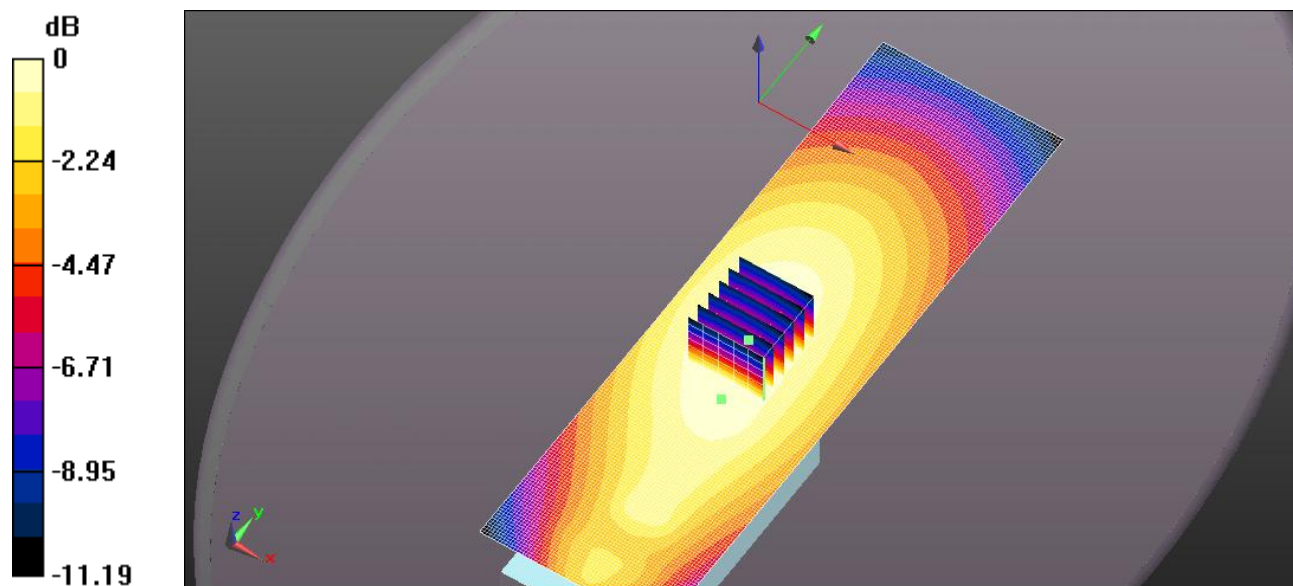
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 26.36 V/m; Power Drift = -0.33 dB

Peak SAR (extrapolated) = 0.667 W/kg

SAR(1 g) = 0.469 W/kg; SAR(10 g) = 0.361 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.520 W/kg



0 dB = 0.522 W/kg = -2.82 dBW/kg