

APPENDIX 1

SAR Measurement Data

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EXHIBIT 1. HEAD SAR MEASUREMENTS

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	5.50	01A	156.05	1.62	1.23	-0.64
	5.40	74	156.725	**	**	**
	5.44	88	157.425	1.58	1.18	-1.45
SD-IC001	5.50	01A	156.05	2.17	1.65	-1.2
	5.40	74	156.725	**	**	**
	5.44	88	157.425	2.84	2.15	-1.04

** SAR Test Reduction Applied For PTT Radio

FILE NAME: [ICOM-5330 HEAD FA-SC59V 156.050 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW (0); Frequency: 156.05 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.763$ S/m; $\epsilon_r = 53.377$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

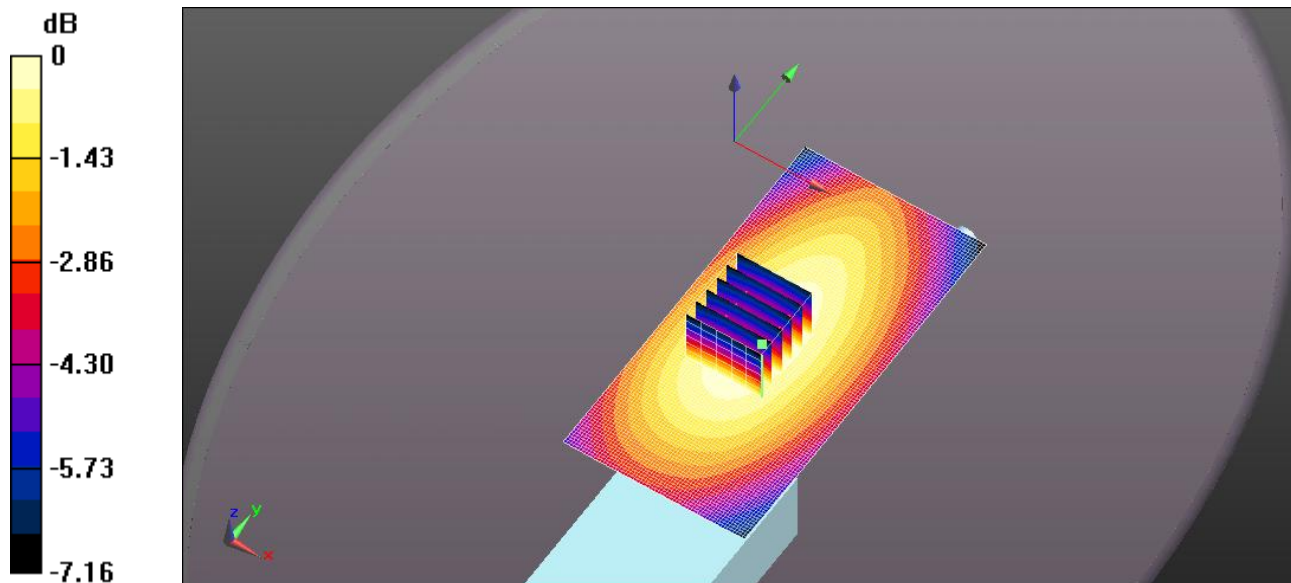
- Probe: ES3DV3 - SN3250; ConvF(7.65, 7.65, 7.65); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS2 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x121x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.81 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 = 50.58 V/m; Power Drift = -0.64 dB
Peak SAR (extrapolated) = 2.31 W/kg
SAR(1 g) = 1.62 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.80 W/kg



0 dB = 1.81 W/kg = 2.58 dBW/kg

FILE NAME: [ICOM-5330 HEAD FA-SC59V 157.425 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW (0); Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158$ MHz; $\sigma = 0.764$ S/m; $\epsilon_r = 53.438$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.65, 7.65, 7.65); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- 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 (61x121x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.90 W/kg

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

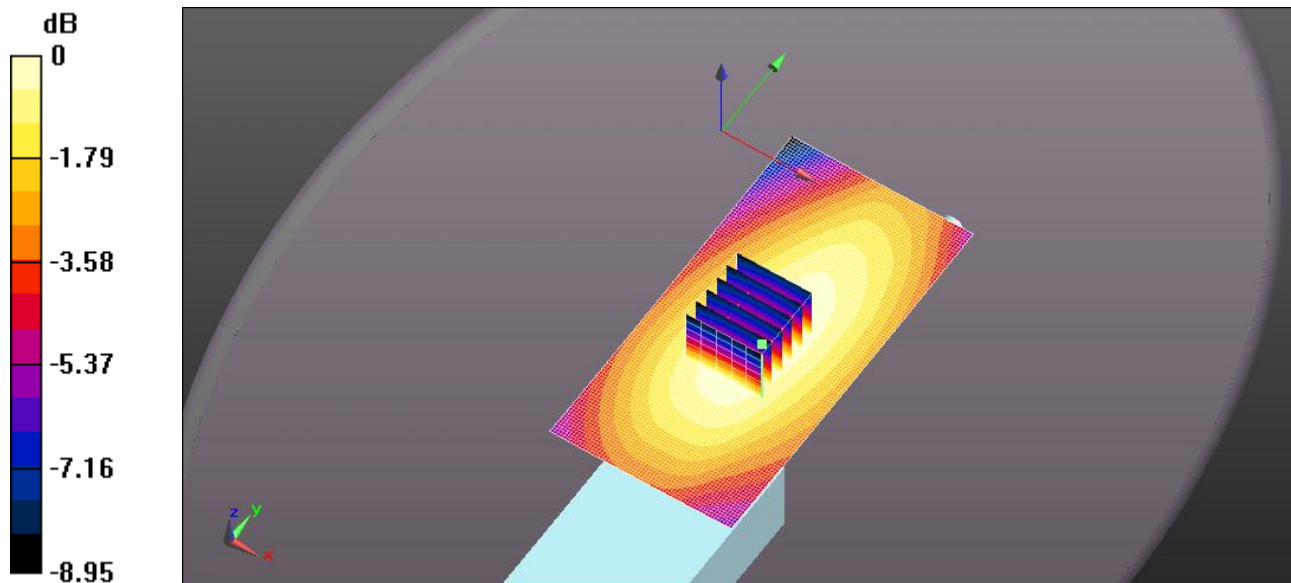
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 54.45 V/m; Power Drift = -1.45 dB

Peak SAR (extrapolated) = 2.33 W/kg

SAR(1 g) = 1.58 W/kg; SAR(10 g) = 1.18 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.76 W/kg



0 dB = 1.90 W/kg = 2.78 dBW/kg

FILE NAME: [ICOM-5330 HEAD SD-IC001 156.050 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW (0); Frequency: 156.05 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.763$ S/m; $\epsilon_r = 53.377$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.65, 7.65, 7.65); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- 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 (61x121x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.56 W/kg

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

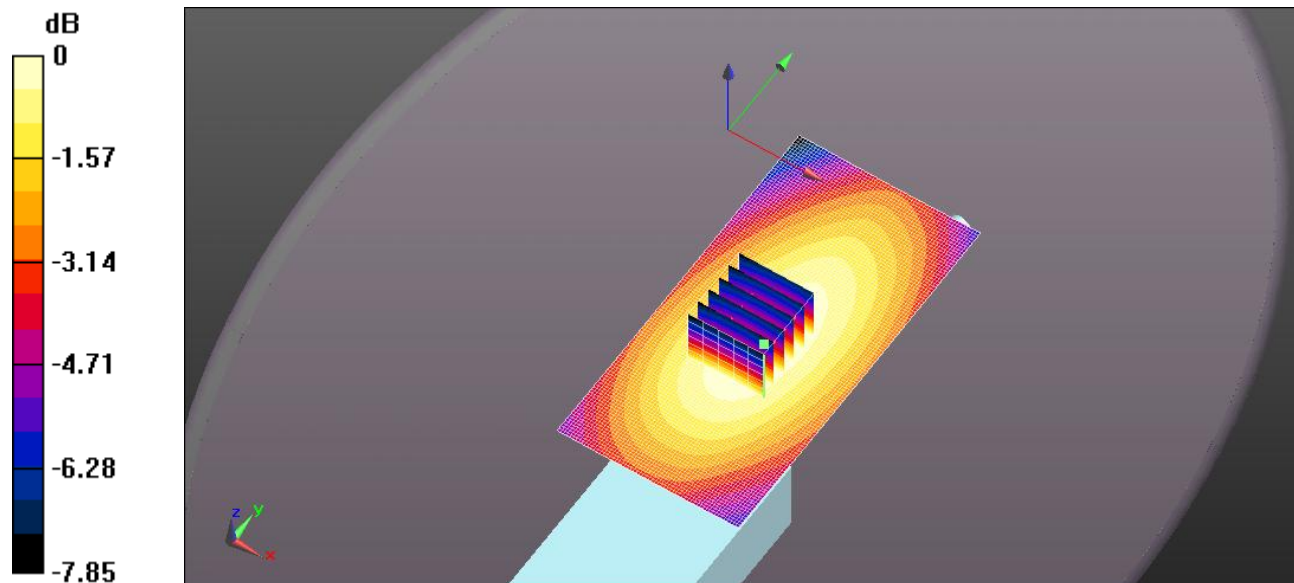
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 62.56 V/m; Power Drift = -1.20 dB

Peak SAR (extrapolated) = 3.09 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.65 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.41 W/kg



0 dB = 2.56 W/kg = 4.09 dBW/kg

FILE NAME: [ICOM-5330 HEAD SD-IC001 157.425 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW (0); Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158$ MHz; $\sigma = 0.764$ S/m; $\epsilon_r = 53.438$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

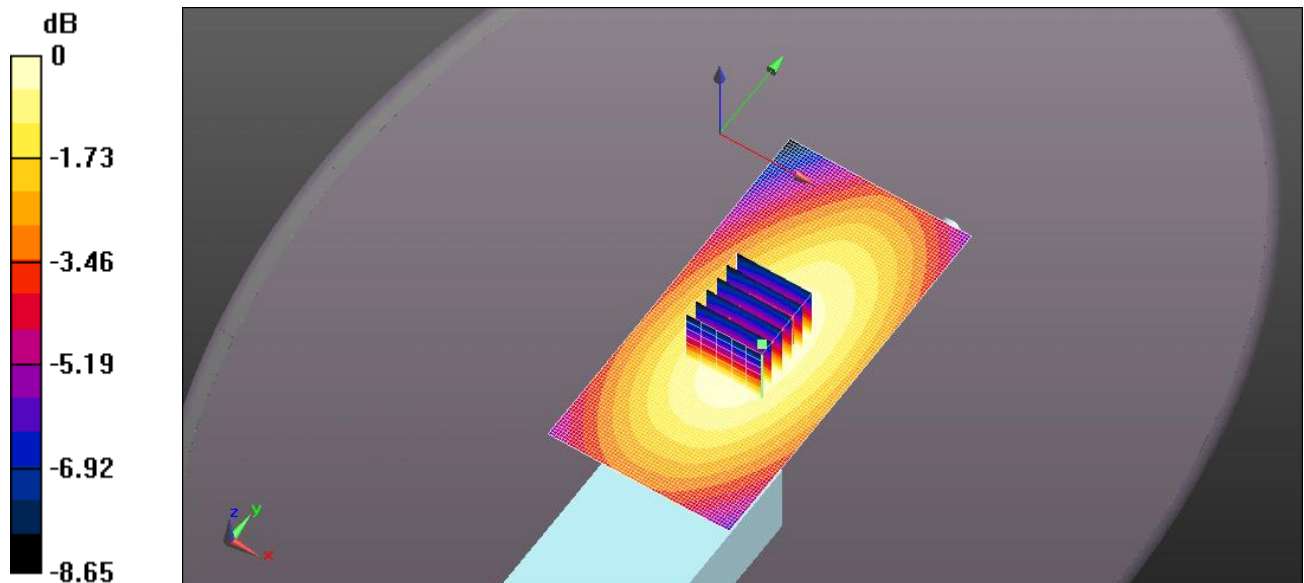
- Probe: ES3DV3 - SN3250; ConvF(7.65, 7.65, 7.65); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS2 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Head_IC-M94D/Head Front, P=6W, d=25mm/Area Scan (61x121x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.49 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 = 69.44 V/m; Power Drift = -1.04 dB
Peak SAR (extrapolated) = 4.12 W/kg
SAR(1 g) = 2.84 W/kg; SAR(10 g) = 2.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.49 W/kg = 5.43 dBW/kg

EXHIBIT 2. BODY SAR MEASUREMENTS

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	BP-306	
FA-SC59V	5.50	01A	156.05	0.539	0.415	-0.63
	5.40	74	156.725	**	**	**
	5.44	88	157.425	0.486	0.373	-0.3
SD-IC001	5.50	01A	156.05	0.952	0.73	-1.73
	5.40	74	156.725	**	**	**
	5.44	88	157.425	0.798	0.613	-0.84

** SAR Test Reduction Applied For PTT Radio

FILE NAME: [ICOM-5330 BODY MB133 HM-165 FA-SC59V 156.050 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW; Frequency: 156.05 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.803$ S/m; $\epsilon_r = 60.507$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.35, 7.35, 7.35); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASYS2 52.10.0(1446); SEMCAD X 14.6.10(7417)

Configuration_Body_IC-M94D/Front to Face, P=6W, d=0mm/Area Scan (61x101x1):

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

Maximum value of SAR (interpolated) = 0.614 W/kg

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

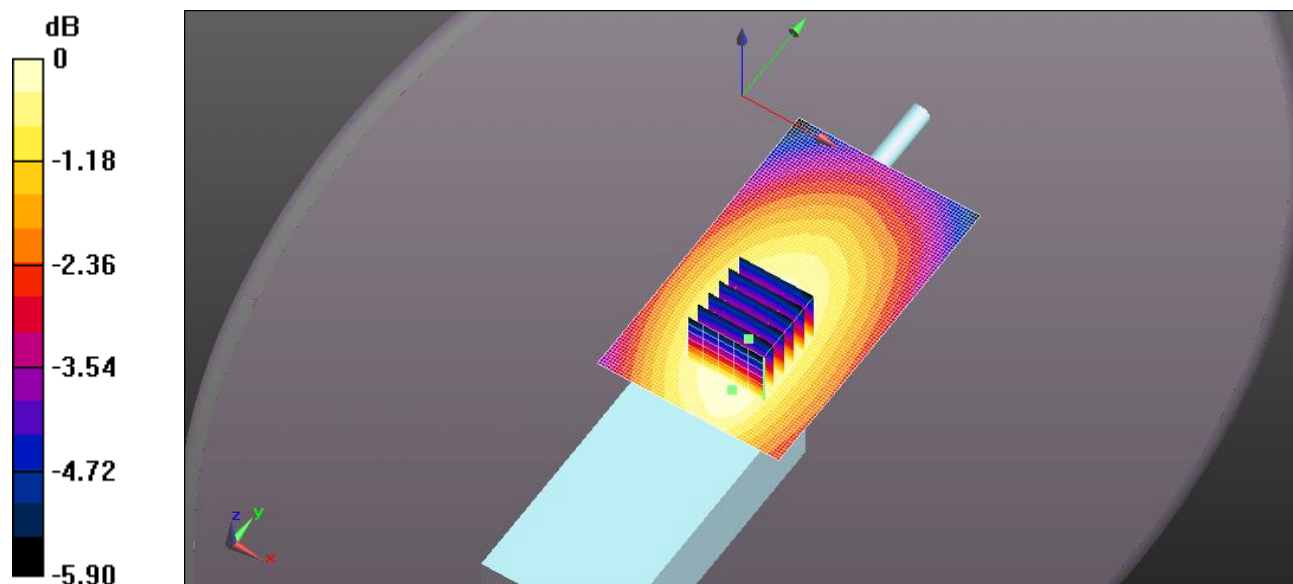
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 29.15 V/m; Power Drift = -0.63 dB

Peak SAR (extrapolated) = 0.761 W/kg

SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.415 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.598 W/kg



0 dB = 0.614 W/kg = -2.12 dBW/kg

FILE NAME: [ICOM-5330 BODY MB133 HM-165 FA-SC59V 157.425 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW; Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158$ MHz; $\sigma = 0.803$ S/m; $\epsilon_r = 60.474$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.35, 7.35, 7.35); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- 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 (61x101x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.543 W/kg

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

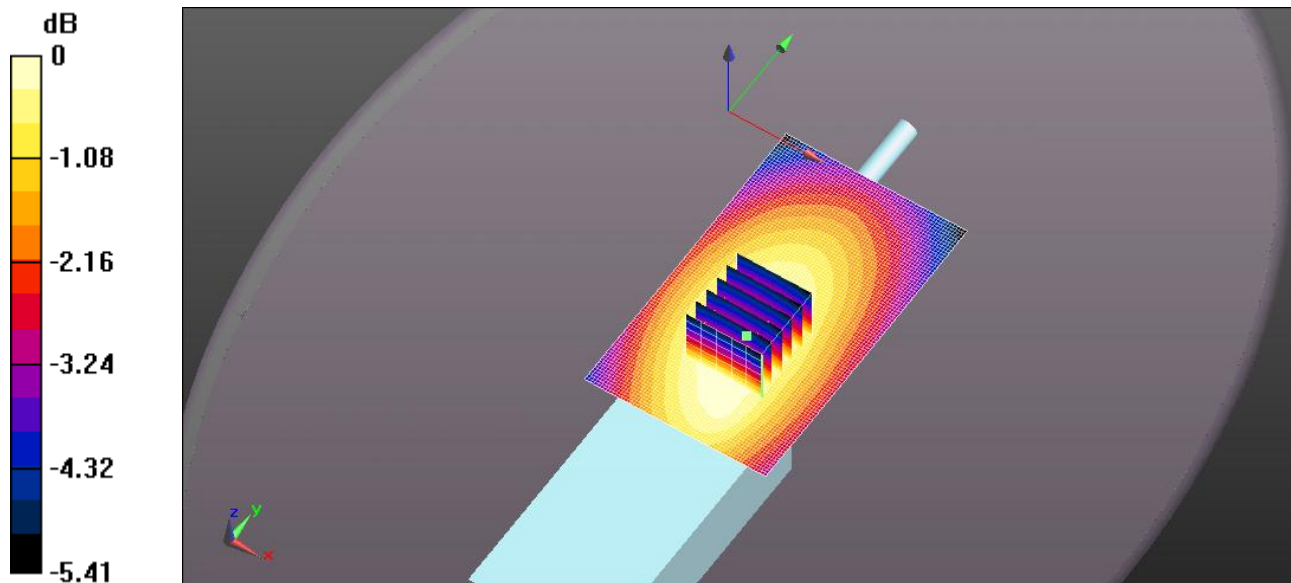
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 26.68 V/m; Power Drift = -0.30 dB

Peak SAR (extrapolated) = 0.684 W/kg

SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.373 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.542 W/kg



0 dB = 0.543 W/kg = -2.65 dBW/kg

FILE NAME: [ICOM-5330 BODY MB133 HM-165 SD-IC001 156.050 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW; Frequency: 156.05 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 156.05$ MHz; $\sigma = 0.803$ S/m; $\epsilon_r = 60.507$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.35, 7.35, 7.35); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- 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 (61x101x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

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

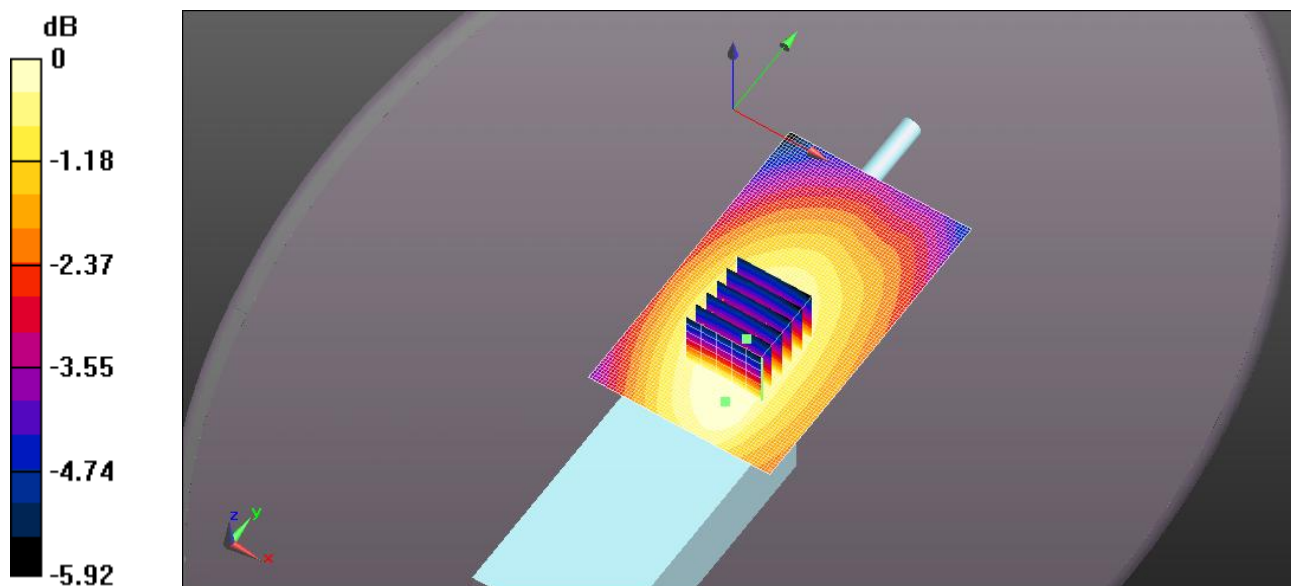
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 44.10 V/m; Power Drift = -1.73 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.952 W/kg; SAR(10 g) = 0.730 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.10 W/kg = 0.42 dBW/kg

FILE NAME: [ICOM-5330 BODY MB133 HM-165 SD-IC001 157.425 MHZ.DA52:0](#)

DUT: IC-M94D; Type: VHF Marine Transceiver; Serial: 00000003

Communication System: UID 0, CW; Frequency: 157.425 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 158$ MHz; $\sigma = 0.803$ S/m; $\epsilon_r = 60.474$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.35, 7.35, 7.35); Calibrated: 3/20/2020;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/13/2020
- 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 (61x101x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.929 W/kg

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

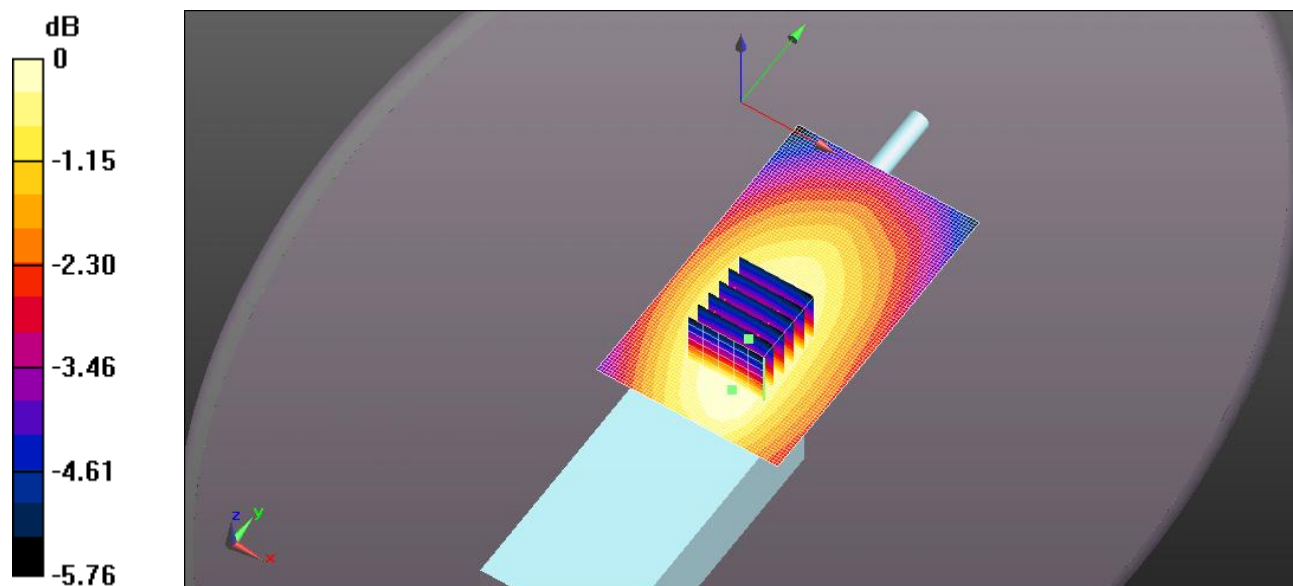
(6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 36.64 V/m; Power Drift = -0.84 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.613 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.883 W/kg



0 dB = 0.929 W/kg = -0.32 dBW/kg