

ICOM-389Q-SAR.docx

APPENDIX 1

SAR Measurement Data

ULTRATECH GROUP OF LABS

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File #: ICOM-389Q-SAR-Appendix 1.docx

Dec 17, 2014

- *All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)*

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EXHIBIT 1. HEAD SAR MEASUREMENT SUMMARY

Antenna	Power	CH	CH. Freq (MHz)	HEAD SAR (W/Kg)	
				BP-279 1485mAh	BP-280 2280mAh
			FA-SC26VS 80mm 136-144 MHz Blue	5.15	1
FA-SC27VS 80mm 142-150 MHz Purple	5.15	1	150		0.11
FA-SC25V-1 163mm 136-150 MHz Blue	5.15	1	150	0.47	0.25
FA-SC55V-1 164mm 150-174 MHz	5.15	1	150	0.33	
	5.46	3	156	0.47	
	5.18	5	162	0.58	0.32
	5.10	7	168	0.39	
	5.16	8	170	0.08	
FA-SC62V 255mm 150-160 MHz	5.15	1	150	0.29	
	5.31	2	155	0.43	
	5.21	4	160	0.83	0.23
FA-SC63V 240mm 155-165 MHz	5.31	2	155	0.38	
	5.21	4	160	0.45	
	5.13	6	165	0.58	0.28
FA-SC56VS-1 80mm 150-162 MHz	5.15	1	150	0.28	0.17
	5.46	3	156	0.1	
	5.18	5	162	0.04	
FA-SC57VS-80mm 1 160-172 MHz	5.21	4	160	0.32	0.16
	5.13	6	165	0.16	
	5.16	8	170	0.02	

*Shaded area denotes SAR measurements taken from original SAR report ICOM-361Q-sar.docx

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Antenna	Power	CH	CH. Freq (MHz)	HEAD SAR (W/Kg)	
				BP-279	BP-280
				1485mAh	2280mAh
FA-SC61VC 156mm 150MHz White	5.15	1	150	0.07	
	5.31	2	155	0.15	
	5.21	4	160		
	5.13	6	165		0.28
	5.16	8	170	0.22	
FA-SC61VC 151mm 155MHz White	5.15	1	150		
	5.31	2	155		0.10
	5.21	4	160		
	5.13	6	165		
	5.16	8	170		
FA-SC61VC 145mm 160MHz White	5.15	1	150		
	5.31	2	155		0.08
	5.21	4	160		
	5.13	6	165		
	5.16	8	170		
FA-SC61VC 136mm 170MHz White	5.15	1	150	0.57	0.03
	5.31	2	155	0.24	
	5.21	4	160		
	5.13	6	165		
	5.16	8	170	0.02	

*Shaded area denotes SAR measurements taken from original SAR report ICOM-361Q-sar.docx

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC26VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.778$ S/m; $\epsilon_r = 53.708$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.0701 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 9.322 V/m; Power Drift = -0.13 dB

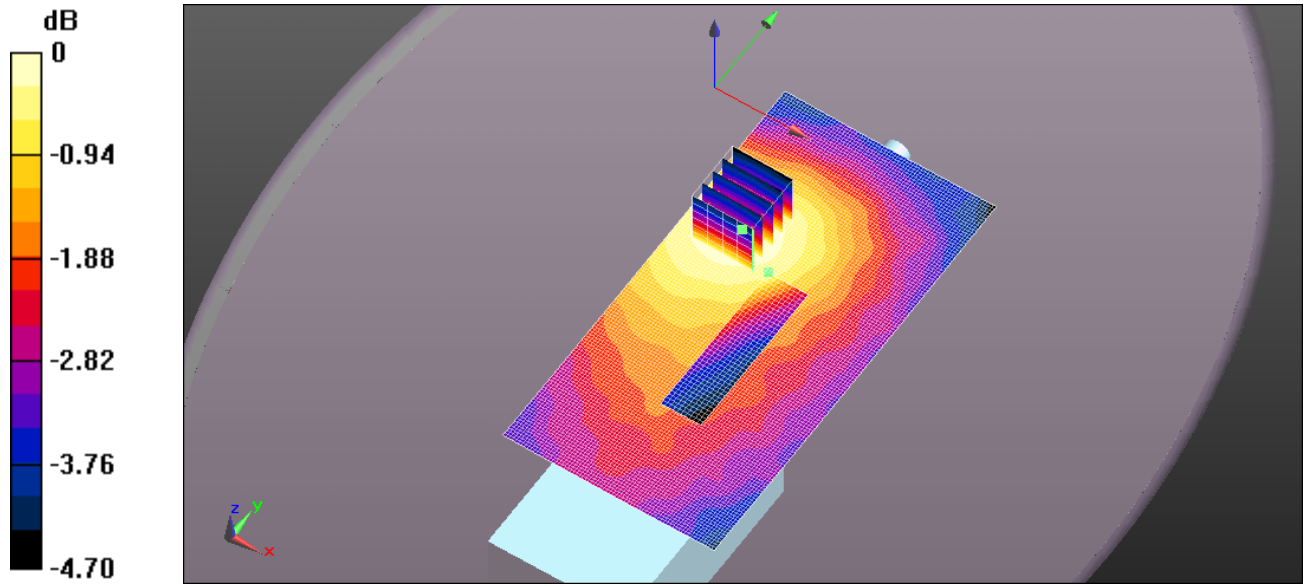
Peak SAR (extrapolated) = 0.117 W/kg

SAR(1 g) = 0.072 W/kg; SAR(10 g) = 0.051 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.0817 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0852 W/kg



0 dB = 0.0701 W/kg = -11.54 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC27VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.778$ S/m; $\epsilon_r = 53.708$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.202 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 15.60 V/m; Power Drift = -0.27 dB

Peak SAR (extrapolated) = 0.345 W/kg

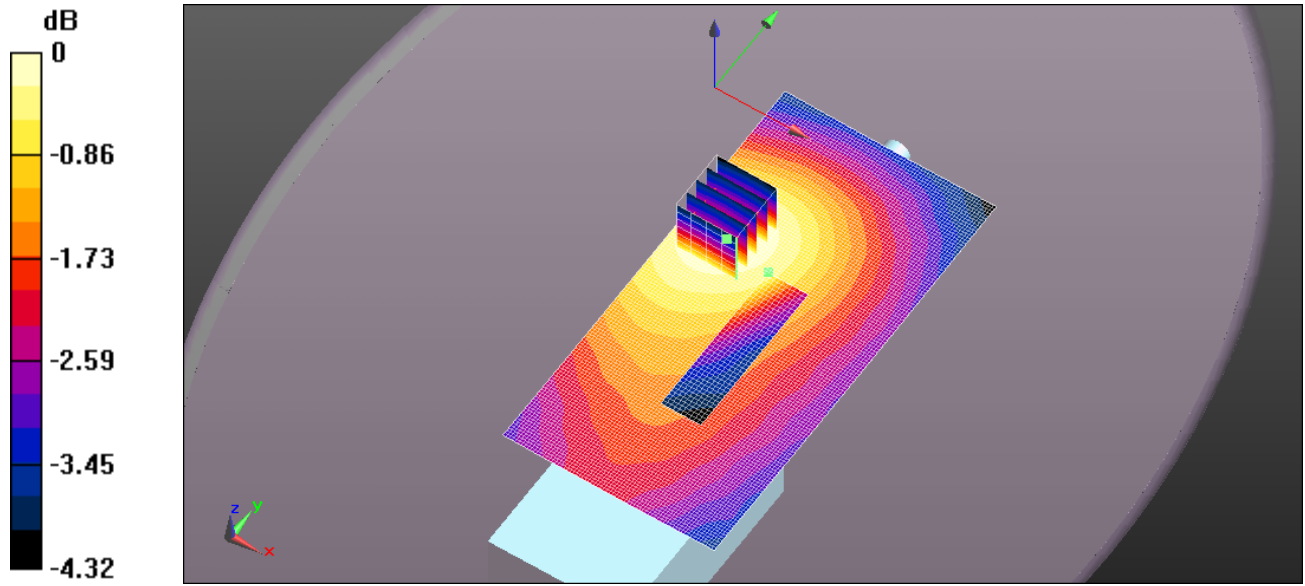
SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.158 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.248 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

Maximum value of SAR (interpolated) = 0.253 W/kg



0 dB = 0.202 W/kg = -6.95 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC25VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.778$ S/m; $\epsilon_r = 53.708$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.466 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 23.73 V/m; Power Drift = -0.04 dB

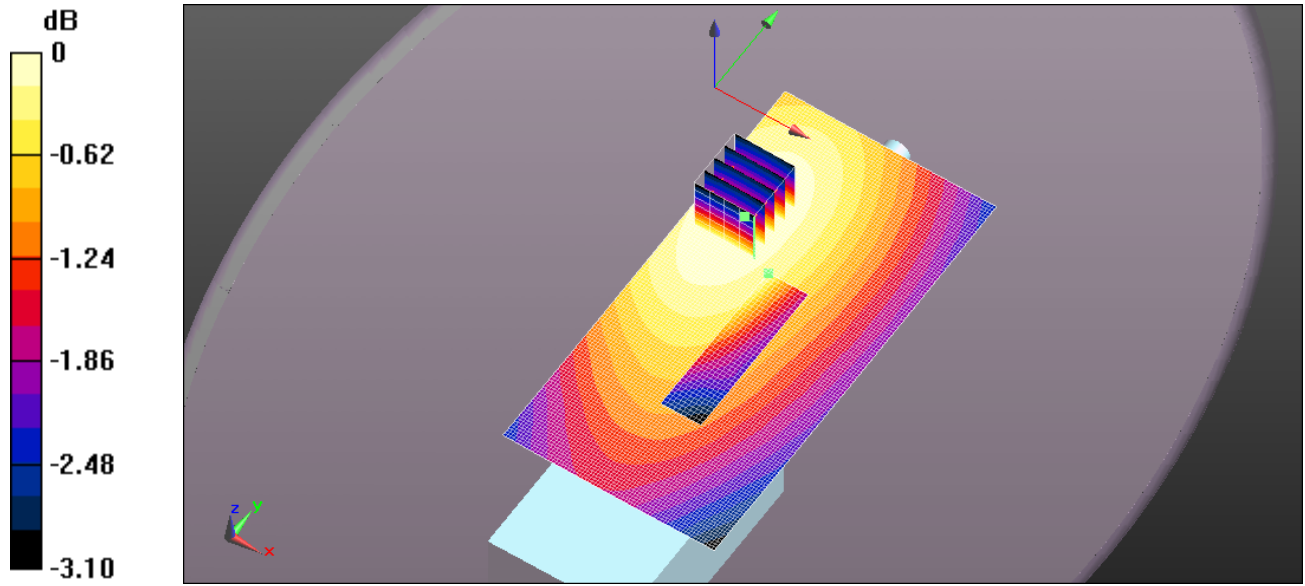
Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.381 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.548 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.548 W/kg



0 dB = 0.466 W/kg = -3.32 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC55V-1 164MM 162MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 162 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 162$ MHz; $\sigma = 0.79$ S/m; $\epsilon_r = 52.924$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.613 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 27.21 V/m; Power Drift = -0.12 dB

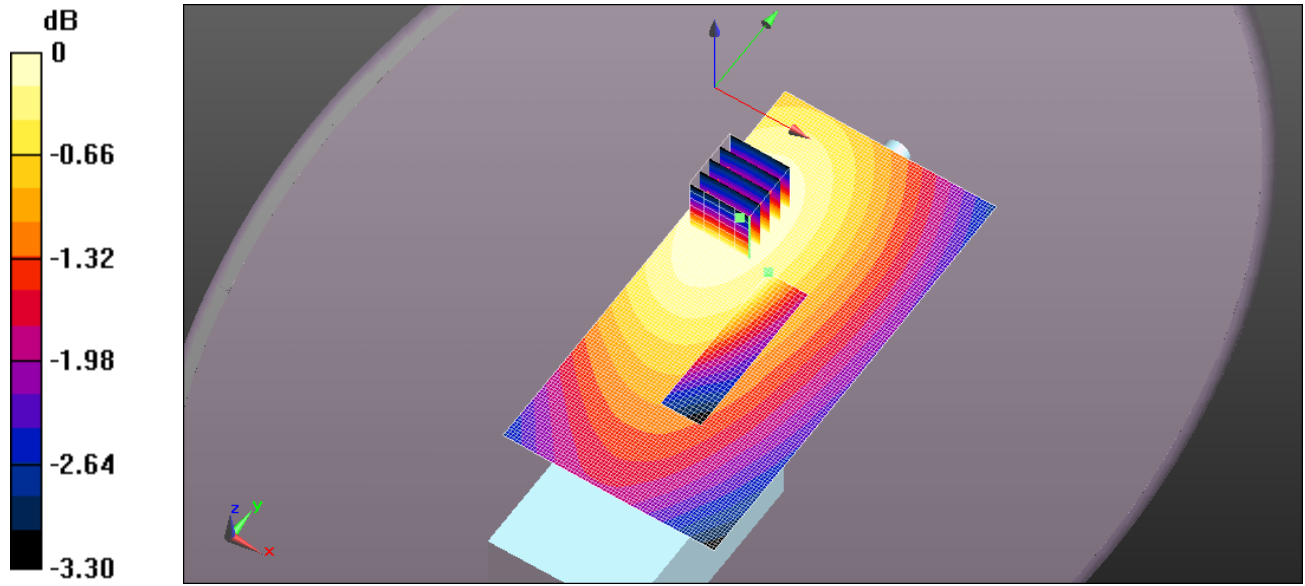
Peak SAR (extrapolated) = 0.944 W/kg

SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.498 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.732 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.735 W/kg



0 dB = 0.613 W/kg = -2.12 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC62V 255MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.79$ S/m; $\epsilon_r = 53.014$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.353 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 20.85 V/m; Power Drift = 0.22 dB

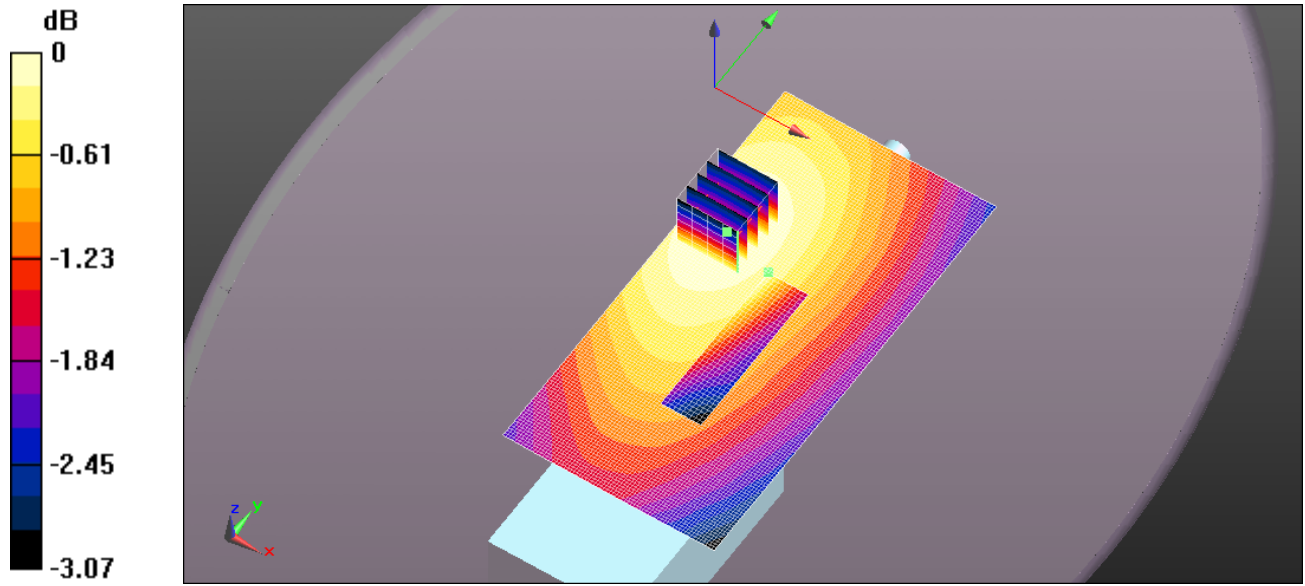
Peak SAR (extrapolated) = 0.678 W/kg

SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.357 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.525 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.493 W/kg



0 dB = 0.353 W/kg = -4.53 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC63V 240MM 165MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 165 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 165$ MHz; $\sigma = 0.793$ S/m; $\epsilon_r = 52.833$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

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

Maximum value of SAR (interpolated) = 0.371 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 21.59 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.817 W/kg

SAR(1 g) = 0.557 W/kg; SAR(10 g) = 0.428 W/kg (SAR corrected for target medium)

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

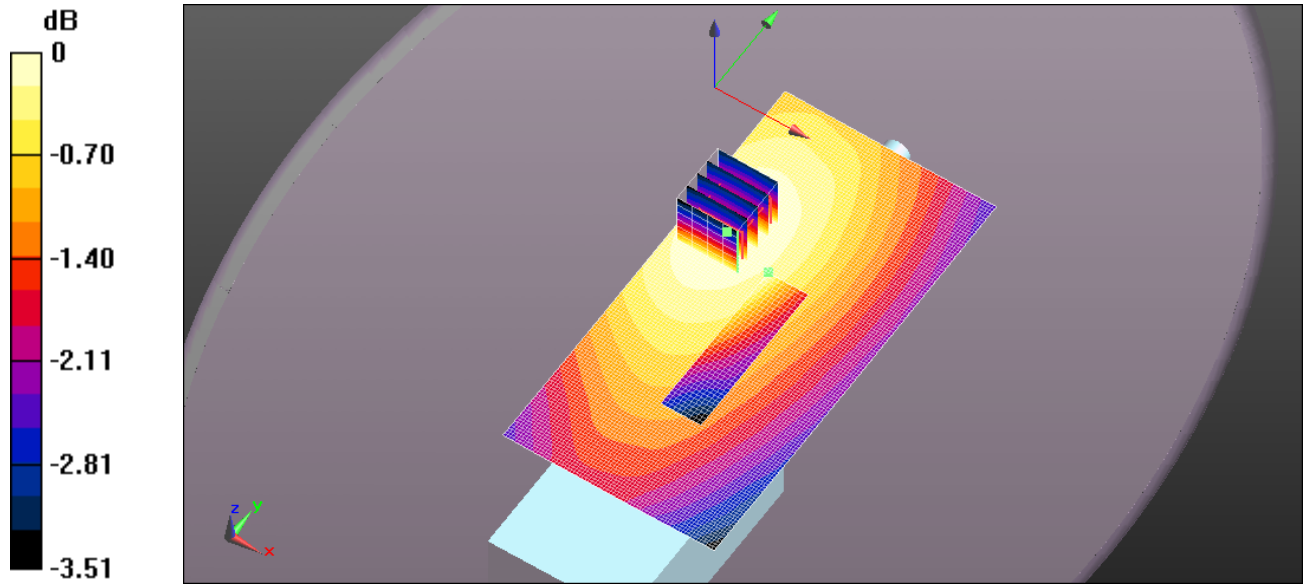
Maximum value of SAR (measured) = 0.632 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

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

Maximum value of SAR (interpolated) = 0.564 W/kg



0 dB = 0.371 W/kg = -4.31 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC56VS-1 60MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.778$ S/m; $\epsilon_r = 53.708$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.268 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 18.03 V/m; Power Drift = -0.23 dB

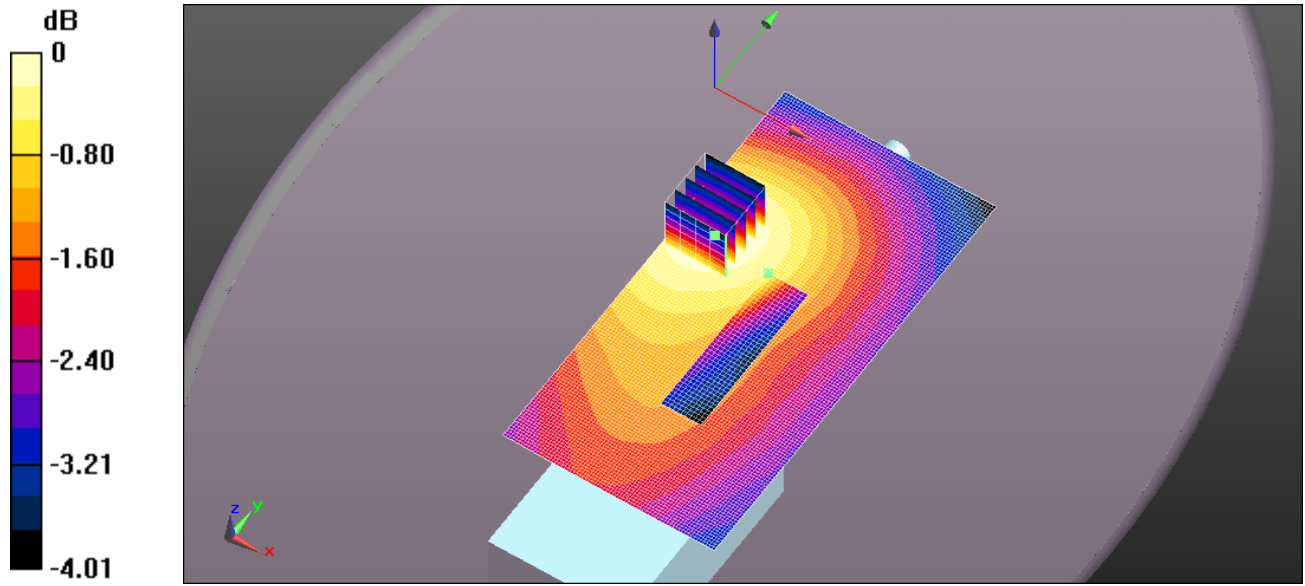
Peak SAR (extrapolated) = 0.532 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.240 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.381 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.384 W/kg



0 dB = 0.268 W/kg = -5.72 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC57VS 80MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.79$ S/m; $\epsilon_r = 53.014$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/FindMax (11x41x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.246 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 17.32 V/m; Power Drift = 0.03 dB

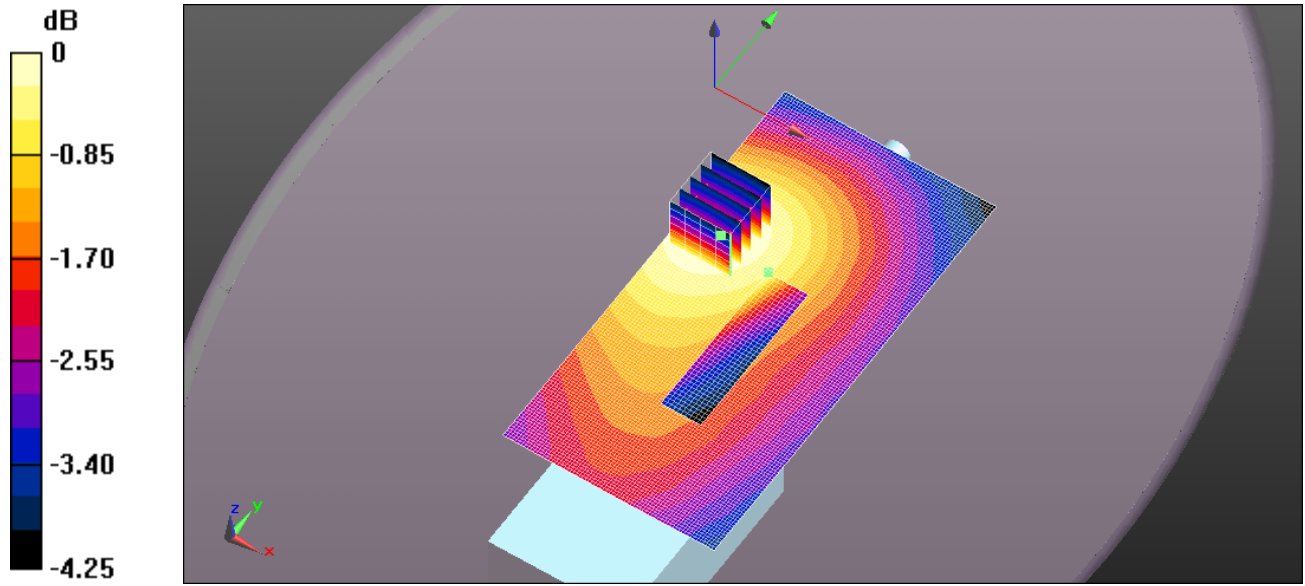
Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.327 W/kg; SAR(10 g) = 0.237 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.378 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.375 W/kg



0 dB = 0.246 W/kg = -6.09 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 156MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.778$ S/m; $\epsilon_r = 53.708$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 24.50 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.800 W/kg

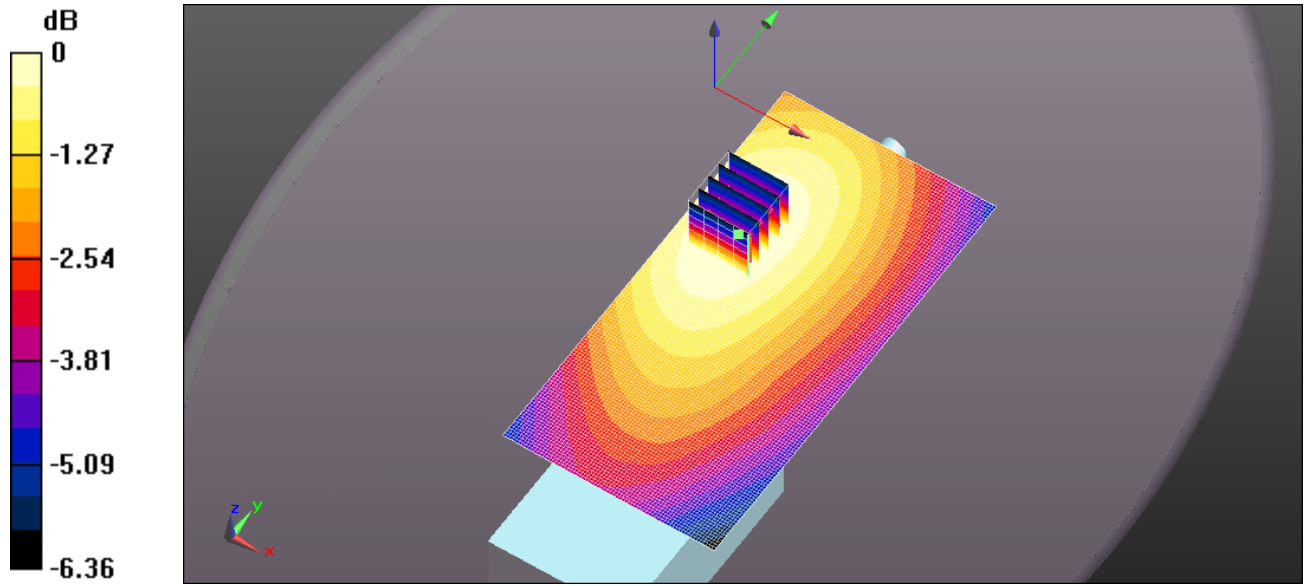
SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.424 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.616 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

Maximum value of SAR (interpolated) = 0.610 W/kg



0 dB = 0.616 W/kg = -2.11 dBW/kg

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File #: ICOM-389Q-SAR-Appendix 1.docx
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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 151MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155$ MHz; $\sigma = 0.783$ S/m; $\epsilon_r = 53.394$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 13.81 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.159 W/kg (SAR corrected for target medium)

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

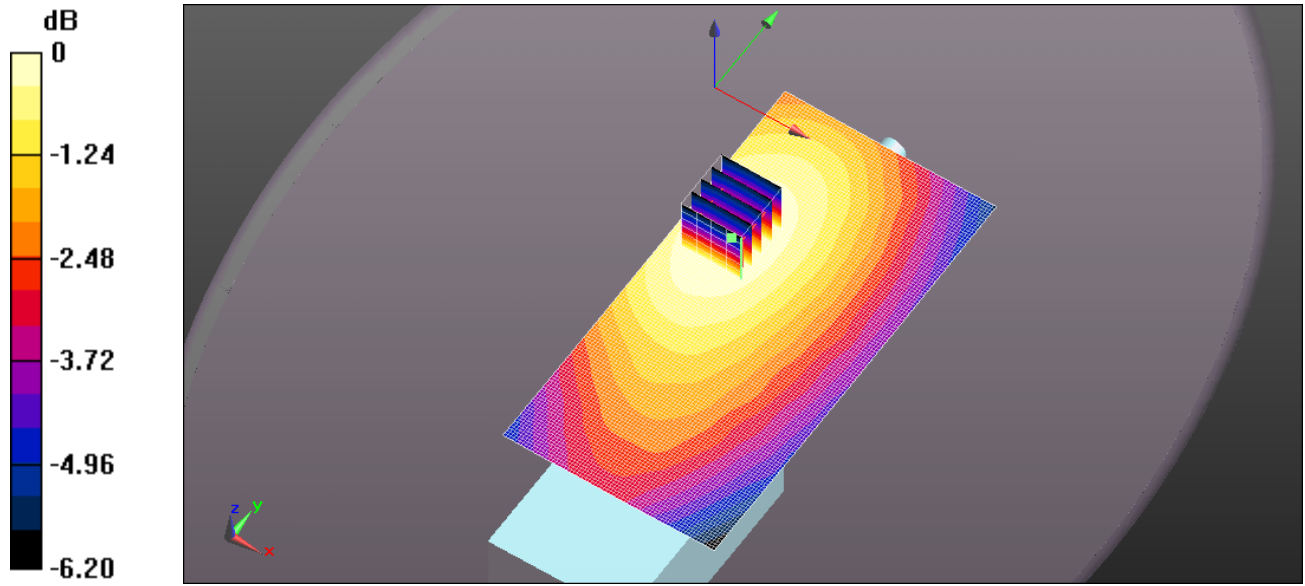
Maximum value of SAR (measured) = 0.232 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

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

Maximum value of SAR (interpolated) = 0.224 W/kg



0 dB = 0.232 W/kg = -6.35 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 145MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155$ MHz; $\sigma = 0.783$ S/m; $\epsilon_r = 53.394$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

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

Reference Value = 13.08 V/m; Power Drift = -0.21 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.119 W/kg (SAR corrected for target medium)

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

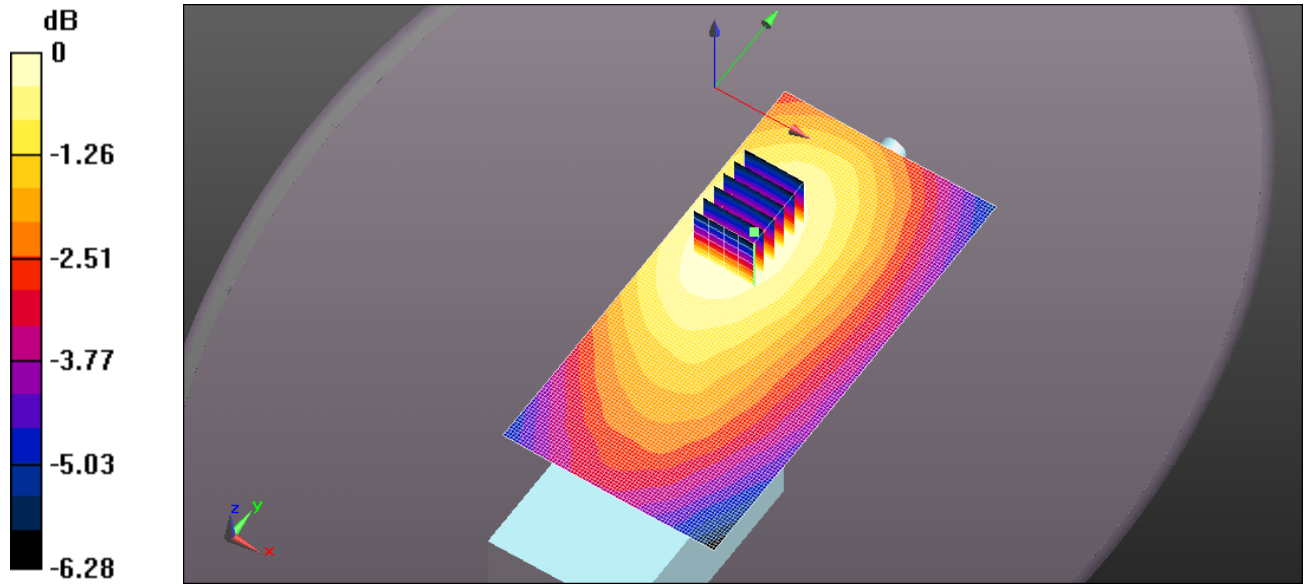
Maximum value of SAR (measured) = 0.174 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

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

Maximum value of SAR (interpolated) = 0.178 W/kg



0 dB = 0.174 W/kg = -7.60 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs
File Name: [BP-280 SC61VC 145mm 155MHz.da52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155 \text{ MHz}$; $\sigma = 0.783 \text{ S/m}$; $\epsilon_r = 53.394$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(7.34, 7.34, 7.34); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Zoom Scan (5x5x7)

(5x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.08 V/m; Power Drift = -0.21 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.119 W/kg (SAR corrected for target medium)

Info: Interpolated medium parameters used for SAR evaluation.

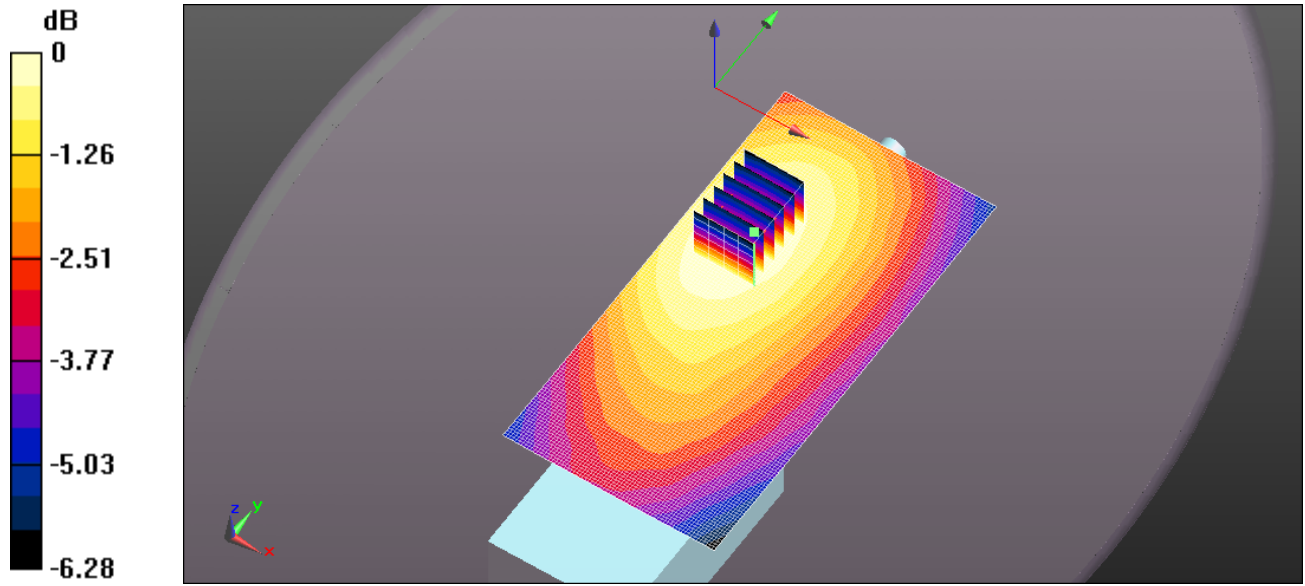
Maximum value of SAR (measured) = 0.174 W/kg

Configuration_Head_IC-F1000/Front to Face, P=5W, d=25mm/Area Scan (71x141x1):

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.178 W/kg



0 dB = 0.174 W/kg = -7.60 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

EXHIBIT 2. BODY SAR MEASUREMENT SUMMARY

Antenna	Power	CH	CH. Freq	BODY SAR (W/Kg)	
				BP-279	BP-280
			(MHz)	1485mAh	2280mAh
FA-SC26VS 80mm 136-144 MHz Blue	5.15	1	150		0.08
FA-SC27VS 80mm 142-150 MHz Purple	5.15	1	150		0.17
FA-SC25V-1 163mm 136-150 MHz Blue	5.15	1	150	0.91	0.39
FA-SC55V-1 164mm 150-174 MHz	5.15	1	150	1.05	0.66
	5.46	3	156	0.74	0.70
	5.18	5	162		
	5.10	7	168	0.36	
	5.16	8	170	0.06	
FA-SC62V 255mm 150-160 MHz	5.15	1	150	1.08	
	5.31	2	155	1.32	
	5.21	4	160	1.95	1.22
FA-SC63V 240mm 155-165 MHz	5.31	2	155	1.08	
	5.21	4	160	2.62	1.09
	5.13	6	165	2.2	
FA-SC56VS-1 80mm 150-162 MHz	5.15	1	150	0.52	0.26
	5.46	3	156	0.16	
	5.18	5	162	0.07	
FA-SC57VS-80mm 1 160-172 MHz	5.21	4	160	0.51	0.40
	5.13	6	165	0.19	
	5.16	8	170	0.02	

*Shaded area denotes SAR measurements taken from original SAR report ICOM-361Q-sar.docx

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Antenna	Power	CH	CH. Freq	BODY SAR (W/Kg)	
				BP-279	BP-280
			(MHz)	1485mAh	2280mAh
FA-SC61VC 156mm 150MHz White	5.15	1	150	0.15	
	5.31	2	155	0.28	0.44
	5.21	4	160		
	5.13	6	165		
	5.16	8	170	0.02	
FA-SC61VC 151mm 155MHz White	5.15	1	150		
	5.31	2	155		0.89
	5.21	4	160		
	5.13	6	165		
	5.16	8	170		
FA-SC61VC 145mm 160MHz White	5.15	1	150		
	5.31	2	155		0.49
	5.21	4	160		
	5.13	6	165		
	5.16	8	170		
FA-SC61VC 136mm 170MHz White	5.15	1	150	0.12	
	5.31	2	155	0.36	0.34
	5.21	4	160		
	5.13	6	165		
	5.16	8	170	0.66	

*Shaded area denotes SAR measurements taken from original SAR report ICOM-361Q-sar.docx

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC26VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.765$ S/m; $\epsilon_r = 60.562$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

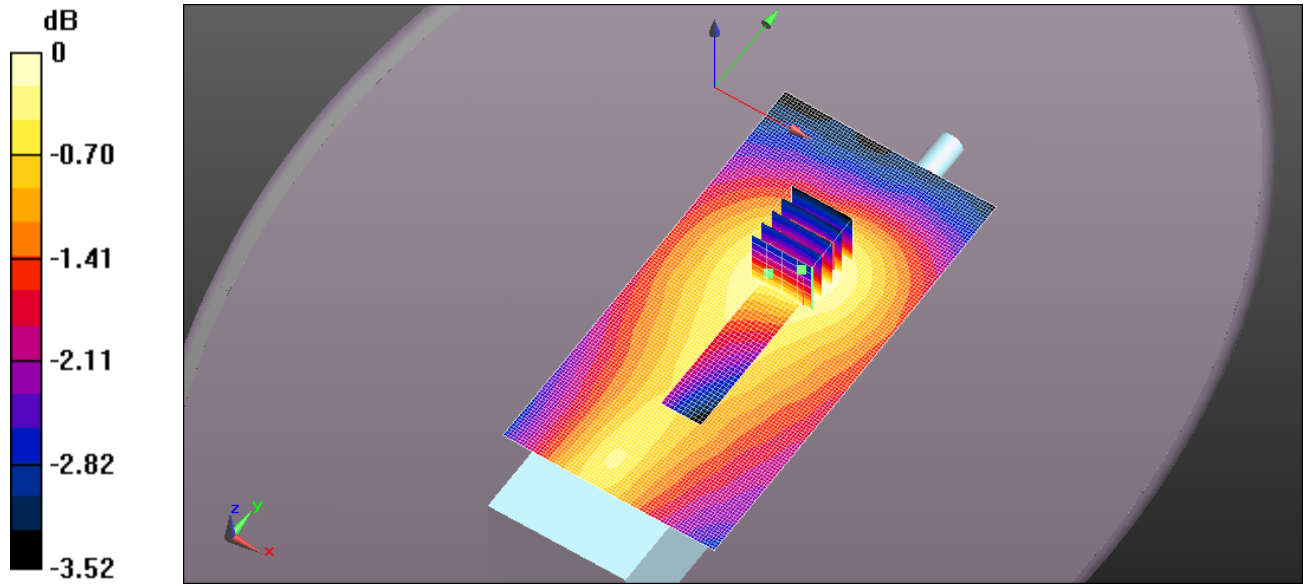
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.184 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.27 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.258 W/kg
SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.109 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.176 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.185 W/kg



0 dB = 0.184 W/kg = -7.36 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC27VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.765$ S/m; $\epsilon_r = 60.562$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

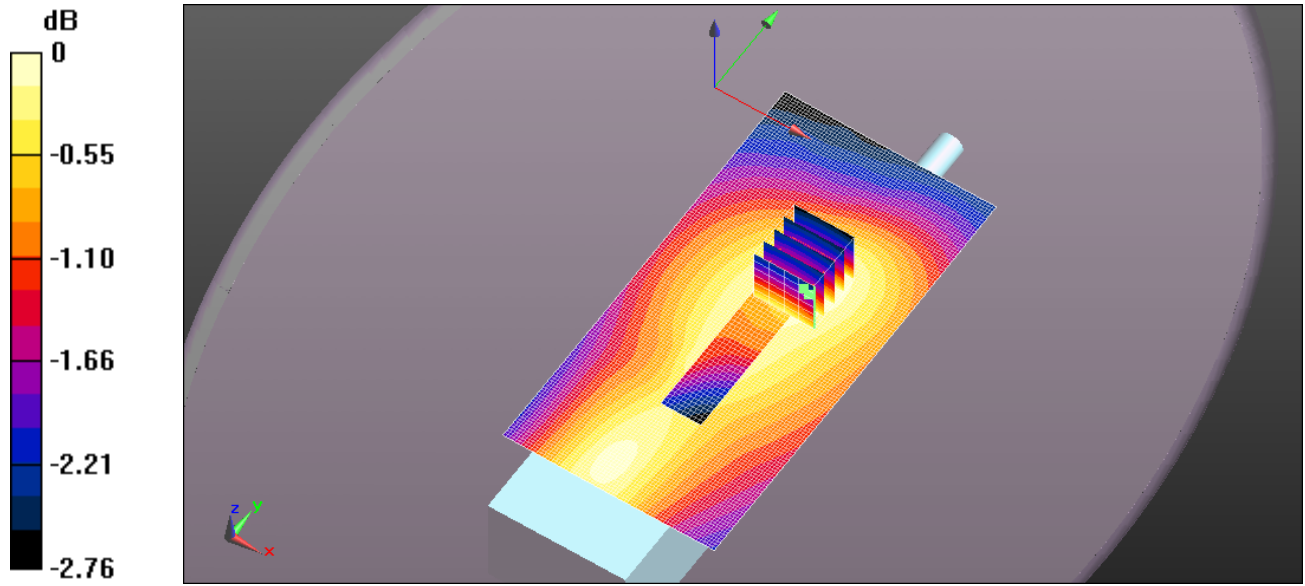
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.441 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.47 V/m; Power Drift = -0.29 dB
Peak SAR (extrapolated) = 0.553 W/kg
SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.247 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.384 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.398 W/kg



0 dB = 0.441 W/kg = -3.56 dBW/kg

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Test Laboratory: Ultratech Group of Labs
File Name: [BP-280 SC25V-1 163mm 150MHz.da52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.765$ S/m; $\epsilon_r = 60.562$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

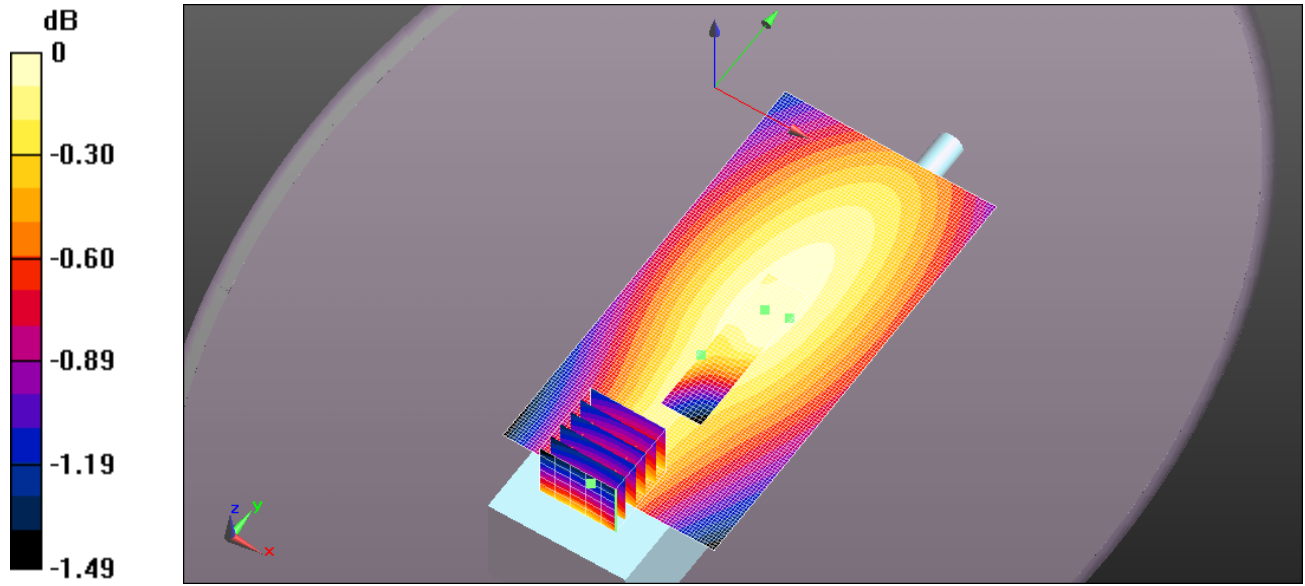
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.897 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 33.35 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.786 W/kg; SAR(10 g) = 0.461 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.952 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.933 W/kg



0 dB = 0.897 W/kg = -0.47 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC55V-1 166MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.765$ S/m; $\epsilon_r = 60.562$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

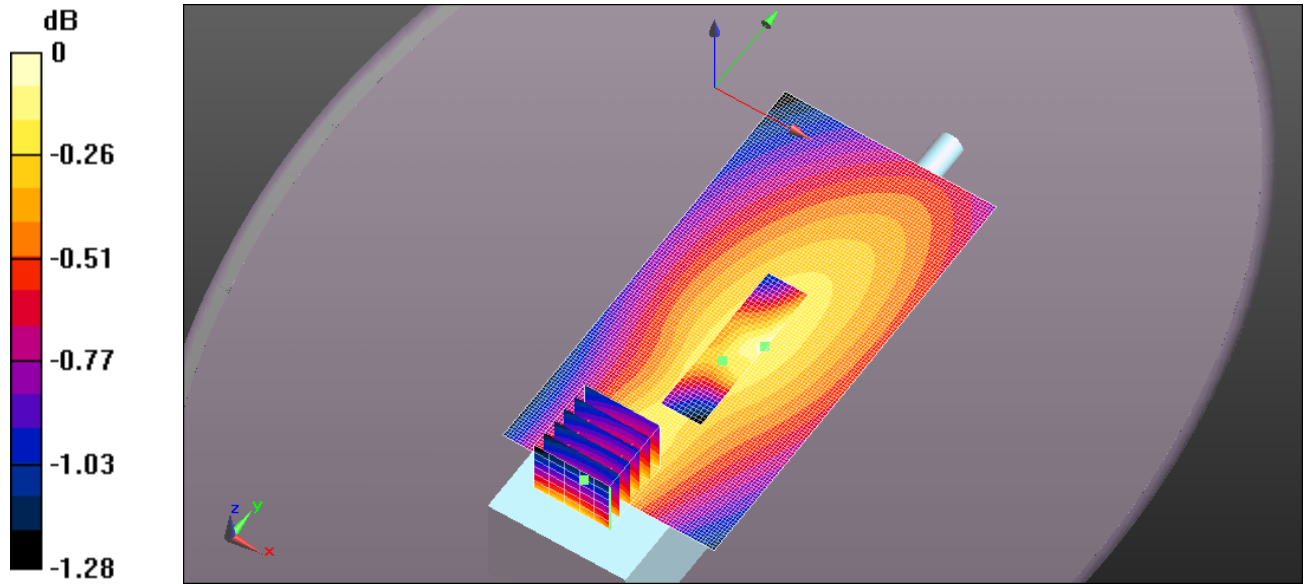
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.32 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 3.02 W/kg
SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.752 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.64 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.61 W/kg



0 dB = 1.13 W/kg = 0.52 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC55V-1 166MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 156 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 156$ MHz; $\sigma = 0.768$ S/m; $\epsilon_r = 60.42$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

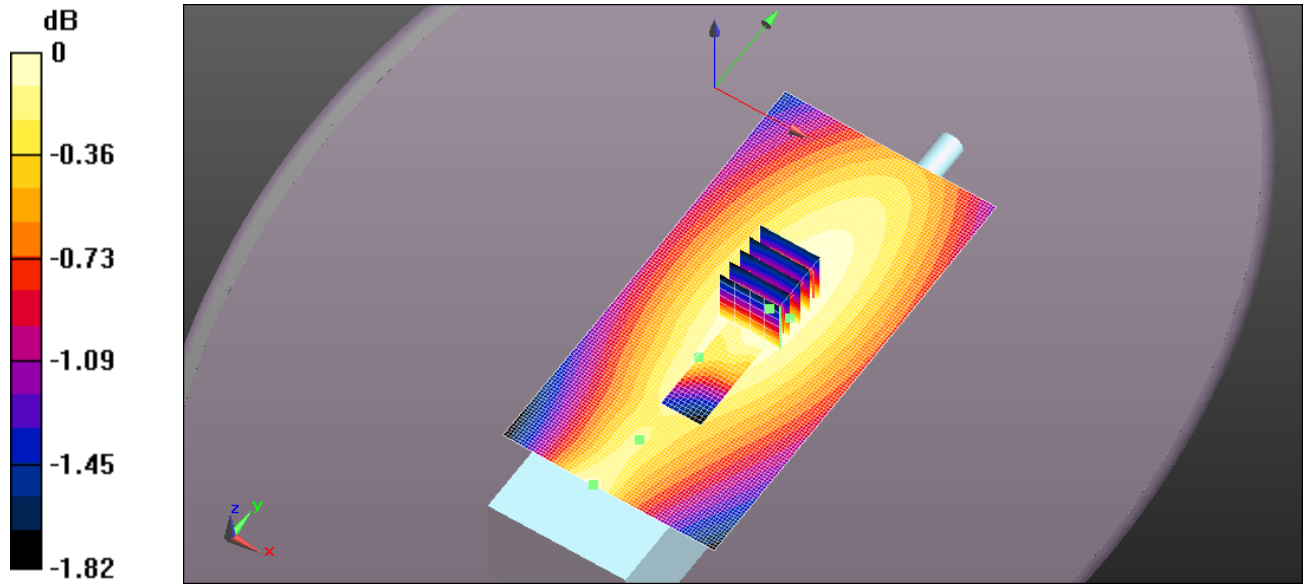
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.84 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.97 W/kg
SAR(1 g) = 1.39 W/kg; SAR(10 g) = 1.05 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.51 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.58 W/kg



0 dB = 1.62 W/kg = 2.09 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC62V 255MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.771$ S/m; $\epsilon_r = 60.376$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

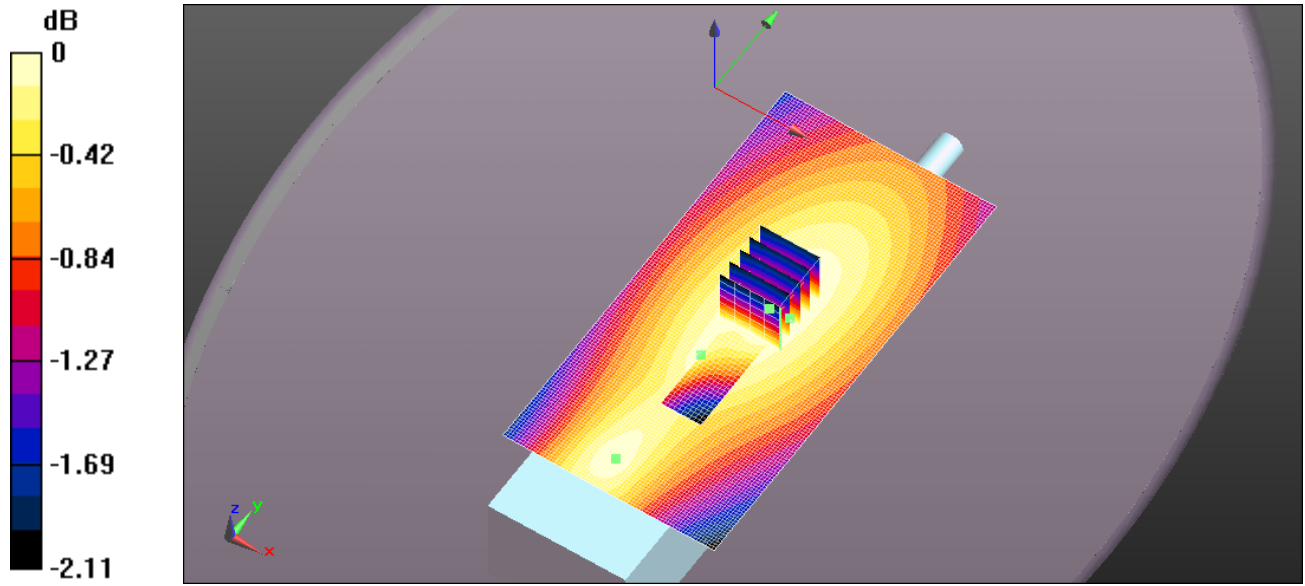
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 2.32 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 54.91 V/m; Power Drift = 0.23 dB
Peak SAR (extrapolated) = 3.43 W/kg
SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.84 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.65 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.56 W/kg



0 dB = 2.32 W/kg = 3.65 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC63V 240MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.771$ S/m; $\epsilon_r = 60.376$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

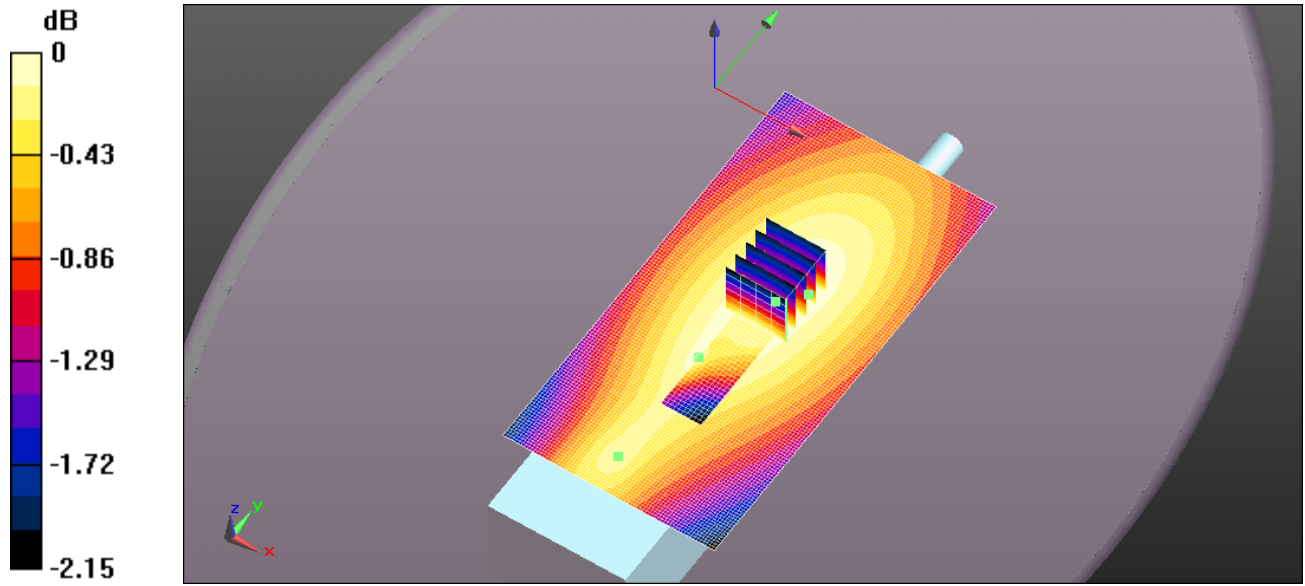
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 1.89 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 49.70 V/m; Power Drift = 0.86 dB
Peak SAR (extrapolated) = 3.08 W/kg
SAR(1 g) = 2.18 W/kg; SAR(10 g) = 1.65 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.38 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.18 W/kg



0 dB = 1.89 W/kg = 2.77 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC56VS 80MM 150MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 150 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 150$ MHz; $\sigma = 0.765$ S/m; $\epsilon_r = 60.562$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

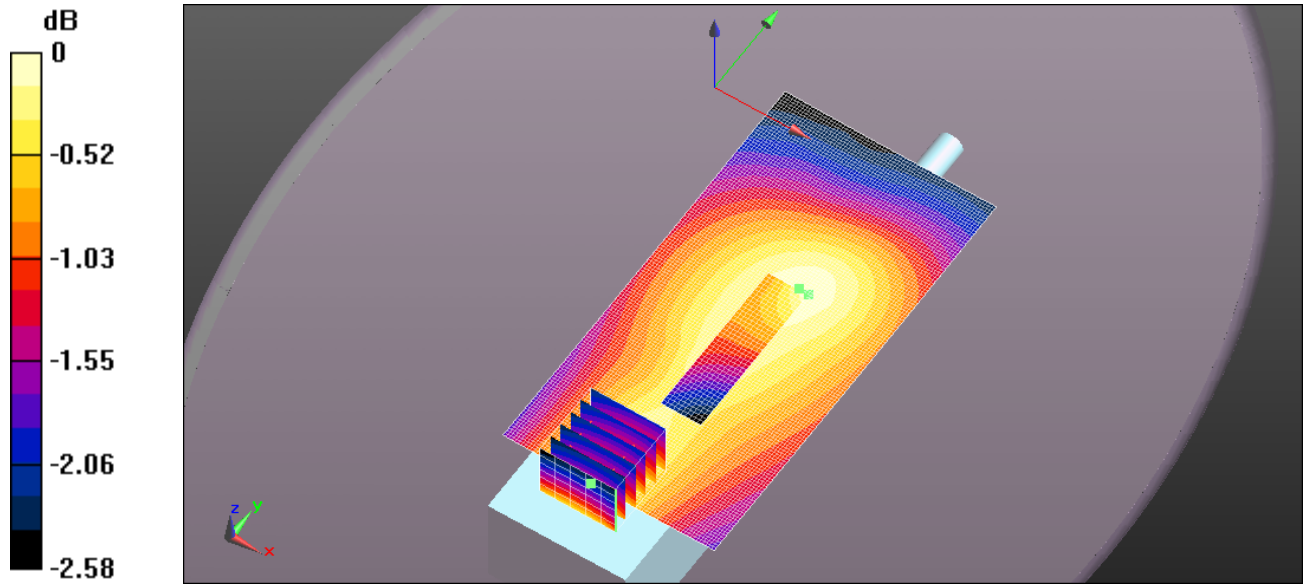
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.600 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 27.59 V/m; Power Drift = -0.30 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.518 W/kg; SAR(10 g) = 0.297 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.623 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.628 W/kg



0 dB = 0.600 W/kg = -2.22 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC57VS 80MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.771$ S/m; $\epsilon_r = 60.376$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

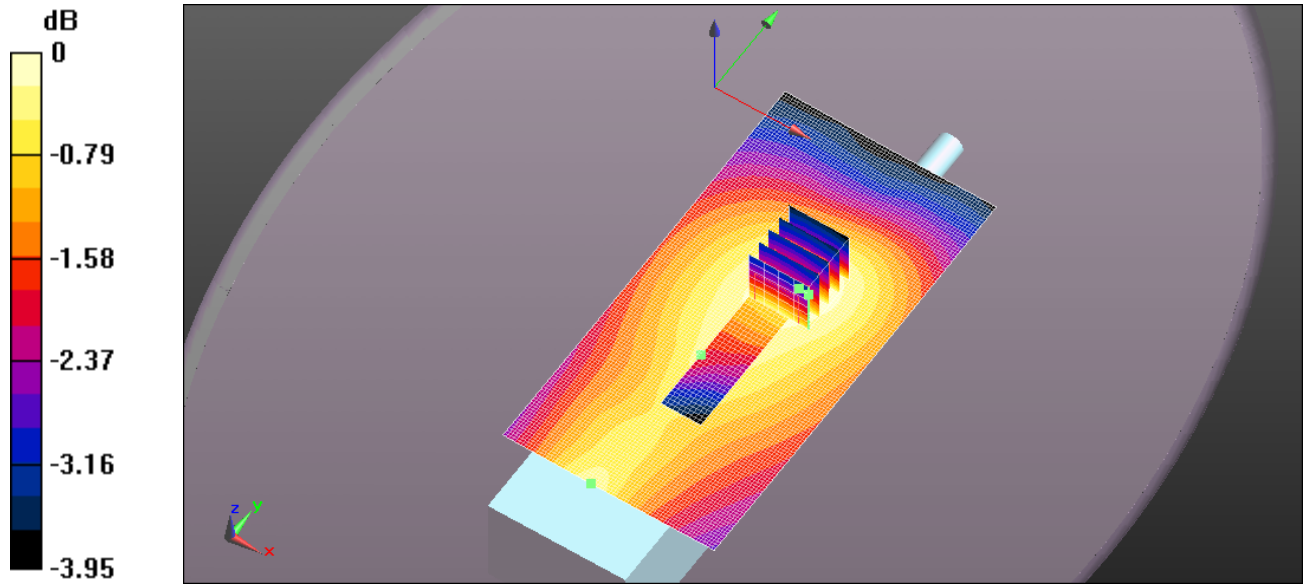
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.938 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 34.66 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.803 W/kg; SAR(10 g) = 0.560 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.902 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.925 W/kg



0 dB = 0.938 W/kg = -0.28 dBW/kg

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Test Laboratory: Ultratech Group of Labs
File Name: [BP-280 SC61VC 156mm 155MHz.da52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155$ MHz; $\sigma = 0.768$ S/m; $\epsilon_r = 60.385$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

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

Maximum value of SAR (interpolated) = 1.16 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom

Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.87 V/m; Power Drift = -0.23 dB

Peak SAR (extrapolated) = 2.01 W/kg

SAR(1 g) = 0.878 W/kg; SAR(10 g) = 0.522 W/kg (SAR corrected for target medium)

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

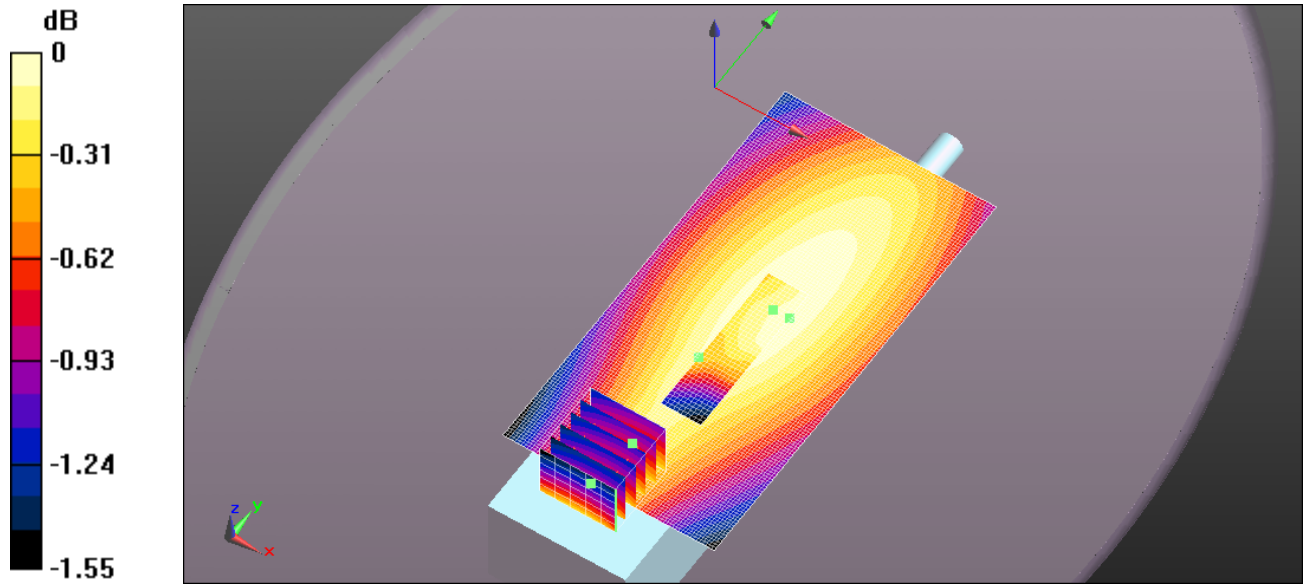
Maximum value of SAR (measured) = 1.10 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area

Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

Maximum value of SAR (interpolated) = 1.13 W/kg



0 dB = 1.16 W/kg = 0.66 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 151MM 160MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 160 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 160$ MHz; $\sigma = 0.771$ S/m; $\epsilon_r = 60.376$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

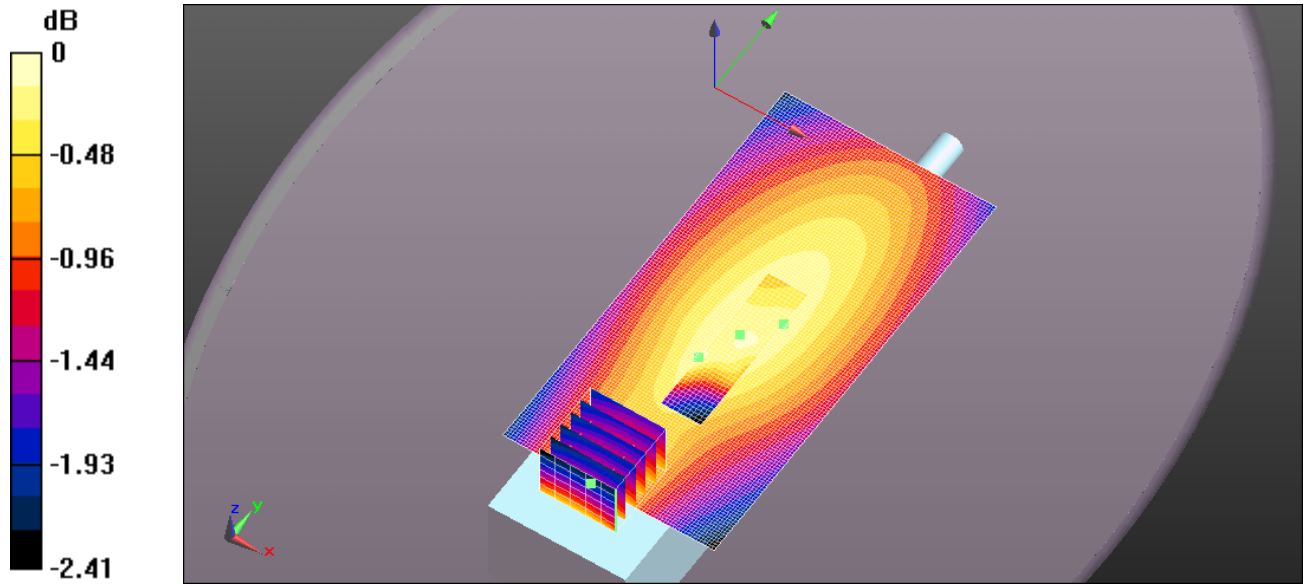
DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 1.74 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 45.60 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 4.09 W/kg
SAR(1 g) = 1.79 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.28 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.17 W/kg



0 dB = 1.74 W/kg = 2.41 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 145MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155$ MHz; $\sigma = 0.768$ S/m; $\epsilon_r = 60.385$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

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

Maximum value of SAR (interpolated) = 1.11 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.60 V/m; Power Drift = 0.26 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 0.986 W/kg; SAR(10 g) = 0.585 W/kg (SAR corrected for target medium)

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

Maximum value of SAR (measured) = 1.26 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

Maximum value of SAR (interpolated) = 1.24 W/kg

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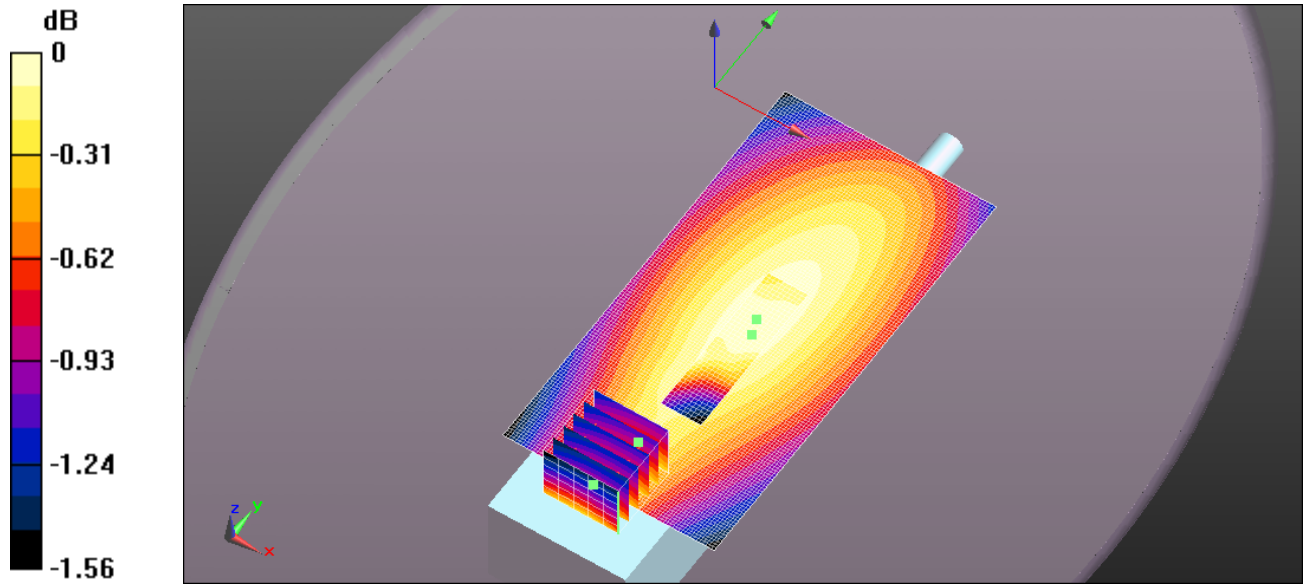
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0 dB = 1.11 W/kg = 0.44 dBW/kg

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61VC 136MM 155MHZ.DA52:0](#)

DUT: ICOM VHF Transceiver; Type: IC-F1000; Serial: 00000107-0
Program Name: Body Back with FA-SC25U (Green)

Communication System: UID 0, CW; Frequency: 155 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 155$ MHz; $\sigma = 0.768$ S/m; $\epsilon_r = 60.385$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3250; ConvF(6.85, 6.85, 6.85); Calibrated: 3/24/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 10/9/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

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

Maximum value of SAR (interpolated) = 0.588 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 27.95 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.402 W/kg (SAR corrected for target medium)

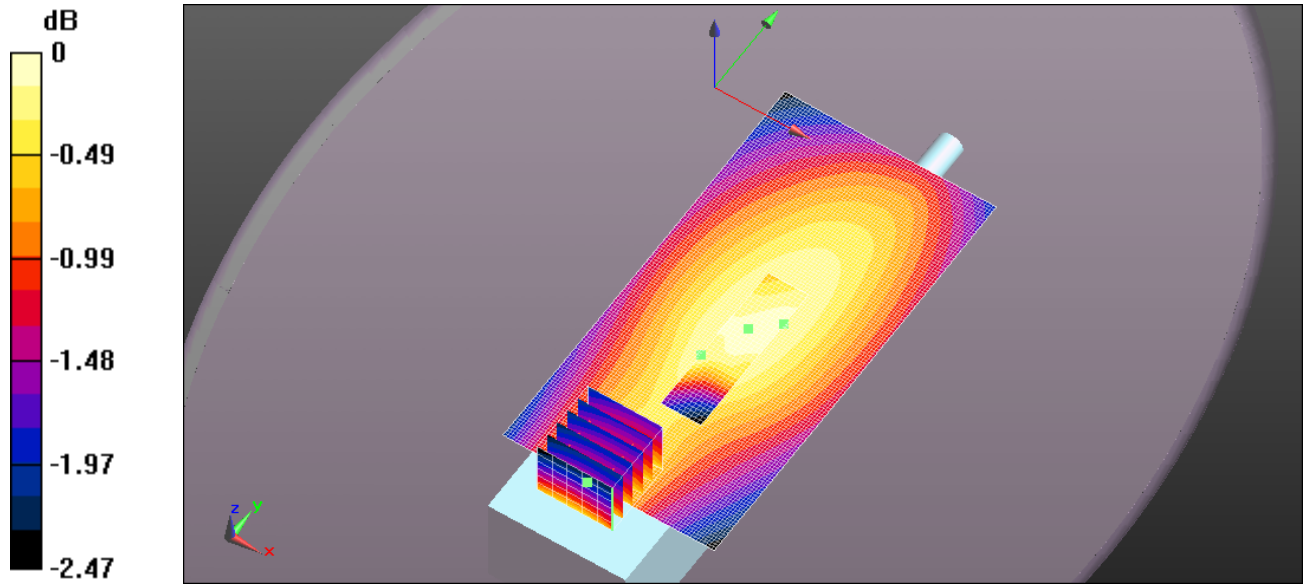
[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.872 W/kg

Configuration_Body_IC-F1000/Back to phantom, Belt Clip Touch, P=5W, d=0mm/Area Scan (71x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

Maximum value of SAR (interpolated) = 0.805 W/kg



0 dB = 0.588 W/kg = -2.31 dBW/kg

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