

APPENDIX 1

SAR Measurement Data

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File Name: ICOM-468Q FA-S76UC 129mm 450MHz.BP-283.MB-133 HS-94.da52:0	76
File Name: ICOM-468Q FA-S76UC 129mm 460MHz.BP-283.MB-133 HS-94.da52:0	77
File Name: ICOM-468Q FA-S76UC 129mm 480MHz.BP-283.MB-133 HS-94.da52:0	78
File Name: ICOM-468Q FA-S76UC 129mm 500MHz.BP-283.MB-133 HS-94.da52:0	79
File Name: ICOM-468Q FA-S76UC 129mm 520MHz.BP-283.MB-133 HS-94.da52:0	80
File Name: ICOM-468Q FA-S76UC 125mm 450MHz.BP-283.MB-133 HS-94.da52:0	81
File Name: ICOM-468Q FA-S76UC 125mm 460MHz.BP-283.MB-133 HS-94.da52:0	82
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EXHIBIT 1. PRESCAN MEASUREMENT SUMMARY

Battery	Antenna	Power (dBm)	CH	CH. Freq	HEAD SAR1g (W/Kg)	HEAD SAR10g (W/Kg)
				(MHz)		
BP-283	FA-S82U 430-480 MHz	36.94	1	450	4.00	2.94
BP-284		36.94	1	450	3.89	2.85

With BP-283

Belt Clip	Antenna	Power (dBm)	CH	CH. Freq	BODY SAR1g (W/Kg)	BODY SAR10g (W/Kg)
				(MHz)	BP-284 3210mAh	BP-284 3210mAh
MB-133	FA-S83U 470-520 MHz	36.80	8	495	7.20	5.25
MB-136		36.80	8	495	4.83	3.55
MB-96N		36.80	8	495	5.07	3.72

With MB-133

Microphone	Antenna	Power (dBm)	CH	CH. Freq	BODY SAR1g (W/Kg)	BODY SAR10g (W/Kg)
				(MHz)	BP-284 3210mAh	BP-284 3210mAh
HS-94	FA-S83U 470-520 MHz	36.80	8	495	7.33	5.27
HM-222		36.80	8	495	7.2	5.25

Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S82U 450MHZ BP-283.DA52:0

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.838$ S/m; $\epsilon_r = 44.774$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.37 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

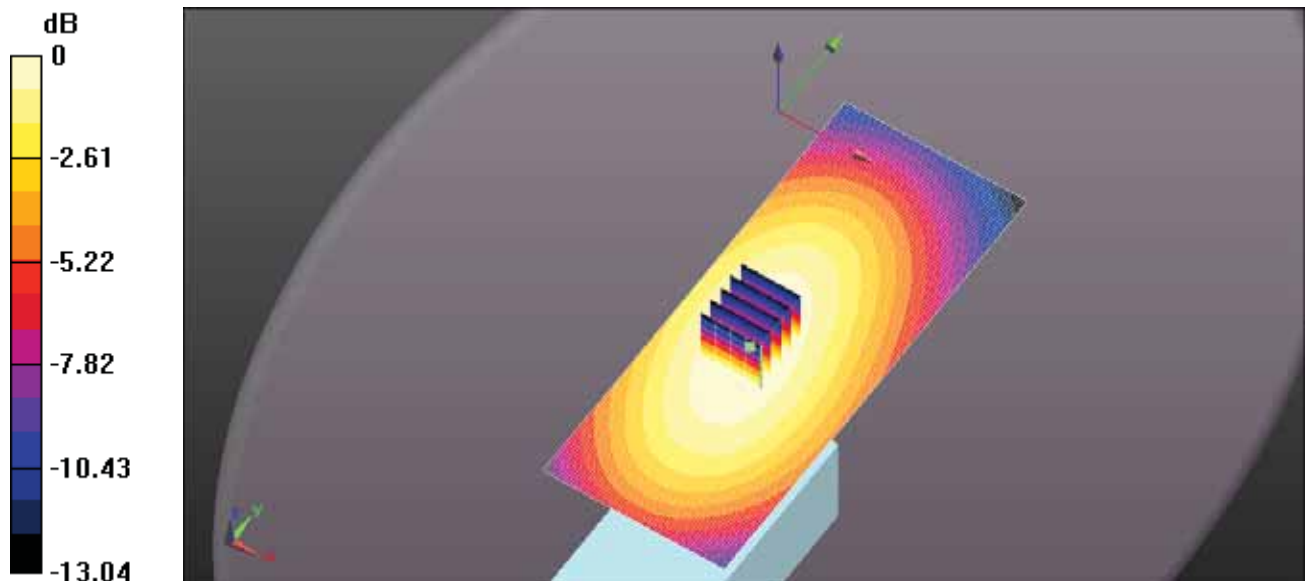
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 20.16 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 5.07 W/kg

SAR(1 g) = 4 W/kg; SAR(10 g) = 2.94 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.30 W/kg



0 dB = 4.37 W/kg = 6.41 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S82U 450MHZ BP-284.DA52:0

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.22 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

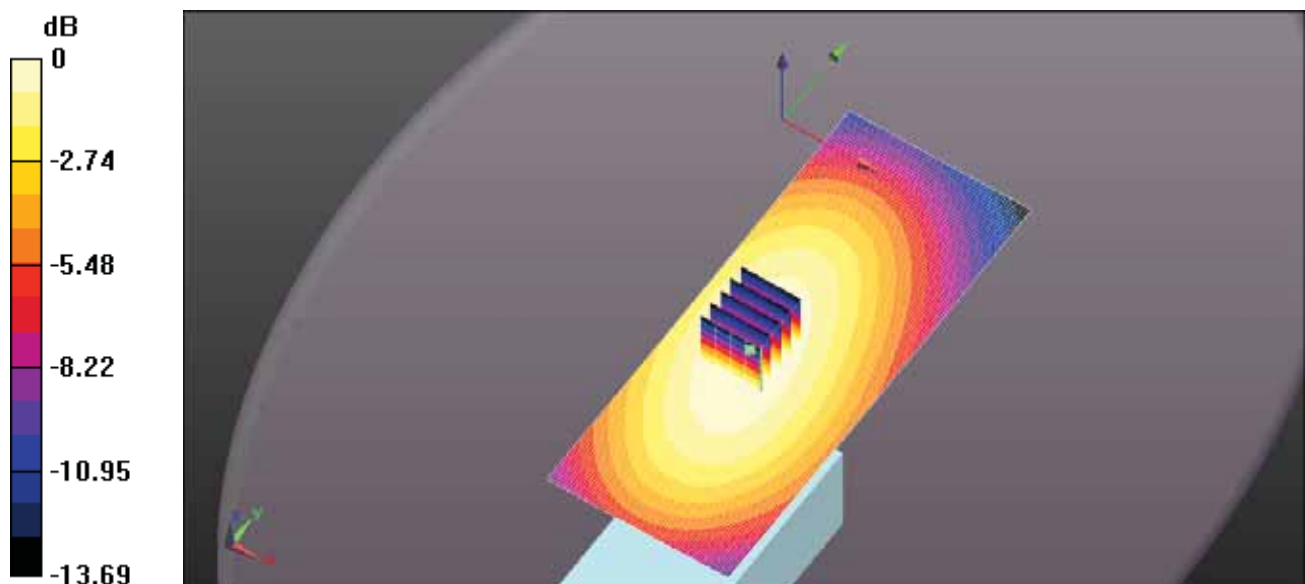
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.85 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 4.98 W/kg

SAR(1 g) = 3.89 W/kg ; SAR(10 g) = 2.85 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.21 W/kg



0 dB = 4.22 W/kg = 6.25 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S83U 495MHZ.BP-283.MB-133DA52.DA52:0

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

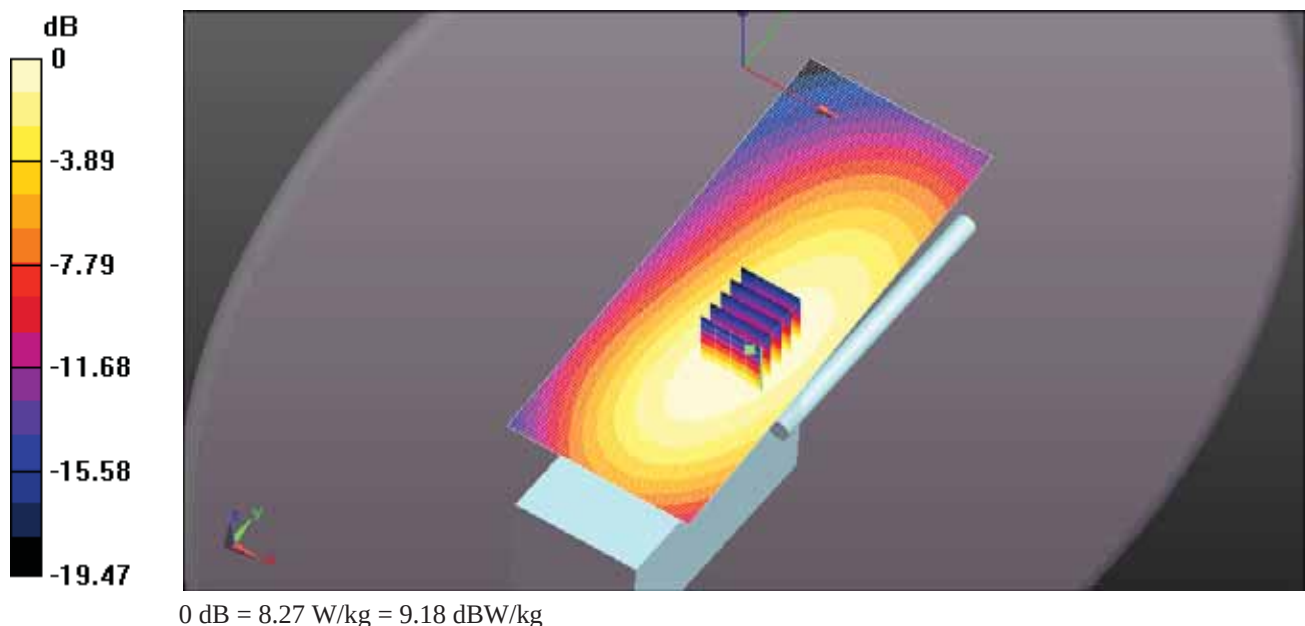
Communication System: UID 0, CW (0); Frequency: 495 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 495$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 55.355$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.27 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.878 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 9.53 W/kg
SAR(1 g) = 7 W/kg; SAR(10 g) = 5.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.02 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S83U 495MHZ.BP-283.MB-136.DA52:0

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

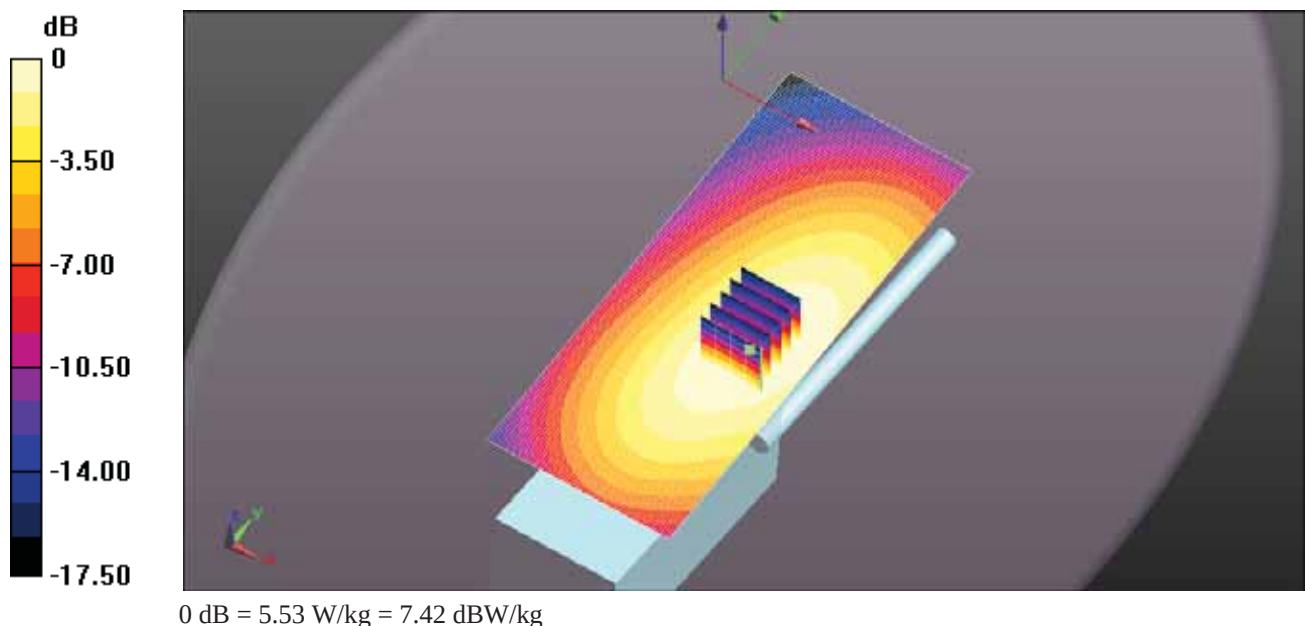
Communication System: UID 0, CW (0); Frequency: 495 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 495$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 55.355$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.53 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.21 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 6.37 W/kg
SAR(1 g) = 4.76 W/kg; SAR(10 g) = 3.55 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.41 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S83U 495MHZ.BP-283.MB-96N.DA52:0

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

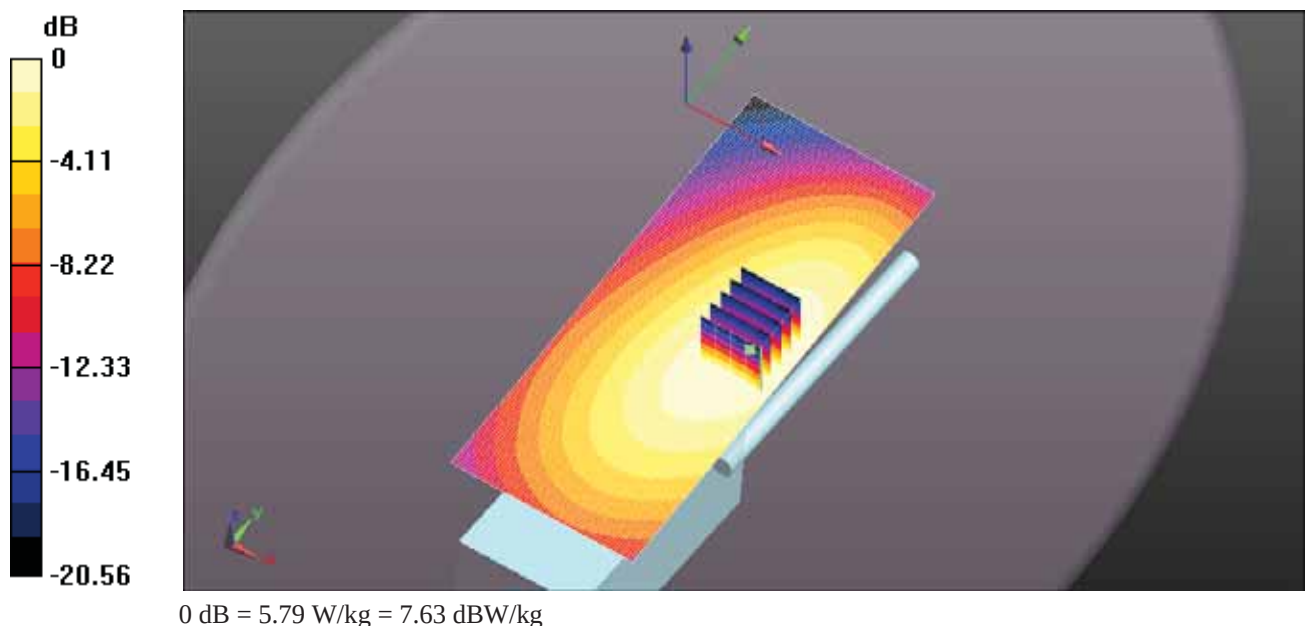
Communication System: UID 0, CW (0); Frequency: 495 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 495 \text{ MHz}$; $\sigma = 0.966 \text{ S/m}$; $\epsilon_r = 55.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.79 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.203 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 6.43 W/kg
SAR(1 g) = 4.76 W/kg; SAR(10 g) = 3.53 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.45 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S83U 495MHZ.BP-283.MB-133 HS-94.DA52:0

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 495 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 495$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 55.355$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.39 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.495 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 9.63 W/kg

SAR(1 g) = 7.11 W/kg; SAR(10 g) = 5.27 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.13 W/kg

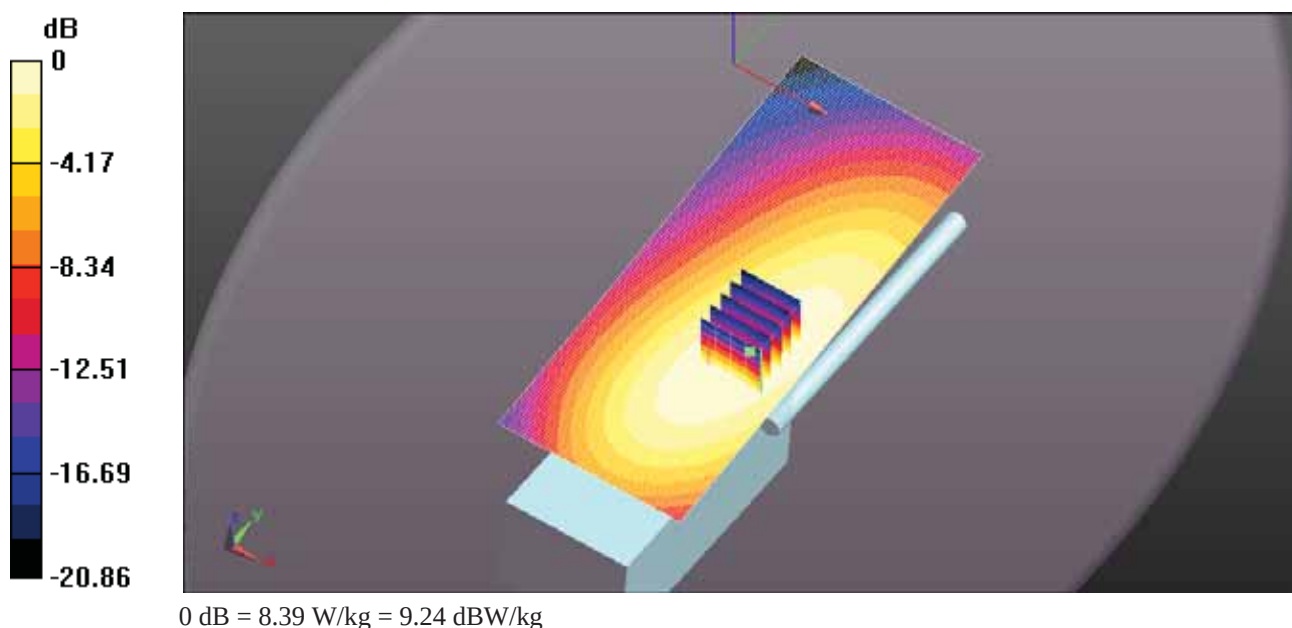


EXHIBIT 2. HEAD SAR MEASUREMENTS

Antenna	Power (dBm)	CH	CH. Freq	HEAD SAR1g (W/Kg)	HEAD SAR10g (W/Kg)
				BP-284	BP-284
			(MHz)	3210mAh	3210mAh
FA-S82U 430-480 MHz	36.94	1	450	4	2.94
	37.22	3	465	3.19	2.33
	37.02	5	480	2.56	1.86
FA-S83U 470-520 MHz	37.20	4	470	5.06	3.7
	36.95	6	482.5	5.65	4.13
	36.80	8	495	6.16	4.51
	36.80	10	507.5	5.35	3.9
	36.90	11	520	4.99	3.64
FA-S82US 450-490 MHz	36.94	1	450	4.28	3.13
	37.20	4	470	4.21	3.07
	36.84	7	490	2.05	1.5

Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S82U 450MHz BP-283.da52:0

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.37 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

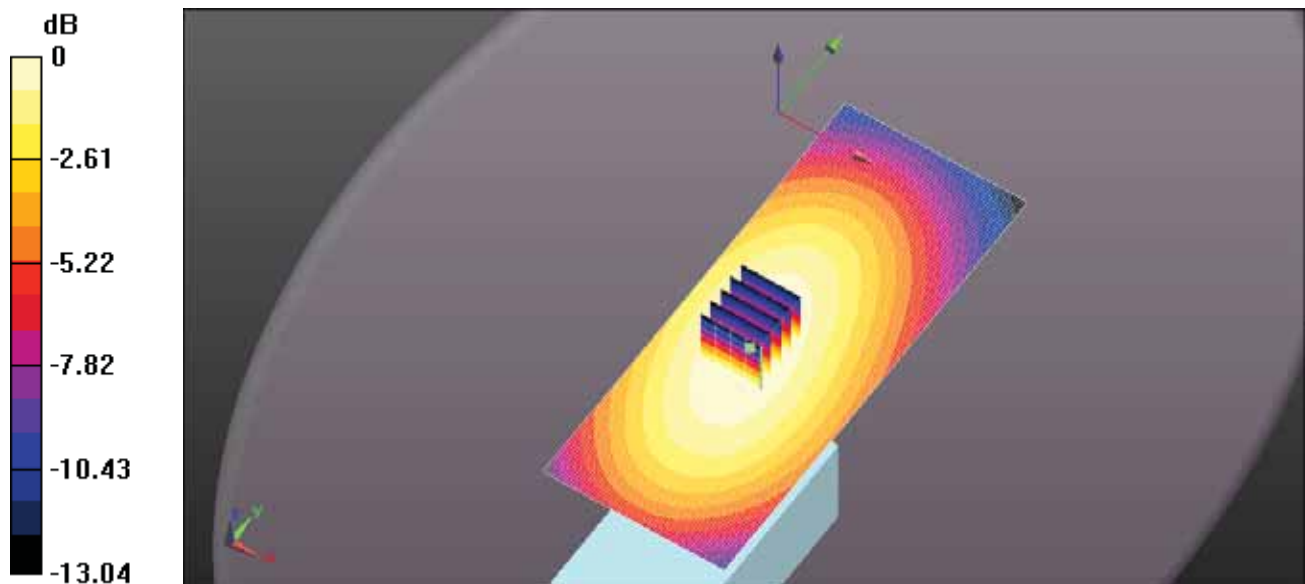
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.16 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 5.07 W/kg

SAR(1 g) = 4 W/kg ; SAR(10 g) = 2.94 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.30 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S82U 465MHzda52.da52:0

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 465 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 465$ MHz; $\sigma = 0.845$ S/m; $\epsilon_r = 44.628$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 3.45 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

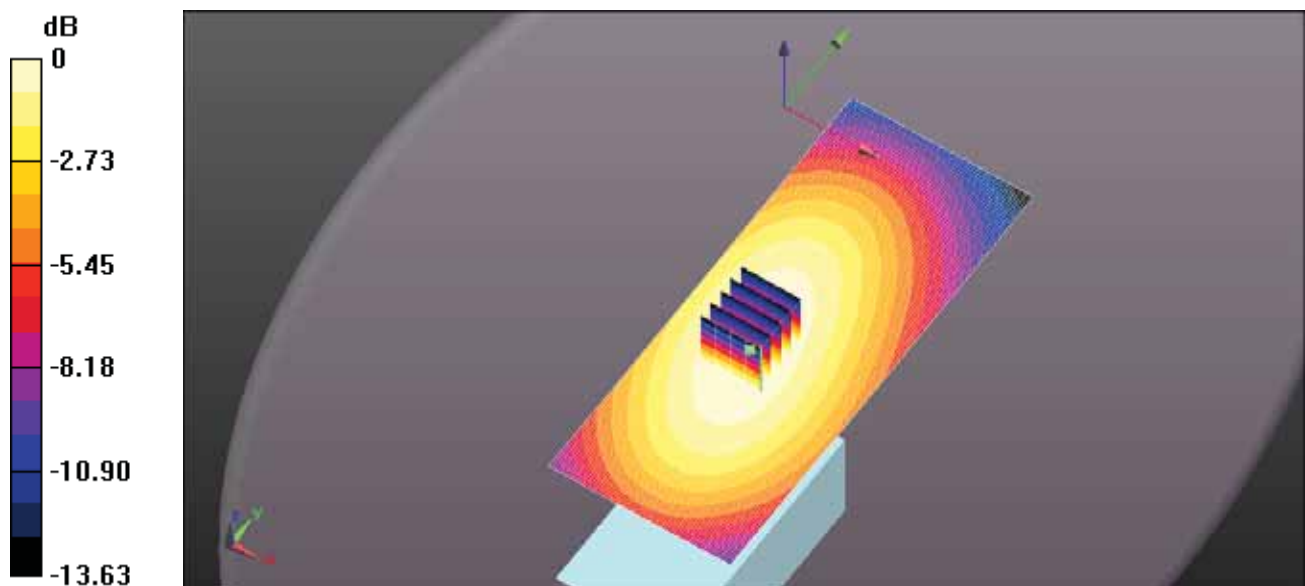
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 17.03 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 4.08 W/kg

SAR(1 g) = 3.19 W/kg; SAR(10 g) = 2.33 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.46 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82U 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 2.82 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

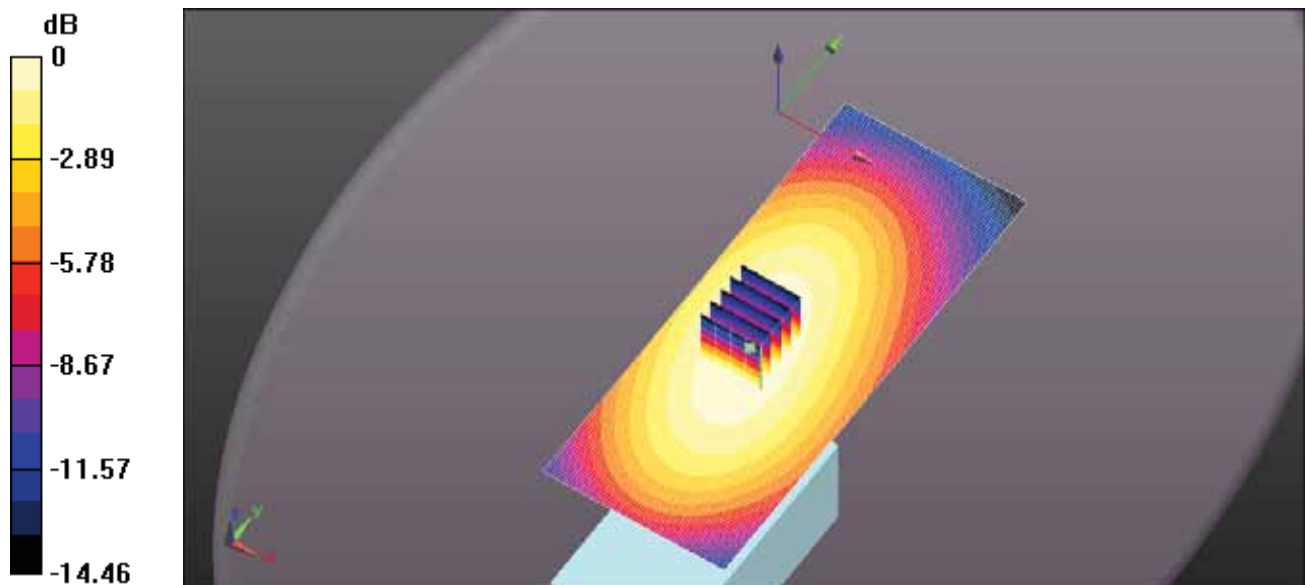
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.92 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.34 W/kg

SAR(1 g) = 2.56 W/kg ; SAR(10 g) = 1.86 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.83 W/kg



0 dB = 2.82 W/kg = 4.51 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 470MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.85 \text{ S/m}$; $\epsilon_r = 44.56$; $\rho = 1000 \text{ kg/m}^3$; Phantom section: Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.60 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

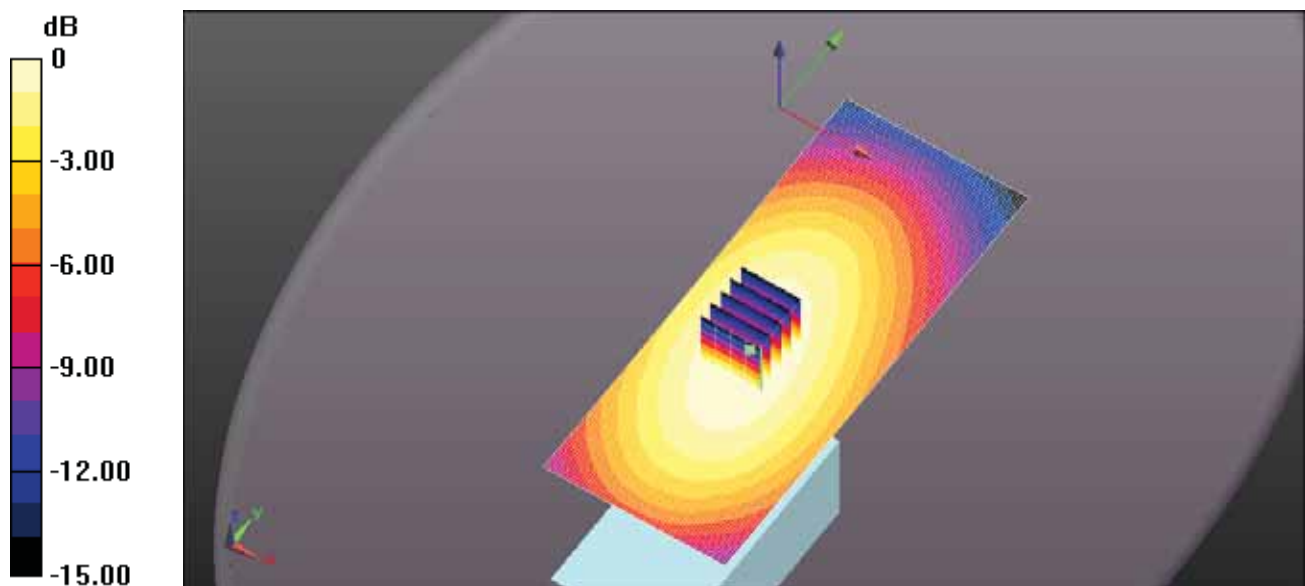
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.94 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.56 W/kg

SAR(1 g) = 5.06 W/kg ; SAR(10 g) = 3.7 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.53 W/kg



0 dB = 5.60 W/kg = 7.48 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 482.5MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 482.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 482.5$ MHz; $\sigma = 0.861$ S/m; $\epsilon_r = 44.31$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.39 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

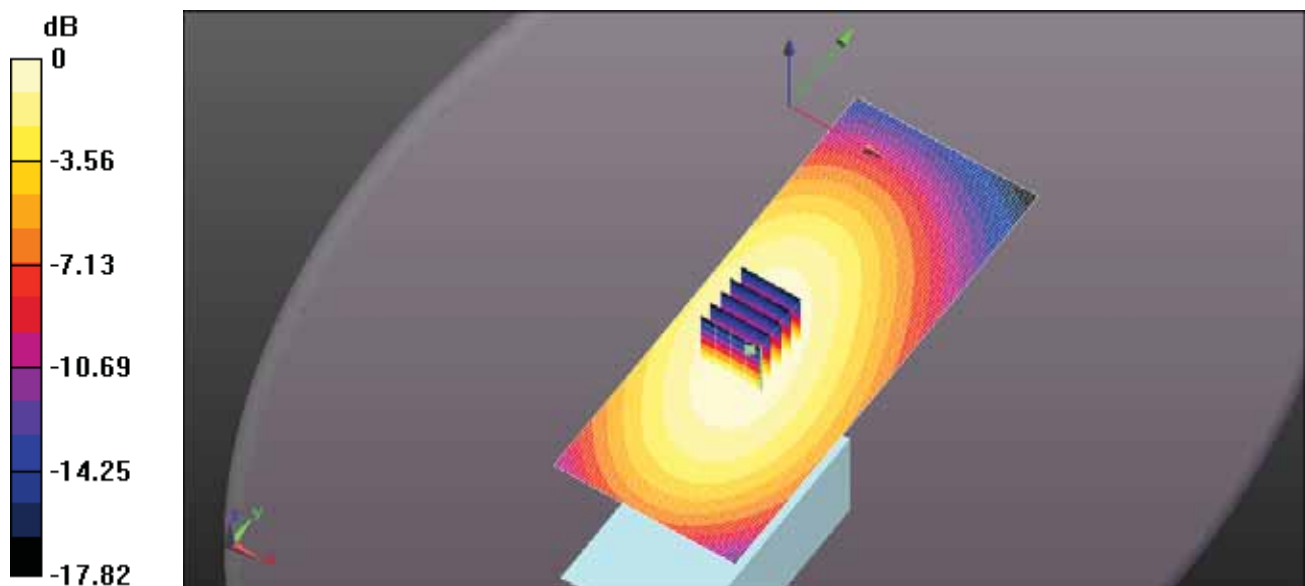
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 15.51 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 7.40 W/kg

SAR(1 g) = 5.65 W/kg; SAR(10 g) = 4.13 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.25 W/kg



0 dB = 6.39 W/kg = 8.05 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 495MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 495 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 495$ MHz; $\sigma = 0.876$ S/m; $\epsilon_r = 43.973$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 7.05 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

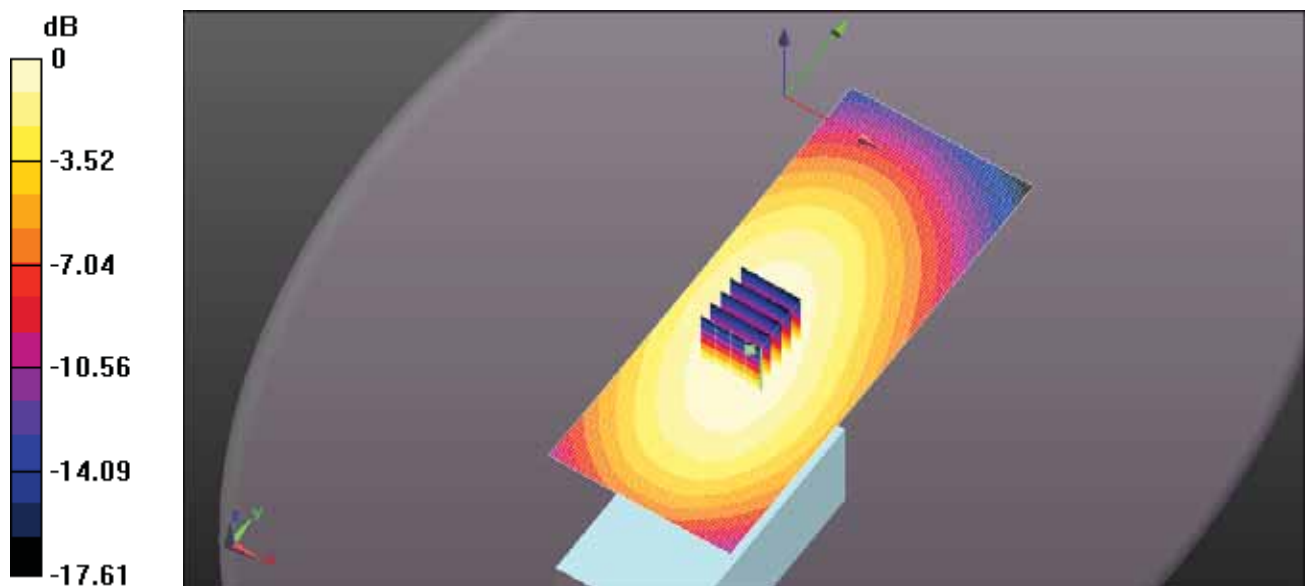
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 16.97 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 8.17 W/kg

SAR(1 g) = 6.16 W/kg; SAR(10 g) = 4.51 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.87 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 507.5MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 507.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 507.5$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 43.597$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.21 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

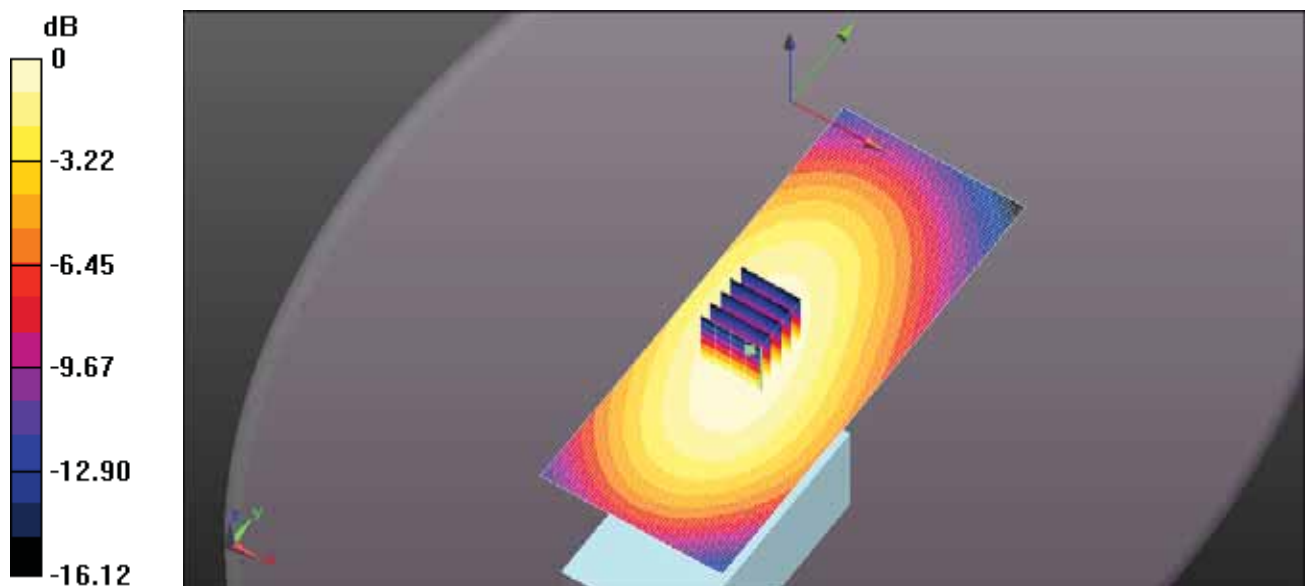
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 18.85 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 7.35 W/kg

SAR(1 g) = 5.35 W/kg; SAR(10 g) = 3.9 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.11 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 43.306$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.81 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

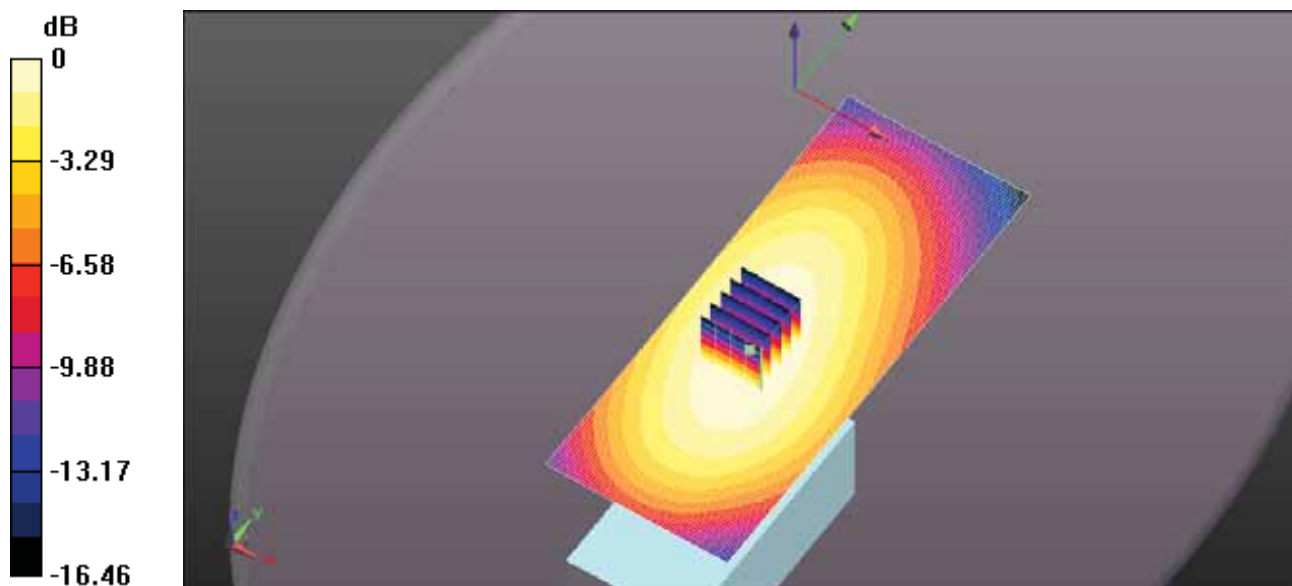
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.37 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.90 W/kg

SAR(1 g) = 4.99 W/kg ; SAR(10 g) = 3.64 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.74 W/kg



0 dB = 5.81 W/kg = 7.64 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.78 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

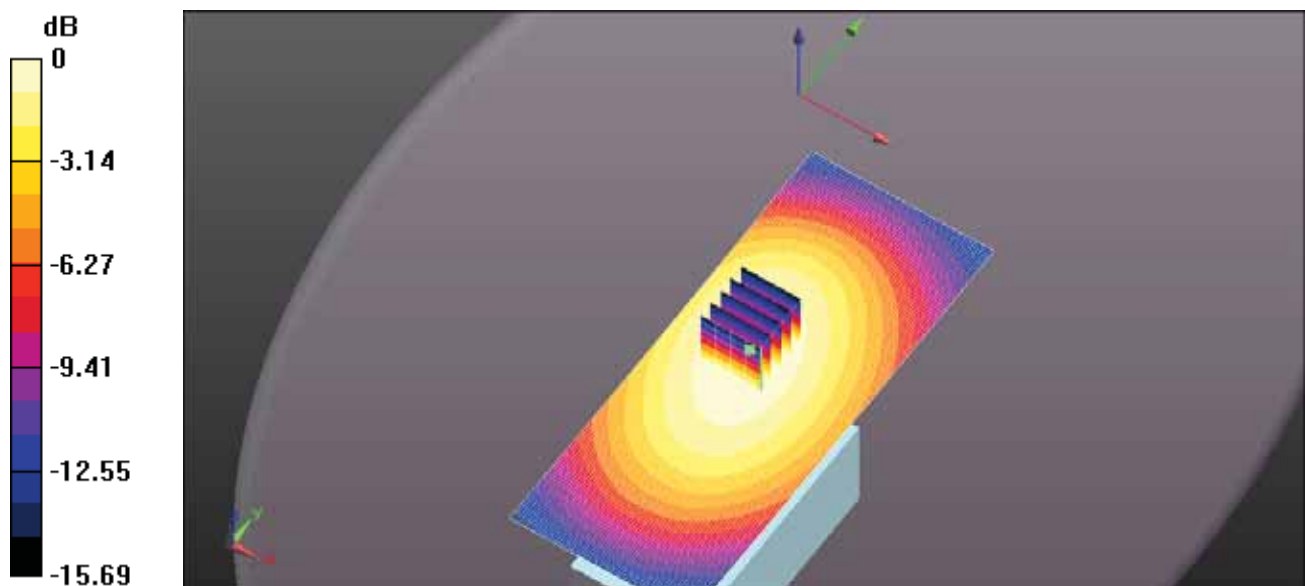
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.54 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 5.43 W/kg

SAR(1 g) = 4.28 W/kg ; SAR(10 g) = 3.13 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.60 W/kg



0 dB = 4.78 W/kg = 6.80 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 470MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.85 \text{ S/m}$; $\epsilon_r = 44.56$; $\rho = 1000 \text{ kg/m}^3$; Phantom section: Flat
Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.70 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

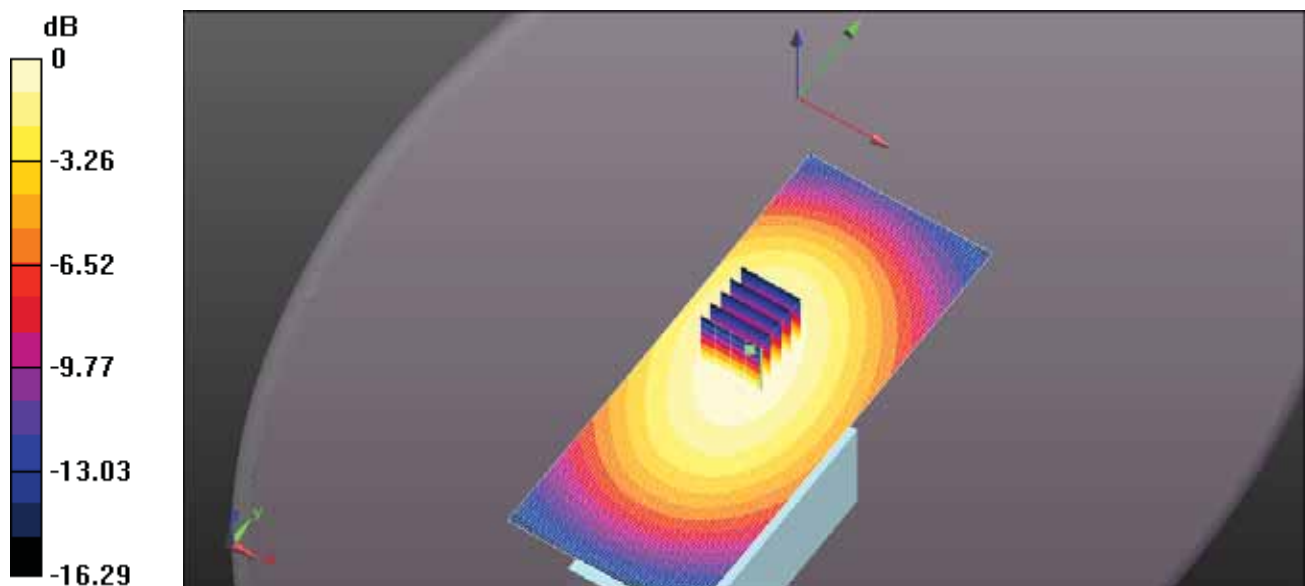
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.65 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 5.42 W/kg

SAR(1 g) = 4.21 W/kg ; SAR(10 g) = 3.07 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.59 W/kg



0 dB = 4.70 W/kg = 6.72 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 490MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 490 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 490 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 44.109$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 2.31 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

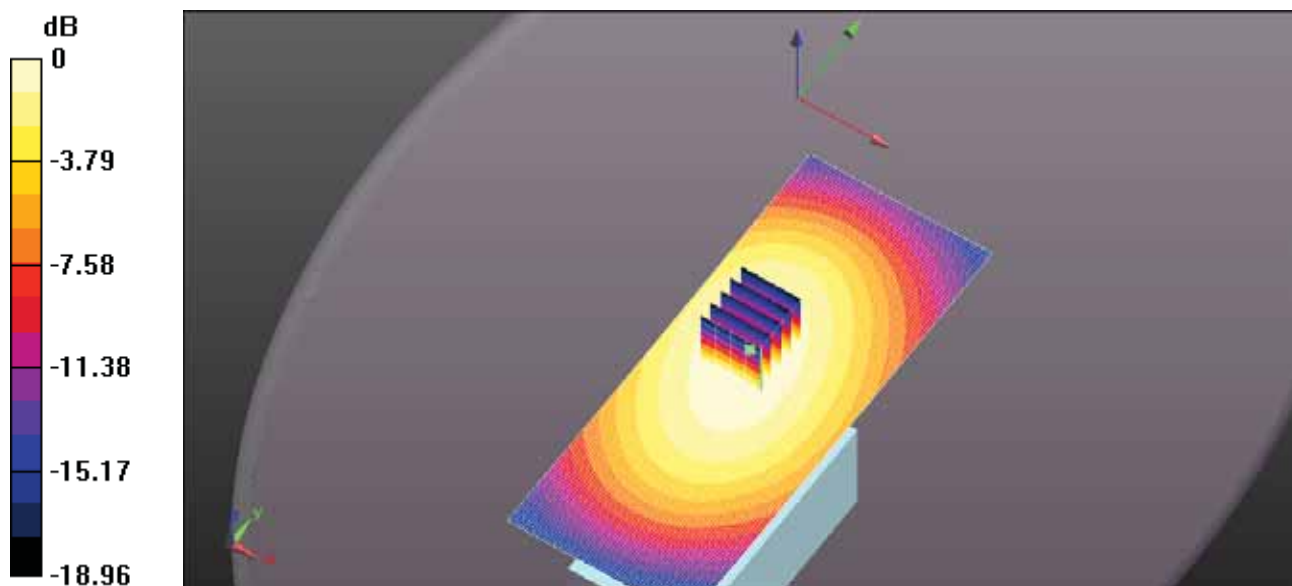
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.224 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.71 W/kg

SAR(1 g) = 2.05 W/kg ; SAR(10 g) = 1.5 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.29 W/kg



0 dB = 2.31 W/kg = 3.64 dBW/kg

EXHIBIT 3. HEAD SAR MEASUREMENTS (CUT ANTENNA)

Antenna	Power (dBm)	CH	CH. Freq	HEAD SAR1g (W/Kg)	HEAD SAR10g (W/Kg)
				BP-284	BP-284
			(MHz)	3210mAh	3210mAh
FA-S76UC 440MHz 148mm	36.94	1	450	4.73	3.49
	37.12	2	460	4.28	3.15
	37.02	5	480	3.86	2.82
	36.80	9	500	3.26	2.38
	36.90	11	520	3.02	2.21
FA-S76UC 460MHz 142mm	36.94	1	450	5.01	3.69
	37.12	2	460	4.49	3.3
	37.02	5	480	4.08	2.97
	36.80	9	500	3.52	2.56
	36.90	11	520	3.14	2.31
FA-S76UC 480MHz 136mm	36.94	1	450	5.68	4.19
	37.12	2	460	5.26	3.88
	37.02	5	480	4.45	3.25
	36.80	9	500	4.99	3.66
	36.90	11	520	4.75	3.49
FA-S76UC 500MHz 129mm	36.94	1	450	5.54	4.09
	37.12	2	460	4.6	3.4
	37.02	5	480	3.97	2.9
	36.80	9	500	5.73	4.2
	36.90	11	520	5.23	3.84
FA-S76UC 520MHz 125mm	36.94	1	450	4.93	3.64
	37.12	2	460	4.3	3.17
	37.02	5	480	3.2	2.34
	36.80	9	500	6.03	4.4
	36.90	11	520	6.53	4.79

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.838$ S/m; $\epsilon_r = 44.774$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.28 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

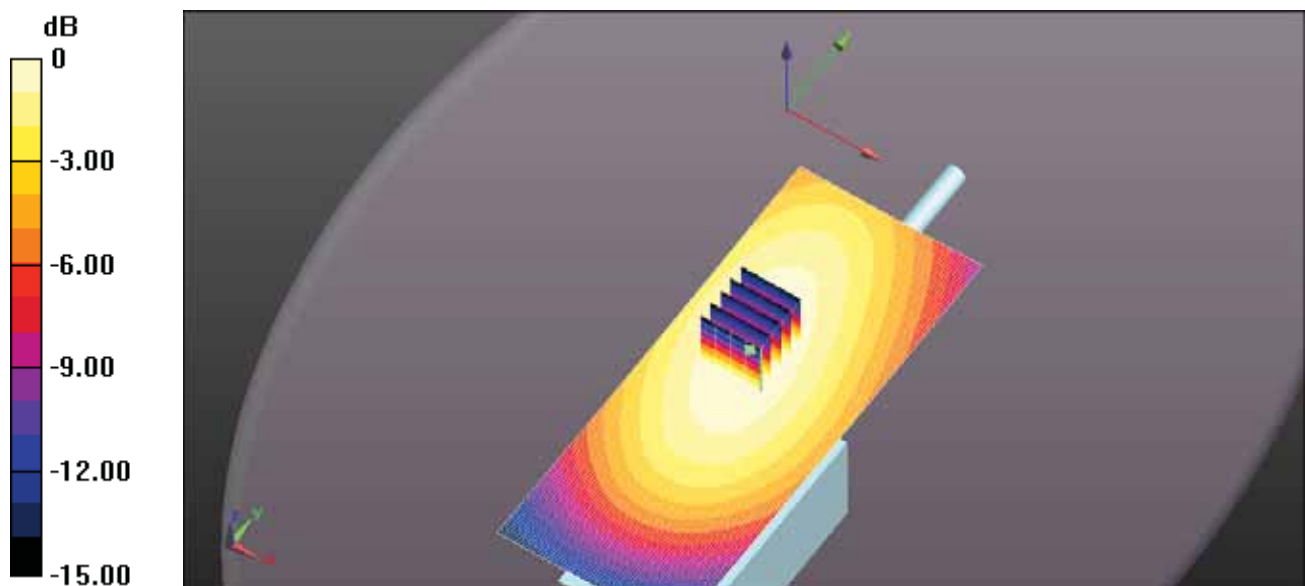
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 44.06 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 5.98 W/kg

SAR(1 g) = 4.73 W/kg; SAR(10 g) = 3.49 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.08 W/kg



0 dB = 5.28 W/kg = 7.22 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 460MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.844$ S/m; $\epsilon_r = 44.647$; $\rho = 1000$ kg/m³; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.86 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

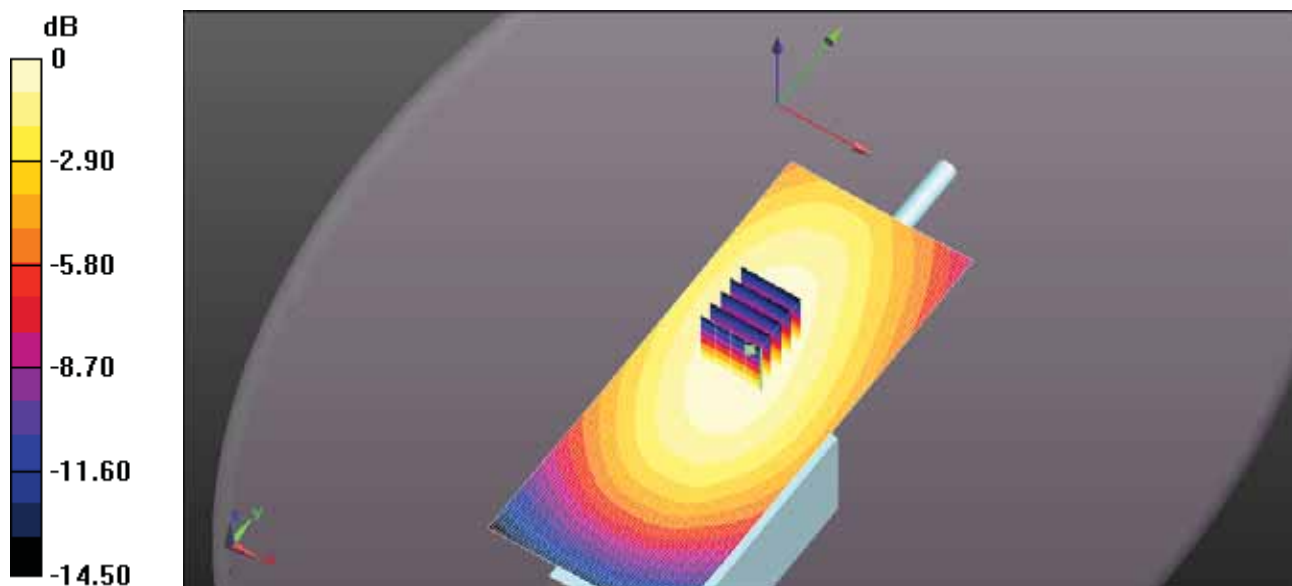
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 41.29 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 5.45 W/kg

SAR(1 g) = 4.28 W/kg; SAR(10 g) = 3.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.61 W/kg



0 dB = 4.86 W/kg = 6.86 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.30 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

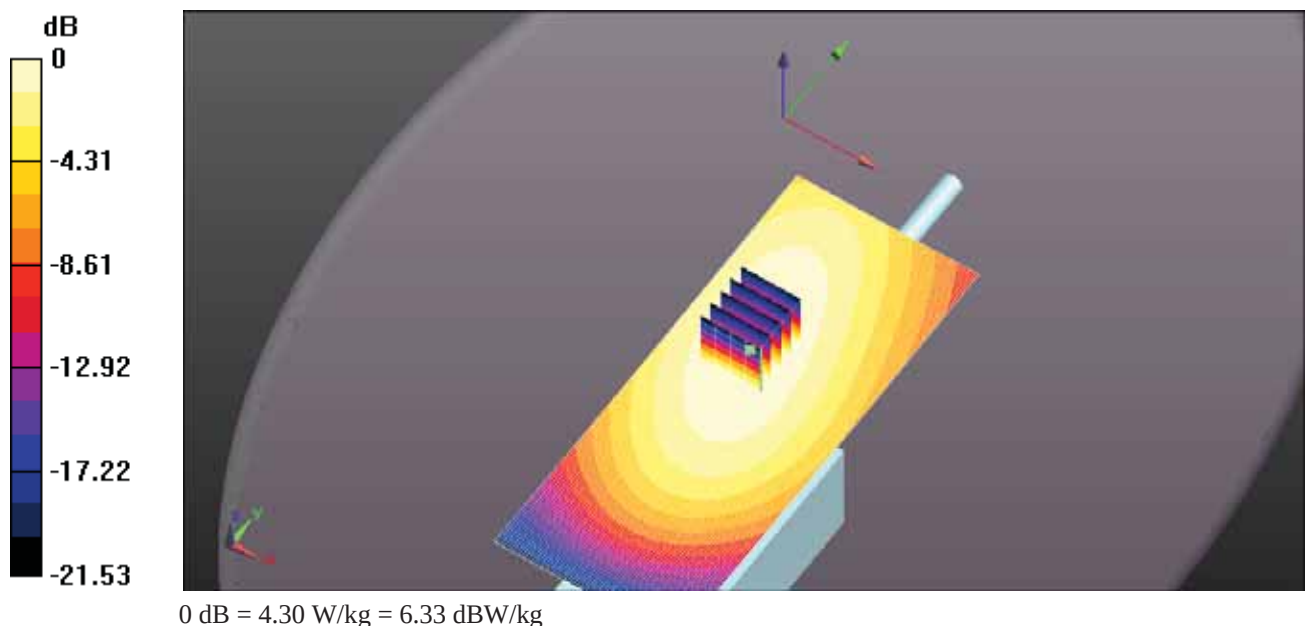
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 41.00 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 5.01 W/kg

SAR(1 g) = 3.86 W/kg ; SAR(10 g) = 2.82 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.25 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 500MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.882 \text{ S/m}$; $\epsilon_r = 43.796$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 3.73 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

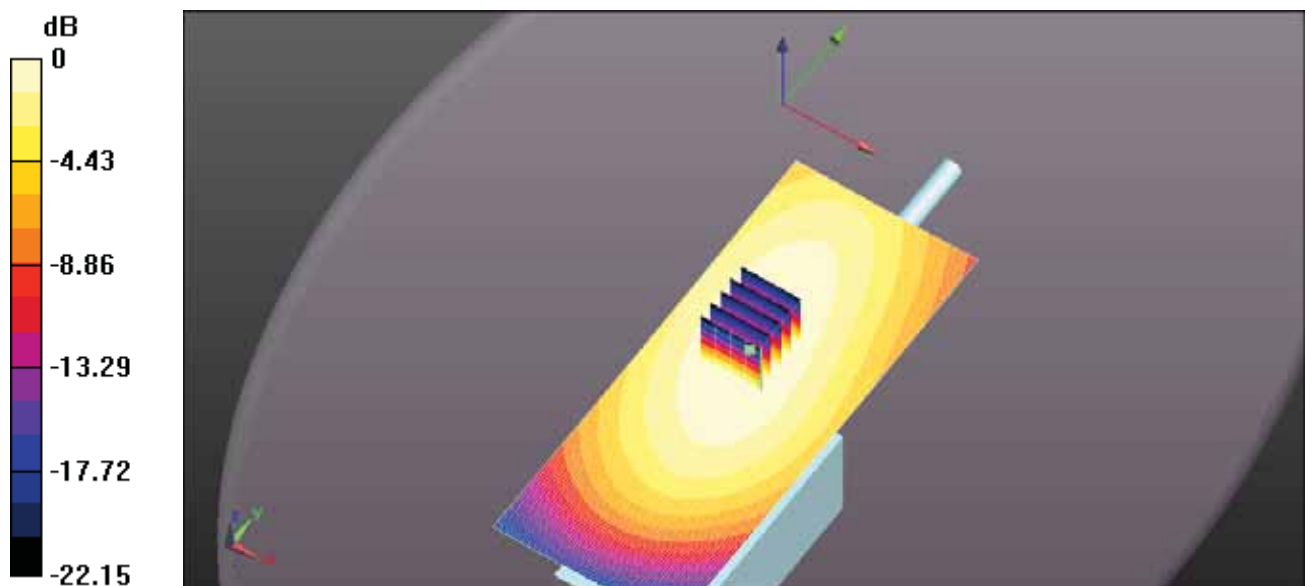
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.60 V/m ; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 4.42 W/kg

SAR(1 g) = 3.26 W/kg ; SAR(10 g) = 2.38 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.68 W/kg



0 dB = 3.73 W/kg = 5.71 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 43.306$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 3.58 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

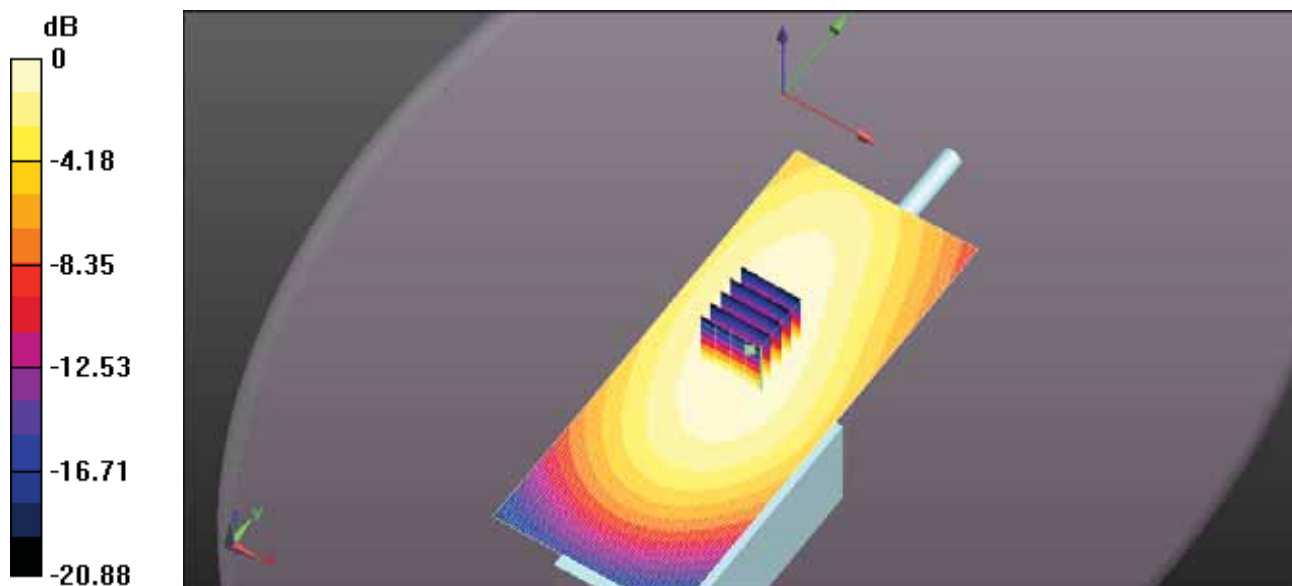
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 32.42 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 4.18 W/kg

SAR(1 g) = 3.02 W/kg; SAR(10 g) = 2.21 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.49 W/kg



0 dB = 3.58 W/kg = 5.54 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.43 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

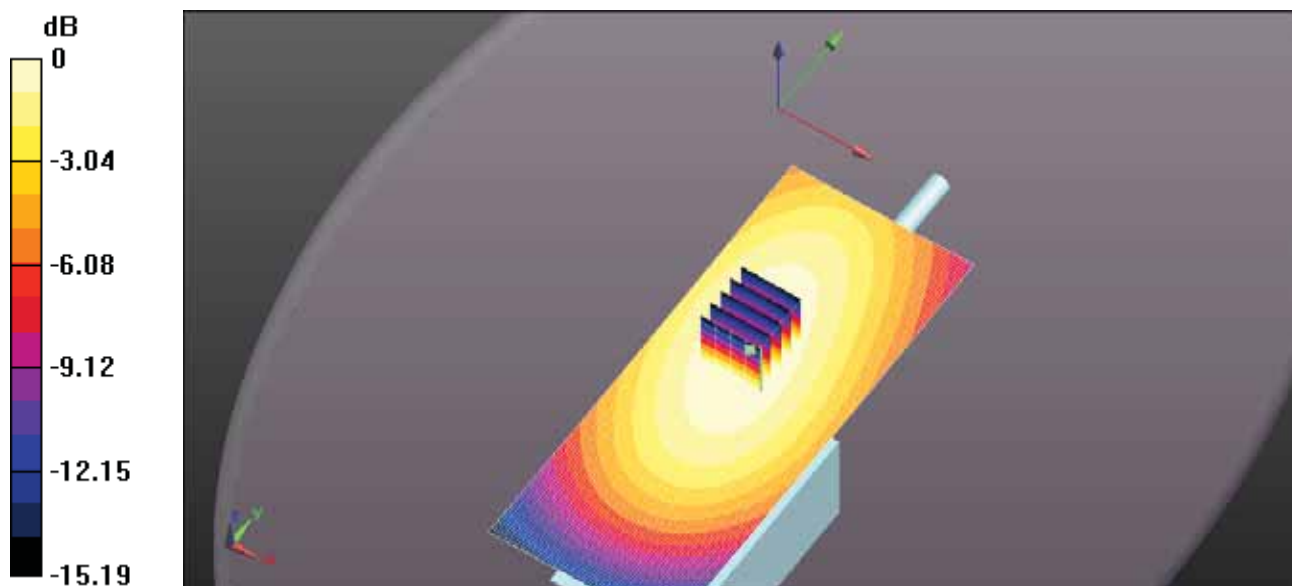
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 42.66 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 6.30 W/kg

SAR(1 g) = 5.01 W/kg ; SAR(10 g) = 3.69 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.36 W/kg



0 dB = 5.43 W/kg = 7.35 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 460MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.844 \text{ S/m}$; $\epsilon_r = 44.647$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.00 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

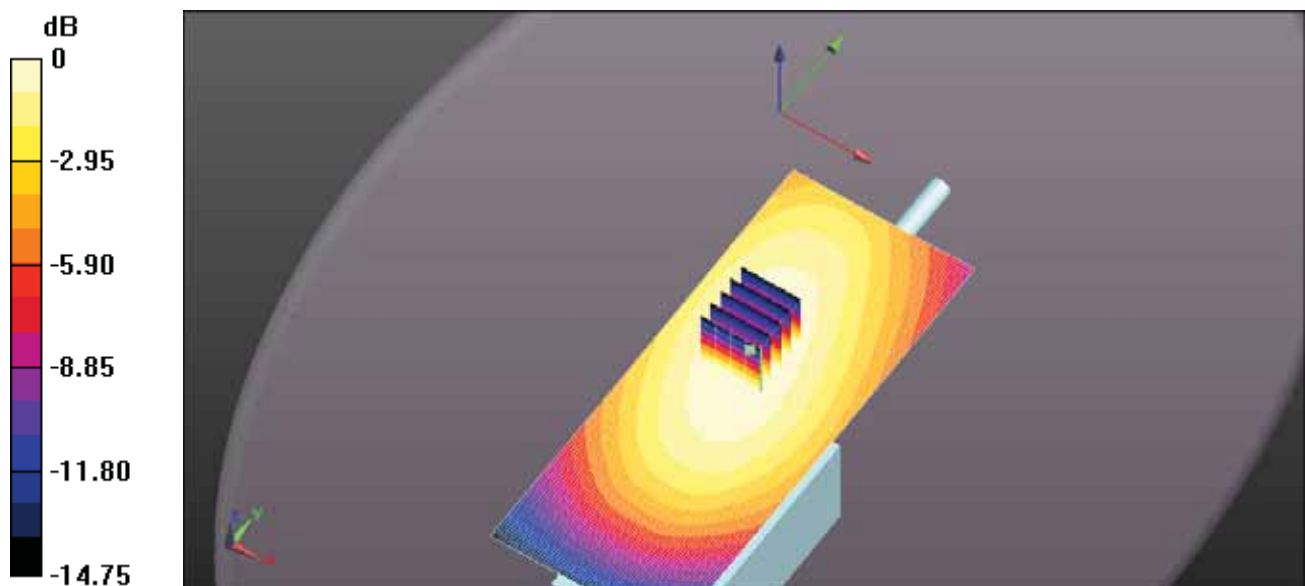
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 43.31 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 5.72 W/kg

SAR(1 g) = 4.49 W/kg ; SAR(10 g) = 3.3 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.84 W/kg



0 dB = 5.00 W/kg = 6.99 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.57 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

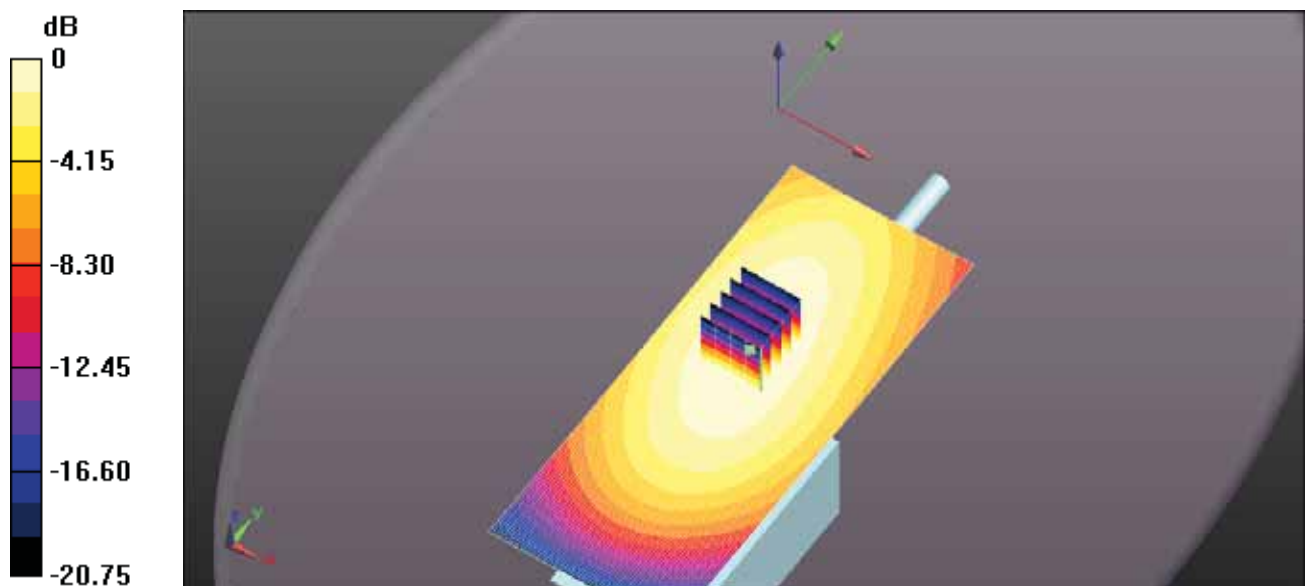
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.96 V/m ; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 5.32 W/kg

SAR(1 g) = 4.08 W/kg ; SAR(10 g) = 2.97 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.50 W/kg



0 dB = 4.57 W/kg = 6.60 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 500MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.882 \text{ S/m}$; $\epsilon_r = 43.796$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.22 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

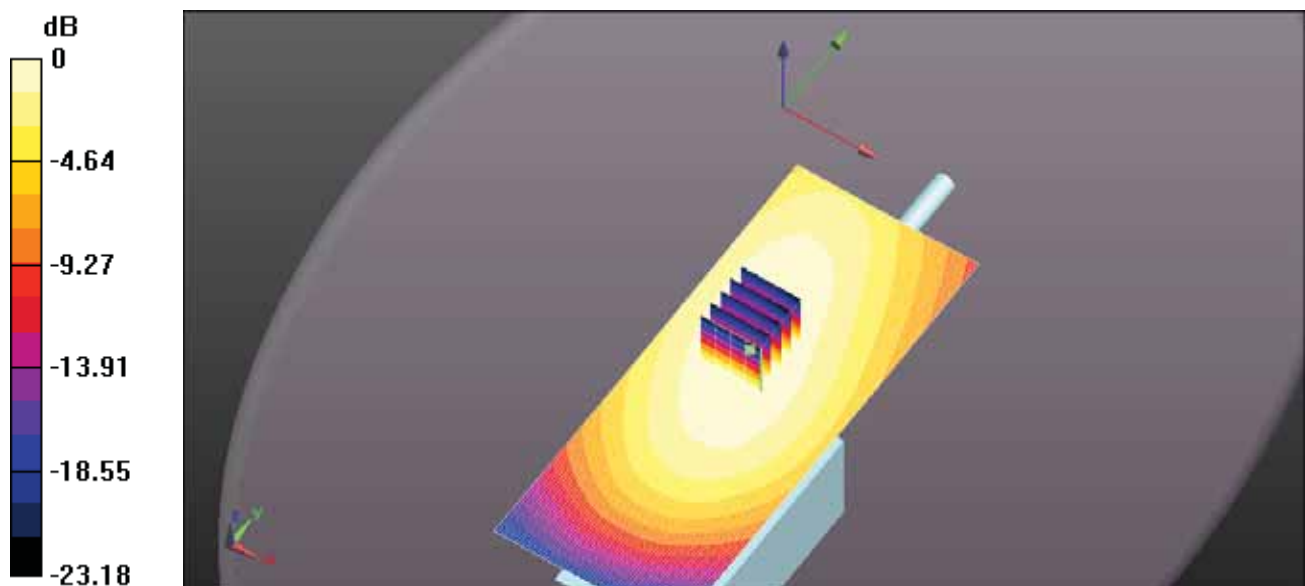
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 38.76 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 4.82 W/kg

SAR(1 g) = 3.52 W/kg ; SAR(10 g) = 2.56 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.96 W/kg



0 dB = 4.22 W/kg = 6.26 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 43.306$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 3.74 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

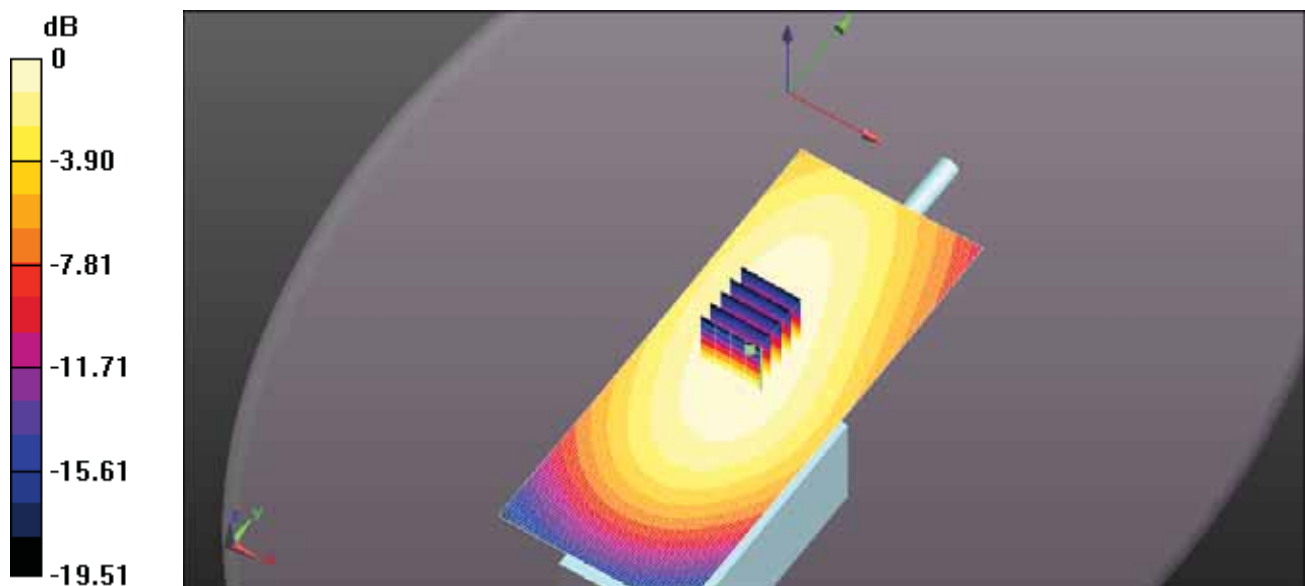
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.47 V/m ; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 4.31 W/kg

SAR(1 g) = 3.14 W/kg ; SAR(10 g) = 2.31 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.61 W/kg



0 dB = 3.74 W/kg = 5.72 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.18 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

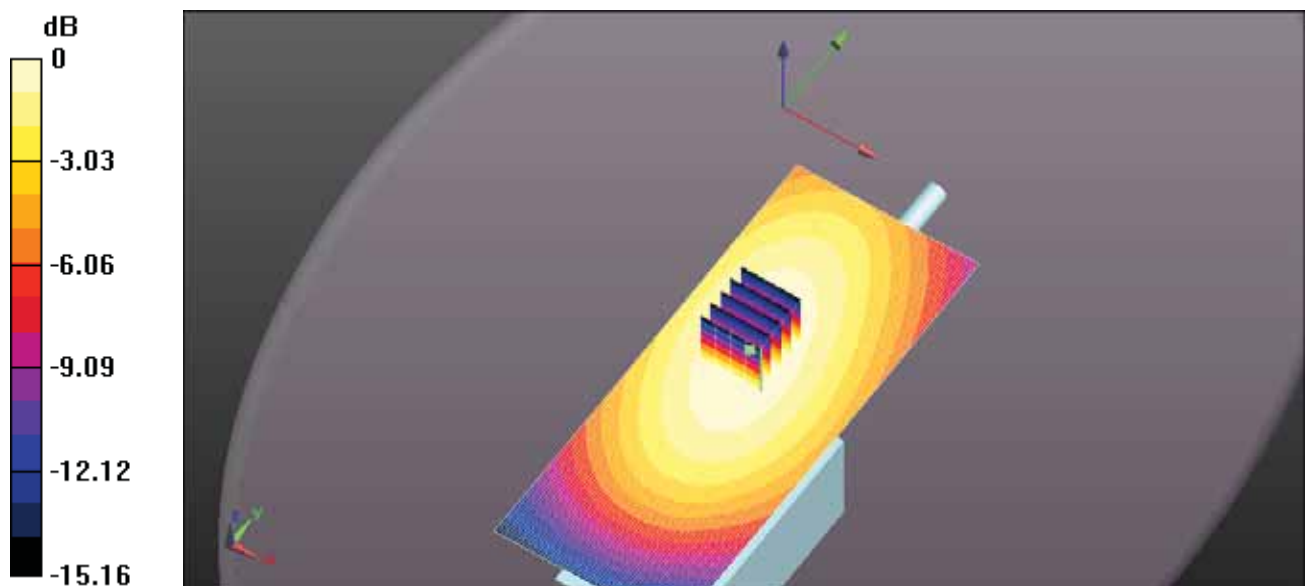
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 43.83 V/m ; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 7.11 W/kg

SAR(1 g) = 5.68 W/kg ; SAR(10 g) = 4.19 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.07 W/kg



0 dB = 6.18 W/kg = 7.91 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 460MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.844 \text{ S/m}$; $\epsilon_r = 44.647$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.77 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

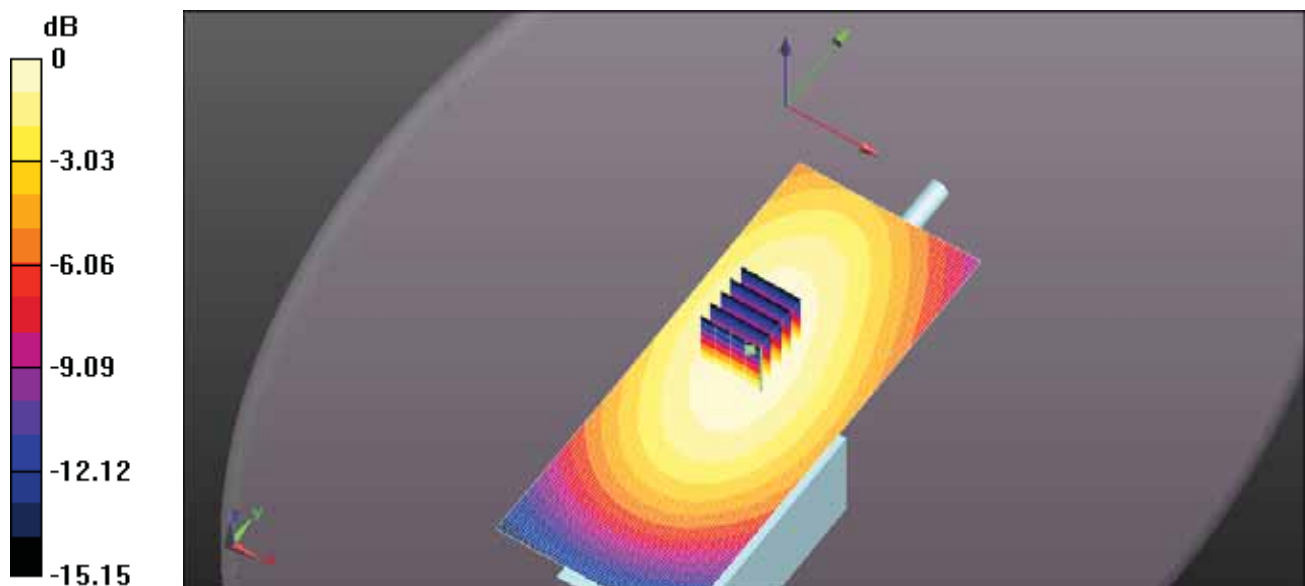
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 42.30 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 6.63 W/kg

SAR(1 g) = 5.26 W/kg ; SAR(10 g) = 3.88 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.66 W/kg



0 dB = 5.77 W/kg = 7.62 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.44 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

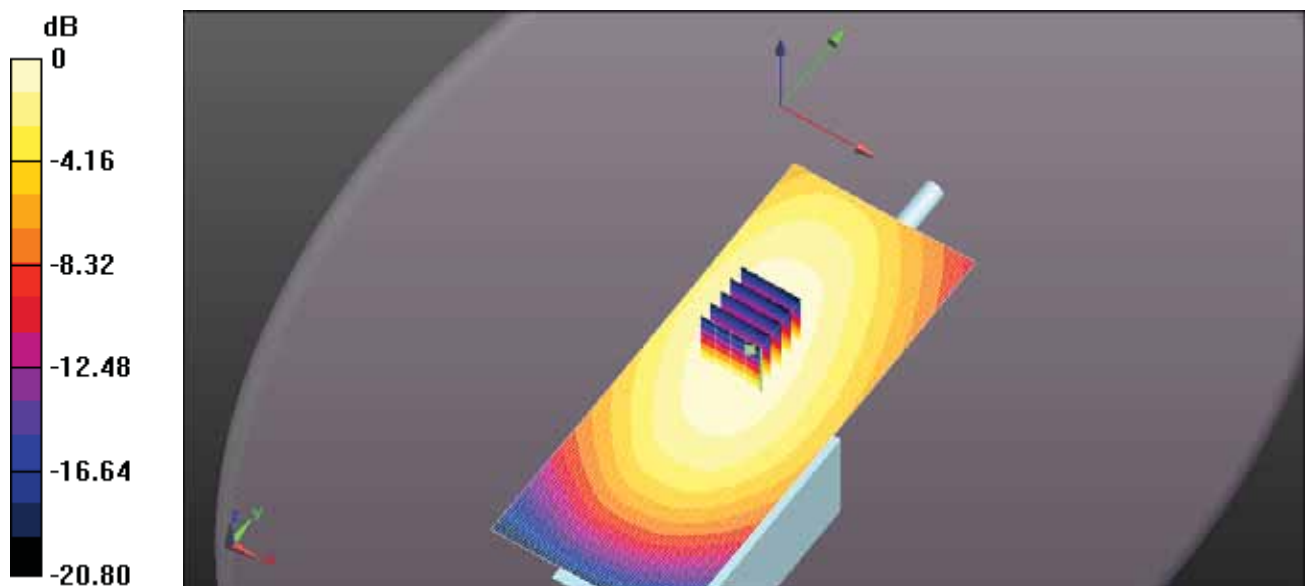
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.63 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 5.76 W/kg

SAR(1 g) = 4.45 W/kg ; SAR(10 g) = 3.25 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.87 W/kg



0 dB = 5.44 W/kg = 7.35 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 500MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.882 \text{ S/m}$; $\epsilon_r = 43.796$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.71 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

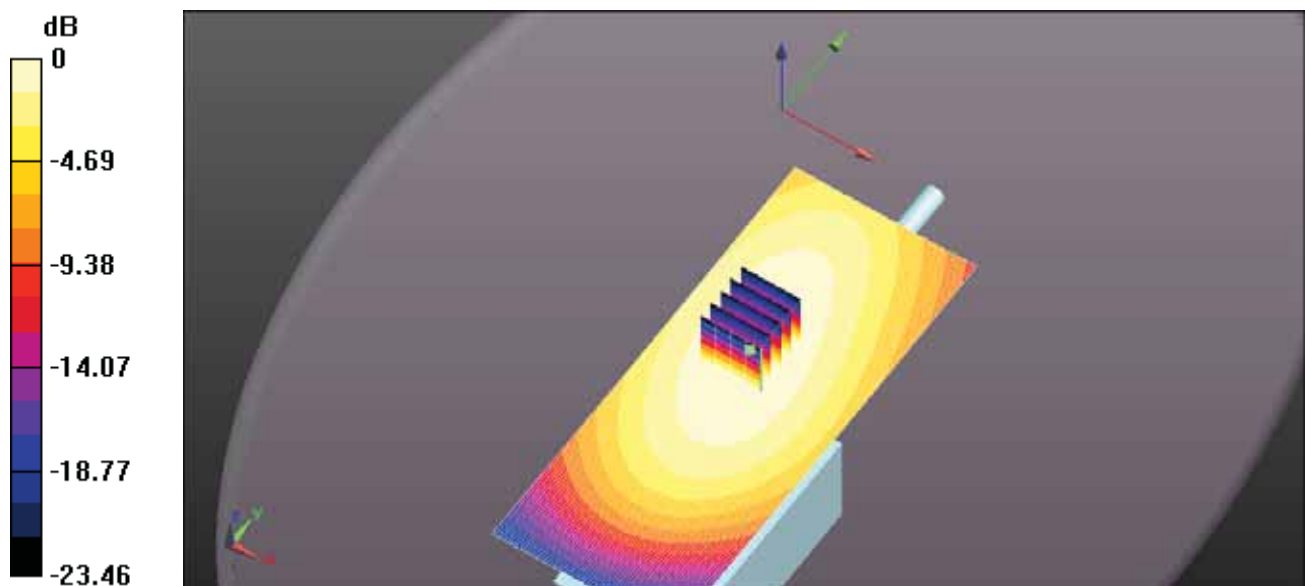
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 39.39 V/m ; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 6.69 W/kg

SAR(1 g) = 4.99 W/kg ; SAR(10 g) = 3.66 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.62 W/kg



0 dB = 5.71 W/kg = 7.57 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 43.306$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.64 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

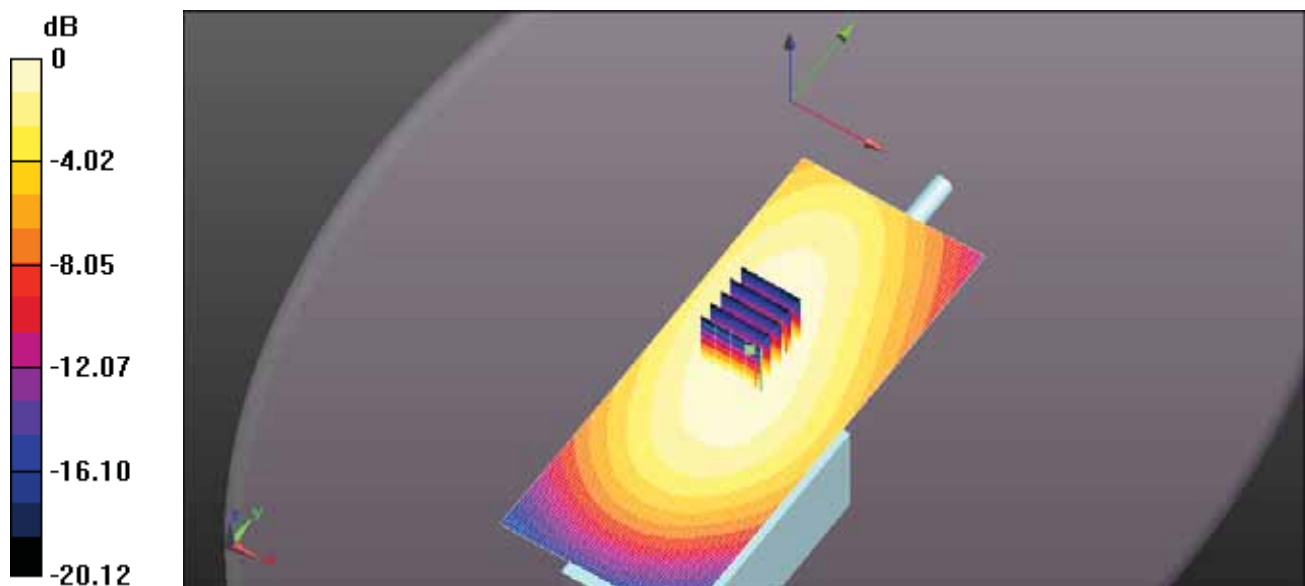
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 38.49 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 6.50 W/kg

SAR(1 g) = 4.75 W/kg ; SAR(10 g) = 3.49 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.45 W/kg



0 dB = 5.64 W/kg = 7.52 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.838 \text{ S/m}$; $\epsilon_r = 44.774$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.01 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

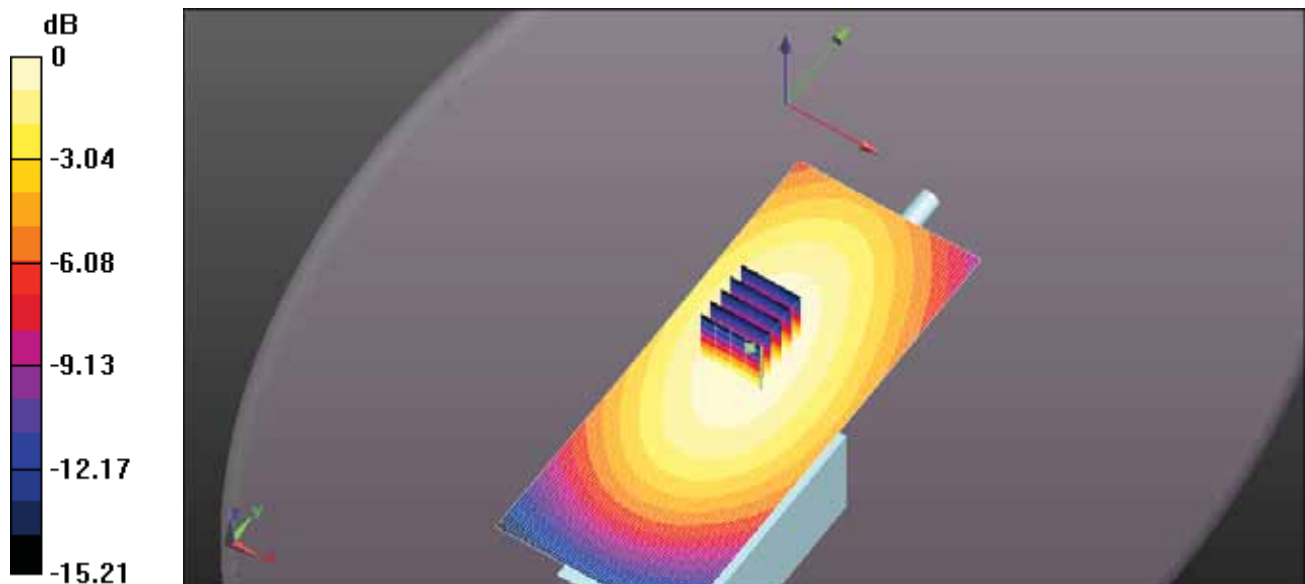
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 39.11 V/m ; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 6.97 W/kg

SAR(1 g) = 5.54 W/kg ; SAR(10 g) = 4.09 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.92 W/kg



0 dB = 6.01 W/kg = 7.79 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 460MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.844$ S/m; $\epsilon_r = 44.647$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.41 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

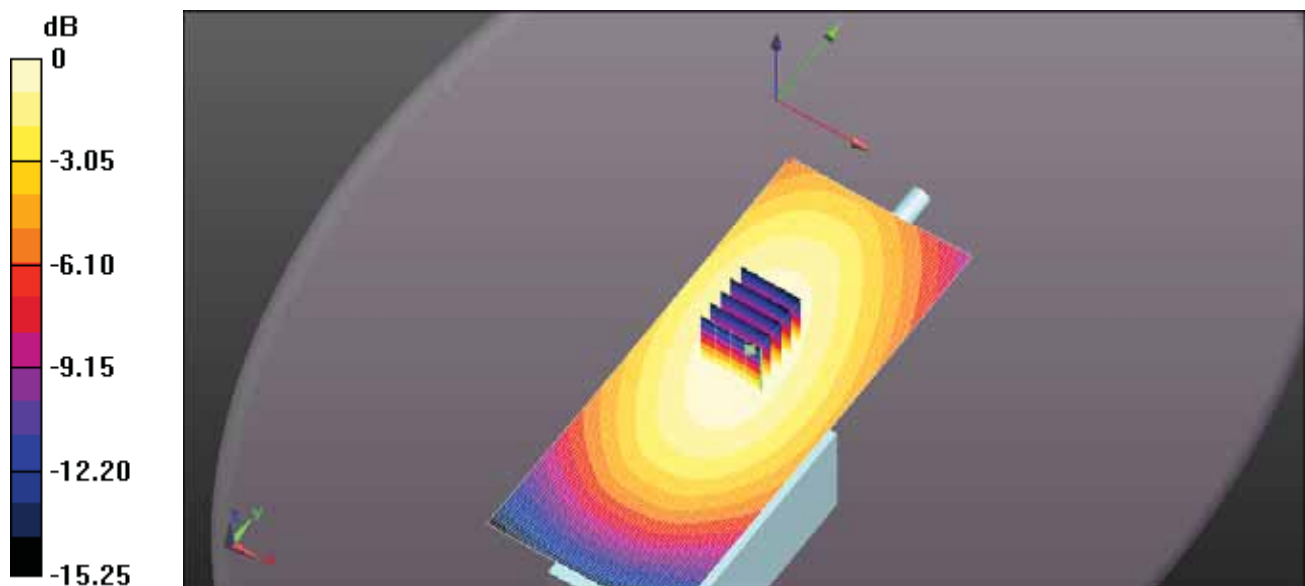
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.60 V/m; Power Drift = -0.24 dB

Peak SAR (extrapolated) = 5.82 W/kg

SAR(1 g) = 4.6 W/kg; SAR(10 g) = 3.4 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.95 W/kg



0 dB = 5.41 W/kg = 7.33 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.42 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

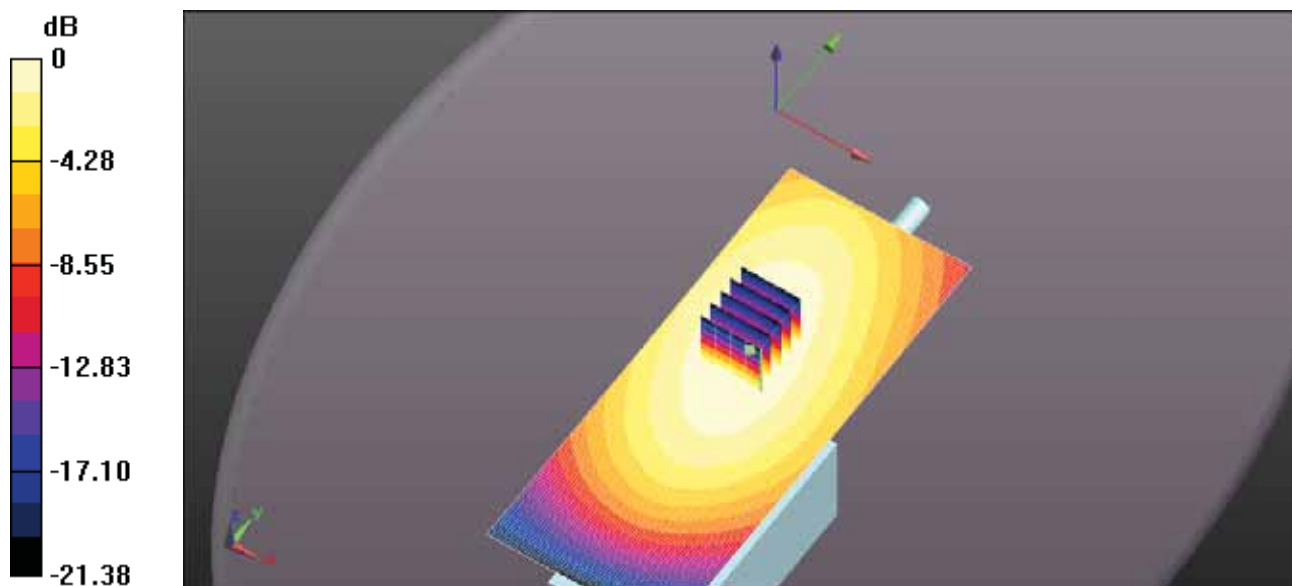
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.53 V/m ; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 5.15 W/kg

SAR(1 g) = 3.97 W/kg ; SAR(10 g) = 2.9 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.37 W/kg



0 dB = 4.42 W/kg = 6.45 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 500MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.882 \text{ S/m}$; $\epsilon_r = 43.796$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.62 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

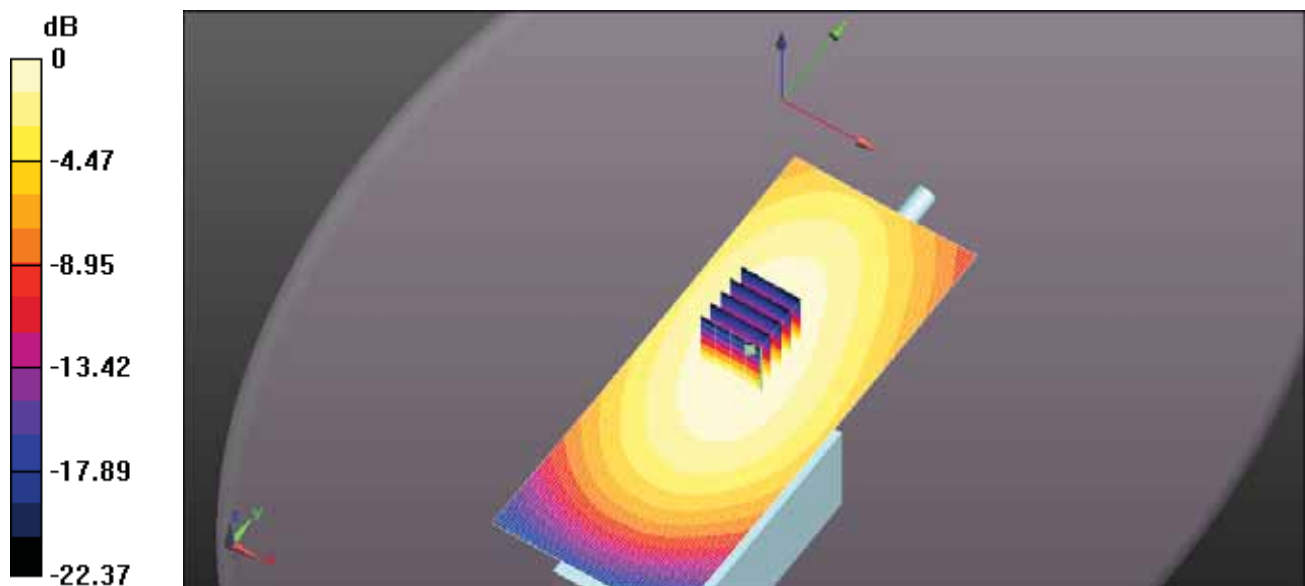
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.69 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 7.72 W/kg

SAR(1 g) = 5.73 W/kg ; SAR(10 g) = 4.2 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.47 W/kg



0 dB = 6.62 W/kg = 8.21 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 43.306$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 6.25 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

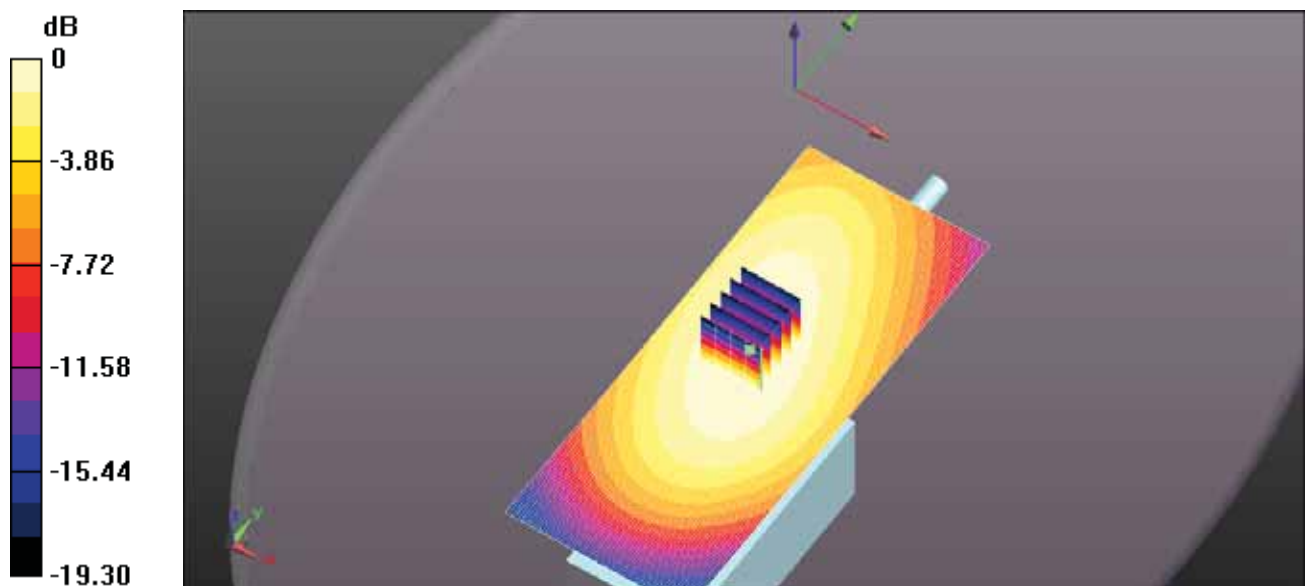
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 38.70 V/m ; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 7.24 W/kg

SAR(1 g) = 5.23 W/kg ; SAR(10 g) = 3.84 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.01 W/kg



0 dB = 6.25 W/kg = 7.96 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 450MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.838$ S/m; $\epsilon_r = 44.774$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 5.50 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

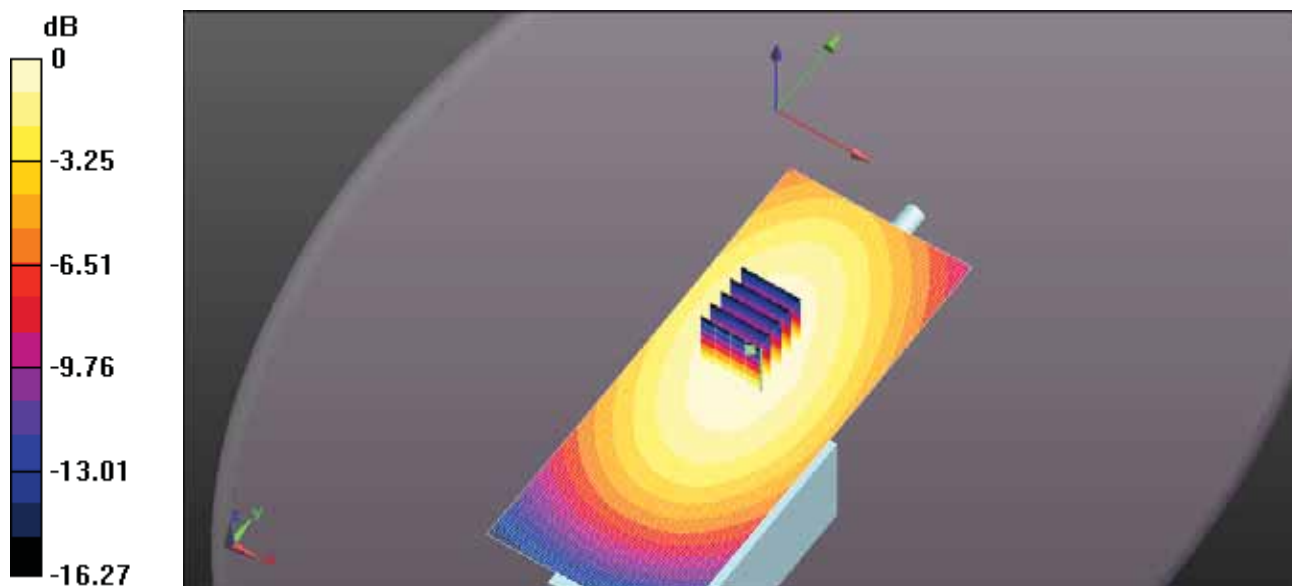
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.62 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 6.22 W/kg

SAR(1 g) = 4.93 W/kg; SAR(10 g) = 3.64 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.30 W/kg



0 dB = 5.50 W/kg = 7.41 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 460MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.844 \text{ S/m}$; $\epsilon_r = 44.647$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 4.82 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

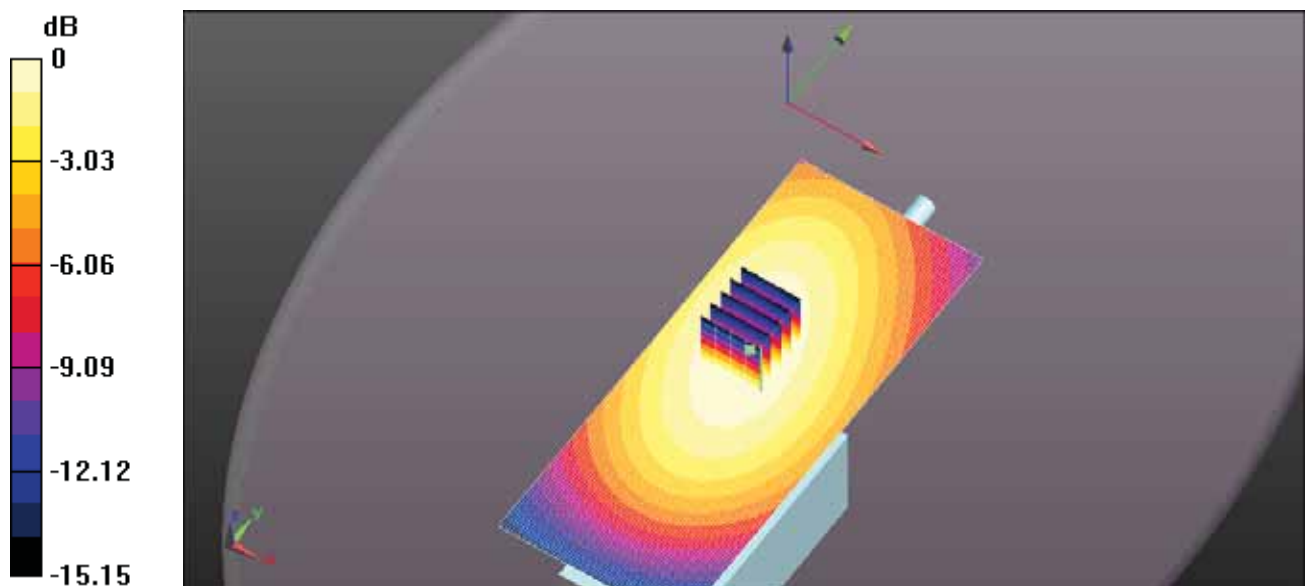
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.63 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 5.47 W/kg

SAR(1 g) = 4.3 W/kg ; SAR(10 g) = 3.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.65 W/kg



0 dB = 4.82 W/kg = 6.83 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 480MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 44.355$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 3.74 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

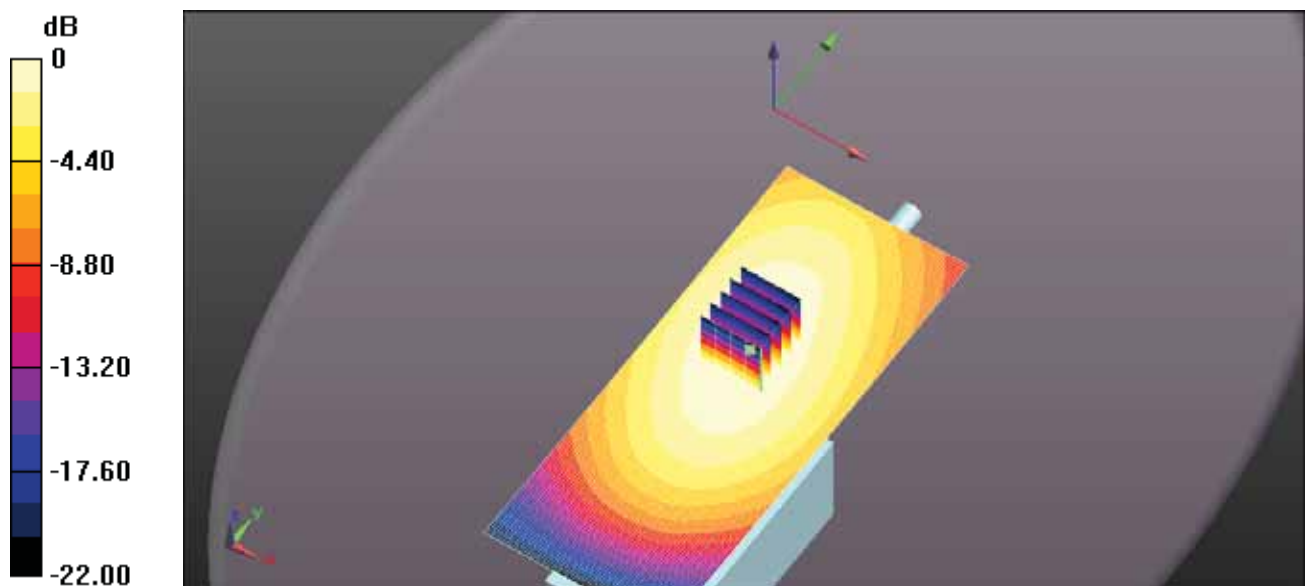
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.58 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 4.13 W/kg

SAR(1 g) = 3.2 W/kg ; SAR(10 g) = 2.34 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.51 W/kg



0 dB = 3.74 W/kg = 5.73 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 520MHzda52.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 43.306$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 8.21 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

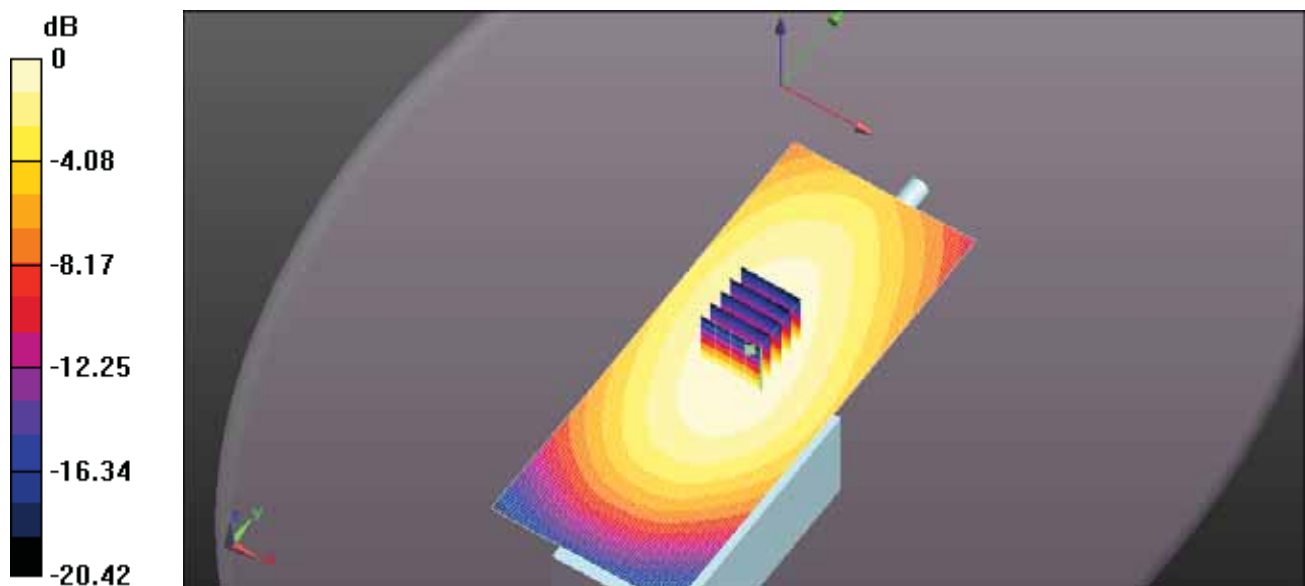
(5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.32 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 9.03 W/kg

SAR(1 g) = 6.53 W/kg ; SAR(10 g) = 4.79 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 7.46 W/kg



0 dB = 8.21 W/kg = 9.15 dBW/kg

EXHIBIT 4. BODY SAR MEASUREMENTS

Antenna	Power (dBm)	CH	CH. Freq	BODY SAR1g (W/Kg)	BODY SAR10g (W/Kg)
				BP-283	BP-283
			(MHz)	1910mAh	1910mAh
FA-S82U 430-480 MHz	36.94	1	450	5.07	3.73
	37.22	3	465	4.38	3.22
	37.02	5	480	3.97	2.91
FA-S83U 470-520 MHz	37.20	4	470	8.82	6.28
	36.95	6	482.5	8.10	5.92
	36.80	8	495	7.33	5.27
	36.80	10	507.5	6.07	4.45
	36.90	11	520	5.79	4.31
FA-S82US 450-490 MHz	36.94	1	450	5.94	4.34
	37.20	4	470	5.97	4.37
	36.84	7	490	2.76	2.02

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 470MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

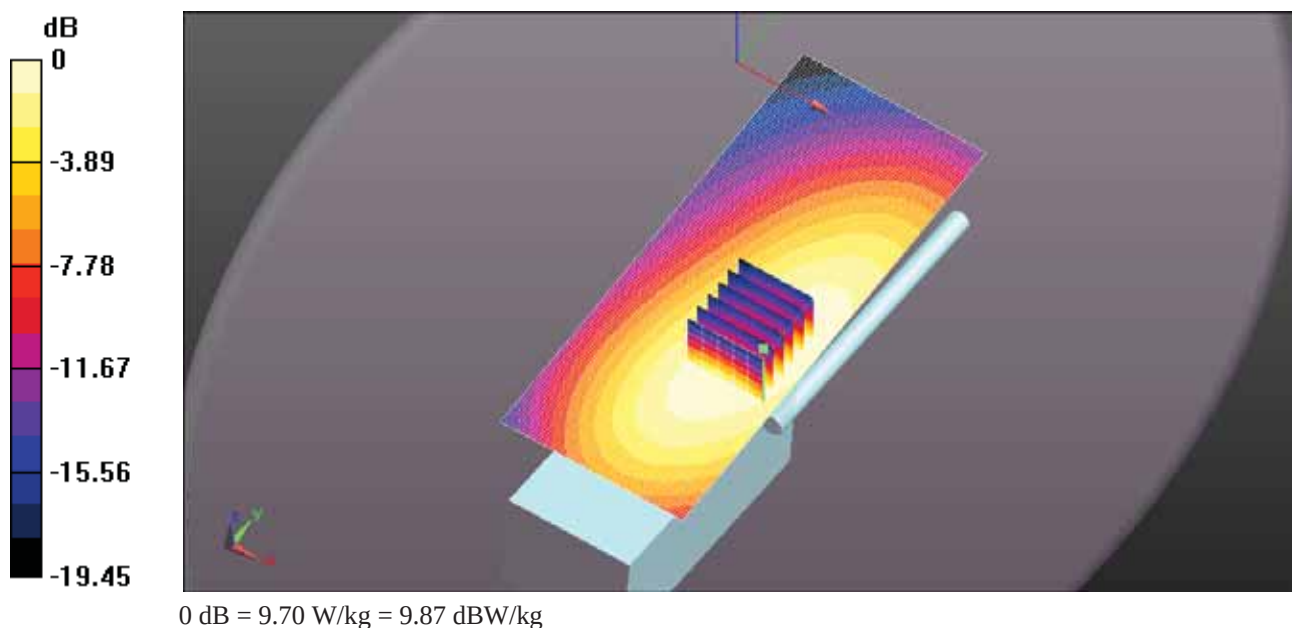
Communication System: UID 0, CW (0); Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470$ MHz; $\sigma = 0.931$ S/m; $\epsilon_r = 56.832$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.70 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.59 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 11.3 W/kg
SAR(1 g) = 8.56 W/kg; SAR(10 g) = 6.28 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.42 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 482.5MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 482.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 482.5$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 56.379$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 9.05 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

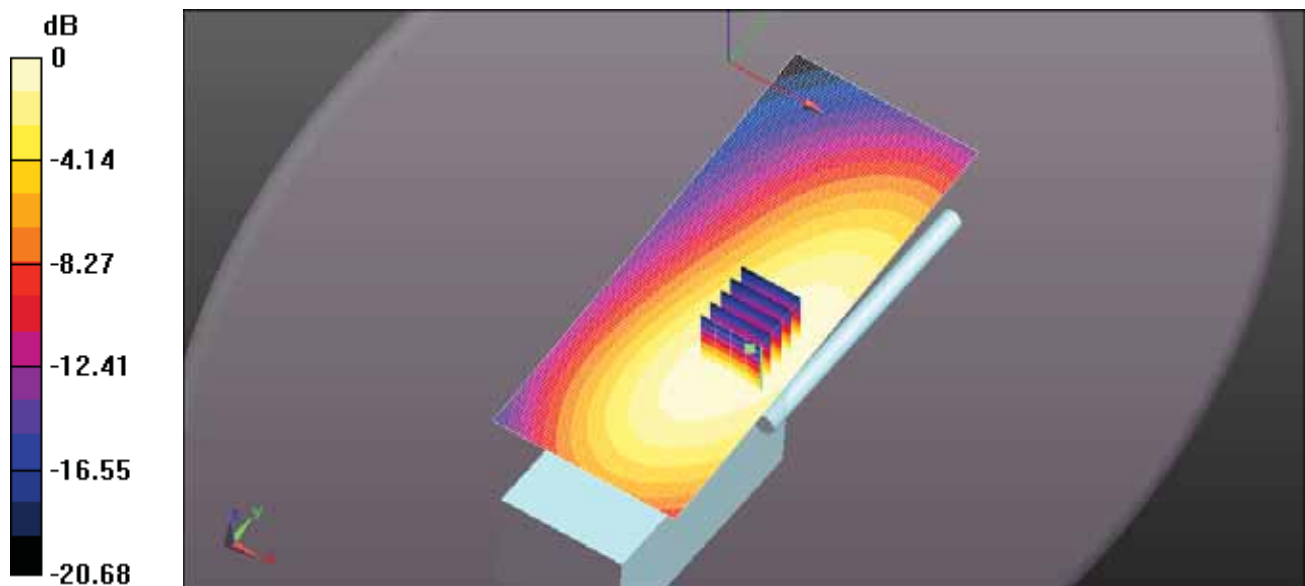
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.103 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 10.4 W/kg

SAR(1 g) = 7.81 W/kg; SAR(10 g) = 5.73 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.75 W/kg



0 dB = 9.05 W/kg = 9.56 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: ICOM-468Q FA-S82US 490MHzda52.da52:0

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 490 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 490$ MHz; $\sigma = 0.87$ S/m; $\epsilon_r = 44.109$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.43, 10.43, 10.43); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Head Front, P=5W, d=25mm/Area Scan (61x151x1):

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

Maximum value of SAR (interpolated) = 2.31 W/kg

Configuration_Head_IC-F7020T/Head Front, P=5W, d=25mm/Zoom Scan (5x5x7)

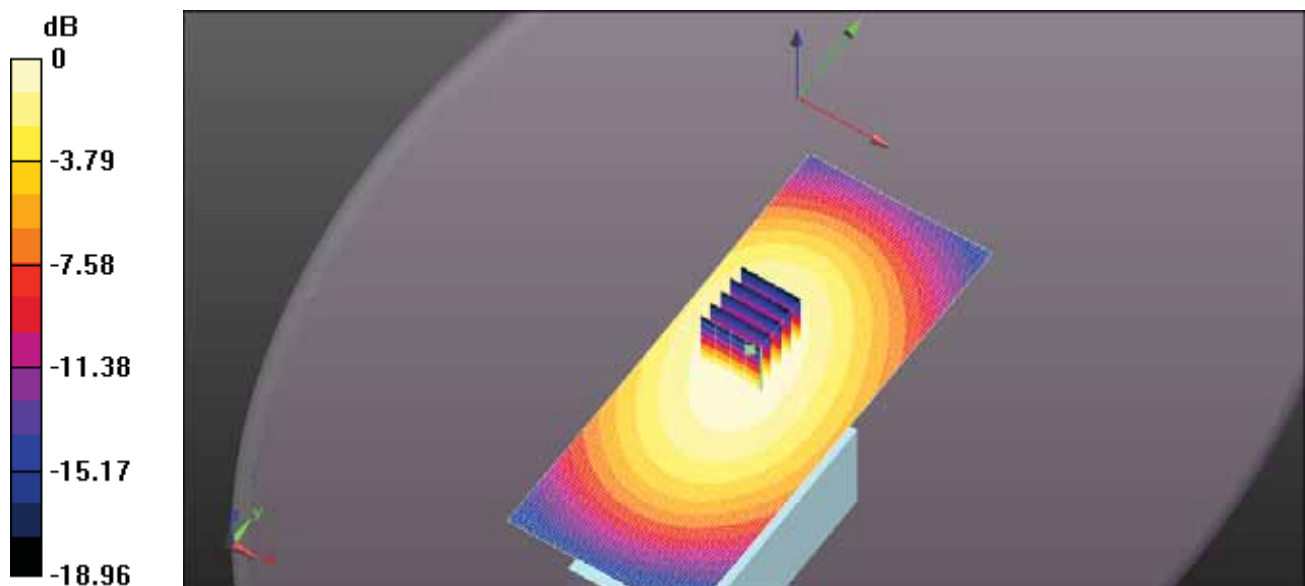
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.224 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.71 W/kg

SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.5 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.29 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 507.5MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 507.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 507.5$ MHz; $\sigma = 0.989$ S/m; $\epsilon_r = 54.057$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 7.15 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x6x7)/Cube 0:

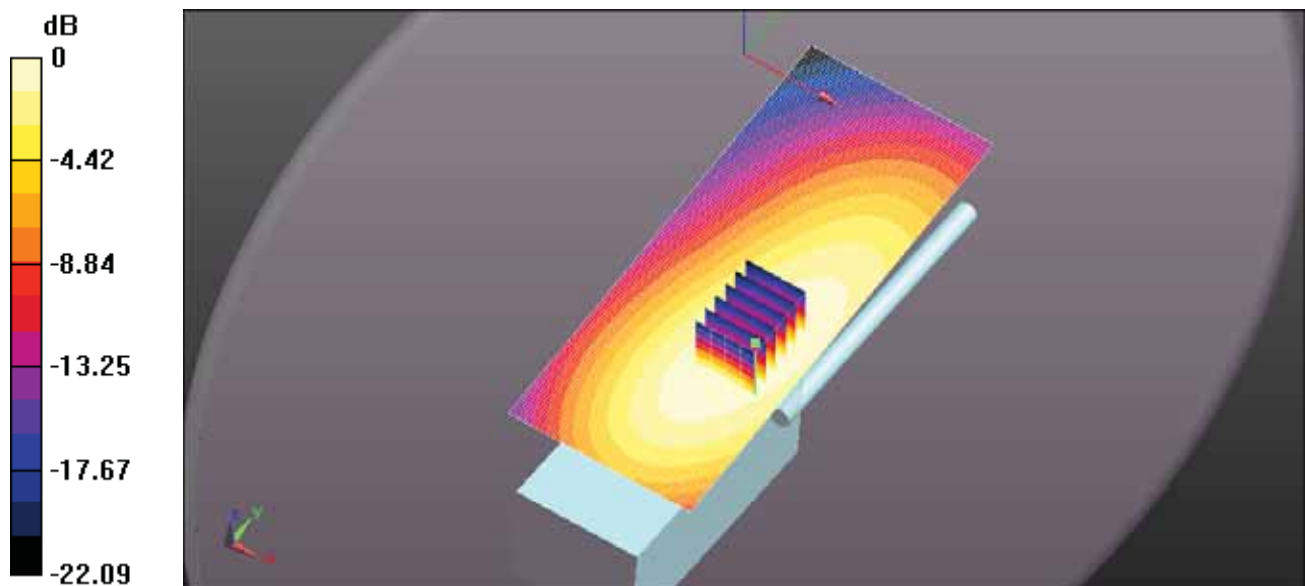
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.620 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 8.23 W/kg

SAR(1 g) = 5.9 W/kg; SAR(10 g) = 4.37 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.94 W/kg



0 dB = 7.15 W/kg = 8.54 dBW/kg

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S83U 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

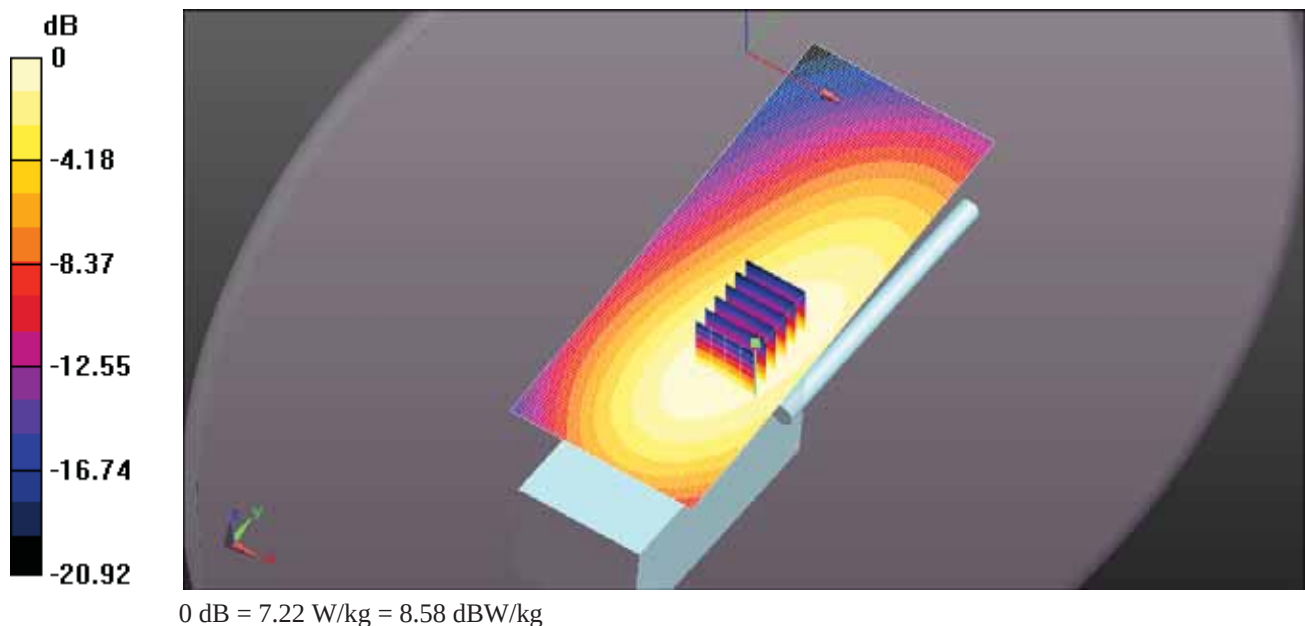
Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 1.008 \text{ S/m}$; $\epsilon_r = 53.006$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.22 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x6x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.621 V/m ; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 8.22 W/kg
SAR(1 g) = 5.79 W/kg ; SAR(10 g) = 4.31 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.95 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82U 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

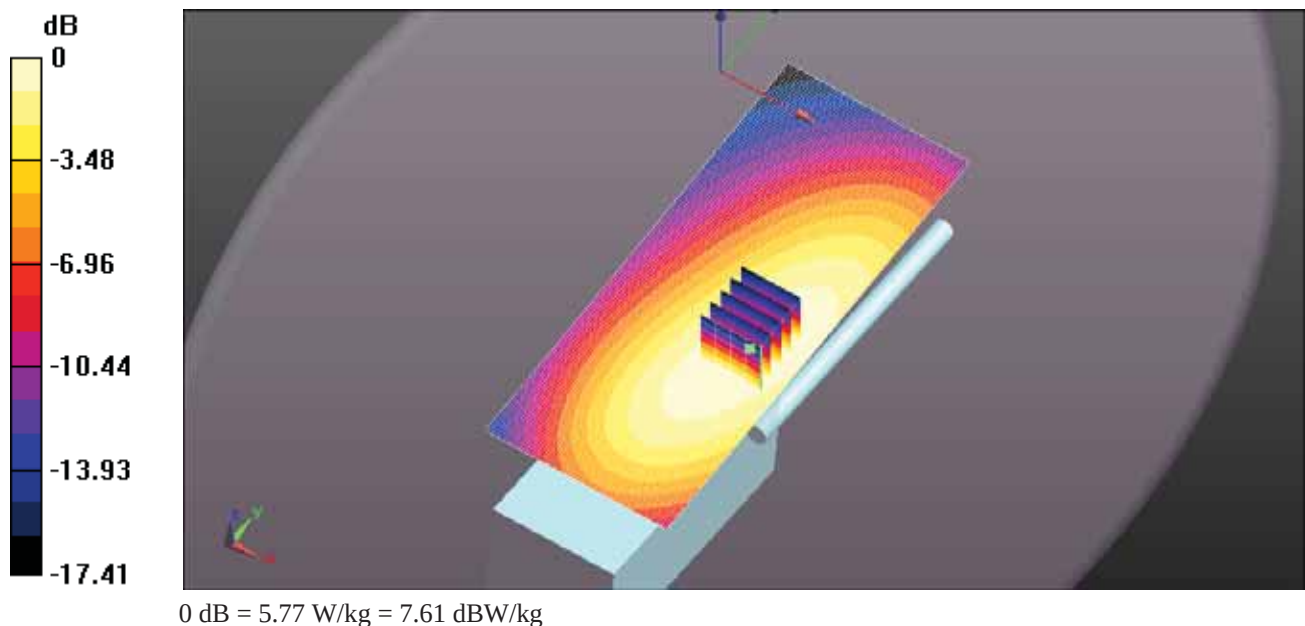
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.007$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.77 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.70 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 6.63 W/kg
SAR(1 g) = 5.07 W/kg; SAR(10 g) = 3.73 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.56 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82U 465MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

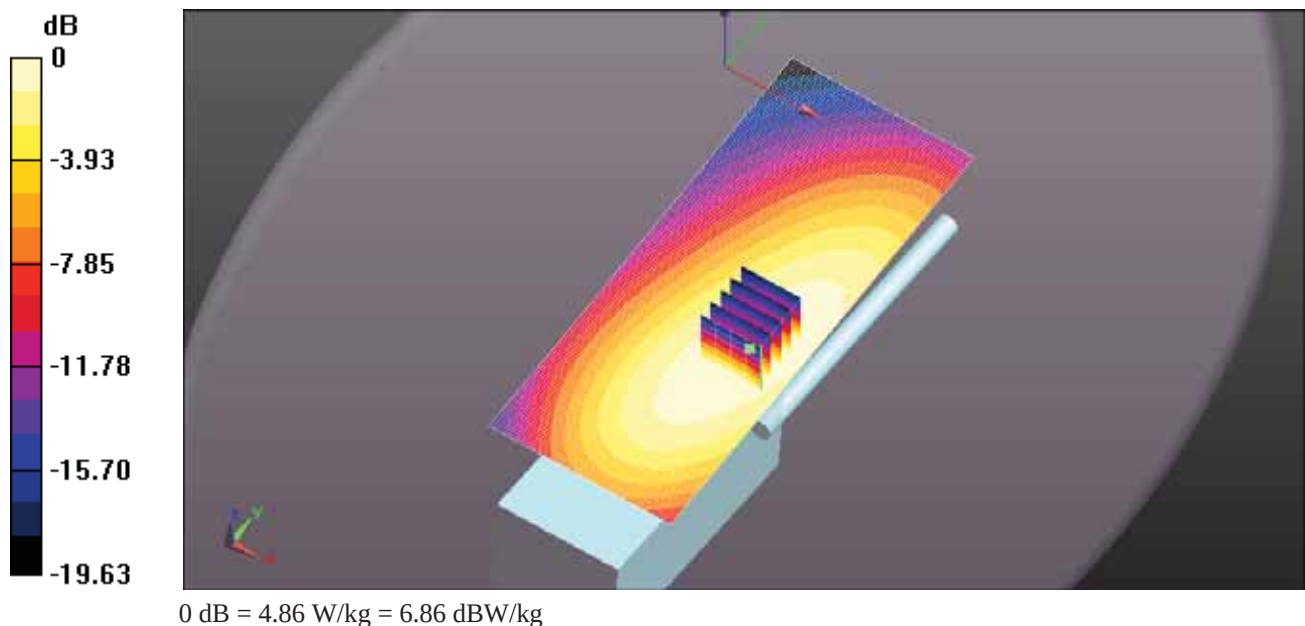
Communication System: UID 0, CW (0); Frequency: 465 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 465 \text{ MHz}$; $\sigma = 0.927 \text{ S/m}$; $\epsilon_r = 56.764$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.86 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.550 V/m; Power Drift = 0.54 dB
Peak SAR (extrapolated) = 5.68 W/kg
SAR(1 g) = 4.38 W/kg; SAR(10 g) = 3.22 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.80 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82U 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

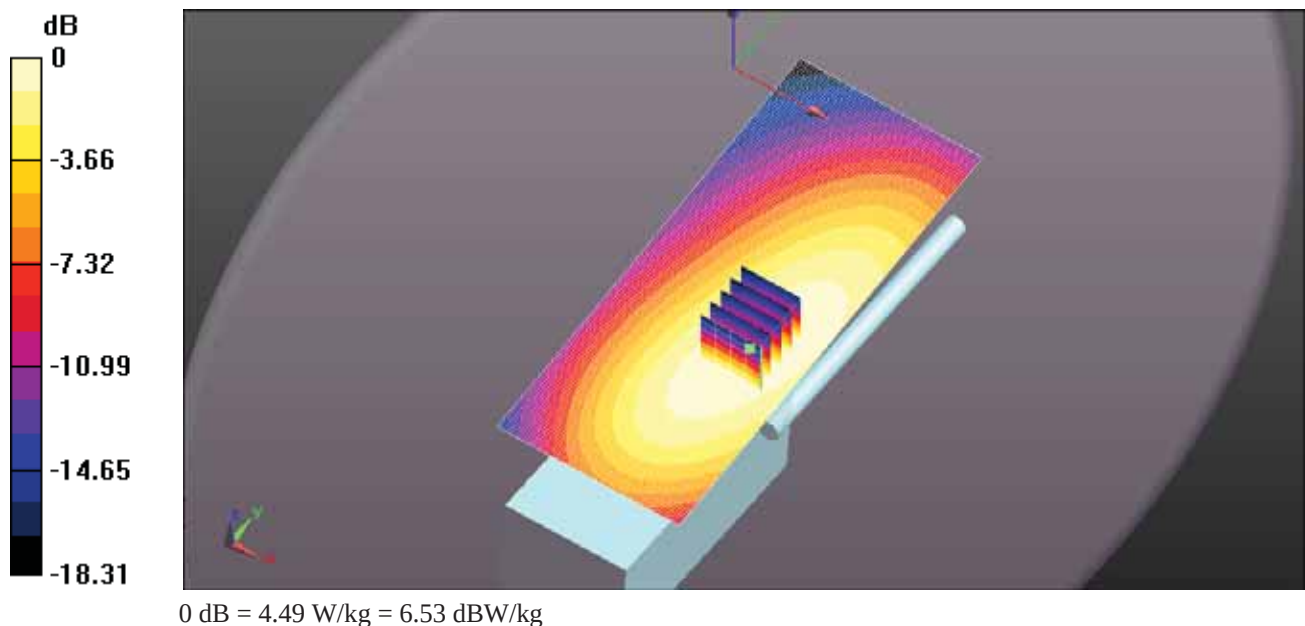
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.49 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 8.443 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 5.25 W/kg
SAR(1 g) = 3.97 W/kg; SAR(10 g) = 2.91 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.42 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

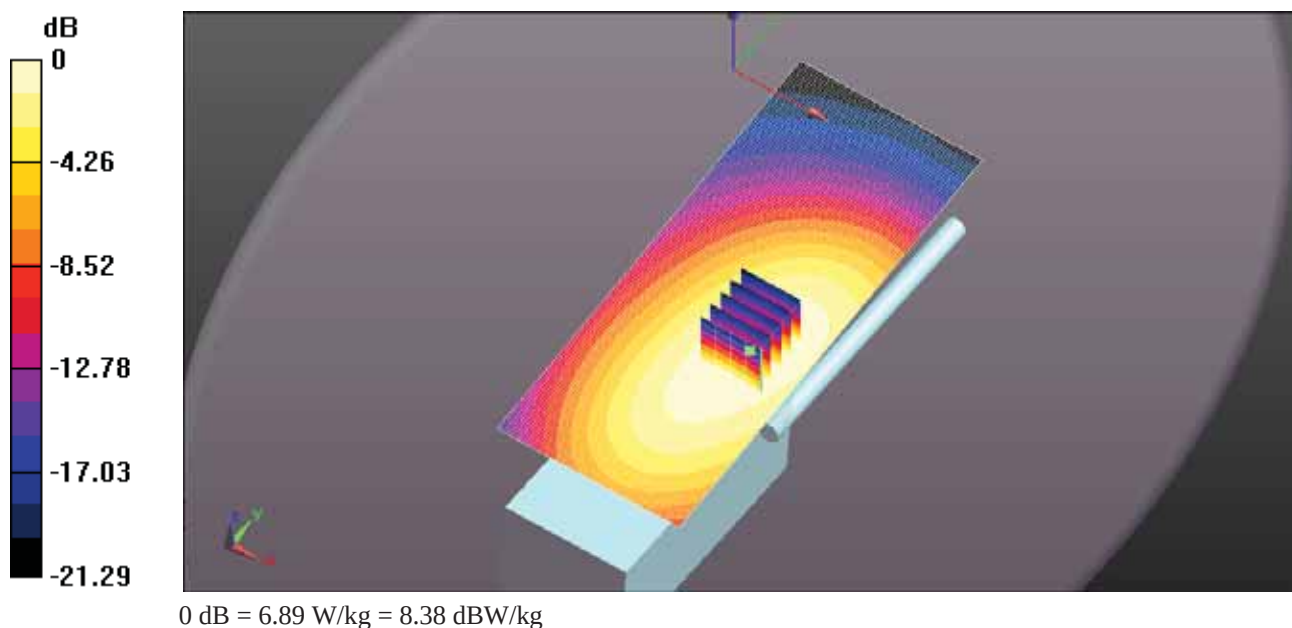
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.007$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.89 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.490 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 7.81 W/kg
SAR(1 g) = 5.94 W/kg; SAR(10 g) = 4.34 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.56 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 470MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

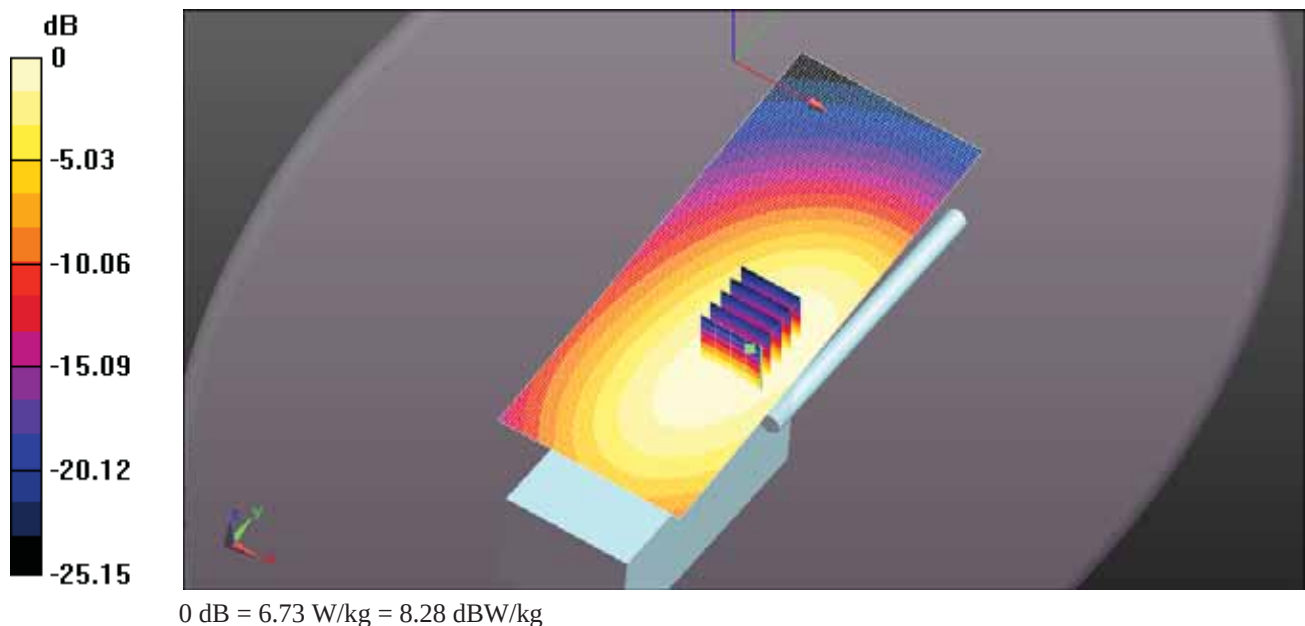
Communication System: UID 0, CW (0); Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470$ MHz; $\sigma = 0.931$ S/m; $\epsilon_r = 56.832$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.73 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.748 V/m; Power Drift = -0.28 dB
Peak SAR (extrapolated) = 7.85 W/kg
SAR(1 g) = 5.97 W/kg; SAR(10 g) = 4.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.60 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S82US 490MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 490 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 490 \text{ MHz}$; $\sigma = 0.957 \text{ S/m}$; $\epsilon_r = 55.816$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 3.20 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 2.912 V/m ; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.75 W/kg
SAR(1 g) = 2.76 W/kg ; SAR(10 g) = 2.02 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.14 W/kg

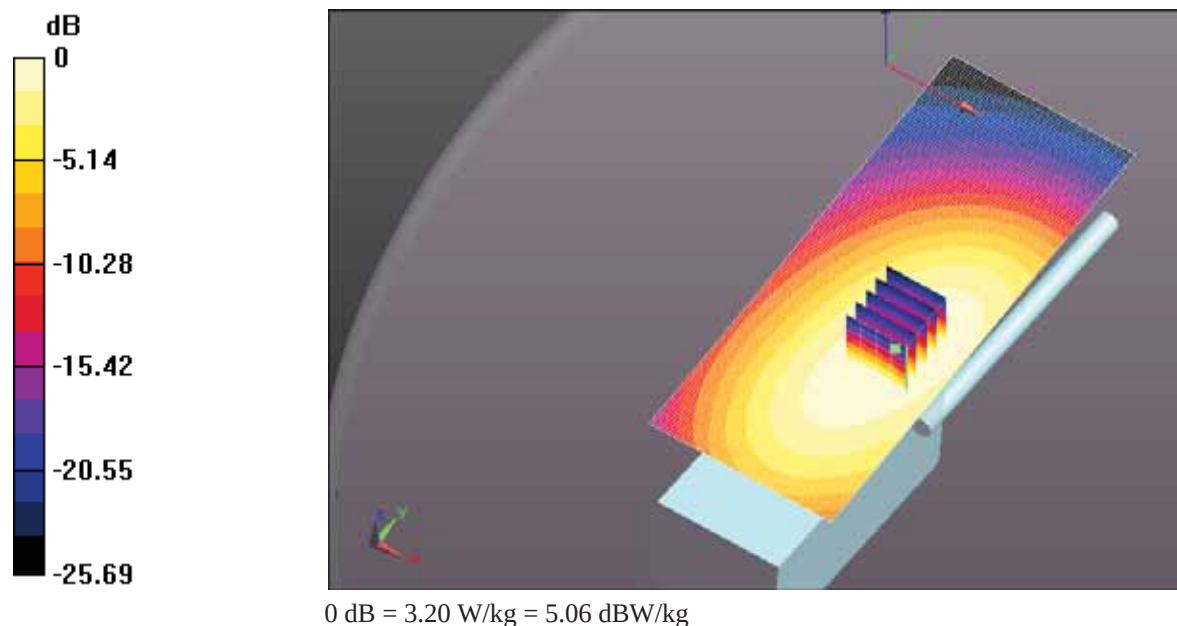


EXHIBIT 5. BODY SAR MEASUREMENTS (CUT ANTENNA)

Antenna	Power (dBm)	CH	CH. Freq	BODY SAR1g (W/Kg)	BODY SAR10g (W/Kg)
				BP-283	BP-283
			(MHz)	1910mAh	1910mAh
FA-S76UC 440MHz 148mm	36.94	1	450	6.15	4.52
	37.12	2	460	5.63	4.11
	37.02	5	480	4.89	3.58
	36.80	9	500	3.9	2.86
	36.90	11	520	3.33	2.47
FA-S76UC 460MHz 142mm	36.94	1	450	5.96	4.36
	37.12	2	460	6.12	4.48
	37.02	5	480	5.06	3.69
	36.80	9	500	4.01	2.94
	36.90	11	520	3.76	2.78
FA-S76UC 480MHz 136mm	36.94	1	450	6.74	4.94
	37.12	2	460	7.56	5.55
	37.02	5	480	6.43	4.71
	36.80	9	500	6.12	4.51
	36.90	11	520	5.03	3.72
FA-S76UC 500MHz 129mm	36.94	1	450	7.37	5.44
	37.12	2	460	7.63	5.6
	37.02	5	480	6.81	4.98
	36.80	9	500	6.8	5
	36.90	11	520	6.43	4.78
FA-S76UC 520MHz 125mm	36.94	1	450	6.14	4.69
	37.12	2	460	5.98	4.37
	37.02	5	480	6.11	4.47
	36.80	9	500	7.51	5.53
	36.90	11	520	11.7	8.39

Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

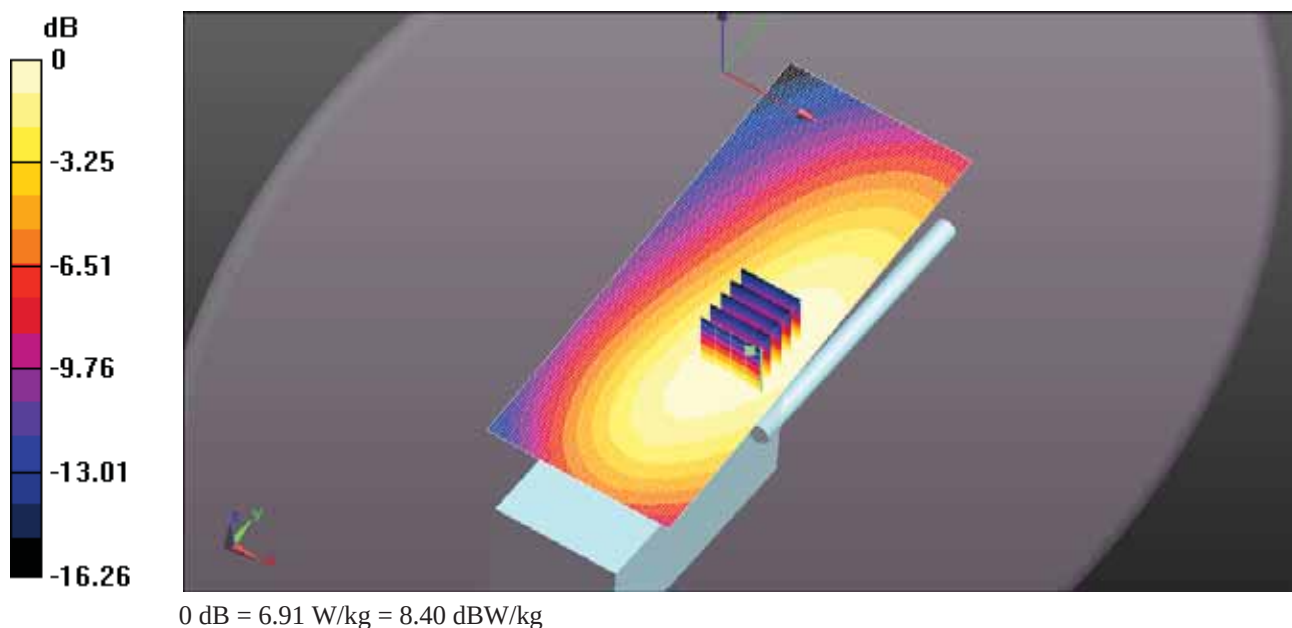
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.007$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.91 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.35 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 8.04 W/kg
SAR(1 g) = 6.15 W/kg; SAR(10 g) = 4.52 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.77 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 460MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

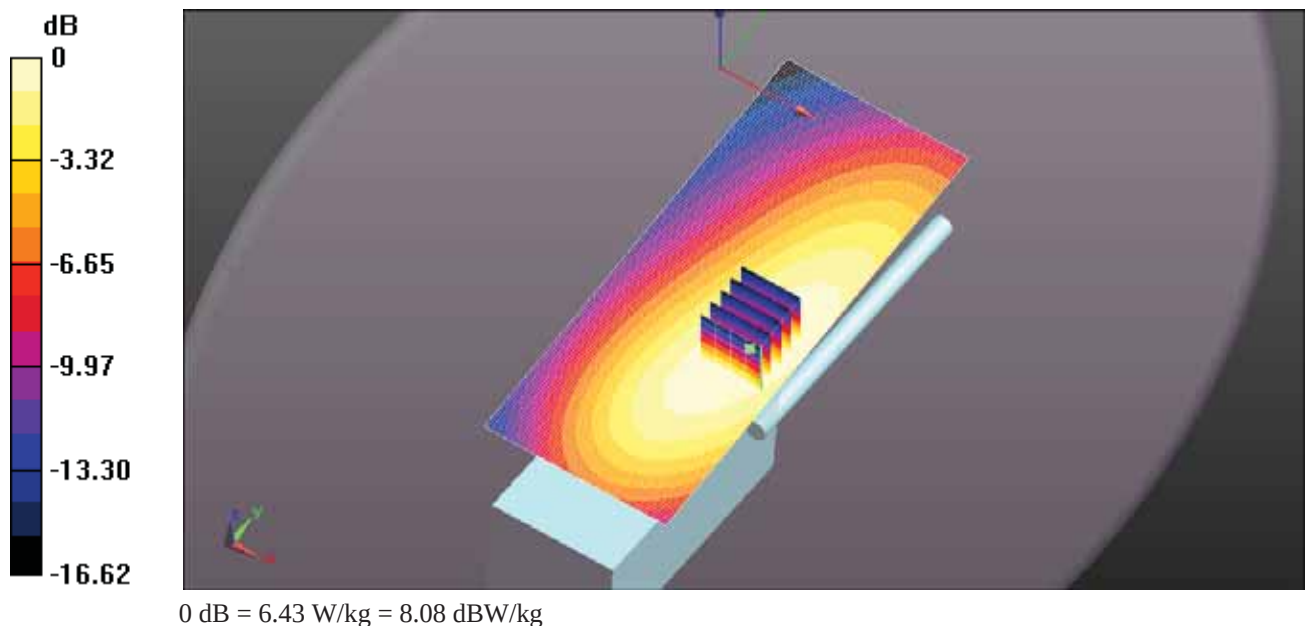
Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.581$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 6.43 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 12.34 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 7.41 W/kg
SAR(1 g) = 5.63 W/kg; SAR(10 g) = 4.11 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.20 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

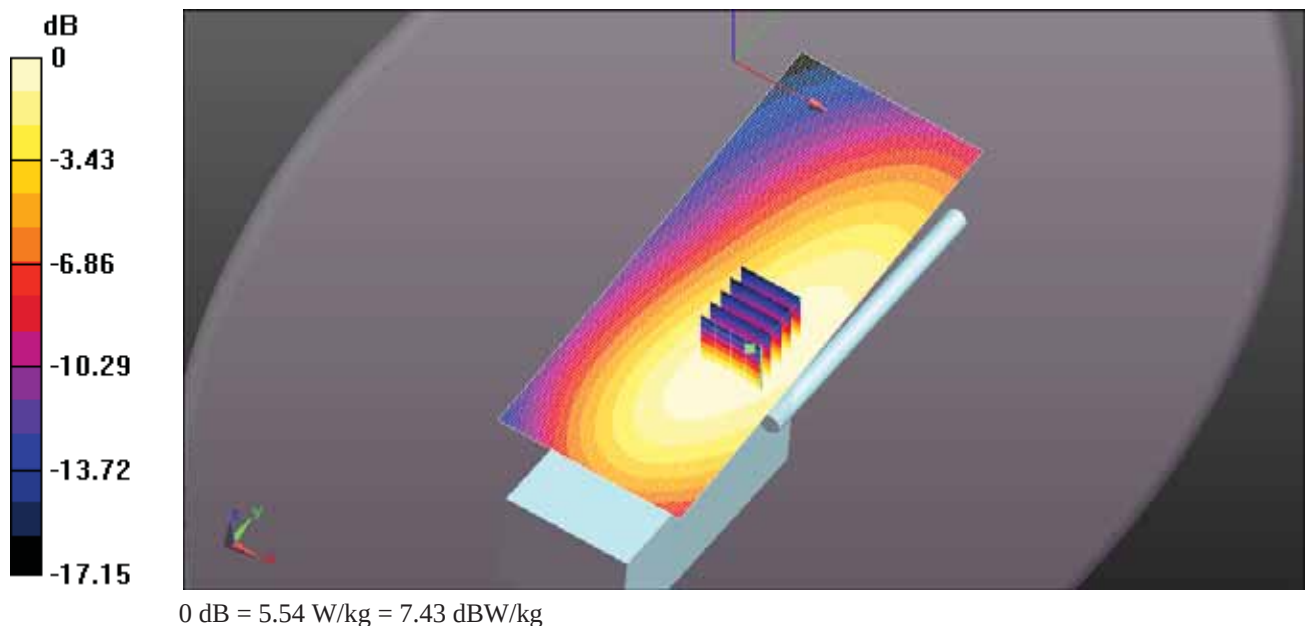
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.54 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.67 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 6.51 W/kg
SAR(1 g) = 4.89 W/kg; SAR(10 g) = 3.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.45 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 500MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

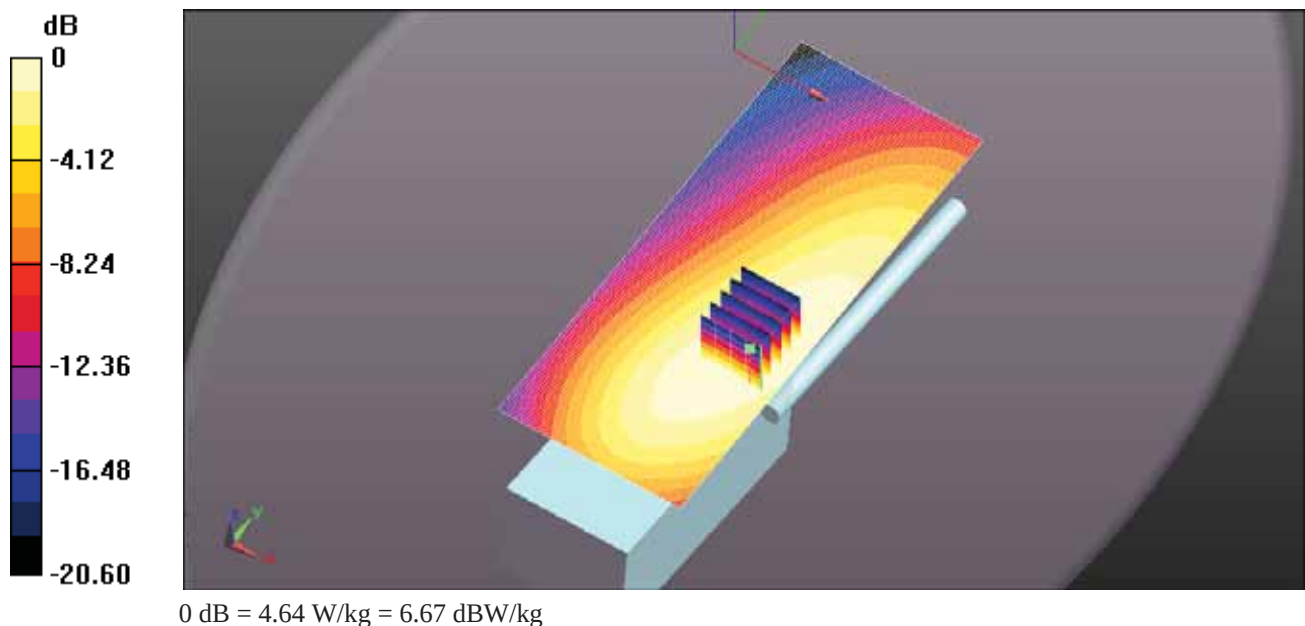
Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.977 \text{ S/m}$; $\epsilon_r = 54.816$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.64 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 6.414 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 5.39 W/kg
SAR(1 g) = 3.9 W/kg; SAR(10 g) = 2.86 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.53 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 148mm 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

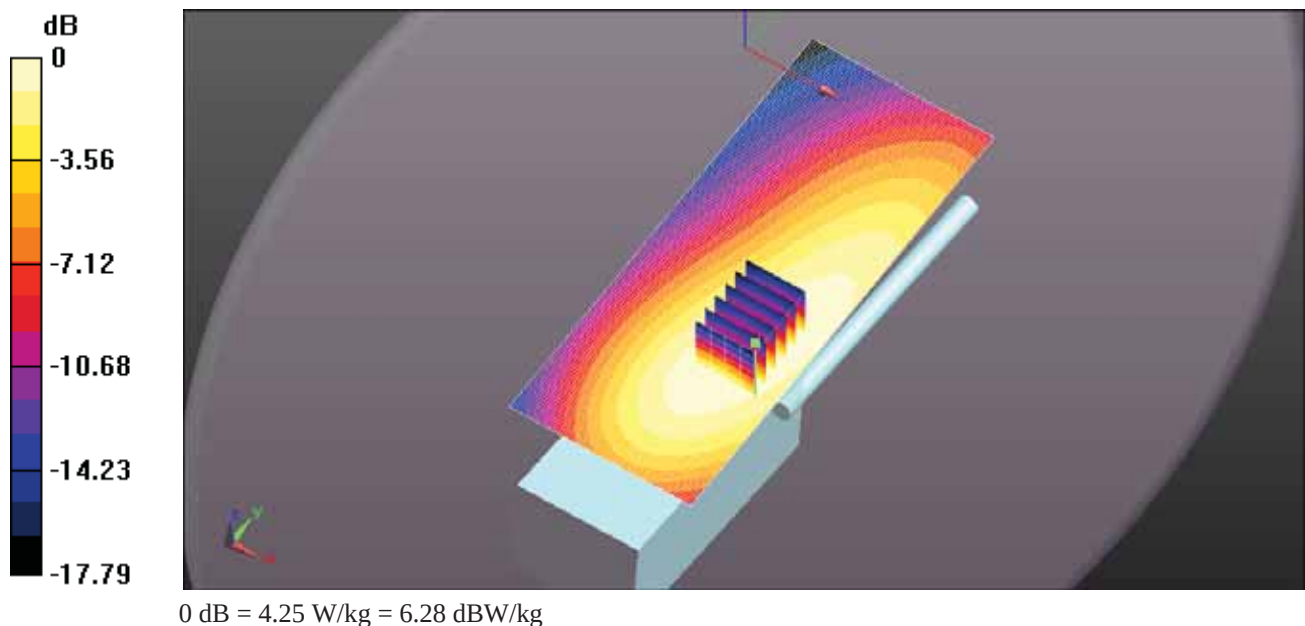
Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520$ MHz; $\sigma = 1.008$ S/m; $\epsilon_r = 53.006$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 4.25 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x6x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 8.392 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 4.75 W/kg
SAR(1 g) = 3.33 W/kg; SAR(10 g) = 2.47 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.00 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

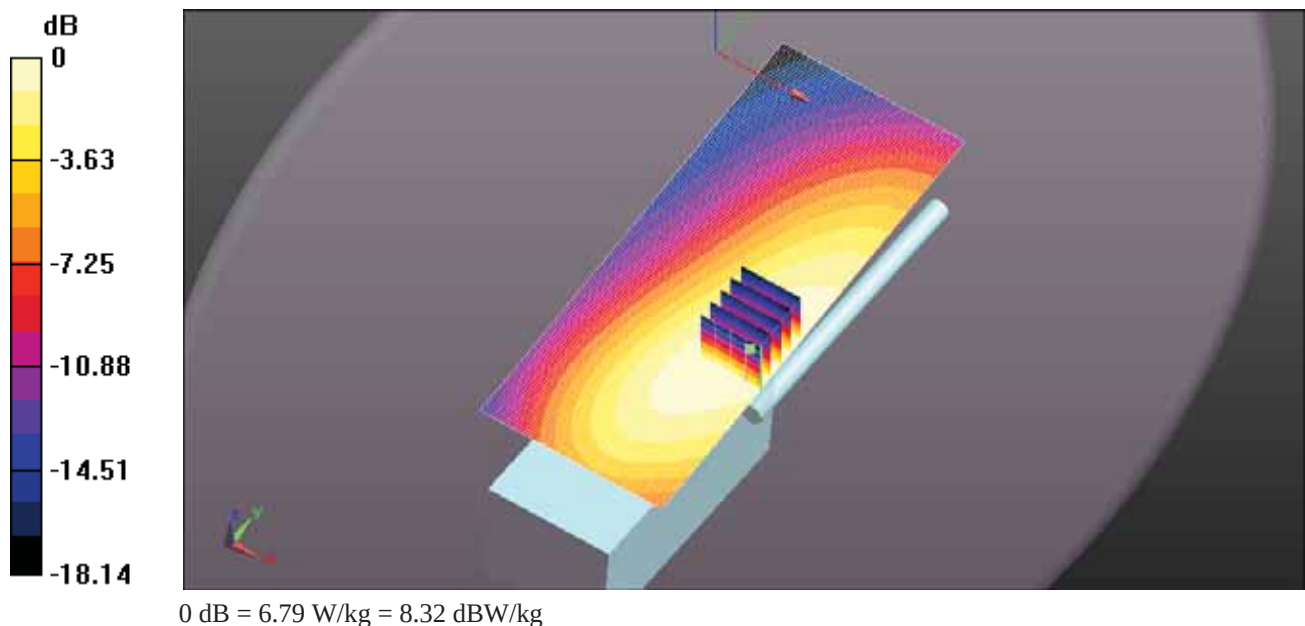
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.926 \text{ S/m}$; $\epsilon_r = 56.007$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 6.79 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.65 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 7.84 W/kg
SAR(1 g) = 5.96 W/kg; SAR(10 g) = 4.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.53 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 460MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

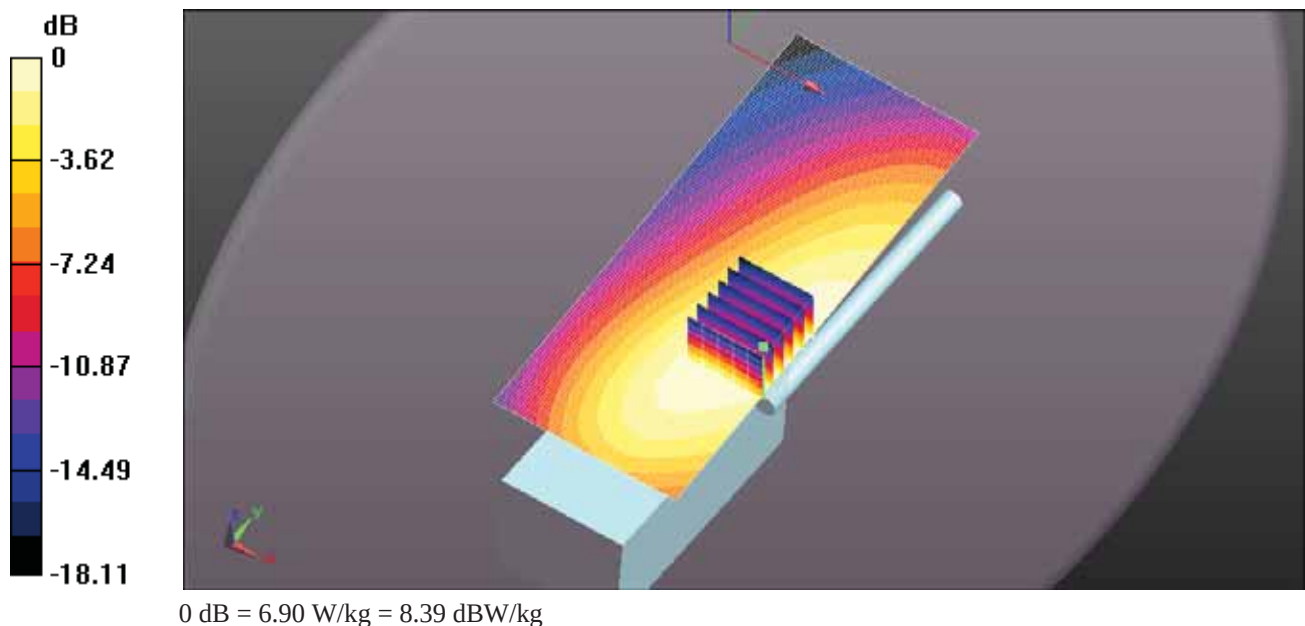
Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.581$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 6.90 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 10.75 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 8.04 W/kg
SAR(1 g) = 6.12 W/kg; SAR(10 g) = 4.48 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.69 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

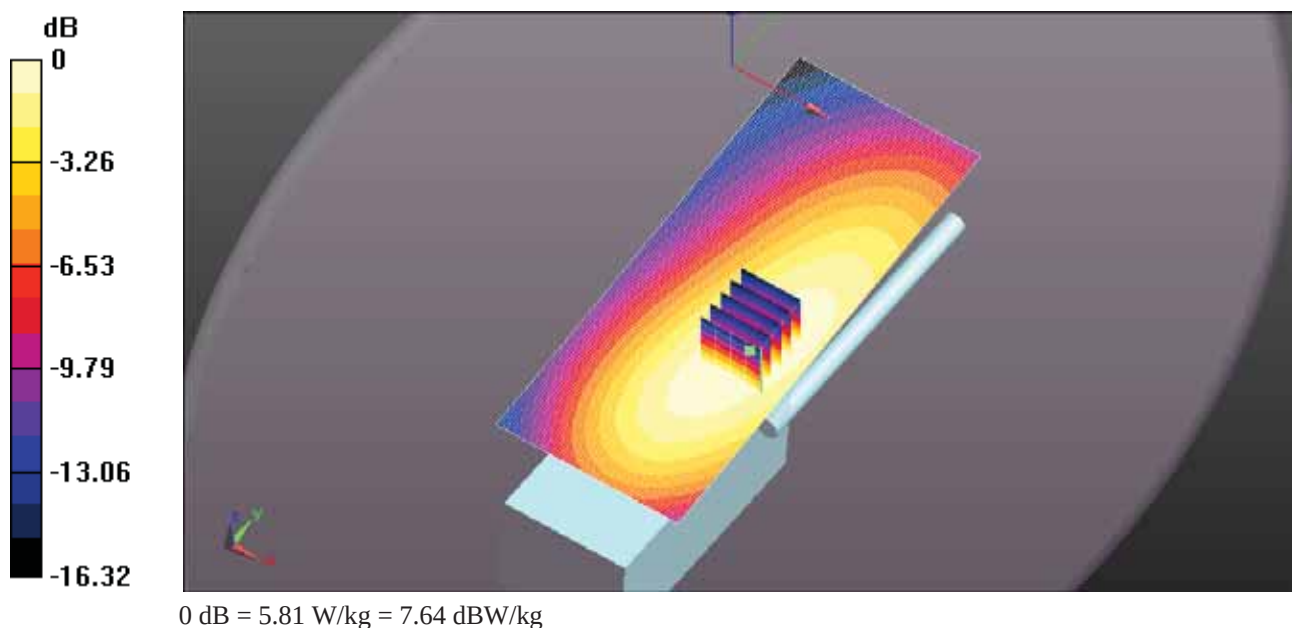
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 56.52$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.81 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.02 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.73 W/kg
SAR(1 g) = 5.06 W/kg; SAR(10 g) = 3.69 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.65 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 500MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

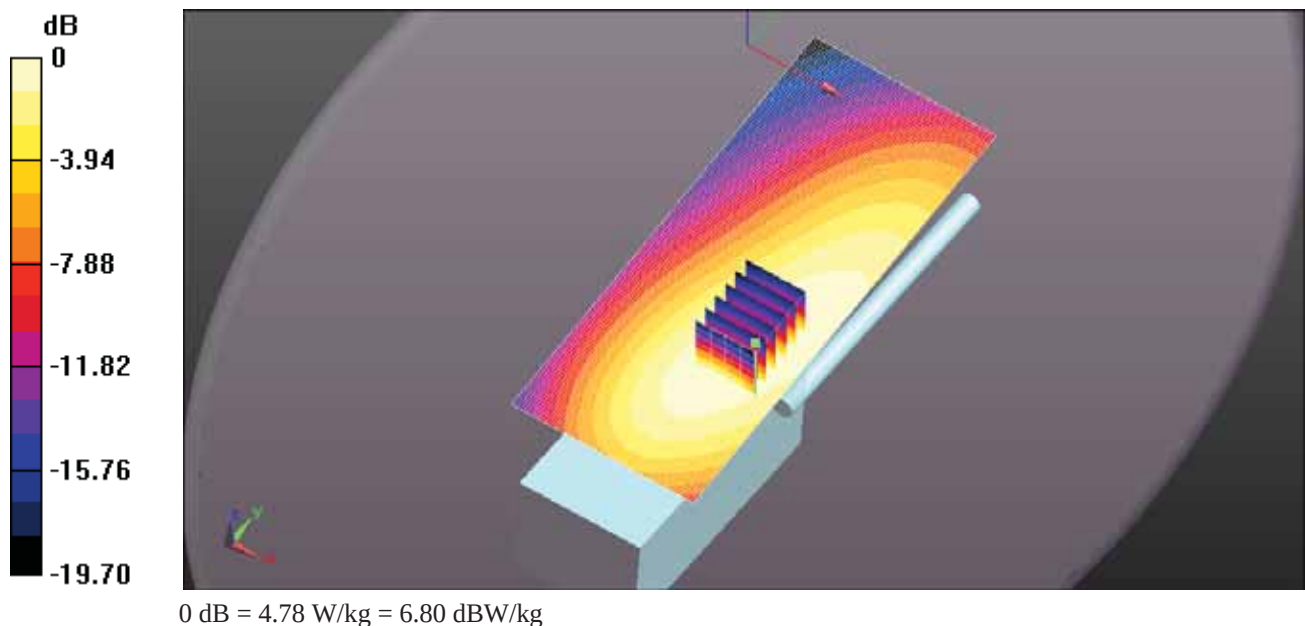
Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.977 \text{ S/m}$; $\epsilon_r = 54.816$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.78 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x6x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.265 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 5.54 W/kg
SAR(1 g) = 4.01 W/kg; SAR(10 g) = 2.94 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.66 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 142mm 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

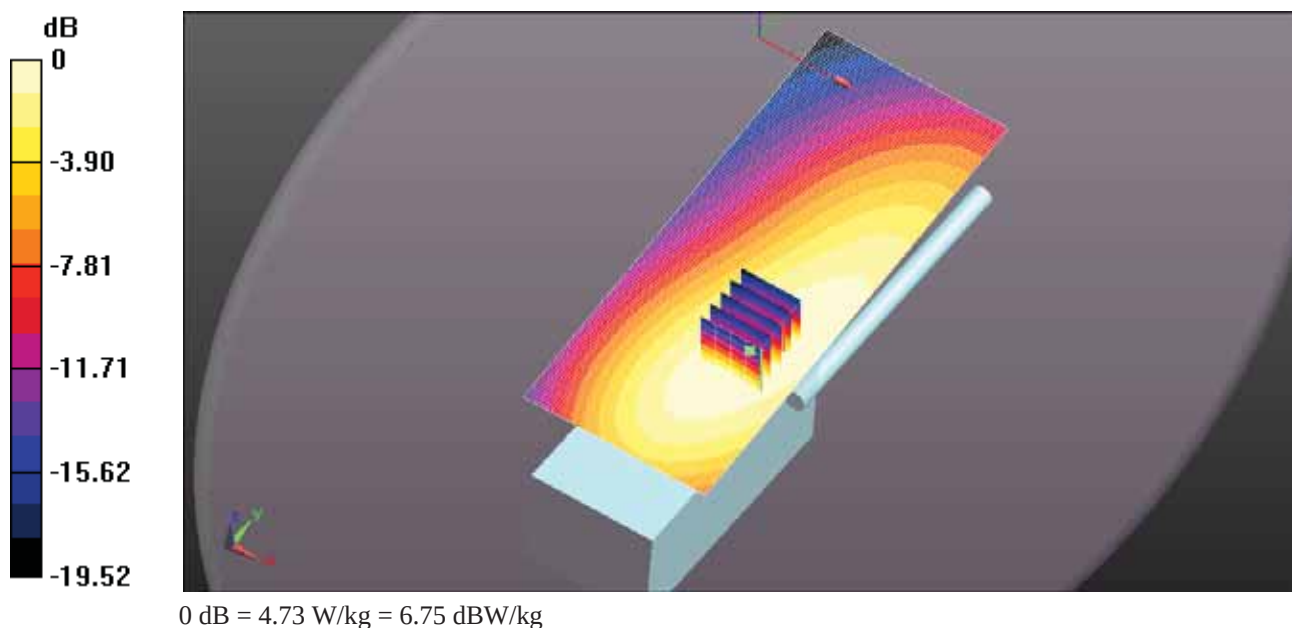
Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520$ MHz; $\sigma = 1.008$ S/m; $\epsilon_r = 53.006$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 4.73 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 7.213 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 3.76 W/kg; SAR(10 g) = 2.78 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.50 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

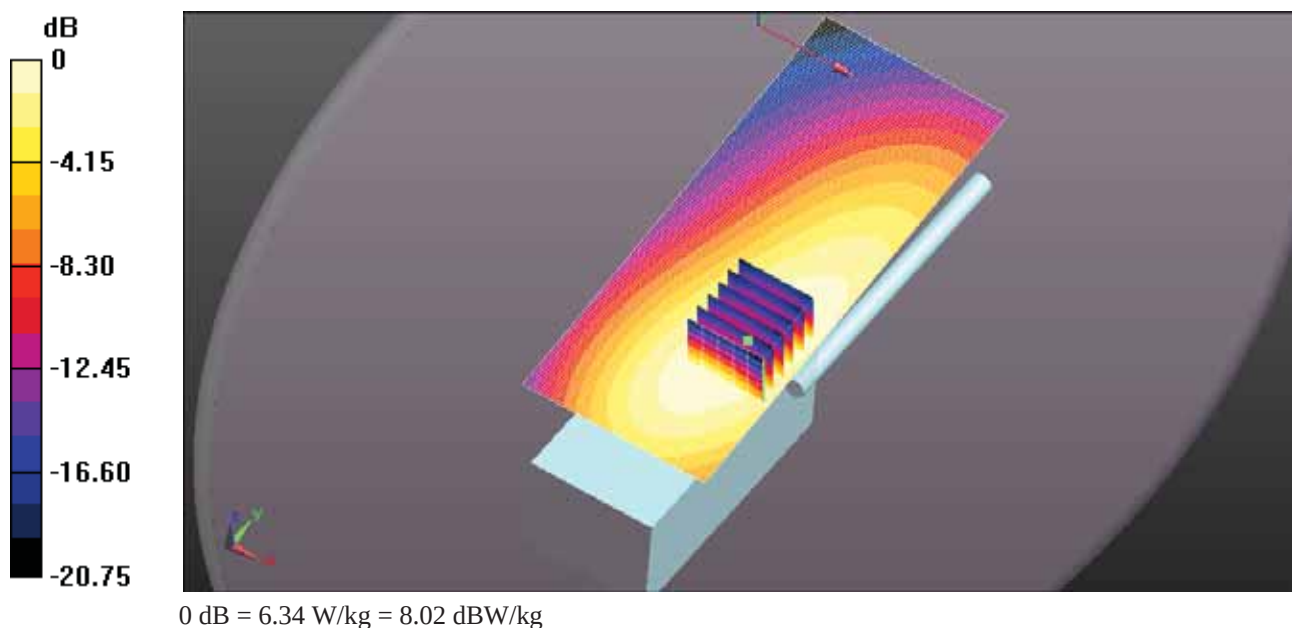
Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520$ MHz; $\sigma = 1.008$ S/m; $\epsilon_r = 53.006$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.34 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.308 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 7.18 W/kg
SAR(1 g) = 5.03 W/kg; SAR(10 g) = 3.72 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.04 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 500MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

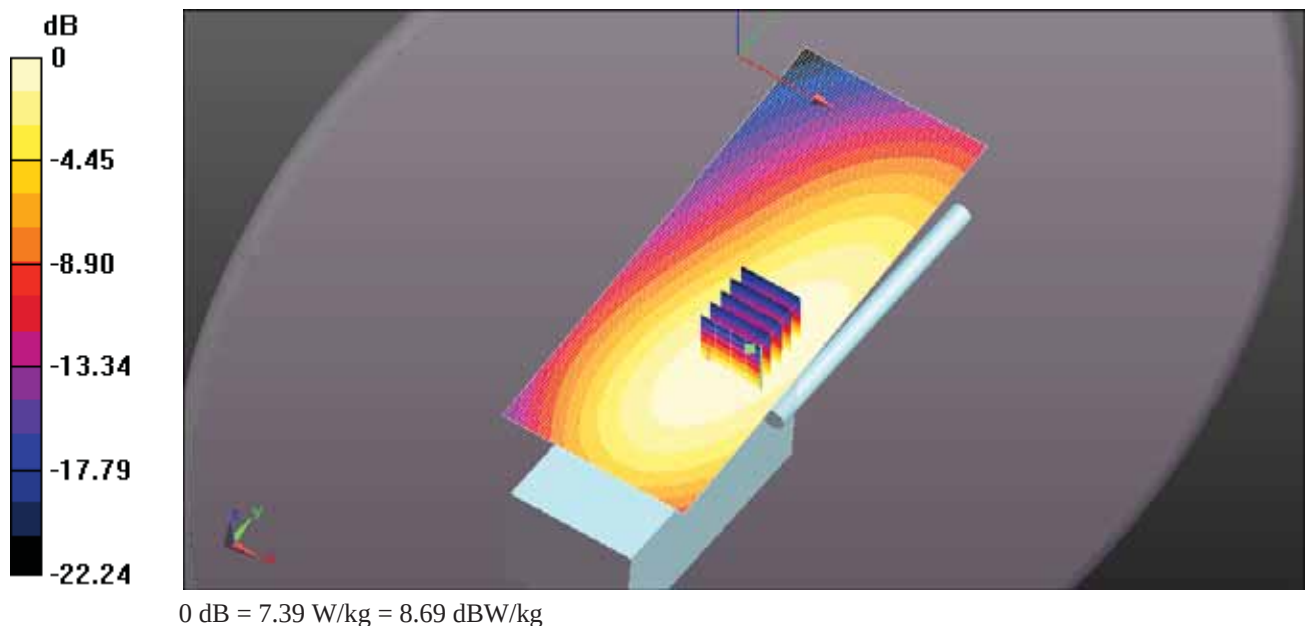
Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.977 \text{ S/m}$; $\epsilon_r = 54.816$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.39 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 6.716 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 8.42 W/kg
SAR(1 g) = 6.12 W/kg; SAR(10 g) = 4.51 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.11 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

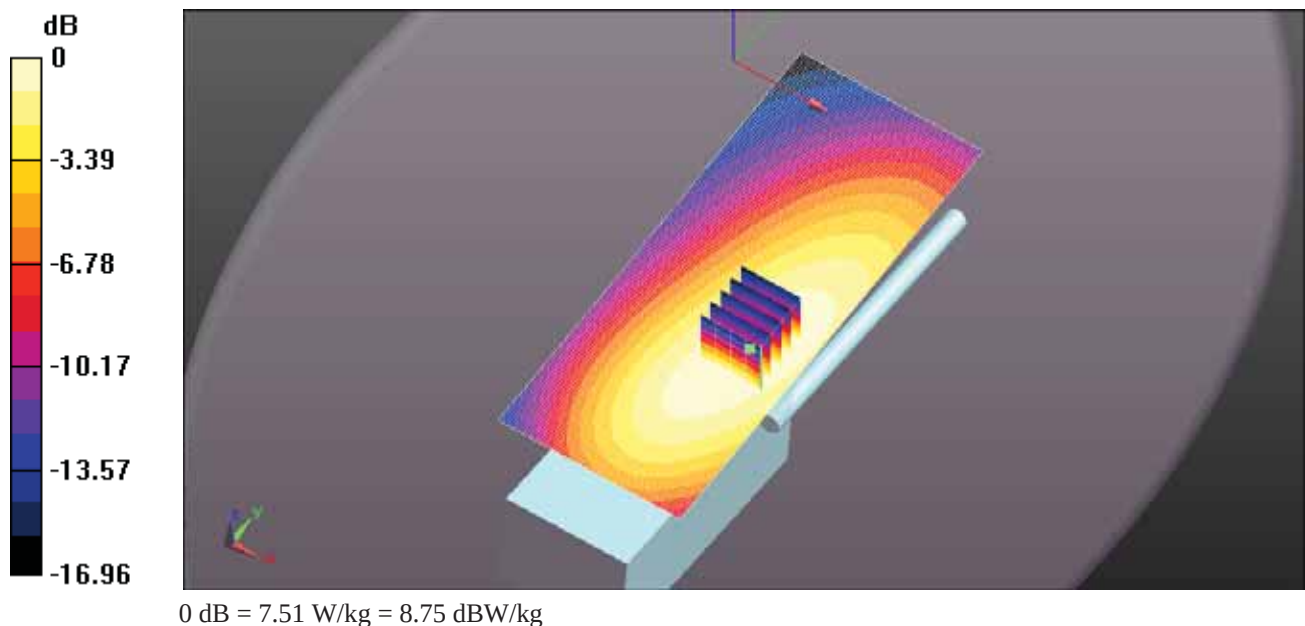
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.51 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 12.73 V/m ; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 8.55 W/kg
SAR(1 g) = 6.43 W/kg ; SAR(10 g) = 4.71 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.17 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 460MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

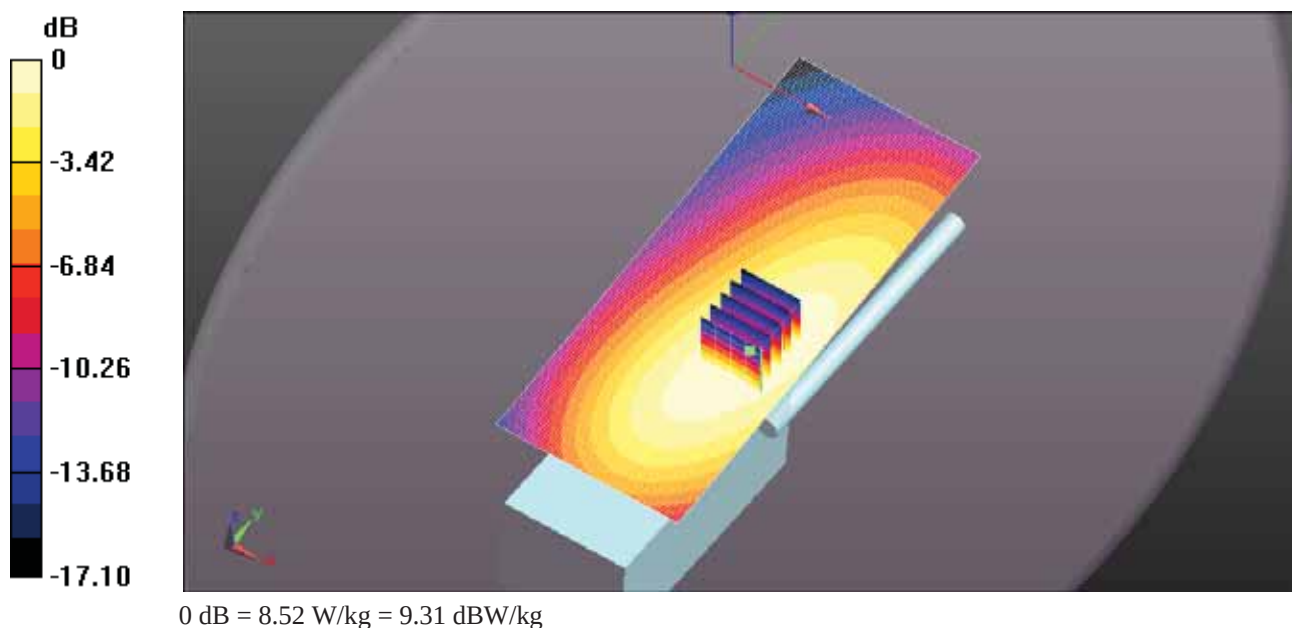
Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.581$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 8.52 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 13.43 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 9.87 W/kg
SAR(1 g) = 7.56 W/kg; SAR(10 g) = 5.55 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.30 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 136mm 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

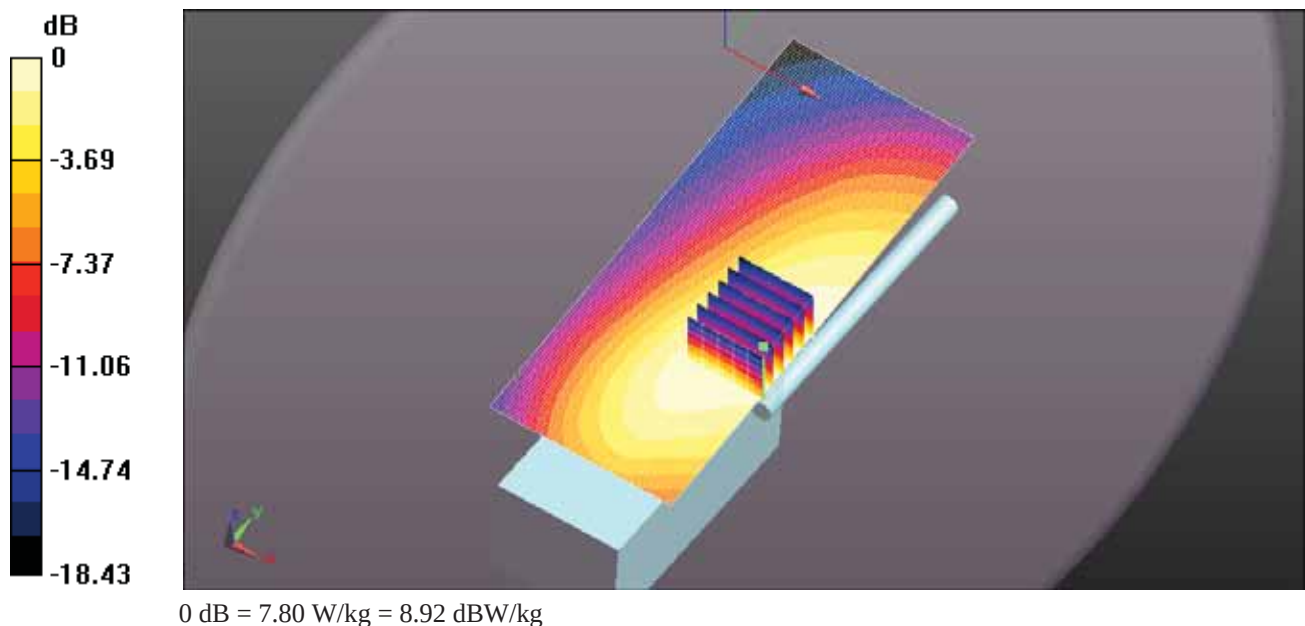
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.007$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 7.80 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 11.00 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 8.87 W/kg
SAR(1 g) = 6.74 W/kg; SAR(10 g) = 4.94 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.40 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

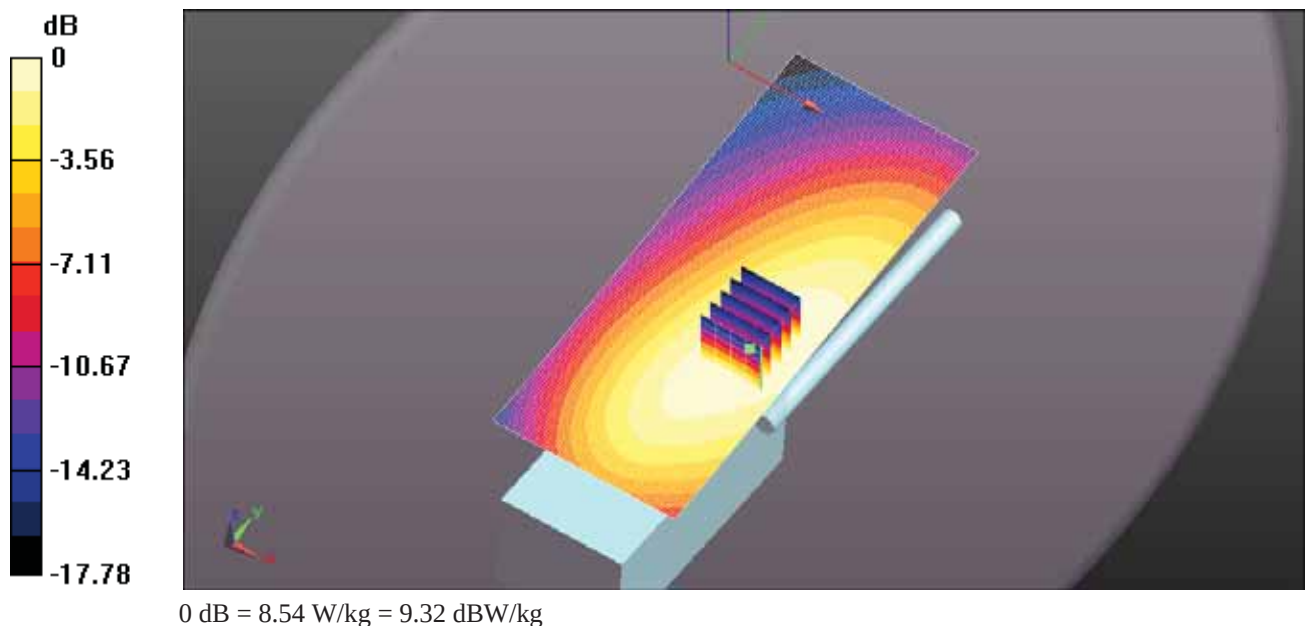
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.926 \text{ S/m}$; $\epsilon_r = 56.007$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.54 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 12.46 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 9.63 W/kg
SAR(1 g) = 7.37 W/kg; SAR(10 g) = 5.44 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.09 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 460MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

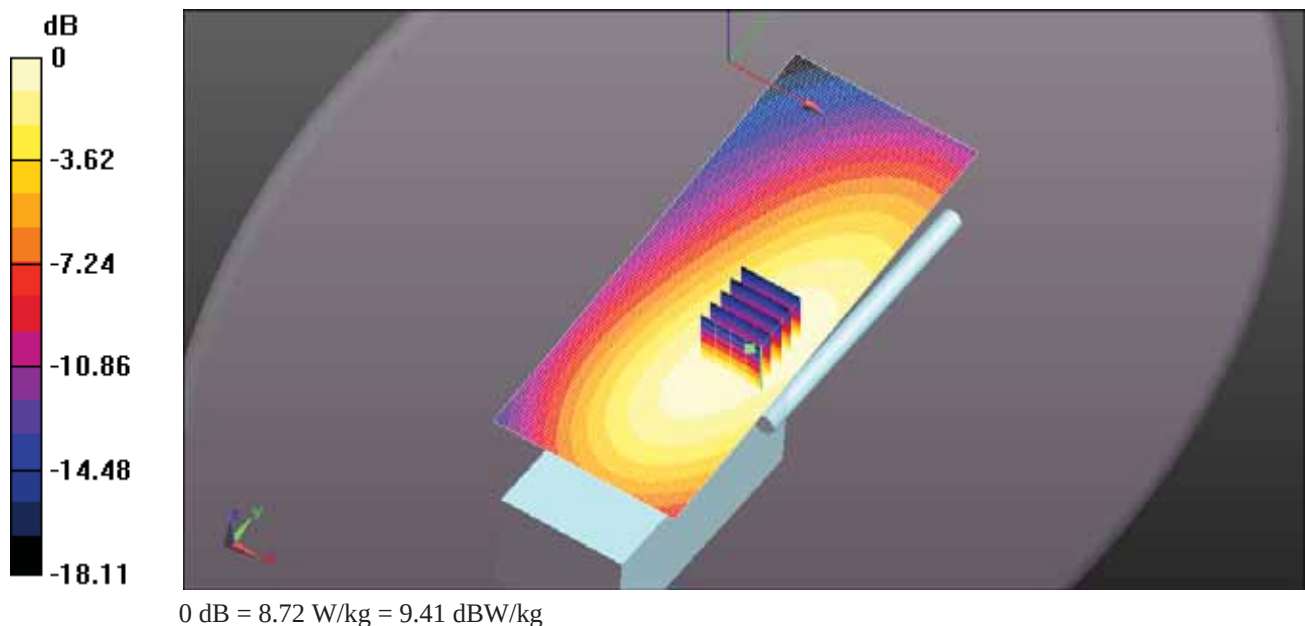
Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.581$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 8.72 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 12.08 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 9.96 W/kg
SAR(1 g) = 7.63 W/kg; SAR(10 g) = 5.6 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.38 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

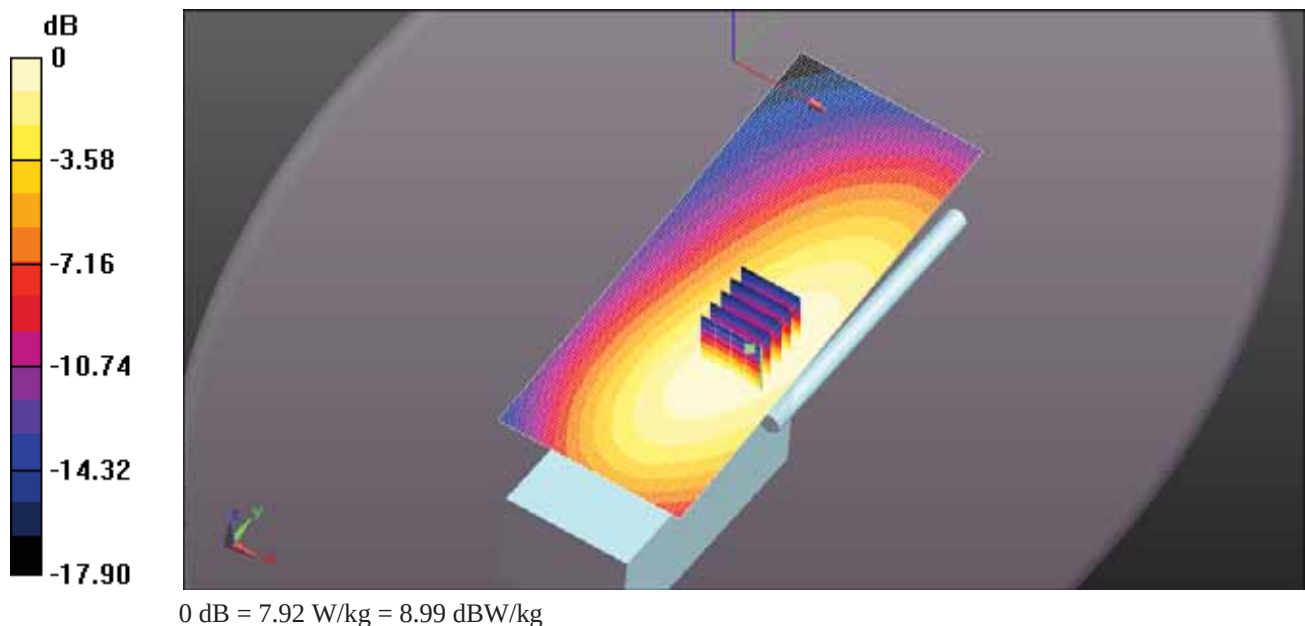
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.92 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.72 V/m ; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 9.05 W/kg
SAR(1 g) = 6.81 W/kg ; SAR(10 g) = 4.98 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.58 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 500MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

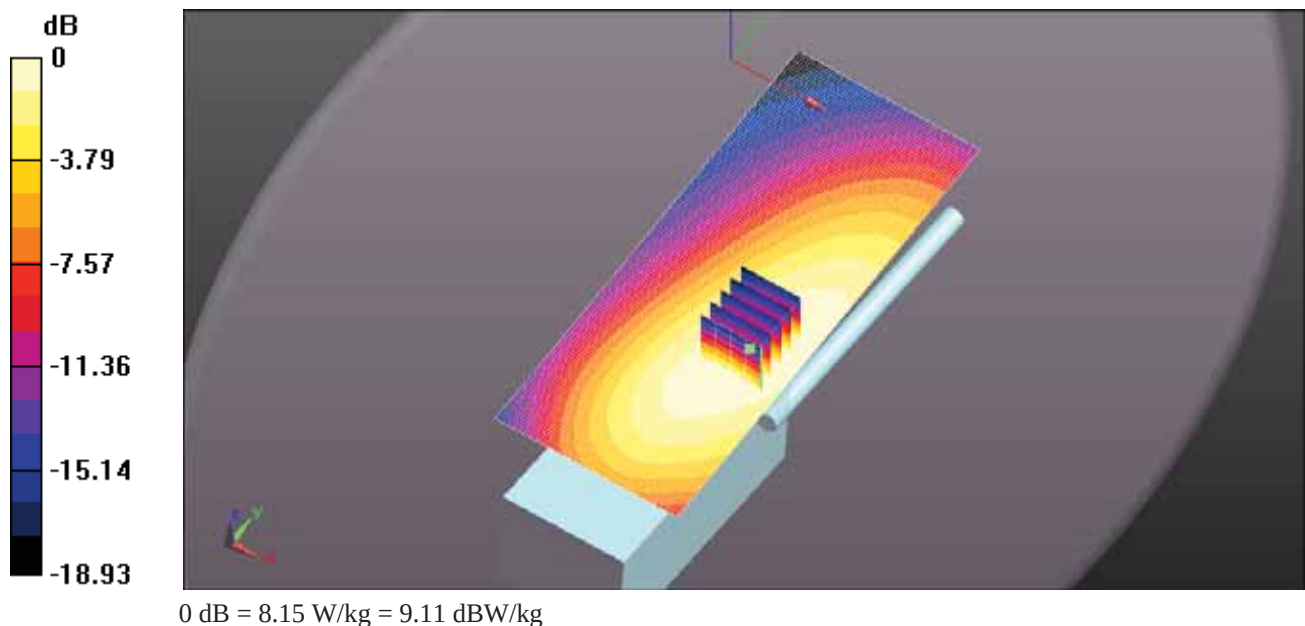
Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500 \text{ MHz}$; $\sigma = 0.977 \text{ S/m}$; $\epsilon_r = 54.816$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.15 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.36 V/m ; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 9.38 W/kg
SAR(1 g) = 6.8 W/kg ; SAR(10 g) = 5 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.88 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 129mm 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

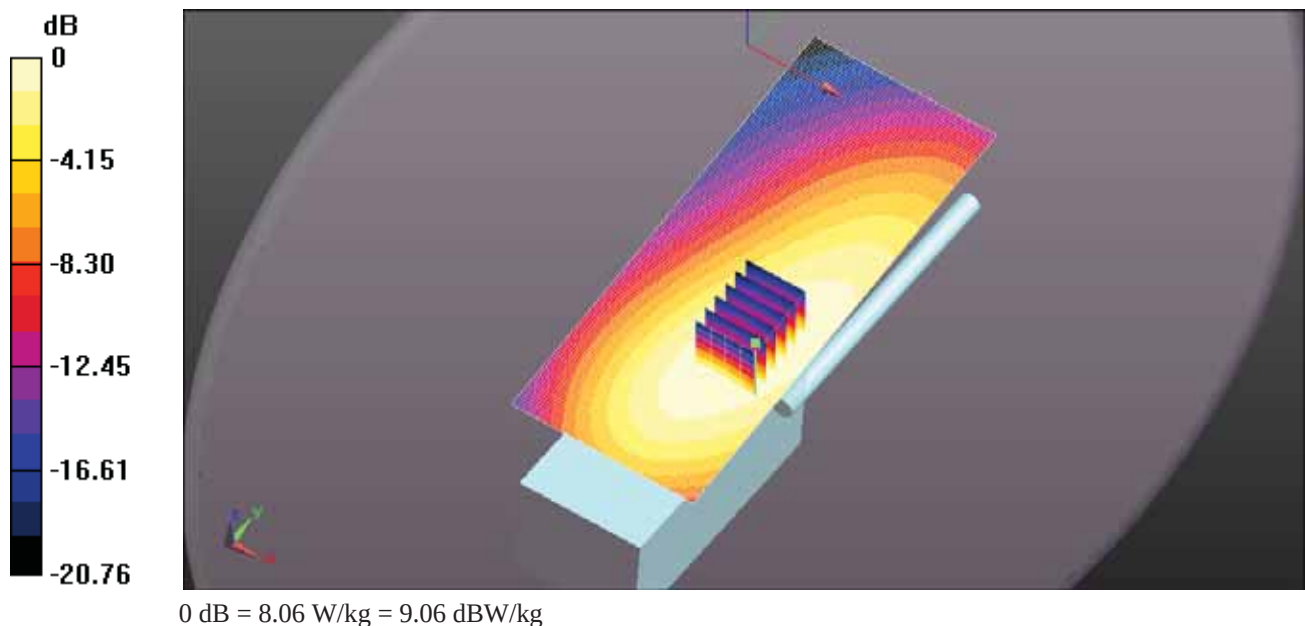
Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520$ MHz; $\sigma = 1.008$ S/m; $\epsilon_r = 53.006$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.06 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.201 V/m; Power Drift = -0.23 dB
Peak SAR (extrapolated) = 9.13 W/kg
SAR(1 g) = 6.43 W/kg; SAR(10 g) = 4.78 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.72 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 450MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

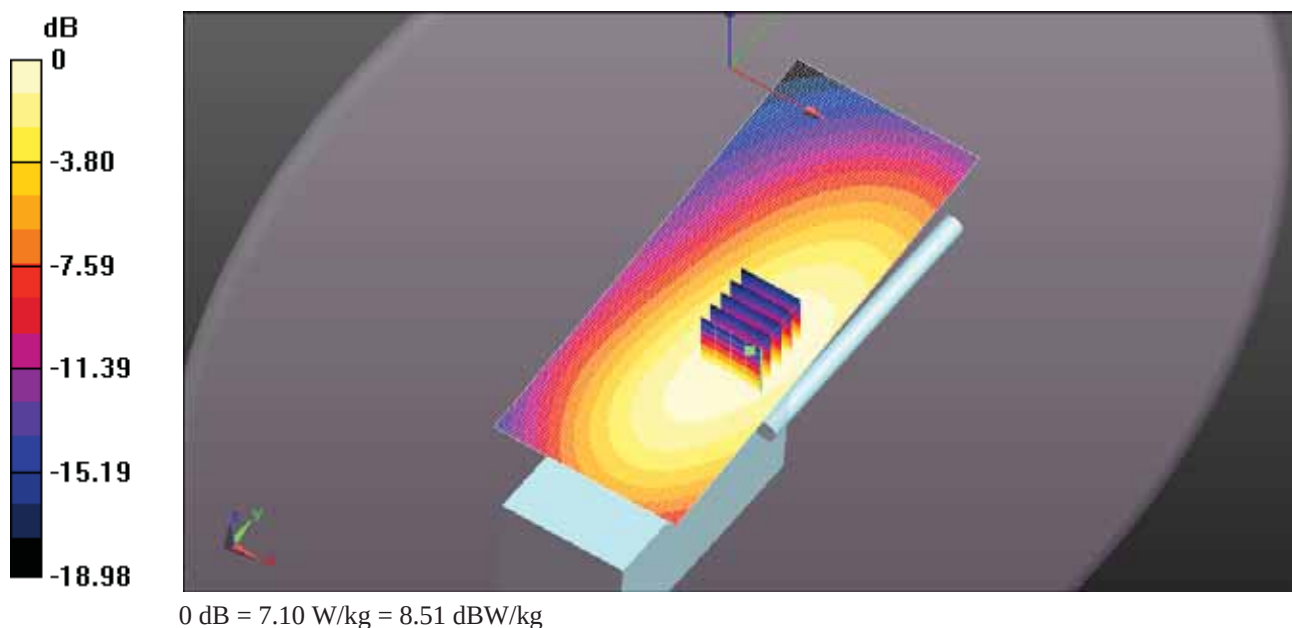
Communication System: UID 0, CW (0); Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.007$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 7.10 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 9.876 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 8.10 W/kg
SAR(1 g) = 6.14 W/kg; SAR(10 g) = 4.5 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.80 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 460MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

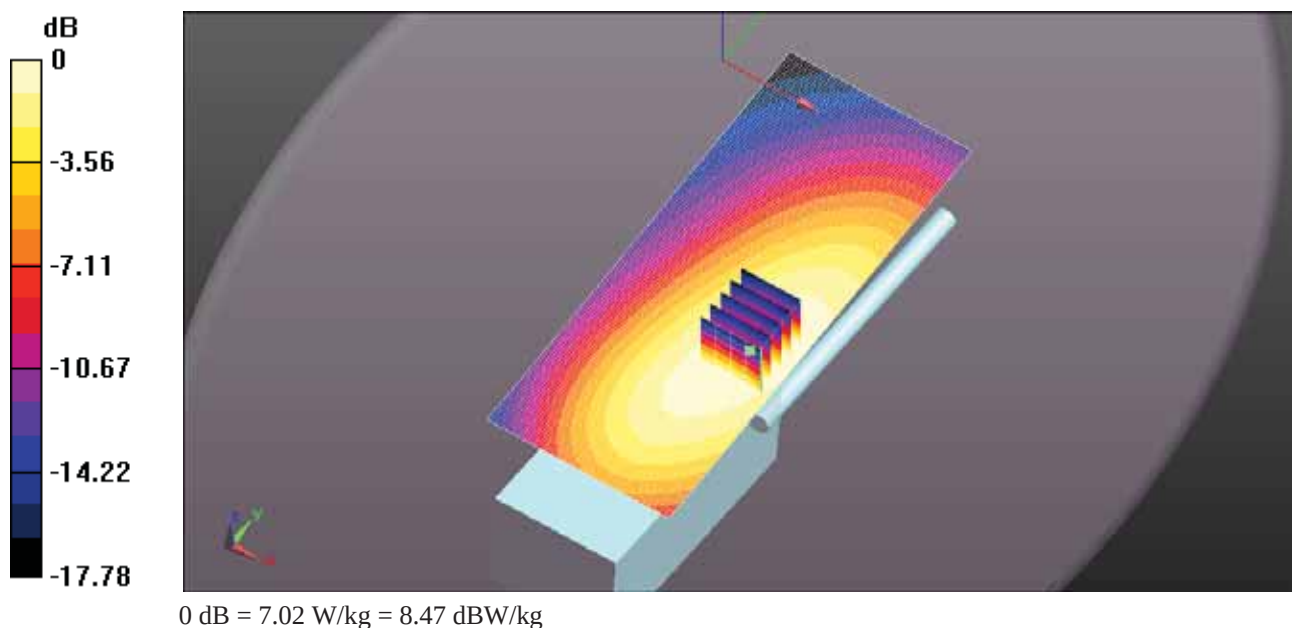
Communication System: UID 0, CW (0); Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 56.581$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.02 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.30 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 7.83 W/kg
SAR(1 g) = 5.98 W/kg; SAR(10 g) = 4.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.57 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 480MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

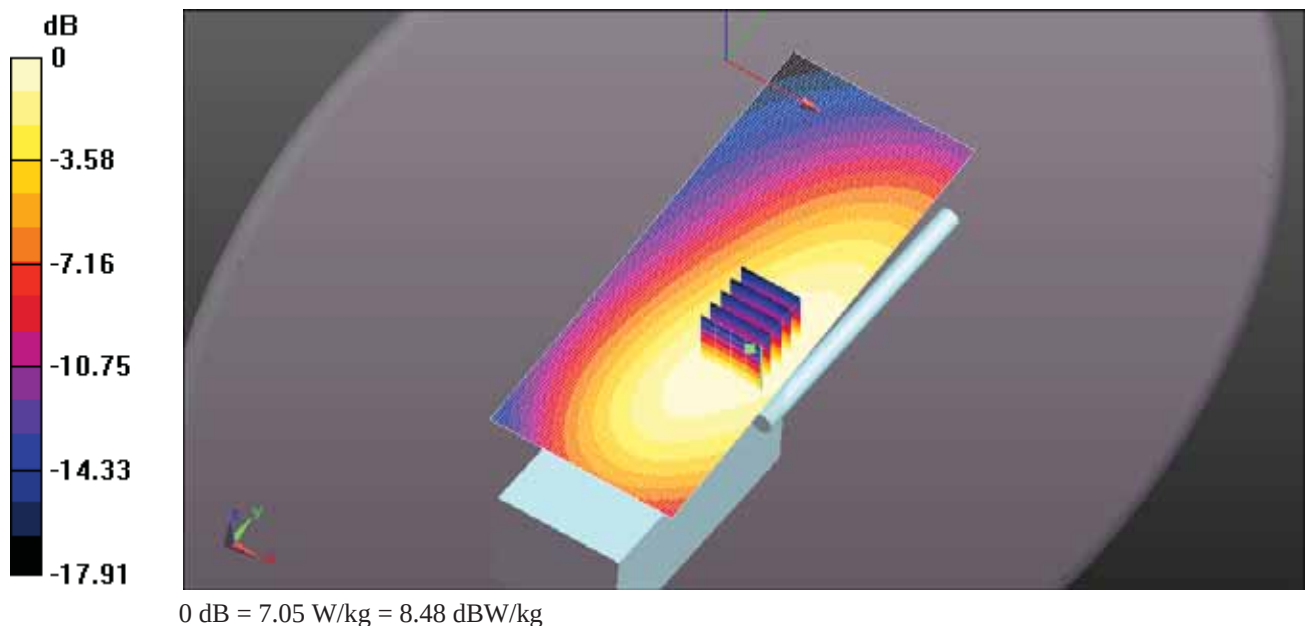
Communication System: UID 0, CW (0); Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.05 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.06 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 8.14 W/kg
SAR(1 g) = 6.11 W/kg; SAR(10 g) = 4.47 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.83 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 500MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transceiver ; Serial: 00000203

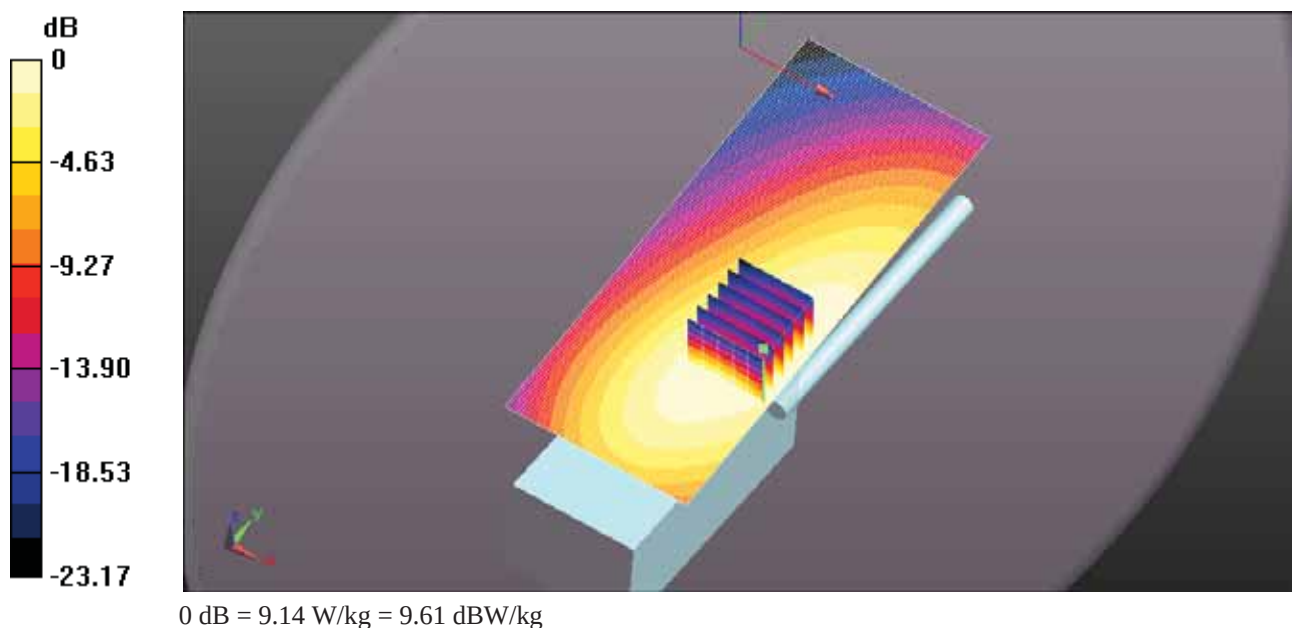
Communication System: UID 0, CW (0); Frequency: 500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 500$ MHz; $\sigma = 0.977$ S/m; $\epsilon_r = 54.816$; $\rho = 1000$ kg/m³ ; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.14 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.693 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 10.4 W/kg
SAR(1 g) = 7.51 W/kg; SAR(10 g) = 5.53 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.72 W/kg



Test Laboratory: Ultratech Group of Labs

File Name: [ICOM-468Q FA-S76UC 125mm 520MHz.BP-283.MB-133 HS-94.da52:0](#)

DUT: IC-F7020T; Type: UHF Transciever ; Serial: 00000203

Communication System: UID 0, CW (0); Frequency: 520 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 1.008 \text{ S/m}$; $\epsilon_r = 53.006$; $\rho = 1000 \text{ kg/m}^3$; Phantom section:
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.51, 10.51, 10.51); Calibrated: 3/20/2017;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/21/2017
- 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-F7020T/Body Mount, 5W/Area Scan (61x151x1): Interpolated grid:
 $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 15.4 W/kg

Configuration_Body_IC-F7020T/Body Mount, 5W/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

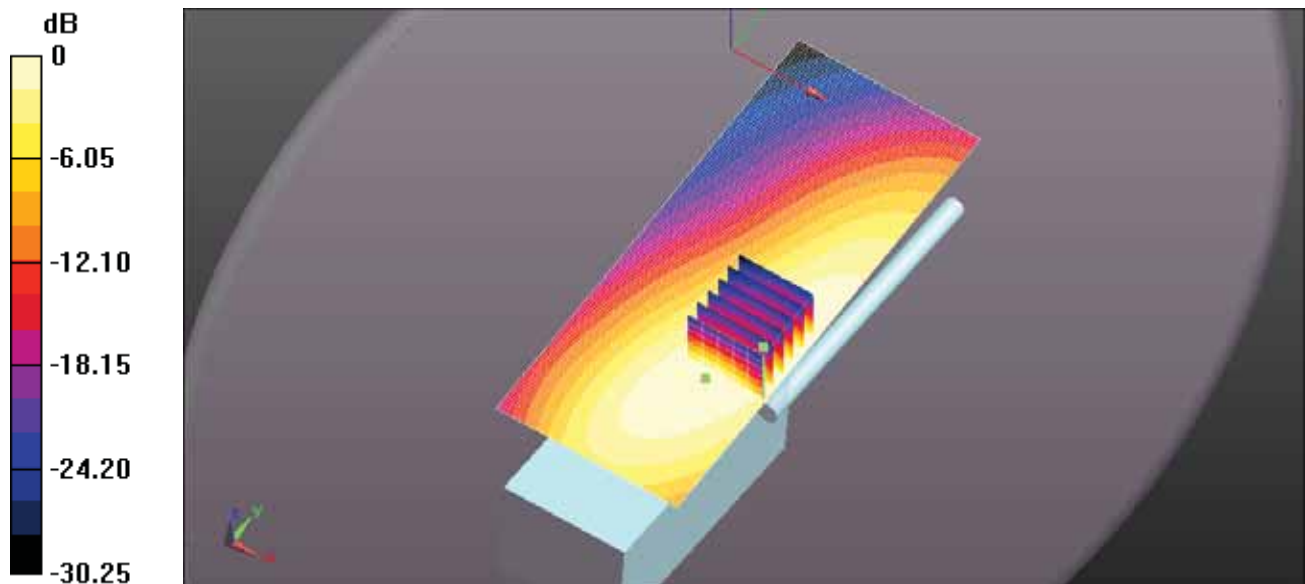
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.860 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 11.7 W/kg; SAR(10 g) = 8.39 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 15.4 W/kg = 11.88 dBW/kg