6.4.4. Body Configuration Result of Part 1: FA-SC25U, FA-SC57U and FA-SC73US Antennas*

#	Configuration	Antenna Position	Frequency [MHz]	Channel	MAX SAR_{1g} [W/Kg]
*	**Occupational/Controlled Exposure Category Limit**				**8.0**
30	¼ helical whip antenna (M/N: FA-SC25U, 400~430 MHz, green ring)	FIX	400	Low	2.35
31	50% duty cycle for PTT	FIX	415	Middle	3.85
32	MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	430	High	3.67
33	¼ helical whip antenna (M/N: FA-SC57U, 430~470 MHz, red ring)	FIX	430	Low	2.30
34	50% duty cycle for PTT	FIX	450	Middle	3.02
35	MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	470	High	3.27
36	¼ helical whip antenna (M/N: FA-SC73US, 450~490 MHz, red ring)	FIX	450	Low	2.39
37	50% duty cycle for PTT	FIX	460	Middle	2.43
38	MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	470	High	1.96

*

6.4.4.1. ¼ helical whip antenna (M/N: FA-SC25U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 400 MHz; #30

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC25U_Body_400MHz(Lf).da52

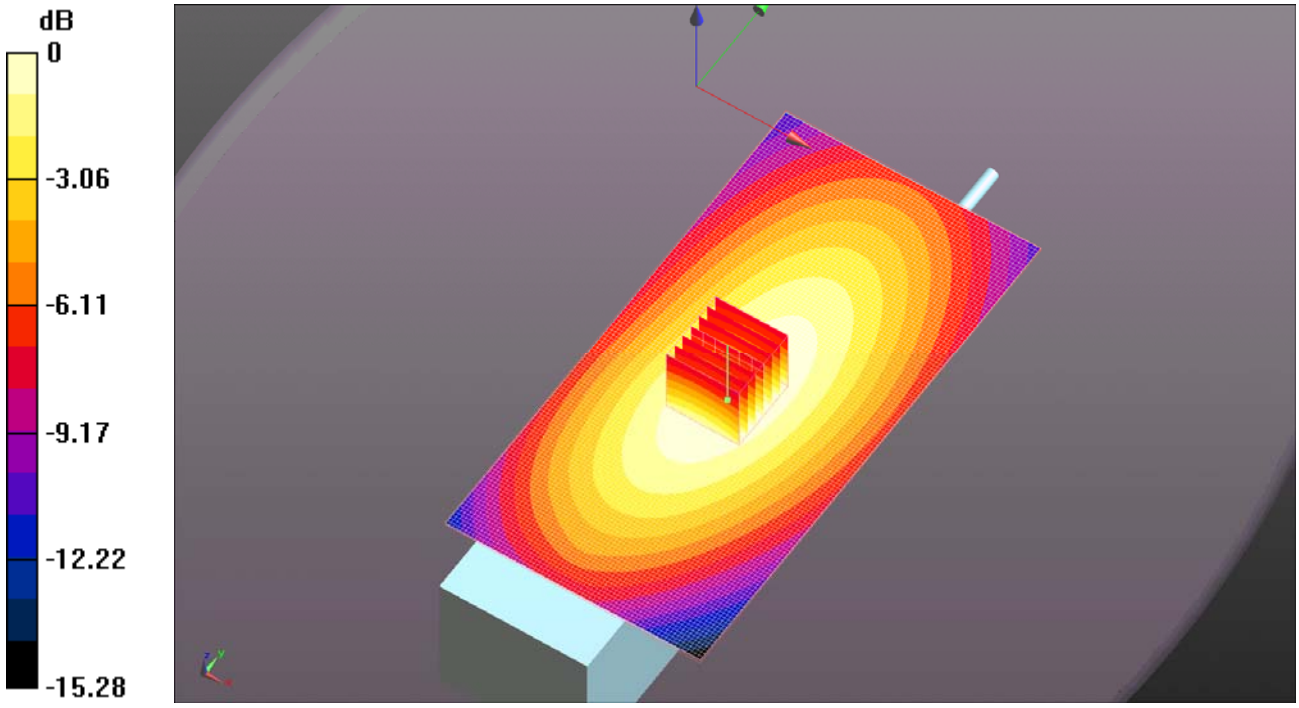
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: f = 400 MHz; σ = 0.902 mho/m; ε_r = 57.686; ρ = 1000 kg/m^3
Phantom section: Flat Section

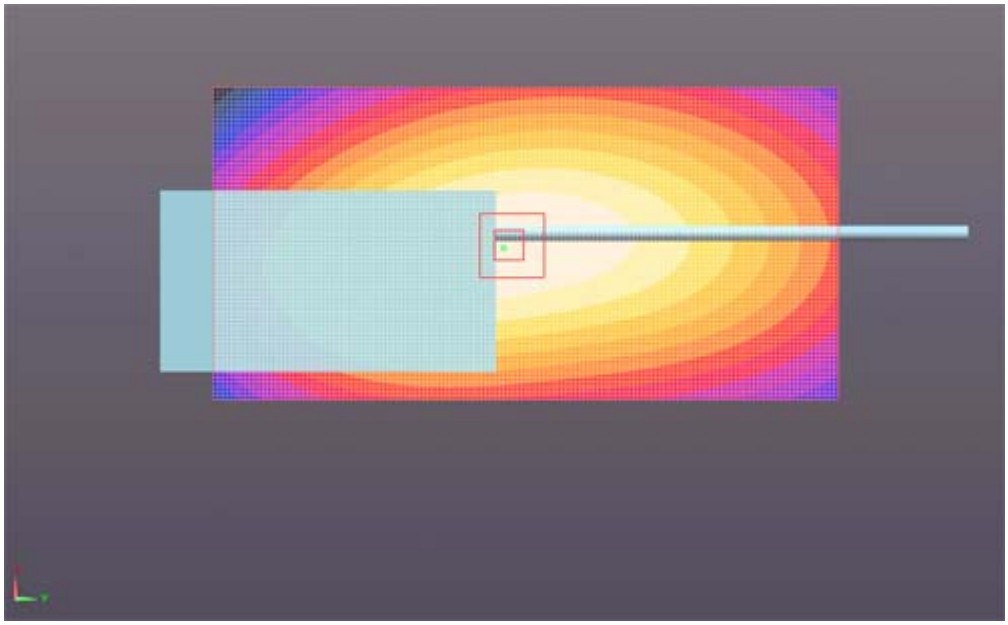
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

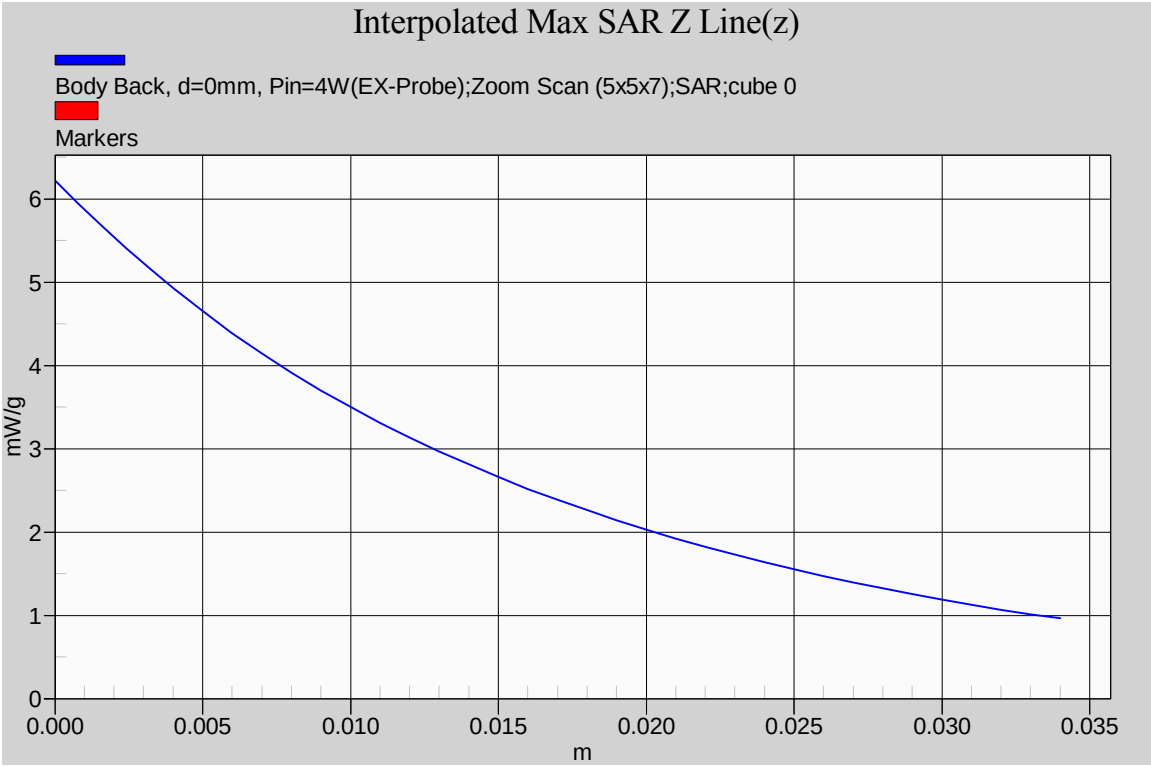
Configuration_Body_FA-SC25U_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 77.861 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.220 W/kg
SAR(1 g) = 4.69 mW/g; SAR(10 g) = 3.47 mW/g
Maximum value of SAR (measured) = 4.931 mW/g

Configuration_Body_FA-SC25U_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.733 mW/g



0 dB = 5.730mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.4.2. ¼ helical whip antenna (M/N: FA-SC25U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 415 MHz; #31

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC25U_Body_415MHz(Mf).da52

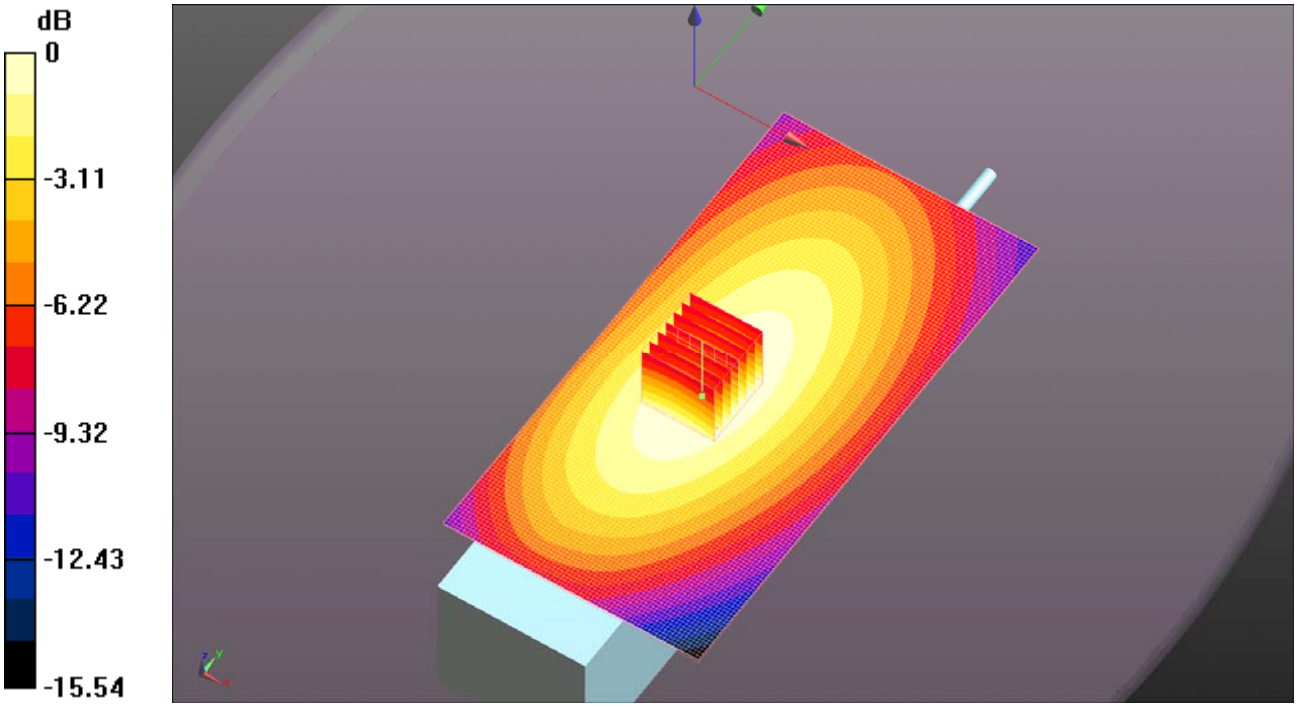
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 415 MHz; Duty Cycle: 1:1
Medium parameters used: f = 415 MHz; σ = 0.912 mho/m; ε_r = 57.356; ρ = 1000 kg/m^3
Phantom section: Flat Section

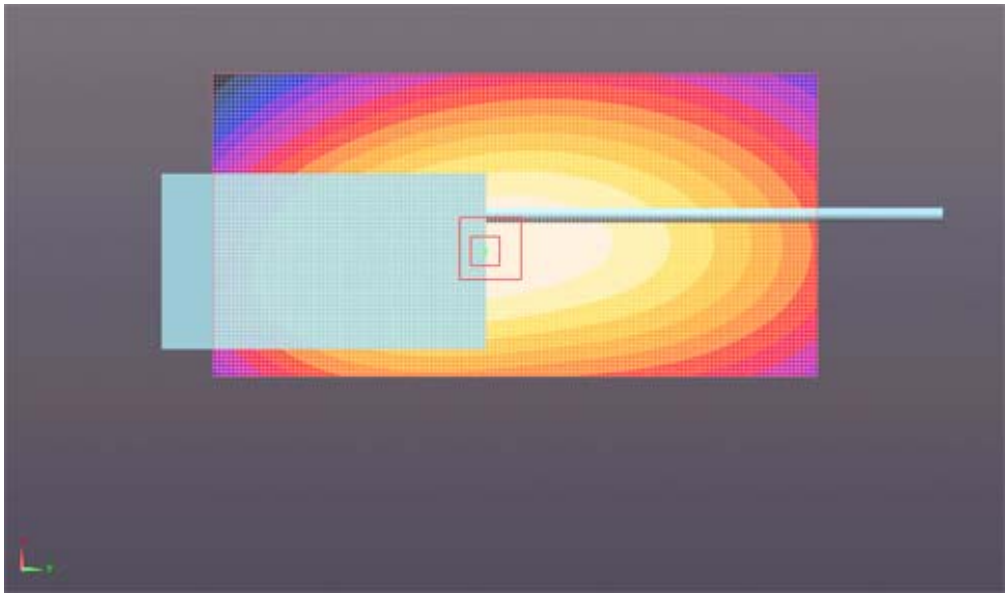
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

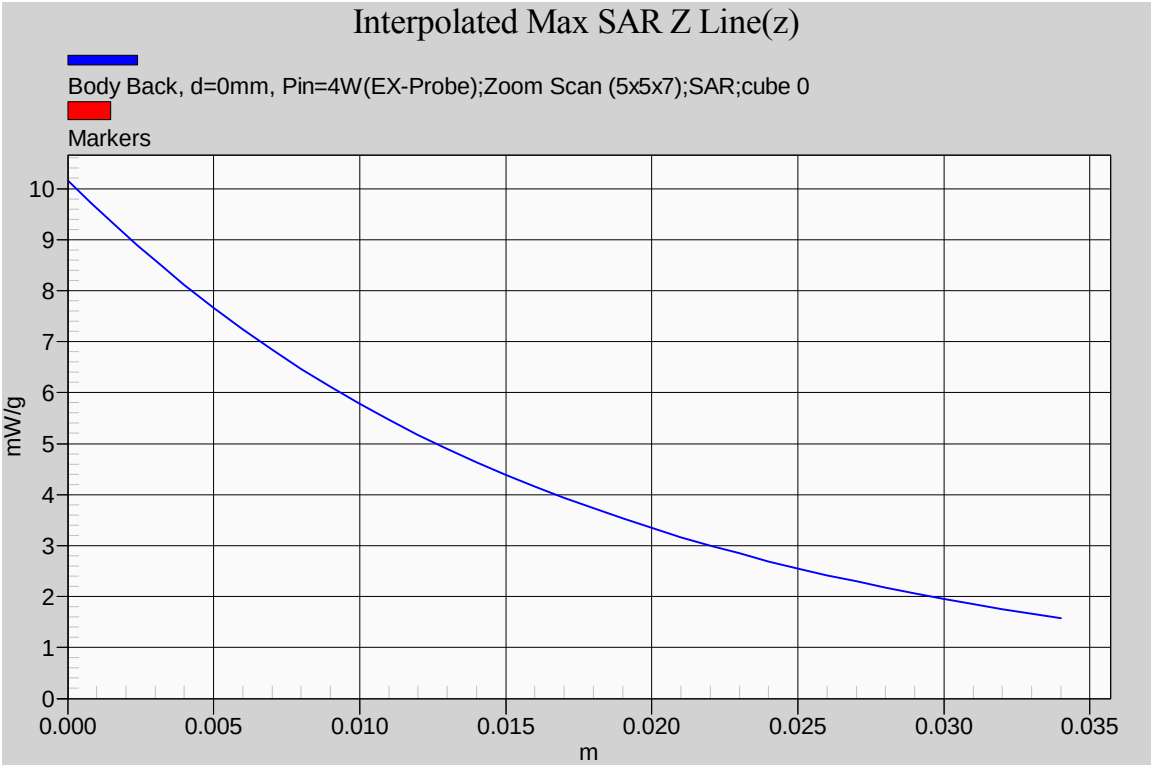
Configuration_Body_FA-SC25U_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 101.2 V/m; Power Drift = 0.0032 dB
Peak SAR (extrapolated) = 10.153 W/kg
SAR(1 g) = 7.7 mW/g; SAR(10 g) = 5.71 mW/g
Maximum value of SAR (measured) = 8.116 mW/g

Configuration_Body_FA-SC25U_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.361 mW/g



0 dB = 9.360mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
m
0
1
2
3
4
5
6
7
8
9
10
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035

6.4.4.3. ¼ helical whip antenna (M/N: FA-SC25U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 430 MHz; #32

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC25U_Body_430MHz(Hf).da52

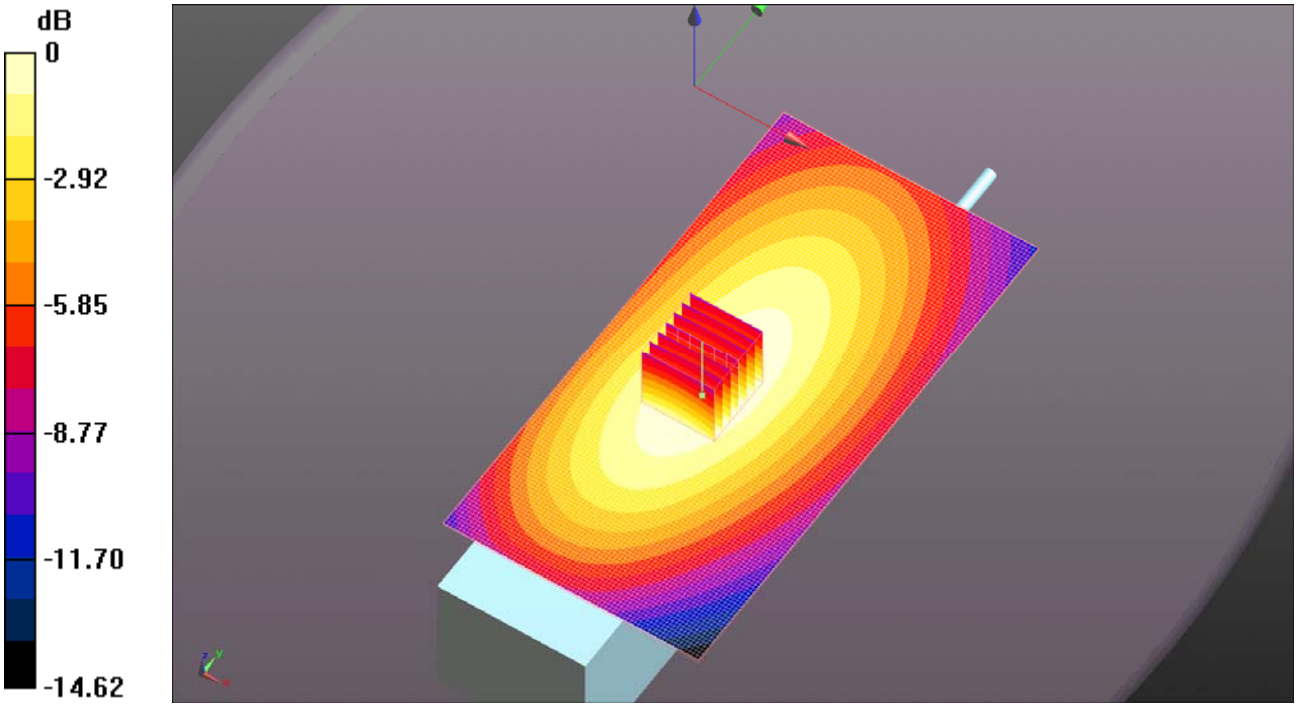
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 430 MHz; Duty Cycle: 1:1
Medium parameters used: f = 430 MHz; σ = 0.922 mho/m; ε_r = 57.153; ρ = 1000 kg/m^3
Phantom section: Flat Section

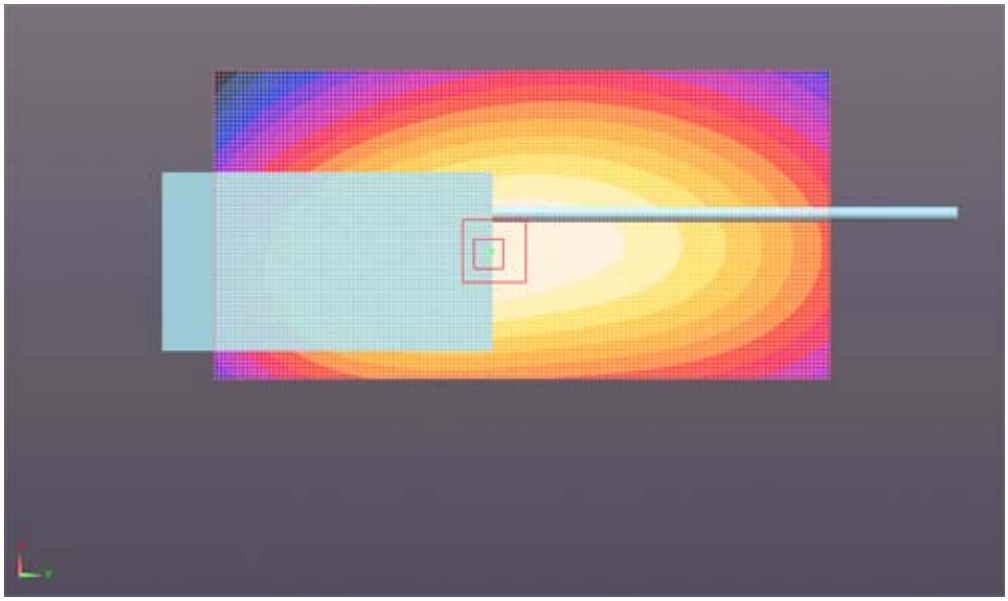
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

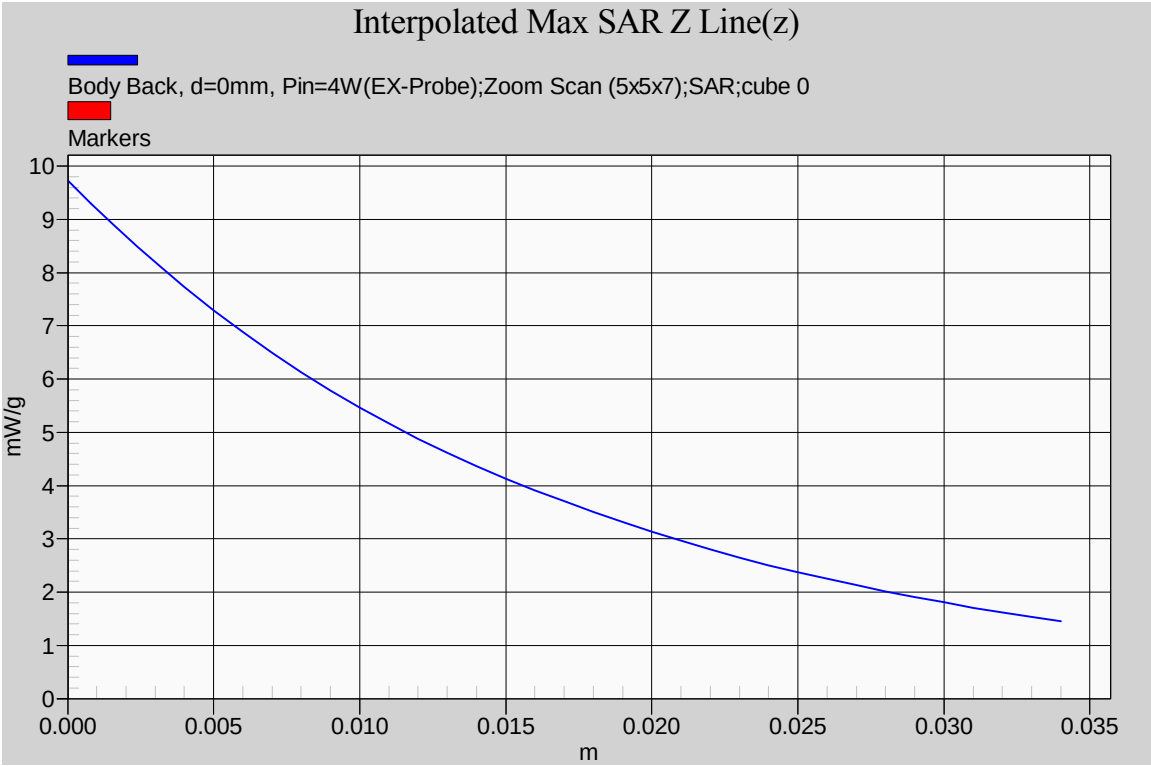
Configuration_Body_FA-SC25U_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 100.0 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 9.725 W/kg
SAR(1 g) = 7.34 mW/g; SAR(10 g) = 5.42 mW/g
Maximum value of SAR (measured) = 7.730 mW/g

Configuration_Body_FA-SC25U_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.025 mW/g



0 dB = 9.020mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
m
0
1
2
3
4
5
6
7
8
9
10
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035

6.4.4.4. ¼ helical whip antenna (M/N: FA-SC57U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 430 MHz; #33

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC57U_Body_430MHz(Lf).da52

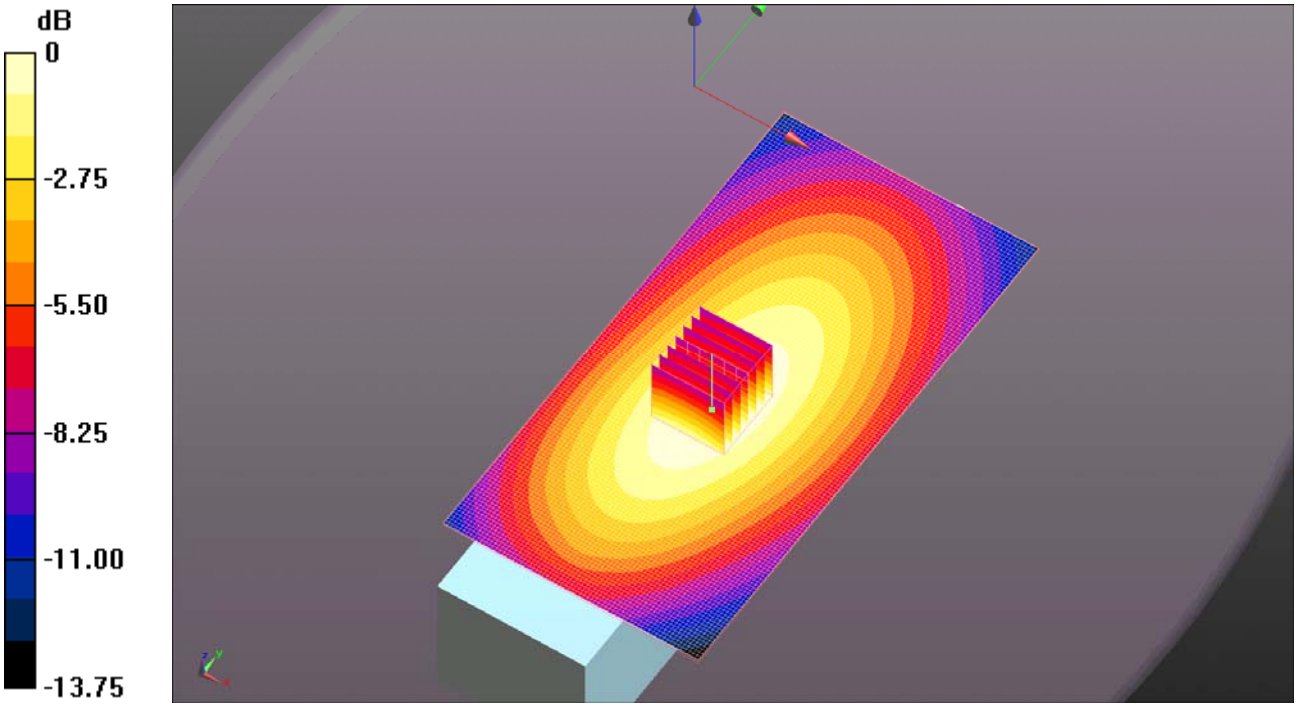
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 430 MHz; Duty Cycle: 1:1
Medium parameters used: f = 430 MHz; σ = 0.922 mho/m; ε_r = 57.153; ρ = 1000 kg/m^3
Phantom section: Flat Section

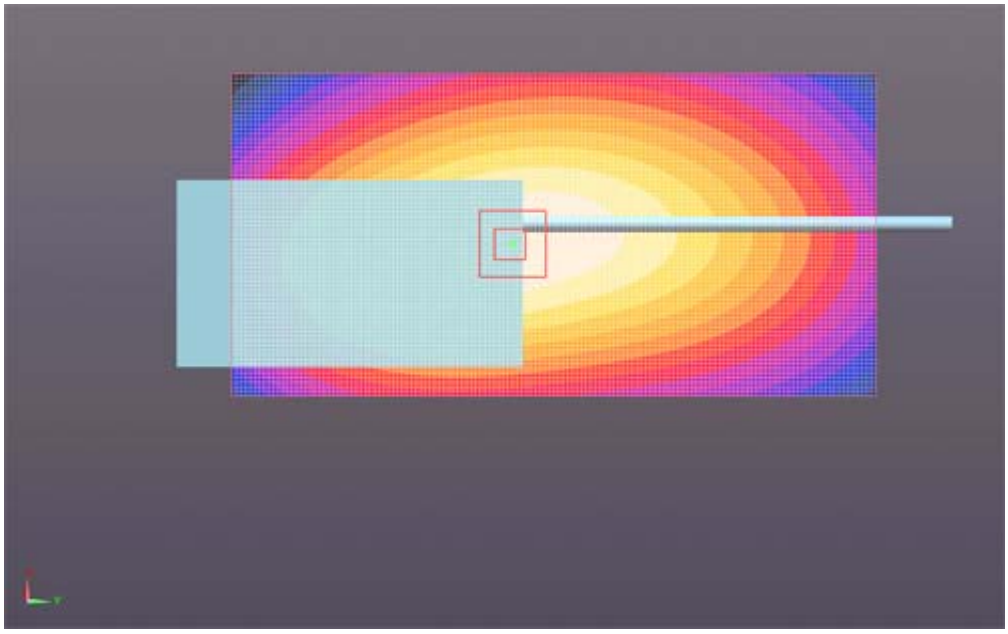
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

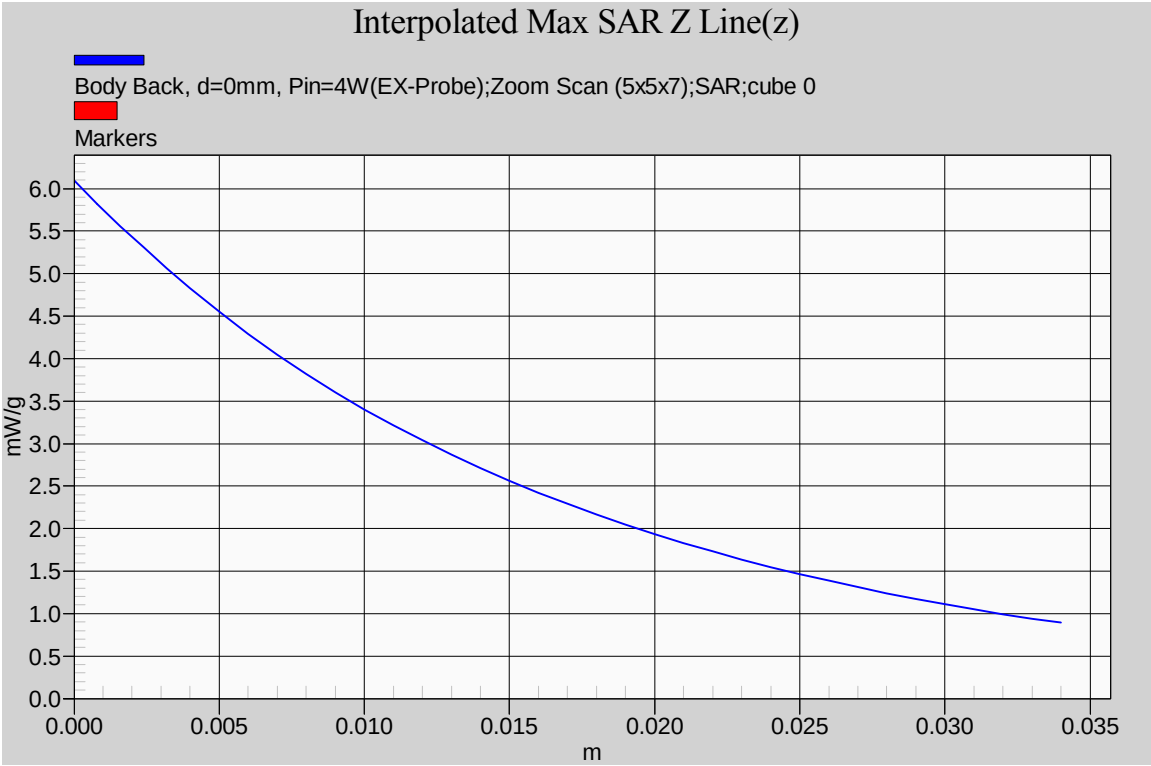
Configuration_Body_FA-SC57U_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 75.494 V/m; Power Drift = 0.0098 dB
Peak SAR (extrapolated) = 6.093 W/kg
SAR(1 g) = 4.59 mW/g; SAR(10 g) = 3.38 mW/g
Maximum value of SAR (measured) = 4.832 mW/g

Configuration_Body_FA-SC57U_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.613 mW/g



0 dB = 5.610mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.4.5. ¼ helical whip antenna (M/N: FA-SC57U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 450 MHz; #34

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC57U_Body_450MHz(Mf).da52

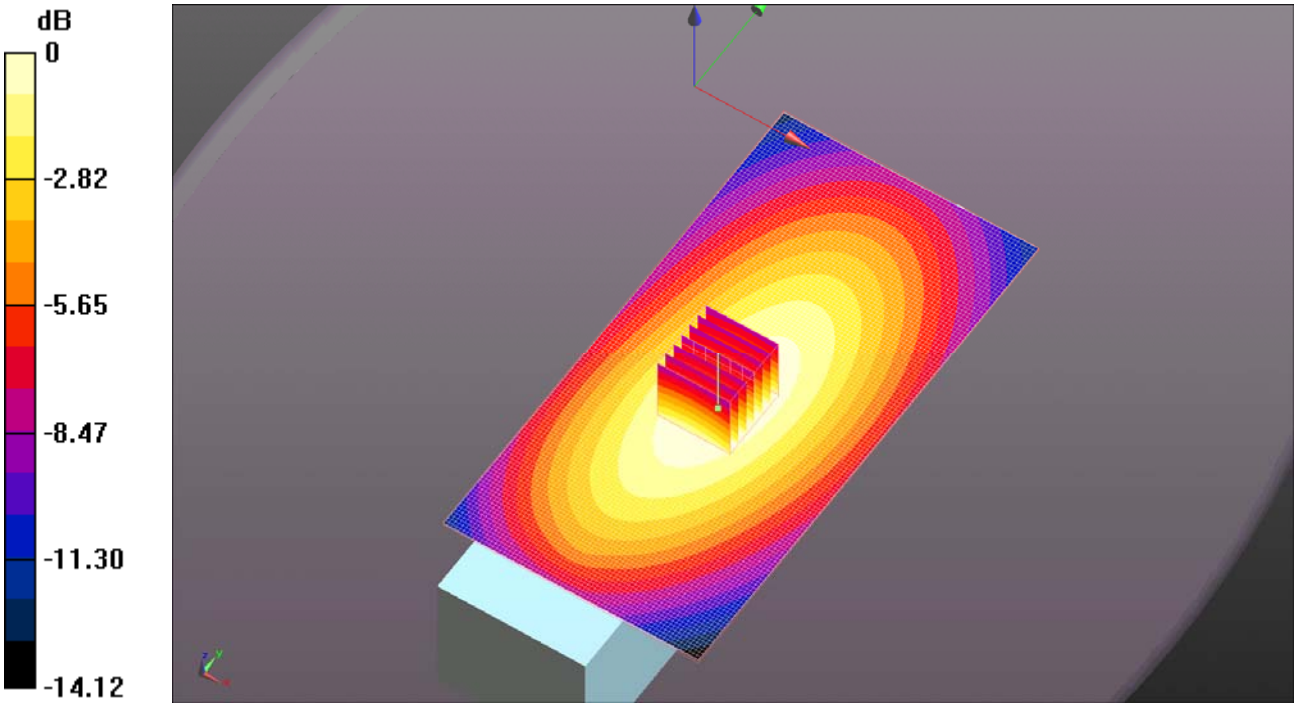
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: f = 450 MHz; σ = 0.941 mho/m; ε_r = 56.718; ρ = 1000 kg/m^3
Phantom section: Flat Section

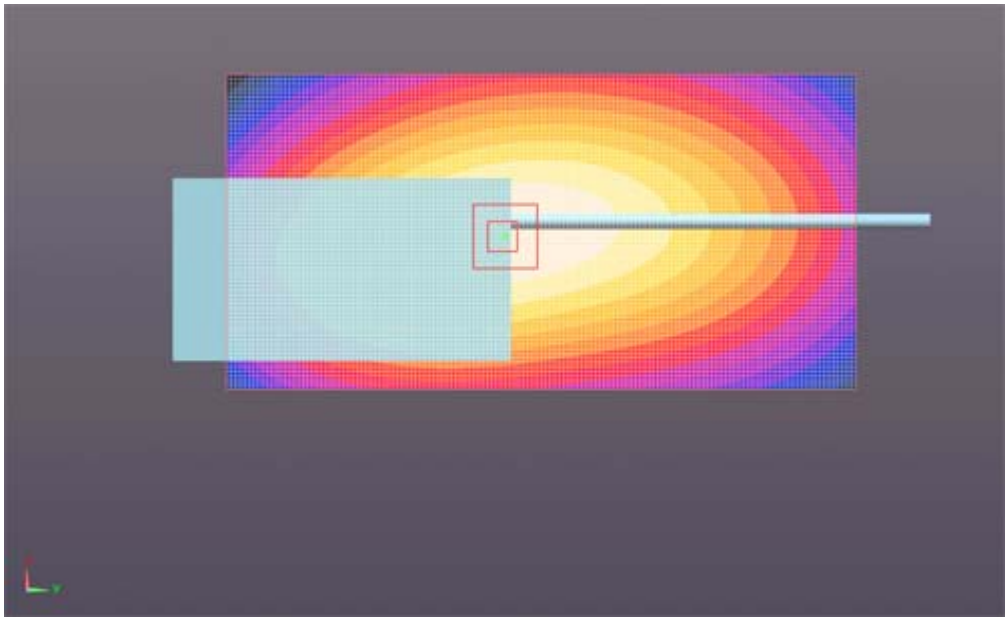
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

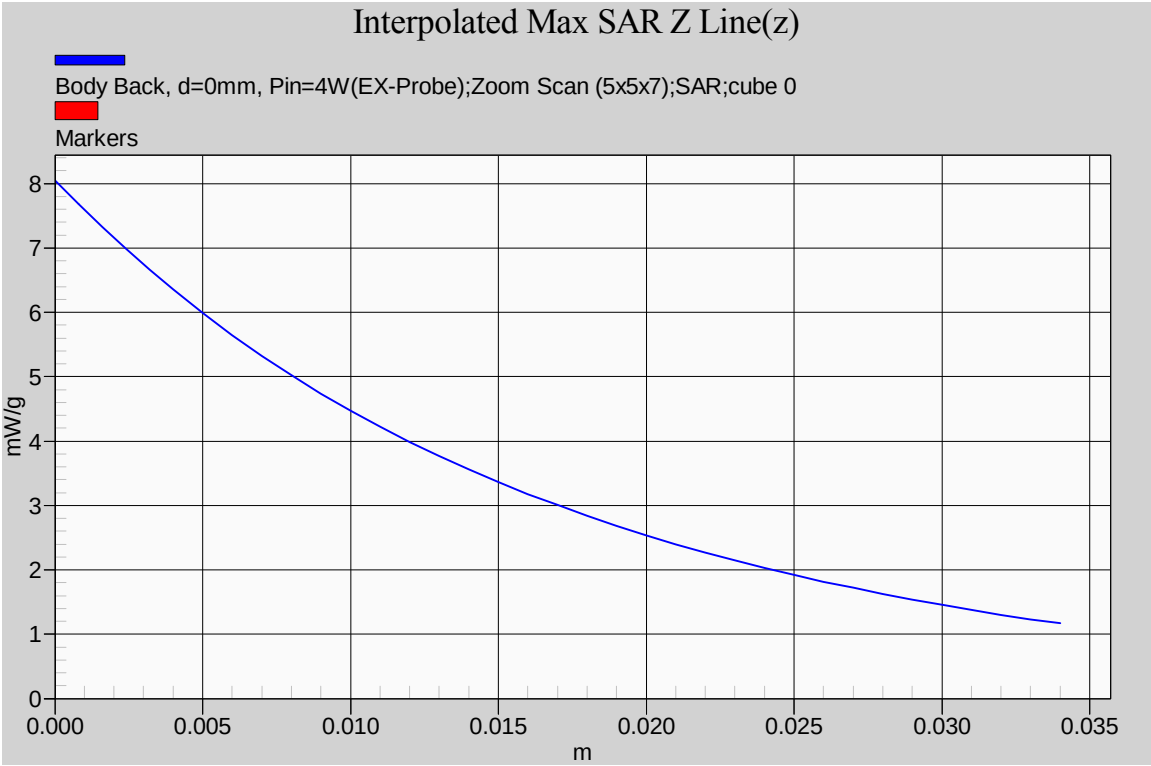
Configuration_Body_FA-SC57U_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.264 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 8.044 W/kg
SAR(1 g) = 6.03 mW/g; SAR(10 g) = 4.43 mW/g
Maximum value of SAR (measured) = 6.358 mW/g

Configuration_Body_FA-SC57U_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.386 mW/g



0 dB = 7.390mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.4.6. ¼ helical whip antenna (M/N: FA-SC57U); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 470 MHz; #35

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC57U_Body_470MHz(Hf).da52

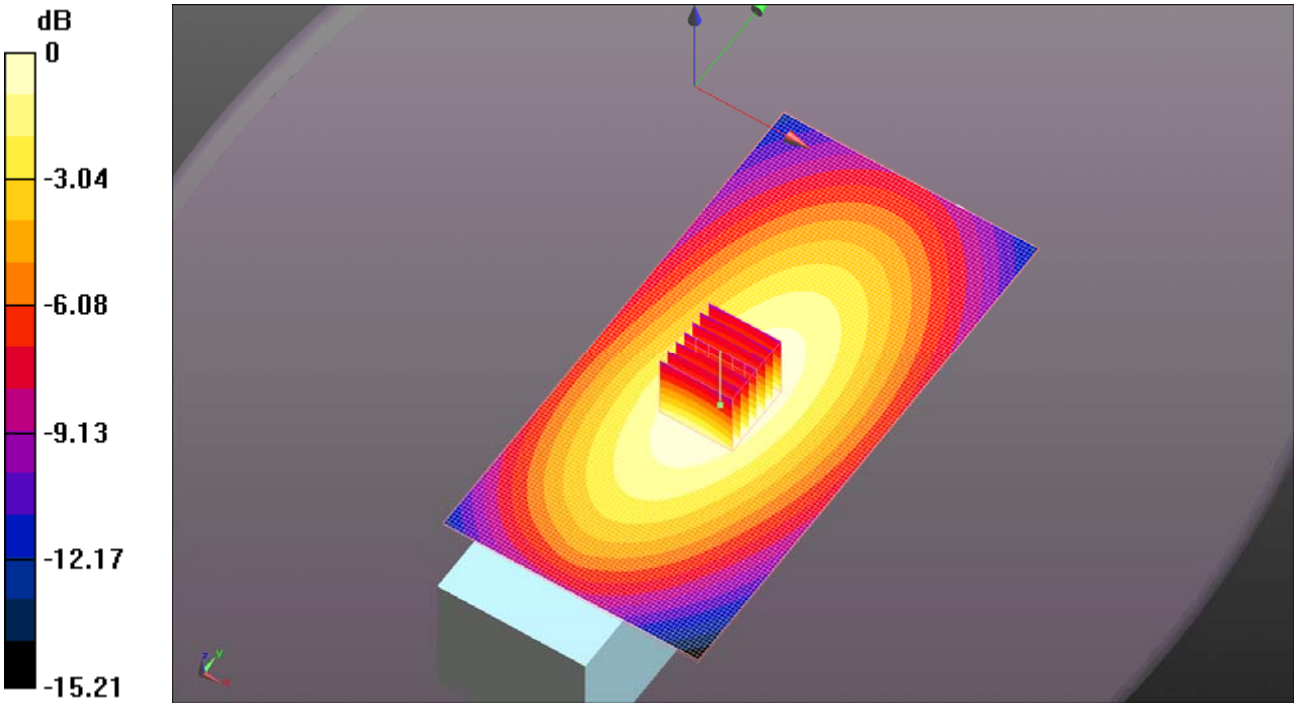
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: f = 470 MHz; σ = 0.962 mho/m; ε_r = 56.443; ρ = 1000 kg/m^3
Phantom section: Flat Section

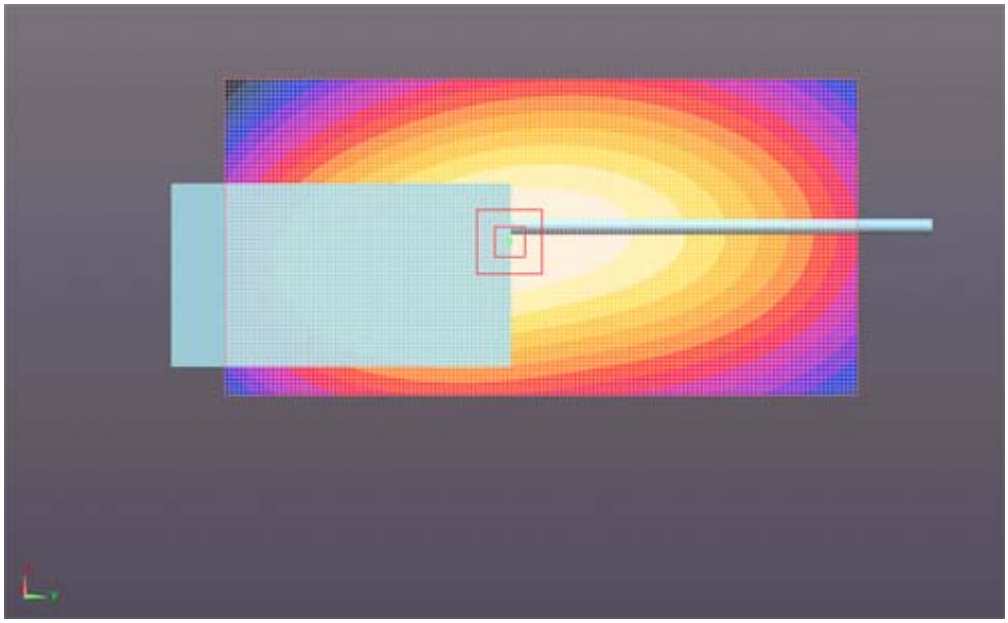
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

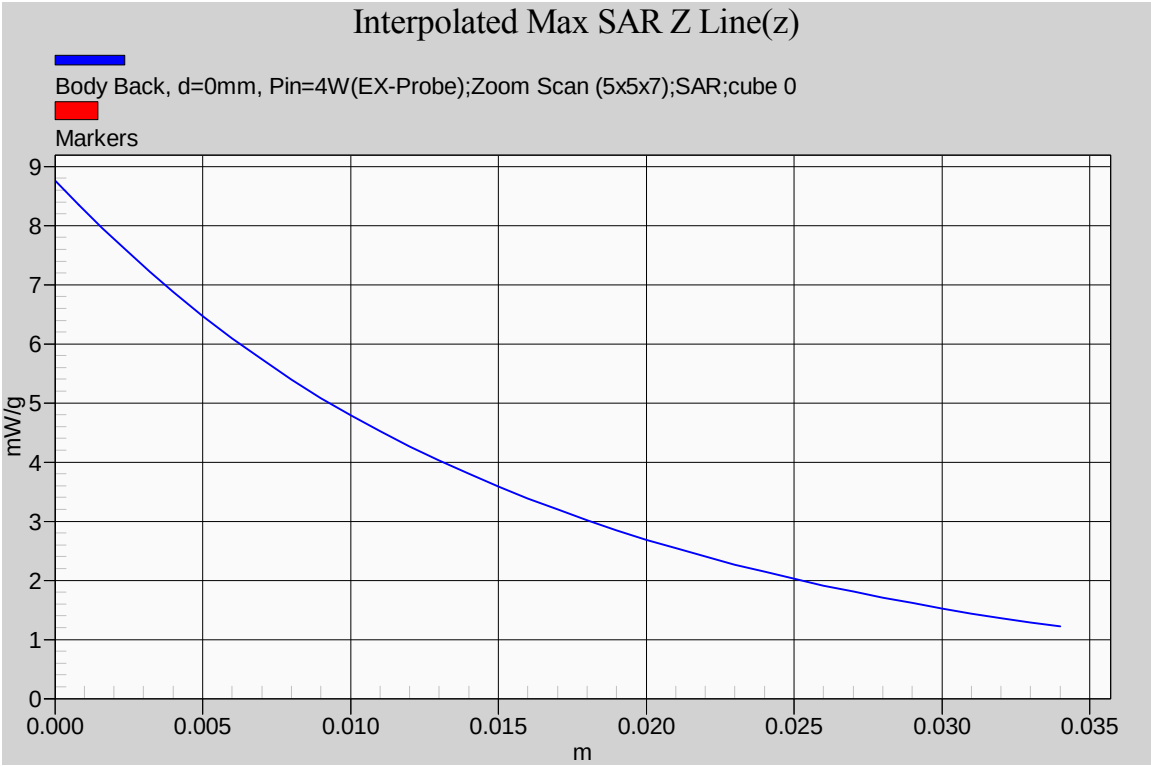
Configuration_Body_FA-SC57U_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 89.206 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 8.759 W/kg
SAR(1 g) = 6.53 mW/g; SAR(10 g) = 4.77 mW/g
Maximum value of SAR (measured) = 6.889 mW/g

Configuration_Body_FA-SC57U_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 8.058 mW/g



0 dB = 8.060mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
m
0
1
2
3
4
5
6
7
8
9
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035

6.4.4.7. ¼ helical whip stubby antenna (M/N: FA-SC73US); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 450 MHz; #36

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC73US_Body_450MHz(Lf).da52

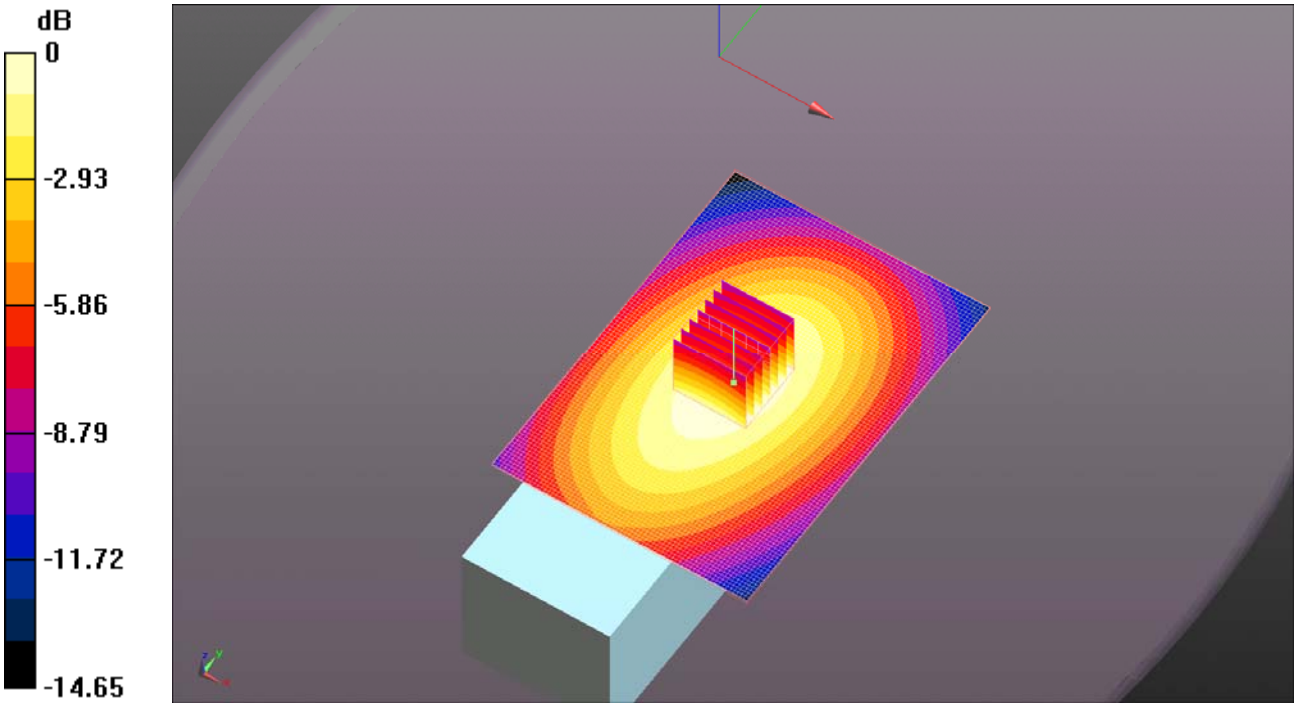
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: f = 450 MHz; σ = 0.941 mho/m; ε_r = 56.718; ρ = 1000 kg/m^3
Phantom section: Flat Section

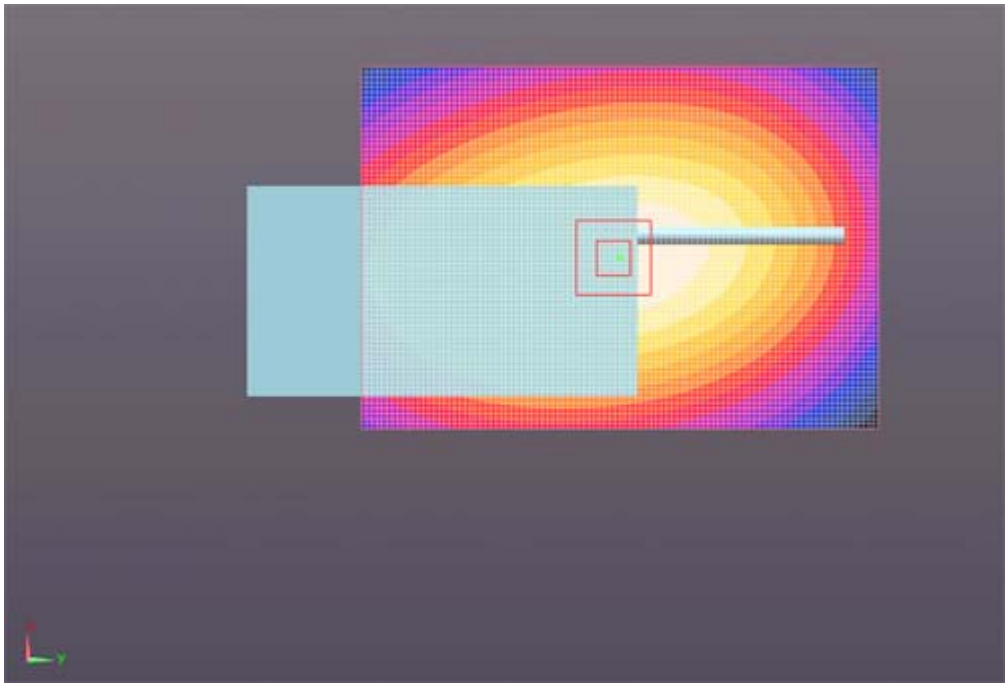
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

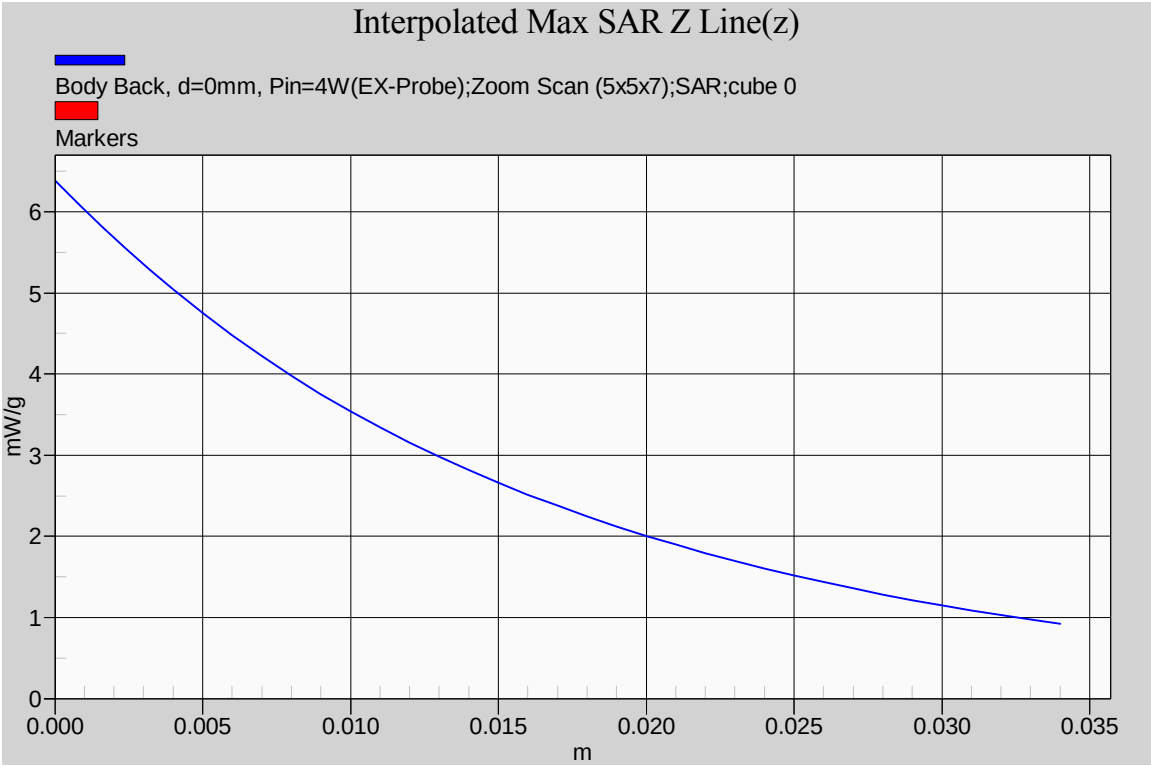
Configuration_Body_FA-SC73US_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 75.786 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 6.383 W/kg
SAR(1 g) = 4.78 mW/g; SAR(10 g) = 3.49 mW/g
Maximum value of SAR (measured) = 5.035 mW/g

Configuration_Body_FA-SC73US_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.906 mW/g



0 dB = 5.910mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.4.8. ¼ helical whip stubby antenna (M/N: FA-SC73US); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 460 MHz; #37

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC73US_Body_460MHz(Mf).da52

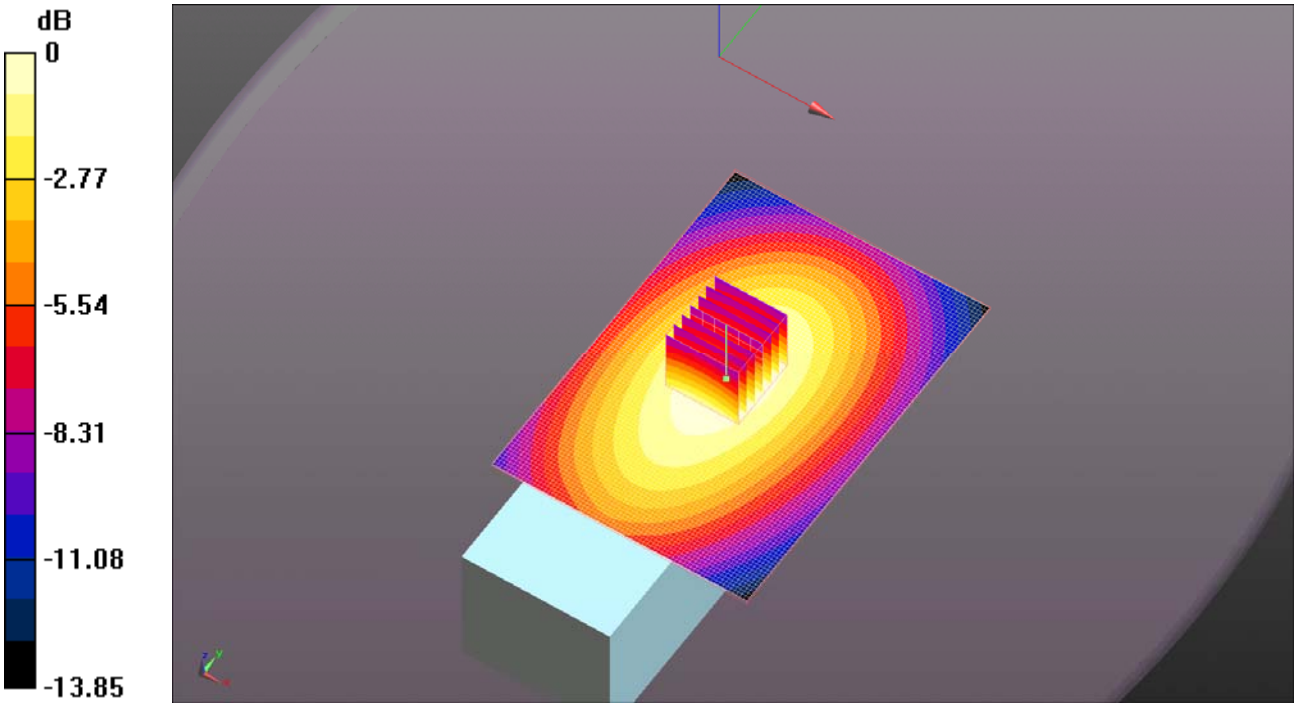
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: f = 460 MHz; σ = 0.95 mho/m; ε_r = 56.587; ρ = 1000 kg/m^3
Phantom section: Flat Section

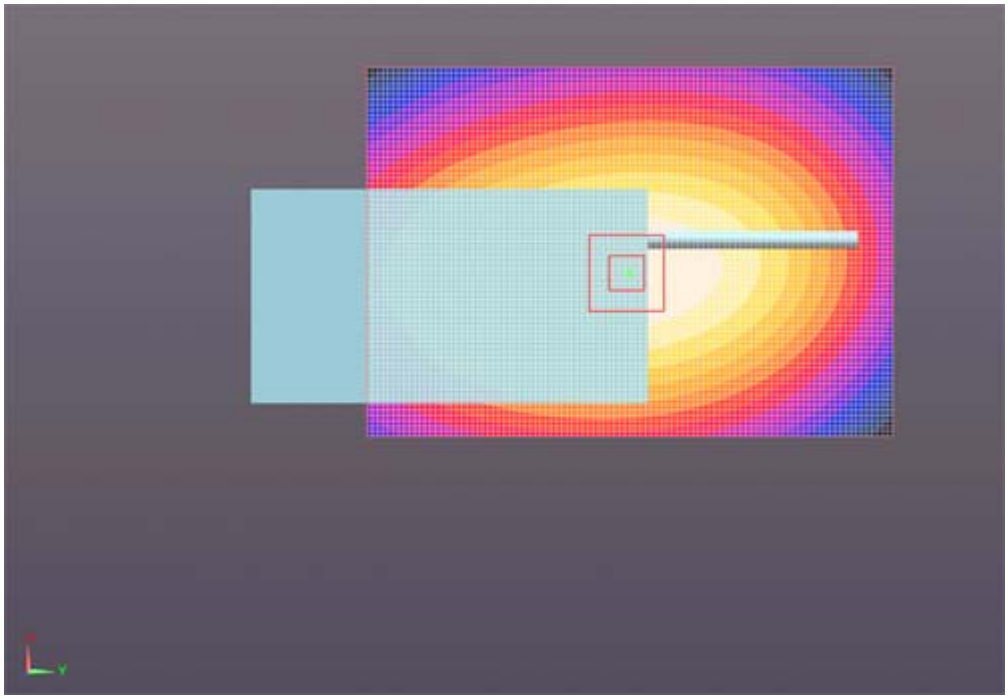
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

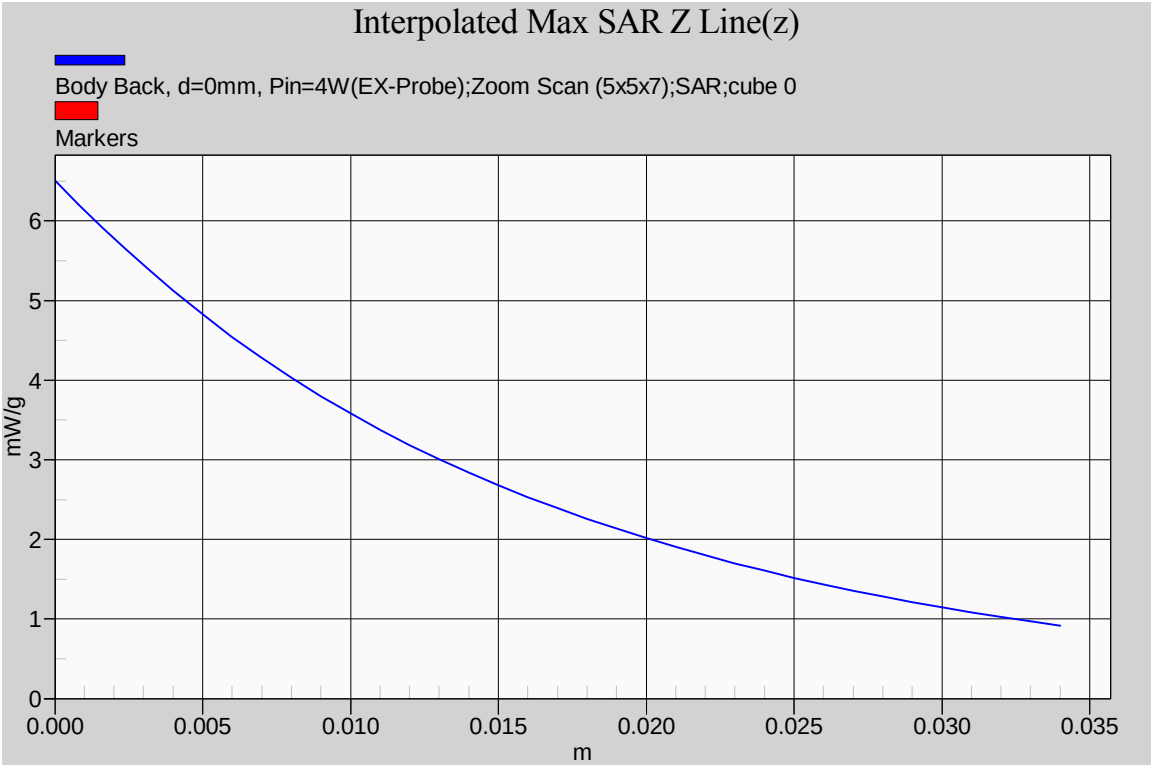
Configuration_Body_FA-SC73US_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 78.646 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 6.505 W/kg
SAR(1 g) = 4.85 mW/g; SAR(10 g) = 3.53 mW/g
Maximum value of SAR (measured) = 5.120 mW/g

Configuration_Body_FA-SC73US_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 6.010 mW/g



0 dB = 6.010mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.4.9. ¼ helical whip stubby antenna (M/N: FA-SC56VS); Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 470 MHz; #38

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC73US_Body_470MHz(Hf).da52

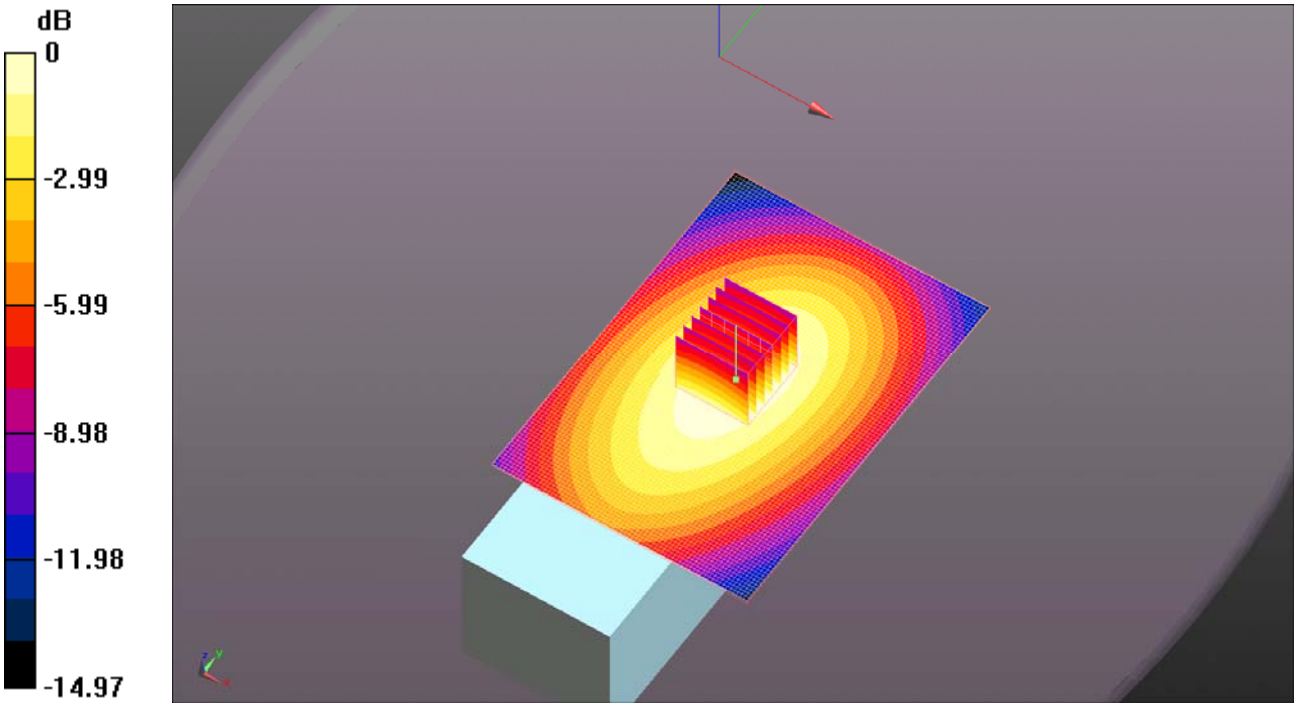
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: f = 470 MHz; σ = 0.962 mho/m; ε_r = 56.443; ρ = 1000 kg/m^3
Phantom section: Flat Section

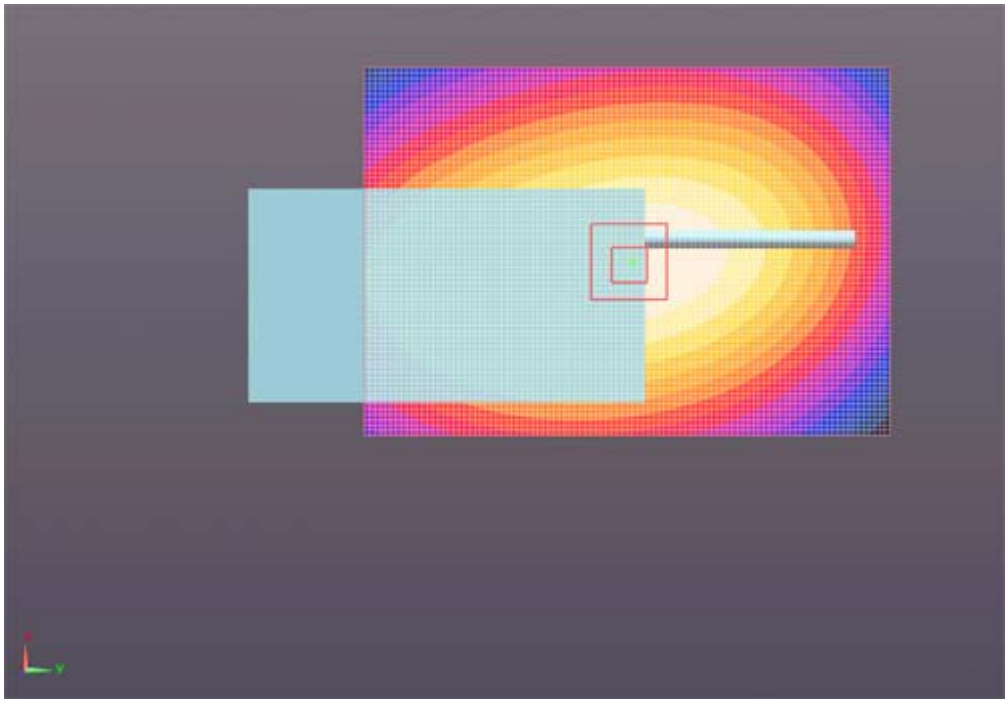
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

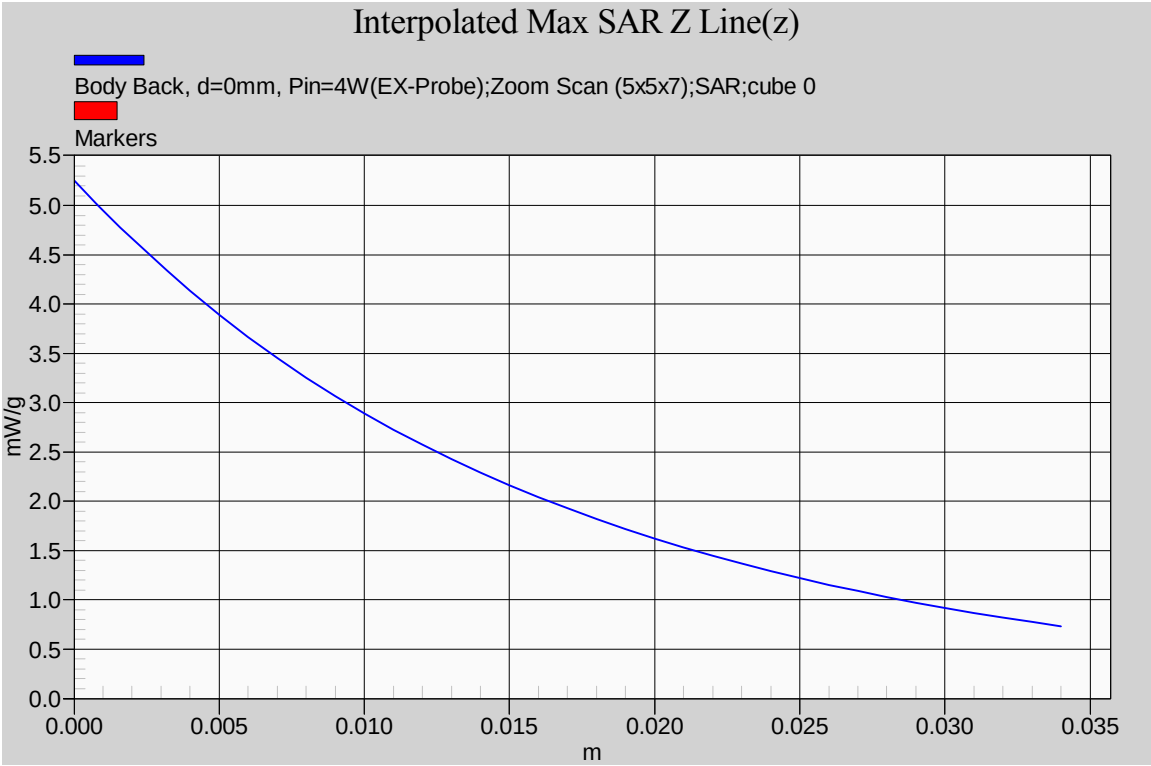
Configuration_Body_FA-SC73US_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 69.689 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 5.250 W/kg
SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.85 mW/g
Maximum value of SAR (measured) = 4.135 mW/g

Configuration_Body_FA-SC73US_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.957 mW/g



0 dB = 4.960mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5. Body Configuration Result of Part 2: FA-SC61UC Cut Antenna*

#	Configuration	Antenna Position	Frequency [MHz]	Channel	MAX SAR_{1g} [W/Kg]
*	Occupational/Controlled Exposure Category Limit				8.0
39	¼ helical whip cut antenna (M/N: FA-SC61UC, 360~520 MHz, white ring) 50% duty cycle for PTT; Antenna Length=165mm MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	400	Low	3.22
40		FIX	435	Middle	2.92
41		FIX	470	High	1.21
42	¼ helical whip antenna (M/N: FA-SC61UC, 360~520 MHz, white ring) 50% duty cycle for PTT; Antenna Length=156mm MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	400	Low	2.03
43		FIX	420	Middle	**4.09**
44		FIX	470	High	1.93
45		FIX	445	Option	3.19
46	¼ helical whip antenna (M/N: FA-SC61UC, 360~520 MHz, white ring) 50% duty cycle for PTT; Antenna Length=148mm MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	400	Low	1.40
47		FIX	440	Middle	3.42
48		FIX	470	High	2.79
49		FIX	420	Option	-
50	¼ helical whip antenna (M/N: FA-SC61UC, 360~520 MHz, white ring) 50% duty cycle for PTT; Antenna Length=142mm MB-124 Clip, HM-159L Speaker Mic with SP-27 Tube Earphone	FIX	400	Low	1.14
51		FIX	430	Middle	2.84
52		FIX	460	High	3.17

*

6.4.5.1. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=165mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 400 MHz; #39

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(165mm)_Body_400MHz(Lf).da52

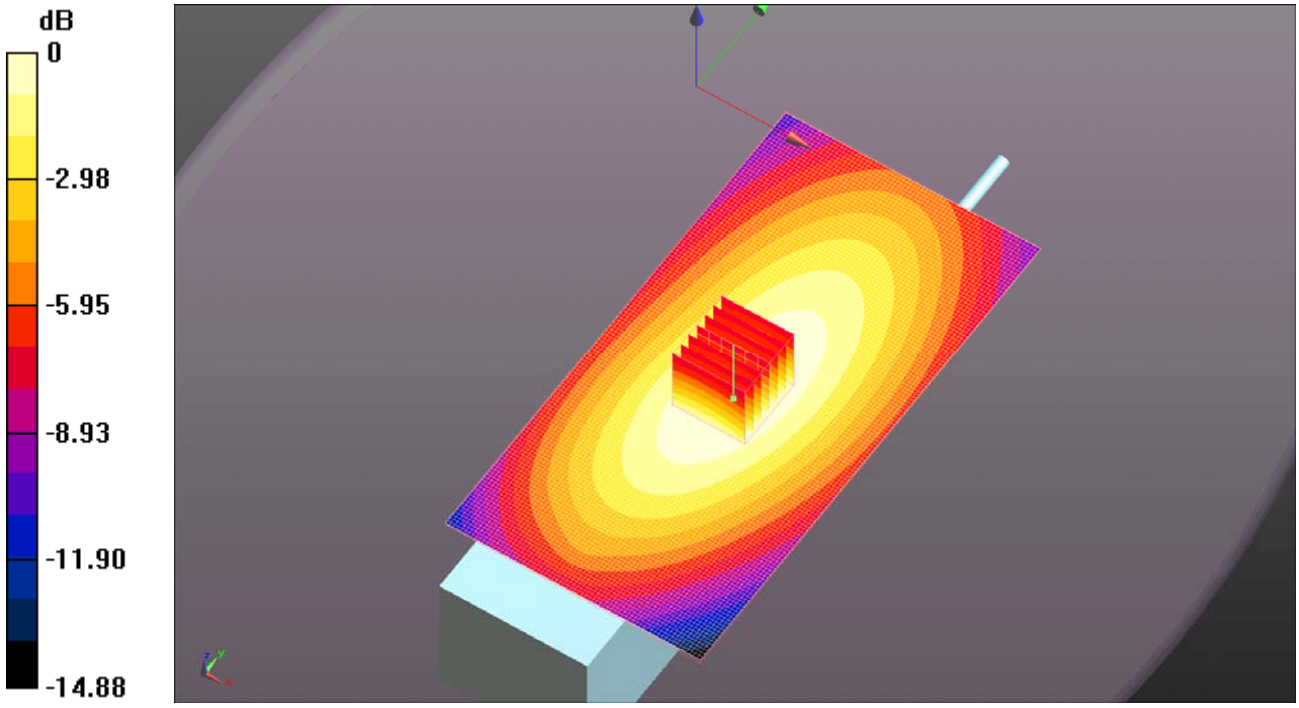
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: f = 400 MHz; σ = 0.902 mho/m; ε_r = 57.686; ρ = 1000 kg/m^3
Phantom section: Flat Section

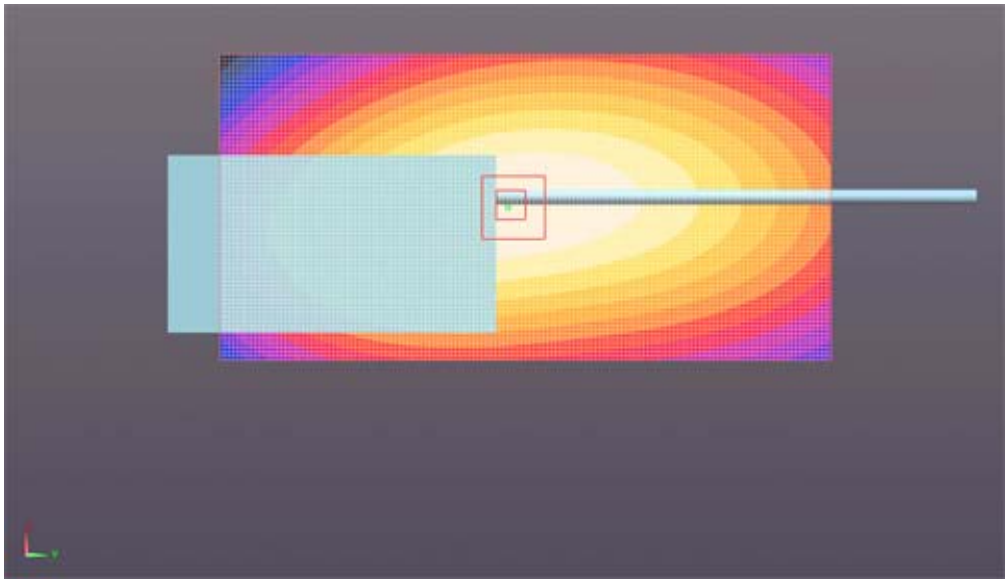
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

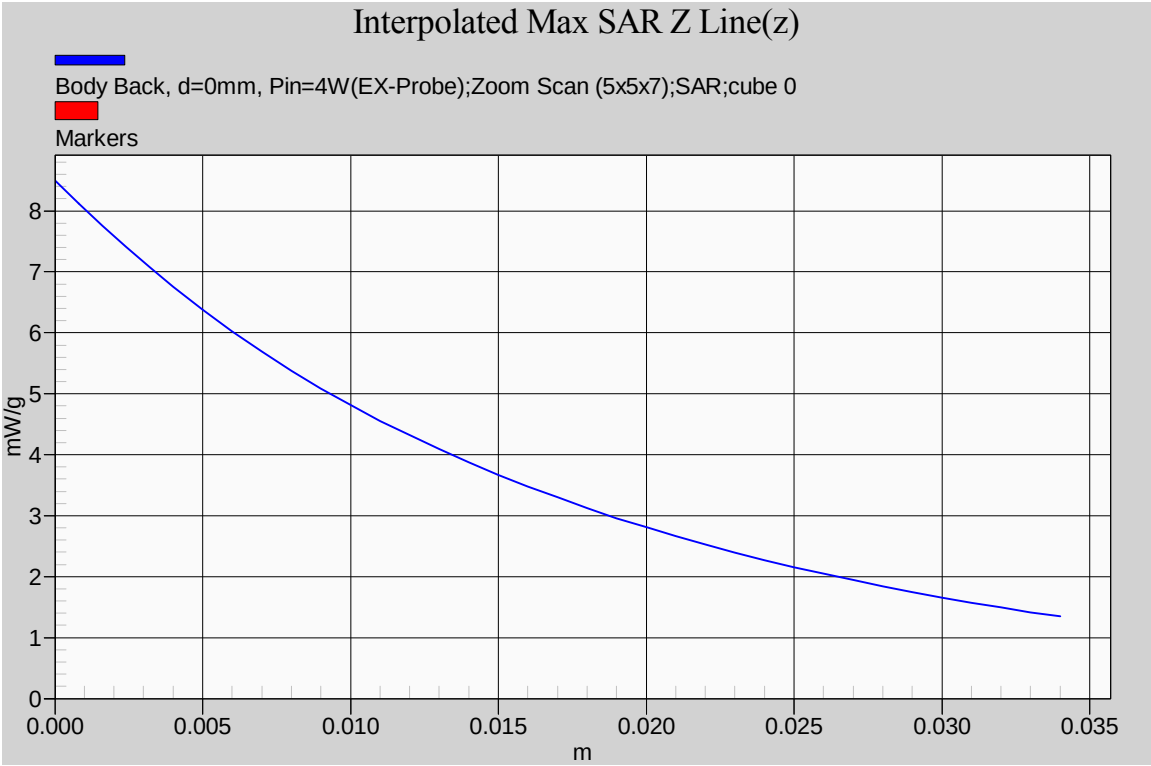
Configuration_Body_FA-SC61UC-165mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.211 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 8.495 W/kg
SAR(1 g) = 6.43 mW/g; SAR(10 g) = 4.79 mW/g
Maximum value of SAR (measured) = 6.756 mW/g

Configuration_Body_FA-SC61UC-165mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.837 mW/g



0 dB = 7.840mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.2. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=165mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 435 MHz; #40

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(165mm)_Body_435MHz(Mf).da52

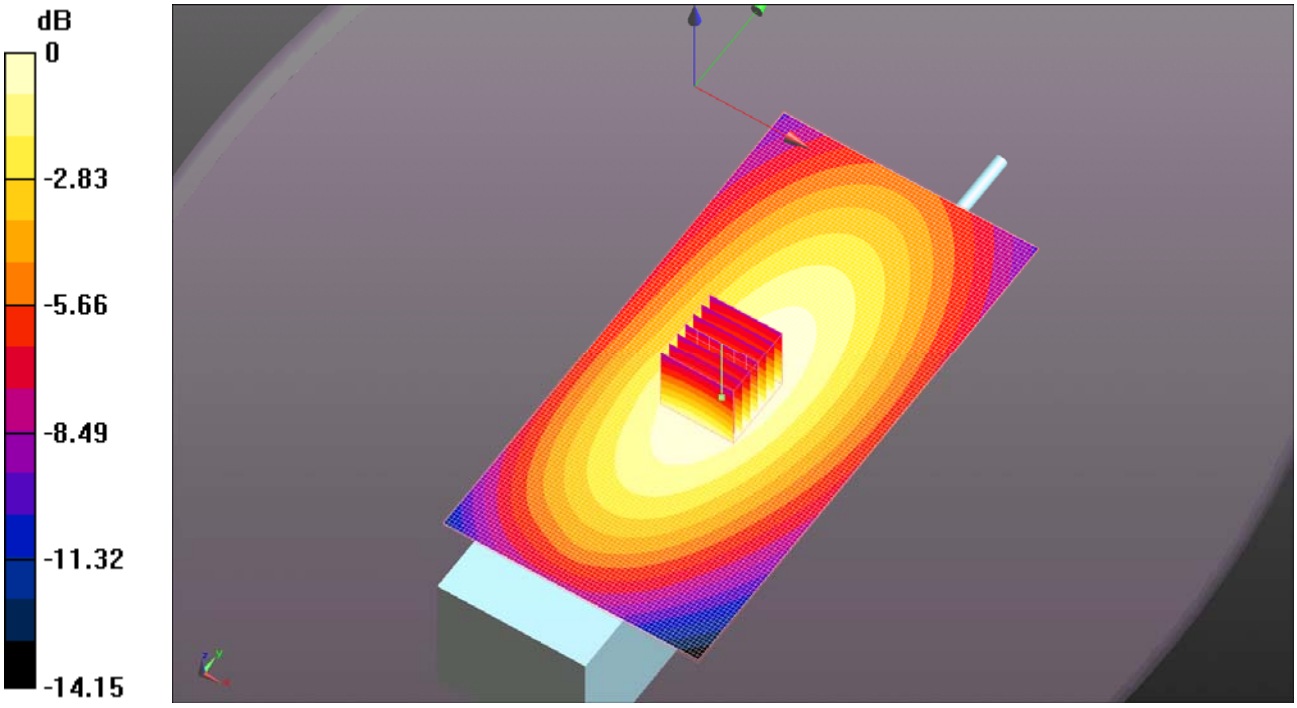
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 435 MHz; Duty Cycle: 1:1
Medium parameters used: f = 435 MHz; σ = 0.928 mho/m; ε_r = 57.037; ρ = 1000 kg/m^3
Phantom section: Flat Section

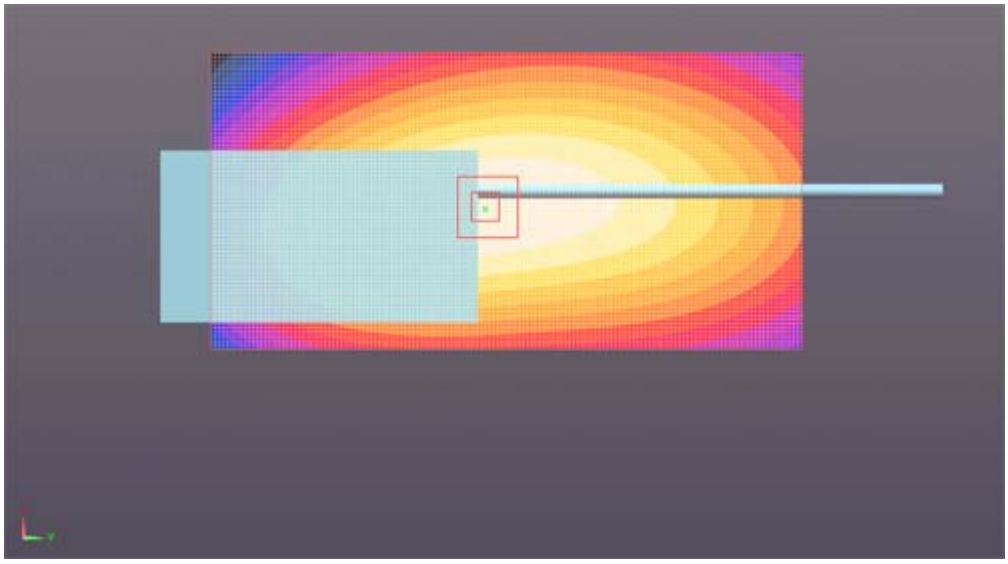
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

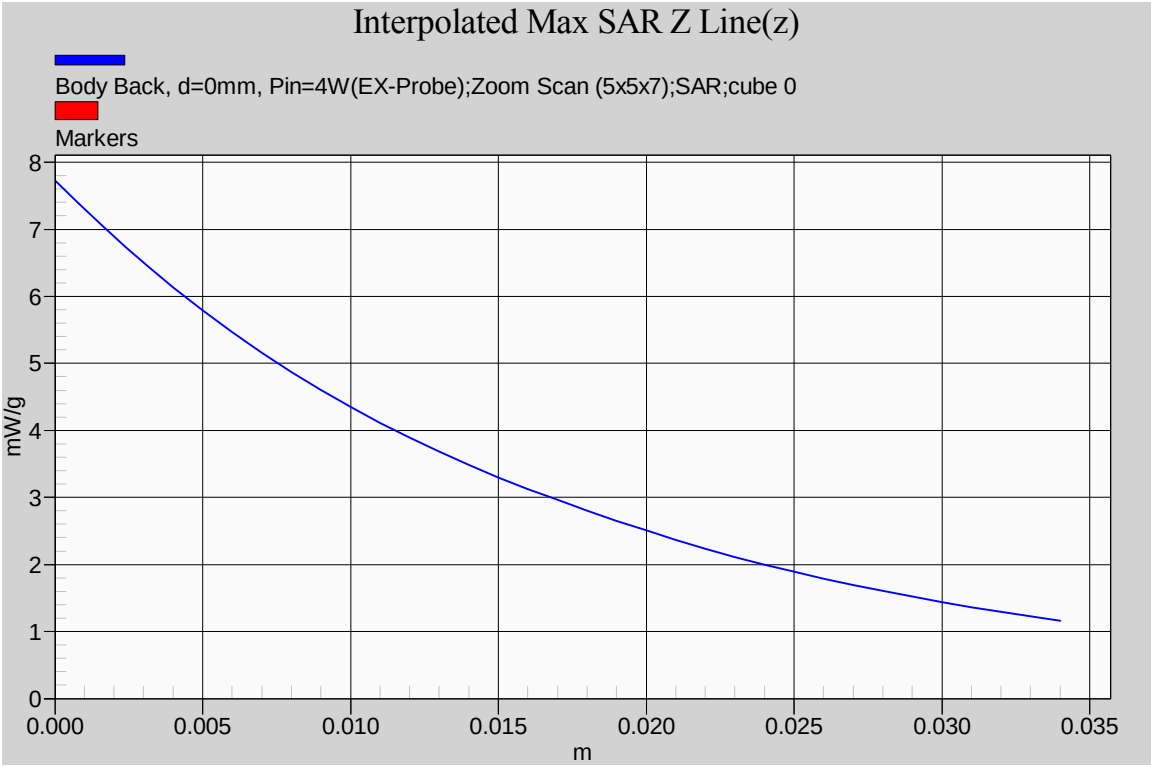
Configuration_Body_FA-SC61UC-165mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.148 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 7.724 W/kg
SAR(1 g) = 5.83 mW/g; SAR(10 g) = 4.31 mW/g
Maximum value of SAR (measured) = 6.136 mW/g

Configuration_Body_FA-SC61UC-165mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.120 mW/g



0 dB = 7.120mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
m
0
1
2
3
4
5
6
7
8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035

6.4.5.3. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=165mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 470MHz; #41

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(165mm)_Body_470MHz(Hf).da52

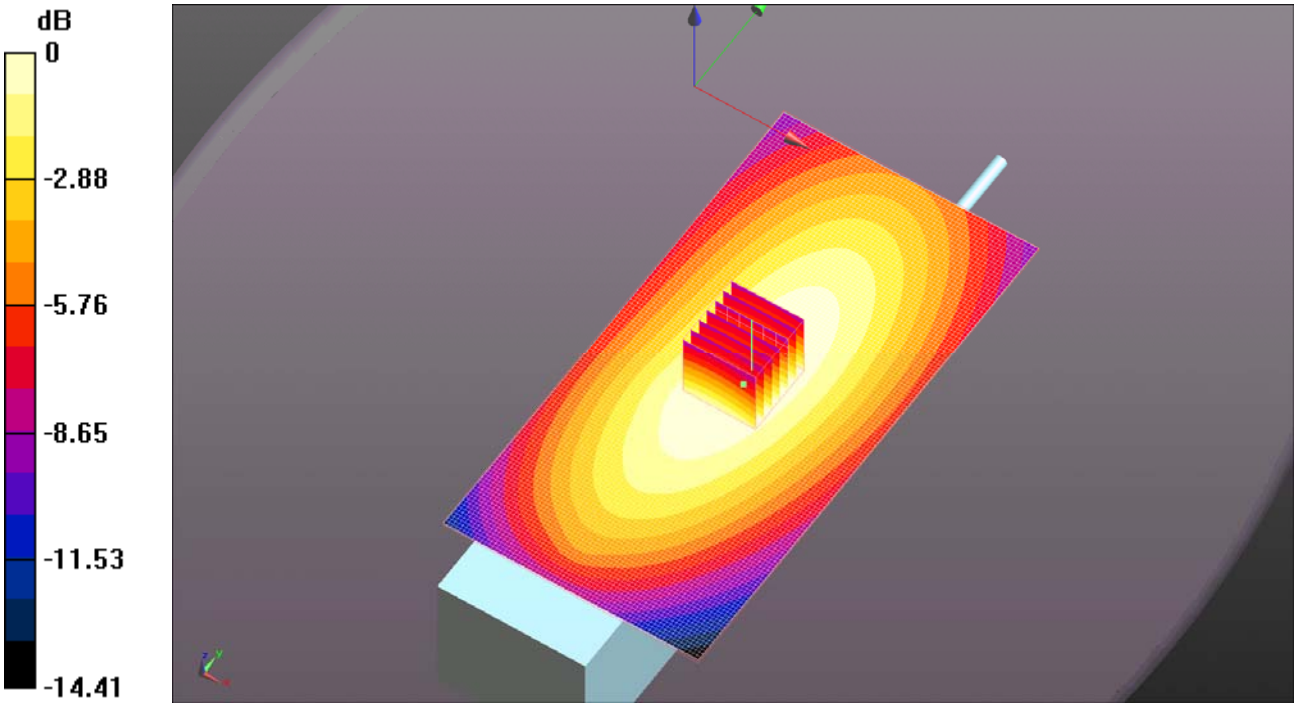
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: f = 470 MHz; σ = 0.962 mho/m; ε_r = 56.443; ρ = 1000 kg/m^3
Phantom section: Flat Section

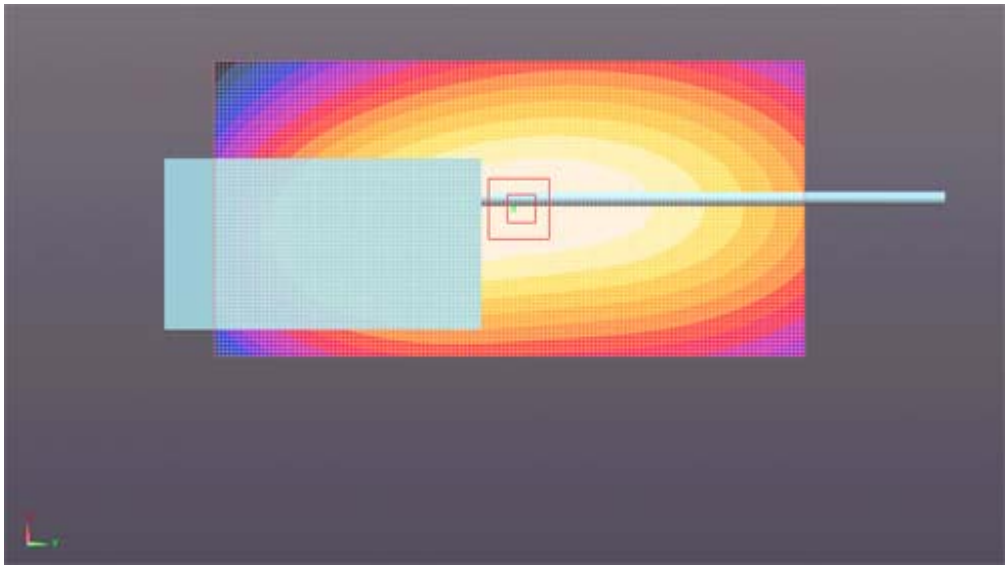
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

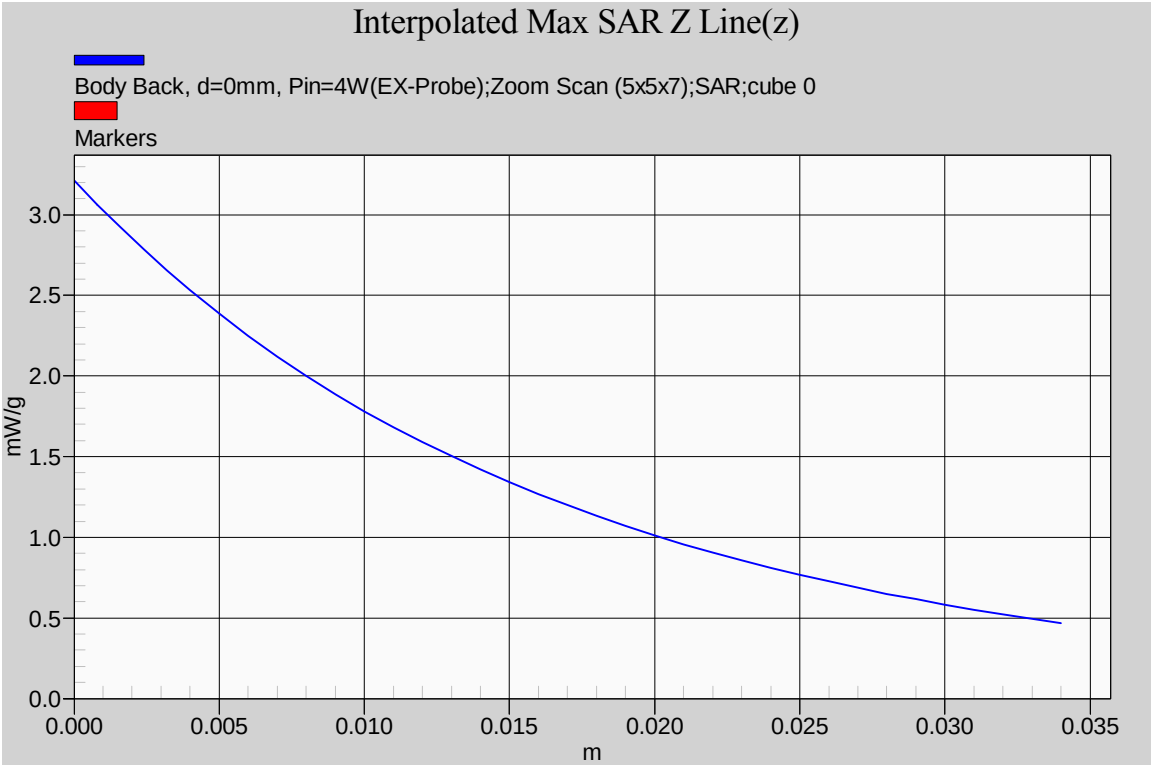
Configuration_Body_FA-SC61UC-165mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.423 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 3.211 W/kg
SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.78 mW/g
Maximum value of SAR (measured) = 2.533 mW/g

Configuration_Body_FA-SC61UC-165mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.975 mW/g



0 dB = 2.980mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.4. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=156mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 400 MHz; #42

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(156mm)_Body_400MHz(Lf).da52

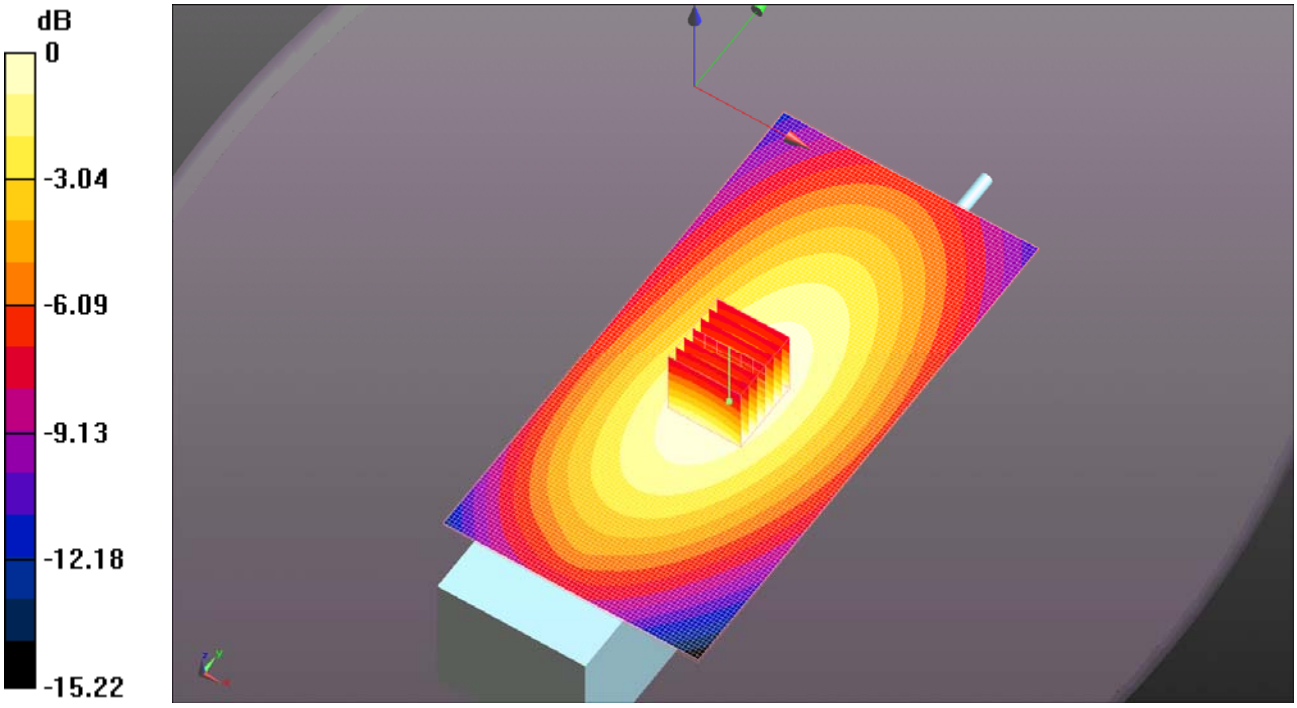
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: f = 400 MHz; σ = 0.902 mho/m; ε_r = 57.686; ρ = 1000 kg/m^3
Phantom section: Flat Section

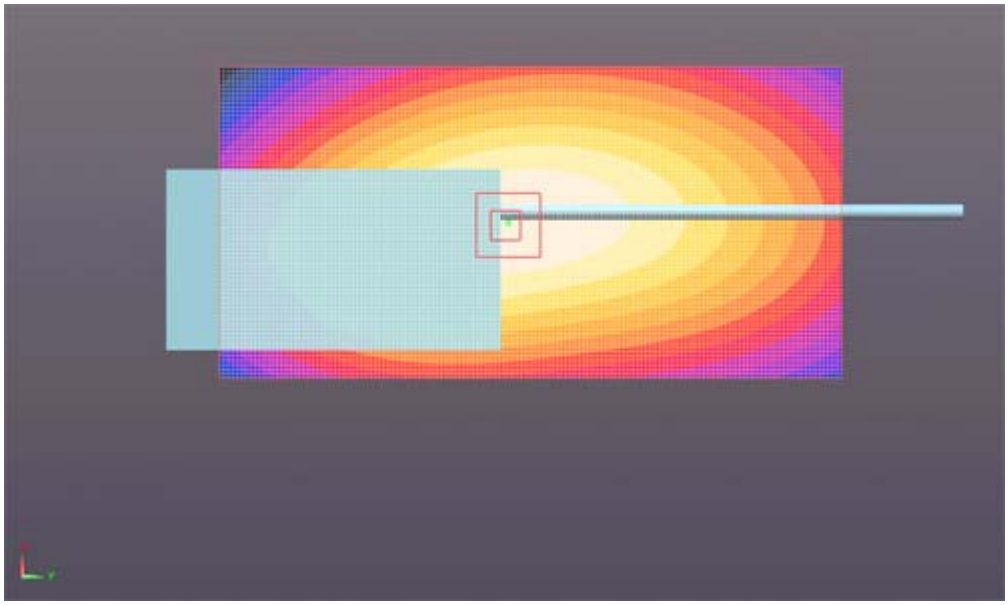
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

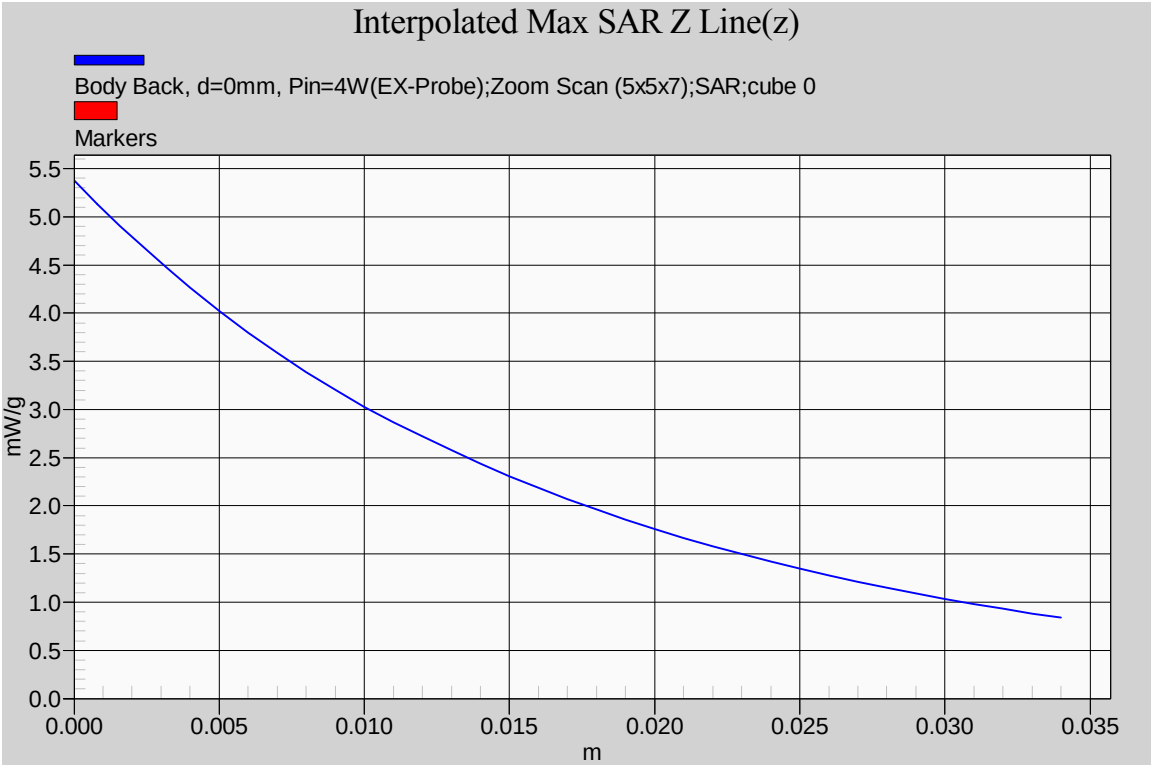
Configuration_Body_FA-SC61UC-156mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 73.104 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 5.373 W/kg
SAR(1 g) = 4.05 mW/g; SAR(10 g) = 3 mW/g
Maximum value of SAR (measured) = 4.266 mW/g

Configuration_Body_FA-SC61UC-156mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.927 mW/g



0 dB = 4.930mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.5. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=156mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 420 MHz; #43

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(156mm)_Body_420MHz(Mf).da52

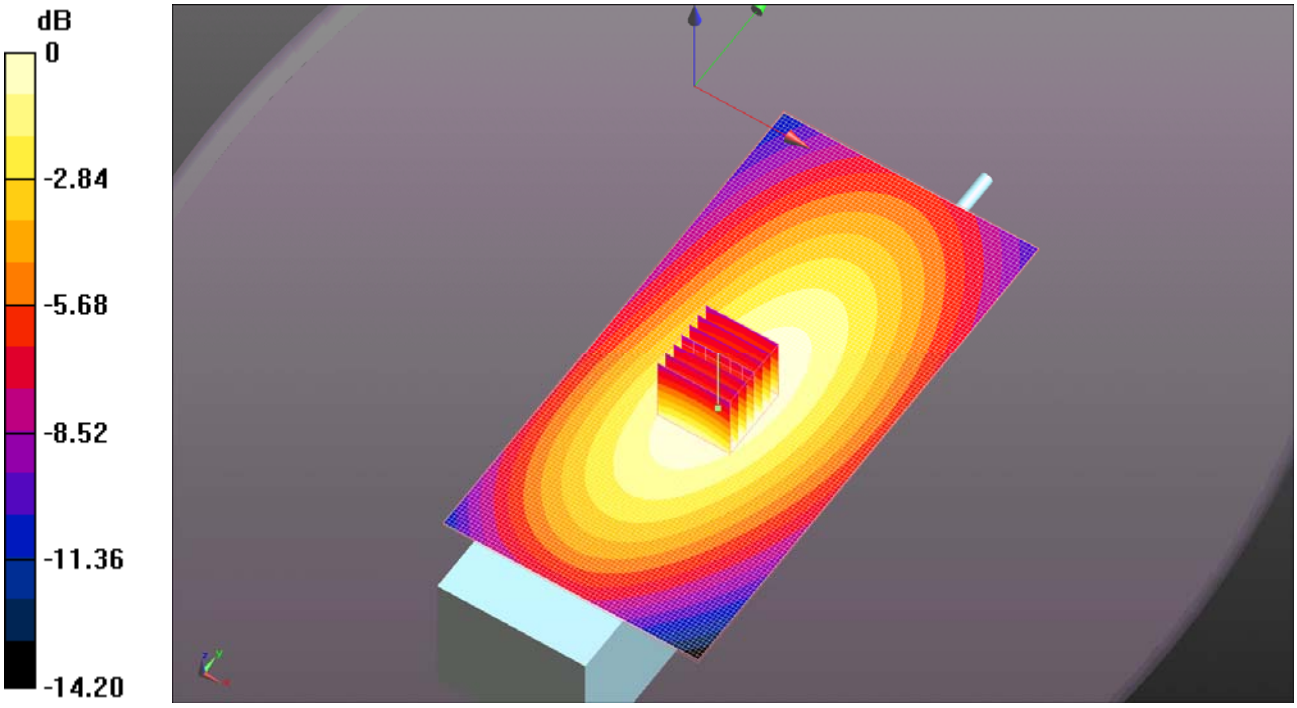
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 420 MHz; Duty Cycle: 1:1
Medium parameters used: f = 420 MHz; σ = 0.916 mho/m; ε_r = 57.351; ρ = 1000 kg/m^3
Phantom section: Flat Section

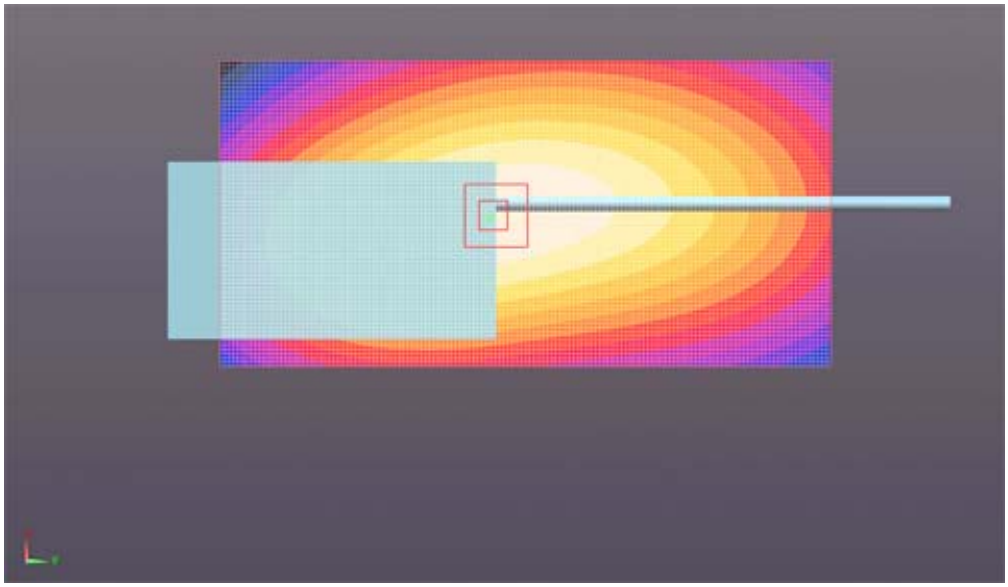
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

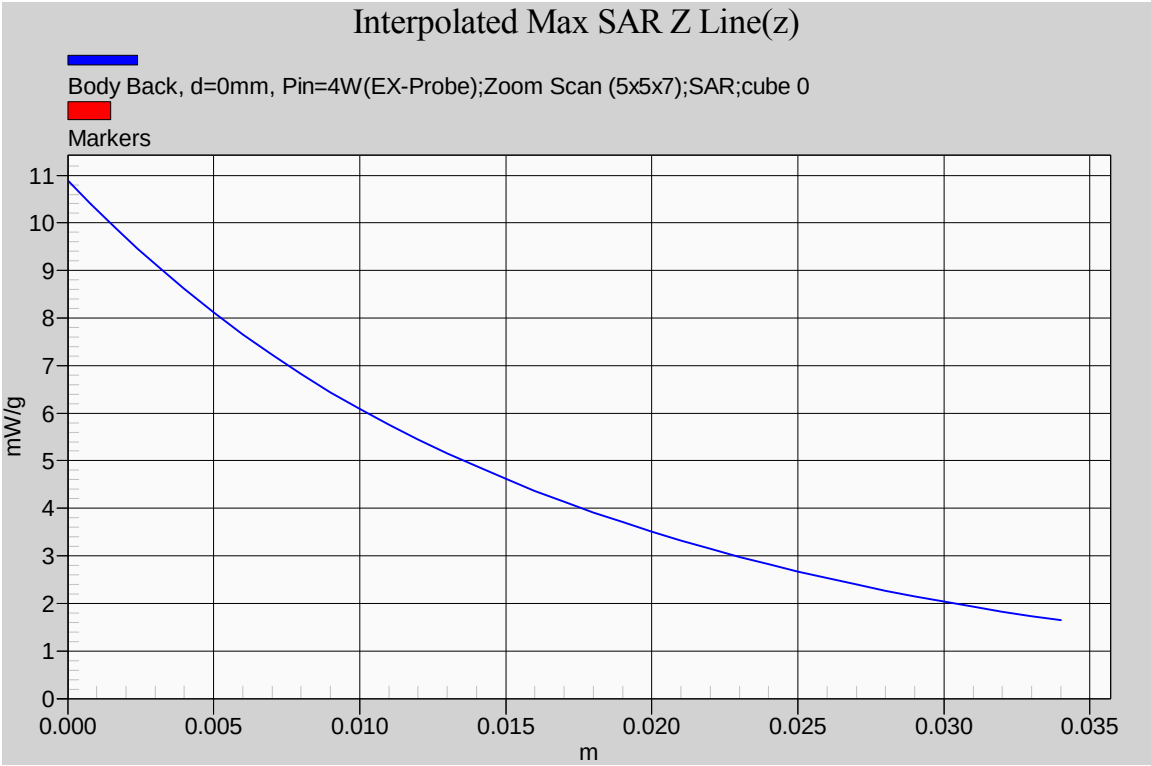
Configuration_Body_FA-SC61UC-156mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 102.2 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 10.885 W/kg
SAR(1 g) = 8.18 mW/g; SAR(10 g) = 6.05 mW/g
Maximum value of SAR (measured) = 8.604 mW/g

Configuration_Body_FA-SC61UC-156mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.880 mW/g



0 dB = 9.880mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
11
10
9
8
7
6
5
4
3
2
1
0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.6. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=156mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 470 MHz; #44

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(156mm)_Body_470MHz(Hf).da52

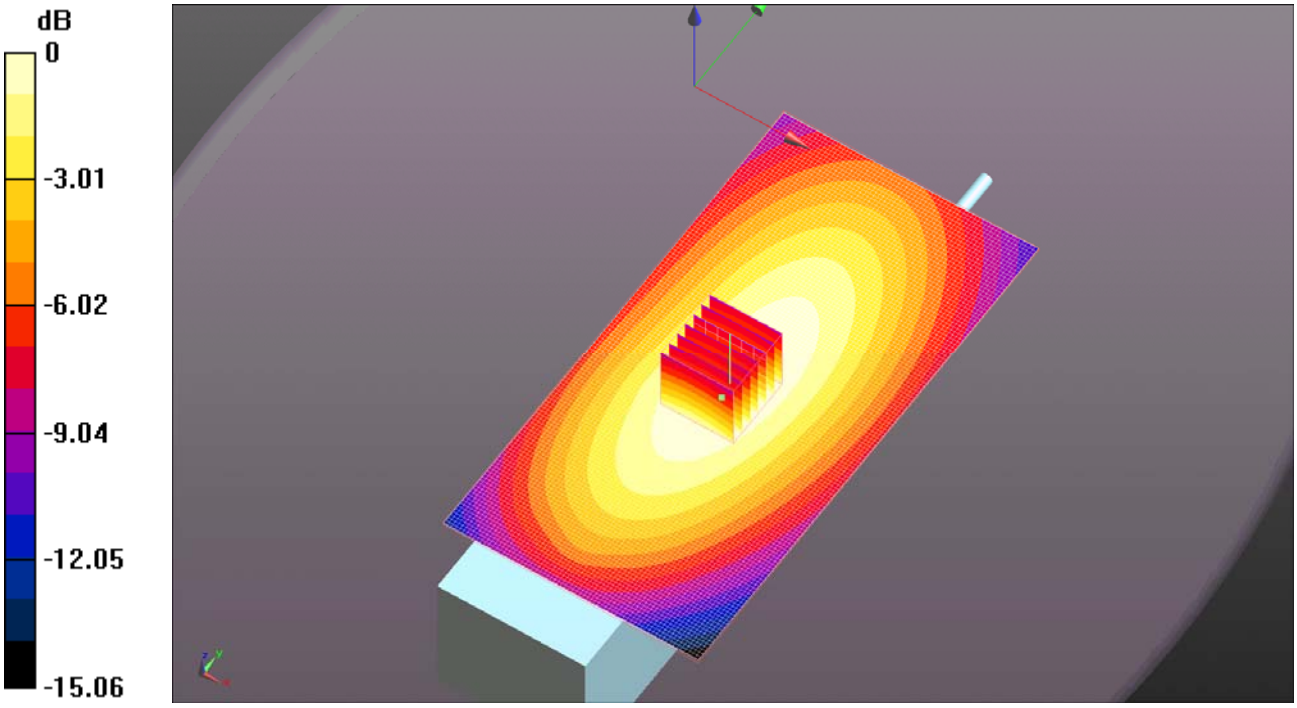
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: f = 470 MHz; σ = 0.962 mho/m; ε_r = 56.443; ρ = 1000 kg/m^3
Phantom section: Flat Section

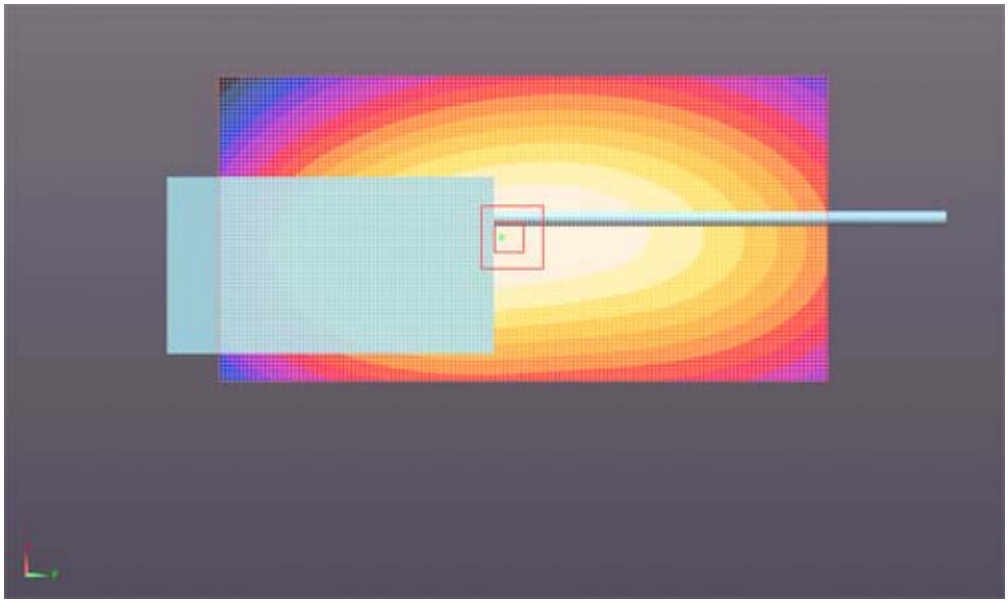
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

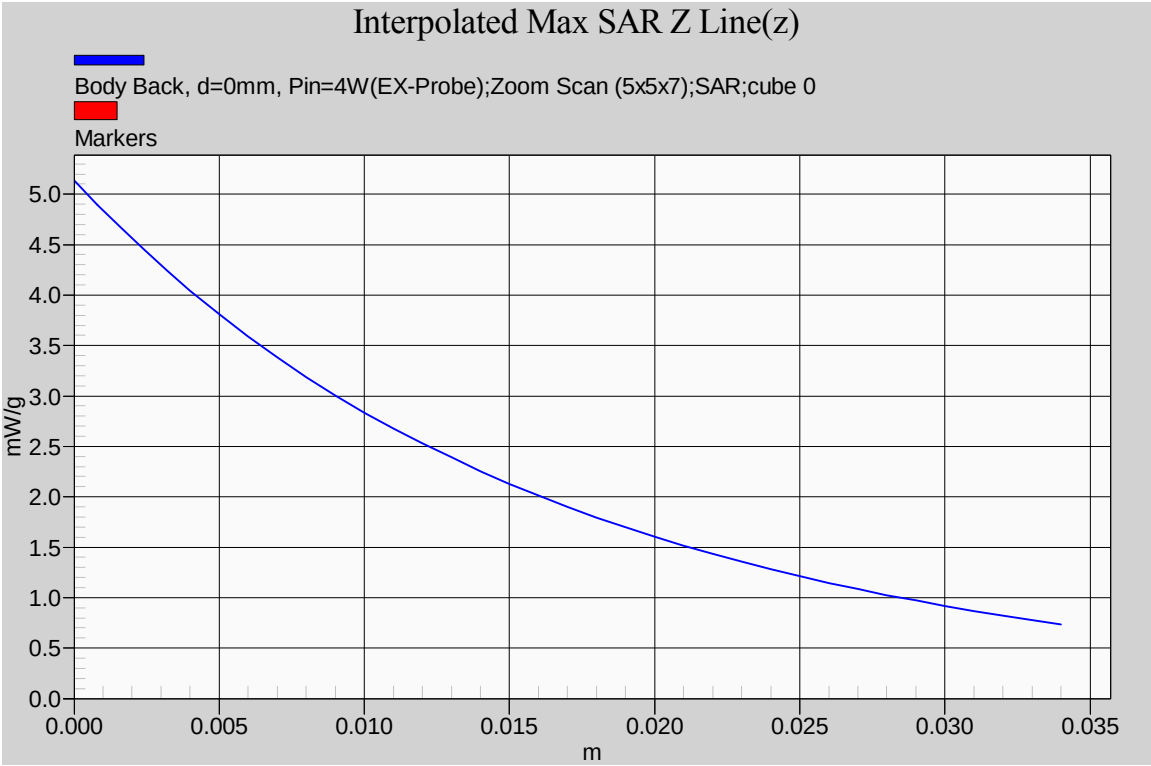
Configuration_Body_FA-SC61UC-156mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 69.291 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 5.133 W/kg
SAR(1 g) = 3.85 mW/g; SAR(10 g) = 2.83 mW/g
Maximum value of SAR (measured) = 4.048 mW/g

Configuration_Body_FA-SC61UC-156mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.791 mW/g



0 dB = 4.790mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.7. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=156mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 445 MHz; #45

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(156mm)_Body_445MHz(Of).da52

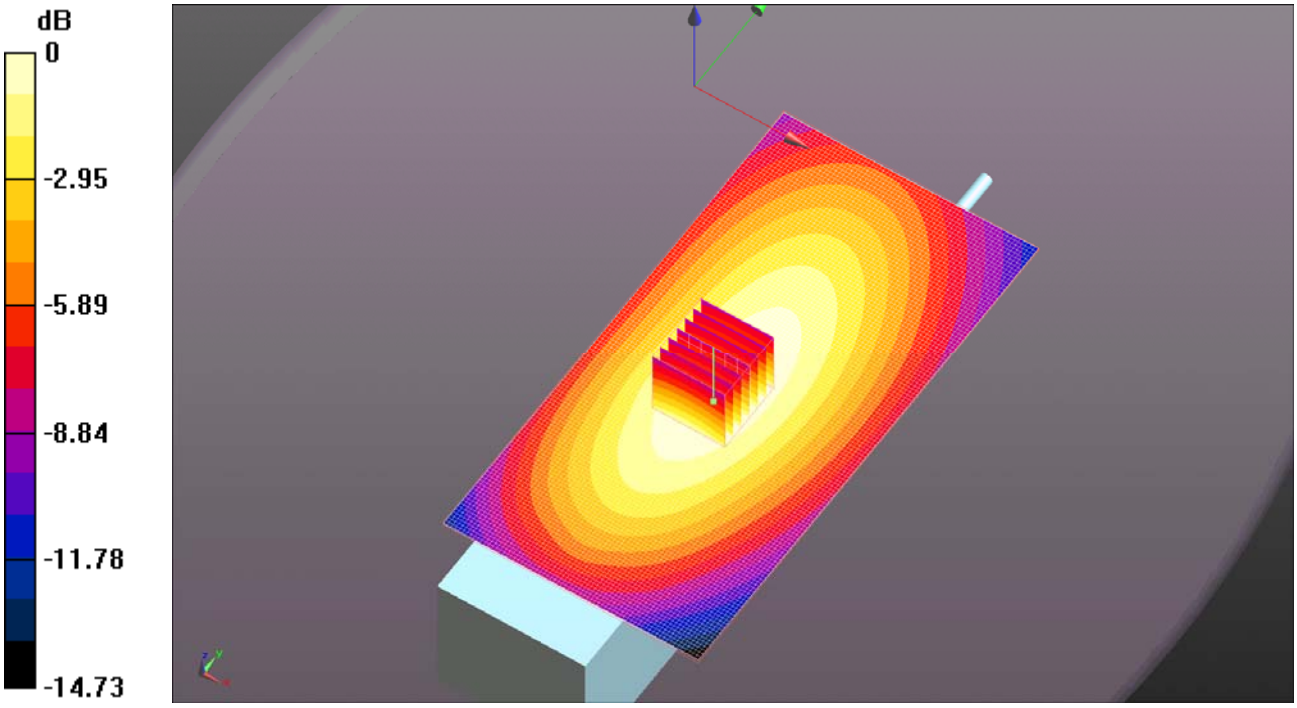
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 445 MHz; Duty Cycle: 1:1
Medium parameters used: f = 445 MHz; σ = 0.938 mho/m; ε_r = 56.86; ρ = 1000 kg/m^3
Phantom section: Flat Section

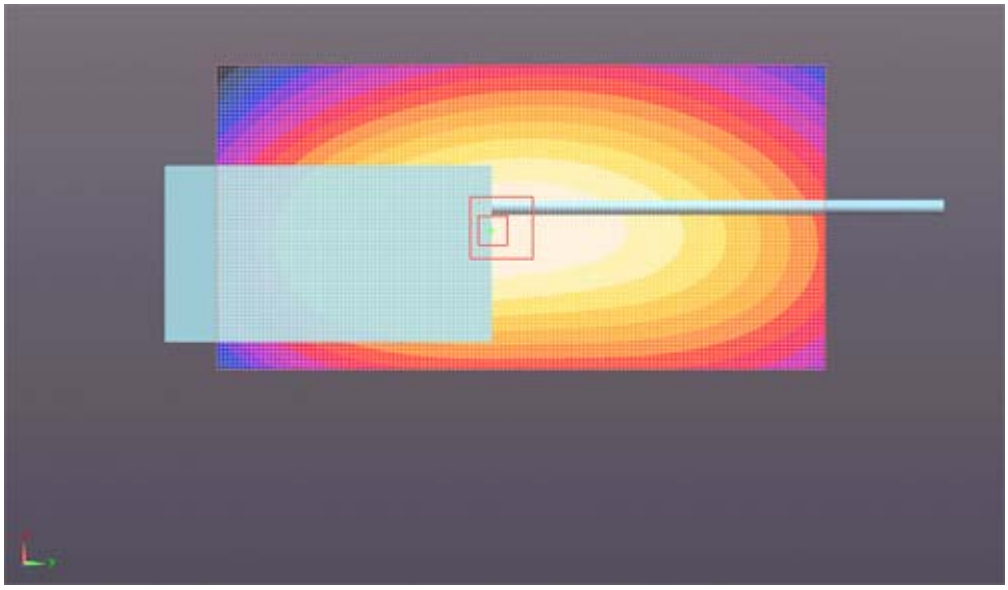
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

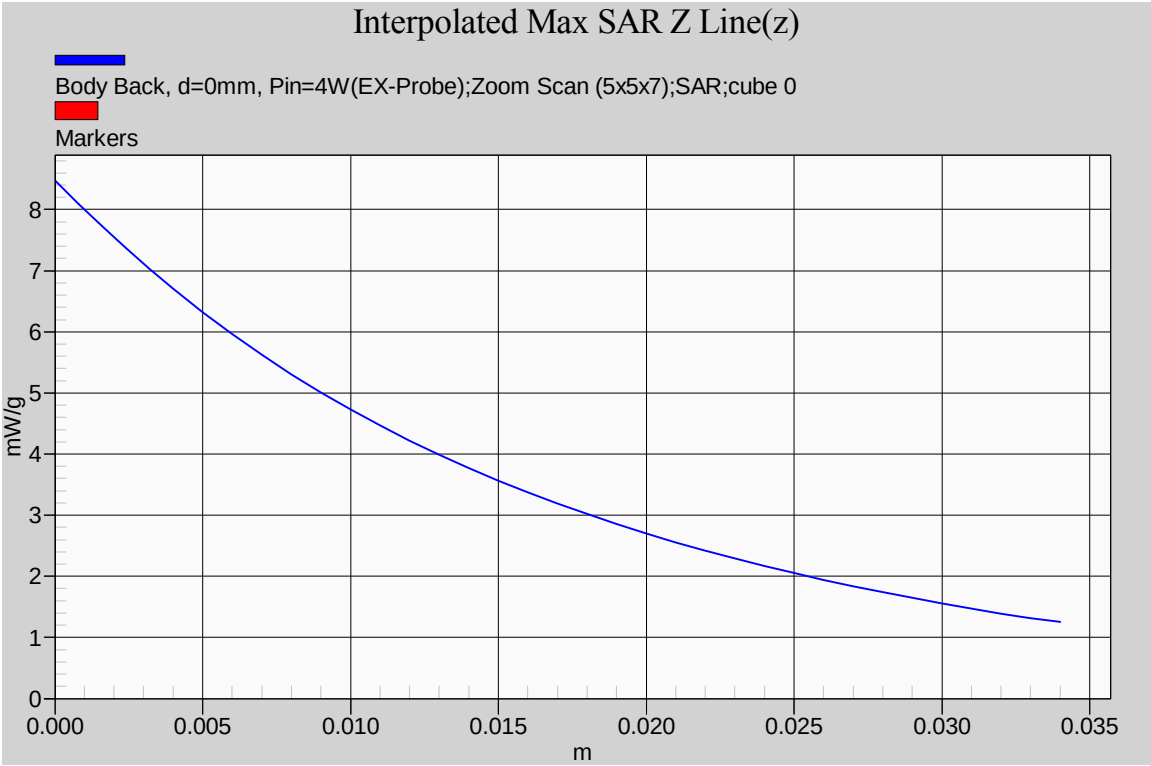
Configuration_Body_FA-SC61UC-156mm_Option-f/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.884 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 8.471 W/kg
SAR(1 g) = 6.37 mW/g; SAR(10 g) = 4.7 mW/g
Maximum value of SAR (measured) = 6.706 mW/g

Configuration_Body_FA-SC61UC-156mm_Option-f/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 8.102 mW/g



0 dB = 8.100mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.8. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=148mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 400 MHz; #46

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(148mm)_Body_400MHz(Lf).da52

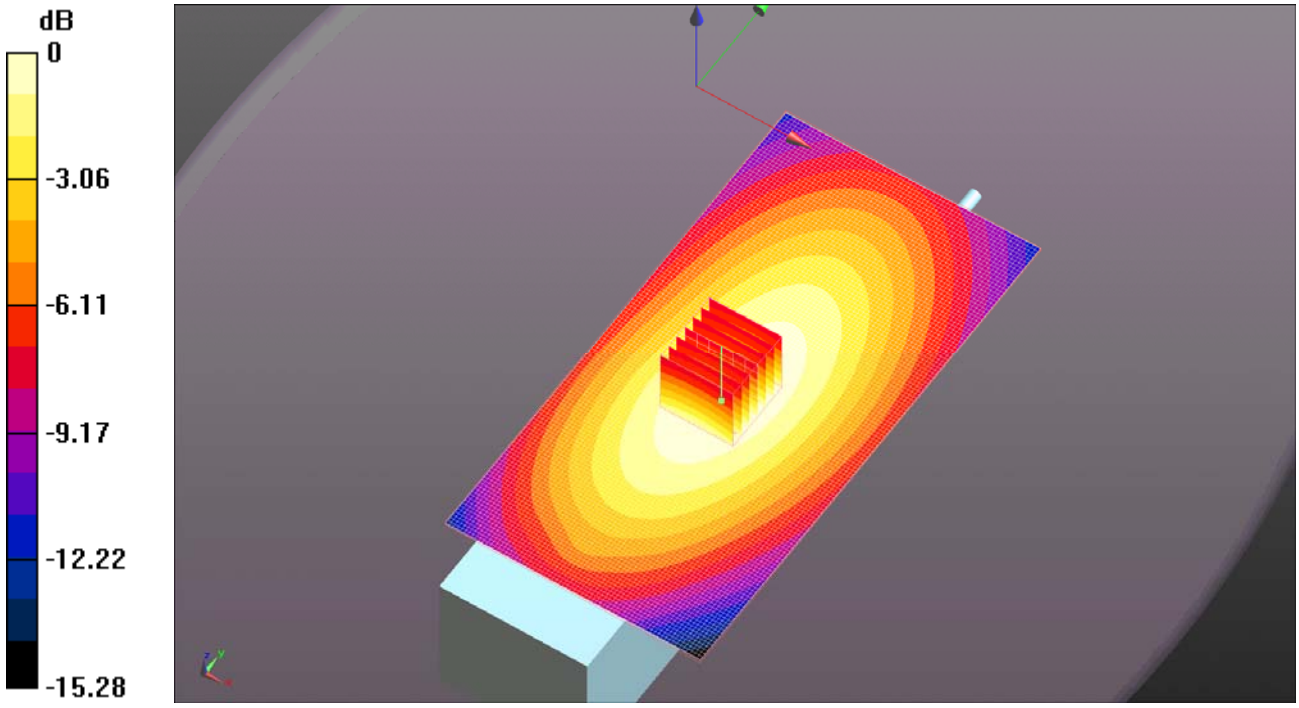
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: f = 400 MHz; σ = 0.902 mho/m; ε_r = 57.686; ρ = 1000 kg/m^3
Phantom section: Flat Section

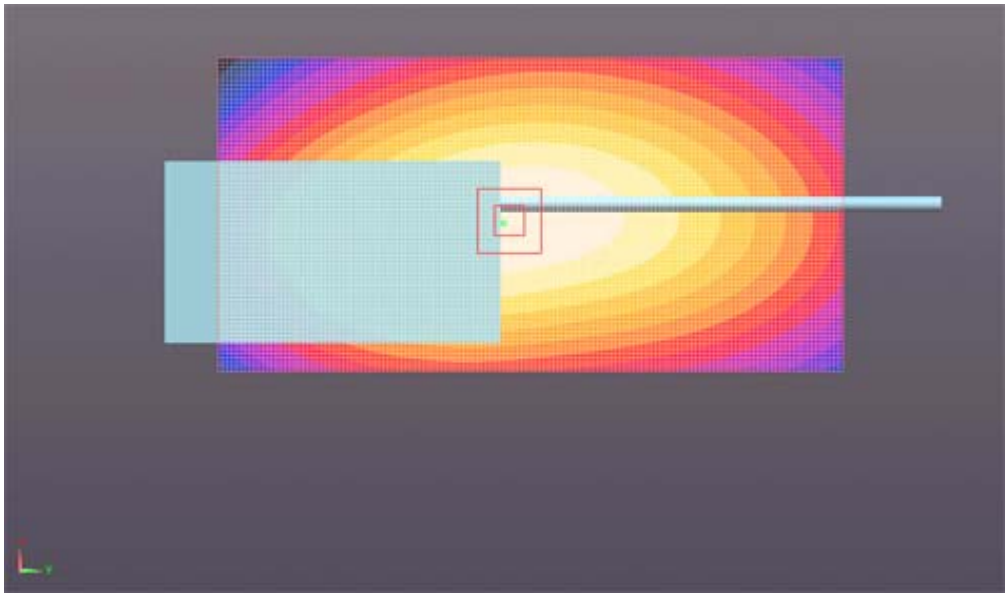
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

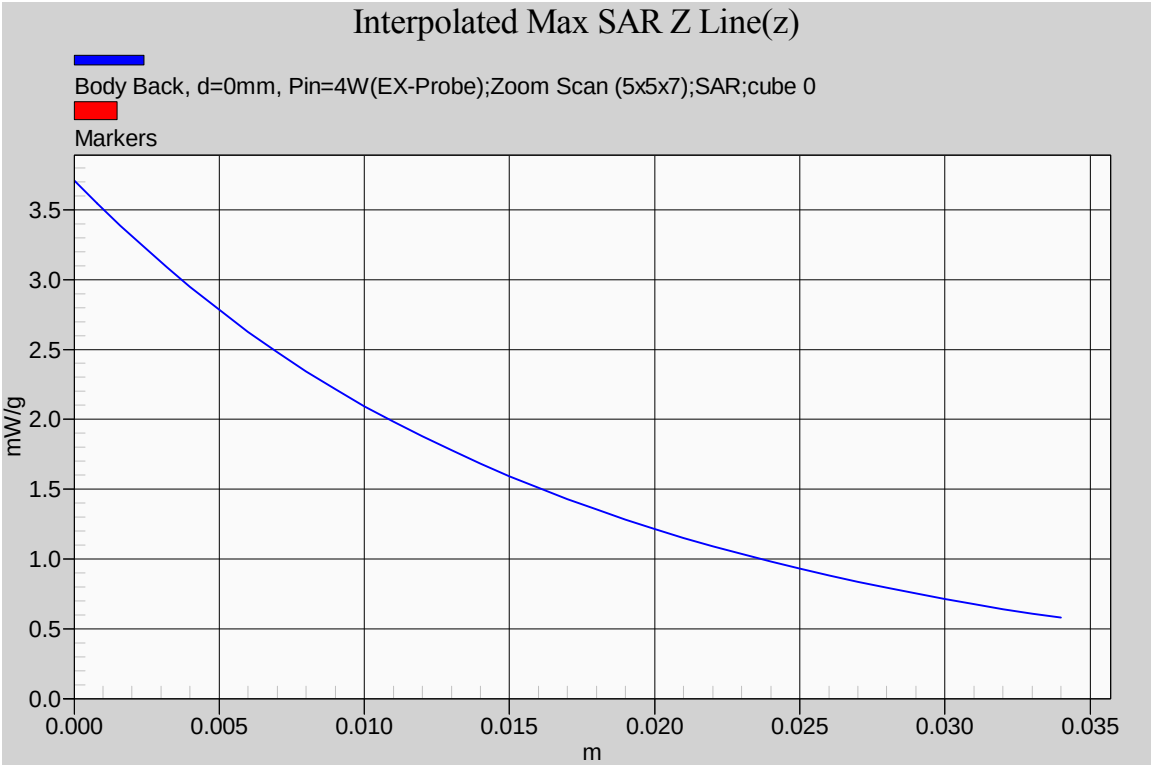
Configuration_Body_FA-SC61UC-148mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 60.912 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 3.708 W/kg
SAR(1 g) = 2.8 mW/g; SAR(10 g) = 2.08 mW/g
Maximum value of SAR (measured) = 2.945 mW/g

Configuration_Body_FA-SC61UC-148mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.405 mW/g



0 dB = 3.400mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.9. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=148mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 440 MHz; #47

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(148mm)_Body_440MHz(Mf).da52

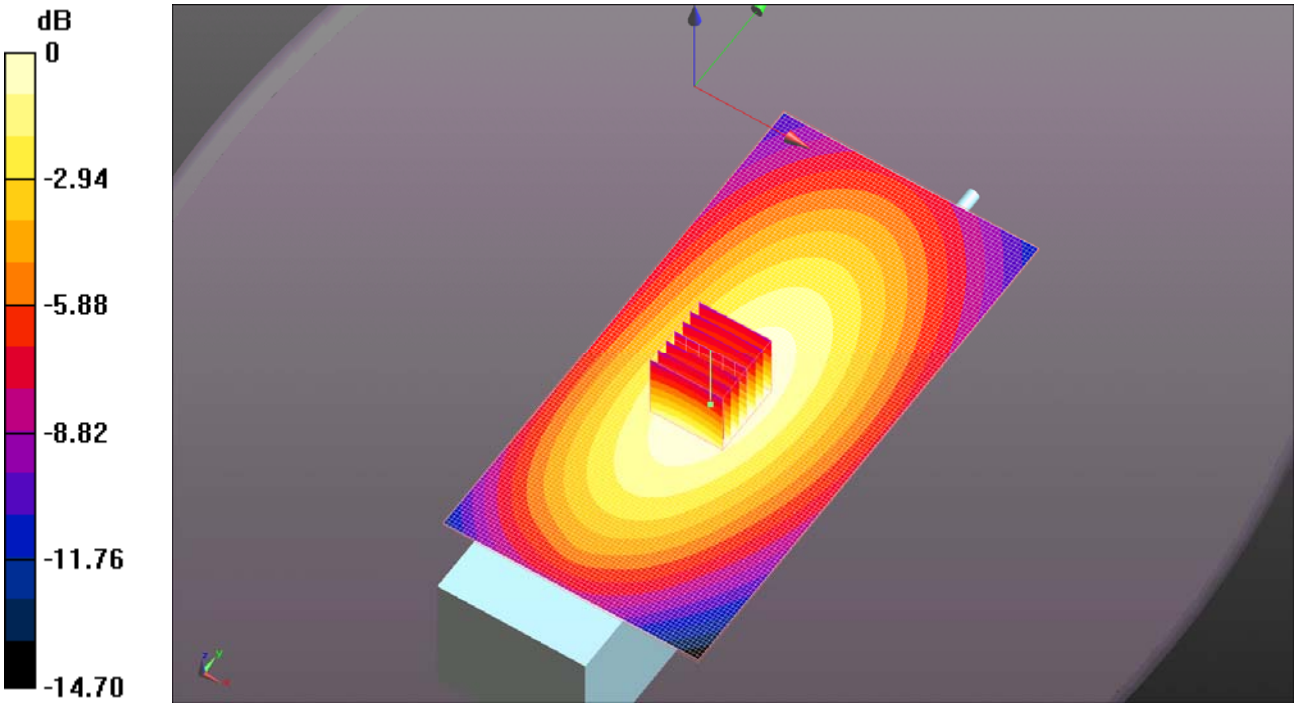
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 440 MHz; Duty Cycle: 1:1
Medium parameters used: f = 440 MHz; σ = 0.931 mho/m; ε_r = 56.945; ρ = 1000 kg/m^3
Phantom section: Flat Section

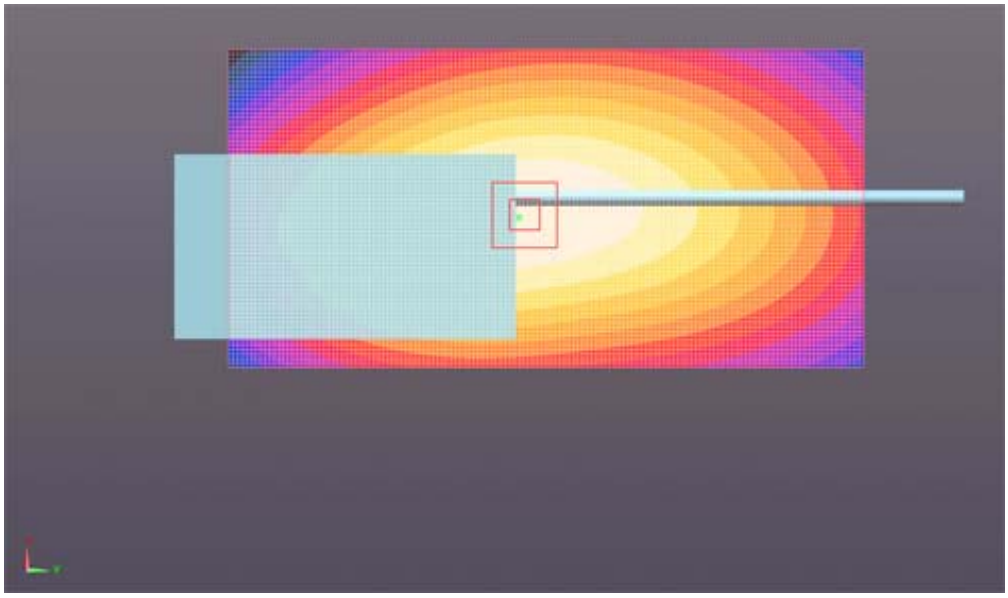
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

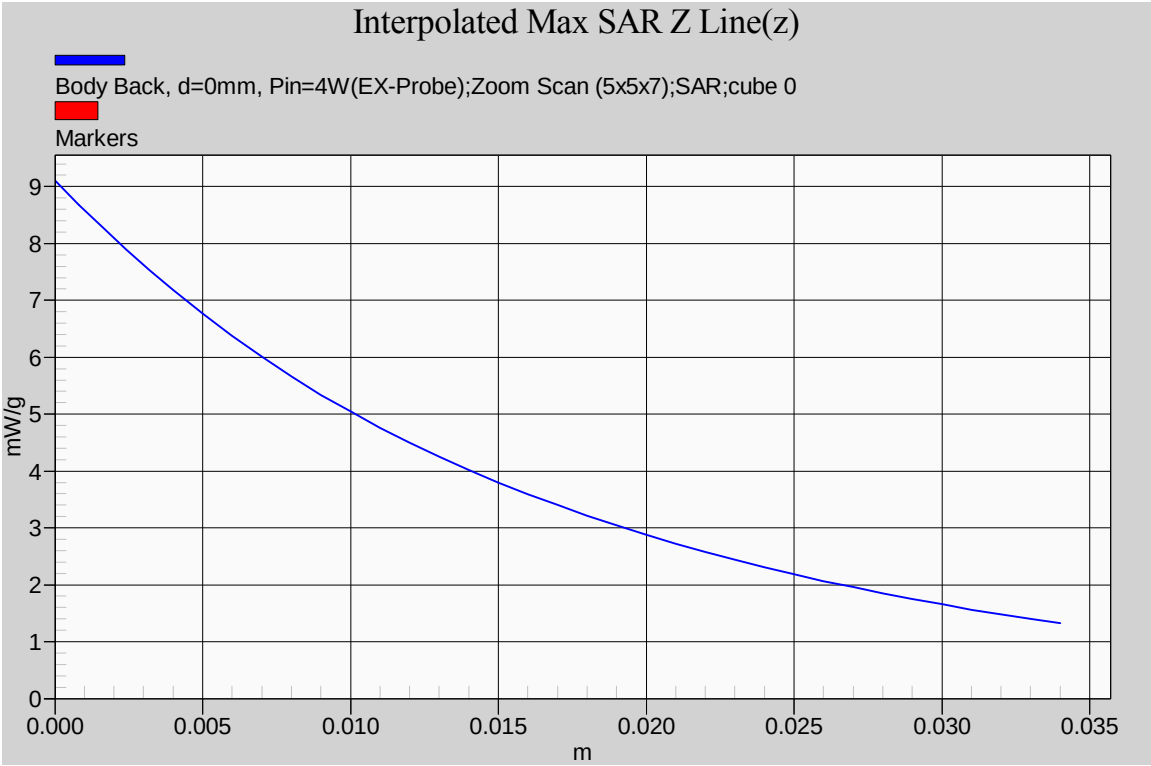
Configuration_Body_FA-SC61UC-148mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.853 V/m; Power Drift = -0.0047 dB
Peak SAR (extrapolated) = 9.102 W/kg
SAR(1 g) = 6.83 mW/g; SAR(10 g) = 5.03 mW/g
Maximum value of SAR (measured) = 7.181 mW/g

Configuration_Body_FA-SC61UC-148mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 8.339 mW/g



0 dB = 8.340mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
8
9
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.10. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=148mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 470 MHz; #48

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(148mm)_Body_470MHz(Hf).da52

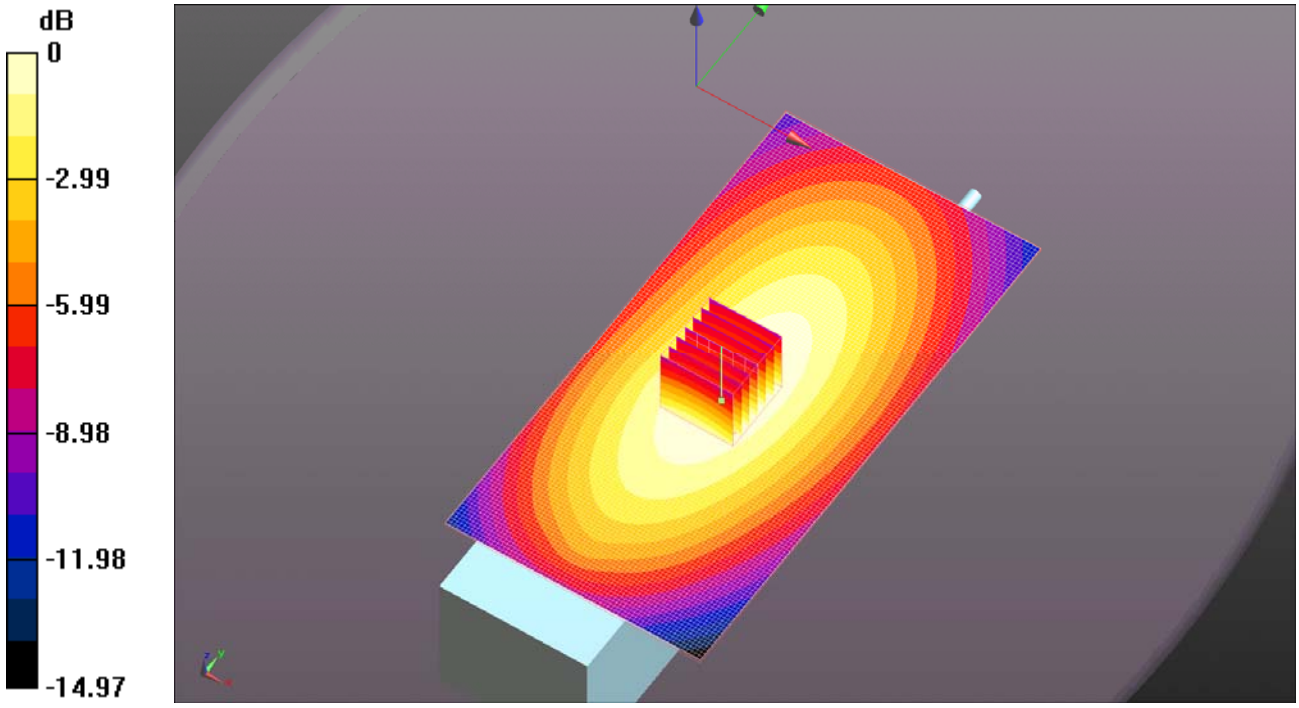
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: f = 470 MHz; σ = 0.962 mho/m; ε_r = 56.443; ρ = 1000 kg/m^3
Phantom section: Flat Section

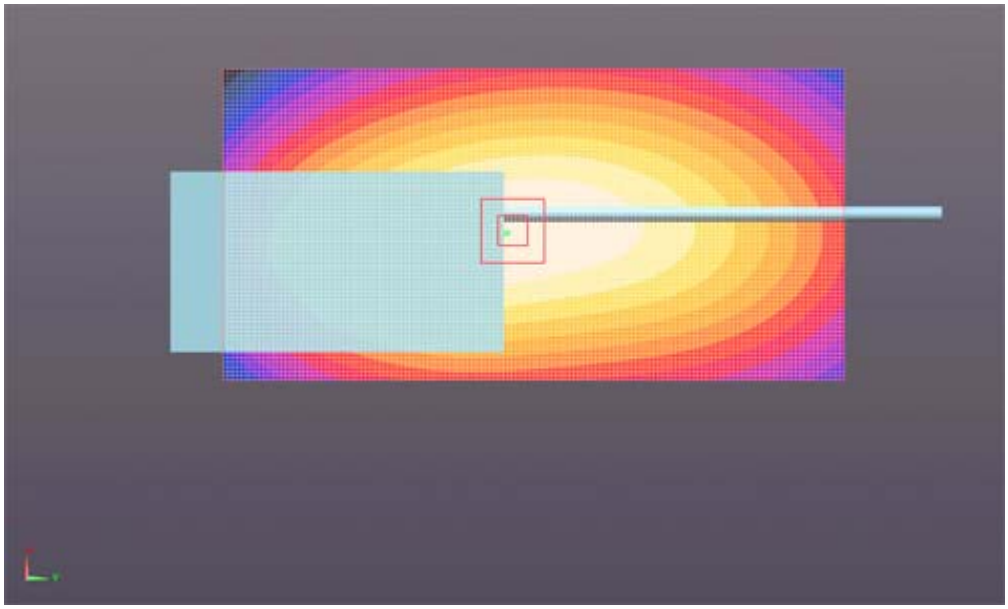
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

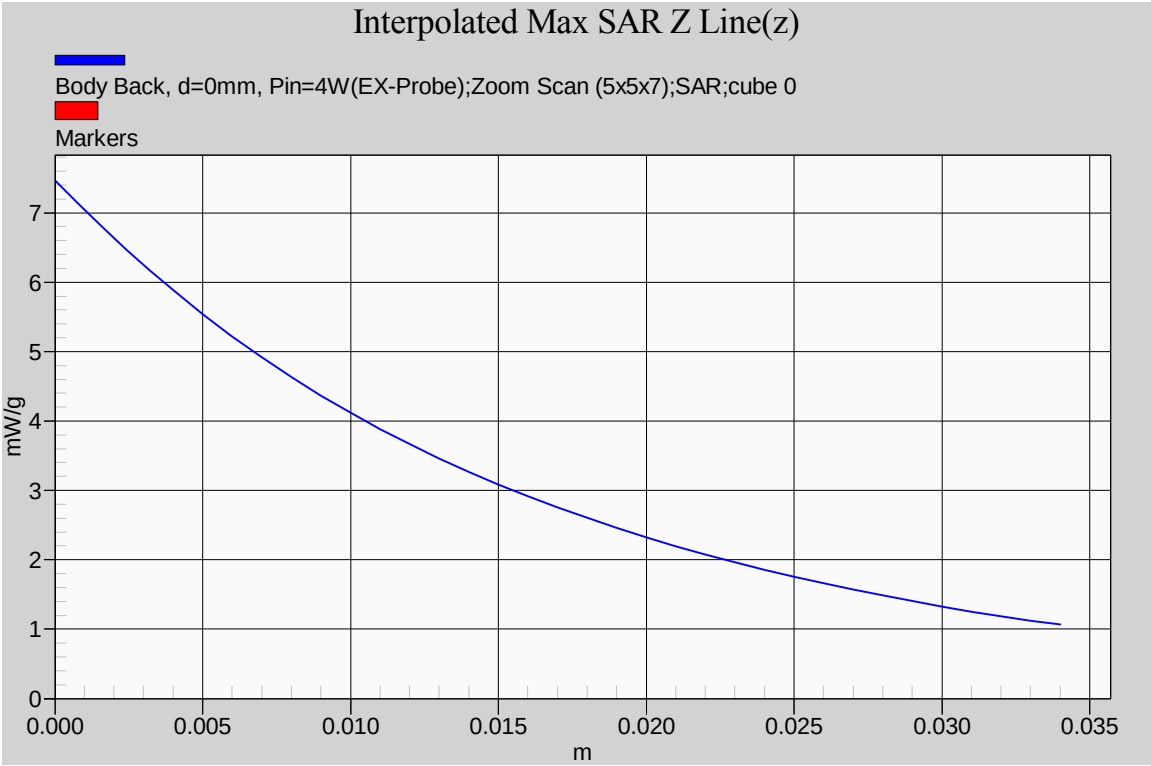
Configuration_Body_FA-SC61UC-148mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 82.466 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 7.462 W/kg
SAR(1 g) = 5.58 mW/g; SAR(10 g) = 4.1 mW/g
Maximum value of SAR (measured) = 5.883 mW/g

Configuration_Body_FA-SC61UC-148mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 6.904 mW/g



0 dB = 6.900mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.11. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=142mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 400 MHz; #50

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(142mm)_Body_400MHz(Lf).da52

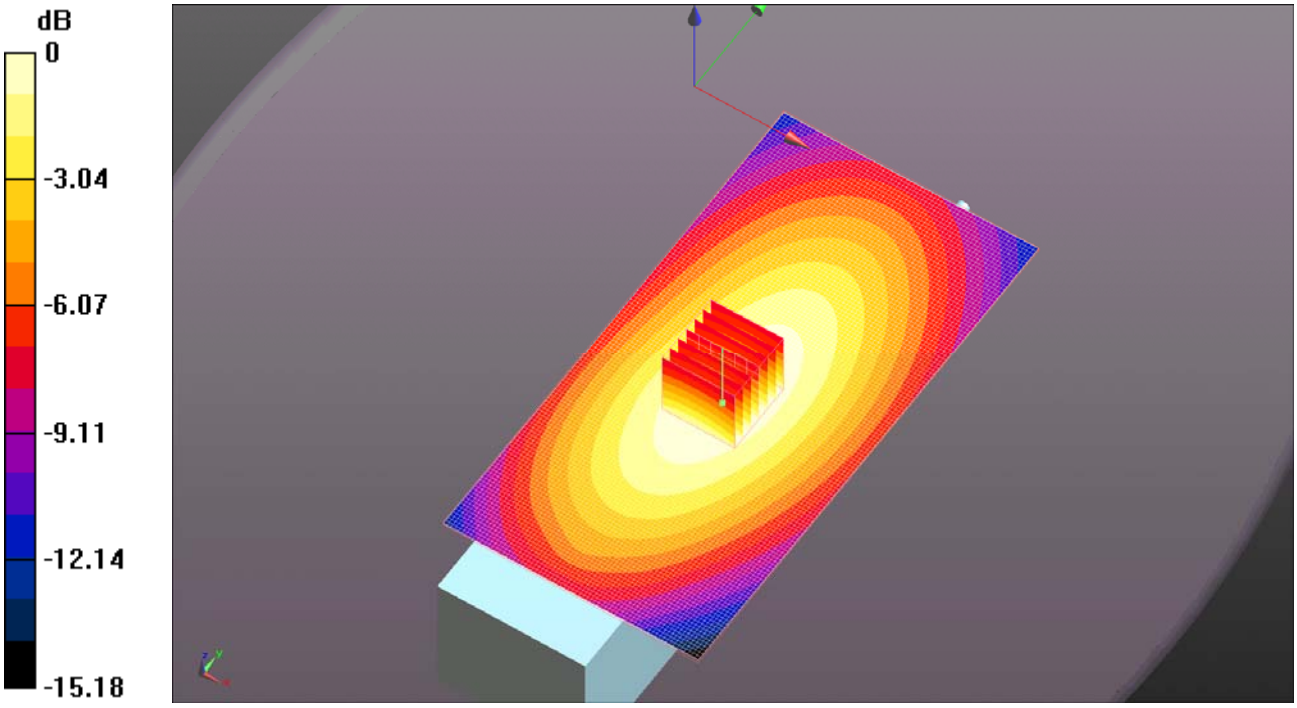
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 400 MHz; Duty Cycle: 1:1
Medium parameters used: f = 400 MHz; σ = 0.902 mho/m; ε_r = 57.686; ρ = 1000 kg/m^3
Phantom section: Flat Section

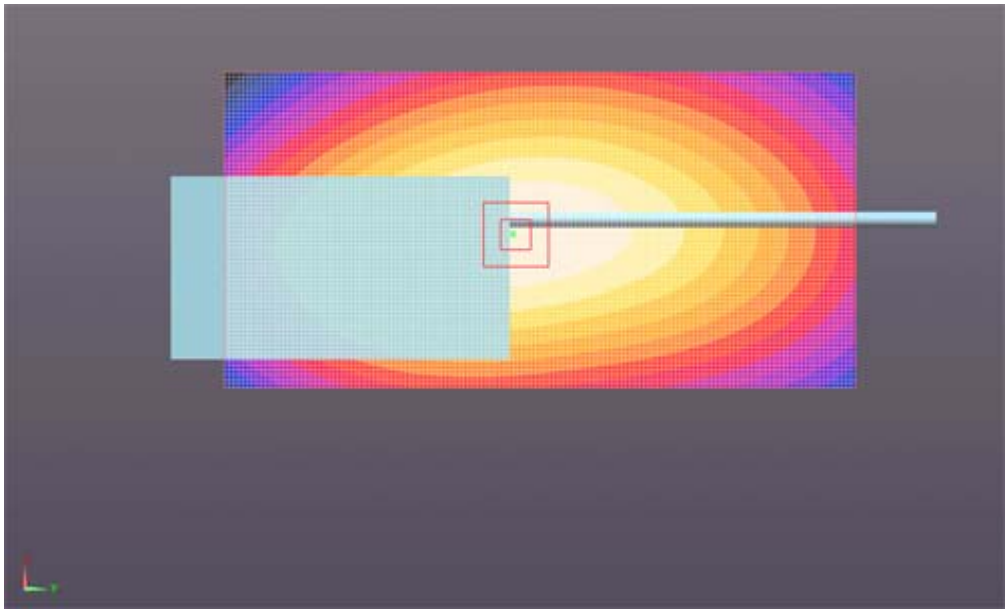
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

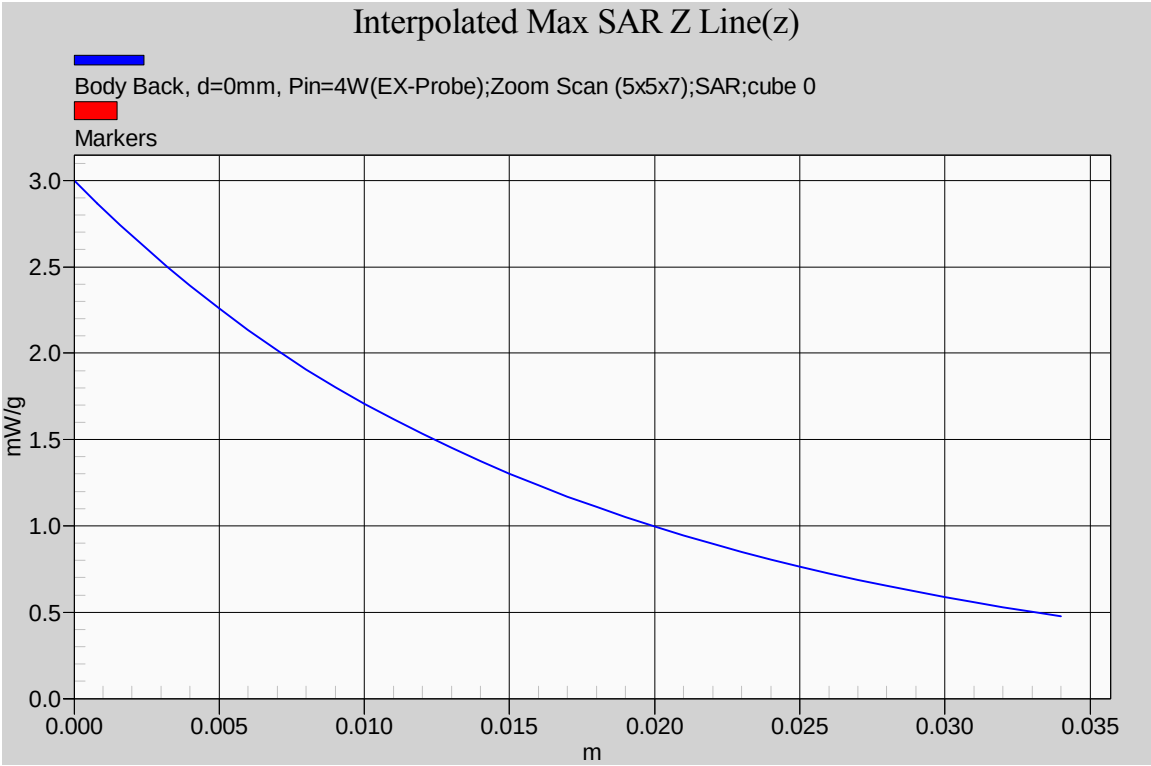
Configuration_Body_FA-SC61UC-142mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.591 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 2.999 W/kg
SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.69 mW/g
Maximum value of SAR (measured) = 2.394 mW/g

Configuration_Body_FA-SC61UC-142mm_Lf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.777 mW/g



0 dB = 2.780mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
3.0
2.5
2.0
1.5
1.0
0.5
0.0
mW/g
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.12. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=142mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 430 MHz; #51

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(142mm)_Body_430MHz(Mf).da52

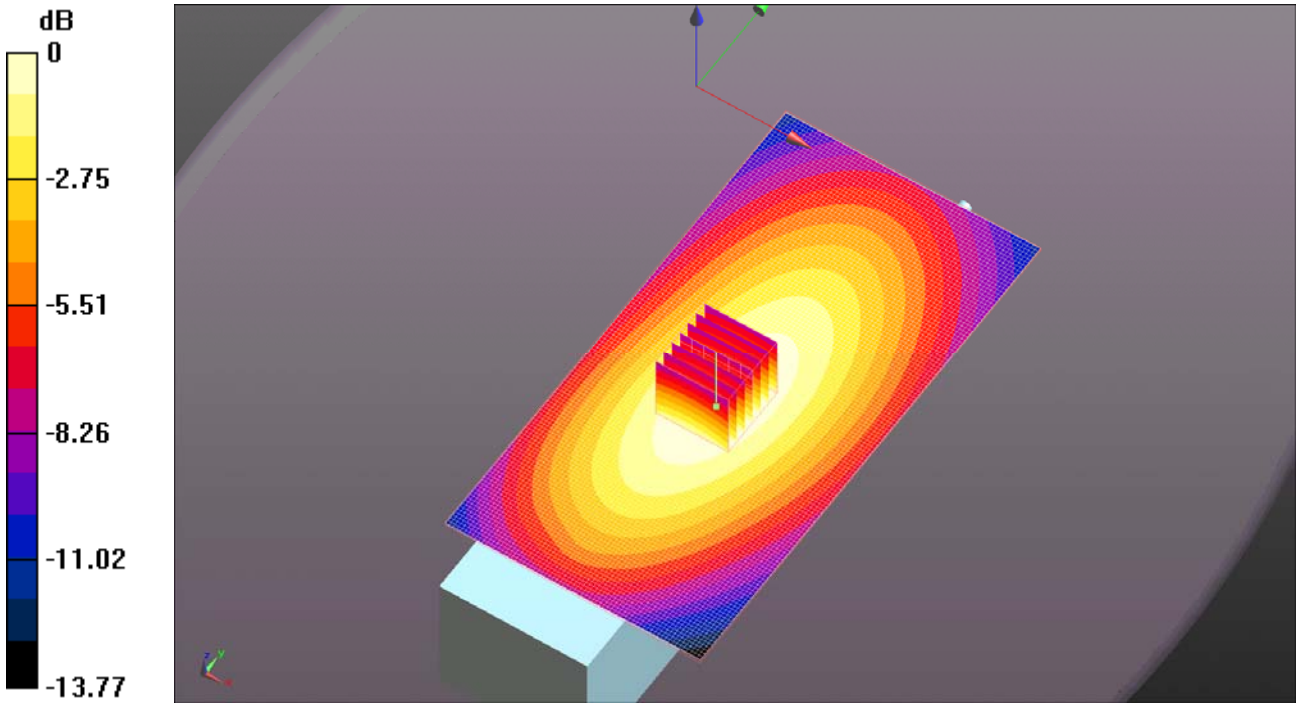
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 430 MHz; Duty Cycle: 1:1
Medium parameters used: f = 430 MHz; σ = 0.922 mho/m; ε_r = 57.153; ρ = 1000 kg/m^3
Phantom section: Flat Section

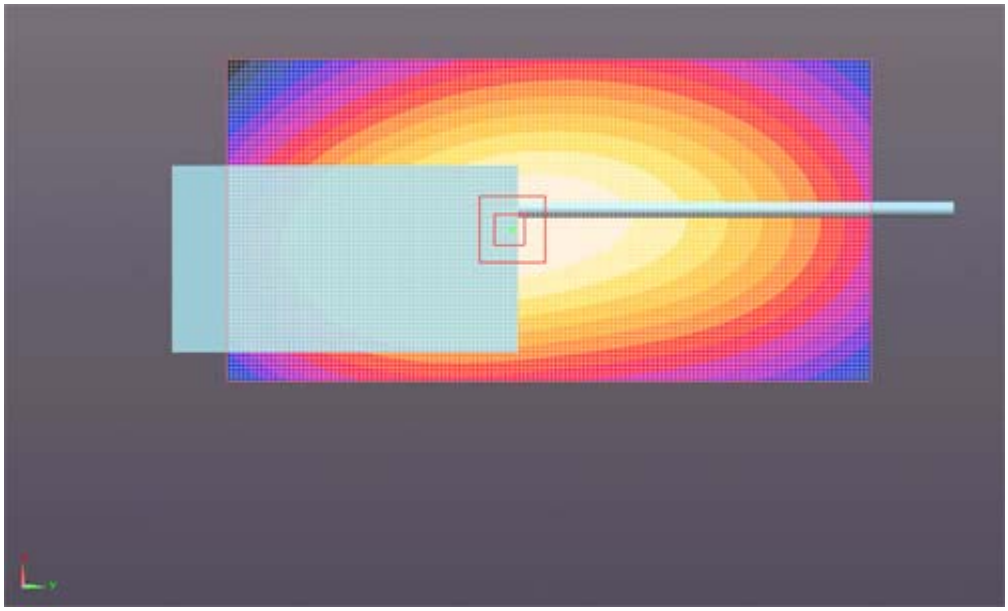
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

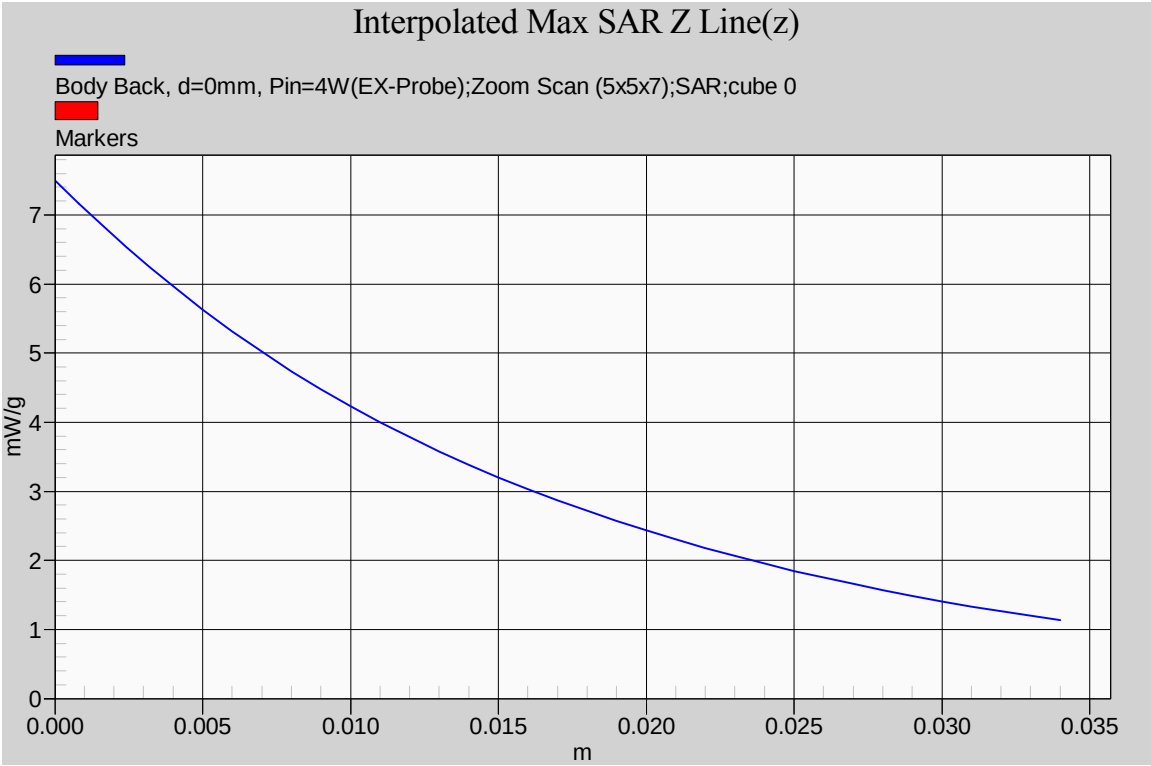
Configuration_Body_FA-SC61UC-142mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 85.203 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 7.495 W/kg
SAR(1 g) = 5.67 mW/g; SAR(10 g) = 4.2 mW/g
Maximum value of SAR (measured) = 5.967 mW/g

Configuration_Body_FA-SC61UC-142mm_Mf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 6.909 mW/g



0 dB = 6.910mW/g




Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

6.4.5.13. ¼ helical whip cut antenna (M/N: FA-SC61UC), length=142mm; Belt Belt Clip (M/N: MB-124), Speaker Microphone (M/N: HM-159L) with Tube Earphone (M/N: SP-27); 460 MHz; #52

Test Laboratory: The name of your organization
File Name: ICOM-267Q_FA-SC61UC(142mm)_Body_460MHz(Hf).da52

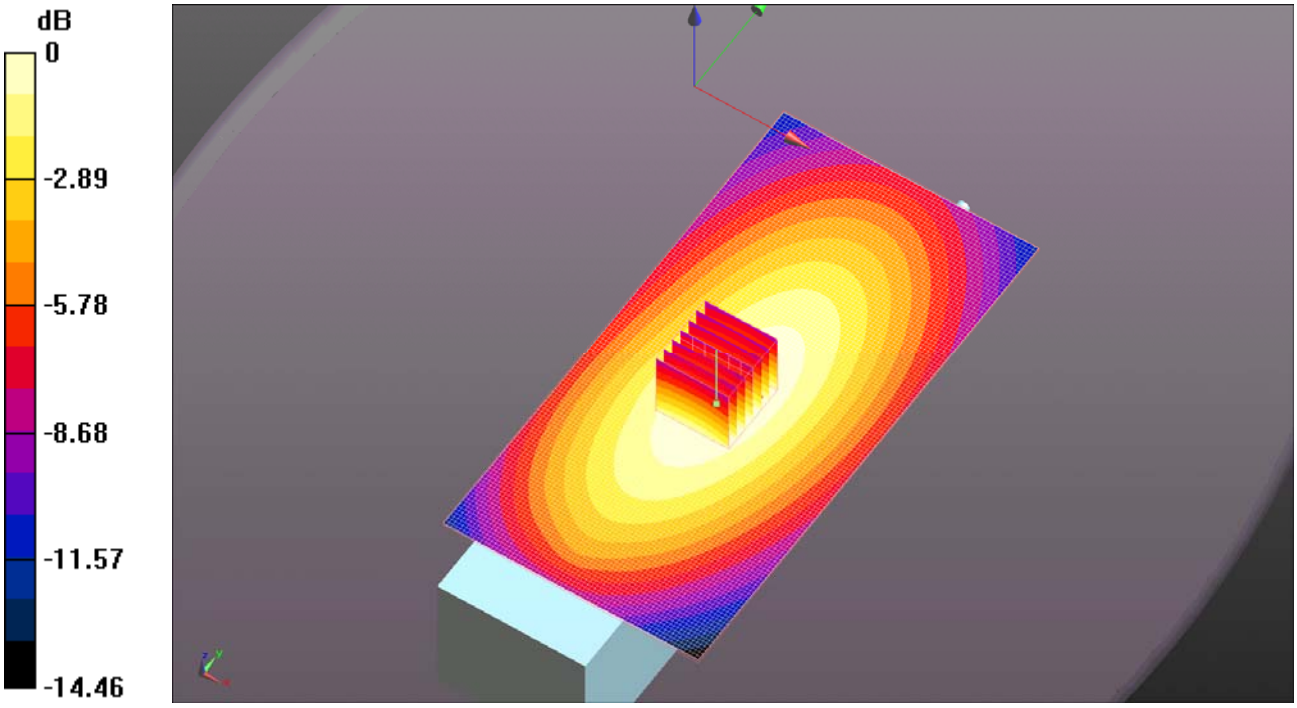
DUT: ICOM UHF Transceiver; Type: IC-F4101D; Serial: 01000201-0

Communication System: CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: f = 460 MHz; σ = 0.95 mho/m; ε_r = 56.587; ρ = 1000 kg/m^3
Phantom section: Flat Section

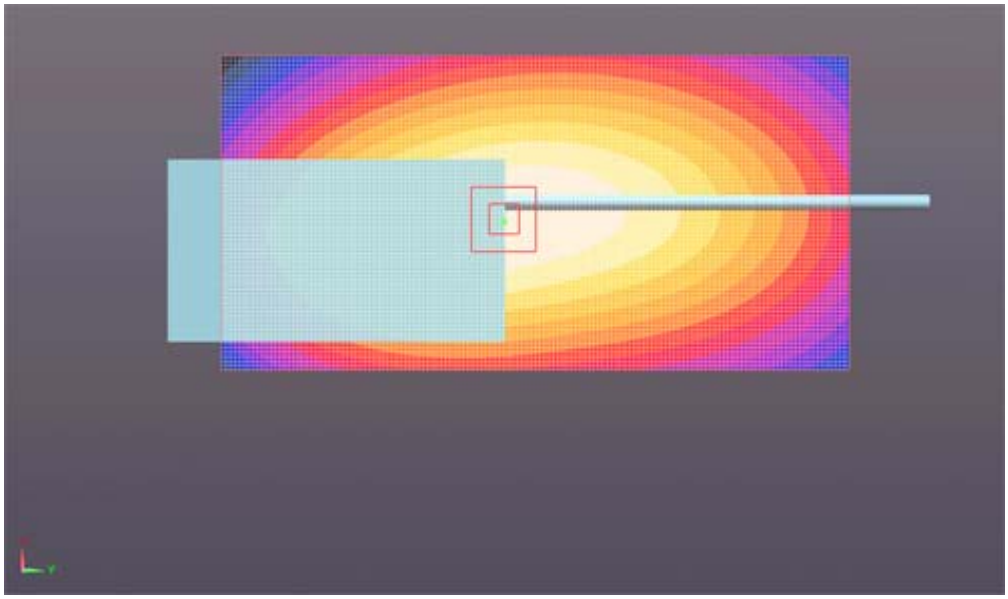
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

Configuration_Body_FA-SC61UC-142mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Zoom Scan (5x5x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.874 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 8.484 W/kg
SAR(1 g) = 6.33 mW/g; SAR(10 g) = 4.65 mW/g
Maximum value of SAR (measured) = 6.702 mW/g

Configuration_Body_FA-SC61UC-142mm_Hf/Body Back, d=0mm, Pin=4W(EX-Probe)/Area Scan (71x141x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.717 mW/g



0 dB = 7.720mW/g



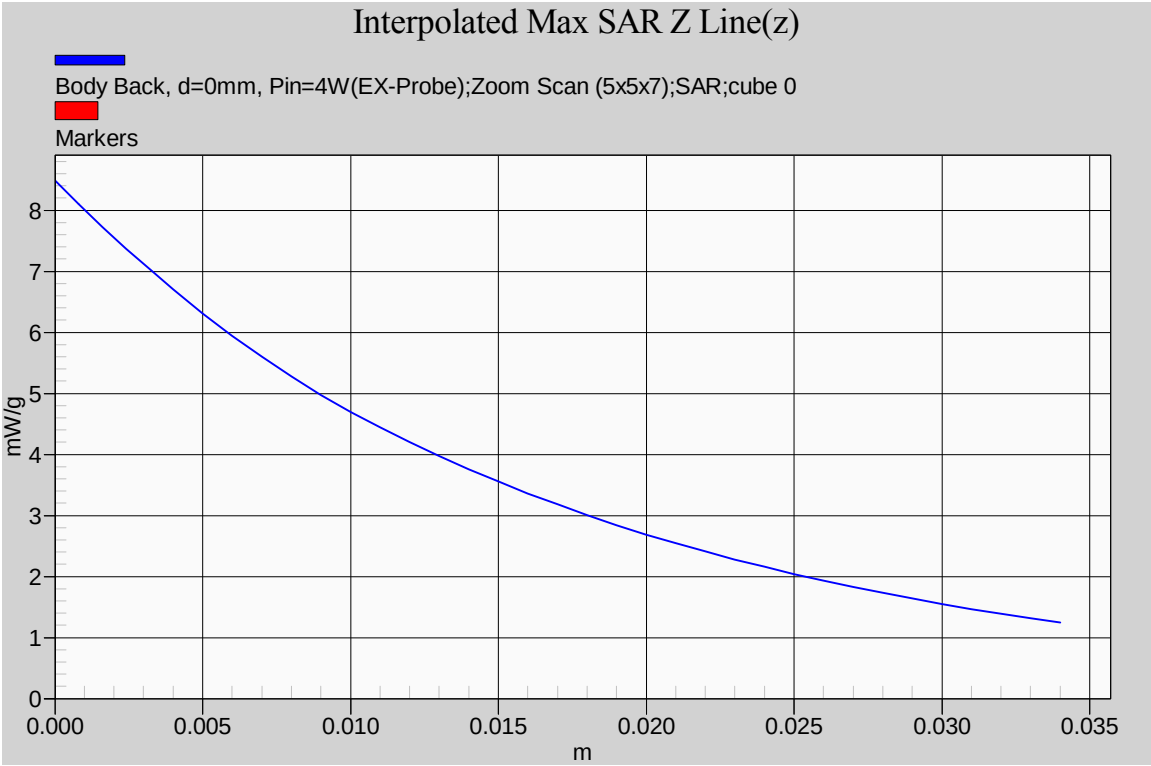
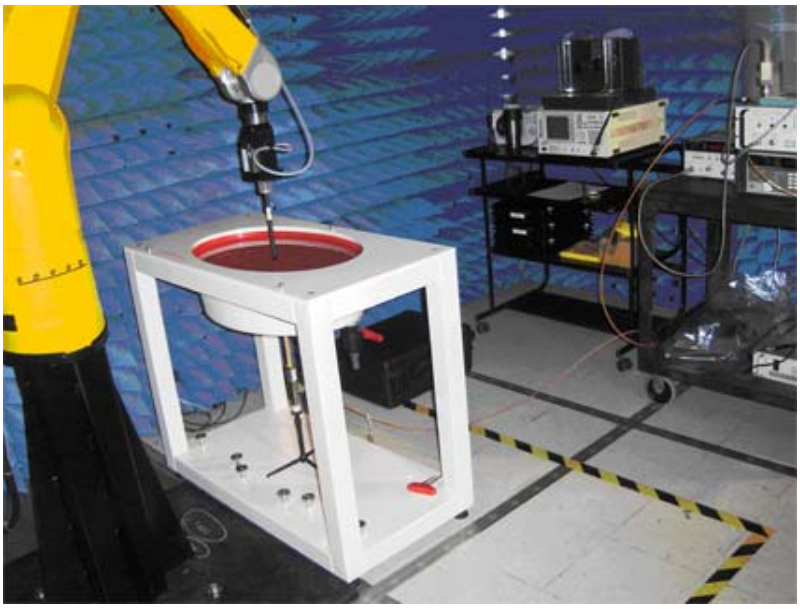
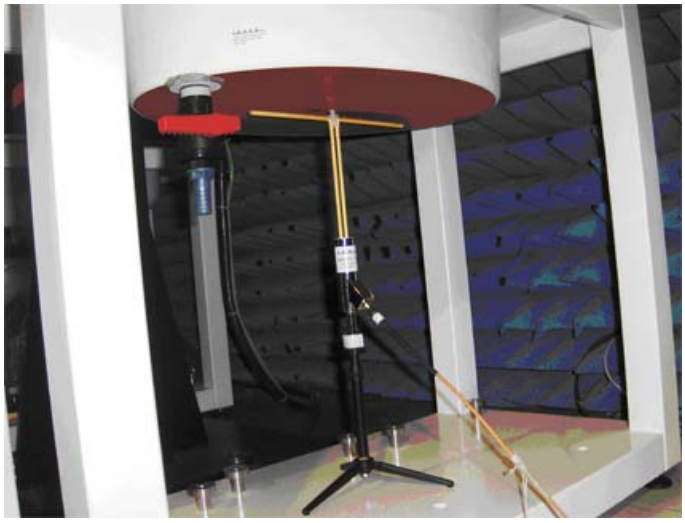

Interpolated Max SAR Z Line(z)
Body Back, d=0mm, Pin=4W(EX-Probe);Zoom Scan (5x5x7);SAR;cube 0
Markers
mW/g
0
1
2
3
4
5
6
7
8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

EXHIBIT 7. SAR MEASUREMENT SYSTEM VERIFICATION



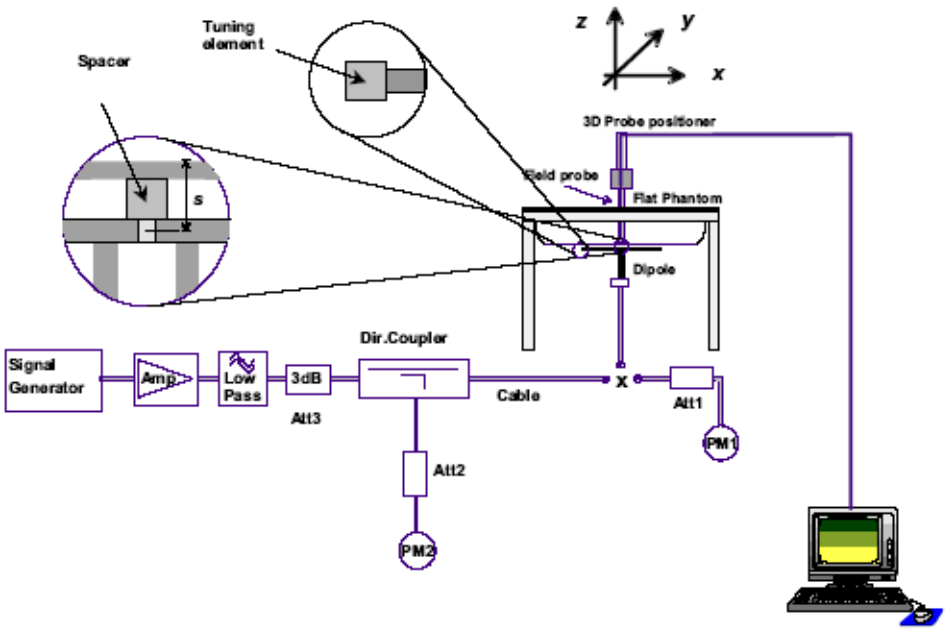
7.1. STANDARD SOURCE

A half-wave dipole is positioned below the bottom of the phantom and centered with its axis parallel to the longest side of the phantom. The distance between the liquid filled phantom bottom surface and the center of the dipole axis, *s*, is chosen as specified IEEE 1528 at the specific test frequency (i.e. 15 mm at 835 MHz). A low loss and low dielectric constant spacer is used to establish the correct distance between the top surface of the dipole and the bottom surface of the phantom.



7.2. STANDARD SOURCE INPUT POWER MEASUREMENT

The system validation is performed as shown below or in Figure 7.1 in IEEE 1528.



First the power meter PM1 (including attenuator Att1) is connected to the cable to measure the forward power at the location of the dipole connector (X). The signal generator is adjusted for the desired forward power at the dipole connector (taking into account the attenuation of Att1) as read by power meter PM2. After connecting the cable to the dipole, the signal generator is readjusted for the same reading at power meter PM2. If the signal generator does not allow adjustment in 0.01dB steps, the remaining difference at PM2 must be taken into consideration. PM3 records the reflected power from the dipole to ensure that the value is not changed from the previous value. The reflected power was verified to be at least 20dB below the forward power.

7.3. SYSTEM VALIDATION PROCEDURE

A complete 1g-averaged SAR measurement is performed. The measured 1g-averaged SAR value is normalized to a forward power of 1W to a half-wave dipole and compared with the reference SAR value for the reference dipole and flat phantom shown in columns 2 and 3 of Table 7.1 in IEEE 1528.

7.4. VERIFICATION RESULTS

*7.4.1. Reference SAR values at 450 MHz**

	Head Tissue	Body Tissue
Reference SAR_{1g} [W/Kg]	**4.58**	**4.69**
Reference SAR_{peak} [W/Kg]	**6.75**	**6.82**
Measured SAR_{1g} [W/Kg]	4.64	4.6
Measured SAR_{peak} [W/Kg]	6.92	6.90

* SAR values in 7.4.1 are normalized to a forward power of 1 W.

7.4.2. Verification at 450 MHz

7.4.2.1. Verification for 450MHz Head Tissue:

Test Laboratory: The name of your organization
File Name: Sys.Per.Check-D450MHz_ICOM-267Q_Head.da52

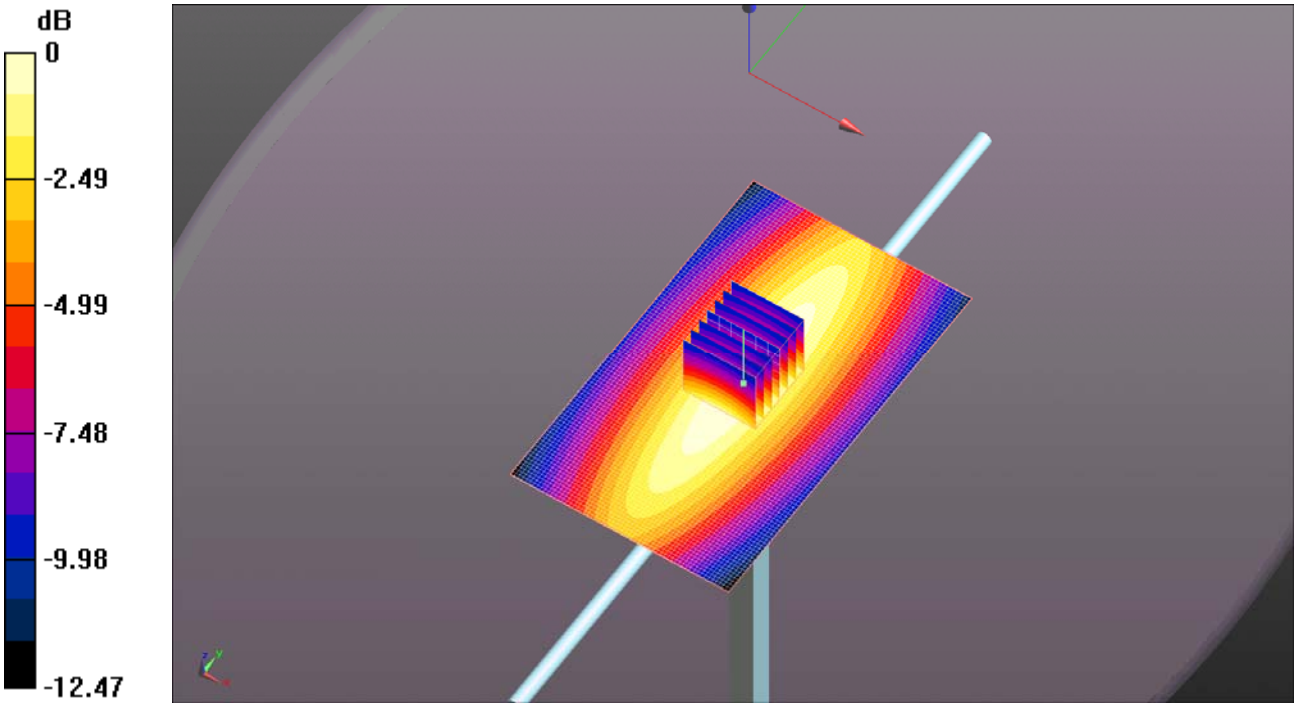
DUT: Dipole 450 MHz D450V3; Type: SA AAD 045 CA; Serial: 1063

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: f = 450 MHz; σ = 0.875 mho/m; ε_r = 43.529; ρ = 1000 kg/m^3
Phantom section: Flat Section

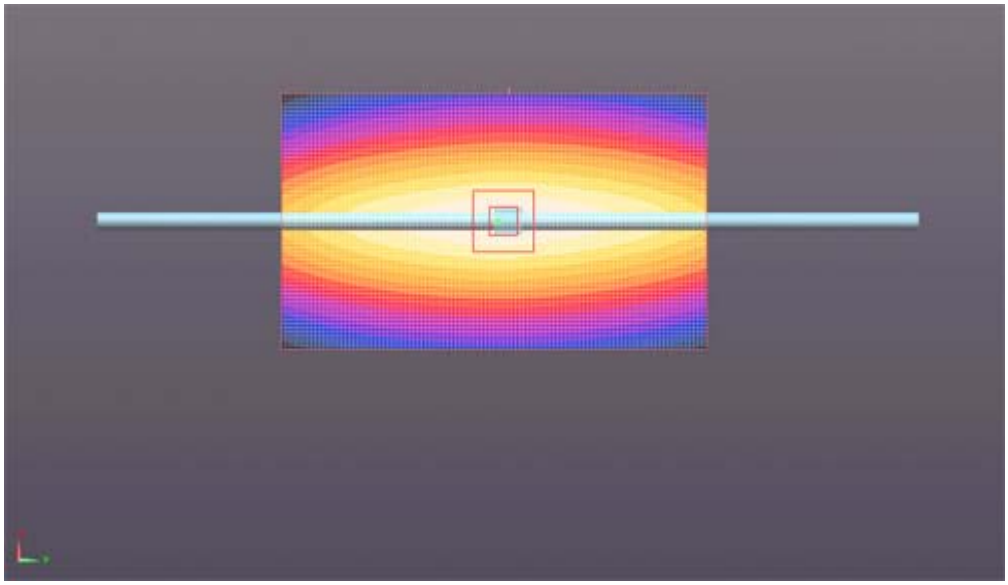
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.2, 9.2, 9.2); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

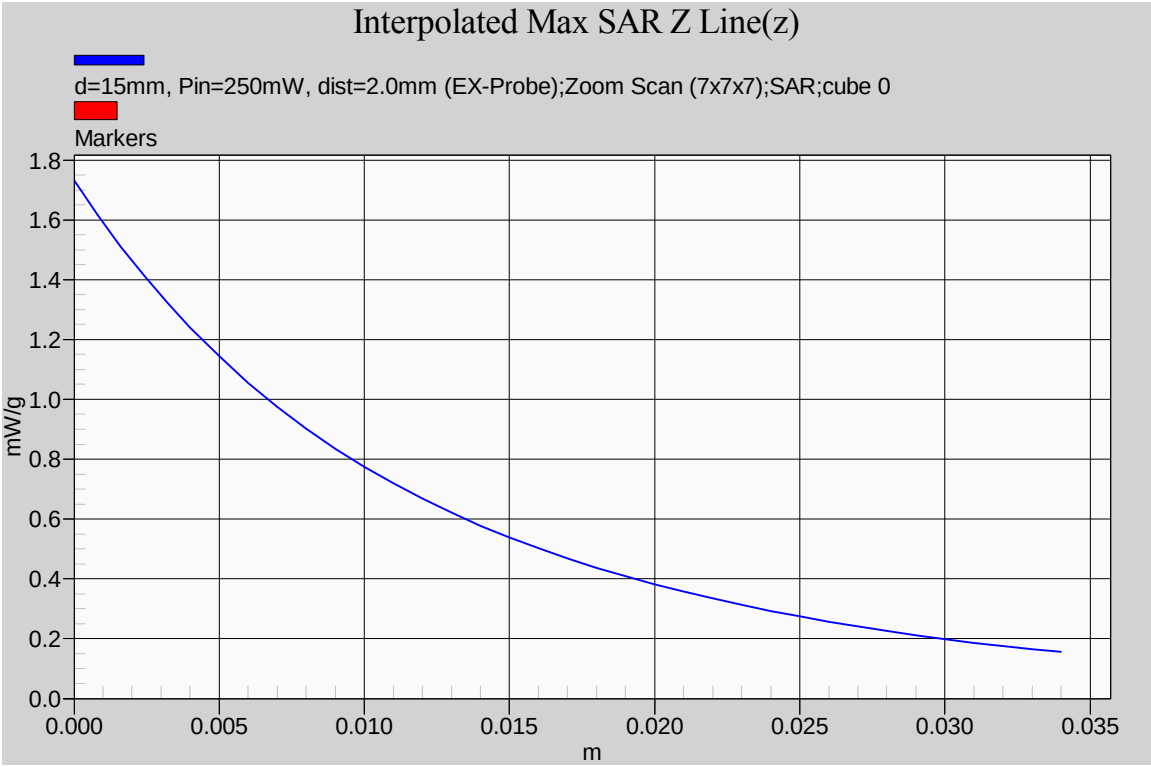
System Verification Configuration for 450MHz_Head/d=15mm, Pin=250mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 42.428 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.730 W/kg
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.771 mW/g
Maximum value of SAR (measured) = 1.240 mW/g

System Verification Configuration for 450MHz_Head/d=15mm, Pin=250mW, dist=2.0mm (EX-Probe)/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.472 mW/g



0 dB = 1.470mW/g




Interpolated Max SAR Z Line(z)
d=15mm, Pin=250mW, dist=2.0mm (EX-Probe);Zoom Scan (7x7x7);SAR;cube 0
Markers
mW/g
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

7.4.2.2. Verification for 450MHz Body Tissue:

Test Laboratory: The name of your organization
File Name: Sys.Per.Check-D450MHz_ICOM-267Q_Body.da52

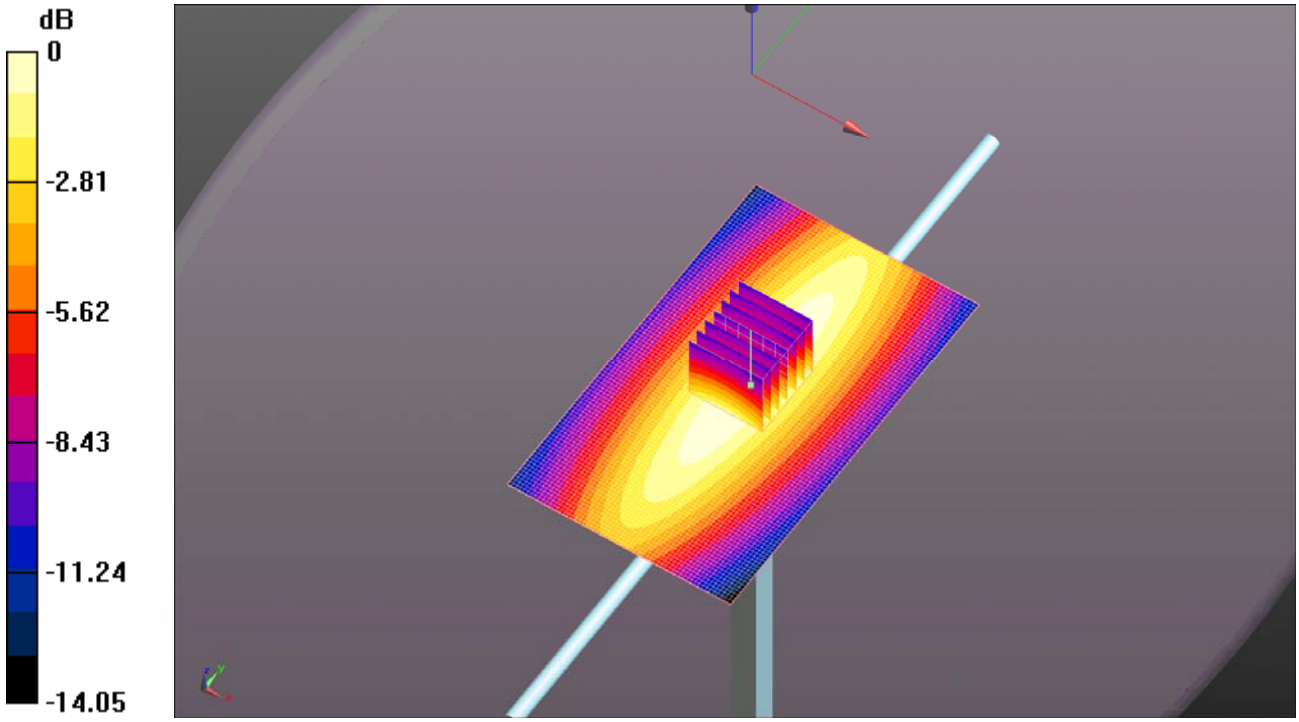
DUT: Dipole 450 MHz D450V3; Type: SA AAD 045 CA; Serial: 1063

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: f = 450 MHz; σ = 0.941 mho/m; ε_r = 56.718; ρ = 1000 kg/m^3
Phantom section: Flat Section

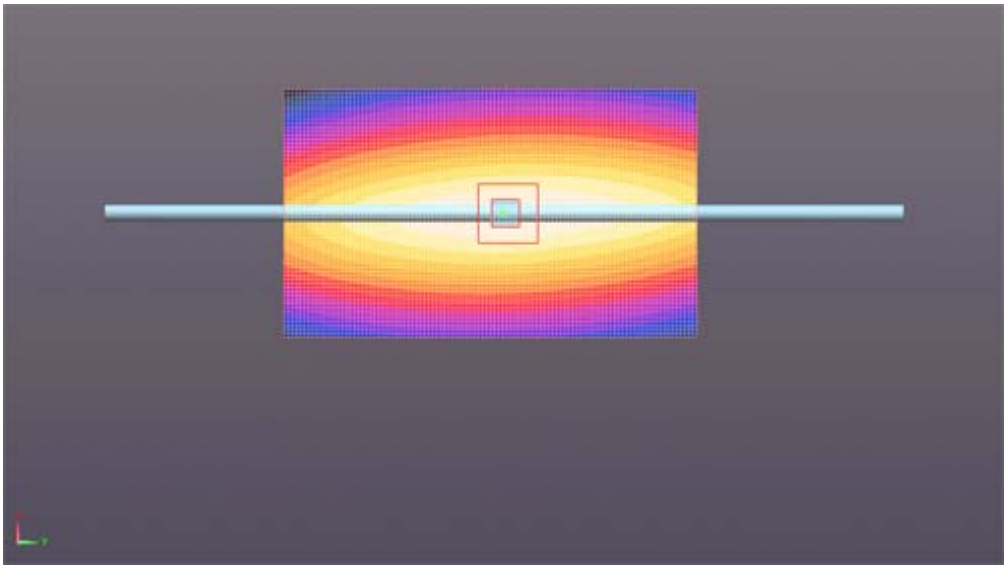
DASY5 Configuration:
- Probe: EX3DV4 - SN3673; ConvF(9.8, 9.8, 9.8); Calibrated: 2/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 2/17/2009
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.4.2 (2595)

System Verification Configuration for 450MHz Body/d=15mm, Pin=250mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 40.030 V/m; Power Drift = 0.0018 dB
Peak SAR (extrapolated) = 1.726 W/kg
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.772 mW/g
Maximum value of SAR (measured) = 1.234 mW/g

System Verification Configuration for 450MHz Body/d=15mm, Pin=250mW, dist=2.0mm (EX-Probe)/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.487 mW/g



0 dB = 1.490mW/g



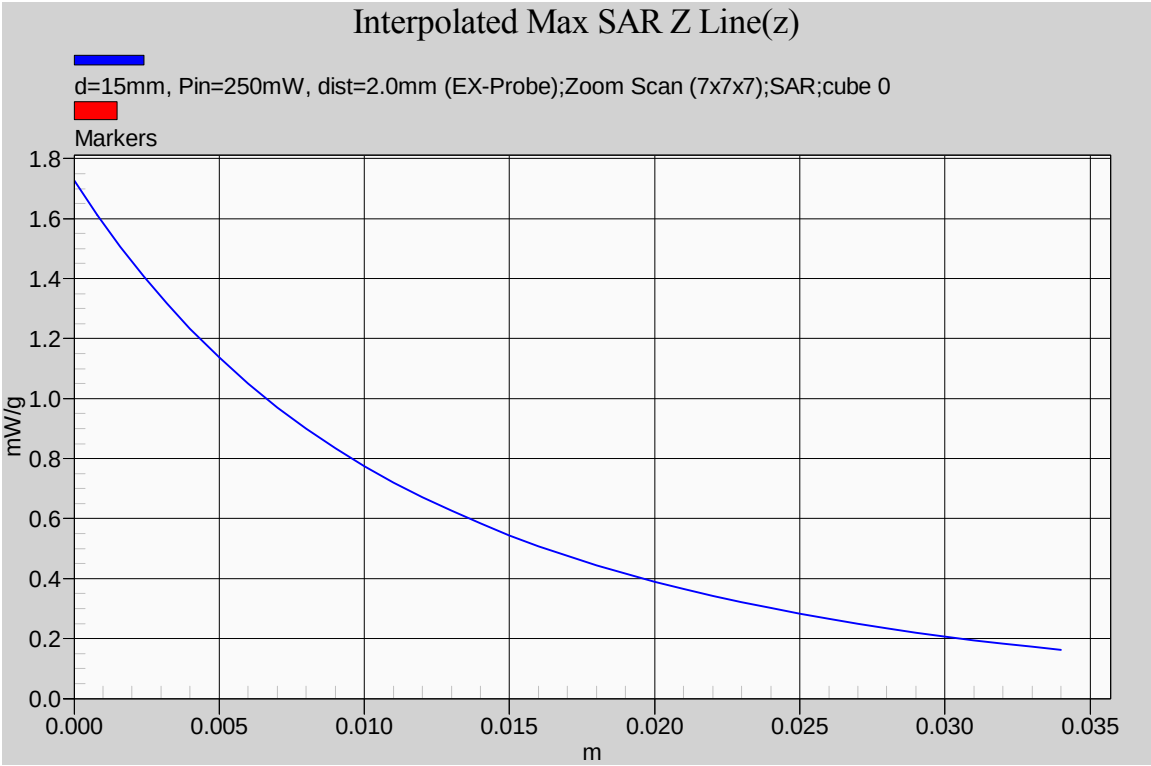
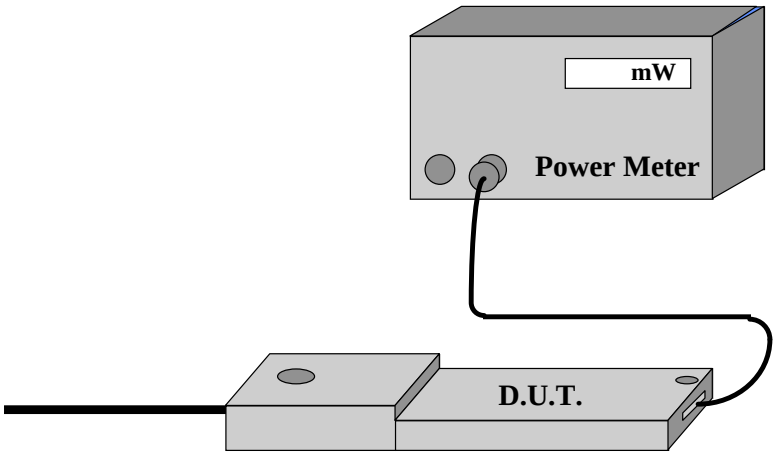

Interpolated Max SAR Z Line(z)
d=15mm, Pin=250mW, dist=2.0mm (EX-Probe);Zoom Scan (7x7x7);SAR;cube 0
Markers
mW/g
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

EXHIBIT 8. D.U.T. POWER MEASUREMENT

Whenever possible, a conducted power measurement is performed. To accomplish this, we utilize a fully charged battery, a calibrated power meter and a cable adapter provided by the manufacturer. The data of the cable and related circuit losses are also provided by the manufacturer. The power measurement is then performed across the operational band and the channel with the highest output power is recorded.



Power measurement is performed before and after the SAR to verify if the battery was delivering full power at the time of testing. A difference in output power would determine a need for battery replacement and to repeat the SAR test.

8.1.1. RF conducted output power measurement

Fundamental Frequency (MHz)	Measured RF output power conducted (W)
400	3.99
415	3.96
420	3.99
430	4.06
435	4.10
440	3.99
445	4.04
450	3.98
460	3.73
470	3.78

8.1.2. SAR drift measurement

The local SAR was measured at the arbitrary location in the vicinity of the antenna fed point in the simulated tissue at 415 MHz during the period of 30 minute for rechargeable Ni-MH battery pack.

The power (SAR) drift after 30 minutes of the continuous transmission at the maximum power level was found to be less than ± 5 %.

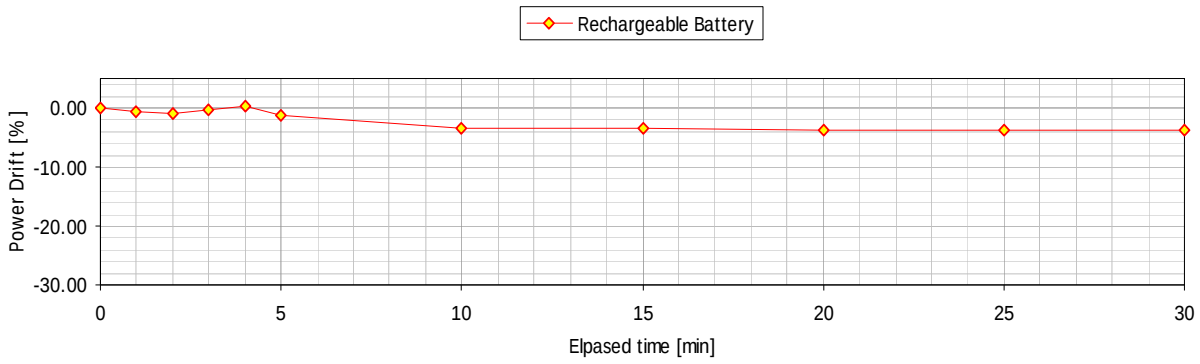


EXHIBIT 9. TISSUE DIELECTRIC PARAMETER CALIBRATION

9.1. SIMULATED TISSUE

Simulated Tissue: Suggested in a paper by George Hartsgrove and colleagues in University of Ottawa Ref.: Bioelectromagnetics 8:29-36 (1987)

Ingredient	Quantity
Water	40.4 %
Sugar	56.0 %
Salt	2.5 %
HEC	1.0 %
Bactericide	0.1 %

Table 9.1 Example of composition of simulated tissue

This simulated tissue is mainly composed of water, sugar and salt. At higher frequencies, in order to achieve the proper conductivity, the solution does not contain salt. Also, at these frequencies, D.I. water and alcohol is preferred.

Target Frequency (MHz)	Head		Body	
	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 Kg/m^{3*})

[*] The actual mass density of the equivalent tissue varies based on the composition of the tissue from 990 Kg/m^3 to 1,300 Kg/m^3.

9.2. MEASUREMENT OF ELECTRICAL CHARACTERISTICS OF SIMULATED TISSUE

HP Dielectric Strength Probe System (open-ended coaxial transmission-line probe/sensor) was used.

9.2.1. Equipment set-up

The equipment consists of a probe connected to one port of a vector network analyzer. The probe is an open-ended coaxial line, as shown in Figure 9.2.1.1. Cylindrical coordinates (ρ, ϕ, z) are used where ρ is the radial distance from the axis, ϕ is the angular displacement around the axis, z is the displacement along the axis, a is the inner conductor radius, and b is the outer conductor inner radius.

The sample holder is a non-metallic container that is large compared with the size of the probe immersed in it. A probe with an outer diameter b of 2 to 4 mm is suitable for the measurement of tissue-equivalent materials in the 300 MHz to 3 GHz frequency range. This probe size is commensurate with sample volumes of 50 cc or higher. Larger probes of up to 7 mm outer diameter b may be used with larger sample volumes. A flange is typically included to better represent the infinite ground-plane assumption used in admittance calculations.

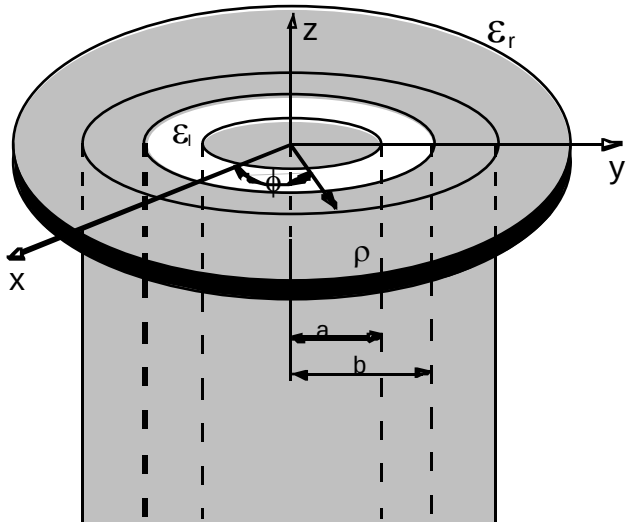


Figure 9.2.1. An open-ended coaxial probe with inner and outer radii a and b, respectively

The accuracy of the short-circuit measurement should be verified for each calibration at a number of frequencies. A short circuit can be achieved by gently pressing a piece of aluminum foil against the open end. For best electrical contact, the probe end should be flat and free of oxidation. Larger the sensors generally have better foil short-circuit repeatability. It is possible to obtain good contact with some commercial 4.6 mm probes using the metal-disk short-circuit supplied with the kit. For best repeatability, it may be necessary to press the disk by hand.

The network analyzer is configured to measure the magnitude and phase of the admittance. A one-port reflection calibration is performed at the plane of the probe by placing materials for which the reflection coefficient can be calculated in contact with the probe. Three standards are needed for the calibration, typically a short circuit, air, and de-ionized water at a well-defined temperature (other reference liquids such as methanol or ethanol may be used for calibration). The calibration is a key part of the measurement procedure, and it is therefore important to ensure that it

has been performed correctly. It can be checked by re-measuring the short circuit to ensure that a reflection coefficient of Γ = -1.0 (linear units) is obtained consistently.

9.2.2. Measurement procedure

a) Configure and calibrate the network analyzer and probe system.

b) Place the sample in a non-metallic container and immerse the probe. A fixture or clamp is recommended to stabilize the probe, mounted such that the probe face is at an angle with respect to the liquid surface to minimize trapped air bubbles beneath the flange.

c) Measure the complex admittance with respect to the probe aperture.

d) Compute the complex relative permittivity $\varepsilon_r = \varepsilon_r' - j\sigma/\omega\varepsilon_0$.

9.3. SIMULATED TISSUE MEASUREMENT RESULTS

Tissue calibration type	HP Dielectric Strength Probe System (M/N: 85070C)	
Tissue calibration date [MM/DD/YYYY]	02/23/2011	02/23/2011
Tissue calibrated by	Steven Lu	Steven Lu
Room temperature [°C]	23.3	23.3
Room humidity [%]	40	40
Simulated tissue temperature [°C]	19.7	19.7
Tissue calibration frequency [MHz]	450	450
Tissue Type	Brain	Muscle
Target conductivity [S/m]	0.87	0.94
Target dielectric constant	43.5	56.7
Composition (by weight) [%]	DI Water (38.56 %) Sugar (56.32 %) Salt (3.95 %) HEC (0.25 %) Bactericide (0.92 %)	DI Water (51.16 %) Sugar (46.78 %) Salt (1.49 %) HEC (0.13 %) Bactericide (0.44 %)
Measured conductivity [S/m]	0.88(0.6%)	0.94(0.1%)
Measured dielectric constant	43.5(0.1%)	56.7(-0.0 %)
Penetration depth (plane wave excitation) [mm]	42.8	44.5

9.3.1. 450 MHz Brain Tissue

	Meas. after 5min			DI Water at 20°C			Init. Meas.		
Frequency [MHz]	**ε'**	**ε"**	**σ [S/m]**	**ε'**	**ε"**	**σ [S/m]**	**ε'**	**ε"**	**σ [S/m]**
415.000	44.4032	36.6613	0.85	80.4630	2.1301	0.05	44.4308	36.8497	0.85
450.000	43.5289	34.9519	0.88	80.5110	2.2899	0.06	43.5448	35.1750	0.88
485.000	42.7817	33.7823	0.91	80.4562	2.4641	0.07	42.8213	33.9163	0.92

9.3.2. 450 MHz Muscle Tissue

	Meas. after 5min			DI Water at 20°C			Init. Meas.		
Frequency [MHz]	**ε'**	**ε"**	**σ [S/m]**	**ε'**	**ε"**	**σ [S/m]**	**ε'**	**ε"**	**σ [S/m]**
415.000	57.3559	39.4891	0.91	80.4630	2.1301	0.05	57.4125	39.4062	0.91
450.000	56.7185	37.6033	0.94	80.5110	2.2899	0.06	56.7589	37.5184	0.94
485.000	56.2418	36.2001	0.98	80.4562	2.4641	0.07	56.2330	36.0764	0.97

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

EXHIBIT 10. SAR MEASUREMENT UNCERTAINTY

10.1. MEASUREMENT UNCERTAINTY EVALUATION FOR SAR TEST

Error Description	Uncertainty value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) v_{eff}
Measurement System								
Probe Calibration	±5.5 %	N	1	1	1	±5.5 %	±5.5 %	∞
Axial Isotropy	±4.7 %	R	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
Hemispherical Isotropy	±9.6 %	R	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	∞
Boundary Effects	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Linearity	±4.7 %	R	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
System Detection Limits	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Readout Electronics	±0.3 %	R	$\sqrt{3}$	1	1	±0.3 %	±0.3 %	∞
Response Time	±0.8 %	N	1	1	1	±0.5 %	±0.5 %	∞
Integration Time	±2.6 %	R	$\sqrt{3}$	1	1	±1.5 %	±1.5 %	∞
RF Ambient Noise	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
RF Ambient Reflections	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Probe Positioner	±0.4 %	R	$\sqrt{3}$	1	1	±0.2 %	±0.2 %	∞
Probe Positioning	±2.9 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Max. SAR Eval.	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Test Sample Related								
Device Positioning	±2.9 %	N	1	1	1	±2.9 %	±2.9 %	145
Device Holder	±3.6 %	N	1	1	1	±3.6 %	±3.6 %	5
Power Drift	±5.0 %	R	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
Phantom and Setup								
Phantom Uncertainty	±4.0 %	R	$\sqrt{3}$	1	1	±2.3 %	±2.3 %	∞
Liquid Conductivity (target)	±5.0 %	R	$\sqrt{3}$	0.64	0.43	±1.8 %	±1.2 %	∞
Liquid Conductivity (meas.)	±2.5 %	N	1	0.64	0.43	±1.6 %	±1.1 %	∞
Liquid Permittivity (target)	±5.0 %	R	$\sqrt{3}$	0.6	0.49	±1.7 %	±1.4 %	∞
Liquid Permittivity (meas.)	±2.5 %	N	1	0.6	0.49	±1.5 %	±1.2 %	∞
Combined Std. Uncertainty						±10.7 %	±10.5 %	387
Expanded STD Uncertainty						**±21.4 %**	**±21.0 %**	

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

EXHIBIT 11. ADDITIONAL TEST INSTRUMENTS LIST

Name	Type	Serial Number (SN)	Calibration Date (or Due Date)
Signal Generator	HP 8648C	3443U00391	Due Date: Dec. 16, 2011
Dipole Antenna	D450V3	1063	Feb. 02, 2009
Power Meter (HP)	HP 436A HP 436A	2347A17246 2709A27515	Due Date: Jul. 09, 2011 Due Date: Aug. 27, 2011
Directional Coupler (narda)	Model 3020A	35482	N/A
Spectrum Analyzer (ADVANTEST)	R3271	15050203	Due Date: Feb. 09, 2011
Network Analyzer (HP)	8753D	3410J02042	Due Date: June 27, 2011
RF Amplifier (RF Bay, Inc)	MPA-12-30	21100106	N/A

EXHIBIT 12. PROBE CALIBRATION CERTIFICATE

See Appendix 1.

EXHIBIT 13. VALIDATION DIPOLE CALIBRATION CERTIFICATE

See Appendix 2.