

APPENDIX A – SYSTEM VERIFICATION PLOTS

Date/Time: 06/09/2017 9:18:12 AM

Test Laboratory: Celltech Labs

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1068; Calibrated: 04/21/2015
Program Name: SPC 450B

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

Body d=15mm Pin=250mW, TS=[1.008][1.12][1.232]/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.15 mW/g

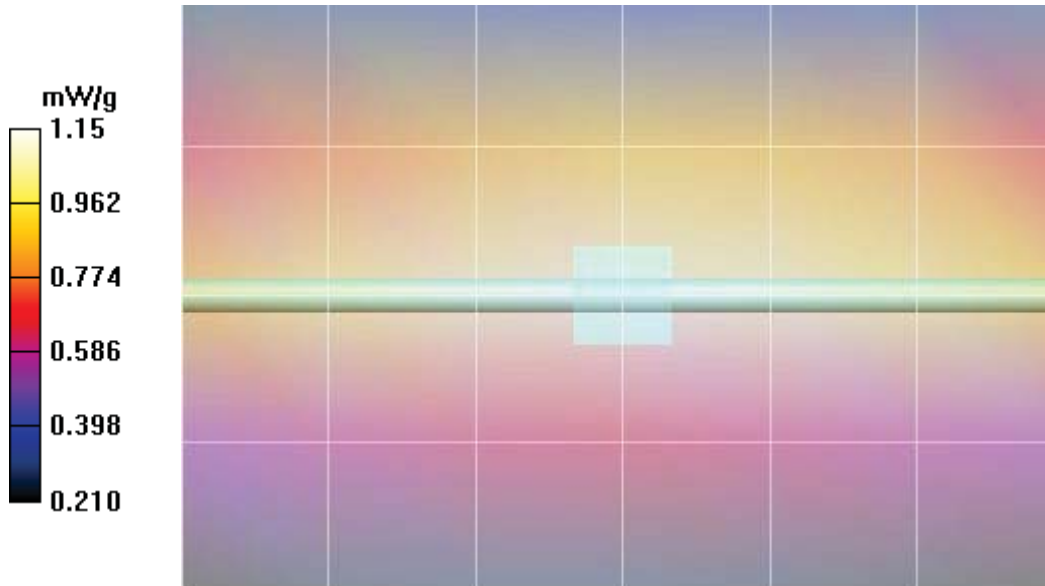
Body d=15mm Pin=250mW, TS=[1.008][1.12][1.232]/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

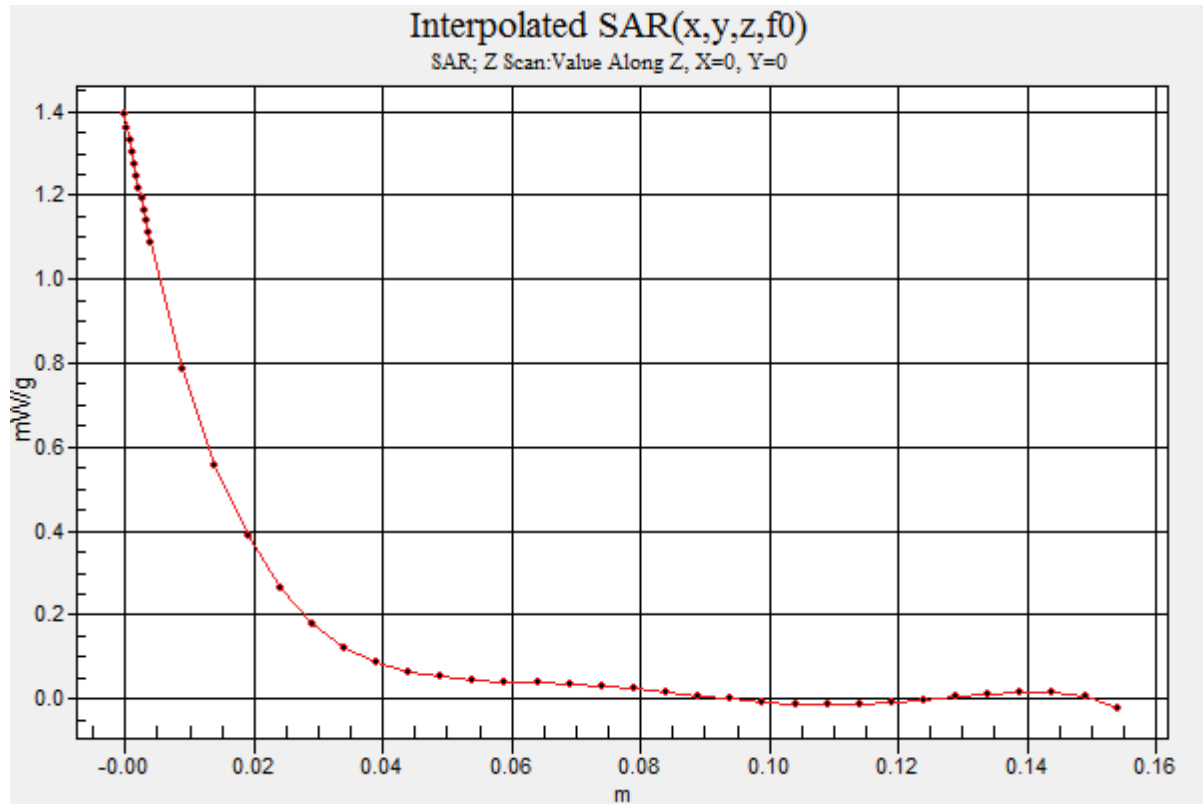
Reference Value = 34.8 V/m; Power Drift = 0.157 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.694 mW/g

Maximum value of SAR (measured) = 1.11 mW/g





Date/Time: 07/09/2017 9:52:04 AM

Test Laboratory: Celltech Labs

DUT: Dipole 450 MHz; Type: D450V3; Serial: 1068; Calibrated: 04/21/2015
Program Name: SPC 450H

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 44.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

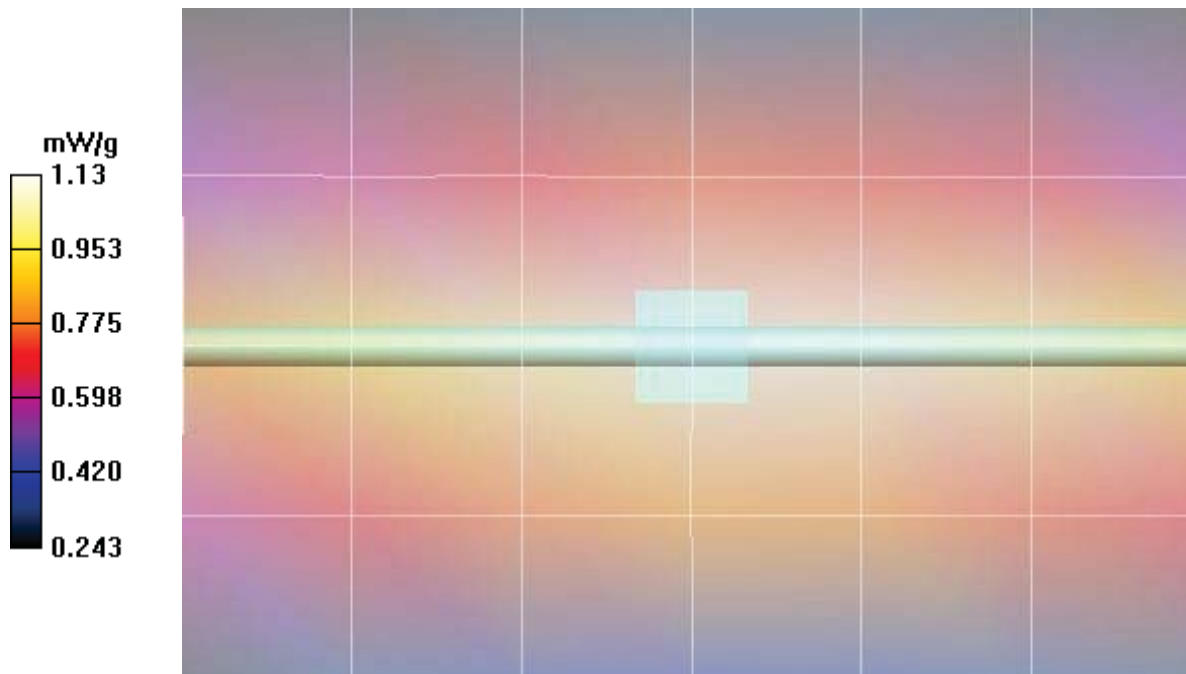
Head d=15mm Pin=250mW, TS=[1.044][1.16][1.276]/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.13 mW/g

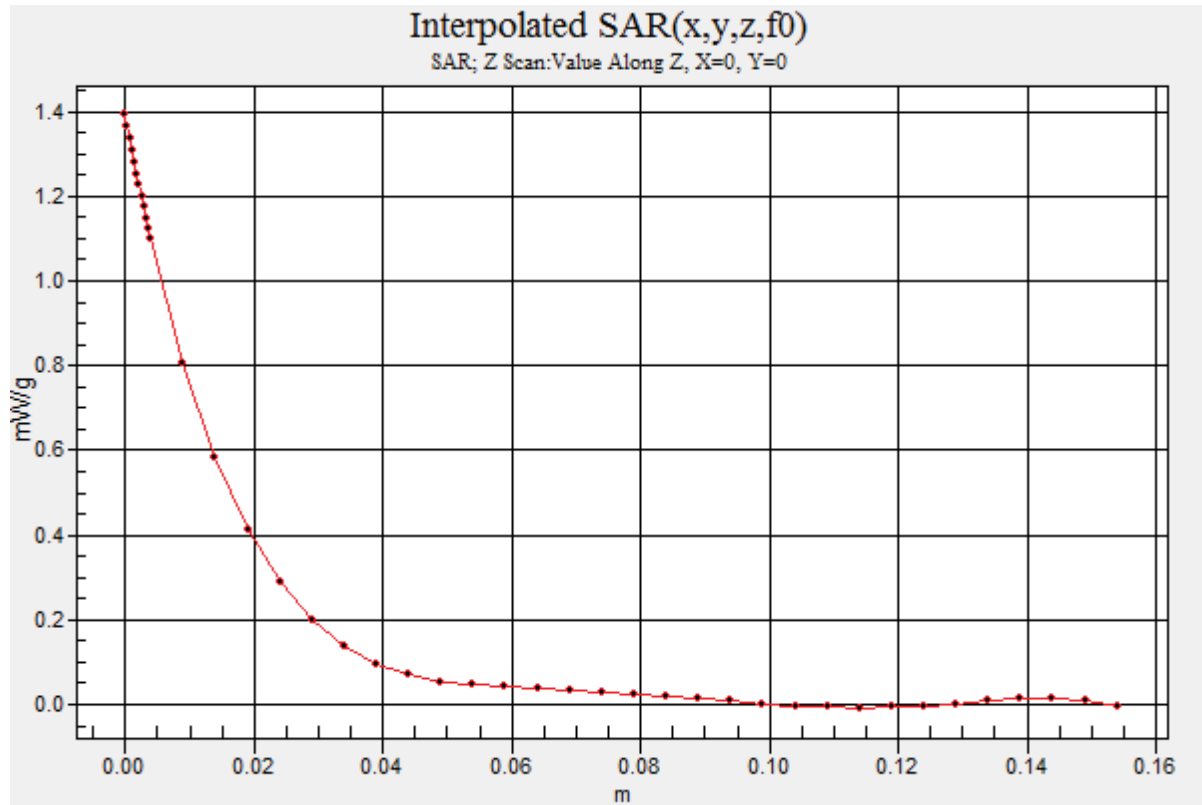
Head d=15mm Pin=250mW, TS=[1.044][1.16][1.276]/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.9 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.719 mW/g





Date/Time: 12/09/2017 12:20:30 PM

Test Laboratory: Celltech Labs

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 825; Calibrated: 22/04/2015
Program Name: 2450MHz Body SPC

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 49.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 5mm (Mechanical Surface Detection) Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

2450MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Area Scan (5x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 11.9 mW/g

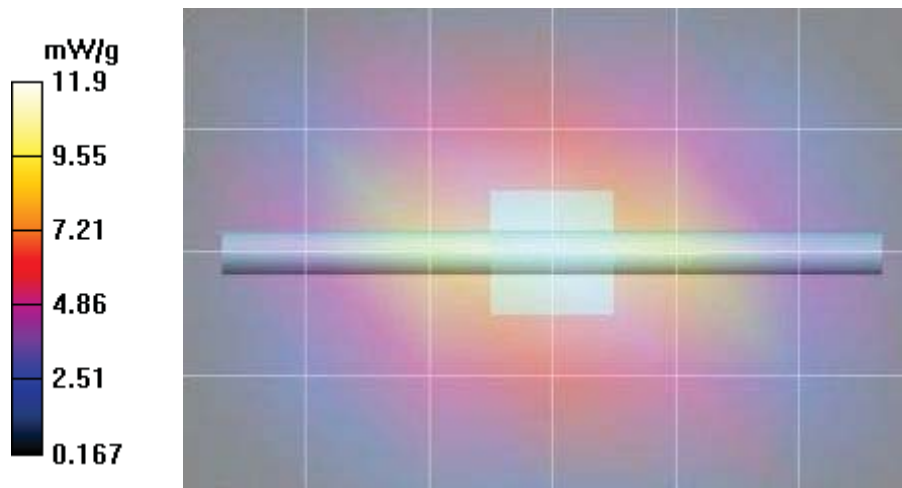
2450MHz Body Dipole d=10mm P=250mW TS=[11.7][13.0][14.3]/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

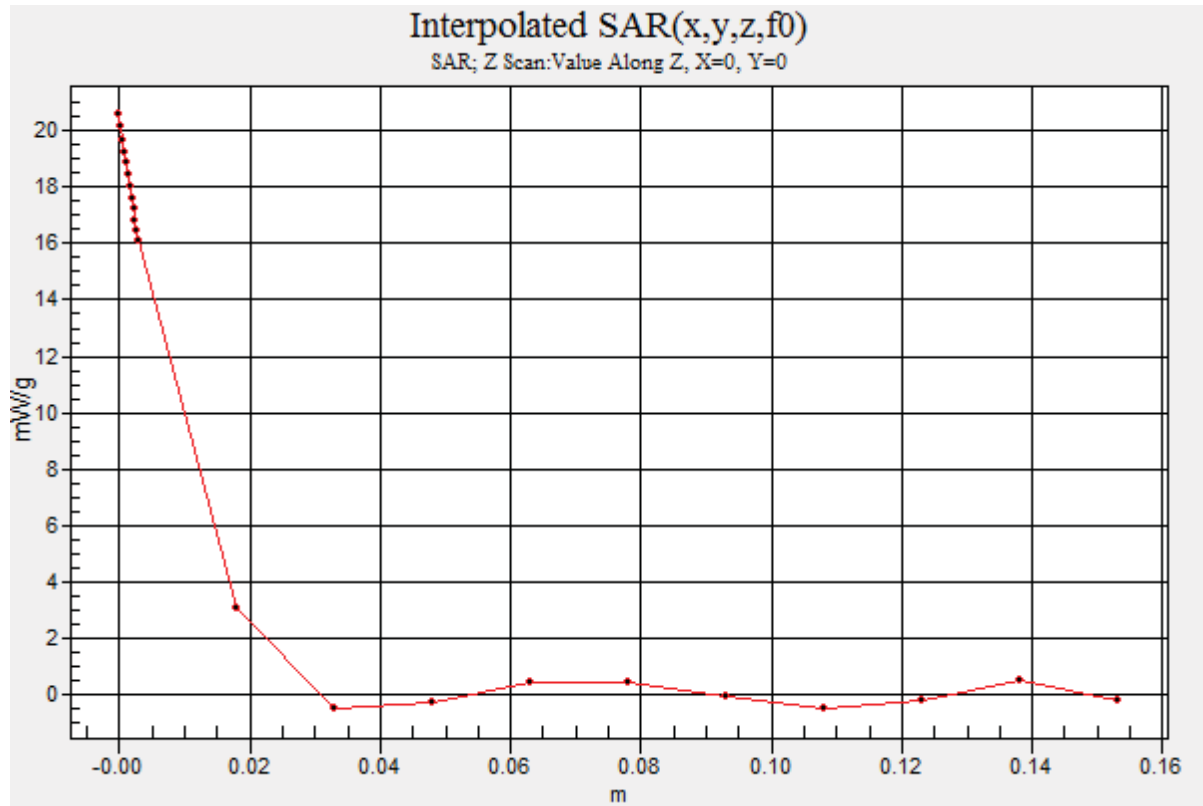
Reference Value = 90.9 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 26.8 W/kg

SAR(1 g) = 12.4 mW/g; SAR(10 g) = 5.64 mW/g

Maximum value of SAR (measured) = 16.2 mW/g





Date/Time: 13/09/2017 3:43:56 PM

Test Laboratory: Celltech Labs

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: 1031; Calibrated: 04/15/2015
Program Name: 5250 MHz SPC

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5250$ MHz; $\sigma = 5.73$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

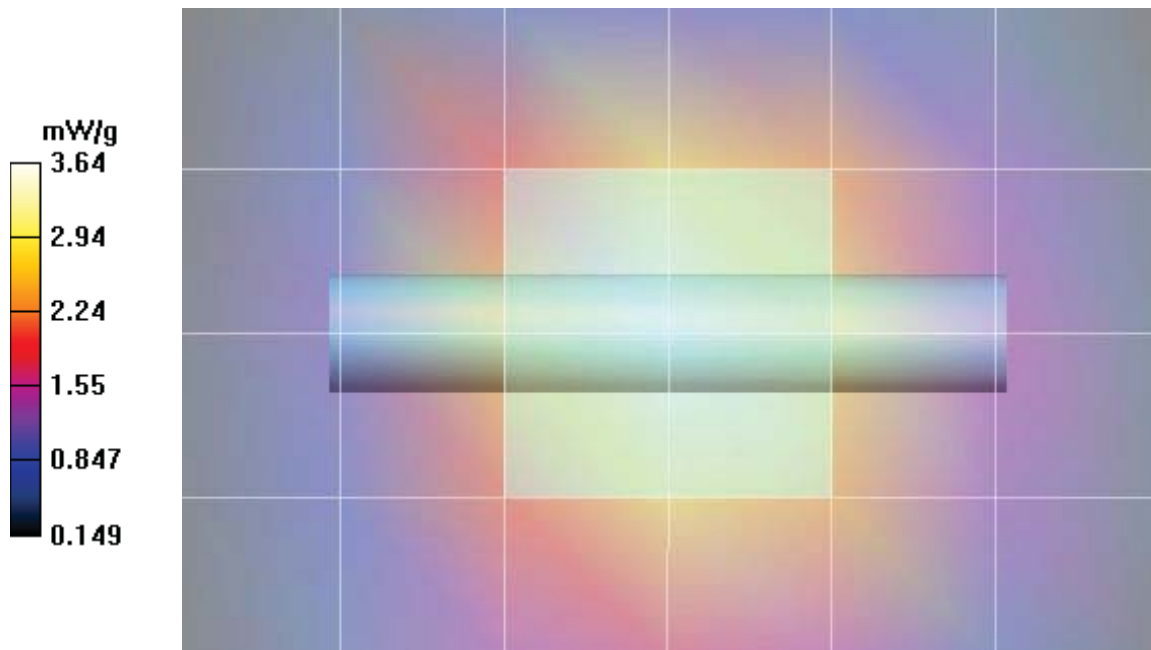
DASY Configuration:

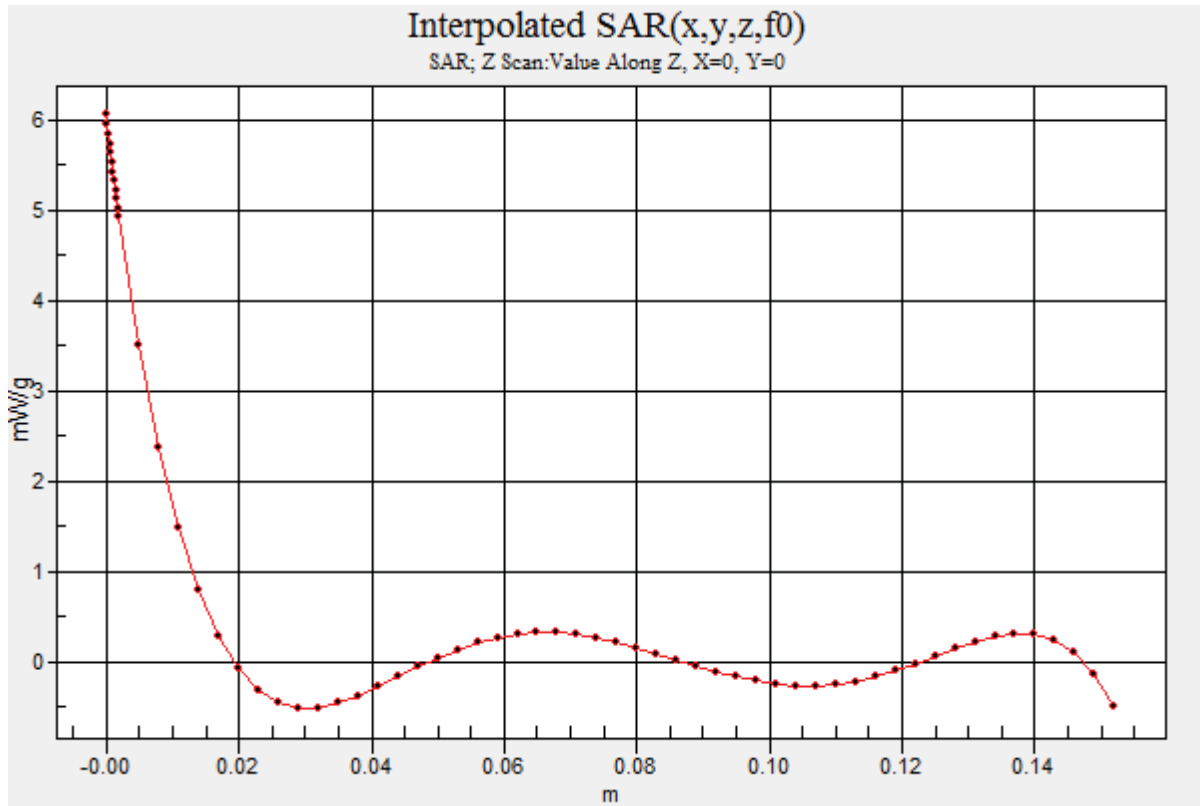
- Probe: EX3DV4 - SN3600; ConvF(4.18, 4.18, 4.18); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

5200-5800 MHz Dipole d=10mm P=47mW, TS=3.42/Area Scan (5x7x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of SAR (measured) = 3.64 mW/g

5200-5800 MHz Dipole d=10mm P=47mW, TS=3.42/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 37.6 V/m; Power Drift = -0.041 dB
Peak SAR (extrapolated) = 14.7 W/kg
SAR(1 g) = 3.35 mW/g; SAR(10 g) = 0.925 mW/g

Maximum value of SAR (measured) = 7.05 mW/g





APPENDIX B – MEASUREMENT PLOTS OF MAXIMUM MEASURED SAR

Plot B1

Date/Time: 06/09/2017 12:09:35 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450B

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B1 Body, 0144-E SYS_RB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1):
Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (measured) = 7.77 mW/g

B1 Body, 0144-E SYS_RB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

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

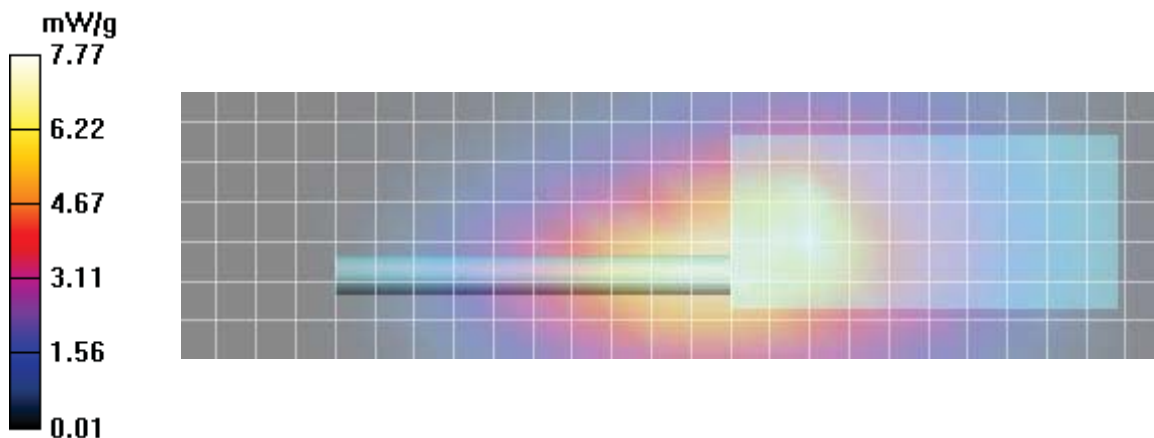
Reference Value = 84.8 V/m; Power Drift = -0.265 dB

Peak SAR (extrapolated) = 9.92 W/kg

SAR(1 g) = 6.89 mW/g; SAR(10 g) = 4.89 mW/g

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

Maximum value of SAR (measured) = 7.32 mW/g



Plot B2

Date/Time: 06/09/2017 10:49:19 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450B

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406 \text{ MHz}$; $\sigma = 0.904 \text{ mho/m}$; $\epsilon_r = 54.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B2 Body, 0146-E SYS_NRB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Area Scan (8x26x1):
Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

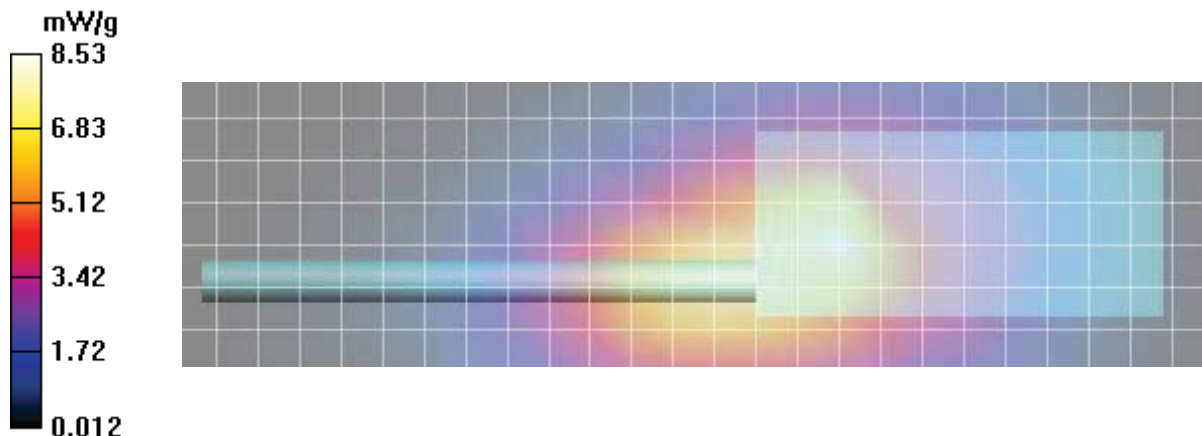
[Info: Interpolated medium parameters used for SAR evaluation!](#)

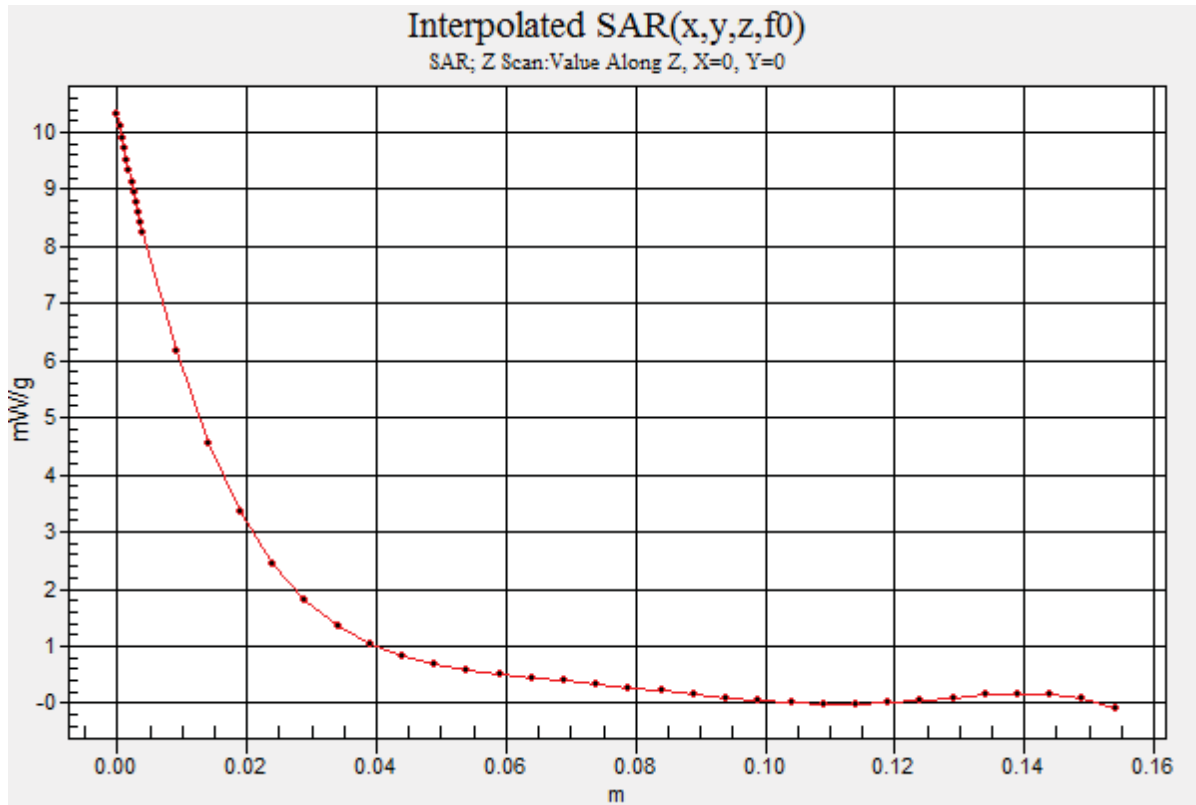
Maximum value of SAR (measured) = 8.53 mW/g

B2 Body, 0146-E SYS_NRB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 86.6 V/m; Power Drift = -0.156 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 7.82 mW/g; SAR(10 g) = 5.51 mW/g

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

Maximum value of SAR (measured) = 8.49 mW/g





Plot B3

Date/Time: 06/09/2017 11:11:25 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450B

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406 \text{ MHz}$; $\sigma = 0.904 \text{ mho/m}$; $\epsilon_r = 54.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B3 Body, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

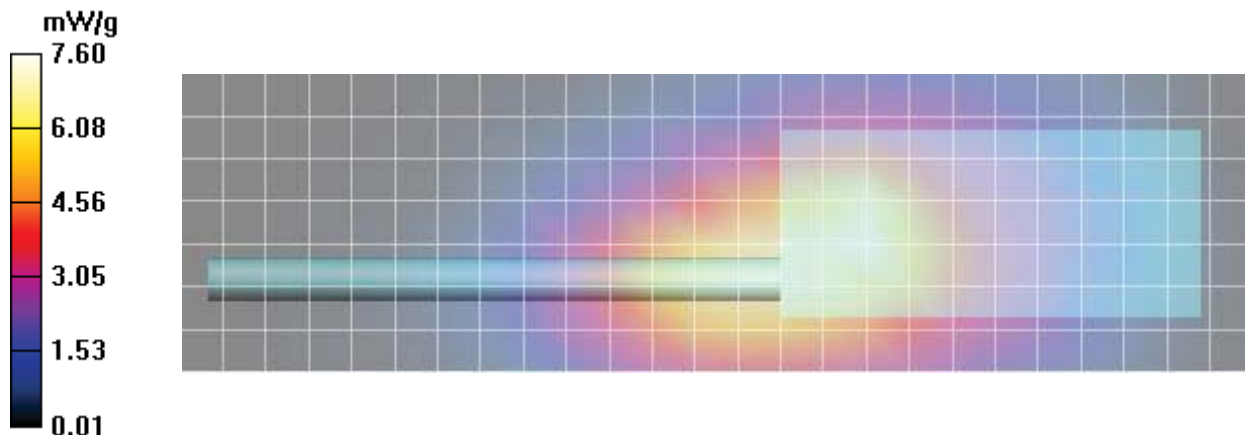
Maximum value of SAR (measured) = 7.60 mW/g

B3 Body, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 83.5 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 9.91 W/kg
SAR(1 g) = 7.01 mW/g; SAR(10 g) = 5.02 mW/g

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

Maximum value of SAR (measured) = 7.40 mW/g



Plot B4

Date/Time: 06/09/2017 11:29:40 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450B

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B4 Body, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (measured) = 8.38 mW/g

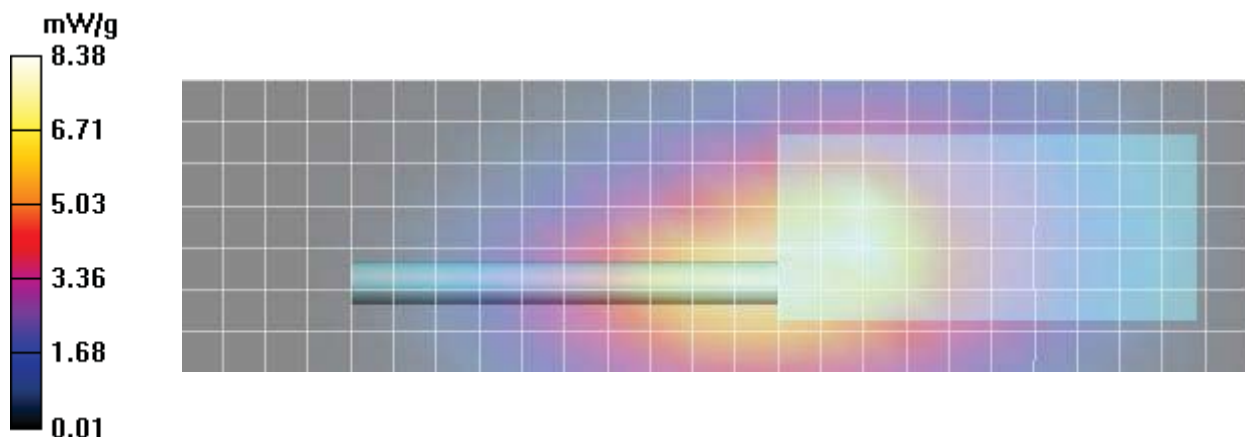
B4 Body, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

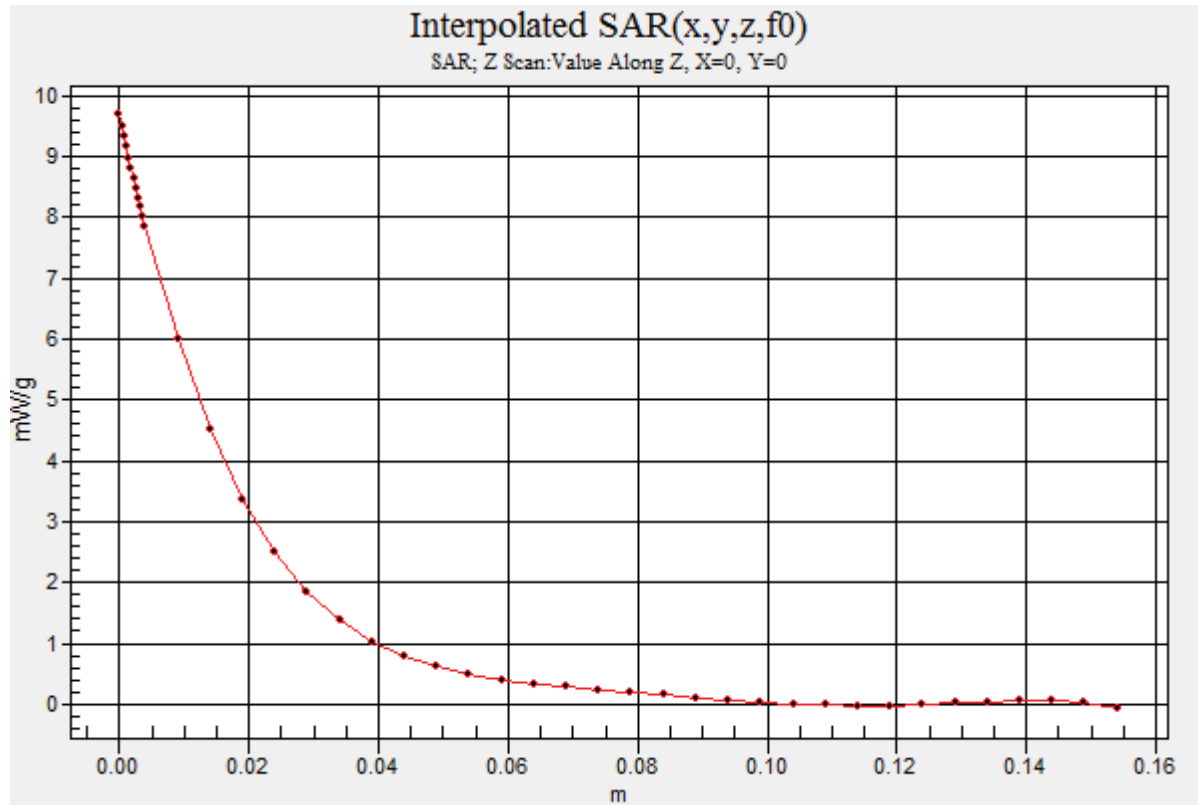
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 87.5 V/m; Power Drift = -0.195 dB
Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 7.67 mW/g; SAR(10 g) = 5.47 mW/g

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

Maximum value of SAR (measured) = 8.08 mW/g





Plot B5

Date/Time: 06/09/2017 11:51:34 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450B

Communication System: UHF; Frequency: 378 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 378 \text{ MHz}$; $\sigma = 0.886 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.22, 9.22, 9.22); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B5 Body, 0152-E SYS Eclipse XL-185P UHF , 378MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

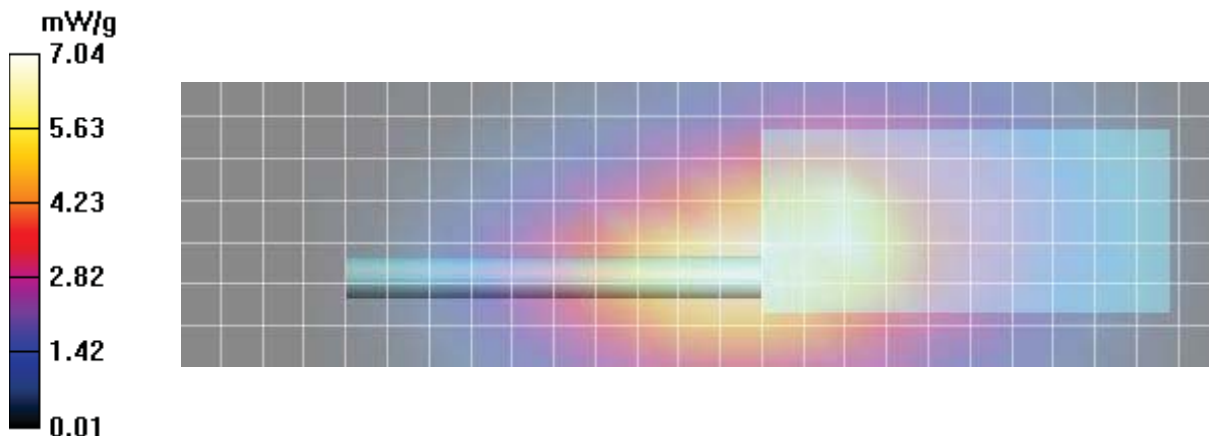
Maximum value of SAR (measured) = 7.04 mW/g

B5 Body, 0152-E SYS Eclipse XL-185P UHF , 378MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 83.2 V/m; Power Drift = -0.266 dB
Peak SAR (extrapolated) = 9.16 W/kg
SAR(1 g) = 6.38 mW/g; SAR(10 g) = 4.59 mW/g

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

Maximum value of SAR (measured) = 6.73 mW/g



Plot F1

Date/Time: 07/09/2017 10:37:12 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450H

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406$ MHz; $\sigma = 0.842$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

F1 Face, 0144-E SYS_RB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1):
Measurement grid: dx=15mm, dy=15mm

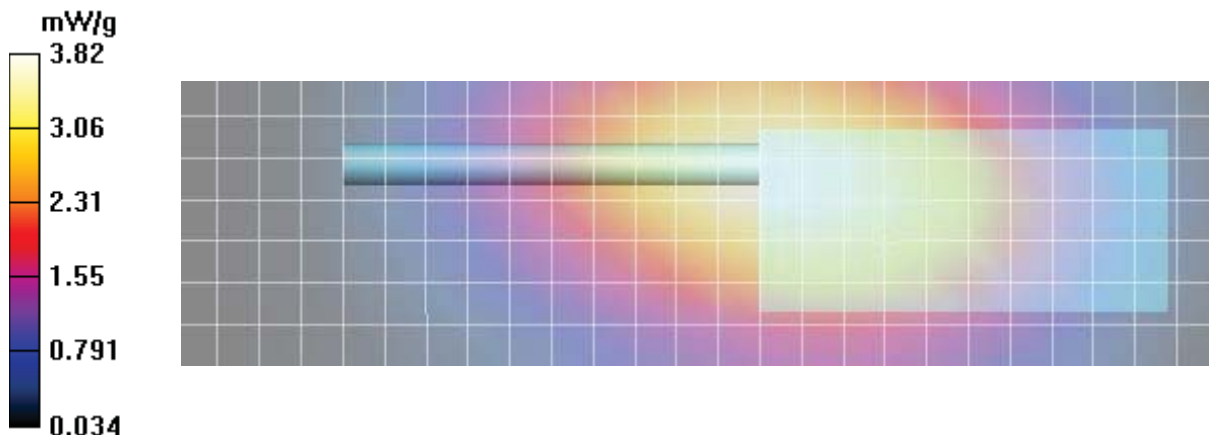
[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 3.82 mW/g

F1 Face, 0144-E SYS_RB Eclipse XL-200P UHF , 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67.0 V/m; Power Drift = -0.371 dB
Peak SAR (extrapolated) = 4.69 W/kg
SAR(1 g) = 3.71 mW/g; SAR(10 g) = 2.86 mW/g

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

Maximum value of SAR (measured) = 3.88 mW/g



Date/Time: 07/09/2017 11:01:58 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450H

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406 \text{ MHz}$; $\sigma = 0.842 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

F2 Face, 0146-E SYS_NRB Eclipse XL-200P UHF, 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1):
Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

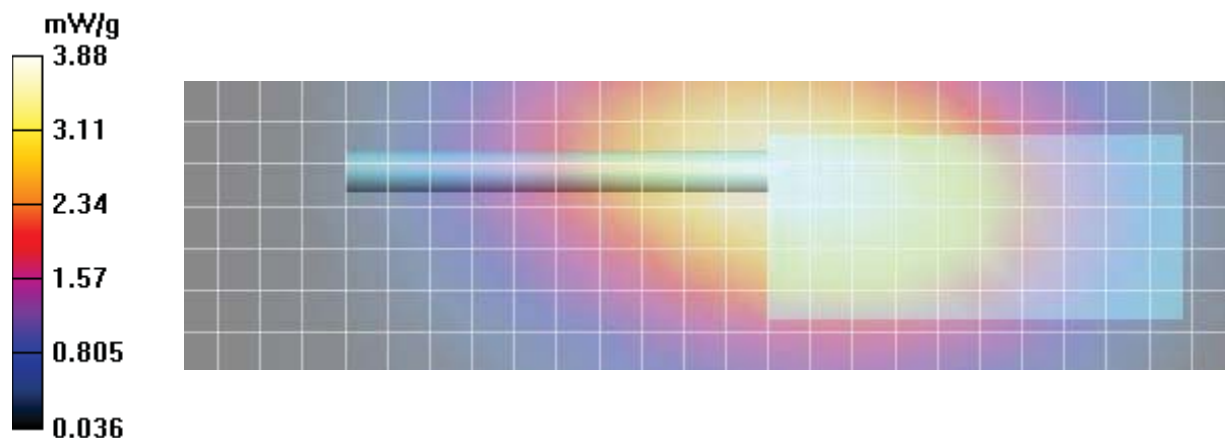
[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 3.88 mW/g

F2 Face, 0146-E SYS_NRB Eclipse XL-200P UHF, 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 65.7 V/m; Power Drift = -0.260 dB
Peak SAR (extrapolated) = 4.79 W/kg
SAR(1 g) = 3.77 mW/g; SAR(10 g) = 2.9 mW/g

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

Maximum value of SAR (measured) = 3.95 mW/g



Plot F3

Date/Time: 07/09/2017 11:21:02 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450H

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406 \text{ MHz}$; $\sigma = 0.842 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

F3 Face, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

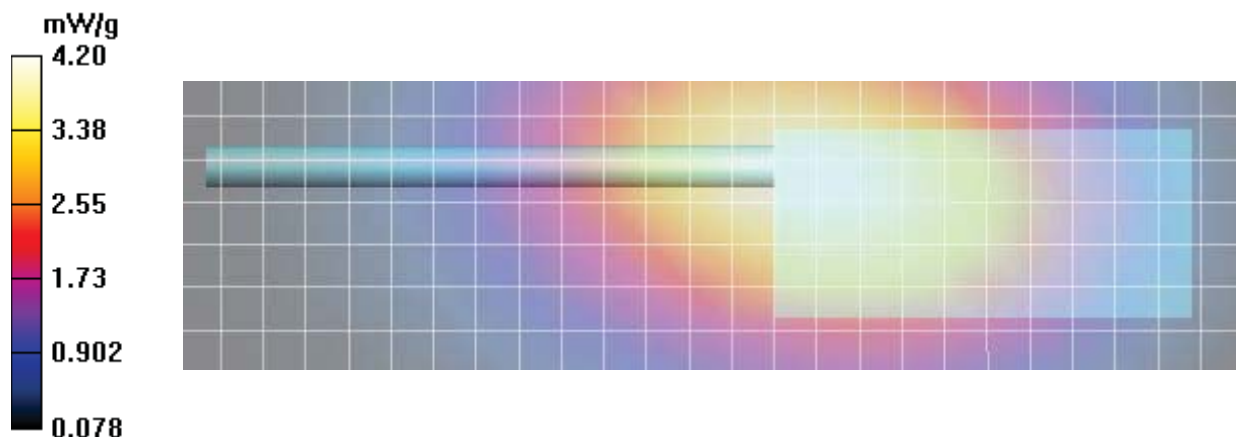
Maximum value of SAR (measured) = 4.20 mW/g

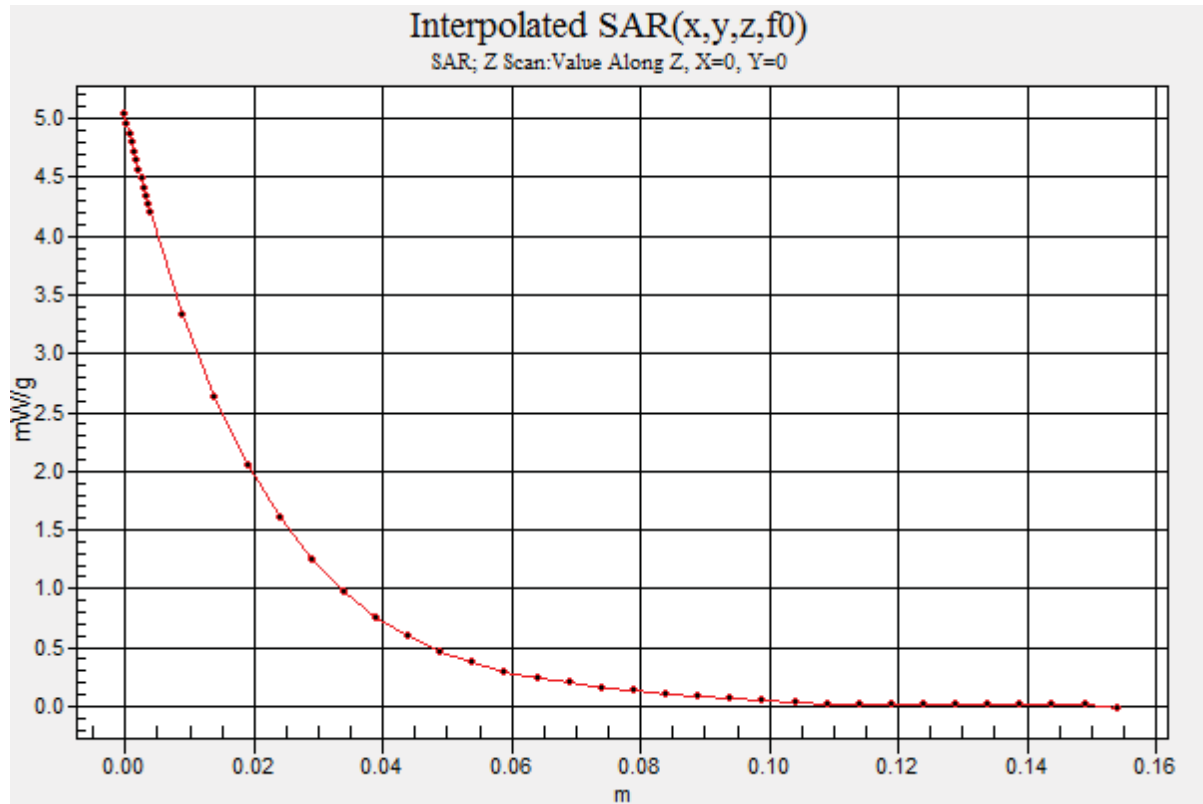
F3 Face, 0152-E SYS Eclipse XL-185P UHF , 406MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 68.4 V/m; Power Drift = -0.181 dB
Peak SAR (extrapolated) = 5.21 W/kg
SAR(1 g) = 4.1 mW/g; SAR(10 g) = 3.16 mW/g

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

Maximum value of SAR (measured) = 4.30 mW/g





Plot F4

Date/Time: 07/09/2017 11:39:12 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450H

Communication System: UHF; Frequency: 406 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 406 \text{ MHz}$; $\sigma = 0.842 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

F4 Face, 0152-E SYS Eclipse XL-185P UHF, 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

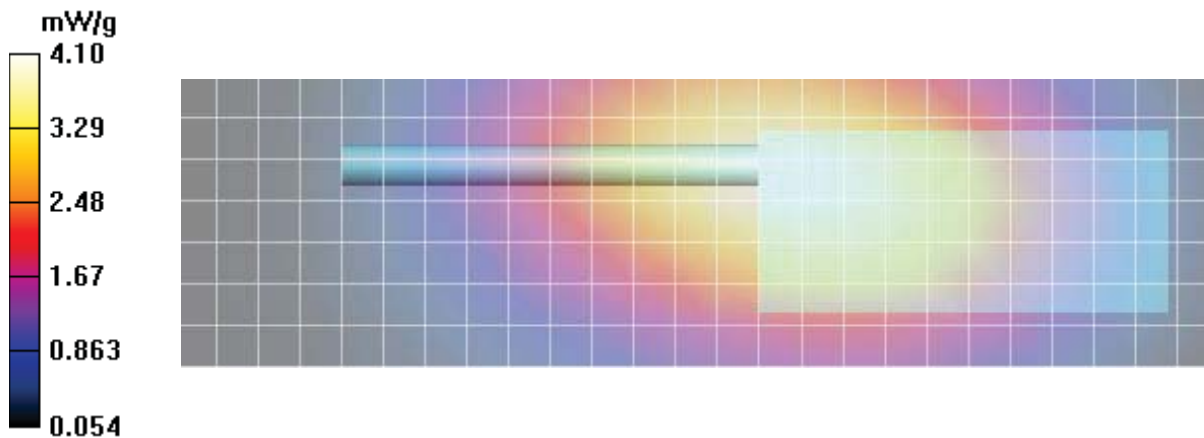
Maximum value of SAR (measured) = 4.10 mW/g

F4 Face, 0152-E SYS Eclipse XL-185P UHF, 406MHz, bc, spk-mic, ant 4420-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 68.1 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 5.08 W/kg
SAR(1 g) = 4 mW/g; SAR(10 g) = 3.08 mW/g

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

Maximum value of SAR (measured) = 4.19 mW/g



Plot F5

Date/Time: 07/09/2017 11:58:24 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 450H

Communication System: UHF; Frequency: 378 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 378 \text{ MHz}$; $\sigma = 0.808 \text{ mho/m}$; $\epsilon_r = 46.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(9.49, 9.49, 9.49); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

F5 Body, 0152-E SYS Eclipse XL-185P UHF , 378MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Area Scan (8x26x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

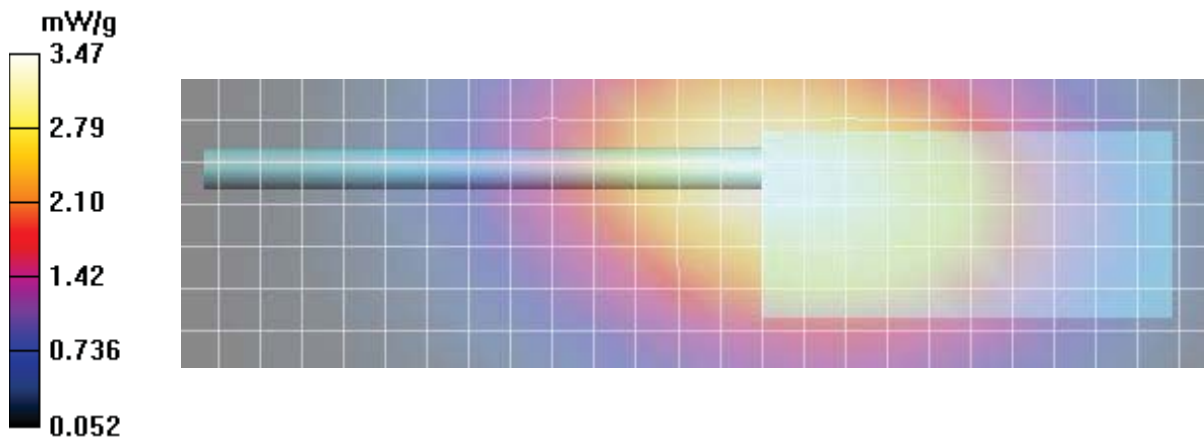
Maximum value of SAR (measured) = 3.47 mW/g

F5 Body, 0152-E SYS Eclipse XL-185P UHF , 378MHz, bc, spk-mic, ant 4000-01, bat 4045-01/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 63.7 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 4.29 W/kg
SAR(1 g) = 3.4 mW/g; SAR(10 g) = 2.63 mW/g

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

Maximum value of SAR (measured) = 3.55 mW/g



Plot B6

Date/Time: 12/09/2017 1:49:18 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2480$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 49.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

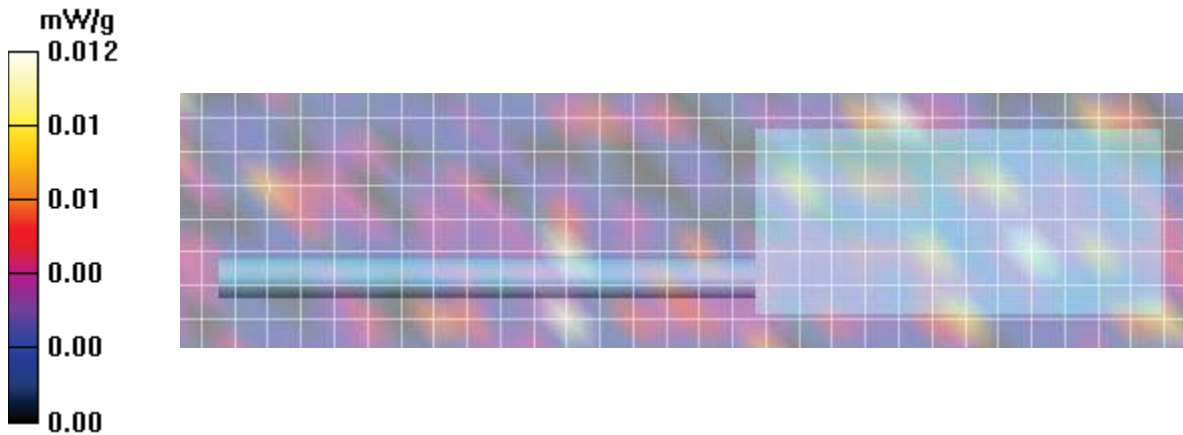
B6 Body, SYS_0144-E_RB Eclipse XL-200P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):

Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.012 mW/g

B6 Body, SYS_0144-E_RB Eclipse XL-200P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.357 V/m; Power Drift = -999.0 dB
Peak SAR (extrapolated) = 0.011 W/kg
SAR(1 g) = 0.000257 mW/g; SAR(10 g) = 6.56e-005 mW/g

Maximum value of SAR (measured) = 0.011 mW/g



Plot B7

Date/Time: 12/09/2017 2:25:32 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2480$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 49.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

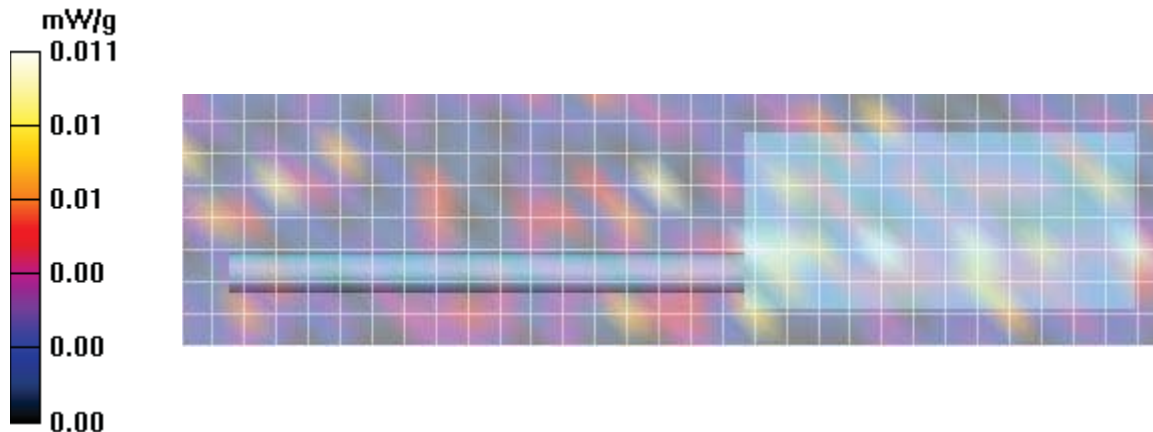
B7 Body, SYS_0146-E_NRB Eclipse XL-200P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):

Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.011 mW/g

B7 Body, SYS_0146-E_NRB Eclipse XL-200P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.882 V/m; Power Drift = -1.44 dB
Peak SAR (extrapolated) = 0.00 W/kg
SAR(1 g) = 6.77e-005 mW/g; SAR(10 g) = 1.73e-005 mW/g

Maximum value of SAR (measured) = 0.01 mW/g



Plot B8

Date/Time: 12/09/2017 3:41:33 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2480$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 49.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B8 Body, SYS_0152-E_UHF Eclipse XL-185P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):

Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.01 mW/g

B8 Body, SYS_0152-E_UHF Eclipse XL-185P BT, 2480MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.979 V/m; Power Drift = -3.58 dB
Peak SAR (extrapolated) = 0.01 W/kg
SAR(1 g) = 5.25e-005 mW/g; SAR(10 g) = 1.3e-005 mW/g



Plot B9

Date/Time: 13/09/2017 8:21:11 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2412 MHz; Duty Cycle: 1:1.2
Medium parameters used (interpolated): $f = 2412 \text{ MHz}$; $\sigma = 1.9 \text{ mho/m}$; $\epsilon_r = 49.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B9 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2412MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):
Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

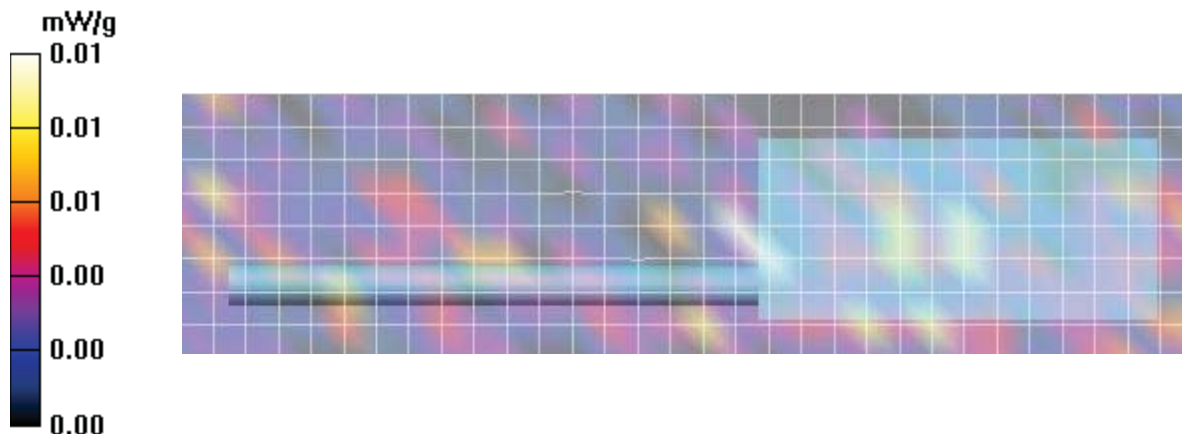
[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.010 mW/g

B9 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2412MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 1.10 V/m; Power Drift = 1.89 dB
Peak SAR (extrapolated) = 0.012 W/kg
SAR(1 g) = 0.000361 mW/g; SAR(10 g) = 4.86e-005 mW/g

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

Maximum value of SAR (measured) = 0.01 mW/g



Plot B10

Date/Time: 13/09/2017 9:12:33 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2437 MHz; Duty Cycle: 1:1.2
Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 49.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

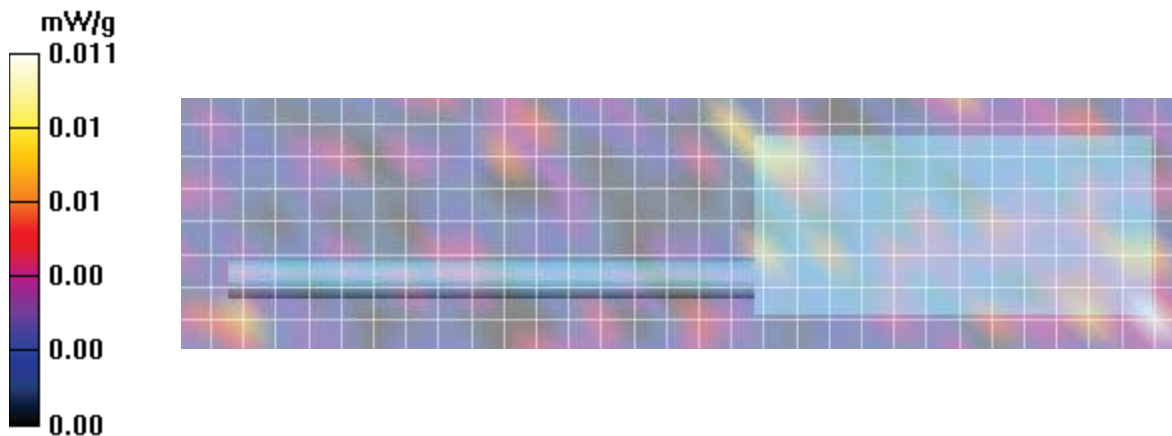
B10 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2437MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):
Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (measured) = 0.011 mW/g

B10 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2437MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.659 V/m; Power Drift = 6.43 dB
Peak SAR (extrapolated) = 0.011 W/kg
SAR(1 g) = 0.000877 mW/g; SAR(10 g) = 0.000169 mW/g

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



Plot B11

Date/Time: 13/09/2017 9:38:10 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 2450B

Communication System: WiFi; Frequency: 2462 MHz; Duty Cycle: 1:1.2
Medium parameters used (interpolated): $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 49.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(6.56, 6.56, 6.56); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

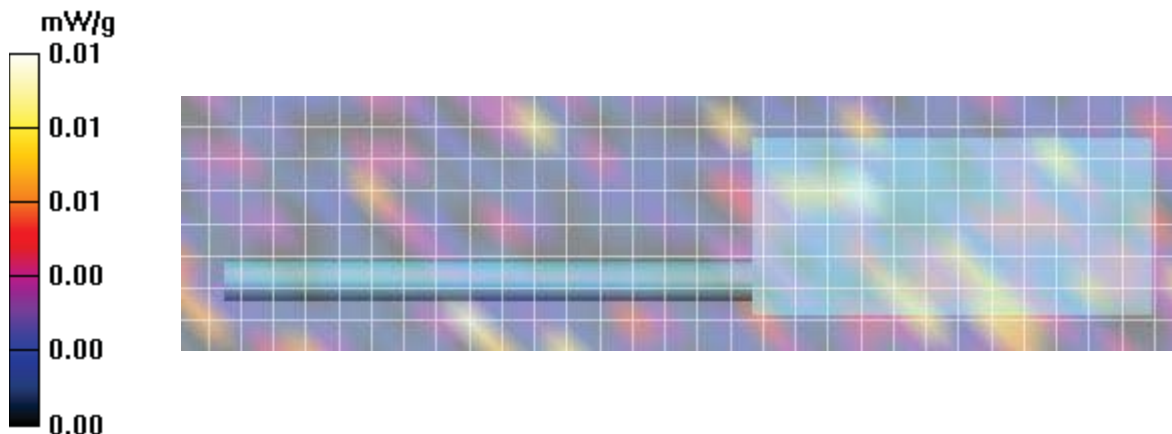
B11 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2462MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (9x32x1):
Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Maximum value of SAR (measured) = 0.01 mW/g

B11 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 2462MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 0.576 V/m; Power Drift = 6.49 dB
Peak SAR (extrapolated) = 0.01 W/kg
SAR(1 g) = 0.000351 mW/g; SAR(10 g) = 6.02e-005 mW/g

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



Plot B12

Date/Time: 14/09/2017 10:10:36 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 5250B

Communication System: Wifi; Frequency: 5180 MHz; Duty Cycle: 1:1.2
Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.66 \text{ mho/m}$; $\epsilon_r = 48.4$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(4.18, 4.18, 4.18); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B12 Body, SYS_0144-E_RB Eclipse XL-200P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (11x38x1):

Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.050 mW/g

B12 Body, SYS_0144-E_RB Eclipse XL-200P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x9)/Cube 0:

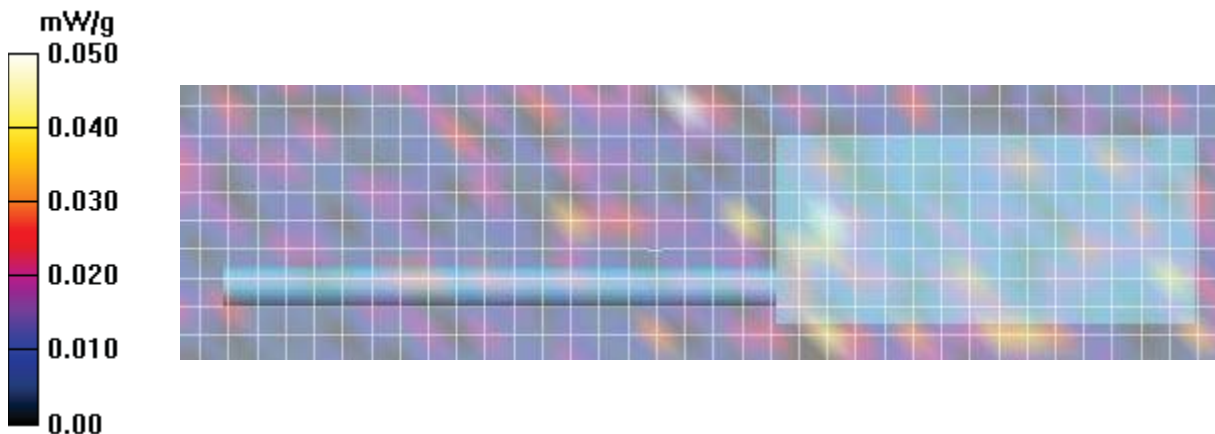
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 0.682 V/m; Power Drift = 8.35 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.00138 mW/g; SAR(10 g) = 0.00033 mW/g

Maximum value of SAR (measured) = 0.047 mW/g



Plot B13

Date/Time: 14/09/2017 10:43:04 AM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 5250B

Communication System: Wifi; Frequency: 5180 MHz; Duty Cycle: 1:1.2
Medium parameters used: $f = 5180$ MHz; $\sigma = 5.66$ mho/m; $\epsilon_r = 48.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(4.18, 4.18, 4.18); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B13 Body, SYS_0146-E_NRB Eclipse XL-200P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (11x38x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.049 mW/g

B13 Body, SYS_0146-E_NRB Eclipse XL-200P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x9)/Cube

0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 0.066 V/m; Power Drift = 29.0 dB

Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.00051 mW/g; SAR(10 g) = 7.18e-005 mW/g

Maximum value of SAR (measured) = 0.051 mW/g



PlotB14

Date/Time: 14/09/2017 12:30:43 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 5250B

Communication System: Wifi; Frequency: 5180 MHz; Duty Cycle: 1:1.2
Medium parameters used: $f = 5180$ MHz; $\sigma = 5.66$ mho/m; $\epsilon_r = 48.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(4.18, 4.18, 4.18); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B14 Body, SYS_0152-E_UHF Eclipse XL-185P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (11x38x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.055 mW/g

B14 Body, SYS_0152-E_UHF Eclipse XL-185P Wifi, 5180MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x9)/Cube 0:

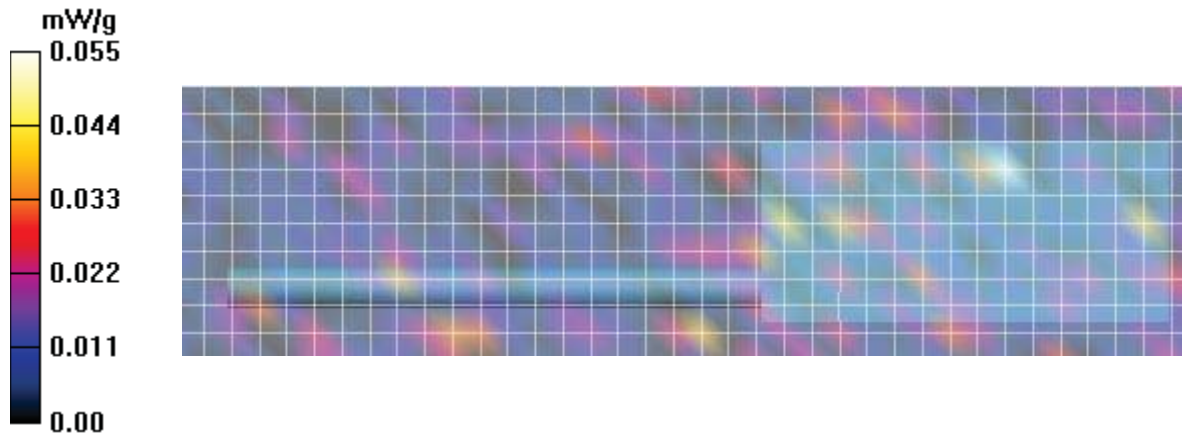
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 0.545 V/m; Power Drift = 3.27 dB

Peak SAR (extrapolated) = 0.063 W/kg

SAR(1 g) = 0.00137 mW/g; SAR(10 g) = 0.000337 mW/g

Maximum value of SAR (measured) = 0.057 mW/g



Plot B15

Date/Time: 14/09/2017 1:39:57 PM

Test Laboratory: Celltech Labs

DUT: Harris; Type: PTT Radio Transceiver;
Program Name: 5250B

Communication System: Wifi; Frequency: 5240 MHz; Duty Cycle: 1:1.2
Medium parameters used: $f = 5240$ MHz; $\sigma = 5.81$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3600; ConvF(4.18, 4.18, 4.18); Calibrated: 27/04/2017
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 24/04/2017
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- Measurement SW: DASY, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 145

B15 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 5240MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Area Scan (11x38x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.043 mW/g

B15 Body, SYS_0151-E_NRB Eclipse XL-185P Wifi, 5240MHz, bc, spk-mic, ant 4440-01, bat 4045-01/Zoom Scan (7x7x9)/Cube

0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 0.465 V/m; Power Drift = 13.7 dB

Peak SAR (extrapolated) = 0.035 W/kg

SAR(1 g) = 0.000272 mW/g; SAR(10 g) = 7.6e-005 mW/g

Maximum value of SAR (measured) = 0.038 mW/g

