



## Appendix A: SAR System performance Check Plots

<b>Measurement</b>	<b>Liquid</b>	<b>Frequency</b>	<b>Test Date</b>
System Check	Head	835	2018-08-28
System Check	Head	1900	2018-08-29
System Check	Body	835	2018-08-28
System Check	Body	1900	2018-08-29

## System Performance Check (Head, 835MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 08/28/2018

Measurement duration: 22 minutes 15seconds

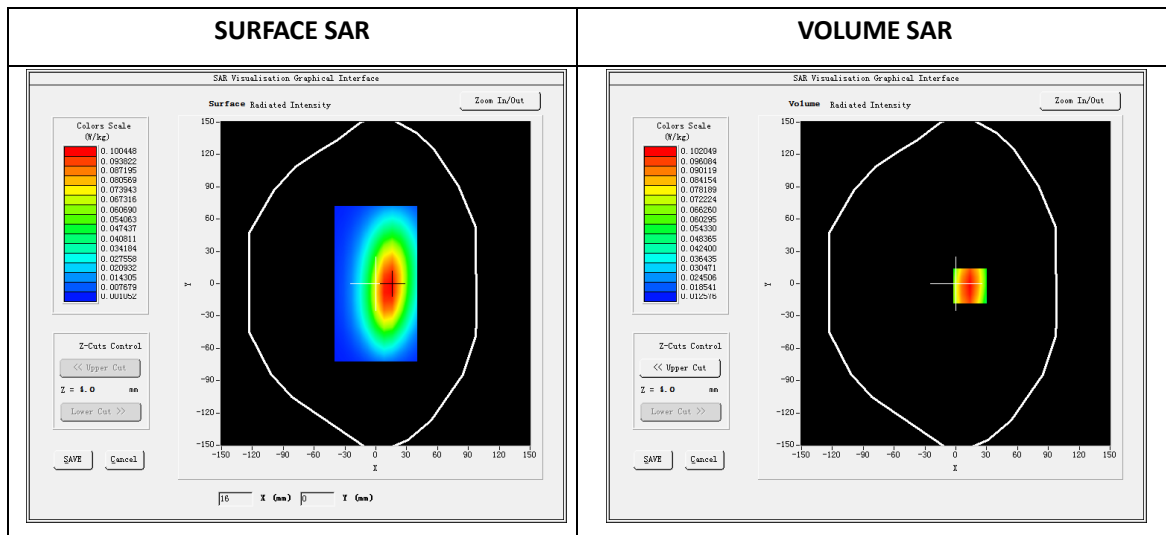
### A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	850MHz
Channels	
Signal	CW

### B. SAR Measurement Results

#### Band SAR

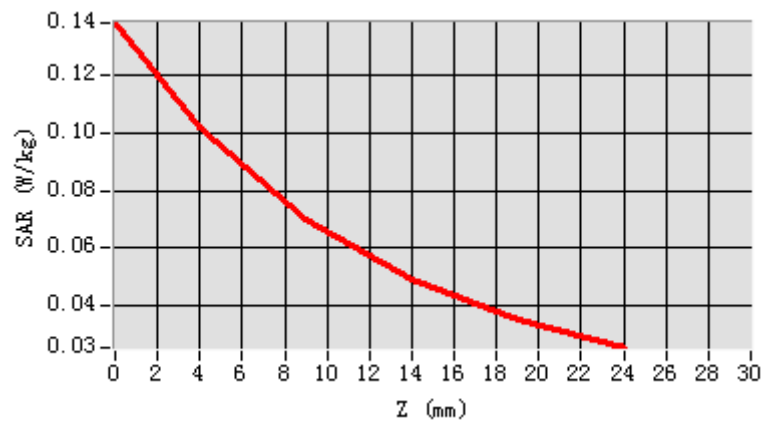
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	835
Relative permittivity (real part)	41.61
Relative permittivity	19.35
Conductivity (S/m)	0.89
Power drift (%)	-0.05
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
ConvF:	4.99
Duty factor:	1:1

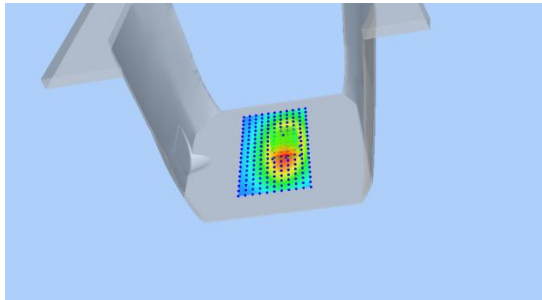
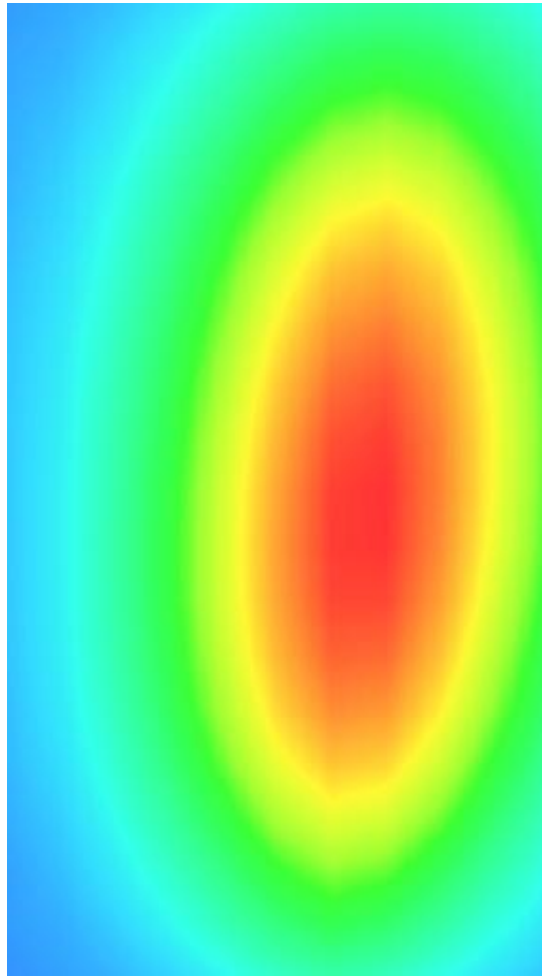


**Maximum location: X=14.00, Y=-2.00**

SAR 10g (W/Kg)	0.064131
SAR 1g (W/Kg)	0.097816

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1383	0.1020	0.0699	0.0488	0.0352



3D screen shot	Hot spot position
	

## System Performance Check (Head ,1900MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 08/29/2018

Measurement duration: 22 minutes 16seconds

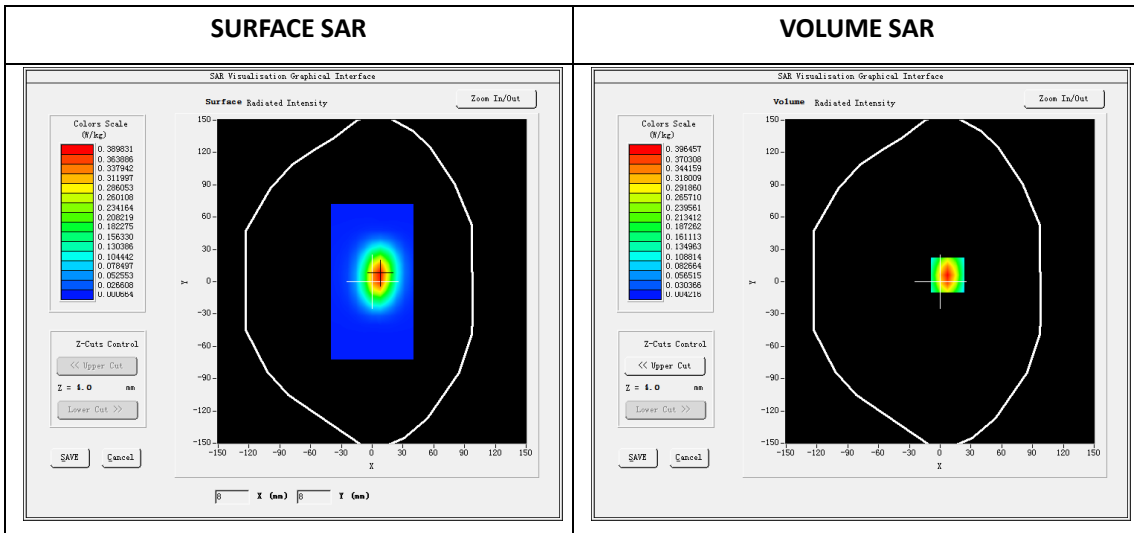
### A. Experimental conditions.

<b>Phantom File</b>	dx=8mm dy=8mm
<b>Phantom</b>	5x5x7,dx=8mm dy=8mm dz=5mm
<b>Device Position</b>	Dipole
<b>Band</b>	1900MHz
<b>Channels</b>	
<b>Signal</b>	CW

### B. SAR Measurement Results

#### Band SAR

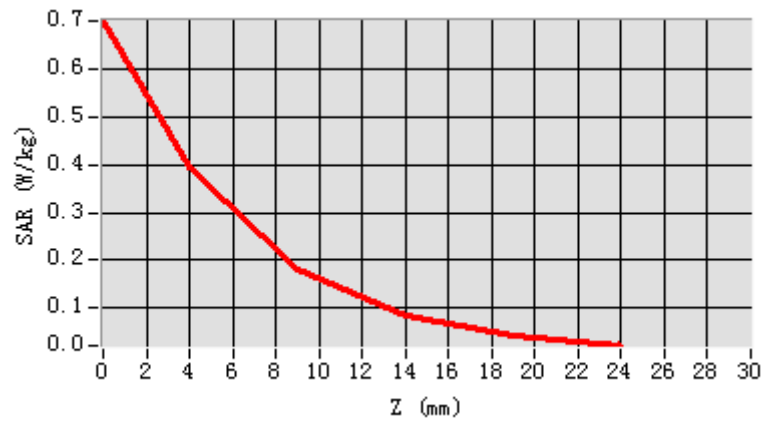
<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1900
<b>Relative permittivity (real part)</b>	41.15
<b>Relative permittivity</b>	12.68
<b>Conductivity (S/m)</b>	1.38
<b>Power drift (%)</b>	-0.02
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	22.5°C
<b>ConvF:</b>	4.73
<b>Duty factor:</b>	1:1

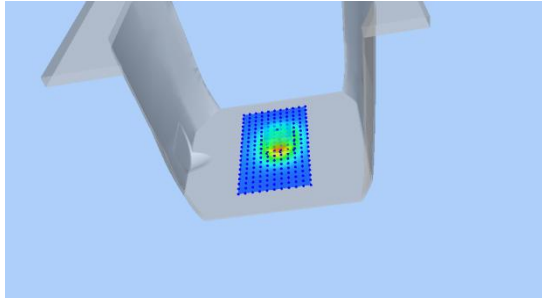
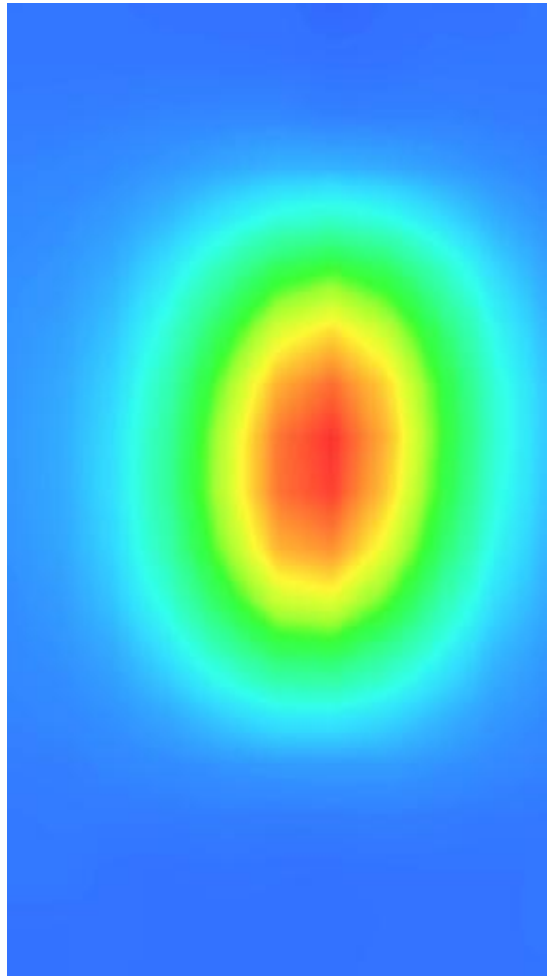


**Maximum location: X=7.00, Y=6.00**

<b>SAR 10g (W/Kg)</b>	0.175121
<b>SAR 1g (W/Kg)</b>	0.368154

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7004	0.3965	0.1830	0.0837	0.0421



3D screen shot	Hot spot position
	

## System Performance Check (Body, 835MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 08/28/2018

Measurement duration: 22 minutes 31seconds

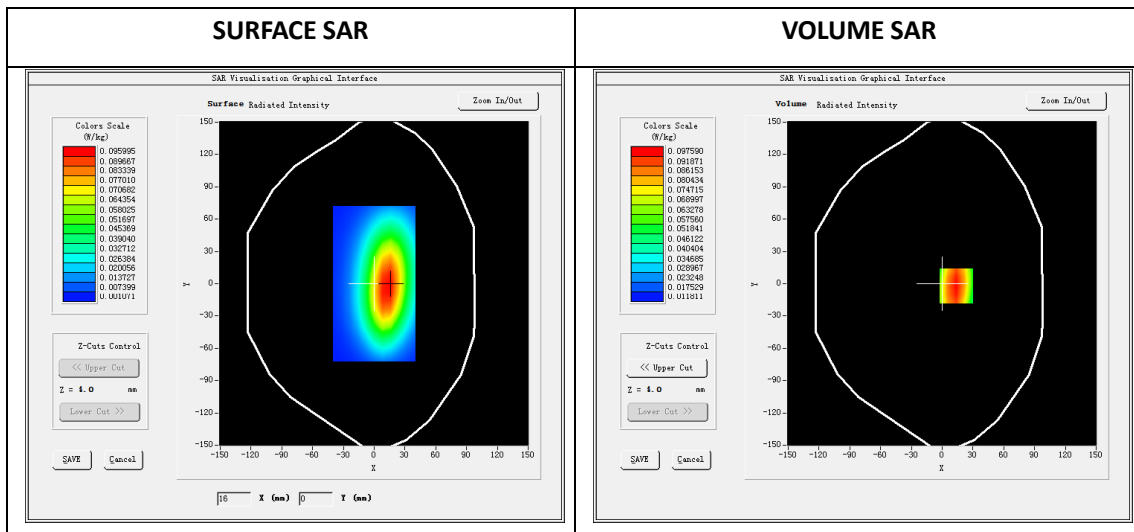
### A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	835MHz
Channels	
Signal	CW

### B. SAR Measurement Results

#### Band SAR

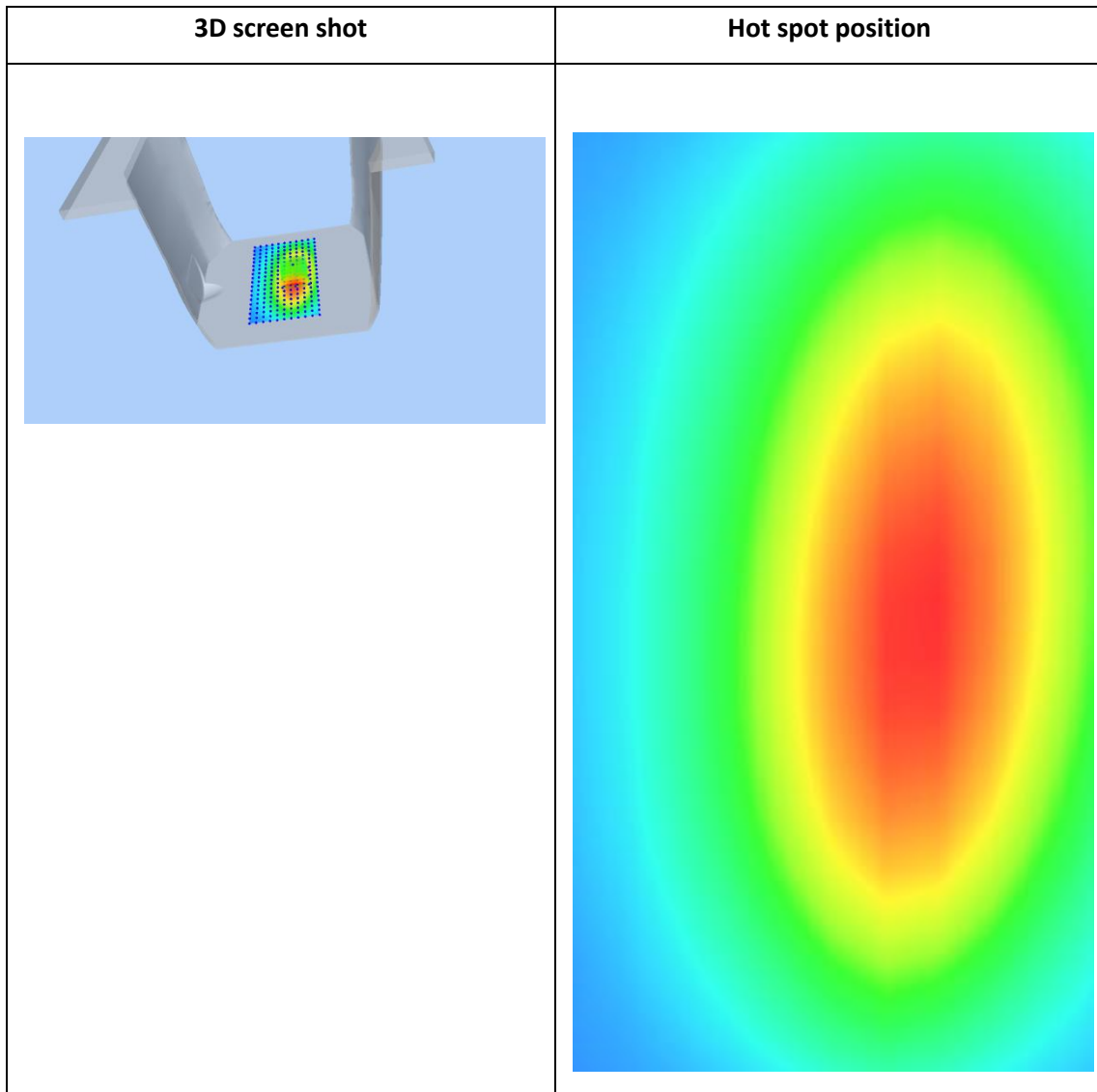
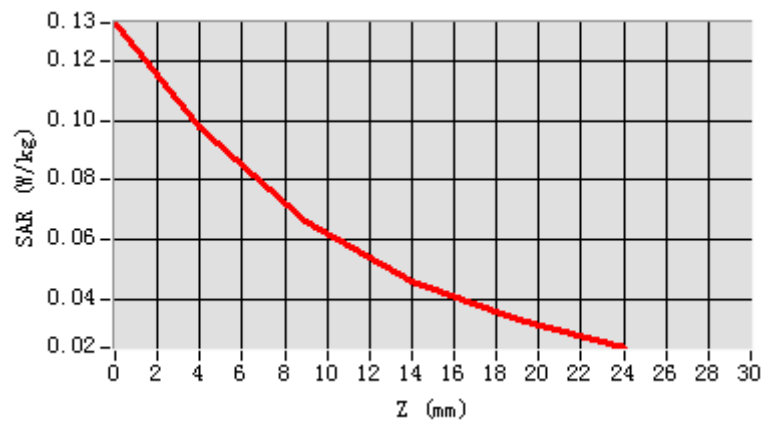
E-Field Probe	SATIMO SN_43/15_EP276
Frequency (MHz)	835
Relative permittivity (real part)	55.35
Relative permittivity	20.35
Conductivity (S/m)	0.91
Power drift (%)	0.21
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
ConvF:	5.18
Duty factor:	1:1



Maximum location: X=14.00, Y=-2.00

SAR 10g (W/Kg)	0.061160
SAR 1g (W/Kg)	0.093540

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1327	0.0976	0.0665	0.0463	0.0332



## System Performance Check (Body, 1900MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 08/29/2018

Measurement duration: 22 minutes 33 seconds

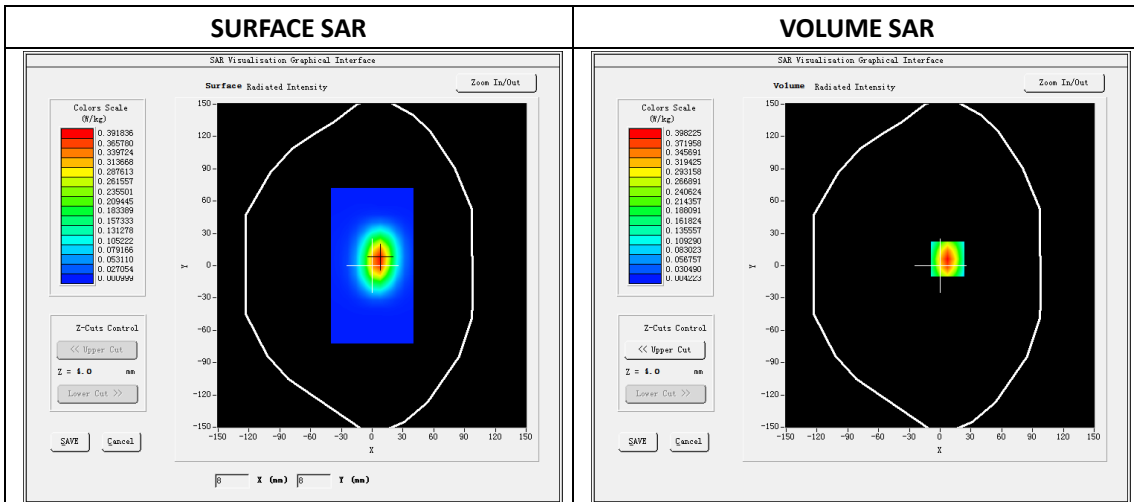
### A. Experimental conditions.

<b>Phantom File</b>	dx=8mm dy=8mm
<b>Phantom</b>	5x5x7, dx=8mm dy=8mm dz=5mm
<b>Device Position</b>	Dipole
<b>Band</b>	1900MHz
<b>Channels</b>	
<b>Signal</b>	CW

### B. SAR Measurement Results

#### Band SAR

<b>E-Field Probe</b>	SATIMO SN_43/15_EP276
<b>Frequency (MHz)</b>	1900
<b>Relative permittivity (real part)</b>	53.94
<b>Relative permittivity</b>	14.15
<b>Conductivity (S/m)</b>	1.53
<b>Power Drift (%)</b>	-0.27
<b>Ambient Temperature:</b>	22.1°C
<b>Liquid Temperature:</b>	22.6°C
<b>ConvF:</b>	4.83
<b>Duty factor:</b>	1:1



**Maximum location: X=7.00, Y=6.00**

<b>SAR 10g (W/Kg)</b>	0.175882
<b>SAR 1g (W/Kg)</b>	0.369825



