OPTION WIRELESS GERMANY GMBH
LABORATORY FOR ELECTROMAGNETIC COMPATIBILITY
SÜDSTRASSE 9
D-47475 KAMP-LINTFORT

SYSTEMVALIDATION

Appendix to the report:

Dosimetric Assessment of the Portable Device ICON 505M from Option Wireless Germany

According to the FCC requirements
FCC ID: NCMOGI1505

Product:

ICON 505M
Option Wireless Technology

Date: April 23, 2009

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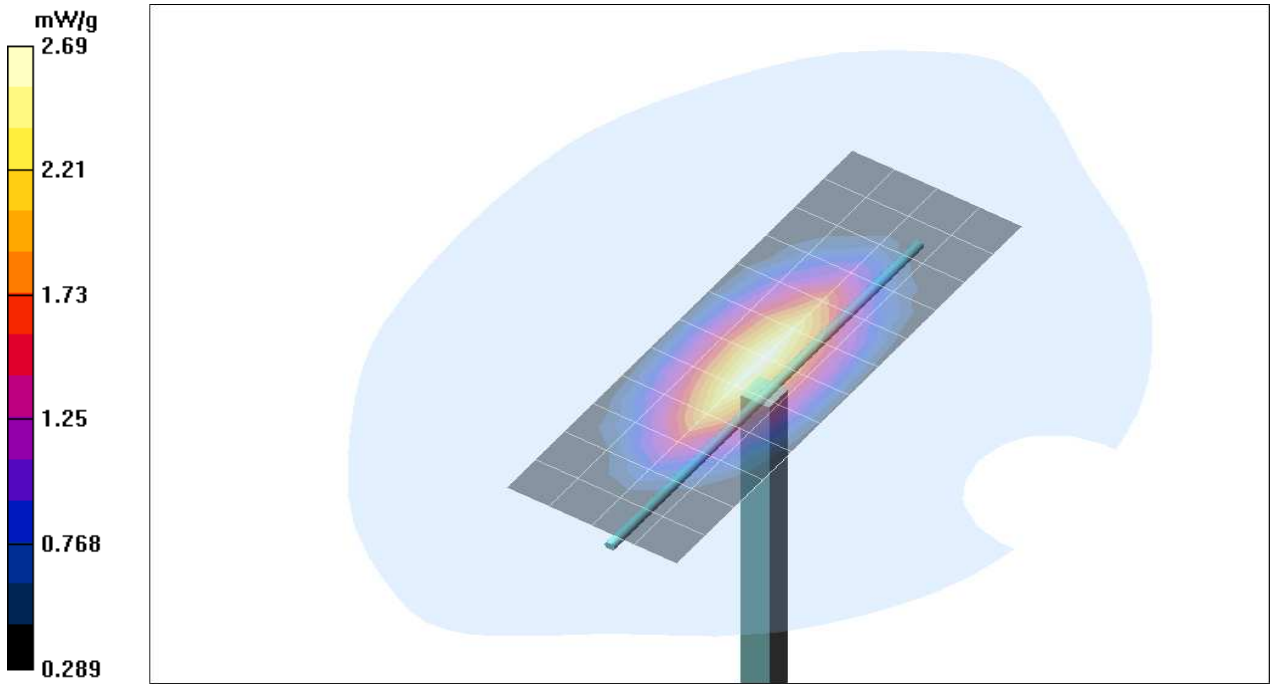
1 835 MHz (Date/Time: 4/15/2009 8:14:50 AM)

Test Laboratory: EMC Department Kamp-Lintfort
File Name: validation8351723_090415
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:470

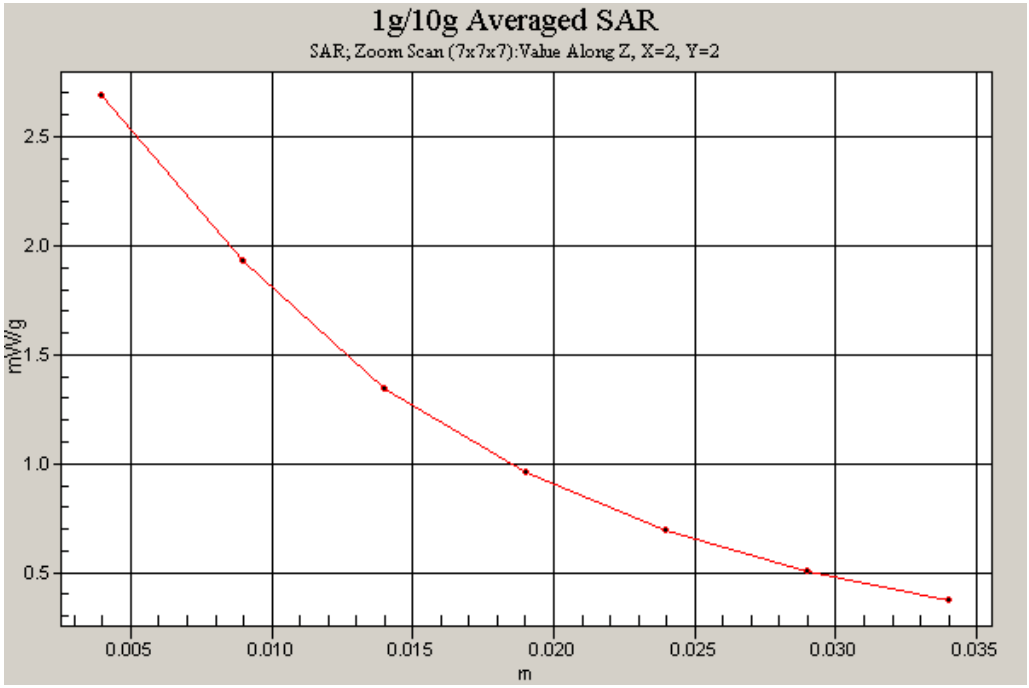
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.95 mho/m; εr = 54.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1723; ConvF(5.91, 5.91, 5.91); Calibrated: 11/10/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn523; Calibrated: 11/6/2008
- Phantom: SAM-RIGHT; Type: SAM 4.0; Serial: 1241
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=250mW/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.68 mW/g
d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56.8 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 3.32 W/kg
SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.67 mW/g
Maximum value of SAR (measured) = 2.69 mW/g



SAR distribution for system validation 835 MHz, April 15, 2009; Ambient Temperature: 21.0°C; Liquid Temperature: 19.2°C).


1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=2, Y=2
mW/g
2.5
2.0
1.5
1.0
0.5
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

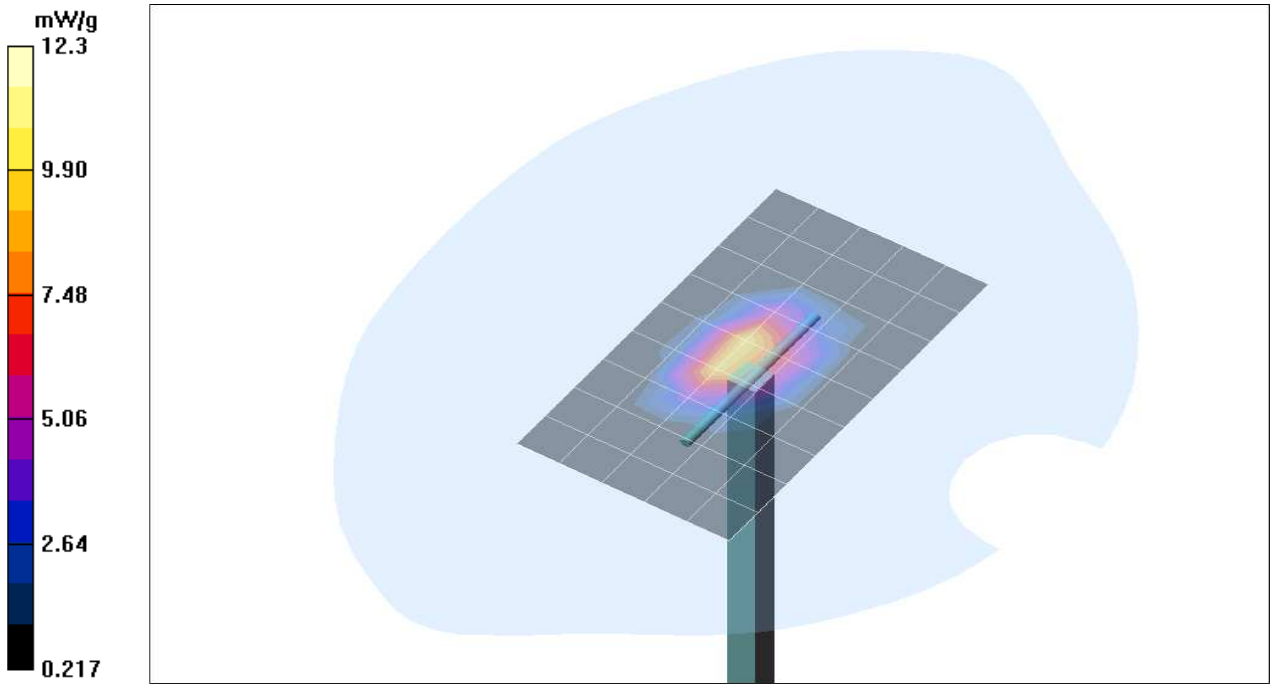
2 1900 MHz (Date/Time: 4/9/2009 8:05:54 AM)

Test Laboratory: EMC Department Kamp-Lintfort
File Name: validation19001723_090409
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d021

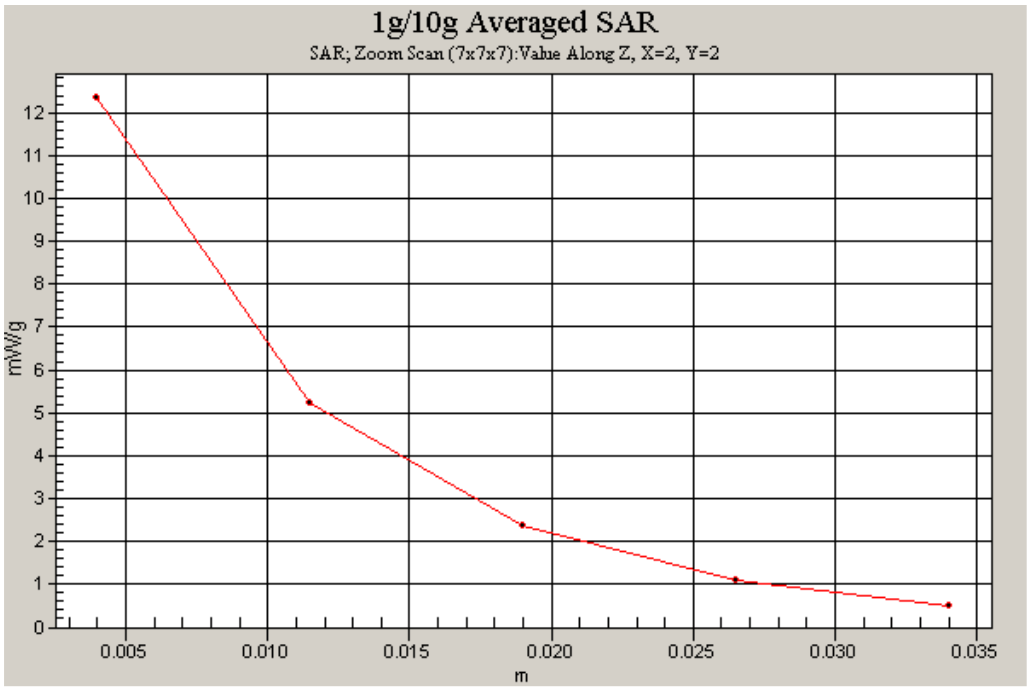
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.59 mho/m; εr = 54.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1723; ConvF(4.4, 4.4, 4.4); Calibrated: 11/10/2008
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn523; Calibrated: 11/6/2008
Phantom: SAM-LEFT; Type: Twin; Serial: 1237
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.0 mW/g
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=7.5mm
Reference Value = 93.5 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 20.4 W/kg
SAR(1 g) = 11 mW/g; SAR(10 g) = 5.68 mW/g
Maximum value of SAR (measured) = 12.3 mW/g



SAR distribution for system validation 1900 MHz, April 09, 2009; Ambient Temperature: 20.5°C; Liquid Temperature: 18.6°C).


1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=2, Y=2
mW/g
m
0
1
2
3
4
5
6
7
8
9
10
11
12
0.005
0.010
0.015
0.020
0.025
0.030
0.035

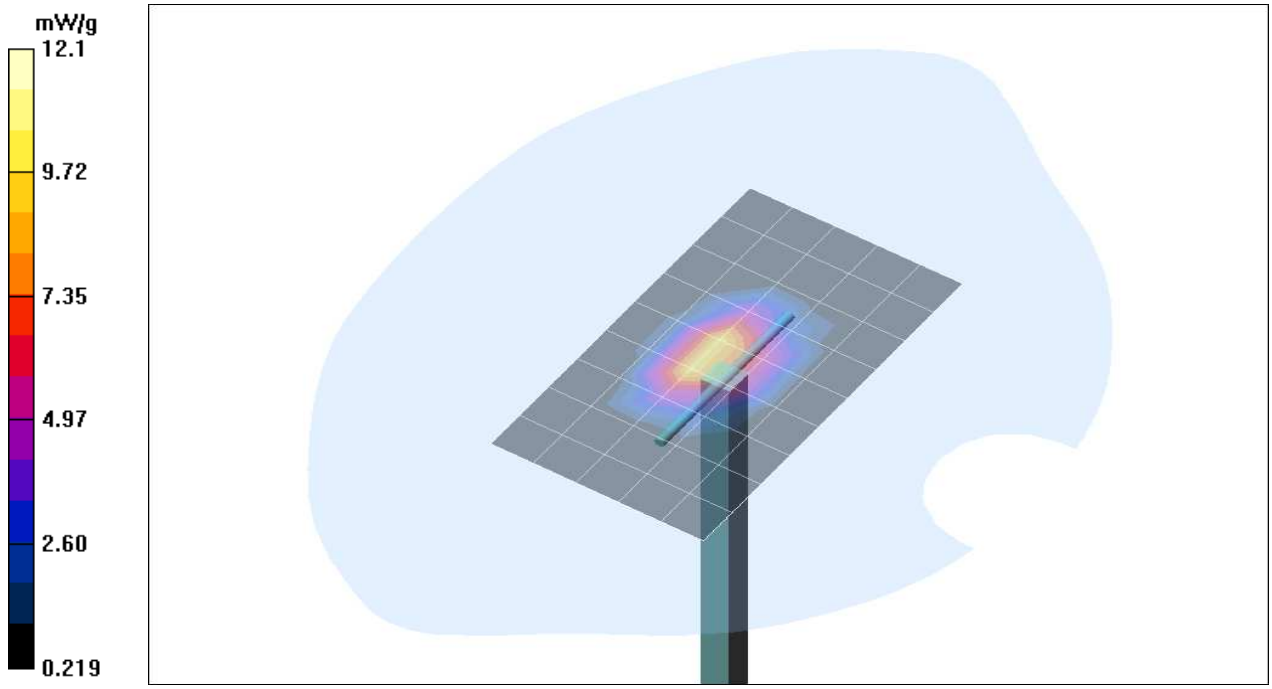
3 1900 MHz (Date/Time: 4/20/2009 8:07:25 AM)

Test Laboratory: EMC Department Kamp-Lintfort
File Name: validation19001723_090420
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d021

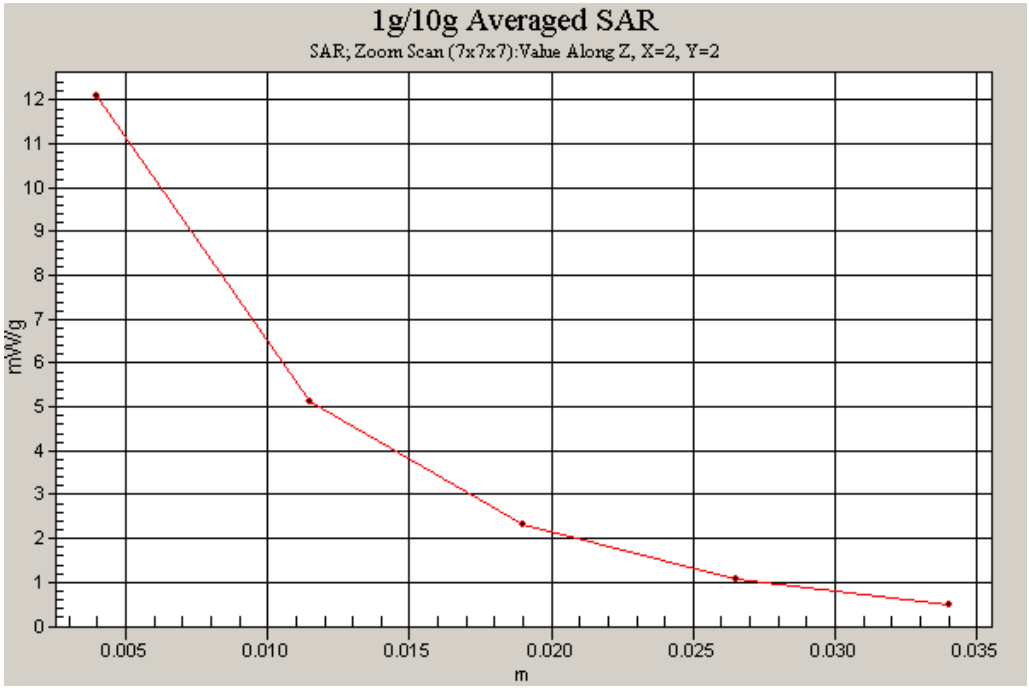
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.59 mho/m; εr = 54.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1723; ConvF(4.4, 4.4, 4.4); Calibrated: 11/10/2008
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn523; Calibrated: 11/6/2008
Phantom: SAM-LEFT; Type: Twin; Serial: 1237
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 9.70 mW/g
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=7.5mm
Reference Value = 91.8 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 20.0 W/kg
SAR(1 g) = 10.9 mW/g; SAR(10 g) = 5.61 mW/g
Maximum value of SAR (measured) = 12.1 mW/g



SAR distribution for system validation 1900 MHz, April 20, 2009; Ambient Temperature: 20.5°C; Liquid Temperature: 18.8°C).


1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=2, Y=2
mW/g
m
0
1
2
3
4
5
6
7
8
9
10
11
12
0.005
0.010
0.015
0.020
0.025
0.030
0.035