February 12, 2004

Federal Communications Commission
Equipment Approval Services
7435 Oakland Mills Road
Columbia, MD 21046
Attn: Stan Lyles

SUBJECT: Itronix Corporation
FCC ID: KBCIX260MPIA555BT
731 Confirmation No.: EA788716
Correspondence Ref. No.: 26295

Dear Stan:

Submitted on behalf of Itronix Corp. is our response to your e-mail dated January 29, 2004 requesting additional information for the subject application.

1. Please find attached the evaluated body SAR test data for the bottom of the Laptop PC with the co-located WLAN, Bluetooth, and PCS CDMA modem transmitting simultaneously (worst-case configuration).
2. Please find attached the original scans for 2450 MHz and 1900 MHz fluids with the SAR scale adjusted to the same maximum value for comparison between the WLAN and PCS CDMA field contours. Also attached are scans for the 2450 MHz and 835 MHz fluids to show comparison between the WLAN and Cellular CDMA field contours. Please note that the 835 MHz scan is the original scan using DASY3 software, however the corresponding 2450 MHz scan was not previously performed, and therefore was re-evaluated with the new DASY4 software. In addition, due to the differences in DASY 3 and 4 software, the maximum value displayed on the scales is not the same, although the maximum value set is the same.

If you have any further questions regarding the above, please do not hesitate to contact me.

Sincerely,

Russell Pipe
Senior Compliance Engineer
Celltech Labs Inc.

cc: Itronix Corporation

Feb 02, 2004 - 2450 MHz - Bottom of Laptop PC - Co-Located Transmit

DUT: Itronix Corporation; FCC ID: KBCIX260MPIA555BT; Model: IX260; Serial: ZZGEG3135ZZ1409

Type: Rugged Laptop PC with co-located WLAN, Bluetooth, & Dual-Band CDMA Modem

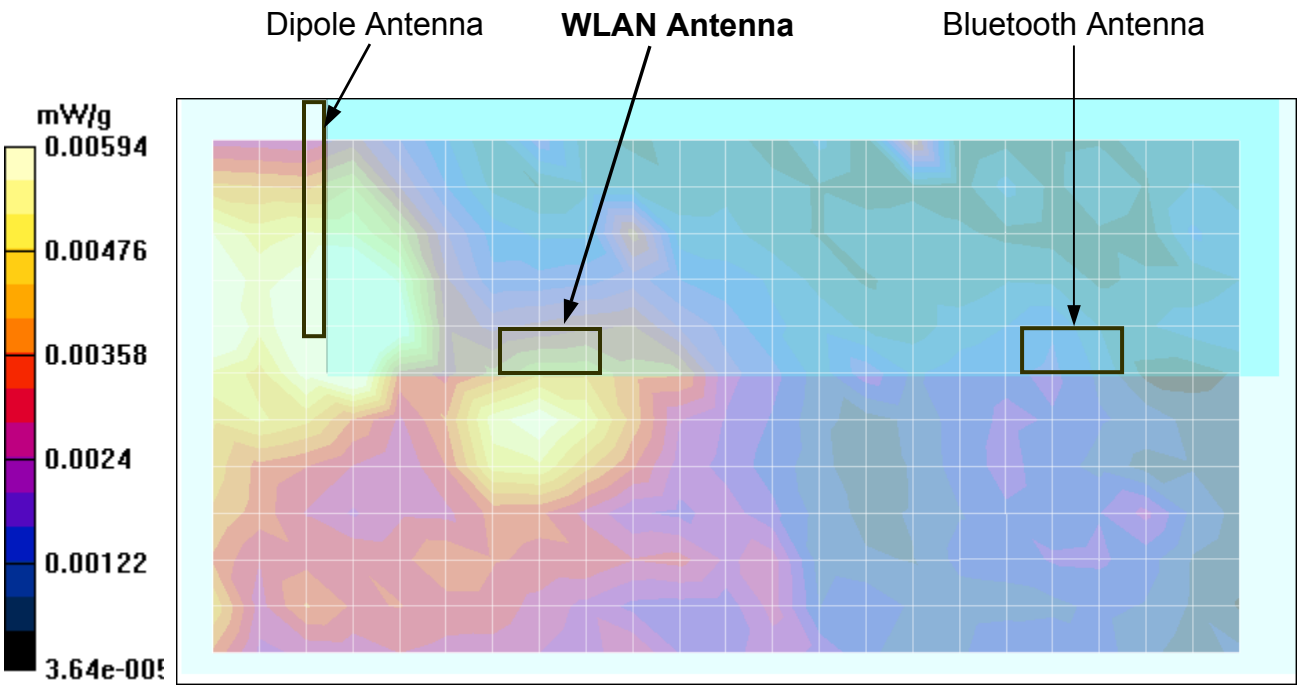
Ambient Temp: 25.0ºC; Fluid Temp: 23.5ºC; Barometric Pressure: 100.9 kPa; Humidity: 35%

Communication System: DSSS WLAN
Frequency: 2412 MHz; Duty Cycle: 1:1
RF Output Power: 21.2 dBm (Conducted)
Medium: M2450 (σ = 1.97 mho/m; ε_r = 50.2; ρ = 1970 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(4.6, 4.6, 4.6); Calibrated: 26/02/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglas; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

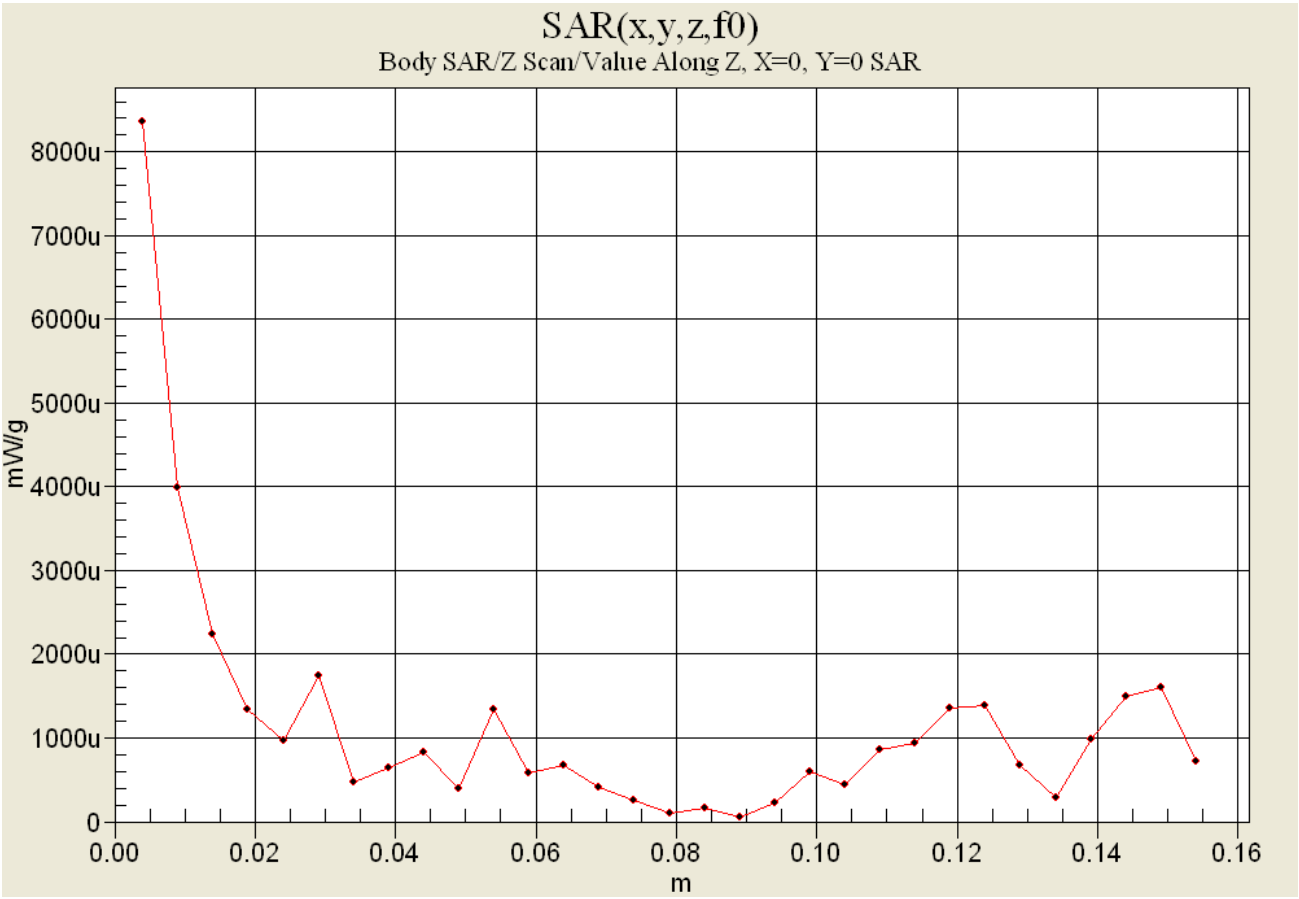
WLAN 2412 MHz, PCS CDMA 1880 MHz, Bluetooth 2441 MHz - Bottom of Laptop/Area Scan (12x24x1):
Measurement grid: dx=15mm, dy=15mm

WLAN 2412 MHz, PCS CDMA 1880 MHz, Bluetooth 2441 MHz - Bottom of Laptop/Zoom Scan (7x7x7)/Cube 2:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.010 W/kg
SAR(1 g) = 0.00605 mW/g; SAR(10 g) = 0.00391 mW/g
Reference Value = 1.02 V/m



Coarse Scan to Evaluate Zoom Scan

Feb 02, 2004 - Z-Axis Scan



Note: As a

result of the low SAR in this device position, ambient noise entered into the SAR measurement of the Z-axis scan (from 2 - 15 cm) as the probe moved away from the RF source.

Feb 02, 2004 - 2450 MHz - Bottom of Laptop PC - Co-Located Transmit

DUT: Itronix Corporation; FCC ID: KBCIX260MPIA555BT; Model: IX260; Serial: ZZGEG3135ZZ1409

Type: Rugged Laptop PC with co-located WLAN, Bluetooth, & Dual-Band CDMA Modem

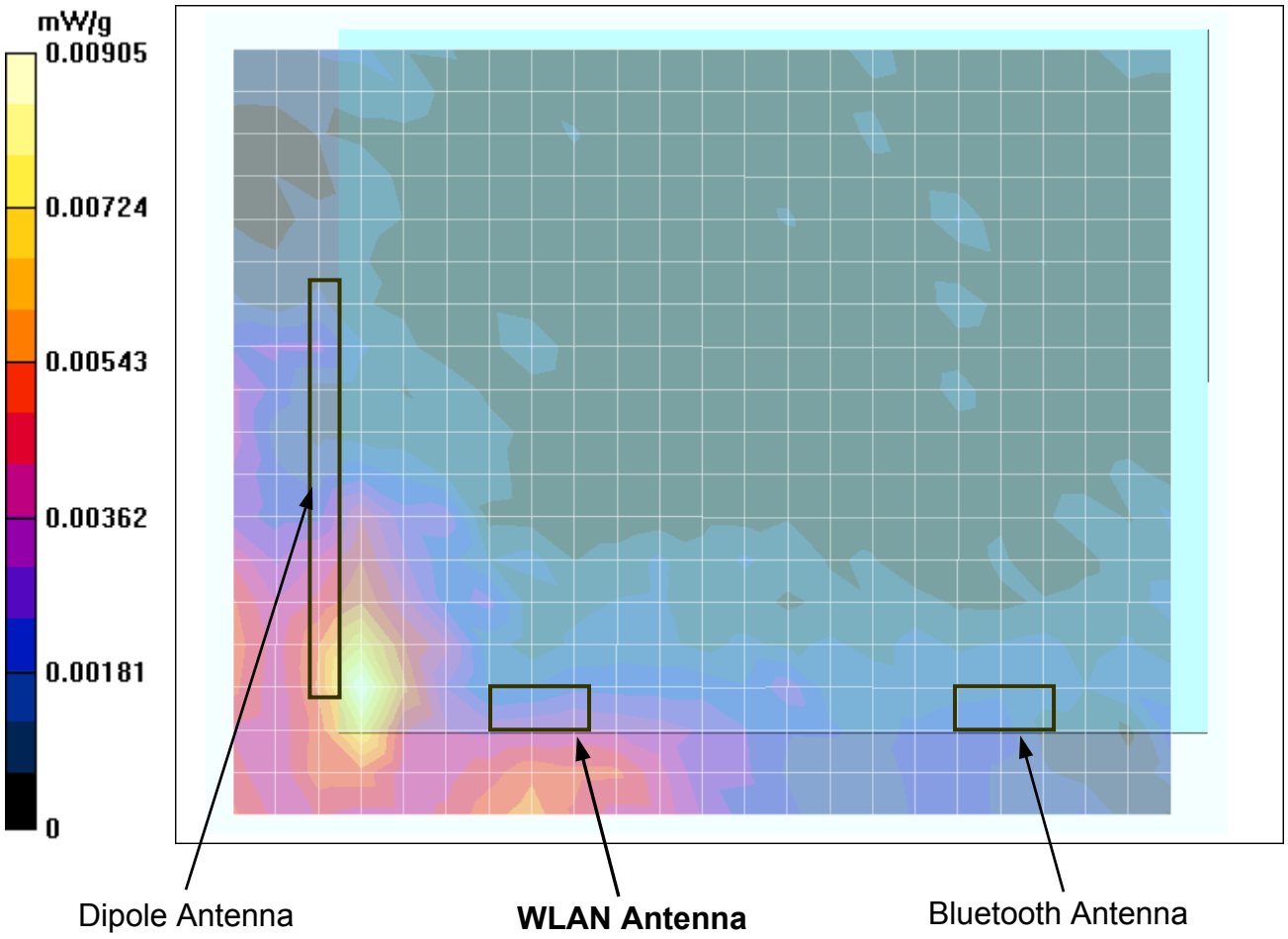
Ambient Temp: 25.0ºC; Fluid Temp: 23.5ºC; Barometric Pressure: 100.9 kPa; Humidity: 35%

Communication System: DSSS WLAN
Frequency: 2412 MHz; Duty Cycle: 1:1
RF Output Power: 21.2 dBm (Conducted)
Medium: M2450 (σ = 1.97 mho/m; ε_r = 50.2; ρ = 1970 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(4.6, 4.6, 4.6); Calibrated: 26/02/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglas; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

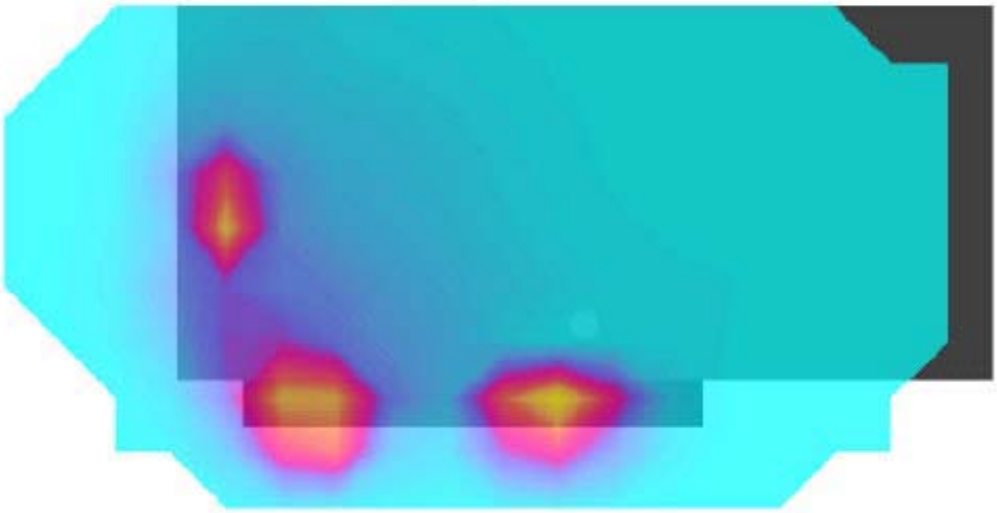
WLAN 2412 MHz, PCS CDMA 1880 MHz, Bluetooth 2441 MHz - Bottom of Laptop - Area Scan Only/Area Scan (19x24x1):
Measurement grid: dx=15mm, dy=15mm
Reference Value = 0.512 V/m
Maximum value of SAR = 0.00905 mW/g

Coarse Scan to Show Remaining Area of Laptop Bottom



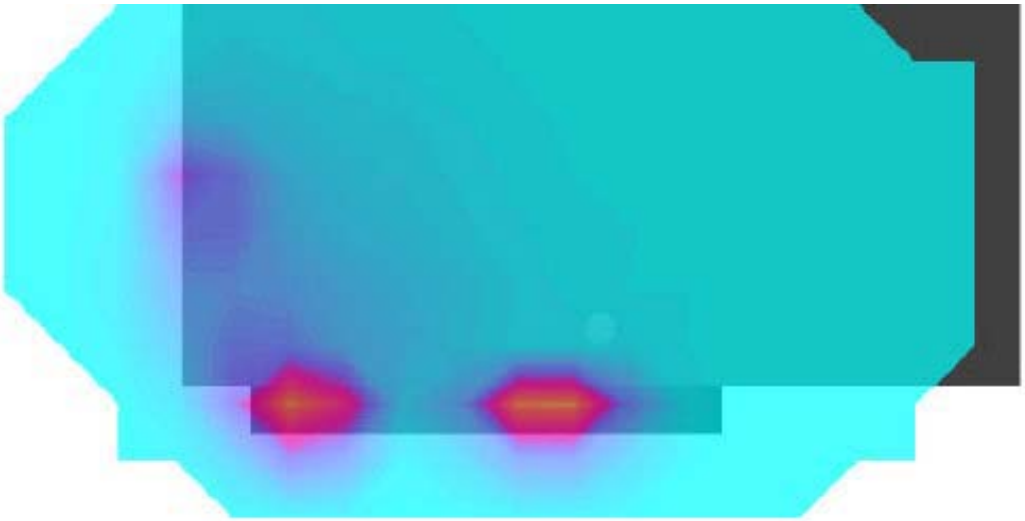
2450 MHz Muscle Fluid with WLAN, Bluetooth, & PCS CDMA simultaneously transmitting to show contour comparison

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)
0.0 cm Separation Distance from Back of LCD to Planar Phantom
IX260 Rugged Laptop PC
Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna
Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card (PCS) with External Dipole Antenna
and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna
Simultaneous Transmit with co-located WLAN, CDMA, and Bluetooth Transmitters
DSSS Mode
Channel 1 (2412 MHz)
Conducted Power: 18.80 dBm
Ambient Temp: 23.9°C; Fluid Temp: 23.9°C
Date Tested: August 29, 2003



1900 MHz Muscle Fluid with PCS CDMA, WLAN, & Bluetooth simultaneously transmitting to show contour comparison

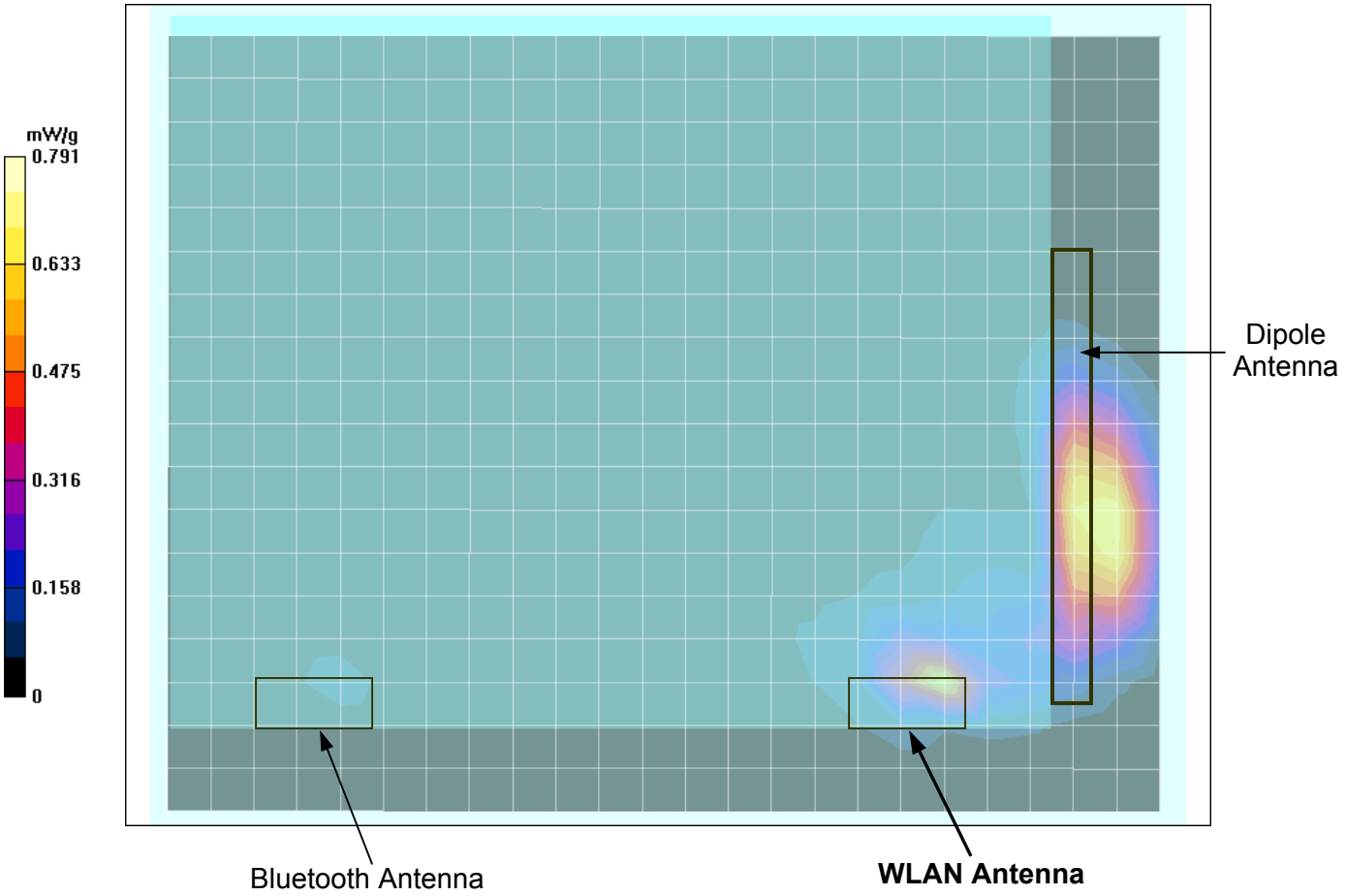
Back of LCD (Display Closed) - CDMA Dipole Antenna Parallel to Planar Phantom (Stowed Position)
0.0 cm Separation Distance from Back of LCD to Planar Phantom
IX260 Rugged Laptop PC
with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card
Co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card with Internal Antenna
and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna
PCS CDMA Mode
Simultaneous Transmit with co-located DSSS WLAN and Bluetooth Transmitters
Channel 600 [1880.00 MHz]
Conducted Power: 23.27 dBm
Ambient Temp: 24.7°C; Fluid Temp: 22.4°C
Date Tested: August 29, 2003



2450 MHz Muscle Fluid with WLAN, Bluetooth, & Cellular CDMA simultaneously transmitting to show contour comparison

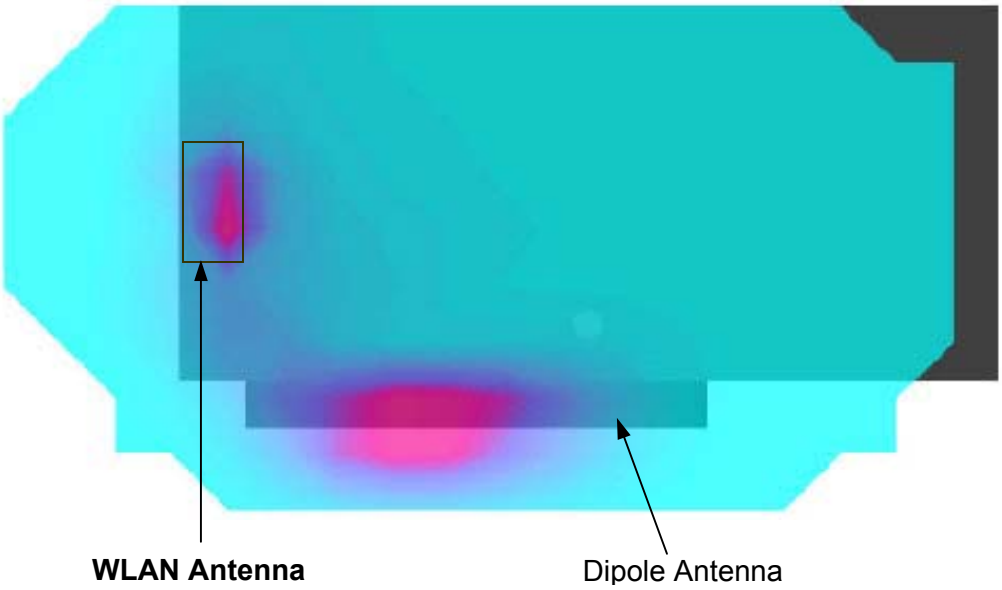
Phantom: Barski Planar; Type: Fiberglas; S/N: 03-01
Probe: ET3DV6 – SN1387; ConvF(4.6,4.6,4.6); Crest factor: 1.0
Muscle 2450 MHz: σ = 1.97 mho/m; ε_r = 50.2 mho/m; ρ = 1970 kg/m^3
Coarse: Dx = 5 mm, Dy = 5 mm, Dz = 5 mm
Cube 7x7x7
SAR (1g): 0.710 mW/g, SAR (10g): 0.359 mW/g

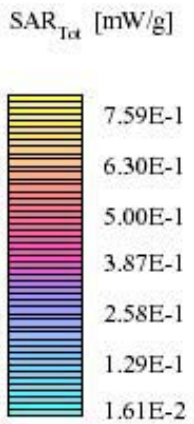
Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)
0.0 cm Separation Distance from Back of LCD to Planar Phantom
IX260 Rugged Laptop PC
Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna
Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem with External Dipole Antenna
& Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna
WLAN Simultaneous Transmit with co-located Cellular CDMA & Bluetooth Transmitters
WLAN DSSS Mode
Channel 1 (2412 MHz)
Conducted Power: 21.2 dBm
Ambient Temp: 25.0ºC; Fluid Temp: 23.5ºC; Barometric Pressure: 100.9 kPa; Humidity: 35%
Date Tested: February 02, 2004



835 MHz Muscle Fluid with Cellular CDMA, WLAN, & Bluetooth simultaneously transmitting for contour comparison

Back of LCD (Display Closed) - CDMA Dipole Antenna Parallel to Planar Phantom (Stowed Position)
0.0 cm Separation Distance from Back of LCD to Planar Phantom
IX260 Rugged Laptop PC
with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card
Co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card with Internal Antenna
and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna
Cellular CDMA Mode
Simultaneous Transmit with colocated CDMA, DSSS WLAN, and Bluetooth Transmitters
Channel 363 [835.89 MHz]
Conducted Power: 23.05 dBm
Ambient Temp: 23.9°C; Fluid Temp: 23.2°C
Date Tested: August 28, 2003





2450 MHz DUT Evaluation (Body)

Measured Fluid Dielectric Parameters (Muscle)

February 02, 2004

Frequency	e'	e"
2.350000000 GHz	50.5255	14.0376
2.360000000 GHz	50.4971	14.0980
2.370000000 GHz	50.4824	14.1287
2.380000000 GHz	50.4448	14.1507
2.390000000 GHz	50.4028	14.1677
2.400000000 GHz	50.3543	14.1751
2.410000000 GHz	50.3084	14.2017
2.420000000 GHz	50.2550	14.2631
2.430000000 GHz	50.2299	14.2986
2.440000000 GHz	50.1833	14.3750
2.450000000 GHz	50.1619	14.4469
2.460000000 GHz	50.1217	14.4990
2.470000000 GHz	50.1105	14.5526
2.480000000 GHz	50.0986	14.5896
2.490000000 GHz	50.0536	14.6278
2.500000000 GHz	50.0380	14.6415
2.510000000 GHz	49.9750	14.6453
2.520000000 GHz	49.9120	14.6861
2.530000000 GHz	49.8600	14.7142
2.540000000 GHz	49.8125	14.7739
2.550000000 GHz	49.7843	14.8247

2450 MHz System Performance Check

Measured Fluid Dielectric Parameters (Brain)

February 02, 2004

Frequency	e'	e"
2.350000000 GHz	37.8546	13.5836
2.360000000 GHz	37.8125	13.6219
2.370000000 GHz	37.7982	13.6523
2.380000000 GHz	37.7517	13.6616
2.390000000 GHz	37.7212	13.6832
2.400000000 GHz	37.6784	13.6984
2.410000000 GHz	37.6292	13.7080
2.420000000 GHz	37.5583	13.7543
2.430000000 GHz	37.5298	13.7945
2.440000000 GHz	37.4671	13.8349
2.450000000 GHz	37.4185	13.8917
2.460000000 GHz	37.3828	13.9193
2.470000000 GHz	37.3638	13.9799
2.480000000 GHz	37.3423	13.9993
2.490000000 GHz	37.3205	14.0272
2.500000000 GHz	37.2812	14.0560
2.510000000 GHz	37.2321	14.0551
2.520000000 GHz	37.1762	14.0846
2.530000000 GHz	37.1314	14.1135
2.540000000 GHz	37.0585	14.1334
2.550000000 GHz	37.0161	14.1826

Feb 02, 2004 - System Performance Check - 2450 MHz Dipole

DUT: Dipole 2450 MHz; Model: D2450V2; Type: System Performance Check; Serial: 150

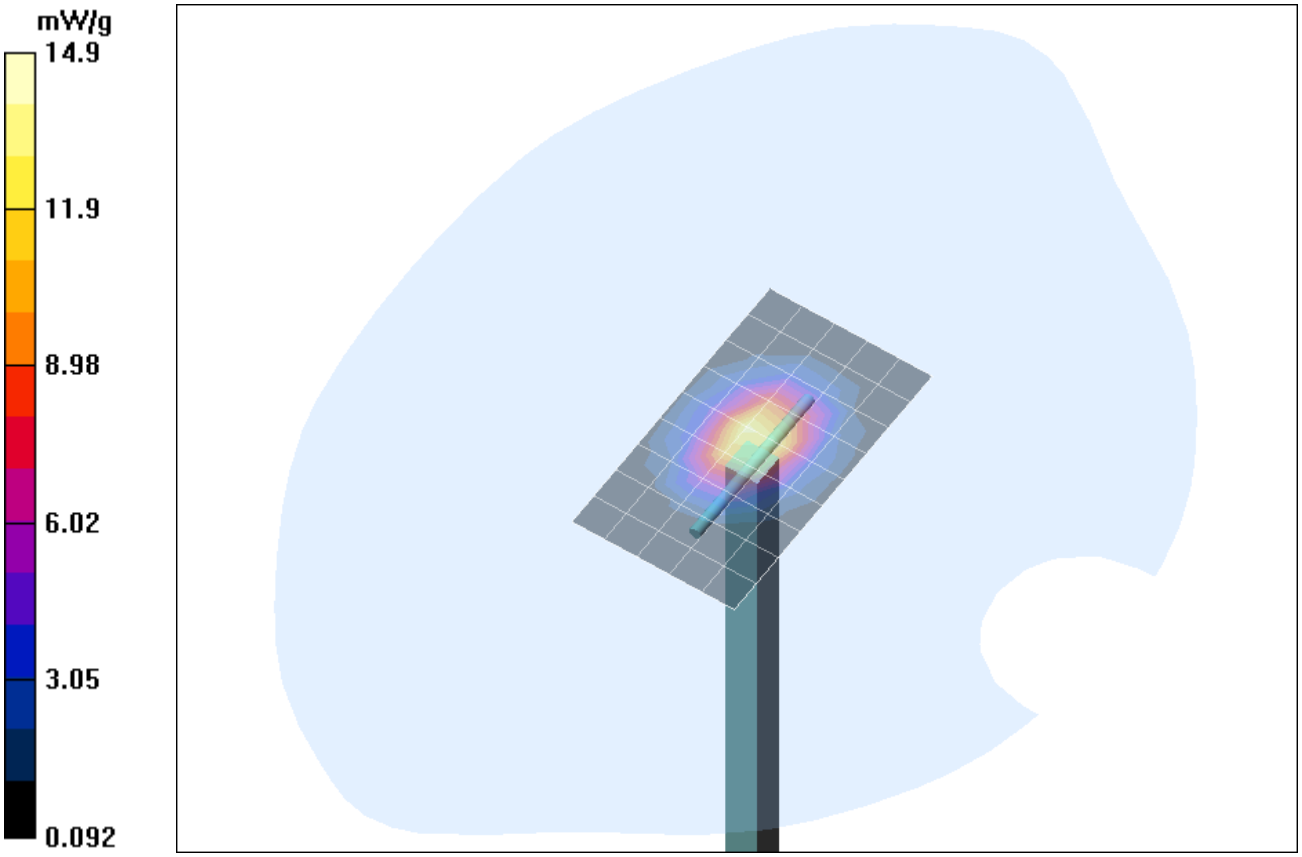
Ambient Temp: 25.0ºC; Fluid Temp: 24.0ºC; Barometric Pressure: 100.9 kPa; Humidity: 35%

Forward Conducted Power: 250 mW
Communication System: CW
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450 (σ = 1.89 mho/m; ε_r = 37.4; ρ = 1000 kg/m^3)

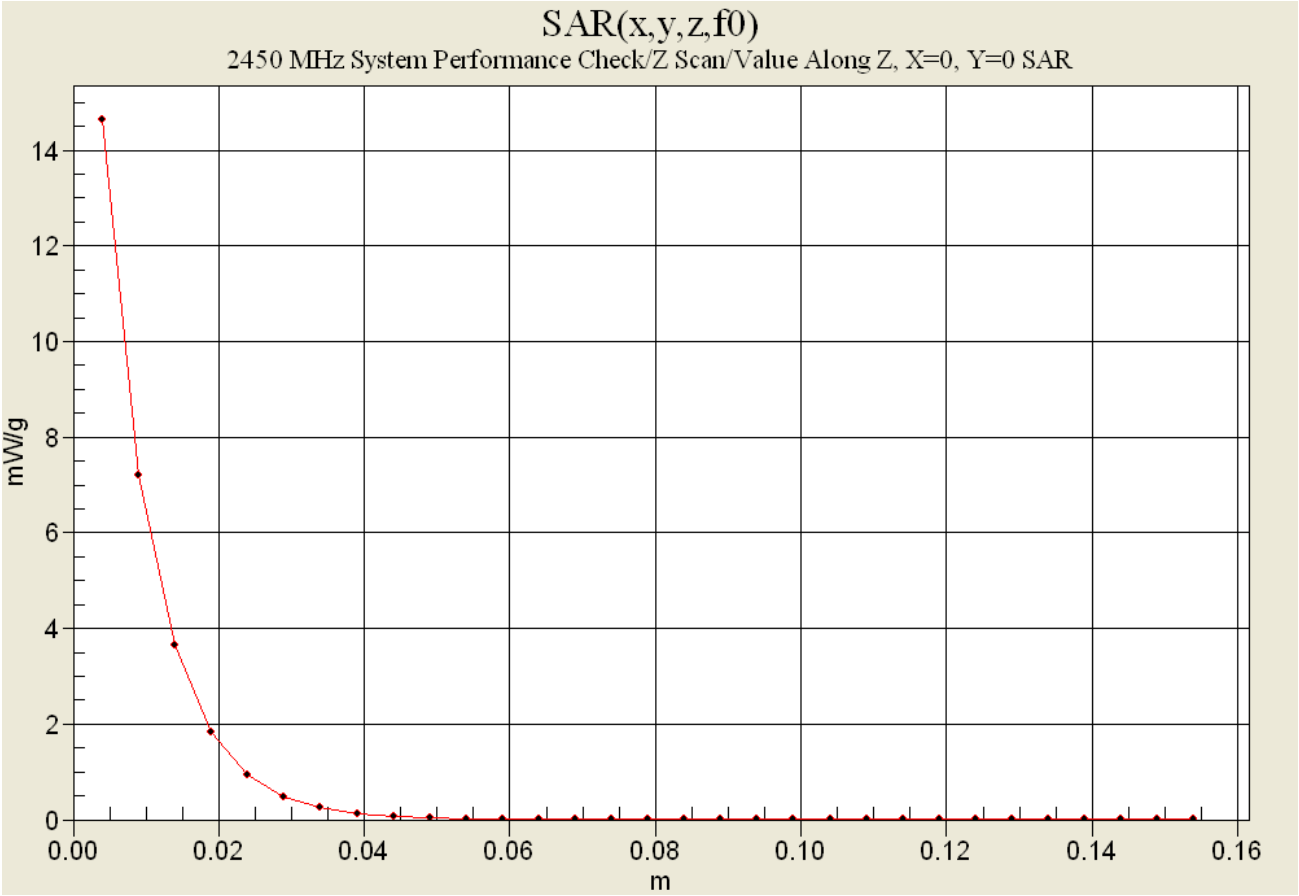
- Probe: ET3DV6 - SN1387; ConvF(5, 5, 5); Calibrated: 26/02/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: SAM front; Type: Fiberglas; Serial: 1033
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

2450 MHz System Performance Check/Area Scan (6x10x1):
Measurement grid: dx=10mm, dy=10mm

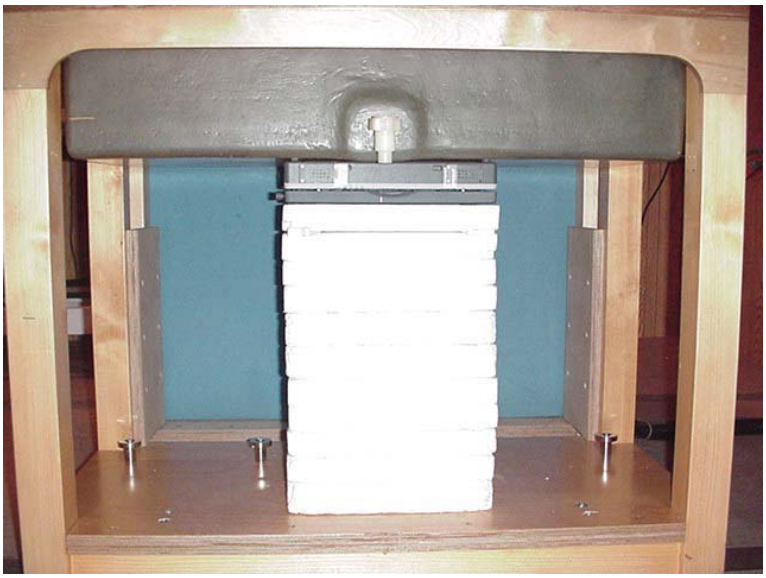
2450 MHz System Performance Check/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 27.4 W/kg
SAR(1 g) = 13.1 mW/g; SAR(10 g) = 6.12 mW/g
Reference Value = 93.1 V/m
Power Drift = -0.1 dB

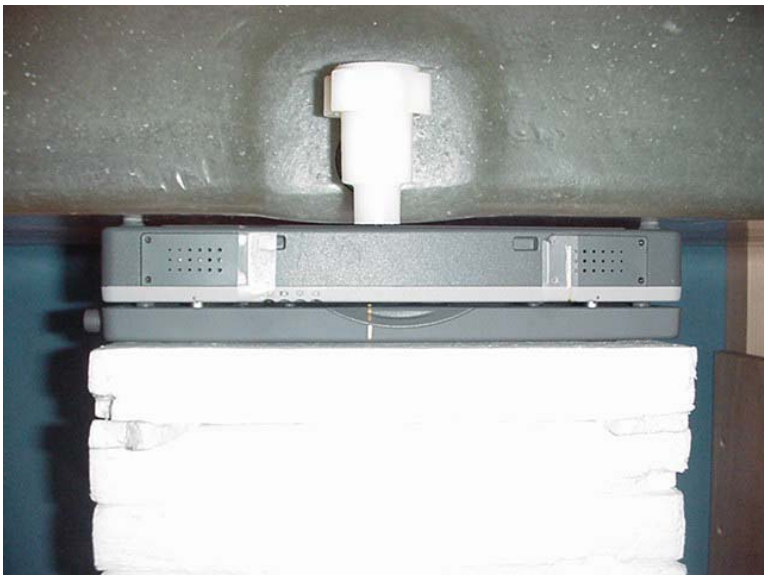


Feb 02, 2004 - Z-Axis Scan

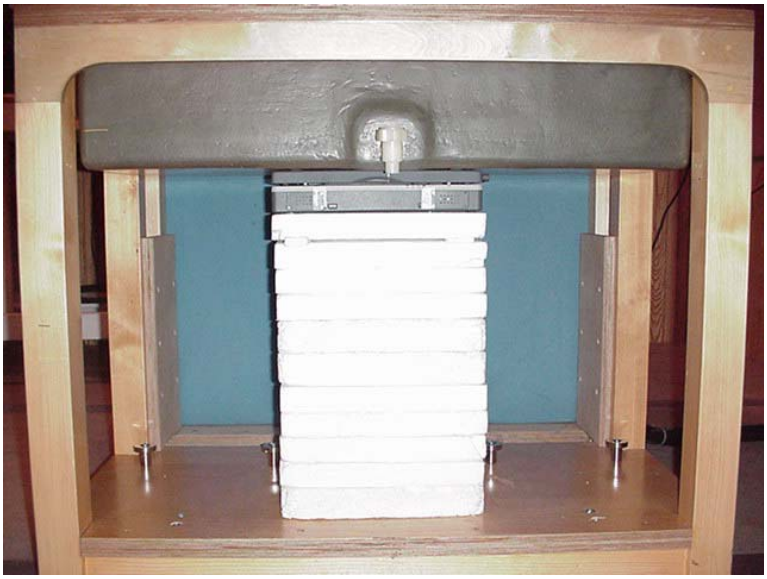


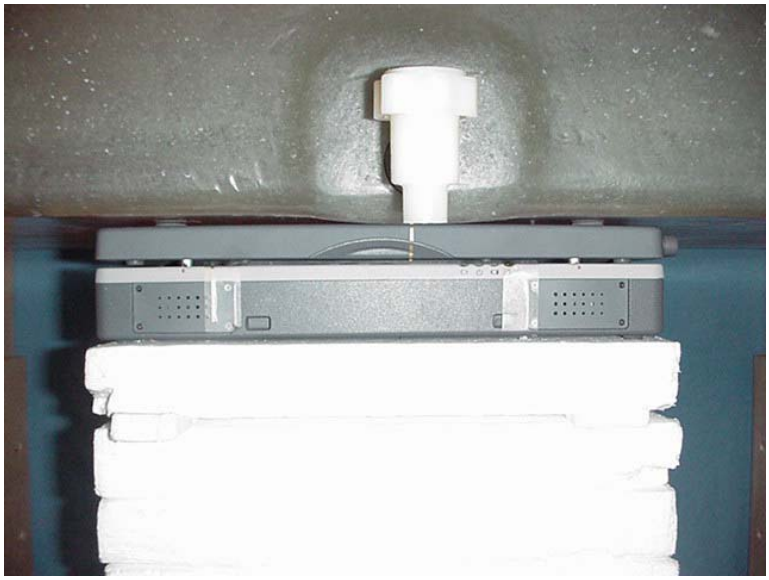
Feb 02, 2004 - SAR Test Setup Photos - Bottom of Laptop PC - Planar Phantom





Feb 02, 2004 - SAR Test Setup Photos - Back of LCD Display - Planar Phantom





2378 Westlake Road
Kelowna, B.C. Canada
V1Z-2V2

BARSKI INDUSTRIES (1985) LTD.

Ph. # 250-769-6848
Fax # 250-769-6334
E-mail: barskiind@shaw.ca
Web: www.bcfiberglass.com

FIBERGLASS FABRICATORS

Certificate of Conformity

Item : Flat Planar Phantom Unit # 03-01
Date: June 16, 2003
Manufacturer: Barski Industries (1985 Ltd)

Test	Requirement	Details
Shape	Compliance to geometry according to drawing	Supplied CAD drawing
Material Thickness	Compliant with the requirements	2mm +/- 0.2mm in measurement area
Material Parameters	Dielectric parameters for required frequencies Based on Dow Chemical technical data	100 MHz-5 GHz Relative permittivity<5 Loss Tangent<0.05

Conformity

Based on the above information, we certify this product to be compliant to the requirements specified.

Signature: _____

Daniel Chailler

Fiberglass Planar Phantom - Top View

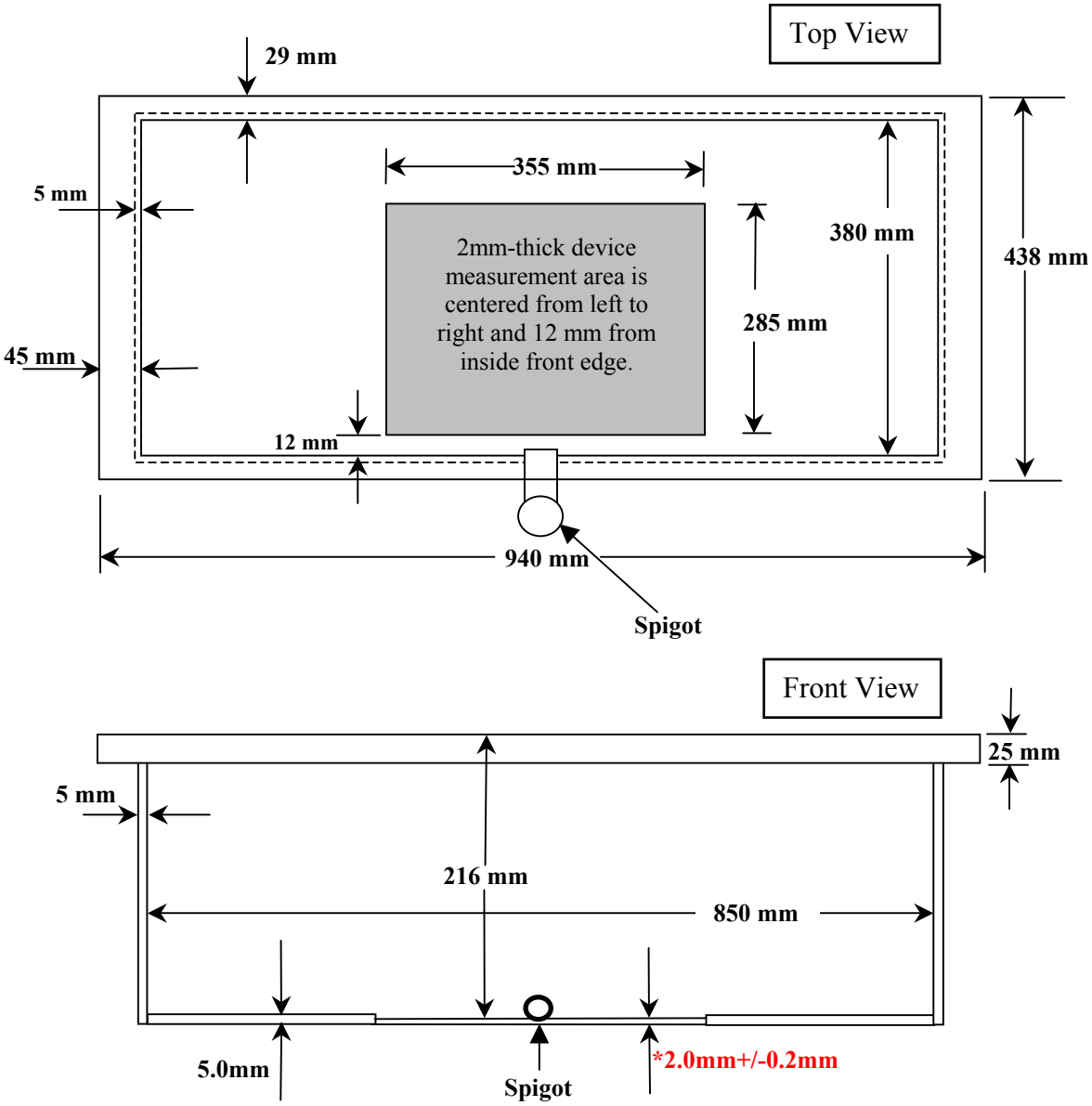
Fiberglass Planar Phantom - Front View

Fiberglass Planar Phantom - Back View

Fiberglass Planar Phantom - Bottom View

Dimensions of Fiberglass Planar Phantom

(Manufactured by Barski Industries Ltd. - Unit# 03-01)



Note: Measurements that aren't repeated for the opposite sides are the same as the side measured. This drawing is not to scale.