

# **FCC Test Report**

# FCC Part 15.247 for FHSS systems

#### For the

# Braemer, Inc.

# **Ambulatory Arrhythmia Monitoring System**

**Model Number: Fusion** 

**FCC ID: HHMFUSION** 

TEST REPORT #: EMC\_BRAEM\_005\_08001\_15.247 DATE: 2009-03-15



Bluetooth

Bluetooth

Qualification Test
Facility
(BQTF)



FCC listed A2LA Accredited

IC recognized # 3462B

#### CETECOM Inc.

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Phone: +1 (408) 586 6200 • Fax: +1 (408) 586 6299 • E-mail: info@cetecomusa.com • <a href="http://www.cetecom.com">http://www.cetecom.com</a> CETECOM Inc. is a Delaware Corporation with Corporation number: 2113686

Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

Test Report #:

EMC\_BRAEM\_005\_08001\_15.247

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Date of Report:

2009-03-15





### 1 Assessment

The following is in compliance with the applicable criteria specified in FCC rules Part 15.247 of the Code of Federal Regulations.

| Company       | Description                                | Model # |
|---------------|--|---------|
| Braemer, Inc. | Ambulatory Arrhythmia<br>Monitoring System | Fusion  |

This report is reviewed by:

Marc Douat

2009-03-15 EMC & Radio (EMC Project Engineer)

Date Section Name Signature

The test results of this test report relate exclusively to the test item specified in Identification of the Equipment under Test. The CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM Inc USA.

This report is prepared by:

Ahmad Safdari

2009-03-15 EMC & Radio (EMC Project Engineer)

Date Section Name Signature

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# 2 Administrative Data

# 2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

| Company Name:                    | CETECOM Inc.   |
|----------------------------------|--|
| Department:                      | EMC  |
| Address:                         | 411 Dixon Landing Road<br>Milpitas, CA 95035<br>U.S.A. |
| Telephone:                       | +1 (408) 586 6200                                      |
| Fax:                             | +1 (408) 586 6299                                      |
| Responsible Test Lab<br>Manager: | Lothar Schmidt   |
| Responsible Project<br>Leader:   | Ahmad Safdari  |
| Date of test:                    | 2009-02-26 to 2009-02-27                               |

# 2.2 Identification of the Client

| APPLICANT                   |                             |  |  |
|-----------------------------|-----------------------------|--|--|
| Applicant (Company<br>Name) | Braemer, Inc.               |  |  |
| Street Address              | 1285 Corporate Center Drive |  |  |
| City/Zip Code               | Eagan 55121                 |  |  |
| Country                     | USA                         |  |  |
| <b>Contact Person</b>       | Adam ford                   |  |  |
| Telephone                   | (651) 286-8620 x144         |  |  |
| Fax                         | (651) 286-8630              |  |  |
| e-mail                      | adam.ford@braemarinc.com    |  |  |

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# 3 Equipment under Test (EUT)

# 3.1 Specification of the Equipment under Test

| Marketing Name:                             | Fusion  |
|---|---|
| Description:                                | Ambulatory Arrhythmia Monitoring System                                   |
| Model No:                                   | Fusion  |
| Antenna Type:                               | Wire Antenna ¼ Wave Antenna   |
| Type(s) of Modulation:                      | GFSK  |
| Frequency Band(s) of Operation:             | 2400~2483.5MHz  |
| Numbers of Channels:                        | 79  |
| Equipment Classification: (CLASS)           | □FIXED □VEHICULAR ■PORTABLE □MODULE                                       |
| Equipment Classification: (POWER(AC MAINS)) | □110VAC (GROUND) □ 110VAC (NO GROUND) □12VDC ■ <b>6.5/8.2 VDC battery</b> |

3.2 Identification of the Equipment Under Test (EUT)

| EUT# | TYPE | MANF.         | MODEL  | SERIAL # |
|------|------|---------------|--------|----------|
| 1    | EUT  | Braemer, Inc. | Fusion | N/A      |

# 3.3 Identification of Accessory equipment

| AE# | ТҮРЕ                    | MODEL           |  |
|-----|-------------------------|-----------------|--|
| 1   | ECG Recording Leadwires | g Leadwires N/A |  |
| 2   | Battery                 | N/A             |  |

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### **Subject Of Investigation**

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT as specified by requirements listed in FCC rules Part 15.247 of Title 47 of the Code of Federal Regulations. The maximization of portable equipment is conducted in accordance with ANSI C63.4.

All testing was performed on the product referred to in Section 3 as EUT. This test report contains only radiated testing results as per FCC15.247 for conduct report refer to report # W6M120703-7876-P-15.

During the testing process the EUT was tested on a single channel using PRBS9 payload using DH5, packets, all data in this report shows the worst case between horizontal and vertical polarization for above 1GHz.

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# 4 Measurements (Radiated)

# 4.1 MAXIMUM PEAK OUTPUT POWER

# 4.1.1 Test Result:

EIRP: GFSK

| TEST CONDITIONS         |                      | MAXIMUM | PEAK OUTPUT P | OWER (dBm) |
|-------------------------|----------------------|---------|---------------|------------|
| Frequency (MHz)         |                      | 2402    | 2441          | 2480       |
| T <sub>nom</sub> (23)°C | V <sub>nom</sub> VDC | -0.90   | -0.37         | 0.98       |
| Measurement uncertainty |                      |         | ±0.5dBm       |            |

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EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

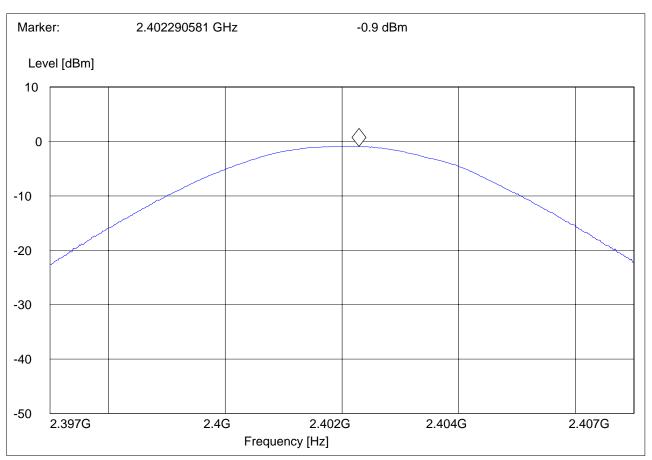
Comments:

#### SWEEP TABLE: "EIRP BT low channel"

Short Description: EIRP Bluetooth channel-2402MHz
Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

2.4 GHz 2.4 GHz MaxPeak Coupled 3 MHz DUMMY-DBM



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EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.39; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

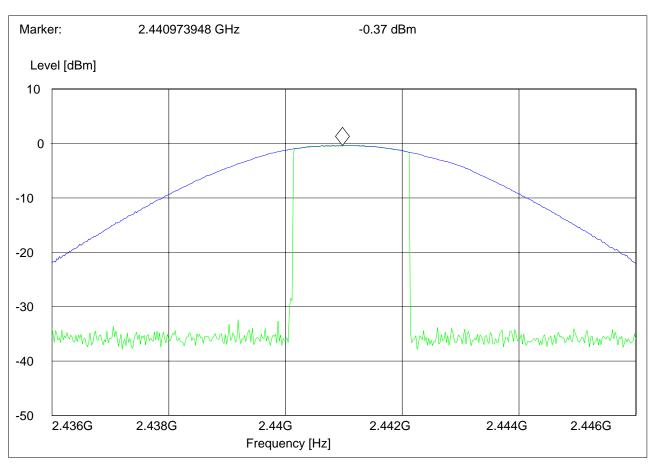
Comments:

#### SWEEP TABLE: "EIRP BT mid channel"

EIRP Bluetooth channel-2441MHz Short Description: Start Stop Detector Meas. IF Transducer

Frequency Frequency Bandw. Time

2.4 GHz 2.4 GHz MaxPeak Coupled 3 MHz DUMMY-DBM



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EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

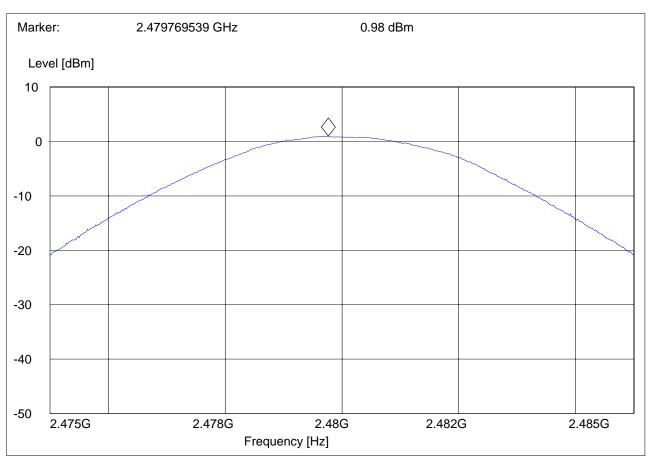
Comments:

#### SWEEP TABLE: "EIRP BT high channel"

EIRP Bluetooth channel-2480MHz Short Description: Detector Meas. IF Transducer Start Stop Bandw.

Frequency Frequency Time

2.5 GHz 2.5 GHz MaxPeak Coupled 3 MHz DUMMY-DBM



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# 4.2 RESTRICTED BAND EDGE COMPLIANCE RADIATED §15.247/15.205

### **4.2.1 LIMITS**

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                 | MHz   | MHz             | GHz           |  |
|---------------------|---|-----------------|---------------|--|
| 0.090 - 0.110       | 16.42 - 16.423                                      | 399.9 - 410     | 4.5 - 5.15    |  |
| 10.495 - 0.505      | 16.69475 - 16.69525                                 | 608 - 614       | 5.35 - 5.46   |  |
| 2.1735 - 2.1905     | 16.80425 - 16.80475                                 | 960 - 1240      | 7.25 - 7.75   |  |
| 4.125 - 4.128       | 25.5 - 25.67  | 1300 - 1427     | 8.025 - 8.5   |  |
| 4.17725 - 4.17775   | 37.5 - 38.25  | 1435 - 1626.5   | 9.0 - 9.2     |  |
| 4.20725 - 4.20775   | 73 - 74.6   | 1645.5 - 1646.5 | 9.3 - 9.5     |  |
| 6.215 - 6.218       | 6.215 - 6.218 74.8 - 75.2 1660 - 1710               |                 | 10.6 - 12.7   |  |
| 6.26775 - 6.26825   | 108 - 121.94  | 1718.8 - 1722.2 | 13.25 - 13.4  |  |
| 6.31175 - 6.31225   | 123 - 138   | 2200 - 2300     | 14.47 - 14.5  |  |
| 8.291 - 8.294       | 149.9 - 150.05                                      | 2310 - 2390     | 15.35 - 16.2  |  |
| 8.362 - 8.366       | 8.362 - 8.366   156.52475 - 156.52525   2483.5 - 25 |                 | 17.7 - 21.4   |  |
| 8.37625 - 8.38675   | 3.37625 - 8.38675 156.7 - 156.9 2690 - 2900         |                 | 22.01 - 23.12 |  |
| 8.41425 - 8.41475   | 162.0125 - 167.17                                   | 3260 - 3267     | 23.6 - 24.0   |  |
| 12.29 - 12.293      | 167.72 - 173.2                                      | 3332 - 3339     | 31.2 - 31.8   |  |
| 12.51975 - 12.52025 | 240 - 285   | 3345.8 - 3358   | 36.43 - 36.5  |  |
| 12.57675 - 12.57725 | 322 - 335.4   | 3600 - 4400     | (2)           |  |
| 13.36 - 13.41       |   |                 |               |  |

<sup>\*</sup>PEAK LIMIT= 74dBuV/m

<sup>\*</sup>AVG. LIMIT= 54dBuV/m

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## 4.2.2 RESULTS: GFSK (2402MHz) LOWER BAND EDGE PEAK -GFSK MODULATION

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

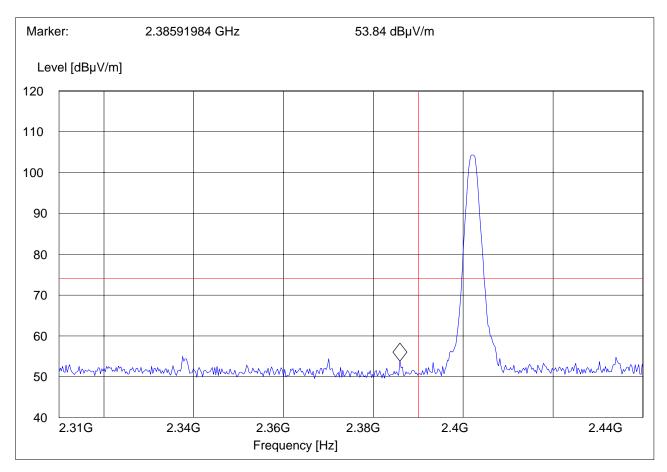
Comments:

#### SWEEP TABLE: "FCC15.247 LBE\_PK"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

2.3 GHz 2.4 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### (2402MHz) LOWER BAND EDGE AVERAGE -GFSK MODULATION

EUT: 04GU10b / C01 Customer: Braemar Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

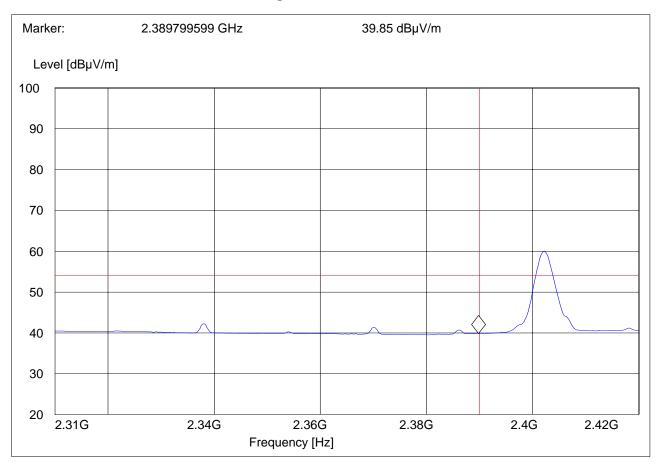
Voltage: Internal Battery

Comments:

## SWEEP TABLE: "FCC15.247 LBE\_AVG"

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

Frequency Frequency Time Bandw.
2.3 GHz 2.4 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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# (2480MHz) HIGHER BAND EDGE PEAK -GFSK MODULATION

EUT: 04GU10b / C01 Customer: Braemar Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

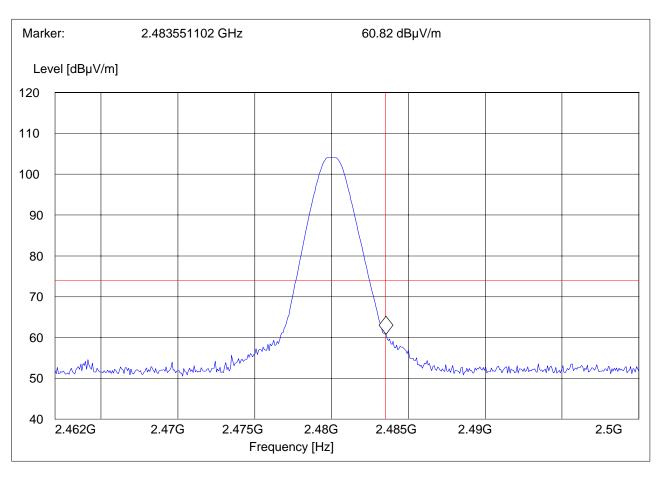
Voltage: Internal Battery

Comments:

#### SWEEP TABLE: "FCC15.247 HBE\_PK"

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

Frequency Frequency Time Bandw.
2.5 GHz 2.5 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### (2480MHz) HIGHER BAND EDGE AVERAGE-GFSK MODULATION

EUT: 04GU10b / C01 Customer: Braemar Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

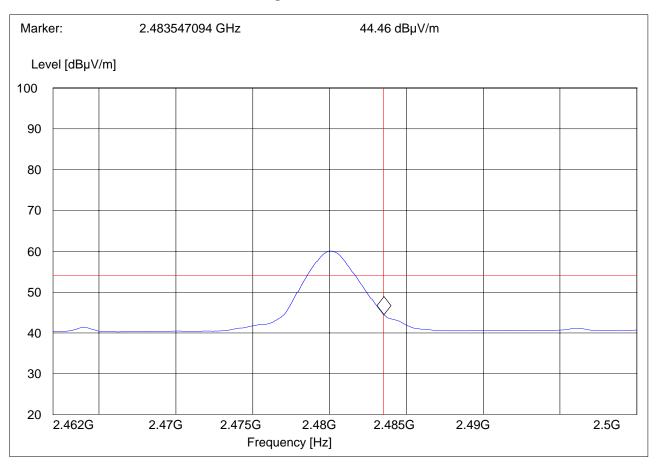
Voltage: Internal Battery

Comments:

#### SWEEP TABLE: "FCC15.247 HBE\_AVG"

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

Frequency Frequency Time Bandw.
2.5 GHz 2.5 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_horz



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### TRANSMITTER SPURIOUS EMISSIONS RADIATED § 15.247/15.205/15.209

#### **4.2.3** LIMITS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                        | MHz   | MHz             | GHz           |  |
|----------------------------|---|-----------------|---------------|--|
| 0.090 - 0.110              | 16.42 - 16.423                                      | 399.9 - 410     | 4.5 - 5.15    |  |
| <sup>1</sup> 0.495 - 0.505 | 16.69475 - 16.69525                                 | 608 - 614       | 5.35 - 5.46   |  |
| 2.1735 - 2.1905            | 16.80425 - 16.80475                                 | 960 - 1240      | 7.25 - 7.75   |  |
| 4.125 - 4.128              | 25.5 - 25.67  | 1300 - 1427     | 8.025 - 8.5   |  |
| 4.17725 - 4.17775          | 37.5 - 38.25  | 1435 - 1626.5   | 9.0 - 9.2     |  |
| 4.20725 - 4.20775          | 73 - 74.6   | 1645.5 - 1646.5 | 9.3 - 9.5     |  |
| 6.215 - 6.218              | .8 74.8 - 75.2 1660 - 1710                          |                 | 10.6 - 12.7   |  |
| 6.26775 - 6.26825          | 108 - 121.94  | 1718.8 - 1722.2 | 13.25 - 13.4  |  |
| 6.31175 - 6.31225          | 123 - 138   | 2200 - 2300     | 14.47 - 14.5  |  |
| 8.291 - 8.294              | 8.291 - 8.294 149.9 - 150.05 2310 - 2390            |                 | 15.35 - 16.2  |  |
| 8.362 - 8.366              | 8.362 - 8.366   156.52475 - 156.52525   2483.5 - 25 |                 | 17.7 - 21.4   |  |
| 8.37625 - 8.38675          | 37625 - 8.38675 156.7 - 156.9 2690 - 2900           |                 | 22.01 - 23.12 |  |
| 8.41425 - 8.41475          | .41425 - 8.41475                                    |                 | 23.6 - 24.0   |  |
| 12.29 - 12.293             | ) - 12.293  |                 | 31.2 - 31.8   |  |
| 12.51975 - 12.52025        | 240 - 285   | 3345.8 - 3358   | 36.43 - 36.5  |  |
| 12.57675 - 12.57725        | 7725 322 - 335.4 3600 - 4400                        |                 | (2)           |  |
| 13.36 - 13.41              |   |                 |               |  |

<sup>\*</sup>PEAK LIMIT= 74dBuV/m

### **NOTE:**

- 1. The radiated emissions were done with different settings, using the relevant pre-amplifiers for the relevant frequency ranges. This is the reason that the graphs show different noise levels. In the range between 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.
- 2. All measurements are done in peak mode using an average limit, unless specified with the plots.

### Results for the radiated measurements below 30MHz according § 15.33

| Frequency Measured values |                                       | Remarks                          |
|---------------------------|---------------------------------------|----------------------------------|
| 9KHz – 30MHz              | No emissions found, caused by the EUT | This is valid for all the tested |
| 9KHZ – 30MHZ              |                                       | channels                         |

<sup>\*</sup>AVG. LIMIT= 54dBuV/m

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### 4.2.4 RESULTS

### 30MHz – 1GHz Antenna: vertical

EUT: 04GU10b / C01

Customer:: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

Comments:

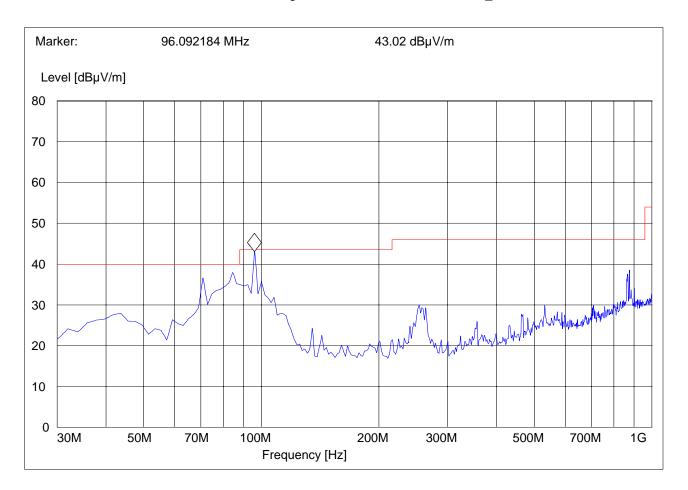
QuasiPeak @ 96.092184 MHz is 39.76 dBuV/m

#### SWEEP TABLE: "FCC15.247\_30M-1G\_Ver"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Vert



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# 30MHz – 1GHz Antenna: horizontal

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: H
EUT Orientation: V
Test Engineer: Chri

Test Engineer: Chris

Voltage: Internal Battery

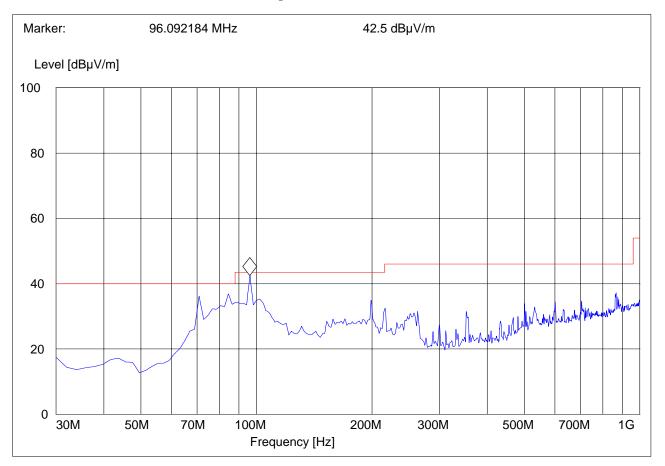
Comments:

#### SWEEP TABLE: "FCC15.247\_30M-1G\_Hor"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Horz



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## 30MHz – 1GHz Antenna: horizontal

EUT: 04GU10b / C01 Customer:: Braemar

Test Mode: BT CH.39; GFSK

ANT Orientation: H EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

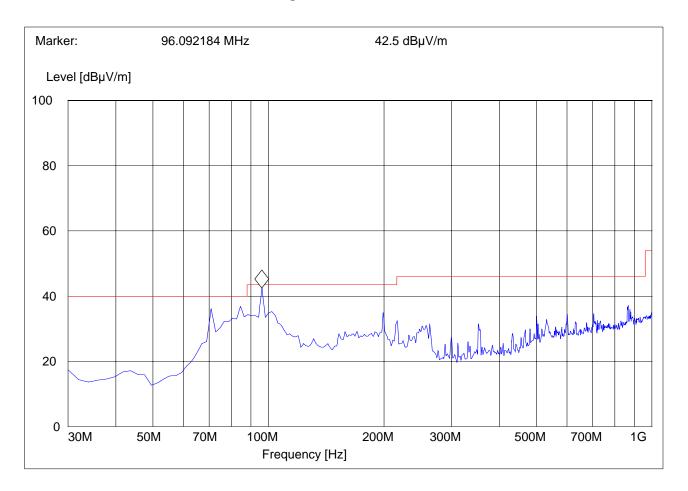
Comments:

#### SWEEP TABLE: "FCC15.247\_30M-1G\_Hor"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Horz



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### **30MHz – 1GHz Antenna: vertical**

EUT: 04GU10b / C01 Test Mode: RT CT

BT CH.39; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

Comments:

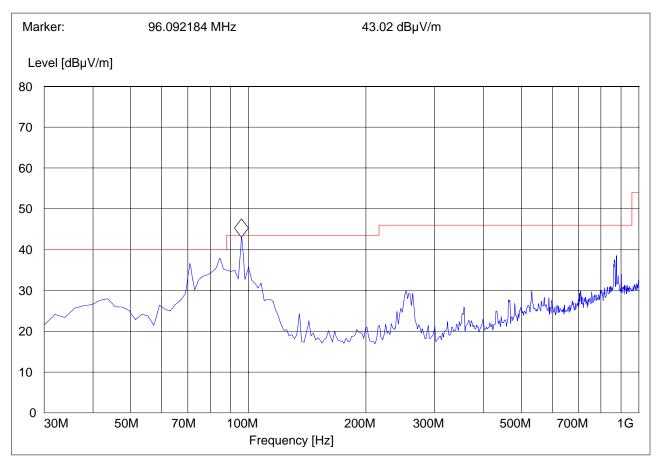
QuasiPeak @ 96.092184 MHz is 39.76 dBuV/m

#### SWEEP TABLE: "FCC15.247\_30M-1G\_Ver"

Detector Meas. IF Transducer Start Stop

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Vert



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## 30MHz – 1GHz Antenna: vertical

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

Comments:

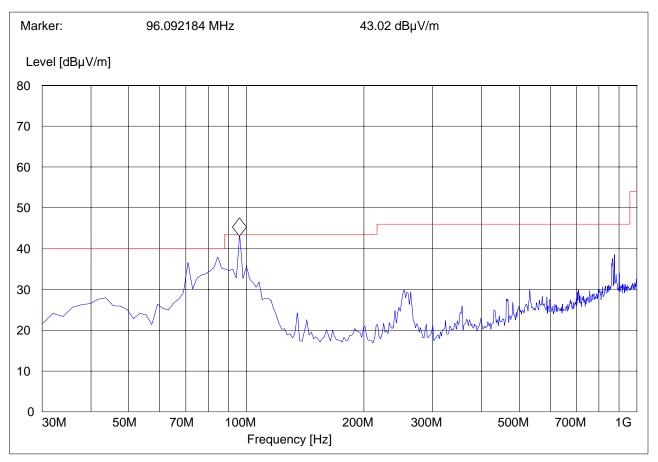
QuasiPeak @ 96.092184 MHz is 39.76 dBuV/m

#### SWEEP TABLE: "FCC15.247\_30M-1G\_Ver"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Vert



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# 30MHz – 1GHz Antenna: horizontal

EUT: 04GU10b / C01

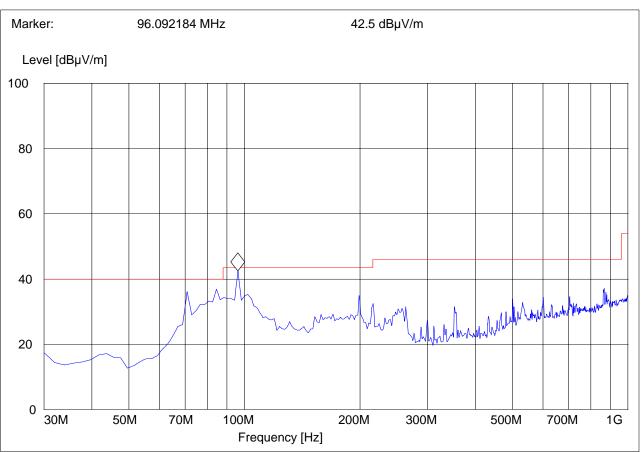
Customer: Braemar

Test Mode: BT CH.78; GFSK

ANT Orientation: H
EUT Orientation: V
Test Engineer: Chris

Voltage: Internal Battery

Comments:



SWEEP TABLE: "FCC15.247\_30M-1G\_Hor"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz 3141-#1186\_Horz

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### 1-3GHz (2402MHz)

Note: The peak above the limit line is the carrier freq.

Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer: Braemar Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

Comments:

#### SWEEP TABLE: "FCC15.247\_1-3G"

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

Frequency Frequency Time Bandw.
1.0 GHz 3.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert

Marker: 2.402805611 GHz  $93.82 dB\mu V/m$ Level [dBµV/m] 110 100 80 60 40 20 10 1G 1.5G 3G 2G 2.5G Frequency [Hz]

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# 1-3GHz (2441MHz)

Note: The peaks above the limit line is the carrier freq.

Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.39; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

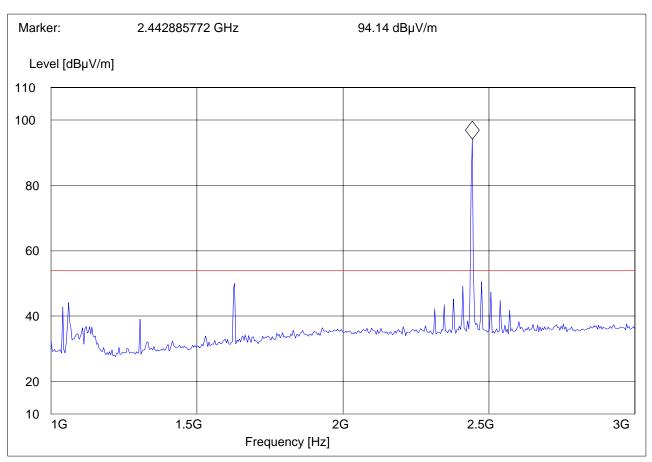
Comments:

#### SWEEP TABLE: "FCC15.247\_1-3G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

1.0 GHz 3.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### 1-3GHz (2480MHz)

Note: The peaks above the limit line is the carrier freq.

Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

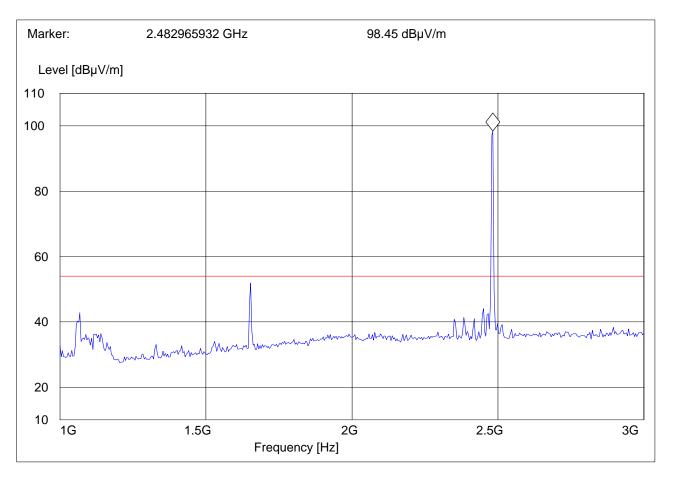
Comments:

#### SWEEP TABLE: "FCC15.247\_1-3G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

1.0 GHz 3.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### 3-18GHz (2402MHz)

# Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

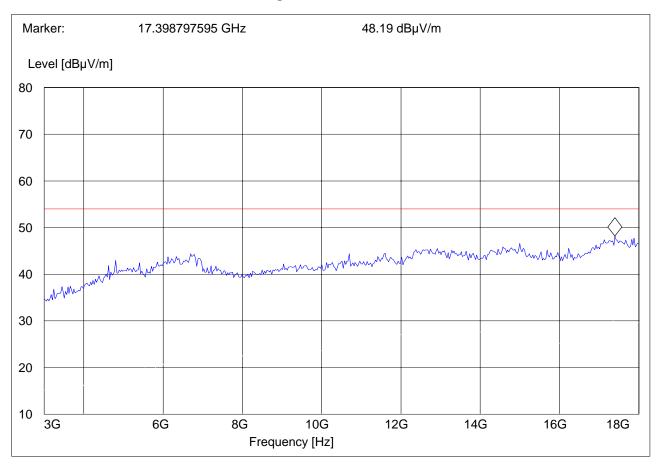
Comments:

#### SWEEP TABLE: "FCC15.247\_3-18G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

3.0 GHz 18.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### 3-18GHz (2441MHz)

# Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer:: Braemar

Test Mode: BT CH.39; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

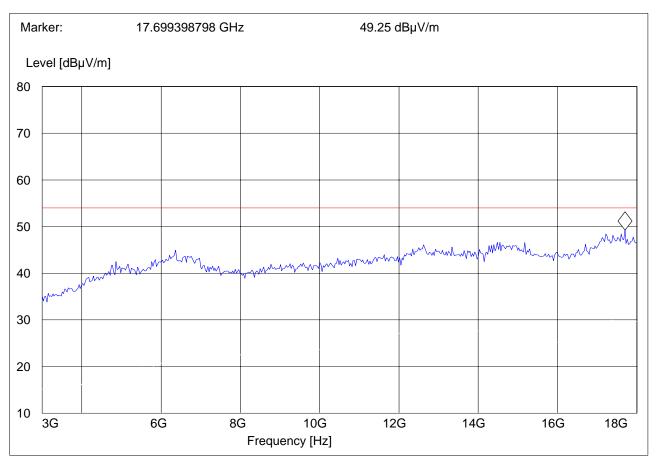
Comments:

#### SWEEP TABLE: "FCC15.247\_3-18G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

3.0 GHz 18.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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### 3-18GHz (2480MHz)

# Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01 Customer: Braemar

Test Mode: BT CH.78; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

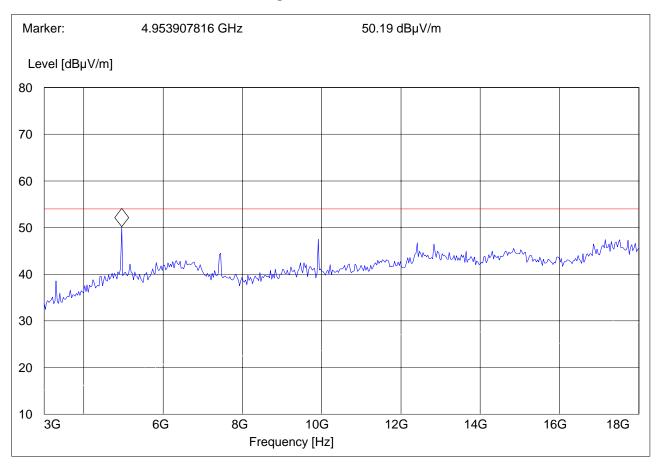
Comments:

#### SWEEP TABLE: "FCC15.247\_3-18G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

3.0 GHz 18.0 GHz MaxPeak Coupled 1 MHz #326horn\_AF\_vert



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#### 18-25GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)

Note: Peak Reading vs. Average limit

EUT: 04GU10b / C01

Customer: Braemar

Test Mode: BT CH.0; GFSK

ANT Orientation: V EUT Orientation: V Test Engineer: Chris

Voltage: Internal Battery

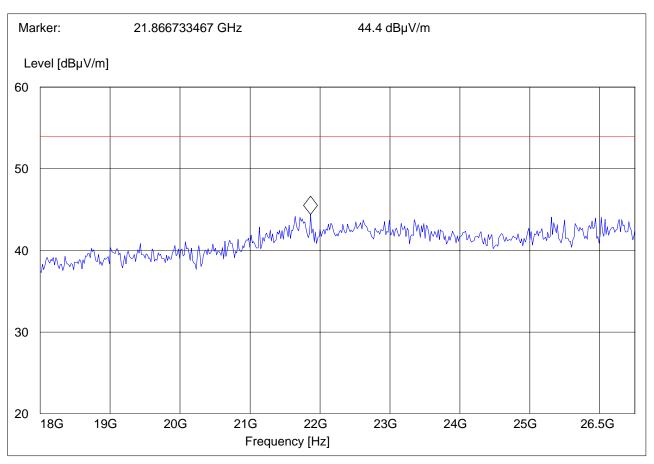
Comments:

#### SWEEP TABLE: "FCC15.247\_18-26.5G"

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

18.0 GHz 26.5 GHz MaxPeak Coupled 100 kHz Horn # 3116\_18-40G



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# 5 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

| No | Instrument/Ancillar | Type      | Manufacturer    | Serial No.   | Cal Due   | Interval |
|----|---------------------|-----------|-----------------|--------------|-----------|----------|
|    | ${f y}$             |           |                 |              |           |          |
| 01 | Spectrum Analyzer   | ESIB 40   | Rohde &         | 100107       | May 2009  | 1 year   |
|    |                     |           | Schwarz         |              |           |          |
| 02 | Spectrum Analyzer   | FSEM 30   | Rohde &         | 100017       | May 2009  | 1 year   |
|    |                     |           | Schwarz         |              |           |          |
| 03 | Signal Generator    | SMY02     | Rohde &         | 836878/011   | May 2009  | 1 year   |
|    |                     |           | Schwarz         |              |           |          |
| 04 | Power-Meter         | NRVD      | Rohde &         | 0857.8008.02 | May 2009  | 1 year   |
|    |                     |           | Schwarz         |              |           |          |
| 05 | Biconilog Antenna   | 3141      | EMCO            | 0005-1186    | June 2009 | 1 year   |
| 06 | Horn Antenna (1-    | SAS-      | AH Systems      | 325          | June 2009 | 1 year   |
|    | 18GHz)              | 200/571   |                 |              |           |          |
| 07 | Horn Antenna (18-   | 3160-09   | EMCO            | 1240         | June 2009 | 1 year   |
|    | 26.5GHz)            |           |                 |              |           |          |
| 08 | Power Splitter      | 11667B    | Hewlett Packard | 645348       | n/a       | n/a      |
| 09 | Climatic Chamber    | VT4004    | Voltsch         | G1115        | May 2009  | 1 year   |
| 10 | High Pass Filter    | 5HC2700   | Trilithic Inc.  | 9926013      | n/a       | n/a      |
| 11 | High Pass Filter    | 4HC1600   | Trilithic Inc.  | 9922307      | n/a       | n/a      |
| 12 | Pre-Amplifier       | JS4-      | Miteq           | 00616        | May 2009  | 1 year   |
|    |                     | 00102600  |                 |              |           |          |
| 13 | Power Sensor        | URV5-Z2   | Rohde &         | DE30807      | May 2009  | 1 year   |
| 13 |                     |           | Schwarz         |              |           |          |
| 14 | Digital Radio Comm. | CMD-55    | Rohde &         | 847958/008   | May 2009  | 1 year   |
|    | Tester              | CIVID-33  | Schwarz         | 0+1/30/000   |           |          |
| 15 | Universal Radio     | CMU 200   | Rohde &         | 832221/06    | May 2009  | 1 year   |
|    | Comm. Tester        | 21110 200 | Schwarz         | 032221700    |           |          |
| 16 | LISN                | ESH3-Z5   | Rohde &         | 836679/003   | May 2009  | 1 year   |
|    |                     |           | Schwarz         |              |           |          |
| 17 | Loop Antenna        | 6512      | EMCO            | 00049838     | July 2010 | 2 years  |

Test Report #:

EMC\_BRAEM\_005\_08001\_15.247

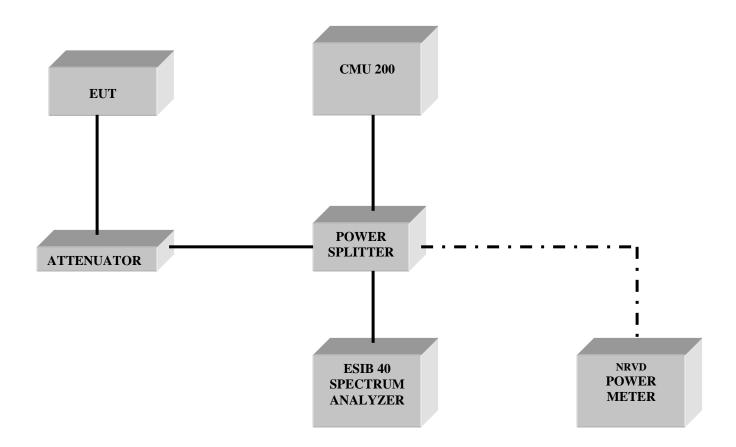
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# 6 BLOCK DIAGRAMS

# **Conducted Testing**



Test Report #:

EMC\_BRAEM\_005\_08001\_15.247

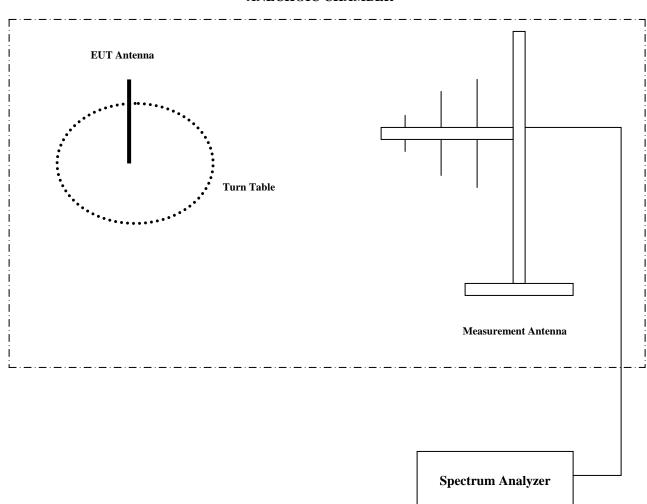
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# **Radiated Testing**

### ANECHOIC CHAMBER



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# 7 REPORT HISTORY

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