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March 16, 2010

## Prüfbericht / *Test Report*

**Nr. / No. 69861-00628-2 (Edition 3)**

Applicant: IDENTEC SOLUTIONS AG  
Type of equipment: Active UHF Tag  
Type designation: i-Q350 RTLS  
Order No.: 1930298  
Test standards: FCC Code of Federal Regulations,  
CFR 47, Part 15,  
Sections 15.205, 15.207, 15.215 and 15.247  
  
Industry Canada Radio Standards Specifications  
RSS-Gen Issue 2, Section 7.2.2 and  
RSS-210 Issue 7, Sections 2.2, A8 (Category I Equipment)

**Note:**

The test data of this report is related only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

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## 1 Description of the Equipment Under Test (EUT)

| General data of EUT             |                                |
|---------------------------------|--------------------------------|
| Type designation <sup>1</sup> : | i-Q350 RTLS                    |
| Parts <sup>2</sup> :            |                                |
| Serial number(s):               | 0.440.000.203<br>0.440.000.848 |
| Manufacturer:                   | IDENITEC Solutions AG          |
| Type of equipment:              | Active UHF Tag                 |
| Version:                        |                                |
| FCC ID:                         |                                |
| Additional parts/accessories:   |                                |

| Technical data of EUT                   |  |
|---|--|
| Application frequency range:            | 2400.0 - 2483.5 MHz  |
| Frequency range:                        | 2.44 GHz   |
| Operating frequency:                    | 2.44 GHz   |
| Type of modulation:                     | F1D  |
| Pulse train:                            | ---  |
| Pulse width:                            | ---  |
| Number of RF-channels:                  | 1  |
| Channel spacing:                        | ---  |
| Designation of emissions <sup>3</sup> : |  |
| Type of antenna:                        | Integrated   |
| Size/length of antenna:                 |  |
| Connection of antenna:                  | <input type="checkbox"/> detachable <input checked="" type="checkbox"/> not detachable |
| Type of power supply:                   | Battery supply   |
| Specifications for power supply:        | nominal voltage:      3.6 V  |

<sup>1</sup> Type designation of the system if EUT consists of more than one part.

<sup>2</sup> Type designations of the parts of the system, if applicable.

<sup>3</sup> Also known as "Class of Emission".

## 2 Administrative Data

| Application details       |  |
|---------------------------|--|
| Applicant (full address): | IDENTEC SOLUTIONS AG<br>Millennium Park 2<br>A-6890 Lustenau   |
| Contact person:           | Mr. Simon Prior  |
| Contract identification:  | 1930298  |
| Receipt of EUT:           | December 1, 2009 (0.440.000.203)<br>March 16, 2010 (0.440.000.848)   |
| Date(s) of test:          | December 2009<br>March 2010  |
| Note(s):                  | Mr. Günther Meuthen representing the applicant attended testings on December 1, 2009.<br><br>This test report covers the operating in the 2400.0 MHz to 2483.5 MHz frequency band. for the operating in the 919 MHz frequency band please refer to TÜV SÜD SENTON test report No. 69861-00628-1.<br><br>Tests in December 2009 were performed with test sample 0.440.000.203. Tests in March 2010 were performed with test sample 0.440.000.848. |

| Report details |                |
|----------------|----------------|
| Report number: | 69861-00628-2  |
| Edition:       | 3              |
| Issue date:    | March 16, 2010 |

### 3 Identification of the Test Laboratory

#### Details of the Test Laboratory

|   |  |
|---|--|
| Company name:                           | TÜV SÜD SENTON GmbH  |
| Address:                                | Aeussere Fruehlingstrasse 45<br>D-94315 Straubing<br>Germany |
| Laboratory accreditation:               | DAR-Registration No. DAT-PL-171/94-03                        |
| FCC test site registration number       | 90926  |
| Industry Canada test site registration: | 3050A  |
| Contact person:                         | Mr. Johann Roidt   |
|   | Phone: (+49) (0)9421 5522-0<br>Fax: (+49) (0)9421 5522-99    |

## 4 Summary

### Summary of test results

The tested sample complies with the requirements set forth in the

**Code of Federal Regulations CFR 47, Part 15, Sections 15.205, 15.215, 15.247  
and 2.1093**

of the Federal Communication Commission (FCC) and the

**Radio Standards Specifications  
RSS-210 Issue 7, Sections 2.2, 2.6 and A8 (Category I Equipment)**

of Industry Canada (IC).

### Personnel involved in this report

Laboratory Manager:



Mr. Johann Roidt

Responsible for testing:



Mr. Martin Steindl

Responsible for test report:

Mr. Martin Steindl

## 5 Operation Mode and Configuration of EUT

### Operation Mode(s)

Transmitting continuously at 2.44 GHz with 80 MHz bandwidth and at 2.412 GHz, 2.44 GHz and 2.472 GHz with 22 MHz bandwidth

### Configuration(s) of EUT

The EUT was configured as stand alone device controlled by an external reader.  
 Conducted measurements were performed on a temporary antenna connector.

### List of ports and cables

| <i>Port</i> | <i>Description</i> | <i>Classification<sup>4</sup></i> | <i>Cable type</i> | <i>Cable length</i> |
|-------------|--------------------|-----------------------------------|-------------------|---------------------|
| ---         |                    |                                   |                   |                     |

### List of devices connected to EUT

| <i>Item</i> | <i>Description</i> | <i>Type Designation</i> | <i>Serial no. or ID</i> | <i>Manufacturer</i> |
|-------------|--------------------|-------------------------|-------------------------|---------------------|
| ---         |                    |                         |                         |                     |

### List of support devices

| <i>Item</i> | <i>Description</i> | <i>Type Designation</i> | <i>Serial no. or ID</i> | <i>Manufacturer</i> |
|-------------|--------------------|-------------------------|-------------------------|---------------------|
| 1           | Reader             | i-PORT M350 RTLS        |                         | IDENTEC             |

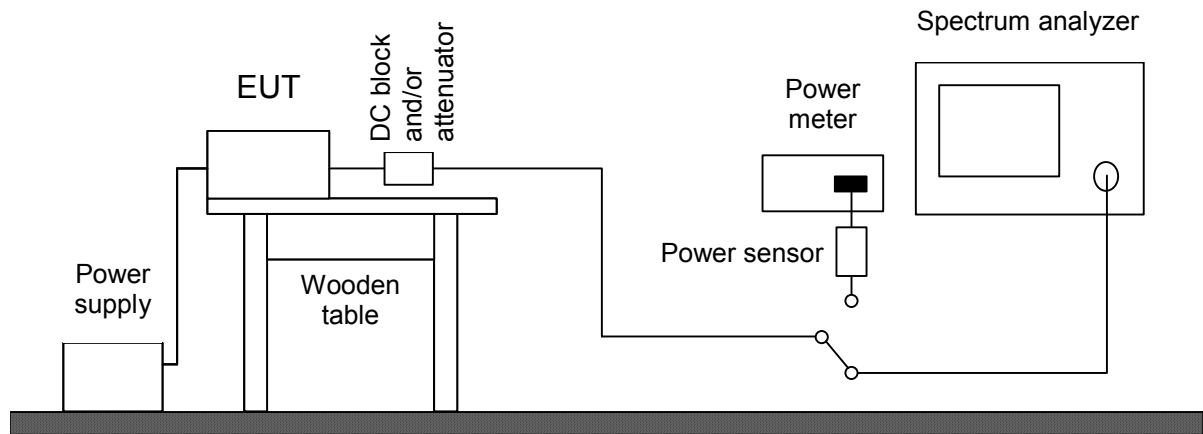
<sup>4</sup> Ports shall be classified as ac power, dc power or signal/control port

## 6 Measurement Procedures

### 6.1 Conducted Output Power

| Measurement Procedure:   |   |
|--|---|
| Rules and specifications:  | CFR 47 Part 2, section 2.1046(a)<br>IC RSS-Gen Issue 2, section 4.8 |
| Guide:   | CFR 47 Part 2, section 2.1046 / IC RSS-Gen Issue 2                  |
| <p>Conducted output power is measured at the RF output terminals (e.g. antenna connector if antenna is detachable) when the transmitter is adjusted in accordance with the tune-up procedure, if applicable. The RF output terminals are connected to a spectrum analyzer and/or a power meter with appropriate sensor. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as dc block and appropriate attenuators (50 Ohms). The electrical characteristics of the radio frequency load attached to the output terminals shall be stated, if applicable.</p> <p>If a spectrum analyzer is used and no other settings are specified resolution bandwidth shall be selected according to the carrier frequency <math>f_c</math> and set to 10 kHz (<math>150 \text{ kHz} \leq f_c &lt; 30 \text{ MHz}</math>), 100 kHz (<math>30 \text{ MHz} \leq f_c &lt; 1 \text{ GHz}</math>) or 1 MHz (<math>f_c \geq 1 \text{ GHz}</math>). The video bandwidth shall be at least three times greater than the resolution bandwidth. The settings used have to be indicated within the appropriate test record(s).</p> |   |



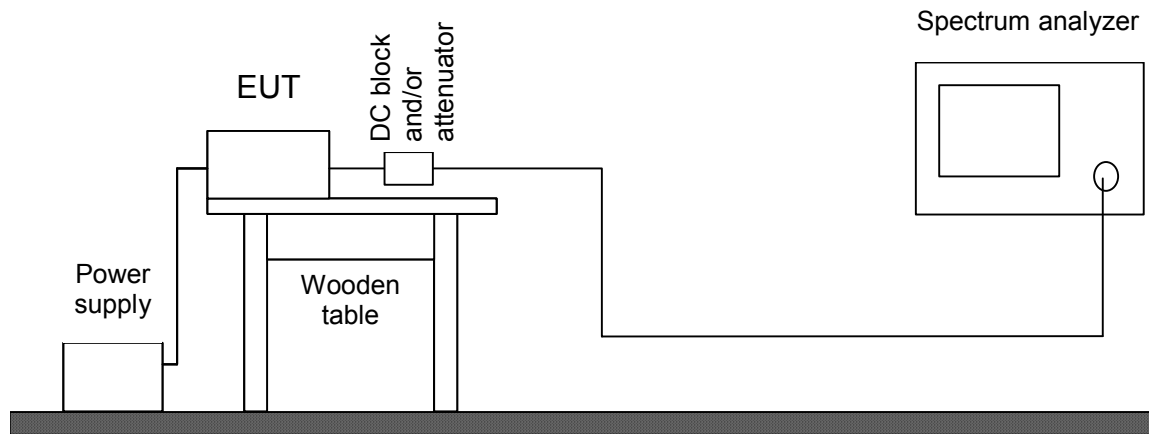


Test instruments used:

| Used                                | Type              | Model   | Serial No. or ID         | Manufacturer    |
|-------------------------------------|-------------------|---------|--------------------------|-----------------|
| <input checked="" type="checkbox"/> | Spectrum Analyzer | FSP 30  | 100063                   | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | EMI test receiver | ESPI7   | 836914/0002              | Rohde & Schwarz |
| <input type="checkbox"/>            | EMI test receiver | ESMI    | 839379/013<br>839587/006 | Rohde & Schwarz |
| <input type="checkbox"/>            | Power meter       | NRVS    | 836856/015               | Rohde & Schwarz |
| <input type="checkbox"/>            | Peak power sensor | NRV-Z31 | 8579604.03               | Rohde & Schwarz |
| <input type="checkbox"/>            | Power sensor      | NRV-Z52 | 837901/030               | Rohde & Schwarz |
| <input type="checkbox"/>            | Power sensor      | NRV-Z4  | 863828/015               | Rohde & Schwarz |
| <input type="checkbox"/>            | DC-block          | 7006    | A2798                    | Weinschel       |
| <input type="checkbox"/>            | Attenuator        | 4776-10 | 9412                     | Narda           |
| <input type="checkbox"/>            | Attenuator        | 4776-20 | 9503                     | Narda           |

## 6.2 Bandwidth Measurements

| Measurement Procedure:   |   |
|--|---|
| Rules and specifications:  | CFR 47 Part 2, section 2.202(a)<br>CFR 47 Part 15, section 15.215(c)<br>IC RSS-Gen Issue 2, sections 4.6.1 and 4.6.2<br>IC RSS-210 Issue 7, section A1.1.3<br>ANSI C63.4, annex H.6 |
| Guide:   | ANSI C63.4 / IC RSS-Gen Issue 2, sections 4.6.1 and 4.6.2   |
| Measurement setup:   | <input checked="" type="checkbox"/> Conducted: See below<br><input type="checkbox"/> Radiated: Radiated Emission in Fully or Semi Anechoic Room (6.4)                               |
| <p>If antenna is detachable bandwidth measurements shall be performed at the antenna connector (conducted measurement) when the transmitter is adjusted in accordance with the tune-up procedure, if applicable. The RF output terminals are connected to a spectrum analyzer. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as dc block and appropriate attenuators (50 Ohms). The electrical characteristics of the radio frequency load attached to the output terminals shall be stated, if applicable.</p> <p>If radiated measurements are performed the same test setups and instruments are used as with radiated emission measurements for the appropriate frequency range.</p> <p>The analyzer settings are specified by the test description of the appropriate test record(s).</p> |   |

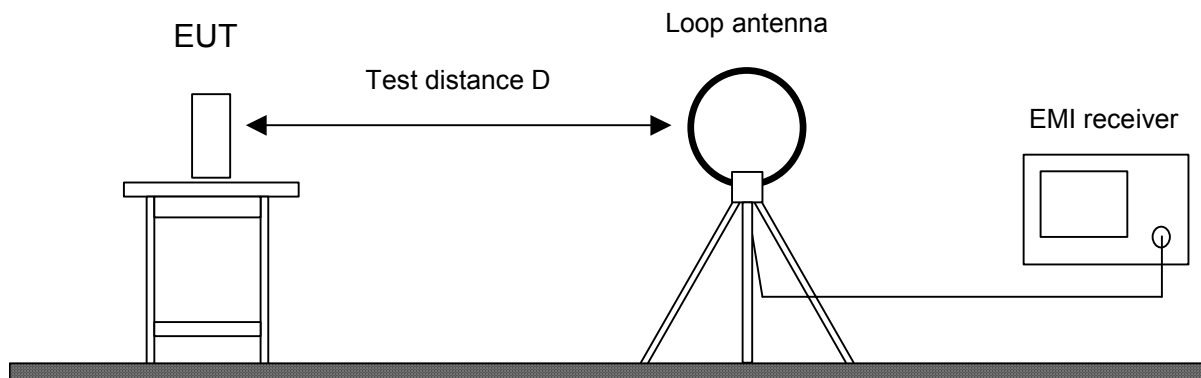


Test instruments used:

| Used                                | Type              | Model   | Serial No. or ID         | Manufacturer    |
|-------------------------------------|-------------------|---------|--------------------------|-----------------|
| <input checked="" type="checkbox"/> | Spectrum Analyzer | FSP 30  | 100063                   | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | EMI test receiver | ESPI7   | 836914/0002              | Rohde & Schwarz |
| <input type="checkbox"/>            | EMI test receiver | ESMI    | 839379/013<br>839587/006 | Rohde & Schwarz |
| <input type="checkbox"/>            | DC-block          | 7006    | A2798                    | Weinschel       |
| <input type="checkbox"/>            | Attenuator        | 4776-10 | 9412                     | Narda           |
| <input type="checkbox"/>            | Attenuator        | 4776-20 | 9503                     | Narda           |

### 6.3 Radiated Emission Measurement 9 kHz to 30 MHz

| Measurement Procedure:  |   |
|---|---|
| Rules and specifications:   | CFR 47 Part 15, sections 15.205(b) and 15.247<br>IC RSS-210 Issue 7, sections 2.2(b)(c), 2.6 and A8.5 |
| Guide:  | ANSI C63.4  |
| <p>Radiated emission in the frequency range 9 kHz to 30 MHz is measured using an active loop antenna. First the whole spectrum of emission caused by the equipment is recorded at a distance of 3 meters in a fully or semi anechoic room with the detector of the spectrum analyzer or EMI receiver set to peak. This configuration is also used for recording the spectrum of intentional radiators.</p> <p>Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing. EUT is rotated all around to find the maximum levels of emissions. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.</p> <p>If worst case emission of the EUT cannot be recorded with EUT in standard position and loop antenna in vertical polarization the EUT (or the radiating part of the EUT) is rotated by 90 degrees instead of changing the loop antenna to horizontal polarization. This procedure is selected to minimize the influence of the environment (e.g. effects caused by the floor especially with longer distances).</p> <p>Final measurement is performed at a test distance D of 30 meters using an open field test site. In case the regulation requires testing at other distances, the result is extrapolated by either making measurements at an additional distance D of 10 meters to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). In cases of very low emissions measurements are performed at shorter distances and results are extrapolated to the required distance. The provisions of CFR 47 Part 15 sections 15.31(d) and (f)(2) apply. According to CFR 47 Part 15 section 15.209(d) final measurement is performed with detector function set to quasi-peak except for the frequency bands 9 to 90 kHz and 110 to 490 kHz where, for non-pulsed operation, average detector is employed.</p> <p>If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.</p> |   |



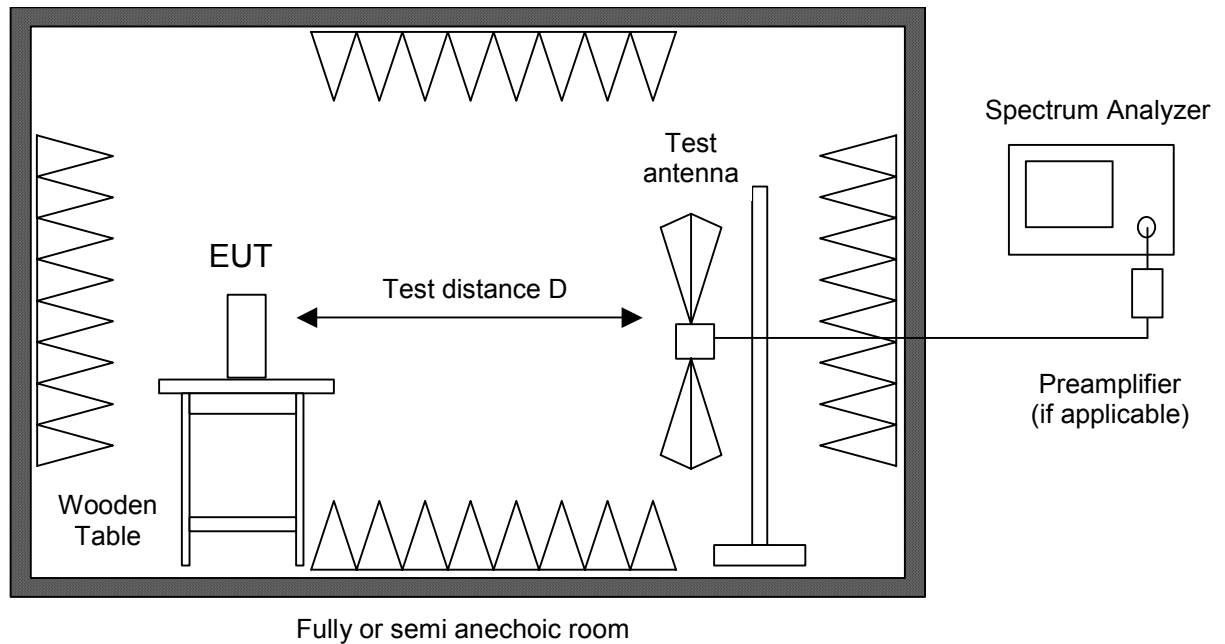


Test instruments used:

| Used                                | Type                 | Model    | Serial No. or ID         | Manufacturer       |
|-------------------------------------|----------------------|----------|--------------------------|--------------------|
| <input checked="" type="checkbox"/> | Spectrum Analyzer    | FSP 30   | 100063                   | Rohde & Schwarz    |
| <input type="checkbox"/>            | EMI test receiver    | ESMI     | 839379/013<br>839587/006 | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | Test receiver        | ESHS 10  | 860043/016               | Rohde & Schwarz    |
| <input type="checkbox"/>            | Preamplifier         | CPA9231A | 3393                     | Schaffner          |
| <input checked="" type="checkbox"/> | Loop antenna         | HFH2-Z2  | 882964/1                 | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | Fully anechoic room  | No. 2    | 1452                     | Albatross Projects |
| <input type="checkbox"/>            | Semi-anechoic room   | No. 3    | 1453                     | Siemens            |
| <input checked="" type="checkbox"/> | Open field test site | EG 1     | 1450                     | Senton             |

## 6.4 Radiated Emission in Fully or Semi Anechoic Room

| Measurement Procedure:  |   |
|---|---|
| Rules and specifications:   | CFR 47 Part 15, sections 15.109, 15.215(b) and 15.249<br>IC RSS-Gen Issue 2, sections 6(a), 7.2.3.2<br>IC RSS-210 Issue 7, section A2.9 |
| Guide:  | ANSI C63.4  |
| <p>Radiated emission in fully or semi anechoic room is measured in the frequency range from 30 MHz to the maximum frequency as specified in CFR 47 Part 15 section 15.33.</p> <p>Measurements are made in both the horizontal and vertical planes of polarization in a fully anechoic room using a spectrum analyzer with the detector function set to peak and resolution as well as video bandwidth set to 100 kHz (below 1 GHz) or 1 MHz (above 1 GHz).</p> <p>Testing up to 1 GHz is performed with a linear polarized logarithmic periodic antenna combined with a 4:1 broadband dipole ("Trilog broadband antenna"). For testing above 1 GHz horn antennas are used.</p> <p>All tests below 18 GHz are performed at a test distance D of 3 meters. For higher frequencies the test distance is reduced (e.g. to 1 meter) due to the sensitivity of the measuring instrument(s) and the test results are calculated according to CFR 47 Part 15 section 15.31(f)(1) using an extrapolation factor of 20 dB/decade. If required, preamplifiers are used for the whole frequency range. Special care is taken to avoid overload, using appropriate attenuators and filters, if necessary.</p> <p>If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.</p> <p>Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing.</p> <p>During testing the EUT is rotated all around to find the maximum levels of emissions. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.</p> <p>For final testing below 1 GHz an open field test-site is used and the plots recorded in the fully or semi anechoic room are indicated as prescans.</p> |   |

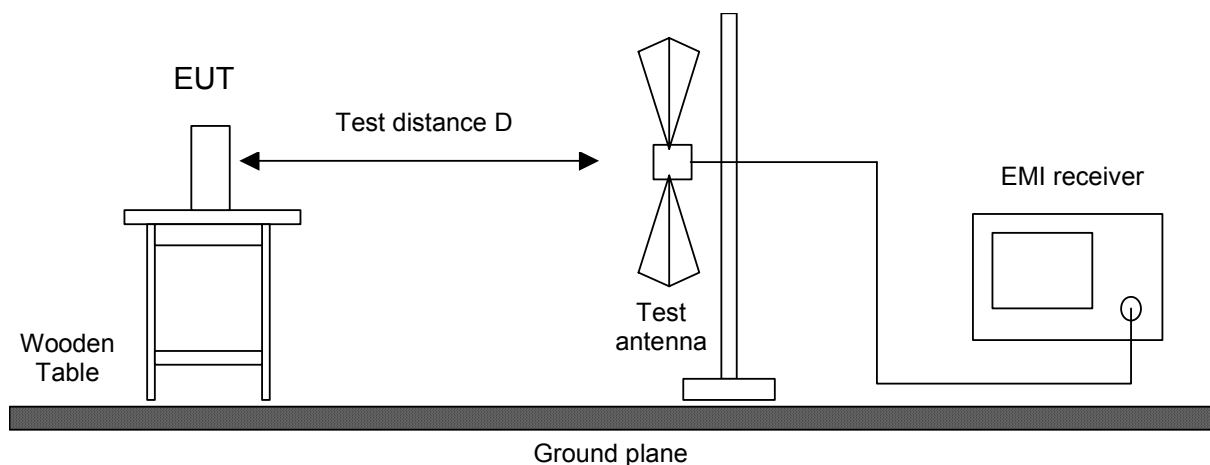


Test instruments used:

| Used                                | Type                       | Model                | Serial No. or ID         | Manufacturer       |
|-------------------------------------|----------------------------|----------------------|--------------------------|--------------------|
| <input checked="" type="checkbox"/> | Spectrum Analyzer          | FSP 30               | 100063                   | Rohde & Schwarz    |
| <input type="checkbox"/>            | Spectrum analyzer          | R 3271               | 05050023                 | Advantest          |
| <input type="checkbox"/>            | EMI test receiver          | ESMI                 | 839379/013<br>839587/006 | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | Preamplifier               | CPA9231A             | 3393                     | Schaffner          |
| <input type="checkbox"/>            | Preamplifier               | R14601               |                          | Advantest          |
| <input checked="" type="checkbox"/> | Preamplifier 1-8 GHz       | AFS3-00100800-32-LN  | 847743                   | Miteq              |
| <input type="checkbox"/>            | Preamplifier 0.5-8 GHz     | AMF-4D-005080-25-13P | 860149                   | Miteq              |
| <input checked="" type="checkbox"/> | Preamplifier 8-18 GHz      | ACO/180-3530         | 32641                    | CTT                |
| <input type="checkbox"/>            | External Mixer             | WM782A               | 845881/005               | Tektronix          |
| <input type="checkbox"/>            | Harmonic Mixer Accessories | FS-Z30               | 843389/007               | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | Trilog broadband antenna   | VULB 9163            | 9163-188                 | Schwarzbeck        |
| <input checked="" type="checkbox"/> | Horn antenna               | 3115                 | 9508-4553                | EMCO               |
| <input type="checkbox"/>            | Horn antenna               | 3160-03              | 9112-1003                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-04              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-05              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-06              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-07              | 9112-1008                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-08              | 9112-1002                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna               | 3160-09              | 9403-1025                | EMCO               |
| <input type="checkbox"/>            | Horn antenna               | 3160-10              | 399185                   | EMCO               |
| <input checked="" type="checkbox"/> | Fully anechoic room        | No. 2                | 1452                     | Albatross Projects |
| <input type="checkbox"/>            | Semi-anechoic room         | No. 3                | 1453                     | Siemens            |

## 6.5 Radiated Emission at Open Field Test Site

| Measurement Procedure:   |   |
|--|---|
| Rules and specifications:  | CFR 47 Part 15, sections 15.109, 15.215(b) and 15.249<br>IC RSS-Gen Issue 2, sections 6(a), 7.2.3.2<br>IC RSS-210 Issue 7, section A2.9 |
| Guide:   | ANSI C63.4  |
| <p>Radiated emission at open field test site is measured in the frequency range 30 MHz to 1 GHz using a bi-conical antenna up to 300 MHz and a logarithmic periodic antenna above. The measurement bandwidth of the test receiver is set to 120 kHz with quasi-peak detector selected.</p> <p>If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.</p> <p>Hand-held or body-worn devices are tested in the position producing the highest emission relative to the limit as verified by prescans in the fully anechoic room. EUT is rotated all around and receiving antenna is raised and lowered within 1 meter to 4 meters to find the maximum levels of emission. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.</p> <p>For measuring emissions of intentional radiators and receivers a test distance D of 3 meters is selected. Testing of unintentional radiators is performed at a distance of 10 meters. If limits specified for 3 meters shall be used for measurements performed at 10 meters distance the limits are calculated according to CFR 47 Part 15 section 15.31(d) and (f)(1) using an inverse linear-distance extrapolation factor of 20 dB/decade.</p> |   |





Test instruments used:

| Used                                | Type                 |      | Model  | Serial No. or ID | Manufacturer    |
|-------------------------------------|----------------------|------|--------|------------------|-----------------|
| <input checked="" type="checkbox"/> | EMI receiver         |      | ESVP   | 881120/024       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Biconical antenna    | EG 1 | HK 116 | 842204/001       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Log. per. antenna    | EG 1 | HL 223 | 841516/023       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Open field test site |      | EG 1   | 1450             | Senton          |

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D-94315 Straubing  
Germany

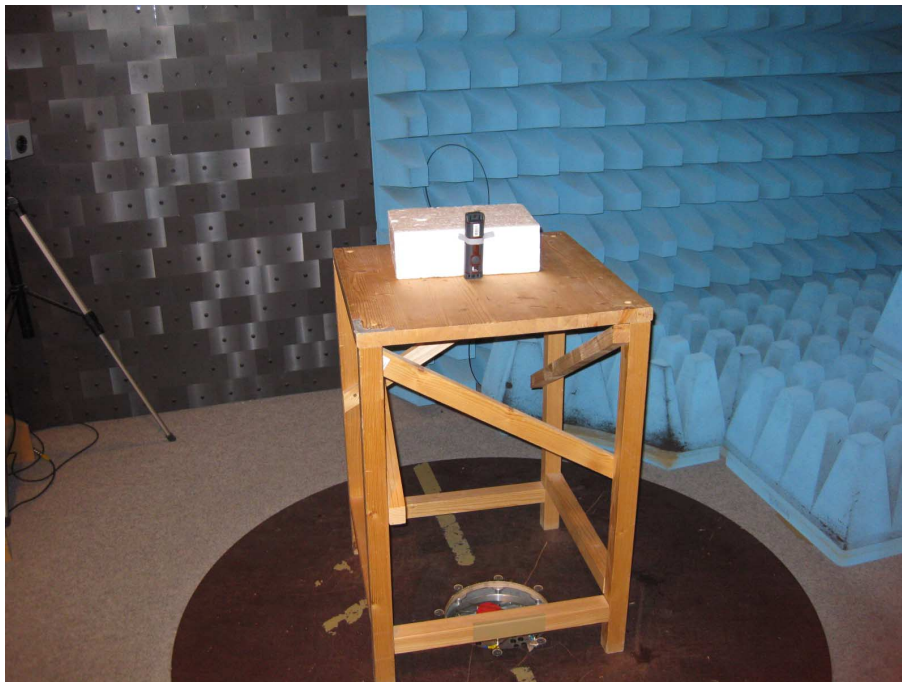
Phone: +49 9421 5522-0  
Fax: +49 9421 5522-99  
eMail: [senton@tuev-sued.de](mailto:senton@tuev-sued.de)  
Web: [www.tuev-sued.de/senton](http://www.tuev-sued.de/senton)



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## **7 Photographs Taken During Testing**

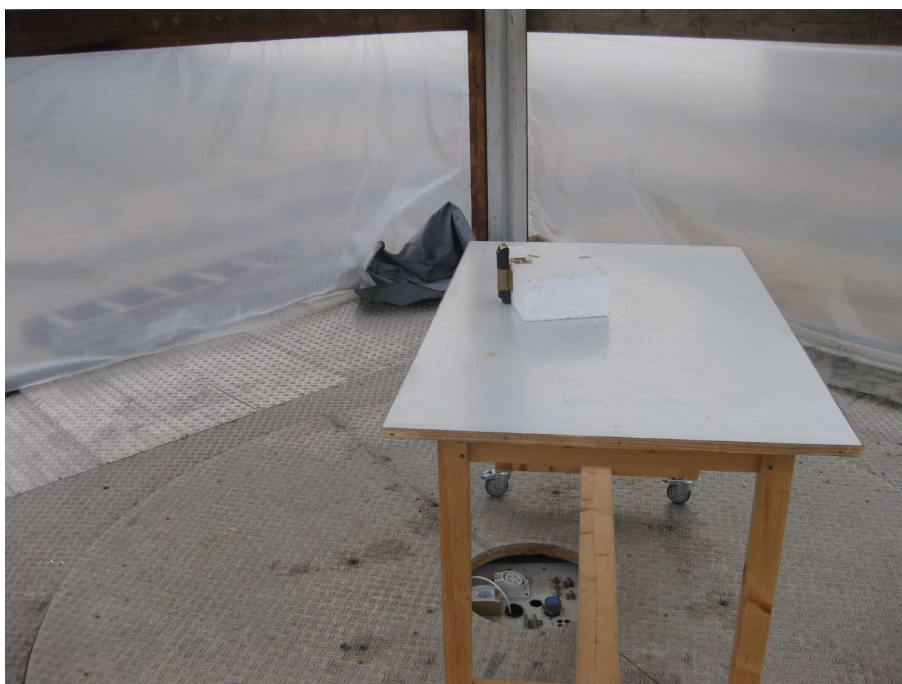
### Test setup for radiated emission measurement (fully anechoic room)



**Test setup for radiated emission measurement  
(open field test site)**



**Test setup for radiated emission measurement  
(open field test site)  
- continued -**





## 8 Test Results

| FCC CFR 47 Parts 2 and 15           |  |       |                    |
|-------------------------------------|--|-------|--------------------|
| Section(s)                          | Test   | Page  | Result             |
| 2.1046(a)                           | Conducted output power                               | ---   | Not applicable     |
| 2.202(a)                            | Occupied bandwidth                                   | 24    | Recorded           |
| 15.204                              | Antenna requirement                                  | ---   | Integrated Antenna |
| 15.215(c)                           | Bandwidth of the emission                            | 34    | Test passed        |
| 2.201, 2.202                        | Class of emission                                    | 39    | Calculated         |
| 15.35(c)                            | Pulse train measurement for pulsed operation         | ---   | Not applicable     |
| 15.205(a)                           | Restricted bands of operation                        | --- 5 | Test passed        |
| 15.247(a)(2)                        | 6 dB-bandwidth                                       | 40    | Test passed        |
| 15.247(e)                           | Spectral power density                               | 43    | Test passed        |
| 15.247(b)(3)                        | Maximum peak output power                            | 48    | Test passed        |
| 15.207                              | Conducted AC powerline emission<br>150 kHz to 30 MHz |       | Not applicable     |
| 15.247(d)                           | Conducted emissions                                  |       | Not applicable     |
| 15.205(b)<br>15.247(d)              | Radiated emission<br>9 kHz to 30 MHz                 | 51    | Test passed        |
| 15.205(b)<br>15.215(b)<br>15.247(d) | Radiated emission<br>30 MHz to 25 GHz                | 52    | Test passed        |
| 15.247(i)<br>2.1093                 | RF exposure requirement                              | 59    | Test passed        |

<sup>5</sup> See "Radiated emission 30 MHz to 25 GHz" for details

| <b>IC RSS-Gen Issue 2</b> |   |             |   |
|---------------------------|---|-------------|---|
| <i>Section(s)</i>         | <i>Test</i>   | <i>Page</i> | <i>Result</i>                             |
| 4.8                       | Transmitter output power (conducted)                                | ---         | Not applicable                            |
| 4.6.1                     | Occupied Bandwidth  | 24          | Recorded                                  |
| 3.2(h), 8                 | Designation of emissions  | 39          | Calculated                                |
| 4.5                       | Pulsed operation  | ---         | Not applicable                            |
| 7.2.2                     | Transmitter AC power lines conducted emissions<br>150 kHz to 30 MHz | ---         | Not applicable                            |
| 5.5                       | Exposure of Humans to RF Fields                                     | 60          | Exempted from<br>SAR and RF<br>evaluation |

| <b>IC RSS-210 Issue 7</b> |  |                  |                    |
|---------------------------|--|------------------|--------------------|
| <i>Section(s)</i>         | <i>Test</i>  | <i>Page</i>      | <i>Result</i>      |
| 2.2(a)                    | Restricted bands and unwanted emission frequencies | --- <sup>6</sup> | Test passed        |
| 7.1.4                     | Antenna requirement                                | ---              | Integrated antenna |
| A8.2(a)                   | 6 dB-bandwidth                                     | 40               | Test passed        |
| A8.2(b)                   | Spectral power density                             | 43               | Test passed        |
| A8.4(4)                   | Maximum output power                               | 48               | Test passed        |
| A8.5                      | Conducted emissions                                | ---              | Not applicable     |
| 2.2(b)(c)<br>2.6<br>A8.5  | Unwanted emissions<br>9 kHz to 30 MHz              | 51               | Test passed        |
| 2.2(b)(c)<br>2.6<br>A8.5  | Unwanted emissions<br>30 MHz to 25 GHz             | 52               | Test passed        |

<sup>6</sup> See "Unwanted emissions 30 MHz to 25 GHz" for details

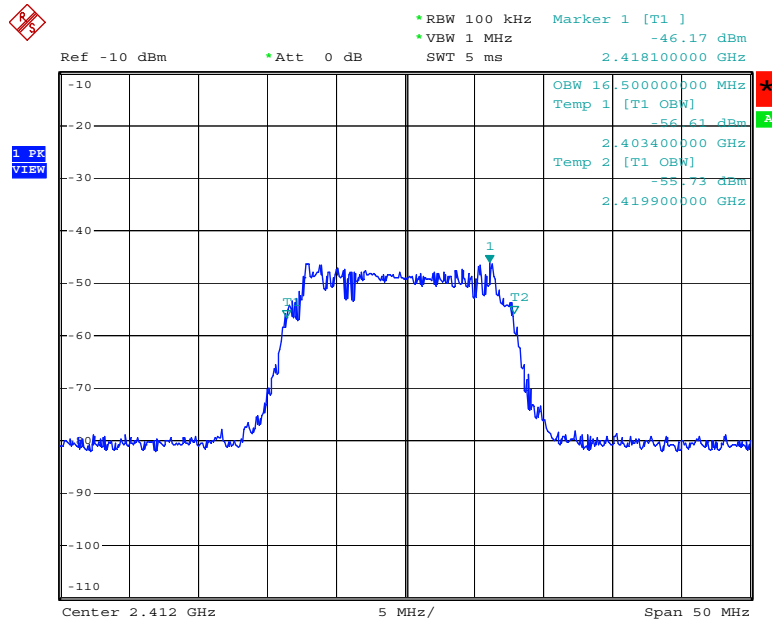
## 8.1 Occupied Bandwidth

|                           |  |                              |
|---------------------------|--|------------------------------|
| Rules and specifications: | CFR 47 Part 2, section 2.202(a)<br>ANSI C63.4, annex H.6   |                              |
| Guide:                    | ANSI C63.4   |                              |
| Description:              | The occupied bandwidth according to CFR 47 Part 2, section 2.202(a), is measured as the 99% emission bandwidth, i.e. below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission. |                              |
|                           | The occupied bandwidth according to ANSI C63.4, annex H.6; is measured as the frequency range defined by the points that are 26 dB down relative to the maximum level of the modulated carrier.  |                              |
|                           | The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:   |                              |
|                           | Fundamental frequency  | Minimum resolution bandwidth |
|                           | 9 kHz to 30 MHz  | 1 kHz                        |
|                           | 30 MHz to 1000 MHz   | 10 kHz                       |
|                           | 1000 MHz to 40 GHz   | 100 kHz                      |
|                           | The video bandwidth shall be at least three times greater than the resolution bandwidth.   |                              |
| Measurement procedure:    | Bandwidth Measurements (6.2)   |                              |

|               |                                     |
|---------------|-------------------------------------|
| Comment:      |                                     |
| Date of test: | December 16, 2009<br>March 15, 2010 |
| Test site:    | Fully anechoic room, cabin no. 2    |

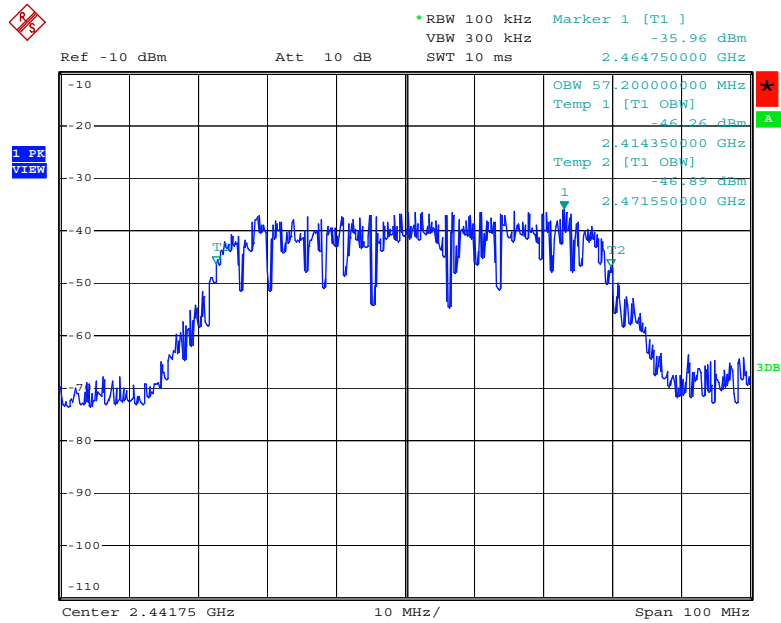


**Occupied Bandwidth (99 %):**



|                            |                 |
|----------------------------|-----------------|
| Occupied Bandwidth (99 %): | <b>16.5 MHz</b> |
|----------------------------|-----------------|

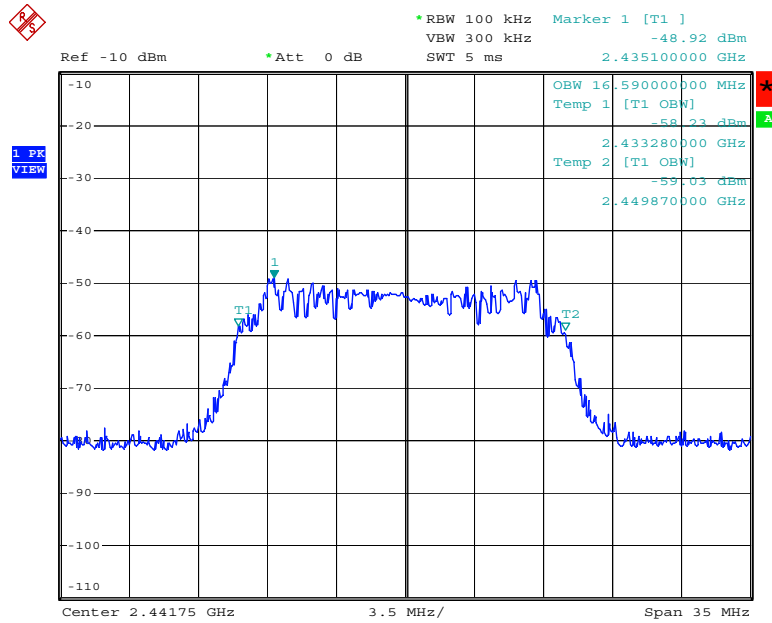
**Occupied Bandwidth (99 %) - continued:**



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Occupied Bandwidth (99 %): **57.2 MHz**

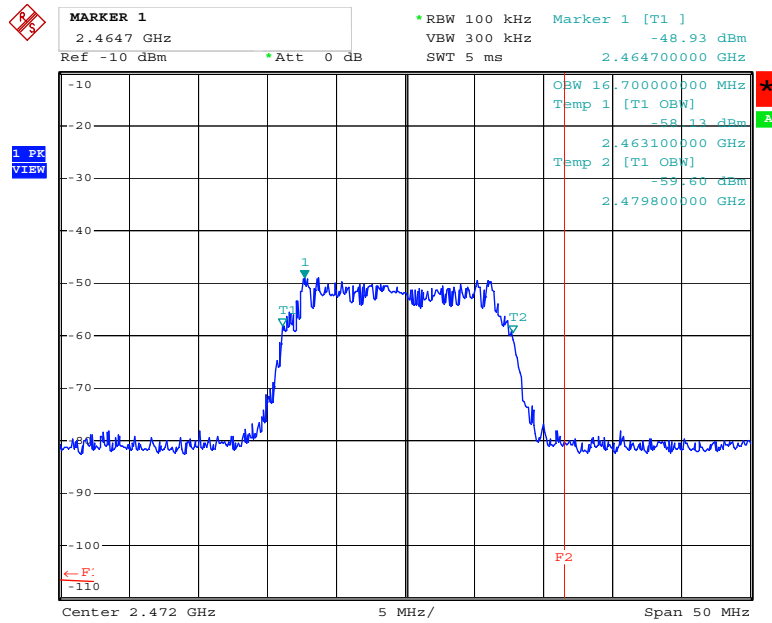
**Occupied Bandwidth (99 %) - continued:**



Date: 15.MAR.2010 13:58:20

|                            |                 |
|----------------------------|-----------------|
| Occupied Bandwidth (99 %): | <b>16.5 MHz</b> |
|----------------------------|-----------------|

**Occupied Bandwidth (99 %) - continued:**



Date: 15.MAR.2010 14:21:33

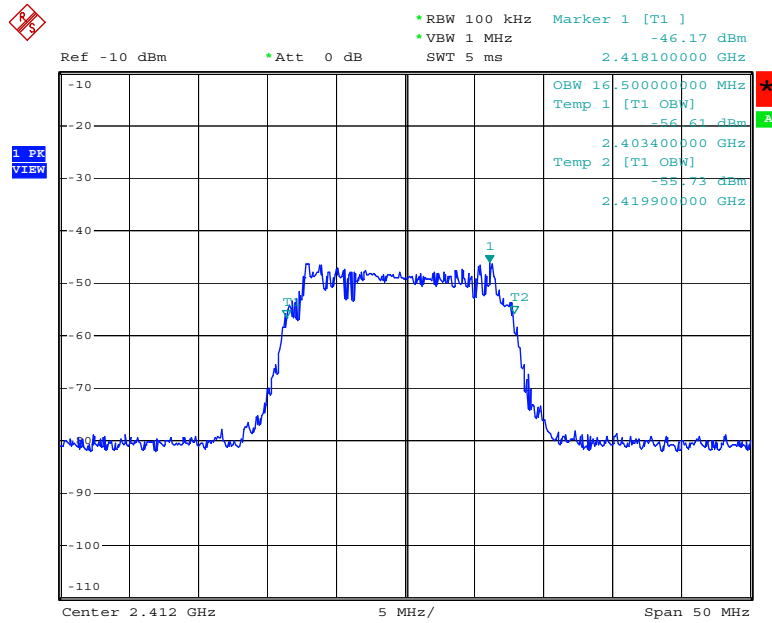
Occupied Bandwidth (99 %): **16.7 MHz**

## Occupied Bandwidth (continued)

|                           |   |
|---------------------------|---|
| Rules and specifications: | IC RSS-Gen Issue 2, section 4.6.1   |
| Guide:                    | IC RSS-Gen Issue 2, section 4.6.1   |
| Description:              | <p>If not specified in the applicable RSS the occupied bandwidth is measured as the 99% emission bandwidth.</p> <p>The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth.</p> <p>The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is also recorded. The span between the two recorded frequencies is the occupied bandwidth.</p> |
| Measurement procedure:    | Bandwidth Measurements (6.2)  |

|               |                                     |
|---------------|-------------------------------------|
| Comment:      |                                     |
| Date of test: | December 16, 2009<br>March 15, 2010 |
| Test site:    | Fully anechoic room, cabin no. 2    |

**Occupied Bandwidth (99 %):**

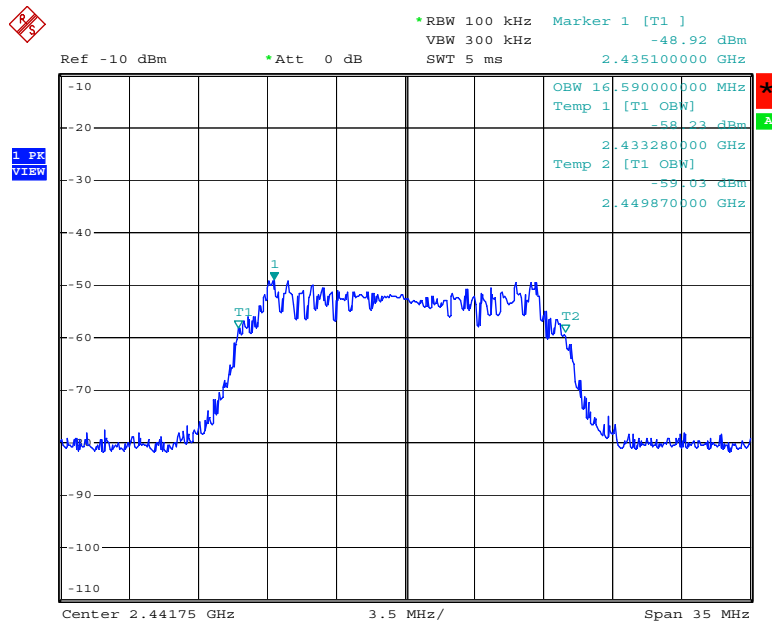


Date: 15.MAR.2010 13:45:07

Occupied Bandwidth (99 %): **16.5 MHz**



**Occupied Bandwidth (99 %) - continued:**

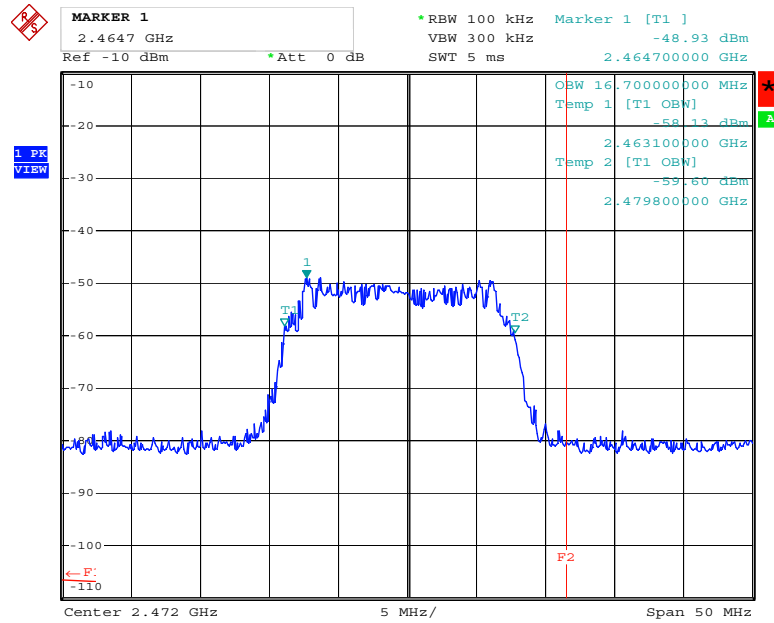


Date: 15.MAR.2010 13:58:20

|                            |                 |
|----------------------------|-----------------|
| Occupied Bandwidth (99 %): | <b>16.5 MHz</b> |
|----------------------------|-----------------|



**Occupied Bandwidth (99 %) - continued:**

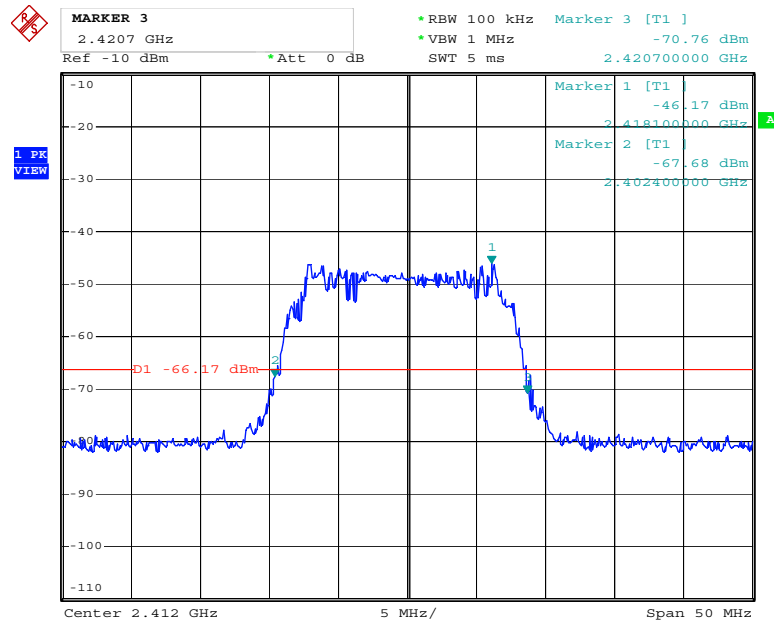


Date: 15.MAR.2010 14:21:33

|                            |                 |
|----------------------------|-----------------|
| Occupied Bandwidth (99 %): | <b>16.7 MHz</b> |
|----------------------------|-----------------|

## 8.2 Bandwidth of the Emission

|  |   |                              |
|--|---|------------------------------|
| Rules and specifications:  | CFR 47 Part 15, section 15.215(c)   |                              |
| Guide:   | ANSI C63.4  |                              |
| Description:   | <p>The 20 dB bandwidth of the emission is measured as the frequency range defined by the points that are 20 dB down relative to the maximum level of the modulated carrier.</p> <p>For intentional radiators operating under the alternative provisions to the general emission limits the requirement to contain the 20 dB bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.</p> <p>The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:</p> |                              |
|  | Fundamental frequency   | Minimum resolution bandwidth |
|  | 9 kHz to 30 MHz   | 1 kHz                        |
|  | 30 MHz to 1000 MHz  | 10 kHz                       |
|  | 1000 MHz to 40 GHz  | 100 kHz                      |
| The video bandwidth shall be at least three times greater than the resolution bandwidth. |   |                              |
| Measurement procedure:   | Bandwidth Measurements (6.2)  |                              |
| Comment:   |   |                              |
| Date of test:  | December 16, 2009<br>March 15, 2010   |                              |
| Test site:   | Fully anechoic room, cabin no. 2  |                              |

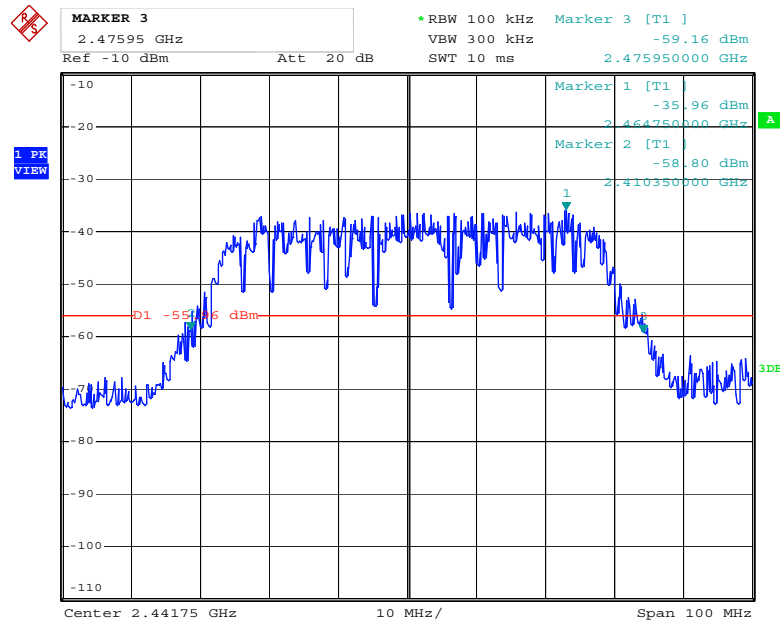


Date: 15.MAR.2010 13:44:19

|                               |                                    |   |
|-------------------------------|------------------------------------|---|
| Permitted frequency band:     | <b>2400.0 - 2483.5 MHz</b>         |   |
| 20 dB bandwidth:              | <b>18.3 MHz</b>                    |   |
| Carrier frequency stability:  | <input type="checkbox"/> specified | <input checked="" type="checkbox"/> not specified                   |
| Maximum frequency tolerances: |                                    |   |
| Bandwidth of the emission:    | <b>18.3 MHz</b>                    | <b>within permitted frequency band<sup>7</sup>:</b>                 |
|                               |                                    | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

<sup>7</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

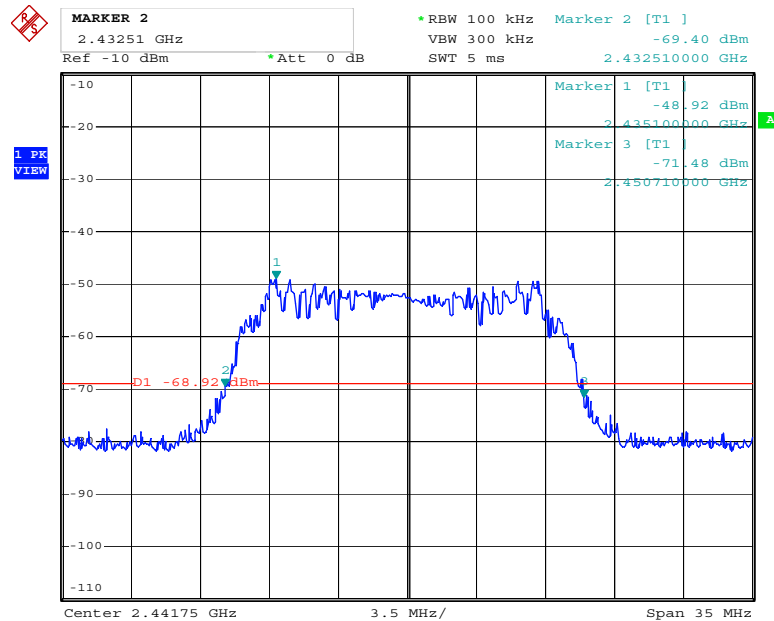


Date: 16.DEC.2009 10:10:45

|                               |                                    |   |
|-------------------------------|------------------------------------|---|
| Permitted frequency band:     | <b>2400.0 - 2483.5 MHz</b>         |   |
| 20 dB bandwidth:              | <b>65.6 MHz</b>                    |   |
| Carrier frequency stability:  | <input type="checkbox"/> specified | <input checked="" type="checkbox"/> not specified                   |
| Maximum frequency tolerances: |                                    |   |
| Bandwidth of the emission:    | <b>65.6 MHz</b>                    | <b>within permitted frequency band<sup>8</sup>:</b>                 |
|                               |                                    | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

<sup>8</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

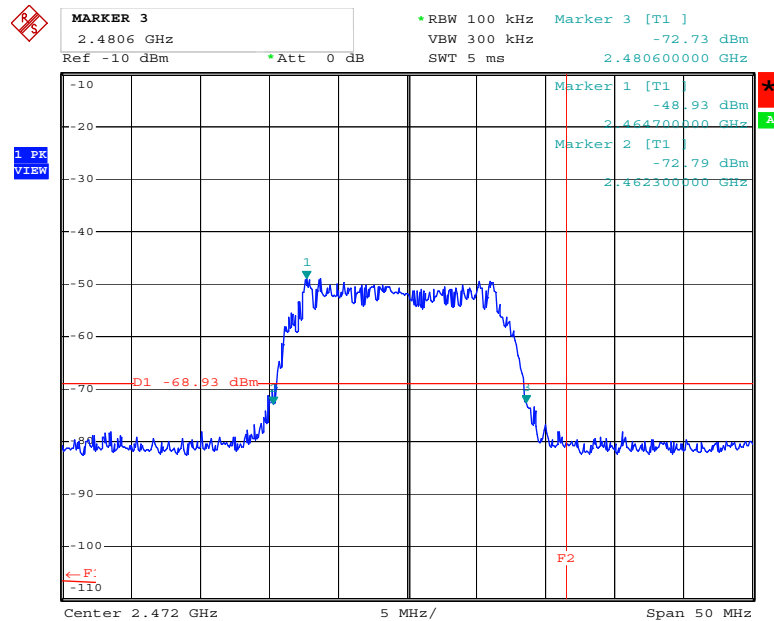


Date: 15.MAR.2010 13:58:00

|                               |                                    |   |
|-------------------------------|------------------------------------|---|
| Permitted frequency band:     | <b>2400.0 - 2483.5 MHz</b>         |   |
| 20 dB bandwidth:              | <b>18.2 MHz</b>                    |   |
| Carrier frequency stability:  | <input type="checkbox"/> specified | <input checked="" type="checkbox"/> not specified                   |
| Maximum frequency tolerances: |                                    |   |
| Bandwidth of the emission:    | <b>18.2 MHz</b>                    | <b>within permitted frequency band<sup>9</sup>:</b>                 |
|                               |                                    | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

<sup>9</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.



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|                               |                                    |   |
|-------------------------------|------------------------------------|---|
| Permitted frequency band:     | <b>2400.0 - 2483.5 MHz</b>         |   |
| 20 dB bandwidth:              | <b>18.3 MHz</b>                    |   |
| Carrier frequency stability:  | <input type="checkbox"/> specified | <input checked="" type="checkbox"/> not specified                   |
| Maximum frequency tolerances: |                                    |   |
| Bandwidth of the emission:    | <b>18.3 MHz</b>                    | <b>within permitted frequency band<sup>10</sup>:</b>                |
|                               |                                    | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

<sup>10</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

### 8.3 Designation of Emissions

|                           |  |
|---------------------------|--|
| Rules and specifications: | CFR 47 Part 2, sections 2.201 and 2.202<br>IC RSS-Gen Issue 2, sections 3.2(h) and 8 |
| Guide:                    | ANSI C63.4 / TRC-43  |

|                     |                              |
|---------------------|------------------------------|
| Type of modulation: | Frequency Shift Keying (FSK) |
|---------------------|------------------------------|

|                              |  |
|------------------------------|--|
| $B_n$ = Necessary Bandwidth  | $B_n = 2DK + B$  |
| D = Peak deviation           | D = 15 MHz   |
| K = Overall numerical factor | K = 1  |
| B = Modulation rate          | B = 20 MHz   |
| Calculation:                 | $B_n = 2 \cdot (15 \text{ MHz}) \cdot 1 + 2 \cdot (20 \text{ MHz}) = 70 \text{ MHz}$ |

|                           |                |
|---------------------------|----------------|
| Designation of Emissions: | <b>70M0F1D</b> |
|---------------------------|----------------|

|                     |                              |
|---------------------|------------------------------|
| Type of modulation: | Frequency Shift Keying (FSK) |
|---------------------|------------------------------|

|                              |   |
|------------------------------|---|
| $B_n$ = Necessary Bandwidth  | $B_n = 2DK + B$   |
| D = Peak deviation           | D = 4.15 MHz  |
| K = Overall numerical factor | K = 1   |
| B = Modulation rate          | B = 5 MHz   |
| Calculation:                 | $B_n = 2 \cdot (4.15 \text{ MHz}) \cdot 1 + 2 \cdot (5 \text{ MHz}) = 18.3 \text{ MHz}$ |

|                           |                |
|---------------------------|----------------|
| Designation of Emissions: | <b>18M3F1D</b> |
|---------------------------|----------------|

## 8.4 6 dB-Bandwidth

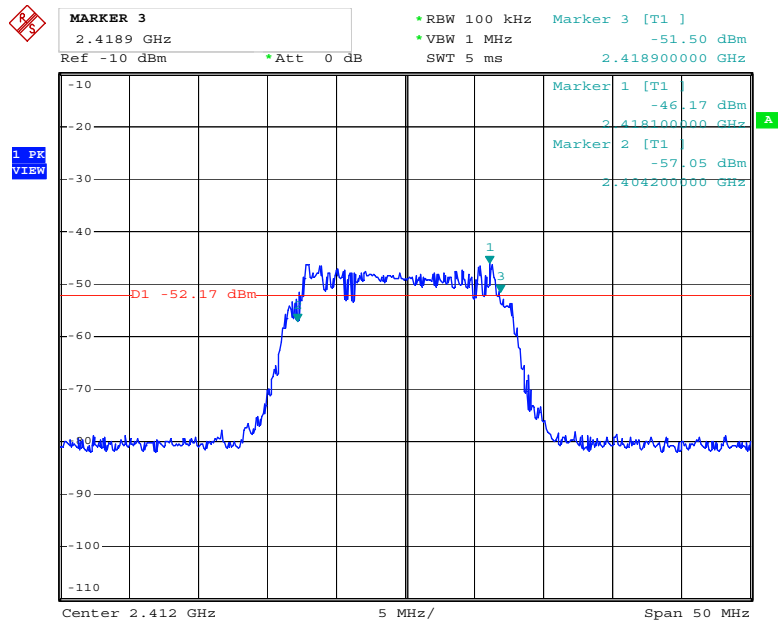
|                           |   |
|---------------------------|---|
| Rules and specifications: | CFR 47 Part 15, section 15.247(a)(2)<br>IC RSS-210 Issue 7, section A8.2(a) |
| Guide:                    | ANSI C63.4  |
| Limit:                    | The minimum 6 dB bandwidth shall be at least 500 kHz                        |
| Measurement procedure:    | Radiated Emission in Fully or Semi Anechoic Room (6.4)                      |

|                |   |
|----------------|---|
| Comment:       | Please see 8.2 Bandwidth of the Emission for details. |
| Date of test:  | December 16, 2009<br>March 15, 2010                   |
| Test site:     | Fully anechoic room, cabin no. 2                      |
| Test distance: | 3 meters  |

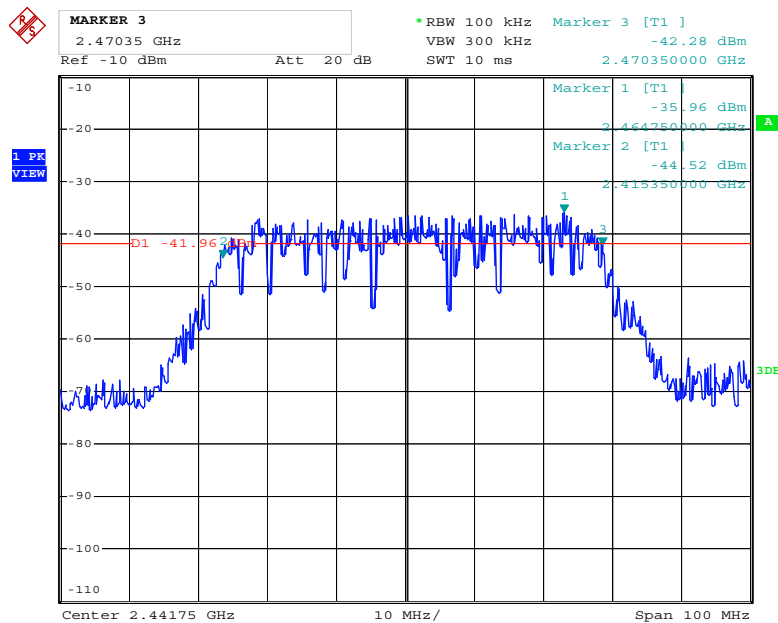
| Frequency (MHz) | Channel Bandwidth (kHz) | Limit (kHz) | Result |
|-----------------|-------------------------|-------------|--------|
| 2412            | 14700                   | ≥ 500       | Pass   |
| 2440 (80 MHz)   | 55000                   | ≥ 500       | Pass   |
| 2440 (22 MHz)   | 14700                   | ≥ 500       | Pass   |
| 2472            | 14800                   | ≥ 500       | Pass   |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

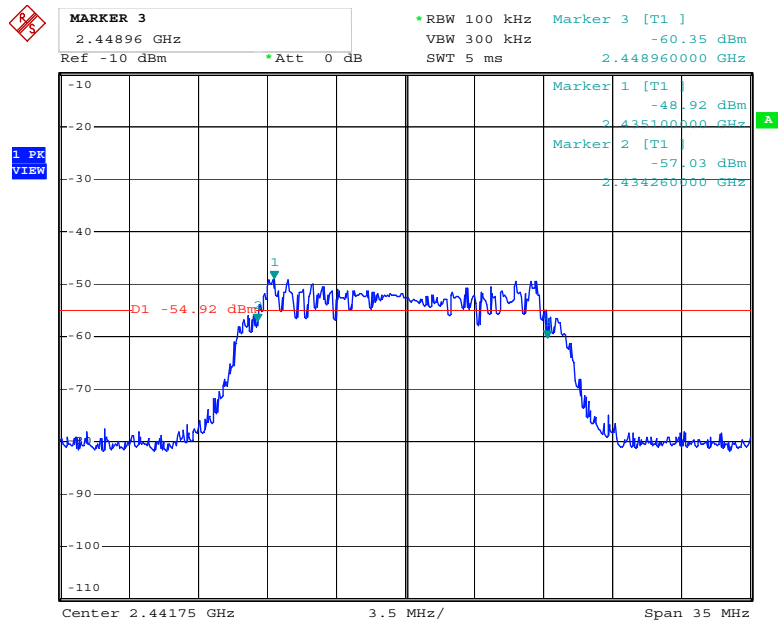




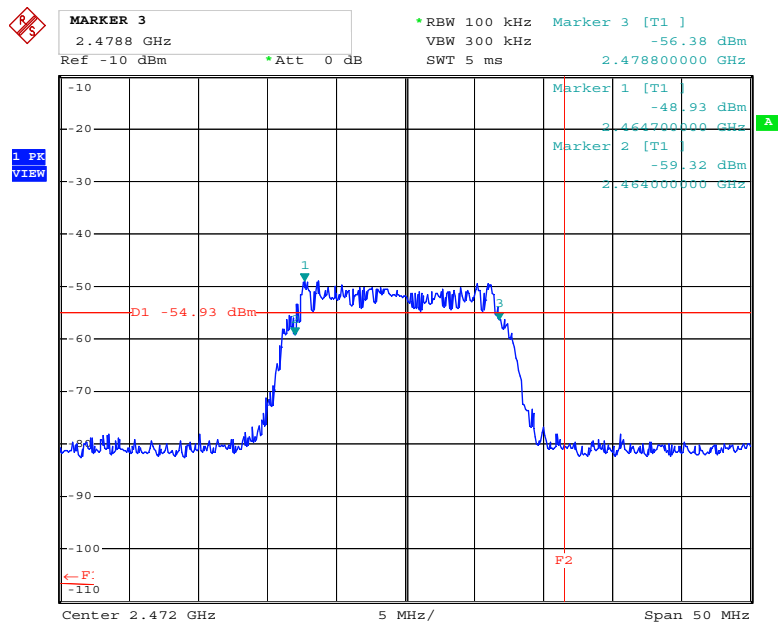
Date: 15.MAR.2010 13:42:54



Date: 16.DEC.2009 10:09:46



Date: 15.MAR.2010 13:57:14



Date: 15.MAR.2010 14:20:33

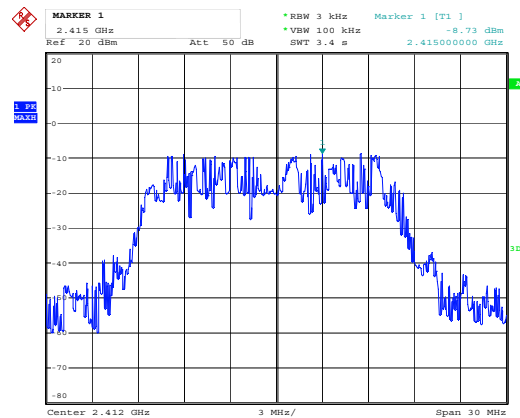
## 8.5 Spectral Power Density

|                           |   |
|---------------------------|---|
| Rules and specifications: | CFR 47 Part 15, section 15.247(e)<br>IC RSS-210 Issue 7, section A8.2(b)  |
| Guide:                    | ANSI C63.4  |
| Limit:                    | For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. |
| Measurement procedure:    | Radiated Emission in Fully or Semi Anechoic Room (6.4)  |

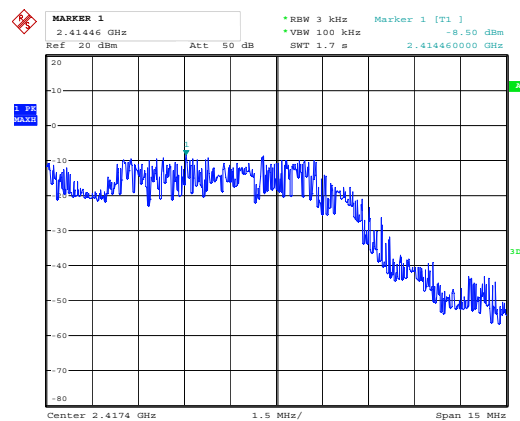
|                |   |
|----------------|---|
| Comment:       | Please see 8.2 Bandwidth of the Emission for details. |
| Date of test:  | December 16, 2009<br>March 16, 2010                   |
| Test site:     | Fully anechoic room, cabin no. 2                      |
| Test distance: | 3 meters  |

| Frequency (MHz) | Spectral Power Density (dBm/3 kHz) | Limit (dBm/3 kHz) | Result |
|-----------------|------------------------------------|-------------------|--------|
| 2412            | -8.93                              | < 8.0             | Pass   |
| 2440 (80 MHz)   | -37.88                             | < 8.0             | Pass   |
| 2440 (22 MHz)   | -9.75                              | < 8.0             | Pass   |
| 2472            | -12.32                             | < 8.0             | Pass   |

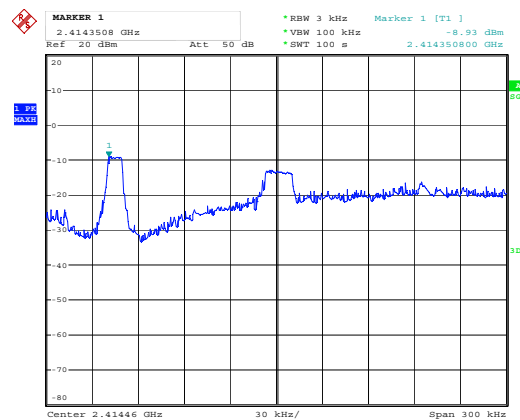
|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|



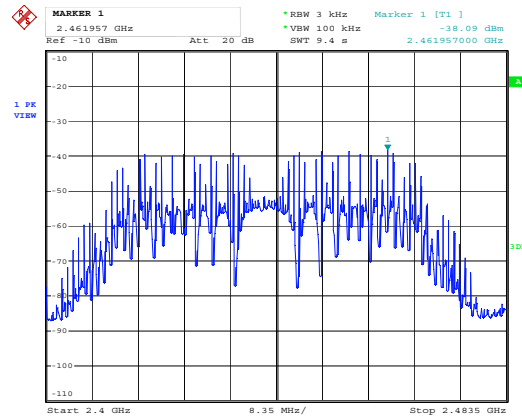
Date: 16.MAR.2010 15:25:12



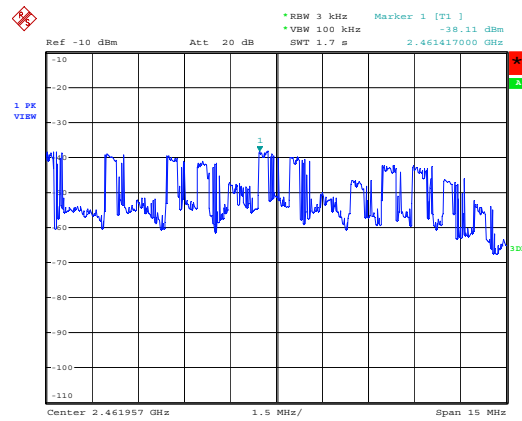
Date: 16.MAR.2010 15:19:03



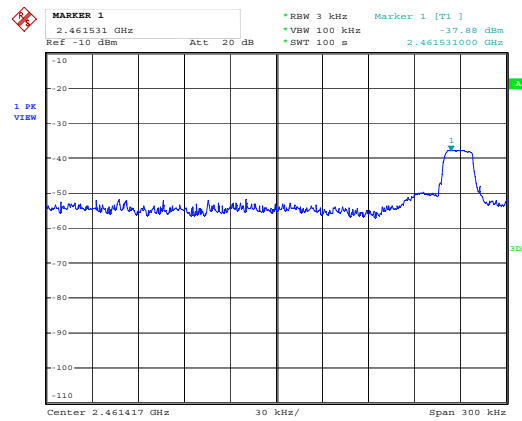
Date: 16.MAR.2010 15:23:00



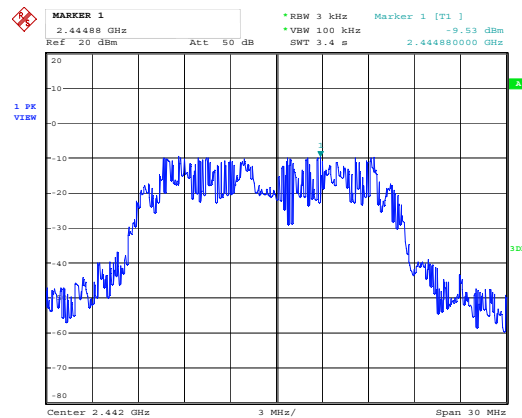
Date: 16.DEC.2009 10:30:38



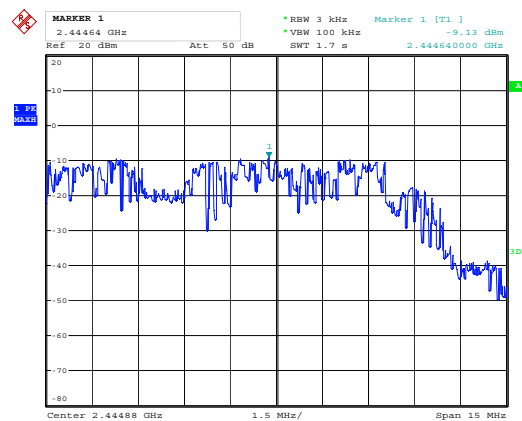
Date: 16.DEC.2009 10:36:03



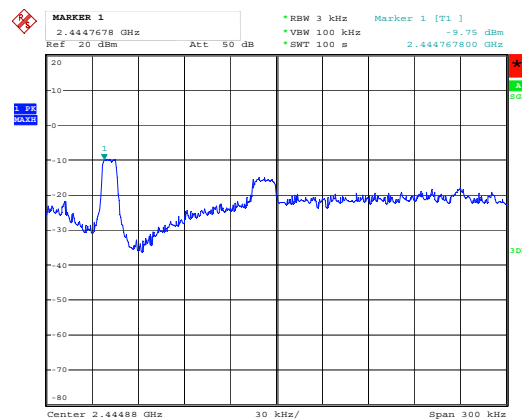
Date: 16.DEC.2009 10:43:41



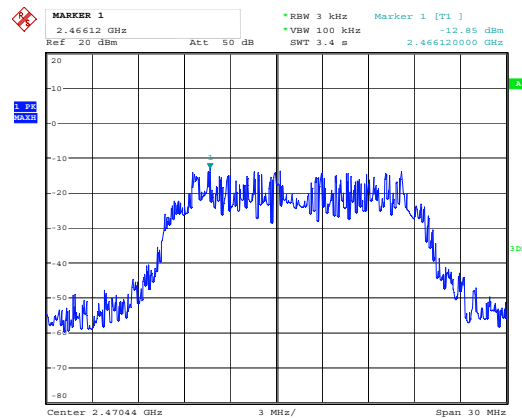
Date: 16.MAR.2010 14:43:25



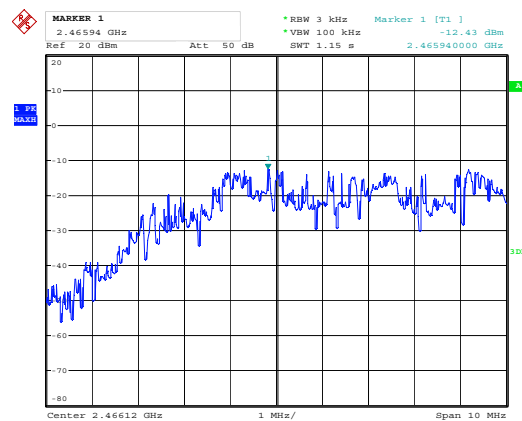
Date: 16.MAR.2010 14:45:33



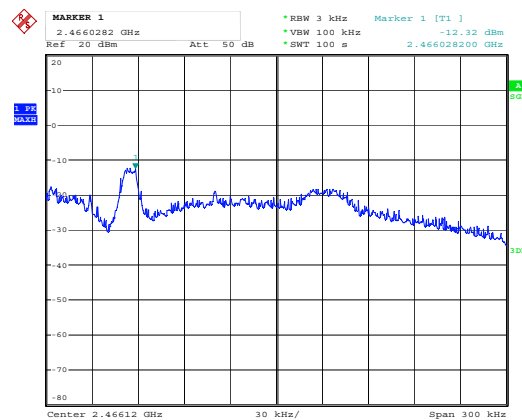
Date: 16.MAR.2010 14:49:20



Date: 16.MAR.2010 14:26:19



Date: 16.MAR.2010 14:29:47



Date: 16.MAR.2010 14:32:55

## 8.6 Maximum output power

|                           |  |
|---------------------------|--|
| Rules and specifications: | CFR 47 Part 15, section 15.247(b)(2)<br>IC RSS-210 Issue 7, section A8.4(1)    |
| Guide:                    | ANSI C63.4<br>TIA/EIA-603, section 2.2.12                                      |
| Limit:                    | For systems using digital modulation the maximum output power is 1 W (30 dBm). |
| Measurement procedure:    | Radiated Emission in Fully or Semi Anechoic Room (6.4)                         |

|                |   |
|----------------|---|
| Comment:       | The EUT contains a integrated antenna and no internal antenna connector |
| Date of test:  | December 1, 2009  |
| Test site:     | Fully anechoic room, cabin no. 2  |
| Test distance: | 3 meters  |

| Frequency (MHz) | Polarisation | Reading (dBm) | Correction factor (dB) | Output power (dBm) | Limit (dBm) | Result |
|-----------------|--------------|---------------|------------------------|--------------------|-------------|--------|
| 2461            | vertical     | -48.81        | 47.09                  | -1.72              | ≤ 30        | Pass   |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

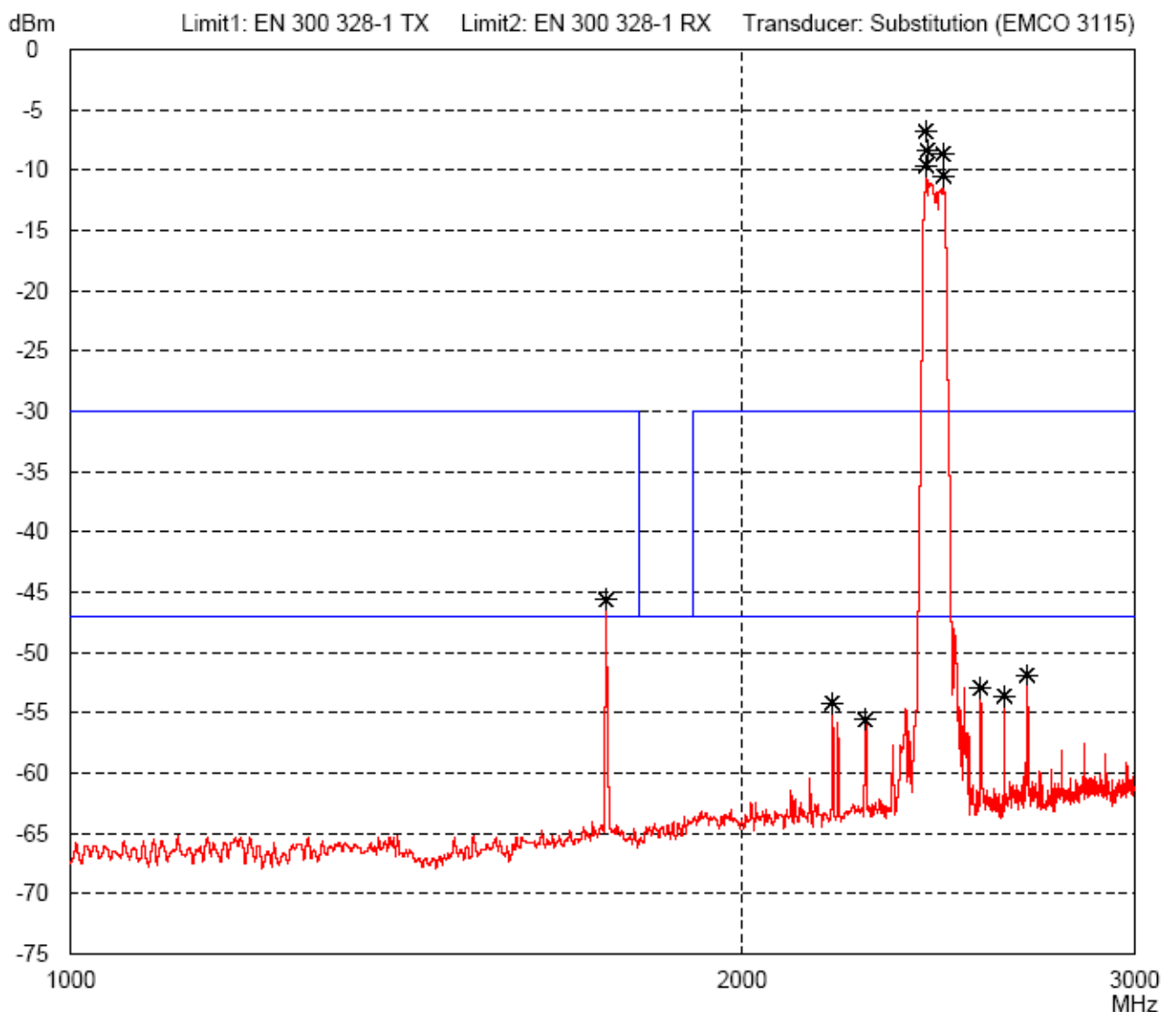


|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.206                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>12/01/2009                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (Spread Spectrum) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|

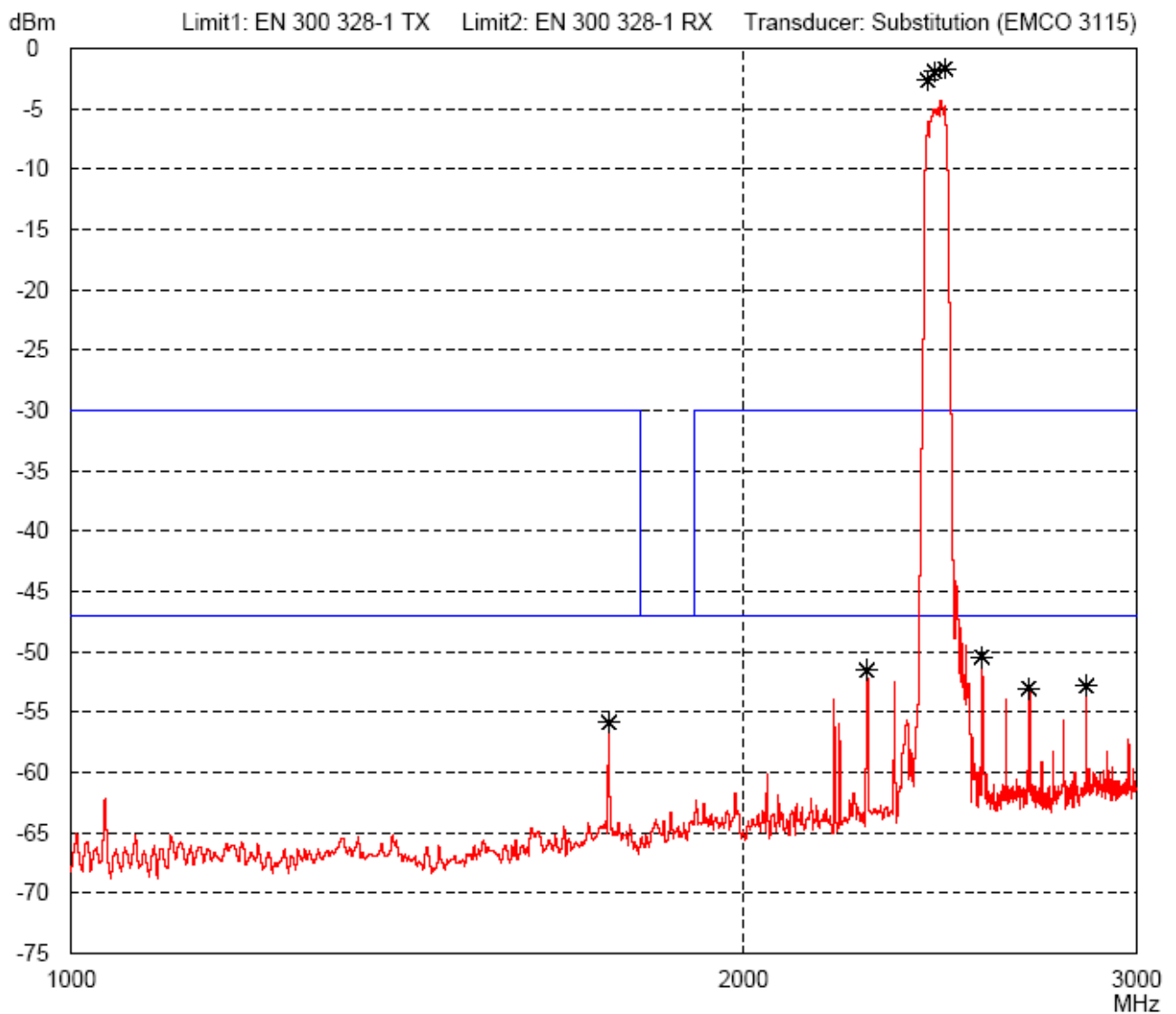


|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.206                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>12/01/2009                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (Spread Spectrum) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



## 8.7 Radiated Emission Measurement 9 kHz to 30 MHz

|                           |   |   |  |                                 |
|---------------------------|---|---|--|---------------------------------|
| Rules and specifications: | CFR 47 Part 15, sections 15.205 and 15.209<br>IC RSS-210 Issue 7, sections 2.2 and 2.6                    |   |  |                                 |
| Guide:                    | ANSI C63.4  |   |  |                                 |
| Limit:                    | Frequency of Emission (MHz)   | Field Strength ( $\mu\text{V}/\text{m}$ ) | Field Strength ( $\text{dB}\mu\text{V}/\text{m}$ ) | Measurement Distance d (meters) |
|                           | 0.009 - 0.490   | 2400/F(kHz)                               | 67.6 - 20 · log(F(kHz))                            | 300                             |
|                           | 0.490 - 1.705   | 24000/F(kHz)                              | 87.6 - 20 · log(F(kHz))                            | 30                              |
|                           | 1.705 - 30.000  | 30  | 29.5   | 30                              |
|                           | Additionally, the level of any unwanted emissions shall not exceed the level of the fundamental emission. |   |  |                                 |
| Measurement procedure:    | Radiated Emission Measurement 9 kHz to 30 MHz (6.3)   |   |  |                                 |

|               |                      |
|---------------|----------------------|
| Comment:      |                      |
| Date of test: |                      |
| Test site:    | Open field test site |

All emissions show more than 20 dB margin to the limit, no values recorded.

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

## 8.8 Radiated Emission Measurement 30 MHz to 25 GHz

|                           |   |   |  |
|---------------------------|---|---|--|
| Rules and specifications: | CFR 47 Part 15, sections 15.215(b) and 15.247<br>IC RSS-210 Issue 7, section A8                           |   |  |
| Guide:                    | ANSI C63.4  |   |  |
| Limit:                    | Frequency of Emission (MHz)   | Field Strength ( $\mu\text{V}/\text{m}$ ) | Field Strength ( $\text{dB}\mu\text{V}/\text{m}$ ) |
|                           | 30 - 88   | 100                                       | 40.0   |
|                           | 88 - 216  | 150                                       | 43.5   |
|                           | 216 - 960   | 200                                       | 46.0   |
|                           | Above 960   | 500                                       | 54.0   |
|                           | Additionally, the level of any unwanted emissions shall not exceed the level of the fundamental emission. |   |  |
| Measurement procedures:   | Radiated Emission in Fully or Semi Anechoic Room (6.4)<br>Radiated Emission at Open Field Test Site (6.5) |   |  |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

|                |  |
|----------------|--|
| Comment:       |  |
| Mode:          | Transmitting at 2.412 GHz with 22 MHz Bandwidth  |
| Date of test:  | December 3, 2009; December 7, 2009   |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | Frequencies ≤ 8.2 GHz: 3 meters<br>Frequencies > 8.2 GHz: 1 meters                                 |

| Frequency (MHz) | Antenna Polarization | Detector | Receiver Reading (dBµV) | Correction Factor (dB/m) | Pulse Train Correction (dB) | Final Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|----------------------|----------|-------------------------|--------------------------|-----------------------------|----------------------|----------------|-------------|
| 2417.702        | vertical             | Peak     | 73.2                    | 33.4                     |                             | 106.6                |                |             |
| 2418.704        | horizontal           | Peak     | 68.6                    | 33.4                     |                             | 102.0                |                |             |
| 4839.200        | vertical             | Peak     | 15.2                    | 34.3                     |                             | 49.5                 | 74.0           | 24.5        |
| 7245.900        | vertical             | Peak     | 13.7                    | 39.0                     |                             | 52.7                 | 86.6           | 33.9        |
| 7254.900        | horizontal           | Average  | 8.6                     | 39.0                     |                             | 47.5                 | 54.0           | <b>6.5</b>  |
| 7255.300        | horizontal           | Peak     | 16.9                    | 39.0                     |                             | 55.8                 | 74.0           | 18.2        |
| 9620.400        | horizontal           | Average  | 14.6                    | 44.1                     |                             | 58.7                 | 86.6           | 27.9        |
| 9625.400        | vertical             | Average  | 9.5                     | 44.1                     |                             | 53.6                 | 86.6           | 33.0        |
| 9644.800        | horizontal           | Peak     | 28.0                    | 44.1                     |                             | 72.2                 | 86.6           | 14.5        |
| 12026.400       | horizontal           | Average  | 10.0                    | 46.0                     |                             | 56.0                 | 63.5           | 7.6         |
| 12055.600       | vertical             | Peak     | 14.8                    | 46.0                     |                             | 60.8                 | 83.5           | 22.7        |
| 12064.000       | horizontal           | Peak     | 19.1                    | 46.0                     |                             | 65.1                 | 83.5           | 18.4        |
| 14466.400       | horizontal           | Peak     | 19.1                    | 51.2                     |                             | 70.3                 | 86.6           | 16.3        |
| 14477.600       | vertical             | Peak     | 15.2                    | 51.2                     |                             | 66.4                 | 83.5           | 17.1        |
| 14488.800       | vertical             | Peak     | 6.8                     | 51.2                     |                             | 57.9                 | 83.5           | 25.6        |
| 14511.200       | horizontal           | Average  | 8.8                     | 51.2                     |                             | 60.0                 | 86.6           | 26.6        |

**Sample calculation of final values:**

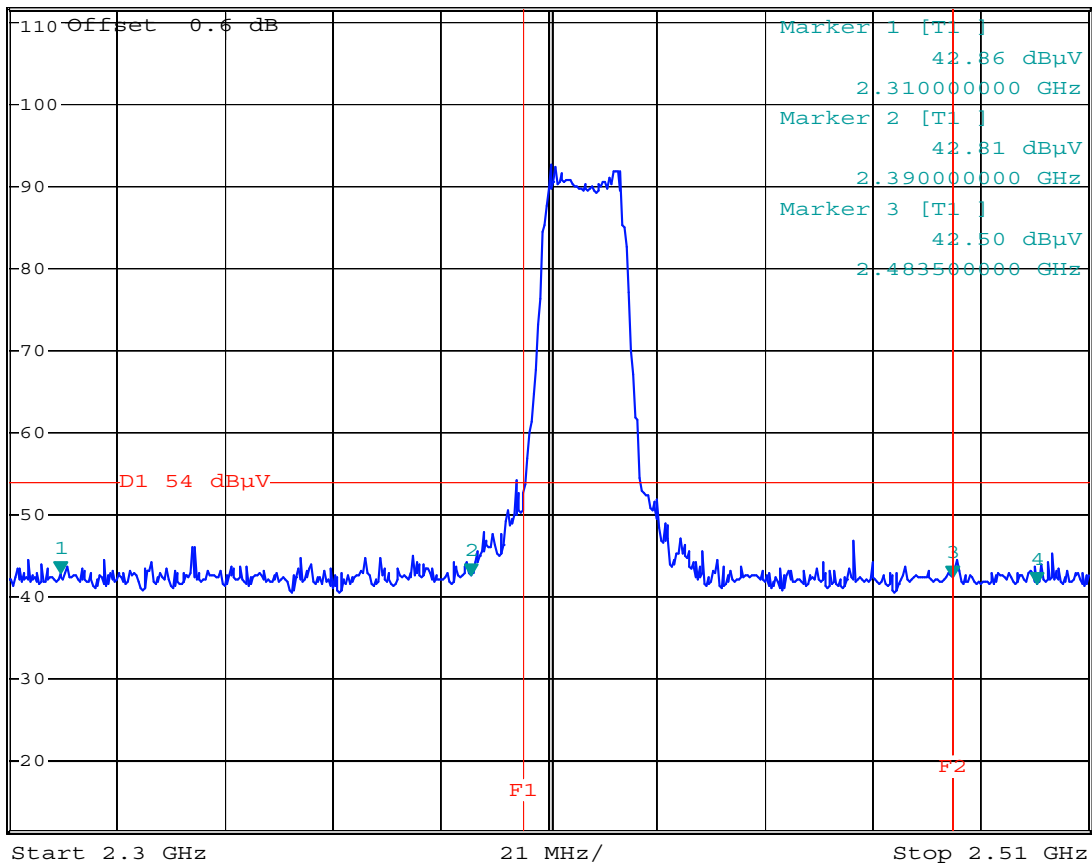
$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$



\*RBW 100 kHz Marker 4 [T1 ]  
 VBW 300 kHz 41.77 dBµV  
 \*Att 20 dB SWT 25 ms 2.500000000 GHz

Ref 111.6 dBµV

1 PK  
 VIEW



Date: 15.MAR.2010 14:14:02

### Band Edges Requirement and Restricted Bands of Operation



|                |  |
|----------------|--|
| Comment:       |  |
| Mode:          | Transmitting at 2.44 GHz with 80 MHz Bandwidth   |
| Date of test:  | December 3, 2009; December 7, 2009   |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | Frequencies ≤ 8.2 GHz: 3 meters<br>Frequencies > 8.2 GHz: 1 meters                                 |

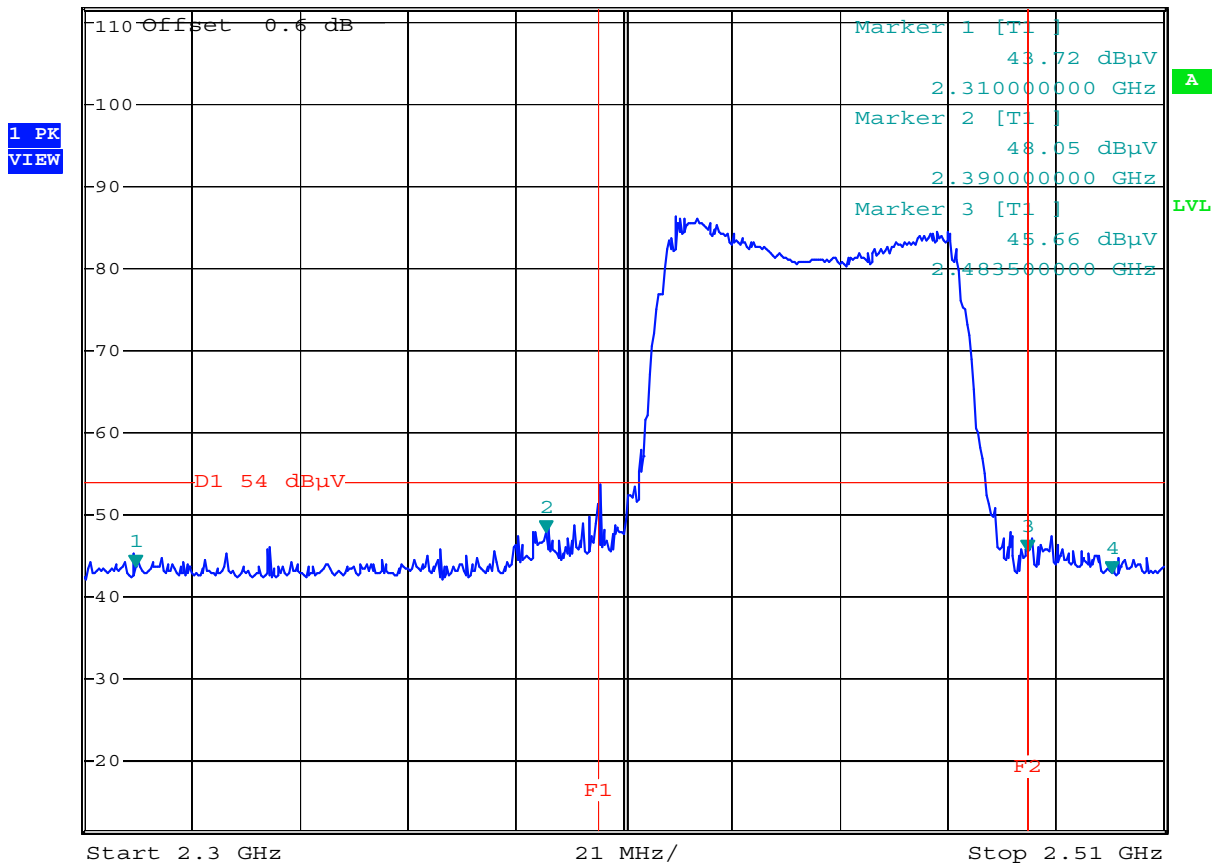
| Frequency (MHz) | Antenna Polarization | Detector | Receiver Reading (dBµV) | Correction Factor (dB/m) | Pulse Train Correction (dB) | Final Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|----------------------|----------|-------------------------|--------------------------|-----------------------------|----------------------|----------------|-------------|
| 2417.869        | horizontal           | Peak     | 60.3                    | 33.4                     |                             | 93.7                 |                |             |
| 2418.036        | horizontal           | Peak     | 68.5                    | 33.4                     |                             | 101.9                |                |             |
| 2462.291        | horizontal           | Peak     | 62.2                    | 33.5                     |                             | 95.8                 |                |             |
| 2462.959        | horizontal           | Peak     | 68.4                    | 33.5                     |                             | 101.9                |                |             |
| 4827.800        | vertical             | Peak     | 6.1                     | 34.3                     |                             | 40.4                 | 54.0           | 13.6        |
| 4835.400        | horizontal           | Peak     | 2.3                     | 34.3                     |                             | 36.6                 | 54.0           | 17.4        |
| 4930.400        | vertical             | Peak     | 6.1                     | 34.4                     |                             | 40.5                 | 54.0           | 13.5        |
| 7260.000        | horizontal           | Peak     | 5.3                     | 39.0                     |                             | 44.2                 | 54.0           | 9.8         |
| 7358.700        | horizontal           | Peak     | 6.3                     | 39.1                     |                             | 45.4                 | 54.0           | 8.6         |
| 7377.500        | horizontal           | Peak     | 6.7                     | 39.1                     |                             | 45.8                 | 54.0           | <b>8.2</b>  |
| 9670.000        | vertical             | Peak     | 10.9                    | 44.2                     |                             | 55.1                 | 81.9           | 26.9        |

**Sample calculation of final values:**

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$



Ref 111.6 dBµV \*Att 20 dB \*RBW 100 kHz Marker 4 [T1 ]  
 VBW 300 kHz 43.03 dBµV  
 SWT 25 ms 2.500000000 GHz



Date: 15.MAR.2010 14:12:55

### Band Edges Requirement and Restricted Bands of Operation





|                |  |
|----------------|--|
| Comment:       |  |
| Mode:          | Transmitting at 2.472 GHz with 22 MHz Bandwidth  |
| Date of test:  | December 3, 2009; December 7, 2009   |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | Frequencies ≤ 8.2 GHz: 3 meters<br>Frequencies > 8.2 GHz: 1 meters                                 |

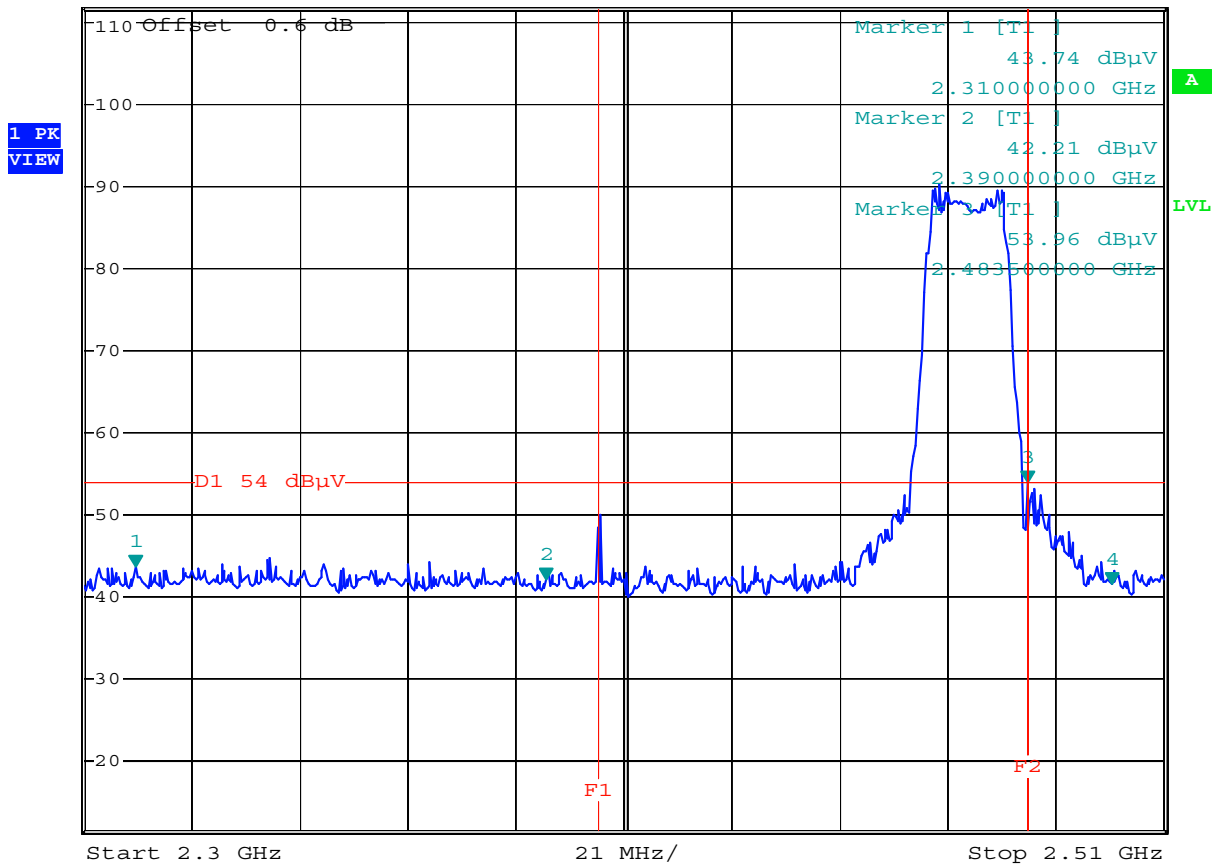
| Frequency (MHz) | Antenna Polarization | Detector | Receiver Reading (dBµV) | Correction Factor (dB/m) | Pulse Train Correction (dB) | Final Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|----------------------|----------|-------------------------|--------------------------|-----------------------------|----------------------|----------------|-------------|
| 2470.800        | vertical             | Peak     | 73.7                    | 33.6                     |                             | 107.2                |                |             |
| 4945.600        | horizontal           | Peak     | 12.2                    | 34.4                     |                             | 46.6                 | 74.0           | 27.4        |
| 4957.000        | vertical             | Peak     | 14.8                    | 34.4                     |                             | 49.2                 | 74.0           | 24.8        |
| 7395.300        | horizontal           | Average  | 5.8                     | 39.1                     |                             | 45.0                 | 54.0           | 9.0         |
| 7419.800        | horizontal           | Peak     | 16.3                    | 39.2                     |                             | 55.4                 | 74.0           | 18.6        |
| 7424.500        | vertical             | Peak     | 10.6                    | 39.2                     |                             | 49.8                 | 74.0           | 24.2        |
| 9892.600        | horizontal           | Peak     | 26.9                    | 44.4                     |                             | 71.2                 | 87.2           | 16.0        |
| 9914.800        | horizontal           | Average  | 14.6                    | 44.4                     |                             | 59.0                 | 87.2           | 28.2        |
| 12366.400       | horizontal           | Peak     | 21.7                    | 46.2                     |                             | 67.9                 | 83.5           | 15.6        |
| 12393.000       | horizontal           | Average  | 11.1                    | 46.2                     |                             | 57.3                 | 63.5           | 6.2         |
| 12393.200       | vertical             | Average  | 7.8                     | 46.2                     |                             | 54.1                 | 63.5           | 9.4         |
| 14824.800       | vertical             | Peak     | 13.8                    | 51.4                     |                             | 65.2                 | 87.2           | 22.0        |
| 14875.200       | vertical             | Average  | 7.0                     | 51.5                     |                             | 58.5                 | 87.2           | 28.8        |

**Sample calculation of final values:**

$$\text{Final Value (dBµV/m)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$



Ref 111.6 dBµV \*Att 20 dB \*RBW 100 kHz Marker 4 [T1 ]  
 VBW 300 kHz 41.55 dBµV  
 SWT 25 ms 2.500000000 GHz



Date: 15.MAR.2010 14:15:57

### Band Edges Requirement and Restricted Bands of Operation

## 8.9 RF exposure requirement

|                           |   |                                   |                                   |   |                          |
|---------------------------|---|-----------------------------------|-----------------------------------|---|--------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(i)<br>CFR 47 Part 1, sections 1.1307(b)(1) |                                   |                                   |   |                          |
| Guide:                    | OET Bulletin 65, Edition 97-01  |                                   |                                   |   |                          |
| Limits:                   | Limits for general population / uncontrolled exposure                     |                                   |                                   |   |                          |
|                           | Frequency Range (MHz)   | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
|                           | 0.3 - 1.34  | 614                               | 1.63                              | (100)*                                  | 30                       |
|                           | 1.34 - 30   | 824 / f                           | 2.19 / f                          | (180 / f <sup>2</sup> )*                | 30                       |
|                           | 30 - 300  | 27.5                              | 0.073                             | 0.2                                     | 30                       |
|                           | 300 - 1500  | ---                               | ---                               | f/1500                                  | 30                       |
| 1500 - 100000             | ---   | ---                               | 1.0                               | 30                                      |                          |
|                           | f = frequency in MHz<br>* Plane-wave equivalent power density             |                                   |                                   |   |                          |

| Power Density              |   | Declared by applicant               | Measured |
|----------------------------|---|-------------------------------------|----------|
| Prediction <sup>11</sup> : | $S = P G / 4 \pi R^2$   |                                     |          |
| Where:                     | S = Power density<br>P = Power input of antenna<br>G = Power gain of the antenna relativ to an isotropic radiator<br>R = Distance to the center of radiation of the antenna |                                     |          |
| Maximum output power:      | P = 0 dBm = 1 mW  | <input checked="" type="checkbox"/> |          |
| Antenna gain:              | G = 1 dBi = 1.26  | <input checked="" type="checkbox"/> |          |
| Prediction distance:       | R = 20 cm   |                                     |          |
| Power density at 20 cm:    | <b>S = 250 · 10<sup>-6</sup> mW/cm<sup>2</sup></b>  |                                     |          |
| Limit                      | <b>S<sub>lim</sub> = 1.0 mW/cm<sup>2</sup></b>  |                                     |          |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

<sup>11</sup> MPE Prediction of MPE according to equation from page 19 of OET Bulletin 65, Ed. 97-01

## 8.10 Exposure of Humans to RF Fields

|                           |                                 |
|---------------------------|---------------------------------|
| Rules and specifications: | IC RSS-Gen Issue 2, section 5.5 |
| Guide:                    | IC RSS-102 Issue 2, section 2.5 |

| Exposure of Humans to RF Fields  | Applicable | Declared by applicant | Measured                            | Exemption                           |
|--|------------|-----------------------|-------------------------------------|-------------------------------------|
| The antenna is   |            |                       |                                     |                                     |
| <input type="checkbox"/> detachable  |            |                       |                                     |                                     |
| <p>The conducted output power (CP in watts) is measured at the antenna connector:</p> $CP = \dots\dots\dots \mathbf{W}$ <p>The effective isotropic radiated power (EIRP in watts) is calculated using</p> <p><input type="checkbox"/> the numerical antenna gain: <math>G = \dots\dots\dots</math></p> $EIRP = G \cdot CP \Rightarrow EIRP = \dots\dots\dots \mathbf{W}$ <p><input type="checkbox"/> the field strength<sup>12</sup> in V/m: <math>FS = \dots\dots\dots \mathbf{V/m}</math></p> $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = \mathbf{124 W}$ <p>with:</p> <p>Distance between the antennas in m: <math>D = \dots\dots\dots \mathbf{m}</math></p> |            |                       | <input type="checkbox"/>            |                                     |
| <input checked="" type="checkbox"/> not detachable   |            |                       |                                     |                                     |
| <p>A field strength measurement is used to determine the effective isotropic radiated power (EIRP in watts) given by<sup>12</sup>:</p> $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = \mathbf{3.65 \cdot 10^{-3} W}$ <p>with:</p> <p>Field strength in V/m: <math>FS = \mathbf{124.5 \cdot 10^{-6} dB\mu V/m}</math></p> <p>Distance between the two antennas in m: <math>D = \mathbf{3 m}</math></p>  |            |                       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Selection of output power  |            |                       |                                     |                                     |
| <p>The output power TP is the higher of the conducted or effective isotropic radiated power (e.i.r.p.):</p> $TP = \mathbf{3.65 \cdot 10^{-3} W}$   |            |                       |                                     |                                     |

<sup>12</sup> The conversion formula is valid only for properly matched antennas. In other cases the transmitter output power may have to be measured by a terminated measurement when applying the exemption clauses. If an open area test site is used for field strength measurement, the effect due to the metal ground reflecting plane should be subtracted from the maximum field strength value in order to reference it to free space, before calculating TP.

| Exposure of Humans to RF Fields (continued)   | Applicable | Declared by applicant               | Measured | Exemption                           |
|---|------------|-------------------------------------|----------|-------------------------------------|
| <b>Separation distance between the user and the transmitting device is</b>  |            |                                     |          |                                     |
| <input type="checkbox"/> less than or equal to 20 cm  |            | <input checked="" type="checkbox"/> |          |                                     |
| <input checked="" type="checkbox"/> greater than 20 cm  |            |                                     |          |                                     |
| <b>Transmitting device is</b>   |            |                                     |          |                                     |
| <input type="checkbox"/> in the vicinity of the human head  |            | <input type="checkbox"/>            |          |                                     |
| <input type="checkbox"/> body-worn  |            |                                     |          |                                     |
| <b>SAR evaluation</b>   |            |                                     |          |                                     |
| SAR evaluation is required if the separation distance between the user and the device is less than or equal to 20 cm.   |            |                                     |          |                                     |
| <input type="checkbox"/> The device operates from 3 kHz up to 1 GHz inclusively and its source-based time-averaged output power is less than, or equal to 200 mW for General Public Use and 1000 mW for Controlled Use.   |            |                                     |          | <input type="checkbox"/>            |
| <input type="checkbox"/> The device operates above 1 GHz up to 2.2 GHz inclusively and its source-based time-averaged output power is less than, or equal to 100 mW for General Public Use and 500 mW for Controlled Use. |            |                                     |          | <input type="checkbox"/>            |
| <input type="checkbox"/> The device operates above 2.2 GHz up to 3 GHz inclusively and its source-based time-averaged output power is less than, or equal to 20 mW for General Public Use and 100 mW for Controlled Use.  |            |                                     |          | <input type="checkbox"/>            |
| <input type="checkbox"/> The device operates above 3 GHz up to 6 GHz inclusively and its source-based time-averaged output power) is less than, or equal to 10 mW for General Public Use and 50 mW for Controlled Use.    |            |                                     |          | <input type="checkbox"/>            |
| <input type="checkbox"/> SAR evaluation is documented in test report no. ....   |            |                                     |          |                                     |
| <b>RF exposure evaluation</b>   |            |                                     |          |                                     |
| RF exposure evaluation is required if the separation distance between the user and the device is greater than 20 cm.  |            |                                     |          |                                     |
| <input type="checkbox"/> The device operates below 1.5 GHz and its e.i.r.p. is equal to or less than 2.5 W.   |            |                                     |          | <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> The device operates at or above 1.5 GHz and the e.i.r.p. of the device is equal to or less than 5 W.  |            |                                     |          | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> RF exposure evaluation is documented in test report no. ....   |            |                                     |          |                                     |

## 9 Referenced Regulations

All tests were performed with reference to the following regulations and standards:

|                                     |                          |   |  |
|-------------------------------------|--------------------------|---|--|
| <input checked="" type="checkbox"/> | CFR 47 Part 2            | Code of Federal Regulations Part 2 (Frequency allocation and radio treaty matters; General rules and regulations) of the Federal Communication Commission (FCC)   | October 1, 2008                                      |
| <input checked="" type="checkbox"/> | CFR 47 Part 15           | Code of Federal Regulations Part 15 (Radio Frequency Devices) of the Federal Communication Commission (FCC)   | October 1, 2008                                      |
| <input checked="" type="checkbox"/> | ANSI C63.4               | American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz                                     | December 11, 2003<br>(published on January 30, 2004) |
| <input checked="" type="checkbox"/> | RSS-Gen                  | Radio Standards Specification RSS-Gen Issue 2 containing General Requirements and Information for the Certification of Radiocommunication Equipment, published by Industry Canada                       | June 2007  |
| <input checked="" type="checkbox"/> | RSS-210                  | Radio Standards Specification RSS-210 Issue 7 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, published by Industry Canada                         | June 2007  |
| <input type="checkbox"/>            | RSS-310                  | Radio Standards Specification RSS-310 Issue 2 for Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category II Equipment, published by Industry Canada                        | June 2007  |
| <input checked="" type="checkbox"/> | RSS-102                  | Radio Standards Specification RSS-102 Issue 3: Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) , published by Industry Canada                            | June 2009  |
| <input type="checkbox"/>            | ICES-003                 | Interference-Causing Equipment Standard ICES-003 Issue 4 for Digital Apparatus, published by Industry Canada  | February 7, 2004                                     |
| <input checked="" type="checkbox"/> | CISPR 22                 | Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment – Radio Disturbance Characteristics – Limits and Methods of Measurement" | 1997   |
| <input type="checkbox"/>            | CAN/CSA-CEI/IEC CISPR 22 | Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment  | 2002   |
| <input checked="" type="checkbox"/> | TRC-43                   | Notes Regarding Designation of Emission (Including Necessary Bandwidth and Classification), Class of Station and Nature of Service, published by Industry Canada  | October 9, 1982                                      |

## 10 Revision History

| Revision History |             |                  |   |
|------------------|-------------|------------------|---|
| <i>Edition</i>   | <i>Date</i> | <i>Issued by</i> | <i>Modifications</i>  |
| 1                | 22.12.09    | M. Steindl (cj)  | First edition   |
| 2                | 8.03.10     | M. Steindl       | Plot for Band Edges Requirement added                             |
| 3                | 16.03.10    | M. Steindl       | Additional measurements for lowest and highest frequency channel. |

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## 11 Charts taken during testing



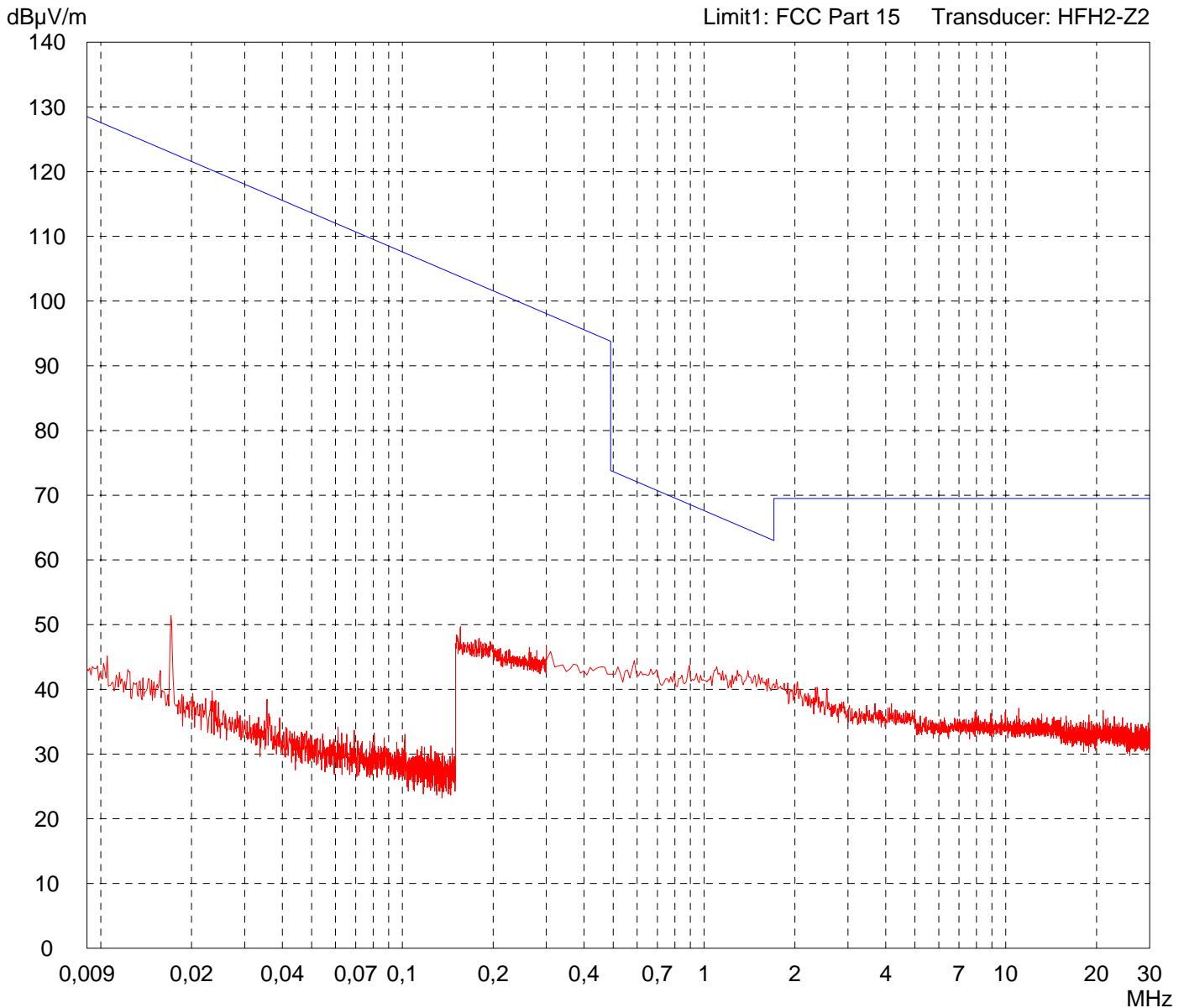
# Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS                          |                           |
| Serial no.:<br>0.440.000.848                   |                           |
| Applicant:<br>Identec Solutions                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2 |                           |
| Tested on:<br>Test distance 3 metres           |                           |
| Date of test:<br>03/16/2010                    | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                     | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

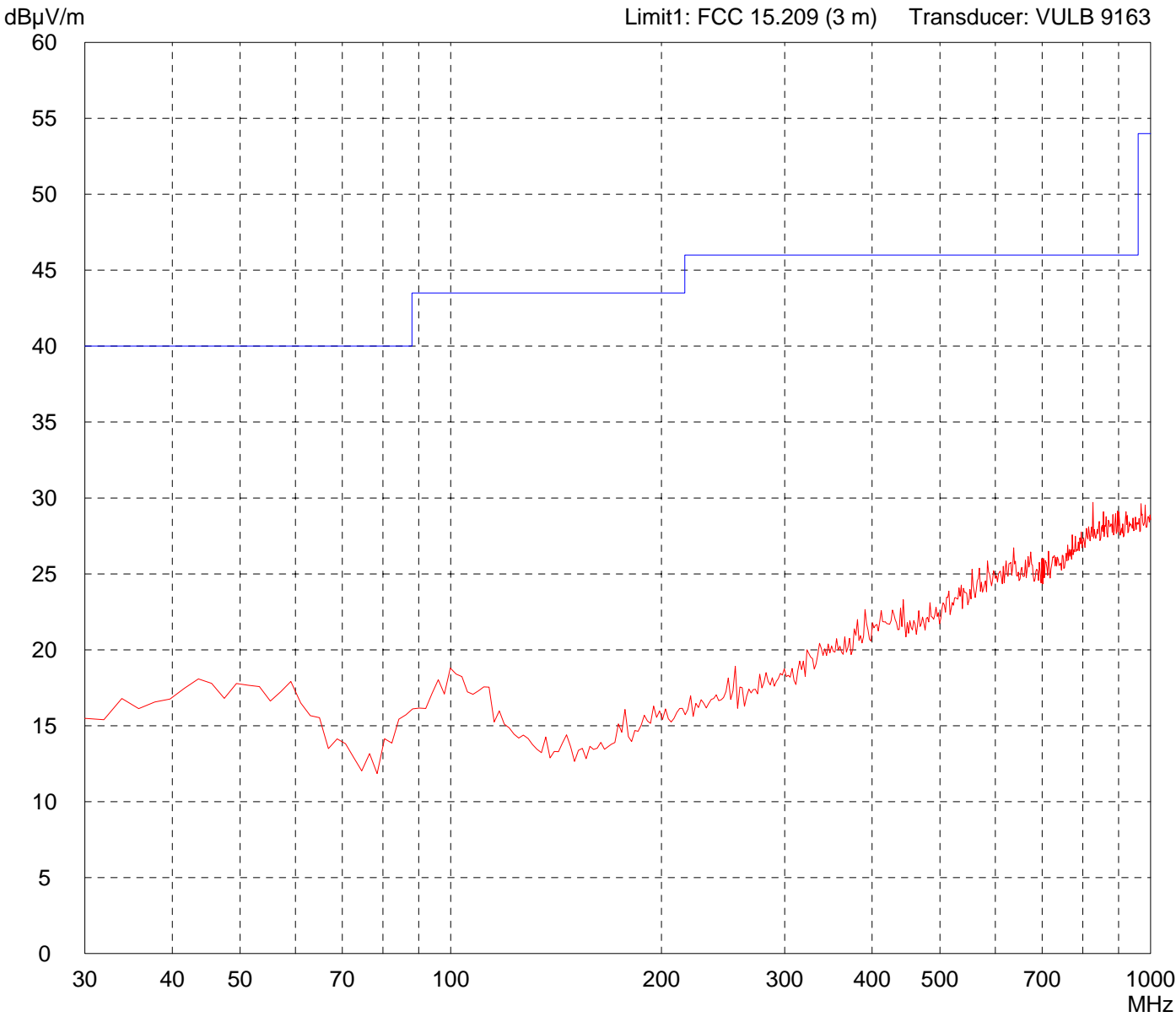
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

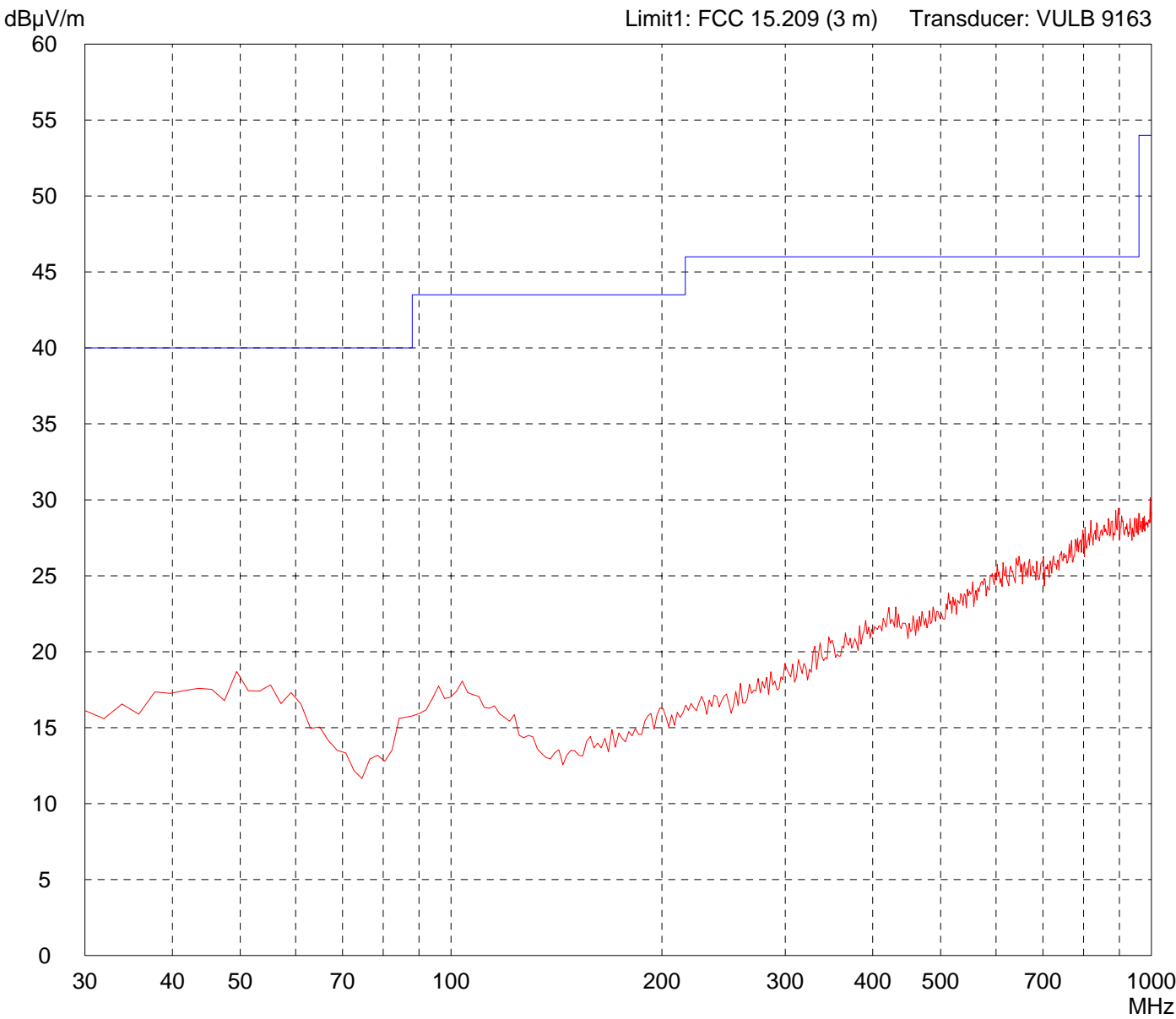
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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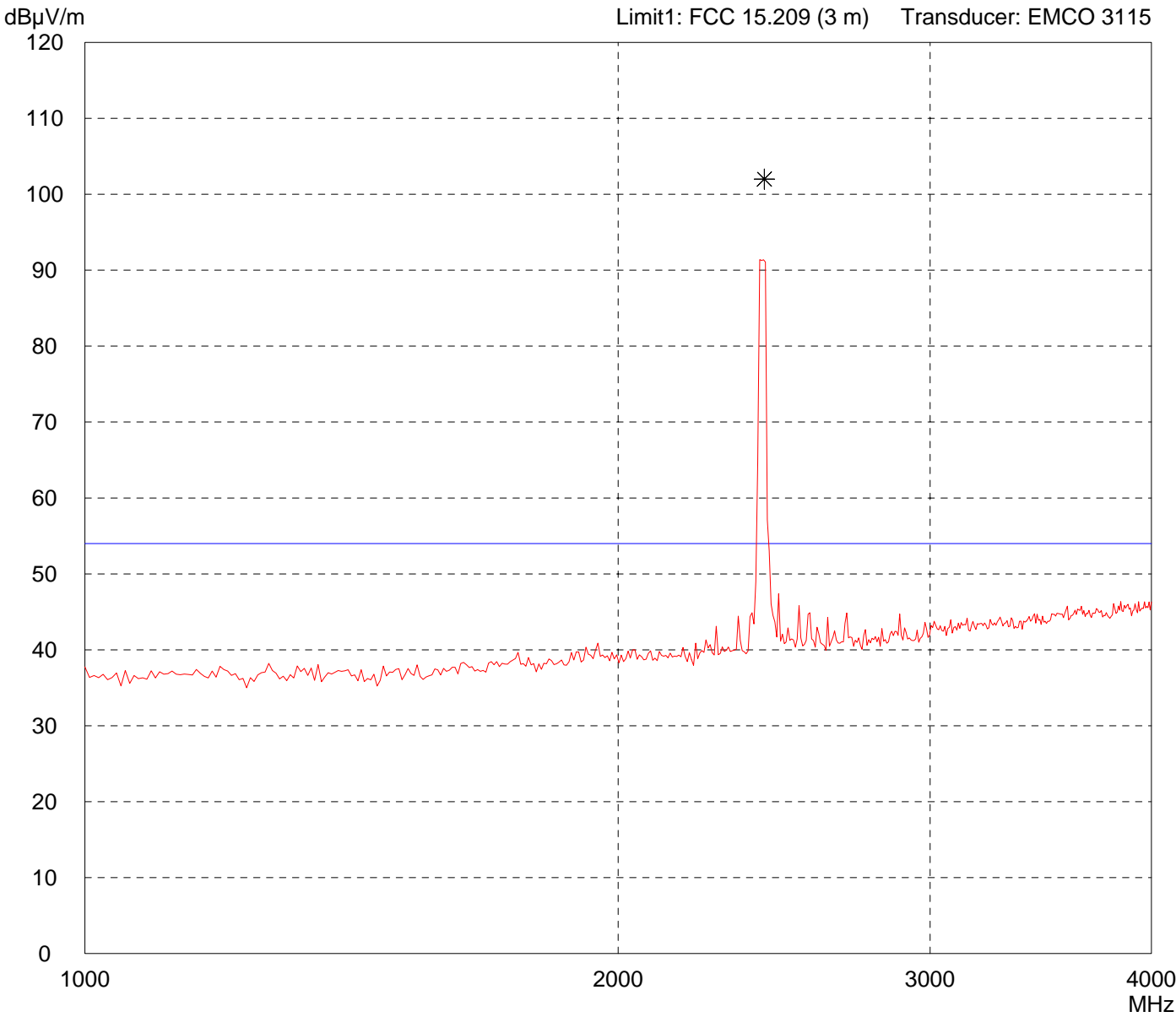
# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

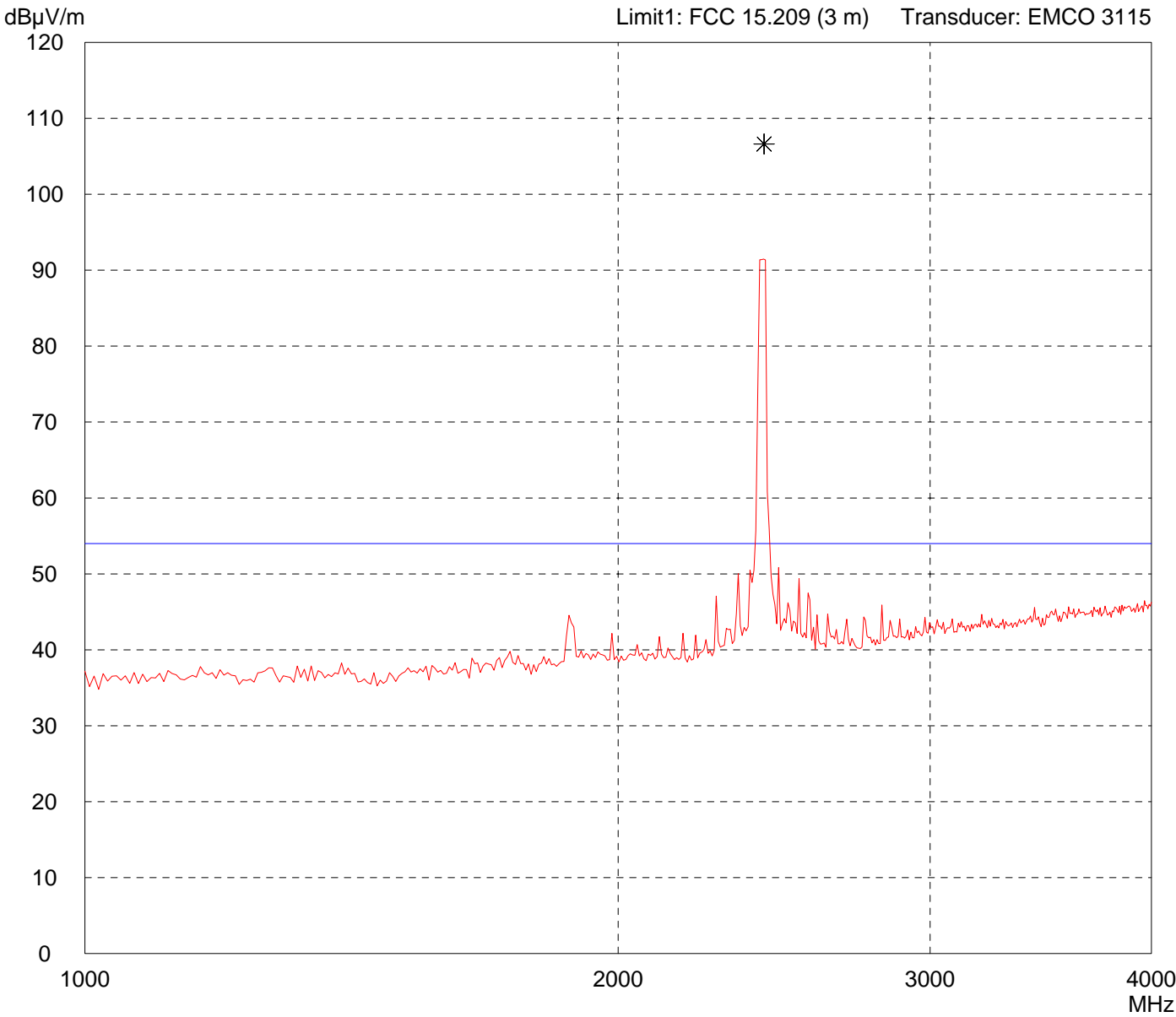
# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



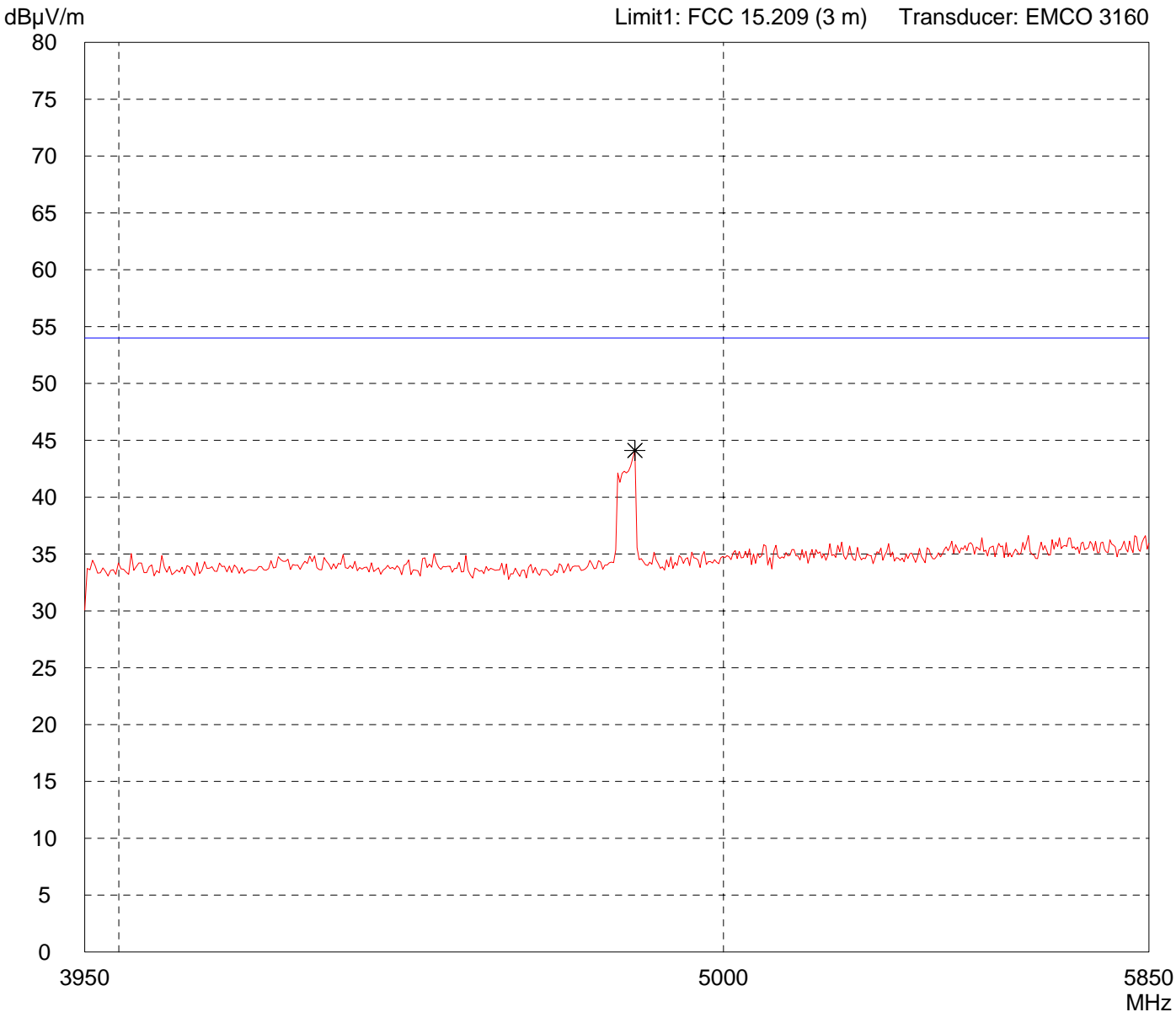
|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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# Radiated Emission Test 3,95 GHz - 5,85 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |  |
|---|--|
| <p>Model:<br/>i-Q350 RTLS</p> <p>Serial no.:<br/>0.440.000.848</p> <p>Applicant:<br/>Identec Solutions</p> <p>Test site:<br/>Fully anechoic room, cabin no. 2</p> <p>Tested on:<br/>Test distance 3 metres<br/>Horizontal Polarization</p> <p>Date of test: 03/15/2010      Operator: M. Steindl</p> <p>Test performed: automatically      File name: default.emi</p> | <p>Comment:</p> <ul style="list-style-type: none"> <li>- Internal battery supply</li> <li>- Transmitting continuously (2.412 GHz)</li> </ul> |
|---|--|

|                           |   |
|---------------------------|---|
| <p>Detector:<br/>Peak</p> | <p>List of values:<br/>10 dB Margin                      50 Subranges</p> |
|---------------------------|---|



|                            |  |
|----------------------------|--|
| <p>Result:<br/>Prescan</p> | <p>Project file:<br/>69861-00628</p> <p style="text-align: right;">Page      of      Pages</p> |
|----------------------------|--|

# Radiated Emission Test 3,95 GHz - 5,85 GHz acc. to FCC Part 15 Subpart C (FAR)

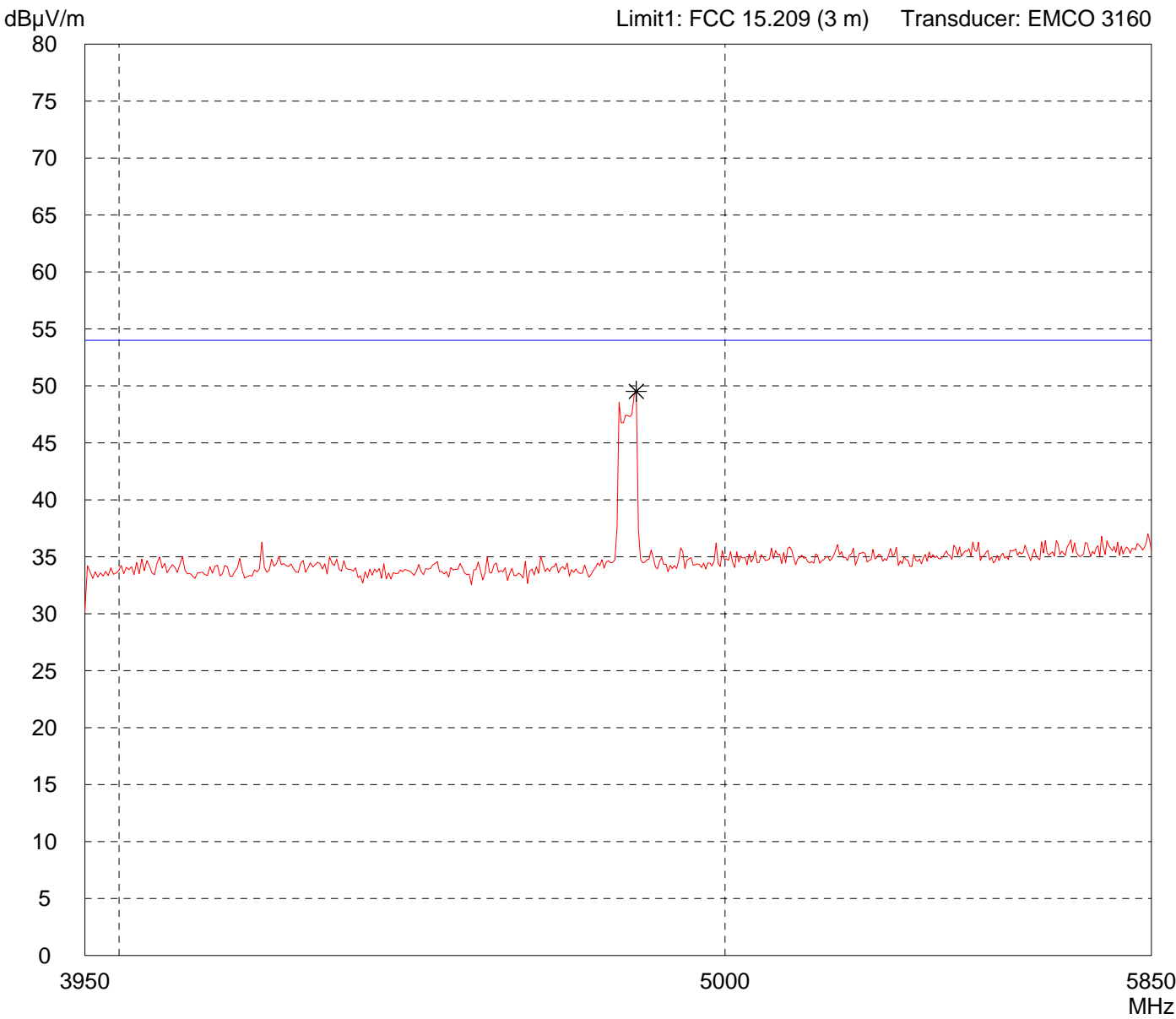
|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

Comment:

- Internal battery supply
- Transmitting continuously (2.412 GHz)

Detector:  
Peak

List of values:  
10 dB Margin 50 Subranges



Result:  
Prescan

Project file:  
69861-00628 Page    of    Pages

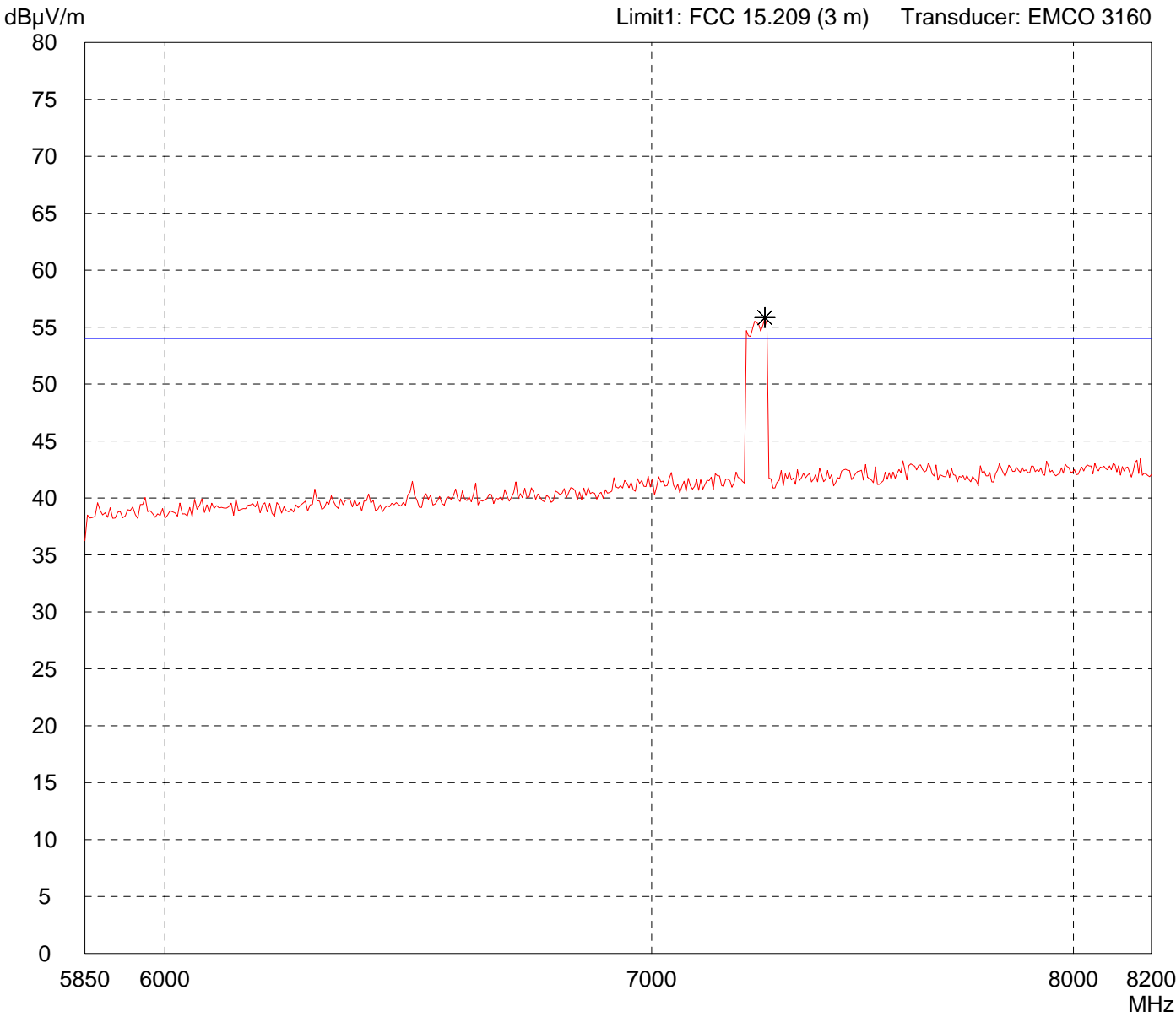
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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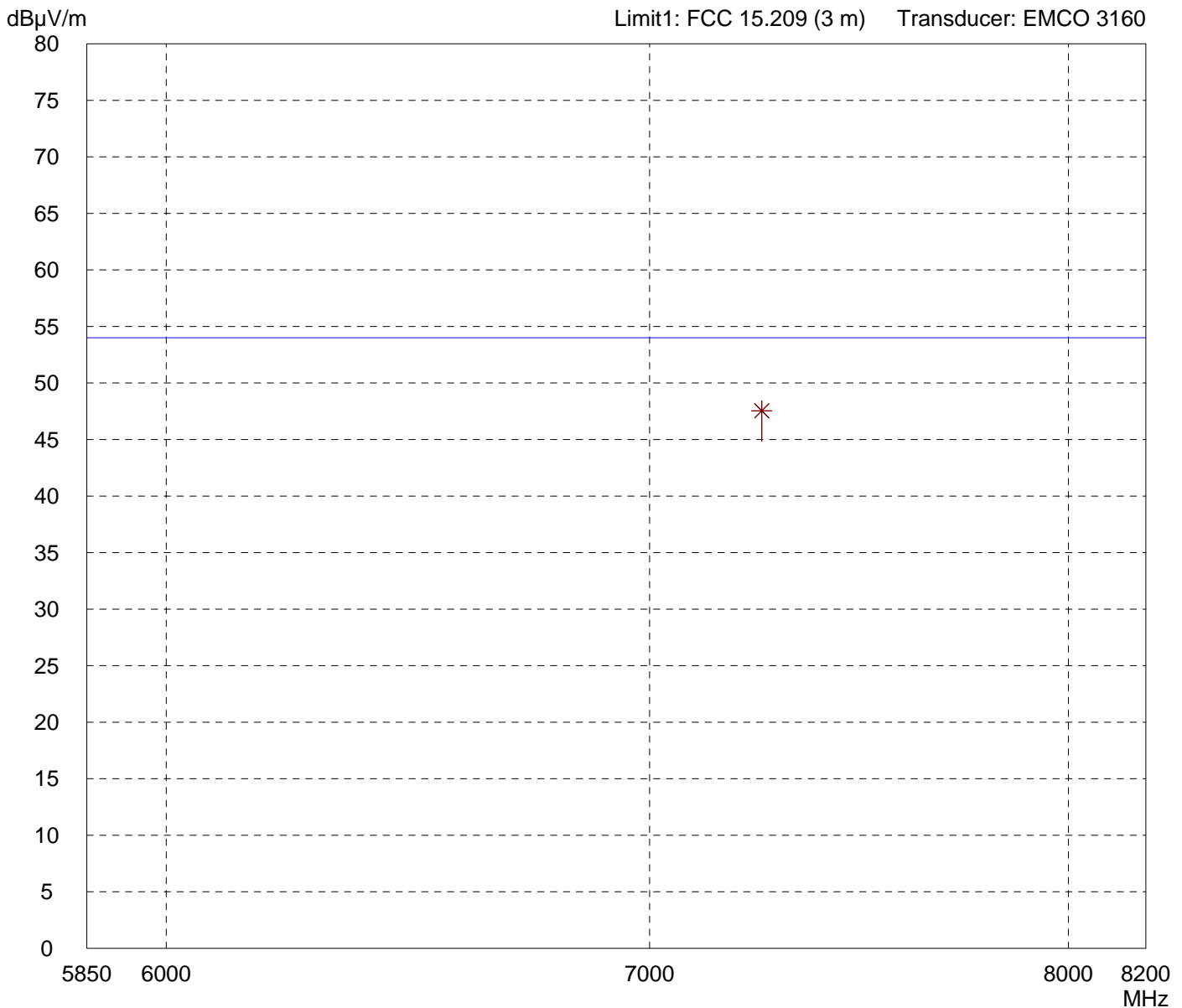
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                      | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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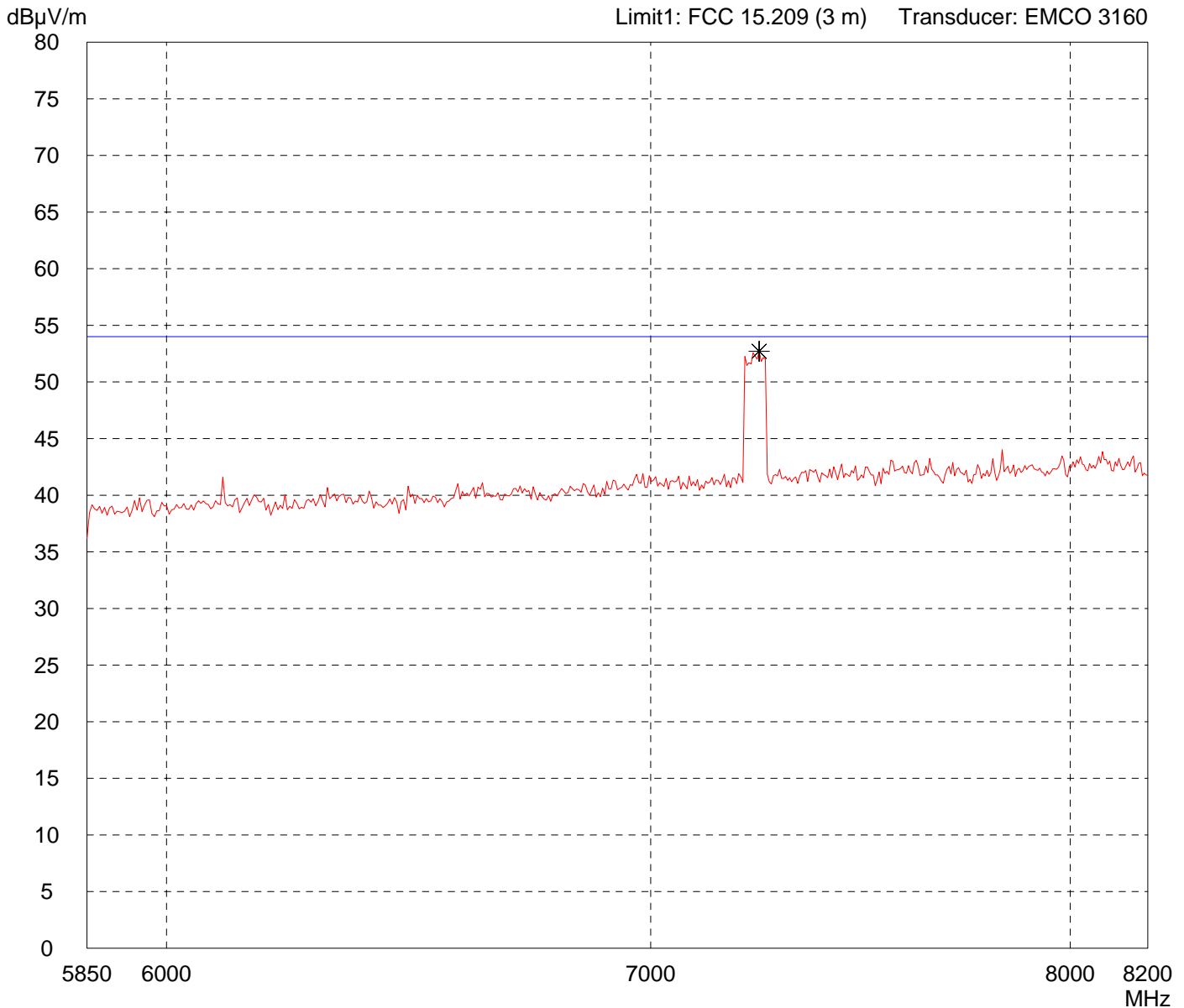
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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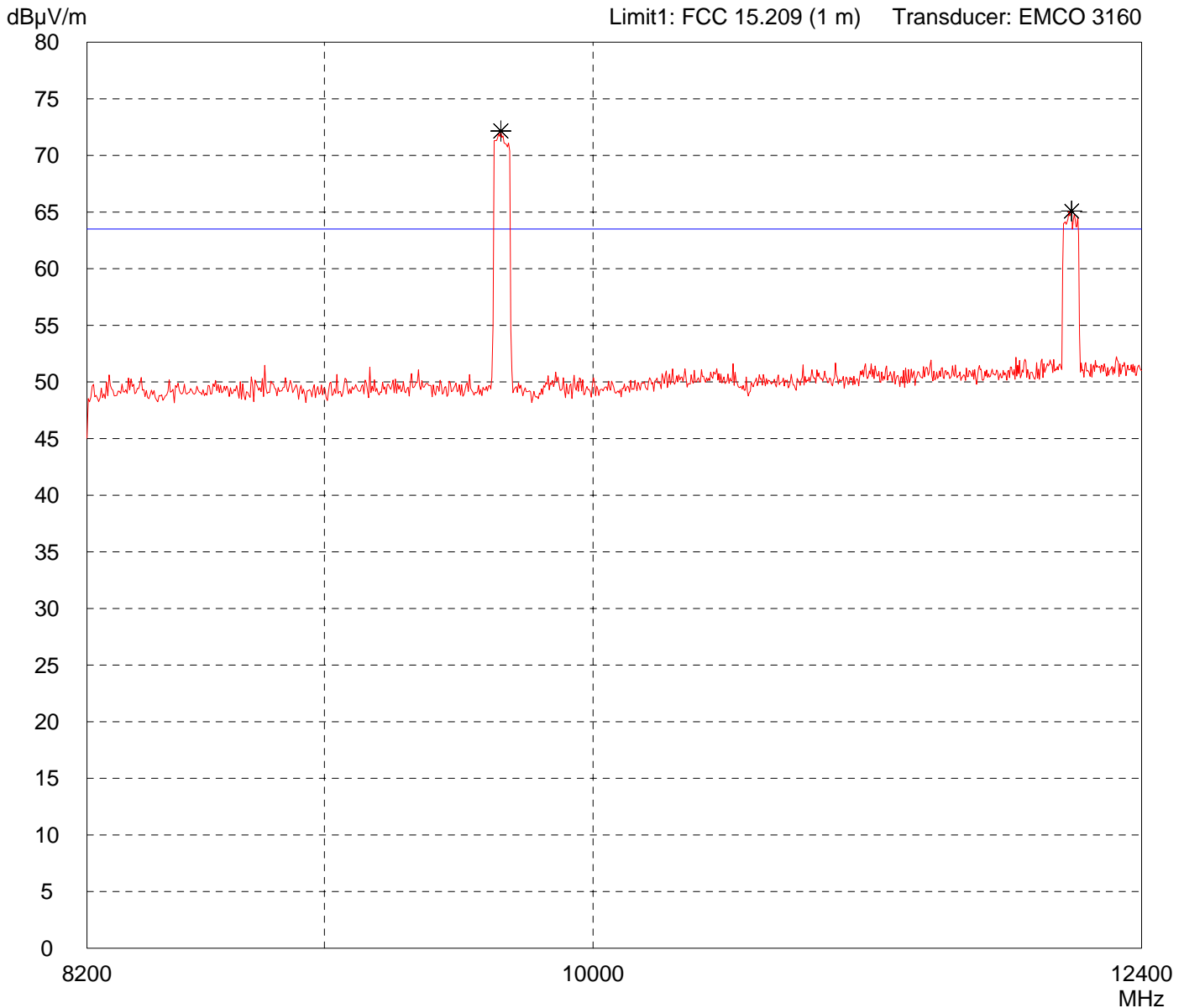
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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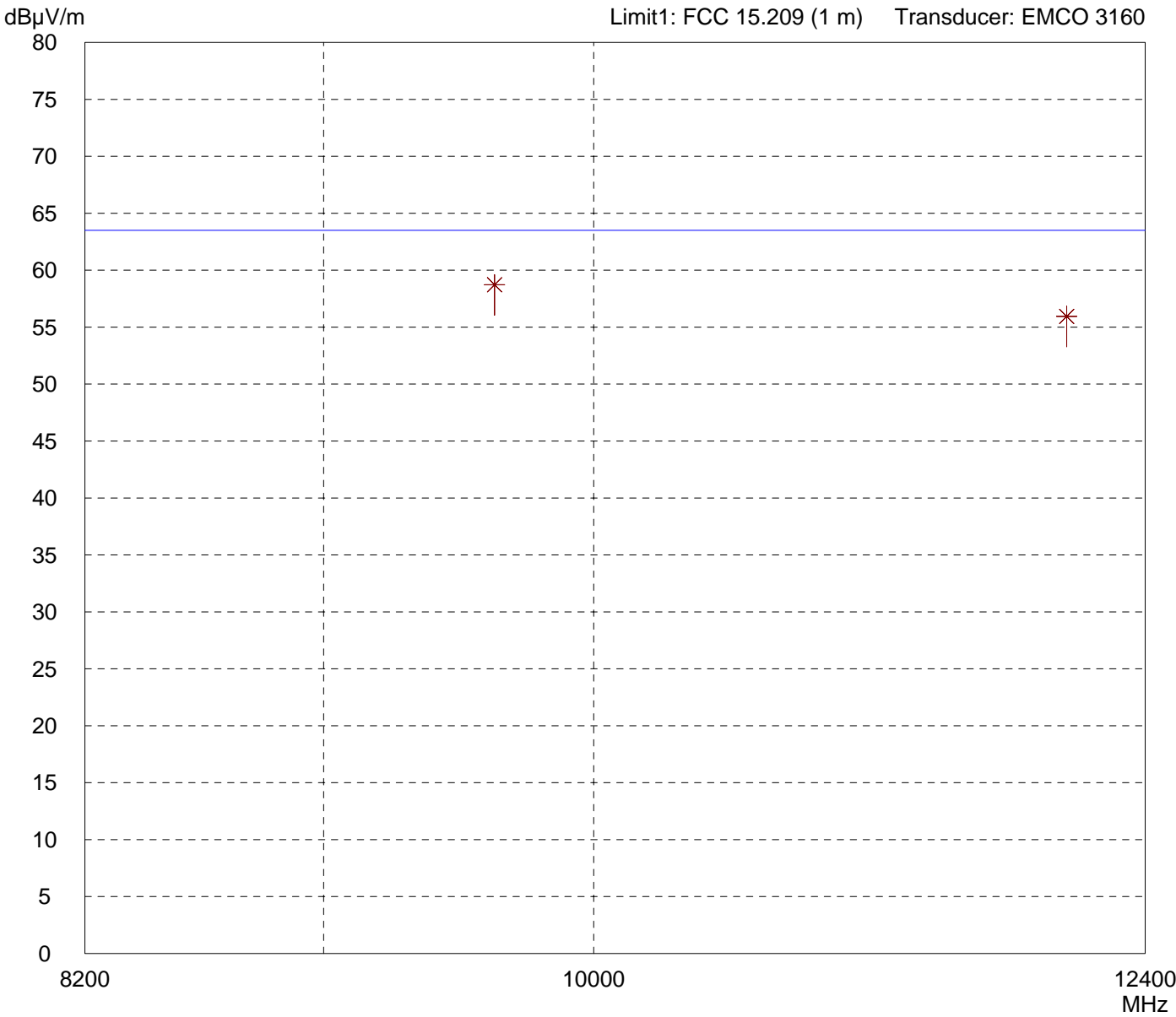
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                     | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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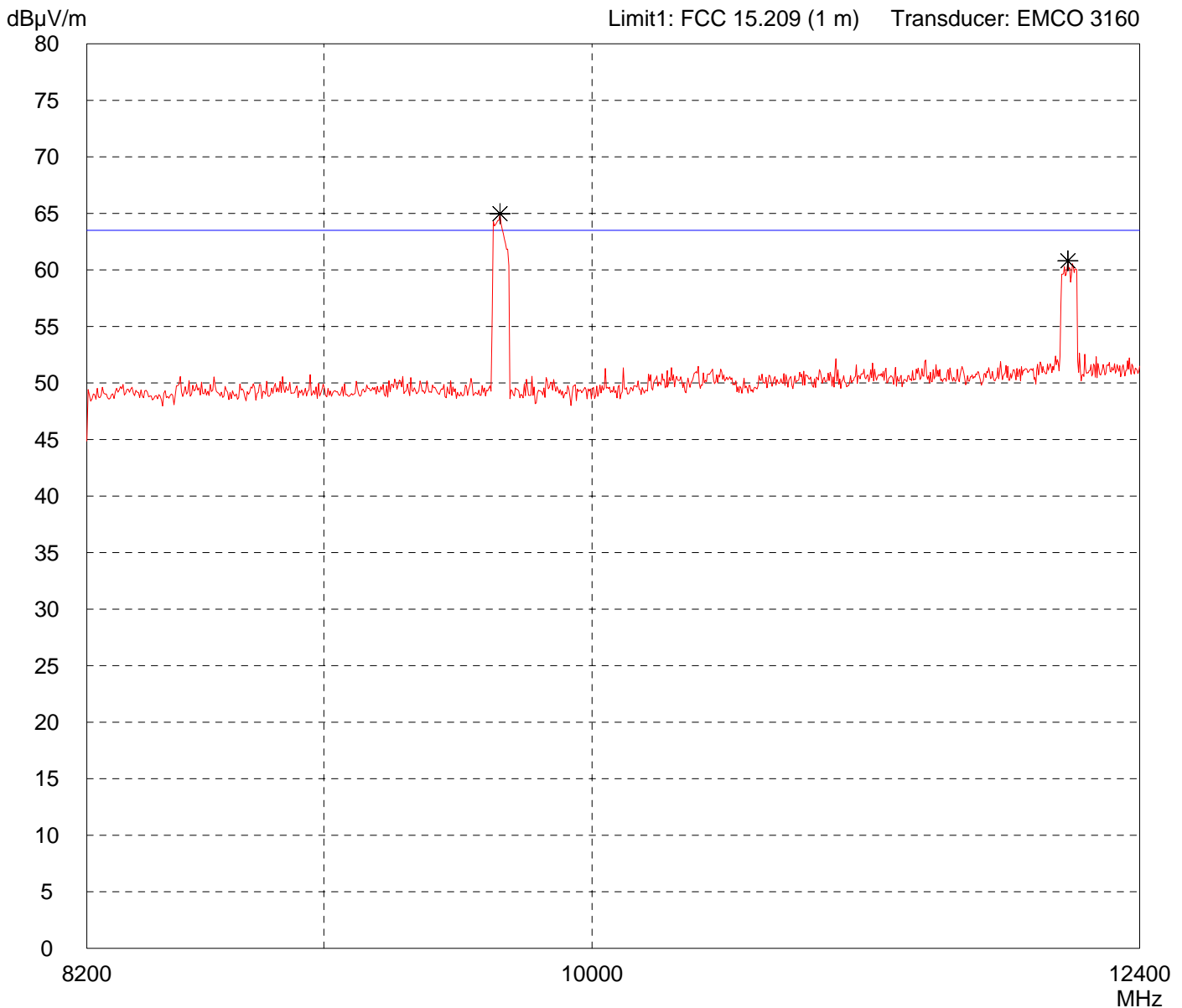
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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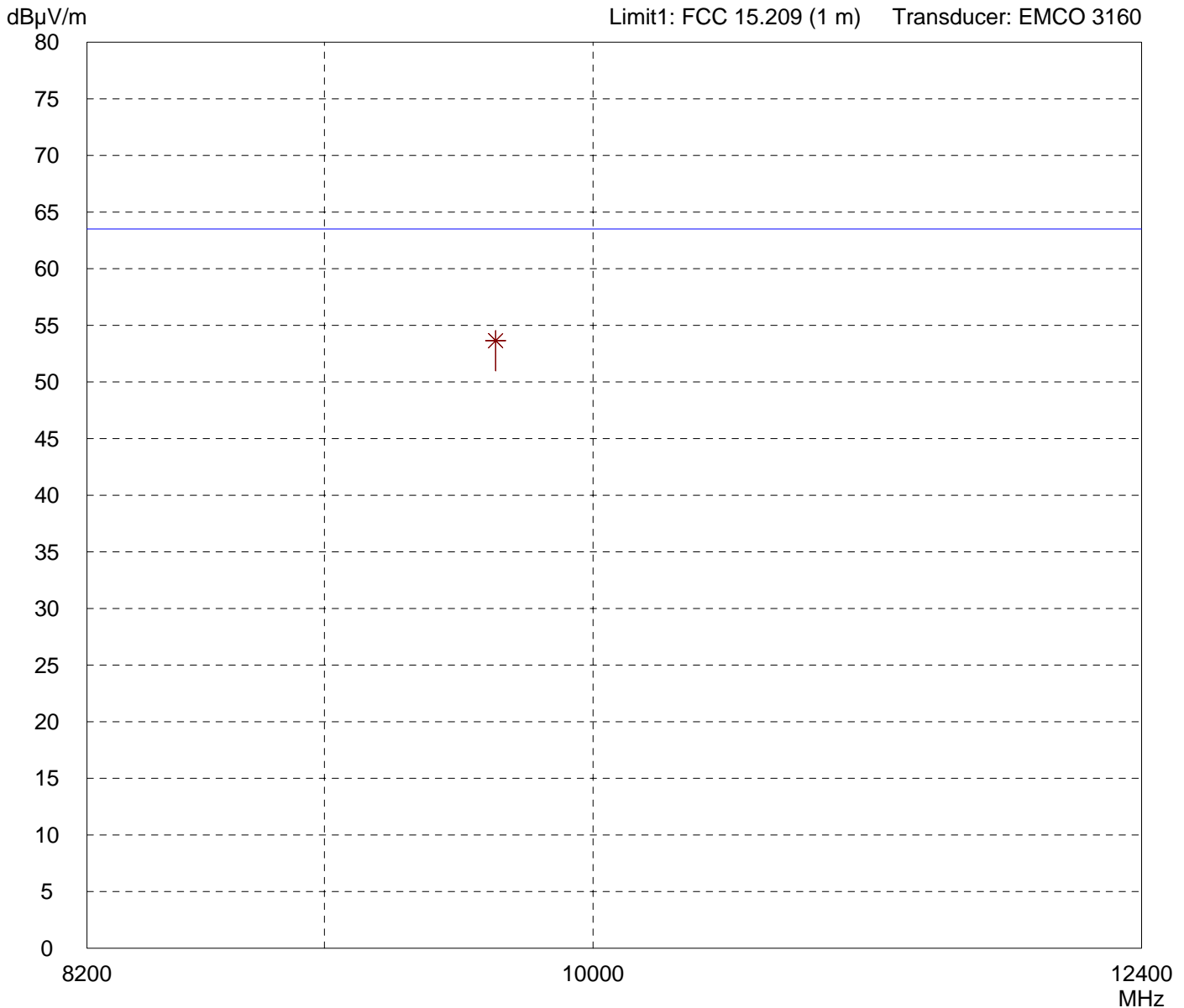
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                   | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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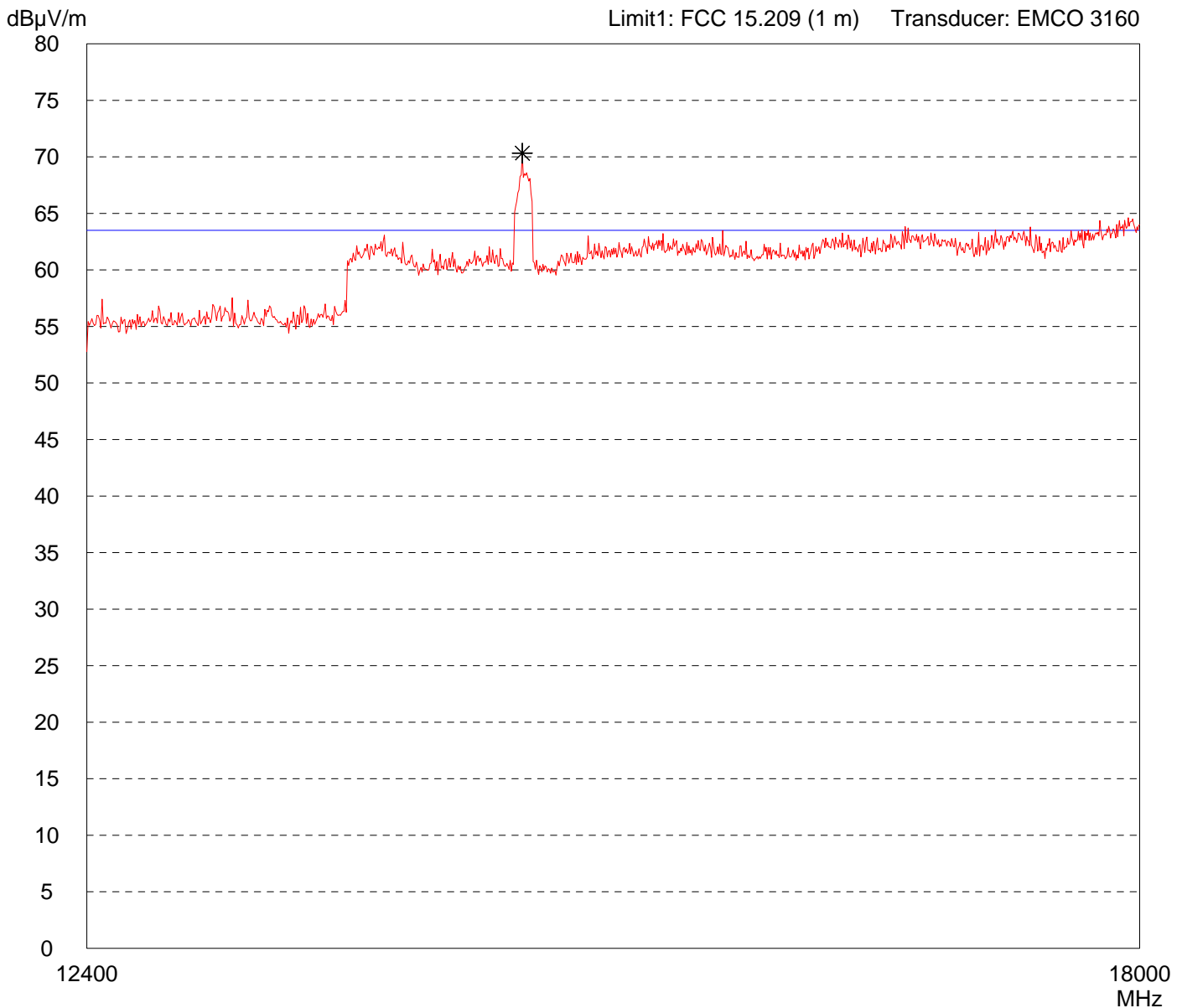
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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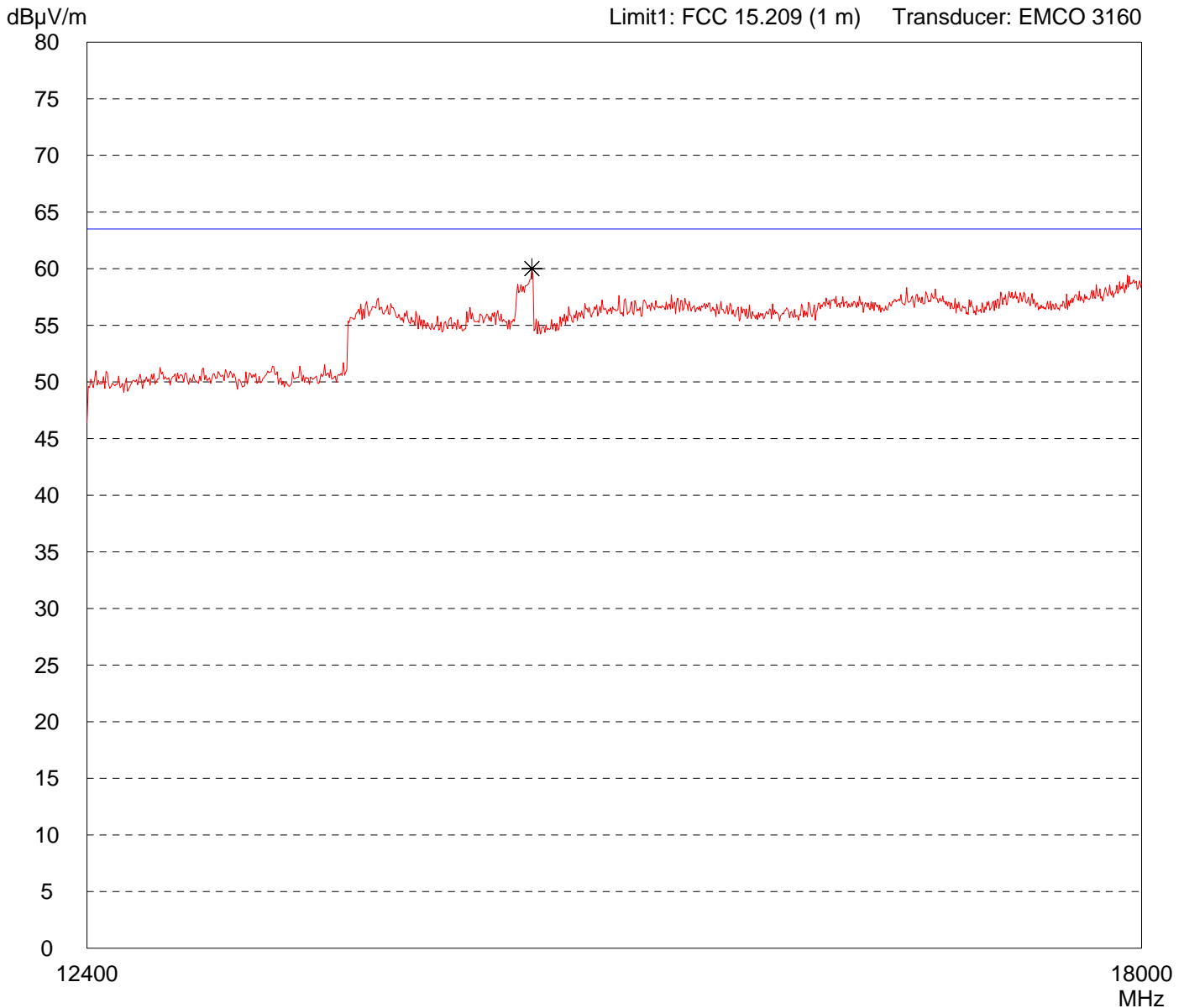
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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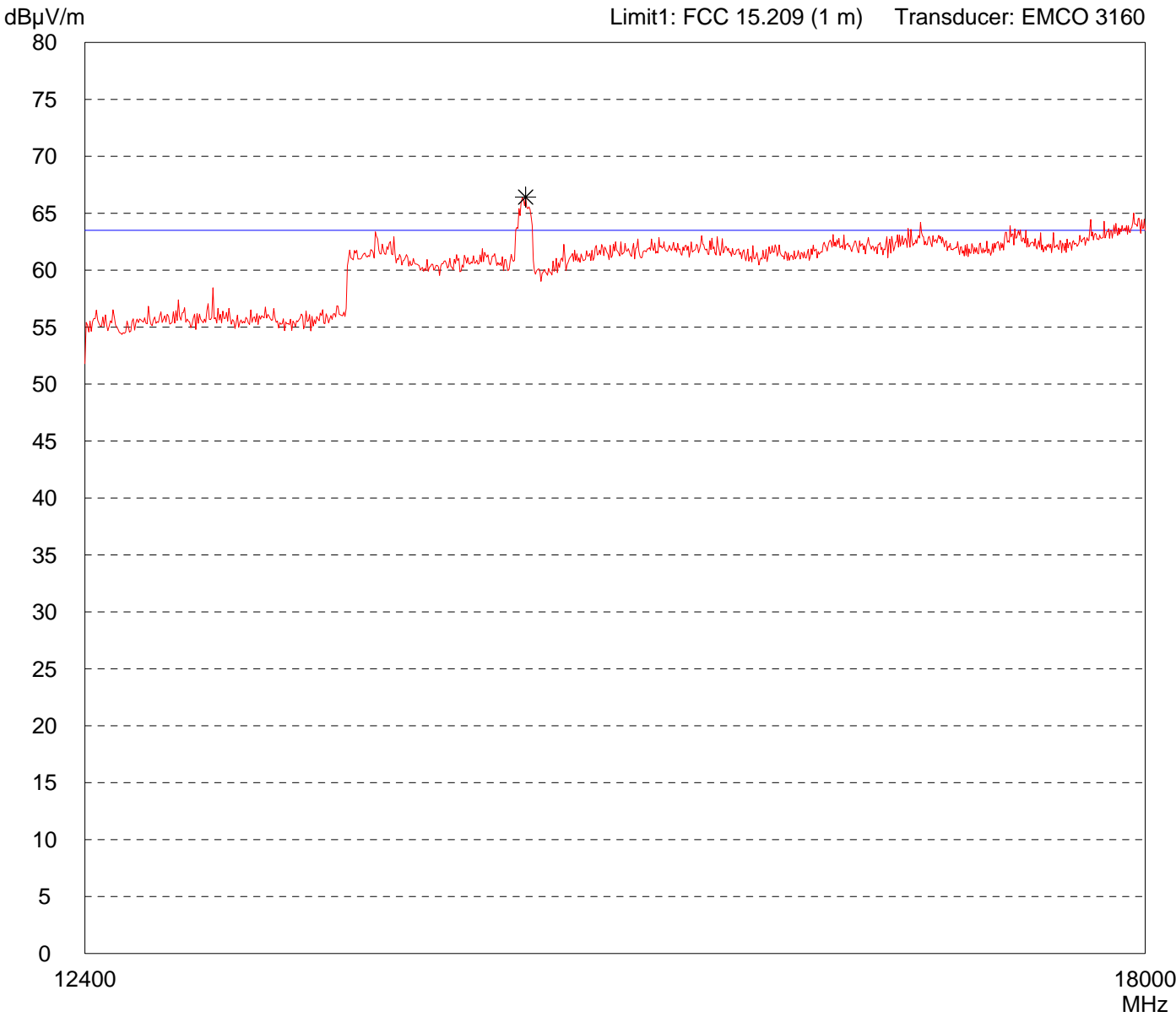
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.412 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



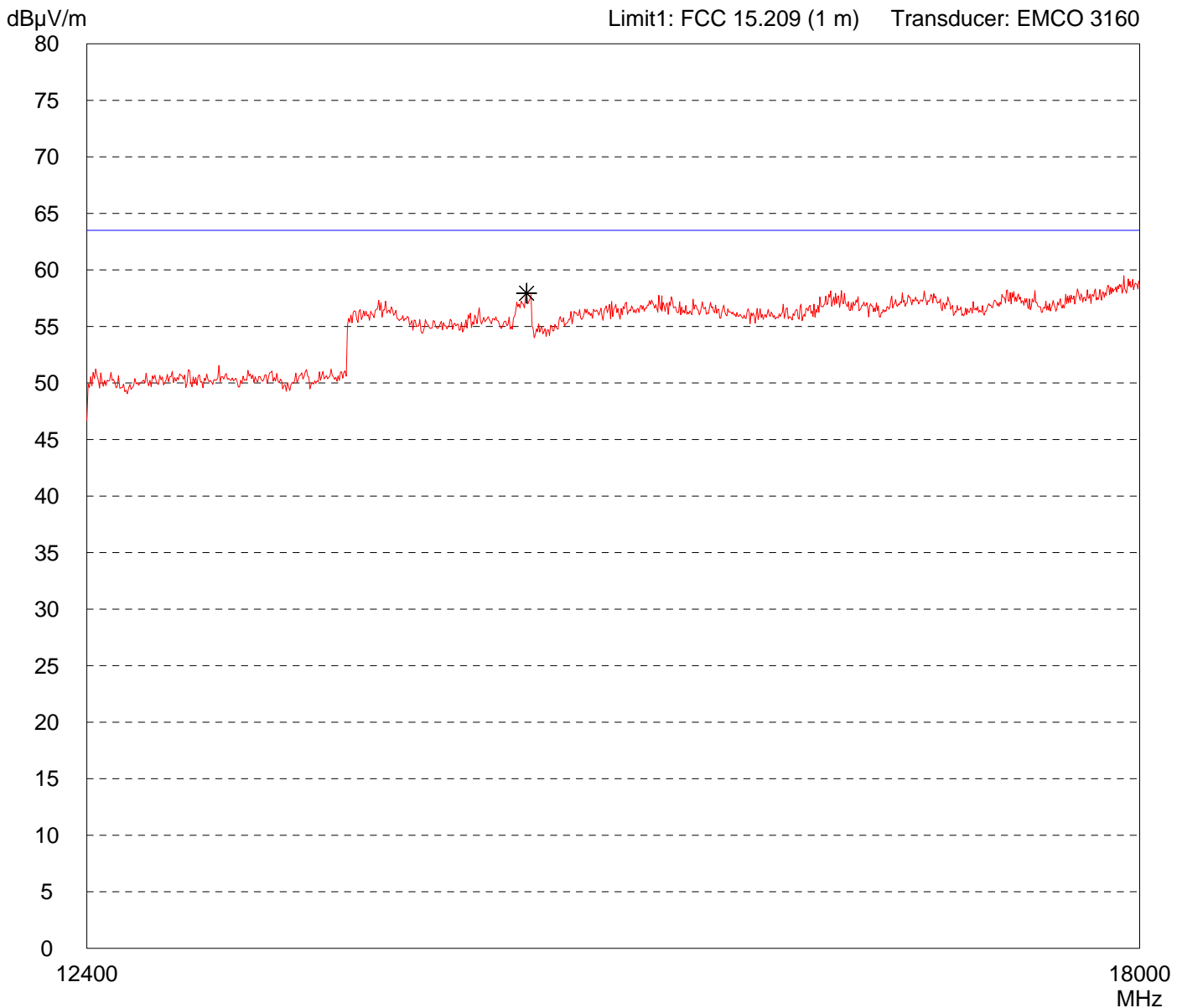
|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |  |
|--|--|
| <p>Model:<br/>i-Q350 RTLS</p> <p>Serial no.:<br/>0.440.000.848</p> <p>Applicant:<br/>Identec Solutions</p> <p>Test site:<br/>Fully anechoic room, cabin no. 2</p> <p>Tested on:<br/>Test distance 1 meter<br/>Vertical Polarization</p> <p>Date of test: 03/15/2010      Operator: M. Steindl</p> <p>Test performed: automatically      File name: default.emi</p> | <p>Comment:</p> <ul style="list-style-type: none"> <li>- Internal battery supply</li> <li>- Transmitting continuously (2.412 GHz)</li> </ul> |
|--|--|

|                           |   |
|---------------------------|---|
| <p>Detector:<br/>Peak</p> | <p>List of values:<br/>Selected by hand</p> |
|---------------------------|---|



|   |  |
|---|--|
| <p>Result:<br/>Limit kept - VBW = 100 kHz</p> | <p>Project file:<br/>69861-00628</p> <p style="text-align: right;">Page    of    Pages</p> |
|---|--|

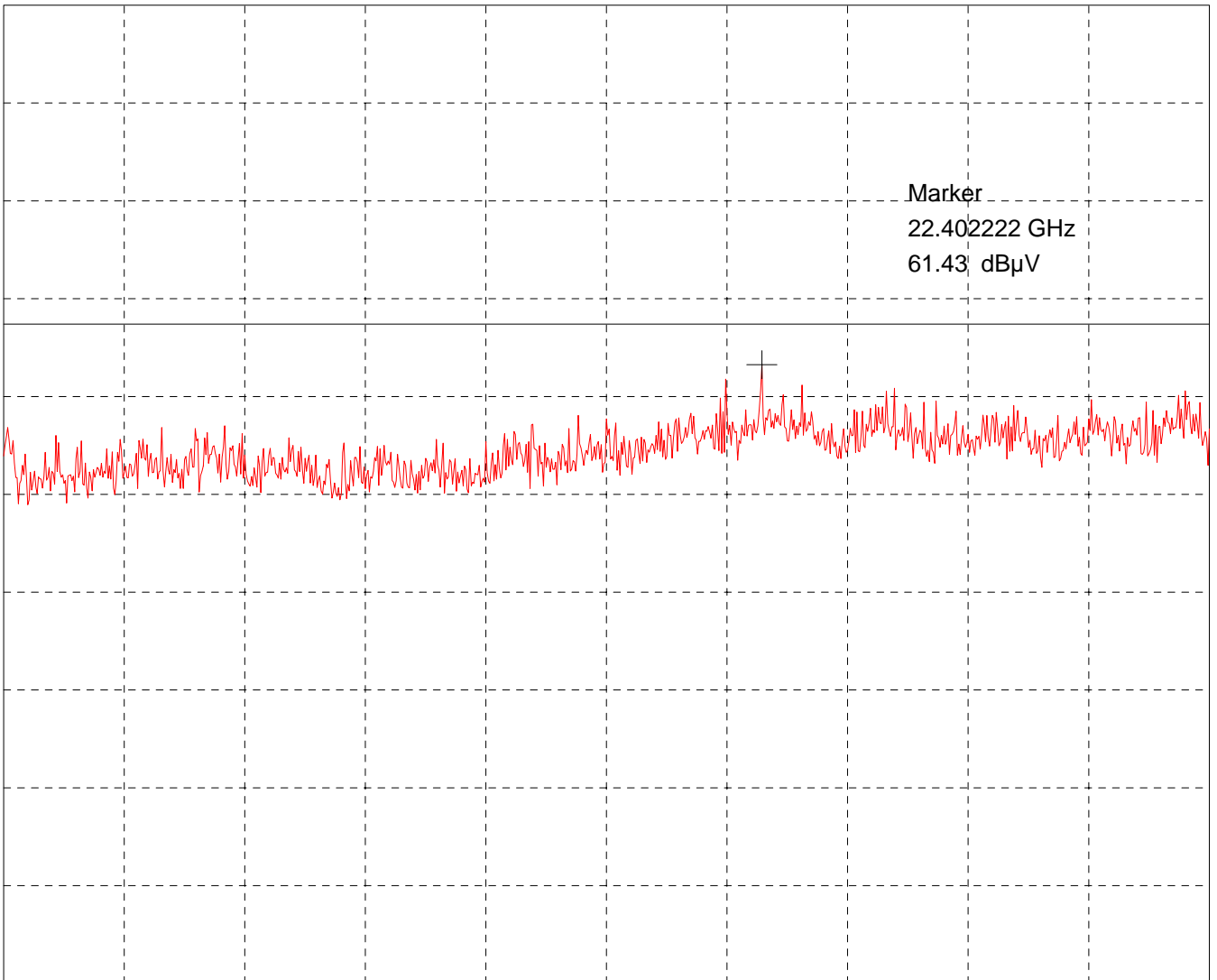
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |  |
|---------------------------------|--|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>-Transmitting continuously (2412 GHz)<br><br>- Polarisation: horizontal<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.848    |  |
| Applicant:<br>Identec Solutions |  |
|                                 |  |
|                                 |  |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2010/03/16      | Page of pages               |

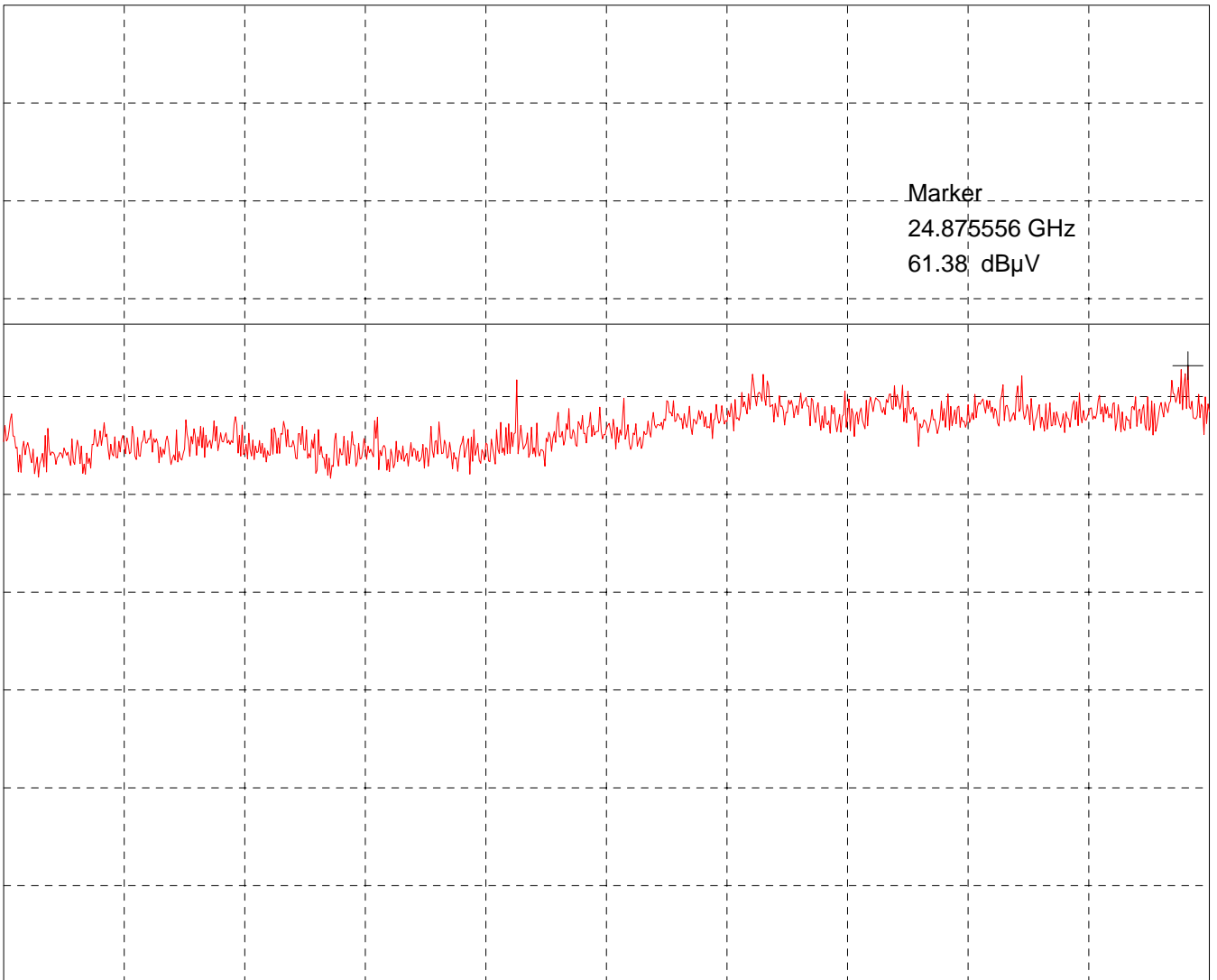
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |  |
|---------------------------------|--|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>-Transmitting continuously (2412 GHz)<br><br>- Polarisation: vertical<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.848    |  |
| Applicant:<br>Identec Solutions |  |
|                                 |  |
|                                 |  |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2010/03/16      | Page of pages               |

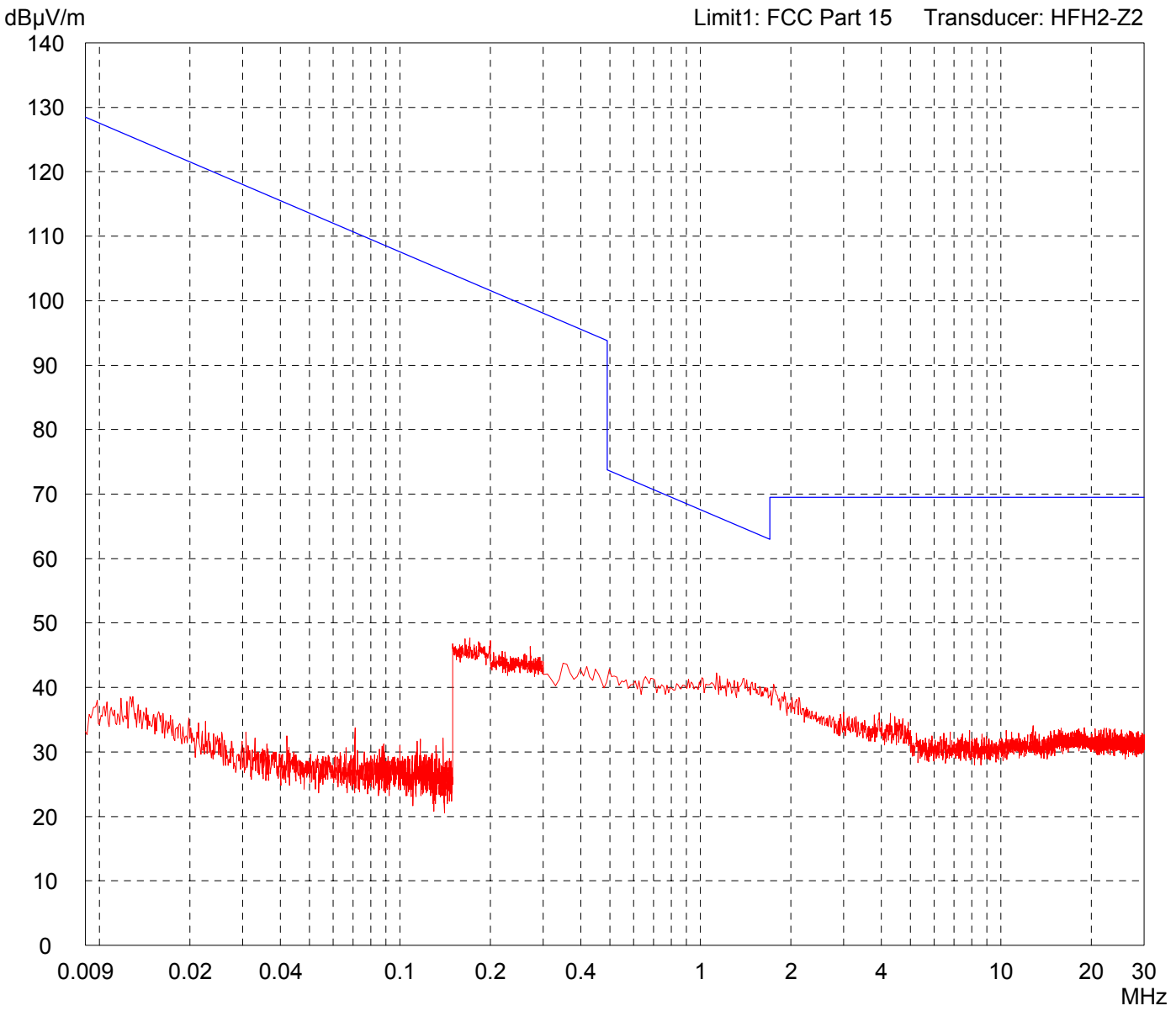
# Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS                          |                           |
| Serial no.:<br>0.440.000.203                   |                           |
| Applicant:<br>Identec Solutions                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2 |                           |
| Tested on:<br>Test distance 3 metres           |                           |
| Date of test:<br>12/01/2009                    | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                     | File name:<br>default.emi |

|   |  |
|---|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |  |
|---|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

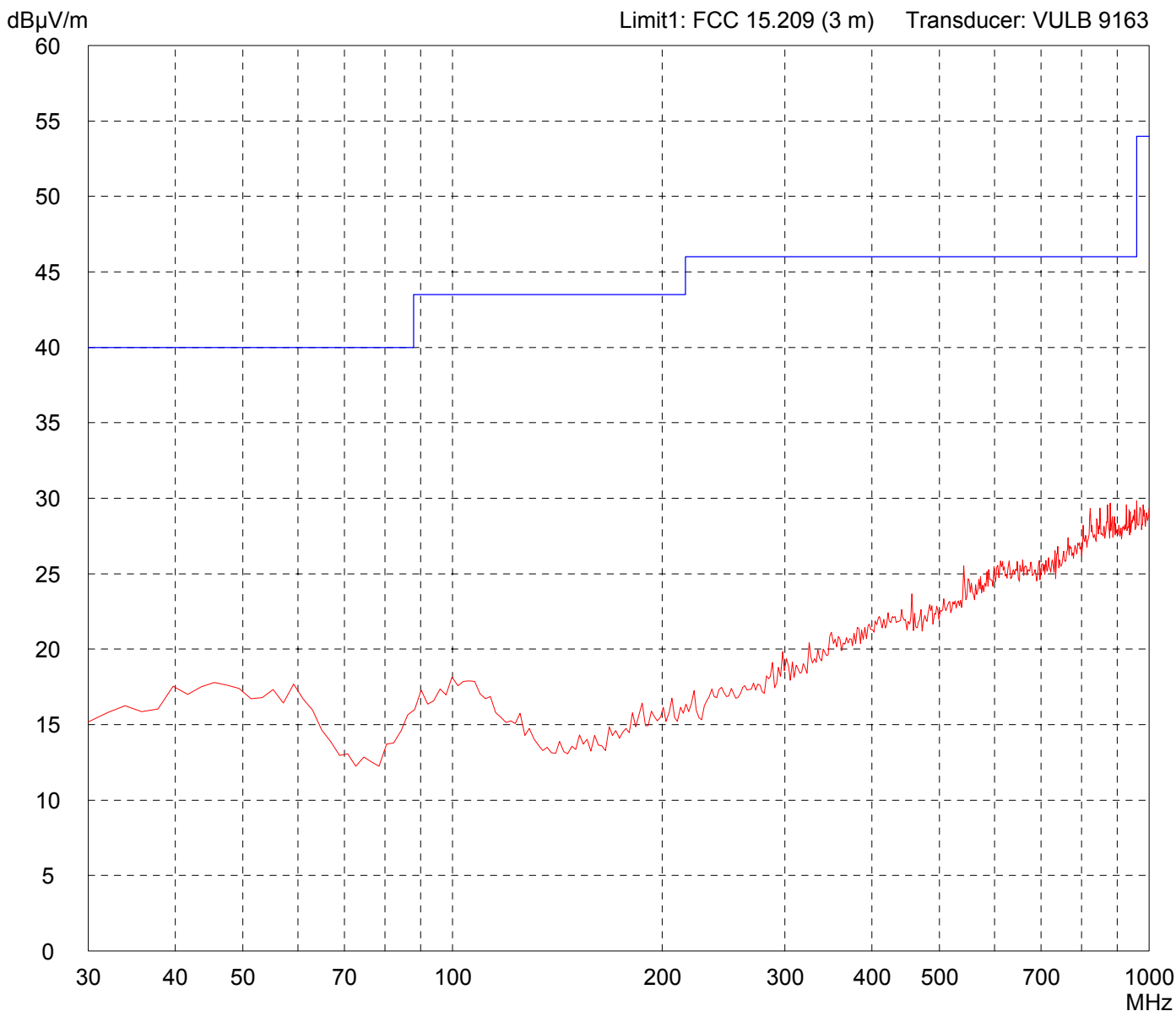
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.203                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>12/01/2009                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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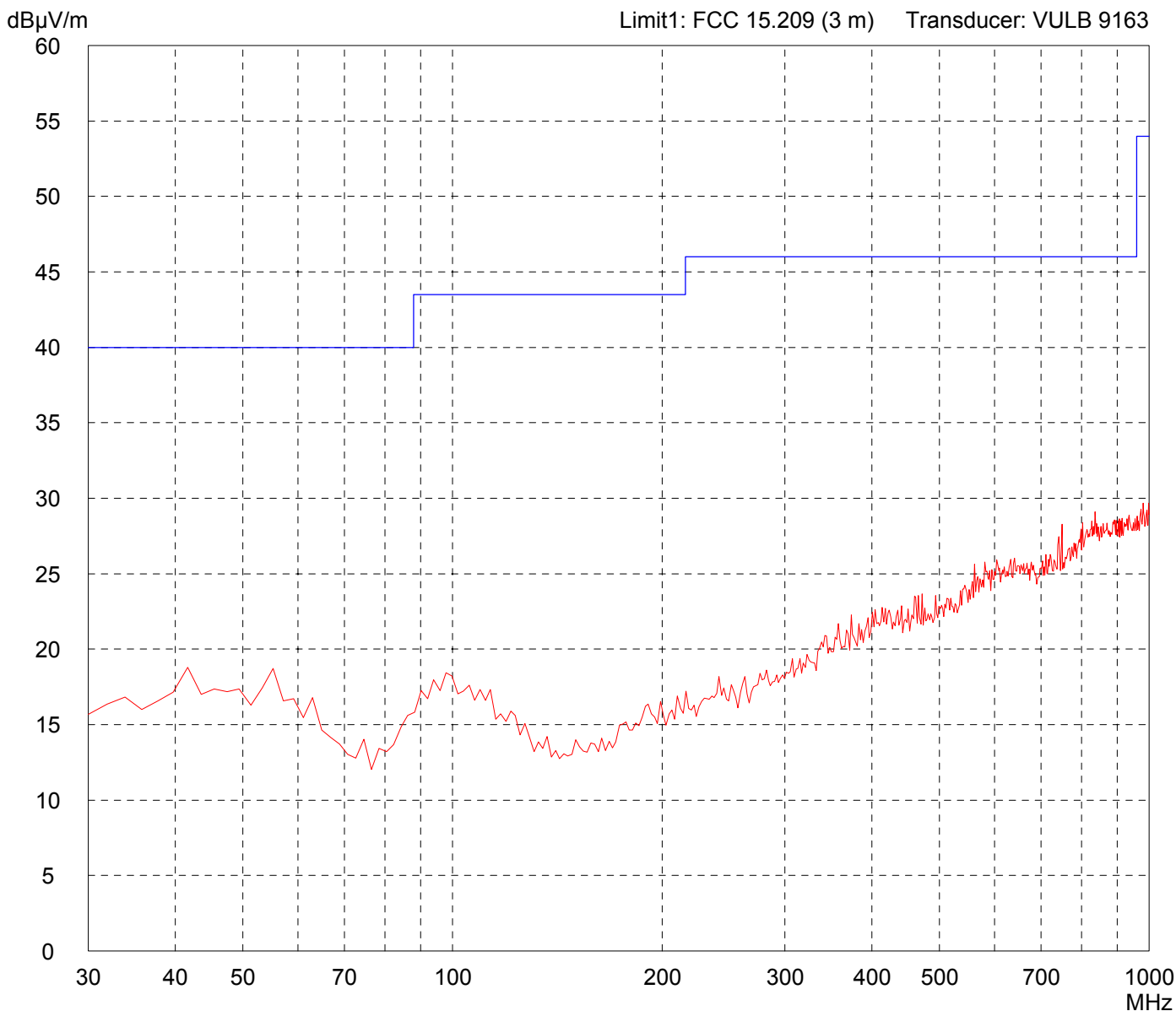
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.203                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>12/01/2009                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|   |  |
|---|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |  |
|---|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:  
i-Q350 RTLS

Serial no.:  
0.440.00.203

Applicant:  
Identec Solutions

Test site:  
Fully anechoic room, cabin no. 2

Tested on:  
Test distance 3 metres  
Horizontal Polarization

Date of test:  
12/03/2009

Operator:  
M. Steindl

Test performed:  
automatically

File name:  
default.emi

Comment:

- Internal battery supply
- Transmitting continuously (2.44 GHz)

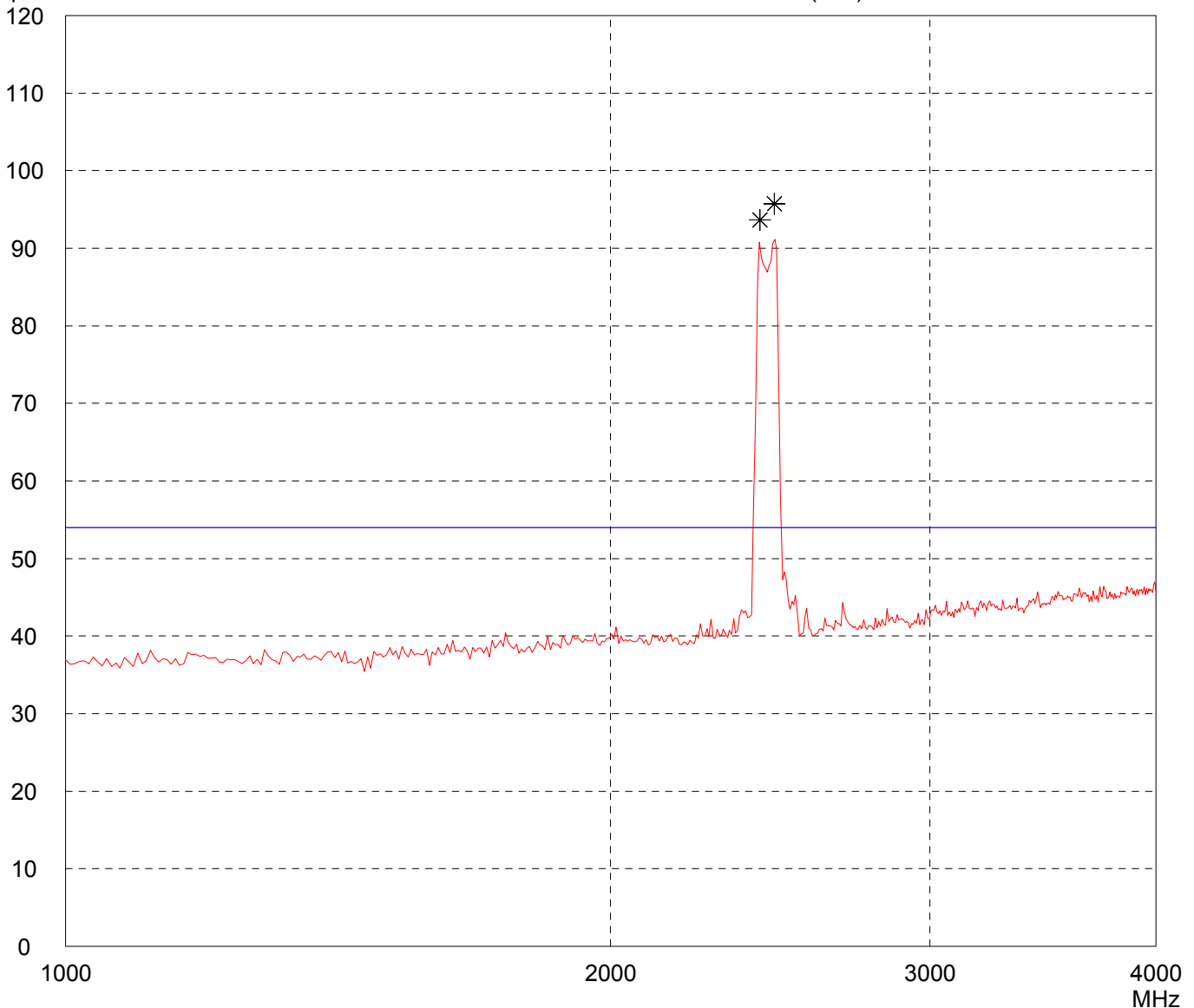
Detector:  
Peak

List of values:  
Selected by hand

dB $\mu$ V/m

Limit1: FCC 15.209 (3 m)

Transducer: EMCO 3115



Result:  
Prescan

Project file:  
69861-00628

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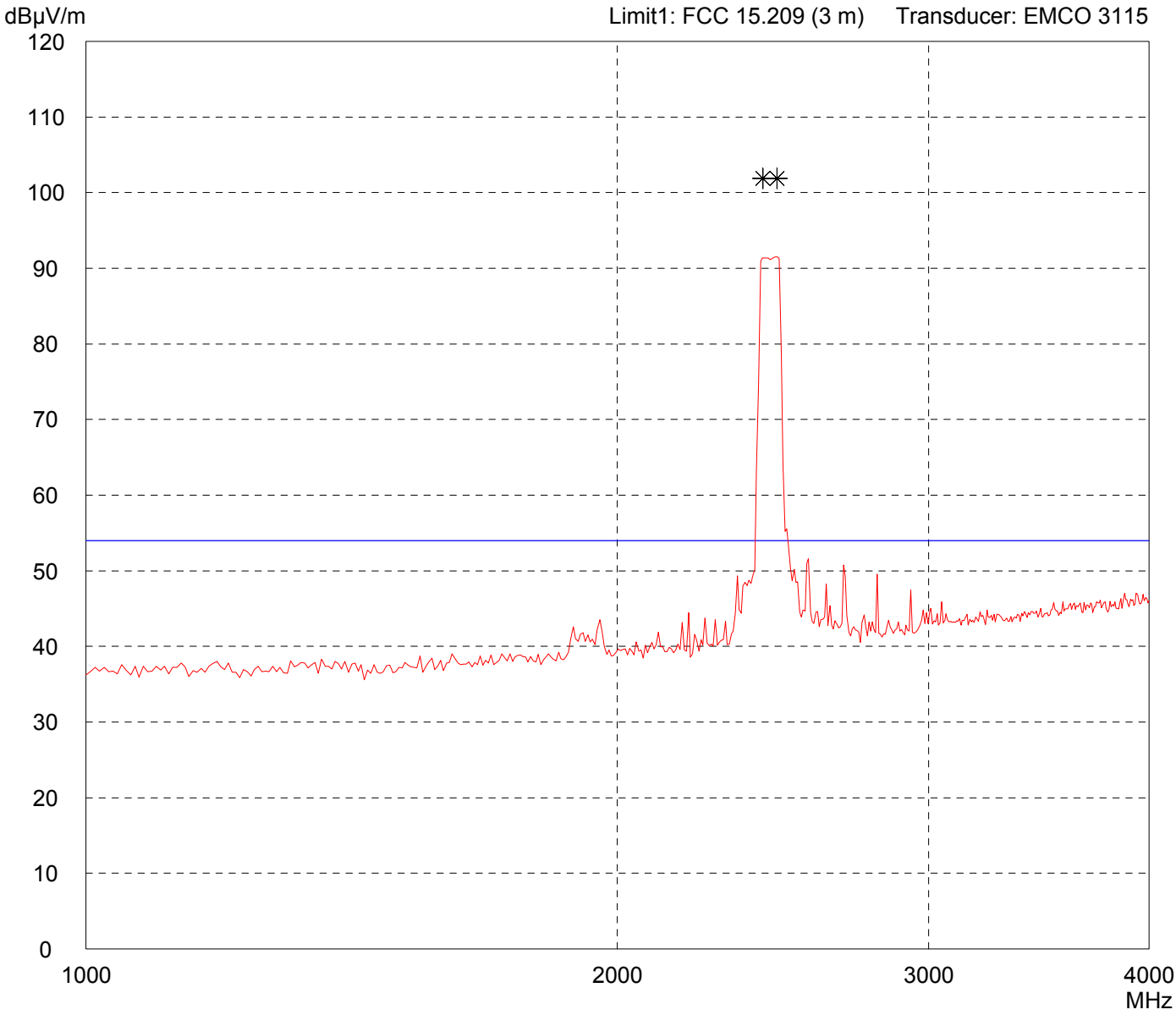
# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.00.203                                   |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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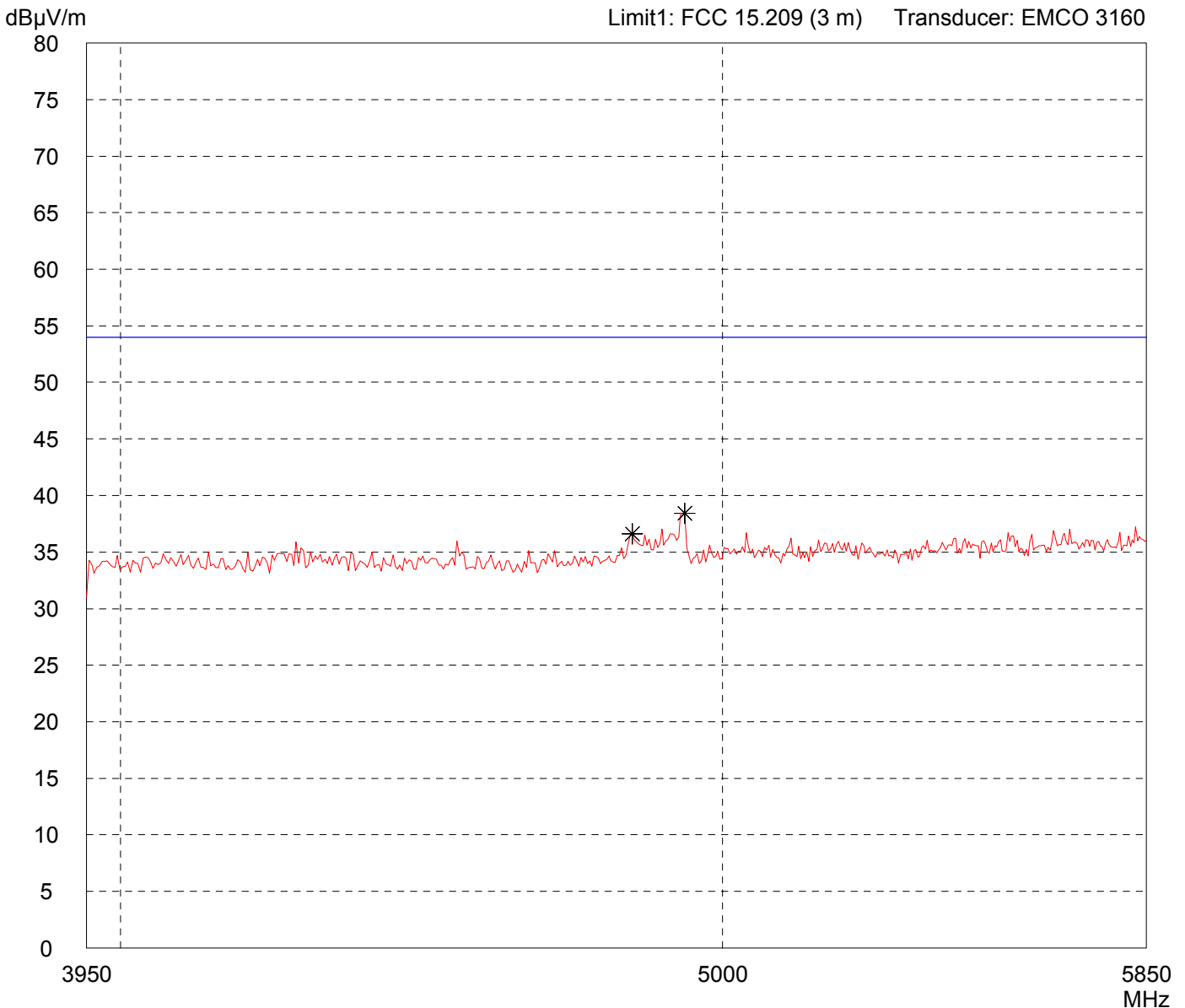
# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.00.203                                     |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>12/03/2009                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

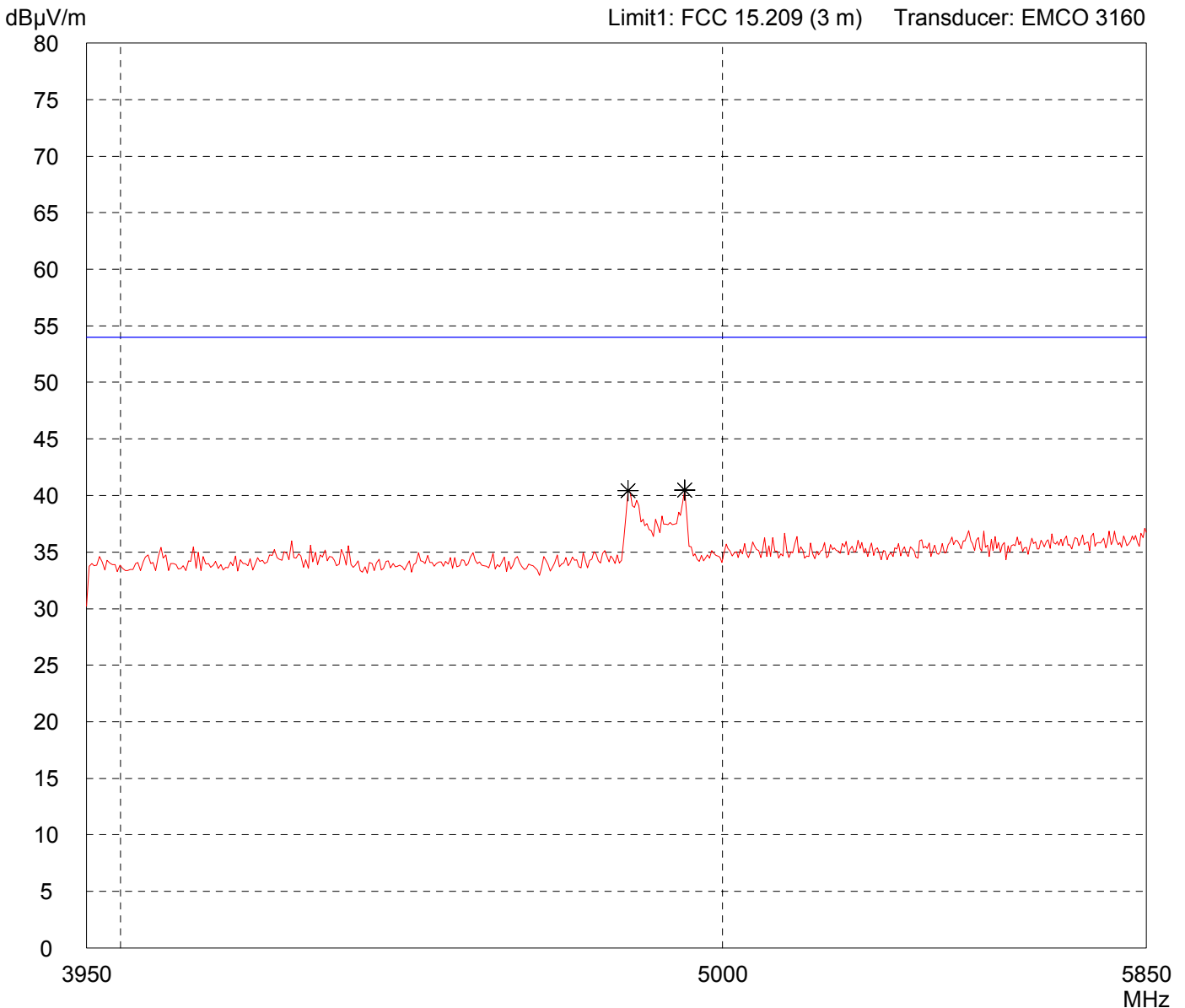
|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.00.203                                   |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

Comment:

- Internal battery supply
- Transmitting continuously (2.44 GHz)

Detector:  
Peak

List of values:  
Selected by hand



Result:  
Prescan

Project file:  
69861-00628

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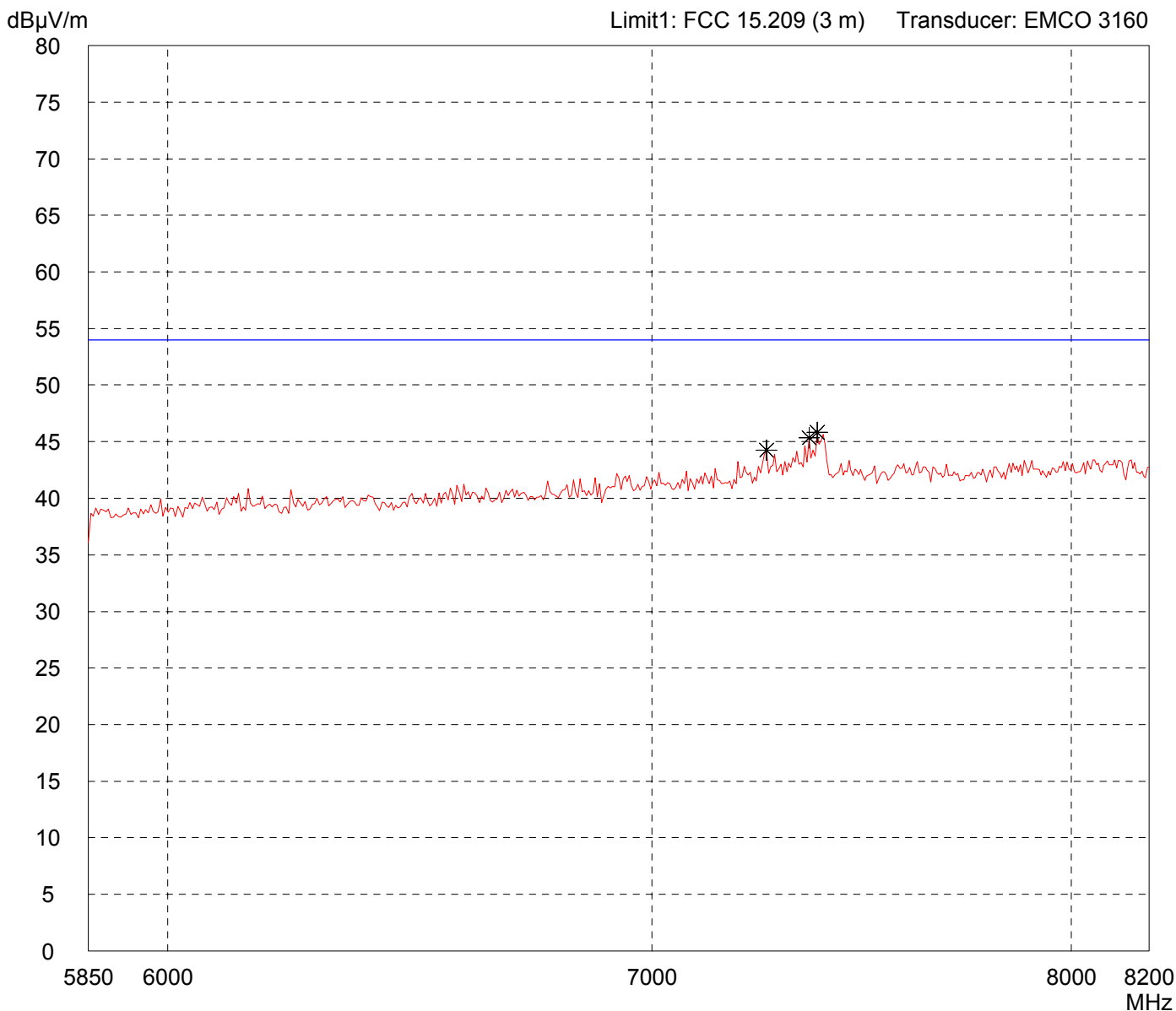
# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.00.203                                     |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>12/03/2009                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|   |  |
|---|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |  |
|---|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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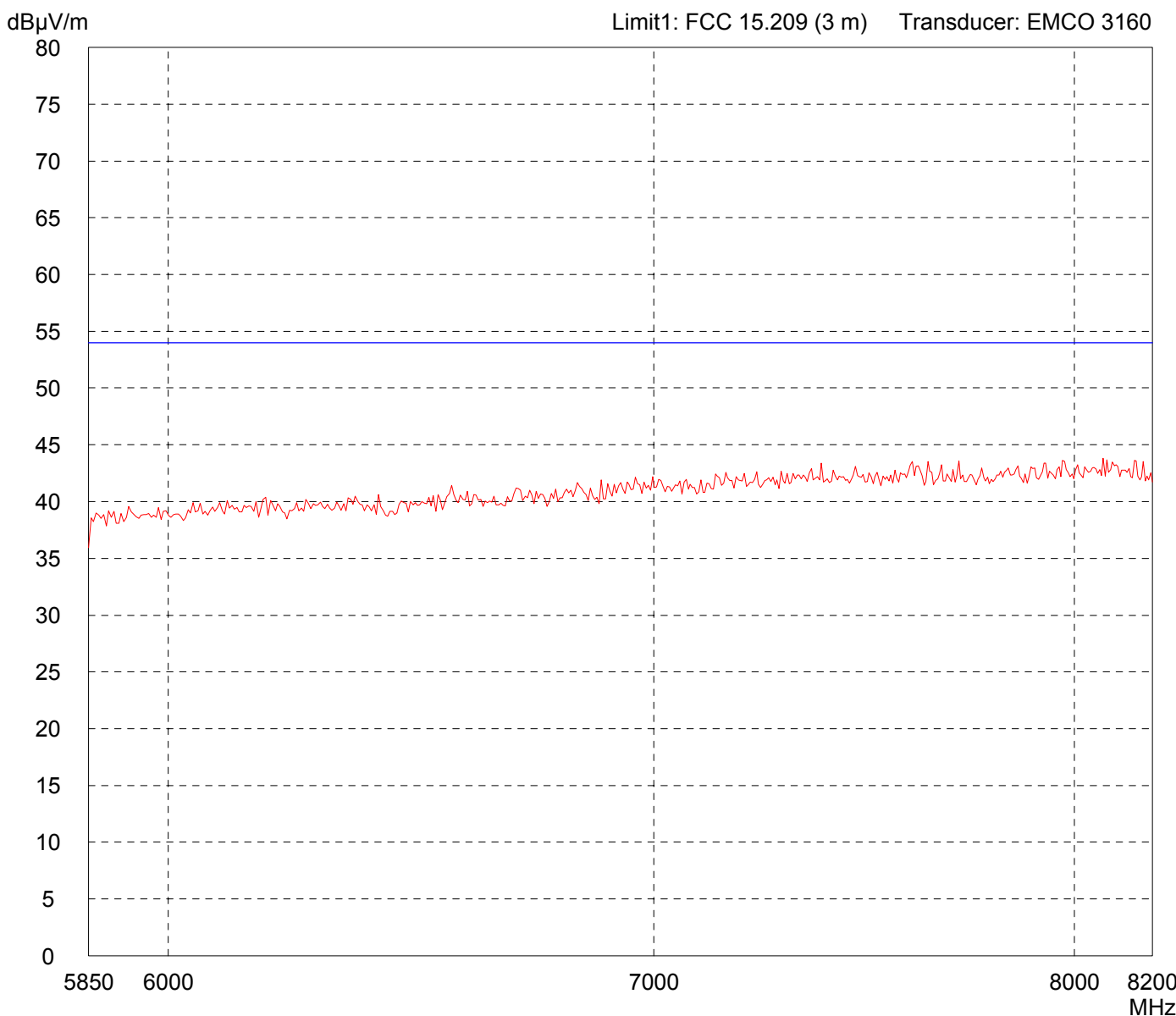
# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.00.203                                   |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|   |  |
|---|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |  |
|---|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



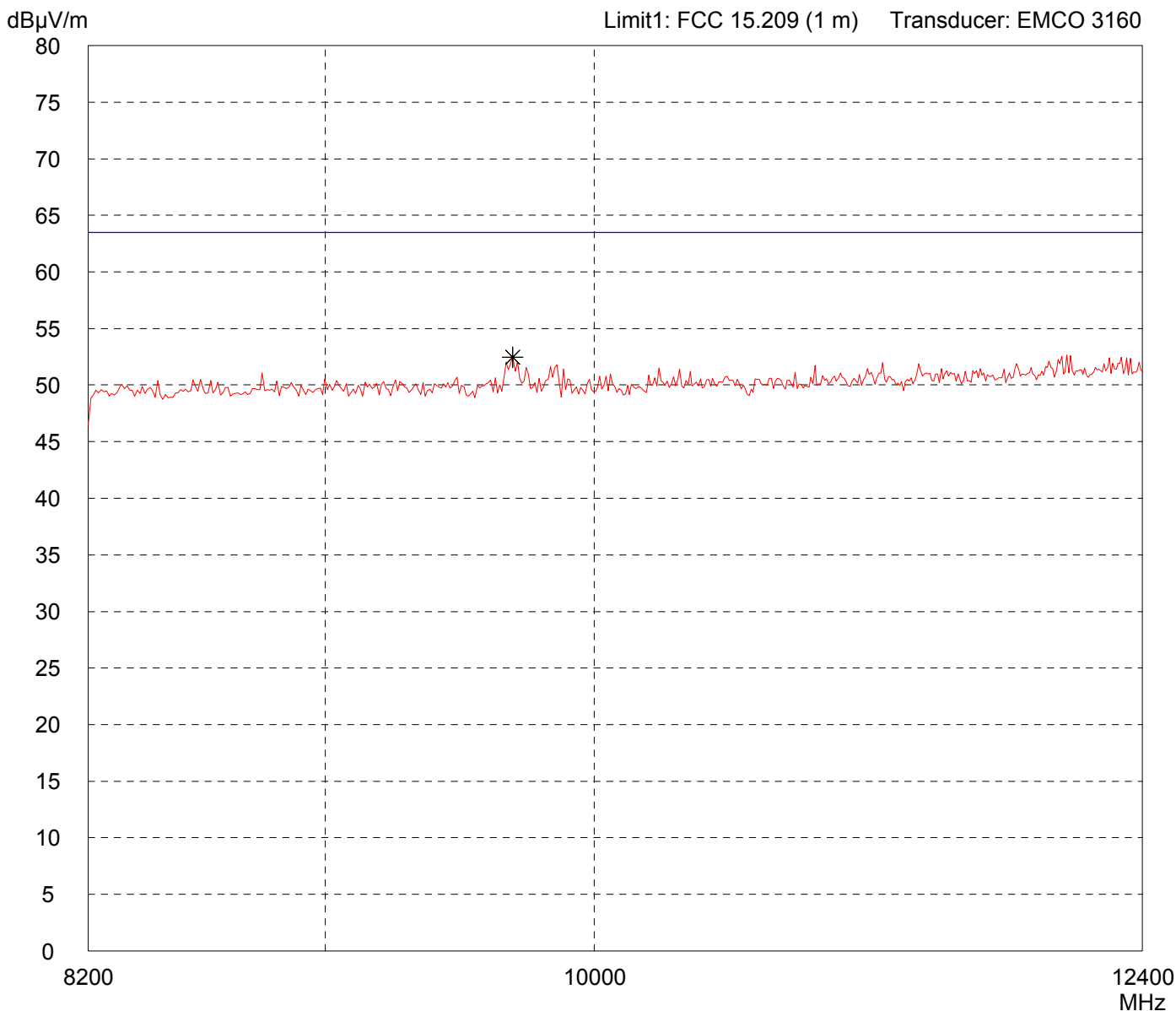
|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

# Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |   |
|---|---|
| <p>Model:<br/>i-Q350 RTLS</p> <p>Serial no.:<br/>0.440.00.203</p> <p>Applicant:<br/>Identec Solutions</p> <p>Test site:<br/>Fully anechoic room, cabin no. 2</p> <p>Tested on:<br/>Test distance 1 meter<br/>Horizontal Polarization</p> <p>Date of test: 12/03/2009      Operator: M. Steindl</p> <p>Test performed: automatically      File name: default.emi</p> | <p>Comment:</p> <ul style="list-style-type: none"> <li>- Internal battery supply</li> <li>- Transmitting continuously (2.44 GHz)</li> </ul> |
|---|---|

|                           |   |
|---------------------------|---|
| <p>Detector:<br/>Peak</p> | <p>List of values:<br/>Selected by hand</p> |
|---------------------------|---|



|                            |  |
|----------------------------|--|
| <p>Result:<br/>Prescan</p> | <p>Project file:<br/>69861-00628</p> <p style="text-align: right;">Page    of    Pages</p> |
|----------------------------|--|

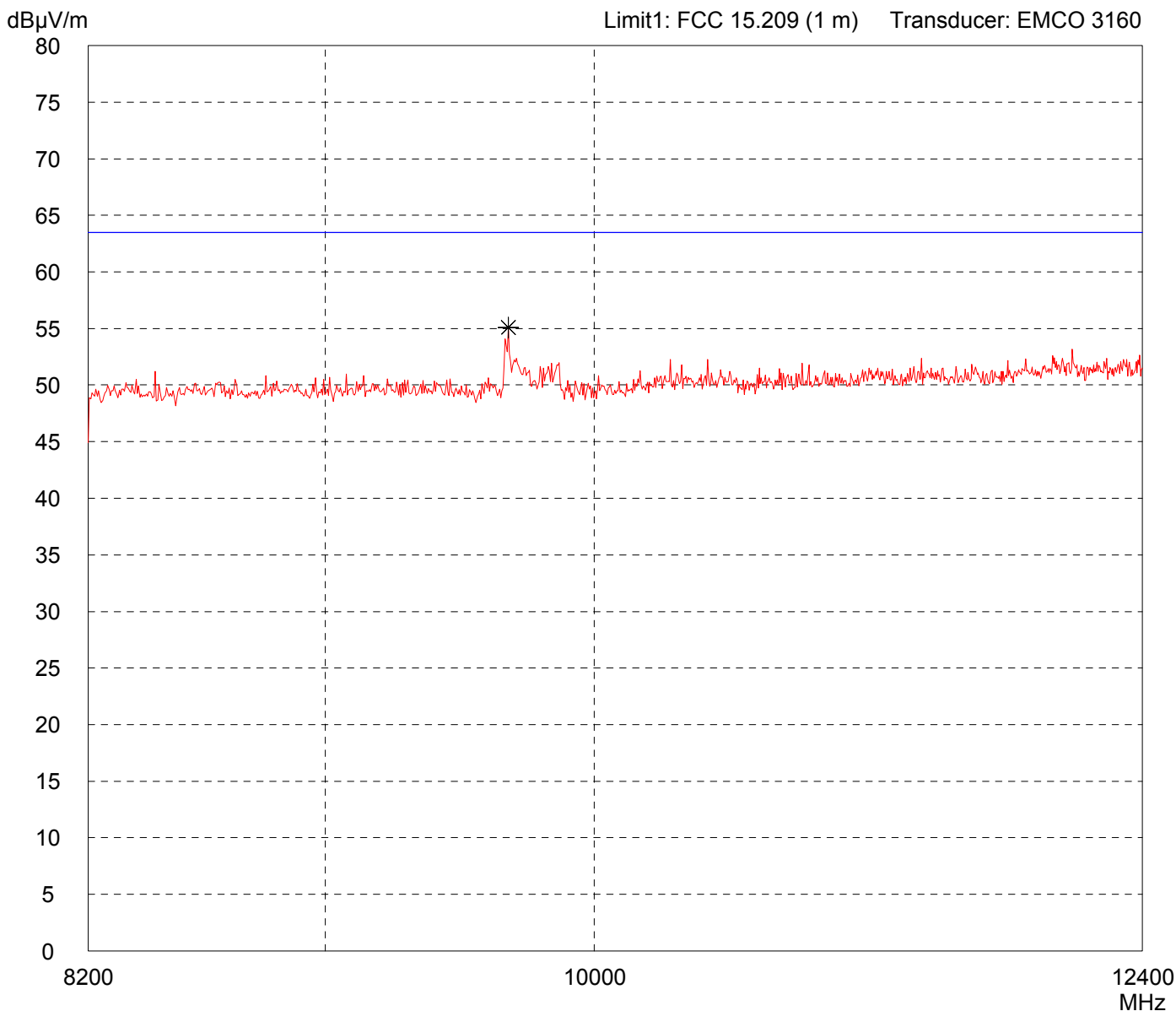
# Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.00.203                                  |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|   |  |
|---|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |  |
|---|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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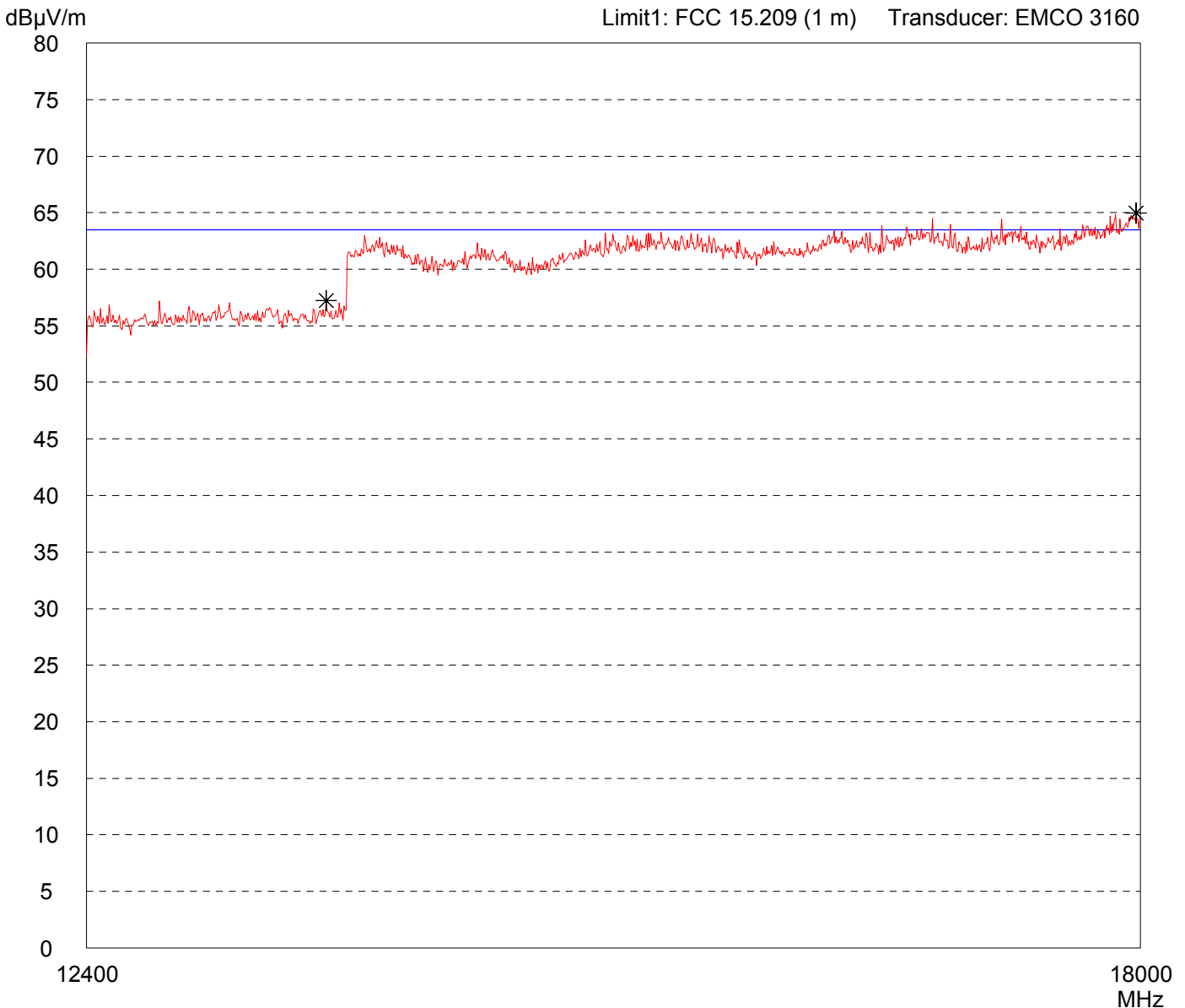
# Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.00.203                                    |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>12/03/2009                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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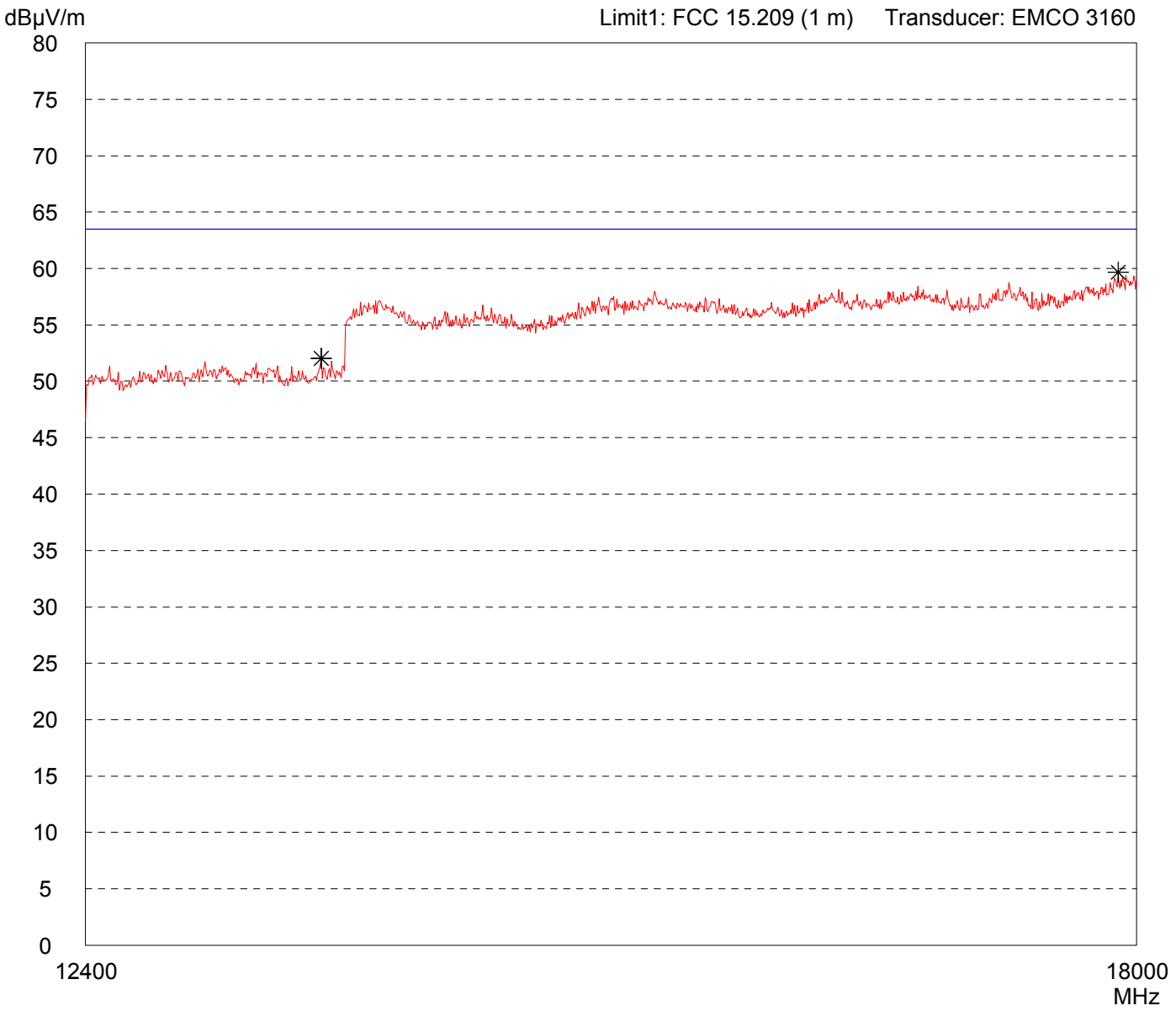
# Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.00.203                                    |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>12/03/2009                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                    |
|------------------------------------|
| Result:<br>Prescan (VBW = 100 kHz) |
|------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

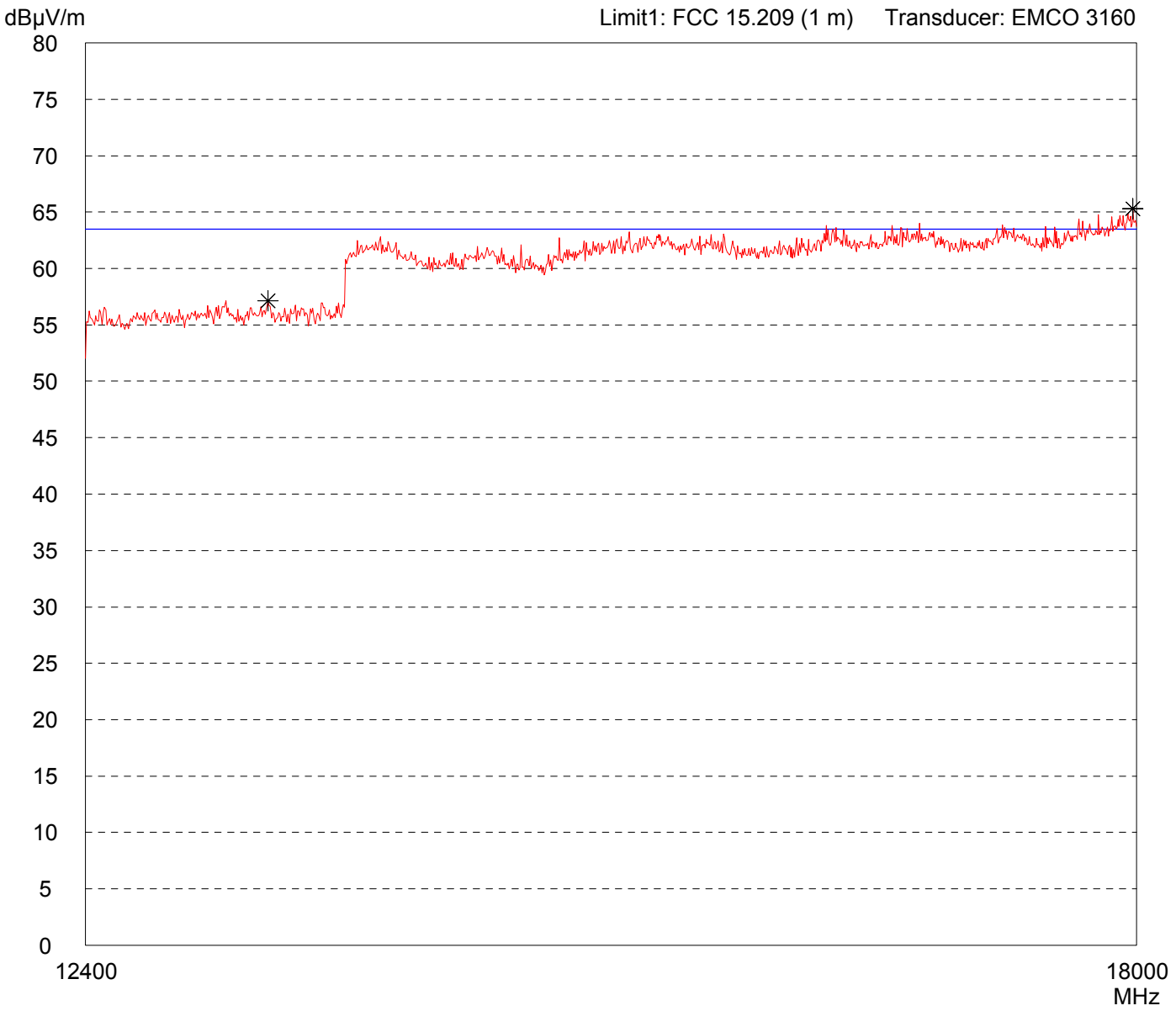
# Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.00.203                                  |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

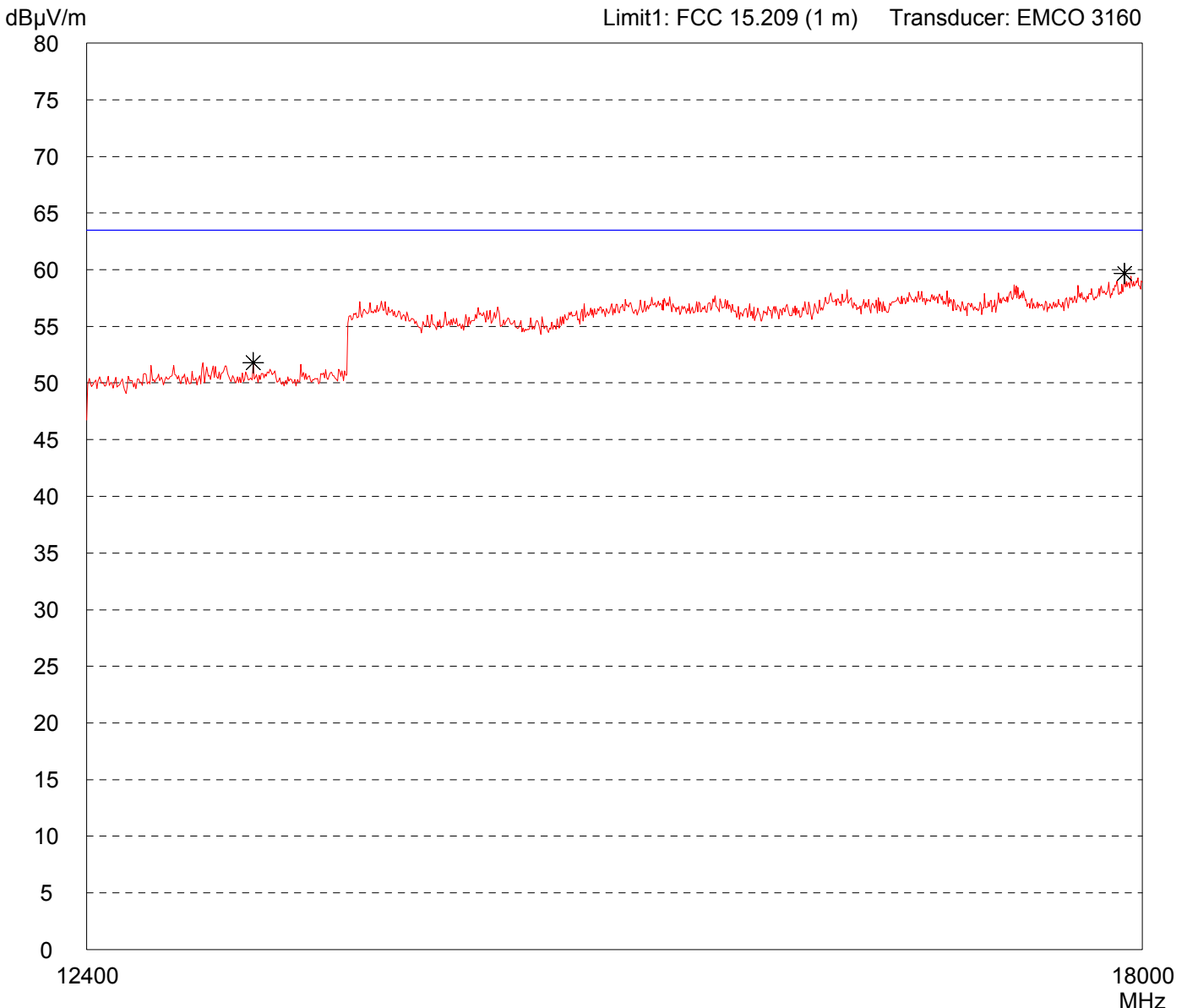
# Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.00.203                                  |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>12/03/2009                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|   |
|---|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz) |
|---|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                    |
|------------------------------------|
| Result:<br>Prescan (VBW = 100 kHz) |
|------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

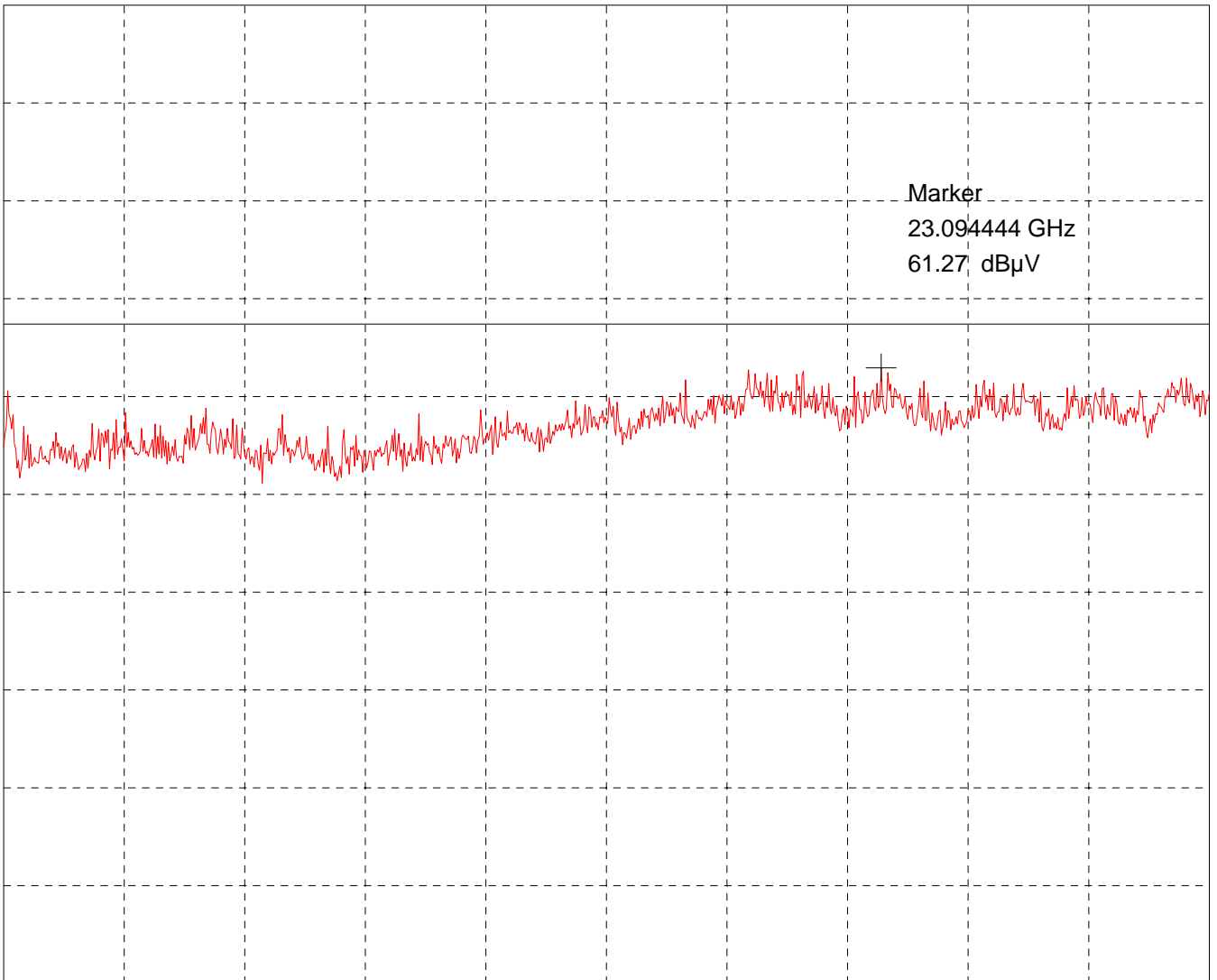
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |   |
|---------------------------------|---|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz)<br><br>- Polarisation: horizontal<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.203    |   |
| Applicant:<br>Identec Solutions |   |
|                                 |   |
|                                 |   |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2009/12/16      | Page of pages               |

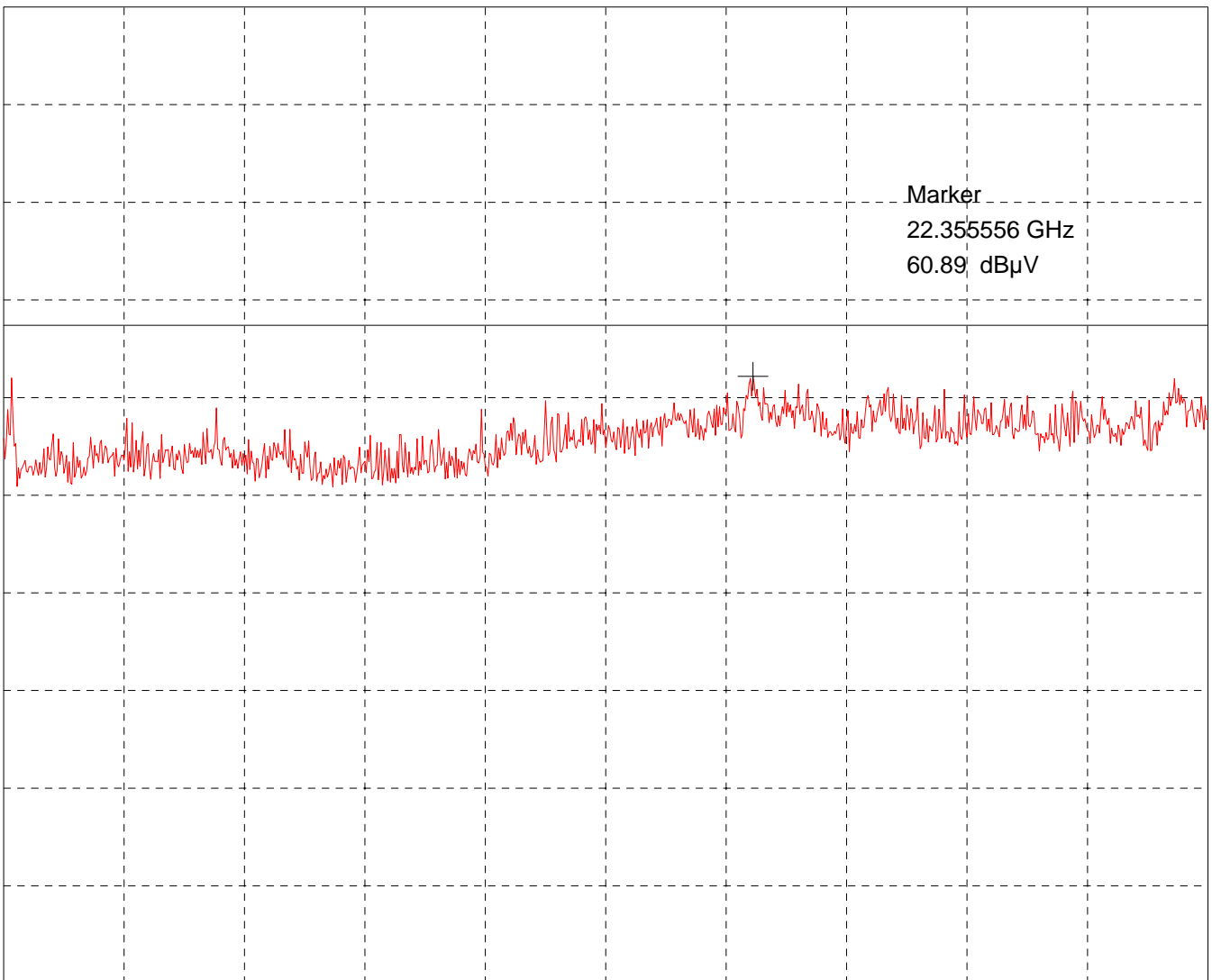
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |   |
|---------------------------------|---|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>- Transmitting continuously (2.44 GHz)<br><br>- Polarisation: vertical<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.203    |   |
| Applicant:<br>Identec Solutions |   |
|                                 |   |
|                                 |   |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2009/12/16      | Page of pages               |

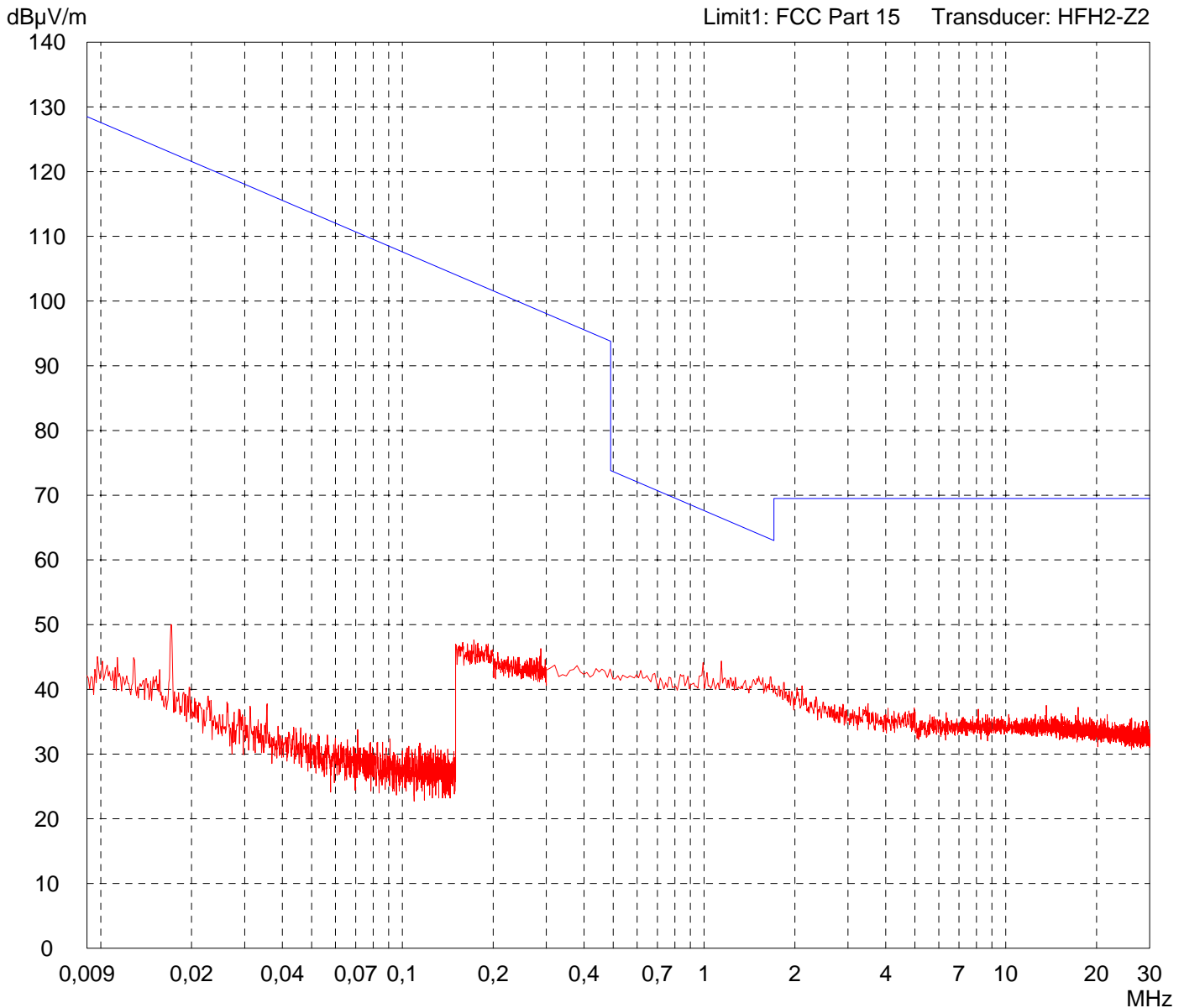
# Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS                          |                           |
| Serial no.:<br>0.440.000.848                   |                           |
| Applicant:<br>Identec Solutions                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2 |                           |
| Tested on:<br>Test distance 3 metres           |                           |
| Date of test:<br>03/16/2010                    | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                     | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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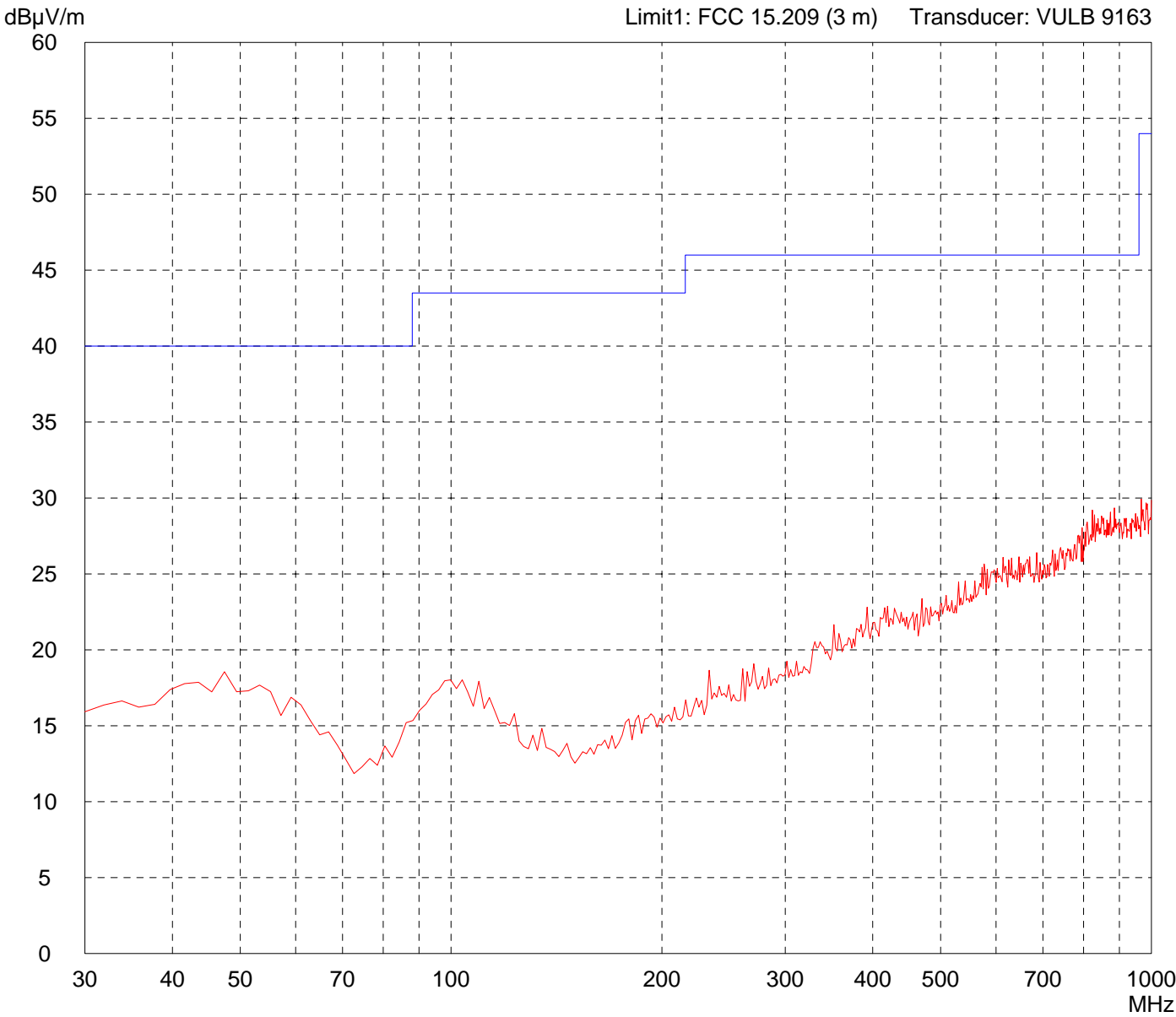
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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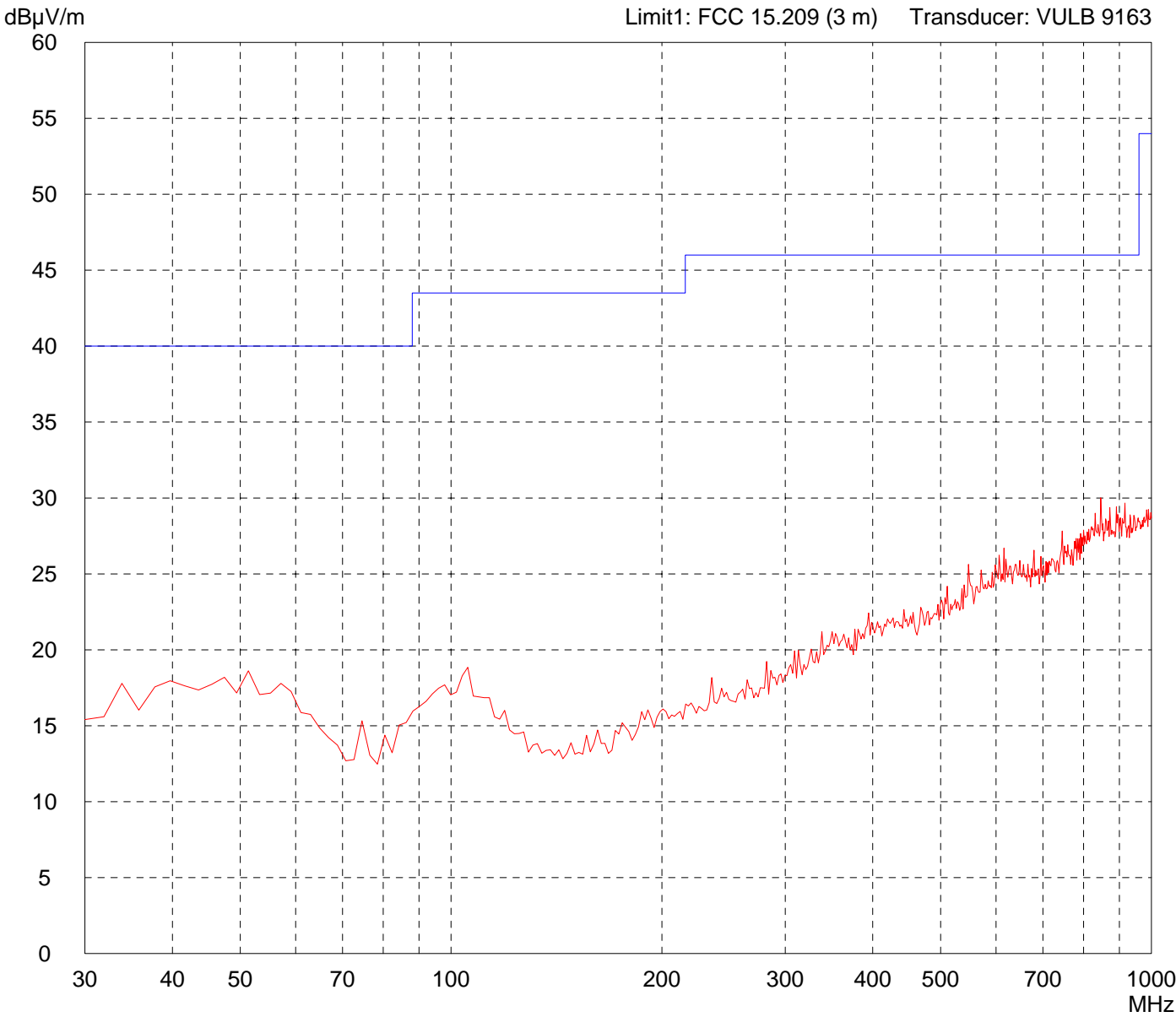
# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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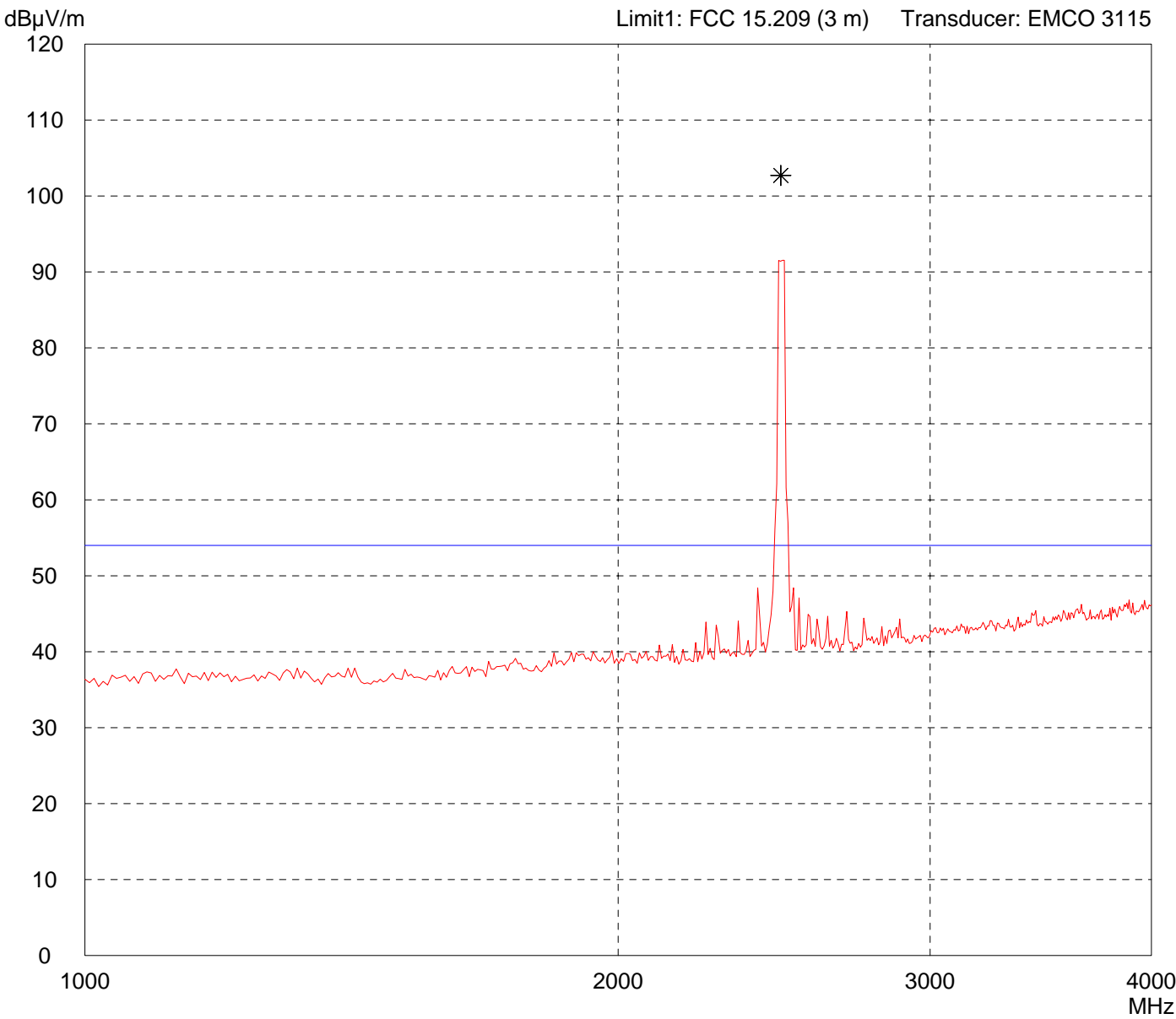
# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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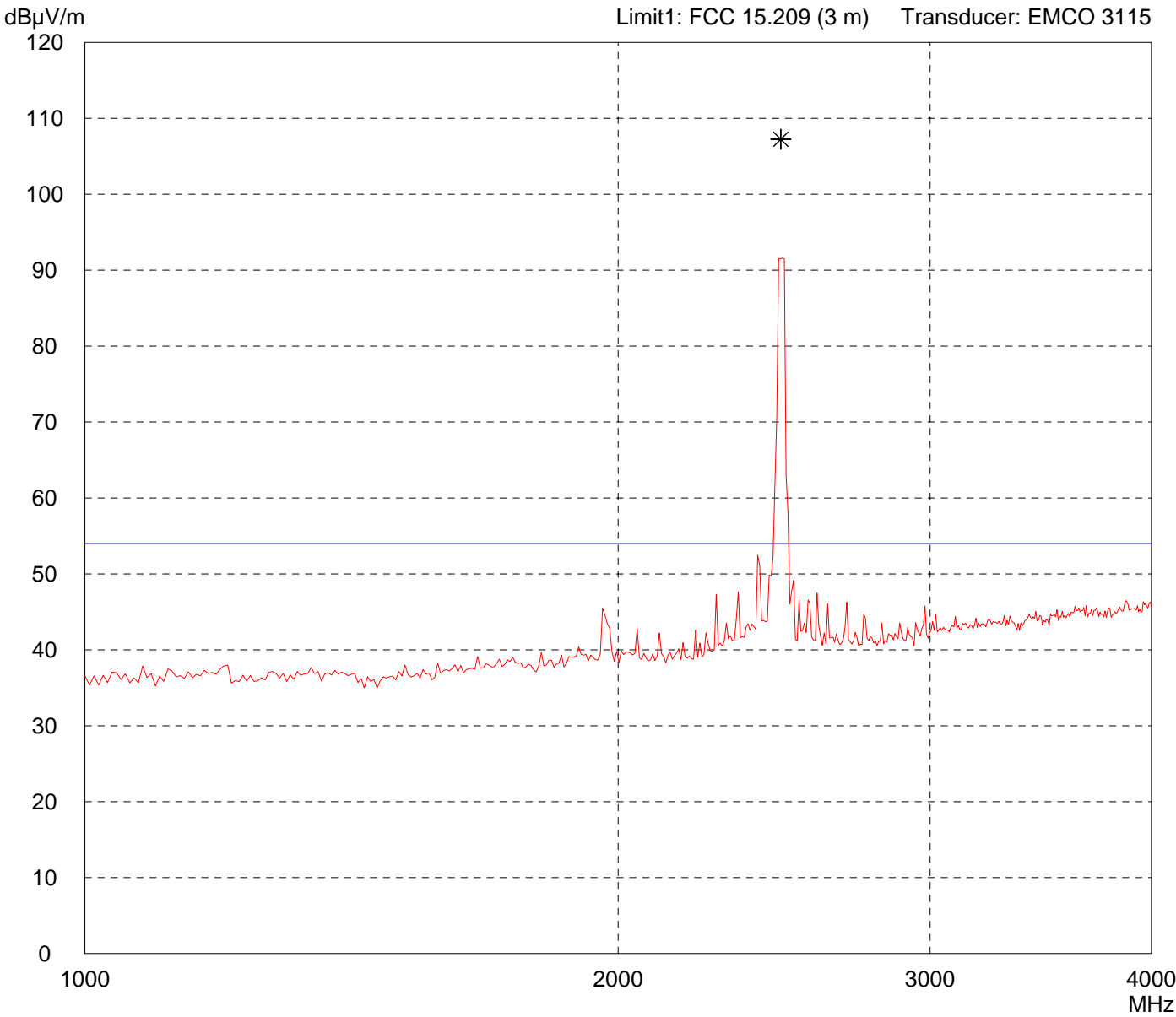
# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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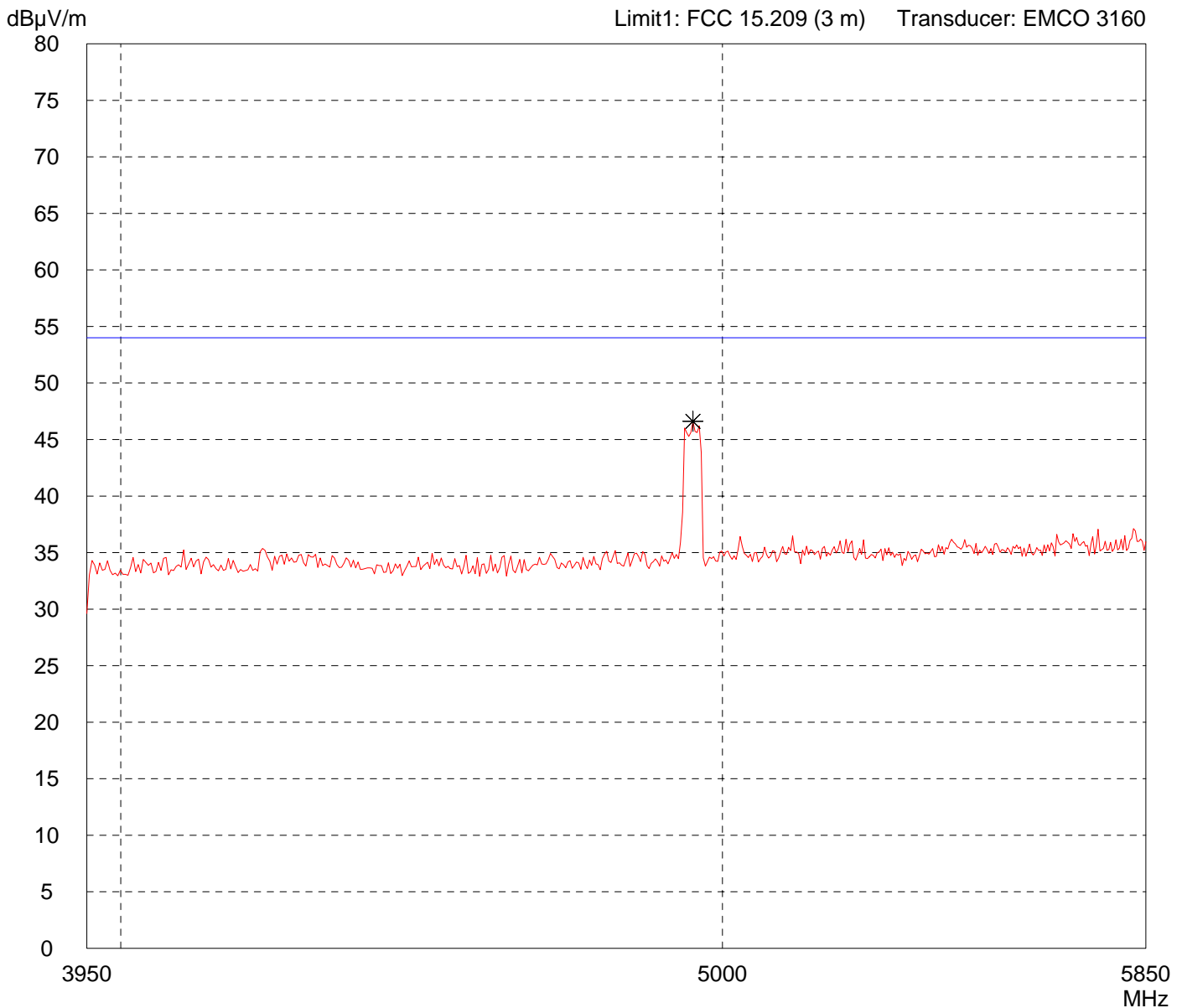
# Radiated Emission Test 3,95 GHz - 5,85 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |  |
|--|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |  |
|--|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                 |              |
|---------------------------------|--------------|
| List of values:<br>10 dB Margin | 50 Subranges |
|---------------------------------|--------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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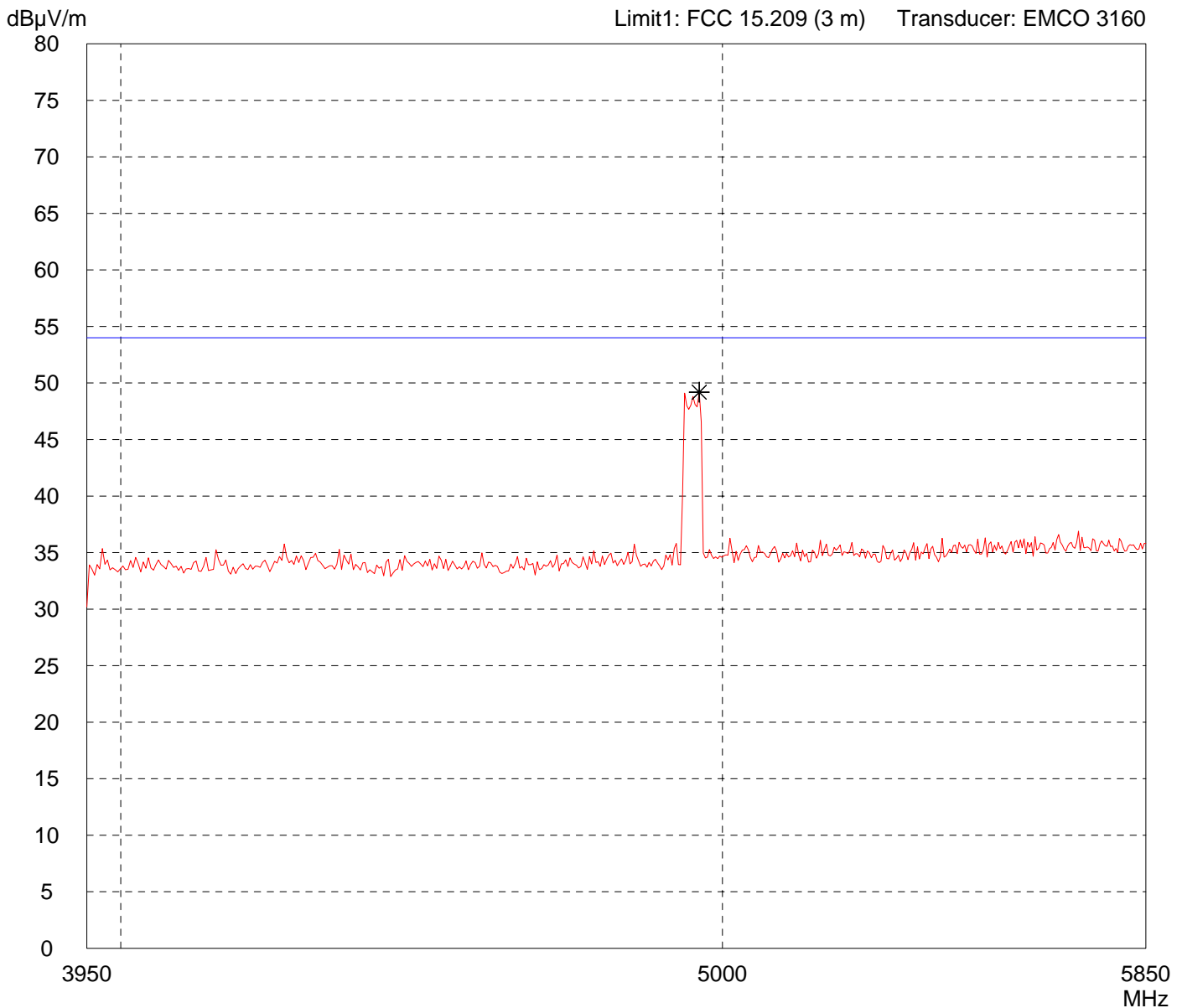
# Radiated Emission Test 3,95 GHz - 5,85 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

Comment:  
- Internal battery supply  
- Transmitting continuously (2.472 GHz)

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

List of values:  
Selected by hand



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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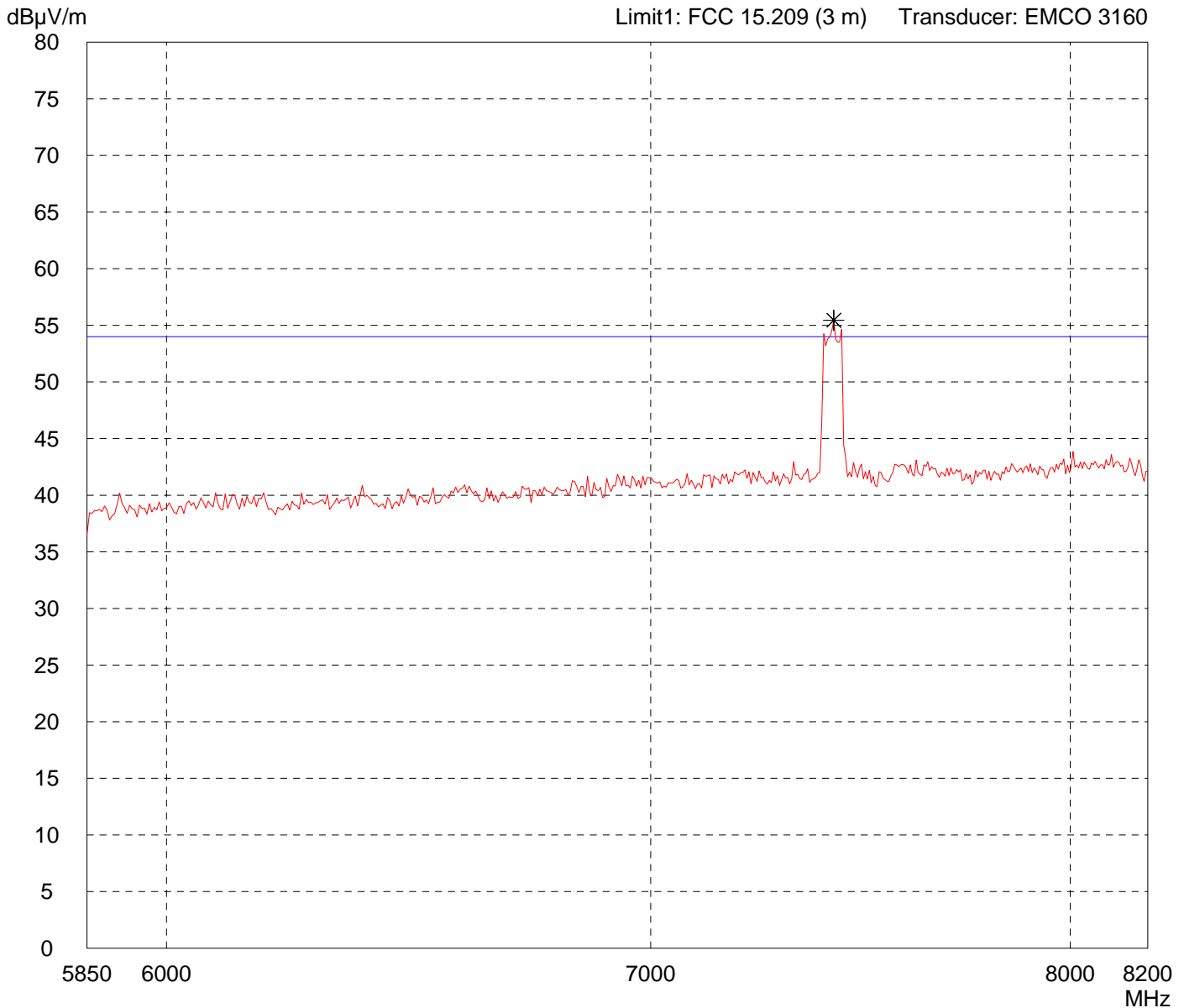
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                                | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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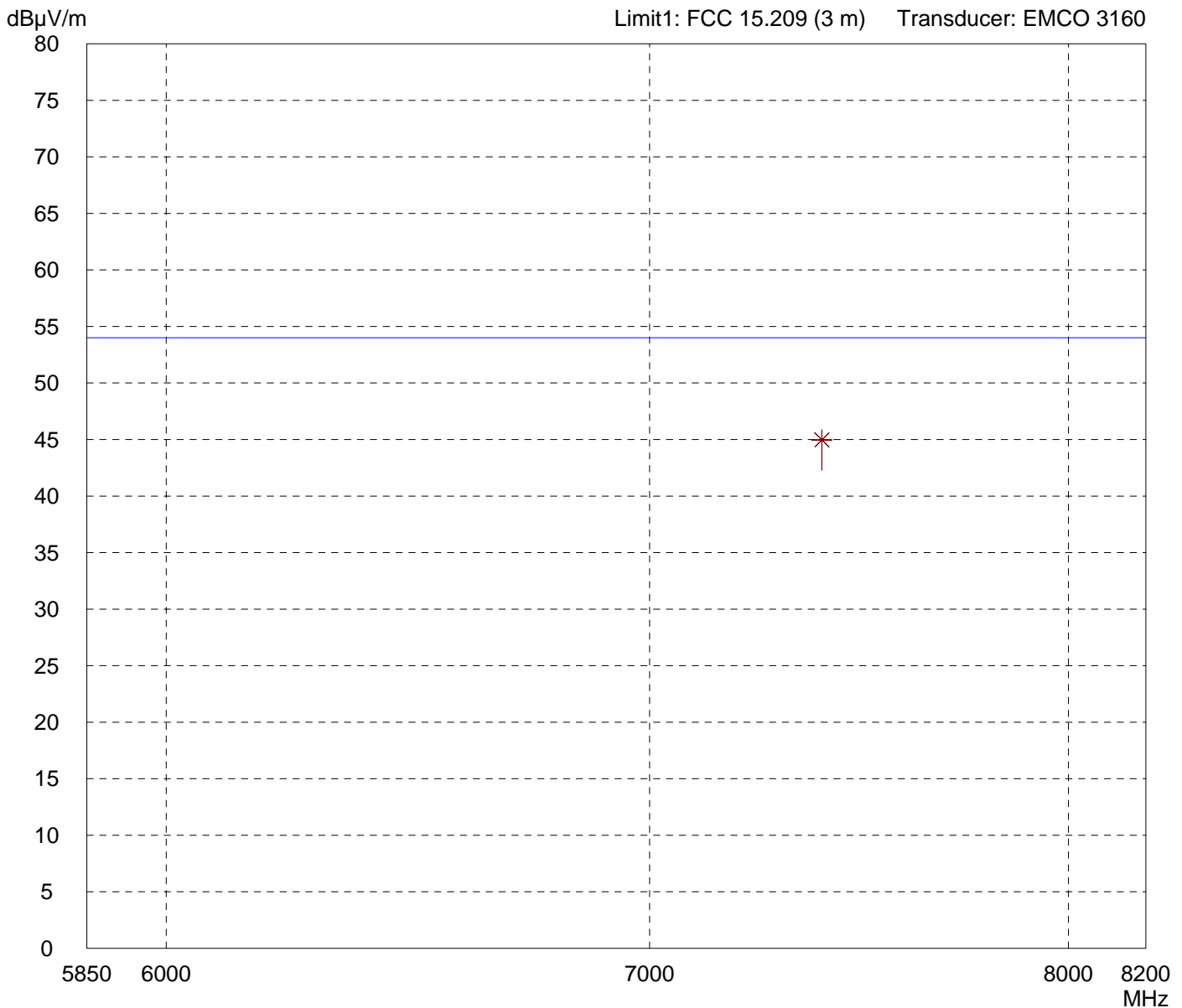
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                    |                           |
| Applicant:<br>Identec Solutions                                 |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                  |                           |
| Tested on:<br>Test distance 3 metres<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                     | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                      | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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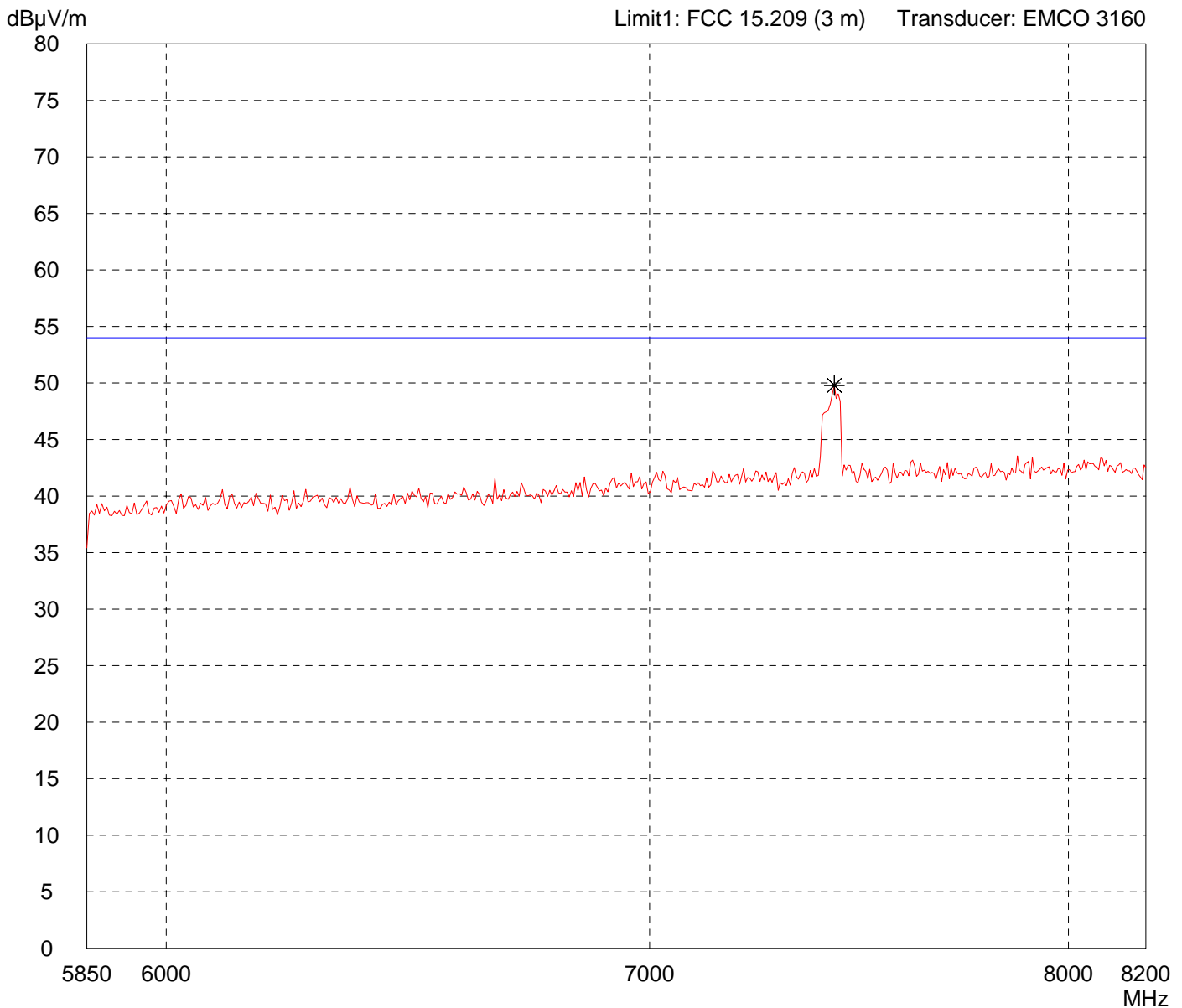
# Radiated Emission Test 5,85 GHz - 8,2 GHz acc. to FCC Part 15 Subpart C (FAR)

|   |                           |
|---|---------------------------|
| Model:<br>i-Q350 RTLS   |                           |
| Serial no.:<br>0.440.000.848                                  |                           |
| Applicant:<br>Identec Solutions                               |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                |                           |
| Tested on:<br>Test distance 3 metres<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                   | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                              | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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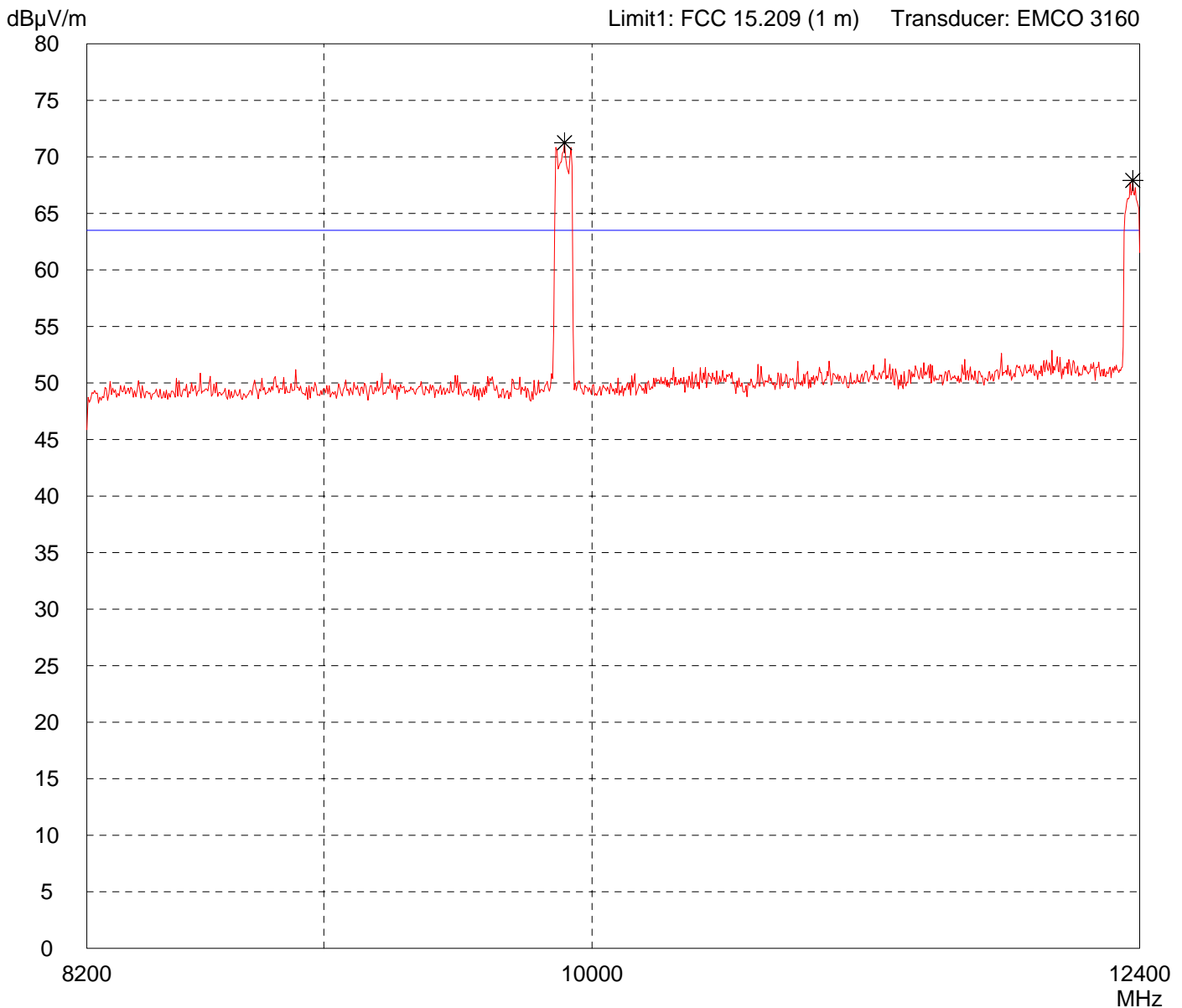
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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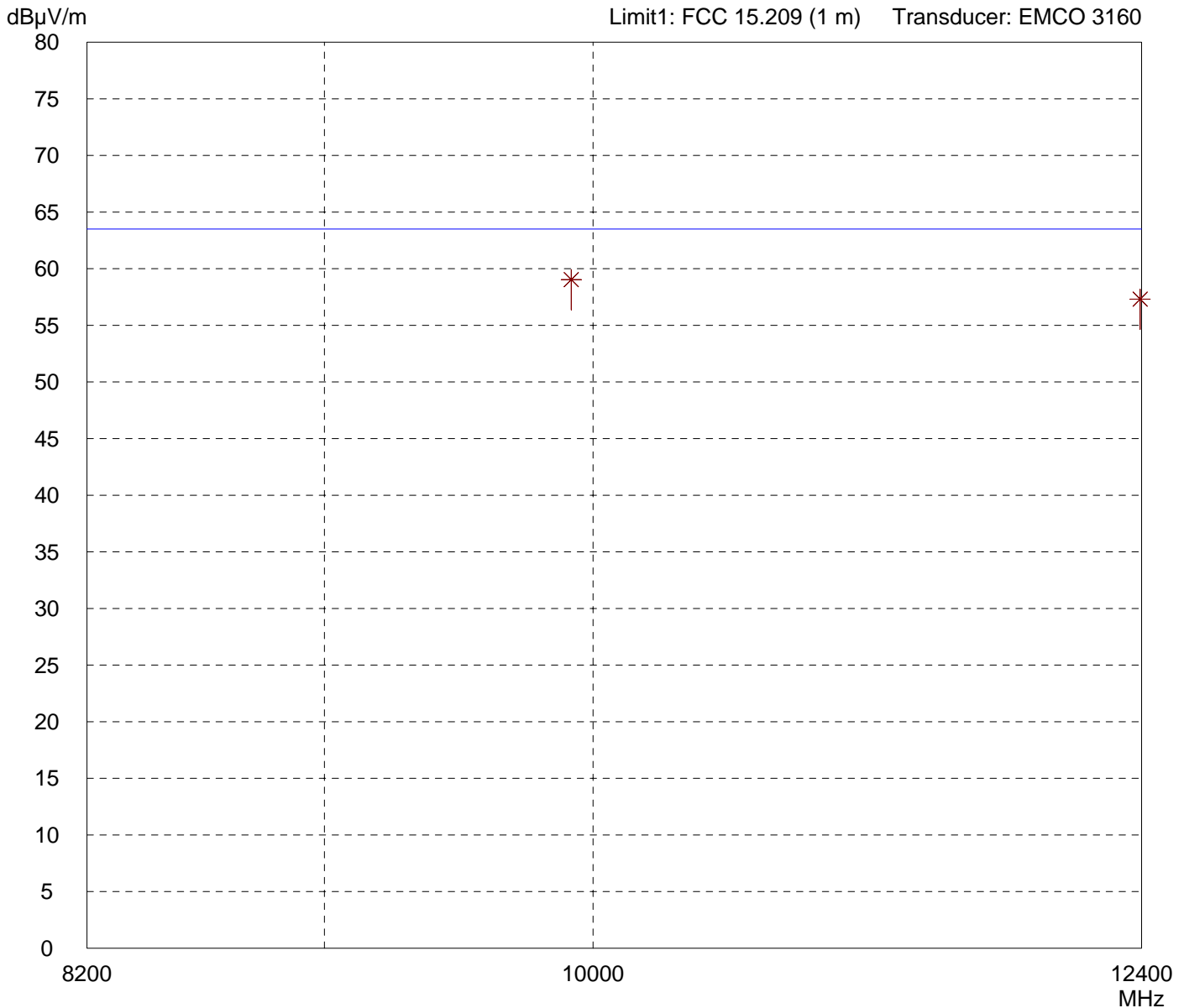
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                     | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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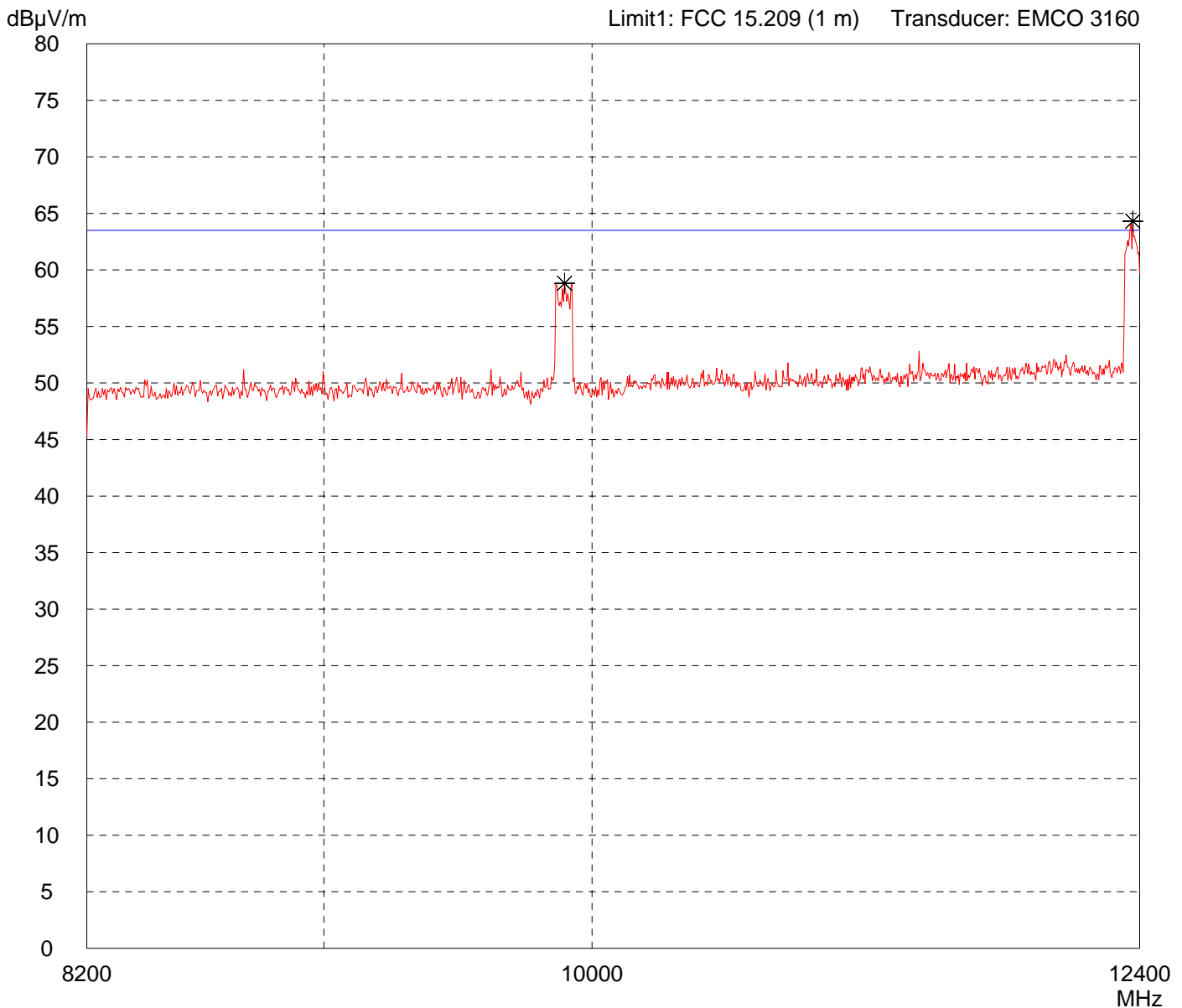
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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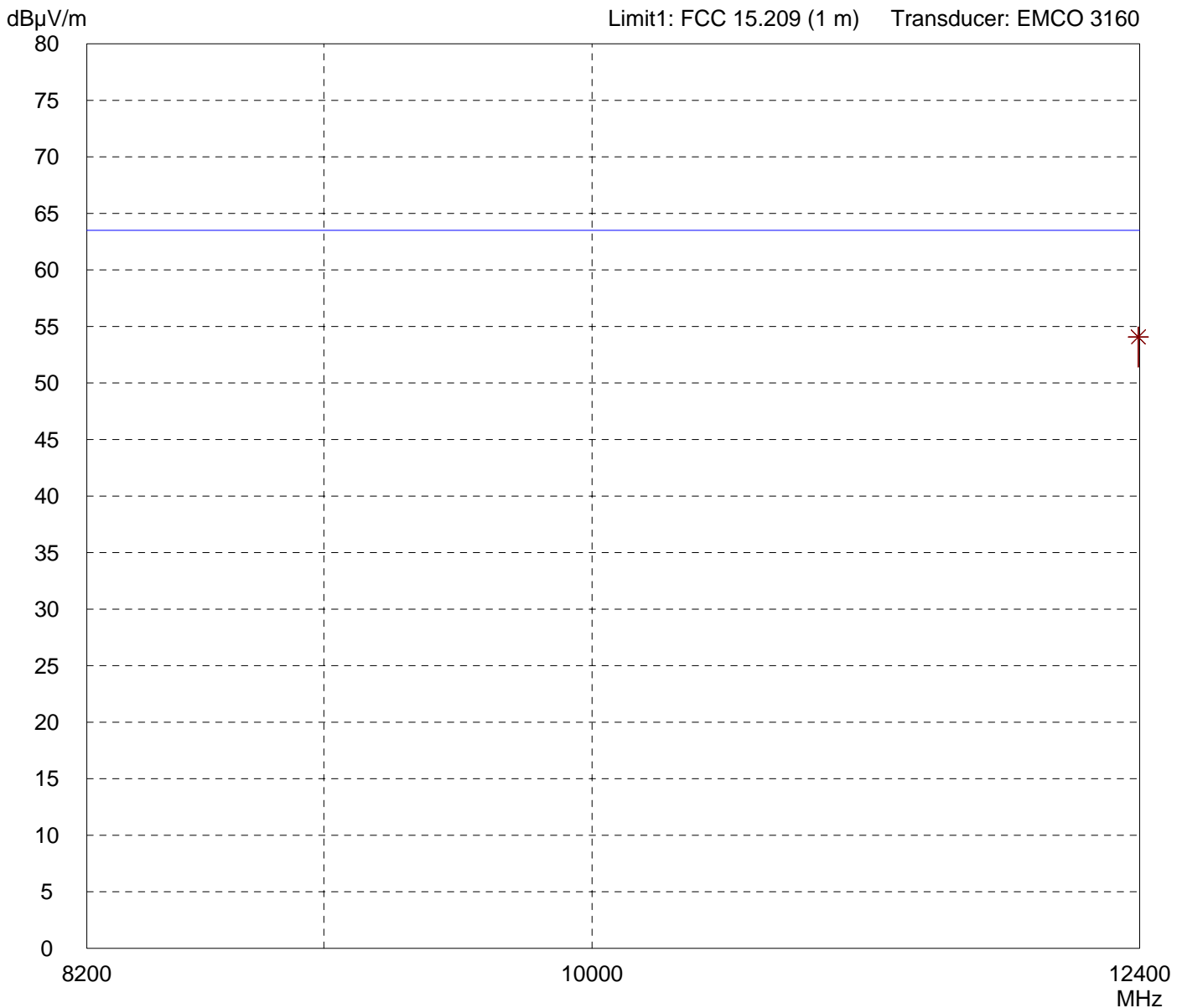
# Radiated Emission Test 8,2 GHz - 12,4 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>by hand                                   | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                      |
|----------------------|
| Detector:<br>Average |
|----------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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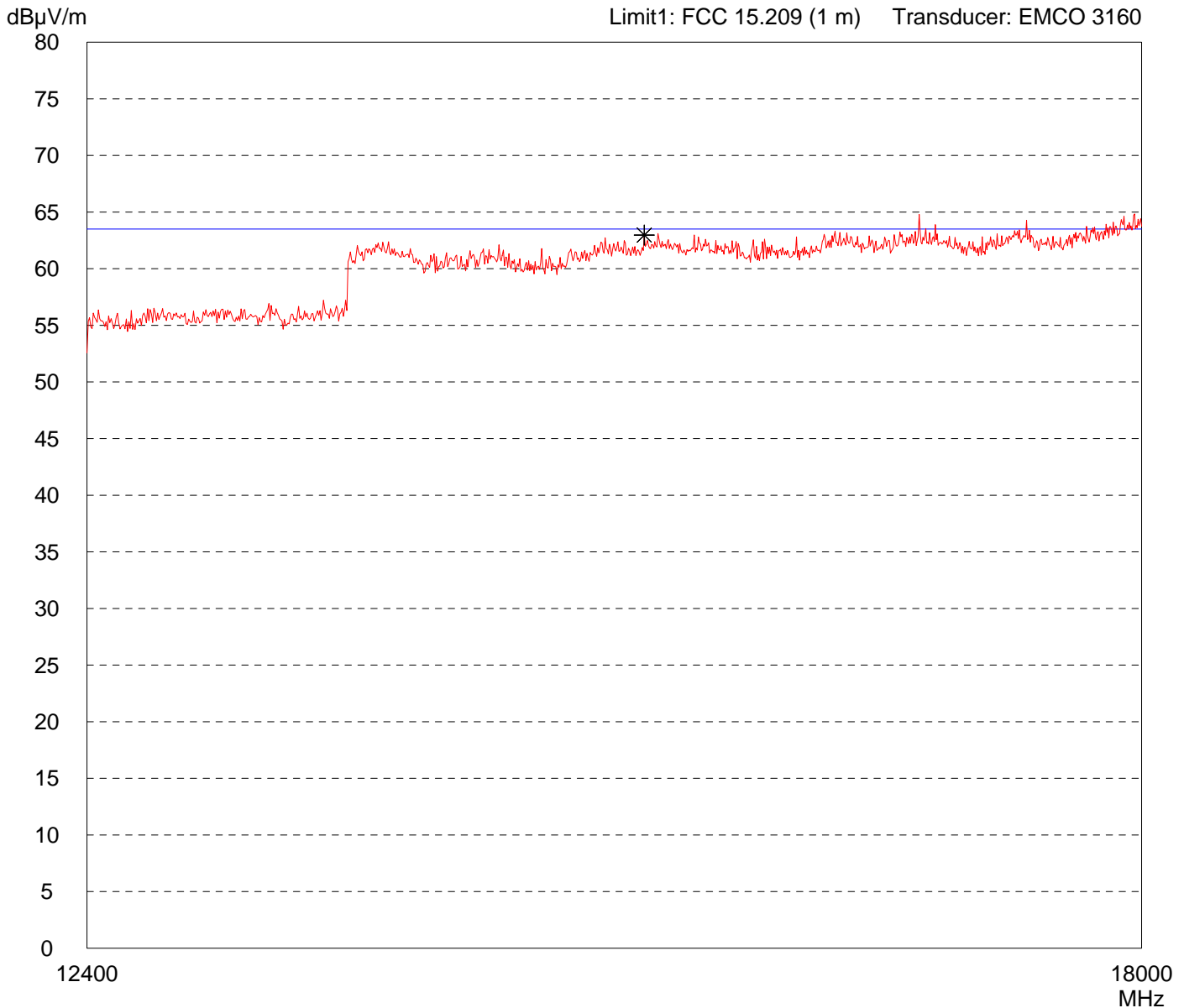
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
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| Project file:<br>69861-00628 | Page    of    Pages |
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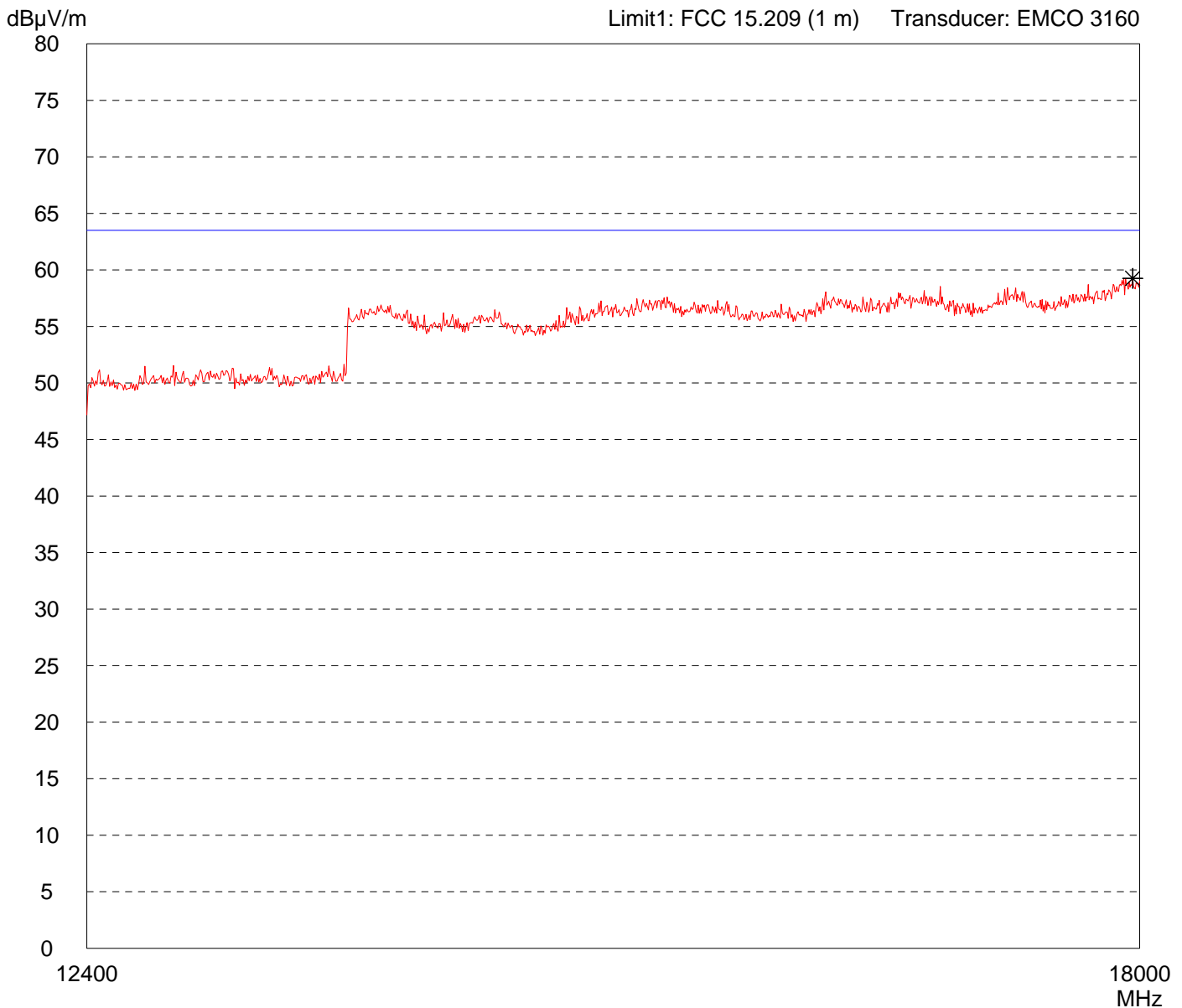
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                   |                           |
| Applicant:<br>Identec Solutions                                |                           |
| Test site:<br>Fully anechoic room, cabin no. 2                 |                           |
| Tested on:<br>Test distance 1 meter<br>Horizontal Polarization |                           |
| Date of test:<br>03/15/2010                                    | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                               | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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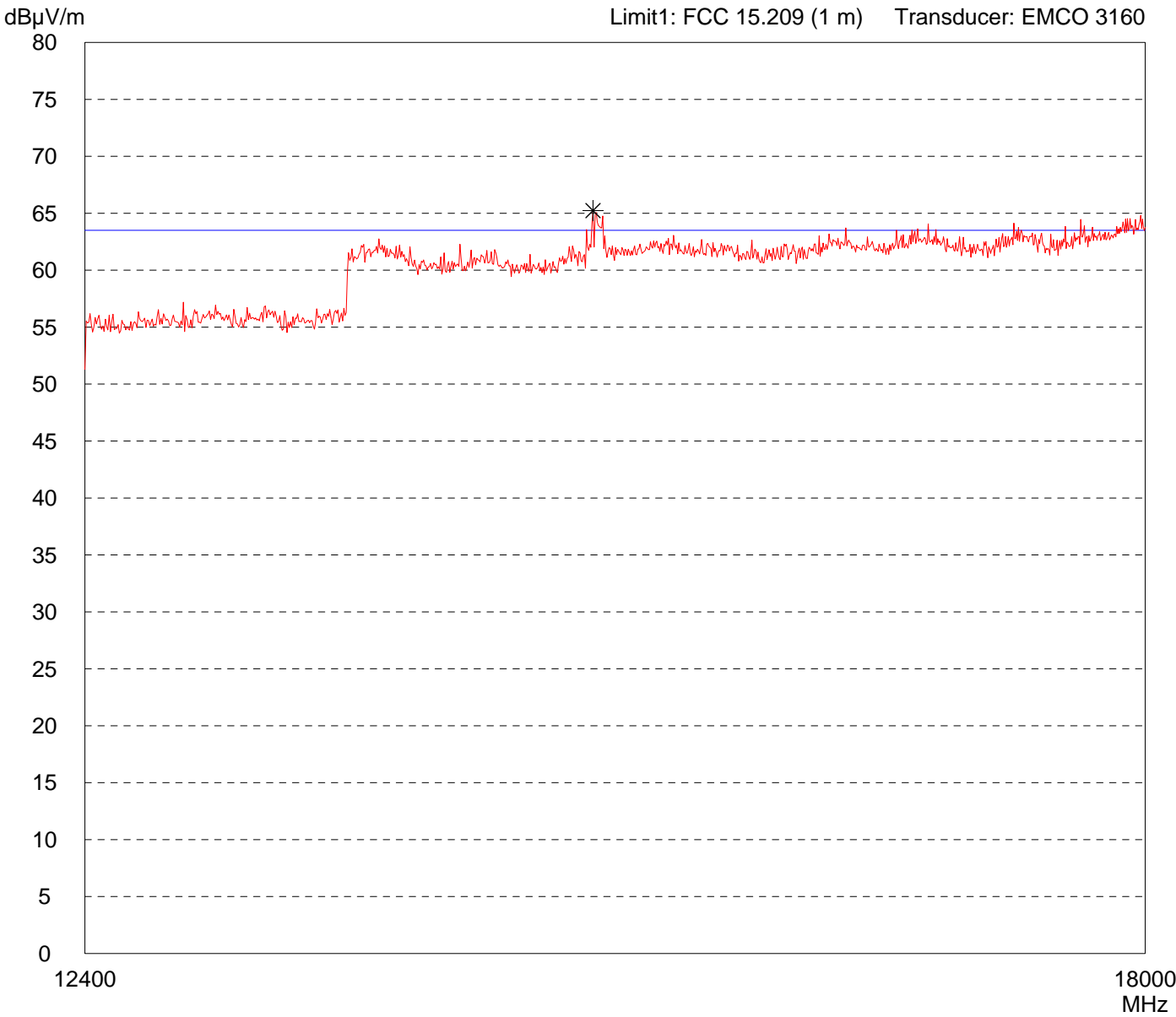
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                    |
|--------------------|
| Result:<br>Prescan |
|--------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
|------------------------------|---------------------|

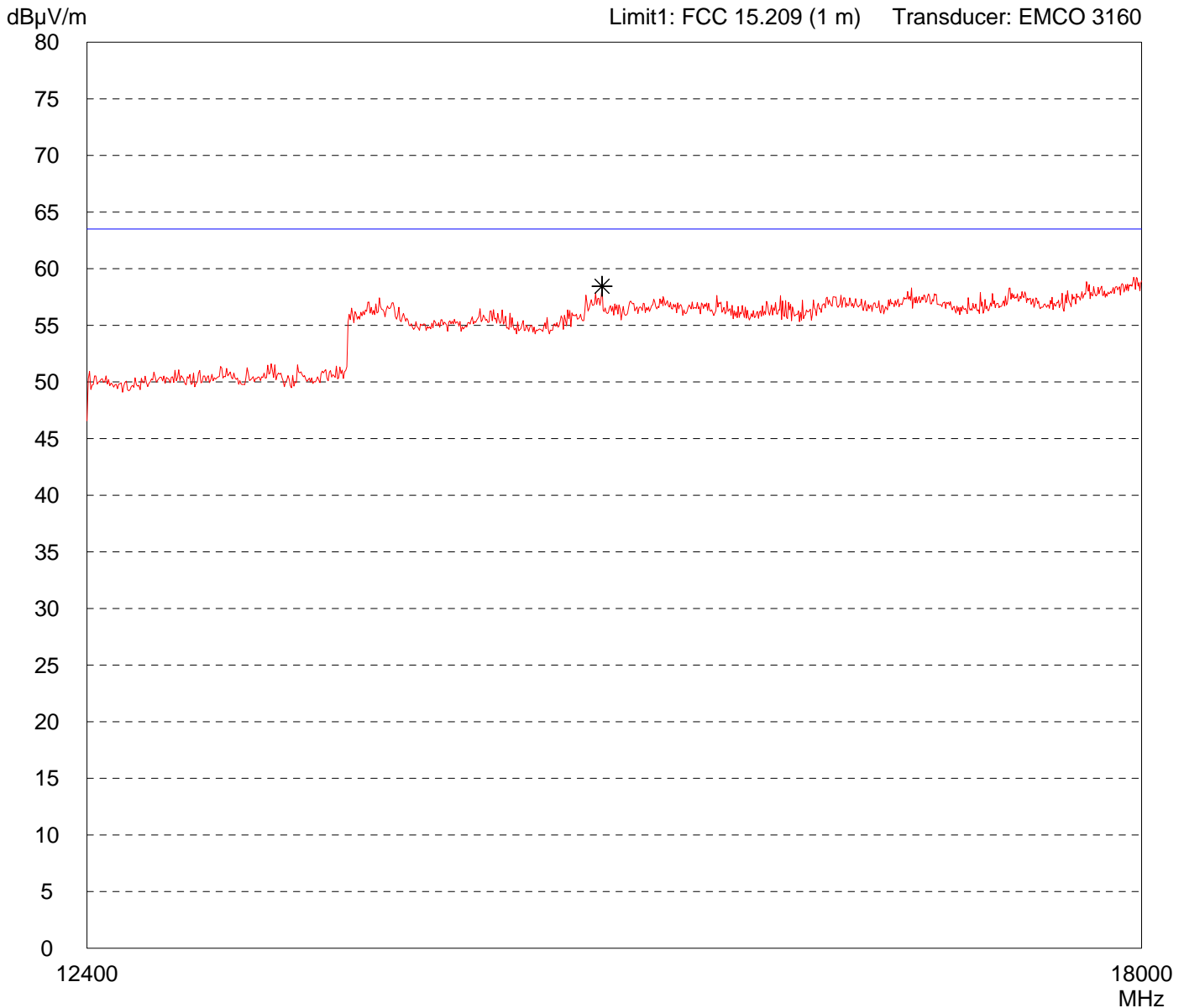
# Radiated Emission Test 12,4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

|  |                           |
|--|---------------------------|
| Model:<br>i-Q350 RTLS  |                           |
| Serial no.:<br>0.440.000.848                                 |                           |
| Applicant:<br>Identec Solutions                              |                           |
| Test site:<br>Fully anechoic room, cabin no. 2               |                           |
| Tested on:<br>Test distance 1 meter<br>Vertical Polarization |                           |
| Date of test:<br>03/15/2010                                  | Operator:<br>M. Steindl   |
| Test performed:<br>automatically                             | File name:<br>default.emi |

|  |
|--|
| Comment:<br>- Internal battery supply<br><br>- Transmitting continuously (2.472 GHz) |
|--|

|                   |
|-------------------|
| Detector:<br>Peak |
|-------------------|

|                                     |
|-------------------------------------|
| List of values:<br>Selected by hand |
|-------------------------------------|



|                                       |
|---------------------------------------|
| Result:<br>Limit kept - VBW = 100 kHz |
|---------------------------------------|

|                              |                     |
|------------------------------|---------------------|
| Project file:<br>69861-00628 | Page    of    Pages |
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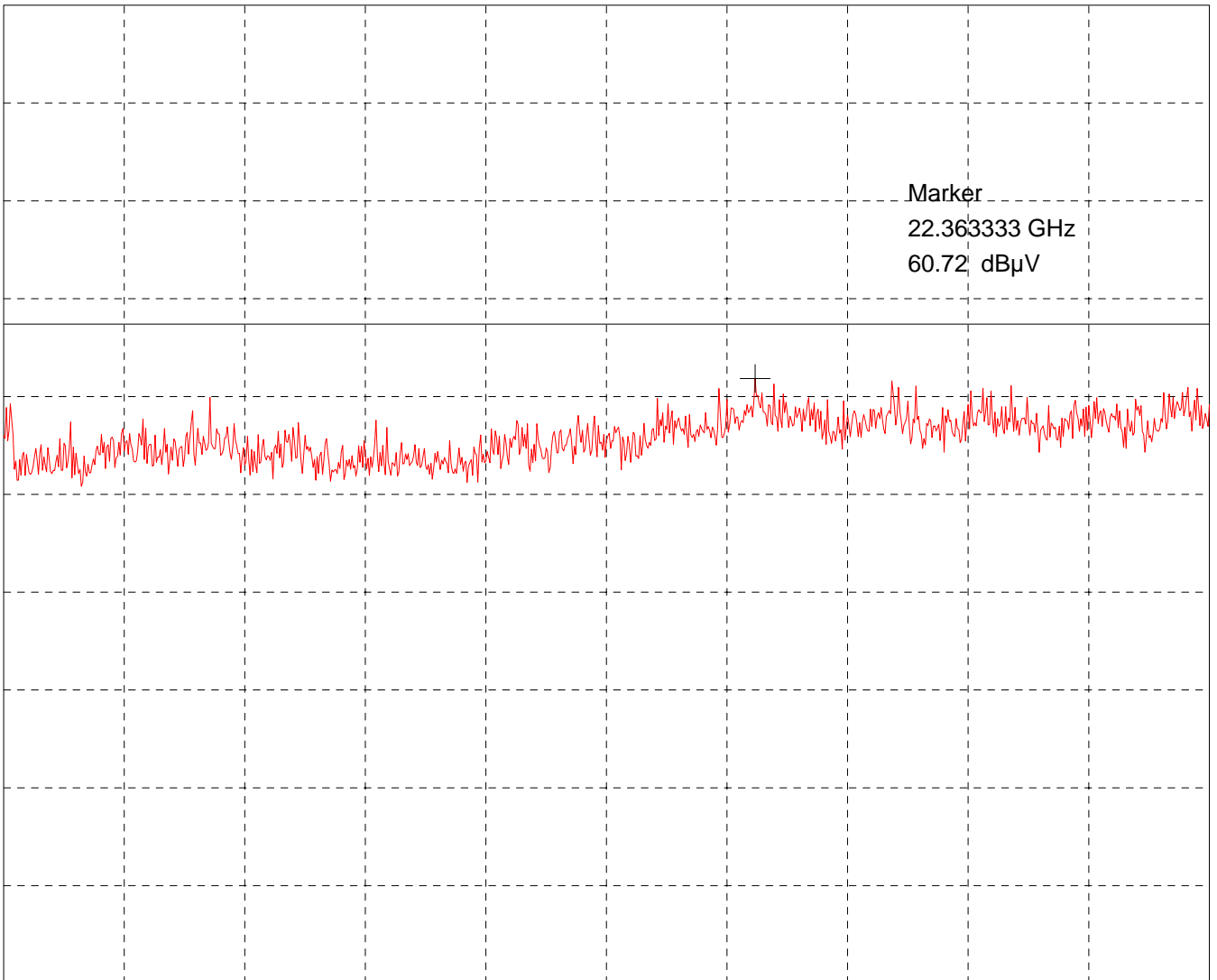
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |  |
|---------------------------------|--|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>-Transmitting continuously (2472 GHz)<br><br>- Polarisation: horizontal<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.848    |  |
| Applicant:<br>Identec Solutions |  |
|                                 |  |
|                                 |  |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2010/03/16      | Page of pages               |



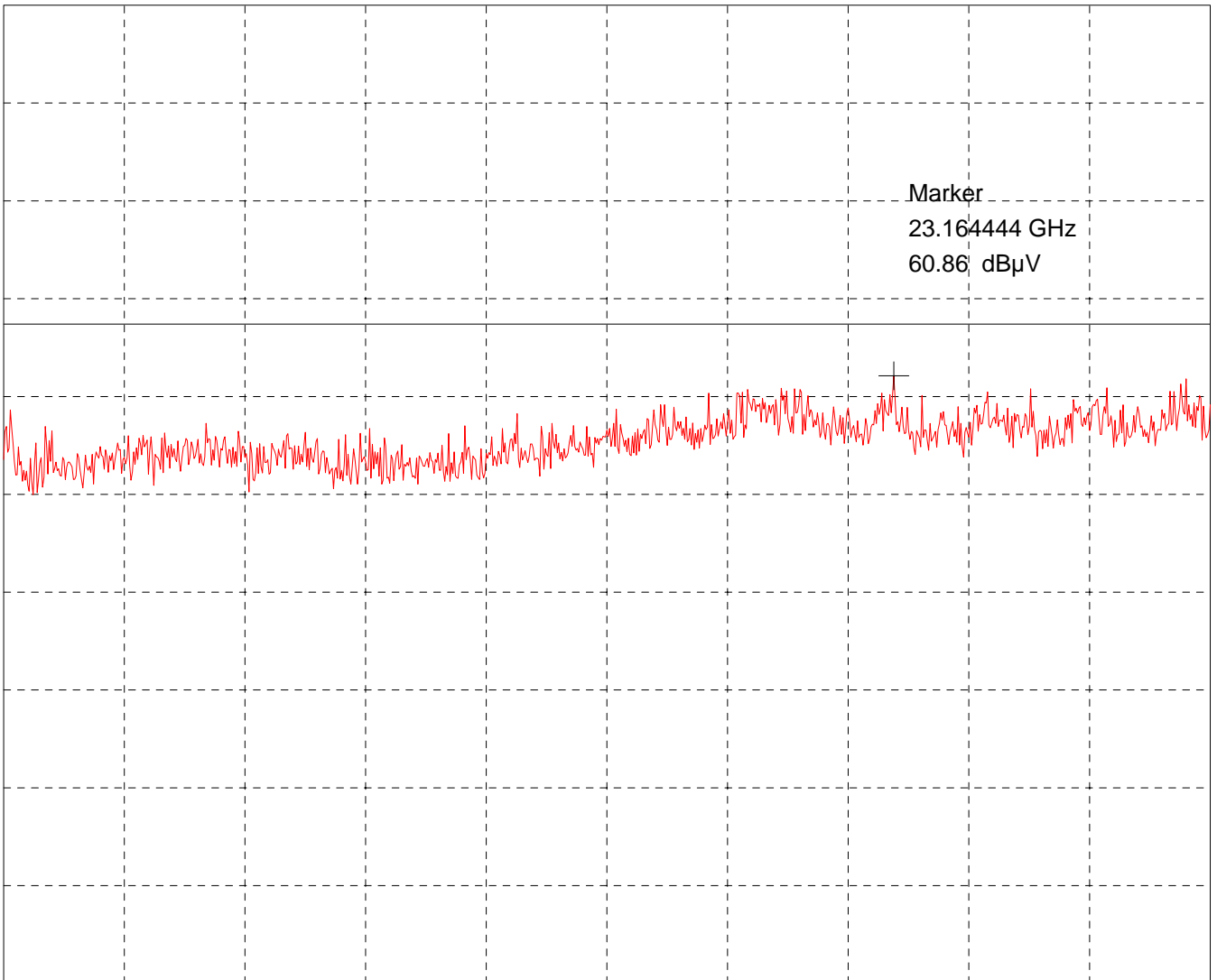
# Radiated Emission Test acc. to FCC Part 15 Subpart C

|                                 |  |
|---------------------------------|--|
| Model:<br>i-Q350 RTLS           | Mode:<br>- Internal battery supply<br><br>-Transmitting continuously (2472 GHz)<br><br>- Polarisation: vertical<br>- Distance: 1 m |
| Serial No.:<br>0.440.000.848    |  |
| Applicant:<br>Identec Solutions |  |
|                                 |  |
|                                 |  |

Ref.Level 79.8 dB $\mu$ V  
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz  
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz  
SWP 40 ms

|                          |                             |
|--------------------------|-----------------------------|
| Tested by:<br>M. Steindl | Project-No.:<br>69861-00628 |
| Date:<br>2010/03/16      | Page of pages               |