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RADIO TEST REPORT FOR CERTIFICATION
to
FCC PART 15 Subpart C (Section 15.247)

| | |
|---|---|
| Test Sample: | Minelab Metal Detector |
| Model: | GO-FIND 40 |
| FCC ID: | Z4C-2660 |
| Report Number: | M140927-4 |
| Tested for: | Minelab Electronics Pty Ltd |
| Issue Date: | 18 March 2015 |

EMC Technologies Pty Ltd reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. EMC Technologies Pty Ltd shall have no liability for any deductions, inferences or generalisations drawn by the client or others from EMC Technologies Pty Ltd issued reports. This report shall not be used to claim, constitute or imply product endorsement by EMC Technologies Pty Ltd.

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| **Report Number:** | M140927-4 |
| **Test Sample:** | Minelab Metal Detector |
| **Model:** | GO-FIND 40 |
| **FCC ID:** | Z4C-2660 |
| **Equipment Type:** | Intentional Radiator (Transceiver) |
| **Manufacturer:** | Minelab Electronics |
| **Address:** | 118 Hayward Avenue<br>Torrensville, SA 5031 |
| **Phone:** | + 61 8 8238 0888 |
| **Fax:** | + 61 8 8238 0890 |
| **Contact:** | Simon Mazurek |
| **Email:** | Simon.Mazurek@minelab.com.au |
| **Test Standards:** | FCC Part 15 – Radio Frequency Devices<br>FCC Part 15 Subpart C – Intentional Radiators<br>Section 15.247 – Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz<br><br>ANSI C63.4 – 2009<br>*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*<br><br>KDB 558074 D01v03r02 – Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 |
| **Test Date:** | 22nd December 2014 |
| **Test Engineer:** | Mahan Ghassempouri |
| **Attestation:** | *I hereby certify that the device(s) described herein were tested as described in this report and that the data included is that which was obtained during such testing.* |
| **Authorised Signatory:** | **Chris Zombolas**<br>**Technical Director**<br>**EMC Technologies Pty Ltd** |

**Radio TEST REPORT FOR CERTIFICATION**
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**FCC PART 15 Subpart C (Section 15.247)**

## 1.0 INTRODUCTION

Radio testing was performed on the Bluetooth transceiver of the Minelab GO-FIND 40 Metal Detector.

Test results and procedures were performed in accordance with the following Federal Communications Commission (FCC) standards/regulations:

| | |
|---|---|
| 47 CFR, Part 15, Subpart C: | Rules for intentional radiators (particularly section 15.247) |
| Section 15.203: | Antenna requirements |
| Section 15.205: | Restricted bands of operation |
| Section 15.207: | Conducted Emission Limits |
| Section 15.209: | Radiated Emission Limits (General requirements) |
| Section 15.247: | Operation in the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5850 MHz |

The test sample **complied** with the requirements of 47 CFR, Part 15 Subpart C - Section 15.247.

The measurement procedure used was in accordance with ANSI C63.4-2009. The instrumentation conformed to the requirements of ANSI C63.2-2009.

### 1.1 Summary of Results

| FCC Part 15 Subpart C | Test Performed | Results |
|---|---|---|
| 15.203 | Antenna requirement | Complied |
| 15.205 | Operation in restricted Band | Complied |
| 15.207 | Conducted emissions limits | N/A as the EUT is battery powered |
| 15.209 | Radiated emissions limits | Complied |
| 15.247 (a)(2) | Minimum 6 dB Bandwidth | Complied |
| 15.247 (b)(3) | Peak Output Power | Complied |
| 15.247 (c) | Antenna Gain > 6 dBi | N/A as EUT uses integral antenna with less than 6 dBi gain with no external antenna connector |
| 15.247 (d) | Out of Band Emissions | Complied |
| 15.247 (e) | Peak Power Spectral Density | Complied |
| 15.247 (f) | Hybrid Systems | N/A assessed to digital modulation requirements |
| 15.247 (g) | Hopping channel application | N/A assessed to digital modulation requirements |
| 15.247 (h) | Incorporation of intelligence within FHSS | N/A assessed to digital modulation requirements |
| 15.247 (i) | Radio Frequency Hazard | Complied |

N/A: Not Applicable

### 1.2 Modifications by EMC Technologies

No modifications were required to achieve compliance.

## 2.0 GENERAL INFORMATION

(Information supplied by the Client)

The EUT is a metal detector with Bluetooth Low Energy (BLE) interface for connecting to a smart phone. Detector could be folded up and can fit into a suitcase for storage.

### 2.1 EUT (Transmitter) Details

The RF transmitter was a Bluetooth Low Energy device operating in 2.4 GHz band. It uses an inverted F PCB antenna. A temporary UFL connector was mounted on the device to provide a means for measuring a conducted output power. Transmitter specifications are shown in below table.

| | |
|---|---|
| **Test Sample:** | Metal Detector |
| **Model Number:** | GO-FIND 40 |
| **Serial Number:** | 12 |
| **Supply Voltage** | 4.1- 7.2V DC |
| **EUT Modulation Type:** | Bluetooth Low Energy (Adaptive DSSS, GFSK) |
| **Operating Frequency Range:** | 2402 MHz-2480 MHz |
| **Nominal Output Power:** | 10 dBm |
| **Number of Channels:** | 40 |
| **Gain of Antenna Assembly:** | 3.3 dBi |
| **Operating Temperature Range:** | -5 °C to 45 °C |

### 2.2 EUT (Host) Details

The device is designed to operate from battery.

### 2.3 Test Procedure

Emissions measurements were performed in accordance with the procedures of ANSI C63.4-2009. KDB 558074 D01v03r02 - Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 was used to demonstrate compliance with FCC part 47CFR15.247.

### 2.4 Test Facility

#### 2.4.1 General

Measurements were performed at EMC Technologies' laboratory in Keilor Park, Victoria Australia. EMC Technologies Pty Ltd is listed by the FCC as a test laboratory able to perform compliance testing for the public. EMC Technologies is listed as an FCC part 47CFR2.948 test lab and may perform the testing required under Parts 15 and 18 – **FCC Registration Number 90560**

EMC Technologies Pty Ltd has also been accredited as a Conformity Assessment Body (CAB) by Australian Communications and Media Authority (ACMA) under the APECTEL MRA and is designated to perform compliance testing on equipment subject to Declaration of Conformity (DoC) and Certification under Parts 15 & 18 of the FCC Commission's rules – **Registration Number 494713 & Designation number AU0001.**

EMC Technologies' indoor open are test site (iOATS) has been accepted by Industry Canada for the performance of radiated measurements in accordance with RSS-Gen Issue 8 - **Industry Canada iOATS number - IC 3569B**

### 2.4.2 NATA Accreditation

NATA is the Australian National laboratory accreditation body and has accredited EMC Technologies to operate to the IEC/ISO17025 requirements. A major requirement for accreditation is the assessment of the company and its personnel as being technically competent in testing to the standards. This requires fully documented test procedures, continued calibration of all equipment to the National Standard at the National Measurements Institute (NMI), NPL (UK), NIST (USA) and an internal quality system to ISO 9002. NATA has mutual recognition agreements with the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Association for Laboratory Accreditation ($A^2LA$).

EMC Technologies is accredited in Australia by the National Association of Testing Authorities (NATA). All testing in this report has been conducted in accordance with EMC Technologies' scope of NATA accreditation.

The current full scope of accreditation can be found on the NATA website: www.nata.asn.au
It also includes a large number of emissions, immunity, SAR, EMR and Safety standards.

## 2.5 Test Equipment Calibration

Measurement instrumentation and transducers were calibrated in accordance with the applicable standards by an independent NATA registered laboratory such as Agilent Technologies (Australia) Pty Ltd, Rhode and Schwarz, NMI, NPL or NIST. All equipment calibration is traceable to Australia national standards at the National Measurements Institute. The reference antenna calibration was performed by NPL and the working antennas (BiLog and horn) calibrated by EMC Technologies. The complete list of test equipment used for the measurements, including calibration dates and traceability is contained in Appendix A

## FCC PART 15 Subpart C (Section 15.247)

### 3.0 ANTENNA REQUIREMENT (§15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

EUT uses a permanently attached PCB antenna therefore considered sufficient to comply with the provisions of this section. There is no external antenna connector available to the user.

### 4.0 CONDUCTED EMISSIONS (§15.207)

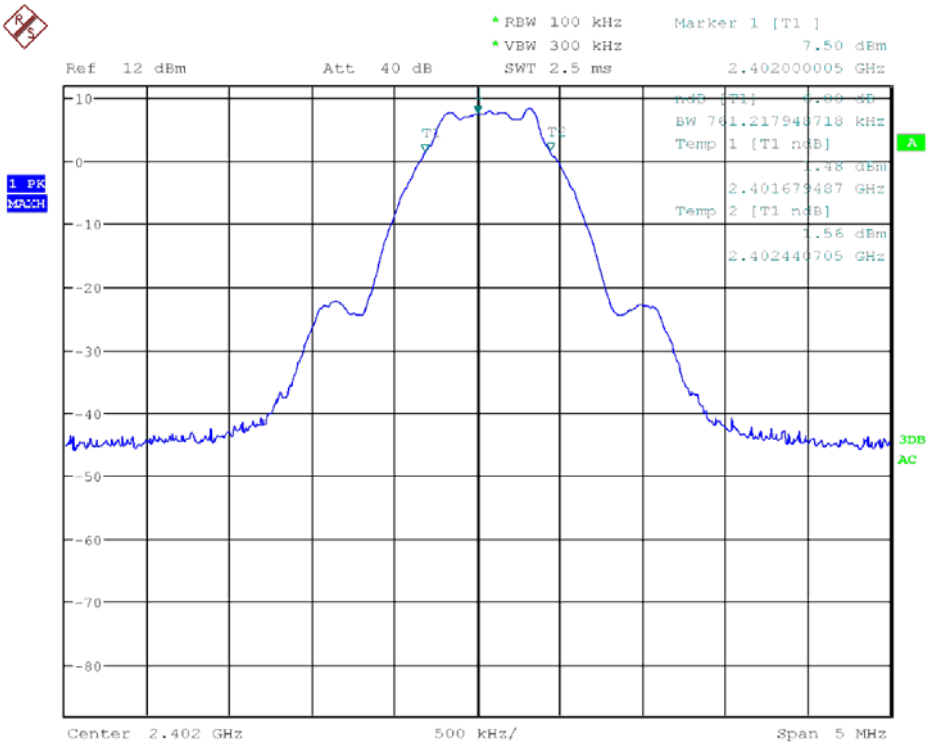
Not applicable as the EUT only employs battery power for operation and does not operate from an AC power network.

### 5.0 DTS 6 dB BANDWIDTH (§15.247 (a)(2))

Minimum 6 dB bandwidth shall be at least 500 kHz. Measurements were performed on low, middle and high channel. Care was taken so that the bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

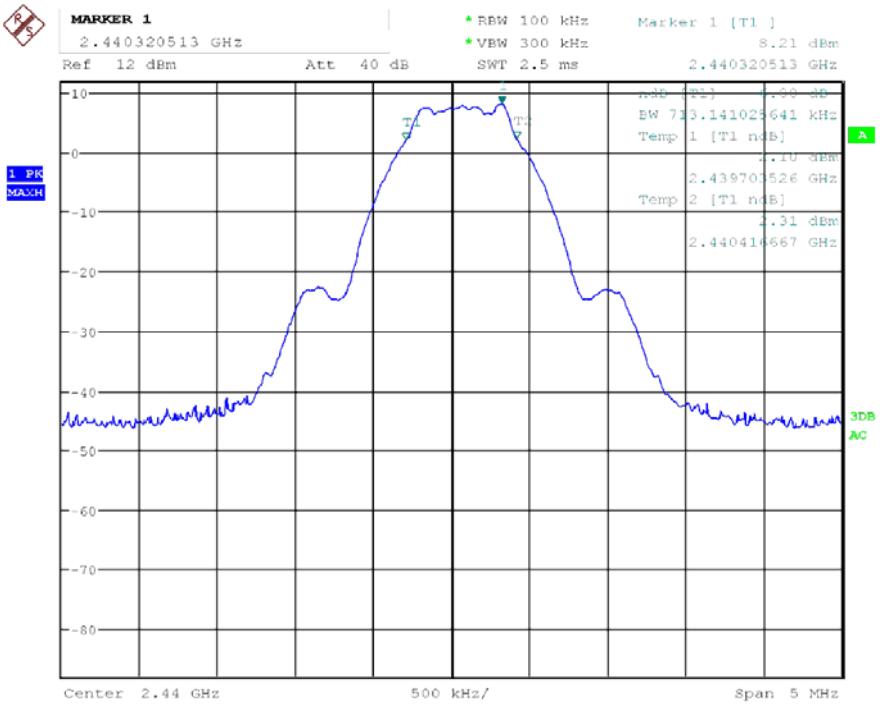
### 5.1. Results

Measurement results are shown in the following graphs.



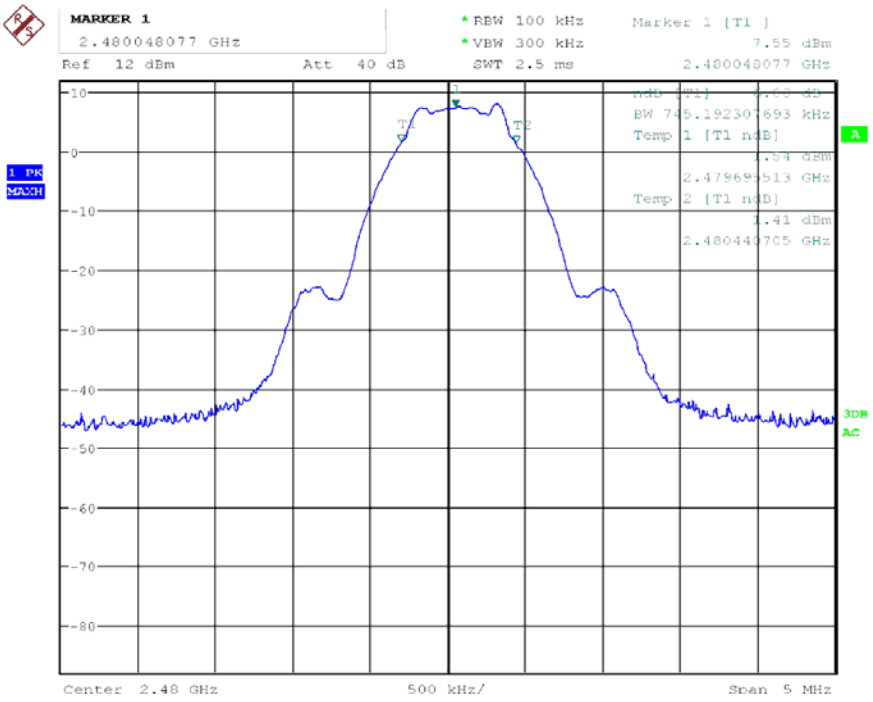

| Modulation | 6 dB Bandwidth (kHz) | Limit (kHz) | Result |
|---|---|---|---|
| BLE | 761.2 | > 500 | Pass |

**Graph 1: 6 dB bandwidth, low channel**




| Modulation | 6 dB Bandwidth (kHz) | Limit (kHz) | Result |
|---|---|---|---|
| BLE | 713.4 | > 500 | Pass |

**Graph 2: 6 dB bandwidth, middle channel**




| Modulation | 6 dB Bandwidth (kHz) | Limit (kHz) | Result |
|---|---|---|---|
| BLE | 745.2 | >500 | Pass |

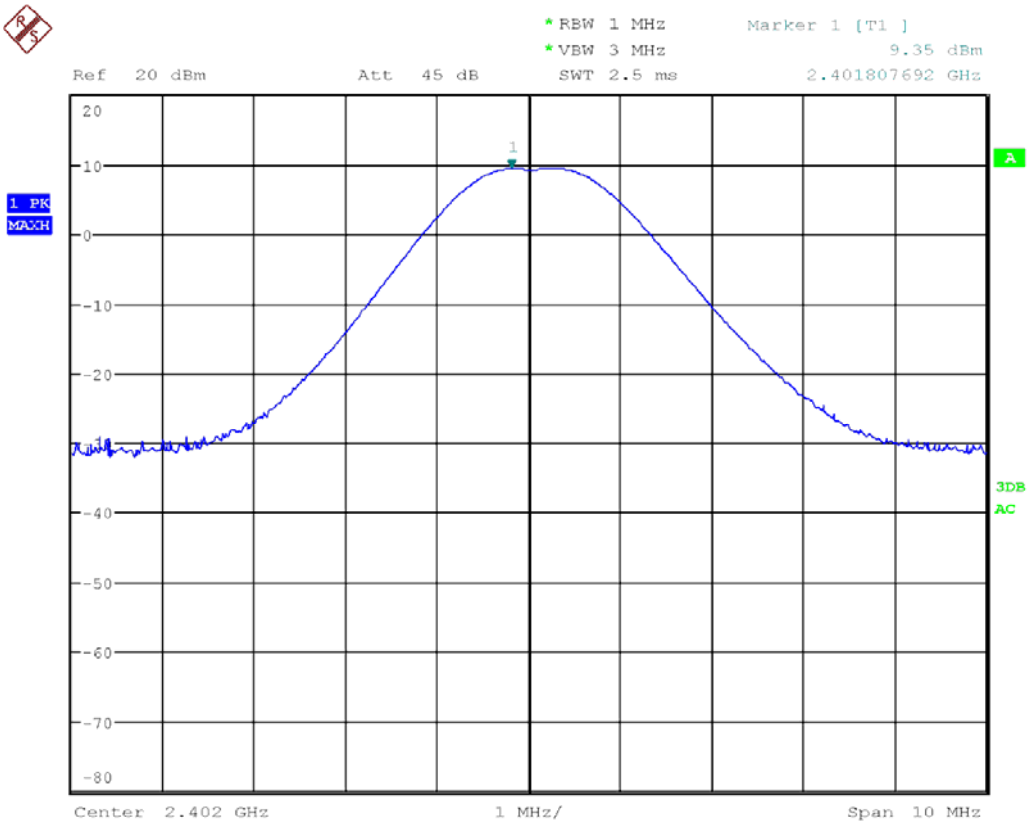
**Graph 3: 6 dB bandwidth, high channel**

## 6.0 PEAK OUTPUT POWER (§15.247 (b)(3))

As there was a temporary antenna connector available on the PCB the test was performed using conducted measurement. Maximum peak conducted power (clause 9.1.1 of KDB 558074 v03r02) was used for measurement.

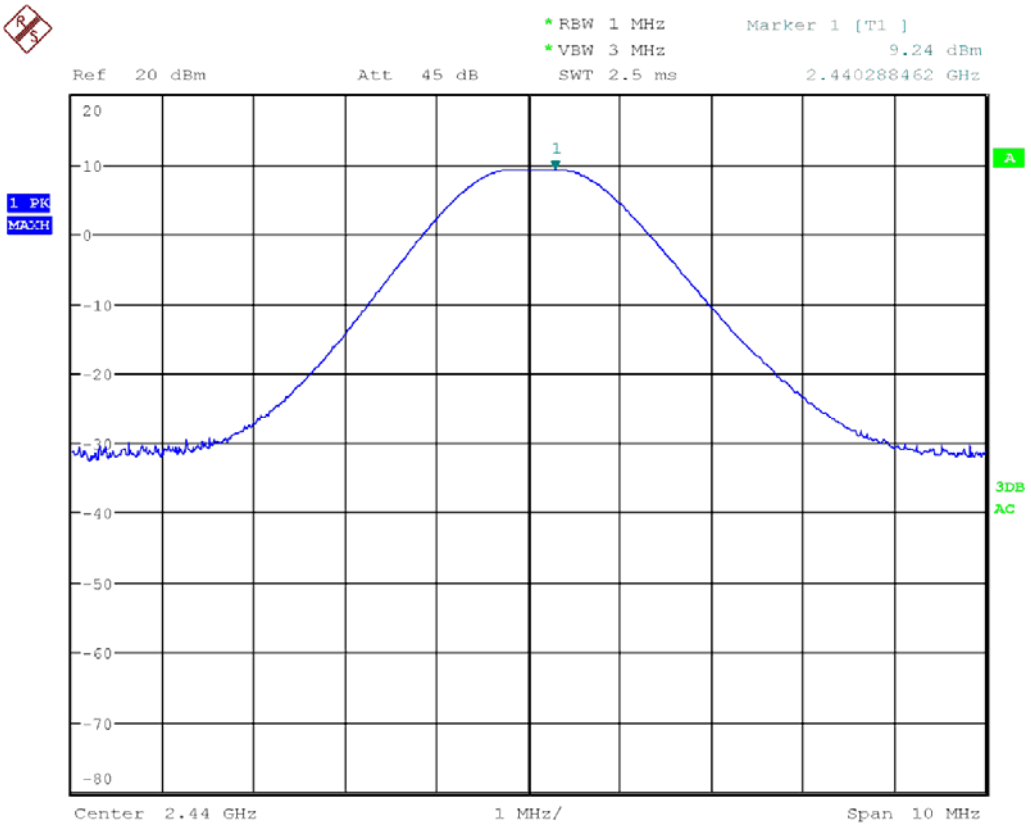
### 6.1. Results

Measurement results are shown in the following graphs.



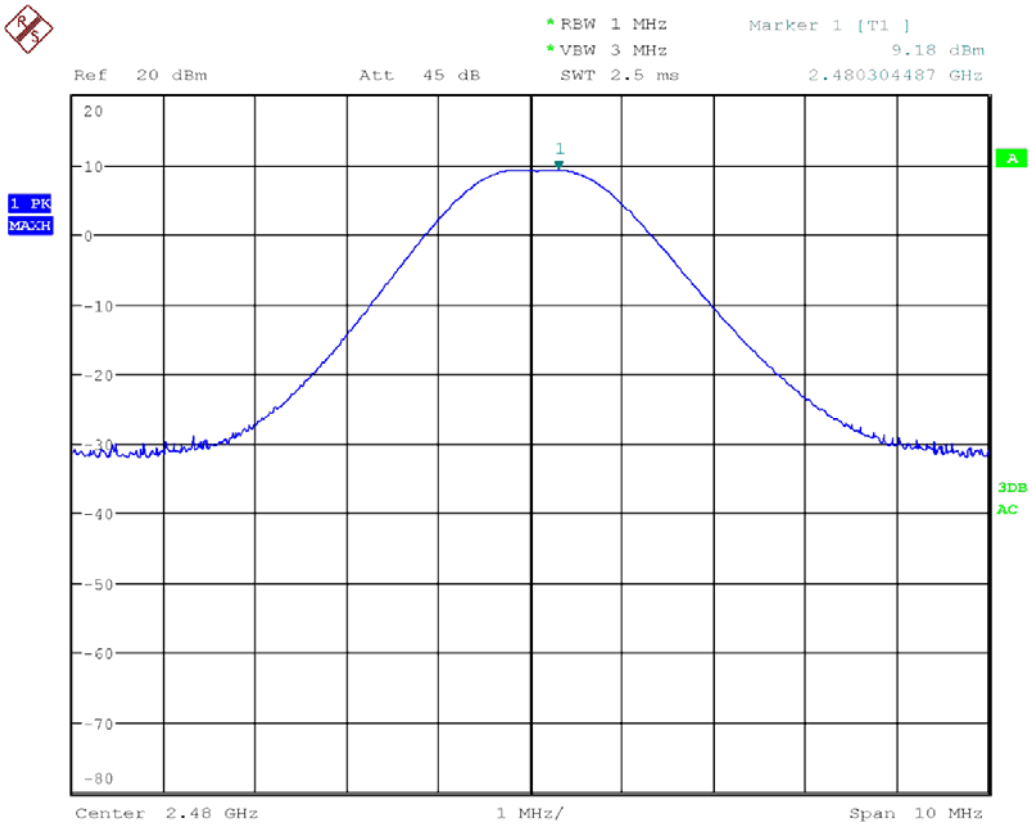

| Channel | SA Power Reading (dBm) | Cable loss (dB) | Conducted Power (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| Low | 9.35 | 0.60 | 9.95 | 30 | -20.05 | Pass |

**Graph 4: Conducted power, low channel**




| Channel | SA Power Reading (dBm) | Cable loss (dB) | Conducted Power (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| Middle | 9.24 | 0.60 | 9.84 | 30 | -20.16 | Pass |

**Graph 5: Conducted power, middle channel**




| Channel | SA Power Reading (dBm) | Cable loss (dB) | Conducted Power (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| High | 9.18 | 0.60 | 9.78 | 30 | -20.22 | Pass |

**Graph 6: Conducted power, high channel**

## 7.0 BAND-EDGE EMISSION MEASUREMENTS

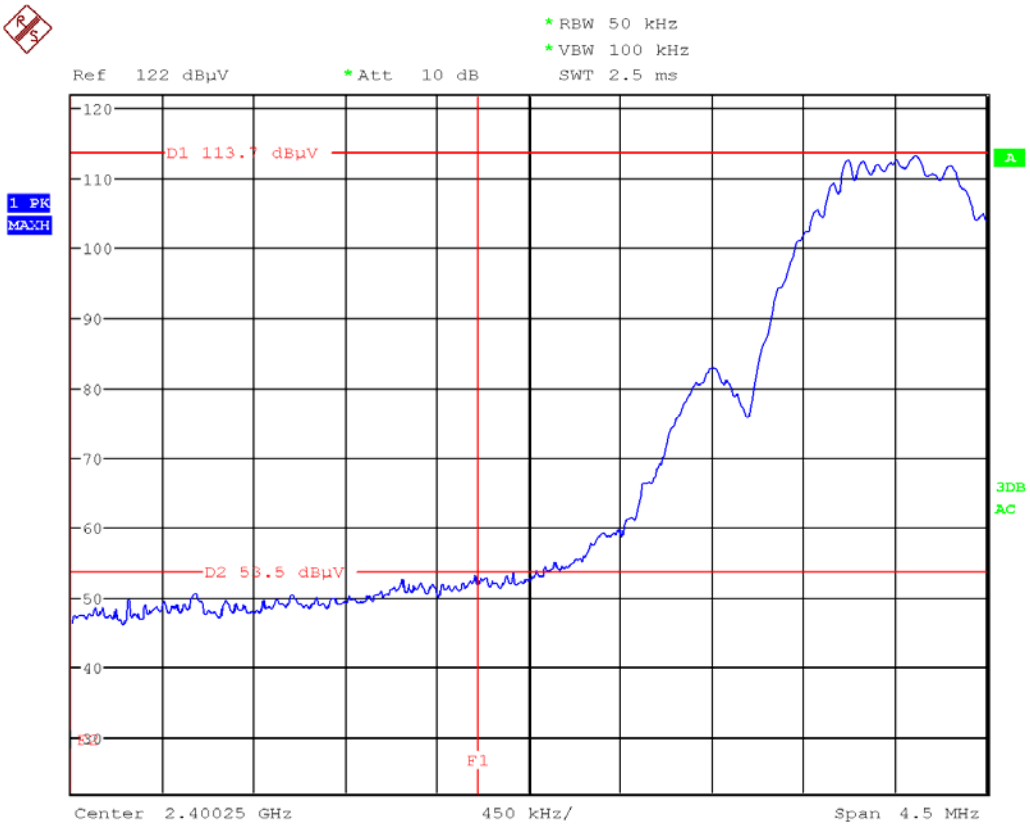
Emissions within 2 MHz of an authorized band edge were measured using the marker-delta method. Emissions were measured using conducted method.

### 7.1. Results

All emissions above and below the edge of the authorised band were more than 20 dB below the in band intentional emission.

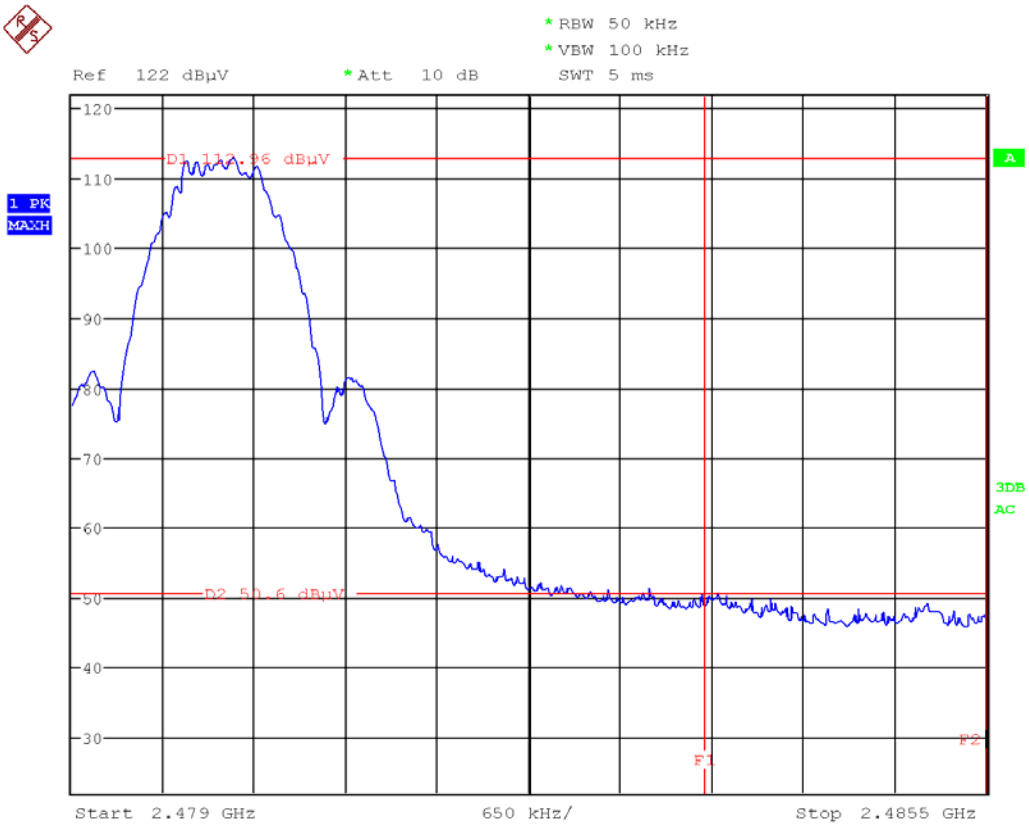
The upper band edge fell into a restricted band of operation (2483.5 MHz-2500 MHz). Emissions were below the -41.2 dBm (500 μV/m @ 3 m distance) limit of FCC Part 15.209.

Measurement results are shown in the following graphs.




Vertical marker F1 was positioned at 2400 MHz, the difference between the peak emission and this point was 60.2 dB.

**Graph 7: Lower band-edge emissions**




Vertical marker F1 was positioned at 2483.5 MHz, the difference between the peak emission and this point was 62.4 dB.

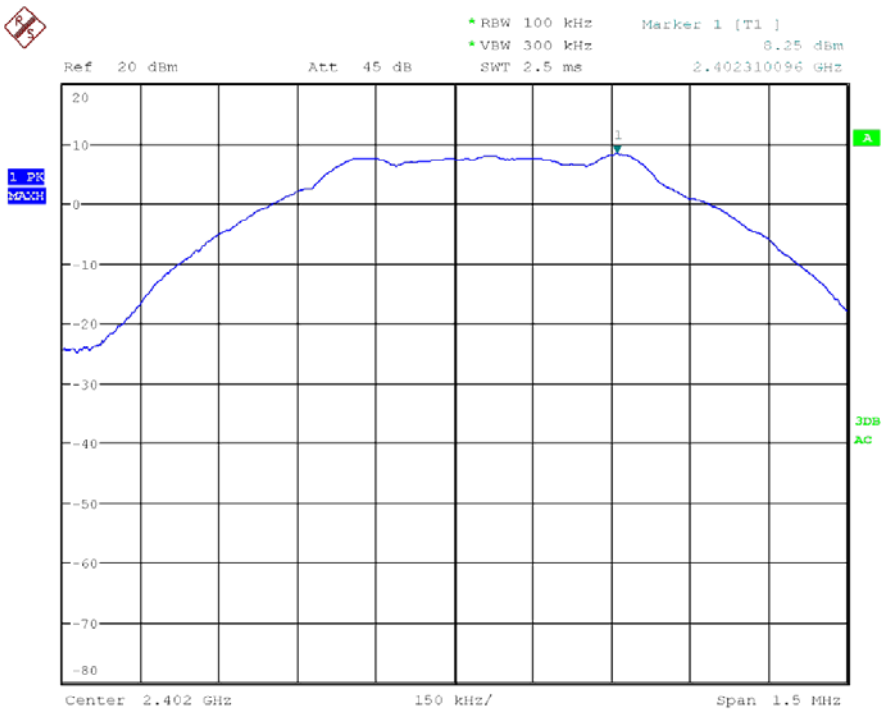
**Graph 8: Upper band-edge emissions**

## 8.0 SPURIOUS EMISSION MEASUREMENTS (§15.247 (d))

### 8.1. Emissions in non-restricted bands

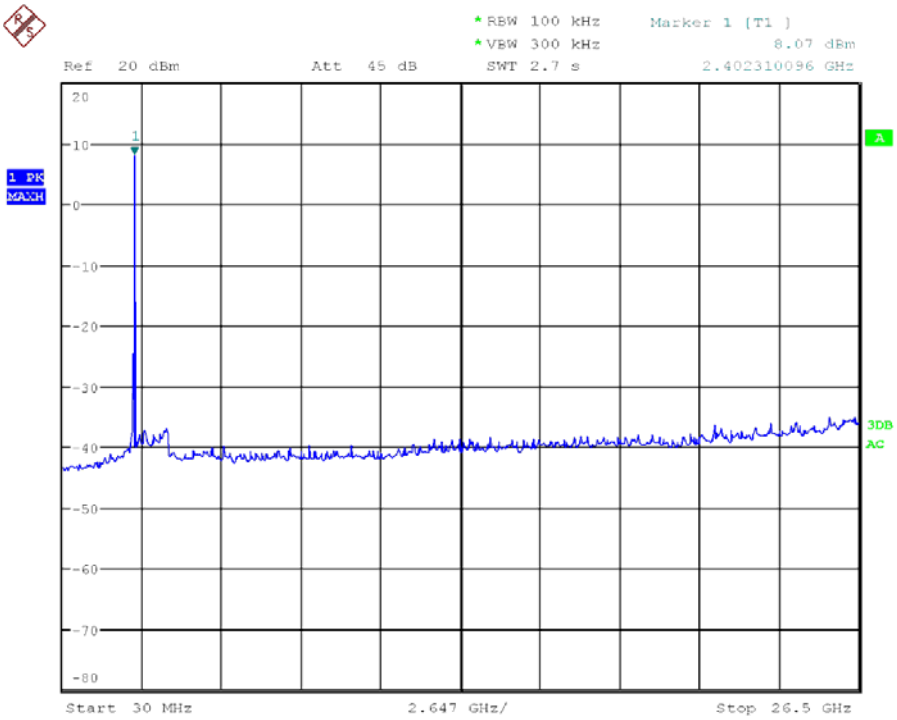
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Conducted method was used according to clause 11 of KDB 558074 D01.

### 8.1.1. Results




| Peak | Frequency (MHz) | SA Reading (dBm) | Cable loss (dB) | Level (dBm) |
|---|---|---|---|---|
| 1 | 2402.3 | 8.25 | 0.60 | 8.85 |

**Graph 9: Reference level measurement (in band emission)**




**Graph 10: Non-restricted band spurious emissions, 30 MHz - 26.5 GHz (100 kHz bandwidth)**

No emission were detected below 30 MHz (refer to graph 11).

All emissions were more than 20 dB below the fundamental.

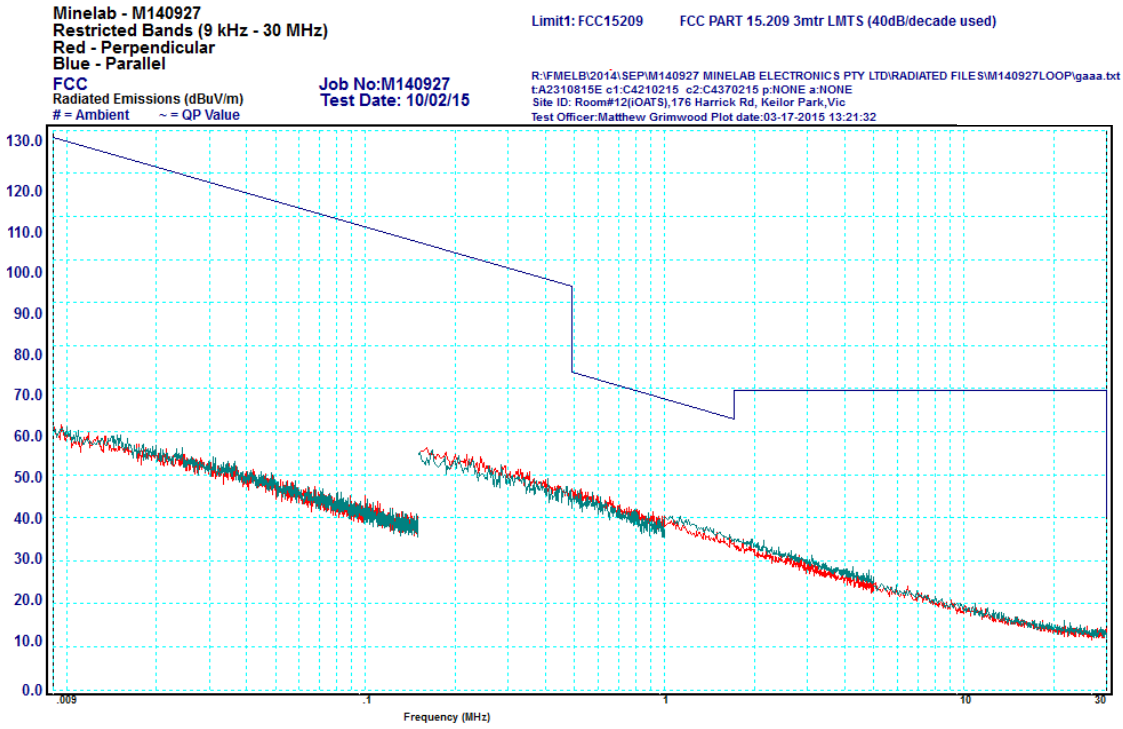
## 8.2. Emissions in restricted bands (radiated)

In order to ensure the compliance to the requirements of emission in restricted bands, radiated measurements were performed. Frequency range of 9 kHz to 26.5 GHz was investigated for any emissions falling in restricted frequency bands. Provisions of FCC 15.35 were observed selecting the detector and bandwidth. Limits of FCC 15.209 were applied.

Band stop filter was used to avoid the spectrum analyzer from overloading.

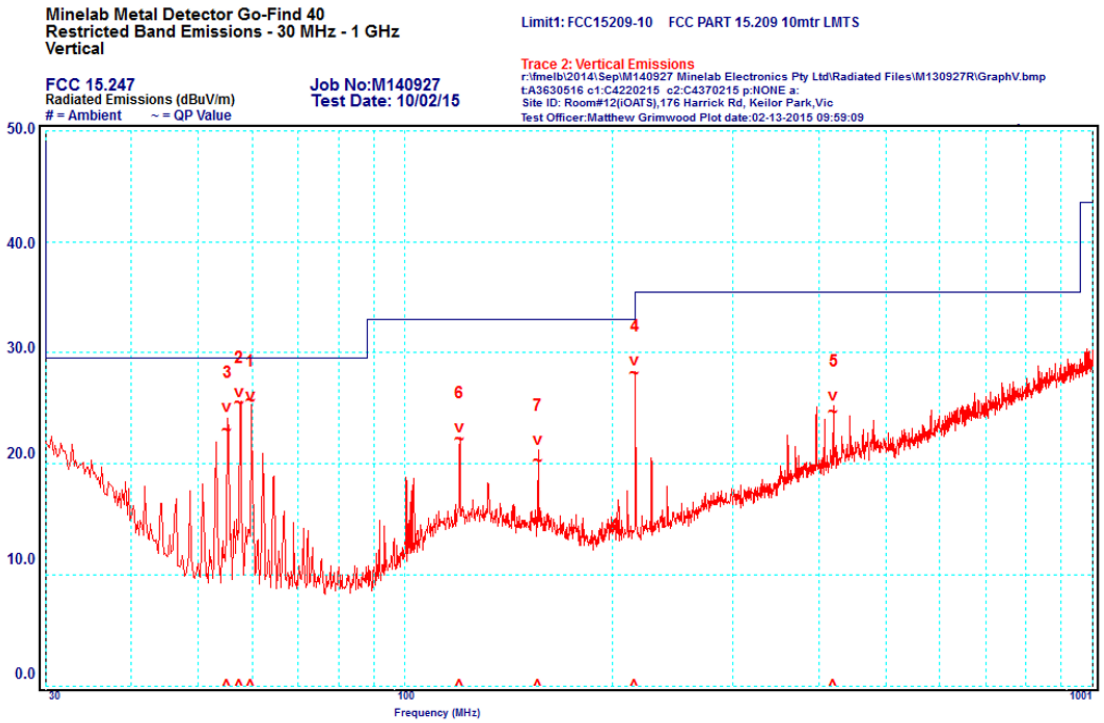
Spurious emissions were investigated while transmitting on the channel with the highest transmit power.

### 8.2.1. Results



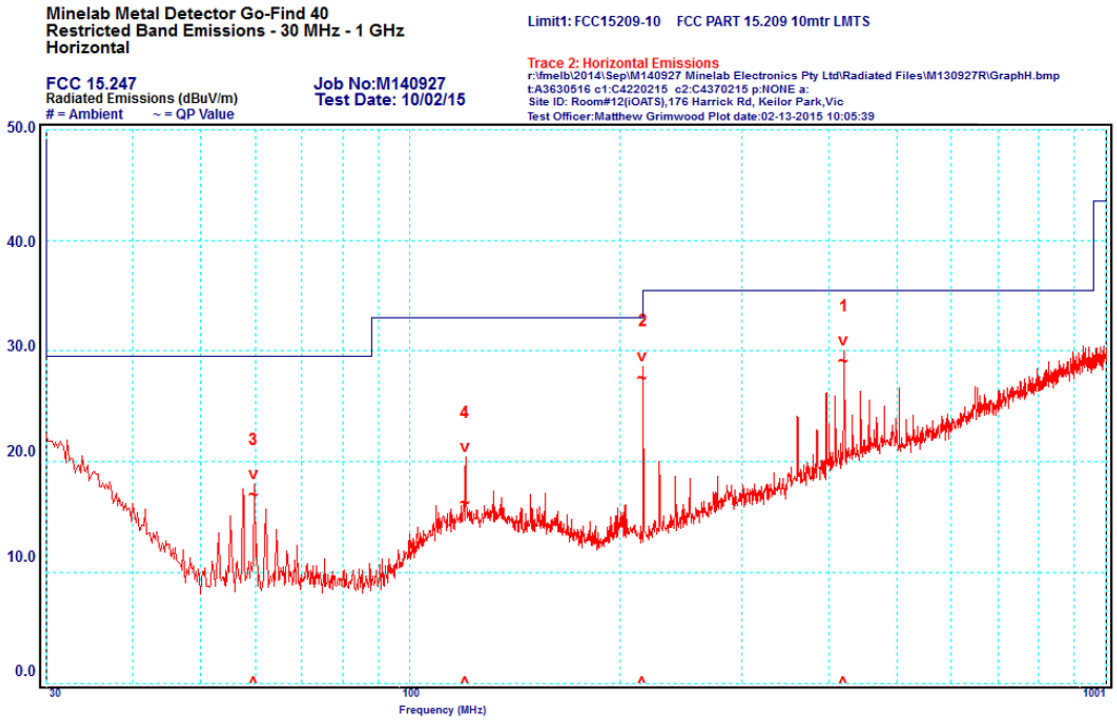

**Graph 11: 9 kHz - 30 MHz, radiated emissions in restricted bands**

No emission were detected in frequency range of 9 kHz-30 MHz



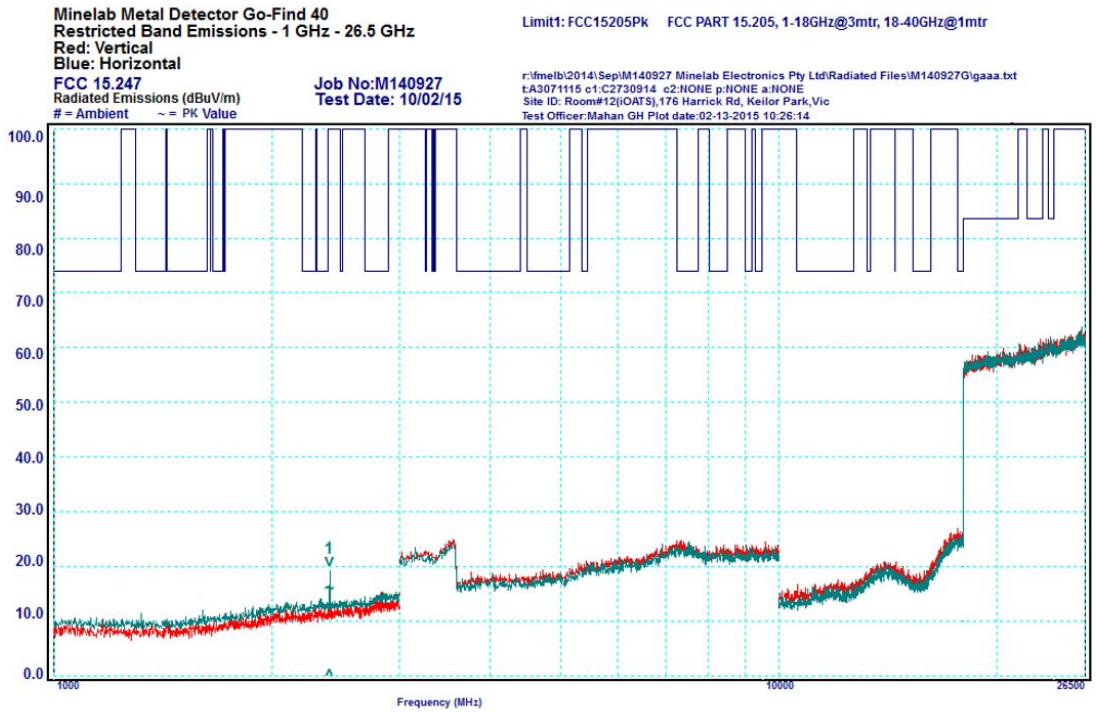

| Peak | Frequency (MHz) | Polarisation | Measured QP Level (dBµV/m) | QP LIMIT (dBµV/m) | ΔQP ±dB |
|---|---|---|---|---|---|
| 1 | 59.63 | Vertical | 25.6 | 29.5 | -3.9 |
| 2 | 57.38 | Vertical | 25.4 | 29.5 | -4.1 |
| 3 | 55.14 | Vertical | 23.0 | 29.5 | -6.5 |
| 4 | 216.01 | Vertical | 28.1 | 35.5 | -7.4 |
| 5 | 420.01 | Vertical | 24.7 | 35.5 | -10.8 |
| 6 | 120.00 | Vertical | 22.1 | 33.0 | -10.9 |
| 7 | 156.00 | Vertical | 20.3 | 33.0 | -12.7 |

**Graph 12: 30 MHz - 1 GHz, radiated emissions in restricted bands, vertical polarization**




| Peak | Frequency (MHz) | Polarisation | Measured QP Level (dBµV/m) | QP LIMIT (dBµV/m) | ΔQP ±dB |
|---|---|---|---|---|---|
| 1 | 419.99 | Horizontal | 29.0 | 35.5 | -6.5 |
| 2 | 216.02 | Horizontal | 27.5 | 35.5 | -8.0 |
| 3 | 59.63 | Horizontal | 17.0 | 29.5 | -12.5 |
| 4 | 119.96 | Horizontal | 16.2 | 33.0 | -16.8 |

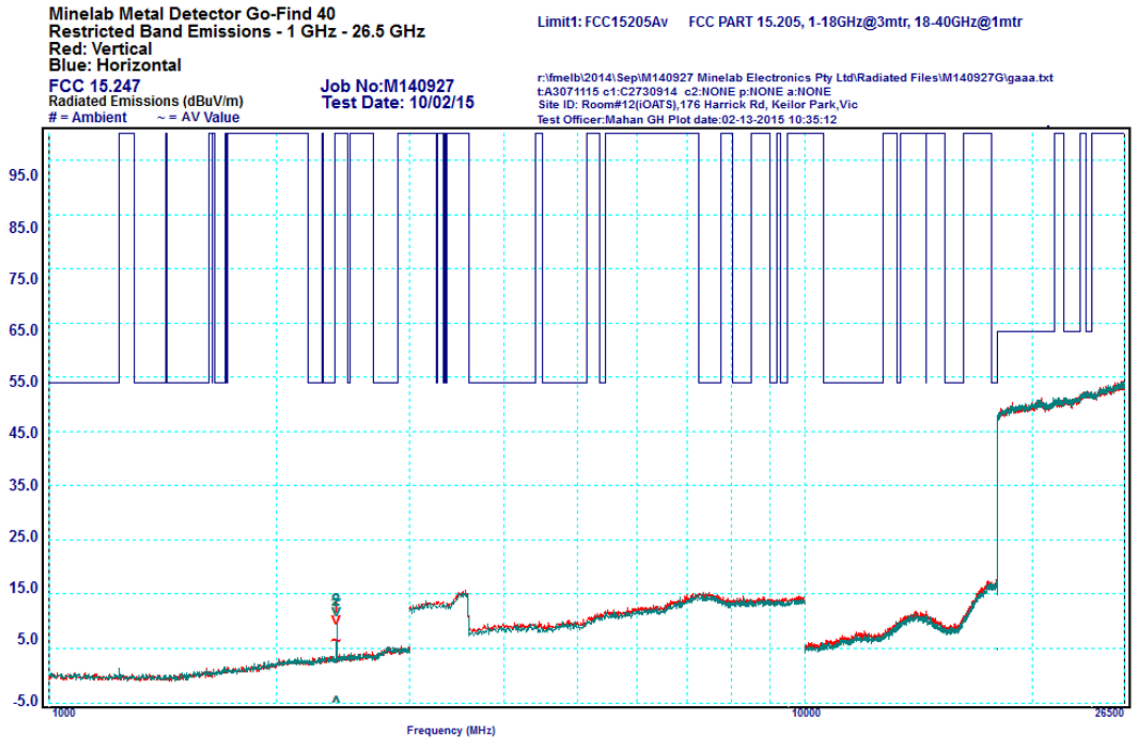
**Graph 13: 30 MHz - 1 GHz, radiated emissions in restricted bands, horizontal polarization**




| Peak | Frequency (MHz) | Polarisation | Measured PK Level (dBμV/m) | PK LIMIT (dBμV/m) | ΔPK ±dB |
|---|---|---|---|---|---|
| 1 | 2401 | Horizontal | - | - | - |

Emission falls outside the restricted bands.

**Graph 14: 1 GHz - 26.5 GHz, radiated emissions in restricted bands, peak detector**




| Peak | Frequency (MHz) | Polarisation | Measured AV Level (dBµV/m) | AV LIMIT (dBµV/m) | ΔAV ±dB |
|---|---|---|---|---|---|
| 1 | 2402.00 | Vertical | - | - | - |
| 2 | 2402.16 | Horizontal | - | - | - |

Emissions fall outside the restricted bands.

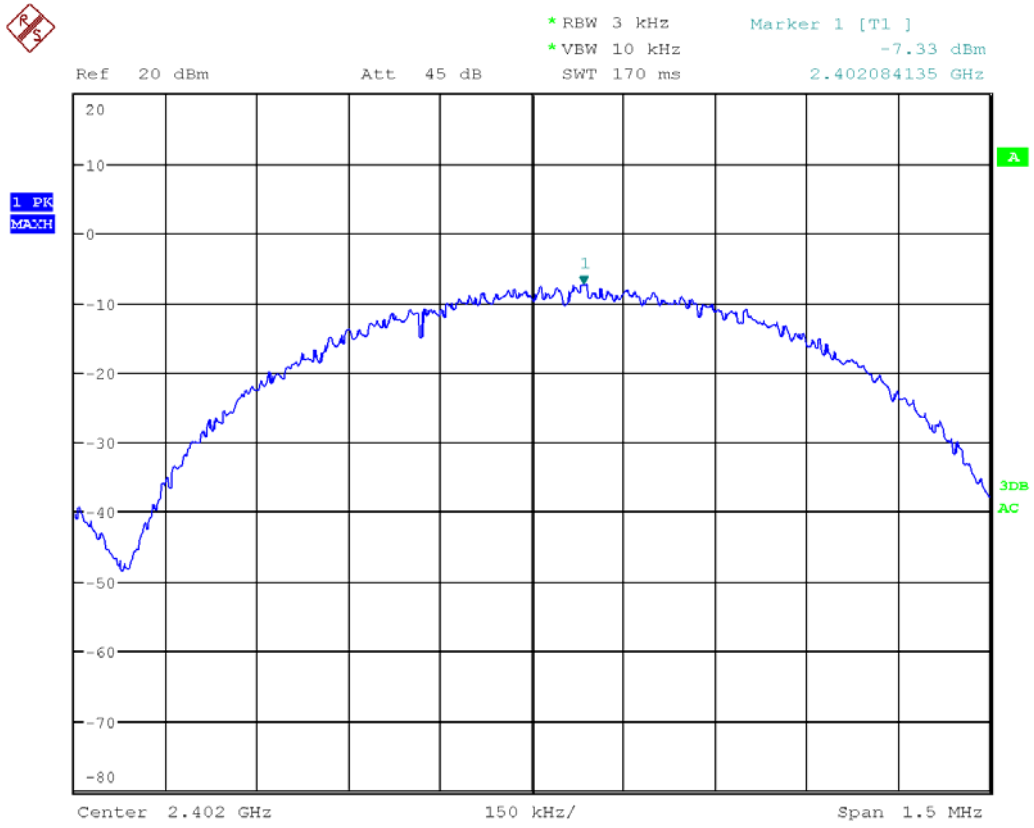
**Graph 15: 1 GHz - 26.5 GHz, radiated emissions in restricted bands, average detector**

## 9.0 POWER SPECTRAL DENSITY (§15.247 (d))

The PKPSD method according to KDB 558074 was used to demonstrate compliance.

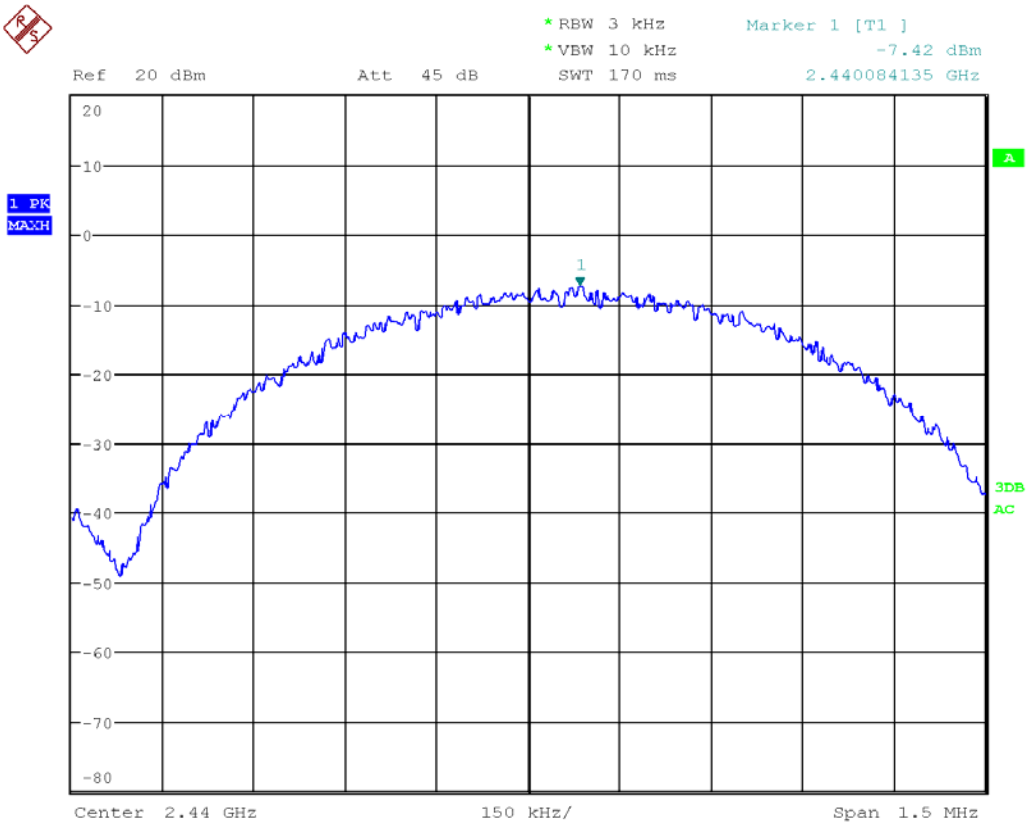
### 9.1. Results

Measurement results are shown in the following graphs.



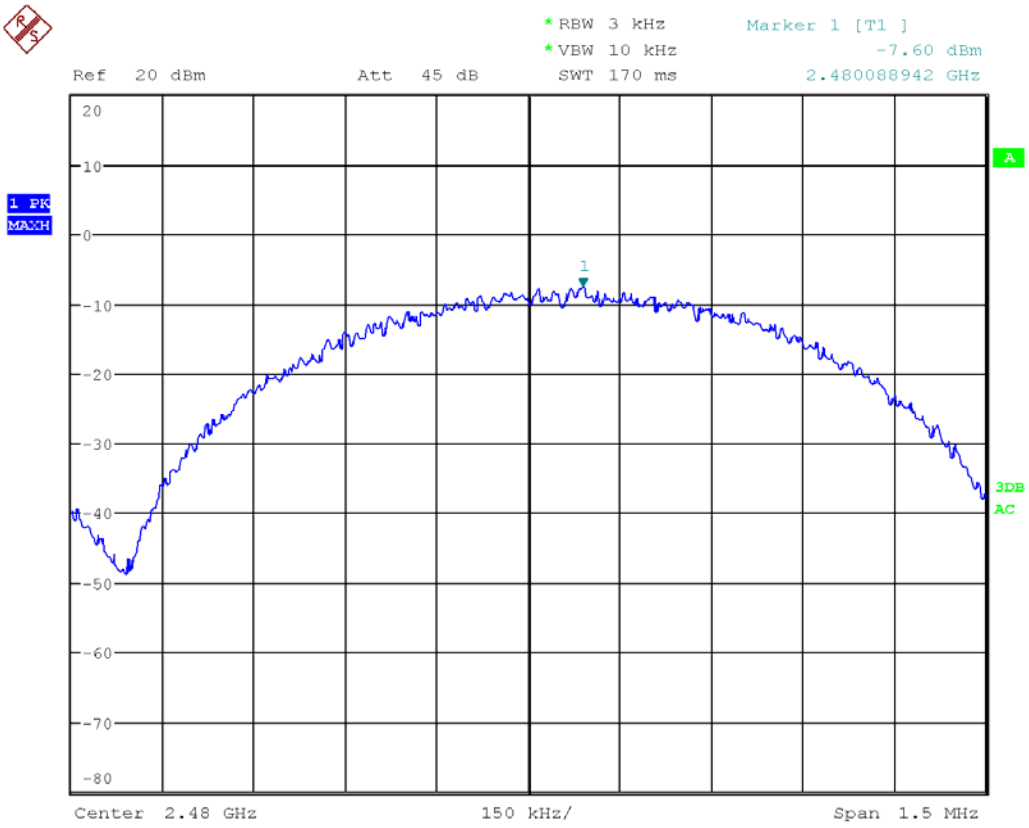

| Channel | SA Power Reading (dBm) | Cable loss (dB) | Peak PSD (dBm/3 kHz) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| Low | -7.33 | 0.6 | -6.73 | 8 | -14.73 | Pass |

**Graph 13: Transmitter peak power spectral density, low channel**




| Channel | SA Power Reading (dBm) | Cable loss (dB) | Peak PSD (dBm/3 kHz) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| Middle | -7.42 | 0.6 | -6.82 | 8 | -14.82 | Pass |

**Graph 14: Transmitter peak power spectral density, middle channel**




| Channel | SA Power Reading (dBm) | Cable loss (dB) | Peak PSD (dBm/3 kHz) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|---|
| High | -7.6 | 0.6 | -7.0 | 8 | -15 | Pass |

**Graph 15: Transmitter peak power spectral density, high channel**

## 10.0 RADIO FREQUENCY EXPOSURE (HAZARD)

**SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and <50mm**

| Frequency (MHz) | 5 | 10 | 15 | 20 | 25 | mm |
|---|---|---|---|---|---|---|
| 150 | 39 | 77 | 116 | 155 | 194 | SAR Test Exclusion Threshold (mW) |
| 300 | 27 | 55 | 82 | 110 | 137 | |
| 450 | 22 | 45 | 67 | 89 | 112 | |
| 435 | 16 | 33 | 49 | 66 | 82 | |
| 900 | 16 | 32 | 47 | 63 | 79 | |
| 1500 | 12 | 24 | 37 | 49 | 61 | |
| 1900 | 11 | 22 | 33 | 44 | 54 | |
| 2450 | 10 | 19 | 29 | 38 | 48 | |
| 3600 | 8 | 16 | 24 | 32 | 40 | |
| 5200 | 7 | 13 | 20 | 26 | 33 | |
| 5400 | 6 | 13 | 19 | 26 | 32 | |
| 5800 | 6 | 12 | 19 | 25 | 31 | |

| Frequency (MHz) | 30 | 35 | 40 | 45 | 50 | mm |
|---|---|---|---|---|---|---|
| 150 | 232 | 271 | 310 | 349 | 387 | SAR Test Exclusion Threshold (mW) |
| 300 | 164 | 192 | 219 | 346 | 274 | |
| 450 | 134 | 157 | 179 | 201 | 224 | |
| 435 | 98 | 115 | 131 | 148 | 164 | |
| 900 | 95 | 111 | 126 | 142 | 158 | |
| 1500 | 73 | 86 | 98 | 110 | 122 | |
| 1900 | 65 | 76 | 87 | 98 | 109 | |
| 2450 | 57 | 67 | 77 | 86 | 96 | |
| 3600 | 47 | 55 | 63 | 71 | 79 | |
| 5200 | 39 | 46 | 53 | 59 | 66 | |
| 5400 | 39 | 45 | 52 | 58 | 65 | |
| 5800 | 37 | 44 | 50 | 56 | 62 | |

**Note**: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz.

For extremities 10-g, the standalone transmitter is exempted from SAR if the below condition satisfied in conjunction with threshold power condition

$$\frac{\text{max. power of channel, including tune} - \text{up tolerance (mW)}}{\text{min. test separation distance (mm)}} * \sqrt{f(GHz)} \leq 7.5$$

Where

Minimum test separation distance ($mm$):
The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures to the outer surface of the device

Maximum power of channel ($mW$):
Time-averaged maximum conducted output power

$$\frac{8.9\ (\text{mW})}{5.0\ (\text{mm})} * \sqrt{2.45} = \mathbf{2.8} \leq 7.5$$

The EUT is exempted from SAR testing based on the test exclusion guidance in KDB 447498 D01 v05r02, clauses 4.3.1 and 4.3.2.

## 11.0 COMPLIANCE STATEMENT

Performance monitoring equipment, Model: Optieye S5 tested on behalf of Minelab Electronics Pty Ltd, **complied** with the requirements of 47 CFR, Part 15 Subpart C - Rules for Radio Frequency Devices (intentional radiators), Section 15.247 - Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

Summary of results are shown in below table:

| FCC Part 15 Subpart C | Test Performed | Results |
|---|---|---|
| 15.203 | Antenna requirement | Complied |
| 15.205 | Operation in restricted Band | Complied |
| 15.207 | Conducted emissions limits | N/A as the EUT is battery powered |
| 15.209 | Radiated emissions limits | Complied |
| 15.247 (a)(2) | Minimum 6 dB bandwidth | Complied |
| 15.247 (b)(3) | Peak output power | Complied |
| 15.247 (c) | Antenna gain > 6 dBi | N/A as the EUT uses integral antenna with less than 6 dBi gain and there is no external antenna connector |
| 15.247 (d) | Out of band emissions | Complied |
| 15.247 (e) | Peak power spectral density | Complied |
| 15.247 (f) | Hybrid systems | N/A as the EUT uses digital modulation |
| 15.247 (g) | Hopping channel application | N/A as EUT uses digital modulation |
| 15.247 (h) | Incorporation of intelligence within FHSS | N/A as EUT uses digital modulation |
| 15.247 (i) | Radio Frequency Hazard | Complied |

## 12.0 UNCERTAINTY

EMC Technologies has evaluated the equipment and the methods used to perform the emissions testing. The estimated measurement uncertainty for emissions tests shown within this report are as follows:

| | | |
|---|---|---|
| **Conducted Emissions:** | 9 kHz to 30 MHz | ±3.2 dB |
| **Radiated Emissions:** | 9 kHz to 30 MHz | ±4.1 dB |
| | 30 MHz to 300 MHz | ±5.1 dB |
| | 300 MHz to 1000 MHz | ±4.7 dB |
| | 1 GHz to 18 GHz | ±4.6 dB |
| | 18 GHz to 26 GHz | ±5.1 dB |
| **Peak Output Power:** | | ±1.5 dB |
| **Peak Power Spectral Density:** | | ±1.5 dB |

The above expanded uncertainties are based on standard uncertainties multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

## APPENDIX A

## MEASUREMENT INSTRUMENT DETAILS

| EQUIPMENT TYPE | MAKE/MODEL/ SERIAL NUMBER | LAST CAL. DD/MM/YY | DUE DATE DD/MM/YY | CAL. INTERVAL |
|---|---|---|---|---|
| **EMI RECEIVER** | R&S ESU40 Sn: 100182 (R-037) | 30/01/14 | 30/01/15 | 1 Year |
| | | | | |
| **ANTENNA** | EMCO 6502 Sn: 9311-2801 (A-231) | 20/08/2012 | 20/08/2015 | 3 Years |
| | Sunol Sciences JB6 Sn: A012312 (A-363) | 16/05/2014 | 16/05/2015 | 1 Year |
| | EMCO 3115 Sn: 8908-3282 (A-004) | 09/05/2013 | 09/05/2016 | 3 Years |
| | EMCO 3160-09 Sn: 66032 (A-307) | 12/11/2012 | 12/11/2015 | 3 Years |