EMC Bayswater Pty Ltd

18/88 Merrindale Drive Croydon South, Victoria, 3136, Australia
Telephone: +61 3 9761 5888
Facsimile: +61 3 8761 6547
Email: sales@emcbayswater.com.au
ABN: 49 112 221 333

EMC COMPLIANCE REPORT
In accordance with:
CFR47 FCC Part 15, Subpart C, 15.247

Schneider Electric Systems Canada Inc.

OM900

O-Series 900MHz FHSS Data Radio

REPORT: E1907-1185-1 Rev 1
DATE: December, 2019

This report replaces the previously issued report E1907-1185-1.
Please refer to section 2 of this report for details of any previously issued reports.

Certificate of Compliance

EMC Bayswater Test Report: E1907-1185-1 Rev 1
Issue Date: December, 2019

Test Sample(s):	O-Series 900MHz FHSS Data Radio
Model No:	OM900
Serial No:	234151
Variant:	TBUROM900-00001-DH0 *The above listed variant (OM900) was tested by EMC Bayswater Pty Ltd as a representative model and the results and conclusions within this report do not necessarily reflect compliance for other models. Please refer to section 5 of this report for variant information and the customer variant declaration.*
Client Details:	Mr Michael Gafanovitch Schneider Electric Systems Canada Inc. 415 Legget Drive, Kanata, Ontario, K2K 3R1, Canada Phone No: +1 613-591-1943 e-mail: michael.gafanovitch@se.com
Test Specification:	CFR47 FCC Part 15, Subpart C, 15.247

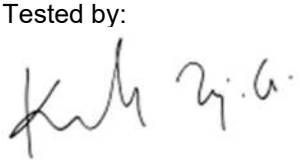
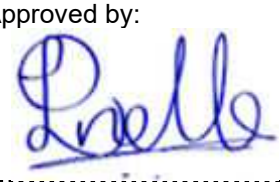
Results Summary:

15.109 - Digital device and Receiver radiated emission Limits	***Complied***
15.111 - Antenna power conduction limits for receivers	***Complied***
15.203 - Antenna requirement	***Complied***
15.207, 15.107 – AC Power line Conducted Emissions	***Not Tested****
15.247 (a)(1)(i) – Frequency hopping requirements	***Not Tested****
15.247 (b)(2) - Maximum peak conducted output power	***Complied***
15.247 (b)(4) – Radiated Transmit Power	***Complied***
15.247 (d) - Out of band emissions	***Complied***
15.247 (d) - Emissions on the Band edge	***Complies***
15.247 (d), 15.209 - Out of Band emissions (Radiated) – Restricted Bands	***Complied***
15.247 (i) - Radio frequency hazard	***Complied***

**Previously tested as specified by the customer*

Test Date(s):	30th & 31st of July, 1st, 2nd, 21st to 23rd and 27th of August, 2019
Test House (Issued By)	EMC Bayswater Pty Ltd 18/88 Merrindale Drive Croydon South, Victoria 3136, Australia FCC Accredited Test Firm Registration number: 527798 FCC Accredited Test Firm Designation number: AU0004 Phone No: +61 3 9761 5888 e-mail: sales@emcbayswater.com.au Fax No: +61 3 8761 6547 Web: www.emcbayswater.com.au

This is to certify that the necessary measurements were made by EMC Bayswater Pty Ltd, and that the Schneider Electric Systems Canada Inc., OM900 O-Series 900MHz FHSS Data Radio (Serial No: 234151), has been tested in accordance with requirements contained in the appropriate commission regulations.

Prepared & Tested by:	Tested by:	Approved by:	
			05/12/2019 15:46
Adnan Zaman (EMC Test Engineer)	Kalyan Tej Guntur (EMC Test Engineer)	Neville Liyanapatabendige (Manager)	Date

EMC Compliance Report
for
Schneider Electric Systems Canada Inc.

Contents

1. Introduction

Electromagnetic Compatibility (EMC) tests were performed on a Schneider Electric Systems Canada Inc., OM900, O-Series 900MHz FHSS Data Radio in accordance with the requirements of CFR47 FCC Part 15, Subpart C, 15.247.

Class 2 permissive change testing has been carried out to ensure that this previously certified device remains compliant.

2. Test Report Revision History

ISSUE	DATE	PAGES AFFECTED	AUTHORISED BY
E1907-1185-1	16/10/19	Original	Neville Liyanapatabendige (Manager)
E1907-1185-1 Rev 1	03/12/19	1. Pg. 2 – Added FCC Test Firm Designation number in Test House section. 2. Pg. 10 - Added FCC Test Firm Designation number in 6.1 Test Facility section. 3. Pg. 49 – Added Calibration Interval column in Appendix A - Test equipment table. 4. Test configuration photographs removed from Appendix B. The above changes were requested by customer. 5. Pg. 10 - Corrected FCC Test Firm Registration number in 6.1 Test Facility section.	Neville Liyanapatabendige (Manager)

3. Report Information

EMC Bayswater Pty Ltd reports apply only to the specific samples tested under the stated test conditions. All samples tested were in good operating condition throughout the entire test program unless otherwise stated. EMC Bayswater Pty Ltd does not in any way guarantee the later performance of the product/equipment. It is the manufacturer's responsibility to ensure that additional production units of the tested model are manufactured with identical electrical and mechanical components. EMC Bayswater Pty Ltd shall have no liability for any deductions, inference or generalisations drawn by the clients or others from EMC Bayswater Pty Ltd issued reports. This report shall not be used to claim, constitute or imply product endorsement by EMC Bayswater Pty Ltd. This report shall not be reproduced except in full (with the exception of the certificate on page 2) without the written approval of EMC Bayswater Pty Ltd. This document may be altered or revised by EMC Bayswater Pty Ltd personnel only, and shall be noted in the revision section of the document. Any alteration of this document not carried out by EMC Bayswater Pty Ltd will nullify the document.

4. Summary of Results

The EUT complied with applicable requirements of CFR47 FCC Part 15, Subpart C, 15.247. Worst-case results are tabled as follows:

Test	Result
15.109 - Digital device and Receiver radiated emission Limits	Complied by 4.4dB+
15.111 - Antenna power conduction limits for receivers	Complied by 3.3dB
15.247 (b)(2) - Maximum peak conducted output power	Complied by 0.9dB+
15.247 (b)(4) – Radiated Transmit power (Antenna gains greater than 6 dBi)	Complied by 1.7dB
15.247 (d) Out of band emissions – 100kHz, -20dBc	Complied by 40.2dB
15.247 (d) Emissions on the Band edge	Complied by 10.8dB
15.247 (d), 15.209 - Radiated Emissions – Restricted Bands	Complied by 1.5dB+

+Refer to relevant section for statement of Measurement Uncertainty

Table 1: Summary of test results

5. Product Sample, Configuration & Modifications

5.1. Product Sample Details

The EUT (Equipment Under Test), as supplied by the client, is described as follows:

Product:	O-Series 900MHz FHSS Data Radio
Model No:	OM900
Variant:	TBUROM900-00001-DH0*
	**The customer (Schneider Electric Systems Canada Inc.) declared testing of one variant as a worst case representative sample and declared that to be the "OM900 " (refer to Appendix D within this report for the customer declaration of worst case variant used for testing). Please note other than the unit(s) listed as a) "Product" and b) "Model", no other products/models or variant(s) were tested.*
Serial No:	234151
Firmware:	2.8.0.6974
Software:	N/A
Power Specifications:	3.3V DC and 5.0V DC.
Dimensions:	80mm x 55mm x 8mm (Width x Height x Length)
Weight:	30g
EUT Type:	Radio Modem Module
Orientation:	The EUT is typically used in one orientation only

Transmitter details:	Description:	OM900
	Type:	900MHz FHSS Data Radio
	Modulation:	2-Level GFSK
	Channels:	67 902.394 to 927.606MHz over 67 channels using 382kHz channel spacing. The frequency for any channel can be calculated using: Fc=902.394 + (channel number*0.382) MHz. Where: channel number = 0 to 66
	Max power:	+30dBm
	Antenna:	TBUMANTY-12-915 11-Element (12dBd) Yagi antenna, or: Laird FG9026 Colinear (6dBd) vertical antenna.
	FCC ID:	NI8OM900
	IC:	4630A-OM900
	CE mark:	No
	RCM Logo:	Yes
	Other ID:	CSA
	Environment:	Indoor or outdoor use (when mounted in equipment within a suitable enclosure)

(Customer supplied product information)

(Refer to photographs in Appendix B for views of the EUT)

5.2. Product description

The EUT (Equipment Under Test) has been described by the customer as follows:

"The product is used for SCADA telemetry infrastructure in the Oil/Water/Gas and Electricity markets. It transfers serial data traffic to and from remote sites."

(Customer supplied product description information)

The highest fundamental frequency generated or used within the EUT, or the highest frequency at which it operates as specified by the customer is 1131.639MHz.

5.3. Support Equipment

Support Equipment: 1	Description:	Linear DC Power Supply (inside chamber)
	Manufacturer:	Tektronix
	Model:	PS280
	Serial number:	TW52828
Support Equipment: 2	Description:	Laptop Personal Computer
	Manufacturer:	Dell
	Model:	Latitude D360
	Serial number:	CN-0WM416-12961-8CC-2759
Support Equipment: 3	Description:	O-Series EMC Test Base Board
	Manufacturer:	Trio Datacom
	Model:	194-01-291B
	Serial number:	001

5.4. Product operating modes

The customer described the products normal operation modes as the following:

"Polled response."

(Customer supplied product operating mode information)

5.5. Product operating mode for testing

1) Transmit, Hopping disabled: Transmits on a selected channel nearly continuously.
2) Receive, Hopping disabled: The radio remains on a fixed channel listening for a signal to synchronise with. No transmission occurs in this mode.

5.6. Configuration

The EUT was either configured by the customer or configured using the customer's instructions.

For transmission testing, the radio module was set to 128kbps over-air rate and random serial data is presented to it at maximum serial baud rate (115.2kbps) to allow near continuous transmission to occur. The radio is set by the operator to transmit at the maximum power allowable for each supplied antenna (while allowing for antenna gain and feeder loss).

For standby testing, the data transmission is disabled and the module is put into its receive state waiting continuously for a synchronisation signal.

The EUT was configured to operate at following Channels:

- Channel 00 (Bottom Channel) = 902.394MHz
- Channel 33 (Middle Channel) = 915.000MHz
- Channel 66 (Top Channel) = 927.606MHz

The antenna 1 port was connected to the TBUMANTY-12-915 11-Element (12dBd gain) Yagi antenna or Laird FG9026 Colinear (6dBd gain) vertical antenna vis a customer supplied 5m in length coaxial cable (Huber+Suhner, Model No: 84327541/13975, customer declared cable loss 1.5dB).

Transmitter parameters were configured prior to testing as per customer supplied configuration instruction document. Following power settings were applied to transmitter as per customer supplied instruction document.

- Yagi Antenna – Power setting: 23.3dBm
- FG9026 Colinear – Power setting: 29.3dBm

Antenna 2 port was left unterminated.

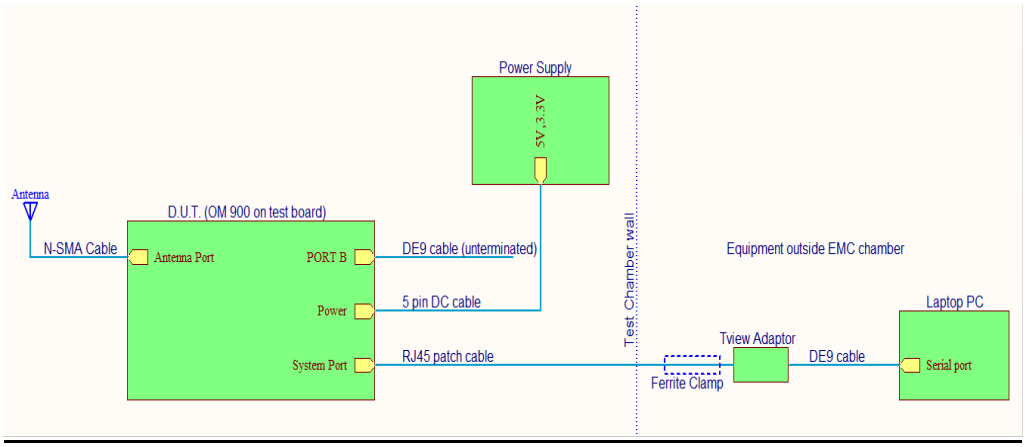


Figure 1: Customer supplied EUT configuration diagram

Port	Cable type	Brand	Model Number	Length (m)	Termination
Antenna (DUT)	SMA(M) – MMCX(M) adaptor	Hus-Tsan	SMA-59-TGG	N/A	User Antenna
Antenna	SMA(F) – SMA(F) adaptor	Amphenol	SF2992-6001	N/A	User Antenna
Antenna Coaxial Cable	SMA(M) -N(M)	Huber+Suhner	84327541/13975	5m	User Antenna
Port B Serial (DUT)	DE9 (M) – DE9 (F)	Kaibao	AWM2464	1.2m	Unterminated
Power (DUT)	4 wire open Figure 8	Altronic	W2136	0.5m	Power Supply
Port A Serial (DUT)	RJ45 (M) – RJ45 (M) UTP	Clipsal	2D4P5IPV3B	20m	Laptop PC
Port A Serial	DE9 (F) – RJ45 (F) adaptor	Trio	TVIEW+	N/A	Laptop PC
Port A Serial	DE9 (M) – DE9 (F)	Kaibao	AWM2464	1.2m	Laptop PC

Table 2: List of ports and associated cables/terminations used for testing

5.7. Modifications

EMC Bayswater did not modify the EUT.

6. Test Facility & Equipment

6.1. Test Facility

Conducted emissions & radiated emissions measurements were taken in the indoor Open Area Test Site (iOATS) facility at EMC Bayswater Pty Ltd, located at 18/88 Merrindale Drive, Croydon South, Victoria, 3136, Australia.

EMC Bayswater Pty Ltd FCC Test Firm registration number is 527798.

EMC Bayswater Pty Ltd FCC Test Firm Designation number is AU0004.

6.2. Test Equipment

Refer to Appendix A for the measurement instrument list.

7. Referenced Standards

CFR47 FCC Part 15, Subpart C

CFR47 FCC Part 15, Subpart B

ANSI C63.10 - 2013
American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

ANSI C63.4 - 2014
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.

8. Referenced Documents

Schneider Electric Systems Canada Inc. OM900 Module FCC/IC Testing Notes: July 2019.

9. Antenna Requirement – FCC 15.203

9.1. Requirements

As per section 15.203 of CFR47 FCC Part 15, Subpart C, 15.247:

- 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

Note: The EUT was tested with following antennas:

- TBUMANTY-12-915 11-Element (12dBd gain) Yagi antenna. N-type connector
- Laird FG9026 Colinear (6dBd gain) vertical antenna. N-type connector

9.2. Result

The antenna port for the EUT uses a unique connector (MMCX connectors). Therefore the EUT complied with the antenna requirements of CFR47 FCC Part 15, Subpart C, 15.247 Section 15.203.

10. Maximum Peak Conducted Output Power - FCC 15.247 (b)(2)

10.1. Test Procedure

The conducted output power measurements were performed in accordance with the section 7.8.5 of ANSI C63.10 - 2013.

The transmitter output was connected to a spectrum analyzer through a suitable attenuator. The Maximum Peak Conducted Output Power of the fundamental transmit frequency was measured using a spectrum analyzer with 1MHz RBW and 3MHz VBW using the peak detector and a suitable span to allow accurate measurement whilst capturing the full intentional transmission including side lobes. An offset for the measurement path insertion loss (attenuators and cables) was used to get a true measurement.

The EUT was tested on the top, middle and bottom channels.

AC mains input of the customer supplied AC/DC power supply was varied between 85% and 115% of nominal (Nominal 120VAC, 60Hz)

(Refer to photographs in Annex A for views of the test configuration)

10.2. Limits

For frequency hopping systems operating in the 902-928 MHz band:

Transmit operating frequency (MHz)	Peak Power (W)	Peak Power (dBm)
902 – 928 (systems employing at least 50 hopping channels)	1	30

Table 3: Limits – Maximum Peak Conducted Output Power

10.3. Test Results

The Maximum Peak Conducted Output Power measurements are tabulated below:

(Refer to plots Appendix C.1)

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	902.467	**29.0***	30.00	-1.0	Complied
Middle	915.074	28.9	30.00	-1.1	Complied
Top	927.543	28.8	30.00	-1.2	Complied

** Highest Conducted Peak power*

Table 4: Results for Maximum Peak Conducted Output Power – AC Mains Nominal - 120VAC, 60Hz

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	902.462	**29.0***	30.00	-1.0	Complied
Middle	915.077	28.9	30.00	-1.1	Complied
Top	927.505	28.9	30.00	-1.1	Complied

** Highest Conducted Peak power*

Table 5: Results for Maximum Peak Conducted Output Power – AC Mains 85% - 102VAC, 60Hz

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	902.470	**29.1***	30.00	-0.9	Complied
Middle	915.045	29.0	30.00	-1.0	Complied
Top	927.516	28.9	30.00	-1.1	Complied

** Highest Conducted Peak power*

Table 6: Results for Maximum Peak Conducted Output Power – AC Mains 115% - 138VAC, 60Hz

The measurement uncertainty was calculated at ±1.4dB. The reported uncertainty is an expanded uncertainty calculated using a coverage factor of approximately *k=2* which gives a level of confidence of approximately 95%.

Climatic Conditions	
Temperature:	16°C
Humidity:	57%
Atmospheric pressure:	1025.9 hPa

Table 7: Climatic conditions

Comments: All Maximum Peak Conducted Power measurements were below the specified limits.

Assessment: The EUT complied with the Maximum Peak Conducted Output Power requirements of CFR47 FCC Part 15, Subpart C, 15.247 section (b)(2).

11. Radiated Transmit Power - FCC 15.247 (b)(4)

11.1. Test Procedure

The Radiated Emissions were performed in accordance with the section 7.8.5 of ANSI C63.10 - 2013.

Radiated Emissions were measured 3 metres away from the EUT in the iOATS (indoor Open Area Test Site) facility, which is an ANSI C63.4 compliant semi-anechoic chamber with ground plane. The EUT was placed on a non-conductive support at a height of 0.8m above the ground plane.

For both horizontal and vertical antenna polarizations, the peak detector was set to MAX-HOLD and the range selected continuously scanned with 1MHz RBW and 3MHz VBW. The antenna height was varied from 1 to 4 metres and the turntable slowly rotated to find the worst case emissions. The maximum emissions were recorded.

Plots of the accumulated measurement data for both horizontal and vertical antenna polarizations, including all transducer and other measuring system correction factors were produced using commercially available compliant software (as listed in the test equipment list of this report).

The EUT was tested on the top, middle and bottom channels under normal conditions.

(Refer to photographs in Annex A for views of the test configuration)

11.2. Limits

For frequency hopping systems operating in the 902-928 MHz band:

Transmit operating frequency (MHz)	Radiated Peak Power (dBm)
902 – 928 (systems employing at least 50 hopping channels)	36

Table 8: Limits – Radiated Transmit Power

11.3. Test Results

The worst-case Radiated Transmit Power measurements are tabulated below:

Yagi Antenna

Channel	Frequency (MHz)	Measured E-Field Peak (dBµV/m)	EIRP (dBm	Limit (dBm)	Margin (dB)	Result
Bottom	902.462	128.8	33.5	36.0	-2.5	Complied
Middle	915.084	129.2	34.0	36.0	**-2.0***	Complied
Top	927.554	129.1	33.9	36.0	-2.1	Complied

**Worst-case emissions*

Table 9: Results for Radiated Transmit Power – Yagi Antenna Vertical

Channel	Frequency (MHz)	Measured E-Field Peak (dBµV/m)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	902.462	129.0	33.8	36.0	-2.8	Complied
Middle	915.084	129.6	34.4	36.0	-2.4	Complied
Top	927.554	129.5	34.3	36.0	**-1.7***	Complied

**Worst-case emissions*

Table 10: Results for Radiated Transmit Power – Yagi Antenna Horizontal

Colinear Antenna

Channel	Frequency (MHz)	Measured E-Field Peak (dBµV/m)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	902.299	128.4	33.2	36.0	-2.8	Complied
Middle	915.051	128.8	33.6	36.0	-2.4	Complied
Top	927.570	129.5	34.3	36.0	**-1.7***	Complied

**Worst-case emissions*

Table 11: Results for Radiated Transmit Power – Colinear Antenna - Vertical

The measurement uncertainty was calculated as follows:

Measurement frequency range	Calculated measurement uncertainty
30MHz to 1GHz	±4.65dB

The reported uncertainty is an expanded uncertainty calculated using a coverage factor of *k=2* which gives a level of confidence of approximately 95%. The referenced uncertainty standard specifies that determination of compliance shall be based on measurements without taking into account measurement uncertainty. However, the measurement uncertainty shall appear in the test report.

Climatic Conditions	
Temperature:	18°C
Humidity:	42%
Atmospheric pressure:	1022.4 hPa

Table 12: Climatic conditions

Calculation: The above results are based upon the following calculation:

$$E = V_{PK} + AF - G_{Amp} + L_C$$

Where:

E = E-field in dBμV/m
$V_{QP/PK/AV}$ = Measured Voltage (Peak) in dBμV
AF = Antenna Factor in dB(/m)
L_C = Cable and attenuator Loss in dB
G_{Amp} = Pre Amplifier Voltage Gain in dB

Example calculation:

$E = V_{PK} + AF - G_{Amp} + L_C$
E = 30dBμV + 12dB/m - 0dB + 2.3dB
E = 44.3 dBμV/m
EIRP = ((E×d)^2) / 30 in Watts
EIRP = E[dBμV/m] + 20 log (d[m]) − 104.77 in dBm
d = measurement distance =3m

Comments: All Radiated Transmit Power measurements were below the specified limits.

Assessment: The EUT complied with the Radiated Transmit Power requirements of CFR47 FCC Part 15, Subpart C, 15.247 section (b)(4).

12. Out of Band emissions (Radiated) – Restricted Bands – FCC 15.247 (d)

12.1. Requirements

As per section 15.247(d) of 47 CFR Part 15 Subpart C:

- 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, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of section 15.247 of 47 CFR Part 15 Subpart C, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section 15.209(a) of 47 CFR Part 15 Subpart C is not required. In addition, radiated emissions which fall in the restricted bands, as defined in section 15.205(a) of 47 CFR Part 15 Subpart C, must also comply with the radiated emission limits specified in section15.209(a) of 47 CFR Part 15 Subpart C (see §15.205(c) of 47 CFR Part 15 Subpart C).

As per section 47 CFR Part 15 Subpart C section 15.209 (Radiated emissions, general requirements) the EUT is required to meet the limits that permit the highest field strength of the following table for the radiated emissions which fall in the restricted bands, as defined in section 15.205(a) of 47 CFR Part 15 Subpart C :

Frequency Range (MHz)	Limits at 3m (dBμV/m)
0.009 to 0.490	128.5 to 93.8
0.490 to 1.705	73.8 to 62.9
1.705 to 30.0	69.5
30.0 to 88	40.0
88.0 to 216.0	43.5
216.0 to 960.0	46.0
Above 960	54.0
NOTE: The lower limit shall apply at the transition frequency.	

Note 1: as per CFR FCC Part 15 section15.209 (d) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector

Note 2: as per CFR FCC Part 15.35 (b) Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz. When average radiated emission measurements are specified in this part, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. Unless otherwise specified, e.g., see §§15.250, 15.252, 15.253(d), 15.255, 15.256, and 15.509 through 15.519 of this part, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device, e.g., the total peak power level. Note that the use of a pulse desensitization correction factor may be needed to determine the total peak emission level. The instruction manual or application note for the measurement instrument should be consulted for determining pulse desensitization factors, as necessary.

Table 13: Limits for Radiated Spurious Emissions at distance of 3m – Restricted Bands

12.2. Test Procedure

The Radiated Emissions were performed in accordance with the section 6.3 to 6.6 of ANSI C63.10 - 2013.

Radiated Emissions were measured 3 metres (from 9kHz to 25GHz) away from the EUT in the iOATS (indoor Open Area Test Site) facility, which is an ANSI C63.4 compliant semi-anechoic chamber with ground plane. The EUT was placed on a non-conductive support at a height of 0.8m above the ground plane.

In the frequency range of 9kHz to 30MHz, an Active loop antenna was used. For X, Y and Z antenna polarizations, the peak detector was set to MAX-HOLD and the range selected continuously scanned. The measuring antenna was positioned at 1m fixed height and the turntable slowly rotated. The peak preview measurements were performed with a resolution bandwidth of 200Hz (9kHz to 150kHz), 9kHz (150kHz to 30MHz) and a video bandwidth of 30kHz. Peak emissions that exceeded the limit or were close to the applicable limit were investigated further. The frequency of each emissions was then accurately determined. Each emission of interest was then in-turn maximised by using the turntable to rotate the EUT through 360 degrees to find the worst-case emission arrangement. Quasi peak measurements were then performed using a measuring time of no less than 15 seconds. The final quasi-peak measurements were performed using a receiver bandwidth of 6dB and a resolution bandwidth of 200Hz (9kHz to 150kHz) and 9kHz (150kHz to 30MHz).

In the frequency range of 30MHz to 1GHz, a Biconilog antenna was used. For both horizontal and vertical antenna polarizations, the peak detector was set to MAX-HOLD and the range selected continuously scanned. The measuring antenna was positioned at 4 different fixed height positions and the turntable slowly rotated. The peak preview measurements were performed with a resolution bandwidth of 120kHz and a video bandwidth of 300kHz. Peak emissions that exceeded the limit or were close to the applicable limit were investigated further. The frequency of each emissions was then accurately determined. Each emission of interest was then in-turn maximised by using the turntable to rotate the EUT through 360 degrees and varying the height of the antenna between 1 and 4 metres to find the worst-case emission arrangement. Quasi peak measurements were then performed using a measuring time of no less than 15 seconds. The final quasi-peak measurements were performed using a receiver bandwidth of 6dB and a resolution bandwidth of 120kHz.

In the frequency range 1.0GHz to 9.5GHz a Horn antenna was used and an area of 3m x 3m was covered between the antenna and the EUT using RF absorbing material with a rated attenuation more than 20dB over the frequency range. The height of the horn antenna was varied using the antenna bore-sighting technique and the turntable slowly rotated to maximise the emissions. For both horizontal and vertical antenna polarizations, the Peak and Average preview measurements were performed with a resolution bandwidth of 1 MHz and a video bandwidth of 3MHz. Peak and average emissions that exceeded the applicable limit or were close to the applicable limit were investigated further. Each emission of interest was then in-turn maximised by using the turntable to rotate the EUT through 360 degrees and the antenna height varied (if applicable, using the antenna bore-sighting technique) to find the worst-case emission arrangement. Peak

and CISPR Average measurements were then performed using a measuring time of no less than 15 seconds, the maximum emission level in the observed duration was recorded as the final result. The final peak and CISPR Average measurements were performed using a receiver bandwidth of 6dB and a resolution bandwidth of 1 MHz. Peak and Average measurements were performed at spot frequencies where the peak or average emission was close to, or exceeded the applicable limit line with the EUT rotation and antenna height varied (if applicable, using the antenna bore-sighting technique) to produce the highest emission.

Plots of the accumulated measurement data for both horizontal and vertical antenna polarizations, including all transducer and other measuring system correction factors were produced using commercially available compliant software (as listed in the test equipment list of this report).

(Refer to photographs in Annex A for views of the test configurations)

12.3. Test Results

Transmitter Spurious Emissions measurements are detailed as follows:

(Refer to graphs in Appendix C.3, C.4 & C.5)

Restricted Bands – Yagi Antenna

Operating Channel: Bottom, Middle and Top				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result peak (dBµV/m)**	**Limit Quasi-peak/ Average (dBµV/m)**	**Delta limit (dB)**
X	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			
Y	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			
Z	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			

Table 14: Transmitter Spurious Emissions – 9kHz to 30MHz – Yagi Antenna

Operating Channel: Bottom				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.7	46.0	-5.4
	322.989	34.9	46.0	-11.2
	400.007	42.8	46.0	**-3.2***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 15: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Horizontal

Operating Channel: Bottom				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.2	46.0	-5.8
	323.086	43.1	46.0	-2.9
	400.007	43.2	46.0	**-2.8***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 16: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Vertical

Operating Channel: Middle				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.0	46.0	-6.1
	400.007	44.5	46.0	**-1.5***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 17: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Horizontal

Operating Channel: Middle				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	400.007	43.0	46.0	**-3.0***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 18: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Vertical

Operating Channel: Top				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.6	46.0	-5.4
	323.086	43.0	46.0	-3.0
	400.007	43.6	46.0	**-2.4***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 19: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Horizontal

Operating Channel: Top				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	323.134	40.4	46.0	-5.6
	400.007	43.2	46.0	**-2.8***
Vertical	Peak preview emissions >10dB below limit or no significant emissions above the noise floor observed			

**Worst-case emissions*

Table 20: Transmitter Spurious Emissions – 30MHz to 1GHz – Yagi Antenna Vertical

Operating Channel: Bottom (902.394MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1041.300	44.3	54.0	**-9.6***
					1106.550	43.0	54.0	-11.0
					3319.460	31.0	54.0	-23.0
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.300	41.3	54.0	**-12.6***
					3609.120	34.0	54.0	-20.0
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 21: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Horizontal

Operating Channel: Bottom (902.394MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	2279.720	47.7	74.0	**-26.2***	1106.500	43.0	54.0	**-11.0***
	2706.900	45.0	74.0	-29.0	2279.980	33.5	54.0	-20.5
	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				2707.160	35.6	54.0	-18.4
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	2706.900	44.7	74.0	**-29.3***	1040.050	44.8	54.0	**-9.2***
	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.550	42.3	54.0	-11.7
					2707.160	34.1	54.0	-19.9
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 22: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Vertical

Operating Channel: Middle (915MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1039.850	44.3	54.0	**-9.7***
					1119.100	43.0	54.0	-11.0
					2279.980	33.7	54.0	-20.3
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.950	41.3	54.0	-32.6
					3357.160	32.7	54.0	-21.2
					3659.760	35.0	54.0	**-19.0***
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 23: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Horizontal

Operating Channel: Middle (915MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	2706.640	42.2	74.0	-31.8	1119.150	43.0	54.0	**-11.0***
	3357.420	45.1	74.0	**-28.9***	2279.980	33.9	54.0	-20.1
	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				3357.160	30.2	54.0	-23.8
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	2745.120	43.1	74.0	-30.8	1041.000	44.0	54.0	**-9.9***
	3356.900	49.1	74.0	**-24.9***	1118.950	41.6	54.0	-12.4
	3660.000	45.0	74.0	-29.0	2745.120	36.3	54.0	-17.6
	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				3357.160	32.3	54.0	-21.7
					3660.240	35.2	54.0	-18.8
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 24: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Vertical

Operating Channel: Top (927.606MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1041.000	43.7	54.0	**-10.3***
					1131.600	42.6	54.0	-11.3
					2706.640	32.6	54.0	-21.4
					6493.600	36.3	54.0	-17.6
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.750	41.5	54.0	**-12.5***
					2783.080	30.3	54.0	-23.6
					3709.920	35.1	54.0	-18.9
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 25: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Horizontal

Operating Channel: Top (927.606MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.750	42.9	54.0	**-11.1***
					2706.640	32.4	54.0	-21.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1038.800	45.3	54.0	-8.7
					1041.250	45.7	54.0	**-8.3***
					1131.700	41.3	54.0	-12.8
					2782.820	33.8	54.0	-20.2
					3710.160	37.3	54.0	-16.7
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 26: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Yagi Antenna Vertical

Restricted Bands – Colinear Antenna

Operating Channel: Bottom, Middle and Top				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result peak (dBµV/m)**	**Limit Quasi-peak/ Average (dBµV/m)**	**Delta limit (dB)**
X	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			
Y	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			
Z	Peak preview emissions >20dB below limit or no significant emissions above the noise floor observed			

Table 27: Transmitter Spurious Emissions – 9kHz to 30MHz – Colinear Antenna

Operating Channel: Bottom				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.6	46.0	-5.4
	247.038	34.4	46.0	-11.6
	279.969	37.2	46.0	-8.8
	322.504	37.0	46.0	-9.0
	400.007	43.7	46.0	**-2.3***
	401.268	41.9	46.0	-4.1
	960.036	45.6	54.0	-8.3
Vertical	240.005	37.6	46.0	**-8.4***
	322.504	34.9	46.0	-11.1
	325.026	31.2	46.0	-14.8
	961.249	45.1	54.0	-8.9

**Worst-case emissions*

Table 28: Transmitter Spurious Emissions – 30MHz to 1GHz – Colinear Antenna

Operating Channel: Middle				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.5	46.0	-5.5
	400.007	43.8	46.0	**-2.2***
	401.268	41.9	46.0	-4.1
	408.688	36.3	46.0	-9.7
Vertical	240.005	37.6	46.0	-8.4
	399.958	36.4	46.0	-9.6
	960.036	46.0	54.0	**-8.0***

**Worst-case emissions*

Table 29: Transmitter Spurious Emissions – 30MHz to 1GHz – Colinear Antenna

Operating Channel: Top				
Measurement Antenna Polarisation	**Frequency (MHz)**	**Result Quasi-peak (dBµV/m)**	**Limit Quasi-peak (dBµV/m)**	**Delta limit (dB)**
Horizontal	240.005	40.8	46.0	-5.2
	275.556	34.7	46.0	-11.3
	280.018	38.0	46.0	-8.0
	323.086	43.6	46.0	-2.4
	400.007	43.8	46.0	**-2.2***
	401.268	42.1	46.0	-4.0
	402.480	39.4	46.0	-6.7
Vertical	37.518	30.0	40.0	-10.0
	240.005	38.0	46.0	-8.0
	960.036	46.1	54.0	**-7.9***

**Worst-case emissions*

Table 30: Transmitter Spurious Emissions – 30MHz to 1GHz – Colinear Antenna

Operating Channel: Bottom (902.394MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.400	43.3	54.0	**-10.6***
					2707.160	29.9	54.0	-25.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.500	42.8	54.0	-11.1
					2707.160	45.0	54.0	**-9.0***
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 31: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Colinear Antenna

Operating Channel: Middle (915MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1119.050	42.6	54.0	**-11.3***
					2278.680	32.6	54.0	-21.4
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.950	42.8	54.0	**-11.2***
					3357.160	31.8	54.0	-22.2
					4575.120	37.6	54.0	-16.4
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 32: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Colinear Antenna

Operating Channel: Top (927.606MHz)								
Measurement Antenna Polarisation	**Peak Measurements**				**Average Measurements**			
	Frequency (MHz)	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**	**Frequency (MHz)**	**Result (dBµV/m)**	**Limit (dBµV/m)**	**Delta Limit (dB)**
Horizontal	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.650	43.6	54.0	**-10.4***
					2783.080	38.1	54.0	-15.9
					3710.640	36.5	54.0	-17.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	All other Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.700	42.1	54.0	-11.8
					2782.820	39.8	54.0	-14.2
					3710.400	43.3	54.0	**-10.6***
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 33: Transmitter Spurious Emissions – 1GHz to 9.5GHz – Colinear Antenna

The measurement uncertainty was calculated as follows:

Measurement frequency range	Calculated measurement uncertainty
30MHz to 1GHz	±4.65dB
1GHz to 6GHz	±4.83dB
6GHz to 18GHz	±4.49dB

The reported uncertainty is an expanded uncertainty calculated using a coverage factor of *k=2* which gives a level of confidence of approximately 95%. The referenced uncertainty standard specifies that determination of compliance shall be based on measurements without taking into account measurement uncertainty. However, the measurement uncertainty shall appear in the test report.

Climatic Conditions	
Temperature:	22 – 26°C
Humidity:	49 – 56%
Atmospheric pressure:	1010.2 to 1011.6 hPa

Table 34: Climatic conditions

Calculation: The above results are based upon the following calculation:

$$E = V_{QP/PK/AV} + AF - G_{Amp} + L_C$$

Where:

E	=	E-field in dBμV/m
$V_{QP/PK/AV}$	=	Measured Voltage (Quasi Peak, Peak or Average) in dBμV
AF	=	Antenna Factor in dB(/m)
L_C	=	Cable and attenuator Loss in dB
G_{Amp}	=	Pre Amplifier Voltage Gain in dB

Example calculation:

$E = V_{PK} + AF - G_{Amp} + L_C$
$E = 30dB\mu V + 12dB/m - 0dB + 2.3dB$
$E = 44.3\ dB\mu V/m$

Comments: All Transmitter Out of Band emissions (Radiated Spurious Emissions) measurements were below the specified limits.

Radiated Emissions measurements were made up to the 10th harmonic.

Assessment: The EUT complied with the Out of Band Emissions (Radiated Emissions) – Restricted Bands requirements of CFR47 FCC Part 15, Subpart C, 15.247 (d).

13. Out of Band emissions (100kHz, -20dBc) - FCC 15.247 (d)

13.1. Test Procedure

The Band edge Emissions were performed in accordance with the section 7.8.8 of ANSI C63.10 – 2013.

Measurements were performed at the antenna port.

The EUT was placed inside a shielded chamber. The transmitter output was connected to a spectrum analyzer through a suitable attenuator. The out of band emissions were measured by spectrum analyzer with 100kHz RBW and 300kHz VBW using the peak detector. All measuring system correction factors (attenuators and cables) were used to get a true measurement.

(Refer to photographs in Annex A for views of the test configuration)

13.2. Limits

As per section 15.247(d) of 47 CFR Part 15 Subpart C:

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, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of section 15.247 of 47 CFR Part 15 Subpart C, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section 15.209(a) of 47 CFR Part 15 Subpart C is not required. In addition, radiated emissions which fall in the restricted bands, as defined in section 15.205(a) of 47 CFR Part 15 Subpart C, must also comply with the radiated emission limits specified in section15.209(a) of 47 CFR Part 15 Subpart C (see §15.205(c) of 47 CFR Part 15 Subpart C).

The measured highest fundamental channel peak conducted power was 29.0dBm

Frequency Range (MHz)	Limits (dBm)
30MHz and 10GHz	9.0

Table 35: Limits for Band edge - -20dBc (Non-restricted bands)

13.3. Test Results

Out of Band emissions measurements are detailed as follows:

Channel	Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Delta limit (dB)
Bottom	1804.625	-42.9	9.0	-51.9
	2706.919	-53.5	9.0	-62.5
	3609.900	-60.7	9.0	-69.7
	5413.343	-50.9	9.0	-59.9
	6313.650	-67.3	9.0	-76.3
	7218.486	-56.7	9.0	-65.7
	8120.077	-60.6	9.0	-69.6
	9023.081	-58.2	9.0	-67.2
Middle	1830.026	-53.8	9.0	-62.8
	2745.255	-58.7	9.0	-67.7
	3660.340	-62.0	9.0	-71.0
	5490.050	-54.4	9.0	-63.4
	6404.994	-61.1	9.0	-70.1
	7319.343	-61.4	9.0	-70.4
	8234.350	-63.7	9.0	-72.7
	9149.241	-64.5	9.0	-73.5
Top	1855.381	-34.8	9.0	-43.8
	2782.830	-31.2	9.0	**-40.2***
	3710.700	-58.6	9.0	-67.6
	4637.580	-34.5	9.0	-43.5
	5565.092	-49.9	9.0	-58.9
	6492.642	-44.8	9.0	-53.8
	7421.510	-47.7	9.0	-56.7
	8349.200	-49.8	9.0	-58.8
	9275.218	-49.0	9.0	-58.0

**Worst-case emissions*

Table 36: Transmitter Spurious Emissions - -20dBc/100kHz

The measurement uncertainty for Out of Band emissions measurement was calculated at ±1.4dB. The reported uncertainty is an expanded uncertainty calculated using a coverage factor of approximately *k=2* which gives a level of confidence of approximately 95%.

Comments: All Transmitter Out of Band emissions measurements were below the specified limits (-20dBc).

Conducted measurements were made up to the 10th harmonic.

Measurements were performed at the antenna port 1.

Assessment: The EUT complied with the Out of Band Emissions (100kHz, -20dBc) requirements of CFR47 FCC Part 15, Subpart C, 15.247 (d).

14. Band edge Measurement – FCC 15.247 (d)

14.1. Test Procedure

Band edge measurement (100kHz, -20dB fc)
The Band edge Emissions were performed in accordance with the section 7.8.6 of ANSI C63.10 - 2013

Measurements were performed at the antenna port.

The EUT was placed inside a shielded chamber. The transmitter output was connected to a spectrum analyzer through a suitable attenuator. The –20dB down points from the highest emission level observed in the band of operation were measured by spectrum analyzer with 100kHz RBW and 300kHz VBW using the peak detector and a suitable span to allow accurate measurements to whilst capturing the full intentional transmission including side lobes.

Band edge measurements were performed both on single channels and with the hopping enabled.

(Refer to photograph in Annex A for views of the test configuration)

14.2. Limits

As per FCC section 15.247 Part (d) the EUT shall meet the requirements that in any given 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.

The measured highest fundamental channel peak conducted power was 29.0dBm

Band edge Frequencies	Limits (dBm)
902MHz and 928MHz	9.0

Table 37: Limits for Band edge - -20dBc (Non-restricted bands)

14.3. Test Results

Band edge measurements are detailed as follows:

(Refer to graphs in Appendix C.2)

Channel	Frequency (MHz)	Result dBc	Level (dBm)	Limit (dBm)	Delta limit (dB)
Bottom	902	-30.9	-1.9	+9.0	-10.8
Top	928	-34.5	-5.5	+9.0	-14.4

Table 38: Transmitter Spurious Emissions –Band edge – single channels

Frequency (MHz)	Result dBc	Level (dBm)	Limit (dBm)	Delta limit (dB)
902	-44.1	-15.1	+9.0	-24.0
928	-43.5	-14.5	+9.0	-23.4

Table 39: Transmitter Spurious Emissions –Band edge – with hopping

The frequency measurement uncertainty for Band edge Measurement (100kHz, -20dB) was calculated at ±5.7kHz. The reported uncertainty is an expanded uncertainty calculated using a coverage factor of *k=2* which gives a level of confidence of approximately 95%.

The measurement uncertainty for Band edge Measurement was calculated at ±1.4dB (amplitude). The reported uncertainty is an expanded uncertainty calculated using a coverage factor of approximately *k=2* which gives a level of confidence of approximately 95%.

Comments: The band edge measurements were below the -20dBc limits.

Measurements were performed at the antenna port 1.

Band edges were not fall into restricted bands.

Assessment: The EUT complied with the Band Edge requirements of CFR47 FCC Part 15, Subpart C, 15.247 (d).

15. Digital device and Receiver radiated emission Limits – FCC 15.109

15.1. Test Procedure

Radiated Emissions were measured 3 metres (from 30MHz to 6GHz) away from the EUT in the iOATS (indoor Open Area Test Site) facility, which is an ANSI C63.4 compliant semi-anechoic chamber with ground plane.

In the frequency range of 30MHz to 1GHz, a Biconilog antenna was used. For both horizontal and vertical antenna polarizations, the peak detector was set to MAX-HOLD and the range selected continuously scanned. The measuring antenna was positioned at 4 different fixed height positions and the turntable slowly rotated. The peak preview measurements were performed with a resolution bandwidth of 120 kHz and a video bandwidth of 300 kHz. Peak emissions that exceeded the limit or were close to the applicable limit were investigated further. The frequency of each emissions was then accurately determined. Each emission of interest was then in-turn maximised by using the turntable to rotate the EUT through 360 degrees and varying the height of the antenna between 1 and 4 metres to find the worst-case emission arrangement. Quasi peak measurements were then performed using a measuring time of no less than 15 seconds. The final quasi-peak measurements were performed using a receiver bandwidth of 6dB and a resolution bandwidth of 120 kHz.

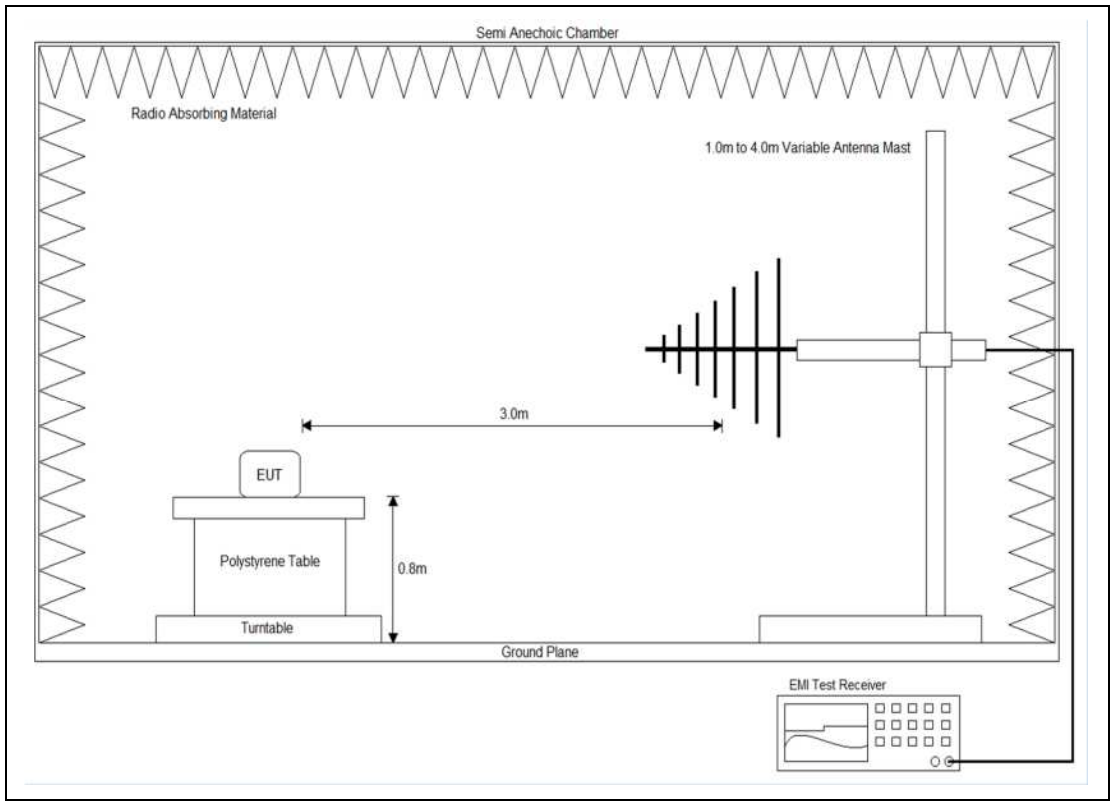


Figure 2: Test setup – 30MHz to 1GHz

In the frequency range 1.0GHz to 6GHz a Horn antenna was used and an area of 3m x 3m was covered between the antenna and the EUT using RF absorbing material with a rated attenuation more than 20dB over the frequency range. The height of the horn antenna was varied using the antenna bore-sighting technique and the turntable slowly rotated to maximise the emissions. For both horizontal and vertical antenna polarizations, the Peak and Average preview measurements were performed with a resolution bandwidth of 1 MHz and a video bandwidth of 3 MHz. Peak and average emissions that exceeded the applicable limit or were close to the applicable limit were investigated further. Each emission of interest was then in-turn maximised by using the turntable to rotate the EUT through 360 degrees and the antenna height varied (if applicable, using the antenna bore-sighting technique) to find the worst-case emission arrangement. Peak and CISPR Average measurements were then performed using a measuring time of 1 second with a number of repetitions to ensure a minimum observation time of 15 seconds, the maximum emission level in the observed duration was recorded as the final result. The final peak and CISPR Average measurements were performed using a receiver bandwidth of 6dB and a resolution bandwidth of 1 MHz. Peak and Average measurements were performed at spot frequencies where the peak or average emission was close to, or exceeded the applicable limit line with the EUT rotation and antenna height varied (if applicable, using the antenna bore-sighting technique) to produce the highest emission.

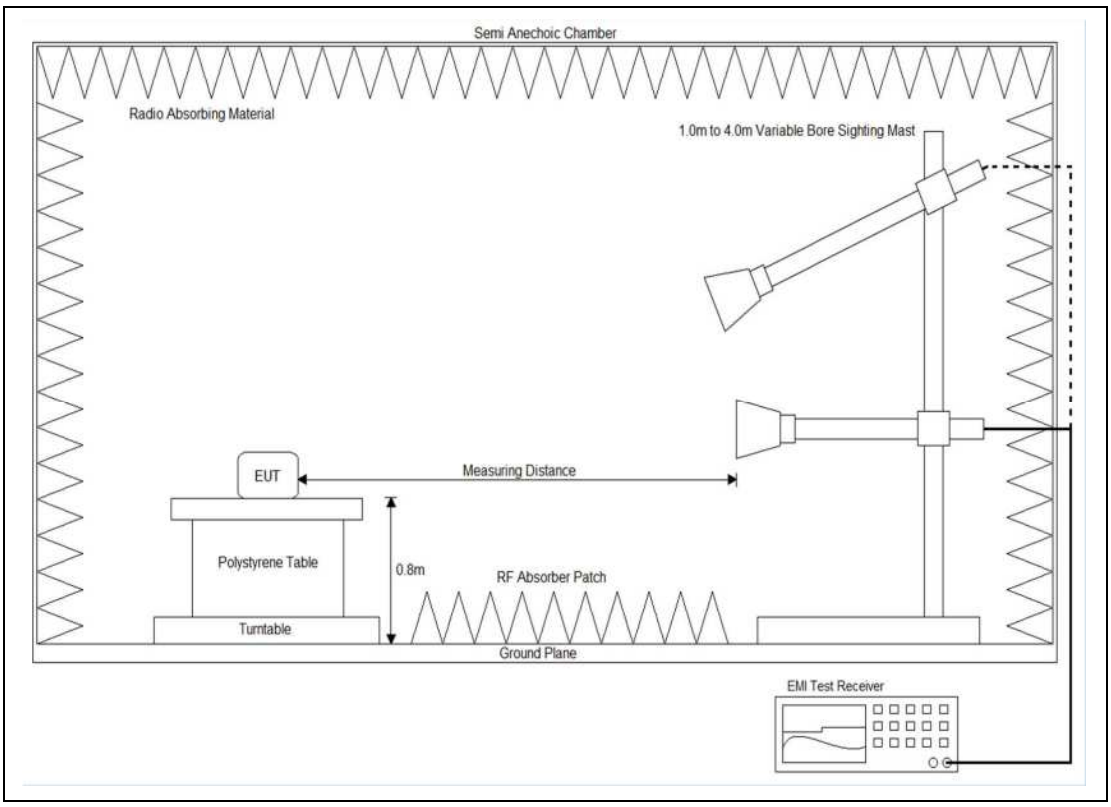


Figure 3: Test setup – above 1GHz

Horn	Frequency (GHz)	Degrees	Measuring Distance (m)	Illumination (m)	Measuring Distance (m	Illumination (m)
EMCO 3115	1 to 2	55.00	3	3.12	1	1.04
	2 to 4	50.00	3	2.80	1	0.93
	4 to 6	34.00	3	1.83	1	0.61
AH SAS-584	5.8 to 8.2	30.00	3	1.61	1	0.54
AH SAS-585	8.2 to 12.4	30.00	3	1.61	1	0.54
AH SAS-586	12.4 to 18	30.00	3	1.61	1	0.54
AH SAS 587	18 to 26.5	30.00	3	1.61	1	0.54
AH SAS 588	26.5 to 40	31.00	3	1.66	1	0.55

Table 1: Worst case Maximum size of measuring envelope for Horn antennas

Plots of the accumulated measurement data for both horizontal and vertical antenna polarizations, including all transducer and other measuring system correction factors were produced using commercially available compliant software (as listed in the test equipment list of this report).

(Refer to photographs in Annex A for views of the test configuration)

15.2. Limits

The EUT shall meet the limits in the following table:

Frequency Range (MHz)	Limits (dBµV/m)	
	Quasi-Peak	
30 to 88	40.0	
88 to 216	43.5	
216 to 960	46.0	
960 to 1000	54.0	
Frequency Range (MHz)	**Limits (dBµV/m)**	
	Average	**Peak**
Above 1000	54.0	74.0
NOTE The lower limit shall apply at the transition frequency.		

Table 40: Limits for Radiated Emissions at distance of 3m – Class B for Receiver Local oscillator emissions

Frequency Range (MHz)	Limits (dBμV/m)	
	Quasi-Peak	
30 to 88	49.0	
88 to 216	53.5	
216 to 960	56.4	
960 to 1000	59.5	
Frequency Range (MHz)	**Limits (dBμV/m)**	
	Average	**Peak**
Above 1000	59.5	79.5
NOTE The lower limit shall apply at the transition frequency.		

Table 41: Limits for Radiated Emissions at distance of 3m – Class A for Digital Device emissions

15.3. Test Results

Radiated Emissions measurements are tabulated below.

(Refer to graphs Appendix C.6)

Measurement Antenna Polarisation	Frequency (MHz)	Result Quasi-peak (dBμV/m)	Limit Quasi-peak (dBμV/m)	Delta limit (dB)
Horizontal	359.994	43.1	56.4	-13.3
	480.032	44.3	56.4	-12.1
	639.985	45.8	56.4	-10.6
	679.997	45.6	56.4	-10.8
	720.010	47.6	56.4	**-8.8***
	800.035	45.6	56.4	-10.8
Vertical	80.004	38.4	49.0	**-10.6***
	320.030	37.3	56.4	-19.1
	560.008	39.5	56.4	-16.9
	600.021	40.4	56.4	-16.0
	640.033	43.0	56.4	-13.4
	720.058	41.7	56.4	-14.7

**Worst-case emissions*

Table 42: Receiver Radiated Emission – 30MHz to 1GHz – Digital Device – Yagi V – CH 0

Measurement Antenna Polarisation	Frequency (MHz)	Result Quasi-peak (dBµV/m)	Limit Quasi-peak (dBµV/m)	Delta limit (dB)
Horizontal	359.994	43.9	56.4	-12.5
	480.032	44.1	56.4	-12.3
	639.985	46.4	56.4	-10.0
	679.997	46.7	56.4	-9.7
	720.010	47.7	56.4	**-8.7***
	799.986	46.4	56.4	-10.0
Vertical	80.004	38.2	49.0	**-10.8***
	94.990	33.4	53.5	-20.1
	359.994	37.5	56.4	-18.9
	600.021	39.5	56.4	-16.9
	639.985	45.0	56.4	-11.4
	720.010	45.1	56.4	-11.3

**Worst-case emissions*

Table 43: Receiver Radiated Emission – 30MHz to 1GHz – Digital Device – Yagi H – CH 33

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.340	49.1	54.0	**-4.9***
					3319.460	45.3	54.0	-8.7
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.340	46.9	54.0	**-7.1***
					3319.460	39.5	54.0	-14.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 44: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 0 – Yagi Horizontal

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.340	49.6	54.0	**-4.4***
					3319.460	44.3	54.0	-9.7
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1106.340	46.0	54.0	**-8.0***
					3319.460	39.0	54.0	-15.0
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 45: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 0 – Yagi Vertical

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.820	47.4	54.0	**-6.6***
					3357.160	45.5	54.0	-8.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.820	46.7	54.0	**-7.3***
					3357.160	40.5	54.0	-13.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 46: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 33 – Yagi Horizontal

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.820	47.7	54.0	**-6.3**
					3357.160	44.5	54.0	-9.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1118.820	44.6	54.0	**-9.4***
					3357.160	39.1	54.0	-14.9
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 47: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 33 – Yagi Vertical

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.560	48.6	54.0	**-5.4***
					3395.120	41.5	54.0	-12.5
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.560	47.0	54.0	**-7.0***
					3395.120	38.4	54.0	-15.6
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 48: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 66 – Yagi Horizontal

Measurement Antenna Polarisation	Peak Measurements				Average Measurements			
	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)	Frequency (MHz)	Result (dBµV/m)	Limit (dBµV/m)	Delta Limit (dB)
Horizontal	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.560	48.5	54.0	**-5.5***
					3395.120	40.4	54.0	-13.6
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			
Vertical	Peak emissions were not above the measurements system noise floor or at least 20dB below the limit				1131.560	44.7	54.0	**-9.3***
					3395.120	38.1	54.0	-15.9
					All other Average emissions were not above the measurements system noise floor or at least 15dB below the limit			

**Worst-case emissions*

Table 49: Receiver Radiated Emission – 1GHz to 6GHz - Receiver Local oscillator emissions – CH 66 – Yagi Vertical

The measurement uncertainty was calculated at ±4.7dB for measurements below 1GHz and ±5.3dB for measurements above 1GHz. The reported uncertainty is an expanded uncertainty calculated using a coverage factor of *k=2* which gives a level of confidence of approximately 95%.

Climatic Conditions	
Temperature:	22 – 26°C
Humidity:	49 – 56%
Atmospheric pressure:	1010.2 to 1011.6 hPa

Table 50: Climatic conditions

Calculation: The above results are based upon the following calculation:

$$E = V_{QP/PK/AV} + AF - G_{Amp} + L_C$$

Where:

E = E-field in dBµV/m
$V_{QP/PK/AV}$ = Measured Voltage (Quasi Peak, Peak or Average) in dBµV
AF = Antenna Factor in dB(/m)
L_C = Cable and attenuator Loss in dB
G_{Amp} = Pre Amplifier Voltage Gain in dB

Example calculation:

$E = V_{PK} + AF - G_{Amp} + L_C$
$E = 30dB\mu V + 12dB/m - 0dB + 2.3dB$
$E = 44.3\ dB\mu V/m$

Comments: Receiver Emissions measurements were below the specified limits.

Testing was performed with highest gain antenna.

Assessment: The EUT complied with the Radiated Emissions requirements of CFR47 FCC Part 15, Subpart B, 15.109.

16. Antenna power conduction limits for receivers

16.1. Test Procedure

The Antenna power conduction limits for receivers measurements were performed in accordance with the section 15.111 (a) of CFR47 FCC Part 15, Subpart C.

Measurements were performed at the antenna port.

The EUT was placed inside a shielded chamber. The transmitter output was connected to a spectrum analyzer through a suitable attenuator. The antenna port emission in receiver mode were measured by spectrum analyzer with 100kHz RBW and 300kHz VBW using the peak detector. All measuring system correction factors (attenuators and cables) were used to get a true measurement.

(Refer to photographs in Annex A for views of the test configuration)

16.2. Limits

As per section 15.111 (a) of 47 CFR Part 15 Subpart C the EUT shall meet the following limits:

Frequency Range (MHz)	Limits (nanowatts)	Limits (dBm)
30MHz and 10GHz	2.0	-57

Table 51: Limits for Antenna power conduction limits for receivers

16.3. Test Results

Antenna power conduction limits for receivers measurements are detailed as follows:

Channel	Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Delta limit (dB)
Bottom	1106.432	-61.9	-57.0	-4.9
	2212.850	-71.4	-57.0	-14.4
	3319.250	-78.6	-57.0	-21.6
	5532.100	-63.8	-57.0	-6.8
	6638.555	-73.5	-57.0	-16.5
	8851.400	-67.4	-57.0	-10.4
	9957.850	-77.4	-57.0	-20.4
Middle	1119.025	-61.0	-57.0	-4.0
	2238.050	-68.4	-57.0	-11.4
	3357.100	-77.9	-57.0	-20.9
	5595.150	-69.0	-57.0	-12.0
	6714.200	-75.1	-57.0	-18.1
	8952.250	-66.8	-57.0	-9.8
Top	1131.667	-60.3	-57.0	**-3.3***
	2263.250	-68.7	-57.0	-11.7
	3394.900	-78.7	-57.0	-21.7
	4526.500	-74.3	-57.0	-17.3
	6789.850	-77.7	-57.0	-20.7
	7921.450	-76.5	-57.0	-19.5
	9053.050	-67.7	-57.0	-10.7

**Worst-case emissions*

Table 52: Antenna power conduction limits for receivers – 30MHz to 10GHz

The measurement uncertainty for Antenna power conduction limits for receivers measurement was calculated at ±1.4dB. The reported uncertainty is an expanded uncertainty calculated using a coverage factor of approximately *k=2* which gives a level of confidence of approximately 95%.

Comments: Antenna power conduction limits for receivers measurements were below the specified limit.

Measurements were performed at the antenna port 1.

Assessment: The EUT complied with the Antenna power conduction limits for receivers requirements of CFR47 FCC Part 15, Subpart C, 15.111.

17. Radio Frequency Hazzard Information – FCC 15.247(i)

As per section 15.247 (i), The EUT require to be operated in in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines (in accordance with CFR 47, Section 1.1307(b)(1))

The device has been defined as a mobile device whereby a distance of 20 cm or greater can normally be maintained between the user and the device.

RF Exposure Limit

As per section 1.1310 of CFR 47 following Maximum Permissible Exposure (MPE) limits are applicable.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

Table 53: Limits for Maximum Permissible Exposure (MPE)

For this 902MHz to 928MHz Transmitter following limits applies

Limits for General Population/Uncontrolled Exposure	
Frequency Range (MHz)	**Power density (mW/cm^2)**
300 to 1500	f/1500

Calculated results from measured maximum radiated power (EIRP):

Operating Frequency MHz	Measured Radiated Power (EIRP) (dBm)	Calculated Power Density at 20cm (mW/cm^2)	Power Density Limit (mW/cm^2)	Minimum safe distance (cm)
CH0 – 902.394	33.8	0.4772	0.6015	17.8
CH33 – 915.000	34.4	0.5479	0.6010	19.0*
CH66 – 927.606	34.3	0.5354	0.6184	18.8

**Worst-case distance*

Example Calculation:

For 915MHz Transmitter, power density limit (f/1500) is 0.610(mW/cm^2).

To calculate Equivalent E field:

Power Density = E^2 /3770
E (Field strength) = $(0.610 * 3770)^{1/2}$ = 47.95V/m

Maximum radiated power (EIRP) measured for this transmitter was +34.4dBm or 2.75W

Using E-Field equation, E, V/m = (√ (30 * P * G)) / d

Minimum safe distance = 0.190m or 19.0cm

Result: Complies

Note: Minimum safe distance as per measured radiated power is less than 20cm but it is recommended to maintain at least 20cm separation distance with the antenna.

18. Conclusion

The Schneider Electric Systems Canada Inc., OM900, O-Series 900MHz FHSS Data Radio complied with the applicable requirements of CFR47 FCC Part 15, Subpart C, 15.247.

Appendix A – Test Equipment

Inv.	Equipment	Make	Model No.	Serial No.	Calibration		
					Interval	Due	Type
1217	ANALYSER, EMI Receiver	Rohde & Schwarz	ESU40	100182	1 year	May-20	E
0932	CONTROLLER, Position	Sunol Sciences	SC104V-3	081006-1	N/A	N/A	V
0933	TURNTABLE	Sunol Sciences	SM46C	081006-2	N/A	N/A	V
0934	MAST, Antenna	Sunol Sciences	TLT2	081006-5	N/A	N/A	V
0935	ANTENNA, Biconilog	Sunol Sciences	JB5	A071106	2 years	Feb-21	E
0718	ATTENUATOR, 6dB	JFW	50FPE-006	-	3 years	Jan-20	I
1193	Standard Gain Horn Antenna - 5.85GHz to 8.2GHz	A.H. Systems, inc	SAS-584	186	1 year	Feb-20	E
1194	Standard Gain Horn Antenna - 8.2GHz to 12.4GHz	A.H. Systems, inc	SAS-585	224	1 year	Feb-20	E
0633	ANTENNA, Double Ridge Horn	EMCO	3115	9712-5369	3 years	Aug-21	I
0559	PRE-AMP, Microwave, 18GHz	Miteq	AFS8	605305	1 year	Nov-19	I
0711	ATTENUATOR, 10dB	JFW	50HF-010N		3 years	Nov-21	I
1143	CABLE, Coax, Sucoflex 104PA	Huber + Suhner	84287041	SN MY058/4PA	1 year	Jan-20	I
1145	CABLE, Coax, Sucoflex 104PA	Huber + Suhner	84279564	SN MY056/4PA	1 year	Jan-20	I
1238	CABLE, Coax, Sucoflex 126 E	Huber + Suhner	10422876	SN 8000495/126E	1 year	Jan-20	I
1250	FILTER, Hi-Pass	K&L Microwave, Inc	41H10-00033	3	1 year	May-20	V
0715	ATTENUATOR, 20dB	JFW	50HF-020N		3 years	Nov-21	I
1248	HYGROMETER, Temp, Humidity	Thomas Scientific	6066N53	181037404	2 years	Mar-20	E
0666	ENCLOSURE, Semi-Anechoic, No 1	RFI Industries	S800 iOATS	1229	2 years	Jan-20	I
0710	ATTENUATOR, 10dB	JFW	50HF-010N		3 years	Nov-21	I
1220	CABLE, Coax, 1.5m	Keysight Technologies Inc	11500F	MY12973/4E	1 year	Nov-19	E
0024	ANTENNA, Active Loop	EMCO	6502	2620	2 years	Jun-21	I
SW007	EMC Measurement Software	Rohde & Schwarz	EMC 32	Version 8.53.0	N/A	N/A	N/A

V: Verification of operation against an internal reference
I: Internal calibration against a traceable standard
E: External calibration by a NATA or MRA equivalent endorsed facility
N/A: Not Applicable

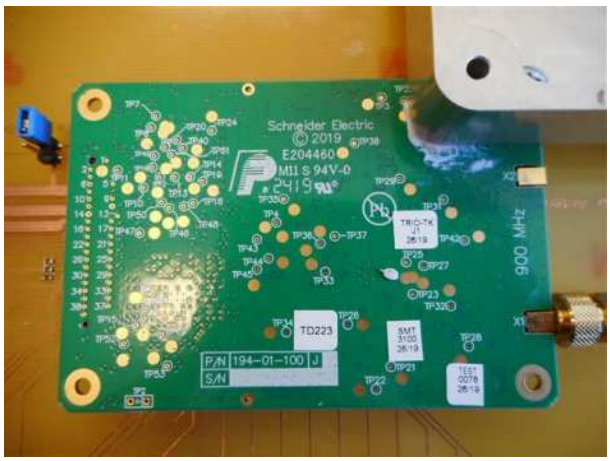
Appendix B – Photographs

Number	Photograph Description
1	EUT Views
2	
3	
4	
5	
6	
7	Support Equipment
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	EUT - TBUMANTY-12-915 11-Element Yagi antenna
19	
20	EUT - Laird FG9026 Colinear vertical antenna
21	

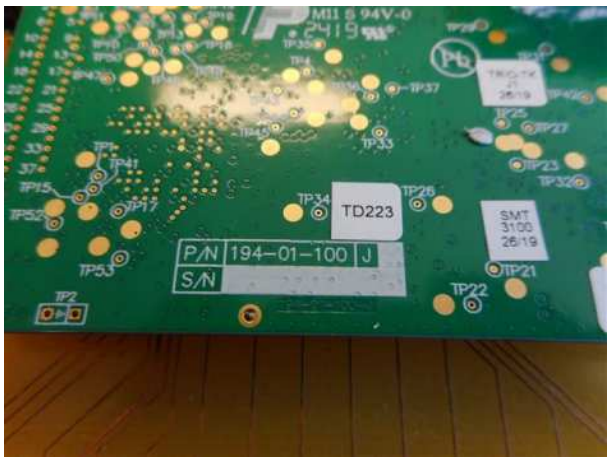
Photographs list continued on the following page

Annex	Number	Photograph Description
A	1	Digital device and Receiver radiated emission – Test configuration
A	2	
A	3	
A	4	
A	5	
A	6	
A	7	
A	8	
A	9	
A	10	Transmitter Restricted Bands – Test Configurations
A	11	
A	12	
A	13	
A	14	
A	15	
A	16	
A	17	
A	18	
A	19	
A	20	
A	21	
A	22	
A	23	
A	24	
A	25	
A	26	
A	27	
A	28	
A	29	
A	30	
A	31	
A	32	
A	33	
A	34	
A	35	
A	36	
A	37	
A	38	
A	39	
A	40	
A	41	
A	42	
A	43	Antenna Port Conducted Emission – Test Configuration

Test Configurations Photographs	-	EMC Bayswater Test Report E1907-1185-1 Rev 1 Annex A



Photograph 1



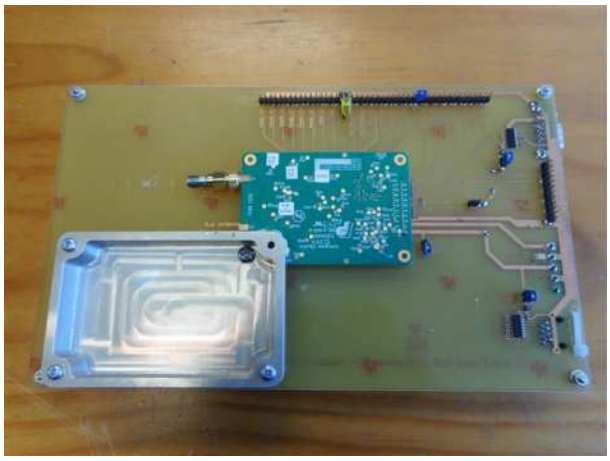
Photograph 2

Photograph 3

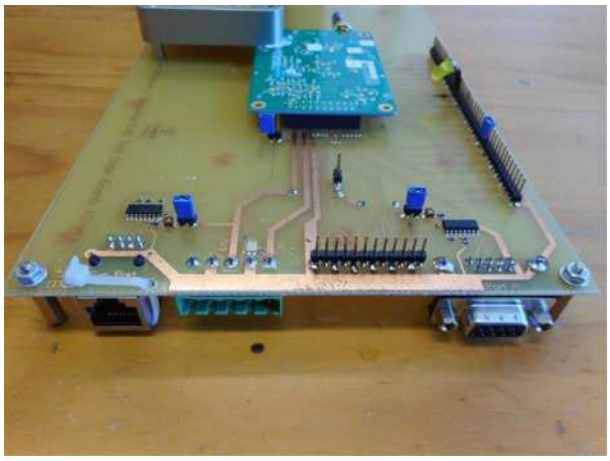
Photograph 4

Photograph 5

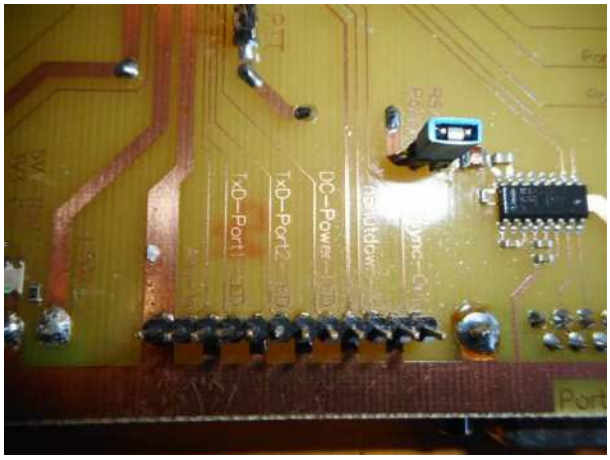
Photograph 6



Photograph 7

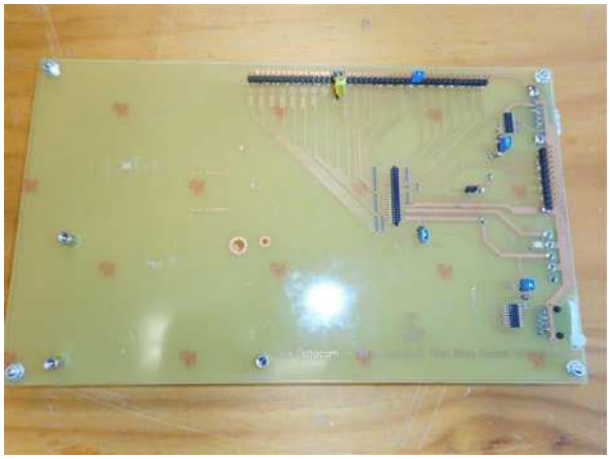


Photograph 8



Photograph 9

Photograph 10



Photograph 11

Photograph 12

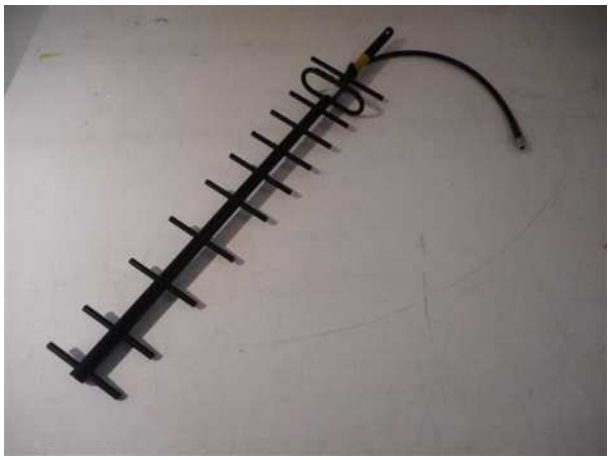
Photograph 13

Photograph 14

Photograph 15

Photograph 16

Photograph 17



Photograph 18

Photograph 19

Photograph 20

Photograph 21

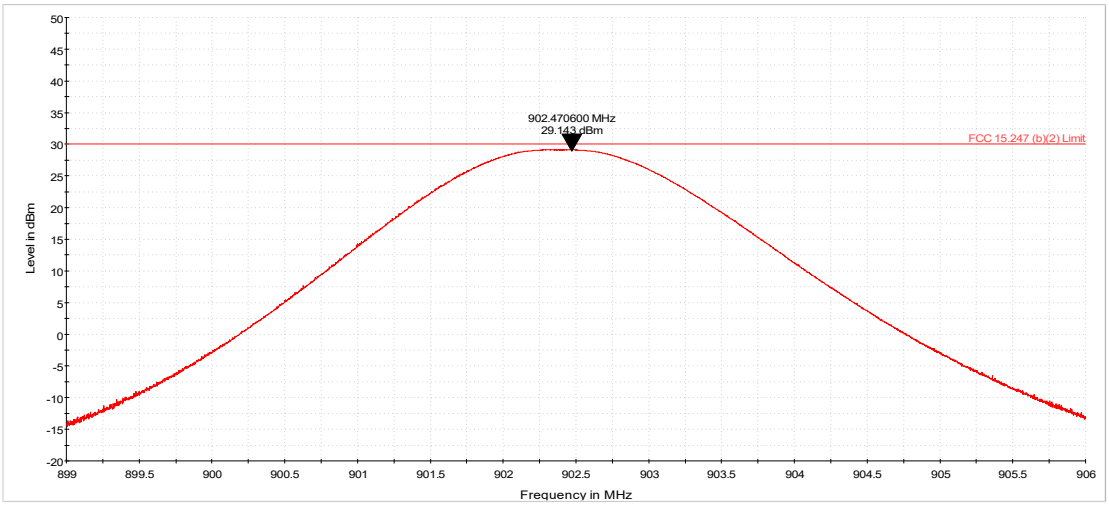
Appendix C.1 – Measurement Graphs – Maximum Peak Conducted Power

No.	Test	Graph Description
1	Maximum Peak Conducted Power	Bottom Channel
2		Middle Channel
3		Top Channel

EMC Bayswater Pty. Ltd.

Maximum Peak Conducted Power
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Bottom Channel

Job Number: E1907-1185-1 Rev 1
Test Engineer: NL

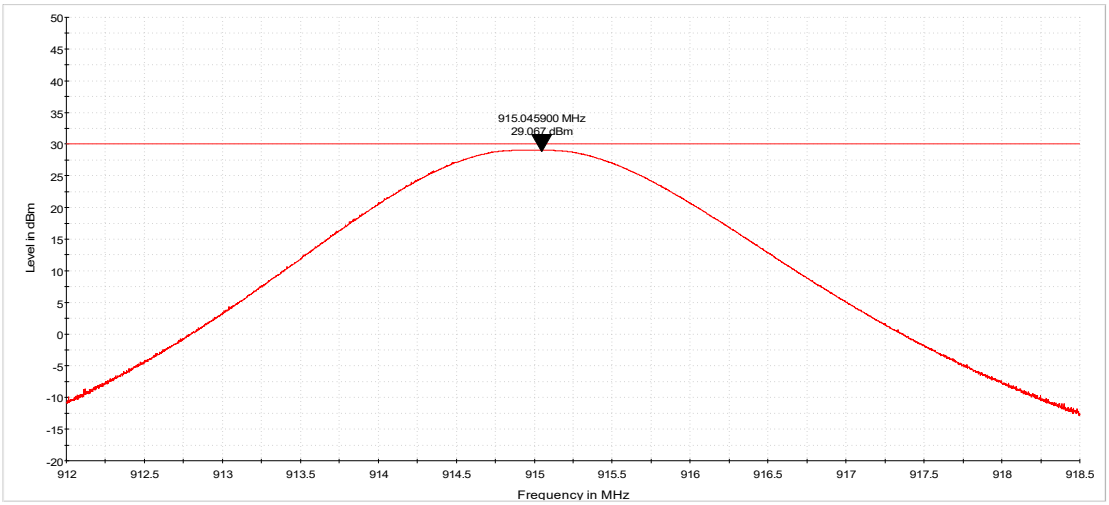


Graph 1

EMC Bayswater Pty. Ltd.

Maximum Peak Conducted Power
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Middle Channel

Job Number: E1907-1185-1 Rev 1
Test Engineer: NL

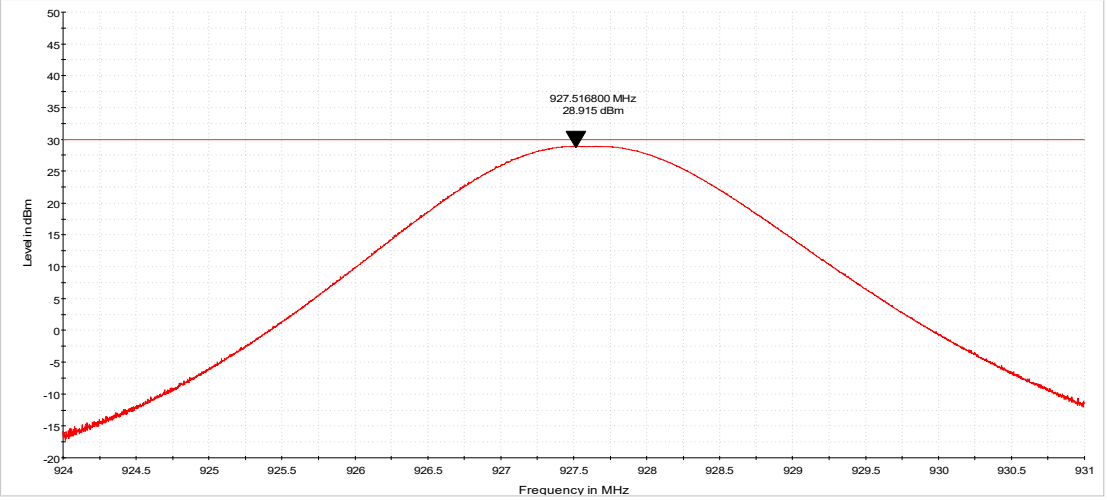


Graph 2

EMC Bayswater Pty. Ltd.

Maximum Peak Conducted Power
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Top Channel

Job Number: E1907-1185-1 Rev 1
Test Engineer: NL



Graph 3

Appendix C.2 – Measurement Graphs – Band Edge (100kHz, -20dB from fc)

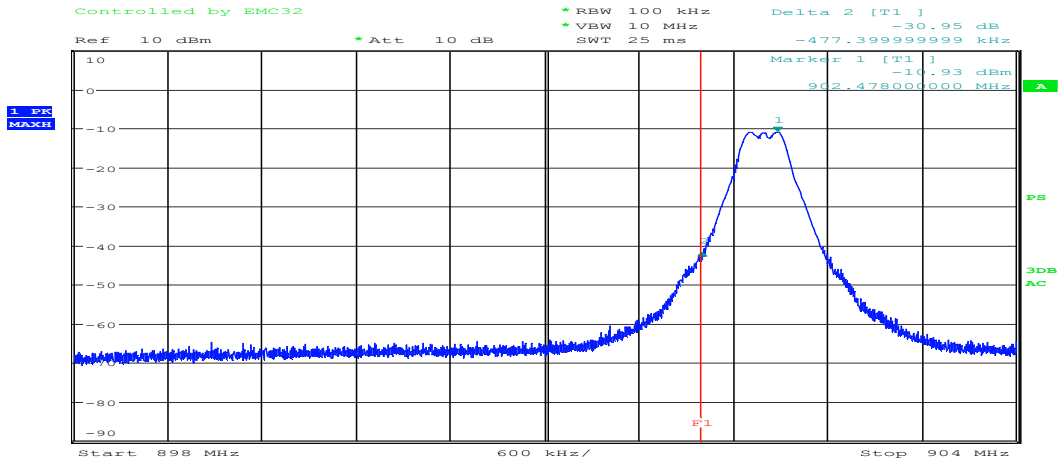
No.	Test	Graph Description
4	Band edge Measurement (100kHz, -20dB from fc)	Bottom Channel
5		Top Channel
6		With hopping

EMC Bayswater Pty. Ltd.

Band edge Measurement (100kHz, -20dB from fc)
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Bottom Channel

Job Number: E1907-1185-1 Rev 1

Test Engineer: NL



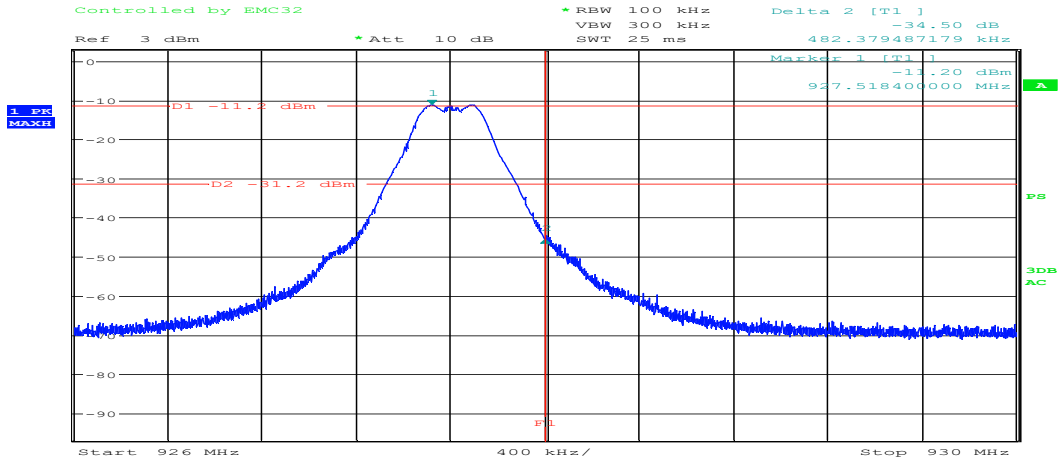
Graph 4

EMC Bayswater Pty. Ltd.

Band edge Measurement (100kHz, -20dB from fc)
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Top Channel

Job Number: E1907-1185-1 Rev 1

Test Engineer: NL



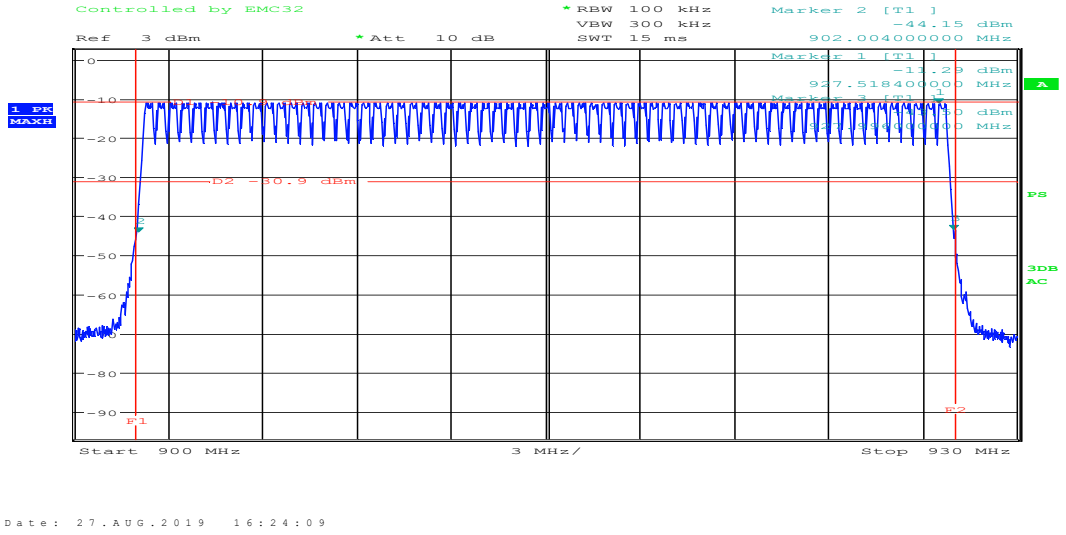
Graph 5

EMC Bayswater Pty. Ltd.

Band edge Measurement (100kHz, -20dB from fc)
Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
With hopping

Job Number: E1907-1185-1 Rev 1

Test Engineer: NL



Graph 6

Appendix C.3 – Measurement Graphs – Restricted Bands – Bottom Channel

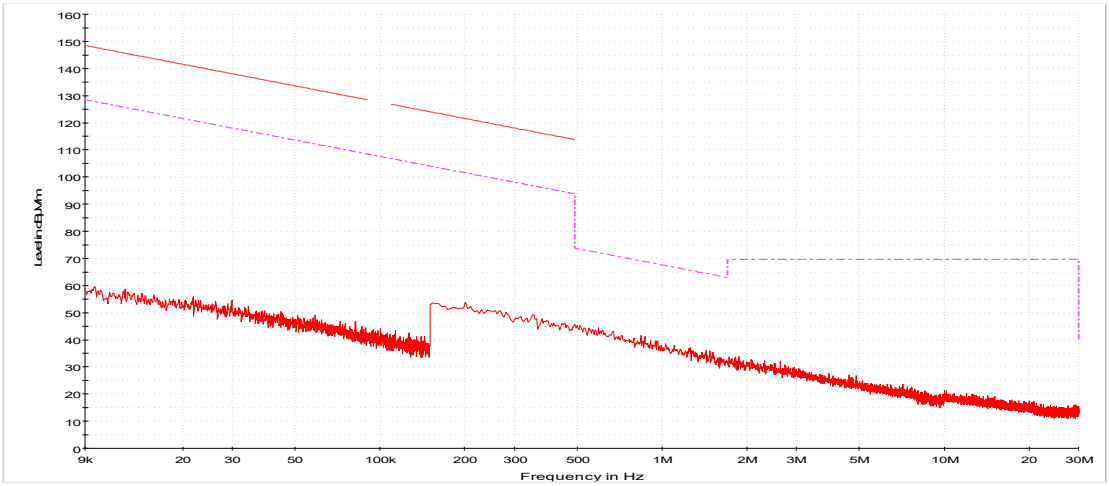
No.	Test	Graph Description
7	Radiated Emissions – Restricted Bands – Bottom Channel (Channel 0)	9kHz to 30MHz – Yagi Antenna Horizontal – Antenna X
8		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Y
9		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Z
10		9kHz to 30MHz – Yagi Antenna Vertical – Antenna X
11		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Y
12		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Z
13		9kHz to 30MHz – Colinear Antenna – Antenna X
14		9kHz to 30MHz – Colinear Antenna – Antenna Y
15		9kHz to 30MHz – Colinear Antenna – Antenna Z
16		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Horizontal
17		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Vertical
18		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Horizontal
19		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Vertical
20		30MHz to 1GHz – Colinear Antenna– Antenna Horizontal
21		30MHz to 1GHz – Colinear Antenna– Antenna Vertical
22		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
23		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Vertical
24		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Horizontal
25		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Vertical
26		1GHz to 1.5GHz – Colinear Antenna– Antenna Horizontal
27		1GHz to 1.5GHz – Colinear Antenna– Antenna Vertical
28		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Horizontal
29		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Vertical
30		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Horizontal
31		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Vertical
32		1.5GHz to 6GHz – Colinear Antenna– Antenna Horizontal
33		1.5GHz to 6GHz – Colinear Antenna– Antenna Vertical
34		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Horizontal
35		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Vertical
36		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Horizontal
37		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Vertical
38		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Horizontal
39		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Vertical
40		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
41		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Vertical
42		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Horizontal
43		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Vertical
44		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Horizontal
45		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Vertical

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



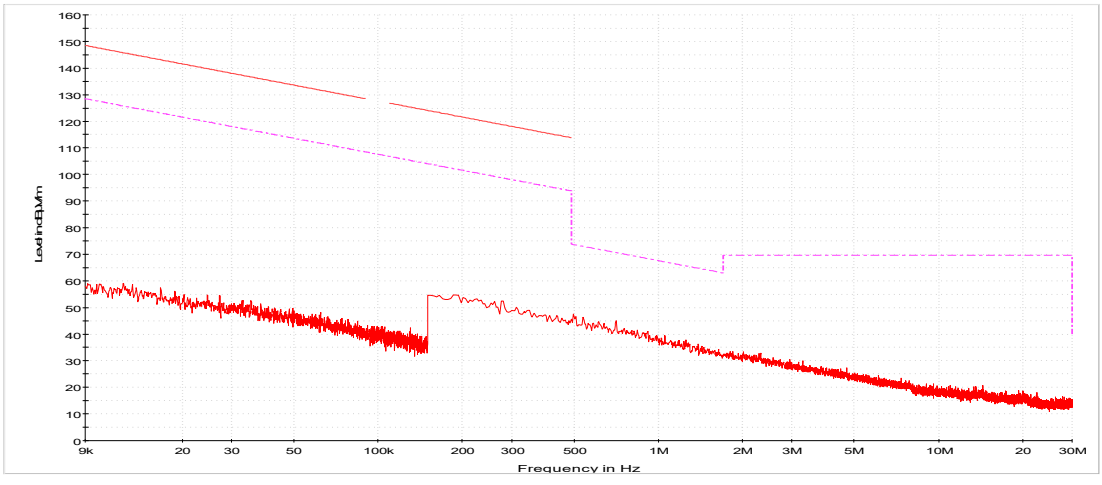
Graph 7

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



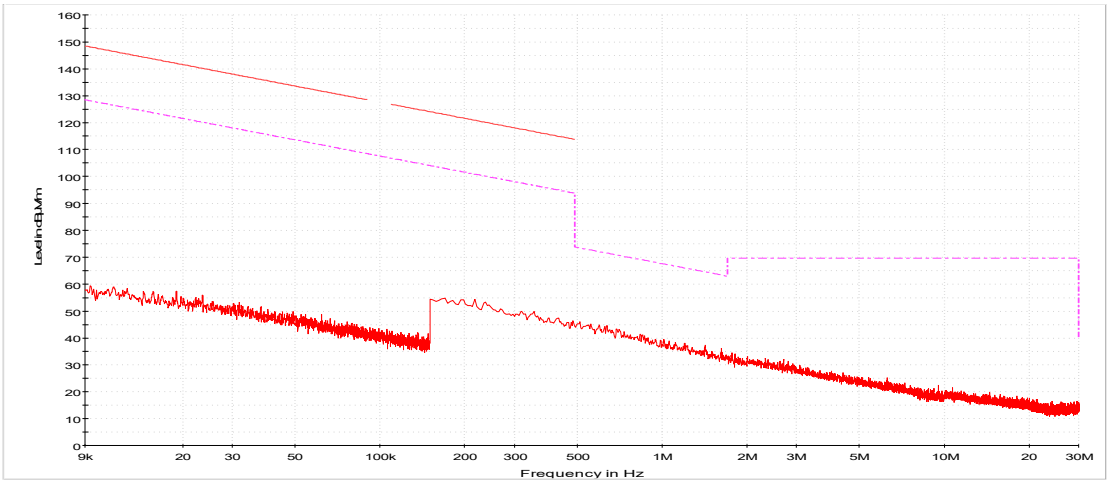
Graph 8

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



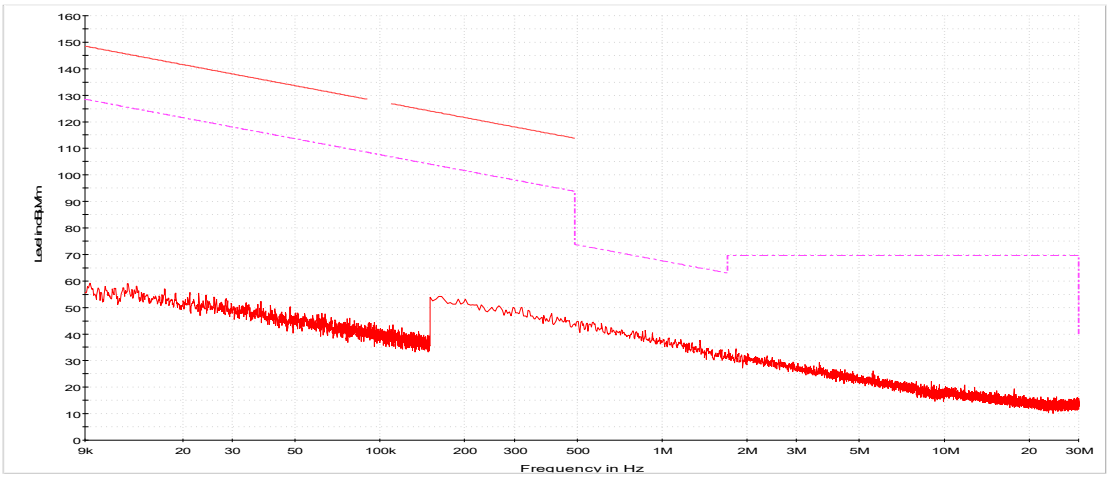
Graph 9

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



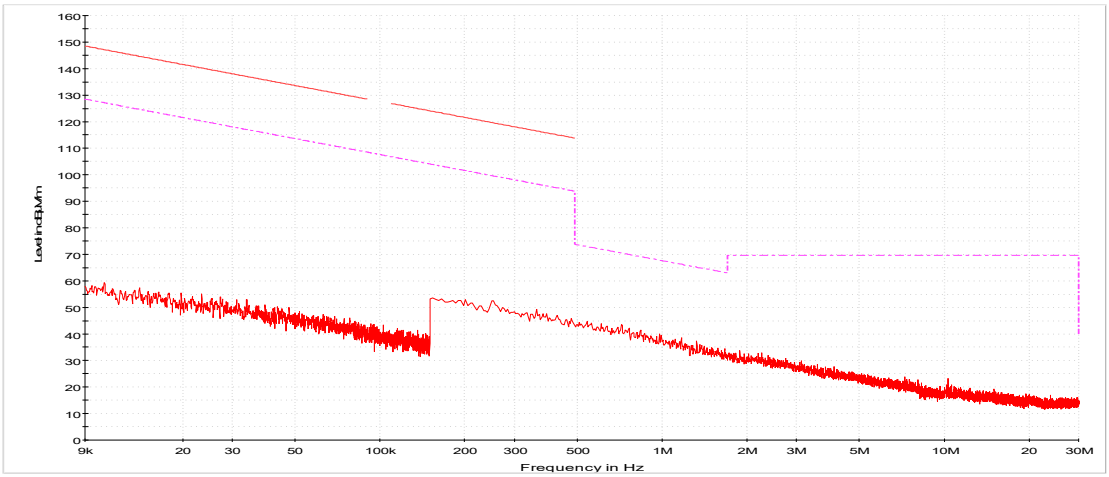
Graph 10

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



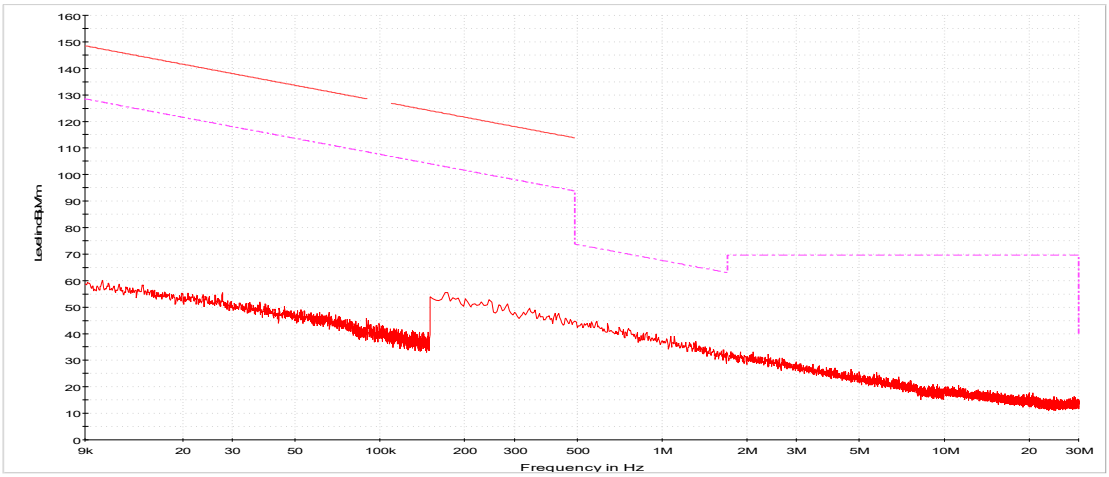
Graph 11

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



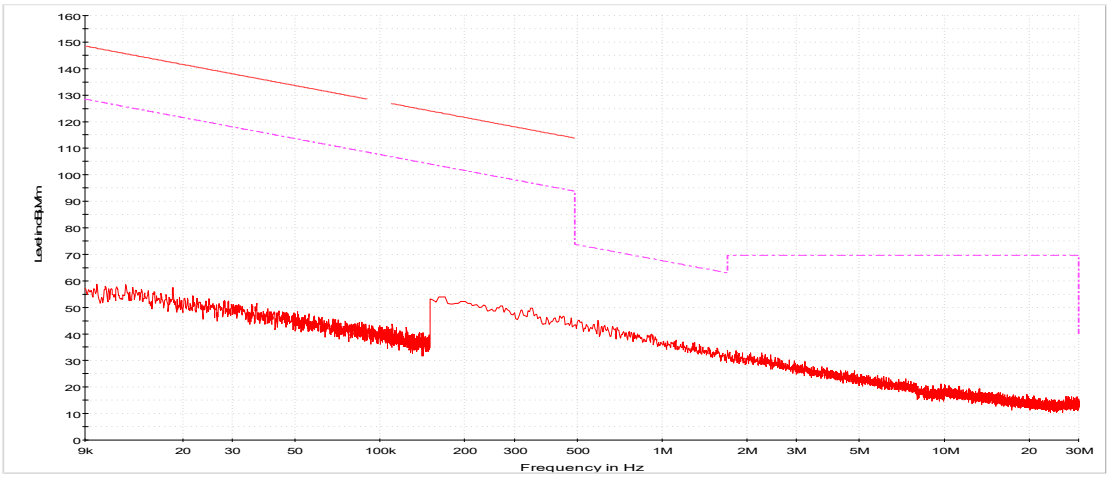
Graph 12

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



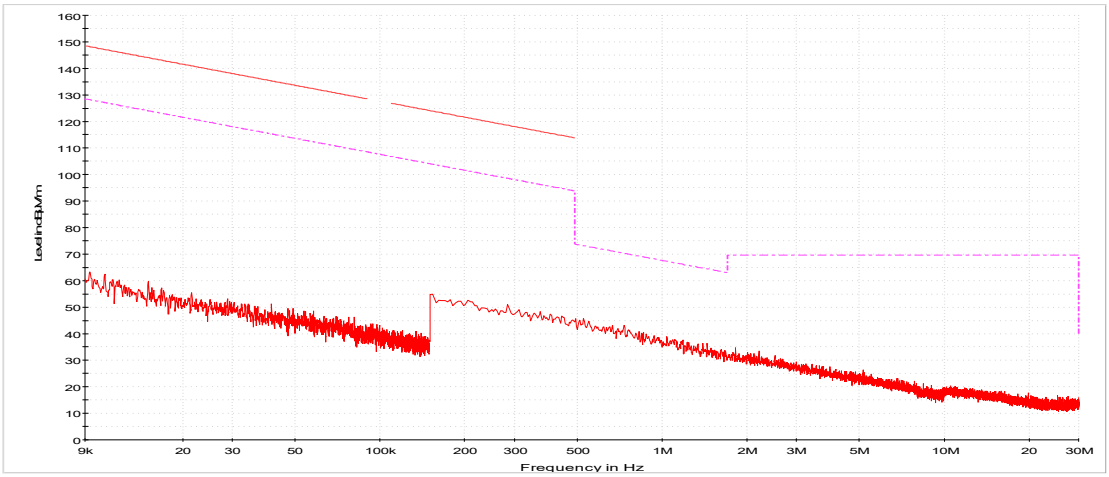
Graph 13

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



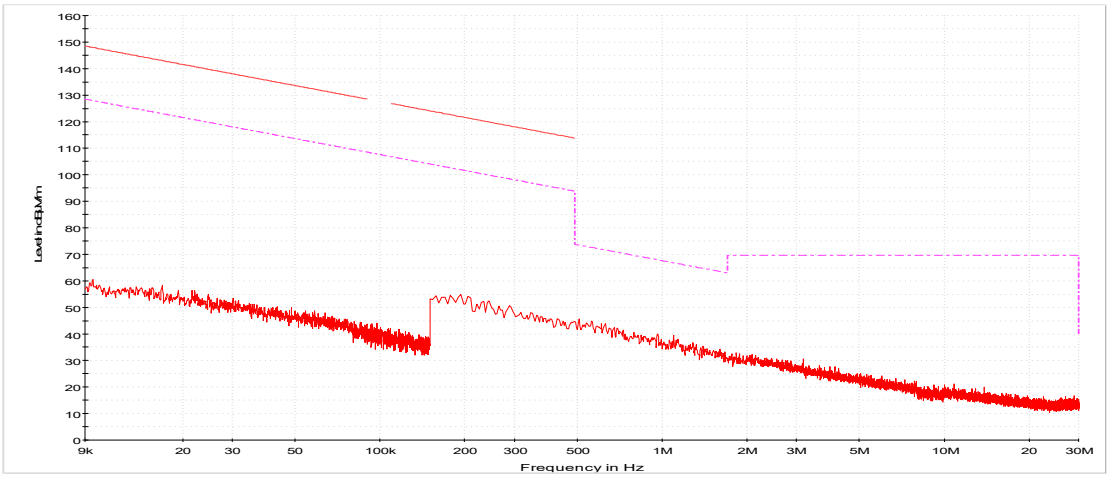
Graph 14

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



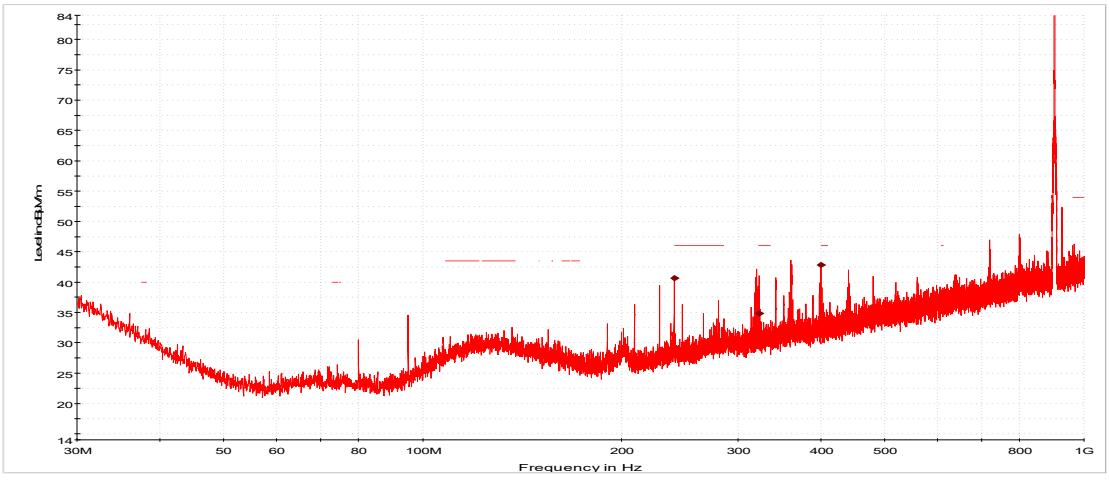
Graph 15

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



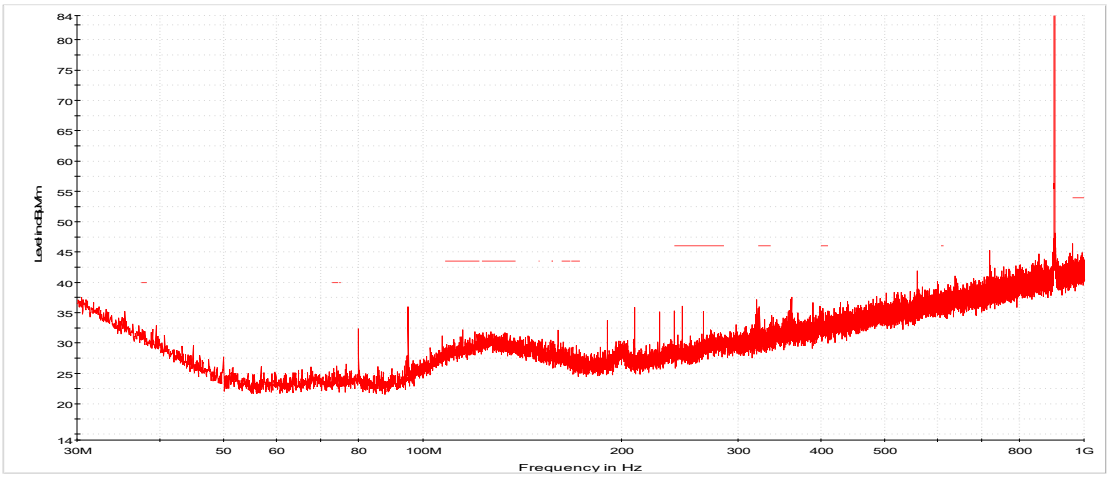
Graph 16

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

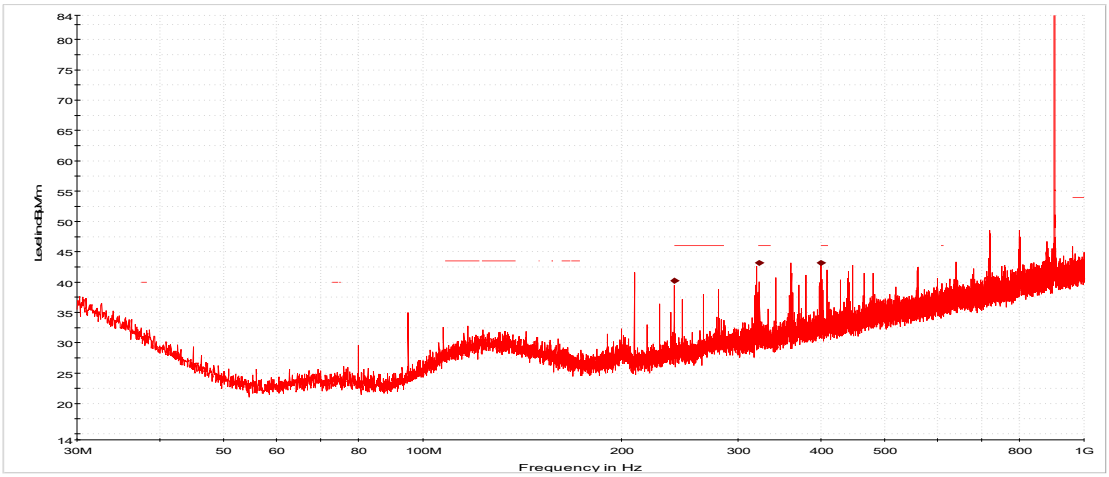
Graph 17

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

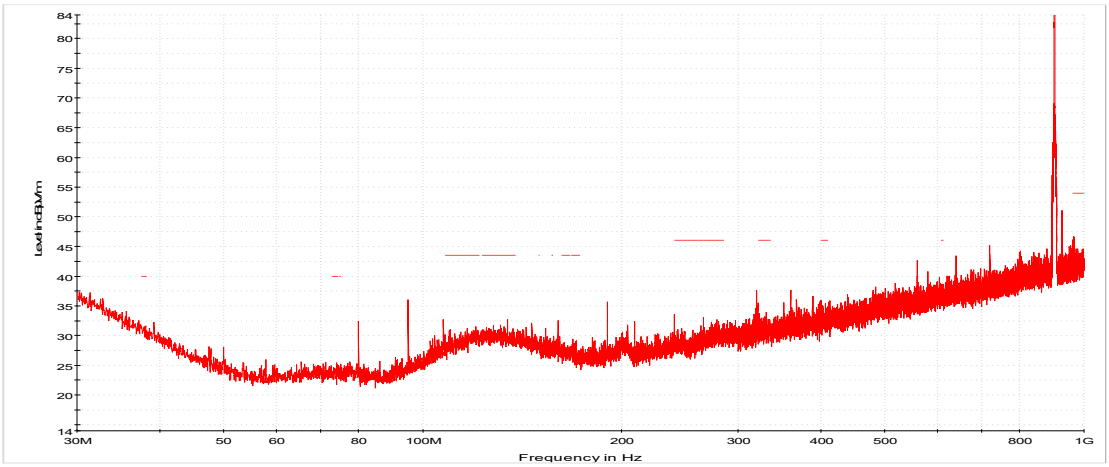
Graph 18

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

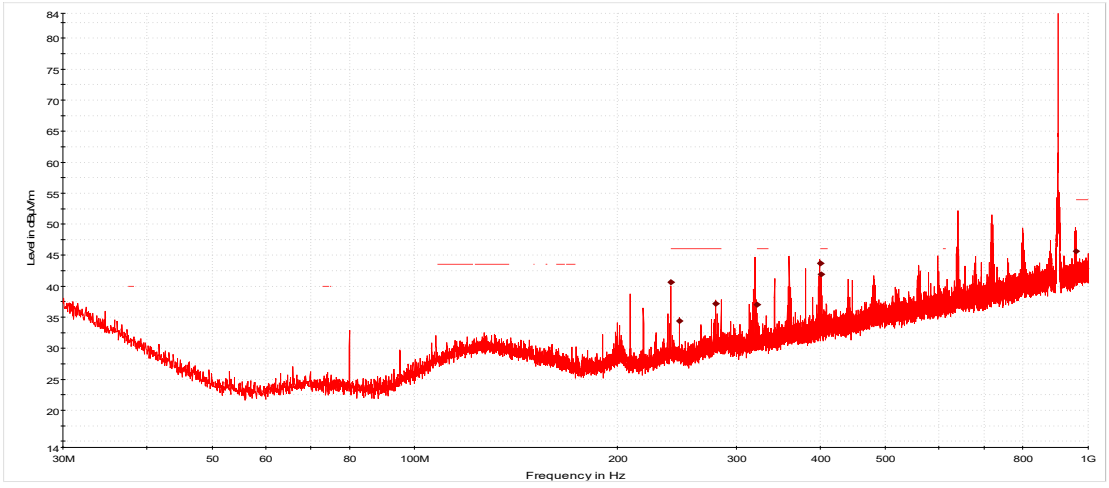
Graph 19

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

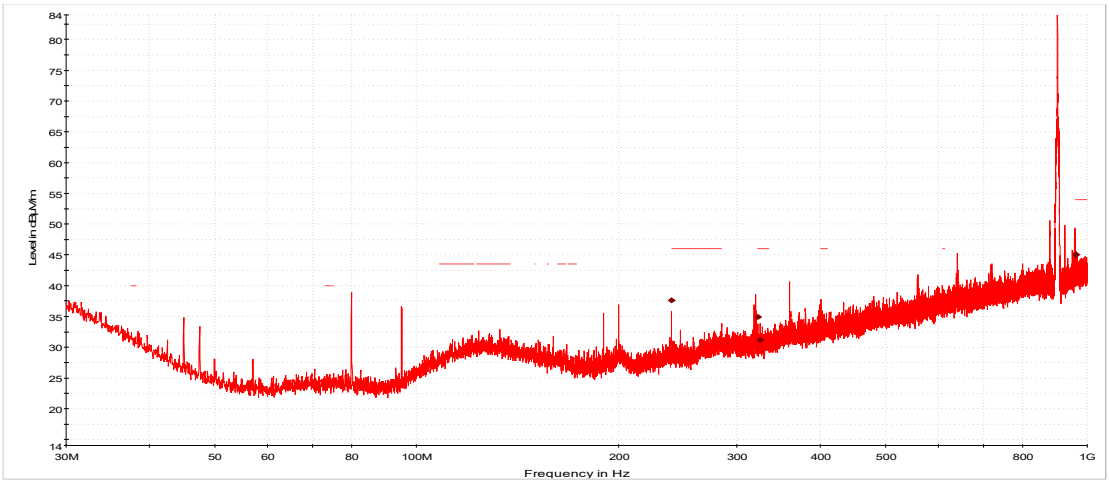
Graph 20

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

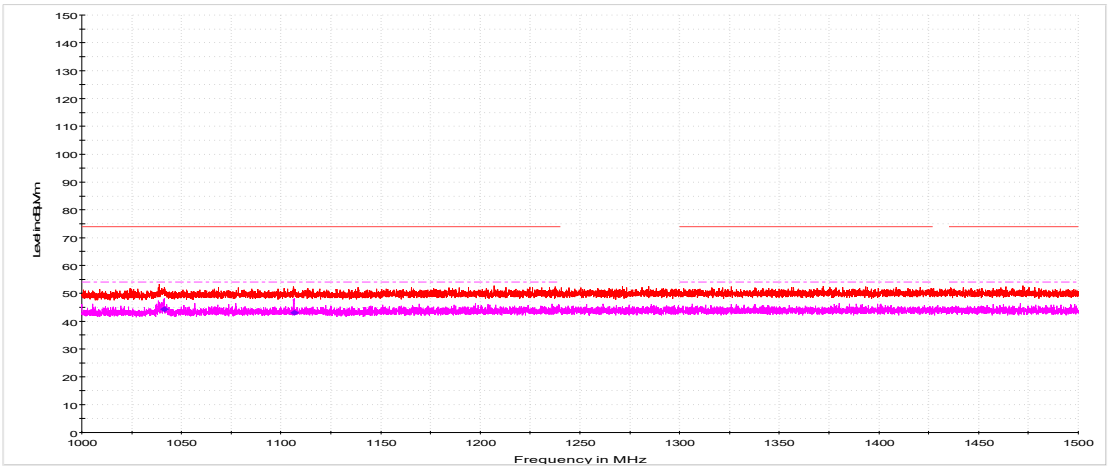
Graph 21

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m - Peak Limit — FCC Part 15.247 - TX - Restricted Band 15.209 3m Limit — Peak Preview
Average Preview ◆ CISPR AV ◆ Peak

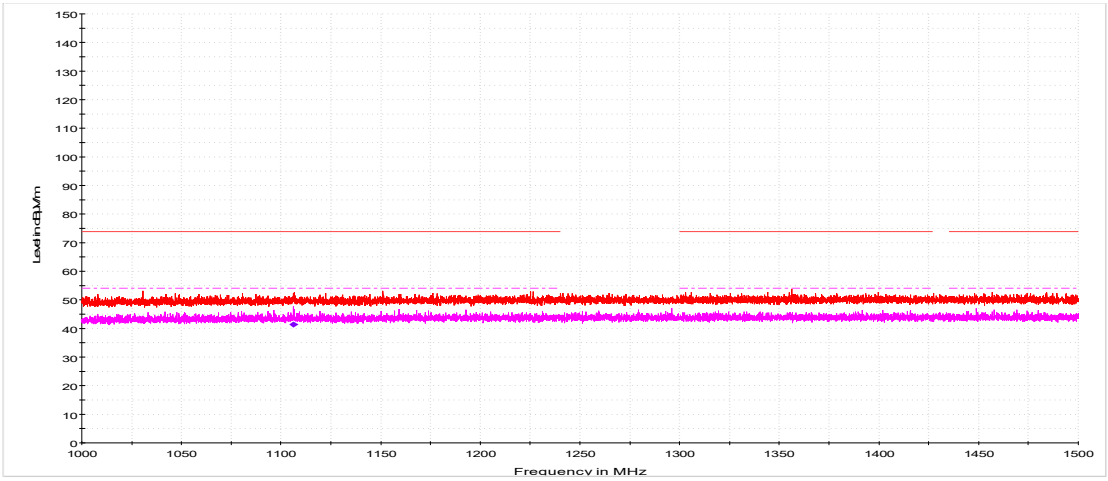
Graph 22

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



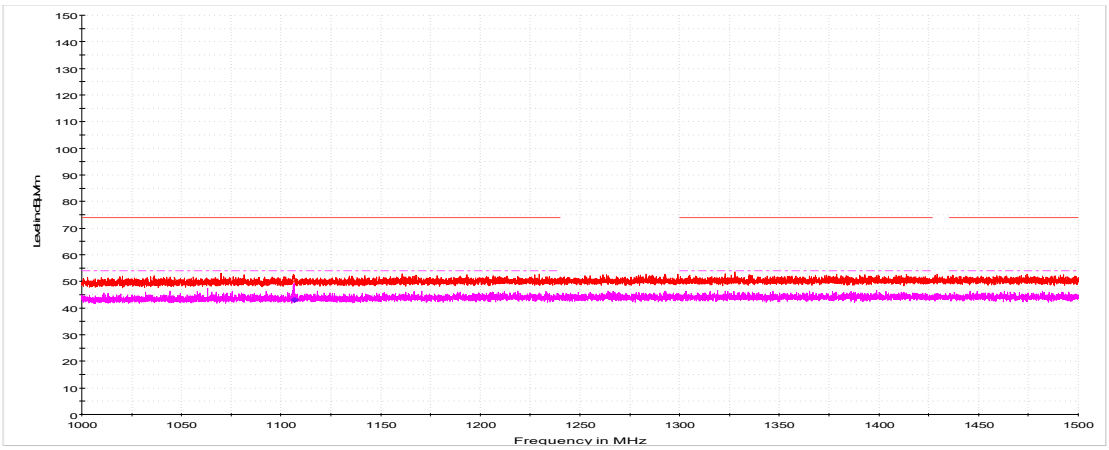
Graph 23

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



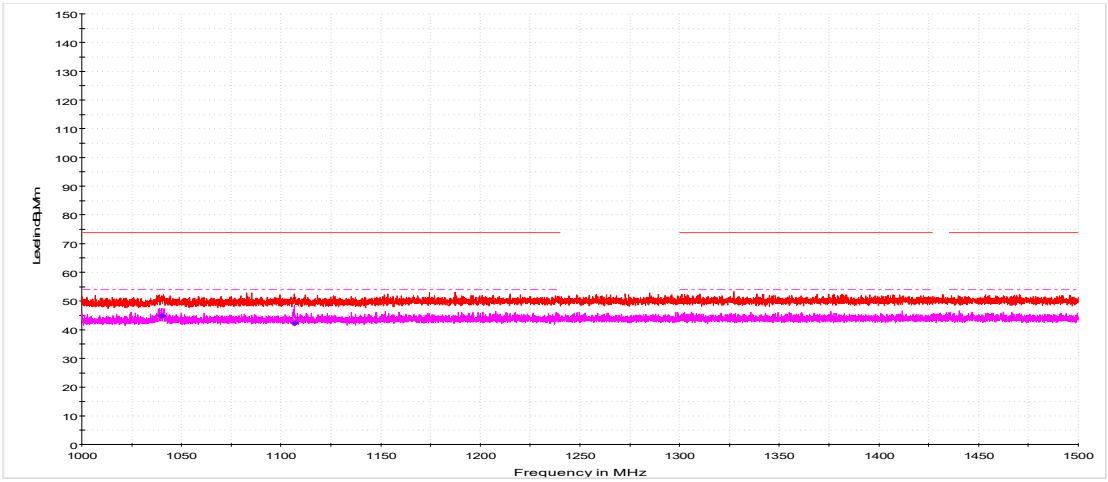
Graph 24

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



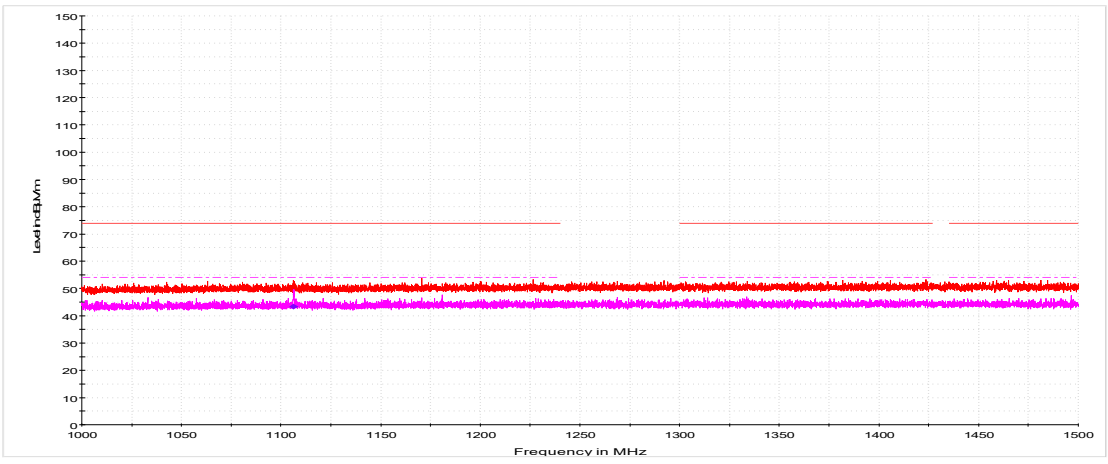
Graph 25

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



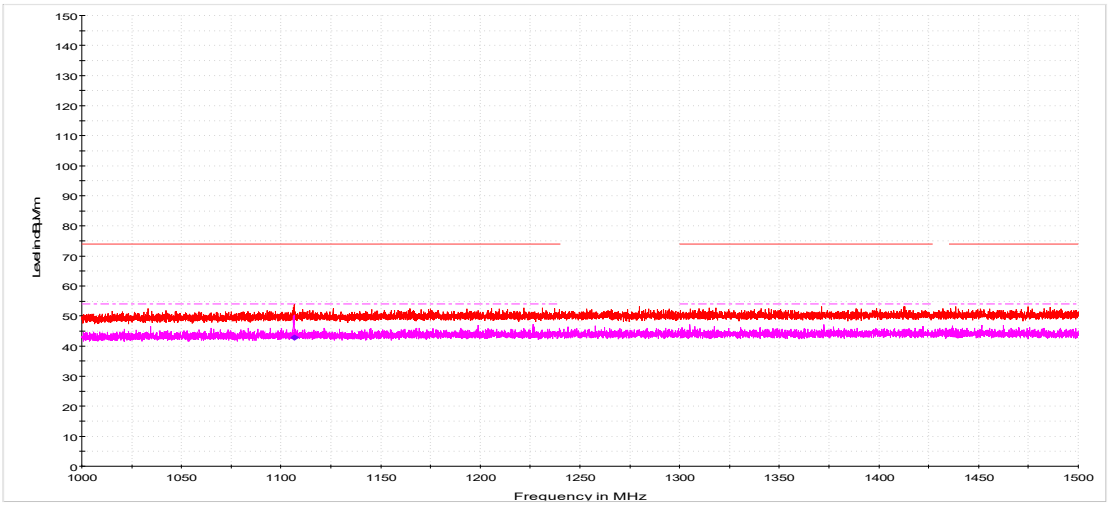
Graph 26

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



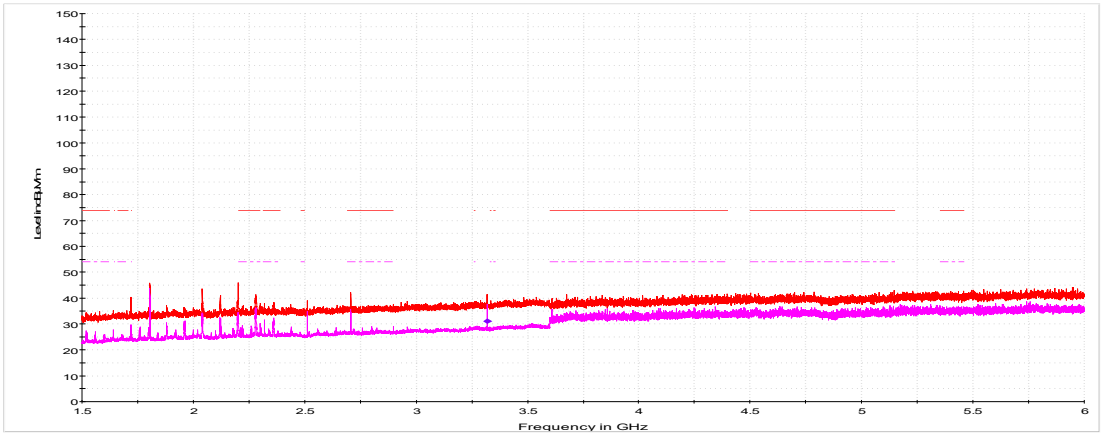
Graph 27

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



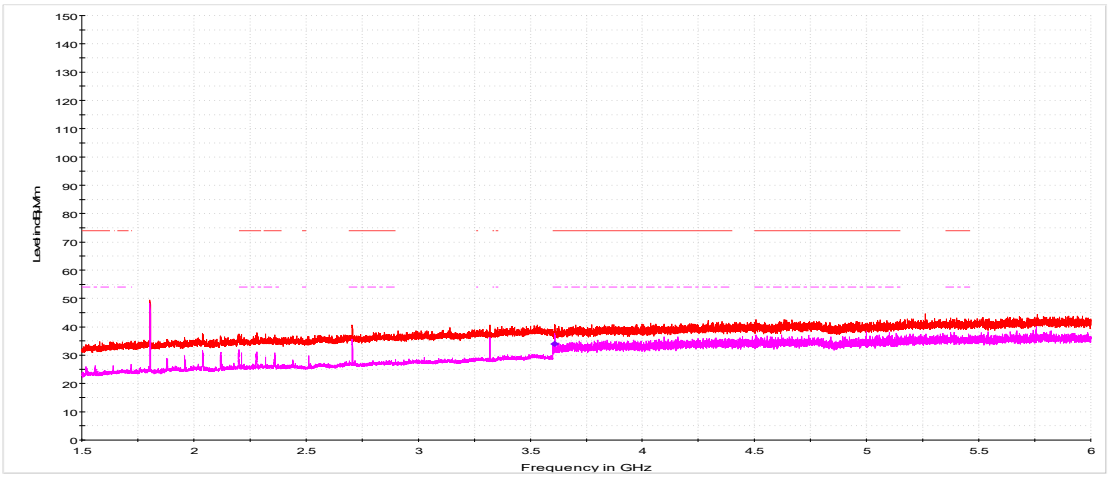
Graph 28

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



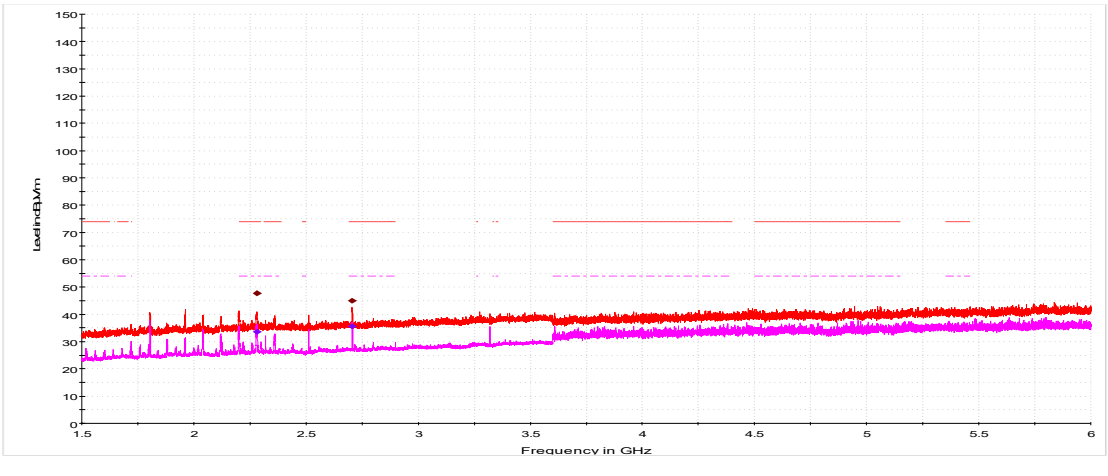
Graph 29

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



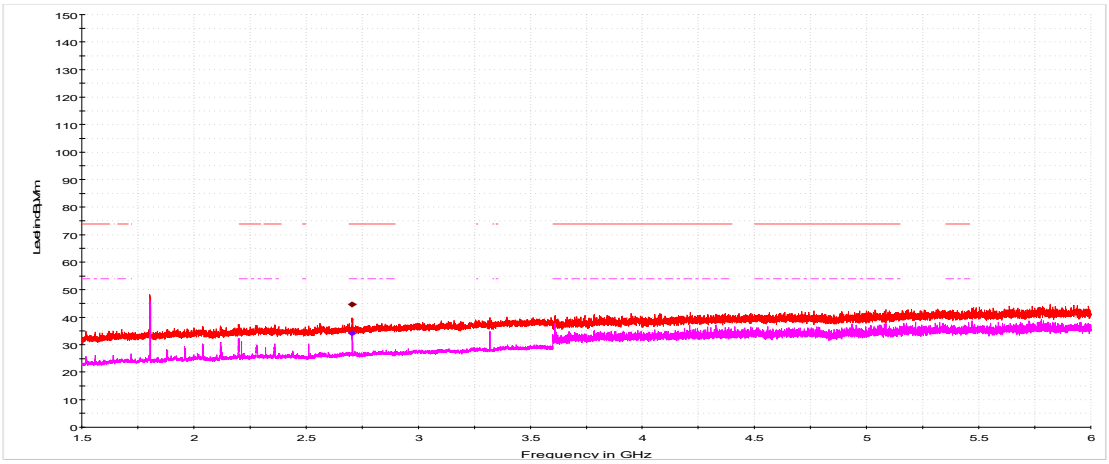
Graph 30

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



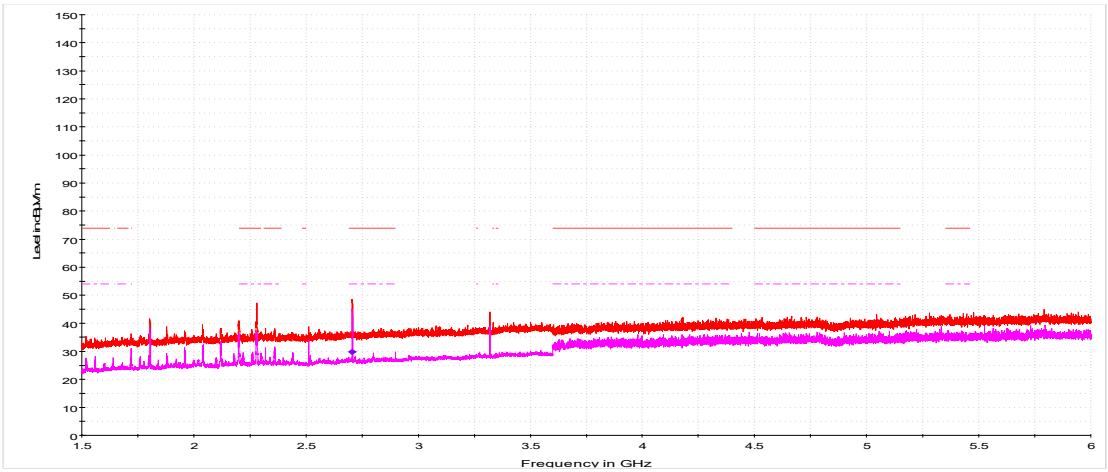
Graph 31

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



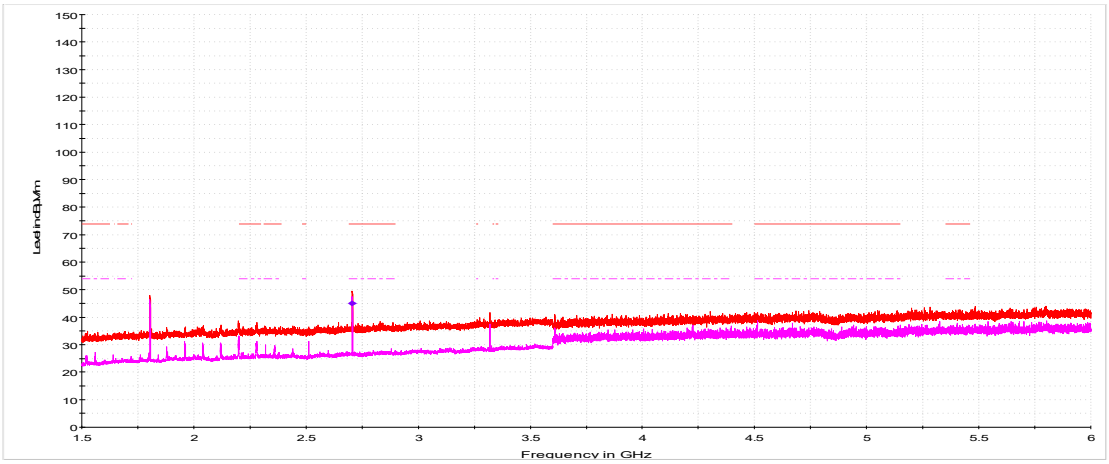
Graph 32

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



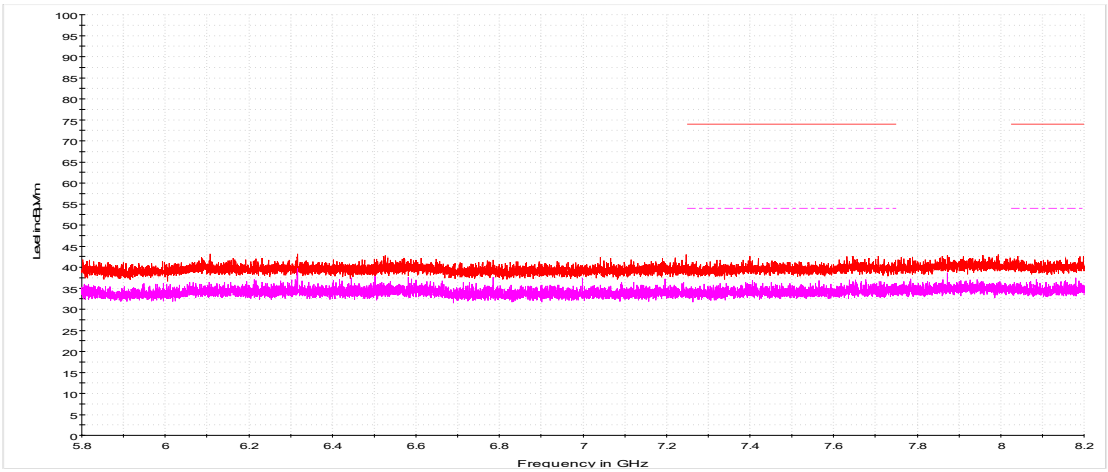
Graph 33

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



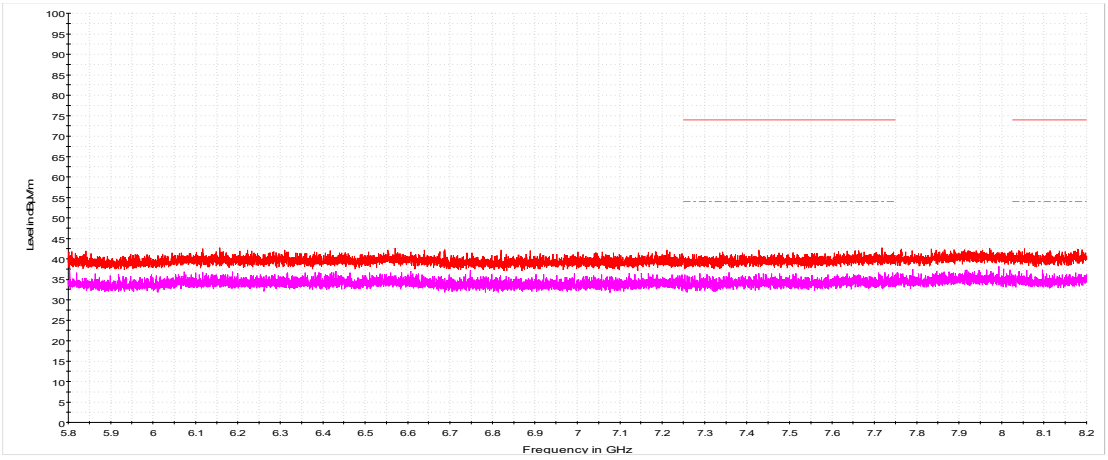
Graph 34

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



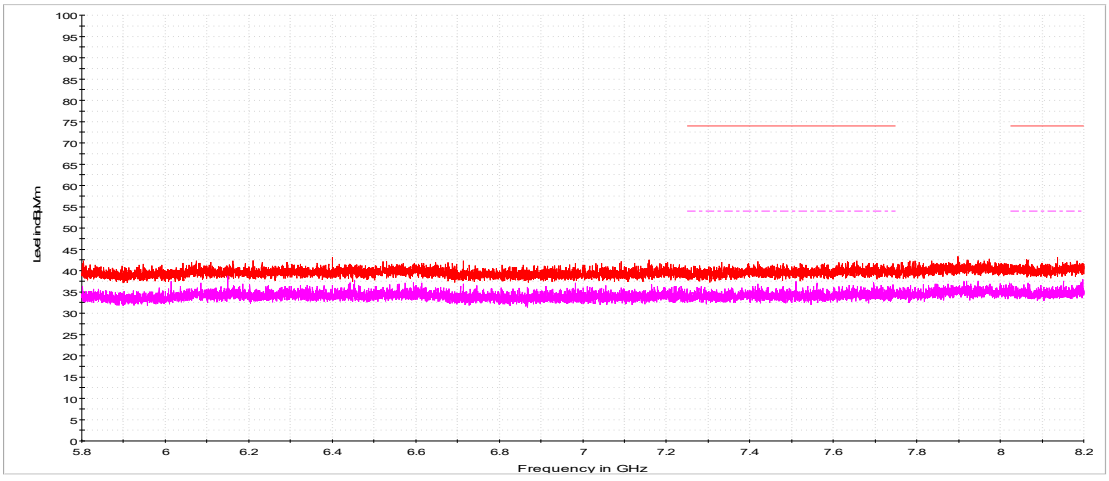
Graph 35

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



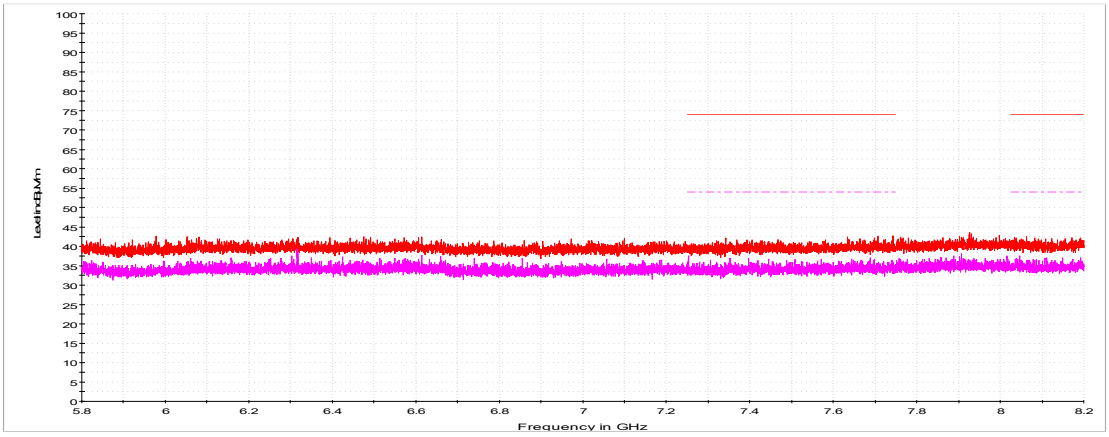
Graph 36

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



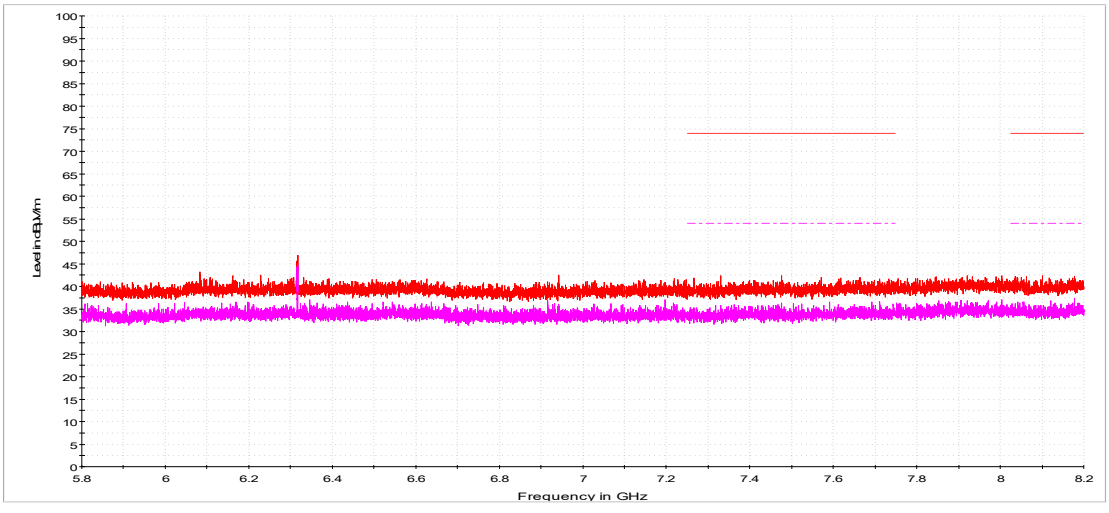
Graph 37

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



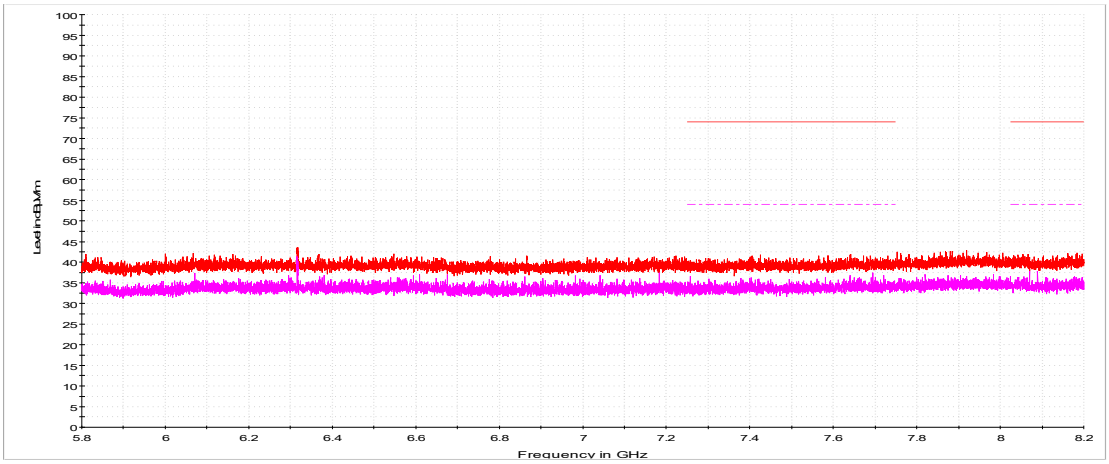
Graph 38

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



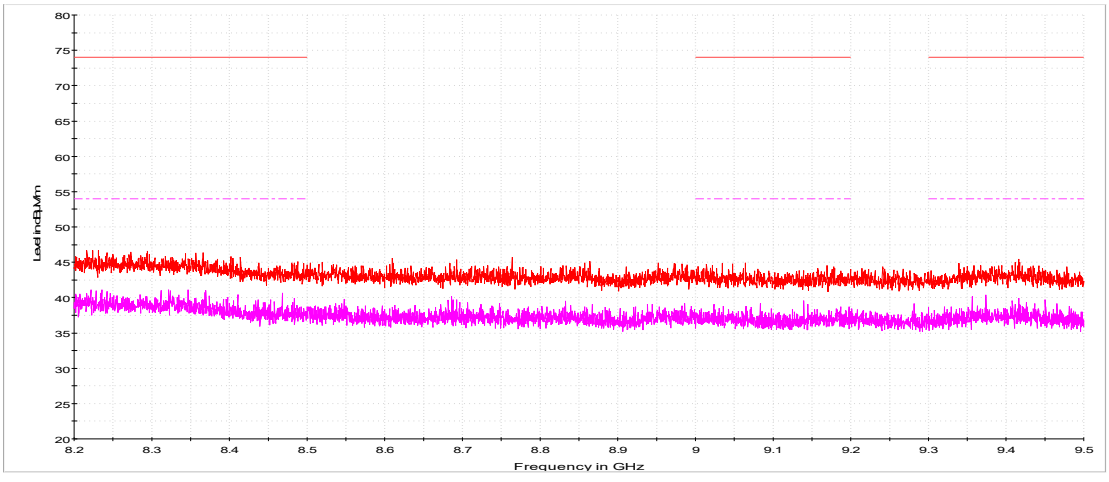
Graph 39

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



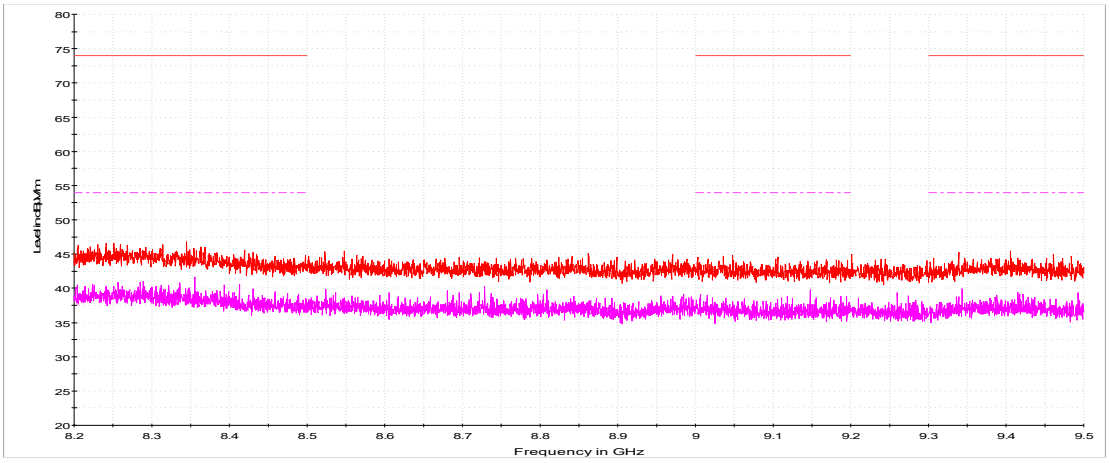
Graph 40

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



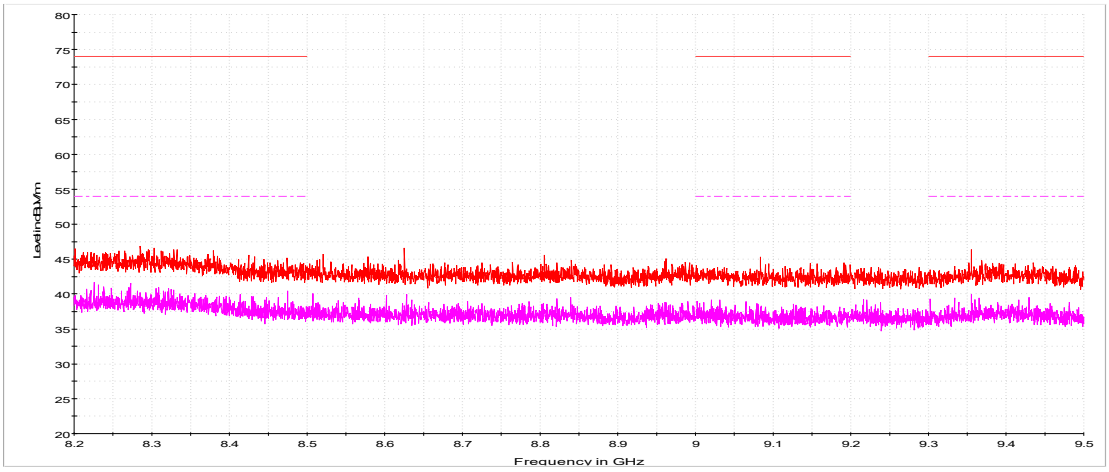
Graph 41

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



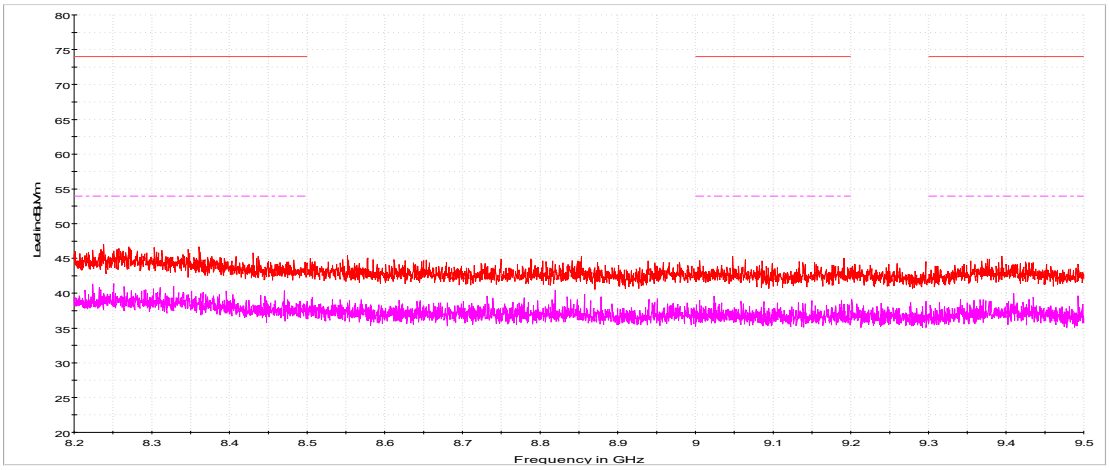
Graph 42

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



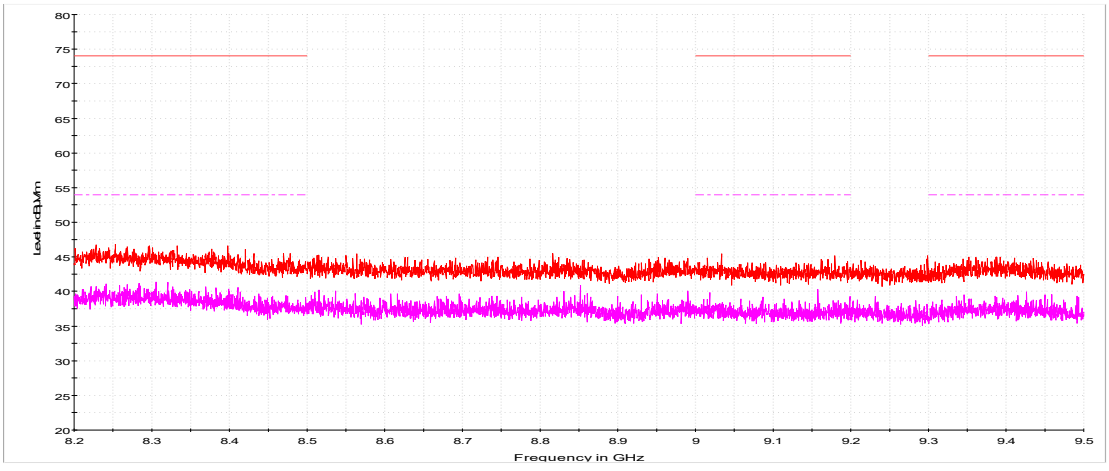
Graph 43

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



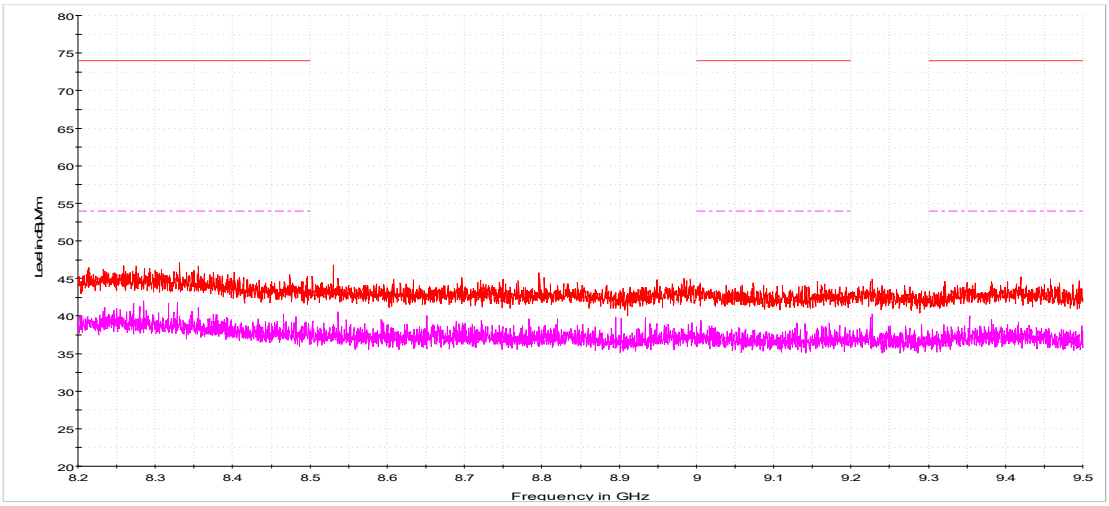
Graph 44

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m - Peak Limit
FCC Part 15.247 - TX - Restricted Band 15.209 3m Limit
Peak Preview
Average Preview
CISPR AV
Peak

Graph 45

Appendix C.4 – Measurement Graphs – Restricted Bands – Middle Channel

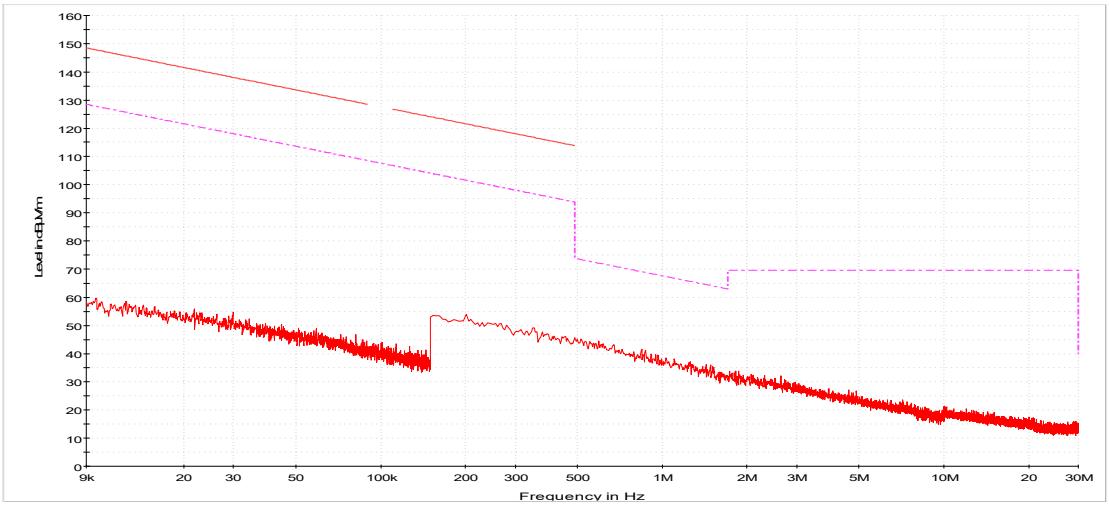
No.	Test	Graph Description
46	Radiated Emissions – Restricted Bands – Middle Channel (Channel 33)	9kHz to 30MHz – Yagi Antenna Horizontal – Antenna X
47		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Y
48		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Z
49		9kHz to 30MHz – Yagi Antenna Vertical – Antenna X
50		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Y
51		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Z
52		9kHz to 30MHz – Colinear Antenna – Antenna X
53		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Horizontal
54		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Vertical
55		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Horizontal
56		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Vertical
57		30MHz to 1GHz – Colinear Antenna– Antenna Horizontal
58		30MHz to 1GHz – Colinear Antenna– Antenna Vertical
59		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
60		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Vertical
61		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Horizontal
62		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Vertical
63		1GHz to 1.5GHz – Colinear Antenna– Antenna Horizontal
64		1GHz to 1.5GHz – Colinear Antenna– Antenna Vertical
65		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Horizontal
66		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Vertical
67		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Horizontal
68		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Vertical
69		1.5GHz to 6GHz – Colinear Antenna– Antenna Horizontal
70		1.5GHz to 6GHz – Colinear Antenna– Antenna Vertical
71		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Horizontal
72		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Vertical
73		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Horizontal
74		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Vertical
75		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Horizontal
76		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Vertical
77		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
78		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Vertical
79		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Horizontal
80		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Vertical
81		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Horizontal
82		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Vertical

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

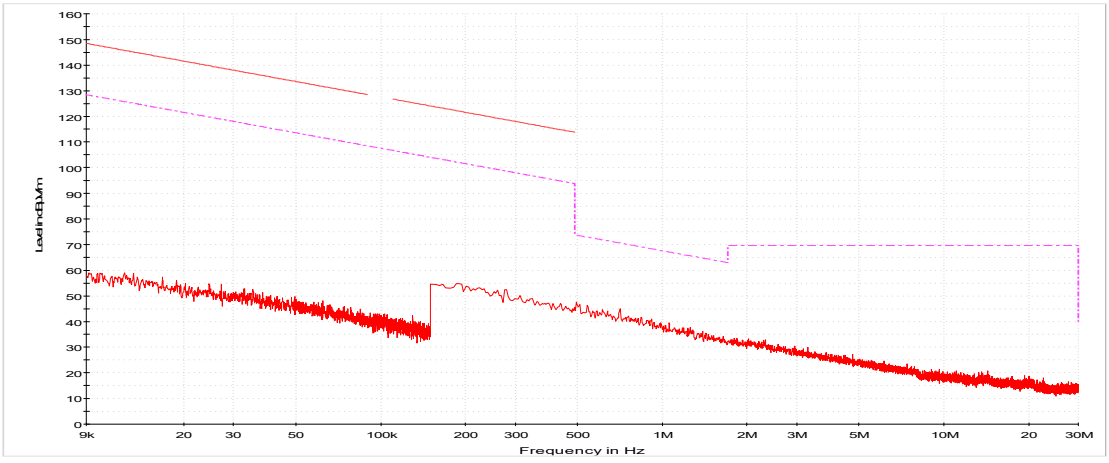
Graph 46

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

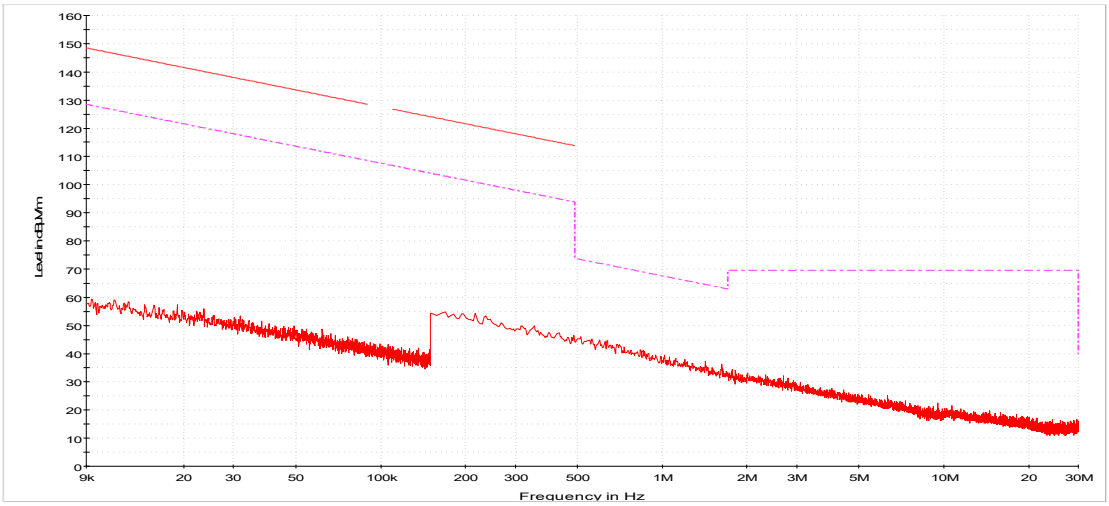
Graph 47

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ | FCC Part 15.209 3m Peak Limit | FCC Part 15.209 3m Limit | Quasi Peak | CISPR AV

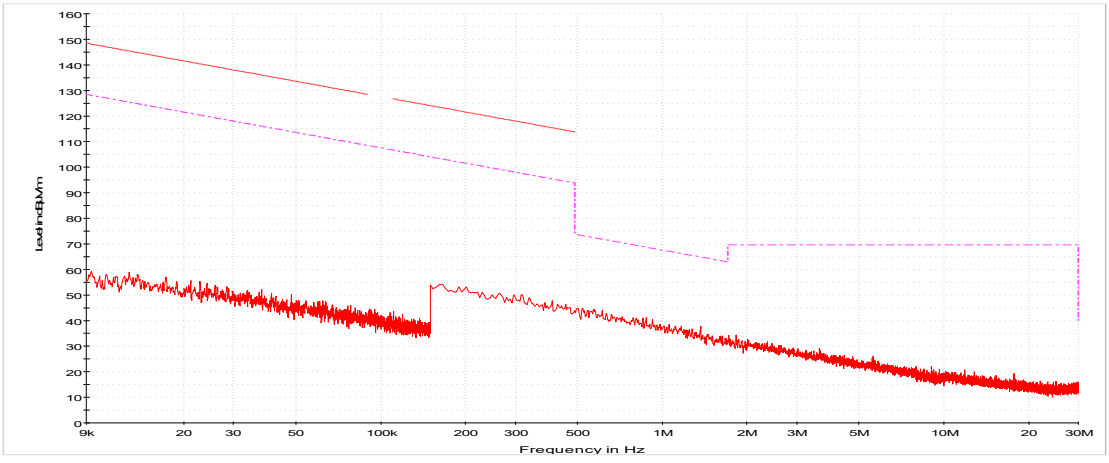
Graph 48

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ | FCC Part 15.209 3m Peak Limit | FCC Part 15.209 3m Limit | Quasi Peak | CISPR AV

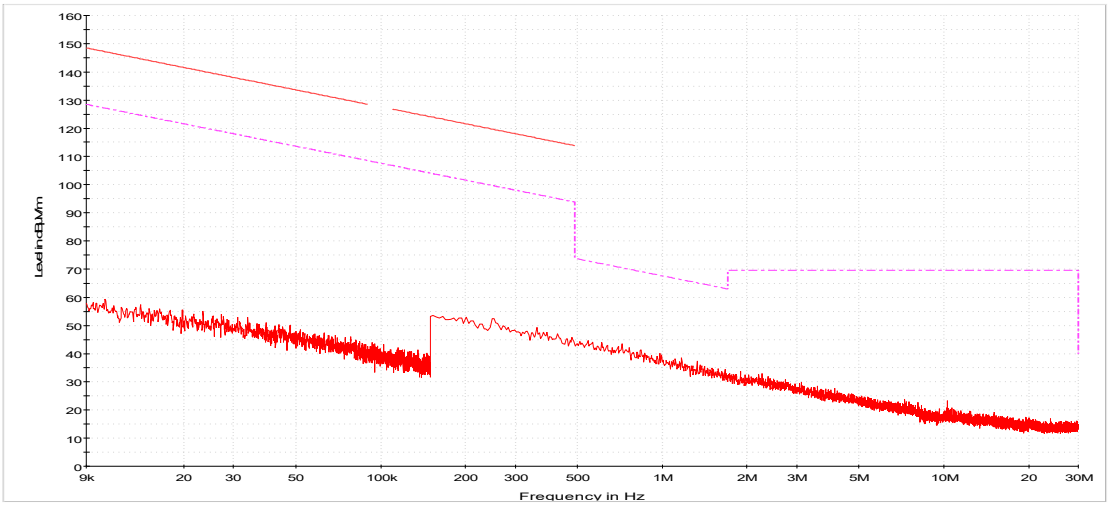
Graph 49

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

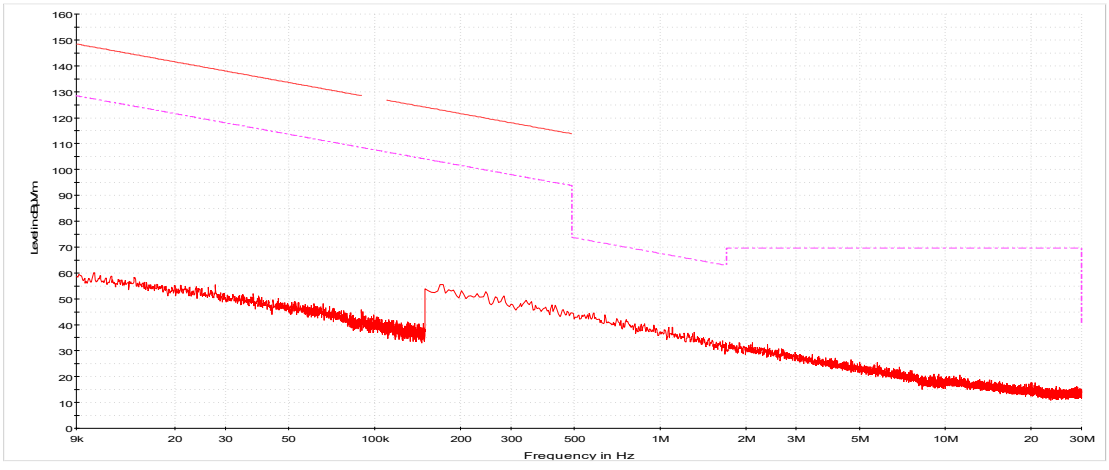
Graph 50

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

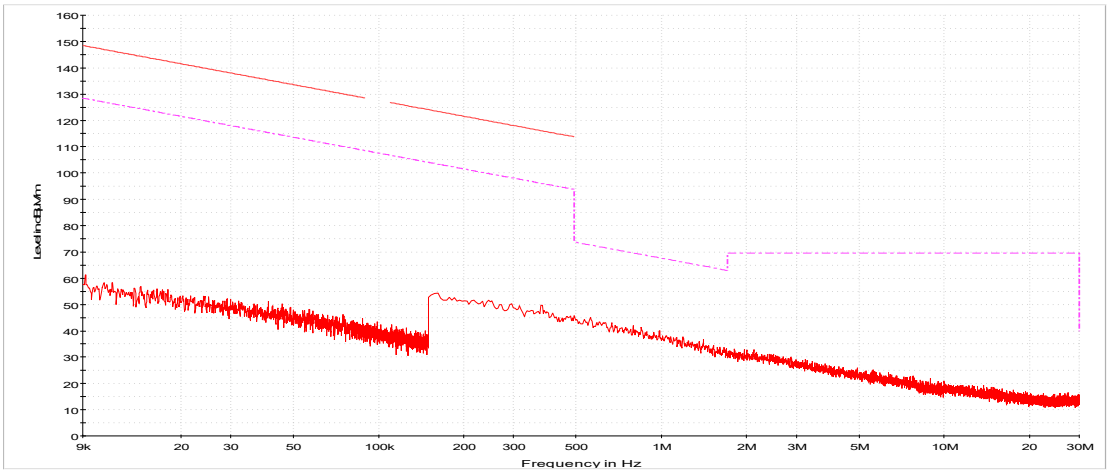
Graph 51

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ | FCC Part 15.209 3m Peak Limit | FCC Part 15.209 3m Limit | Quasi Peak | CISPR AV

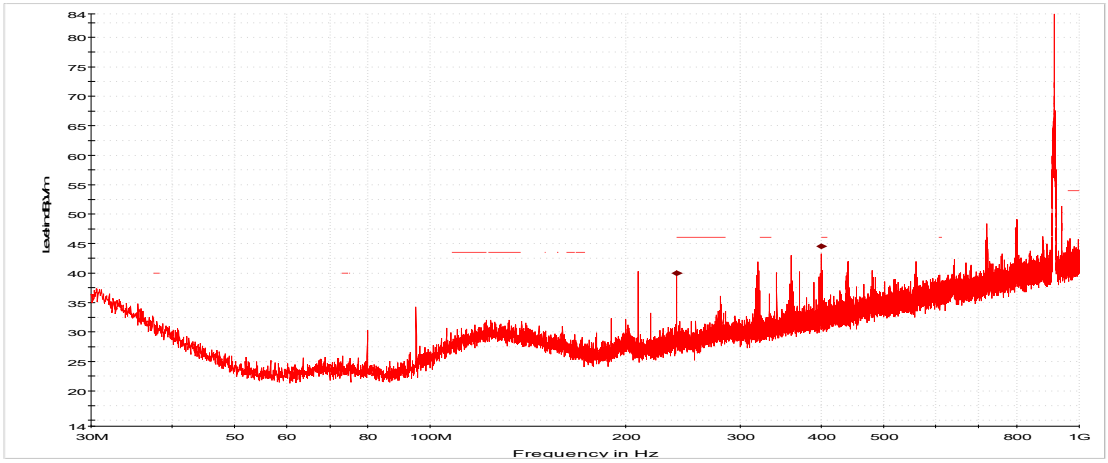
Graph 52

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m | Max Peak-Max Hold-PK+ | Quasi-peak

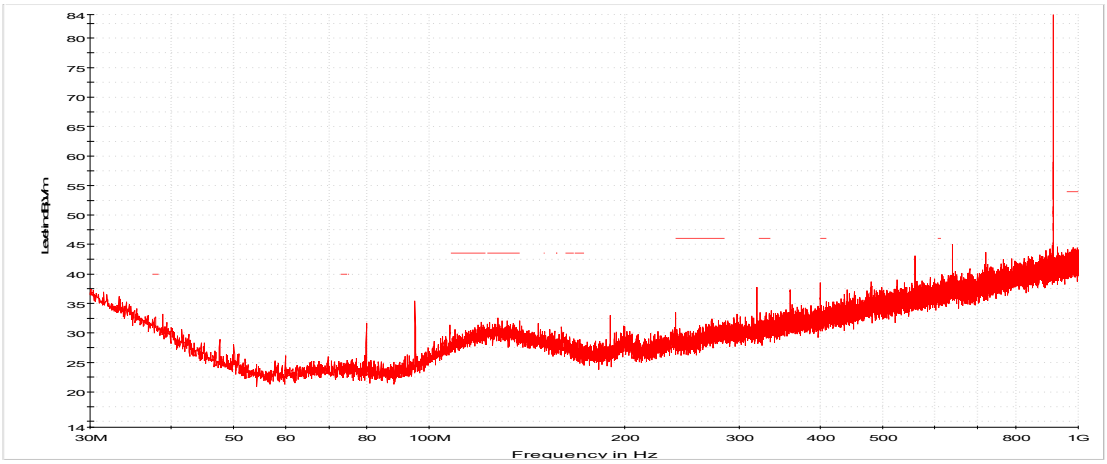
Graph 53

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

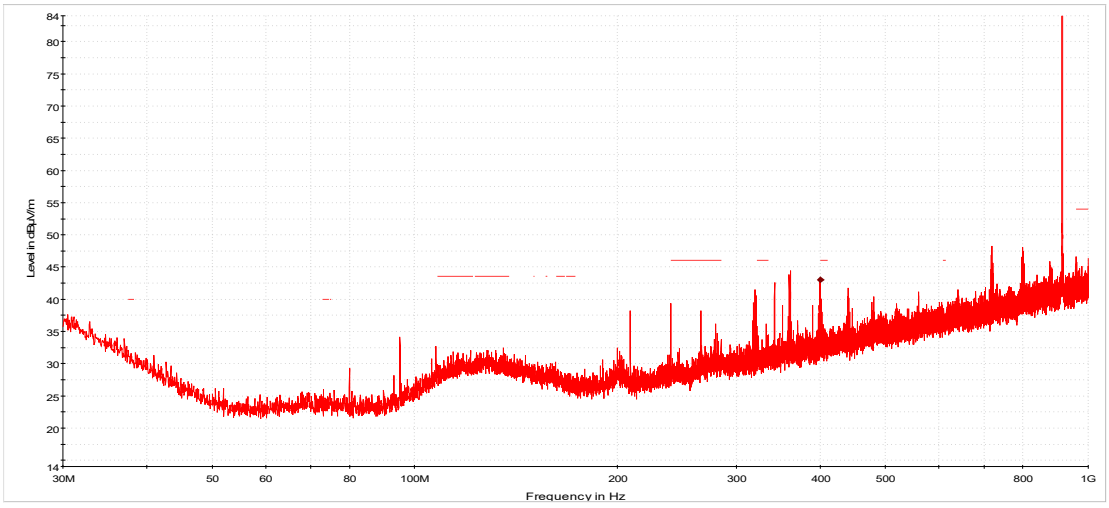
Graph 54

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

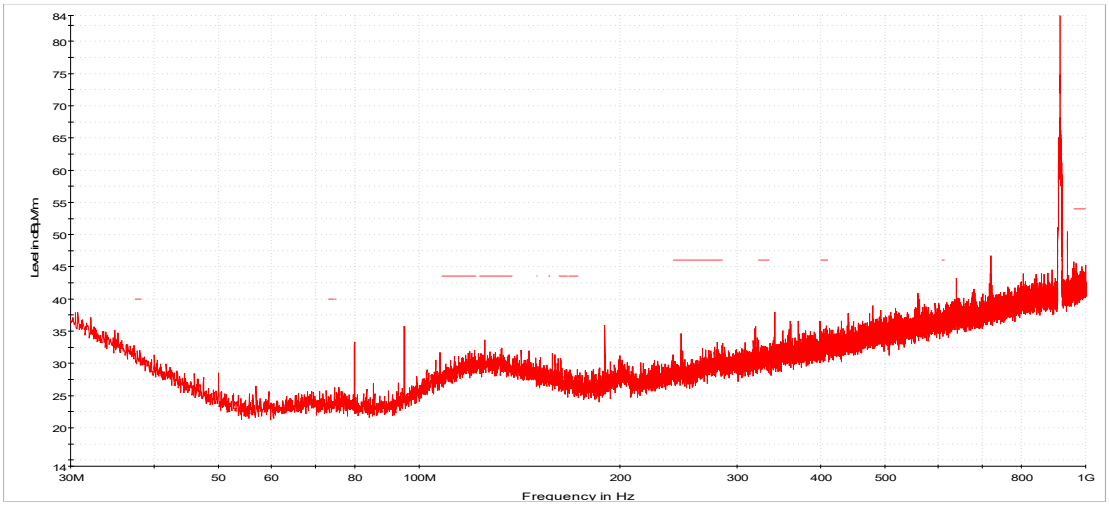
Graph 55

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical –
Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

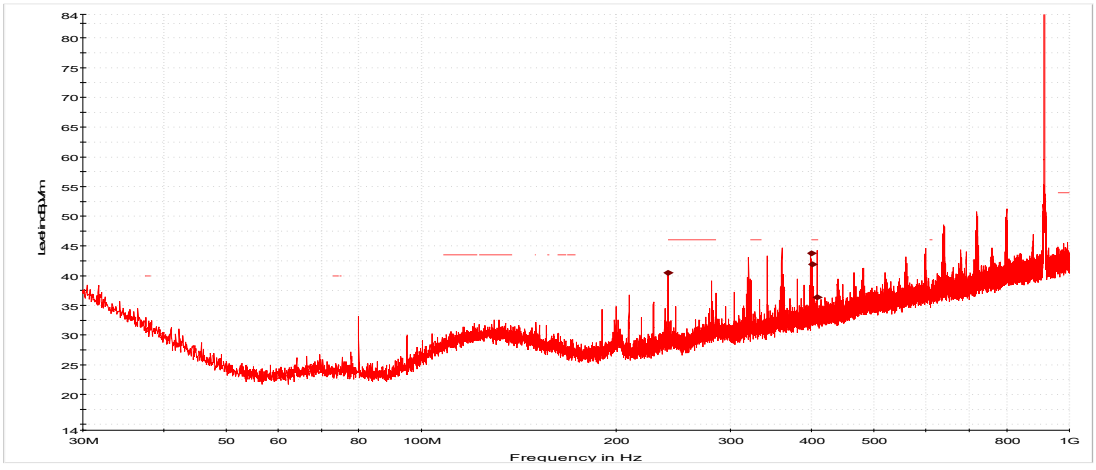
Graph 56

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

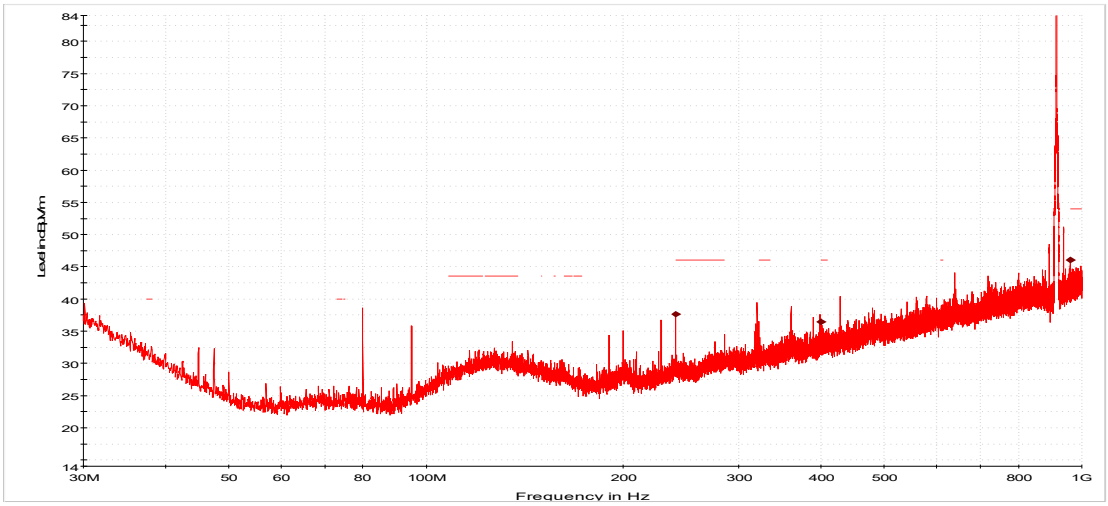
Graph 57

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ ◆ Quasi-peak

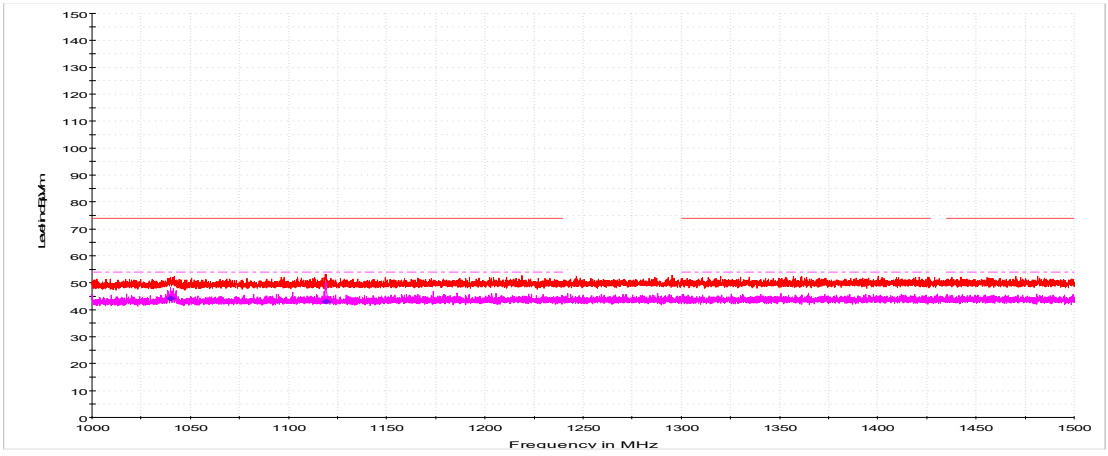
Graph 58

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m - Peak Limit — FCC Part 15.247 - TX - Restricted Band 15.209 3m Limit — Peak Preview
Average Preview ◆ CISPR AV ◆ Peak

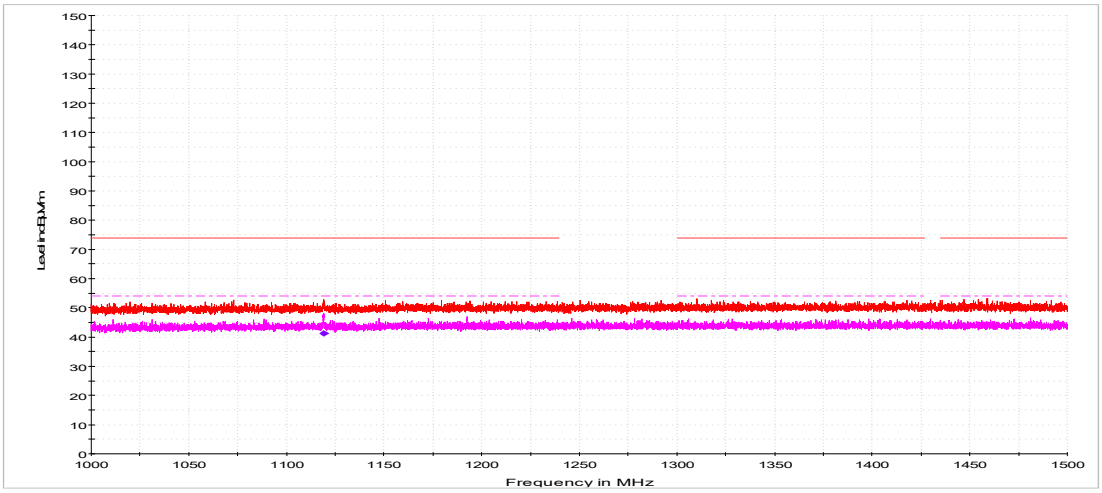
Graph 59

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



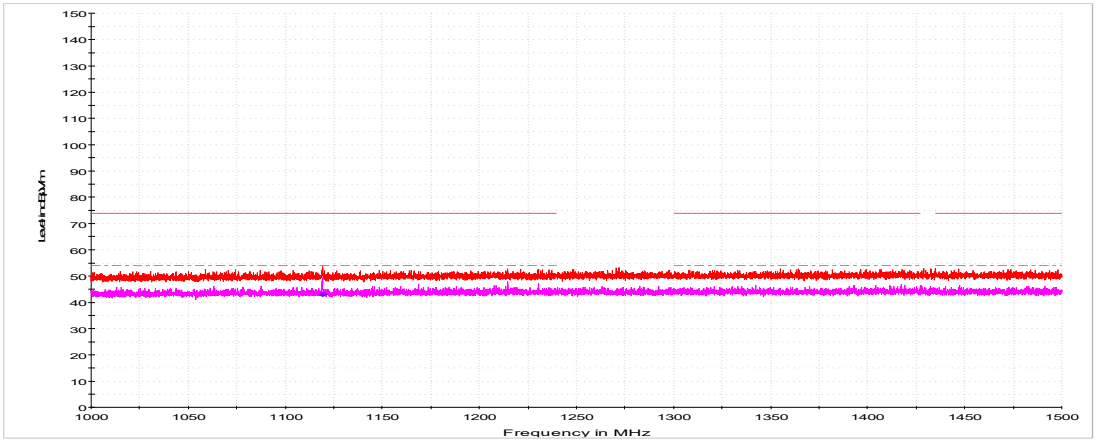
Graph 60

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



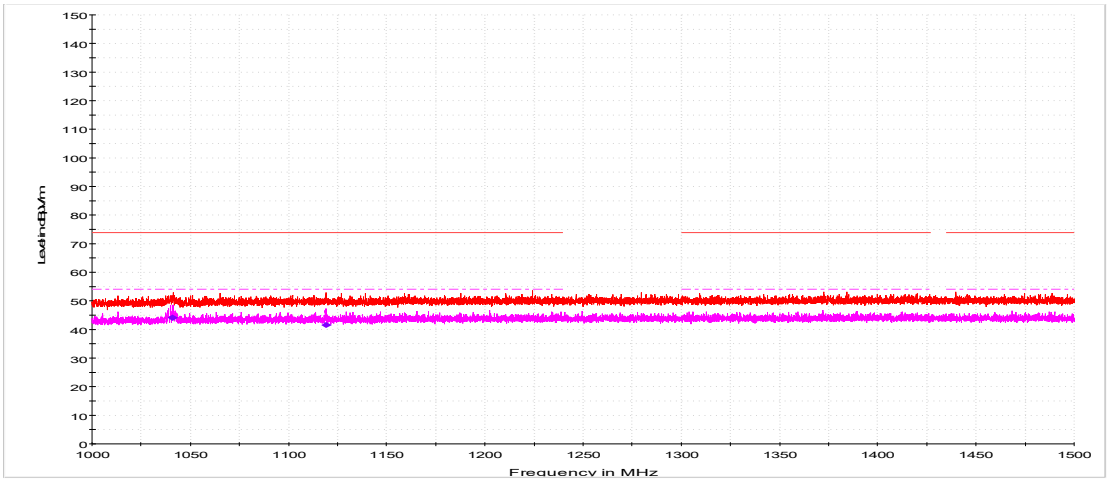
Graph 61

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical –
Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



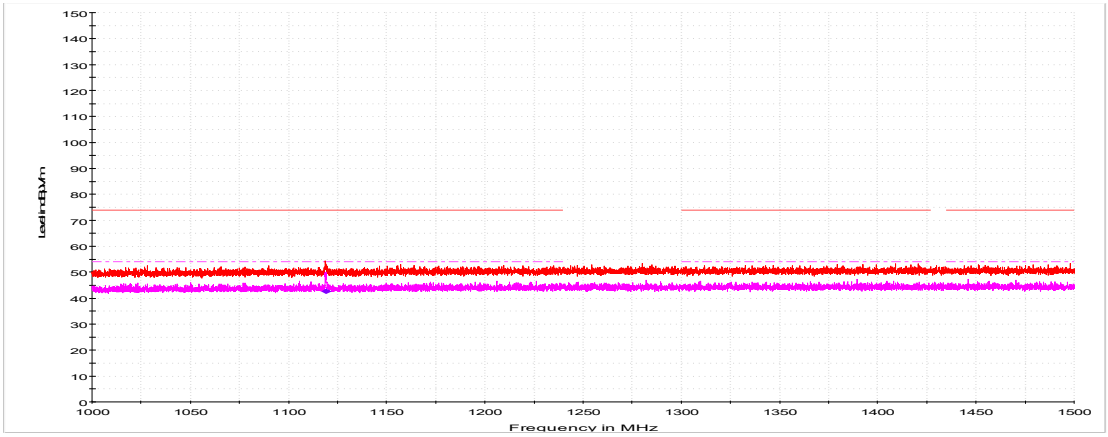
Graph 62

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



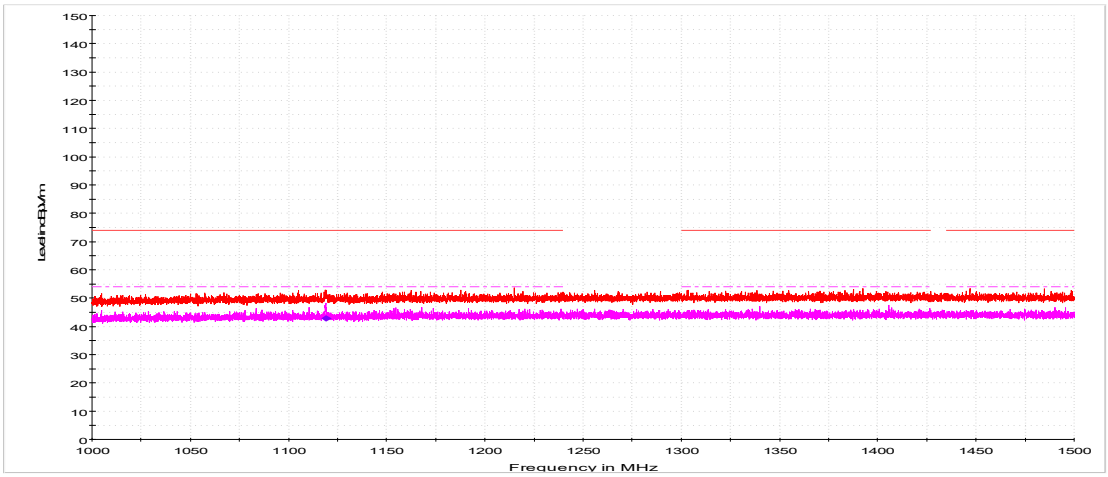
Graph 63

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



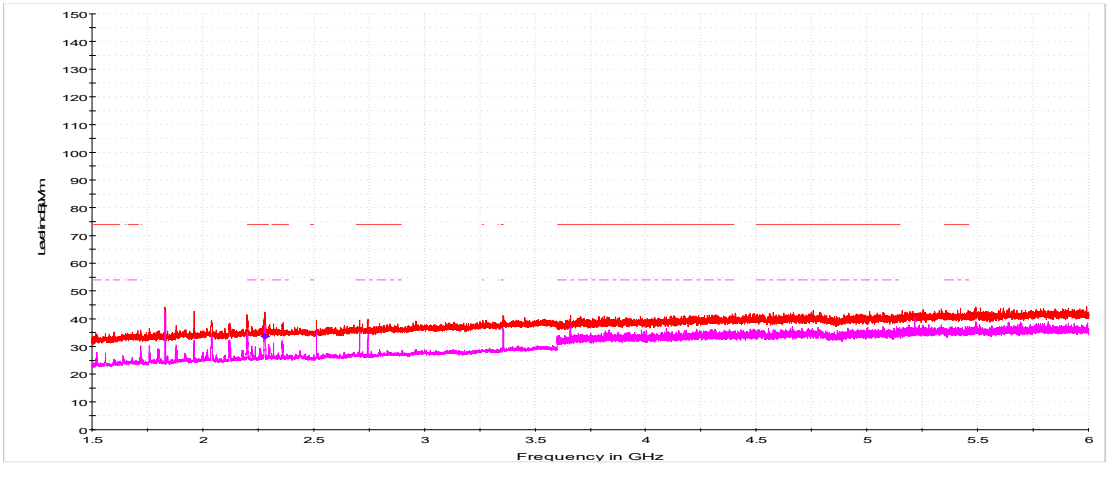
Graph 64

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



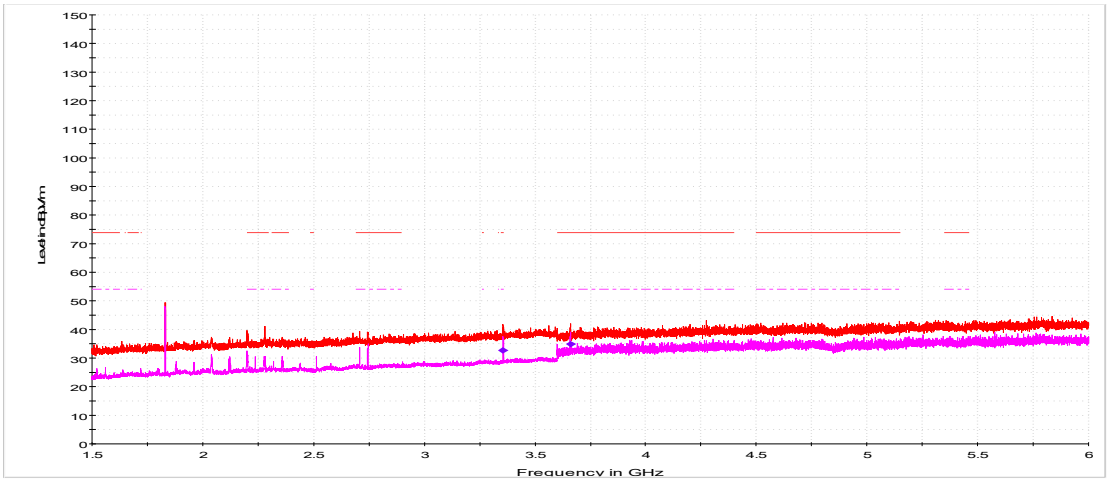
Graph 65

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



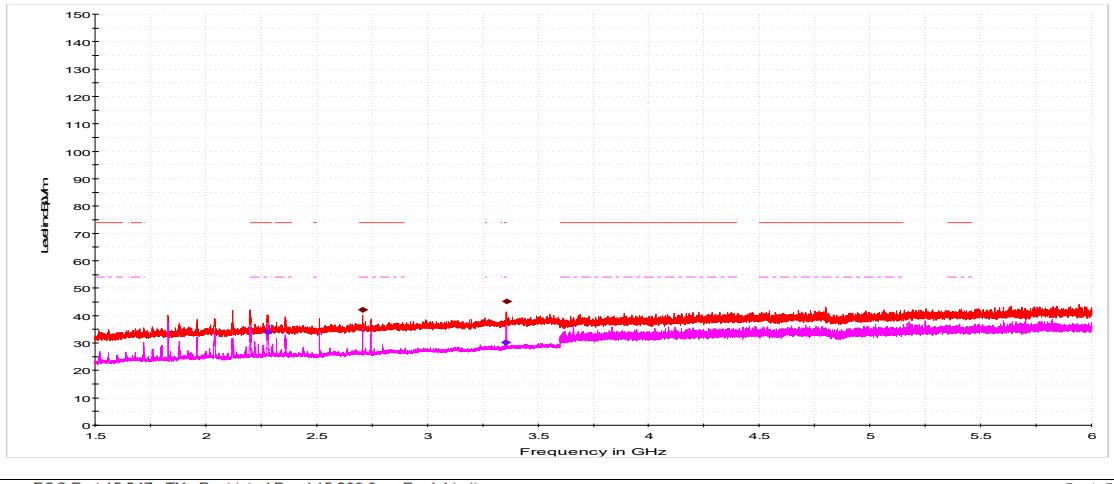
Graph 66

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



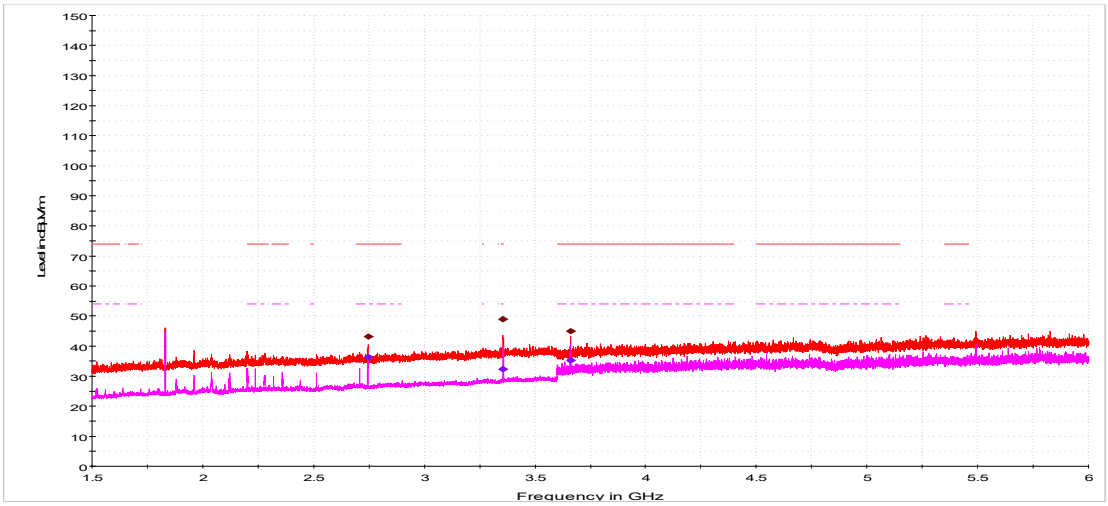
Graph 67

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical –
Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



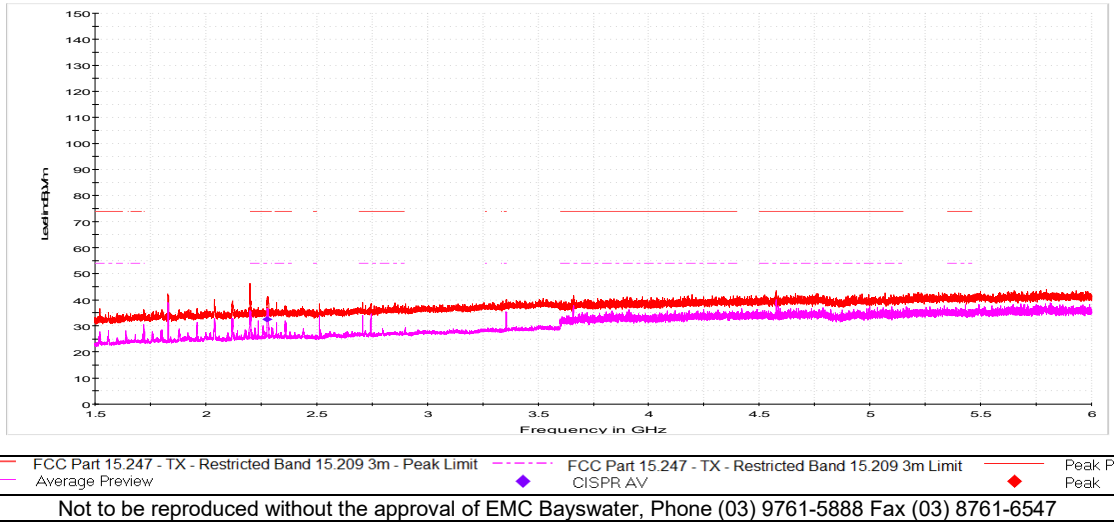
Graph 68

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



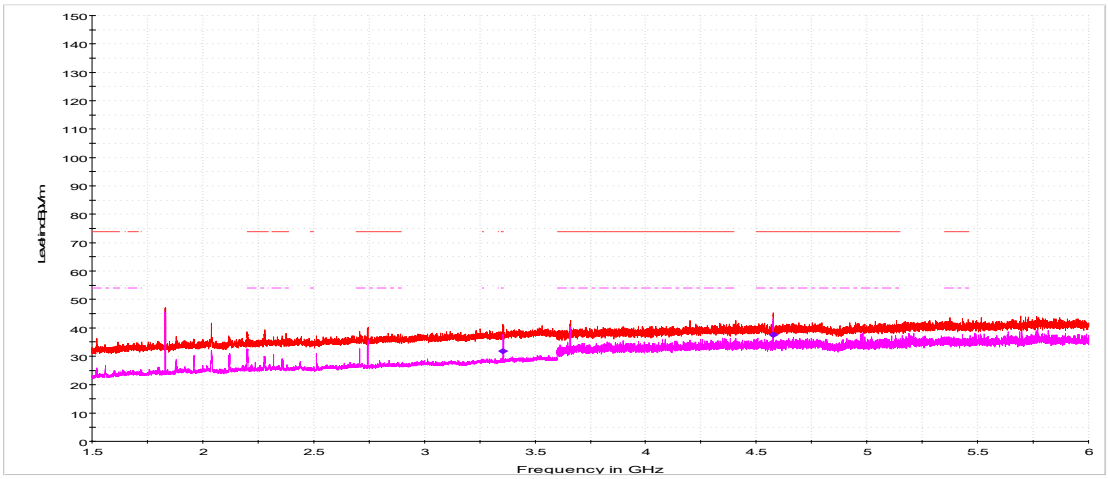
Graph 69

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



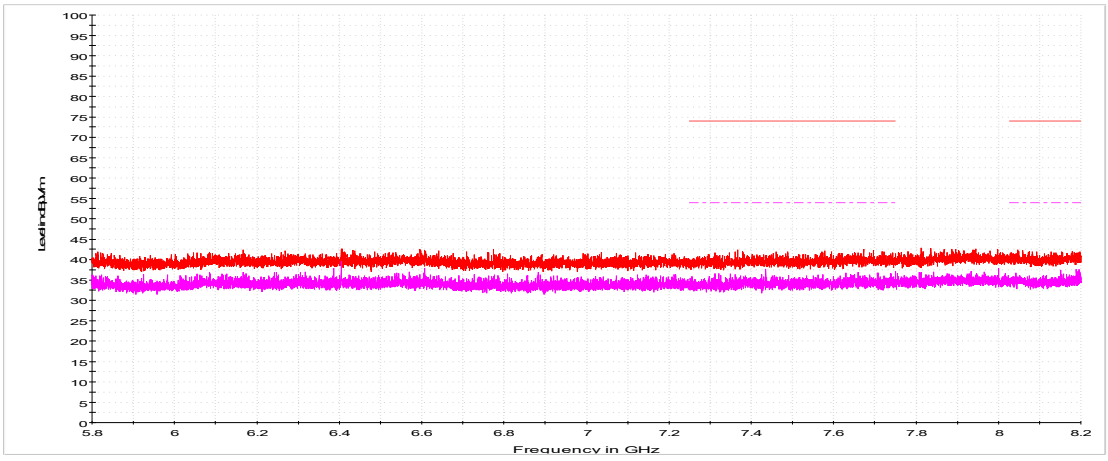
Graph 70

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



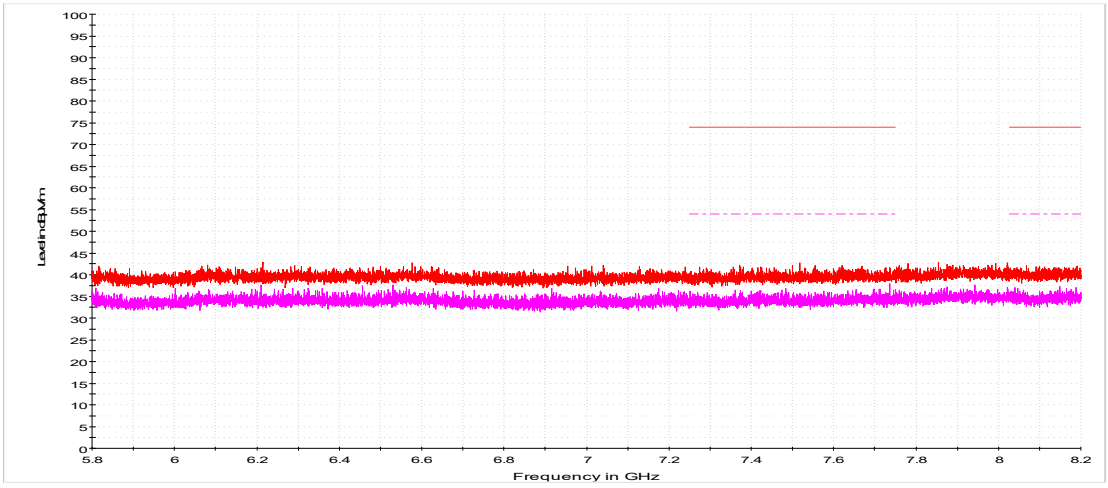
Graph 71

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



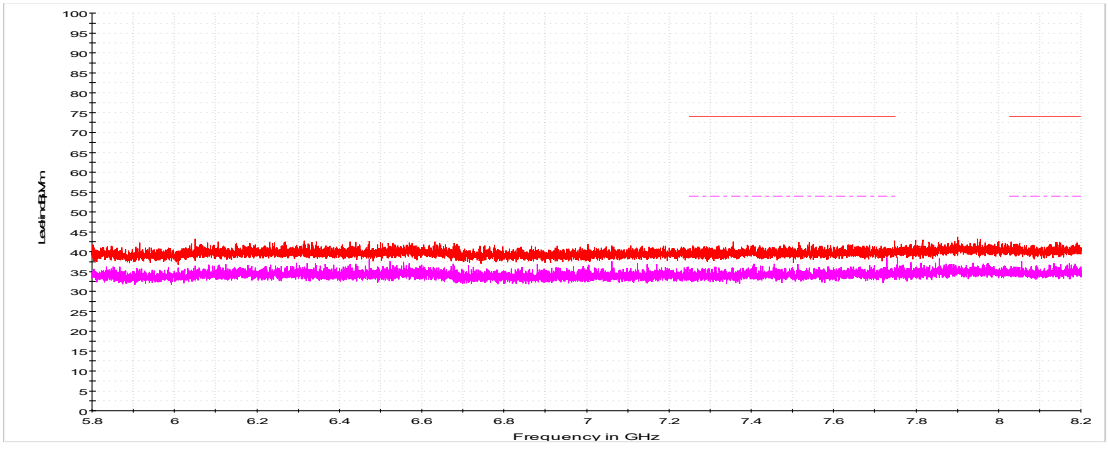
Graph 72

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



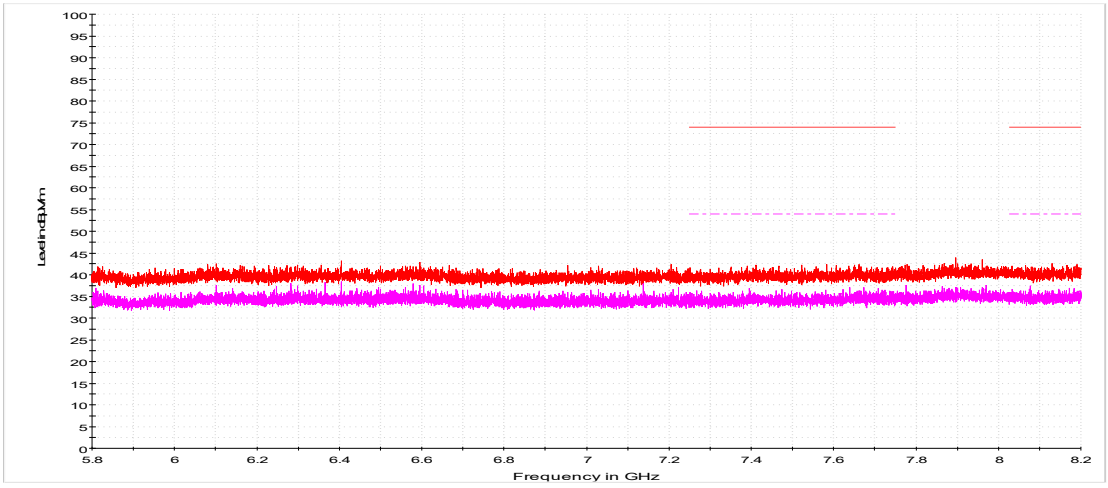
Graph 73

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical –
Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



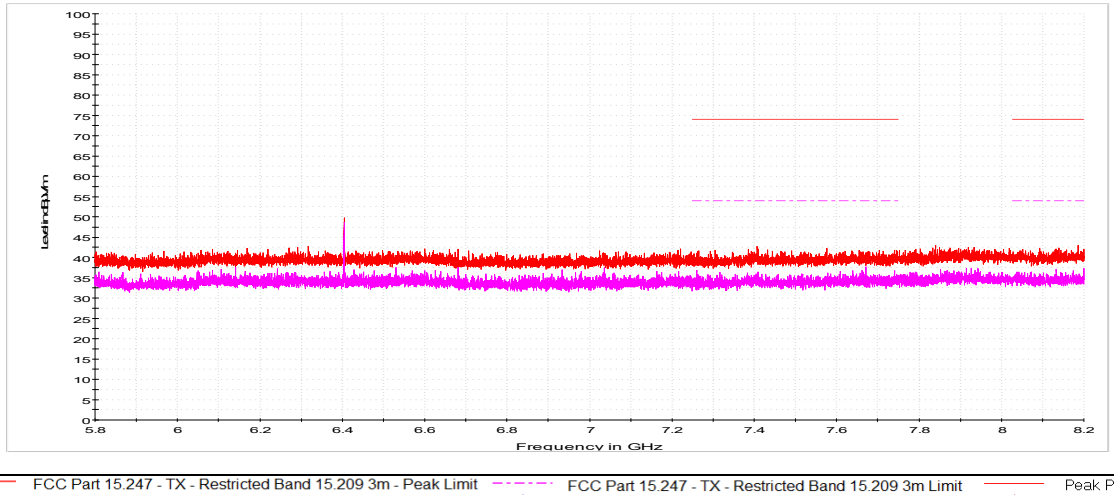
Graph 74

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



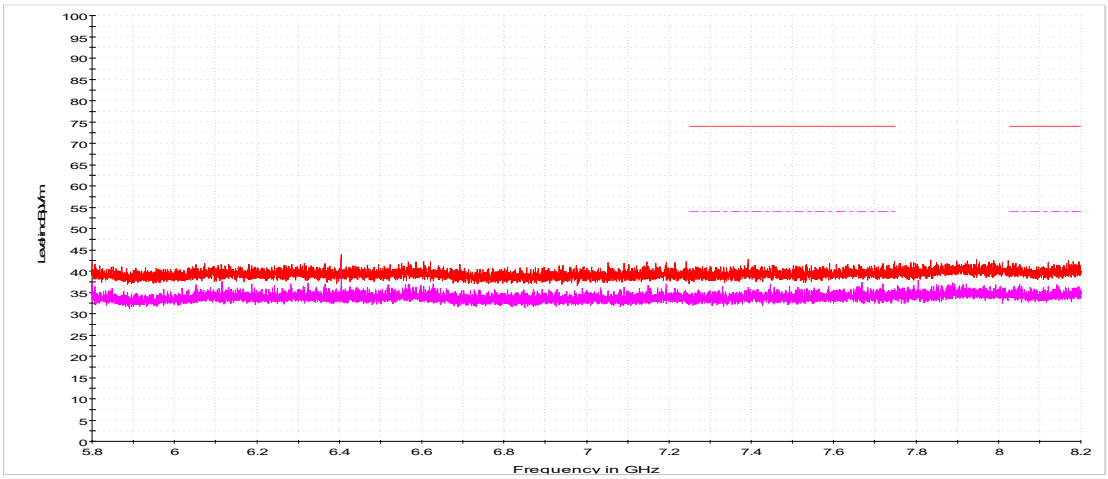
Graph 75

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



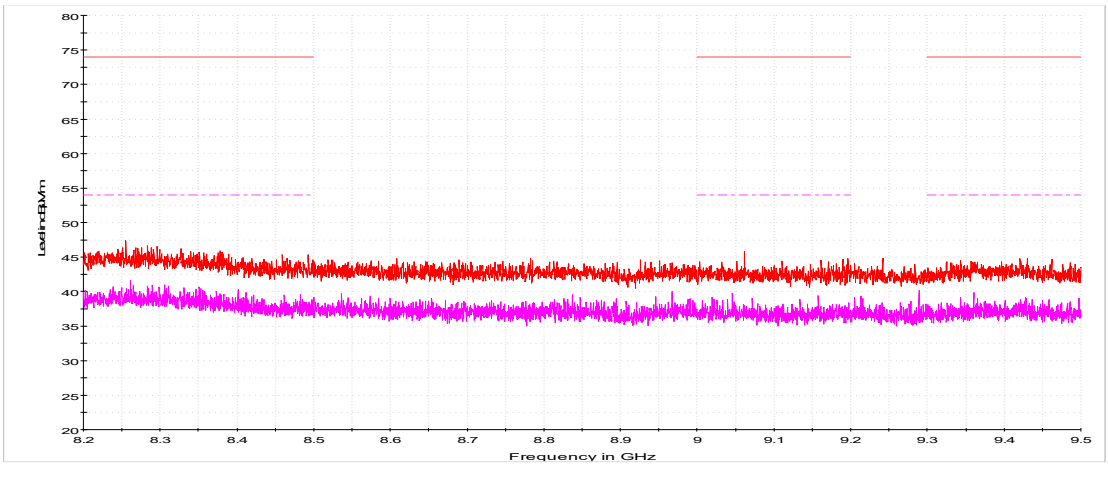
Graph 76

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



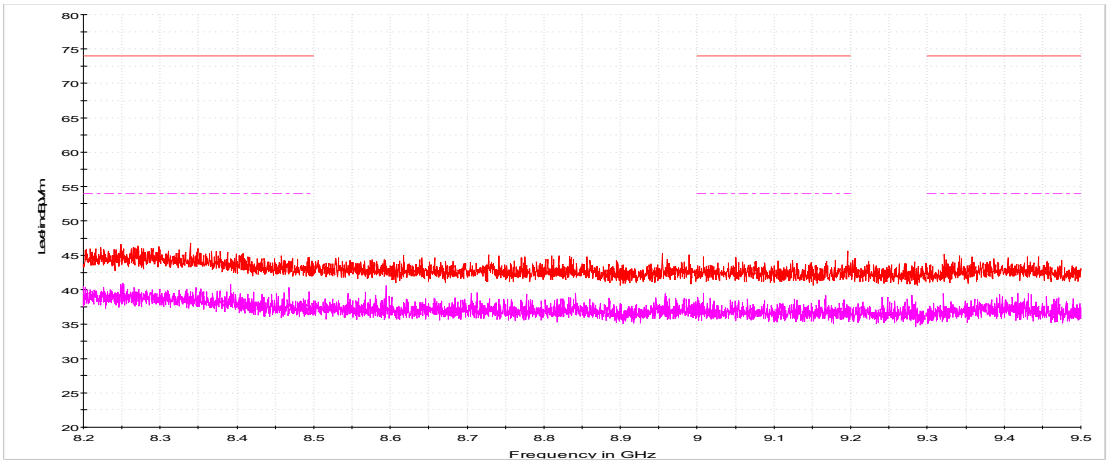
Graph 77

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



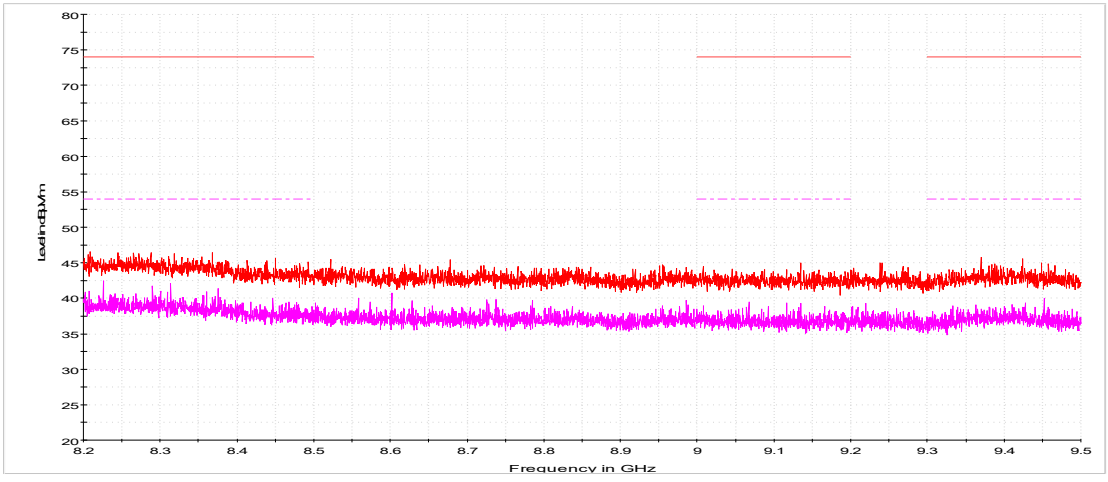
Graph 78

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



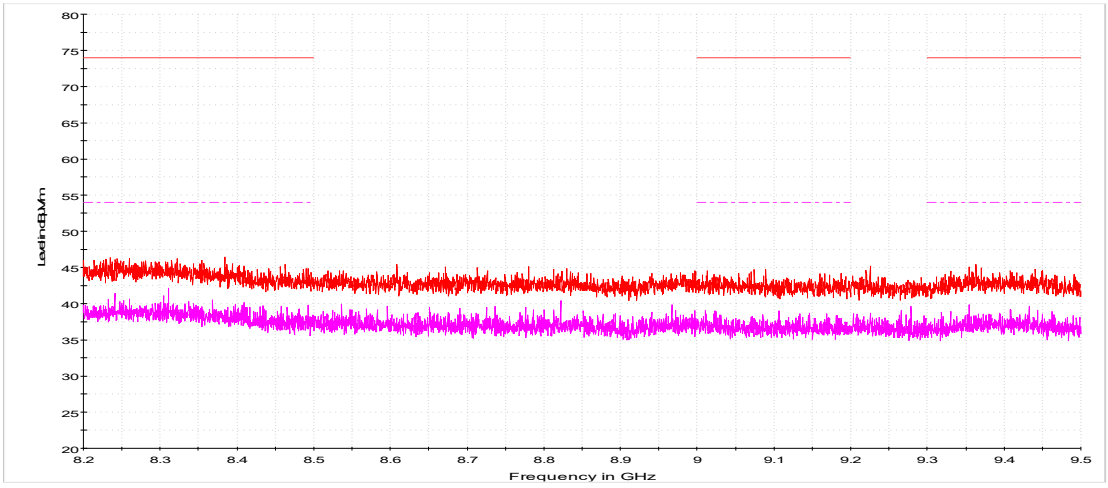
Graph 79

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical –
Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



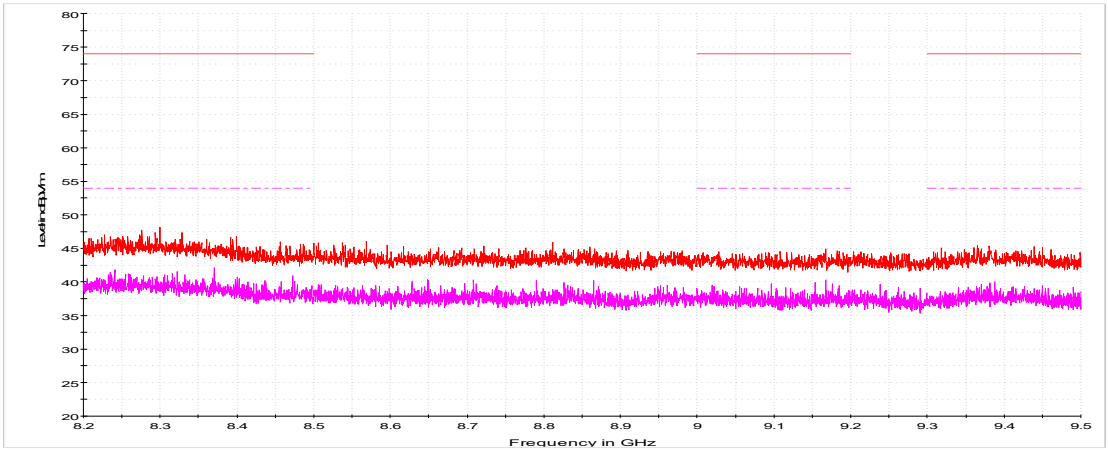
Graph 80

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



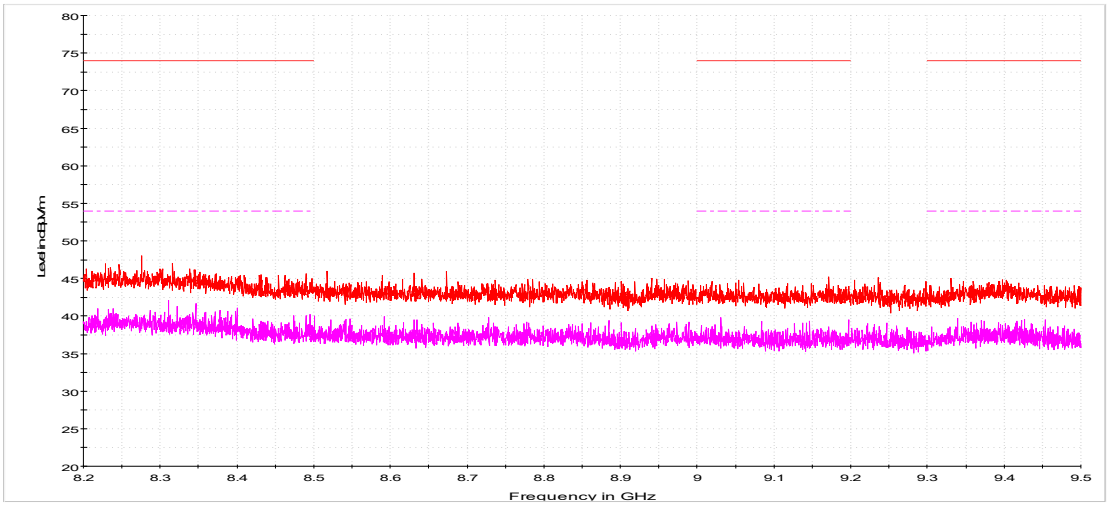
Graph 81

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number:	E1907-1185-1 Rev 1
Test Engineer:	AZ



Graph 82

Appendix C.5 – Measurement Graphs – Restricted Bands – Top Channel

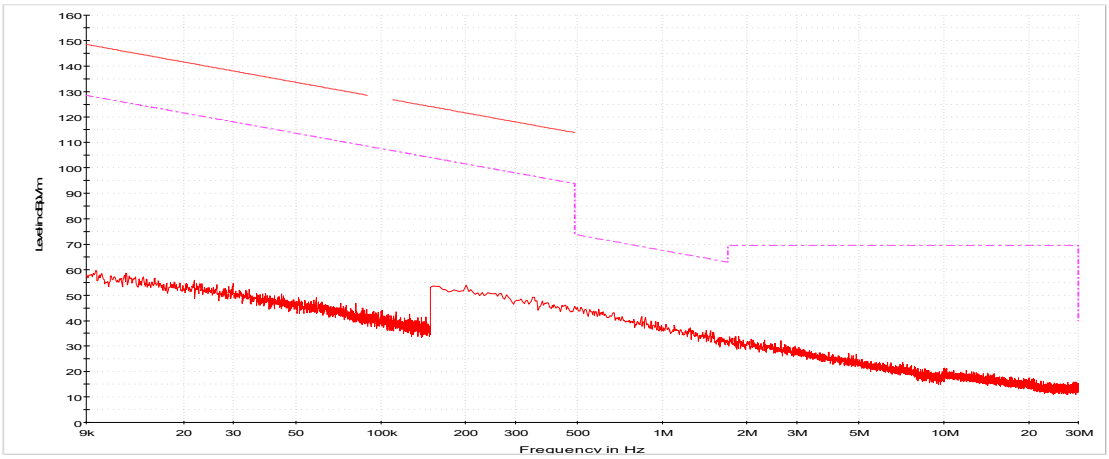
No.	Test	Graph Description
83	Radiated Emissions – Restricted Bands – Top Channel (Channel 66)	9kHz to 30MHz – Yagi Antenna Horizontal – Antenna X
84		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Y
85		9kHz to 30MHz – Yagi Antenna Horizontal – Antenna Z
86		9kHz to 30MHz – Yagi Antenna Vertical – Antenna X
87		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Y
88		9kHz to 30MHz – Yagi Antenna Vertical – Antenna Z
89		9kHz to 30MHz – Colinear Antenna – Antenna X
90		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Horizontal
91		30MHz to 1GHz – Yagi Antenna Horizontal – Antenna Vertical
92		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Horizontal
93		30MHz to 1GHz – Yagi Antenna Vertical – Antenna Vertical
94		30MHz to 1GHz – Colinear Antenna– Antenna Horizontal
95		30MHz to 1GHz – Colinear Antenna– Antenna Vertical
96		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
97		1GHz to 1.5GHz – Yagi Antenna Horizontal – Antenna Vertical
98		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Horizontal
99		1GHz to 1.5GHz – Yagi Antenna Vertical – Antenna Vertical
100		1GHz to 1.5GHz – Colinear Antenna– Antenna Horizontal
101		1GHz to 1.5GHz – Colinear Antenna– Antenna Vertical
102		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Horizontal
103		1.5GHz to 6GHz – Yagi Antenna Horizontal – Antenna Vertical
104		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Horizontal
105		1.5GHz to 6GHz – Yagi Antenna Vertical – Antenna Vertical
106		1.5GHz to 6GHz – Colinear Antenna– Antenna Horizontal
107		1.5GHz to 6GHz – Colinear Antenna– Antenna Vertical
108		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Horizontal
109		5.8GHz to 8.2GHz – Yagi Antenna Horizontal – Antenna Vertical
110		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Horizontal
111		5.8GHz to 8.2GHz – Yagi Antenna Vertical – Antenna Vertical
112		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Horizontal
113		5.8GHz to 8.2GHz – Colinear Antenna– Antenna Vertical
114		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Horizontal
115		8.2GHz to 9.5GHz – Yagi Antenna Horizontal – Antenna Vertical
116		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Horizontal
117		8.2GHz to 9.5GHz – Yagi Antenna Vertical – Antenna Vertical
118		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Horizontal
119		8.2GHz to 9.5GHz – Colinear Antenna– Antenna Vertical

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

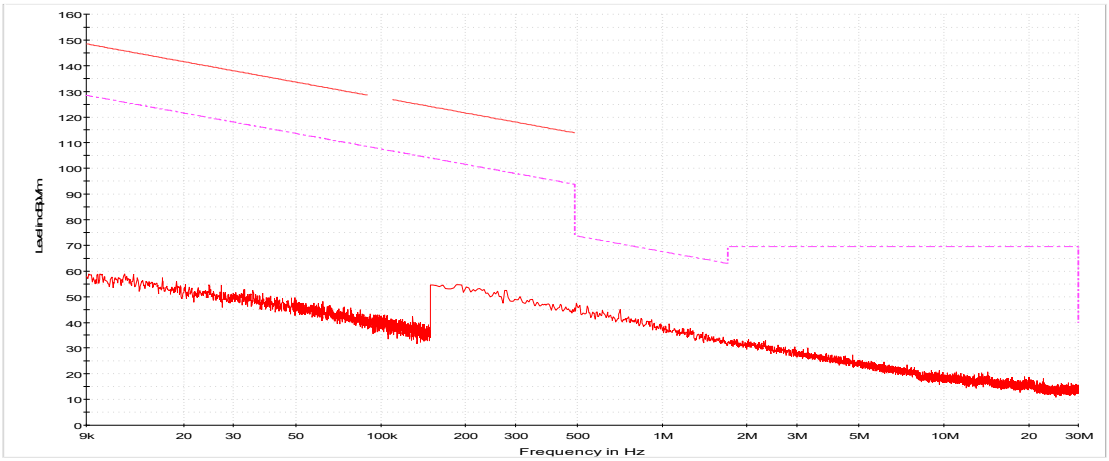
Graph 83

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

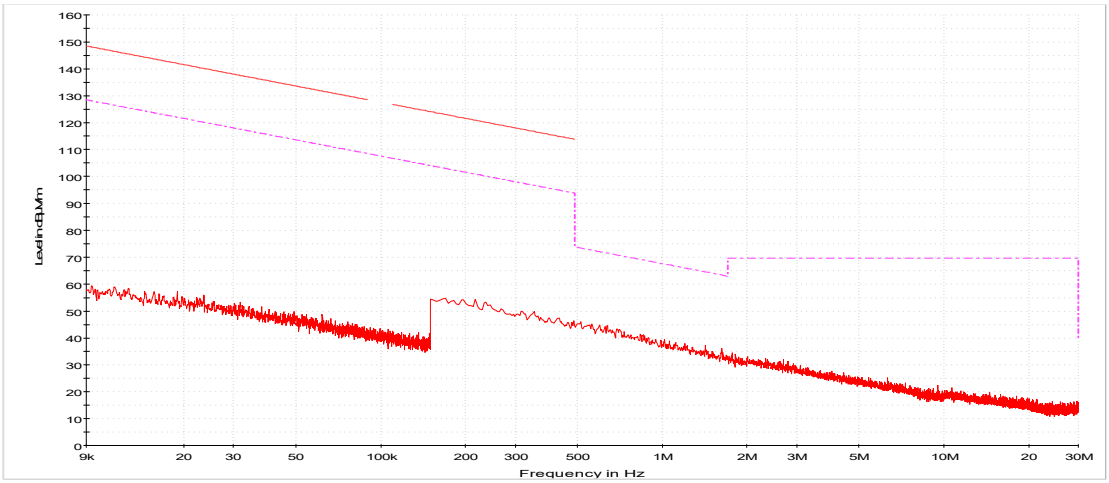
Graph 84

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

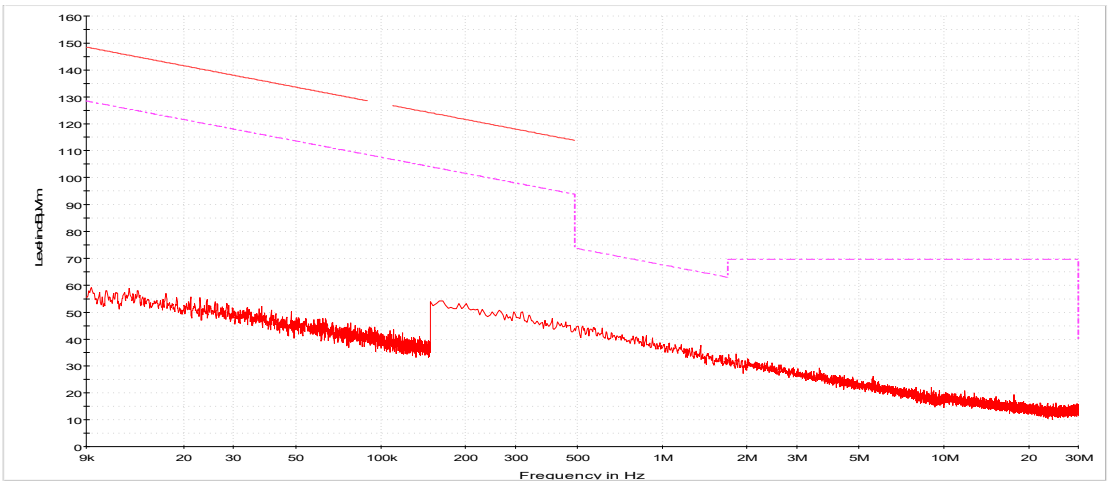
Graph 85

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

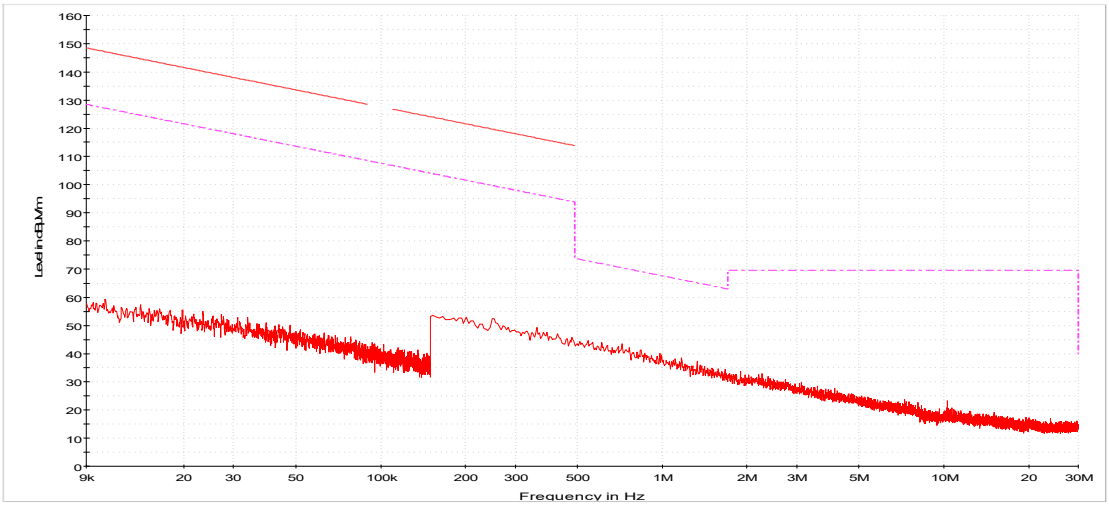
Graph 86

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Y – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



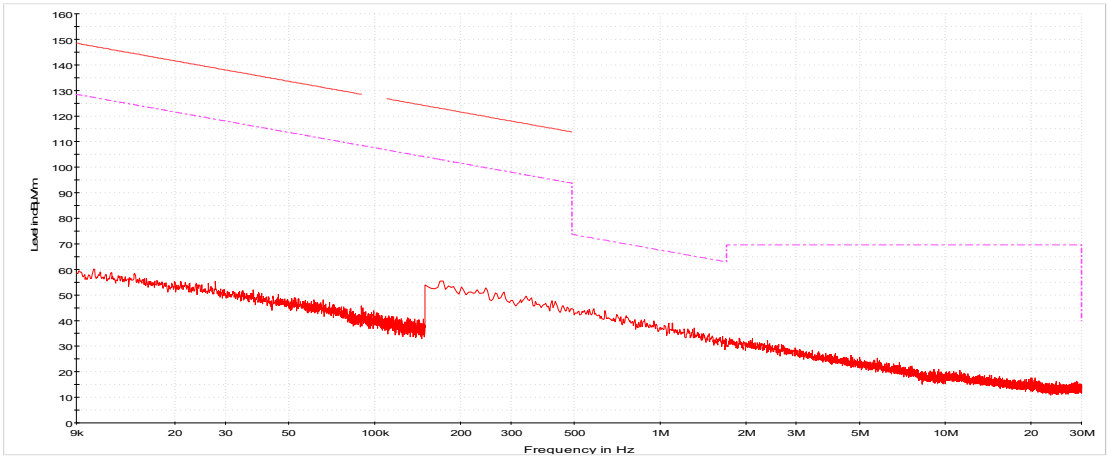
Graph 87

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Z – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



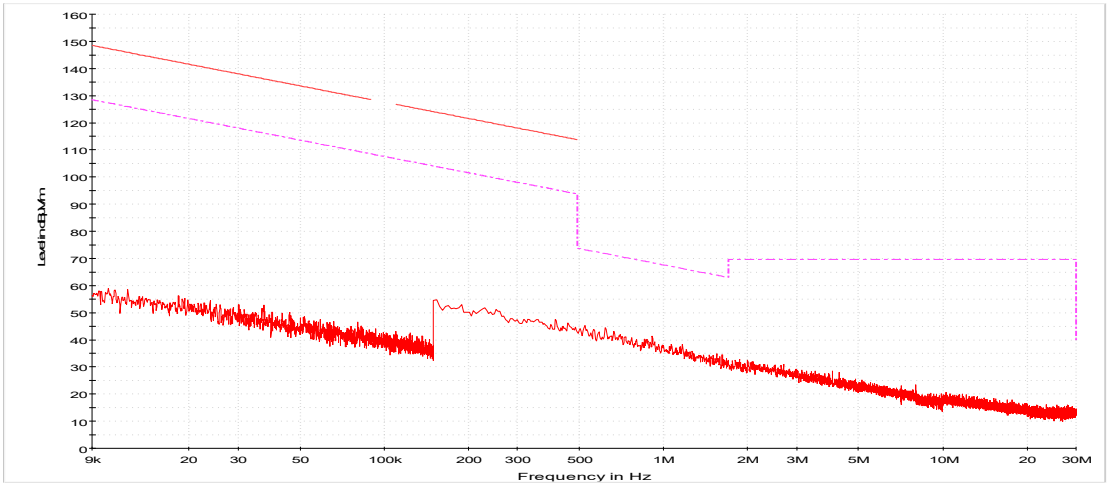
Graph 88

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation X – 9kHz to 30MHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



MaxPeak-MaxHold-PK+ FCC Part 15.209 3m Peak Limit FCC Part 15.209 3m Limit Quasi Peak CISPR AV

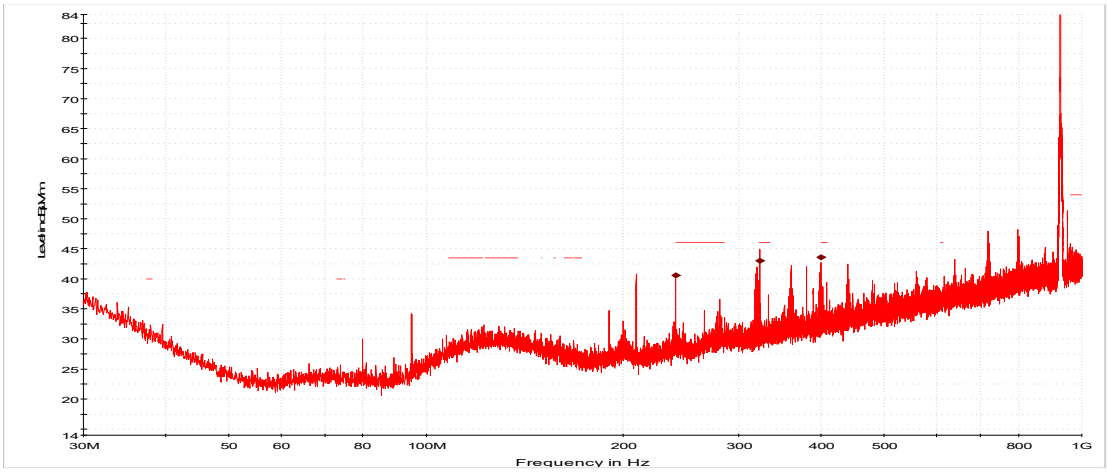
Graph 89

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m Max Peak-Max Hold-PK+ Quasi-peak

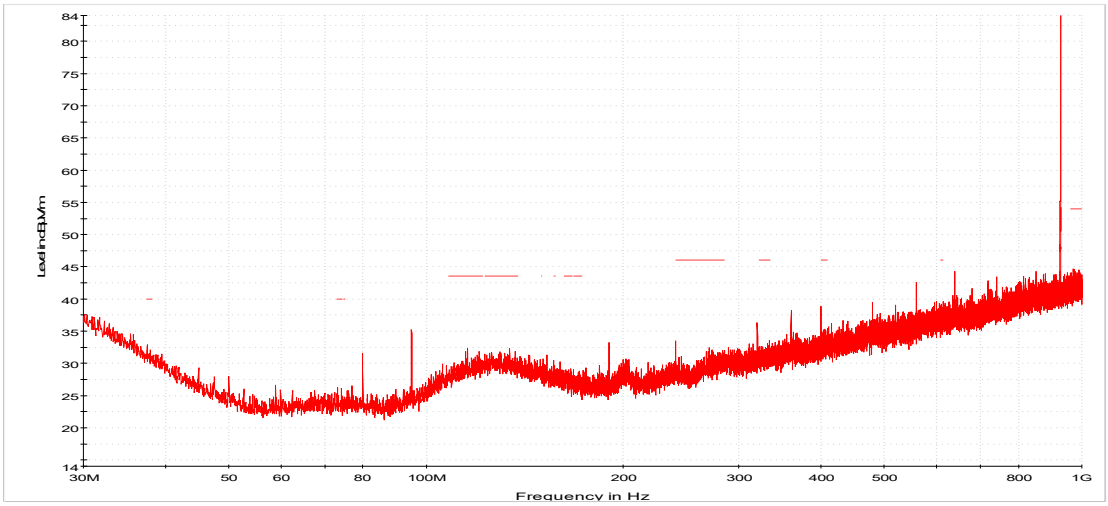
Graph 90

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ — Quasi-peak

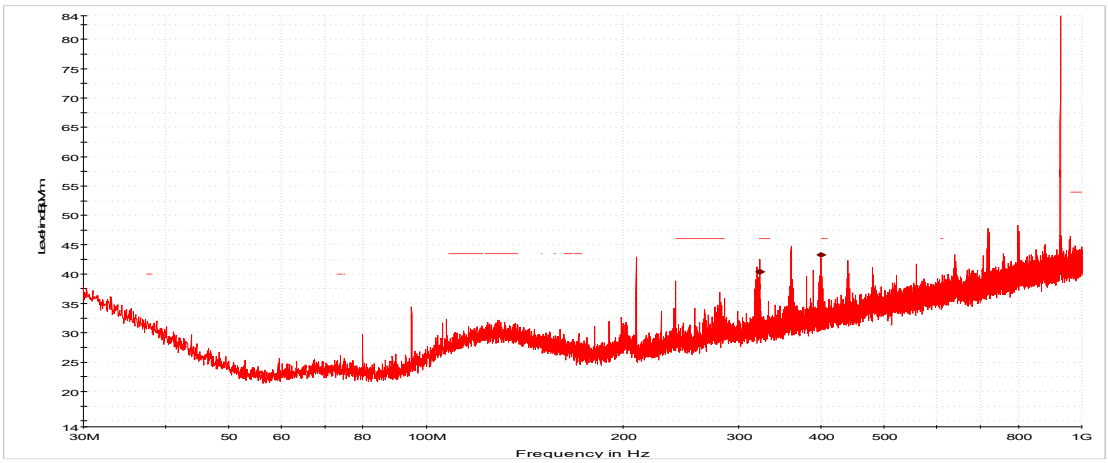
Graph 91

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ — Quasi-peak

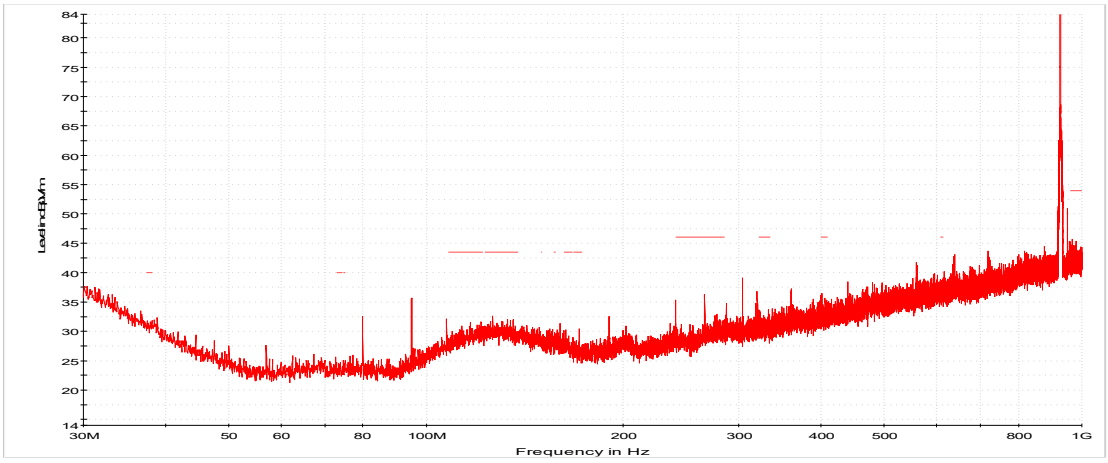
Graph 92

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ — Quasi-peak

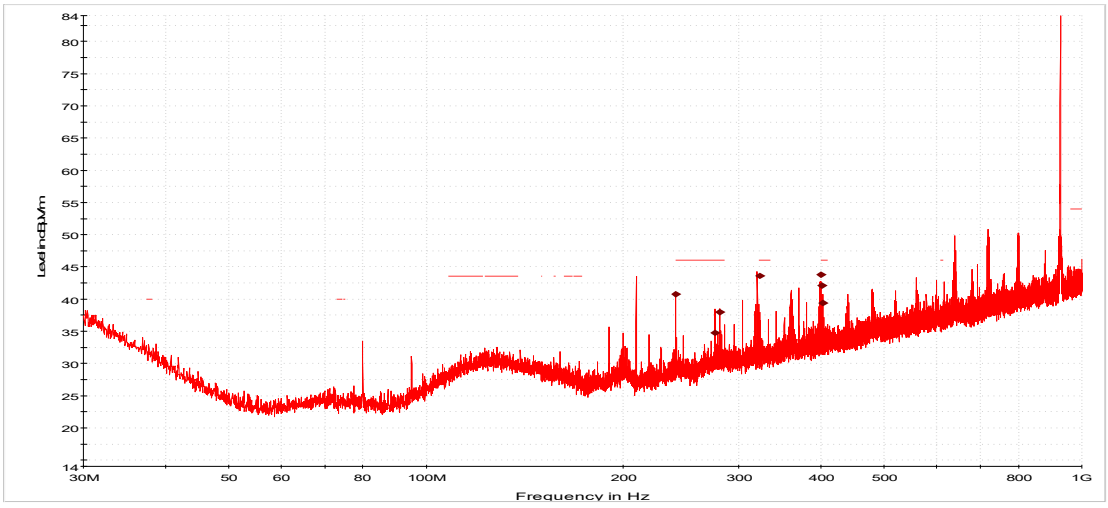
Graph 93

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ — Quasi-peak

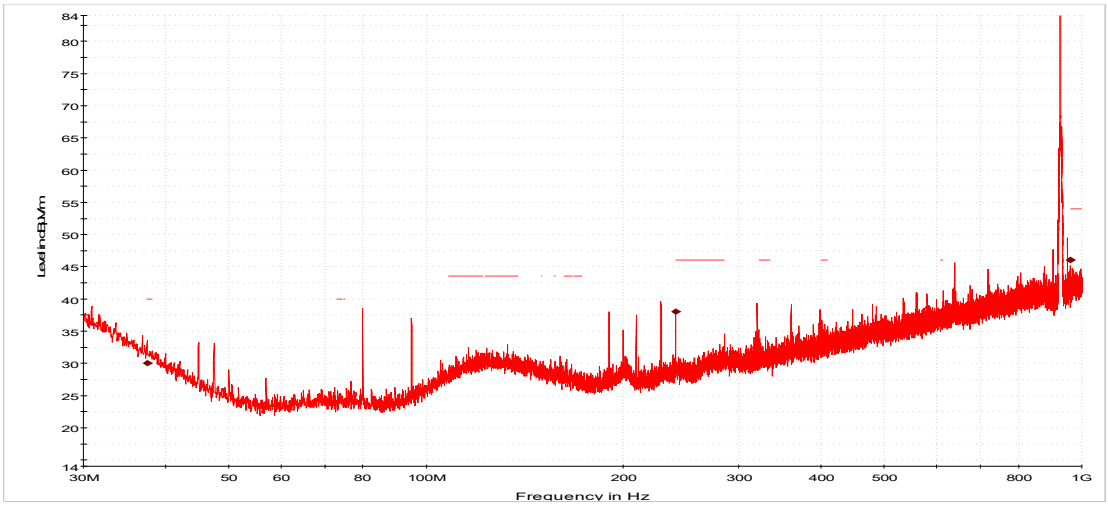
Graph 94

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m — Max Peak-Max Hold-PK+ — Quasi-peak

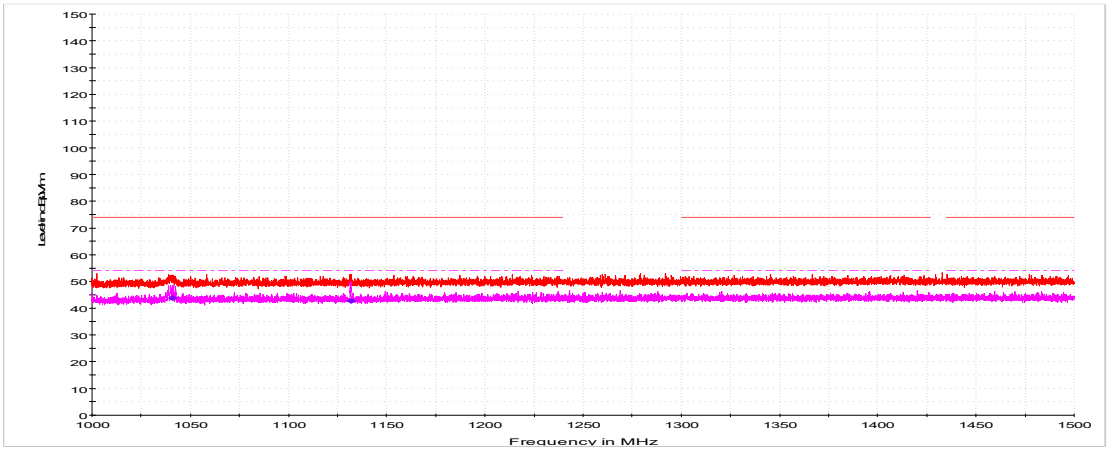
Graph 95

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



FCC Part 15.247 - TX - Restricted Band 15.209 3m - Peak Limit — FCC Part 15.247 - TX - Restricted Band 15.209 3m Limit — Peak Preview
Average Preview — CISPR AV — Peak

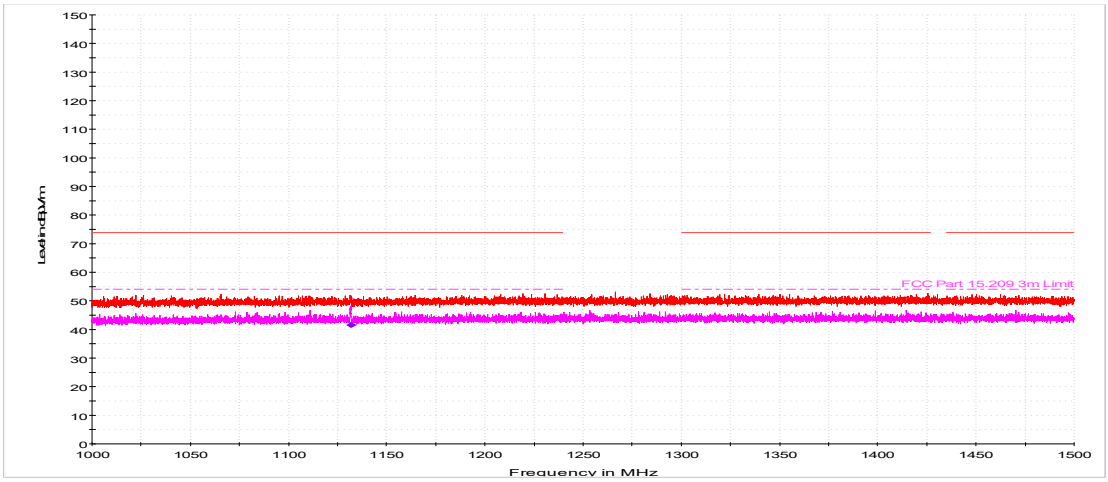
Graph 96

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



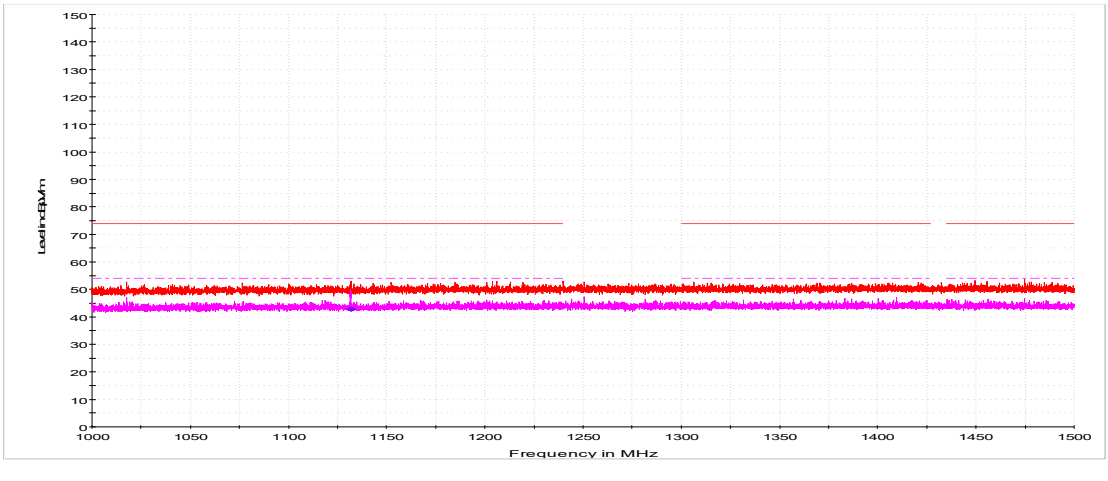
Graph 97

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



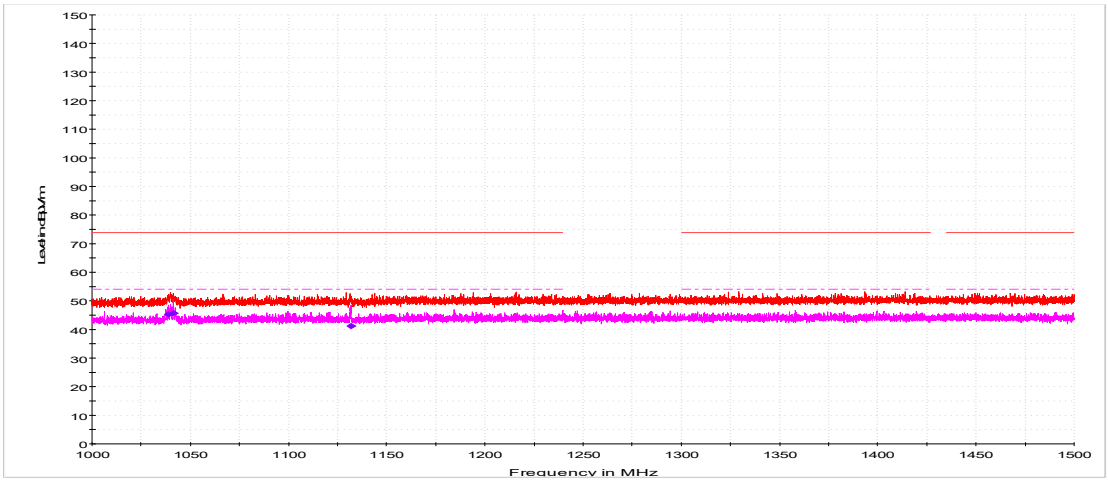
Graph 98

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



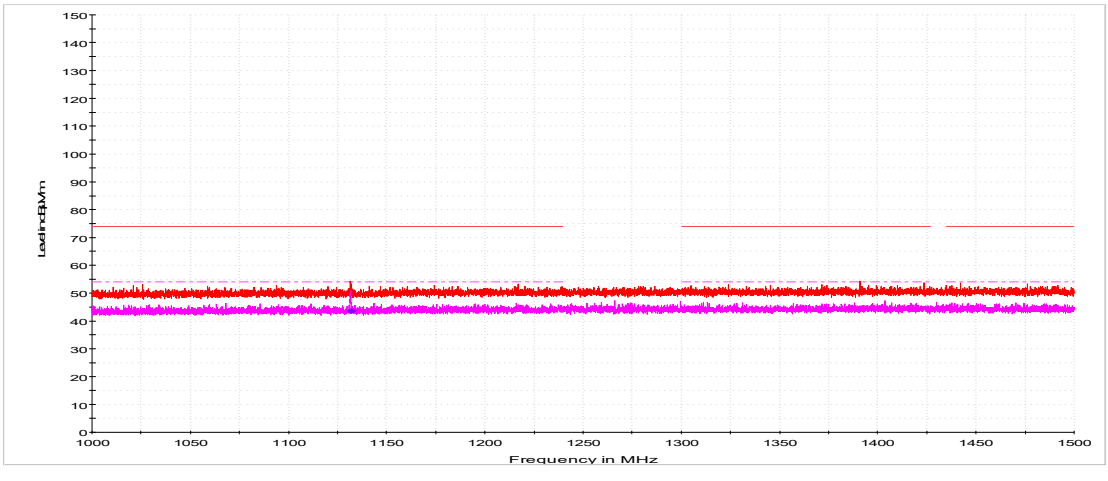
Graph 99

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



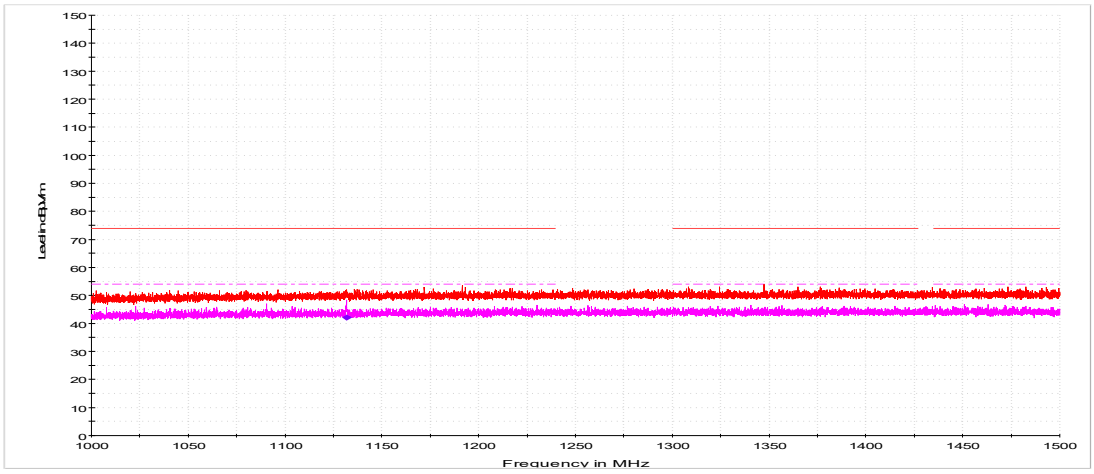
Graph 100

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1GHz to 1.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



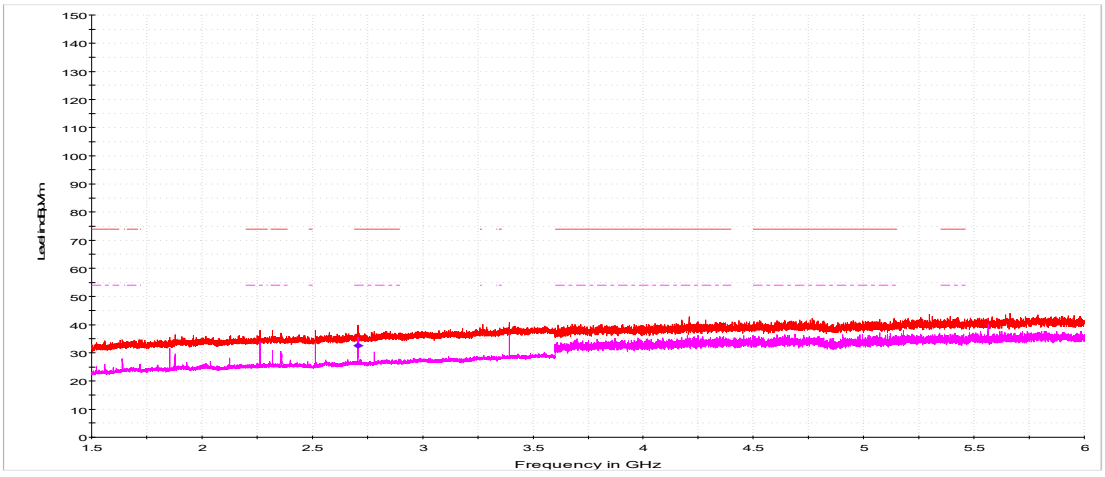
Graph 101

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



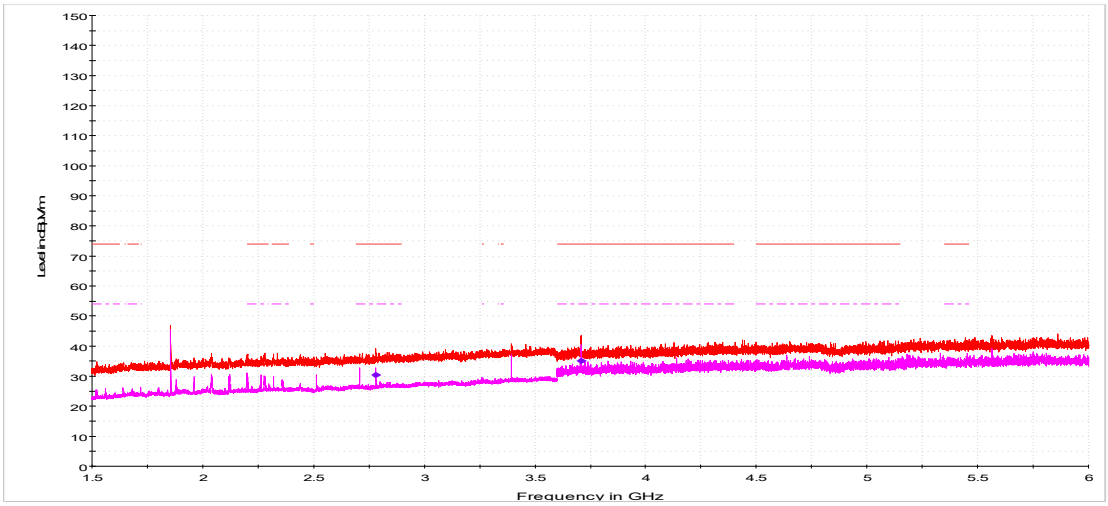
Graph 102

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



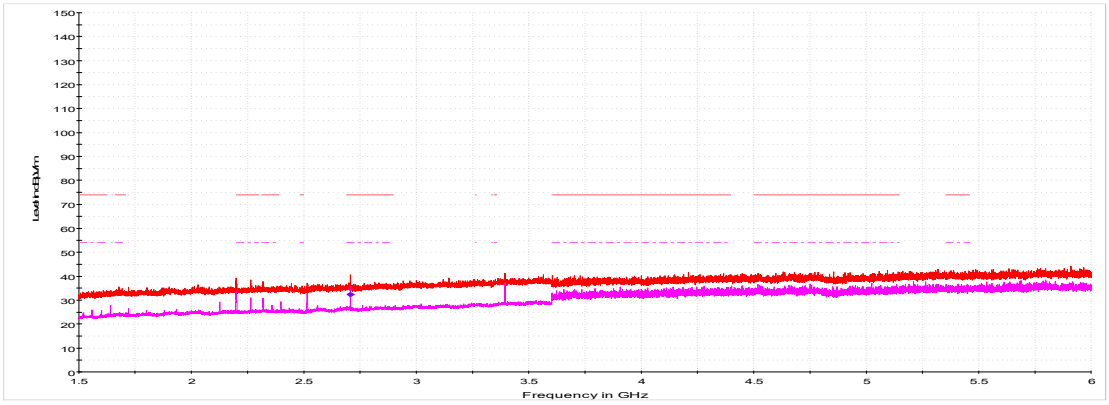
Graph 103

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



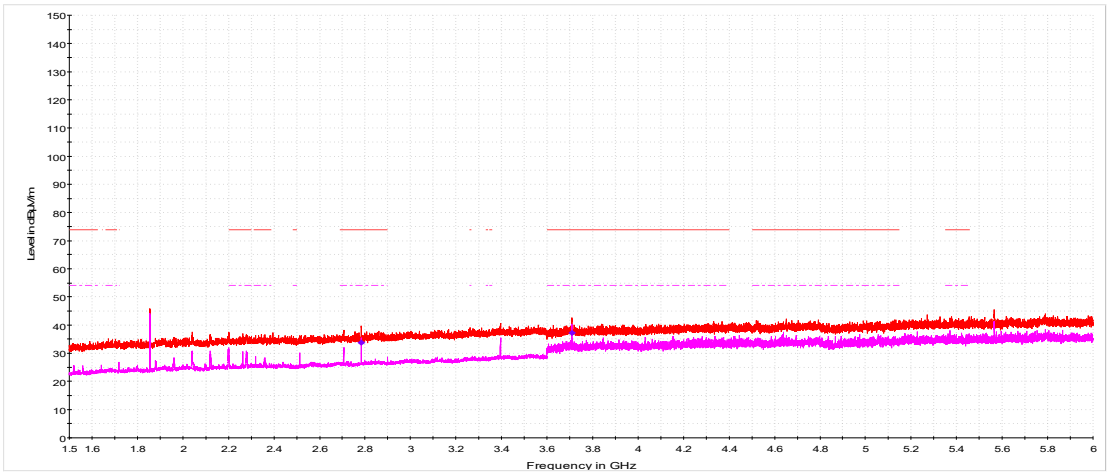
Graph 104

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



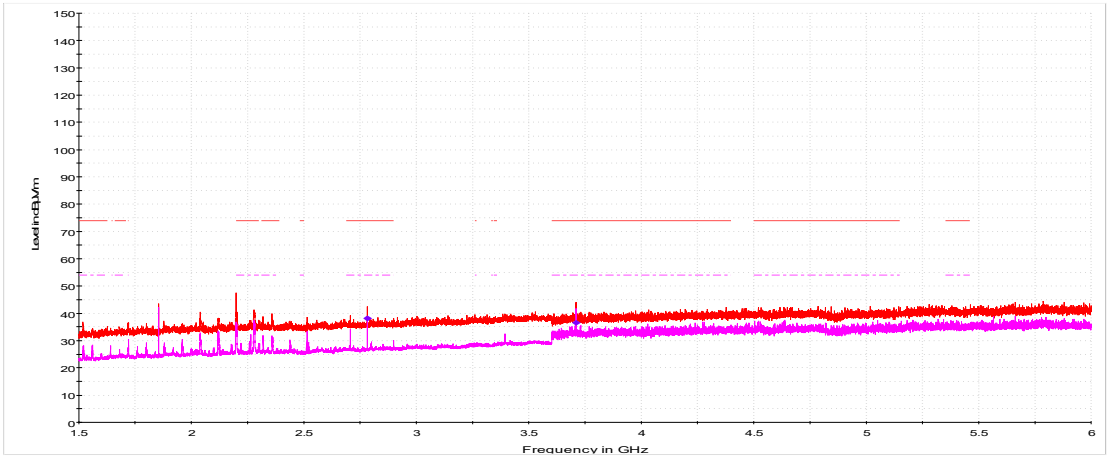
Graph 105

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz)) – Colinear Antenna – Antenna Polarisation Horizontal – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



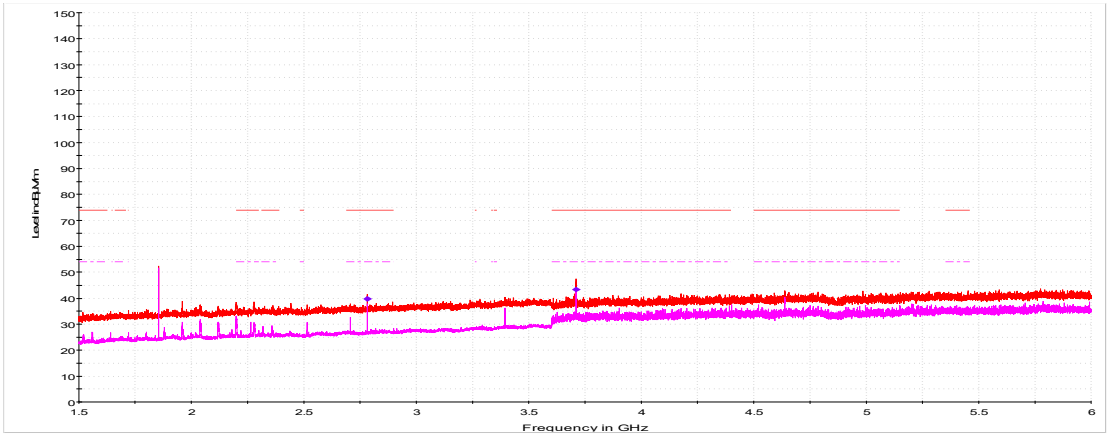
Graph 106

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 1.5GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



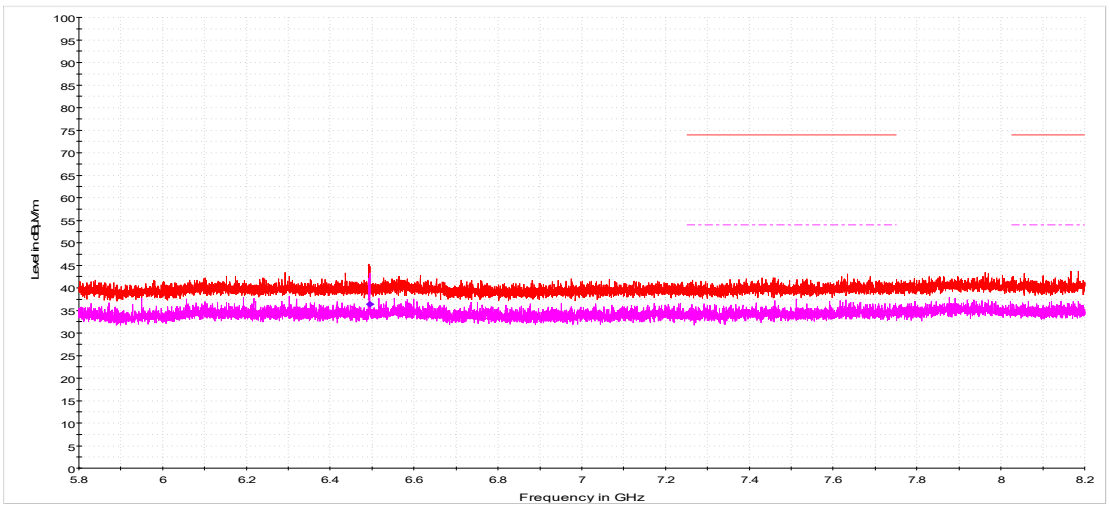
Graph 107

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



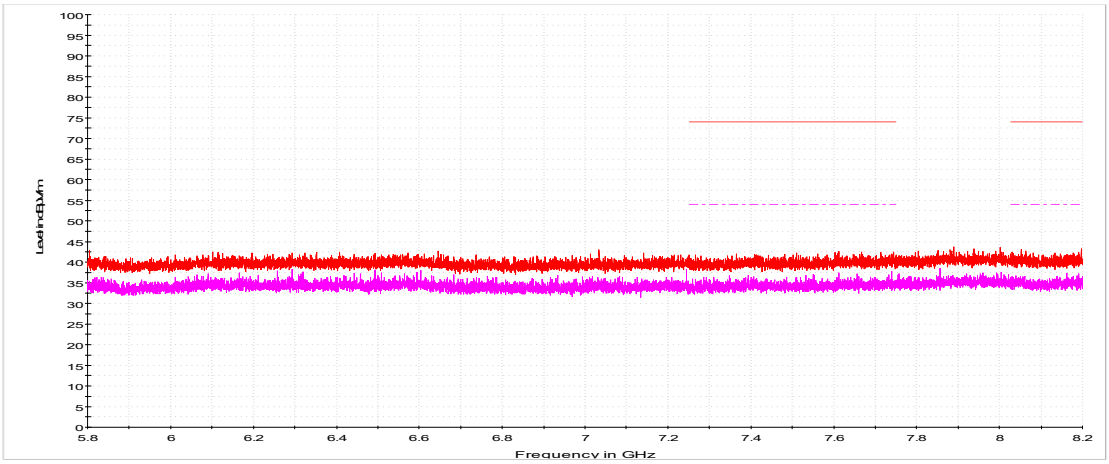
Graph 108

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



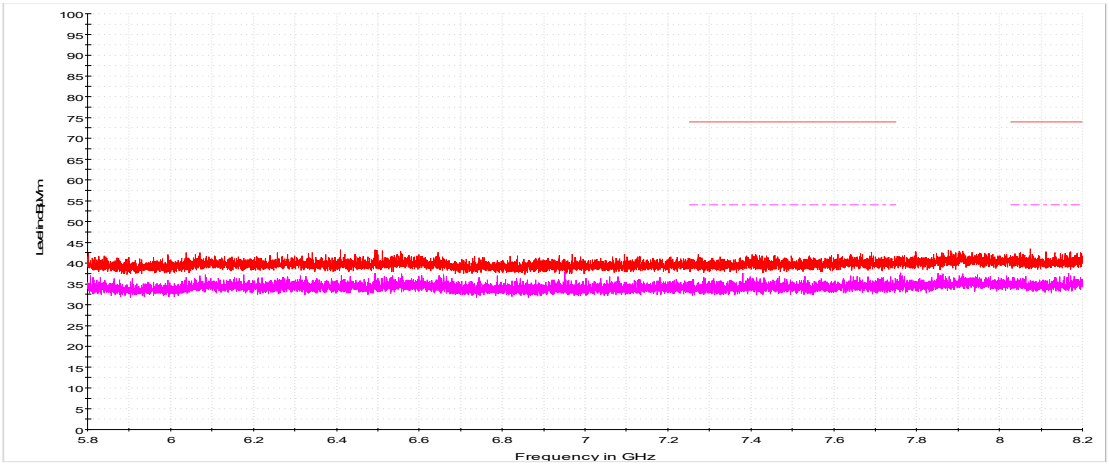
Graph 109

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



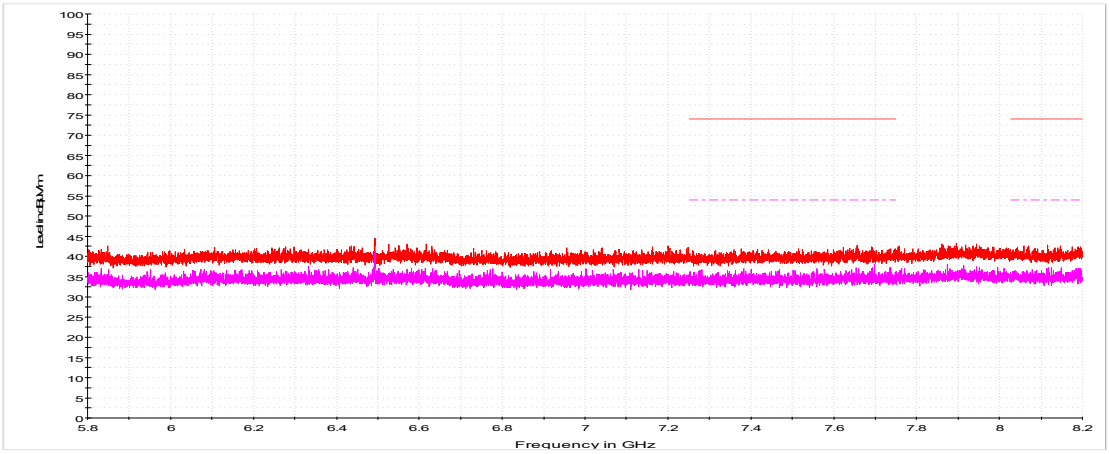
Graph 110

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



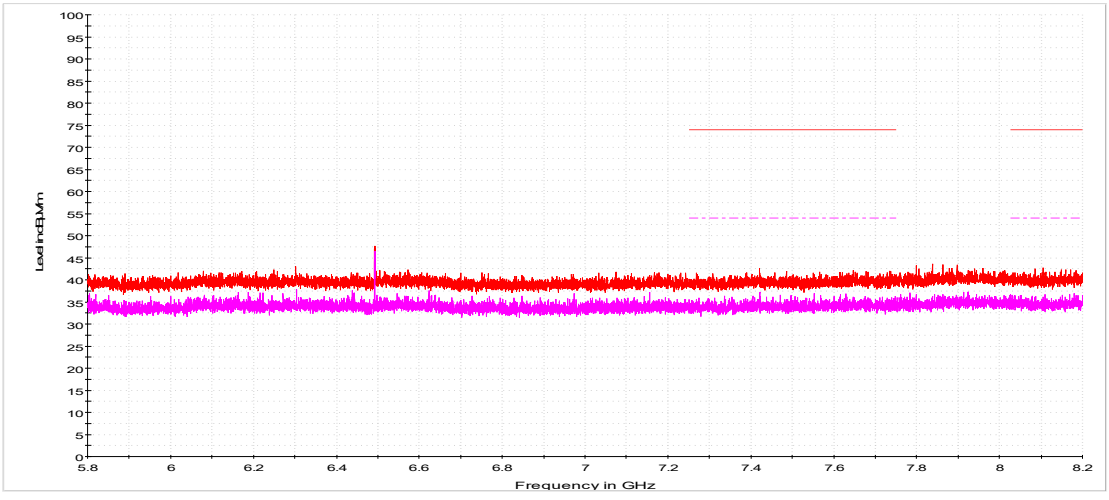
Graph 111

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



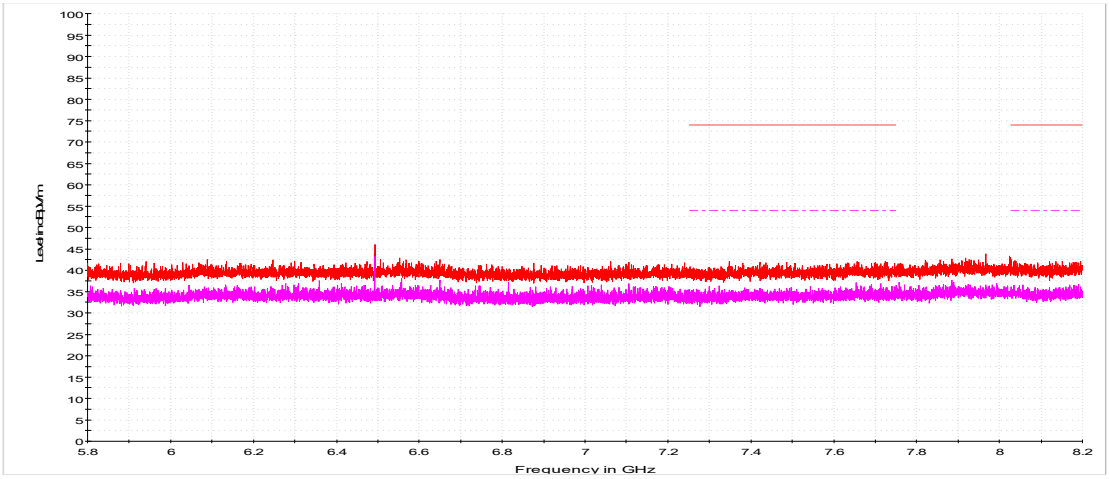
Graph 112

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 5.8GHz to 8.2GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



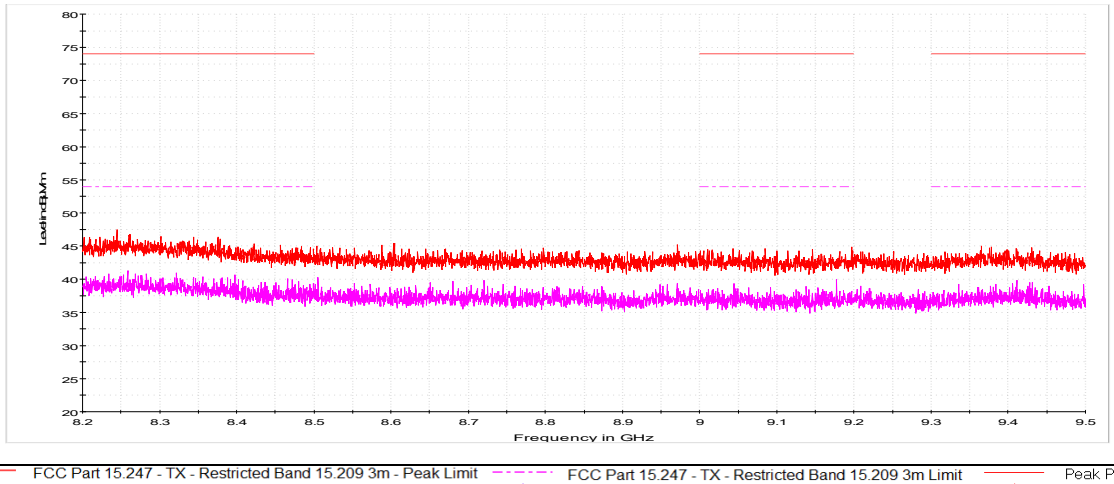
Graph 113

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal –
Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



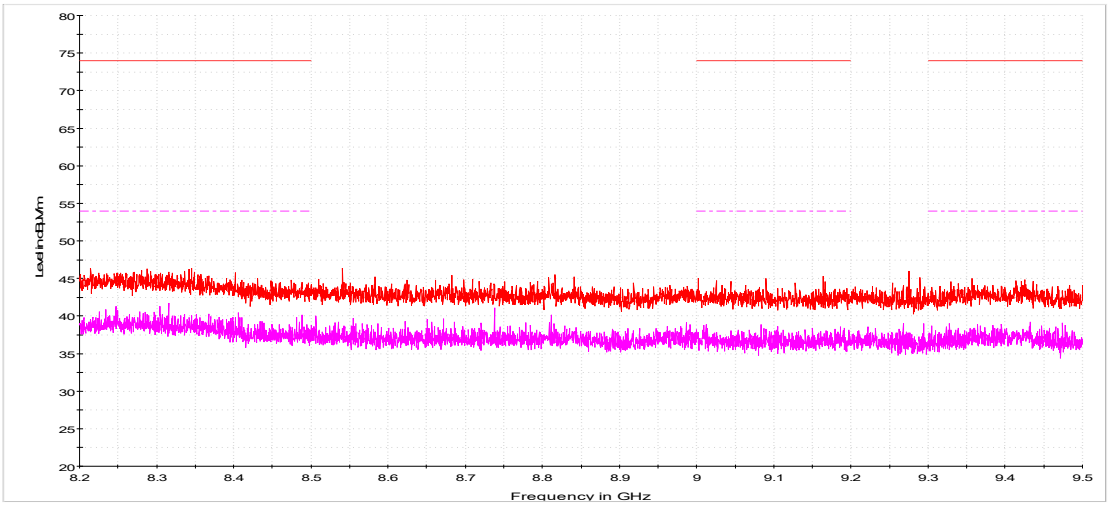
Graph 114

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



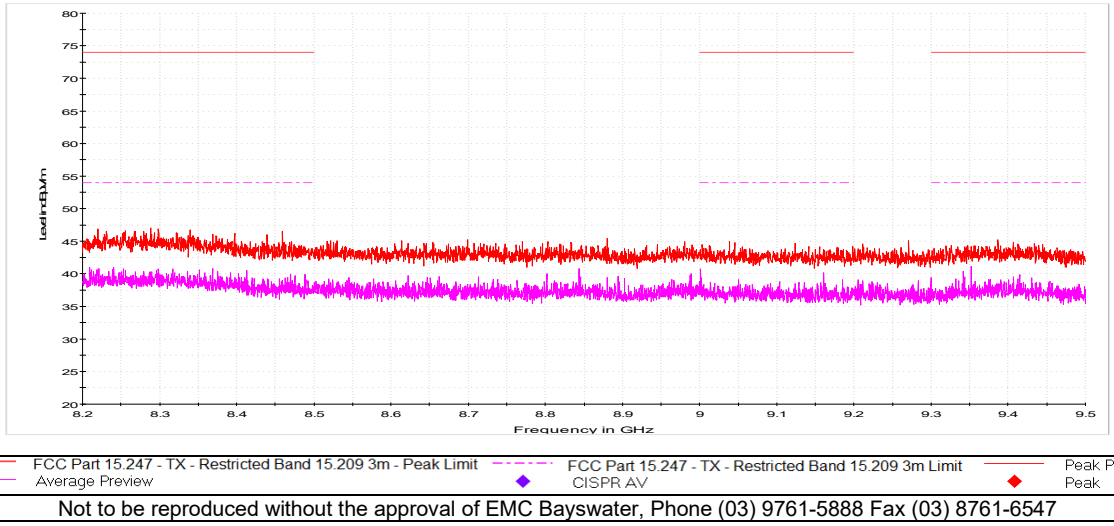
Graph 115

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



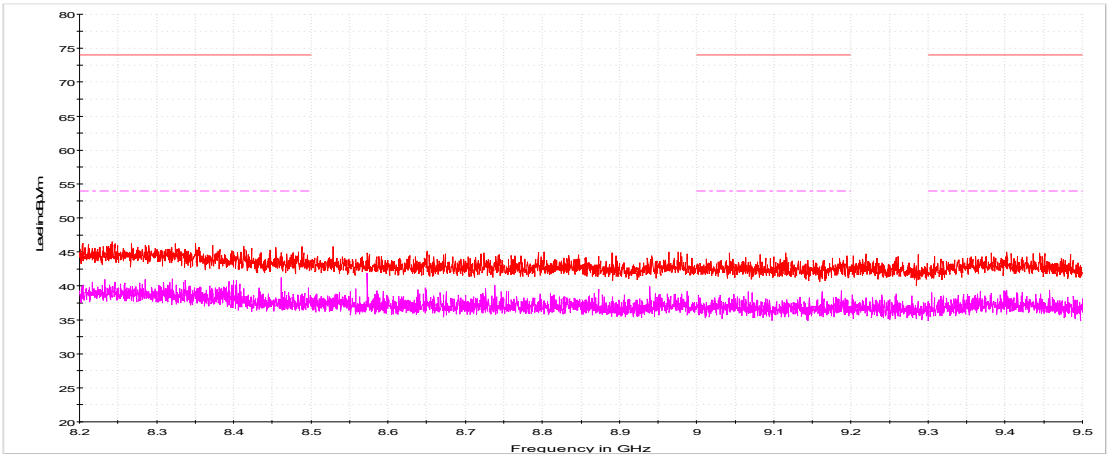
Graph 116

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



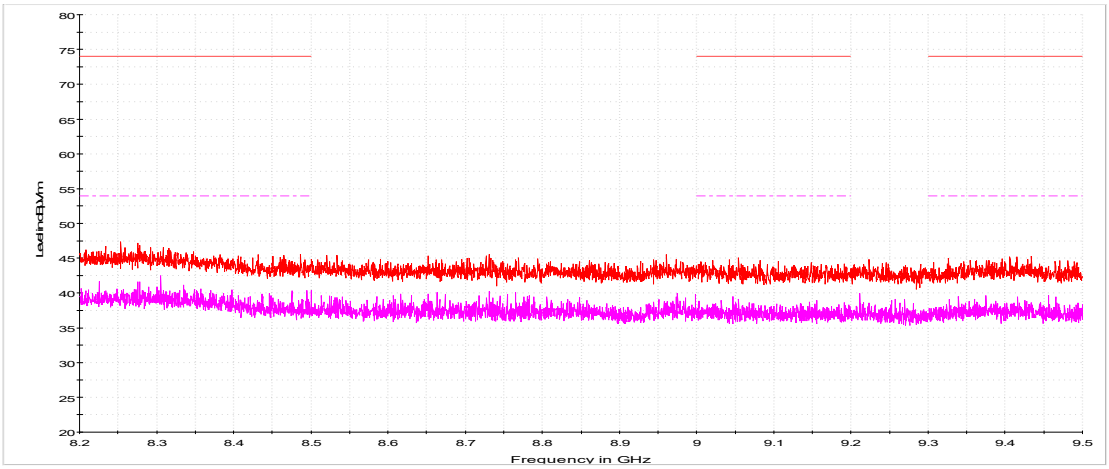
Graph 117

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna – Antenna Polarisation Horizontal – 8.2GHz to 9.5GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



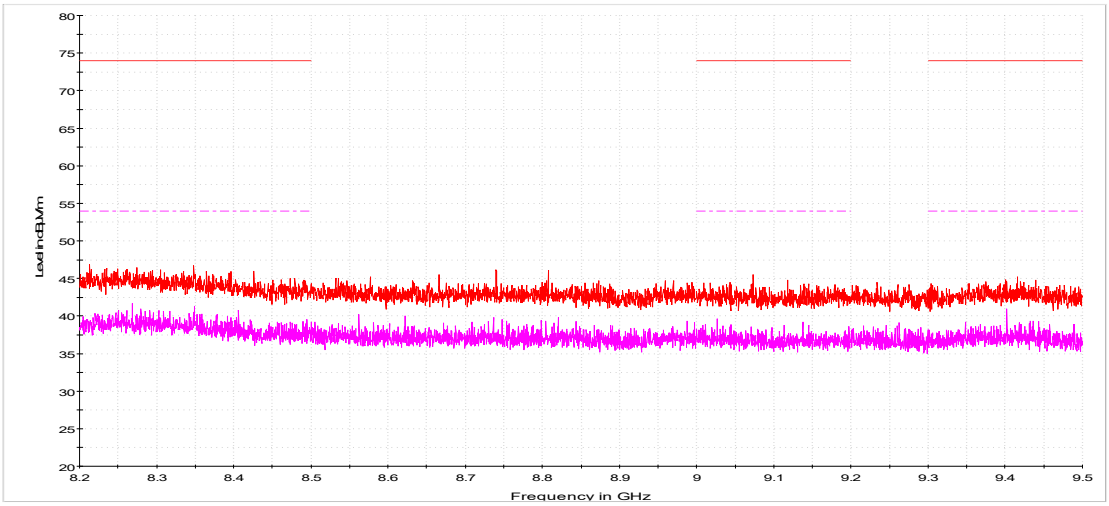
Graph 118

EMC Bayswater Pty. Ltd.

Radiated Emissions – Restricted Bands

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Colinear Antenna –
Antenna Polarisation Vertical – 8.2GHz to 9.5GHz

Job Number:	E1907-1185-1 Rev 1
Test Engineer:	AZ



Graph 119

Appendix C.6 – Measurement Graphs – Radiated Emissions – Receiver mode

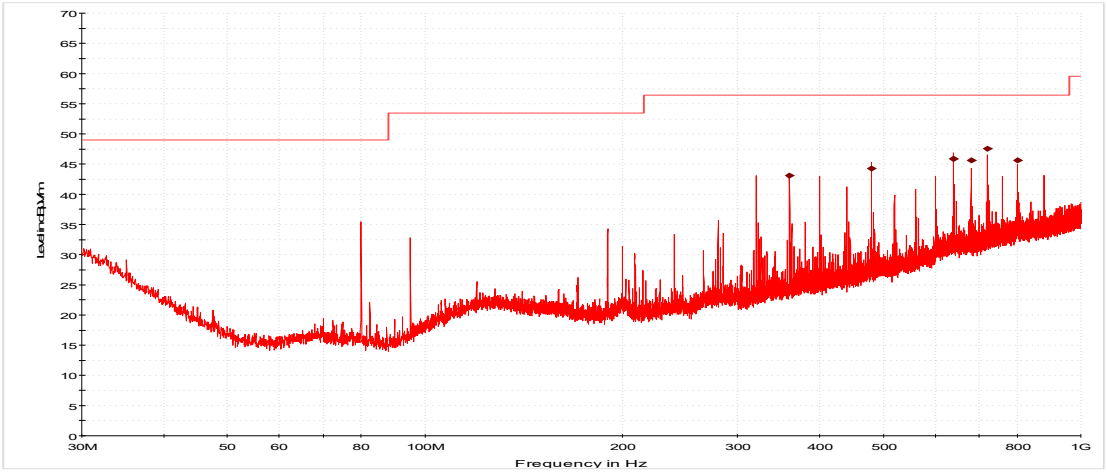
No.	Test	Graph Description
120	Radiated Emissions – Receiver Mode	Yagi Antenna Vertical – Channel 0 – 30MHz to 1GHz – Horizontal Antenna
121		Yagi Antenna Vertical – Channel 0 – 30MHz to 1GHz – Vertical Antenna
122		Yagi Antenna Horizontal – Channel 33 – 30MHz to 1GHz – Horizontal Antenna
123		Yagi Antenna Horizontal – Channel 33 – 30MHz to 1GHz – Vertical Antenna
124		Channel 0 – Yagi Antenna Horizontal – 1GHz to 6GHz – Horizontal Antenna
125		Channel 0 – Yagi Antenna Horizontal – 1GHz to 6GHz – Vertical Antenna
126		Channel 0 – Yagi Antenna Vertical – 1GHz to 6GHz – Horizontal Antenna
127		Channel 0 – Yagi Antenna Vertical – 1GHz to 6GHz – Vertical Antenna
128		Channel 33 – Yagi Antenna Horizontal – 1GHz to 6GHz – Horizontal Antenna
129		Channel 33 – Yagi Antenna Horizontal – 1GHz to 6GHz – Vertical Antenna
130		Channel 33 – Yagi Antenna Vertical – 1GHz to 6GHz – Horizontal Antenna
131		Channel 33 – Yagi Antenna Vertical – 1GHz to 6GHz – Vertical Antenna
132		Channel 66 – Yagi Antenna Horizontal – 1GHz to 6GHz – Horizontal Antenna
133		Channel 66 – Yagi Antenna Horizontal – 1GHz to 6GHz – Vertical Antenna
134		Channel 66 – Yagi Antenna Vertical – 1GHz to 6GHz – Horizontal Antenna
135		Channel 66 – Yagi Antenna Vertical – 1GHz to 6GHz – Vertical Antenna

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Horizontal Antenna Polarisation – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



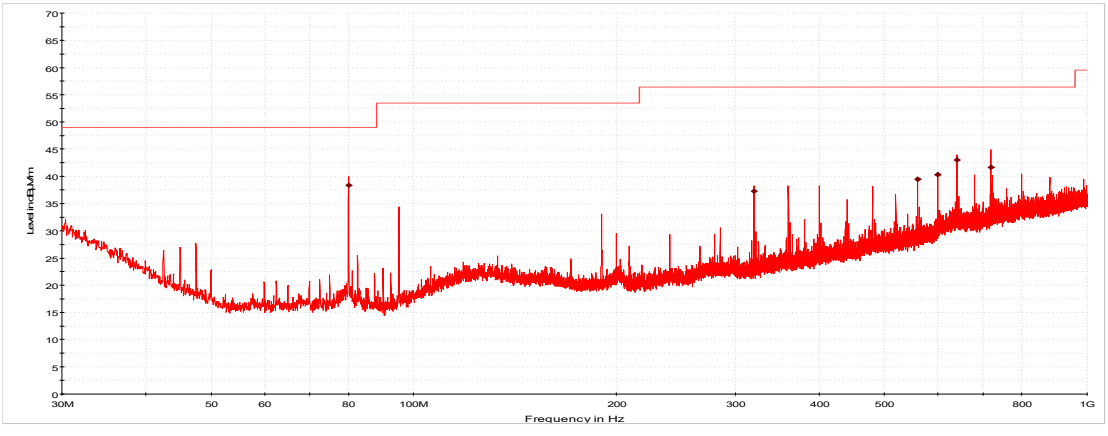
Graph 120

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Vertical Antenna Polarisation – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



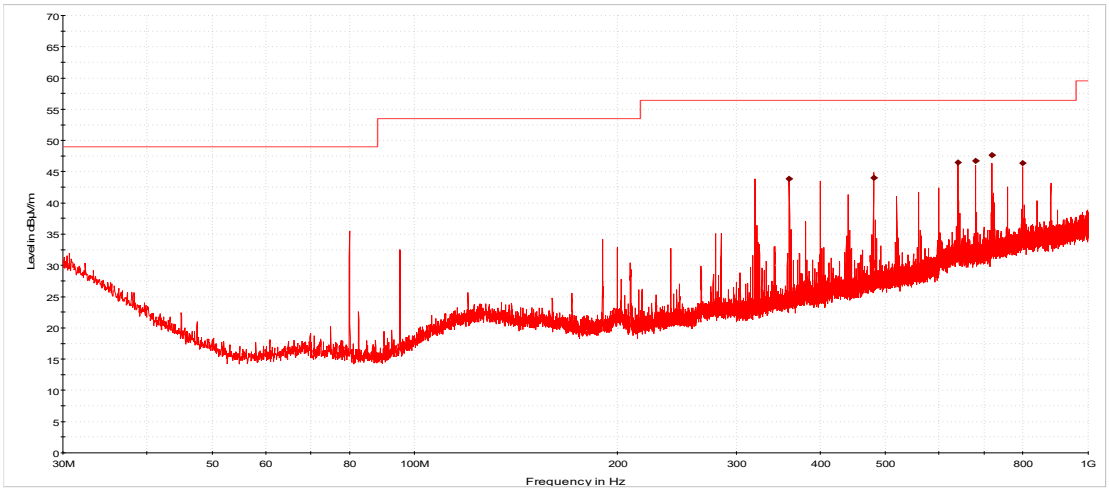
Graph 121

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Horizontal Antenna Polarisation – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



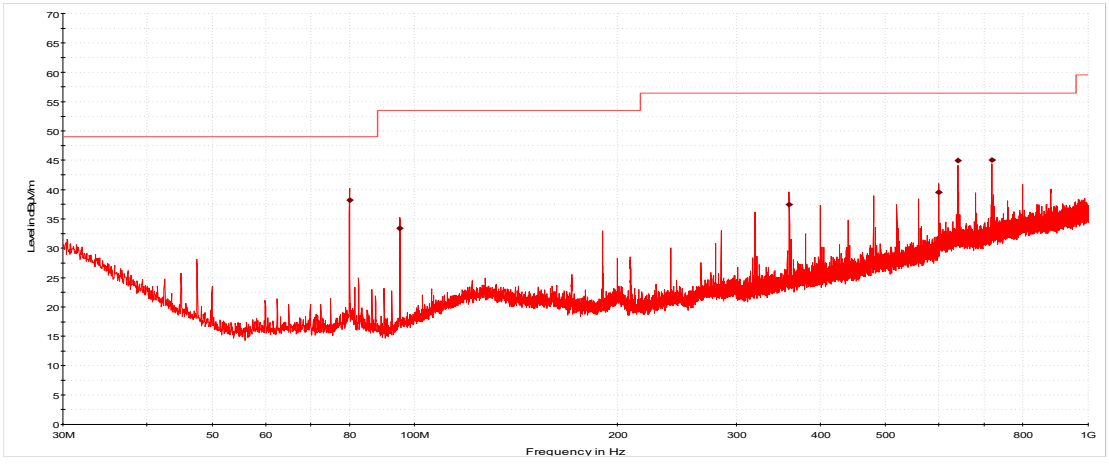
Graph 122

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Vertical Antenna Polarisation – 30MHz to 1GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



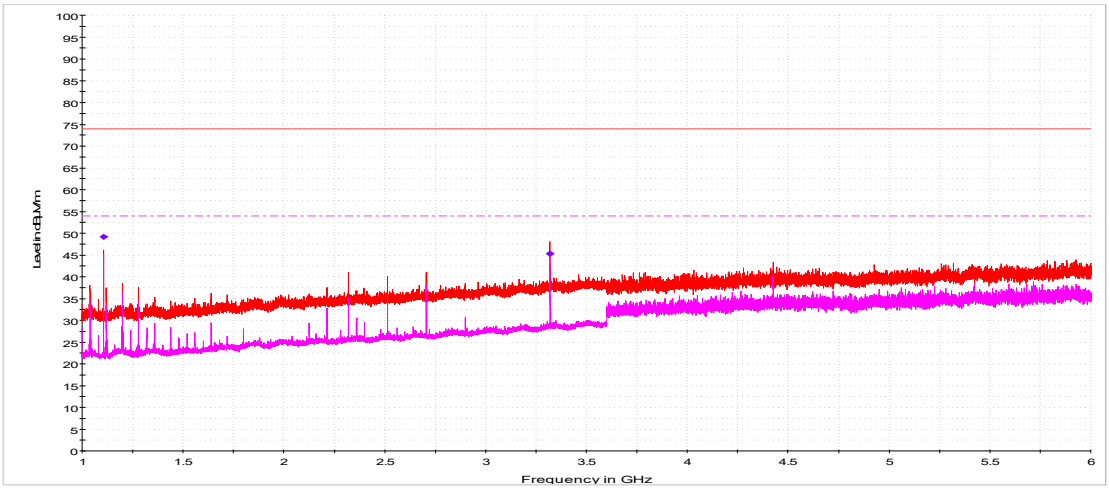
Graph 123

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



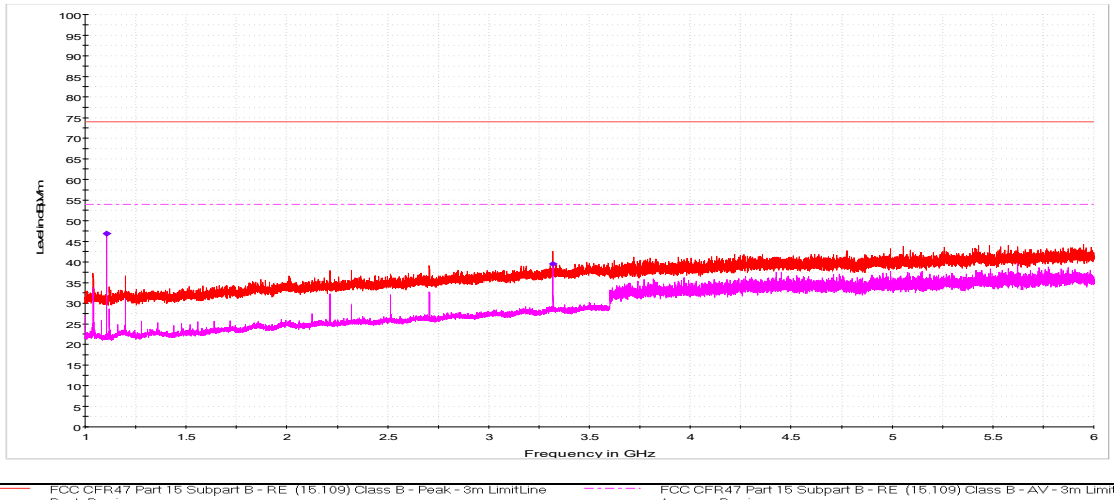
Graph 124

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Horizontal – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



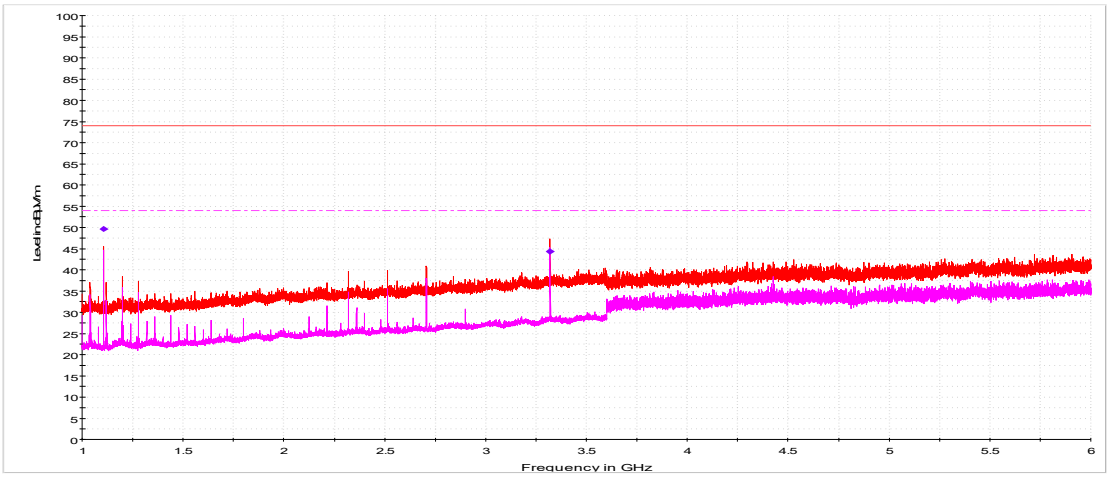
Graph 125

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



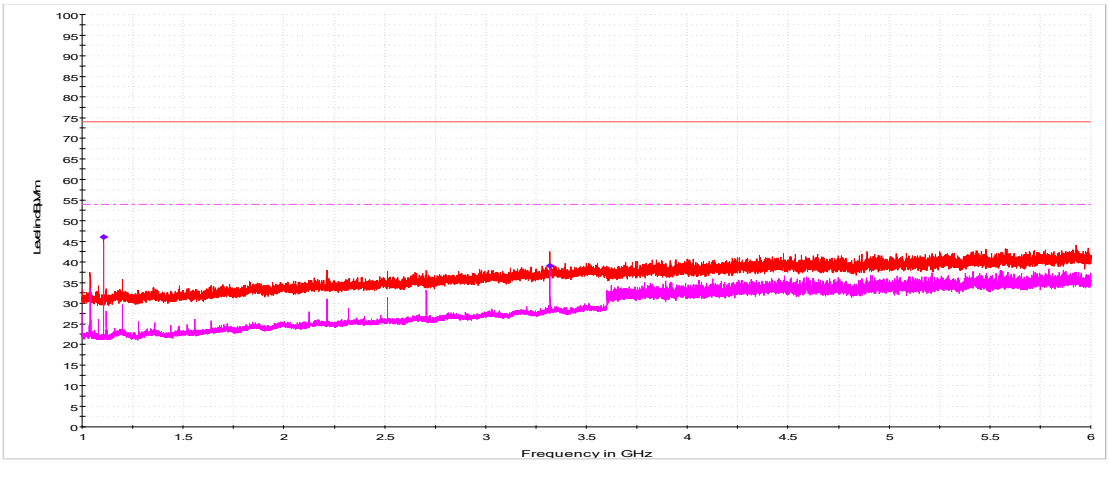
Graph 126

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 0 (902.394MHz) – Yagi Antenna Vertical – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



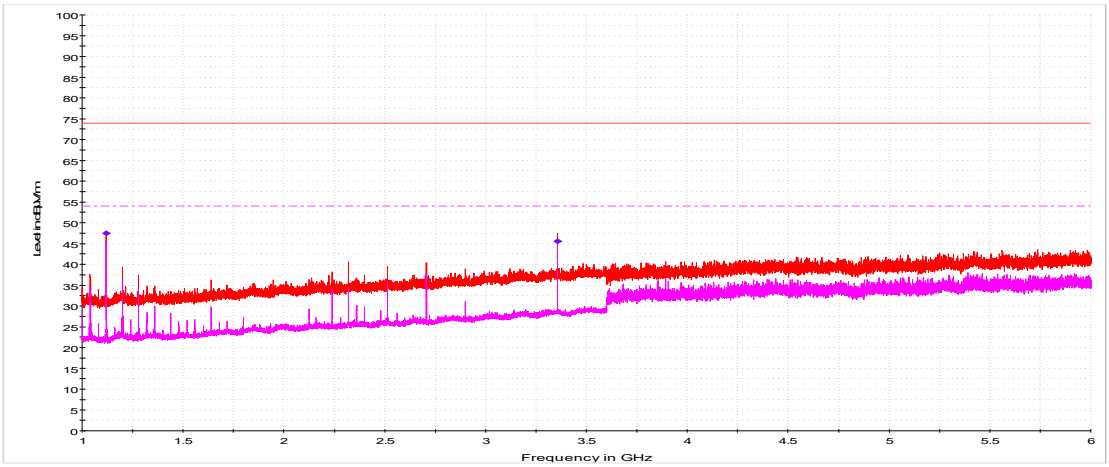
Graph 127

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Horizontal – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



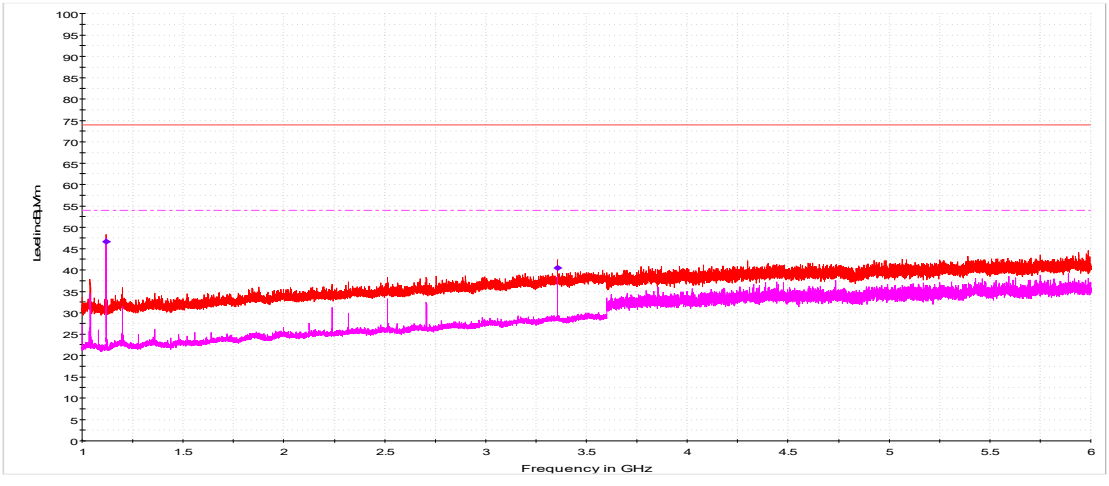
Graph 128

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz)) – Yagi Antenna Horizontal – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



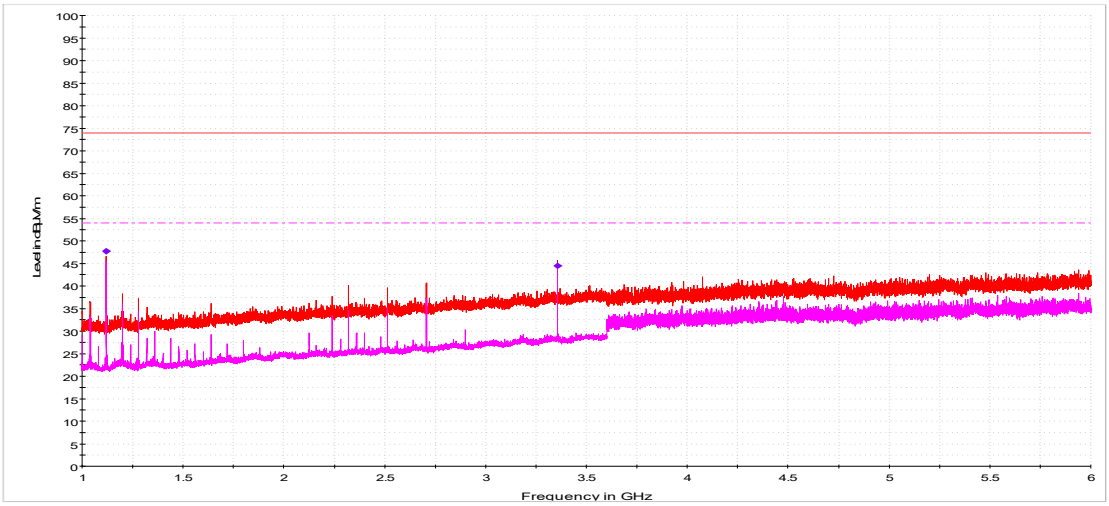
Graph 129

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



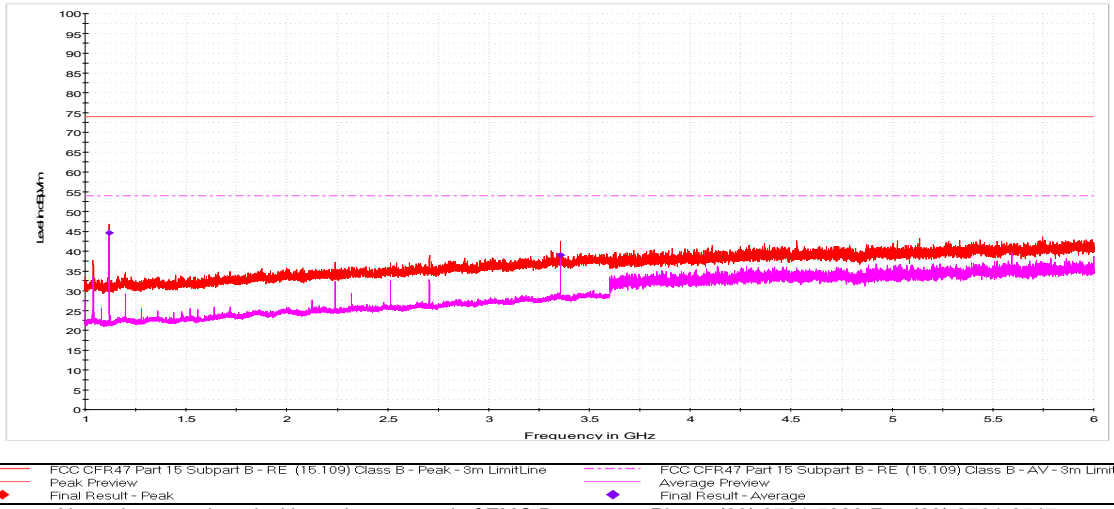
Graph 130

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 33 (915MHz) – Yagi Antenna Vertical – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



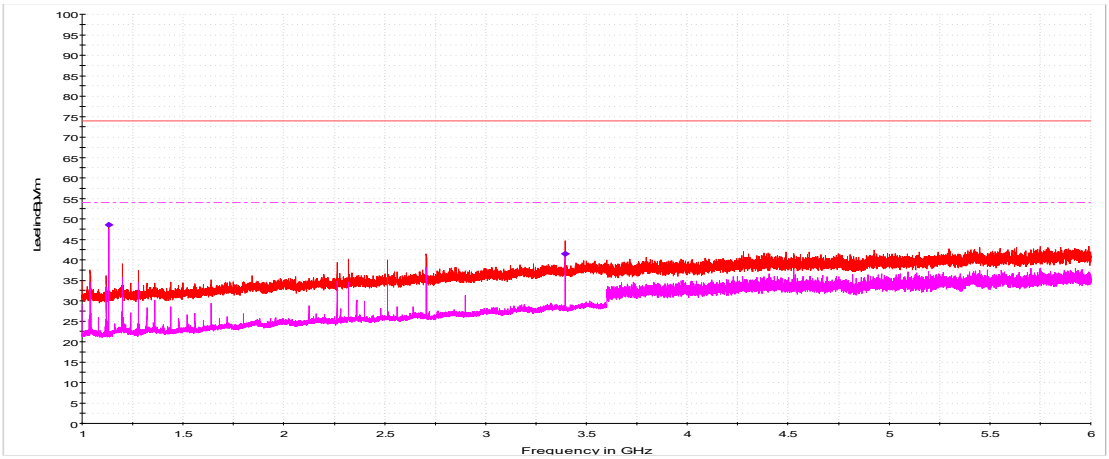
Graph 131

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



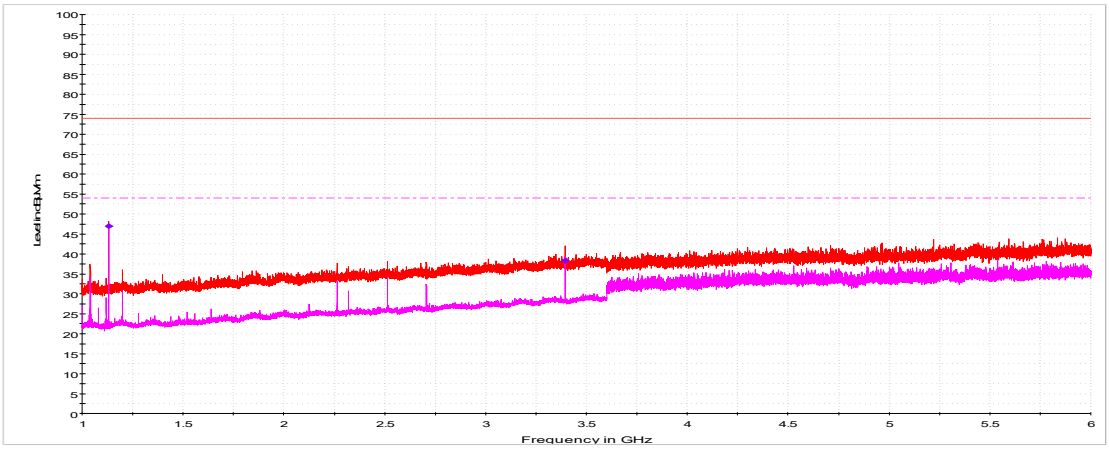
Graph 132

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Horizontal – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



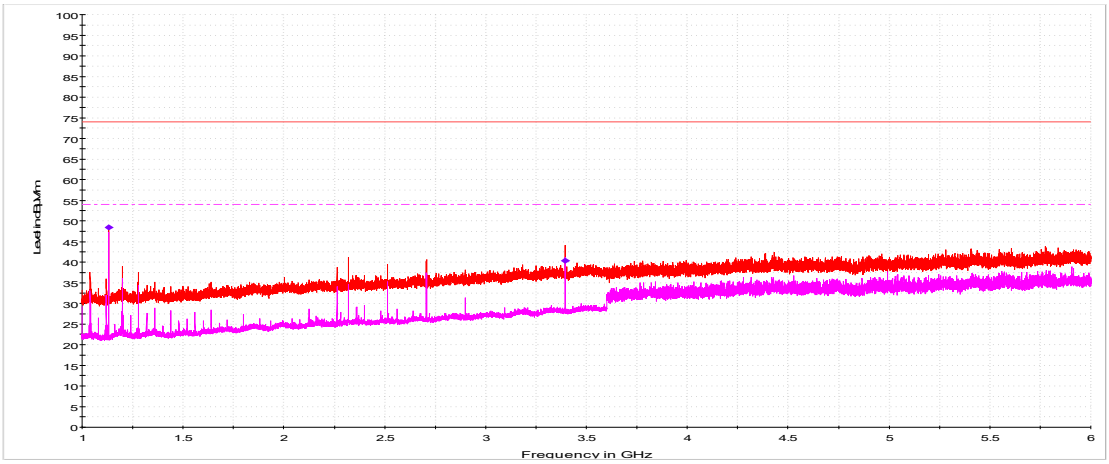
Graph 133

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Horizontal Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



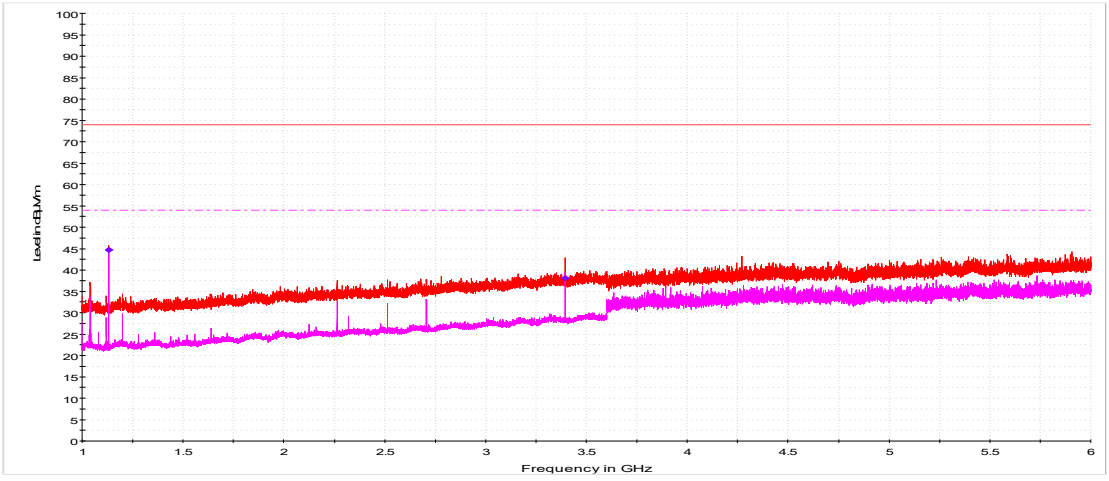
Graph 134

EMC Bayswater Pty. Ltd.

Radiated Emissions – Digital Device – Receiver Mode

Schneider Electric Systems Canada Inc. - OM900 - O-Series 900MHz FHSS Data Radio
Channel 66 (927.606MHz) – Yagi Antenna Vertical – Vertical Antenna Polarisation – 1GHz to 6GHz

Job Number: E1907-1185-1 Rev 1
Test Engineer: AZ



Graph 135

Appendix D – Customer Declaration of Product Variant

Schneider Electric (Australia) Pty Ltd
1 Acacia Place
Notting Hill
Vic, 3168
Australia
T +61 3 9550 7000
F +61 (N/A)
www.schneider-electric.com
ABN: 42 004 969 304

Date: 2nd September 2019

Declaration of Product Variations

We Schneider Electric
of 1 Acacia Place, Notting Hill, Vic, 3168 Australia

hereby declare that:

Equipment O-Series 900MHz FHSS Data Radio

Model number TBUROM900-00001-DH0

to be the worst case variant used for EMC testing of a product range consisting of other variants along with the justification declared in the table below. Schneider electric accepts all responsibility for any adverse effects with respect to the EMC performance of the variant products listed in the table with regards to the performance observed whilst testing the declared worst case model.

Model tested	Variants models	Justification (examples)
OM900	TBUROM900-00001-DH0	Where "TBUROM900" represents the generic 900MHz FHSS product
		Where "-00001" represents the FCC 902-928MHz, 32-256kbps version (for FCC/IC operation region).
		Where "-D" indicates Diagnostics enabled. (Software option only. No RF impact)
		Where "H" represents Hazardous Environment Class 1 Div 2 Groups A, B, C & D. (only option available)
		Where 0 indicates configuration for OEM use. (Software option only. No RF impact)

Signed by:
Name: Bryan Ackerly
Position: Senior RF Engineer – Trio Wireless Connectivity
Date signed: 2nd September 2019