FCC and Industry Canada Testing of the DAQRI International Limited Model: DAQRI Compute Pack In accordance with FCC 47 CFR Part 15C, Industry Canada RSS-247 and Industry Canada RSS-GEN

Product Service

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Prepared for: DAQRI LLC
1201 W. 5th St. Suite T-800
Los Angeles
California
90017
United States

FCC ID: 2AEWMDQR002001
IC: 22854-DQR002001

COMMERCIAL-IN-CONFIDENCE

Date: August 2017
Document Number: 75936979-18 | Issue: 01

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Steven White	22 August 2017	
Authorised Signatory	Matthew Russell	22 August 2017	

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

ENGINEERING STATEMENT
The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15C, Industry Canada RSS-247 and Industry Canada RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Graeme Lawler	22 August 2017	

FCC Accreditation	Industry Canada Accreditation
90987 Octagon House, Fareham Test Laboratory	IC2932B-1 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY
A sample of this product was tested and found to be in compliance with FCC 47 CFR Part 15C: 2016 and Industry Canada RSS-247: Issue 2 (2017-02) and Industry Canada RSS-GEN: Issue 4 (2014-11) for the tests detailed in section 1.3.

TÜV SÜD Product Service
is a trading name of TUV SUD Ltd
Registered in Scotland at East Kilbride,
Glasgow G75 0QF, United Kingdom
Registered number: SC215164

TUV SUD Ltd is a
TÜV SÜD Group Company

Phone: +44 (0) 1489 558100
Fax: +44 (0) 1489 558101
www.tuv-sud.co.uk

TÜV SÜD Product Service
Octagon House
Concorde Way
Fareham
Hampshire PO15 5RL
United Kingdom

Product Service

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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	22 August 2017

Table 1

1.2 Introduction

Applicant	DAQRI LLC
Manufacturer	DAQRI International Limited
Model Number(s)	DAQRI Compute Pack
Serial Number(s)	OA565-7DF-94TC48EA8Y
Hardware Version(s)	DCP 2017
Software Version(s)	V16
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15C: 2016 Industry Canada RSS-247: Issue 2 (2017-02) Industry Canada RSS-GEN: Issue 4 (2014-11)
Order Number Date	PO-UK3931 06-July-2017
Date of Receipt of EUT	26-July-2017
Start of Test	26-July-2017
Finish of Test	26-July-2017
Name of Engineer(s)	Graeme Lawler
Related Document(s)	ANSI C63.10 (2013)

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1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15C, Industry Canada RSS-247 and Industry Canada RSS-GEN is shown below.

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15C	RSS-247	RSS-GEN			
Configuration: 802.11b						
2.1	15.247 (d) and 15.205	5.5	-	Spurious Radiated Emissions	Pass	ANSI C63.10
Configuration: 802.11g						
2.2	15.247 (d)	5.5	-	Authorised Band Edges	Pass	ANSI C63.10
2.3	15.205	-	8.10	Restricted Band Edges	Pass	ANSI C63.10

Table 2

Limited testing of worst case modes / modulation schemes has been performed on the DAQRI Compute Pack, to verify the effects of the metal outer top plate being changed to plastic.

Full testing having previously been performed and detailed within report RP75936979-07

1.4 Application Form

EQUIPMENT DESCRIPTION	
Model Name/Number	DAQRI Compute Pack
Part Number	870-00163
Hardware Version	DCP 2017
Software Version	V16
FCC ID (if applicable)	2AEWMDQR002001
Industry Canada ID (if applicable)	22854-DQR002001
Technical Description (Please provide a brief description of the intended use of the equipment)	DAQRI Compute Pack is a mobile computer that powers a lightweight wearable human-machine interface that connects workers in a variety of industries and environments to real time information and augmented work instruction.

Types of Modulations used by the Equipment	
☒	FHSS
☒	Other forms of modulation
In case of FHSS Modulation	
In case of non-Adaptive Frequency Hopping equipment:	
	Number of Hopping Frequencies:
In case of Adaptive Frequency Hopping Equipment:	
	Maximum number of Hopping Frequencies: 79
	Minimum number of Hopping Frequencies: 20
Dwell Time: Up to 3.2 ms for Bluetooth	
Adaptive / non-adaptive equipment:	
☐	non-adaptive Equipment
☒	adaptive Equipment without the possibility to switch to a non-adaptive mode
☐	adaptive Equipment which can also operate in a non-adaptive mode
In case of adaptive equipment:	
The maximum Channel Occupancy Time implemented by the equipment: ms	
☐	The equipment has implemented an LBT based DAA mechanism
In case of equipment using modulation different from FHSS:	
☐	The equipment is Frame Based equipment
☒	The equipment is Load Based equipment
☐	The equipment can switch dynamically between Frame Based and Load Based equipment
The CCA time implemented by the equipment: µs	
☒	The equipment has implemented an non-LBT based DAA mechanism
☐	The equipment can operate in more than one adaptive mode

In case of non-adaptive Equipment:
The maximum RF Output Power (e.i.r.p.): 19 dBm
The maximum (corresponding) Duty Cycle: 100 %
Equipment with dynamic behaviour, that behaviour is described here. (e.g. the different combinations of duty cycle and corresponding power levels to be declared):

The worst case operational mode for each of the following tests:
RF Output Power:
Power Spectral Density:
Duty cycle, Tx-Sequence, Tx-gap:
Accumulated Transmit Time, Frequency Occupation & Hopping Sequence (only for FHSS equipment):
Hopping Frequency Separation (only for FHSS equipment):
Medium Utilisation:
Adaptivity & Receiver Blocking:
Nominal Channel Bandwidth:
Transmitter unwanted emissions in the OOB domain:
Transmitter unwanted emissions in the spurious domain:
Receiver spurious emissions:

The different transmit operating modes (tick all that apply):		
☒	Operating mode 1: Single Antenna Equipment	
	☒	Equipment with only 1 antenna
	☒	Equipment with 2 diversity antennas but only 1 antenna active at any moment in time
	☐	Smart Antenna Systems with 2 or more antennas, but operating in a (legacy) mode where only 1 antenna is used. (e.g. IEEE 802.11™ [i.3] legacy mode in smart antenna systems)
☒	Operating mode 2: Smart Antenna Systems - Multiple Antennas without beam forming	
	☒	Single spatial stream / Standard throughput / (e.g. IEEE 802.11™ [i.3] legacy mode)
	☒	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1
	☒	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 3
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 4
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 5
NOTE: Add more lines if more channel bandwidths are supported.		
☐	Operating mode 3: Smart Antenna Systems - Multiple Antennas with beam forming	
	☐	Single spatial stream / Standard throughput (e.g. IEEE 802.11™ [i.3] legacy mode)
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 3
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 4
	☐	High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 5
NOTE: Add more lines if more channel bandwidths are supported.		

In case of Smart Antenna Systems:
The number of Receive chains: 2
The number of Transmit chains: 2
☒ symmetrical power distribution
☐ asymmetrical power distribution
In case of beam forming, the maximum (additional) beam forming gain: dB
NOTE: The additional beam forming gain does not include the basic gain of a single antenna.
Operating Frequency Range(s) of the equipment:
Operating Frequency Range 1: 2400 MHz to 2483.5 MHz
Operating Frequency Range 2: MHz to MHz
Operating Frequency Range 3: MHz to MHz
NOTE: Add more lines if more Frequency Ranges are supported.
Nominal Channel Bandwidth(s):
Nominal Channel Bandwidth1: 20 MHz
Nominal Channel Bandwidth2: 40 MHz
Nominal Channel Bandwidth3: Bluetooth 1 MHz
Nominal Channel Bandwidth4: BLE 2 MHz
Nominal Channel Bandwidth5: MHz
NOTE: Add more lines if more channel bandwidths are supported.
Type of Equipment (stand-alone, combined, plug-in radio device, etc.):
☒ Stand-alone
☐ Combined Equipment (Equipment where the radio part is fully integrated within another type of equipment)
☐ Plug-in radio device (Equipment intended for a variety of host systems)
☐ Other
The normal and extreme operating conditions that apply to the equipment:
Normal operating conditions (if applicable):
Operating temperature: °C
Other (please specify if applicable):
Extreme operating conditions:
Operating temperature range: Minimum 0 °C to Maximum 30 °C
Other (please specify if applicable): Minimum °C to Maximum °C
Details provided are for the:
☒ stand-alone equipment
☐ combined (or host) equipment
☐ test jig

Product Service

The intended combination(s) of the radio equipment power settings and one or more antenna assemblies and their corresponding e.i.r.p levels:			
Antenna Type:			
☒ Integral Antenna (information to be provided in case of conducted measurements)			
Antenna Gain: 2 dBi			
If applicable, additional beamforming gain (excluding basic antenna gain): dB			
☒ Temporary RF connector provided			
☐ No temporary RF connector provided			
☐ Dedicated Antennas (equipment with antenna connector)			
☐ Single power level with corresponding antenna(s)			
☐ Multiple power settings and corresponding antenna(s)			
Number of different Power Levels:			
Power Level 1: dBm			
Power Level 2: dBm			
Power Level 3: dBm			
NOTE 1: Add more lines in case the equipment has more power levels.			
NOTE 2: These power levels are conducted power levels (at antenna connector).			
For each of the Power Levels, provide the intended antenna assemblies, their corresponding gains (G) and the resulting e.i.r.p. levels also taking into account the beamforming gain (Y) if applicable			
Power Level 1: 19 dBm			
Number of antenna assemblies provided for this power level:			
Assembly #	**Gain (dBi)**	**e.i.r.p (dBm)**	**Part number or model number**
1	2	19	Taoglas FXP840
2	2	19	Taoglas FXP840
3			
4			
NOTE: Add more rows in case more antenna assemblies are supported for this power level.			
Power Level 2: dBm			
Number of antenna assemblies provided for this power level:			
Assembly #	**Gain (dBi)**	**e.i.r.p (dBm)**	**Part number or model number**
1			
2			
3			
4			
NOTE: Add more rows in case more antenna assemblies are supported for this power level.			
Power Level 3: dBm			
Number of antenna assemblies provided for this power level:			
Assembly #	**Gain (dBi)**	**e.i.r.p (dBm)**	**Part number or model number**
1			
2			
3			
4			
NOTE: Add more rows in case more antenna assemblies are supported for this power level.			

The nominal voltages of the stand-alone radio equipment or the nominal voltages of the combined (host) equipment or test jig in case of plug-in devices:		
Details provided are for the:		
☒	stand-alone equipment	
☐	combined (or host) equipment	
☐	test jig	
Supply Voltage	☐ AC mains State AC voltage V	
	☐ DC State DC voltage V	
In case of DC, indicate the type of power source		
☐	Internal Power Supply	
☐	External Power Supply or AC/DC adapter	
☐	Battery	
☒	Other: Li-ion	
Describe the test modes available which can facilitate testing:		
The equipment type (e.g. Bluetooth®, IEEE 802.11™ [i.3] IEEE 802.15.4™ [i.4], proprietary, etc.):		
If applicable, the statistical analysis referred in clause 5.4.1 q)		
To be provided as separate attachment		
If applicable, the statistical analysis referred in clause 5.4.1 r)		
To be provided as separate attachment		
Geo-location capability supported by the equipment:		
☒ Yes		
☒	The geographical location determined by the equipment as defined in clause 4.3.1.13.2 or clause 4.3.2.12.2 is not accessible to the user.	
☐ No		
Describe the minimum performance criteria that apply to the equipment (see clause 4.3.1.12.3 or 4.3.2.11.3)		
Combination for testing (see clause 5.3.2.3 of EN 300 328 V21.1)		
From all combinations of conducted power settings and intended antenna assembly(ies) specified in clause 5.4.1 m), specify the combination resulting in the highest e.i.r.p. for the radio equipment. Unless otherwise specified in ETSI EN 300 328, this power setting is to be used for testing against the requirements of ETSI EN 300 328. In case there is more than one such conducted power setting resulting in the same (highest) e.i.r.p. level, the highest power setting is to be used for testing. See also ETS EN 300 328, clause 5.3.2.3		
Highest overall e.i.r.p. value: dBm		
Corresponding Antenna assembly gain: dBi		Antenna Assembly #:
Corresponding conducted power setting: dBm (also the power level to be used for testing)		Listed as Power Setting #:

Additional information provided by the applicant	
Modulation	
ITU Class(es) of emission: 20M0 G1D, 40M0 G1D, 2M00 G1D, 1M00 G1D	
Can the transmitter operate unmodulated? ☐ Yes	☒ No
Duty Cycle	
The transmitter is intended for:	
☒	Continuous duty
☐	Intermittent duty
☐	Continuous operation possible for testing purposes
About the UUT	
☐	The equipment submitted are representative production models
☐	If not, the equipment submitted are pre-production models?
☒	If pre-production equipment are submitted, the final production equipment will be identical in all respects with the equipment tested
☐	If not, supply full details
☐	The equipment submitted is CE marked
Additional items and/or supporting equipment provided	
☒	Spare batteries (e.g. for portable equipment)
☒	Battery charging device
☒	External Power Supply or AC/DC adapter
☐	Test Jig or interface box
☐	RF test fixture (for equipment with integrated antennas)
☐	Host System
	Manufacturer
	Model
	Model Name
☐	Combined equipment
	Manufacturer
	Model
	Model Name
☒	User Manual
☐	Technical documentation (Handbook and circuit diagrams)

I hereby declare that that the information supplied is correct and complete.

Name: Dave Williams Position held: Certification Test Manager
Date: 26th May 2017

1.5 Product Information

1.5.1 Technical Description

DAQRI Compute Pack is a mobile computer that powers a lightweight wearable human-machine interface that connects workers in a variety of industries and environments to real time information and augmented work instruction.

1.6 Deviations from the Standard

Limited testing of worst case modes / modulation schemes was been performed with the new case on the DAQRI Compute Pack to verify previous results. No deviations from the applicable test methods were made during testing.

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme.
The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Serial Number: OA565-7DF-94TC48EA8Y			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 3

1.8 Test Location

TÜV SÜD Product Service conducted the following tests at our Fareham Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration: 802.11b		
Spurious Radiated Emissions	Graeme Lawler	UKAS
Configuration: 802.11g		
Authorised Band Edges	Graeme Lawler	UKAS
Restricted Band Edges	Graeme Lawler	UKAS

Table 4

Office Address:

Octagon House
Concorde Way
Segensworth North
Fareham
Hampshire
PO15 5RL
United Kingdom

2 Test Details

2.1 Spurious Radiated Emissions

2.1.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d) and 15.205
Industry Canada RSS-247, Clause 5.5.

2.1.2 Equipment Under Test and Modification State

DAQRI Compute Pack, S/N: OA565-7DF-94TC48EA8Y - Modification State 0

2.1.3 Date of Test

26-July-2017

2.1.4 Test Method

802.11b

Testing was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6.

Plots for average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.3 to characterize the EUT. Where emissions were detected, final average measurements were taken in accordance with ANSI C63.10-2013 clause 4.1.4.2.2.

The plots shown are the characterization of the EUT. The limits on the plots represent the most stringent case for restricted bands, (54/74 dBuV/m) when compared to 20 dBc outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

Measurements are reported in dBµV/m. The following conversion can be applied to convert from dBµV/m to µV/m: 10^(Field Strength in dBµV/m/20).

2.1.5 Environmental Conditions

Ambient Temperature	20.8 °C
Relative Humidity	67.0 %

2.1.6 Test Results

802.11b

Testing was performed on the Data Rate which resulted in the highest conducted output power. The Data Rate used during testing was 5.5 Mbps. For configurations supporting multiple bandwidths, emission measurements were only made in the bandwidth with the highest conducted output power.

Frequency (MHz)	Result (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)	
	Peak	Average	Peak	Average	Peak	Average
4821.922	56.28	48.01	73.98	53.98	17.70	5.97

Table 5 - 2412 MHz - 3 GHz to 8 GHz

No other emissions were detected within 10 dB of the limit.

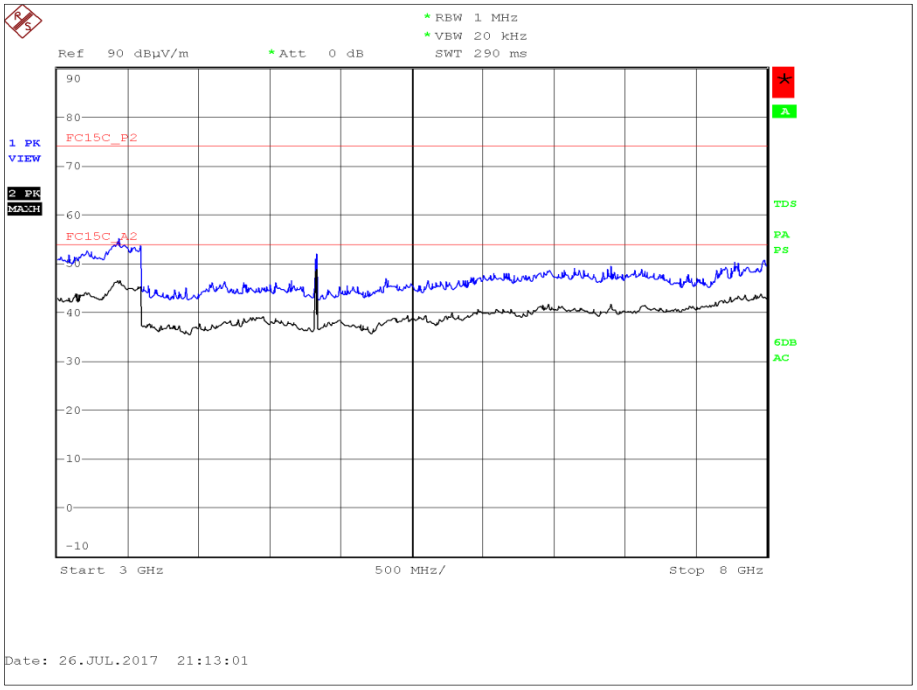

Figure 1 - 2412 MHz - 3 GHz to 8 GHz - Horizontal and Vertical

Frequency (MHz)	Result (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)	
	Peak	Average	Peak	Average	Peak	Average
4879.449	53.86	44.34	73.98	53.98	20.12	9.64

Figure 2 - 2437 MHz - 3 GHz to 8 GHz

No other emissions were detected within 10 dB of the limit.

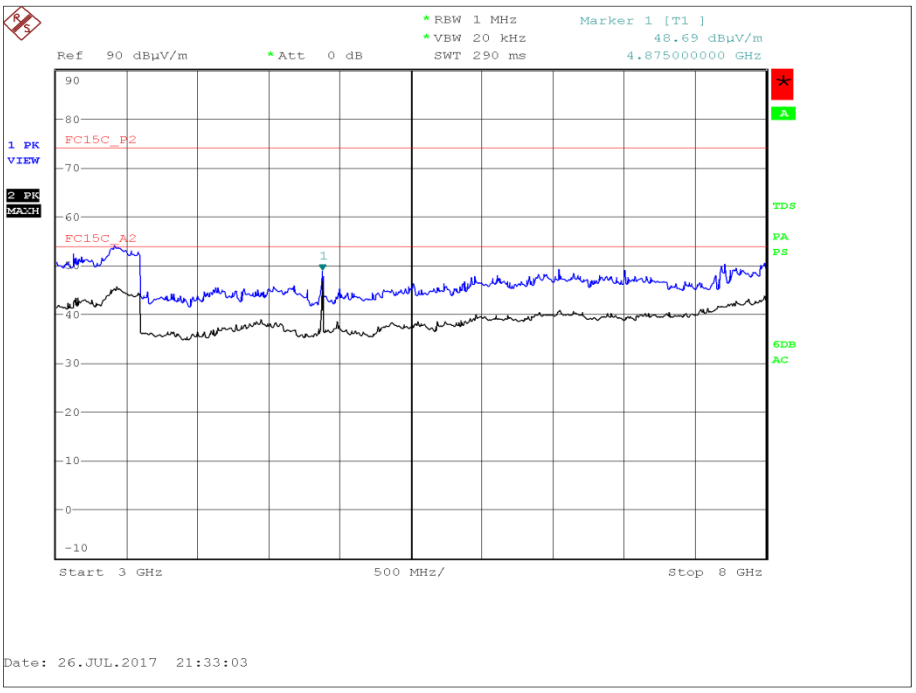

Figure 3 - 2437 MHz - 3 GHz to 8 GHz - Horizontal and Vertical

Frequency (MHz)	Result (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)	
	Peak	Average	Peak	Average	Peak	Average
*						

Table 6 - 2462 MHz - 1 GHz to 8 GHz

*No emissions were detected within 10 dB of the limit.

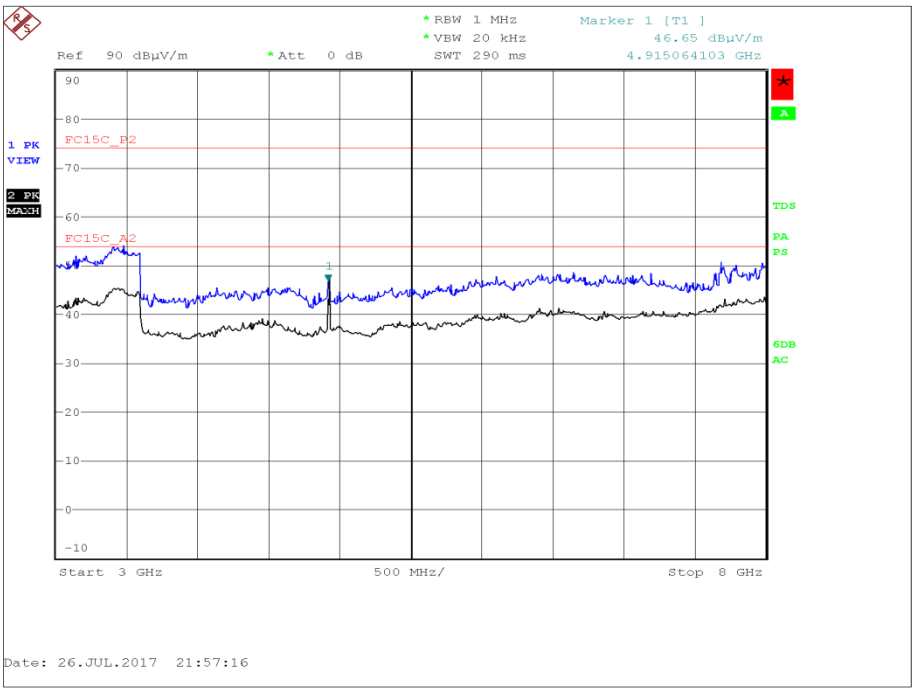

Figure 4 - 2462 MHz - 3 GHz to 8 GHz - Horizontal and Vertical

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

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 this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in 15.209(a)

Industry Canada RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates

compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.1.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	20-Dec-2017
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygromer	Rotronic	A1	2138	12	02-Feb-2018
Filter Unit	Rohde & Schwarz	ASCU 850	3148	-	TU
Cable (N-N, 8m)	Rhophase	NPS-2302-8000-NPS	3248	12	02-May-2018
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	12-Nov-2017
Tilt Antenna Mast	maturo Gmbh	TAM 4.0-P	3916	-	TU
Mast Controller	maturo Gmbh	NCD	3917	-	TU
Suspended Substrate Highpass Filter	Advance Power Components	11SH10-3000/X18000-O/O	4411	12	22-May-2018
Cable (Rx, Km-Km 2m)	Scott Cables	KPS-1501-2000-KPS	4526	6	17-Sep-2017
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	17-Feb-2018

Table 7

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

2.2 Authorised Band Edges

2.2.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d)
Industry Canada RSS-247, Clause 5.5

2.2.2 Equipment Under Test and Modification State

DAQRI Compute Pack, S/N: OA565-7DF-94TC48EA8Y - Modification State 0

2.2.3 Date of Test

26-July-2017

2.2.4 Test Method

802.11g

Testing was performed in accordance with ANSI C63.10, clause 6.10.4

Measurements are reported in dBµV/m. The following conversion can be applied to convert from dBµV/m to µV/m: 10^(Field Strength in dBµV/m/20).

2.2.5 Environmental Conditions

Ambient Temperature	20.8 °C
Relative Humidity	67.0 %

2.2.6 Test Results

802.11g

Mode	Data Rate/MCS	Frequency (MHz)	Measured Frequency (MHz)	Peak Level (dBµV/m)
Data Rate/MCS with the Highest Power and Widest Bandwidth	6 Mbps	2462	2483.5	49.48
Data Rate/MCS with the Highest Power and Widest Bandwidth	6 Mbps	2412	2400.0	64.47

Table 8

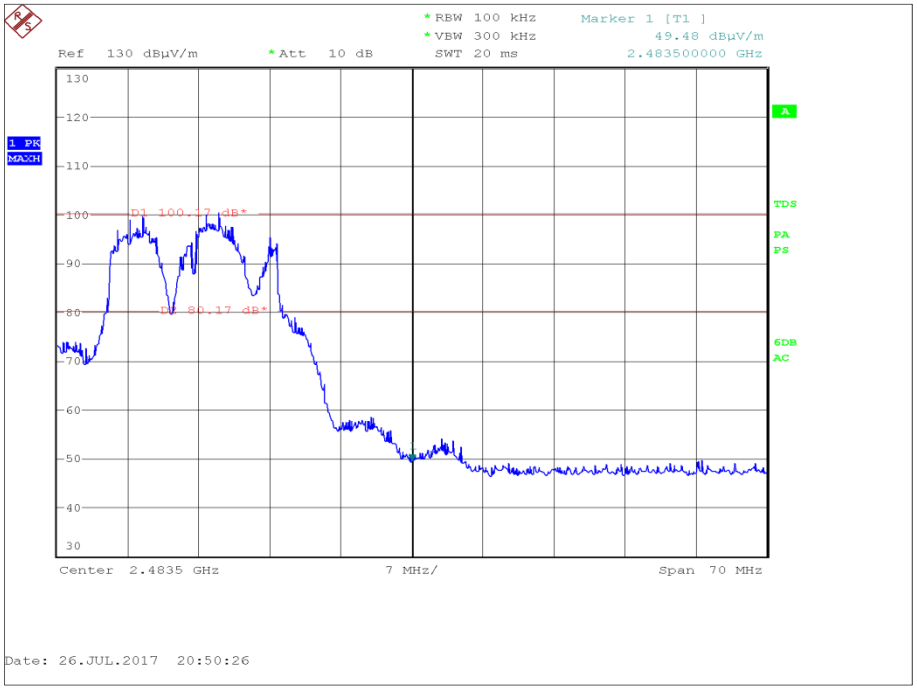

Figure 5 - Data Rate/MCS with Highest Power and Widest Bandwidth - 6 Mbps - 2462 MHz - Measured Frequency 2483.5 MHz

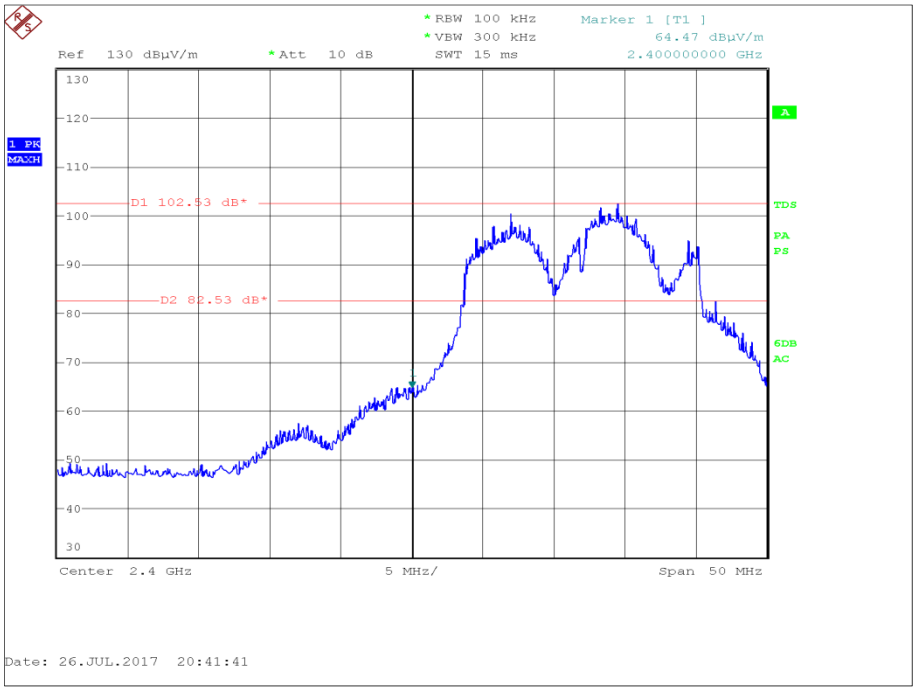

Figure 6 - Data Rate/MCS with Highest Power and Widest Bandwidth - 6 Mbps - 2412 MHz - Measured Frequency 2400.0 MHz

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

Industry Canada RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.2.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	20-Dec-2017
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygromer	Rotronic	A1	2138	12	02-Feb-2018
Cable (N-N, 8m)	Rhophase	NPS-2302-8000-NPS	3248	12	02-May-2018
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	12-Nov-2017
Tilt Antenna Mast	maturo Gmbh	TAM 4.0-P	3916	-	TU
Mast Controller	maturo Gmbh	NCD	3917	-	TU
Cable (Rx, Km-Km 2m)	Scott Cables	KPS-1501-2000-KPS	4526	6	17-Sep-2017
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	17-Feb-2018

Table 9

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

2.3 Restricted Band Edges

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.205
Industry Canada RSS-GEN, Clause 8.10

2.3.2 Equipment Under Test and Modification State

DAQRI Compute Pack, S/N: OA565-7DF-94TC48EA8Y - Modification State 0

2.3.3 Date of Test

26-July-2017

2.3.4 Test Method

802.11g

This test was performed in accordance with ANSI C63.10, clause 6.10.5.

Plots for average measurements were taken in accordance with ANSI C63.10 clause 4.1.4.2.3. These are shown for information purposes and were used to determine the worst case measurement point. Final average measurements were then taken in accordance with ANSI C63.10 clause 4.1.4.2.2. to obtain the measurement result recorded in the test results tables.

Measurements are reported in dBµV/m. The following conversion can be applied to convert from dBµV/m to µV/m: 10^(Field Strength in dBµV/m/20).

2.3.5 Environmental Conditions

Ambient Temperature	20.8 °C
Relative Humidity	67.0 %

2.3.6 Test Results

802.11g

Mode	Data Rate/MCS	Frequency (MHz)	Measured Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Data Rate/MCS with the Highest Power and Widest Bandwidth	6 Mbps	2462	2483.5	66.04	49.61
Data Rate/MCS with the Highest Power and Widest Bandwidth	6 Mbps	2412	2390.0	67.66	52.22

Table 10

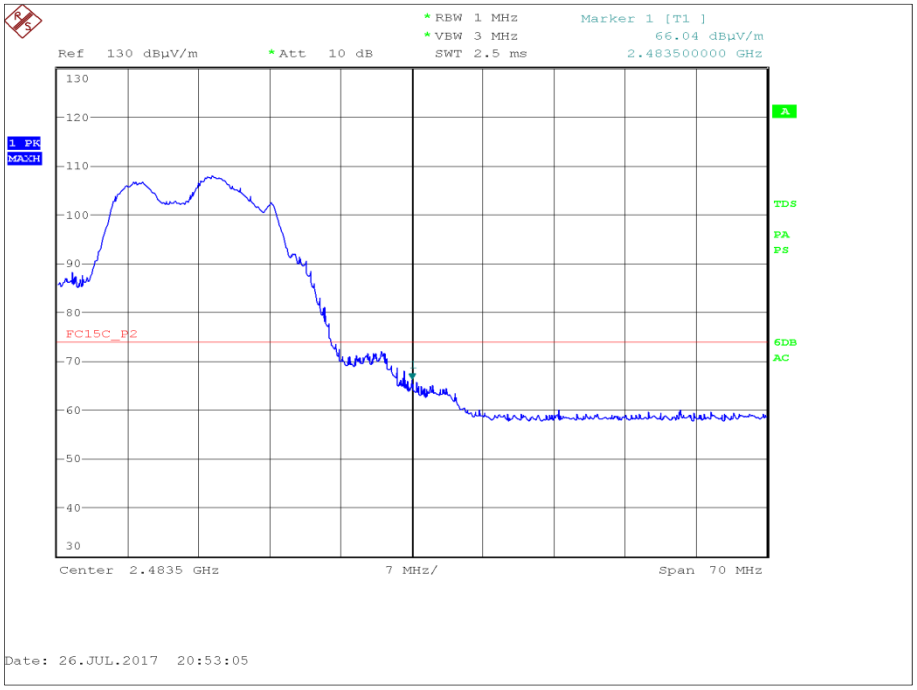

Figure 7 - Data Rate/MCS with Highest Power and Widest Bandwidth – 6 Mbps - 2462 MHz - Measured Frequency 2483.5 MHz - Peak

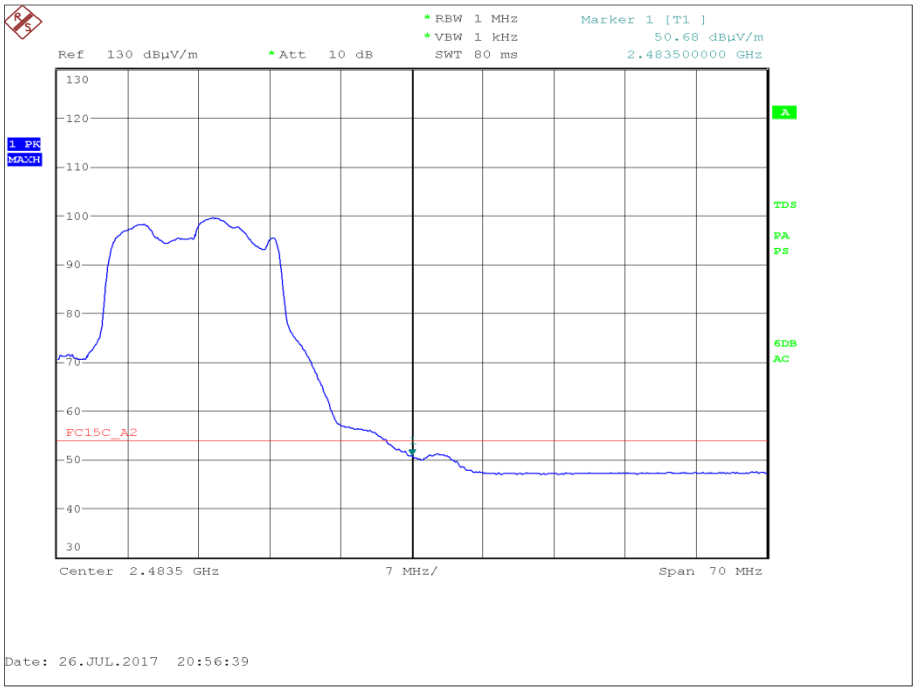

Figure 8 - Data Rate/MCS with Highest Power and Widest Bandwidth – 6 Mbps - 2462 MHz - Measured Frequency 2483.5 MHz - Average

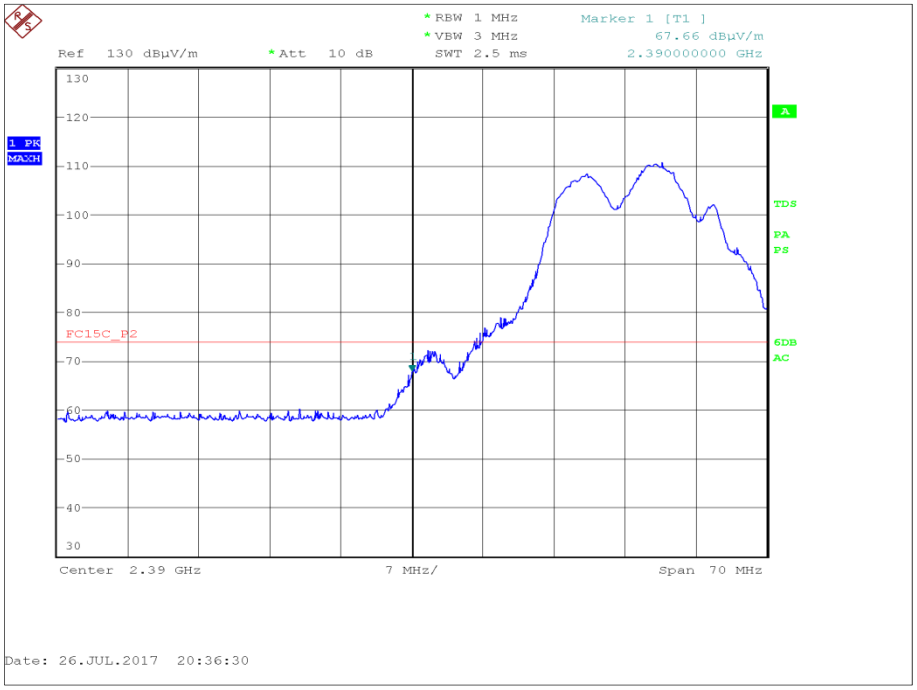

Figure 9 - Data Rate/MCS with Highest Power and Widest Bandwidth – 6 Mbps - 2412 MHz - Measured Frequency 2390.0 MHz - Peak

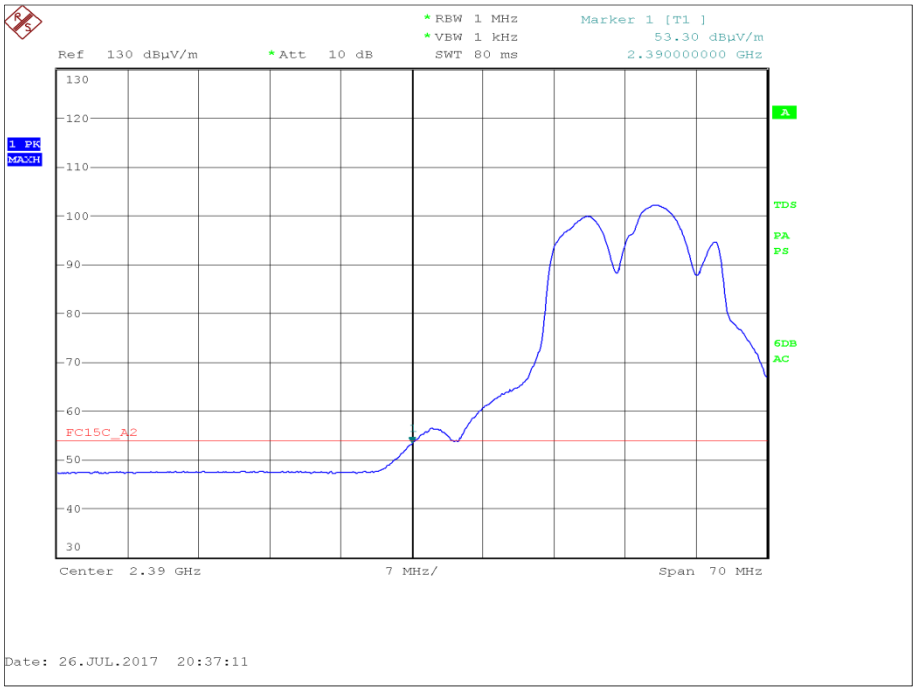

Figure 10 - Data Rate/MCS with Highest Power and Widest Bandwidth – 6 Mbps - 2412 MHz - Measured Frequency 2390.0 MHz - Average

FCC 47 CFR Part 15C, Limit Clause 15.205

	Peak (dBµV/m)	Average (dBµV/m)
Restricted Bands of Operation	74	54

Table 11

Industry Canada RSS-GEN, Limit Clause 8.9

Frequency (MHz)	Field Strength (µV/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960*	500

Table 12

*Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for licence-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.

2.3.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	20-Dec-2017
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygromer	Rotronic	A1	2138	12	02-Feb-2018
Cable (N-N, 8m)	Rhophase	NPS-2302-8000-NPS	3248	12	02-May-2018
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	12-Nov-2017
Tilt Antenna Mast	maturo Gmbh	TAM 4.0-P	3916	-	TU
Mast Controller	maturo Gmbh	NCD	3917	-	TU
Cable (Rx, Km-Km 2m)	Scott Cables	KPS-1501-2000-KPS	4526	6	17-Sep-2017
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	17-Feb-2018

Table 13

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.1 dB 1 GHz to 40 GHz: ± 6.3 dB
Authorised Band Edges	30 MHz to 1 GHz: ± 5.1 dB 1 GHz to 40 GHz: ± 6.3 dB
Restricted Band Edges	30 MHz to 1 GHz: ± 5.1 dB 1 GHz to 40 GHz: ± 6.3 dB

Table 14