REGULATORY COMPLIANCE TEST REPORT

FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-247

Report No.: RDWN72-U3 Rev A

Company: Radwin

Model Name: AP0263510, AP0263530, AP0263540

REGULATORY COMPLIANCE TEST REPORT

Company Name: Radwin

Model Name: AP0263510, AP0263530, AP0263540

To: FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-247

Test Report Serial No.: RDWN72-U3 Rev A

This report supersedes: NONE

Applicant: Radwin
27 Habarzel Street
Tel Aviv, 6971039
Israel

Issue Date: 25th March 2021

This Test Report is Issued Under the Authority of:

MiCOM Labs, Inc.
575 Boulder Court
Pleasanton California 94566
USA
Phone: +1 (925) 462-0304
Fax: +1 (925) 462-0306
www.micomlabs.com

ACCREDITED
TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

Table of Contents

1. ACCREDITATION, LISTINGS & RECOGNITION 5
1.1. TESTING ACCREDITATION 5
1.2. RECOGNITION 6
1.3. PRODUCT CERTIFICATION 7
2. DOCUMENT HISTORY 8
3. TEST RESULT CERTIFICATE 9
4. REFERENCES AND MEASUREMENT UNCERTAINTY 10
4.1. Normative References 10
4.2. Test and Uncertainty Procedure 11
5. PRODUCT DETAILS AND TEST CONFIGURATIONS 12
5.1. Technical Details 12
5.2. Scope Of Test Program 13
5.3. Equipment Model(s) and Serial Number(s) 14
5.4. Antenna Details 14
5.5. Cabling and I/O Ports 14
5.6. Test Configurations 15
5.7. Equipment Modifications 15
5.8. Deviations from the Test Standard 15
6. TEST SUMMARY 16
7. TEST EQUIPMENT CONFIGURATION(S) 17
7.1. Conducted RF 17
7.2. Radiated Emissions - 3m Chamber 19
8. MEASUREMENT AND PRESENTATION OF TEST DATA 22
9. TEST RESULTS 23
9.1. Peak Transmit Power 23
9.1.1.1. Point to Multi-Point 24
9.1.1.2. Point to Multi-Point RSS-247 28
9.1.1.3. Point to Point 32
9.1.1.4. Point to Point RSS-247 36
9.2. 6 dB & 99% Bandwidth 40
9.2.1.5. Point to Multi-Point 41
9.2.1.6. Point to Multi-Point RSS-247 45
9.2.1.7. Point to Point 49
9.2.1.8. Point to Point RSS-247 53
9.3. Power Spectral Density 57
9.3.1.9. Point to Multi-Point 58
9.3.1.10. Point to Multi-Point RSS-247 62
9.3.1.11. Point to Point 66
9.3.1.12. Point to Point RSS-247 70
9.4. Radiated 74
9.4.1. TX Spurious & Restricted Band Emissions 77
9.4.1.1. RADWIN MT0268450 77
9.4.1.2. RADWIN RW-9105-4958 Point to Multi-Point 80
9.4.1.3. RADWIN RW-9105-4958 Point to Point 83
9.4.1.4. RADWIN RW-9105-5159 Point to Multi-Point 86
9.4.1.5. RADWIN RW-9105-5159 Point to Point 89
9.4.1.6. RADWIN RW-9622-5001 92
9.4.1.7. RADWIN RW-9732-4958 95
9.4.2. Restricted Edge & Band-Edge Emissions 98
9.4.2.1. RADWIN MT0268450 98

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.2. RADWIN RW-9105-4958 Point to Multi-Point 107
9.4.2.3. RADWIN RW-9105-4958 Point to Point 116
9.4.2.4. RADWIN RW-9105-5159 Point to Multi-Point 125
9.4.2.5. RADWIN RW-9105-5159 Point to Point 134
9.4.2.6. RADWIN RW-9622-5001 143
9.4.2.7. RADWIN RW-9732-4958 152
A. APPENDIX - GRAPHICAL IMAGES 161
A.1. 6 dB & 99% Bandwidth 162
A.2. Power Spectral Density 258
A.3. Radiated 414
A.3.1. TX Spurious & Restricted Band Emissions 414
A.3.1.1. RADWIN MT0268450 414
A.3.1.2. RADWIN RW-9105-4958 Point to Multi-Point 417
A.3.1.3. RADWIN RW-9105-4958 Point to Point 420
A.3.1.4. RADWIN RW-9105-5159 Point to Multi-Point 423
A.3.1.5. RADWIN RW-9105-5159 Point to Point 426
A.3.1.6. RADWIN RW-9622-5001 429
A.3.1.7. RADWIN RW-9732-4958 432
A.3.2. Restricted Edge & Band-Edge Emissions 435
A.3.2.8. RADWIN MT0268450 435
A.3.2.9. RADWIN RW-9105-4958 Point to Multi-Point 443
A.3.2.10. RADWIN RW-9105-4958 Point to Point 451
A.3.2.11. RADWIN RW-9105-5159 Point to Multi-Point 459
A.3.2.12. RADWIN RW-9105-5159 Point to Point 467
A.3.2.13. RADWIN RW-9622-5001 475
A.3.2.14. RADWIN RW-9732-4958 483

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

1. ACCREDITATION, LISTINGS & RECOGNITION

1.1. TESTING ACCREDITATION

MiCOM Labs, Inc. is an accredited Electrical testing laboratory per the international standard ISO/IEC 17025:2017. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.01. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-01.pdf

ilac-MRA A2LA

Accredited Laboratory

A2LA has accredited

MICOM LABS

Pleasanton, CA

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 24th day of February 2020.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2381.01
Valid to November 30, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

1.2. RECOGNITION

MiCOM Labs, Inc is widely recognized for its wireless testing and certification capabilities. In addition to being recognized for Testing and Certification under Phase 2 Mutual Recognition Agreements (MRA) with Canada, Europe, United Kingdom and Japan, our international recognition includes Conformity Assessment Body (CAB) designation status under agreements with Asia Pacific (APEC) MRA Phase 1 countries giving acceptance of MiCOM test reports. MiCOM Labs test reports are accepted globally.

Country	Recognition Body	Status	MRA Phase	Identification No.
USA	Federal Communications Commission (FCC)	TCB	-	US0159 Test Site Designation #: US1084
Canada	Industry Canada (ISED)	FCB	APEC MRA 2	US0159 Test Company #: 4143A
Japan	MIC (Ministry of Internal Affairs and Communication)	CAB	Japan MRA 2	RCB 210
	Japan Approvals Institute for Telecommunication Equipment (JATE)			
	VCCI	--	--	A-0012
Europe	European Commission	NB	EU MRA 2	NB 2280
United Kingdom	Department for Business, Energy & Industrial Strategy (BEIS)	AB	UK MRA 2	AB 2280
Mexico	Instituto Federal de Telecomunicaciones (IFT)	CAB	Mexico MRA 1	US0159
Australia	Australian Communications and Media Authority (ACMA)	CAB	APEC MRA 1	US0159
Hong Kong	Office of the Telecommunication Authority (OFTA)			
Korea	Ministry of Information and Communication Radio Research Laboratory (RRL)			
Singapore	Infocomm Development Authority (IDA)			
Taiwan	National Communications Commission (NCC) Bureau of Standards, Metrology and Inspection (BSMI)			
Vietnam	Ministry of Communication (MIC)			

TCB- Telecommunications Certification Bodies (TCB)
FCB – Foreign Certification Body
CAB – Conformity Assessment Body
NB – Notified Body;
AB – Approved Body
MRA – Mutual Recognition Agreement

MRA Phases
Phase I - recognition for product testing
Phase II – recognition for both product testing and certification

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

1.3. PRODUCT CERTIFICATION

MiCOM Labs, Inc. is an accredited Product Certification Body per the international standard ISO/IEC 17065:2012. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.02. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-02.pdf

Accredited Product Certification Body

A2LA has accredited

MiCOM LABS

Pleasanton, CA

This product certification body is accredited in accordance with the recognized International Standard ISO/IEC 17065:2012 *Requirements for bodies certifying products, processes and services*. This product certification body also meets the *A2LA R322 – Specific Requirements – Notified Body Accreditation Requirements* and *A2LA R308 - Specific Requirements - ISO-IEC 17065 - Telecommunication Certification Body Accreditation Program*. This accreditation demonstrates technical competence for a defined scope and the operation of a management system.

Presented this 24th day of February 2020

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2381.02
Valid to November 30, 2021

For the product certification schemes to which this accreditation applies, please refer to the organization's Product Certification Scope of Accreditation.

United States of America – Telecommunication Certification Body (TCB)
Industry Canada – Certification Body, CAB Identifier – US0159
Europe – Notified Body (NB), NB Identifier – 2280
UK – Approved Body (AB), AB Identifier - 2280
Japan – Recognized Certification Body (RCB), RCB Identifier - 210

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

2. DOCUMENT HISTORY

Document History		
Revision	Date	Comments
Draft	16th March 2021	Draft report for client review.
Draft 2	23rd March 2021	Draft 2 report for client review.
Rev A	25th March 2021	Initial release.
.		
.		
.		
.		

In the above table the latest report revision will replace all earlier versions.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

3. TEST RESULT CERTIFICATE

Manufacturer:	Radwin 27 Habarzel Street Tel Aviv . 6971039 Israel	**Tested By:**	MiCOM Labs, Inc. 575 Boulder Court Pleasanton California 94566 USA
Model:	AP0263510, AP0263530, AP0263540	**Telephone:**	+1 925 462 0304
Type Of Equipment:	5 GHz SU/Alpha Board	**Fax:**	+1 925 462 0306
S/N's:	Sample Unit		
Test Date(s):	10th – 26th February 2021	**Website:**	www.micomlabs.com

STANDARD(S)	TEST RESULTS
FCC CFR 47 Part 15 Subpart E 15.407 **ISED RSS-247**	**EQUIPMENT COMPLIES**

MiCOM Labs, Inc. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report.

Notes:

1. This document reports conditions under which testing was conducted and the results of testing performed.

2. Details of test methods used have been recorded and kept on file by the laboratory.

3. Test results apply only to the item(s) tested.

A2LA ACCREDITED
TESTING CERT #2381.01

Approved & Released for MiCOM Labs, Inc. by:

Graeme Grieve
Quality Manager MiCOM Labs, Inc.

Gordon Hurst
President & CEO MiCOM Labs, Inc.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

4. REFERENCES AND MEASUREMENT UNCERTAINTY

4.1. Normative References

REF.	PUBLICATION	YEAR	TITLE
I	KDB 662911 D01 & D02	Oct 31 2013	Guidance for measurement of output emission of devices that employ single transmitter with multiple outputs or systems with multiple transmitters operating simultaneously in the same frequency band
II	KDB 905462 D07 v02	22nd August 2016	Test guidance to demonstrate compliance for U-NII devices subject to DFS requirements.
III	KDB 926956 D01 v02	22nd August 2016	U-NII Device Transition Plan
IV	A2LA	5th October 2020	R105 - Requirement's When Making Reference to A2LA Accreditation Status
V	ANSI C63.10	2013	American National Standard for Testing Unlicensed Wireless Devices
VI	ANSI C63.4	2014	American National Standards for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
VII	CISPR 32	2015	Electromagnetic compatibility of multimedia equipment - Emission requirements
VIII	ETSI TR 100 028	2001-12	Parts 1 and 2 Electromagnetic compatibility and Radio Spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics
IX	FCC 06-96	Jun 30 2006	Memorandum Opinion and Order
X	FCC 47 CFR Part 15.407	2020	Radio Frequency Devices; Subpart E –Unlicensed National Information Infrastructure Devices
XI	ICES-003	Issue 7 ; October 15,2020	Information Technology Equipment (Including Digital Apparatus) – Limits and methods of measurement.
XII	M 3003	Edition 3 Nov.2012	Expression of Uncertainty and Confidence in Measurements
XIII	RSS-247 Issue 2	Feb 2017	Digital Transmission Systems (DTSs), Frequency Hopping System (FHSs) and Licence-Exempt Local Area Network (LE-LEN) Devices
XIV	RSS-Gen Issue 5	March 2019 Amendment 1	General Requirements for Compliance of Radio Apparatus
XV	FCC 47 CFR Part 2.1033	2020	FCC requirements and rules regarding photographs and test setup diagrams.
XVI	KDB 905462 D02 v02	April 8 2016	Compliance Measurement Procedures for Unlicensed National Information Infrastructure devices operating in the 5250 to 5350 MHz and 5470 to 5725 MHz bands incorporating Dynamic Frequency Selection.
XVII	KDB 789033 D02 V02r01	14th December, 2017	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

4.2. Test and Uncertainty Procedure

Conducted and radiated emission measurements were conducted in accordance with American National Standards Institute ANSI C63.4, listed in the Normative References section of this report.

Measurement uncertainty figures are calculated in accordance with ETSI TR 100 028 Parts 1 and 2.

Measurement uncertainties stated are based on a standard uncertainty multiplied by a coverage factor k = 2, providing a level of confidence of approximately 95 % in accordance with UKAS document M 3003 listed in the Normative References section of this report.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

5. PRODUCT DETAILS AND TEST CONFIGURATIONS

5.1. Technical Details

Details	Description
Purpose:	Test of the Radwin AP0263510, AP0263530, AP0263540 to FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-247; Compliance Measurement Procedures for Unlicensed National Information Infrastructure devices operating in the 5725 to 5850 MHz band.
Applicant:	Radwin 27 Habarzel Street Tel Aviv . 6971039 Israel
Manufacturer:	Radwin
Laboratory performing the tests:	MiCOM Labs, Inc. 575 Boulder Court Pleasanton California 94566 USA
Test report reference number:	RDWN72-U3 Rev A
Date EUT received:	08th February 2021
Standard(s) applied:	FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-247
Dates of test (from - to):	10th – 26th February 2021
No of Units Tested:	1
Product Family Name:	SU / Alpha
Model(s):	AP0263510, AP0263530, AP0263540.
Location for use:	Outdoors
Declared Frequency Range(s):	5725 - 5850 MHz;
Type of Modulation:	OFDM
EUT Modes of Operation:	5725 - 5850 MHz: 10MHz; 20MHz; 40MHz; 80MHz;
Transmit/Receive Operation:	Transceiver
Rated Input Voltage and Current:	56VDC, 1A
Operating Temperature Range:	-35°C to +60°C
ITU Emission Designator:	10 MHz: 9M00W7W 20 MHz: 17M7W7W 40 MHz: 36M2W7W 80 MHz: 75M8W7W
Equipment Dimensions:	0.04 / 3.78 / 6.45 in
Weight:	0.004 Lb
Hardware Rev:	Prototype
Software Rev:	Protoype

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

5.2. Scope Of Test Program

Radwin AP0263510, AP0263530, AP0263540

The scope of the test program was to test the Radwin AP0263510, AP0263530, AP0263540 configurations in the frequency ranges 5725 - 5850 MHz; for compliance against the following specification:

FCC CFR 47 Part 15 Subpart E 15.407
Compliance Measurement Procedures for Unlicensed National Information Infrastructure devices operating in the 5725 to 5850 MHz band incorporating Dynamic Frequency Selection.

ISED RSS-247
Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

Conducted testing was performed at different Transmitter power levels to take into account the range of antennas gains and configurations that may be used in normal operation.

Device Configuration	Range of Antenna Gains (dBi)
Point to Multi-Point	13 to 23
Point to Point	13 to 32

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

5.3. Equipment Model(s) and Serial Number(s)

Type	Description	Manufacturer	Model	Serial no.	Delivery Date
EUT	Non-Isolated 5 GHz SU/Alpha Board	Radwin Ltd.	AP0263510	Sample Unit#1	8th February
Support	PoE Injector	SHENZHEN GOSPELL	G0566-560-100	--	--
Support	Laptop	Dell	--	--	--

5.4. Antenna Details

Highlighted antennas (total of 5) were tested during Radiated Emissions testing.

Type	Manufacturer	Model	Family	Gain (dBi)	BF Gain	Dir BW (degrees)	X-Pol	Frequency Band (MHz)
integral	RADWIN	MR0204670	Directional	22.0	-	10	Yes	5725 - 5850
integral	RADWIN	MT0268450	Directional	25.0	-	8	Yes	5725 - 5850
external	RADWIN	RW-9105-4958	Directional	16.0	-	20	Yes	5725 - 5850
integral	RADWIN	RW-9105-5159	Directional	13.0	-	30	Yes	5725 - 5850
external	RADWIN	RW-9613-4960	Directional	23.0	-	10	Yes	5725 - 5850
external	RADWIN	RW-9622-5001	Directional	28.0	-	5	Yes	5725 - 5850
external	RADWIN	RW-9721-5158	Dish	28.0	-	5.5	Yes	5725 - 5850
external	RADWIN	RW-9732-4958	Dish	32.0	-	4	Yes	5725 - 5850

BF Gain - Beamforming Gain
Dir BW - Directional BeamWidth
X-Pol - Cross Polarization

5.5. Cabling and I/O Ports

Port Type	Max Cable Length	# of Ports	Screened	Conn Type	Data Type	Bit Rate	Environment
Ethernet PoE IN	>30m	1			Packet Data	1000	Outdoors

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

5.6. Test Configurations

Results for the following configurations are provided in this report:

Operational Mode(s)	Data Rate with Highest Power MBit/s	Channel Frequency (MHz)		
		Low	Mid	High
5725 - 5850 MHz				
10MHz	13.0	5,730.00	5,785.00	5,845.00
20MHz	13.0	5,735.00	5,785.00	5,840.00
40MHz	13.0	5,745.00	5,785.00	5,830.00
80MHz	13.0	5,765.00	5,785.00	5,810.00

5.7. Equipment Modifications

The following modifications were required to bring the equipment into compliance:
1. NONE

5.8. Deviations from the Test Standard

The following deviations from the test standard were required in order to complete the test program:
1. NONE

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6. TEST SUMMARY

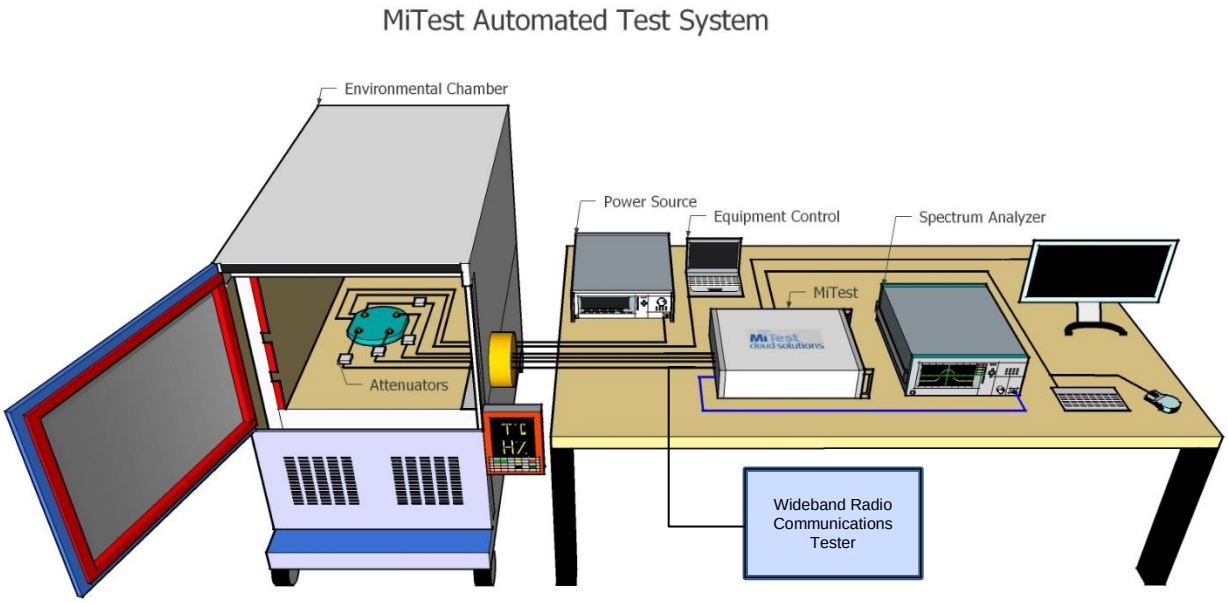
List of Measurements

Test Header	Result	Data Link
Peak Transmit Power	Complies	View Data
6 dB & 99% Bandwidth	Complies	View Data
Power Spectral Density	Complies	View Data
Radiated	Complies	-
TX Spurious & Restricted Band Emissions	Complies	-
RADWIN MT0268450	Complies	View Data
RADWIN RW-9105-4958	Complies	View Data
RADWIN RW-9105-5159	Complies	View Data
RADWIN RW-9613-4960	Complies	View Data
RADWIN RW-9622-5001	Complies	View Data
RADWIN RW-9732-4958	Complies	View Data
Restricted Edge & Band-Edge Emissions	Complies	-
RADWIN MT0268450	Complies	View Data
RADWIN RW-9105-4958	Complies	View Data
RADWIN RW-9105-5159	Complies	View Data
RADWIN RW-9613-4960	Complies	View Data
RADWIN RW-9622-5001	Complies	View Data
RADWIN RW-9732-4958	Complies	View Data
Digital Emissions	Complies	See test report RDWN72-U2
AC Wireline	Complies	See test report RDWN72-U2

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

7. TEST EQUIPMENT CONFIGURATION(S)

7.1. Conducted RF



A full system calibration was performed on the test station and any resulting system losses (or gains) were taken into account in the production of all final measurement data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

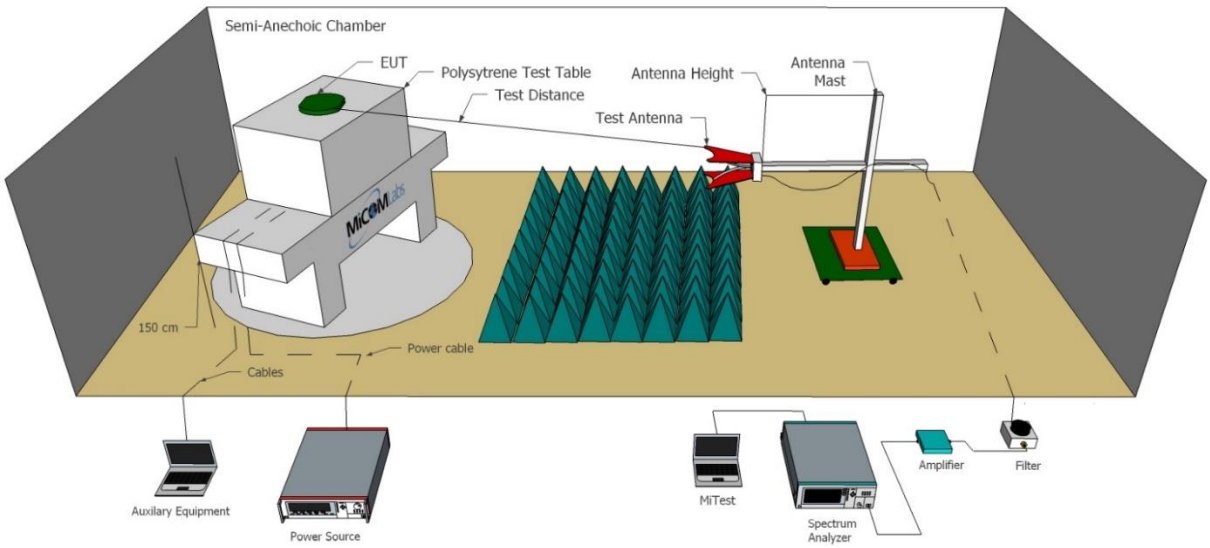
Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
#3 SA	MiTest Box to SA	Fairview Microwave	SCA1814-0101-72	#3 SA	4 Jun 2021
#3P1	EUT to MiTest box port 1	Fairview Microwave	SCA1814-0101-72	#3P1	4 Jun 2021
#3P2	EUT to MiTest box port 2	Fairview Microwave	SCA1814-0101-72	#3P2	4 Jun 2021
#3P3	EUT to MiTest box port 3	Fairview Microwave	SCA1814-0101-72	#3P3	4 Jun 2021
#3P4	EUT to MiTest box port 4	Fairview Microwave	SCA1812-0101-72	#3P4	4 Jun 2021
249	Thermocouple; Resistance Thermometer	Thermotronics	GR2105-02	9340 #2	30 Oct 2021
287	Rohde & Schwarz 40 GHz Receiver	Rhode & Schwarz	ESIB40	100201	8 Oct 2021
398	MiTest RF Conducted Test Software	MiCOM	MiTest ATS	Version 4.2.3.0	Not Required
405	DC Power Supply 0-60V	Agilent	6654A	MY4001826	Cal when used
408	USB to GPIB interface	National Instruments	GPIB-USB HS	14C0DE9	Not Required
440	USB Wideband Power Sensor	Boonton	55006	9178	22 Jun 2021
441	USB Wideband Power Sensor	Boonton	55006	9179	20 Jun 2021
442	USB Wideband Power Sensor	Boonton	55006	9181	19 Jun 2021
445	PoE Injector	D-Link	DPE-101GL	QTAH1E2000625	Not Required
461	Spectrum Analyzer	Agilent	E4440A	MY46185537	20 Jun 2021
510	Barometer/Thermometer	Control Company	68000-49	170871375	20 Dec 2021
515	MiTest Cloud Solutions RF Test Box	MiCOM	2nd Gen with DFS	515	4 Jun 2021
75	Environmental Chamber	Thermatron	SE-300-2-2	27946	20 Feb 2022

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

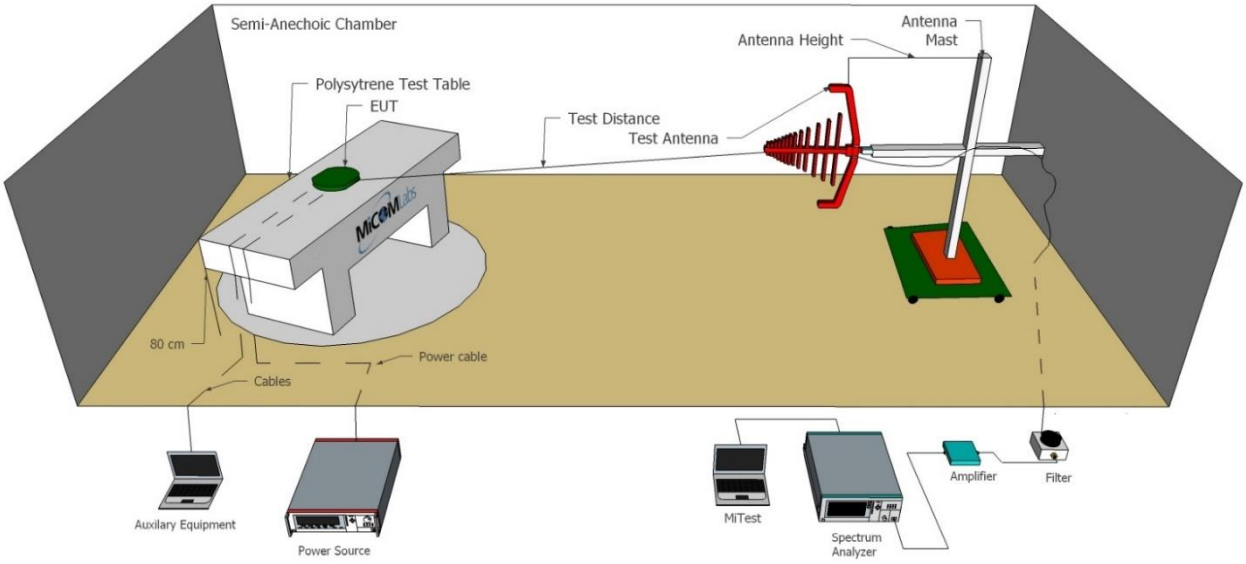
7.2. Radiated Emissions - 3m Chamber

The following tests were performed using the radiated test set-up shown in the diagram below.
Radiated emissions above and below 1GHz.

Radiated Emissions Above 1GHz Test Setup



Radiated Emissions Below 1GHz Test Setup



This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
170	Video System Controller for Semi Anechoic Chamber	Panasonic	WV-CU101	04R08507	Not Required
287	Rohde & Schwarz 40 GHz Receiver	Rhode & Schwarz	ESIB40	100201	8 Oct 2021
298	3M Radiated Emissions Chamber Maintenance Check	MiCOM	3M Chamber	298	26 Apr 2021
301	5470 to 5725 MHz Notch Filter	Microtronics	RBC50704	001	4 May 2021
302	5150 to 5350 MHz Notch Filter	Microtronics	BRC50703	002	4 May 2021
303	5725 to 5875 MHz Notch filter	Microtronics	BRC50705	003	4 May 2021
330	Variac 0-280 Vac	Staco Energy Co	3PN1020B	0546	Cal when used
338	Sunol 30 to 3000 MHz Antenna	Sunol	JB3	A052907	4 Apr 2021
342	2.4 GHz Notch Filter	EWT	EWT-14-0203	H1	4 May 2021
373	26III RMS Multimeter	Fluke	Fluke 26 series III	76080720	21 Jun 2021
377	Band Rejection Filter 5150 to 5880MHz	Microtronics	BRM50716	034	4 May 2021
396	2.4 GHz Notch Filter	Microtronics	BRM50701	001	4 May 2021
397	Amp 10 - 2500MHz	MiCOM Labs	Amp 10 - 2500 MHz	NA	9 May 2021
399	ETS 1-18 GHz Horn Antenna	ETS	3117	00154575	12 May 2021
406	Amplifier for Radiated Emissions	MiCOM Labs	40dB 1 to 18GHz Amp	0406	9 May 2021
410	Desktop Computer	Dell	Inspiron 620	WS38	Not Required
411	Mast/Turntable Controller	Sunol Sciences	SC98V	060199-1D	Not Required
412	USB to GPIB Interface	National Instruments	GPIB-USB HS	11B8DC2	Not Required
413	Mast Controller	Sunol Science	TWR95-4	030801-3	Not Required
414	DC Power Supply 0-60V	HP	6274	1029A01285	Cal when used
415	Turntable Controller	Sunol Sciences	Turntable Controller	None	Not Required
416	Gigabit ethernet filter	ETS-Lingren	Gigafoil 260366	None	Not Required
447	MiTest Rad Emissions Test Software	MiCOM	Rad Emissions Test Software Version 1.0	447	Not Required
462	Schwarzbeck cable from Antenna to Amplifier.	Schwarzbeck	AK 9513	462	4 May 2021
463	Schwarzbeck cable from	Schwarzbeck	AK 9513	463	4 May 2021

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

	Amplifier to Bulkhead.				
464	Schwarzbeck cable from Bulkhead to Receiver	Schwarzbeck	AK 9513	464	4 May 2021
465	Low Pass Filter DC-1000 MHz	Mini-Circuits	NLP-1200+	VUU01901402	4 May 2021
466	Low Pass Filter DC-1500 MHz	Mini-Circuits	NLP-1750+	VUU10401438	4 May 2021
467	2495 to 2650 MHz notch filter	MicroTronics	BRM50709	011	4 May 2021
468	Low pass filter	Mini Circuits	SLP-550	None	4 May 2021
469	Low pass filter	Mini Circuit	SLP-1000	None	4 May 2021
470	High Pass filter	Mini Circuits	SHP-700	None	4 May 2021
476	Low Pass dc-2200MHz filter	Mini Circuits	15542 NLP-2400+	VUU13801345	4 May 2021
480	Cable - Bulkhead to Amp	SRC Haverhill	157-3050360	480	4 May 2021
481	Cable - Bulkhead to Receiver	SRC Haverhill	151-3050787	481	4 May 2021
510	Barometer/Thermometer	Control Company	68000-49	170871375	20 Dec 2021
518	Cable - Amp to Antenna	SRC Haverhill	157-3051574	518	4 May 2021
87	Uninterruptible Power Supply	Falcon Electric	ED2000-1/2LC	F3471 02/01	Cal when used

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

8. MEASUREMENT AND PRESENTATION OF TEST DATA

The measurement and graphical data presented in this test report was generated automatically using state-of-the-art technology creating an easy to read report structure. Numerical measurement data is separated from supporting graphical data (plots) through hyperlinks. Numerical measurement data can be reviewed without scrolling through numerous graphical pages to arrive at the next data matrix.

Plots have been relegated into the Appendix 'Graphical Data'.

Test and report automation was performed by MiTest. MiTest is an automated test system developed by MiCOM Labs. MiTest is the first cloud based modular test system enabling end-to-end automation of regulatory compliance testing for conducted RF testing.

The MiCOM Labs "MiTest" Automated Test System" (Patent Pending)

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9. TEST RESULTS

9.1. Peak Transmit Power

Conducted Test Conditions for Maximum Conducted Output Power			
Standard:	FCC CFR 47:15.407 ISED RSS 247	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	Maximum Conducted Output Power	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a) 6.2.4.1	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Maximum Conducted Output Power Measurement
Method PM (Measurement using an RF average power meter). KDB 789033 defines a methodology using an average wideband power meter. Measurements were made while the EUT was operating in a continuous transmission mode (100% duty cycle) at the appropriate center frequency. All operational modes and frequency bands were measured independently and the resultant calculated. Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured and reported separately. A summation (Σ) of each antenna port output power is provided which includes any offset due to Duty Cycle Correction Factor (DCCF). Testing was performed under ambient conditions at nominal voltage.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.
Supporting Information
Calculated Power = A + G + Y+ 10 log (1/x) dBm

A = Total Power [10*Log10 ($10^{a/10}$ + $10^{b/10}$ + $10^{c/10}$ + $10^{d/10}$)]
G = Antenna Gain
Y = Beamforming Gain
x = Duty Cycle (average power measurements only)

Limits Maximum Conducted Output Power

Operating Frequency Band 5725 – 5850 MHz

15. 407 (a)(3)
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.1.1.1. Point to Multi-Point

Equipment Configuration for Peak Transmit Power

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5730.0	20.15	19.11			22.67		23.00	-0.33	19.00
5785.0	19.98	19.54			22.78		23.00	-0.22	20.00
5845.0	19.68	19.81			22.76		23.00	-0.24	20.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5735.0	19.70	19.19			22.46		23.00	-0.54	19.50
5785.0	19.87	19.62			22.76		23.00	-0.24	19.50
5840.0	19.42	19.64			22.54		23.00	-0.46	19.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	19.42	18.81			22.14		23.00	-0.86	19.00
5785.0	20.05	19.51			22.80		23.00	-0.20	19.50
5830.0	19.15	19.16			22.17		23.00	-0.83	19.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5765.0	16.56	16.08			19.34		23.00	-3.66	16.50
5785.0	19.45	19.13			22.30		23.00	-0.70	19.50
5810.0	14.79	14.70			17.76		23.00	-5.24	15.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.1.1.2. Point to Multi-Point RSS-247

Equipment Configuration for Peak Transmit Power

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5730.0	9.91	9.41			12.68	--	13.00	-0.32	10.00
5785.0	10.15	9.75			12.96	--	13.00	-0.04	10.00
5845.0	9.85	9.88			12.88	--	13.00	-0.12	10.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5735.0	9.89	9.18			12.56	--	13.00	-0.44	9.50
5785.0	9.97	9.51			12.76	--	13.00	-0.24	9.50
5840.0	9.67	9.61			12.65	--	13.00	-0.35	9.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	9.99	9.28			12.66	--	13.00	-0.34	9.50
5785.0	10.12	9.57			12.86	--	13.00	-0.14	9.50
5830.0	9.82	9.61			12.73	--	13.00	-0.27	9.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5765.0	9.61	9.05			12.35	--	13.00	-0.65	9.50
5785.0	9.59	9.12			12.37	--	13.00	-0.63	9.50
5810.0	9.46	9.17			12.33	--	13.00	-0.67	9.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.1.1.3. Point to Point

Equipment Configuration for Peak Transmit Power

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5730.0	22.95	22.80			25.89		30.00	-4.11	23.50
5785.0	24.93	24.82			27.89		30.00	-2.11	26.00
5845.0	23.33	22.40			25.90		30.00	-4.10	23.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5735.0	22.98	22.92			25.96		30.00	-4.04	23.50
5785.0	25.06	25.02			28.05		30.00	-1.95	26.00
5840.0	23.36	22.57			25.99		30.00	-4.01	23.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	19.47	19.36			22.43		30.00	-7.57	19.50
5785.0	25.86	25.35			28.62		30.00	-1.38	26.00
5830.0	19.79	19.08			22.46		30.00	-7.54	20.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 26 dB Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5765.0	16.31	16.10			19.22		30.00	-10.78	16.50
5785.0	25.07	24.84			27.97		30.00	-2.03	26.00
5810.0	16.42	15.75			19.11		30.00	-10.89	16.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-01 MEASURING RF OUTPUT POWER
Measurement Uncertainty:	±1.33 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.1.1.4. Point to Point RSS-247

Equipment Configuration for Peak Transmit Power

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5730.0	8.01	7.19			10.63	--	30.00	-19.37	8.00
5785.0	10.12	9.72			12.93	--	30.00	-17.07	10.00
5845.0	3.41	3.49			6.46	--	30.00	-23.54	3.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5735.0	6.96	5.96			9.50	--	30.00	-20.50	6.50
5785.0	10.41	9.94			13.19	--	30.00	-16.81	10.00
5840.0	4.18	4.21			7.21	--	30.00	-22.79	4.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5745.0	4.54	3.59			7.10	--	30.00	-22.90	4.00
5785.0	10.55	10.03			13.31	--	30.00	-16.69	10.00
5830.0	3.76	3.72			6.75	--	30.00	-23.25	3.50

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Peak Transmit Power			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Conducted Output Power (dBm) Port(s)				Calculated Total Power	Minimum 99% Bandwidth	Limit	Margin	EUT Power Setting
MHz	a	b	c	d	Σ Port(s) dBm	MHz	dBm	dB	
5765.0	2.17	1.53			4.87	--	30.00	-25.13	2.00
5785.0	10.00	9.50			12.77	--	30.00	-17.23	10.00
5810.0	0.06	-0.18			2.95	--	30.00	-27.05	0.00

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

The above measurements are true pulse readings and therefore a Duty Cycling correction factor is not required.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.2. 6 dB & 99% Bandwidth

Conducted Test Conditions for 6 dB and 99% Bandwidth			
Standard:	FCC CFR 47:15.407 ISED RSS-247	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	6 dB and 99 % Bandwidth	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a) 6.2.4.1	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for 6 dB and 99% Bandwidth Measurement
The bandwidth at 6 dB and 99 % is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency. The Resolution Bandwidth was set to 100 kHz.
Testing was performed under ambient conditions at nominal voltage. Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured and reported.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.2.1.5. Point to Multi-Point

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.870	8.870			8.870	8.870		
5785.0	8.900	8.870			8.900	8.870		
5845.0	8.870	8.870			8.870	8.870		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.886	8.897			8.897	8.886		
5785.0	8.889	8.898			8.898	8.889		
5845.0	8.893	8.902			8.902	8.893		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.600	17.670			17.670	17.600		
5785.0	17.600	17.670			17.670	17.600		
5840.0	17.600	17.670			17.670	17.600		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.670	17.673			17.673	17.670		
5785.0	17.668	17.677			17.677	17.668		
5840.0	17.674	17.688			17.688	17.674		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.270	36.270			36.270	36.270		
5785.0	36.270	36.270			36.270	36.270		
5830.0	36.270	36.270			36.270	36.270		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.179	36.194			36.194	36.179		
5785.0	36.140	36.170			36.170	36.140		
5830.0	36.171	36.181			36.181	36.171		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	76.000	76.000			76.000	76.000		
5785.0	76.000	76.000			76.000	76.000		
5810.0	76.000	76.000			76.000	76.000		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	75.779	75.606			75.779	75.606		
5785.0	75.709	75.669			75.709	75.669		
5810.0	75.772	75.540			75.772	75.540		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.2.1.6. Point to Multi-Point RSS-247

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.870	8.870			8.870	8.870		
5785.0	8.900	8.870			8.900	8.870		
5845.0	8.870	8.870			8.870	8.870		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.884	8.899			8.899	8.884		
5785.0	8.886	8.906			8.906	8.886		
5845.0	8.893	8.901			8.901	8.893		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5735.0	17.600	17.670			17.670	17.600		
5785.0	17.670	17.670			17.670	17.670		
5840.0	17.600	17.670			17.670	17.600		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5735.0	17.662	17.678			17.678	17.662		
5785.0	17.666	17.674			17.674	17.666		
5840.0	17.659	17.683			17.683	17.659		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.270	36.270			36.270	36.270		
5785.0	36.270	36.270			36.270	36.270		
5830.0	36.270	36.270			36.270	36.270		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.184	36.190			36.190	36.184		
5785.0	36.132	36.199			36.199	36.132		
5830.0	36.173	36.181			36.181	36.173		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	76.000	75.730			76.000	75.730		
5785.0	76.000	75.730			76.000	75.730		
5810.0	76.000	76.000			76.000	76.000		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	75.772	75.582			75.772	75.582		
5785.0	75.697	75.575			75.697	75.575		
5810.0	75.798	75.578			75.798	75.578		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.2.1.7. Point to Point

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.870	8.900			8.900	8.870		
5785.0	8.870	8.870			8.870	8.870		
5845.0	8.870	8.870			8.870	8.870		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.901	8.888			8.901	8.888		
5785.0	10.523	12.800			12.800	10.523		
5845.0	8.902	8.909			8.909	8.902		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.670	17.600			17.670	17.600		
5785.0	17.600	17.600			17.600	17.600		
5840.0	17.600	17.600			17.600	17.600		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.742	17.772			17.772	17.742		
5785.0	20.338	24.900			24.900	20.338		
5840.0	17.818	17.891			17.891	17.818		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.270	36.270			36.270	36.270		
5785.0	36.130	36.130			36.130	36.130		
5830.0	36.270	36.270			36.270	36.270		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5745.0	36.196	36.180			36.196	36.180		
5785.0	49.614	53.844			53.844	49.614		
5830.0	36.198	36.169			36.198	36.169		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 6 dB Bandwidth (MHz) Port(s)				6 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5765.0	76.000	76.000			76.000	76.000		
5785.0	75.470	76.000			76.000	75.470		
5810.0	76.000	76.000			76.000	76.000		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5765.0	75.661	75.769			75.769	75.661		
5785.0	86.738	101.010			101.010	86.738		
5810.0	75.647	75.733			75.733	75.647		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.2.1.8. Point to Point RSS-247

Equipment Configuration for 6 dB & 99% Bandwidth

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.870	8.870			8.870	8.870		
5785.0	8.870	8.870			8.870	8.870		
5845.0	8.870	8.870			8.870	8.870		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5730.0	8.882	8.899			8.899	8.882		
5785.0	8.888	8.895			8.895	8.888		
5845.0	8.886	8.903			8.903	8.886		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.600	17.600			17.600	17.600		
5785.0	17.600	17.600			17.600	17.600		
5840.0	17.600	17.670			17.670	17.600		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5735.0	17.656	17.669			17.669	17.656		
5785.0	17.660	17.673			17.673	17.660		
5840.0	17.660	17.669			17.669	17.660		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5745.0	36.270	36.400			36.400	36.270		
5785.0	36.270	36.270			36.270	36.270		
5830.0	36.270	36.270			36.270	36.270		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5745.0	36.162	36.197			36.197	36.162		
5785.0	36.122	36.167			36.167	36.122		
5830.0	36.198	36.170			36.198	36.170		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 6 dB & 99% Bandwidth			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	76.000	76.000			76.000	76.000		
5785.0	76.000	76.000			76.000	76.000		
5810.0	76.000	76.000			76.000	76.000		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	a	b	c	d	Highest	Lowest		
5765.0	75.778	75.662			75.778	75.662		
5785.0	75.871	75.644			75.871	75.644		
5810.0	75.918	75.606			75.918	75.606		

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.3. Power Spectral Density

Conducted Test Conditions for Power Spectral Density			
Standard:	FCC CFR 47:15.407 ISED RSS-247	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	Power Spectral Density	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a) 6.2.4.1	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Power Spectral Density
The in-band power spectral density was measured using the test technique specified in KDB 789033. A 1 MHz measurement bandwidth was implemented for the analyzer sweep. Once the sweep is complete the analyzer trace data is downloaded and used for post processing purposes.
Where the device operated with multiple antenna ports i.e. MIMO device, each port was measured separately. The Peak Power Spectral Density is the highest level found across the emission bandwidth. With multiple antenna port measurements the numerical analyzer data from each port is summed (å) and a link to this additional graphic is provided.

Test configuration and setup used for the measurement was per the Conducted Test Set-up section specified in this document.

Measure and sum the spectra across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The individual spectra are then summed mathematically in linear power units. Unlike in-band power measurements, in which the sum involves a single measured value (output power) from each output, measurements for compliance with PSD limits involve summing entire spectra across corresponding frequency bins on the various outputs. Consistency is maintained for any device with multiple transmitter outputs to be certain the individual outputs are all aligned with the same span and same number of points. In this instance, the linear power spectrum value within the first spectral bin of output 0 is summed with that in the first spectral bin of output 1, and the first spectral bin of output 2, and so on up to the Nth output to obtain the true value for the first frequency bin of the summed spectrum. The summed spectrum value for each frequency bin is computed in this fashion. These summed spectral values were post processed and the resulting numerical and graphical data presented.

NOTE: It may be observed that spectrum in some plots break the limit line however this in itself does NOT constitute a failure. In all cases a spectrum summation plot is provided in order to prove compliance. A failure occurs only after the summation of all spectrum plots have been summed and are found to be greater than the limit line.

Supporting Information
Calculated Power = A + 10 log (1/x) dBm
A = Total Power Spectral Density [10*Log10 ($10^{a/10}$ + $10^{b/10}$ + $10^{c/10}$ + $10^{d/10}$)]
x = Duty Cycle

Limits Power Spectral Density

Operating Frequency Band 5725 – 5850 MHz

15. 407 (a)(3)
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.3.1.9. Point to Multi-Point

Equipment Configuration for Power Spectral Density			
Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5730.0	7.116	6.128			9.560	23.0	-13.5
5785.0	6.989	6.499			9.656	23.0	-13.4
5845.0	7.500	7.868			10.585	23.0	-12.4

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5735.0	5.859	5.130			8.401	23.0	-14.6
5785.0	5.339	5.048			8.115	23.0	-14.9
5840.0	4.655	5.037			7.733	23.0	-15.3

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	2.274	1.610			4.738	23.0	-18.3
5785.0	2.603	2.017			5.188	23.0	-17.8
5830.0	2.077	1.966			4.945	23.0	-18.1

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5765.0	-4.133	-4.427			-1.315	23.0	-24.3
5785.0	-0.970	-1.855			1.420	23.0	-21.6
5810.0	-5.535	-5.967			-2.988	23.0	-26.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.3.1.10. Point to Multi-Point RSS-247

Equipment Configuration for Power Spectral Density

Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5730.0	-2.014	-2.672			0.585	13.0	-12.4
5785.0	-1.811	-2.449			0.907	13.0	-12.1
5845.0	-2.533	-2.641			0.353	13.0	-12.7

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5735.0	-5.047	-6.431			-2.648	13.0	-15.7
5785.0	-4.954	-5.961			-2.514	13.0	-15.5
5840.0	-5.531	-5.543			-2.542	13.0	-15.6

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5745.0	-7.916	-8.556			-5.239	13.0	-18.2
5785.0	-7.773	-8.399			-5.074	13.0	-18.1
5830.0	-8.007	-8.460			-5.406	13.0	-18.4

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	23.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5765.0	-10.875	-11.569			-8.293	13.0	-21.3
5785.0	-11.332	-12.069			-8.731	13.0	-21.7
5810.0	-11.455	-12.024			-8.828	13.0	-21.8

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.3.1.11. Point to Point

Equipment Configuration for Power Spectral Density			
Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5730.0	11.455	10.989			14.162	30.0	-15.8
5785.0	12.870	12.618			15.719	30.0	-14.3
5845.0	11.691	10.645			14.086	30.0	-15.9

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5735.0	8.297	8.266			11.085	30.0	-18.9
5785.0	10.439	10.119			13.241	30.0	-16.8
5840.0	8.449	7.626			11.035	30.0	-19.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5745.0	1.539	1.409			4.424	30.0	-25.6
5785.0	8.425	7.470			10.796	30.0	-19.2
5830.0	2.258	1.654			4.819	30.0	-25.2

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	13.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5765.0	-4.503	-4.899			-1.742	30.0	-31.8
5785.0	4.105	3.956			6.943	30.0	-23.1
5810.0	-4.457	-5.429			-2.030	30.0	-32.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Point to Point RSS-247

Equipment Configuration for Power Spectral Density			
Variant:	10MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/500 KHz	dBm/500 KHz	dB
5730.0	-5.118	-4.947			-2.031	30.0	-32.0
5785.0	-1.872	-2.355			0.839	30.0	-29.2
5845.0	-9.180	-8.836			-6.049	30.0	-36.1

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5735.0	-8.011	-8.983			-5.560	30.0	-35.6
5785.0	-4.482	-4.965			-1.821	30.0	-31.8
5840.0	-11.135	-10.841			-8.023	30.0	-38.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5745.0	-13.323	-14.287			-10.895	30.0	-40.9
5785.0	-7.016	-8.017			-4.640	30.0	-34.6
5830.0	-14.127	-14.186			-11.184	30.0	-41.2

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for Power Spectral Density			
Variant:	80MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	32.00
Modulation:	OFDM	**Beam Forming Gain (Y)(dB):**	Not Applicable
TPC:	Not Applicable	**Tested By:**	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Power Spectral Density Port(s) (dBm/500 KHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/500 KHz**	**dBm/500 KHz**	**dB**
5765.0	-18.582	-19.295			-15.985	30.0	-46.0
5785.0	-10.759	-10.998			-7.970	30.0	-38.0
5810.0	-20.705	-21.160			-17.979	30.0	-48.0

Traceability to Industry Recognized Test Methodologies	
Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

Note: click the links in the above matrix to view the graphical image (plot).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4. Radiated

Radiated Test Conditions for Radiated Spurious and Band-Edge Emissions			
Standard:	FCC CFR 47:15.407 ISED RSS-247	**Ambient Temp. (ºC):**	20.0 - 24.5
Test Heading:	Radiated Spurious and Band-Edge Emissions	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (b), 15.205, 15.209 6.2.4.2	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Radiated Spurious and Band-Edge Emissions
Radiated emissions for restricted bands above 1 GHz are measured in the anechoic chamber at a 3-meter distance on every azimuth in both horizontal and vertical polarities. The emissions are recorded and maximized as a function of azimuth by rotation through 360° with a spectrum analyzer in peak hold mode. Depending on the frequency band spanned a notch filter was used to remove the fundamental frequency. The highest emissions relative to the limit are listed for each frequency spanned.
Measurements on any restricted band frequency or frequencies above 1 GHz are based on the use of measurement instrumentation employing peak and average detectors. All measurements were performed using a resolution bandwidth of 1 MHz.

Test configuration and setup for Undesirable Measurement were per the Radiated Test Set-up specified in this document.

15.407 (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Limits for Restricted Bands (15.205, 15.209)
Peak emission: 74 dBuV/m
Average emission: 54 dBuV/m

Field Strength Calculation
The field strength is calculated by adding the Antenna Factor and Cable Loss, and subtracting Amplifier Gain from the measured reading. All factors are included in the reported data.
FS = R + AF + CORR - FO

where:
FS = Field Strength
R = Measured Spectrum analyzer Input Amplitude

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

AF = Antenna Factor
CORR = Correction Factor = CL – AG + NFL
CL = Cable Loss
AG = Amplifier Gain
FO = Distance Falloff Factor
NFL = Notch Filter Loss

Example:
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength (dBµV/m);

$$E = \frac{1000000 \times \sqrt{30P}}{3}$$ µV/m

where P is the EIRP in Watts

Therefore: -27 dBm/MHz equates to 68.23 dBuV/m

Conversion between dBmV/m (or dBmV) and mV/m (or mV) are as follows:
Level (dBmV/m) = 20 * Log (level (mV/m))

40 dBmV/m = 100 mV/m
48 dBmV/m = 250 mV/m

Restricted Bands of Operation (15.205)
(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

Frequency Band			
MHz	**MHz**	**MHz**	**GHz**
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

(b) Except as provided in paragraphs (d) and (e) of this section, the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

(c) Except as provided in paragraphs (d) and (e) of this section, regardless of the field strength limits specified elsewhere in this subpart, the provisions of this section apply to emissions from any intentional radiator.

(d) The following devices are exempt from the requirements of this section:

(1) Swept frequency field disturbance sensors operating between 1.705 and 37 MHz provided their emissions only sweep through the bands listed in paragraph (a) of this section, the sweep is never stopped with the fundamental emission within the bands listed in paragraph (a) of this section, and the fundamental emission is outside of the bands listed in paragraph (a) of this section more than 99% of the time the device is actively transmitting, without compensation for duty cycle.

(2) Transmitters used to detect buried electronic markers at 101.4 kHz which are employed by telephone companies.

(3) Cable locating equipment operated pursuant to §15.213.

(4) Any equipment operated under the provisions of §15.253, 15.255, and 15.256 in the frequency band 75-85 GHz, or §15.257 of this part.

(5) Biomedical telemetry devices operating under the provisions of §15.242 of this part are not subject to the restricted band 608-614 MHz but are subject to compliance within the other restricted bands.

(6) Transmitters operating under the provisions of subparts D or F of this part.

(7) Devices operated pursuant to §15.225 are exempt from complying with this section for the 13.36-13.41 MHz band only.

(8) Devices operated in the 24.075-24.175 GHz band under §15.245 are exempt from complying with the requirements of this section for the 48.15-48.35 GHz and 72.225-72.525 GHz bands only, and shall not exceed the limits specified in §15.245(b).

(9) Devices operated in the 24.0-24.25 GHz band under §15.249 are exempt from complying with the requirements of this section for the 48.0-48.5 GHz and 72.0-72.75 GHz bands only, and shall not exceed the limits specified in §15.249(a).

(e) Harmonic emissions appearing in the restricted bands above 17.7 GHz from field disturbance sensors operating under the provisions of §15.245 shall not exceed the limits specified in §15.245(b).

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1. TX Spurious & Restricted Band Emissions

9.4.1.1. RADWIN MT0268450

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	10MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	11.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3995.93	66.36	2.60	-12.25	56.71	Max Peak	Horizontal	107	218	68.2	-11.5	Pass
#2	3995.93	56.44	2.60	-12.25	46.79	Max Avg	Horizontal	107	218	54.0	-7.2	Pass
#3	5727.04	65.06	3.17	-11.21	57.02	Fundamental	Horizontal	150	0	--	--	
#4	6081.28	55.21	3.26	-10.01	48.46	Peak (NRB)	Horizontal	150	0	--	--	Pass
#5	6249.96	52.58	3.25	-9.50	46.33	Peak (NRB)	Horizontal	150	130	--	--	Pass
Test Notes: EUT powered by POE. 5G notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	10MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3995.99	71.66	2.60	-12.25	62.01	Max Peak	Horizontal	185	207	68.2	-6.2	Pass
#2	3995.99	62.00	2.60	-12.25	52.35	Max Avg	Horizontal	185	207	54.0	-1.7	Pass
#3	5786.88	68.00	3.14	-10.93	65.21	Fundamental	Horizontal	150	0	--	--	
#4	6105.01	61.62	3.21	-9.86	54.97	Peak (NRB)	Horizontal	150	2	--	--	Pass
#5	6249.98	52.14	3.25	-9.50	46.88	Peak (NRB)	Horizontal	150	148	--	--	Pass
Test Notes: EUT powered by POE. 5G notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	10MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	11.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3995.98	65.98	2.60	-12.25	56.33	Max Peak	Horizontal	196	217	68.2	-11.9	Pass
#2	3995.98	59.70	2.60	-12.25	50.05	Max Avg	Horizontal	196	217	54.0	-4.0	Pass
#3	5844.23	61.07	3.20	-10.74	53.53	Fundamental	Vertical	151	0	--	--	
#4	6103.88	58.94	3.21	-9.86	52.29	Peak (NRB)	Vertical	151	0	--	--	Pass
#5	6249.96	53.81	3.25	-9.50	47.56	Peak (NRB)	Horizontal	151	217	--	--	Pass
Test Notes: EUT powered by POE. 5G notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.2. RADWIN RW-9105-4958 Point to Multi-Point

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1332.00	65.53	1.49	-15.95	51.07	Max Peak	Horizontal	168	20	68.2	-17.2	Pass
#2	1332.00	57.91	1.49	-15.95	43.45	Max Avg	Horizontal	168	20	54.0	-10.6	Pass
#3	3819.91	59.09	2.52	-11.92	49.69	Max Peak	Horizontal	186	0	68.2	-18.5	Pass
#4	3819.91	54.78	2.52	-11.92	45.38	Max Avg	Horizontal	186	0	54.0	-8.6	Pass
#5	3995.94	63.09	2.60	-12.25	53.44	Max Peak	Horizontal	147	283	68.2	-14.8	Pass
#6	3995.94	56.72	2.60	-12.25	47.07	Max Avg	Horizontal	147	283	54.0	-6.9	Pass
#7	5728.27	61.47	3.16	-11.21	53.42	Fundamental	Vertical	100	0	--	--	
#8	6249.91	50.16	3.25	-9.50	43.91	Peak (NRB)	Horizontal	100	0	--	--	Pass

Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3856.59	58.76	2.57	-12.01	49.32	Max Peak	Horizontal	98	288	68.2	-18.9	Pass
#2	3856.59	53.16	2.57	-12.01	43.72	Max Avg	Horizontal	98	288	54.0	-10.3	Pass
#3	3996.00	65.85	2.60	-12.25	56.20	Max Peak	Horizontal	158	355	68.2	-12.0	Pass
#4	3996.00	55.98	2.60	-12.25	46.33	Max Avg	Horizontal	158	355	54.0	-7.7	Pass
#5	5792.08	66.28	3.14	-10.85	58.57	Fundamental	Vertical	100	0	--	--	
#6	6249.97	51.12	3.25	-9.50	44.87	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3896.62	58.95	2.58	-12.00	49.53	Max Peak	Horizontal	99	288	68.2	-18.7	Pass
#2	3896.62	54.10	2.58	-12.00	44.68	Max Avg	Horizontal	99	288	54.0	-9.3	Pass
#3	3995.89	70.56	2.60	-12.25	60.91	Max Peak	Horizontal	159	295	68.2	-7.3	Pass
#4	3995.89	60.48	2.60	-12.25	50.83	Max Avg	Horizontal	159	295	54.0	-3.2	Pass
#5	5836.52	65.84	3.16	-10.78	58.22	Fundamental	Horizontal	100	0	--	--	
#6	6249.89	51.50	3.25	-9.50	45.25	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.3. RADWIN RW-9105-4958 Point to Point

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3995.89	67.67	2.60	-12.25	58.02	Max Peak	Horizontal	158	353	68.2	-10.2	Pass
#2	3995.89	57.05	2.60	-12.25	47.40	Max Avg	Horizontal	158	353	54.0	-6.6	Pass
#3	5729.46	68.17	3.16	-11.21	60.12	Fundamental	Vertical	100	0	--	--	
#4	6249.90	52.22	3.25	-9.50	45.97	Peak (NRB)	Horizontal	100	11	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1332.06	68.85	1.49	-15.95	54.39	Max Peak	Horizontal	164	355	68.2	-13.8	Pass
#2	1332.06	60.49	1.49	-15.95	46.03	Max Avg	Horizontal	164	355	54.0	-8.0	Pass
#3	3856.64	61.44	2.57	-12.01	55.00	Max Peak	Horizontal	107	313	68.2	-13.2	Pass
#4	3856.64	56.06	2.57	-12.01	46.62	Max Avg	Horizontal	107	313	54.0	-7.4	Pass
#5	3995.97	66.49	2.60	-12.25	56.84	Max Peak	Horizontal	120	48	68.2	-11.4	Pass
#6	3995.97	59.80	2.60	-12.25	50.15	Max Avg	Horizontal	120	48	54.0	-3.9	Pass
#7	5784.14	70.19	3.14	-10.97	62.36	Fundamental	Horizontal	100	0	--	--	
#8	6249.92	49.86	3.25	-9.50	43.61	Peak (NRB)	Horizontal	100	0	--	--	Pass
#9	11569.21	57.19	4.40	-5.56	56.03	Max Peak	Horizontal	130	13	68.2	-12.2	Pass
#10	11569.21	43.62	4.40	-5.56	42.46	Max Avg	Horizontal	130	13	54.0	-11.5	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3896.68	58.63	2.58	-12.00	49.21	Max Peak	Horizontal	98	312	68.2	-19.0	Pass
#2	3896.68	53.55	2.58	-12.00	44.13	Max Avg	Horizontal	98	312	54.0	-9.9	Pass
#3	3996.04	70.48	2.60	-12.25	60.83	Max Peak	Horizontal	159	47	68.2	-7.4	Pass
#4	3996.04	59.74	2.60	-12.25	50.09	Max Avg	Horizontal	159	47	54.0	-3.9	Pass
#5	5841.53	65.46	3.18	-10.75	57.89	Fundamental	Vertical	100	0	--	--	
#6	6250.07	52.45	3.25	-9.49	46.21	Peak (NRB)	Horizontal	100	11	--	--	Pass
#7	11688.85	58.84	4.48	-5.35	57.97	Max Peak	Horizontal	186	19	68.2	-10.3	Pass
#8	11688.85	45.31	4.48	-5.35	44.44	Max Avg	Horizontal	186	19	54.0	-9.6	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.4. RADWIN RW-9105-5159 Point to Multi-Point

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3820.04	60.80	2.53	-11.93	51.40	Max Peak	Horizontal	191	358	68.2	-16.8	Pass
#2	3820.04	56.88	2.53	-11.93	47.48	Max Avg	Horizontal	191	358	54.0	-6.5	Pass
#3	3995.99	70.69	2.60	-12.25	61.04	Max Peak	Horizontal	101	39	68.2	-7.2	Pass
#4	3995.99	59.45	2.60	-12.25	49.80	Max Avg	Horizontal	101	39	54.0	-4.2	Pass
#5	5728.17	67.30	3.16	-11.21	59.25	Fundamental	Horizontal	100	0	--	--	
#6	6249.94	55.27	3.25	-9.50	49.02	Peak (NRB)	Horizontal	100	0	--	--	Pass
#7	11459.86	53.95	4.74	-6.01	52.68	Max Peak	Horizontal	158	281	68.2	-15.6	Pass
#8	11459.86	40.03	4.74	-6.01	38.76	Max Avg	Horizontal	158	281	54.0	-15.2	Pass

Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1331.98	67.84	1.49	-15.95	53.38	Max Peak	Horizontal	158	352	68.2	-14.9	Pass
#2	1331.98	60.09	1.49	-15.95	45.63	Max Avg	Horizontal	158	352	54.0	-8.4	Pass
#3	3856.59	59.80	2.57	-12.01	50.36	Max Peak	Horizontal	101	353	68.2	-17.9	Pass
#4	3856.59	55.58	2.57	-12.01	46.14	Max Avg	Horizontal	101	353	54.0	-7.9	Pass
#5	3995.97	60.55	2.60	-12.25	50.90	Max Peak	Horizontal	127	270	68.2	-17.3	Pass
#6	3995.97	53.65	2.60	-12.25	44.00	Max Avg	Horizontal	127	270	54.0	-10.0	Pass
#7	5786.02	72.95	3.14	-10.96	65.13	Fundamental	Horizontal	100	0	--	--	
#8	6073.24	55.44	3.24	-10.08	48.60	Peak (NRB)	Horizontal	100	0	--	--	Pass
#9	6249.95	56.35	3.25	-9.50	50.10	Peak (NRB)	Horizontal	100	0	--	--	Pass
#10	11567.58	54.87	4.42	-5.56	53.73	Max Peak	Horizontal	157	290	68.2	-14.5	Pass
#11	11567.58	41.08	4.42	-5.56	39.94	Max Avg	Horizontal	157	290	54.0	-14.1	Pass

Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3896.62	60.26	2.58	-12.00	50.84	Max Peak	Horizontal	115	355	68.2	-17.4	Pass
#2	3896.62	56.12	2.58	-12.00	46.70	Max Avg	Horizontal	115	355	54.0	-7.3	Pass
#3	3996.01	70.31	2.60	-12.25	60.66	Max Peak	Horizontal	156	353	68.2	-7.6	Pass
#4	3996.01	60.17	2.60	-12.25	50.52	Max Avg	Horizontal	156	353	54.0	-3.5	Pass
#5	5843.57	73.23	3.20	-10.74	65.69	Fundamental	Horizontal	100	0	--	--	
#6	6073.71	56.75	3.24	-10.08	49.91	Peak (NRB)	Horizontal	100	0	--	--	Pass
#7	6249.98	56.42	3.25	-9.50	50.17	Peak (NRB)	Horizontal	100	0	--	--	Pass
#8	11689.79	58.52	4.48	-5.35	57.65	Max Peak	Horizontal	132	13	68.2	-10.6	Pass
#9	11689.79	45.20	4.48	-5.35	44.33	Max Avg	Horizontal	132	13	54.0	-9.7	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.5. RADWIN RW-9105-5159 Point to Point

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3819.93	58.00	2.52	-11.92	48.60	Max Peak	Horizontal	101	51	68.2	-19.6	Pass
#2	3819.93	52.82	2.52	-11.92	43.42	Max Avg	Horizontal	101	51	54.0	-10.6	Pass
#3	5731.67	69.12	3.14	-11.22	61.04	Fundamental	Horizontal	100	0	--	--	
#4	6249.90	53.52	3.25	-9.50	47.27	Peak (NRB)	Horizontal	100	0	--	--	Pass
#5	11460.17	56.05	4.73	-6.02	54.76	Max Peak	Horizontal	163	50	68.2	-13.5	Pass
#6	11460.17	43.75	4.73	-6.02	42.46	Max Avg	Horizontal	163	50	54.0	-11.5	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	26.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1332.02	63.97	1.49	-15.95	49.51	Max Peak	Horizontal	136	25	68.2	-18.7	Pass
#2	1332.02	58.11	1.49	-15.95	43.65	Max Avg	Horizontal	136	25	54.0	-10.4	Pass
#3	3856.63	61.82	2.57	-12.01	52.38	Max Peak	Horizontal	119	47	68.2	-15.9	Pass
#4	3856.63	57.05	2.57	-12.01	47.61	Max Avg	Horizontal	119	47	54.0	-6.4	Pass
#5	3995.98	70.35	2.60	-12.25	60.70	Max Peak	Horizontal	129	42	68.2	-7.5	Pass
#6	3995.98	58.64	2.60	-12.25	48.99	Max Avg	Horizontal	129	42	54.0	-5.0	Pass
#7	5786.80	75.41	3.14	-10.94	67.61	Fundamental	Horizontal	100	0	--	--	
#8	6164.53	55.63	3.25	-9.70	49.18	Peak (NRB)	Horizontal	100	0	--	--	Pass
#9	6249.89	54.72	3.25	-9.50	48.47	Peak (NRB)	Horizontal	100	0	--	--	Pass
#10	11569.62	60.40	4.40	-5.56	59.24	Max Peak	Horizontal	197	70	68.2	-9.0	Pass
#11	11569.62	47.68	4.40	-5.56	46.52	Max Avg	Horizontal	197	70	54.0	-7.5	Pass

Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads. Max effective output power from radio.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	3896.57	60.63	2.58	-12.00	51.21	Max Peak	Horizontal	144	0	68.2	-17.0	Pass
#2	3896.57	56.71	2.58	-12.00	47.29	Max Avg	Horizontal	144	0	54.0	-6.7	Pass
#3	3995.97	67.67	2.60	-12.25	58.02	Max Peak	Horizontal	128	0	68.2	-10.2	Pass
#4	3995.97	59.58	2.60	-12.25	49.93	Max Avg	Horizontal	128	0	54.0	-4.1	Pass
#5	5841.59	73.85	3.18	-10.75	66.28	Fundamental	Horizontal	100	0	--	--	
#6	6072.90	54.35	3.23	-10.09	47.49	Peak (NRB)	Horizontal	155	11	--	--	Pass
#7	11685.83	60.58	4.48	-5.35	59.71	Max Peak	Horizontal	164	22	68.2	-8.5	Pass
#8	11685.83	47.44	4.48	-5.35	46.57	Max Avg	Horizontal	164	22	54.0	-7.4	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.6. RADWIN RW-9622-5001

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	10MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1331.86	68.84	1.49	-15.95	54.38	Max Peak	Horizontal	178	185	68.2	-13.9	Pass
#2	1331.86	62.67	1.49	-15.95	48.21	Max Avg	Horizontal	178	185	54.0	-5.8	Pass
#3	3819.88	58.76	2.52	-11.92	49.36	Max Peak	Horizontal	113	214	68.2	-18.9	Pass
#4	3819.88	53.68	2.52	-11.92	44.28	Max Avg	Horizontal	113	214	54.0	-9.7	Pass
#5	3995.89	66.63	2.60	-12.25	56.98	Max Peak	Horizontal	141	146	68.2	-11.3	Pass
#6	3995.89	60.34	2.60	-12.25	50.69	Max Avg	Horizontal	141	146	54.0	-3.3	Pass
#7	5728.03	54.90	3.16	-11.21	46.85	Fundamental	Horizontal	100	16	--	--	
#8	6159.35	55.17	3.23	-9.74	48.66	Peak (NRB)	Horizontal	149	4	--	--	Pass
#9	6249.94	53.27	3.25	-9.50	47.02	Peak (NRB)	Horizontal	100	156	--	--	Pass
Test Notes: EUT powered by POE. 5 G notch in front of amp to prevent overload												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	10MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	12.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1331.83	68.89	1.49	-15.95	54.43	Max Peak	Horizontal	185	186	68.2	-13.8	Pass
#2	1331.83	63.00	1.49	-15.95	48.54	Max Avg	Horizontal	185	186	54.0	-5.5	Pass
#3	3856.66	62.39	2.57	-12.01	52.95	Max Peak	Horizontal	112	170	68.2	-15.3	Pass
#4	3856.66	57.97	2.57	-12.01	48.53	Max Avg	Horizontal	112	170	54.0	-5.5	Pass
#5	3995.97	68.36	2.60	-12.25	58.71	Max Peak	Horizontal	194	145	68.2	-9.5	Pass
#6	3995.97	62.07	2.60	-12.25	52.42	Max Avg	Horizontal	194	145	54.0	-1.6	Pass
#7	5787.21	63.97	3.14	-10.93	56.18	Fundamental	Horizontal	100	4	--	--	
#8	6043.27	60.07	3.22	-10.04	53.25	Peak (NRB)	Horizontal	150	4	--	--	Pass
#9	6250.03	53.19	3.25	-9.49	46.95	Peak (NRB)	Horizontal	100	179	--	--	Pass
Test Notes: EUT powered by POE. 5 G notch in front of amp to prevent overload												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	10MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	4.5	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1332.01	68.96	1.49	-15.95	54.50	Max Peak	Horizontal	168	195	68.2	-13.7	Pass
#2	1332.01	62.57	1.49	-15.95	48.11	Max Avg	Horizontal	168	195	54.0	-5.9	Pass
#3	3896.76	59.63	2.58	-12.00	50.21	Max Peak	Horizontal	102	170	68.2	-18.0	Pass
#4	3896.76	54.93	2.58	-12.00	45.51	Max Avg	Horizontal	102	170	54.0	-8.5	Pass
#5	3995.89	69.17	2.60	-12.25	59.52	Max Peak	Horizontal	140	222	68.2	-8.7	Pass
#6	3995.89	61.35	2.60	-12.25	51.70	Max Avg	Horizontal	140	222	54.0	-2.3	Pass
#7	5842.91	54.10	3.19	-10.74	46.55	Fundamental	Horizontal	100	7	--	--	
#8	6076.15	57.41	3.25	-10.05	50.61	Peak (NRB)	Vertical	151	3	--	--	Pass
#9	6250.00	53.50	3.25	-9.50	47.25	Peak (NRB)	Horizontal	100	179	--	--	Pass
Test Notes: EUT powered by POE. 5 G notch in front of amp to prevent overload												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.1.7. RADWIN RW-9732-4958

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	10MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	8.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1331.95	70.37	1.49	-15.95	55.91	Max Peak	Horizontal	185	196	68.2	-12.3	Pass
#2	1331.95	65.43	1.49	-15.95	50.97	Max Avg	Horizontal	185	196	54.0	-3.0	Pass
#3	3819.98	61.57	2.52	-11.92	52.17	Max Peak	Horizontal	149	198	68.2	-16.1	Pass
#4	3819.98	58.26	2.52	-11.92	48.86	Max Avg	Horizontal	149	198	54.0	-5.1	Pass
#5	3995.96	66.87	2.60	-12.25	57.22	Max Peak	Horizontal	194	135	68.2	-11.0	Pass
#6	3995.96	60.11	2.60	-12.25	50.46	Max Avg	Horizontal	194	135	54.0	-3.5	Pass
#7	5728.36	56.91	3.16	-11.21	48.86	Fundamental	Vertical	151	5	--	--	
#8	6159.89	55.54	3.23	-9.74	49.03	Peak (NRB)	Vertical	151	13	--	--	Pass
#9	6249.87	55.88	3.25	-9.50	49.63	Peak (NRB)	Horizontal	151	195	--	--	Pass
Test Notes: EUT powered by POE. 5G notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	10MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5785.00	**Data Rate:**	13.00 MBit/s
Power Setting:	10.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1332.02	72.37	1.49	-15.95	57.91	Max Peak	Horizontal	183	195	68.2	-10.3	Pass
#2	1332.02	64.86	1.49	-15.95	50.40	Max Avg	Horizontal	183	195	54.0	-3.6	Pass
#3	3856.53	61.38	2.57	-12.01	51.94	Max Peak	Horizontal	140	189	68.2	-16.3	Pass
#4	3856.53	57.89	2.57	-12.01	48.45	Max Avg	Horizontal	140	189	54.0	-5.6	Pass
#5	3995.95	69.54	2.60	-12.25	59.89	Max Peak	Horizontal	110	155	68.2	-8.3	Pass
#6	3995.95	58.83	2.60	-12.25	49.18	Max Avg	Horizontal	110	155	54.0	-4.8	Pass
#7	5787.12	67.10	3.14	-10.94	59.30	Fundamental	Horizontal	151	7	--	--	
#8	6160.88	58.11	3.24	-9.74	51.61	Peak (NRB)	Vertical	151	20	--	--	Pass
#9	6250.01	53.89	3.25	-9.49	47.65	Peak (NRB)	Horizontal	151	181	--	--	Pass
Test Notes: EUT powered by POE. 5G notch in front of amp to prevent overload.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	10MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	4.0	**Tested By:**	JMH

Test Measurement Results

1000.00 - 18000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	1331.97	73.04	1.49	-15.95	58.58	Max Peak	Horizontal	171	193	68.2	-9.7	Pass
#2	1331.97	65.53	1.49	-15.95	51.07	Max Avg	Horizontal	171	193	54.0	-2.9	Pass
#3	3896.64	64.32	2.58	-12.00	54.90	Max Peak	Horizontal	155	193	68.2	-13.3	Pass
#4	3896.64	61.62	2.58	-12.00	52.20	Max Avg	Horizontal	155	193	54.0	-1.8	Pass
#5	5843.24	66.74	3.19	-10.74	59.19	Fundamental	Horizontal	151	10	--	--	
#6	6192.19	55.63	3.27	-9.68	49.22	Peak (NRB)	Vertical	151	10	--	--	Pass
#7	6249.93	56.42	3.25	-9.50	50.17	Peak (NRB)	Horizontal	151	197	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2. Restricted Edge & Band-Edge Emissions

9.4.2.1. RADWIN MT0268450

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN MT0268450		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	67.81	117.92	9.0
20MHz	5735.00	5725.00	67.79	109.22	9.0
40MHz	5745.00	5725.00	67.85	104.93	9.0
80MHz	5765.00	5725.00	67.90	96.99	6.0

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN MT0268450		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	116.90	67.02	11.0
20MHz	5840.00	5850.00	107.98	67.60	11.0
40MHz	5830.00	5850.00	104.00	67.22	10.0
80MHz	5810.00	5850.00	97.17	67.90	6.0

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	10MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5647.11	30.10	3.08	34.63	67.81	Max Peak	Horizontal	169	350	68.2	-0.4	Pass
#2	5725.00	80.01	3.19	34.72	117.92	Max Peak	Horizontal	169	350	122.2	-4.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5643.94	30.07	3.09	34.63	67.79	Max Peak	Horizontal	169	350	68.2	-0.4	Pass
#2	5725.00	71.31	3.19	34.72	109.22	Max Peak	Horizontal	169	350	122.2	-13.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	40MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5637.81	30.10	3.11	34.64	67.85	Max Peak	Horizontal	169	350	68.2	-0.4	Pass
#2	5725.00	67.02	3.19	34.72	104.93	Max Peak	Horizontal	169	350	122.2	-17.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	80MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5629.15	30.14	3.12	34.64	67.90	Max Peak	Horizontal	169	350	68.2	-0.3	Pass
#2	5725.00	59.08	3.19	34.72	96.99	Max Peak	Horizontal	169	350	122.2	-25.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	10MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	11.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	78.70	3.24	34.96	116.90	Max Peak	Horizontal	169	350	122.2	-7.3	Pass
#3	5952.06	28.71	3.19	35.12	67.02	Max Peak	Horizontal	169	350	68.2	-1.2	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	11.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	69.78	3.24	34.96	107.98	Max Peak	Horizontal	169	350	122.2	-14.3	Pass
#3	5930.52	29.29	3.20	35.11	67.60	Max Peak	Horizontal	169	350	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	40MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	10.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	65.80	3.24	34.96	104.00	Max Peak	Horizontal	169	350	122.2	-18.2	Pass
#3	5927.76	28.93	3.18	35.11	67.22	Max Peak	Horizontal	169	350	68.2	-1.0	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	80MHz
Antenna Gain (dBi):	25.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	58.97	3.24	34.96	97.17	Max Peak	Horizontal	169	350	122.2	-25.1	Pass
#3	5935.59	29.58	3.21	35.11	67.90	Max Peak	Horizontal	169	350	68.2	-0.3	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.2. RADWIN RW-9105-4958 Point to Multi-Point

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9105-4958		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	66.28	117.99	17.5
20MHz	5735.00	5725.00	66.84	110.40	17.5
40MHz	5745.00	5725.00	66.95	103.78	17.5
80MHz	5765.00	5725.00	65.00	97.81	14.5

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9105-4958		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	112.55	64.57	17.5
20MHz	5840.00	5850.00	106.04	65.09	17.5
40MHz	5830.00	5850.00	100.98	65.26	17.5
80MHz	5810.00	5850.00	97.00	67.42	16.5

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5645.81	28.57	3.08	34.63	66.28	Max Peak	Vertical	144	0	68.2	-2.0	Pass
#2	5725.00	80.08	3.19	34.72	117.99	Max Peak	Vertical	144	0	122.2	-4.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5647.55	29.13	3.08	34.63	66.84	Max Peak	Vertical	144	0	68.2	-1.4	Pass
#2	5725.00	72.49	3.19	34.72	110.40	Max Peak	Vertical	144	0	122.2	-11.8	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5646.82	29.24	3.08	34.63	66.95	Max Peak	Vertical	144	0	68.2	-1.3	Pass
#2	5725.00	65.87	3.19	34.72	103.78	Max Peak	Vertical	144	0	122.2	-18.4	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	83
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	14.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5648.27	27.29	3.08	34.63	65.00	Max Peak	Vertical	144	0	68.2	-3.2	Pass
#2	5725.00	59.90	3.19	34.72	97.81	Max Peak	Vertical	144	0	122.2	-24.4	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	74.35	3.24	34.96	112.55	Max Peak	Vertical	144	0	122.2	-9.7	Pass
#3	5939.74	26.27	3.18	35.12	64.57	Max Peak	Vertical	144	0	68.2	-3.7	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	67.84	3.24	34.96	106.04	Max Peak	Vertical	144	0	122.2	-15.8	Pass
#3	5936.51	26.78	3.20	35.11	65.09	Max Peak	Vertical	144	0	68.2	-3.1	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	62.78	3.24	34.96	100.98	Max Peak	Vertical	144	0	122.2	-21.3	Pass
#3	5929.60	26.96	3.19	35.11	65.26	Max Peak	Vertical	144	0	68.2	-3.0	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	58.80	3.24	34.96	97.00	Max Peak	Vertical	144	0	122.2	-25.2	Pass
#3	5931.90	29.10	3.21	35.11	67.42	Max Peak	Vertical	144	0	68.2	-0.8	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.3. RADWIN RW-9105-4958 Point to Point

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9105-4958		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	67.73	119.0	19.5
20MHz	5735.00	5725.00	67.86	109.24	18.0
40MHz	5745.00	5725.00	67.31	103.04	17.5
80MHz	5765.00	5725.00	67.47	97.92	16.5

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9105-4958		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	114.92	67.68	20.5
20MHz	5840.00	5850.00	107.85	67.59	20.5
40MHz	5830.00	5850.00	101.45	67.64	19.5
80MHz	5810.00	5850.00	96.54	67.80	16.5

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5607.87	29.99	3.09	34.65	67.73	Max Peak	Vertical	165	0	68.2	-0.5	Pass
#2	5725.00	81.09	3.19	34.72	119.00	Max Peak	Vertical	165	0	122.2	-3.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	18.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5646.46	30.15	3.08	34.63	67.86	Max Peak	Vertical	165	0	68.2	-0.4	Pass
#2	5725.00	71.33	3.19	34.72	109.24	Max Peak	Vertical	165	0	122.2	-13.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	17.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5647.18	29.60	3.08	34.63	67.31	Max Peak	Vertical	165	0	68.2	-0.9	Pass
#2	5725.00	65.13	3.19	34.72	103.04	Max Peak	Vertical	165	0	122.2	-19.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5641.41	29.73	3.10	34.64	67.47	Max Peak	Vertical	165	0	68.2	-0.8	Pass
#2	5725.00	60.01	3.19	34.72	97.92	Max Peak	Vertical	165	0	122.2	-24.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	10MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	76.72	3.24	34.96	114.92	Max Peak	Vertical	146	0	122.2	-7.3	Pass
#3	5966.81	29.35	3.17	35.16	67.68	Max Peak	Vertical	146	0	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	69.65	3.24	34.96	107.85	Max Peak	Vertical	146	0	122.2	-14.4	Pass
#3	5985.37	29.16	3.23	35.20	67.59	Max Peak	Vertical	146	0	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	63.25	3.24	34.96	101.45	Max Peak	Vertical	146	0	122.2	-20.8	Pass
#3	5940.66	29.34	3.18	35.12	67.64	Max Peak	Vertical	146	0	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	58.34	3.24	34.96	96.54	Max Peak	Vertical	146	0	122.2	-25.7	Pass
#3	5931.44	29.49	3.20	35.11	67.80	Max Peak	Vertical	146	0	68.2	-0.4	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.4. RADWIN RW-9105-5159 Point to Multi-Point

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9105-5159		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	65.93	121.36	20.5
20MHz	5735.00	5725.00	65.22	111.96	20.5
40MHz	5745.00	5725.00	67.15	104.68	19.0
80MHz	5765.00	5725.00	67.41	97.90	16.5

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9105-5159		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	114.92	66.70	20.5
20MHz	5840.00	5850.00	108.42	65.96	20.5
40MHz	5830.00	5850.00	101.22	67.55	19.0
80MHz	5810.00	5850.00	94.56	94.56	15.0

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5645.02	28.22	3.08	34.63	65.93	Max Peak	Horizontal	155	0	68.2	-2.3	Pass
#2	5725.00	83.45	3.19	34.72	121.36	Max Peak	Horizontal	155	0	122.2	-0.8	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5630.23	27.46	3.12	34.64	65.22	Max Peak	Horizontal	155	0	68.2	-3.0	Pass
#2	5725.00	74.05	3.19	34.72	111.96	Max Peak	Horizontal	155	0	122.2	-10.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5649.71	29.43	3.09	34.63	67.15	Max Peak	Horizontal	155	0	68.2	-1.1	Pass
#2	5725.00	66.77	3.19	34.72	104.68	Max Peak	Horizontal	155	0	122.2	-17.5	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	80
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5648.27	29.70	3.08	34.63	67.41	Max Peak	Horizontal	155	0	68.2	-0.8	Pass
#2	5725.00	59.99	3.19	34.72	97.90	Max Peak	Horizontal	155	0	122.2	-24.3	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	76.72	3.24	34.96	114.92	Max Peak	Horizontal	155	0	122.2	-7.3	Pass
#3	5949.88	28.40	3.18	35.12	66.70	Max Peak	Horizontal	155	0	68.2	-1.5	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	70.22	3.24	34.96	108.42	Max Peak	Horizontal	155	0	122.2	-13.8	Pass
#3	5948.50	27.68	3.17	35.12	65.97	Max Peak	Horizontal	155	0	68.2	-2.3	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	63.02	3.24	34.96	101.22	Max Peak	Horizontal	155	0	122.2	-21.0	Pass
#3	5924.99	29.27	3.17	35.11	67.55	Max Peak	Horizontal	155	0	68.2	-0.7	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	80
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	56.36	3.24	34.96	94.56	Max Peak	Horizontal	155	0	122.2	-27.7	Pass
#3	5952.18	28.14	3.19	35.12	66.45	Max Peak	Horizontal	155	0	68.2	-1.8	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.5. RADWIN RW-9105-5159 Point to Point

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9105-5159		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	65.76	121.59	23.5
20MHz	5735.00	5725.00	67.86	113.21	23.5
40MHz	5745.00	5725.00	67.77	102.79	19.5
80MHz	5765.00	5725.00	67.53	95.72	16.5

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9105-5159		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	116.60	67.87	23.5
20MHz	5840.00	5850.00	110.52	67.78	23.5
40MHz	5830.00	5850.00	99.79	67.49	20.0
80MHz	5810.00	5850.00	94.38	67.76	16.5

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5638.89	28.01	3.11	34.64	65.76	Max Peak	Horizontal	157	11	68.2	-2.5	Pass
#2	5725.00	83.68	3.19	34.72	121.59	Max Peak	Horizontal	157	11	122.2	-0.6	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5638.17	30.11	3.11	34.64	67.86	Max Peak	Horizontal	157	11	68.2	-0.4	Pass
#2	5725.00	75.30	3.19	34.72	113.21	Max Peak	Horizontal	157	11	122.2	-9.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	19.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5645.38	30.06	3.08	34.63	67.77	Max Peak	Horizontal	157	11	68.2	-0.5	Pass
#2	5725.00	64.79	3.19	34.72	102.70	Max Peak	Horizontal	157	11	122.2	-19.5	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5646.46	29.82	3.08	34.63	67.53	Max Peak	Horizontal	157	11	68.2	-0.7	Pass
#2	5725.00	57.81	3.19	34.72	95.72	Max Peak	Horizontal	157	11	122.2	-26.5	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	10MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	78.40	3.24	34.96	116.60	Max Peak	Horizontal	157	11	122.2	-5.6	Pass
#3	5962.32	29.53	3.19	35.15	67.87	Max Peak	Horizontal	157	11	68.2	-0.4	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	23.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	72.32	3.24	34.96	110.52	Max Peak	Horizontal	157	11	68.2	-11.7	Pass
#3	5925.45	29.50	3.17	35.11	67.78	Max Peak	Horizontal	157	11	68.2	-0.5	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	20.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	61.59	3.24	34.96	99.79	Max Peak	Horizontal	157	11	122.2	-22.4	Pass
#3	5927.17	29.20	3.18	35.11	67.49	Max Peak	Horizontal	157	11	68.2	-0.7	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	16.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	56.18	3.24	34.96	94.38	Max Peak	Horizontal	157	11	122.2	-27.8	Pass
#3	5925.45	29.48	3.17	35.11	67.76	Max Peak	Horizontal	157	11	68.2	-0.5	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.6. RADWIN RW-9622-5001

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9622-5001		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	67.80	118.49	6.0
20MHz	5735.00	5725.00	67.79	109.24	6.0
40MHz	5745.00	5725.00	67.97	100.17	3.0
80MHz	5765.00	5725.00	67.79	95.82	2.0

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9622-5001		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	112.83	67.14	3.5
20MHz	5840.00	5850.00	107.61	67.44	4.5
40MHz	5830.00	5850.00	98.49	67.83	3.0
80MHz	5810.00	5850.00	94.42	67.65	1.0

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	10MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5614.00	30.04	3.11	34.65	67.80	Max Peak	Vertical	162	1	68.2	-0.4	Pass
#2	5725.00	80.58	3.19	34.72	118.49	Max Peak	Vertical	162	1	122.2	-3.7	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	20MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5646.10	30.08	3.08	34.63	67.79	Max Peak	Vertical	162	1	68.2	-0.4	Pass
#2	5725.00	71.33	3.19	34.72	109.24	Max Peak	Vertical	162	1	122.2	-13.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	40MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5624.46	30.21	3.12	34.64	67.97	Max Peak	Vertical	162	1	68.2	-0.3	Pass
#2	5725.00	62.26	3.19	34.72	100.17	Max Peak	Vertical	162	1	122.2	-22.0	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	80MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	2.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5645.81	30.08	3.08	34.63	67.79	Max Peak	Vertical	162	1	68.2	-0.4	Pass
#2	5725.00	57.91	3.19	34.72	95.82	Max Peak	Vertical	162	1	122.2	-26.4	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	10MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	74.63	3.24	34.96	112.83	Max Peak	Vertical	162	1	122.2	-9.4	Pass
#3	5977.54	28.77	3.19	35.18	67.14	Max Peak	Vertical	162	1	68.2	-1.1	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	20MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	4.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	69.41	3.24	34.96	107.61	Max Peak	Vertical	162	1	122.2	-14.6	Pass
#3	5988.60	28.99	3.24	35.21	67.44	Max Peak	Vertical	162	1	68.2	-0.8	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	40MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	60.29	3.24	34.96	98.49	Max Peak	Vertical	162	1	122.2	-23.7	Pass
#3	5937.90	29.51	3.20	35.12	67.83	Max Peak	Vertical	162	1	68.2	-0.4	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9622-5001	**Variant:**	80MHz
Antenna Gain (dBi):	28.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	56.22	3.24	34.96	94.42	Max Peak	Vertical	162	1	122.2	-27.8	Pass
#3	5985.37	29.22	3.23	35.20	67.65	Max Peak	Vertical	162	1	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.4.2.7. RADWIN RW-9732-4958

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5725 MHz Radiated Lower Band-Edge Emissions

RADWIN RW-9732-4958		Band-Edge Freq	Limit 68.2dBµV/m	Limit 122.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5730.00	5725.00	67.71	118.72	8.0
20MHz	5735.00	5725.00	67.76	112.76	6.5
40MHz	5745.00	5725.00	67.71	102.34	4.0
80MHz	5765.00	5725.00	67.39	95.99	2.0

5850 MHz Radiated Higher Band-Edge Emissions

RADWIN RW-9732-4958		Band-Edge Freq	Limit 122.2dBµV/m	Limit 68.2dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
10MHz	5845.00	5850.00	113.93	67.15	3.5
20MHz	5840.00	5850.00	107.51	67.70	4.0
40MHz	5830.00	5850.00	100.73	68.08	3.5
80MHz	5810.00	5850.00	94.45	67.64	0.0

Click on the links to view the data.

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	10MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5730.00	**Data Rate:**	13.00 MBit/s
Power Setting:	8.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5629.51	29.95	3.12	34.64	67.71	Max Peak	Vertical	138	351	68.2	-0.5	Pass
#2	5725.00	80.81	3.19	34.72	118.72	Max Peak	Vertical	138	351	122.2	-3.5	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	20MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5735.00	**Data Rate:**	13.00 MBit/s
Power Setting:	6.5	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5609.67	30.01	3.10	34.65	67.76	Max Peak	Vertical	138	351	68.2	-0.5	Pass
#3	5725.36	74.85	3.19	34.72	112.76	Max Peak	Vertical	138	351	122.2	-9.4	Pass
#2	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	40MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5745.00	**Data Rate:**	13.00 MBit/s
Power Setting:	4.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5622.36	29.95	3.12	34.64	67.71	Max Peak	Horizontal	138	351	68.2	-0.5	Pass
#2	5725.00	64.43	3.19	34.72	102.34	Max Peak	Horizontal	138	351	122.2	-19.9	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5725 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	80MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5765.00	**Data Rate:**	13.00 MBit/s
Power Setting:	2.0	**Tested By:**	JMH

Test Measurement Results

5600.00 - 5780.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5646.82	29.68	3.08	34.63	67.39	Max Peak	Vertical	138	351	68.2	-0.8	Pass
#2	5725.00	58.08	3.19	34.72	95.99	Max Peak	Vertical	138	351	122.2	-26.2	Pass
#3	5725.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	10MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5845.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	75.73	3.24	34.96	113.93	Max Peak	Vertical	138	351	122.2	-8.3	Pass
#3	5931.44	28.84	3.20	35.11	67.15	Max Peak	Vertical	138	351	68.2	-1.1	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	20MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5840.00	**Data Rate:**	13.00 MBit/s
Power Setting:	4.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	69.31	3.24	34.96	107.51	Max Peak	Vertical	138	351	122.2	-14.7	Pass
#3	5972.00	29.35	3.18	35.17	67.70	Max Peak	Vertical	138	351	68.2	-0.5	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	40MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5830.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	62.53	3.24	34.96	100.73	Max Peak	Vertical	138	351	122.2	-21.5	Pass
#3	5931.90	29.76	3.21	35.11	68.08	Max Peak	Vertical	138	351	68.2	-0.2	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

Equipment Configuration for 5850 MHz Radiated Band-Edge Emissions

Antenna:	RADWIN RW-9732-4958	**Variant:**	80MHz
Antenna Gain (dBi):	32.0	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5810.00	**Data Rate:**	13.00 MBit/s
Power Setting:	0.0	**Tested By:**	JMH

Test Measurement Results

5770.00 - 6000.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5850.00	56.25	3.24	34.96	94.45	Max Peak	Vertical	138	351	122.2	-27.8	Pass
#3	5954.49	29.31	3.20	35.13	67.64	Max Peak	Vertical	138	351	68.2	-0.6	Pass
#2	5850.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

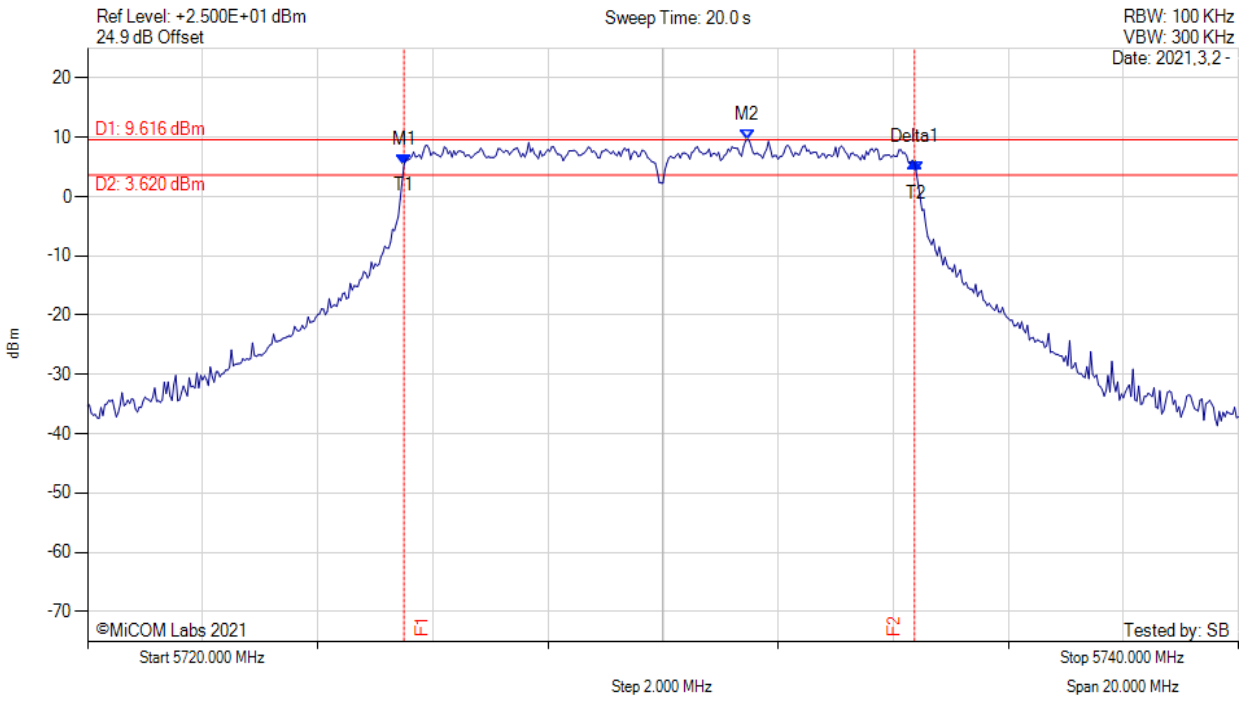
A. APPENDIX - GRAPHICAL IMAGES

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

A.1. 6 dB & 99% Bandwidth

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5730.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



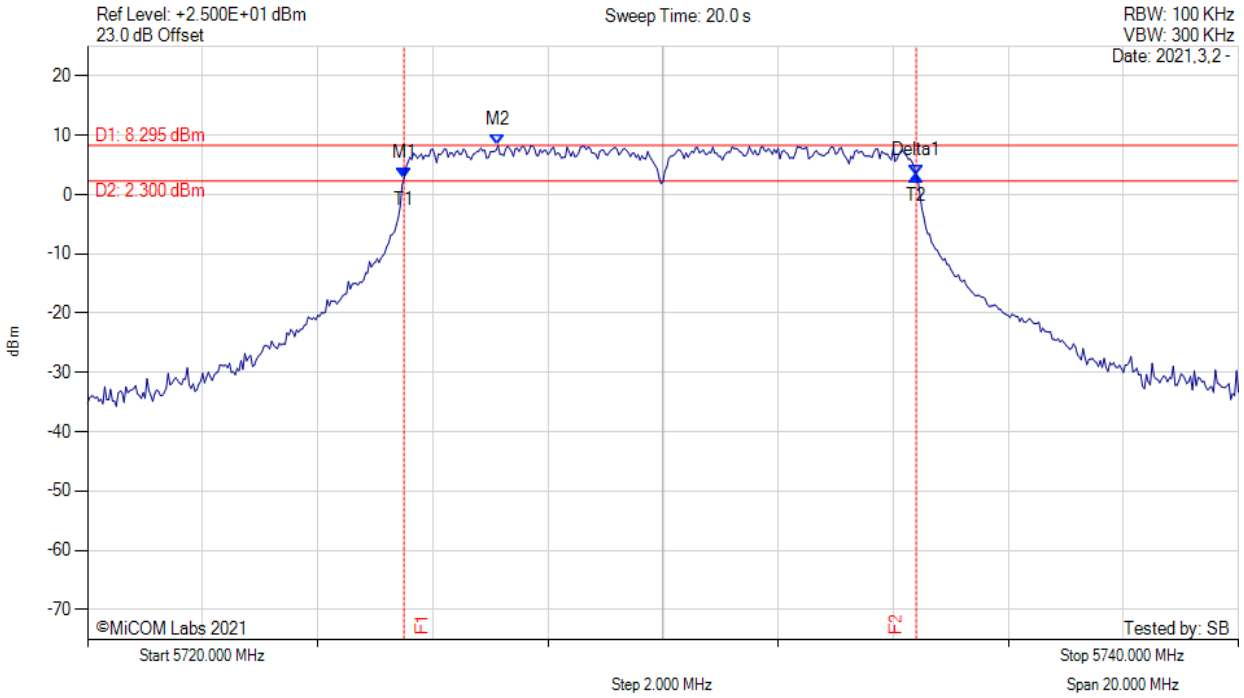
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5725.500 MHz : 5.408 dBm M2 : 5731.470 MHz : 9.616 dBm Delta1 : 8.870 MHz : 0.438 dB T1 : 5725.500 MHz : 5.408 dBm T2 : 5734.400 MHz : 4.110 dBm OBW : 8.901 MHz	Measured 6 dB Bandwidth: 8.870 MHz Measured 99% Bandwidth: 8.901 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5730.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



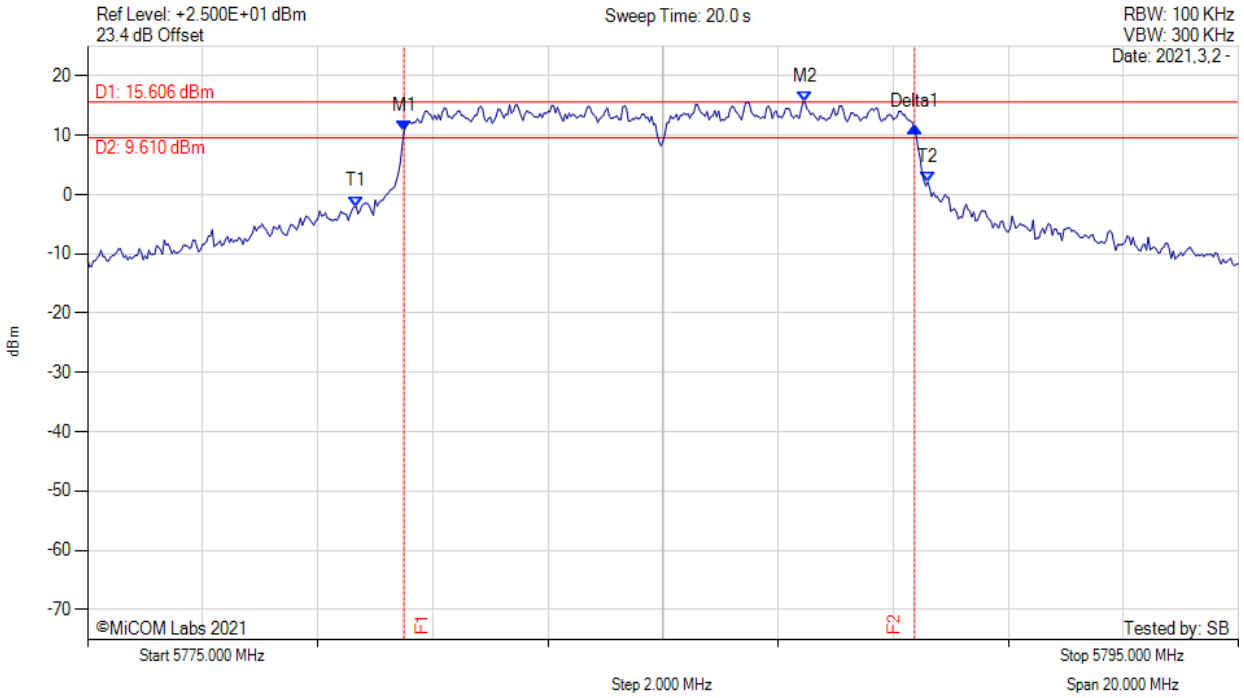
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5725.500 MHz : 2.752 dBm M2 : 5727.130 MHz : 8.295 dBm Delta1 : 8.900 MHz : 0.543 dB T1 : 5725.500 MHz : 2.752 dBm T2 : 5734.400 MHz : 3.295 dBm OBW : 8.888 MHz	Measured 6 dB Bandwidth: 8.900 MHz Measured 99% Bandwidth: 8.888 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



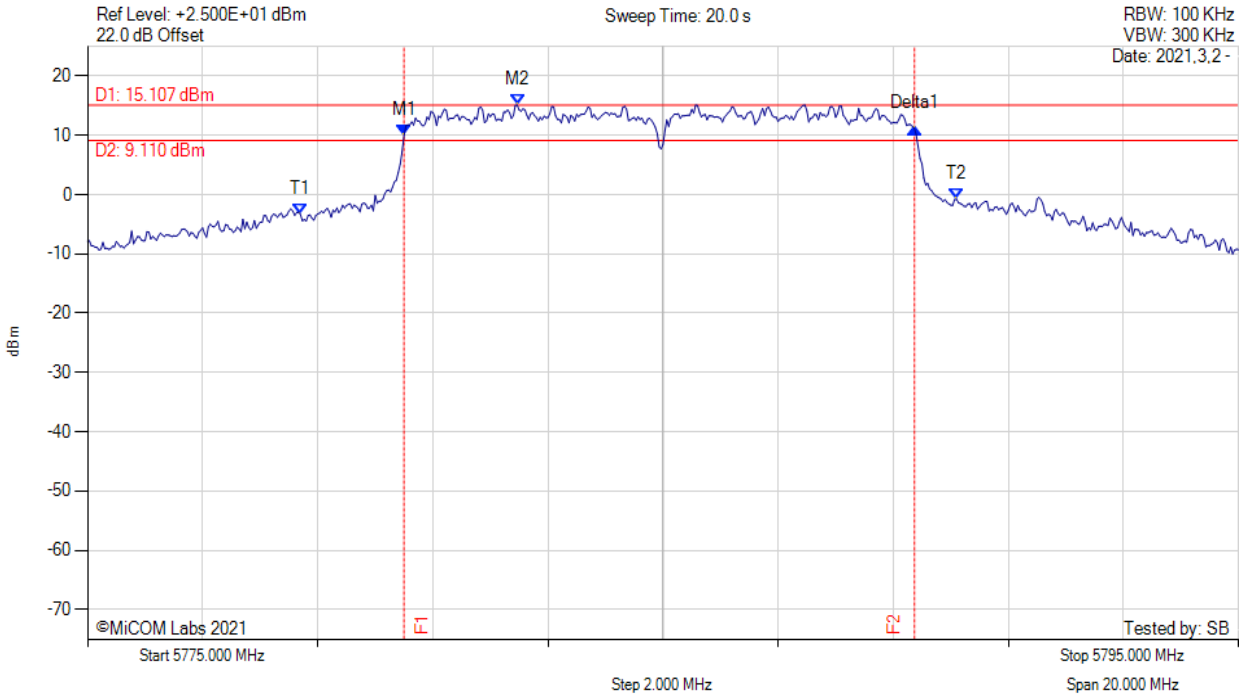
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5780.500 MHz : 10.715 dBm M2 : 5787.470 MHz : 15.606 dBm Delta1 : 8.870 MHz : 0.654 dB T1 : 5779.667 MHz : -2.014 dBm T2 : 5789.600 MHz : 2.101 dBm OBW : 10.523 MHz	Measured 6 dB Bandwidth: 8.870 MHz Measured 99% Bandwidth: 10.523 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



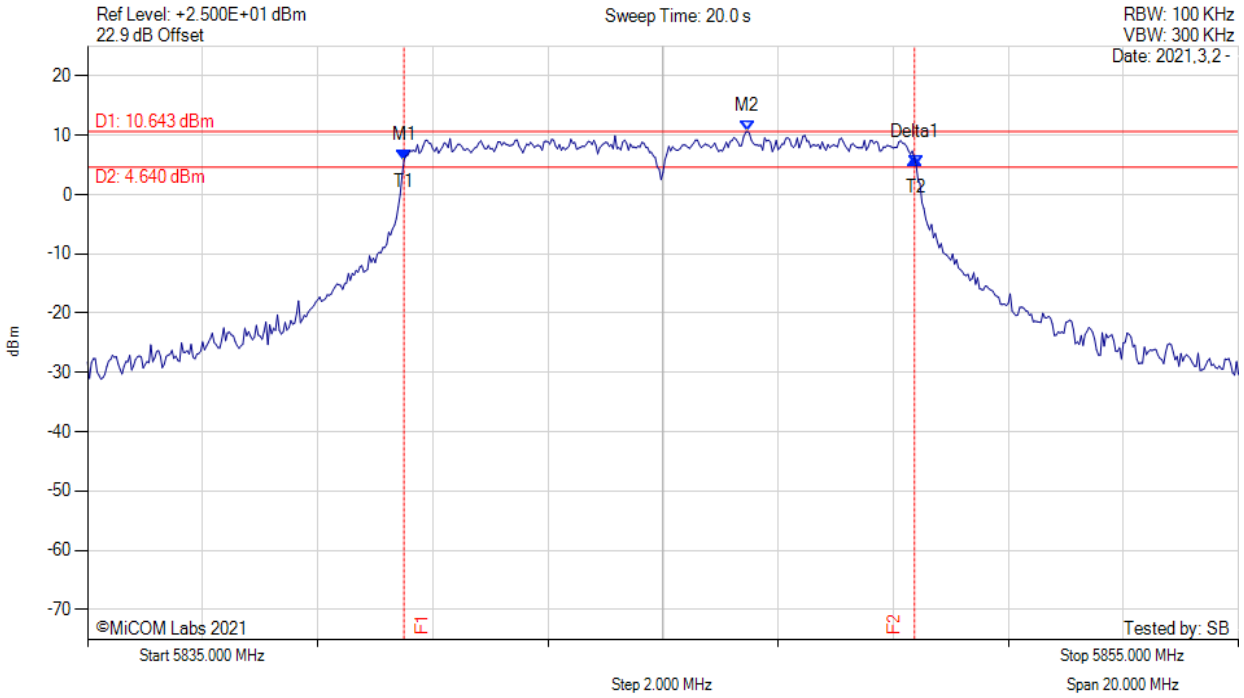
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5780.500 MHz : 9.991 dBm M2 : 5782.470 MHz : 15.107 dBm Delta1 : 8.870 MHz : 1.230 dB T1 : 5778.700 MHz : -3.350 dBm T2 : 5790.100 MHz : -0.760 dBm OBW : 12.800 MHz	Measured 6 dB Bandwidth: 8.870 MHz Measured 99% Bandwidth: 12.800 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5845.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



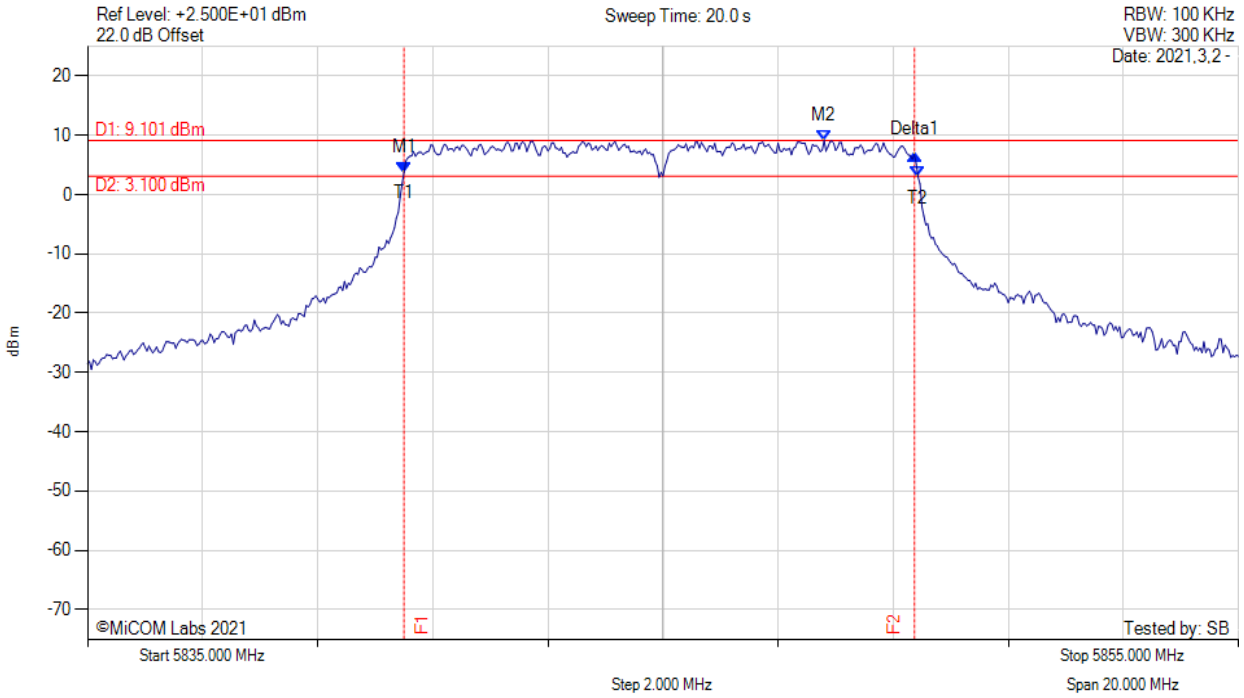
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5840.500 MHz : 5.836 dBm M2 : 5846.470 MHz : 10.643 dBm Delta1 : 8.870 MHz : 0.332 dB T1 : 5840.500 MHz : 5.836 dBm T2 : 5849.400 MHz : 4.889 dBm OBW : 8.902 MHz	Measured 6 dB Bandwidth: 8.870 MHz Measured 99% Bandwidth: 8.902 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 10MHz, Channel: 5845.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



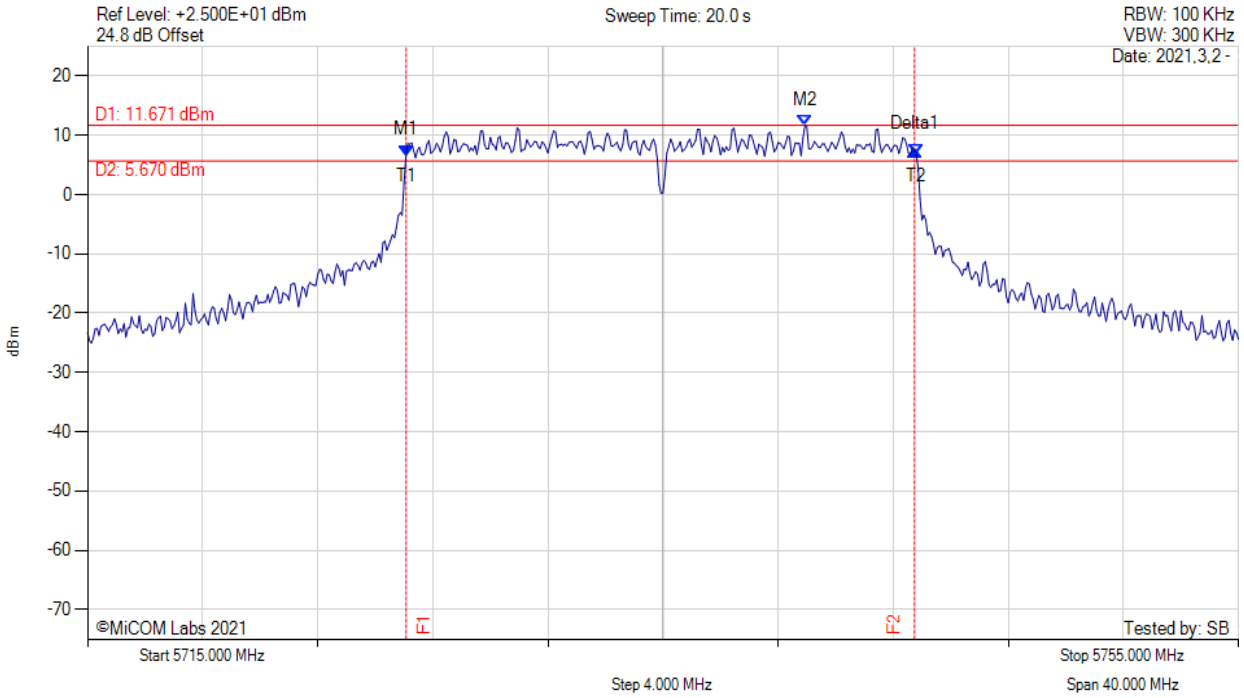
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5840.500 MHz : 3.793 dBm M2 : 5847.800 MHz : 9.101 dBm Delta1 : 8.870 MHz : 2.920 dB T1 : 5840.500 MHz : 3.793 dBm T2 : 5849.433 MHz : 2.968 dBm OBW : 8.909 MHz	Measured 6 dB Bandwidth: 8.870 MHz Measured 99% Bandwidth: 8.909 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5735.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



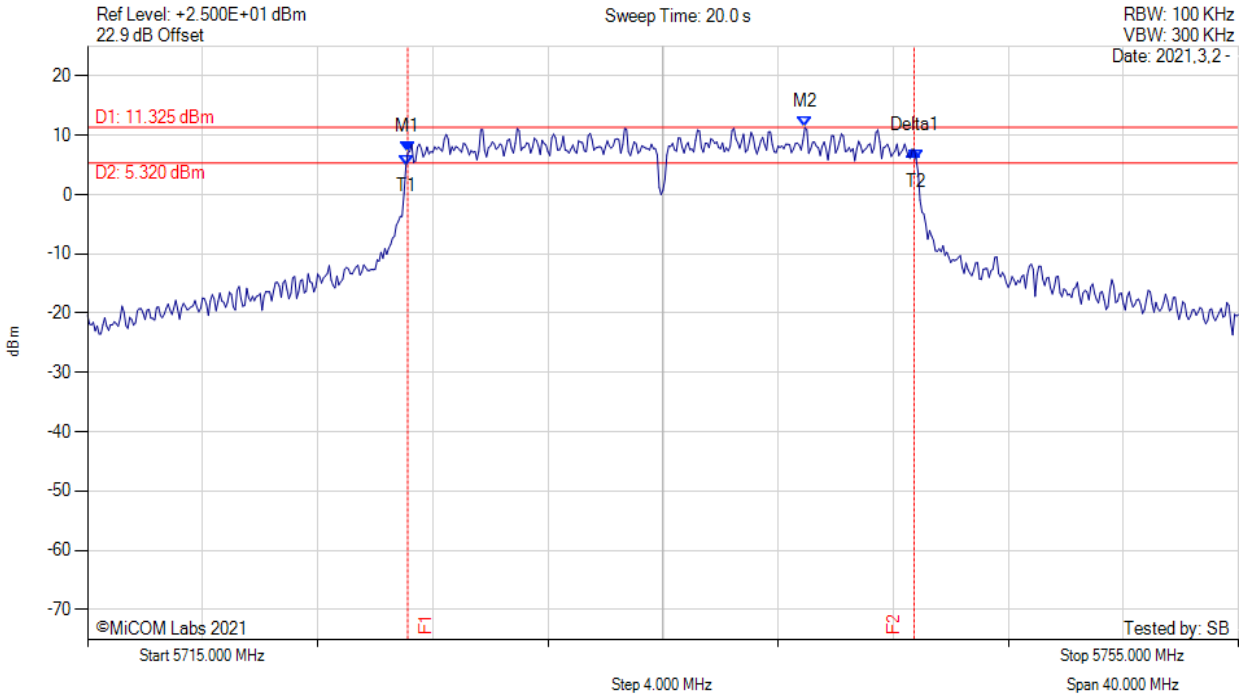
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.070 MHz : 6.635 dBm M2 : 5739.930 MHz : 11.671 dBm Delta1 : 17.670 MHz : 0.918 dB T1 : 5726.067 MHz : 6.635 dBm T2 : 5743.800 MHz : 6.741 dBm OBW : 17.742 MHz	Measured 6 dB Bandwidth: 17.670 MHz Measured 99% Bandwidth: 17.742 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5735.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



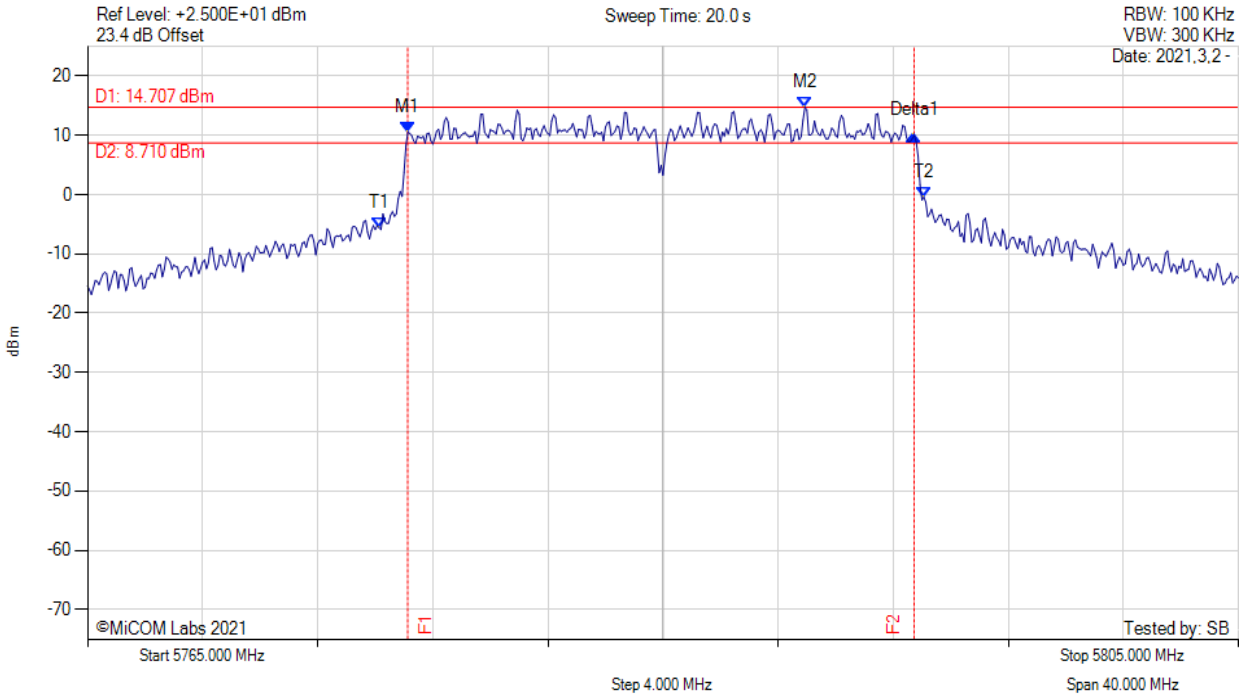
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.130 MHz : 7.136 dBm M2 : 5739.930 MHz : 11.325 dBm Delta1 : 17.600 MHz : 0.374 dB T1 : 5726.067 MHz : 4.968 dBm T2 : 5743.800 MHz : 5.835 dBm OBW : 17.772 MHz	Measured 6 dB Bandwidth: 17.600 MHz Measured 99% Bandwidth: 17.772 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



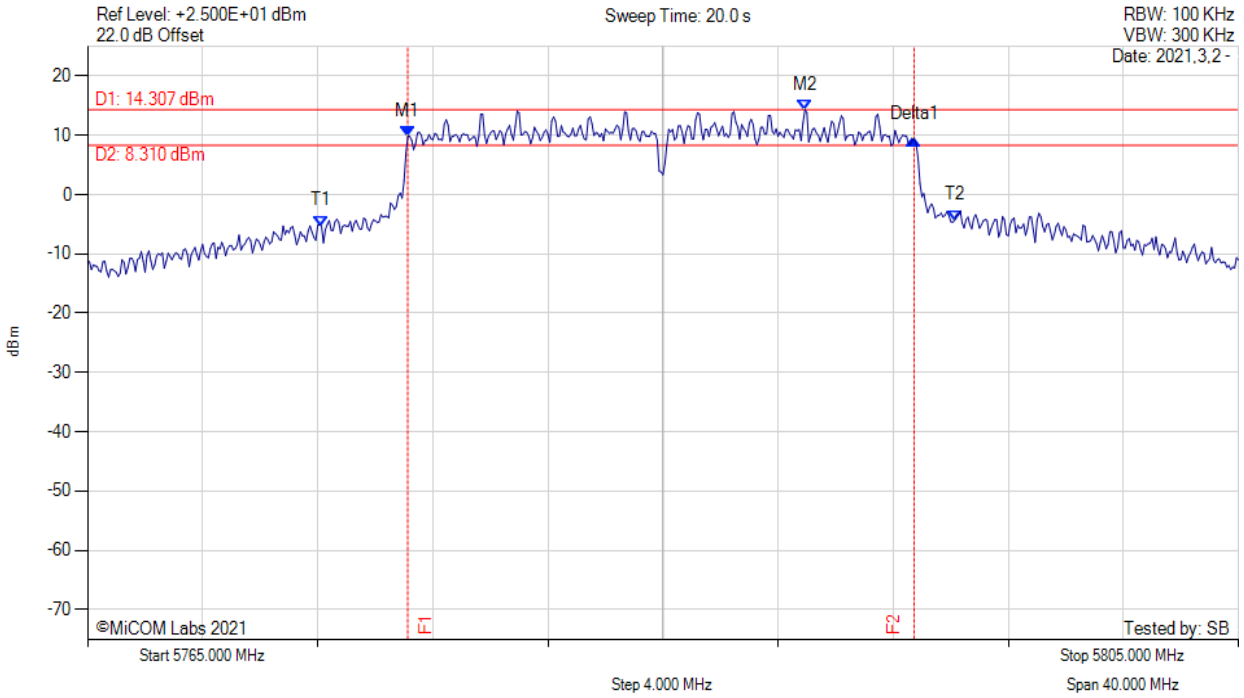
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5776.130 MHz : 10.534 dBm M2 : 5789.930 MHz : 14.707 dBm Delta1 : 17.600 MHz : -0.554 dB T1 : 5775.133 MHz : -5.585 dBm T2 : 5794.067 MHz : -0.422 dBm OBW : 20.338 MHz	Measured 6 dB Bandwidth: 17.600 MHz Measured 99% Bandwidth: 20.338 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



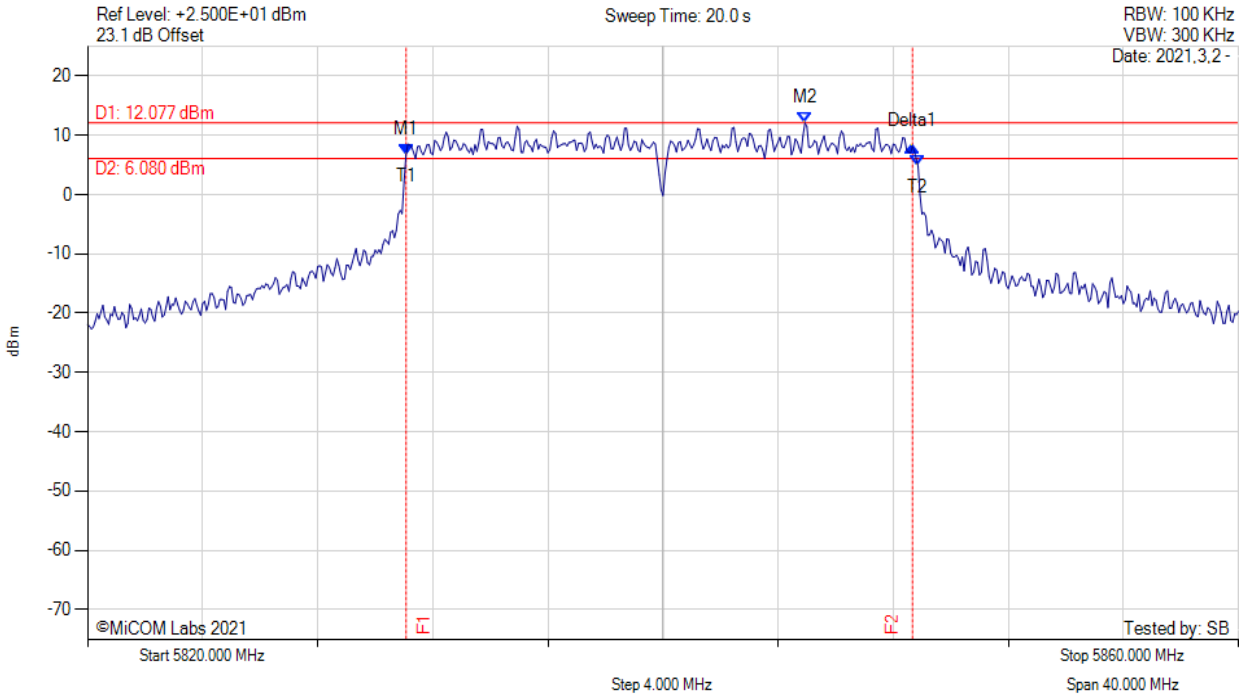
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5776.130 MHz : 9.846 dBm M2 : 5789.930 MHz : 14.307 dBm Delta1 : 17.600 MHz : -0.580 dB T1 : 5773.133 MHz : -5.290 dBm T2 : 5795.133 MHz : -4.362 dBm OBW : 24.900 MHz	Measured 6 dB Bandwidth: 17.600 MHz Measured 99% Bandwidth: 24.900 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5840.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



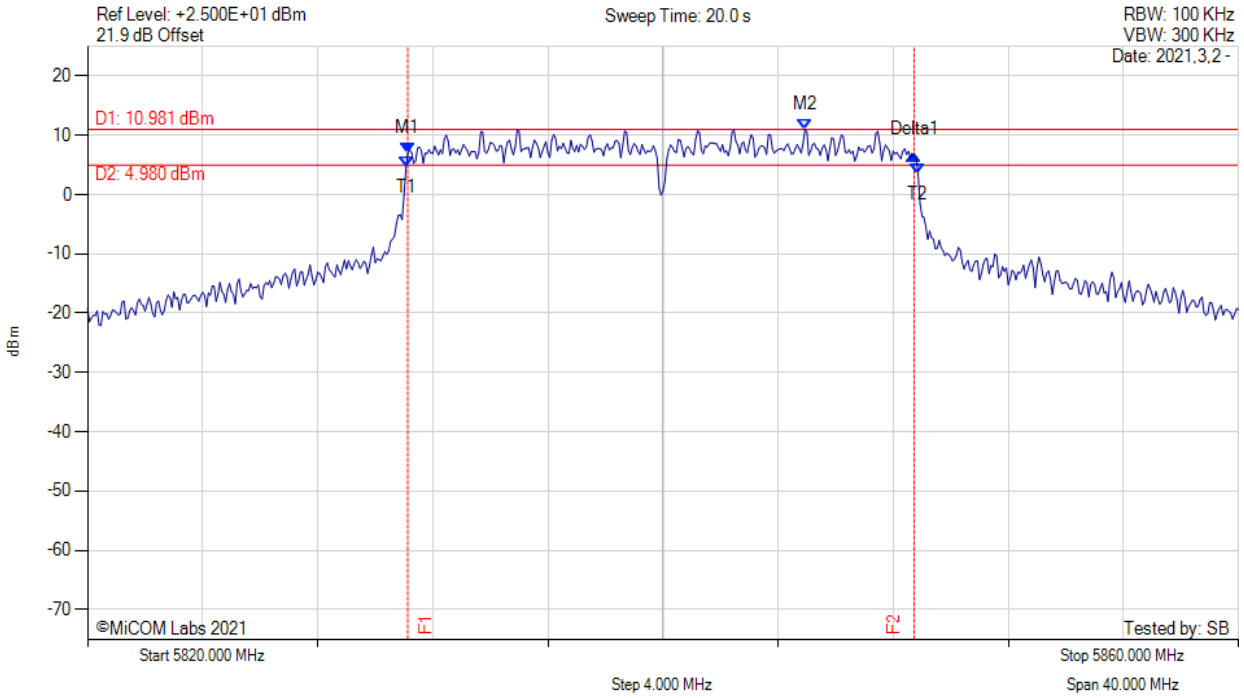
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5831.070 MHz : 6.682 dBm M2 : 5844.930 MHz : 12.077 dBm Delta1 : 17.600 MHz : 1.427 dB T1 : 5831.067 MHz : 6.682 dBm T2 : 5848.867 MHz : 4.783 dBm OBW : 17.818 MHz	Measured 6 dB Bandwidth: 17.600 MHz Measured 99% Bandwidth: 17.818 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5840.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



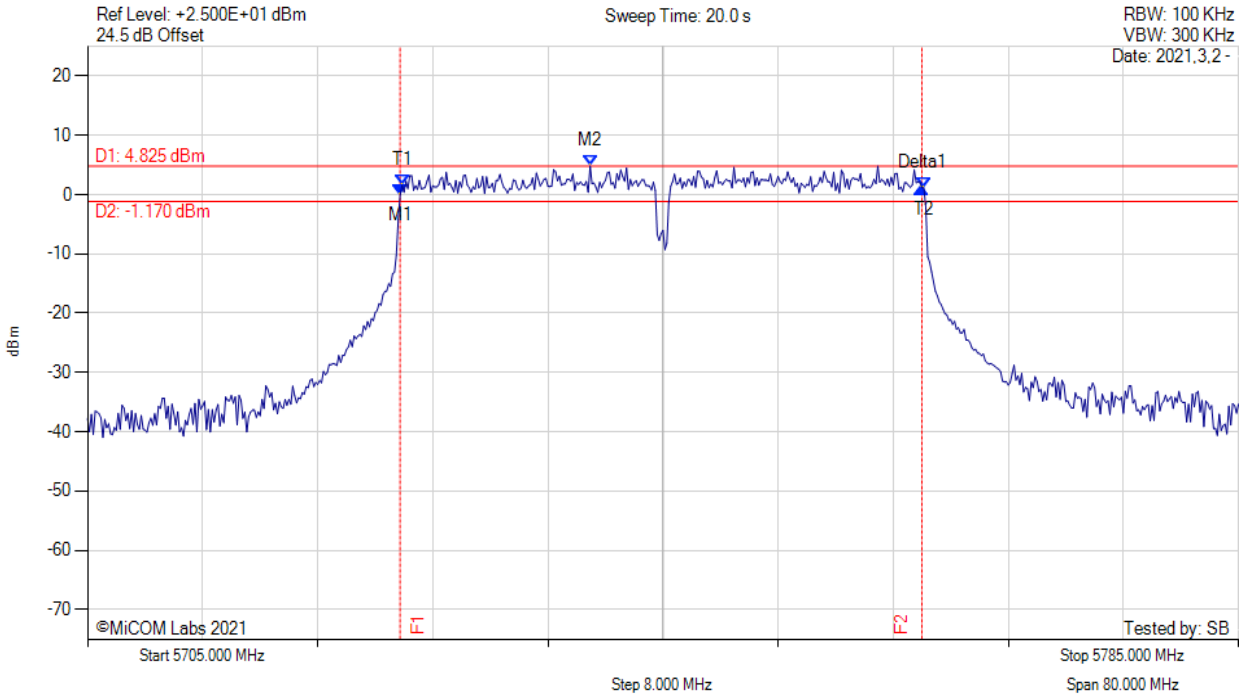
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5831.130 MHz : 7.053 dBm M2 : 5844.930 MHz : 10.981 dBm Delta1 : 17.600 MHz : -0.392 dB T1 : 5831.067 MHz : 4.725 dBm T2 : 5848.867 MHz : 3.541 dBm OBW : 17.891 MHz	Measured 6 dB Bandwidth: 17.600 MHz Measured 99% Bandwidth: 17.891 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5745.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



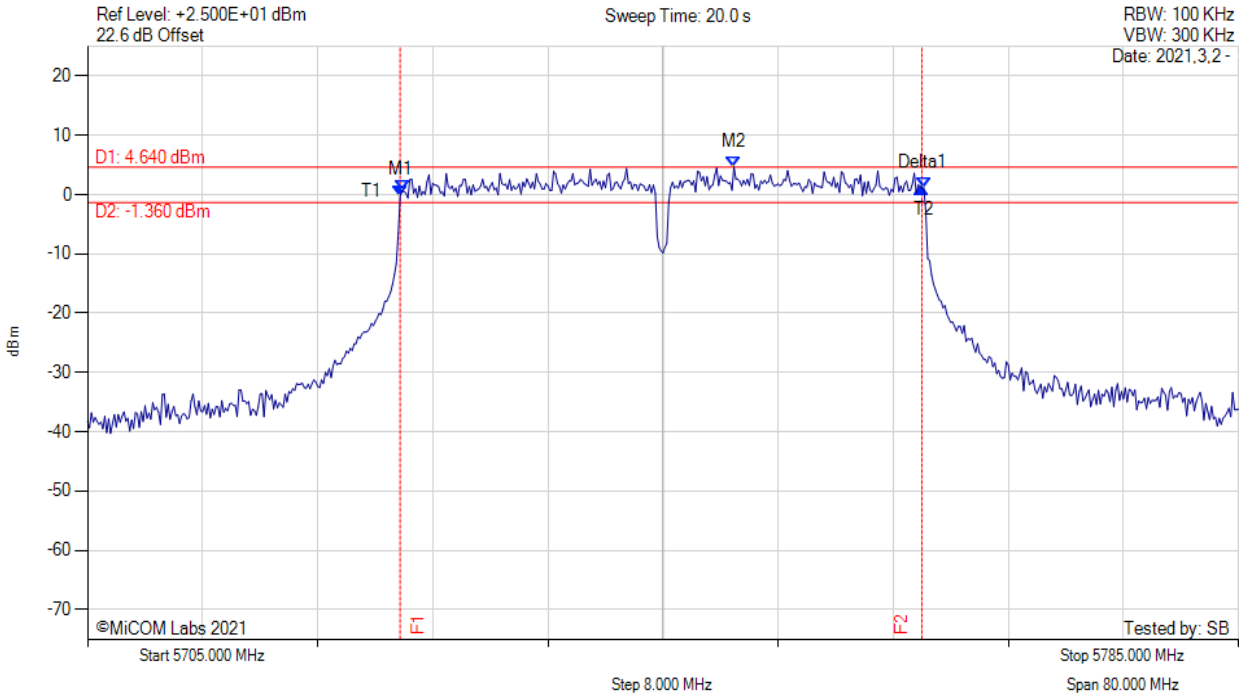
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.730 MHz : 0.048 dBm M2 : 5739.930 MHz : 4.825 dBm Delta1 : 36.270 MHz : 1.126 dB T1 : 5726.867 MHz : 1.543 dBm T2 : 5763.133 MHz : 1.146 dBm OBW : 36.196 MHz	Measured 6 dB Bandwidth: 36.270 MHz Measured 99% Bandwidth: 36.196 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5745.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



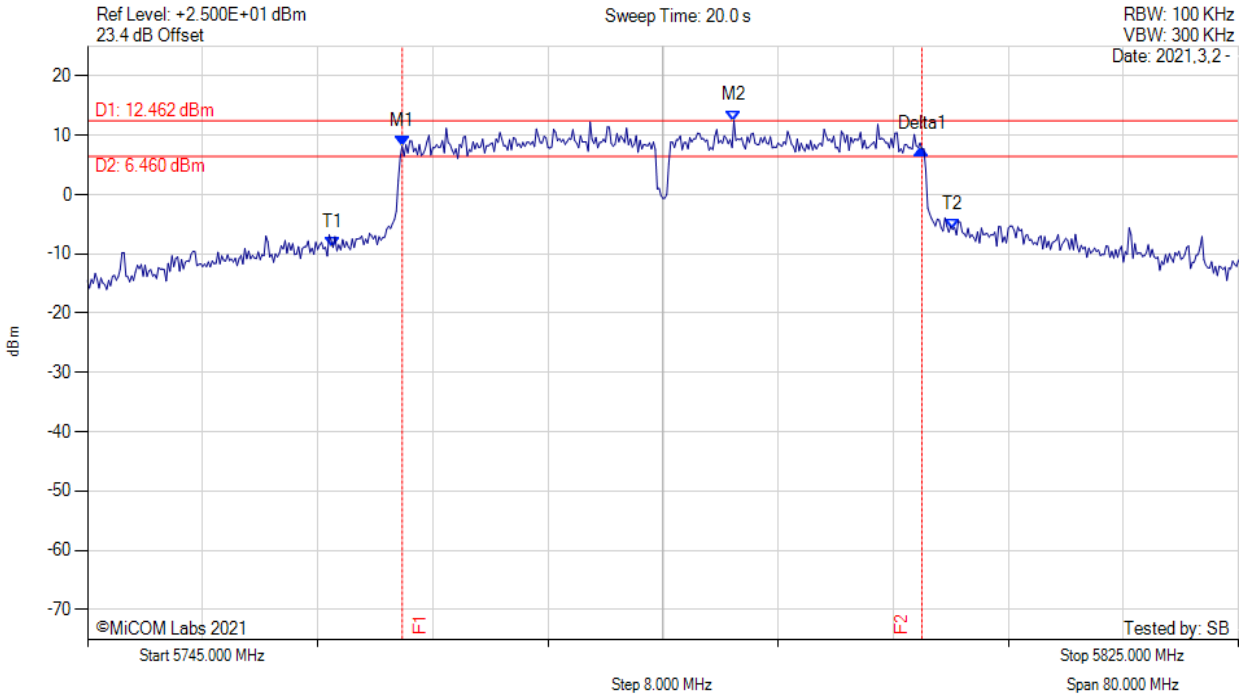
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.730 MHz : -0.149 dBm M2 : 5749.930 MHz : 4.640 dBm Delta1 : 36.270 MHz : 1.208 dB T1 : 5726.867 MHz : 0.644 dBm T2 : 5763.133 MHz : 1.111 dBm OBW : 36.180 MHz	Measured 6 dB Bandwidth: 36.270 MHz Measured 99% Bandwidth: 36.180 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



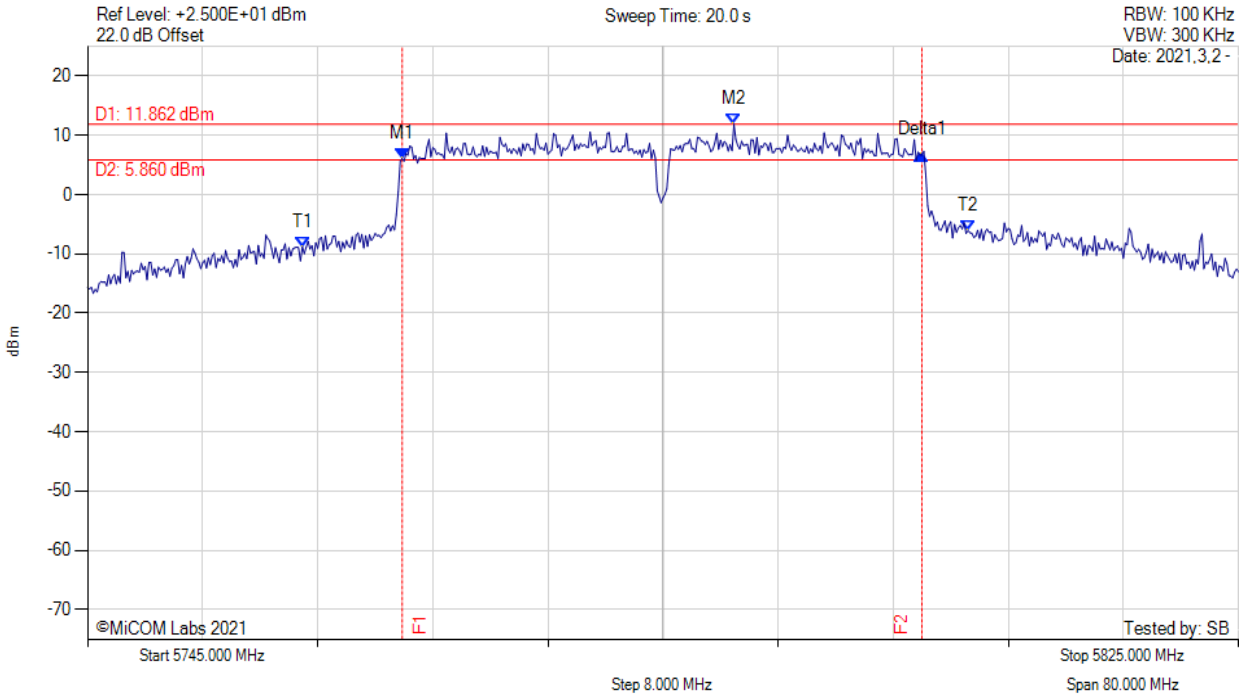
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5766.870 MHz : 8.173 dBm M2 : 5789.930 MHz : 12.462 dBm Delta1 : 36.130 MHz : -0.486 dB T1 : 5762.067 MHz : -8.905 dBm T2 : 5805.133 MHz : -5.874 dBm OBW : 49.614 MHz	Measured 6 dB Bandwidth: 36.130 MHz Measured 99% Bandwidth: 49.614 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



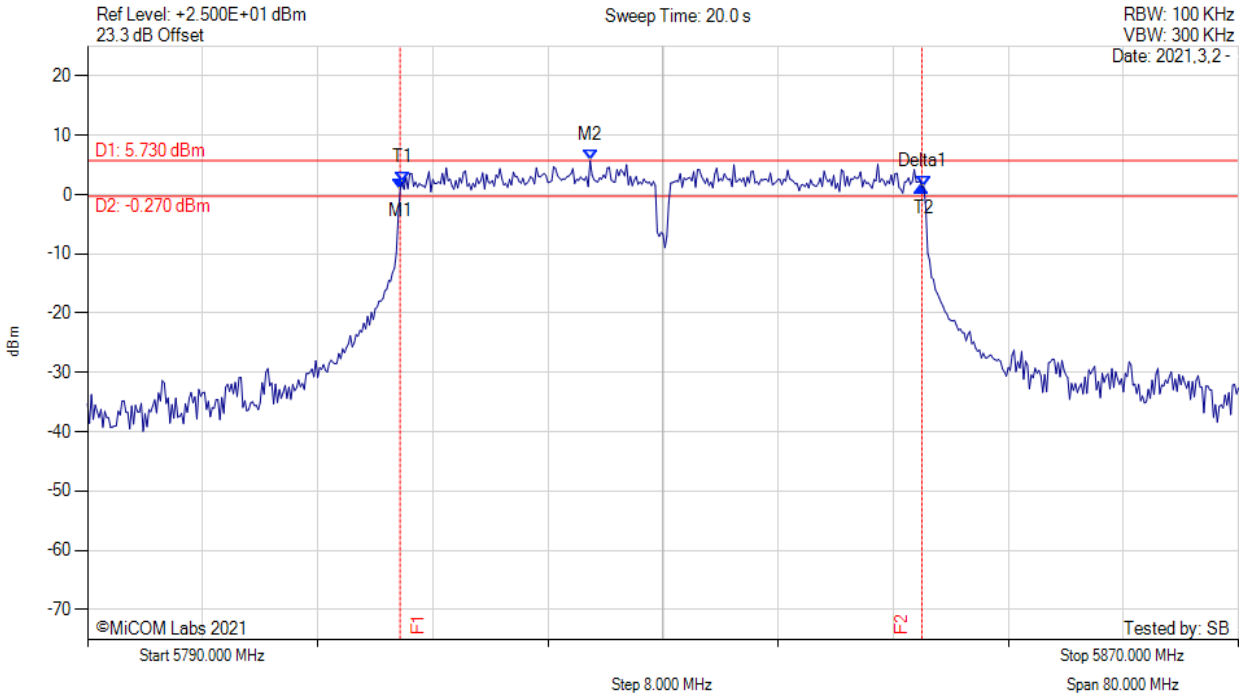
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5766.870 MHz : 6.098 dBm M2 : 5789.930 MHz : 11.862 dBm Delta1 : 36.130 MHz : 0.566 dB T1 : 5759.933 MHz : -8.826 dBm T2 : 5806.200 MHz : -6.094 dBm OBW : 53.844 MHz	Measured 6 dB Bandwidth: 36.130 MHz Measured 99% Bandwidth: 53.844 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5830.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



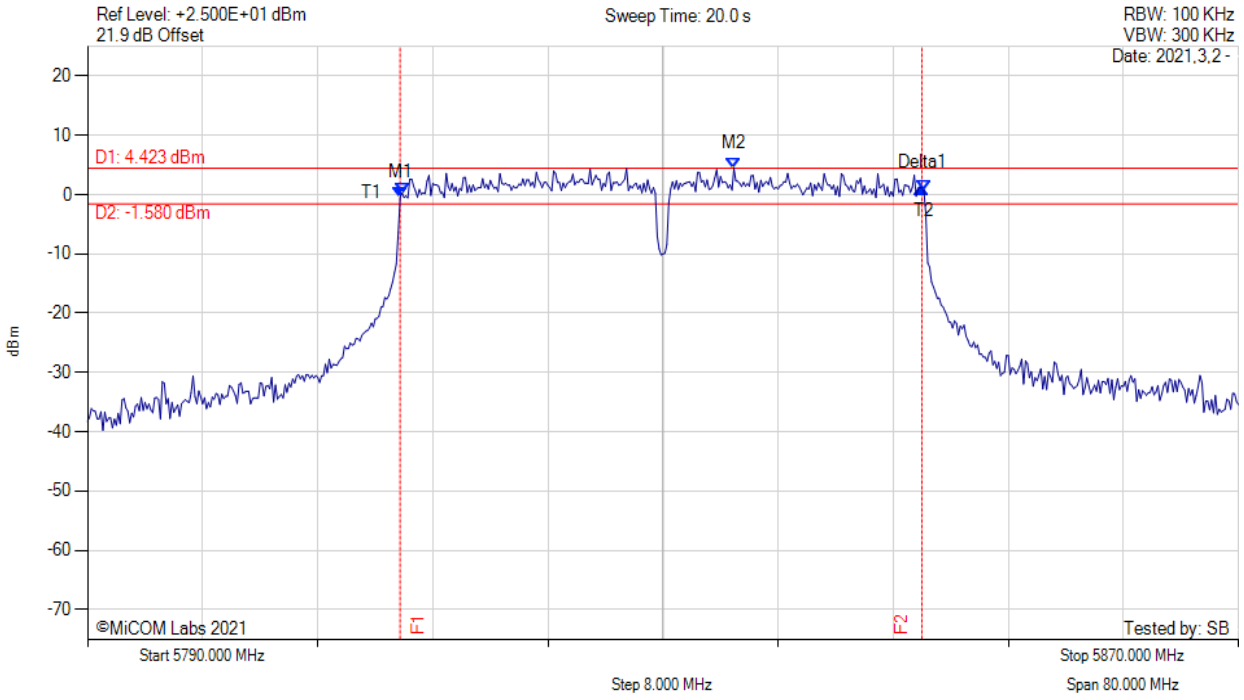
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5811.730 MHz : 0.895 dBm M2 : 5824.930 MHz : 5.730 dBm Delta1 : 36.270 MHz : 0.384 dB T1 : 5811.867 MHz : 2.016 dBm T2 : 5848.133 MHz : 1.342 dBm OBW : 36.198 MHz	Measured 6 dB Bandwidth: 36.270 MHz Measured 99% Bandwidth: 36.198 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5830.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



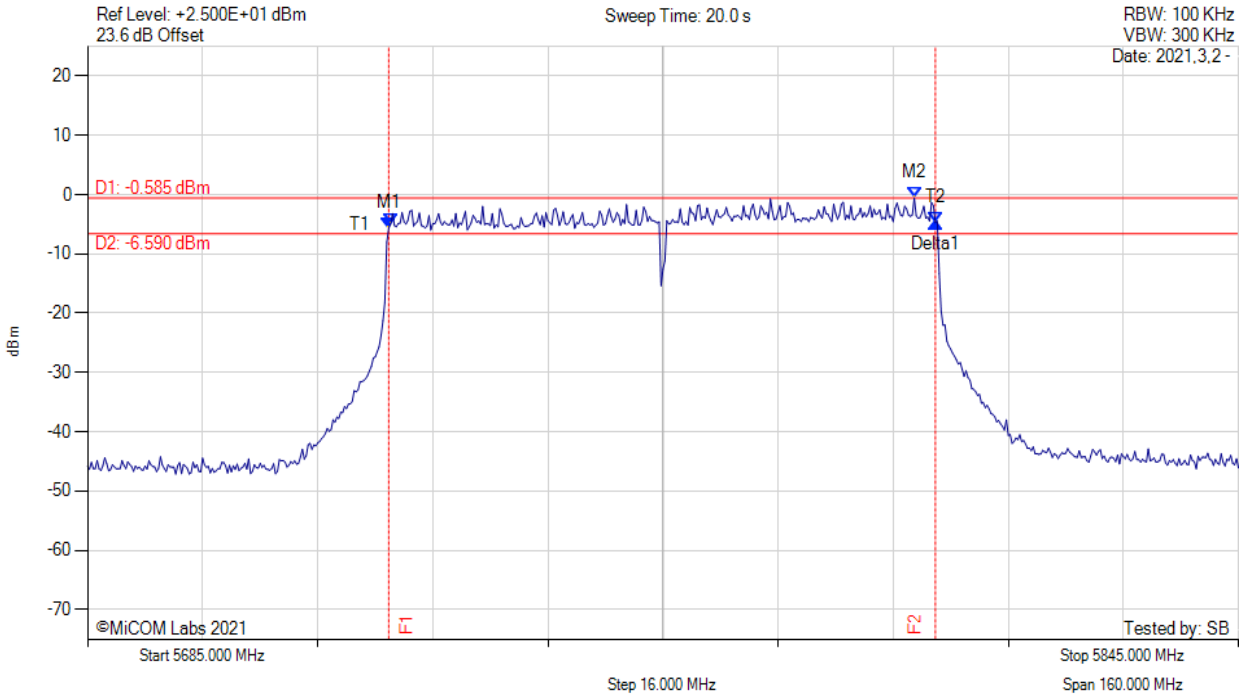
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5811.730 MHz : -0.416 dBm M2 : 5834.930 MHz : 4.423 dBm Delta1 : 36.270 MHz : 1.634 dB T1 : 5811.867 MHz : 0.252 dBm T2 : 5848.133 MHz : 0.757 dBm OBW : 36.169 MHz	Measured 6 dB Bandwidth: 36.270 MHz Measured 99% Bandwidth: 36.169 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5765.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



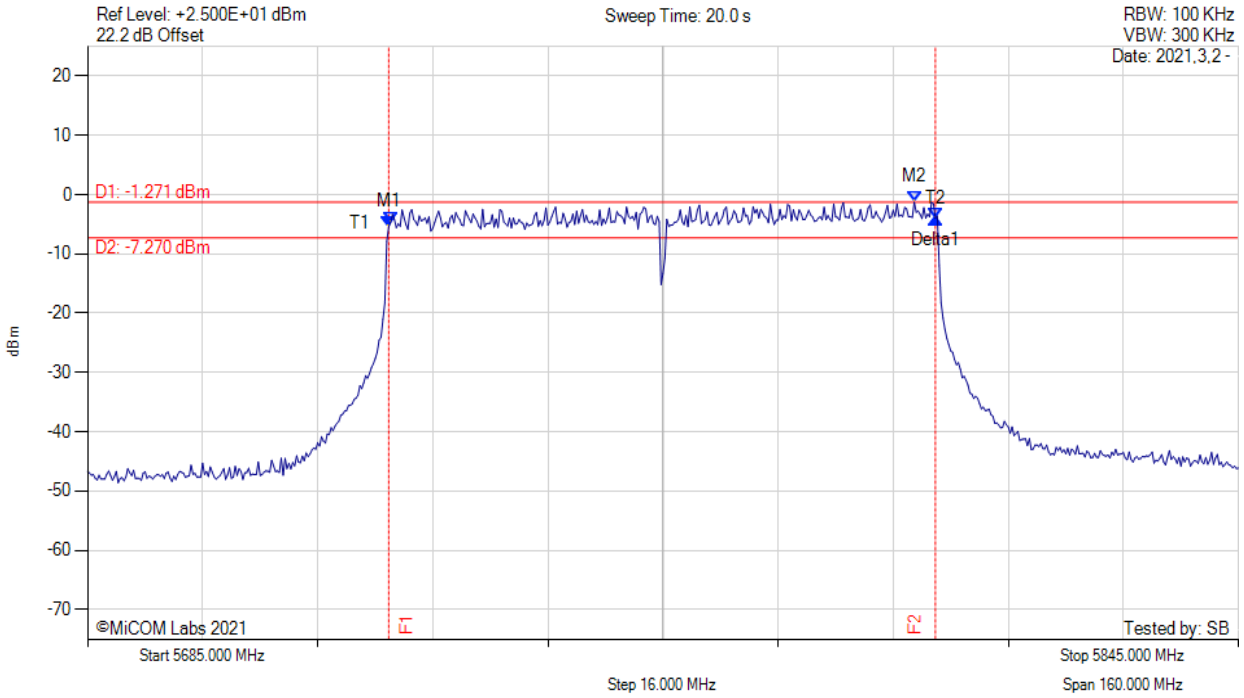
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.870 MHz : -5.675 dBm M2 : 5799.930 MHz : -0.585 dBm Delta1 : 76.000 MHz : 0.934 dB T1 : 5727.133 MHz : -5.042 dBm T2 : 5802.867 MHz : -4.741 dBm OBW : 75.661 MHz	Measured 6 dB Bandwidth: 76.000 MHz Measured 99% Bandwidth: 75.661 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5765.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



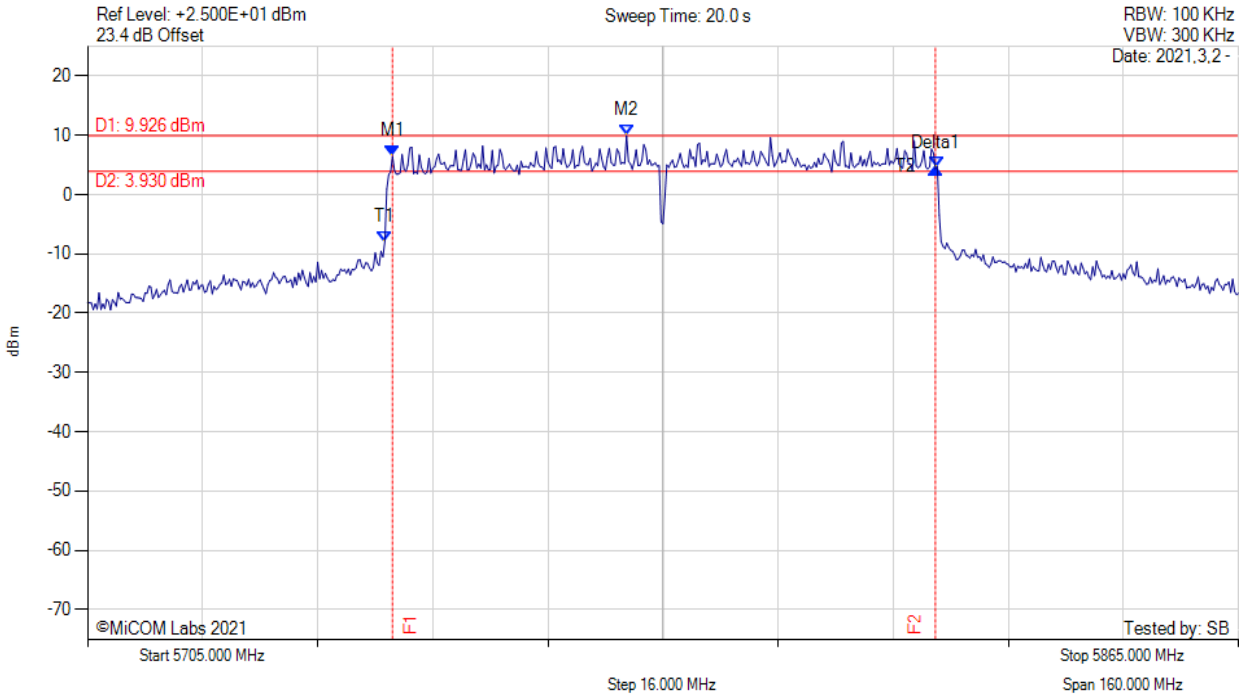
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5726.870 MHz : -5.442 dBm M2 : 5799.930 MHz : -1.271 dBm Delta1 : 76.000 MHz : 1.438 dB T1 : 5727.133 MHz : -4.753 dBm T2 : 5802.867 MHz : -4.004 dBm OBW : 75.769 MHz	Measured 6 dB Bandwidth: 76.000 MHz Measured 99% Bandwidth: 75.769 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5785.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc



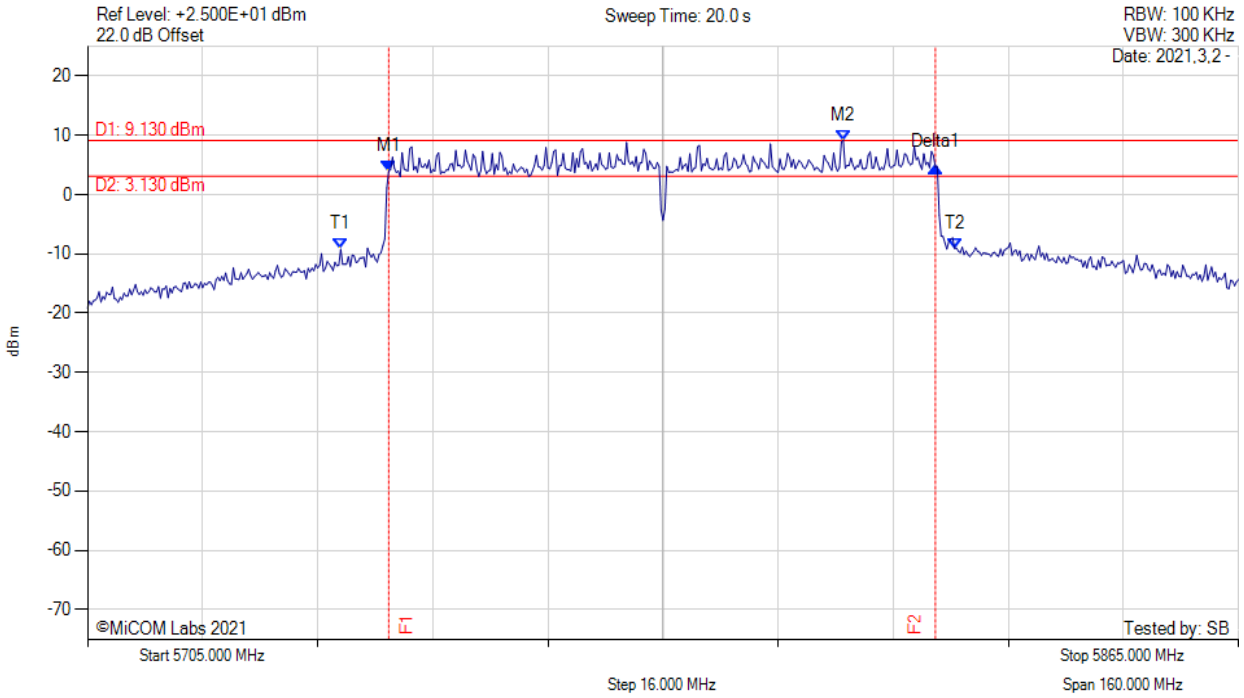
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5747.400 MHz : 6.439 dBm M2 : 5779.930 MHz : 9.926 dBm Delta1 : 75.470 MHz : -2.115 dB T1 : 5746.333 MHz : -7.947 dBm T2 : 5823.133 MHz : 4.734 dBm OBW : 86.738 MHz	Measured 6 dB Bandwidth: 75.470 MHz Measured 99% Bandwidth: 86.738 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

6 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5785.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5746.870 MHz : 3.991 dBm M2 : 5810.070 MHz : 9.130 dBm Delta1 : 76.000 MHz : 0.622 dB T1 : 5740.200 MHz : -9.216 dBm T2 : 5825.533 MHz : -9.074 dBm OBW : 101.010 MHz	Measured 6 dB Bandwidth: 76.000 MHz Measured 99% Bandwidth: 101.010 MHz

back to matrix

This test report may be reproduced in full only. The document may only be updated by MiCOM Labs personnel. All changes will be noted in the Document History section of the report.
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com