REGULATORY COMPLIANCE TEST REPORT

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

Report No.: RDWN72-U5 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-U5 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
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www.micomlabs.com

ACCREDITED
TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

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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.

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

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

2. DOCUMENT HISTORY

Document History		
Revision	Date	Comments
Draft	16th March 2021	Draft report for client review.
Draft 2	23rd March 2021	Draft 2 for client review.
Rev A	25th March 2021	Initial release.
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In the above table the latest report revision will replace all earlier versions.

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):	9th to 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.

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.

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

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.

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 5250 to 5350 MHz and 5470 to 5725 MHz bands incorporating Dynamic Frequency Selection.
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-U5 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):	09 - 16 February 2021
No of Units Tested:	4
Product Family Name:	SU / Alpha
Model(s):	AP0263510, AP0263530, AP0263540.
Location for use:	Outdoors
Declared Frequency Range(s):	5250 - 5350 MHz; 5470 - 5725 MHz
Type of Modulation:	OFDM
EUT Modes of Operation:	5250 - 5350 MHz: 20MHz; 40MHz; 80MHz; 5470 - 5725 MHz: 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:	20 MHz: 17M8W7W 40 MHz: 36M3W7W 80 MHz: 75M8W7W
Equipment Dimensions:	0.04 / 3.78 / 6.45 in
Weight:	0.004 Lb
Hardware Rev:	Prototype
Software Rev:	Prototype

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 5250 - 5350 MHz; 5470 - 5725 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 5250 - 5350 MHz; 5470 - 5725 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 (13 dBi to 25 dBi) that may be used in normal operation.

NOTE: Antenna model MT0268450 25 dBi, is the highest Gain antenna; no 80 MHz measurements are provided for this antenna

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 4) were tested during Radiated Emissions testing.

Type	Manufacturer	Model	Family	Gain (dBi)	BF Gain	Dir BW	X-Pol	Frequency Band (MHz)
integral	RADWIN	MR0204670	Directional	22.0	-	10	Yes	5250 - 5350
integral	RADWIN	MR0204670	Directional	22.0	-	10	Yes	5470 - 5725
external	RADWIN	RW-9105-4958	Directional	16.0	-	20	Yes	5250 - 5350
external	RADWIN	RW-9105-4958	Directional	16.0	-	20	Yes	5470 - 5725
integral	RADWIN	RW-9105-5159	Directional	13.0	-	30	Yes	5250 - 5350
integral	RADWIN	RW-9105-5159	Directional	13.0	-	30	Yes	5470 - 5725
external	RADWIN	RW-9613-4960	Directional	23.0	-	10	Yes	5250 - 5350
external	RADWIN	RW-9613-4960	Directional	23.0	-	10	Yes	5470 - 5725
integral	RADWIN	MT0268450	Directional	25.0	-	8	Yes	5250 - 5350
integral	RADWIN	MT0268450	Directional	25.0	-	8	Yes	5470 - 5725

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

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
5250 - 5350 MHz				
20MHz	13.0	5,265.00	5,300.00	5,330.00
40MHz	13.0	5,275.00	5,300.00	5,320.00
80MHz	13.0	5,290.00	5,295.00	5,300.00
5470 - 5725 MHz				
20MHz	13	5,490.00	5,590.00	5,705.00
40MHz	13.0	5,500.00	5,580.00	5,695.00
80MHz	13.0	5,525.00	5,560.00	5,675.00

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

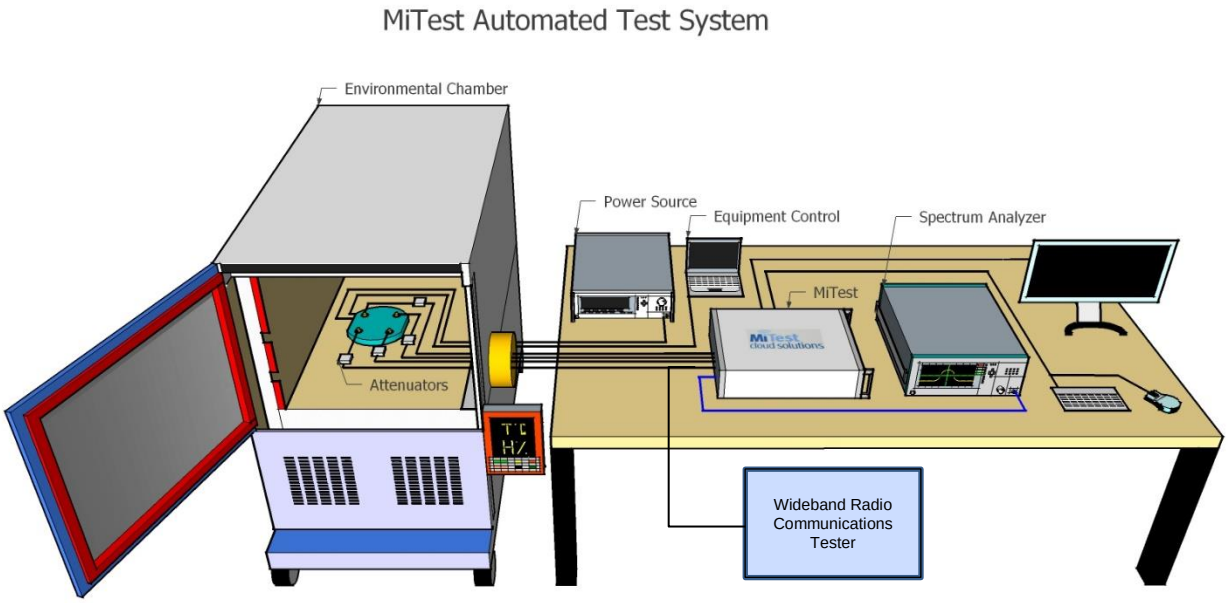
6. TEST SUMMARY

List of Measurements

Test Header	Result	Data Link
Peak Transmit Power	Complies	View Data
26 dB & 99% Bandwidth	Complies	View Data
Power Spectral Density	Complies	View Data
Transmit Power Control (TPC)	Complies	View Data
Dynamic Frequency Selection (DFS) **EUT is Client device without radar detection**	Complies	-
Channel Availability Check	Not Required	-
Initial CAC	Not Required	-
Beginning CAC	Not Required	-
End CAC	Not Required	-
Channel Close / Transmission Time	Complies	View Data
Non-Occupancy Period	Complies	View Data
Probability of Detection	Not Required	-
Detection Bandwidth	Not Required	-
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
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
Digital Emissions	Complies	See Test Report RDWN72-U2
AC Wireline	Complies	See Test Report RDWN72-U2

7. TEST EQUIPMENT CONFIGURATION(S)

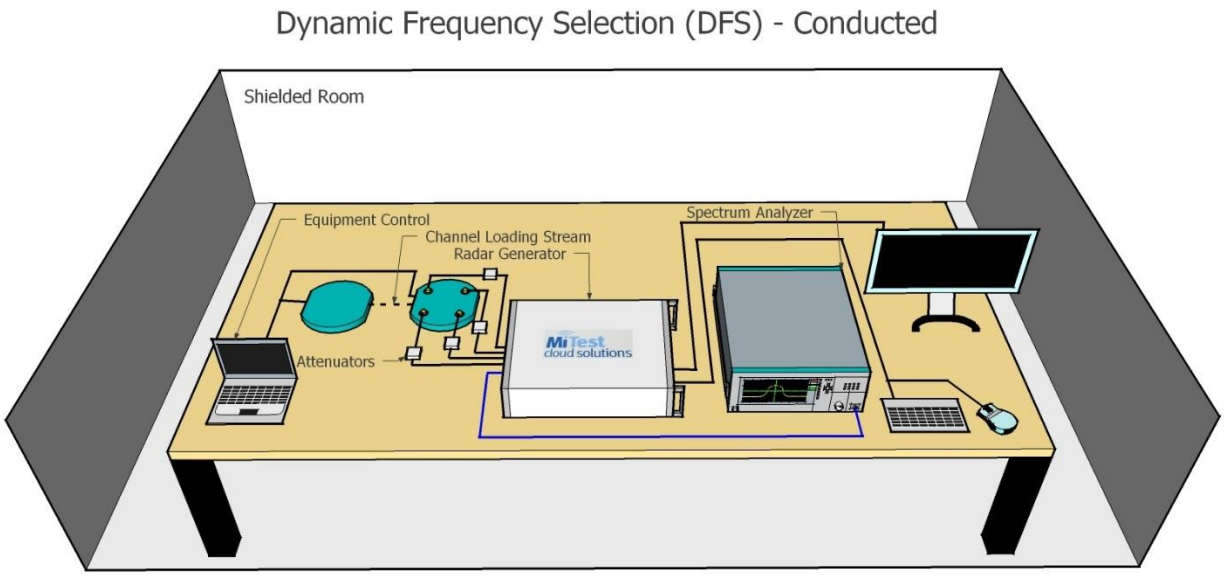
7.1. Conducted RF



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.

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

7.2. DFS - Conducted



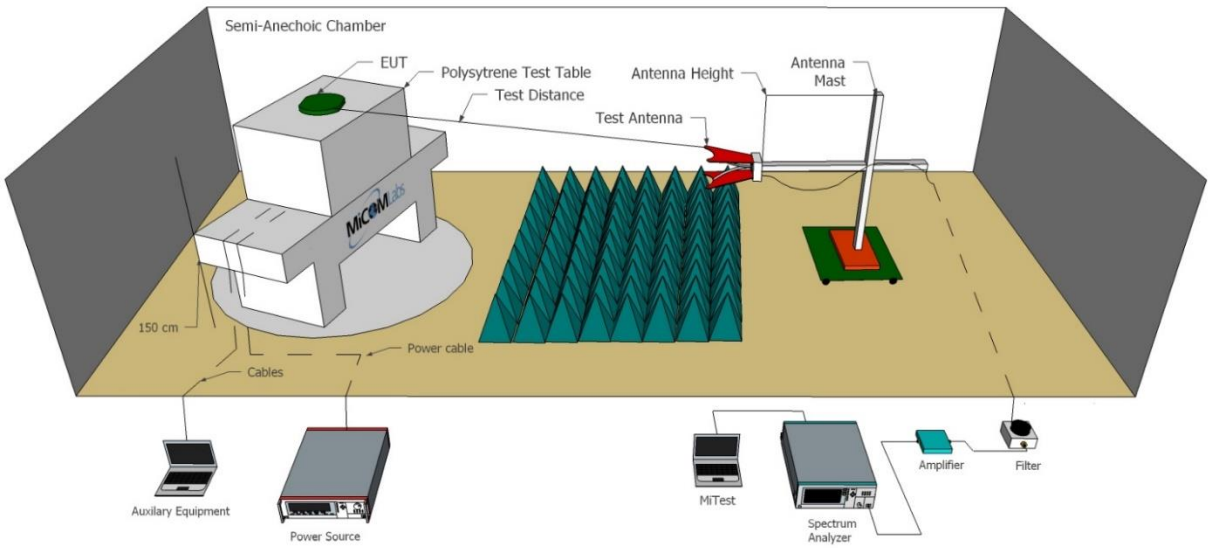
A full system calibration was performed on the test station and any resulting system losses (or gains) were taken into account in the production of all final measurement data.

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
417	Laptop for DFS with DFS software	Lenova	W520	DFS	Not Required
422	Splitter/Combiner	Pasternack	PE 2031	001	Cal when used
495	RF Power Divider	Micon Precise Corp	91002	495	Cal when used
504	MiTest Cloud Solutions RF Test Box	MiCOM	2nd Gen	504	5 Sep 2021
510	Barometer/Thermometer	Control Company	68000-49	170871375	20 Dec 2021
533	MiTest DFS Test Software	MiCOM	MiTest DFS Test software Version 2.8	533	Not Required
71	Spectrum Analyser 9KHz-50GHz	HP	8565E	3425A00181	Not Required
DFS SMA#1	SMA Cable for DFS	Megaphase	SMA Cable	None	Cal when used
DFS SMA#2	SMA Cable for DFS	Megaphase	SMA Cable	None	Cal when used
DFS SMA#3	SMA Cable for DFS	Megaphase	SMA Cable	None	Cal when used
DFS SMA#4	SMA Cable for DFS	Megaphase	SMA Cable	None	Cal when used

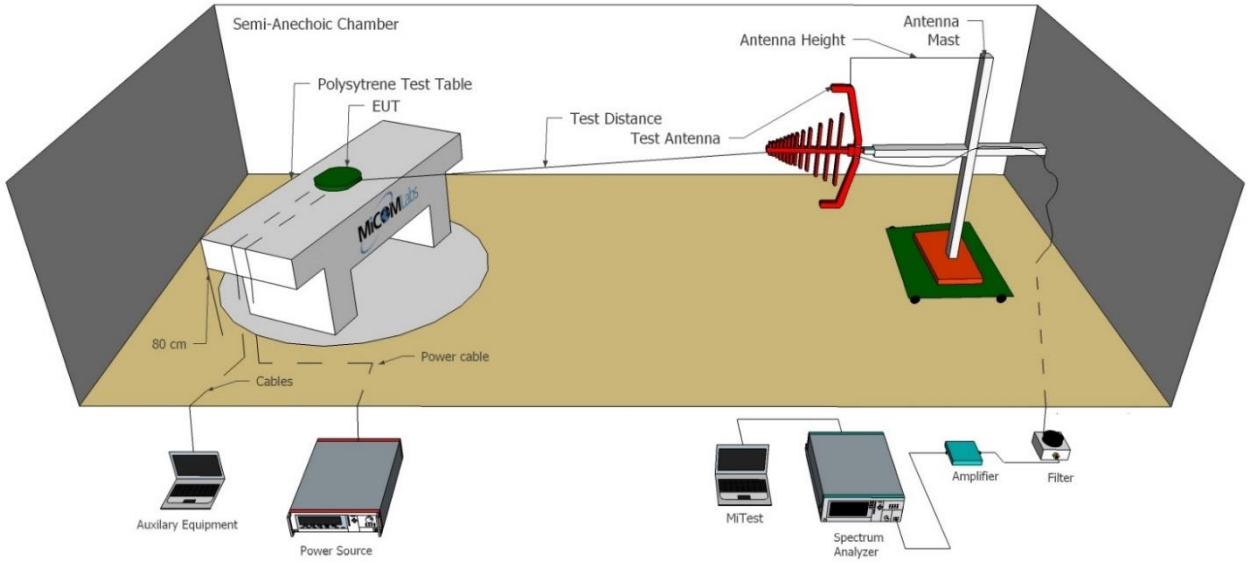
7.3. Radiated Emissions - 3m Chamber

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



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

	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

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)

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) 6.2.2.1 & 6.2.3.1	**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 5250-5350 and 5470 – 5725 MHz

15. 407 (a)(2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz 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.

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	
5265.0	14.00	13.31			16.68	21.600	17.00	-0.32	13.50
5300.0	13.76	13.29			16.54	21.800	17.00	-0.46	13.50
5330.0	10.26	9.86			13.07	21.600	17.00	-3.93	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.

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	
5275.0	14.07	13.43			16.77	40.800	17.00	-0.23	13.50
5300.0	13.87	13.50			16.70	41.070	17.00	-0.30	13.50
5320.0	9.30	9.00			12.16	41.330	17.00	-4.84	9.00

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.

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	
5290.0	13.48	13.24			16.37	81.330	17.00	-0.63	13.50
5295.0	13.44	13.30			16.38	81.330	17.00	-0.62	13.50
5300.0	7.26	6.69			9.99	81.330	17.00	-7.01	7.50

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.

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	
5490.0	10.07	9.38			12.75	22.130	17.00	-4.25	9.50
5590.0	14.09	13.25			16.70	22.000	17.00	-0.30	13.00
5705.0	12.96	11.58			15.33	21.730	17.00	-1.67	12.50

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.

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	
5500.0	10.29	9.43			12.89	40.800	17.00	-4.11	9.50
5580.0	14.03	13.30			16.69	41.470	17.00	-0.31	13.00
5695.0	14.13	12.95			16.59	40.930	17.00	-0.41	13.50

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.

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	
5525.0	11.02	10.15			13.62	80.800	17.00	-3.38	10.50
5560.0	13.98	13.14			16.59	81.070	17.00	-0.41	13.50
5675.0	14.11	12.75			16.49	81.330	17.00	-0.51	14.00

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.

9.1.1.1. ISED RSS-247

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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	
5265.0	2.08	1.42	-	-	4.77	17.721	5.00	-0.23	1.0
5300.0	1.89	1.28	-	-	4.61	17.711	5.00	-0.39	1.0
5330.0	1.89	1.41	-	-	4.67	17.725	5.00	-0.33	1.0

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.

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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	
5275.0	2.07	1.41	-	-	4.76	36.177	5.00	-0.24	1.0
5300.0	1.94	1.37	-	-	4.67	36.151	5.00	-0.33	1.0
5320.0	1.95	1.4	-	-	4.69	36.220	5.00	-0.31	1.0

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.

Equipment Configuration for Peak Transmit Power			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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	
5490.0	2.01	1.42	-	-	4.74	17.749	5.00	-0.26	1.0
5590.0	2.12	1.72	-	-	4.93	17.758	5.00	-0.07	1.0
5705.0	2.01	0.82	-	-	4.47	17.709	5.00	-0.53	1.0

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.

Equipment Configuration for Peak Transmit Power			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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	
5500.0	2.23	1.45	-	-	4.87	36.196	5.00	-0.13	1.0
5580.0	2.00	1.65	-	-	4.84	36.180	5.00	-0.16	1.0
5695.0	2.09	0.71	-	-	4.46	36.192	5.00	-0.54	1.0

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.

9.2. 26 dB & 99% Bandwidth

Conducted Test Conditions for 26 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) 6.2.1.1 & 6.2.3.1	**Pressure (mBars):**	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for 26 dB and 99% Bandwidth Measurement
The bandwidth at 26 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 approximately 1% of the emission bandwidth.
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.

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5265.0	21.730	21.600			21.730	21.600		
5300.0	22.200	21.800			22.200	21.800		
5330.0	21.930	21.600			21.930	21.600		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5265.0	17.707	17.738			17.738	17.707		
5300.0	17.722	17.742			17.742	17.722		
5330.0	17.719	17.744			17.744	17.719		

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).

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5275.0	40.930	40.800			40.930	40.800		
5300.0	41.330	41.070			41.330	41.070		
5320.0	42.130	41.330			42.130	41.330		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5275.0	36.144	36.175			36.175	36.144		
5300.0	36.211	36.156			36.211	36.156		
5320.0	36.247	36.194			36.247	36.194		

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).

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5290.0	81.600	81.330			81.600	81.330		
5295.0	81.330	81.600			81.600	81.330		
5300.0	81.330	81.330			81.330	81.330		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5290.0	75.702	75.777			75.777	75.702		
5295.0	75.739	75.820			75.820	75.739		
5300.0	75.691	75.764			75.764	75.691		

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).

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5490.0	22.130	22.130			22.130	22.130		
5590.0	22.000	22.000			22.000	22.000		
5705.0	21.730	22.270			22.270	21.730		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5490.0	17.734	17.753			17.753	17.734		
5590.0	17.733	17.751			17.751	17.733		
5705.0	17.727	17.758			17.758	17.727		

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).

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5500.0	40.800	41.730			41.730	40.800		
5580.0	41.600	41.470			41.600	41.470		
5695.0	40.930	41.330			41.330	40.930		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5500.0	36.206	36.188			36.206	36.188		
5580.0	36.220	36.183			36.220	36.183		
5695.0	36.157	36.190			36.190	36.157		

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).

Equipment Configuration for 26 dB & 99% Occupied 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 26 dB Bandwidth (MHz) Port(s)				26 dB Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5525.0	80.800	81.600			81.600	80.800		
5560.0	81.070	81.600			81.600	81.070		
5675.0	81.330	81.330			81.330	81.330		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5525.0	75.621	75.749			75.749	75.621		
5560.0	75.857	75.763			75.857	75.763		
5675.0	75.671	75.807			75.807	75.671		

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).

9.2.1.2. ISED RSS-247

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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**		
5265.0	21.870	22.070			22.070	21.870		
5300.0	22.130	21.670			22.130	21.670		
5330.0	22.330	21.930			22.330	21.930		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5265.0	17.721	17.767			17.767	17.721		
5300.0	17.711	17.756			17.756	17.711		
5330.0	17.725	17.759			17.759	17.725		

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).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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**		
5275.0	40.930	41.200			41.200	40.930		
5300.0	41.330	41.330			41.330	41.330		
5320.0	42.000	41.870			42.000	41.870		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5275.0	36.177	36.194			36.194	36.177		
5300.0	36.202	36.151			36.202	36.151		
5320.0	36.261	36.220			36.261	36.220		

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).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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**		
5490.0	21.870	21.670			21.870	21.670		
5590.0	22.200	22.200			22.200	22.200		
5705.0	22.070	22.070			22.070	22.070		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5490.0	17.749	17.775			17.775	17.749		
5590.0	17.760	17.758			17.760	17.758		
5705.0	17.709	17.757			17.757	17.709		

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).

Equipment Configuration for 26 dB & 99% Occupied Bandwidth

Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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**		
5500.0	41.470	41.730			41.730	41.470		
5580.0	41.870	41.730			41.870	41.730		
5695.0	41.330	41.600			41.600	41.330		

Test Frequency	Measured 99% Bandwidth (MHz) Port(s)				99% Bandwidth (MHz)			
MHz	**a**	**b**	**c**	**d**	**Highest**	**Lowest**		
5500.0	36.232	36.196			36.232	36.196		
5580.0	36.230	36.180			36.230	36.180		
5695.0	36.192	36.217			36.217	36.192		

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).

9.3. Power Spectral Density

Conducted Test Conditions for Power Spectral Density			
Standard:	FCC CFR 47:15.407	**Ambient Temp. (ºC):**	24.0 - 27.5
Test Heading:	Power Spectral Density	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	15.407 (a) 6.2.2.1 & 6.2.3.1	**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 5250-5350 and 5470 – 5725 MHz

15. 407 (a)(2)
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz 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.

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5265.0	1.384	0.841			3.998	4.0	0.0
5300.0	1.113	0.471			3.824	4.0	-0.2
5330.0	-2.182	-2.336			0.637	4.0	-3.4

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).

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5275.0	-1.487	-2.028			1.305	4.0	-2.7
5300.0	-1.220	-1.822			1.424	4.0	-2.6
5320.0	-5.737	-6.235			-3.011	4.0	-7.0

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).

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5290.0	-5.069	-5.508			-2.263	4.0	-6.3
5295.0	-4.889	-5.926			-2.413	4.0	-6.4
5300.0	-10.807	-11.741			-8.331	4.0	-12.3

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).

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/MHz**	**dBm/MHz**	**dB**
5490.0	-2.257	-2.842			0.429	4.0	-3.6
5590.0	1.417	0.625			3.886	4.0	-0.1
5705.0	1.434	-0.357			3.562	4.0	-0.4

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).

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/MHz**	**dBm/MHz**	**dB**
5500.0	-4.432	-5.715			-2.028	4.0	-6.0
5580.0	-1.323	-1.860			1.345	4.0	-2.7
5695.0	-0.808	-2.289			1.516	4.0	-2.5

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).

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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/MHz**	**dBm/MHz**	**dB**
5525.0	-7.552	-8.241			-4.917	4.0	-8.9
5560.0	-3.243	-5.101			-1.202	4.0	-5.2
5675.0	-4.665	-5.814			-2.195	4.0	-6.2

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).

9.3.1.3. ISED RSS-247

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5265.0	-11.592	-12.210			-9.037	-8.0	-1.0
5300.0	-11.252	-12.111			-8.642	-8.0	-0.7
5330.0	-11.327	-11.930			-8.667	-8.0	-0.7

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).

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5275.0	-13.150	-13.873			-10.557	-8.0	-2.6
5300.0	-13.300	-14.141			-10.720	-8.0	-2.7
5320.0	-13.003	-13.678			-10.343	-8.0	-2.4

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).

Equipment Configuration for Power Spectral Density			
Variant:	20MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	**a**	**b**	**c**	**d**	**dBm/MHz**	**dBm/MHz**	**dB**
5490.0	-11.380	-11.766			-8.630	-8.0	-0.6
5590.0	-11.165	-11.750			-8.484	-8.0	-0.5
5705.0	-10.724	-12.007			-8.290	-8.0	-0.3

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).

Equipment Configuration for Power Spectral Density			
Variant:	40MHz	**Duty Cycle (%):**	99.0
Data Rate:	13.00 MBit/s	**Antenna Gain (dBi):**	25.00
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/MHz)				Summation Peak Marker + DCCF (+0.04 dB)	Limit	Margin
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dB
5500.0	-12.493	-13.493			-9.967	-8.0	-2.0
5580.0	-12.916	-13.221			-10.246	-8.0	-2.3
5695.0	-12.611	-14.156			-10.311	-8.0	-2.3

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).

9.4. Transmit Power Control (TPC)

Equipment Configuration for Transmit Power Control

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	
5265.0	14.00	13.31	--	--	16.68	--	--	--	13.50
5265.0	7.98	7.33	--	--	10.67	--	--	--	7.50

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.

EUT Complies with TPC regulations as shown by the table above. (min 6 dB power drop)
Result: Pass

9.5. Dynamic Frequency Selection (DFS)

Test Conditions for Dynamic Frequency Selection (DFS)			
Standard:	FCC 15.407	**Ambient Temp. (ºC):**	20.0 - 24.5
Test Heading:	Dynamic Frequency Selection (DFS)	**Rel. Humidity (%):**	32 - 45
Standard Section(s):	KDB 905462	**Pressure (mBars):**	999 - 1001
EUT Type:	Client without Radar Detection	**Frequency Bands:**	5,250 – 5,350 MHz 5,470 – 5,725 MHz
Test Environment:	Conducted	**Antenna Gain used for Testing:**	13 dBi
Detection Threshold:	N/A	**Test Radar Level: (Threshold + Gain)**	N/A
Number of Antenna Chains:	2	**Duty Cycle Target:**	≥ 17.00%
Transmit Power:	+17 dBm	**Minimum Data Rate:**	6 Mbit/s / MCS0 / NSS1-MCS0
Uniform Loading:	For the above frequency band(s) the manufacturer declared that the device provides an aggregate uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.		
Communication Method:	The device was placed into an artificial test mode that loaded the channel with the required data in order to produce the desired load.		
Engineer Notes:			

Client Devices

a) A Client Device will not transmit before having received appropriate control signals from a Master Device.

b) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing Transmission Time requirements. The Client Device will not resume any transmissions until it has again received control signals from a Master Device.

c) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1 apply.

d) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.

e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shutdown (rather than moving channels), no beacons should appear.

9.5.1. Response Requirements

The following table provides the response requirements for Master and Client Devices incorporating DFS. The EUT is a Client device without radar detection.

Requirement	Master Device or Client with Radar Detection	Client without Radar Detection
	Operational Mode	
DFS Detection Threshold	Yes	Not Required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not Required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

NOTE: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

DFS Response Requirement Values

Parameter	Value
Non-Occupancy Period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds, see NOTE 1
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period, see NOTES 1 and 2
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth, see NOTE 3

NOTE 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

NOTE 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

NOTE 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

9.5.2. Channel Close / Transmission Time

The steps below define the procedure to determine the above-mentioned parameters when a radar burst with a level of up to 10 dB above the DFS Detection threshold is injected on the Operating Channel of the EUT.

Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time results to the limits defined in the DFS Response requirement values table.

Channel Closing Transmission Time - Measurement
The reference radar signature was introduced to the EUT, from which a 11 second transmission record was captured, as well as 1000ms of pre-trigger data. The Reference radar type was triggered to play at the exact time allowing the end of the pulse to occur at time t=0.

The system was setup to capture data for all transmission events above a given threshold level as determined and adjusted by the test engineer. The system time stamps all captured events with respect to T0 (zero time indicating the start of the measurement sequence) starting at the end of the radar pulse indicated by the purple vertical marker line in the Plot (on the next page).

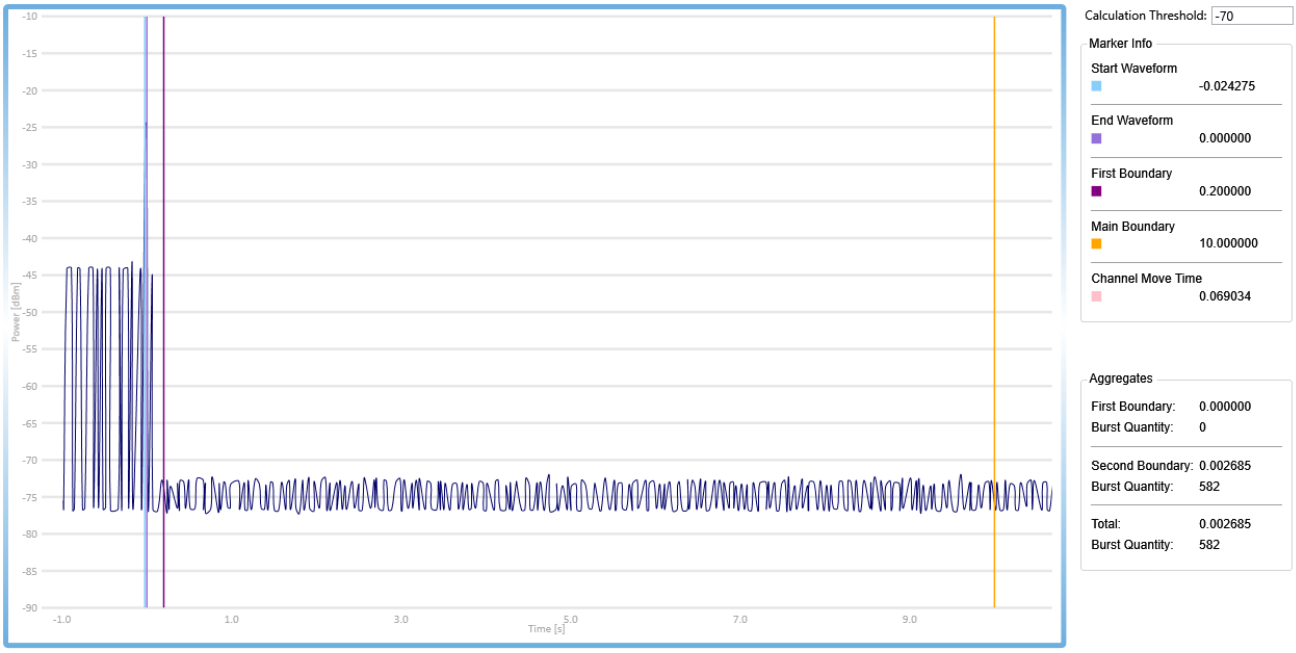
The system captured data over a 12 second period at 10 points per microsecond. The data is analyzed by counting all “bursts” that occur above the threshold limit and aggregating the time each burst is on. The data is then compressed for presentation in one 12 second segment showing all of the activity recorded over the period.

80 MHz Channel 5530 MHz; Observed Frequency 5500 MHz

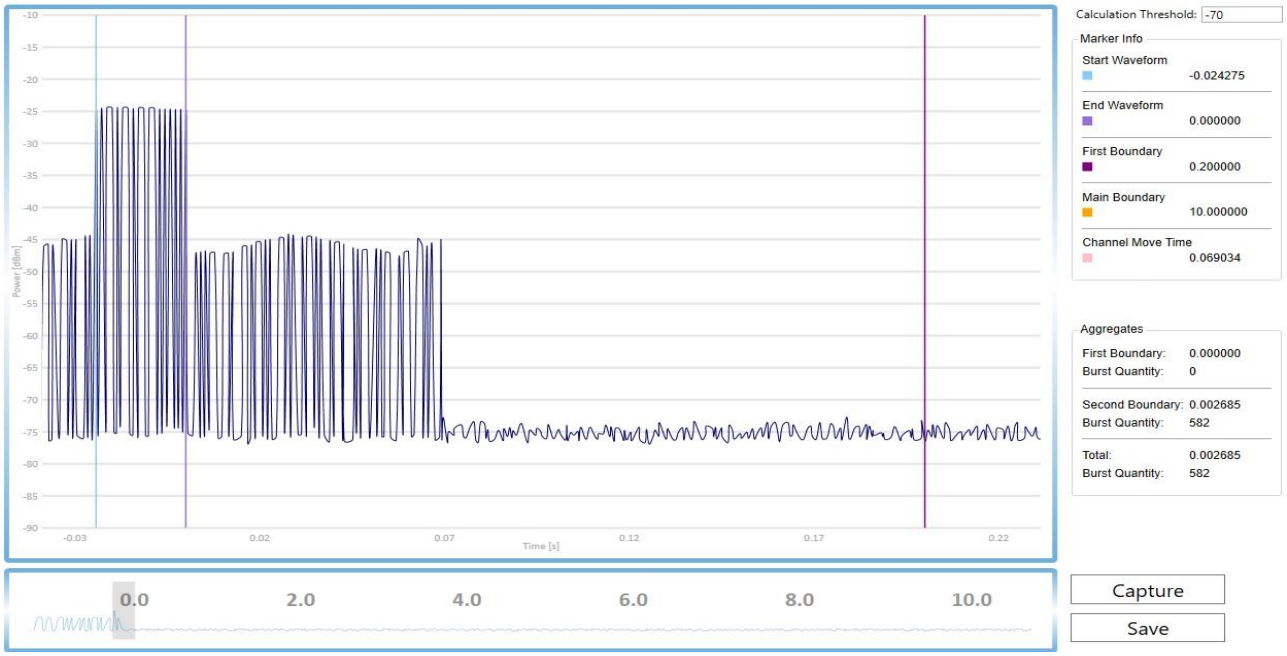
The system measures and aggregates the pulses occurring after the end of the radar pulse to determine the following parameters: -

Test Heading	Time (Secs)	Limit (Secs)	Status
Channel Closing Transmission Time	0.002685	0.260	Complies
Channel Move Time	0.069034	10.0	Complies

Channel Move Time
0-12 Second Capture



Channel Closing Transmission Time
0-200 Millisecond Capture

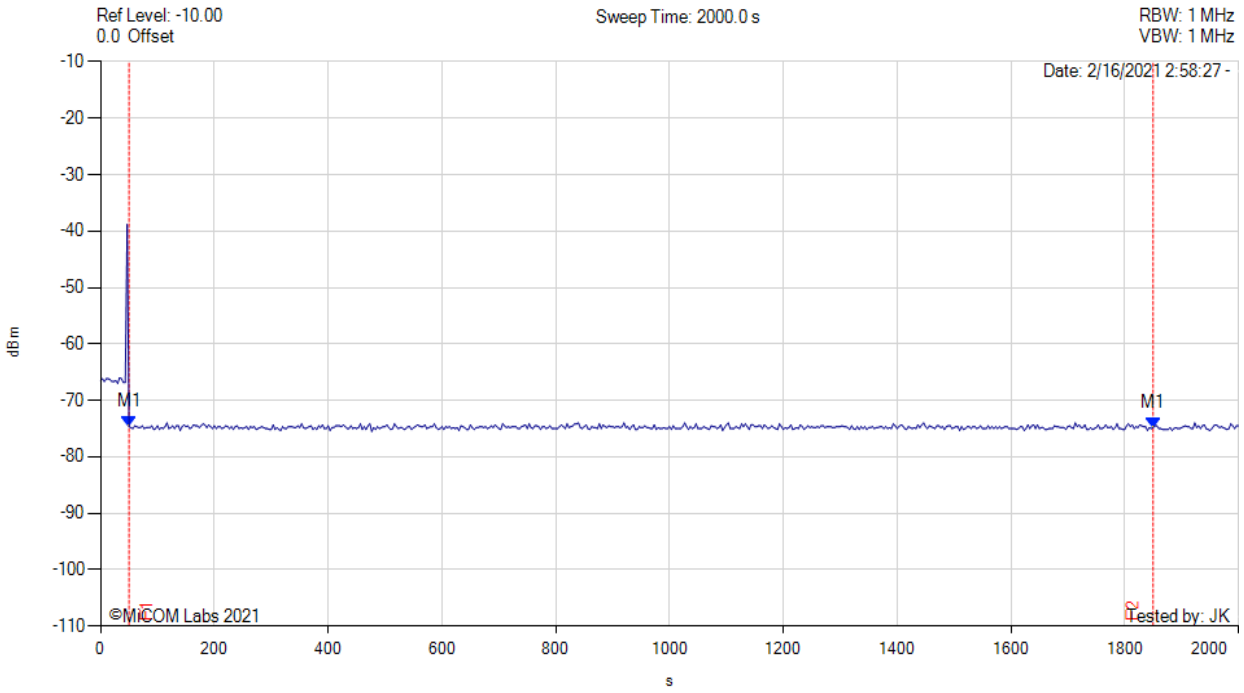


9.5.3. Non-Occupancy Period

The EUT is monitored for more than 30 minutes following the channel close/move time to verify no transmissions resume on this Channel. There should be no transmissions on the frequency of interest during the non-occupancy period.

NON-OCCUPANCY PERIOD

Variant: 802.11ac-80, Channel: 5530.00 MHz, Data Rate: MCS0, Duty Cycle: 18.00%, Antenna Gain: 13.00 dBi



Analyzer Setup	Marker:Time:Amplitude	Test Results
Detector = POS Sweep Count = View RF Atten (dB) = 0 Trace Mode = 0	M1 : 50.000 s : -74.660 dBm M1 : 1850.000 s : -74.830 dBm	Channel Frequency: 5530.00 MHz Observed Frequency: 5500 MHz F2 – F1 = 1850.00 s – 50.00 s = 1800.00 s

9.6. Radiated

Radiated Test Conditions for Radiated Spurious and Band-Edge Emissions			
Standard:	FCC CFR 47:15.407	**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	**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

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);

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

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			

(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).

9.6.1. TX Spurious & Restricted Band Emissions

9.6.1.4. RADWIN MT0268450

Equipment Configuration for TX Spurious & Restricted Band Emissions			
Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5265.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3995.94	60.03	2.60	-12.25	50.38	Max Peak	Horizontal	124	200	68.2	-17.9	Pass
#2	3995.94	54.90	2.60	-12.25	45.25	Max Avg	Horizontal	124	200	54.0	-8.8	Pass
#3	5268.16	70.03	2.91	-12.21	60.73	Fundamental	Horizontal	100	0	--	--	
#4	6249.97	50.72	3.25	-9.50	44.47	Peak (NRB)	Horizontal	100	121	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3995.91	62.68	2.60	-12.25	53.03	Max Peak	Horizontal	186	216	68.2	-15.2	Pass
#2	3995.91	57.76	2.60	-12.25	48.11	Max Avg	Horizontal	186	216	54.0	-5.9	Pass
#3	5303.44	68.65	3.06	-11.97	59.74	Fundamental	Horizontal	100	0	--	--	
#4	6249.96	49.89	3.25	-9.50	43.64	Peak (NRB)	Horizontal	100	106	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3996.04	63.08	2.60	-12.25	53.43	Max Peak	Horizontal	169	153	68.2	-14.8	Pass
#2	3996.04	53.83	2.60	-12.25	44.18	Max Avg	Horizontal	169	153	54.0	-9.8	Pass
#3	5333.43	65.87	3.08	-12.01	56.94	Fundamental	Horizontal	100	0	--	--	
#4	6250.05	51.09	3.25	-9.49	44.85	Peak (NRB)	Horizontal	100	51	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3660.04	60.90	2.48	-11.92	51.46	Max Peak	Horizontal	190	151	68.2	-16.8	Pass
#2	3660.04	56.05	2.48	-11.92	46.61	Max Avg	Horizontal	190	151	54.0	-7.4	Pass
#3	3996.04	60.16	2.60	-12.25	50.51	Max Peak	Horizontal	133	207	68.2	-17.7	Pass
#4	3996.04	55.17	2.60	-12.25	45.52	Max Avg	Horizontal	133	207	54.0	-8.5	Pass
#5	5493.30	57.23	3.10	-11.65	48.68	Fundamental	Horizontal	100	0	--	--	
#6	6250.03	50.27	3.25	-9.49	44.03	Peak (NRB)	Horizontal	100	123	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5590.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3995.96	62.42	2.60	-12.25	52.77	Max Peak	Horizontal	104	198	68.2	-15.5	Pass
#2	3995.96	54.14	2.60	-12.25	44.49	Max Avg	Horizontal	104	198	54.0	-9.5	Pass
#3	5585.87	63.80	3.13	-11.56	55.37	Fundamental	Horizontal	100	0	--	--	
#4	6250.06	51.15	3.25	-9.49	44.91	Peak (NRB)	Horizontal	100	130	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5705.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3803.44	59.42	2.54	-11.86	50.10	Max Peak	Horizontal	191	209	68.2	-18.1	Pass
#2	3803.44	55.24	2.54	-11.86	45.92	Max Avg	Horizontal	191	209	54.0	-8.1	Pass
#3	3995.86	60.54	2.60	-12.25	50.89	Max Peak	Horizontal	144	143	68.2	-17.3	Pass
#4	3995.86	54.47	2.60	-12.25	44.82	Max Avg	Horizontal	144	143	54.0	-9.2	Pass
#5	5708.51	55.89	3.13	-11.35	47.67	Fundamental	Horizontal	100	0	--	--	
#6	6250.02	51.87	3.25	-9.49	45.63	Peak (NRB)	Horizontal	100	197	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload												

9.6.1.5. RADWIN RW-9105-4958

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5265.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	3995.97	64.05	2.60	-12.25	54.40	Max Peak	Horizontal	136	281	68.2	-13.8	Pass
#2	3995.97	57.58	2.60	-12.25	47.93	Max Avg	Horizontal	136	281	54.0	-6.1	Pass
#3	5263.62	85.60	2.90	-12.24	76.26	Fundamental	Vertical	100	0	--	--	
#4	6249.92	50.55	3.25	-9.50	44.30	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	65.40	1.49	-15.95	50.94	Max Peak	Horizontal	138	1	68.2	-17.3	Pass
#2	1331.97	59.72	1.49	-15.95	45.26	Max Avg	Horizontal	138	1	54.0	-8.7	Pass
#3	3995.95	68.16	2.60	-12.25	58.51	Max Peak	Horizontal	140	36	68.2	-9.7	Pass
#4	3995.95	61.10	2.60	-12.25	51.45	Max Avg	Horizontal	140	36	54.0	-2.6	Pass
#5	5304.10	81.16	3.06	-11.96	72.26	Fundamental	Vertical	100	0	--	--	
#6	6249.90	50.28	3.25	-9.50	44.03	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	67.25	2.60	-12.25	57.60	Max Peak	Horizontal	125	296	68.2	-10.6	Pass
#2	3995.98	60.52	2.60	-12.25	50.87	Max Avg	Horizontal	125	296	54.0	-3.1	Pass
#3	5328.03	78.52	2.96	-11.96	69.52	Fundamental	Vertical	100	0	--	--	
#4	6249.97	50.80	3.25	-9.50	44.55	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	3995.95	63.64	2.60	-12.25	53.99	Max Peak	Horizontal	133	280	68.2	-14.2	Pass
#2	3995.95	56.97	2.60	-12.25	47.32	Max Avg	Horizontal	133	280	54.0	-6.7	Pass
#3	5488.12	72.21	3.17	-11.70	63.68	Fundamental	Vertical	100	0	--	--	
#4	6249.89	50.92	3.25	-9.50	44.67	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5590.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	3995.97	63.78	2.60	-12.25	54.13	Max Peak	Horizontal	98	260	68.2	-14.1	Pass
#2	3995.97	51.10	2.60	-12.25	41.45	Max Avg	Horizontal	98	260	54.0	-12.6	Pass
#3	5588.28	78.64	3.14	-11.58	70.20	Fundamental	Vertical	100	0	--	--	
#4	6249.93	52.20	3.25	-9.50	45.95	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5705.00	**Data Rate:**	13.00 MBit/s
Power Setting:	13.0	**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	3803.25	59.78	2.54	-11.86	50.46	Max Peak	Horizontal	190	357	68.2	-17.8	Pass
#2	3803.25	55.14	2.54	-11.86	45.82	Max Avg	Horizontal	190	357	54.0	-8.2	Pass
#3	3995.97	71.21	2.60	-12.25	61.56	Max Peak	Horizontal	110	354	68.2	-6.7	Pass
#4	3995.97	59.88	2.60	-12.25	50.23	Max Avg	Horizontal	110	354	54.0	-3.8	Pass
#5	5703.33	68.29	3.18	-11.34	60.13	Fundamental	Vertical	100	0	--	--	
#6	6250.04	50.32	3.25	-9.49	44.08	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

9.6.1.6. RADWIN RW-9105-5159

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5265.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	1332.01	67.45	1.49	-15.95	52.99	Max Peak	Horizontal	167	358	68.2	-15.2	Pass
#2	1332.01	59.49	1.49	-15.95	45.03	Max Avg	Horizontal	167	358	54.0	-9.0	Pass
#3	3996.12	66.11	2.60	-12.25	56.46	Max Peak	Horizontal	190	39	68.2	-11.8	Pass
#4	3996.12	59.38	2.60	-12.25	49.73	Max Avg	Horizontal	190	39	54.0	-4.3	Pass
#5	5270.26	85.87	2.91	-12.18	76.60	Fundamental	Horizontal	100	0	--	--	
#6	6249.94	53.17	3.25	-9.50	46.92	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	65.53	1.49	-15.95	51.07	Max Peak	Horizontal	130	347	68.2	-17.2	Pass
#2	1332.06	60.31	1.49	-15.95	45.85	Max Avg	Horizontal	130	347	54.0	-8.2	Pass
#3	3995.96	70.43	2.60	-12.25	60.78	Max Peak	Horizontal	176	295	68.2	-7.5	Pass
#4	3995.96	60.36	2.60	-12.25	50.71	Max Avg	Horizontal	176	295	54.0	-3.3	Pass
#5	5299.98	80.31	2.90	-11.66	71.55	Fundamental	Horizontal	100	0	--	--	
#6	6249.99	53.73	3.25	-9.50	47.48	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	1331.98	69.48	1.49	-15.95	55.02	Max Peak	Horizontal	186	358	68.2	-13.2	Pass
#2	1331.98	61.10	1.49	-15.95	46.64	Max Avg	Horizontal	186	358	54.0	-7.4	Pass
#3	3995.99	66.49	2.60	-12.25	56.84	Max Peak	Horizontal	101	57	68.2	-11.4	Pass
#4	3995.99	56.30	2.60	-12.25	46.65	Max Avg	Horizontal	101	57	54.0	-7.4	Pass
#5	5328.36	81.35	2.96	-11.96	72.35	Fundamental	Horizontal	100	0	--	--	
#6	6249.97	54.29	3.25	-9.50	48.04	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	1332.01	67.45	1.49	-15.95	52.99	Max Peak	Horizontal	167	1	68.2	-15.2	Pass
#2	1332.01	59.48	1.49	-15.95	45.02	Max Avg	Horizontal	167	1	54.0	-9.0	Pass
#3	3995.85	68.16	2.60	-12.25	58.51	Max Peak	Horizontal	143	42	68.2	-9.7	Pass
#4	3995.85	61.32	2.60	-12.25	51.67	Max Avg	Horizontal	143	42	54.0	-2.3	Pass
#5	5492.42	74.27	3.12	-11.67	65.72	Fundamental	Horizontal	100	0	--	--	
#6	6249.93	54.16	3.25	-9.50	47.91	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5590.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	1331.98	68.09	1.49	-15.95	53.63	Max Peak	Horizontal	180	3	68.2	-14.6	Pass
#2	1331.98	60.13	1.49	-15.95	45.67	Max Avg	Horizontal	180	3	54.0	-8.3	Pass
#3	3996.00	70.69	2.60	-12.25	61.04	Max Peak	Horizontal	172	43	68.2	-7.2	Pass
#4	3996.00	60.72	2.60	-12.25	51.07	Max Avg	Horizontal	172	43	54.0	-2.9	Pass
#5	5588.83	80.20	3.15	-11.58	71.77	Fundamental	Horizontal	100	0	--	--	
#6	6249.89	54.55	3.25	-9.50	48.30	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5705.00	**Data Rate:**	13.00 MBit/s
Power Setting:	15.0	**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	3995.95	66.87	2.60	-12.25	57.22	Max Peak	Horizontal	153	293	68.2	-11.0	Pass
#2	3995.95	59.94	2.60	-12.25	50.29	Max Avg	Horizontal	153	293	54.0	-3.7	Pass
#3	5703.22	70.21	3.18	-11.34	62.05	Fundamental	Horizontal	100	0	--	--	
#4	6249.93	54.76	3.25	-9.50	48.51	Peak (NRB)	Horizontal	100	0	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overload.												

9.6.1.7. RADWIN RW-9613-4960

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5265.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	3996.00	66.61	2.60	-12.25	56.96	Max Peak	Horizontal	168	42	68.2	-11.3	Pass
#2	3996.00	59.15	2.60	-12.25	49.50	Max Avg	Horizontal	168	42	54.0	-4.5	Pass
#3	5263.53	75.78	2.90	-12.24	66.44	Fundamental	Vertical	100	0	--	--	
#4	6250.07	53.17	3.25	-9.49	46.93	Peak (NRB)	Horizontal	151	38	--	--	Pass
Test Notes: EUT powered by POE.5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	68.53	2.60	-12.25	58.88	Max Peak	Horizontal	152	215	68.2	-9.4	Pass
#2	3995.98	58.09	2.60	-12.25	48.44	Max Avg	Horizontal	152	215	54.0	-5.6	Pass
#3	5304.65	72.59	3.07	-11.96	63.70	Fundamental	Vertical	100	0	--	--	
#4	6250.01	48.78	3.25	-9.49	42.54	Peak (NRB)	Horizontal	100	70	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	3996.07	63.36	2.60	-12.25	53.71	Max Peak	Horizontal	98	118	68.2	-14.5	Pass
#2	3996.07	51.08	2.60	-12.25	41.43	Max Avg	Horizontal	98	118	54.0	-12.6	Pass
#3	5328.47	69.94	2.96	-11.96	60.94	Fundamental	Vertical	100	0	--	--	
#4	6249.96	52.76	3.25	-9.50	46.51	Peak (NRB)	Horizontal	100	51	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	3995.94	59.62	2.60	-12.25	49.97	Max Peak	Horizontal	98	356	68.2	-18.3	Pass
#2	3995.94	54.40	2.60	-12.25	44.75	Max Avg	Horizontal	98	356	54.0	-9.3	Pass
#3	5488.23	60.57	3.17	-11.70	52.04	Fundamental	Vertical	100	0	--	--	
#4	6249.96	54.04	3.25	-9.50	47.79	Peak (NRB)	Horizontal	100	45	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5590.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	3726.72	60.67	2.51	-11.76	51.42	Max Peak	Horizontal	148	145	68.2	-16.8	Pass
#2	3726.72	57.15	2.51	-11.76	47.90	Max Avg	Horizontal	148	145	54.0	-6.1	Pass
#3	3995.96	62.67	2.60	-12.25	53.02	Max Peak	Horizontal	151	115	68.2	-15.2	Pass
#4	3995.96	54.79	2.60	-12.25	45.14	Max Avg	Horizontal	151	115	54.0	-8.9	Pass
#5	5588.39	66.02	3.14	-11.58	57.58	Fundamental	Vertical	100	0	--	--	
#6	6249.90	52.09	3.25	-9.50	45.84	Peak (NRB)	Horizontal	151	82	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5705.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.0	**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	3803.30	61.74	2.54	-11.86	52.42	Max Peak	Horizontal	149	146	68.2	-15.8	Pass
#2	3803.30	58.28	2.54	-11.86	48.96	Max Avg	Horizontal	149	146	54.0	-5.0	Pass
#3	3995.98	70.31	2.60	-12.25	60.66	Max Peak	Horizontal	107	292	68.2	-7.6	Pass
#4	3995.98	59.14	2.60	-12.25	49.49	Max Avg	Horizontal	107	292	54.0	-4.5	Pass
#5	5701.40	68.35	3.19	-11.35	60.19	Fundamental	Vertical	129	0	--	--	
#6	6071.36	56.98	3.23	-10.09	50.12	Peak (NRB)	Vertical	150	1	--	--	Pass
#7	6132.55	55.13	3.30	-9.84	48.59	Peak (NRB)	Vertical	150	5	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

9.6.2. Restricted Edge & Band-Edge Emissions

9.6.2.8. RADWIN MT0268450

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5470 - 5725 MHz

RADWIN MT0268450		Band-Edge Freq	Limit 68.23dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5490.00	5470.00	65.04	50.75	1.0
40MHz	5500.00	5470.00	65.68	50.75	1.0

5250 - 5350 MHz

RADWIN MT0268450		Band-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5330.00	5350.00	65.96	52.91	0.0
40MHz	5320.00	5350.00	66.29	53.60	0.0

*Note: No 80 MHz mode provided for this range with this antenna

Click on the links to view the data.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5439.86	13.14	3.11	34.50	50.75	Max Avg	Horizontal	163	0	54.0	-3.3	Pass
#3	5470.00	27.43	3.06	34.55	65.04	Max Peak	Horizontal	163	0	74.0	-9.0	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. PS 1.0 Max PSD												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	40MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5500.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5440.16	13.14	3.11	34.50	50.75	Max Avg	Horizontal	163	0	54.0	-3.3	Pass
#3	5470.00	28.07	3.06	34.55	65.68	Max Peak	Horizontal	163	0	68.2	-2.6	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. 0.4 dB DCCF added to average measurement												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	0.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	28.34	3.06	34.46	65.86	Max Peak	Horizontal	163	5	74.0	-8.1	Pass
#3	5440.12	15.30	3.11	34.50	52.91	Max Avg	Horizontal	163	5	54.0	-1.1	Pass
#2	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--

Test Notes: EUT powered by POE.

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN MT0268450	**Variant:**	40MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5320.00	**Data Rate:**	13.00 MBit/s
Power Setting:	0.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	28.77	3.06	34.46	66.29	Max Peak	Horizontal	163	5	74.0	-7.7	Pass
#3	5440.12	15.99	3.11	34.50	53.60	Max Avg	Horizontal	163	5	54.0	-0.4	Pass
#2	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. 0.4 dB DCCF added to avg measurement												

Equipment Configuration for TX Spurious & Restricted Band Emissions

Antenna:	RADWIN MT0268450	**Variant:**	20MHz
Antenna Gain (dBi):	25	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5265.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**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	3995.94	60.03	2.60	-12.25	50.38	Max Peak	Horizontal	124	200	68.2	-17.9	Pass
#2	3995.94	54.90	2.60	-12.25	45.25	Max Avg	Horizontal	124	200	54.0	-8.8	Pass
#3	5268.16	70.03	2.91	-12.21	60.73	Fundamental	Horizontal	100	0	--	--	
#4	6249.97	50.72	3.25	-9.50	44.47	Peak (NRB)	Horizontal	100	121	--	--	Pass
Test Notes: EUT powered by POE. 5G Notch in front of amp to prevent overloads.												

9.6.2.9. RADWIN RW-9105-4958

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5470 - 5725 MHz

RADWIN RW-9105-4958		Band Edge Freq	Limit 68.23dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5490.00	5470.00	67.97	48.65	8.5
40MHz	5500.00	5470.00	66.92	48.52	7.5
80MHz	5525.00	5470.00	67.32	49.29	7.5

5250 - 5350 MHz

RADWIN RW-9105-4958		Band-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5330.00	5350.00	68.92	53.48	9.0
40MHz	5320.00	5350.00	68.85	53.48	8.0
80MHz	5300.00	5350.00	72.10	53.78	7.5

Click on the links to view the data.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	8.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5423.93	11.07	3.07	34.51	48.65	Max Avg	Vertical	142	0	54.0	-5.4	Pass
#3	5470.00	30.36	3.06	34.55	67.97	Max Peak	Vertical	142	0	68.2	-0.3	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5500.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5423.93	10.94	3.07	34.51	48.52	Max Avg	Vertical	142	0	54.0	-5.5	Pass
#3	5469.70	29.31	3.06	34.55	66.92	Max Peak	Vertical	142	0	68.2	-1.3	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. 0.4 dB DCCF added to average measurement.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5525.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5460.00	11.70	3.06	34.53	49.29	Max Avg	Vertical	142	0	54.0	-4.7	Pass
#3	5462.79	30.12	3.07	34.93	67.32	Max Peak	Vertical	142	0	68.2	-0.5	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. 1.25 dB DCCF added to average measurement.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	20MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	15.96	3.06	34.46	53.48	Max Avg	Vertical	147	1	54.0	-0.5	Pass
#2	5350.00	31.40	3.06	34.46	68.92	Max Peak	Vertical	147	1	74.0	-5.1	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	40MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5320.00	**Data Rate:**	13.00 MBit/s
Power Setting:	8.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	15.96	3.06	34.46	53.48	Max Avg	Vertical	147	1	54.0	-0.5	Pass
#3	5350.96	31.33	3.06	34.46	68.85	Max Peak	Vertical	147	1	74.0	-5.2	Pass
#2	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. 0.4 dB DCCF added to average measurement.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-4958	**Variant:**	80MHz
Antenna Gain (dBi):	16	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.5	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	16.26	3.06	34.46	53.78	Max Avg	Vertical	147	1	54.0	-0.2	Pass
#2	5350.00	34.58	3.06	34.46	72.10	Max Peak	Vertical	147	1	74.0	-1.9	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. 1.25 dB DCCF added to average measurement.												

9.6.2.10. RADWIN RW-9105-5159

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5470 - 5725 MHz

RADWIN RW-9105-5159		Restricted-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5490.00	5470.00	67.67	47.16	9.5
40MHz	5500.00	5470.00	67.84	48.71	9.5
80MHz	5525.00	5470.00	67.34	53.48	10.5

5250 - 5350 MHz

RADWIN RW-9105-5159		Band-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5330.00	5350.00	68.06	53.48	10.
40MHz	5320.00	5350.00	67.28	53.79	9.0
80MHz	5300.00	5350.00	70.23	53.24	7.5

Click on the links to view the data.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5423.93	9.58	3.07	34.51	47.16	Max Avg	Horizontal	158	0	54.0	-6.8	Pass
#3	5470.00	30.06	3.06	34.55	67.67	Max Peak	Horizontal	158	0	68.2	-0.6	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5500.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5460.00	11.12	3.06	34.53	48.71	Max Avg	Horizontal	158	0	54.0	-5.4	Pass
#3	5469.70	30.23	3.06	34.55	67.84	Max Peak	Horizontal	158	0	68.2	-0.4	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. Avg Measurements include DCCF of 0.4 dB.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5525.00	**Data Rate:**	13.00 MBit/s
Power Setting:	10.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5460.00	15.49	3.06	34.53	53.48	Max Avg	Horizontal	158	0	54.0	-0.1	Pass
#3	5468.50	29.72	3.07	34.55	67.34	Max Peak	Horizontal	158	0	68.2	-0.9	Pass
#2	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#4	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. Avg measurements have 1.25 dB DCCF added												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	20MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	10.	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	15.96	3.06	34.46	53.48	Max Avg	Horizontal	158	0	54.0	-0.5	Pass
#2	5350.00	30.54	3.06	34.46	68.06	Max Peak	Horizontal	158	0	74.0	-5.9	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--

Test Notes: EUT powered by POE.

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	40MHz
Antenna Gain (dBi):	13.00	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5320.00	**Data Rate:**	13.00 MBit/s
Power Setting:	9.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	16.27	3.06	34.46	53.79	Max Avg	Horizontal	158	0	54.0	-0.2	Pass
#3	5352.89	29.76	3.05	34.47	67.28	Max Peak	Horizontal	158	0	74.0	-6.7	Pass
#2	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. Avg measurements have 0.4 dB DCCF added												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9105-5159	**Variant:**	80MHz
Antenna Gain (dBi):	13	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	7.5	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	16.27	3.06	34.46	53.24	Max Avg	Horizontal	158	0	54.0	-0.3	Pass
#2	5350.00	32.71	3.06	34.46	70.23	Max Peak	Horizontal	158	0	74.0	-3.8	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. Avg measurements have 1.25 dB DCCF added												

9.6.2.11. RADWIN RW-9613-4960

RESULTS SUMMARY FOR RADIATED BAND-EDGE EMISSIONS

5470 - 5725 MHz

RADWIN RW-9613-4960		Band Edge Freq	Limit 68.23dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5490.00	5470.00	67.64	51.47	3.5
40MHz	5500.00	5470.00	67.42	51.33	3.0
80MHz	5525.00	5470.00	67.61	51.56	3.5

5250 - 5350 MHz

RADWIN RW-9613-4960		Band-Edge Freq	Limit 74.0dBµV/m	Limit 54.0dBµV/m	Power Setting
Operational Mode	Operating Frequency (MHz)	MHz	dBµV/m	dBµV/m	
20MHz	5330.00	5350.00	68.60	53.34	3.5
40MHz	5320.00	5350.00	69.61	53.01	3.0
80MHz	5300.00	5350.00	72.50	53.81	1.0

Click on the links to view the data.

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5490.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5424.01	13.89	3.07	34.51	51.47	Max Avg	Vertical	150	0	54.0	-2.5	Pass
#2	5460.00	11.51	3.06	34.53	49.10	Max Avg	Vertical	150	0	54.0	-4.9	Pass
#4	5469.40	30.03	3.06	34.55	67.64	Max Peak	Vertical	150	0	68.2	-0.6	Pass
#3	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#5	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	40MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5500.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.0	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5424.01	13.76	3.07	34.51	51.33	Max Avg	Vertical	150	0	54.0	-2.7	Pass
#2	5460.00	12.57	3.06	34.53	50.26	Max Avg	Vertical	150	0	54.0	-3.7	Pass
#4	5470.00	29.81	3.06	34.55	67.42	Max Peak	Vertical	150	0	68.2	-0.8	Pass
#3	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#5	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. DCCF of 0.4 dB added to average measurement.												

Equipment Configuration for Restricted Lower Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	80MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5525.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5350.00 - 5500.00 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	5424.01	13.98	3.07	34.51	51.56	Max Avg	Vertical	150	0	54.0	-2.4	Pass
#2	5460.00	13.79	3.06	34.53	51.38	Max Avg	Vertical	150	0	54.0	-2.6	Pass
#4	5466.99	29.98	3.08	34.55	67.61	Max Peak	Vertical	150	0	68.2	-0.6	Pass
#3	5460.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
#5	5470.00	--	--	--	--	Band-Edge	--	--	--	--	--	--
Test Notes: EUT powered by POE. DCCF of 1.25 dB added to average measurement.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	20MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	99
Channel Frequency (MHz):	5330.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.5	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	31.08	3.06	34.46	68.60	Max Peak	Vertical	149	0	74.0	-5.4	Pass
#2	5350.00	15.12	3.06	34.46	52.64	Max Avg	Vertical	149	0	54.0	-1.4	Pass
#4	5424.07	15.76	3.07	34.51	53.34	Max Avg	Vertical	149	0	54.0	-0.7	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	40MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	90
Channel Frequency (MHz):	5320.00	**Data Rate:**	13.00 MBit/s
Power Setting:	3.0	**Tested By:**	JMH

Test Measurement Results

5300.00 - 5460.00 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	5350.00	16.32	3.06	34.46	53.84	Max Avg	Vertical	149	0	54.0	-0.2	Pass
#3	5350.96	32.09	3.06	34.46	69.61	Max Peak	Vertical	149	0	74.0	-4.4	Pass
#4	5424.08	15.43	3.07	34.51	53.01	Max Avg	Vertical	149	0	54.0	-1.0	Pass
#2	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. DCCF of 0.4 dB added to average measurement.												

Equipment Configuration for Restricted Upper Band-Edge Emissions

Antenna:	RADWIN RW-9613-4960	**Variant:**	80MHz
Antenna Gain (dBi):	23	**Modulation:**	OFDM
Beam Forming Gain (Y):	Not Applicable	**Duty Cycle (%):**	75
Channel Frequency (MHz):	5300.00	**Data Rate:**	13.00 MBit/s
Power Setting:	1.0	**Tested By:**	JMH

Test Measurement Results

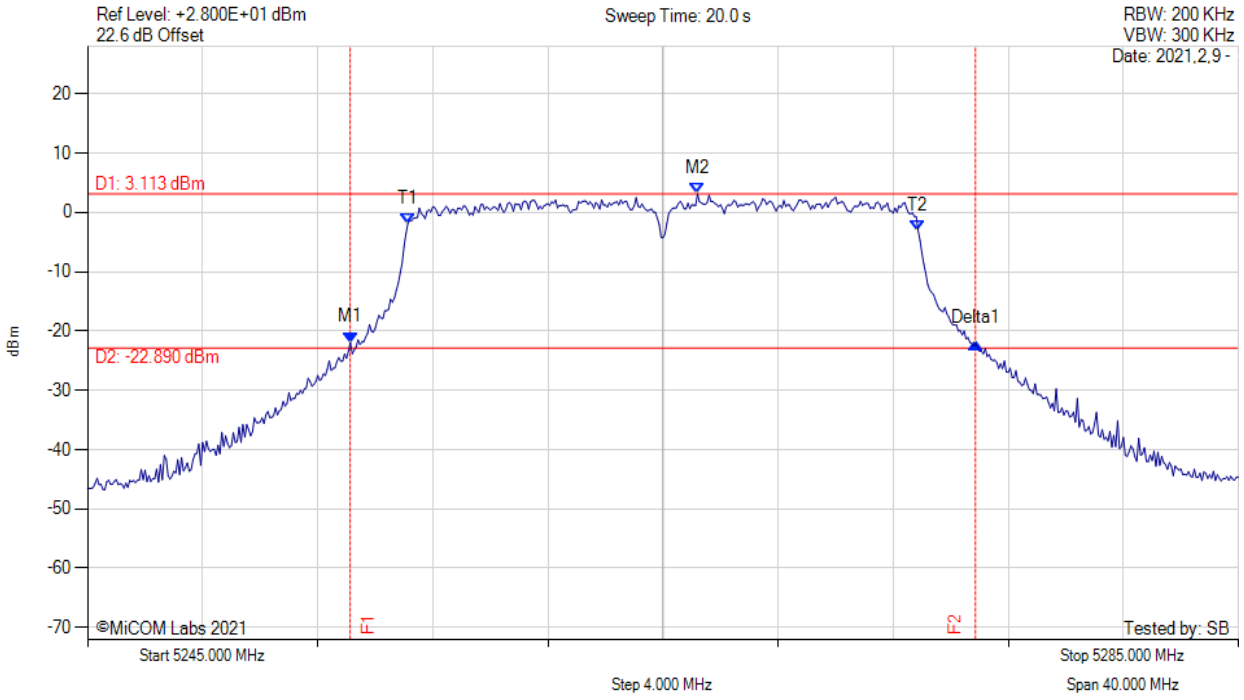
5300.00 - 5460.00 MHz												
Num	**Frequency MHz**	**Raw dBµV**	**Cable Loss dB**	**AF dB/m**	**Level dBµV/m**	**Measurement Type**	**Pol**	**Hgt cm**	**Azt Deg**	**Limit dBµV/m**	**Margin dB**	**Pass /Fail**
#1	5350.00	16.08	3.06	34.46	53.60	Max Avg	Vertical	149	0	54.0	-0.4	Pass
#2	5350.00	34.98	3.06	34.46	72.50	Max Peak	Vertical	149	0	74.0	-1.5	Pass
#4	5424.09	16.12	3.08	34.51	53.81	Max Avg	Vertical	149	0	54.0	-0.2	Pass
#3	5350.00	--	--	--	--	Restricted-Band	--	--	--	--	--	--
Test Notes: EUT powered by POE. DCCF of 1.25 dB added to average measurement.												

A. APPENDIX - GRAPHICAL IMAGES

A.1. 26 dB & 99% Bandwidth

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5265.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

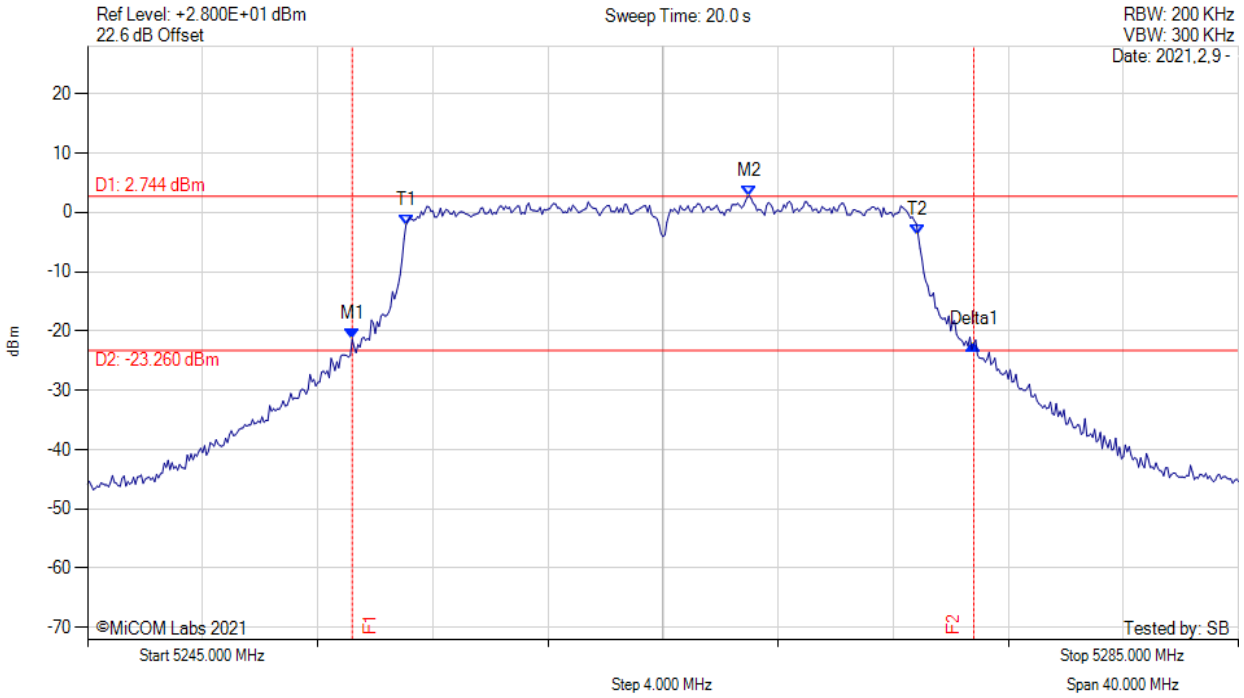


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.130 MHz : -21.932 dBm M2 : 5266.200 MHz : 3.113 dBm Delta1 : 21.730 MHz : -0.135 dB T1 : 5256.133 MHz : -1.856 dBm T2 : 5273.867 MHz : -3.035 dBm OBW : 17.707 MHz	Measured 26 dB Bandwidth: 21.730 MHz Measured 99% Bandwidth: 17.707 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5265.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

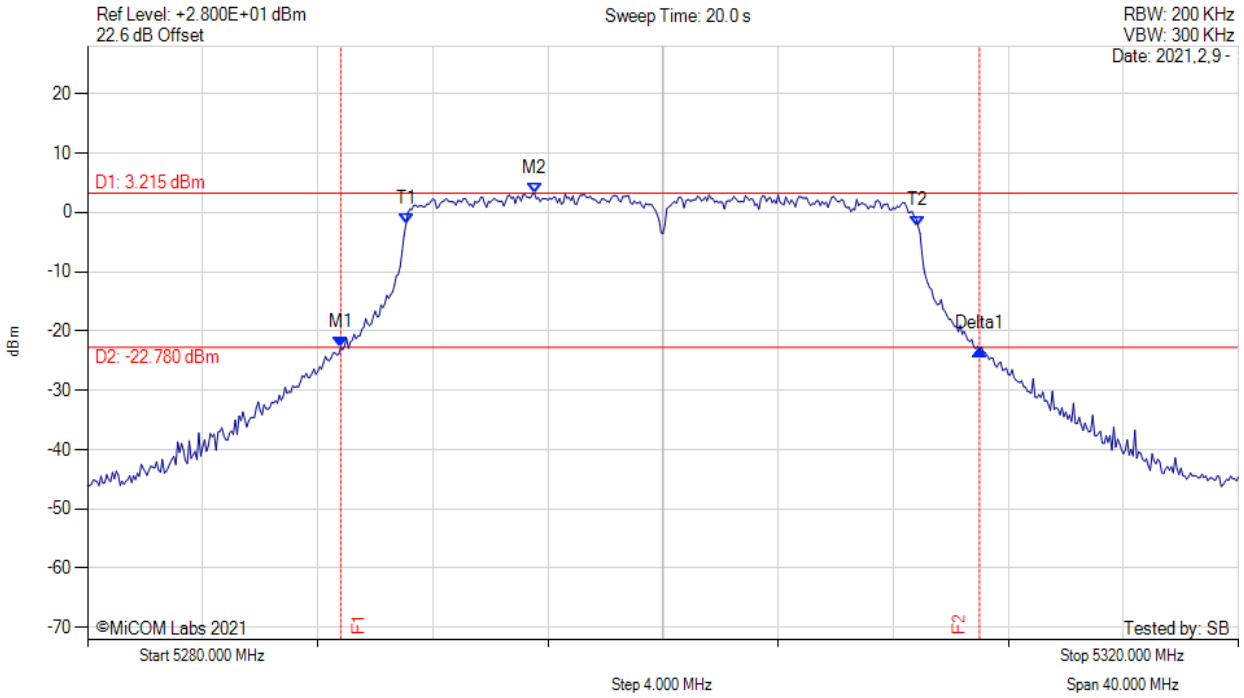


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.200 MHz : -21.398 dBm M2 : 5268.000 MHz : 2.744 dBm Delta1 : 21.600 MHz : -0.852 dB T1 : 5256.067 MHz : -2.115 dBm T2 : 5273.867 MHz : -3.752 dBm OBW : 17.738 MHz	Measured 26 dB Bandwidth: 21.600 MHz Measured 99% Bandwidth: 17.738 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

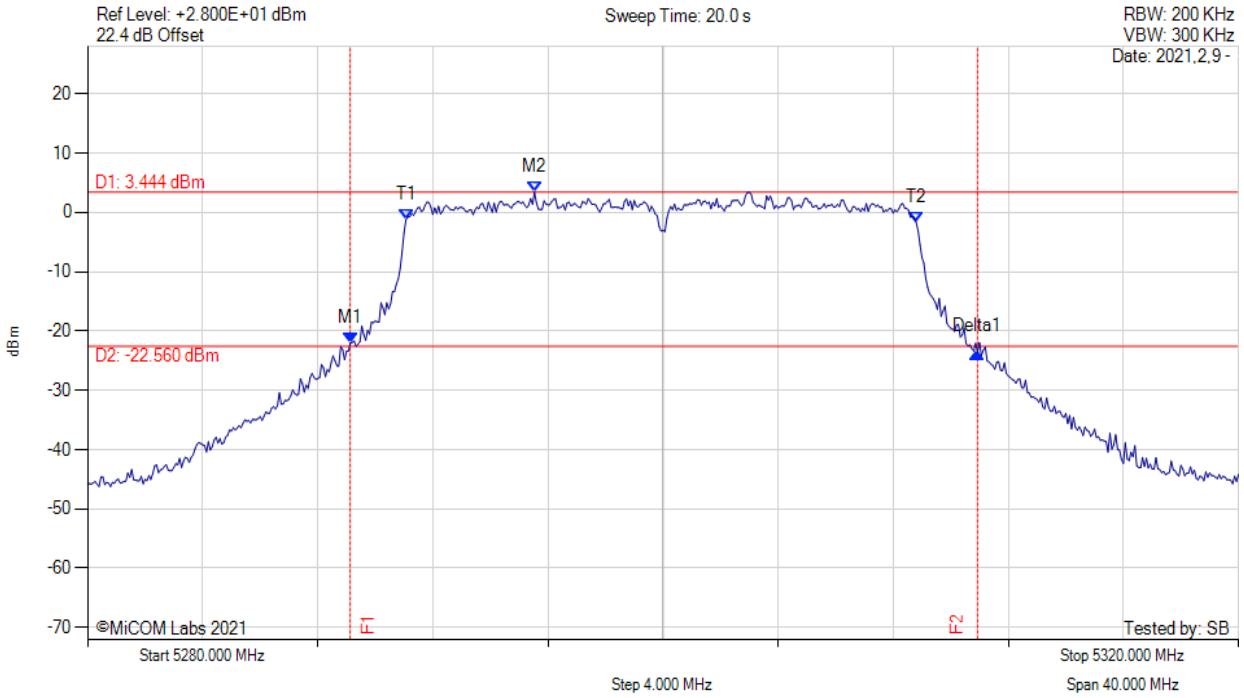


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5288.800 MHz : -22.759 dBm M2 : 5295.530 MHz : 3.215 dBm Delta1 : 22.200 MHz : -0.343 dB T1 : 5291.067 MHz : -1.966 dBm T2 : 5308.867 MHz : -2.299 dBm OBW : 17.722 MHz	Measured 26 dB Bandwidth: 22.200 MHz Measured 99% Bandwidth: 17.722 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

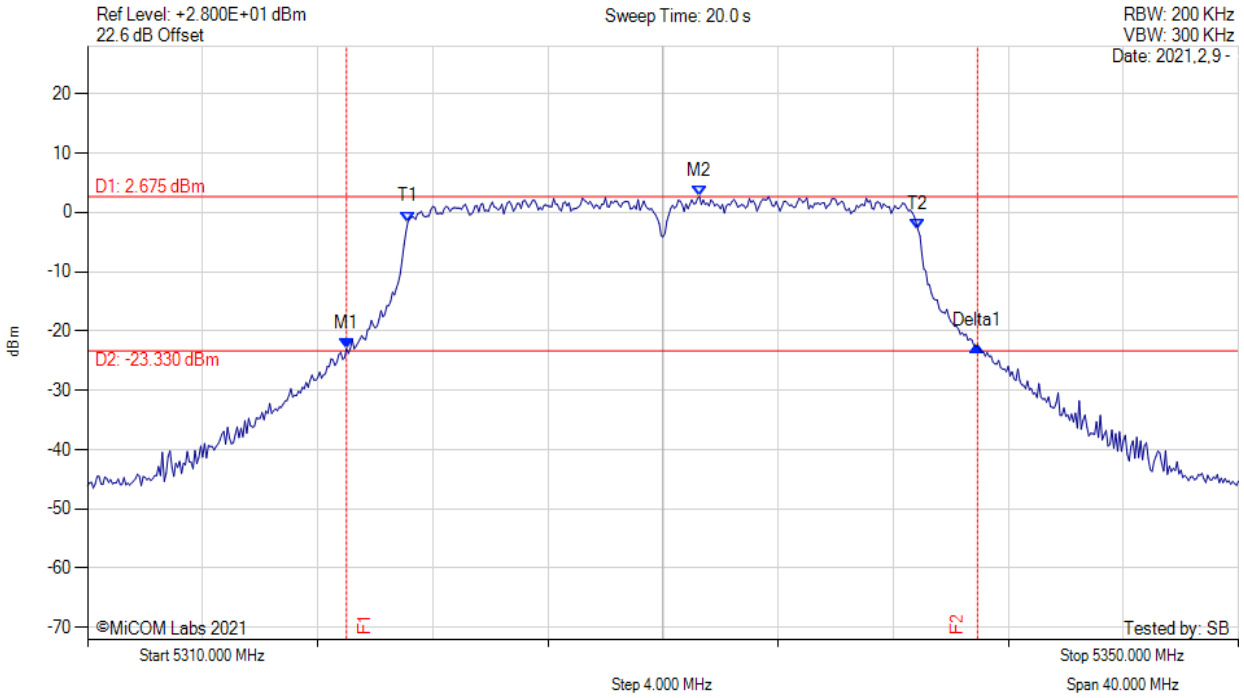


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5289.130 MHz : -22.075 dBm M2 : 5295.530 MHz : 3.444 dBm Delta1 : 21.800 MHz : -1.480 dB T1 : 5291.067 MHz : -1.211 dBm T2 : 5308.800 MHz : -1.753 dBm OBW : 17.742 MHz	Measured 26 dB Bandwidth: 21.800 MHz Measured 99% Bandwidth: 17.742 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5330.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

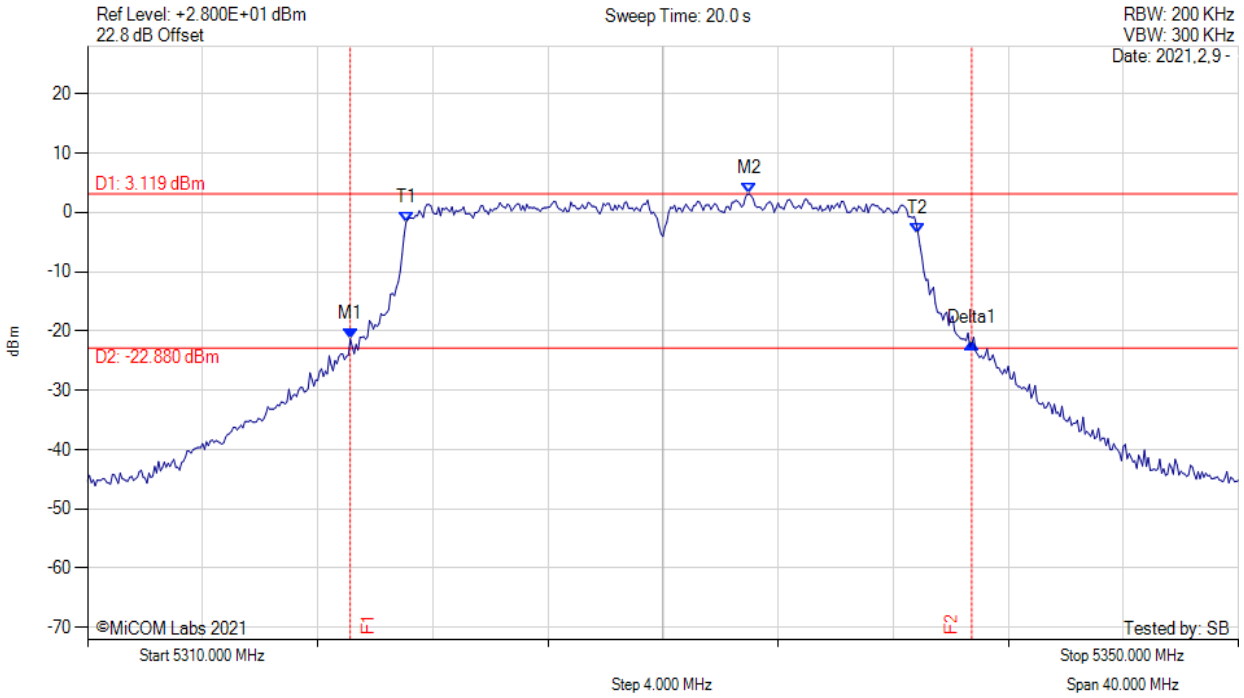


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5319.000 MHz : -22.995 dBm M2 : 5331.270 MHz : 2.675 dBm Delta1 : 21.930 MHz : 0.441 dB T1 : 5321.133 MHz : -1.584 dBm T2 : 5338.867 MHz : -2.954 dBm OBW : 17.719 MHz	Measured 26 dB Bandwidth: 21.930 MHz Measured 99% Bandwidth: 17.719 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5330.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

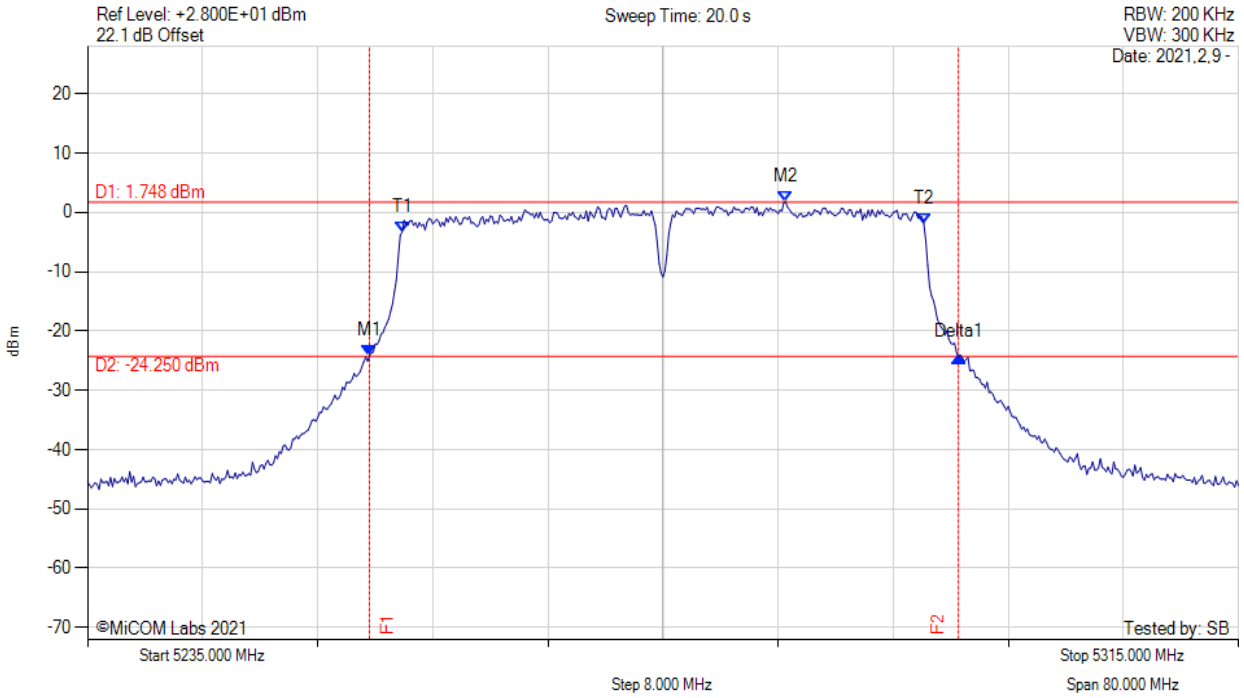


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5319.130 MHz : -21.348 dBm M2 : 5333.000 MHz : 3.119 dBm Delta1 : 21.600 MHz : -0.656 dB T1 : 5321.067 MHz : -1.711 dBm T2 : 5338.867 MHz : -3.522 dBm OBW : 17.744 MHz	Measured 26 dB Bandwidth: 21.600 MHz Measured 99% Bandwidth: 17.744 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5275.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

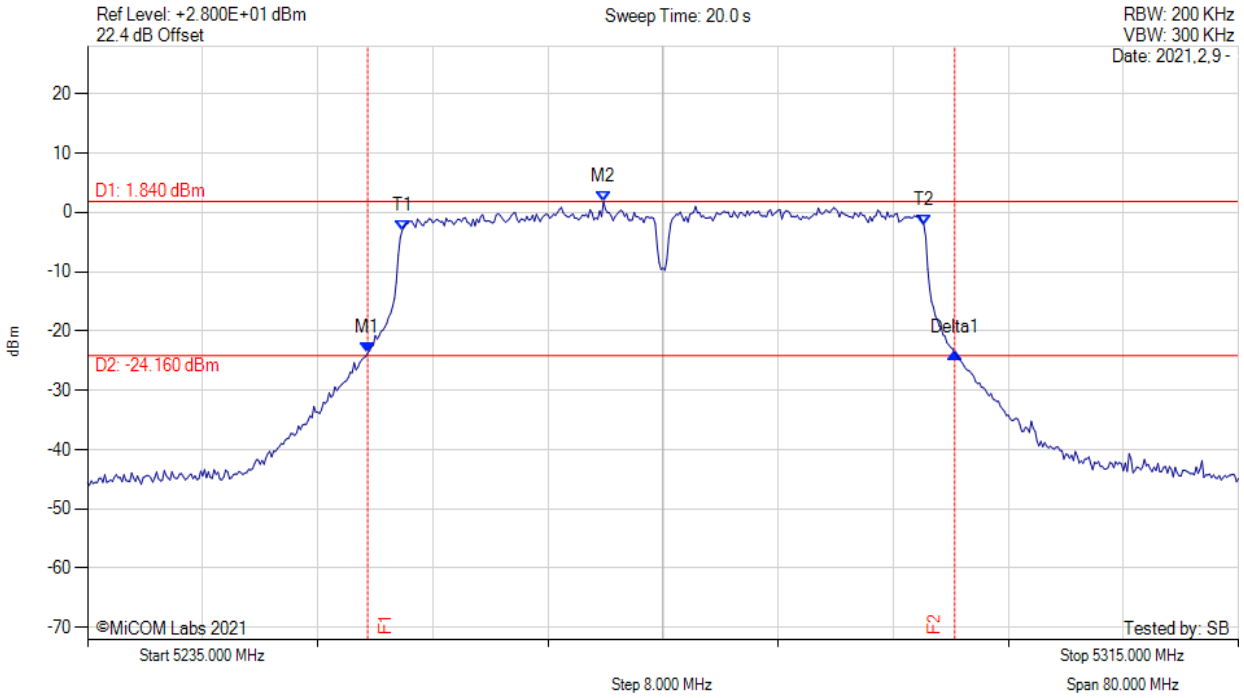


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.600 MHz : -24.119 dBm M2 : 5283.530 MHz : 1.748 dBm Delta1 : 40.930 MHz : -0.213 dB T1 : 5256.867 MHz : -3.300 dBm T2 : 5293.133 MHz : -1.917 dBm OBW : 36.144 MHz	Measured 26 dB Bandwidth: 40.930 MHz Measured 99% Bandwidth: 36.144 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5275.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

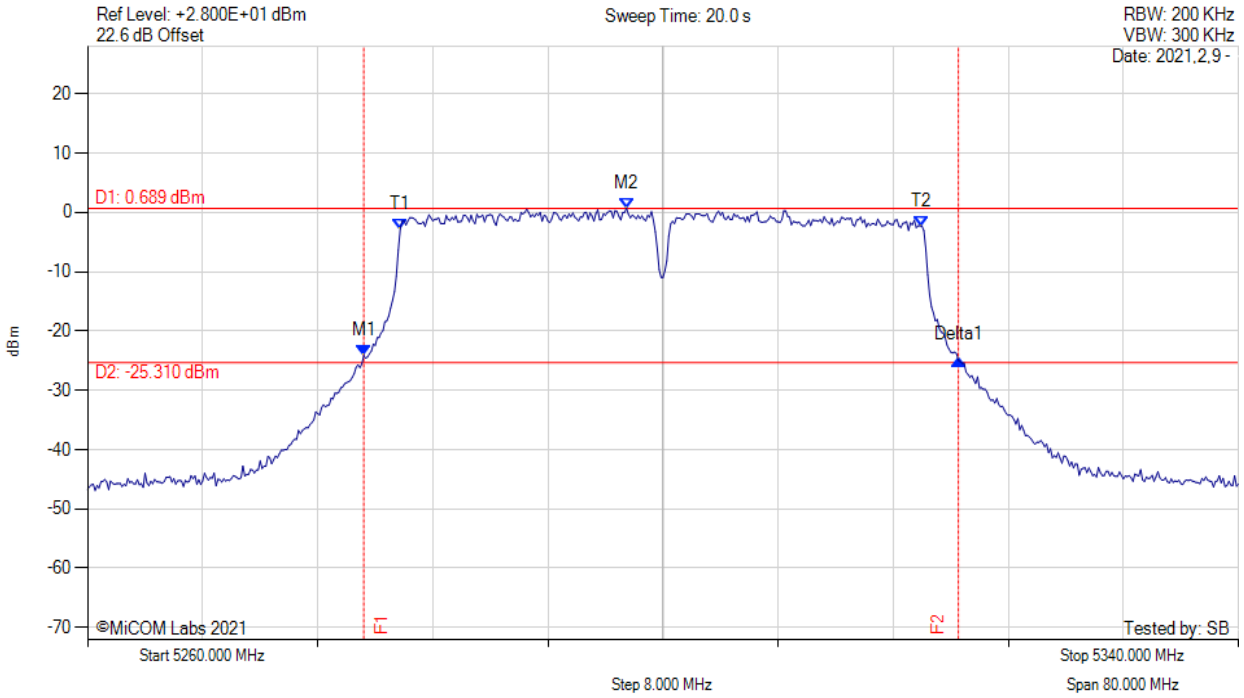


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.470 MHz : -23.736 dBm M2 : 5270.870 MHz : 1.840 dBm Delta1 : 40.800 MHz : 0.076 dB T1 : 5256.867 MHz : -3.072 dBm T2 : 5293.133 MHz : -2.125 dBm OBW : 36.175 MHz	Measured 26 dB Bandwidth: 40.800 MHz Measured 99% Bandwidth: 36.175 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

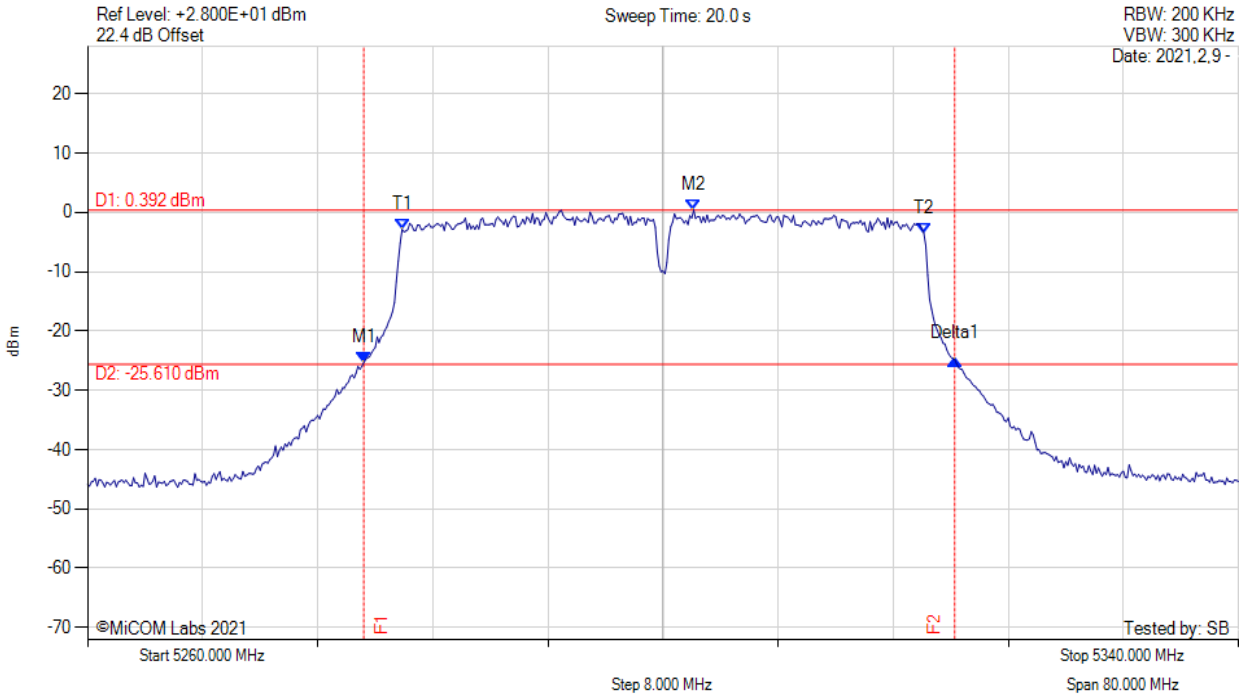


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5279.200 MHz : -24.122 dBm M2 : 5297.470 MHz : 0.689 dBm Delta1 : 41.330 MHz : -0.805 dB T1 : 5281.733 MHz : -2.858 dBm T2 : 5318.000 MHz : -2.311 dBm OBW : 36.211 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.211 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

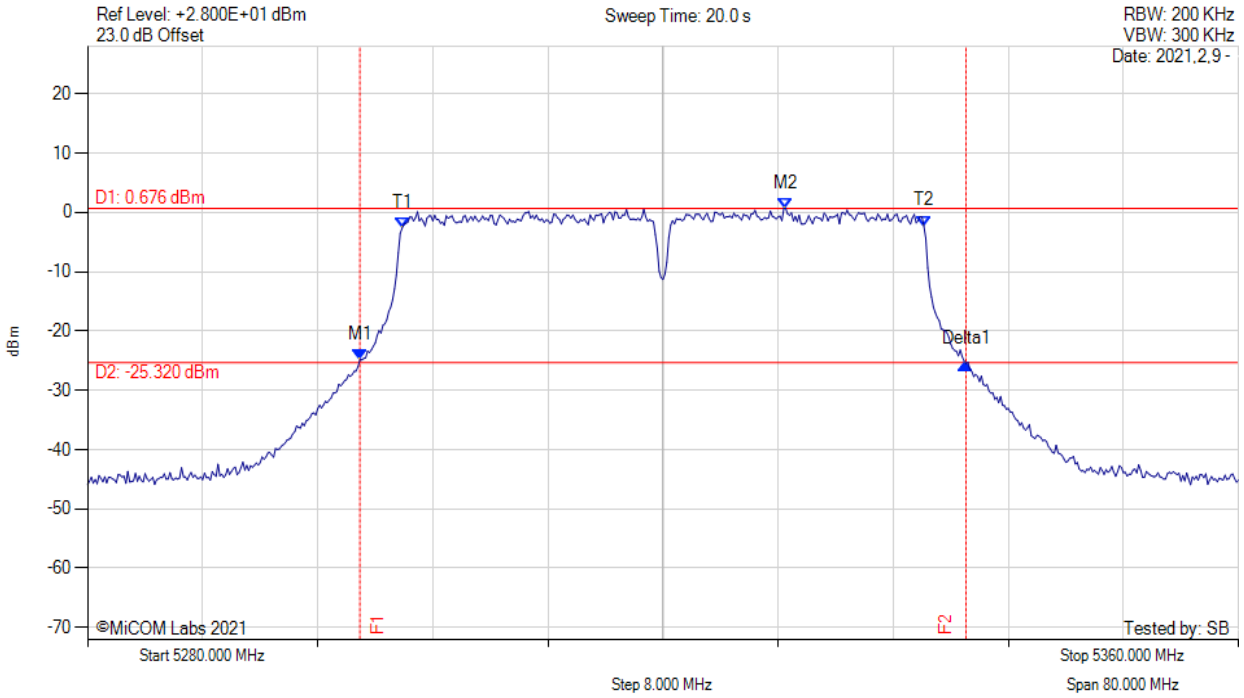


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5279.200 MHz : -25.322 dBm M2 : 5302.130 MHz : 0.392 dBm Delta1 : 41.070 MHz : 0.589 dB T1 : 5281.867 MHz : -2.863 dBm T2 : 5318.133 MHz : -3.485 dBm OBW : 36.156 MHz	Measured 26 dB Bandwidth: 41.070 MHz Measured 99% Bandwidth: 36.156 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5320.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

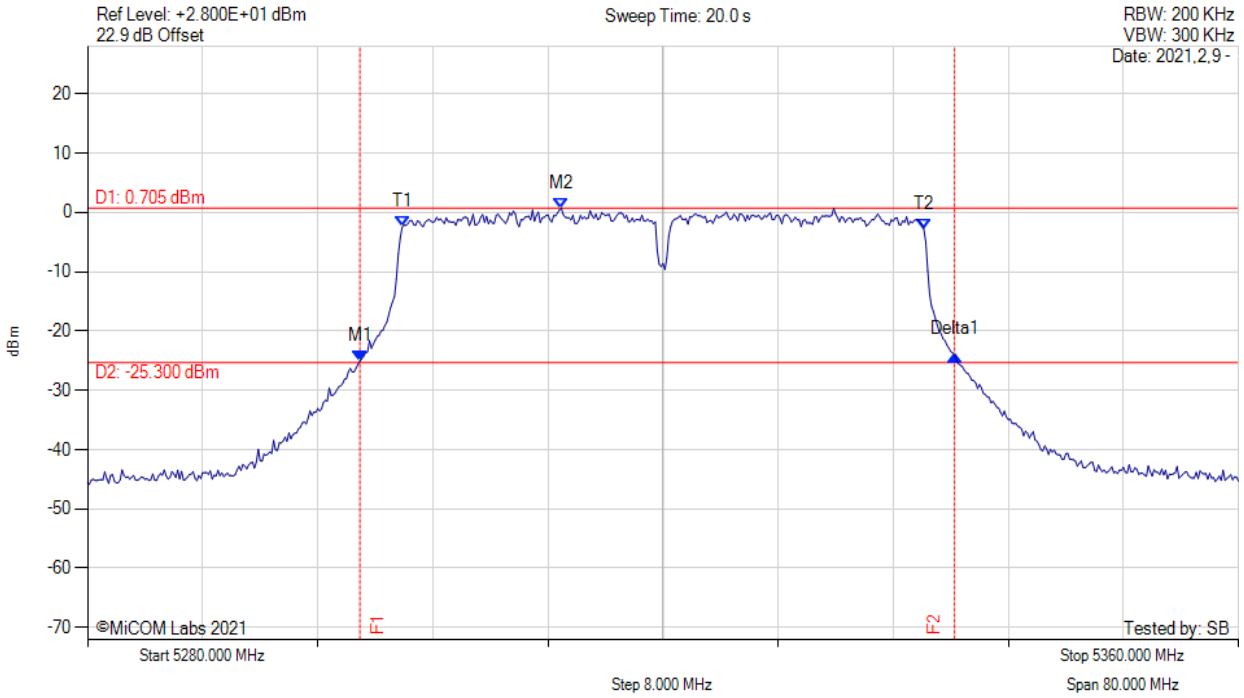


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5298.930 MHz : -24.856 dBm M2 : 5328.530 MHz : 0.676 dBm Delta1 : 42.130 MHz : -0.640 dB T1 : 5301.867 MHz : -2.670 dBm T2 : 5338.133 MHz : -2.307 dBm OBW : 36.247 MHz	Measured 26 dB Bandwidth: 42.130 MHz Measured 99% Bandwidth: 36.247 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5320.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

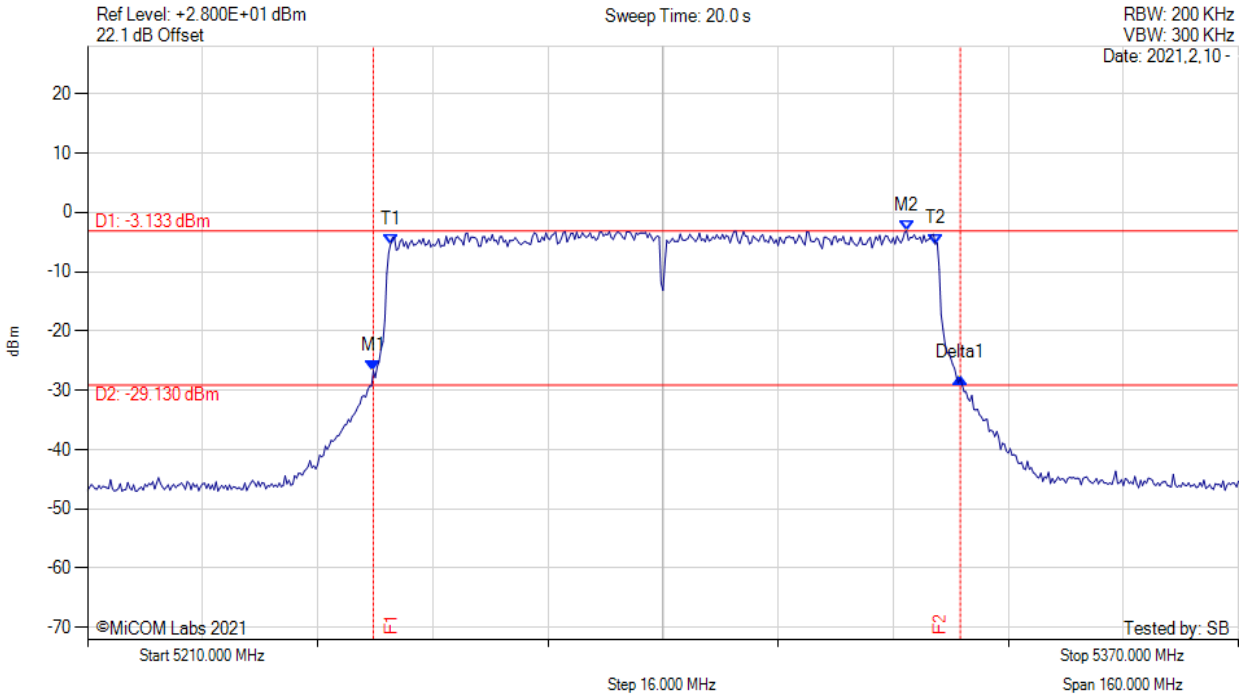


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5298.930 MHz : -25.072 dBm M2 : 5312.930 MHz : 0.705 dBm Delta1 : 41.330 MHz : 1.046 dB T1 : 5301.867 MHz : -2.502 dBm T2 : 5338.133 MHz : -2.836 dBm OBW : 36.194 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.194 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5290.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

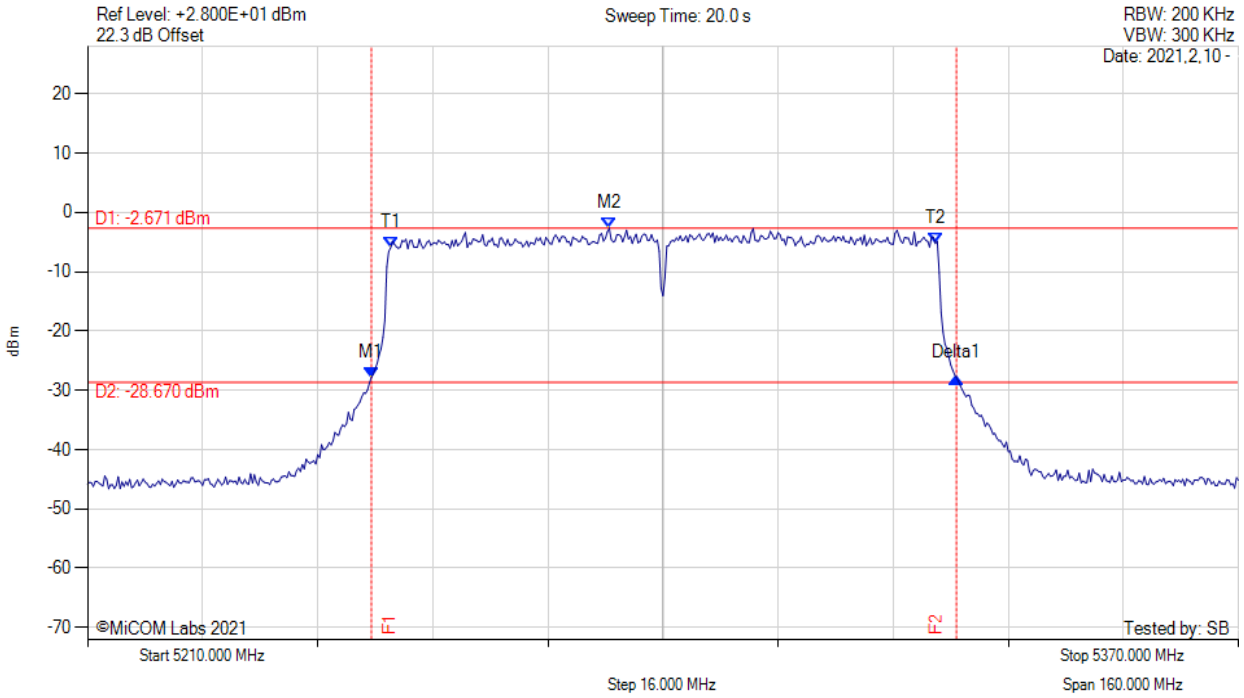


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5249.730 MHz : -26.707 dBm M2 : 5323.870 MHz : -3.133 dBm Delta1 : 81.600 MHz : -1.264 dB T1 : 5252.133 MHz : -5.368 dBm T2 : 5327.867 MHz : -5.322 dBm OBW : 75.702 MHz	Measured 26 dB Bandwidth: 81.600 MHz Measured 99% Bandwidth: 75.702 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5290.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

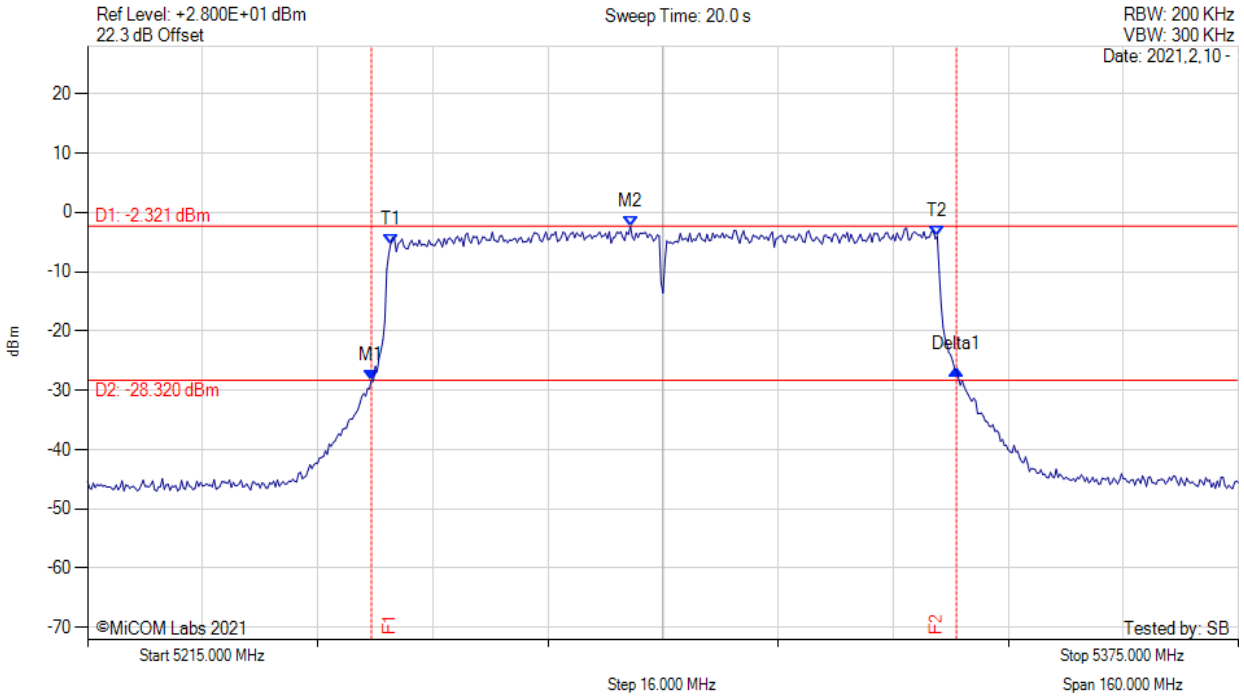


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5249.470 MHz : -27.784 dBm M2 : 5282.530 MHz : -2.671 dBm Delta1 : 81.330 MHz : -0.072 dB T1 : 5252.133 MHz : -6.012 dBm T2 : 5327.867 MHz : -5.248 dBm OBW : 75.777 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.777 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5295.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

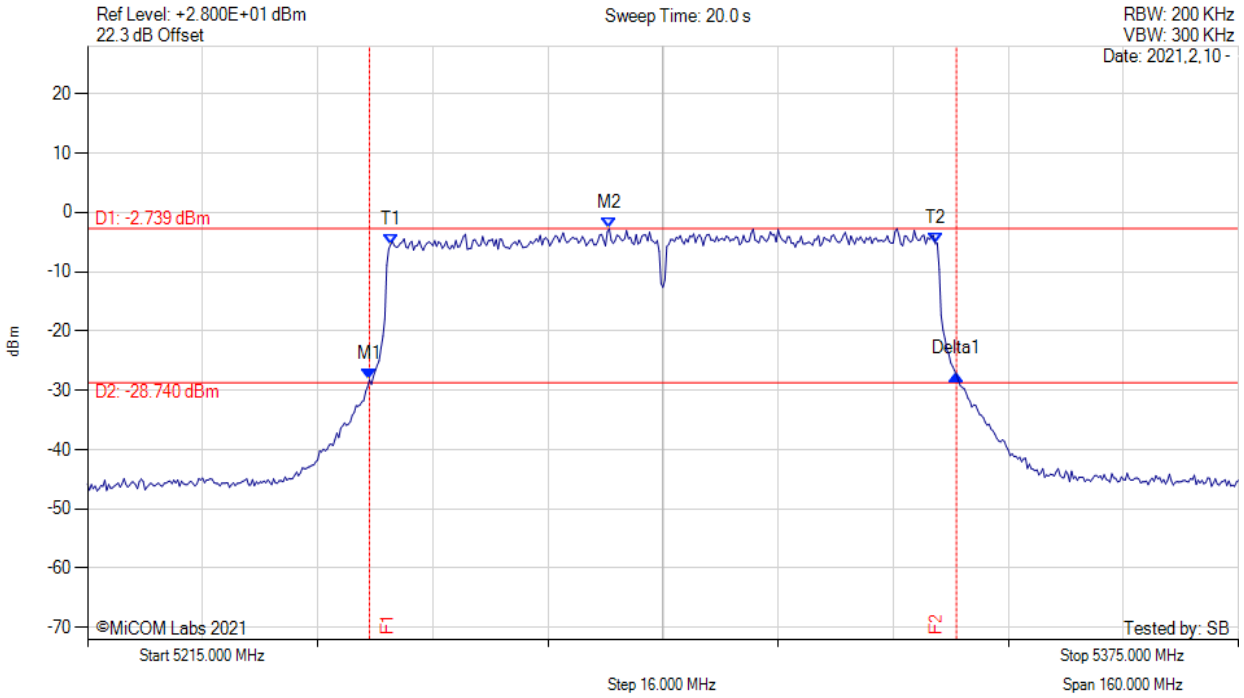


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.470 MHz : -28.261 dBm M2 : 5290.470 MHz : -2.321 dBm Delta1 : 81.330 MHz : 1.713 dB T1 : 5257.133 MHz : -5.433 dBm T2 : 5333.133 MHz : -4.005 dBm OBW : 75.739 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.739 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5295.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

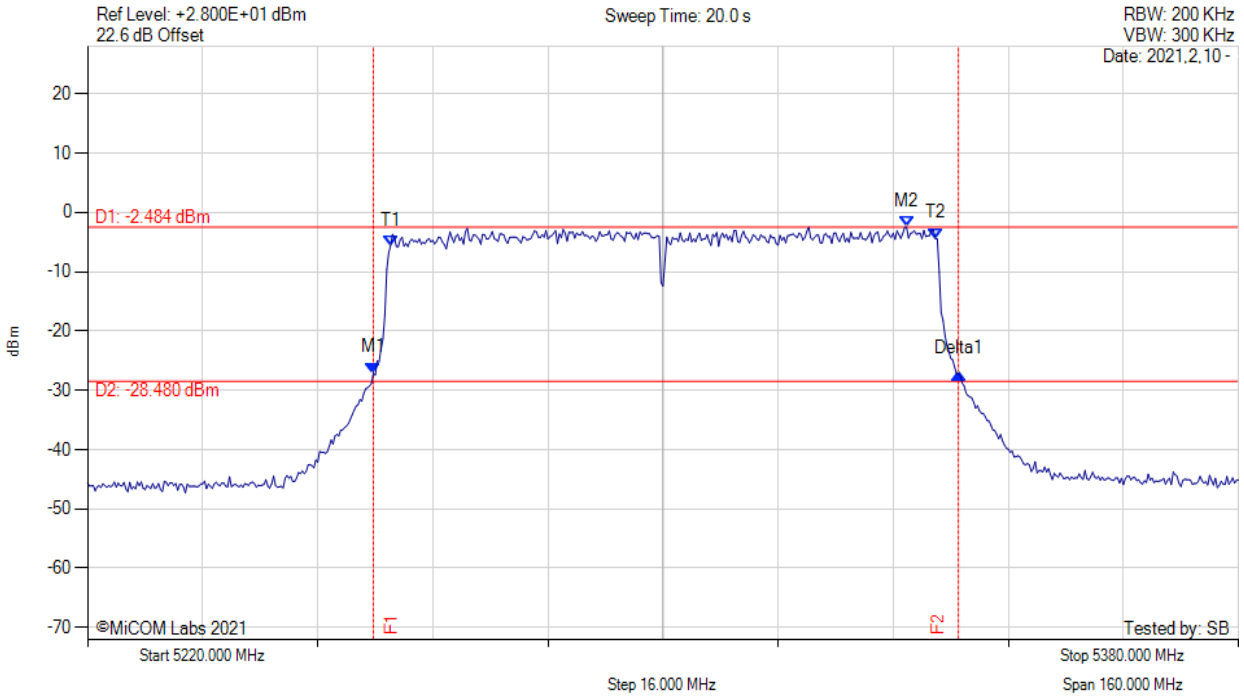


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.200 MHz : -28.200 dBm M2 : 5287.530 MHz : -2.739 dBm Delta1 : 81.600 MHz : 0.891 dB T1 : 5257.133 MHz : -5.455 dBm T2 : 5332.867 MHz : -5.277 dBm OBW : 75.820 MHz	Measured 26 dB Bandwidth: 81.600 MHz Measured 99% Bandwidth: 75.820 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

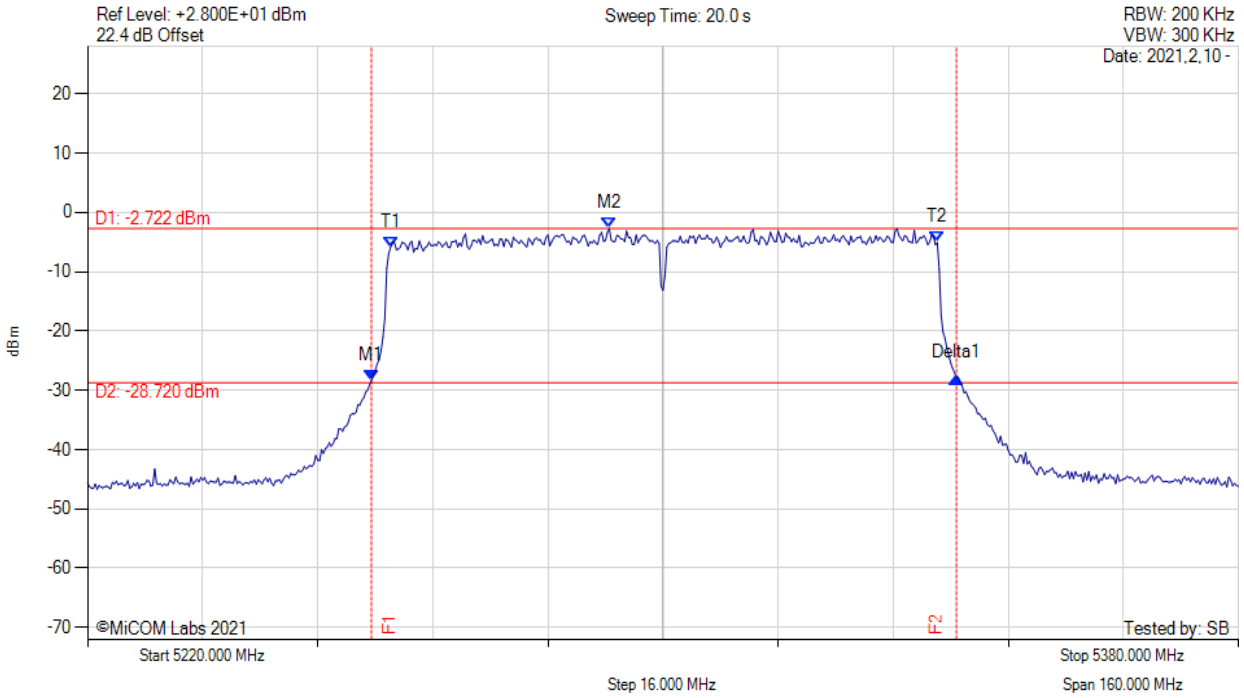


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5259.730 MHz : -27.067 dBm M2 : 5333.870 MHz : -2.484 dBm Delta1 : 81.330 MHz : -0.082 dB T1 : 5262.133 MHz : -5.596 dBm T2 : 5337.867 MHz : -4.408 dBm OBW : 75.691 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.691 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

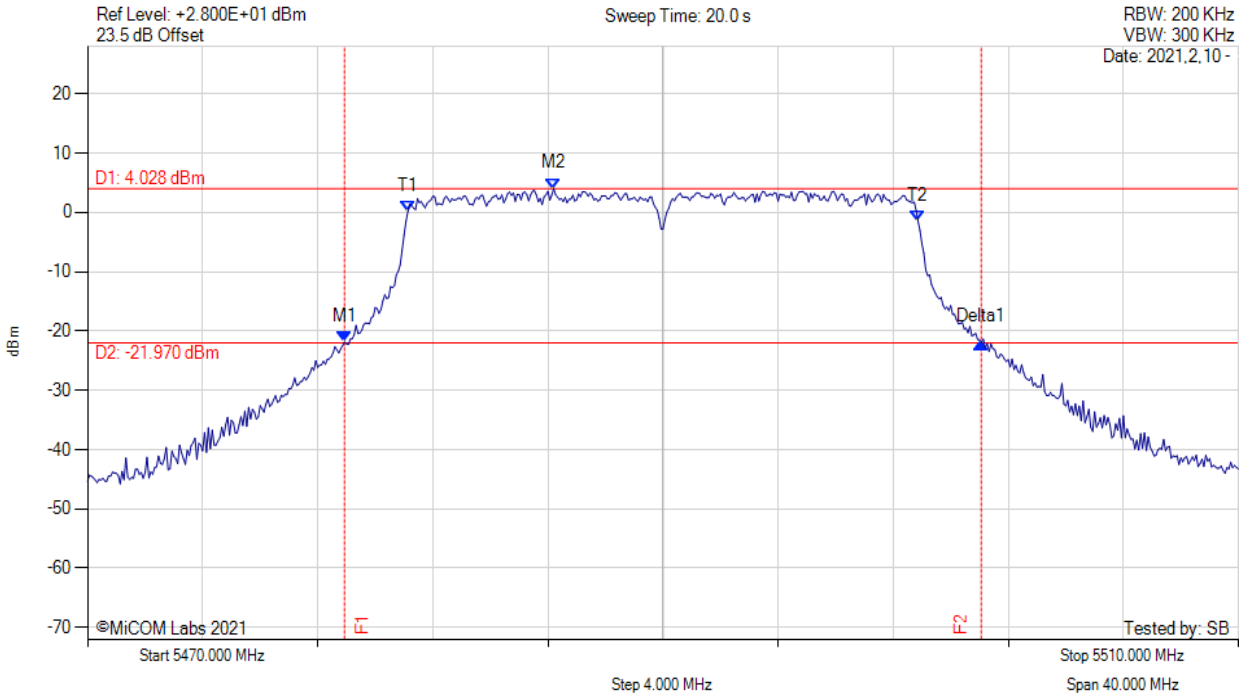


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5259.470 MHz : -28.362 dBm M2 : 5292.530 MHz : -2.722 dBm Delta1 : 81.330 MHz : 0.539 dB T1 : 5262.133 MHz : -5.892 dBm T2 : 5338.133 MHz : -5.065 dBm OBW : 75.764 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.764 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5490.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

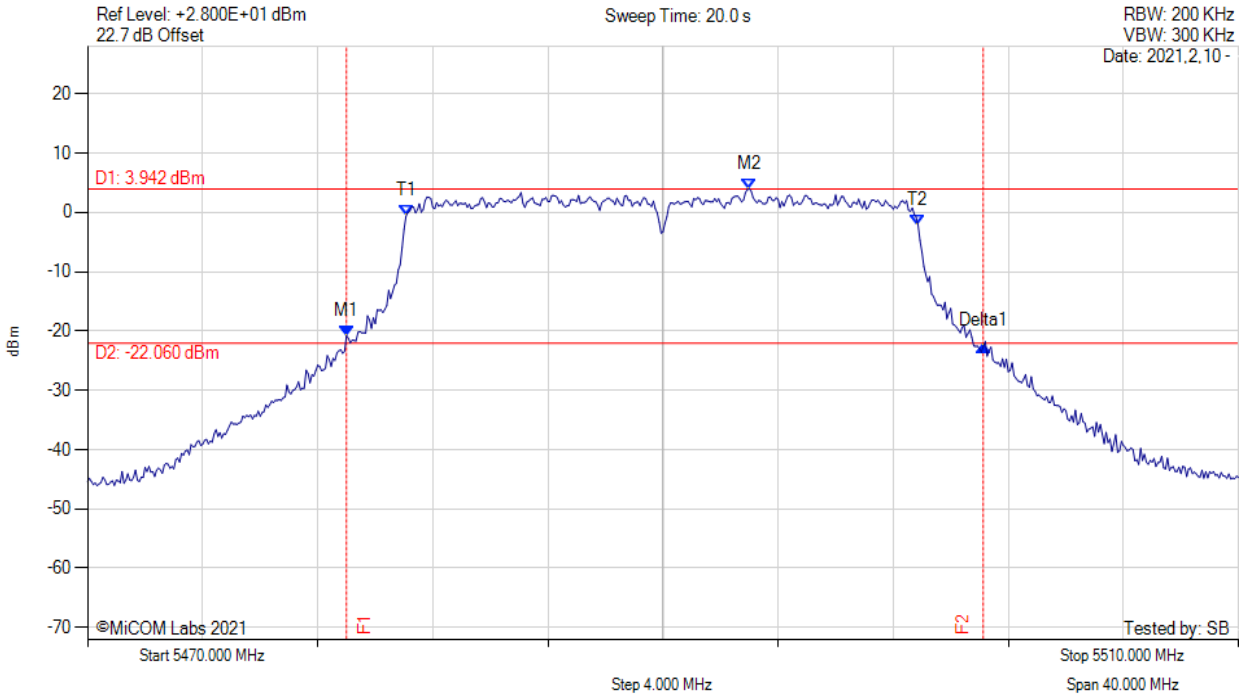


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5478.930 MHz : -21.876 dBm M2 : 5486.200 MHz : 4.028 dBm Delta1 : 22.130 MHz : -0.063 dB T1 : 5481.133 MHz : 0.138 dBm T2 : 5498.867 MHz : -1.536 dBm OBW : 17.734 MHz	Measured 26 dB Bandwidth: 22.130 MHz Measured 99% Bandwidth: 17.734 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5490.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

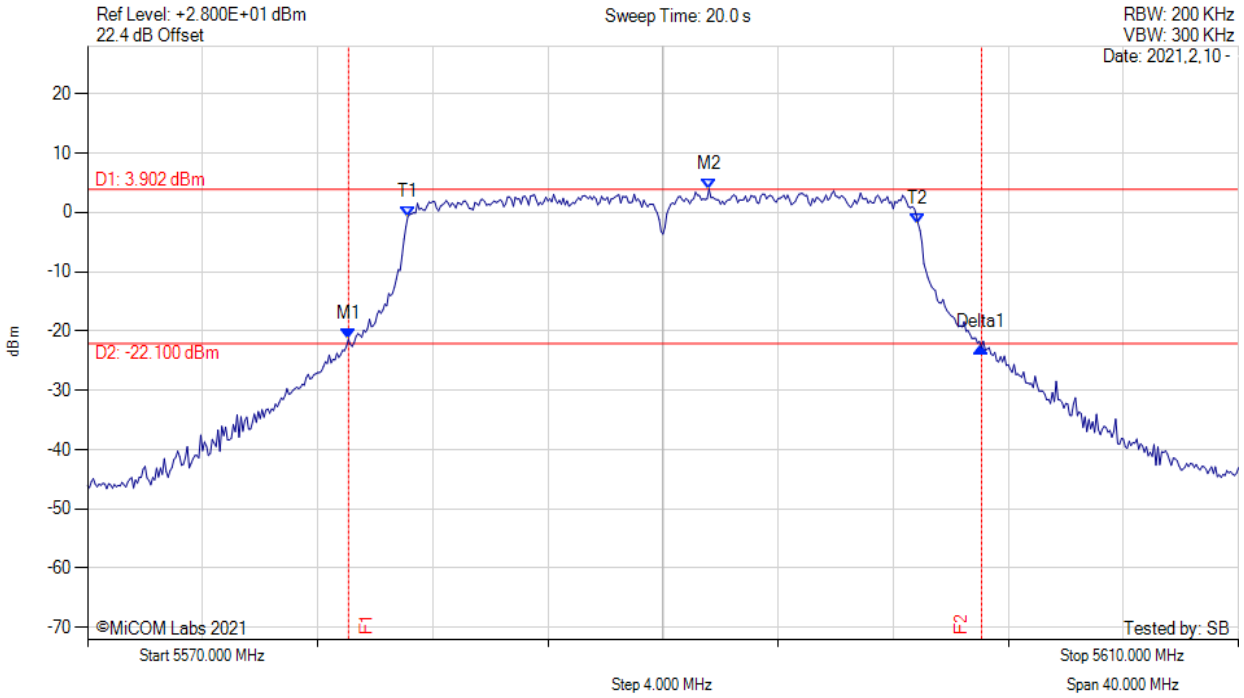


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5479.000 MHz : -20.783 dBm M2 : 5493.000 MHz : 3.942 dBm Delta1 : 22.130 MHz : -1.811 dB T1 : 5481.067 MHz : -0.629 dBm T2 : 5498.867 MHz : -2.153 dBm OBW : 17.753 MHz	Measured 26 dB Bandwidth: 22.130 MHz Measured 99% Bandwidth: 17.753 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5590.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

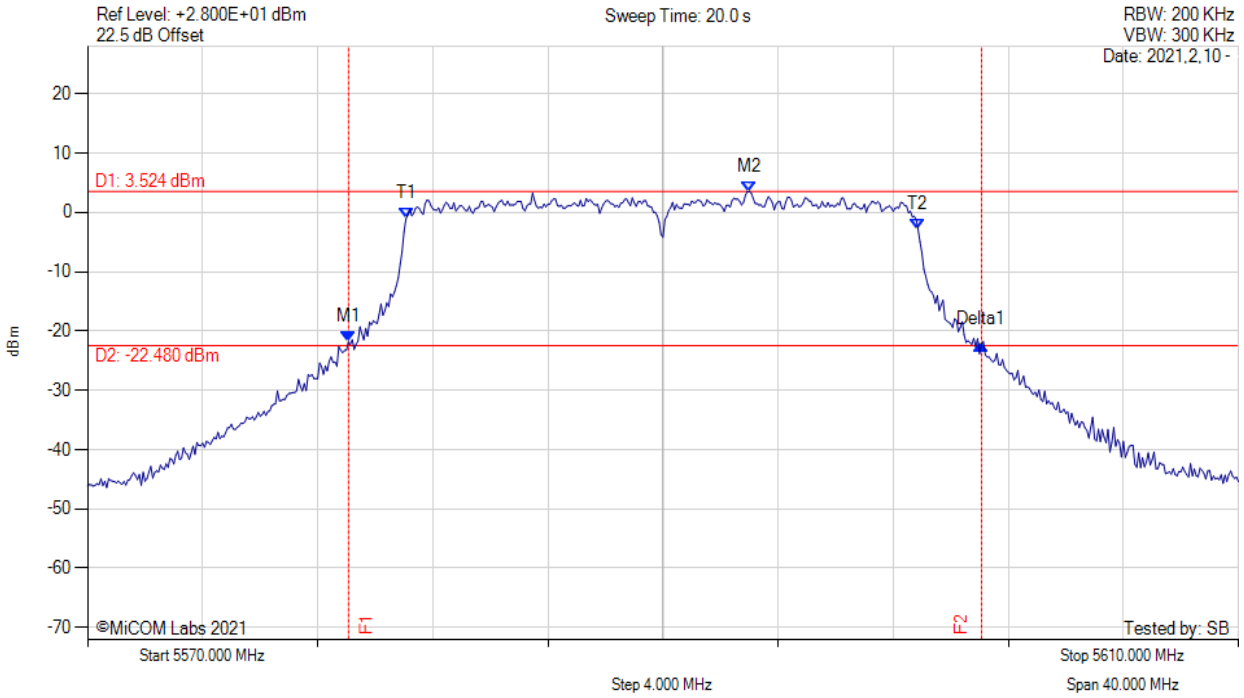


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5579.070 MHz : -21.398 dBm M2 : 5591.600 MHz : 3.902 dBm Delta1 : 22.000 MHz : -1.416 dB T1 : 5581.133 MHz : -0.676 dBm T2 : 5598.867 MHz : -1.880 dBm OBW : 17.733 MHz	Measured 26 dB Bandwidth: 22.000 MHz Measured 99% Bandwidth: 17.733 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5590.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

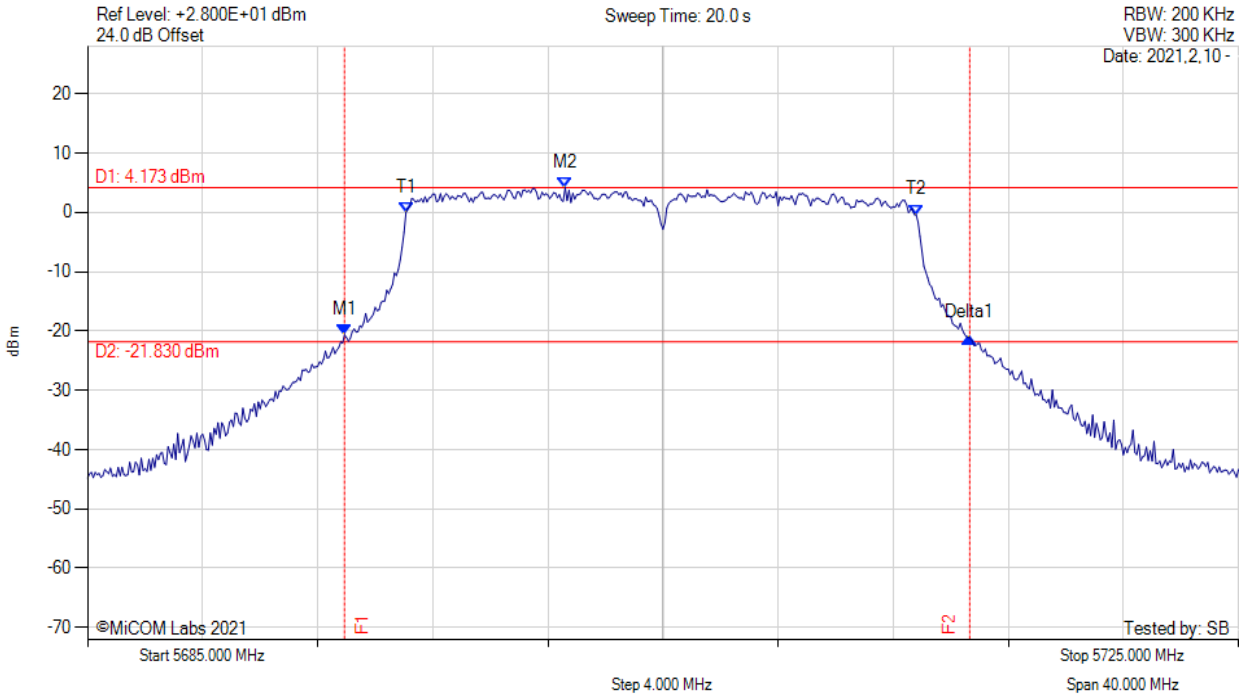


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5579.070 MHz : -21.809 dBm M2 : 5593.000 MHz : 3.524 dBm Delta1 : 22.000 MHz : -0.536 dB T1 : 5581.067 MHz : -1.087 dBm T2 : 5598.867 MHz : -2.907 dBm OBW : 17.751 MHz	Measured 26 dB Bandwidth: 22.000 MHz Measured 99% Bandwidth: 17.751 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5705.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

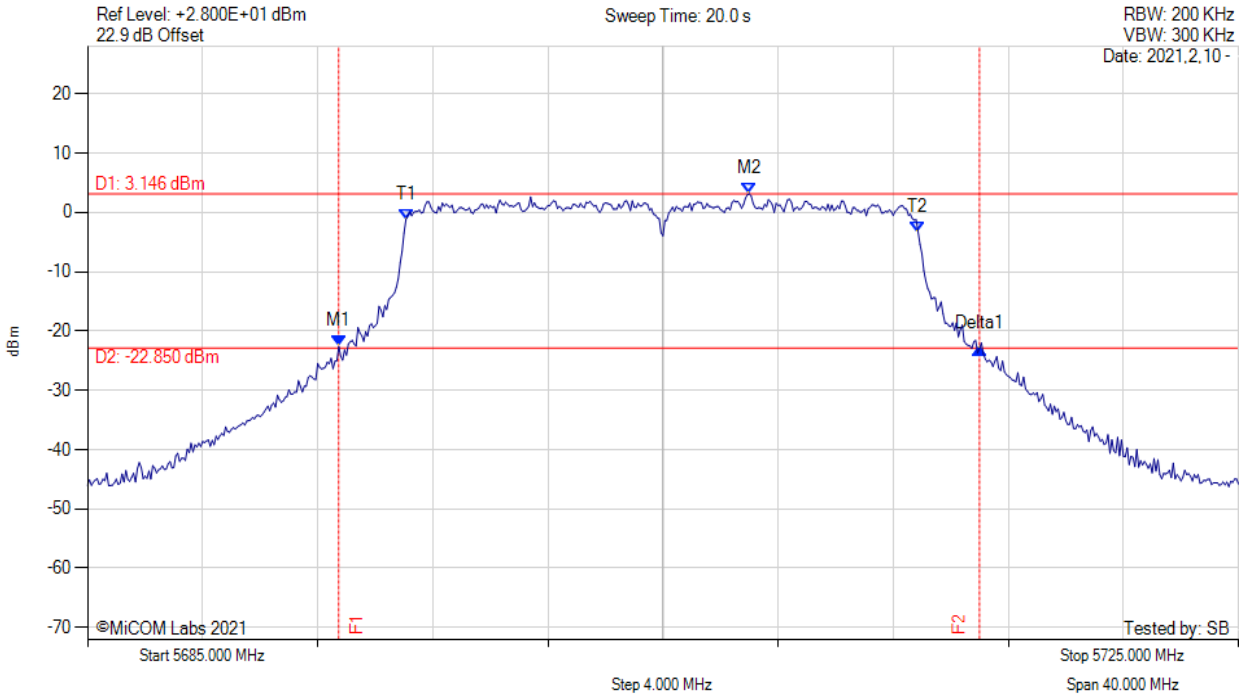


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5693.930 MHz : -20.625 dBm M2 : 5701.600 MHz : 4.173 dBm Delta1 : 21.730 MHz : -0.501 dB T1 : 5696.067 MHz : 0.001 dBm T2 : 5713.800 MHz : -0.431 dBm OBW : 17.727 MHz	Measured 26 dB Bandwidth: 21.730 MHz Measured 99% Bandwidth: 17.727 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5705.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

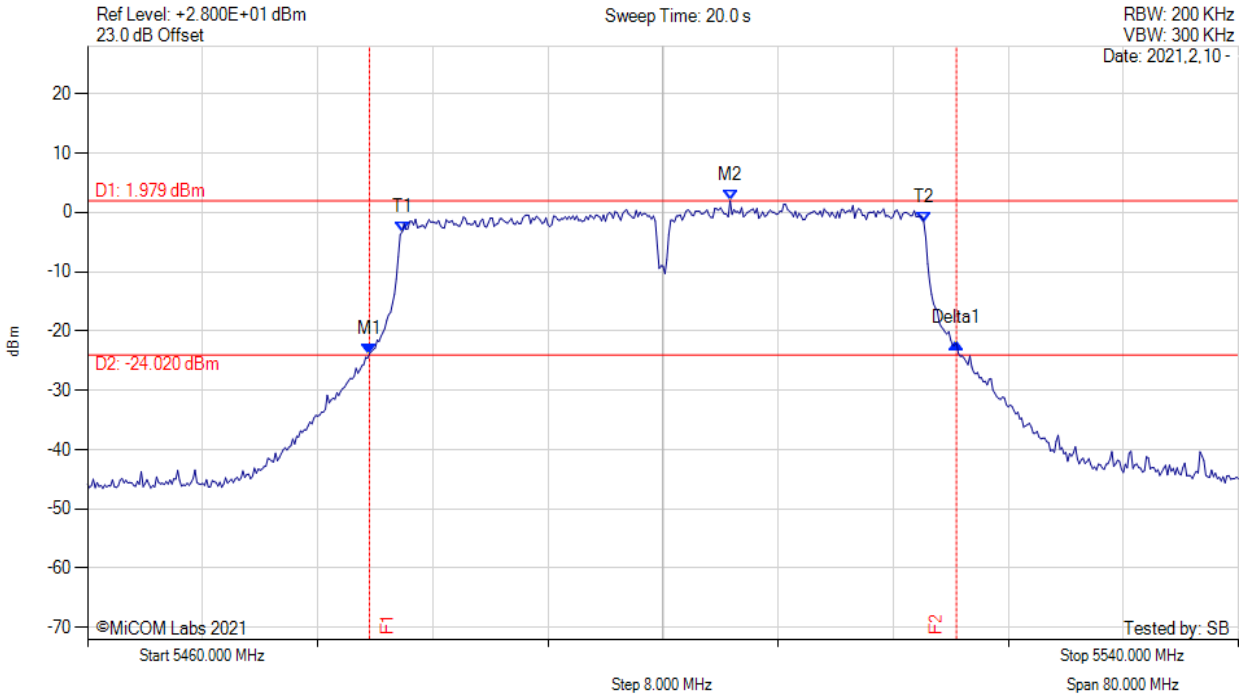


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5693.730 MHz : -22.604 dBm M2 : 5708.000 MHz : 3.146 dBm Delta1 : 22.270 MHz : -0.306 dB T1 : 5696.067 MHz : -1.164 dBm T2 : 5713.867 MHz : -3.279 dBm OBW : 17.758 MHz	Measured 26 dB Bandwidth: 22.270 MHz Measured 99% Bandwidth: 17.758 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5500.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

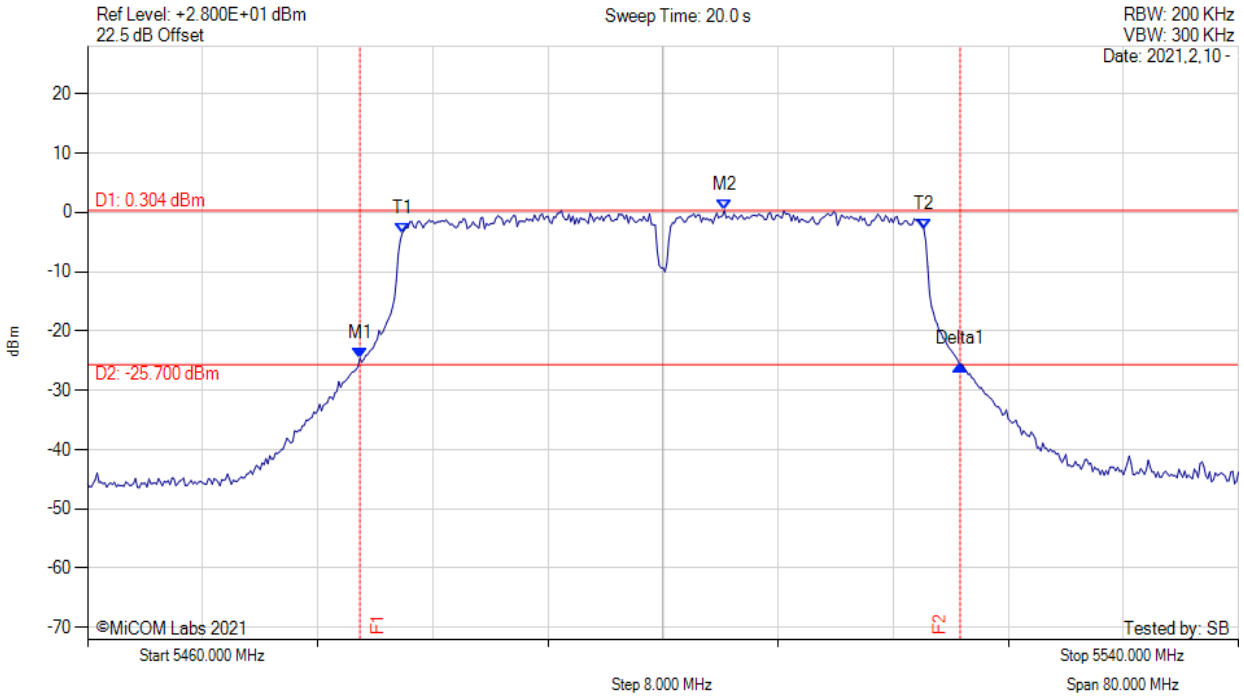


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5479.600 MHz : -23.838 dBm M2 : 5504.670 MHz : 1.979 dBm Delta1 : 40.800 MHz : 1.796 dB T1 : 5481.867 MHz : -3.342 dBm T2 : 5518.133 MHz : -1.696 dBm OBW : 36.206 MHz	Measured 26 dB Bandwidth: 40.800 MHz Measured 99% Bandwidth: 36.206 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5500.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

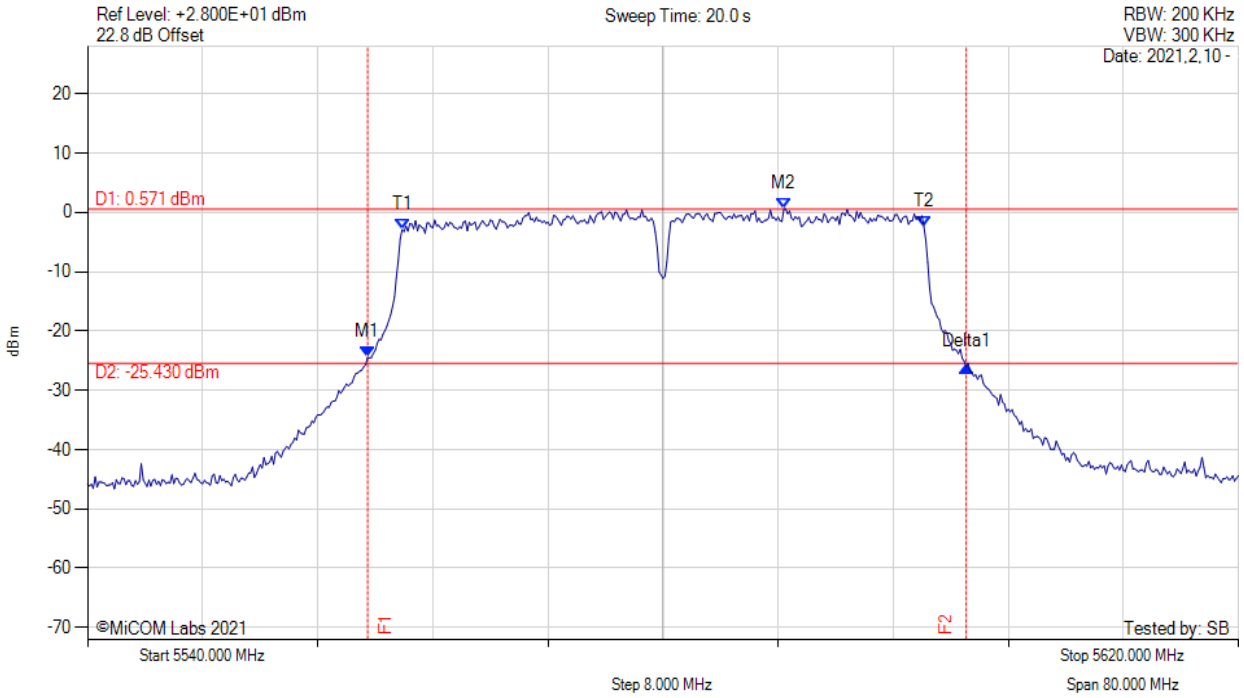


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5478.930 MHz : -24.601 dBm M2 : 5504.270 MHz : 0.304 dBm Delta1 : 41.730 MHz : -1.050 dB T1 : 5481.867 MHz : -3.553 dBm T2 : 5518.133 MHz : -2.793 dBm OBW : 36.188 MHz	Measured 26 dB Bandwidth: 41.730 MHz Measured 99% Bandwidth: 36.188 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5580.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

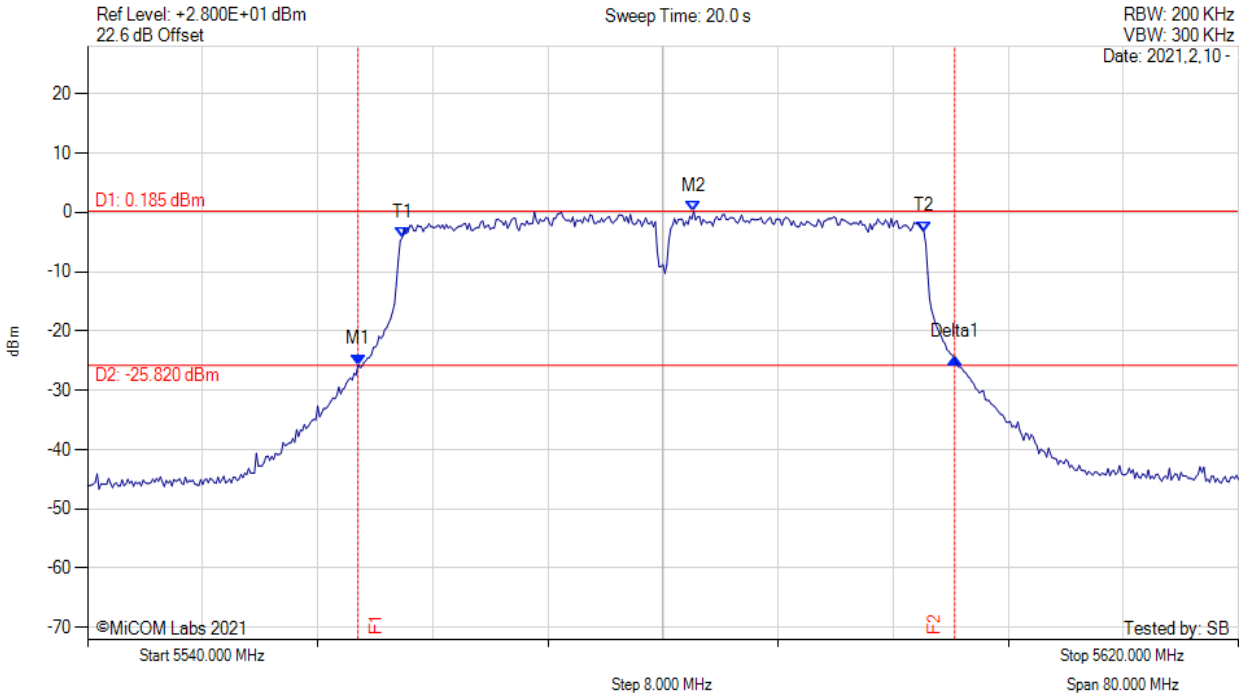


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5559.470 MHz : -24.460 dBm M2 : 5588.400 MHz : 0.571 dBm Delta1 : 41.600 MHz : -1.533 dB T1 : 5561.867 MHz : -2.927 dBm T2 : 5598.133 MHz : -2.358 dBm OBW : 36.220 MHz	Measured 26 dB Bandwidth: 41.600 MHz Measured 99% Bandwidth: 36.220 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5580.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

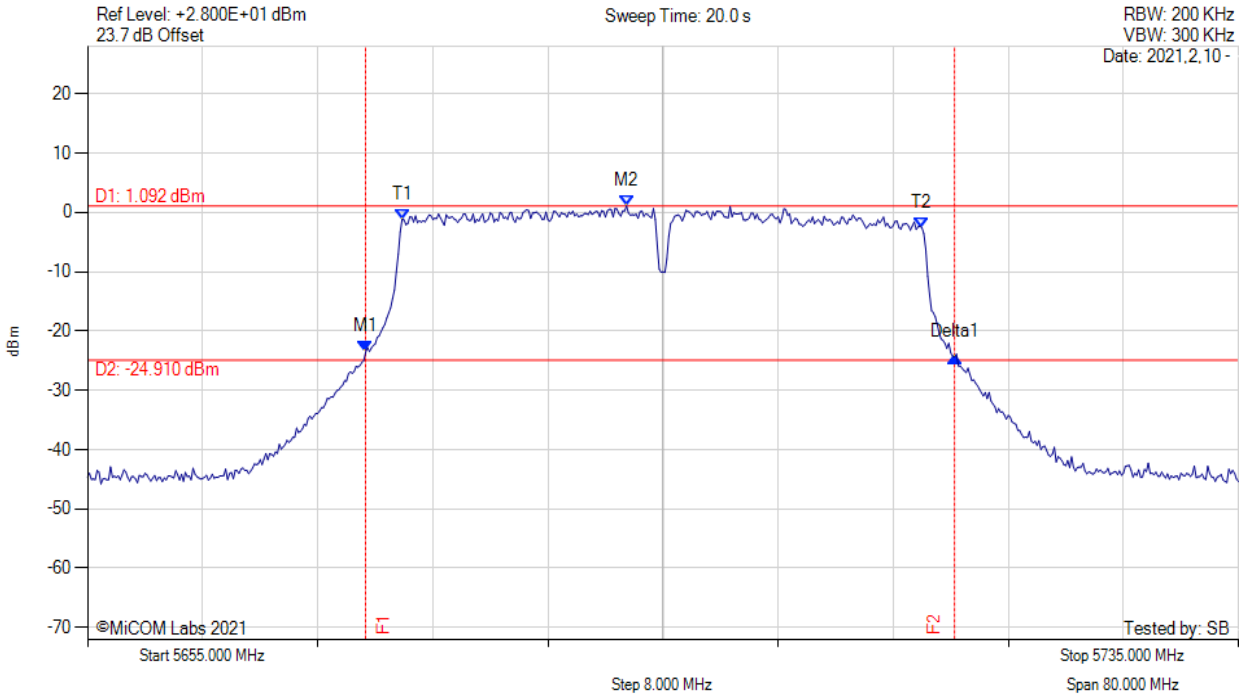


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5558.800 MHz : -25.674 dBm M2 : 5582.130 MHz : 0.185 dBm Delta1 : 41.470 MHz : 1.183 dB T1 : 5561.867 MHz : -4.303 dBm T2 : 5598.133 MHz : -3.230 dBm OBW : 36.183 MHz	Measured 26 dB Bandwidth: 41.470 MHz Measured 99% Bandwidth: 36.183 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5695.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

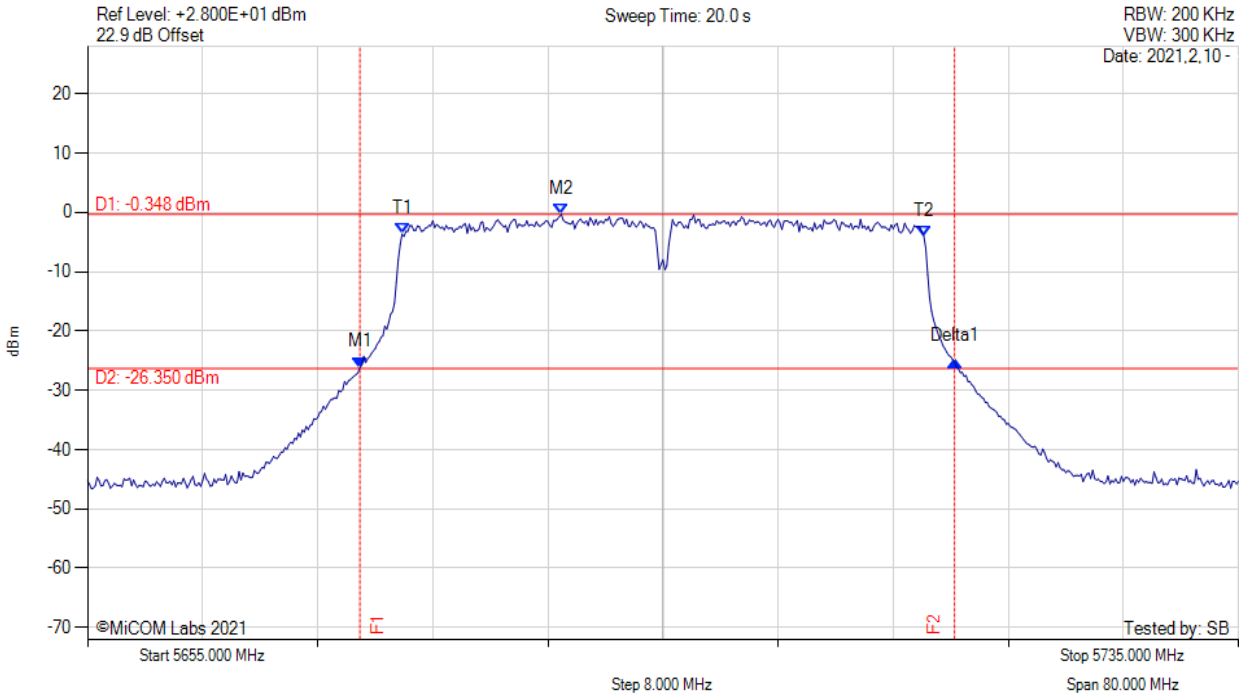


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5674.330 MHz : -23.541 dBm M2 : 5692.470 MHz : 1.092 dBm Delta1 : 40.930 MHz : -0.821 dB T1 : 5676.867 MHz : -1.183 dBm T2 : 5713.000 MHz : -2.614 dBm OBW : 36.157 MHz	Measured 26 dB Bandwidth: 40.930 MHz Measured 99% Bandwidth: 36.157 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5695.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

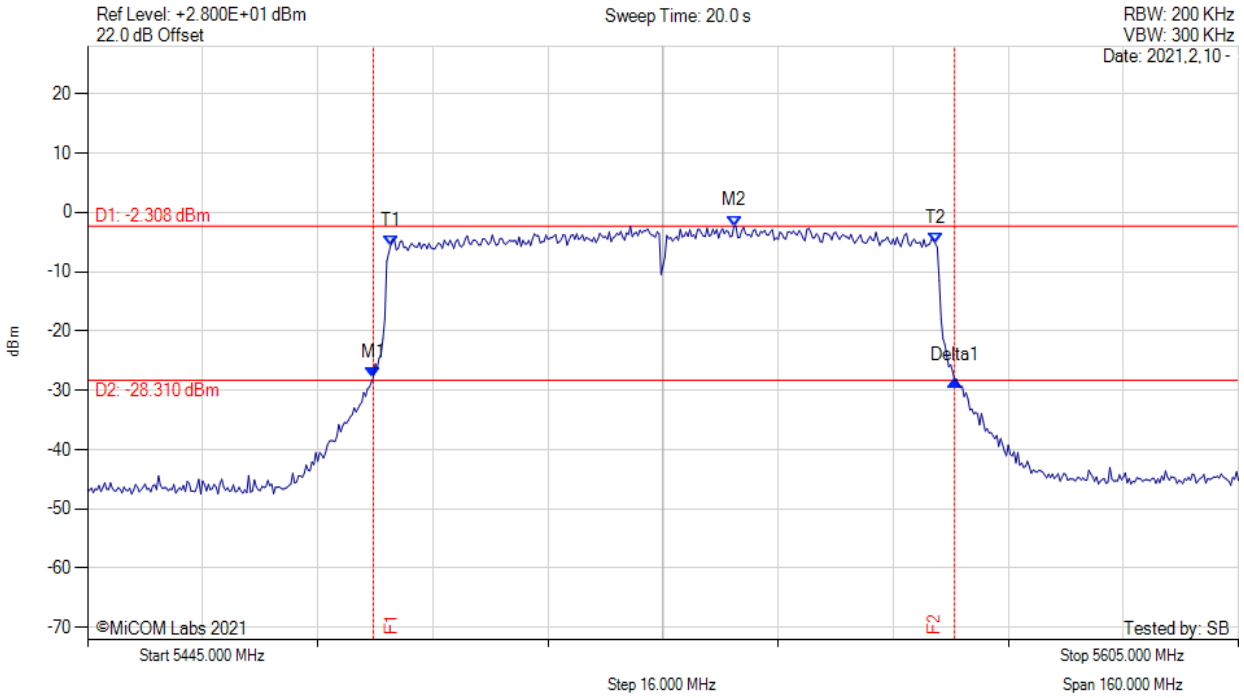


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5673.930 MHz : -26.118 dBm M2 : 5687.930 MHz : -0.348 dBm Delta1 : 41.330 MHz : 0.980 dB T1 : 5676.867 MHz : -3.644 dBm T2 : 5713.133 MHz : -4.006 dBm OBW : 36.190 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.190 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5525.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

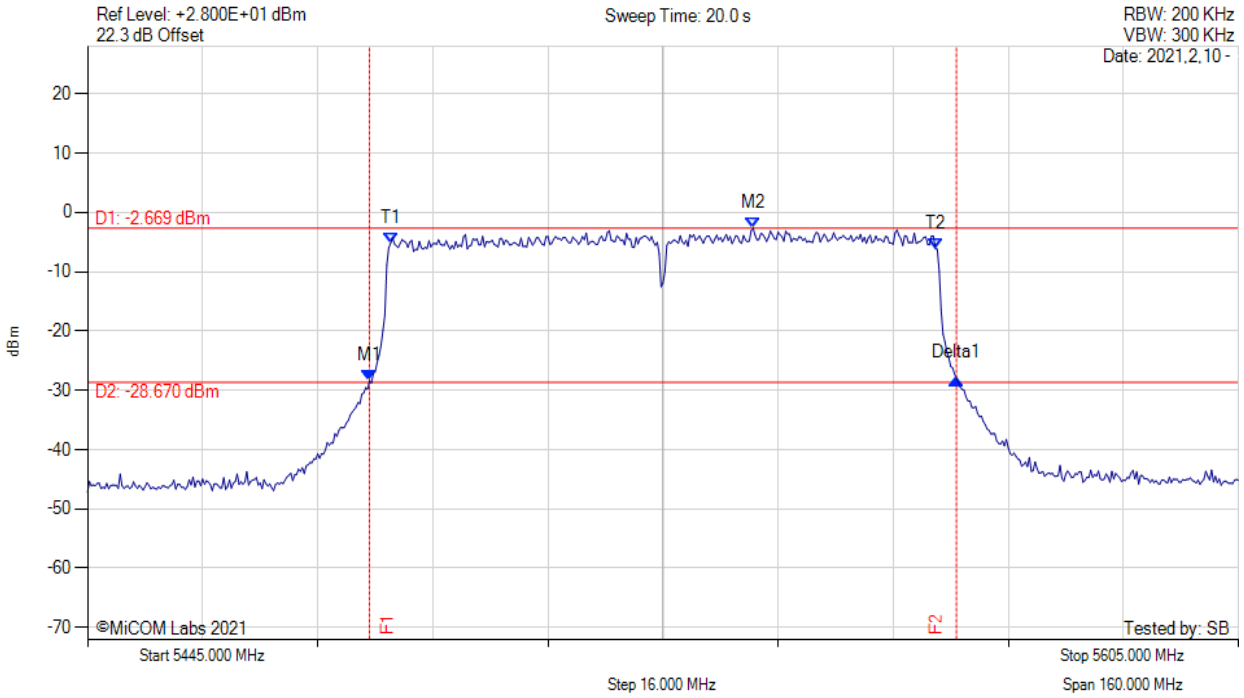


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5484.730 MHz : -27.794 dBm M2 : 5534.870 MHz : -2.308 dBm Delta1 : 80.800 MHz : -0.597 dB T1 : 5487.133 MHz : -5.628 dBm T2 : 5562.867 MHz : -5.254 dBm OBW : 75.621 MHz	Measured 26 dB Bandwidth: 80.800 MHz Measured 99% Bandwidth: 75.621 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5525.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

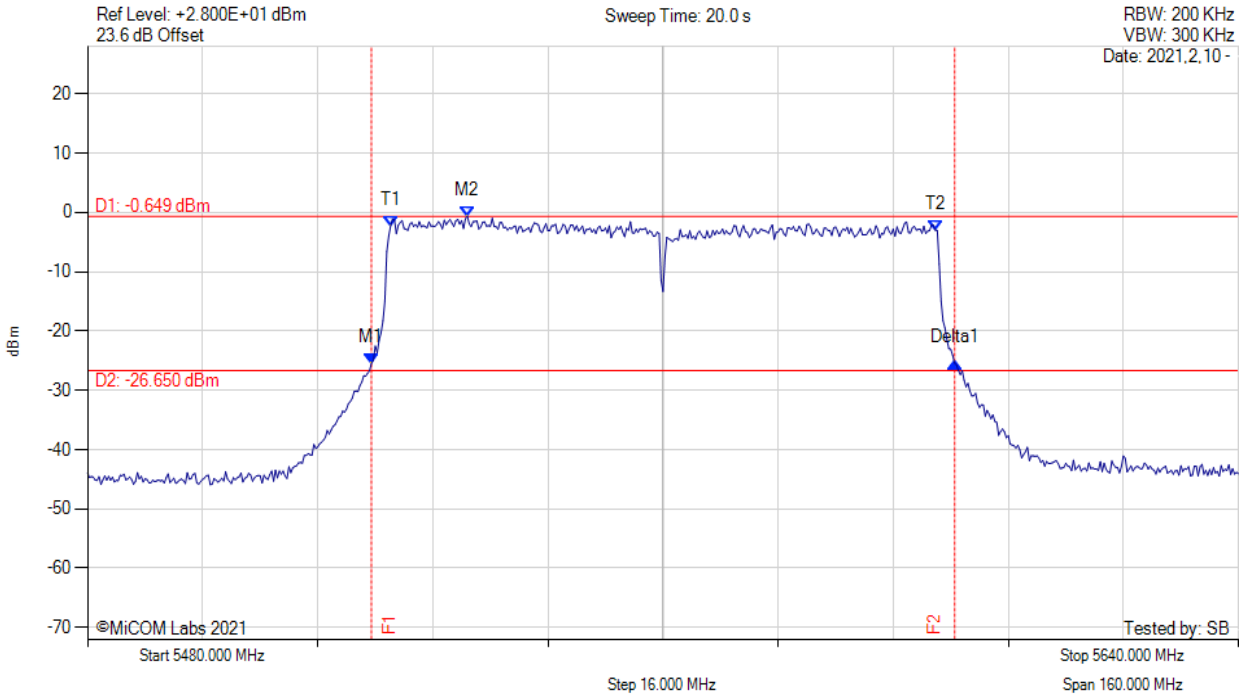


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5484.200 MHz : -28.356 dBm M2 : 5537.530 MHz : -2.669 dBm Delta1 : 81.600 MHz : 0.367 dB T1 : 5487.133 MHz : -5.217 dBm T2 : 5562.867 MHz : -6.129 dBm OBW : 75.749 MHz	Measured 26 dB Bandwidth: 81.600 MHz Measured 99% Bandwidth: 75.749 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5560.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

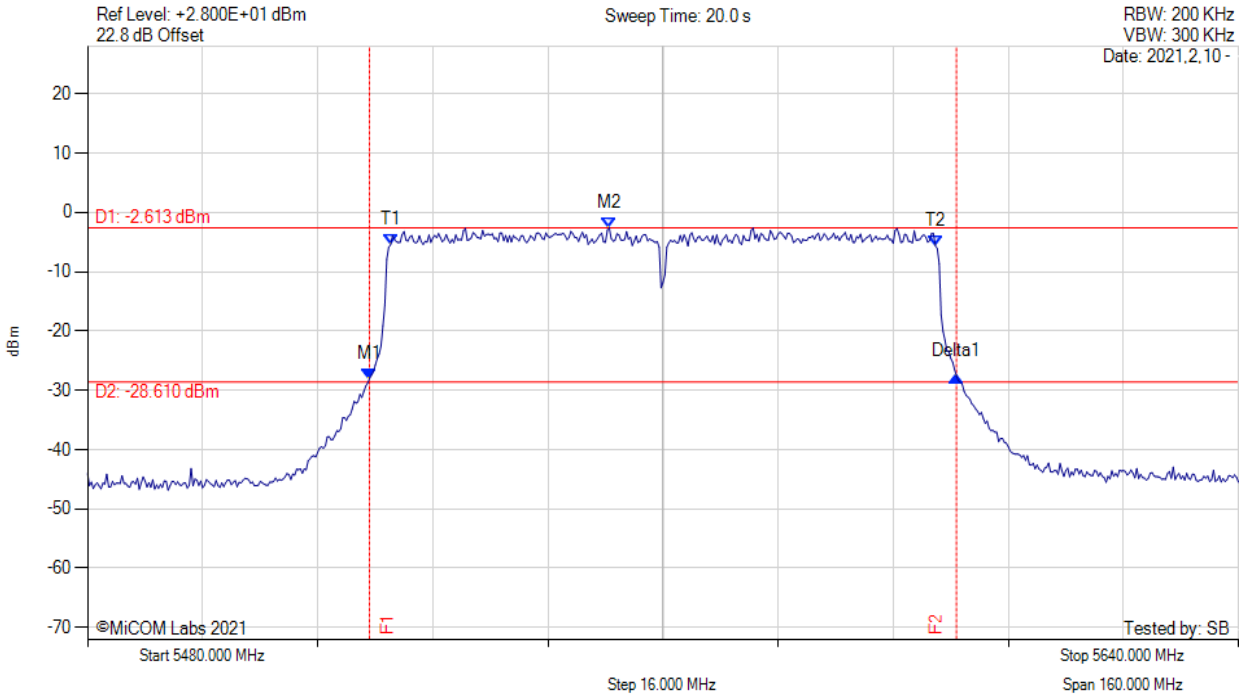


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5519.470 MHz : -25.429 dBm M2 : 5532.800 MHz : -0.649 dBm Delta1 : 81.070 MHz : 0.055 dB T1 : 5522.133 MHz : -2.299 dBm T2 : 5597.867 MHz : -2.982 dBm OBW : 75.857 MHz	Measured 26 dB Bandwidth: 81.070 MHz Measured 99% Bandwidth: 75.857 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5560.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

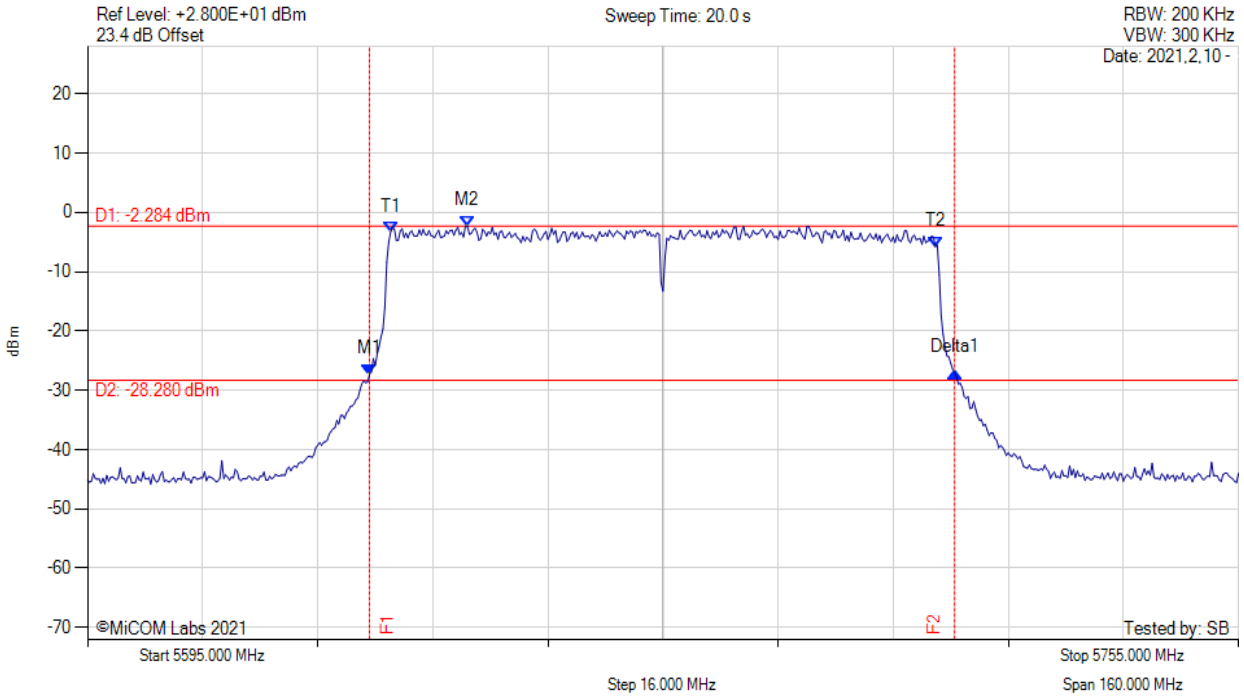


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5519.200 MHz : -28.025 dBm M2 : 5552.530 MHz : -2.613 dBm Delta1 : 81.600 MHz : 0.450 dB T1 : 5522.133 MHz : -5.477 dBm T2 : 5597.867 MHz : -5.611 dBm OBW : 75.763 MHz	Measured 26 dB Bandwidth: 81.600 MHz Measured 99% Bandwidth: 75.763 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5675.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

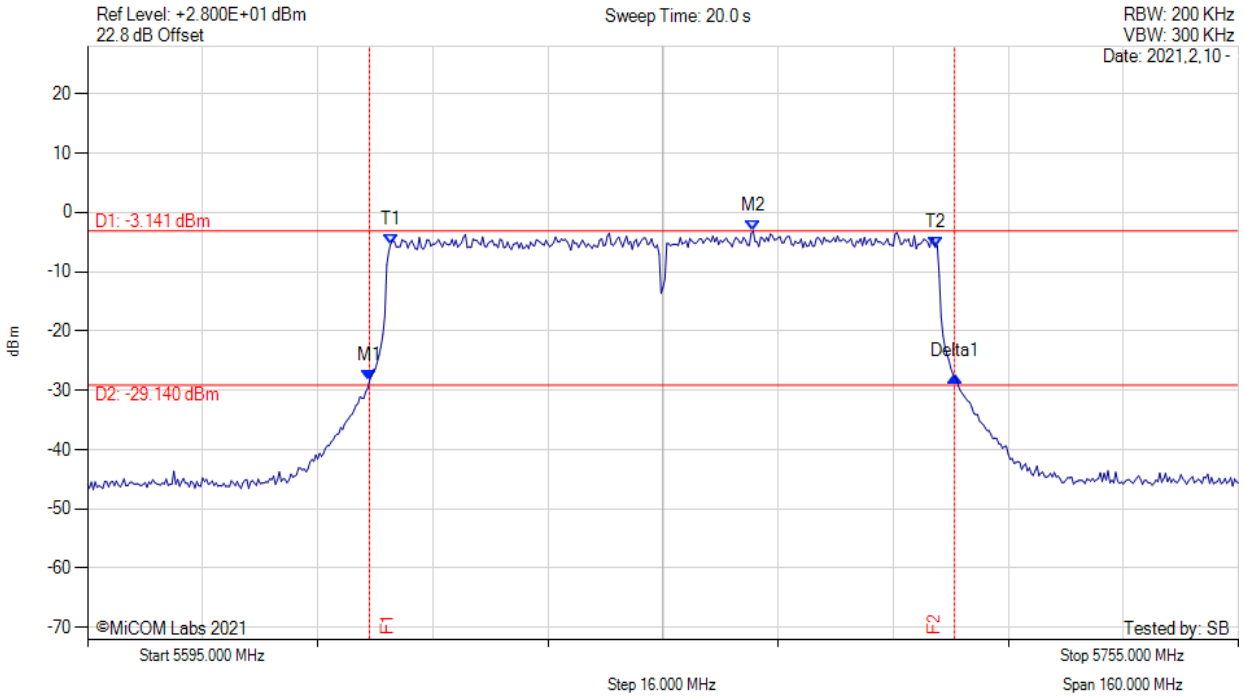


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5634.200 MHz : -27.296 dBm M2 : 5647.800 MHz : -2.284 dBm Delta1 : 81.330 MHz : 0.442 dB T1 : 5637.133 MHz : -3.347 dBm T2 : 5712.867 MHz : -5.812 dBm OBW : 75.671 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.671 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 80MHz, Channel: 5675.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

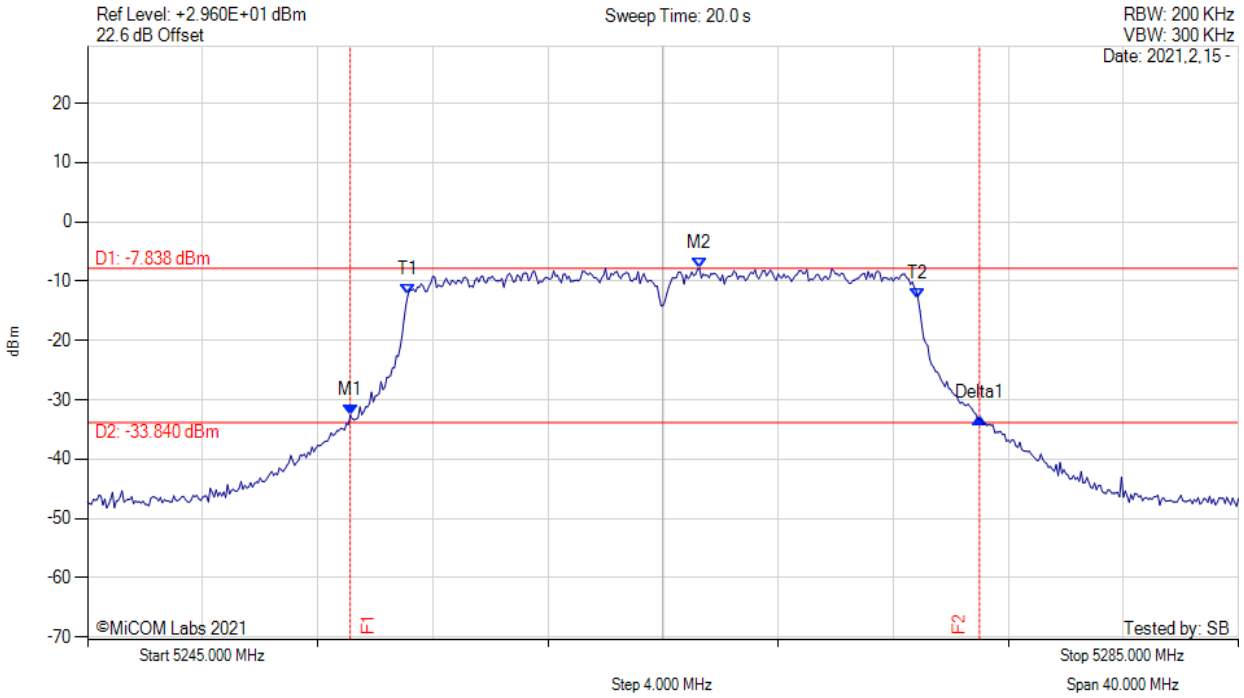


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5634.200 MHz : -28.400 dBm M2 : 5687.530 MHz : -3.141 dBm Delta1 : 81.330 MHz : 0.663 dB T1 : 5637.133 MHz : -5.397 dBm T2 : 5712.867 MHz : -5.902 dBm OBW : 75.807 MHz	Measured 26 dB Bandwidth: 81.330 MHz Measured 99% Bandwidth: 75.807 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5265.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

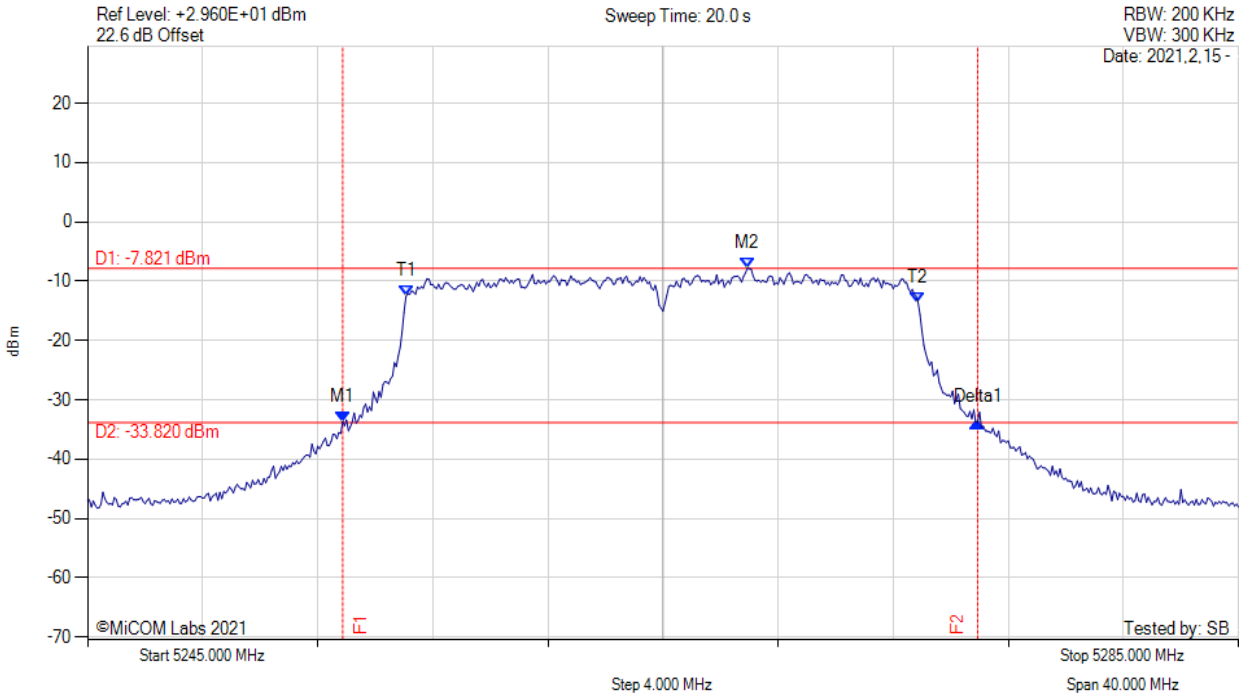


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.130 MHz : -32.578 dBm M2 : 5266.270 MHz : -7.838 dBm Delta1 : 21.870 MHz : -0.569 dB T1 : 5256.133 MHz : -12.341 dBm T2 : 5273.867 MHz : -12.975 dBm OBW : 17.721 MHz	Measured 26 dB Bandwidth: 21.870 MHz Measured 99% Bandwidth: 17.721 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5265.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

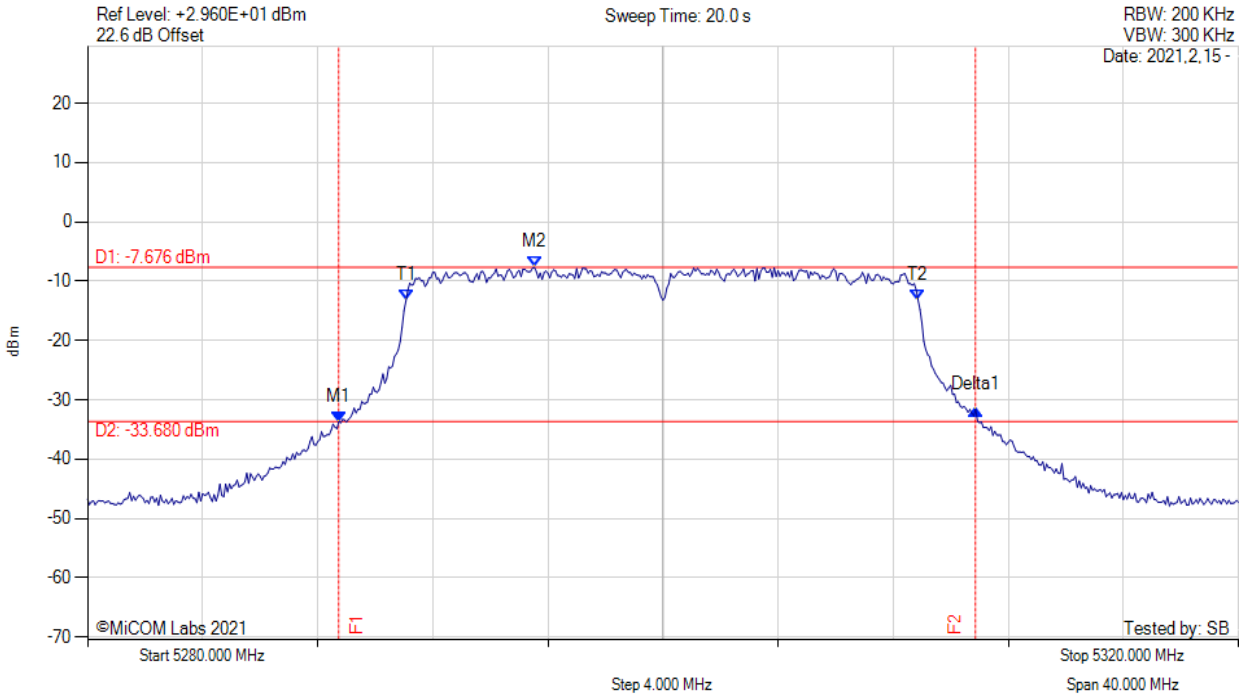


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5253.870 MHz : -33.666 dBm M2 : 5267.930 MHz : -7.821 dBm Delta1 : 22.070 MHz : -0.192 dB T1 : 5256.067 MHz : -12.549 dBm T2 : 5273.867 MHz : -13.608 dBm OBW : 17.767 MHz	Measured 26 dB Bandwidth: 22.070 MHz Measured 99% Bandwidth: 17.767 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

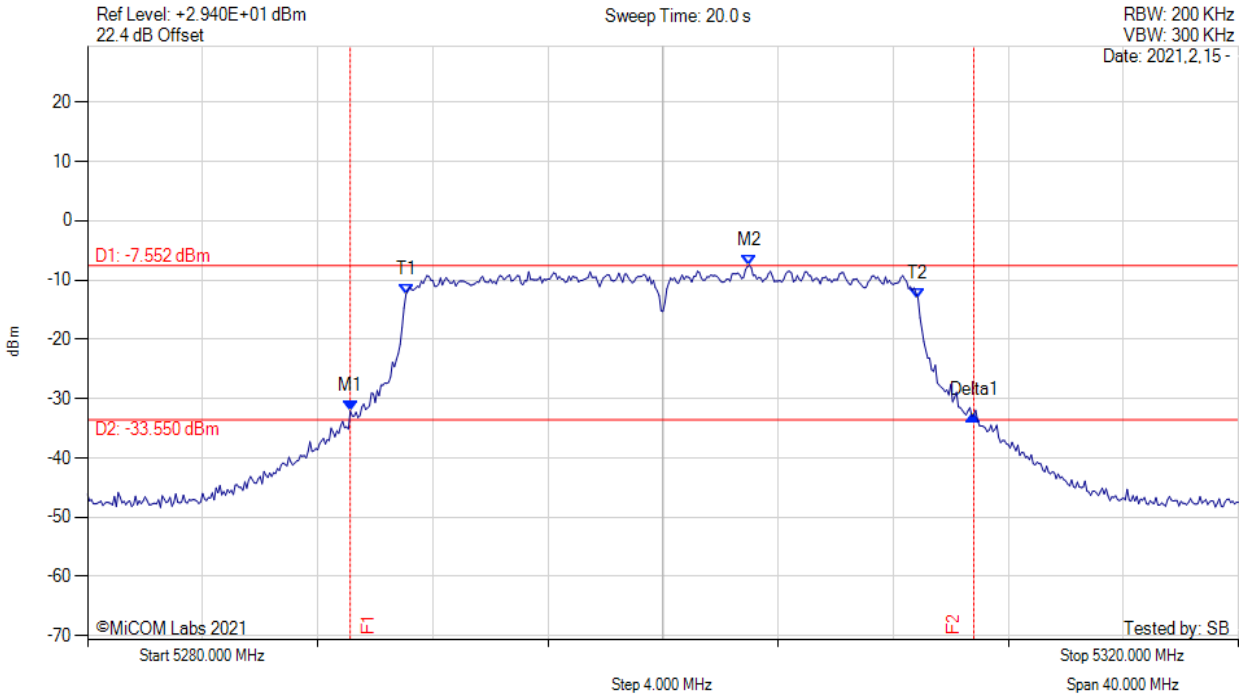


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5288.730 MHz : -33.672 dBm M2 : 5295.530 MHz : -7.676 dBm Delta1 : 22.130 MHz : 2.042 dB T1 : 5291.067 MHz : -13.284 dBm T2 : 5308.867 MHz : -13.202 dBm OBW : 17.711 MHz	Measured 26 dB Bandwidth: 22.130 MHz Measured 99% Bandwidth: 17.711 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

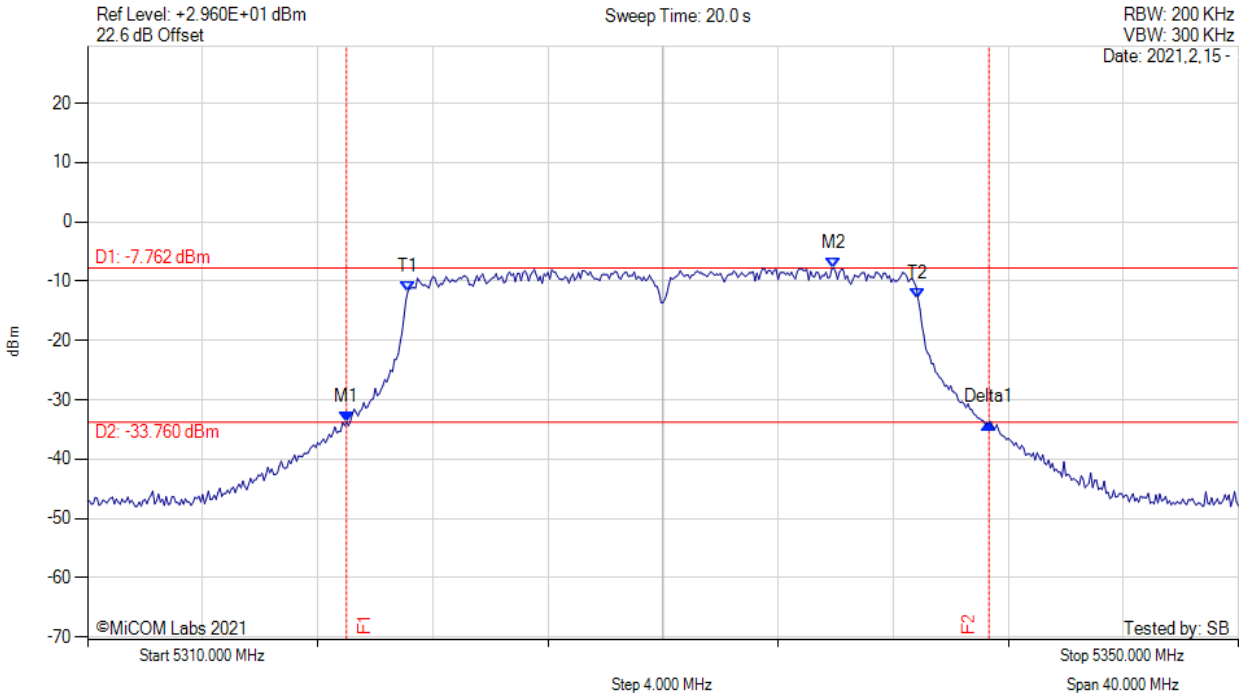


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5289.130 MHz : -32.096 dBm M2 : 5303.000 MHz : -7.552 dBm Delta1 : 21.670 MHz : -0.739 dB T1 : 5291.067 MHz : -12.420 dBm T2 : 5308.867 MHz : -13.149 dBm OBW : 17.756 MHz	Measured 26 dB Bandwidth: 21.670 MHz Measured 99% Bandwidth: 17.756 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5330.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

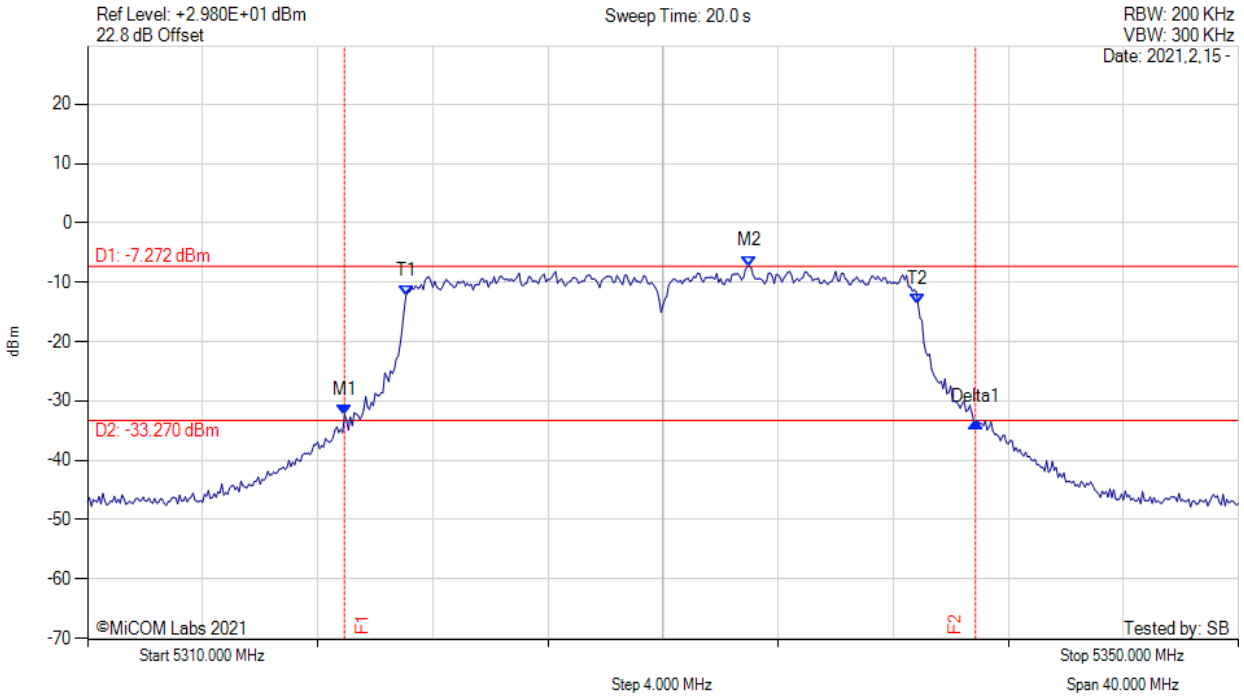


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5319.000 MHz : -33.740 dBm M2 : 5335.930 MHz : -7.762 dBm Delta1 : 22.330 MHz : -0.138 dB T1 : 5321.133 MHz : -11.700 dBm T2 : 5338.867 MHz : -12.956 dBm OBW : 17.725 MHz	Measured 26 dB Bandwidth: 22.330 MHz Measured 99% Bandwidth: 17.725 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5330.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

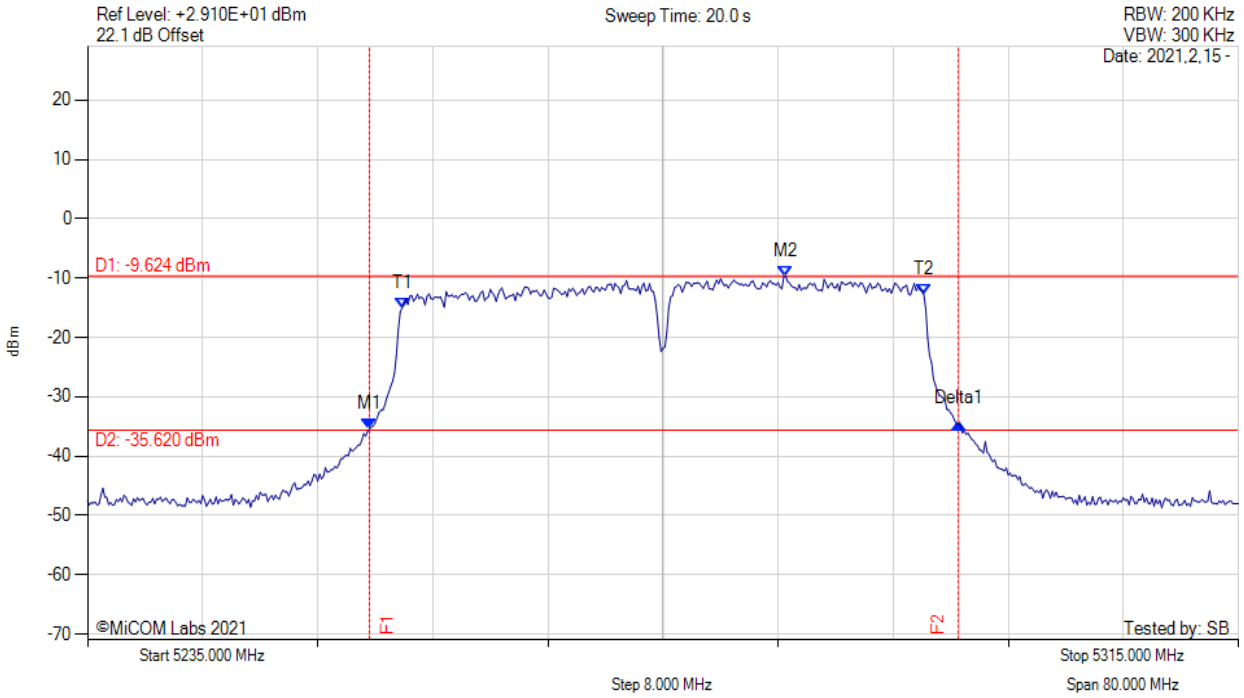


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5318.930 MHz : -32.299 dBm M2 : 5333.000 MHz : -7.272 dBm Delta1 : 21.930 MHz : -1.169 dB T1 : 5321.067 MHz : -12.210 dBm T2 : 5338.867 MHz : -13.706 dBm OBW : 17.759 MHz	Measured 26 dB Bandwidth: 21.930 MHz Measured 99% Bandwidth: 17.759 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5275.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

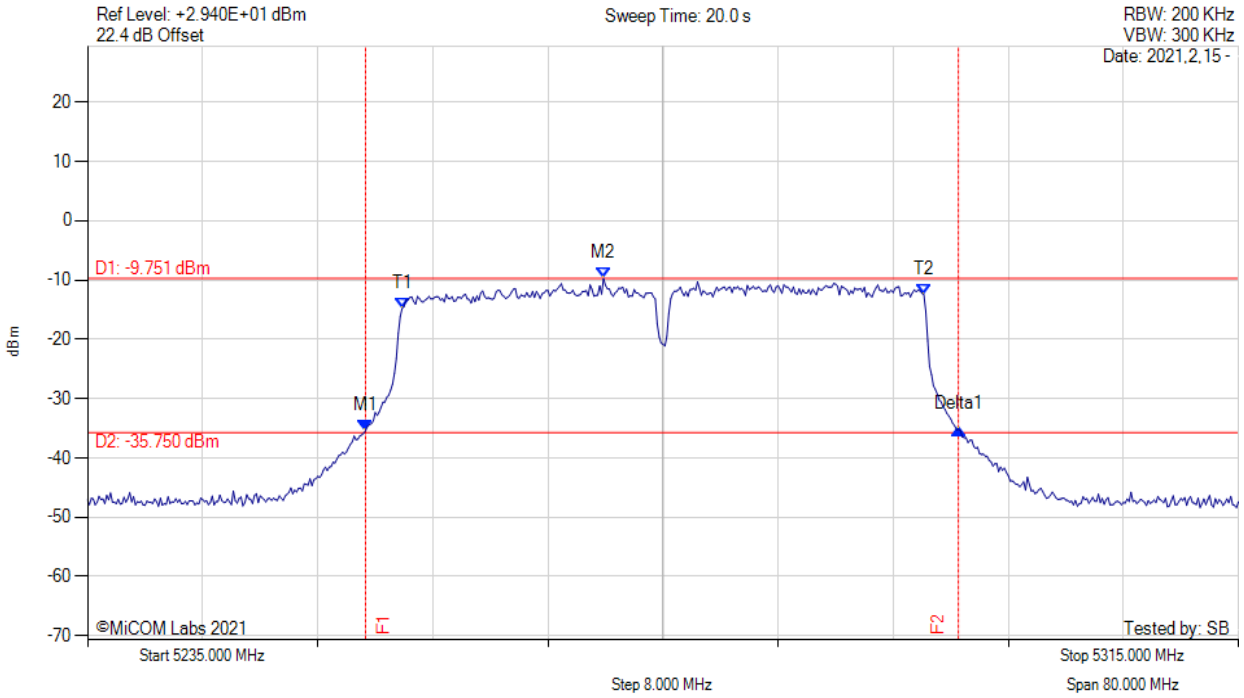


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.600 MHz : -35.413 dBm M2 : 5283.530 MHz : -9.624 dBm Delta1 : 40.930 MHz : 0.912 dB T1 : 5256.867 MHz : -14.997 dBm T2 : 5293.133 MHz : -12.726 dBm OBW : 36.177 MHz	Measured 26 dB Bandwidth: 40.930 MHz Measured 99% Bandwidth: 36.177 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5275.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

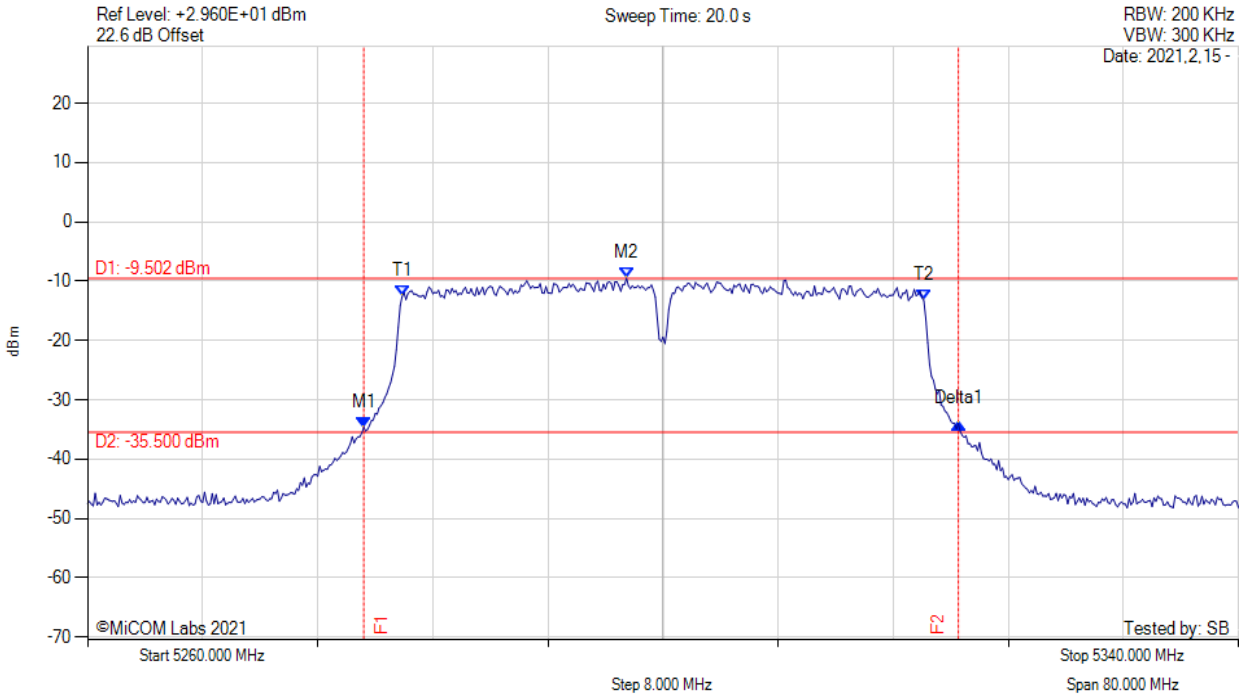


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5254.330 MHz : -35.361 dBm M2 : 5270.870 MHz : -9.751 dBm Delta1 : 41.200 MHz : 0.213 dB T1 : 5256.867 MHz : -14.842 dBm T2 : 5293.133 MHz : -12.422 dBm OBW : 36.194 MHz	Measured 26 dB Bandwidth: 41.200 MHz Measured 99% Bandwidth: 36.194 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

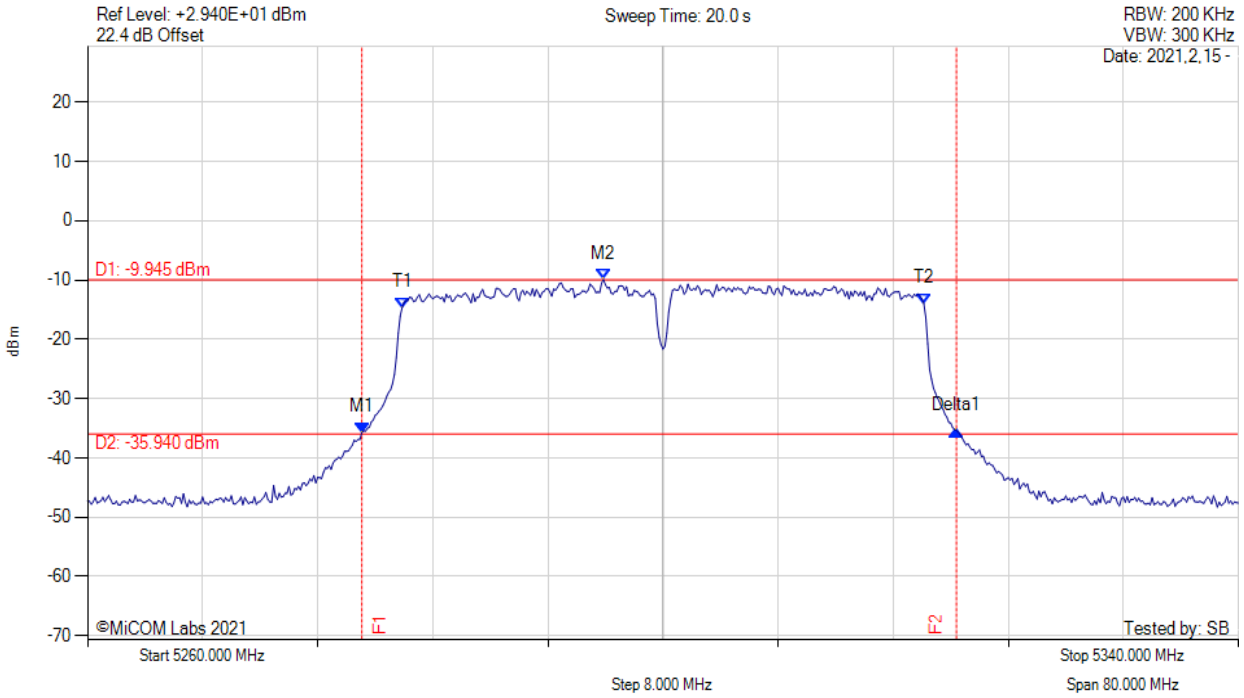


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5279.200 MHz : -34.664 dBm M2 : 5297.470 MHz : -9.502 dBm Delta1 : 41.330 MHz : 0.624 dB T1 : 5281.867 MHz : -12.578 dBm T2 : 5318.133 MHz : -13.249 dBm OBW : 36.202 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.202 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

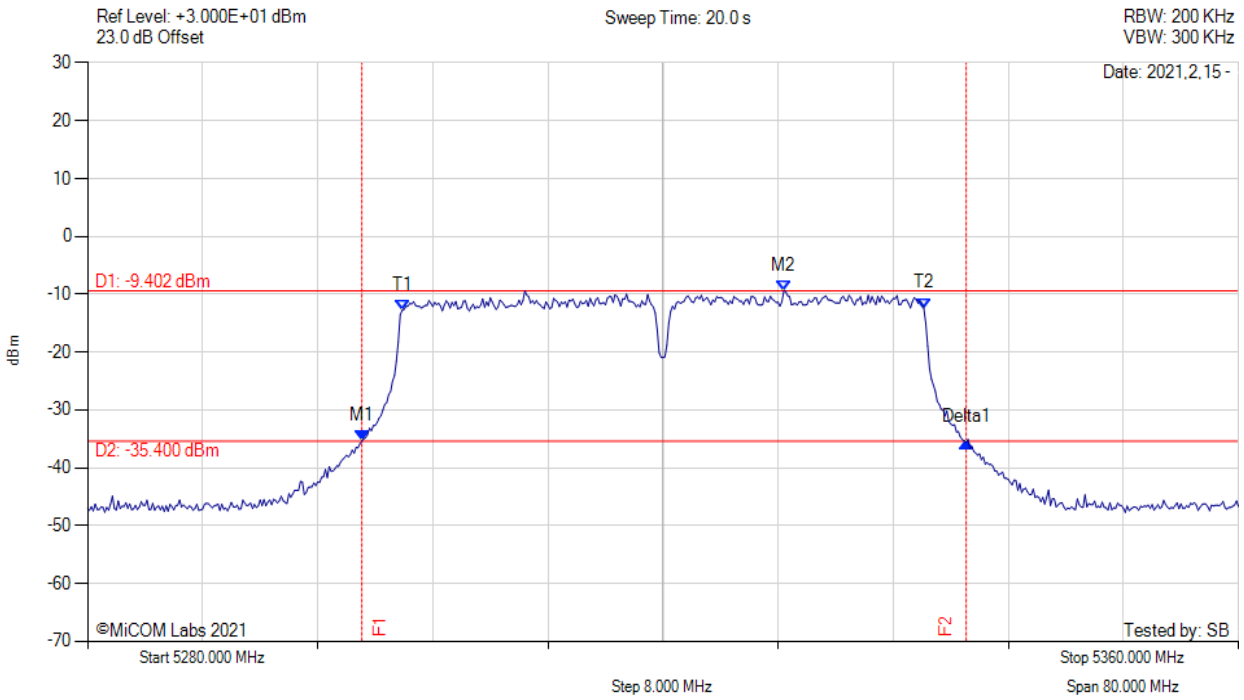


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5279.070 MHz : -35.705 dBm M2 : 5295.870 MHz : -9.945 dBm Delta1 : 41.330 MHz : 0.330 dB T1 : 5281.867 MHz : -14.690 dBm T2 : 5318.133 MHz : -13.993 dBm OBW : 36.151 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.151 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5320.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

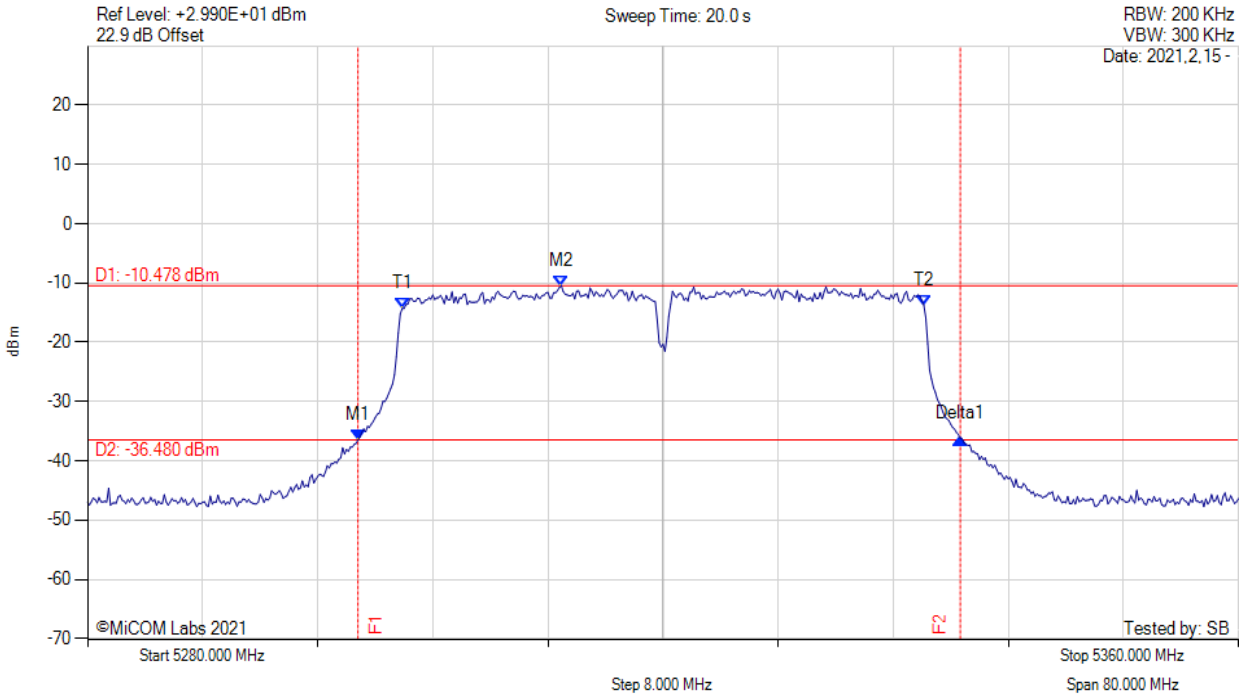


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5299.070 MHz : -35.397 dBm M2 : 5328.400 MHz : -9.402 dBm Delta1 : 42.000 MHz : -0.232 dB T1 : 5301.867 MHz : -12.802 dBm T2 : 5338.133 MHz : -12.427 dBm OBW : 36.261 MHz	Measured 26 dB Bandwidth: 42.000 MHz Measured 99% Bandwidth: 36.261 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5320.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

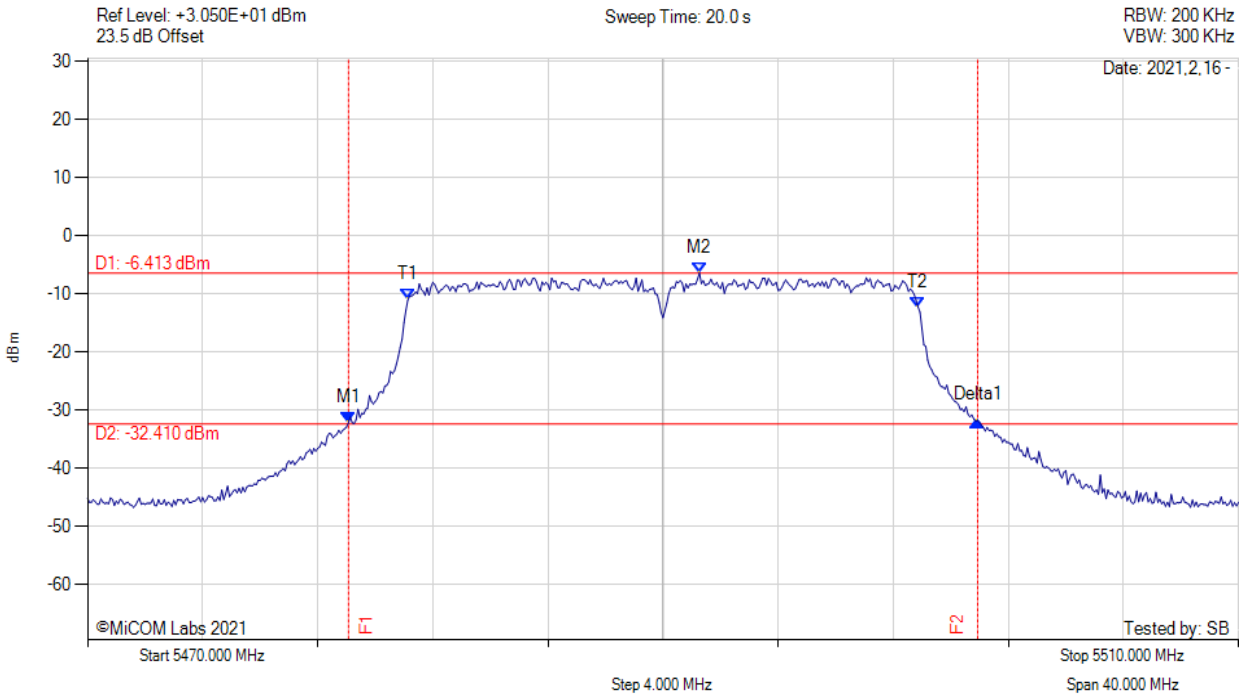


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5298.800 MHz : -36.469 dBm M2 : 5312.930 MHz : -10.478 dBm Delta1 : 41.870 MHz : 0.271 dB T1 : 5301.867 MHz : -14.329 dBm T2 : 5338.133 MHz : -13.750 dBm OBW : 36.220 MHz	Measured 26 dB Bandwidth: 41.870 MHz Measured 99% Bandwidth: 36.220 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5490.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

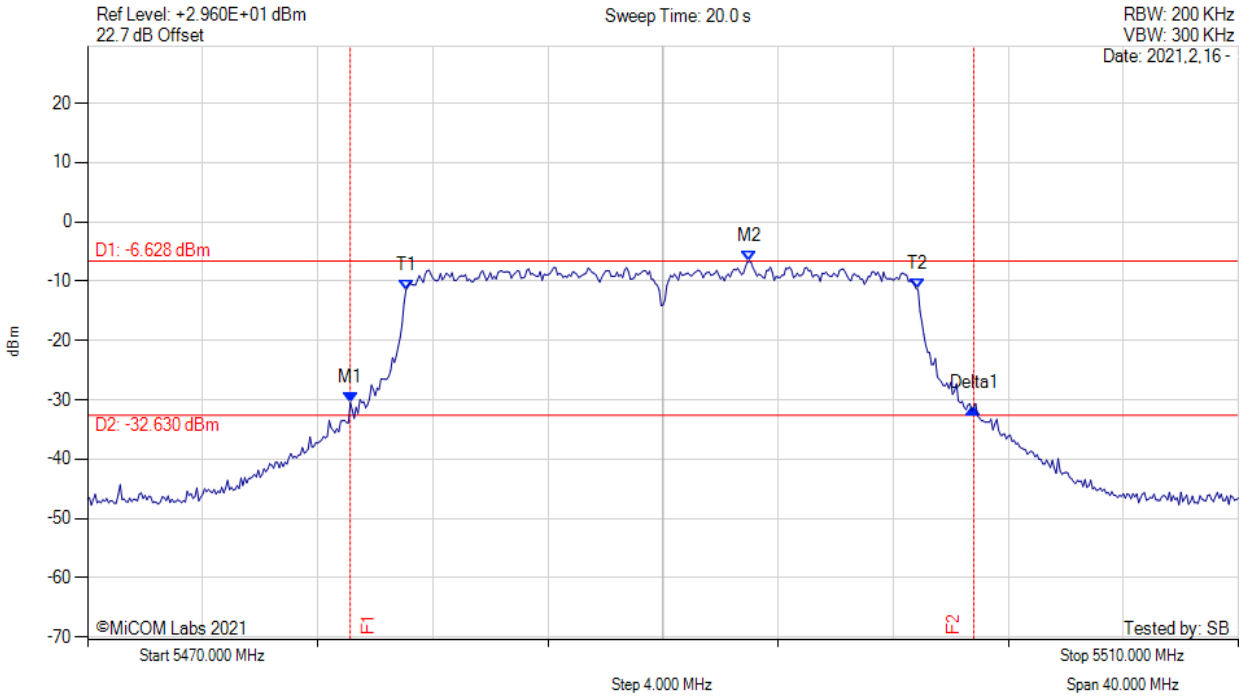


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5479.070 MHz : -32.200 dBm M2 : 5491.270 MHz : -6.413 dBm Delta1 : 21.870 MHz : 0.414 dB T1 : 5481.133 MHz : -11.018 dBm T2 : 5498.867 MHz : -12.280 dBm OBW : 17.749 MHz	Measured 26 dB Bandwidth: 21.870 MHz Measured 99% Bandwidth: 17.749 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5490.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

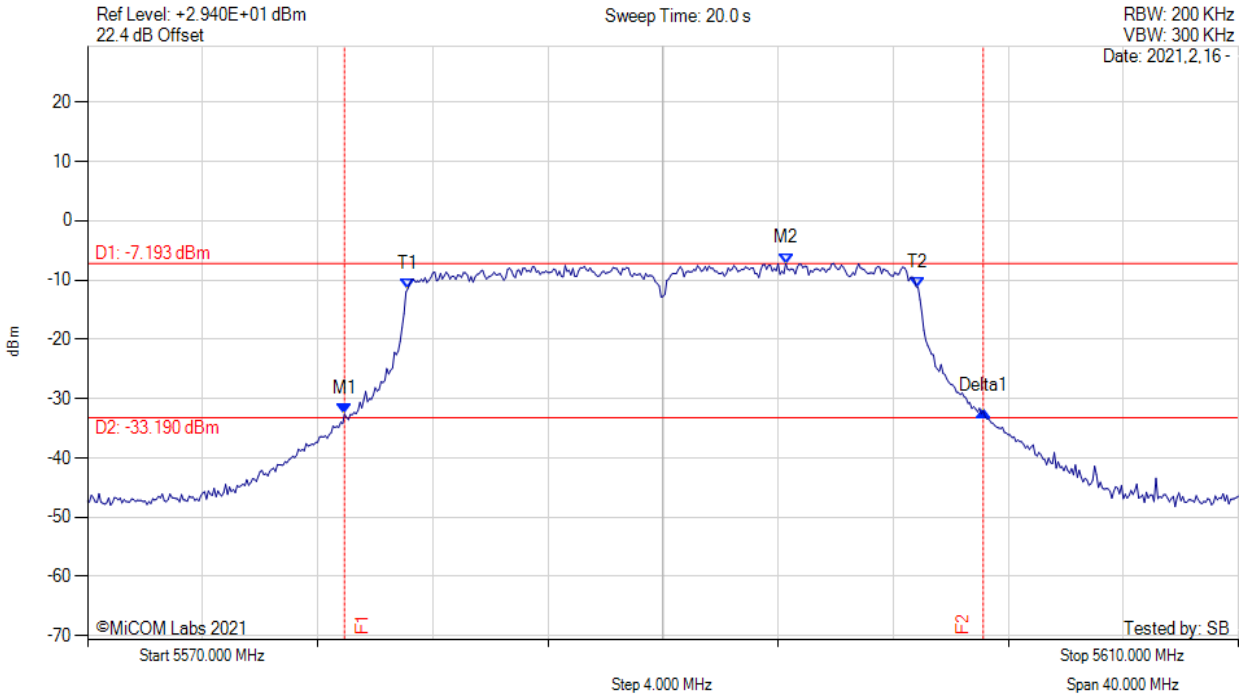


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5479.130 MHz : -30.437 dBm M2 : 5493.000 MHz : -6.628 dBm Delta1 : 21.670 MHz : -0.940 dB T1 : 5481.067 MHz : -11.487 dBm T2 : 5498.867 MHz : -11.416 dBm OBW : 17.775 MHz	Measured 26 dB Bandwidth: 21.670 MHz Measured 99% Bandwidth: 17.775 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5590.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

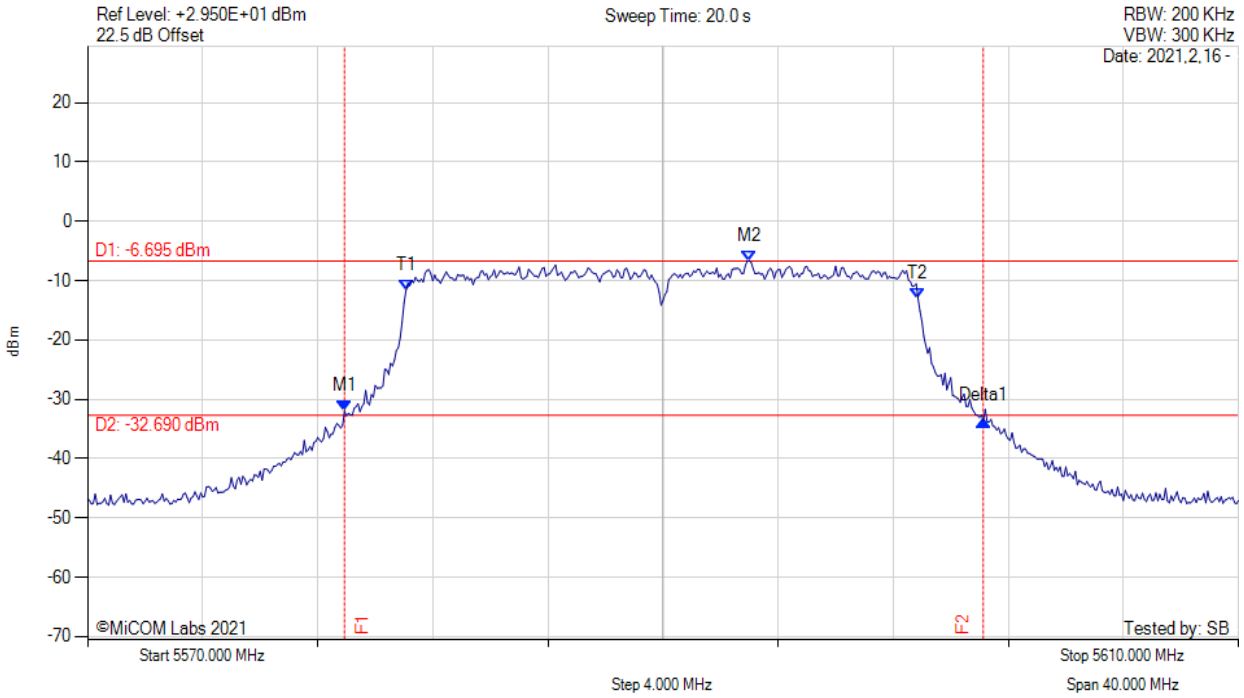


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5578.930 MHz : -32.599 dBm M2 : 5594.270 MHz : -7.193 dBm Delta1 : 22.200 MHz : 0.516 dB T1 : 5581.133 MHz : -11.458 dBm T2 : 5598.867 MHz : -11.243 dBm OBW : 17.760 MHz	Measured 26 dB Bandwidth: 22.200 MHz Measured 99% Bandwidth: 17.760 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5590.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

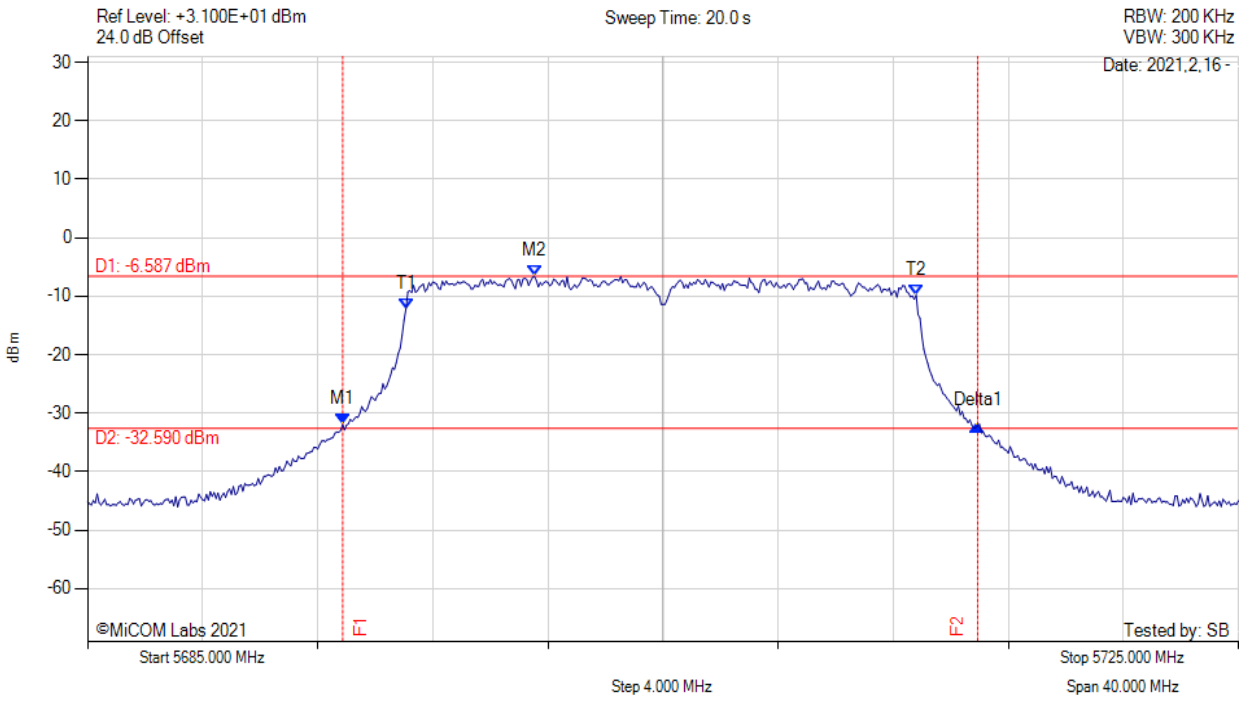


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5578.930 MHz : -32.029 dBm M2 : 5593.000 MHz : -6.695 dBm Delta1 : 22.200 MHz : -1.558 dB T1 : 5581.067 MHz : -11.638 dBm T2 : 5598.867 MHz : -13.081 dBm OBW : 17.758 MHz	Measured 26 dB Bandwidth: 22.200 MHz Measured 99% Bandwidth: 17.758 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5705.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

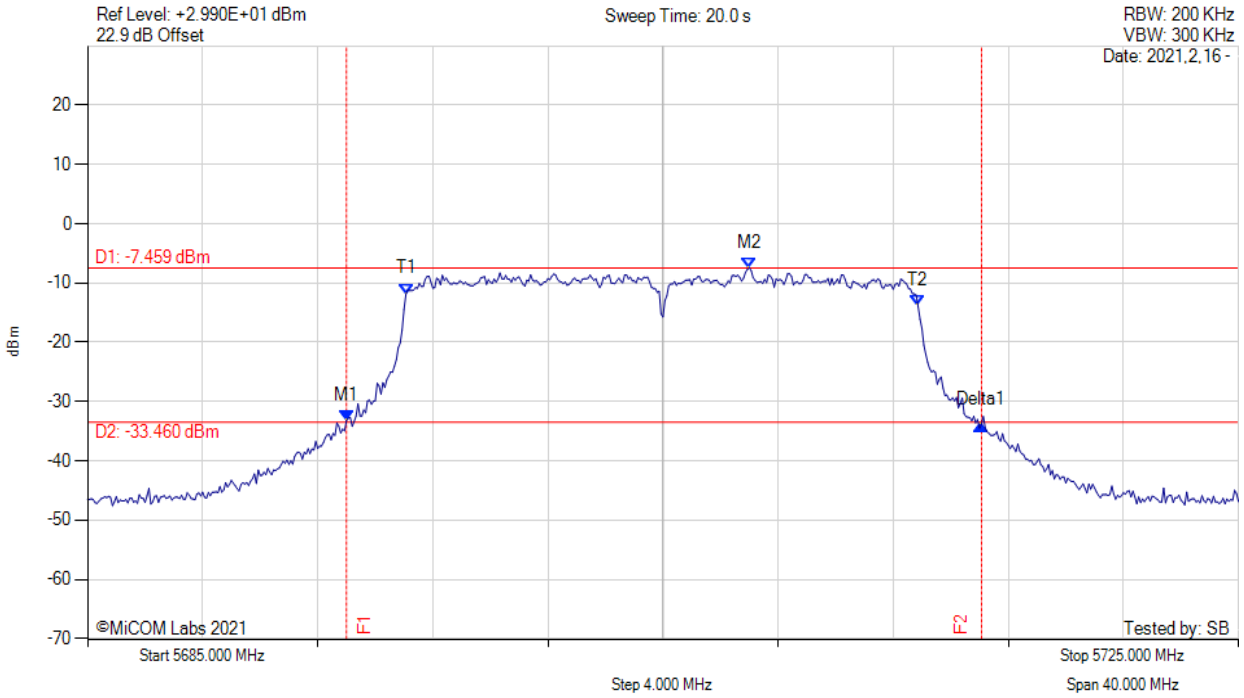


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5693.870 MHz : -31.956 dBm M2 : 5700.530 MHz : -6.587 dBm Delta1 : 22.070 MHz : -0.219 dB T1 : 5696.067 MHz : -12.119 dBm T2 : 5713.800 MHz : -9.827 dBm OBW : 17.709 MHz	Measured 26 dB Bandwidth: 22.070 MHz Measured 99% Bandwidth: 17.709 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 20MHz, Channel: 5705.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

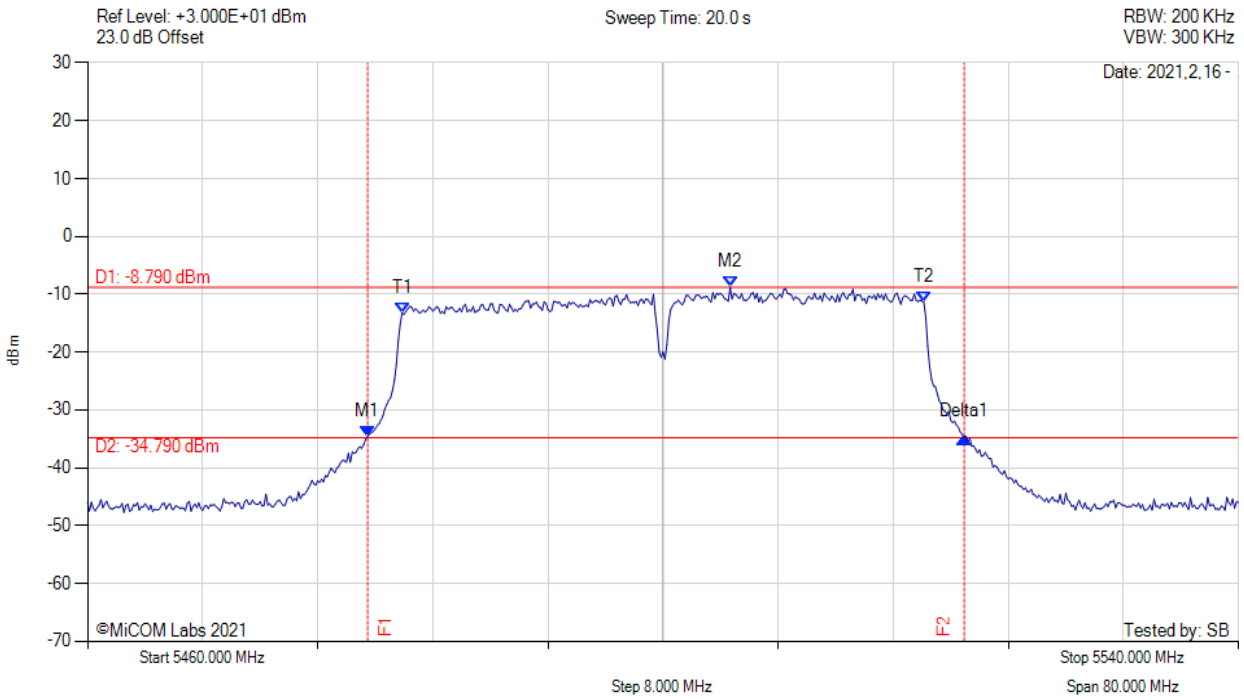


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5694.000 MHz : -33.194 dBm M2 : 5708.000 MHz : -7.459 dBm Delta1 : 22.070 MHz : -0.716 dB T1 : 5696.067 MHz : -11.833 dBm T2 : 5713.867 MHz : -13.932 dBm OBW : 17.757 MHz	Measured 26 dB Bandwidth: 22.070 MHz Measured 99% Bandwidth: 17.757 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5500.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

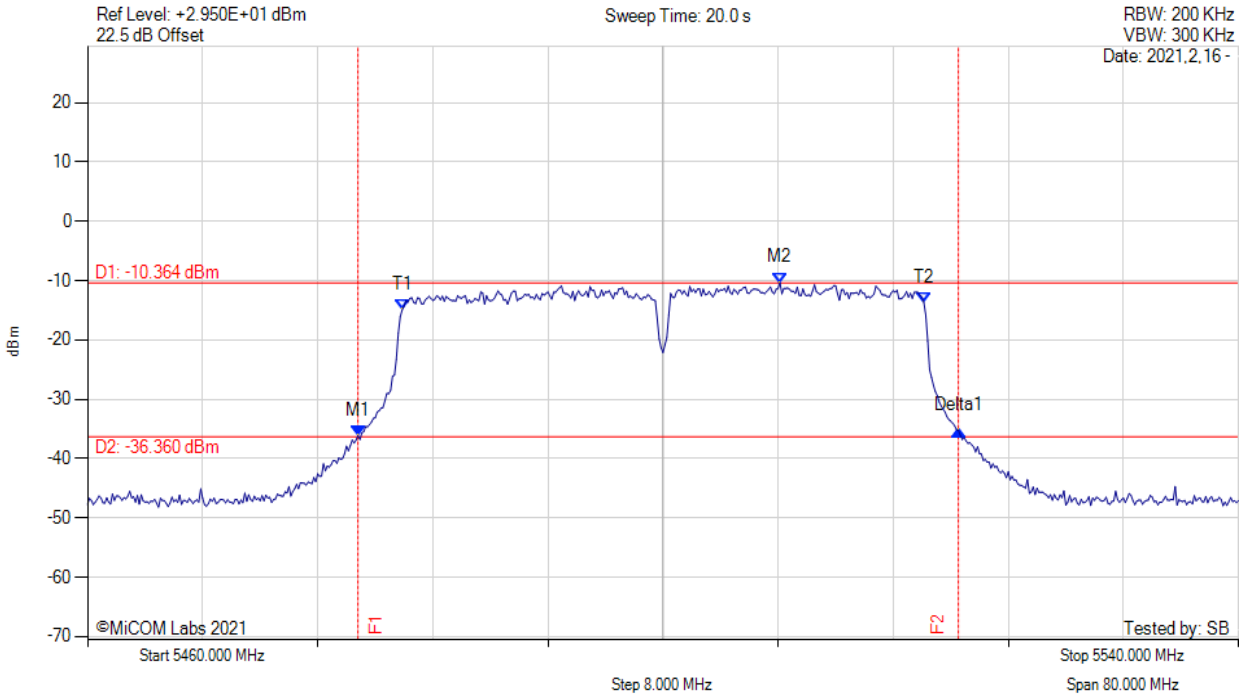


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5479.470 MHz : -34.593 dBm M2 : 5504.670 MHz : -8.790 dBm Delta1 : 41.470 MHz : -0.119 dB T1 : 5481.867 MHz : -13.225 dBm T2 : 5518.133 MHz : -11.371 dBm OBW : 36.232 MHz	Measured 26 dB Bandwidth: 41.470 MHz Measured 99% Bandwidth: 36.232 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5500.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

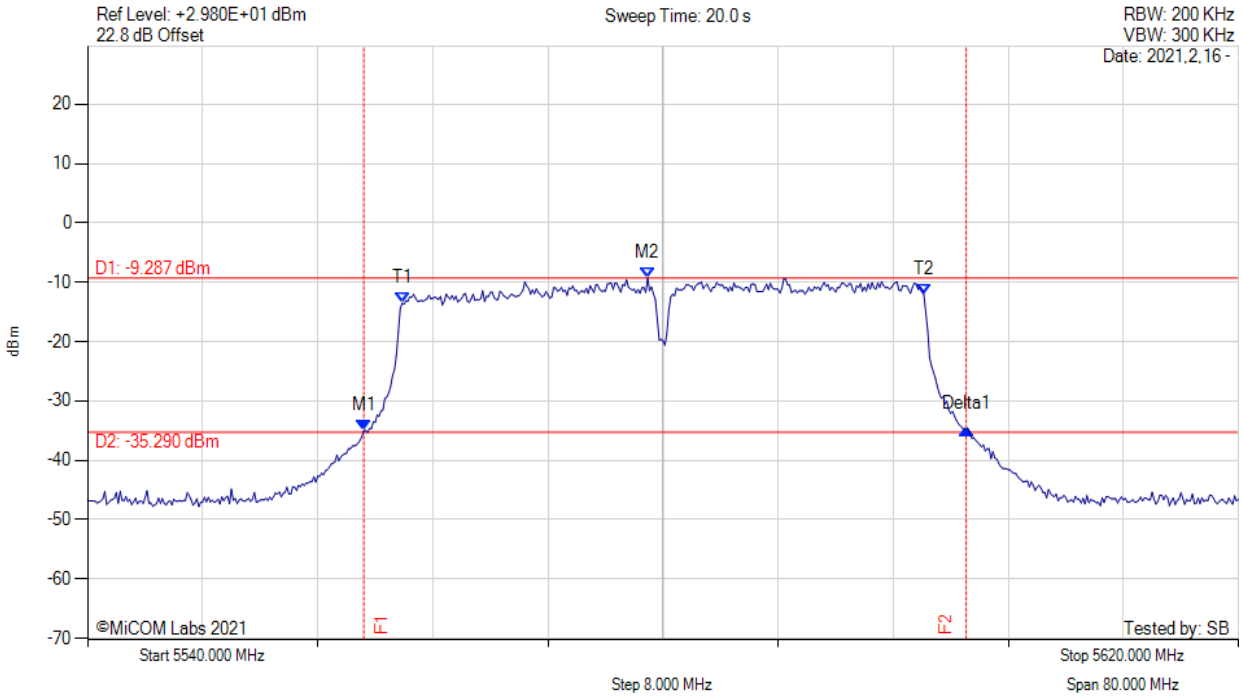


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5478.800 MHz : -36.140 dBm M2 : 5508.130 MHz : -10.364 dBm Delta1 : 41.730 MHz : 0.891 dB T1 : 5481.867 MHz : -14.978 dBm T2 : 5518.133 MHz : -13.674 dBm OBW : 36.196 MHz	Measured 26 dB Bandwidth: 41.730 MHz Measured 99% Bandwidth: 36.196 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5580.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

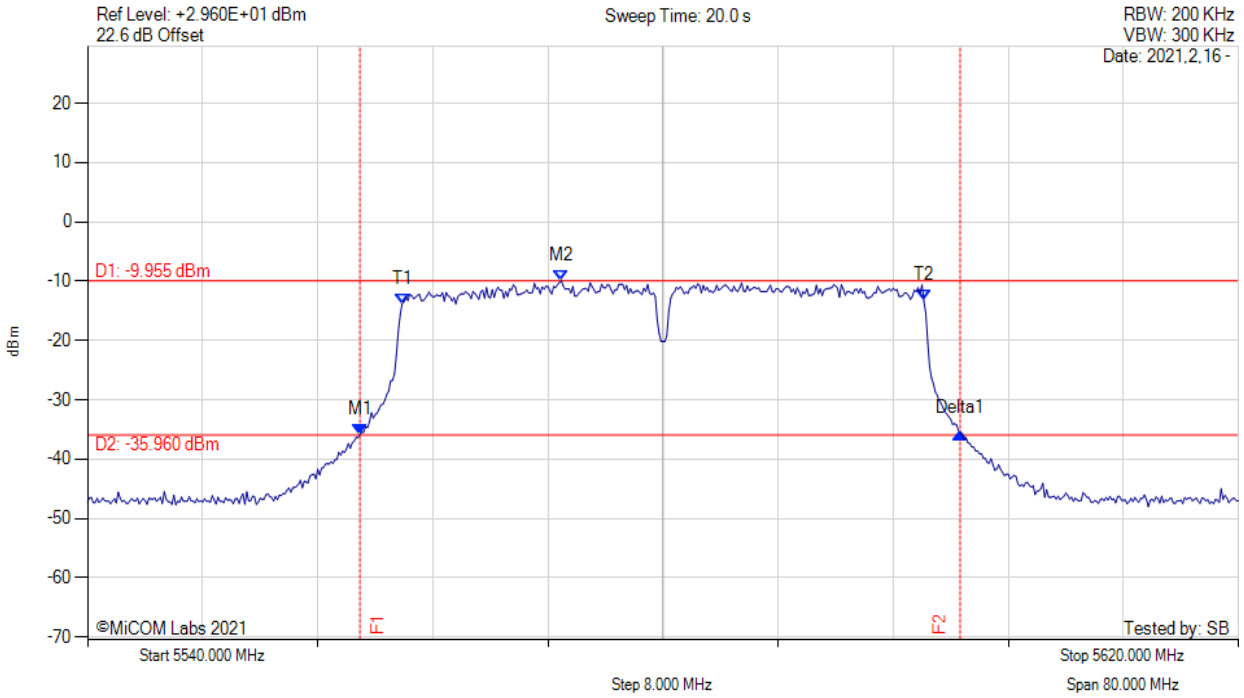


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5559.200 MHz : -35.056 dBm M2 : 5578.930 MHz : -9.287 dBm Delta1 : 41.870 MHz : 0.231 dB T1 : 5561.867 MHz : -13.510 dBm T2 : 5598.133 MHz : -12.074 dBm OBW : 36.230 MHz	Measured 26 dB Bandwidth: 41.870 MHz Measured 99% Bandwidth: 36.230 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5580.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

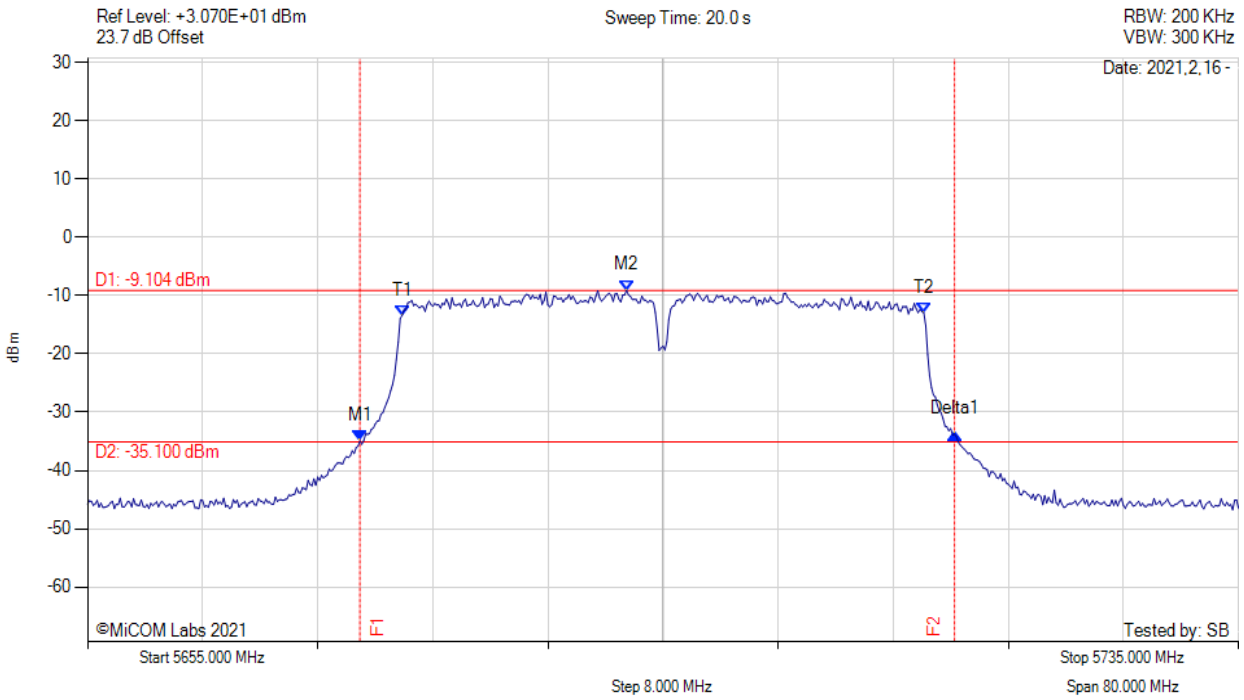


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5558.930 MHz : -35.867 dBm M2 : 5572.930 MHz : -9.955 dBm Delta1 : 41.730 MHz : 0.278 dB T1 : 5561.867 MHz : -13.809 dBm T2 : 5598.133 MHz : -13.281 dBm OBW : 36.180 MHz	Measured 26 dB Bandwidth: 41.730 MHz Measured 99% Bandwidth: 36.180 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5695.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

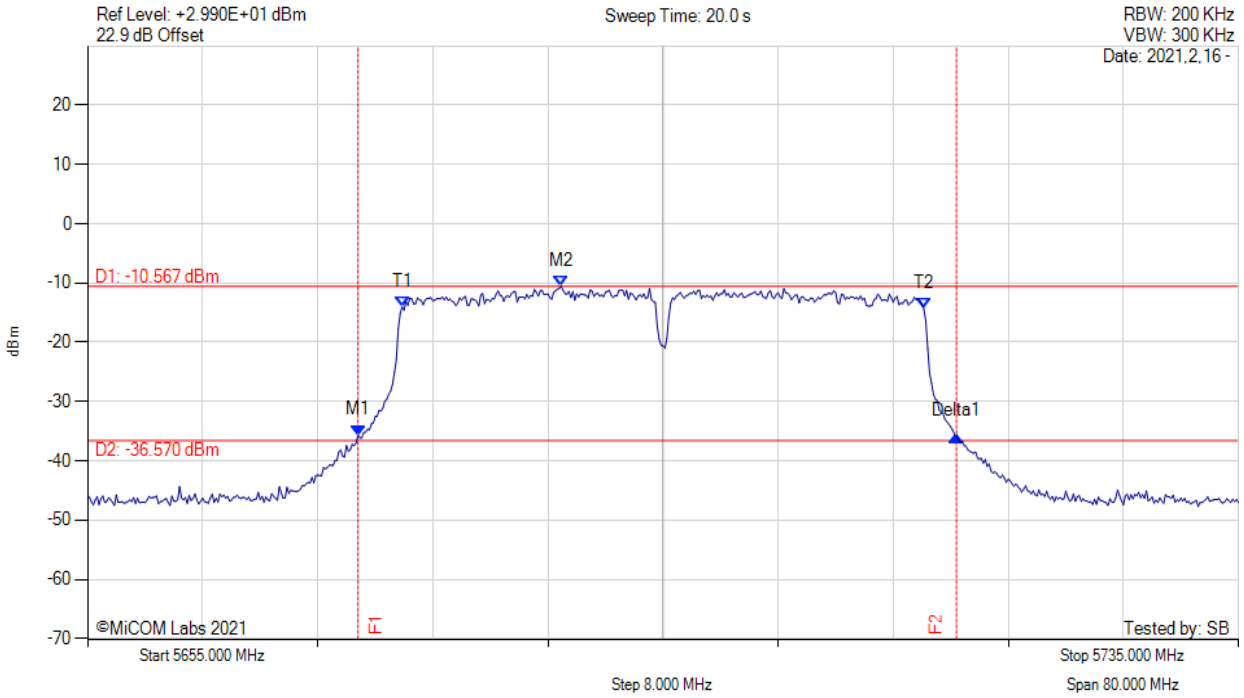


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5673.930 MHz : -34.941 dBm M2 : 5692.470 MHz : -9.104 dBm Delta1 : 41.330 MHz : 1.186 dB T1 : 5676.867 MHz : -13.408 dBm T2 : 5713.133 MHz : -12.958 dBm OBW : 36.192 MHz	Measured 26 dB Bandwidth: 41.330 MHz Measured 99% Bandwidth: 36.192 MHz

back to matrix

26 dB & 99% BANDWIDTH

Variant: 40MHz, Channel: 5695.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



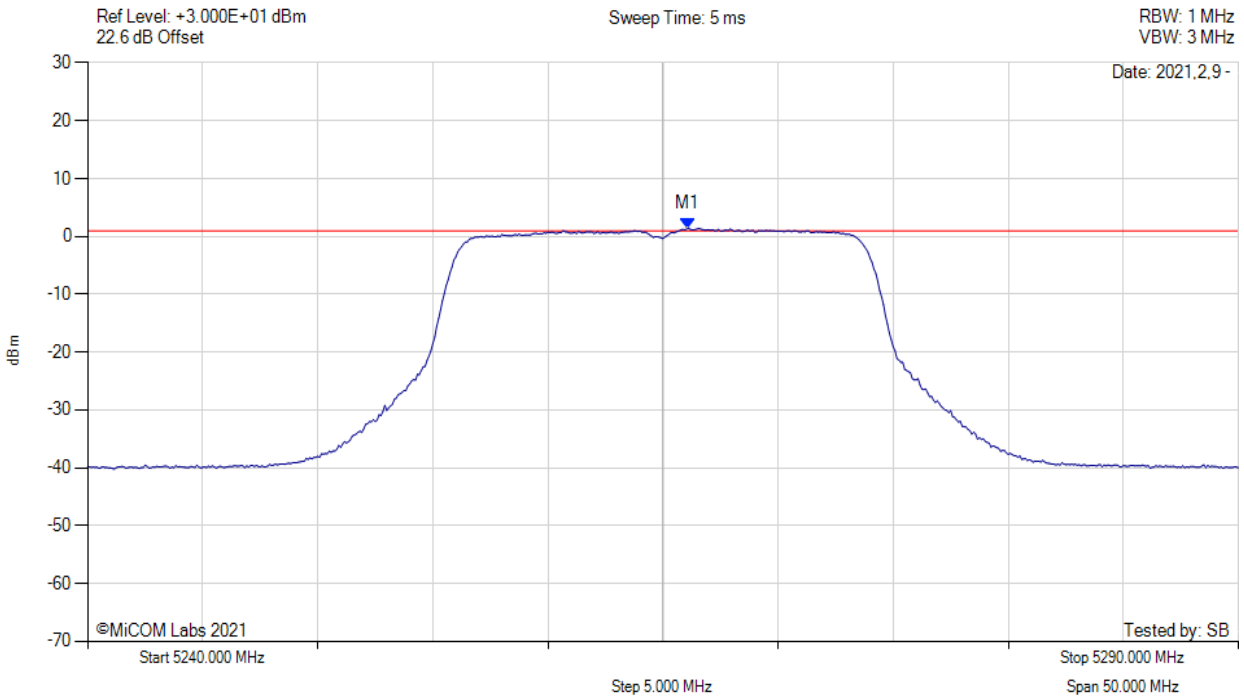
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = POS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAXH	M1 : 5673.800 MHz : -35.680 dBm M2 : 5687.930 MHz : -10.567 dBm Delta1 : 41.600 MHz : -0.188 dB T1 : 5676.867 MHz : -14.034 dBm T2 : 5713.133 MHz : -14.393 dBm OBW : 36.217 MHz	Measured 26 dB Bandwidth: 41.600 MHz Measured 99% Bandwidth: 36.217 MHz

back to matrix

A.2. Power Spectral Density

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5265.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

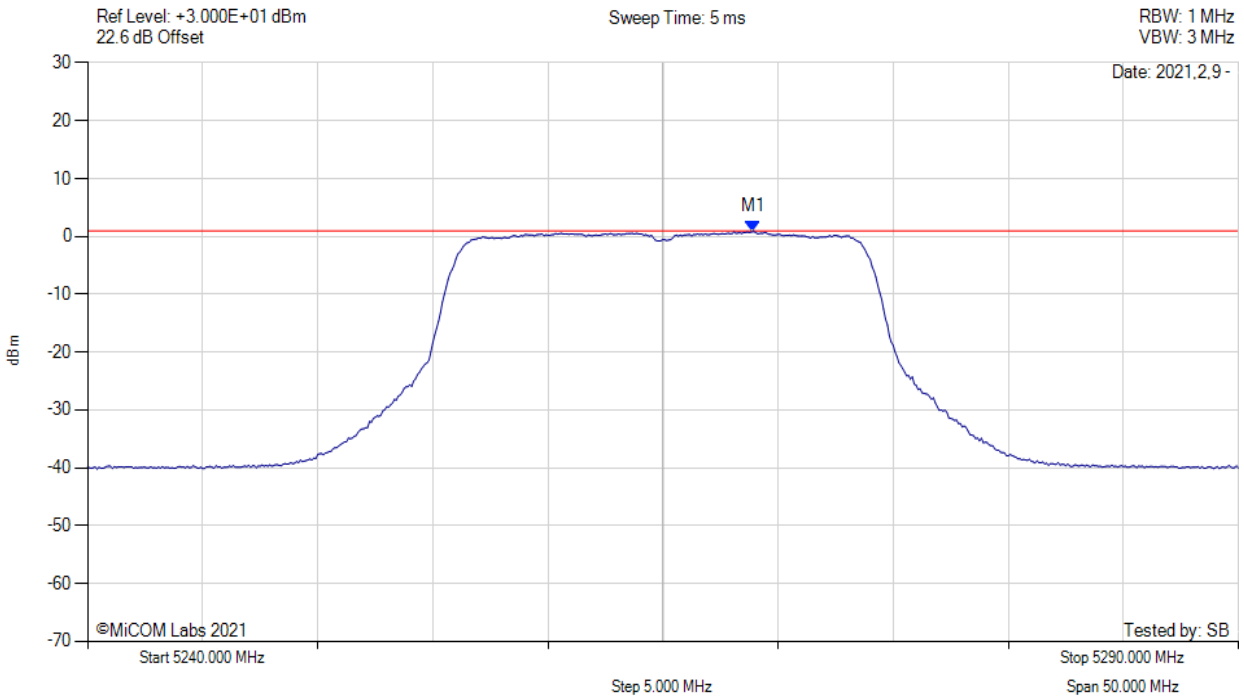


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5266.080 MHz : 1.384 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5265.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

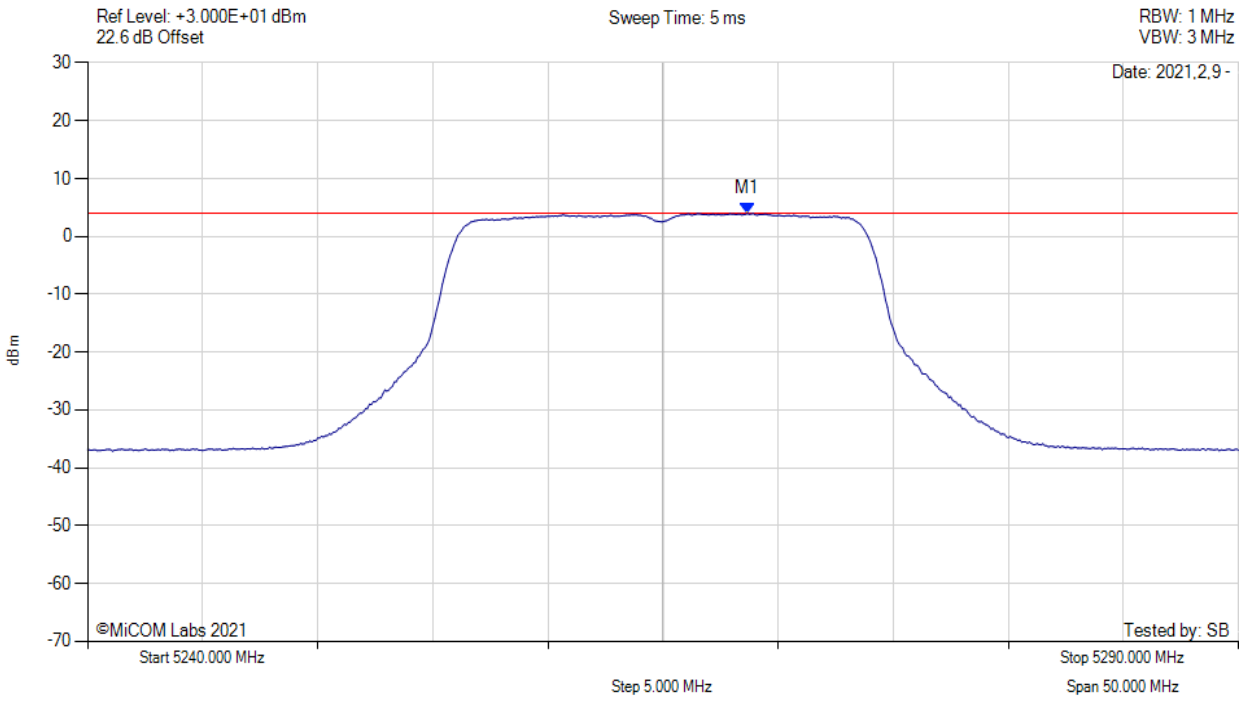


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5268.920 MHz : 0.841 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5265.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

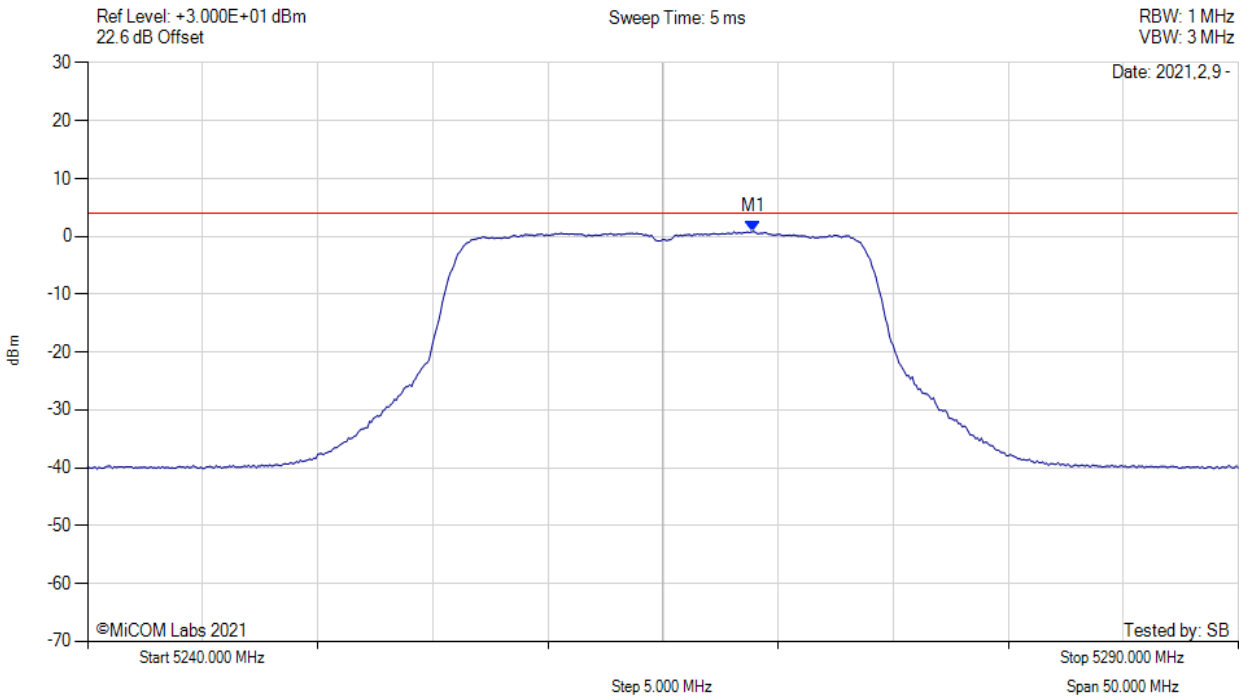


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5268.700 MHz : 3.954 dBm M1 + DCCF : 5268.700 MHz : 3.998 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: 0.0 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5265.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

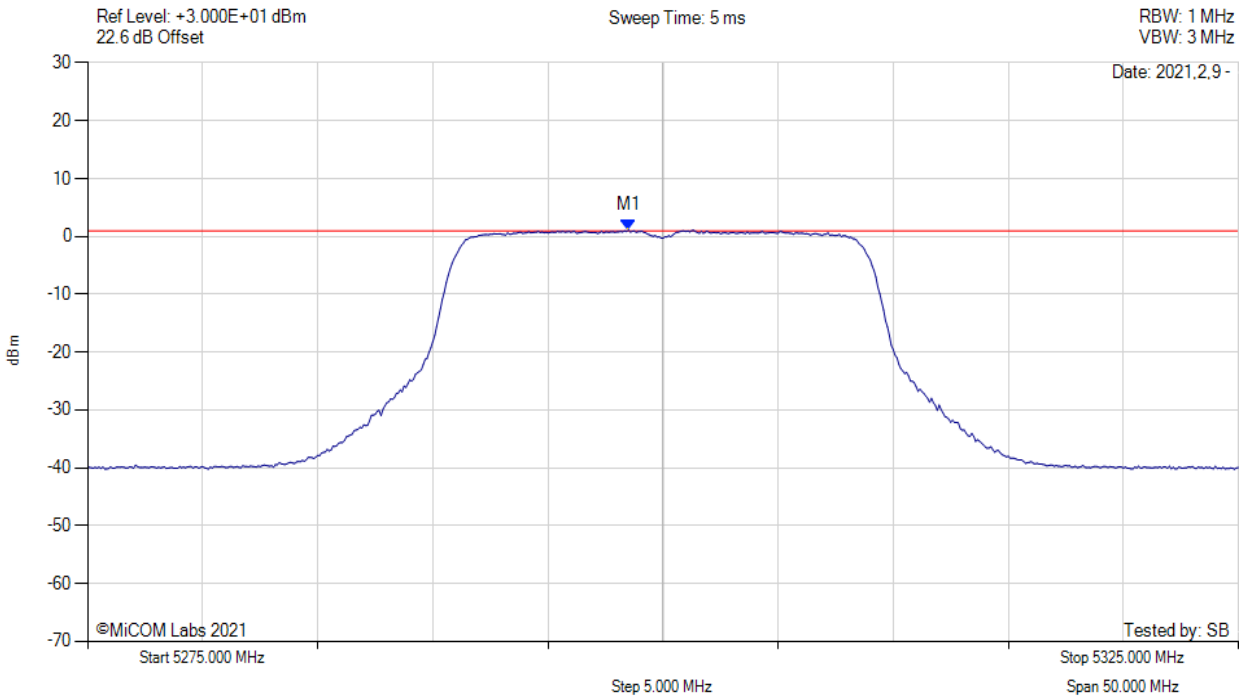


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5268.900 MHz : 0.841 dBm M1 + DCCF : 5268.900 MHz : 0.885 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: -3.1 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5300.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

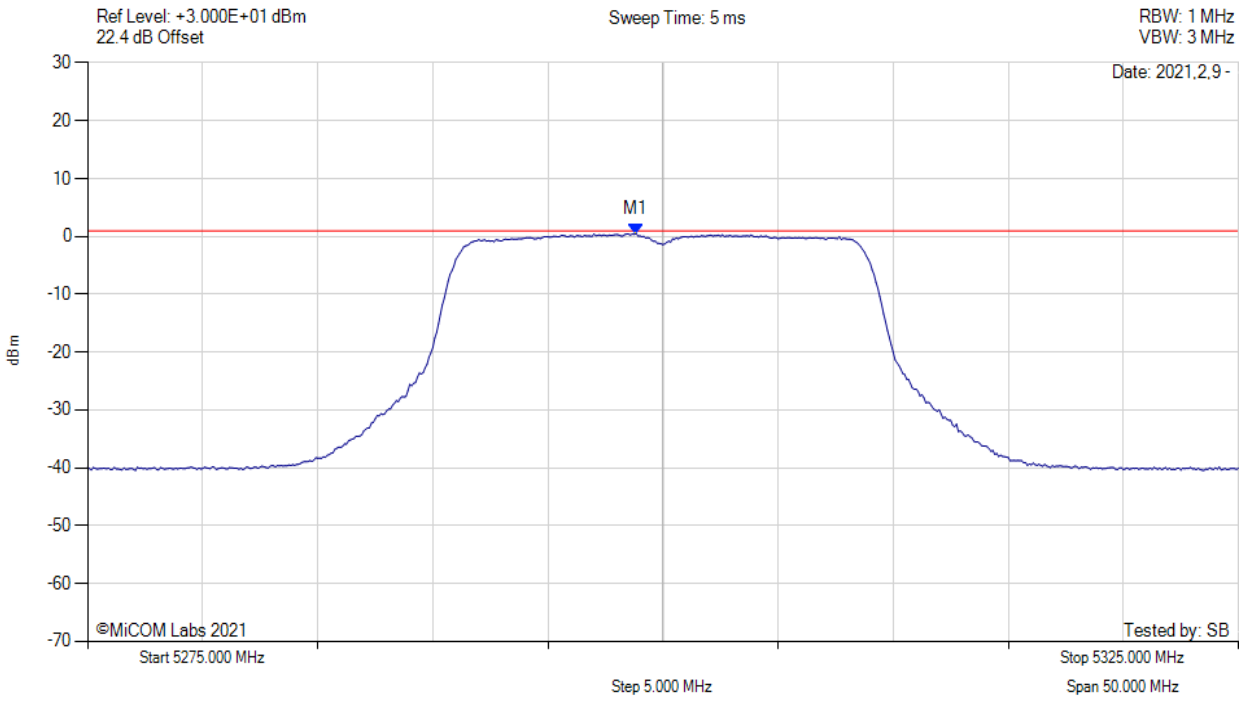


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5298.500 MHz : 1.113 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5300.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

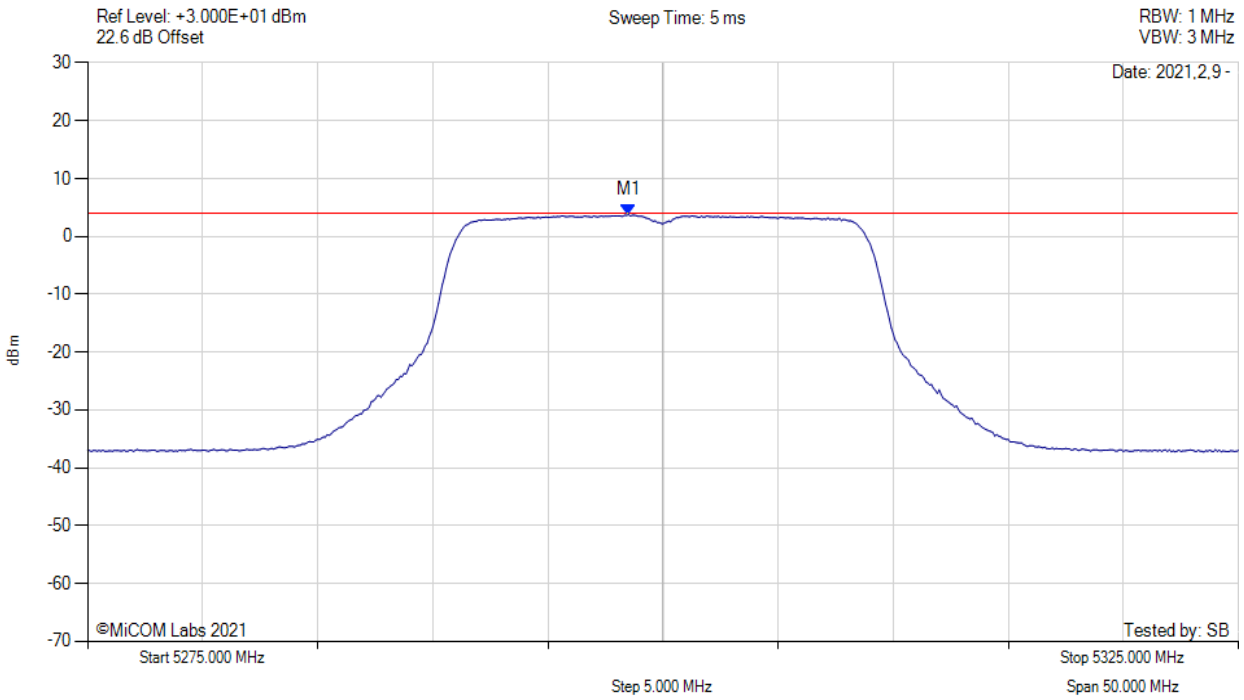


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5298.830 MHz : 0.471 dBm	Channel Frequency: 5300.00 MHz

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5300.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

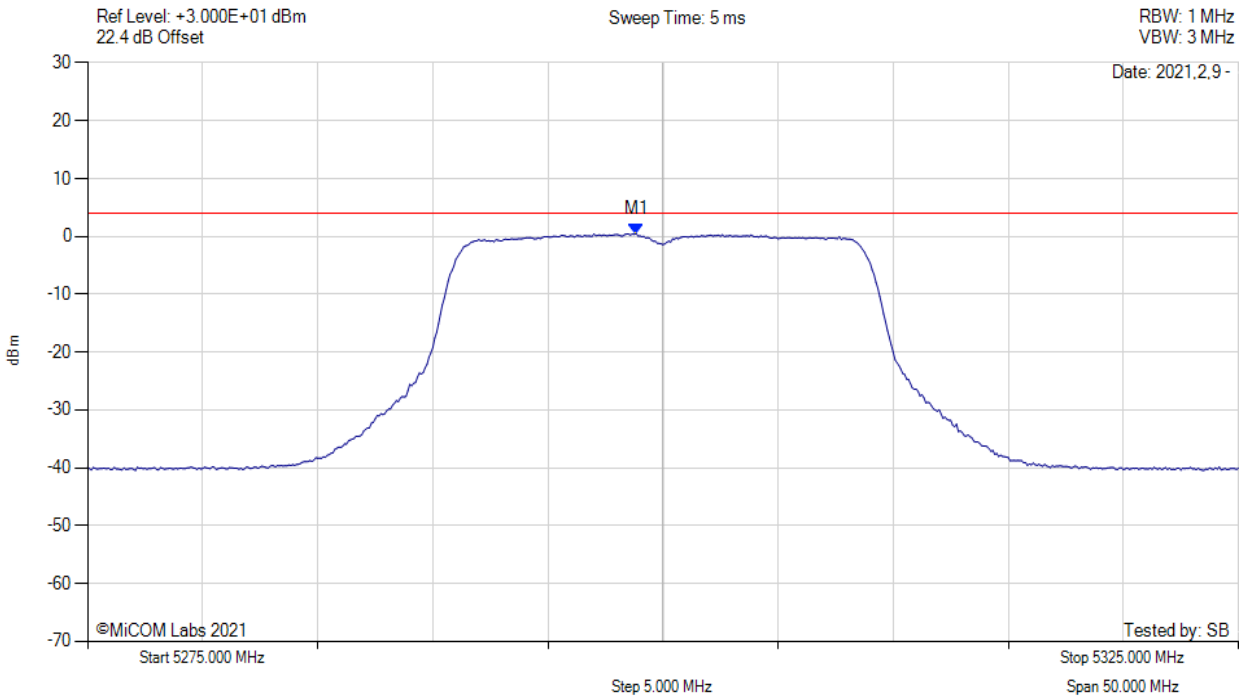


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5298.500 MHz : 3.780 dBm M1 + DCCF : 5298.500 MHz : 3.824 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: -0.2 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5300.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

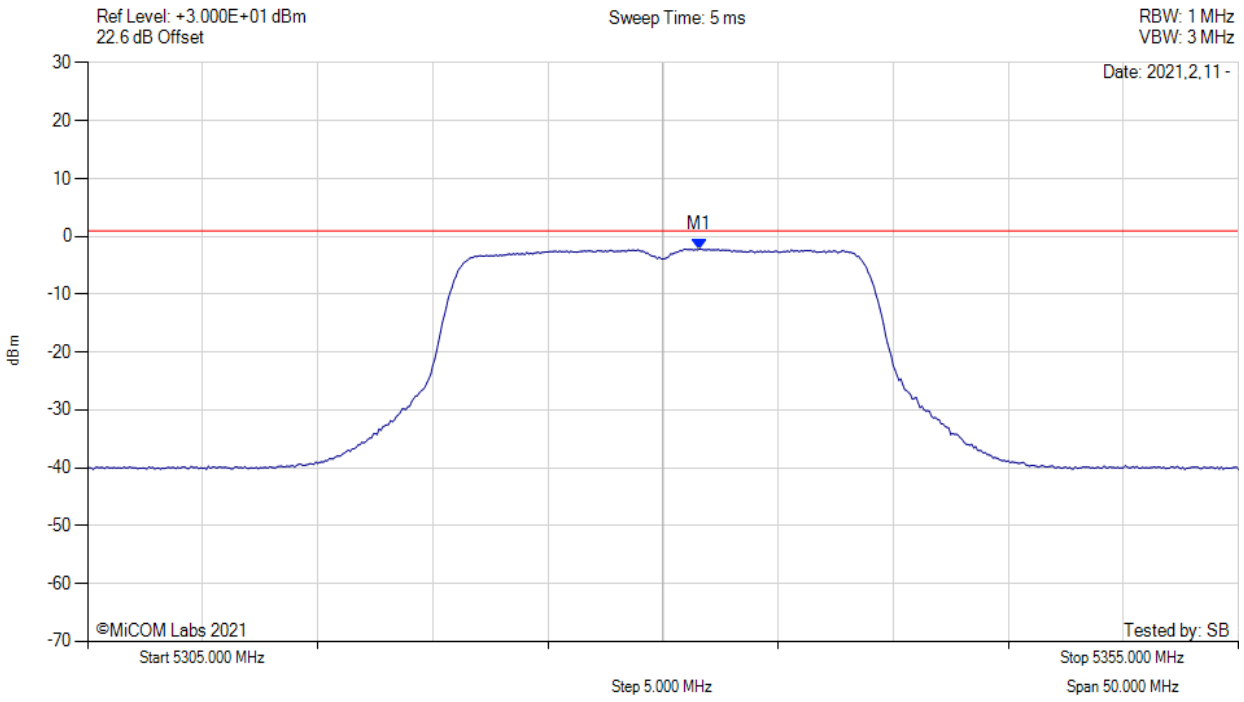


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5298.800 MHz : 0.471 dBm M1 + DCCF : 5298.800 MHz : 0.515 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: -3.5 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5330.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

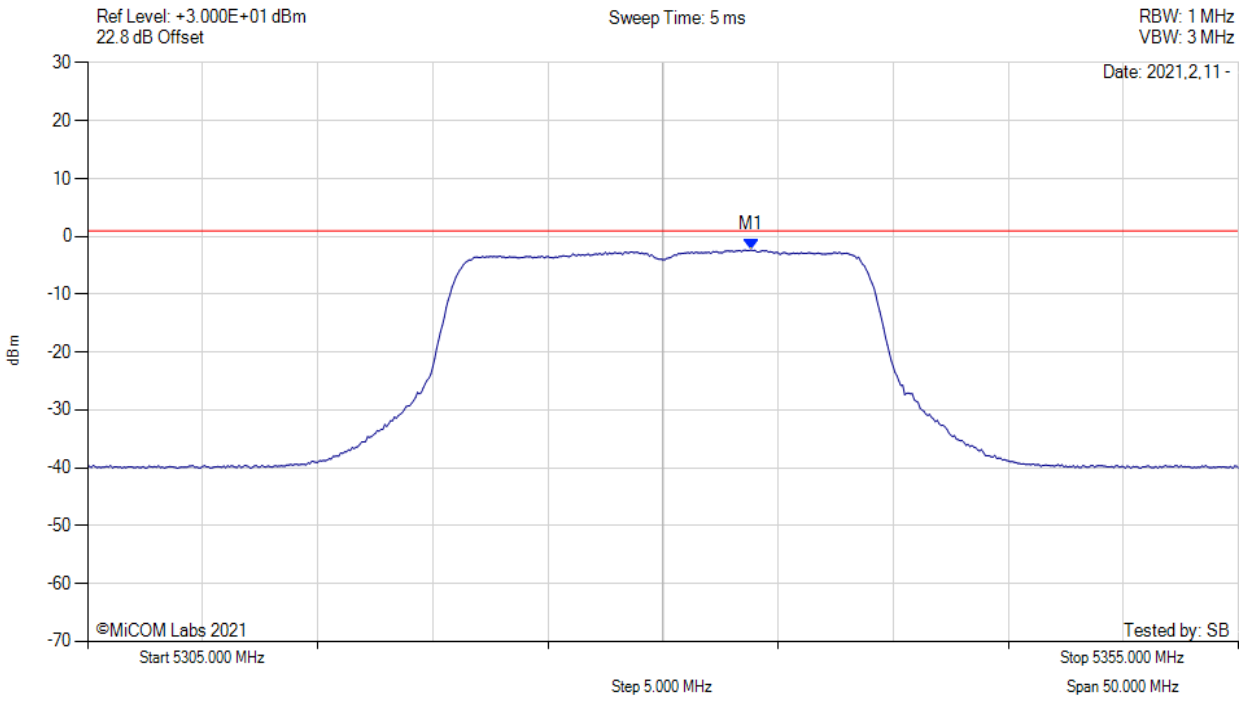


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5331.580 MHz : -2.182 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5330.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc

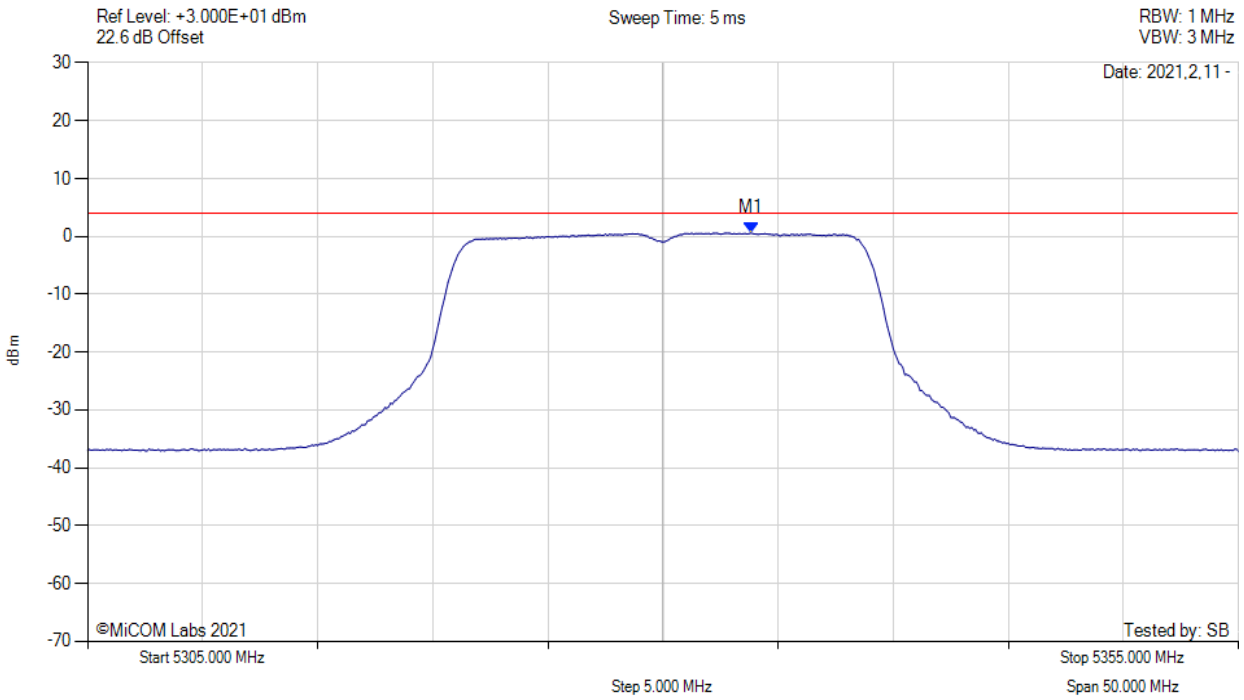


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5333.830 MHz : -2.336 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5330.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

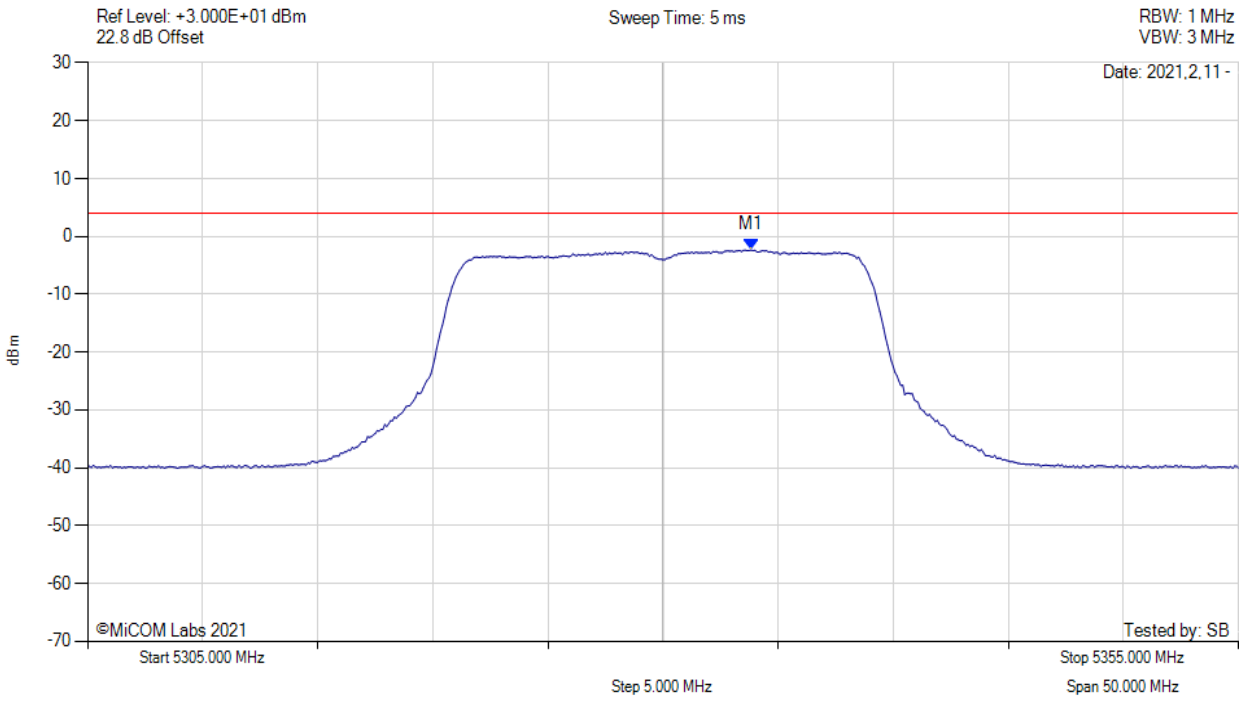


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5333.800 MHz : 0.593 dBm M1 + DCCF : 5333.800 MHz : 0.637 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: -3.4 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 20MHz, Channel: 5330.00 MHz, SUM, Temp: 20, Voltage: 56 Vdc

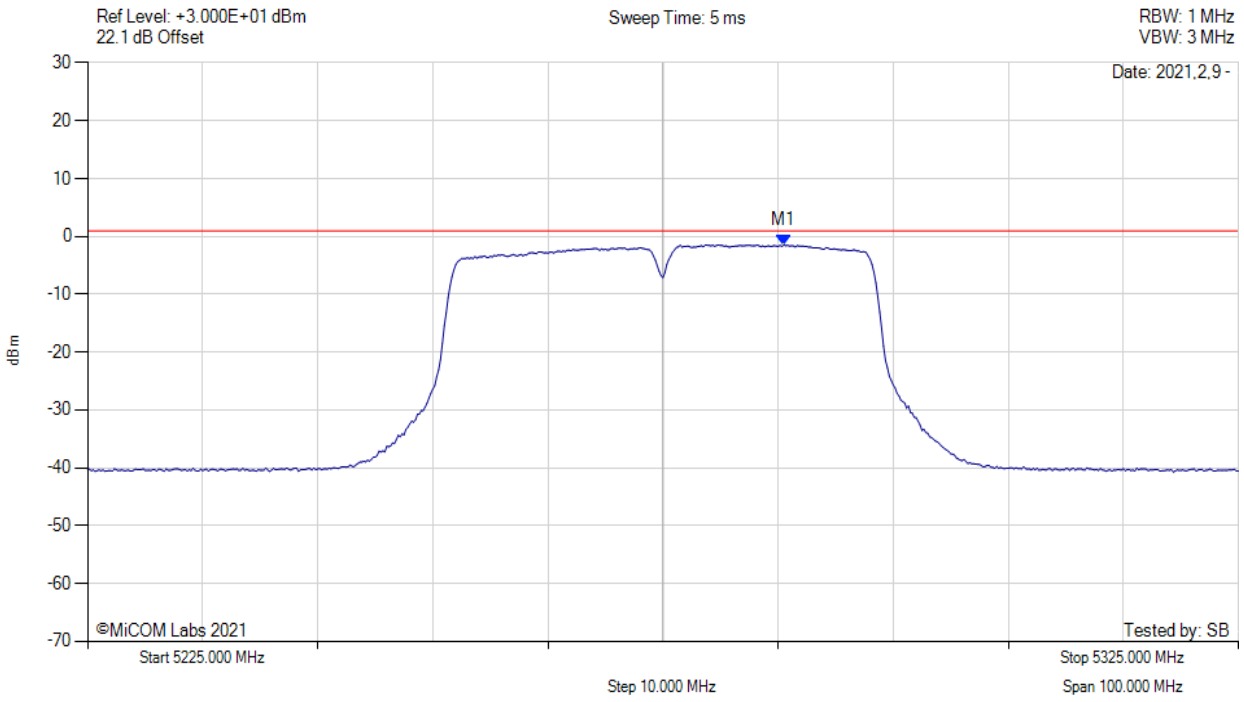


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5333.800 MHz : -2.336 dBm M1 + DCCF : 5333.800 MHz : -2.292 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 4.0 dBm Margin: -6.3 dB

back to matrix

POWER SPECTRAL DENSITY

Variant: 40MHz, Channel: 5275.00 MHz, Chain a, Temp: 20, Voltage: 56 Vdc

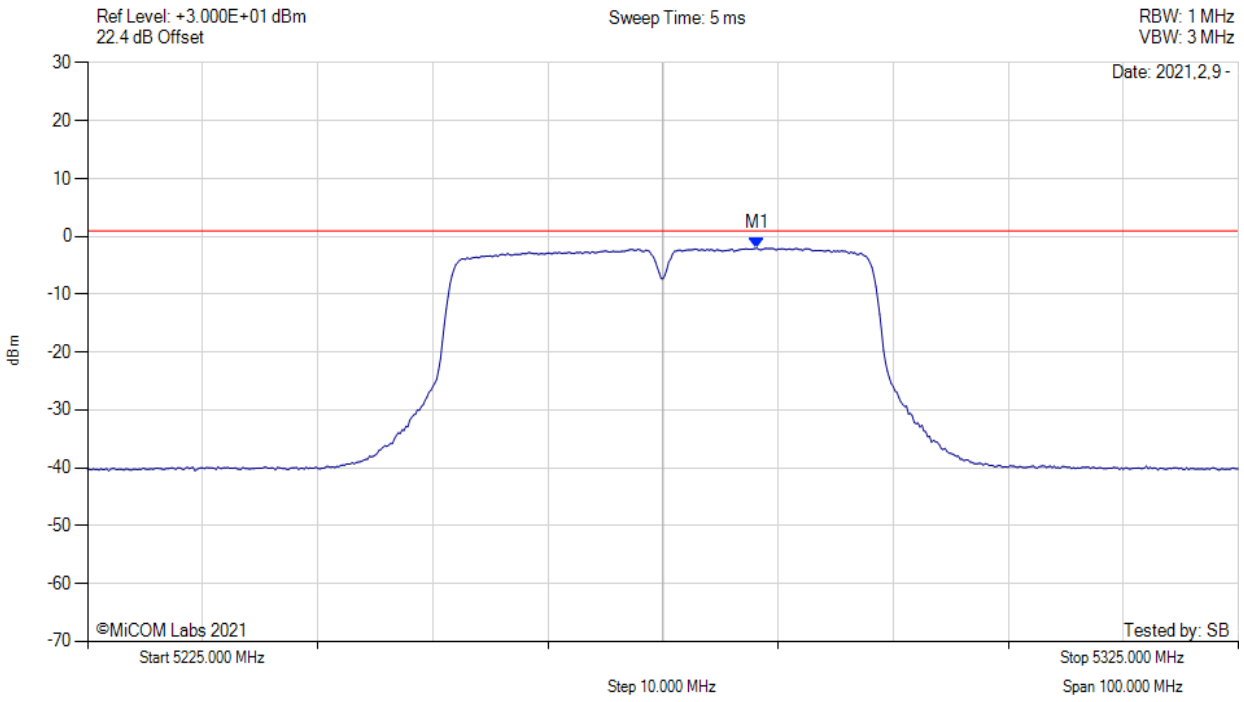


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5285.500 MHz : -1.487 dBm	Limit: ≤ 0.990 dBm

back to matrix

POWER SPECTRAL DENSITY

Variant: 40MHz, Channel: 5275.00 MHz, Chain b, Temp: 20, Voltage: 56 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = AVER Sweep Count = +100 RF Atten (dB) = 30 Trace Mode = VIEW	M1 : 5283.170 MHz : -2.028 dBm	Limit: ≤ 0.990 dBm

back to matrix