



REGULATORY COMPLIANCE TEST REPORT

FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-248

Report No.: RDWN98-U2 Rev A

Company: Radwin

Model Name: RADWIN 2000 E CON EC00,
RADWIN 2000 E INT EI00

REGULATORY COMPLIANCE TEST REPORT

Company Name: Radwin

Model Name: RADWIN 2000 E CON EC00,
RADWIN 2000 E INT EI00

To: FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-248

Test Report Serial No.: RDWN98-U2 Rev A

This report supersedes: NONE

Applicant: Radwin
27 Habarzel Street
Tel Aviv, 6971039
Israel

Issue Date: 8th January 2025

This Test Report is Issued Under the Authority of:

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MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

Table of Contents

1. ACCREDITATION, LISTINGS & RECOGNITION	4
1.1. TESTING ACCREDITATION	4
1.2. RECOGNITION	5
1.3. PRODUCT CERTIFICATION	6
2. DOCUMENT HISTORY	7
3. TEST RESULT CERTIFICATE	8
4. REFERENCES AND MEASUREMENT UNCERTAINTY	9
4.1. Normative References	9
4.2. Test and Uncertainty Procedure	10
5. PRODUCT DETAILS AND TEST CONFIGURATIONS	11
5.1. Technical Details	11
5.2. Scope Of Test Program	12
5.3. Equipment Model(s) and Serial Number(s)	13
5.4. Antenna Details	13
5.5. Cabling and I/O Ports	13
5.6. Test Configurations	14
5.7. Equipment Modifications	14
5.8. Deviations from the Test Standard	14
6. TEST SUMMARY	15
7. TEST EQUIPMENT CONFIGURATION(S)	16
7.1. Conducted RF	16
7.2. Radiated Emissions	18
8. MEASUREMENT AND PRESENTATION OF TEST DATA	21
9. TEST RESULTS	22
9.1. Peak Transmit Power	22
9.2. 26 dB & 99% Bandwidth	25
9.3. Power Spectral Density	30
9.4. In-Band Spectrum Emission Mask	35
9.5. Radiated	39
9.5.1. <i>TX Spurious & Restricted Band Emissions</i>	41
9.5.1.1. Antenna: AX6400	41
9.5.1.1.1. <i>BE 5925 MHz</i>	46
9.5.1.1.2. <i>BE 7125 MHz</i>	50
9.5.1.2. Antenna: RW-9622-5001	54
9.5.1.2.1. <i>BE 5925 MHz</i>	58
9.5.1.2.2. <i>BE 7125 MHz</i>	63
9.5.1.3. Antenna: RW-9632-5872	67
9.5.1.3.1. <i>BE 5925 MHz</i>	71
9.5.1.3.2. <i>BE 7125 MHz</i>	76
9.5.2. <i>Digital Emissions</i>	80
9.6. AC Wireline	81
A. APPENDIX - GRAPHICAL IMAGES	86
A.1. 26 dB & 99% Bandwidth	87
A.2. Power Spectral Density	111
A.3. Spectrum Emission Mask	159

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>



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 Labs 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 Firm Designation#: US1084
Canada	Industry Canada (ISED)	FCB	APEC MRA 2	US0159 ISED#: 4143A
Japan	MIC (Ministry of Internal Affairs and Communication)	CAB	Japan MRA 2	RCB 210
	Japan Approvals Institute for Telecommunication Equipment (JATE)			
	VCCI			
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 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>



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	3 rd September 2024	Draft for client review and comments
Draft #2	12 th September 2024	Additional review
Rev A	8 th January 2025	Initial Release

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(s): RADWIN 2000 E CON EC00
RADWIN 2000 E INT EI00

Telephone: +1 925 462 0304

Type Of Equipment: 5 GHz High Performance PtP
Outdoor Unit

Fax: +1 925 462 0306

S/N's: Prototype 1

Test Date(s): 20th – 27th August 2024

Website: www.micomlabs.com

STANDARD(S)

**FCC CFR 47 Part 15 Subpart E 15.407 & ISED
RSS-248**

TEST RESULTS

EQUIPMENT COMPLIES

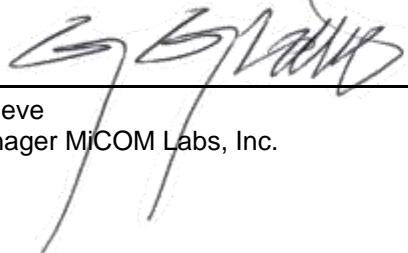
MiCOM Labs, Inc. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report.

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.

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, D03	D01 Oct 2013, D02 Oct 2011, D03 Oct 2020	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. 662911 D01 Multiple Transmitter Output v02r01, 662911 D02 MIMO with Cross Polarized Antenna v01, 662911 D03 MIMO Antenna Gain Measurement v01, OET 13TR1003 Directional Gain of 802.11 MIMO with CDD 04.05 2013
II	KDB 905462 D07 v02	Aug 2016	Test guidance to demonstrate compliance for U-NII devices subject to DFS requirements.
III	KDB 926956 D01 v02	Aug 2016	U-NII Device Transition Plan
IV	A2LA	16th April 2024	R105 - Requirements When Making Reference to A2LA Accreditation Status
V	ANSI C63.10	2020	American National Standard for Testing Unlicensed Wireless Devices
VI	ANSI C63.4	2014 + 2017 Amendment	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	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
VIII	FCC 06-96	Jun 2006	Memorandum Opinion and Order
IX	FCC 47 CFR Part 15.407	2021	Radio Frequency Devices; Subpart E –Unlicensed National Information Infrastructure Devices
X	ICES-003	Issue 7; Oct 2020	Information Technology Equipment (Including Digital Apparatus)
XI	UKAS M3003	Edition 6 March 2024	The Expression of Uncertainty and Confidence in Measurements
XII	RSS-247 Issue 3	Aug 2023	Digital Transmission Systems (DTSs), Frequency Hopping System (FHSs) and Licence-Exempt Local Area Network (LE-LEN) Devices
XIII	RSS-Gen Issue 5	Amendment 1,2 (Feb 2021)	General Requirements for Compliance of Radio Apparatus. With Amendments 1: March 2019 and 2: Feb 2021.
XIV	FCC 47 CFR Part 2.1033	Feb 2023	FCC requirements and rules regarding photographs and test setup diagrams.
XV	KDB 789033 D02 V02r01	Dec 2017	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
XVI	UKAS LAB 12	Edition 4 April 2022	The Expression of Uncertainty in Testing
XVII	KDB 987594 D01 U-NII	Aug 22 2023	Part 15 Subpart E U-NII 6GHz General Guidance Bands 5, 6, 7, and 8
XVIII	KDB 987594 D02 U-NII	Aug 9 th 2023	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure 6GHz (U-NII) Devices Part 15 Subpart E
XIV	ISED RSS-248 ISSUE 2	Dec 20 th 2022	This Radio Standards Specification (RSS) sets out the certification requirements for licence-exempt Radio Local Area Network (RLAN) devices operating in the 5925-7125 MHz frequency band (the 6 GHz band). The RLAN devices with occupied bandwidths that fall into other frequency bands (e.g., the 2.4 GHz band) shall comply with the requirements for each respective band specified in the applicable RSS standard(s).

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.

5. PRODUCT DETAILS AND TEST CONFIGURATIONS

5.1. Technical Details

Details	Description
Purpose:	Test of the RADWIN 2000 E to FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-248
Applicant:	RADWIN Ltd. 27 Habarzel Street Tel Aviv, 6971039 Israel
Manufacturer:	RADWIN Ltd.
Laboratory performing the tests:	MiCOM Labs, Inc. 575 Boulder Court Pleasanton California 94566 USA
Test report reference number:	RDWN98-U2
Date EUT received:	26 th September 2022
Standard(s) applied:	FCC CFR 47 Part 15 Subpart E 15.407 & ISED RSS-248
Dates of test (from - to):	20 th – 27 th August 2024
No of Units Tested:	2
Product Family Name:	RADWIN 2000
Model(s):	RADWIN 2000 E CON EC00, RADWIN 2000 E INT EI00
Location for use:	Outdoors
Declared Frequency Range(s):	5925 - 6425 MHz;
Type of Modulation:	OFDM
EUT Modes of Operation:	20MHz, 40MHz, 80MHz, 160MHz
Declared Nominal Output Power (dBm):	+30
Transmit/Receive Operation:	Transceiver
Rated Input Voltage and Current:	56VDC 1A
Operating Temperature Range:	-40°C to +60°C
ITU Emission Designator:	20M0W7W, 40M0W7W, 80M0W7W, 160M0W7W
Equipment Dimensions:	4.2 / 10.1 / 4.9 in
Weight:	2.7 lb
Hardware Rev:	Prototype
Software Rev:	C

5.2. Scope Of Test Program

RADWIN 2000 E CON EC00, RADWIN 2000 E INT EI00

The scope of the test program was to test the RADWIN 2000 E CON EC00, RADWIN 2000 E INT EI00 configurations in the frequency ranges 5925 - 6425 MHz; for compliance against the following specification:

FCC CFR 47 Part 15 Subpart E 15.407 (2024-08-20)

This subpart sets out the regulations for Unlicensed National Information Infrastructure (U-NII) devices operating in the 5.15-5.35 GHz, 5.47-5.895 GHz bands, and 5.925-7.125 GHz bands.

ISED RSS-248 Issue 2

This Radio Standards Specification (RSS) sets out the certification requirements for licence-exempt Radio Local Area Network (RLAN) devices operating in the 5925-7125 MHz frequency band (the 6 GHz band). The RLAN devices with occupied bandwidths that fall into other frequency bands (e.g., the 2.4 GHz band) shall comply with the requirements for each respective band specified in the applicable RSS standard(s).

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

Type	Equipment Description	Manufacturer	Model No.	Serial No.
EUT	5 GHz High Performance PtP Outdoor Unit	RADWIN	RADWIN 2000 E	Prototype
Support	POE Power Supply	Gospell	G0566-560-100	--
Support	Laptop	Dell	--	--

5.4. Antenna Details

Type	Manufacturer	Model	Family	Gain (dBi)	BF Gain	Dir BW	X-Pol	Frequency Band (MHz)
integral	RADWIN	AX6400	Panel	24.0	-	13.0	Yes	5925 - 6425
external	RADWIN	RW-9622-5001	Panel	27.0	-	5.0	Yes	5925 - 6425
external	RADWIN	RW-9628-5872	Dish	28.0	-	6.0	Yes	5925 - 6425
external	RADWIN	RW-9632-5872	Dish	32.0	-	4.0	Yes	5925 - 6425
external	RADWIN	RW-9732-4965	Dish	25.0	-	7.0	Yes	5925 - 6425

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	Connector Type	Data Type	Bit Rate Mbit/s
Ethernet PoE IN	>30m	1	No	RJ45	Packet Data	1000

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
5925 - 6425 MHz				
160 MHz	72.1	6,025.00	6,175.00	6,345.00
20 MHz	8.6	5,945.00	6,175.00	6,415.00
40 MHz	17.2	5,960.00	6,175.00	6,405.00
80 MHz	36	5,985.00	6,175.00	6,385.00

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 to complete the test program:

1. NONE

6. TEST SUMMARY

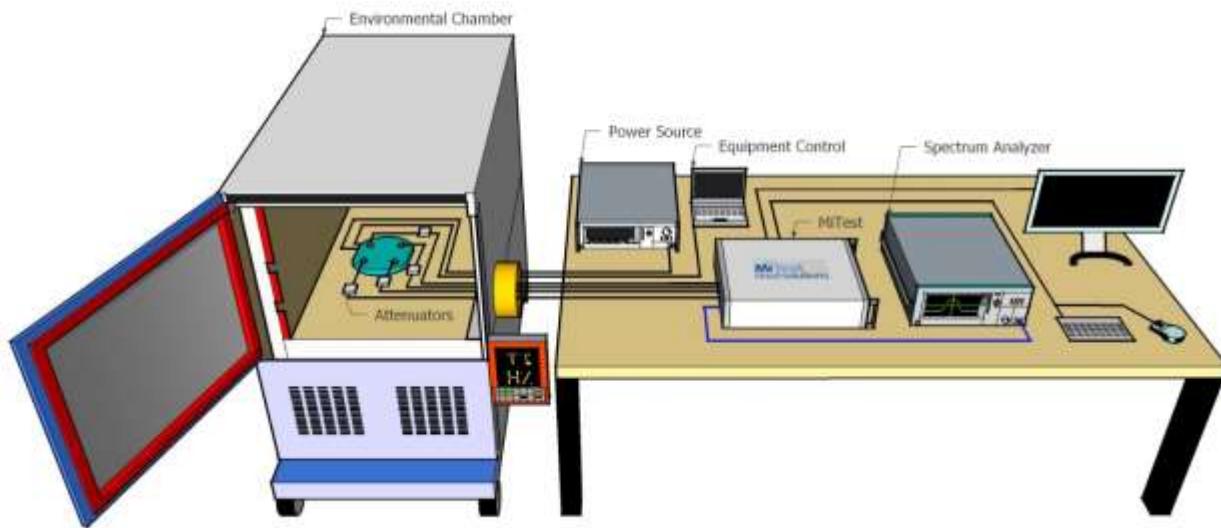
List of Measurements

Test Header	Result	Data Link
Peak Transmit Power	Complies	View Data
26 dB & 99% Bandwidth	Complies	View Data
Power Spectral Density	Complies	View Data
In-Band Spectrum Emission Mask	Complies	View Data
Radiated	Complies	-
TX Spurious & Restricted Band Emissions	Complies	View Data
Digital Emissions	Complies	View Data
AC Wireline	Complies	View Data

7. TEST EQUIPMENT CONFIGURATION(S)

7.1. Conducted RF

MiTest Automated Test System



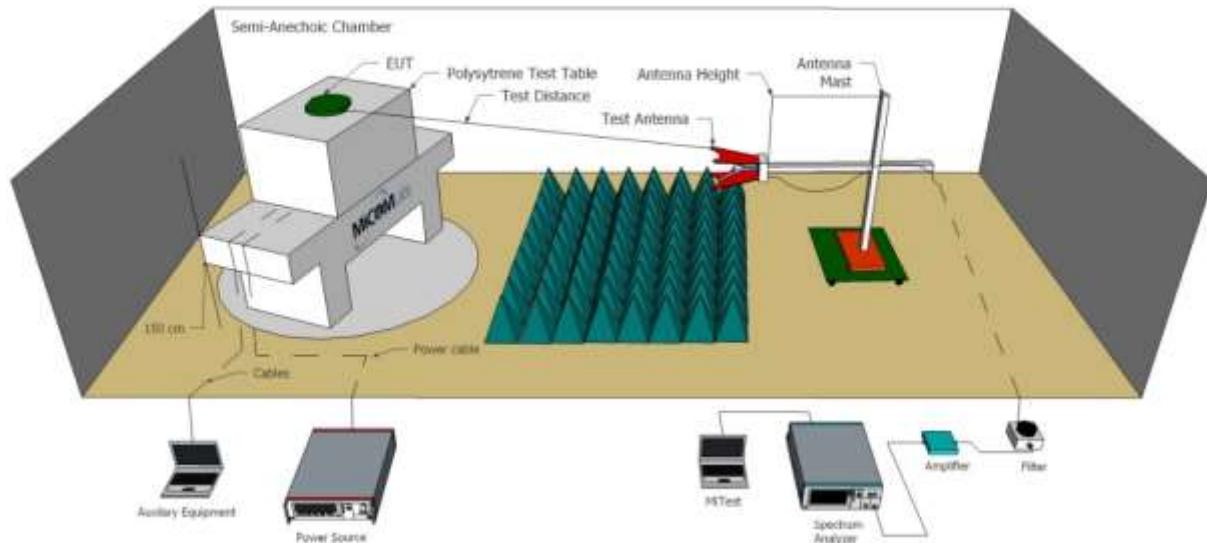
A full system calibration was performed on the test station and any resulting system losses (or gains) were taken into account in the production of all final measurement data.

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
#3 SA	MiTest Box to SA	Fairview Microwave	SCA1814-0101-72	#3 SA	26 Oct 2024
#3P1	EUT to MiTest box port 1	Fairview Microwave	SCA1814-0101-72	#3P1	26 Oct 2024
#3P2	EUT to MiTest box port 2	Fairview Microwave	SCA1814-0101-72	#3P2	26 Oct 2024
#3P3	EUT to MiTest box port 3	Fairview Microwave	SCA1814-0101-72	#3P3	26 Oct 2024
#3P4	EUT to MiTest box port 4	Fairview Microwave	SCA1812-0101-72	#3P4	26 Oct 2024
249	Thermocouple; Resistance Thermometer	Thermotronics	GR2105-02	9340 #2	22 Mar 2025
266	10 Hz to 50GHz MXA Signal Analyzer	Keysight	N9020B	MY60110791	25 Jul 2025
285	DC Power Supply	Keysight	E36155A	MY63000156	4 Dec 2024
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
441	USB Wideband Power Sensor	Boonton	55006	9179	4 Dec 2024
442	USB Wideband Power Sensor	Boonton	55006	9181	12 Dec 2024
445	PoE Injector	D-Link	DPE-101GL	QTAH1E2000625	Not Required
461	Spectrum Analyzer	Agilent	E4440A	MY46185537	27 Sep 2025
493	USB Wideband Power Sensor	Boonton	55006	9634	8 Oct 2024
494	USB Wideband Power Sensor	Boonton	55006	9726	12 Dec 2024
510	Barometer/Thermometer	Digi Sense	68000-49	170871375	4 Jan 2026
512	MiTest Cloud Solutions RF Test Box	MiCOM	2nd Gen	512	24 Oct 2024
516	USB Wideband Power Sensor	Boonton	RTP5006	10511	4 Dec 2024
555	Rhode & Schwarz Receiver (Firmware Version: 3.10 SP1)	Rhode & Schwarz	ESW 44	101893	28 Jun 2025
75	Environmental Chamber	ThermaTron	SE-300-2-2	27946	20 Nov 2024

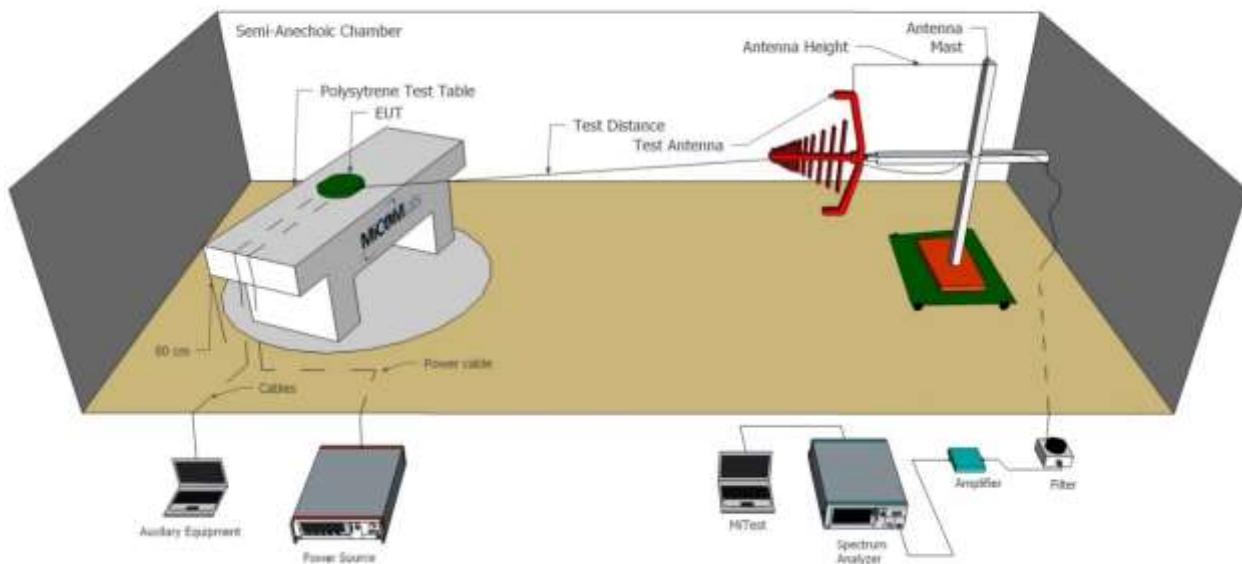
7.2. Radiated Emissions

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



Test Equipment Utilized

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
170	Video System Controller for Semi Anechoic Chamber	Panasonic	WV-CU101	04R08507	Not Required
285	DC Power Supply	Keysight	E36155A	MY63000156	4 Dec 2024
298	3M Radiated Emissions Chamber Maintenance Check	MiCOM	3M Chamber	298	11 Oct 2024
330	Variac 0-280 Vac	Staco Energy Co	3PN1020B	0546	Cal when used
336	Active loop Ant 10kHz to 30 MHz	EMCO	EMCO 6502	00060498	7 Dec 2024
338	Sunol 30 to 3000 MHz Antenna	Sunol	JB3	A052907	5 Dec 2024
373	26III RMS Multimeter	Fluke	Fluke 26 series III	76080720	29 Sep 2025
397	Amp 10 - 2500MHz	MiCOM Labs	Amp 10 - 2500 MHz	NA	27 Oct 2024
399	ETS 1-18 GHz Horn Antenna	ETS	3117	00154575	7 Dec 2024
406	Amplifier for Radiated Emissions	MiCOM Labs	40dB 1 to 18GHz Amp	0406	2 Nov 2024
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
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	Version 1.0	447	Not Required
462	Schwarzbeck cable from Antenna to Amplifier.	Schwarzbeck	AK 9513	462	18 Sep 2024
463	Schwarzbeck cable from Amplifier to Bulkhead.	Schwarzbeck	AK 9513	463	18 Sep 2024
464	Schwarzbeck cable from Bulkhead to Receiver	Schwarzbeck	AK 9513	464	16 Sep 2024
465	Low Pass Filter DC-1000 MHz	Mini-Circuits	NLP-1200+	VUU01901402	14 Sep 2024
480	Cable - Bulkhead to Amp	SRC Haverhill	157-3050360	480	18 Sep 2024
481	Cable - Bulkhead to Receiver	SRC Haverhill	151-3050787	481	18 Sep 2024
510	Barometer/Thermometer	Digi Sense	68000-49	170871375	4 Jan 2026
554	Precision SMA Cable	Fairview Microwave	SCE18060101-400CM	554	18 Sep 2024

555	Rhode & Schwarz Receiver (Firmware Version : 3.10 SP1)	Rhode & Schwarz	ESW 44	101893	28 Jun 2025
578	DC Power Supply 0 - 60 V, 0 - 15 A	HP	6274B	2537A-08192	Not Required
579	5900 MHz - 7200 MHz Notch Filter	Microtronics	BRM50741	G001	6 Jun 2025
87	Uninterruptible Power Supply	Falcon Electric	ED2000-1/2LC	F3471 02/01	Cal when used
CC05	Confidence Check	MiCOM	CC05	None	11 Nov 2024

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	Ambient Temp. (°C):	24.0 - 27.5
Test Heading:	Maximum Conducted Output Power	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.407 (a)	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 $[10^{\log_{10} (10^{a/10} + 10^{b/10} + 10^{c/10} + 10^{d/10})}]$

G = Antenna Gain

Y = Beamforming Gain

x = Duty Cycle (average power measurements only)

Limits Maximum Conducted Output Power

Operating Frequency Band 5925 – 6425 MHz

15.407(a)(4)

For a standard power access point and fixed client device operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 23 dBm e.i.r.p in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

Operating Frequency Band 5925 – 7125 MHz (KDB 987594 D01)

Standard Power Access Point: +36 dBm EIRP

Fixed Client: +36 dBm EIRP

Standard Client: +30 dBm EIRP & 6 dB below Standard Access Point

Equipment Configuration for Peak Transmit Power			
Variant:	160 MHz	Duty Cycle (%):	99.0
Data Rate:	72.10 MBit/s	Antenna Gain (dBi):	24.00
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)				Calculated Total Power	Total EIRP	Limit EIRP	Margin	EUT Power Setting
	Port(s)								
MHz	a	b	c	d	Σ Port(s) dBm	dBm	dBm	dB	
6025.0	8.19	8.52	--	--	11.37	35.37	36.00	-0.63	13.00
6175.0	8.20	8.29	--	--	11.26	35.26	36.00	-0.74	13.00
6345.0	8.20	8.38	--	--	11.30	35.30	36.00	-0.70	13.50

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

Equipment Configuration for Peak Transmit Power								
Variant:	20 MHz	Duty Cycle (%):	99.0					
Data Rate:	8.60 MBit/s	Antenna Gain (dBi):	24.00					
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)				Calculated Total Power	Total EIRP	Limit EIRP	Margin	EUT Power Setting
	Port(s)								
MHz	a	b	c	d	Σ Port(s) dBm	dBm	dBm	dB	
5945.0	8.02	8.61	--	--	11.34	35.34	36.00	-0.66	12.00
6175.0	8.45	8.62	--	--	11.55	35.55	36.00	-0.45	12.50
6415.0	8.27	8.50	--	--	11.40	35.40	36.00	-0.60	13.50

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

The above measurements were taken using FCC KDB 789033 method SA-1 under Section E as per FCC KDB 987594 D02

Equipment Configuration for Peak Transmit Power							
---	--	--	--	--	--	--	--

Variant:	40 MHz	Duty Cycle (%):	99.0
Data Rate:	17.20 MBit/s	Antenna Gain (dBi):	24.00
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)				Calculated Total Power	Total EIRP	Limit EIRP	Margin	EUT Power Setting
	Port(s)								
MHz	a	b	c	d	Σ Port(s) dBm	dBm	dBm	dB	
5960.0	8.41	8.51	--	--	11.47	35.47	36.00	-0.53	12.50
6175.0	8.38	8.47	--	--	11.44	35.44	36.00	-0.56	13.00
6405.0	8.53	8.68	--	--	11.62	35.62	36.00	-0.38	13.50

Traceability to Industry Recognized Test Methodologies							
--	--	--	--	--	--	--	--

Work Instruction:	WI-01 MEASURING RF OUTPUT POWER						
Measurement Uncertainty:	± 1.33 dB						

Equipment Configuration for Peak Transmit Power							
---	--	--	--	--	--	--	--

Variant:	80 MHz	Duty Cycle (%):	99.0
Data Rate:	36.00 MBit/s	Antenna Gain (dBi):	24.00
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)				Calculated Total Power	Total EIRP	Limit EIRP	Margin	EUT Power Setting
	Port(s)								
MHz	a	b	c	d	Σ Port(s) dBm	dBm	dBm	dB	
5985.0	8.35	8.79	--	--	11.59	35.59	36.00	-0.41	13.00
6175.0	8.31	8.51	--	--	11.42	35.42	36.00	-0.58	12.00
6385.0	8.43	8.50	--	--	11.48	35.48	36.00	-0.52	13.00

Traceability to Industry Recognized Test Methodologies							
--	--	--	--	--	--	--	--

Work Instruction:	WI-01 MEASURING RF OUTPUT POWER						
Measurement Uncertainty:	± 1.33 dB						

The above measurements were taken using FCC KDB 789033 method SA-1 under Section E as per FCC KDB 987594 D02

9.2. 26 dB & 99% Bandwidth

Conducted Test Conditions for 26 dB and 99% Bandwidth			
Standard:	FCC CFR 47:15.407	Ambient Temp. (°C):	24.0 - 27.5
Test Heading:	26 dB and 99 % Bandwidth	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.407 (a)	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. Fundamental Bandwidth Limit: 320MHz			

Equipment Configuration for 26 dB & 99% Occupied Bandwidth

Variant:	160 MHz	Duty Cycle (%):	99.0
Data Rate:	72.10 MBit/s	Antenna Gain (dBi):	24.00
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)				26 dB Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
6025.0	173.146	174.429	--	--	174.429	173.146		
6175.0	171.864	172.505	--	--	172.505	171.864		
6345.0	173.788	172.505	--	--	173.788	172.505		

Test Frequency	Measured 99% Bandwidth (MHz)				99% Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
6025.0	157.756	157.756	--	--	157.756	157.756		
6175.0	157.756	157.756	--	--	157.756	157.756		
6345.0	158.397	158.397	--	--	158.397	158.397		

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:	20 MHz	Duty Cycle (%):	99.0
Data Rate:	8.60 MBit/s	Antenna Gain (dBi):	24.00
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)				26 dB Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5945.0	21.403	21.242	--	--	21.403	21.242		
6175.0	21.723	21.323	--	--	21.723	21.323		
6415.0	21.483	21.162	--	--	21.483	21.162		

Test Frequency	Measured 99% Bandwidth (MHz)				99% Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5945.0	17.796	17.796	--	--	17.796	17.796		
6175.0	17.796	17.796	--	--	17.796	17.796		
6415.0	17.796	17.796	--	--	17.796	17.796		

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:	40 MHz	Duty Cycle (%):	99.0
Data Rate:	17.20 MBit/s	Antenna Gain (dBi):	24.00
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)				26 dB Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5960.0	44.409	44.729	--	--	44.729	44.409		
6175.0	44.088	44.890	--	--	44.890	44.088		
6405.0	43.768	44.248	--	--	44.248	43.768		

Test Frequency	Measured 99% Bandwidth (MHz)				99% Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5960.0	38.156	38.156	--	--	38.156	38.156		
6175.0	37.996	38.317	--	--	38.317	37.996		
6405.0	38.156	38.156	--	--	38.156	38.156		

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:	80 MHz	Duty Cycle (%):	99.0
Data Rate:	36.00 MBit/s	Antenna Gain (dBi):	24.00
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)				26 dB Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5985.0	89.459	90.100	--	--	90.100	89.459		
6175.0	89.459	91.062	--	--	91.062	89.459		
6385.0	90.100	90.100	--	--	90.100	90.100		

Test Frequency	Measured 99% Bandwidth (MHz)				99% Bandwidth (MHz)			
	Port(s)							
MHz	a	b	c	d	Highest	Lowest		
5985.0	78.236	78.236	--	--	78.236	78.236		
6175.0	77.916	78.236	--	--	78.236	77.916		
6385.0	77.916	77.916	--	--	77.916	77.916		

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. (°C):	24.0 - 27.5
Test Heading:	Power Spectral Density	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.407 (a)	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 = $A + 10 \log (1/x) \text{ dBm}$

$A = \text{Total Power Spectral Density} [10^{\log_{10}(A)} + 10^{\log_{10}(B)} + 10^{\log_{10}(C)} + 10^{\log_{10}(D)}]$

$x = \text{Duty Cycle}$

Limits Power Spectral Density

Operating Frequency Band 5925-6425 MHz

15. 407 (a)(4)

For a standard power access point and fixed client device operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 23 dBm e.i.r.p in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

Operating Frequency Band 5925 – 7125 MHz

Fundamental Power Spectral Density: +23 dBm/MHz Per Table 2 KDB 987594 D01



Title: RADWIN 2000 E
To: FCC Part 15 Subpart E 15.407 & ISED RSS-248
Serial #: RDWN98-U2 Rev A

Equipment Configuration for Power Spectral Density

Variant:	160 MHz	Duty Cycle (%):	99.0
Data Rate:	72.10 MBit/s	Antenna Gain (dBi):	24.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Frequency	Test Measurement Results							
	Measured Power Spectral Density				Summation Peak Marker + DCCF (+0.04 dB)	Total EIRP	Limit EIRP	Margin
MHz	a	b	c	d				
6025.0	-11.871	-11.032	--	--	-8.526	15.474	23.0	-7.526
6175.0	-11.619	-11.786	--	--	-8.894	15.106	23.0	-7.894
6345.0	-11.430	-10.282	--	--	-8.101	15.899	23.0	-7.101

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:	20 MHz	Duty Cycle (%):	99.0
Data Rate:	8.60 MBit/s	Antenna Gain (dBi):	24.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Frequency	Test Measurement Results							
	Measured Power Spectral Density				Summation Peak Marker + DCCF (+0.04 dB)	Total EIRP	Limit	Margin
	Port(s) (dBm/MHz)							
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dBm/MHz	dB
5945.0	-5.523	-3.976	--	--	-2.377	21.623	23.0	-1.377
6175.0	-3.582	-3.763	--	--	-1.339	22.661	23.0	-0.339
6415.0	-4.320	-3.432	--	--	-1.568	22.432	23.0	-0.568

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:	40 MHz	Duty Cycle (%):	99.0
Data Rate:	17.20 MBit/s	Antenna Gain (dBi):	24.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Frequency	Test Measurement Results							
	Measured Power Spectral Density				Summation Peak Marker + DCCF (+0.04 dB)	Total EIRP	Limit	Margin
	Port(s) (dBm/MHz)							
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dBm/MHz	dB
5960.0	-6.637	-5.613	--	--	-3.232	20.768	23.0	-2.232
6175.0	-6.551	-6.378	--	--	-3.739	20.261	23.0	-2.739
6405.0	-5.743	-4.985	--	--	-2.695	21.305	23.0	-1.695

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:	80 MHz	Duty Cycle (%):	99.0
Data Rate:	36.00 MBit/s	Antenna Gain (dBi):	24.00
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Frequency	Test Measurement Results							
	Measured Power Spectral Density				Summation Peak Marker + DCCF (+0.04 dB)	Total EIRP	Limit	Margin
	Port(s) (dBm/MHz)							
MHz	a	b	c	d	dBm/MHz	dBm/MHz	dBm/MHz	dB
5985.0	-9.788	-8.481	--	--	-6.401	17.599	23.0	-5.401
6175.0	-9.419	-9.405	--	--	-6.867	17.133	23.0	-5.867
6385.0	-9.213	-8.266	--	--	-6.049	17.951	23.0	-5.049

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-03 MEASURING RF SPECTRUM MASK
Measurement Uncertainty:	±2.81 dB

DCCF - Duty Cycle Correction Factor

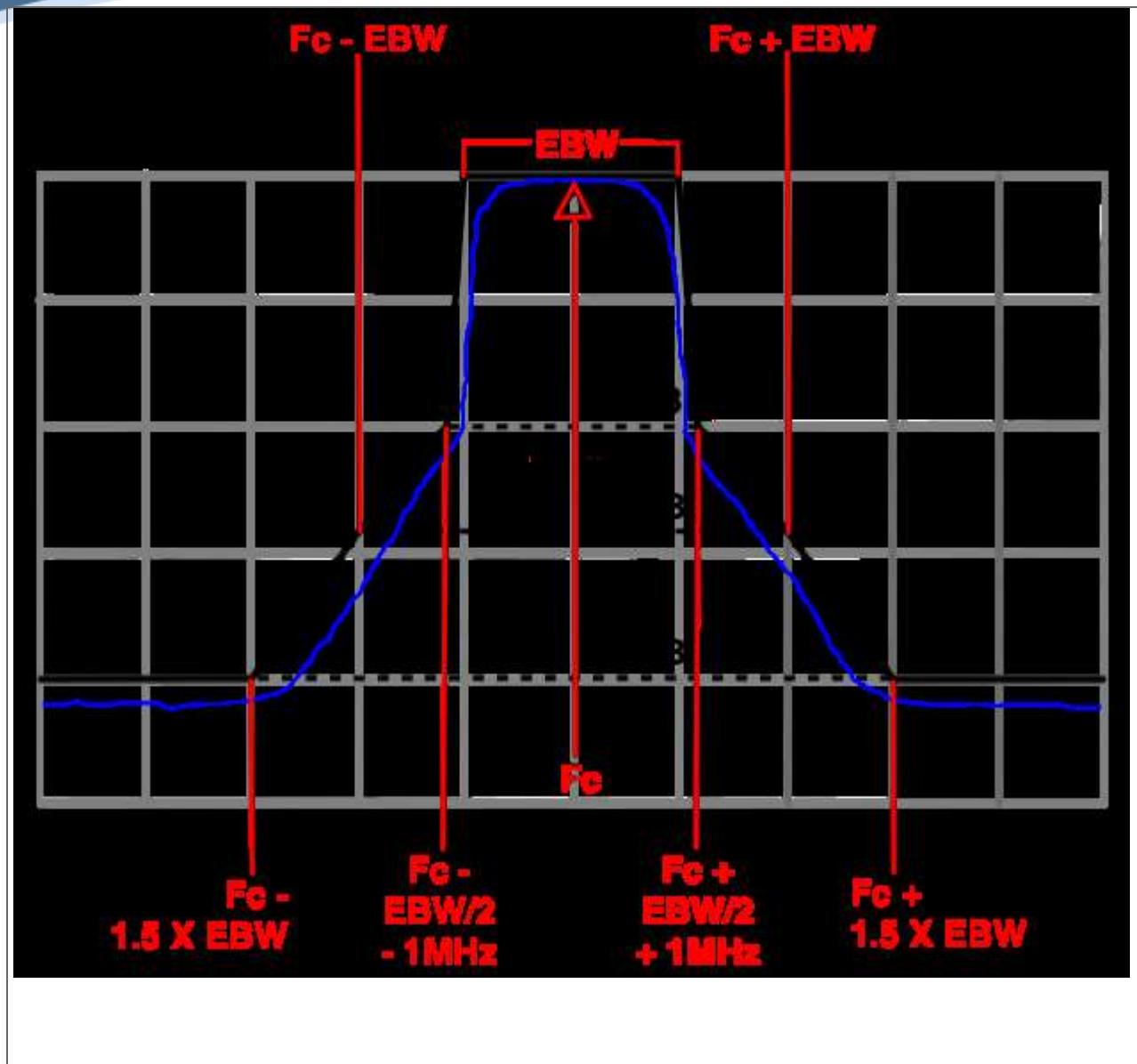
Note: click the links in the above matrix to view the graphical image (plot).

9.4. In-Band Spectrum Emission Mask

Conducted Test Conditions for Spectrum Emission Mask			
Standard:	15.407	Ambient Temp. (°C):	24.0 - 27.5
Test Heading:	Spectrum Emission Mask	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.407(7)	Pressure (mBars):	999 - 1001
Reference Document(s):	KDB 987594 D02 (J)		

Test Procedure for Emission Masks

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW \geq 3 X RBW
 - d) Number of points in sweep \geq [2 X span / RBW].
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW or 99% of the occupied bandwidth.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
 - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.



Equipment Configuration for Spectrum Emission Mask			
Variant:	20MHz	Duty Cycle (%):	99
Data Rate:	8.60 MBit/s	Antenna Gain (dBi):	24.0
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results					
Test Frequency	Measured Spectrum Mask				Complies
	Port(s)				
MHz	a	b	c	d	Pass/Fail
5945.0	Mask	Mask	--	--	Pass
6175.0	Mask	Mask	--	--	Pass
6415.0	Mask	Mask	--	--	Pass

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 Spectrum Emission Mask					
Variant:	40MHz		Duty Cycle (%):	99	
Data Rate:	17.20 MBit/s		Antenna Gain (dBi):	24.0	
Modulation:	OFDM		Beam Forming Gain (Y)(dB):	Not Applicable	
TPC:	Not Applicable		Tested By:	SB	
Engineering Test Notes:					

Test Measurement Results					
Test Frequency	Measured Spectrum Mask				Complies
	Port(s)				
MHz	a	b	c	d	Pass/Fail
5960.0	Mask	Mask	--	--	Pass
6175.0	Mask	Mask	--	--	Pass
6405.0	Mask	Mask	--	--	Pass

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 Spectrum Emission Mask

Variant:	80MHz	Duty Cycle (%):	99
Data Rate:	36 MBit/s	Antenna Gain (dBi):	24.0
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Spectrum Mask				Complies
	Port(s)				
MHz	a	b	c	d	Pass/Fail
5985.0	Mask	Mask	--	--	Pass
6175.0	Mask	Mask	--	--	Pass
6385.0	Mask	Mask	--	--	Pass

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 Spectrum Emission Mask

Variant:	160MHz	Duty Cycle (%):	99
Data Rate:	72.1 MBit/s	Antenna Gain (dBi):	24.0
Modulation:	OFDM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Test Frequency	Measured Spectrum Mask				Complies
	Port(s)				
MHz	a	b	c	d	Pass/Fail
6025.0	Mask	Mask	--	--	Pass
6175.0	Mask	Mask	--	--	Pass
6345.0	Mask	Mask	--	--	Pass

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).

9.5. Radiated

Radiated Test Conditions for Radiated Spurious and Band-Edge Emissions			
Standard:	FCC CFR 47:15.407	Ambient Temp. (°C):	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)(10) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (6) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.
- (10) The provisions of §15.205 apply to intentional radiators operating under this section.

Limits for Restricted Bands (15.205, 15.209)

Peak emission: 74 dB_µV/m

Average emission: 54 dB_µV/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 (dB_µV/m);

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

where P is the EIRP in Watts

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

Conversion between dBmV/m (or dBmV) and mV/m (or mV) are as follows:

$$\text{Level (dBmV/m)} = 20 * \text{Log}(\text{level (mV/m)})$$

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			

No emissions were observed in the frequency range of 18GHz to 40GHz.

9.5.1. TX Spurious & Restricted Band Emissions

9.5.1.1. Antenna: AX6400

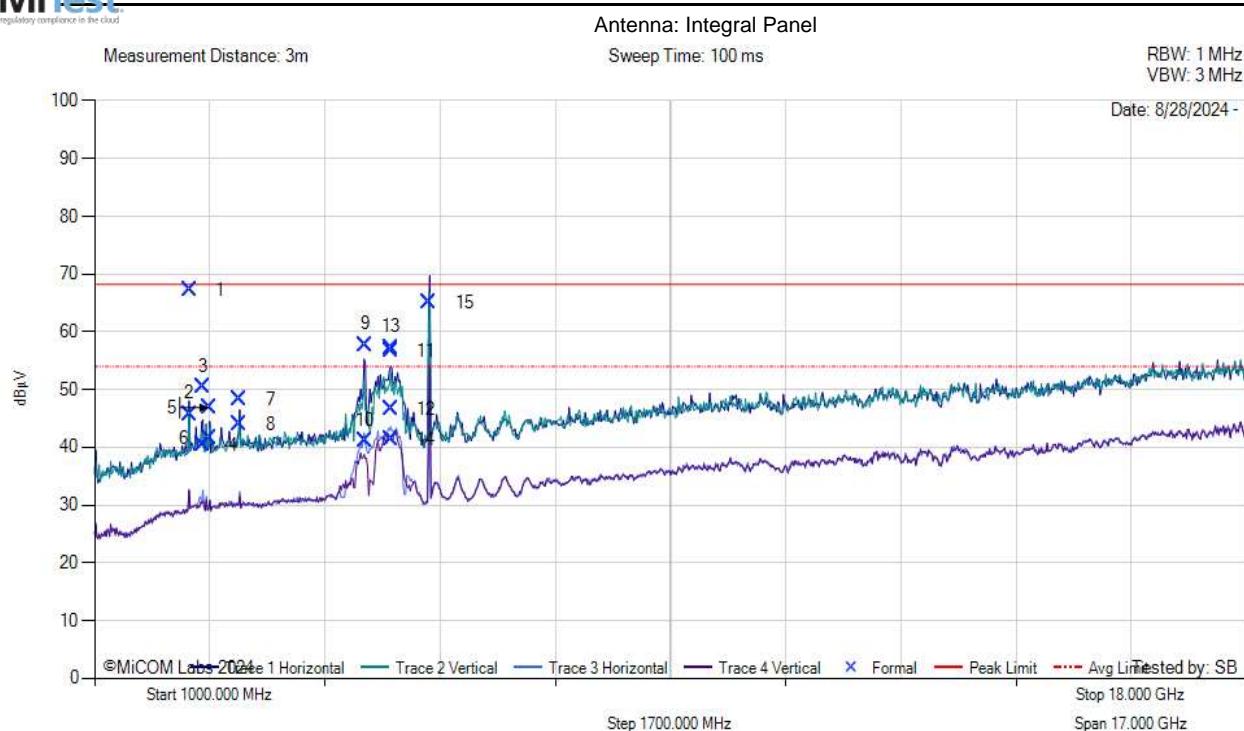
Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



FCC Spurious 1 GHz -18 GHz



1000.00 - 18000.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	2399.91	72.46	1.96	-12.14	67.29	MaxP	Horizontal	153	312	68.2	-1.0	Pass	
2	2399.91	56.00	1.96	-12.14	45.82	AVG	Horizontal	153	312	54.0	-8.2	Pass	
3	2600.13	59.96	2.07	-11.64	50.39	MaxP	Horizontal	100	232	68.2	-17.8	Pass	
4	2600.13	49.99	2.07	-11.64	40.42	AVG	Horizontal	100	232	54.0	-13.6	Pass	
5	2700.09	56.58	2.06	-11.76	46.89	MaxP	Horizontal	115	241	68.2	-21.3	Pass	
6	2700.09	51.34	2.06	-11.76	41.65	AVG	Horizontal	115	241	54.0	-12.4	Pass	
7	3142.65	57.41	2.27	-11.36	48.32	MaxP	Horizontal	194	270	68.2	-19.9	Pass	
8	3142.65	53.12	2.27	-11.36	44.03	AVG	Horizontal	194	270	54.0	-10.0	Pass	
9	4991.70	66.78	3.10	-12.13	57.75	MaxP	Horizontal	154	91	68.2	-10.5	Pass	
10	4991.70	50.16	3.10	-12.13	41.13	AVG	Horizontal	154	91	54.0	-12.9	Pass	
11	5375.81	65.38	3.12	-11.86	56.64	MaxP	Vertical	170	90	68.2	-11.6	Pass	
12	5375.81	55.35	3.12	-11.86	46.61	AVG	Vertical	170	90	54.0	-7.4	Pass	
13	5380.74	66.13	3.14	-11.96	57.31	MaxP	Horizontal	153	91	68.2	-10.9	Pass	
14	5380.74	50.13	3.14	-11.96	41.31	AVG	Horizontal	153	91	54.0	-12.7	Pass	
15	5939.00	81.03	3.26	35.45	71.11	Fundamental	Vertical	150	91	--	--	--	

Test Notes: 120VAC POE, 5945MHz, Max Power, Integral Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

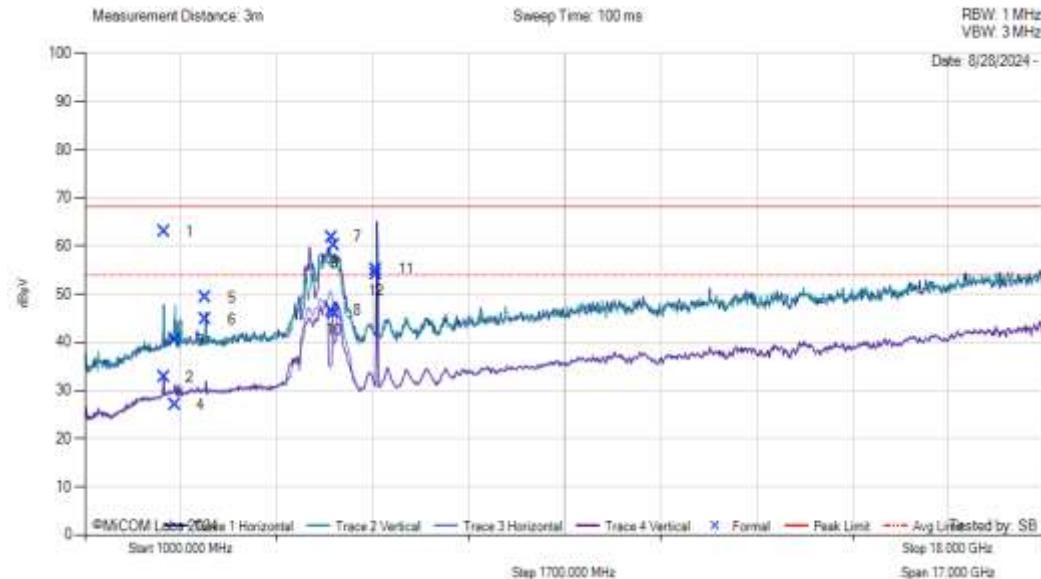
Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6175	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



FCC Spurious 1 GHz -18 GHz

Antenna: Integral Panel



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	2399.31	73.15	1.96	-12.14	62.97	MaxP	Horizontal	196	301	68.2	-5.3	Pass
2	2399.31	42.86	1.96	-12.14	32.68	AVG	Horizontal	196	301	54.0	-21.3	Pass
3	2598.48	49.92	2.07	-11.64	40.35	MaxP	Vertical	127	360	68.2	-27.9	Pass
4	2598.48	36.57	2.07	-11.64	27.00	AVG	Vertical	127	360	54.0	-27.0	Pass
5	3142.64	58.37	2.27	-11.36	49.28	MaxP	Horizontal	177	239	68.2	-19.0	Pass
6	3142.64	53.75	2.27	-11.36	44.66	AVG	Horizontal	177	239	54.0	-9.3	Pass
7	5381.27	70.67	3.14	-11.97	61.85	MaxP	Horizontal	156	89	68.2	-6.4	Pass
8	5381.27	55.35	3.14	-11.97	46.52	AVG	Horizontal	156	89	54.0	-7.5	Pass
9	5415.08	68.57	3.07	-11.66	59.98	MaxP	Vertical	174	93	68.2	-8.2	Pass
10	5415.08	54.62	3.07	-11.66	46.03	AVG	Vertical	174	93	54.0	-8.0	Pass
11	6168.00	61.08	3.27	35.47	55.11	Fundamental	Vertical	149	90	--	--	--
12	6168.00	60.10	3.27	35.47	54.14	Fundamental	Horizontal	149	90	--	--	--

Test Notes: 120VAC POE, 6175MHz, Max Power, Integral Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

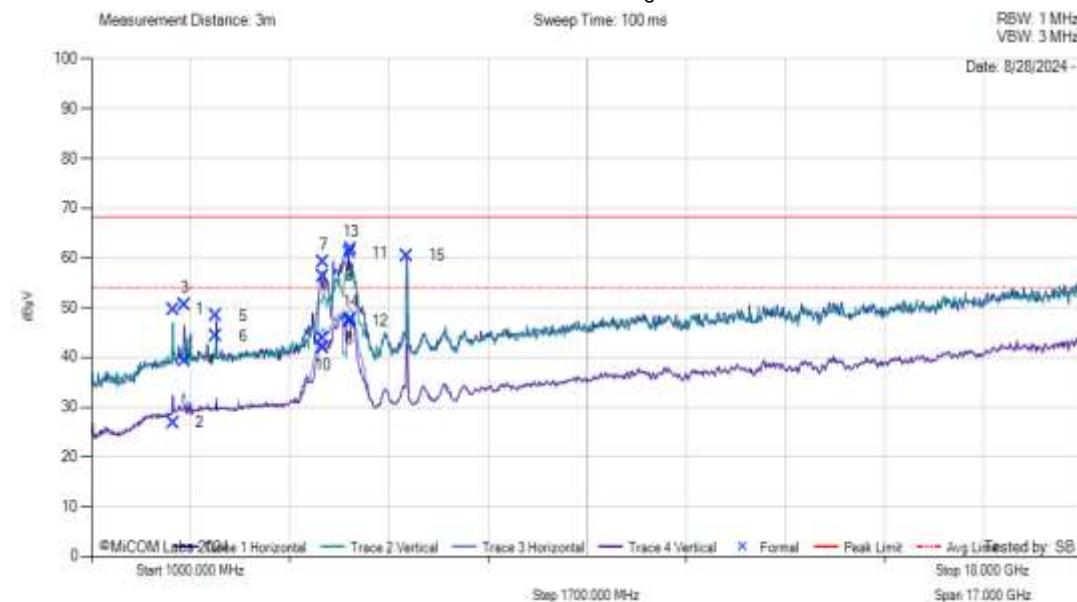
Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



FCC Spurious 1 GHz -18 GHz

Antenna: Integral Panel





Title: RADWIN 2000 E
To: FCC Part 15 Subpart E 15.407 & ISED RSS-248
Serial #: RDWN98-U2 Rev A

1000.00 - 18000.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	2399.34	59.80	1.96	-12.14	49.62	MaxP	Vertical	114	245	68.2	-18.6	Pass	
2	2399.34	37.02	1.96	-12.14	26.84	AVG	Vertical	114	245	54.0	-27.2	Pass	
3	2600.11	60.05	2.07	-11.64	50.48	MaxP	Horizontal	116	216	68.2	-17.8	Pass	
4	2600.11	48.85	2.07	-11.64	39.28	AVG	Horizontal	116	216	54.0	-14.7	Pass	
5	3142.70	57.37	2.27	-11.36	48.29	MaxP	Horizontal	173	237	68.2	-19.9	Pass	
6	3142.70	53.31	2.27	-11.36	44.22	AVG	Horizontal	173	237	54.0	-9.8	Pass	
7	4977.28	68.21	2.94	-12.09	59.06	MaxP	Horizontal	168	91	68.2	-9.2	Pass	
8	4977.28	52.93	2.94	-12.09	43.78	AVG	Horizontal	168	91	54.0	-10.2	Pass	
9	4978.54	65.45	2.94	-12.08	56.31	MaxP	Vertical	161	92	68.2	-11.9	Pass	
10	4978.54	51.09	2.94	-12.08	41.95	AVG	Vertical	161	92	54.0	-12.1	Pass	
11	5431.80	69.29	3.06	-11.33	61.01	MaxP	Vertical	163	92	68.2	-7.2	Pass	
12	5431.80	55.47	3.06	-11.33	47.19	AVG	Vertical	163	92	54.0	-6.8	Pass	
13	5456.83	69.92	3.15	-11.42	61.66	MaxP	Horizontal	158	90	68.2	-6.6	Pass	
14	5456.83	55.87	3.15	-11.42	47.61	AVG	Horizontal	158	90	54.0	-6.4	Pass	
15	6406.00	65.95	3.36	35.59	60.37	Fundamental	Horizontal	149	90	--	--	--	

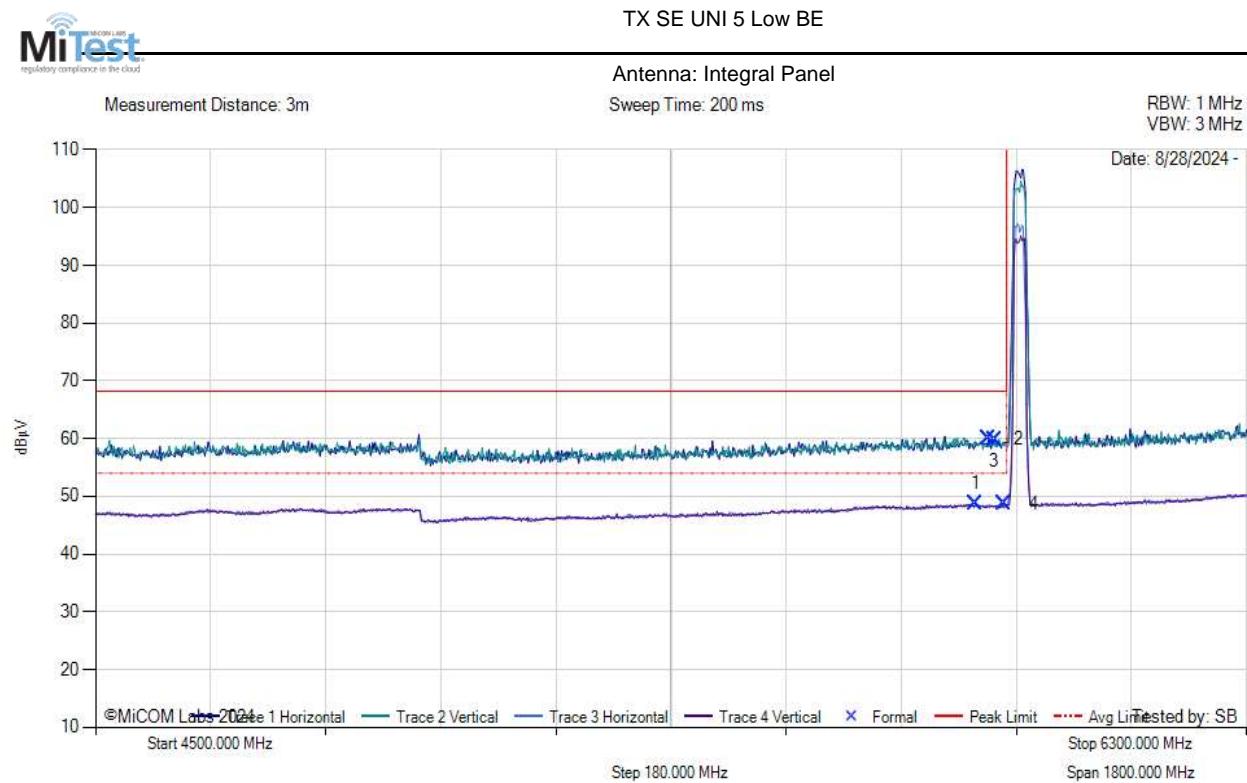
Test Notes: 120VAC POE, 6415MHz, Max Power, Integral Antenna, 20MHz BW

9.5.1.1.1. BE 5925 MHz

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



4500.00 - 6300.00 MHz

Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	5877.00	20.51	3.22	35.01	48.74	AVG	Vertical	149	89	54.0	-5.3	Pass
2	5896.80	31.76	3.22	35.04	60.03	MaxP	Horizontal	101	90	68.2	-8.2	Pass
3	5905.80	31.44	3.19	35.06	59.69	MaxP	Vertical	101	119	68.2	-8.5	Pass
4	5920.20	20.42	3.21	35.09	48.72	AVG	Horizontal	149	90	54.0	-5.3	Pass

Test Notes: 120VAC POE, 5945MHz, Max Power, Integral Antenna, 20MHz BW

Issue Date: 8th January 2025

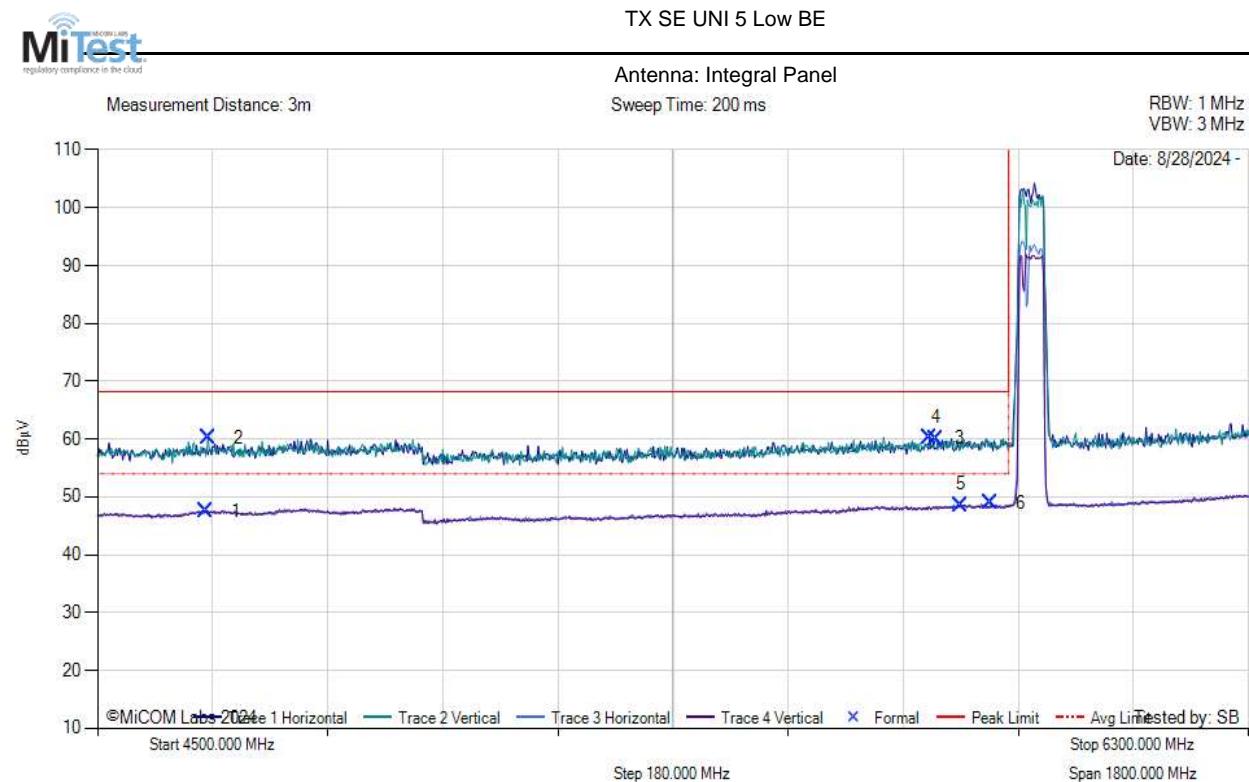
Page: 46 of 183

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Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	AX6400	Variant:	40MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5960	Data Rate:	17.2
Power Setting:	Max	Tested By:	SB

Test Measurement Results



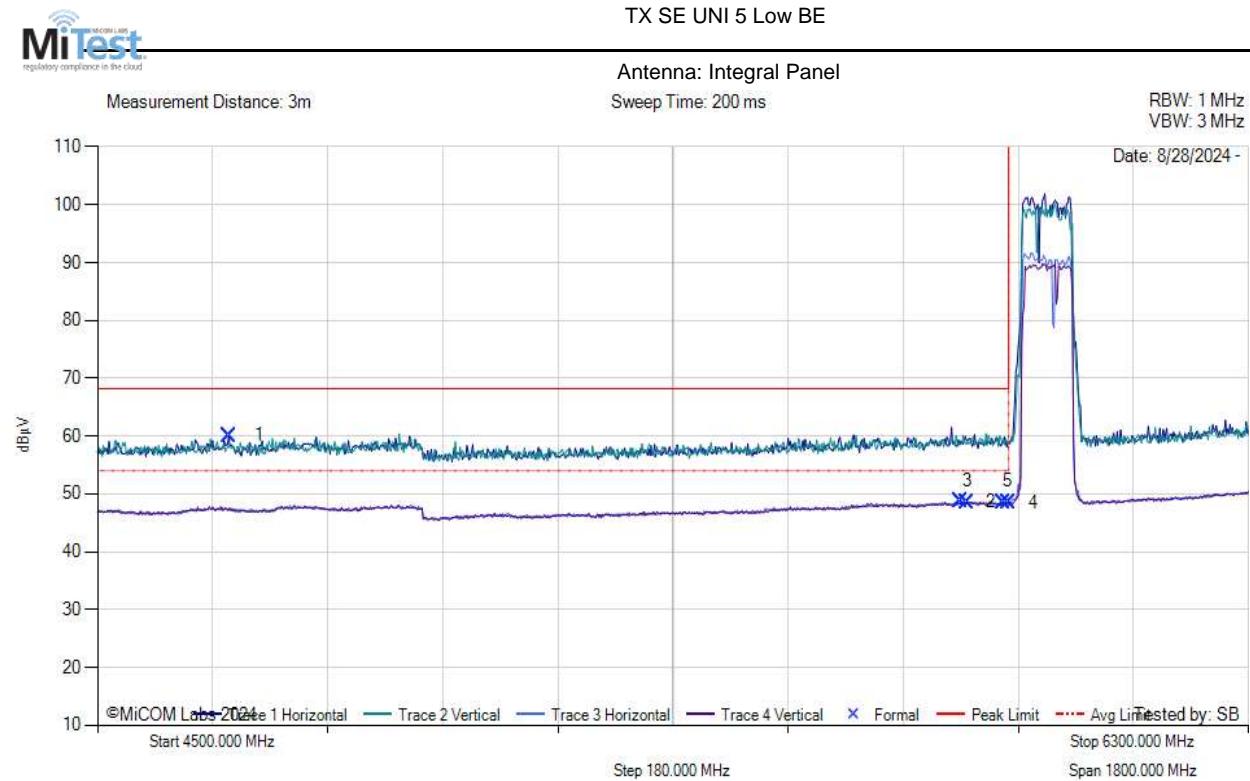
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	4669.20	20.69	2.87	34.02	47.58	AVG	Vertical	100	59	54.0	-6.4	Pass
2	4672.80	33.33	2.86	34.02	60.21	MaxP	Vertical	199	29	68.2	-8.0	Pass
3	5801.40	32.14	3.26	34.85	60.25	MaxP	Horizontal	149	150	68.2	-8.0	Pass
4	5812.20	32.04	3.20	34.87	60.11	MaxP	Vertical	100	119	68.2	-8.1	Pass
5	5850.00	20.42	3.24	34.96	48.62	AVG	Vertical	149	59	54.0	-5.4	Pass
6	5896.80	20.74	3.22	35.04	49.01	AVG	Horizontal	149	90	54.0	-5.0	Pass

Test Notes: 120VAC POE, 5960MHz, Max Power, Integral Antenna, 40MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	AX6400	Variant:	80MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5985	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



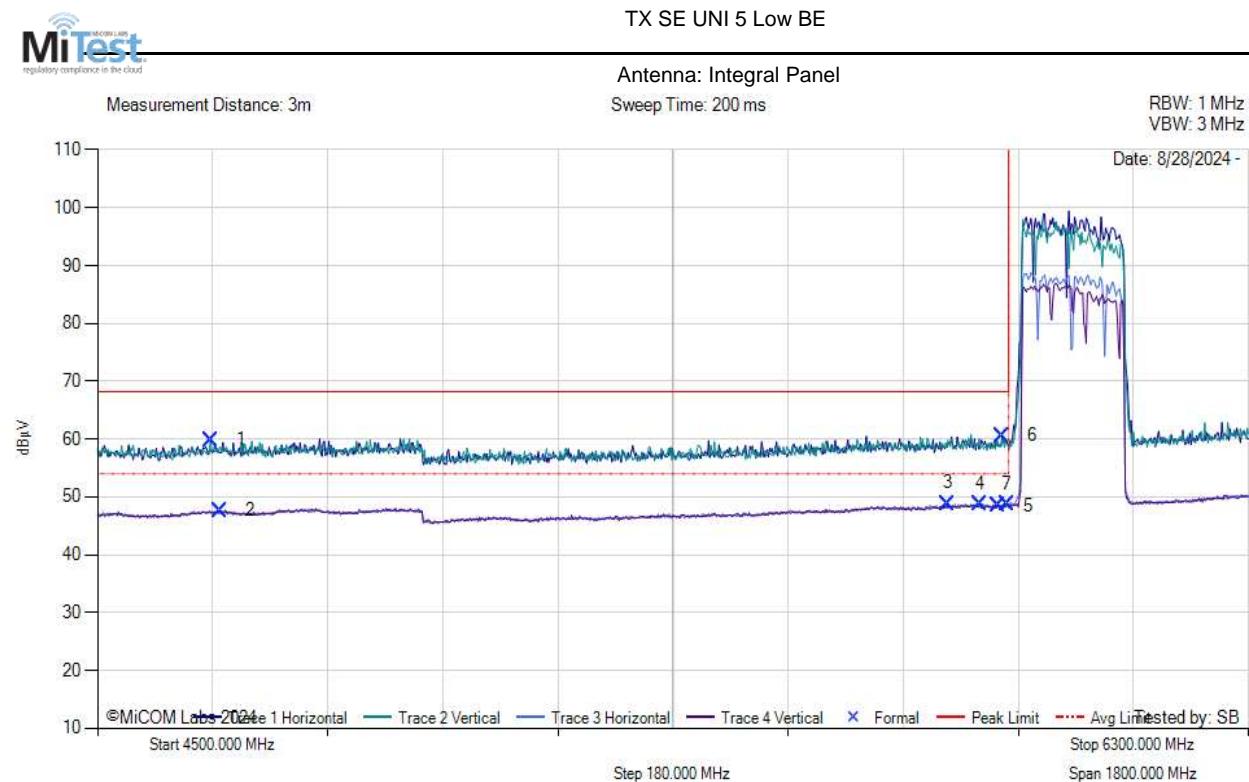
4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	4705.20	33.29	2.81	34.03	60.13	MaxP	Horizontal	149	30	68.2	-8.1	Pass	
2	5850.00	20.50	3.24	34.96	48.69	AVG	Horizontal	149	90	54.0	-5.3	Pass	
3	5860.80	20.36	3.29	34.98	48.63	AVG	Vertical	149	119	54.0	-5.4	Pass	
4	5916.60	20.28	3.20	35.08	48.56	AVG	Vertical	149	0	54.0	-5.4	Pass	
5	5923.80	20.24	3.25	35.09	48.59	AVG	Horizontal	149	90	54.0	-5.4	Pass	

Test Notes: 120VAC POE, 5985MHz, Max Power, Integral Antenna, 80MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	AX6400	Variant:	160MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6025	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	4676.40	33.03	2.85	34.02	59.90	MaxP	Vertical	149	0	68.2	-8.3	Pass	
2	4690.80	20.78	2.83	34.03	47.64	AVG	Vertical	199	150	54.0	-6.4	Pass	
3	5830.20	20.70	3.23	34.91	48.84	AVG	Horizontal	149	90	54.0	-5.2	Pass	
4	5880.60	20.49	3.21	35.01	48.71	AVG	Vertical	149	90	54.0	-5.3	Pass	
5	5907.60	20.20	3.19	35.06	48.45	AVG	Vertical	199	150	54.0	-5.6	Pass	
6	5914.80	32.33	3.20	35.08	60.61	MaxP	Horizontal	149	152	68.2	-7.6	Pass	
7	5922.00	20.48	3.22	35.09	48.80	AVG	Horizontal	149	60	54.0	-5.2	Pass	

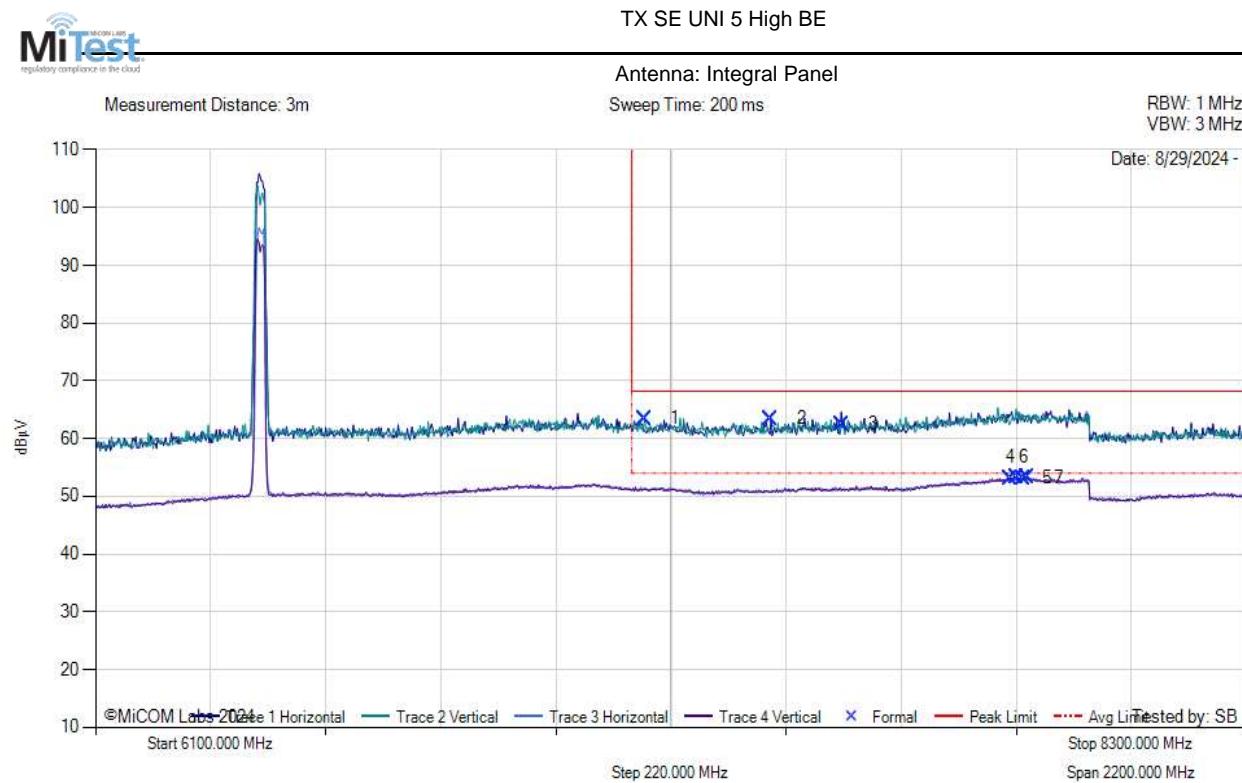
Test Notes: 120VAC POE, 6025MHz, Max Power, Integral Antenna, 160MHz BW

9.5.1.1.2. BE 7125 MHz

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6515	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz

Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7149.40	33.81	3.68	35.94	63.43	MaxP	Vertical	149	150	68.2	-4.8	Pass
2	7391.40	33.97	3.62	35.87	63.46	MaxP	Horizontal	99	60	68.2	-4.8	Pass
3	7527.80	32.95	3.68	35.85	62.48	MaxP	Horizontal	199	30	68.2	-5.8	Pass
4	7849.00	23.35	3.90	35.88	53.13	AVG	Horizontal	199	30	54.0	-0.9	Pass
5	7860.00	23.47	3.87	35.88	53.22	AVG	Horizontal	149	90	54.0	-0.8	Pass
6	7873.20	23.35	3.91	35.88	53.14	AVG	Vertical	199	150	54.0	-0.9	Pass
7	7882.00	23.45	3.89	35.88	53.23	AVG	Vertical	149	29	54.0	-0.8	Pass

Test Notes: 120VAC POE, 6415MHz, Max Power, Integral Antenna, 20MHz BW

Issue Date: 8th January 2025

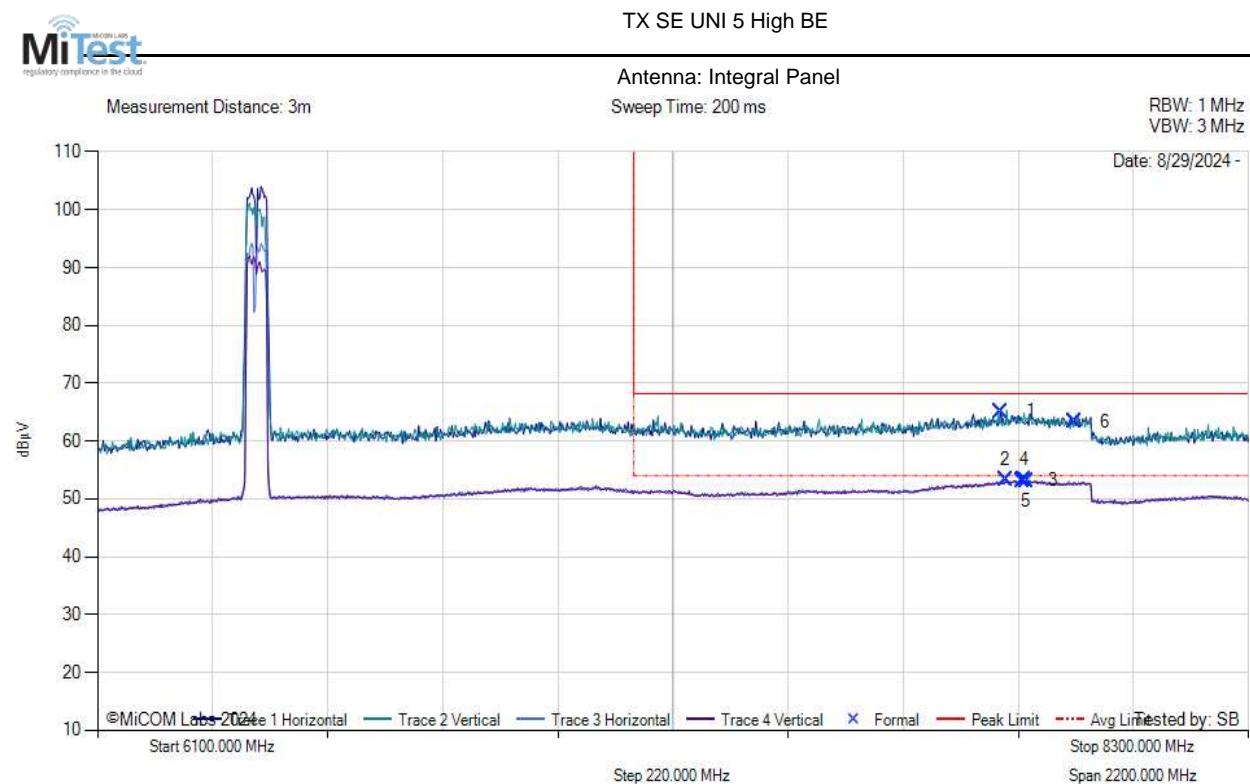
Page: 50 of 183

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Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	AX6400	Variant:	40MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6405	Data Rate:	17.2
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7827.00	35.42	3.82	35.87	65.12	MaxP	Horizontal	149	120	68.2	-3.1	Pass
2	7835.80	23.53	3.82	35.88	53.22	AVG	Horizontal	199	60	54.0	-0.8	Pass
3	7868.80	23.42	3.85	35.88	53.15	AVG	Vertical	149	0	54.0	-0.8	Pass
4	7871.00	23.57	3.88	35.88	53.33	AVG	Horizontal	149	0	54.0	-0.7	Pass
5	7875.40	23.31	3.92	35.88	53.11	AVG	Vertical	199	89	54.0	-0.9	Pass
6	7967.80	33.67	3.84	35.86	63.38	MaxP	Vertical	199	29	68.2	-4.9	Pass

Issue Date: 8th January 2025

Page: 51 of 183

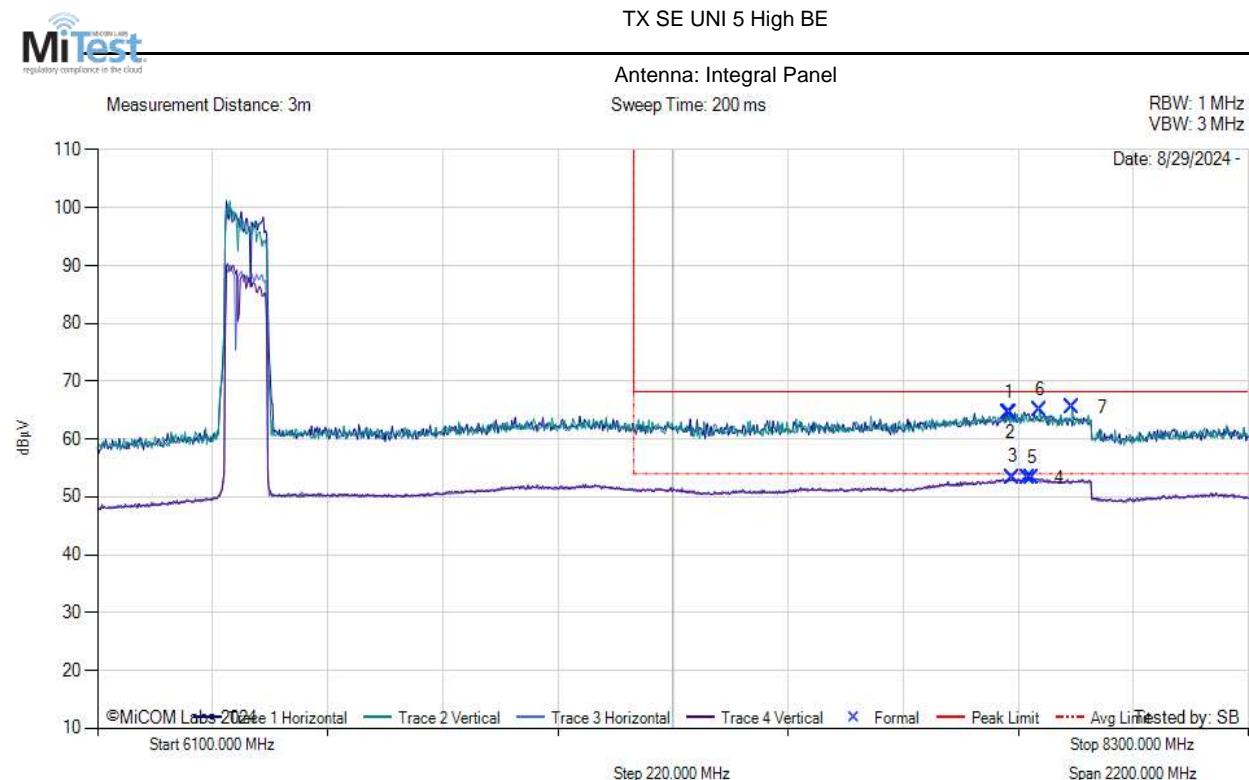
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Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	AX6400	Variant:	80MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6385	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



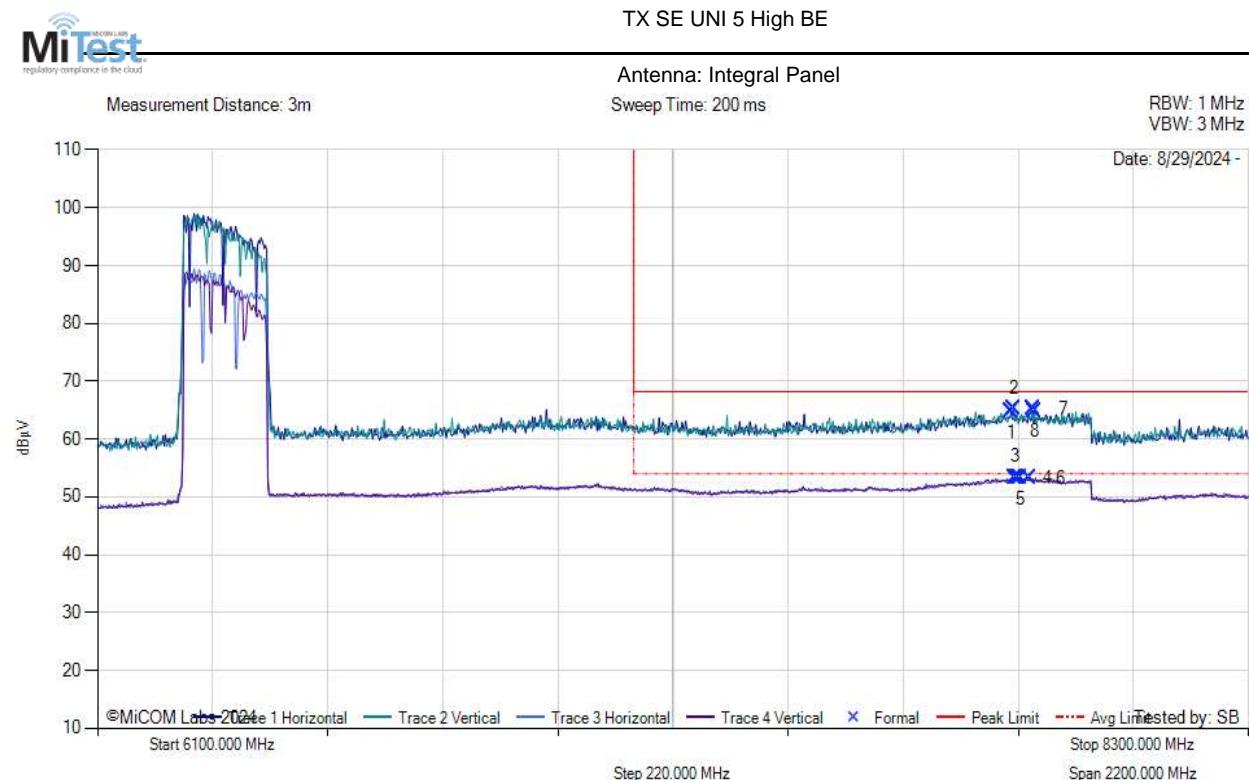
6100.00 - 8300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7842.40	34.82	3.85	35.88	64.54	MaxP	Vertical	149	90	68.2	-3.7	Pass
2	7844.60	34.95	3.86	35.88	64.69	MaxP	Horizontal	100	60	68.2	-3.5	Pass
3	7849.00	23.61	3.90	35.88	53.38	AVG	Horizontal	149	0	54.0	-0.6	Pass
4	7879.80	23.45	3.91	35.88	53.24	AVG	Horizontal	199	120	54.0	-0.8	Pass
5	7886.40	23.49	3.86	35.88	53.23	AVG	Vertical	199	150	54.0	-0.8	Pass
6	7901.80	35.45	3.75	35.88	65.08	MaxP	Vertical	149	150	68.2	-3.1	Pass
7	7963.40	35.79	3.82	35.87	65.48	MaxP	Vertical	149	150	68.2	-2.8	Pass

Test Notes: 120VAC POE, 6385MHz, Max Power, Integral Antenna, 80MHz BW

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	AX6400	Variant:	160MHz
Antenna Gain (dBi):	24	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6345	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	7846.80	34.97	3.88	35.88	64.73	MaxP	Horizontal	149	150	68.2	-3.5	Pass	
2	7851.20	35.44	3.92	35.88	65.24	MaxP	Vertical	149	119	68.2	-3.0	Pass	
3	7853.40	23.56	3.93	35.88	53.37	AVG	Vertical	149	29	54.0	-0.6	Pass	
4	7857.80	23.46	3.90	35.88	53.23	AVG	Horizontal	149	0	54.0	-0.8	Pass	
5	7864.40	23.64	3.82	35.88	53.34	AVG	Vertical	100	29	54.0	-0.7	Pass	
6	7882.00	23.55	3.89	35.88	53.32	AVG	Horizontal	149	30	54.0	-0.7	Pass	
7	7888.60	35.56	3.84	35.88	65.28	MaxP	Horizontal	149	0	68.2	-2.9	Pass	
8	7890.80	35.18	3.82	35.88	64.88	MaxP	Vertical	149	119	68.2	-3.4	Pass	

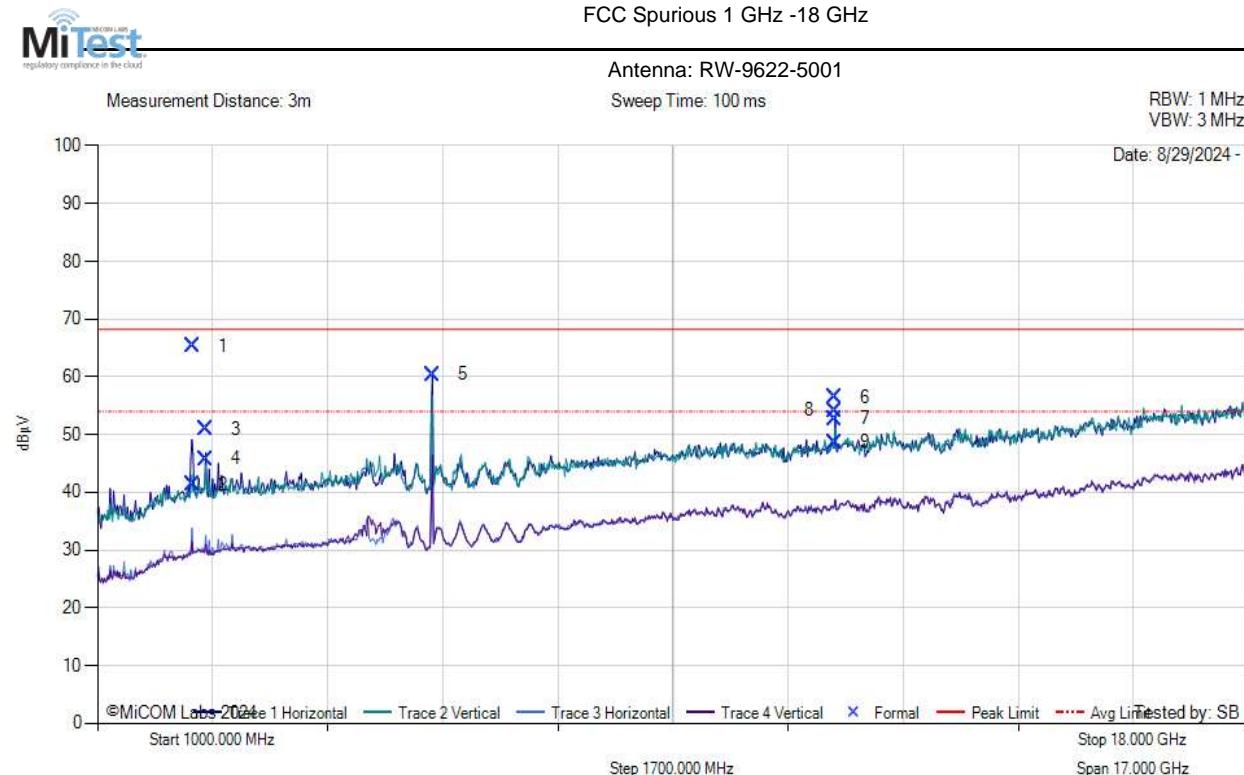
Test Notes: 120VAC POE, 6345MHz, Max Power, Integral Antenna, 160MHz BW

9.5.1.2. Antenna: RW-9622-5001

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9622-5001	Variant:	20MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



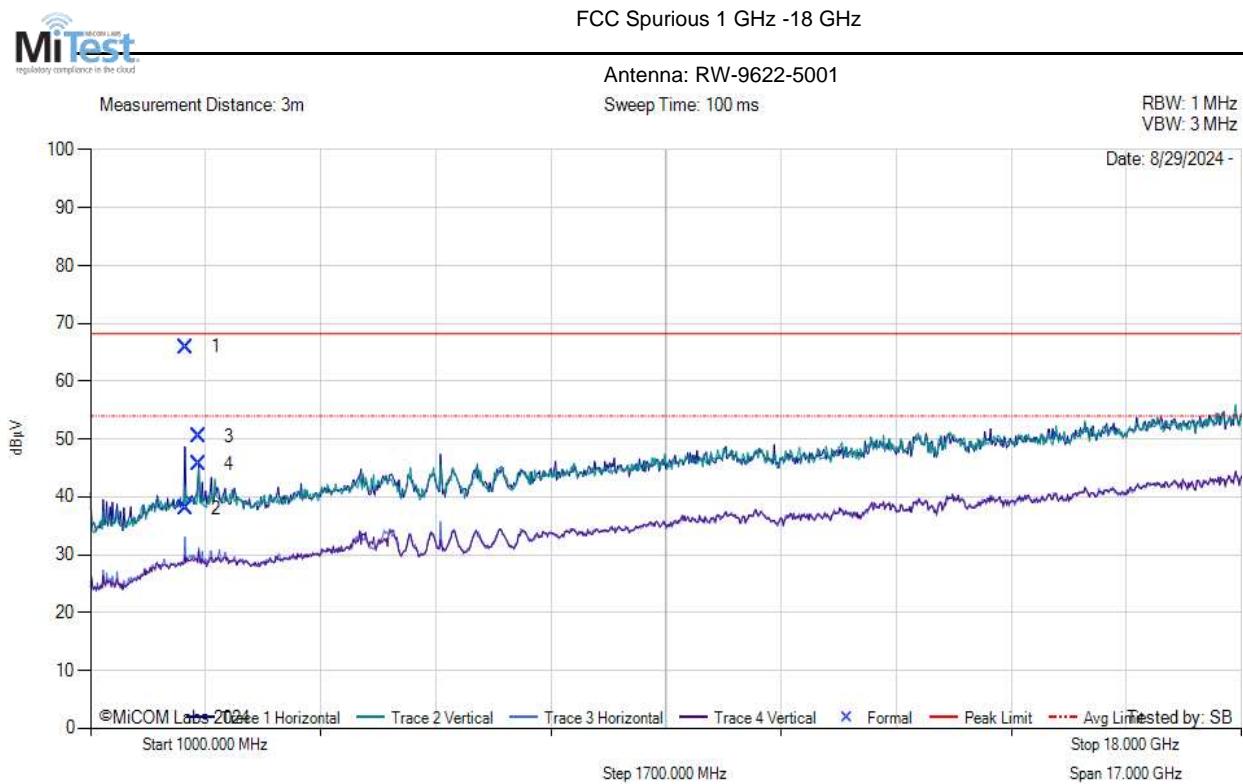
1000.00 - 18000.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	2399.58	75.50	1.96	-12.14	65.32	MaxP	Horizontal	179	250	68.2	-2.9	Pass
2	2399.58	51.59	1.96	-12.14	41.42	AVG	Horizontal	179	250	54.0	-12.6	Pass
3	2600.07	60.50	2.07	-11.64	50.93	MaxP	Horizontal	123	298	68.2	-17.3	Pass
4	2600.07	55.40	2.07	-11.64	45.83	AVG	Horizontal	123	298	54.0	-8.2	Pass
5	5947.00	67.60	3.24	35.14	60.44	Fundamental	Horizontal	149	90	--	--	--
6	11889.66	57.62	4.98	-6.21	56.39	MaxP	Vertical	125	241	68.2	-11.8	Pass
7	11889.66	53.98	4.98	-6.21	52.76	AVG	Vertical	125	241	54.0	-1.2	Pass
8	11889.78	55.43	4.98	-6.20	54.21	MaxP	Horizontal	147	273	68.2	-14.0	Pass
9	11889.78	49.86	4.98	-6.20	48.64	AVG	Horizontal	147	273	54.0	-5.4	Pass

Test Notes: 120VAC POE, 5945MHz, Max Power, RW-9622-5001 Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9622-5001	Variant:	20MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6175	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



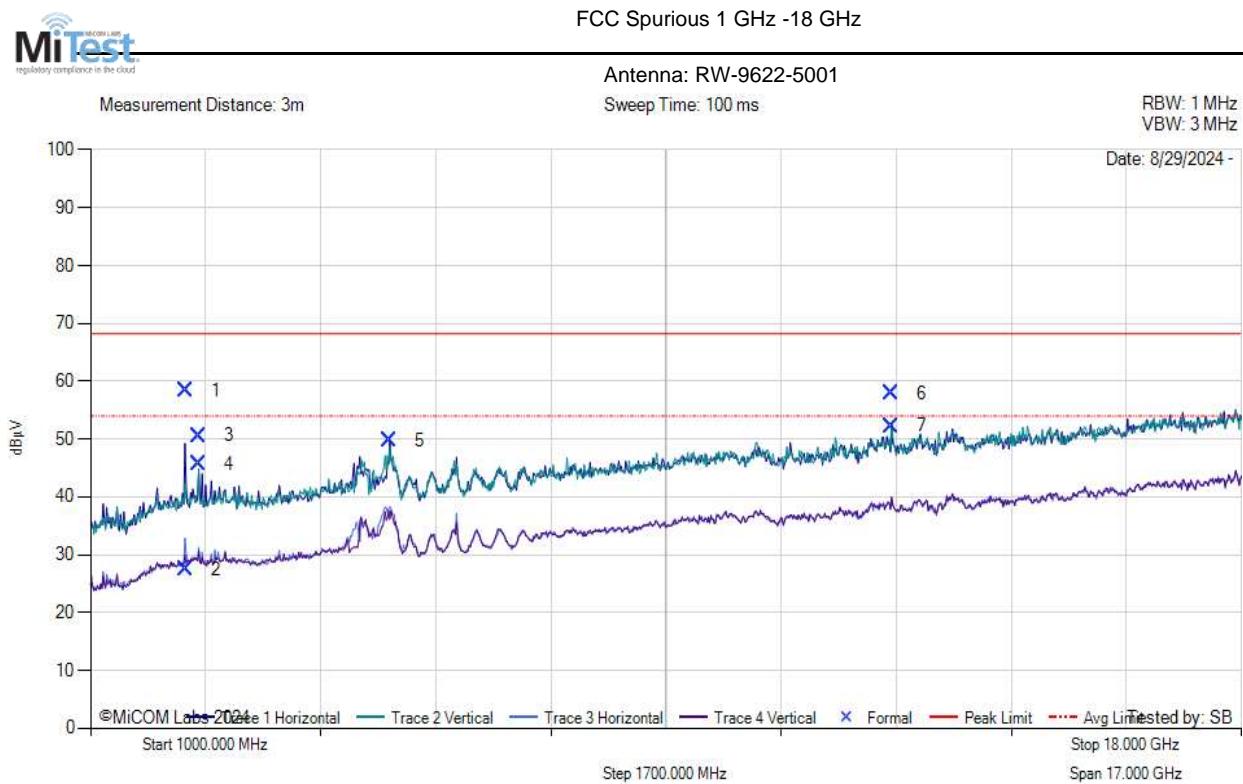
1000.00 - 18000.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	2399.39	76.07	1.96	-12.14	65.89	MaxP	Horizontal	110	208	68.2	-2.3	Pass
2	2399.39	48.23	1.96	-12.14	38.06	AVG	Horizontal	110	208	54.0	-15.9	Pass
3	2600.00	60.08	2.07	-11.64	50.51	MaxP	Horizontal	158	297	68.2	-17.7	Pass
4	2600.00	55.27	2.07	-11.64	45.70	AVG	Horizontal	158	297	54.0	-8.3	Pass

Test Notes: 120VAC POE, 6175MHz, Max Power, RW-9622-5001 Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9622-5001	Variant:	20MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



1000.00 - 18000.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	2398.44	68.56	1.96	-12.14	58.38	MaxP	Horizontal	179	239	68.2	-9.8	Pass	
2	2398.44	37.68	1.96	-12.14	27.49	AVG	Horizontal	179	239	54.0	-26.5	Pass	
3	2600.06	60.13	2.07	-11.64	50.56	MaxP	Horizontal	115	297	68.2	-17.7	Pass	
4	2600.06	55.30	2.07	-11.64	45.73	AVG	Horizontal	115	297	54.0	-8.3	Pass	
5	5420.00	58.21	3.08	34.50	49.73	MaxP	Horizontal	149	90	68.2	-18.5	Pass	
6	12829.69	61.12	5.17	-8.46	57.82	MaxP	Vertical	158	244	68.2	-10.4	Pass	
7	12829.69	55.52	5.17	-8.46	52.22	AVG	Vertical	158	244	54.0	-1.8	Pass	

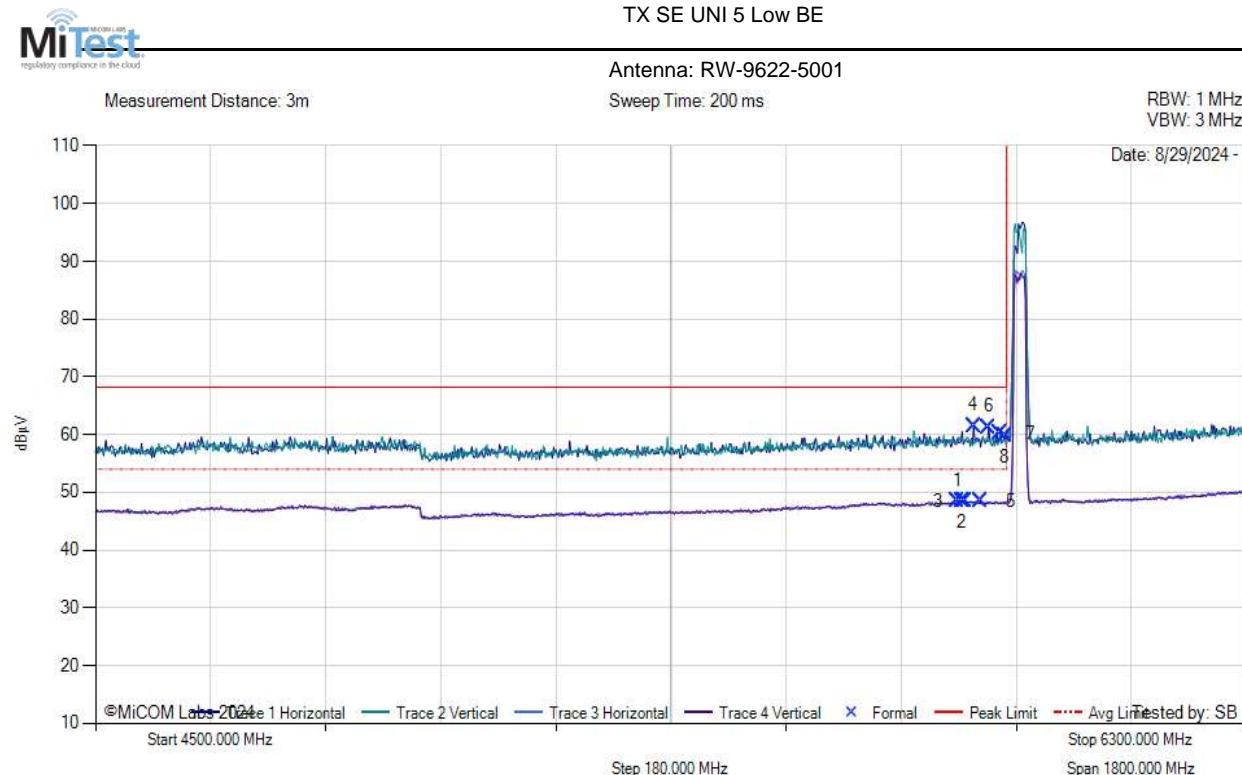
Test Notes: 120VAC POE, 6415MHz, Max Power, RW-9622-5001 Antenna, 20MHz BW

9.5.1.2.1. BE 5925 MHz

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9622-5001	Variant:	20MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



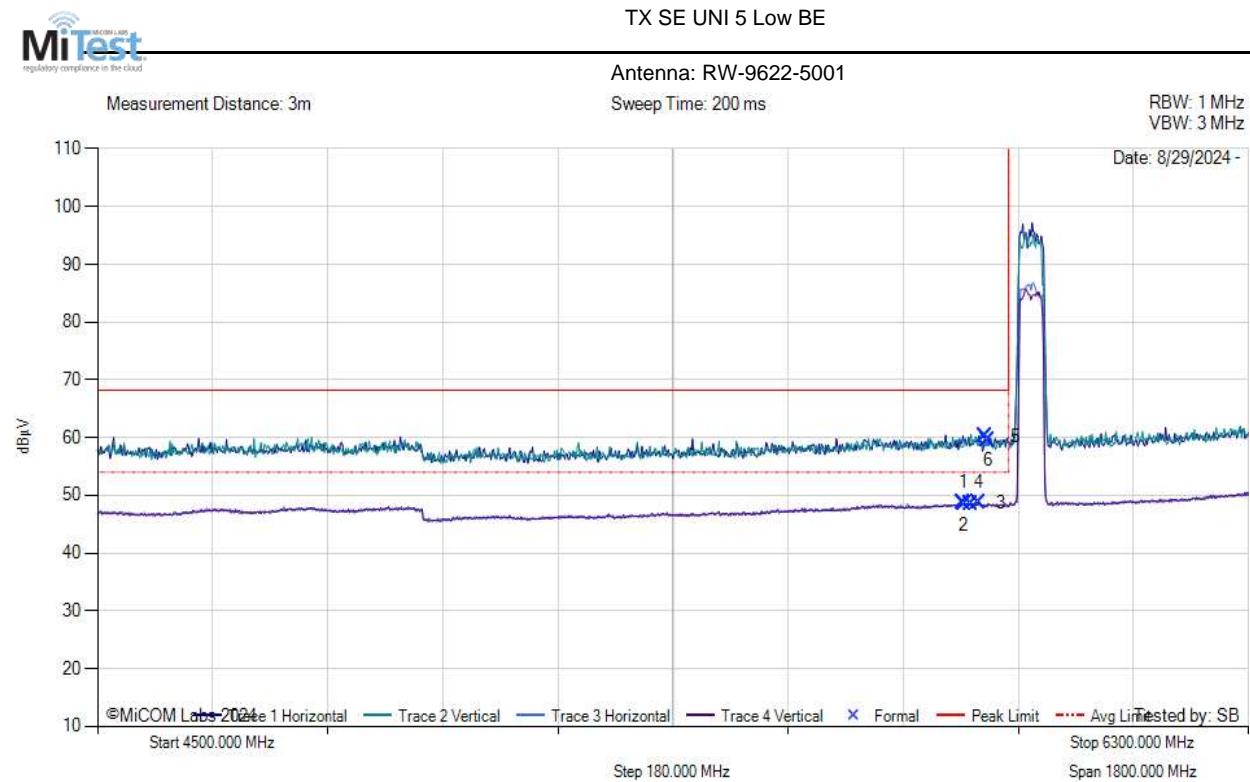
4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	5848.20	20.33	3.21	34.95	48.49	AVG	Vertical	149	29	54.0	-5.5	Pass	
2	5855.40	20.19	3.30	34.97	48.46	AVG	Horizontal	199	120	54.0	-5.5	Pass	
3	5859.00	20.27	3.30	34.97	48.55	AVG	Vertical	149	119	54.0	-5.5	Pass	
4	5873.40	33.28	3.23	35.00	61.52	MaxP	Horizontal	101	90	68.2	-6.7	Pass	
5	5884.20	20.24	3.19	35.02	48.45	AVG	Horizontal	101	90	54.0	-5.5	Pass	
6	5896.80	33.07	3.22	35.04	61.33	MaxP	Horizontal	199	120	68.2	-6.9	Pass	
7	5914.80	31.95	3.20	35.08	60.22	MaxP	Vertical	199	119	68.2	-8.0	Pass	
8	5922.00	31.47	3.22	35.09	59.79	MaxP	Vertical	199	150	68.2	-8.4	Pass	

Test Notes: 120VAC POE, 5945MHz, Max Power, RW-9622-5001 Antenna, 20MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9622-5001	Variant:	40MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5960	Data Rate:	17.2
Power Setting:	Max	Tested By:	SB

Test Measurement Results



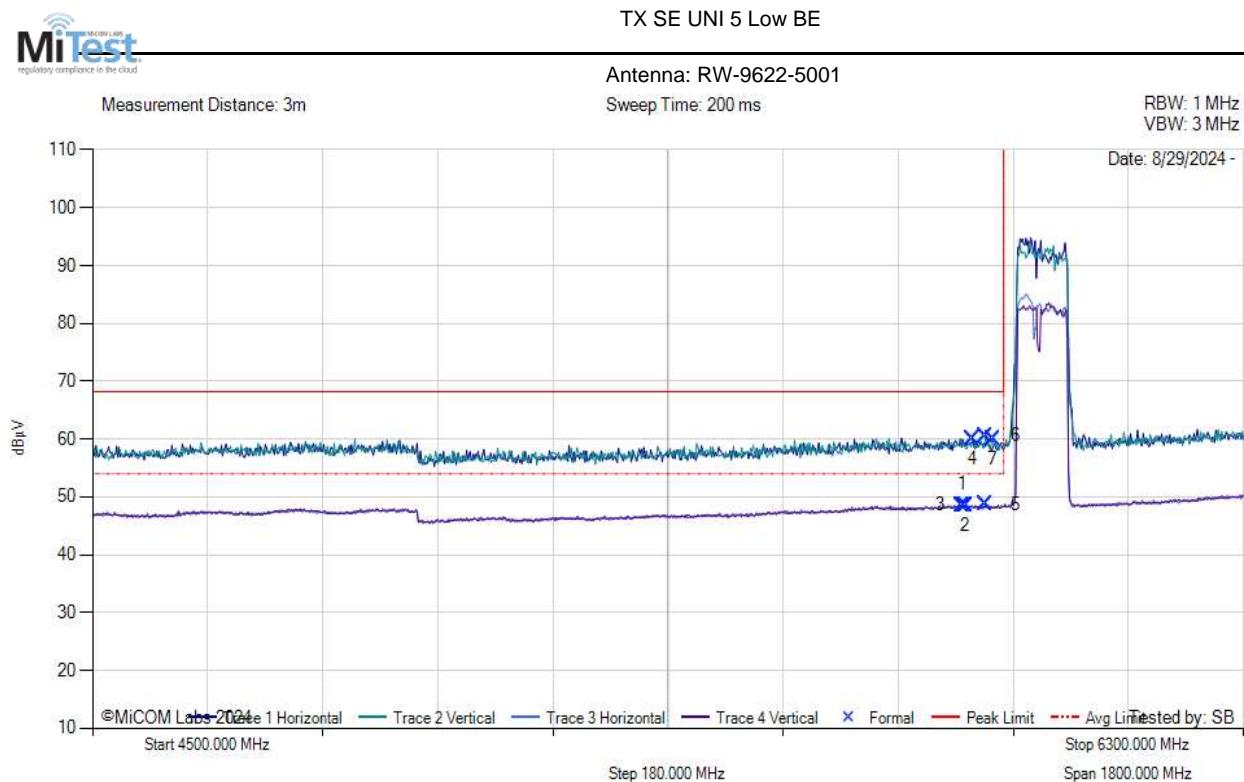
4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	5853.60	20.46	3.29	34.96	48.72	AVG	Vertical	99	89	54.0	-5.3	Pass	
2	5855.40	20.24	3.30	34.97	48.51	AVG	Horizontal	99	60	54.0	-5.5	Pass	
3	5866.20	20.32	3.27	34.99	48.57	AVG	Horizontal	149	120	54.0	-5.4	Pass	
4	5878.80	20.49	3.22	35.01	48.71	AVG	Vertical	101	0	54.0	-5.3	Pass	
5	5887.80	32.02	3.18	35.03	60.22	MaxP	Horizontal	149	150	68.2	-8.0	Pass	
6	5893.20	31.37	3.20	35.04	59.61	MaxP	Vertical	149	90	68.2	-8.6	Pass	

Test Notes: 120VAC POE, 5960MHz, Max Power, RW-9622-5001 Antenna, 40MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9622-5001	Variant:	80MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5985	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



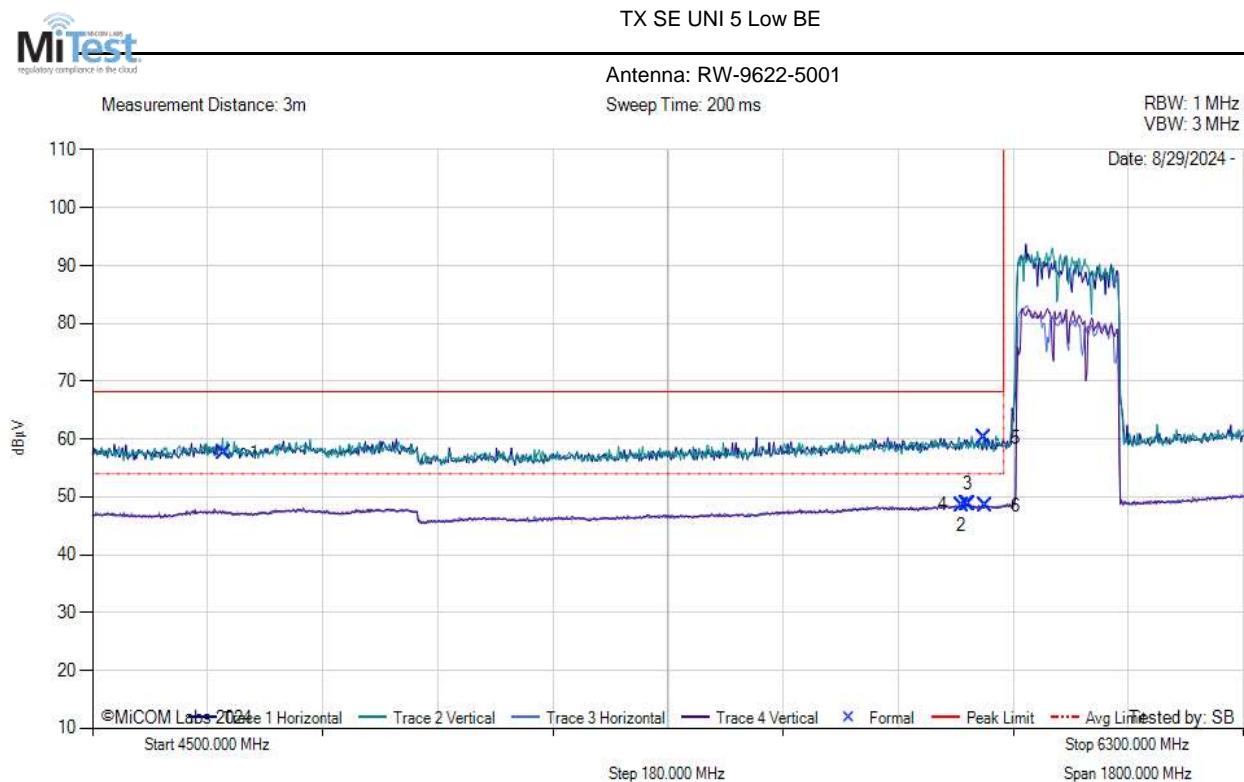
4500.00 - 6300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	5860.80	20.30	3.29	34.98	48.57	AVG	Vertical	149	150	54.0	-5.4	Pass
2	5864.40	20.30	3.28	34.98	48.56	AVG	Vertical	149	150	54.0	-5.4	Pass
3	5866.20	20.31	3.27	34.99	48.57	AVG	Horizontal	199	60	54.0	-5.4	Pass
4	5877.00	31.84	3.22	35.01	60.07	MaxP	Horizontal	149	0	68.2	-8.2	Pass
5	5896.80	20.47	3.22	35.04	48.74	AVG	Horizontal	100	120	54.0	-5.3	Pass
6	5896.80	32.35	3.22	35.04	60.61	MaxP	Vertical	100	29	68.2	-7.6	Pass
7	5907.60	31.88	3.19	35.06	60.12	MaxP	Vertical	199	59	68.2	-8.1	Pass

Test Notes: 120VAC POE, 5985MHz, Max Power, RW-9622-5001 Antenna, 80MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9622-5001	Variant:	160MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6025	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



4500.00 - 6300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	4705.20	30.74	2.81	34.03	57.58	MaxP	Vertical	149	29	68.2	-10.6	Pass
2	5859.00	20.30	3.30	34.97	48.57	AVG	Vertical	100	119	54.0	-5.4	Pass
3	5868.00	20.48	3.26	34.99	48.74	AVG	Vertical	149	59	54.0	-5.3	Pass
4	5869.80	20.55	3.25	34.99	48.80	AVG	Horizontal	199	60	54.0	-5.2	Pass
5	5895.00	31.99	3.21	35.04	60.25	MaxP	Horizontal	100	150	68.2	-8.0	Pass
6	5896.80	20.28	3.22	35.04	48.54	AVG	Horizontal	100	90	54.0	-5.5	Pass

Issue Date: 8th January 2025

Page: 62 of 183

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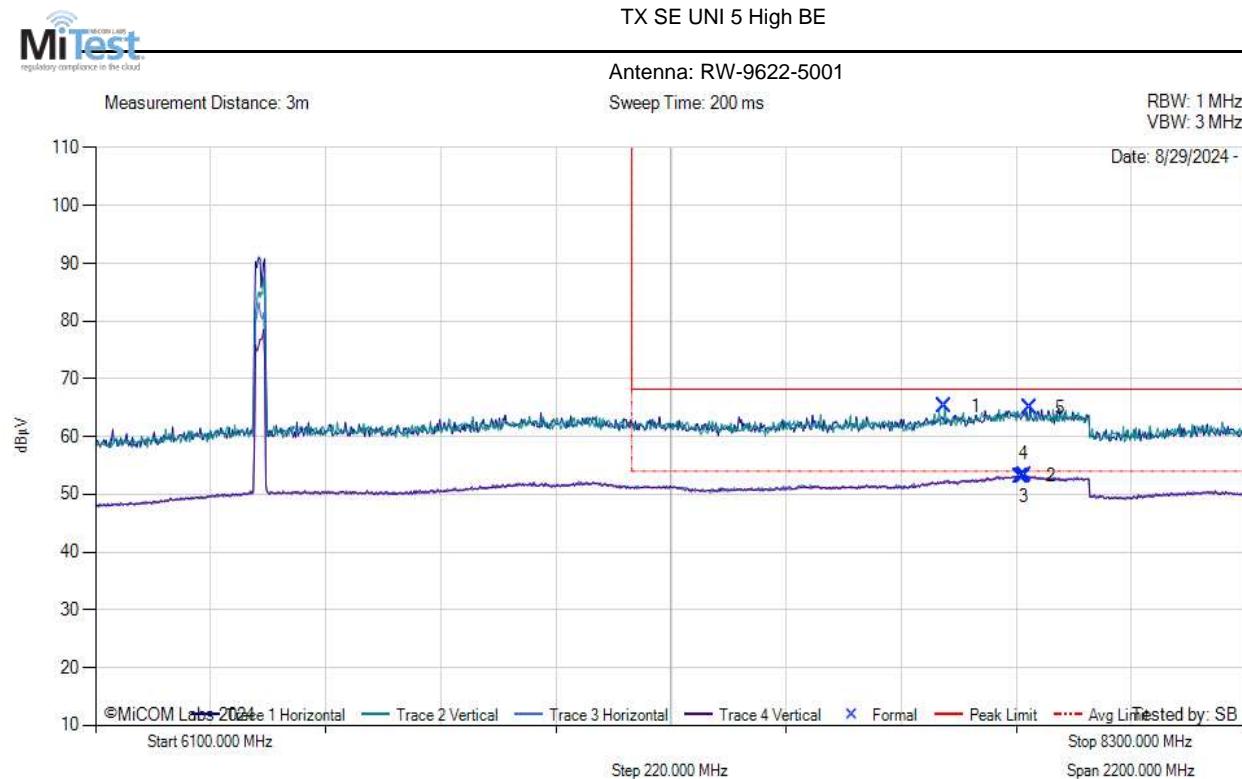
MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

9.5.1.2.2. BE 7125 MHz

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9622-5001	Variant:	20MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



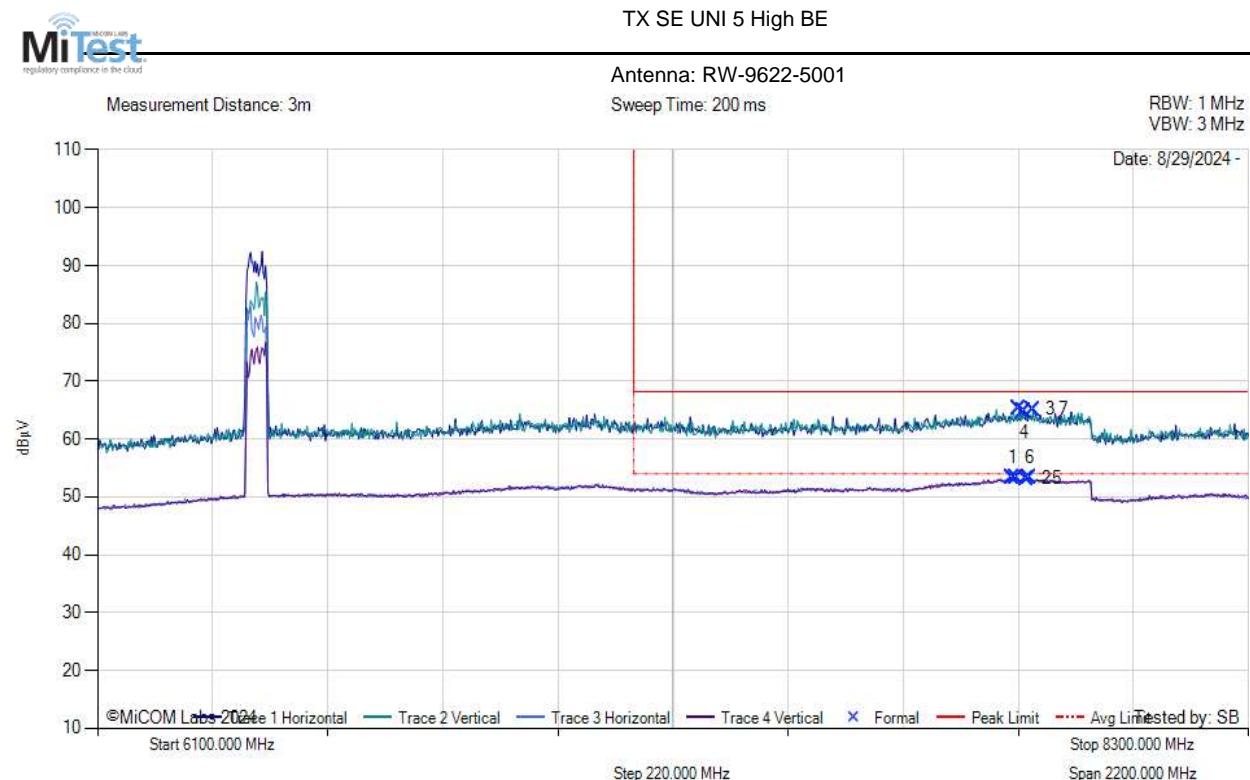
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7723.60	35.41	3.96	35.85	65.23	MaxP	Vertical	149	150	68.2	-3.0	Pass
2	7868.80	23.43	3.85	35.88	53.16	AVG	Vertical	101	119	54.0	-0.8	Pass
3	7873.20	23.35	3.91	35.88	53.14	AVG	Horizontal	199	150	54.0	-0.9	Pass
4	7875.40	23.56	3.92	35.88	53.36	AVG	Horizontal	149	120	54.0	-0.6	Pass
5	7886.40	35.30	3.86	35.88	65.04	MaxP	Horizontal	199	60	68.2	-3.2	Pass

Test Notes: 120VAC POE, 6415MHz, Max Power, RW-9622-5001 Antenna, 20MHz BW

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9622-5001	Variant:	40MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415	Data Rate:	17.2
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz

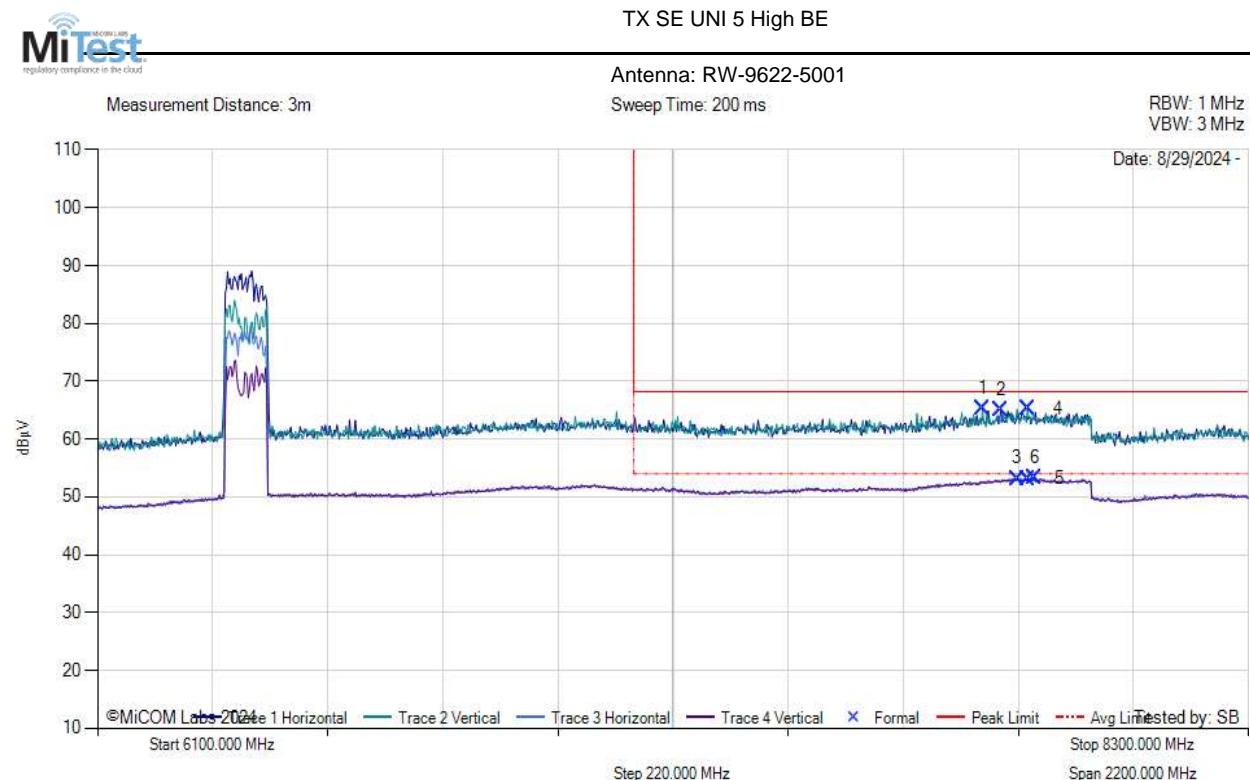
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7849.00	23.53	3.90	35.88	53.31	AVG	Horizontal	149	60	54.0	-0.7	Pass
2	7855.60	23.50	3.93	35.88	53.31	AVG	Vertical	199	59	54.0	-0.7	Pass
3	7862.20	35.50	3.84	35.88	65.21	MaxP	Vertical	100	90	68.2	-3.0	Pass
4	7871.00	35.05	3.88	35.88	64.81	MaxP	Horizontal	199	0	68.2	-3.4	Pass
5	7875.40	23.38	3.92	35.88	53.18	AVG	Horizontal	149	90	54.0	-0.8	Pass
6	7882.00	23.53	3.89	35.88	53.30	AVG	Vertical	149	29	54.0	-0.7	Pass
7	7888.60	35.41	3.84	35.88	65.13	MaxP	Vertical	100	0	68.2	-3.1	Pass

Test Notes: 120VAC POE, 6405MHz, Max Power, RW-9622-5001 Antenna, 40MHz BW

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9622-5001	Variant:	80MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6385	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



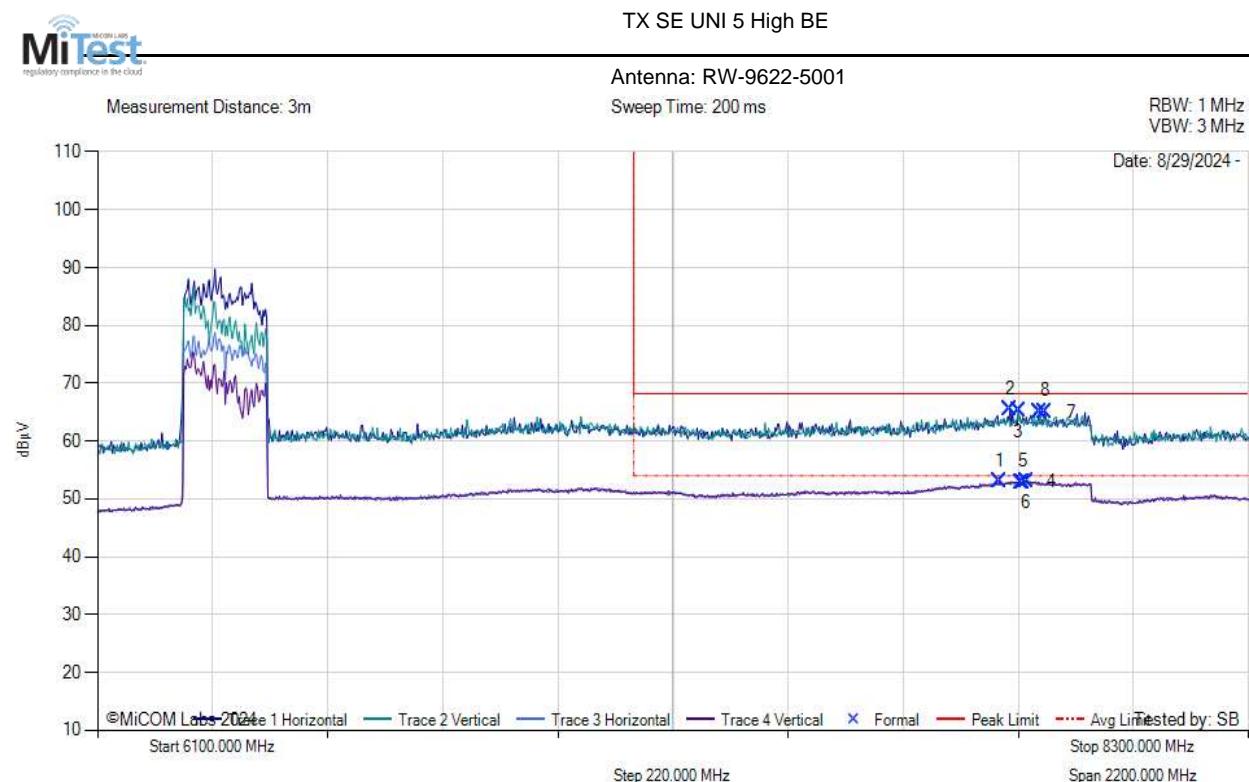
6100.00 - 8300.00 MHz													
Num	Frequency MHz	Raw dB _μ V	Cable Loss dB	AF dB/m	Level dB _μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB _μ V/m	Margin dB	Pass /Fail	
1	7791.80	35.65	3.67	35.87	65.19	MaxP	Vertical	149	0	68.2	-3.0	Pass	
2	7827.00	35.32	3.82	35.87	65.02	MaxP	Horizontal	199	30	68.2	-3.2	Pass	
3	7857.80	23.35	3.90	35.88	53.13	AVG	Vertical	149	89	54.0	-0.9	Pass	
4	7877.60	35.47	3.93	35.88	65.27	MaxP	Vertical	199	59	68.2	-3.0	Pass	
5	7879.80	23.39	3.91	35.88	53.18	AVG	Horizontal	149	60	54.0	-0.8	Pass	
6	7890.80	23.53	3.82	35.88	53.23	AVG	Vertical	199	89	54.0	-0.8	Pass	

Test Notes: 120VAC POE, 6385MHz, Max Power, RW-9622-5001 Antenna, 80MHz

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9622-5001	Variant:	160MHz
Antenna Gain (dBi):	27	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6345	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7824.80	23.39	3.83	35.87	53.09	AVG	Vertical	100	59	54.0	-0.9	Pass
2	7844.60	35.83	3.86	35.88	65.56	MaxP	Horizontal	149	30	68.2	-2.7	Pass
3	7860.00	35.57	3.87	35.88	65.32	MaxP	Vertical	199	150	68.2	-2.9	Pass
4	7866.60	23.25	3.82	35.88	52.95	AVG	Vertical	199	0	54.0	-1.1	Pass
5	7868.80	23.21	3.85	35.88	52.94	AVG	Horizontal	199	150	54.0	-1.1	Pass
6	7875.40	23.23	3.92	35.88	53.03	AVG	Horizontal	149	0	54.0	-1.0	Pass
7	7901.80	35.41	3.75	35.88	65.05	MaxP	Vertical	199	89	68.2	-3.2	Pass
8	7910.60	35.49	3.74	35.88	65.11	MaxP	Horizontal	149	30	68.2	-3.1	Pass

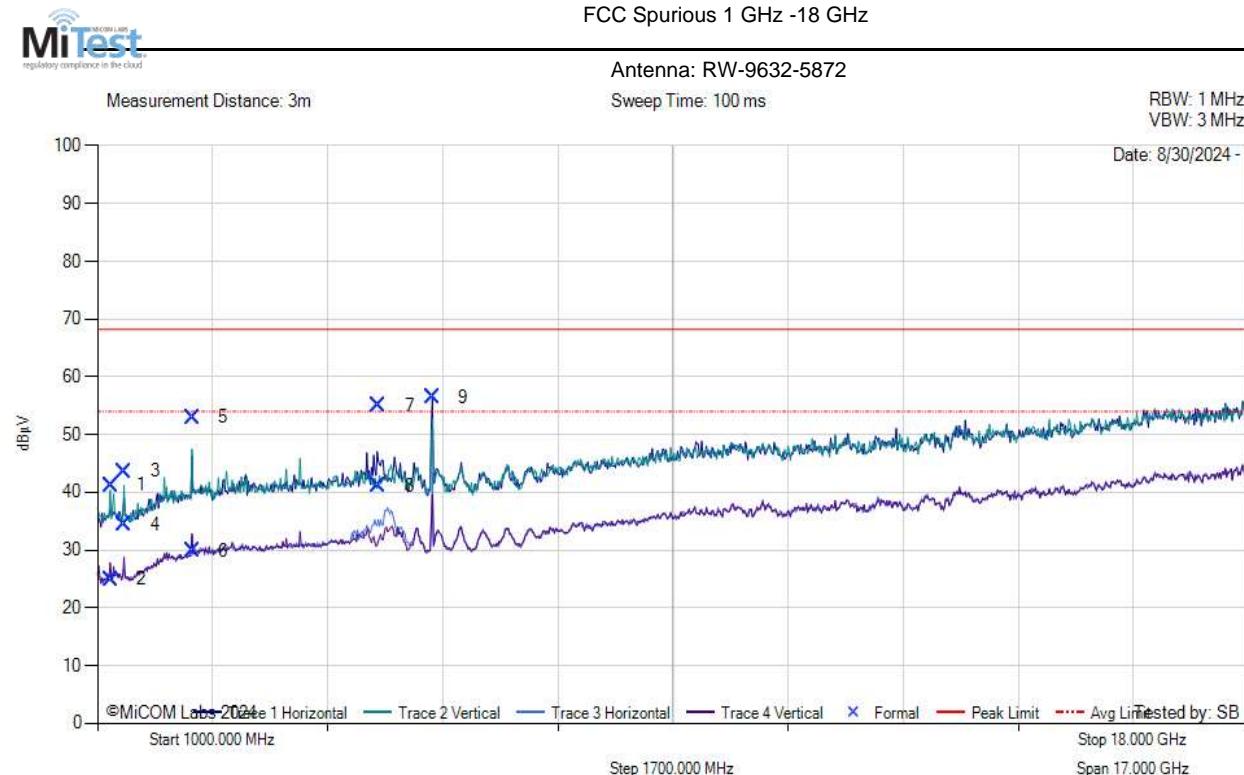
Test Notes: 120VAC POE, 6345MHz, Max Power, RW-9622-5001 Antenna, 160MHz BW

9.5.1.3. Antenna: RW-9632-5872

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9632-5872	Variant:	20MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



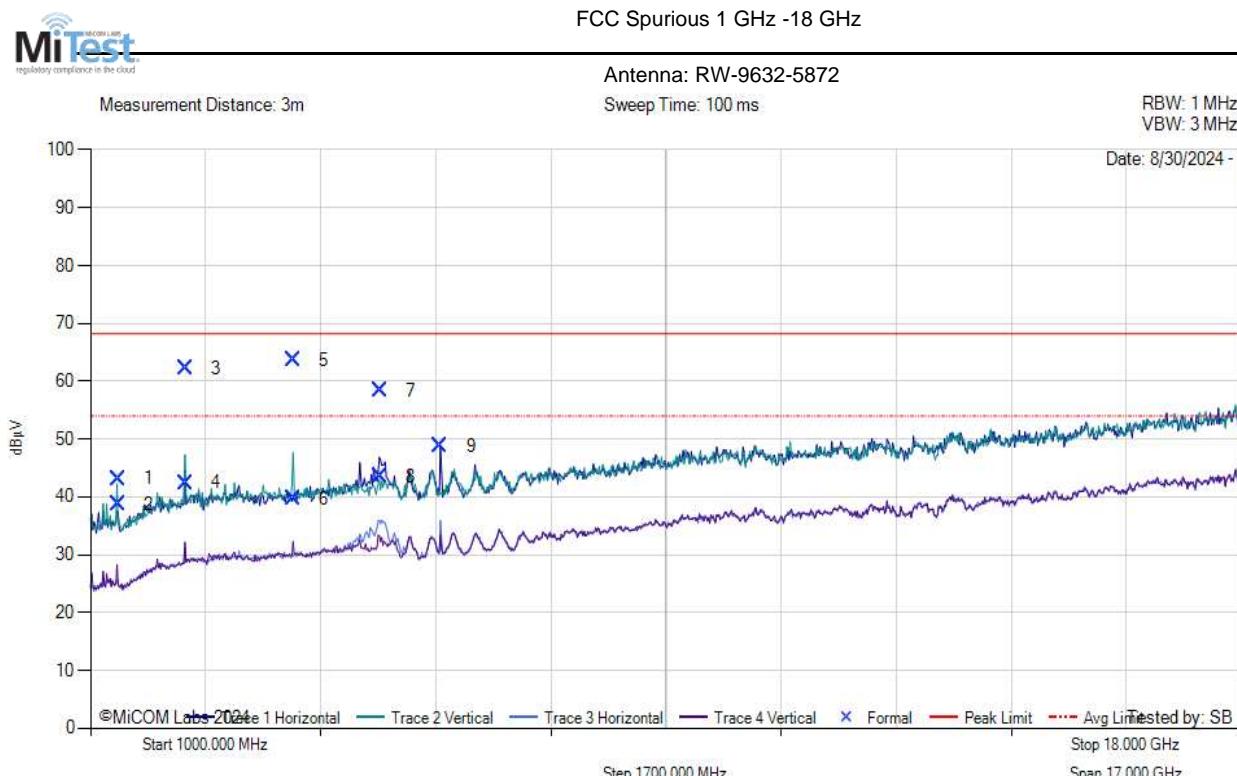
1000.00 - 18000.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	1194.75	56.49	1.39	-16.67	41.21	MaxP	Vertical	112	200	68.2	-27.0	Pass	
2	1194.75	40.21	1.39	-16.67	24.93	AVG	Vertical	112	200	54.0	-29.1	Pass	
3	1400.11	58.67	1.52	-16.55	43.64	MaxP	Vertical	180	200	68.2	-24.6	Pass	
4	1400.11	49.39	1.52	-16.55	34.36	AVG	Vertical	180	200	54.0	-19.6	Pass	
5	2399.53	63.12	1.96	-12.14	52.94	MaxP	Vertical	114	181	68.2	-15.3	Pass	
6	2399.53	40.06	1.96	-12.14	29.89	AVG	Vertical	114	181	54.0	-24.1	Pass	
7	5154.53	63.61	3.02	-11.67	54.96	MaxP	Horizontal	128	96	68.2	-13.3	Pass	
8	5154.53	49.83	3.02	-11.67	41.18	AVG	Horizontal	128	96	54.0	-12.8	Pass	
9	5947.00	63.61	3.24	35.14	56.45	Fundamental	Horizontal	149	90	--	--	--	

Test Notes: 120VAC POE, 5945MHz, Max Power, RW-9632-5872 Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9632-5872	Variant:	20MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6175	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



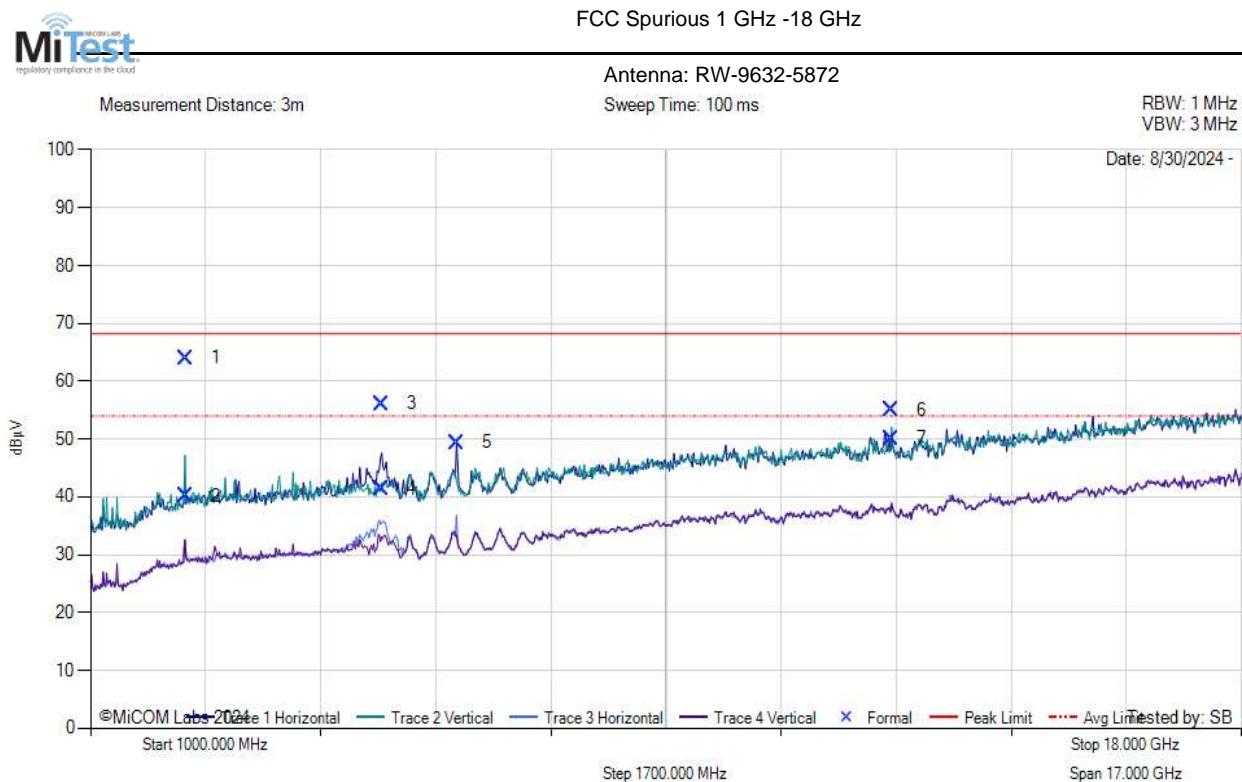
1000.00 - 18000.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	1406.12	58.18	1.52	-16.56	43.14	MaxP	Vertical	183	204	68.2	-25.1	Pass
2	1406.12	53.75	1.52	-16.56	38.71	AVG	Vertical	183	204	54.0	-15.3	Pass
3	2400.10	72.39	1.96	-12.14	62.22	MaxP	Vertical	140	207	68.2	-6.0	Pass
4	2400.10	52.63	1.96	-12.14	42.45	AVG	Vertical	140	207	54.0	-11.5	Pass
5	3999.74	73.23	2.53	-12.13	63.62	MaxP	Vertical	130	172	68.2	-4.6	Pass
6	3999.74	49.34	2.53	-12.13	39.73	AVG	Vertical	130	172	54.0	-14.3	Pass
7	5274.92	67.03	2.98	-11.70	58.30	MaxP	Horizontal	130	97	68.2	-9.9	Pass
8	5274.92	52.17	2.98	-11.70	43.44	AVG	Horizontal	130	97	54.0	-10.6	Pass
9	6168.00	54.68	3.27	35.47	48.71	Fundamental	Horizontal	99	90	--	--	--

Test Notes: 120VAC POE, 6175MHz, Max Power, RW-9632-5872 Antenna, 20MHz BW

Equipment Configuration for FCC Spurious 1 GHz -18 GHz

Antenna:	RW-9632-5872	Variant:	20MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



1000.00 - 18000.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	2399.68	74.18	1.96	-12.14	64.01	MaxP	Vertical	162	203	68.2	-4.2	Pass
2	2399.68	50.30	1.96	-12.14	40.12	AVG	Vertical	162	203	54.0	-13.9	Pass
3	5300.47	65.06	3.26	-12.22	56.11	MaxP	Horizontal	124	95	68.2	-12.1	Pass
4	5300.47	50.33	3.26	-12.22	41.38	AVG	Horizontal	124	95	54.0	-12.6	Pass
5	6406.00	54.99	3.36	35.59	49.41	Fundamental	Horizontal	149	90	--	--	--
6	12829.76	58.27	5.17	-8.46	54.97	MaxP	Vertical	190	230	68.2	-13.3	Pass
7	12829.76	53.43	5.17	-8.46	50.14	AVG	Vertical	190	230	54.0	-3.9	Pass

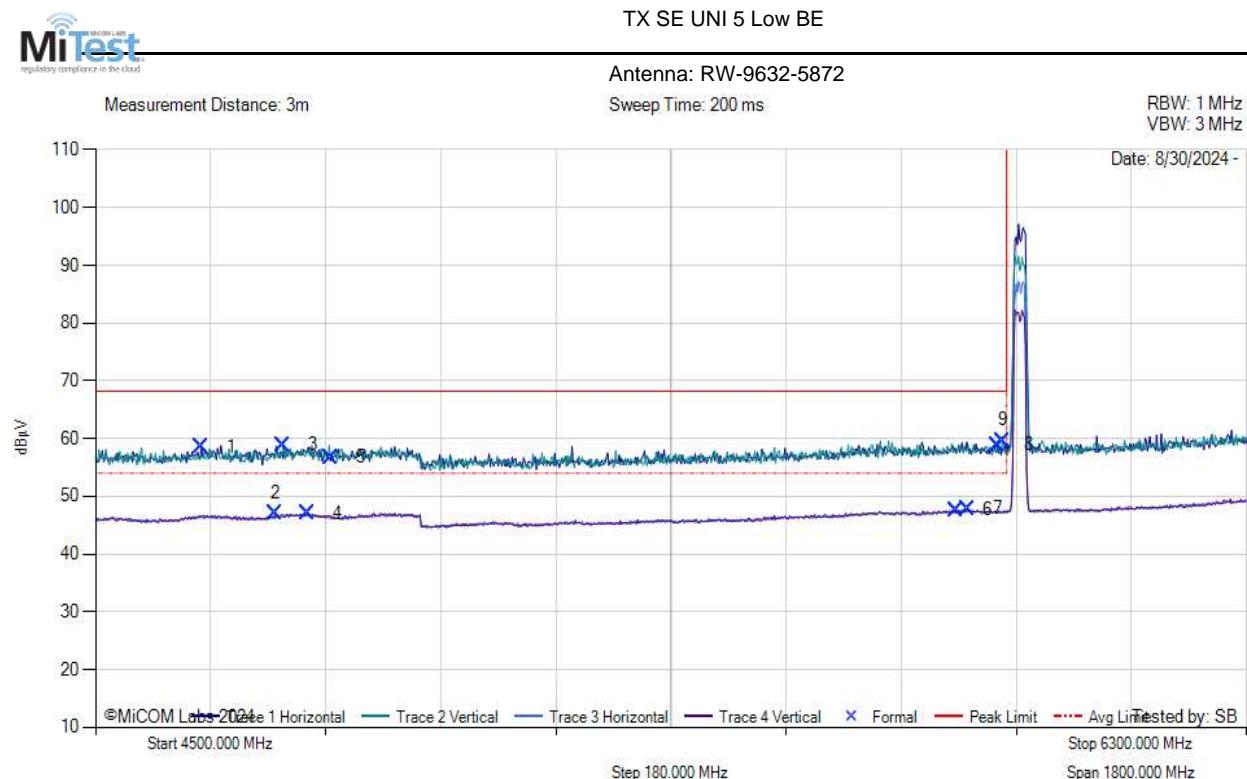
Test Notes: 120VAC POE, 6415MHz, Max Power, RW-9632-5872 Antenna, 20MHz BW

9.5.1.3.1. BE 5925 MHz

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9632-5872	Variant:	160MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945.00	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results





Title: RADWIN 2000 E
To: FCC Part 15 Subpart E 15.407 & ISED RSS-248
Serial #: RDWN98-U2 Rev A

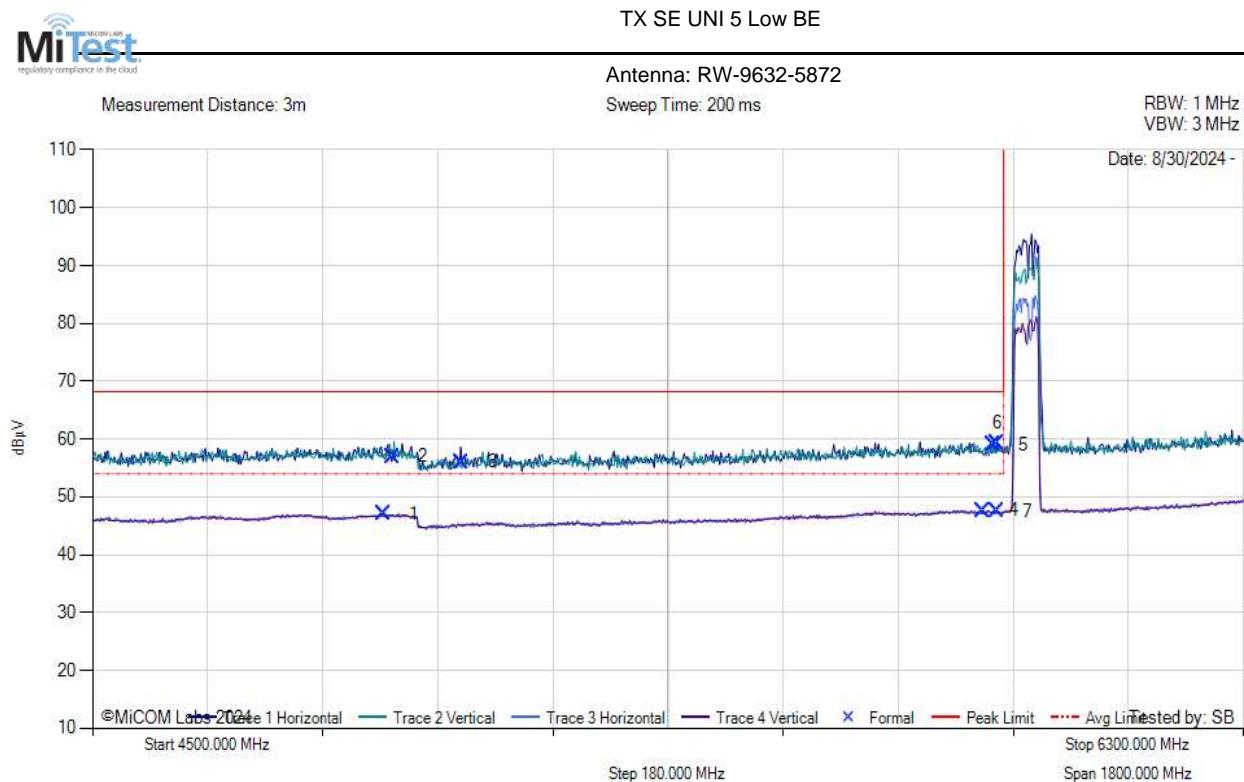
4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	4665.60	31.60	2.87	34.02	58.49	MaxP	Horizontal	101	90	68.2	-9.7	Pass	
2	4780.80	20.11	2.89	34.01	47.01	AVG	Horizontal	101	30	54.0	-7.0	Pass	
3	4793.40	32.05	2.89	34.00	58.94	MaxP	Vertical	199	150	68.2	-9.3	Pass	
4	4831.20	20.11	2.92	34.00	47.03	AVG	Vertical	199	89	54.0	-7.0	Pass	
5	4867.20	29.91	2.87	34.00	56.78	MaxP	Vertical	149	150	68.2	-11.4	Pass	
6	5846.40	19.47	3.19	34.95	47.60	AVG	Horizontal	149	90	54.0	-6.4	Pass	
7	5864.40	19.60	3.28	34.98	47.86	AVG	Vertical	101	29	54.0	-6.1	Pass	
8	5911.20	30.69	3.18	35.07	58.95	MaxP	Horizontal	101	150	68.2	-9.3	Pass	
9	5918.40	31.37	3.21	35.08	59.66	MaxP	Vertical	101	0	68.2	-8.6	Pass	

Test Notes: 120VAC POE, 5945MHz, Max Power, RW-9632-5872 Antenna, 20MHz

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9632-5872	Variant:	40MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5960.00	Data Rate:	17.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	4955.40	20.21	2.89	34.01	47.11	AVG	Horizontal	199	0	54.0	-6.9	Pass	
2	4969.80	30.04	2.94	34.01	56.99	MaxP	Vertical	199	29	68.2	-11.2	Pass	
3	5077.80	29.01	2.95	34.07	56.02	MaxP	Horizontal	149	150	68.2	-12.2	Pass	
4	5893.20	19.44	3.20	35.04	47.68	AVG	Horizontal	199	90	54.0	-6.3	Pass	
5	5907.60	30.81	3.19	35.06	59.06	MaxP	Vertical	199	150	68.2	-9.2	Pass	
6	5914.80	30.98	3.20	35.08	59.26	MaxP	Horizontal	149	60	68.2	-9.0	Pass	
7	5914.80	19.18	3.20	35.08	47.45	AVG	Vertical	199	90	54.0	-6.5	Pass	

Issue Date: 8th January 2025

Page: 73 of 183

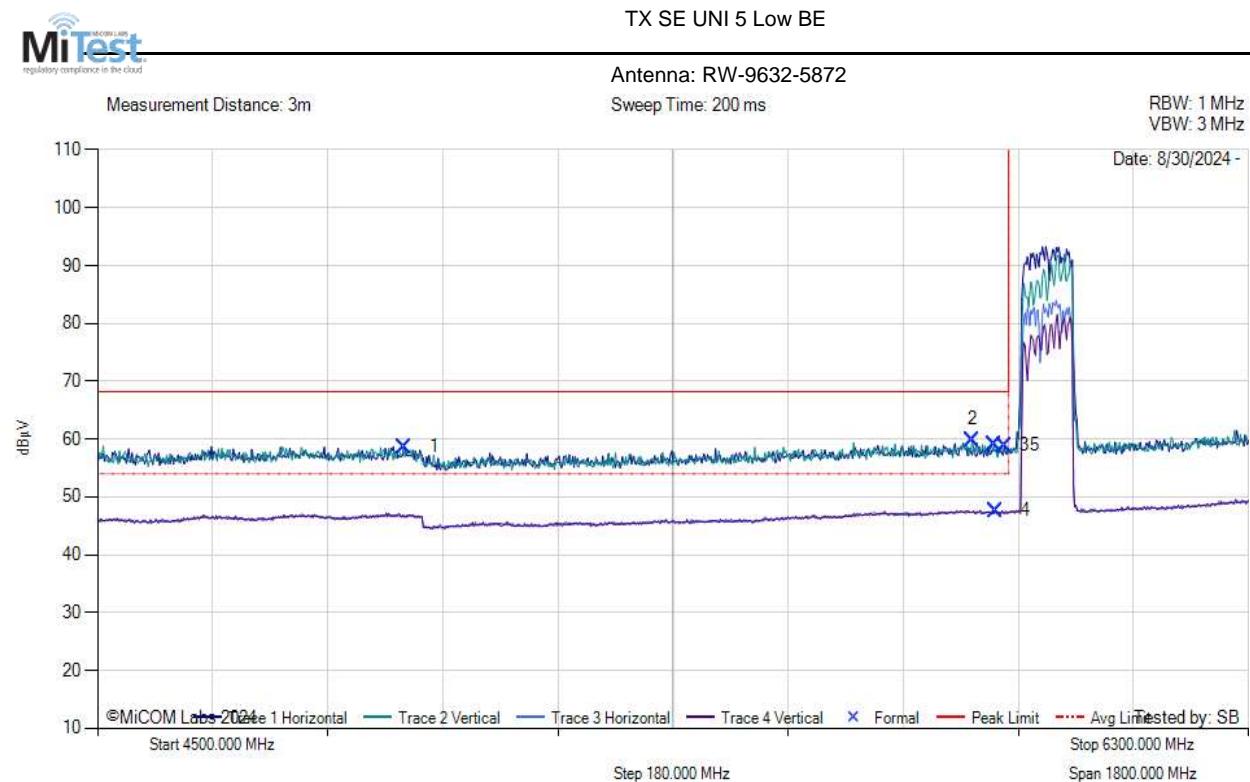
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Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9632-5872	Variant:	80MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5985.00	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



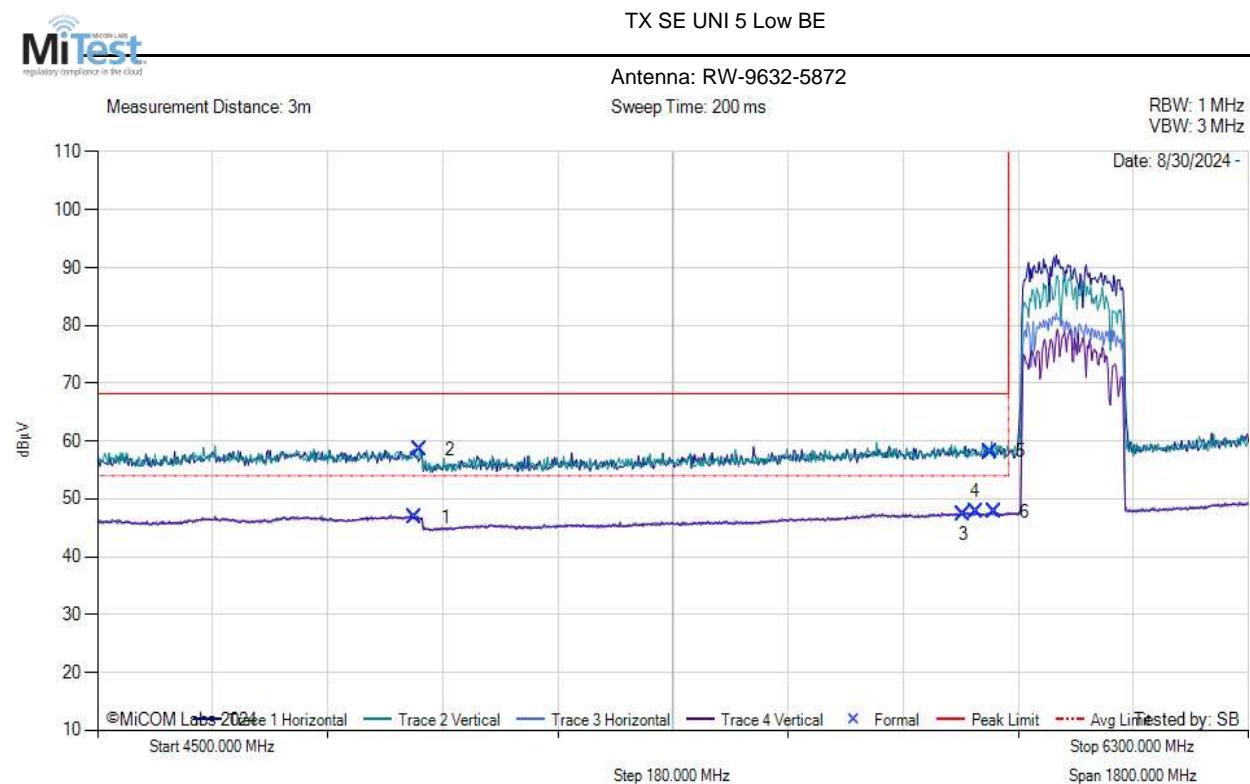
4500.00 - 6300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	4978.80	31.72	2.94	34.02	58.68	MaxP	Horizontal	199	60	68.2	-9.6	Pass
2	5868.00	31.64	3.26	34.99	59.89	MaxP	Vertical	101	0	68.2	-8.3	Pass
3	5902.20	30.75	3.21	35.05	59.02	MaxP	Vertical	199	29	68.2	-9.2	Pass
4	5904.00	19.36	3.20	35.06	47.62	AVG	Horizontal	149	30	54.0	-6.4	Pass
5	5918.40	30.66	3.21	35.08	58.95	MaxP	Horizontal	149	30	68.2	-9.3	Pass

Test Notes: 120VAC POE, 5985MHz, Max Power, RW-9632-5872 Antenna, 80MHz BW

Equipment Configuration for TX SE UNI 5 LOW BE

Antenna:	RW-9632-5872	Variant:	160MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6025.00	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



4500.00 - 6300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	4996.80	19.76	2.99	34.02	46.77	AVG	Vertical	149	29	54.0	-7.2	Pass	
2	5004.00	31.66	2.93	34.02	58.62	MaxP	Vertical	149	150	68.2	-9.6	Pass	
3	5853.60	19.18	3.29	34.96	47.44	AVG	Vertical	199	59	54.0	-6.6	Pass	
4	5873.40	19.51	3.23	35.00	47.75	AVG	Horizontal	100	90	54.0	-6.3	Pass	
5	5896.80	29.90	3.22	35.04	58.16	MaxP	Vertical	149	59	68.2	-10.1	Pass	
6	5902.20	19.44	3.21	35.05	47.70	AVG	Vertical	199	89	54.0	-6.3	Pass	

Issue Date: 8th January 2025

Page: 75 of 183

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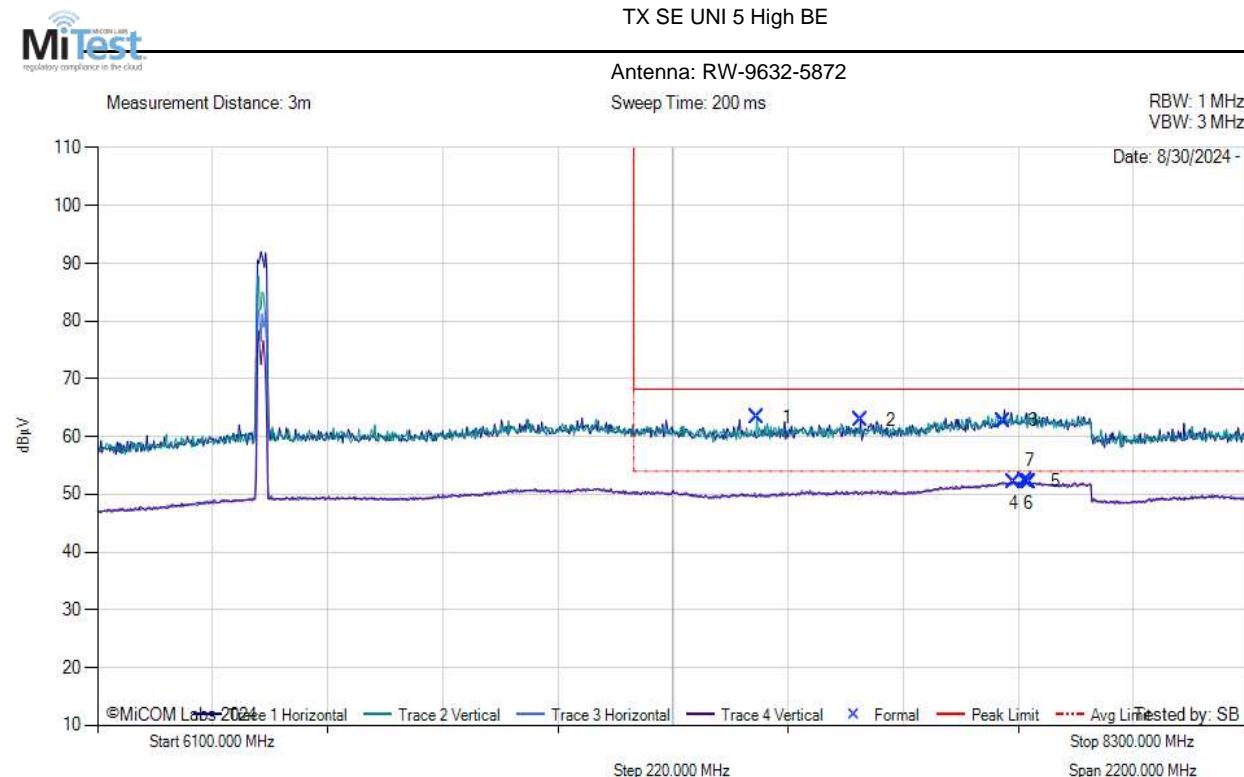
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9.5.1.3.2. BE 7125 MHz

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9632-5872	Variant:	20MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6415.00	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



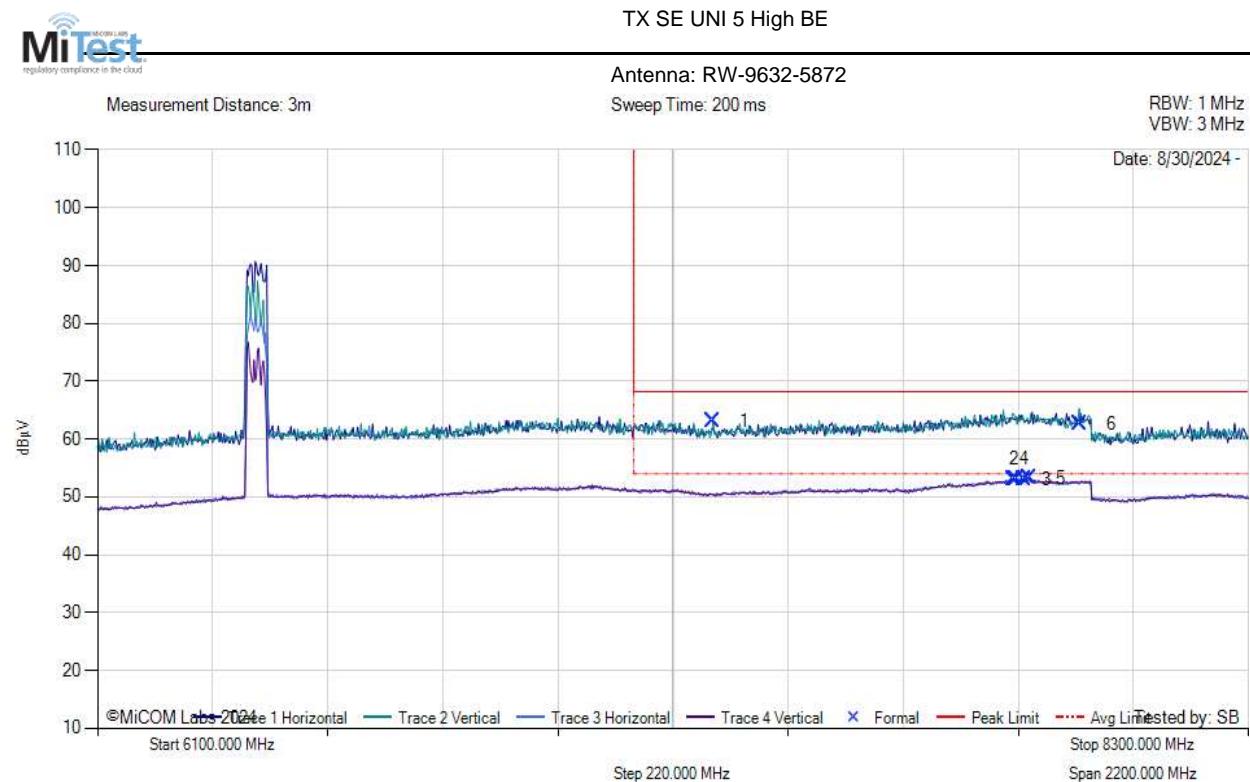
6100.00 - 8300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	7360.60	33.86	3.63	35.88	63.37	MaxP	Vertical	199	89	68.2	-4.9	Pass	
2	7558.60	33.27	3.73	35.85	62.85	MaxP	Horizontal	100	150	68.2	-5.4	Pass	
3	7831.40	33.01	3.81	35.88	62.70	MaxP	Horizontal	199	0	68.2	-5.5	Pass	
4	7851.20	22.25	3.92	35.88	52.05	AVG	Vertical	100	29	54.0	-1.9	Pass	
5	7873.20	22.54	3.91	35.88	52.33	AVG	Vertical	199	0	54.0	-1.7	Pass	
6	7879.80	22.27	3.91	35.88	52.06	AVG	Horizontal	199	150	54.0	-1.9	Pass	
7	7882.00	22.46	3.89	35.88	52.23	AVG	Horizontal	199	60	54.0	-1.8	Pass	

Test Notes: 120VAC POE, 6415MHz, Max Power, RW-9632-5872 Antenna, 20MHz BW

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9632-5872	Variant:	40MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6405.00	Data Rate:	17.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results

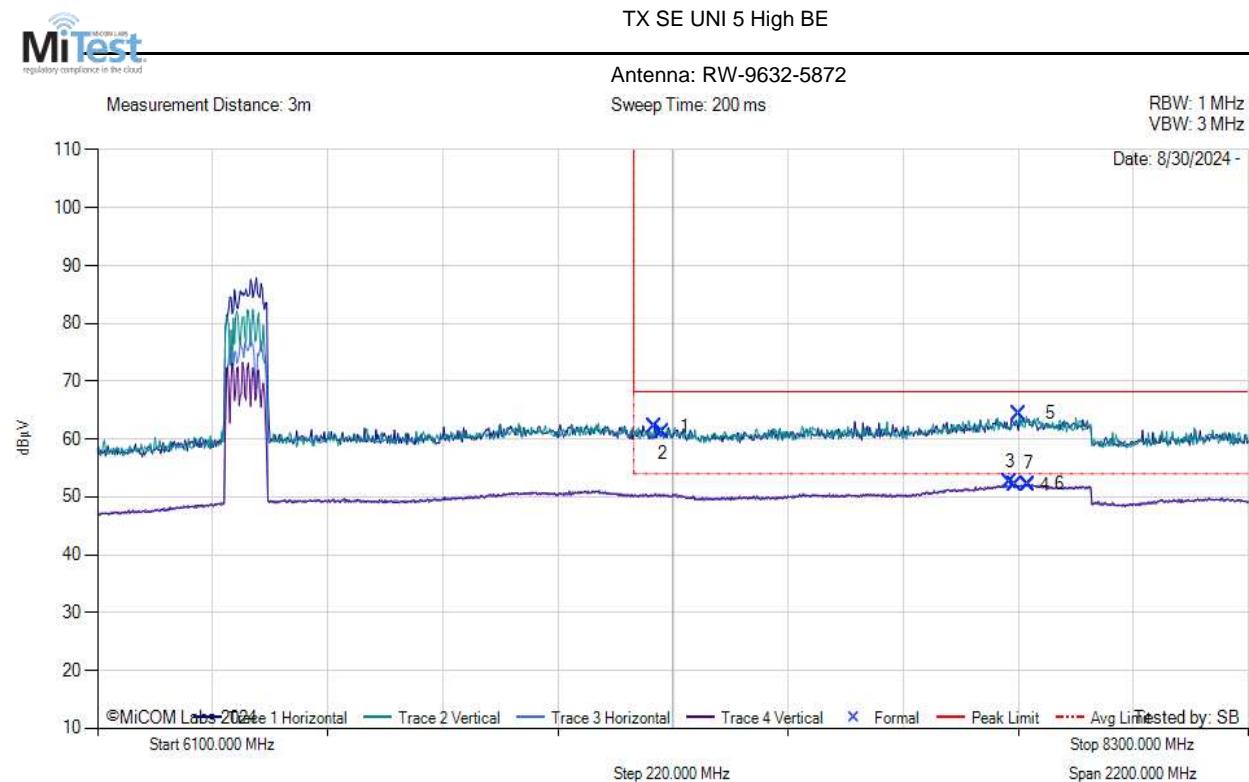


6100.00 - 8300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7277.00	33.55	3.64	35.89	63.08	MaxP	Vertical	149	150	68.2	-5.1	Pass
2	7851.20	23.26	3.92	35.88	53.06	AVG	Vertical	199	29	54.0	-0.9	Pass
3	7855.60	23.23	3.93	35.88	53.05	AVG	Horizontal	199	90	54.0	-1.0	Pass
4	7871.00	23.24	3.88	35.88	53.00	AVG	Horizontal	199	90	54.0	-1.0	Pass
5	7882.00	23.43	3.89	35.88	53.20	AVG	Vertical	100	29	54.0	-0.8	Pass
6	7978.80	32.87	3.91	35.86	62.64	MaxP	Vertical	149	59	68.2	-5.6	Pass

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9632-5872	Variant:	80MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6385.00	Data Rate:	36
Power Setting:	Max	Tested By:	SB

Test Measurement Results



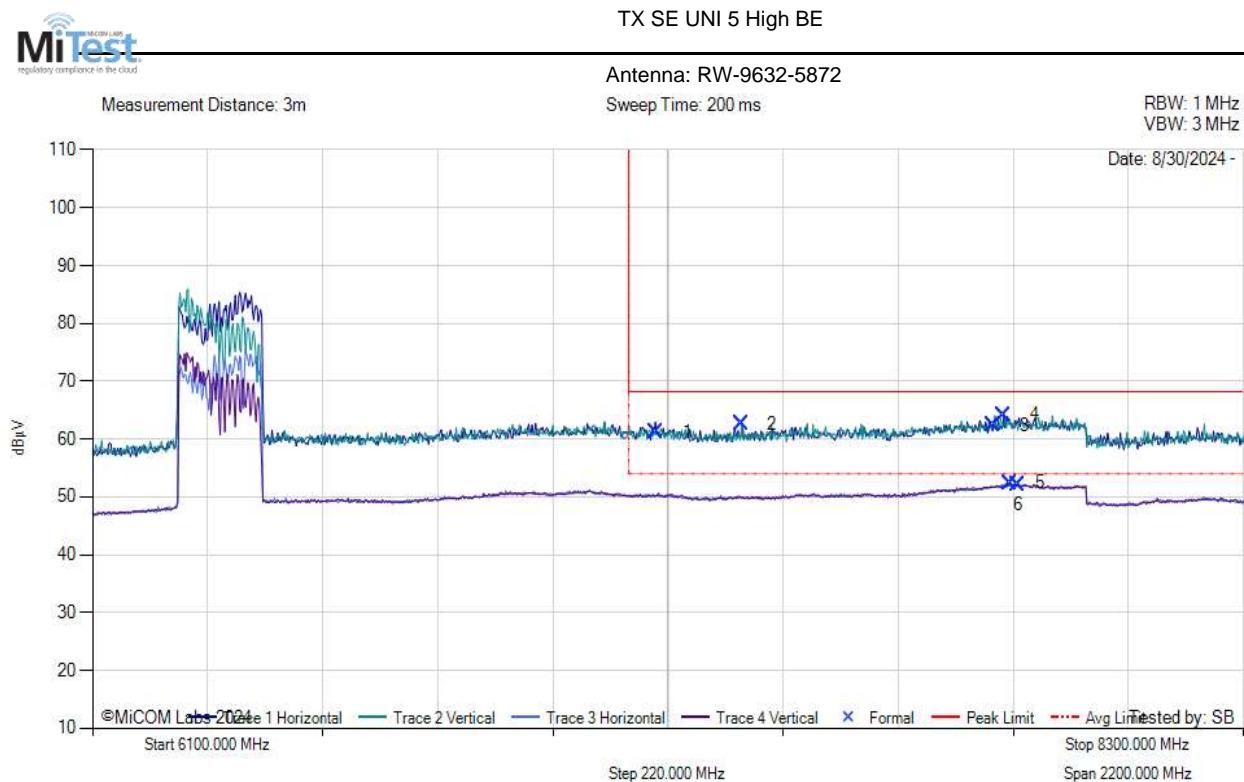
6100.00 - 8300.00 MHz												
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail
1	7164.80	32.54	3.69	35.93	62.16	MaxP	Horizontal	100	60	68.2	-6.1	Pass
2	7180.20	31.50	3.75	35.93	61.18	MaxP	Vertical	100	119	68.2	-7.1	Pass
3	7844.60	22.77	3.86	35.88	52.51	AVG	Horizontal	149	0	54.0	-1.5	Pass
4	7853.40	22.33	3.93	35.88	52.14	AVG	Vertical	149	29	54.0	-1.9	Pass
5	7862.20	34.69	3.84	35.88	64.40	MaxP	Vertical	100	119	68.2	-3.8	Pass
6	7879.80	22.40	3.91	35.88	52.19	AVG	Horizontal	100	60	54.0	-1.8	Pass
7	7879.80	22.38	3.91	35.88	52.17	AVG	Vertical	149	89	54.0	-1.8	Pass

Test Notes: 120VAC POE, 6385MHz, Max Power, RW-9632-5872 Antenna, 80MHz BW

Equipment Configuration for TX SE UNI 5 HIGH BE

Antenna:	RW-9632-5872	Variant:	160MHz
Antenna Gain (dBi):	32	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	6345.00	Data Rate:	72.1
Power Setting:	Max	Tested By:	SB

Test Measurement Results



6100.00 - 8300.00 MHz													
Num	Frequency MHz	Raw dB μ V	Cable Loss dB	AF dB/m	Level dB μ V/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dB μ V/m	Margin dB	Pass /Fail	
1	7178.00	31.45	3.75	35.93	61.13	MaxP	Horizontal	101	60	68.2	-7.1	Pass	
2	7340.80	32.99	3.72	35.88	62.59	MaxP	Vertical	199	119	68.2	-5.6	Pass	
3	7822.60	32.64	3.83	35.87	62.34	MaxP	Vertical	149	59	68.2	-5.9	Pass	
4	7842.40	34.48	3.85	35.88	64.20	MaxP	Horizontal	199	0	68.2	-4.0	Pass	
5	7853.40	22.63	3.93	35.88	52.44	AVG	Vertical	101	29	54.0	-1.6	Pass	
6	7868.80	22.47	3.85	35.88	52.20	AVG	Horizontal	199	30	54.0	-1.8	Pass	

Issue Date: 8th January 2025

Page: 79 of 183

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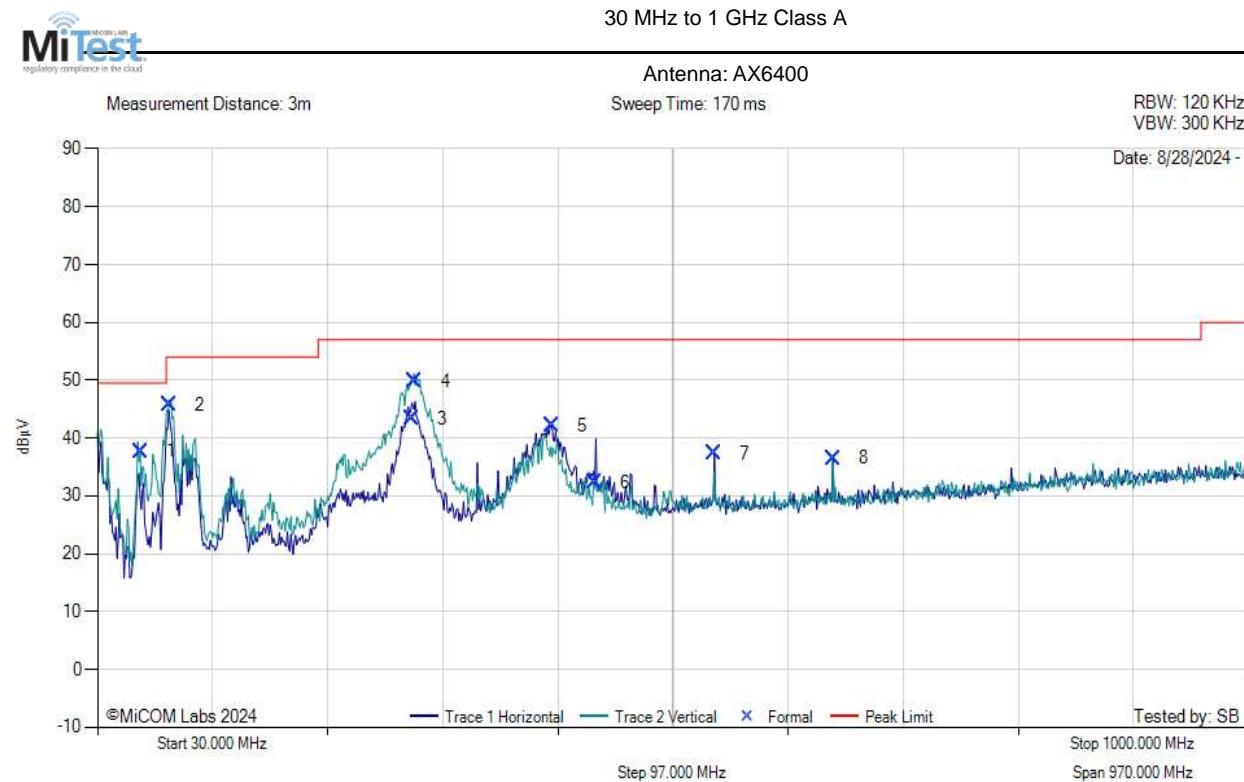
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9.5.2. Digital Emissions

Equipment Configuration for 30 MHz TO 1 GHz Class A

Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	Not Applicable	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results



30.00 - 1000.00 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	66.31	50.87	3.87	-17.08	37.67	MaxQP	Vertical	99	183	49.5	-11.8	Pass	
2	90.37	58.76	4.03	-17.01	45.78	MaxQP	Vertical	102	85	54.0	-8.2	Pass	
3	294.98	49.70	4.97	-11.33	43.34	MaxQP	Horizontal	198	360	57.0	-13.7	Pass	
4	297.60	56.18	4.99	-11.29	49.88	MaxQP	Vertical	120	126	57.0	-7.1	Pass	
5	413.15	45.28	5.39	-8.55	42.12	MaxP	Horizontal	199	240	57.0	-14.9	Pass	
6	449.04	34.65	5.53	-7.87	32.31	MaxP	Horizontal	199	270	57.0	-24.7	Pass	
7	549.92	37.73	5.86	-6.26	37.33	MaxP	Horizontal	98	270	57.0	-19.7	Pass	
8	649.83	34.86	6.17	-4.52	36.50	MaxP	Horizontal	199	120	57.0	-20.5	Pass	

Test Notes: 120VAC POE, 5945MHz, Max Power, Integral Antenna

9.6. AC Wireline

Test Conditions for ac Wireline Emissions (0.15 – 30 MHz)			
Standard:	FCC CFR 47:15.247	Ambient Temp. (°C):	20.0 - 24.5
Test Heading:	Conducted (ac Wireline Emissions)	Rel. Humidity (%):	32 - 45
Standard Section(s):	15.207	Pressure (mBars):	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for ac Wireline Emissions (0.15 – 30 MHz)

The EUT is configured in accordance with ANSI C63.4. The conducted emissions are measured in a shielded room with a spectrum analyzer in peak hold in the first instance. Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation. The highest emissions relative to the limit are listed.

Test configuration and setup for ac Wireline Emission Measurement were per the ac Wireline Test Set-up specified in this document.

Limits for ac Wireline Emissions

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Limits for conducted disturbance at the mains ports of class B ITE

Frequency of emission (MHz)	Quasi-peak dBuV	Average dBuV
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50
Note 1	* Decreases with the logarithm of the frequency	
Note 2	* The lower limit applies at the boundary between frequency ranges	

Limits for conducted disturbance at the mains ports of class A ITE

Frequency of emission (MHz)	Quasi-peak dBuV	Average dBuV
0.15–0.5	79	66
0.5–30	73	60
Note 1	* The lower limit shall apply at the transition frequency.	

The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

- (1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.
- (2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.
- (3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

Scope

This test assesses the ability of the EUT to limit its internal noise from being present on the AC mains power input/output ports.

Test Procedure

The EUT is configured in accordance with ANSI C63.4. The conducted emissions are measured in a shielded room with a spectrum analyzer in peak hold in the first instance. Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation. The highest emissions relative to the limit are listed.

Limits

The equipment shall meet the class B limits given in FCC 15.207 & ICES-003. Alternatively, for equipment intended to be used in telecommunication centers only, the class A limits given in FCC 15B, ICES-003 may be used.

Limits for conducted disturbance at the mains ports of class B ITE

Frequency of emission (MHz)	Quasi-peak dBuV	Average dBuV
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50
Note 1	* Decreases with the logarithm of the frequency	
Note 2	* The lower limit applies at the boundary between frequency ranges	

Limits for conducted disturbance at the mains ports of class A ITE

Frequency of emission (MHz)	Quasi-peak dBuV	Average dBuV
0.15–0.5	79	66
0.5–30	73	60
Note 1	* The lower limit shall apply at the transition frequency.	

Traceability

All conducted emission measurements are traceable to national standards. The uncertainty of measurement at a confidence level of not less than 95 %, with a coverage factor of $k=2$, in the range 9 kHz – 30 MHz (Average & Quasi-peak) is ± 2.64 dB.

Laboratory Measurement Uncertainty	
Measurement uncertainty	± 2.64 dB

Method	
Measurements were made per work instruction WI-EMC-01 'Measurement of Conducted Emissions'	

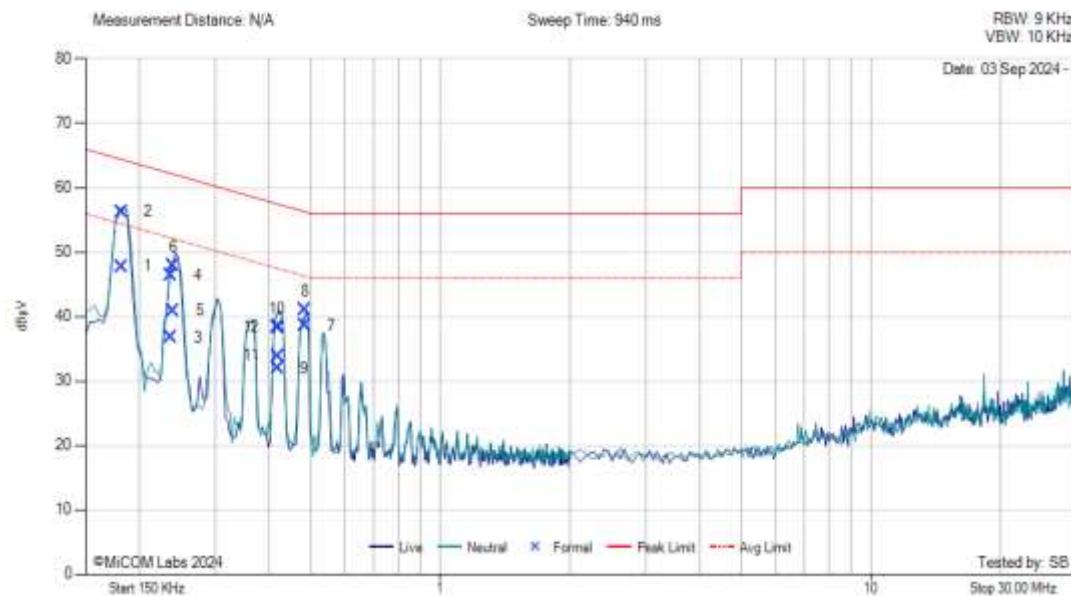
Test Equipment Utilized

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
184	Pulse Limiter	Rhode & Schwarz	ESH3Z2	357.8810.52	23 Feb 2025
190	LISN (two-line V-network)	Rhode & Schwarz	ESH3Z5	836679/006	5 Dec 2024
285	DC Power Supply	Keysight	E36155A	MY63000156	4 Dec 2024
288	Multimeter	Fluke	117	62521706MV	1 Dec 2025
295	Conducted Emissions Chamber Maintenance Check	MiCOM	Conducted Emissions Chamber	295	1 Dec 2024
307	BNC-CABLE	Megaphase	1689 1GVT4	15F50B002	23 Feb 2025
316	Dell desktop computer workstation	Dell	Desktop	WS04	Not Required
372	AC Variable PS	California Instruments	1251P	L06951	Cal when used
389	LISN (3 Phase) 9kHz - 30 MHz for support equipment	Rohde & Schwarz	ESH2-Z5	881493/013	Not Required
496	Conducted Emissions Test Software Version 3.0.0.57	MiCOM	Conducted Emissions Software	496	Not Required
510	Barometer/Thermometer	Digi Sense	68000-49	170871375	4 Jan 2026
555	Rhode & Schwarz Receiver (Firmware Version : 3.10 SP1)	Rhode & Schwarz	ESW 44	101893	28 Jun 2025
CCEMC01	Confidence Check.	MiCOM	CCEMC01	None	18 Oct 2024

Equipment Configuration for 30 MHz TO 1 GHz CLASS A

Antenna:	AX6400	Variant:	20MHz
Antenna Gain (dBi):	Not Applicable	Modulation:	OFDM
Beam Forming Gain (Y):	Not Applicable	Duty Cycle (%):	99
Channel Frequency (MHz):	5945	Data Rate:	8.6
Power Setting:	Max	Tested By:	SB

Test Measurement Results

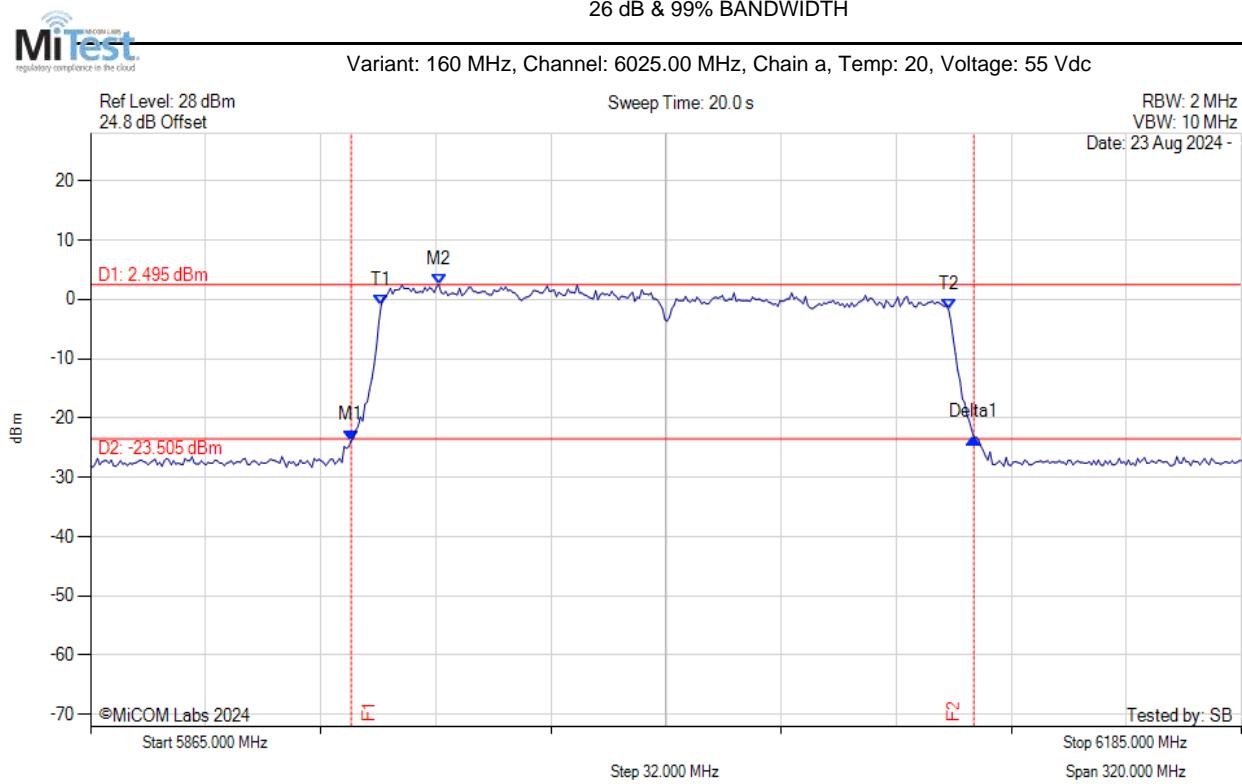


Num	Frequency MHz	Raw dBµV	Cable Loss dB	Factor dB	Total Correction dBµV	Corrected Value dBµV	Measurement Type	Line	Limit dBµV/m	Margin dB	Pass /Fail
1	0.182	37.80	-0.04	10.00	9.96	47.76	Max Avg	Live	55.1	-7.3	Pass
2	0.182	46.29	-0.04	10.00	9.96	56.25	Max Qp	Live	65.1	-8.8	Pass
3	0.237	26.82	-0.04	10.00	9.96	36.78	Max Avg	Live	53.5	-16.7	Pass
4	0.237	36.38	-0.04	10.00	9.96	46.34	Max Qp	Live	63.5	-17.2	Pass
5	0.240	30.98	-0.04	10.00	9.96	40.94	Max Avg	Neutral	53.4	-12.5	Pass
6	0.240	38.01	-0.04	10.00	9.96	47.97	Max Qp	Neutral	63.4	-15.5	Pass
7	0.485	28.62	-0.06	9.99	9.93	38.55	Max Avg	Live	46.4	-7.9	Pass
8	0.485	31.19	-0.06	9.99	9.93	41.12	Max Qp	Live	56.4	-15.3	Pass
9	0.419	22.04	-0.06	9.99	9.93	31.97	Max Avg	Neutral	48.3	-16.3	Pass
10	0.419	28.51	-0.06	9.99	9.93	38.44	Max Qp	Neutral	58.3	-19.9	Pass
11	0.420	23.97	-0.06	9.99	9.93	33.90	Max Avg	Neutral	48.3	-14.4	Pass
12	0.420	28.42	-0.06	9.99	9.93	38.35	Max Qp	Neutral	58.3	-19.9	Pass

Test Notes: 120VAC POE 55VDC Output, Max Power, 99% Duty Cycle

A. APPENDIX - GRAPHICAL IMAGES

A.1. 26 dB & 99% Bandwidth



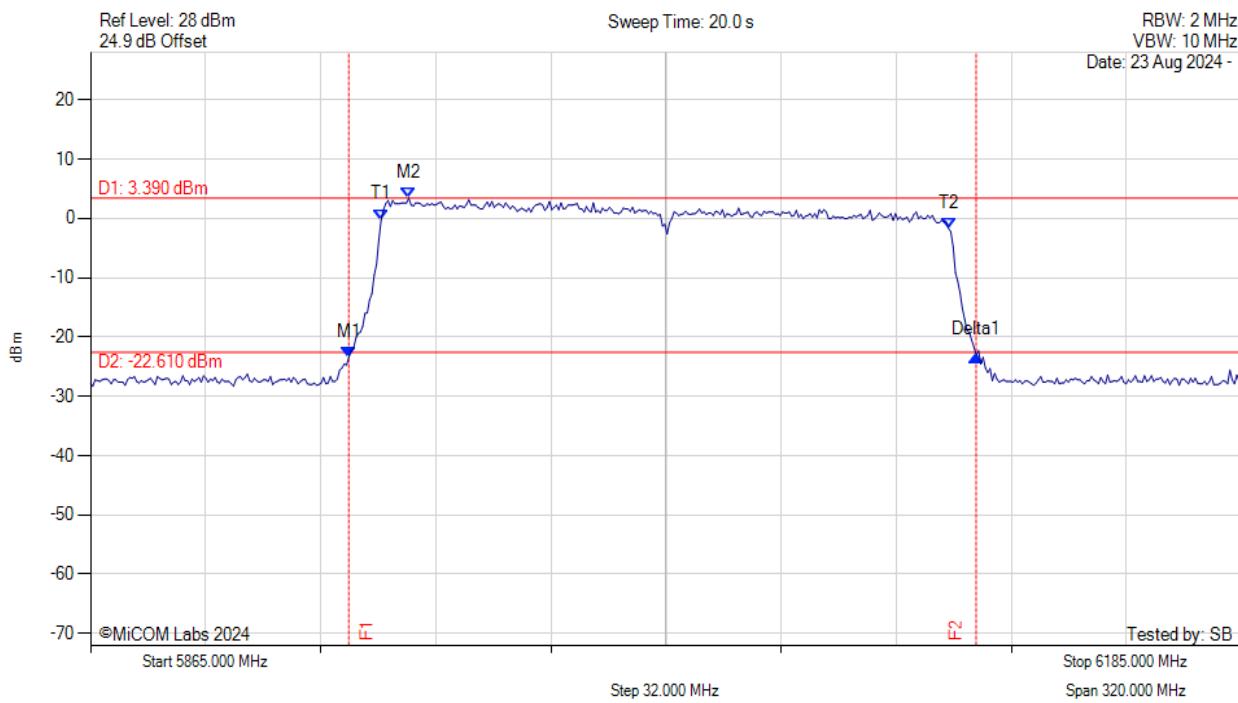
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5937.465 MHz : -23.789 dBm M2 : 5961.834 MHz : 2.495 dBm Delta1 : 173.146 MHz : 0.472 dB T1 : 5945.802 MHz : -1.007 dBm T2 : 6103.557 MHz : -1.707 dBm OBW : 157.756 MHz	Measured 26 dB Bandwidth: 173.146 MHz Measured 99% Bandwidth: 157.756 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 160 MHz, Channel: 6025.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



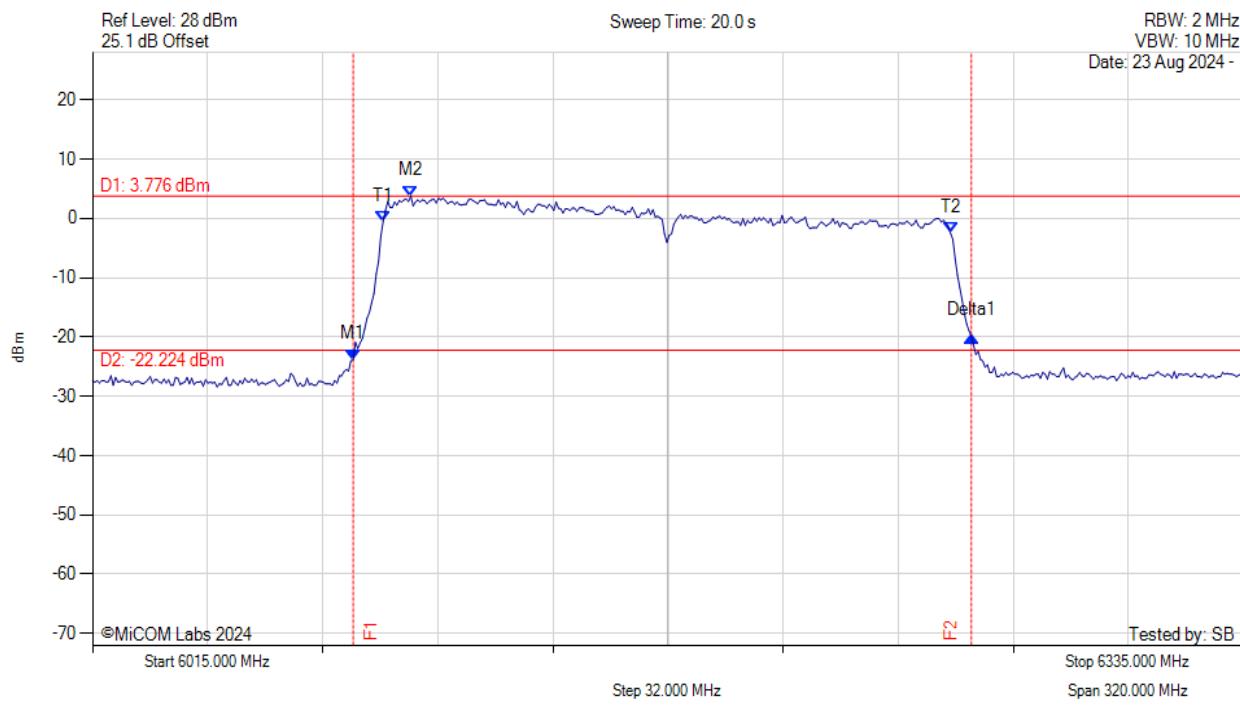
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5936.824 MHz : -23.435 dBm M2 : 5953.497 MHz : 3.390 dBm Delta1 : 174.429 MHz : 0.352 dB T1 : 5945.802 MHz : -0.188 dBm T2 : 6103.557 MHz : -1.707 dBm OBW : 157.756 MHz	Measured 26 dB Bandwidth: 174.429 MHz Measured 99% Bandwidth: 157.756 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 160 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



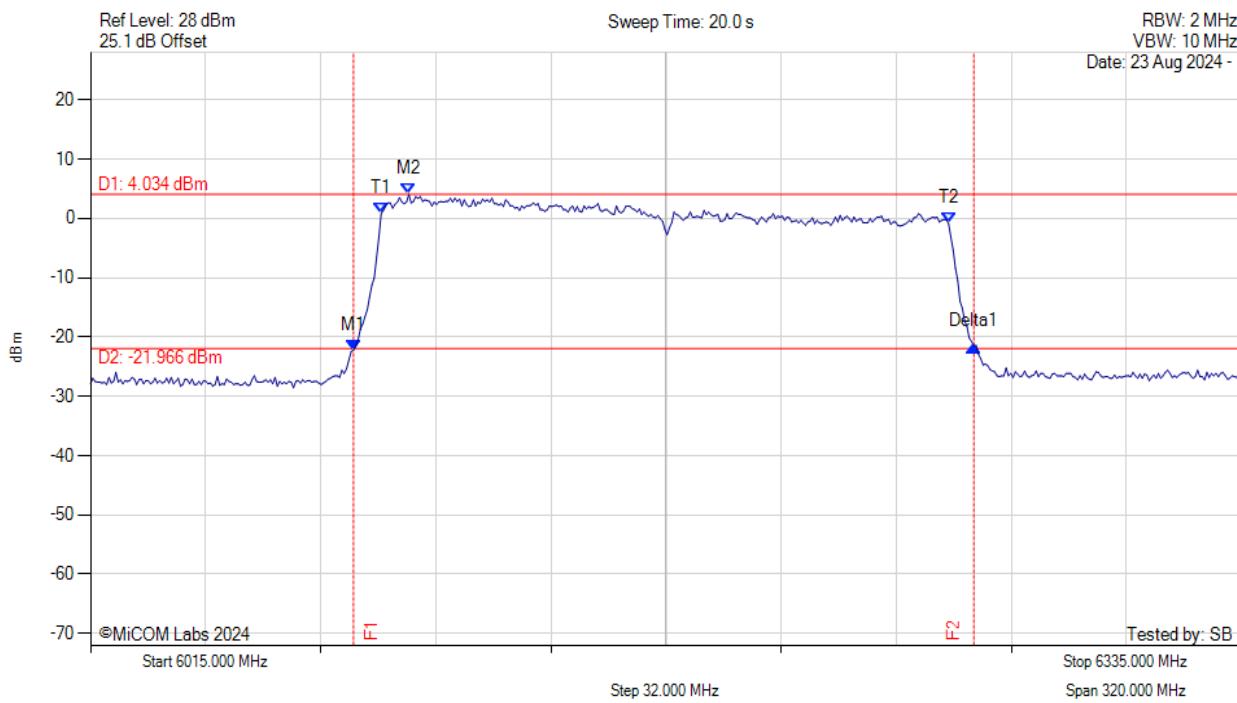
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6087.465 MHz : -23.789 dBm M2 : 6103.497 MHz : 3.776 dBm Delta1 : 171.864 MHz : 3.972 dB T1 : 6095.802 MHz : -0.460 dBm T2 : 6253.557 MHz : -2.490 dBm OBW : 157.756 MHz	Measured 26 dB Bandwidth: 171.864 MHz Measured 99% Bandwidth: 157.756 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 160 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



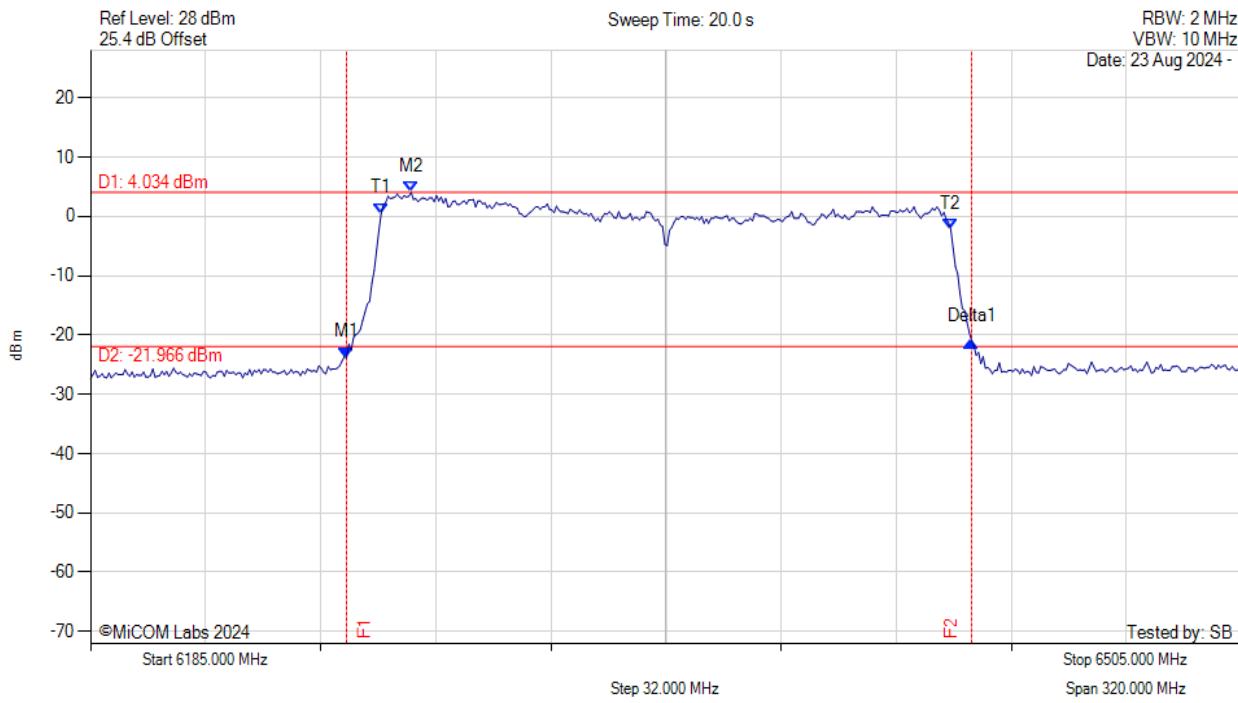
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6088.106 MHz : -22.185 dBm M2 : 6103.497 MHz : 4.034 dBm Delta1 : 172.505 MHz : 0.649 dB T1 : 6095.802 MHz : 0.791 dBm T2 : 6253.557 MHz : -0.871 dBm OBW : 157.756 MHz	Measured 26 dB Bandwidth: 172.505 MHz Measured 99% Bandwidth: 157.756 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 160 MHz, Channel: 6345.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



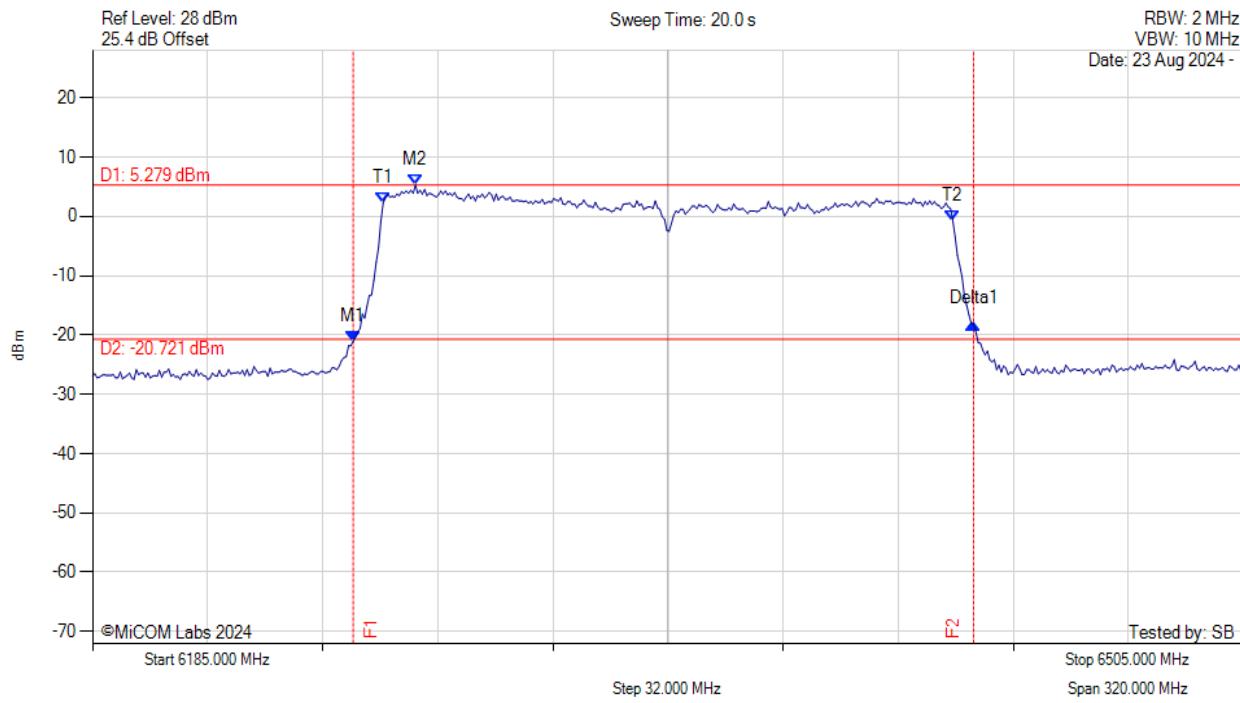
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6256.182 MHz : -23.789 dBm M2 : 6274.138 MHz : 4.034 dBm Delta1 : 173.788 MHz : 2.776 dB T1 : 6265.802 MHz : 0.510 dBm T2 : 6424.198 MHz : -2.238 dBm OBW : 158.397 MHz	Measured 26 dB Bandwidth: 173.788 MHz Measured 99% Bandwidth: 158.397 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 160 MHz, Channel: 6345.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



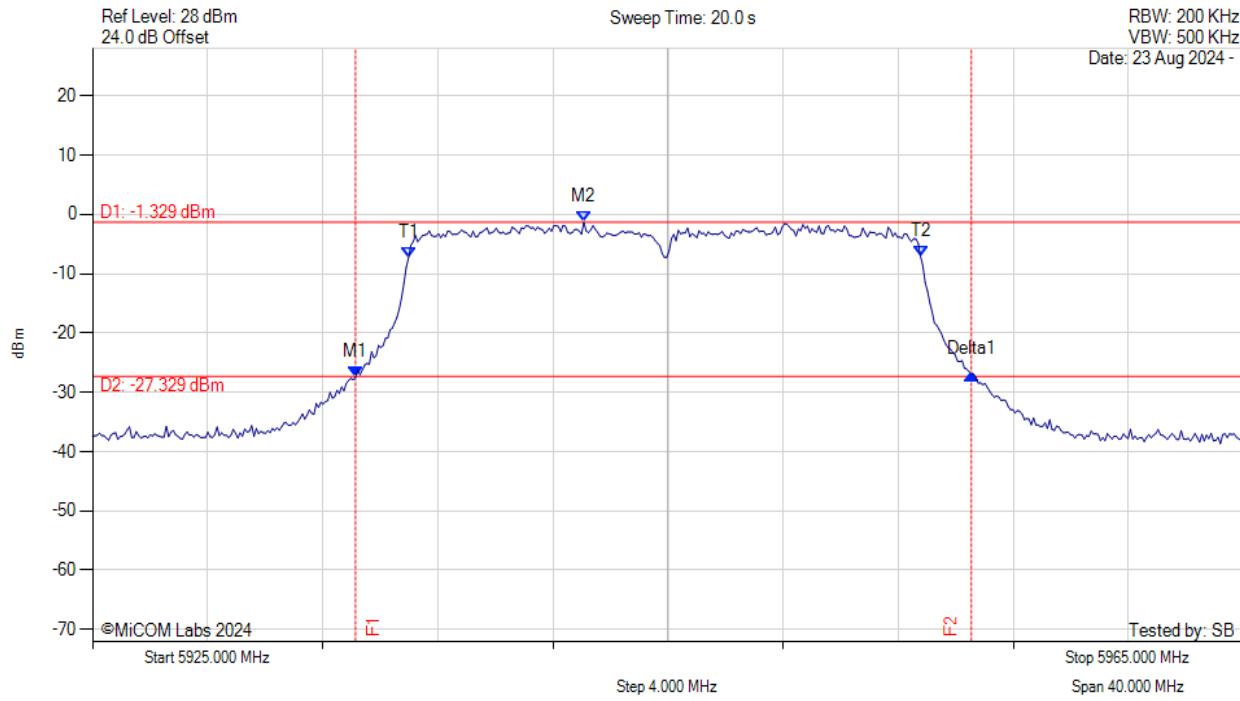
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6257.465 MHz : -21.013 dBm M2 : 6274.780 MHz : 5.279 dBm Delta1 : 172.505 MHz : 2.937 dB T1 : 6265.802 MHz : 2.241 dBm T2 : 6424.198 MHz : -0.733 dBm OBW : 158.397 MHz	Measured 26 dB Bandwidth: 172.505 MHz Measured 99% Bandwidth: 158.397 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 5945.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



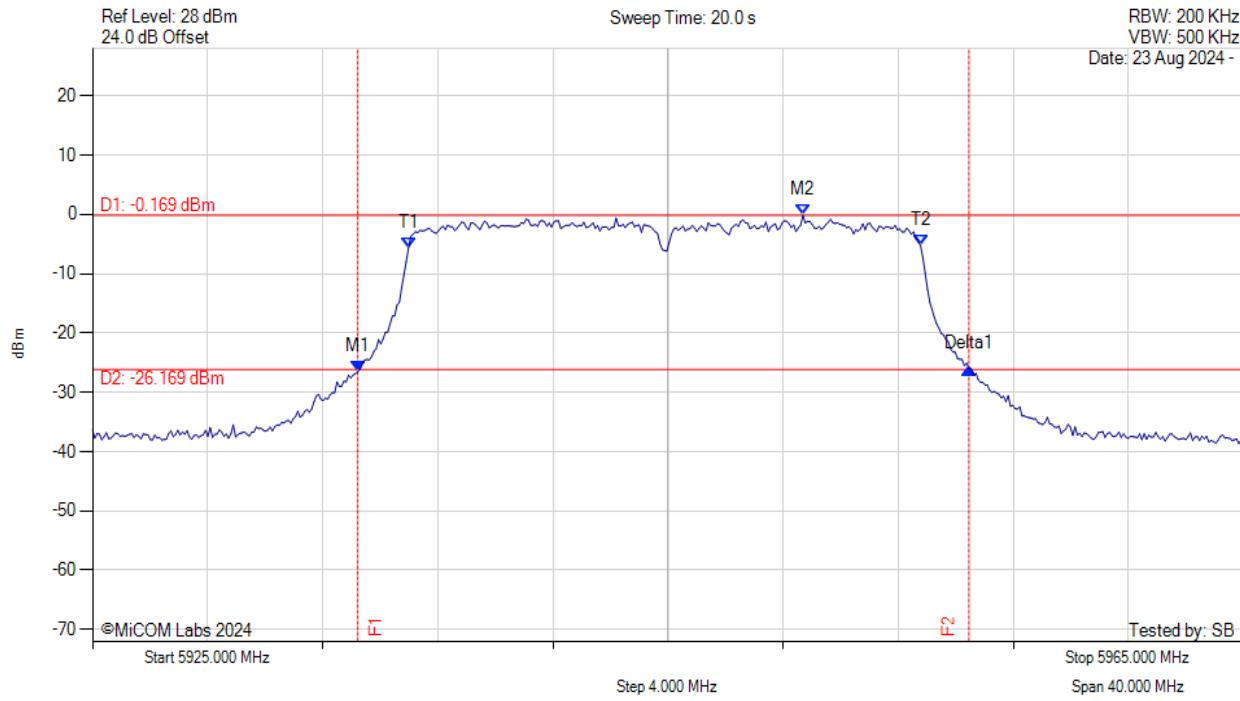
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5934.138 MHz : -27.450 dBm M2 : 5942.074 MHz : -1.329 dBm Delta1 : 21.403 MHz : 0.476 dB T1 : 5935.982 MHz : -7.267 dBm T2 : 5953.778 MHz : -7.098 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.403 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 5945.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



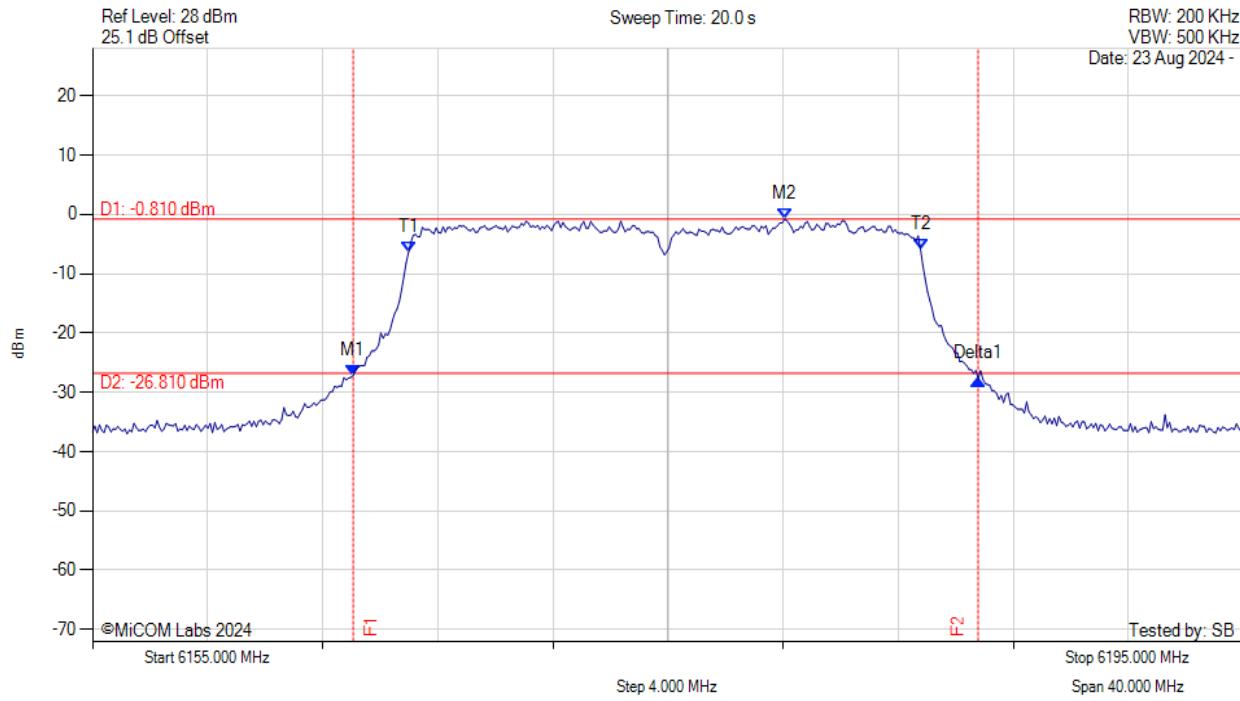
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5934.218 MHz : -26.515 dBm M2 : 5949.689 MHz : -0.169 dBm Delta1 : 21.242 MHz : 0.537 dB T1 : 5935.982 MHz : -5.595 dBm T2 : 5953.778 MHz : -5.268 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.242 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



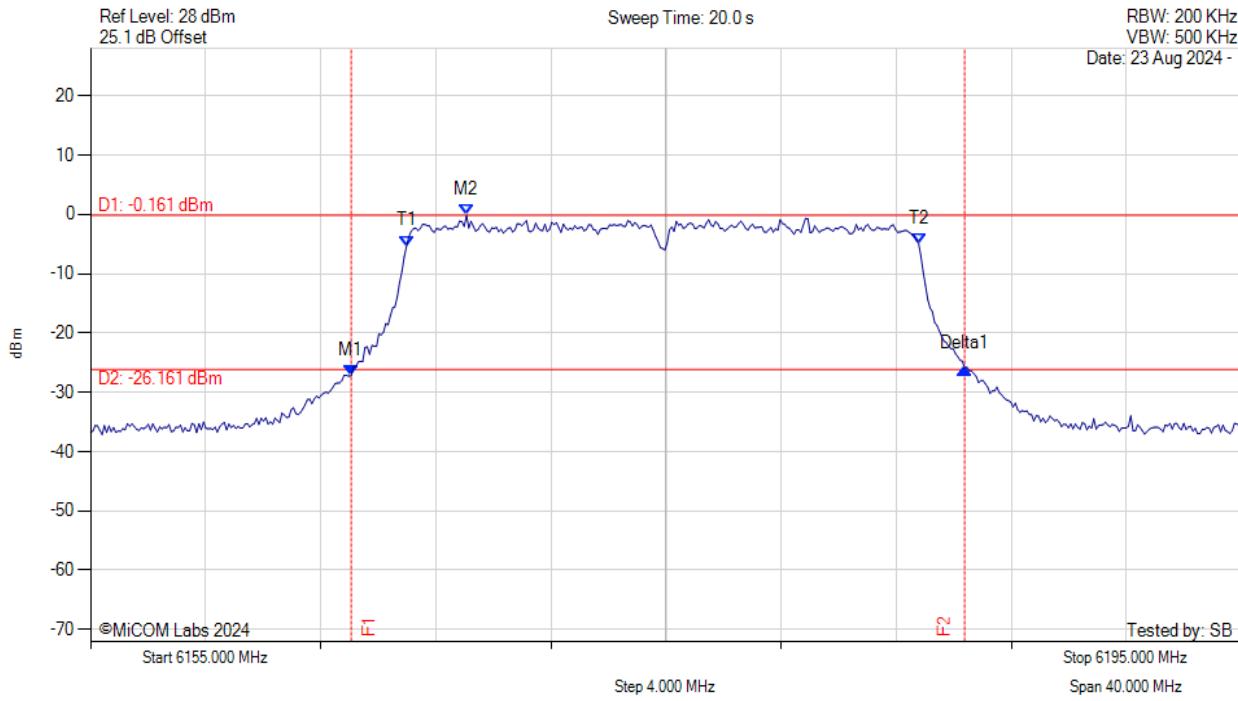
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6164.058 MHz : -27.178 dBm M2 : 6179.048 MHz : -0.810 dBm Delta1 : 21.723 MHz : -0.578 dB T1 : 6165.982 MHz : -6.370 dBm T2 : 6183.778 MHz : -5.945 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.723 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



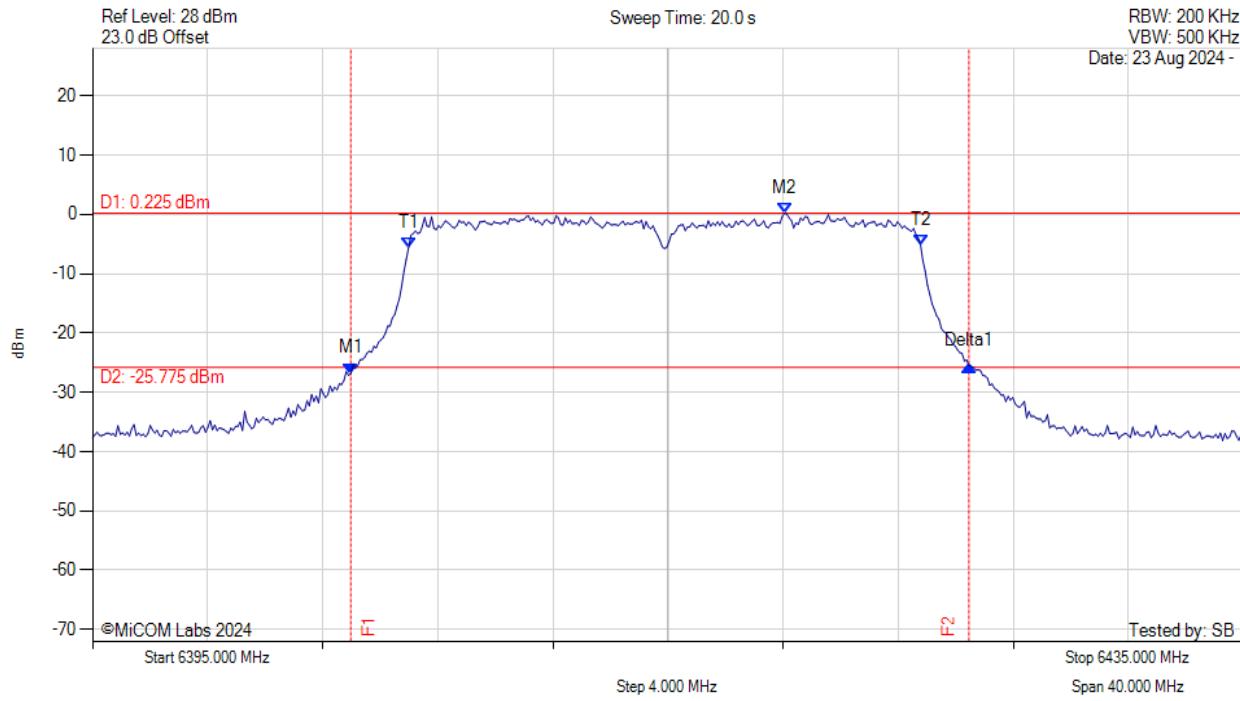
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6164.058 MHz : -27.204 dBm M2 : 6168.066 MHz : -0.161 dBm Delta1 : 21.323 MHz : 1.230 dB T1 : 6165.982 MHz : -5.333 dBm T2 : 6183.778 MHz : -4.902 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.323 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 6415.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



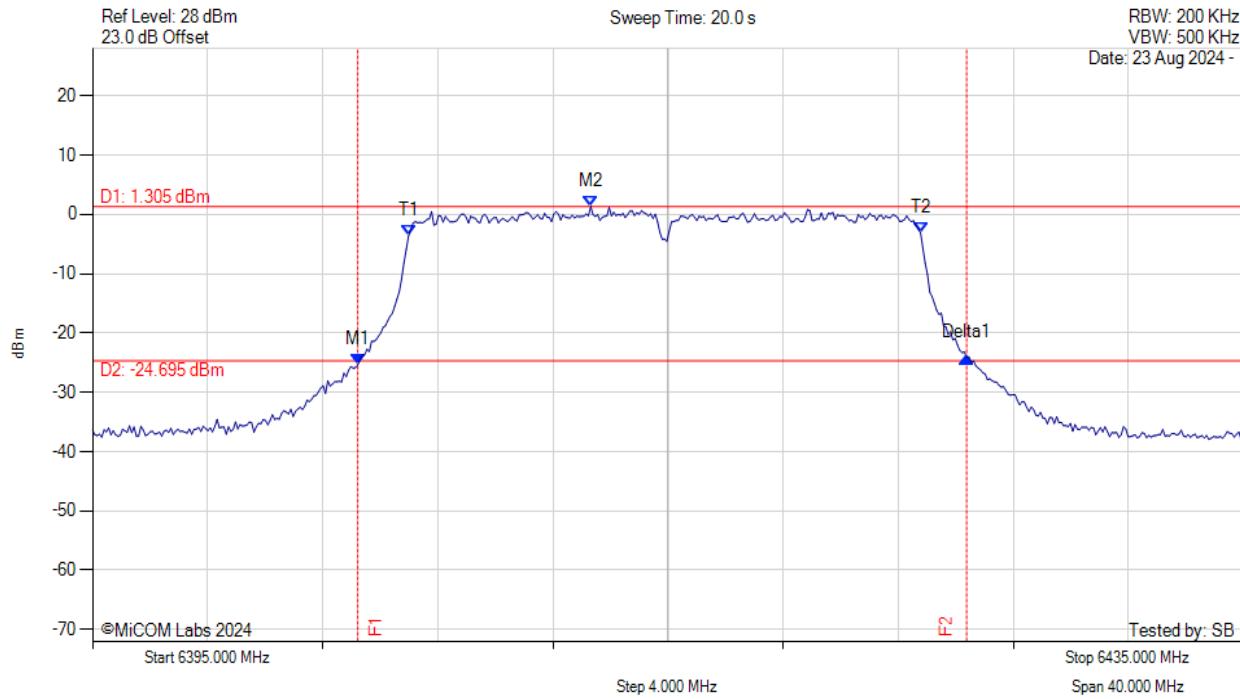
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6403.978 MHz : -26.822 dBm M2 : 6419.048 MHz : 0.225 dBm Delta1 : 21.483 MHz : 1.318 dB T1 : 6405.982 MHz : -5.610 dBm T2 : 6423.778 MHz : -5.176 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.483 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 20 MHz, Channel: 6415.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



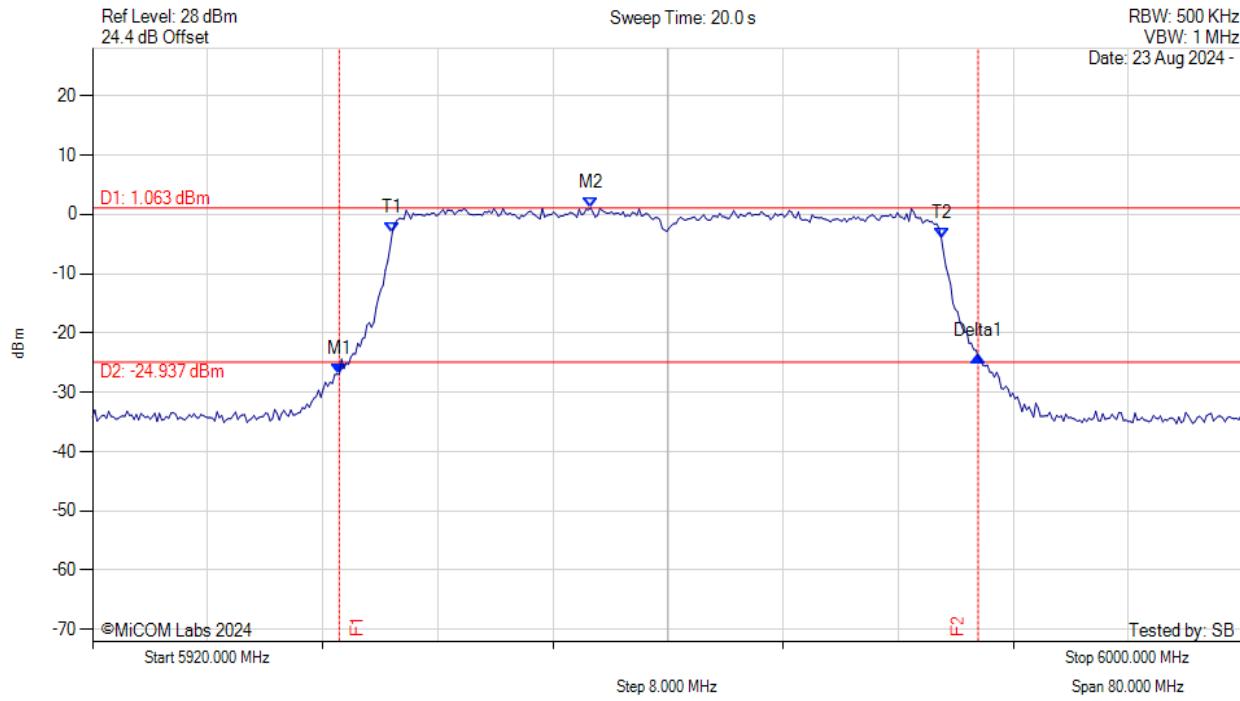
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6404.218 MHz : -25.339 dBm M2 : 6412.315 MHz : 1.305 dBm Delta1 : 21.162 MHz : 1.218 dB T1 : 6405.982 MHz : -3.629 dBm T2 : 6423.778 MHz : -3.114 dBm OBW : 17.796 MHz	Measured 26 dB Bandwidth: 21.162 MHz Measured 99% Bandwidth: 17.796 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 5960.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



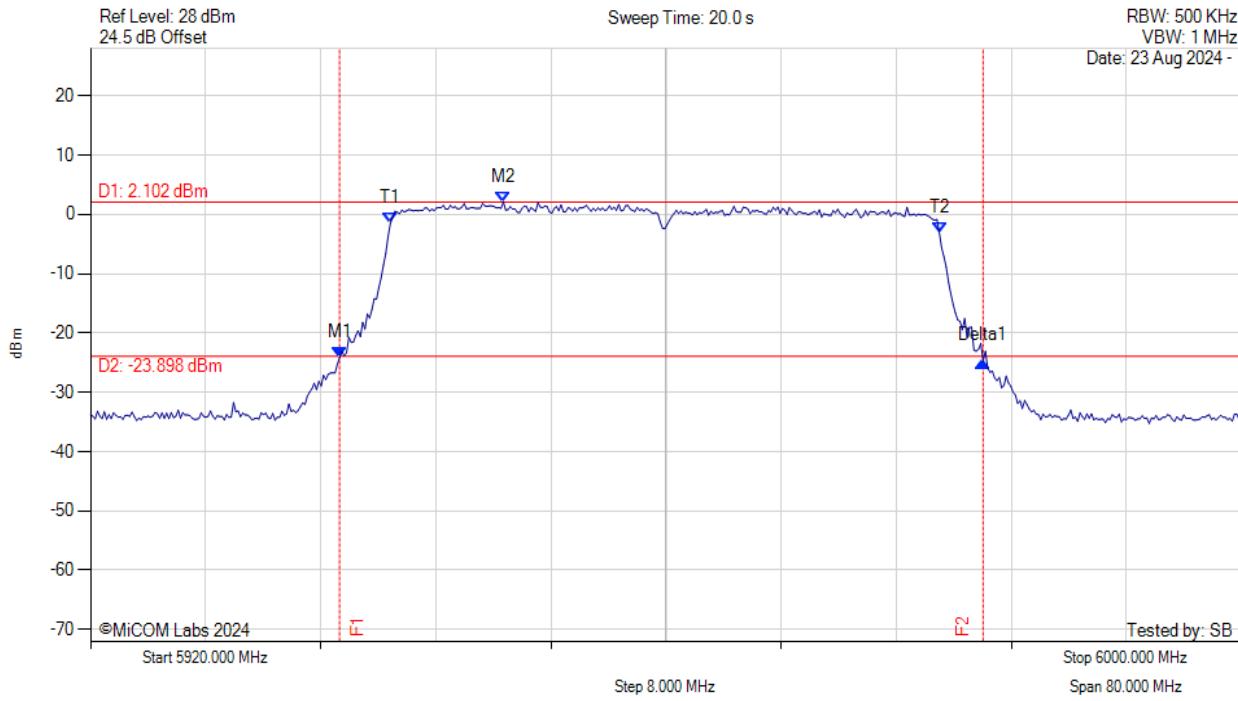
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5937.154 MHz : -26.997 dBm M2 : 5954.629 MHz : 1.063 dBm Delta1 : 44.409 MHz : 3.055 dB T1 : 5940.842 MHz : -3.059 dBm T2 : 5978.998 MHz : -3.981 dBm OBW : 38.156 MHz	Measured 26 dB Bandwidth: 44.409 MHz Measured 99% Bandwidth: 38.156 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 5960.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



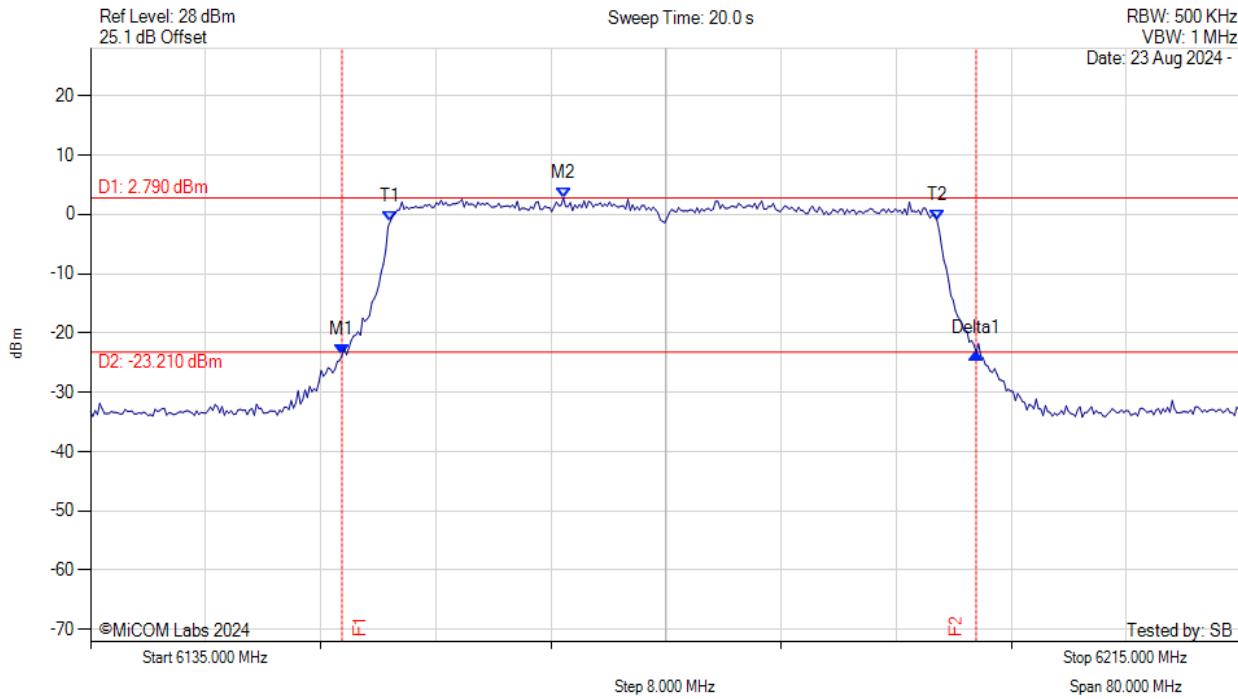
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5937.315 MHz : -24.135 dBm M2 : 5948.697 MHz : 2.102 dBm Delta1 : 44.729 MHz : -0.584 dB T1 : 5940.842 MHz : -1.534 dBm T2 : 5978.998 MHz : -3.063 dBm OBW : 38.156 MHz	Measured 26 dB Bandwidth: 44.729 MHz Measured 99% Bandwidth: 38.156 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



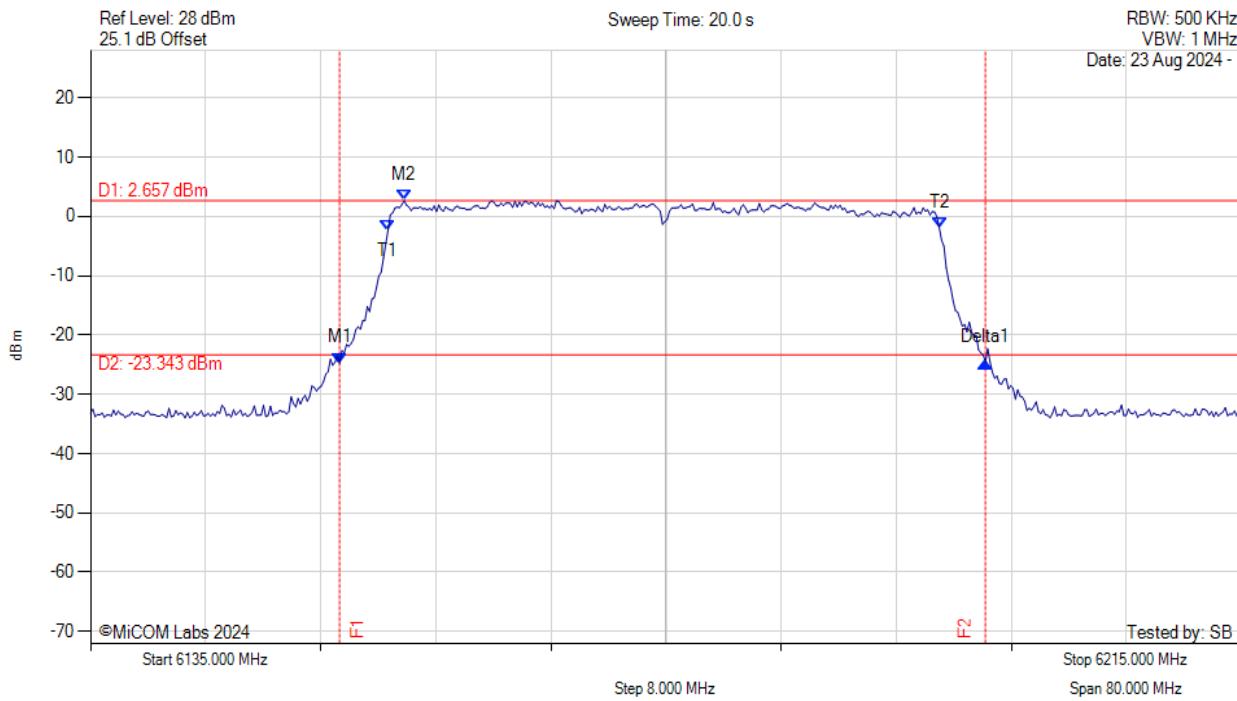
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6152.475 MHz : -23.736 dBm M2 : 6167.866 MHz : 2.790 dBm Delta1 : 44.088 MHz : 0.390 dB T1 : 6155.842 MHz : -1.188 dBm T2 : 6193.838 MHz : -0.987 dBm OBW : 37.996 MHz	Measured 26 dB Bandwidth: 44.088 MHz Measured 99% Bandwidth: 37.996 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



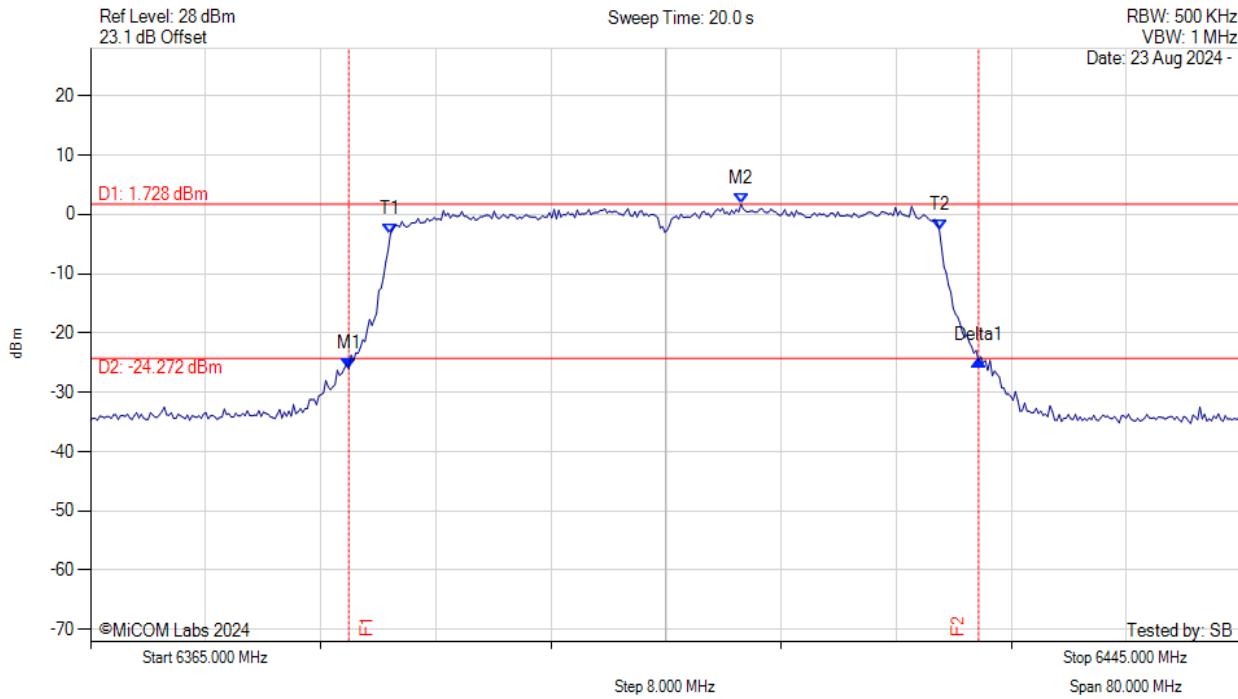
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6152.315 MHz : -24.735 dBm M2 : 6156.804 MHz : 2.657 dBm Delta1 : 44.890 MHz : 0.177 dB T1 : 6155.681 MHz : -2.293 dBm T2 : 6193.998 MHz : -1.941 dBm OBW : 38.317 MHz	Measured 26 dB Bandwidth: 44.890 MHz Measured 99% Bandwidth: 38.317 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 6405.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



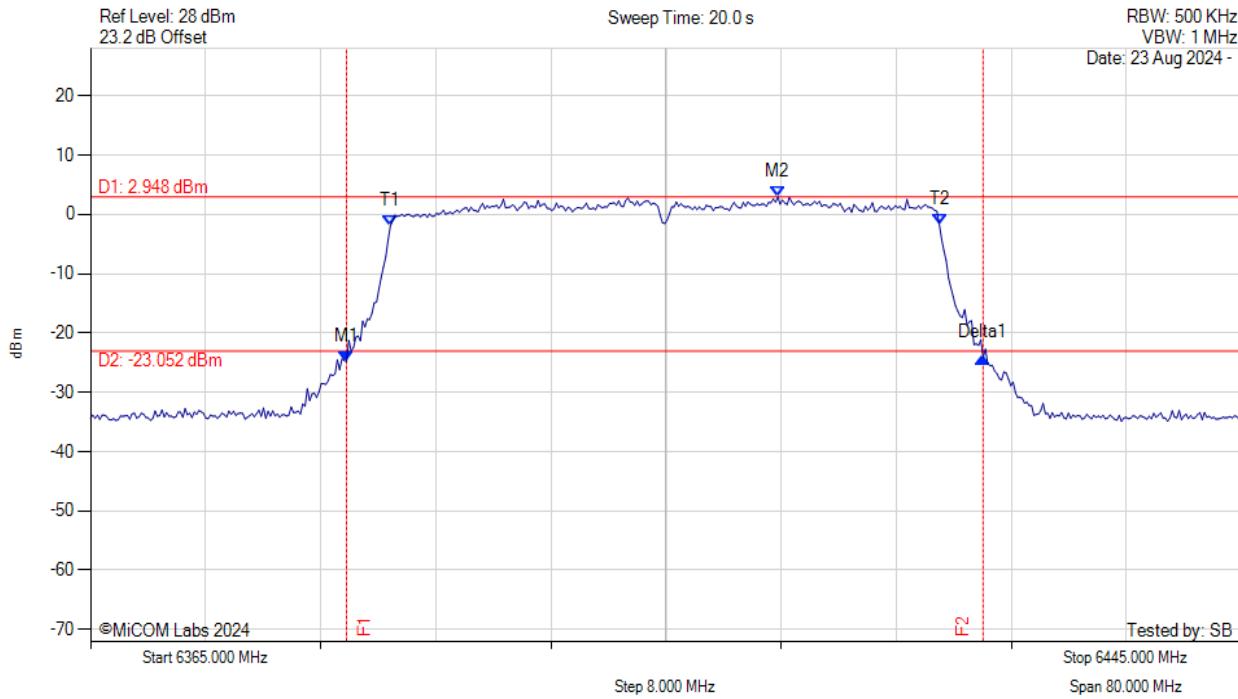
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6382.956 MHz : -26.094 dBm M2 : 6410.210 MHz : 1.728 dBm Delta1 : 43.768 MHz : 1.415 dB T1 : 6385.842 MHz : -3.362 dBm T2 : 6423.998 MHz : -2.600 dBm OBW : 38.156 MHz	Measured 26 dB Bandwidth: 43.768 MHz Measured 99% Bandwidth: 38.156 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 40 MHz, Channel: 6405.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



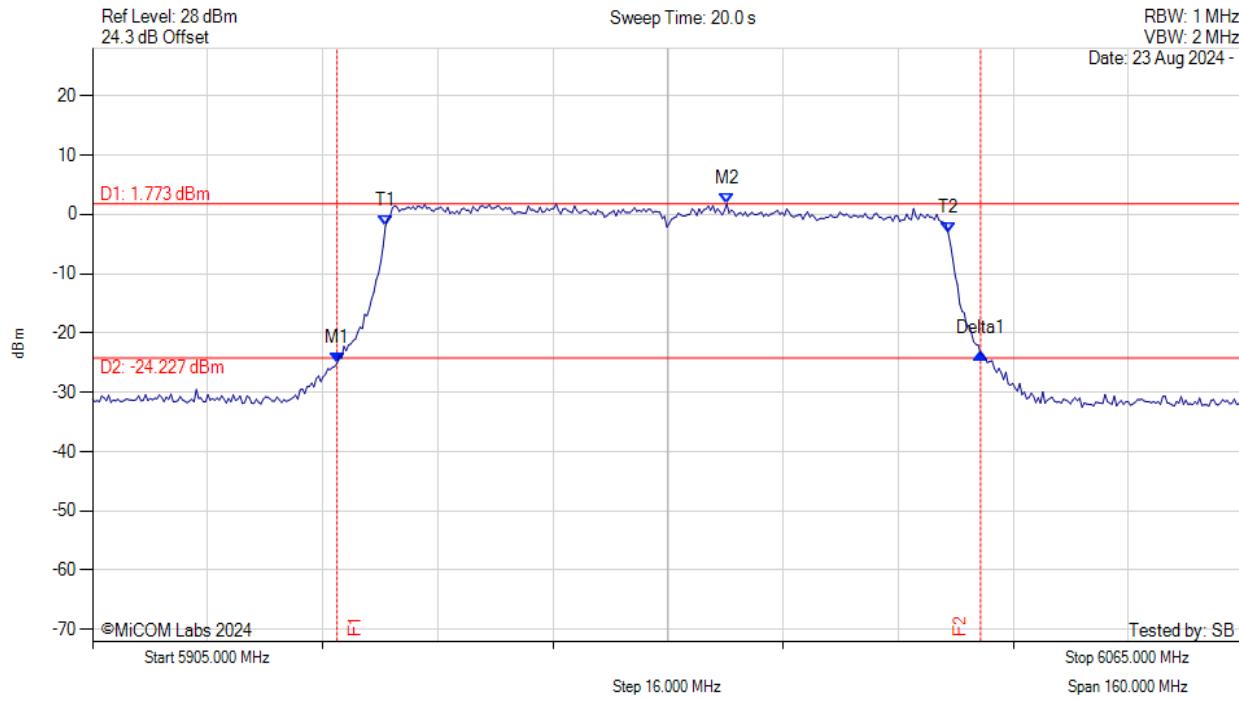
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6382.796 MHz : -24.782 dBm M2 : 6412.776 MHz : 2.948 dBm Delta1 : 44.248 MHz : 0.651 dB T1 : 6385.842 MHz : -1.975 dBm T2 : 6423.998 MHz : -1.668 dBm OBW : 38.156 MHz	Measured 26 dB Bandwidth: 44.248 MHz Measured 99% Bandwidth: 38.156 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 80 MHz, Channel: 5985.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



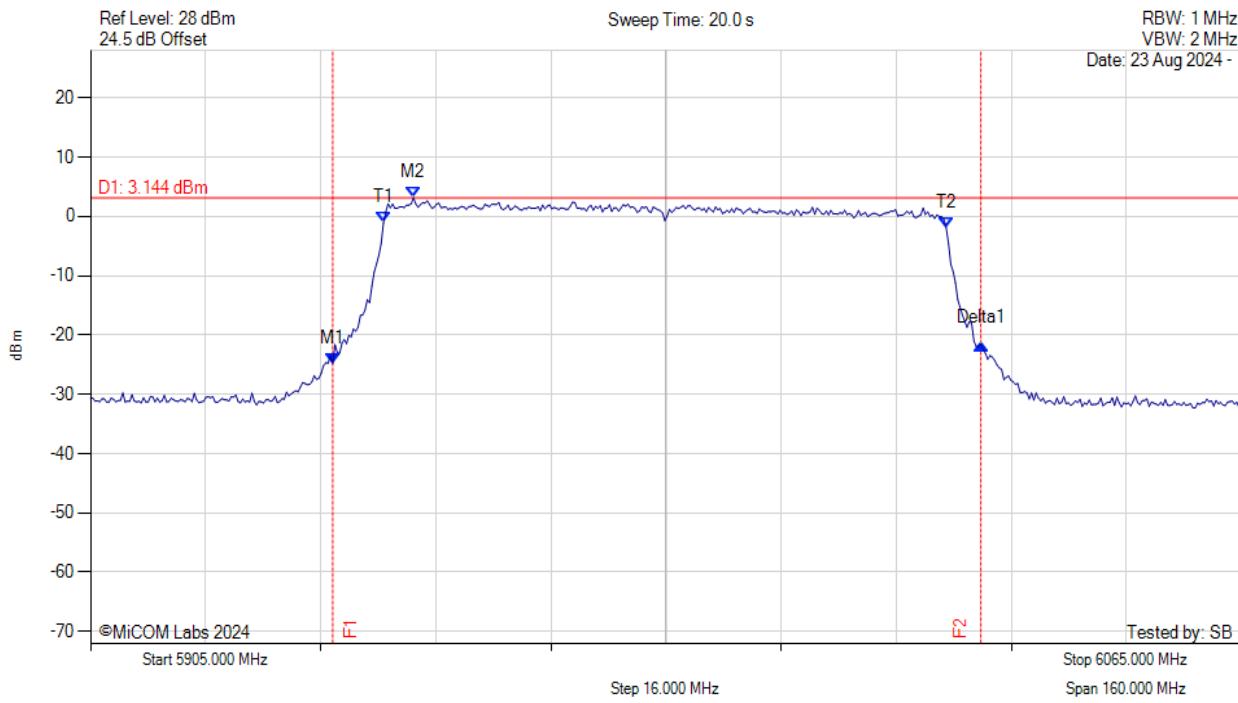
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5938.988 MHz : -25.083 dBm M2 : 5993.176 MHz : 1.773 dBm Delta1 : 89.459 MHz : 1.615 dB T1 : 5945.721 MHz : -1.959 dBm T2 : 6023.958 MHz : -3.133 dBm OBW : 78.236 MHz	Measured 26 dB Bandwidth: 89.459 MHz Measured 99% Bandwidth: 78.236 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 80 MHz, Channel: 5985.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



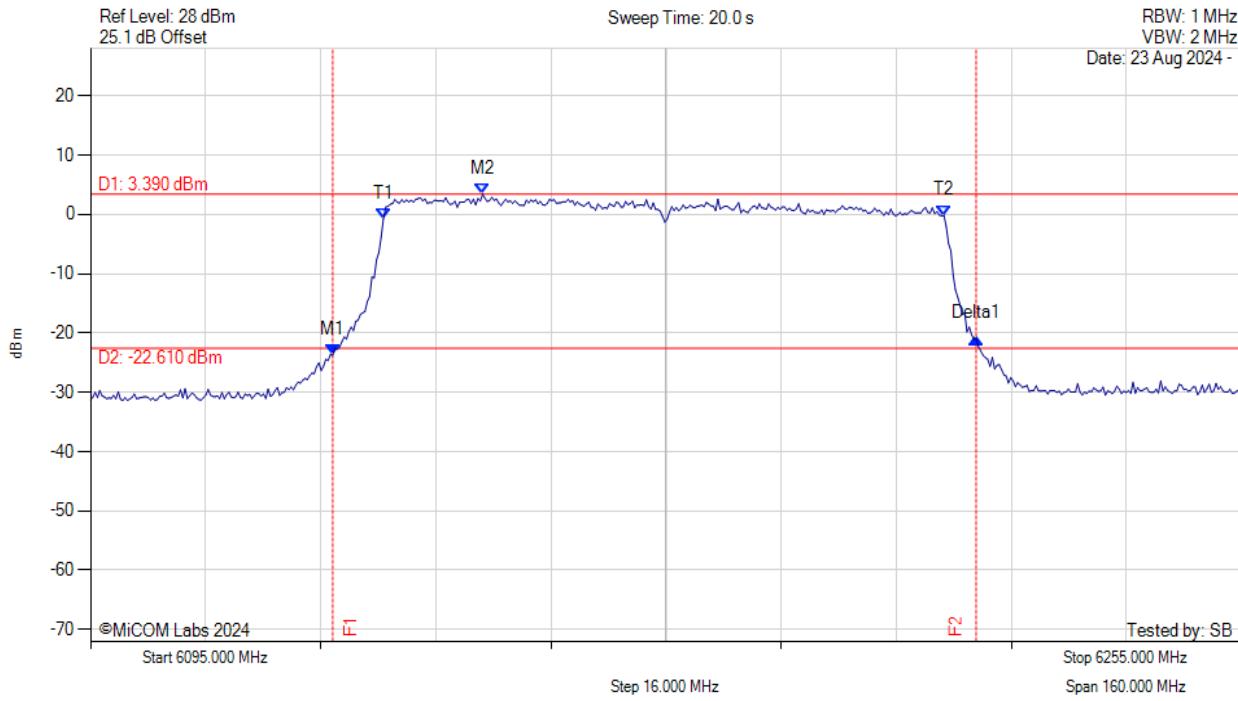
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 5938.667 MHz : -24.768 dBm M2 : 5949.890 MHz : 3.144 dBm Delta1 : 90.100 MHz : 3.311 dB T1 : 5945.721 MHz : -1.101 dBm T2 : 6023.958 MHz : -1.923 dBm OBW : 78.236 MHz	Measured 26 dB Bandwidth: 90.100 MHz Measured 99% Bandwidth: 78.236 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 80 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



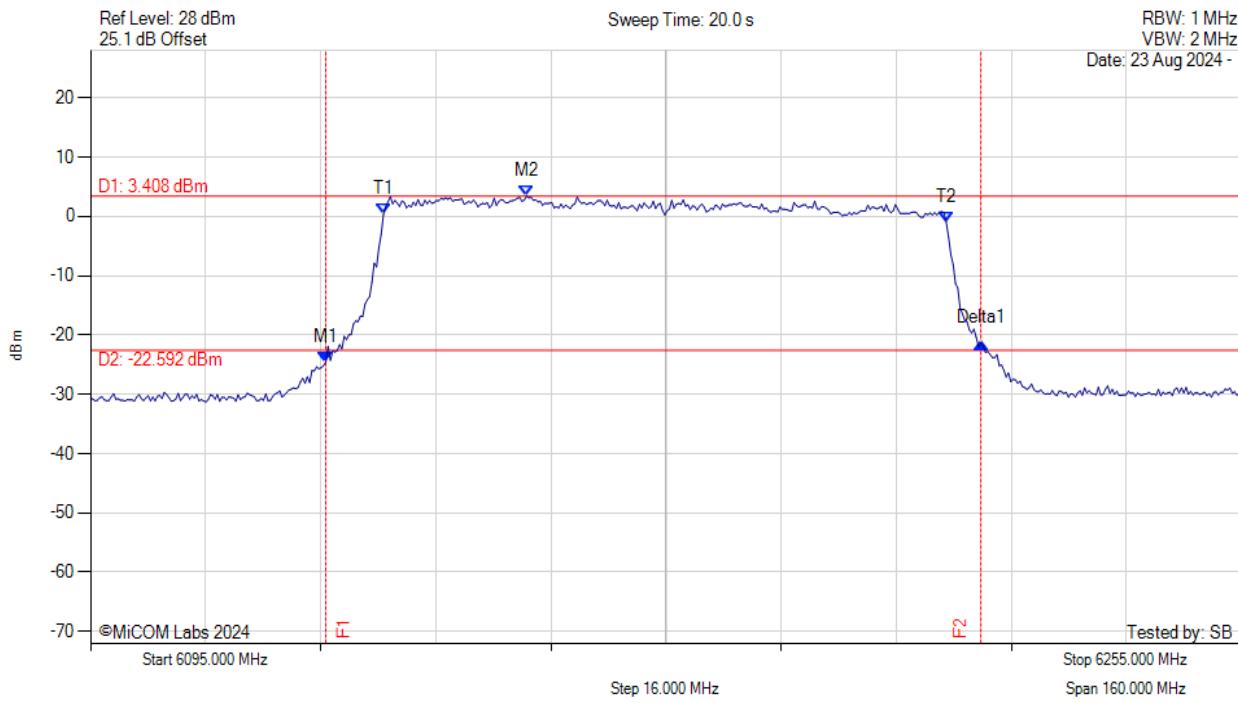
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6128.667 MHz : -23.734 dBm M2 : 6149.509 MHz : 3.390 dBm Delta1 : 89.459 MHz : 2.764 dB T1 : 6135.721 MHz : -0.680 dBm T2 : 6213.637 MHz : -0.190 dBm OBW : 77.916 MHz	Measured 26 dB Bandwidth: 89.459 MHz Measured 99% Bandwidth: 77.916 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 80 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



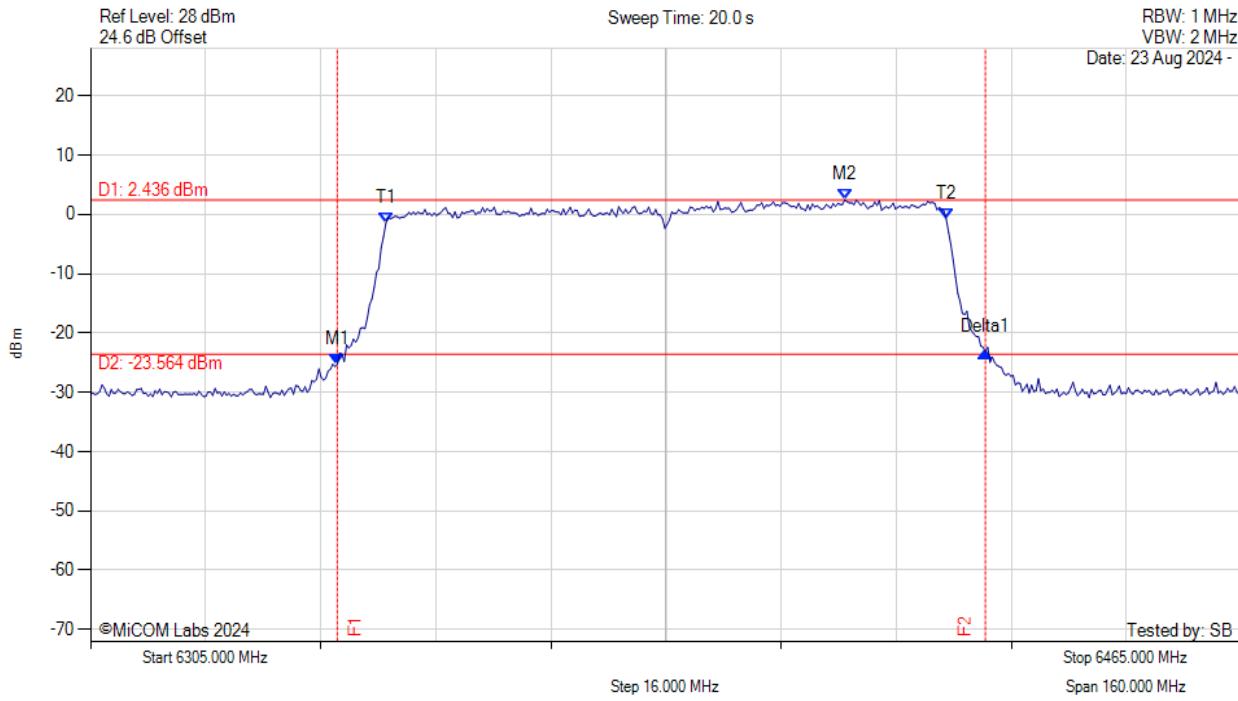
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6127.705 MHz : -24.528 dBm M2 : 6155.601 MHz : 3.408 dBm Delta1 : 91.062 MHz : 3.228 dB T1 : 6135.721 MHz : 0.325 dBm T2 : 6213.958 MHz : -0.975 dBm OBW : 78.236 MHz	Measured 26 dB Bandwidth: 91.062 MHz Measured 99% Bandwidth: 78.236 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



Variant: 80 MHz, Channel: 6385.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



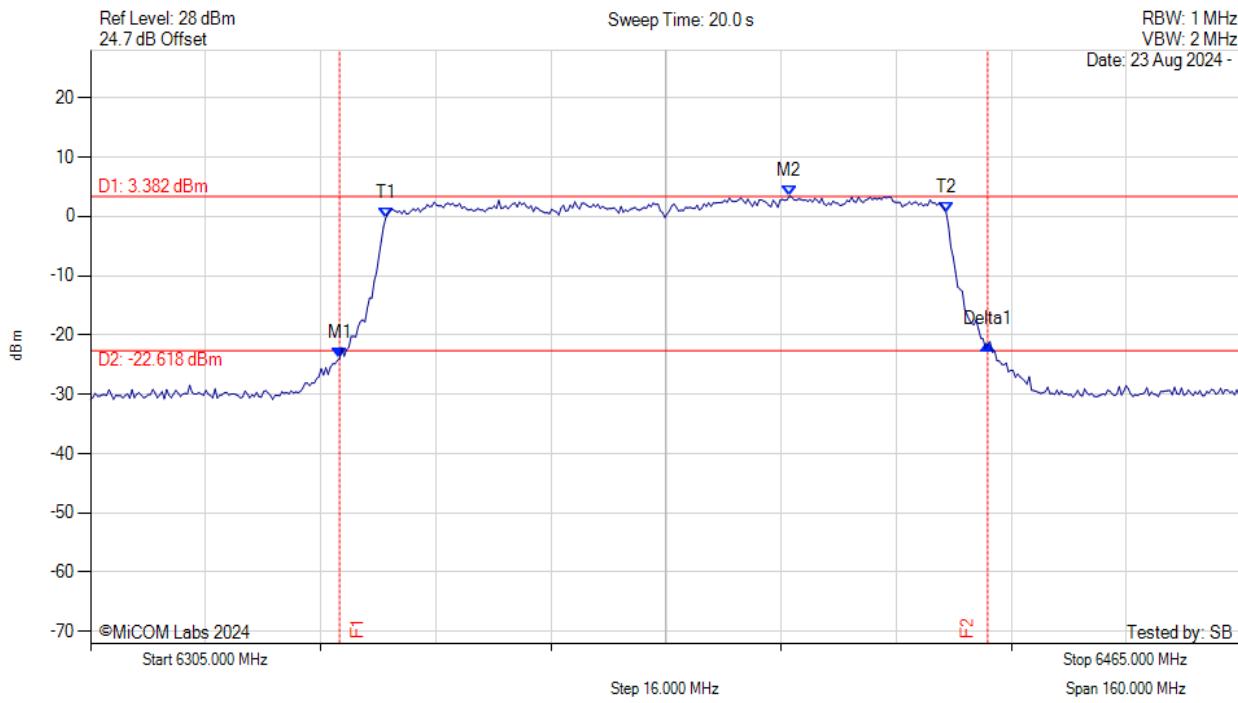
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6339.309 MHz : -25.284 dBm M2 : 6409.850 MHz : 2.436 dBm Delta1 : 90.100 MHz : 2.154 dB T1 : 6346.042 MHz : -1.546 dBm T2 : 6423.958 MHz : -0.775 dBm OBW : 77.916 MHz	Measured 26 dB Bandwidth: 90.100 MHz Measured 99% Bandwidth: 77.916 MHz

[back to matrix](#)

26 dB & 99% BANDWIDTH



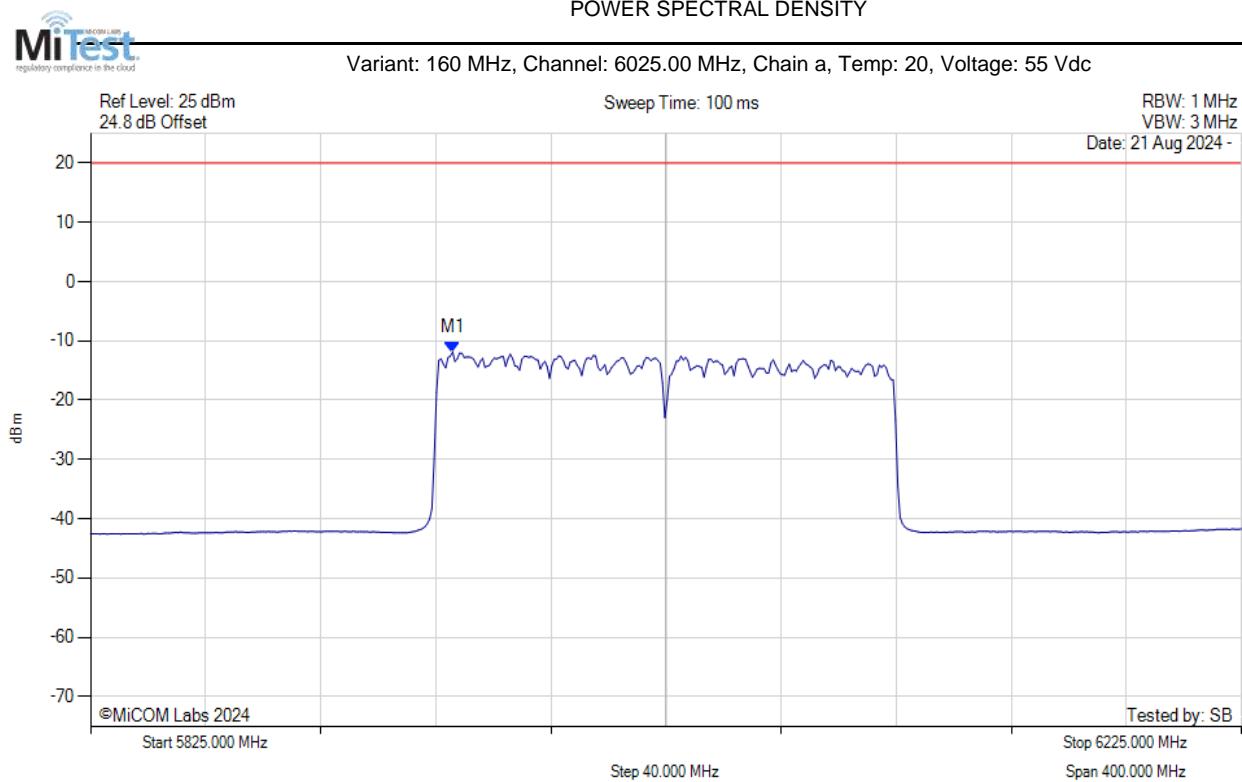
Variant: 80 MHz, Channel: 6385.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = MAX HOLD	M1 : 6339.629 MHz : -24.007 dBm M2 : 6402.154 MHz : 3.382 dBm Delta1 : 90.100 MHz : 2.331 dB T1 : 6346.042 MHz : -0.232 dBm T2 : 6423.958 MHz : 0.620 dBm OBW : 77.916 MHz	Measured 26 dB Bandwidth: 90.100 MHz Measured 99% Bandwidth: 77.916 MHz

[back to matrix](#)

A.2. Power Spectral Density



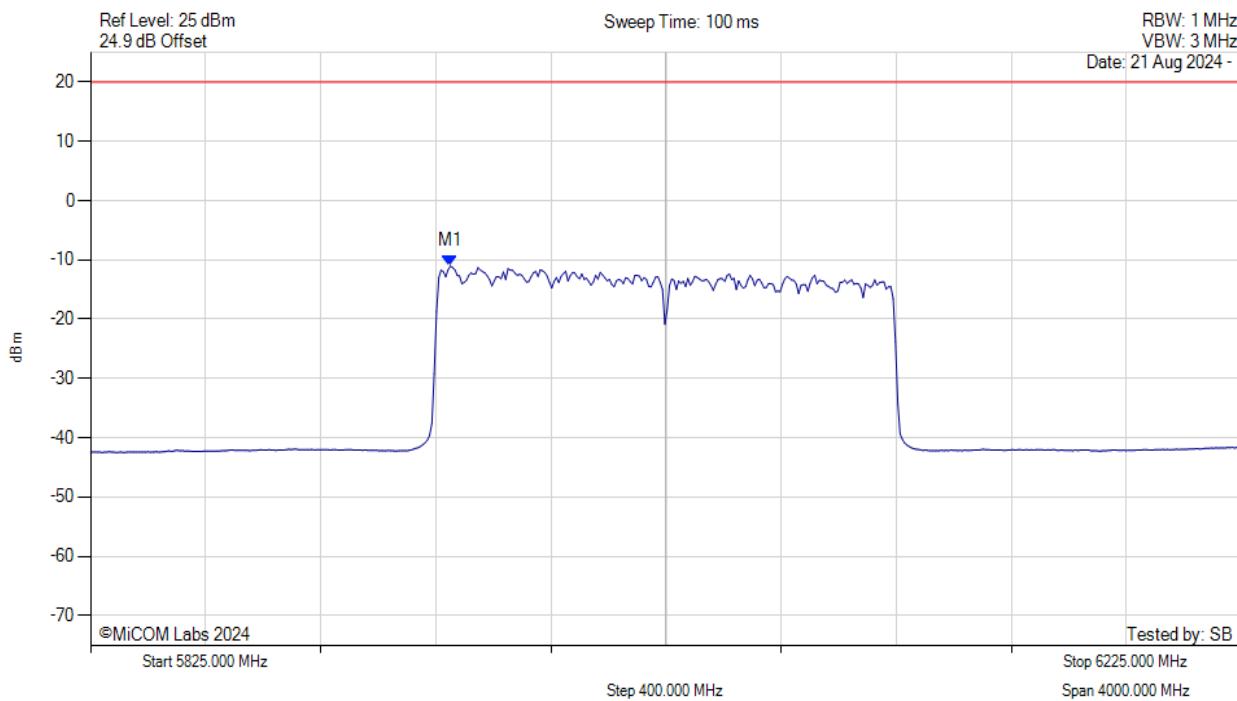
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.852 MHz : -11.871 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



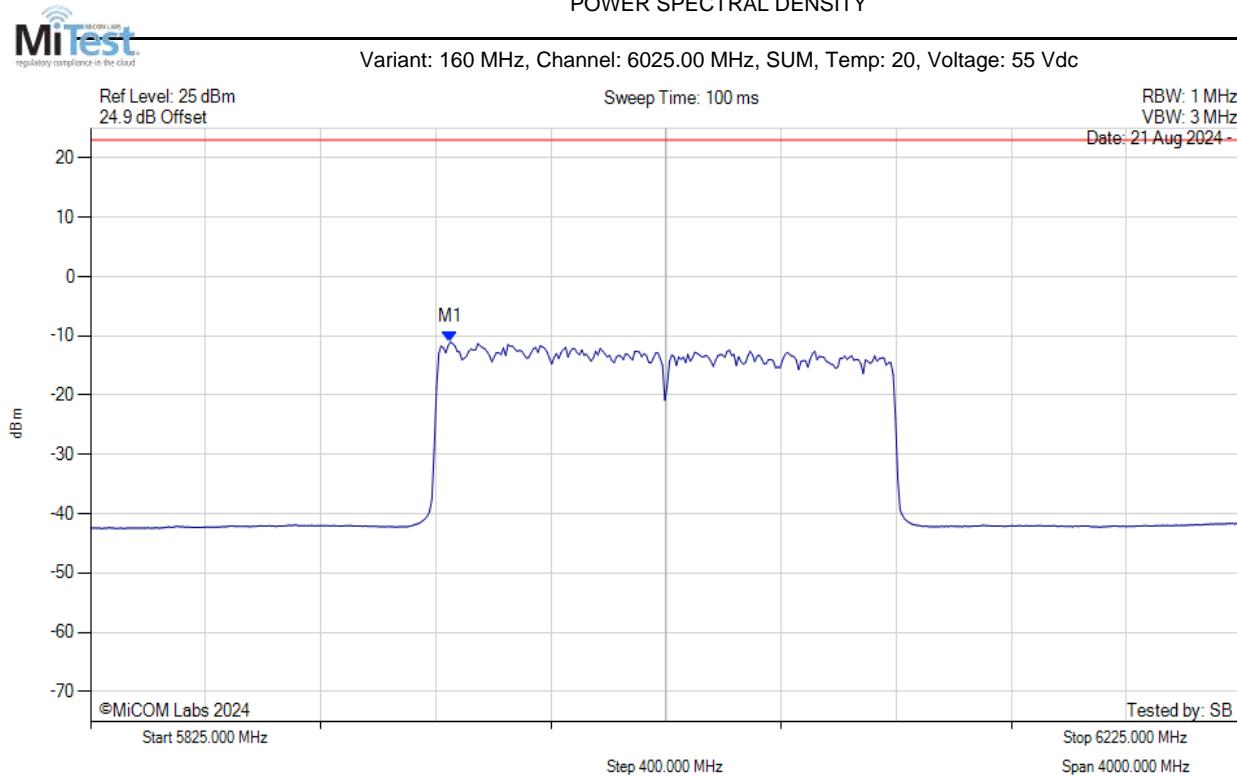
Variant: 160 MHz, Channel: 6025.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.050 MHz : -11.032 dBm	Pass

[back to matrix](#)

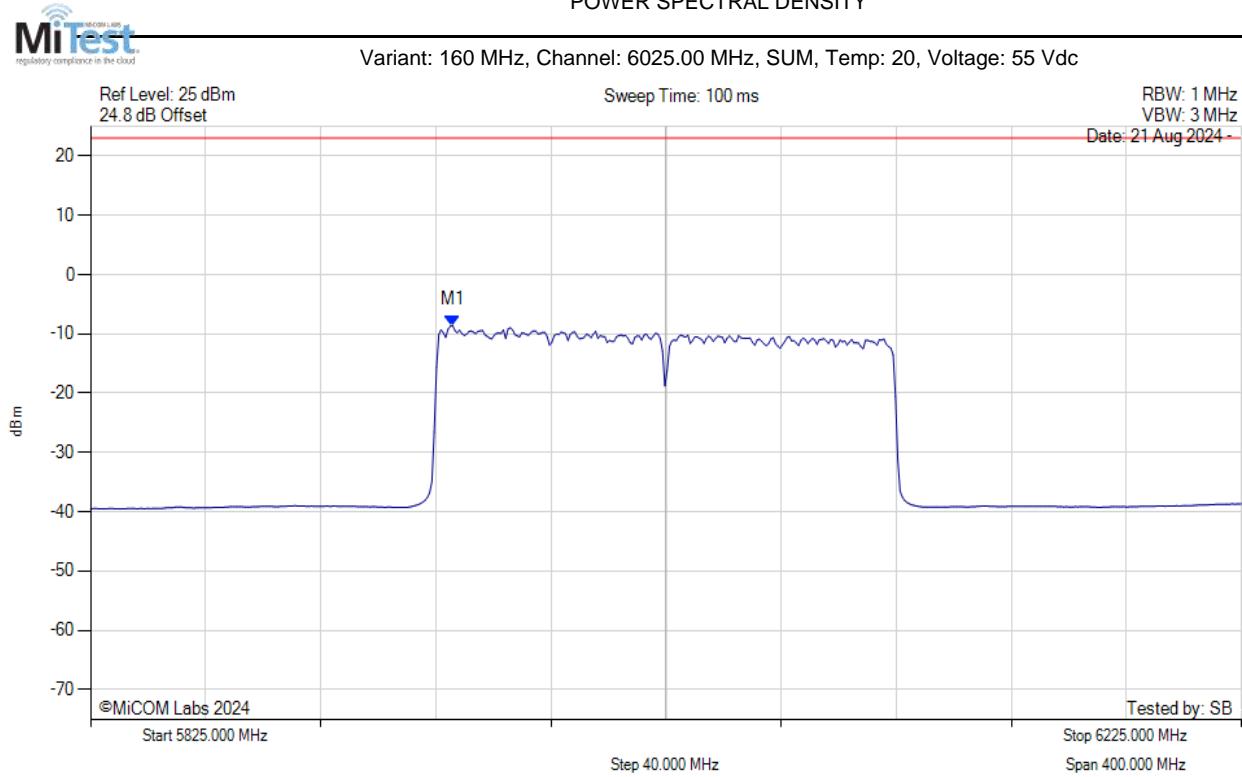
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.100 MHz : -11.032 dBm M1 + DCCF : 5950.100 MHz : -10.988 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



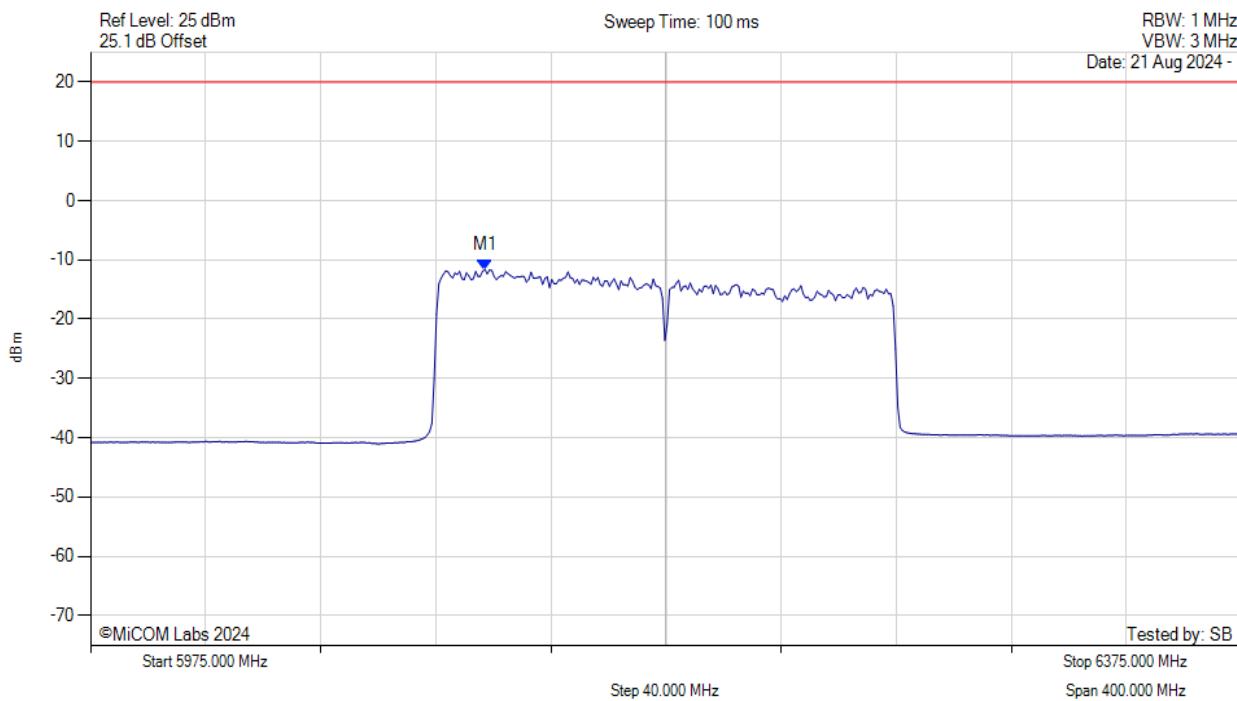
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.900 MHz : -8.570 dBm M1 + DCCF : 5950.900 MHz : -8.526 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 160 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



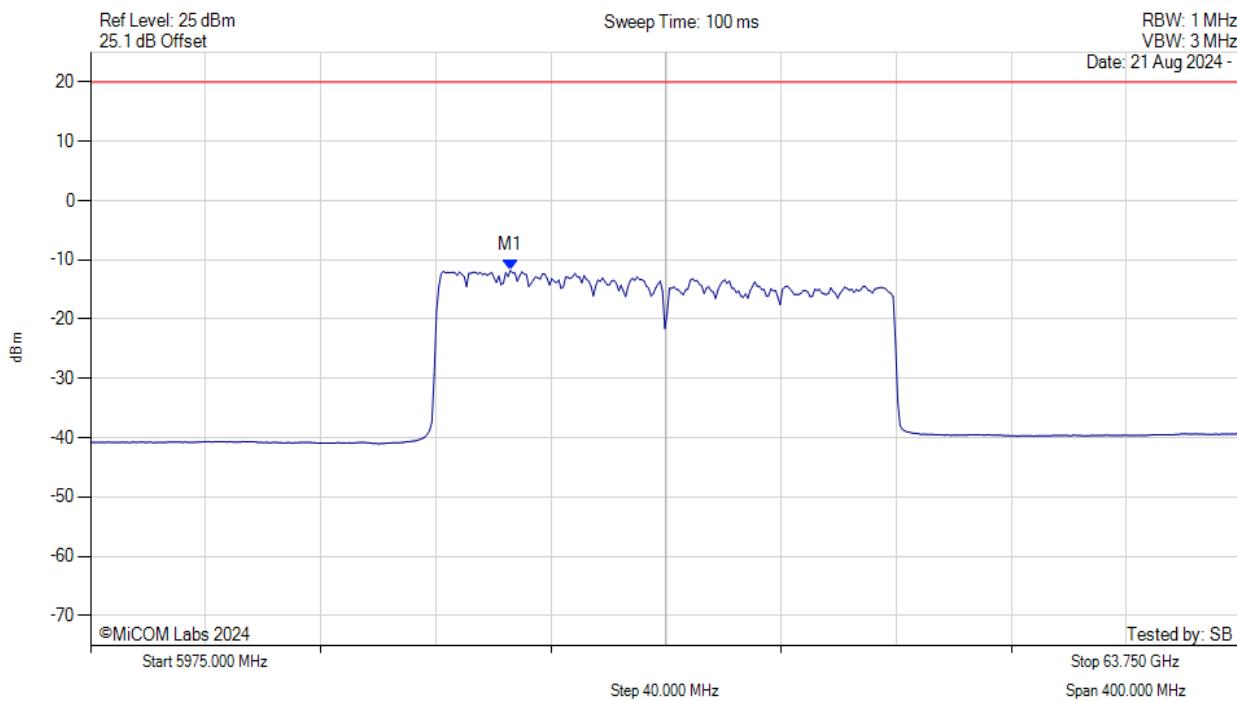
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6112.074 MHz : -11.619 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



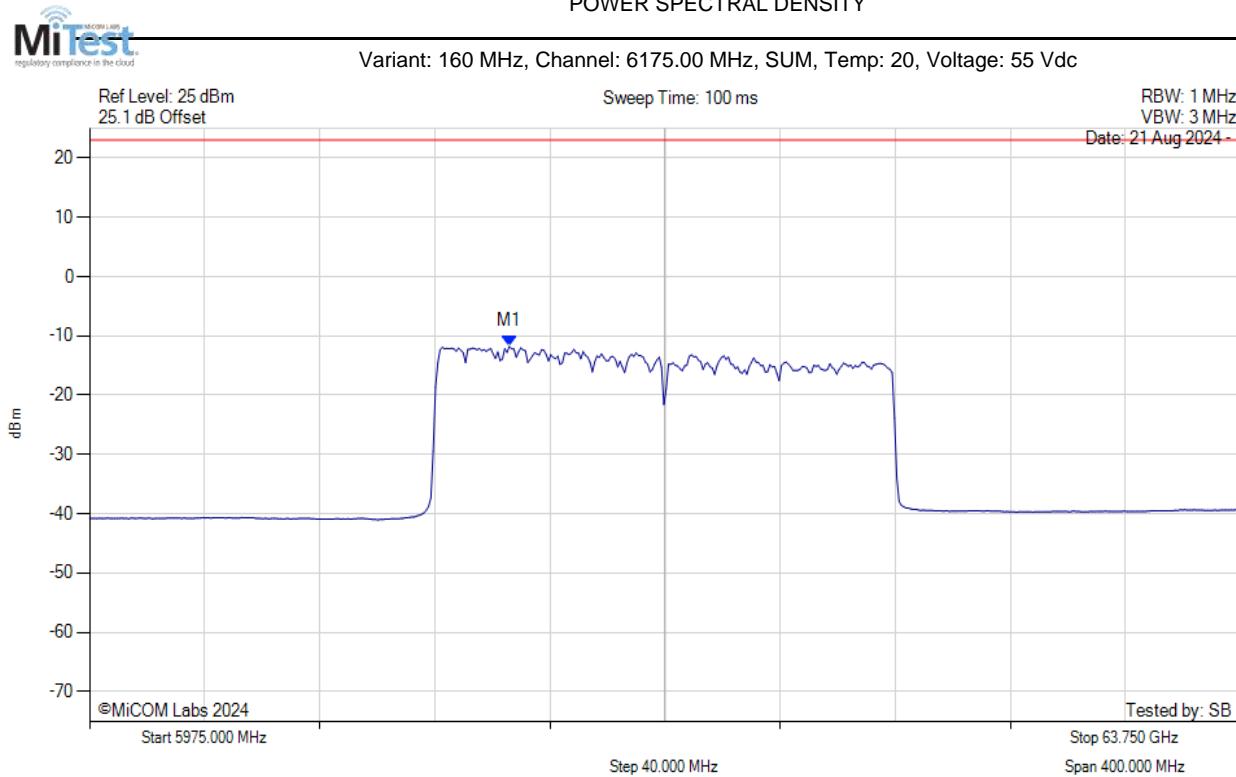
Variant: 160 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6120.892 MHz : -11.786 dBm	Pass

[back to matrix](#)

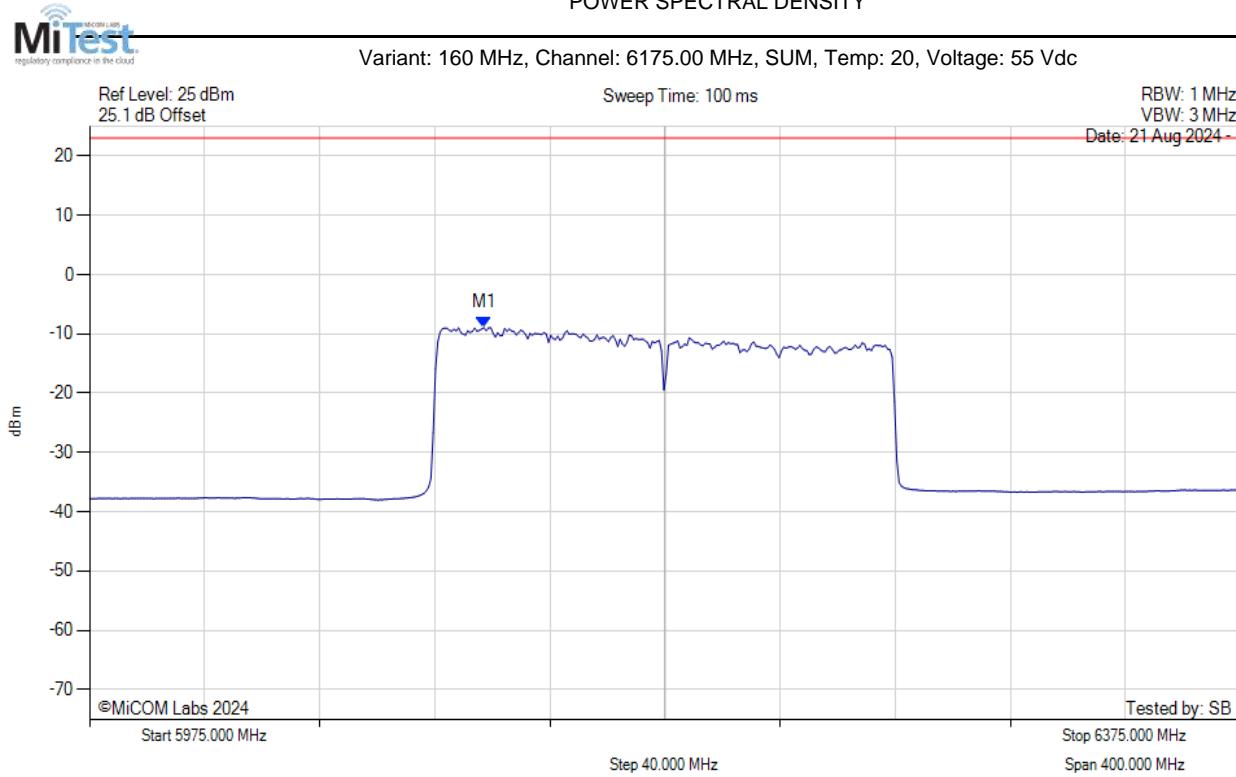
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6120.900 MHz : -11.786 dBm M1 + DCCF : 6120.900 MHz : -11.742 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



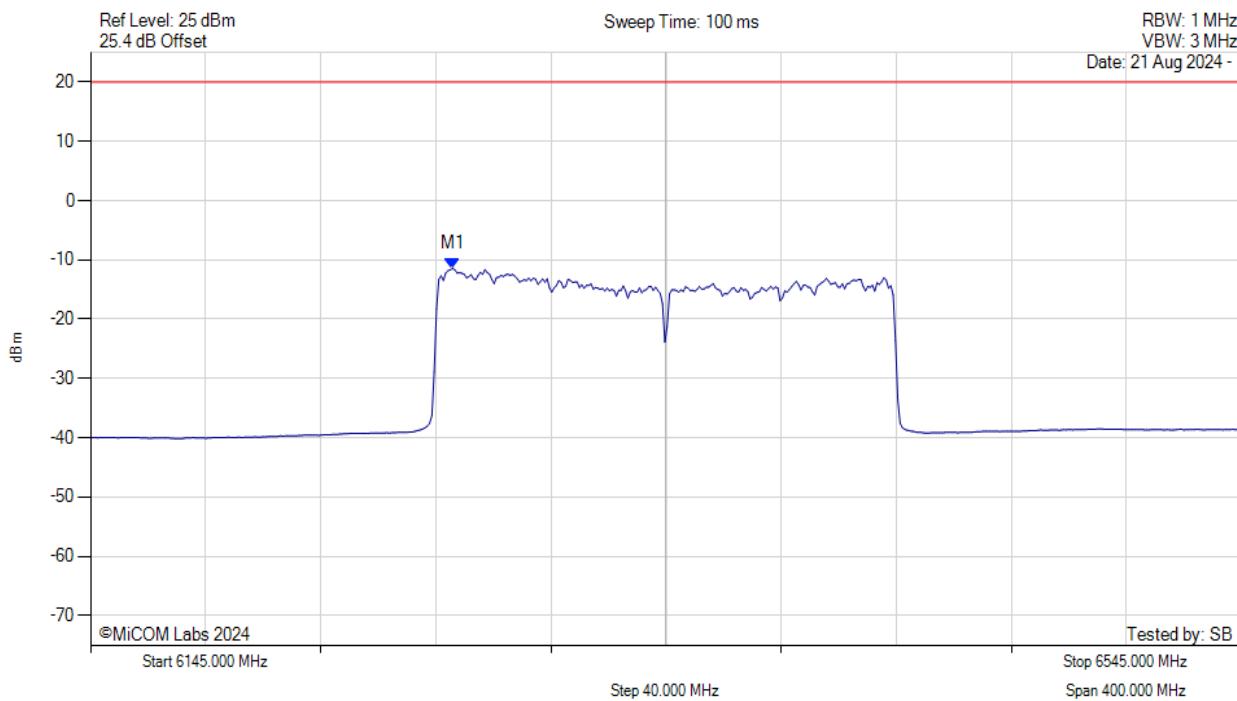
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6112.100 MHz : -8.938 dBm M1 + DCCF : 6112.100 MHz : -8.894 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 160 MHz, Channel: 6345.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



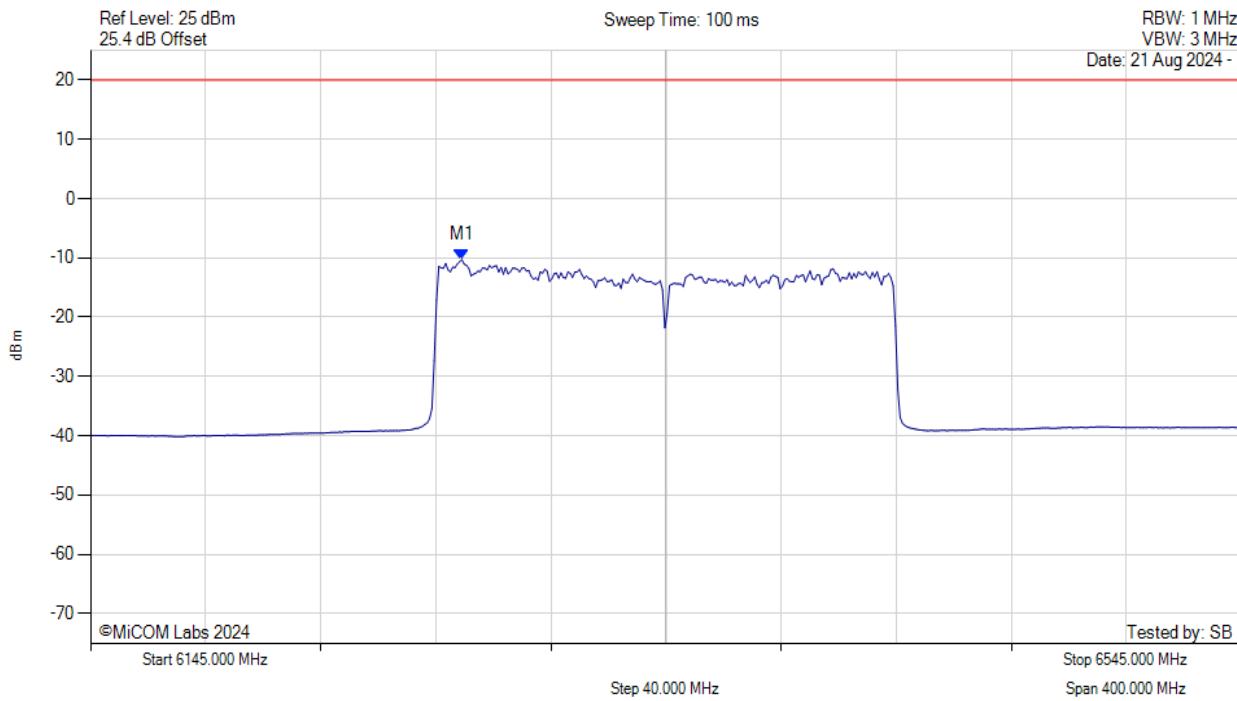
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6270.852 MHz : -11.430 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



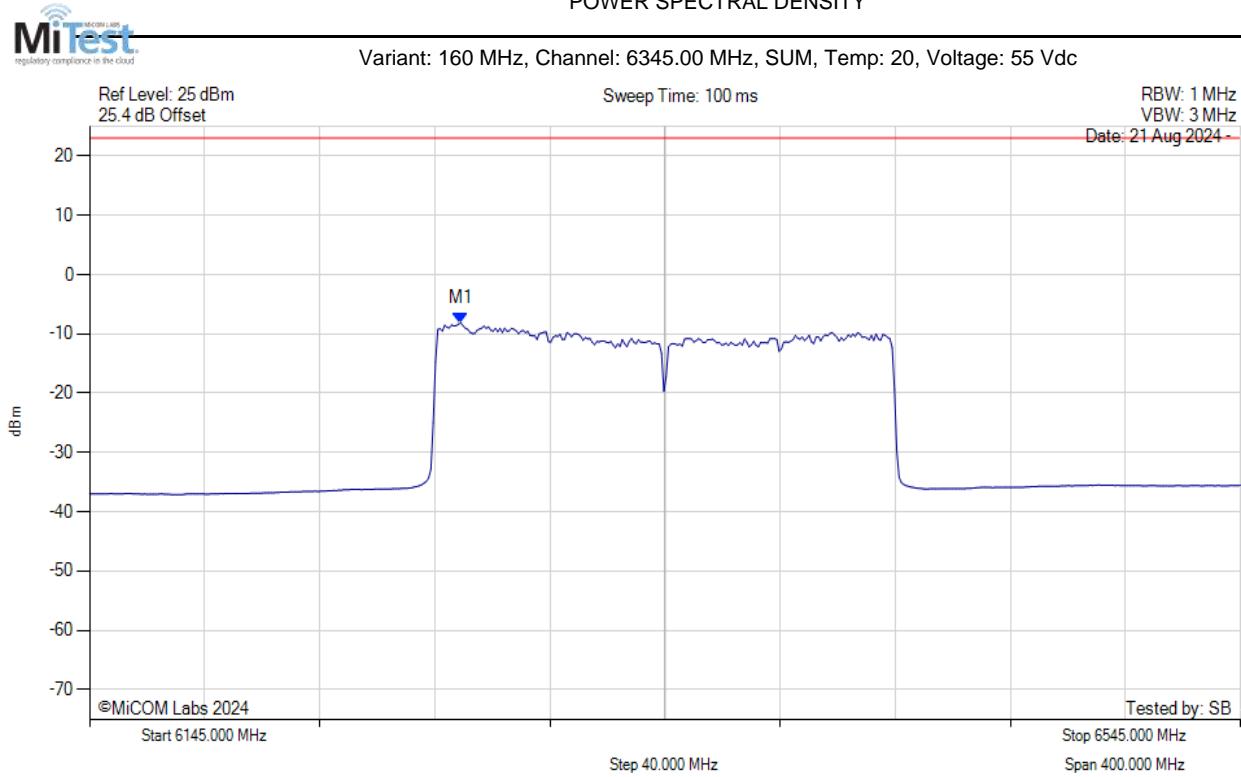
Variant: 160 MHz, Channel: 6345.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6274.058 MHz : -10.282 dBm	Pass

[back to matrix](#)

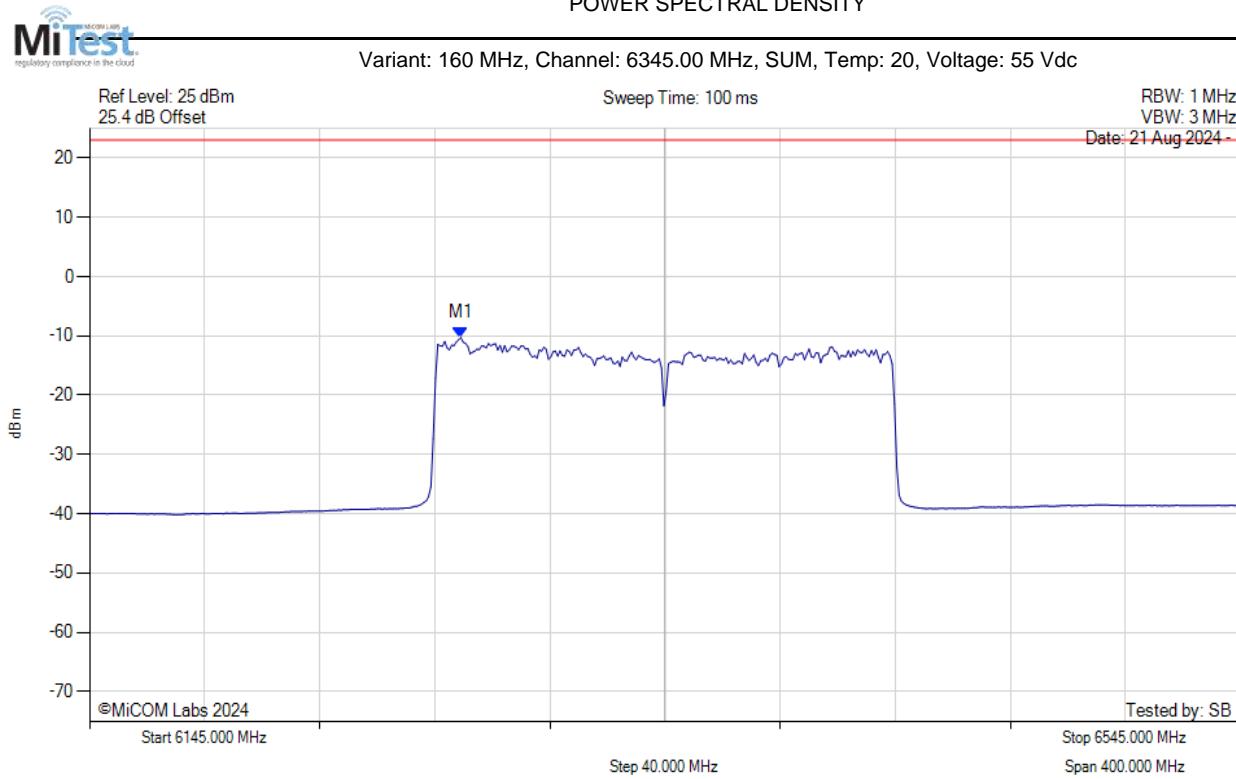
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6274.100 MHz : -8.145 dBm M1 + DCCF : 6274.100 MHz : -8.101 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

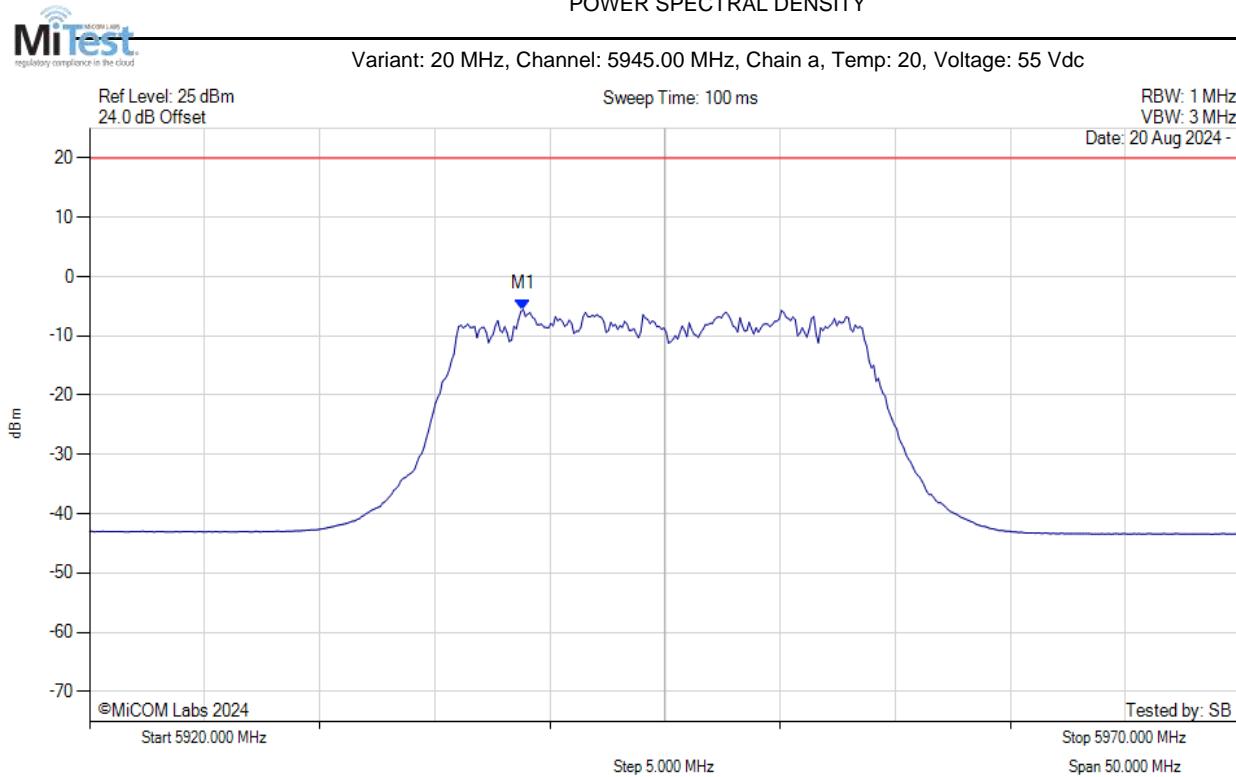
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6274.100 MHz : -10.282 dBm M1 + DCCF : 6274.100 MHz : -10.238 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

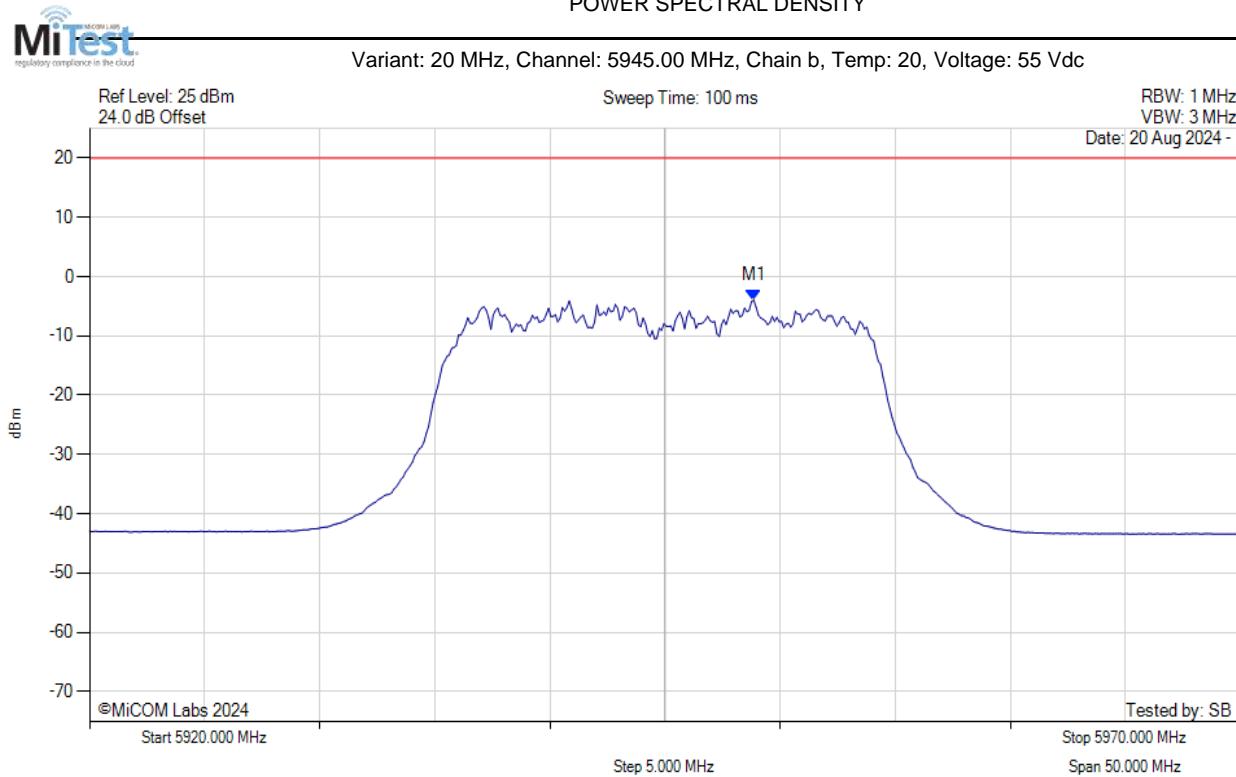
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5938.838 MHz : -5.523 dBm	Pass

[back to matrix](#)

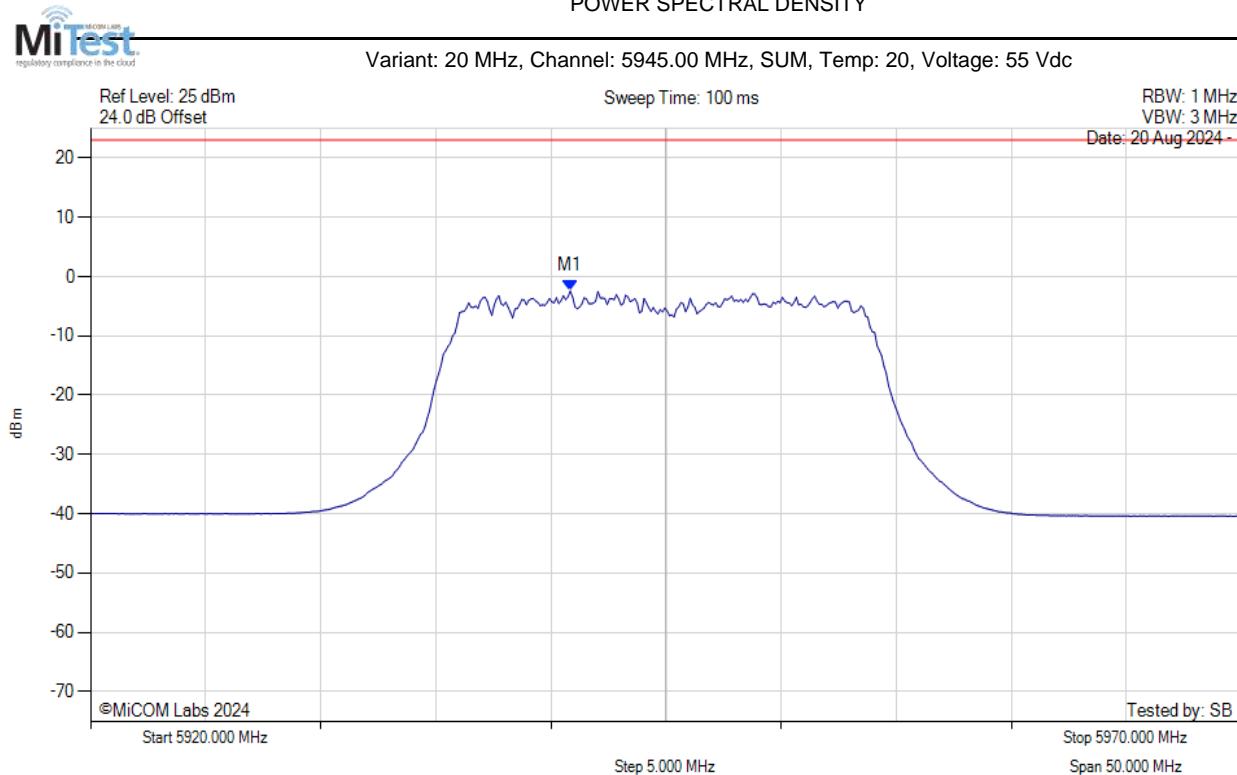
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5948.858 MHz : -3.976 dBm	Pass

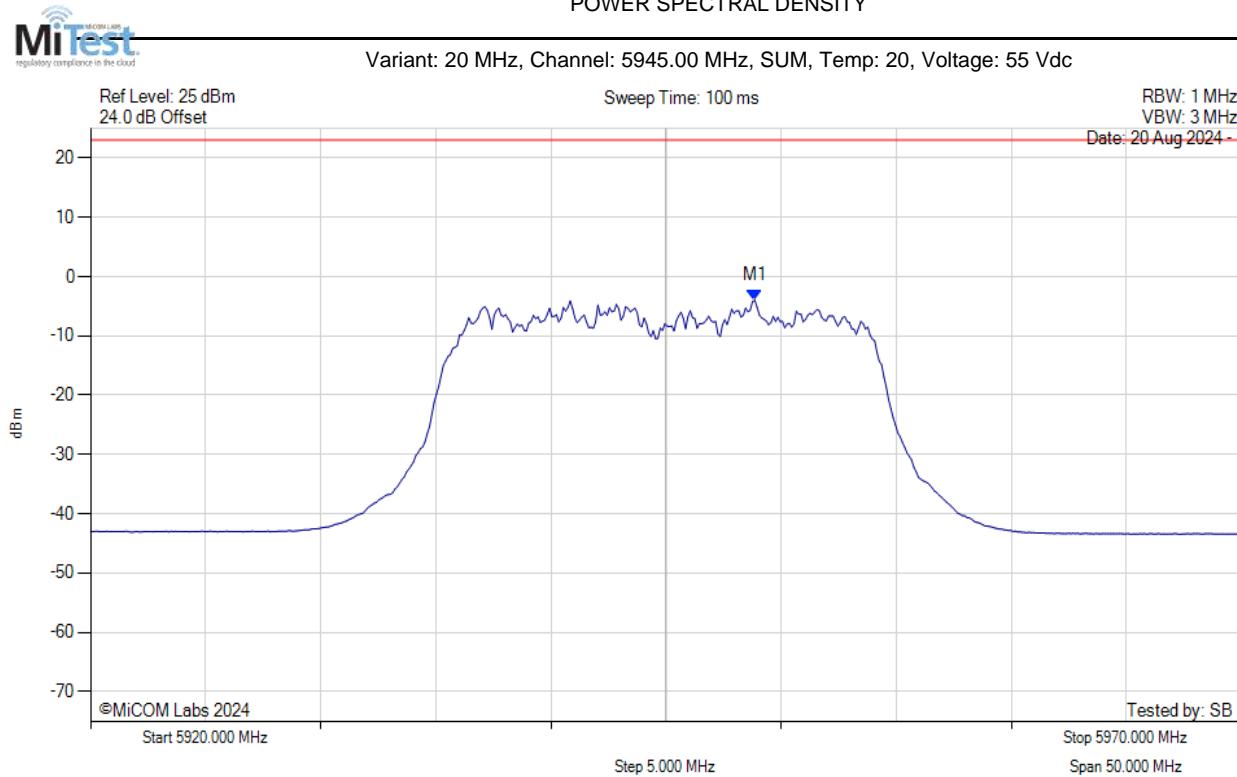
[back to matrix](#)

POWER SPECTRAL DENSITY



[back to matrix](#)

POWER SPECTRAL DENSITY



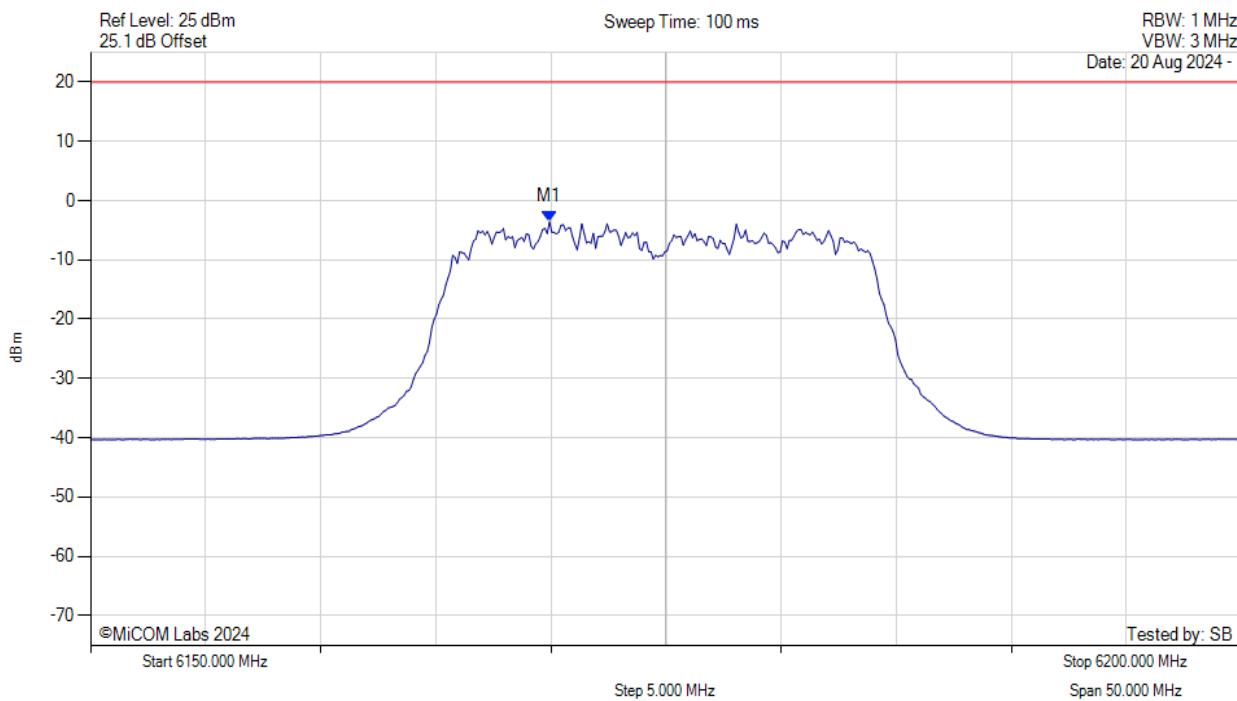
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5948.900 MHz : -3.976 dBm M1 + DCCF : 5948.900 MHz : -3.932 dBm Duty Cycle Correction Factor : +0.04 dB	Limit: ≤ 23.0 dBm Margin: -26.9 dB

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 20 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



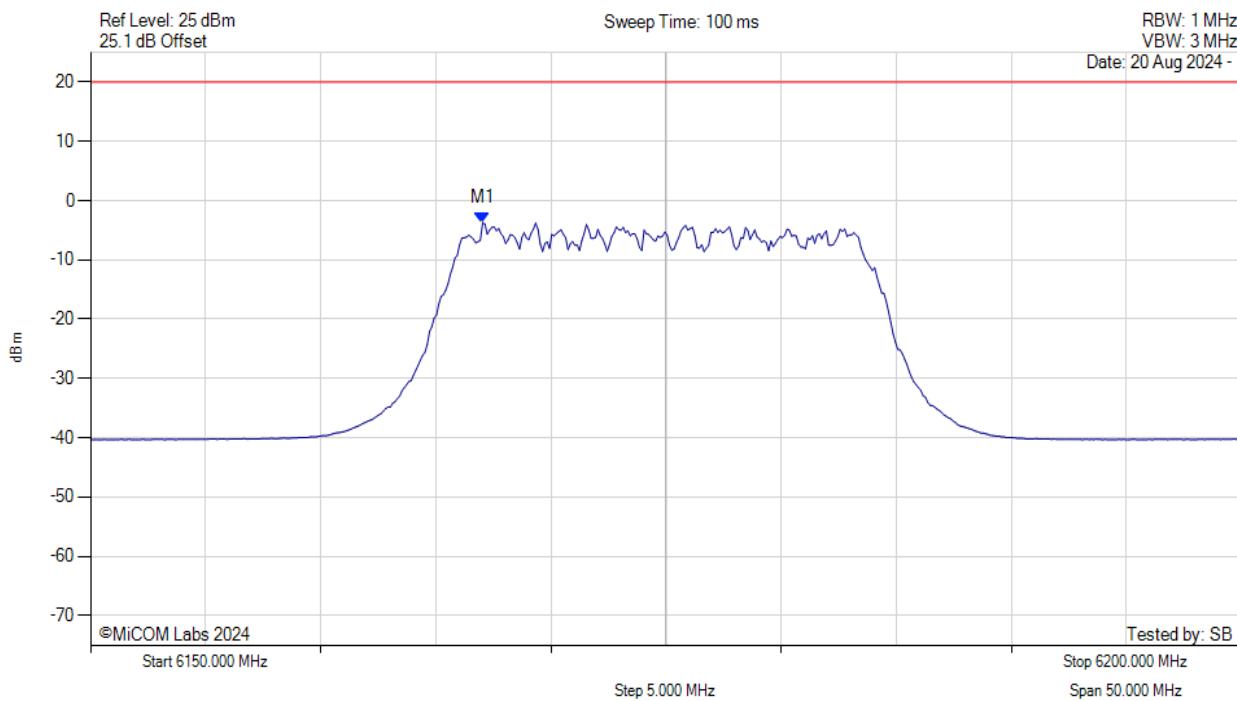
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6169.940 MHz : -3.582 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



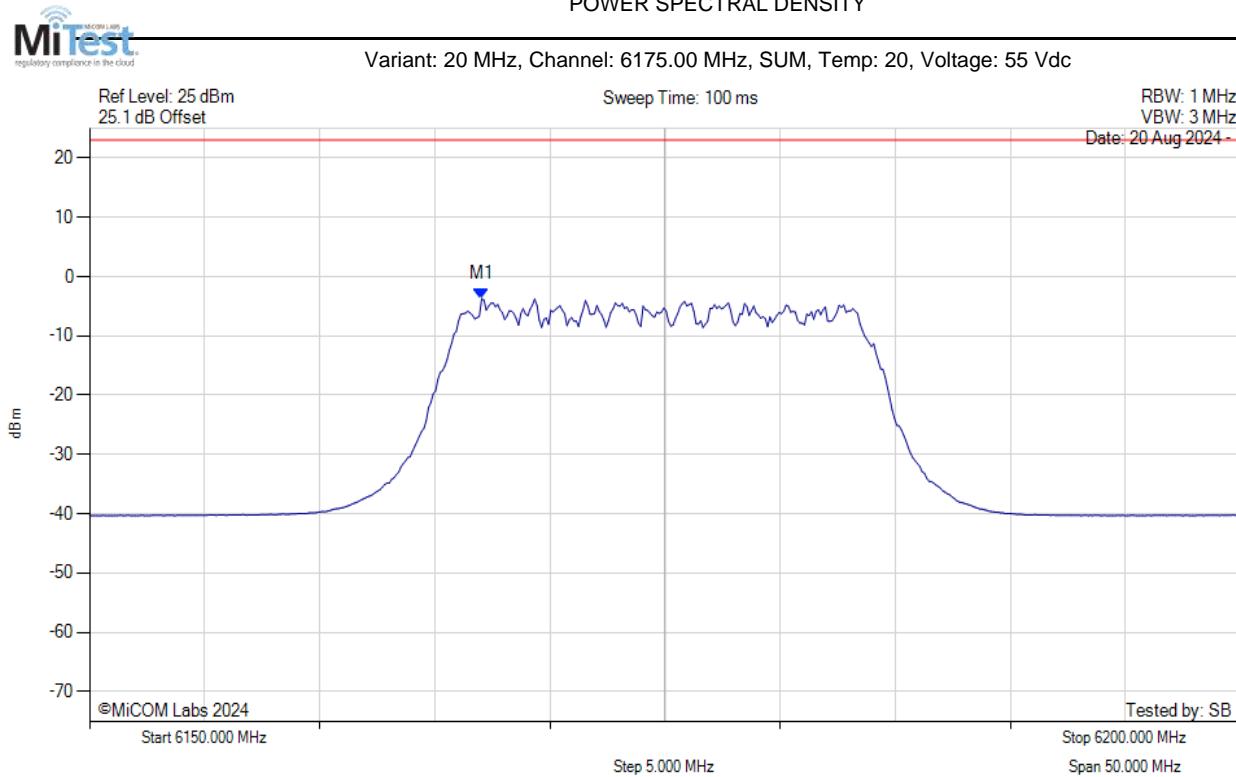
Variant: 20 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6167.034 MHz : -3.763 dBm	Pass

[back to matrix](#)

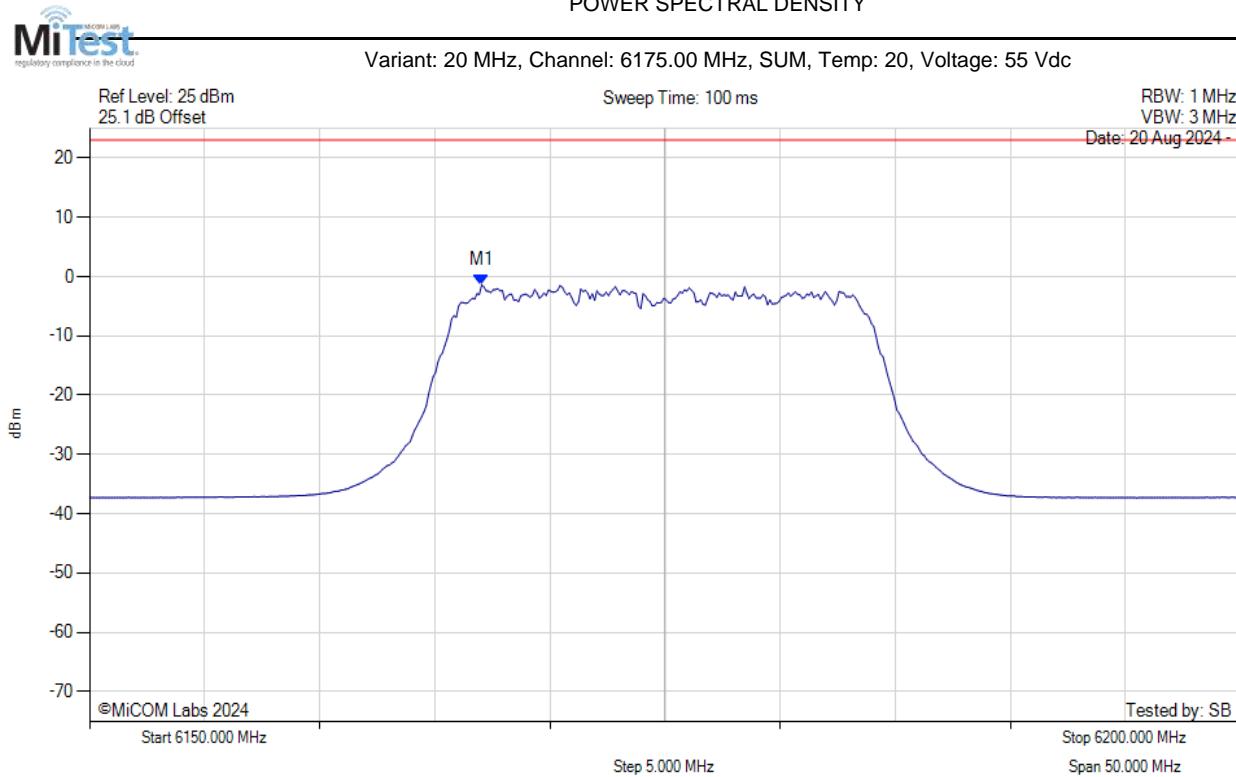
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6167.000 MHz : -3.763 dBm M1 + DCCF : 6167.000 MHz : -3.719 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



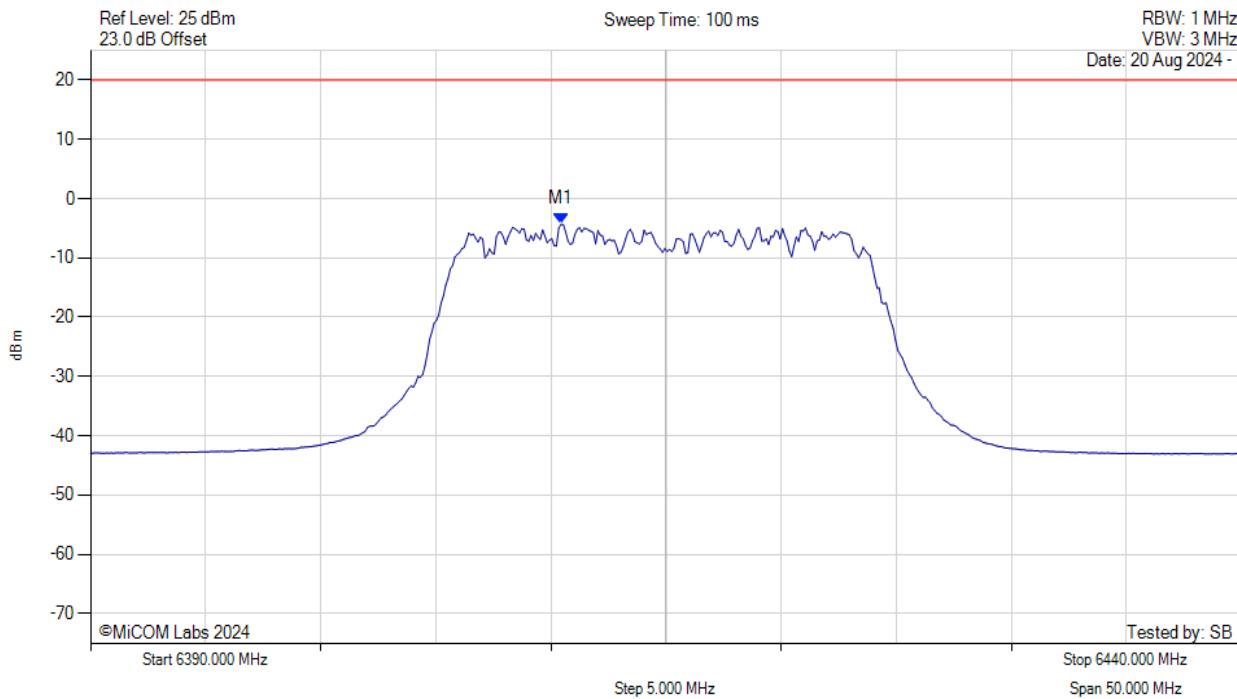
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6167.000 MHz : -1.383 dBm M1 + DCCF : 6167.000 MHz : -1.339 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



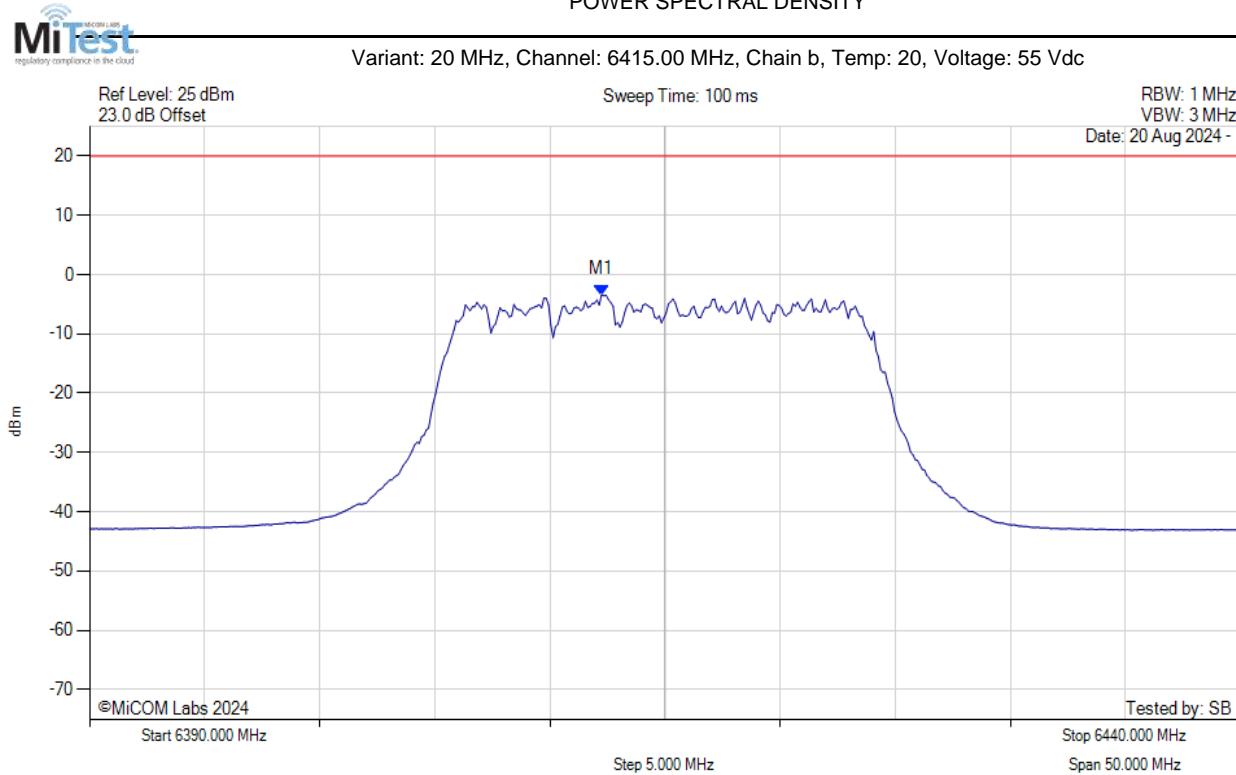
Variant: 20 MHz, Channel: 6415.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6410.441 MHz : -4.320 dBm	Pass

[back to matrix](#)

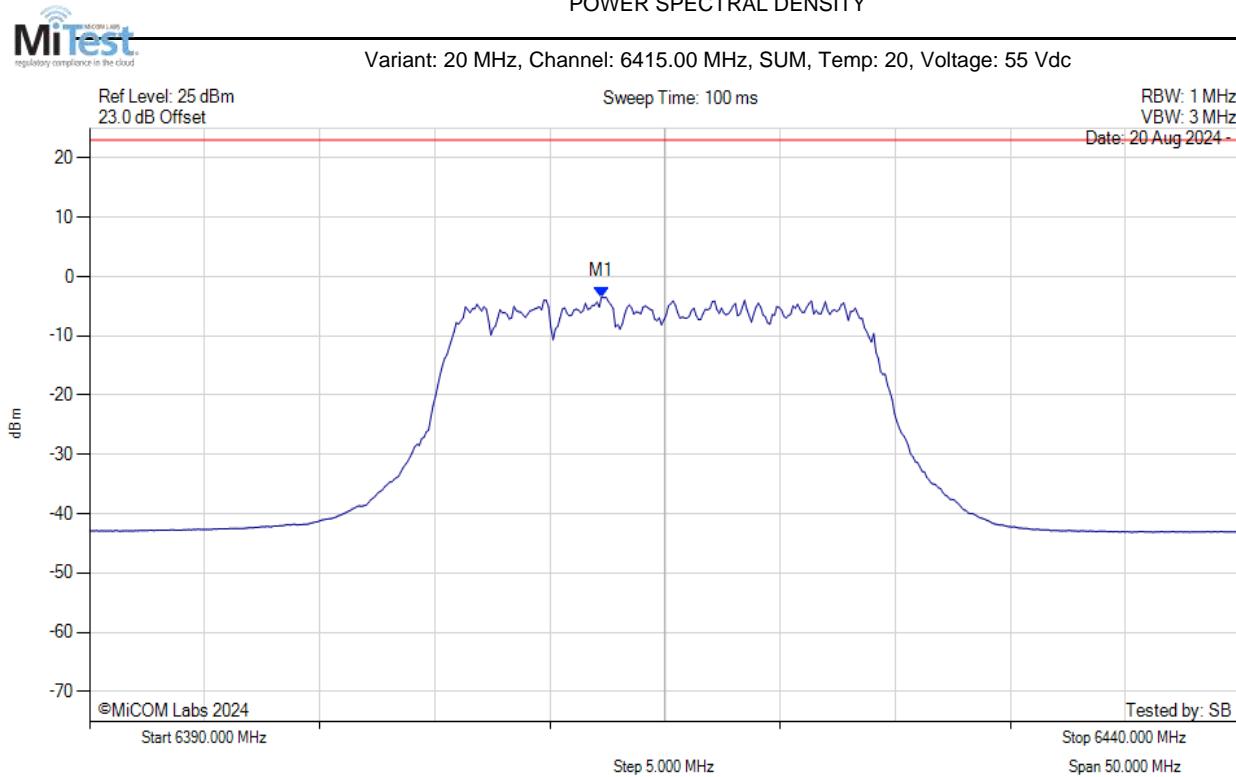
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6412.244 MHz : -3.432 dBm	Pass

[back to matrix](#)

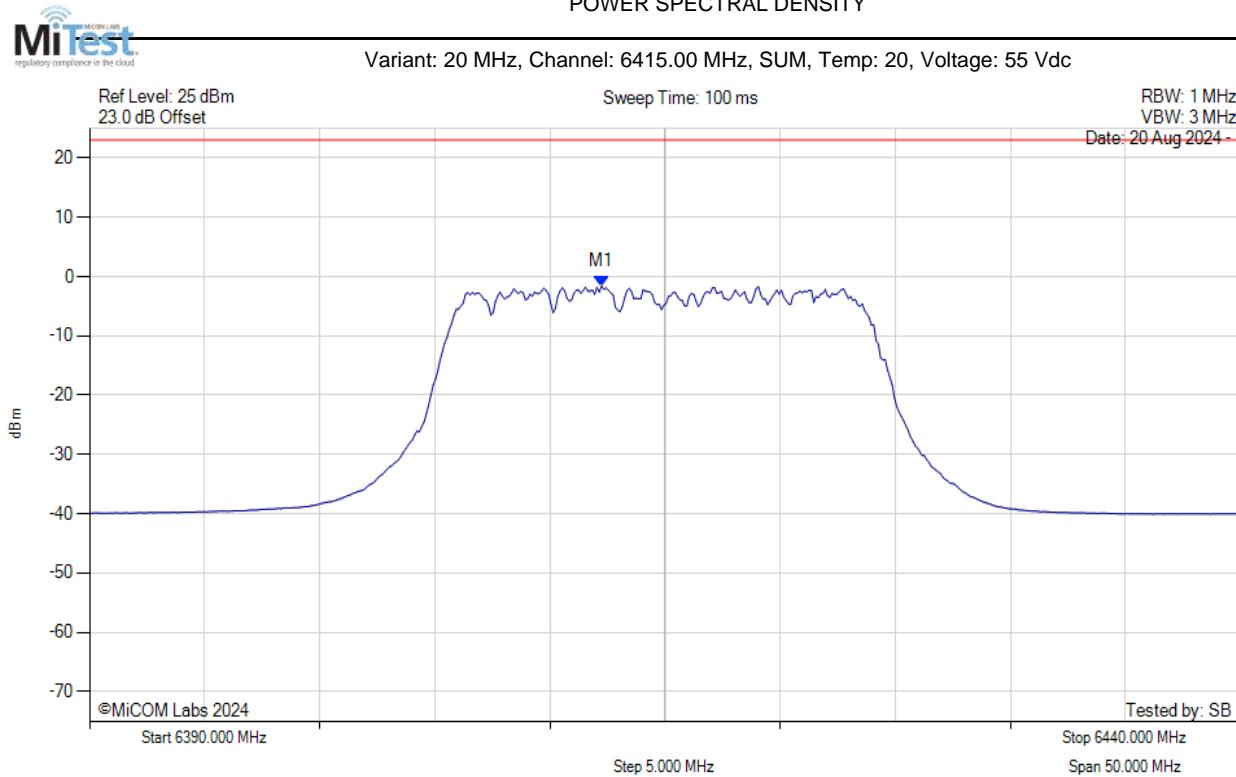
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6412.200 MHz : -3.432 dBm M1 + DCCF : 6412.200 MHz : -3.388 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



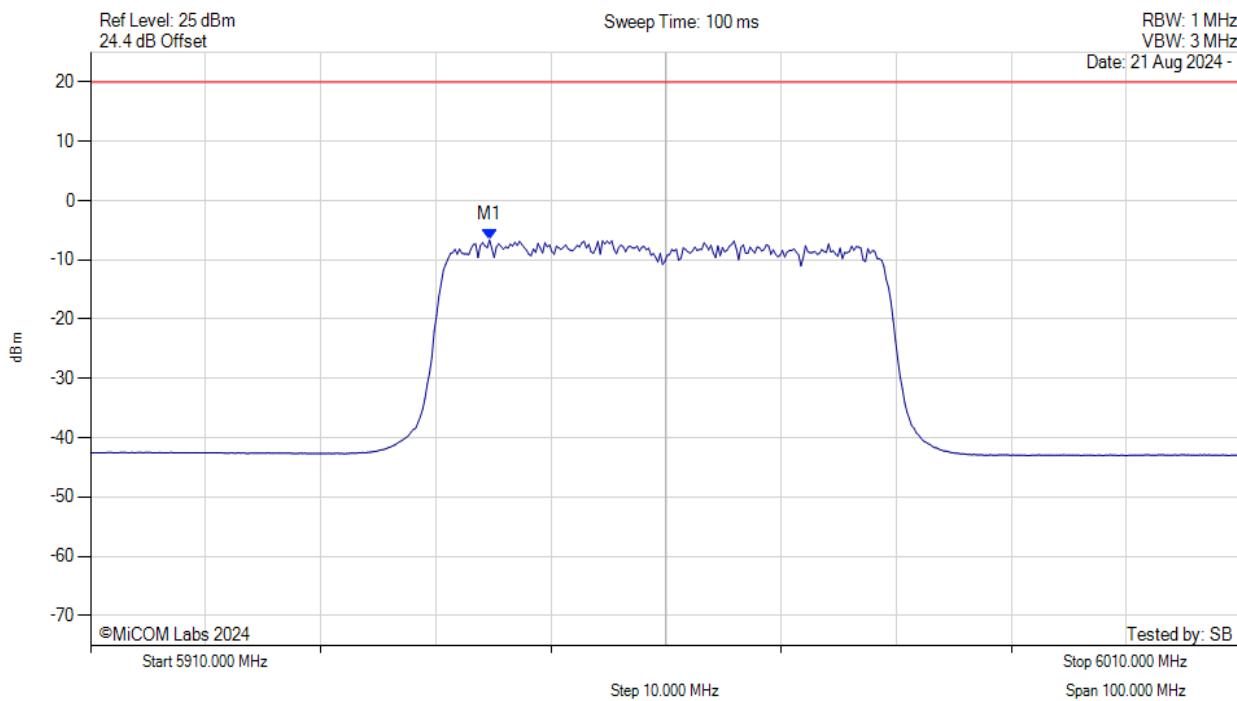
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6412.200 MHz : -1.612 dBm M1 + DCCF : 6412.200 MHz : -1.568 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 40 MHz, Channel: 5960.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



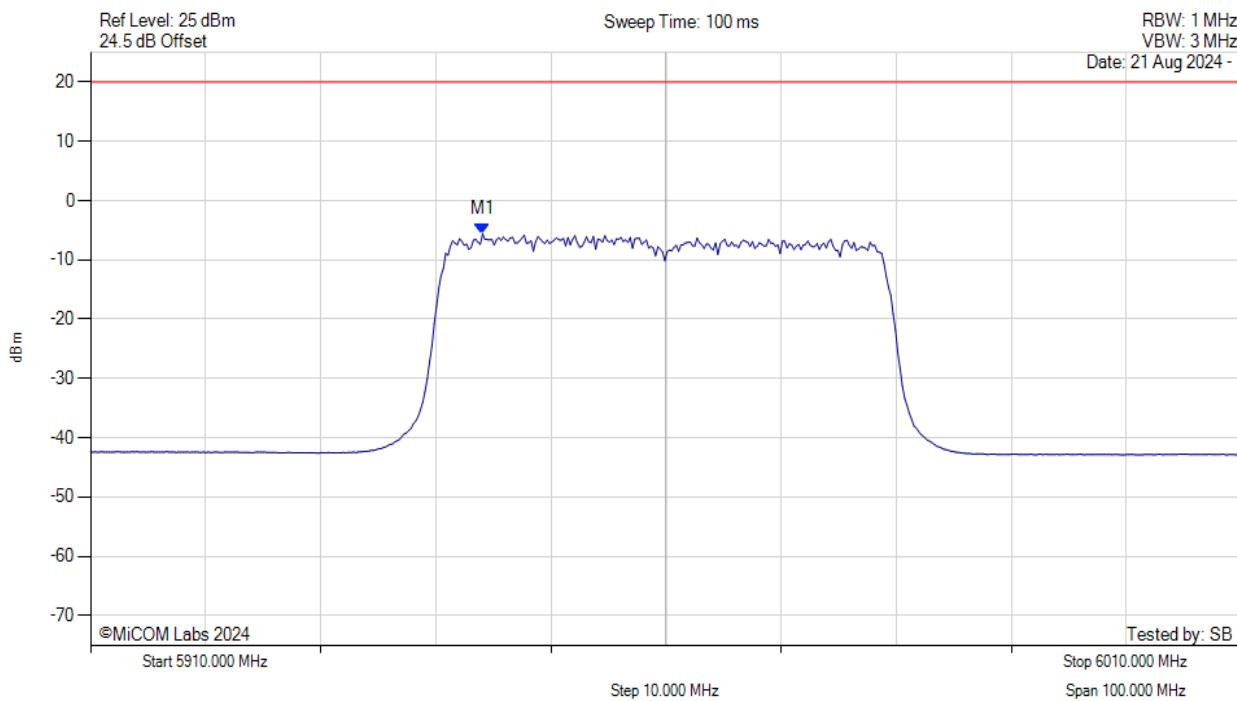
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5944.669 MHz : -6.637 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



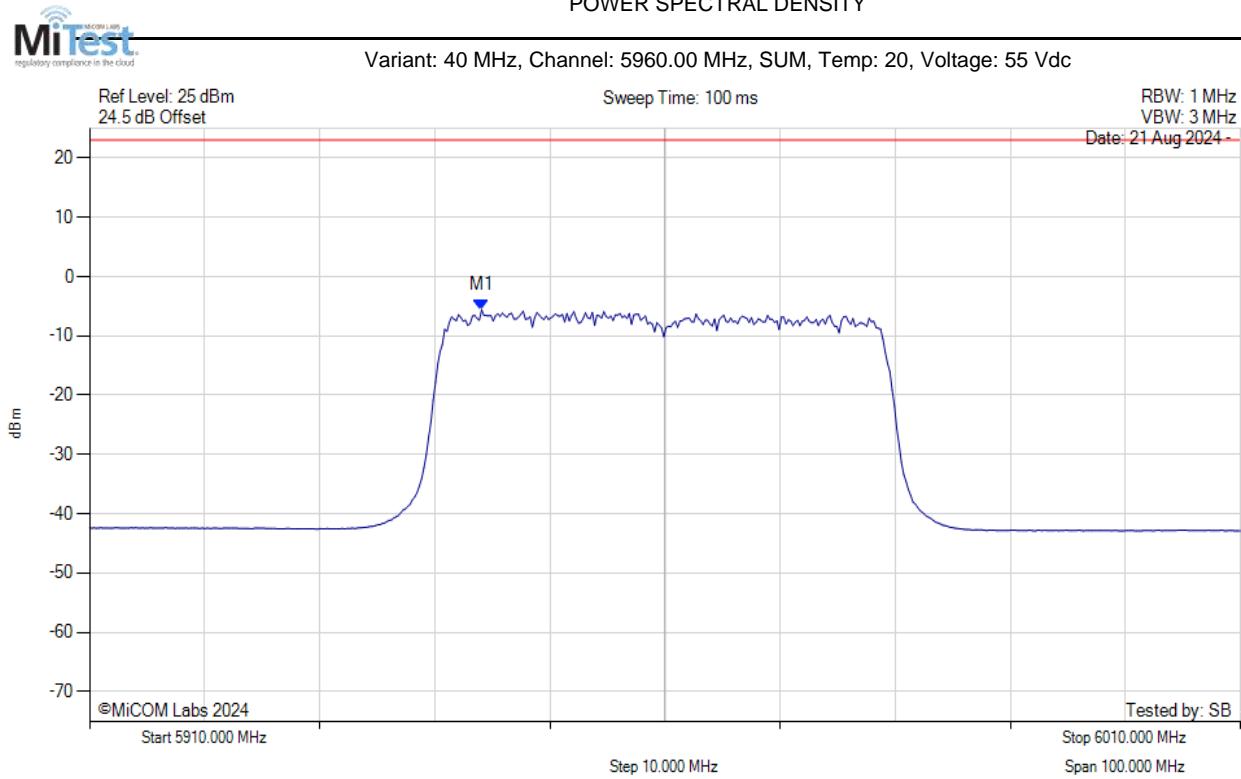
Variant: 40 MHz, Channel: 5960.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5944.068 MHz : -5.613 dBm	Pass

[back to matrix](#)

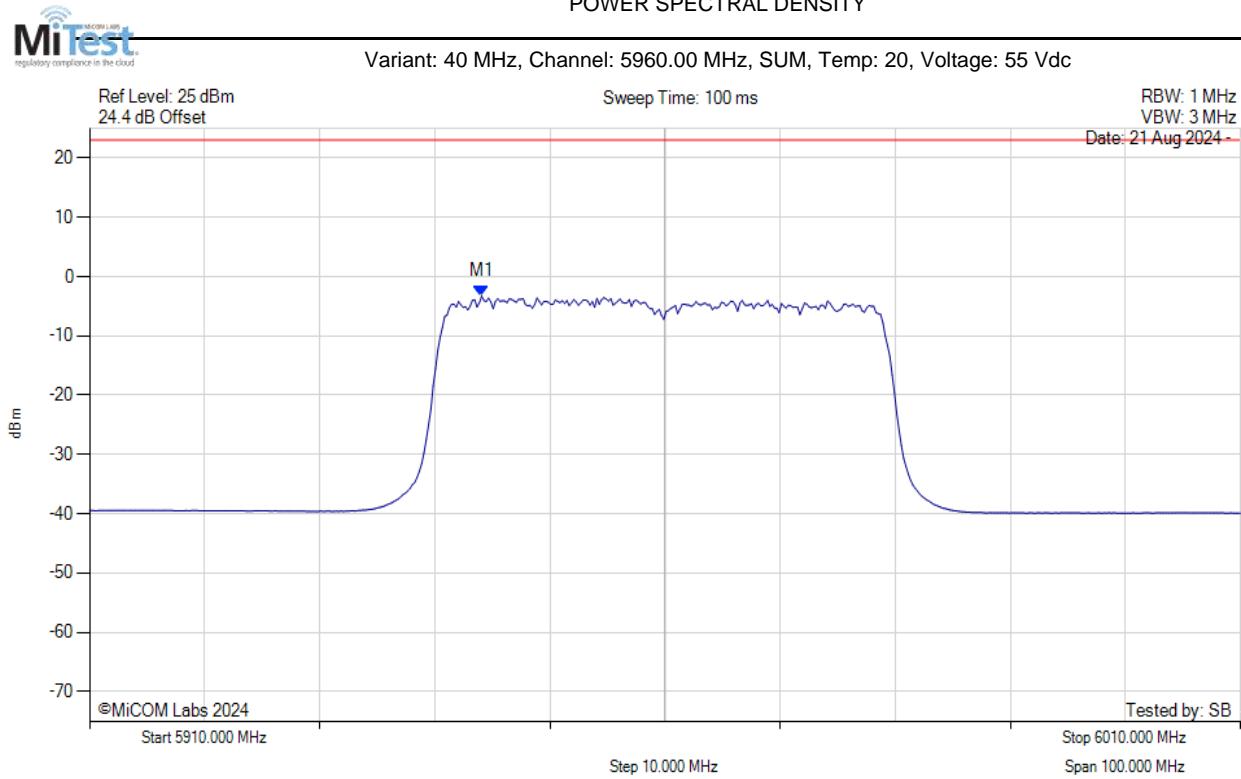
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5944.100 MHz : -5.613 dBm M1 + DCCF : 5944.100 MHz : -5.569 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



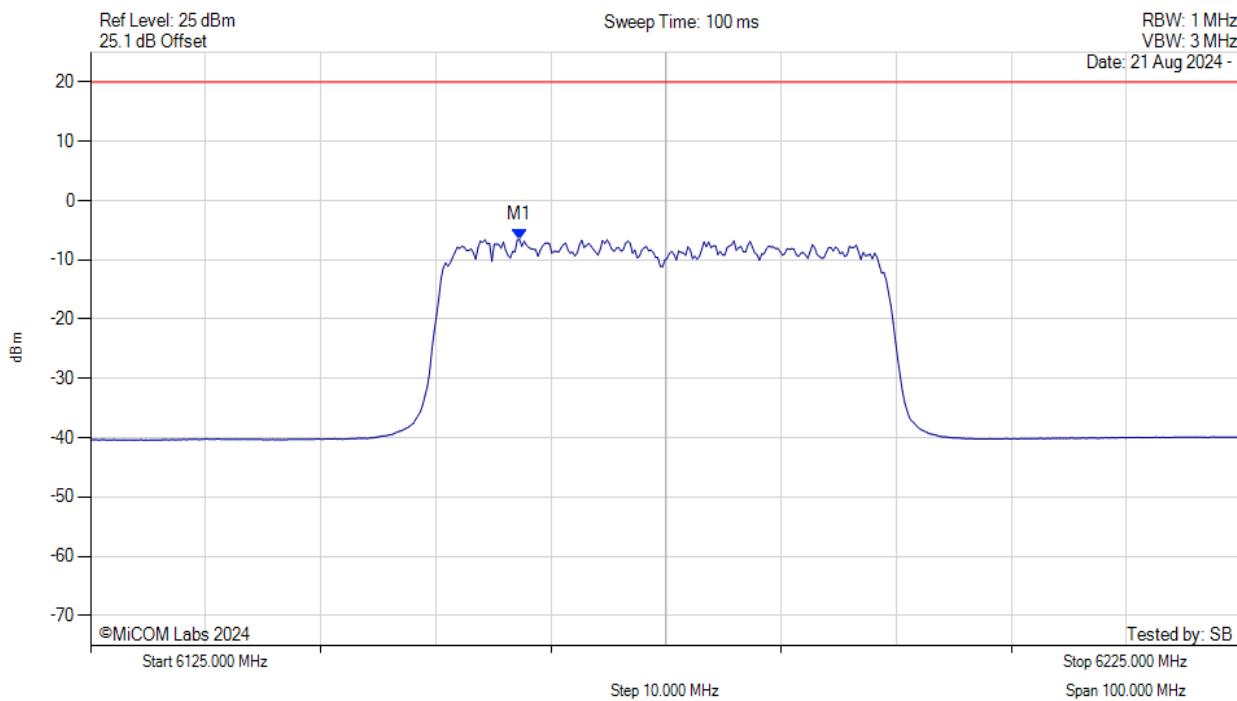
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5944.100 MHz : -3.276 dBm M1 + DCCF : 5944.100 MHz : -3.232 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



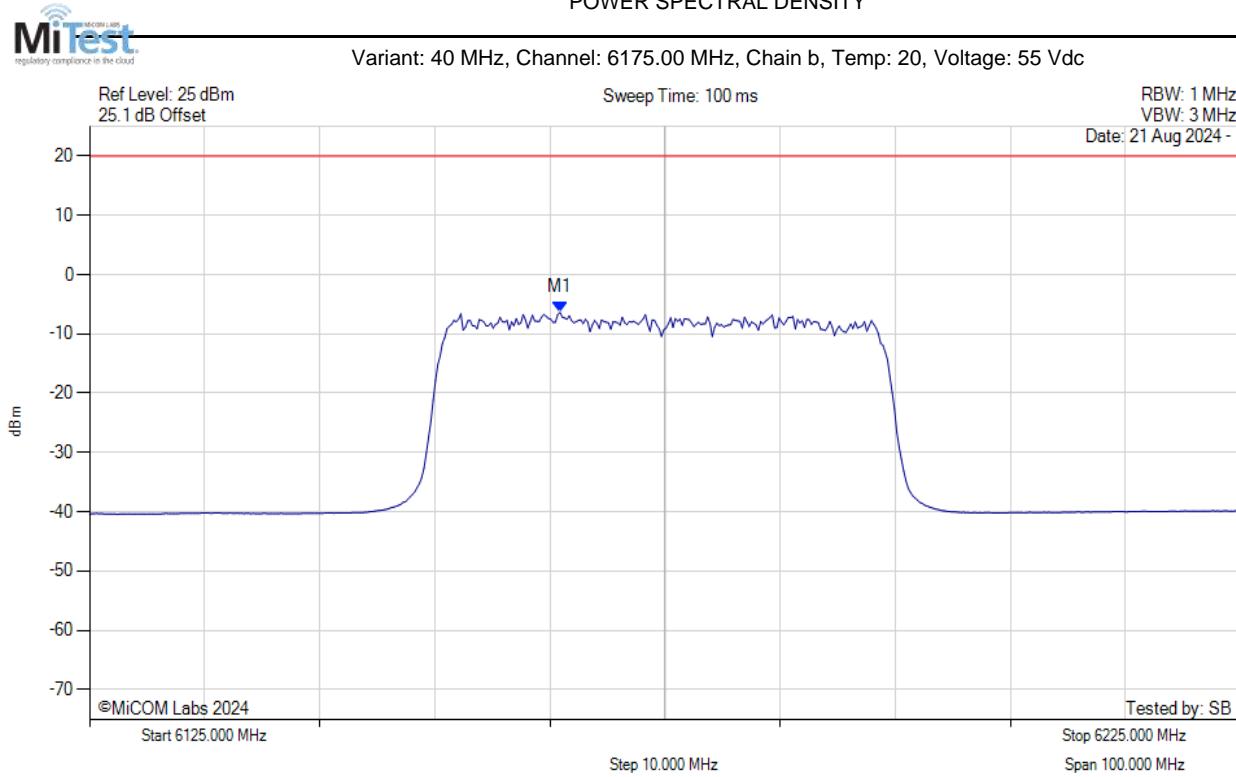
Variant: 40 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6162.275 MHz : -6.551 dBm	Pass

[back to matrix](#)

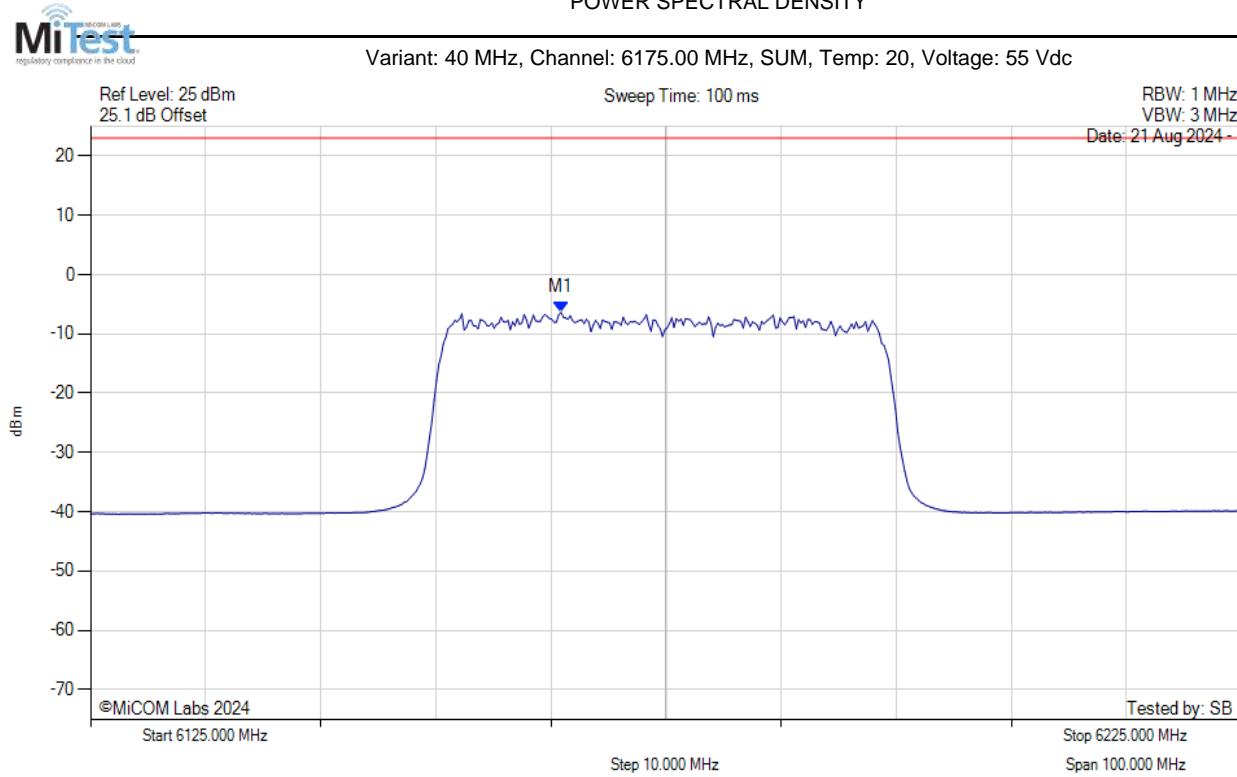
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6165.882 MHz : -6.378 dBm	Pass

[back to matrix](#)

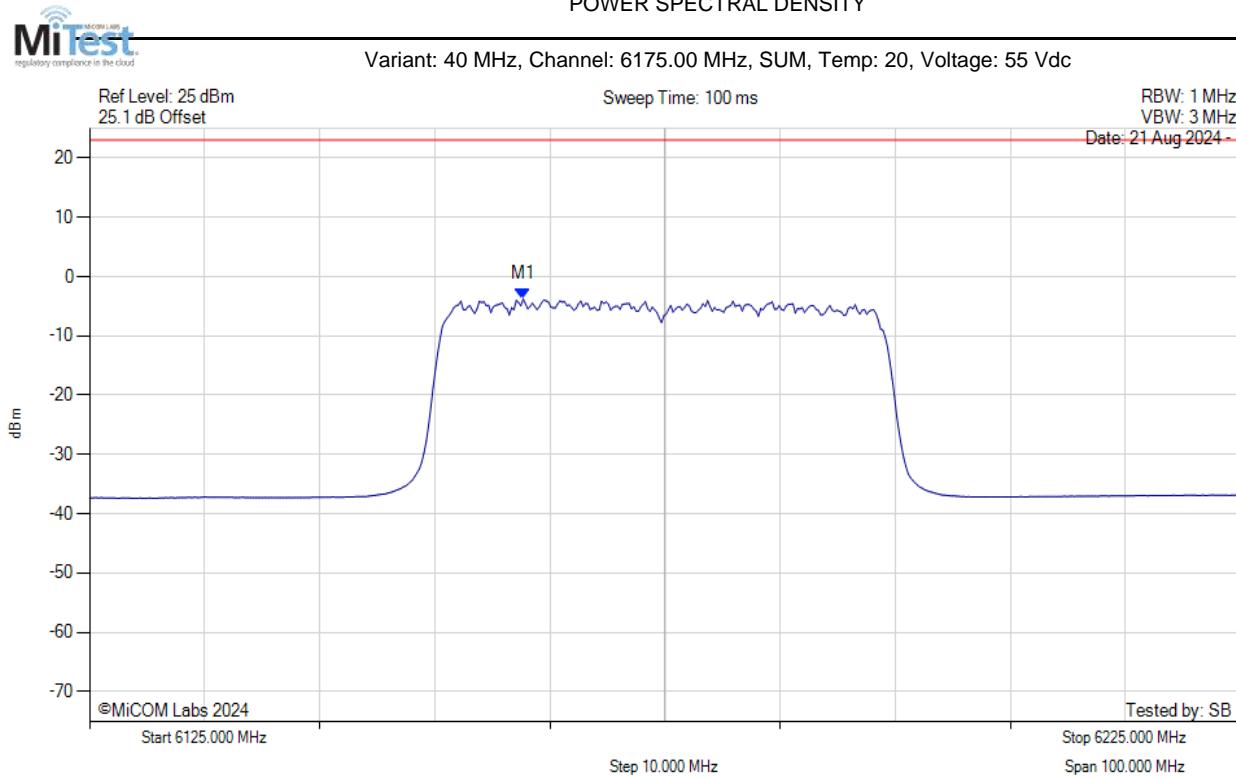
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6165.900 MHz : -6.378 dBm M1 + DCCF : 6165.900 MHz : -6.334 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

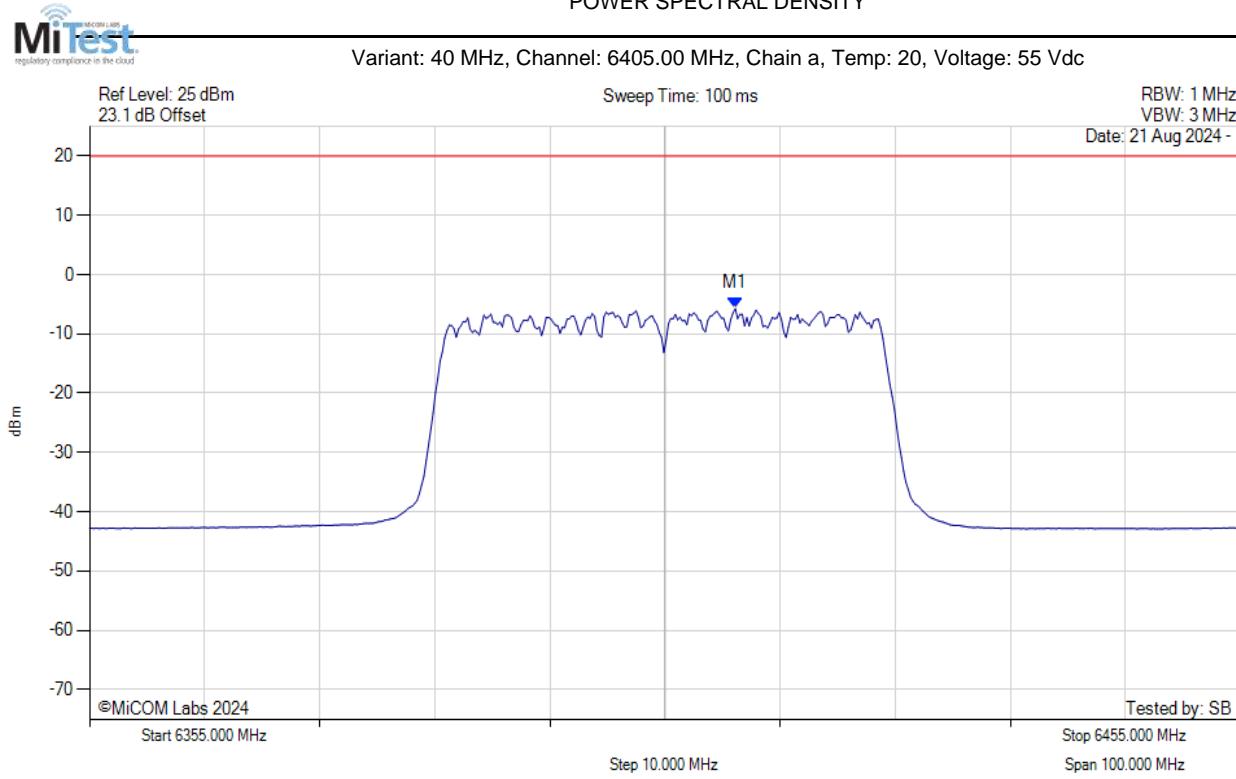
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6162.700 MHz : -3.783 dBm M1 + DCCF : 6162.700 MHz : -3.739 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



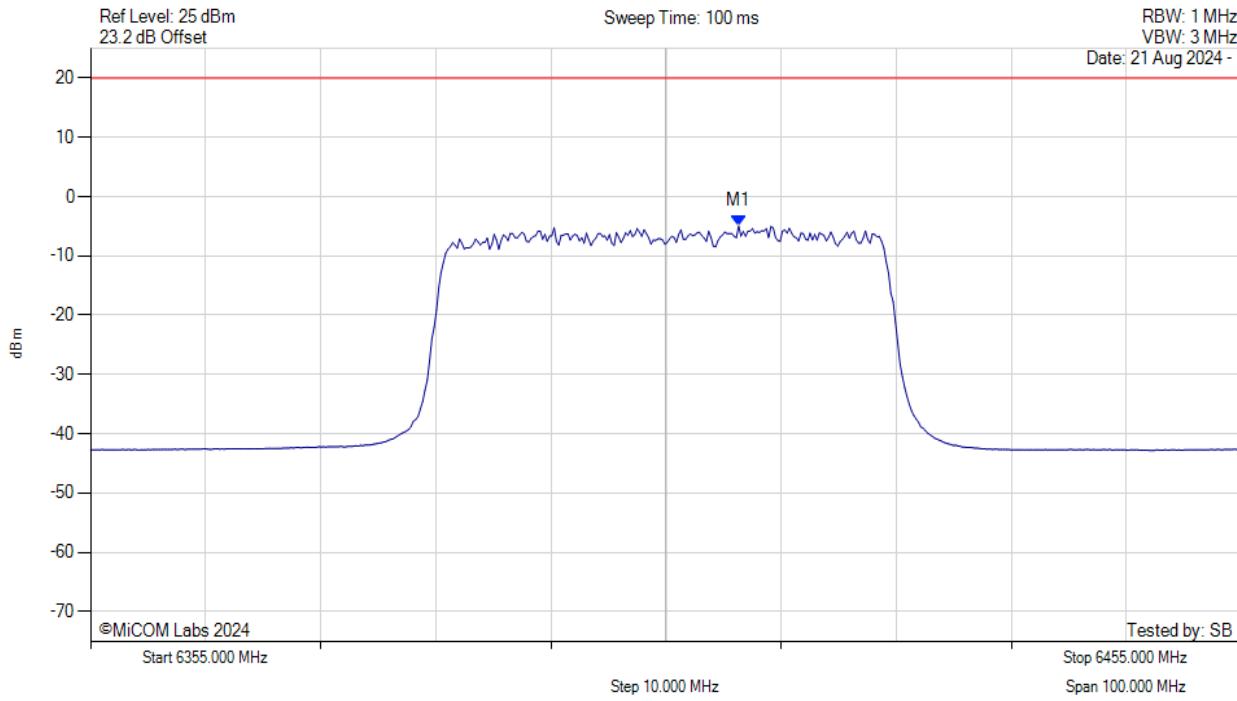
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6411.112 MHz : -5.743 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



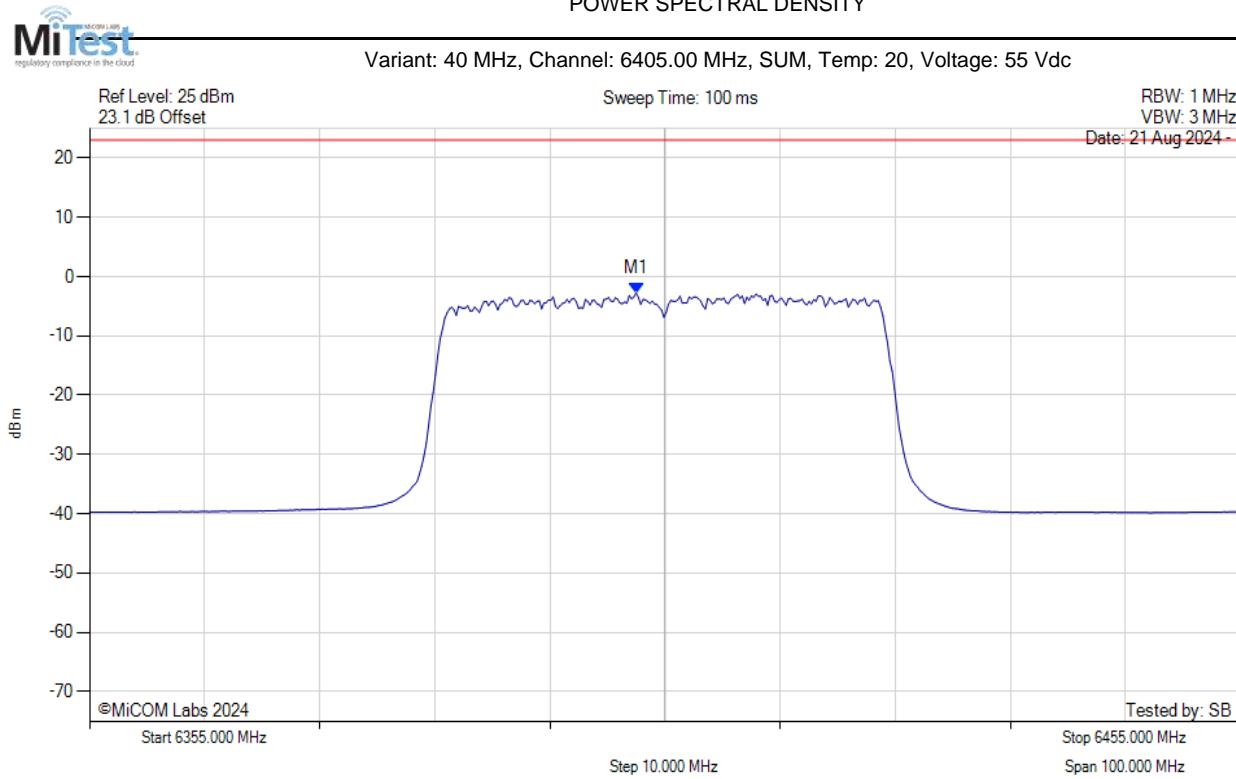
Variant: 40 MHz, Channel: 6405.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6411.313 MHz : -4.985 dBm	Pass

[back to matrix](#)

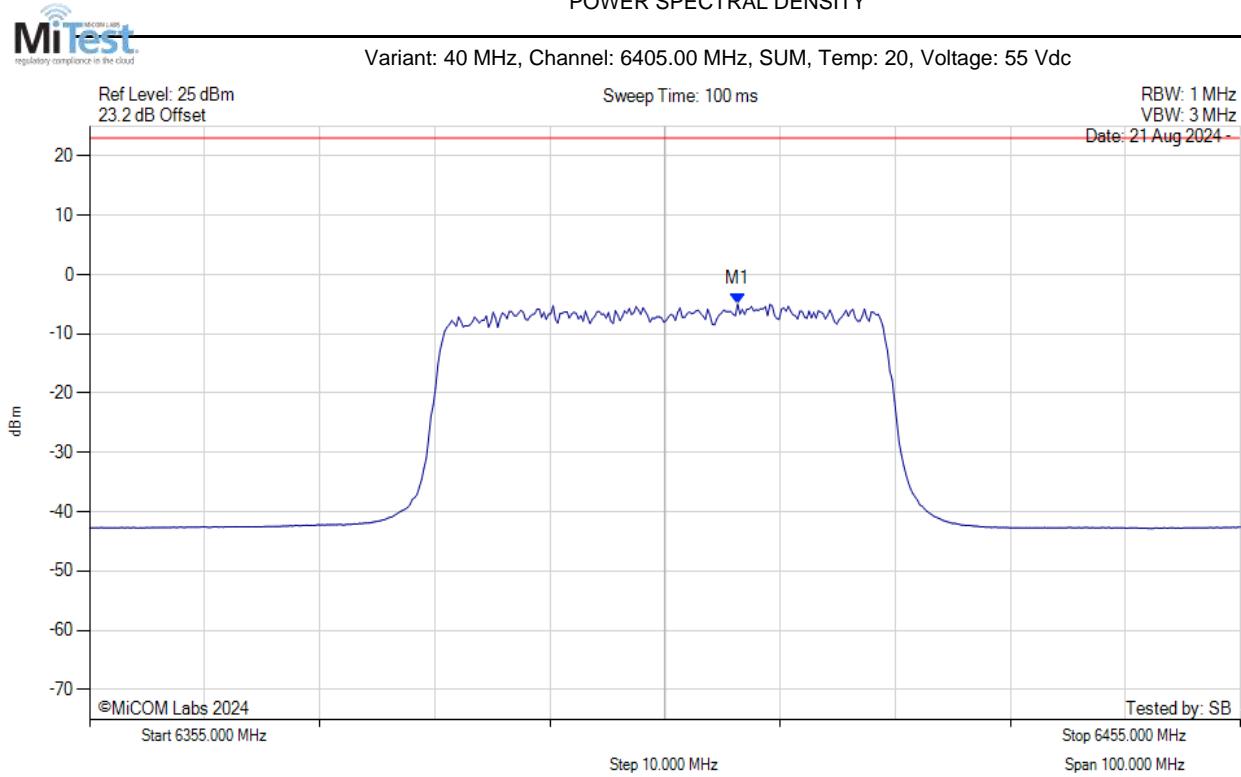
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6402.500 MHz : -2.739 dBm M1 + DCCF : 6402.500 MHz : -2.695 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



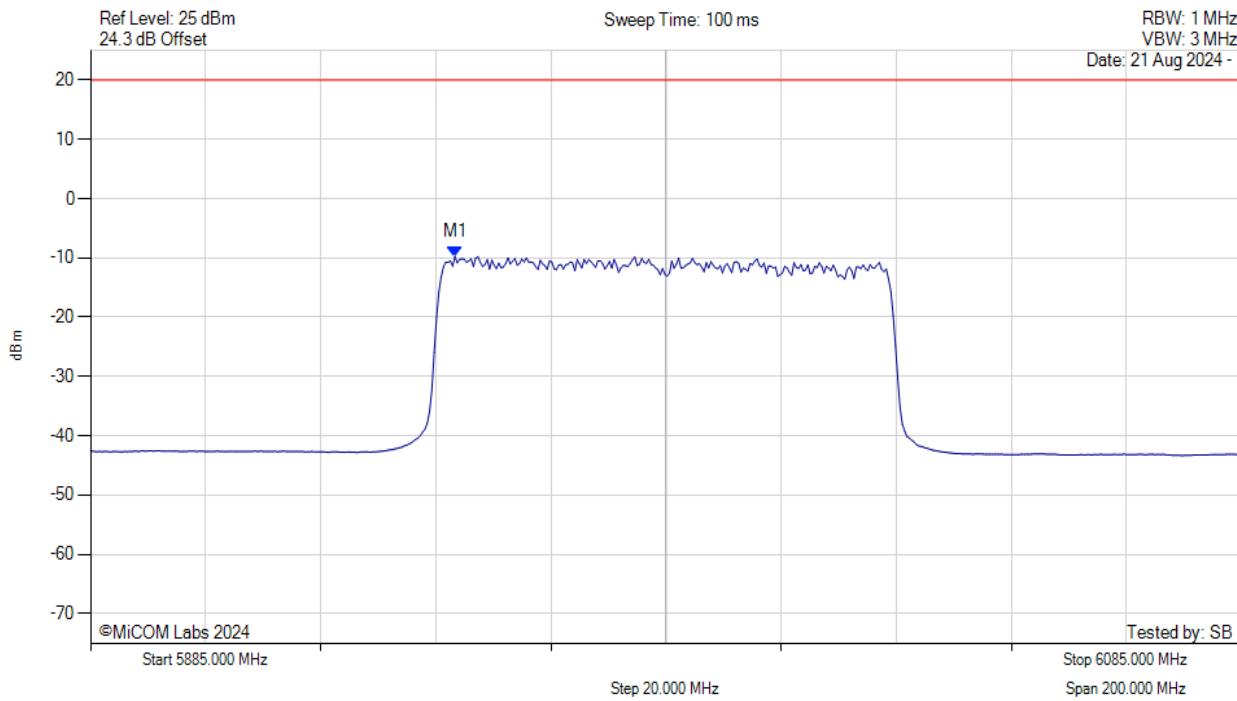
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6411.300 MHz : -4.985 dBm M1 + DCCF : 6411.300 MHz : -4.941 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 80 MHz, Channel: 5985.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



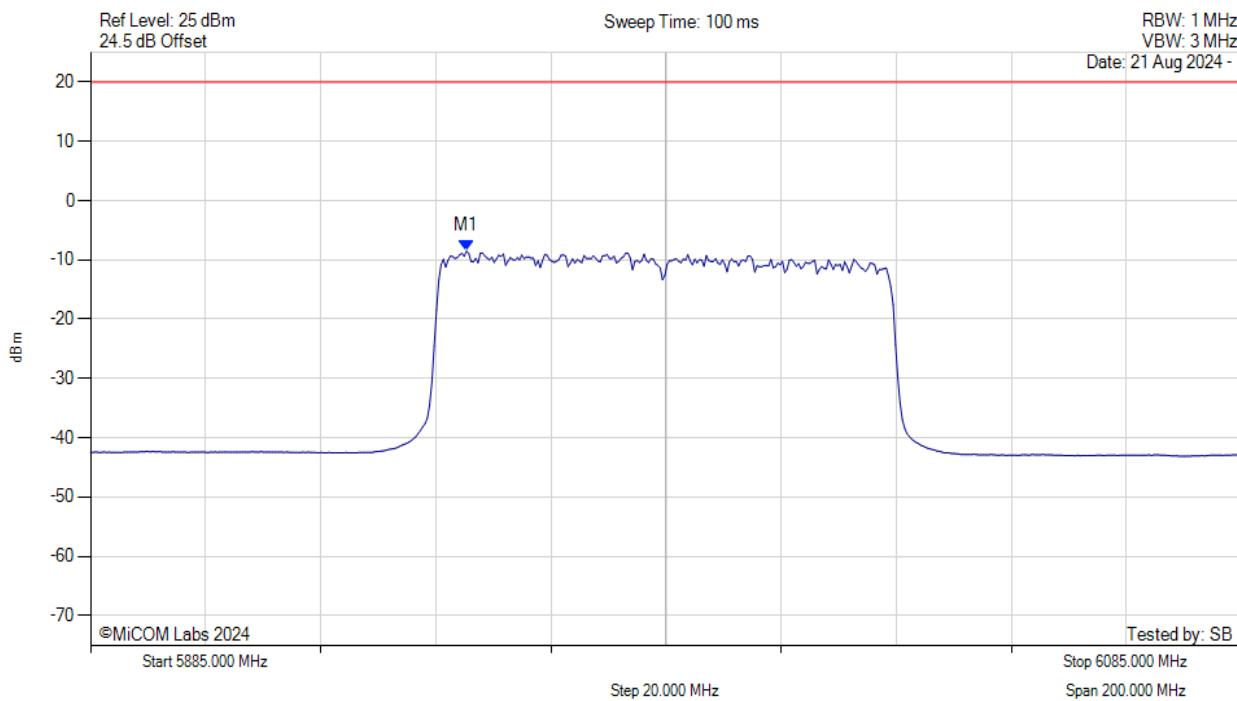
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5948.327 MHz : -9.788 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



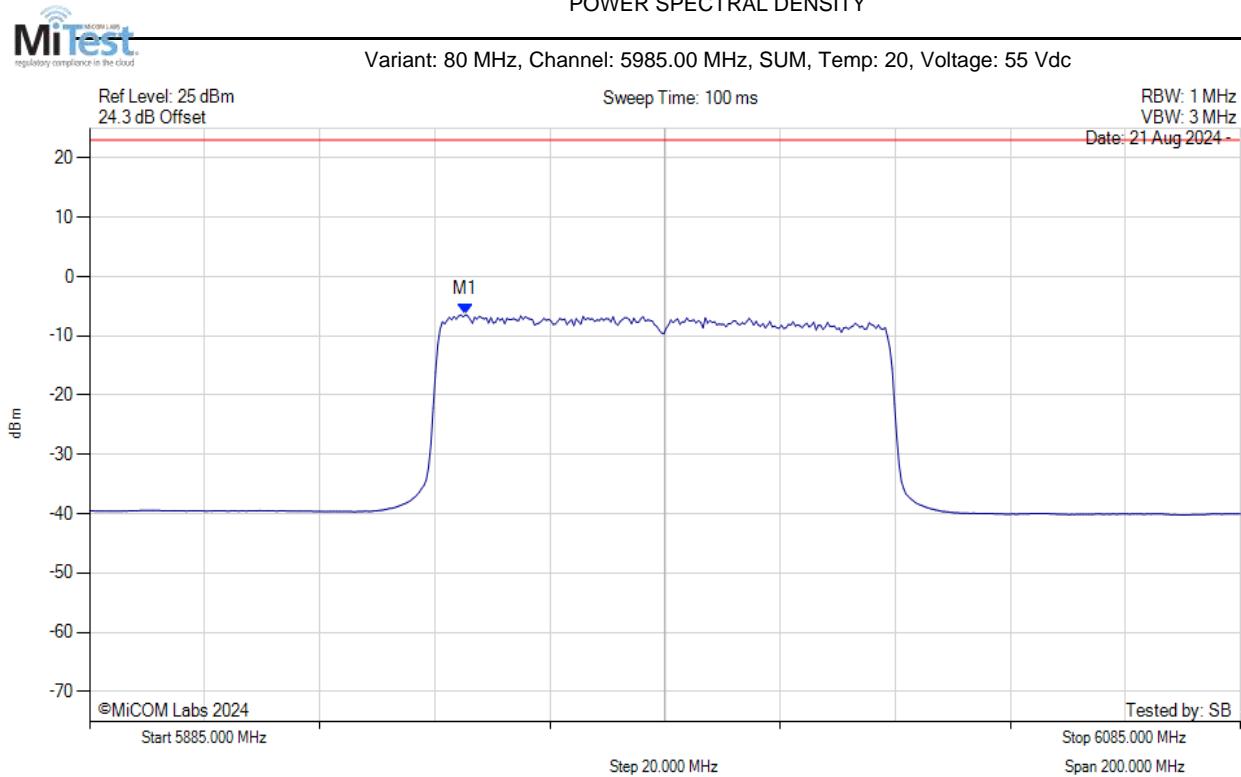
Variant: 80 MHz, Channel: 5985.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.331 MHz : -8.481 dBm	Pass

[back to matrix](#)

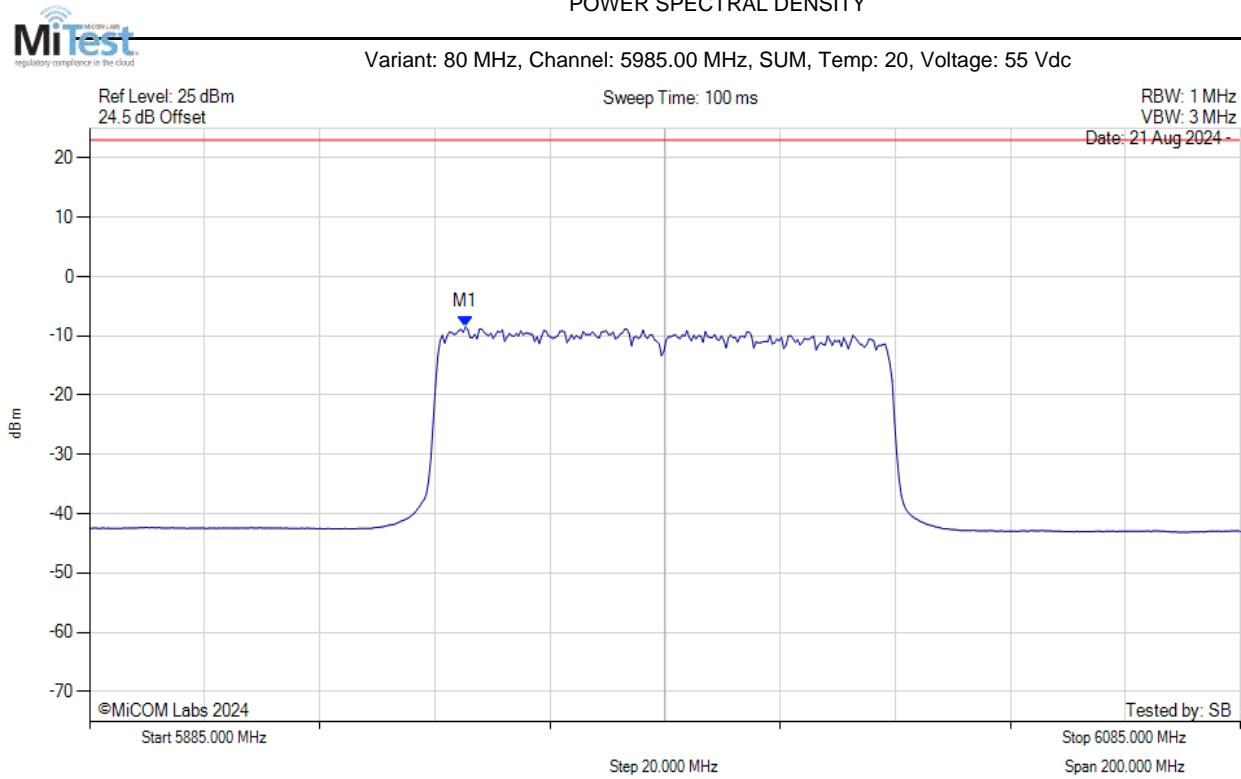
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.300 MHz : -6.445 dBm M1 + DCCF : 5950.300 MHz : -6.401 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



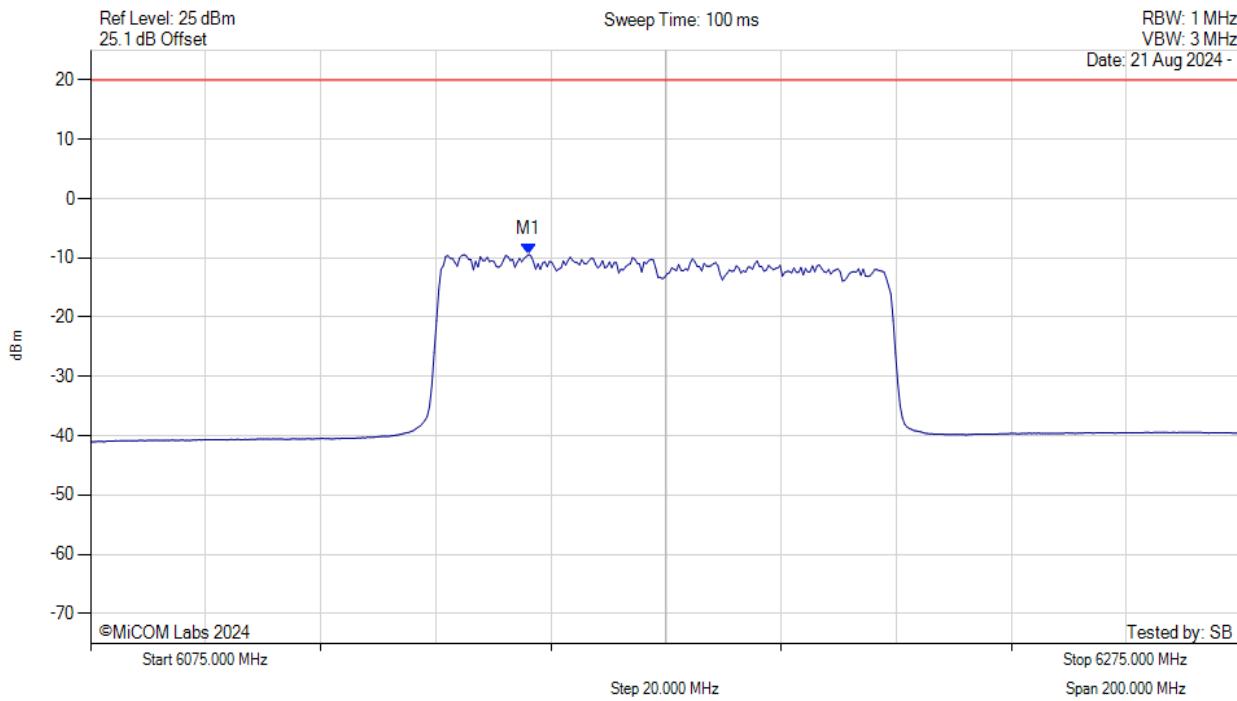
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5950.300 MHz : -8.481 dBm M1 + DCCF : 5950.300 MHz : -8.437 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 80 MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



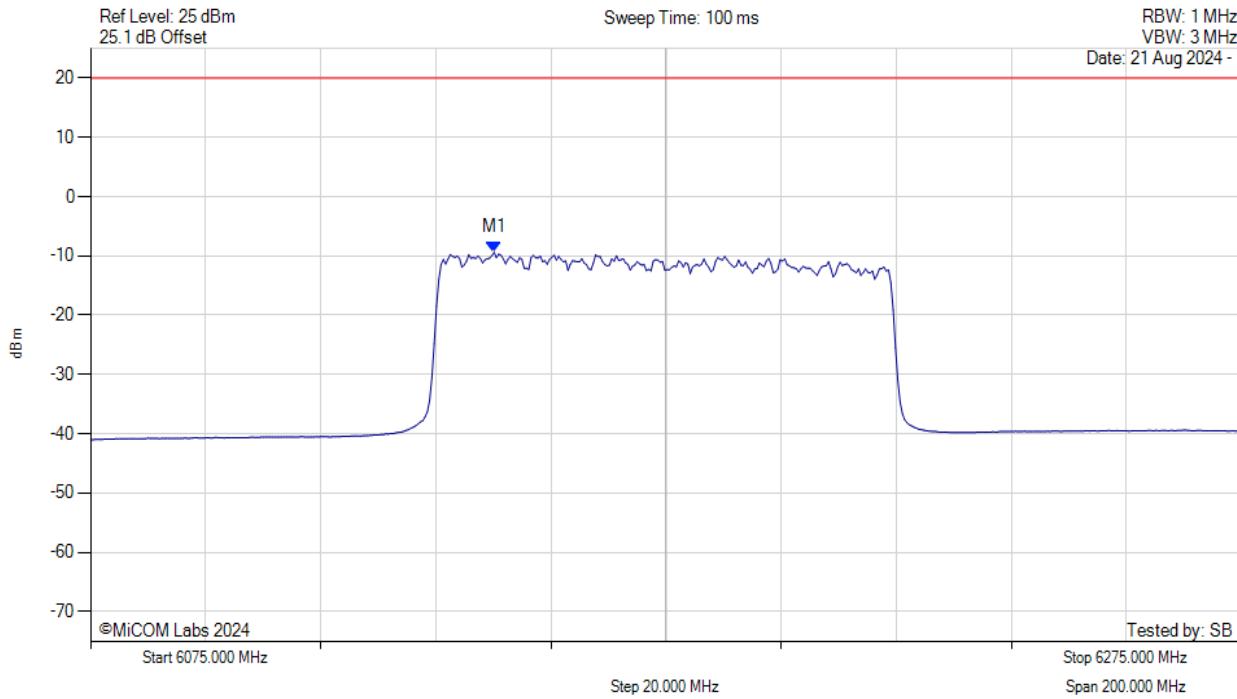
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6151.152 MHz : -9.419 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



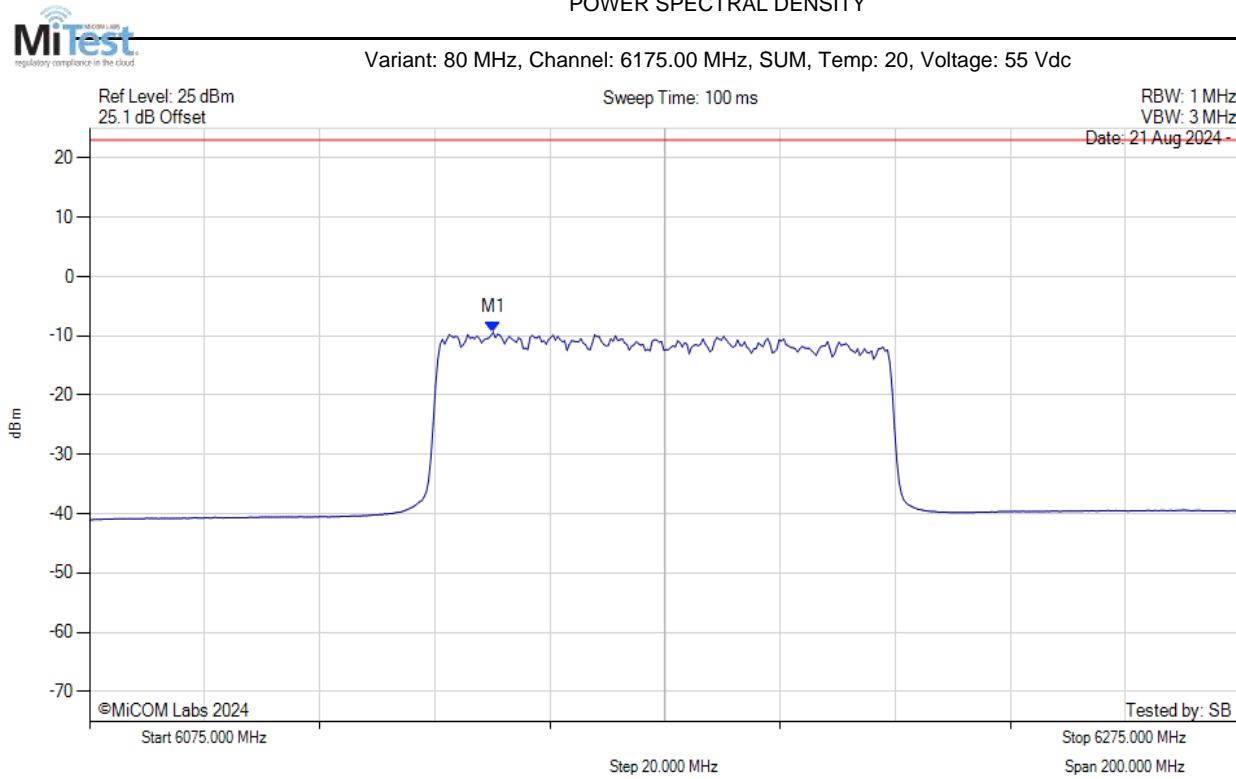
Variant: 80 MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6145.140 MHz : -9.405 dBm	Pass

[back to matrix](#)

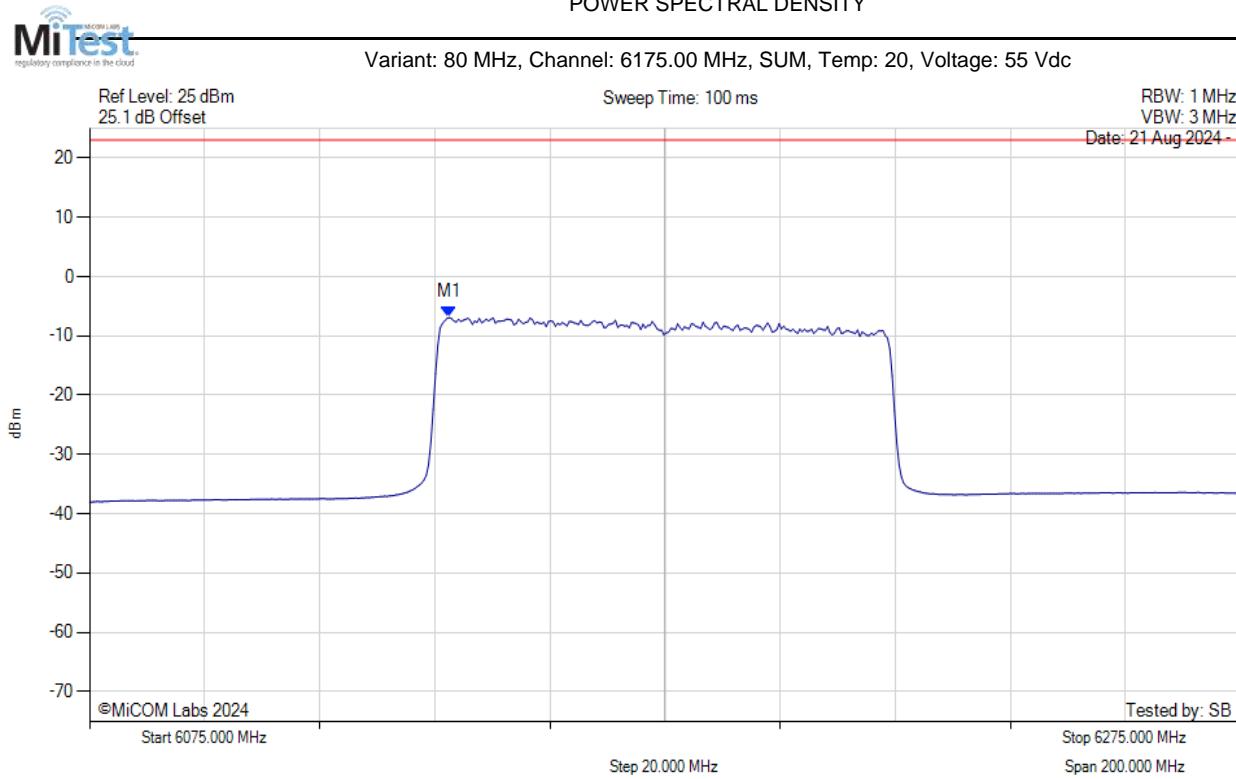
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6145.100 MHz : -9.405 dBm M1 + DCCF : 6145.100 MHz : -9.361 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



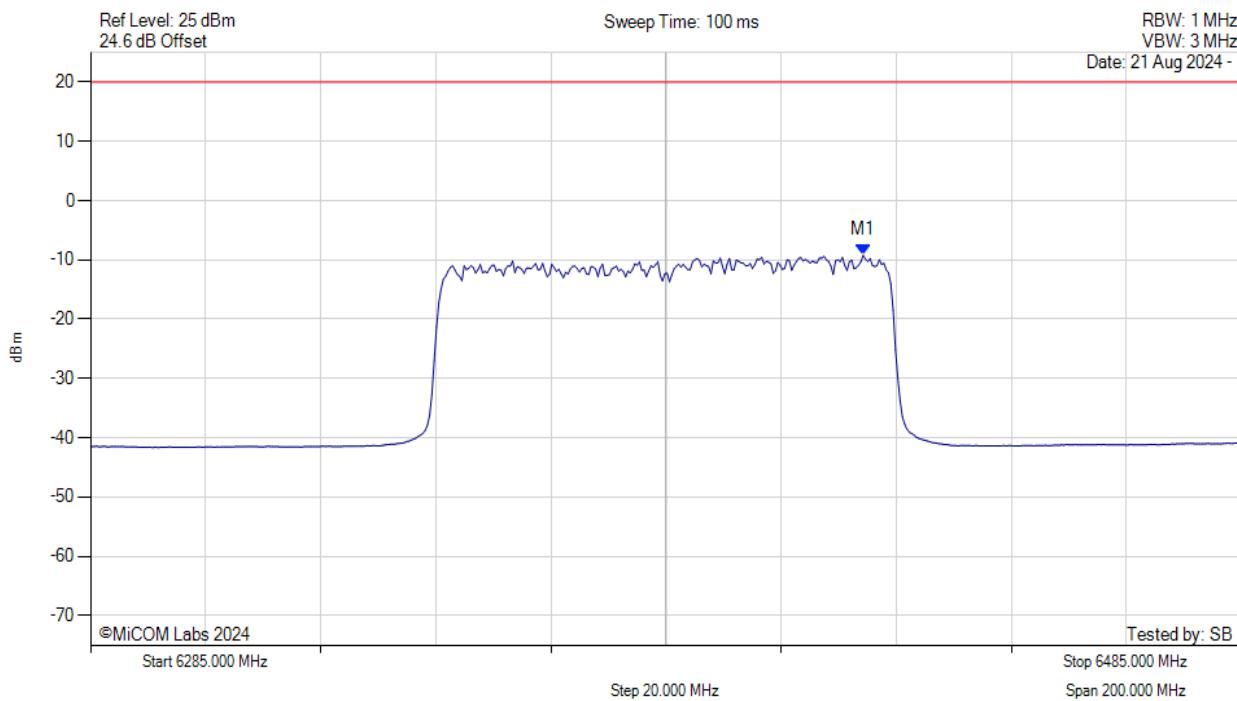
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6137.500 MHz : -6.911 dBm M1 + DCCF : 6137.500 MHz : -6.867 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



Variant: 80 MHz, Channel: 6385.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



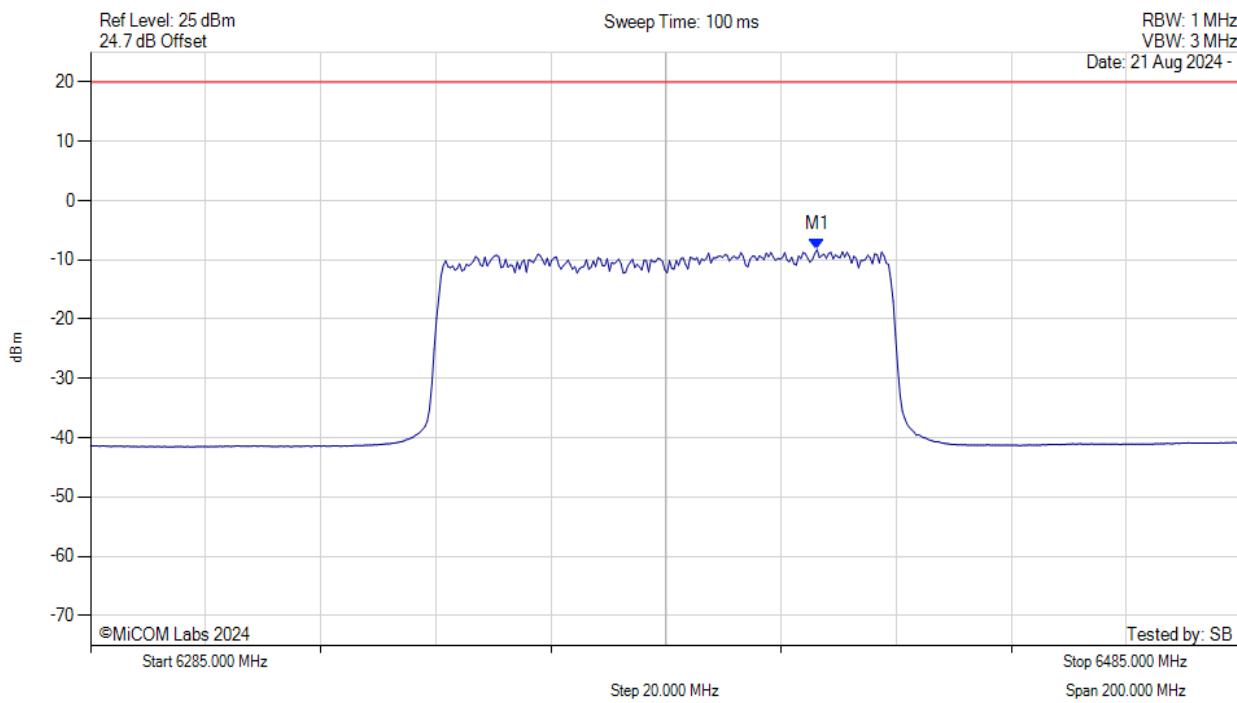
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6419.269 MHz : -9.213 dBm	Pass

[back to matrix](#)

POWER SPECTRAL DENSITY



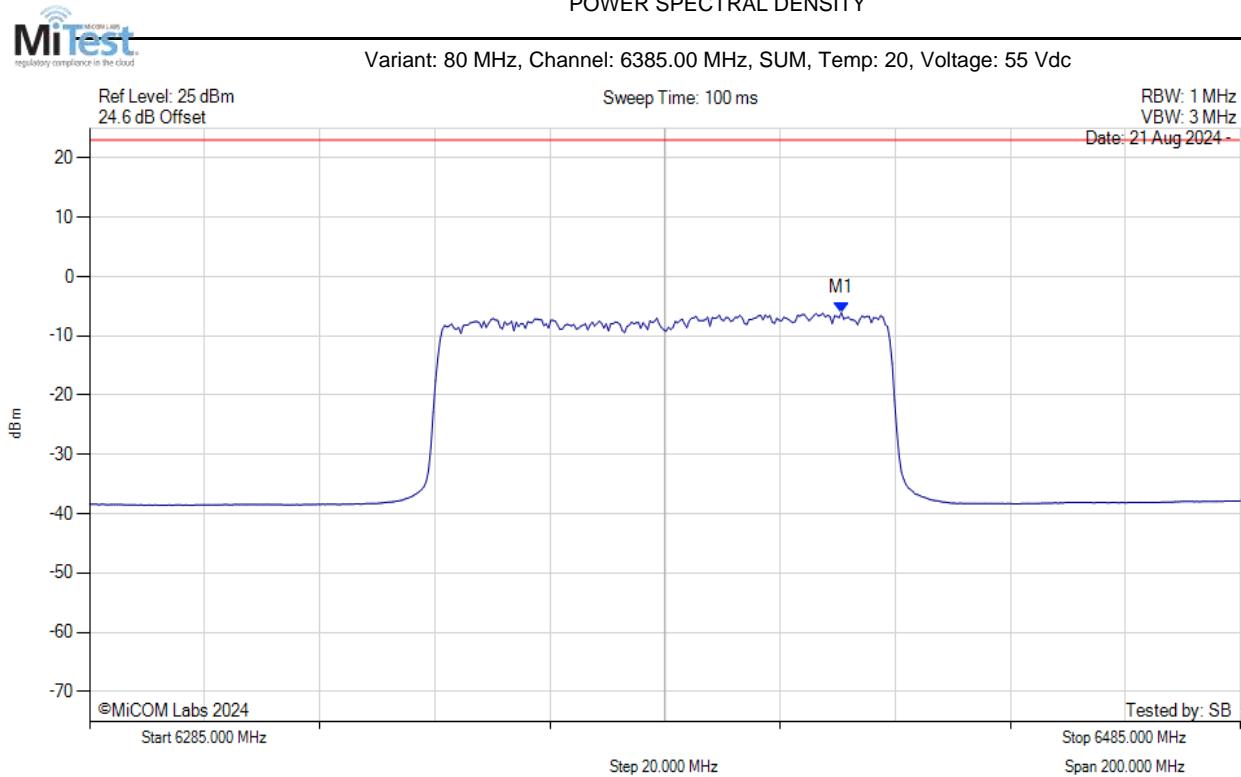
Variant: 80 MHz, Channel: 6385.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6411.253 MHz : -8.266 dBm	Pass

[back to matrix](#)

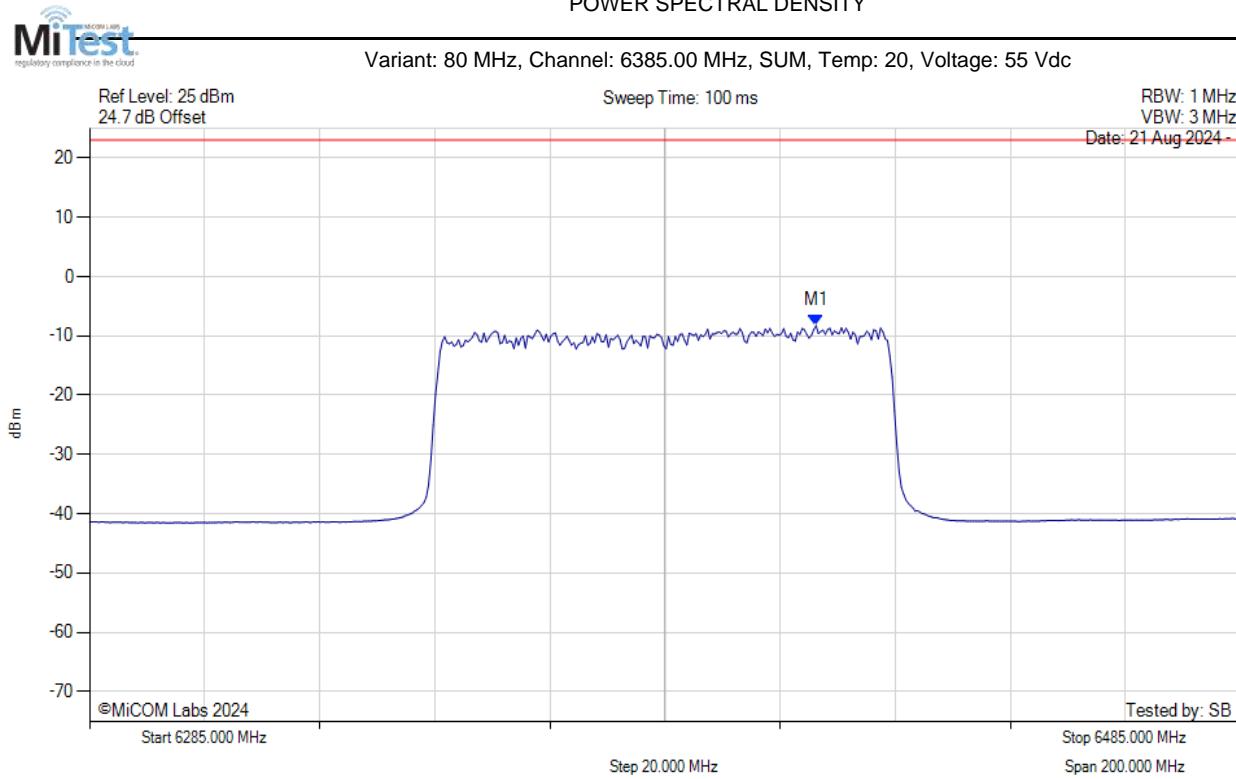
POWER SPECTRAL DENSITY



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6415.700 MHz : -6.093 dBm M1 + DCCF : 6415.700 MHz : -6.049 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

[back to matrix](#)

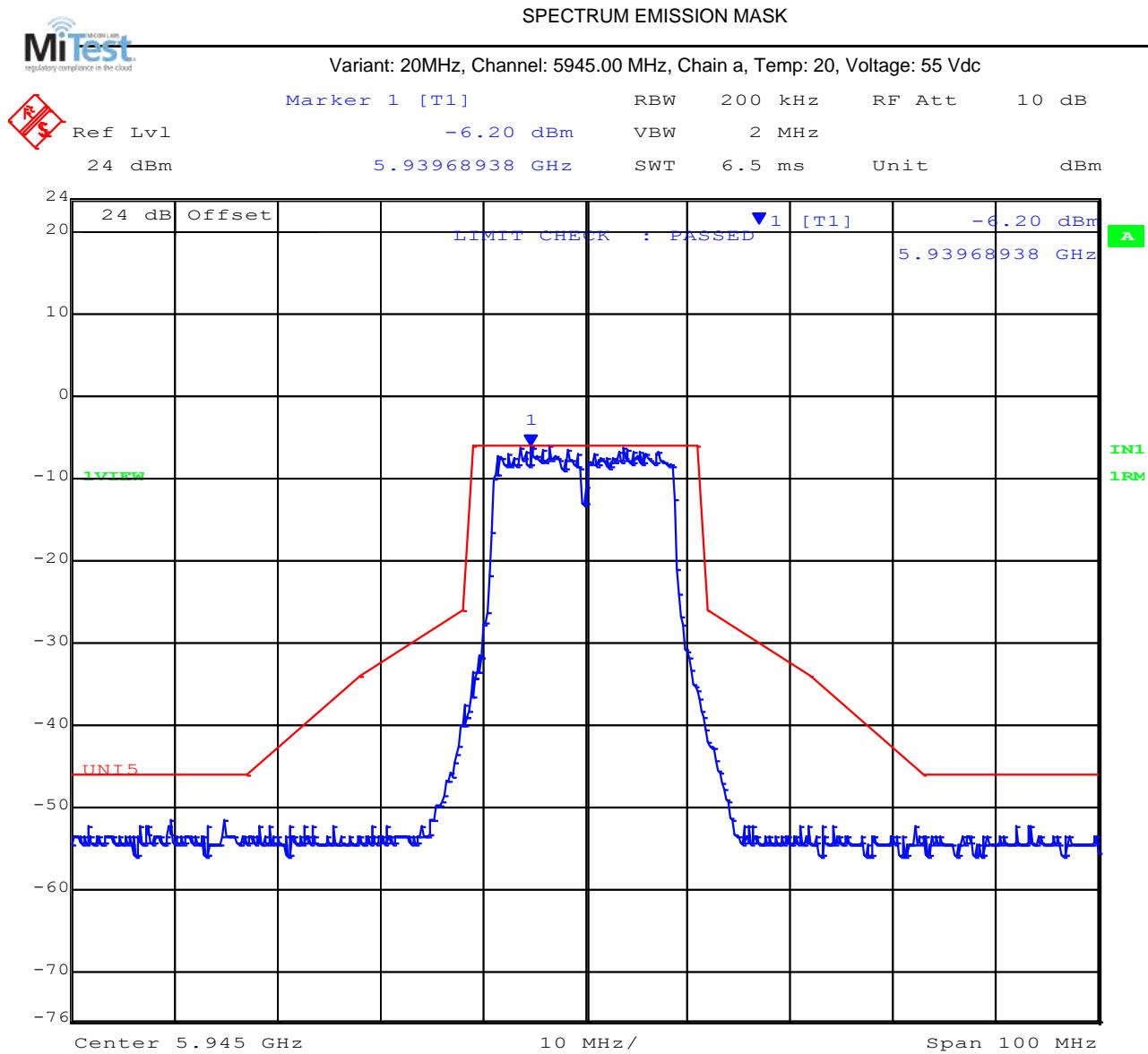
POWER SPECTRAL DENSITY



[back to matrix](#)

Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 6411.300 MHz : -8.266 dBm M1 + DCCF : 6411.300 MHz : -8.222 dBm Duty Cycle Correction Factor : +0.04 dB	Pass

A.3. Spectrum Emission Mask



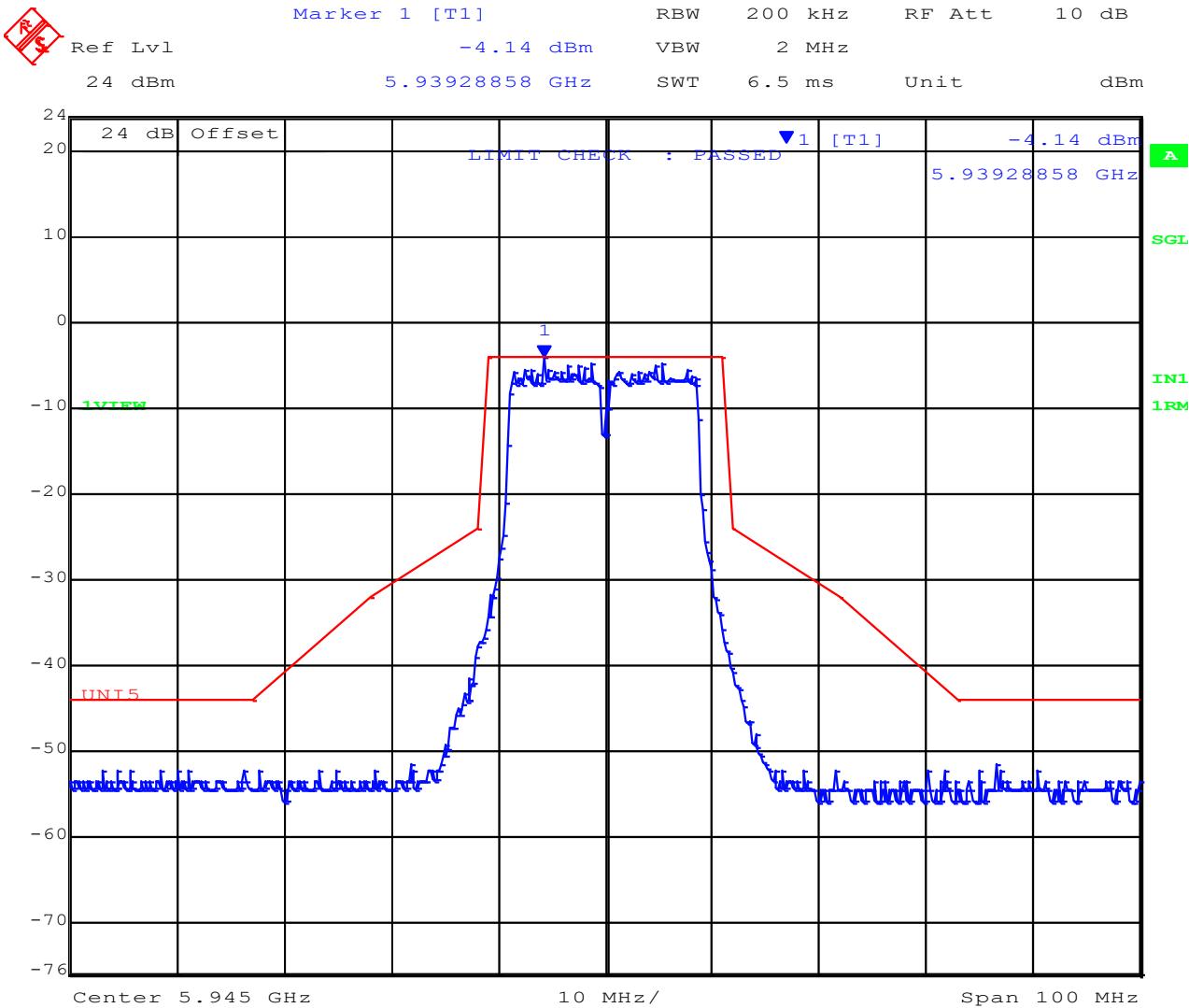
Date: 26.AUG.2024 08:50:33

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 20MHz, Channel: 5945.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



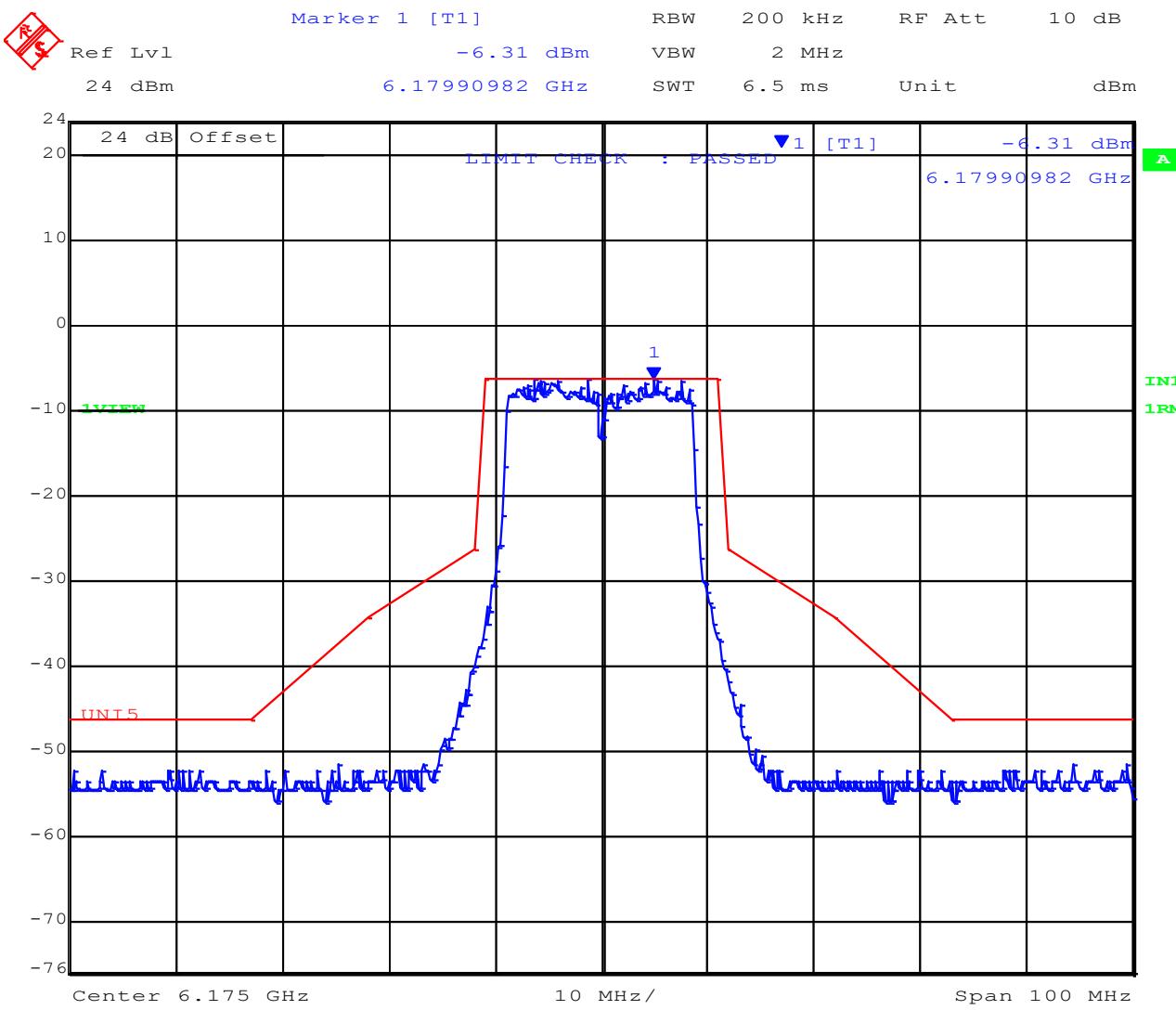
Date: 26 . AUG . 2024 09 : 54 : 22

[back to matrix](#)

SPECTRUM EMISSION MASK



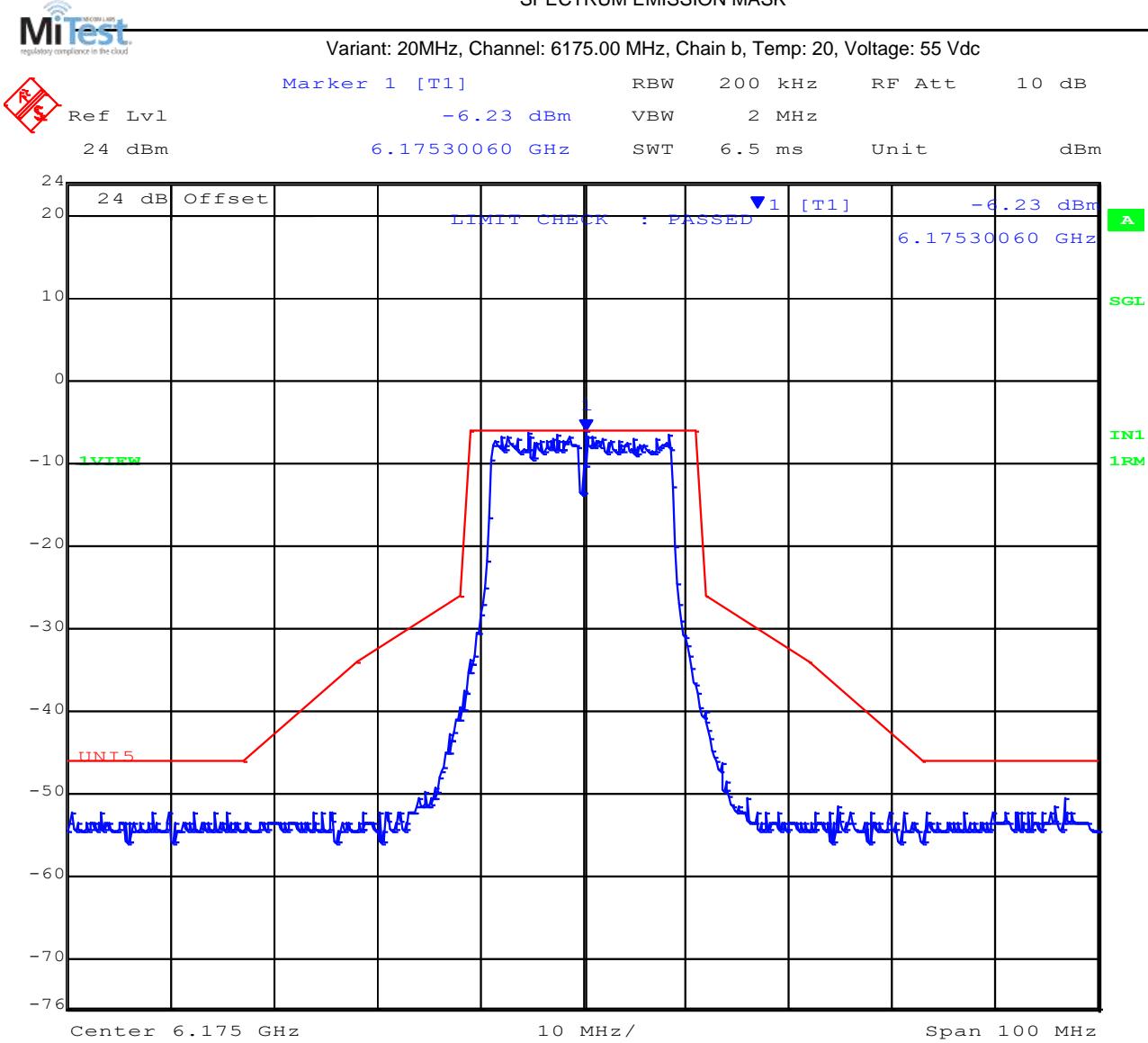
Variant: 20MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Date: 26.AUG.2024 08:49:08

[back to matrix](#)

SPECTRUM EMISSION MASK



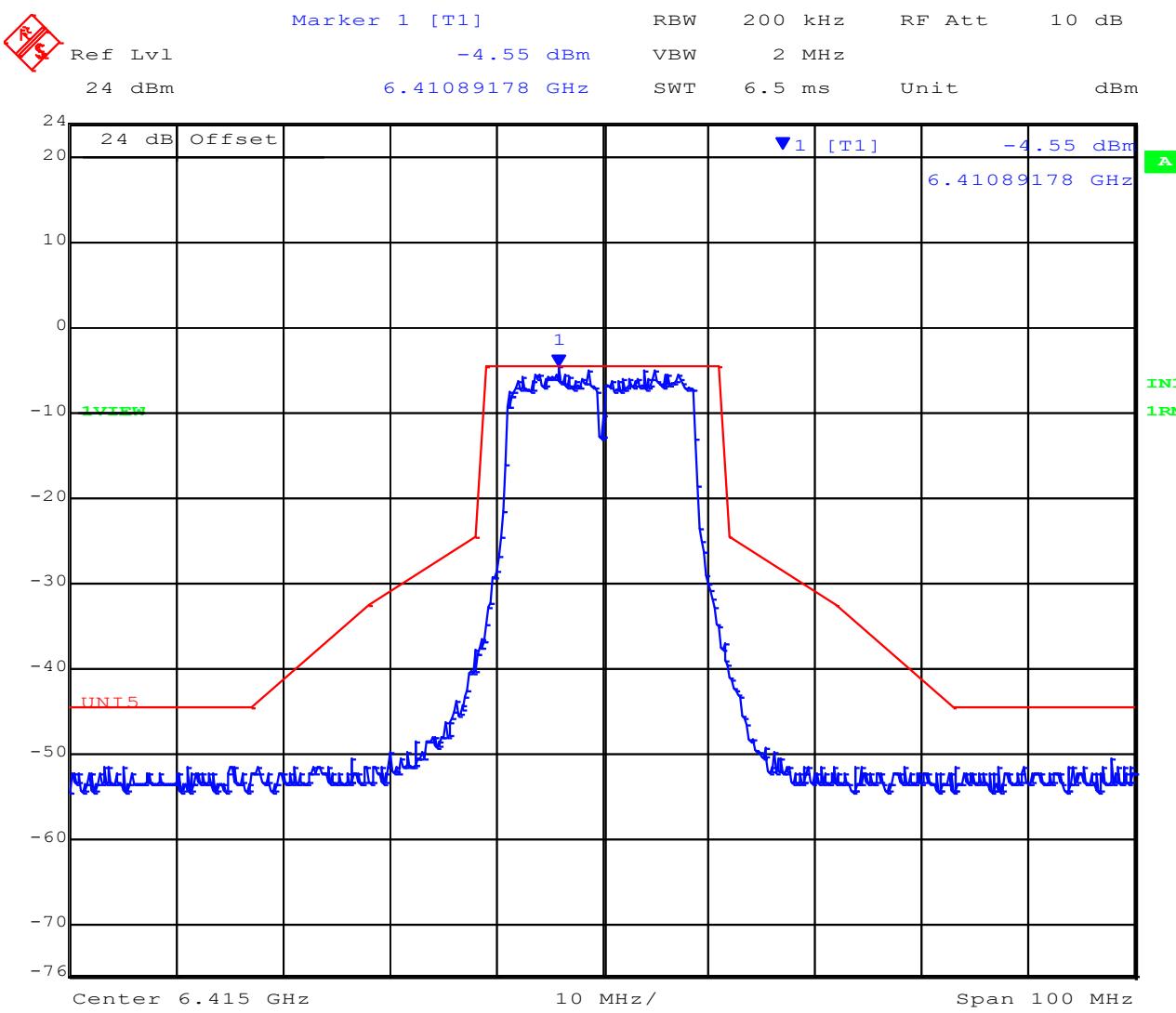
Date: 26.AUG.2024 09:55:59

[back to matrix](#)

SPECTRUM EMISSION MASK



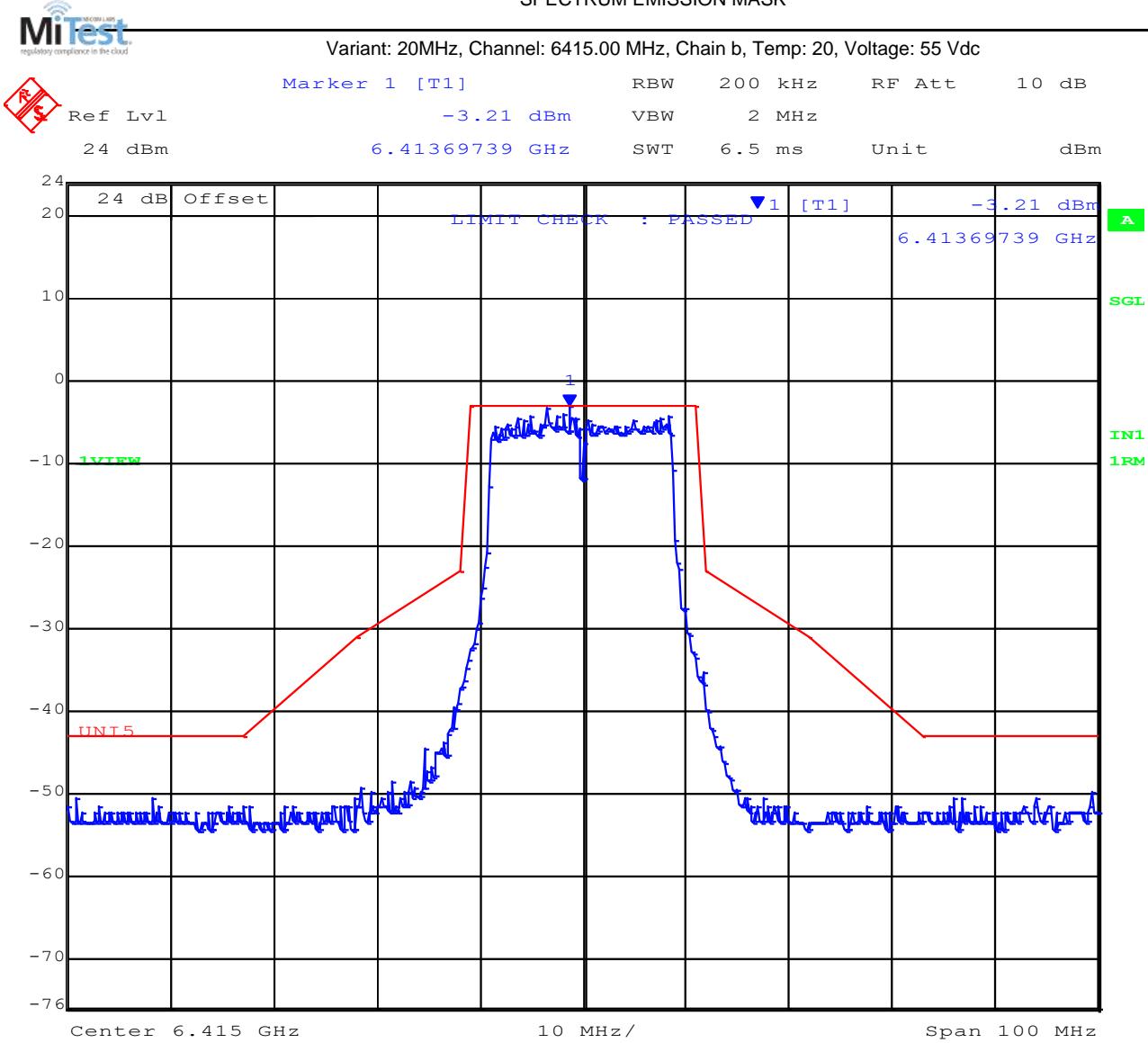
Variant: 20MHz, Channel: 6415.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Date: 26.AUG.2024 08:51:57

[back to matrix](#)

SPECTRUM EMISSION MASK



Date: 26.AUG.2024 09:58:20

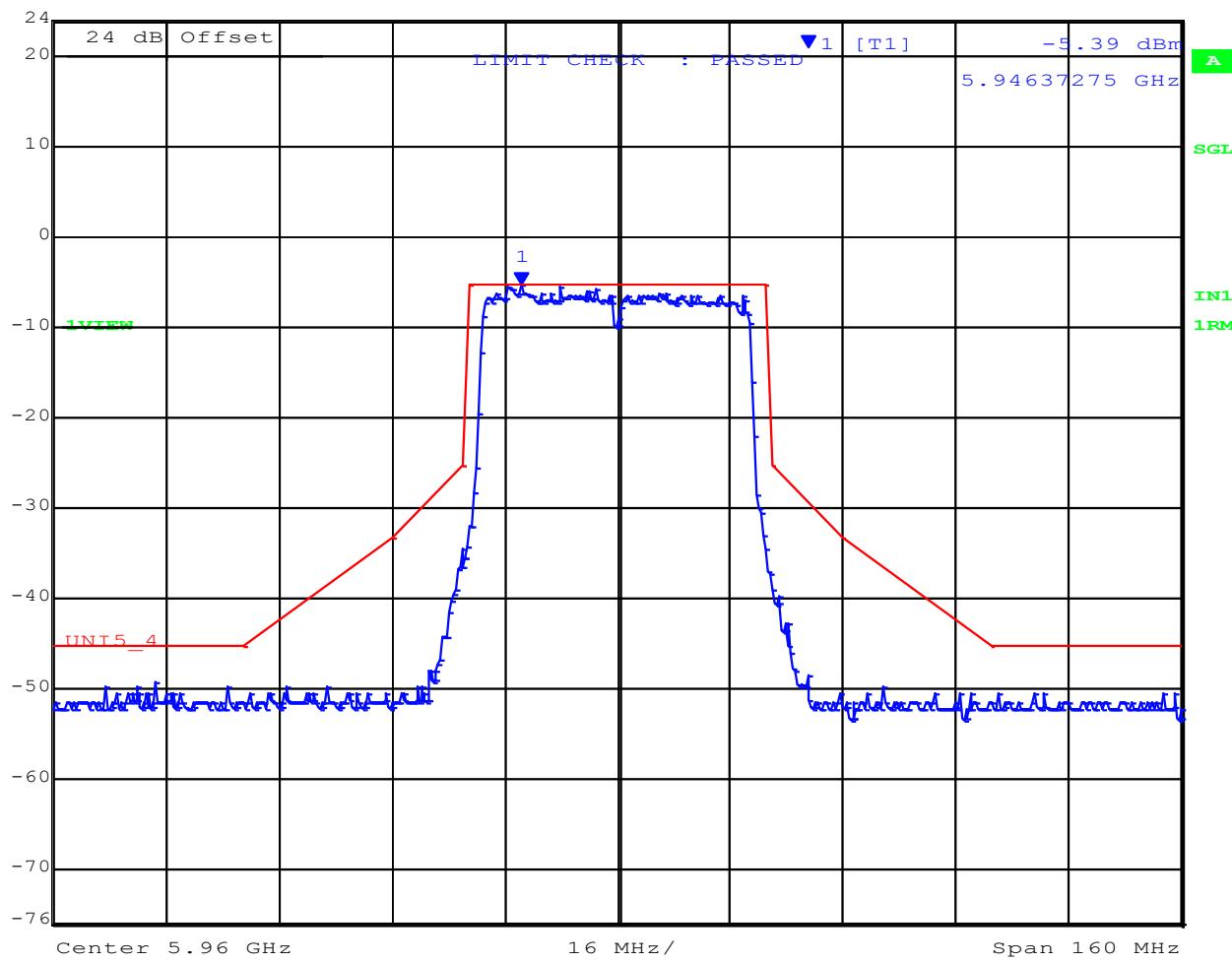
[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 5960.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc

Marker 1 [T1]		RBW	500 kHz	RF Att	10 dB
 Ref Lvl	-5.39 dBm	VBW	5 MHz		
24 dBm	5.94637275 GHz	SWT	5 ms	Unit	dBm



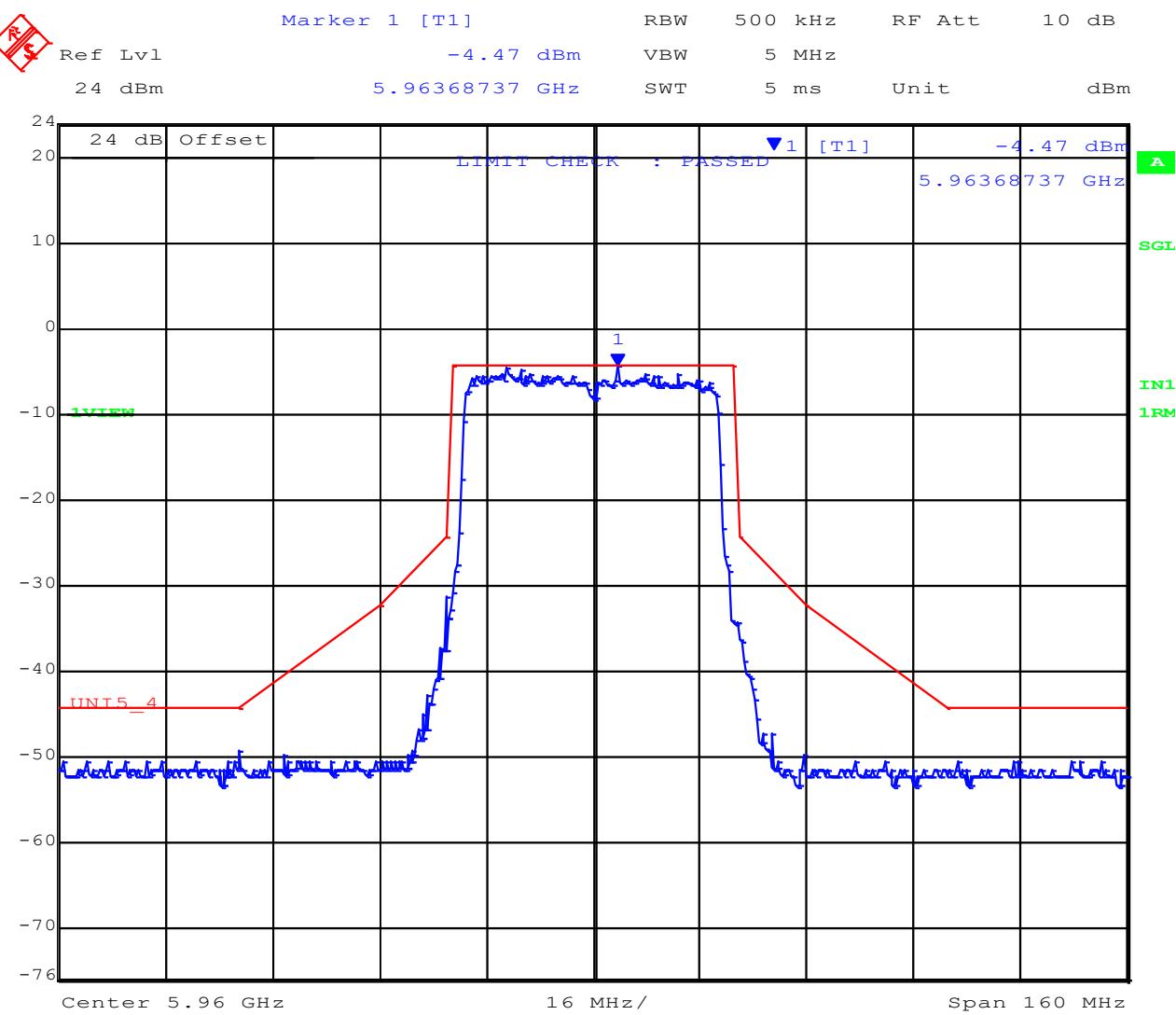
Date: 26.AUG.2024 09:20:25

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 5960.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



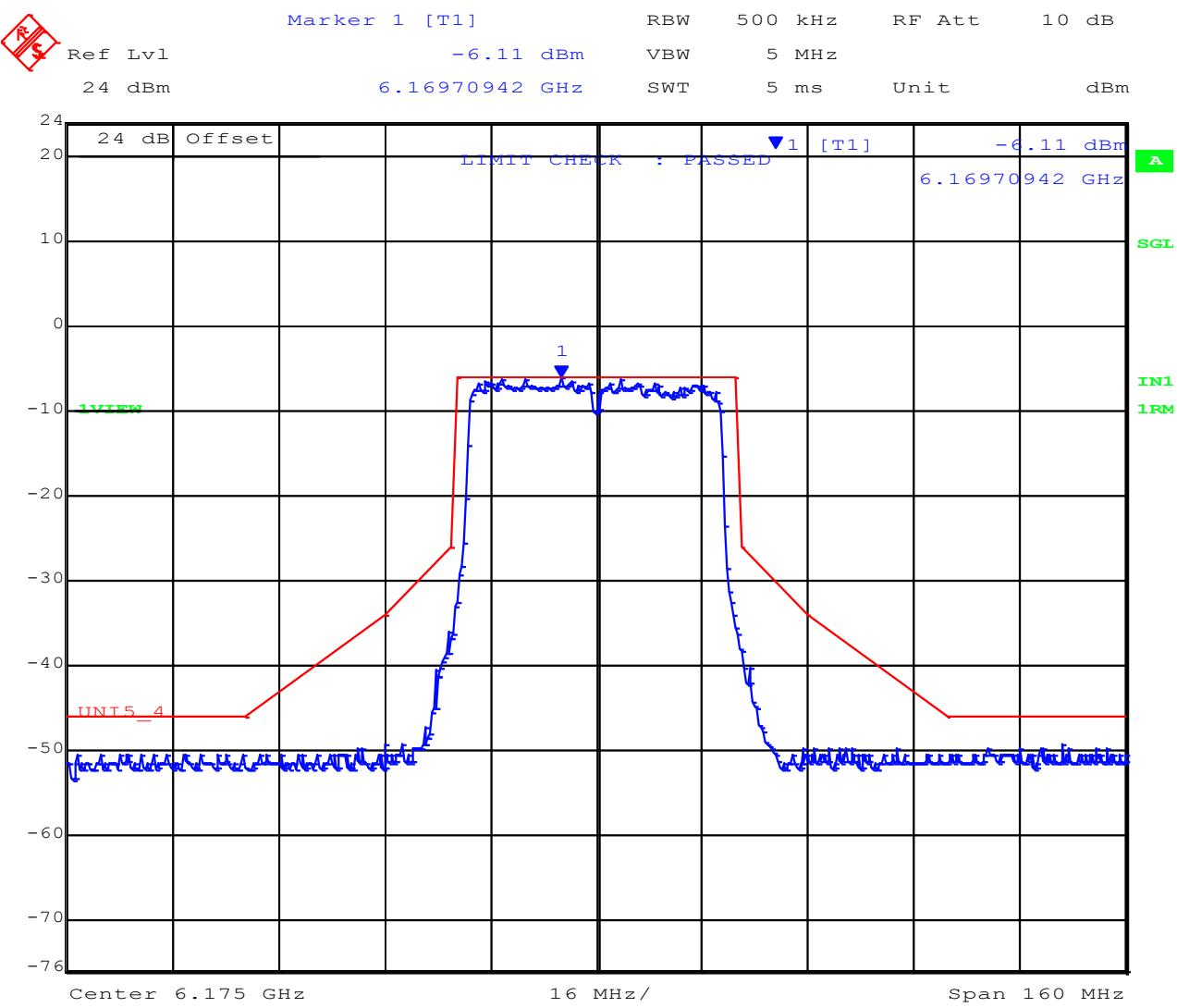
Date: 26.AUG.2024 09:47:27

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



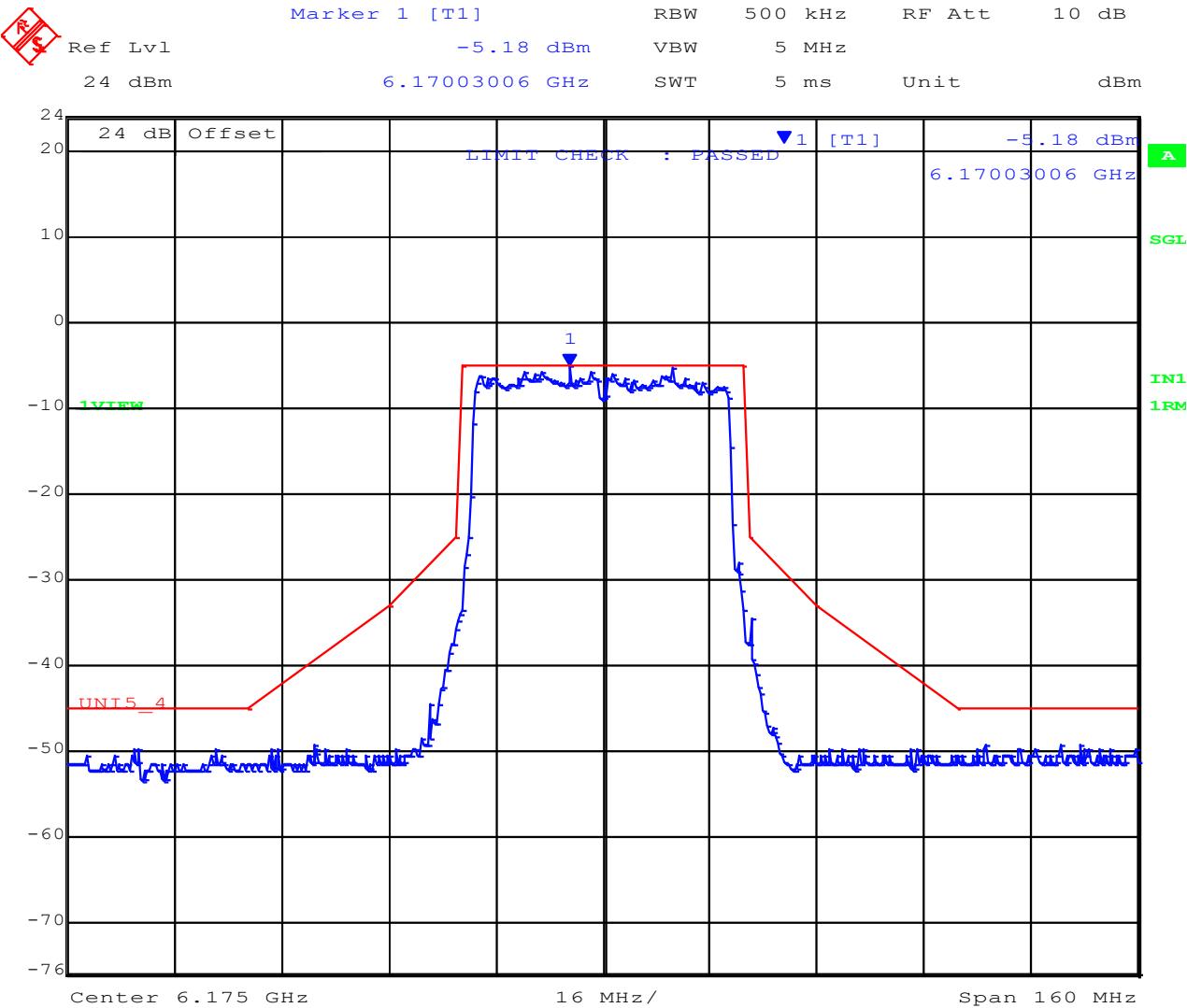
Date: 26.AUG.2024 09:40:34

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



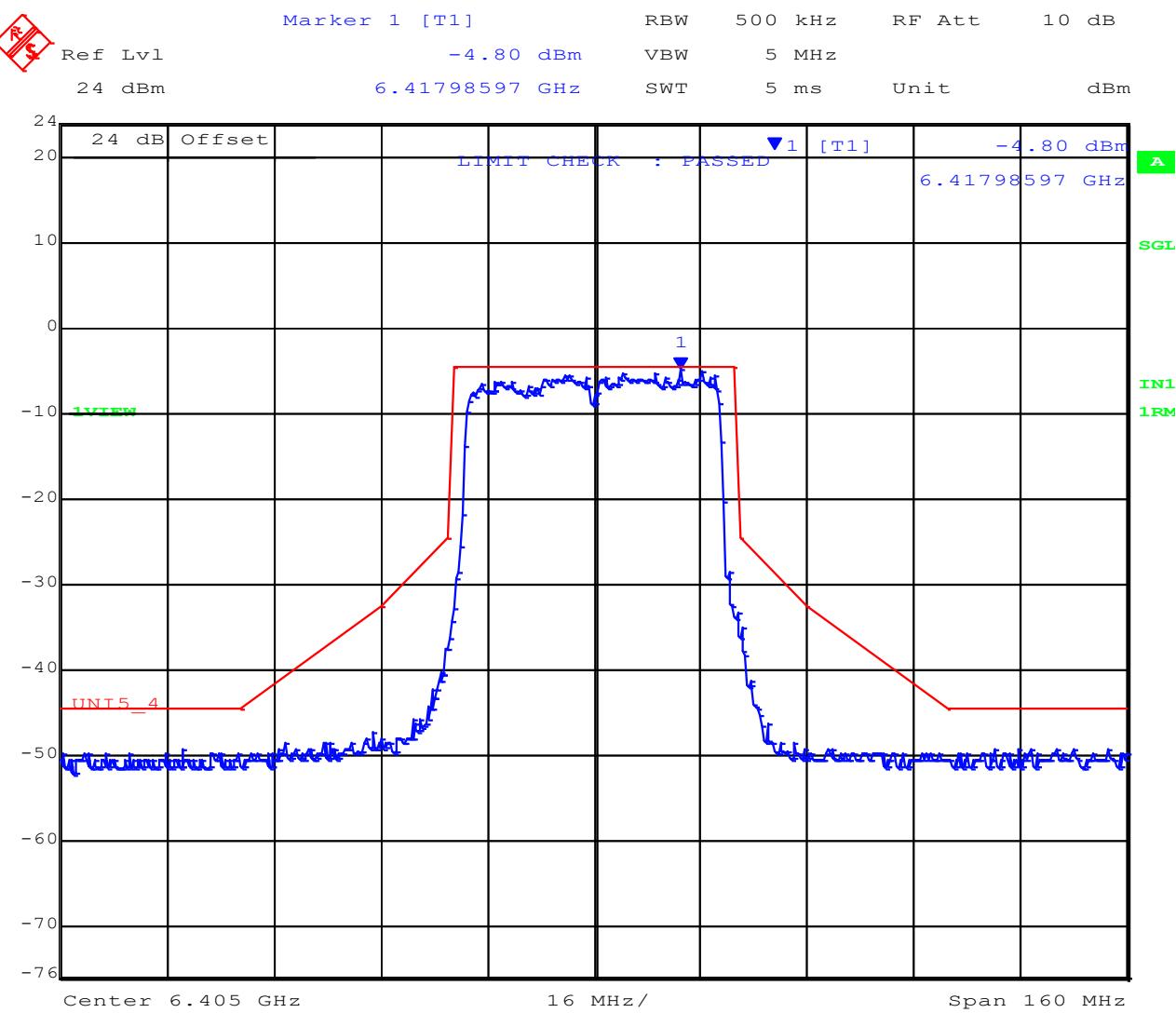
Date: 26 . AUG . 2024 09 : 45 : 59

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 6405.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



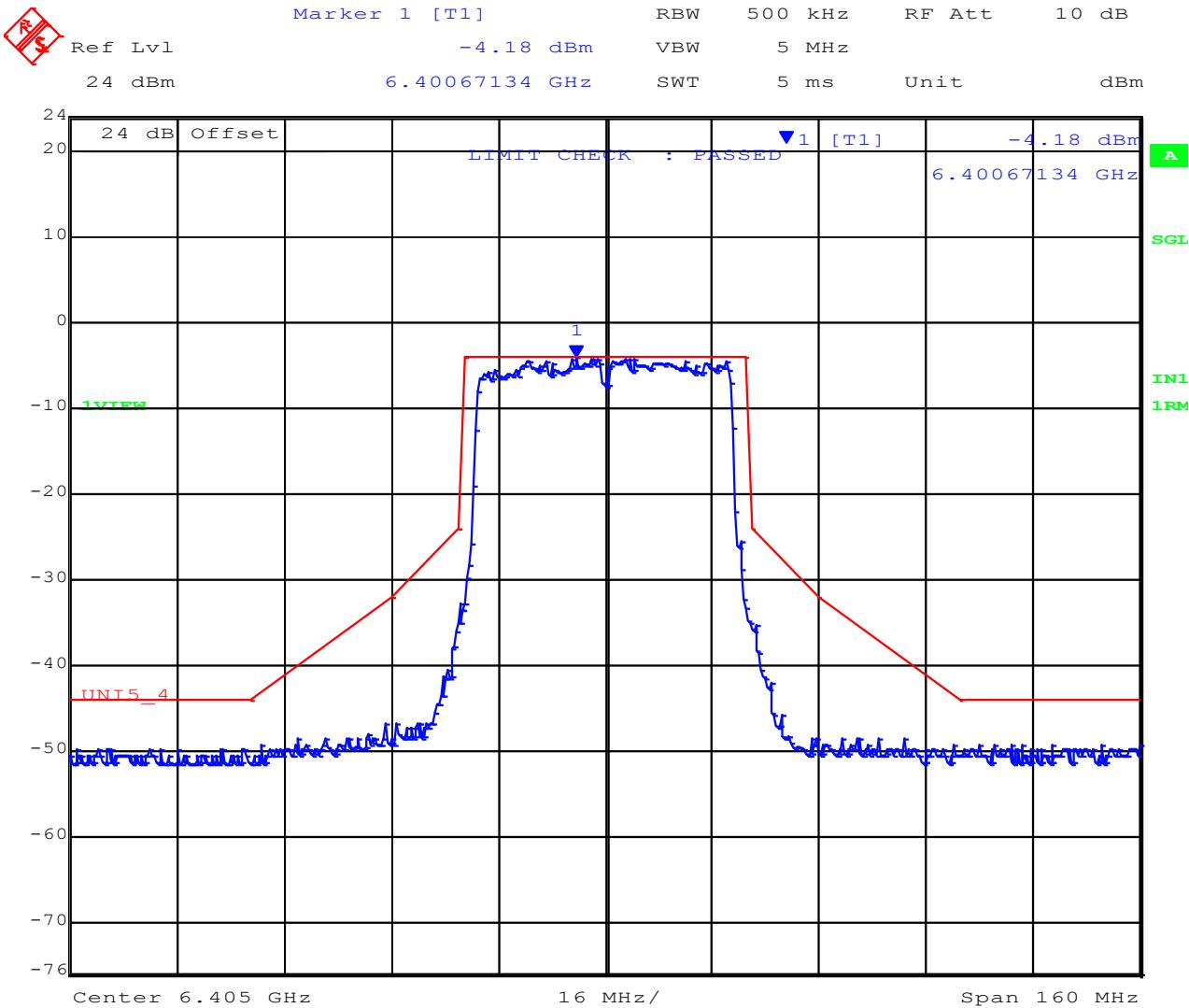
Date: 26.AUG.2024 09:42:57

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 40MHz, Channel: 6405.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



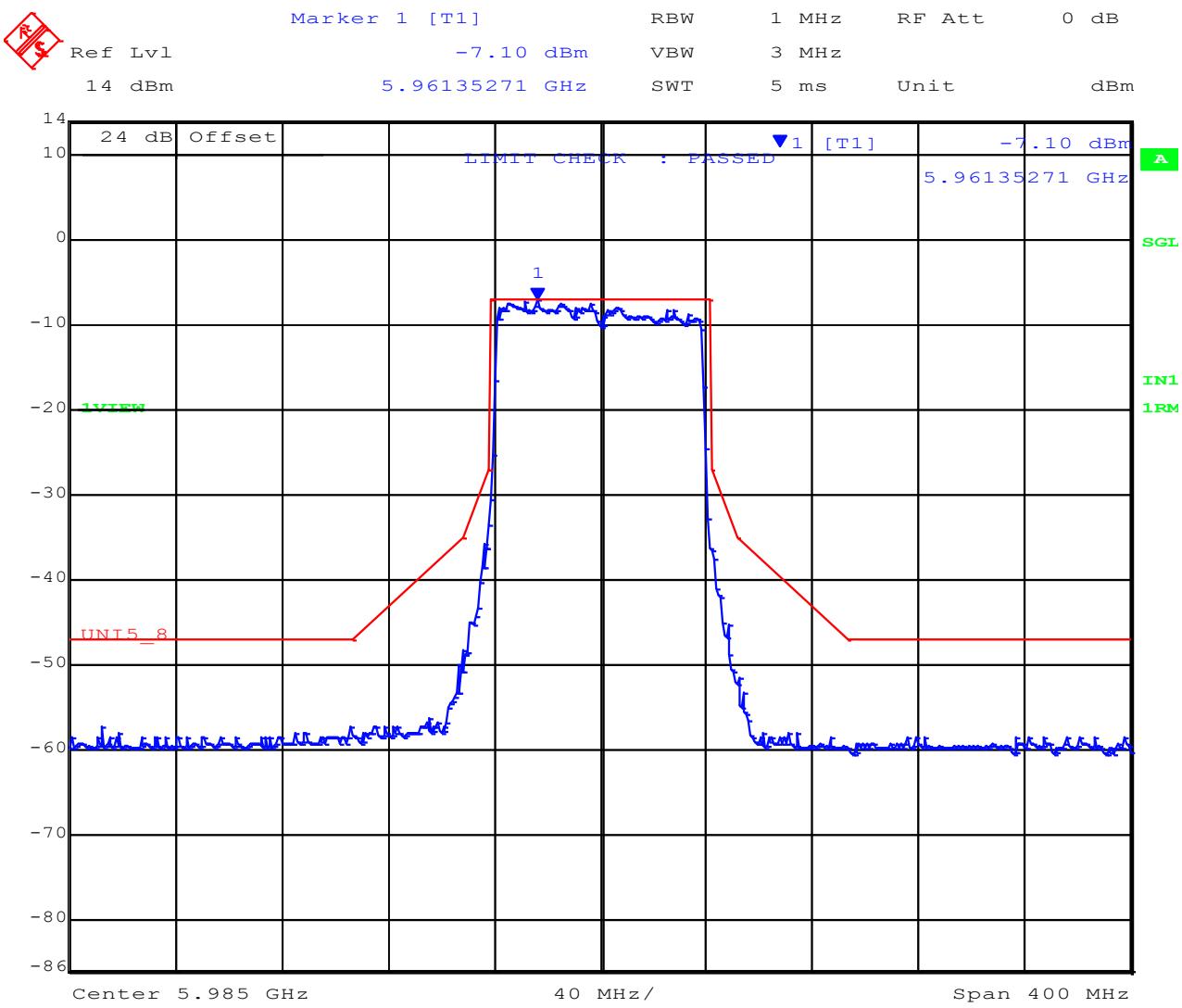
Date: 26 . AUG . 2024 09 : 44 : 01

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 80MHz, Channel: 5985.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



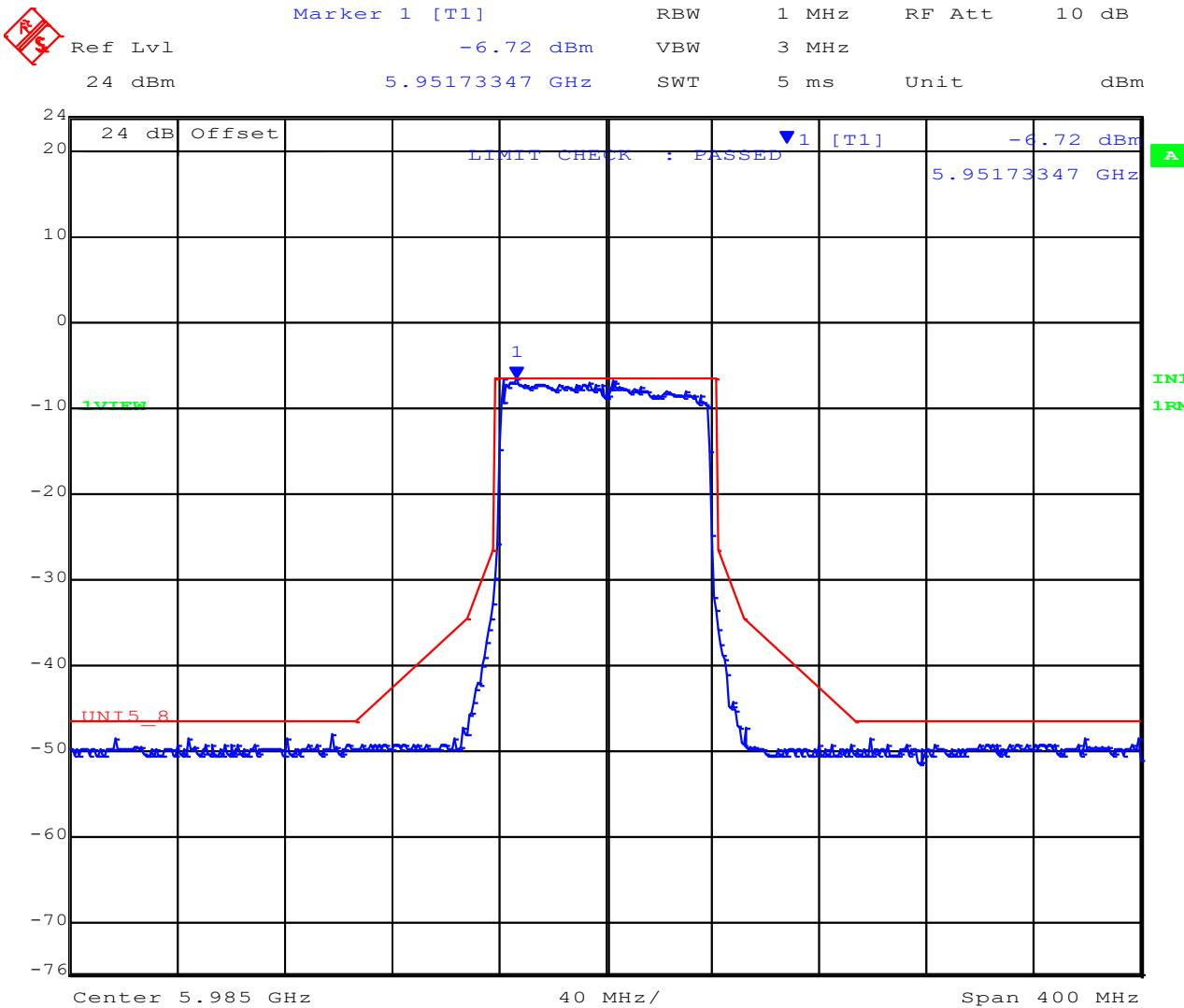
Date: 26.AUG.2024 13:24:31

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 80MHz, Channel: 5985.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



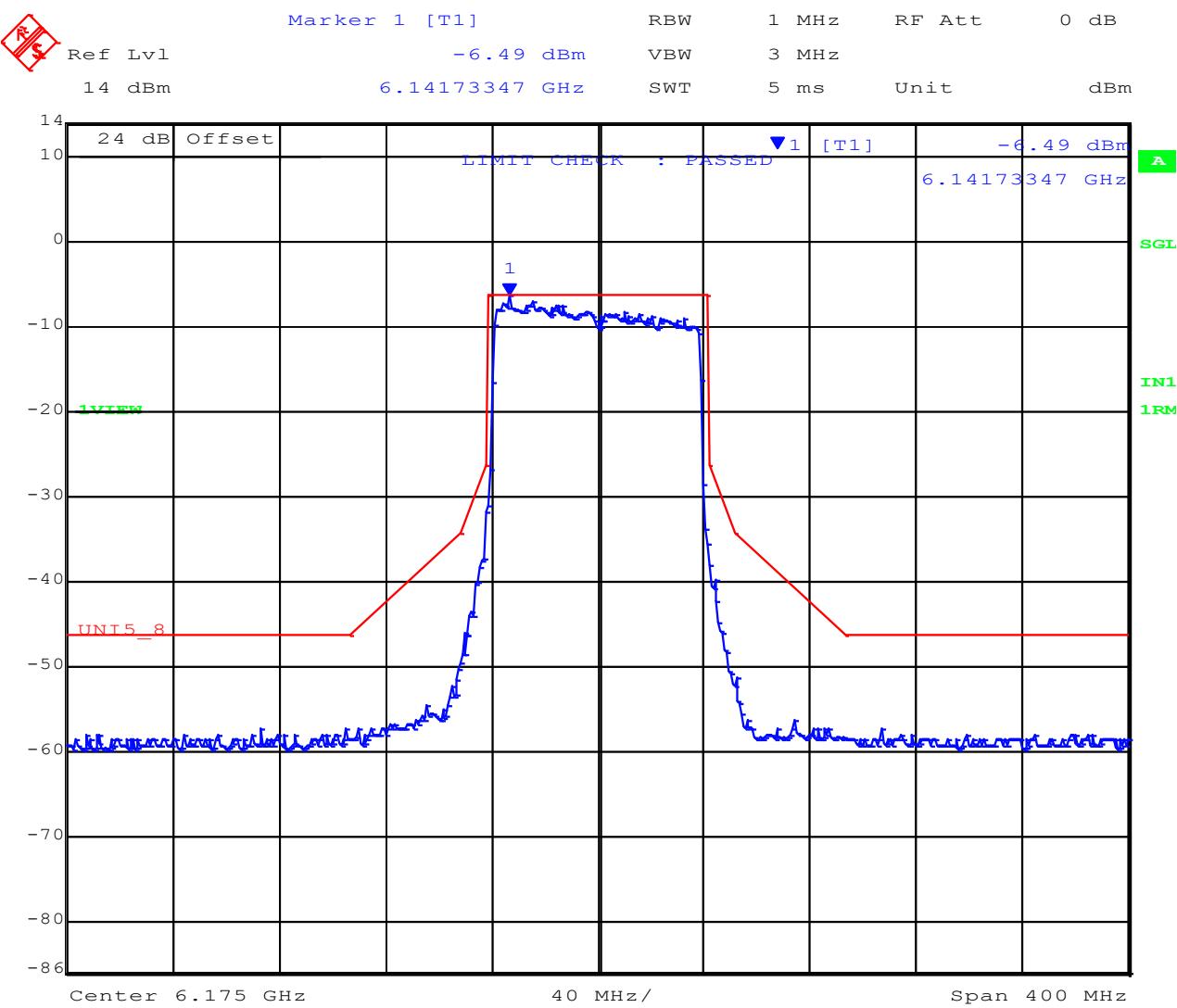
Date: 26 . AUG . 2024 12 : 33 : 58

[back to matrix](#)

SPECTRUM EMISSION MASK



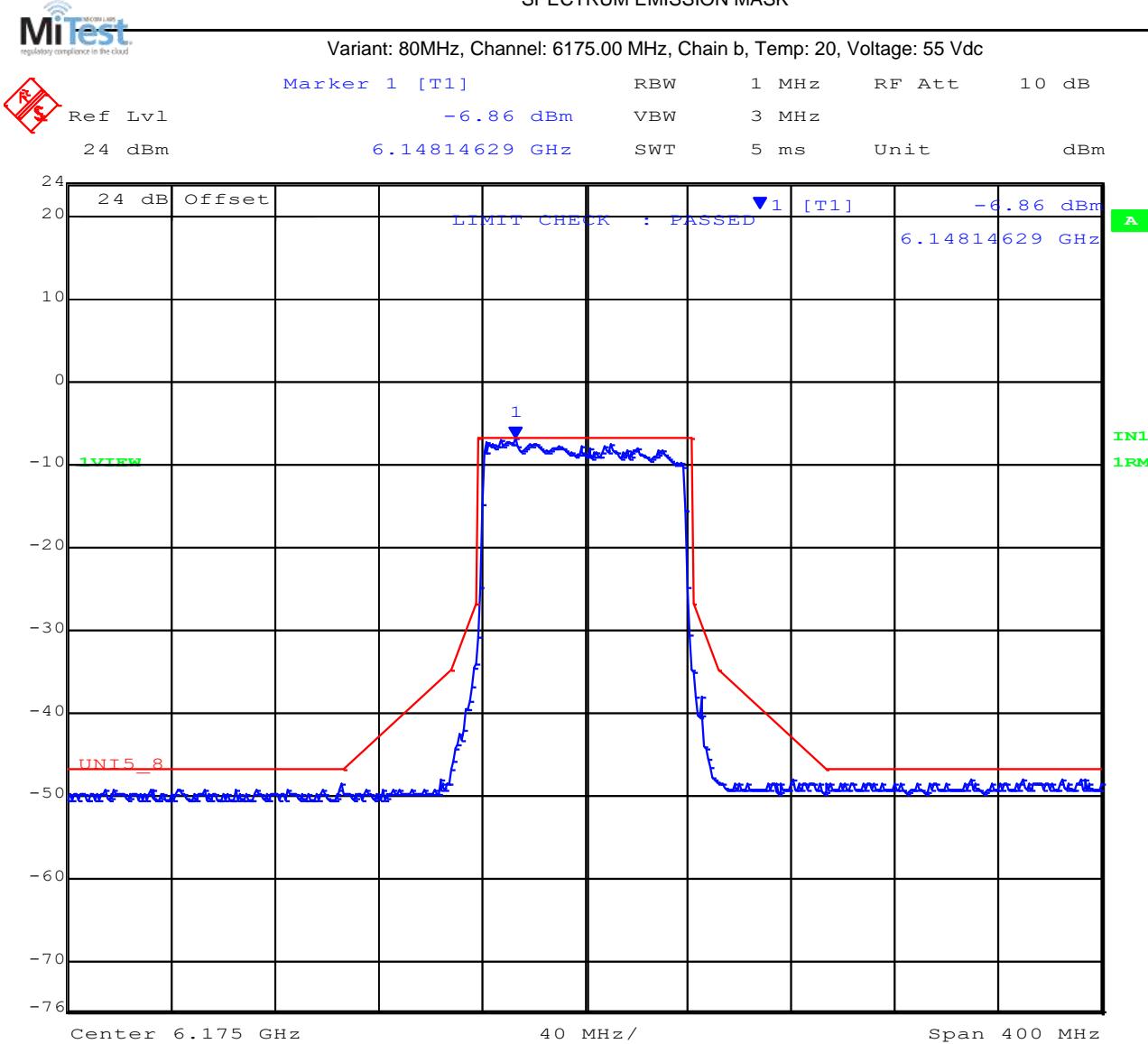
Variant: 80MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Date: 26.AUG.2024 13:06:23

[back to matrix](#)

SPECTRUM EMISSION MASK



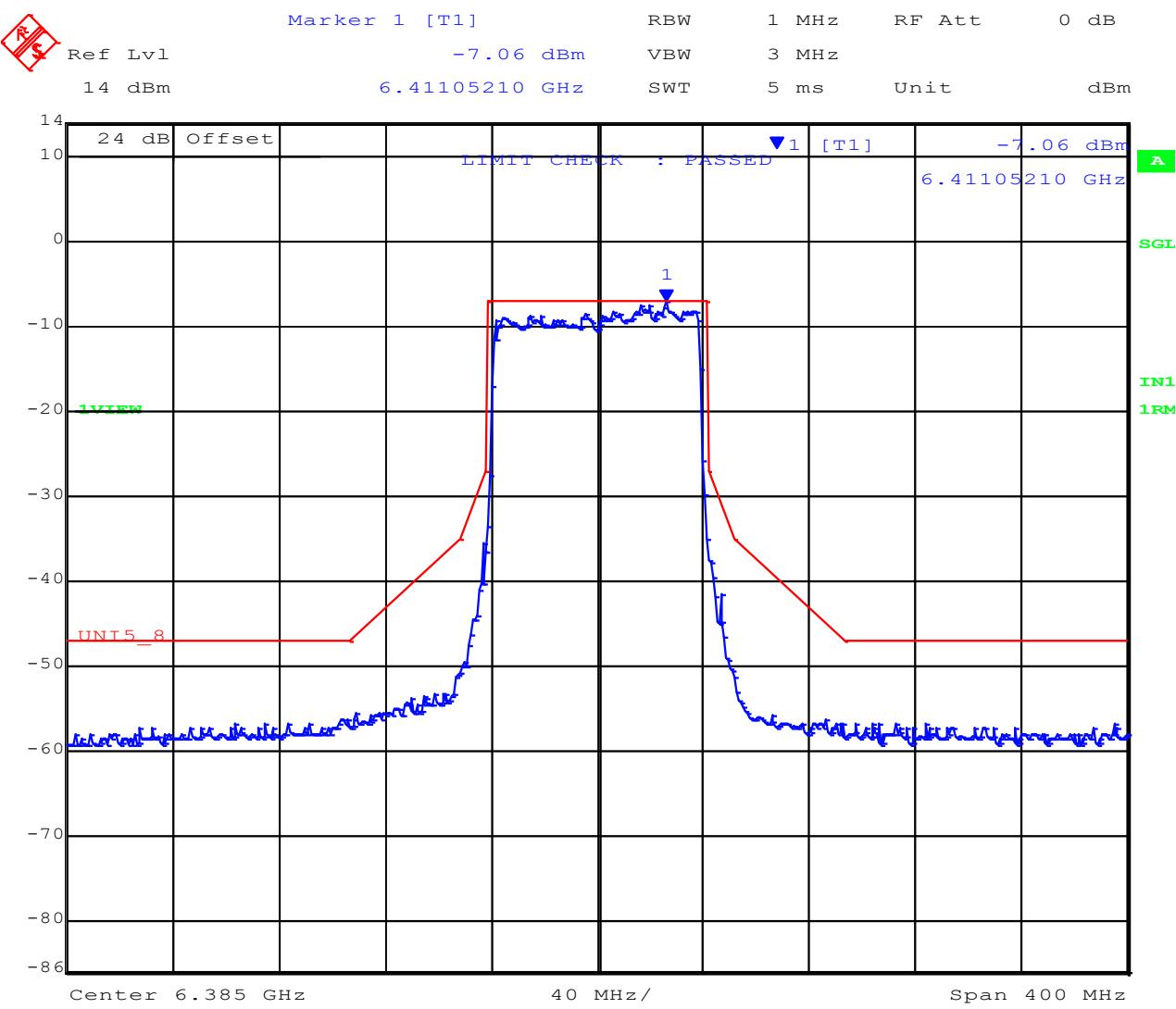
Date: 26.AUG.2024 12:36:42

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 80MHz, Channel: 6385.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



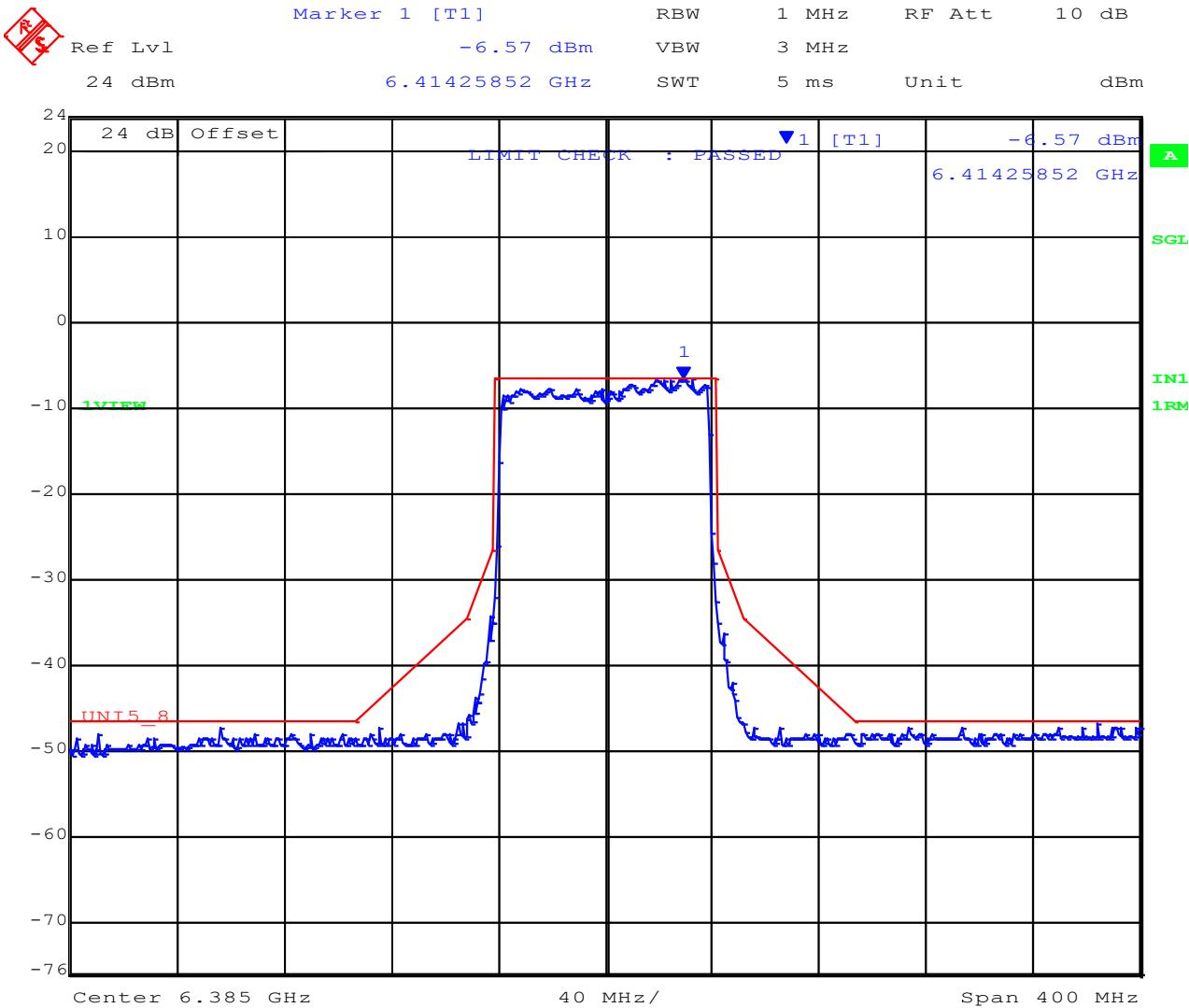
Date: 26.AUG.2024 13:25:46

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 80MHz, Channel: 6385.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



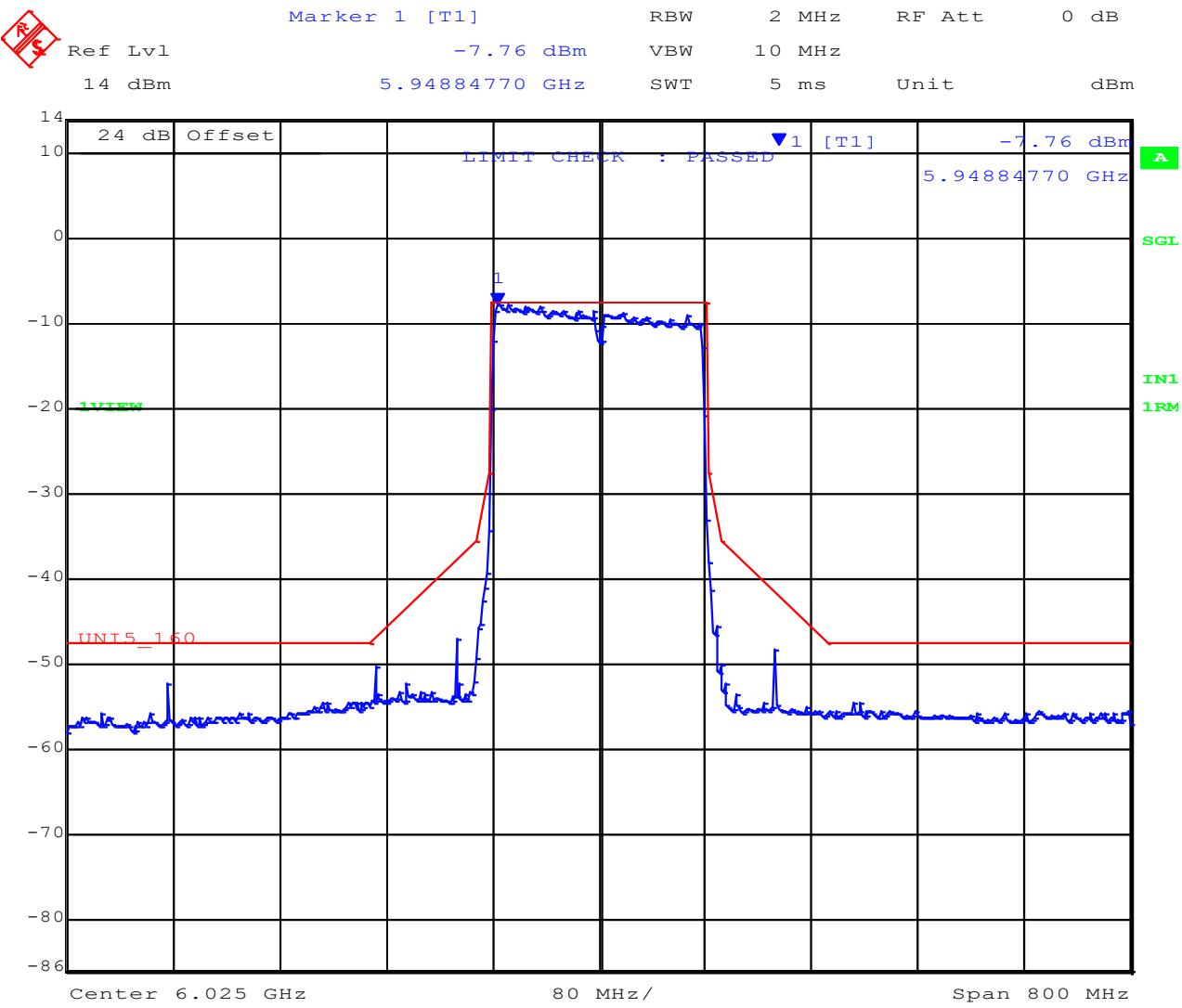
Date: 26 . AUG . 2024 12 : 38 : 41

[back to matrix](#)

SPECTRUM EMISSION MASK



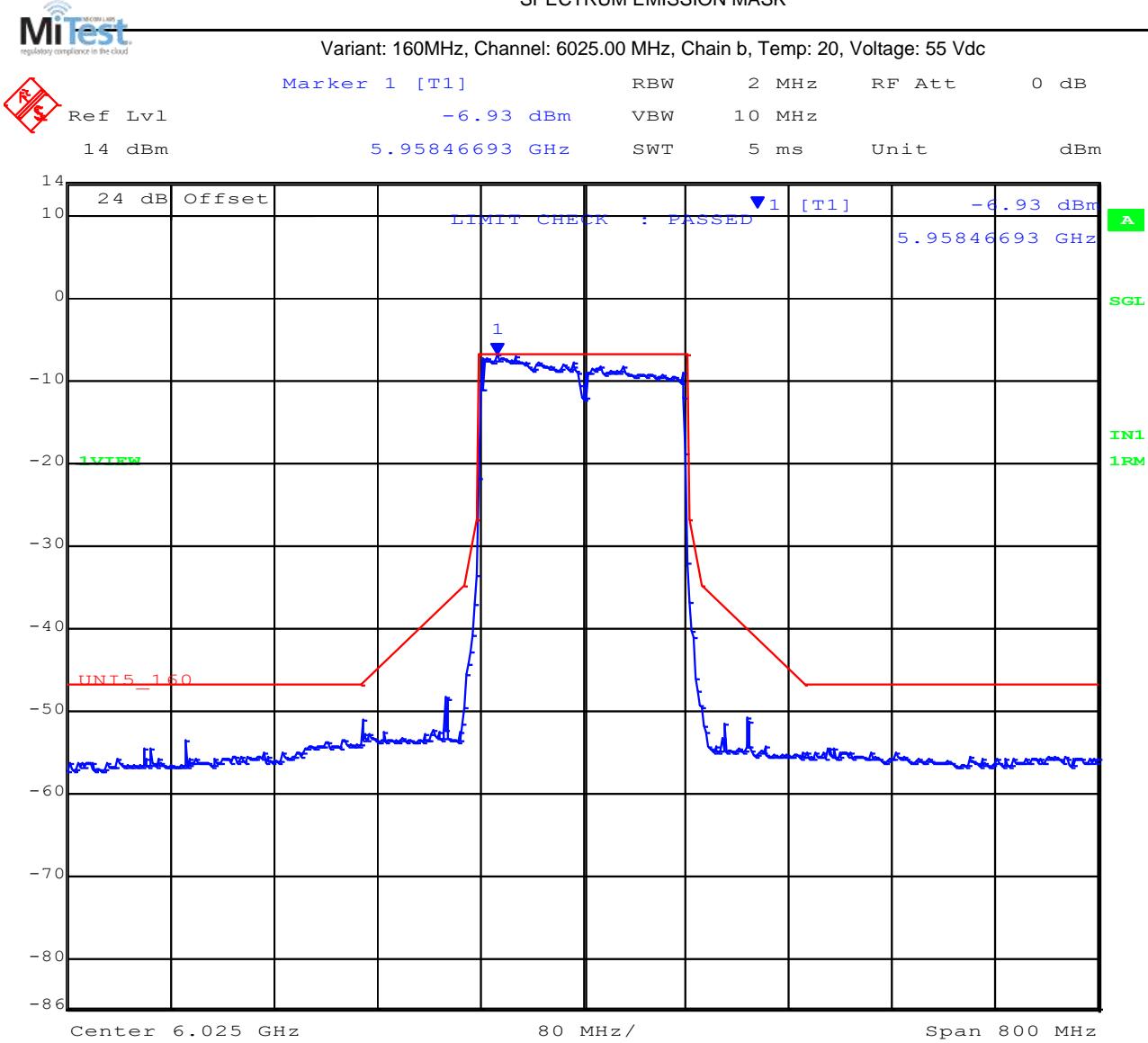
Variant: 160MHz, Channel: 6025.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



Date: 26.AUG.2024 13:46:56

[back to matrix](#)

SPECTRUM EMISSION MASK



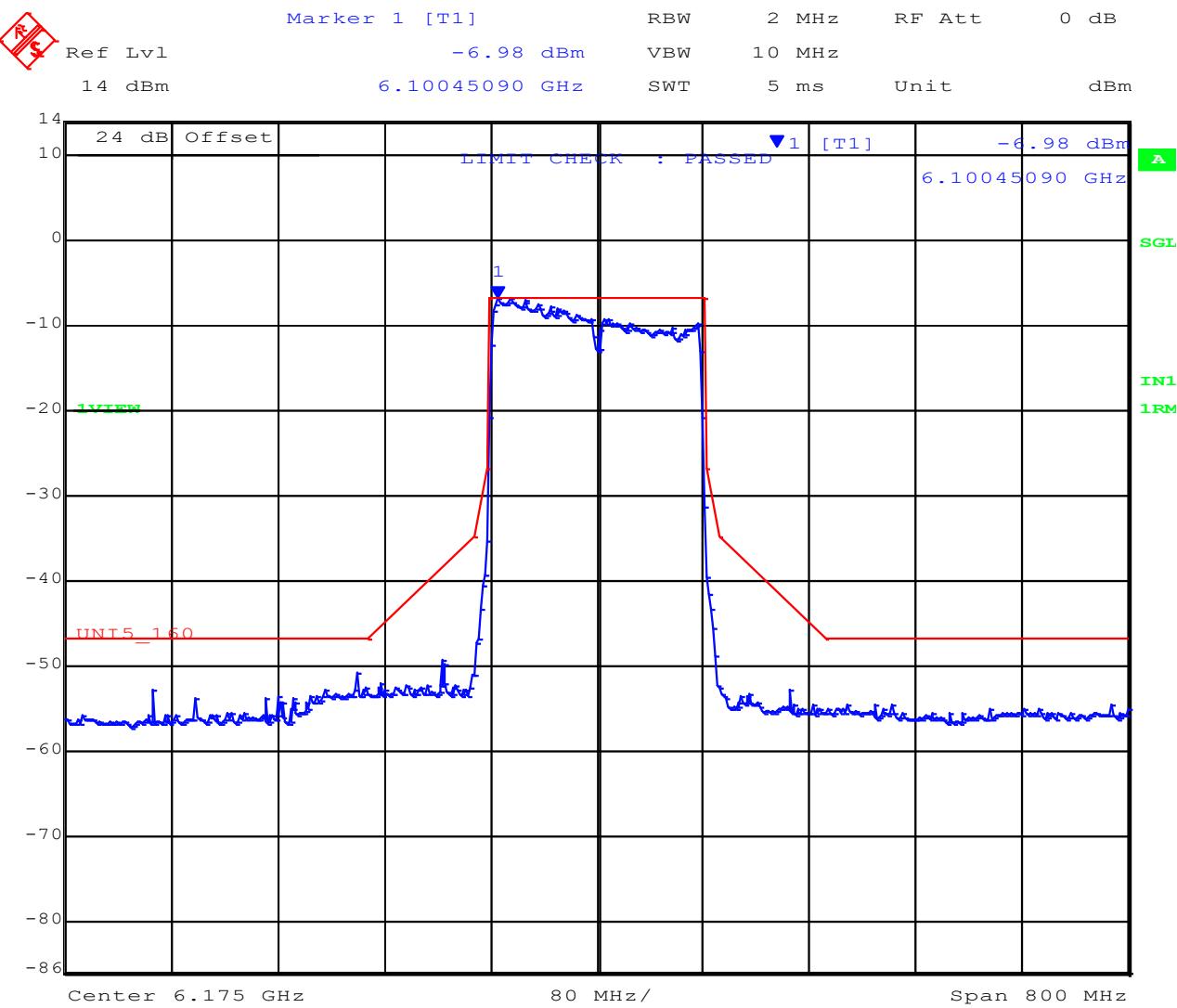
Date: 26.AUG.2024 13:45:03

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 160MHz, Channel: 6175.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



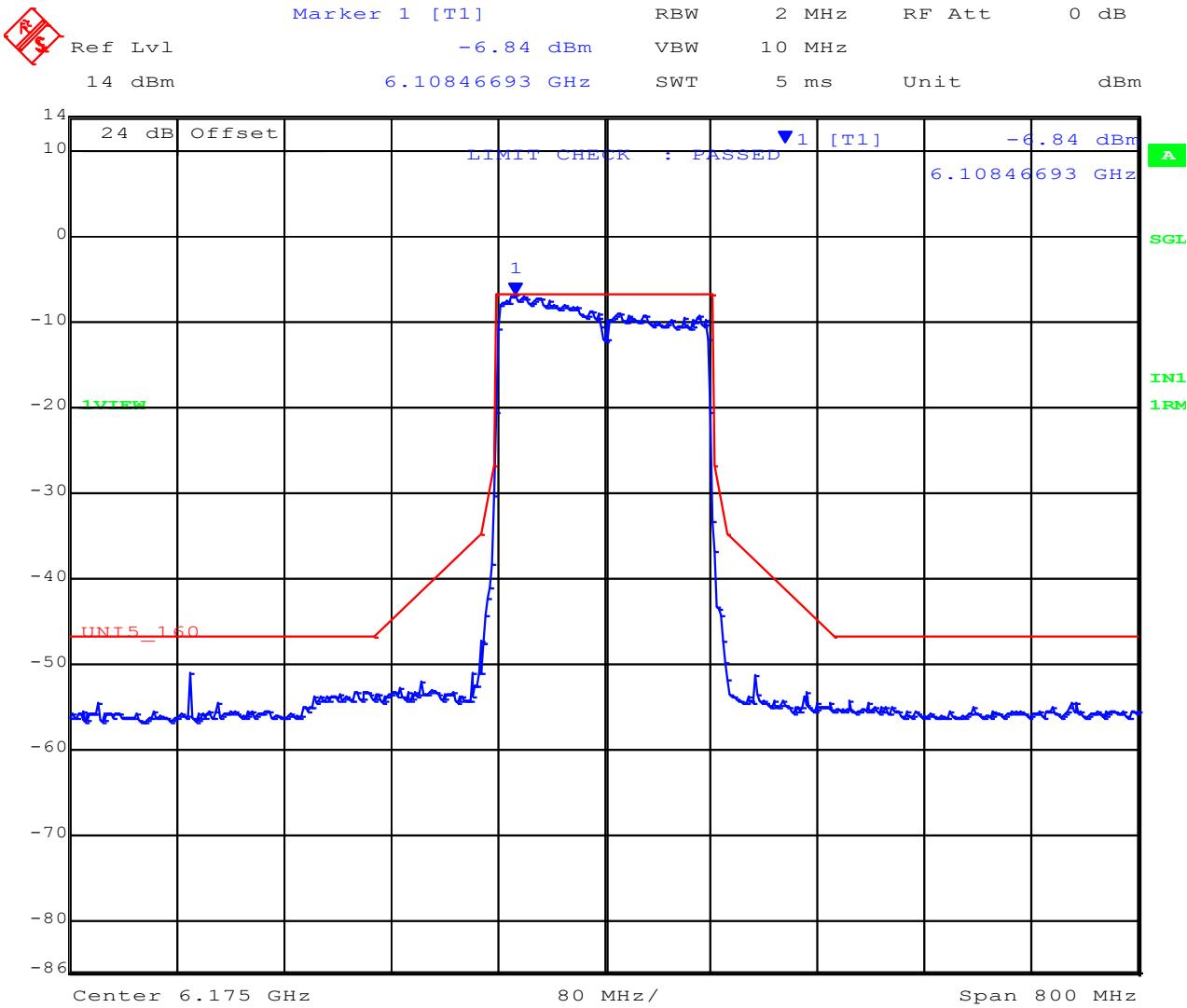
Date: 26.AUG.2024 13:59:11

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 160MHz, Channel: 6175.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



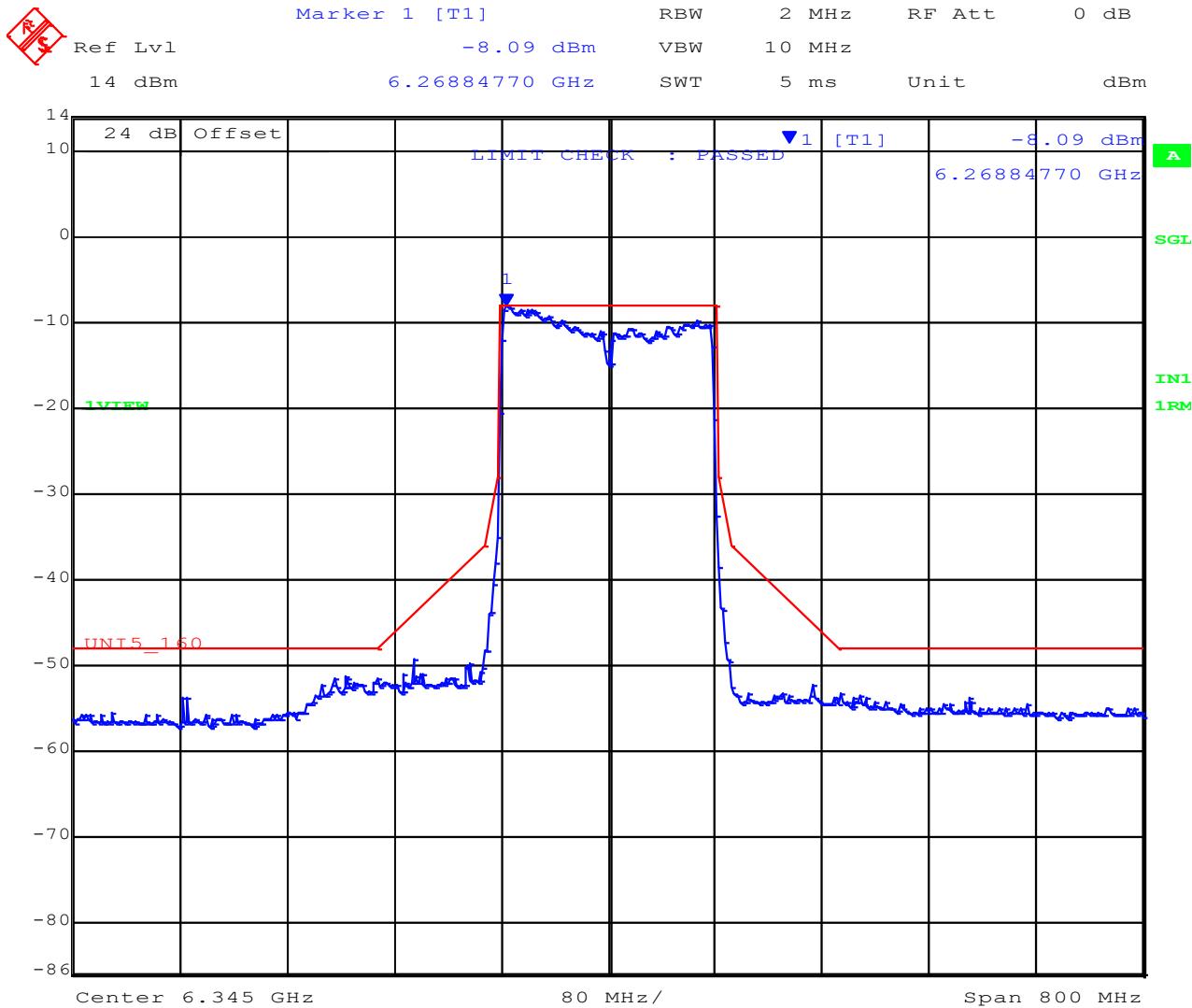
Date: 26 . AUG . 2024 14 : 00 : 34

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 160MHz, Channel: 6345.00 MHz, Chain a, Temp: 20, Voltage: 55 Vdc



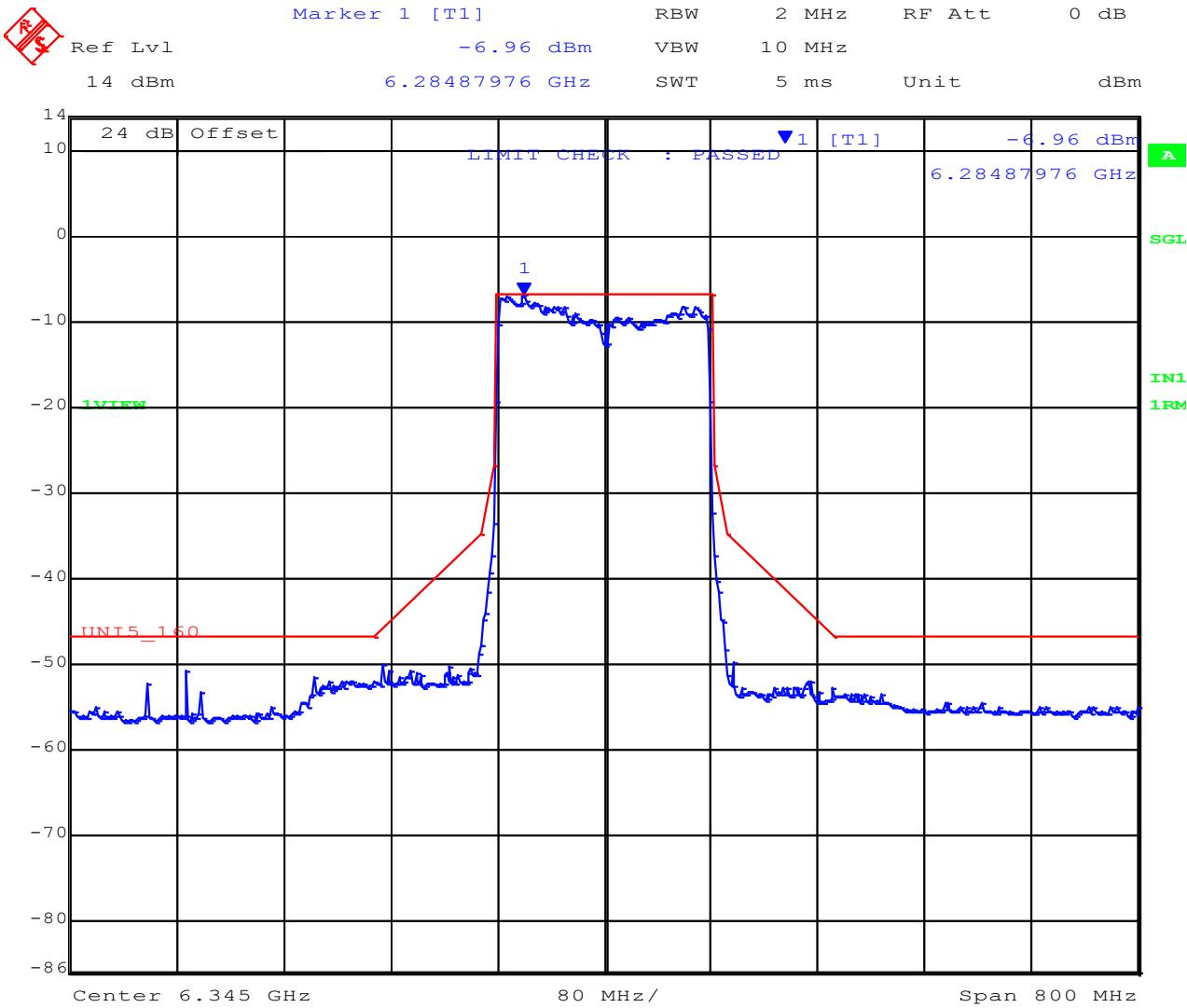
Date: 26 . AUG . 2024 14 : 03 : 49

[back to matrix](#)

SPECTRUM EMISSION MASK



Variant: 160MHz, Channel: 6345.00 MHz, Chain b, Temp: 20, Voltage: 55 Vdc



Date: 26 . AUG . 2024 14 : 02 : 41

[back to matrix](#)



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