Accred. no. 10363
Testing
ISO/IEC 17025

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Report On

FCC Testing of the
Ericsson AIR 6472 B77G B77M, KRD 901 259/2, NR, (3450-3550 MHz and 3840-3980 MHz) Base Station in accordance with FCC CFR 47 Part 2 and FCC CFR 47 Part 27

COMMERCIAL-IN-CONFIDENCE

FCC: TA8AKRD901259

PREPARED BY	APPROVED BY	DATED
Maggie Whiting Key Account Manager	Nic Forsyth Authorised Signatory	29 May 2024

Document 75958451 Report 01 Issue 1 **May-2024**

CONTENTS

SECTION 1

REPORT INFORMATION

1.1 REPORT DETAILS

Manufacturer	Ericsson
Address	Torshamnsgatan 23 Kista SE-16480 Stockholm Sweden
Product Name & Product Number	AIR 6472 B77G B77M - KRD 901 259/2
Serial Number(s)	Module 1 -C82A5951ZD Module 2 - CB2A5951Z5
Software Version	Module 1 - CXP2021151/1_P20B30604 Module 2 - CXP2021151/1_P20B30604
Hardware Version	Module 1 - R1C Module 2 – R1C
Non-Tested Variant (See Section 1.11 Additional Information)	KRD 901 259/11 KRD 901 259/21
Test Specification/Issue/Date	FCC CFR 47 Part 2: 2022 FCC CFR 47 Part 27: 2022
Test Plan	General RA FCC Test Plan for AIR 6472 B77G B77M_U
Start of Test	11-April-2024
Finish of Test	23-May-2024
Name of Engineer(s)	Ashok Kumar Shashi Kiran Vinodhini Chandrasekaran
Related Document(s)	KDB 971168 D01 v02r02 KDB 662911 D01 v02r01 ANSI C63.26-2015 DA 23-142: February, 2023

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate compliance with FCC CFR 47 Part 2: 2022 and FCC CFR 47 Part 27: 2022. The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineer(s).

Ashok Kumar Shashi Kiran Vinodhini Chandrasekaran

1.2 BRIEF SUMMARY OF RESULTS

The tests that have been selected are detailed in the customer Test Plan as defined in section 1.1 of this report. The Test Plan is based on the TÜV SÜD FCC Test Plan Rationale, available on request.

A brief summary of results for each configuration, in accordance with FCC CFR 47 Part 2 and , FCC CFR 47 Part 27 is shown below.

Section	Specification Clause		Test Description	Result
	FCC CFR 47 Part 2	FCC CFR 47 Part 27		
2.1	2.1046	27.50	Maximum Peak Output Power and Peak to Average Ratio - Conducted	Pass
2.2	2.1049	27.53	Occupied Bandwidth	Pass
2.3	2.1051	27.53	Band Edge	Pass
2.4	2.1051	27.53	Transmitter Spurious Emissions	Pass
2.5	2.1055	27.54	Frequency Stability	Pass
-	2.1053	27.53	Radiated Emissions	Pass*

* - Testing for Radiated Spurious Emissions are recorded in the following report

- FCC Part 27 – Intertek Test Report reference 2310415STO-101 AIR 6472 FCCp27

1.3 TEST RATIONALE

The tests that have been selected are detailed in the customer Test Plan as defined in section 1.1 of this report. The Test Plan is based on the TÜV SÜD FCC Test Plan Rationale, available on request.

1.4 CONFIGURATION DESCRIPTION

Config No	No Of carriers	Band	Carrier Bandwidth	Carrier Frequency Configuration (MHz)				
				Channel position B (MHz)	Channel position M (MHz)	Channel position T (MHz)	Power (W) per carrier	Power (dBm) per RDNB connector
1 Sections 2.2-2.5	1	77G	10 MHz 30kHz SCS	3455	3500	3545	40	27.96
			20 MHz 30kHz SCS	3460	3500	3540	80	30.97
			40 MHz 30kHz SCS	3470	3500	3530	160	33.98
			100 MHz 30kHz SCS	*-	3500	*-	320	36.98
1 Section 2.1	1	77G	10 MHz 30kHz SCS	3455	3500	3545	33	27.16
			20 MHz 30kHz SCS	3460	3500	3540	66	30.13
			40 MHz 30kHz SCS	3470	3500	3530	132	33.13
			100 MHz 30kHz SCS	*-	3500	*-	320	36.98
2 Sections 2.2-2.5	1	77M	20 MHz 30kHz SCS	3850	3910	3970	80	30.97
			40 MHz 30kHz SCS	3860	3910	3960	160	33.98
			60 MHz 30kHz SCS	3870	3910	3950	240	35.74
			80 MHz 30kHz SCS	3880	3910	3940	320	36.99
			100 MHz 30kHz SCS	3890	3910	3930	400	37.96
2 Section 2.1	1	77M	20 MHz 30kHz SCS	3850	3910	3970	54	29.26
			40 MHz 30kHz SCS	3860	3910	3960	108	32.27
			60 MHz 30kHz SCS	3870	3910	3950	162	34.03
			80 MHz 30kHz SCS	3880	3910	3940	216	35.28
			100 MHz 30kHz SCS	3890	3910	3930	270	36.25
3 Sections 2.4	2	77M 77G	20 MHz 30kHz SCS 20 MHz 30kHz SCS	3850 3460	3910 3500	3970 3540	80 80	30.97 30.97
		77M 77G	40 MHz 30kHz SCS 20 MHz 30kHz SCS	3860 3460	3910 3500	3960 3540	160 80	33.98 30.97
		77M 77G	60 MHz 30kHz SCS 20 MHz 30kHz SCS	3870 3460	3910 3500	3950 3540	240 80	35.74 30.97
		77M 77G	80 MHz 30kHz SCS 20 MHz 30kHz SCS	3880 3460	3910 3500	3940 3540	320 80	36.99 30.97
		77M 77G	100 MHz 30kHz SCS 20 MHz 30kHz SCS	3890 3460	3910 3500	3930 3540	320 80	36.99 30.97
		77M 77G	20 MHz 30kHz SCS 40 MHz 30kHz SCS	3850 3470	3910 3500	3970 3530	80 160	30.97 33.98
		77M 77G	40 MHz 30kHz SCS 40 MHz 30kHz SCS	3860 3470	3910 3500	3960 3530	160 160	33.98 33.98
		77M 77G	60 MHz 30kHz SCS 40 MHz 30kHz SCS	3870 3470	3910 3500	3950 3530	240 160	35.74 33.98
		77M 77G	80 MHz 30kHz SCS 40 MHz 30kHz SCS	3880 3470	3910 3500	3940 3530	280 120	36.41 32.73
		77M 77G	100 MHz 30kHz SCS 40 MHz 30kHz SCS	3890 3470	3910 3500	3930 3530	300 100	36.71 31.94
		77M 77G	20 MHz 30kHz SCS 100 MHz 30kHz SCS	3850 3500	3910 3500	3970 3500	80 320	30.97 36.98
		77M 77G	40 MHz 30kHz SCS 100 MHz 30kHz SCS	3860 3500	3910 3500	3960 3500	80 320	30.97 36.98
		77M 77G	60 MHz 30kHz SCS 100 MHz 30kHz SCS	3870 3500	3910 3500	3950 3500	120 280	32.73 36.41
		77M 77G	80 MHz 30kHz SCS 100 MHz 30kHz SCS	3880 3500	3910 3500	3940 3500	160 240	33.98 35.74
		77M 77G	100 MHz 30kHz SCS 100 MHz 30kHz SCS	3890 3500	3910 3500	3930 3500	200 200	34.95 34.95
3 Section 2.1	2	77M 77G	20 MHz 30kHz SCS 20 MHz 30kHz SCS	3850 3460	3910 3500	3970 3540	54 66	29.26 30.13
		77M 77G	40 MHz 30kHz SCS 20 MHz 30kHz SCS	3860 3460	3910 3500	3960 3540	108 66	32.27 30.13
		77M 77G	60 MHz 30kHz SCS 20 MHz 30kHz SCS	3870 3460	3910 3500	3950 3540	162 66	34.03 30.13
		77M 77G	80 MHz 30kHz SCS 20 MHz 30kHz SCS	3880 3460	3910 3500	3940 3540	216 66	35.28 30.13

Config No	No Of carriers	Band	Carrier Bandwidth	Carrier Frequency Configuration (MHz)				
				Channel position B (MHz)	Channel position M (MHz)	Channel position T (MHz)	Power (W) per carrier	Power (dBm) per RDNB connector
		77M 77G	100 MHz 30kHz SCS 20 MHz 30kHz SCS	3890 3460	3910 3500	3930 3540	270 66	36.25 30.13
		77M 77G	20 MHz 30kHz SCS 40 MHz 30kHz SCS	3850 3470	3910 3500	3970 3530	54 132	29.26 33.13
		77M 77G	40 MHz 30kHz SCS 40 MHz 30kHz SCS	3860 3470	3910 3500	3960 3530	180 132	32.27 33.13
		77M 77G	60 MHz 30kHz SCS 40 MHz 30kHz SCS	3870 3470	3910 3500	3950 3530	162 132	34.03 33.13
		77M 77G	80 MHz 30kHz SCS 40 MHz 30kHz SCS	3880 3470	3910 3500	3940 3530	216 120	35.28 32.73
		77M 77G	100 MHz 30kHz SCS 40 MHz 30kHz SCS	3890 3470	3910 3500	3930 3530	270 100	36.25 31.94
		77M 77G	20 MHz 30kHz SCS 100 MHz 30kHz SCS	3850 3500	3910 3500	3970 3500	54 320	29.26 36.98
		77M 77G	40 MHz 30kHz SCS 100 MHz 30kHz SCS	3860 3500	3910 3500	3960 3500	80 320	30.97 36.98
		77M 77G	60 MHz 30kHz SCS 100 MHz 30kHz SCS	3870 3500	3910 3500	3950 3500	120 280	32.73 36.41
		77M 77G	80 MHz 30kHz SCS 100 MHz 30kHz SCS	3880 3500	3910 3500	3940 3500	160 240	33.98 35.74
		77M 77G	100 MHz 30kHz SCS 100 MHz 30kHz SCS	3890 3500	3910 3500	3930 3500	200 200	34.95 34.95
4 MC-1 Section 2.1	2	77G 77G	10 MHz 30kHz SCS 10 MHz 30kHz SCS	3455 3495	3475 3525	3505 3545	33 33	27.16 27.16
4 MC-2 Sections 2.2-2.3		77G **77G**	10 MHz 30kHz SCS 10 MHz 30kHz SCS	3455 3465	3495 3505	3535 3545	40 40	27.96 27.96
4 MC-1 Sections 2.4		77G 77G	10 MHz 30kHz SCS 10 MHz 30kHz SCS	3455 3495	3475 3525	3505 3545	40 40	27.96 27.96
5 MC-1 Section 2.1	3	77M 77G 77G	60 MHz 30kHz SCS 10 MHz 30kHz SCS 10 MHz 30kHz SCS	3870 3455 3495	3910 3475 3525	3950 3505 3545	162 33 33	34.03 27.16 27.16
5 MC-1 Sections 2.4		77M 77G 77G	60 MHz 30kHz SCS 10 MHz 30kHz SCS 10 MHz 30kHz SCS	3870 3455 3495	3910 3475 3525	3950 3505 3545	240 40 40	35.74 27.96 27.96

*Note - The BW is 100 MHz which is equal to the IBW and therefore testing was performed on Channel Position M only.

1.5 DECLARATION OF BUILD STATUS

Equipment Description	AIR Antenna Integrated Radio AAS		
Manufacturer:	Ericsson AB		
Model:	AIR 6472 B77G B77M		
Part Number:	KRD 901 259/11** Radio including AFU (Antenna Filter Unit) Secure looked. KRD 901 259/2* Radio including VFU (Verification Filter Unit, excluding antenna), Secure Unlocked. Note**: This will be the marketed, sold unit. Note*: Tested unit		
Hardware Version:	R1C		
Software Version:	CXP2021151/1_P20B30604		
FCC ID of the product under test	TA8AKRD901259		
Intentional Radiators			
	Both bands	B77G	B77M
RAT	NR		
Frequency Range (MHz to MHz)		3450 MHz - 3550 MHz	3840 MHz - 3980 MHz
Conducted Declared Output Power (dBm)	38 dBm per TAB		
Antenna Gain (dBi)	B:26.0/ M:26.4 / T:26.32	B:26.0/ M:26.4 / T:26.32	B, M, T: 27.4 for all BW except BW.20: B:27.04, M: 27.4, T:27.04
Supported Bandwidth(s) (MHz)		10, 20, 40,100 MHz	20,40, 60, 80,100 MHz
Modulation Scheme(s)	QPSK,16QAM, 64QAM, 256QAM		
Total RF BW (BWtot), Maximum Base Station RF BW	530MHz		
Maximum Operational BW	200 MHz	100 MHz	140 MHz
ITU Emission Designator		BW:10MHz :8M63W7D, BW:20MHz :18M2W7D, BW:40MHz :37M8W7D, BW:100MHz :97M2W7D, 18M6W7D (CA 10MHz+10MHz)	BW:20MHz :18M2W7D, BW:40MHz :37M9W7D, BW:60MHz :57M8W7D, BW:80MHz :77M4W7D, BW:100MHz :97M3W7D
Duty Cycle	73%-74%		
Total Horizontal Plane Beamwith		65°±5	65°±5
Maximum number of carriers	2C, Up to 3 carriers, B77G: 2x 10 MHz + B77M: 60	2C max(BW:10MHz), 1C max(BW:20MHz, BW:40MHz, BW:100MHz)	1C
CarrierAggregation	2xNR10 (B77G) + 1C (B77M)	2x10MHz (two carriers of non-contiguous 10MHz	N/A
Maximum Total Power	400W	320W	400W
Max Power per carrier	4W/MHz		
Sub Carrier Spacing (NR only)	30 kHz		
Unintentional Radiators			
Highest frequency generated or used in the device or on which the device operates or tunes	CPRI 25,78 GHz		
Lowest frequency generated or used in the device or on which the device operates or tunes if <30MHz	.-		
Class B Digital Device	Class B		

DC Power Supply (Delete if Not Applicable)			
Nominal voltage:	-48V		
Extreme upper voltage:	-58.5V		
Extreme lower voltage:	-36V		
Max current:	50A		
Temperature			
Minimum temperature:	-40°C		
Maximum temperature:	55°C		
Antenna Characteristics			
Temporary antenna connector (Delete if Not Applicable)	50 Ohm		
Integral antenna (Delete if Not Applicable)	Type:	AAS (Advanced Antenna System)	
EIRP Limit to be used	Non-rural	B77G with max 3.3 W/MHz PSD is classified with FCC Non-Rural EIRP limit	B77M with max 2.7 W/MHz PSD is classified with FCC Non-Rural EIRP limit
I hereby declare that I am entitled to sign on behalf of the manufacturer and that the information supplied is correct and complete.			
Name:	Afrah Ali Sadiq		
Position held:	Regulatory Approval Engineer		
Email address:	Afrah.ali.sadiq@ericsson.com		
Telephone number:	.+46724650796		
Date:	22/05/2024		

No responsibility will be accepted by TÜV SÜD as to the accuracy of the information declared in this document by the manufacturer.

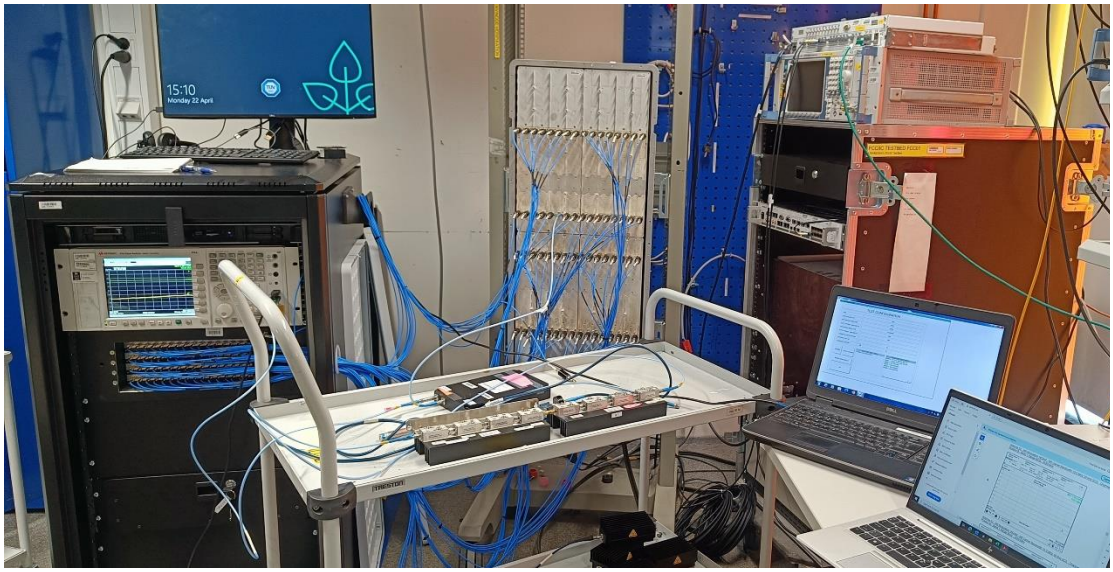
1.6 PRODUCT INFORMATION

1.6.1 Technical Description

The Equipment Under Test (EUT) AIR 6472 B77G B77M - KRD 901 259/2 is an Ericsson AB Radio Unit working in the public mobile service band 77G and 77M which provides communication connections to the Band 77G and 77M network.

The EUT is declared as operating from a nominal -48V DC supply.

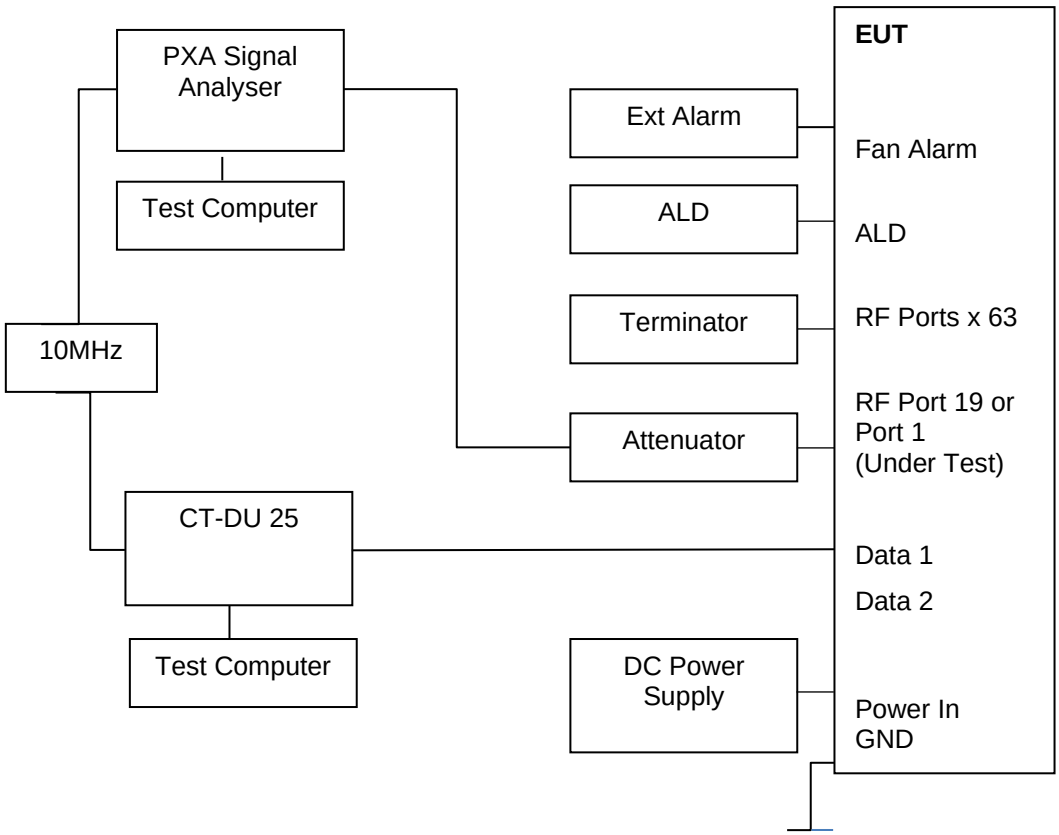
The Equipment Under Test (EUT) is shown in the photograph below. A full technical description can be found in the Manufacturer's documentation.



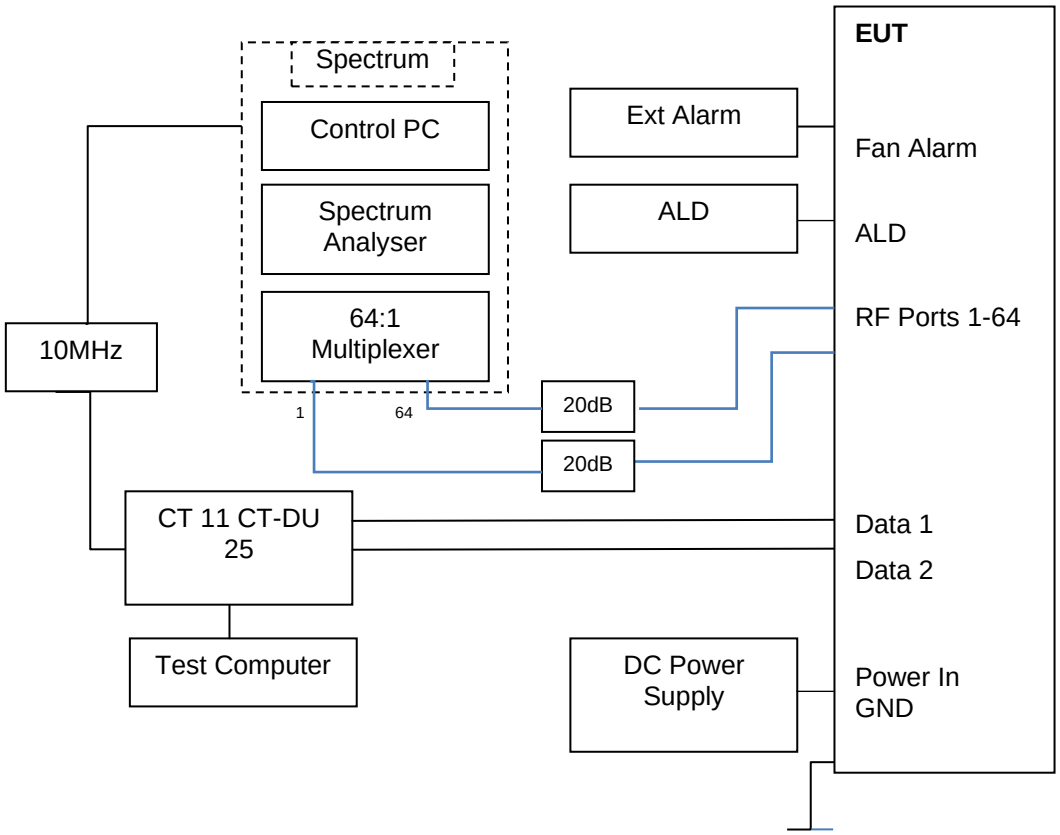
Equipment Under Test

1.7 TEST SETUP

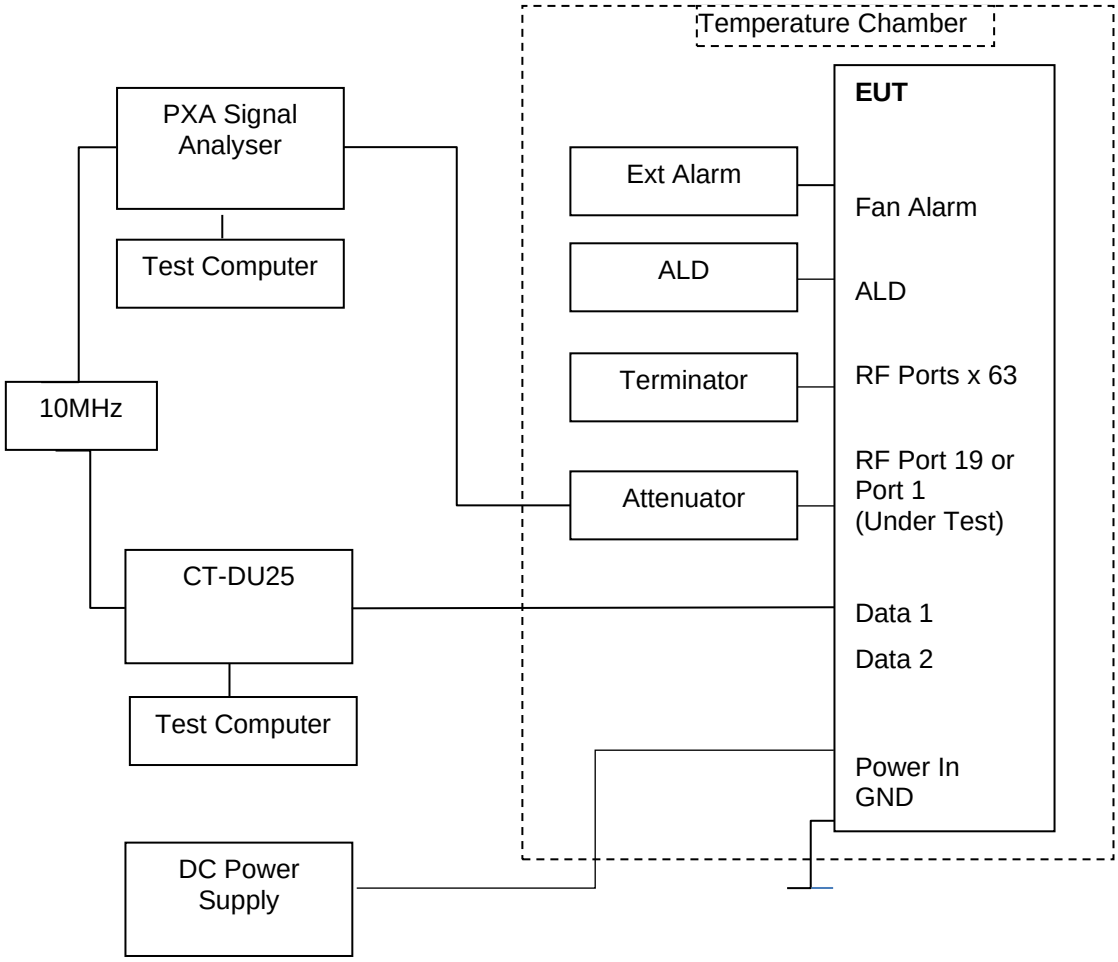
Conducted Test Set Up – Occupied Bandwidth, Band Edge, Conducted Emissions



Conducted Test Set Up, Power, PSD, PAR



Conducted Test Set Up – Frequency Stability
Dashed line indicates equipment inside the Temperature Chamber for testing



1.8 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated as described in the Test Method for each Test.

The EUT was powered from a -53.22 V DC supply unless otherwise stated.

FCC Measurement Facility Registration Number
563983 Ericsson Test Laboratory, Kista
Postal Address: Ericsson AB, Isafjordsgatan 10, Stockholm, SE-16 440, Sweden

Under our group Swedac Accreditation, TÜV SÜD Sverige conducted the following tests Ericsson Test Lab, Kista.

Test Name	Name of Engineer(s)	Module Number
Maximum Peak Output Power and Peak to Average Ratio - Conducted	Ashok Kumar/Shashi Kiran	1 & 2
Occupied Bandwidth	Ashok Kumar/Shashi Kiran	1
Band Edge	Ashok Kumar/Shashi Kiran	1
Transmitter Spurious Emissions	Ashok Kumar/Shashi Kiran	1
Frequency Stability	Vinodhini Chandrasekaran	2

1.9 DEVIATION FROM THE STANDARD

Waiver DA-23-142A1
The Petitioner's radio, when operated in carrier aggregation mode across the 3.5 GHz and 3.7 GHz Services must comply with section 27.53(n)(1) of the Commission's rules in its entirety, except for the -25 dBm/MHz conducted power limit specified for emissions above 3560 MHz and the -40 dBm/MHz conducted power limit above 3570 MHz, as those limits apply throughout the 3.7 GHz band;
Petitioner's radio must comply with all Commission rules not specifically waived herein; and when operating as a standalone device in any particular band, the device must meet the technical rules, including OOBE, for that band.

No other deviations from the applicable test standards or test plan were made during testing.

1.10 MODIFICATION RECORD

No modifications were made to the EUT during testing.

1.11 ADDITIONAL INFORMATION

This filing is for an original Grant.

Ericsson will limit this product through the software from operating across the whole of Band 77 it will be limited to B77G (3450-3550 MHz) and B77M (3840-3980 MHz).

The Test Plan is based on the TUV SUD Document FCC and ISED Test Plan Rationale for Base Station Equipment.
Pre-testing was performed in accordance with the Test Plan to establish the worst-case Port, modulation schemes and bandwidths using Module 1, as defined below and in the Module Annex.

Band 77G for Single Carrier and 2 Carrier
The port with the highest power, worst case port was port 1
Worst case modulation was QPSK (NR)
Worst case bandwidth was 10 MHz (NR)

Band 77M for Single Carrier and Band 77G+Band 77M and Band 77G 3 Carrier
The port with the highest power, worst case port was port 19
Worst case modulation was QPSK (NR)
Worst case bandwidth was 20 MHz (NR)

These worst-case results are presented in this report to demonstrate compliance.

This EUT uses the same port for Tx and Rx and therefore RX Spurious Emisisons has not been performed. Rx Spurious Emissions have been covered by testing to FCC Part 15B, which are covered by a seprate test report.

Ericsson have provided the following details about the variants of the AIR 6472 B77G B77M
KRD 901 259/1 Radio including AFU (Antenna Filter Unit), Secure Unlocked
KRD 901 259/11** (with security software and antenna)
KRD 901 259/2*(with un-security software and SRDNB)
KRD 901 259/21 Radio including VFU (Verification Filter Unit, excluding antenna), Secure Locked.

Note*: Tested unit
Note**: This will be the marketed, sold unit

The KRD 901 259/11 is equivalent to KRD 901 259/2 in conducted radio performance terms, as such no extra testing is required to prove conformity.

Testing was carried out at two power levels with Sections 2.2-2.5 being performed on a higher power (4W/MHz) and section 2.1 on a lower power (see below), however the unit will be supplied using the lower power and therefore as all tests were compliant at the higher power then retesting of Sections 2.2-2.5 at a lower power level is not required.

The following PSD restrictions apply:
— B77G with max 3.3 W/MHz PSD is classified with FCC Non-Rural EIRP limit
— B77M with max 2.7 W/MHz PSD is classified with FCC Non-Rural EIRP limit
— The product is HW limited to 4 W/MHz PSD

To expedite testing two AIR 6472 B77G B77M radios were used, the Hardware and Software Versions were identical. The table in Section 1.8 indicates which units were used for which tests and refers to them throughout as Module 1 and Module 2.

Each test shows whether Module 1 or Module 2 was used and which Max PSD was used.

Throughout this report the power unit dBm is used. dBm is a unit of level used to indicate that a power level is expressed in decibels (dB) with reference to one milliwatt (mW). It is used as a convenient measure of absolute power because of its capability to express both very large and very small values in a short form.

Testing shows Regulatory Compliance for the AIR 6472 B77G B77M, KRD 901 259/2 .

SECTION 2

TEST DETAILS

2.1 MAXIMUM PEAK OUTPUT POWER AND PEAK TO AVERAGE RATIO - CONDUCTED

2.1.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.50
FCC CFR 47 Part 2, Clause 2.1046

2.1.2 Date of Test and Modification State

22,24-April, 08, 15,16,23-May-2024 - Modification State 0

2.1.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.4 Environmental Conditions

Ambient Temperature	20.5 - 22.8°C
Relative Humidity	34.1 – 48.9%

2.1.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, clause 5.2.1 and summed in accordance with FCC KDB 662911 D01.

Plot data performance for all transmitter ports are on file and available on request.

Measurements and calculations for In Band Power Spectral Density (PSD) have been made either in accordance with FCC KDB 662911 D01 V02r01 E 2) a) and ANSI C63.26.6.4.3.2.2 for In-Band Power Spectral Density (PSD) Measurements, Measure and sum the spectra across the outputs or in accordance with FCC KDB 662911 D01 V02r01 E 2) c) and ANSI C63.26. 6.4.3.2.4 Measure and add [10 log (Nout)] dB using the following calculation

Calculations:
Total power = Measured Output Power (port x, worst case) + 10log (NANT) + Declared Antenna Gain
Where NANT refers to the number of Ports.

2.1.6 Test Results

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

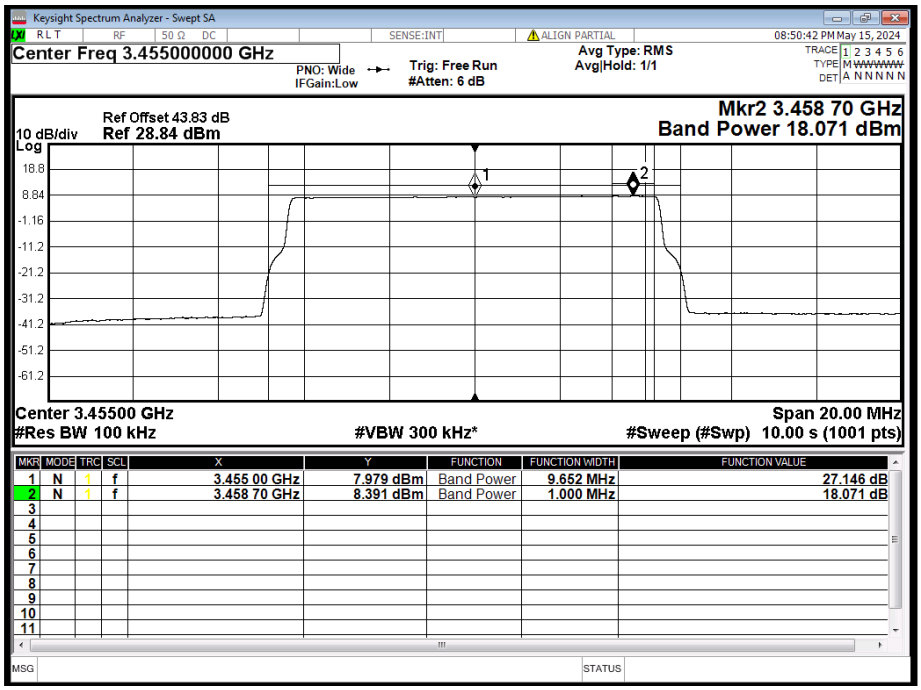
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	10M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	10 MHz	DCCF (dB):	1.31
Channel	Bottom (3455 MHz)	Peak Antenna Gain (dBi):	26.00

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3455 MHz)	64	25.77	27.15	44.26

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3455 MHz)	64	16.54	18.07	35.08	61.08	62.15	-1.07	65.15	-4.07

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3455 MHz)	64	9.41	9.74	13.00	-3.26



Worst Case Plot - Bottom Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

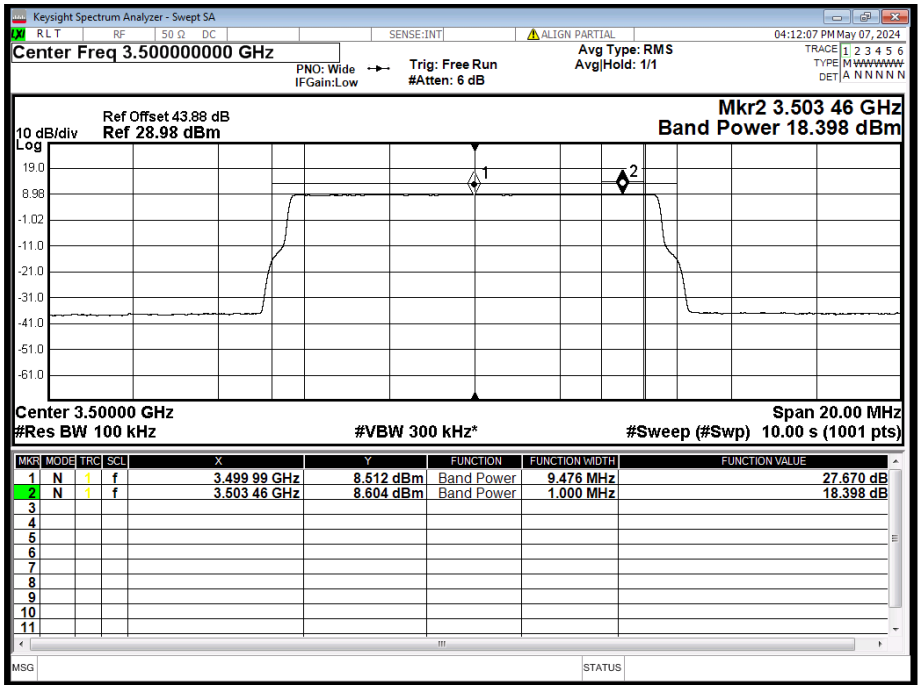
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	10M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	10 MHz	DCCF (dB):	1.31
Channel	Middle (3500 MHz)	Peak Antenna Gain (dBi):	26.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3500 MHz)	64	25.69	27.67	44.44

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3500 MHz)	64	16.35	18.40	35.12	61.52	62.15	-0.63	65.15	-3.63

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3500 MHz)	64	9.47	9.75	13.00	-3.26



Worst Case Plot - Middle Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

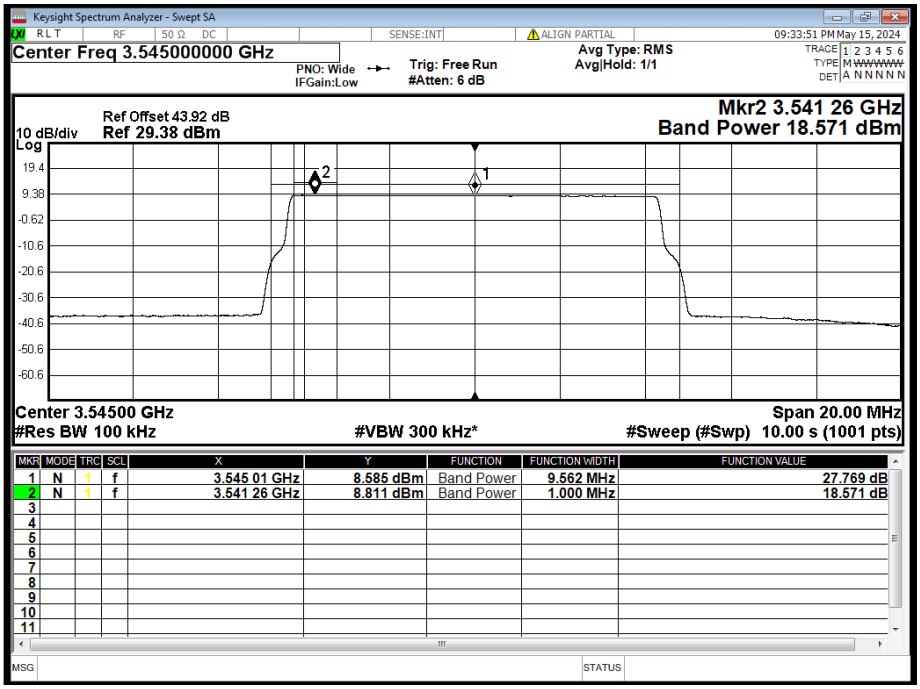
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	10M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	10 MHz	DCCF (dB):	1.31
Channel	Top (3545 MHz)	Peak Antenna Gain (dBi):	26.32

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3545 MHz)	64	25.45	27.77	44.29

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3545 MHz)	64	16.30	18.57	35.13	61.45	62.15	-0.70	65.15	-3.70

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3545 MHz)	64	9.45	9.82	13.00	-3.18



Worst Case Plot - Top Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

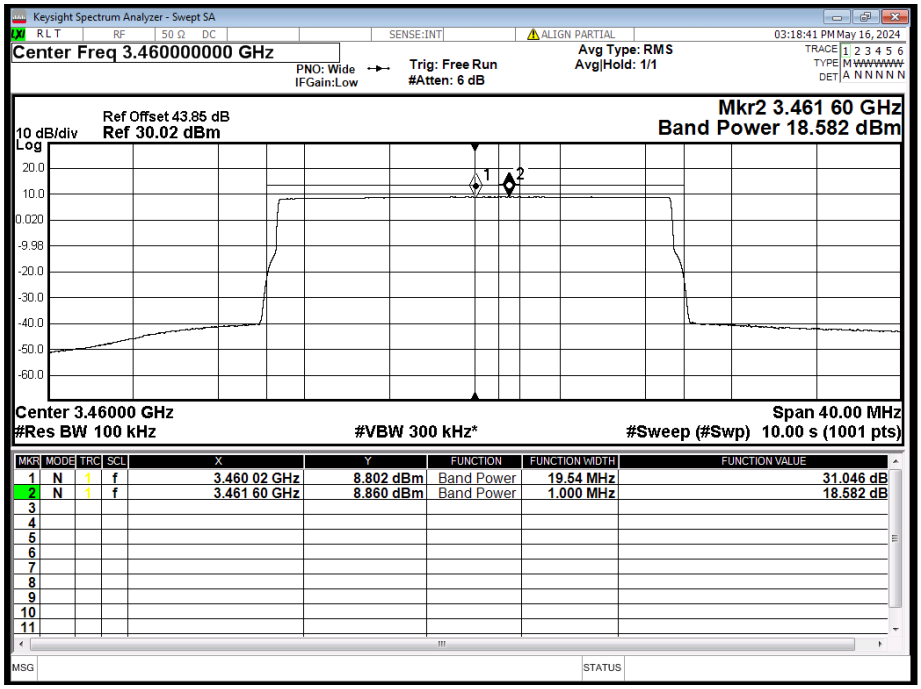
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	20M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	20 MHz	DCCF (dB):	1.31
Channel	Bottom (3460 MHz)	Peak Antenna Gain (dBi):	26.00

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3460 MHz)	64	29.35	31.05	47.81

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3460 MHz)	64	16.93	18.58	35.38	61.38	62.15	-0.77	65.15	-3.77

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3460 MHz)	64	9.30	9.64	13.00	-3.36



Worst Case Plot – Bottom Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

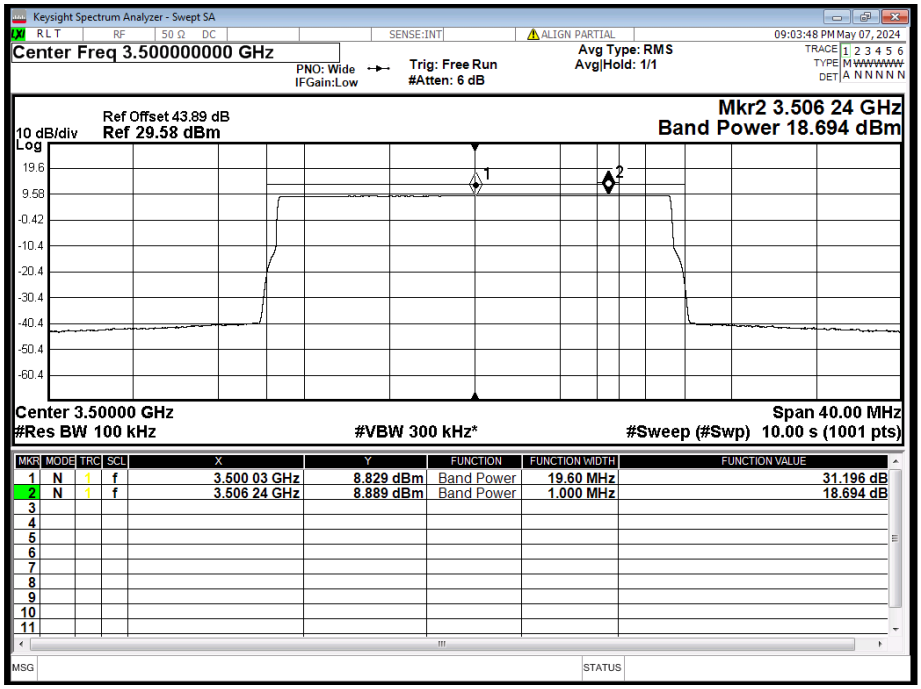
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	20M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	20 MHz	DCCF (dB):	1.31
Channel	Middle (3500 MHz)	Peak Antenna Gain (dBi):	26.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3500 MHz)	64	28.90	31.20	47.88

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3500 MHz)	64	16.34	18.69	35.30	61.70	62.15	-0.45	65.15	-3.45

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3500 MHz)	64	9.08	9.68	13.00	-3.32



Worst Case Plot - Middle Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

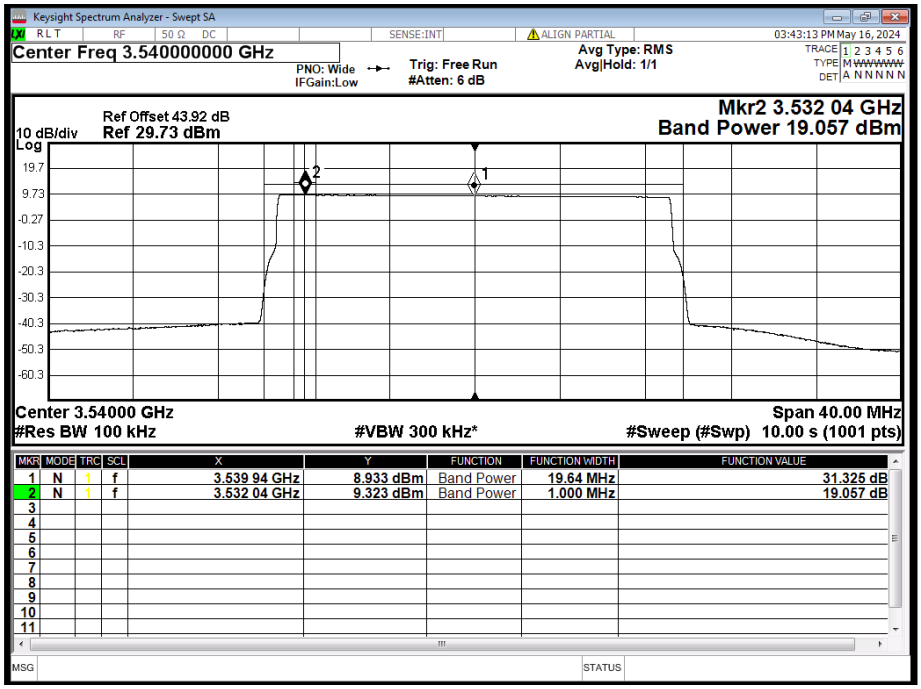
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	20M 3.3W/MHz	Duty Cycle (%):	73.9
RFBW:	20 MHz	DCCF (dB):	1.31
Channel	Top (3540 MHz)	Peak Antenna Gain (dBi):	26.32

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3540 MHz)	64	29.35	31.33	47.92

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3540 MHz)	64	16.97	19.06	35.61	61.84	62.15	-0.31	65.15	-3.31

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3540 MHz)	64	9.22	9.65	13.00	-3.35



Worst Case Plot - Top Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

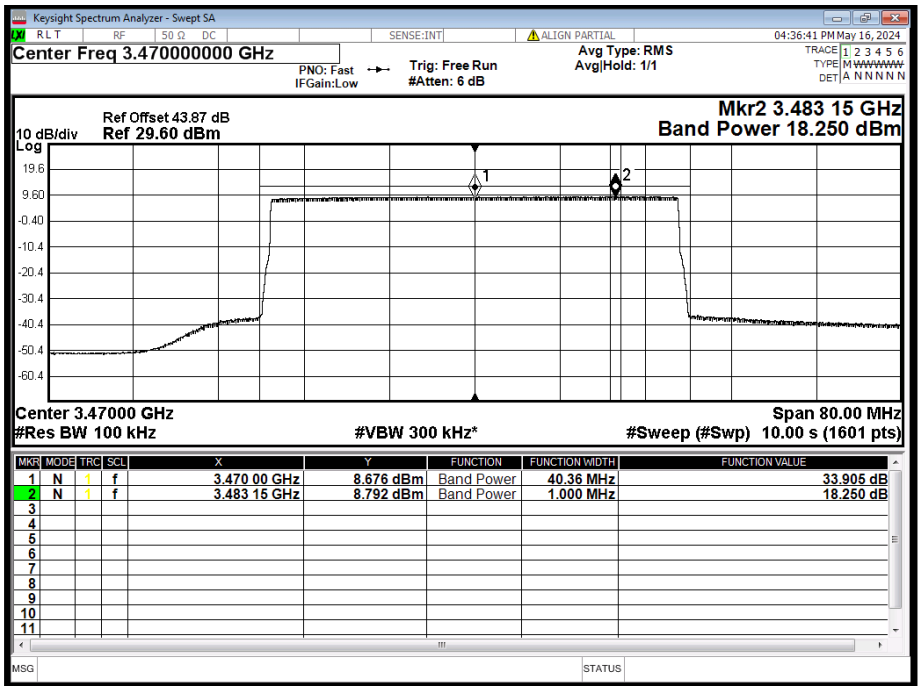
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	40M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	40 MHz	DCCF (dB):	1.31
Channel	Bottom (3470 MHz)	Peak Antenna Gain (dBi):	26.00

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3470 MHz)	64	32.08	33.91	50.65

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3470 MHz)	64	16.46	18.25	35.02	61.02	62.15	-1.13	65.15	-4.13

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3470 MHz)	64	8.51	9.31	13.00	-3.70



Worst Case Plot - Bottom Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

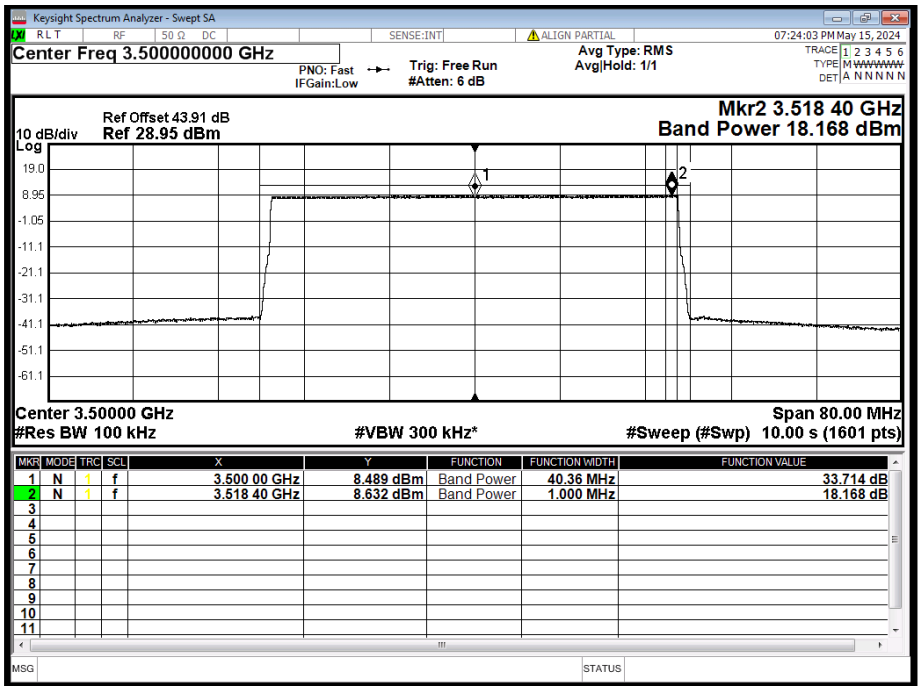
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	40M 3.3W/MHz	Duty Cycle (%):	73.8
RFBW:	40 MHz	DCCF (dB):	1.32
Channel	Middle (3500 MHz)	Peak Antenna Gain (dBi):	26.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3500 MHz)	64	31.69	33.71	50.37

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3500 MHz)	64	15.93	18.17	34.64	61.04	62.15	-1.11	65.15	-4.11

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3500 MHz)	64	8.60	9.22	13.00	-3.78



Worst Case Plot - MIddle Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

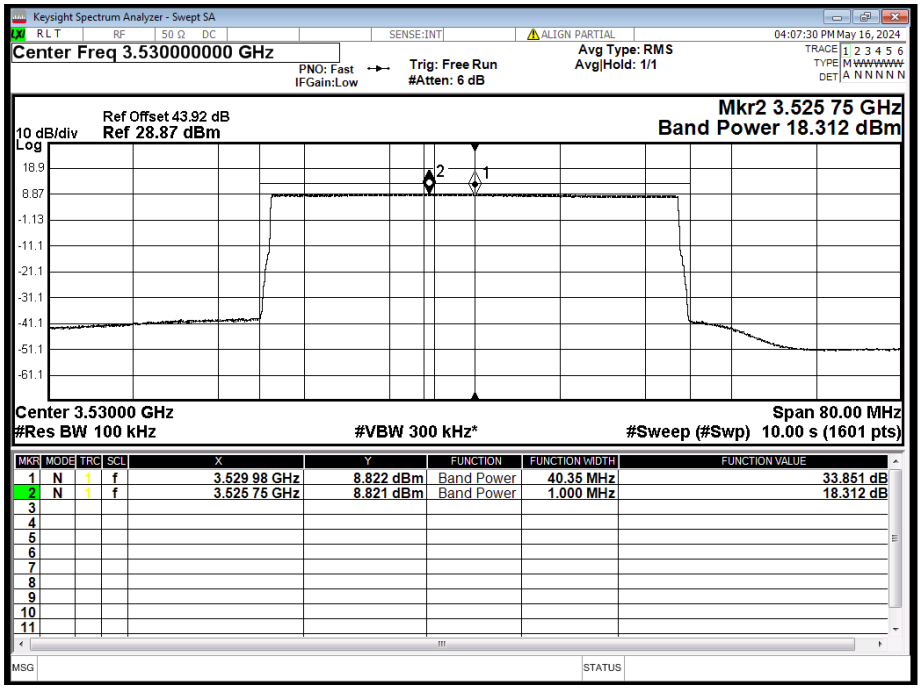
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	40M 3.3W/MHz	Duty Cycle (%):	74.0
RFBW:	40 MHz	DCCF (dB):	1.31
Channel	Top (3530 MHz)	Peak Antenna Gain (dBi):	26.32

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3530 MHz)	64	31.66	33.85	50.33

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3530 MHz)	64	16.07	18.31	34.73	61.05	62.15	-1.10	65.15	-4.10

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3530 MHz)	64	8.55	9.29	13.00	-3.71



Worst Case Plot - Top Channel Port 1

Configuration 1

Maximum Output Power 27.16, 30.13, 33.13, 36.98 dBm

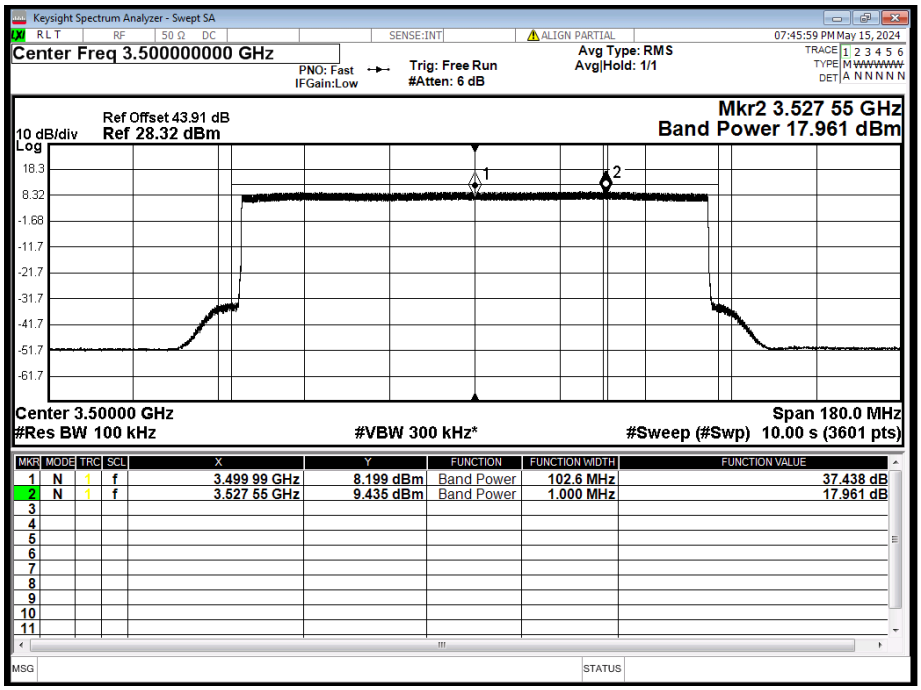
Module 1 Max 3.3W/MHz PSD

DUT Configuration			
Carrier Configuration:	100M 3.3W/MHz	Duty Cycle (%):	74.1
RFBW:	100 MHz	DCCF (dB):	1.30
Channel	Middle (3500 MHz)	Peak Antenna Gain (dBi):	26.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3500 MHz)	64	35.02	37.44	53.85

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3500 MHz)	64	15.35	17.96	34.18	60.55	62.15	-1.57	65.15	-4.57

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3500 MHz)	64	7.26	8.71	13.00	-4.29



Worst Case Plot - Top Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

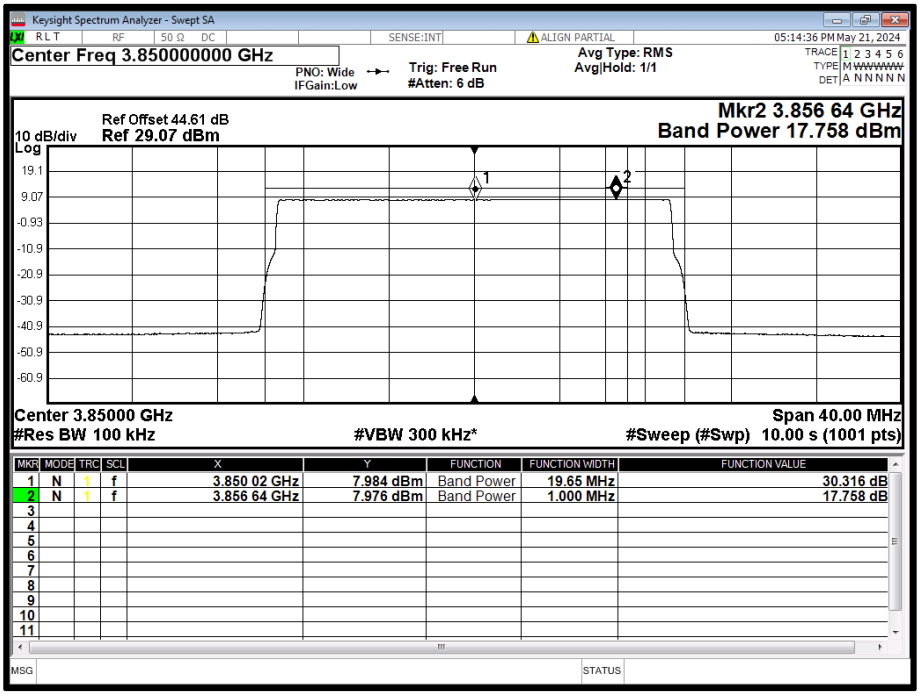
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.8
RFBW:	20 MHz	DCCF (dB):	1.32
		Peak Antenna Gain (dBi):	27.04

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3850 MHz)	64	28.98	30.32	47.48

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3850 MHz)	64	16.38	17.76	34.89	61.93	62.15	-0.22	65.15	-3.22

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3850 MHz)	64	8.58	9.12	13.00	-3.88



Worst Case Plot- Bottom Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

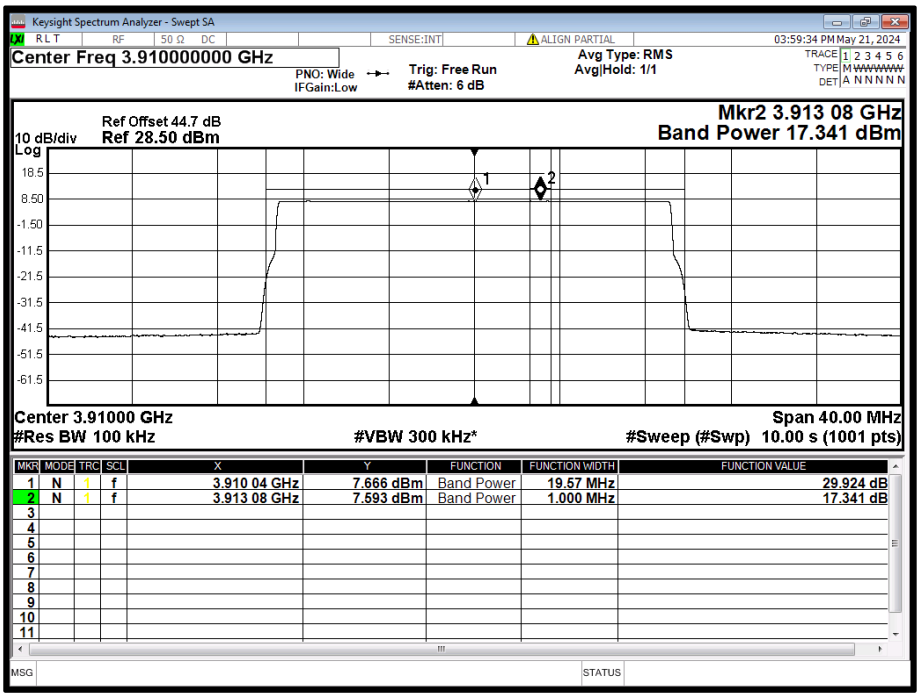
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.8
RFBW:	20 MHz	DCCF (dB):	1.32
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3910 MHz)	64	28.62	29.92	47.14

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3910 MHz)	64	16.14	17.34	34.63	62.03	62.15	-0.12	65.15	-3.12

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3910 MHz)	64	8.58	9.01	13.00	-3.99



Worst Case Plot- Middle Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

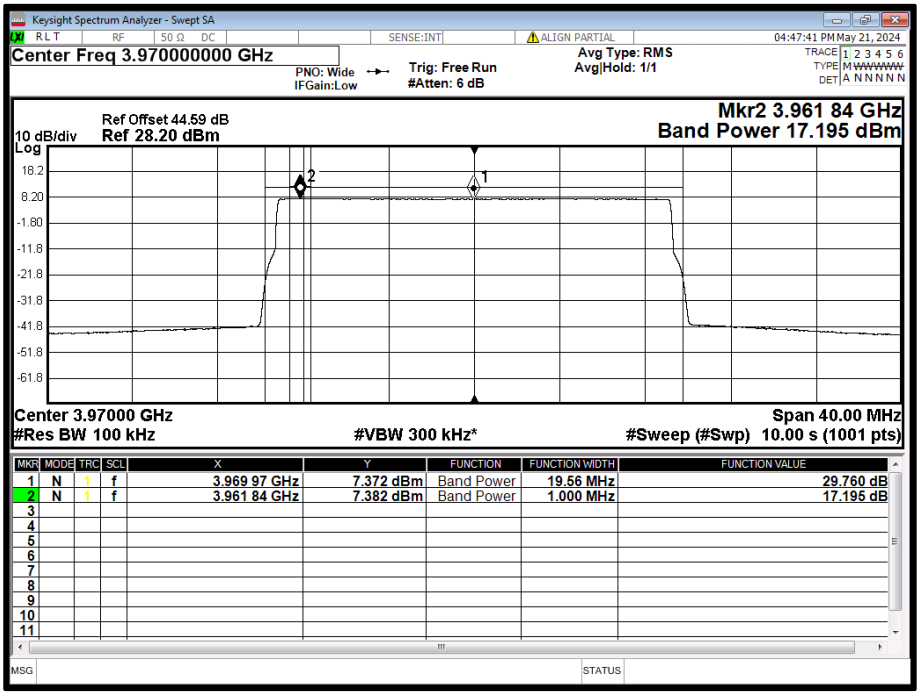
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	20 MHz	DCCF (dB):	1.30
		Peak Antenna Gain (dBi):	27.04

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3970 MHz)	64	28.17	29.76	46.82

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3970 MHz)	64	15.78	17.20	34.34	61.38	62.15	-0.77	65.15	-3.77

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3970 MHz)	64	8.67	9.08	13.00	-3.92



Worst Case Plot- Top Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

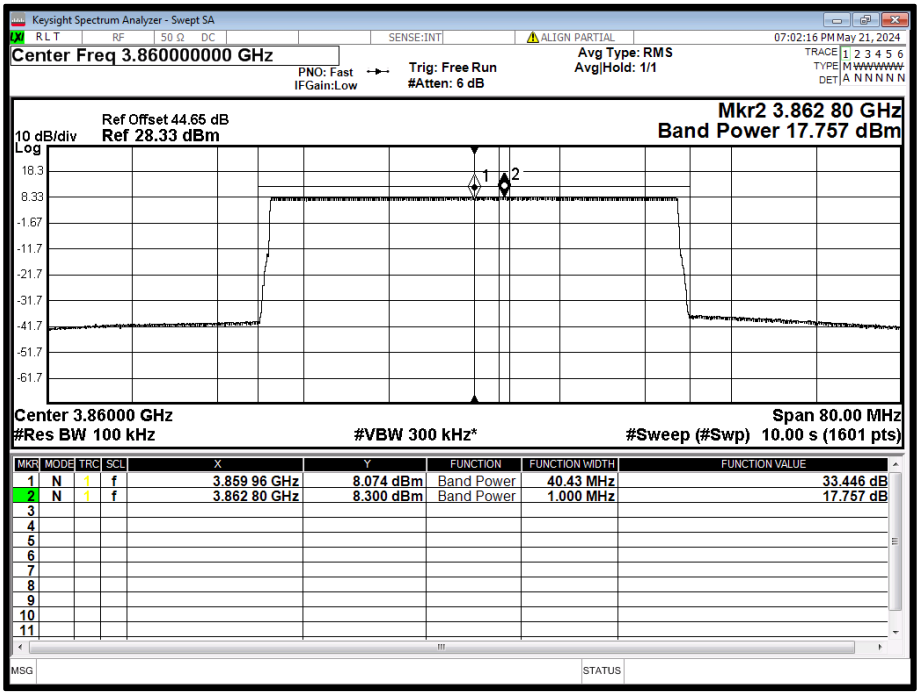
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.9
RFBW:	40 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3860 MHz)	64	31.95	33.45	50.47

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3860 MHz)	64	16.28	17.76	34.74	62.14	62.15	-0.01	65.15	-3.01

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3860 MHz)	64	8.66	9.30	13.00	-3.70



Worst Case Plot- Bottom Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

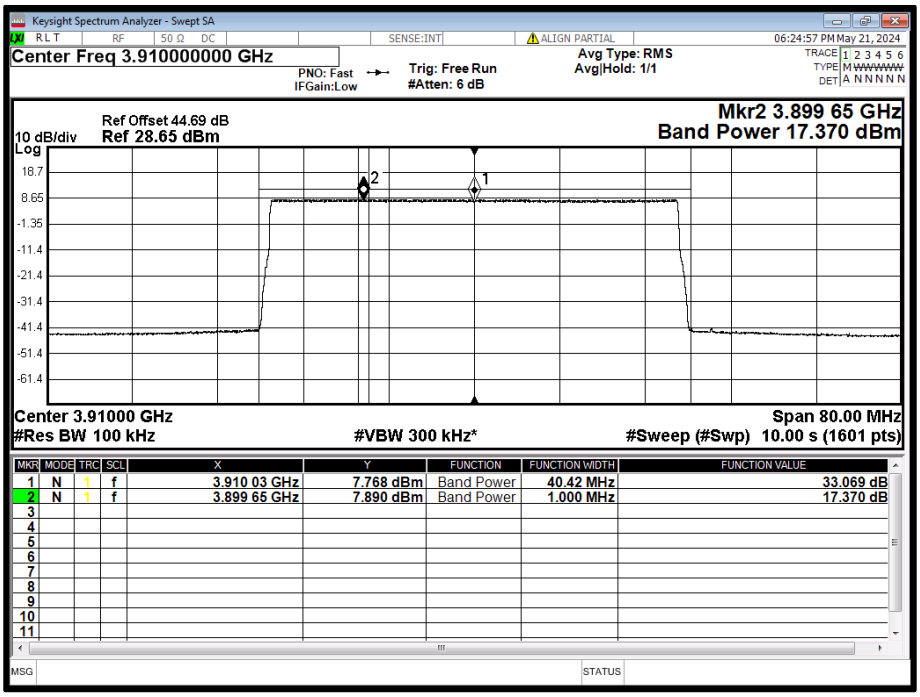
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.9
RFBW:	40 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3910 MHz)	64	31.53	33.07	50.16

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3910 MHz)	64	15.91	17.37	34.52	61.92	62.15	-0.23	65.15	-3.23

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3910 MHz)	64	8.69	9.20	13.00	-3.81



Worst Case Plot- Middle Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

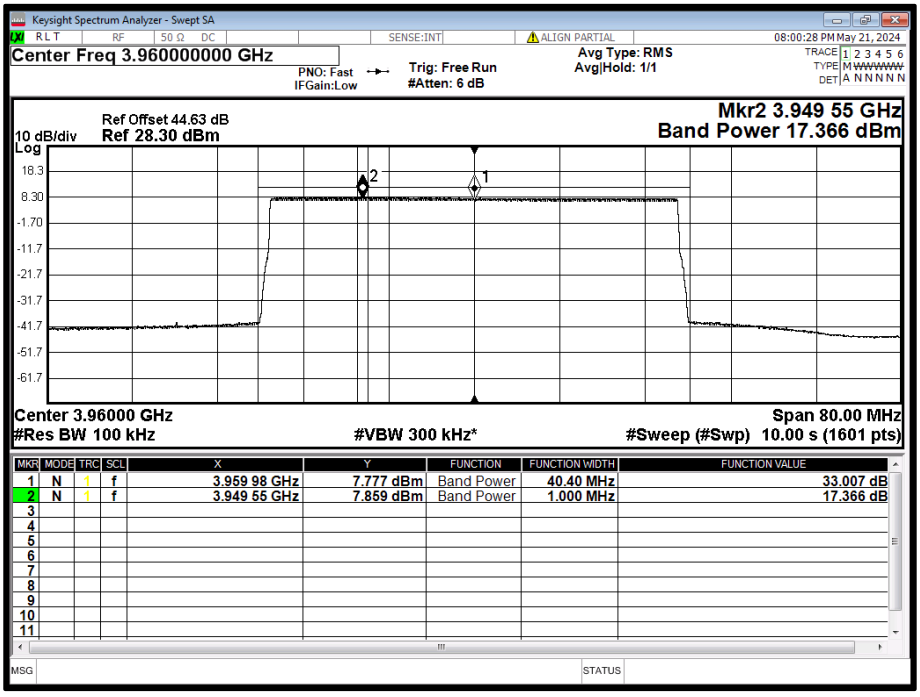
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.9
RFBW:	40 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3960 MHz)	64	31.42	33.01	50.00

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3960 MHz)	64	15.89	17.37	34.40	61.80	62.15	-0.35	65.15	-3.35

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3960 MHz)	64	8.78	9.24	13.00	-3.76



Worst Case Plot- Top Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

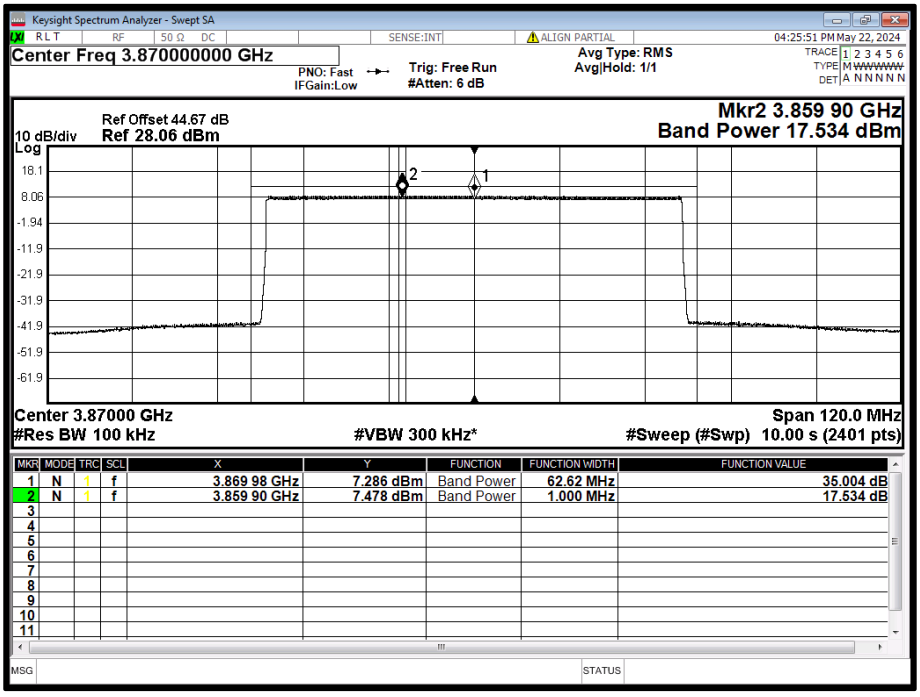
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	60 MHz	DCCF (dB):	1.30
		Peak Antenna Gain (dBi):	27.4

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3870 MHz)	64	33.66	35.00	52.09

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3870 MHz)	64	16.21	17.53	34.61	62.01	62.15	-0.14	65.15	-3.14

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3870 MHz)	64	8.71	9.42	13.00	-3.58



Worst Case Plot- Bottom Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

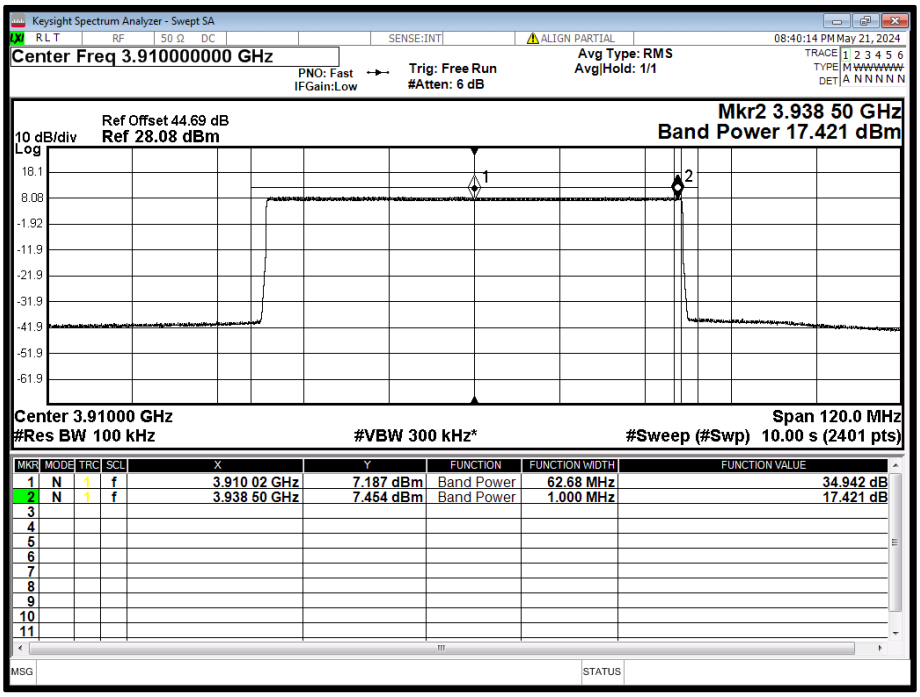
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	60 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)			EIRP (dBm)	Limit (dBm)	Margin (dB)
		Min	Max	∑			
Middle (3910 MHz)	64	33.45	34.94	51.95	79.35	32.27	47.08

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3910 MHz)	64	16.10	17.42	34.52	61.92	62.15	-0.23	65.15	-3.23

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3910 MHz)	64	8.64	9.52	13.00	-3.48



Worst Case Plot- Middle Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

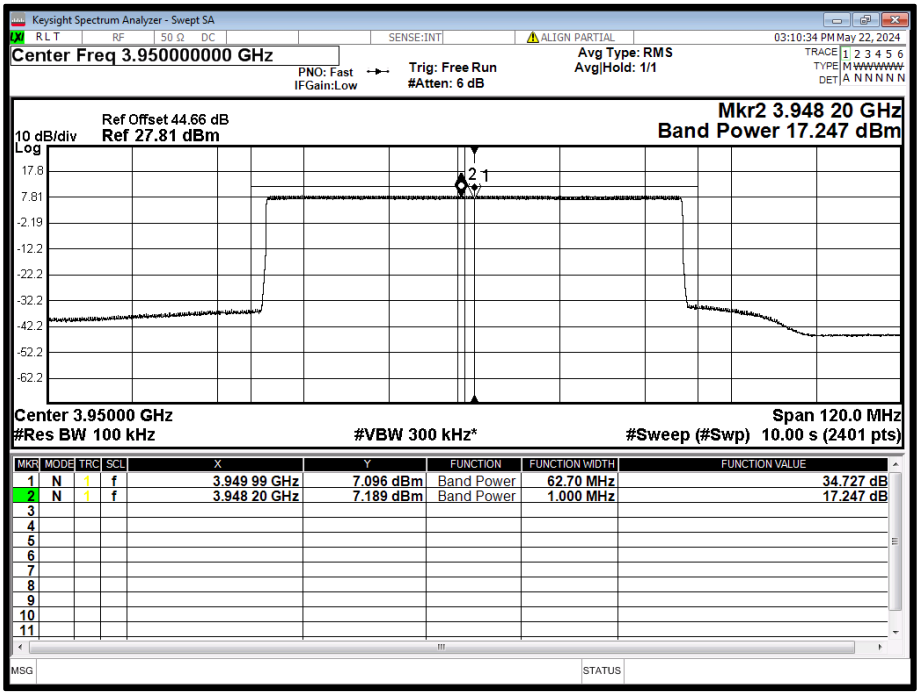
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	60 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3950 MHz)	64	33.27	34.73	51.70

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3950 MHz)	64	15.87	17.25	34.24	61.64	62.15	-0.51	65.15	-3.51

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3950 MHz)	64	8.66	9.52	13.00	-3.48



Worst Case Plot- Top Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

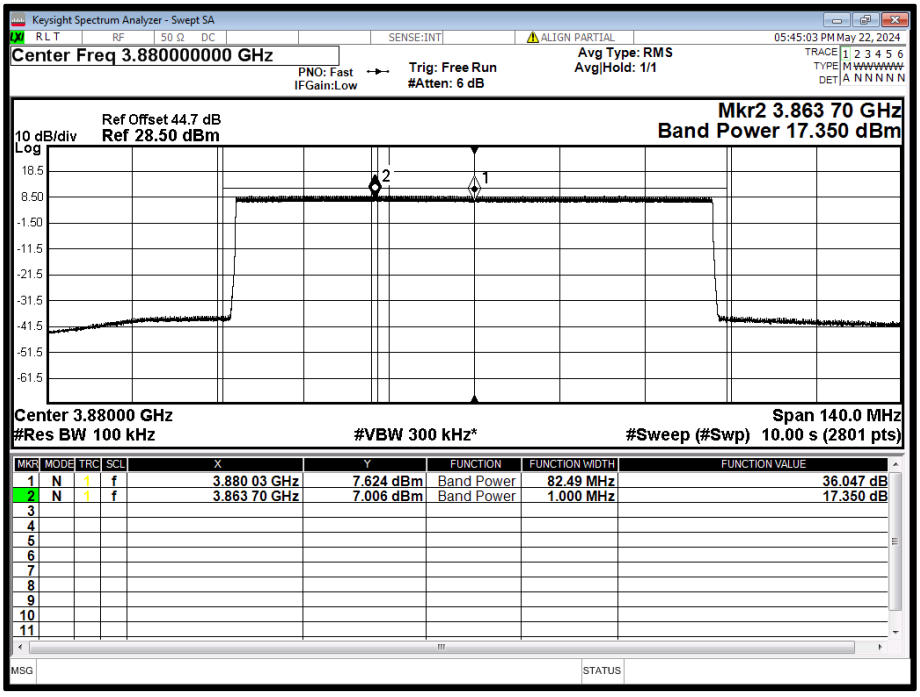
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.8
RFBW:	80 MHz	DCCF (dB):	1.32
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3880 MHz)	64	34.48	36.05	53.01

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3880 MHz)	64	15.85	17.35	34.27	61.67	62.15	-0.48	65.15	-3.48

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3880 MHz)	64	8.83	9.74	13.00	-3.27



Worst Case Plot- Bottom Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

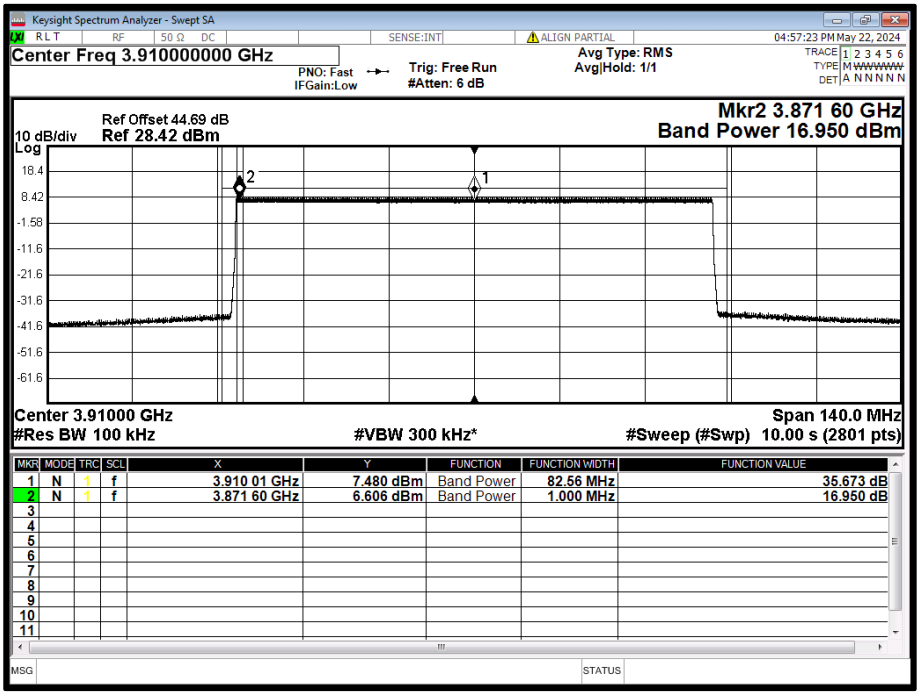
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	80 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3910 MHz)	64	34.16	35.67	52.71

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3910 MHz)	64	15.58	16.95	34.02	61.41	62.15	-0.74	65.15	-3.74

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3910 MHz)	64	8.84	9.72	13.00	-3.28



Worst Case Plot- Middle Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

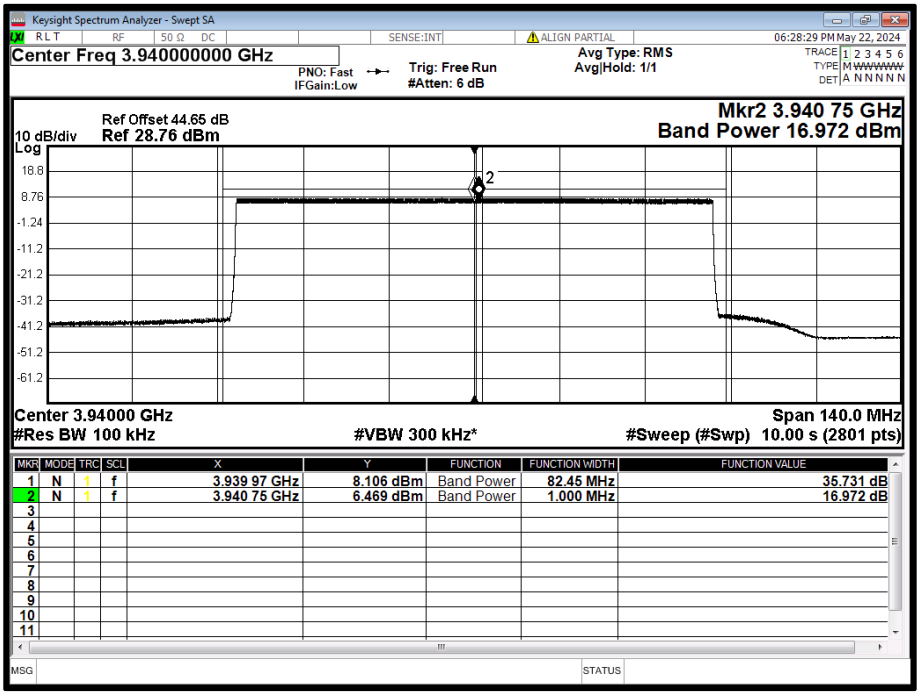
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.6
RFBW:	80 MHz	DCCF (dB):	1.27
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3940 MHz)	64	33.99	35.73	52.56

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3940 MHz)	64	15.42	16.97	33.95	61.35	62.15	-0.80	65.15	-3.80

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3940 MHz)	64	8.88	9.87	13.00	-3.13



Worst Case Plot- Top Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

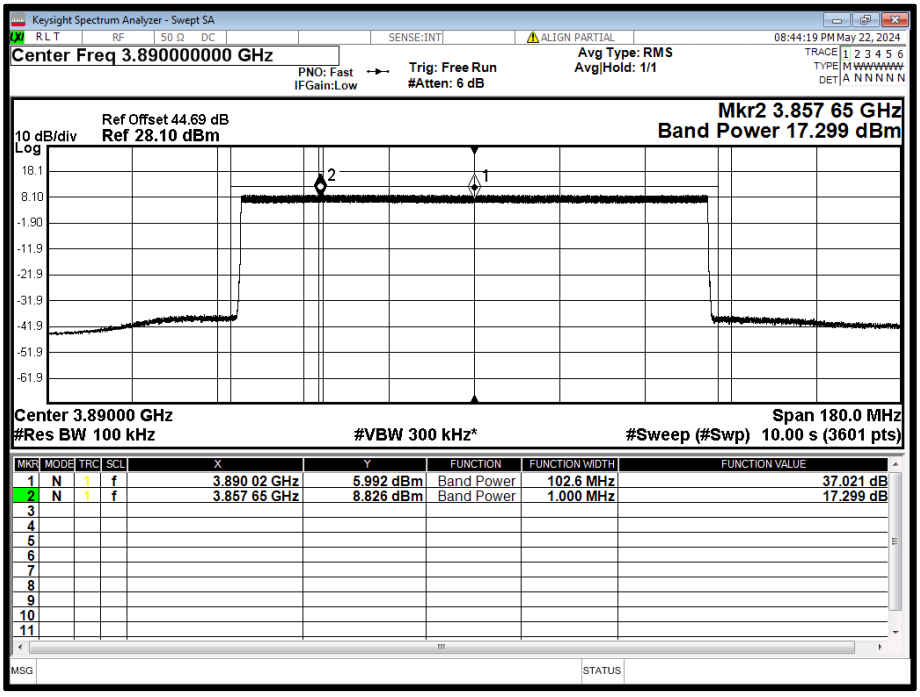
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.9
RFBW:	100 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Bottom (3890 MHz)	64	35.23	37.02	53.87

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Bottom (3890 MHz)	64	15.57	17.30	34.16	61.55	62.15	-0.59	65.15	-3.59

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Bottom (3890 MHz)	64	9.02	9.90	13.00	-3.10



Worst Case Plot- Bottom Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

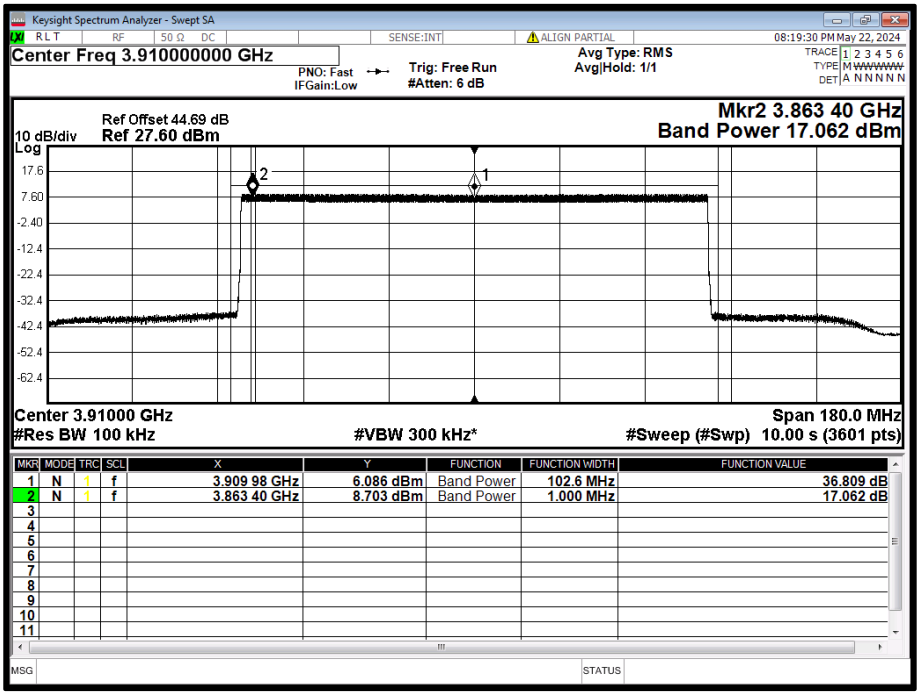
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	73.9
RFBW:	100 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Middle (3910 MHz)	64	35.26	36.81	53.82

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Middle (3910 MHz)	64	15.52	17.06	34.11	61.51	62.15	-0.64	65.15	-3.64

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Middle (3910 MHz)	64	9.01	9.90	13.00	-3.10



Worst Case Plot- Middle Channel Port 1

Configuration 2

Maximum Output Power 29.26, 32.27, 34.03, 35.28, 36.25 dBm

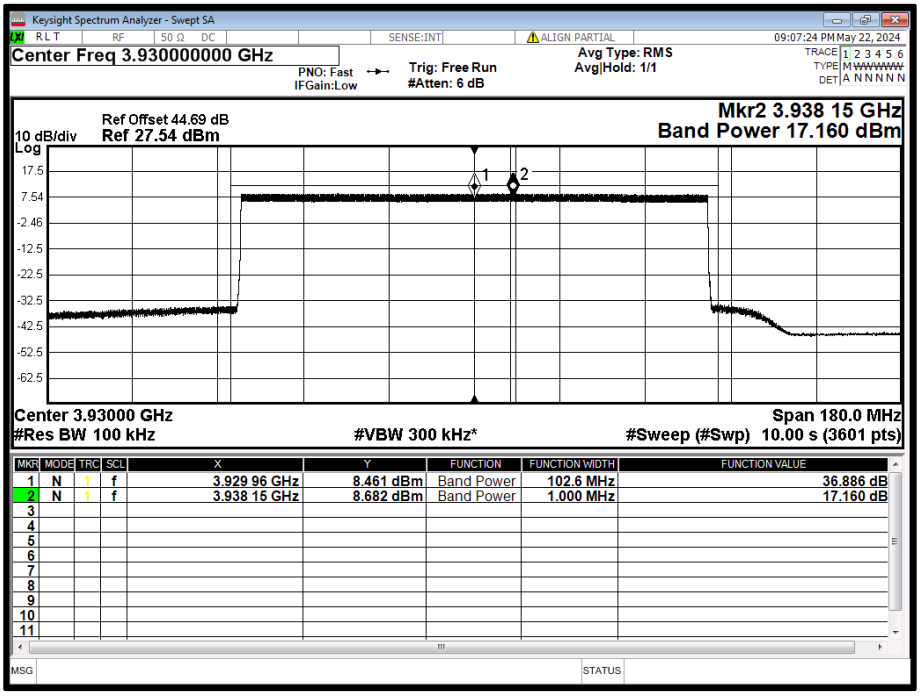
Module 2 - Max 2.7 W/MHz PSD

DUT Configuration			
Carrier Configuration:	QPSK 77M 2.7W/MHz Non-rural	Duty Cycle (%):	74.0
RFBW:	100 MHz	DCCF (dB):	1.31
		Peak Antenna Gain (dBi):	27.40

Test Channel	Number of Measurements	PWR (dBm)		
		Min	Max	∑
Top (3930 MHz)	64	35.02	36.89	53.63

Test Channel	Number of Measurements	PSD (dBm/MHz)			EIRP (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Limit (dBm/MHz)	Margin (dB)
		Min	Max	∑					
Top (3930 MHz)	64	15.40	17.16	34.02	61.42	**62.15**	-0.73	65.15	-3.73

Test Channel	Number of Measurements	PAPR (dB)		Limit (dB)	Margin (dB)
		Min	Max		
Top (3930 MHz)	64	8.97	10.18	13.00	-2.82



Worst Case Plot- Top Channel Port 1

Configuration 3

Maximum Output Power by Test Case, see Section 1.4, Configuration Description - Module 2

Antenna	NR Modulation	Test Case	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD											
				Channel Position B											
				Band 77M					Band 77G						
				Average Power ∑	PSD ∑	Declared Gain	Total EIRP	Total EIRP Limit 62.15dB	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBi	dBm/MHz	dB	dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1-64 4	QPSK	1	1C 20M Band 77M + 1C 20M Band 77G	47.48	34.89	26.00	60.89	-1.26	29.82	17.40	47.88	35.46	26.00	61.46	-0.69
1-64 4	QPSK	2	1C 40M Band 77M + 1C 20M Band 77G	50.47	34.74	26.00	60.74	-1.41	29.82	17.40	47.88	35.46	26.00	61.46	-0.69
1-64 4	QPSK	3	1C 60M Band 77M + 1C 20M Band 77G	52.09	34.61	26.00	60.61	-1.54	29.82	17.40	47.88	35.46	26.00	61.46	-0.69
1-64 4	QPSK	4	1C 80M Band 77M + 1C 20M Band 77G	53.01	34.26	26.00	60.26	-1.89	29.82	17.40	47.88	35.46	26.00	61.46	-0.69
1-64 4	QPSK	5	1C 100M Band 77M + 1C 20M Band 77G	53.87	34.15	26.00	60.15	-2.00	29.82	17.40	47.88	35.46	26.00	61.46	-0.69
1-64 4	QPSK	6	1C 20M Band 77M + 1C 40M Band 77G	47.48	34.89	26.00	60.89	-1.26	32.70	17.02	50.76	35.08	26.00	61.08	-1.07
1-64 4	QPSK	7	1C 40M Band 77M + 1C 40M Band 77G	50.47	34.74	26.00	60.74	-1.41	32.70	17.02	50.76	35.08	26.00	61.08	-1.07
1-64 4	QPSK	8	1C 60M Band 77M + 1C 40M Band 77G	52.09	34.61	26.00	60.61	-1.54	32.70	17.02	50.76	35.08	26.00	61.08	-1.07
1-64 4	QPSK	9	1C 80M Band 77M + 1C40M Band 77G	53.01	34.26	26.00	60.26	-1.89	32.70	17.02	50.76	35.08	26.00	61.08	-1.07
1-64 4	QPSK	10	1C 100M Band 77M + 1C 40M Band 77G	53.87	34.15	26.00	60.15	-2.00	32.70	17.02	50.76	35.08	26.00	61.08	-1.07
1-64 4	QPSK	11	1C 20M Band 77M + 1C 100M Band 77G	47.48	34.89	26.00	60.89	-1.26	36.30	16.61	54.36	34.67	26.00	60.67	-1.48
1-64 4	QPSK	12	1C 40M Band 77M + 1C 100M Band 77G	50.47	34.74	26.00	60.74	-1.41	36.30	16.61	54.36	34.67	26.00	60.67	-1.48
1-64 4	QPSK	13	1C 60M Band 77M + 1C 100M Band 77G	52.09	34.61	26.00	60.61	-1.54	36.30	16.61	54.36	34.67	26.00	60.67	-1.48
1-64 4	QPSK	14	1C 80M Band 77M + 1C100M Band 77G	53.01	34.26	26.00	60.26	-1.89	36.30	16.61	54.36	34.67	26.00	60.67	-1.48
1-64 4	QPSK	15	1C 100M Band 77M + 1C 100M Band 77G	53.9	34.2	26.0	60.15	-2.00	36.30	16.61	54.36	34.67	26.00	60.67	-1.48

Configuration 3 Maximum Output Power by Test Case, see Section 1.4, Configuration Description - Module 2

Antenna	NR Modulation	Test Case	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD					Peak to Average Ratio (PAR) / Output Power / PSD				
				Channel Position M					Channel Position M				
				Band 77M					Band 77G				
				Average Power ∑	PSD ∑	Declared Gain	Total EIRP	Total EIRP Limit 62.15dB	Average Power ∑	PSD ∑	Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBi	dBm/MHz	dB	dBm	dBm/MHz	dBi	dBm/MHz	dB
1-64 1-64	QPSK	1	1C 20M Band 77M + 1C 20M Band 77G	47.14	34.63	26.40	61.03	-1.12	47.70	35.15	26.40	61.55	-0.60
1-64 1-64	QPSK	2	1C 40M Band 77M + 1C 20M Band 77G	50.16	34.52	26.40	60.92	-1.23	47.70	35.15	26.40	61.55	-0.60
1-64 1-64	QPSK	3	1C 60M Band 77M + 1C 20M Band 77G	51.95	34.52	26.40	60.92	-1.23	47.70	35.15	26.40	61.55	-0.60
1-64 1-64	QPSK	4	1C 80M Band 77M + 1C 20M Band 77G	52.71	34.02	26.40	60.42	-1.73	47.70	35.15	26.40	61.55	-0.60
1-64 1-64	QPSK	5	1C 100M Band 77M + 1C 20M Band 77G	53.82	34.11	26.40	60.51	-1.64	47.70	35.15	26.40	61.55	-0.60
1-64 1-64	QPSK	6	1C 20M Band 77M + 1C 40M Band 77G	47.14	34.63	26.40	61.03	-1.12	50.23	34.52	26.40	60.92	-1.23
1-64 1-64	QPSK	7	1C 40M Band 77M + 1C 40M Band 77G	50.16	34.52	26.40	60.92	-1.23	50.23	34.52	26.40	60.92	-1.23
1-64 1-64	QPSK	8	1C 60M Band 77M + 1C 40M Band 77G	51.95	34.52	26.40	60.92	-1.23	50.23	34.52	26.40	60.92	-1.23
1-64 1-64	QPSK	9	1C 80M Band 77M + 1C40M Band 77G	52.71	34.02	26.40	60.42	-1.73	50.23	34.52	26.40	60.92	-1.23
1-64 1-64	QPSK	10	1C 100M Band 77M + 1C 40M Band 77G	53.82	34.11	26.40	60.51	-1.64	50.23	34.52	26.40	60.92	-1.23

Antenna	NR Modulation	Test Case	NR Carrier Bandwidth	Average Powe ∑	PSD ∑	Declared Gain	Total EIRP	Total EIRP Limit 62.15dB	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBi	dBm/MHz	dB	dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1-64 1	QPSK	11	1C 20M Band 77M + 1C 100M Band 77G	47.14	34.63	26.40	61.03	-1.12	36.31	16.65	54.37	34.71	26.40	61.11	-1.04
1-64 1	QPSK	12	1C 40M Band 77M + 1C 100M Band 77G	50.16	34.52	26.40	60.92	-1.23	36.31	16.65	54.37	34.71	26.40	61.11	-1.04
1-64 1	QPSK	13	1C 60M Band 77M + 1C 100M Band 77G	51.95	34.52	26.40	60.92	-1.23	36.31	16.65	54.37	34.71	26.40	61.11	-1.04
1-64 1	QPSK	14	1C 80M Band 77M + 1C100M Band 77G	52.71	34.02	26.40	60.42	-1.73	36.31	16.65	54.37	34.71	26.40	61.11	-1.04
1-64 1	QPSK	15	1C 100M Band 77M + 1C 100M Band 77G	53.8	34.1	26.40	60.51	-1.64	36.31	16.65	54.37	34.71	26.40	61.11	-1.04

Configuration 3

Maximum Output Power by Test Case, see Section 1.4, Configuration Description - Module 2

Antenna	NR Modulation	Test Case	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD											
				Channel Position T											
				Band 77M					Band 77G						
				Average Power ∑	PSD ∑	Declared Gain	Total EIRP	Total EIRP Limit 62.15dB	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBi	dBm/MHz	dB	dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1-64 4	QPSK	1	1C 20M Band 77M + 1C 20M Band 77G	46.82	34.34	26.32	60.66	-1.49	29.81	17.48	47.87	35.54	26.32	61.86	-0.29
1-64 4	QPSK	2	1C 40M Band 77M + 1C 20M Band 77G	50.00	34.40	26.32	60.72	-1.43	29.81	17.48	47.87	35.54	26.32	61.86	-0.29
1-64 4	QPSK	3	1C 60M Band 77M + 1C 20M Band 77G	51.70	34.24	26.32	60.56	-1.59	29.81	17.48	47.87	35.54	26.32	61.86	-0.29
1-64 4	QPSK	4	1C 80M Band 77M + 1C 20M Band 77G	52.56	33.95	26.32	60.27	-1.88	29.81	17.48	47.87	35.54	26.32	61.86	-0.29
1-64 4	QPSK	5	1C 100M Band 77M + 1C 20M Band 77G	53.63	34.02	26.32	60.34	-1.81	29.81	17.48	47.87	35.54	26.32	61.86	-0.29
1-64 4	QPSK	6	1C 20M Band 77M + 1C 40M Band 77G	46.82	34.34	26.32	60.66	-1.49	32.77	17.23	50.83	35.29	26.32	61.61	-0.54
1-64 4	QPSK	7	1C 40M Band 77M + 1C 40M Band 77G	46.82	34.34	26.32	60.66	-1.49	32.77	17.23	50.83	35.29	26.32	61.61	-0.54
1-64 4	QPSK	8	1C 60M Band 77M + 1C 40M Band 77G	46.82	34.34	26.32	60.66	-1.49	32.77	17.23	50.83	35.29	26.32	61.61	-0.54
1-64 4	QPSK	9	1C 80M Band 77M + 1C40M Band 77G	46.82	34.34	26.32	60.66	-1.49	32.77	17.23	50.83	35.29	26.32	61.61	-0.54
1-64 4	QPSK	10	1C 100M Band 77M + 1C 40M Band 77G	46.82	34.34	26.32	60.66	-1.49	32.77	17.23	50.83	35.29	26.32	61.61	-0.54
1-64 4	QPSK	11	1C 20M Band 77M + 1C 100M Band 77G	46.82	34.34	26.32	60.66	-1.49	36.32	16.65	54.38	34.71	26.32	61.03	-1.12
1-64 4	QPSK	12	1C 40M Band 77M + 1C 100M Band 77G	46.82	34.34	26.32	60.66	-1.49	36.32	16.65	54.38	34.71	26.32	61.03	-1.12
1-64 4	QPSK	13	1C 60M Band 77M + 1C 100M Band 77G	46.82	34.34	26.32	60.66	-1.49	36.32	16.65	54.38	34.71	26.32	61.03	-1.12
1-64 4	QPSK	14	1C 80M Band 77M + 1C100M Band 77G	46.82	34.34	26.32	60.66	-1.49	36.32	16.65	54.38	34.71	26.32	61.03	-1.12
1-64 4	QPSK	15	1C 100M Band 77M + 1C 100M Band 77G	46.82	34.34	26.32	60.66	-1.49	36.32	16.65	54.38	34.71	26.32	61.03	-1.12

Configuration 4

Maximum Output Power 2 x 27.16 dBm

Module 1 Max 3.3W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position B							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1	QPSK	10.0 MHz 30 kHz SCS	-	28.70	16.82	46.76	34.88	27.04	61.92	-0.23

Configuration 4

Maximum Output Power 2 x 27.16 dBm

Module 1 Max 3.3W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position M							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1	QPSK	10.0 MHz 30 kHz SCS	-	28.96	16.60	47.02	34.66	27.04	61.70	-0.45

Configuration 4

Maximum Output Power 2 x 27.16 dBm

Module 1 Max 3.3W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position T							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15 dB
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
1	QPSK	10.0 MHz 30 kHz SCS	-	28.74	16.60	46.80	34.66	27.04	61.70	-0.45

Configuration 5

Maximum Output Power 34.03, 27.16, 27.16 dBm

Module 1 -B77G Max 3.3W/MHz PSD, B77M Max 2.7W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD						
			Channel Position B						
			Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
			dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
19	QPSK	1C 60M Band 77M + 2C 10M Band 77G	34.20	16.93	52.26	34.99	27.04	62.03	-0.12

Configuration 5

Maximum Output Power 34.03, 27.16, 27.16 dBm

Module 1 -B77G Max 3.3W/MHz PSD, B77M Max 2.7W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD						
			Channel Position M						
			Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
			dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
19	QPSK	1C 60M Band 77M + 2C 10M Band 77G	34.27	16.78	52.33	34.84	27.04	61.88	-0.27

Configuration 5

Maximum Output Power 34.03, 27.16, 27.16 dBm

Module 1 -B77G Max 3.3W/MHz PSD, B77M Max 2.7W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD						
			Channel Position T						
			Average Power/PSD		Total Power Ports 1-64		Declared Gain	Total EIRP	Total EIRP Limit 62.15dB
			dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
19	QPSK	1C 60M Band 77M + 2C 10M Band 77G	34.04	16.78	52.10	34.84	27.04	61.88	-0.27

Limit 27.50 (j)

Maximum rated output power (Non-Rural)	≤ 1640 W/MHz or ≤+62.15 dBm/MHz
Maximum rated output power (Rural)	≤ 3280 W/MHz or ≤+65.15 dBm/MHz
Peak to Average Ratio	13 dB

Limit 27.50 9 (k)

Maximum rated output power (Non-Rural)	≤ 1640 W/MHz or ≤+62.15 dBm/MHz
Maximum rated output power (Rural)	≤ 3280 W/MHz or ≤+65.15 dBm/MHz
Peak to Average Ratio	13 dB

2.2 OCCUPIED BANDWIDTH

2.2.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
FCC CFR 47 Part 2, Clause 2.1049

2.2.2 Date of Test and Modification State

16 and 19-April-2024 - Modification State 0

2.2.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.4 Environmental Conditions

Ambient Temperature	22.4 - 22.6°C
Relative Humidity	35.6 - 35.8%

2.2.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 4.2 and 4.3. The Spectrum Analyser RBW was configured to be at least 1% of the channel bandwidth of the carrier to be measured.

For 26 dB Bandwidth, in accordance with KDB 971168 D01, a peak detector and a trace setting of Max Hold were used. The trace was allowed to stabilise. Using the Spectrum Analyser function, the 26dB measurement result was obtained.

4.2 Occupied bandwidth – relative measurement procedure
The reference value is the highest level of the spectral envelope of the modulated signal, unless otherwise specified in an applicable rule section.
Subclause 5.4.3 of ANSI C63.26-2015 is applicable.

4.3 Occupied bandwidth – power bandwidth (99 %) measurement procedure
Subclause 5.4.4 of ANSI C63.26-2015 is applicable (wherein the recommendation is to use the 99 % power bandwidth function of a spectrum analyser).

2.2.6 Test Results

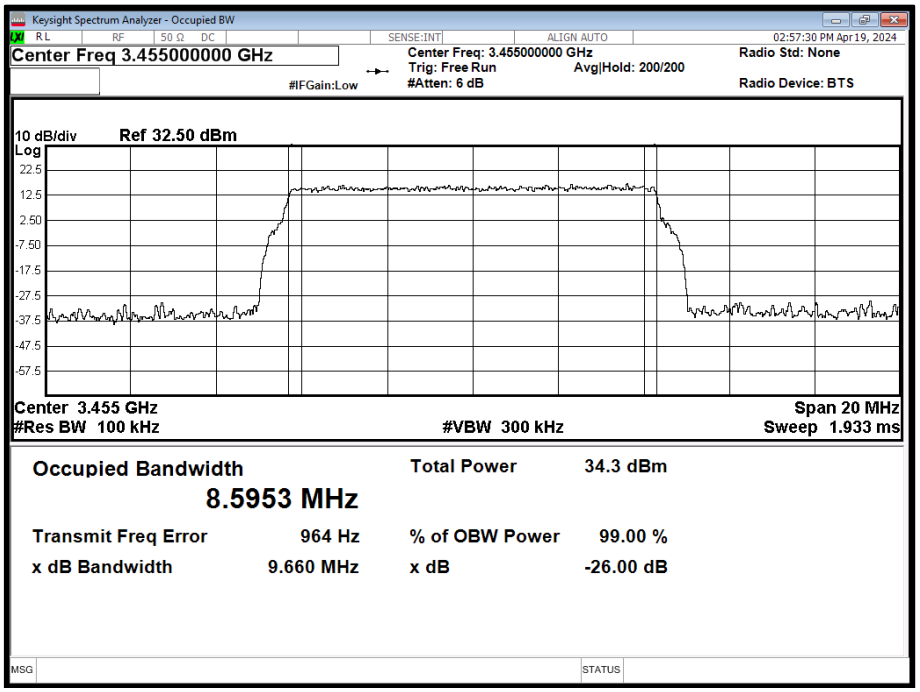
Configuration 1

Maximum Output Power 27.96, 30.97, 33.98, 36.98 dBm

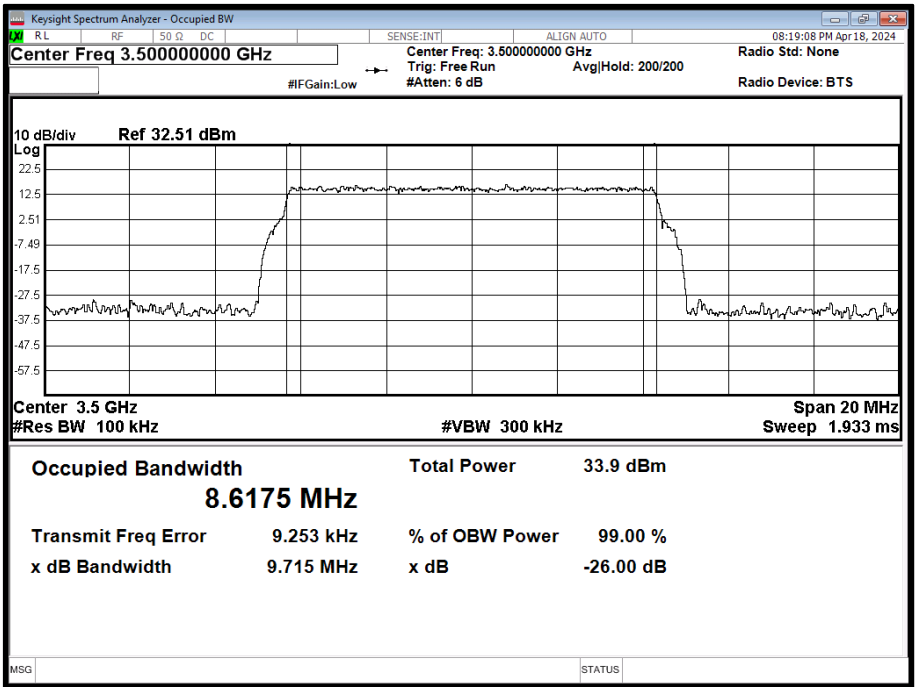
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
1	QPSK	10.0 MHz 30 kHz SCS	8595.26	9660.01	8617.51	9715.24	8631.86	9701.70
1	QPSK	20.0 MHz 30 kHz SCS	18246.22	19543.36	18245.32	19657.36	18241.97	19586.19
1	QPSK	40.0 MHz 30 kHz SCS	37715.91	39638.62	37821.61	39664.09	37790.41	39660.11
1	QPSK	100.0 MHz 30 kHz SCS	-	-	97134.32	100391.09	-	-

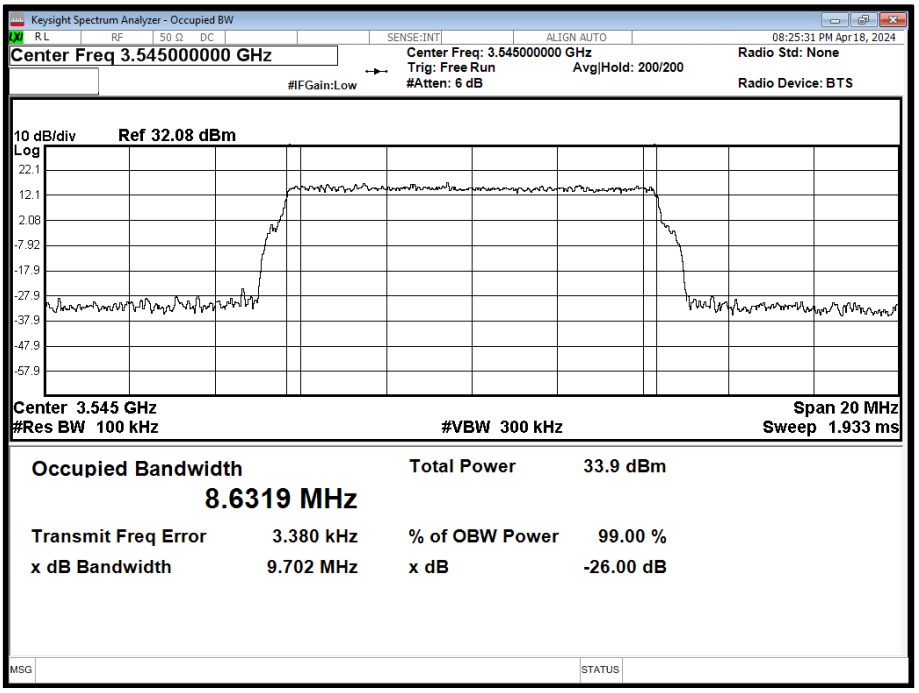
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B



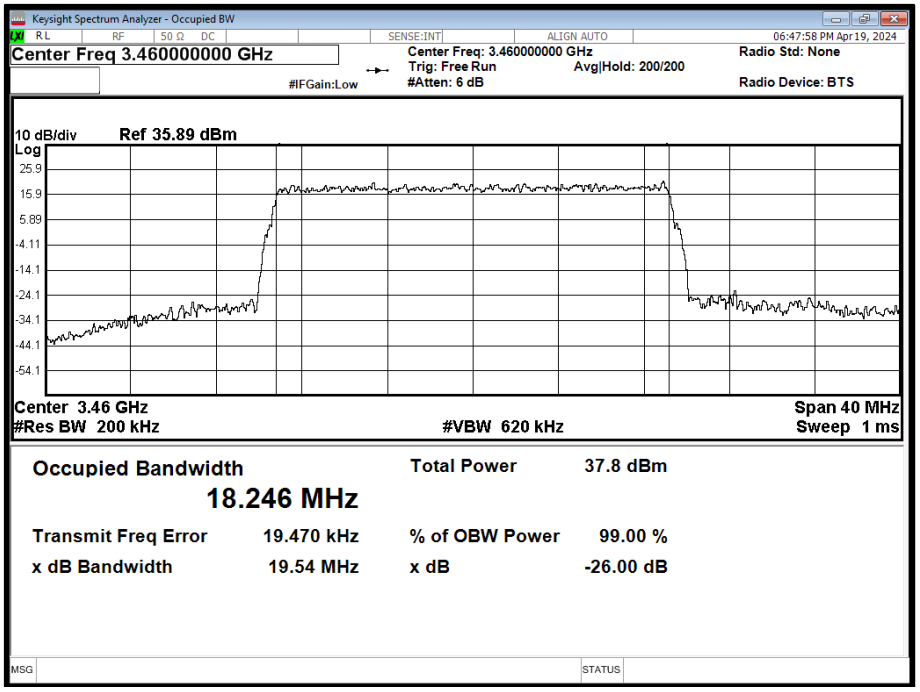
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M



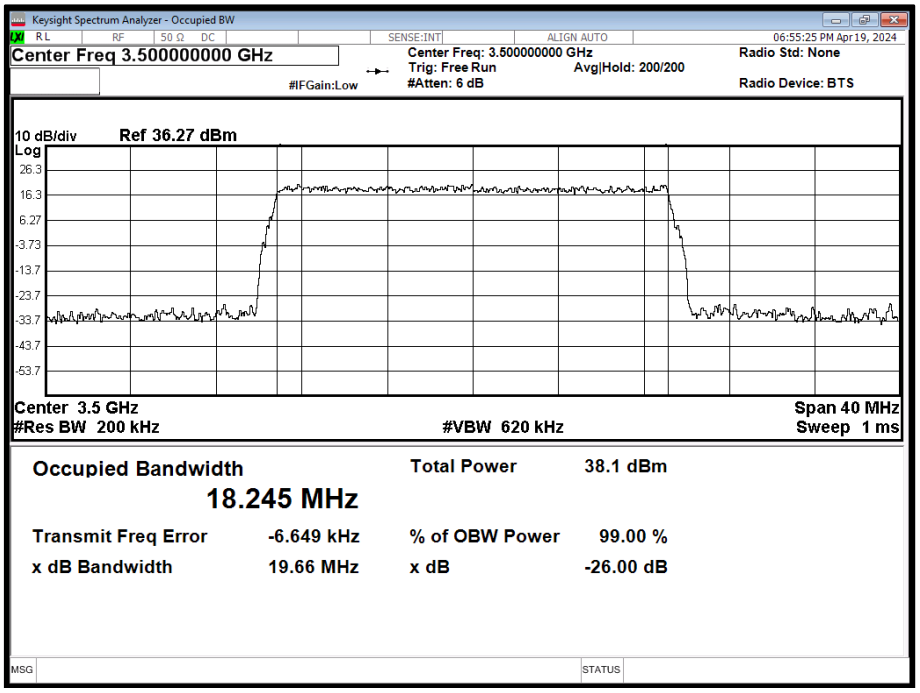
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T



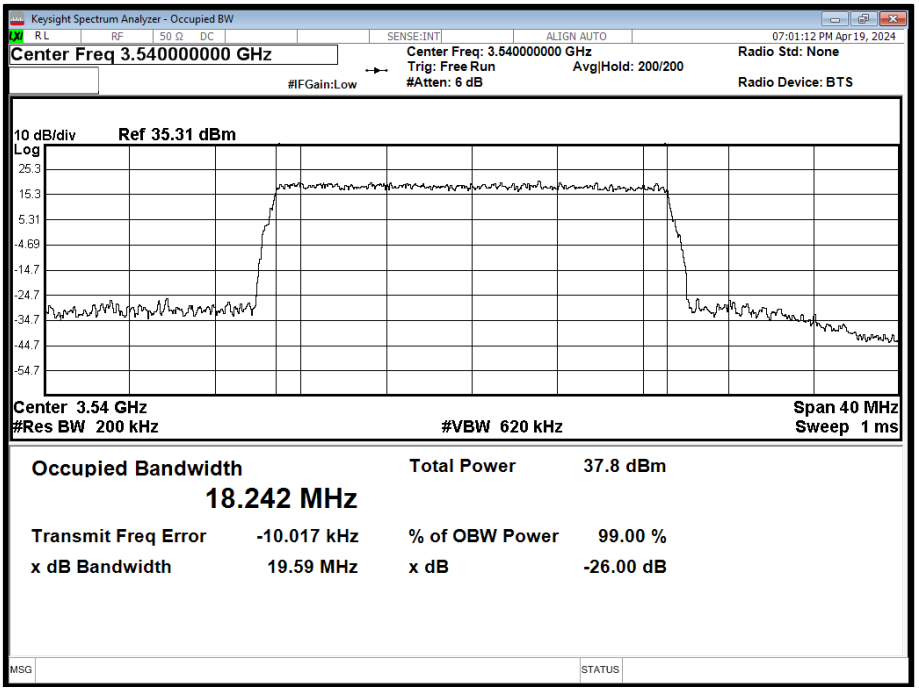
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B



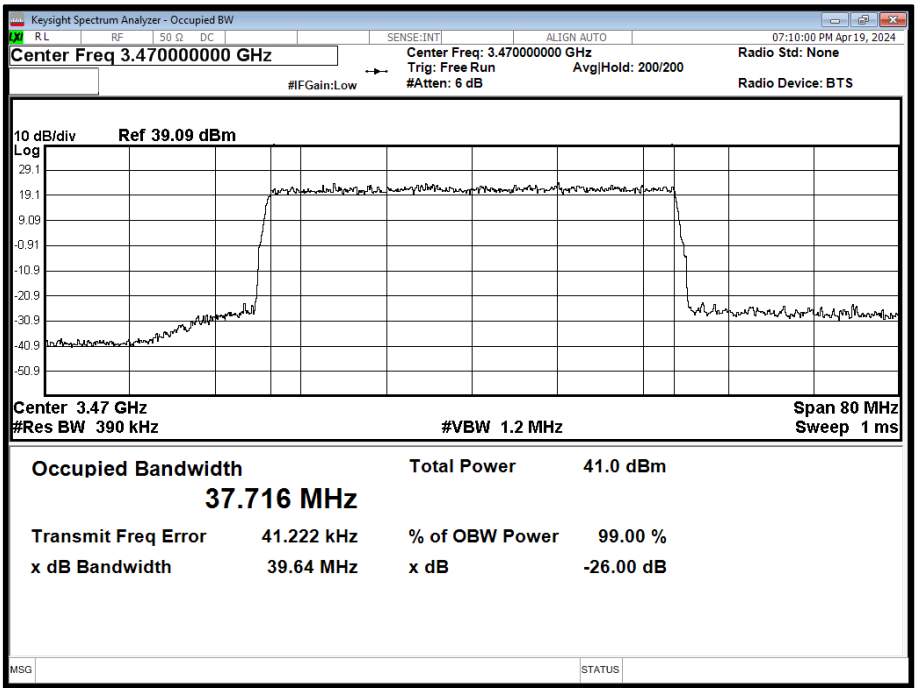
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M



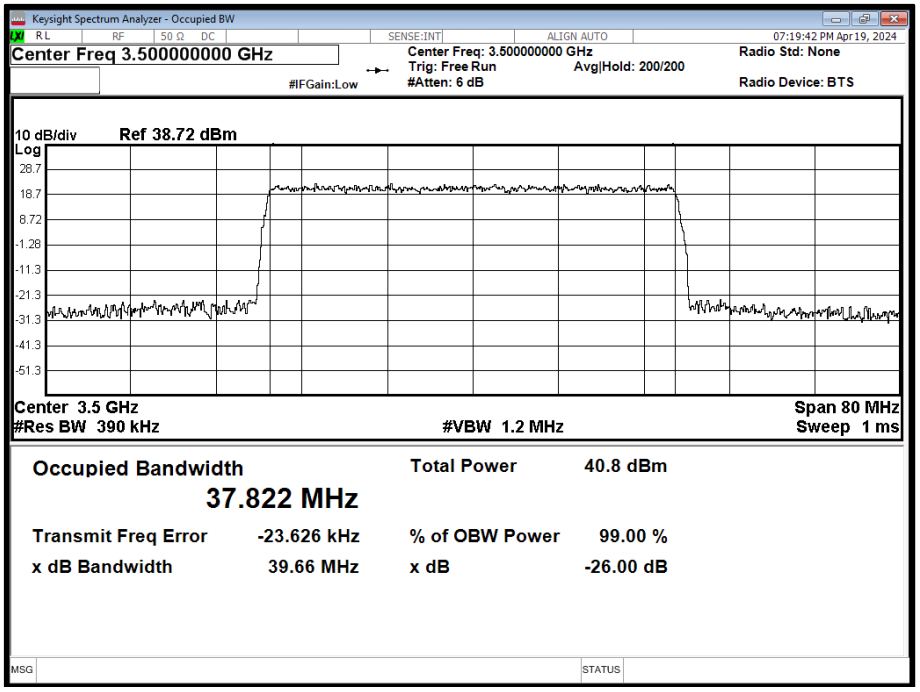
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T



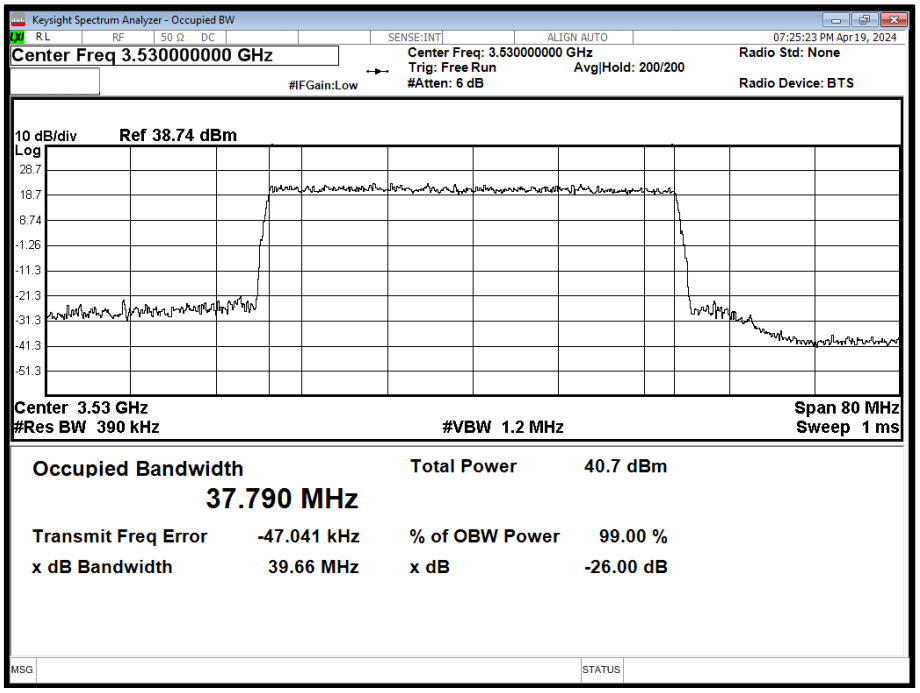
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B



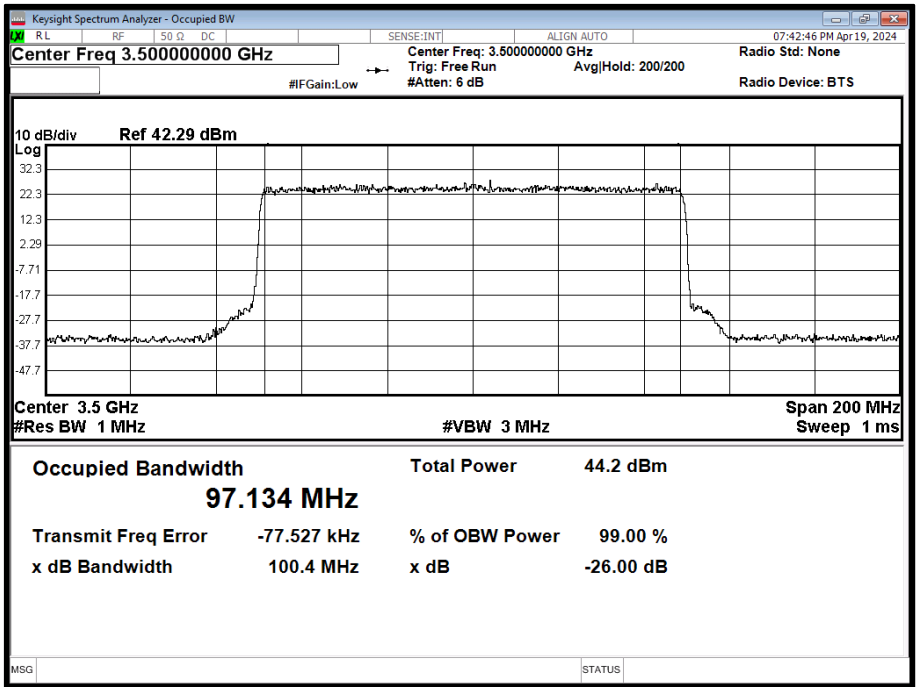
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position M



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M



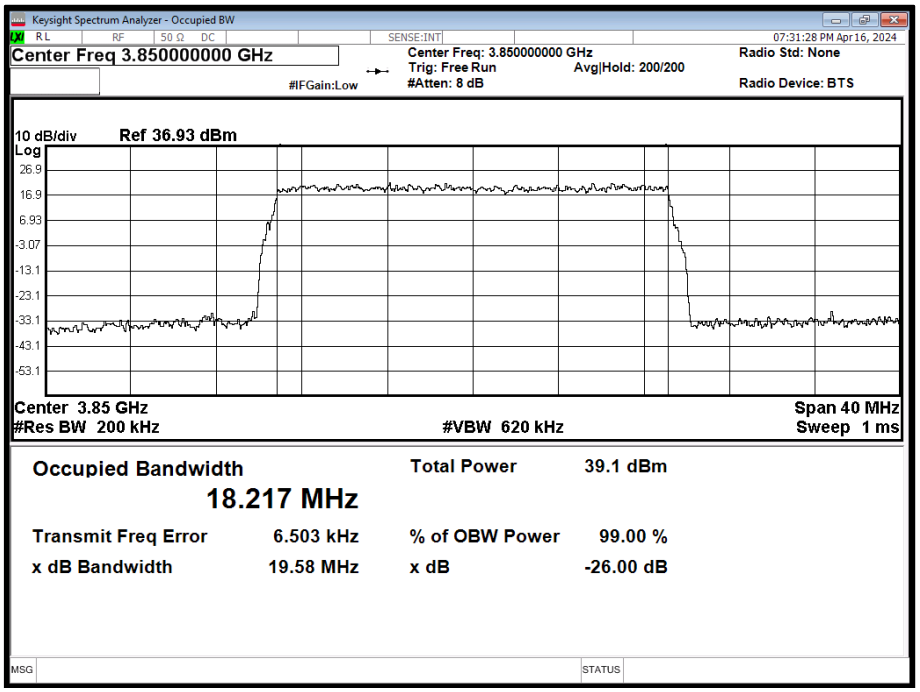
Configuration 2

Maximum Output Power 30.97, 33.98, 35.74, 36.99, 37.96 dBm

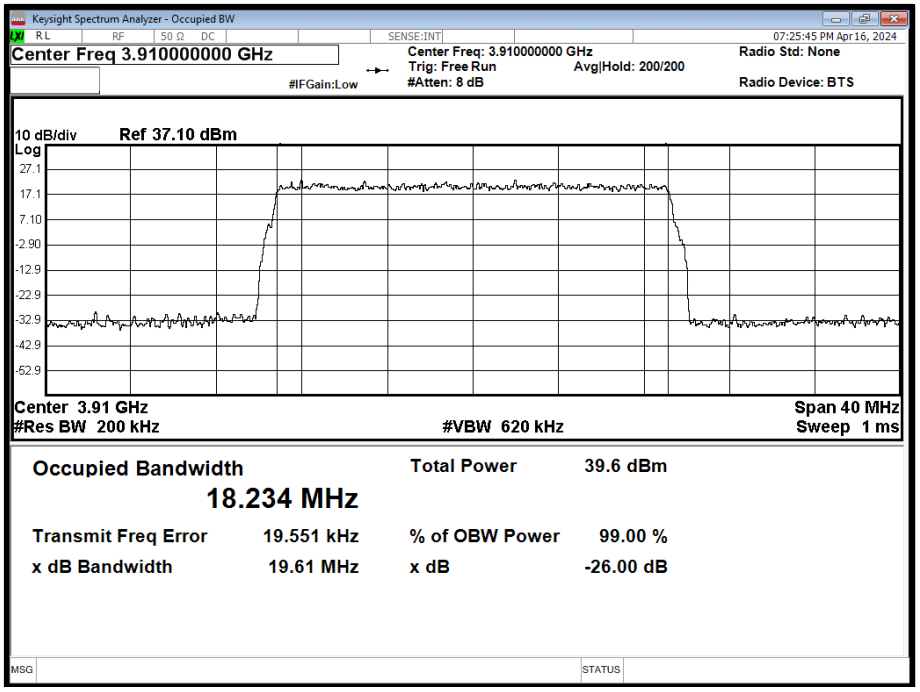
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
19	QPSK	20.0 MHz 30 kHz SCS	18216.74	19578.53	18233.97	19609.84	18203.64	19559.57
19	QPSK	40.0 MHz 30 kHz SCS	37864.00	39664.93	37769.57	39626.84	37818.62	39658.16
19	QPSK	60.0 MHz 30 kHz SCS	57774.73	59727.24	57828.77	59769.75	57741.06	59760.35
19	QPSK	80.0 MHz 30 kHz SCS	77337.22	80036.16	77403.79	80055.14	77211.55	79958.85
19	QPSK	100.0 MHz 30 kHz SCS	97143.59	100520.88	97281.97	100645.04	97296.00	100507.16

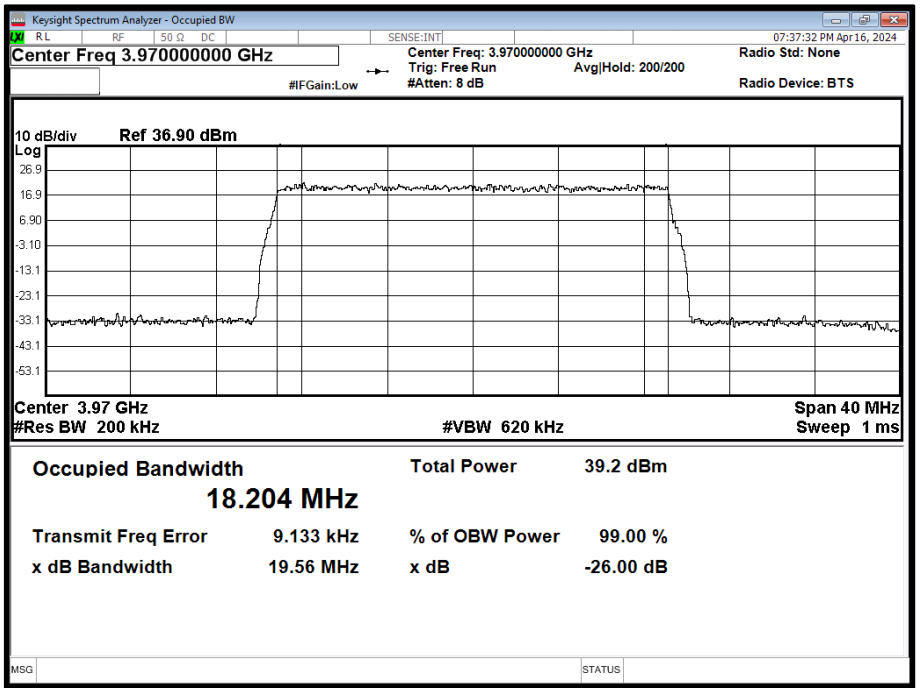
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B



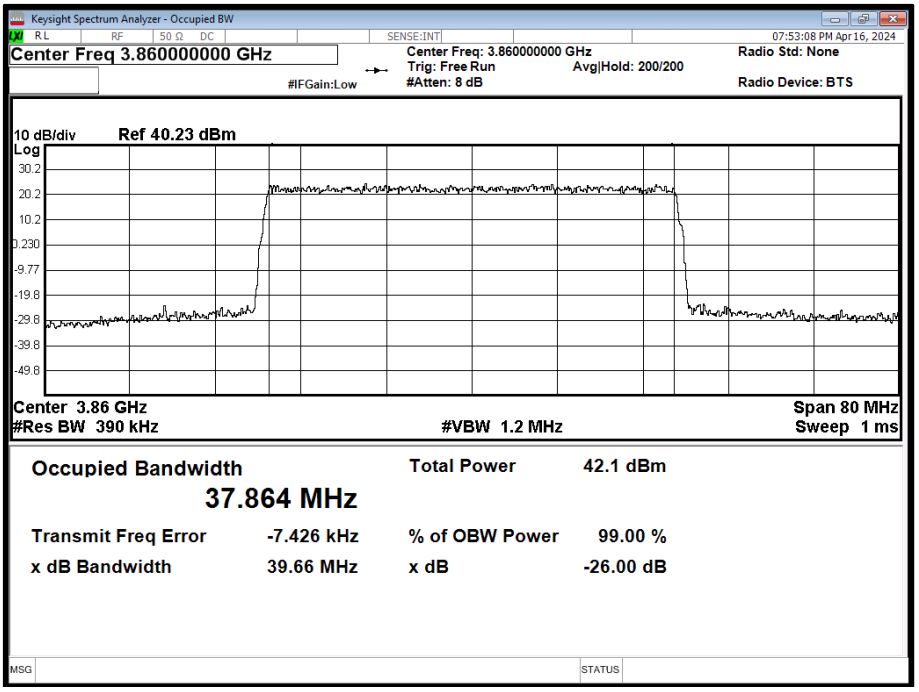
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M



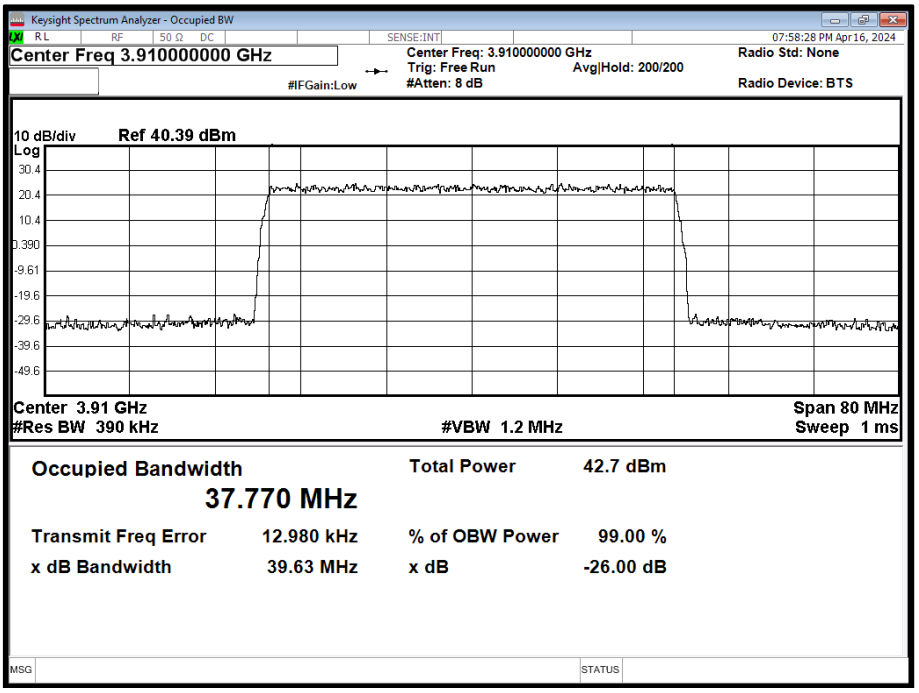
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T



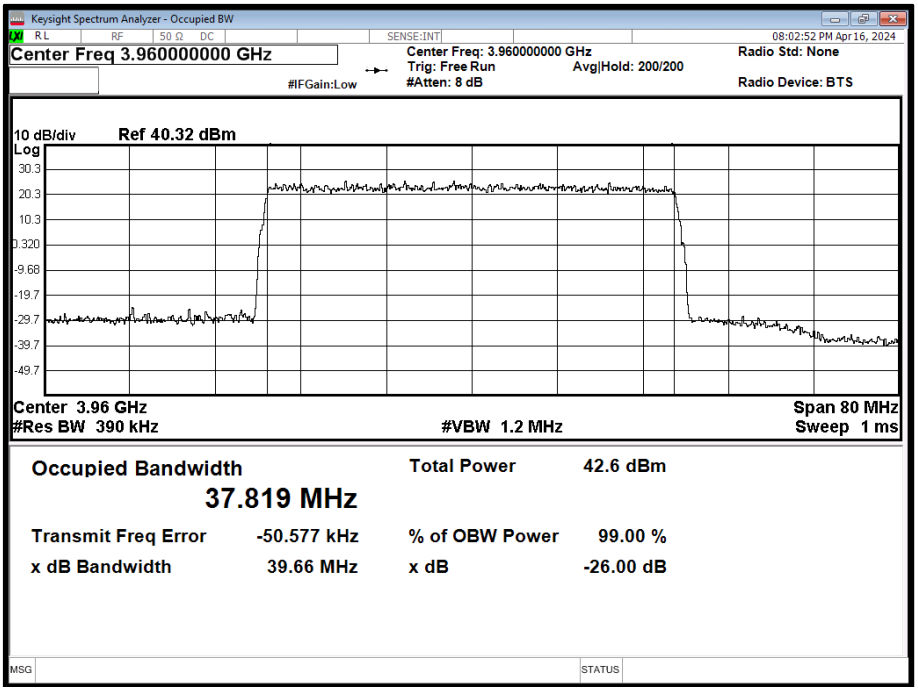
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B



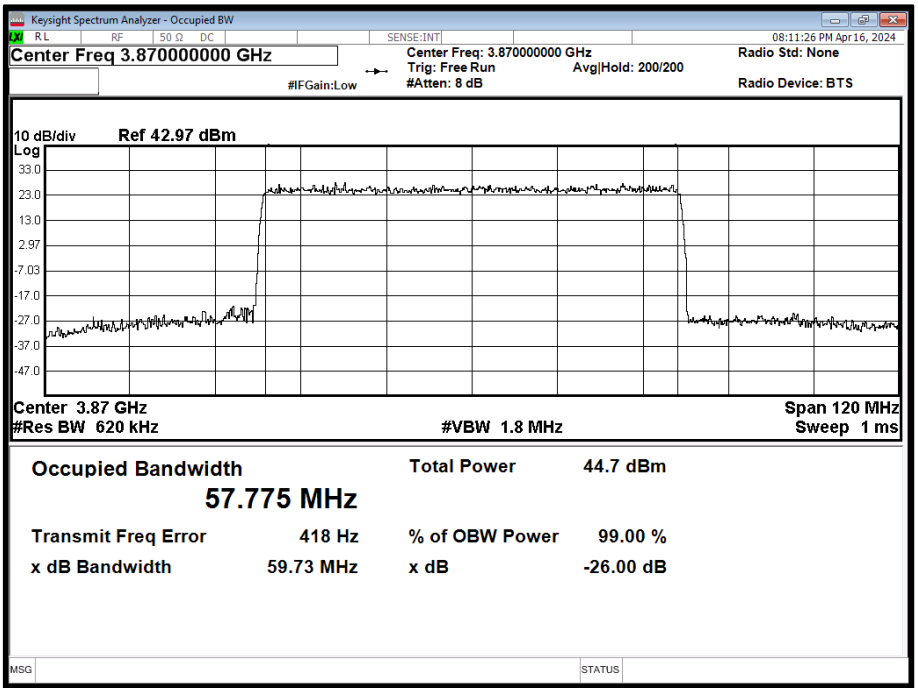
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position M



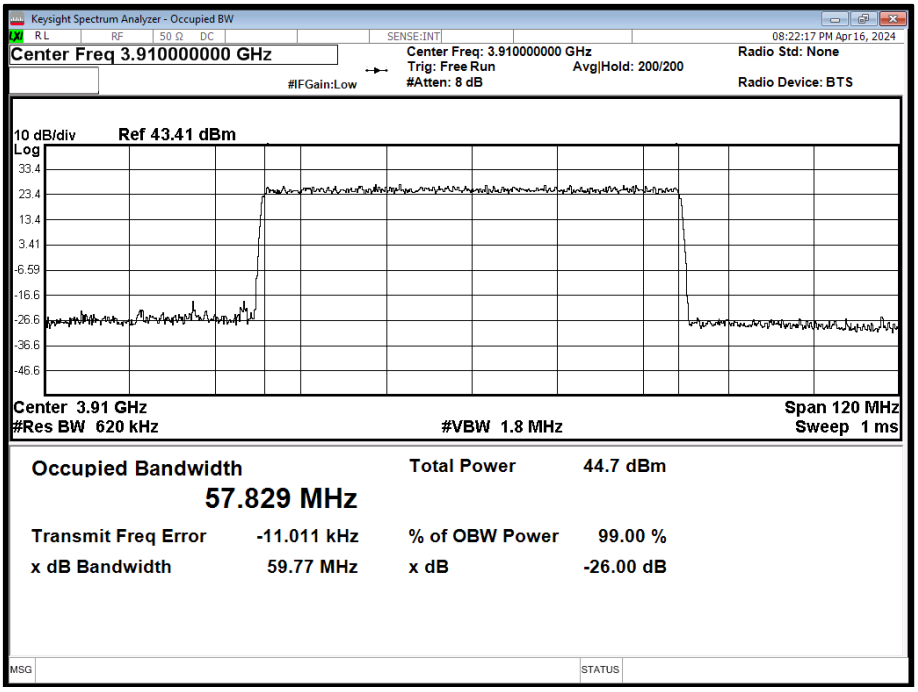
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T



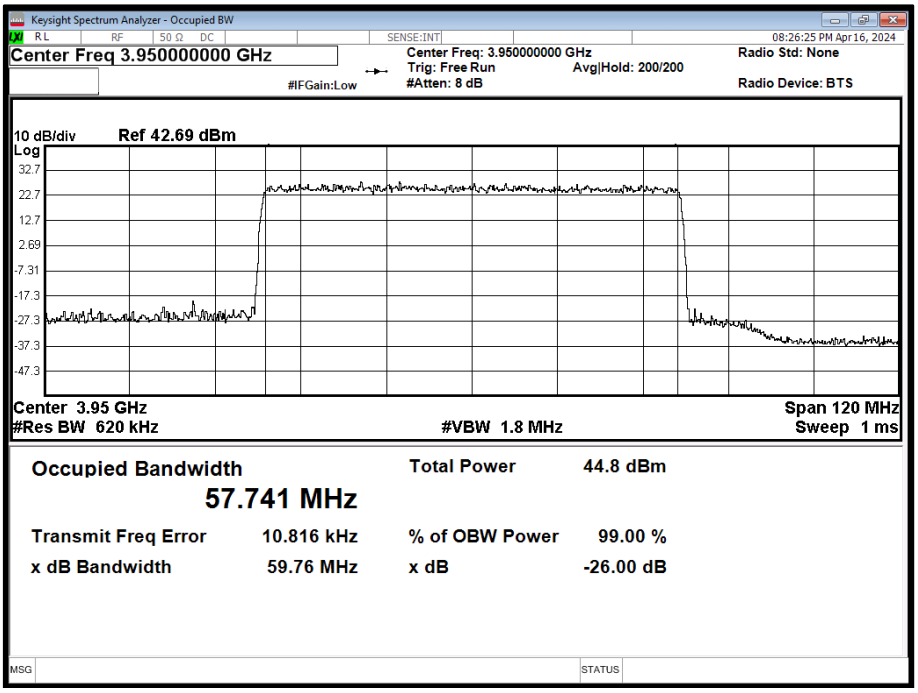
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position B



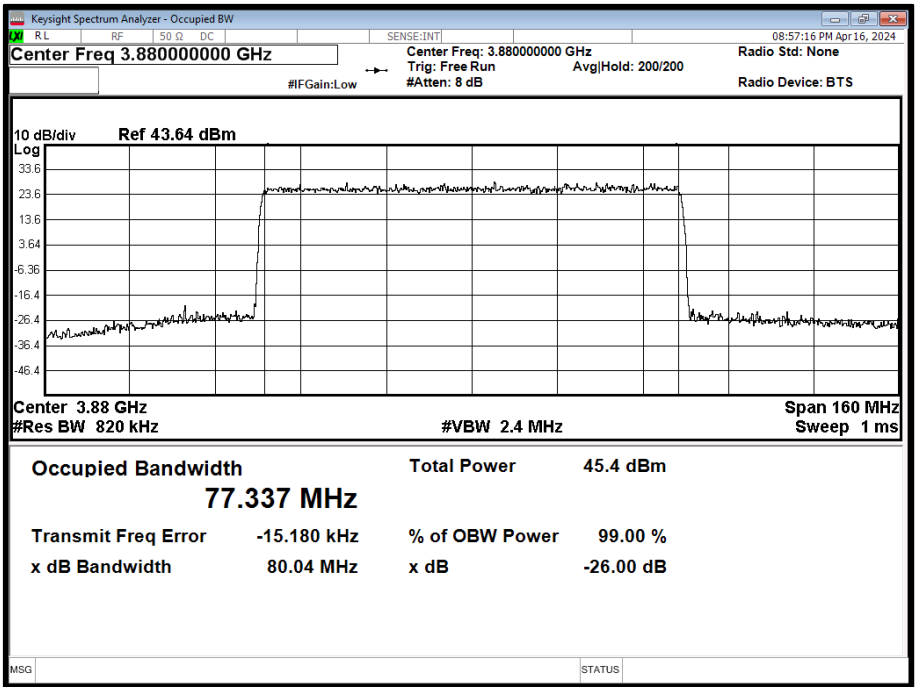
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position M



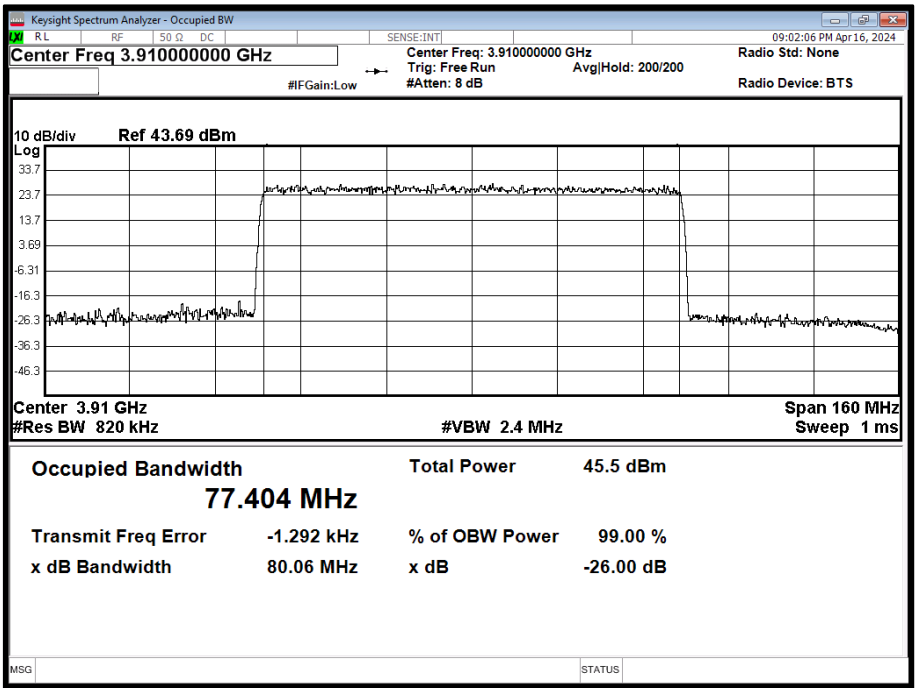
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position T



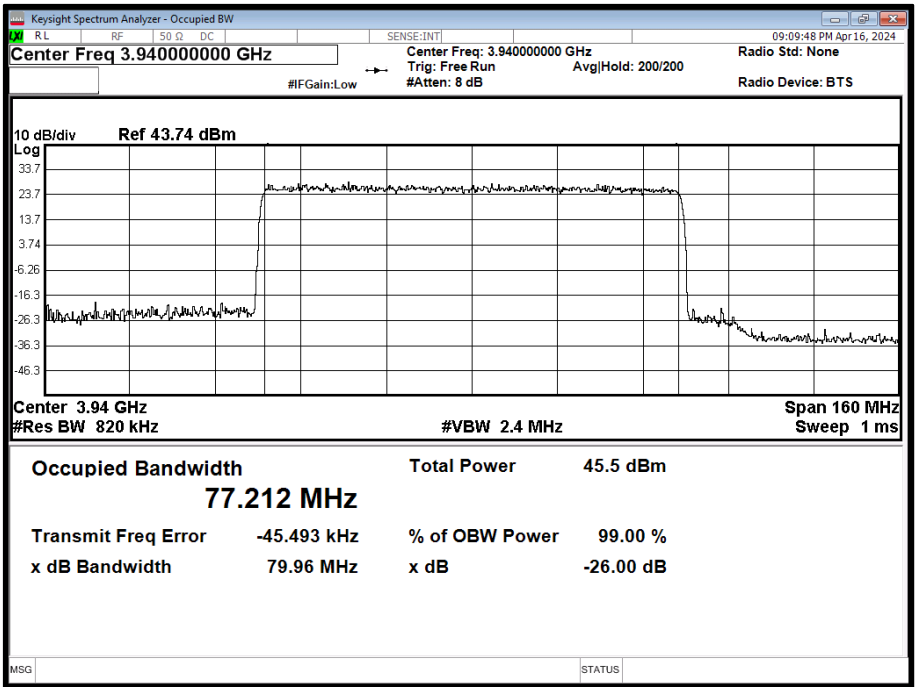
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position B



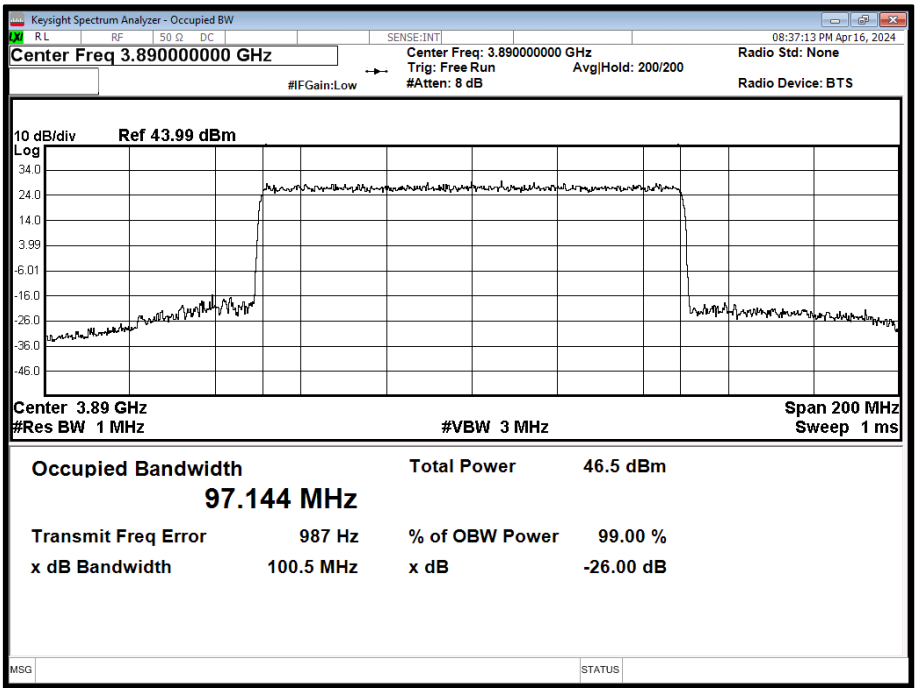
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position M



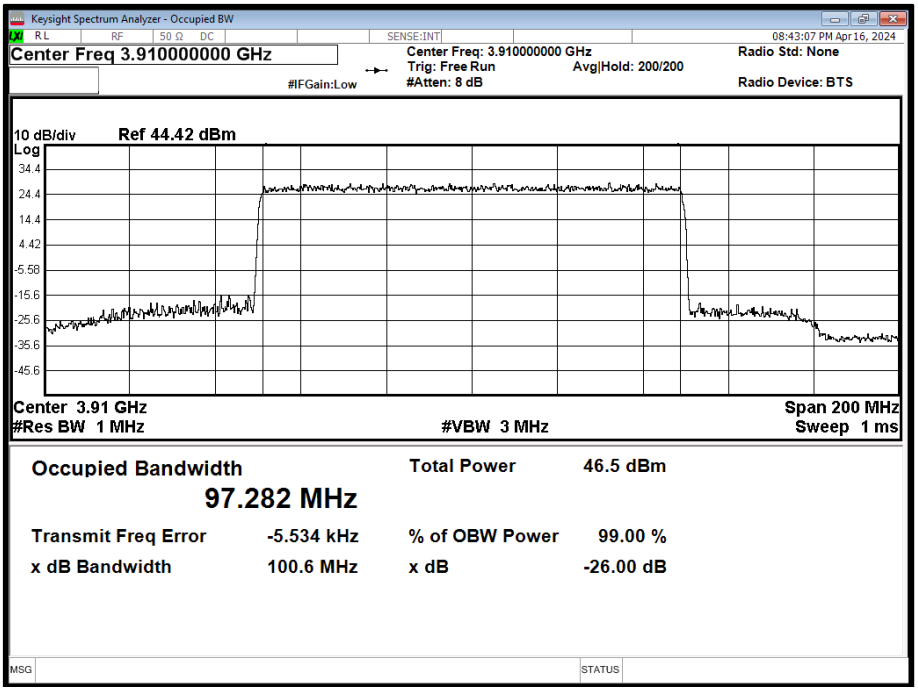
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position T



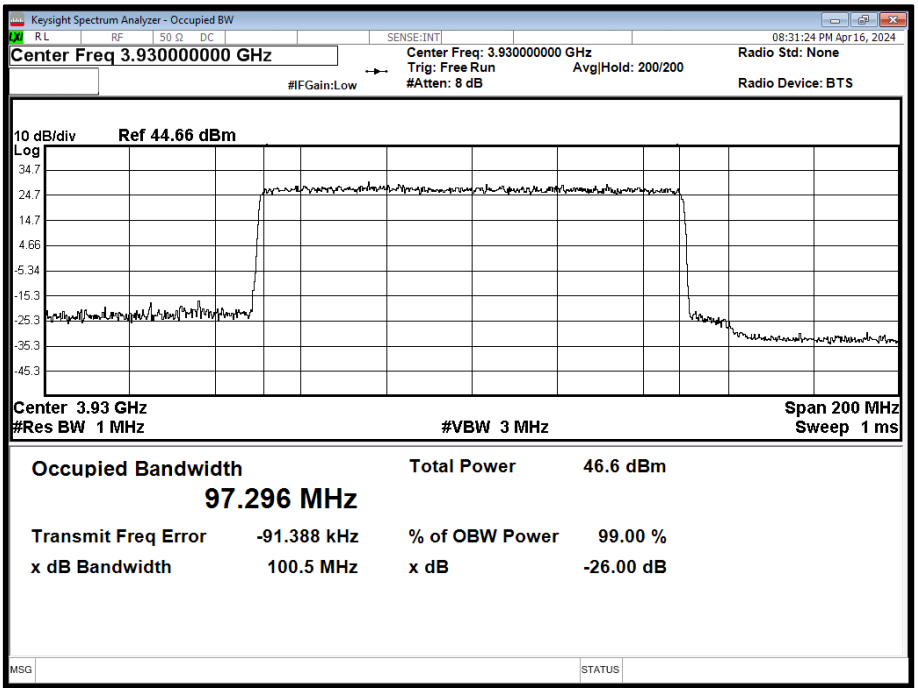
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position B



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position T



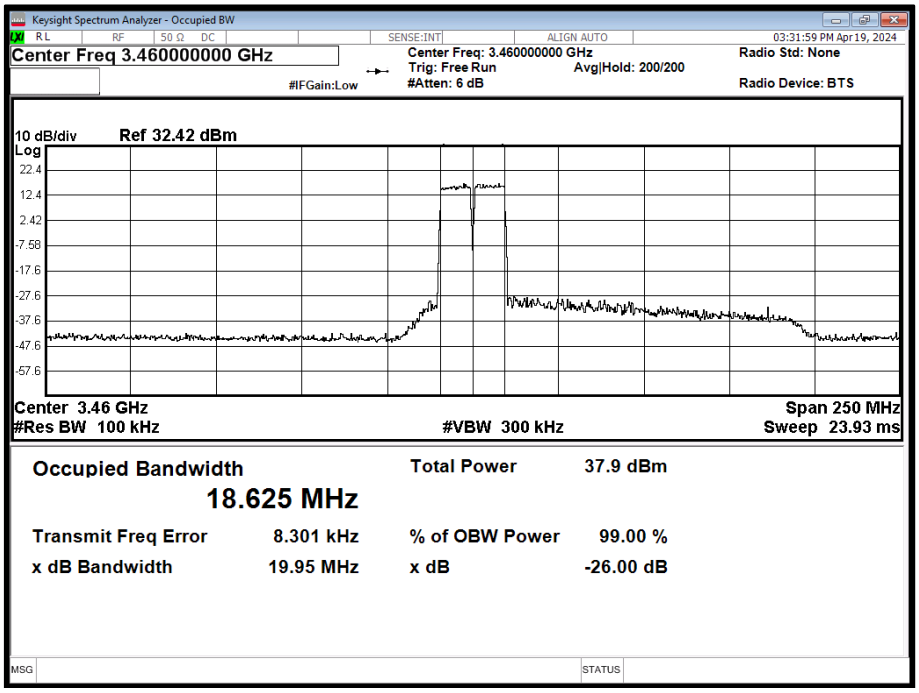
Configuration 4

Maximum Output Power 2 x 27.96 dBm

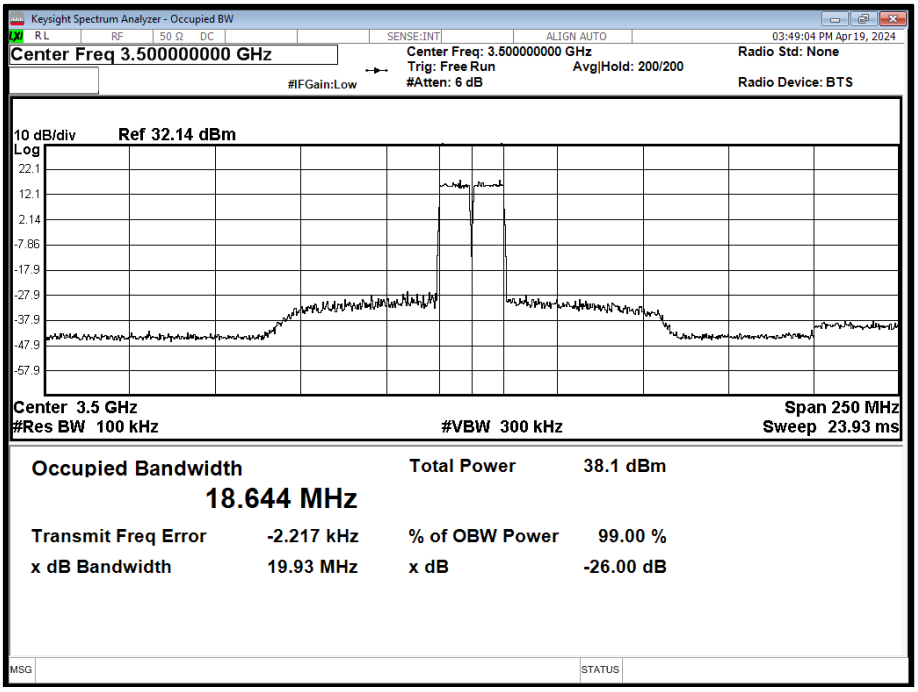
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
1	QPSK	10.0 MHz 30 kHz SCS	18624.76	19947.32	18644.32	19929.10	18625.82	19955.72

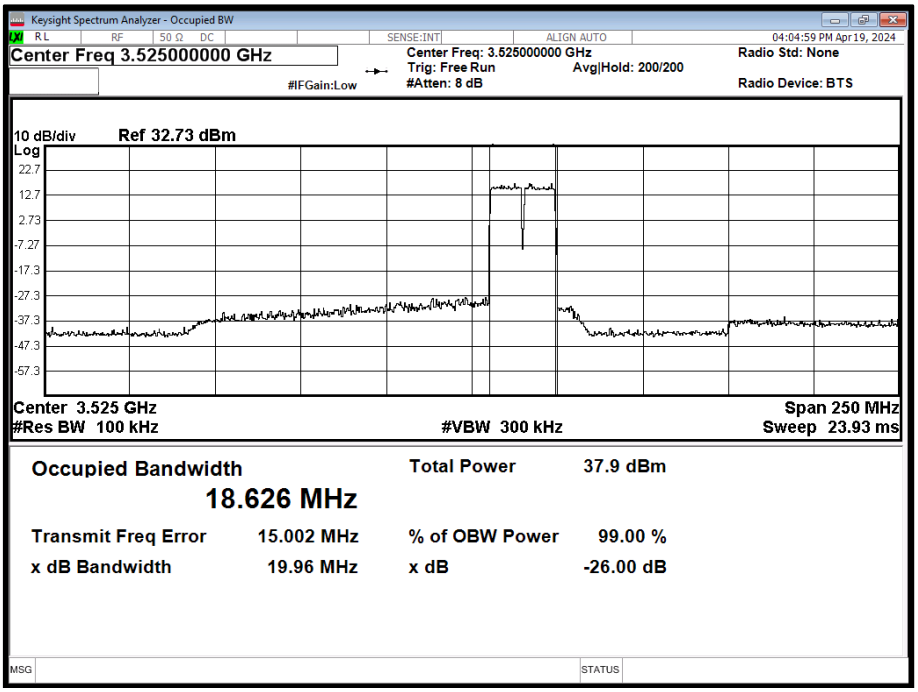
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T



2.3 BAND EDGE

2.3.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
FCC CFR 47 Part 2, Clause 2.1051

2.3.2 Date of Test and Modification State

16 and 19-April-2024 - Modification State 0

2.3.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.3.4 Environmental Conditions

Ambient Temperature	22.4 - 22.6°C
Relative Humidity	35.6 - 35.8%

2.3.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.0.

Band Edge measurements were used an Integration Bandwidth of at least 1% of the measured 26dB Bandwidth.

Each antenna port has been declared as being equivalent, therefore measurements were made on one antenna port only. To account for this, the limit was tightened by 10 * Log(N), where N is equal to the number of MIMO antenna ports.

For the number of antenna ports, the limit was calculated as being:
-13 dBm - 10 * Log (64) = -31.06 dBm.

2.3.6 Test Results

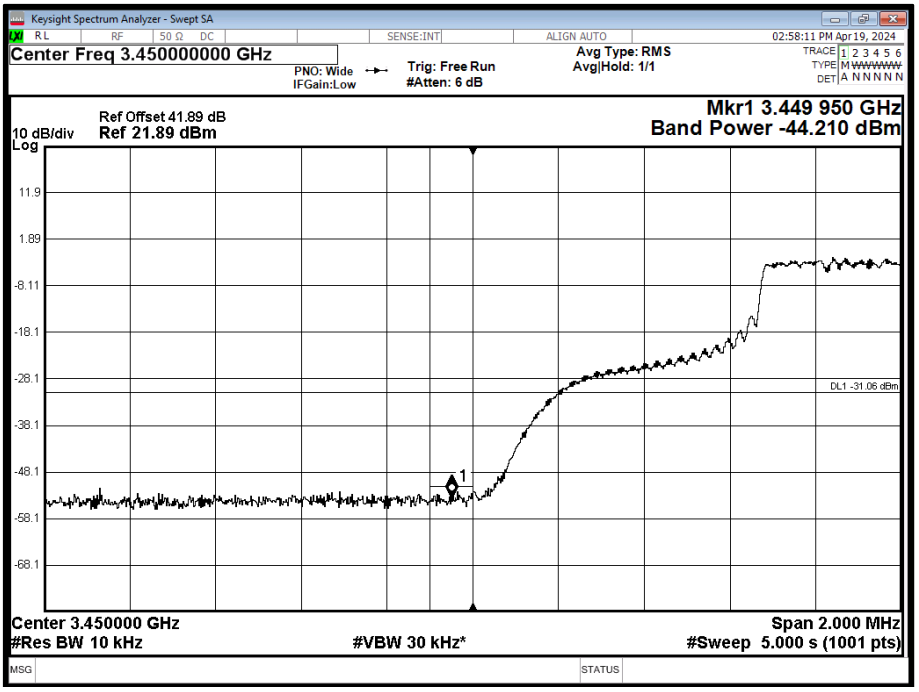
Configuration 1

Maximum Output Power 27.96, 30.97, 33.98, 36.98 dBm

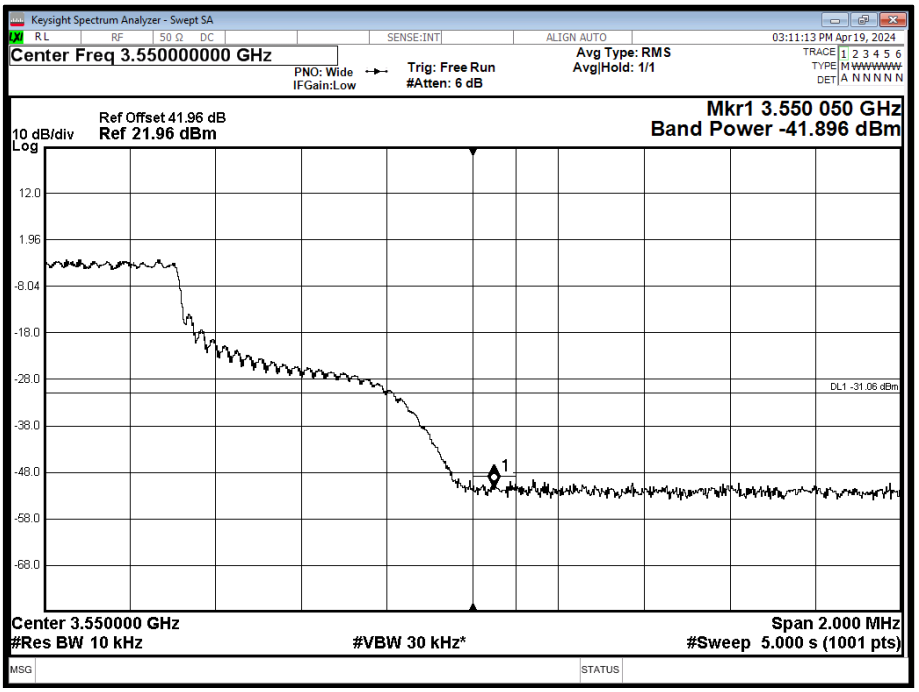
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
1	QPSK	10.0 MHz 30 kHz SCS	3,455.0	3,545.0
1	QPSK	20.0 MHz 30 kHz SCS	3,460.0	3,540.0
1	QPSK	40.0 MHz 30 kHz SCS	3,470.0	3,530.0
1	QPSK	100.0 MHz 30 kHz SCS	3,500.0	3,500.0

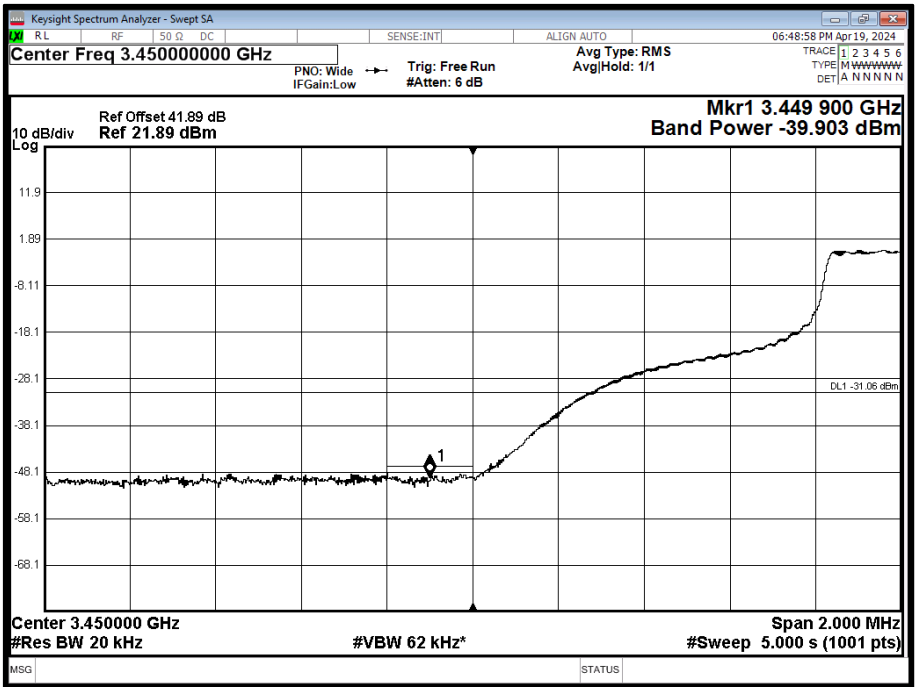
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B



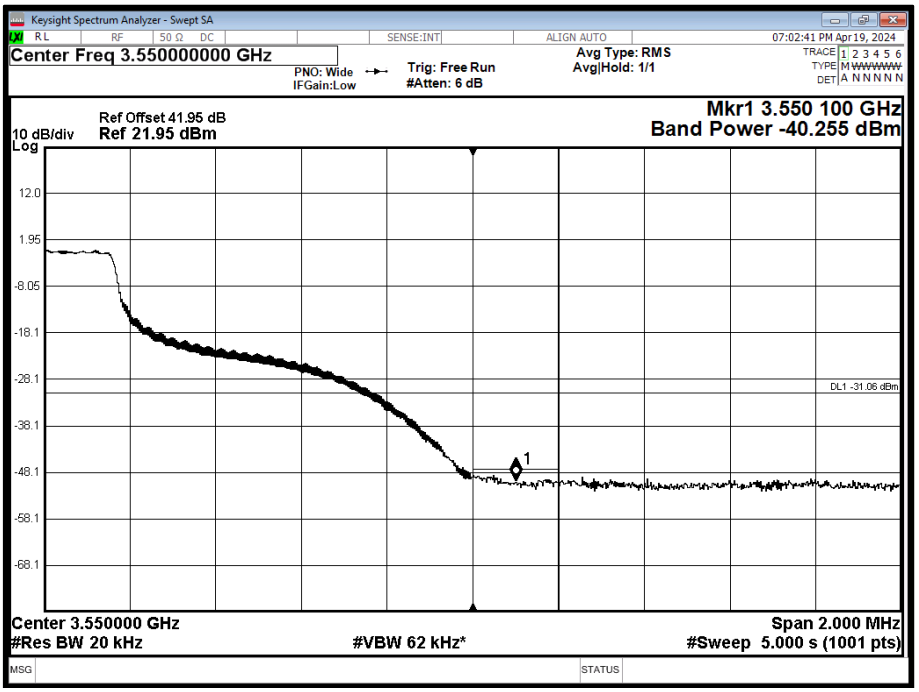
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T



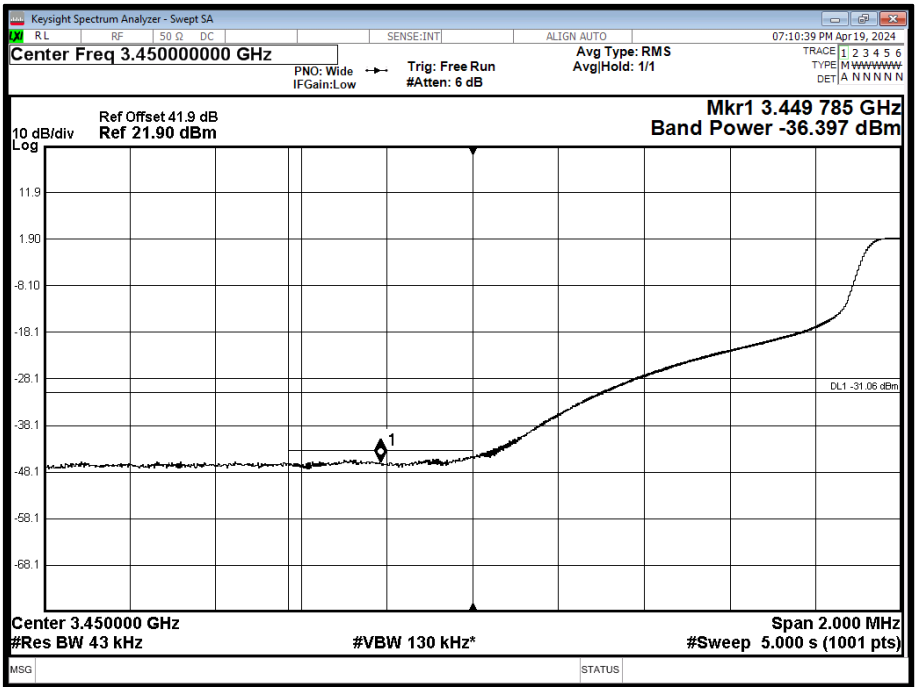
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B



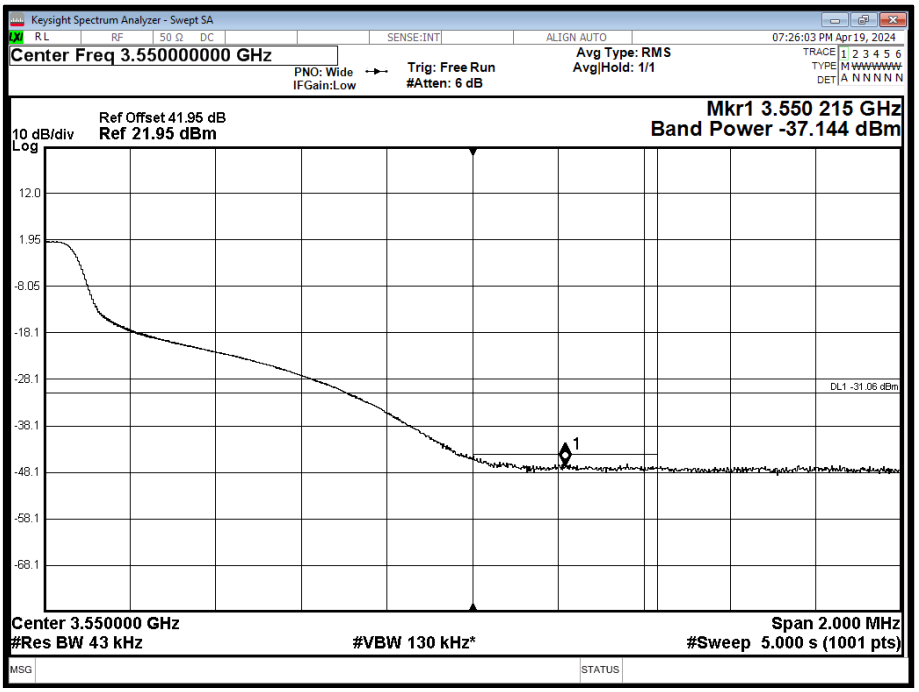
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T



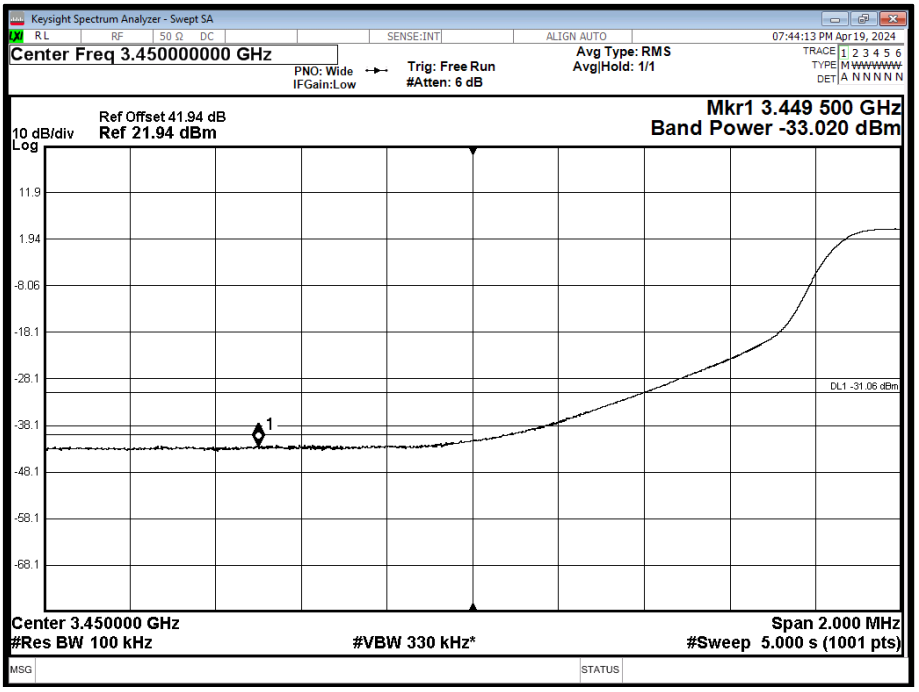
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B



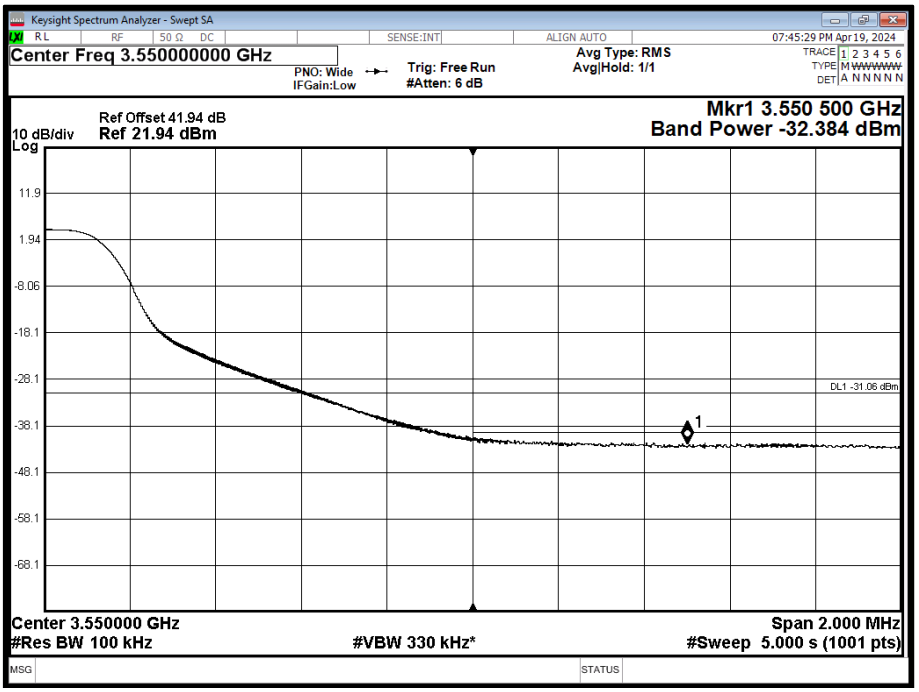
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position B



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position T



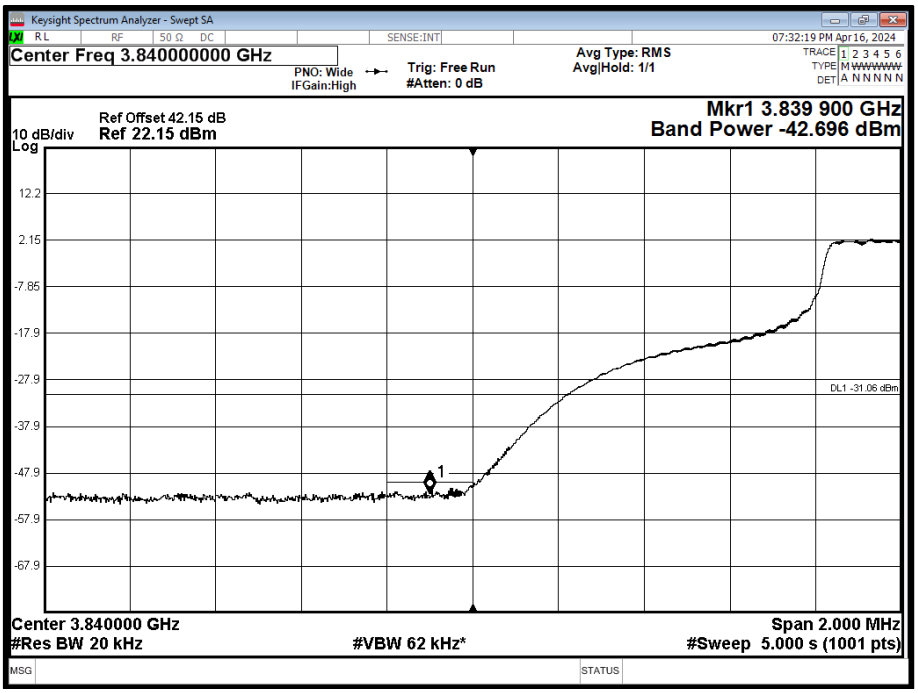
Configuration 2

Maximum Output Power 30.97, 33.98, 35.74, 36.99, 37.96 dBm

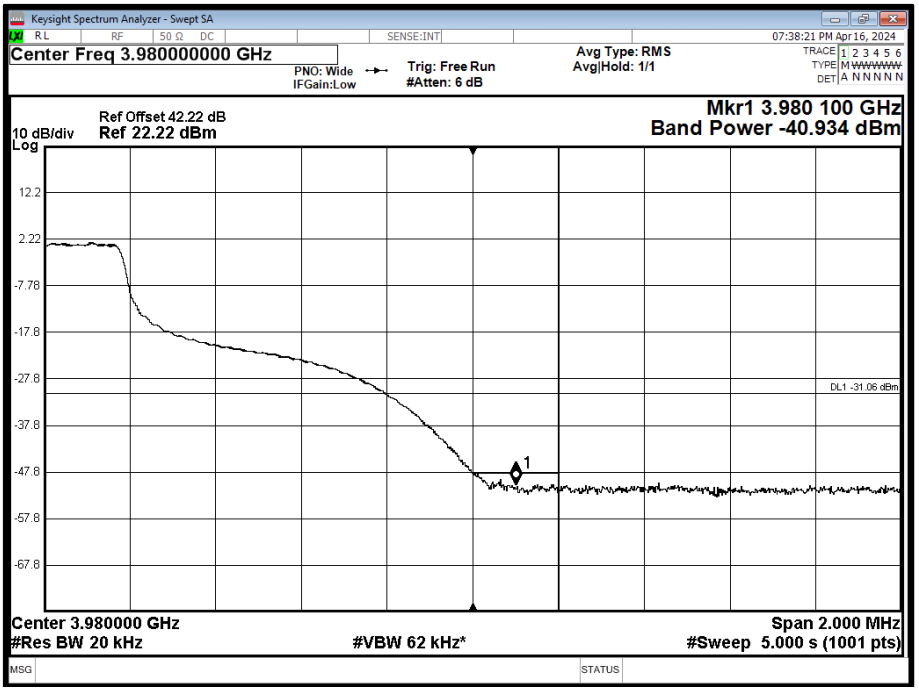
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
19	QPSK	20.0 MHz 30 kHz SCS	3,850.0	3,970.0
19	QPSK	40.0 MHz 30 kHz SCS	3,860.0	3,960.0
19	QPSK	60.0 MHz 30 kHz SCS	3,870.0	3,950.0
19	QPSK	80.0 MHz 30 kHz SCS	3,880.0	3,940.0
19	QPSK	100.0 MHz 30 kHz SCS	3,890.0	3,930.0

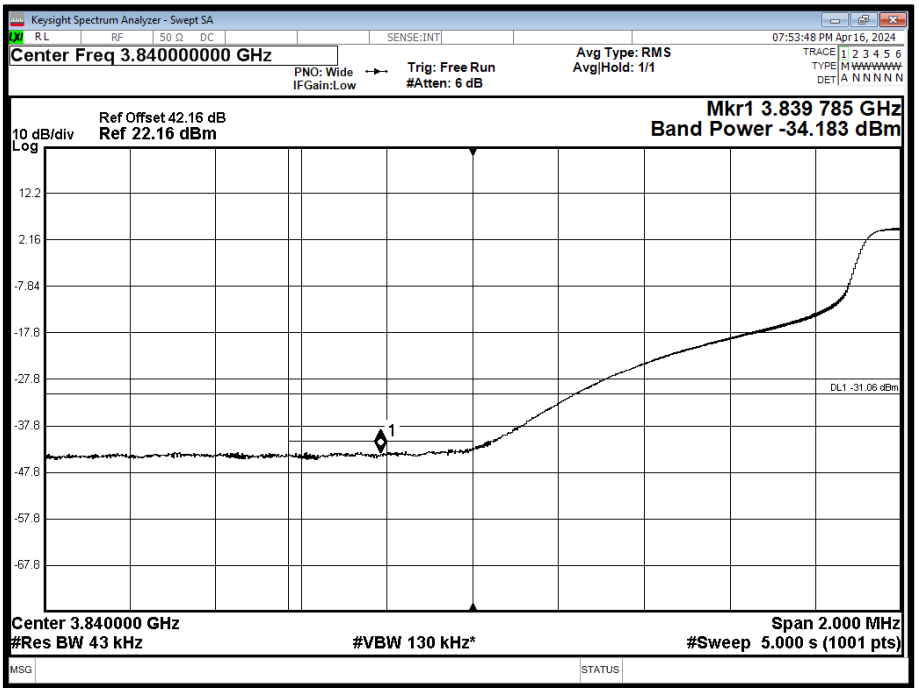
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B



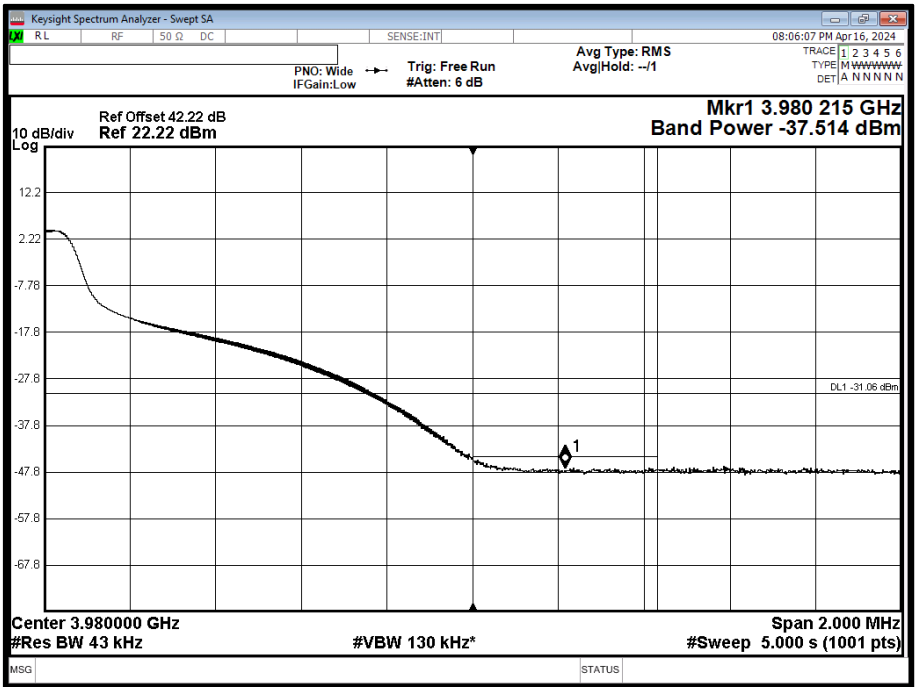
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T



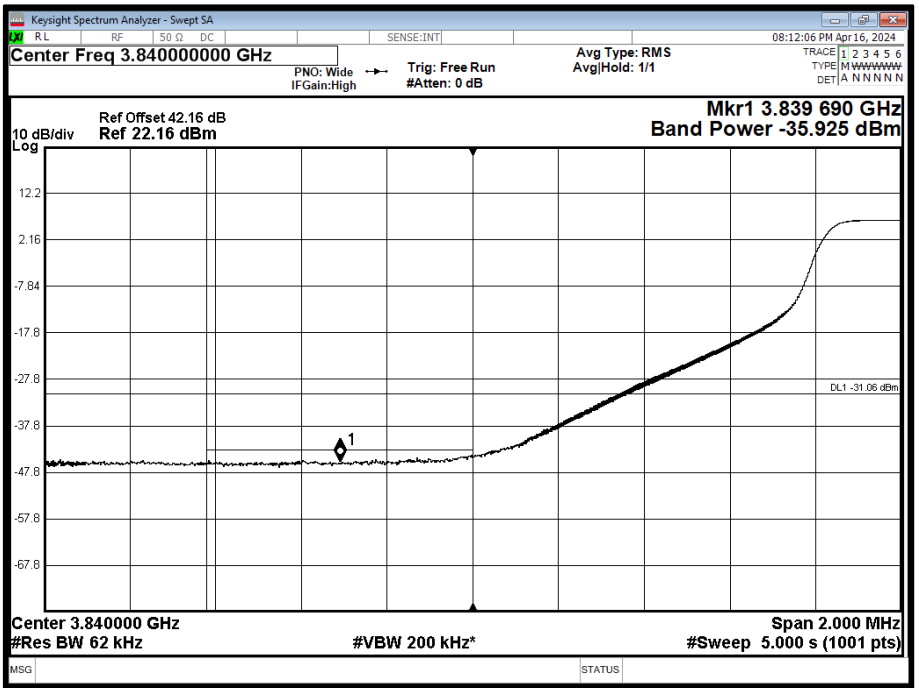
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B



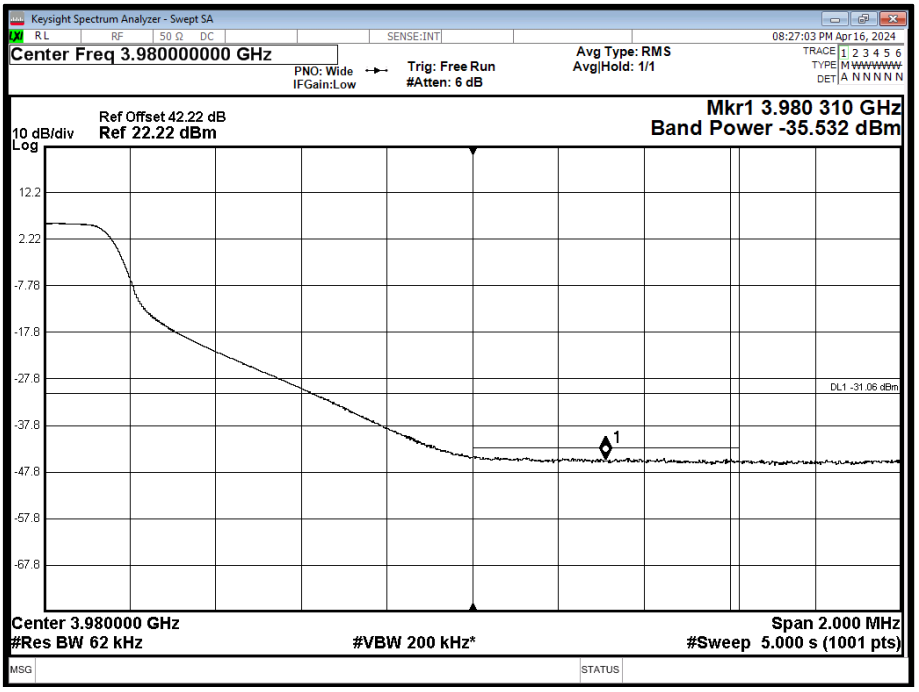
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T



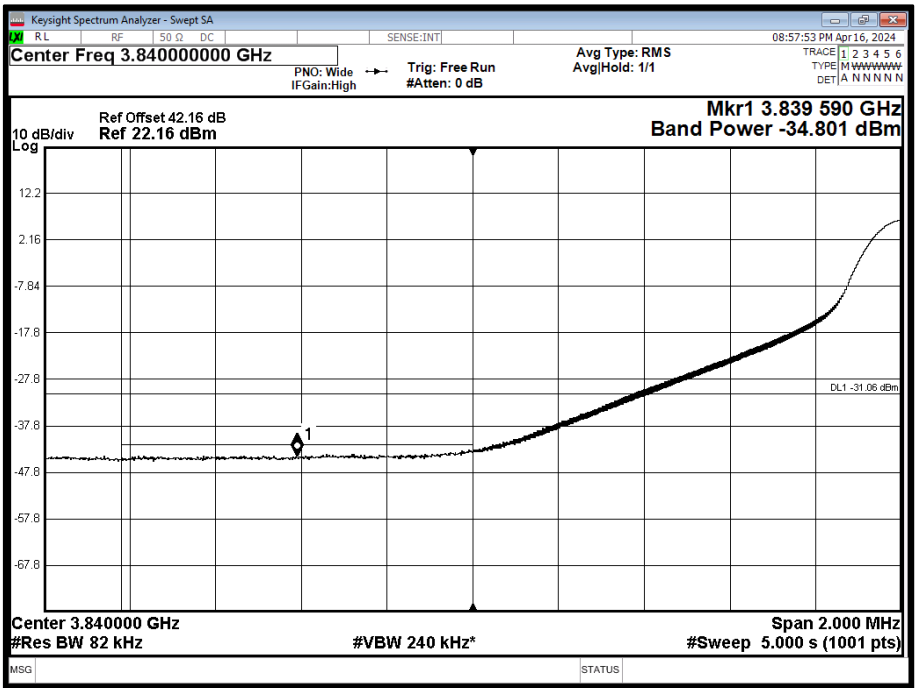
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position B



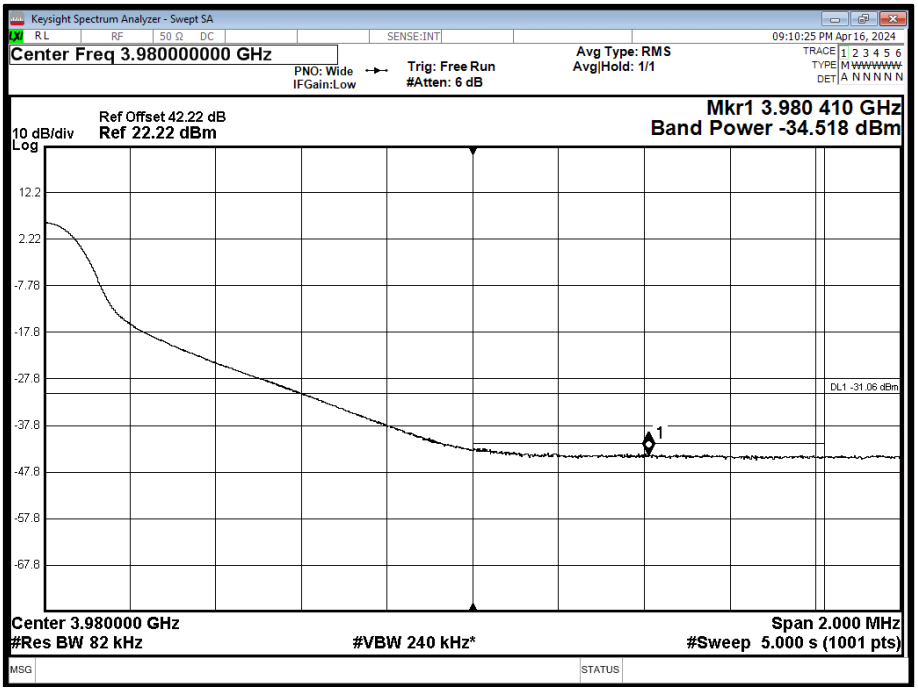
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position T



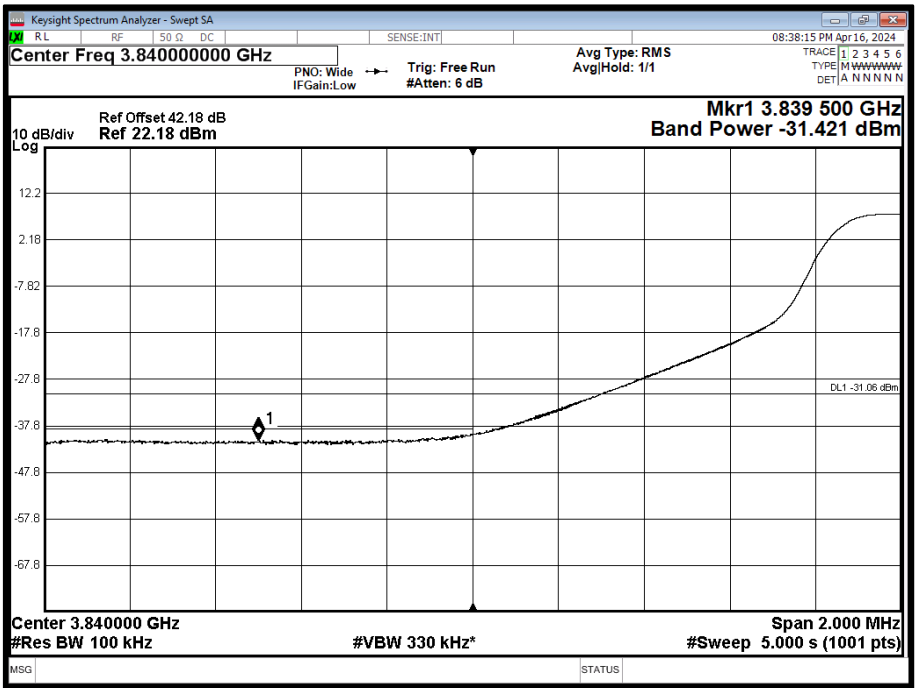
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position B



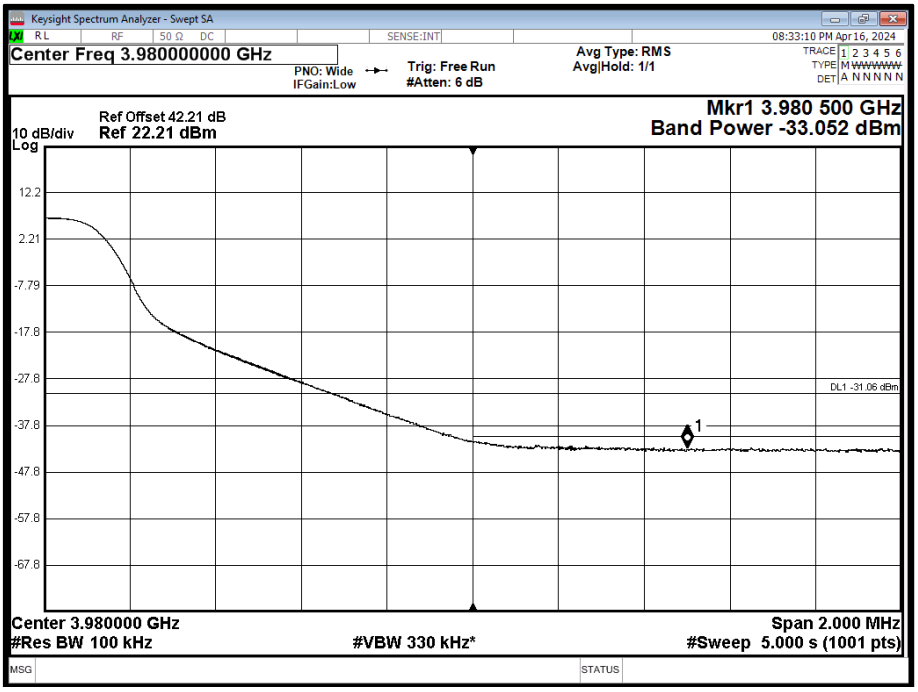
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position T



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position B



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position T



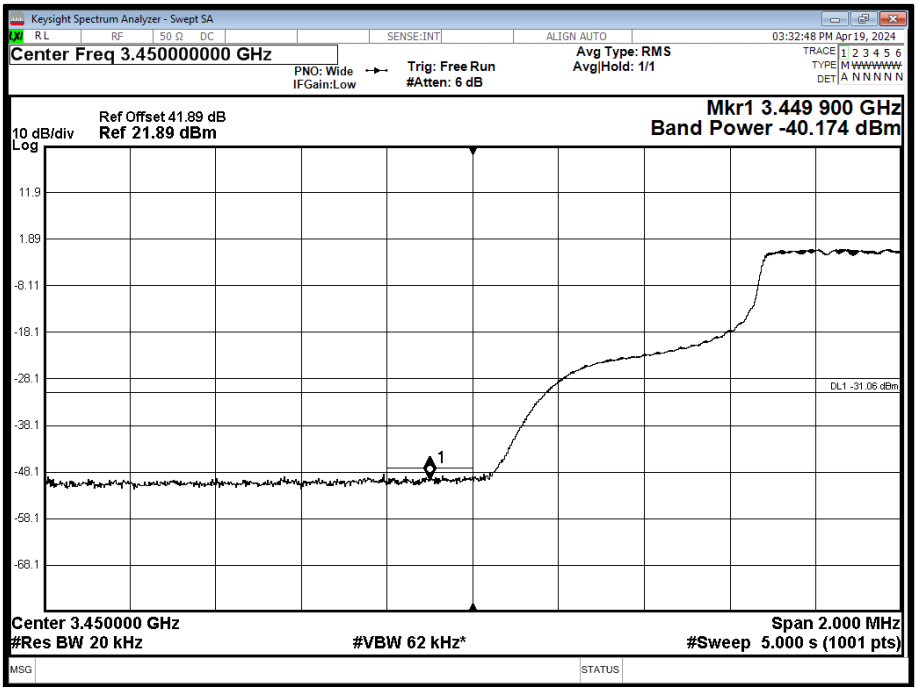
Configuration 4

Maximum Output Power 2 x 27.96 dBm

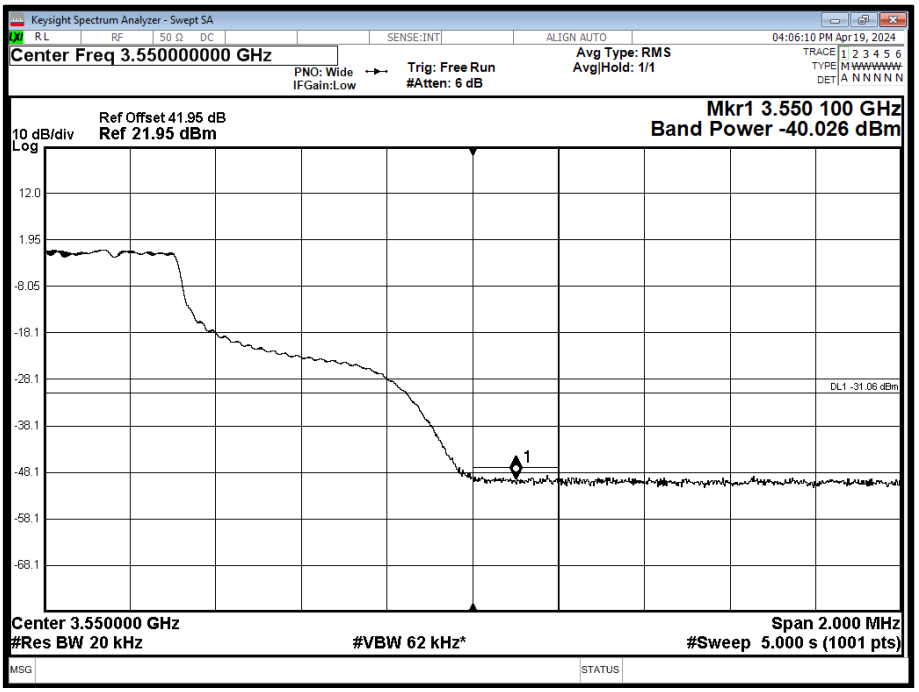
Module 1 - Max 4W/MHz PSD

Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
1	QPSK	10.0 MHz 30 kHz SCS	3455+3465	3505+3545

Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T



Limit 27.53 l (1)

Limit	-13 dBm - 10 * Log (64) = -31.06 dBm.

Limit Part 27.53 (n) (1)

Limit	For base station operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with the provisions of this paragraph (n)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Notwithstanding the channel edge requirement of −13 dBm per megahertz, for base station operations in the 3450-3550 MHz band, the conducted power of any emission below 3440 MHz or above 3560 MHz shall not exceed −25 dBm/MHz, and the conducted power of emissions below 3430 MHz or above 3570 MHz shall not exceed −40 dBm/MHz.

2.4 TRANSMITTER SPURIOUS EMISSIONS

2.4.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
FCC CFR 47 Part 2, Clause 2.1051

2.4.2 Date of Test and Modification State

16-18, 25, 26, 29,and 30-April, 02, 03, 07, 08-May-2024 - Modification State 0

2.4.3 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.4.4 Environmental Conditions

Ambient Temperature	21.1 - 22.8°C
Relative Humidity	34.2 – 37.8%

2.4.5 Test Method

All measurements were made in accordance with FCC KDB 971168 D01, Clause 6.1.

Each antenna port has been declared as being equivalent, therefore measurements were made on one antenna port only. To account for this, the limit was tightened by 10 * Log(N), where N is equal to the number of MIMO antenna ports.

For the number of antenna ports, the limit was calculated as being:
-13 dBm - 10 * Log (64) = -31.06 dBm.

For 3450-3550 MHz only

For single port, the limit in accordance with Limit Part 27.53 (n) (1) was calculated as being:
-13 dBm - 10 * Log (64) = -31.06 dBm.
-25 dBm - 10 * Log (64) = -43.06 dBm.
-40 dBm - 10 * Log (64) = -58.06 dBm.

Waiver DA-23-142A1
The Petitioner’s radio, when operated in carrier aggregation mode across the 3.5 GHz and 3.7 GHz Services must comply with section 27.53(n)(1) of the Commission’s rules in its entirety, except for the -25 dBm/MHz conducted power limit specified for emissions above 3560 MHz and the -40 dBm/MHz conducted power limit above 3570 MHz, as those limits apply throughout the 3.7 GHz band;

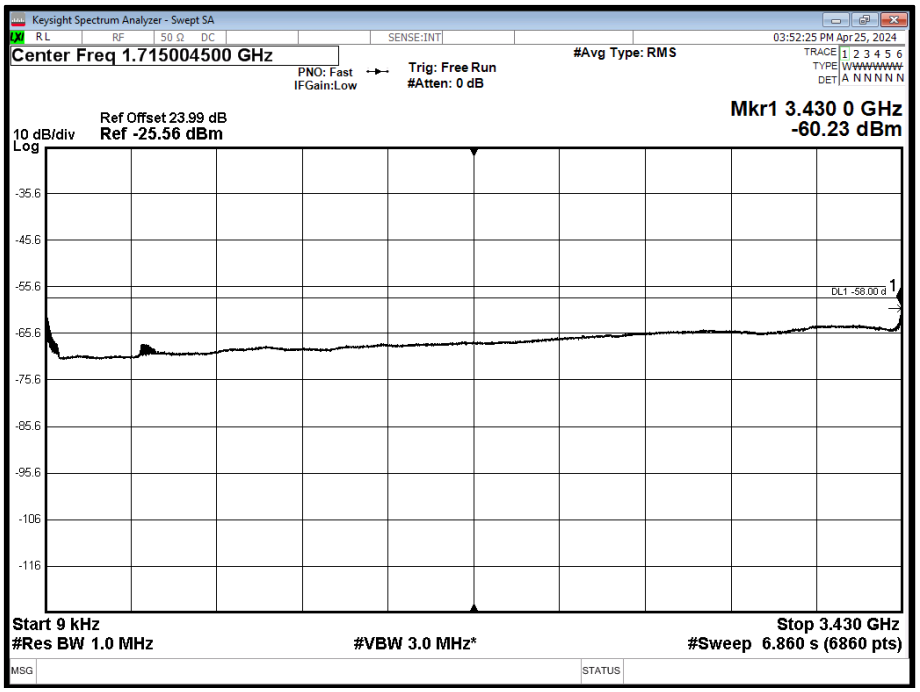
The plot results presented are the measured worst case and represent typical performance for all bands and antenna ports, plot data performance is on file and available on request.

2.4.6 Test Results

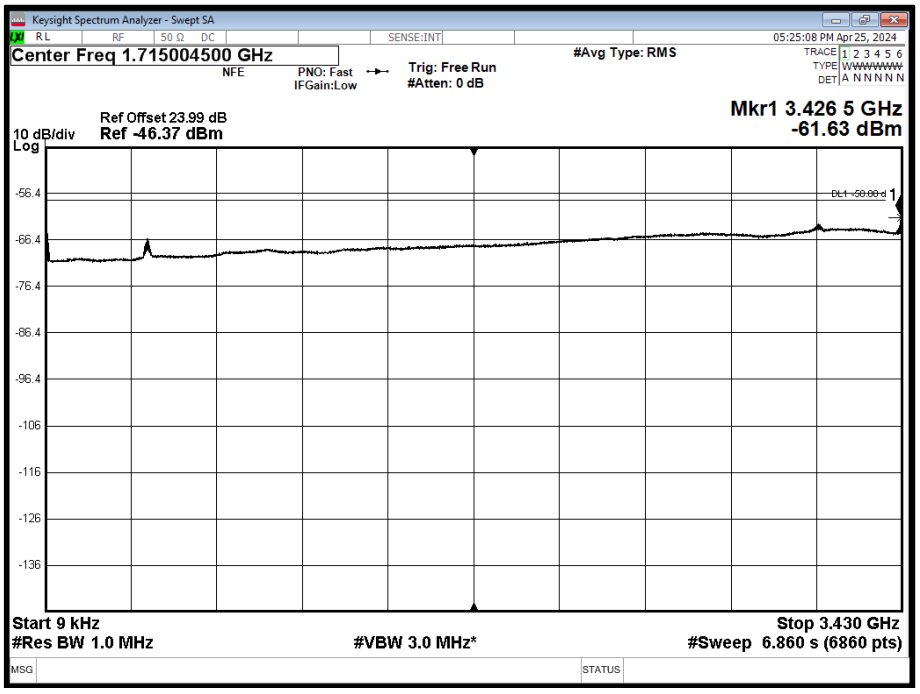
Configuration 1

Maximum Output Power 27.96, 30.97, 33.98, 36.98 dBm - Module 1 - Max 4W/MHz PSD

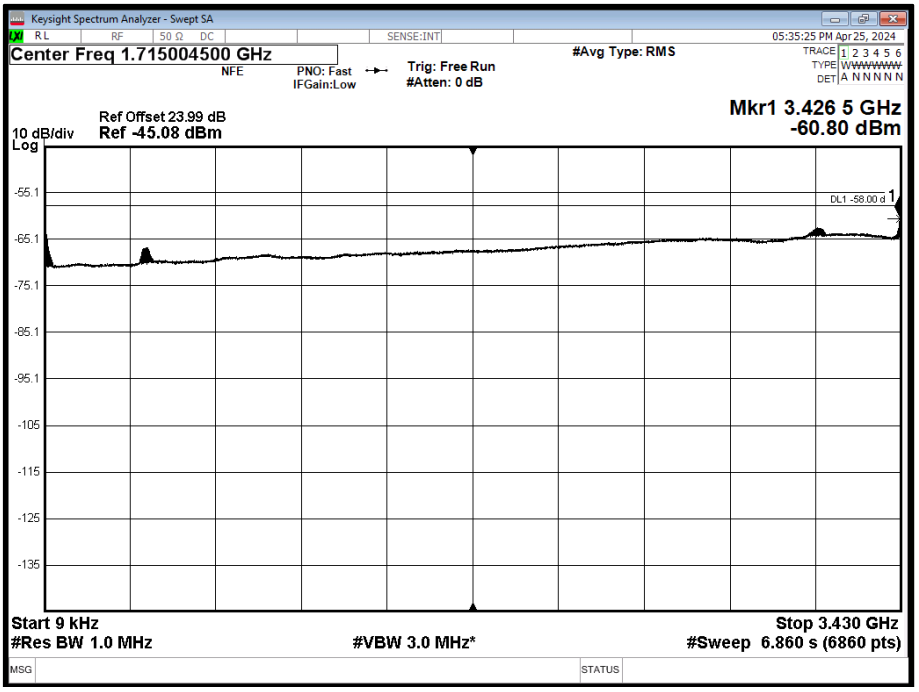
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M - Band 1 - Range 0.009 to 3430 MHz



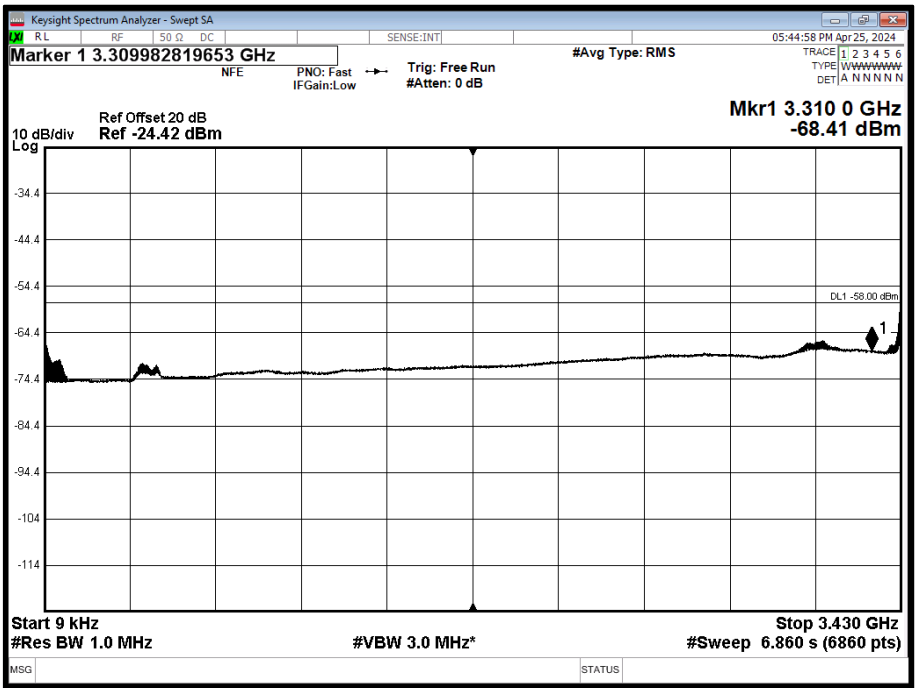
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M - Band 1 - Range 0.009 to 3430 MHz



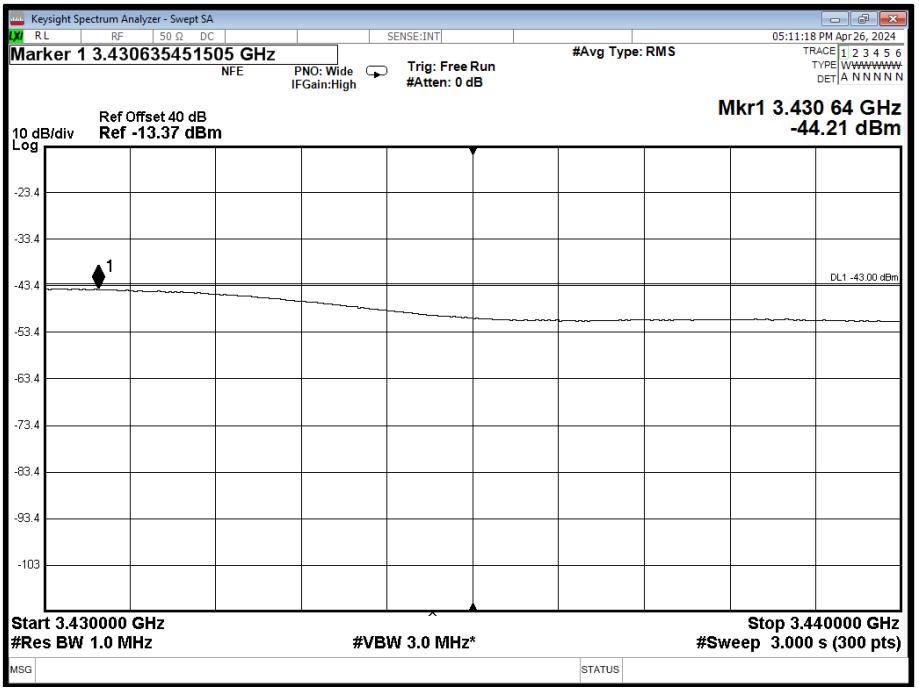
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position M - Band 1 - Range 0.009 to 3430 MHz



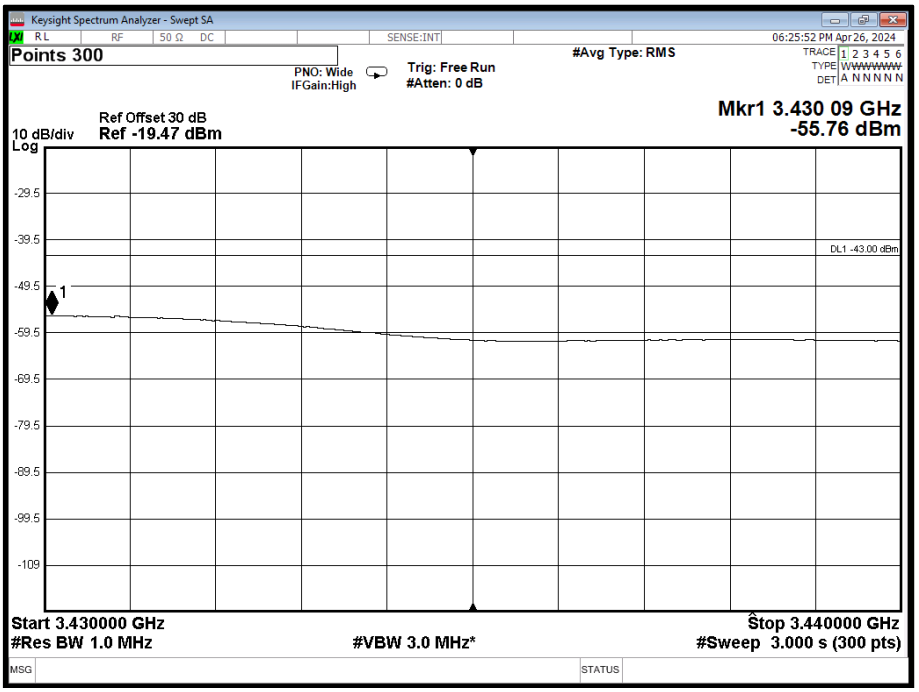
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 1 - Range 0.009 to 3430 MHz



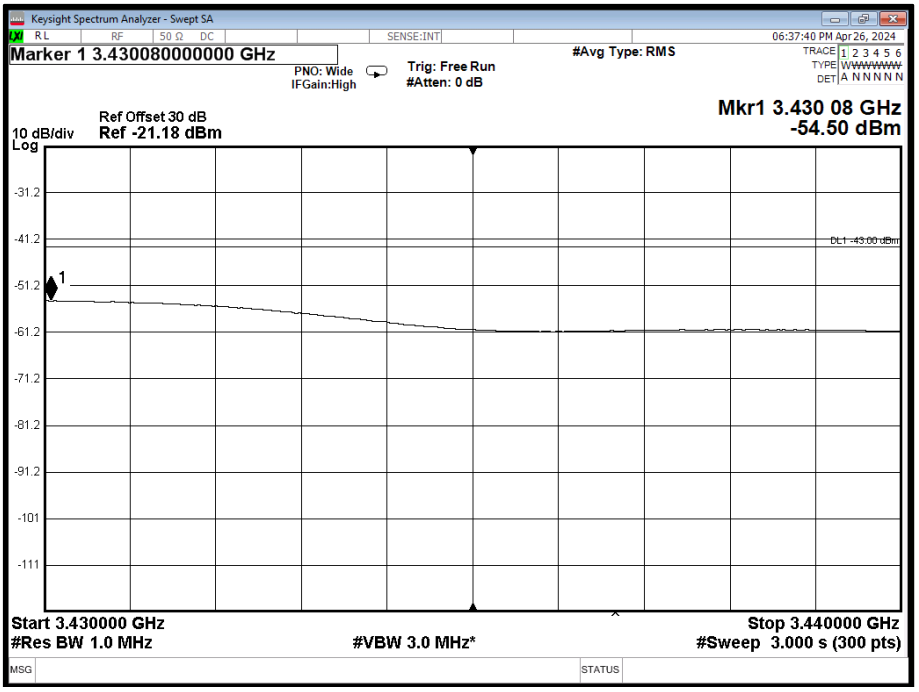
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B - Band 2 - Range 3430 to 3440 MHz



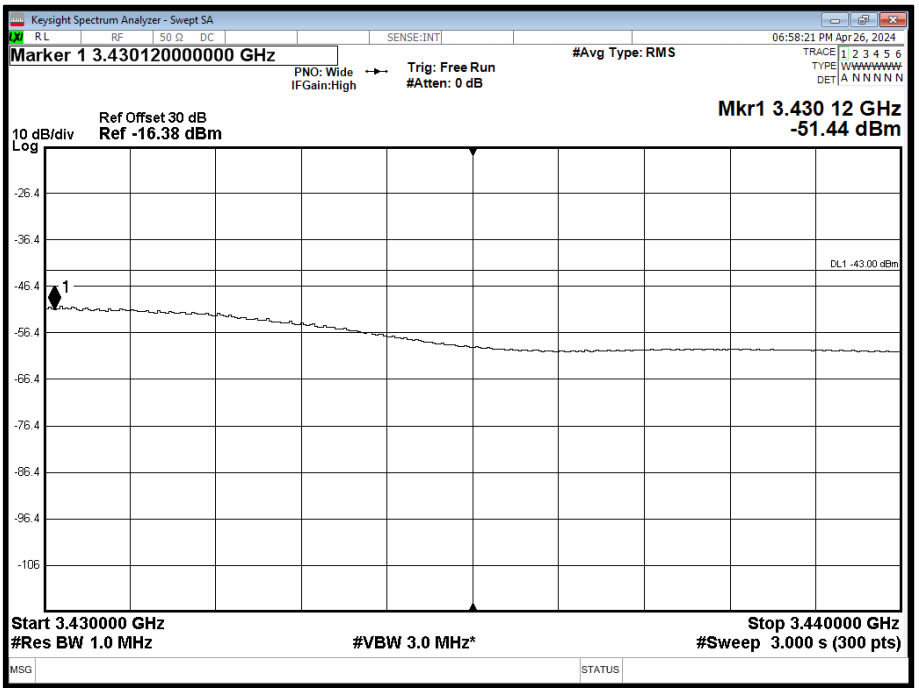
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B - Band 2 - Range 3430 to 3440 MHz



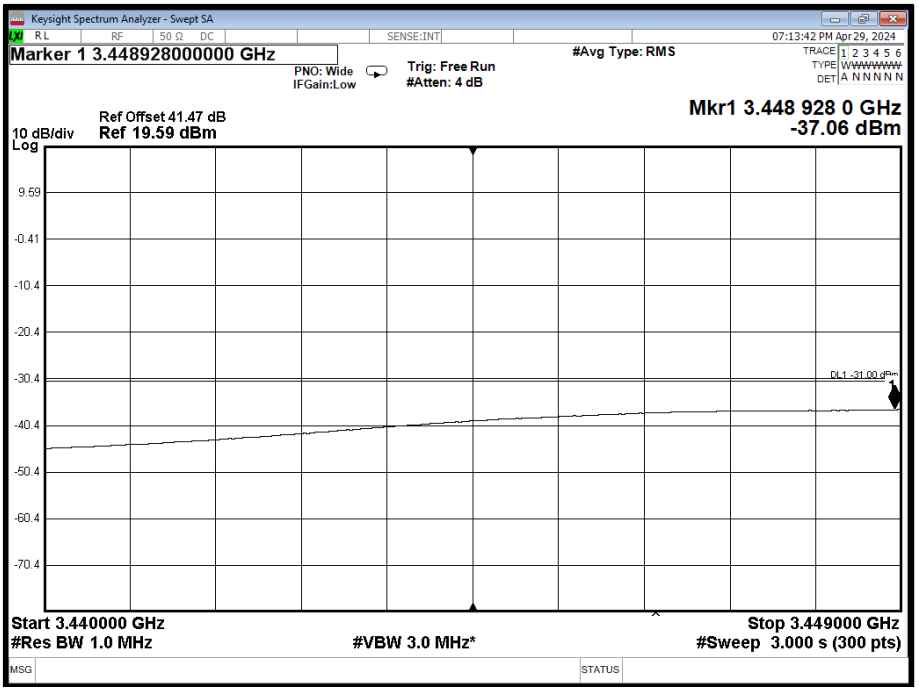
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B - Band 2 - Range 3430 to 3440 MHz



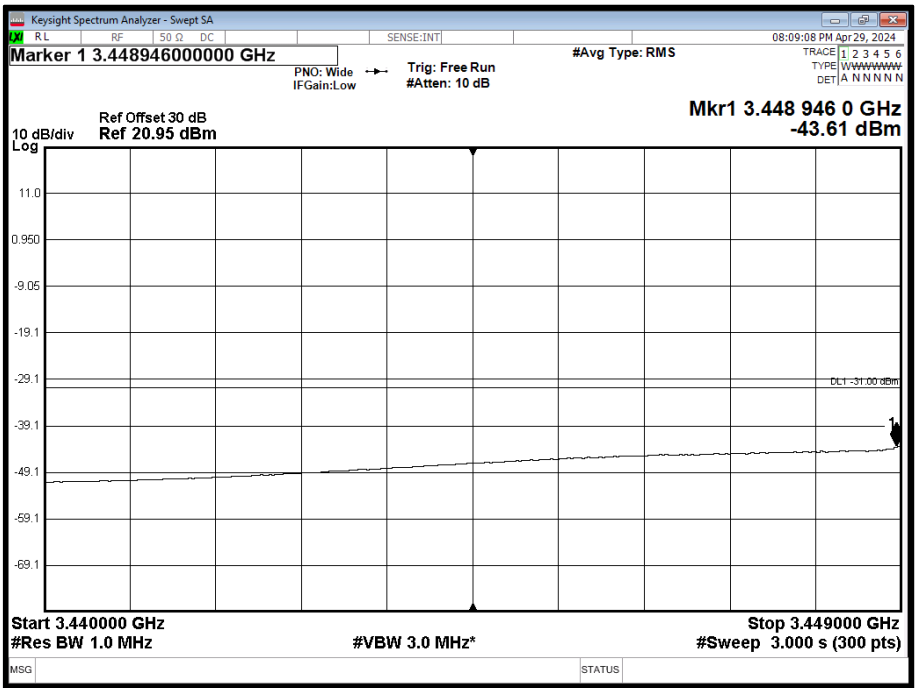
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 2 - Range 3430 to 3440 MHz



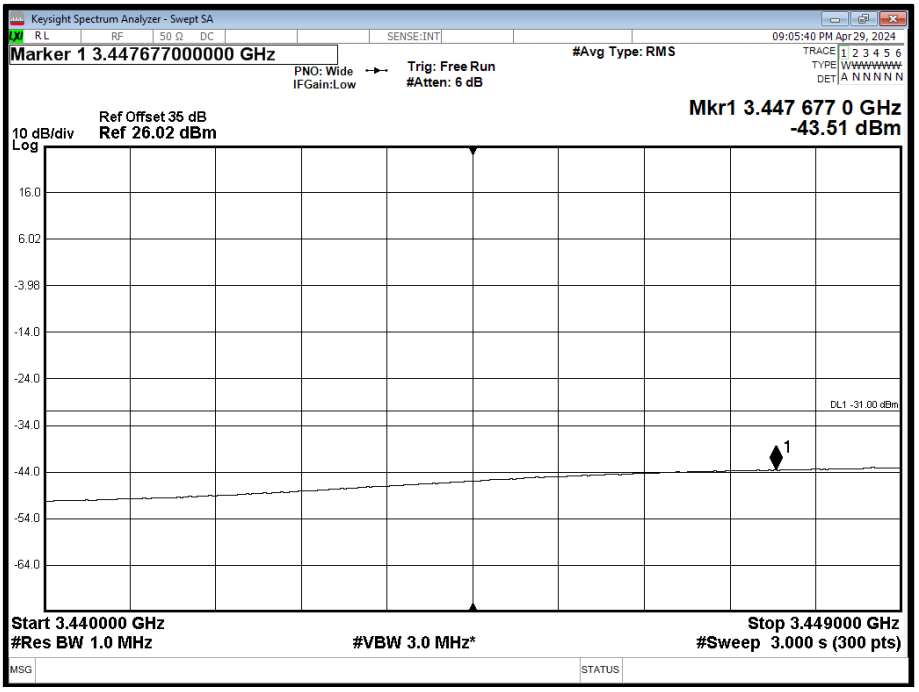
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T - Band 3 - Range 3440 to 3449 MHz



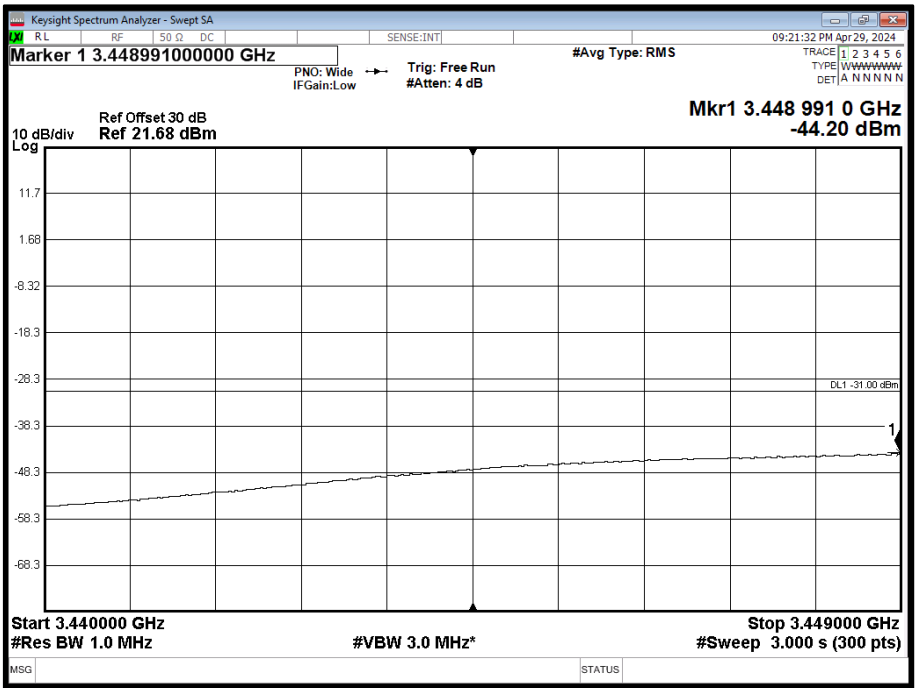
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B - Band 3 - Range 3440 to 3449 MHz



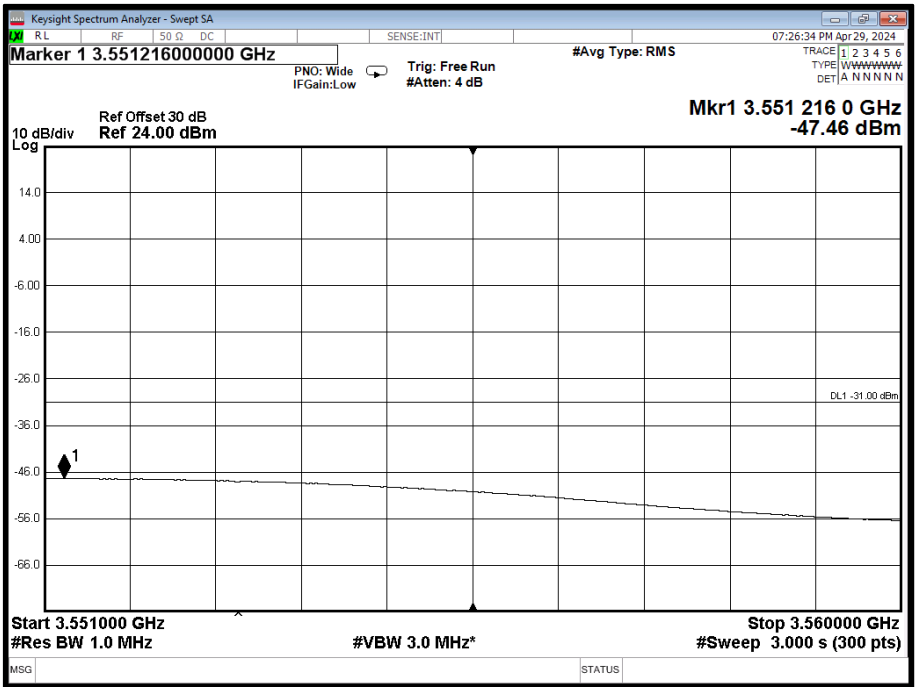
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position M - Band 3 - Range 3440 to 3449 MHz



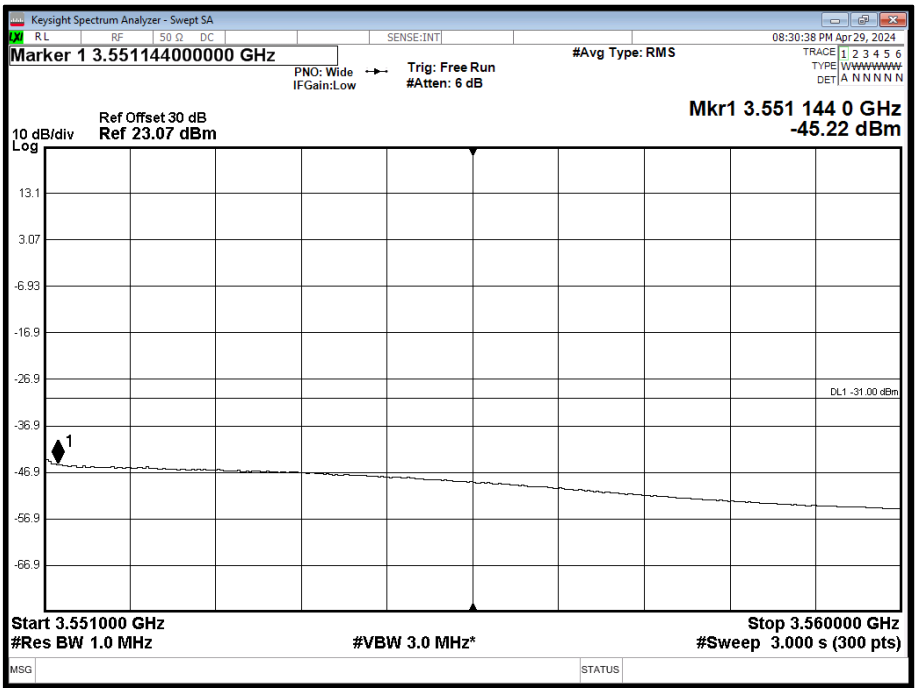
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 3 - Range 3440 to 3449 MHz



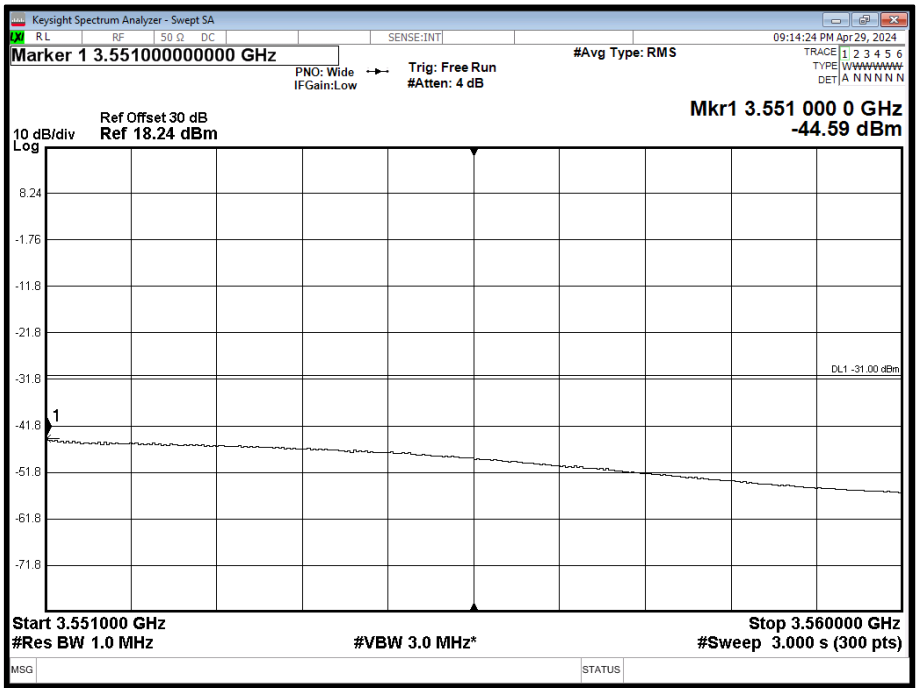
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M - Band 4 - Range 3551 to 3560 MHz



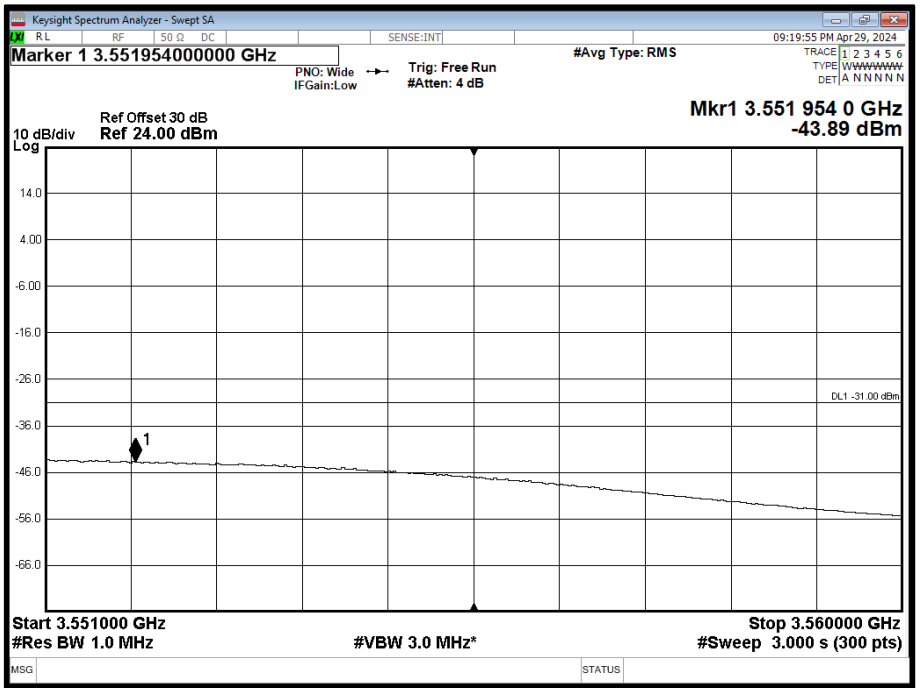
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T - Band 4 - Range 3551 to 3560 MHz



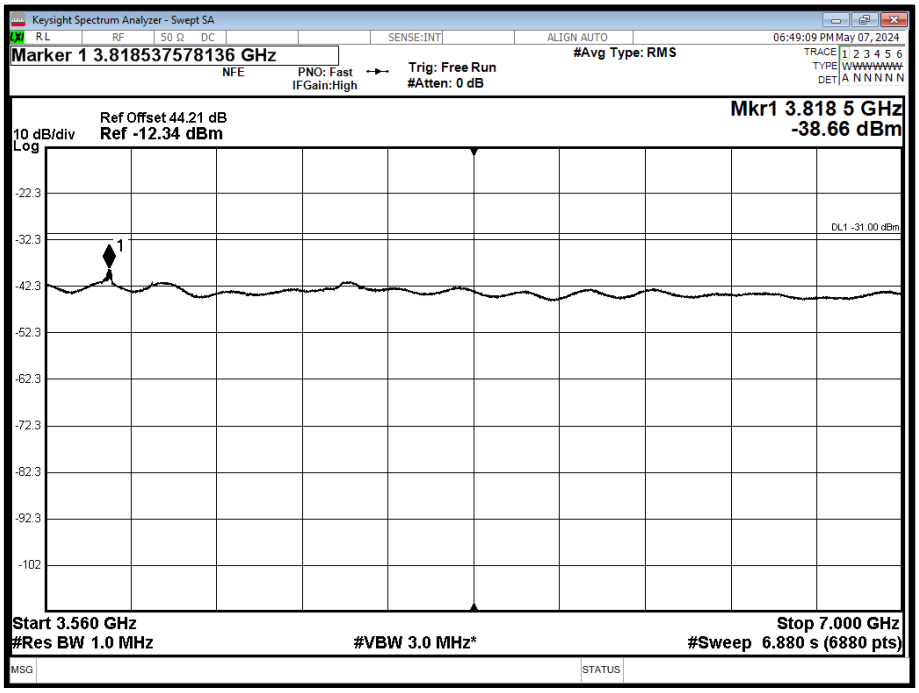
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T - Band 4 - Range 3551 to 3560 MHz



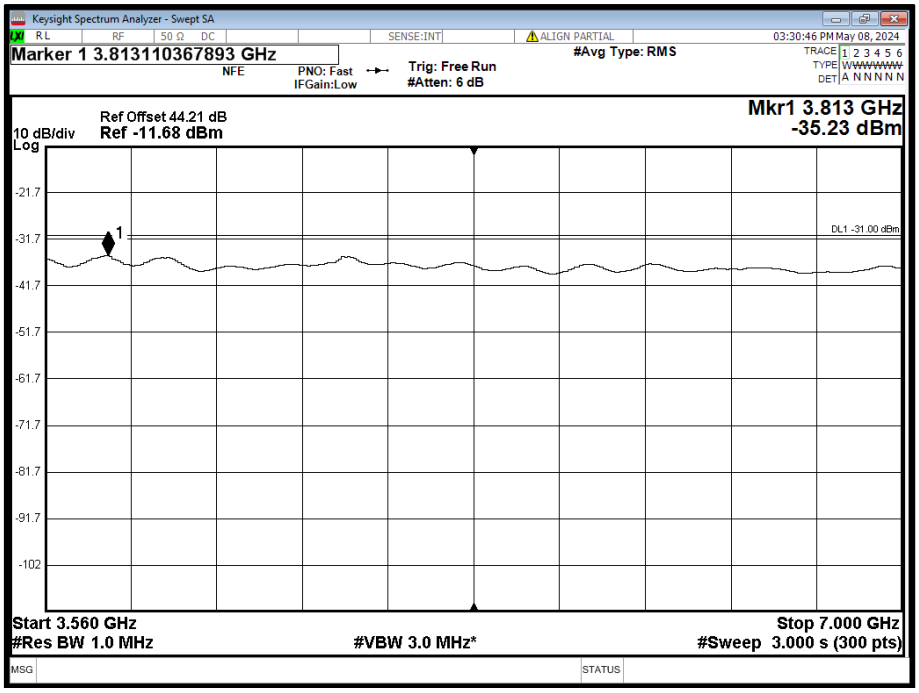
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 4 - Range 3551 to 3560 MHz



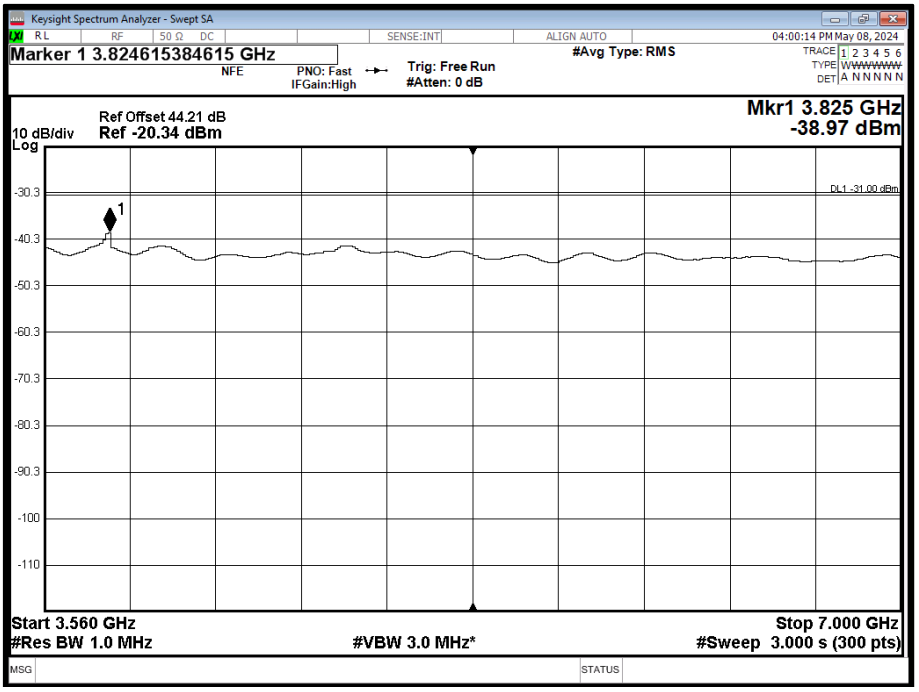
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position M - Band 5 - Range 3560 to 7000 MHz



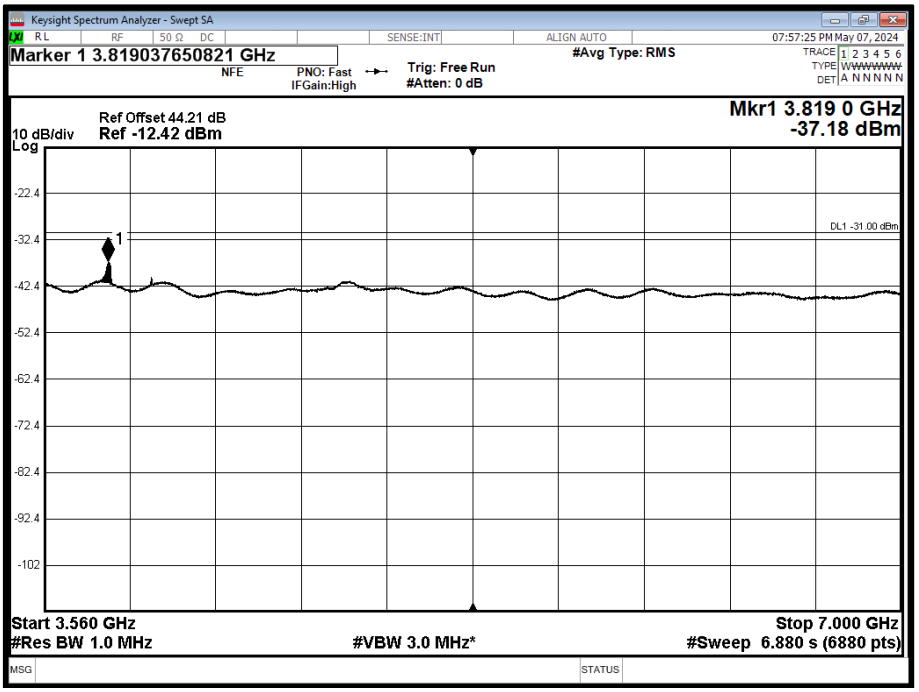
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M - Band 5 - Range 3560 to 7000 MHz



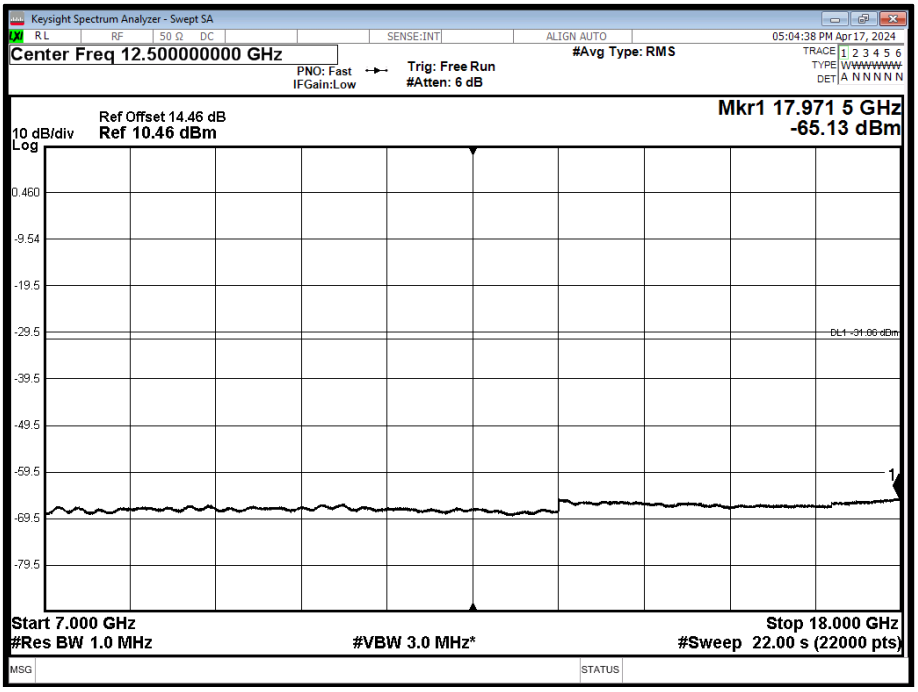
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B - Band 5 - Range 3560 to 7000 MHz



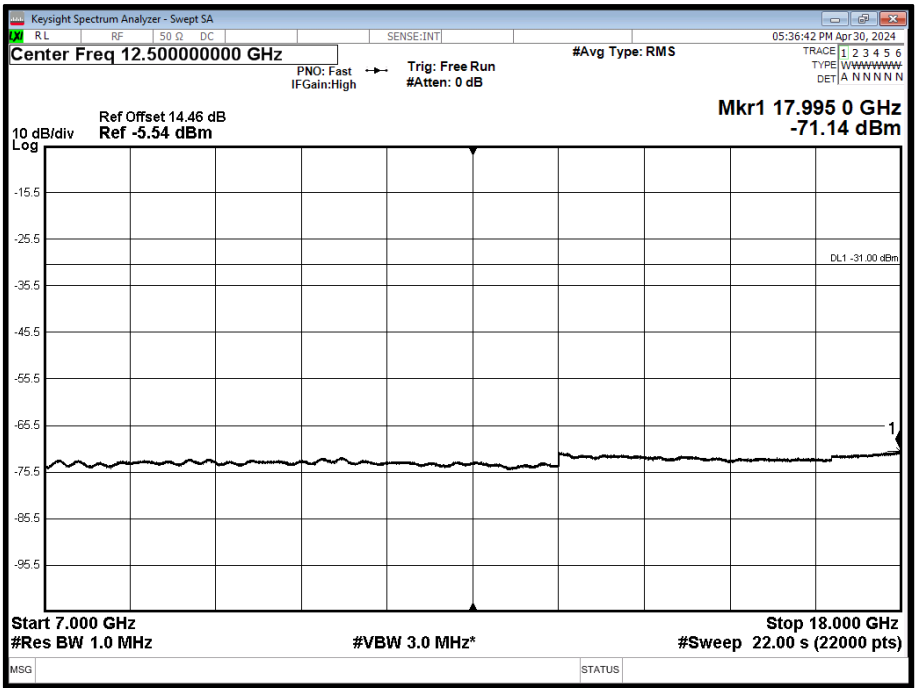
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 5 - Range 3560 to 7000 MHz



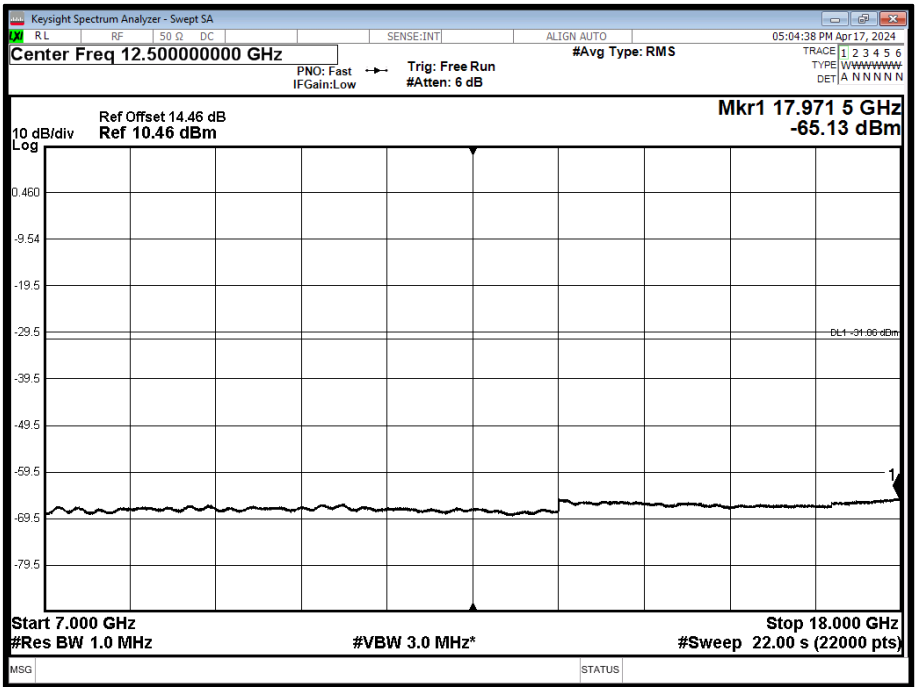
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T - Band 6 - Range 7000 to 18000 MHz



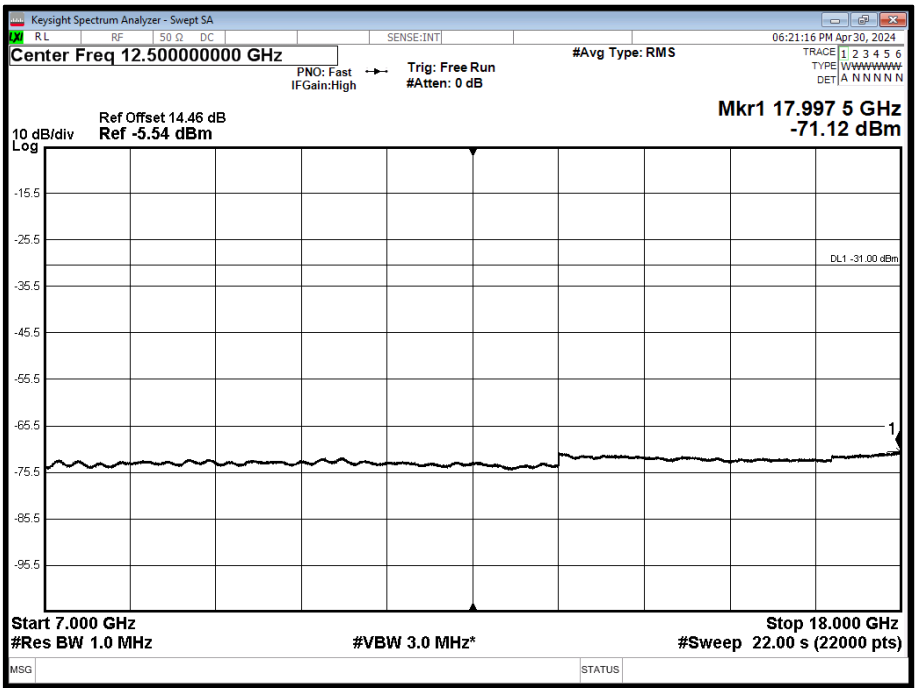
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M - Band 6 - Range 7000 to 18000 MHz



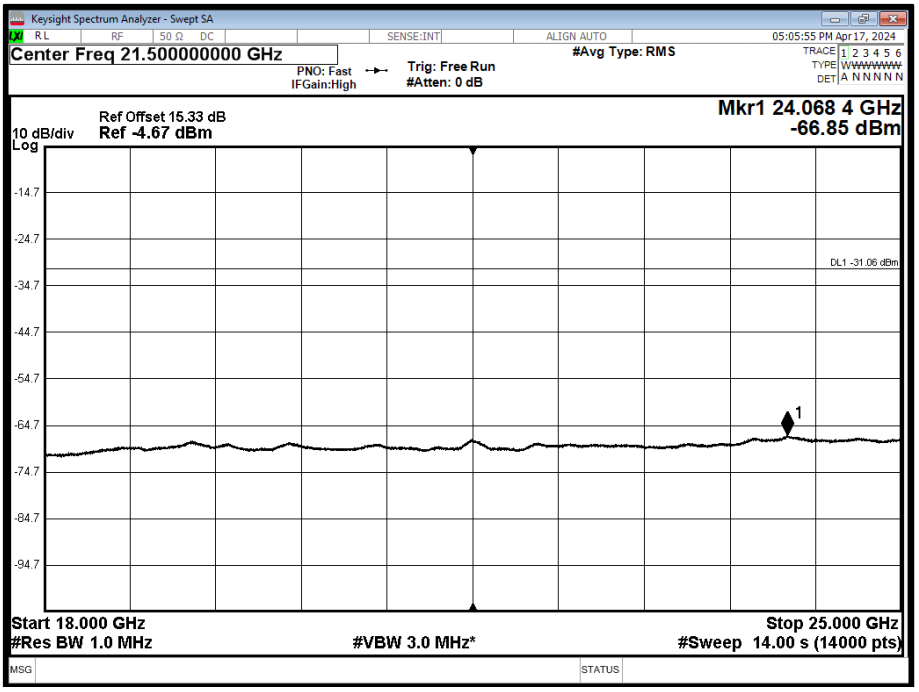
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T - Band 6 - Range 7000 to 18000 MHz



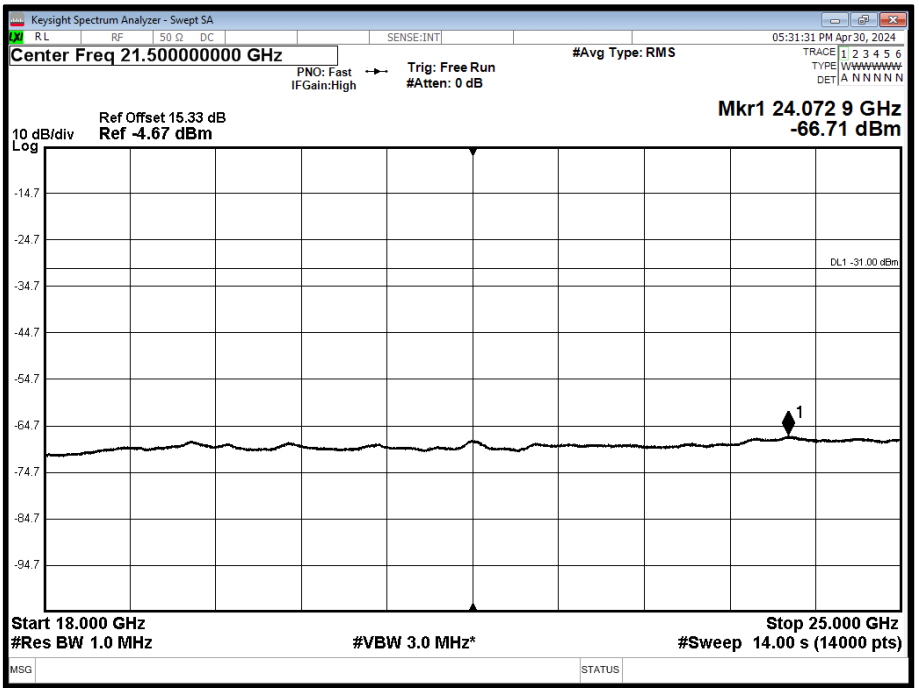
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 6 - Range 7000 to 18000 MHz



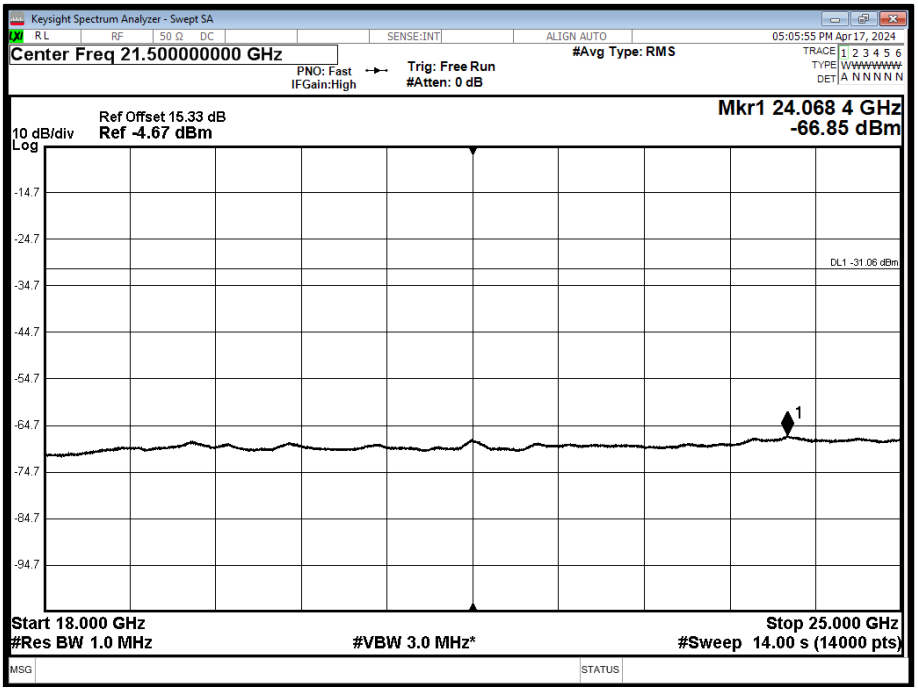
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position T - Band 7 - Range 18000 to 25000 MHz



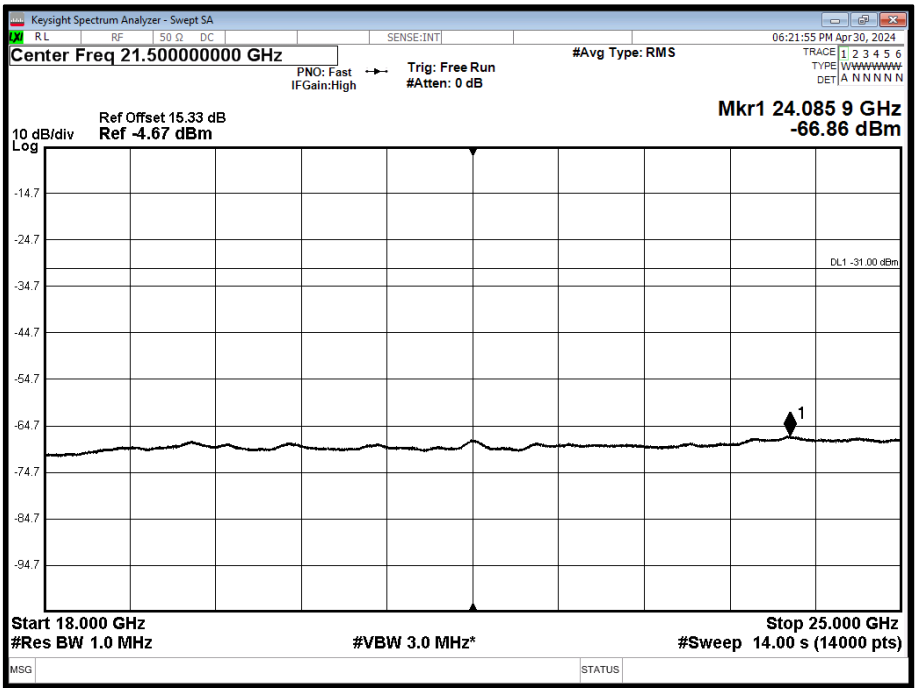
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position B - Band 7 - Range 18000 to 25000 MHz



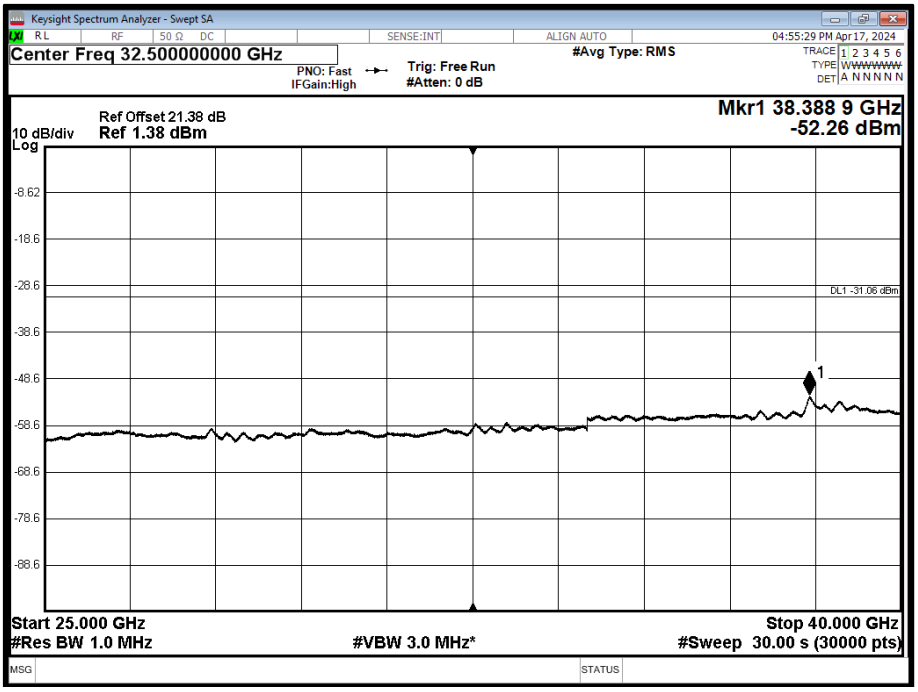
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T - Band 7 - Range 18000 to 25000 MHz



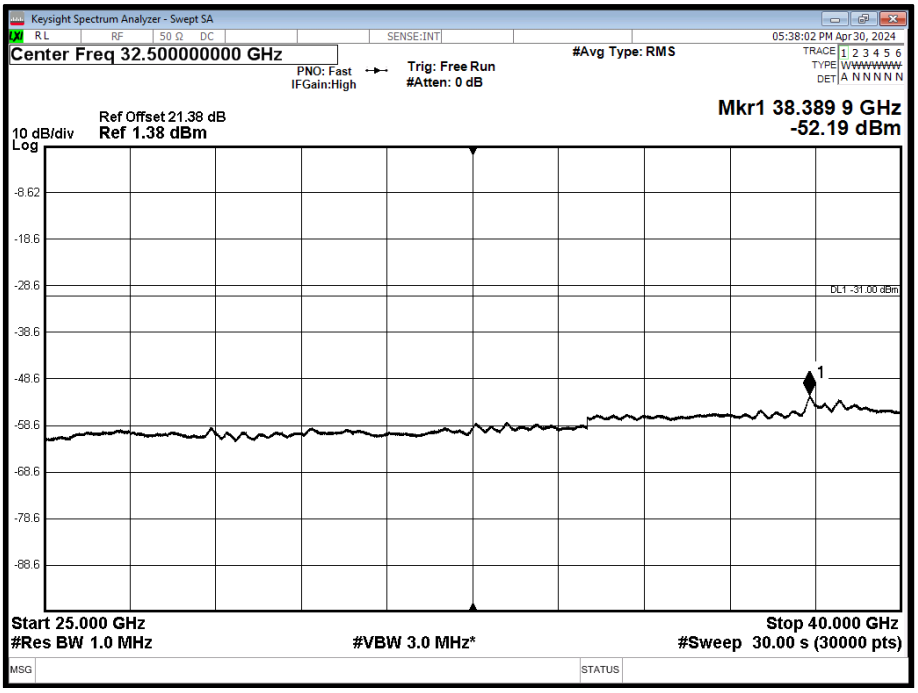
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 7 - Range 18000 to 25000 MHz



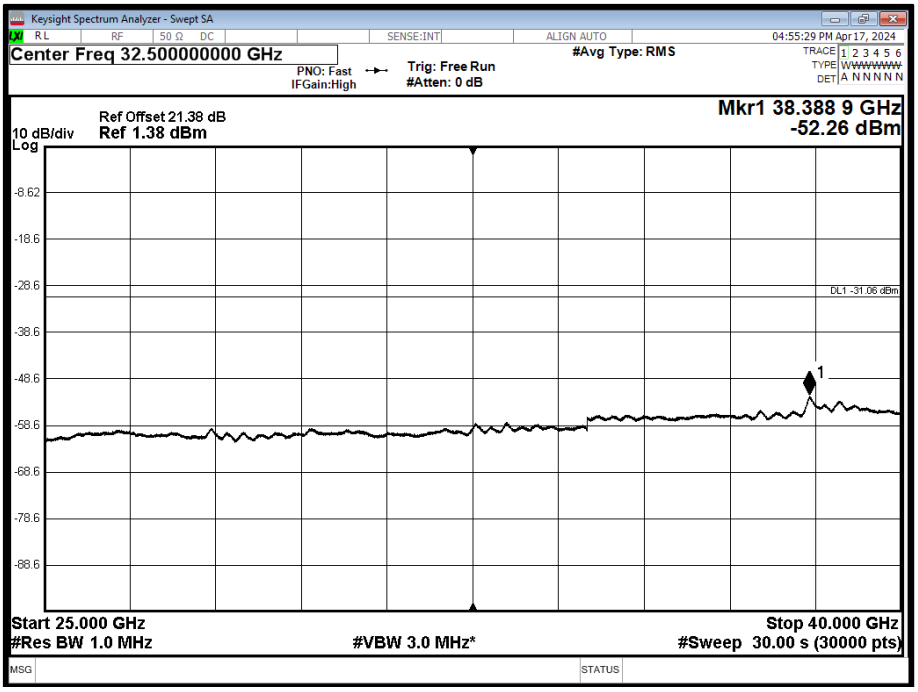
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 10.0 MHz 30 kHz SCS - Channel Position B - Band 8 - Range 25000 to 40000 MHz



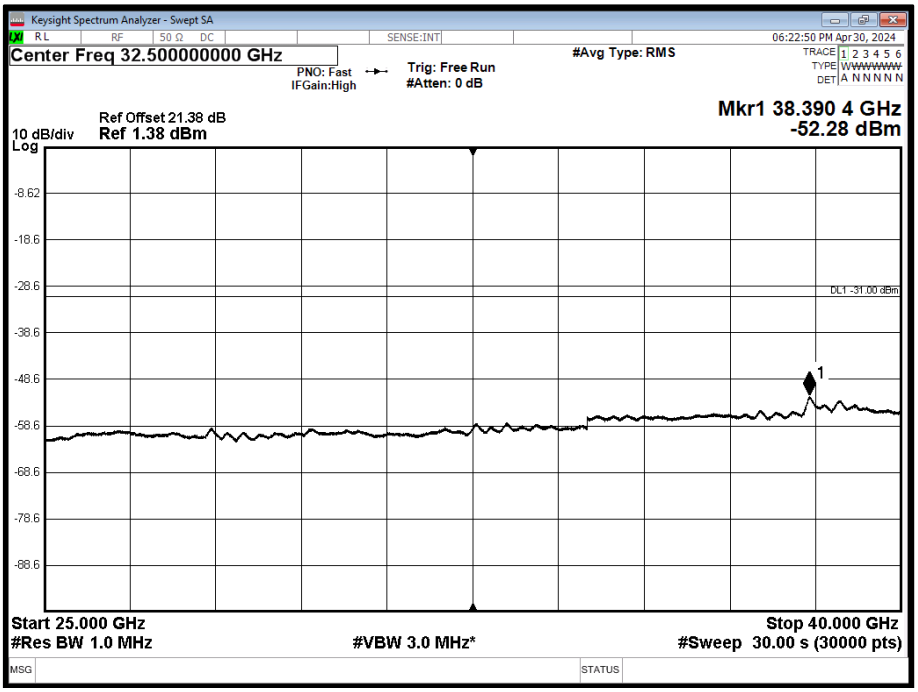
Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position M - Band 8 - Range 25000 to 40000 MHz



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position B - Band 8 - Range 25000 to 40000 MHz



Antenna 1 - NR Modulation QPSK - NR Carrier Bandwidth 100.0 MHz 30 kHz SCS - Channel Position M - Band 8 - Range 25000 to 40000 MHz

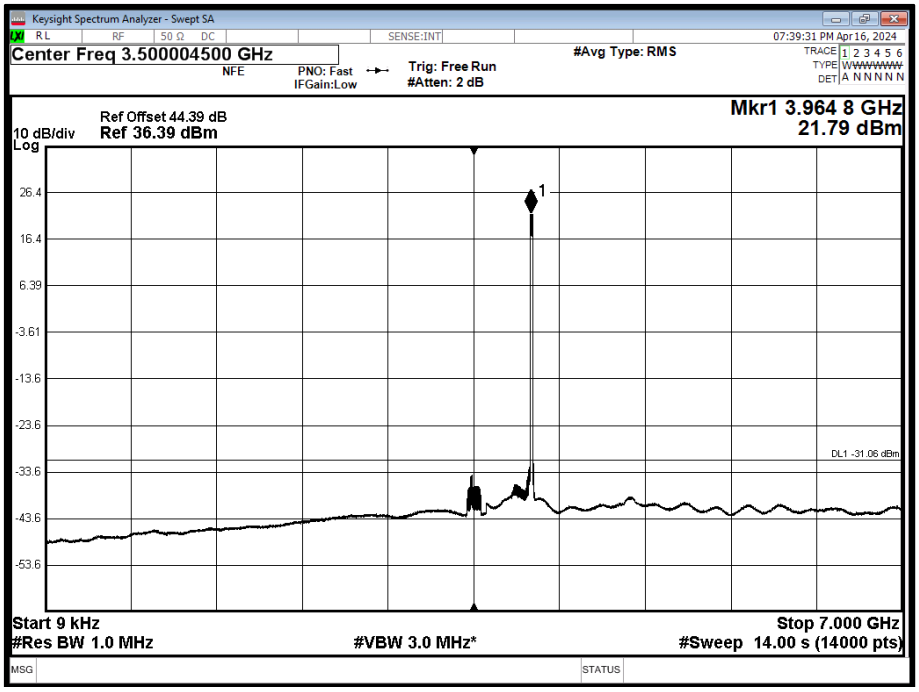


Configuration 2

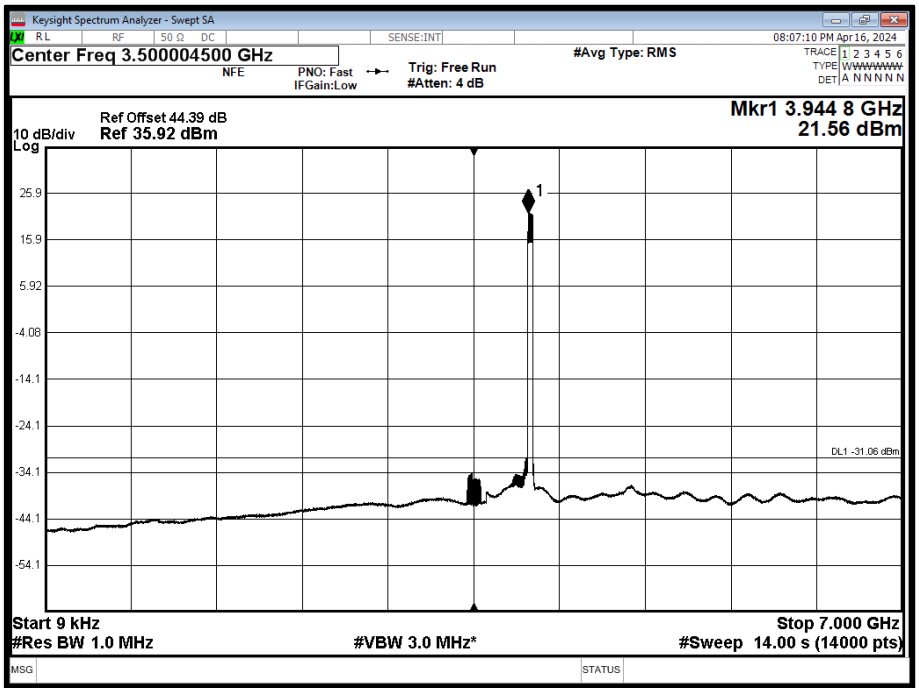
Maximum Output Power 30.97, 33.98, 35.74, 36.99, 37.96 dBm

Module 1 - Max 4W/MHz PSD

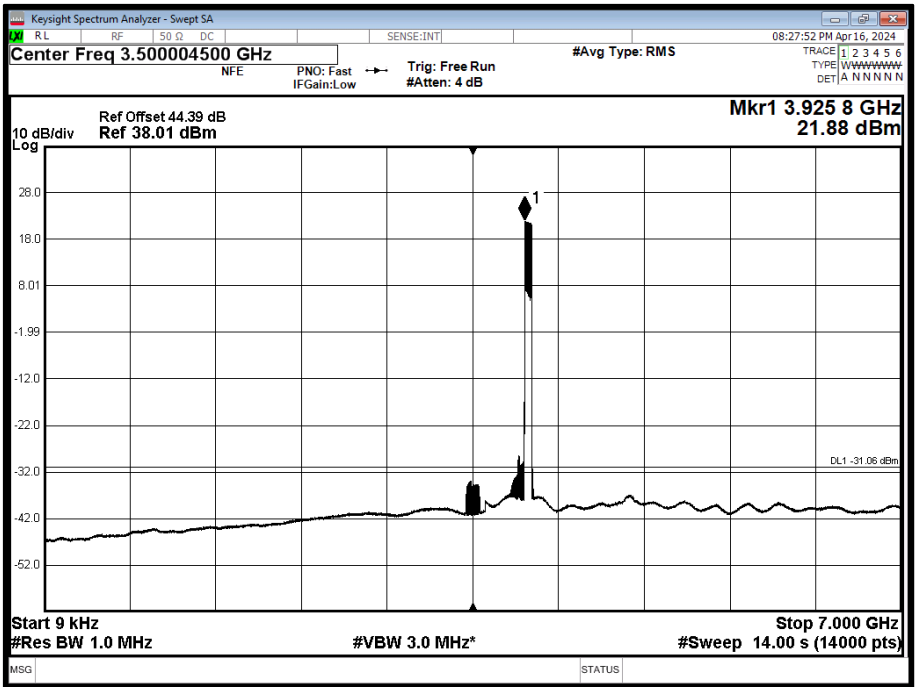
Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 20.0 MHz 30 kHz SCS - Channel Position T - Band 1 - Range 0.009 to 7000 MHz



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 40.0 MHz 30 kHz SCS - Channel Position T - Band 1 - Range 0.009 to 7000 MHz



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 60.0 MHz 30 kHz SCS - Channel Position T - Band 1 - Range 0.009 to 7000 MHz



Antenna 19 - NR Modulation QPSK - NR Carrier Bandwidth 80.0 MHz 30 kHz SCS - Channel Position T - Band 1 - Range 0.009 to 7000 MHz