



Accred. no. 10363
Testing
ISO/IEC 17025



Report On

FCC and ISED Testing of the Ericsson AIR 3283 B25 B66, KRD 901 892/2, LTE and NR (2100 MHz) Base Station in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 27, ISED RSS-GEN and Industry Canada RSS-139

COMMERCIAL-IN-CONFIDENCE

FCC: TA8AKRD901892

IC: 287AB-AS901892

PREPARED BY

A handwritten signature in black ink, appearing to read 'Maggie Whiting'.

Maggie Whiting
Key Account Manager

APPROVED BY

A handwritten signature in black ink, appearing to read 'Steve Scarfe'.

Steve Scarfe
Authorised Signatory

DATED

24 March 2025

Document 75961458 Report 06 Issue 1

March 2025



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SECTION 1

REPORT INFORMATION



1.1 REPORT DETAILS

Manufacturer	Ericsson
Address	Torshamnsgatan 23 Kista SE-16480 Stockholm Sweden
Product Name & Product Number	AIR 3283 B25 B66 - KRD 901 892/2
IC Model Name	AS901892
Serial Number(s)	E23F527361
Software Version	CXP2021151/1-R24A70
Hardware Version	R1C
Non-Tested Variant (See Section 1.11 Additional Information)	KRD 901 892/1 KRD 901 892/11 KRD 901 892/21
Test Specification/Issue/Date	FCC CFR 47 Part 2: 2023 FCC CFR 47 Part 27: 2024 ISED RSS-GEN: Issue 5: April 2018, Amendment 1; March 2019, Amendment 2; February 2021 ISED RSS-139: Issue 4: September 2022, Amendment October 2022
Test Plan	General RA FCC Test Plan for AIR 3283 B25B66_FCC#3_E
Start of Test	21-February-2025
Finish of Test	12-March-2025
Name of Engineer(s)	Vinodhini Chandrasekaran and Shakir Salman
Related Document(s)	KDB 971168 D01 v02r02 KDB 662911 D01 v02r01 ICES-003:Issue 7 (2020-10) ANSI C63.26-2015

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 and FCC CFR 47 Part 2: 2023, FCC CFR 47 Part 27: 2024, ISED RSS-GEN: Issue 5: April 2018, Amendment 1; March 2019, Amendment 2 February 2021, ISED RSS-139: Issue 4: September 2022, Amendment October 2022 The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineer(s);

Vinodhini Chandrasekaran and Shakir Salman



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, FCC CFR 47 Part 27, ISSED RSS-GEN and ISSED RSS-139 is shown below.

Section	Specification Clause				Test Description	Result
	FCC CFR 47 Part 2	FCC CFR 47 Part 27	RSS-GEN	ISSED RSS-139		
2.1	2.1046	27.50	6.11	5.5	Maximum Peak Output Power and Peak to Average Ratio - Conducted	Pass
2.2	2.1049	27.53	6.7	5.5	Occupied Bandwidth	Pass
2.3	2.1051	27.53	-	5.5	Band Edge	Pass
2.4	2.1051	27.53	6.13	5.6	Transmitter Spurious Emissions	Pass
*-	2.1053	27.53	6.13	5.6	Radiated Spurious Emissions	Pass

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

Intertek Test Report reference 2409561STO-101 AIR3283 FCC2427 for (1-4Carriers)

Intertek Test Report reference 2407336STO-101 AIR3283 FCC2427 for (3-6Carriers)

Intertek Test Report reference 2500147STO-101 AIR3283 FCC2427 for (NR: wide Bandwidth).

Testing in this Report covers only B66 (2110 MHz -2200 MHz).

For additional configurations and test cases not contained within this test report, refer to the following report:

TÜV SÜD Document 75961458 Report 01 – B25 (1930 MHz -1995 MHz) and B2 (1930 MHz - 1990 MHz).

TÜV SÜD Document 75961458 Report 02 – B66 (2110 MHz -2200 MHz).

TÜV SÜD Document 75961458 Report 03 – B25 (1930 MHz -1995 MHz) and B2 (1930 MHz - 1990 MHz).

TÜV SÜD Document 75961458 Report 04 – B66 (2110 MHz -2200 MHz).

TÜV SÜD Document 75961458 Report 05 – B25 (1930 MHz -1995 MHz) and B2 (1930 MHz - 1990 MHz).



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	RAT Band	Carrier Bandwidth (MHz)	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 2.1, 2.2 & 2.4	1	NR	25	2122.5	2155.0	2187.5	240	38.75
			30	2125.0	2155.0	2185.0	240	38.75
			35	2127.5	2155.0	2182.5	240	38.75
1 - Sections 2.3	1	NR	25	2122.5	N/A	2187.5	240	38.75
			30	2125.0	N/A	2185.0	240	38.75
			35	2127.5	N/A	2182.5	240	38.75
2 - Sections 2.1	1	NR	25	2122.5	2155.0	2187.5	143.75	36.52
			30	2125.0	2155.0	2185.0	172.5	37.31
			35	2127.5	2155.0	2182.5	201.25	37.98
3 - Sections 2.1	2	NR	25	2122.5 + 2147.5	2135.0 + 2175.0	2162.5 + 2187.5	2x120	2x35.74
			30	2125.0 + 2155.0	2135.0 + 2175.0	2155.0 + 2185.0	2x120	2x35.74
3 - Sections 2.2	2	NR	25	2122.5 + 2147.5	2142.5 + 2167.5	2162.5 + 2187.5	2x120	2x35.74
			30	2125.0 + 2155.0	2140.0 + 2170.0	2155.0 + 2185.0	2x120	2x35.74
4 - Sections 2.1 & 2.3 & 2.4	6	NR + LTE (B25 +B66)	LTE-5M 64QAM Band25 + NR-15M QPSK Band25 + NR-25M QPSK Band25 + LTE-20M QPSK Band66 + NR-5M QPSK Band66 + NR-20M QPSK Band66	1932.5 + 1942.5 + 1962.5 + 2120.0 + 2132.5 + 2145.0	1942.5 + 1952.5+ 1972.5+ 2135.0+ 2147.5+ 2160.0	1992.5 + 1982.5 + 1962.5+ 2190.0+ 2177.5+ 2165.0	15, 45, 100, 70, 20,70.	26.7 31.48 34.94 33.39 27.95 33.39
5 - Sections 2.1 & 2.3 & 2.4	6	NR + LTE (B2 +B66)	LTE-5M 64QAM Band2 + NR-15M QPSK Band2 + NR-25M QPSK Band2 + LTE-20M QPSK Band66 + NR-5M QPSK Band66 + NR-20M QPSK Band66	N/A	N/A	1987.5 + 1977.5 + 1957.5+ 2190.0 + 2177.5+ 2165.0	15, 45, 100, 70, 20,70.	26.7 31.48 34.94 33.39 27.95 33.39

1.5 DECLARATION OF BUILD STATUS

Equipment Description		
Technical Description:	Multi standard AIR 3283 B25 B66 32Tx/32Rx	
Manufacturer:	Ericsson AB	
Model:	AIR 3283 B25 B66	
Part Number:	KRD 901 892/11** With Antenna, Security Locked KRD 901 892/2* CAB-unit, Security Unlocked	
	Note*: Tested unit	
	Note**: This will be the marketed, sold unit	
Hardware Version:	R1C	
Software Version:	CXP2021151/1-R24A70	
FCC ID of the product under test	TA8AKRD901892	
IC ID of the product under test	287AB-AS901892	
HVIN	AS901892	
FVIN	CXP2021151/1-R24A70	
Intentional Radiators		
RAT	LTE	NR SCS 15kHz
Frequency Range (MHz to MHz) B25/n25	1930MHz -1995MHz	1930MHz -1995MHz
Frequency Range (MHz to MHz) B2/n2	1930MHz -1990MHz	1930MHz -1990MHz
Frequency Range (MHz to MHz) B66/n66	2110MHz -2200MHz	2110MHz -2200MHz
Conducted Declared Output Power (dBm)	40dBm (10W)Max output power per carrier	40dBm (10W)Max output power per carrier
	53,8dBm(240W)Max output power per band	53,8dBm(240W)Max output power per band
	55dBm (320W)Max output power multi band per Radio	55dBm (320W)Max output power multi band per Radio
Max Power per carrier	4W/MHz	
EIRP Limit to be used non-rural	B25/B2, n25/n2 with max 6 W/MHz PSD is classified with FCC Non-Rural EIRP limit	B66, n66 with max 5.75W/MHz PSD is classified with FCC Non-Rural EIRP limit
Duty Cycle	73%-74%	
Total Horizontal Plane Beamwidth	65°±5	65°±5
Antenna Gain (dBi)B2/n2, B25/n25 & B66/n66	23.7	
Antenna Impedance(Ω)	50	
Total RF bandwidth (BW) B25/n25	65MHz	65MHz
Total RF bandwidth (BW) B66/n66	90MHz	90MHz
Total RF bandwidth (BW) B2/n2	60MHz	60MHz
Total RF bandwidth (BW) multiband(B2/n2, B25/n25 + B66/n66)	270 MHz(Both SRO and MRO)	270 MHz(Both SRO and MRO)
Maximum Opertional bandwidth (BW) multiband(B25/B2, B66)	90 MHz(Both SRO and MRO)	90 MHz(Both SRO and MRO)
Supported Bandwidth(s) (MHz) B2/n2, B25/n25, B66/n66	LTE: 5,10, 15,20MHz	NR: 5 ,10 ,15 ,20 ,25 ,30 ,35MHz
Modulation Scheme(s) B2/n2, B25/n25, B66/n66	LTE:QPSK, 16QAM, 64QAM, 256QAM	NR: QPSK, 16QAM, 64QAM, 256QAM



ITU Emission Designator B2/n2, B25/n25	5MHz BW: 4M50W7D 10MHz BW: 8M96W7D 15MHz BW: 13M5W7D 20MHz BW: 17M9W7D CA(20+20)MHz BW:37M7W7D CA(20+20+20)MHz BW:57M4W7D	5MHz BW: 4M48W7D 10MHz BW: 9M28W7D 15MHz BW: 14M2W7D 20MHz BW: 19M0W7D CA(20+20M)MHz BW:38M7W7D CA(20+20+20M)MHz BW:58M5W7D
ITU Emission Designator B66/n66	5MHz BW: 4M48W7D 10MHz BW: 8M96W7D 15MHz BW: 13M5W7D 20MHz BW: 17M9W7D CA(20+20)MHz BW:37M7W7D CA(20+20+20)MHz BW:57M5W7D CA(15+15+15+15)MHz BW:57M9W7D	5MHz BW: 4M48W7D 10MHz BW: 9M28W7D 15MHz BW: 14M1W7D 20MHz BW: 19M0W7D CA(20+20)MHz BW:38M7W7D CA(20+20+20)MHz BW:58M5W7D CA(15+15+15+15)MHz BW:58M6W7D
ITU Emission Designator (additional BW's) n2, n25,5	No additional BW.	25MHz BW: 23M8W7D 30MHz BW: 28M6W7D 35MHz BW: 33M6W7D CA(25+25)MHz BW:48M4W7D CA(30+30)MHz BW:58M4W7D
ITU E6mission Designator (additional BW's) n66,		25MHz BW: 23M8W7D 30MHz BW: 28M6W7D 35MHz BW: 33M6W7D CA(25+25)MHz BW:48M6W7D CA(30+30)MHz BW:58M4W7D
Duplex mode:	FDD	FDD
Supported transmission modes:	32 x 32 MIMO	32 x 32 MIMO
Maximum number of carriers per band B25/n25 /Port	3(Both SRO and MRO)	3 (Both SRO and MRO)
Maximum number of carriers per band B2/n2 /Port	3(Both SRO and MRO)	3(Both SRO and MRO)
Maximum number of carriers per band B66/n66 /Port	4(Both SRO and MRO)	4(Both SRO and MRO)
Maximum number of carriers per multi band (B2/n2t, B25/n25 + B66/n66)/Port	6(Both SRO and MRO)	6(Both SRO and MRO)
Antenna Characteristics		
Temporary antenna connector	State impedance	50 Ohm
Integral antenna	Type:	AAS (Advanced Antenna System)
Unintentional Radiators		
Highest frequency generated or used in the device or on which the device operates or tunes		Up to 25.8 Gbit/s
Lowest frequency generated or used in the device or on which the device operates or tunes if <30MHz		.-
Class A fDigital Device (Use in commercial, industrial or business environment)		.-
Class B Digital Device (Use in residential environment)		Class B
DC Power Supply (Delete if Not Applicable)		
Nominal voltage:	-48V	
Operating (Normal) Voltage:	-53.22V	
Extreme upper voltage:	-36V	
Extreme lower voltage:	-58.5V	
Max current:	50A	
Temperature		



Minimum temperature:	-40°C		
Maximum temperature:	55°C		
Ancillaries			
Equipment Description	Model:	Part Number:	Manufacturer:
Baseband simulator CT-DU25	LPC 102 500/1	T01G522534	Ericsson
Power Supply Unit CT-DU25/LP2x700W	BML 901 468/1	LP00588	Ericsson
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:	21/03/2025		

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 3283 B25 B66 - KRD 901 892/2 is an Ericsson AB Radio Unit working in the public mobile service B2, B25 & B66 which provides communication connections to B2, B25 & B66 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.

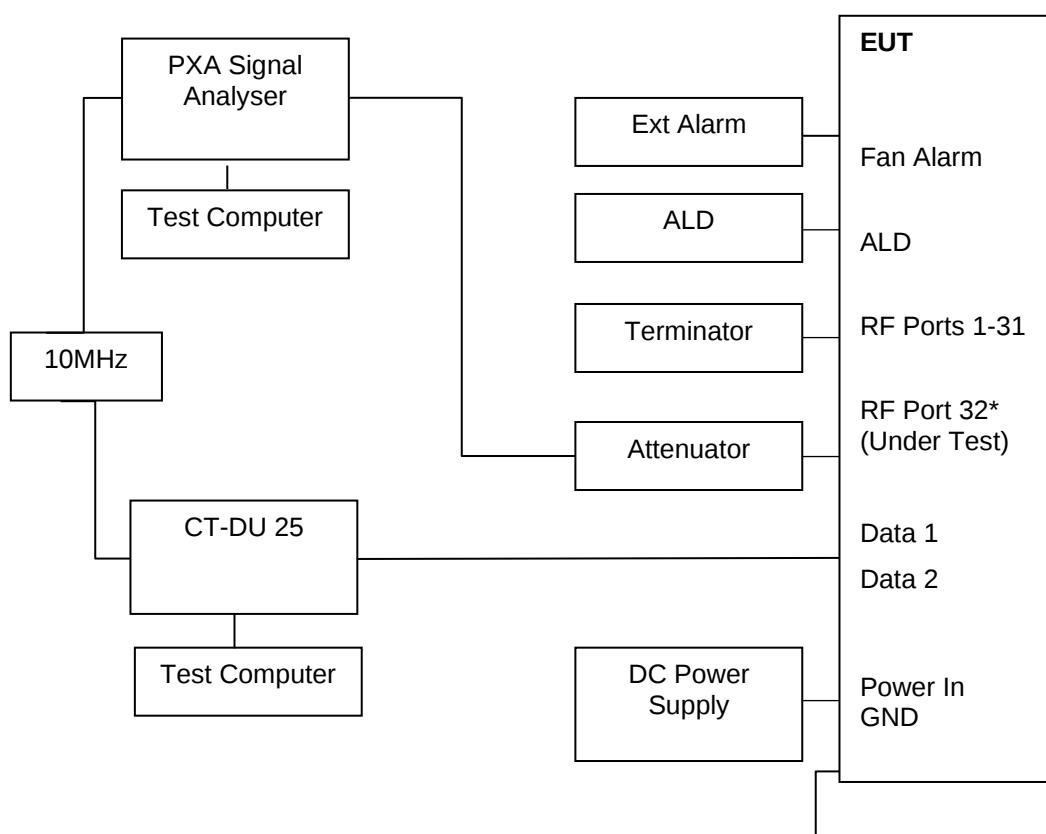


Equipment Under Test

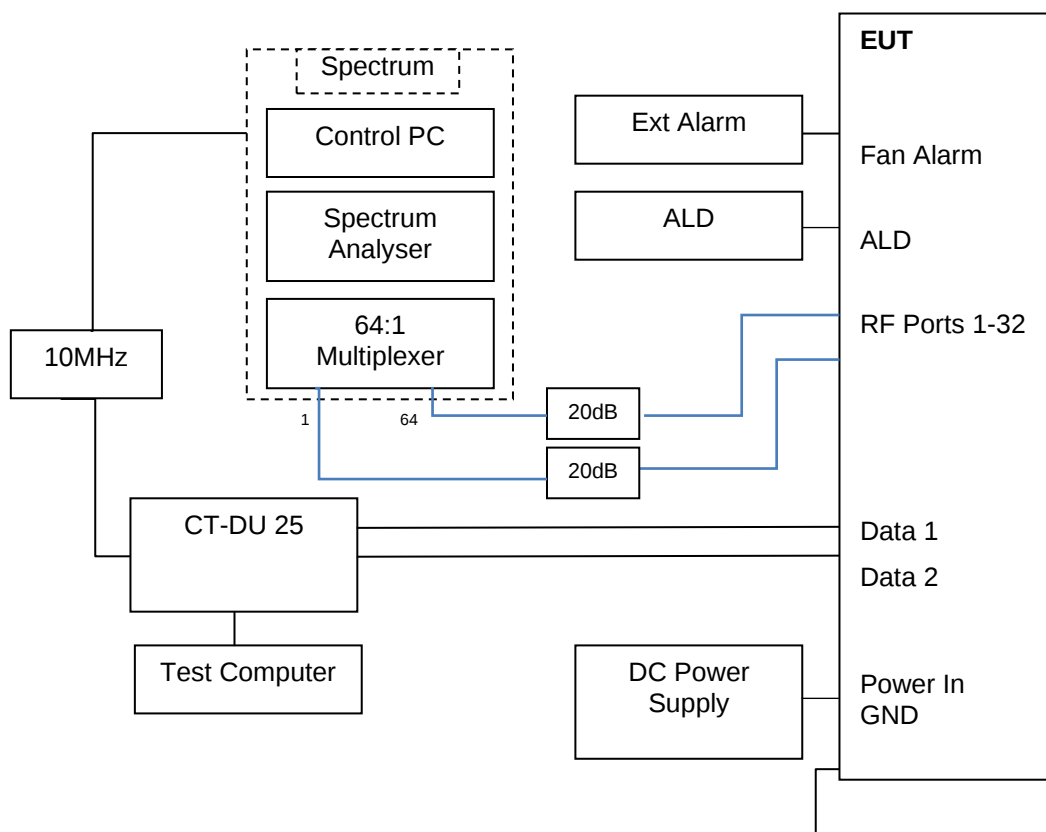
1.7 TESETUP

Conducted Test Set Up – Conducted Emissions

* Port 32 has been used in the Multiband Tests



Conducted Test Set Up, Power, PSD, PAR, Occupied Bandwidth, Band Edge





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

ISED Accreditation
IC#26170 Ericsson Test Laboratory, Kista
Postal Address: Ericsson AB, Isafjordsgatan 10, Stockholm, SE-164 40, Sweden

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

Test Name	Name of Engineer(s)
Maximum Peak Output Power and Peak to Average Ratio - Conducted	Vinodhini Chandrasekaran and Shakir Salman
Occupied Bandwidth	Vinodhini Chandrasekaran and Shakir Salman
Band Edge	Vinodhini Chandrasekaran and Shakir Salman
Transmitter Spurious Emissions	Vinodhini Chandrasekaran and Shakir Salman

1.9 DEVIATION FROM THE STANDARD

No 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 a Class 2 & 3 Permissive change to add NR bandwidths 25 MHz, 30 MHz and 35 MHz to a previously certified Radio for use in the USA and Canada under the following IDs:

FCC: TA8AKRD901892

IC: 287AB-AS901892

This device is electrically identical as originally certified as no hardware changes have been made.

Frequency Stability has been verified at time of original certification.

The Test Plan is based on the TÜV SÜD Document FCC and ISSED Test Plan Rationale for Base Station Equipment.

Pre-testing was performed for the initial testing in TÜV SÜD Document 75961458 Report 01, 02, 03 and 04 in accordance with the Test Plan to establish the worst-case modulation scheme.

Pre-testing was performed in accordance with the Test Plan to establish the worst-case Port, and bandwidths.

The port with the highest power, worst case port was port 32.

The modulation used was QPSK (LTE) ,QPSK (NR), these were defined by Ericsson, based on previous testing of this product.

Worst case bandwidth for the multiband configuration was measured as 20 MHz (NR), see Section 1.4, Configuration Description.

For LTE the most appropriate bandwidth to fit into the multiband configuration was used, see Section 1.4, Configuration Description.

These worst-case results from antenna port 32 are presented in this report to demonstrate compliance.

TÜV SÜD retains all results, plots and printouts for the tests performed and also calibration details of the test equipment used.

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

Ericsson have provided the following details about the variants of the <EUT>

KRD 901 892/1 With Antenna, Security Unlocked.

KRD 901 892/11** With Antenna, Security Locked

KRD 901 892/2* CAB-unit, Security Unlocked

KRD 901 892/21 CAB unit, Security Locked

Note*: Tested unit

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

In Section 1.5 Ericsson's Declaration of Build Status shows the EIRP Limit to be used under the Antenna Characteristics section.

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 3283 B25 B66, KRD 901 892/2.



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
ISED RSS-GEN, Clause 6.11
ISED RSS-139, Clause 5.5
FCC CFR 47 Part 2, Clause 2.1046

2.1.2 Date of Test and Modification State

27- February, 03 and 05-March-2025 - 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	22.2 - 23.8°C
Relative Humidity	23.5 - 39.1%

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.

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 $[10 \log (N_{out})]$ dB using the following calculation

Calculations:

Total Power (dBm/MHz) = $PSD (port x_i) + 10 \log (N_{ANT})$

Total EIRP (dBm/MHz) = Total Power + Declared Antenna Gain

Margin Limit (dB) = Limit – Total EIRP

Where NANT refers to the number of Ports and x is the number of the port deemed to be worst case during pre-test measurements.

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.

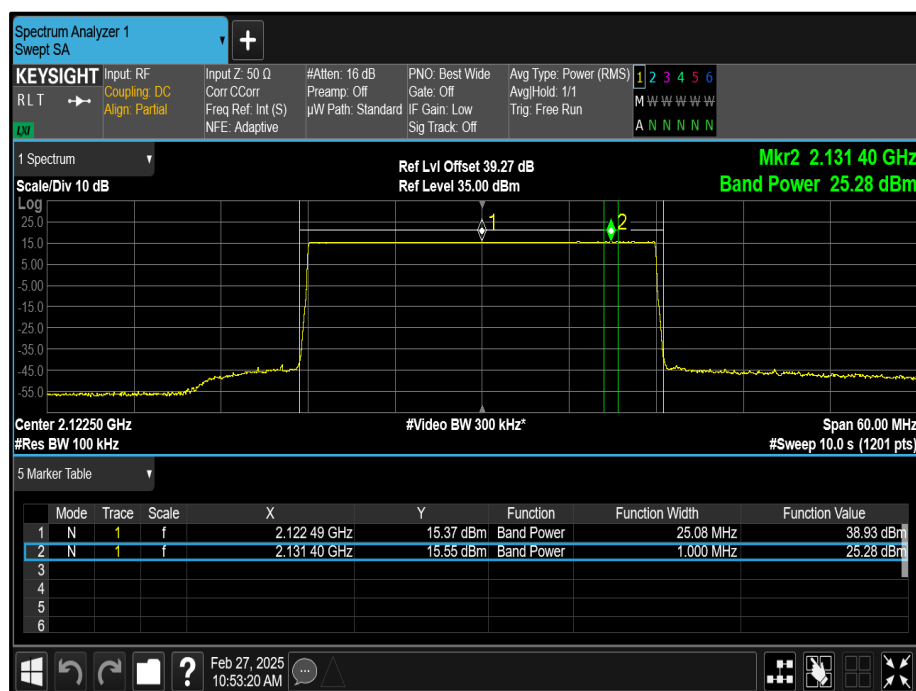
2.1.6 Test Results

Configuration 1

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.58	38.93	25.29	53.98	40.34	23.70	64.04	1.11
32	QPSK	30.0 MHz 15 kHz SCS	8.62	38.97	24.54	54.02	39.59	23.70	63.29	1.86
32	QPSK	35.0 MHz 15 kHz SCS	8.64	38.93	23.81	53.98	38.86	23.70	62.56	2.59

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position B

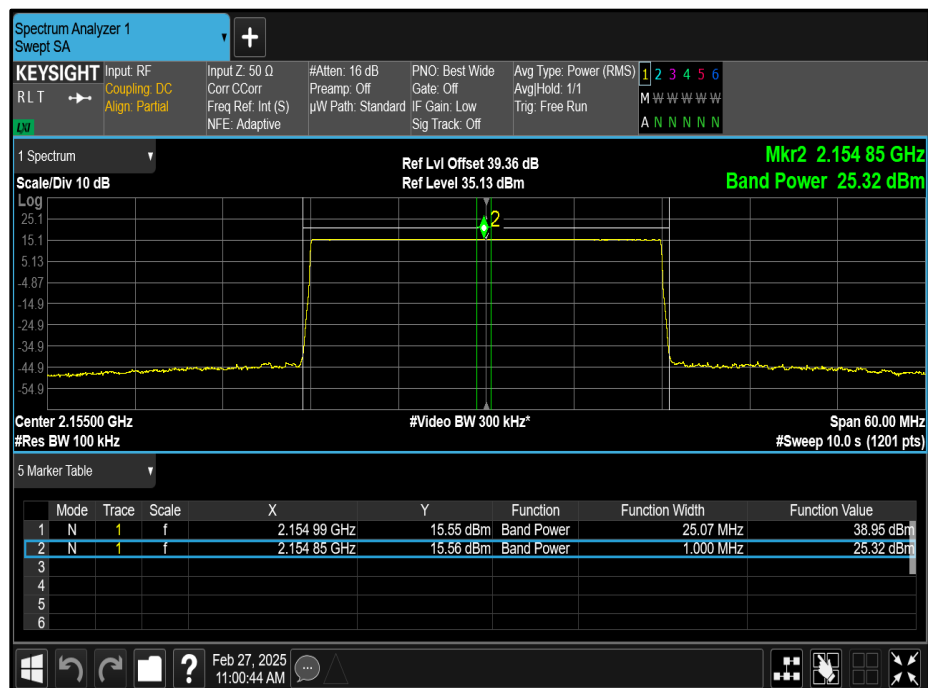


Configuration 1

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.46	38.95	25.32	54.00	40.37	23.70	64.07	1.08
32	QPSK	30.0 MHz 15 kHz SCS	8.48	38.92	24.48	53.97	39.53	23.70	63.23	1.92
32	QPSK	35.0 MHz 15 kHz SCS	8.47	38.93	23.82	53.98	38.87	23.70	62.57	2.58

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position M

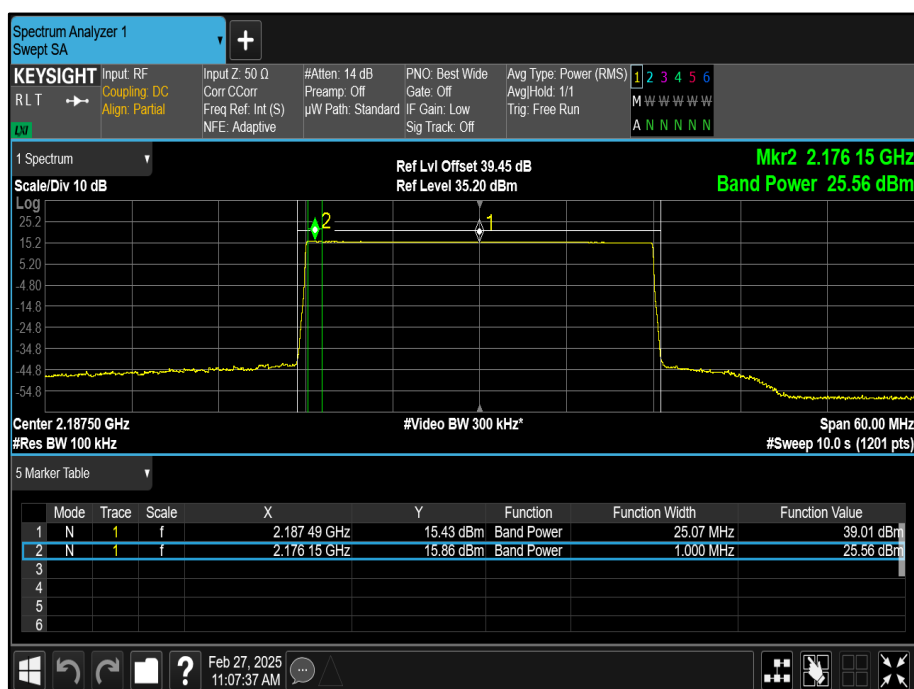


Configuration 1

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.58	39.01	25.56	54.06	40.61	23.70	64.31	0.84
32	QPSK	30.0 MHz 15 kHz SCS	8.70	39.00	24.70	54.05	39.75	23.70	63.45	1.70
32	QPSK	35.0 MHz 15 kHz SCS	8.73	38.97	23.97	54.02	39.02	23.70	62.72	2.43

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position T

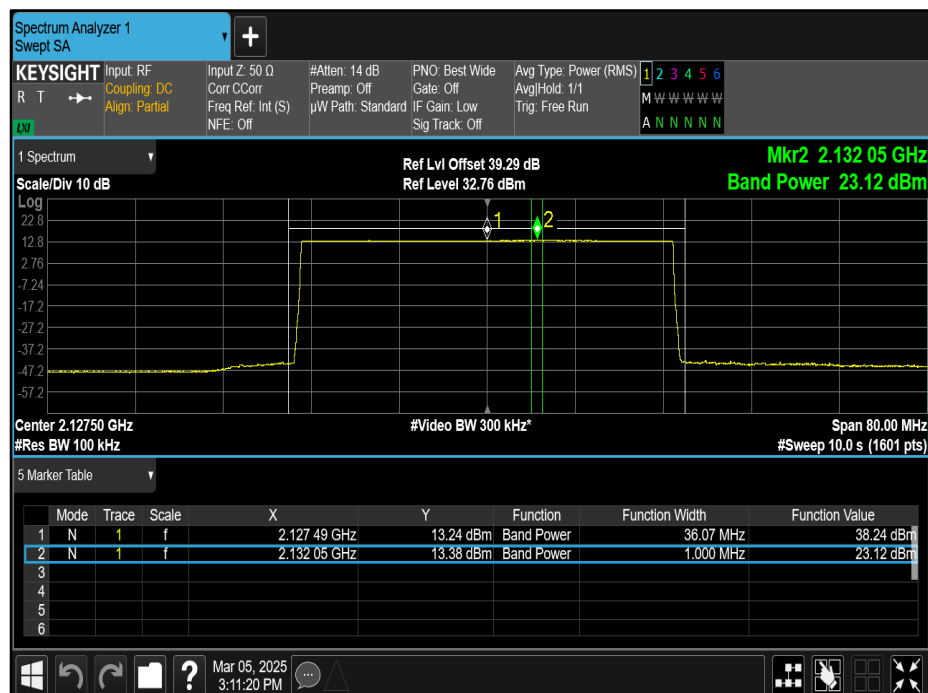


Configuration 2

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 62.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.60	36.73	23.07	51.78	38.12	23.70	61.82	0.33
32	QPSK	30.0 MHz 15 kHz SCS	8.64	37.55	23.07	52.60	38.12	23.70	61.82	0.33
32	QPSK	35.0 MHz 15 kHz SCS	8.64	38.24	23.12	53.29	38.17	23.70	61.87	0.28

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 35.0 MHz 15 kHz SCS - Channel Position B

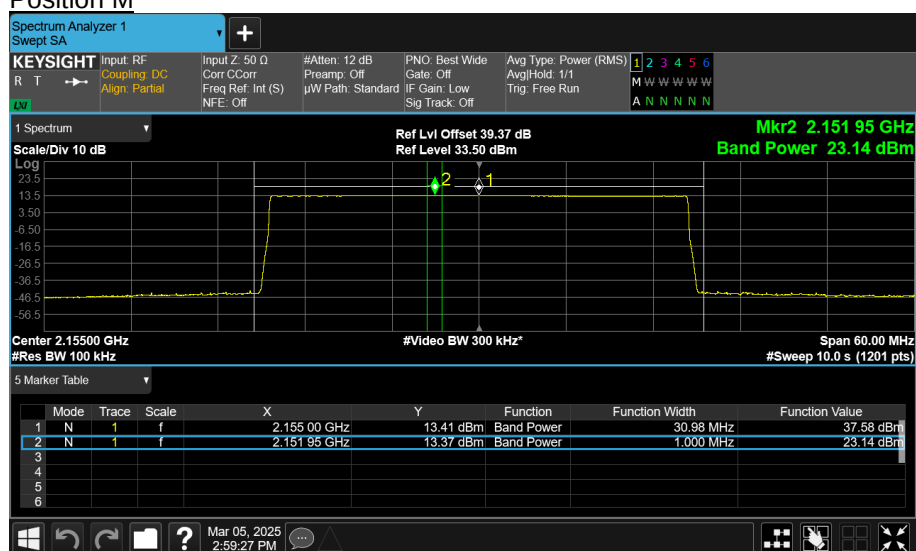


Configuration 2

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 62.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.46	36.76	23.10	51.81	38.15	23.70	61.85	0.30
32	QPSK	30.0 MHz 15 kHz SCS	8.48	37.58	23.14	52.63	38.19	23.70	61.89	0.26
32	QPSK	35.0 MHz 15 kHz SCS	8.47	38.21	23.08	53.26	38.13	23.70	61.83	0.32

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 30.0 MHz 15 kHz SCS - Channel Position M

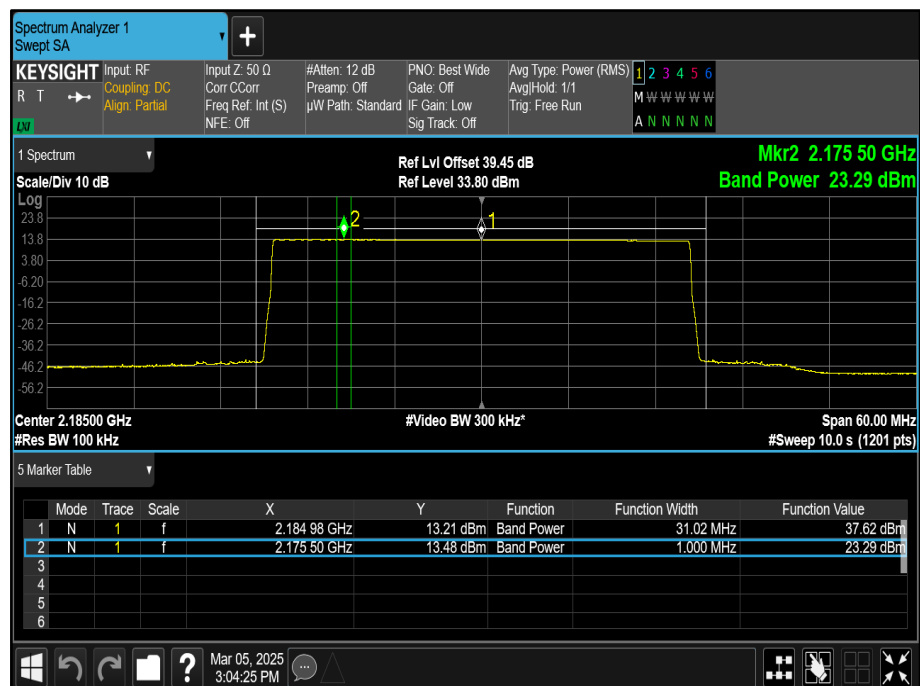


Configuration 2

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 62.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK	25.0 MHz 15 kHz SCS	8.59	36.77	23.28	51.82	38.33	23.70	62.03	0.12
32	QPSK	30.0 MHz 15 kHz SCS	8.68	37.62	23.29	52.67	38.34	23.70	62.04	0.11
32	QPSK	35.0 MHz 15 kHz SCS	8.71	38.19	23.14	53.24	38.19	23.70	61.89	0.26

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 30.0 MHz 15 kHz SCS - Channel Position T

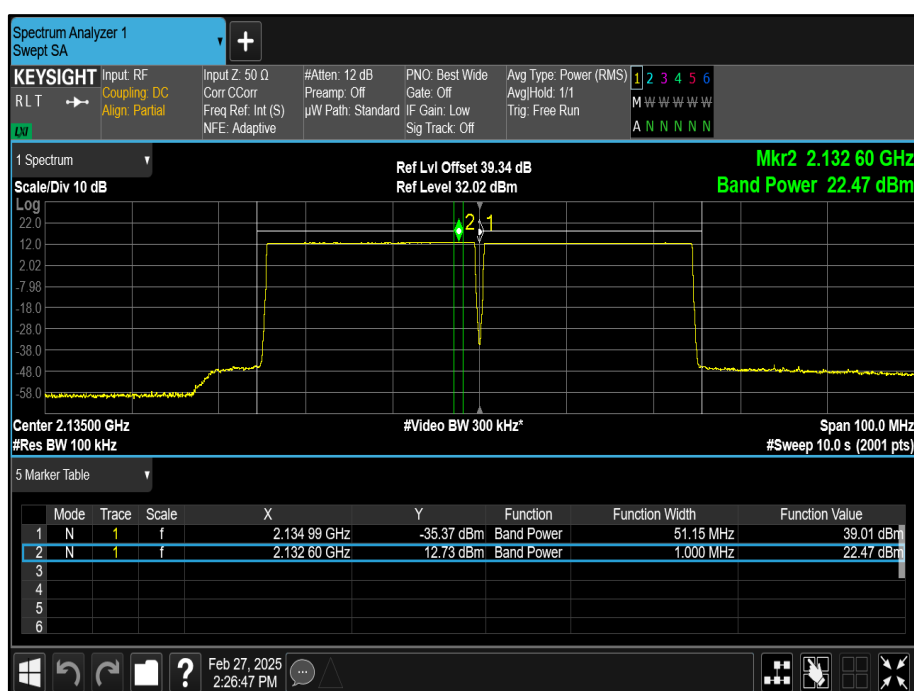


Configuration 3

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK	2 x 25.0 MHz 15 kHz SCS	8.64	39.01	22.47	54.06	37.52	23.70	61.22	3.93
32	QPSK	2 x 30.0 MHz 15 kHz SCS	8.64	39.00	21.67	54.05	36.72	23.70	60.42	4.73

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position B

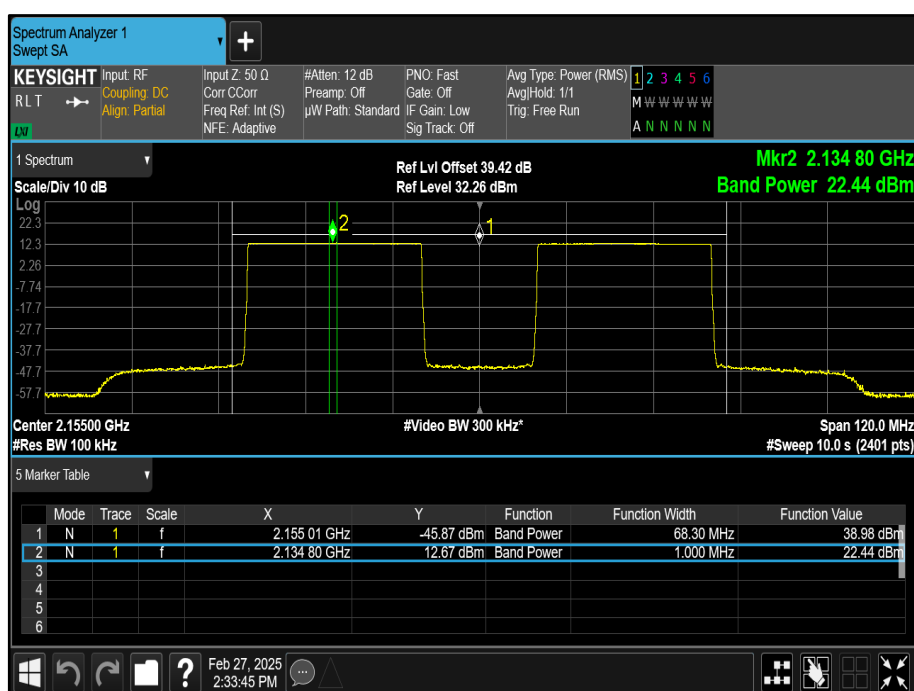


Configuration 3

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK	2 x 25.0 MHz 15 kHz SCS	8.46	38.98	22.44	54.03	37.49	23.70	61.19	3.96
32	QPSK	2 x 30.0 MHz 15 kHz SCS	8.50	38.96	21.58	54.01	36.63	23.70	60.33	4.82

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position M

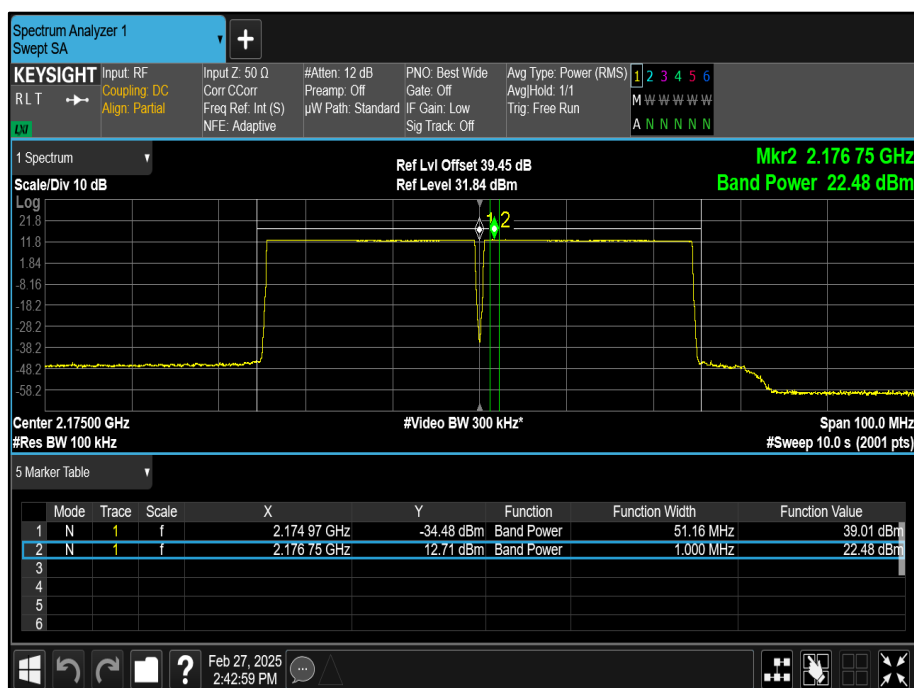


Configuration 3

Maximum Output Power See Section 1.4 Configuration Description

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 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK	2 x 25.0 MHz 15 kHz SCS	8.73	39.01	22.48	54.06	37.53	23.70	61.23	3.92
32	QPSK	2 x 30.0 MHz 15 kHz SCS	8.75	38.95	21.63	54.00	36.68	23.70	60.38	4.77

Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position T

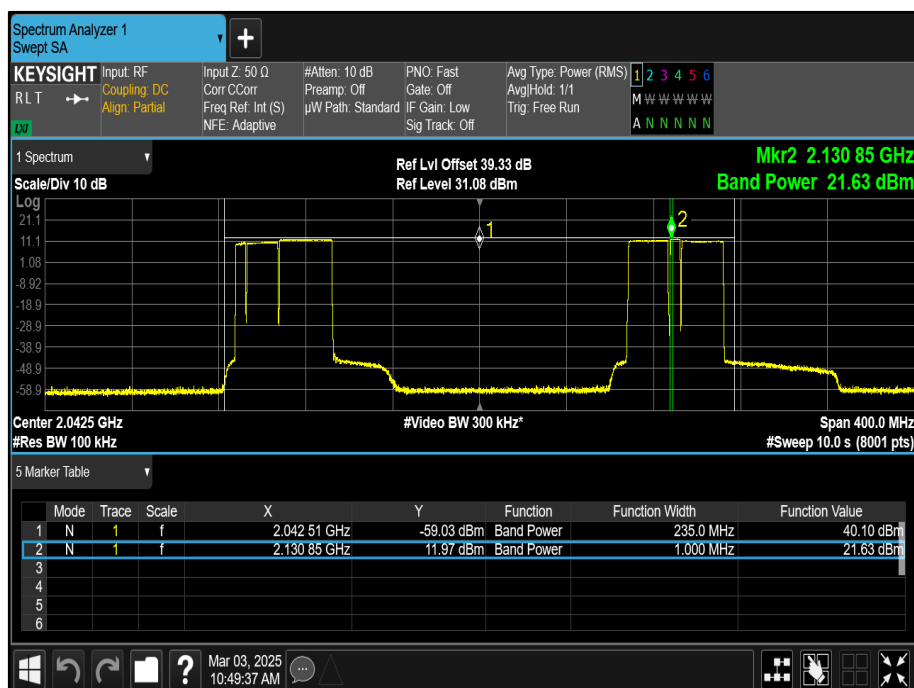


Configuration 4

Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position B							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B25) + 3CC (B66)	8.98	40.10	21.63	55.15	36.68	23.70	60.38	4.77

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position B

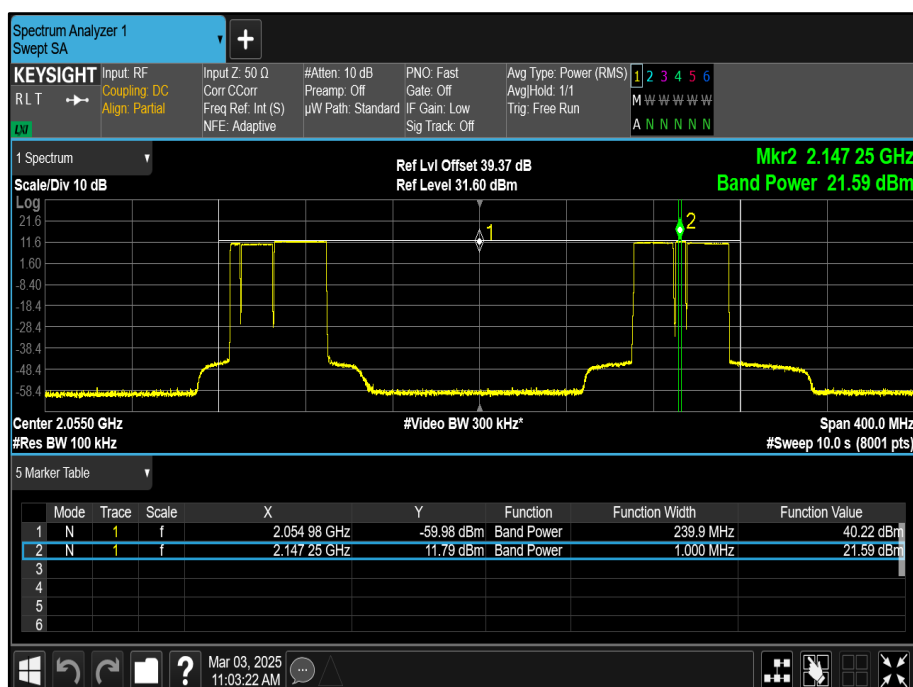


Configuration 4

Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position M							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dB	dBm/MHz	dB
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B25) + 3CC (B66)	8.83	40.22	21.59	55.27	36.64	23.70	60.34	4.81

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position M

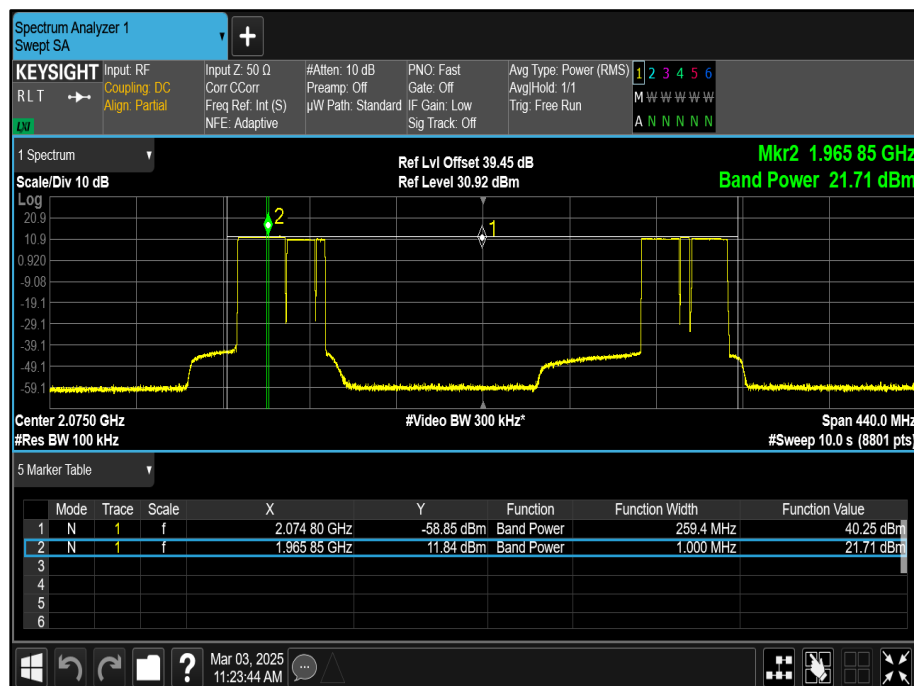


Configuration 4

Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position T							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B25) + 3CC (B66)	8.56	40.25	21.71	55.30	36.76	23.70	60.46	4.69

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position T

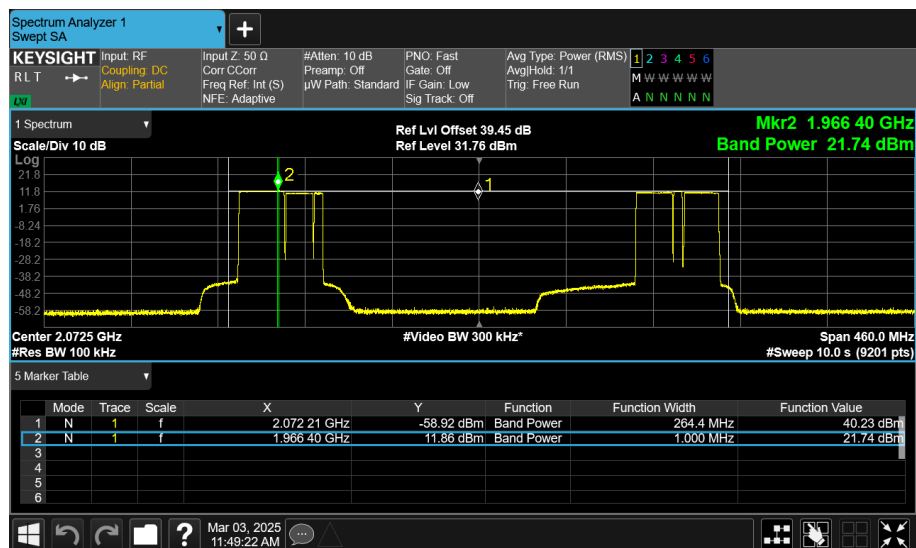


Configuration 5

Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Peak to Average Ratio (PAR) / Output Power / PSD							
			Channel Position T							
			PAR (dB)	Average Power/PSD		Total Power Ports 1-32	Total Power Ports 1-32	Declared Gain	Total EIRP	Margin Limit 65.15
				dBm	dBm/MHz	dBm	dBm/MHz	dBi	dBm/MHz	dB
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B2) + 3CC (B66)	8.56	40.23	21.74	55.28	36.79	23.70	60.49	4.66

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B2) + 3CC (B66) - Channel Position T





Limit	
Maximum rated output power (Non-Rural)	$\leq 1640 \text{ W/MHz}$ or $\leq +62.15 \text{ dBm/MHz}$
Maximum rated output power (Rural)	$\leq 3280 \text{ W/MHz}$ or $\leq +65.15 \text{ dBm/MHz}$
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
ISED RSS-GEN, Clause 6.7
ISED RSS-139, Clause 5.5

2.2.2 Date of Test and Modification State

27-February-2025 - 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	23.8°C
Relative Humidity	38.9%

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).

The worst-case modulation and bandwidth plots are presented here, all other applicable plots are retained by TUV SUD and available for presentation if required.

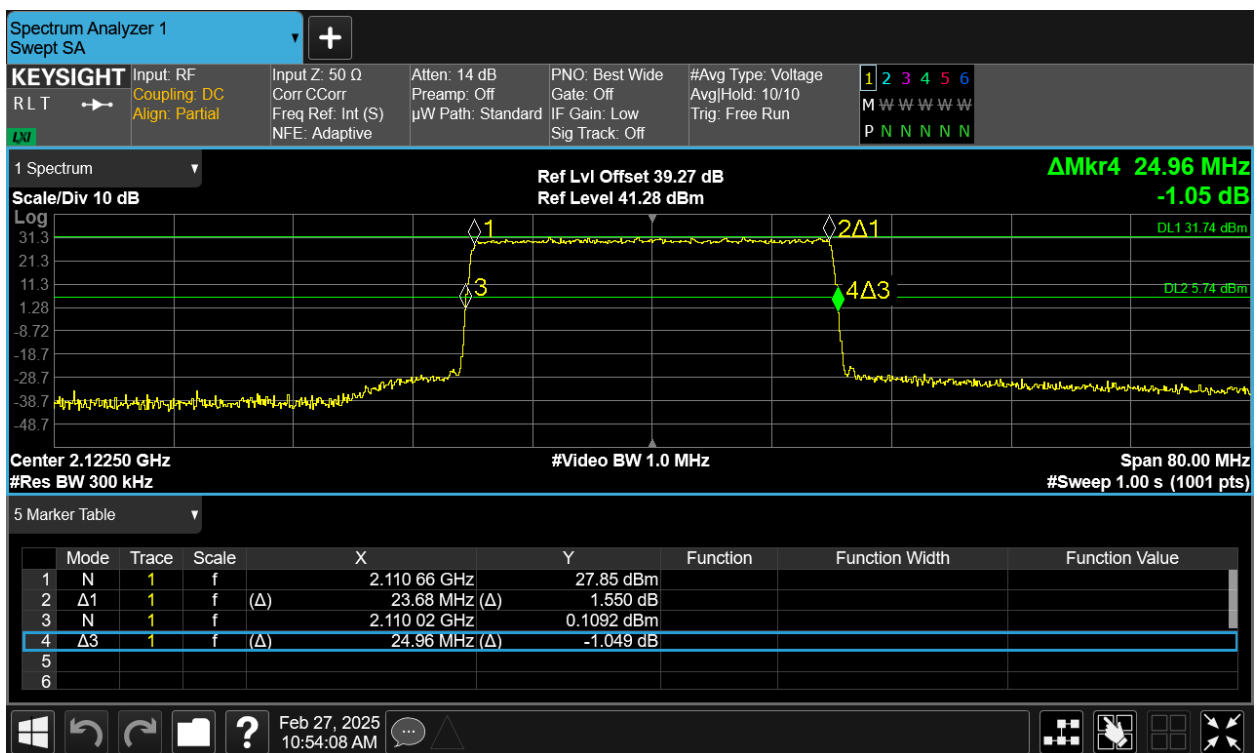
2.2.6 Test Results

Configuration 1

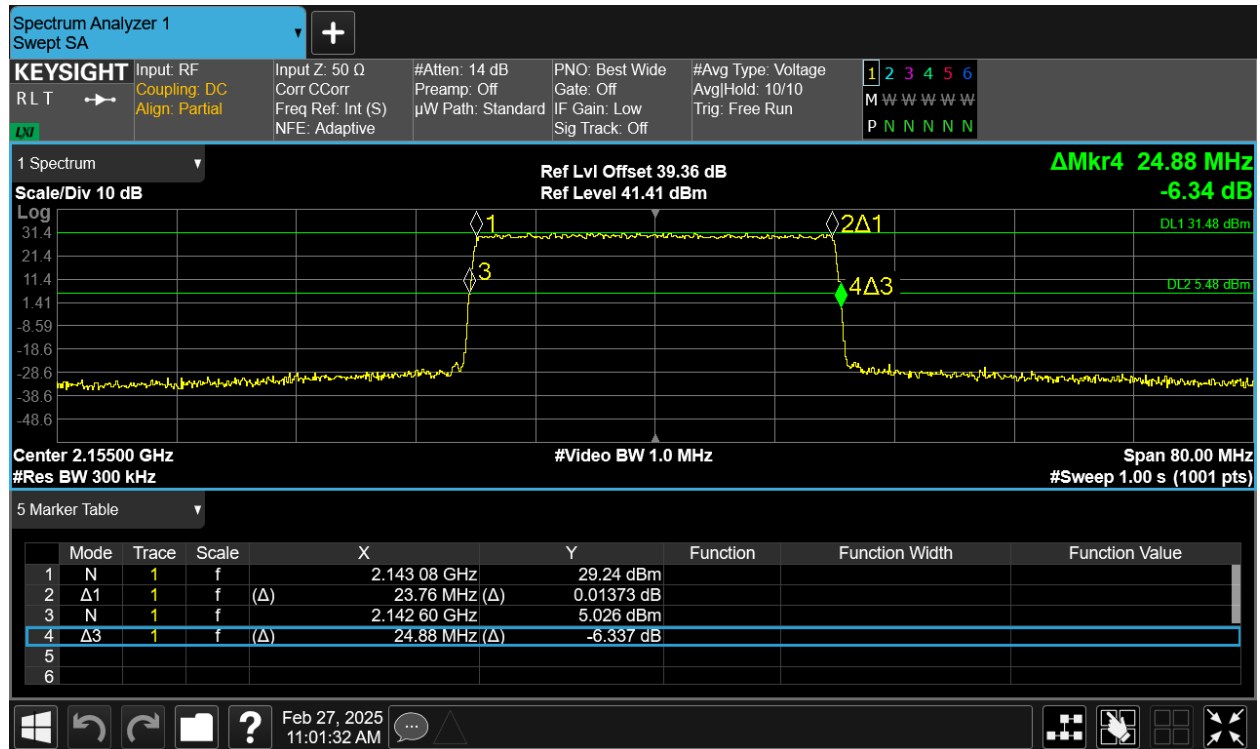
Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR Modulation	NR Carrier Bandwidth	Result (MHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
32	QPSK	25.0 MHz 15 kHz SCS	23.68	24.96	23.76	24.88	23.76	24.88
32	QPSK	30.0 MHz 15 kHz SCS	28.56	29.84	28.56	29.76	28.48	29.76
32	QPSK	35.0 MHz 15 kHz SCS	33.60	35.10	33.60	35.10	33.60	35.10

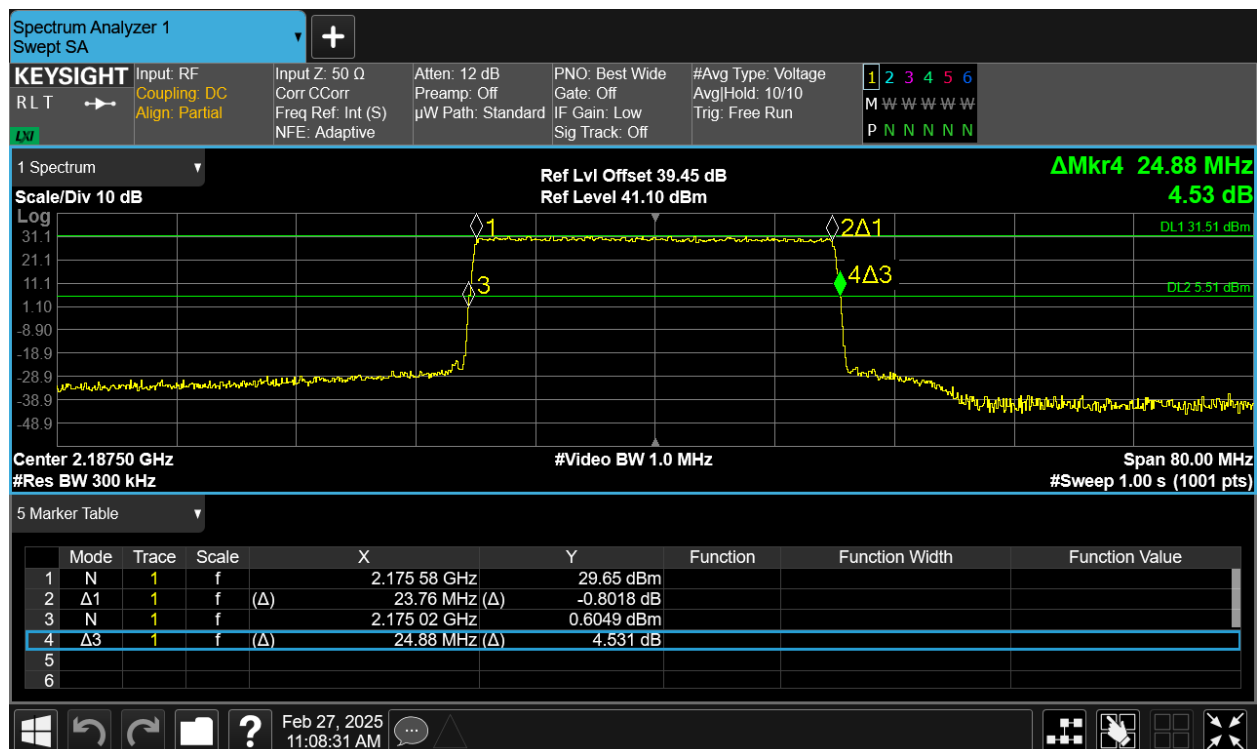
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz - Channel Position B



Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 25 MHz - Channel Position M

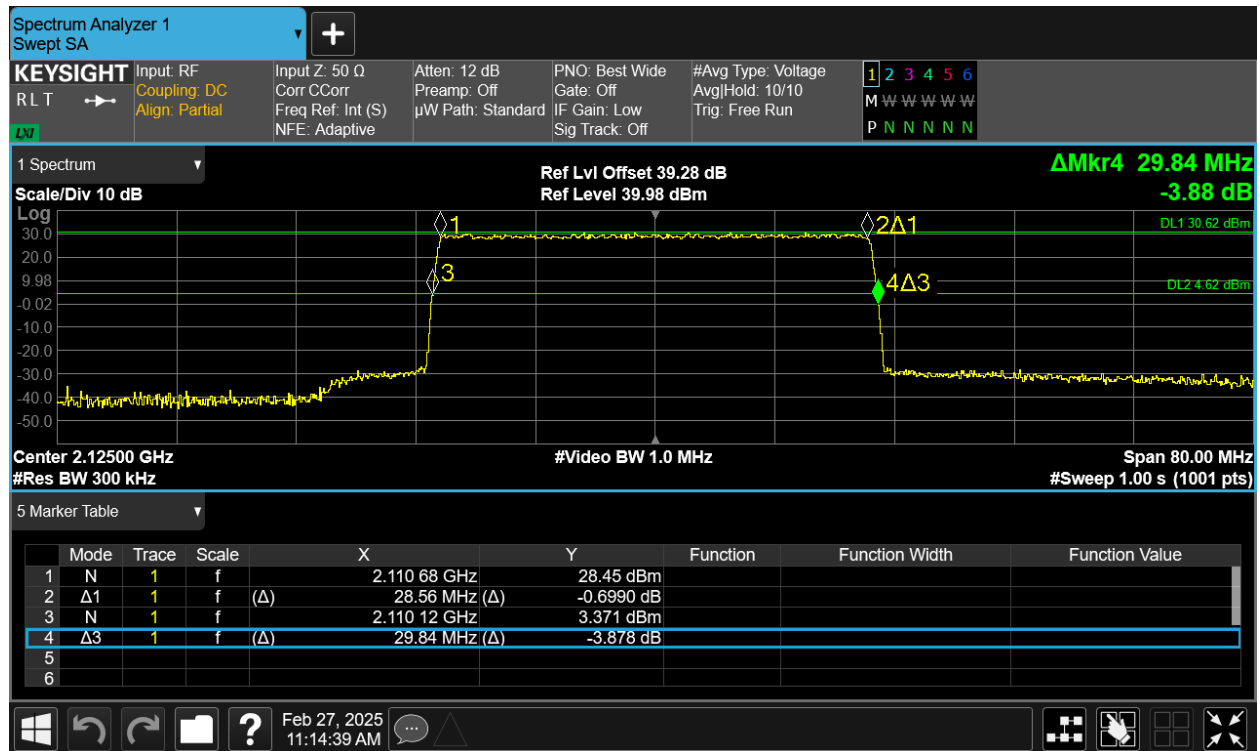


Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 25 MHz - Channel Position T

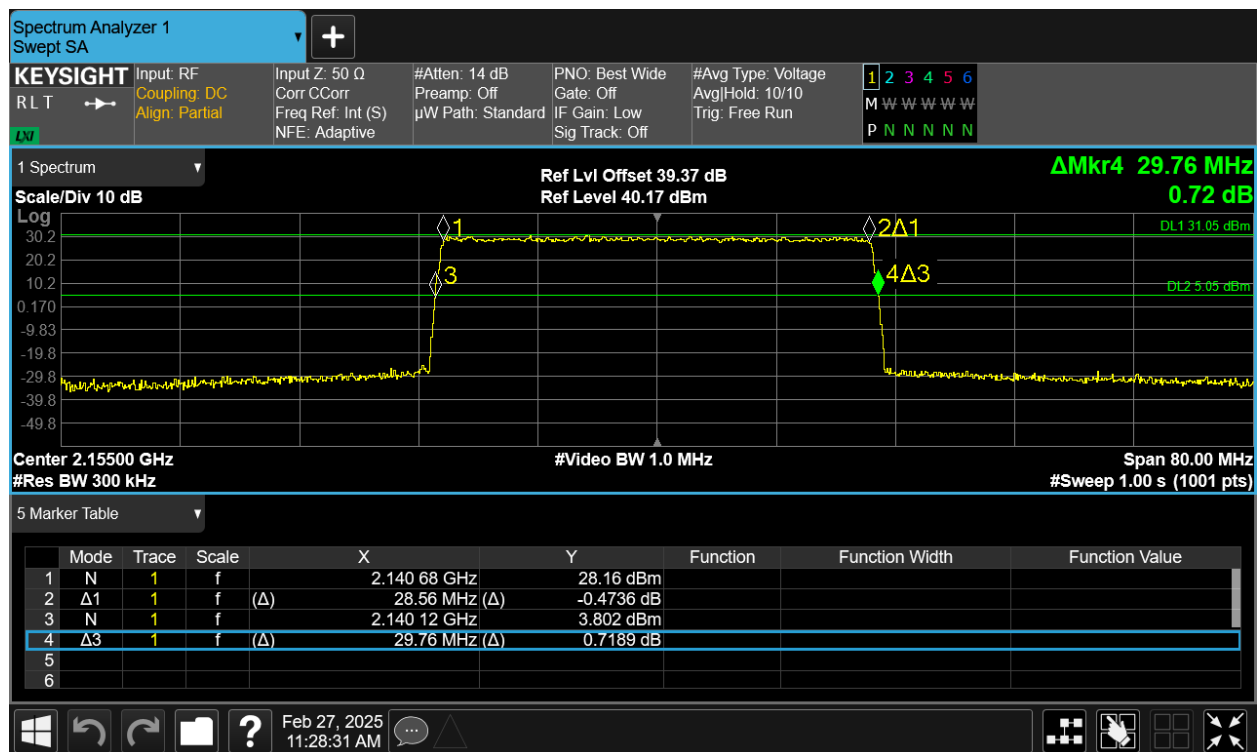




Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 30 MHz - Channel Position B

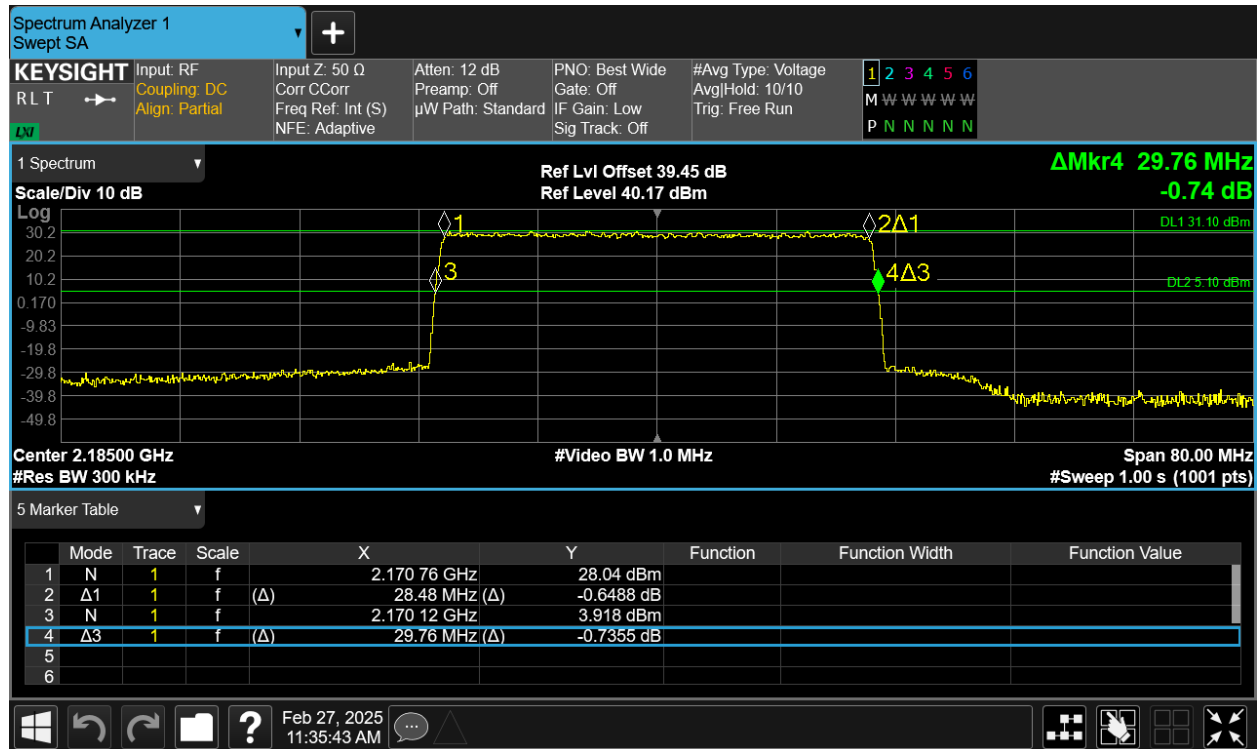


Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 30 MHz - Channel Position M

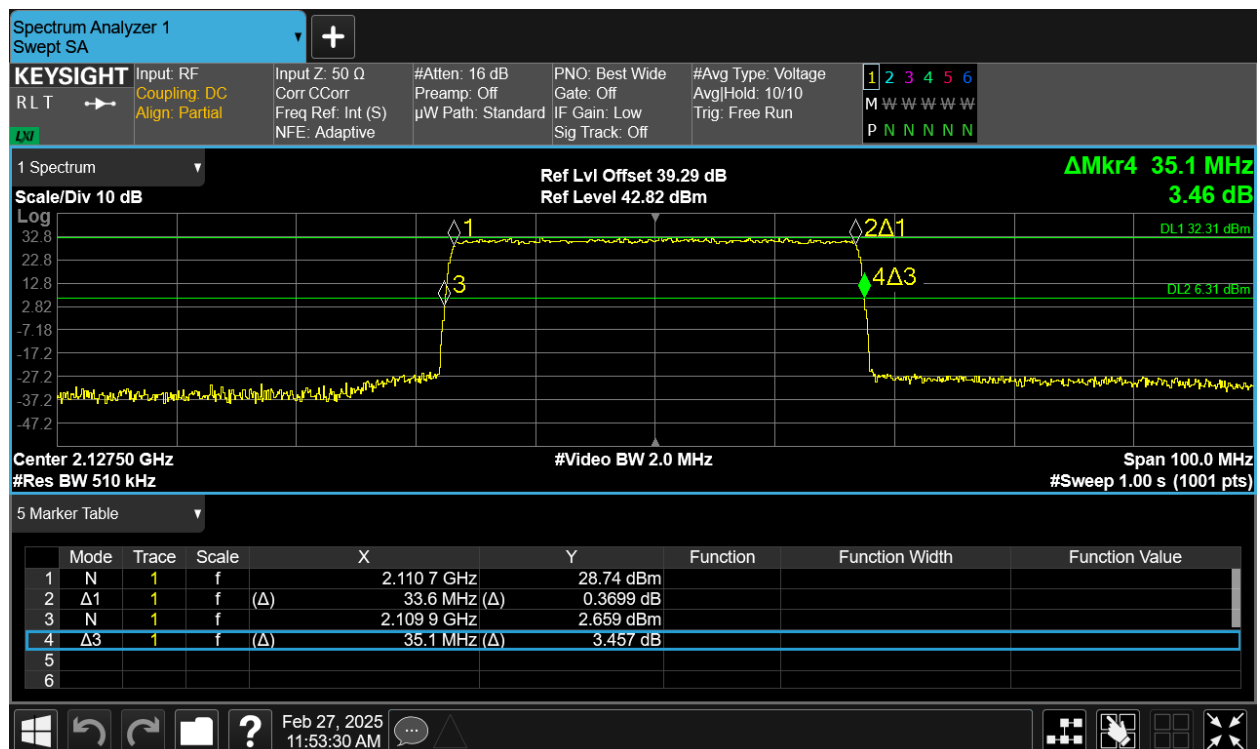




Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 30 MHz - Channel Position T

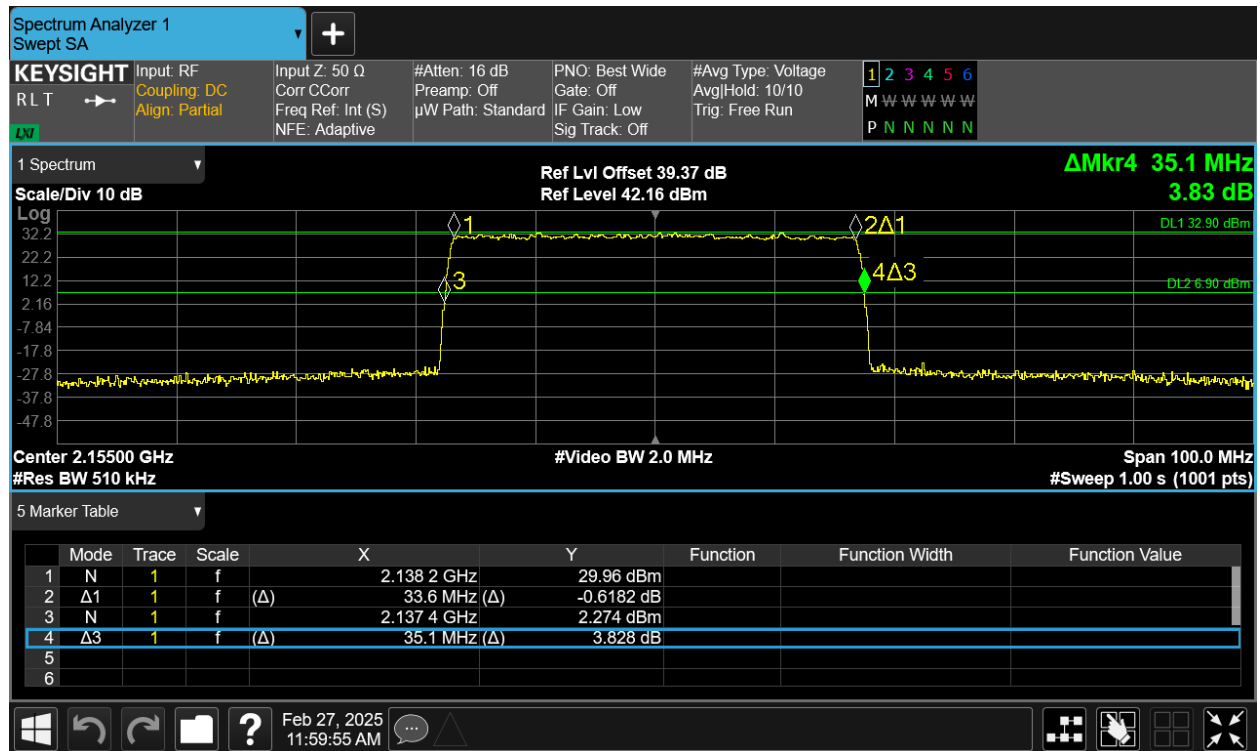


Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 35 MHz - Channel Position B

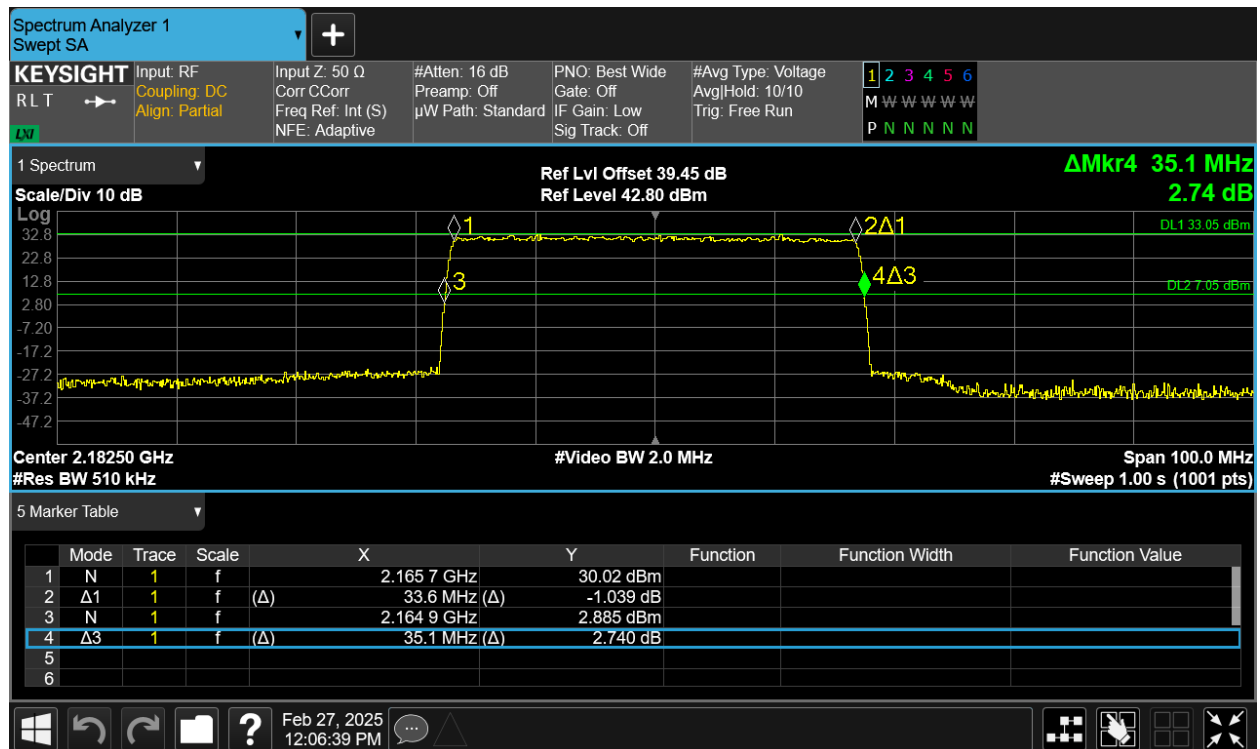




Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 35 MHz - Channel Position M



Antenna 32 - NR Modulation QPSK - NRCarrier Bandwidth 35 MHz - Channel Position T

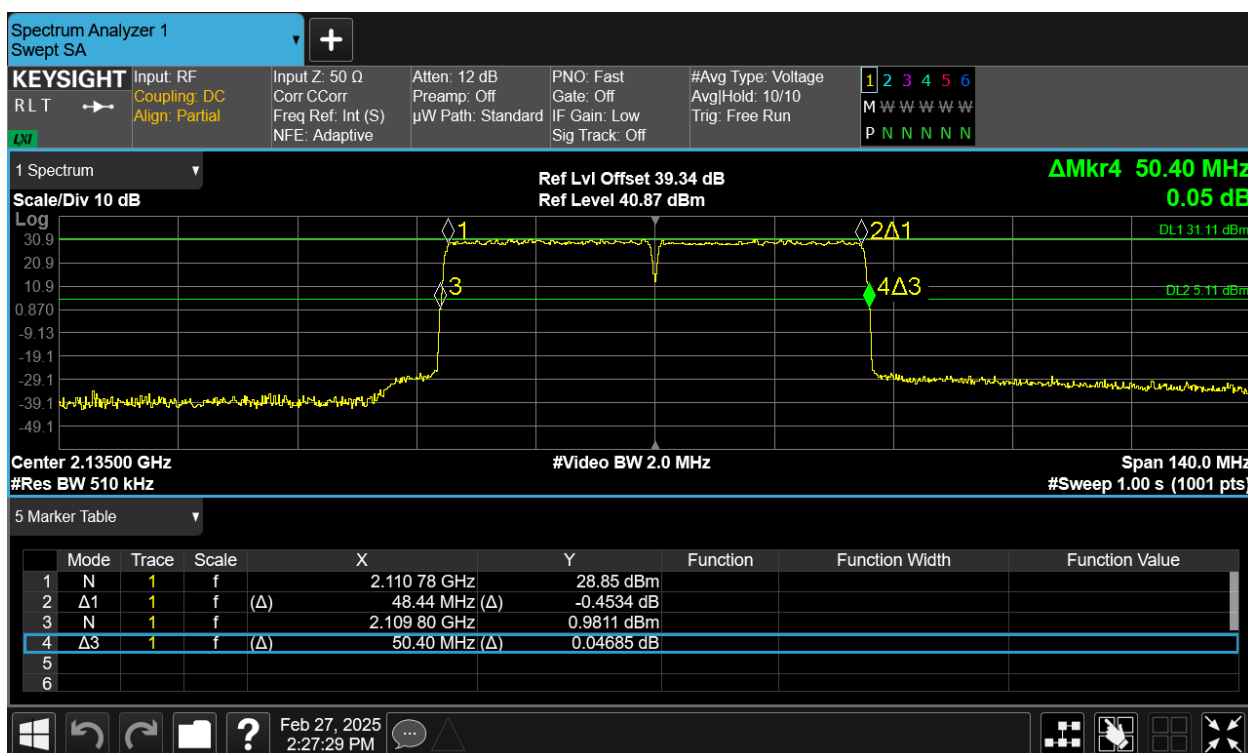


Configuration 3

Maximum Output Power See Section 1.4 Configuration Description

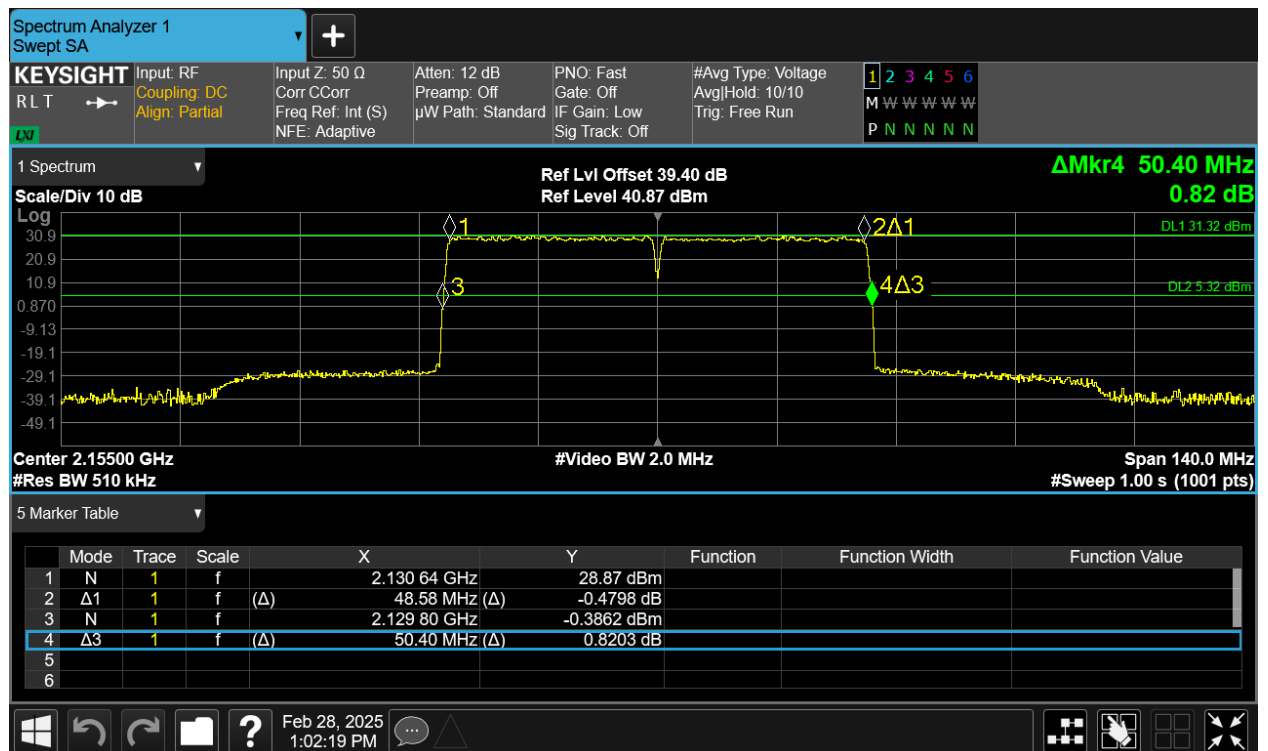
Antenna	NR Modulation	NR Carrier Bandwidth	Result (kHz)					
			Channel Position B		Channel Position M		Channel Position T	
			Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth	Occupied Bandwidth	-26 dB Bandwidth
32	QPSK	2 x 25.0 MHz 15 kHz SCS	48.44	50.40	48.58	50.40	48.58	50.40
32	QPSK	2 x 30.0 MHz 15 kHz SCS	58.40	61.12	58.40	61.12	58.40	61.12

Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 25.0 MHz - Channel Position B

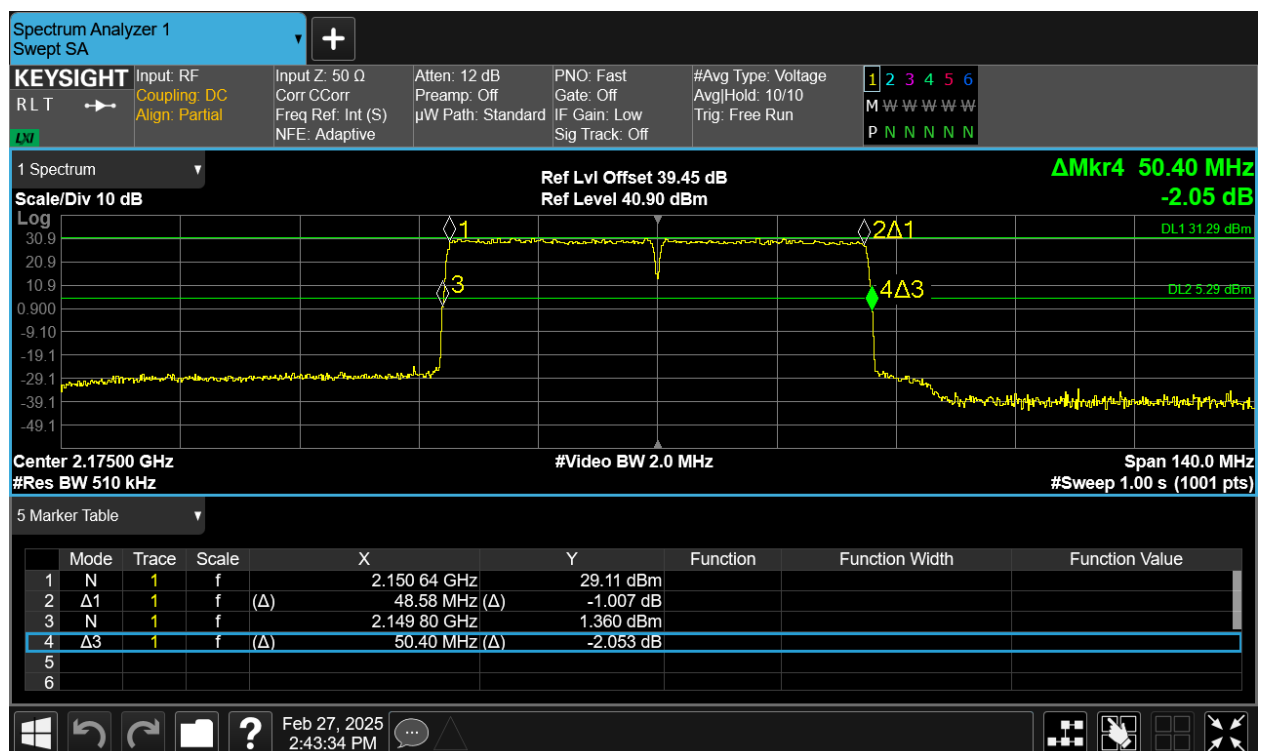




Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 25.0 MHz - Channel Position M

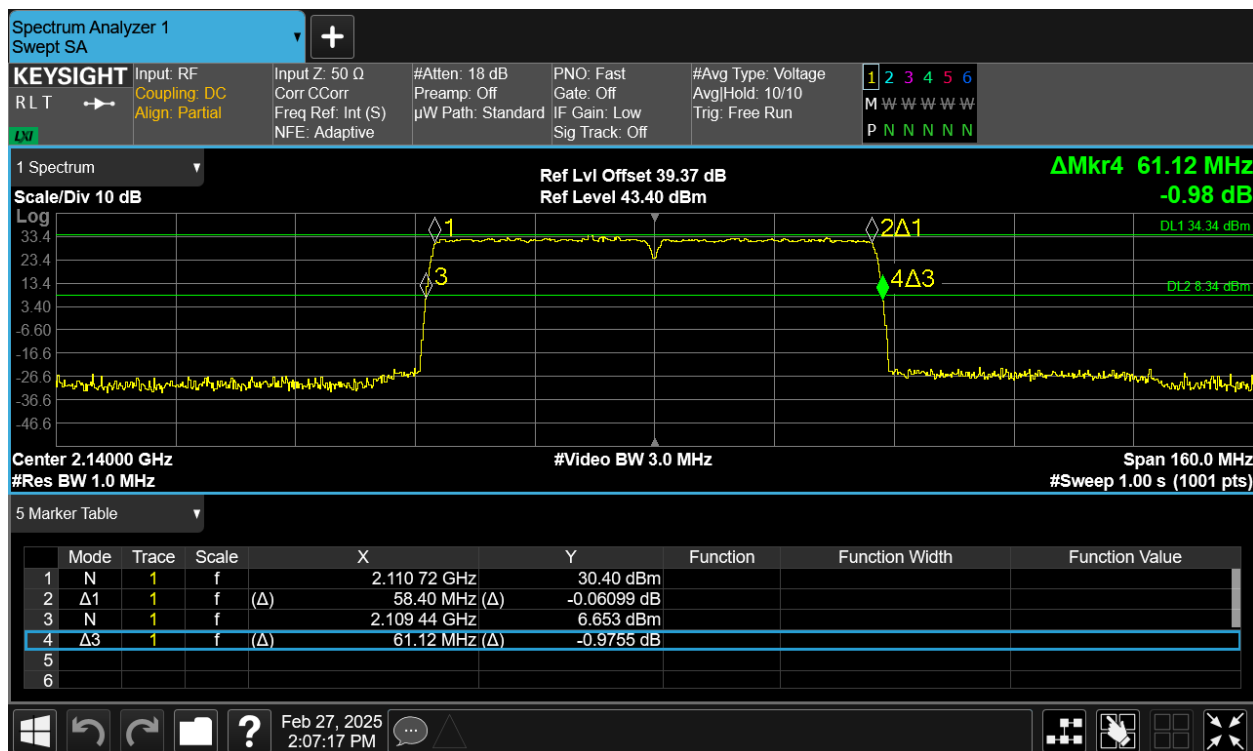


Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 25.0 MHz - Channel Position T

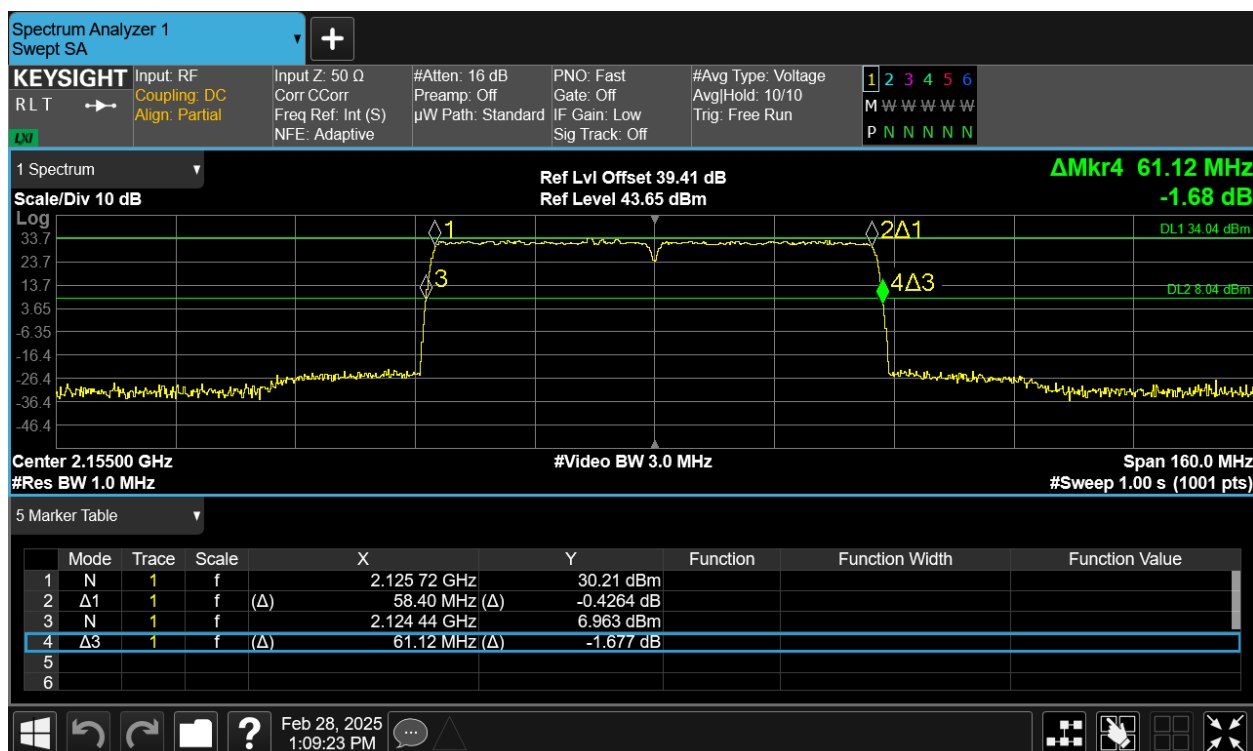




Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 30.0 MHz - Channel Position B

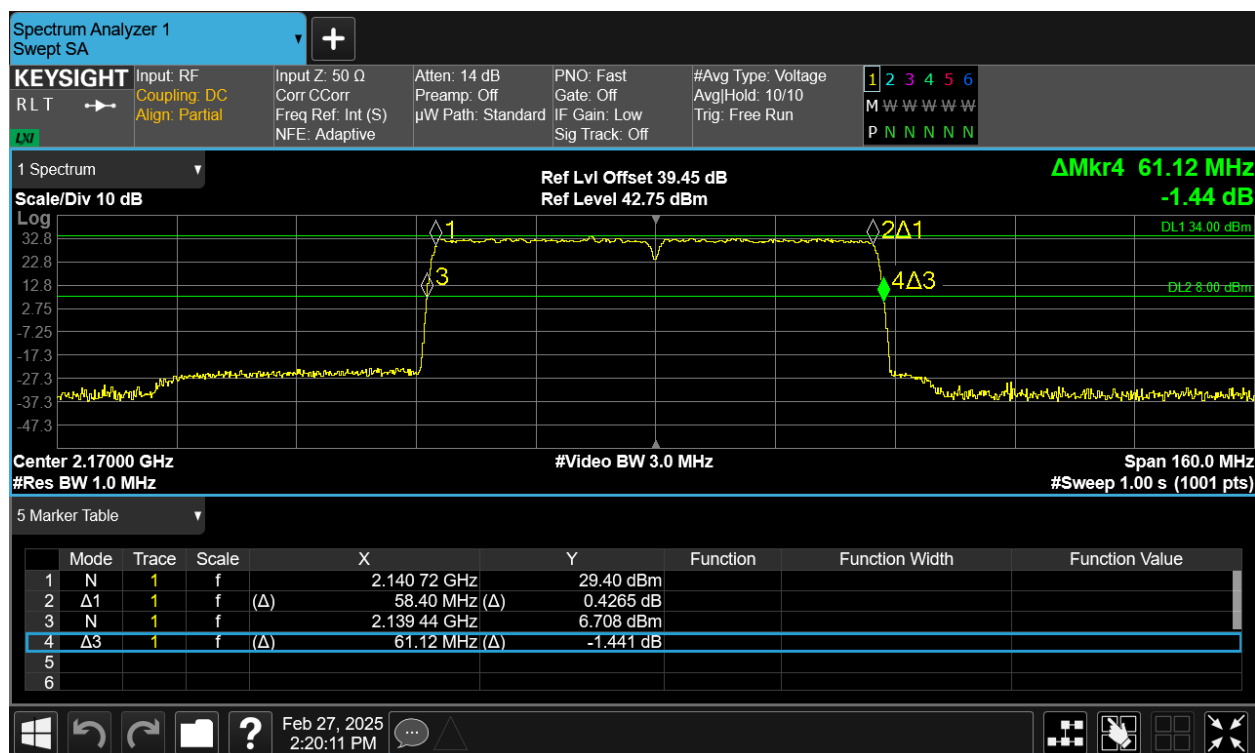


Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 30.0 MHz - Channel Position M





Antenna 32 - NR Modulation QPSK – NR Carrier Bandwidth 30.0 MHz - Channel Position T





2.3 BAND EDGE

2.3.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
ISED RSS-139, Clause 5.5
FCC CFR 47 Part 2, Clause 2.1051

2.3.2 Date of Test and Modification State

27-February and 03-March-2025 - 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 22.2 - 23.8°C
Relative Humidity 38.9 - 39.1%

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:
 $-13 \text{ dBm} - 10 * \log(32) = -28.05 \text{ dBm}$.

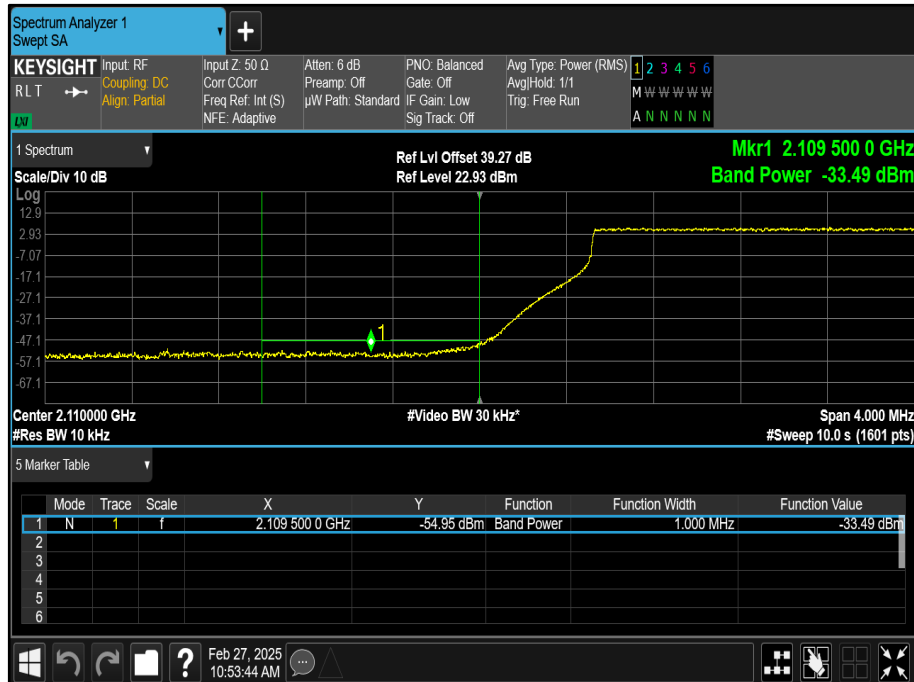
2.3.6 Test Results

Configuration 1

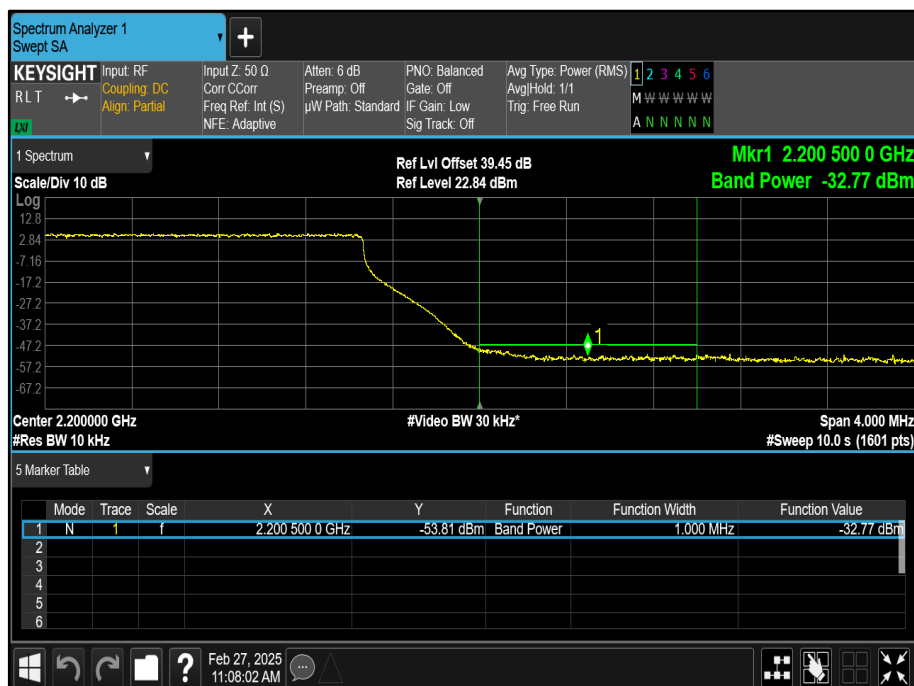
Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR Modulation	NR Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
32	QPSK	25.0 MHz 15 kHz SCS	2,122.5	2,187.5
32	QPSK	30.0 MHz 15 kHz SCS	2,125.0	2,185.0
32	QPSK	35.0 MHz 15 kHz SCS	2,127.5	2,182.5

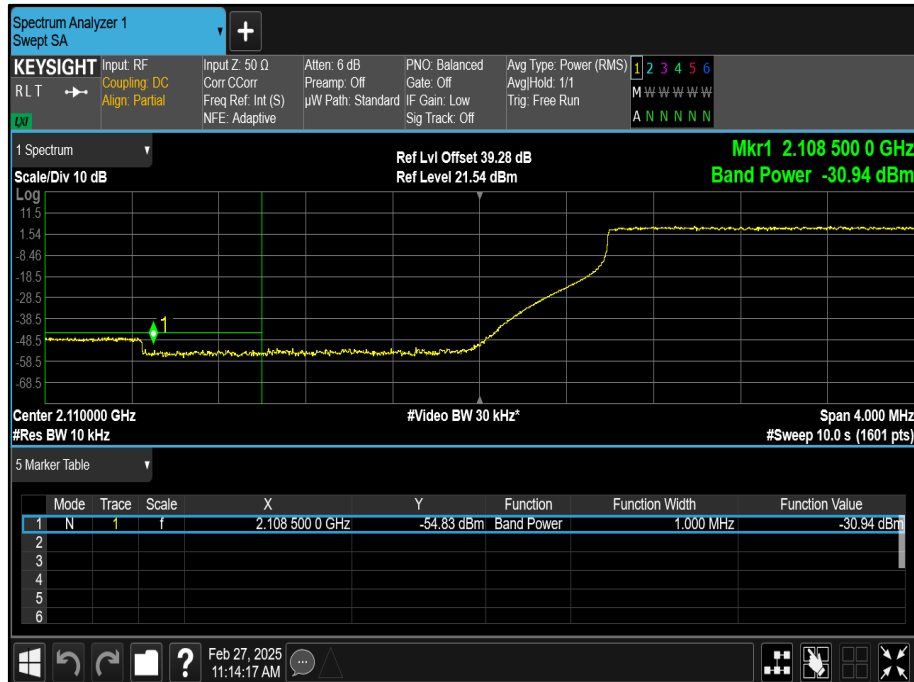
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position B



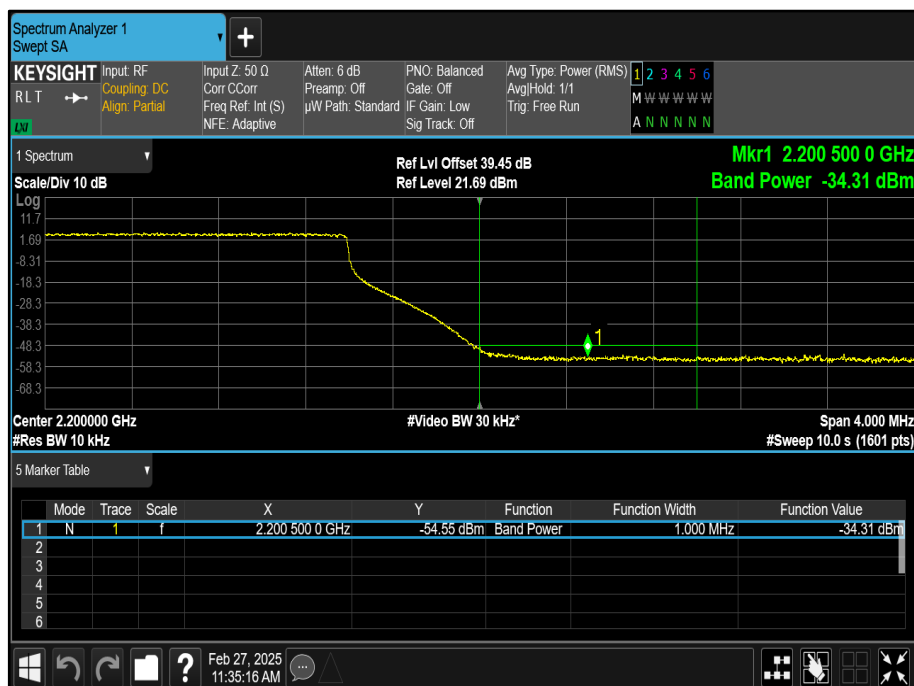
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position T



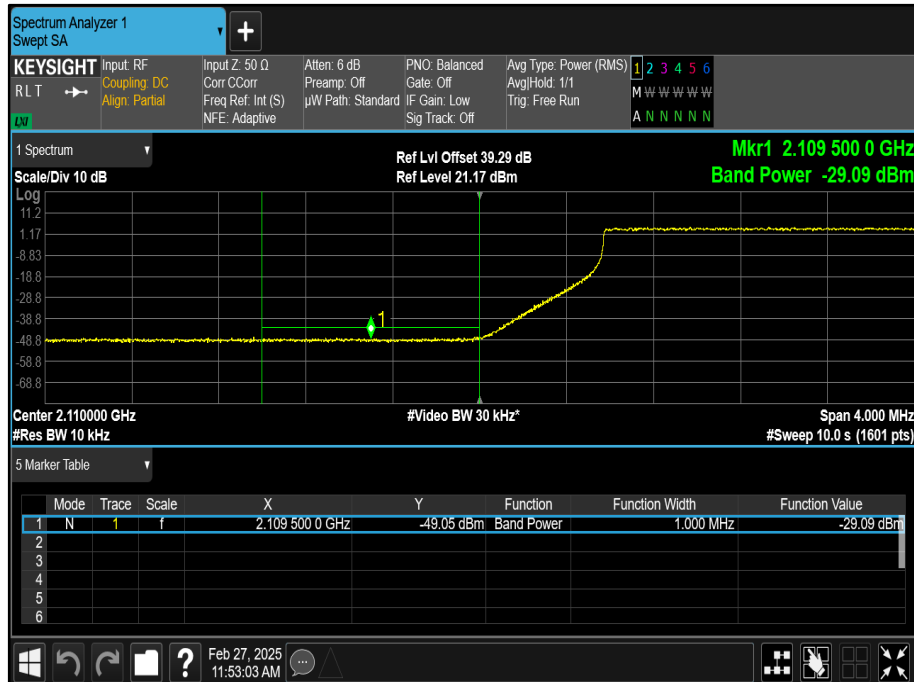
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 30.0 MHz 15 kHz SCS - Channel Position B



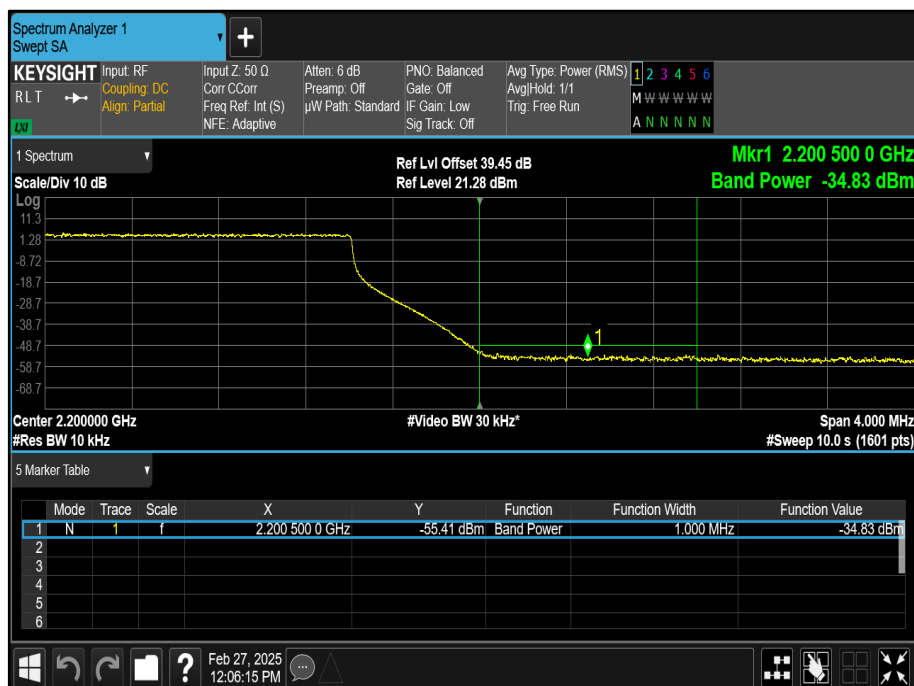
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 30.0 MHz 15 kHz SCS - Channel Position T



Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 35.0 MHz 15 kHz SCS - Channel Position B



Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 35.0 MHz 15 kHz SCS - Channel Position T

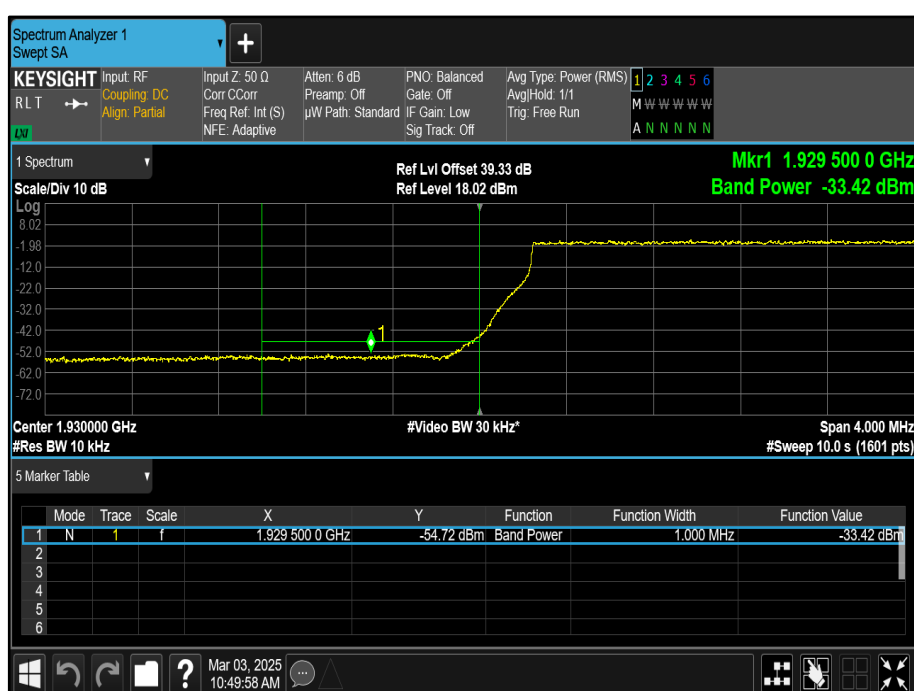


Configuration 4

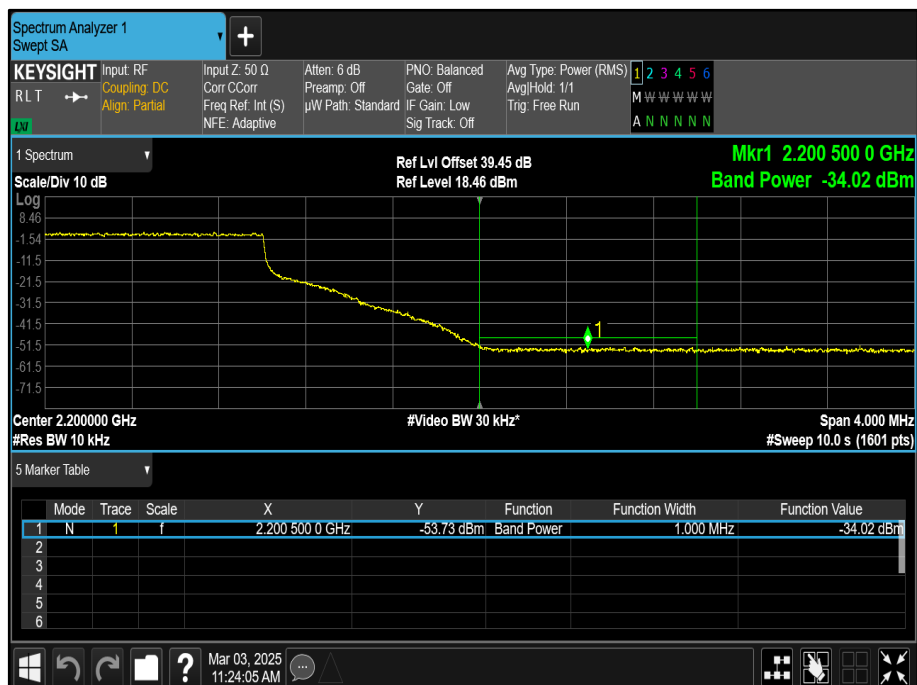
Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Band Edge (MHz)	
			Channel Position B	Channel Position T
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B25) + 3CC (B66)	1932.5+1942.5+1962. 5+2120.0+2132.5+21 45.0	1962.5+1982.5+1992. 5+2165.0+2177.5+21 90.0

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position B



Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position T



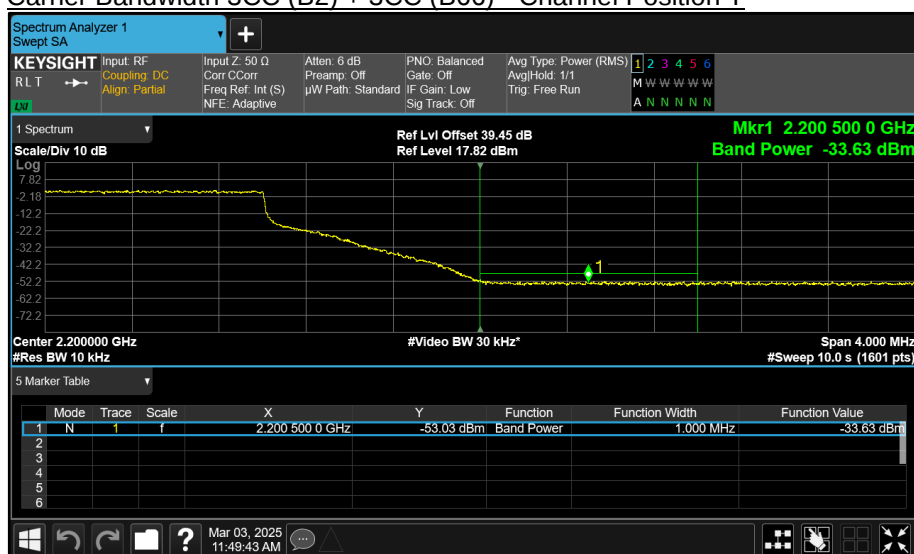


Configuration 5

Maximum Output Power See Section 1.4 Configuration Description

Antenna	NR / LTE Modulation	NR / LTE Carrier Bandwidth	Band Edge (MHz)
			Channel Position T
32	QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK	3CC (B2) + 3CC (B66)	1957.5+1977.5+1987.5+2165.0+2177.5+2190.0

Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE Carrier Bandwidth 3CC (B2) + 3CC (B66) - Channel Position T



Limit	-28.05 dBm
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2.4 TRANSMITTER SPURIOUS EMISSIONS

2.4.1 Specification Reference

FCC CFR 47 Part 27, Clause 27.53
ISED RSS-GEN, Clause 6.13
ISED RSS-139, Clause 5.6
FCC CFR 47 Part 2, Clause 2.1051

2.4.2 Date of Test and Modification State

05-March-2025 - 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	23.0°C
Relative Humidity	25.8%

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:
 $-13 \text{ dBm} - 10 * \log(32) = -28.05 \text{ dBm}$.

2.4.6 Test Results

Configuration 1

Maximum Output Power See Section 1.4 Configuration Description

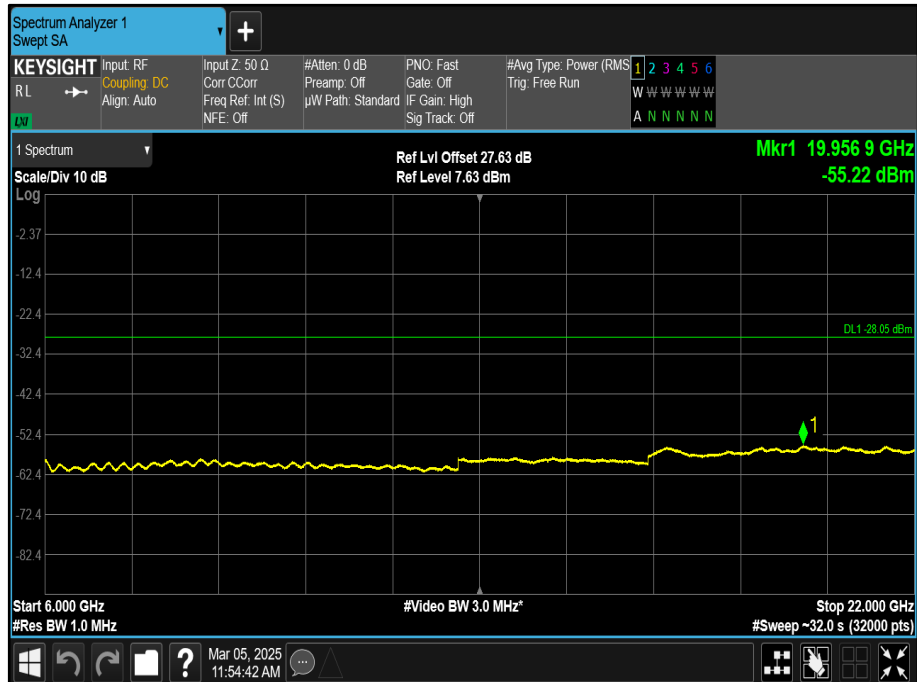
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel Position B - Band 1 - Range 0.009 to 4000 MHz



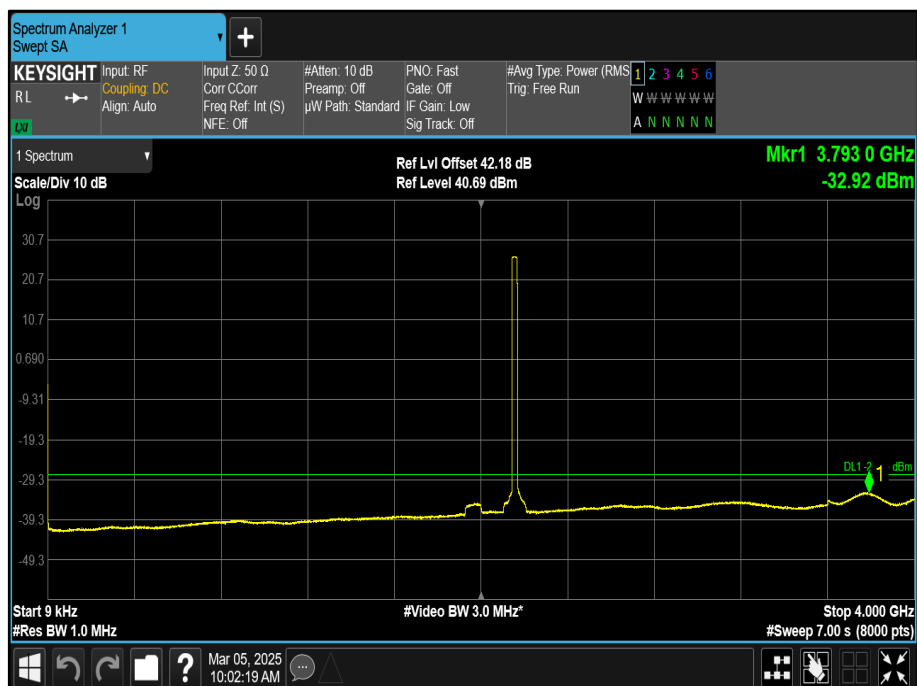
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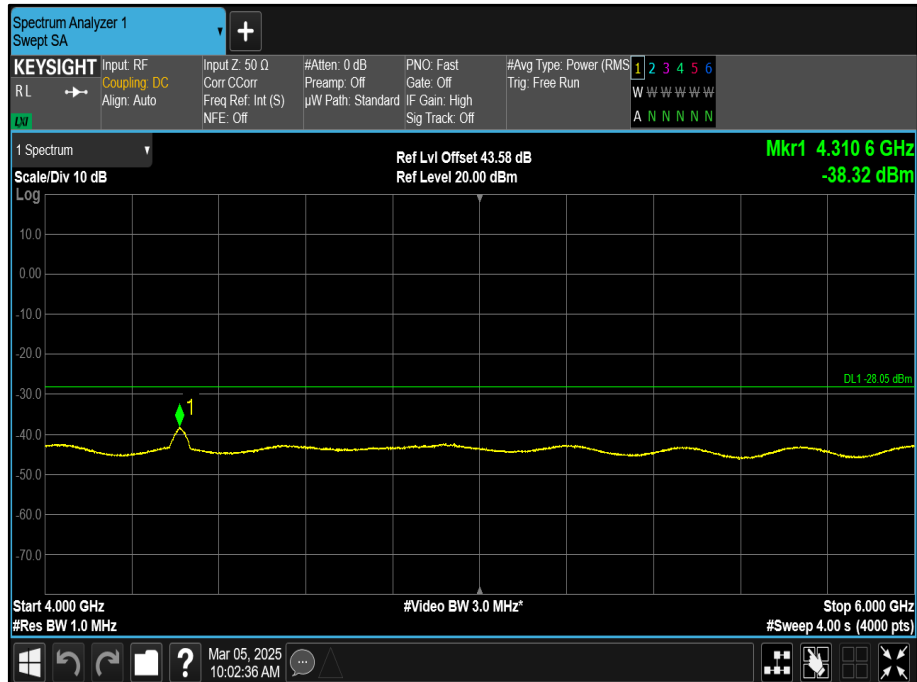
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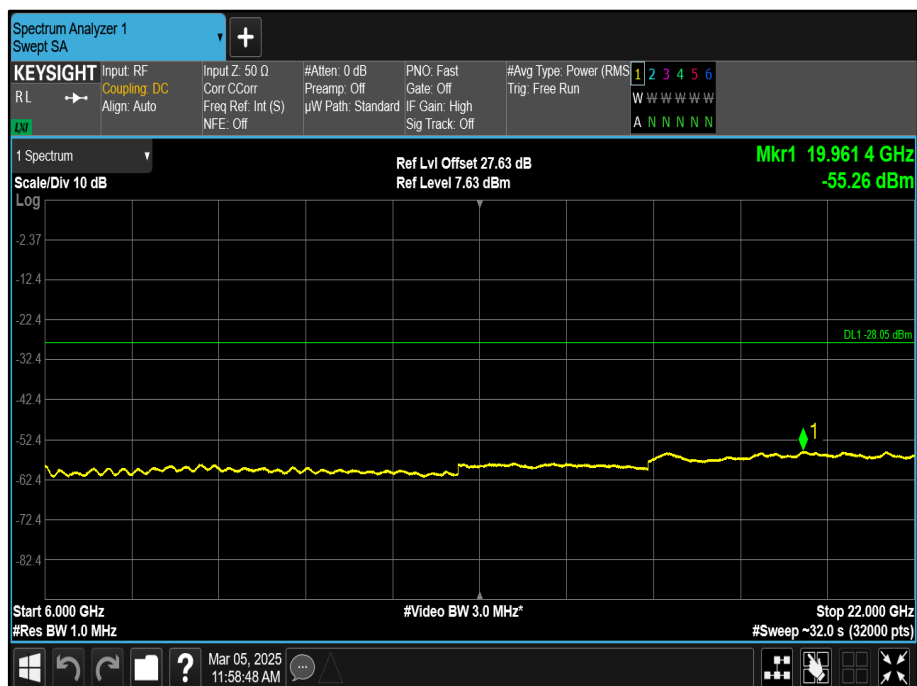
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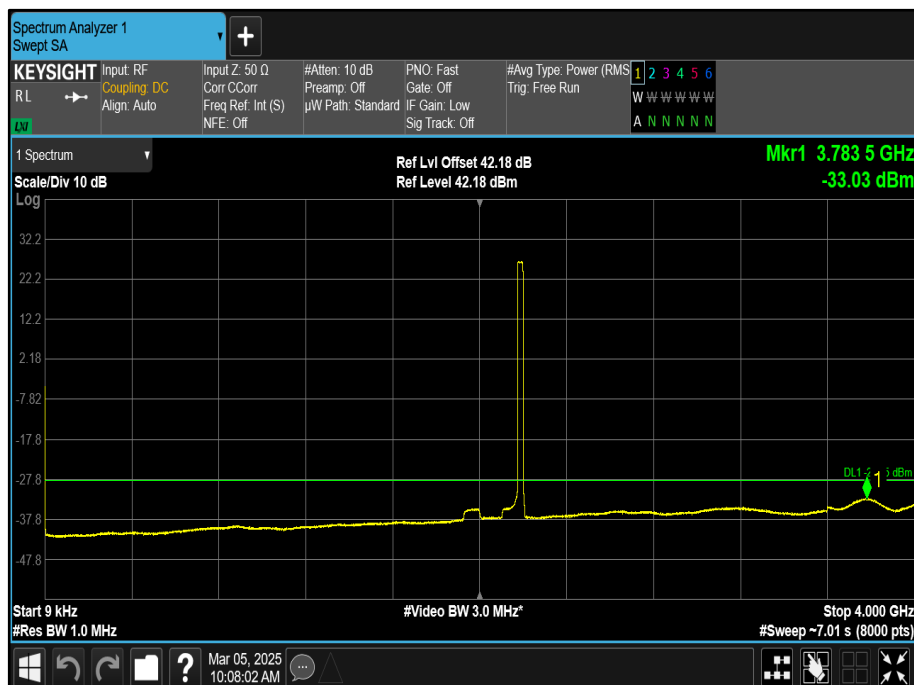
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Position M - Band - Range 4000 to 6000 MHz



Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel
Position M - Band 3 - Range 6000 to 22000 MHz



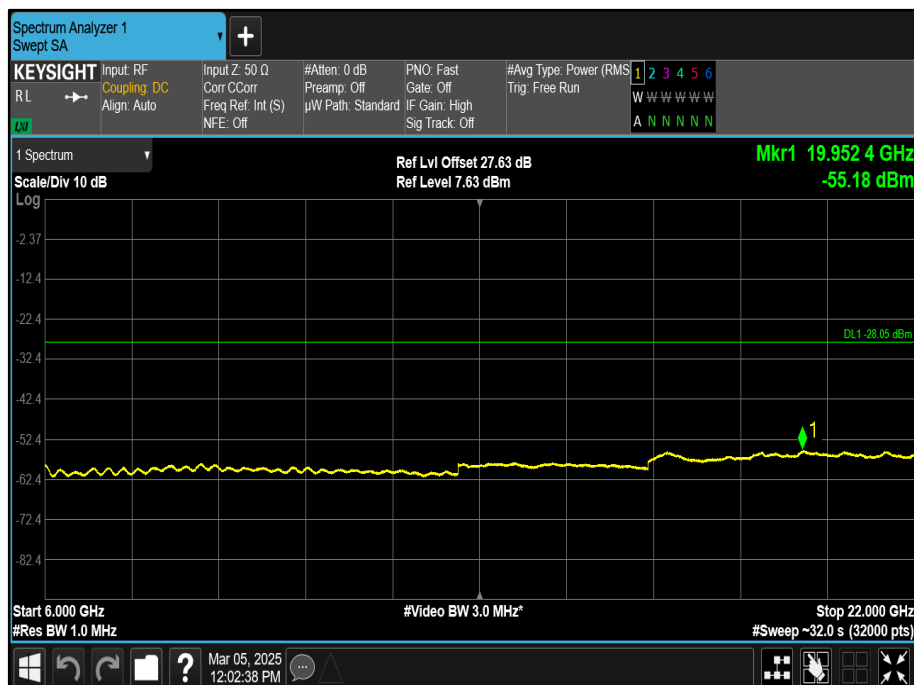
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Position T - Band 1 - Range 0.009 to 4000 MHz



Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 25.0 MHz 15 kHz SCS - Channel
Position T - Band - Range 4000 to 6000 MHz



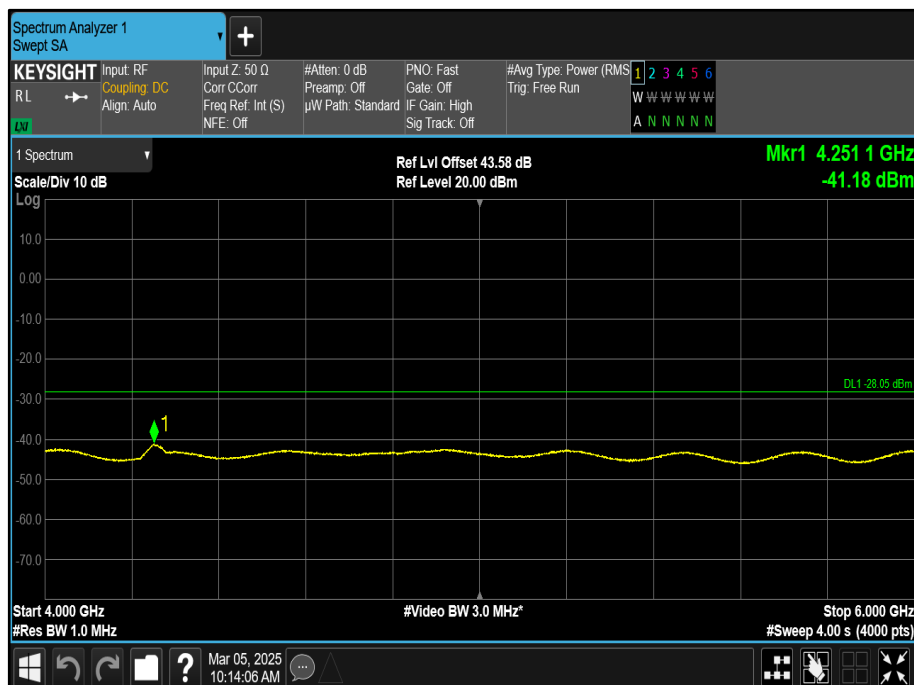
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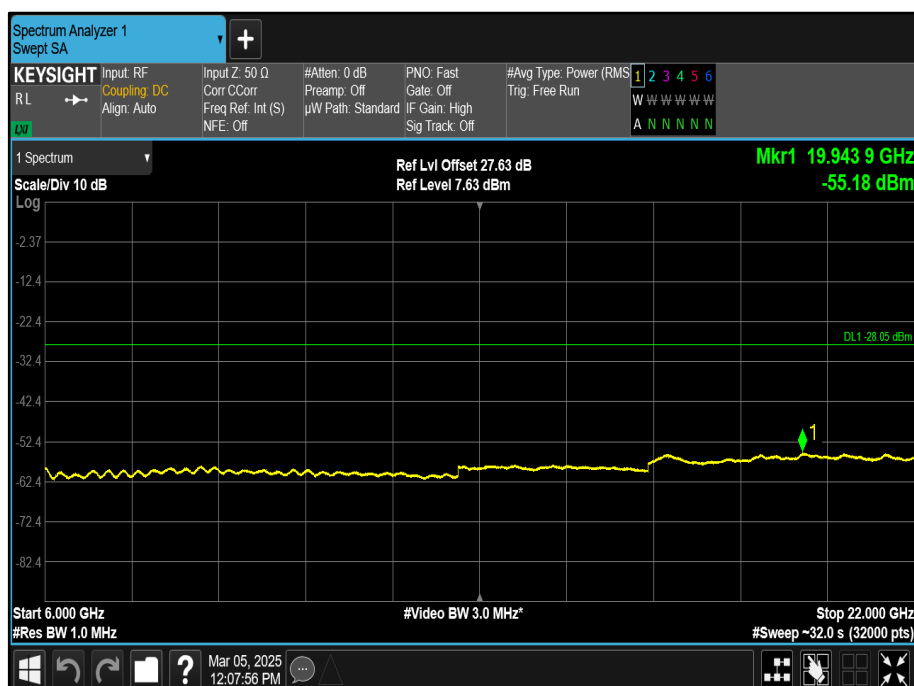
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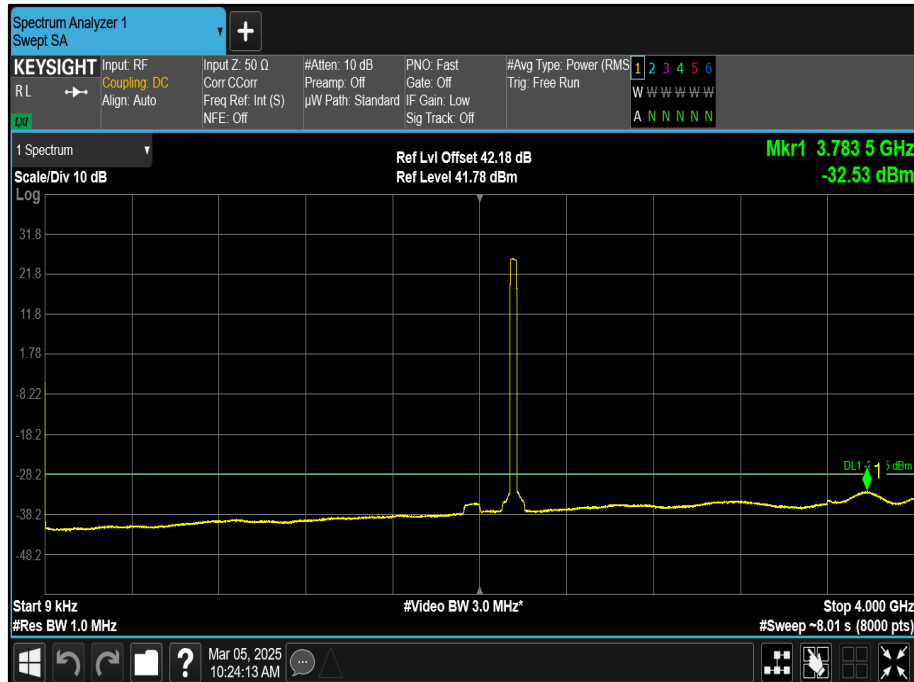
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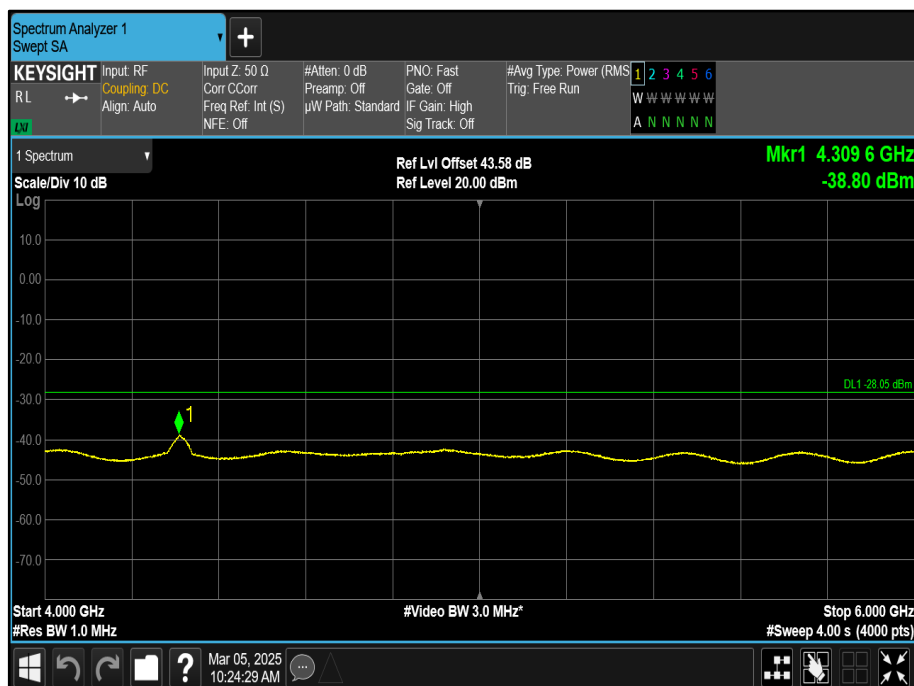
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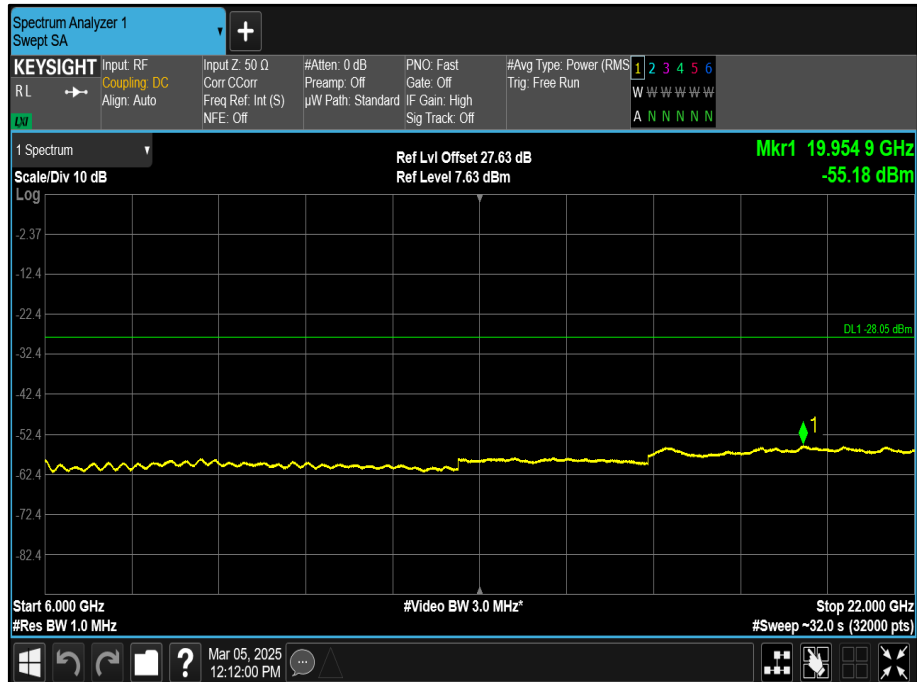
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Position M - Band 1 - Range 0.009 to 4000 MHz



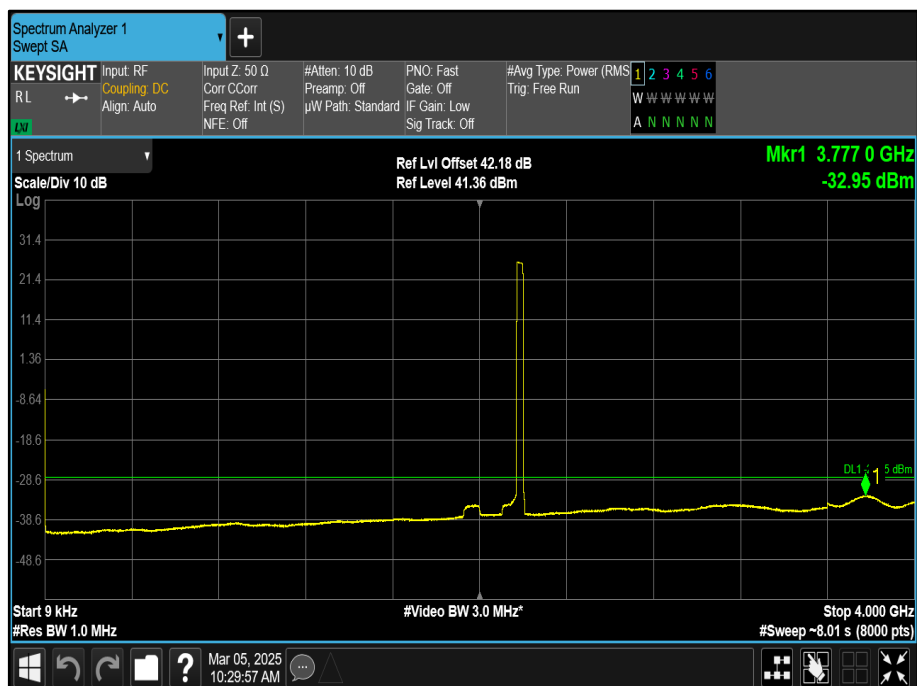
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Position M - Band - Range 4000 to 6000 MHz



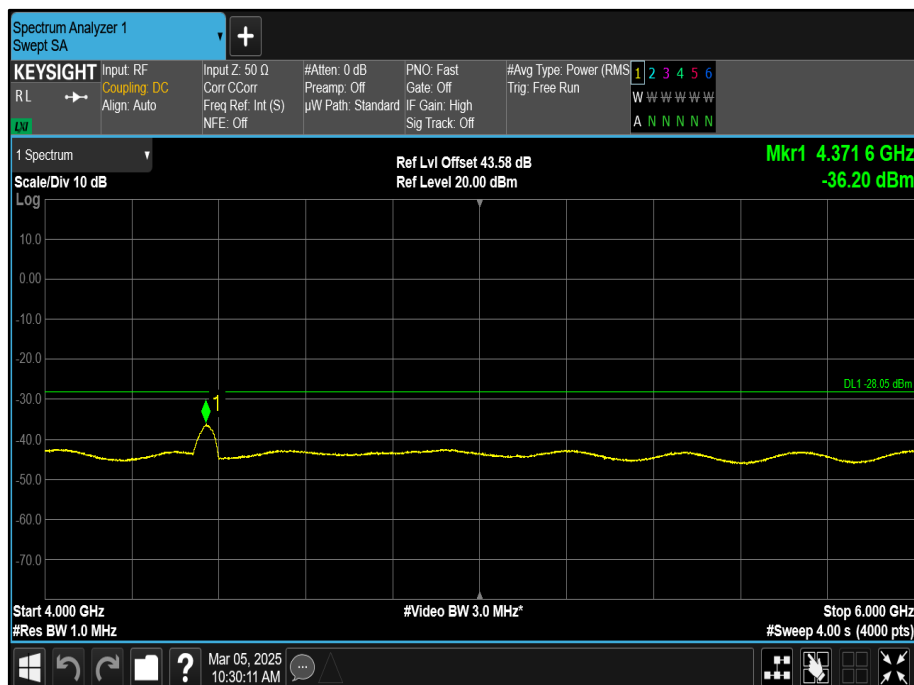
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Position M - Band 3 - Range 6000 to 22000 MHz



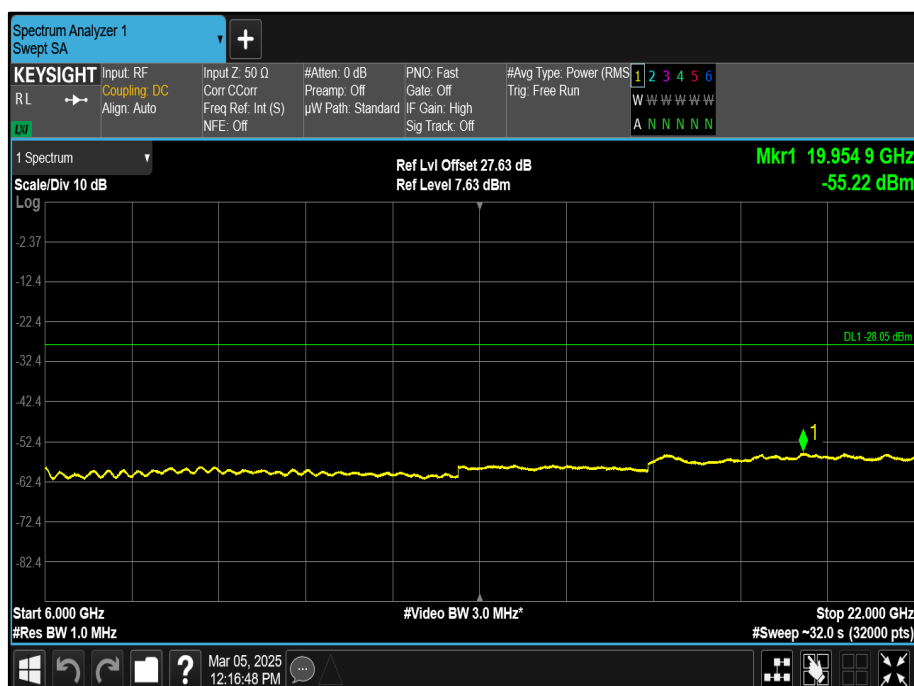
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 30.0 MHz 15 kHz SCS - Channel
Position T - Band 1 - Range 0.009 to 4000 MHz



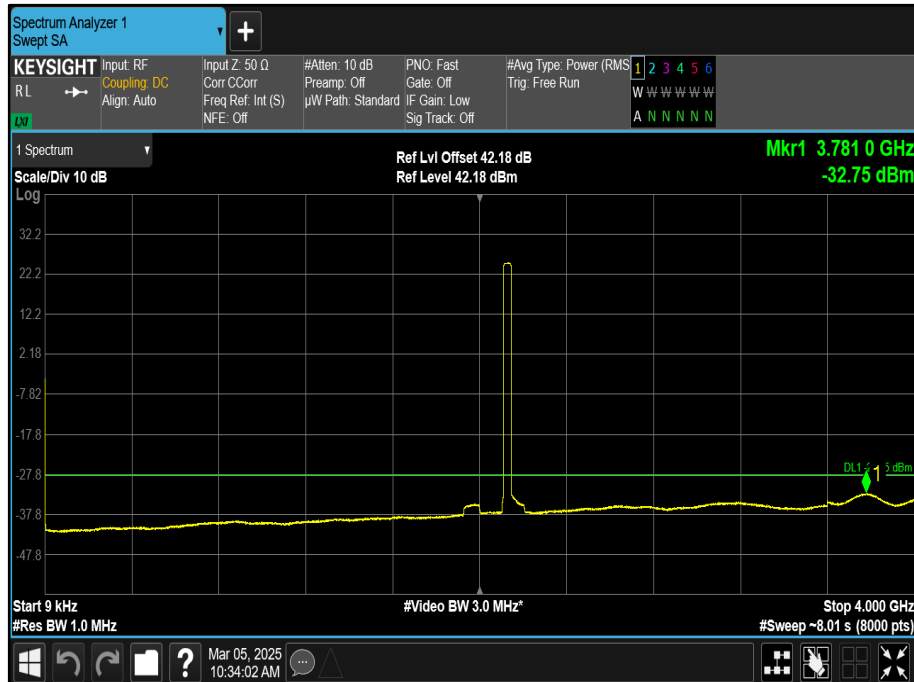
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Position T - Band - Range 4000 to 6000 MHz



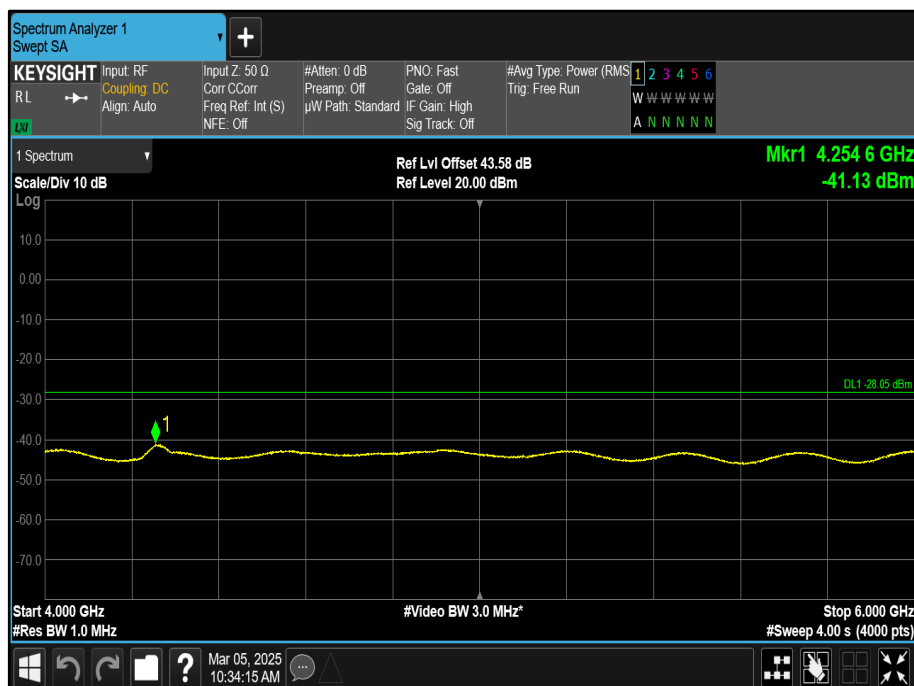
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Position T - Band 3 - Range 6000 to 22000 MHz



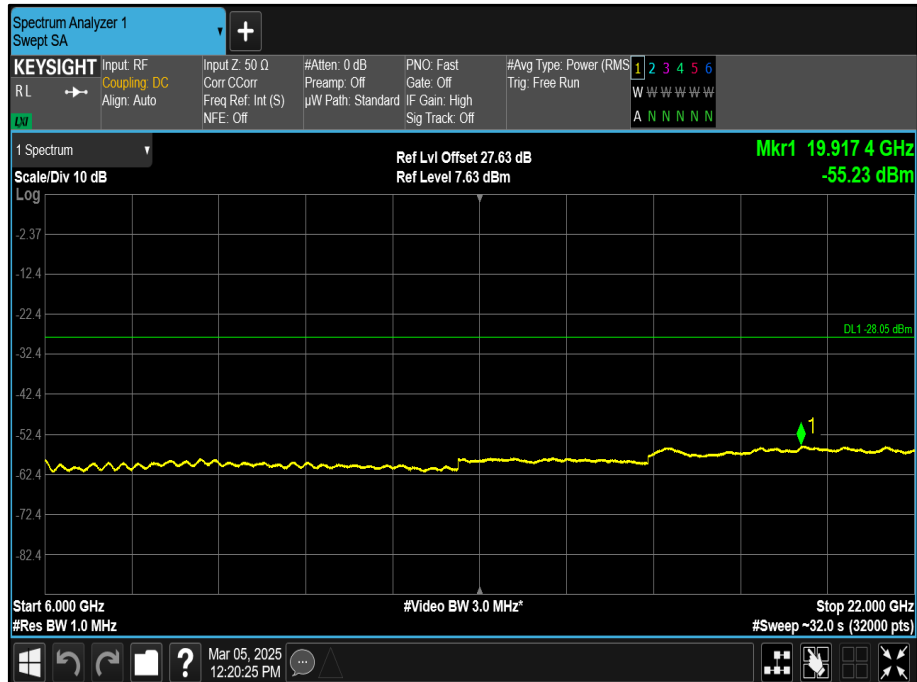
Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 35.0 MHz 15 kHz SCS - Channel Position B - Band 1 - Range 0.009 to 4000 MHz



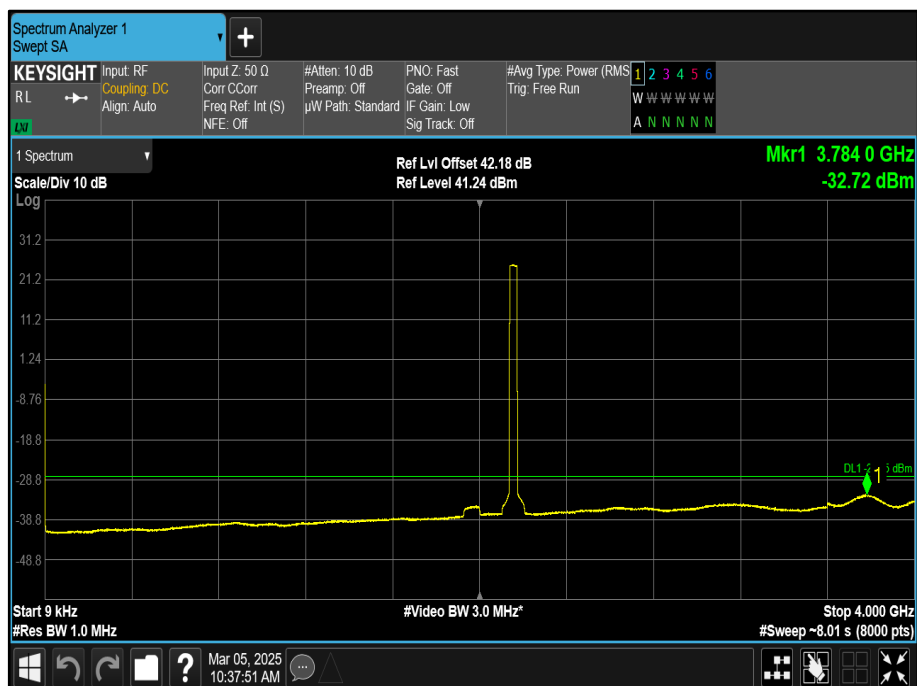
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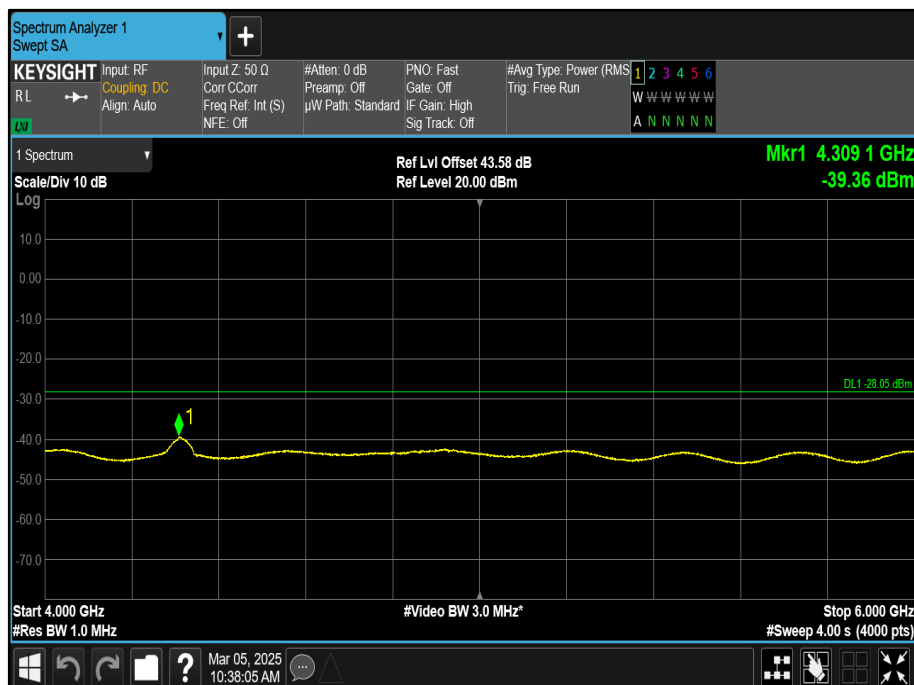
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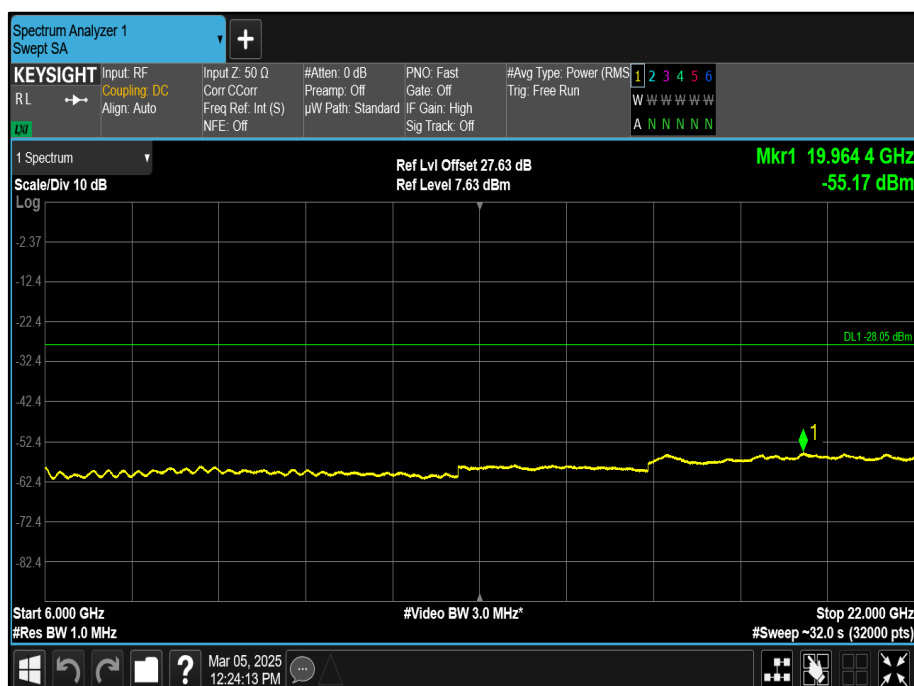
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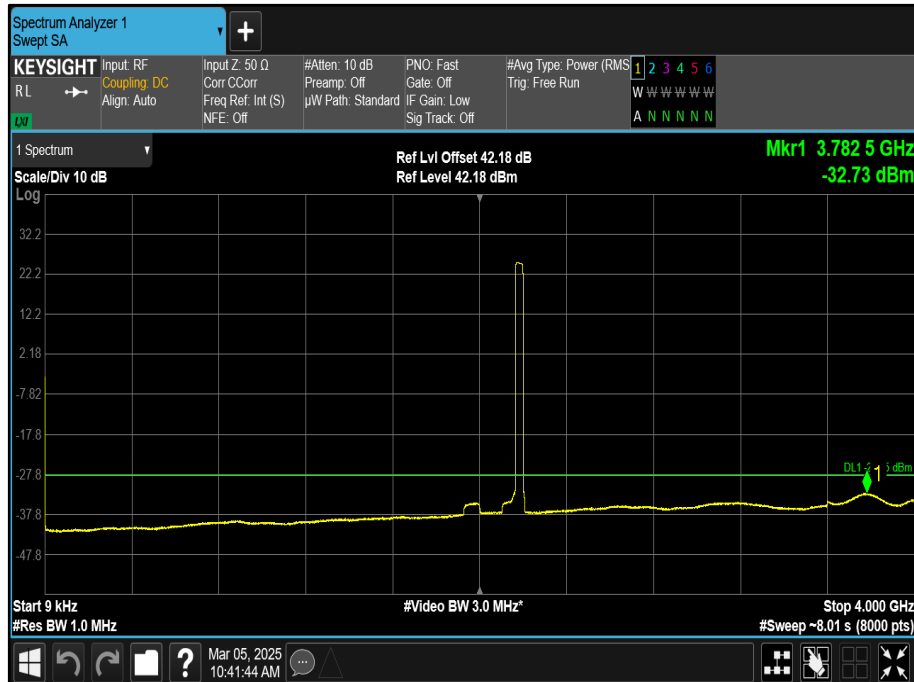
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Position M - Band - Range 4000 to 6000 MHz



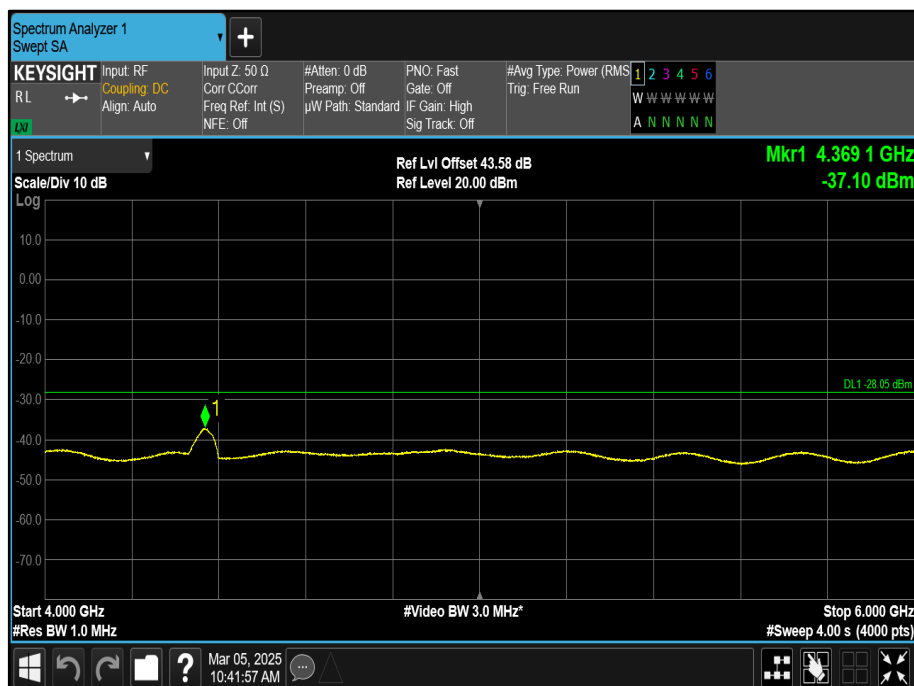
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Position M - Band 3 - Range 6000 to 22000 MHz



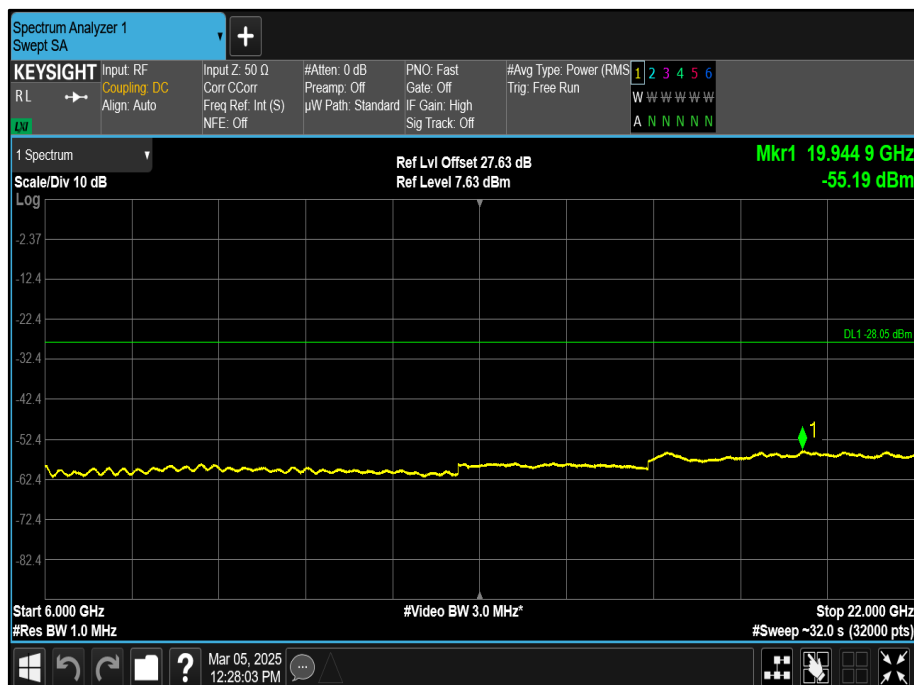
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Antenna 32 - NR Modulation QPSK - NR Carrier Bandwidth 35.0 MHz 15 kHz SCS - Channel Position T - Band - Range 4000 to 6000 MHz



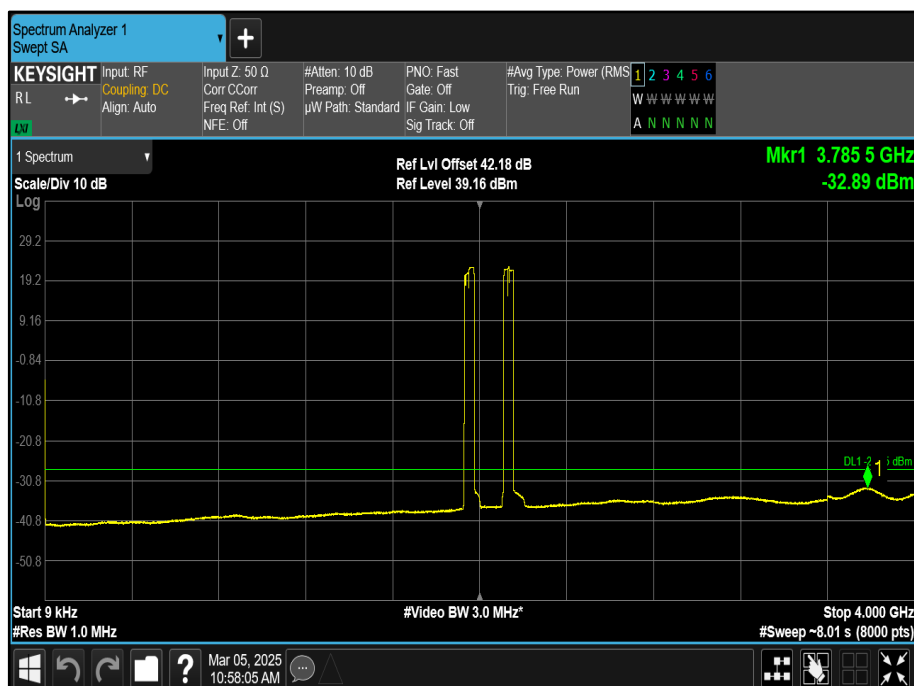
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Position T - Band 3 - Range 6000 to 22000 MHz



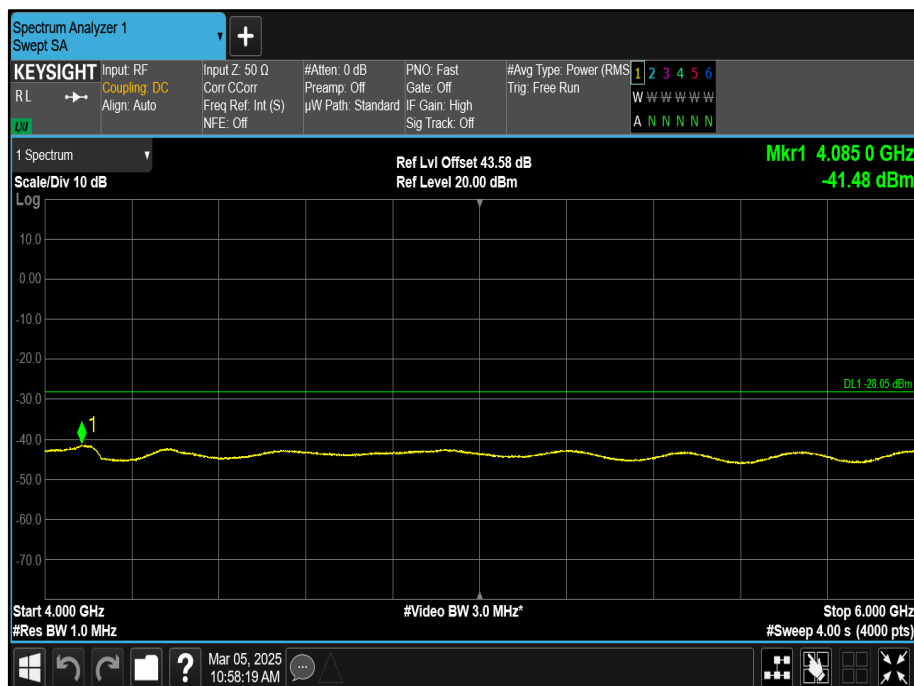
Configuration 4

Maximum Output Power See Section 1.4 Configuration Description

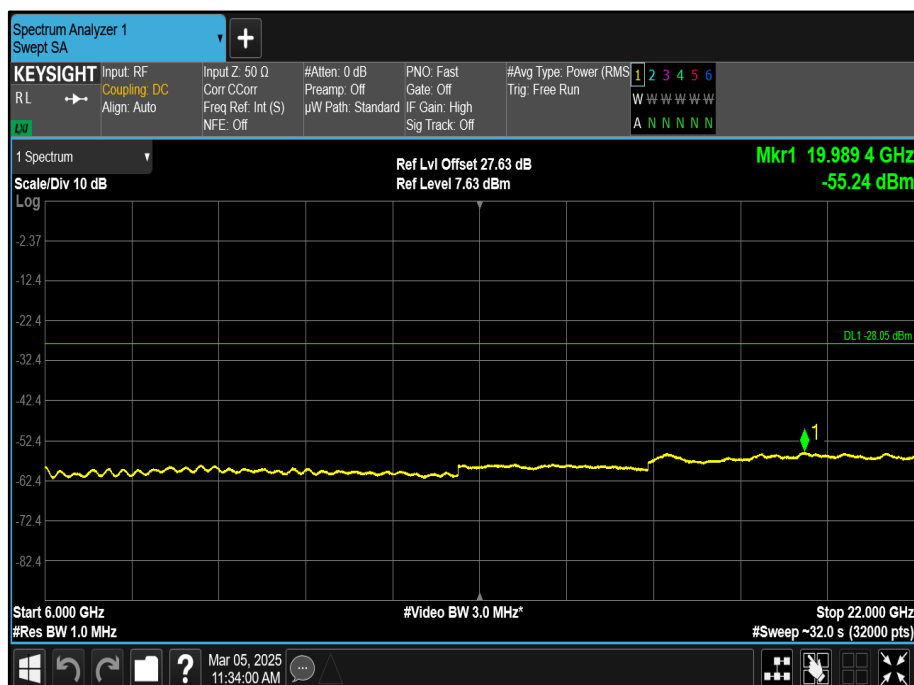
Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position BRFBW- Band 1 - Range 0.009
to 4000 MHz



Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK – NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position BRFBW- Band 2 - Range 4000 to
6000 MHz



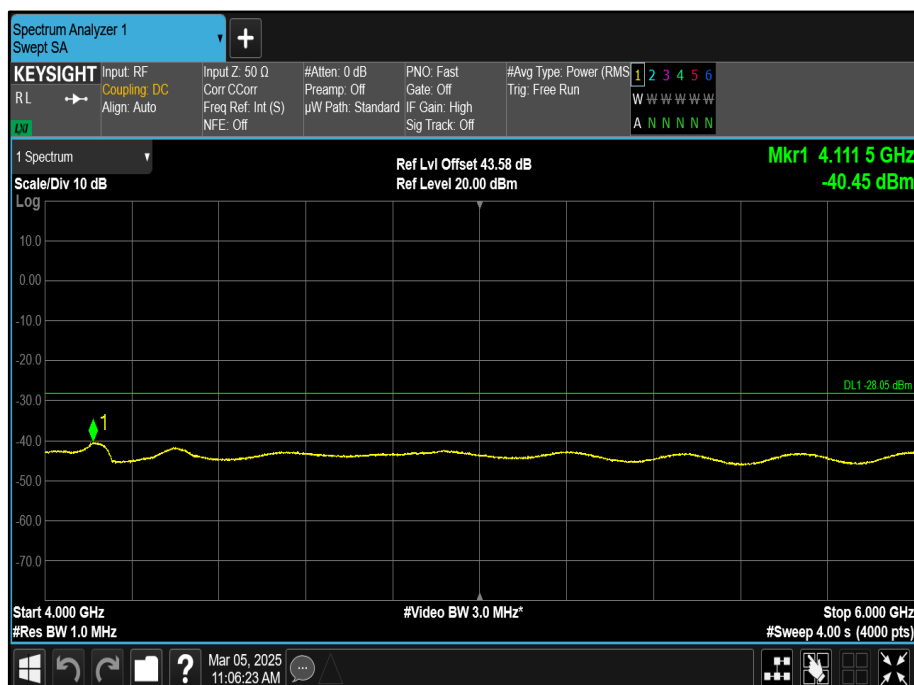
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Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position BRFBW- Band 3 - Range 6000 to
22000 MHz



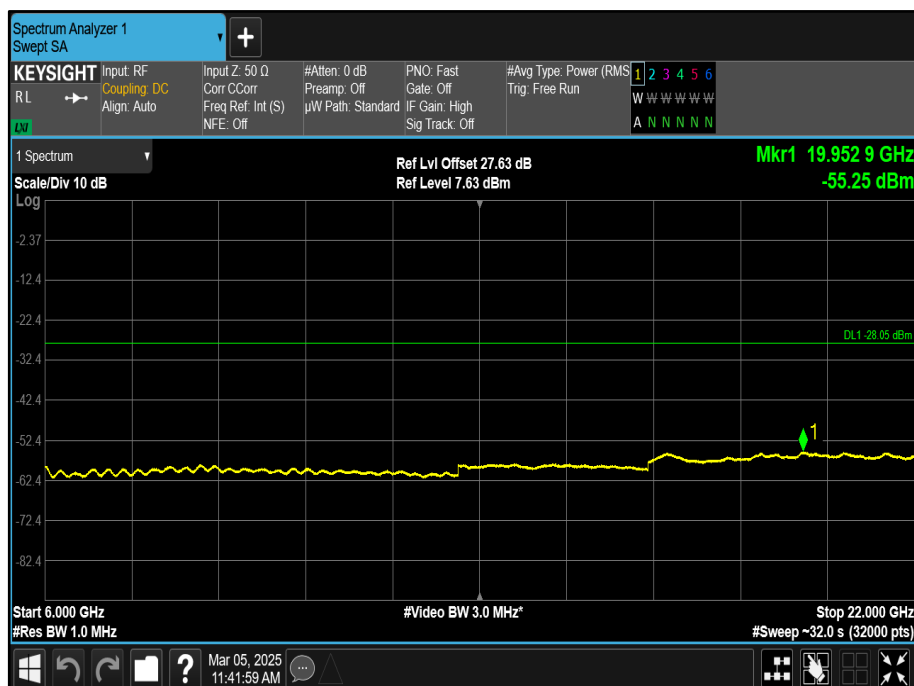
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Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position MRFBW- Band 1 - Range 0.009
to 4000 MHz



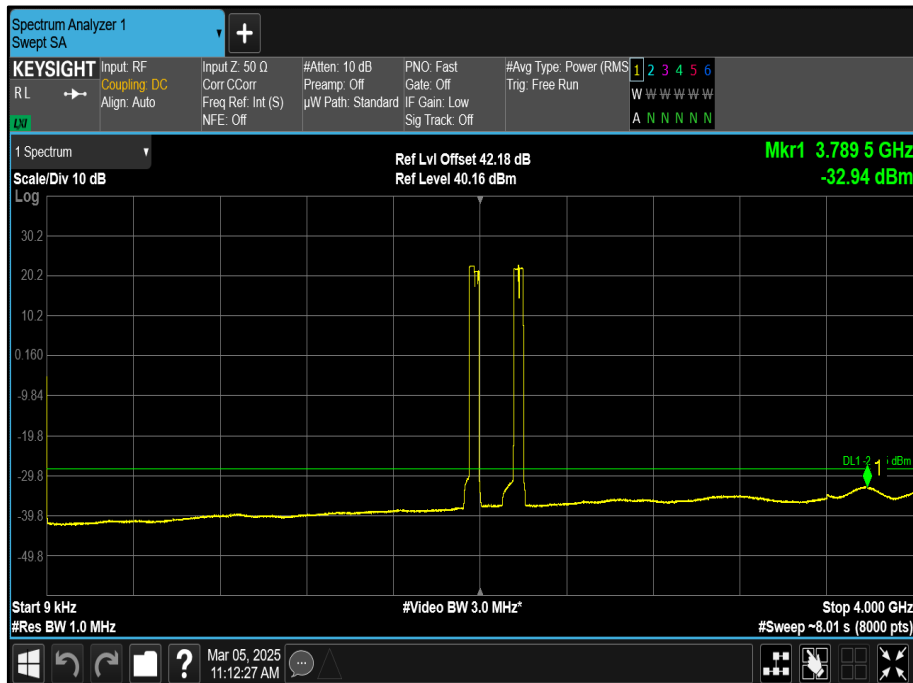
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Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position MRFBW- Band 2 - Range 4000
to 6000 MHz



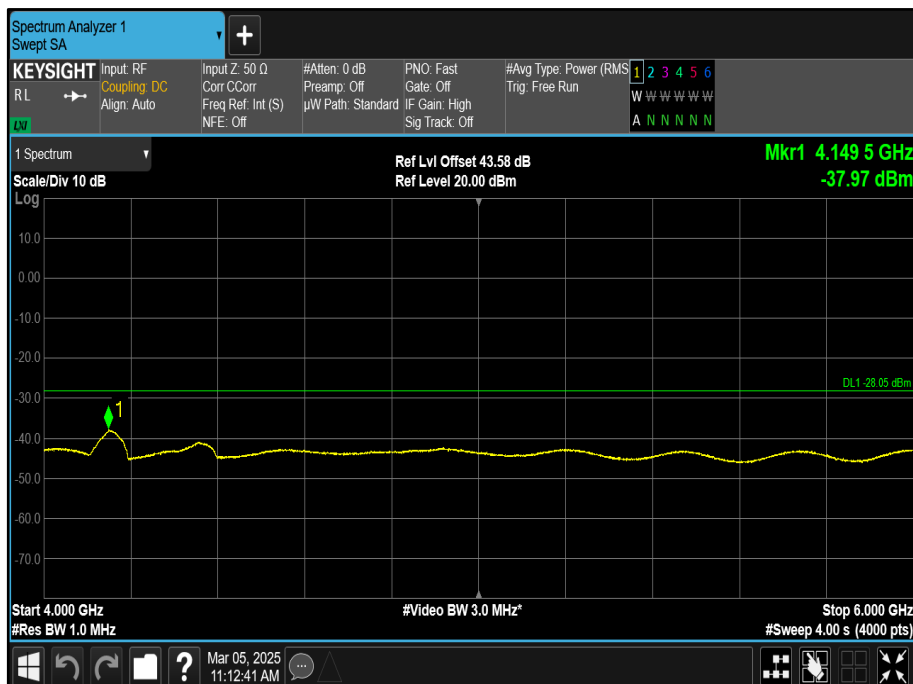
Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK – NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position MRFBW- Band 3 - Range 6000
to 22000 MHz



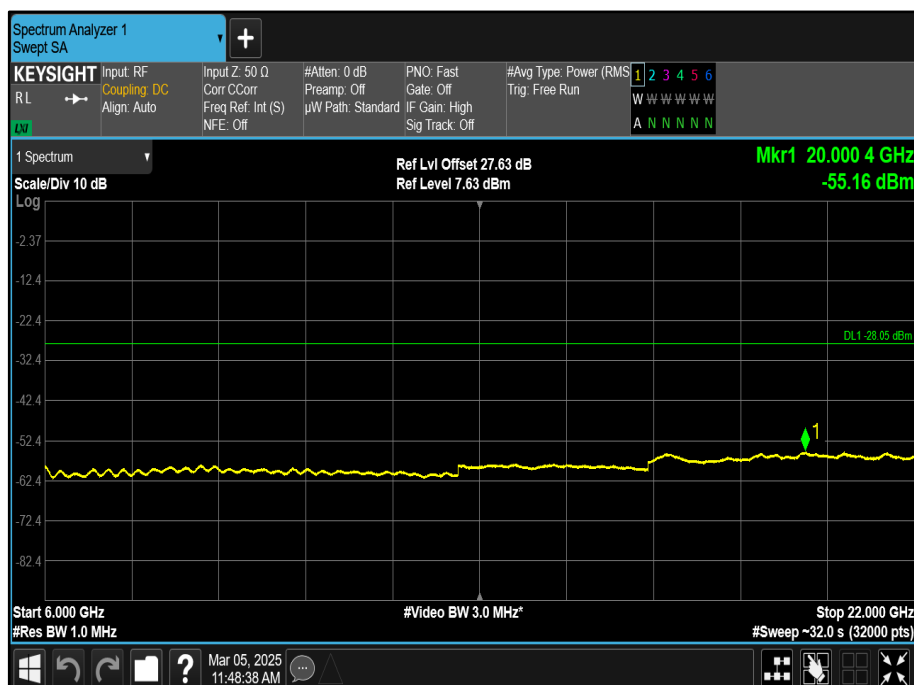
Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position TRFBW- Band 1 - Range 0.009
to 4000 MHz



Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position TRFBW- Band - Range 4000 to
6000 MHz



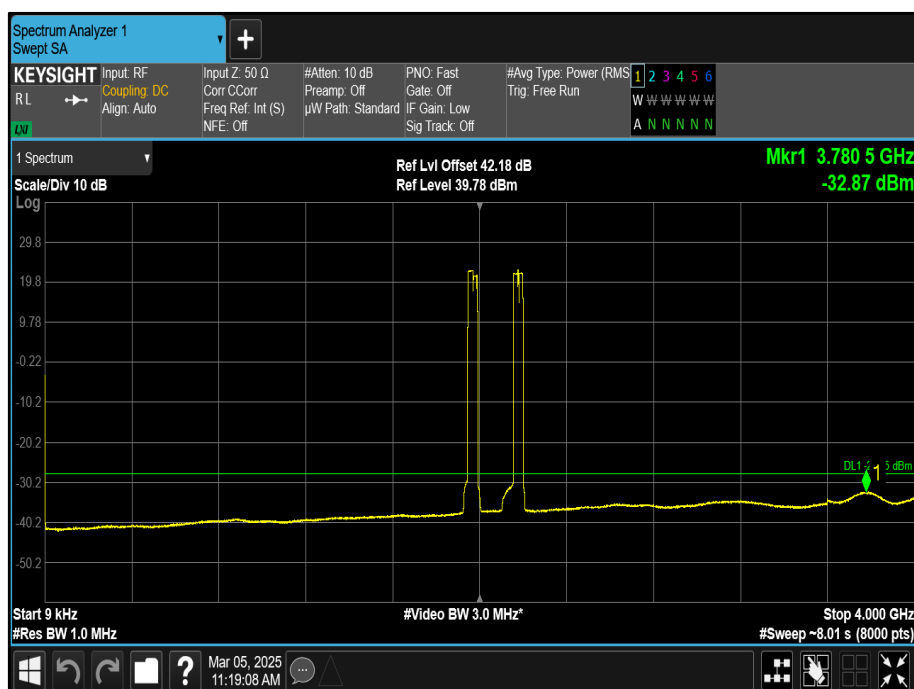
Antenna 32 – NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B25) + 3CC (B66) - Channel Position TRFBW- Band 3 - Range 6000 to
22000 MHz



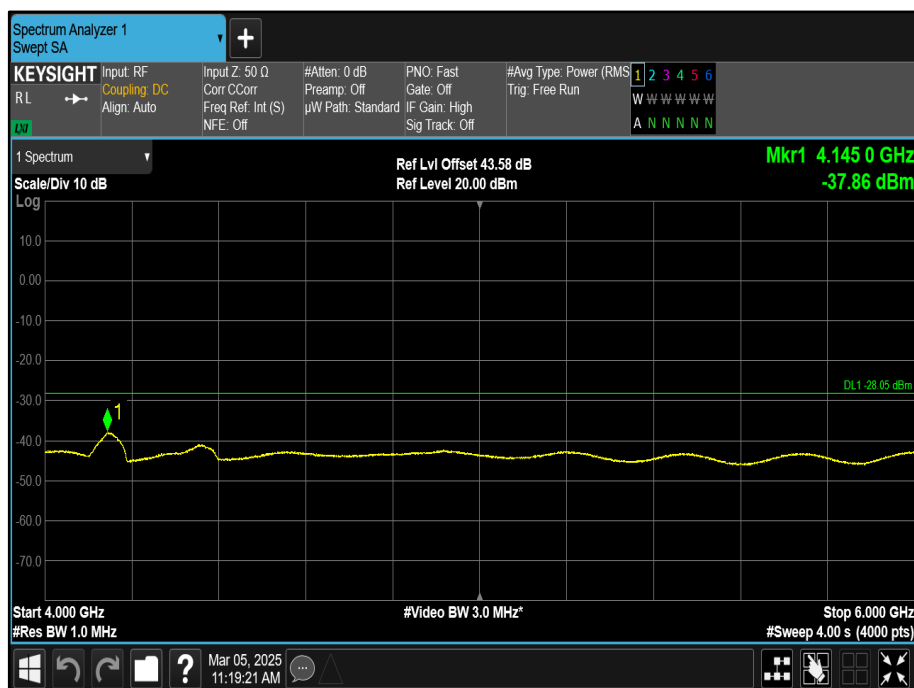
Configuration 5

Maximum Output Power See Section 1.4 Configuration Description

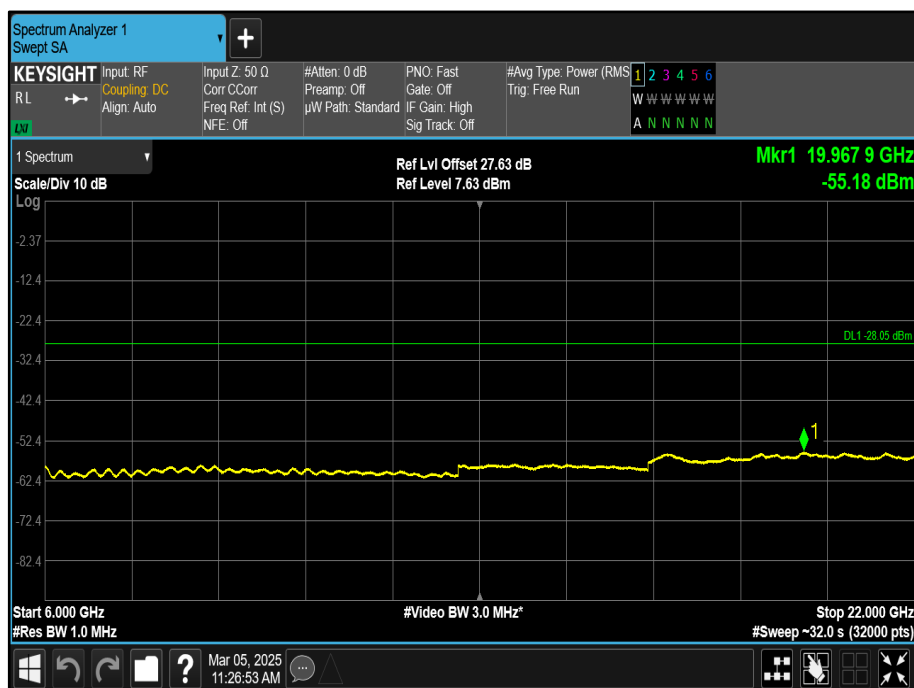
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Carrier Bandwidth 3CC (B2) + 3CC (B66) - Channel Position TRFBW- Band 1 - Range 0.009 to
4000 MHz



Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B2) + 3CC (B66) - Channel Position TRFBW- Band - Range 4000 to
6000 MHz



Antenna 32 - NR / LTE Modulation QPSK / QPSK / 64QAM / QPSK / QPSK / QPSK - NR / LTE
Carrier Bandwidth 3CC (B2) + 3CC (B66) - Channel Position TRFBW- Band 3 - Range 6000 to
22000 MHz



Unwanted emission limits for all equipment	-28.05dBm/MHz
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SECTION 3

TEST EQUIPMENT USED



3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Due
Auxiliary Equipment					
Computer	MacBook Pro	Apple	BAMS-1002122808	N/A	TU
PSU	LP2 x 700W	Ericsson	BAMS-1017033678	N/A	O/P Mon
Spectrum Sysyem	TUV SUD	N/A	TE5991	N/A	O/P Mon
Power supply (for EUT)	Delta Elektronika	SM66-AR-110	BAMS-1002162504	N/A	O/P Mon
Maximum Peak Output Power and Peak to Average Ratio - Conducted					
PNA-L Network Analyzer	Agilent Technologies	N5230A	BAMS 1000626182	12	02-Dec-2025
PXA Signal Analyzer	Keysight	N9030B	BAMS 1002020934	12	01-Jul-2025
Digital Multimeter	RS Pro	RS-14	TE-6485	12	31-May-2025
Milliohm Meter	RS Pro	ILOM-508A	TE-5755	12	11-Jun-2025
Hygro meter	Rotronic	HP21	TE-4989	12	29-Jul-2025
Occupied Bandwidth					
PNA-L Network Analyzer	Agilent Technologies	N5230A	BAMS 1000626182	12	02-Dec-2025
PXA Signal Analyzer	Keysight	N9030B	BAMS 1002020934	12	01-Jul-2025
Digital Multimeter	RS Pro	RS-14	TE-6485	12	31-May-2025
Milliohm Meter	RS Pro	ILOM-508A	TE-5755	12	11-Jun-2025
Hygro meter	Rotronic	HP21	TE-4989	12	29-Jul-2025
Band Edge					
PNA-L Network Analyzer	Agilent Technologies	N5230A	BAMS 1000626182	12	02-Dec-2025
PXA Signal Analyzer	Keysight	N9030B	BAMS 1002020934	12	01-Jul-2025
Digital Multimeter	RS Pro	RS-14	TE-6485	12	31-May-2025
Milliohm Meter	RS Pro	ILOM-508A	TE-5755	12	11-Jun-2025
Hygro meter	Rotronic	HP21	TE-4989	12	29-Jul-2025
Transmitter Spurious Emissions					
Hygro meter	Rotronic	HP21	TE-4989	12	29-Jul-2025
PNA-L Network Analyzer	Agilent Technologies	N5230A	BAMS 1000626182	12	02-Dec-2025
PXA Signal Analyzer	Keysight	N9030B	BAMS 1002020934	12	01-Jul-2025
Digital Multimeter	RS Pro	RS-14	TE-6485	12	31-May-2025
Attenuator 20dB	Aeroflex/Weinschel	Model: 6834-20-11	SERIAL NO: 004	N/A	O/P Mon
Attenuator 20dB	Aeroflex/Weinschel	Model: 6834-20-11	SERIAL NO: 002	N/A	O/P Mon
Attenuator 20dB	-	P/N:ZSJ20-20RS-TB	-	N/A	O/P Mon
HPF	RF-Lambda	F:6-40GHz	SN:21052000020	N/A	O/P Mon
Milliohm Meter	RS Pro	ILOM-508A	TE-5755	12	11-Jun-2025

TU – Traceability Unscheduled

N/A – Not Applicable

O/P Mon – Output Monitored with Calibrated Equipment

3.2 MEASUREMENT UNCERTAINTY

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

Test Discipline	Frequency / Parameter	MU
Conducted Maximum Peak Output Power-Spectrum	2110 MHz to 2200 MHz Amplitude	± 1.07
Conducted Maximum Peak Output Power-HP-VEE Software	9 KHz to 22 GHz	± 1.38 dB
Occupied Bandwidth- Spectrum	25 MHz Bandwidth	± 256209.2
	30 MHz Bandwidth	± 285605.3
	35 MHz Bandwidth	± 361126.9
Band Edge & PSD-Spectrum	Up to 8.4 GHz	± 1.37 dB

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the results of the compliance measurement and does not take into account measurement instrumentation uncertainty as defined in ANSI C63.26:2015 Clause 1.3.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8



3.3 MEASUREMENT SOFTWARE USED

List of measurement software versions used for testing.

Instrument	Manufacturer	Type No.	TE No.	Software Version
PXA Signal Analyser	Keysight	N9030B	BAMS 1002020934	A 24.56
SPECTRUM	TÜV SÜD	SCU004	TE5991	1.13.8
HP-VEE Software	TUV SUD	HP_VEE	N/A	V3.35



SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT

4.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT



Accred. no. 10363
Testing
ISO/IEC 17025

This report relates only to the actual item/items tested.

Our Swedac Accreditation does not cover opinions and interpretations and any expressed are outside the scope of our Swedac Accreditation.

Results of tests not covered by our Swedac Accreditation Schedule are marked NSA
(Not Swedac Accredited).

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Postal Address: Adelgatan 2, 211 22 Malmö, Sweden

ANNEX A

MODULE LIST

Configurations 1-5			
Product	Product No	R-State	Serial No
AIR 3283 B25 B66	KRD 901 892/2	R1C	E23F527361
CT-DU25	LPC102500/1	R3B	T01G522534
Software Version:	CXP2021151	Revision:	R24A70
External Cables Connected to the EUT			
Port	Type	Length (m)	Specifications
DC in	DC power	2*10 m2	Copper cable
Earth	Ground	50 mm2	300/500V, -40/90 °C
Data_1 & Data_2	Optical fibre cable	20m	Single Mode Duplex