FCC RF Test Report

APPLICANT	**:**	**Smawave Technology Co. ,Ltd**
EQUIPMENT	**:**	**5G ODU_NA**
BRAND NAME	**:**	**smawave**
MODEL NAME	**:**	**SRE620-b**
FCC ID	**:**	**2AU8HSRE620-BH**
STANDARD	**:**	**47 CFR Part 2, 96**
CLASSIFICATION	**:**	**Citizens Band Category A and B Devices (CBD)**
EQUIPMENT TYPE	**:**	**CPE-CBSD (Category B)**
TEST DATE(S)	**:**	**May 06, 2023 ~ Jul. 11, 2023**

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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History of this test report

Report No.	Version	Description	Issued Date
FG342001-01C	01	Initial issue of report	Jul. 17, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§96.41	Maximum E.I.R.P	Pass	-
		Maximum Power Spectral Density	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 19.71 dB at 14424.00 MHz

Remark: This is a data reuse test report, please refer to chapter 1.4 for details.

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Smawave Technology Co. ,Ltd
3/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China

1.2 Manufacturer

Smawave Technology Co. ,Ltd
3/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G ODU_NA
Brand Name	smawave
Model Name	SRE620-b
FCC ID	2AU8HSRE620-BH
Tx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
Rx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
Bandwidth	10MHz / 20MHz / 40MHz
Antenna Gain	<Ant.0>: 16.32 dBi <Ant.3>: 15.92 dBi
Type of Modulation	DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (QPSK / 16QAM / 64QAM / 256QAM)
IMEI Code	Conducted: 863109050026090 Radiation: 863109050026090
HW Version	V1.0
SW Version	Codium_FW_5G_1.0.8

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. 5G NR n48 supports UL MIMO mode, and only supports CP-OFDM modulation in UL MIMO mode. The MIMO mode is completely uncorrelated, the directional gain is selected the maximum gain among Ant.0 & Ant.3.
3. 5G NR does not support NSA mode for LTE B48 and 5G NR n48.

1.4 Re-use of Measured Data

1.4.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: SRE620-b, FCC ID: 2AU8HSRE620-BH) is electrically identical to the reference device (Model: SRE620-b, FCC ID: 2AU8HSRE620-B) for the portions of the circuitry corresponding to the data being re-used. Based on their similarity, the FCC Part 96 for 5G NR n48 (equipment class: CBD) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 Referencing Test Data v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: 2AU8HSRE620-BH.

1.4.2 Model Difference Information

The **main** difference between FCC ID: 2AU8HSRE620-B and FCC ID: 2AU8HSRE620-BH is as below:

- Remove LTE B41, 5G NR n41.
- Change to high gain antenna for LTE B48 & 5G NR n48;

Other differences and all the details of similarity and difference can be found in the confidential documents (SRE620-b_Operational Description of Product Equality Declaration).

1.4.3 Reference detail Section:

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Report Title/Section
96	CBD (NR)	n48 (Part96)	2AU8HSRE620-B	Original Grant	FG342001C	2AU8HSRE620-BH	All sections applicable (Except for EIRP&RSE)

1.4.4 Spot Check Verification Data Section

Conducted power test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

All test procedures follow the related section of parent report.

Summary for power spot check for each rule entry and technology is listed as below:

Test Item	Mode	2AU8HSRE620-B Parent Worst mode Test Result	2AU8HSRE620-BH Variant Check Test Result	Difference (dB)
Conducted Power (dBm)	n48	19.93	19.17	0.76
	n48 MIMO	19.25	19.17	0.08

Conclusion:
Conducted power test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result, the test data from the original model is representative for the variant model. The power level spot check is shown within expected level compliant to limit line.

We confirm that the test data reuse policy of FCC KDB 484596 D01 Referencing Test Data v01 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.

1.5 Maximum EIRP

5G NR n48		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
10	3555.00~3694.98	4.0644	3.3037
20	3560.01~3690.00	4.1783	3.2961
40	3570.00~3679.98	4.2170	3.1915
5G NR n48 MIMO		QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
10	3555.00~3694.98	3.4198	3.1405
20	3560.01~3690.00	3.4119	3.2734
40	3570.00~3679.98	3.6058	3.2659

Note: All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.6 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-KS TH01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24al

1.8 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26-2015
- 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

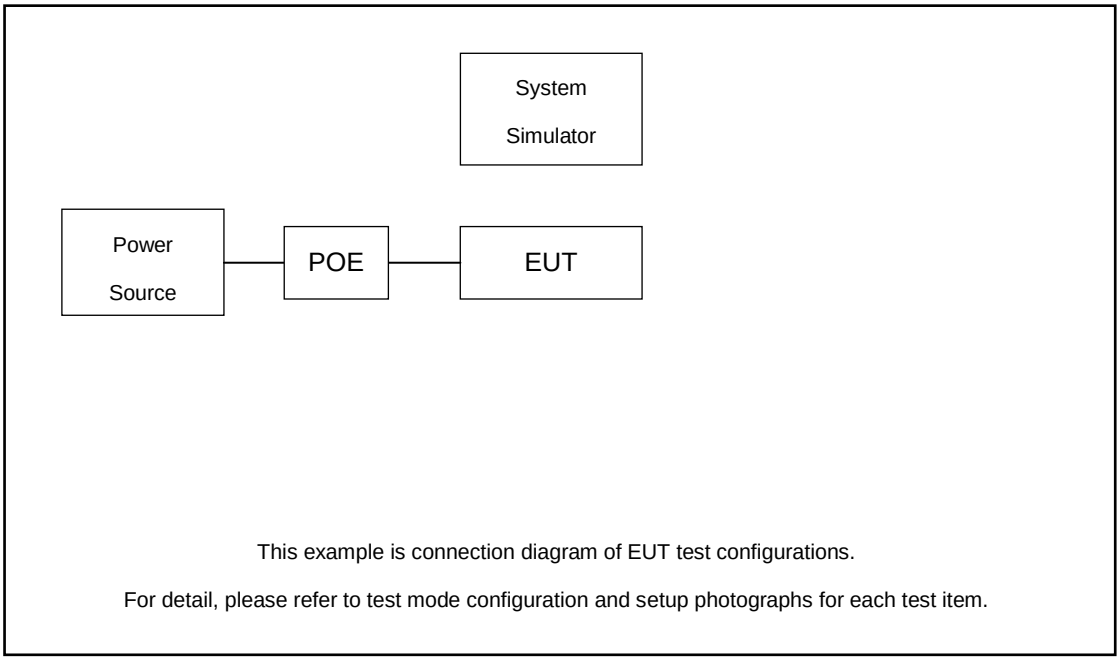
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

Test Items	5G NR	Bandwidth (MHz)				Modulation					RB #			Test Channel		
		10	15	20	40	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
E.I.R.P	n48	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Power Spectral Density	n48	v	-	v	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	n48	Worst Case													v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

5G NR n48 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
40	Channel	638000	641666	645332
	Frequency	3570	3624.99	3679.98
20	Channel	637334	641666	646000
	Frequency	3560.01	3624.99	3690
10	Channel	637000	641666	646332
	Frequency	3555	3624.99	3694.98

3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 EIRP

3.2.1 Description of the EIRP Measurement

EIRP and PSD limits for CBRS equipment as below table:

Device		Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
☐	**End User Device**	23	n/a
☐	**Category A CBSD**	30	20
Applied	**Category B CBSD**	47	37

Remark:

1. The worst case EIRP shown in this section is found with NR operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for n48 (i.e. 10, 20, 40MHz)
2. Maximum PSD values are radiated. Measurements can be done conducted and add antenna gain back in.

3.2.2 Test Procedures for EIRP

1. Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)

2. Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)

   $EIRP = P_T + G_T – L_C$, $ERP = EIRP - 2.15$, where

   P_T = transmitter output power in dBm

   G_T = gain of the transmitting antenna in dBi

   L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.3 Test Procedures for EIRP PSD

1. Set instrument center frequency to OBW center frequency.
2. Set span to at least 2 times the OBW.
3. Set the RBW to the specified reference bandwidth (often 1 MHz).
4. Set VBW ≥ 3 × RBW.
5. Detector = RMS (power averaging).
6. Ensure that the number of measurement points in the sweep ≥ 2 × span/RBW.
7. Sweep time = auto couple.
8. Employ trace averaging (RMS) mode over a minimum of 100 traces.
9. Use the peak marker function to determine the maximum amplitude level within the reference bandwidth (PSD).
10. Determine the EIRP by adding the effective antenna gain to the adjusted power level.
11. Add 10 log (1/duty cycle) to the measured power level to compute the average power during continuous transmission.

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.4 Test Result of Conducted Test

Please refer to Appendix A.

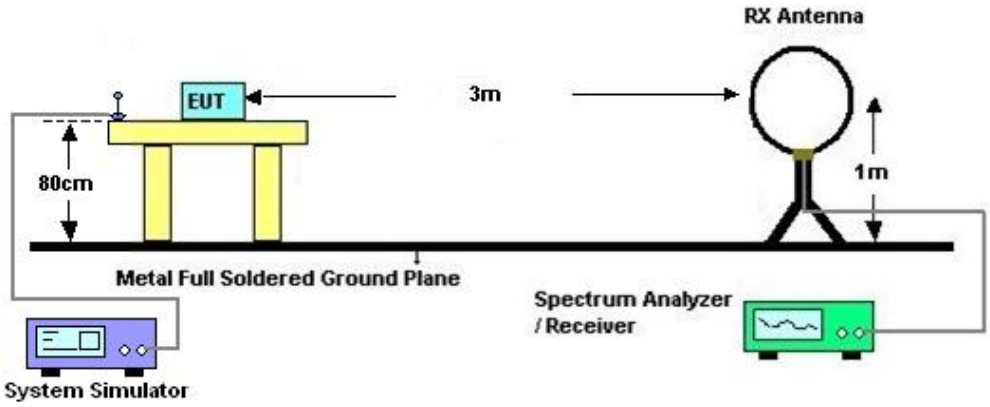
4 Radiated Test Items

4.1 Measuring Instruments

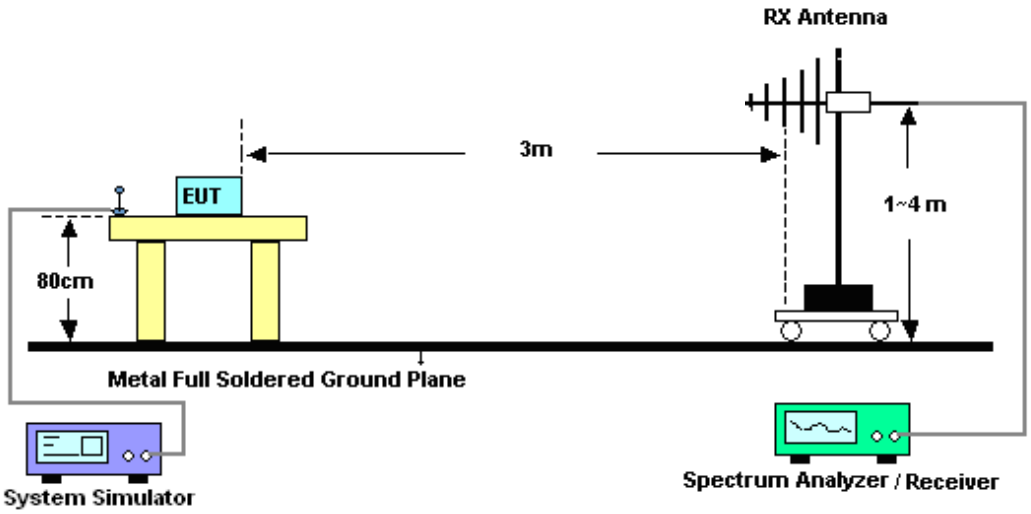
See list of measuring instruments of this test report.

4.2 Test Setup

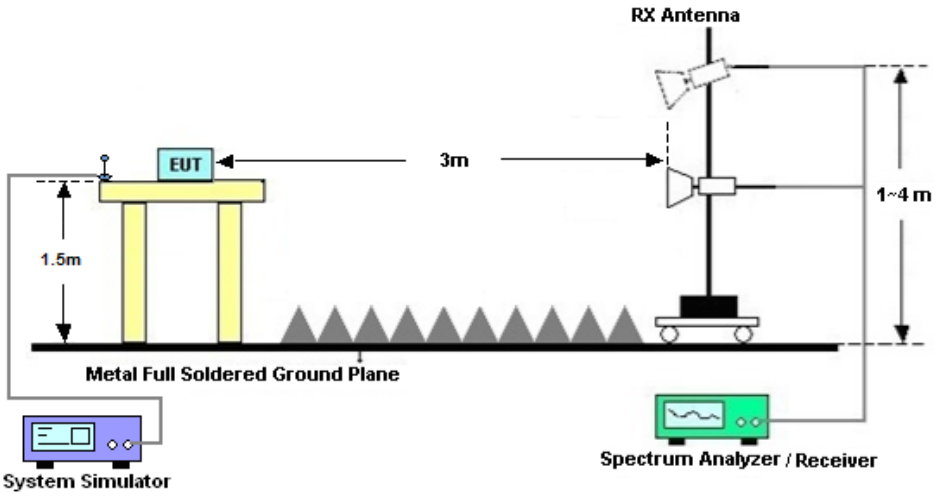
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least -40dBm / MHz.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
   Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
   The limit line is −40dBm/MHz

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 12, 2022	May 06, 2023~ Jul. 11, 2023	Oct. 11, 2023	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	May 06, 2023~ Jul. 11, 2023	NCR	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 12, 2022	Jun. 29, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 16, 2022	Jun. 29, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Jun. 29, 2023	Apr. 08, 2024	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1284	1GHz~18GHz	Oct. 16, 2022	Jun. 29, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2023	Jun. 29, 2023	Jan. 07, 2024	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 11, 2022	Jun. 29, 2023	Jul. 10, 2023	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2023	Jun. 29, 2023	Jan. 04, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 12, 2022	Jun. 29, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 12, 2022	Jun. 29, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 29, 2023	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 29, 2023	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 29, 2023	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Measurement Uncertainty

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.46 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.82 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.56 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.54 dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

EIRP

5G NR n48 (Ant.0):

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Gain	EIRP （W）		
Channel				638000	641666	645332		L	M	H
Frequency (MHz)				3570	3624.99	3679.98				
40	PI/2 BPSK	1	1	19.54	19.75	19.66	16.32	3.8548	4.0458	3.9628
40	PI/2 BPSK	1	104	19.67	19.68	19.93	16.32	3.9719	3.9811	4.2170
40	PI/2 BPSK	1	105	16.16	16.25	16.40	16.32	1.7701	1.8072	1.8707
40	PI/2 BPSK	1	0	16.05	16.20	16.22	16.32	1.7258	1.7865	1.7947
40	PI/2 BPSK	50	25	19.51	19.84	19.82	16.32	3.8282	4.1305	4.1115
40	PI/2 BPSK	100	0	17.53	17.76	17.83	16.32	2.4266	2.5586	2.6002
40	QPSK	1	1	19.53	19.76	19.77	16.32	3.8459	4.0551	4.0644
40	QPSK	1	104	19.57	19.87	19.92	16.32	3.8815	4.1591	4.2073
40	QPSK	1	105	18.60	18.66	19.02	16.32	3.1046	3.1477	3.4198
40	QPSK	1	0	18.70	18.77	18.80	16.32	3.1769	3.2285	3.2509
40	QPSK	50	25	19.54	19.88	19.86	16.32	3.8548	4.1687	4.1495
40	QPSK	100	0	17.75	17.76	17.84	16.32	2.5527	2.5586	2.6062
40	16QAM	1	1	18.65	18.72	18.67	16.32	3.1405	3.1915	3.1550
40	64QAM	1	1	17.16	17.21	17.03	16.32	2.2284	2.2542	2.1627
40	256QAM	1	1	15.10	15.18	15.23	16.32	1.3868	1.4125	1.4289
Channel				637334	641666	646000	Gain	EIRP （W）		
Frequency (MHz)				3560.01	3624.99	3690				
20	PI/2 BPSK	1	1	19.60	19.84	19.89	16.32	3.9084	4.1305	4.1783
20	QPSK	1	1	19.56	19.78	19.87	16.32	3.8726	4.0738	4.1591
20	16QAM	1	1	18.56	18.68	18.86	16.32	3.0761	3.1623	3.2961
Channel				637000	641666	646332	Gain	EIRP （W）		
Frequency (MHz)				3555	3624.99	3694.98				
10	PI/2 BPSK	1	1	19.43	19.57	19.77	16.32	3.7584	3.8815	4.0644
10	QPSK	1	1	19.34	19.49	19.70	16.32	3.6813	3.8107	3.9994
10	16QAM	1	1	18.33	18.56	18.87	16.32	2.9174	3.0761	3.3037

5G NR n48 UL MIMO (Ant.0+3):

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Gain	EIRP （W）		
Channel				638000	641666	645332		L	M	H
Frequency (MHz)				3570	3624.99	3679.98				
40	QPSK	1	1	18.96	19.25	19.05	16.32	3.3729	3.6058	3.4435
40	QPSK	1	104	18.84	19.01	19.08	16.32	3.2810	3.4119	3.4674
40	QPSK	1	105	17.45	17.57	17.66	16.32	2.3823	2.4491	2.5003
40	QPSK	1	0	17.69	17.66	17.47	16.32	2.5177	2.5003	2.3933
40	QPSK	50	25	18.90	19.20	18.95	16.32	3.3266	3.5645	3.3651
40	QPSK	100	0	14.46	14.66	14.45	16.32	1.1967	1.2531	1.1940
40	16QAM	1	1	18.78	18.82	18.67	16.32	3.2359	3.2659	3.1550
40	64QAM	1	1	16.94	17.00	16.85	16.32	2.1184	2.1478	2.0749
40	256QAM	1	1	14.09	14.21	14.03	16.32	1.0990	1.1298	1.0839
Channel				637334	641666	646000	Gain	EIRP （W）		
Frequency (MHz)				3560.01	3624.99	3690				
20	QPSK	1	1	18.95	19.01	18.91	16.32	3.3651	3.4119	3.3343
20	16QAM	1	1	18.73	18.83	18.57	16.32	3.1989	3.2734	3.0832
Channel				637000	641666	646332	Gain	EIRP （W）		
Frequency (MHz)				3555	3624.99	3694.98				
10	QPSK	1	1	18.78	19.02	18.95	16.32	3.2359	3.4198	3.3651
10	16QAM	1	1	18.31	18.65	18.56	16.32	2.9040	3.1405	3.0761

EIRP Power Density

5G NR n48 (Ant.0):

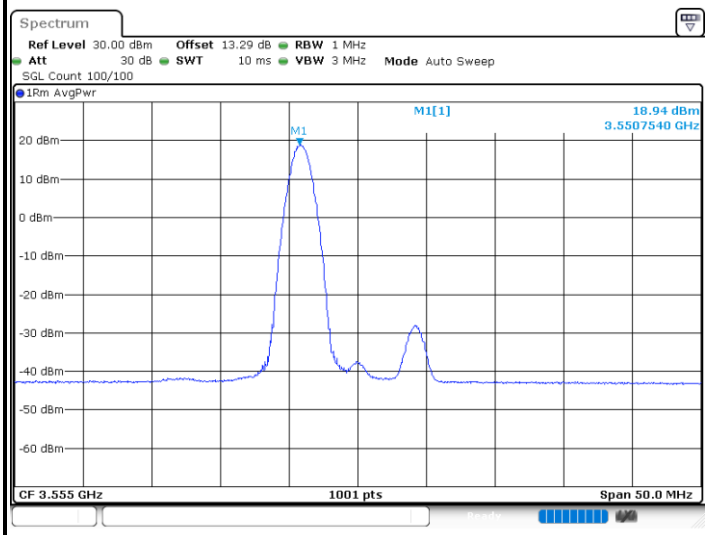
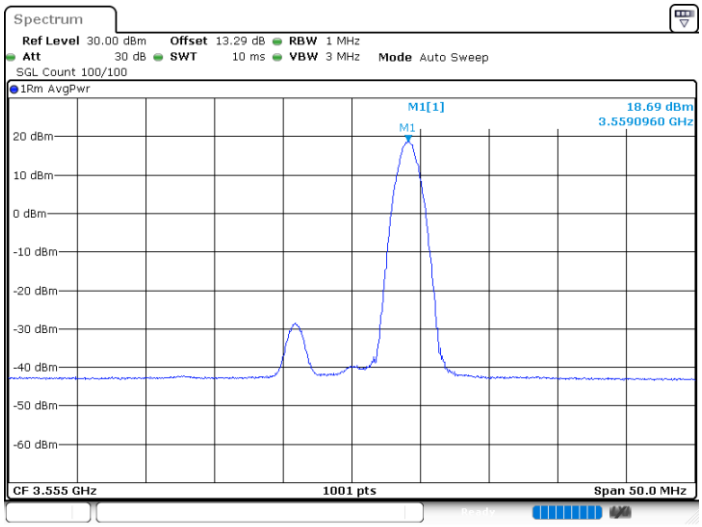
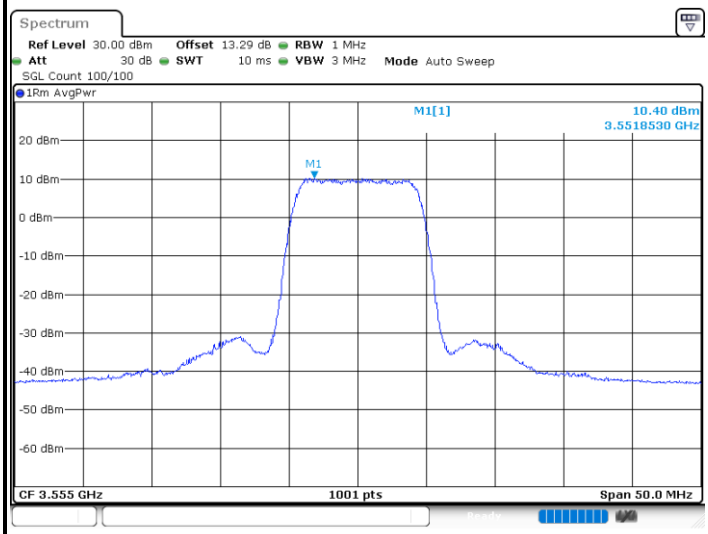
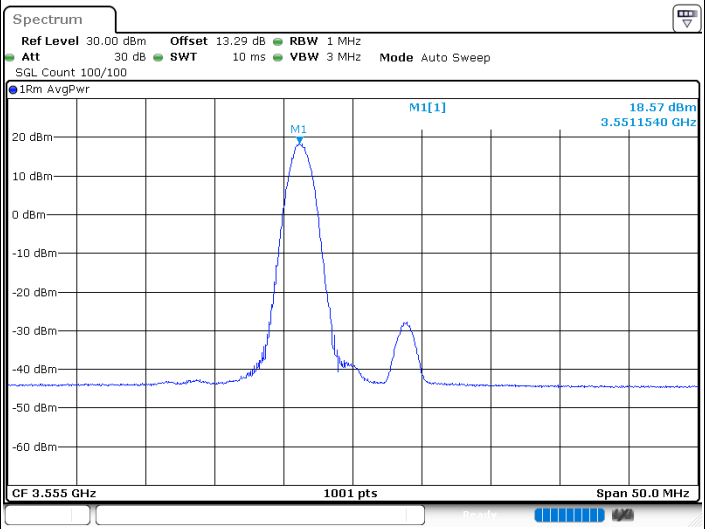
Mode	FR1 Part96 N48 : EIRP Power Density (dBm/1MHz)				
BW	10M (1RB1)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	34.89	35.14	35.03	33.28	31.65
Middle CH	35.04	35.09	34.76	34.02	32.23
Highest CH	36.07	35.63	35.5	33.86	32.03
BW	20M (1RB1)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	35.67	35.79	35.17	33.2	31.37
Middle CH	35.31	34.95	34.56	33.33	31.22
Highest CH	35.82	35.3	35.27	33.89	31.3
BW	40M (1RB1)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	35.19	34.91	34.08	33.06	30.95
Middle CH	35.67	35	35.64	33.62	33.27
Highest CH	35.48	34.39	35.2	32.68	31.62
Limit	37dBm /1MHz				
Gain	16.32				
Result	Pass				

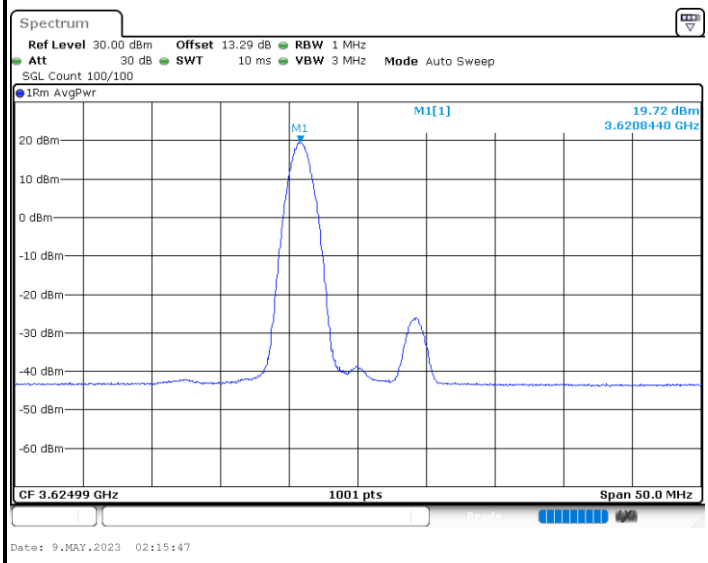
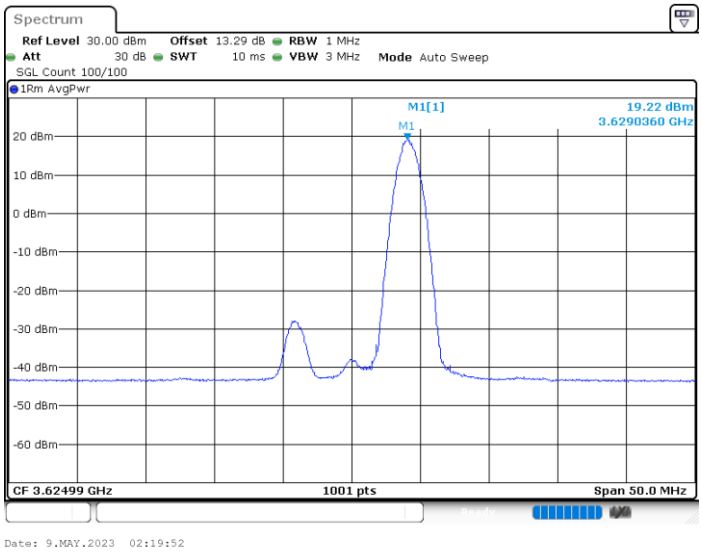
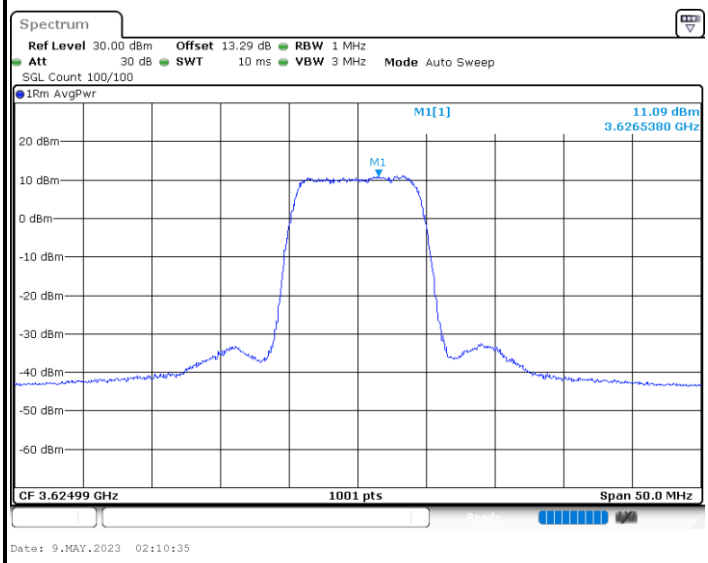
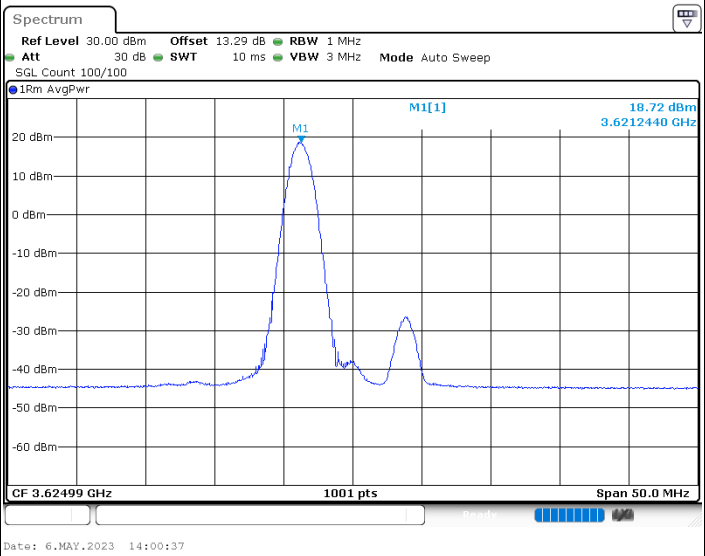
BW	10M (1RB0)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	35.26	34.73	33.72	32.93	31.44
Middle CH	36.04	35.35	34.42	33.4	31.69
Highest CH	36	35.37	34.39	34.21	32
BW	20M (1RB0)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	35.75	34.63	33.83	33.3	31.81
Middle CH	36.07	35.39	34.06	33.6	31.84
Highest CH	35.29	35.65	34.11	33.55	32.05
BW	40M (1RB0)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	31.21	33.76	32.25	31.98	30.3
Middle CH	33.76	34.78	34.14	32.82	30.36
Highest CH	32.99	34.41	34.15	33.3	31.55
Limit	37dBm /1MHz				
Gain	16.32				
Result	Pass				

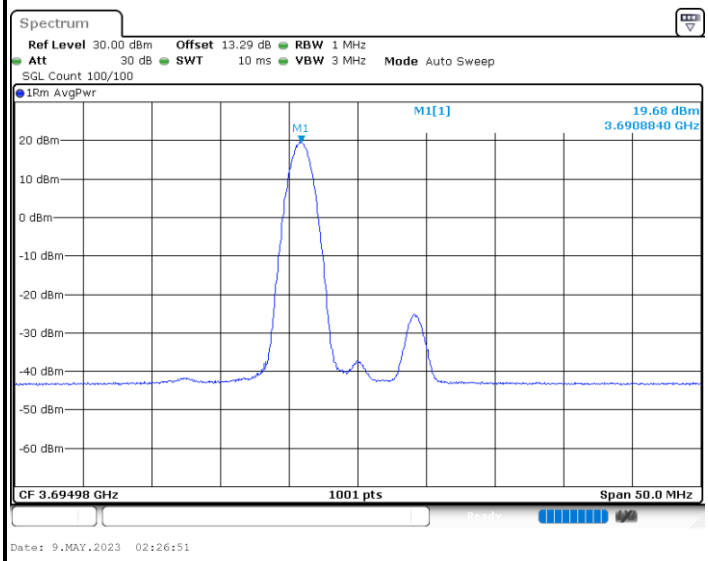
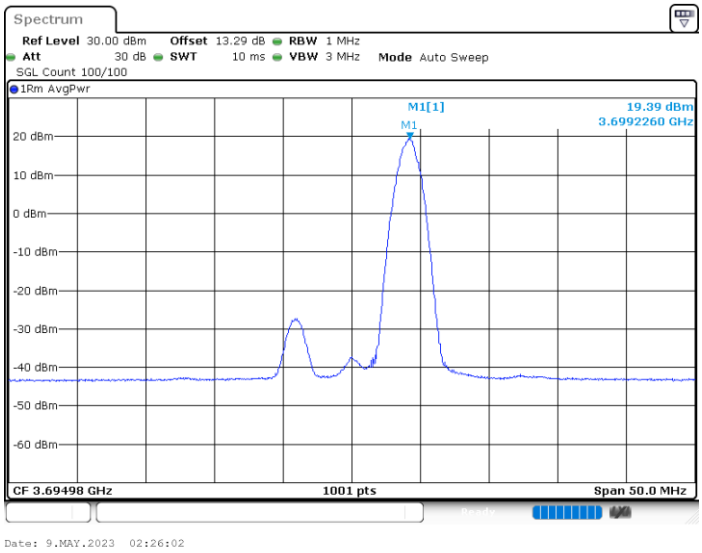
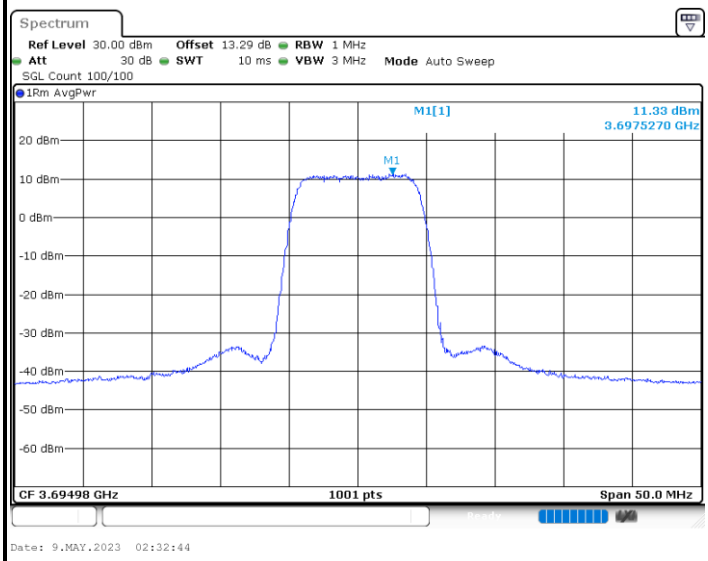
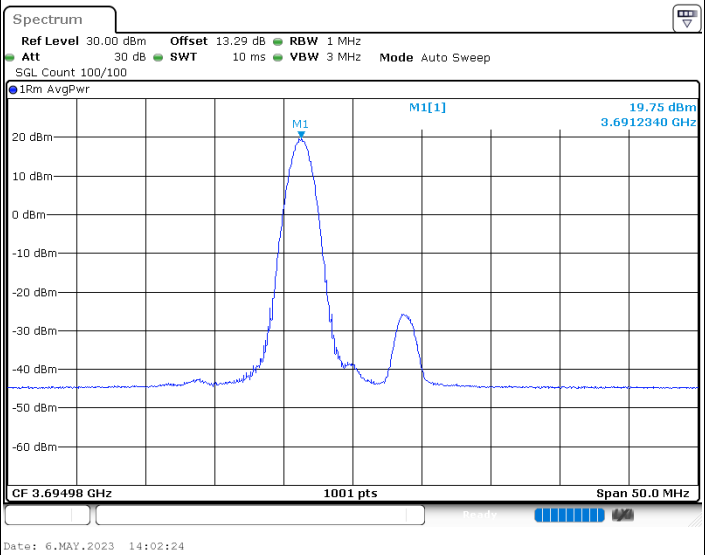
BW	10M (1RBMax)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	35.01	34.62	33.97	32.43	31.03
Middle CH	35.54	35.15	34.5	33.66	32.33
Highest CH	35.71	34.93	33.9	33.36	32.03
BW	20M (1RBMax)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	32.1	34.53	33.59	32.7	31.07
Middle CH	32.39	34.92	33.16	32.99	30.14
Highest CH	32.57	35.39	34.82	32.9	31.24
BW	40M (1RBMax)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	34.77	34.74	34.04	32.94	31.62
Middle CH	35.45	34.87	34.36	33.62	31.96
Highest CH	36.01	35.58	33.89	33.86	32.24
Limit	37dBm /1MHz				
Gain	16.32				
Result	Pass				

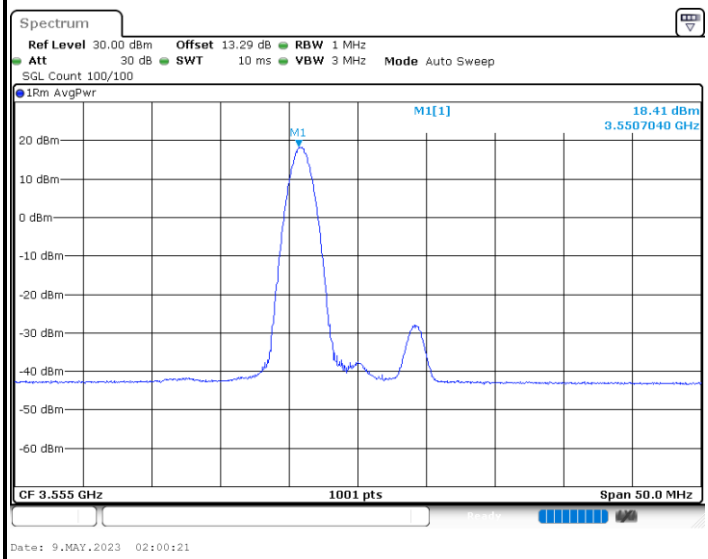
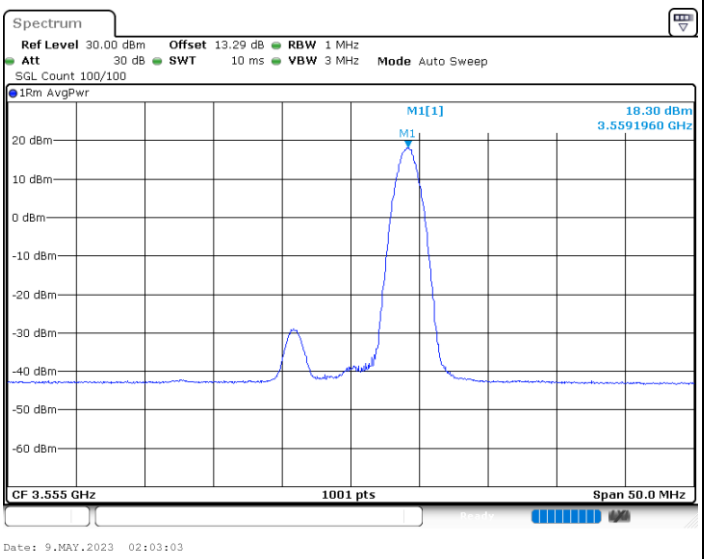
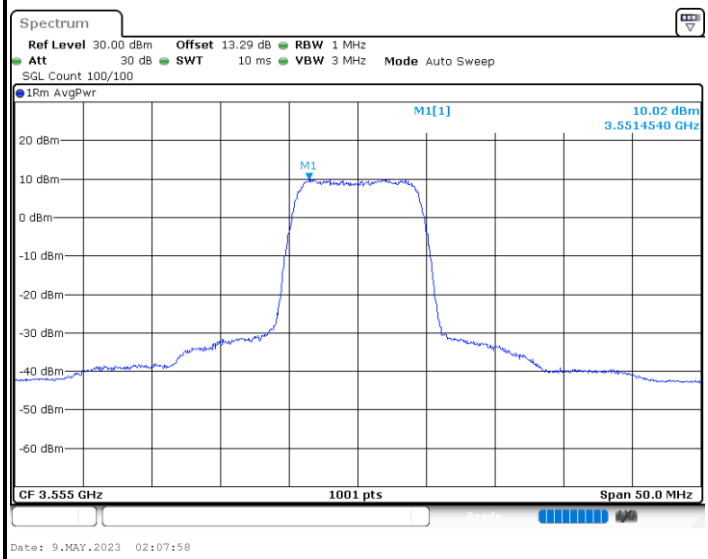
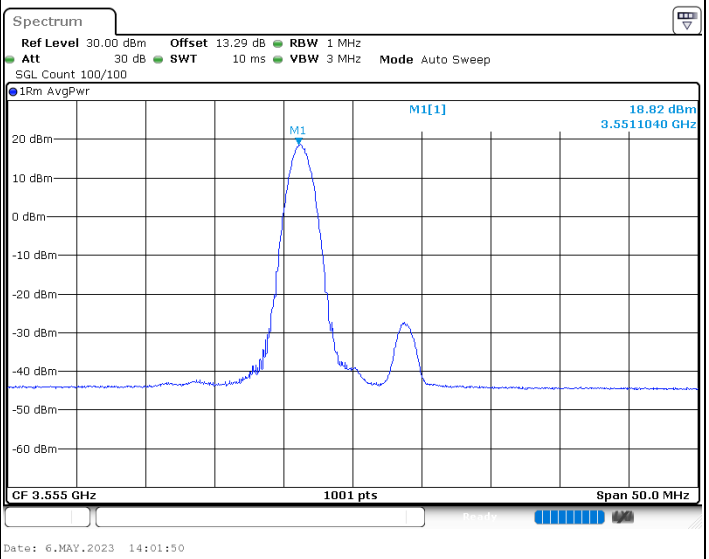
BW	10M (FULL)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	26.72	26.34	25.19	25.04	23.24
Middle CH	27.41	27.05	25.74	25.62	23.28
Highest CH	27.65	27.22	26.29	25.7	23.47
BW	20M (FULL)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	24.01	23.43	22.4	21.78	20.11
Middle CH	24.64	23.98	23.42	22.72	20.41
Highest CH	24.51	24.1	23.03	22.62	20.69
BW	40M (FULL)				
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM
Lowest CH	19.7	19.5	18.75	18.06	16.31
Middle CH	20.58	20.57	19.98	19.8	17.25
Highest CH	20.86	20.66	20.13	18.89	16.91
Limit	37dBm /1MHz				
Gain	16.32				
Result	Pass				

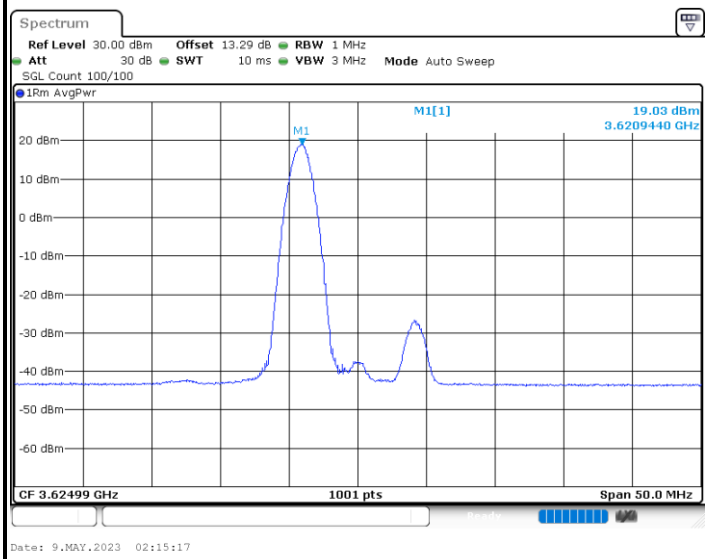
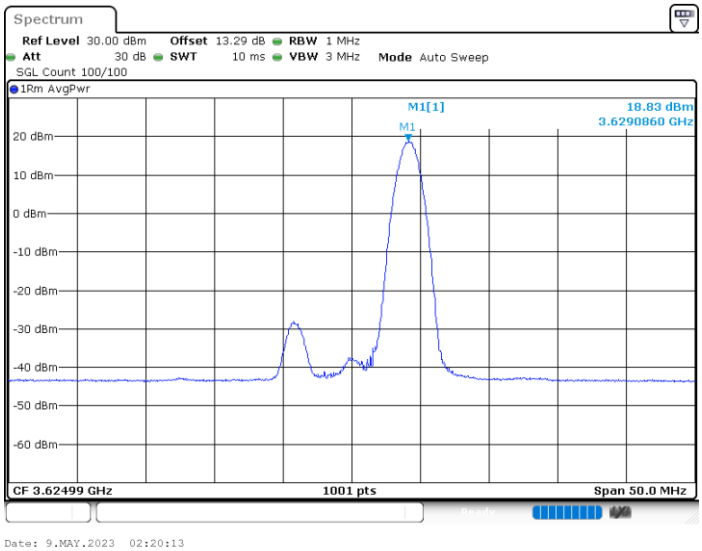
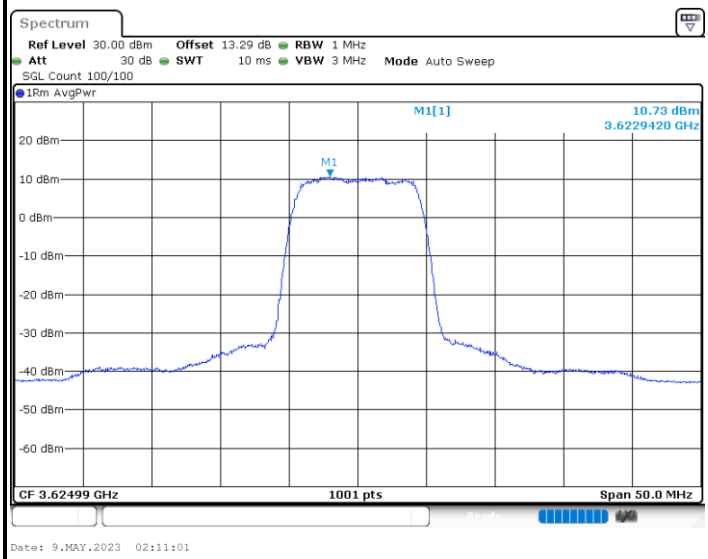
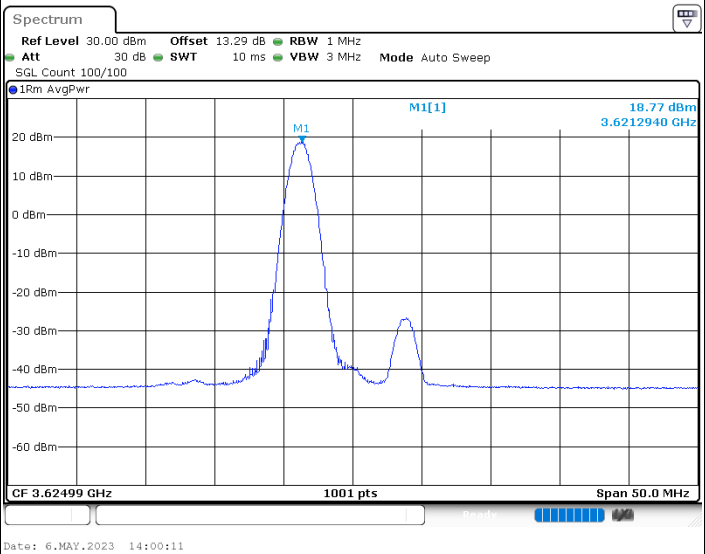
Conducted PSD

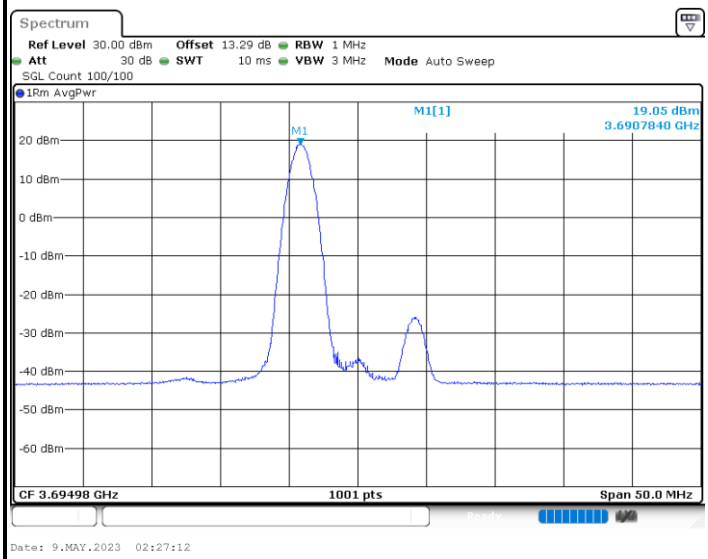
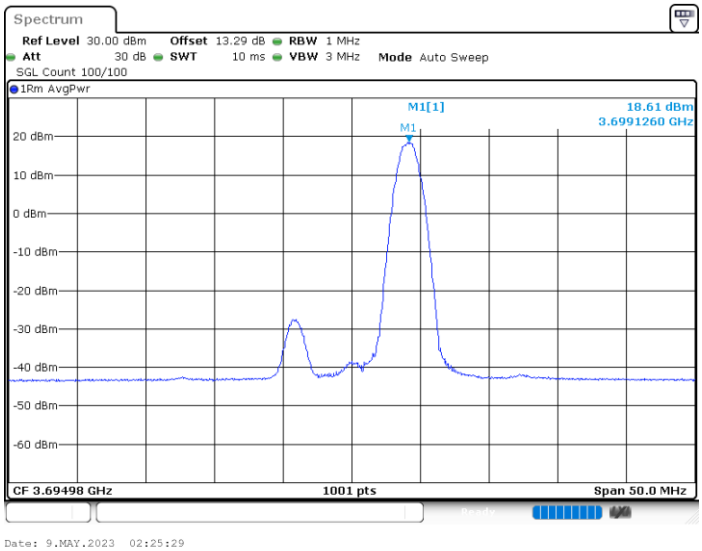
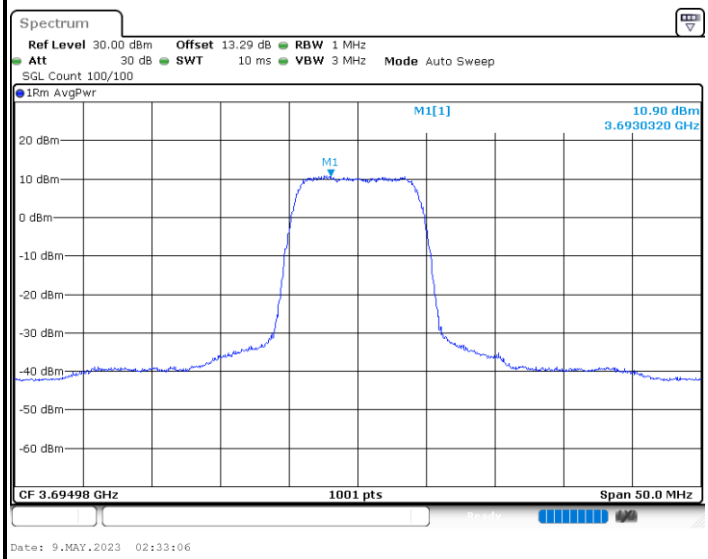
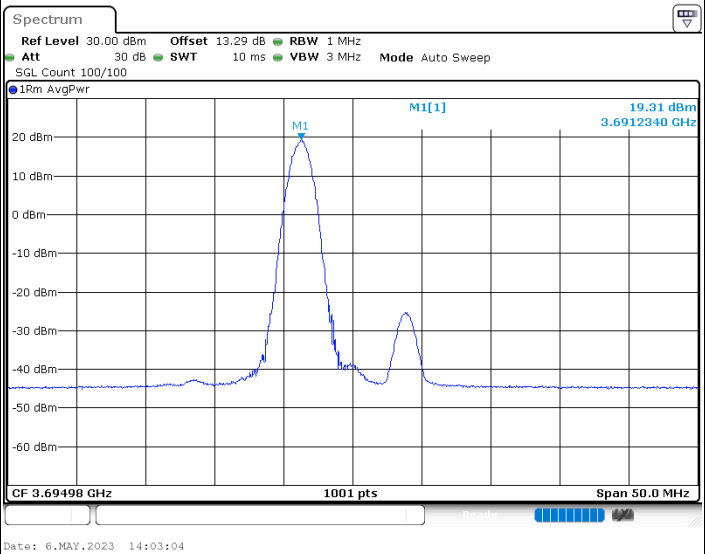
FR1 Part 96 n48 / 10MHz	
BPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

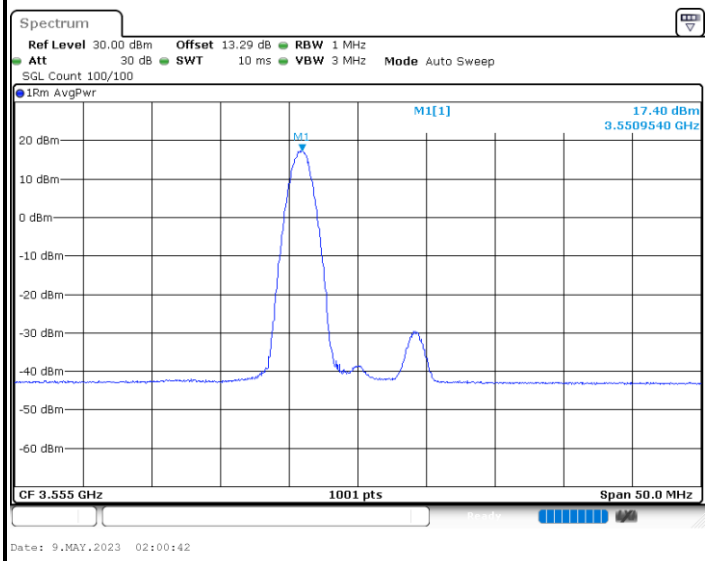
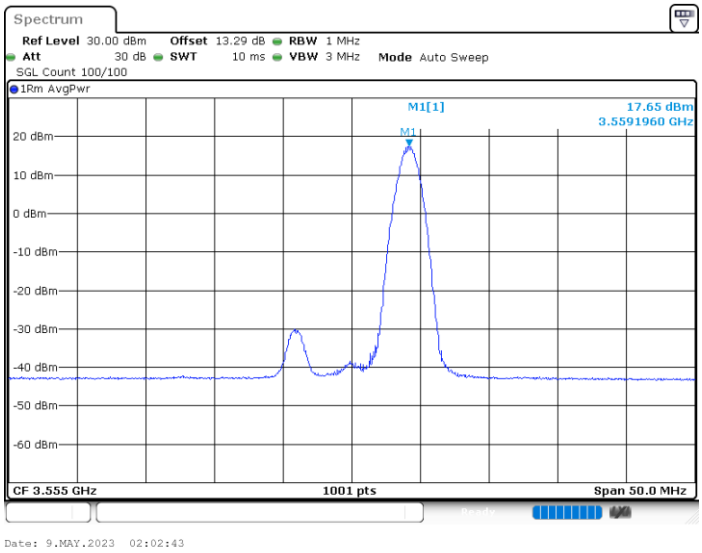
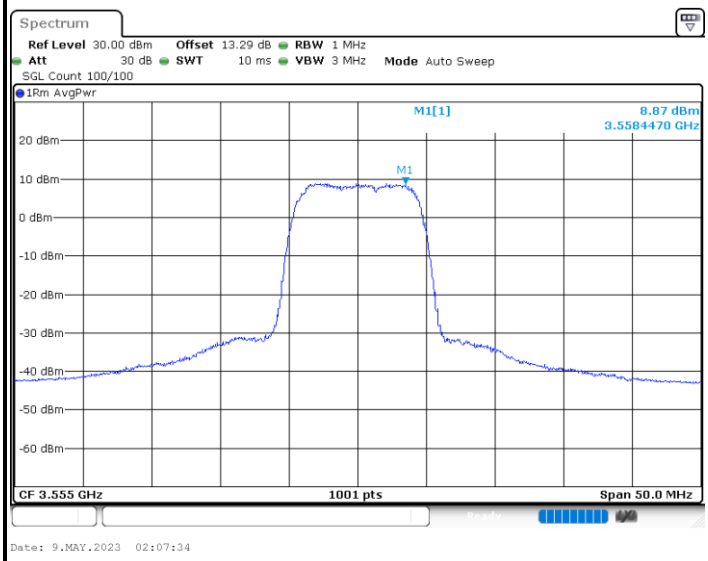
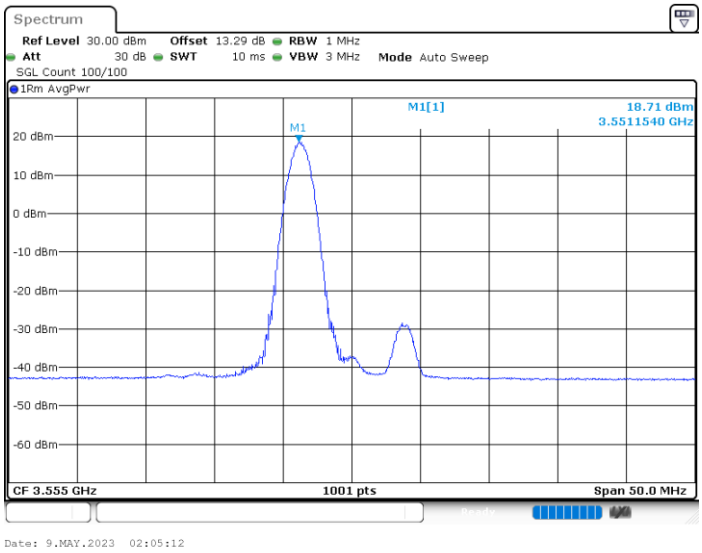
FR1 Part 96 n48 / 10MHz	
BPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

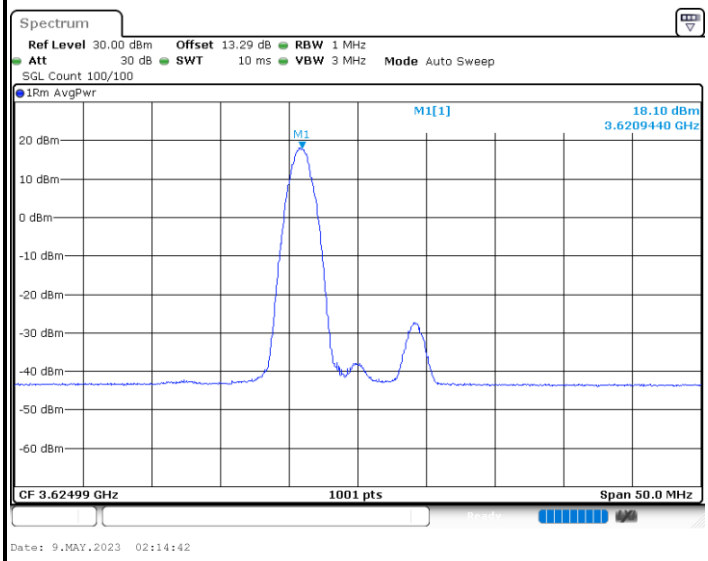
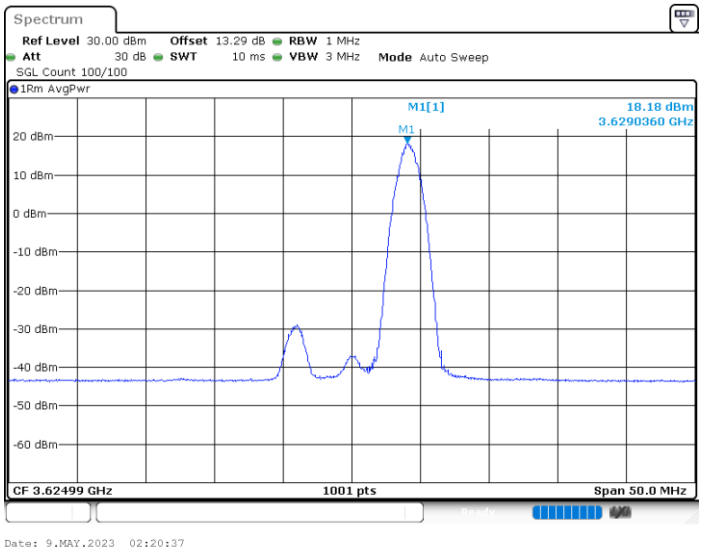
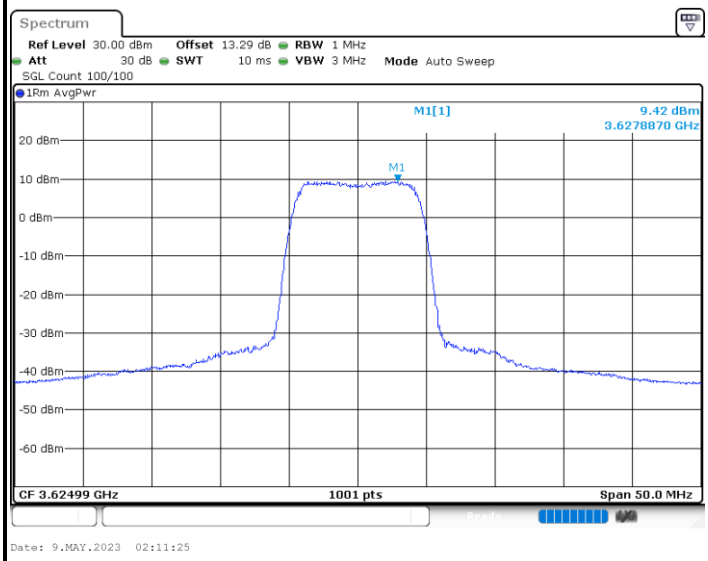
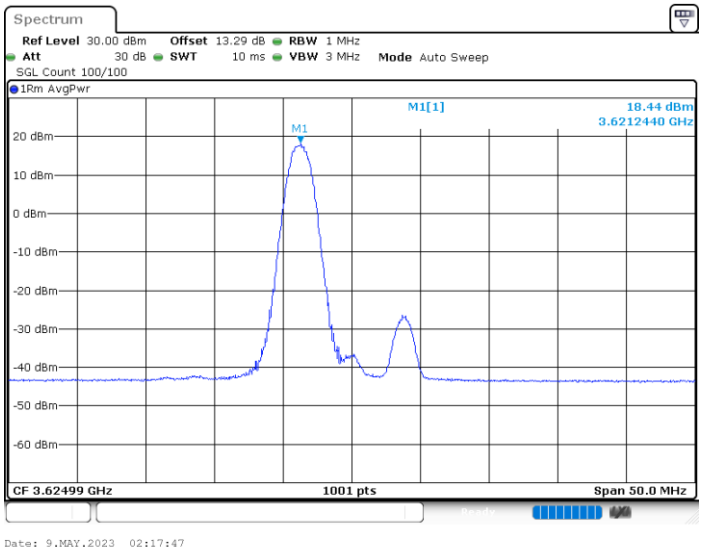
FR1 Part 96 n48 / 10MHz	
BPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

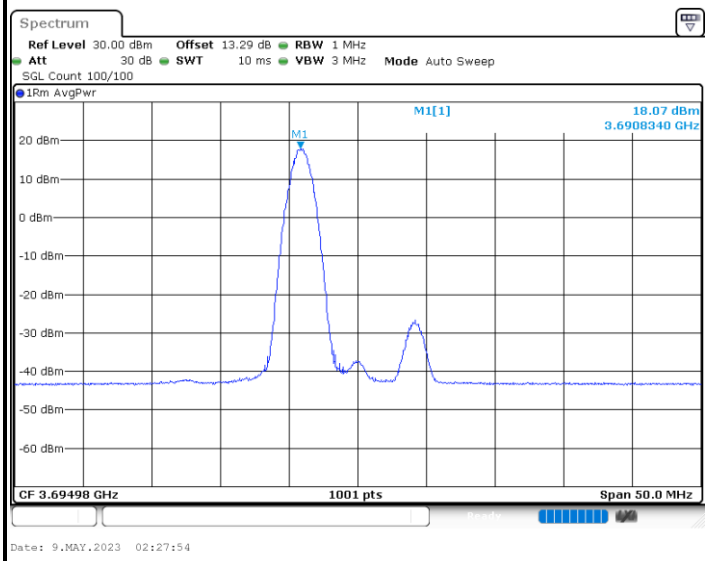
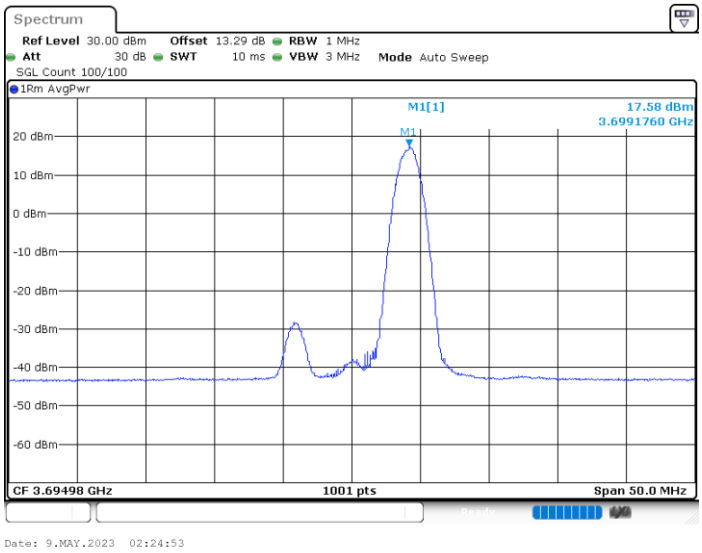
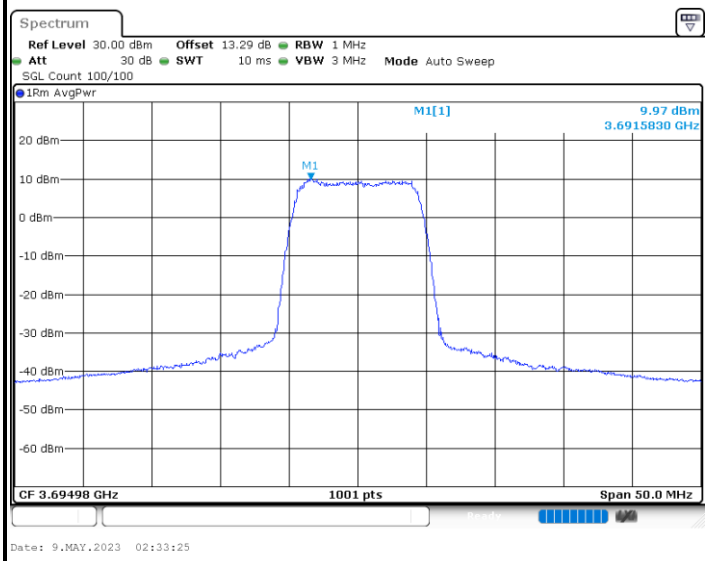
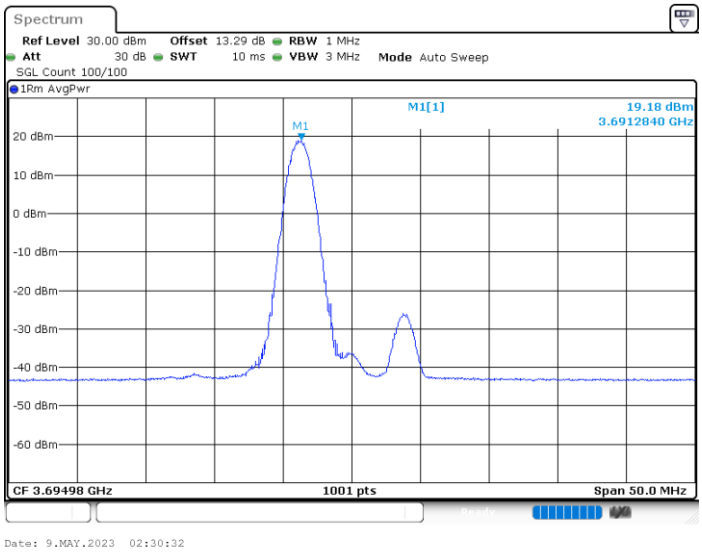
FR1 Part 96 n48 / 10MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

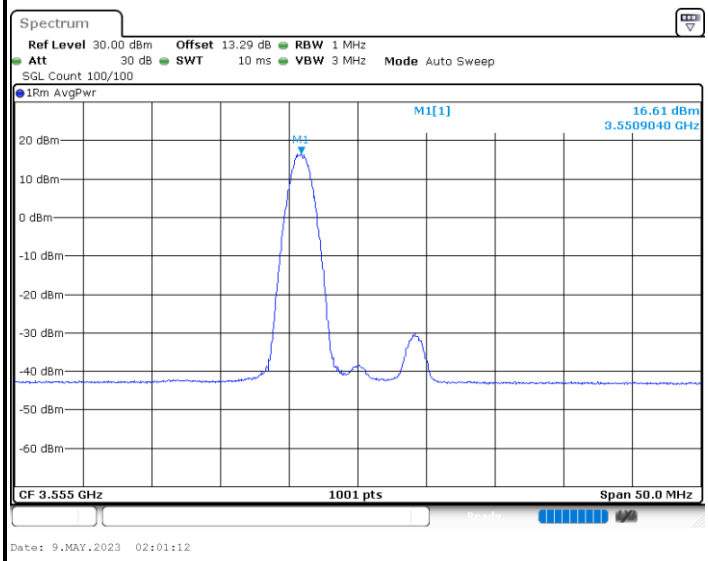
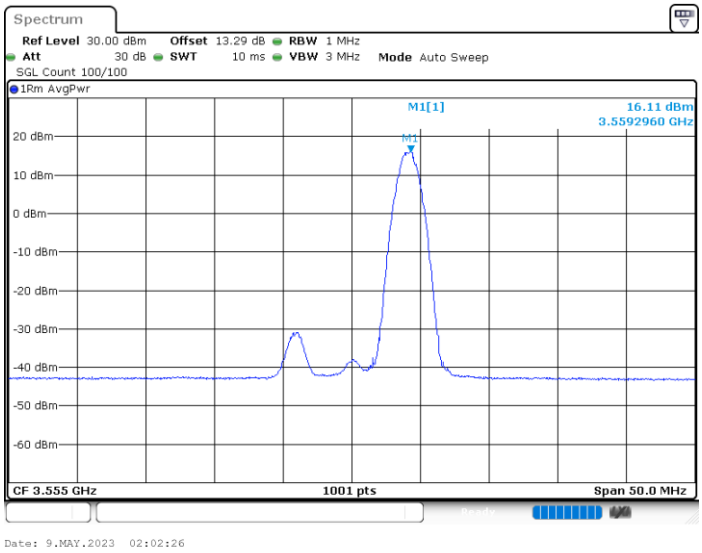
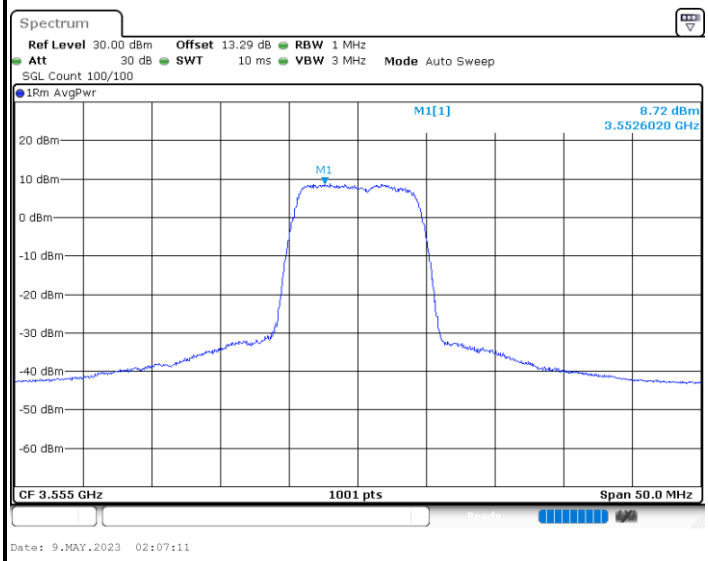
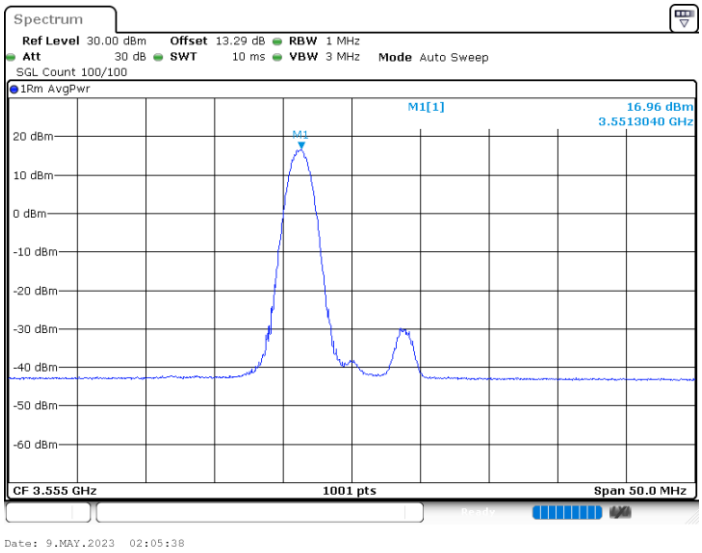
FR1 Part 96 n48 / 10MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

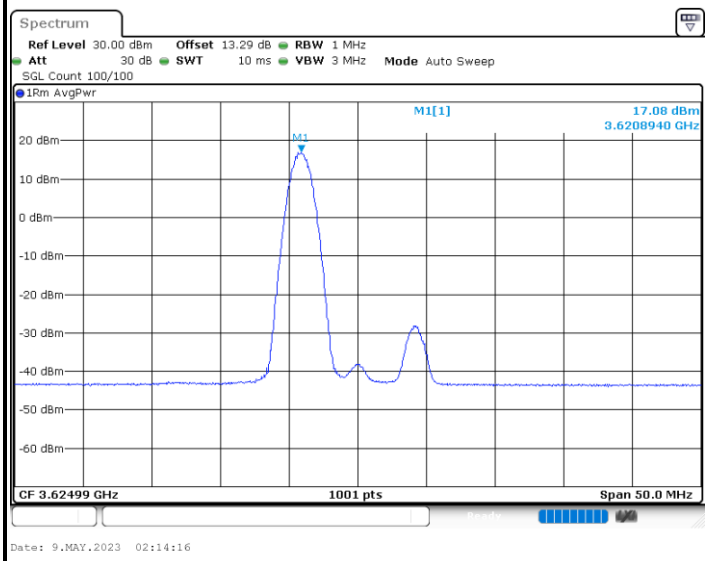
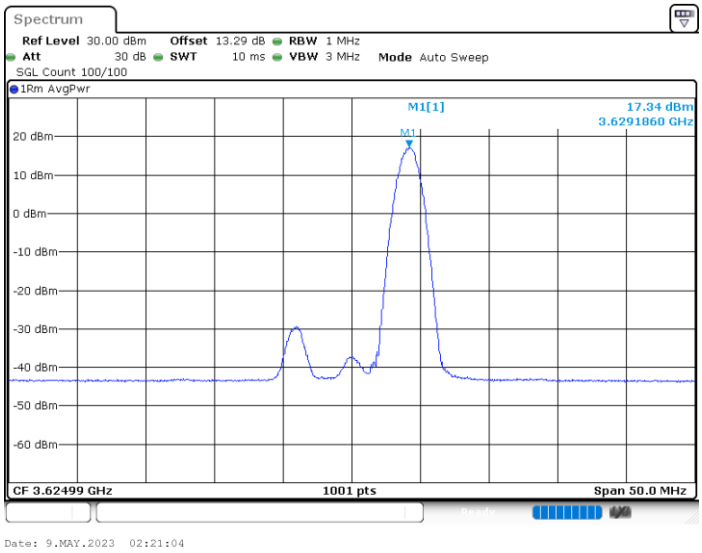
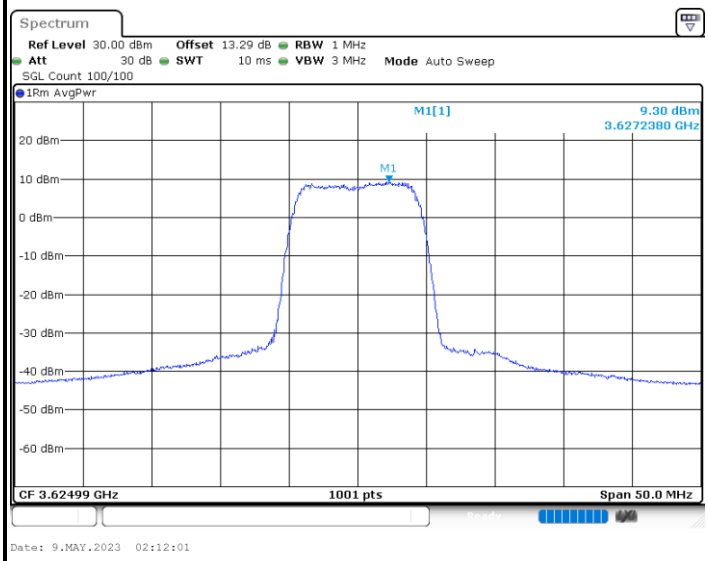
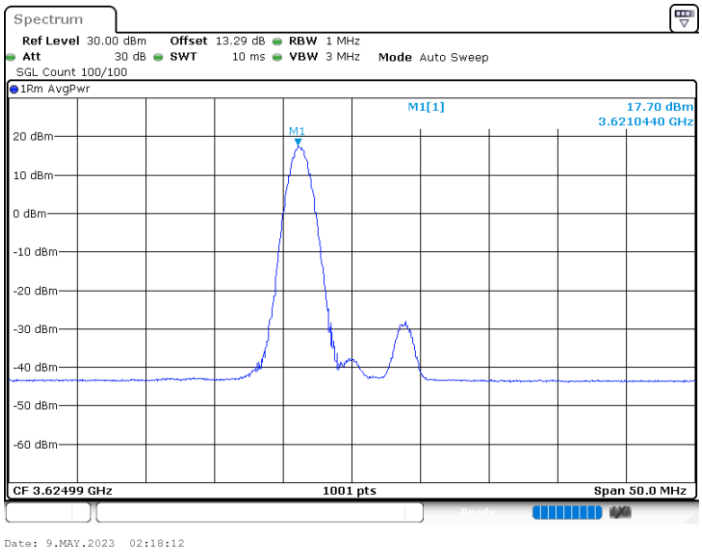
FR1 Part 96 n48 / 10MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

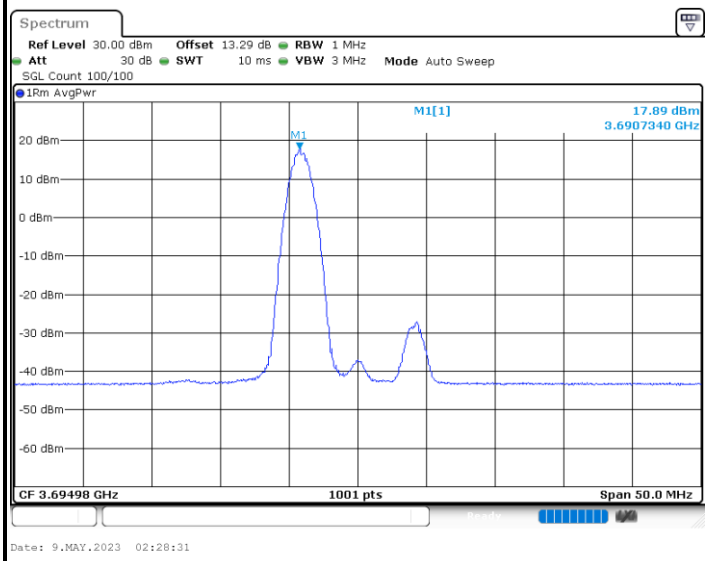
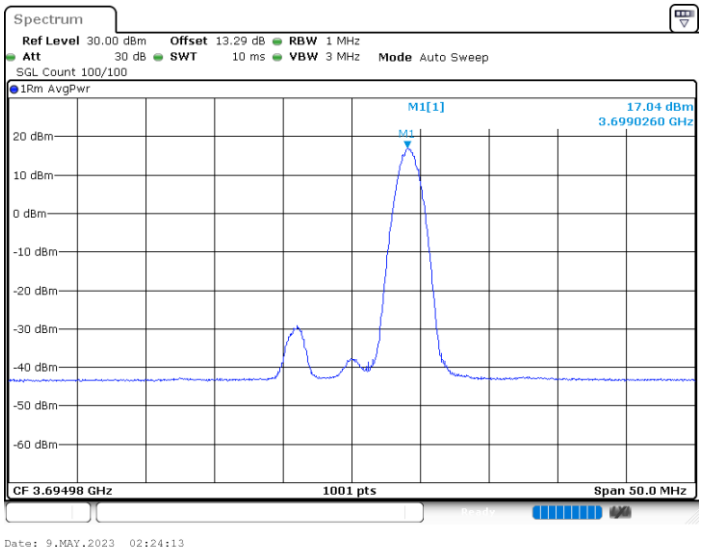
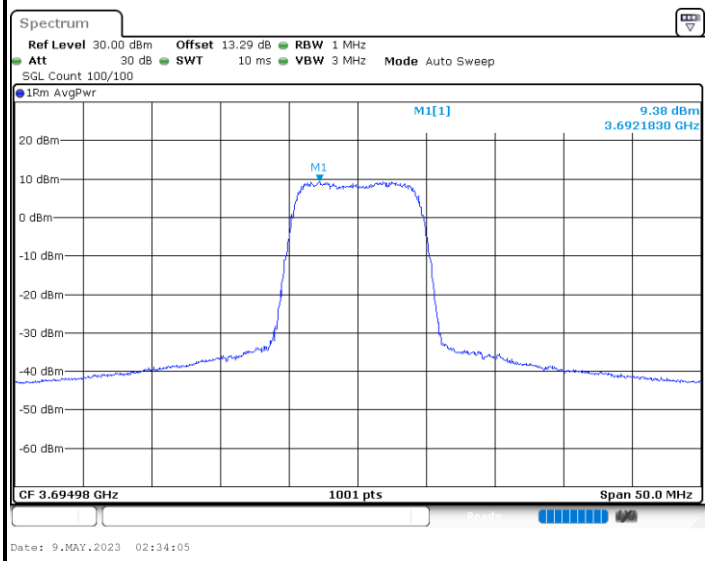
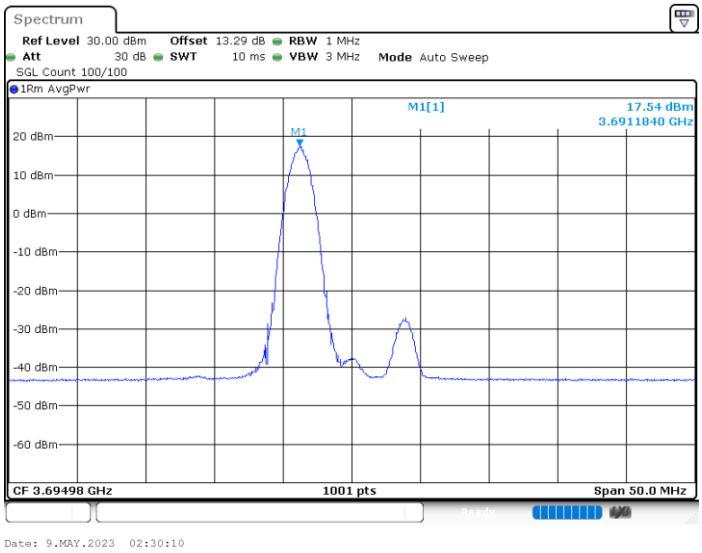
FR1 Part 96 n48 / 10MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

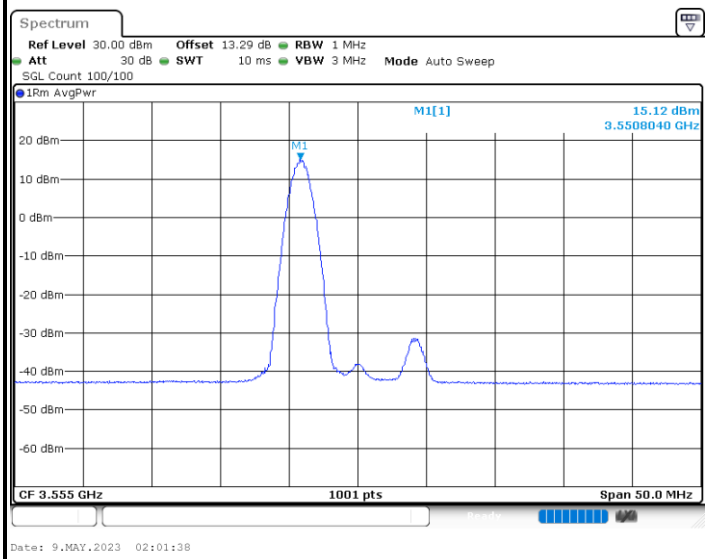
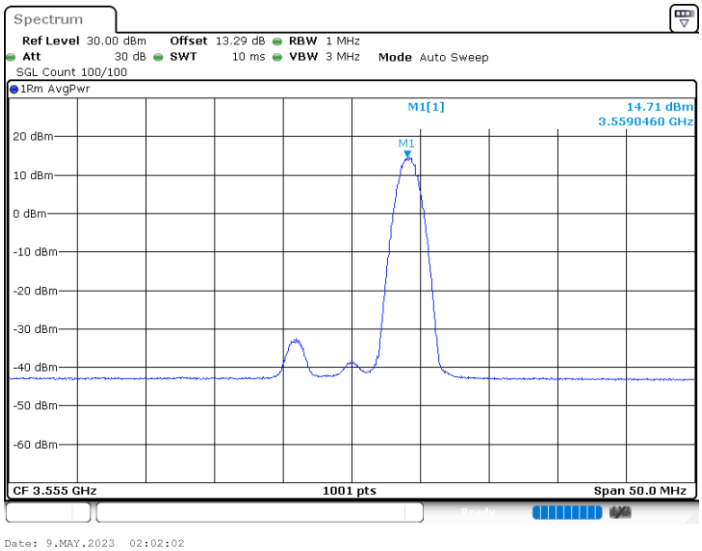
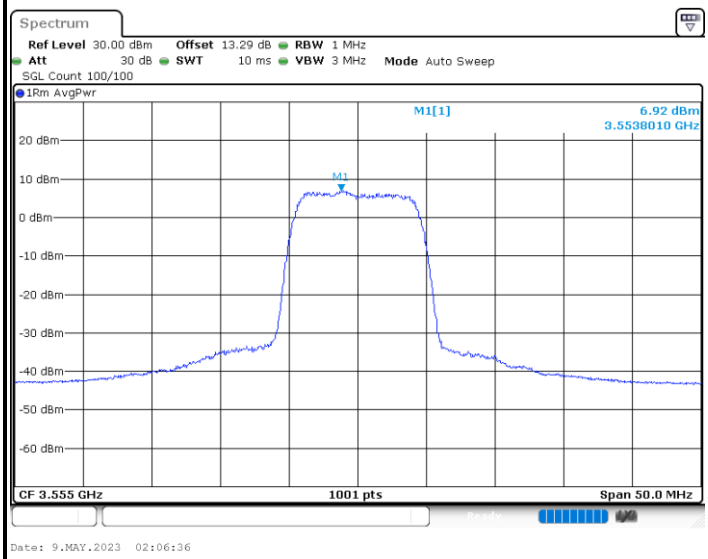
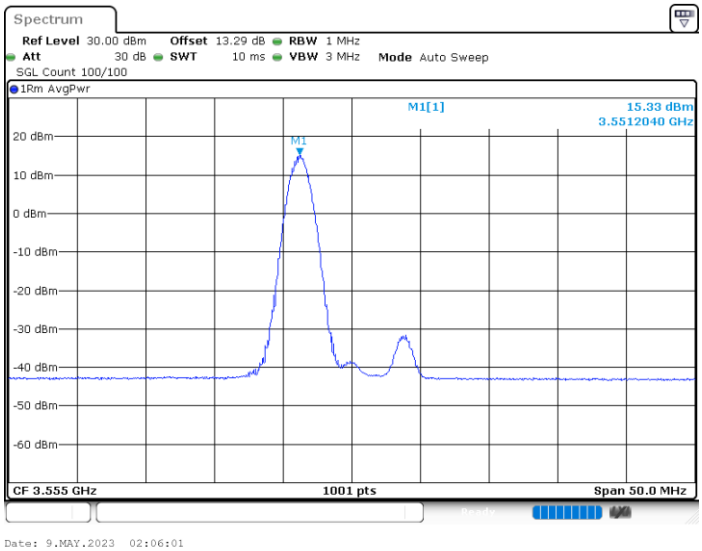
FR1 Part 96 n48 / 10MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

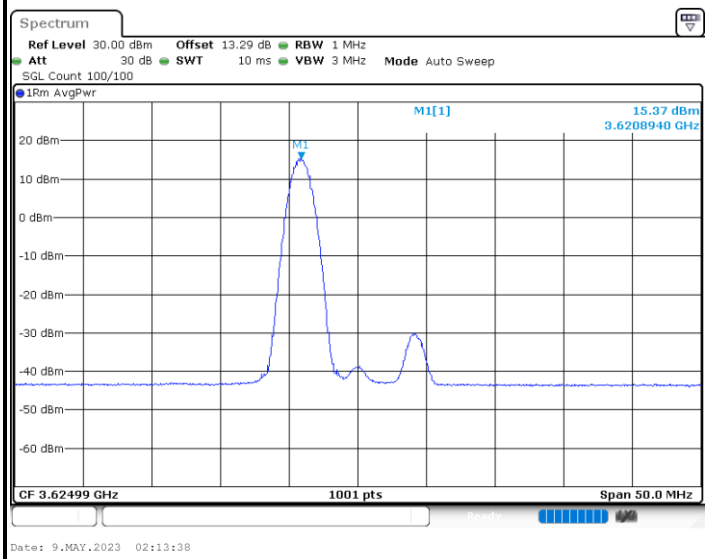
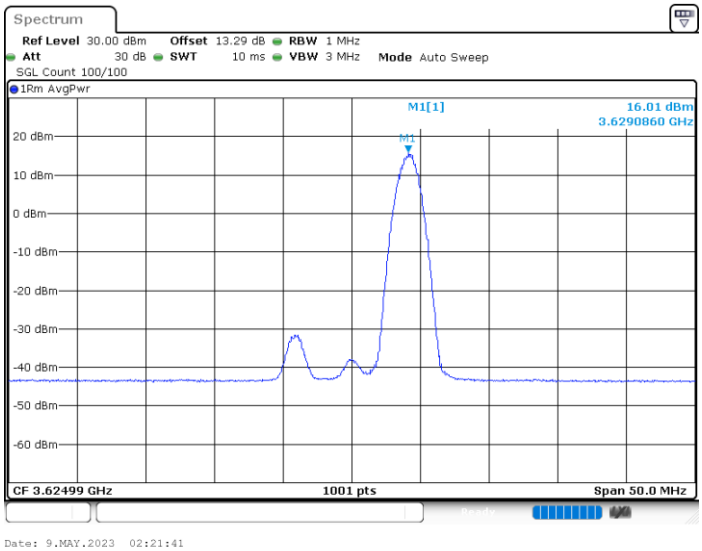
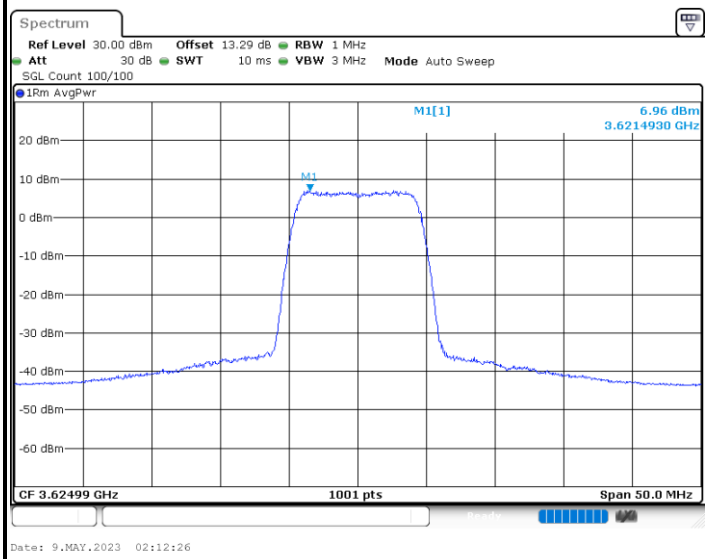
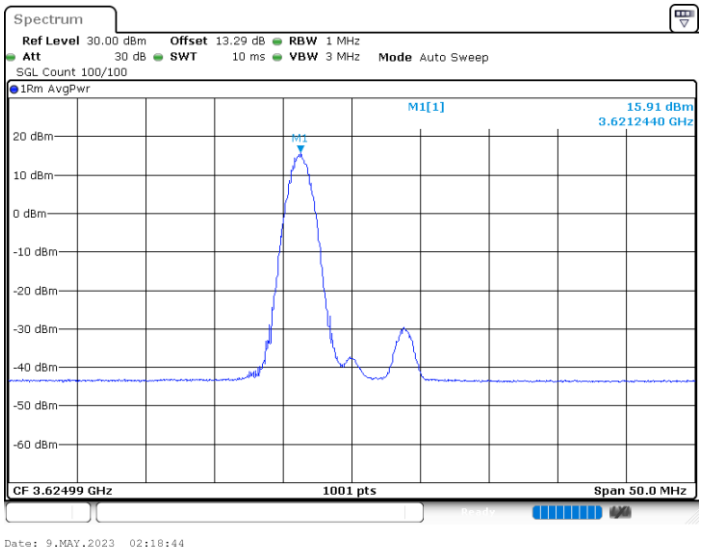
FR1 Part 96 n48 / 10MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

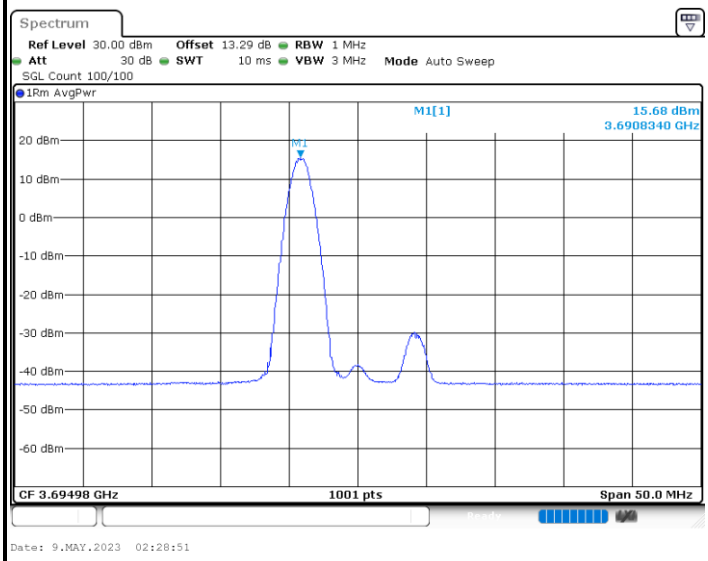
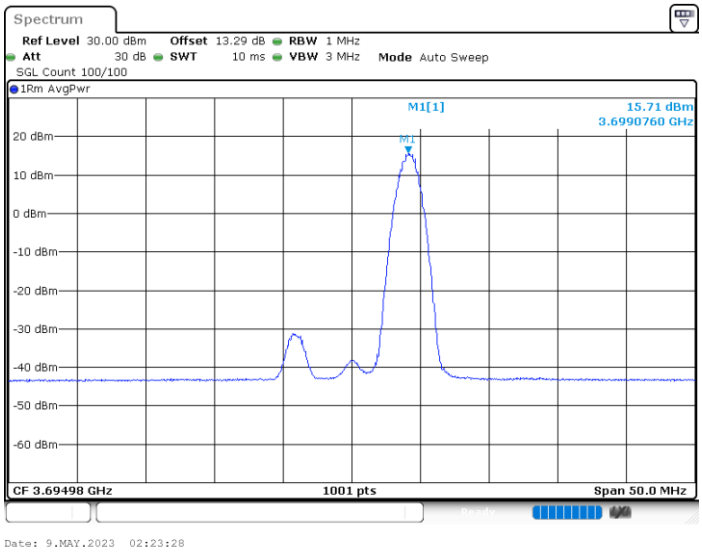
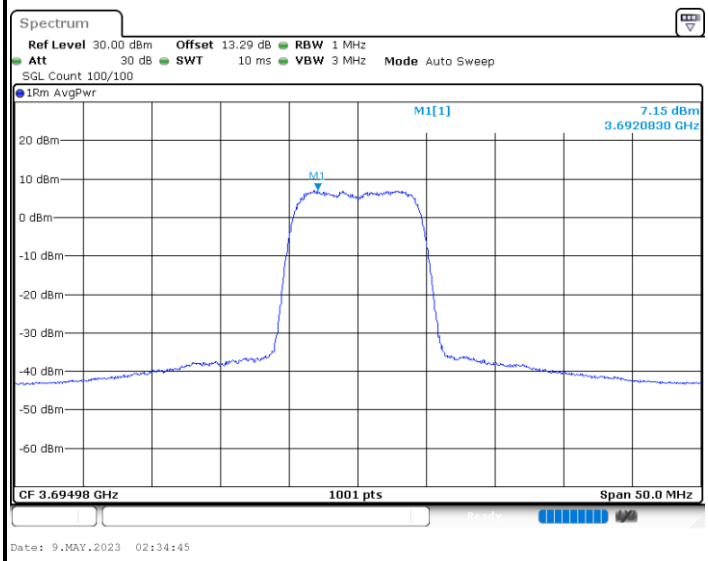
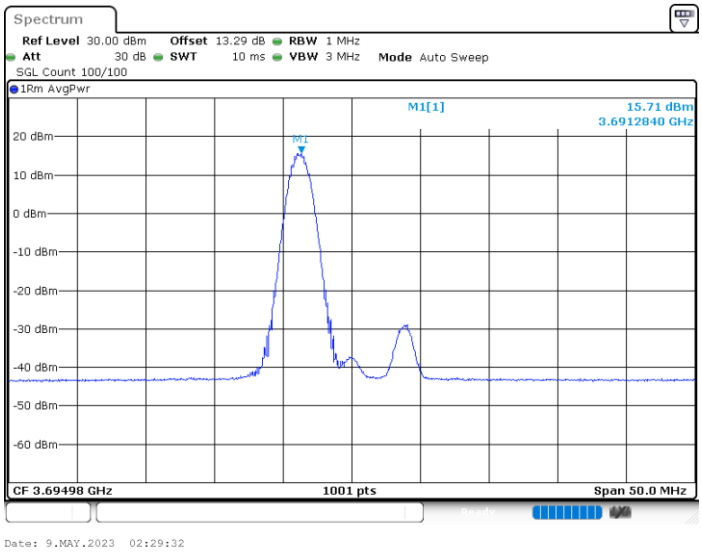
FR1 Part 96 n48 / 10MHz	
64QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

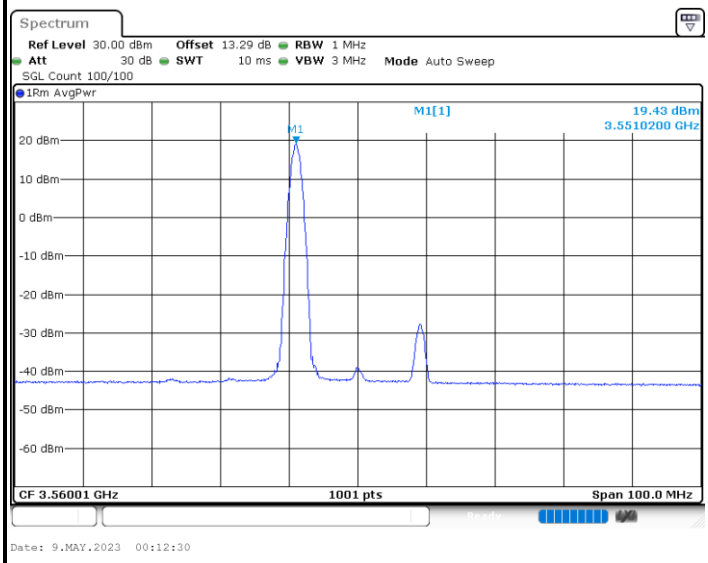
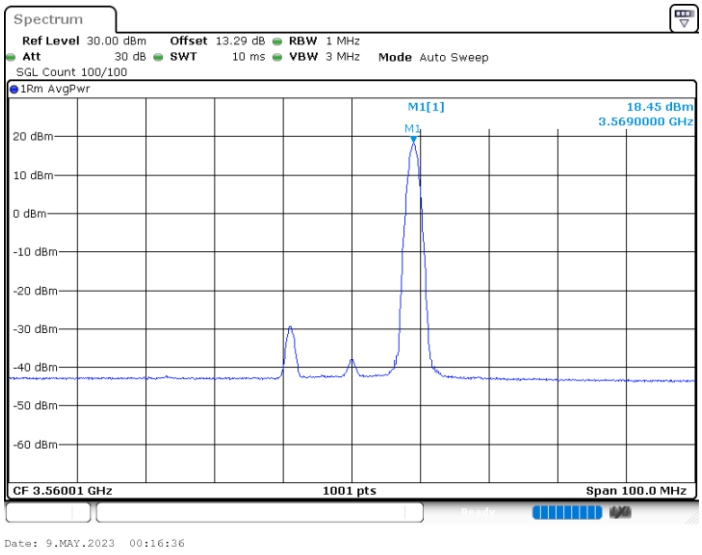
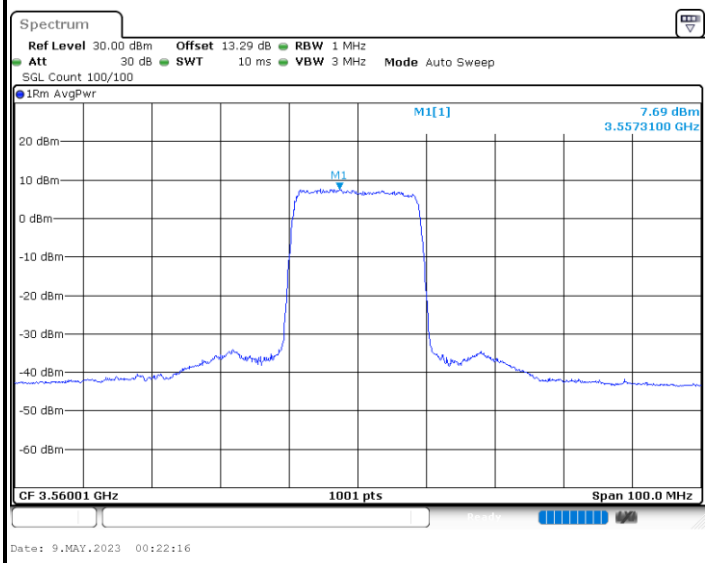
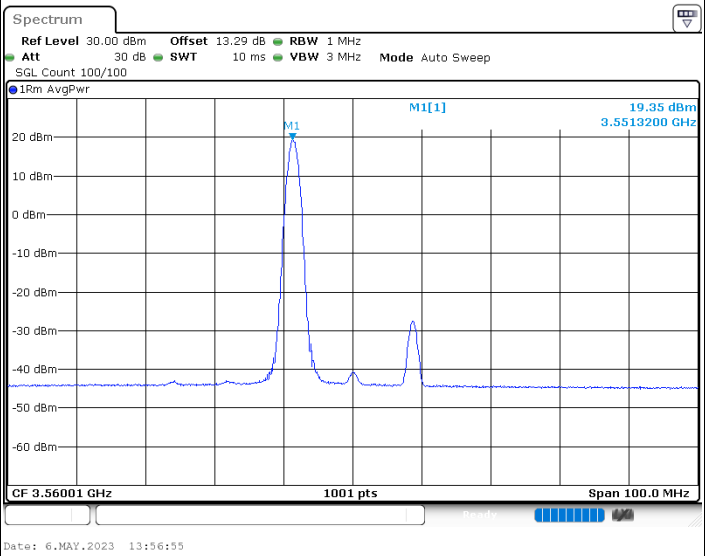
FR1 Part 96 n48 / 10MHz	
64QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

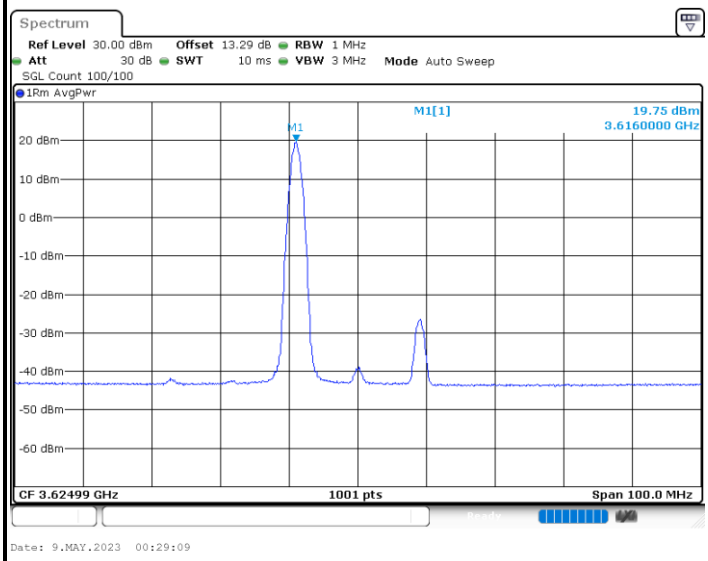
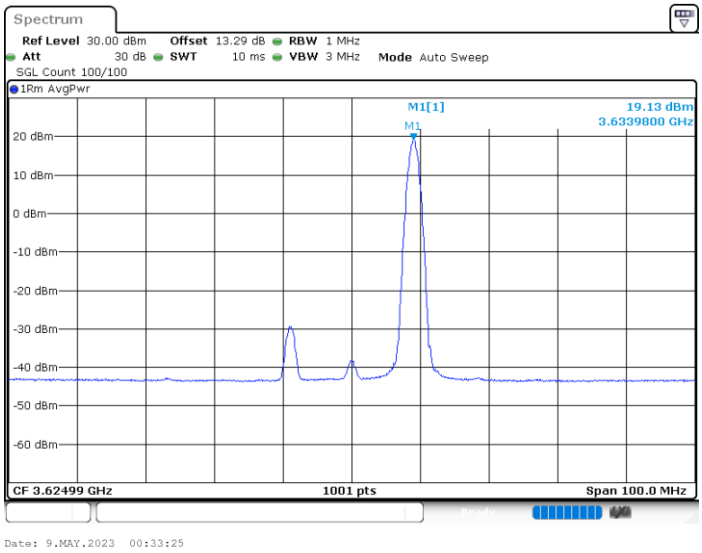
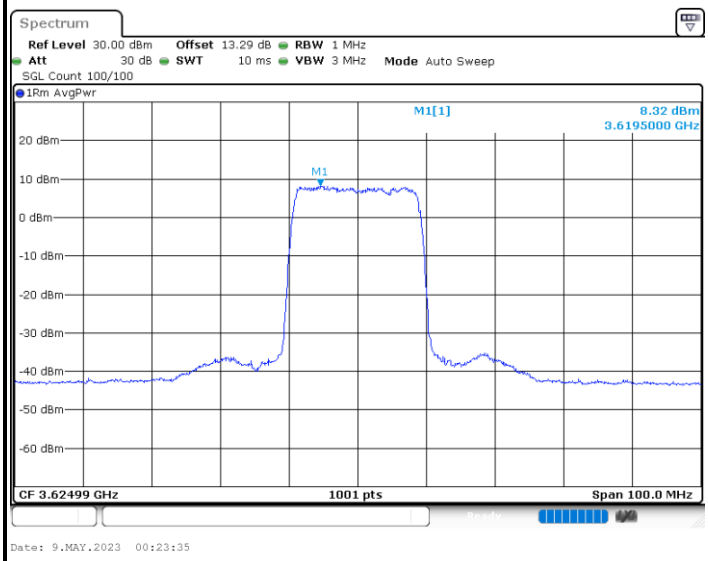
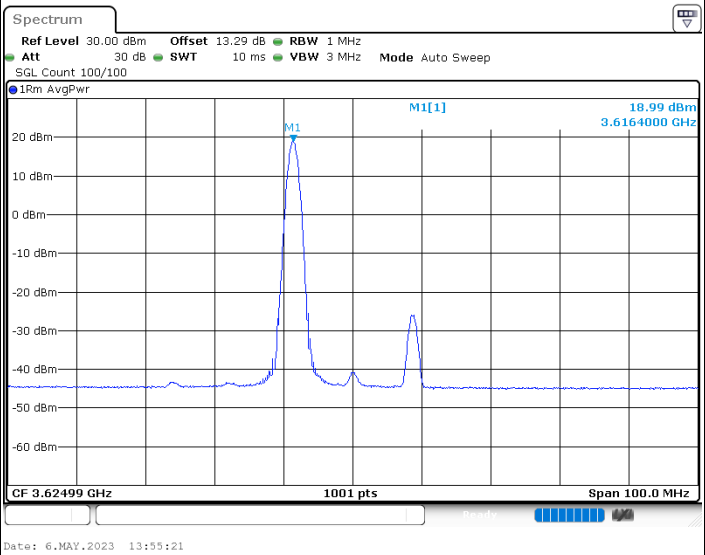
FR1 Part 96 n48 / 10MHz	
64QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

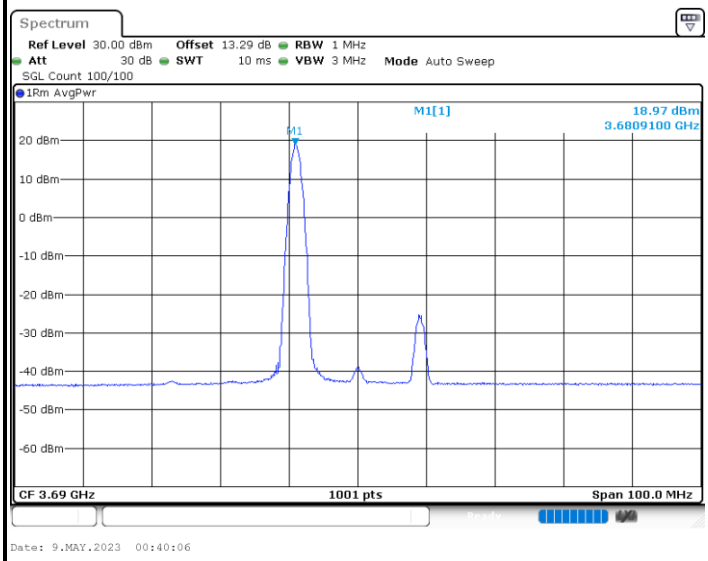
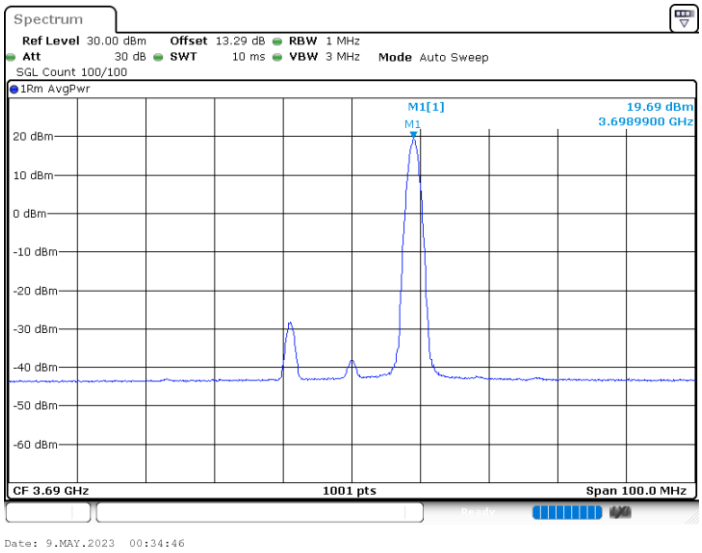
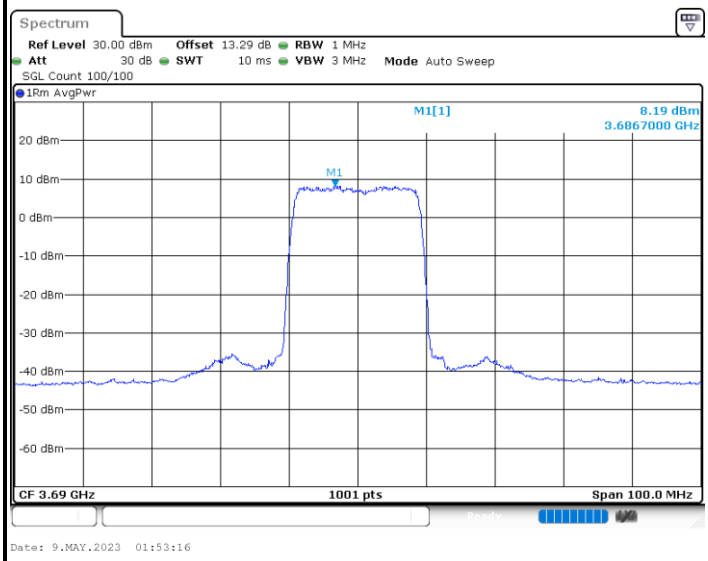
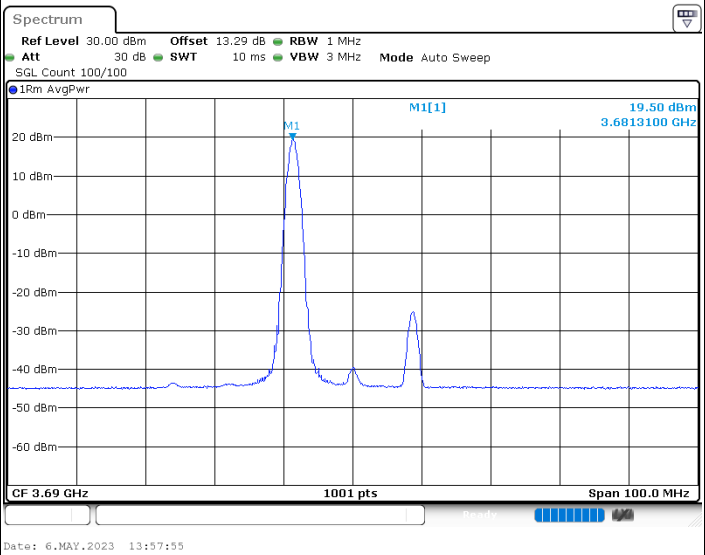
FR1 Part 96 n48 / 10MHz	
256QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

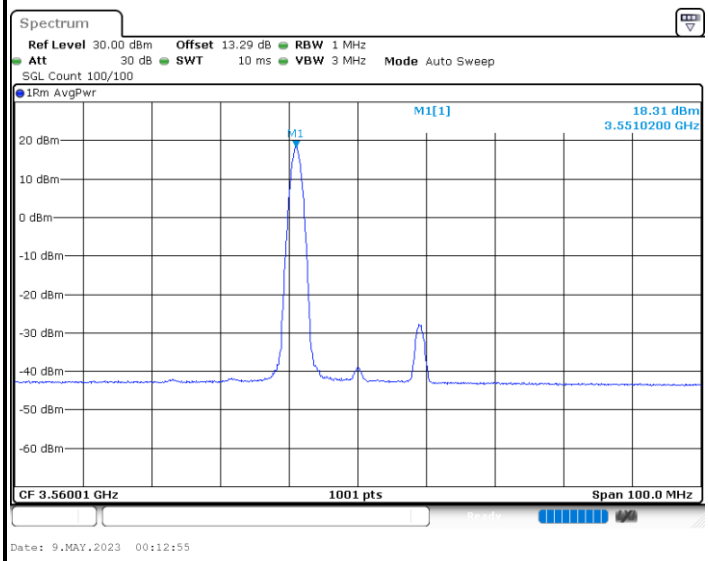
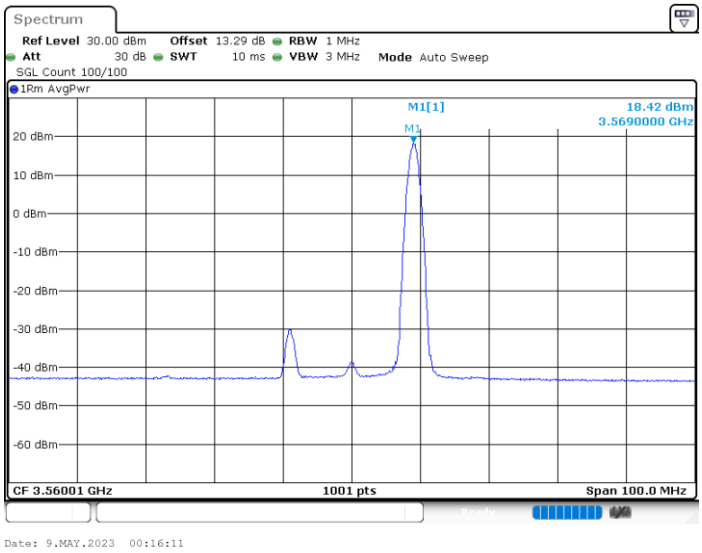
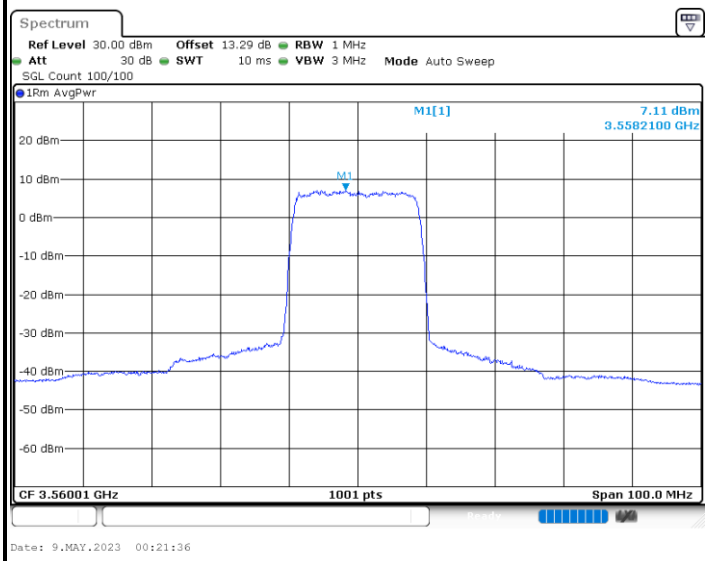
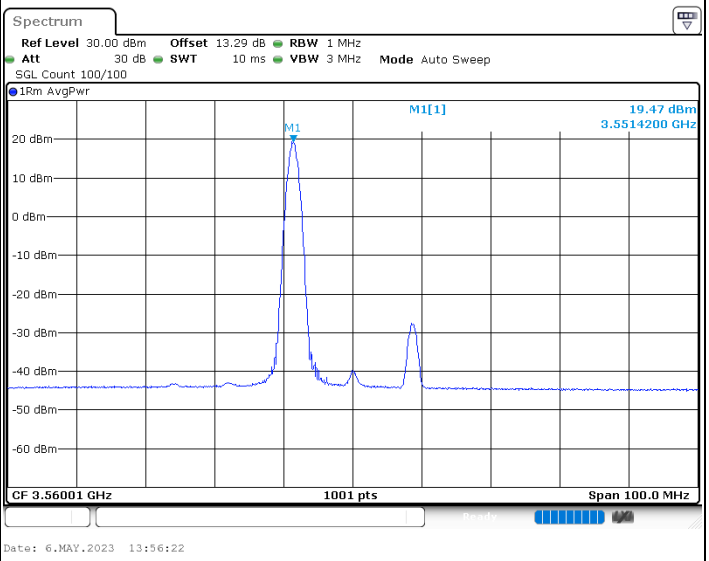
FR1 Part 96 n48 / 10MHz	
256QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

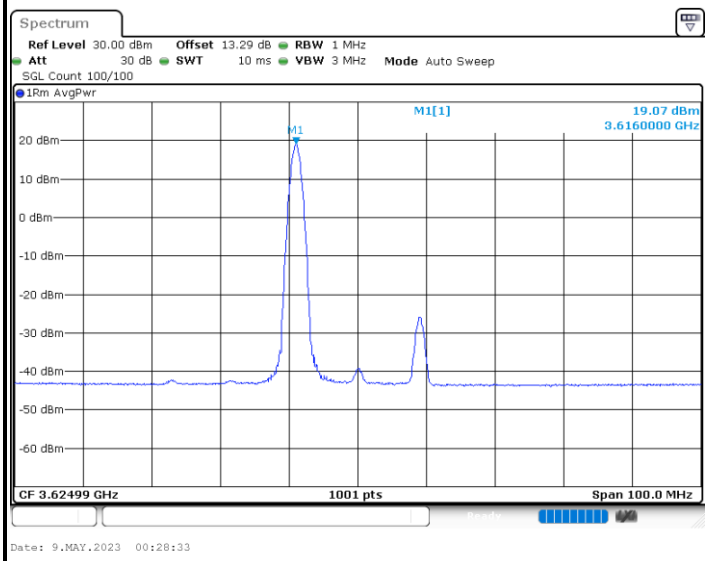
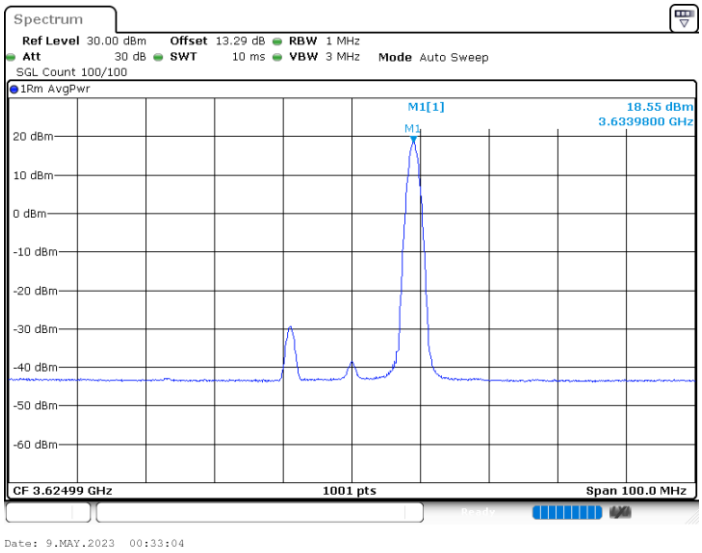
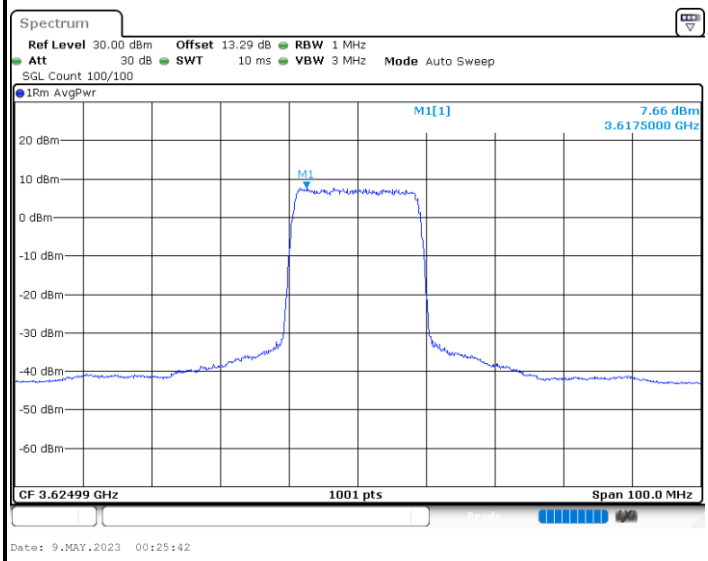
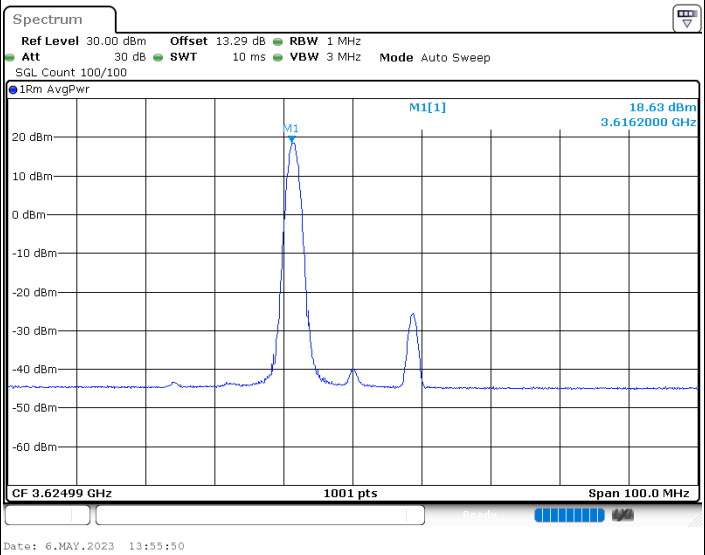
FR1 Part 96 n48 / 10MHz	
256QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

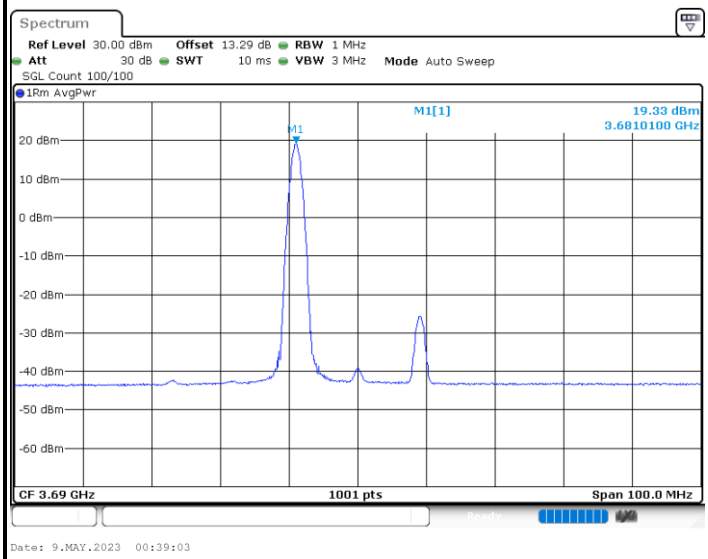
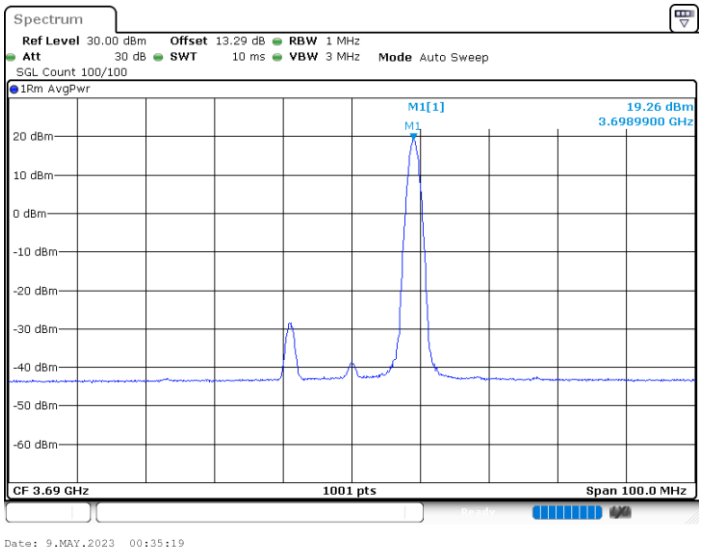
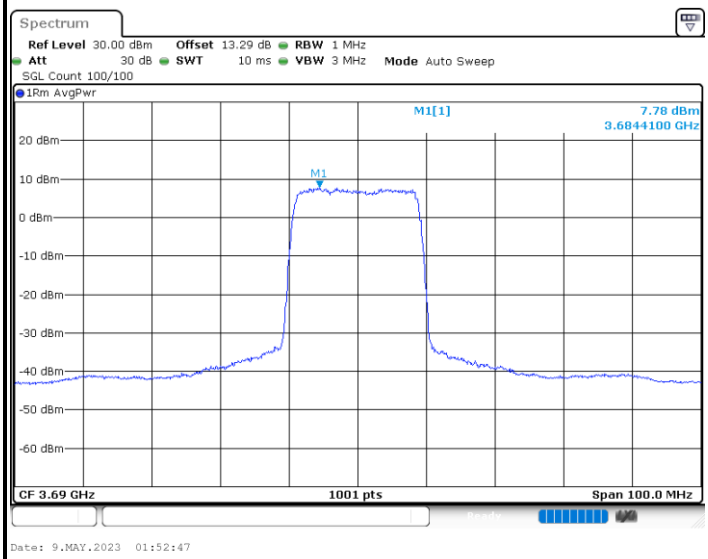
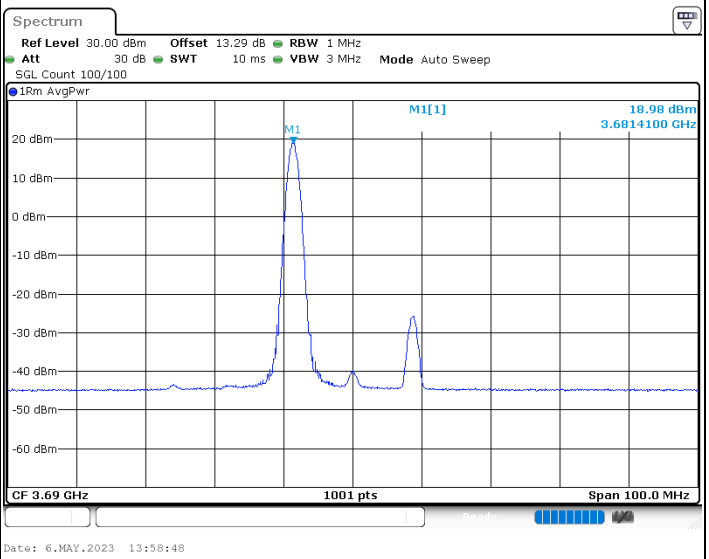
FR1 Part 96 n48 / 20MHz	
BPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

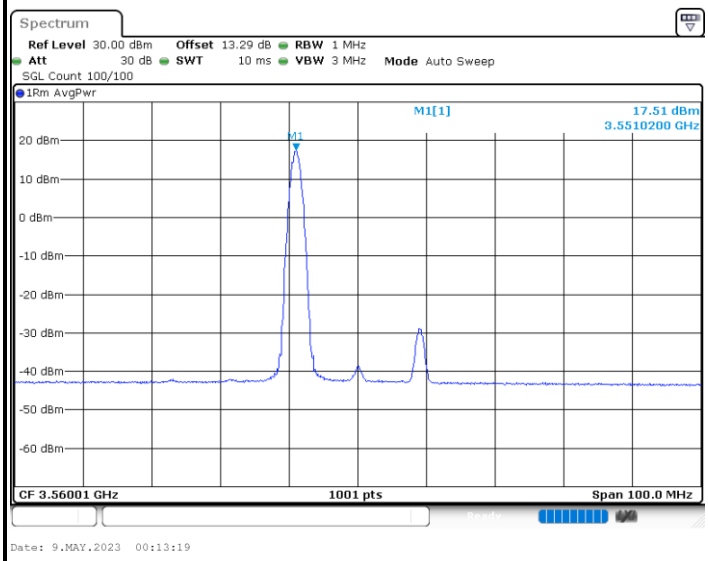
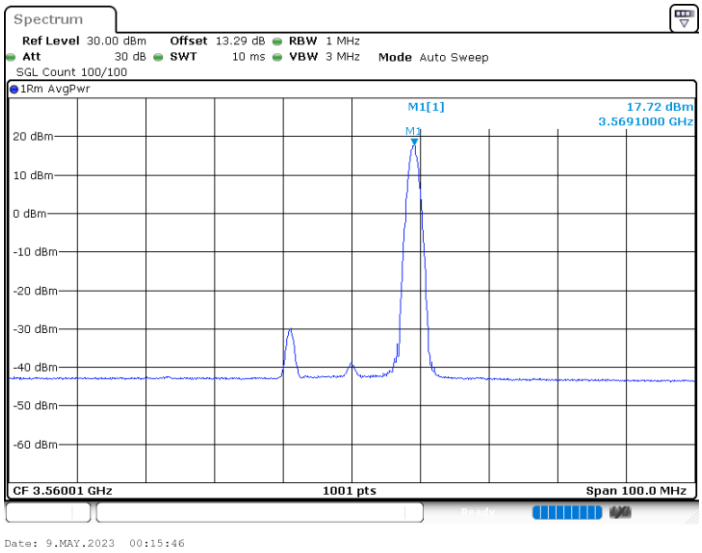
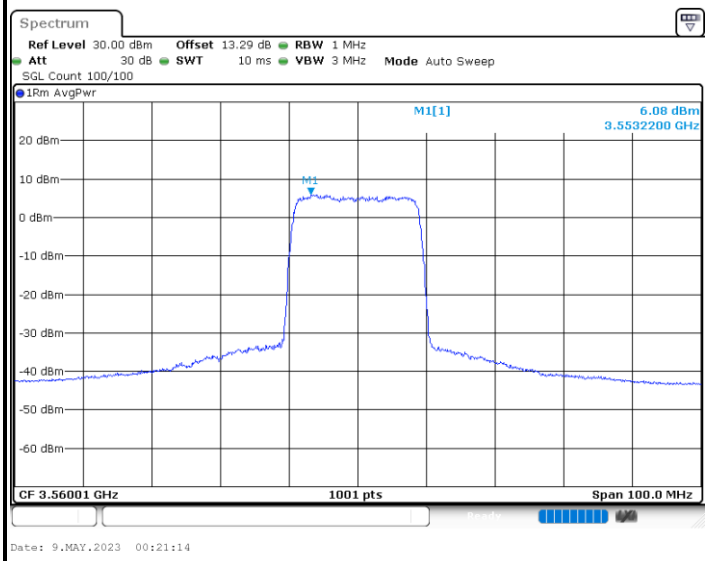
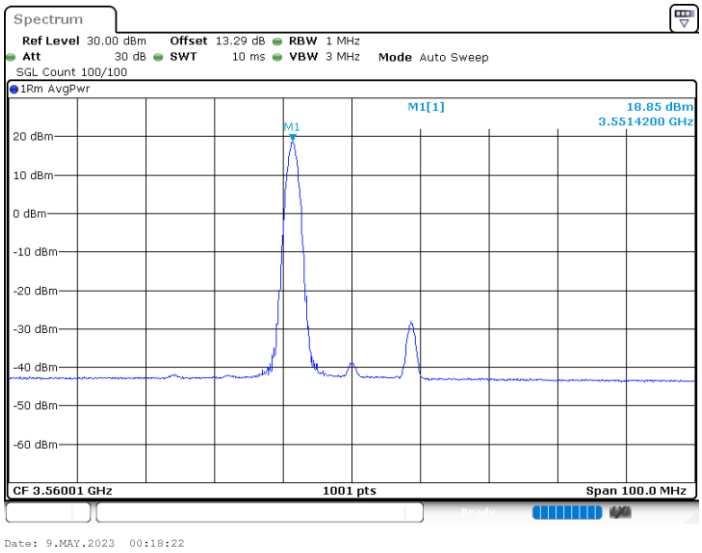
FR1 Part 96 n48 / 20MHz	
BPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

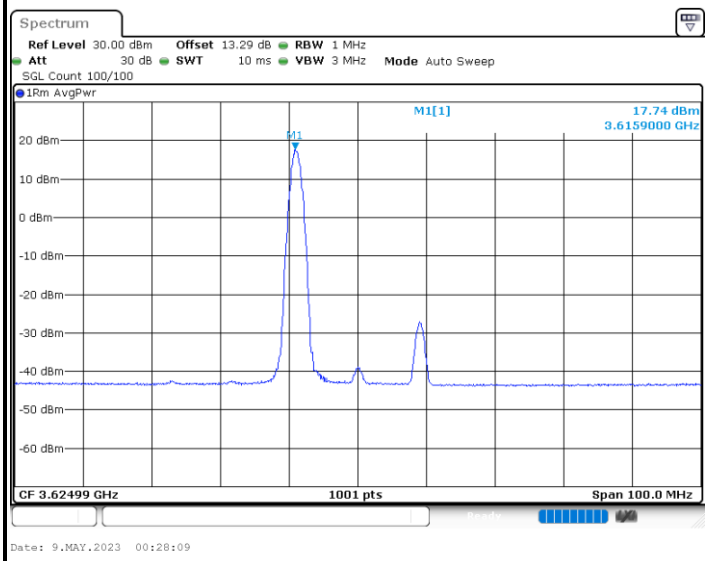
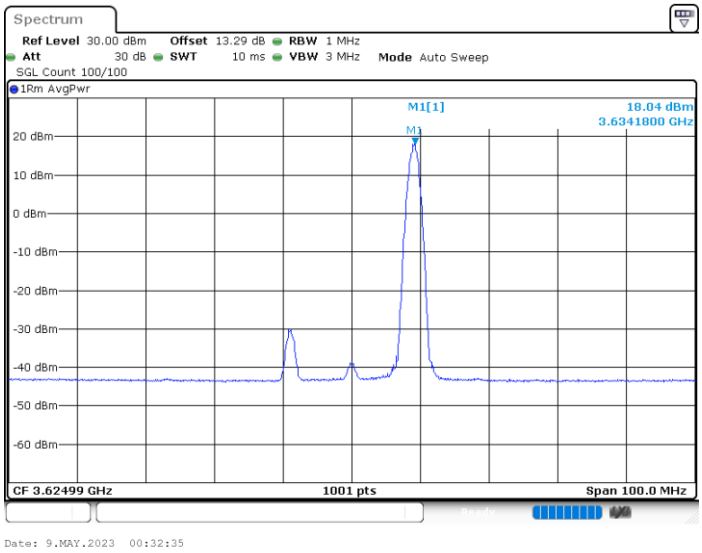
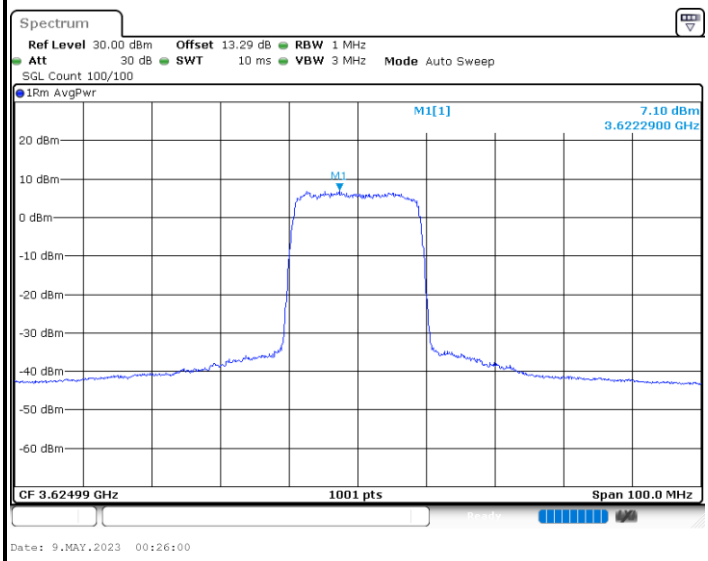
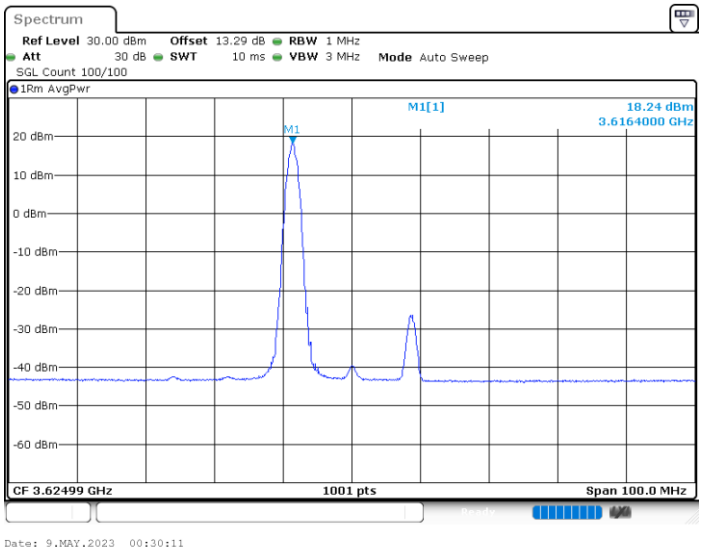
FR1 Part 96 n48 / 20MHz	
BPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

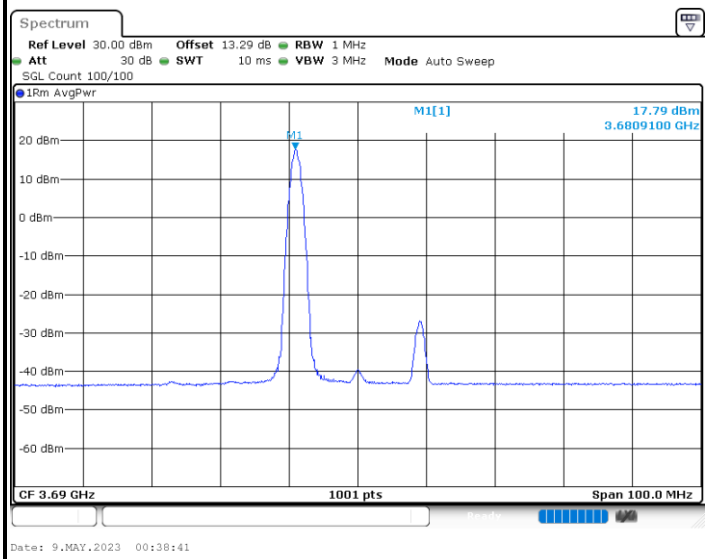
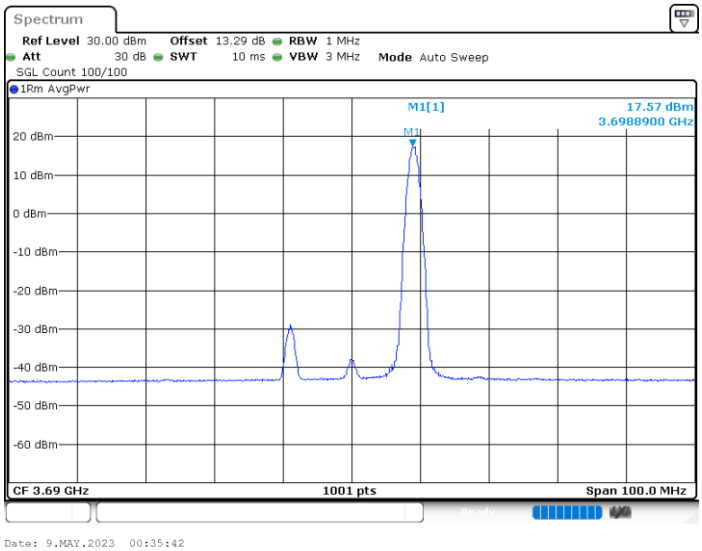
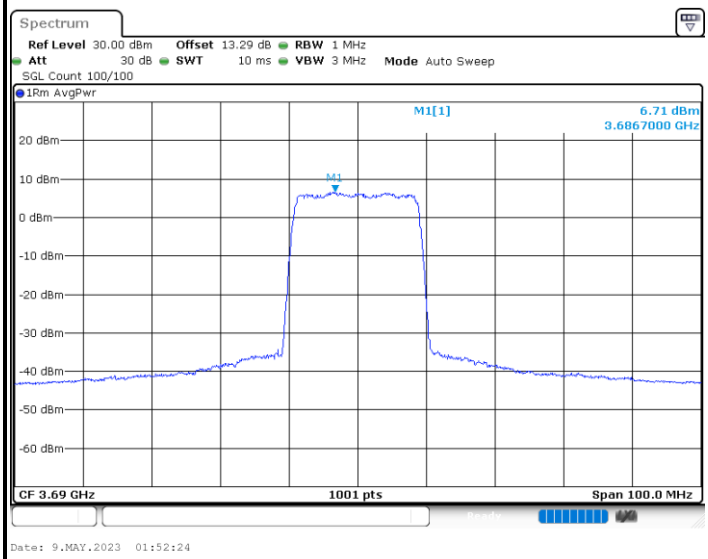
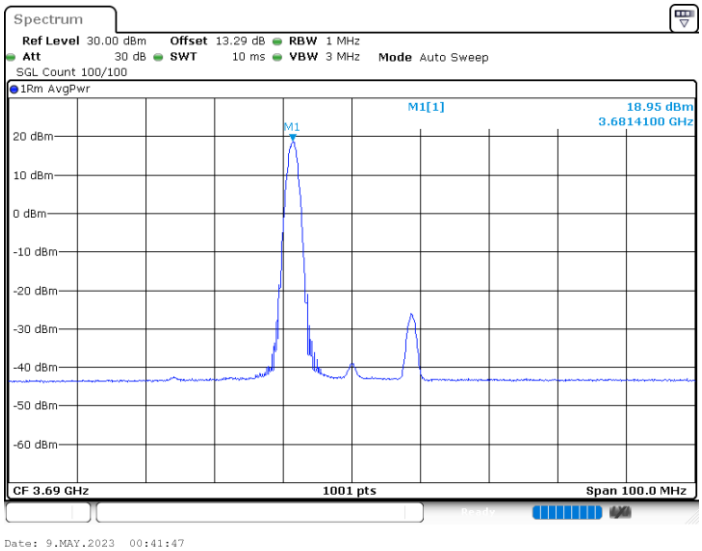
FR1 Part 96 n48 / 20MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

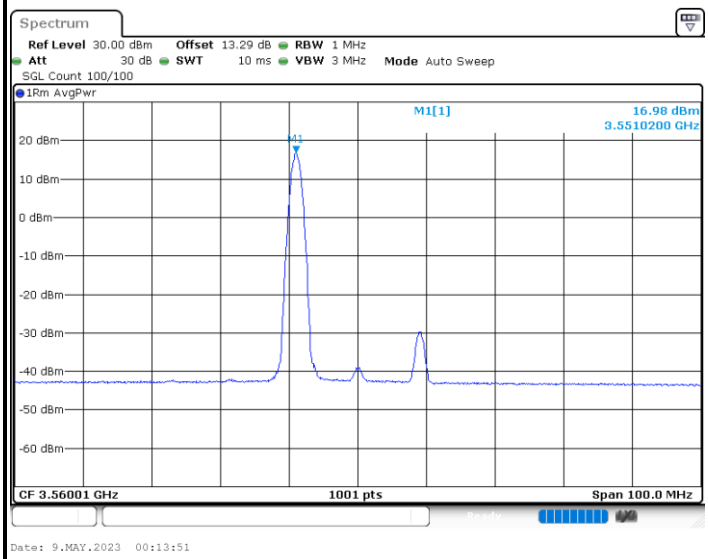
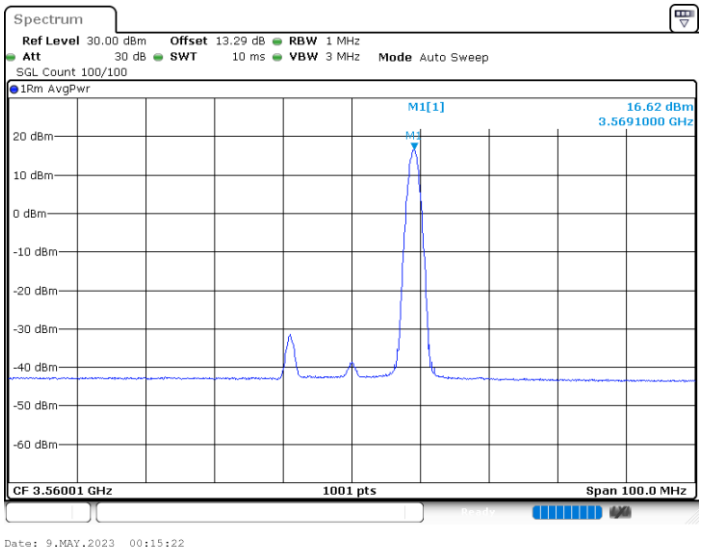
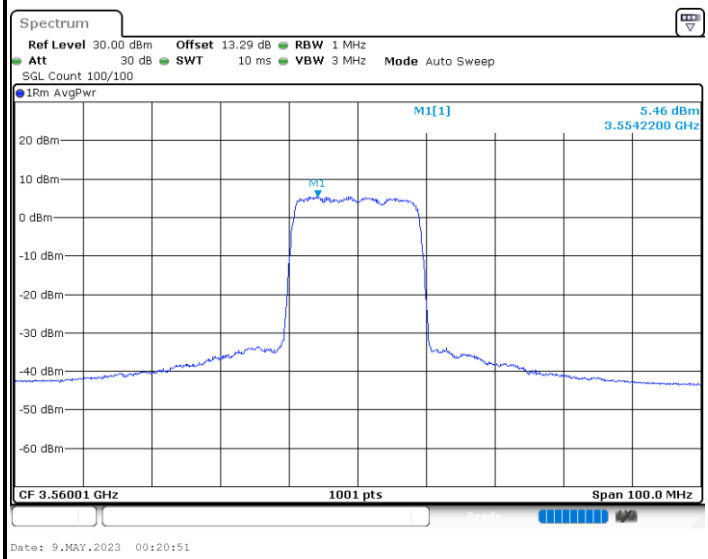
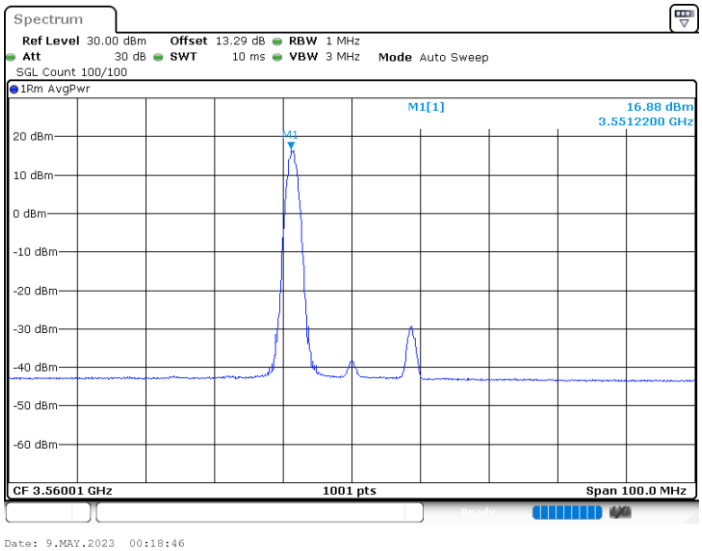
FR1 Part 96 n48 / 20MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

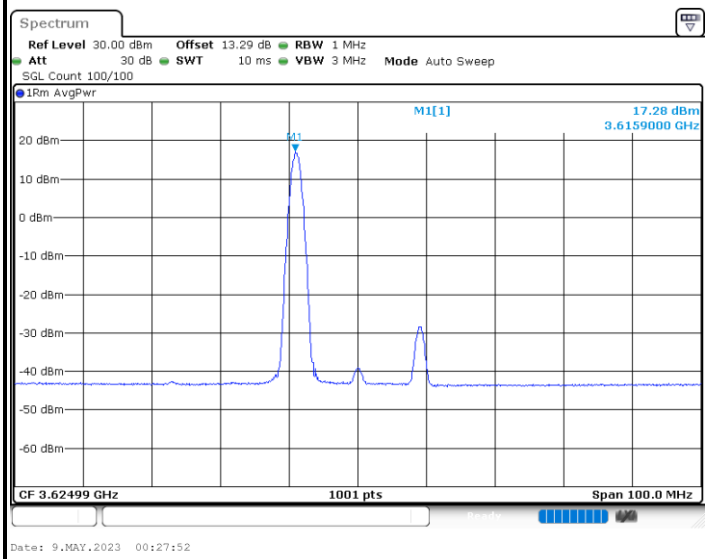
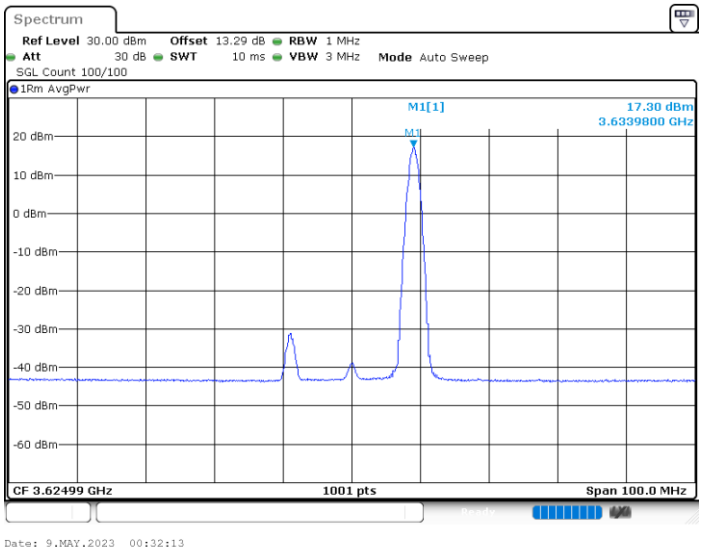
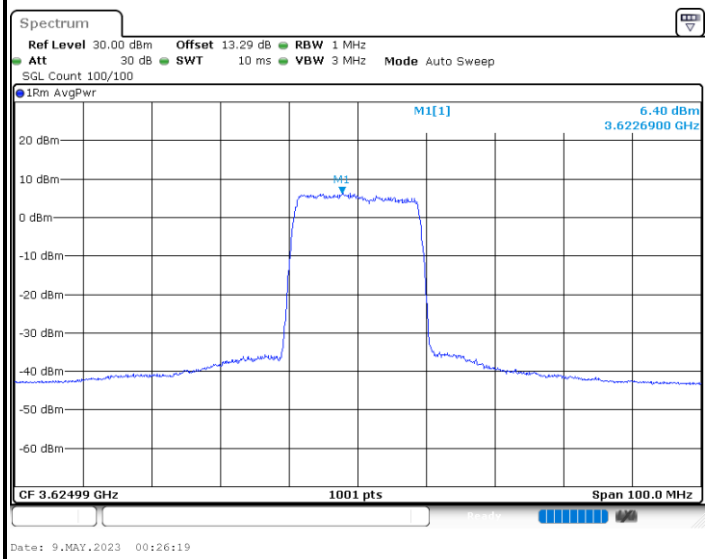
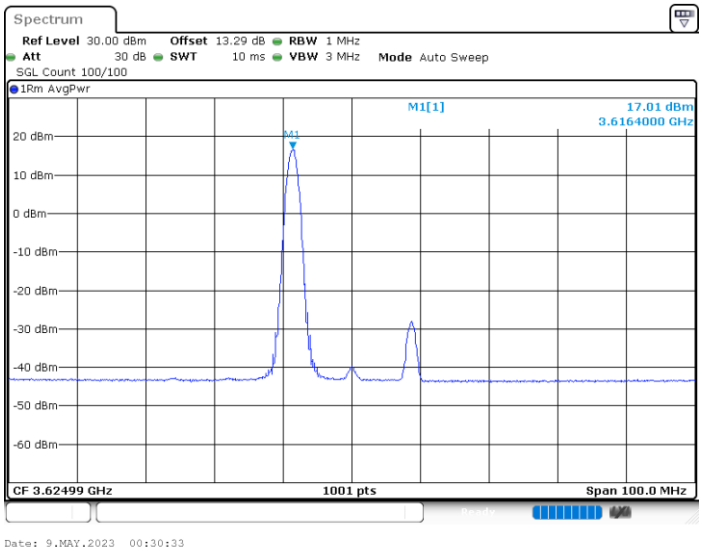
FR1 Part 96 n48 / 20MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

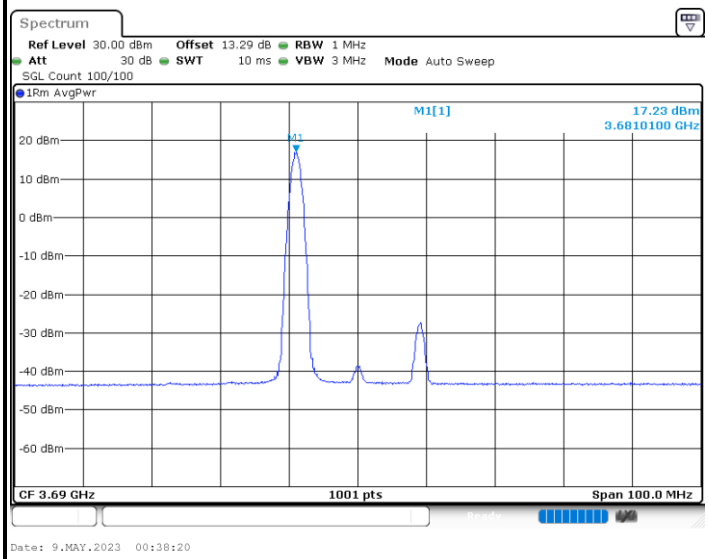
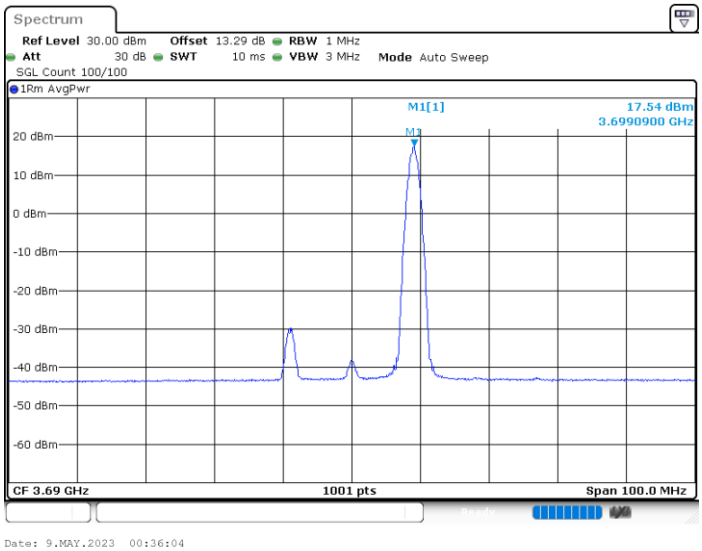
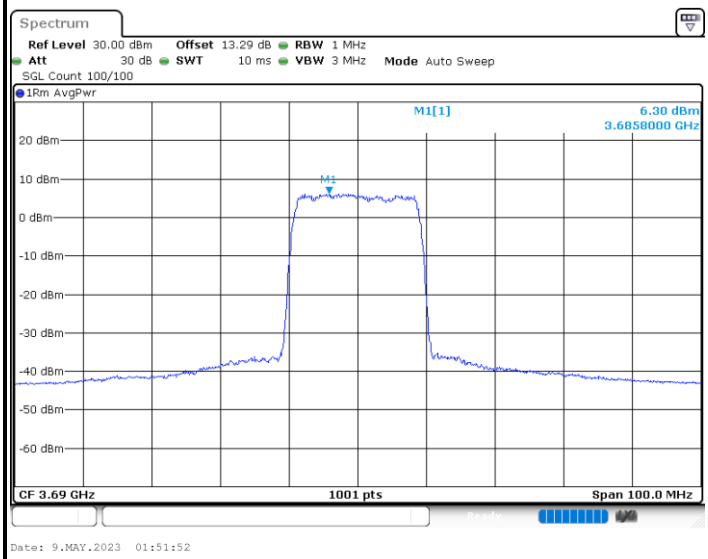
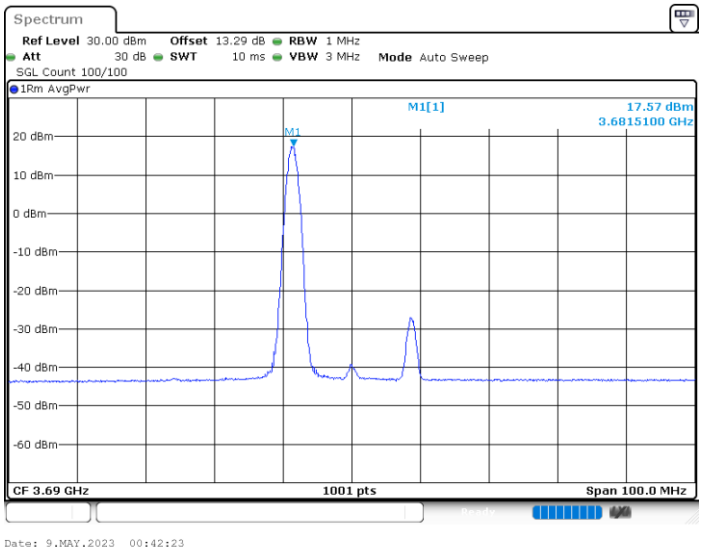
FR1 Part 96 n48 / 20MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

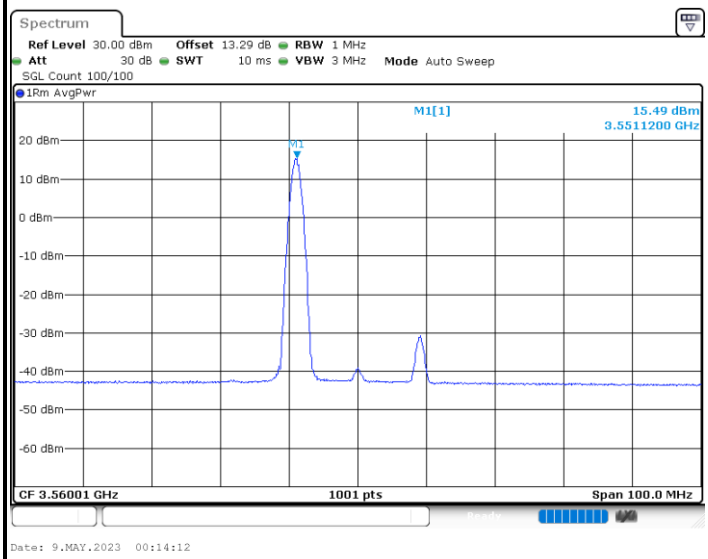
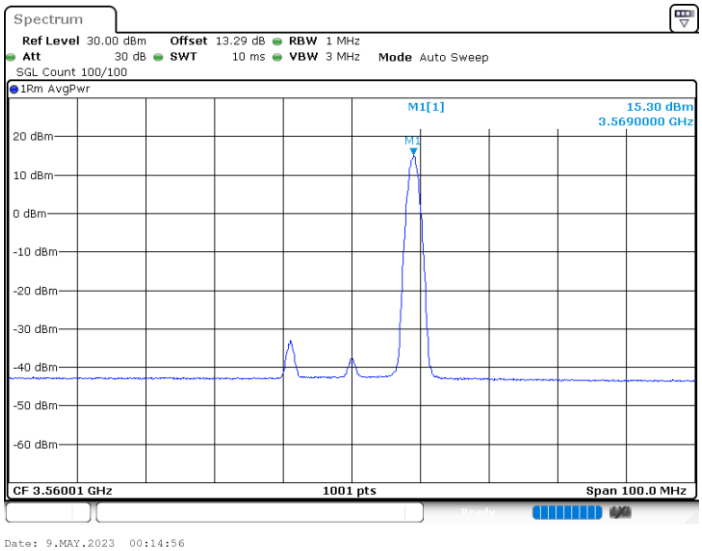
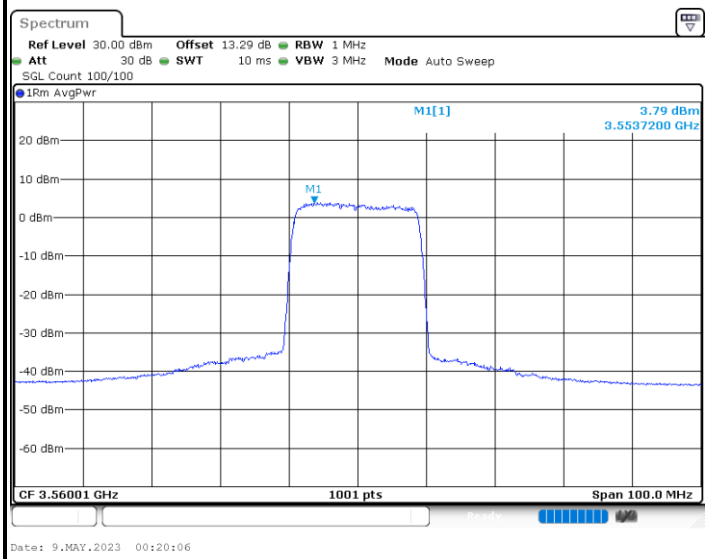
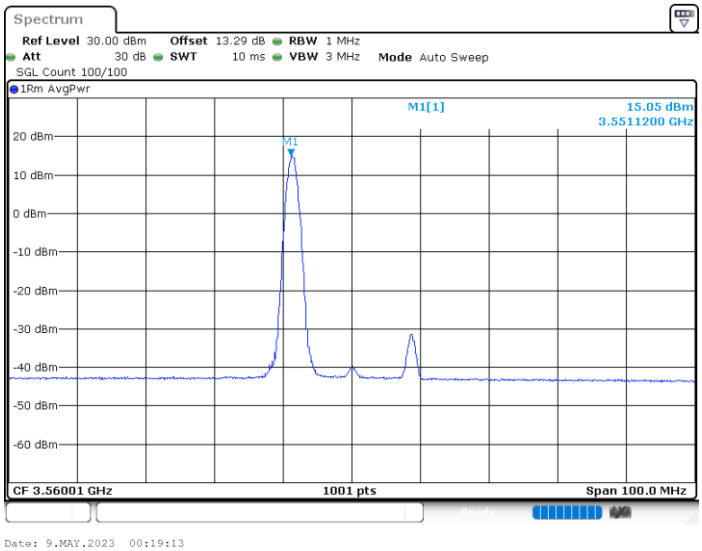
FR1 Part 96 n48 / 20MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

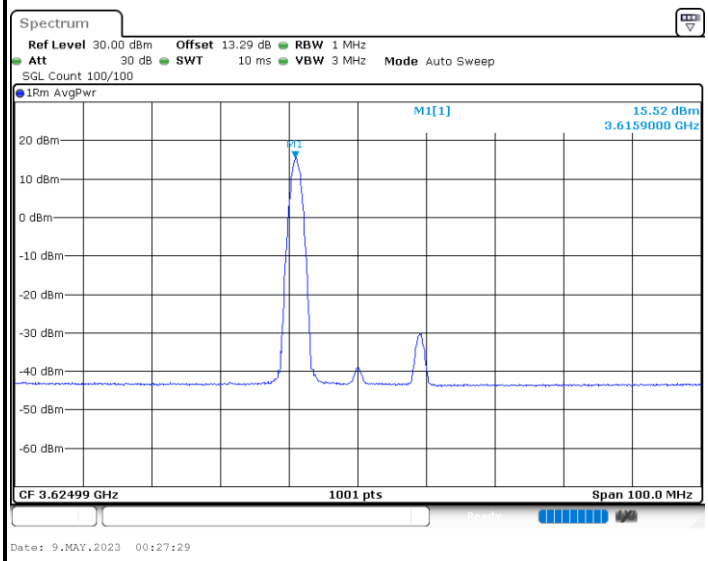
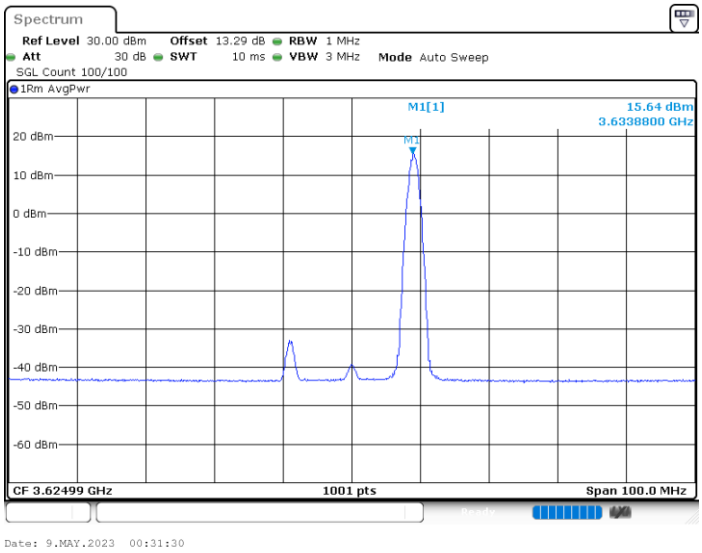
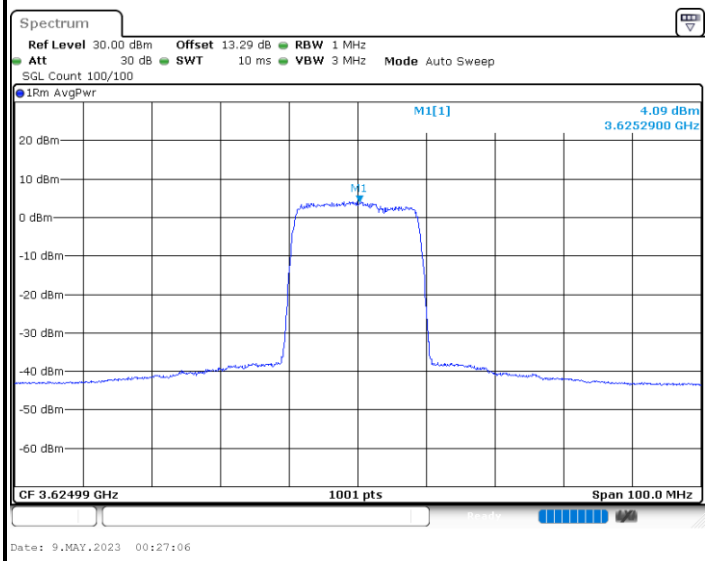
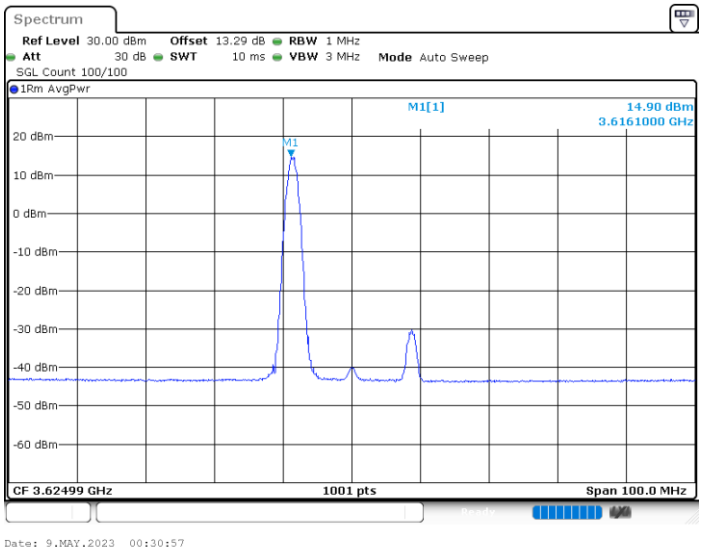
FR1 Part 96 n48 / 20MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

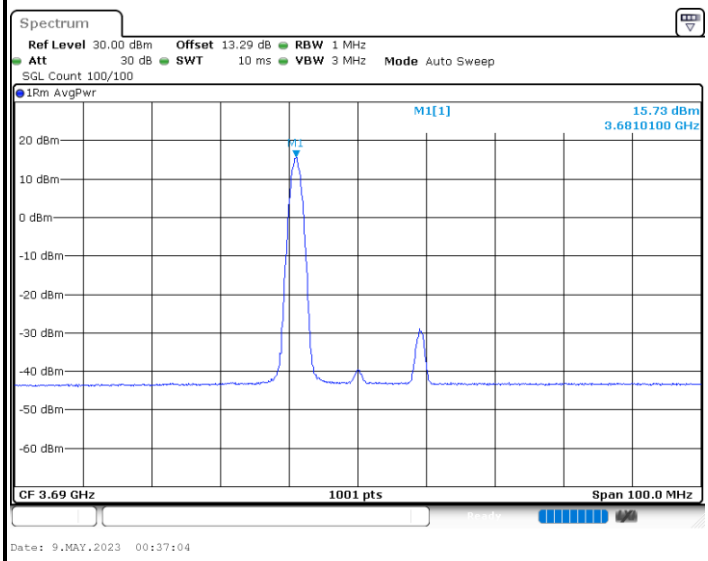
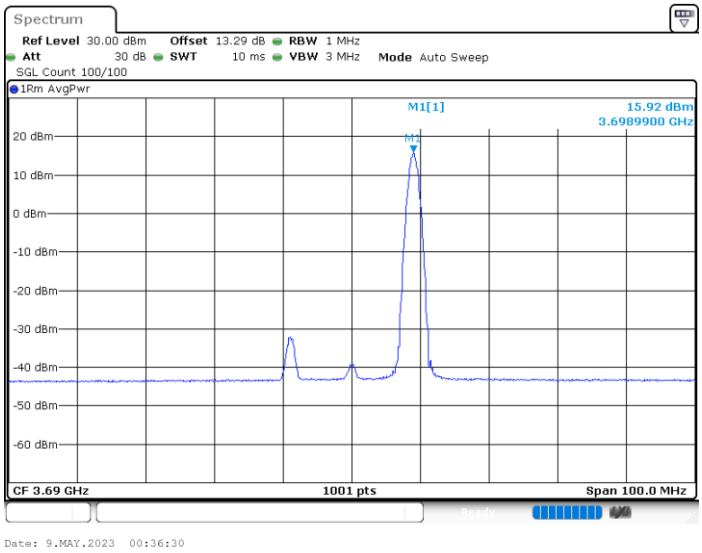
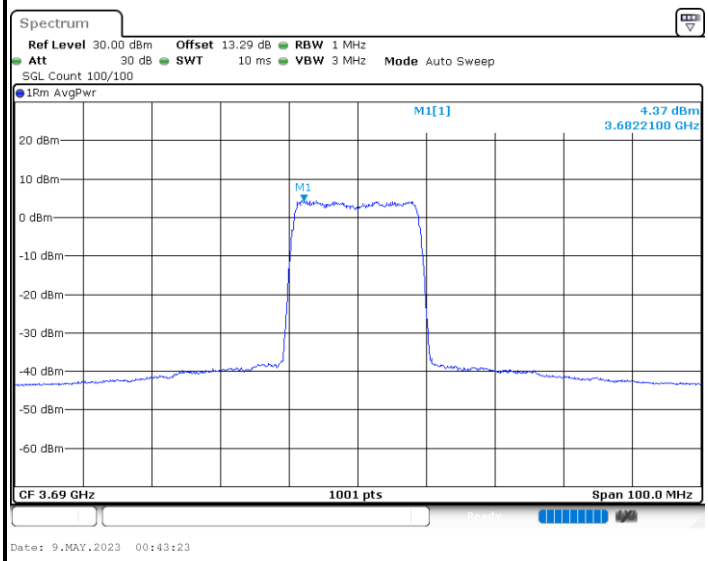
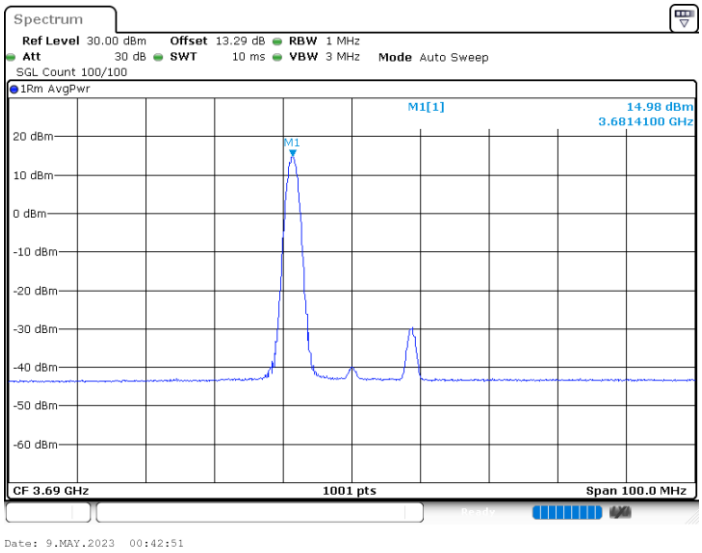
FR1 Part 96 n48 / 20MHz	
64QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

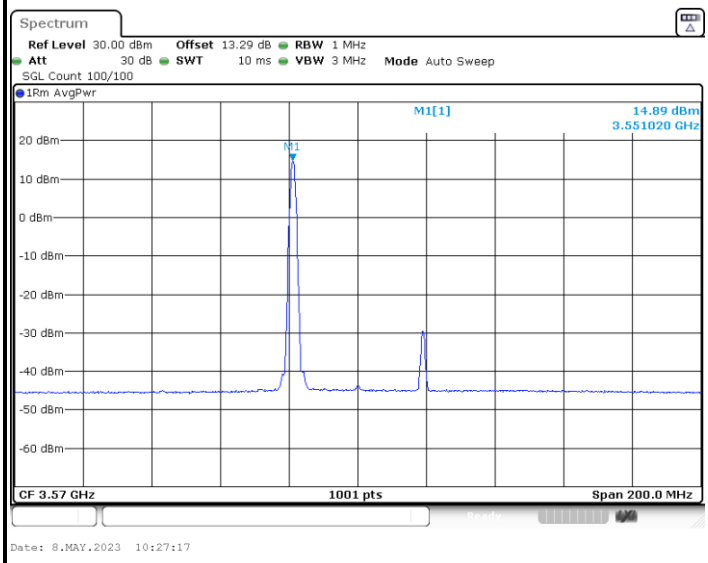
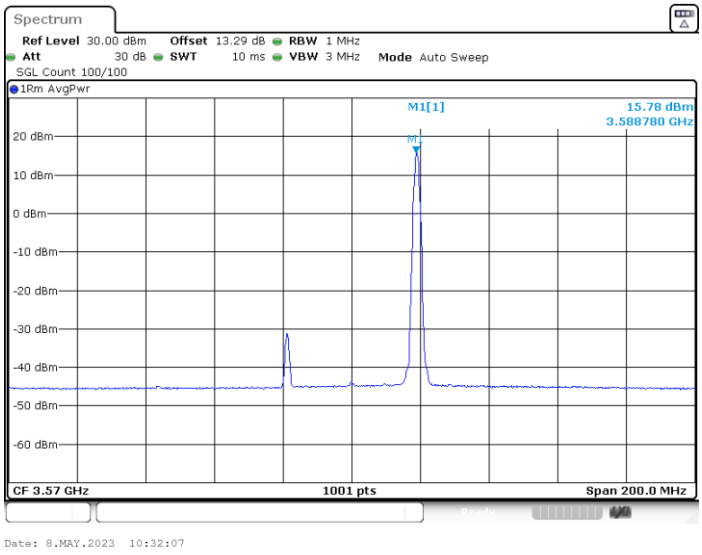
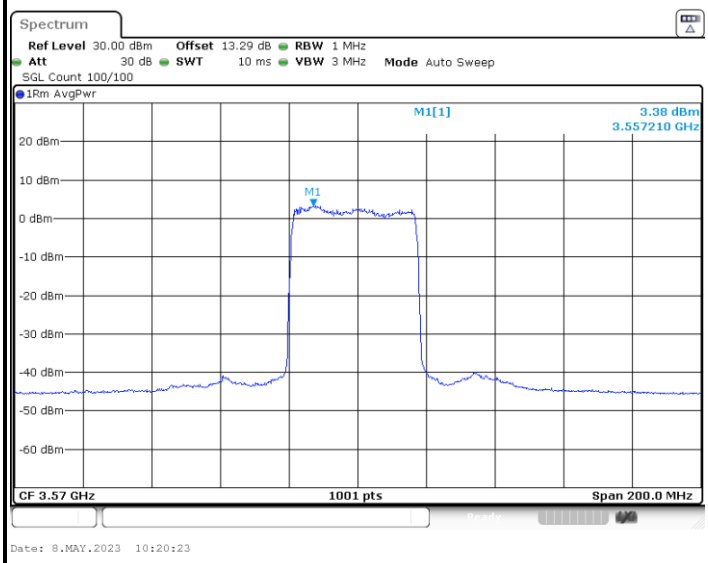
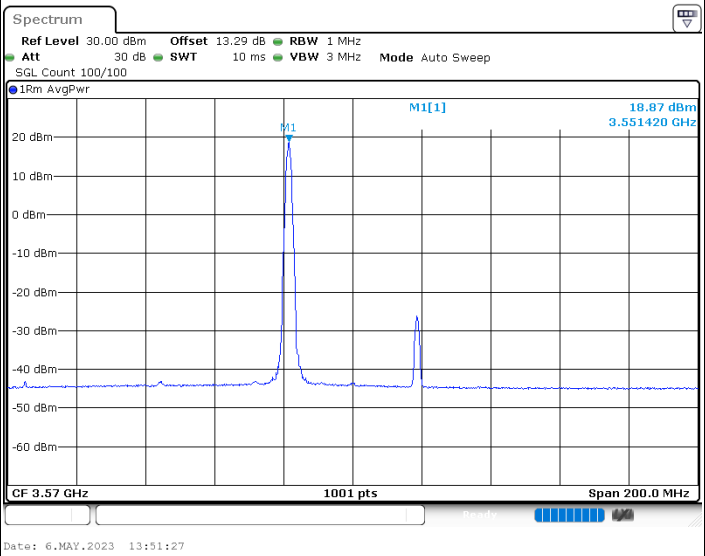
FR1 Part 96 n48 / 20MHz	
64QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

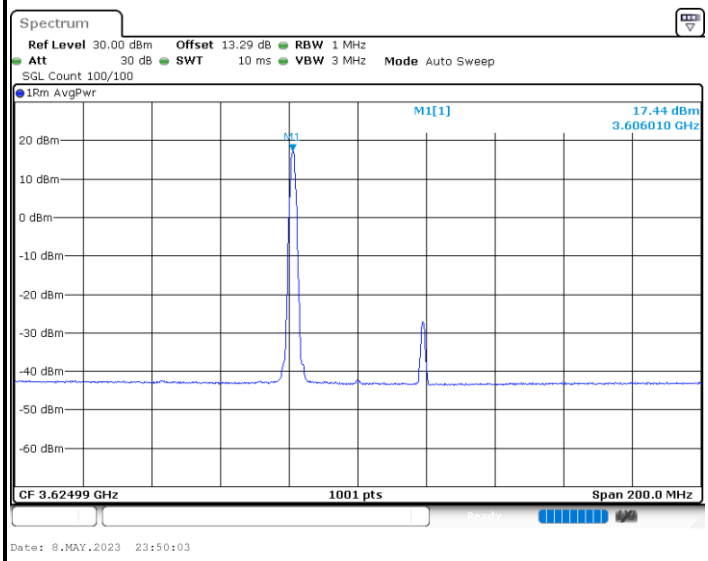
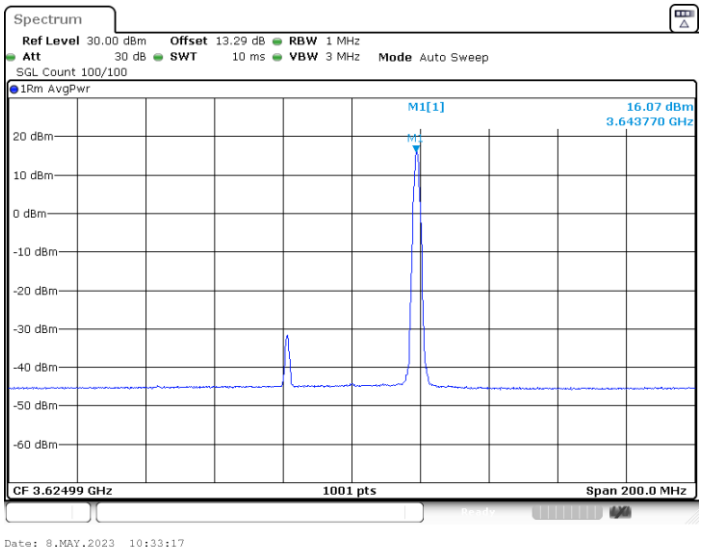
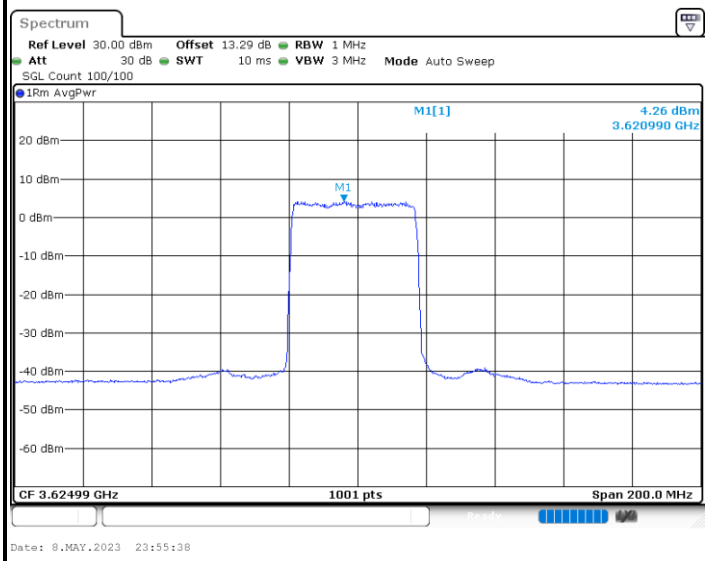
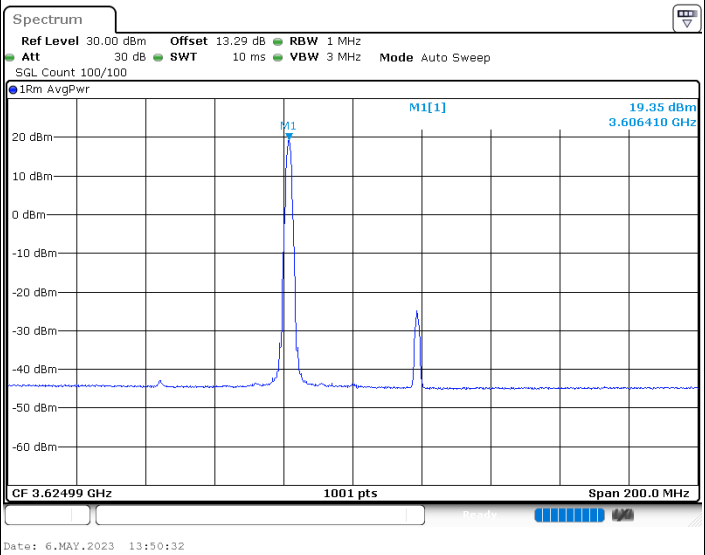
FR1 Part 96 n48 / 20MHz	
64QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

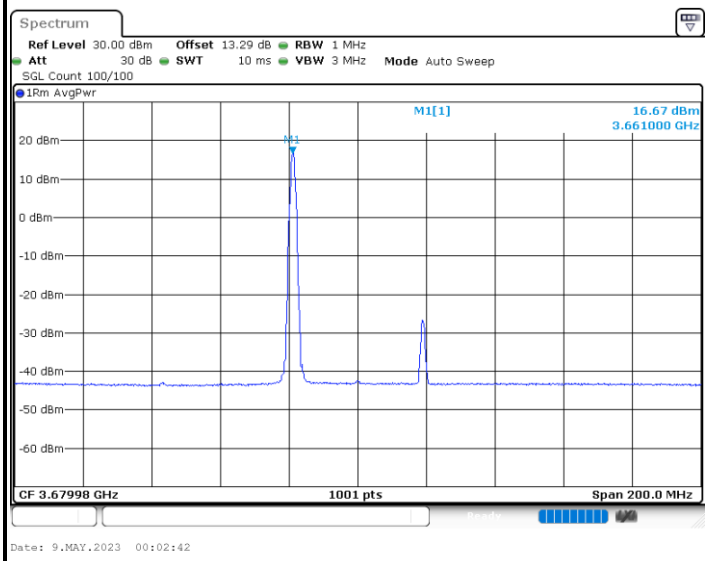
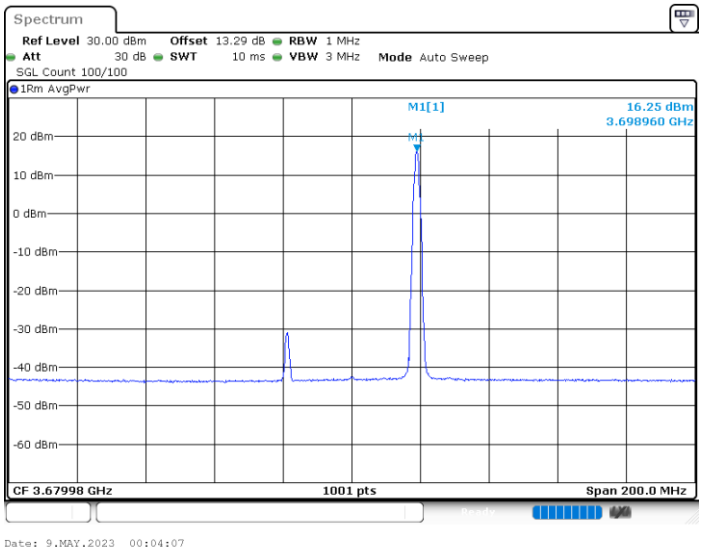
FR1 Part 96 n48 / 20MHz	
256QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

FR1 Part 96 n48 / 20MHz	
256QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

FR1 Part 96 n48 / 20MHz	
256QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1
	

FR1 Part 96 n48 / 40MHz	
BPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	Lowest Channel / 1RB1
	

FR1 Part 96 n48 / 40MHz	
BPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	Middle Channel / 1RB1
	

FR1 Part 96 n48 / 40MHz	
BPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	Highest Channel / 1RB1