FCC Test Report

Report No.:	RWAY202300013A
Applicant:	Shenzhen AI-LINK Network Co., LTD
Address:	524 room, 4D Building of Shenzhen Nanshan District Software Industry Base, Guangdong Province, China
Product Name:	5.8GHz Radio Unit
Product Model:	RU1606
Multiple Models:	N/A
Trade Mark:	N/A
FCC ID:	2BDQJ-RU1606
Standards:	FCC CFR Title 47 Part 15E (§15.407)
Test Date:	2024-01-24 to 204-01-29
Test Result:	Complied
Issue Date:	2024-02-06

Reviewed by: Abel Chen — Project Engineer

Approved by: Jacob Kong — Manager

Prepared by:

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

NVLAP TESTING NVLAP LAB CODE 600335-0

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Announcement

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5. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

Revision History

Version No.	Issued Date	Description
00	2024-02-06	*Original*

Contents

1 General Information

1.1Client Information

Applicant:	Shenzhen AI-LINK Network Co., LTD
Address:	524 room, 4D Building of Shenzhen Nanshan District Software Industry Base, Guangdong Province, China
Manufacturer:	Shenzhen AI-LINK Network Co., LTD
Address:	524 room, 4D Building of Shenzhen Nanshan District Software Industry Base, Guangdong Province, China

1.2Product Description of EUT

The EUT is 5.8GHz Radio Unit that contains 5G NR-U radio, this report covers the full testing of the 5G NR-U radio.

Sample Serial number	A-4 (assigned by WATC)
Sample Received Date	2023-12-13
Sample Status	Good Condition
Frequency Range	5G NR-U n46: 5725 MHz - 5850MHz
Maximum Conducted Output Power	5725 MHz - 5850MHz: 14.77dBm
Modulation Technology	CP-OFDM (QPSK,16QAM,64QAM,256QAM)
Spatial Streams	MIMO (4TX, 4RX)
Antenna Gain#	15dBi
Power Supply	DC 48V
Operating temperature#	-40 deg.C to +55 deg.C
Adapter Information	N/A
Modification	Sample No Modification by the test lab

1.3Antenna information

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Device Antenna information:	

The EUT have four external antenna which use N-type antenna connector, the device need professionally installed, please see the product external photos and declare letter for details.

1.4Related Submittal(s)/Grant(s)

No Related Submittal(s)/Grant(s)

1.5Measurement Uncertainty

Parameter		Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
AC Power Lines Conducted Emissions		±3.14dB
Emissions, Radiated	Below 30MHz	±2.78dB
	Below 1GHz	±4.84dB
	Above 1GHz	±5.44dB
Emissions, Conducted		1.75dB
Conducted Power		0.74dB
Frequency Error		150Hz
Bandwidth		0.34%
Power Spectral Density		0.74dB

Note 1: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Note 2: The Decision Rule is based on simple acceptance with ISO Guide 98-4:2012 Clause 8.2 (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

1.6Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd
No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China
Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.7Test Methodology

FCC CFR 47 Part 2
FCC CFR 47 Part 15
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2020

2 Description of Measurement

2.1Test Configuration

Operate Frequency Range:	5G NR n46: 5725 MHz - 5850MHz
Channel Bandwidth:	100MHz
SCS:	30kHz

According to ANSI C63.10-2020 chapter 5.6.1 Table 11 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
785000	5775	785834	5787.51	786668	5800.02

Test Mode:			
Transmitting mode:	Keep the EUT in continuous transmitting with modulation		
Exercise software#:	AiLink Local maintain Tool		
Modulation	**Power Level Setting#**		
	Low Channel	**Middle Channel**	**High Channel**
QPSK	18	18	18
16QAM	18	18	18
64QAM	18	18	18
256QAM	18	18	18

The exercise software and the maximum power setting that provided by manufacturer.

Worst-Case Configuration:

For AC power line conducted emission and radiated emission 9kHz-1GHz and above 18GHz were performed with the EUT transmits at the channel with highest output power as worst-case scenario.

According to manufacturer, the device support MIMO mode, all modes share the same power level setting under the same modulation. So the worst mode MIMO was selected to test

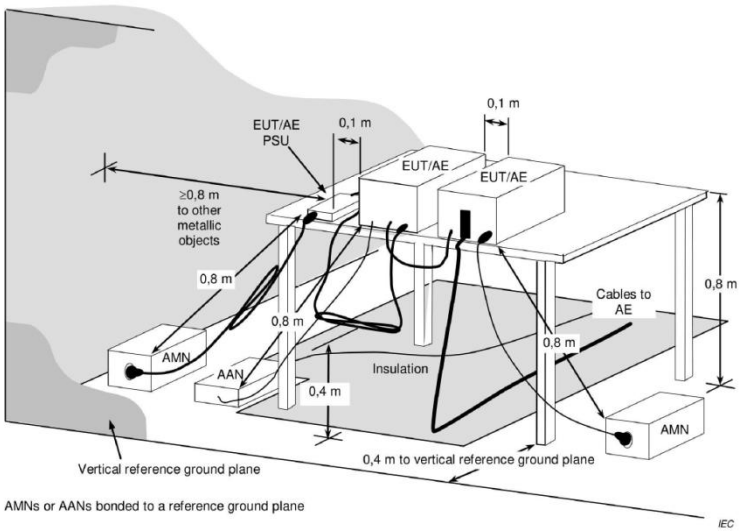
According to manufacturer, the device have equal power spectral density for the full RB mode and partial RB mode, this was verified and recorded in the section 3.5.3 of report, for the band edge test and radiated emission test 1-18GHz test, was investigating all the modulation and full RB/1RB, the worst case 256QAM modulation with full RB setting was recorded in report.

2.2Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number
Beijing Dynamic power co., Ltd.	Power supply	PWR1000	unknown
Shenzhen AI-LINK Network Co., LTD	BBU	BB1000-J	unknown
unknown	RF cable	unknown	unknown
Tongyu communication Inc.	Antenna	TDQ-575915D-65PT0	unknown

2.3Test Setup

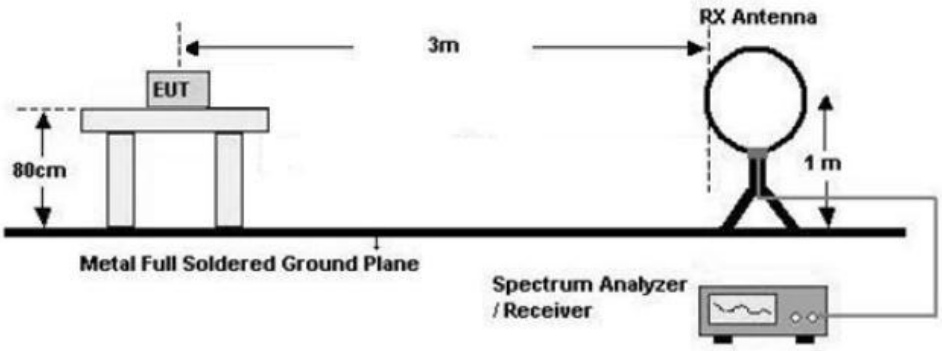
1) Conducted emission measurement:



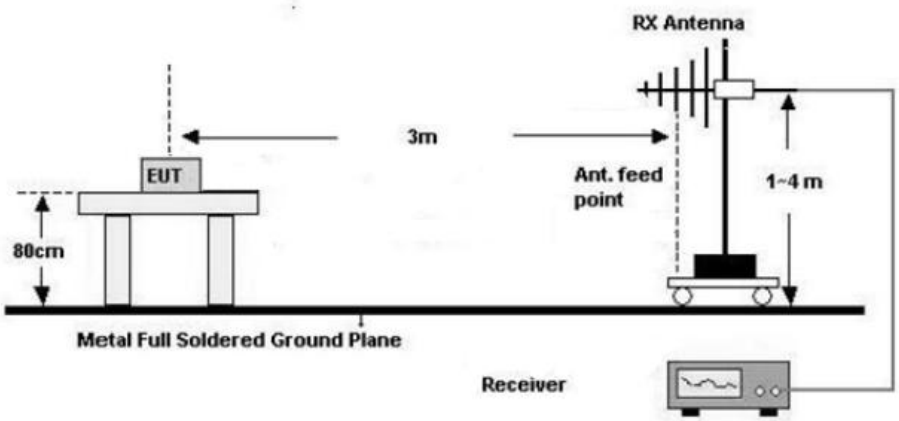
Note: The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be >0.8 m.

2) Radiated emission measurement:

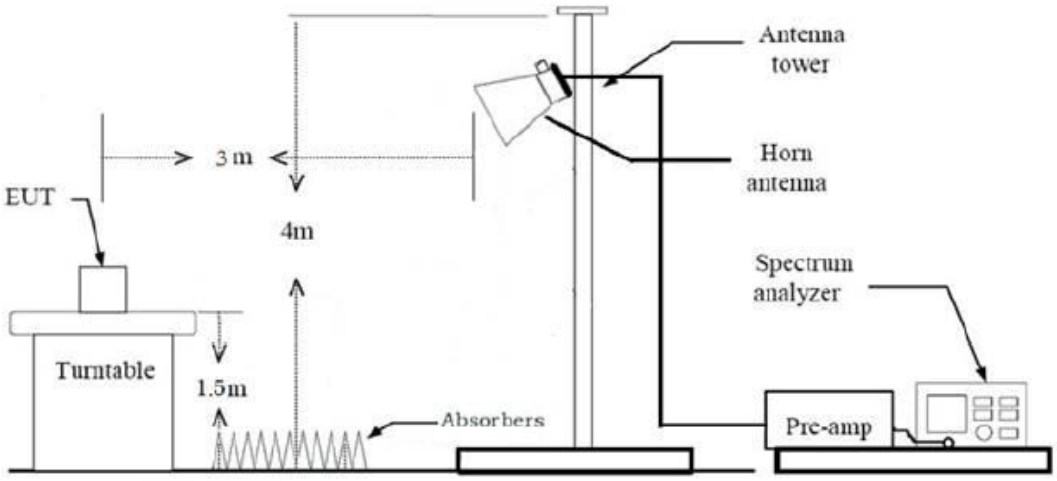
Below 30MHz (3m SAC)



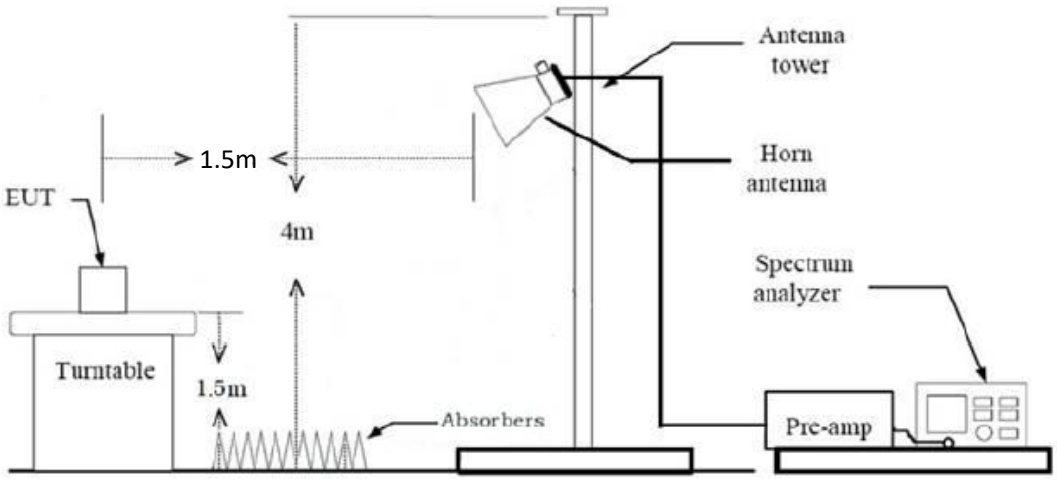
0MHz-1GHz (3m SAC)



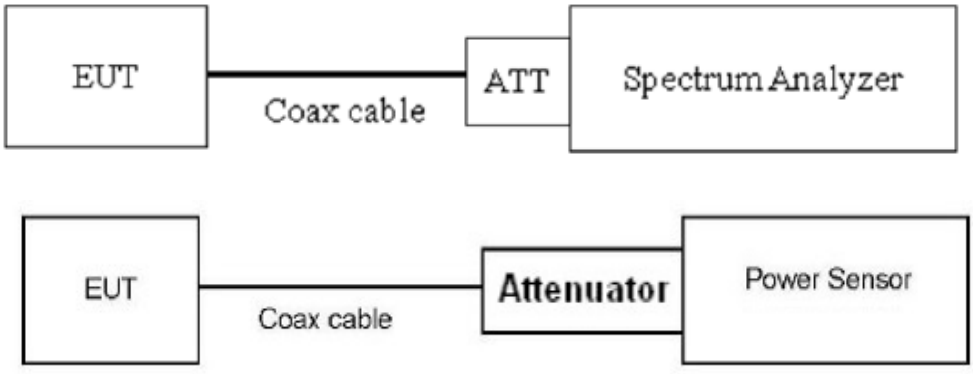
1GHz-18GHz(3m FAC)



Above 18GHz (3m FAC)



3) RF Conducted Test



or

2.4Test Procedure

Conducted emission:

1. The E.U.T is placed on a non-conducting table 40cm from the vertical ground plane and 80cm above the horizontal ground plane (Please refer to the block diagram of the test setup and photographs).
2. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.
3. Line conducted data is recorded for both Line and Neutral

Radiated Emission Procedure:

a) For below 30MHz

1. All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz- 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).
2. Loop antenna use, investigation was done on the three antenna orientations (parallel, perpendicular, gound-parallel)

b) For 30MHz-1GHz:

1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.

c) For above 1GHz:

1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m (1-18GHz) and 1.5 m (above 18GHz).
2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
4. Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

RF Conducted Test:

1. The antenna port of EUT was connected to the RF port of the test equipment (Power Meter or Spectrum analyzer) through Attenuator and RF cable.
2. The cable assembly insertion loss of 8.0dB (including 6.0 dB Attenuator and 2.0 dB cable) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a loss of 2.0dB was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)
3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

2.5Measurement Method

Description of Test	Measurement Method
AC Line Conducted Emissions	ANSI C63.10-2020 Section 6.2
Maximum Conducted Output Power	KDB 789033 D02 v02r01 section E.3. b)
Power Spectral Density	KDB 789033 D02 v02r01 section F
26 dB Emission Bandwidth	KDB 789033 D02 v02r01 section C.1
6 dB Emission Bandwidth	KDB 789033 D02 v02r01 section C.2
99% Occupied Bandwidth	KDB 789033 D02 v02r01 section D.
Unwanted Emissions	KDB 789033 D02 v02r01 section G.
Duty Cycle	KDB 789033 D02 v02r01 section B.

2.6Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
ROHDE& SCHWARZ	EMI TEST RECEIVER	ESR	101817	2023/7/3	2024/7/2
R&S	LISN	ENV216	101748	2023/8/1	2024/7/31
N/A	Coaxial Cable	NO.12	N/A	2023/7/3	2024/7/2
Farad	Test Software	EZ-EMC	Ver. EMEC-3A1	/	/
Radiated Emission Test					
R&S	EMI test receiver	ESR3	102758	2023/7/3	2024/7/2
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSV40-N	101608	2023/7/3	2024/7/2
SONOMA INSTRUMENT	Low frequency amplifier	310	186014	2023/7/12	2024/7/11
COM-POWER	preamplifier	PAM-118A	18040152	2023/8/21	2024/8/20
COM-POWER	Amplifier	PAM-840A	461306	2023/8/8	2024/8/7
ETS	Passive Loop Antenna	6512	29604	2023/7/7	2024/7/6
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2024/7/6
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2024/7/5
Ducommun technologies	Horn Antenna	ARH-4223-02	1007726-03	2023/7/10	2024/7/9
Ducommun technologies	Horn Antenna	ARH-2823-02	1007726-03	2023/7/10	2024/7/9
Oulitong	Band Reject Filter	OBSF-5150-5850-S	OE02104371	2023/9/15	2024/9/14

N/A	Coaxial Cable	N/A	NO.9	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.10	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.11	2023/8/8	2024/8/7
Audix	Test Software	E3	191218 V9	/	/
RF Conducted Test					
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSU-26	200680/026	2023/7/12	2024/7/11
ANRITSU	USB Power Sensor	MA24418A	12620	2023/7/12	2024/7/11
narda	6dB attenuator	603-06-1	N/A	2023/7/26	2024/7/25

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1Test Summary

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a) §15.407 (b)(9)	AC Line Conducted Emissions	Compliance
§15.407 (a)(1)(iv),(3)(i)	Conducted Peak Output Power Power Spectral Density	Compliance
§15.407 (a)(12)	99% Occupied Bandwidth	Compliance
§15.407 (e)	6 dB Emission Bandwidth	Compliance
§15.205, §15.209, §15.407 (b)(1), (4), (9), (10)	Unwanted Emissions	Compliance
/	Duty Cycle	Report only

3.2Limit

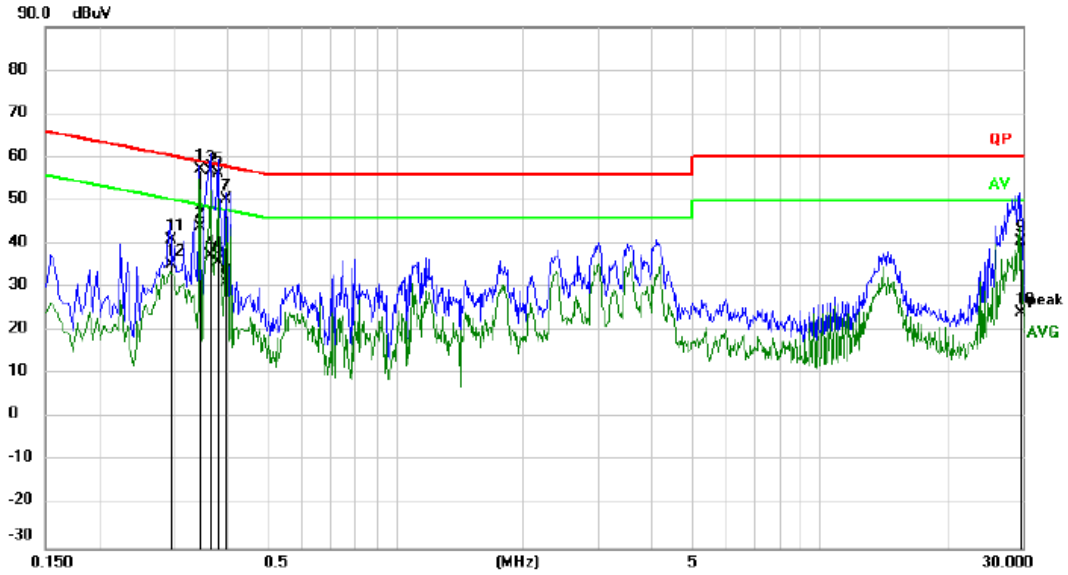
Test items	Limit
AC Power Line Conducted Emission	See details §15.207 (a)
Conducted Peak Output Power Power Spectral Density	**For the band 5.725-5.895 GHz:** For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas ofdirectional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, Fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi withoutany corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipointsystems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. Theoperator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
99% Occupied Bandwidth	N/A
6dB Emission Bandwidth	Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Unwanted Emissions	For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.47–5.725 GHz band: All emissions outside of the 5.47–5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating solely in the 5.725–5.850 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. The provisions of § 15.205 apply to intentional radiators operating under this section.

3.3AC Line Conducted Emissions Test Data

Test Date:	2024-01-26	**Test By:**	Lirou Li
Environment condition:	Temperature: 22.1°C; Relative Humidity:36%; ATM Pressure: 101.5kPa		

Conducted Emission Measurement

File :RWAY202300013 Data :#3 Date: 2024/1/26 Time: 16:29:30



Limit: QP
Mode:transmitting
Note: RRU

Phase: L1
Power: DC 48V

Temperature: 22.1
Humidity: 36 %
Air Pressure: 1015 hpa

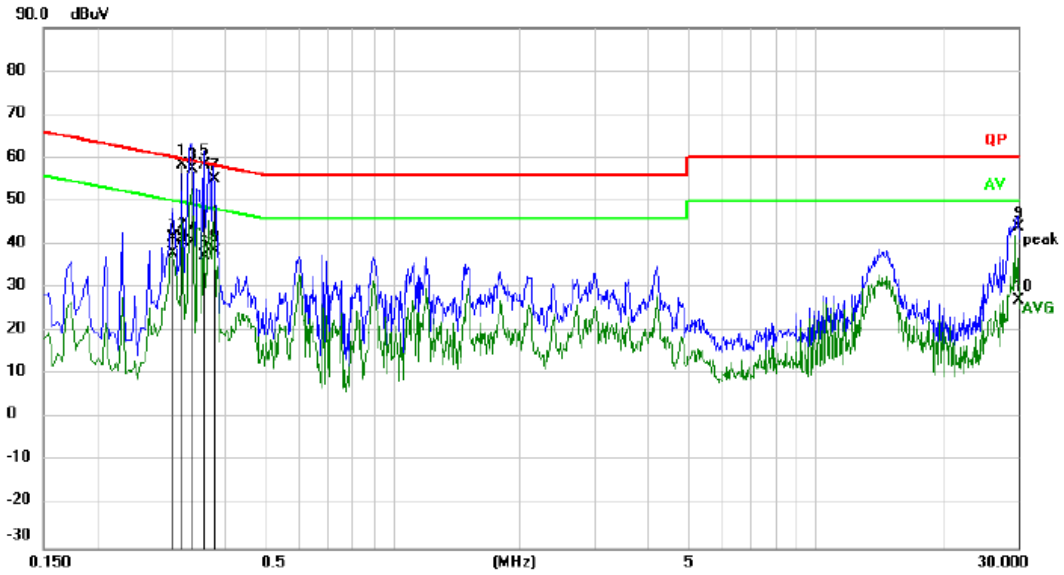
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3460	46.55	10.74	57.29	59.06	-1.77	QP	
2		0.3460	33.15	10.74	43.89	49.06	-5.17	AVG	
3	*	0.3660	46.08	10.76	56.84	58.59	-1.75	QP	
4		0.3660	26.57	10.76	37.33	48.59	-11.26	AVG	
5		0.3820	45.52	10.77	56.29	58.24	-1.95	QP	
6		0.3820	25.04	10.77	35.81	48.24	-12.43	AVG	
7		0.3980	39.40	10.78	50.18	57.90	-7.72	QP	
8		0.3980	20.42	10.78	31.20	47.90	-16.70	AVG	
9		29.5700	30.26	10.39	40.65	60.00	-19.35	QP	
10		29.5700	13.86	10.39	24.25	50.00	-25.75	AVG	
11		0.2940	30.11	10.70	40.81	60.41	-19.60	QP	
12		0.2940	24.41	10.70	35.11	50.41	-15.30	AVG	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Lirou

Conducted Emission Measurement

File :RWAY202300013 Data :#4 Date: 2024/1/26 Time: 16:31:49



Limit: QP
Mode:transmitting
Note: RRU

Phase: N
Power: DC 48V

Temperature: 22.1
Humidity: 36 %
Air Pressure: 1015 hpa

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3180	47.65	10.56	58.21	59.76	-1.55	QP	
2		0.3180	30.94	10.56	41.50	49.76	-8.26	AVG	
3		0.3339	46.98	10.57	57.55	59.35	-1.80	QP	
4		0.3339	29.98	10.57	40.55	49.35	-8.80	AVG	
5	*	0.3580	47.87	10.61	58.48	58.77	-0.29	QP	
6		0.3580	26.60	10.61	37.21	48.77	-11.56	AVG	
7		0.3780	44.43	10.63	55.06	58.32	-3.26	QP	
8		0.3780	27.91	10.63	38.54	48.32	-9.78	AVG	
9		29.9980	33.23	10.78	44.01	60.00	-15.99	QP	
10		29.9980	16.30	10.78	27.08	50.00	-22.92	AVG	
11		0.3020	31.11	10.54	41.65	60.19	-18.54	QP	
12		0.3020	27.40	10.54	37.94	50.19	-12.25	AVG	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Lirou

Remark:

Measurement (dBuV)= Reading Level (dBuV) + Correct Factor(dB)

Correct Factor(dB)= LISN Voltage Division Factor (dB)+ Cable loss(dB)

Over Limit = Measurement – Limit

3.4Radiated emission Test Data

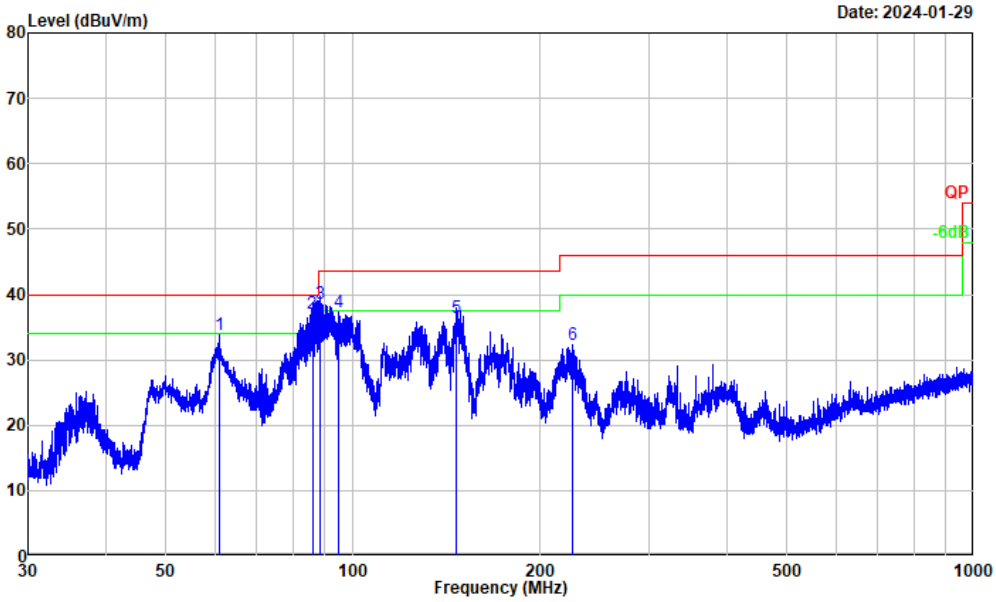
9 kHz-30MHz:

Test Date:	2024-01-29	**Test By:**	Luke Li
Environment condition:	Temperature: 21.9°C; Relative Humidity:42%; ATM Pressure: 101.8kPa		

For radiated emissions below 30MHz, there were no emissions found within 20dB of limit.

30MHz-1GHz:

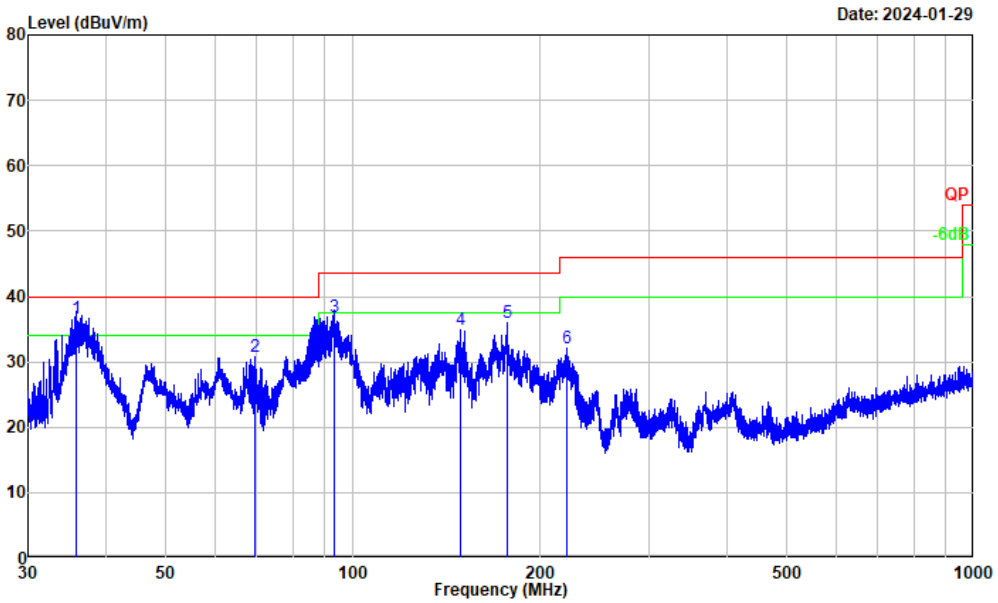
Test Date:	2024-01-29	Test By:	Luke Li
Environment condition:	Temperature: 21.9°C; Relative Humidity:42%; ATM Pressure: 101.8kPa		



Project No. : RWAY202300013
Test Mode : Transmitting
Test Voltage : DC 48V
Environment : 21.9℃/42%R.H./101.8kPa
Tested by : Luke Li
Polarization : horizontal
Remark : RRU

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	60.864	47.65	-13.81	33.84	40.00	-6.16	Peak
2	86.087	53.90	-16.90	37.00	40.00	-3.00	QP
3	88.497	54.69	-16.15	38.54	43.50	-4.96	QP
4	95.093	52.17	-14.78	37.39	43.50	-6.11	Peak
5	147.017	54.10	-17.58	36.52	43.50	-6.98	QP
6	225.802	45.65	-13.29	32.36	46.00	-13.64	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain



Project No. : RWAY202300013
Test Mode : Transmitting
Test Voltage : DC 48V
Environment : 21.9℃/42%R.H./101.8kPa
Tested by : Luke Li
Polarization : vertical
Remark : RRU

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	35.812	51.21	-14.53	36.68	40.00	-3.32	QP
2	69.662	46.99	-16.18	30.81	40.00	-9.19	Peak
3	93.236	51.90	-15.07	36.83	43.50	-6.67	QP
4	149.159	52.30	-17.46	34.84	43.50	-8.66	Peak
5	177.587	51.87	-15.85	36.02	43.50	-7.48	Peak
6	221.198	45.72	-13.57	32.15	46.00	-13.85	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

Remark:

Result = Reading + Factor

Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Result – Limit

Above 1GHz:

Test Date:	2024-01-24	Test By:	Luke Li
Environment condition:	Temperature: 22.4°C; Relative Humidity:28%; ATM Pressure: 102.0kPa		

Frequency (MHz)	Reading level (dBμV)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
Worst case 256QAM RB273#0							
5775MHz							
5620.885	50.70	horizontal	11.91	62.61	68.20	-5.59	Peak
5682.542	50.81	horizontal	11.97	62.78	92.32	-29.54	Peak
5719.310	51.94	horizontal	12.03	63.97	110.61	-46.64	Peak
5724.938	64.02	horizontal	12.03	76.05	122.06	-46.01	Peak
5614.507	50.79	vertical	11.90	62.69	68.20	-5.51	Peak
5668.159	51.15	vertical	11.95	63.10	81.68	-18.58	Peak
5719.560	52.44	vertical	12.03	64.47	110.68	-46.21	Peak
5724.938	66.30	vertical	12.03	78.33	122.06	-43.73	Peak
11550.000	46.00	horizontal	6.50	52.50	74.00	-21.50	Peak
11550.000	45.90	vertical	6.50	52.40	74.00	-21.60	Peak
5787.51MHz							
11575.020	36.59	horizontal	6.52	43.11	54.00	-10.89	Average
11575.020	48.21	horizontal	6.52	54.73	74.00	-19.27	Peak
11575.020	46.93	vertical	6.52	53.45	74.00	-20.55	Peak
5800.02MHz							
5850.225	63.18	horizontal	12.31	75.49	121.69	-46.20	Peak
5870.998	54.93	horizontal	12.38	67.31	106.32	-39.01	Peak
5887.231	54.51	horizontal	12.44	66.95	96.12	-29.17	Peak
5926.851	51.82	horizontal	12.44	64.26	68.20	-3.94	Peak
5850.087	69.46	vertical	12.31	81.77	122.00	-40.23	Peak
5870.860	56.46	vertical	12.37	68.83	106.36	-37.53	Peak
5898.649	57.03	vertical	12.46	69.49	87.66	-18.17	Peak
5925.613	54.20	vertical	12.44	66.64	68.20	-1.56	Peak
11600.040	37.19	horizontal	6.54	43.73	54.00	-10.27	Average
11600.040	48.69	horizontal	6.54	55.23	74.00	-18.77	Peak
11600.040	37.09	vertical	6.54	43.63	54.00	-10.37	Average
11600.040	49.41	vertical	6.54	55.95	74.00	-18.05	Peak

Remark:

Corrected Amplitude= Reading level + corrected Factor

Corrected Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Corrected Amplitude – Limit

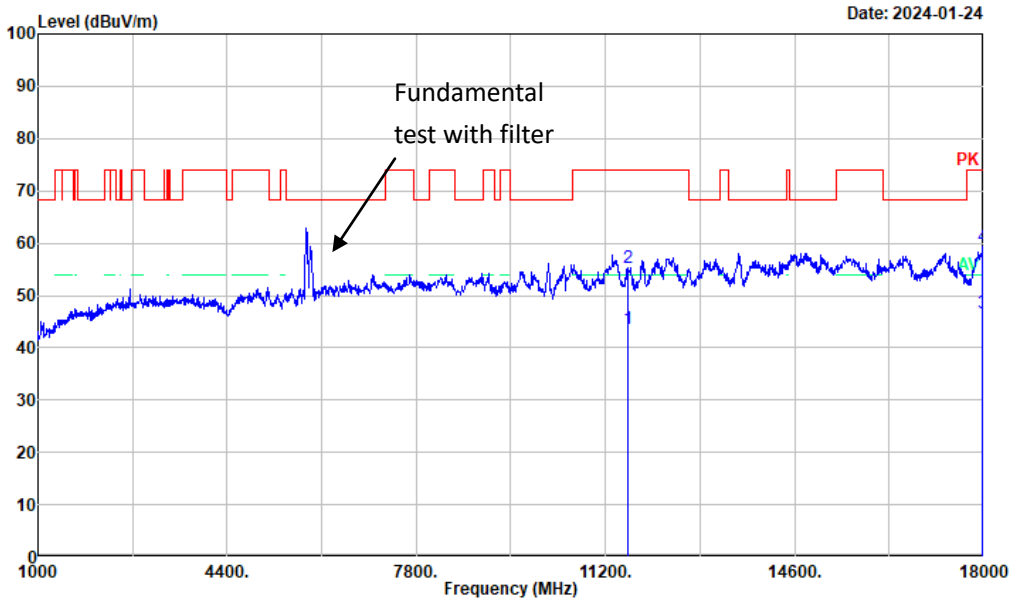
For the test result of Peak below the Peak limit more than 20dB, which can compliance with the average limit, just the Peak level was recorded.

The emission levels of other frequencies that were lower than the limit 20dB, not show in test report.

For emissions in 18GHz-40GHz range, all emissions were investigated and in the noise floor level.

Test plot for example as below:

Mode:	256QAM 273RB#0	Channel:	5800.02MHz

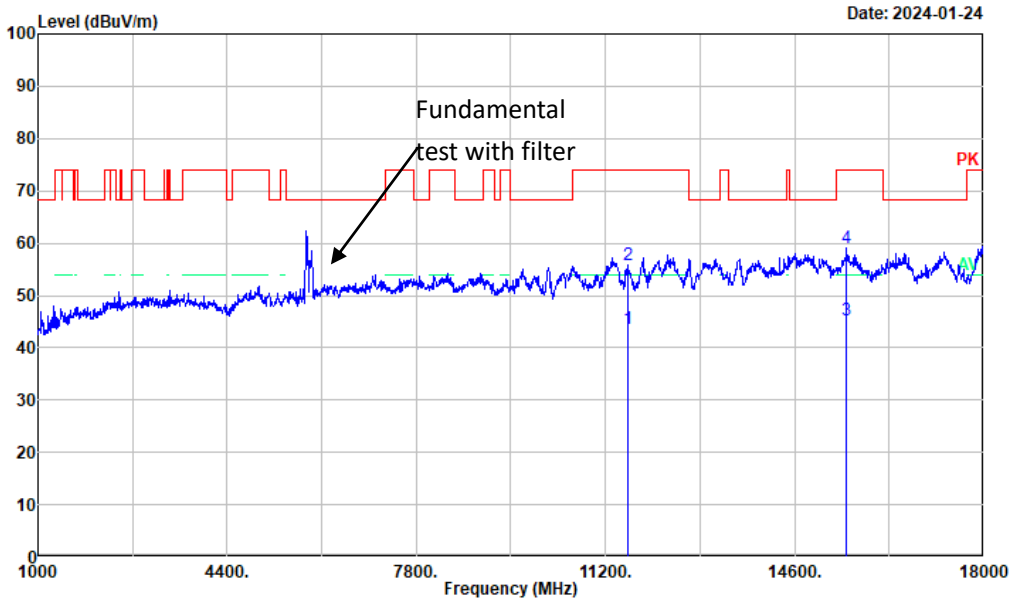


Project No. : RWAY202300013
Test Mode : Transmitting
Test Voltage : DC 48V
Environment : 22.4℃/28%R.H./102.0kPa
Tested by : Luke Li
Polarization : horizontal
Remark : 256QAM 273RB#0 5800.02MHz

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	11600.040	37.19	6.54	43.73	54.00	-10.27	Average
2	11600.040	48.69	6.54	55.23	74.00	-18.77	Peak
3	17974.490	38.46	8.19	46.65	54.00	-7.35	Average
4	17974.490	51.28	8.19	59.47	74.00	-14.53	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

Mode:	256QAM 273RB#0	Channel:	5800.02MHz



Project No. : RWAY202300013
Test Mode : Transmitting
Test Voltage : DC 48V
Environment : 22.4℃/28%R.H./102.0kPa
Tested by : Luke Li
Polarization : vertical
Remark : 256QAM 273RB#0 5800.02MHz

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	11600.040	37.09	6.54	43.63	54.00	-10.37	Average
2	11600.040	49.41	6.54	55.95	74.00	-18.05	Peak
3	15533.770	37.06	8.11	45.17	54.00	-8.83	Average
4	15533.770	51.10	8.11	59.21	74.00	-14.79	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain

3.5RF Conducted Test Data

Test Date:	2024-01-24~2024-01-25	Test By:	Baylor Li
Environment condition:	Temperature: 20.6~21.2°C; Relative Humidity: 46~49%; ATM Pressure: 101.7~102.6kPa		

3.5.1 6dB Emission Bandwidth and 99% Occupied Bandwidth

Test Modes	Port No.	Test Frequency (MHz)	6dB emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK RB273#0	1	5775	98.397	97.436	0.5	Pass
		5787.51	98.269	97.436	0.5	Pass
		5800.02	98.269	97.436	0.5	Pass
CP-OFDM 16QAM RB273#0	1	5775	98.333	97.436	0.5	Pass
		5787.51	98.269	97.756	0.5	Pass
		5800.02	98.269	97.436	0.5	Pass
CP-OFDM 64QAM RB273#0	1	5775	98.397	97.436	0.5	Pass
		5787.51	98.269	97.756	0.5	Pass
		5800.02	98.205	97.436	0.5	Pass
CP-OFDM 256QAM RB273#0	1	5775	98.269	97.436	0.5	Pass
		5787.51	98.269	97.756	0.5	Pass
		5800.02	98.718	97.436	0.5	Pass

Note: test only performed on Antenna port 1.

3.5.2 Maximum conducted output power

Port No.	Modulation	RB allocation	RB offset	Maximum conducted output power(dBm)			Limit (dBm)	Verdict
				Low Channel	Middle Channel	Middle Channel		
1	CP-OFDM QPSK	1	0	-11.63	-8.26	-10.20	15	Pass
		1	272	-9.48	-7.72	-11.41	15	Pass
		273	0	8.33	8.85	8.66	15	Pass
	CP-OFDM 16QAM	1	0	-11.57	-8.27	-10.15	15	Pass
		1	272	-9.51	-7.72	-11.43	15	Pass
		273	0	8.39	8.77	8.68	15	Pass
	CP-OFDM 64QAM	1	0	-9.36	-8.24	-10.12	15	Pass
		1	272	-9.53	-7.69	-11.50	15	Pass
		273	0	8.43	8.79	8.73	15	Pass
	CP-OFDM 256QAM	1	0	-11.45	-8.20	-10.09	15	Pass
		1	272	-9.54	-7.69	-11.52	15	Pass
		273	0	8.48	8.85	8.75	15	Pass
2	CP-OFDM QPSK	1	0	-11.41	-11.35	-10.03	15	Pass
		1	272	-9.49	-10.85	-11.51	15	Pass
		273	0	8.43	8.73	8.28	15	Pass
	CP-OFDM 16QAM	1	0	-11.39	-11.32	-10.03	15	Pass
		1	272	-9.52	-10.83	-11.38	15	Pass
		273	0	8.44	8.76	8.17	15	Pass
	CP-OFDM 64QAM	1	0	-11.37	-11.32	-10.02	15	Pass
		1	272	-9.50	-10.81	-11.40	15	Pass
		273	0	8.46	8.78	8.19	15	Pass
	CP-OFDM 256QAM	1	0	-11.35	-11.32	-10.03	15	Pass
		1	272	-9.50	-10.81	-11.40	15	Pass
		273	0	8.47	8.83	8.21	15	Pass
3	CP-OFDM QPSK	1	0	-11.31	-11.42	-10.03	15	Pass
		1	272	-9.47	-10.80	-11.49	15	Pass
		273	0	8.52	8.72	8.06	15	Pass
	CP-OFDM 16QAM	1	0	-11.32	-11.40	-10.01	15	Pass
		1	272	-9.48	-10.79	-11.49	15	Pass
		273	0	8.51	8.73	8.14	15	Pass
	CP-OFDM 64QAM	1	0	-11.34	-11.41	-10.00	15	Pass
		1	272	-9.49	-10.77	-11.50	15	Pass
		273	0	8.50	8.76	8.20	15	Pass
	CP-OFDM 256QAM	1	0	-11.35	-11.37	-10.01	15	Pass
		1	272	-9.49	-10.78	-11.48	15	Pass
		273	0	8.49	8.79	8.24	15	Pass
4	CP-OFDM QPSK	1	0	-11.32	-11.35	-10.02	15	Pass
		1	272	-9.47	-10.78	-11.36	15	Pass
		273	0	8.53	8.47	8.50	15	Pass

	CP-OFDM 16QAM	1	0	-11.31	-11.51	-10.05	15	Pass
		1	272	-9.46	-10.75	-11.50	15	Pass
		273	0	8.54	8.48	8.53	15	Pass
	CP-OFDM 64QAM	1	0	-11.30	-11.46	-10.03	15	Pass
		1	272	-9.46	-10.76	-11.49	15	Pass
		273	0	8.54	8.50	8.55	15	Pass
	CP-OFDM 256QAM	1	0	-11.30	-11.44	-10.04	15	Pass
		1	272	-9.45	-10.74	-11.36	15	Pass
		273	0	8.55	8.53	8.58	15	Pass
Total	CP-OFDM QPSK	1	0	-5.40	-4.34	-4.05	15	Pass
		1	272	-3.46	-3.79	-5.42	15	Pass
		273	0	14.47	14.72	14.40	15	Pass
	CP-OFDM 16QAM	1	0	-5.38	-4.37	-4.04	15	Pass
		1	272	-3.47	-3.78	-5.43	15	Pass
		273	0	14.49	14.71	14.41	15	Pass
	CP-OFDM 64QAM	1	0	-4.73	-4.35	-4.02	15	Pass
		1	272	-3.47	-3.76	-5.45	15	Pass
		273	0	14.50	14.73	14.44	15	Pass
	CP-OFDM 256QAM	1	0	-5.34	-4.32	-4.02	15	Pass
		1	272	-3.47	-3.76	-5.42	15	Pass
		273	0	14.52	14.77	14.47	15	Pass

Note:

The device has 4 antennas and support 4TX4RX MIMO mode, according to KDB 662911 D01 Multiple Transmitter Output v02r01, for In-Band Measurements:

Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi

$G_{ANT}=15dBi$, $N_{ANT}=4$

Directional gain=15+10log(4)=21dBi>6dBi

So the limit need reduce (21dBi-6dBi)=15dB

3.5.3 Power Spectral Density

Port No.	Modulation	RB allocation	RB offset	Power Spectral Density (dBm/500kHz)			Limit (dBm/500 kHz)	Verdict
				Low Channel	Middle Channel	Middle Channel		
1	CP-OFDM QPSK	1	0	-14.65	-17.06	-14.64	15	Pass
		1	272	-15.44	-13.42	-12.83	15	Pass
		273	0	-13.31	-12.39	-12.96	15	Pass
	CP-OFDM 16QAM	1	0	-14.58	-16.74	-14.57	15	Pass
		1	272	-15.43	-13.41	-12.85	15	Pass
		273	0	-13.12	-12.39	-12.95	15	Pass
	CP-OFDM 64QAM	1	0	-14.54	-16.54	-14.56	15	Pass
		1	272	-15.41	-13.49	-13.19	15	Pass
		273	0	-13.04	-12.38	-12.94	15	Pass
	CP-OFDM 256QAM	1	0	-14.48	-16.33	-14.55	15	Pass
		1	272	-15.4	-13.57	-13.47	15	Pass
		273	0	-12.96	-12.49	-12.98	15	Pass
2	CP-OFDM QPSK	1	0	-14.33	-15.96	-14.52	15	Pass
		1	272	-15.39	-13.87	-13.89	15	Pass
		273	0	-12.77	-12.64	-12.66	15	Pass
	CP-OFDM 16QAM	1	0	-14.3	-15.82	-14.52	15	Pass
		1	272	-15.41	-13.92	-13.8	15	Pass
		273	0	-12.71	-12.69	-12.58	15	Pass
	CP-OFDM 64QAM	1	0	-14.28	-15.73	-14.51	15	Pass
		1	272	-14.45	-13.96	-13.74	15	Pass
		273	0	-12.66	-12.72	-12.54	15	Pass
	CP-OFDM 256QAM	1	0	-14.26	-15.63	-14.5	15	Pass
		1	272	-15.48	-13.99	-13.71	15	Pass
		273	0	-12.62	-12.74	-12.5	15	Pass
3	CP-OFDM QPSK	1	0	-14.2	-15.45	-14.49	15	Pass
		1	272	-15.56	-14.07	-13.64	15	Pass
		273	0	-12.52	-12.77	-12.44	15	Pass
	CP-OFDM 16QAM	1	0	-14.19	-15.39	-14.47	15	Pass
		1	272	-15.61	-14.09	-13.61	15	Pass
		273	0	-12.48	-12.68	-12.42	15	Pass
	CP-OFDM 64QAM	1	0	-14.18	-15.33	-14.47	15	Pass
		1	272	-15.63	-14.12	-13.59	15	Pass
		273	0	-12.46	-12.49	-12.41	15	Pass
	CP-OFDM 256QAM	1	0	-14.17	-15.29	-14.48	15	Pass
		1	272	-15.65	-14.13	-13.57	15	Pass
		273	0	-12.44	-12.36	-12.39	15	Pass
4	CP-OFDM QPSK	1	0	-14.15	-15.18	-14.35	15	Pass
		1	272	-15.71	-14.17	-13.53	15	Pass
		273	0	-12.38	-12.14	-12.37	15	Pass

	CP-OFDM 16QAM	1	0	-14.14	-15.15	-14.3	15	Pass
		1	272	-15.72	-14.19	-13.52	15	Pass
		273	0	-12.36	-12.07	-12.37	15	Pass
	CP-OFDM 64QAM	1	0	-14.14	-15.13	-14.26	15	Pass
		1	272	-15.73	-14.2	-13.51	15	Pass
		273	0	-12.35	-11.99	-12.37	15	Pass
	CP-OFDM 256QAM	1	0	-14.13	-15.11	-14.21	15	Pass
		1	272	-15.73	-14.2	-13.5	15	Pass
		273	0	-12.34	-11.95	-12.36	15	Pass
Total	CP-OFDM QPSK	1	0	-8.31	-9.83	-8.48	15	Pass
		1	272	-9.50	-7.85	-7.43	15	Pass
		273	0	-6.71	-6.46	-6.58	15	Pass
	CP-OFDM 16QAM	1	0	-8.28	-9.71	-8.44	15	Pass
		1	272	-9.52	-7.87	-7.41	15	Pass
		273	0	-6.64	-6.43	-6.55	15	Pass
	CP-OFDM 64QAM	1	0	-8.26	-9.63	-8.43	15	Pass
		1	272	-9.25	-7.91	-7.48	15	Pass
		273	0	-6.60	-6.37	-6.54	15	Pass
	CP-OFDM 256QAM	1	0	-8.24	-9.54	-8.41	15	Pass
		1	272	-9.54	-7.94	-7.54	15	Pass
		273	0	-6.56	-6.35	-6.53	15	Pass

Note:

The device has 4 antennas and support 4TX4RX MIMO mode, according to KDB 662911 D01 Multiple Transmitter Output v02r01, for In-Band Measurements:

Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi

$G_{ANT}=15dBi$, $N_{ANT}=4$

Directional gain=15+10log(4)=21dBi>6dBi

So the limit need reduce (21dBi-6dBi)=15dB

3.5.4 Duty Cycle

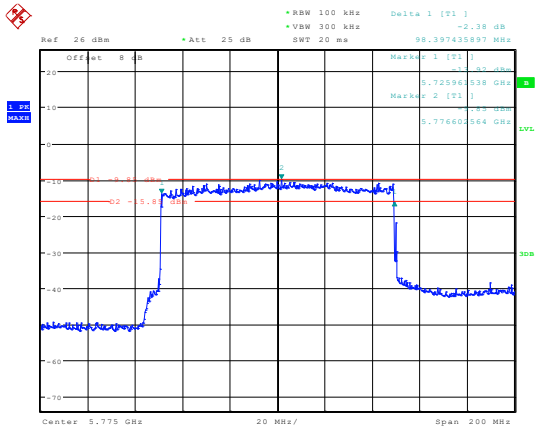
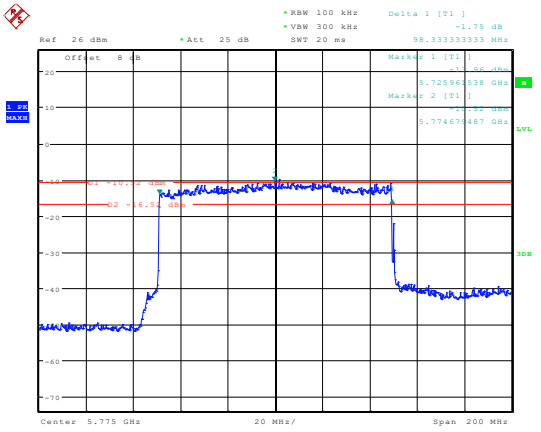
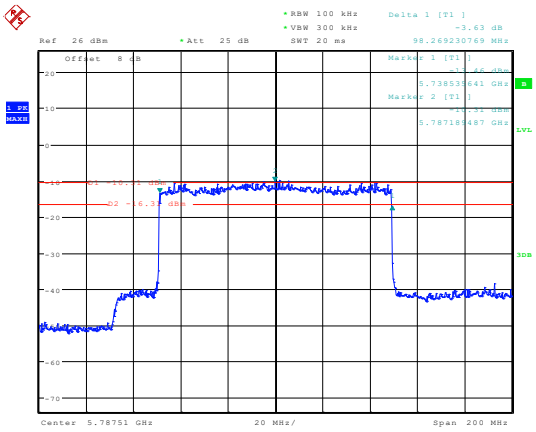
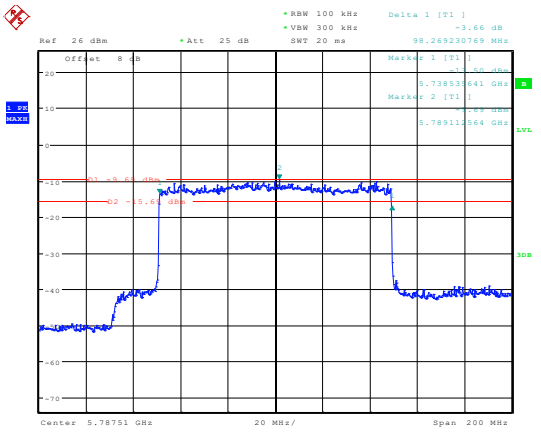
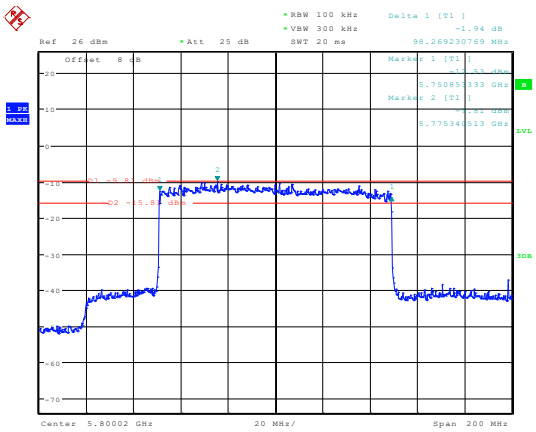
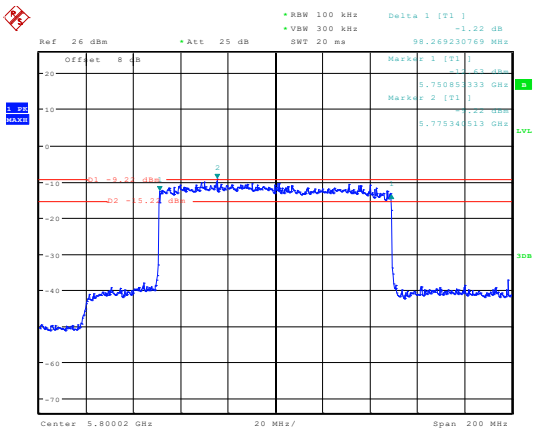
Test Modes	Port No.	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (KHz)	VBW Setting* (Hz)
CP-OFDM QPSK	1	0.885	2.495	35.47	1.130	2000
CP-OFDM 16QAM	1	0.908	2.520	36.03	1.101	2000
CP-OFDM 64QAM	1	0.908	2.516	36.09	1.101	2000
CP-OFDM 256QAM	1	0.895	2.494	35.89	1.117	2000

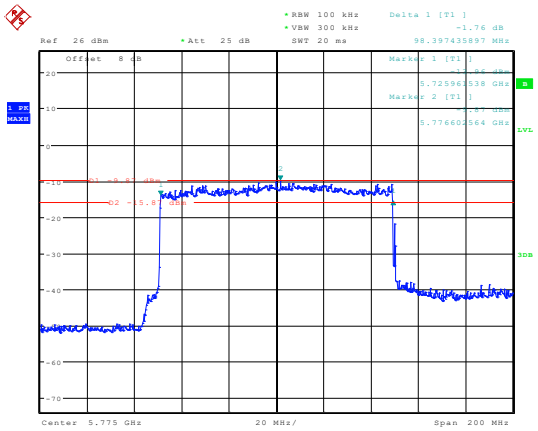
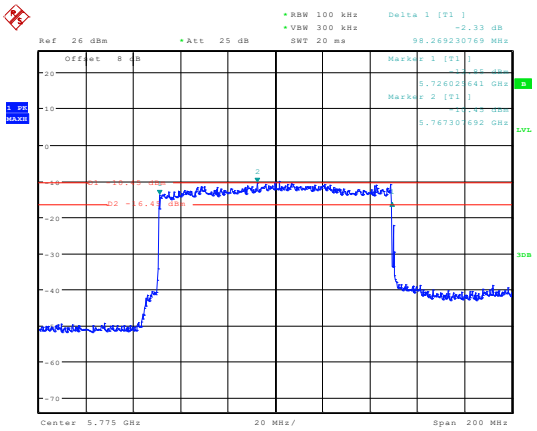
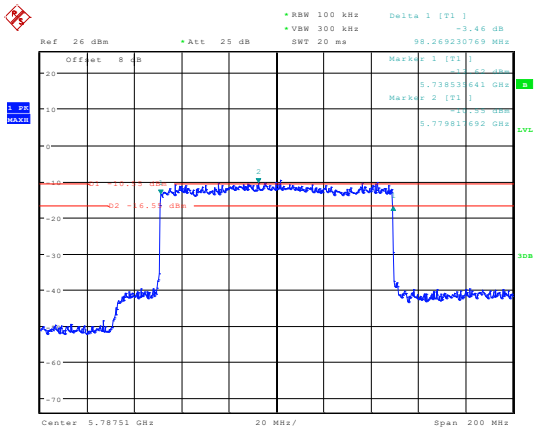
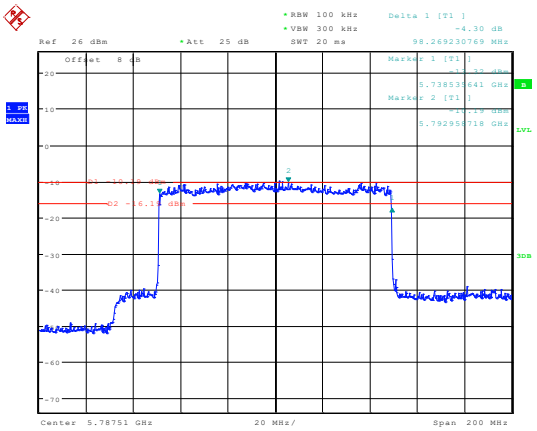
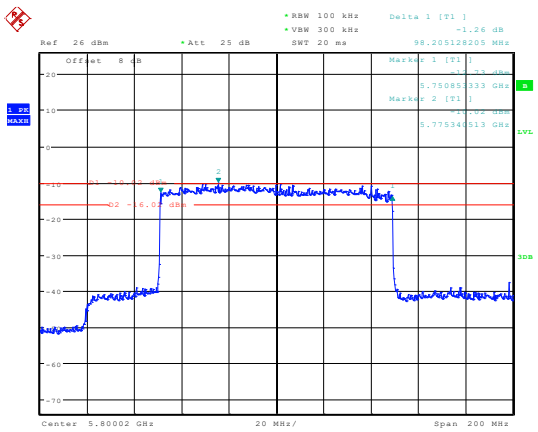
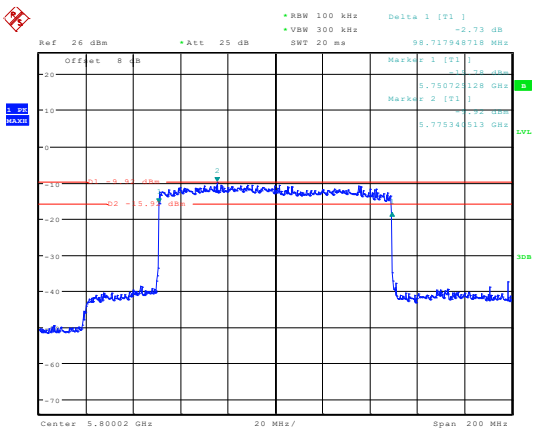
Note: test only performed on Antenna port 1.

Note*: Radiated emission test with average value, the Spectrum analyzer VBW setting information.

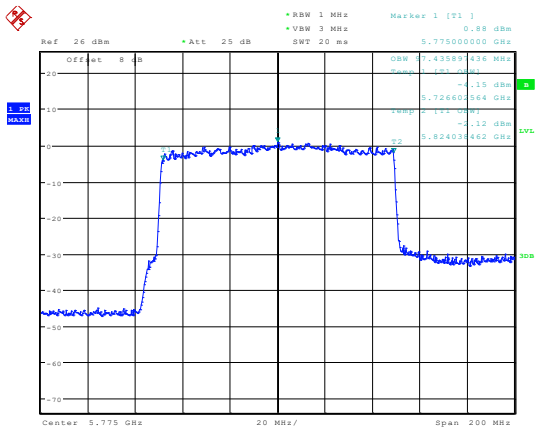
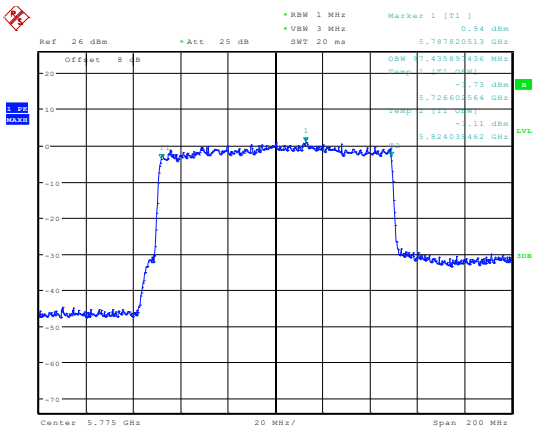
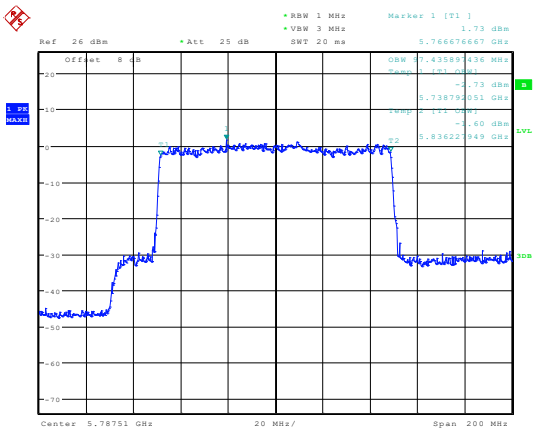
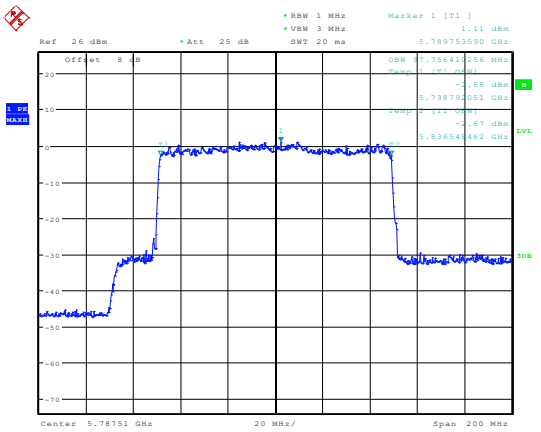
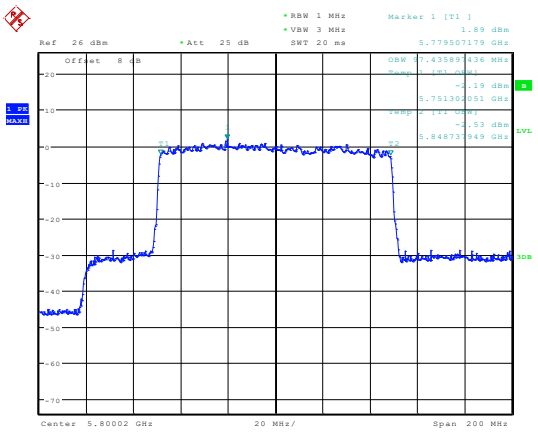
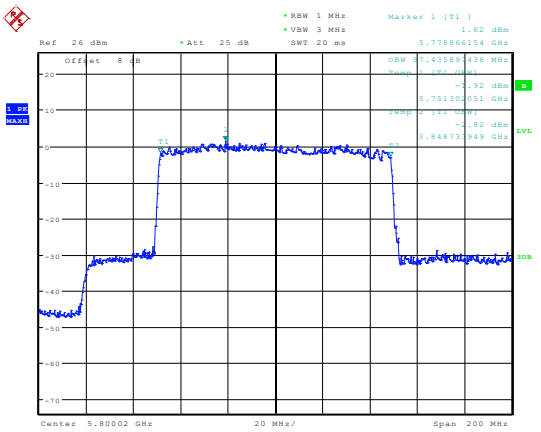
Test Plots:

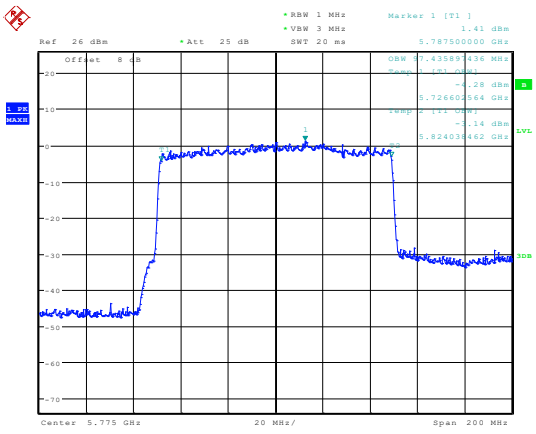
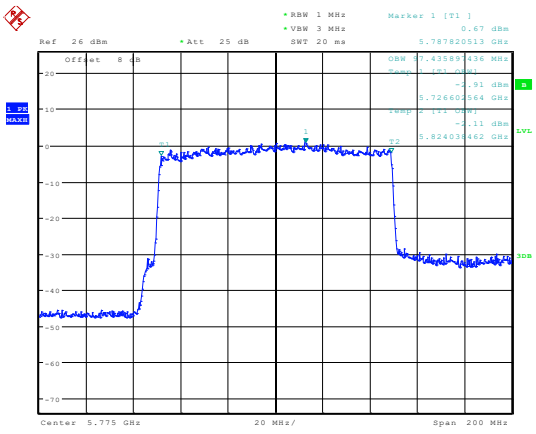
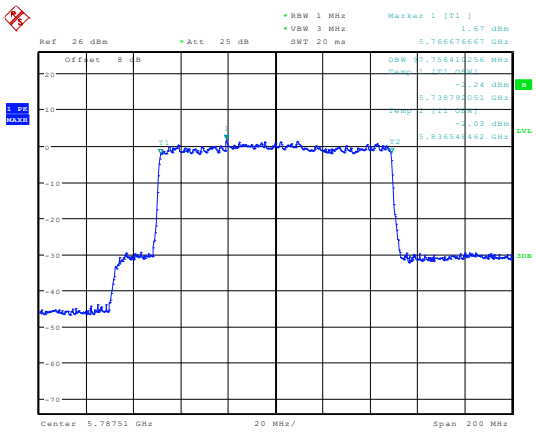
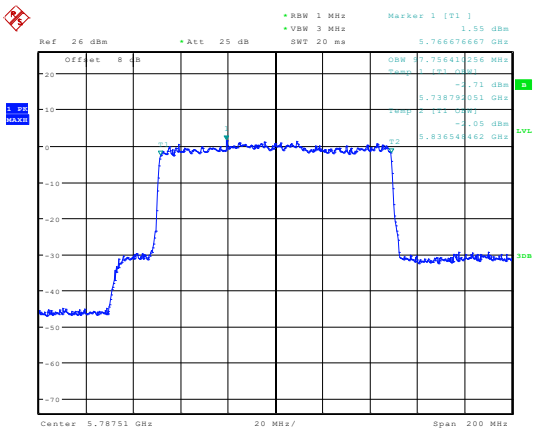
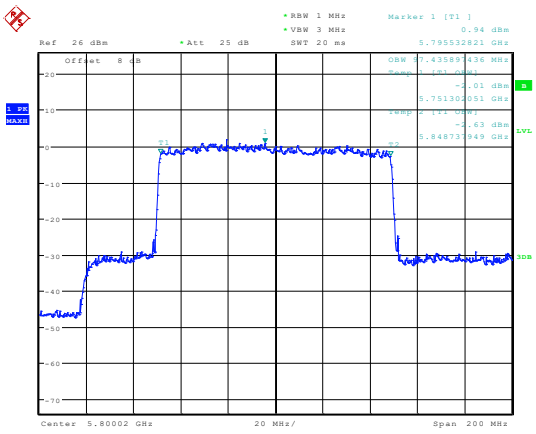
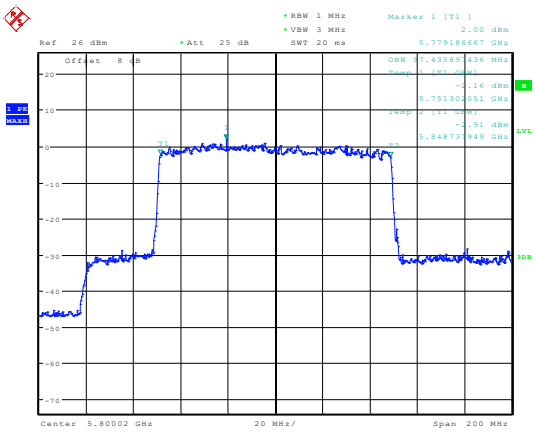
6dB Emission Bandwidth

QPSK	16QAM
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

64QAM	256QAM
Lowest channel	Lowest channel
	
Date: 25.JAN.2024 14:55:33	Date: 25.JAN.2024 14:57:21
Middle channel	Middle channel
	
Date: 25.JAN.2024 15:08:33	Date: 25.JAN.2024 15:10:58
High channel	High channel
	
Date: 25.JAN.2024 15:23:40	Date: 25.JAN.2024 15:25:05

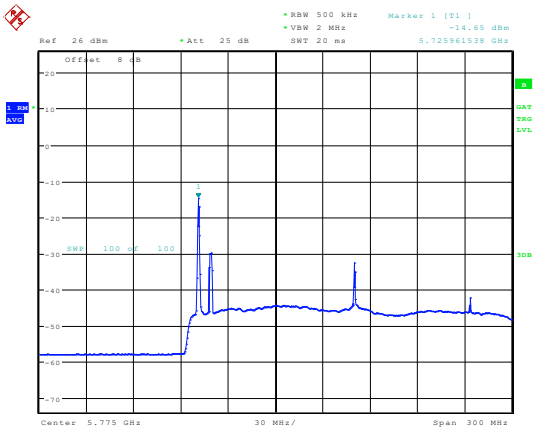
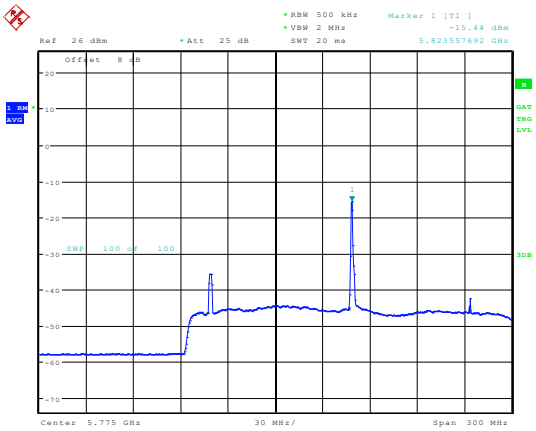
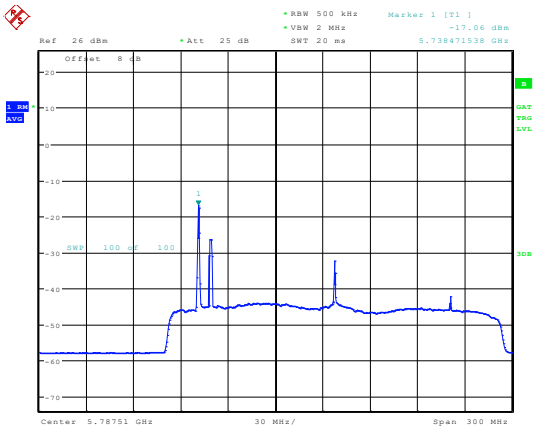
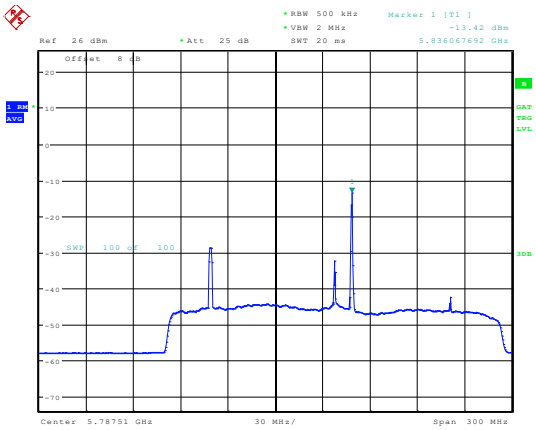
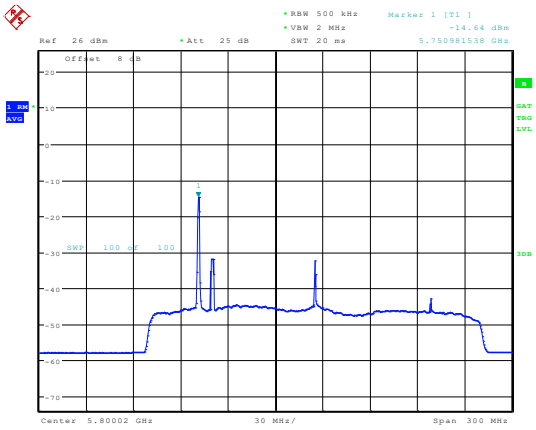
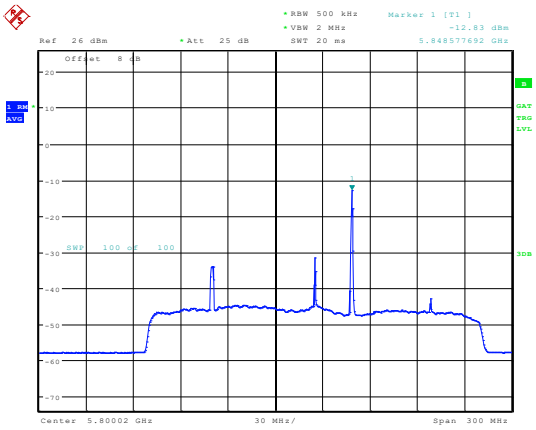
99% Occupied Bandwidth

QPSK	16QAM
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

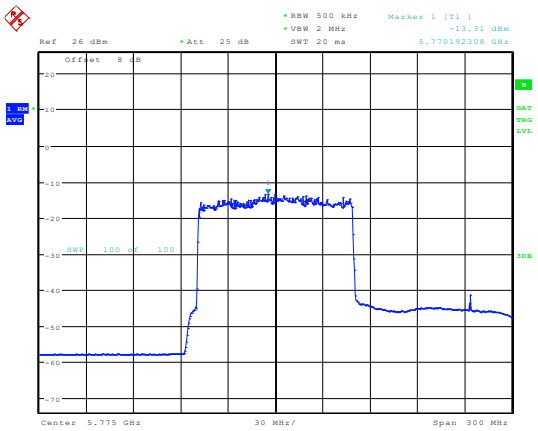
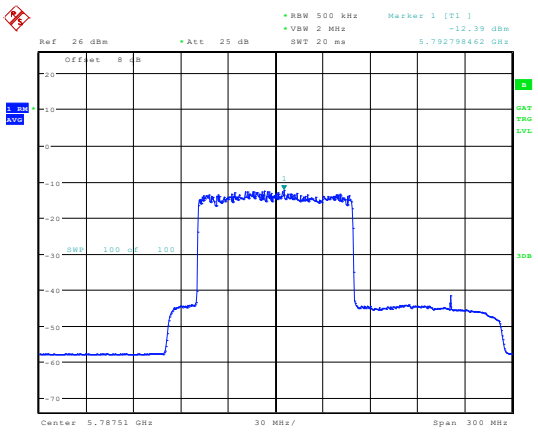
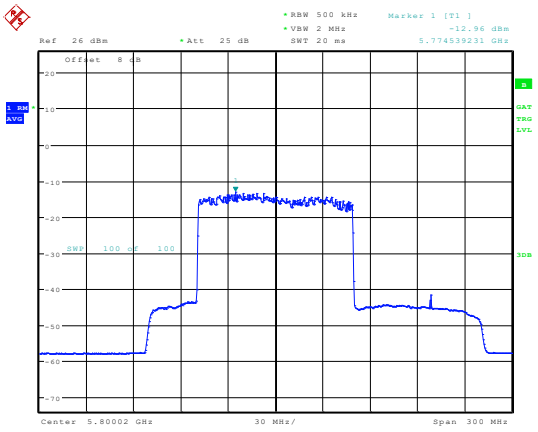
64QAM	256QAM
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

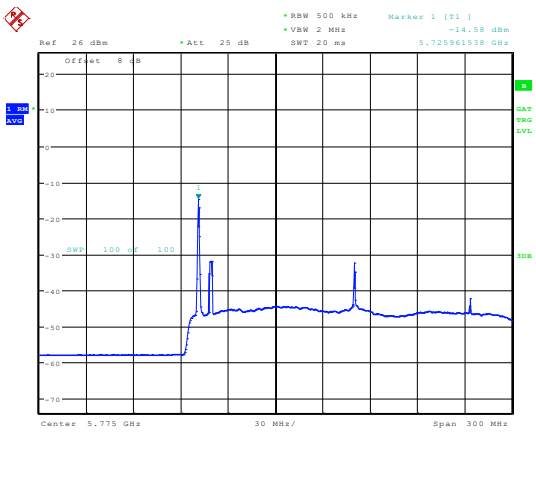
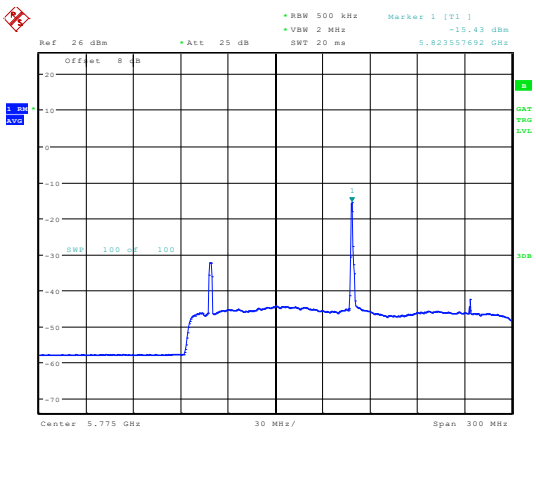
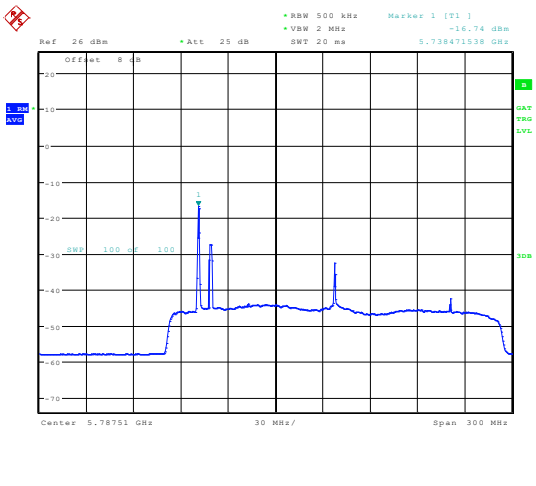
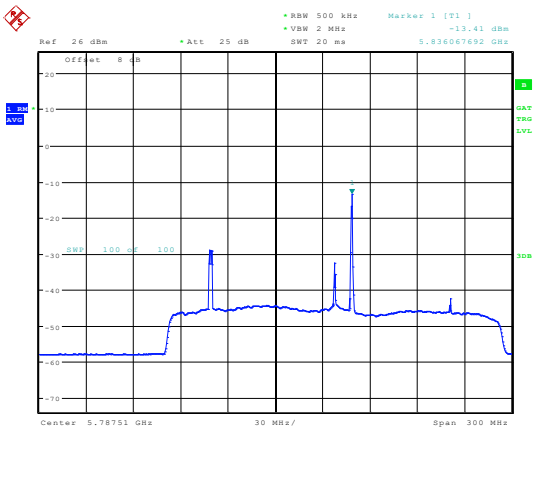
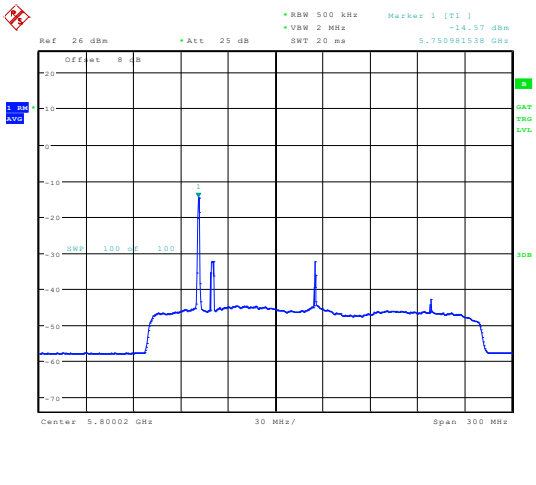
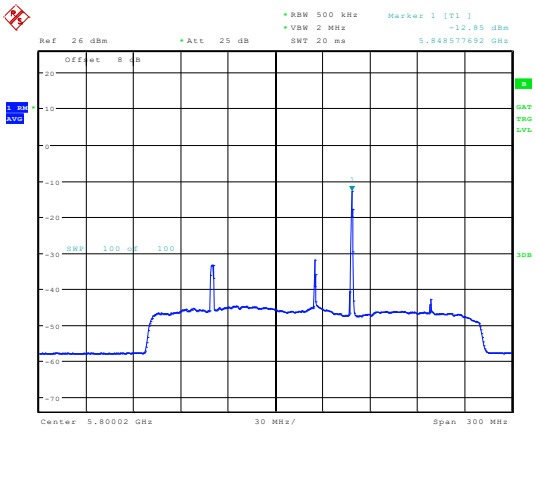
Power Spectral Density

Port No. 1

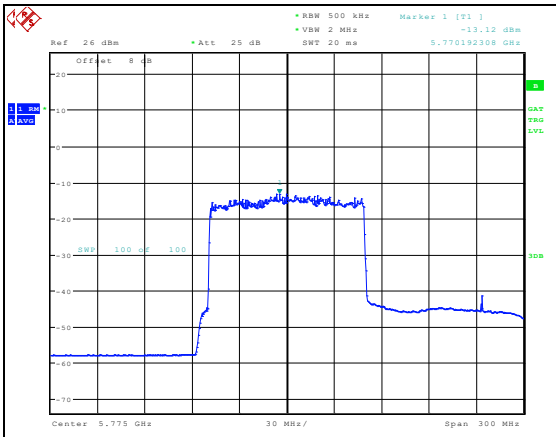
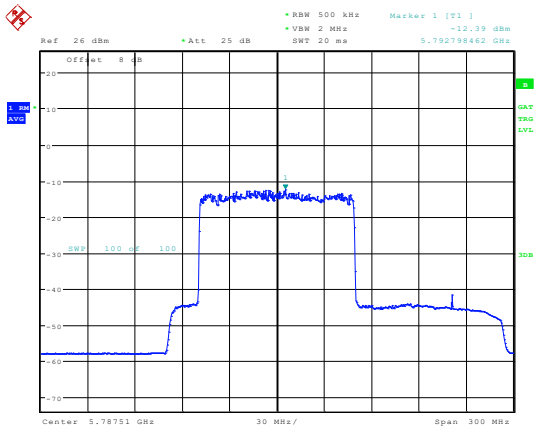
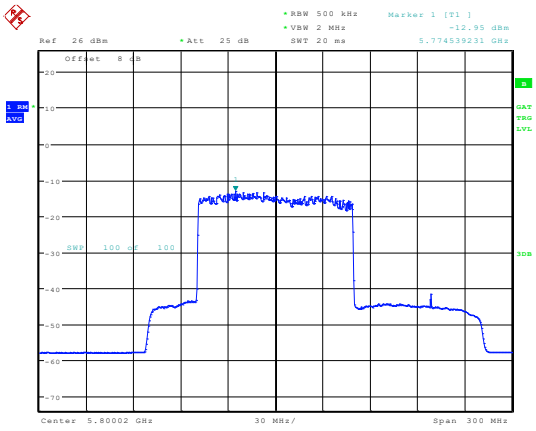
QPSK	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
High channel	High channel
	

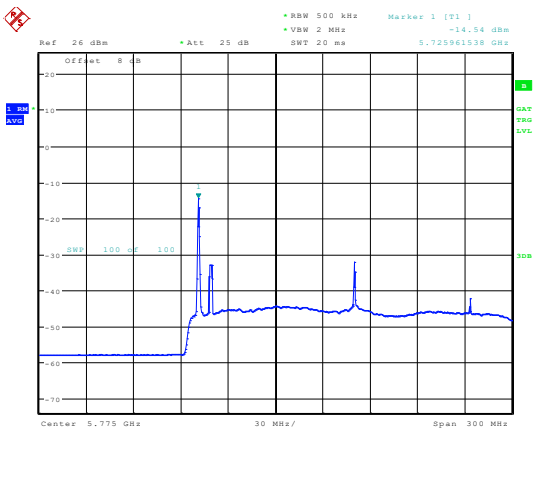
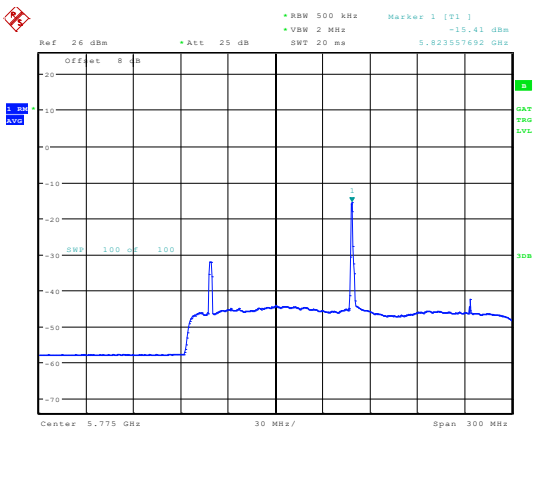
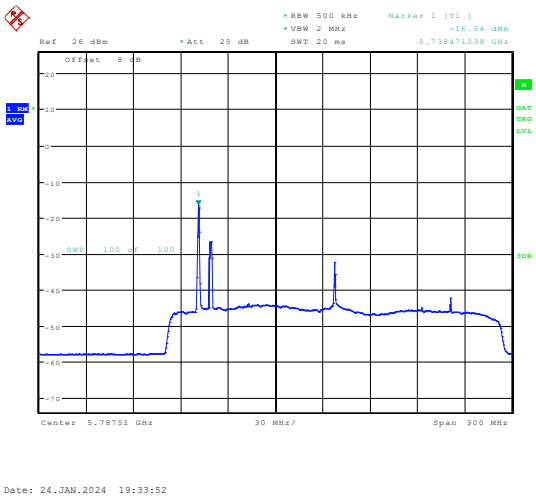
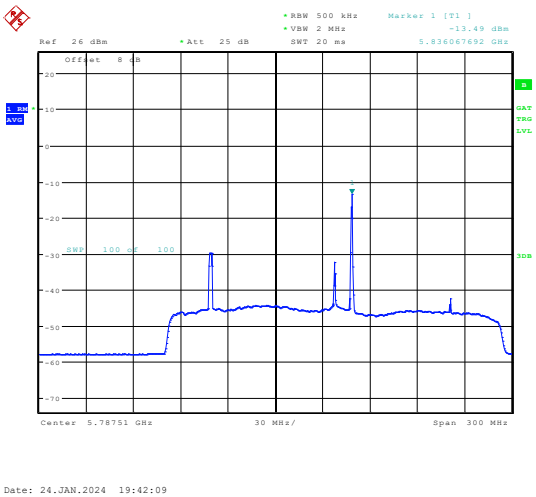
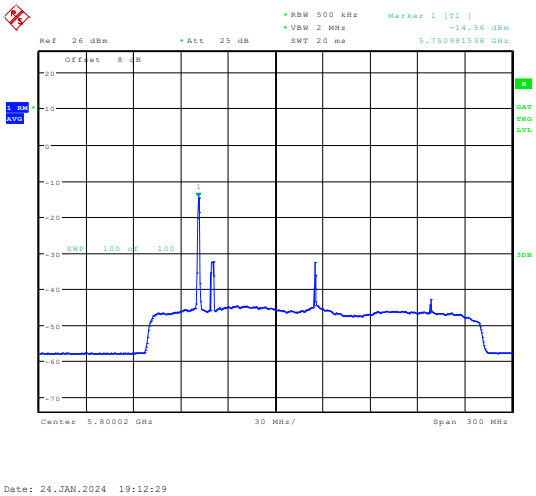
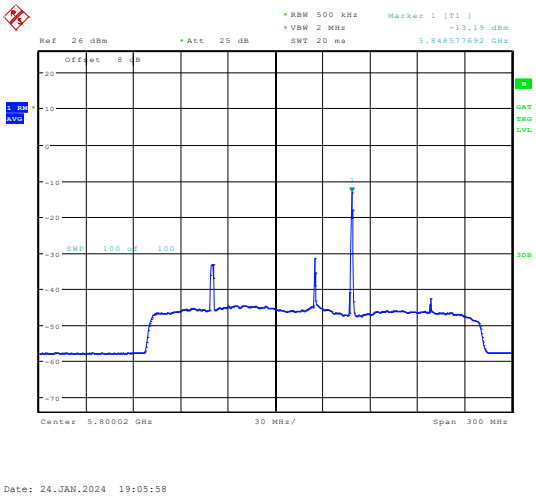
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
High channel	/
	/

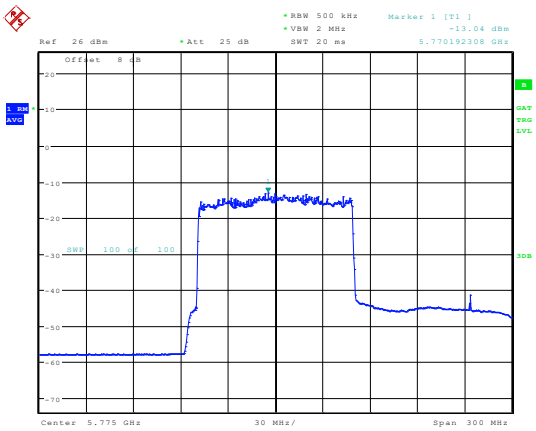
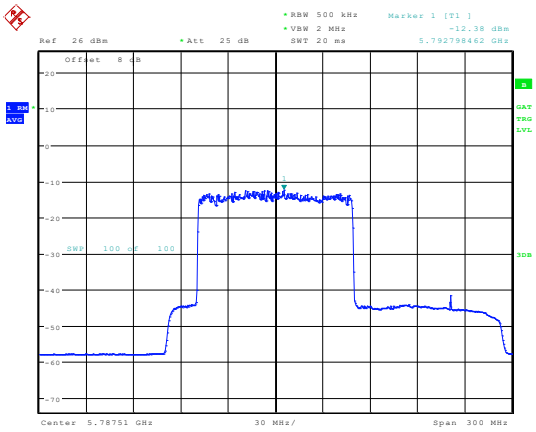
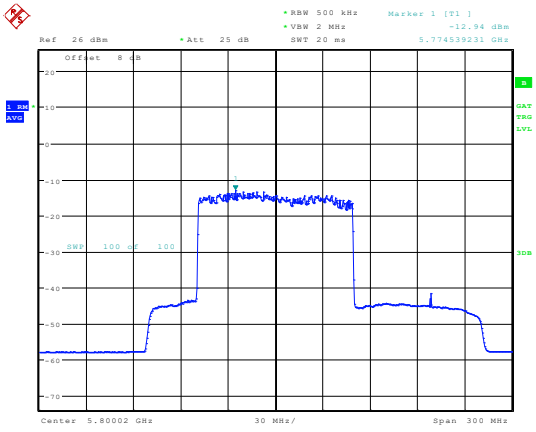
16QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

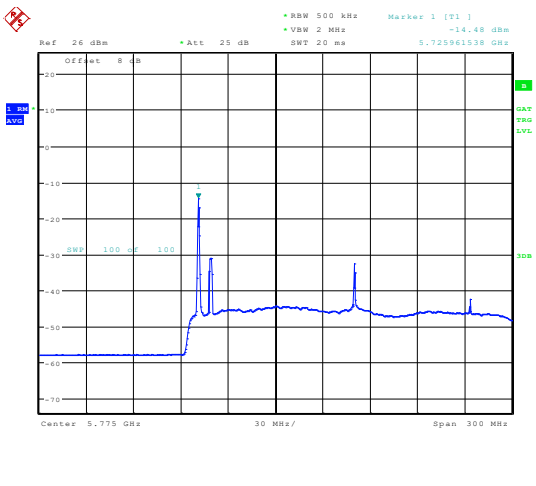
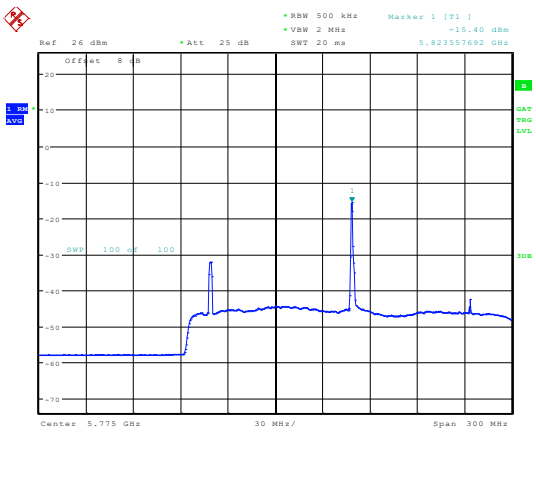
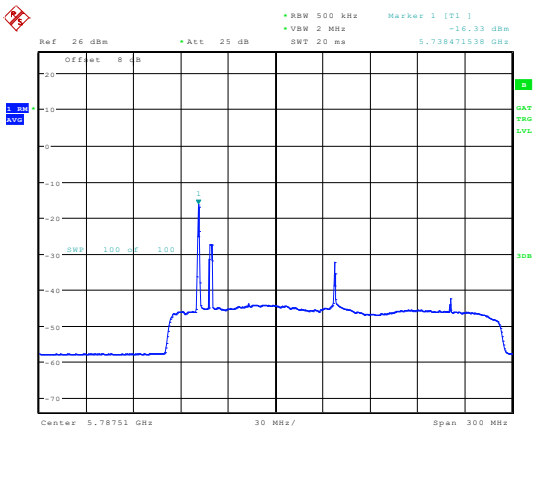
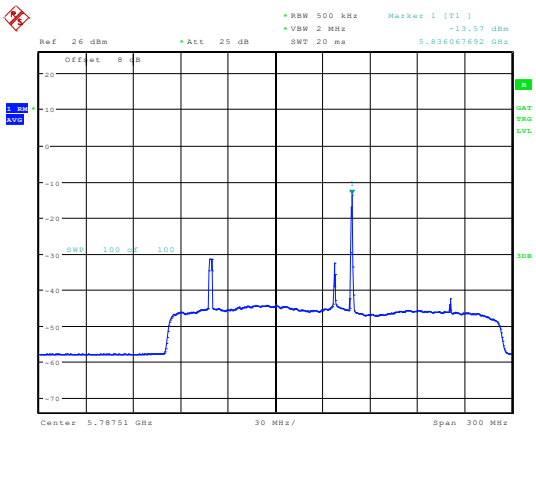
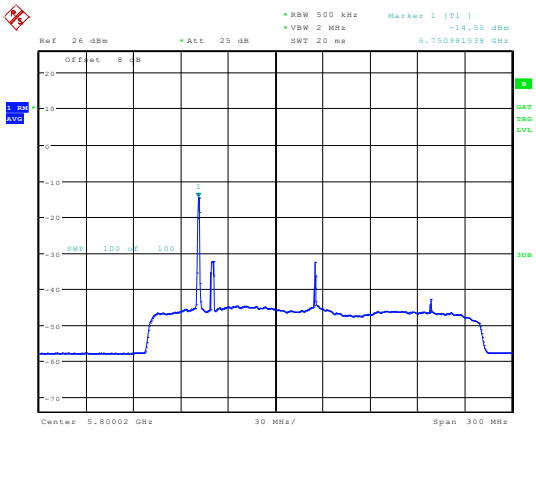
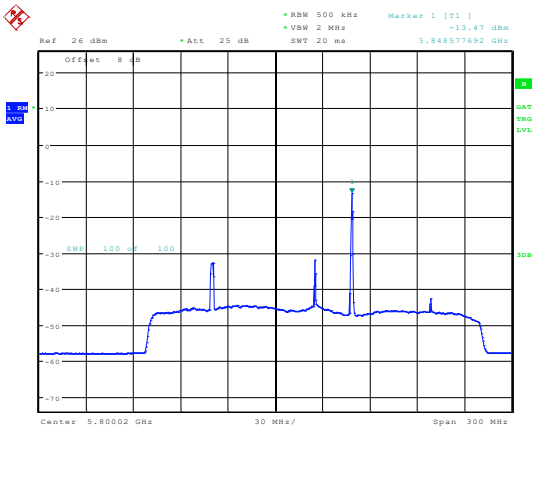
273RB#0	/
Lowest channel	

	/
Middle channel	/
	/
Highest channel	/
	/

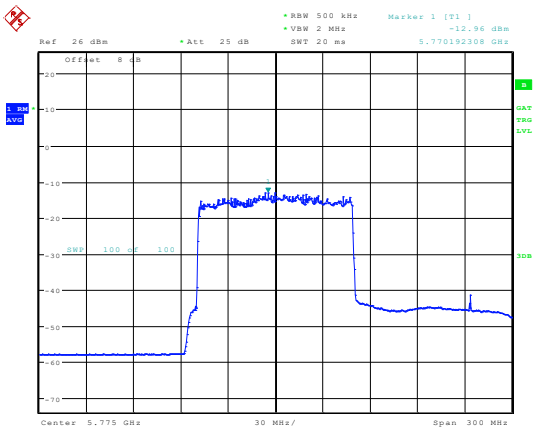
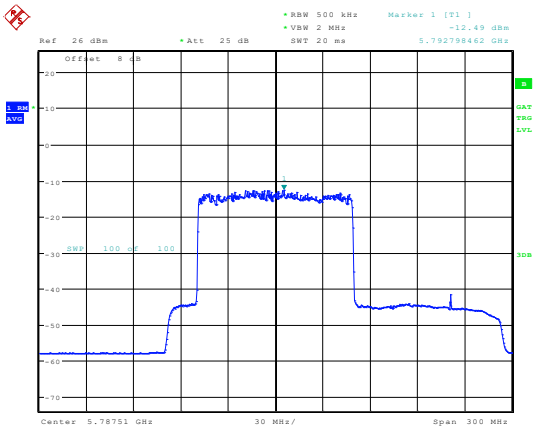
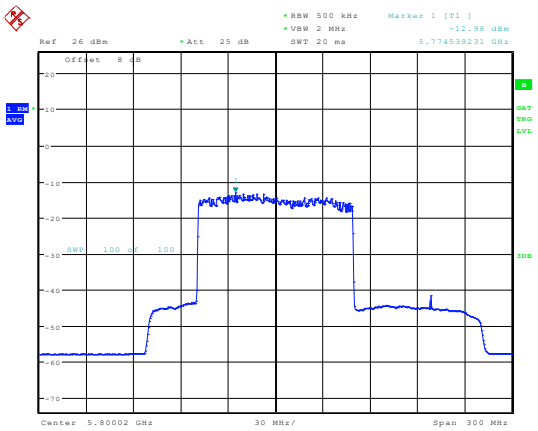
64QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

273RB#0	/
Lowest channel	/

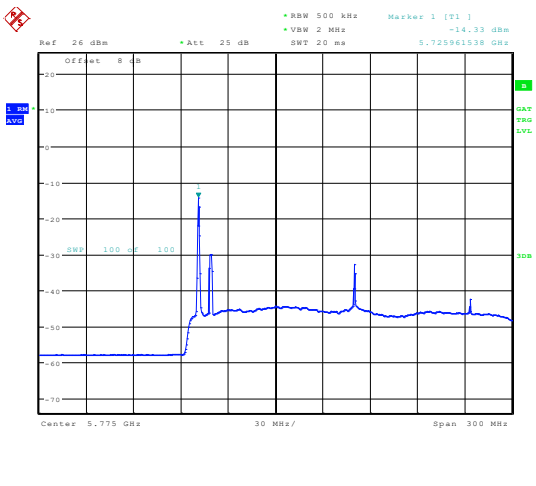
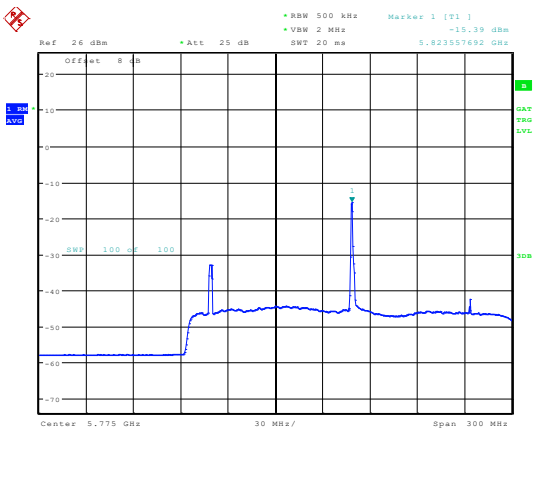
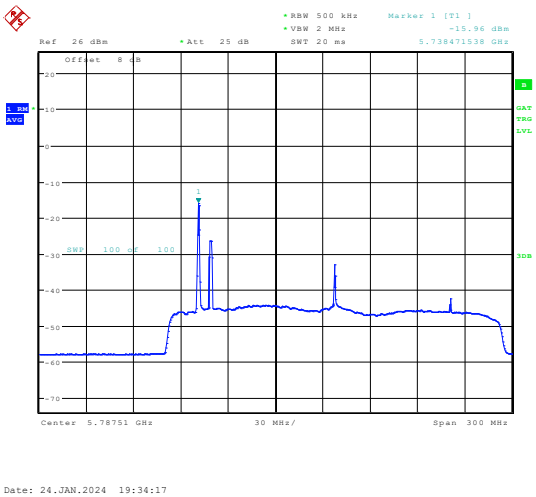
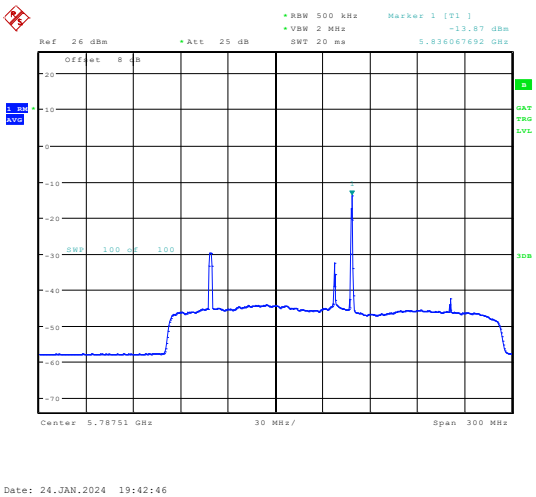
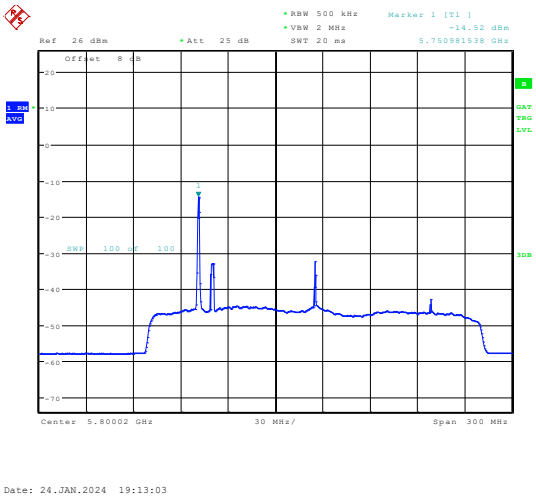
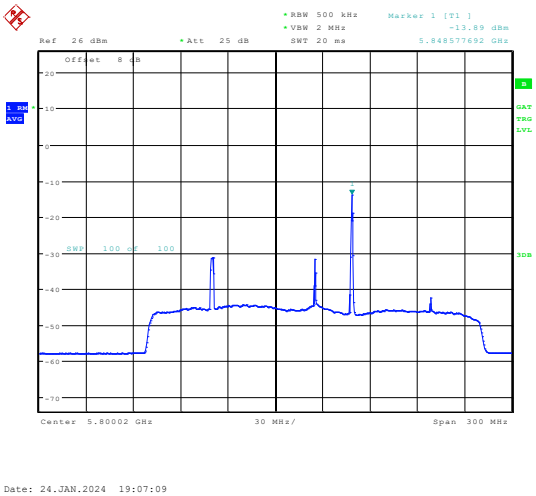
	/
Middle channel	/
	/
Highest channel	/
	/

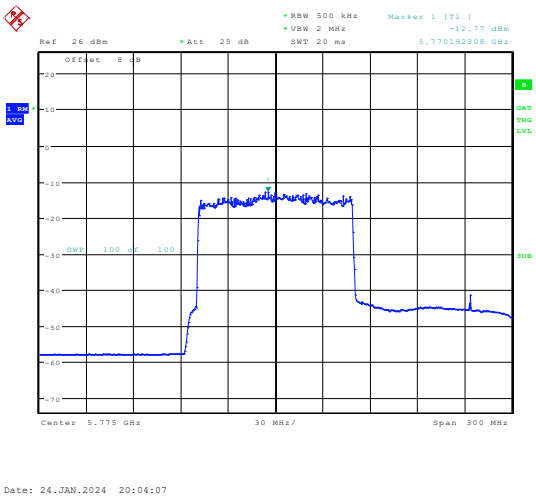
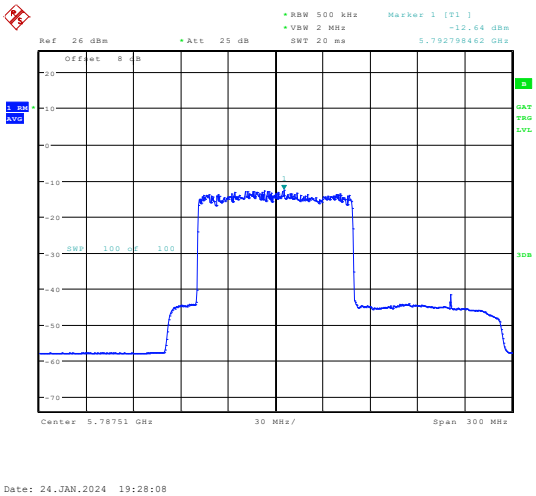
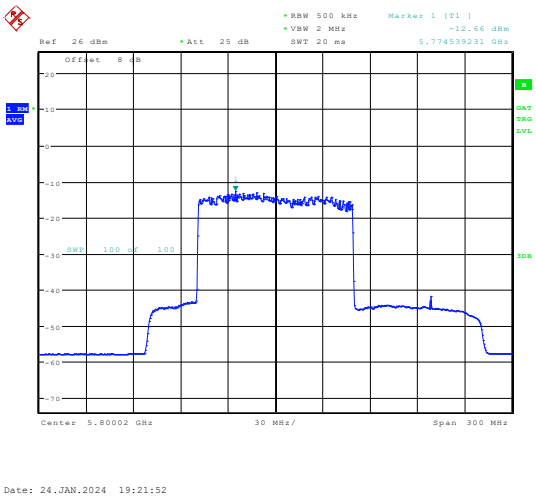
256QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

273RB#0	/
Lowest channel	/

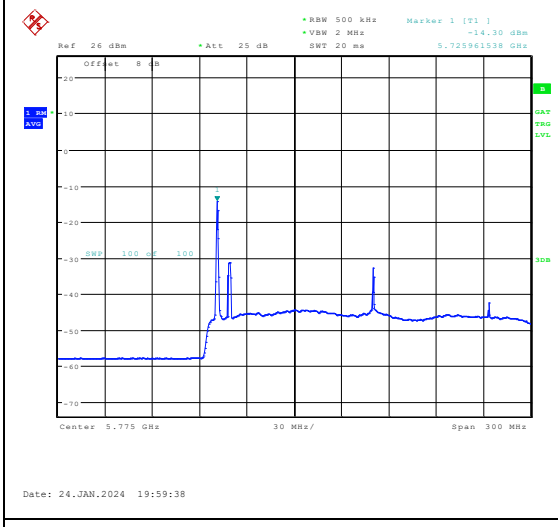
	/
Middle channel	/
	/
Highest channel	/
	/

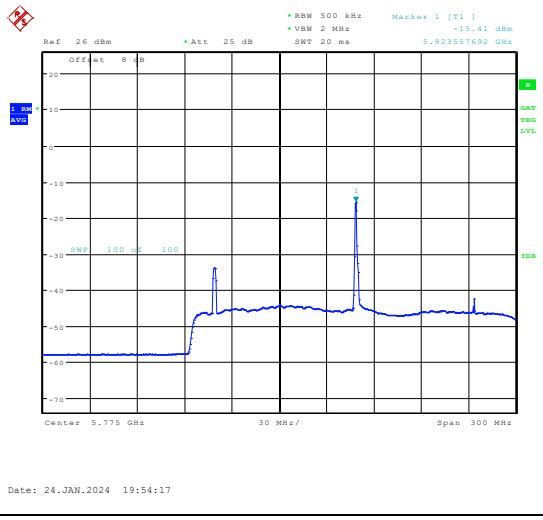
Port No. 2

QPSK	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
Highest channel	/
	/

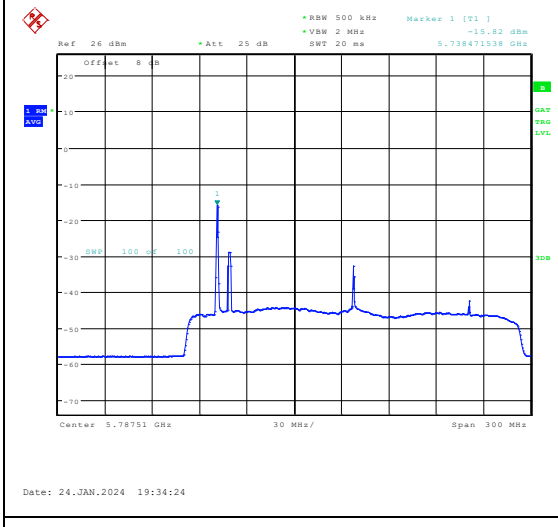
16QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel

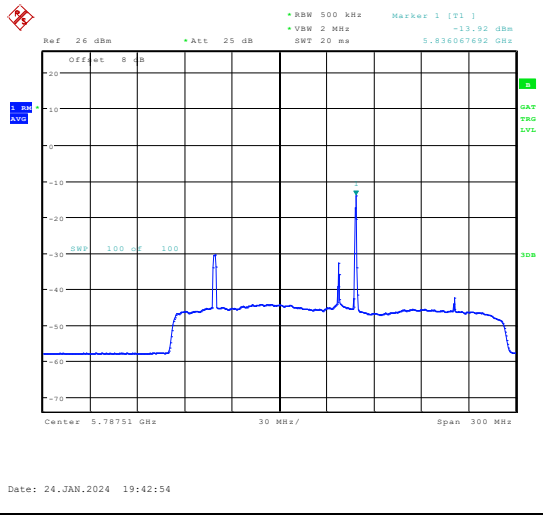




Middle channel

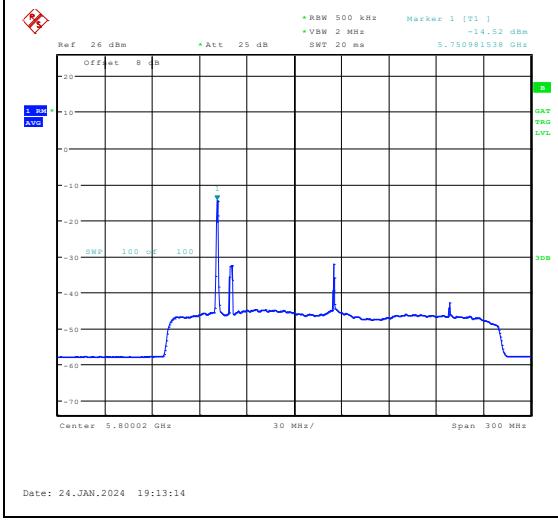
Middle channel

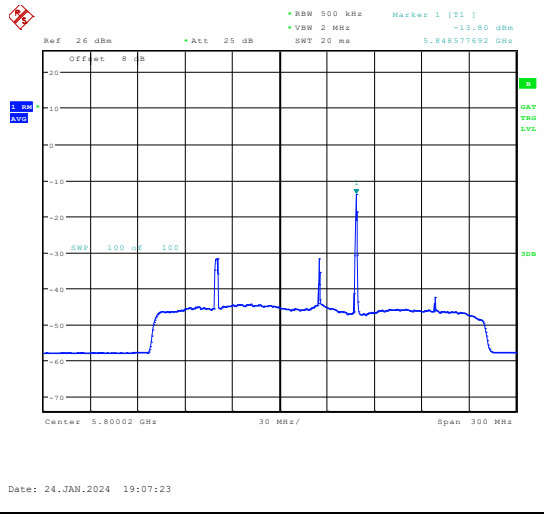


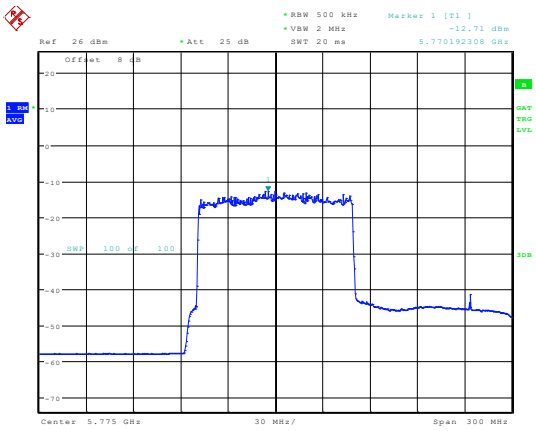
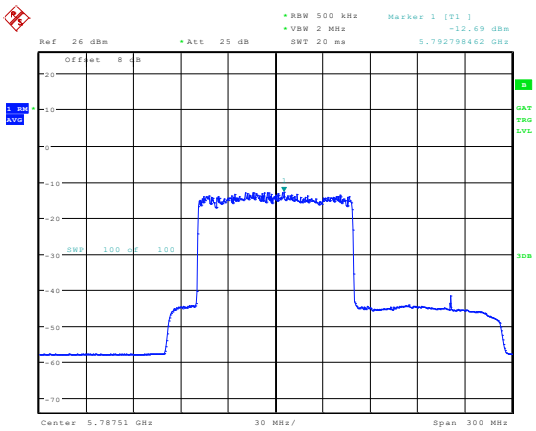
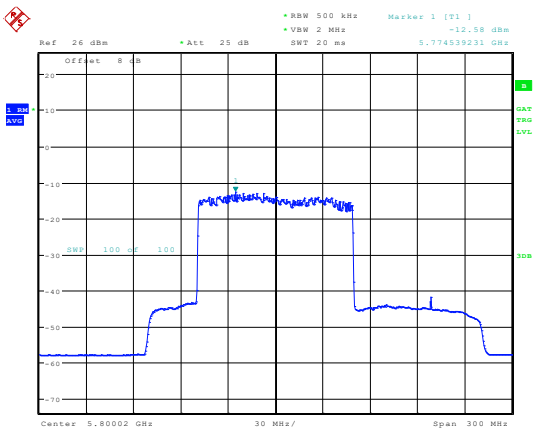


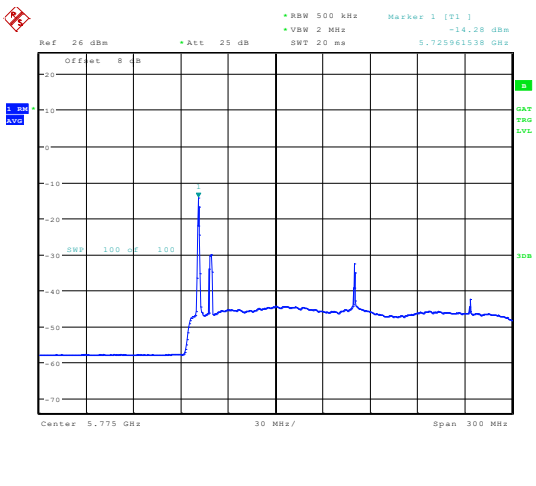
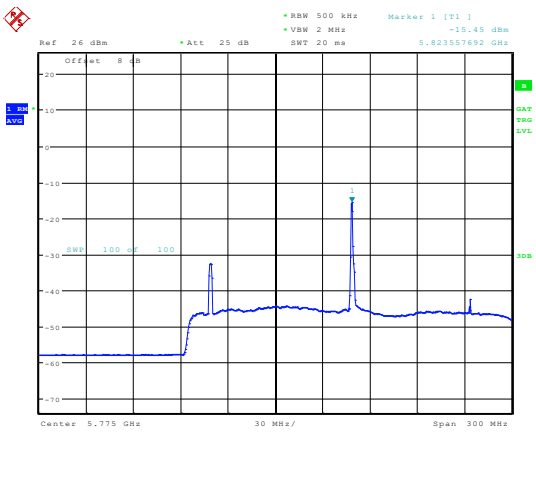
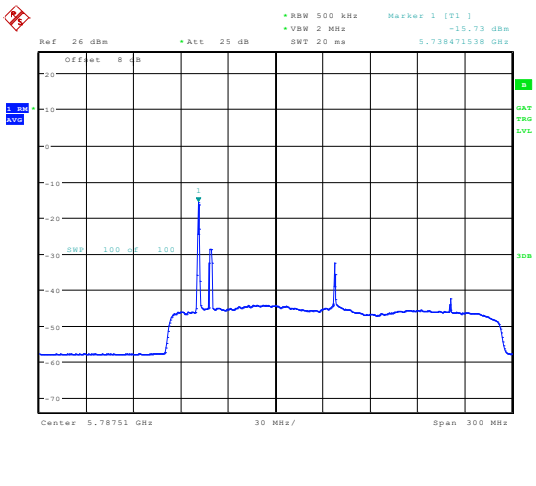
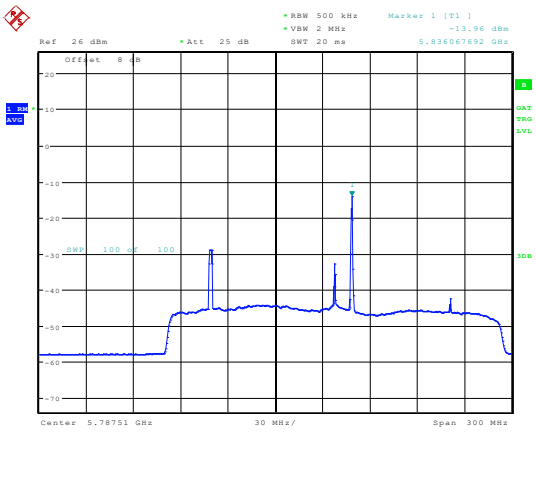
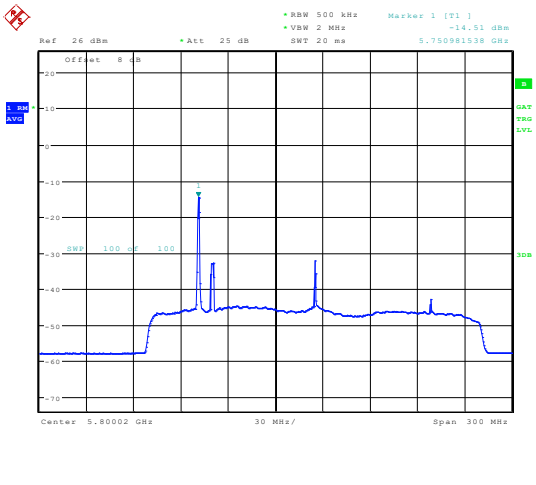
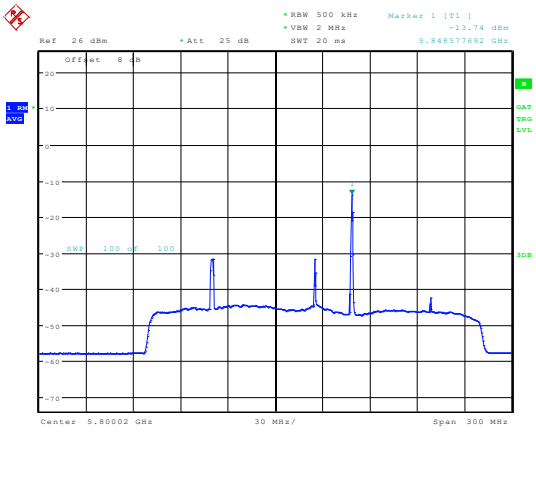
Highest channel

Highest channel

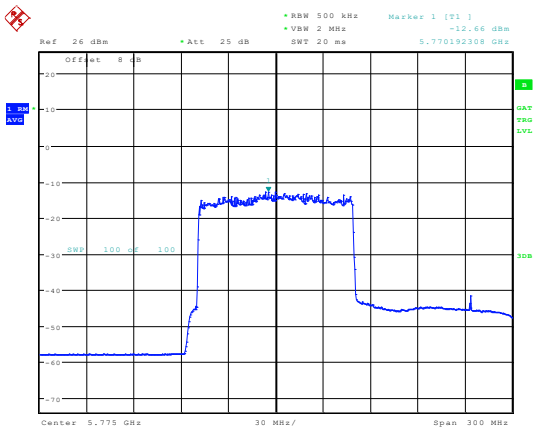
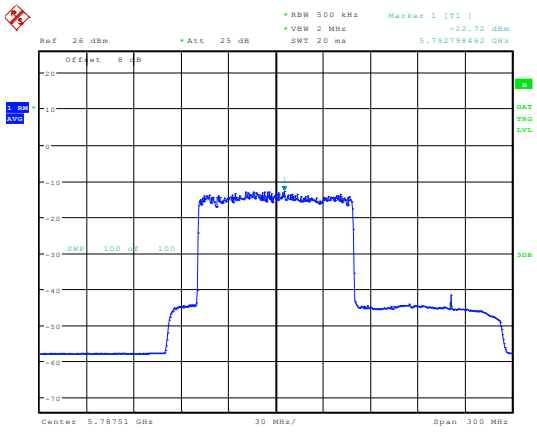
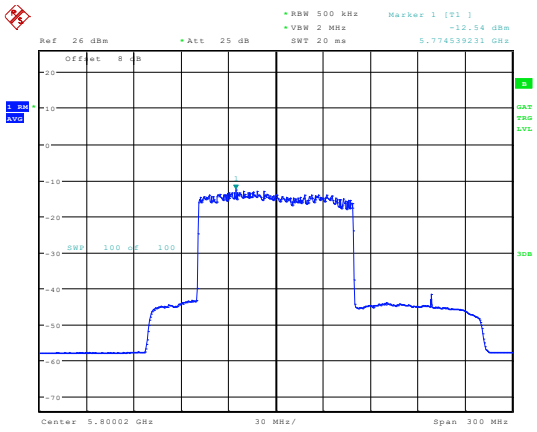


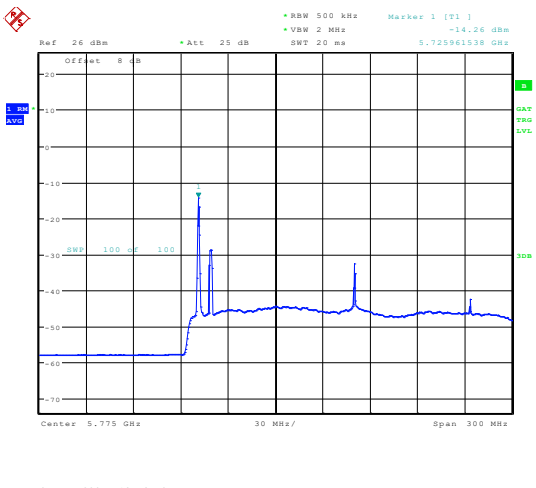
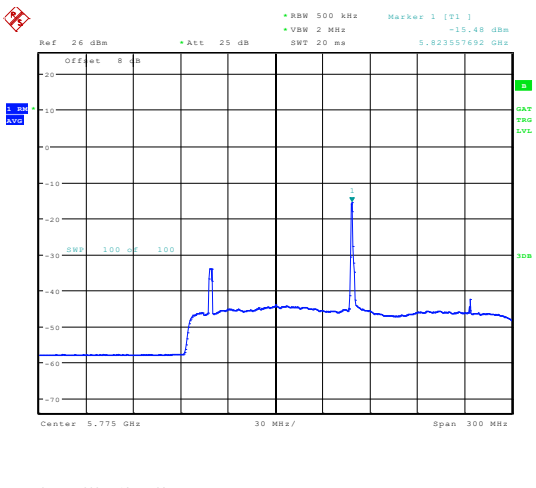
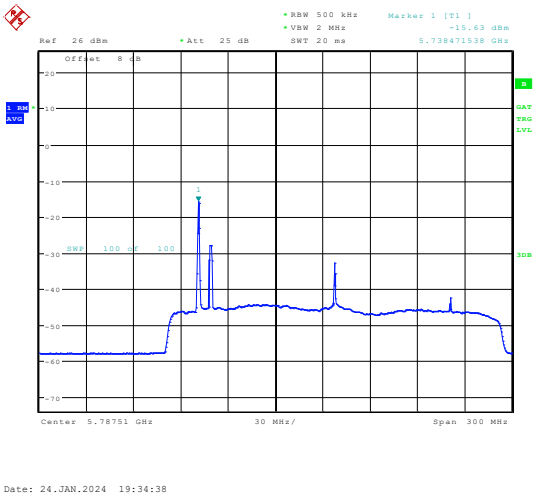
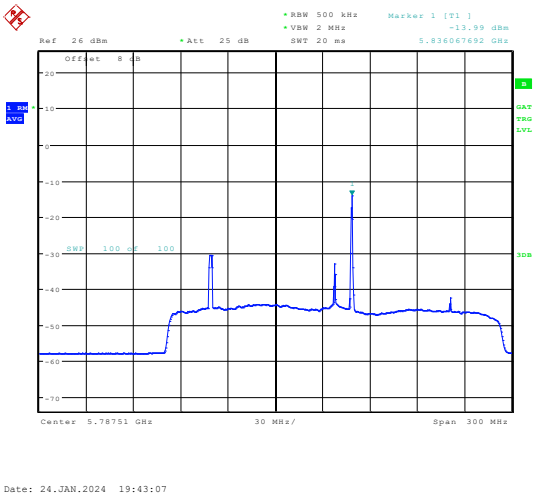
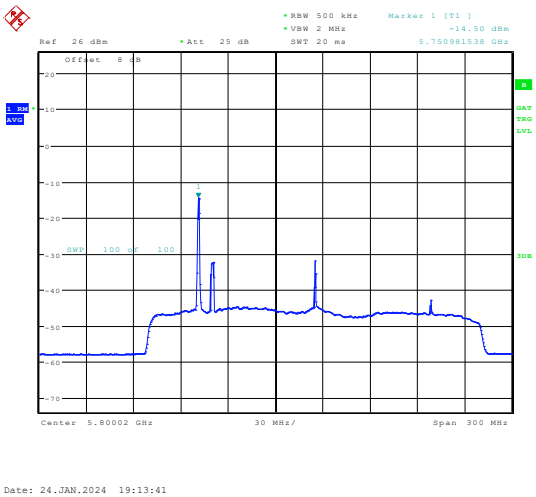
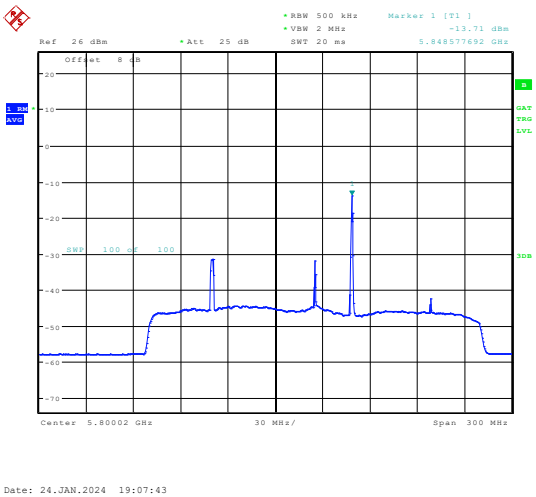


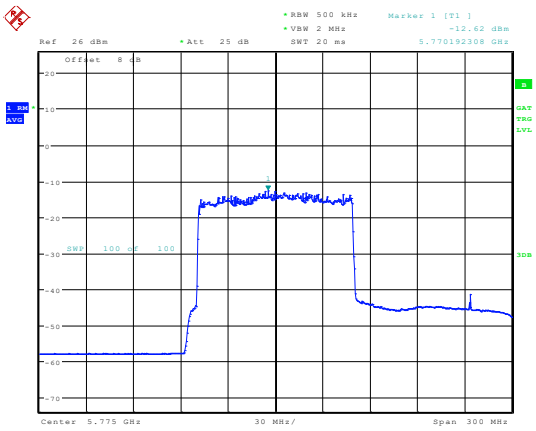
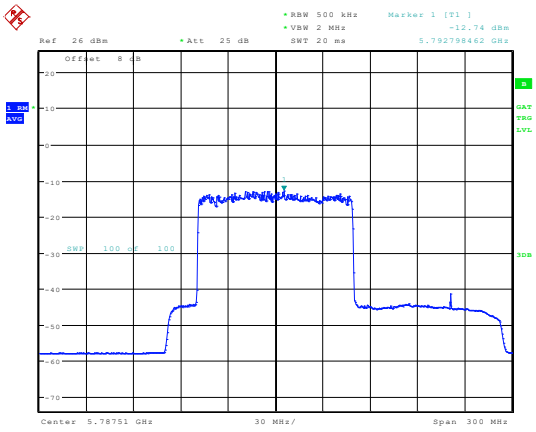
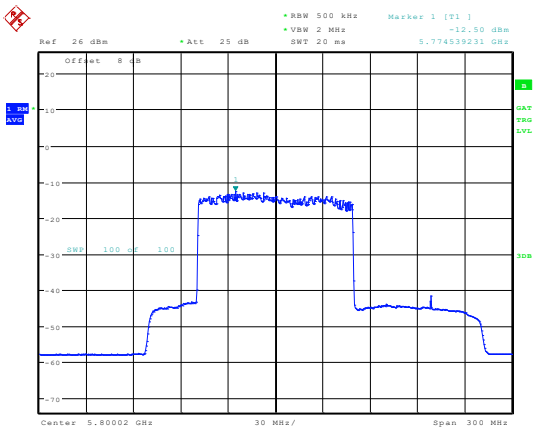
273RB#0	/
Lowest channel	/
	/
Middle channel	/
	/
Highest channel	/
	/

64QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

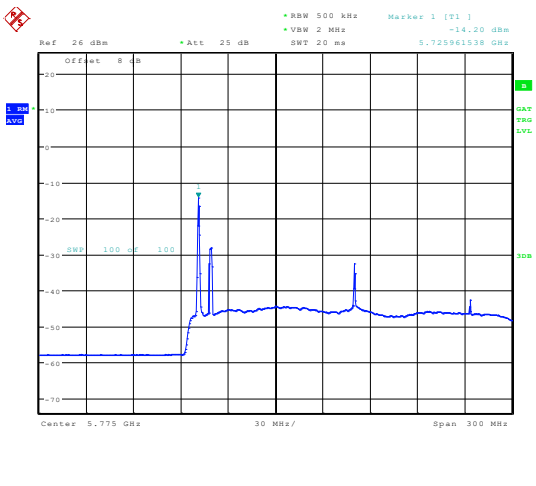
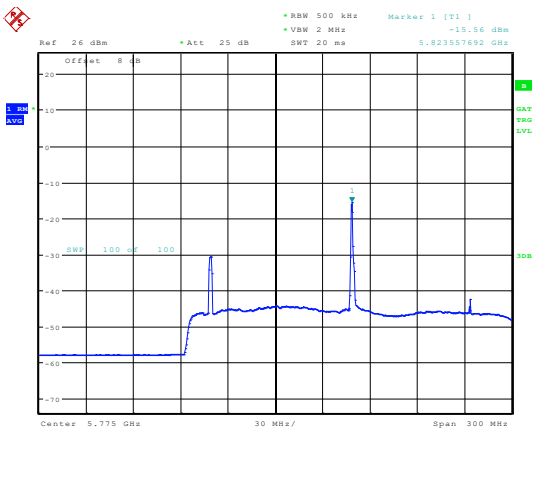
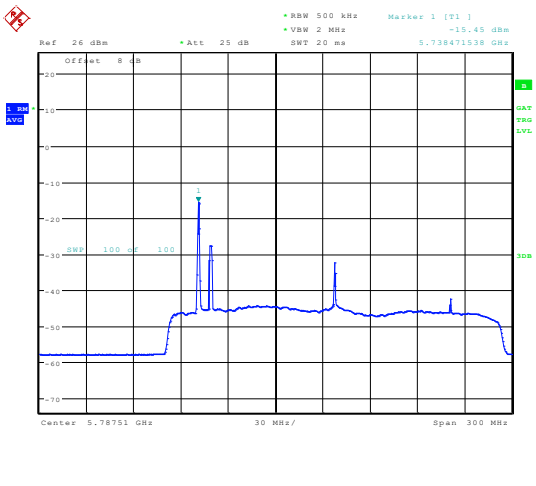
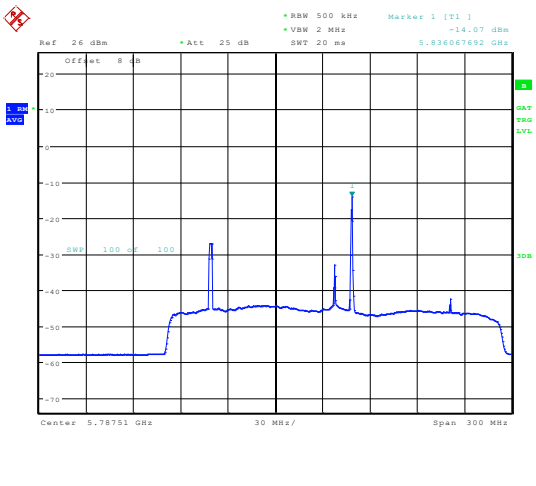
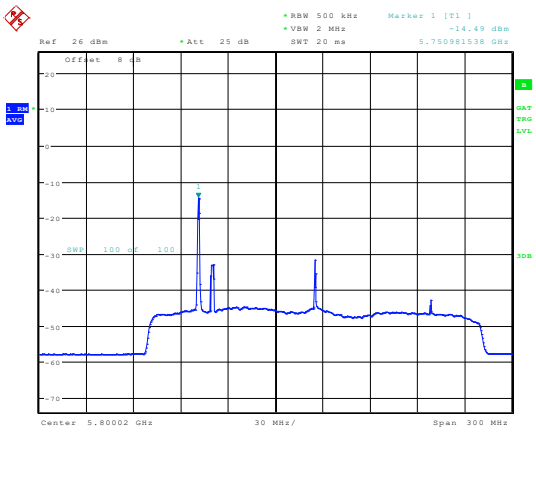
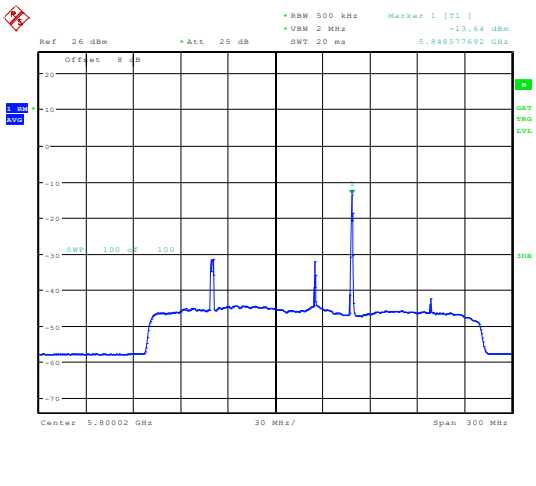
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
Highest channel	/
	/

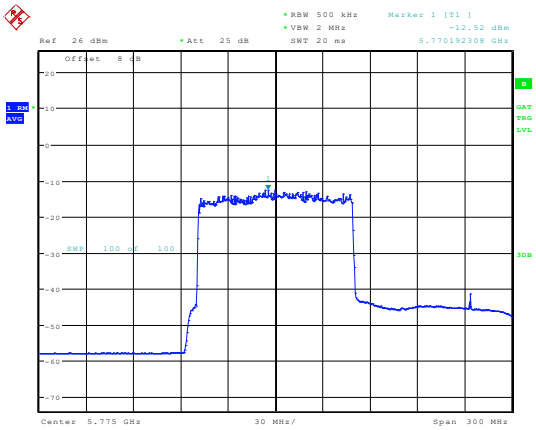
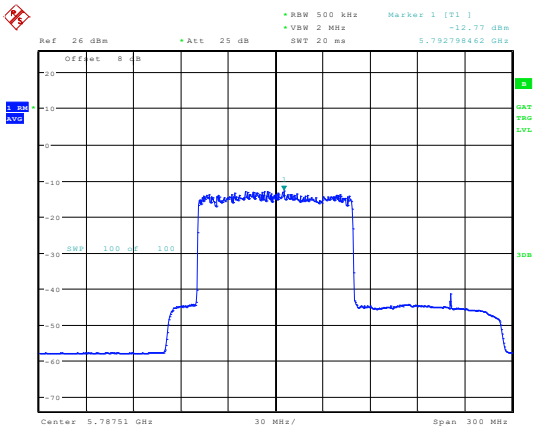
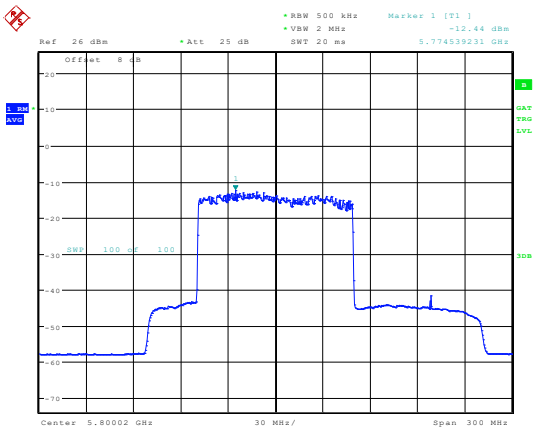
256QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

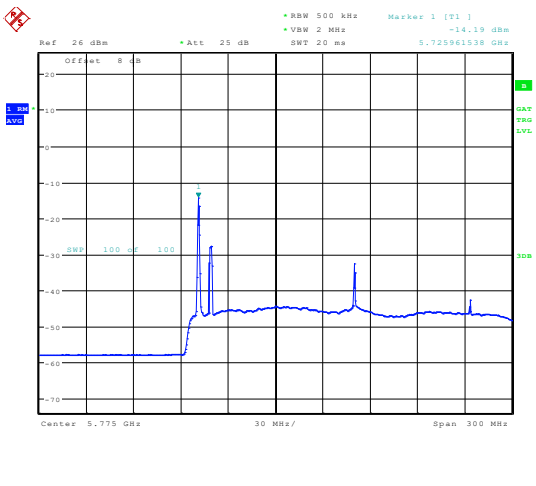
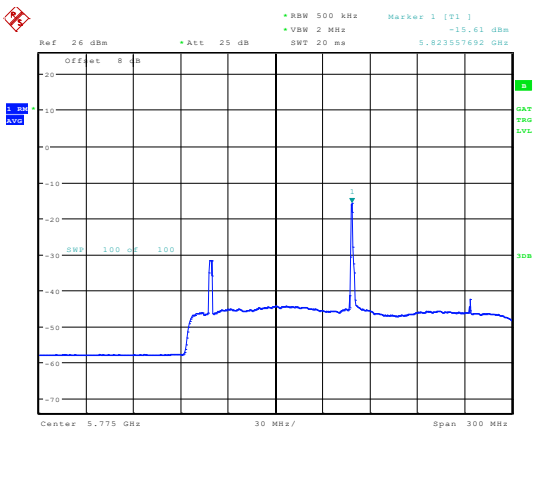
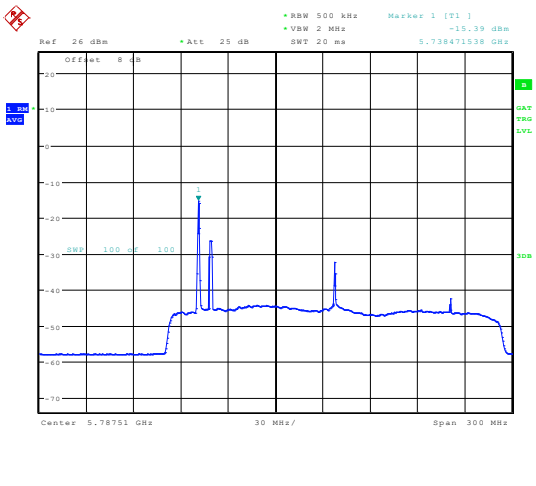
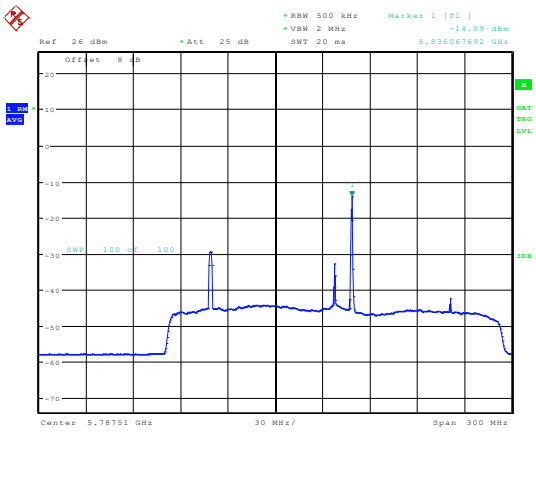
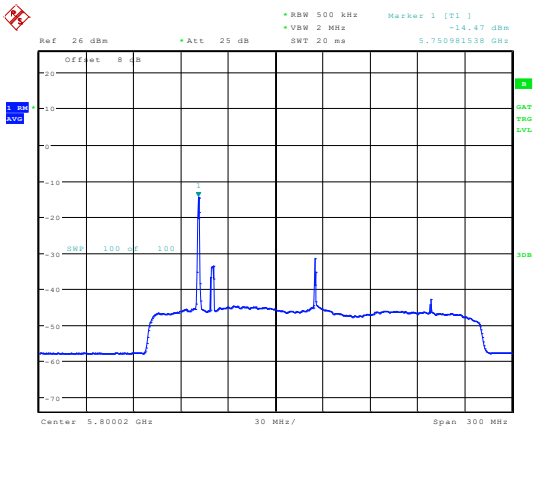
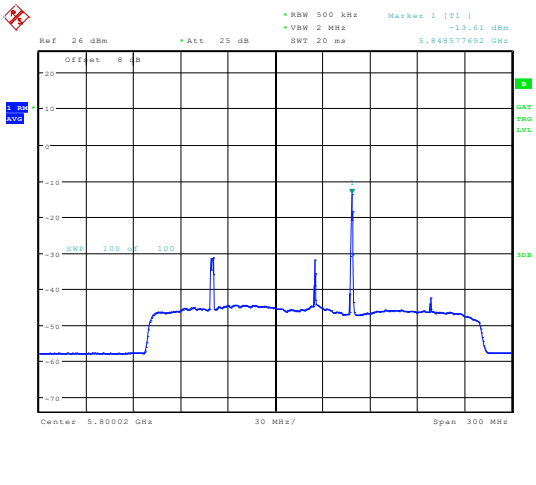
273RB#0	/
Lowest channel	/
	/
Middle channel	/
	/
Highest channel	/
	/

Port No. 3

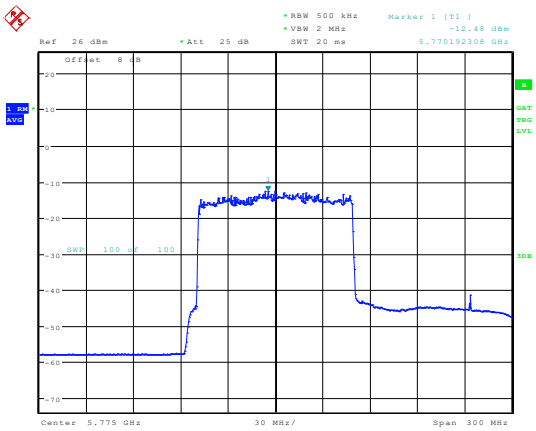
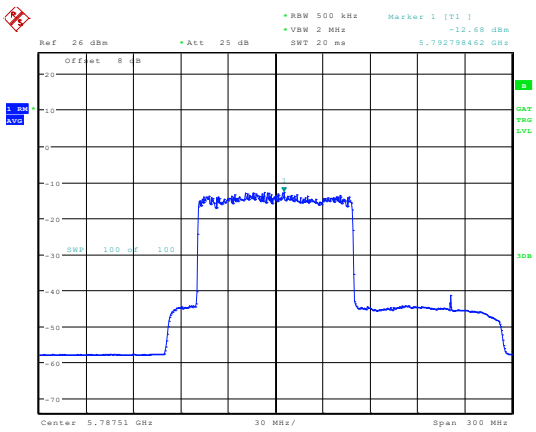
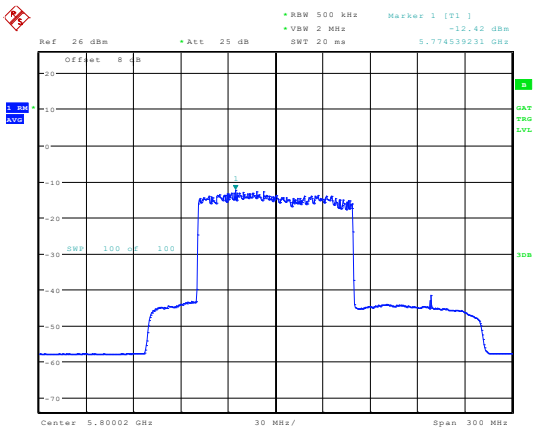
QPSK	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

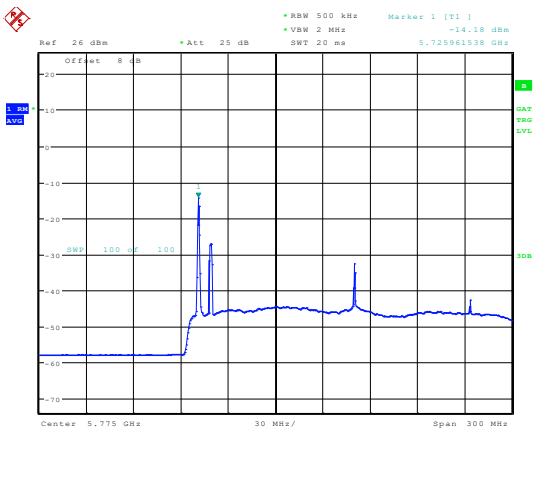
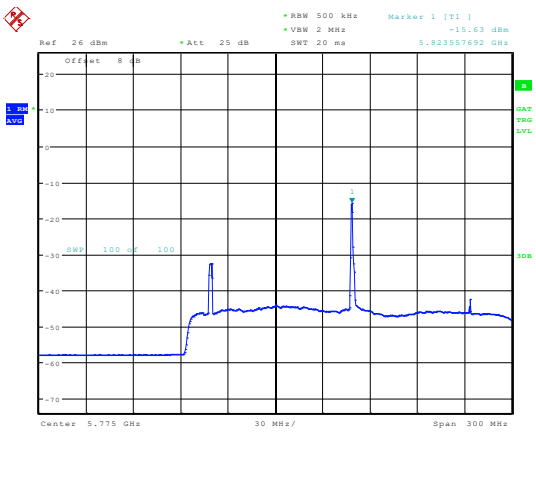
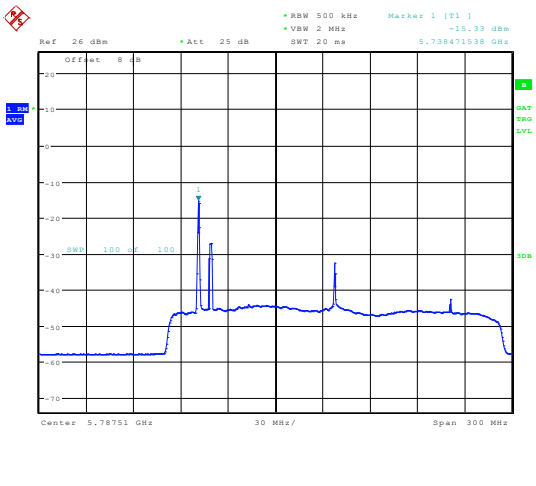
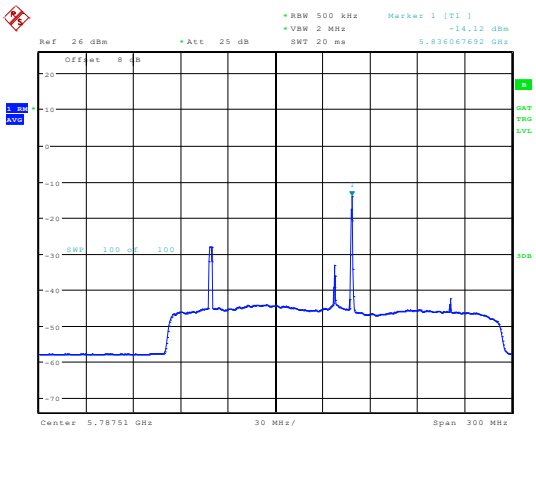
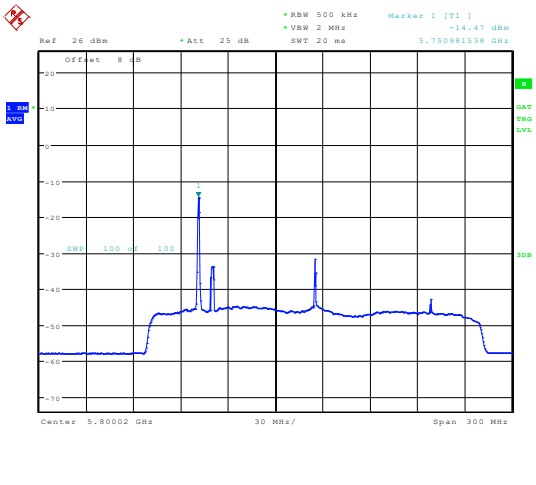
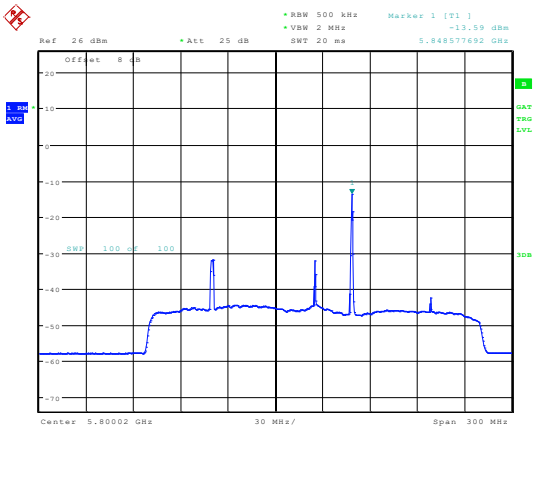
273RB#0	/

Lowest channel	/
	/
Middle channel	/
	/
Highest channel	/
	/

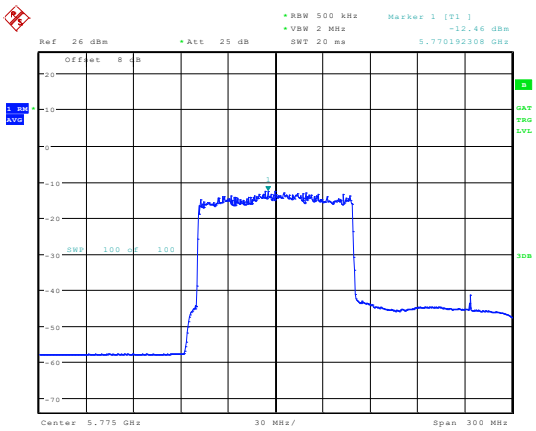
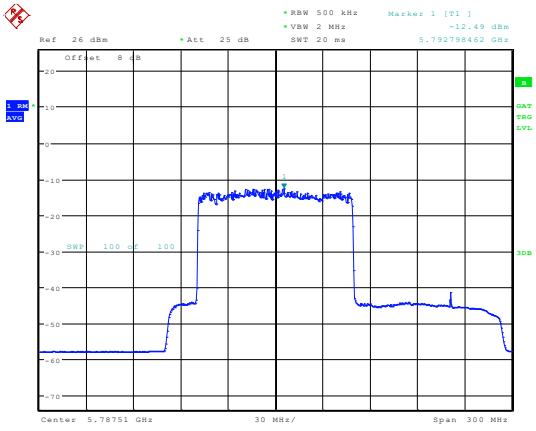
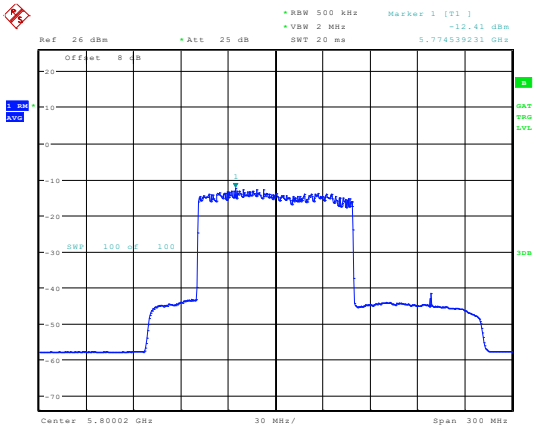
16QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

273RB#0	/
Lowest channel	/

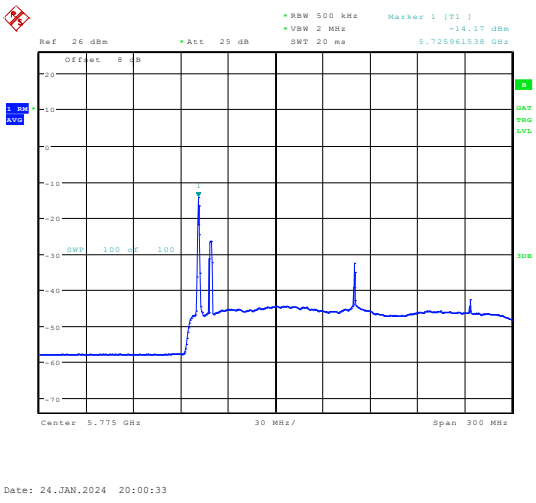
	/
Middle channel	/
	/
Highest channel	/
	/

64QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

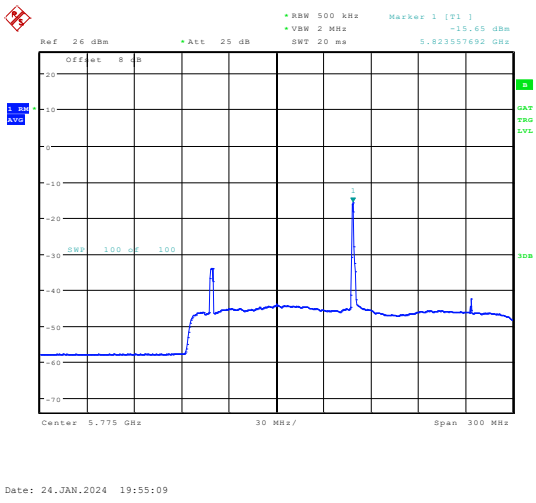
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
Highest channel	/
	/

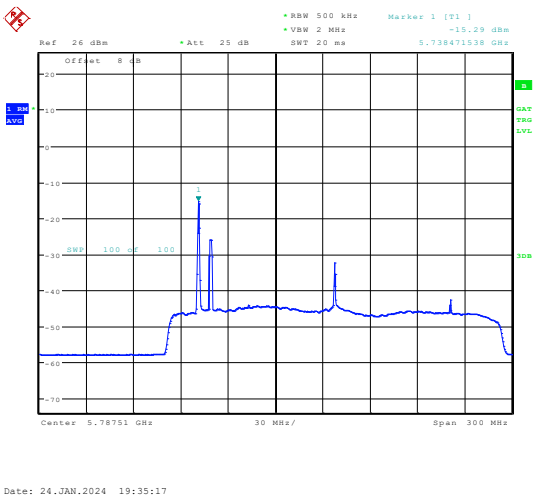
256QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel



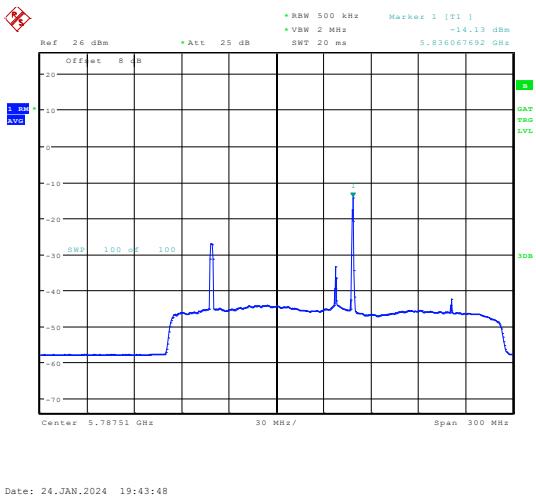
Middle channel



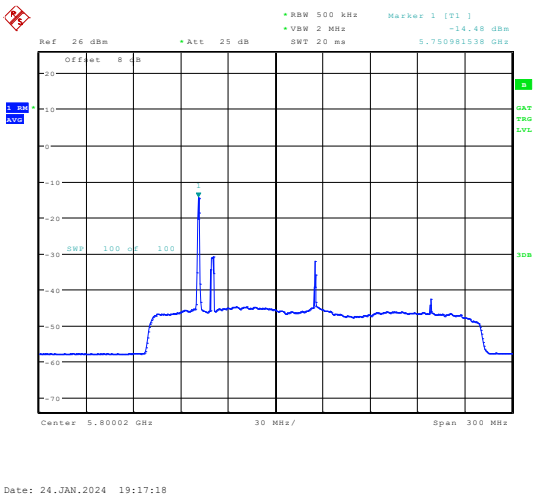
Middle channel

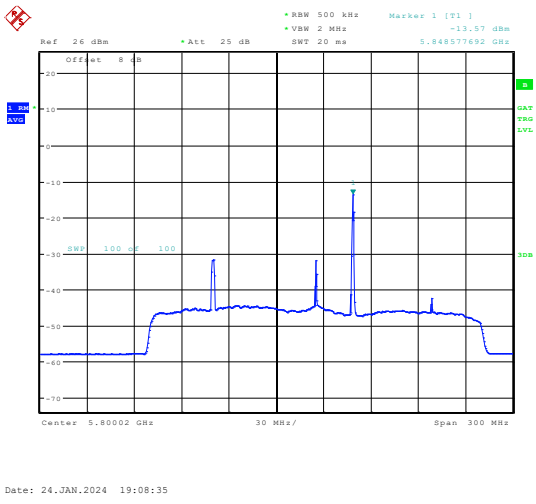


Highest channel

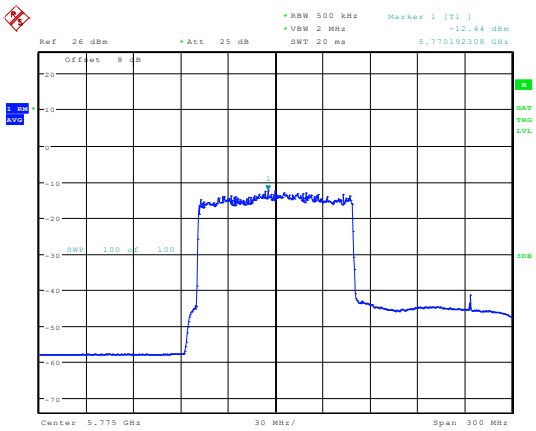
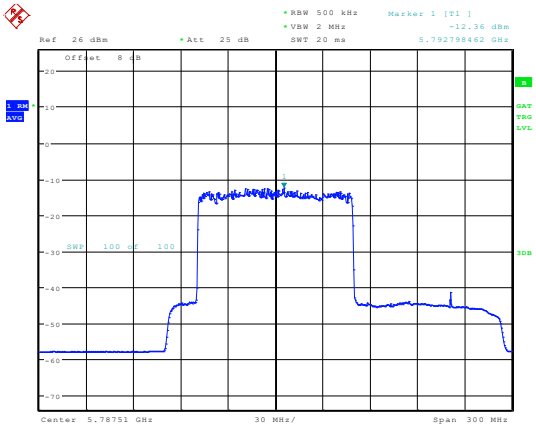
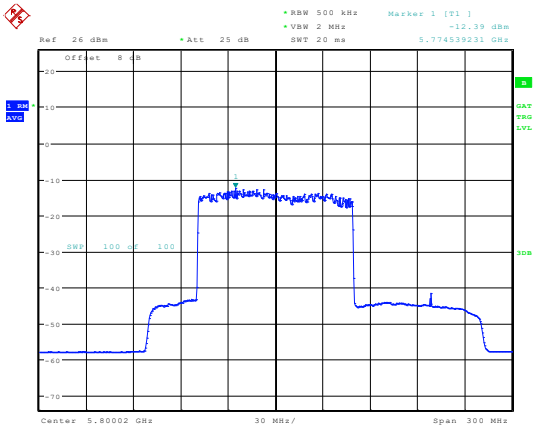


Highest channel

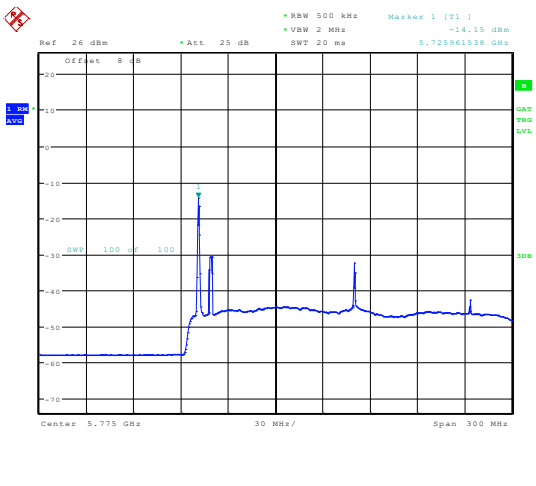
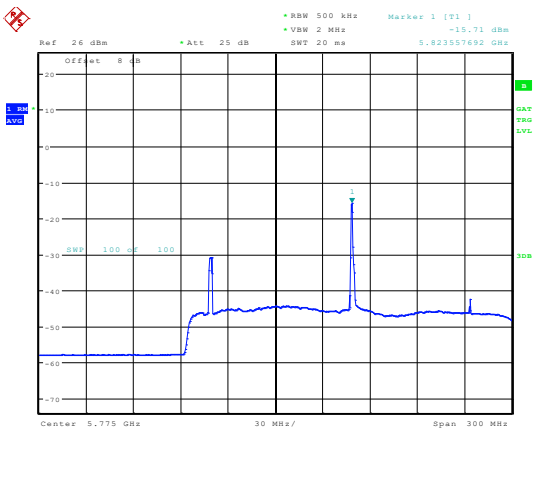
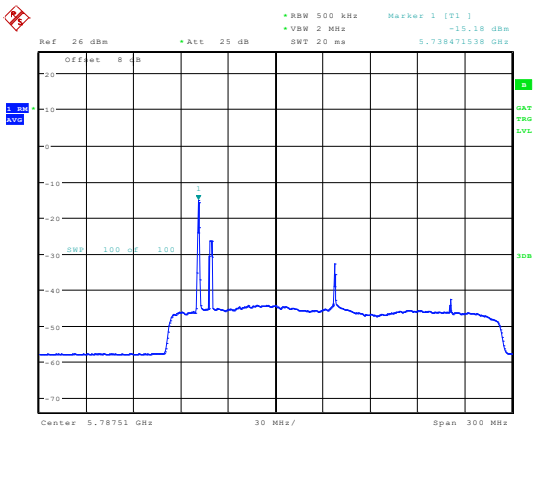
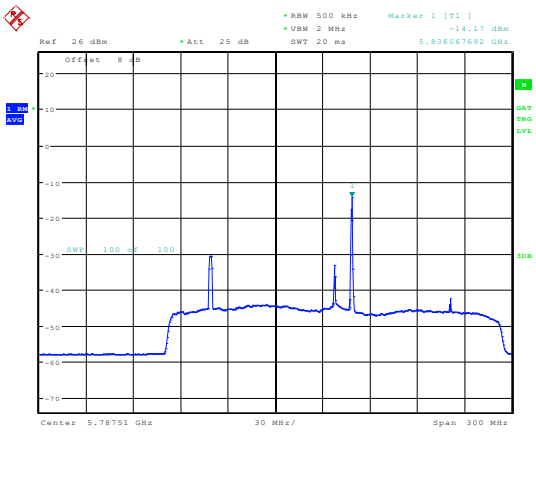
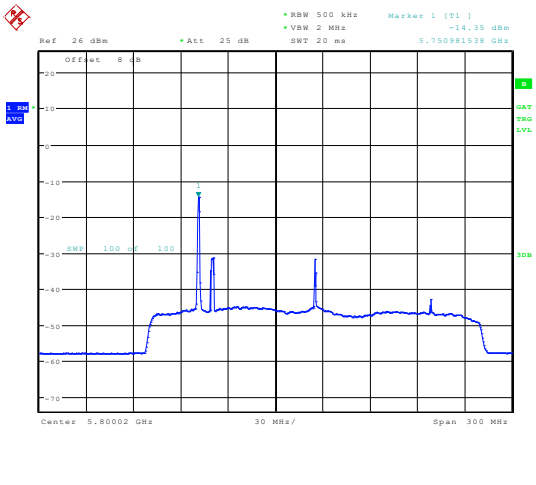
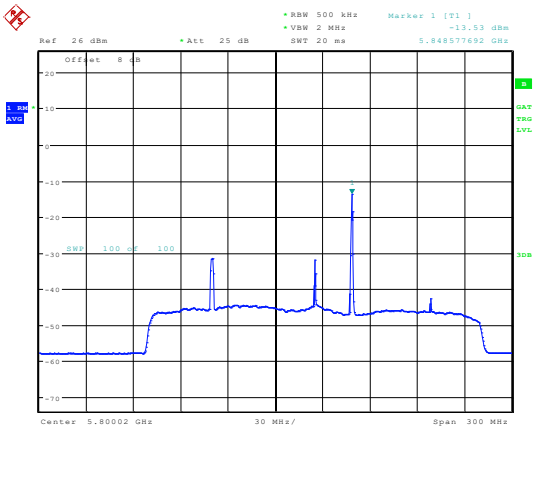


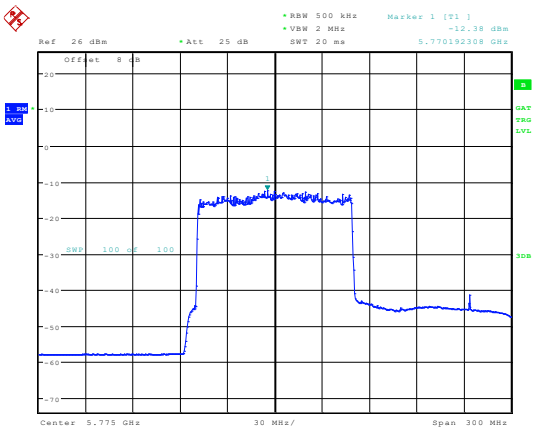
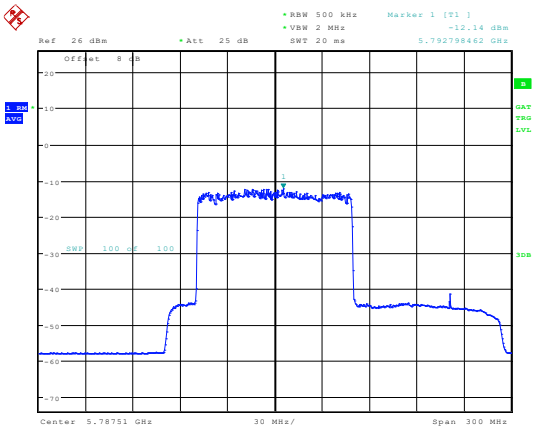
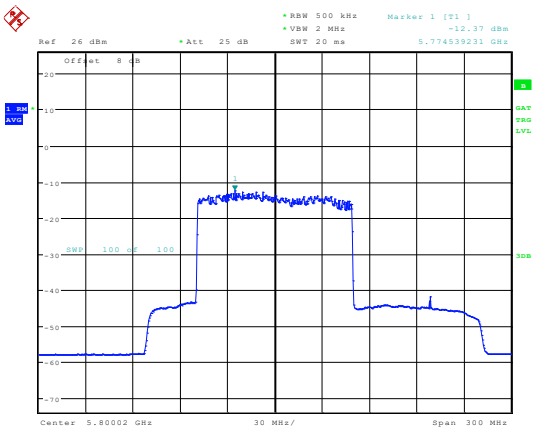


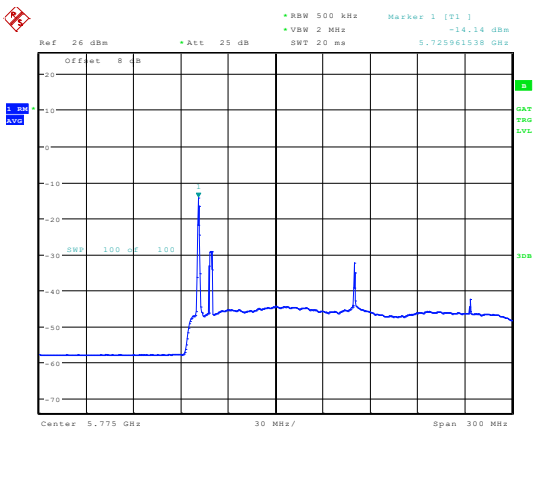
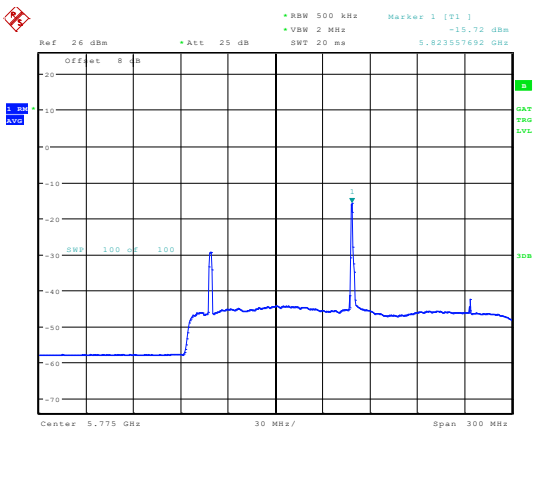
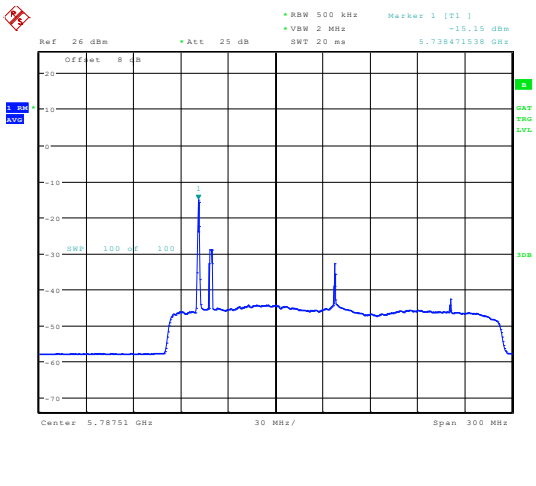
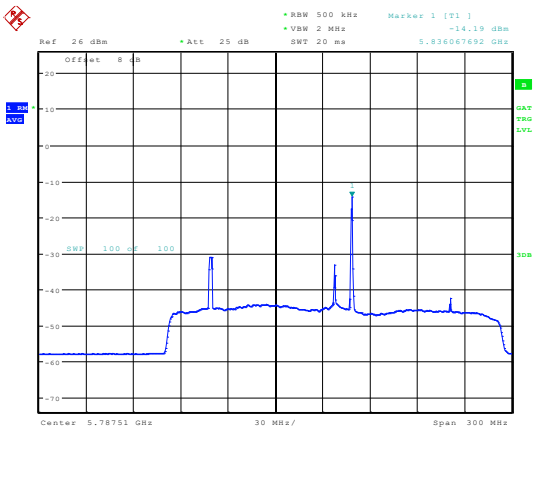
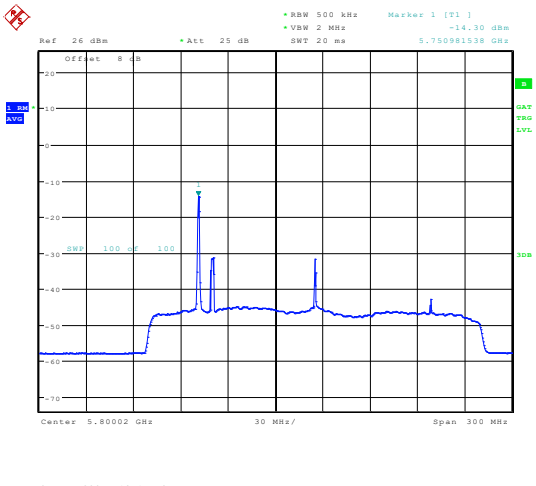
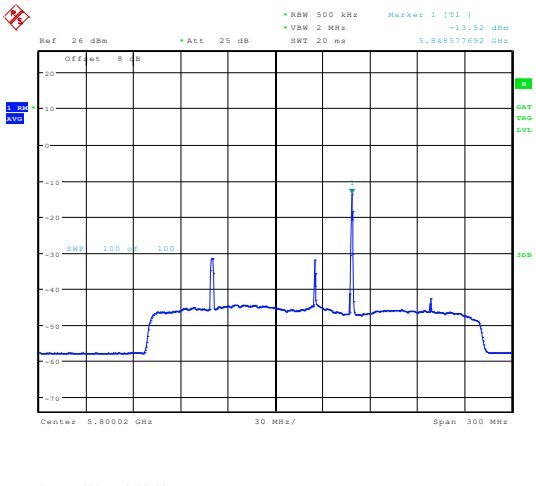
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
Highest channel	/
	/

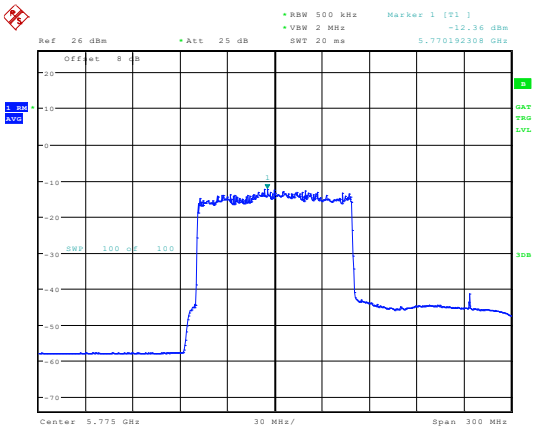
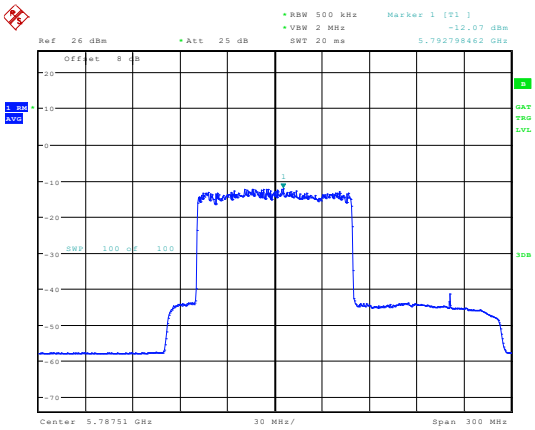
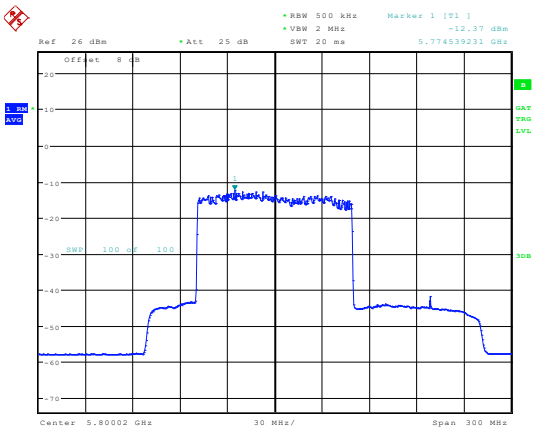
Port No. 4

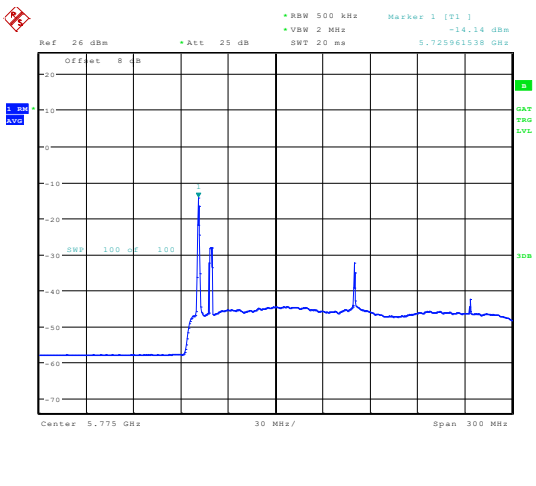
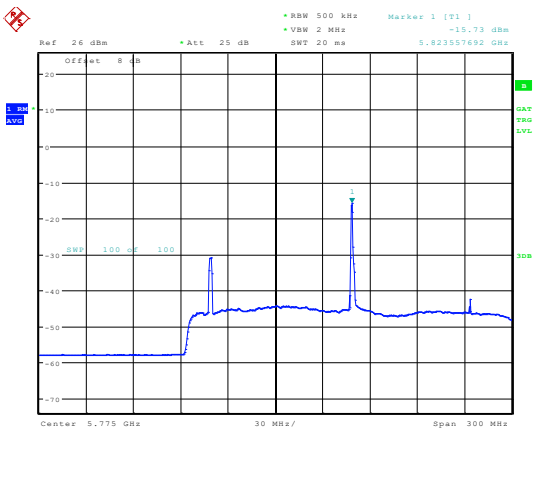
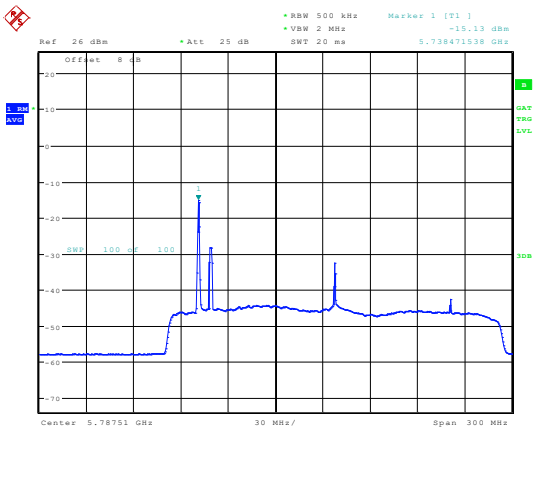
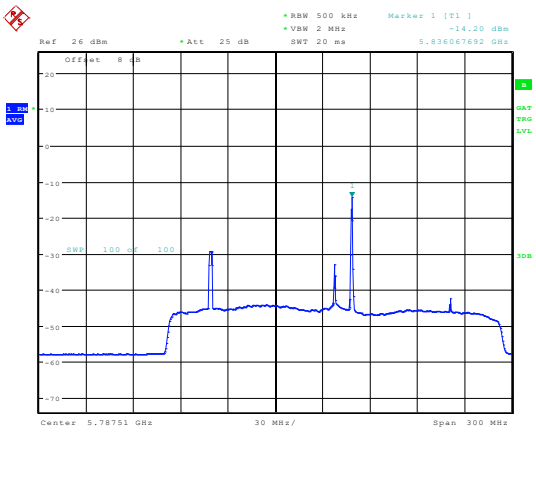
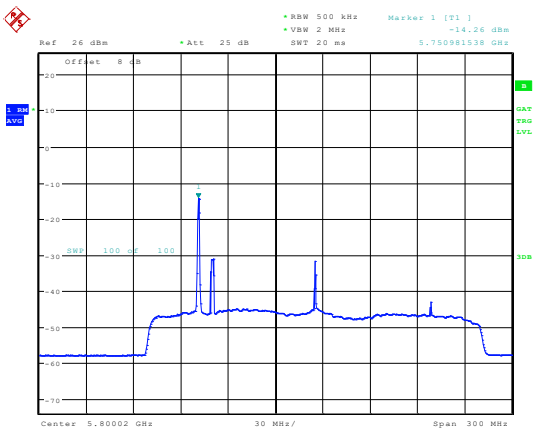
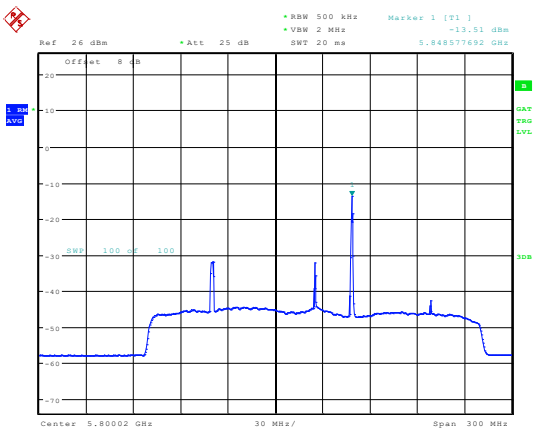
QPSK	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	
273RB#0	/
Lowest channel	/

	/
Middle channel	/
	/
Highest channel	/
	/

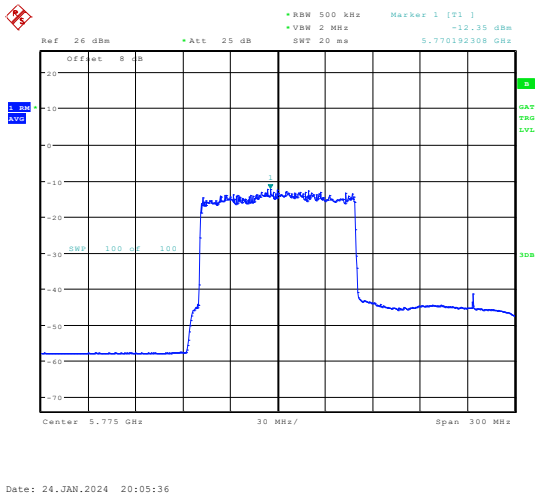
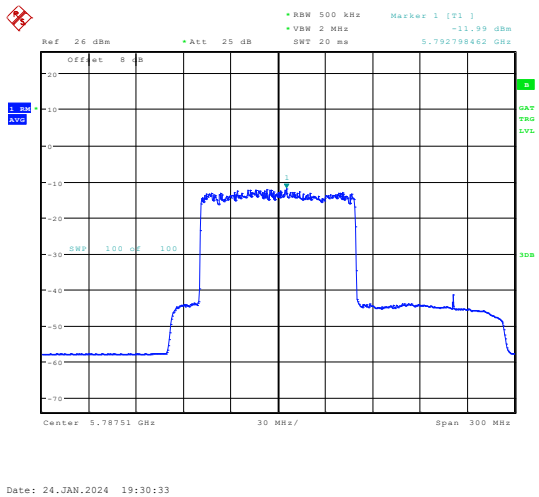
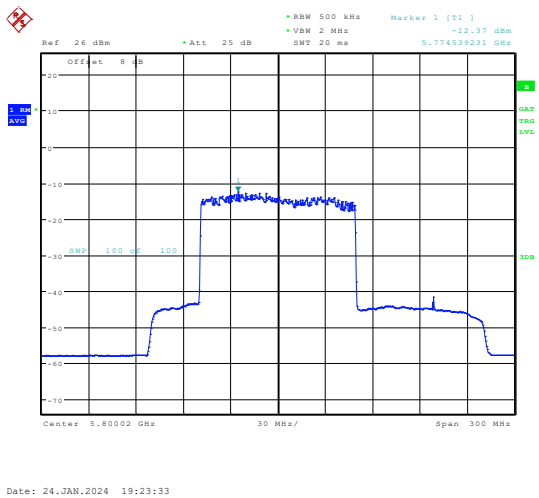
16QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

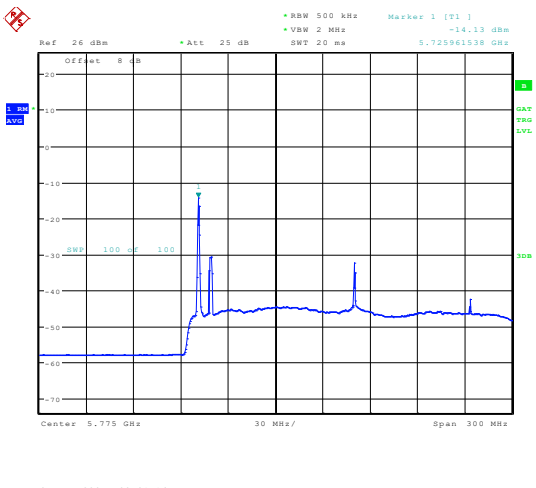
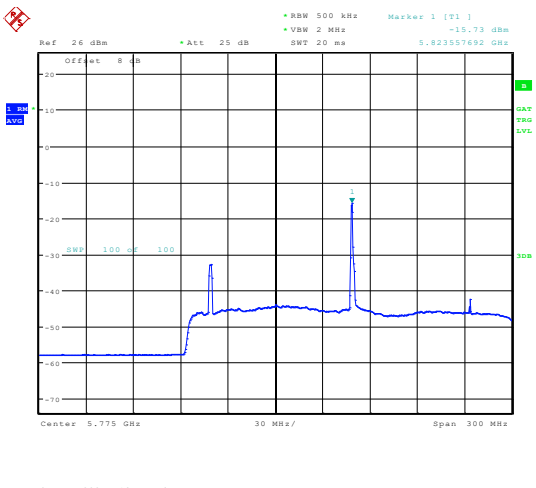
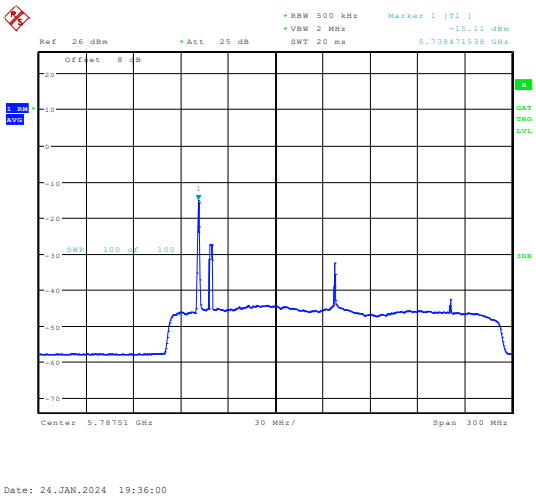
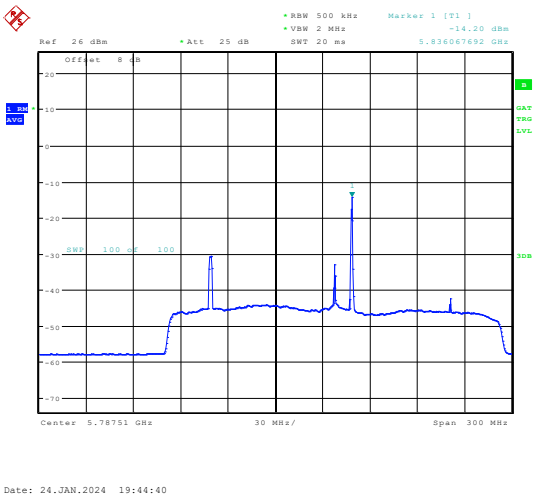
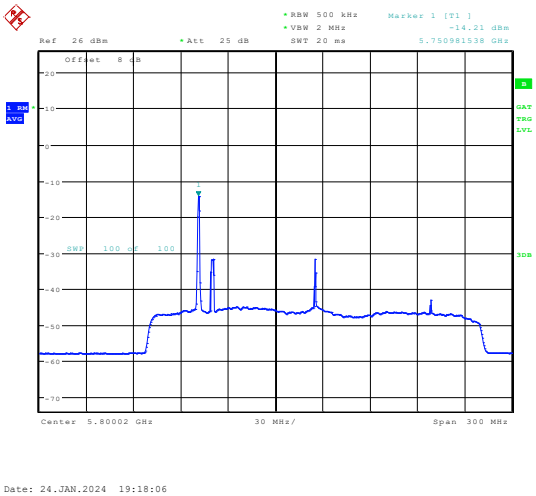
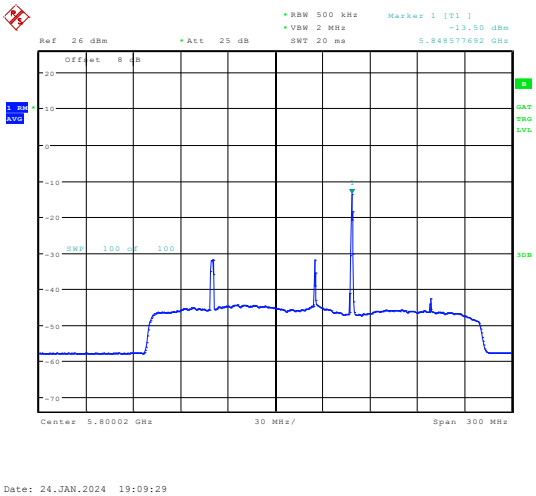
273RB#0	

Lowest channel	
	/
Middle channel	/
	/
Highest channel	/
	/

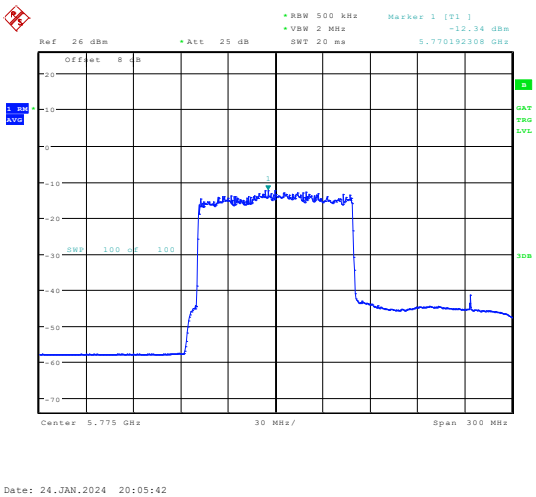
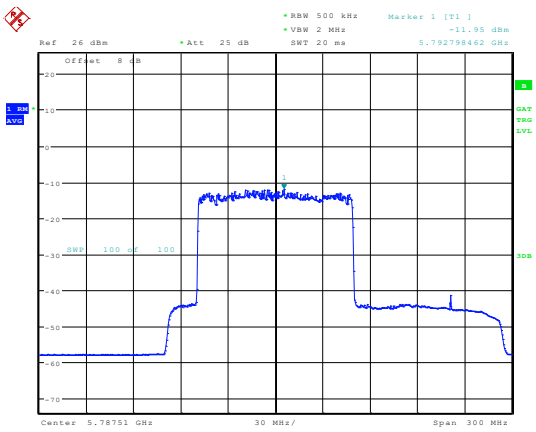
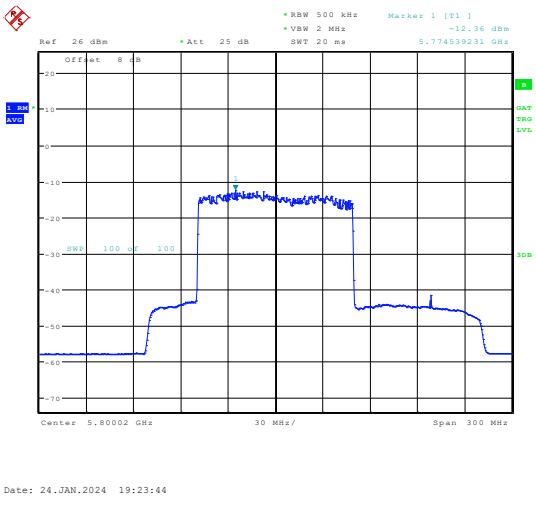
64QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Date: 24.JAN.2024 20:01:07	Date: 24.JAN.2024 19:55:49
Middle channel	Middle channel
	
Date: 24.JAN.2024 19:35:54	Date: 24.JAN.2024 19:44:32
Highest channel	Highest channel
	
Date: 24.JAN.2024 19:17:57	Date: 24.JAN.2024 19:09:17

273RB#0	/

Lowest channel	/
	/
Middle channel	/
	/
Highest channel	/
	/

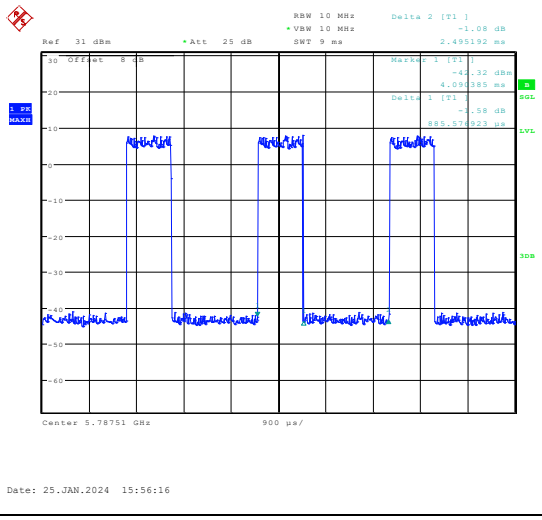
256QAM	
1RB#0	1RB#272
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

273RB#0	/
Lowest channel	/

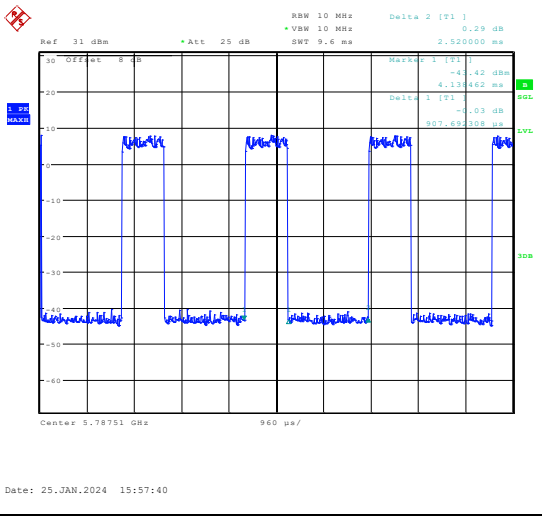
	/
Middle channel	/
	/
Highest channel	/
	/

Duty Cycle

QPSK	16QAM
Middle channel	Middle channel

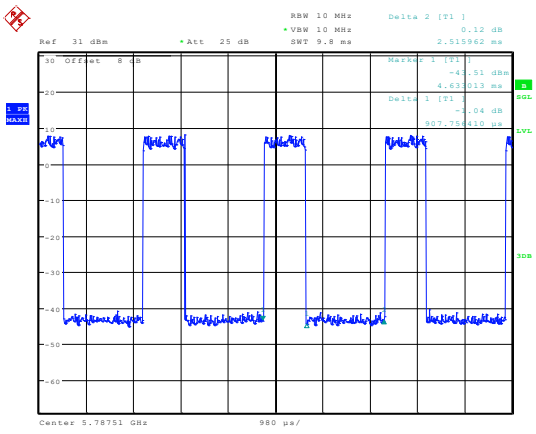


Middle channel

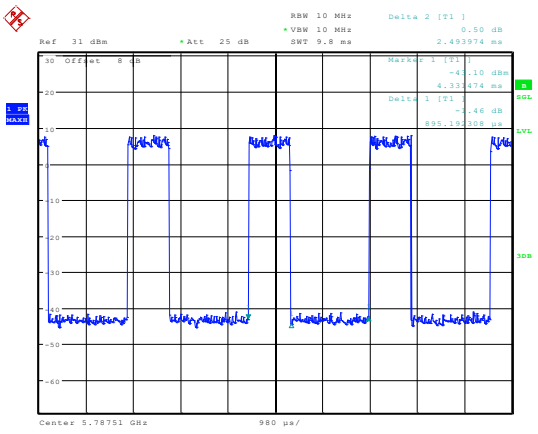


Middle channel

64QAM



256QAM



4 Test Setup Photo

Please refer to the attachment RWAY202300013 Test Setup photo.

5 E.U.T Photo

Please refer to the attachment RWAY202300013 External photo and RWAY202300013 Internal photo.

---End of Report---