Testing Laboratory 3786

FCC RADIO TEST REPORT

FCC ID	:	GKRRMMT1
Equipment	:	NTN miniPCIE module
Brand Name	:	COMPAL
Model Name	:	RMM-T1
Applicant	:	COMPAL ELECTRONICS, INC. No. 581 & 581-1, Ruiguang Rd., Neihu District Taipei City 11492, Taiwan (R.O.C.)
Manufacturer	:	COMPAL (VIETNAM) CO., LTD BA THIEN INDUSTRIAL ZONE, BA HIEN TOWN, BINH XUYEN DISTRICT, VINH PHUC PROVINCE VIETNAM
Standard	:	FCC 47 CFR Part 2, and 25

The product was received on Jun. 13, 2024 and testing was performed from Jun. 20, 2024 to Jul. 27, 2024. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory
No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C)

Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FG3D2704	01	Initial issue of report	Aug. 13, 2024
FG3D2704	02	Revise Section 2.1 and Appendix B This report is an updated version, replacing the report issued on Aug. 13, 2024.	Aug. 15, 2024
FG3D2704	03	Revise Appendix A This report is an updated version, replacing the report issued on Aug. 15, 2024.	Nov. 29, 2024

Summary of Test Result

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§2.1046(a) §25.204(a)	RF Output Power	40dBW(max)	PASS	-
3.2	§2.1055 §25.202(d)	Frequency Stability	within 0.001 percent of the reference frequency.	PASS	-
3.3	§2.1049	Occupied Bandwidth	-	PASS	-
3.4	§2.1051 §25.202(f)	Conducted Emissions Mask	§25.202(f)	PASS	-
3.5	§2.1051 §25.202(f)	Conducted Spurious Emission	§25.202(f)	Pass	-
3.6	§2.1053 §25.202(f)	Field Strength of Spurious Radiation	§25.202(f)	PASS	23.63 dB under the limit at 3287.00 MHz
3.7	§25.216(c)(e)(h)(i)	Additional Limits on Emissions from Mobile Earth Station	§25.216(c)(e)(h)(i)	PASS	-

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.

Reviewed by: Steve Chen

Report Producer: Michelle Chen

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs NTN and GNSS. **Antenna Type** NTN: Dipole Antenna GPS / Glonass / BDS / Galileo / SBAS: External Antenna	
Antenna Gain	**Band 23:** 7.0 dBi **Band 24:** 7.0 dBi **Band 255:** 7.0 dBi

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	**Sporton Site No.**	
	TH05-HY	03CH16-HY
Test Engineer	Alston Tsai	Bill Chang and Steven Wu
Temperature (℃)	25~27	19.1~22.3
Relative Humidity (%)	51~54	62.5~68.3

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW3786

1.4 Applied Standards

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

- FCC 47 CFR Part 2, 25
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

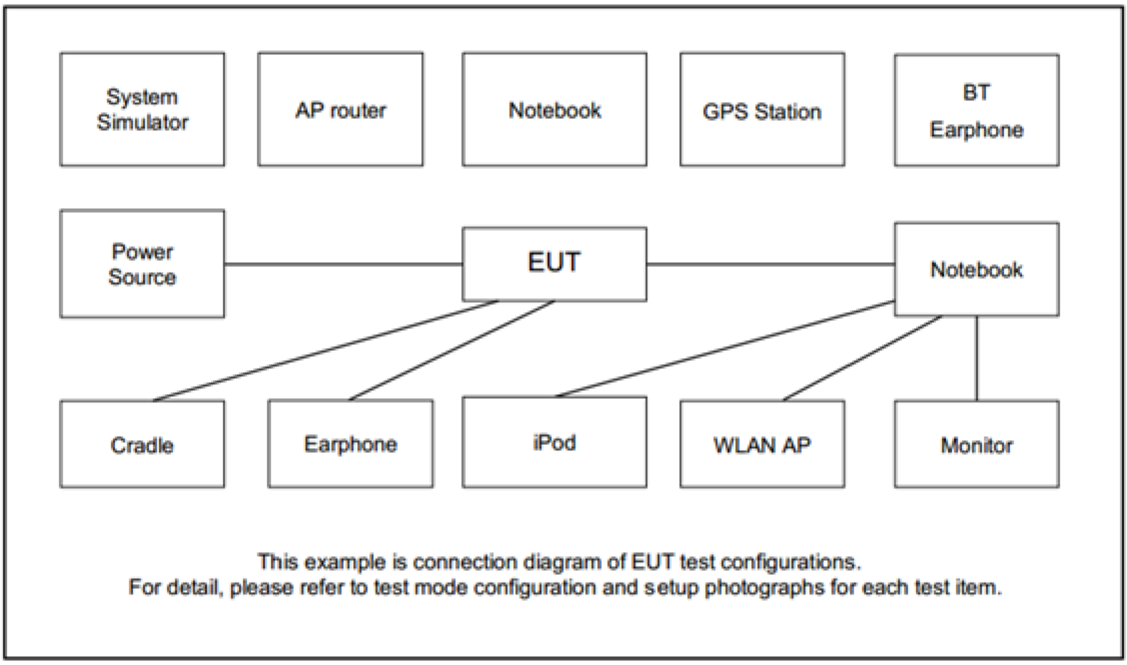
2.1 Test Mode

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, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in two degree (Degree 0 or Degree 90), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

Support band and evaluated information	
Supported band	B23, B24, B255
Evaluated and Tested band	B23, B255
Band covered information	Test cases cover another band when the conducted power is worse as follow: ■ B255 cover B24

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	Fixture	Compal	RMM-T1 EVB	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

Band 23 Channel and Frequency List			
Channel/Frequency(MHz)	**Lowest**	**Middle**	**Highest**
Channel	25501	25600	25699
Frequency	2000.1	2010	2019.9

Band 24 Channel and Frequency List			
Channel/Frequency(MHz)	**Lowest**	**Middle**	**Highest**
Channel	25700	25870	26039
Frequency	1626.6	1643.5	1660.4

Band 255 Channel and Frequency List			
Channel/Frequency(MHz)	**Lowest**	**Middle**	**Highest**
Channel	261505	261674	261843
Frequency	1626.6	1643.5	1660.4

3 Test Result

3.1 RF Output Power

3.1.1 Description of the Conducted Output Power Measurement

FCC Part 25.204 (a)

In bands shared coequally with terrestrial radio communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station, other than an ESV, operating in frequency bands between 1 and 15 GHz, shall not exceed the following limits except as provided for in paragraph (c) of this section:

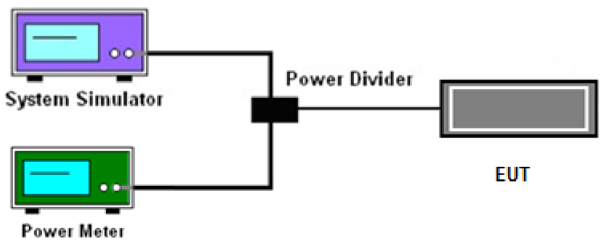
- + 40 dBW in any 4 kHz band for θ ≤0°
- + 40 + 3θ dBW in any 4 kHz band for 0° <θ ≤5°

  Where θ is the angle of elevation of the horizon viewed from the center of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

3.1.2 Test Procedures

The output power is measured by using power meter when the transmitter is operating at the manufacturer's rated power and modulated with signals. The maximum antenna gain of EUT for the test range will then be added to the measured conducted power to calculate the EIRP. Since the power meter can only measure the overall power, the measured result will be worse than the one measured in 4 kHz RBW. The test result will be compared to the most restricted limit: +40 dBW.

3.1.3 Test Setup



3.1.4 Test Results

Please refer to Appendix A.

3.2 Frequency Stability

3.2.1 Description of the Frequency Stability Measurement

FCC Part 25.202 (d) Frequency tolerance, Earth stations. The carrier frequency of each earth station transmitter authorized in these services shall be maintained within 0.001 percent of the reference frequency.

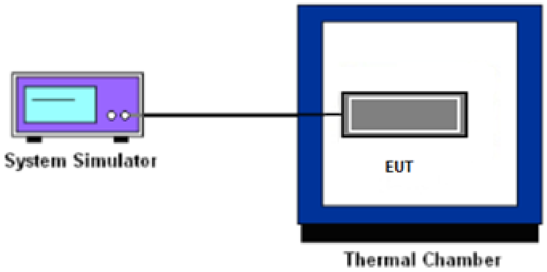
3.2.2 Test Procedures for Temperature Variation

1. The testing follows FCC KDB 971168 D01 v03r01 Section 9.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.2.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 D01 Section 9.
2. The EUT was placed in a temperature chamber at 20±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from the lowermost voltage to the uppermost voltage. The range is specified by manufacturer.
4. The variation in frequency was measured for the worst case.

3.2.4 Test Setup



3.2.5 Test Results

Please refer to Appendix A.

3.3 Occupied Bandwidth

3.3.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

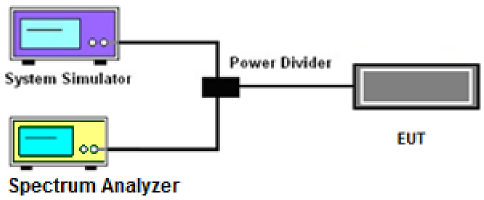
3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.3.4 Test Setup



3.3.5 Test Result

Please refer to Appendix A.

3.4 Conducted Emissions Mask

3.4.1 Description of Conducted Spurious Emission Measurement

FCC Part 25.202(f) Emissions Limitations The mean power of the emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50% up to and including 100% of the authorized bandwidth: 25 decibels;

(2) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 100% up to and including 250% of the authorized bandwidth: 35 decibels;

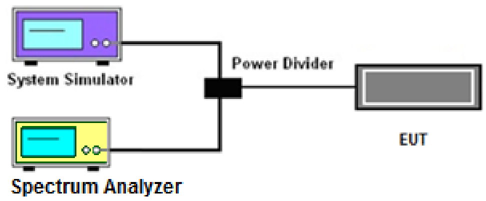
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 D01 Section 6.1.
2. The EUT was connected to the spectrum analyzer.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The highest RF power within the transmitting frequency was measured.
5. Make the measurement with the spectrum analyzer's RBW = 5kHz, VBW = 20kHz, taking the record of the worst unwanted emission.
6. If the test result in Step 5 exceed the limit, the following procedure will be used:
   6.1. Make the measurement with the spectrum analyzer's RBW = 1kHz, VBW = 3kHz.
   6.2. Record all measured worst frequencies.
   6.3. Use the Channel Power Function of the Spectrum Analyzer.
   6.4. Measure the powers of 4kHz bandwidth center the worst frequencies.
7. The limit line is derived from FCC 25.202 (f) below the transmitter power P(Watts)

3.4.4 Test Setup



3.4.5 Test Result

Please refer to Appendix A.

3.5 Conducted Spurious Emission

3.5.1 Description of Conducted Spurious Emission Measurement

FCC Part 25.202(f) Emissions Limitations The mean power of the emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(3) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250% of the authorized bandwidth: an amount equal to 43 decibels plus 10 times Logarithm (to the base 10) of the transmitter power in watts.

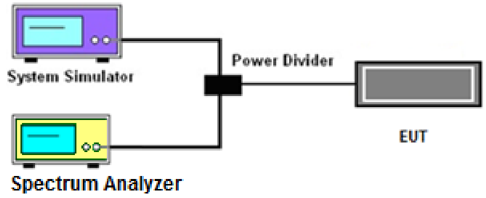
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 D01 Section 6.1.
2. The EUT was connected to the spectrum analyzer.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The highest RF power within the transmitting frequency was measured.
5. Peak detector is used instead of RMS detector since the measured result of Peak detector is worse than the RMS one. If the test result of Peak detector exceed the limit, RMS detector will then be used.
6. Make the measurement with the spectrum analyzer's RBW = 100kHz, VBW = 300kHz, taking the record of the worst unwanted emission.
7. The conducted spurious emission for the whole frequency range was taken.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is derived from FCC 25.202 (f) below the transmitter power P(Watts)

3.5.4 Test Setup



3.5.5 Test Result

Please refer to Appendix A.

3.6 Field Strength of Spurious Radiation

3.6.1 Description of Radiated Spurious Emission

FCC Part 25.202(f) Emissions Limitations The mean power of the emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(3) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250% of the authorized bandwidth: an amount equal to 43 decibels plus 10 times Logarithm (to the base 10) of the transmitter power in watts

3.6.2 Measuring Instruments

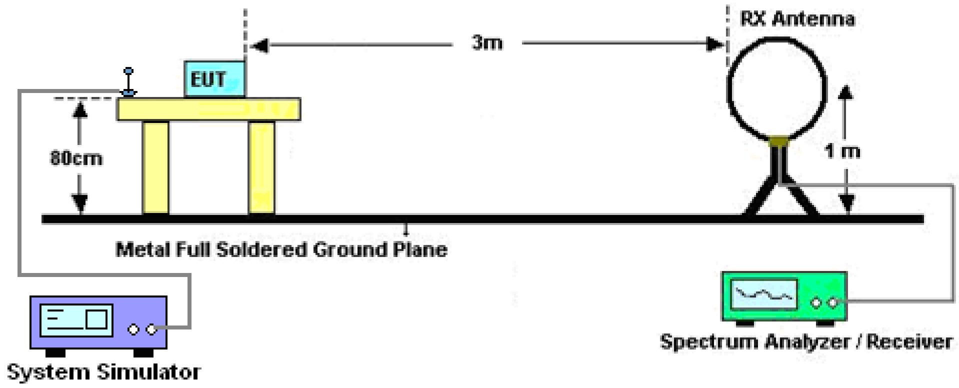
The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

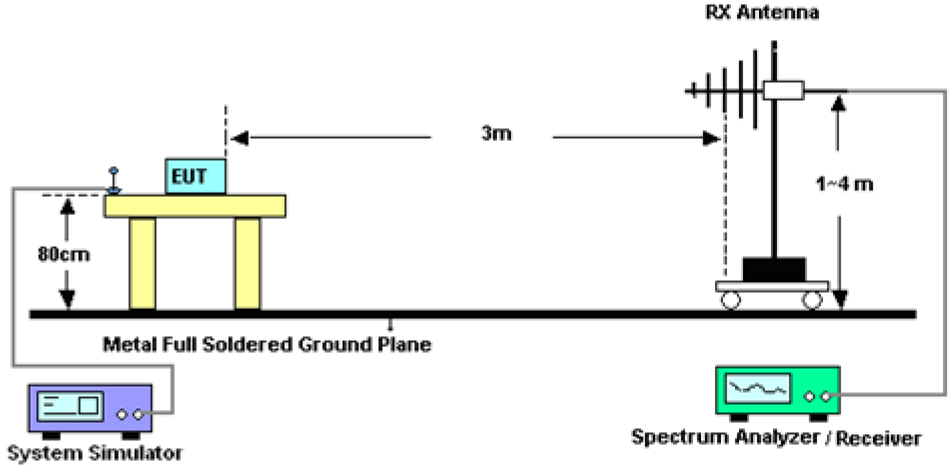
1. The testing follows ANSI C63.26-2015.
2. The EUT was placed on a rotatable table with:
   - 0.8 meter above ground for emissions under 1 GHz
   - 1.5 meter above ground for emissions above 1 GHz
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Peak detector is used instead of RMS detector since the measured result of Peak detector is worse than the RMS one. If the test result of Peak detector exceed the limit, RMS detector will then be used.
7. Make the measurement with the spectrum analyzer's RBW = 100kHz, VBW = 300kHz, taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.6.4 Test Setup

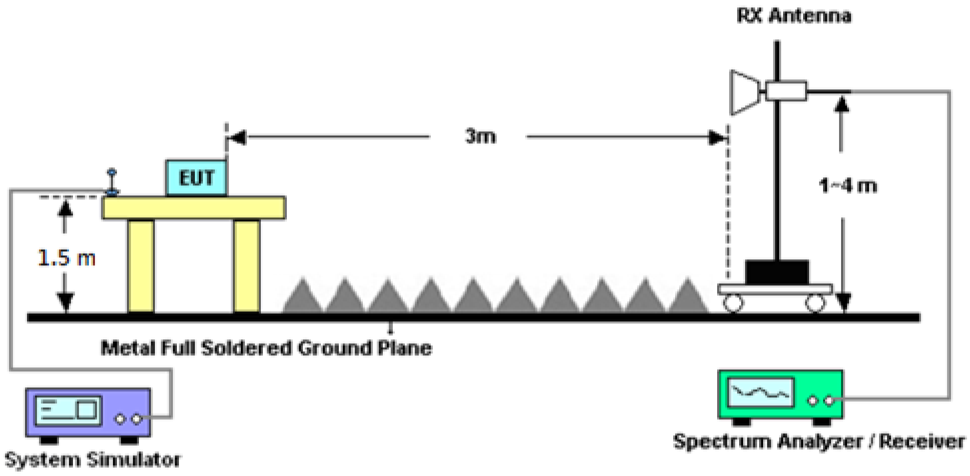
For radiated emissions from 10KHz to 30MHz.



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.6.5 Test Results

Please refer to Appendix B.

3.7 Additional Limits on Emissions from Mobile Earth Station

Additional Limits on emissions from mobile earth stations for protection of aeronautical radionavigation-satellite service and Special requirements for ancillary terrestrial components operating in the 1626.5-1660.5 MHz and 2000-2020 MHz bands.

3.7.1 Description of Additional Limits on Emissions from Mobile Earth Station

FCC Part 25.216 Emissions Limitations:

(c) The e.i.r.p. density of emissions from mobile earth stations placed in service after July 21, 2002 with assigned uplink frequencies between 1610 MHz and 1660.5 MHz shall not exceed −70 dBW/MHz, averaged over any 2 millisecond active transmission interval, in the band 1559-1605 MHz. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed −80 dBW, averaged over any 2 millisecond active transmission interval, in the 1559-1605 MHz band.

(e) The e.i.r.p density of emissions from mobile earth stations with assigned uplink frequencies between 1990 MHz and 2025 MHz shall not exceed −70 dBW/MHz, averaged over any 2 millisecond active transmission interval, in frequencies between 1559 MHz and 1610 MHz. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations between 1559 MHz and 1605 MHz shall not exceed −80 dBW, averaged over any 2 millisecond active transmission interval. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations between 1605 MHz and 1610 MHz manufactured more than six months after Federal Register publication of the rule changes adopted in FCC 03-283 shall not exceed −80 dBW, averaged over any 2 millisecond active transmission interval.

(h) Mobile earth stations manufactured more than six months after Federal Register publication of the rule changes adopted in FCC 03-283 with assigned uplink frequencies in the 1626.5-1660.5 MHz band shall suppress the power density of emissions in the 1605-1610 MHz band-segment to an extent determined by linear interpolation from −70 dBW/MHz at 1605 MHz to −46 dBW/MHz at 1610 MHz, averaged over any 2 millisecond active transmission interval. The e.i.r.p of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed a level determined by linear interpolation from −80 dBW at 1605 MHz to −56 dBW at 1610 MHz, averaged over any 2 millisecond active transmission interval.

(i) The e.i.r.p density of carrier-off state emissions from mobile earth stations manufactured more than six months after Federal Register publication of the rule changes adopted in FCC 03-283 with assigned uplink frequencies between 1 and 3 GHz shall not exceed −80 dBW/MHz in the 1559-1610 MHz band averaged over any two millisecond interval.

(j) A Root-Mean-Square detector shall be used for all power density measurements.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Procedures

For Conducted test:

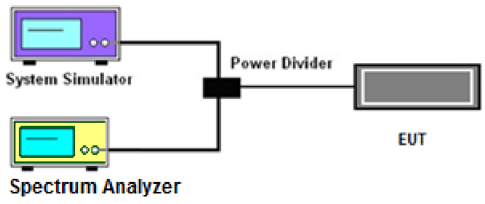
1. The testing follows FCC KDB 971168 v03r01 D01 Section 6.1.
2. The EUT was connected to the spectrum analyzer.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The highest RF power within the transmitting frequency was measured.
5. Make the measurement with the spectrum analyzer's RBW = 1kHz for discrete emissions, RBW = 1MHz for broadband emissions, and VBW = 3 x RBW Taking the record of maximum spurious emission.

For Radiated test:

1. The testing follows ANSI C63.26-2015.
2. The EUT was placed on a rotatable table with 1.5 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1kHz for discrete emissions, RBW = 1MHz for broadband emissions, and VBW = 3 x RBW Taking the record of maximum spurious emission.

3.7.4 Test Setup

For conducted test



For Radiated test, please refer to clause 3.6.4 of this test report.

3.7.5 Test Results

For test results of conducted test, please refer to Appendix A.

For test results of Radiated test, please refer to Appendix B.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Signal Analyzer	Rohde & Schwarz	FSV40	101907	10Hz - 40GHz	Aug. 15, 2023	Jun. 20, 2024~ Jul. 27, 2024	Aug. 14, 2024	Conducted (TH05-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6272278356	LTE FDD/TDD DLCA/ULCA	Aug. 24, 2023	Jun. 20, 2024~ Jul. 27, 2024	Aug. 23, 2024	Conducted (TH05-HY)
DC Power Supply	GW Instek	GPE-2323	GET861546	0V~64V ; 0A~6A	Jun. 05, 2024	Jun. 20, 2024~ Jul. 27, 2024	Jun. 04, 2025	Conducted (TH05-HY)
Temperature & Humidity Cabinet Chamber	ESPEC	LHU-113	1012005860	-20℃~85℃	Dec. 13, 2023	Jun. 20, 2024~ Jul. 27, 2024	Dec. 12, 2024	Conducted (TH05-HY)
Coupler	MVE	MVE4816	A400014	0.5~18GHz	Mar. 12, 2024	Jun. 20, 2024~ Jul. 27, 2024	Mar. 11, 2025	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Jun. 23, 2024~ Jun. 28, 2024	Sep. 11, 2024	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz-40GHz	Nov. 24, 2023	Jun. 23, 2024~ Jun. 28, 2024	Nov. 23, 2024	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz to 1GHz	Oct. 07, 2023	Jun. 23, 2024~ Jun. 28, 2024	Oct. 06, 2024	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 28, 2024	Jun. 23, 2024~ Jun. 28, 2024	Mar. 27, 2025	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jul. 03, 2023	Jun. 23, 2024~ Jun. 28, 2024	Jul. 02, 2024	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 07, 2023	Jun. 23, 2024~ Jun. 28, 2024	Dec. 06, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 25, 2023	Jun. 23, 2024~ Jun. 28, 2024	Dec. 24, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060872	18GHz~40GHz	Sep. 06, 2023	Jun. 23, 2024~ Jun. 28, 2024	Sep. 05, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 15, 2024	Jun. 23, 2024~ Jun. 28, 2024	Jan. 14, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-900-1000-15000-60SS	SN11	1GHz High Pass Filter	Mar. 13, 2024	Jun. 23, 2024~ Jun. 28, 2024	Mar. 12, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN3	3GHz High Pass Filter	Jun. 29, 2023	Jun. 23, 2024~ Jun. 27, 2024	Jun. 28, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN3	3GHz High Pass Filter	Jun. 28, 2024	Jun. 28, 2024	Jun. 27, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN27	6.75GHz High Pass Filter	Nov. 13, 2023	Jun. 23, 2024~ Jun. 28, 2024	Nov. 12, 2024	Radiation (03CH16-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Jun. 23, 2024~ Jun. 28, 2024	Mar. 05, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 08, 2023	Jun. 23, 2024~ Jun. 28, 2024	Aug. 07, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40GHz	Jan. 02, 2024	Jun. 23, 2024~ Jun. 28, 2024	Jan. 01, 2025	Radiation (03CH16-HY)
Software	Audix	E3 230621 V9	RK-002393	N/A	N/A	Jun. 23, 2024~ Jun. 28, 2024	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jun. 23, 2024~ Jun. 28, 2024	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 23, 2024~ Jun. 28, 2024	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 23, 2024~ Jun. 28, 2024	N/A	Radiation (03CH16-HY)

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.09 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.55 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.02 dB**

Appendix A. Test Results of Conducted Test

Band 23

Conducted Output Power (Average power) and EIRP

Band 23 SCS 3.75kHz							Limit
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP Power (dBm)		Result
		BPSK	QPSK		BPSK	QPSK	
2000.1	1SC0	23.3	23.32	7	30.3	30.32	PASS
	1SC47	23.31	23.33	7	30.31	30.33	
2010	1SC0	23.32	23.31	7	30.32	30.31	
	1SC47	23.3	23.32	7	30.3	30.32	
2019.9	1SC0	23.46	23.43	7	30.46	30.43	
	1SC47	23.45	23.47	7	30.45	30.47	

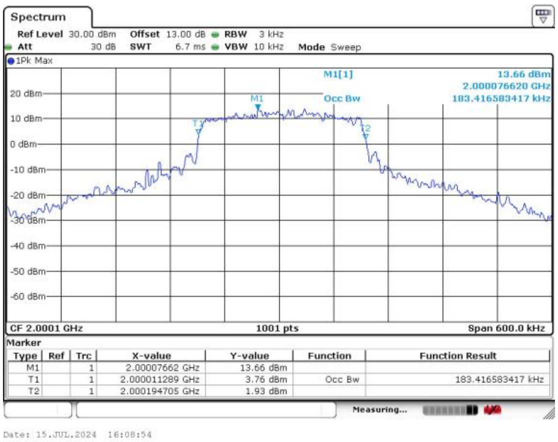
Band 23 SCS 15kHz							Limit
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP Power (dBm)		Result
		BPSK	QPSK		BPSK	QPSK	
2000.1	1SC0	23.52	23.49	7	30.52	30.49	PASS
	1SC11	23.51	23.44	7	30.51	30.44	
	3SC0	-	23.06	7	-	30.06	
	3SC9	-	22.9	7	-	29.9	
	6SC0	-	22.43	7	-	29.43	
	6SC6	-	22.4	7	-	29.4	
	12SC0	-	21.51	7	-	28.51	
2010	1SC0	23.56	23.58	7	30.56	30.58	
	1SC11	23.55	23.56	7	30.55	30.56	
	3SC0	-	23.06	7	-	30.06	
	3SC9	-	22.91	7	-	29.91	
	6SC0	-	22.48	7	-	29.48	
	6SC6	-	22.55	7	-	29.55	
	12SC0	-	21.7	7	-	28.7	
2019.9	1SC0	23.58	23.55	7	30.58	30.55	
	1SC11	23.55	23.54	7	30.55	30.54	
	3SC0	-	23.18	7	-	30.18	
	3SC9	-	23	7	-	30	
	6SC0	-	22.5	7	-	29.5	
	6SC6	-	22.47	7	-	29.47	
	12SC0	-	21.52	7	-	28.52	

Occupied Bandwidth

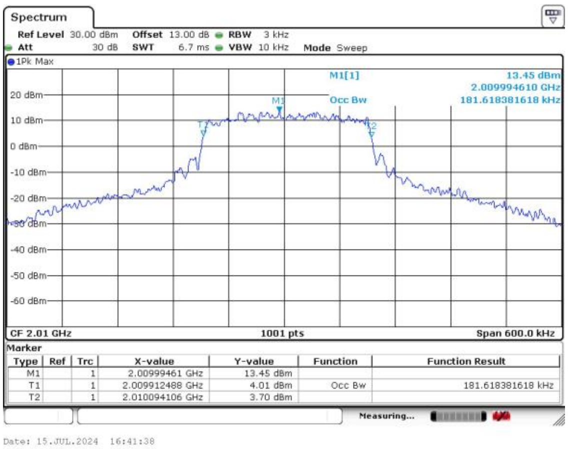
Mode	Band 23 : 99%OBW(kHz)
SCS	15kHz
Mod.	QPSK
SC Size	12SC0
Lowest CH	183.417
Middle CH	181.618
Highest CH	182.817

Band 23 SCS 15kHz

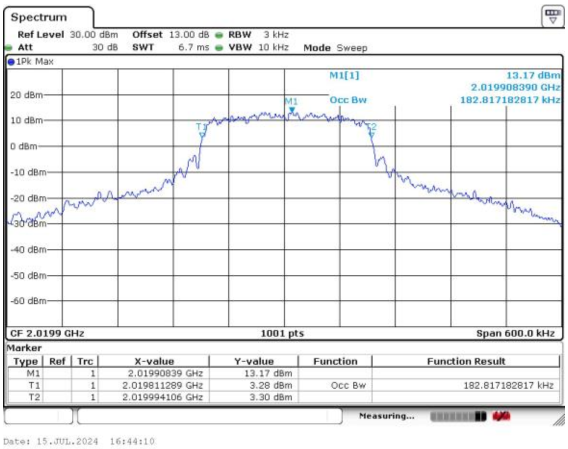
Lowest Channel / 12SC0 / QPSK



Middle Channel / 12SC0 / QPSK



Highest Channel / 12SC0 / QPSK



Conducted Emissions Mask

B23 L CH 2000.1 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.55	-9.3	-	-2.17	-7.13	Pass
3.75	BPSK	1SC47	-7.45	-6.2	-	-1.97	-4.23	Pass
3.75	QPSK	1SC0	-9.51	-8.26	-	-1.65	-6.61	Pass
3.75	QPSK	1SC47	-6.95	-5.7	-	-1.72	-3.98	Pass
15	BPSK	1SC0	-2.99	-1.74	-	-1.46	-0.28	Pass
15	BPSK	1SC11	-4.81	-3.56	-	-3.42	-0.14	Pass
15	QPSK	1SC0	-4.62	-3.37	-	-3.12	-0.25	Pass
15	QPSK	1SC11	-3.74	-2.49	-	-2.45	-0.04	Pass
15	QPSK	3SC0	-10.45	-9.2	-	-3.07	-6.13	Pass
15	QPSK	3SC9	-7.07	-5.82	-	-3.36	-2.46	Pass
15	QPSK	6SC0	-10.61	-9.36	-	-3.54	-5.82	Pass
15	QPSK	6SC6	-9.31	-8.06	-	-3.6	-4.46	Pass
15	QPSK	12SC0	-17.17	-15.92	-	-4.38	-11.54	Pass
B23 M CH 2010 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.33	-9.08	-	-2.23	-6.85	Pass
3.75	BPSK	1SC47	-7.74	-6.49	-	-2.29	-4.2	Pass
3.75	QPSK	1SC0	-10.25	-9	-	-2.46	-6.54	Pass
3.75	QPSK	1SC47	-7.2	-5.95	-	-2.3	-3.65	Pass
15	BPSK	1SC0	-4.63	-3.38	-	-3.3	-0.08	Pass
15	BPSK	1SC11	-3.01	-1.76	-2.57	-2.54	-0.03	Pass
15	QPSK	1SC0	-4.39	-3.14	-	-2.78	-0.36	Pass
15	QPSK	1SC11	-3.26	-2.01	-2.99	-2.15	-0.84	Pass
15	QPSK	3SC0	-11.29	-10.04	-	-3.21	-6.83	Pass
15	QPSK	3SC9	-9.08	-7.83	-	-3.21	-4.62	Pass
15	QPSK	6SC0	-11.78	-10.53	-	-3.58	-6.95	Pass
15	QPSK	6SC6	-10.1	-8.85	-	-3.61	-5.24	Pass
15	QPSK	12SC0	-16.85	-15.6	-	-4.39	-11.21	Pass

B23 H CH 2019.9 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.92	-9.67	-	-2.97	-6.7	Pass
3.75	BPSK	1SC47	-9.02	-7.77	-	-3.27	-4.5	Pass
3.75	QPSK	1SC0	-11.4	-10.15	-	-3.17	-6.98	Pass
3.75	QPSK	1SC47	-9.35	-8.1	-	-3.43	-4.67	Pass
15	BPSK	1SC0	-4.58	-3.33	-	-3.28	-0.05	Pass
15	BPSK	1SC11	-5.25	-4	-	-3.23	-0.77	Pass
15	QPSK	1SC0	-5.28	-4.03	-	-3.13	-0.9	Pass
15	QPSK	1SC11	-4.32	-3.07	-	-2.87	-0.2	Pass
15	QPSK	3SC0	-12.71	-11.46	-	-4.28	-7.18	Pass
15	QPSK	3SC9	-9.77	-8.52	-	-4.23	-4.29	Pass
15	QPSK	6SC0	-12.13	-10.88	-	-5.13	-5.75	Pass
15	QPSK	6SC6	-11.75	-10.5	-	-5.27	-5.23	Pass
15	QPSK	12SC0	-18.64	-17.39	-	-5.74	-11.65	Pass

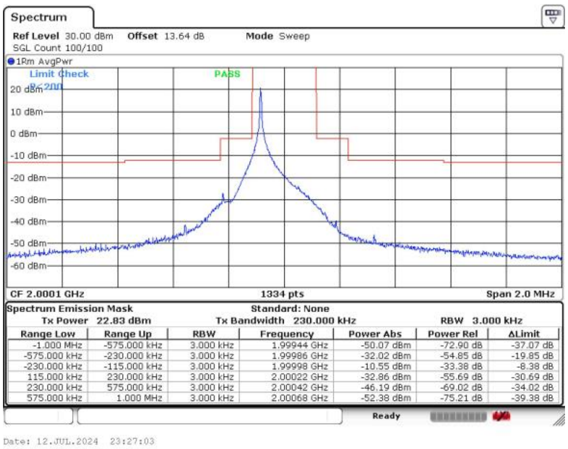
Remark: The above results of RBW 3kHz should be added a factor of 10log(4kHz/3kHz) = 1.25dB.

If the result of the Mask method with factor fails, then the Channel Power method will be used.

The authorized bandwidth is 230kHz according to FCC Public Notice Report No. SES-02669.

Band 23 SCS 3.75kHz

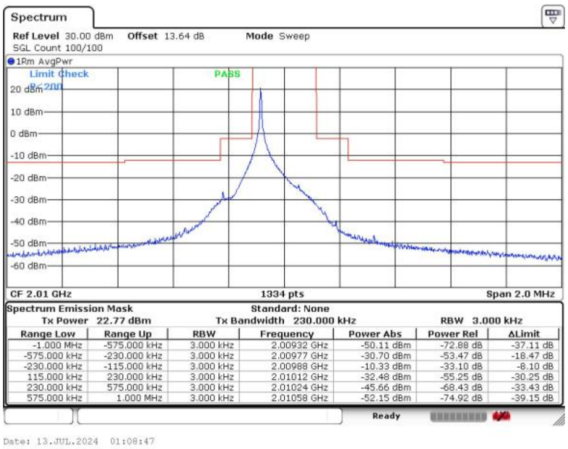
Lowest Channel / 1SC0 / BPSK



Lowest Channel / 1SC0 / BPSK - CP

N/A

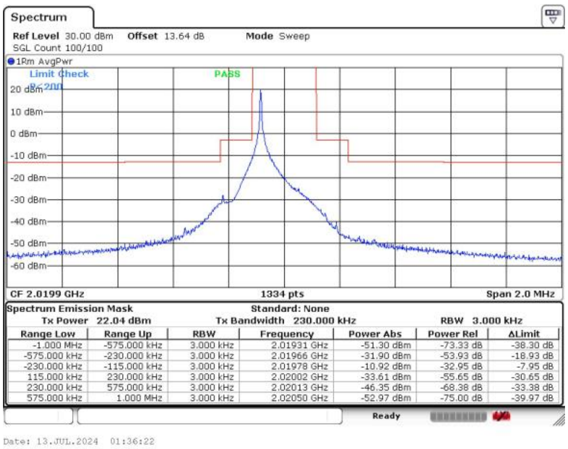
Middle Channel / 1SC0 / BPSK



Middle Channel / 1SC0 / BPSK - CP

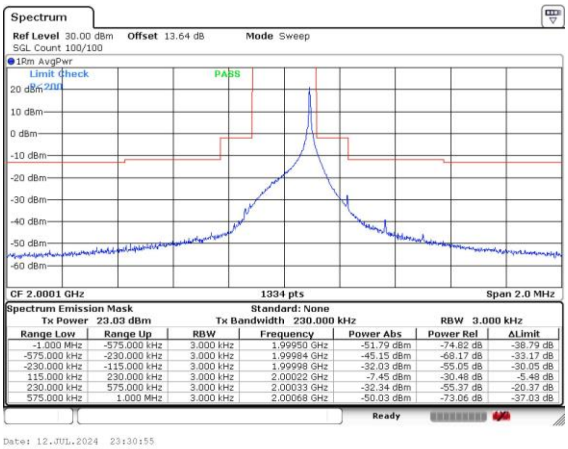
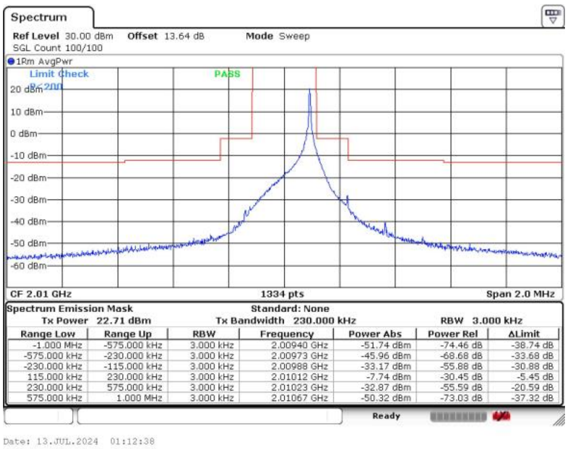
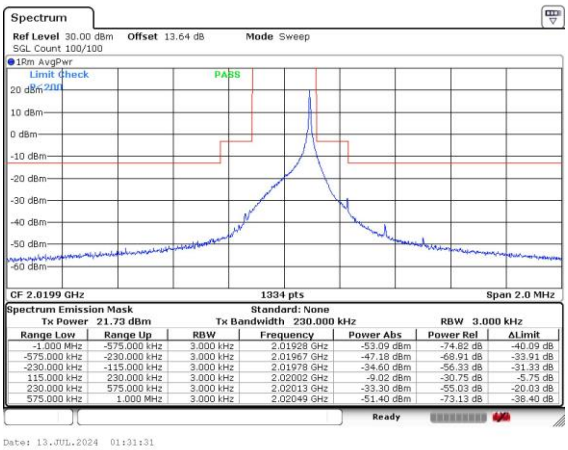
N/A

Highest Channel / 1SC0 / BPSK



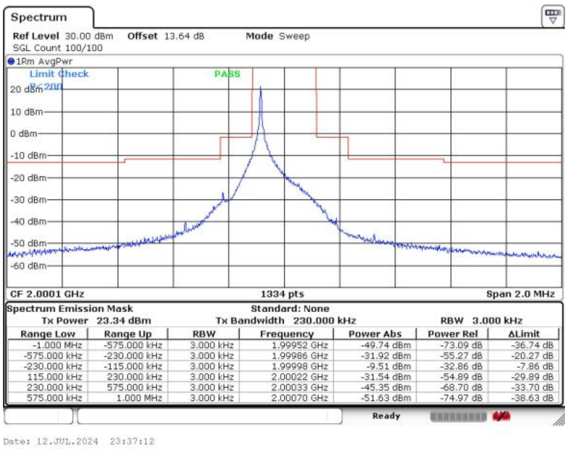
Highest Channel / 1SC0 / BPSK - CP

N/A

Band 23 SCS 3.75kHz	
Lowest Channel / 1SC47 / BPSK	**Lowest Channel / 1SC47 / BPSK-CP**
	N/A
Middle Channel / 1SC47 / BPSK	**Middle Channel / 1SC47 / BPSK-CP**
	N/A
Highest Channel / 1SC47 / BPSK	**Highest Channel / 1SC47 / BPSK-CP**
	N/A

Band 23 SCS 3.75kHz

Lowest Channel / 1SC0 / QPSK

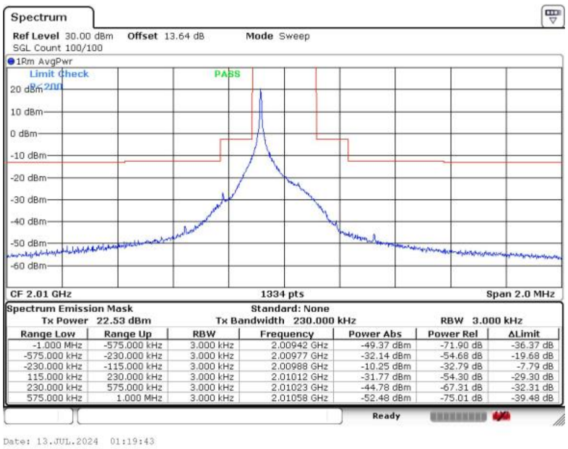


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	1.99952 GHz	-49.74 dBm	-73.09 dB	-36.74 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	1.99986 GHz	-31.92 dBm	-55.27 dB	-20.27 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	1.99998 GHz	-9.51 dBm	-32.86 dB	-7.86 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.00022 GHz	-31.54 dBm	-54.89 dB	-29.89 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.00033 GHz	-45.35 dBm	-68.70 dB	-33.70 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.00070 GHz	-51.63 dBm	-74.97 dB	-38.63 dB

Lowest Channel / 1SC0 / QPSK - CP

N/A

Middle Channel / 1SC0 / QPSK

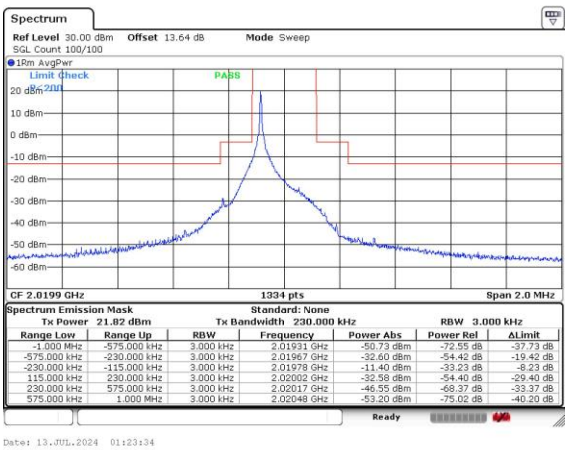


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	2.00942 GHz	-49.37 dBm	-71.90 dB	-36.37 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	2.00977 GHz	-32.14 dBm	-54.68 dB	-19.68 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	2.00988 GHz	-10.25 dBm	-32.79 dB	-7.79 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.01012 GHz	-31.77 dBm	-54.30 dB	-29.30 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.01023 GHz	-44.78 dBm	-67.31 dB	-32.31 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.01058 GHz	-52.48 dBm	-75.01 dB	-39.48 dB

Middle Channel / 1SC0 / QPSK - CP

N/A

Highest Channel / 1SC0 / QPSK



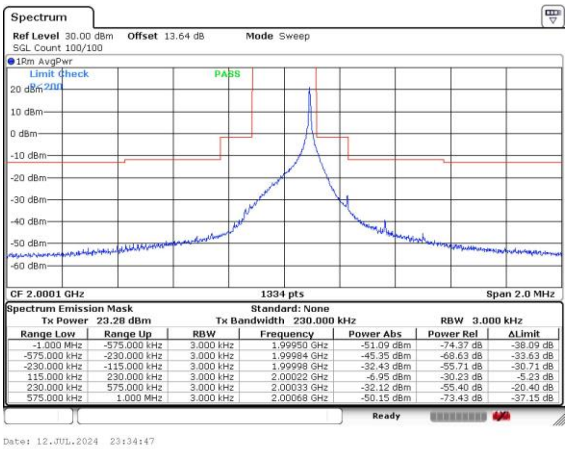
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	2.01931 GHz	-50.73 dBm	-72.55 dB	-37.73 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	2.01967 GHz	-32.60 dBm	-54.42 dB	-19.42 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	2.01978 GHz	-11.40 dBm	-33.23 dB	-8.23 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.02002 GHz	-32.58 dBm	-54.40 dB	-29.40 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.02017 GHz	-46.55 dBm	-68.37 dB	-33.37 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.02048 GHz	-53.20 dBm	-75.02 dB	-40.20 dB

Highest Channel / 1SC0 / QPSK - CP

N/A

Band 23 SCS 3.75kHz

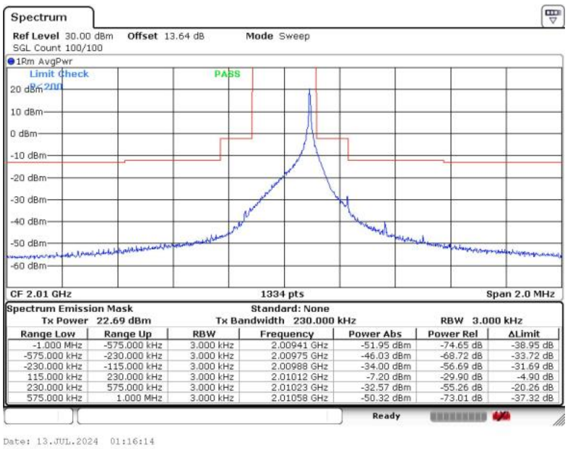
Lowest Channel / 1SC47 / QPSK



Lowest Channel / 1SC47 / QPSK-CP

N/A

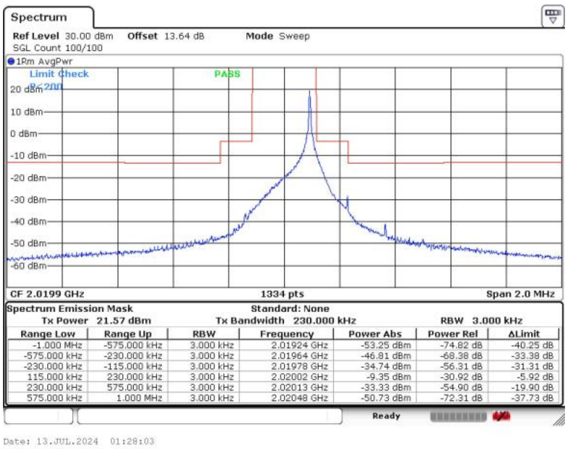
Middle Channel / 1SC47 / QPSK



Middle Channel / 1SC47 / QPSK-CP

N/A

Highest Channel / 1SC47 / QPSK

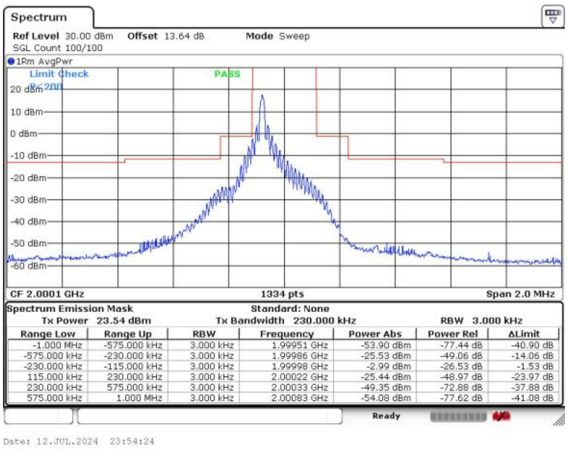


Highest Channel / 1SC47 / QPSK-CP

N/A

Band 23 SCS 15kHz

Lowest Channel / 1SC0 / BPSK

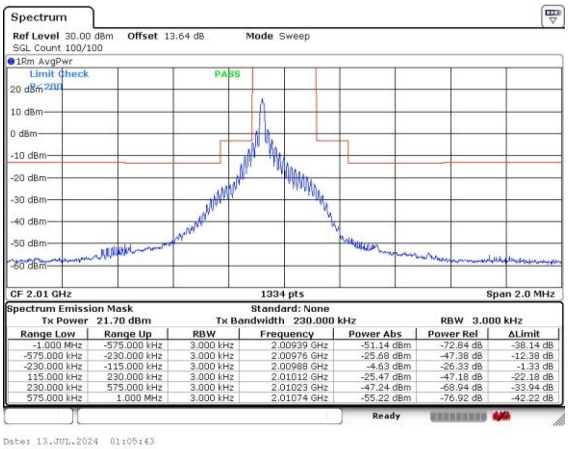


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	1.99951 GHz	-53.90 dBm	-77.44 dB	-40.90 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	1.99986 GHz	-25.53 dBm	-49.06 dB	-14.06 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	1.99998 GHz	-2.99 dBm	-26.53 dB	-1.53 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.00022 GHz	-25.44 dBm	-48.97 dB	-23.97 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.00033 GHz	-49.35 dBm	-72.88 dB	-37.88 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.00083 GHz	-54.08 dBm	-77.62 dB	-41.08 dB

Lowest Channel / 1SC0 / BPSK - CP

N/A

Middle Channel / 1SC0 / BPSK

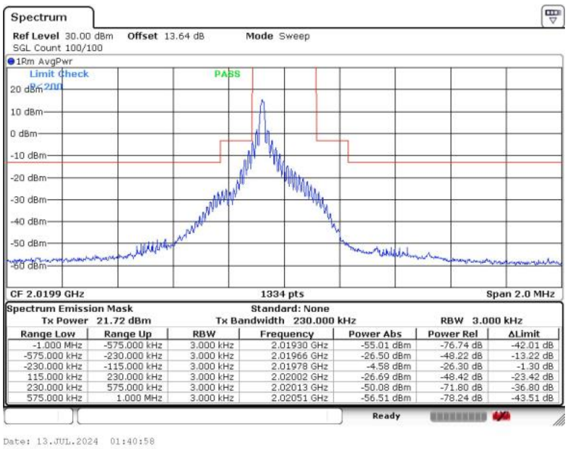


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	2.00939 GHz	-51.14 dBm	-72.84 dB	-38.14 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	2.00976 GHz	-25.68 dBm	-47.38 dB	-12.38 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	2.00988 GHz	-4.63 dBm	-26.33 dB	-1.33 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.01012 GHz	-25.47 dBm	-47.18 dB	-22.18 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.01023 GHz	-47.24 dBm	-68.94 dB	-33.94 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.01074 GHz	-55.22 dBm	-76.92 dB	-42.22 dB

Middle Channel / 1SC0 / BPSK - CP

N/A

Highest Channel / 1SC0 / BPSK



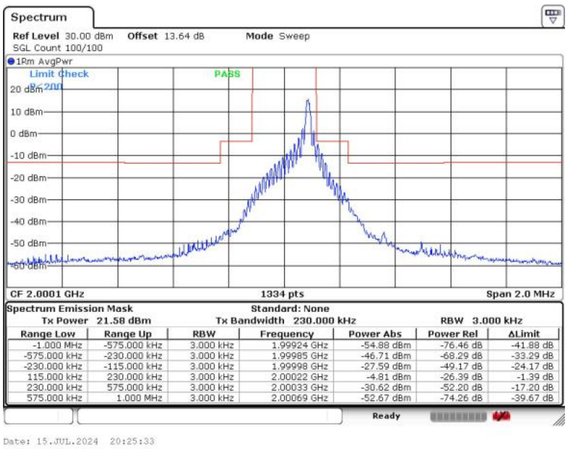
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.000 MHz	-575.000 kHz	3.000 kHz	2.01930 GHz	-55.01 dBm	-76.74 dB	-42.01 dB
-575.000 kHz	-230.000 kHz	3.000 kHz	2.01966 GHz	-26.50 dBm	-48.22 dB	-13.22 dB
-230.000 kHz	-115.000 kHz	3.000 kHz	2.01978 GHz	-4.58 dBm	-26.30 dB	-1.30 dB
115.000 kHz	230.000 kHz	3.000 kHz	2.02002 GHz	-26.69 dBm	-48.42 dB	-23.42 dB
230.000 kHz	575.000 kHz	3.000 kHz	2.02013 GHz	-50.08 dBm	-71.80 dB	-36.80 dB
575.000 kHz	1.000 MHz	3.000 kHz	2.02051 GHz	-56.51 dBm	-78.24 dB	-43.51 dB

Highest Channel / 1SC0 / BPSK - CP

N/A

Band 23 SCS 15kHz

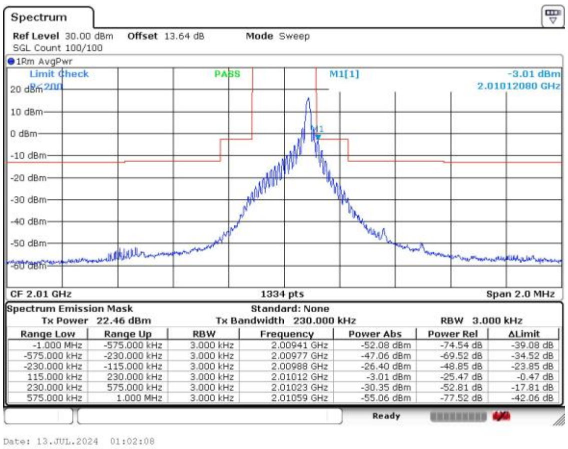
Lowest Channel / 1SC11 / BPSK



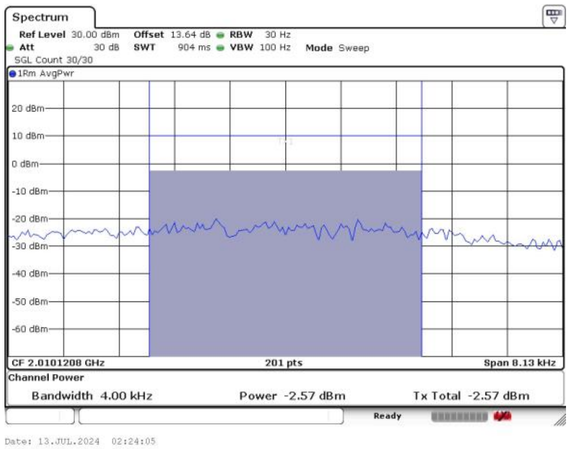
Lowest Channel / 1SC11 / BPSK-CP

N/A

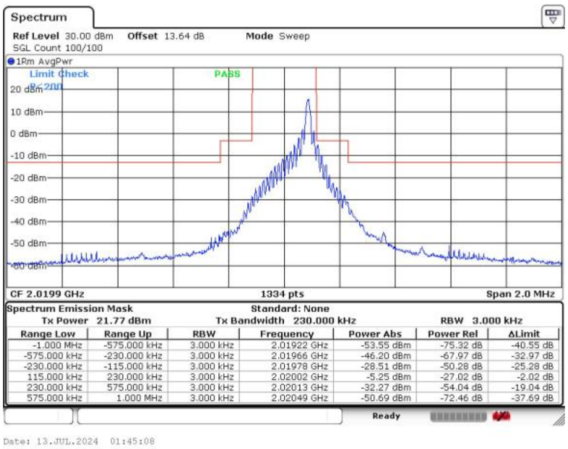
Middle Channel / 1SC11 / BPSK



Middle Channel / 1SC11 / BPSK – CP

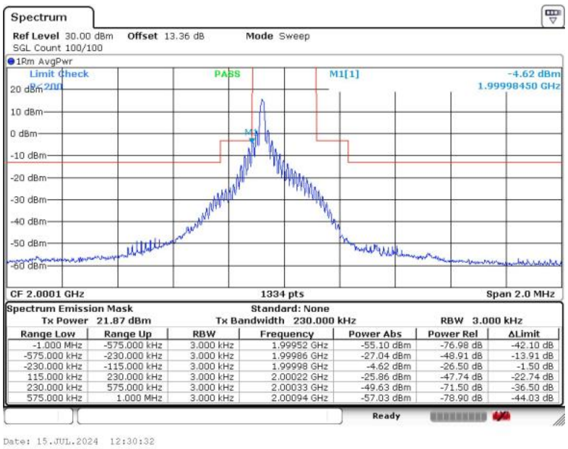
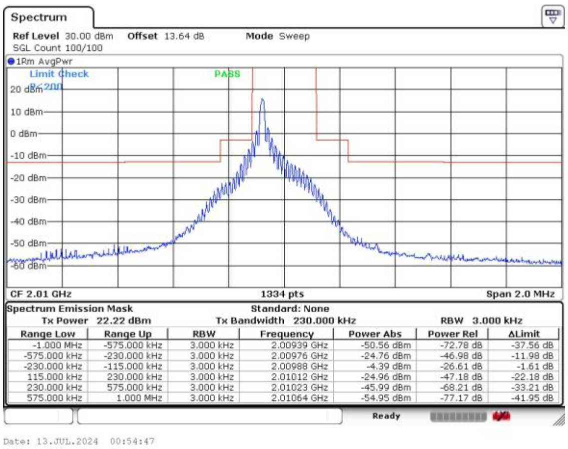
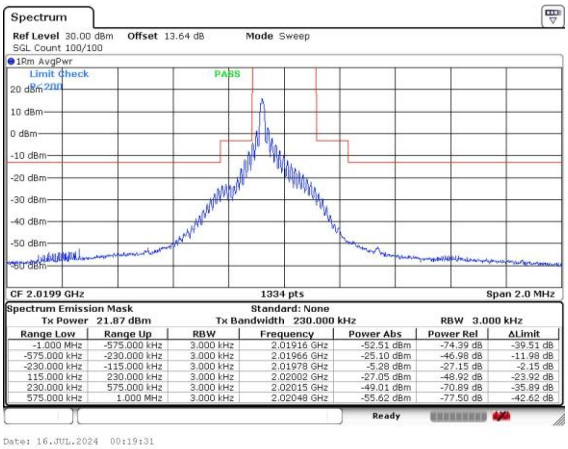


Highest Channel / 1SC11 / BPSK



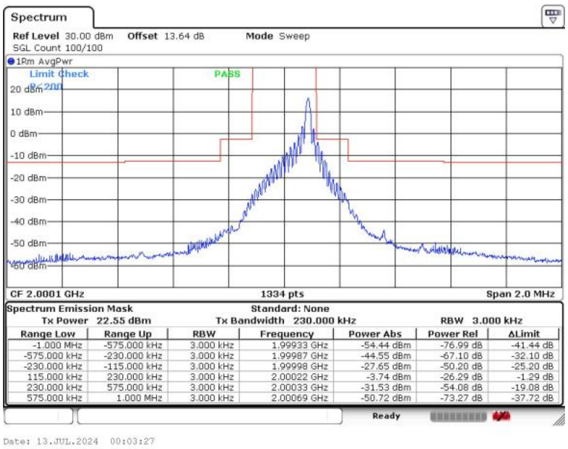
Highest Channel / 1SC11 / BPSK-CP

N/A

<table>
<tr><th colspan="2">Band 23 SCS 15kHz</th></tr>
<tr><th>Lowest Channel / 1SC0 / QPSK</th><th>Lowest Channel / 1SC0 / QPSK - CP</th></tr>
<tr><td>
</td><td>N/A</td></tr>
<tr><th>Middle Channel / 1SC0 / QPSK</th><th>Middle Channel / 1SC0 / QPSK - CP</th></tr>
<tr><td>
</td><td>N/A</td></tr>
<tr><th>Highest Channel / 1SC0 / QPSK</th><th>Highest Channel / 1SC0 / QPSK - CP</th></tr>
<tr><td>
</td><td>N/A</td></tr>
</table>

Band 23 SCS 15kHz

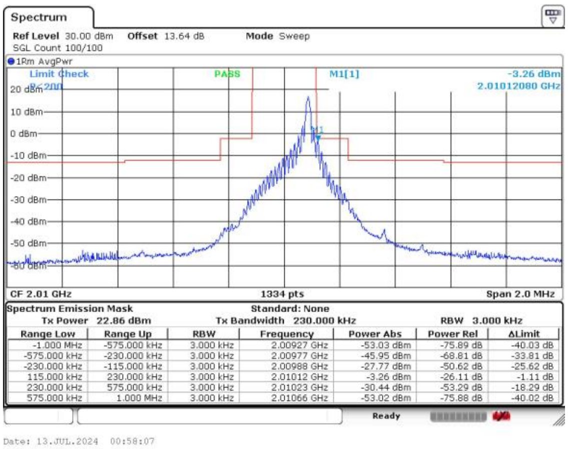
Lowest Channel / 1SC11 / QPSK



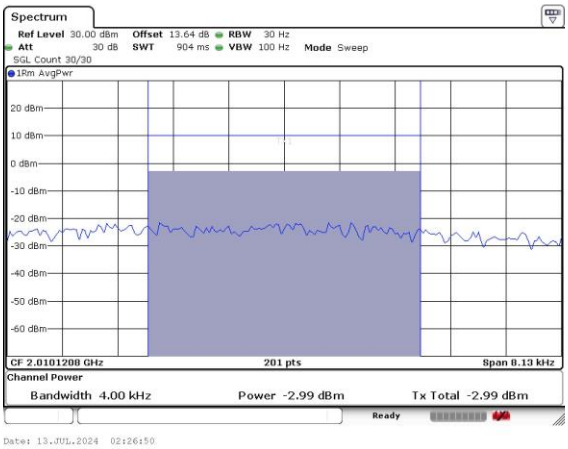
Lowest Channel / 1SC11 / QPSK - CP

N/A

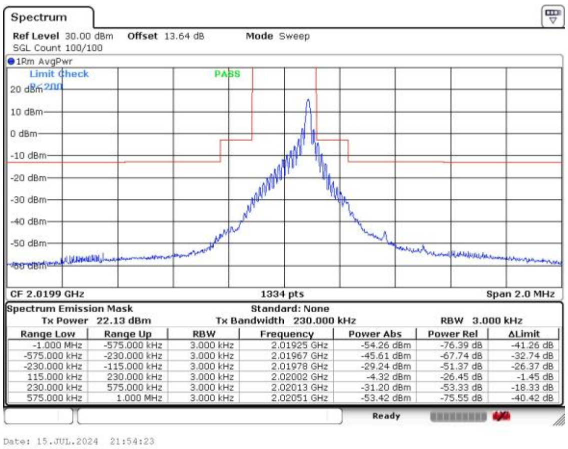
Middle Channel / 1SC11 / QPSK



Middle Channel / 1SC11 / QPSK - CP

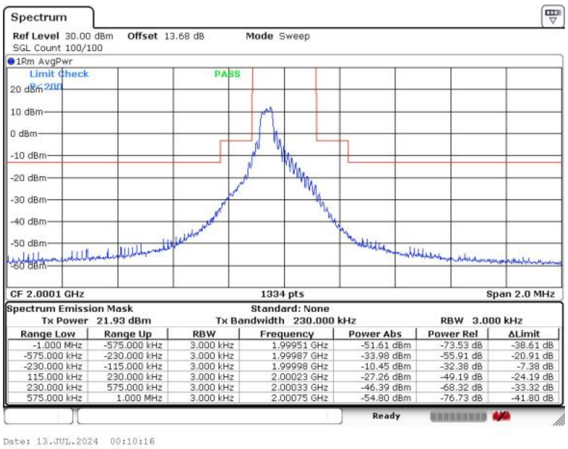
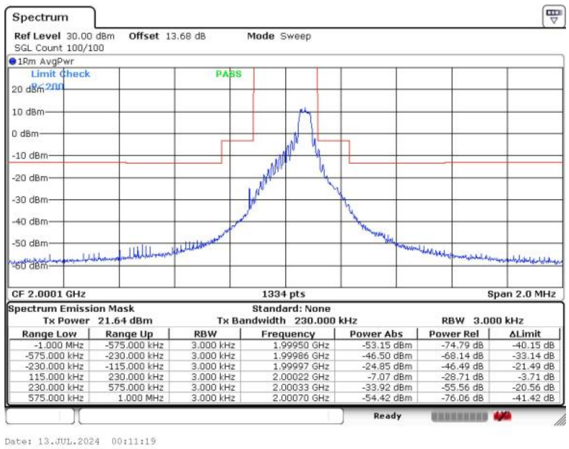
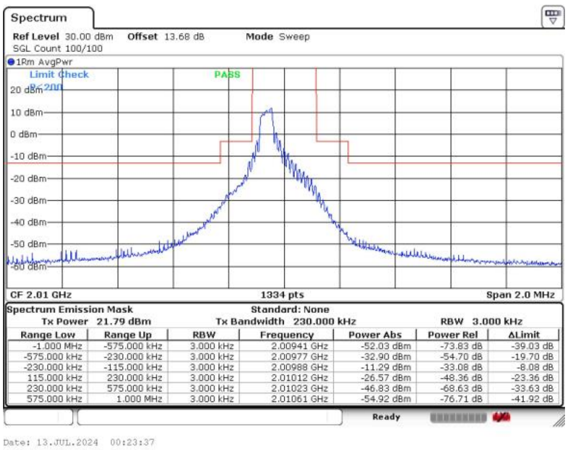
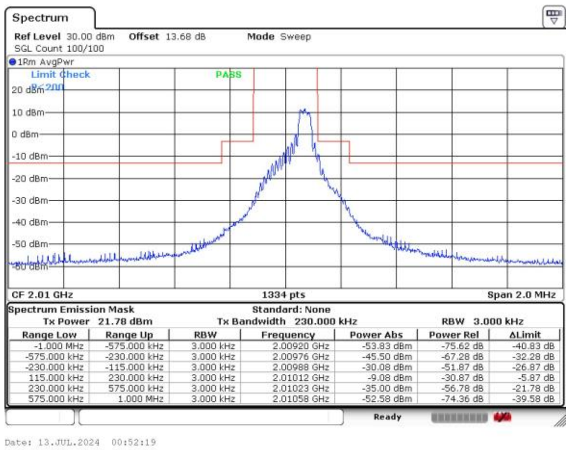
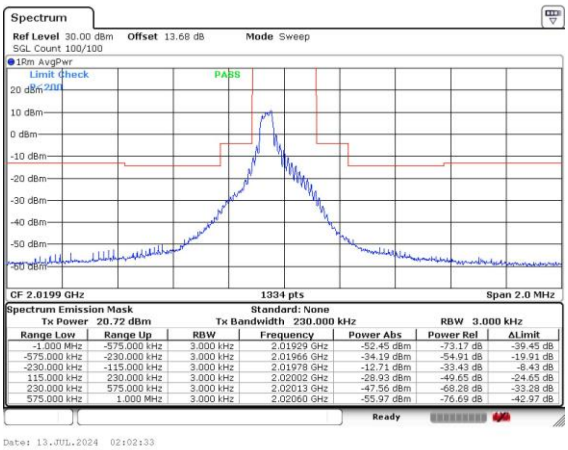
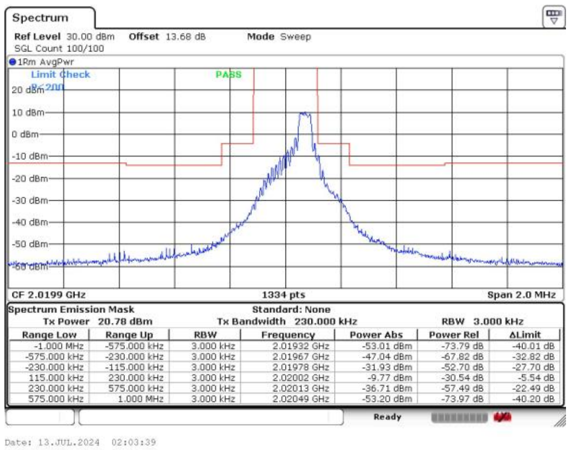


Highest Channel / 1SC11 / QPSK

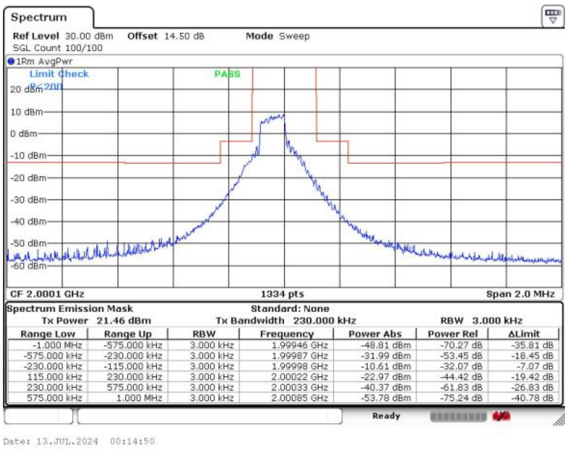


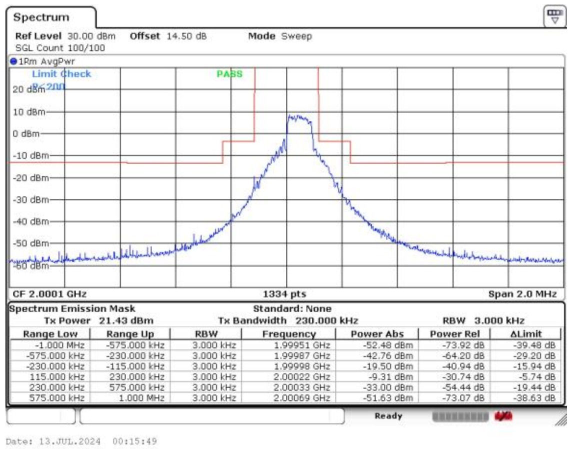
Highest Channel / 1SC11 / QPSK - CP

N/A

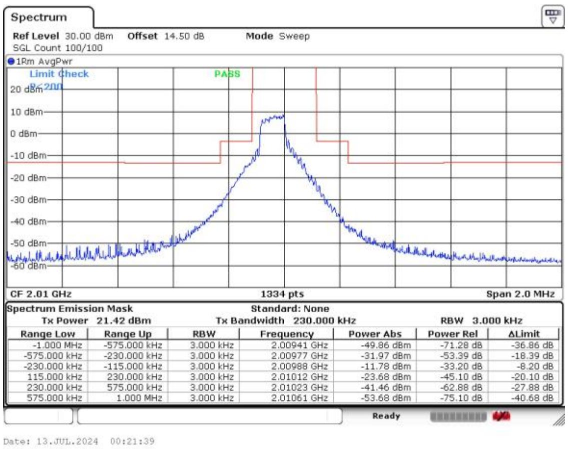
Band 23 SCS 15kHz	
Lowest Channel / 3SC0 / QPSK	**Lowest Channel / 3SC9 / QPSK**
	
Middle Channel / 3SC0 / QPSK	**Middle Channel / 3SC9 / QPSK**
	
Highest Channel / 3SC0 / QPSK	**Highest Channel / 3SC9 / QPSK**
	

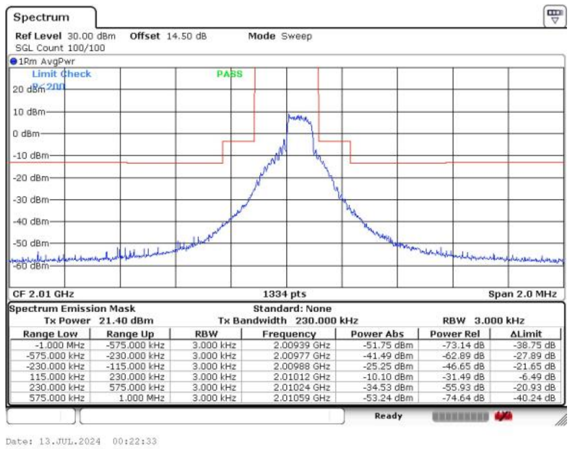
Band 23 SCS 15kHz	
Lowest Channel / 6SC0 / QPSK	**Lowest Channel / 6SC6 / QPSK**



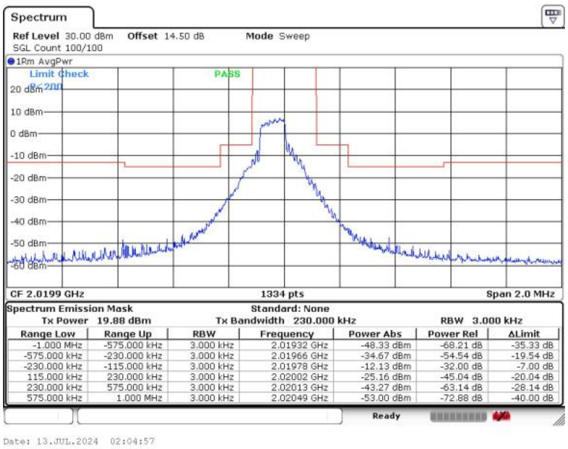


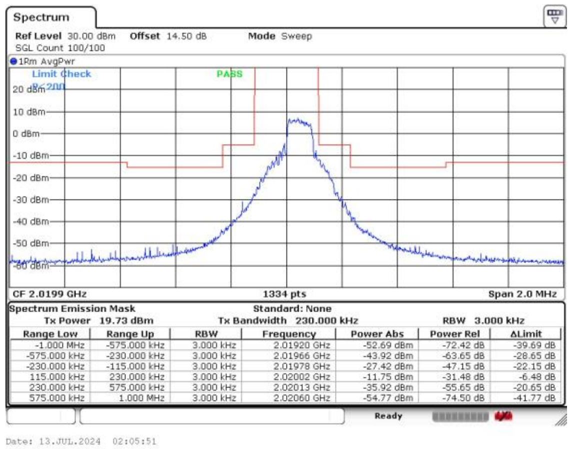
Middle Channel / 6SC0 / QPSK	**Middle Channel / 6SC6 / QPSK**



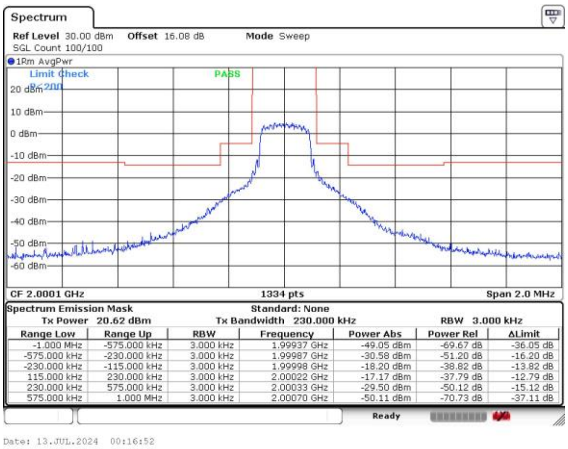


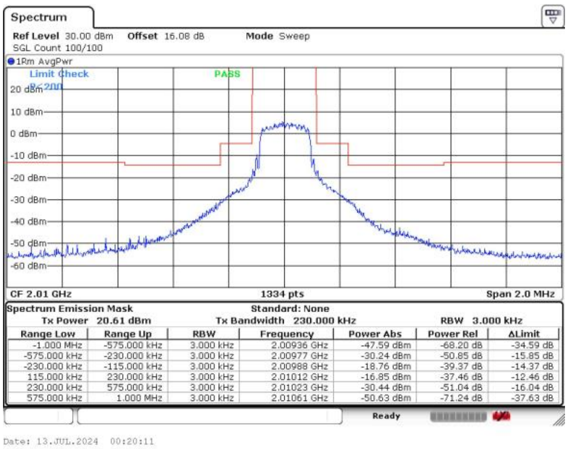
Highest Channel / 6SC0 / QPSK	**Highest Channel / 6SC6 / QPSK**

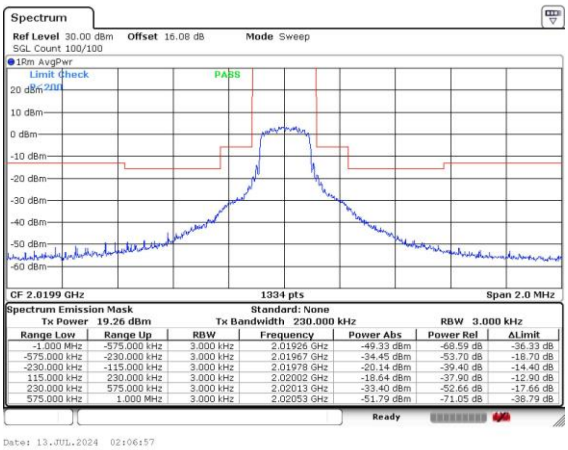




Band 23 SCS 15kHz

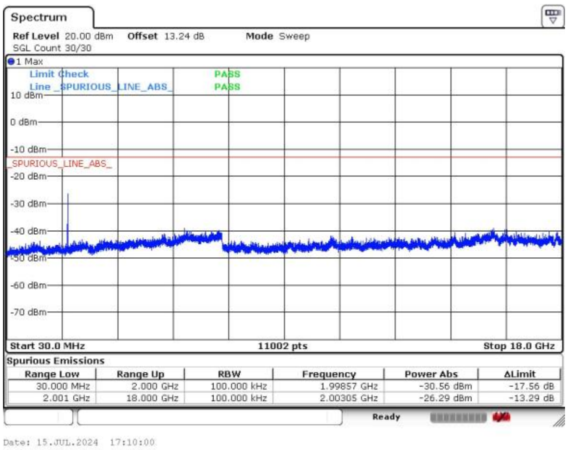
Lowest Channel / 12SC0 / QPSK	N/A
	-

Middle Channel / 12SC0 / QPSK	N/A
	-

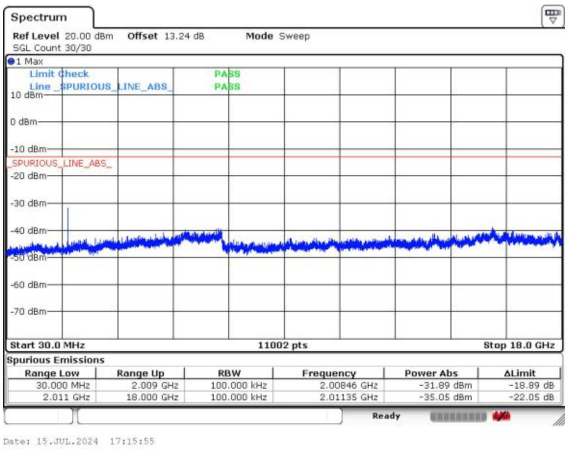
Highest Channel / 12SC0 / QPSK	N/A
	-

Conducted Spurious Emission

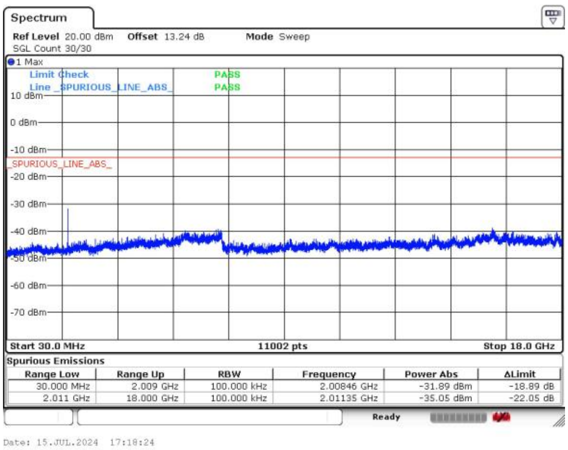
Band 23 SCS 3.75kHz
Lowest Channel / 1SC0 / BPSK



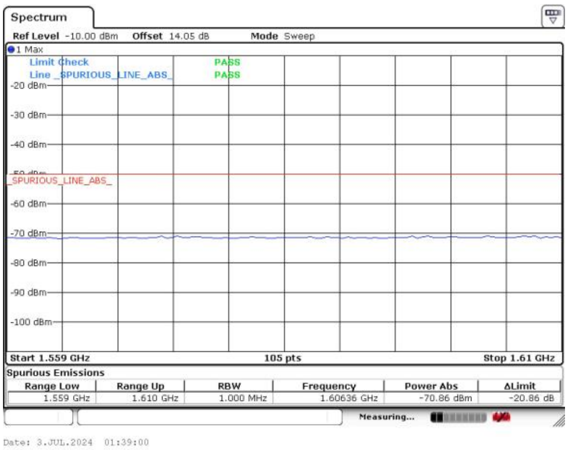
Middle Channel / 1SC0 / BPSK



Highest Channel / 1SC0 / BPSK



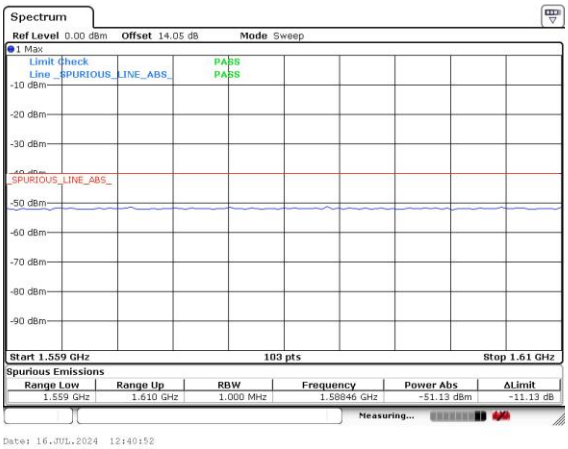
Emission limits for protection of aeronautical service

Band 23
Carrier off


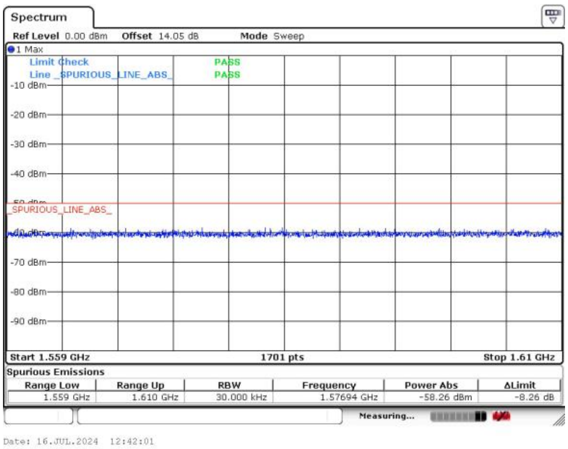
Band 23 SCS 3.75kHz

BPSK

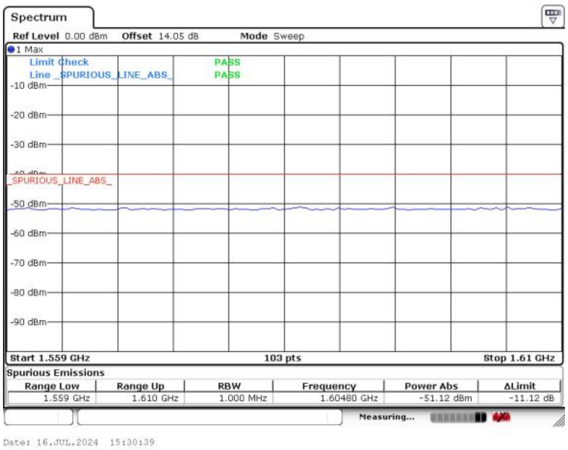
Lowest Channel / 1SC0 Carrier on



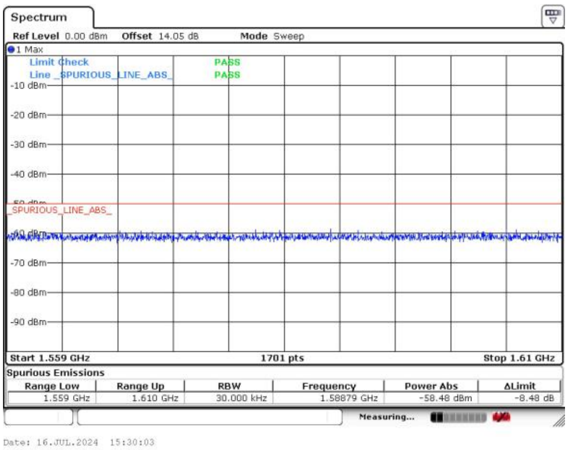
Lowest Channel / 1SC0 Discrete



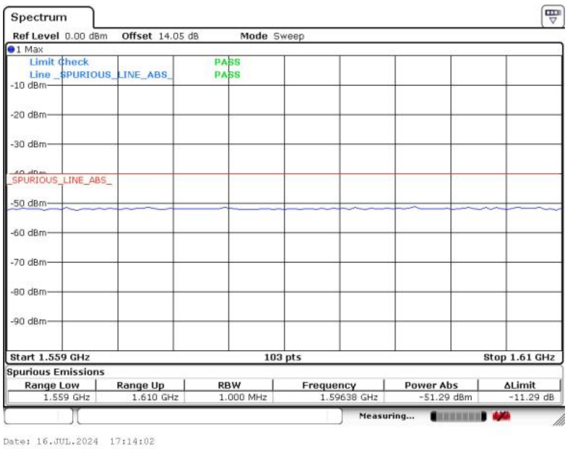
Middle Channel / 1SC0 Carrier on



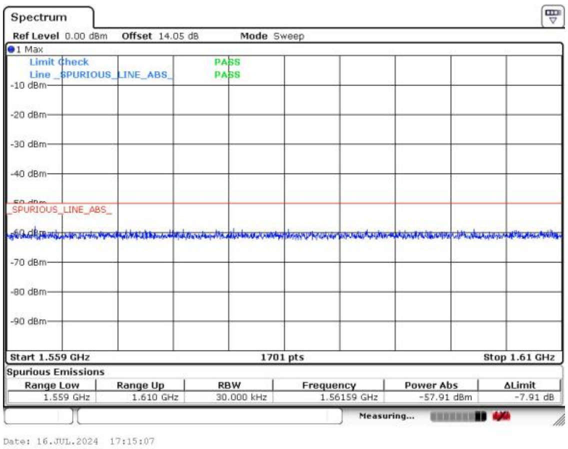
Middle Channel / 1SC0 Discrete

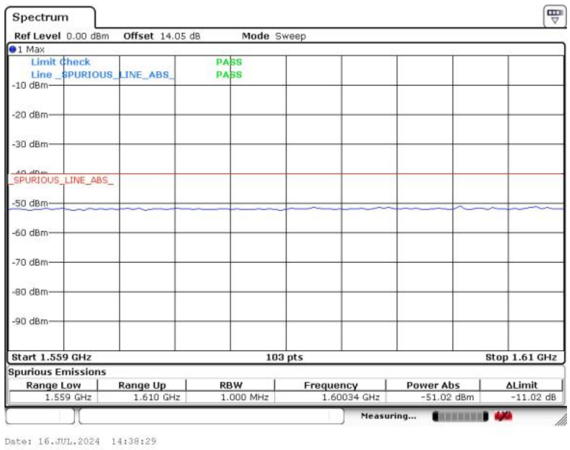
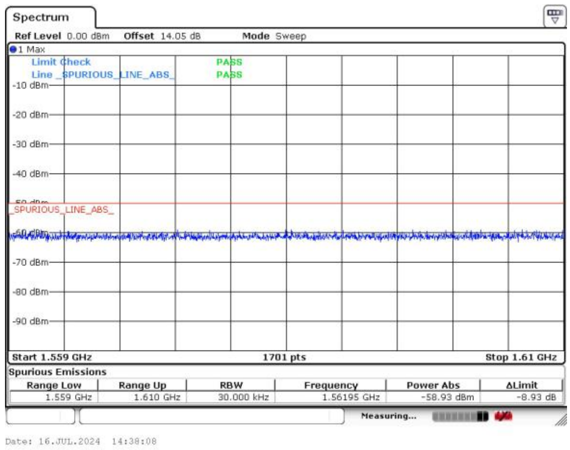
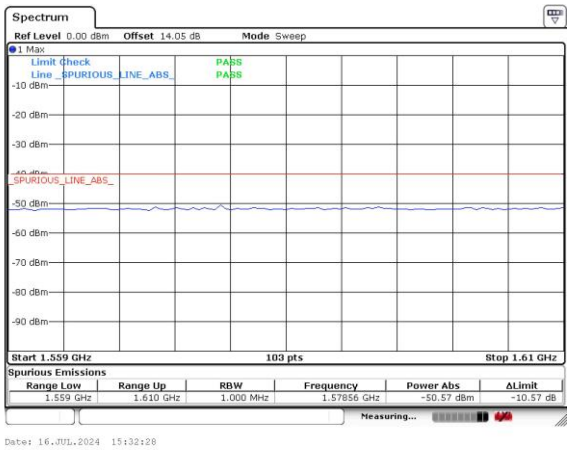
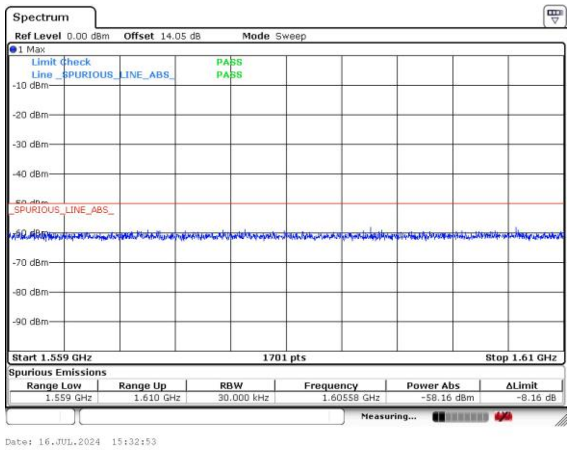
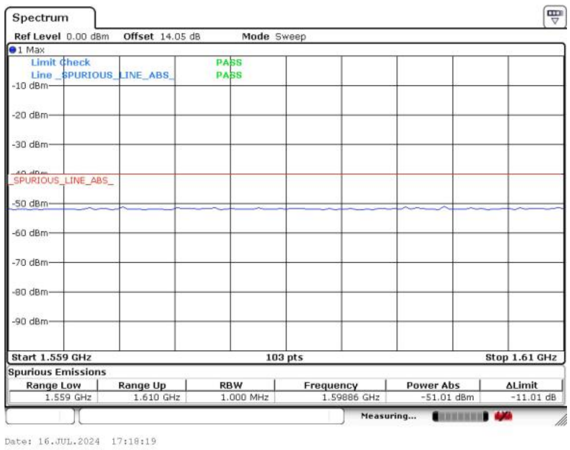
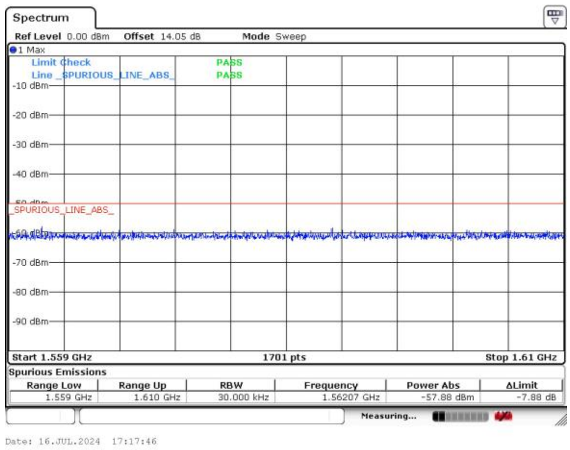


Highest Channel / 1SC0 Carrier on



Highest Channel / 1SC0 Discrete

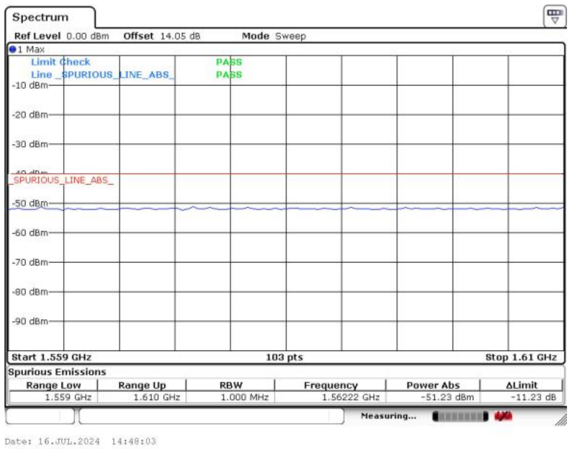


Lowest Channel / 1SC47 Carrier on	Lowest Channel / 1SC47 Discrete
	
Middle Channel / 1SC47 Carrier on	**Middle Channel / 1SC47 Discrete**
	
Highest Channel / 1SC47 Carrier on	**Highest Channel / 1SC47 Discrete**
	

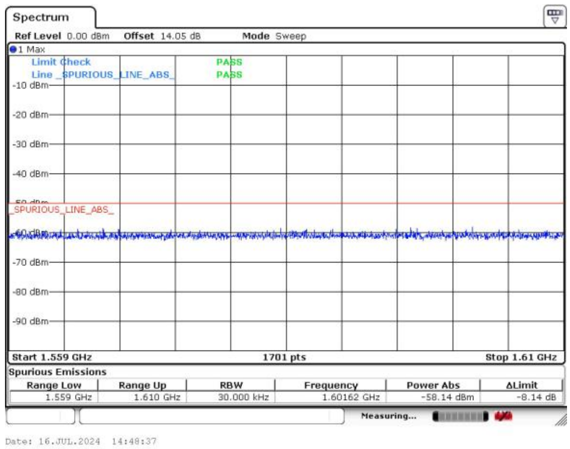
Band 23 SCS 15kHz

BPSK

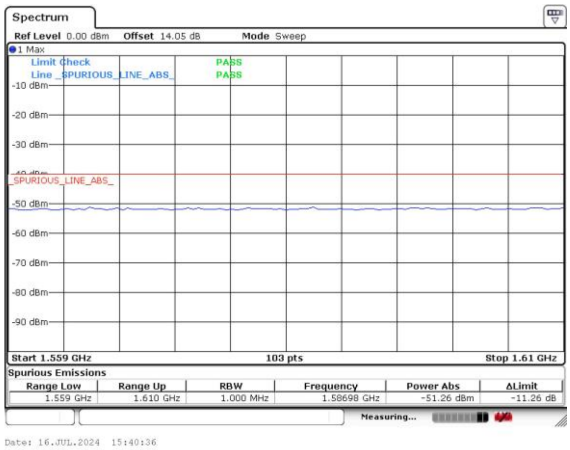
Lowest Channel / 1SC0 Carrier on



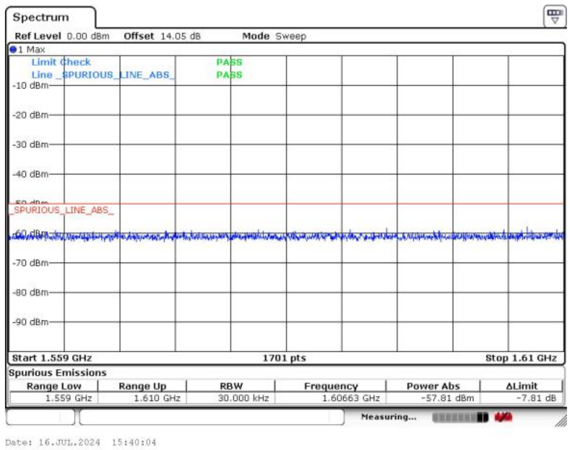
Lowest Channel / 1SC0 Discrete



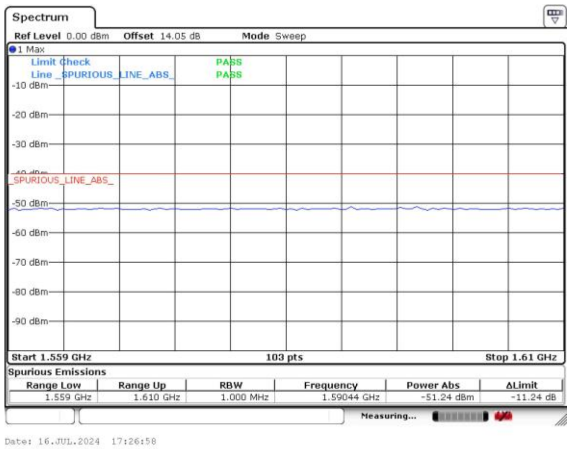
Middle Channel / 1SC0 Carrier on



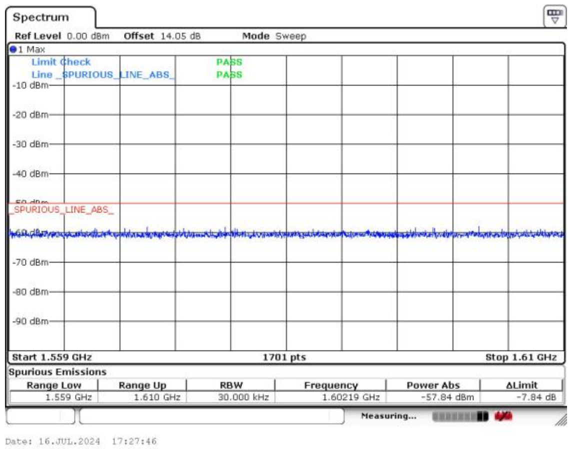
Middle Channel / 1SC0 Discrete



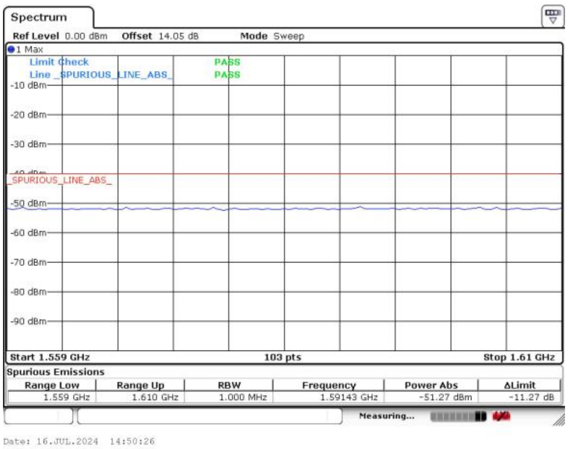
Highest Channel / 1SC0 Carrier on



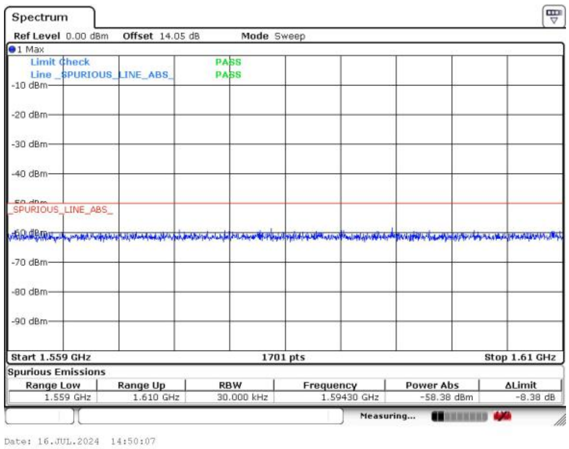
Highest Channel / 1SC0 Discrete



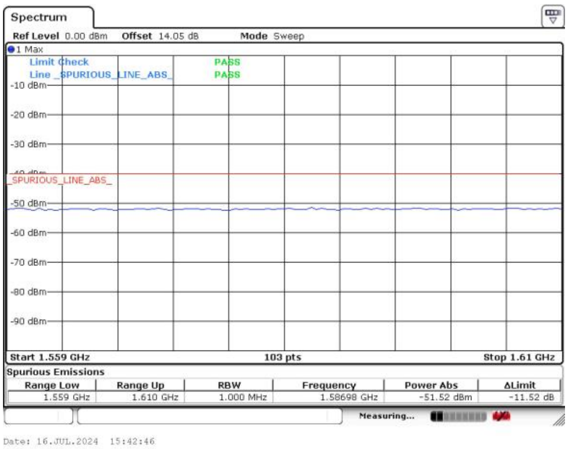
Lowest Channel / 1SC11 Carrier on



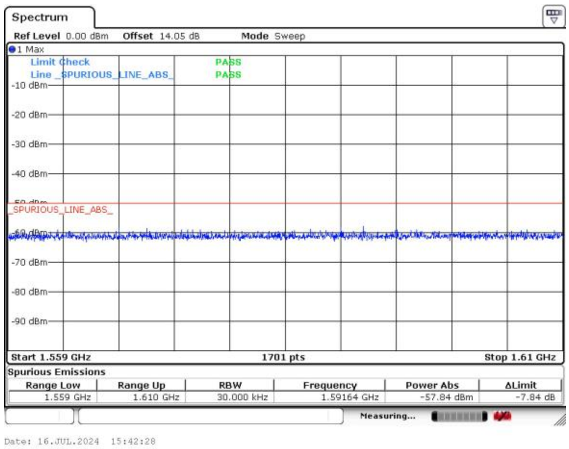
Lowest Channel / 1SC11 Discrete



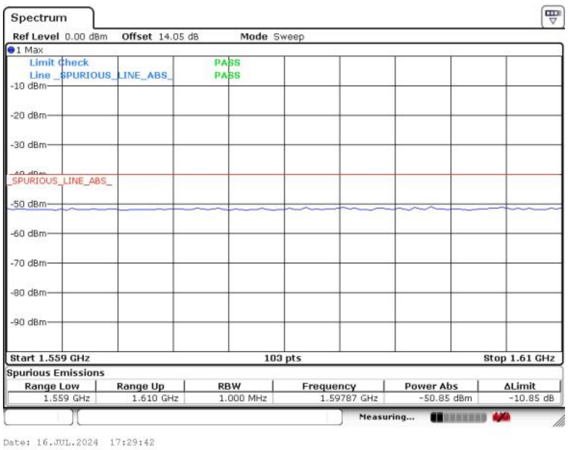
Middle Channel / 1SC11 Carrier on



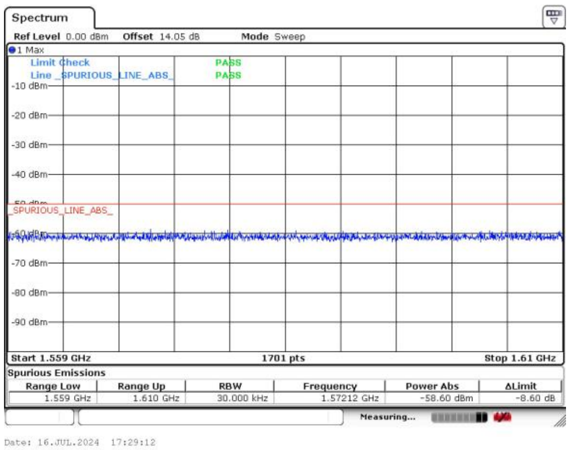
Middle Channel / 1SC11 Discrete



Highest Channel / 1SC11 Carrier on



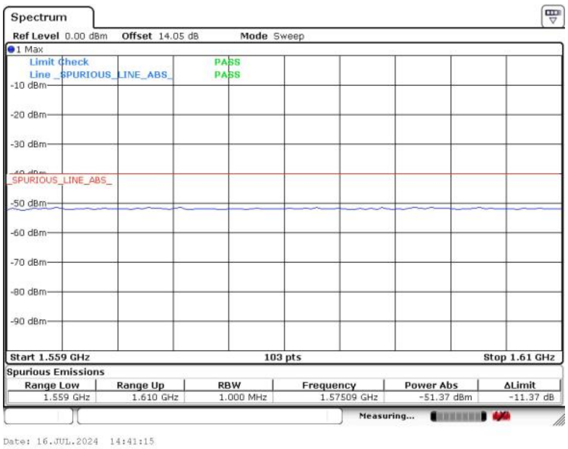
Highest Channel / 1SC11 Discrete



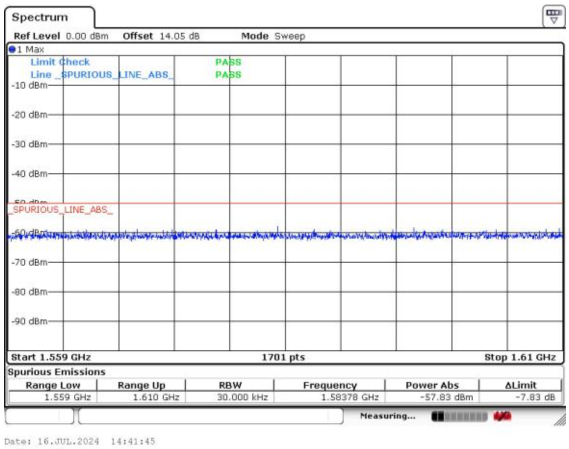
Band 23 SCS 3.75kHz

QPSK

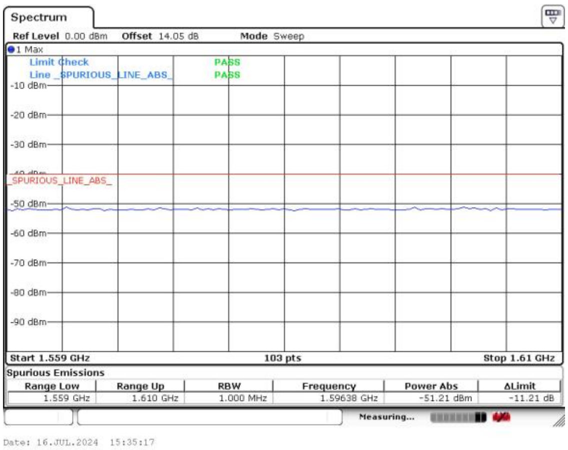
Lowest Channel / 1SC0 Carrier on



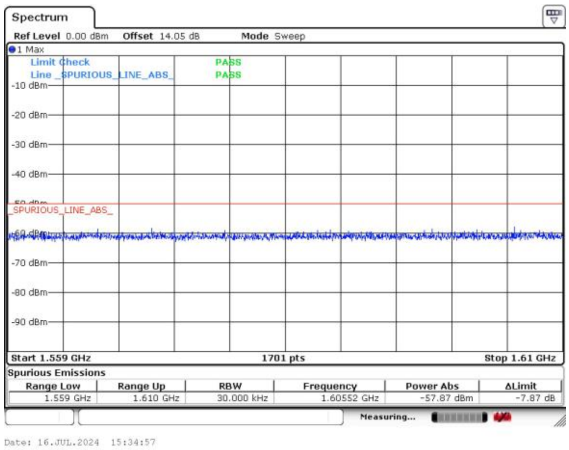
Lowest Channel / 1SC0 Discrete



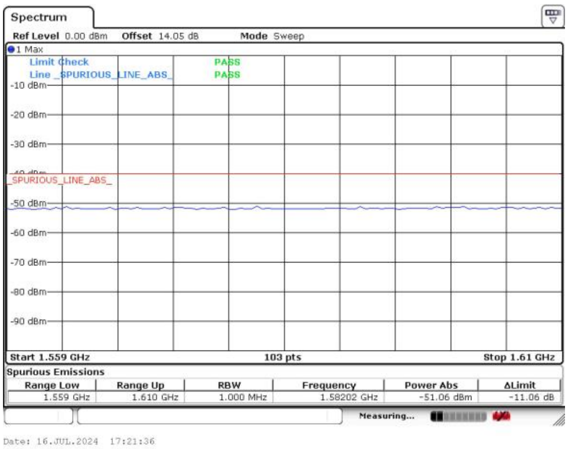
Middle Channel / 1SC0 Carrier on



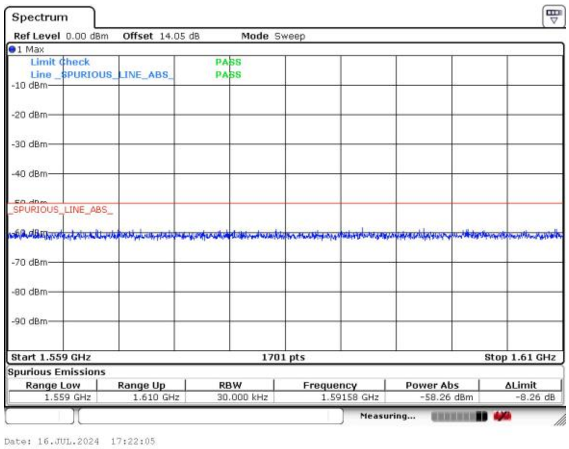
Middle Channel / 1SC0 Discrete



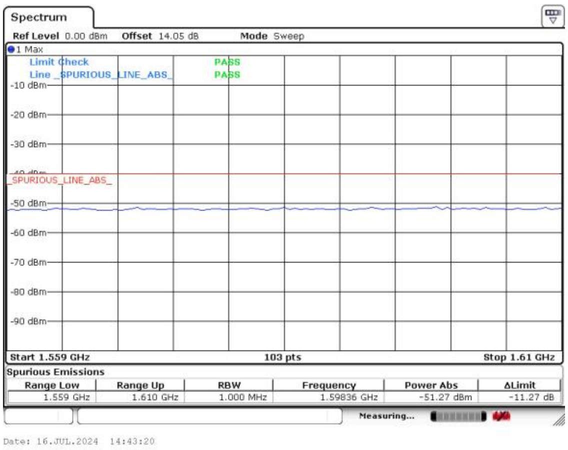
Highest Channel / 1SC0 Carrier on



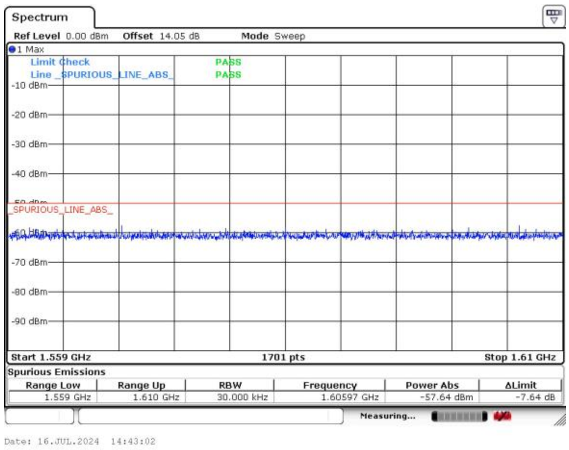
Highest Channel / 1SC0 Discrete



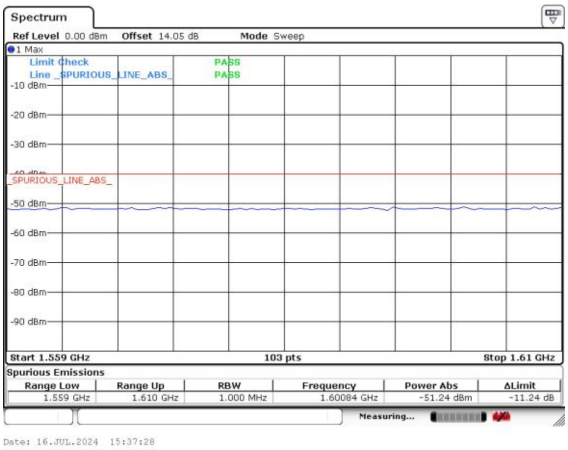
Lowest Channel / 1SC47 Carrier on



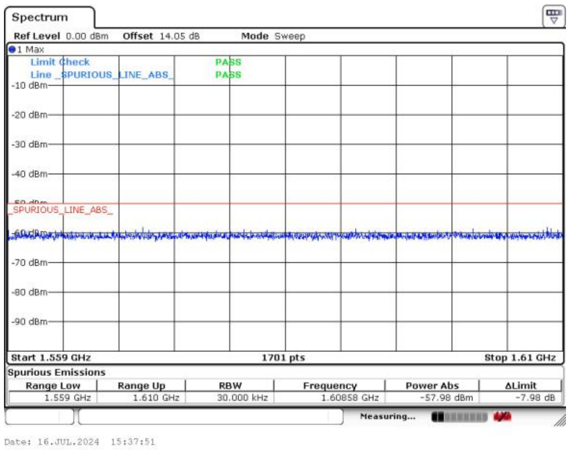
Lowest Channel / 1SC47 Discrete



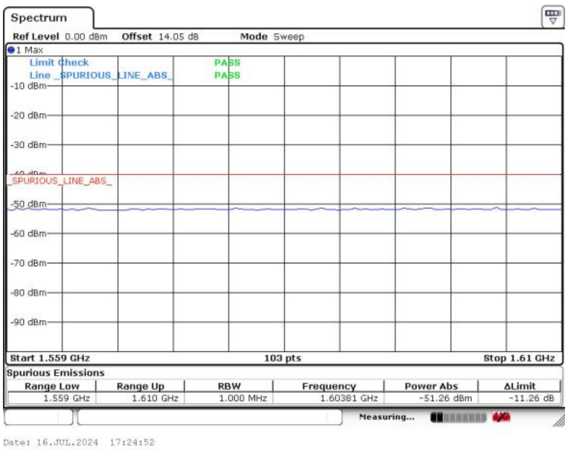
Middle Channel / 1SC47 Carrier on



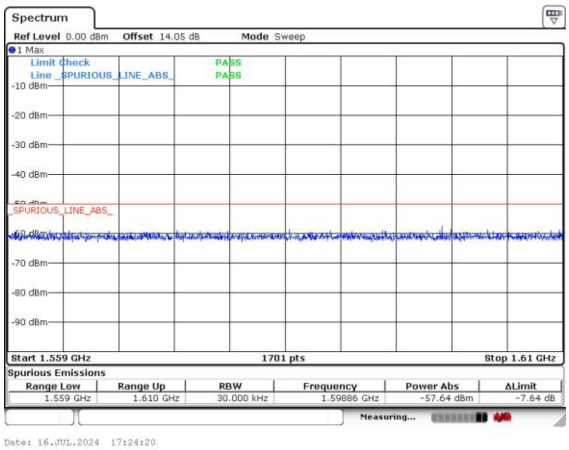
Middle Channel / 1SC47 Discrete



Highest Channel / 1SC47Carrier on



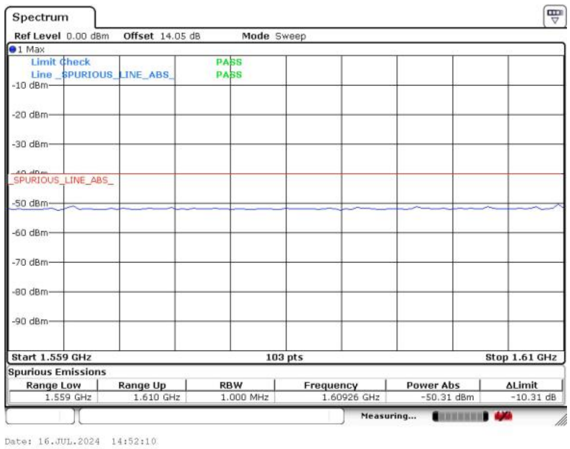
Highest Channel / 1SC47 Discrete



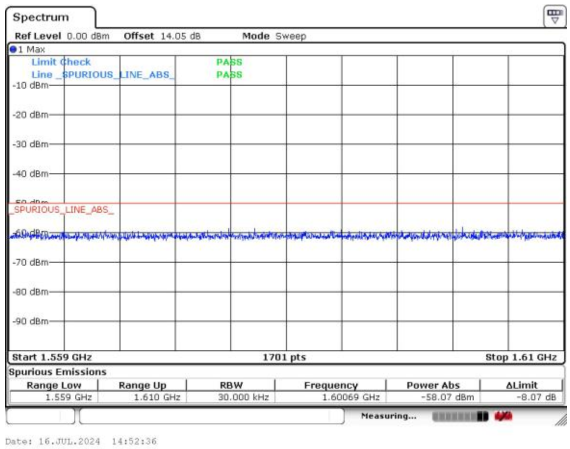
Band 23 SCS 15kHz

QPSK

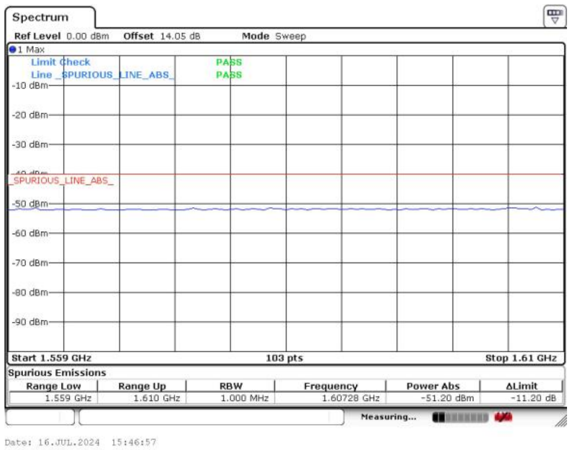
Lowest Channel / 1SC0 Carrier on



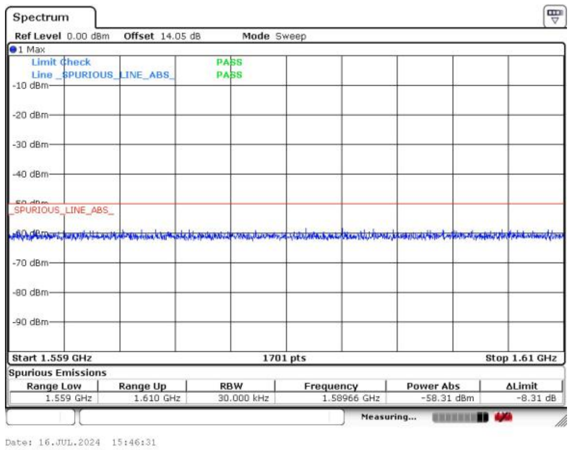
Lowest Channel / 1SC0 Discrete



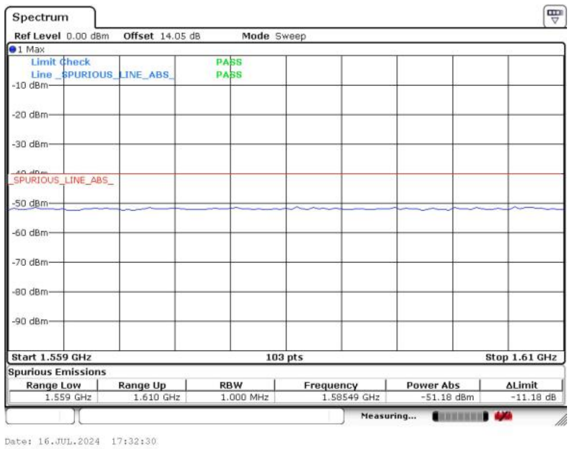
Middle Channel / 1SC0 Carrier on



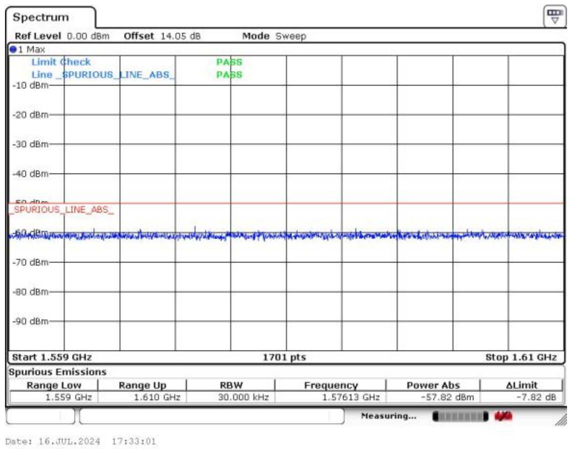
Middle Channel / 1SC0 Discrete

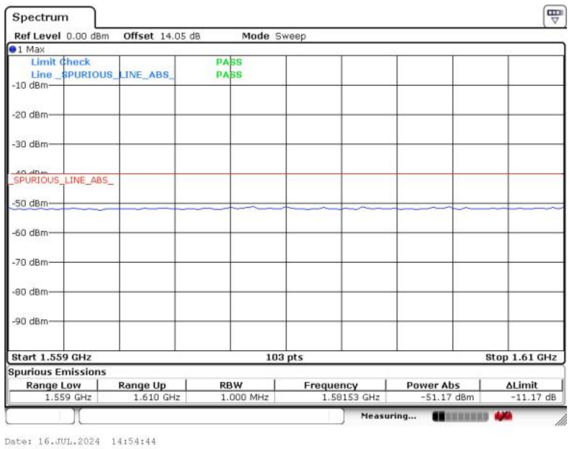
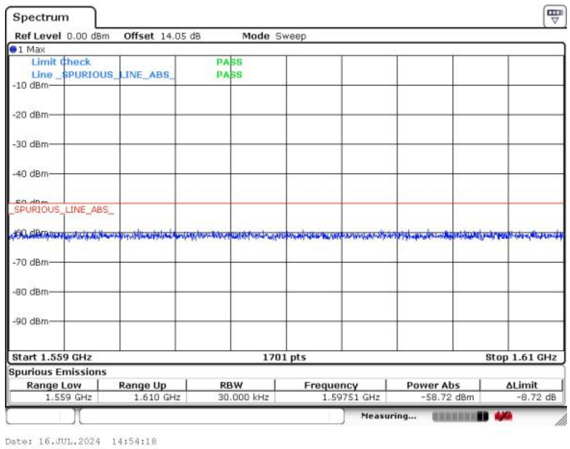
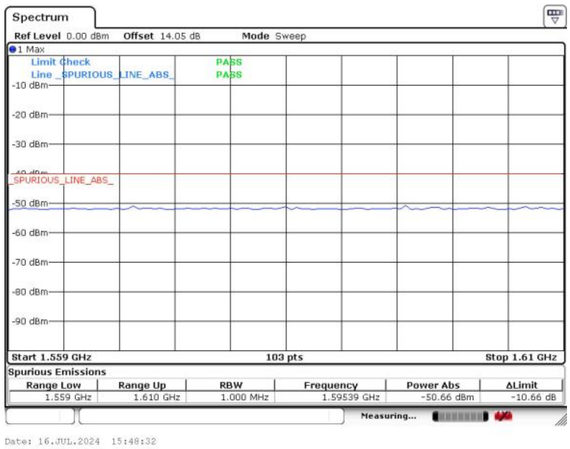
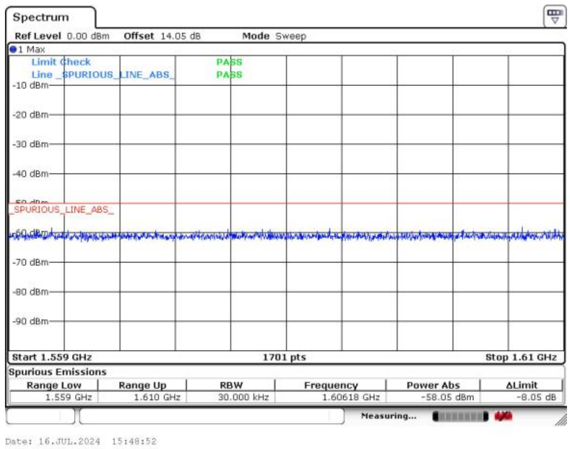


Highest Channel / 1SC0 Carrier on



Highest Channel / 1SC0 Discrete



Lowest Channel / 1SC11 Carrier on	Lowest Channel / 1SC11 Discrete
	
Middle Channel / 1SC11 Carrier on	**Middle Channel / 1SC11 Discrete**
	
Highest Channel / 1SC11 Carrier on	**Highest Channel / 1SC11 Discrete**