



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 1 of 200

TEST REPORT

Application No.: KSCR2408001569AT
FCC ID: 2AC8UA2427
Applicant: Anhui Huami Information Technology Co., Ltd.
Address of Applicant: 7/F, Building B2, Huami Global Innovation Center, No. 900, Wangjiang West Road, High-tech Zone, Hefei City, China (Anhui) Pilot Free Trade Zone(230088)
Manufacturer: Anhui Huami Information Technology Co., Ltd.
Address of Manufacturer: 7/F, Building B2, Huami Global Innovation Center, No. 900, Wangjiang West Road, High-tech Zone, Hefei City, China (Anhui) Pilot Free Trade Zone(230088)
Equipment Under Test (EUT):
EUT Name: Open-Ear earbuds
Model No.: A2427
Trade Mark: Amazfit
Standard(s) : 47 CFR Part 15, Subpart C 15.247
Date of Receipt: 2024-08-19
Date of Test: 2024-09-05 to 2024-09-11
Date of Issue: 2024-09-13

Test Result:	Pass*
---------------------	--------------

* In the configuration tested, the EUT complied with the standards specified above.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 2 of 200

Revision Record			
Version	Description	Date	Remark
00	Original	2024-09-13	/

Authorized for issue by:			
Tested By		Damon Zhou	
		Damon_Zhou/Project Engineer	
Approved By		Terry Hou	
		Terry Hou /Reviewer	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Other requirements Frequency Hopping Spread Spectrum System Hopping Sequence	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.247(a)(1),(g),(h)	Pass
Antenna Requirement		N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Radiated Spurious Emissions Above 1GHz	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Below 1GHz		ANSI C63.10 (2013) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Emissions which fall in the restricted bands		ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Conducted Spurious Emissions		ANSI C63.10 (2013) Section 7.8.8	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Band Edges Measurement		ANSI C63.10 (2013) Section 7.8.6	47 CFR Part 15, Subpart C 15.247(d)	Pass
Dwell Time		ANSI C63.10 (2013) Section 7.8.4	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass
Hopping Channel Number		ANSI C63.10 (2013) Section 7.8.3	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass
Carrier Frequencies Separation		ANSI C63.10 (2013) Section 7.8.2	47 CFR Part 15, Subpart C 15.247a(1)	Pass
20dB Bandwidth		ANSI C63.10 (2013) Section 7.8.7	47 CFR Part 15, Subpart C 15.247(a)(1)	Pass
Conducted Peak Output Power		ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(1)	Pass

3 Contents

	Page
1 COVER PAGE.....	1
2 Test Summary	3
3 Contents	4
4 General Information	5
4.1 Details of E.U.T.....	5
4.2 Power level setting using in test:	5
4.3 Description of Support Units	5
4.4 Measurement Uncertainty.....	6
4.5 Test Location	7
4.6 Test Facility.....	7
4.7 Deviation from Standards	7
4.8 Abnormalities from Standard Conditions	7
5 Equipment List.....	8
6 Radio Spectrum Technical Requirement	9
6.1 Other requirements Frequency Hopping Spread Spectrum System Hopping Sequence	9
6.2 Antenna Requirement	11
7 Radio Spectrum Matter Test Results.....	12
7.1 Radiated Spurious Emissions Above 1GHz	12
7.2 Radiated Spurious Emissions Below 1GHz.....	50
7.3 Radiated Emissions which fall in the restricted bands.....	54
7.4 Conducted Spurious Emissions	80
7.5 Conducted Band Edges Measurement.....	81
7.6 Dwell Time	82
7.7 Hopping Channel Number	83
7.8 Carrier Frequencies Separation.....	84
7.9 20dB Bandwidth.....	85
7.10 Conducted Peak Output Power	86
8 Test Setup Photo	88
9 EUT Constructional Details (EUT Photos)	88
10 Appendix	89

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.7V,50mAh by Rechargeable Li-ion Battery
Test Voltage	DC 3.7V
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK, Pi/4DQPSK, 8DPSK
Number of Channels:	79
Channel Spacing:	1MHz
Antenna Type:	Monopole Antenna
Antenna Gain:	Left Ear: -1dBi (Provided by the manufacturer) Right Ear: 0.8dBi (Provided by the manufacturer)

4.2 Power level setting using in test:

Channel	DH	2DH	3DH
	Ant 1	Ant 1	Ant 1
0	9	9	9
39	9	9	9
78	9	9	9

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	Lenovo	/	/

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 6 of 200

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%
Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 7 of 200

4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 8 of 200

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/01/2024	07/31/2025
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/01/2024	07/31/2025
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2024	01/14/2025
4	Signal Generator	R&S	SMBV100B	KSEM032	03/19/2024	03/18/2025
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/02/2024	08/01/2025
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/01/2024	07/31/2025
7	Signal Generator	Agilent	E8257C	KS301066	08/06/2024	08/05/2025
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/12/2024	08/11/2025
11	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/15/2024	01/14/2025
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/26/2024	08/25/2025
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/06/2024	08/05/2025
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	03/19/2024	03/18/2025
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	03/18/2023	03/17/2025
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2023	06/28/2025
6	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E006	03/19/2024	03/18/2025
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	03/23/2024	08/22/2026
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	04/07/2023	04/06/2025
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/07/2024	01/06/2026
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/15/2024	01/14/2025
11	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	08/12/2024	08/11/2025
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/12/2024	08/11/2025
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/21/2024	03/20/2025
14	Software	Faratronic	EZ_EMV-3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Other requirements Frequency Hopping Spread Spectrum System Hopping Sequence

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.247(a)(1),(g),(h)

6.1.2 Conclusion

Standard Requirement:

The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Compliance for section 15.247(a)(1):

According to Technical Specification, the pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones.

> Number of shift register stages: 9

> Length of pseudo-random sequence: $2^9 - 1 = 511$ bits

> Longest sequence of zeros: 8 (non-inverted signal)

Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:

Each frequency used equally on the average by each transmitter.

According to Technical Specification, the receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any transmitters and shift frequencies in synchronization with the transmitted signals.

Compliance for section 15.247(g):

According to Technical Specification, the system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom hopping frequency system.

Compliance for section 15.247(h):



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 10 of 200

According to Technical specification, the system incorporates with an adaptive system to detect other user within the spectrum band so that it individually and independently to avoid hopping on the occupied channels.

The system is designed not have the ability to coordinated with other FHSS System in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitter.



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 11 of 200

6.2 Antenna Requirement

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

6.2.2 Conclusion

Standard 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.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is Monopole Antenna and no consideration of replacement. The best case gain is:-1dBi for Left Ear ; 0.8dBi for Right Ear.

Antenna location: Refer to internal photo.

7 Radio Spectrum Matter Test Results

7.1 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.6

Measurement Distance: 3M

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1000	500	3

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.6 °C

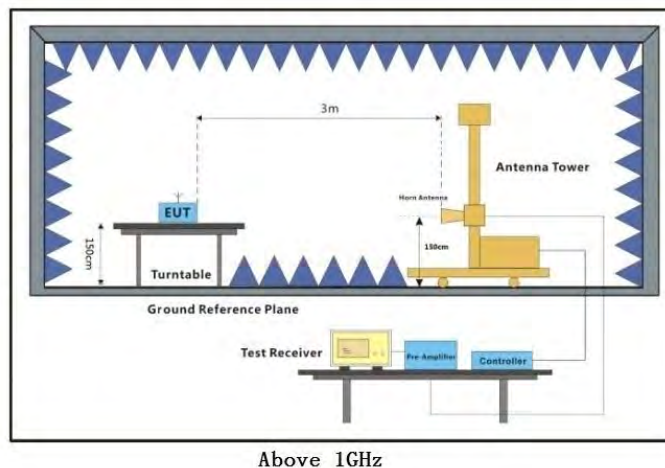
Humidity: 47.8 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamplifier Factor}$
2. Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

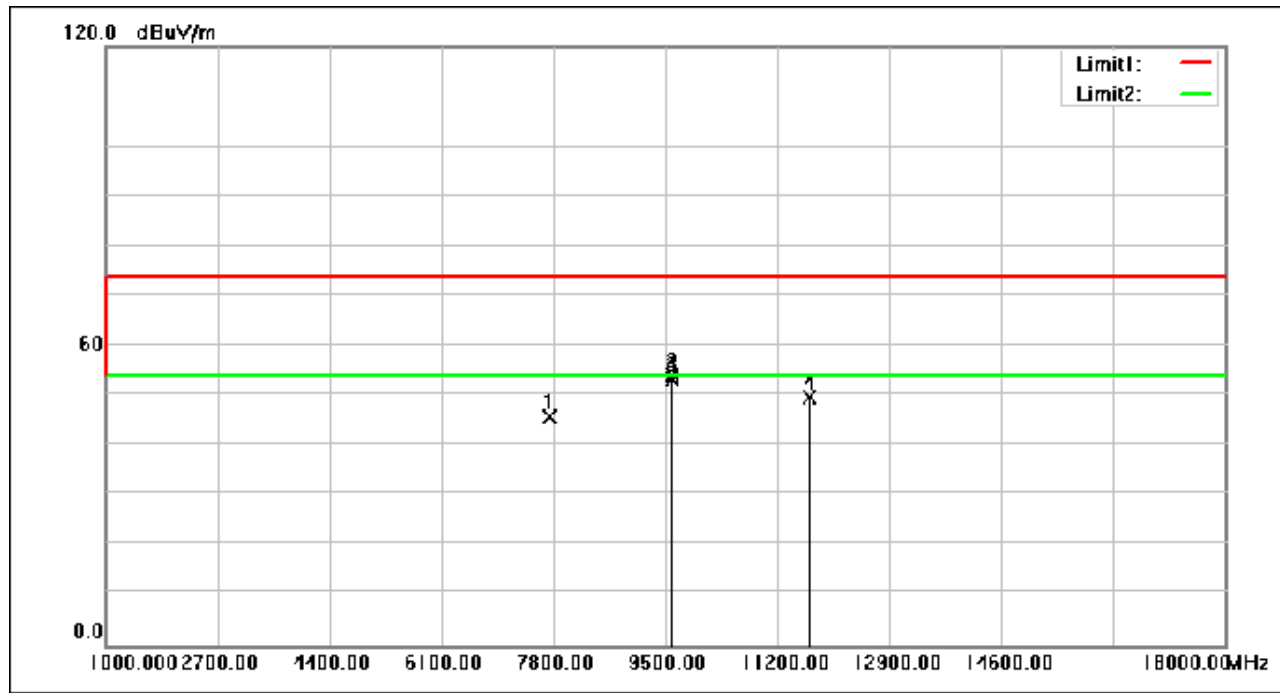
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 14 of 200

Test Mode: 04; Polarity: Horizontal; Modulation:GFSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7752.400	56.71	-10.93	45.78	74.00	-28.22	peak
2	9602.000	62.01	-7.76	54.25	74.00	-19.75	peak
3	9602.000	60.99	-7.76	53.23	54.00	-0.77	AVG
4	11709.320	55.70	-6.19	49.51	74.00	-24.49	peak

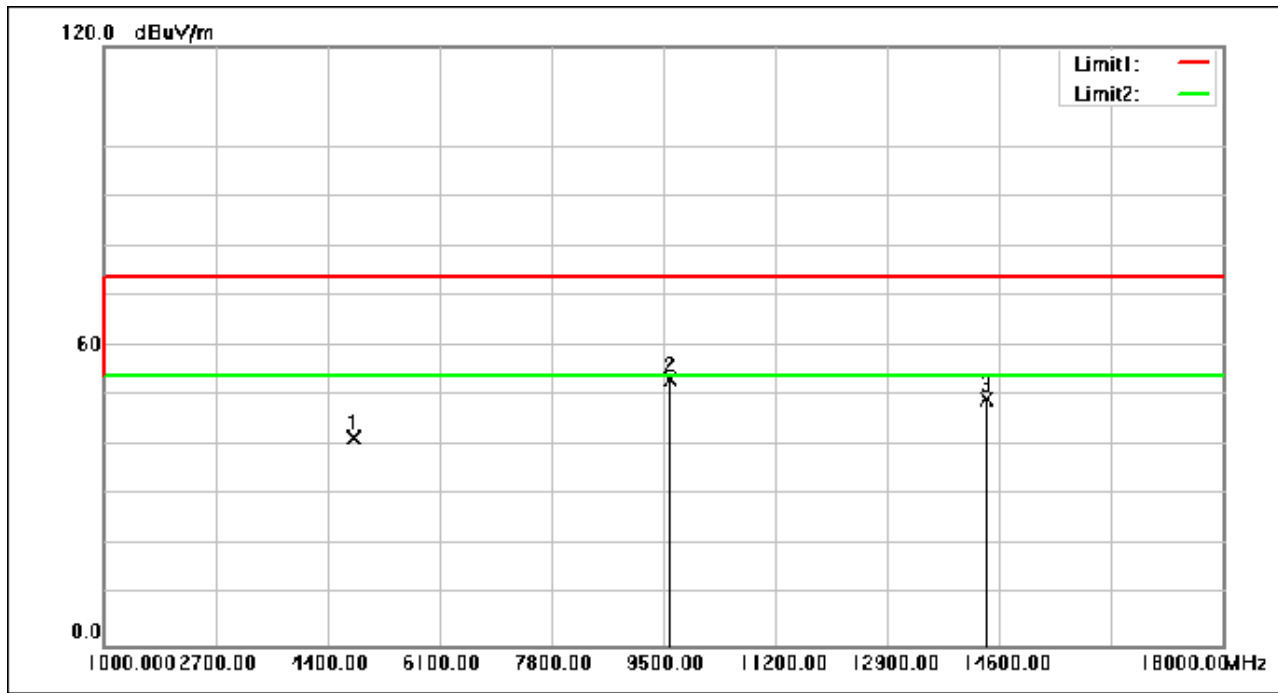
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 15 of 200

Test Mode: 06; Polarity: Horizontal; Modulation:GFSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.520	60.09	-18.56	41.53	74.00	-32.47	peak
2	9602.000	61.15	-7.76	53.39	74.00	-20.61	peak
3	14413.000	55.59	-6.09	49.50	74.00	-24.50	peak

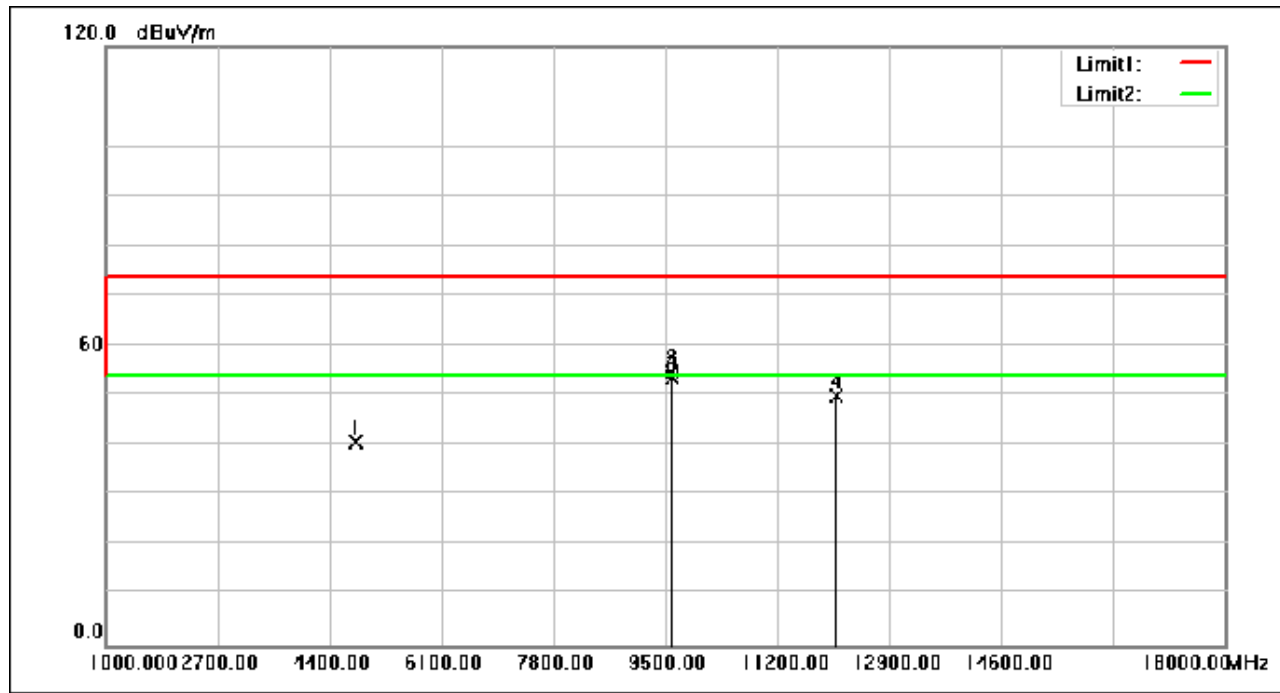
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 16 of 200

Test Mode: 04; Polarity: Vertical; Modulation:GFSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.520	59.29	-18.56	40.73	74.00	-33.27	peak
2	9602.000	62.39	-7.76	54.63	74.00	-19.37	peak
3	9602.000	61.27	-7.76	53.51	54.00	-0.49	AVG
4	12109.840	55.76	-5.94	49.82	74.00	-24.18	peak

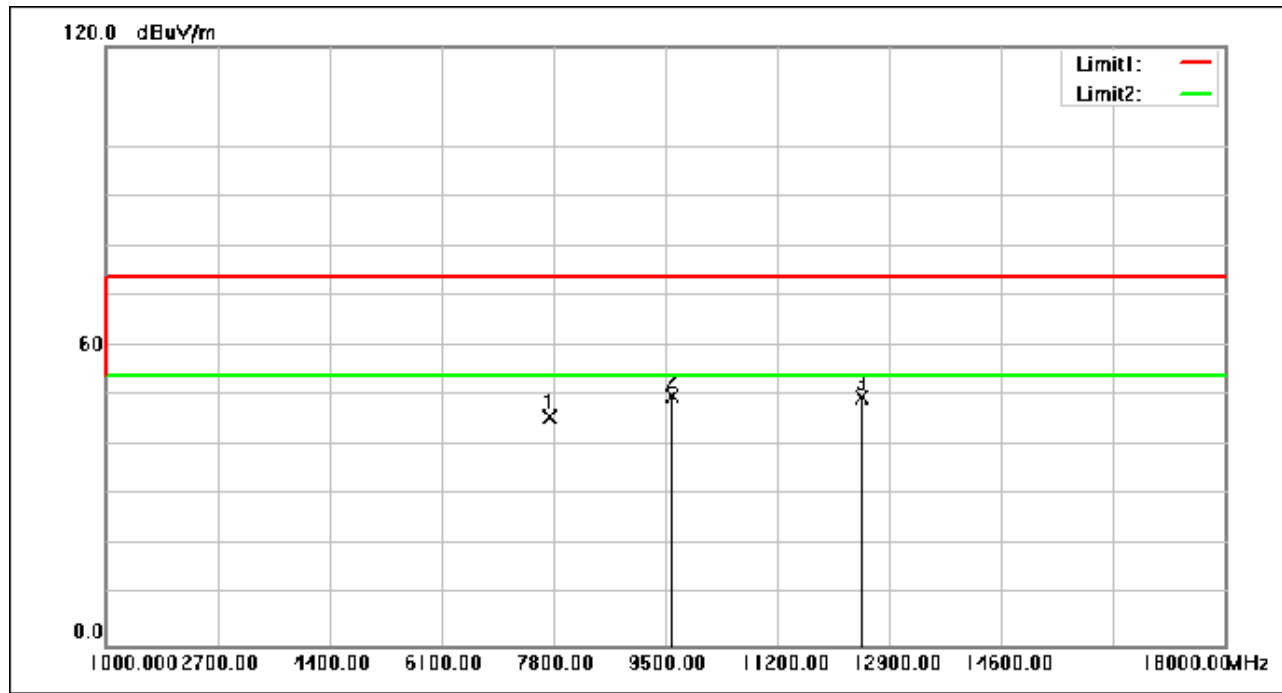
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 17 of 200

Test Mode: 06; Polarity: Vertical; Modulation:GFSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7736.760	56.65	-10.95	45.70	74.00	-28.30	peak
2	9602.000	57.57	-7.76	49.81	74.00	-24.19	peak
3	12485.880	55.69	-6.10	49.59	74.00	-24.41	peak

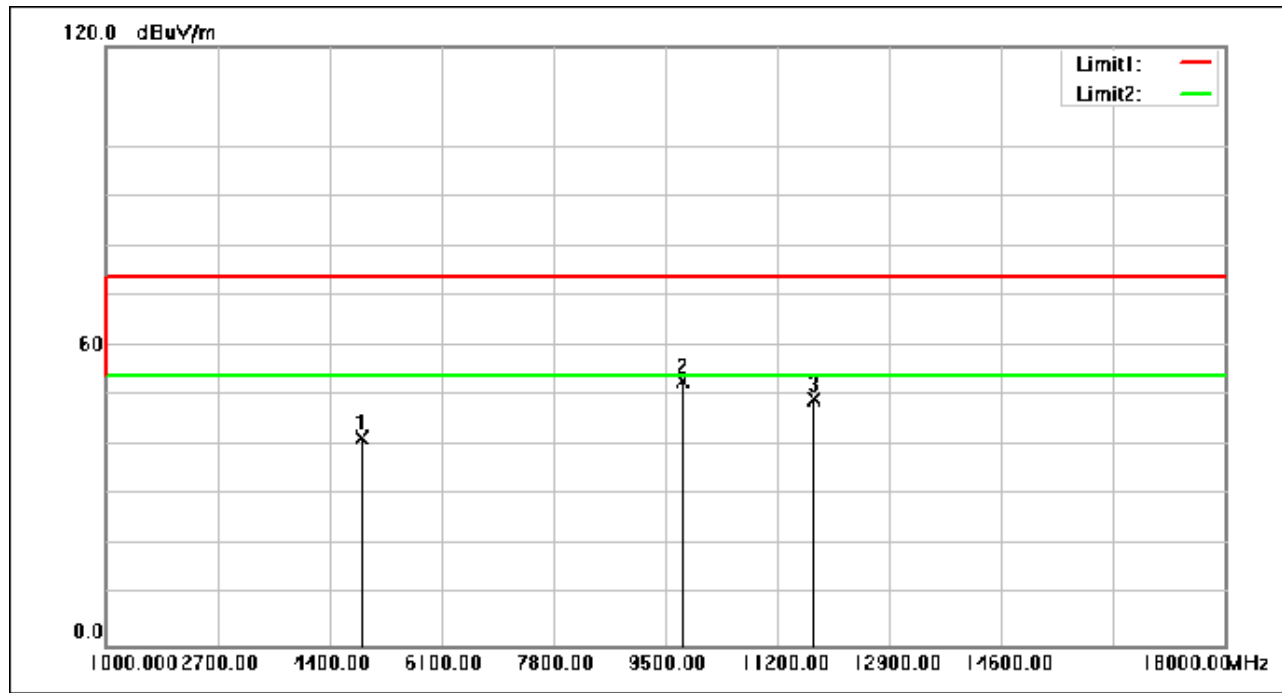
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 18 of 200

Test Mode: 04; Polarity: Horizontal; Modulation:GFSK; Channel:middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	60.17	-18.52	41.65	74.00	-32.35	peak
2	9757.720	60.46	-7.47	52.99	74.00	-21.01	peak
3	11746.720	55.64	-6.16	49.48	74.00	-24.52	peak

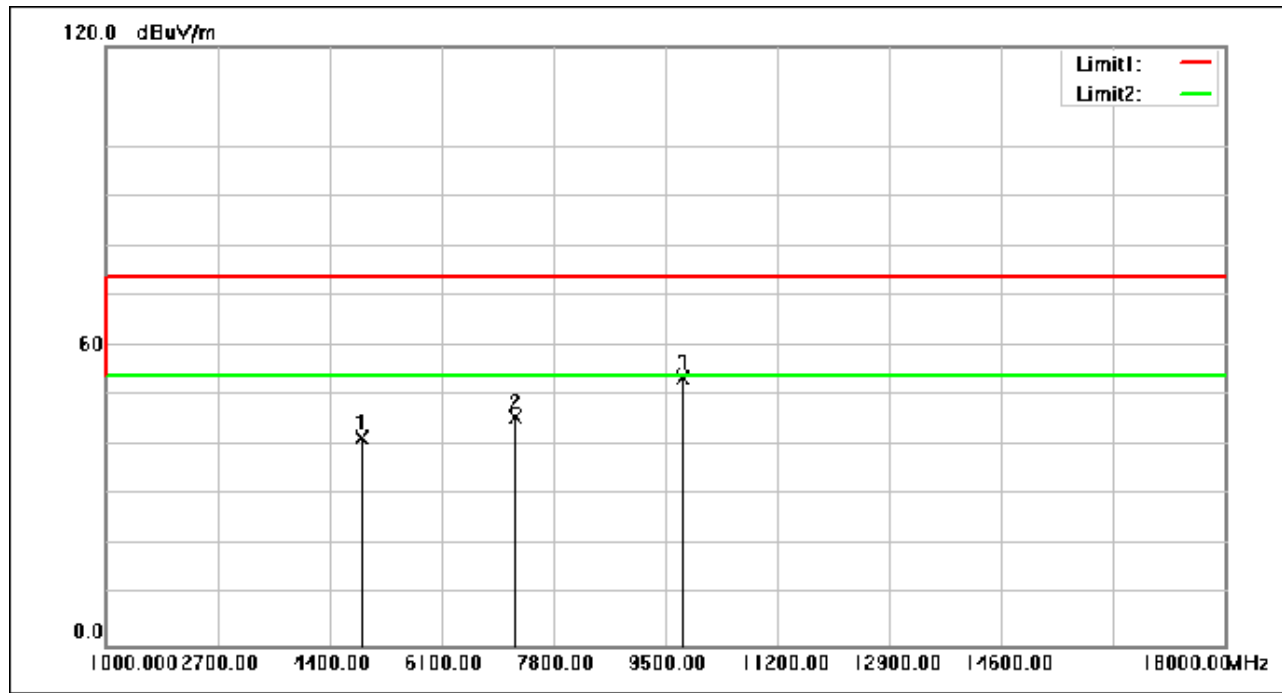
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 19 of 200

Test Mode: 06; Polarity: Horizontal; Modulation:GFSK; Channel:middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	60.09	-18.52	41.57	74.00	-32.43	peak
2	7238.320	57.36	-11.46	45.90	74.00	-28.10	peak
3	9758.400	61.01	-7.47	53.54	74.00	-20.46	peak

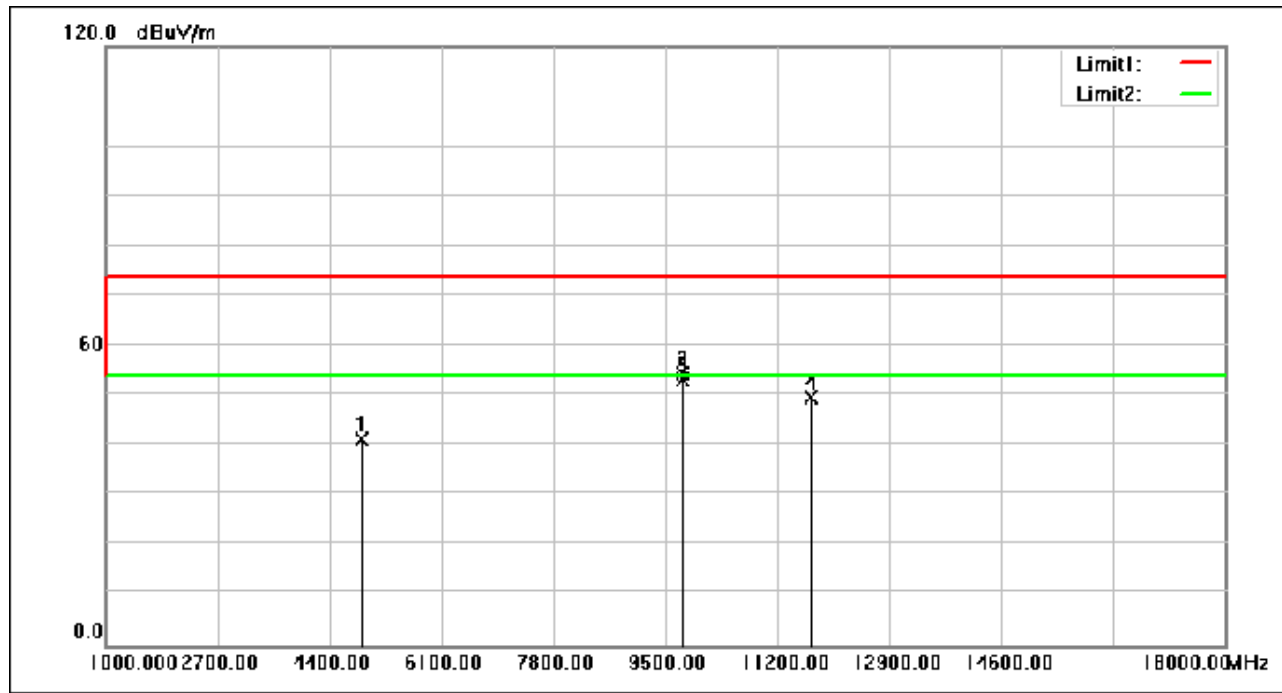
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 20 of 200

Test Mode: 04; Polarity: Vertical; Modulation:GFSK; Channel:middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	59.68	-18.52	41.16	74.00	-32.84	peak
2	9758.400	61.84	-7.47	54.37	74.00	-19.63	peak
3	9758.400	60.76	-7.47	53.29	54.00	-0.71	AVG
4	11715.440	55.70	-6.18	49.52	74.00	-24.48	peak

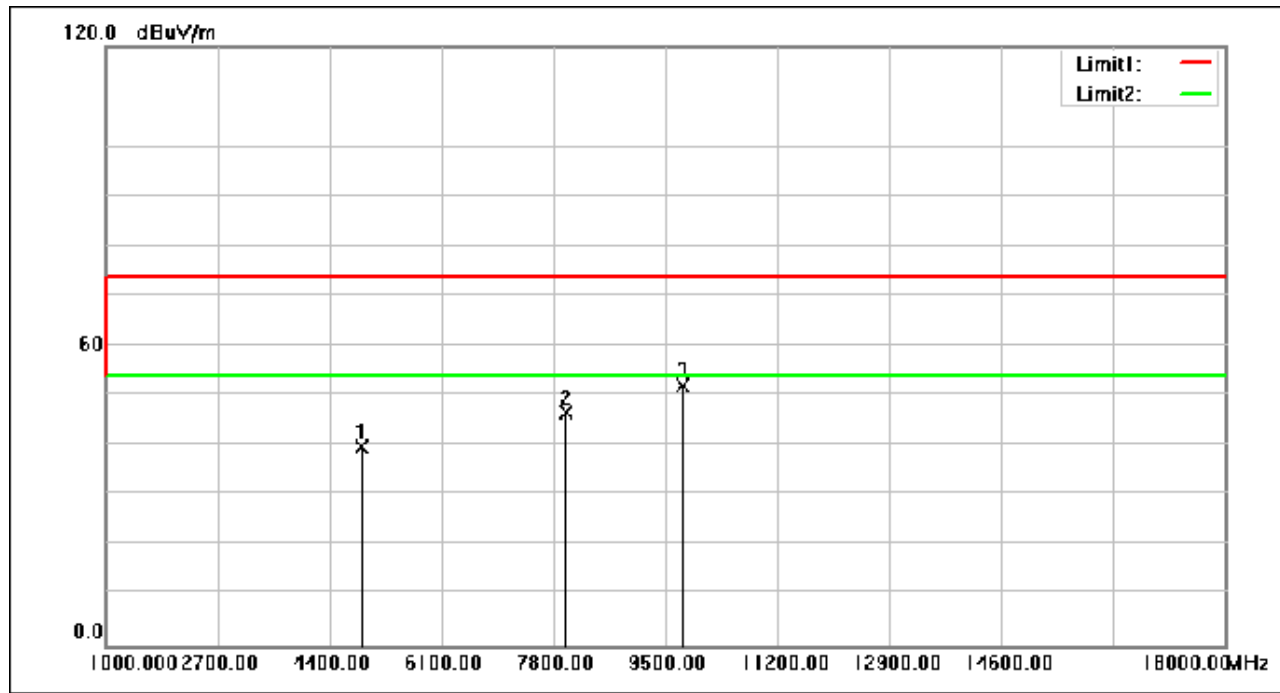
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 21 of 200

Test Mode: 06; Polarity: Vertical; Modulation:GFSK; Channel:middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4879.400	58.41	-18.52	39.89	74.00	-34.11	peak
2	7990.400	57.16	-10.62	46.54	74.00	-27.46	peak
3	9757.720	59.55	-7.47	52.08	74.00	-21.92	peak

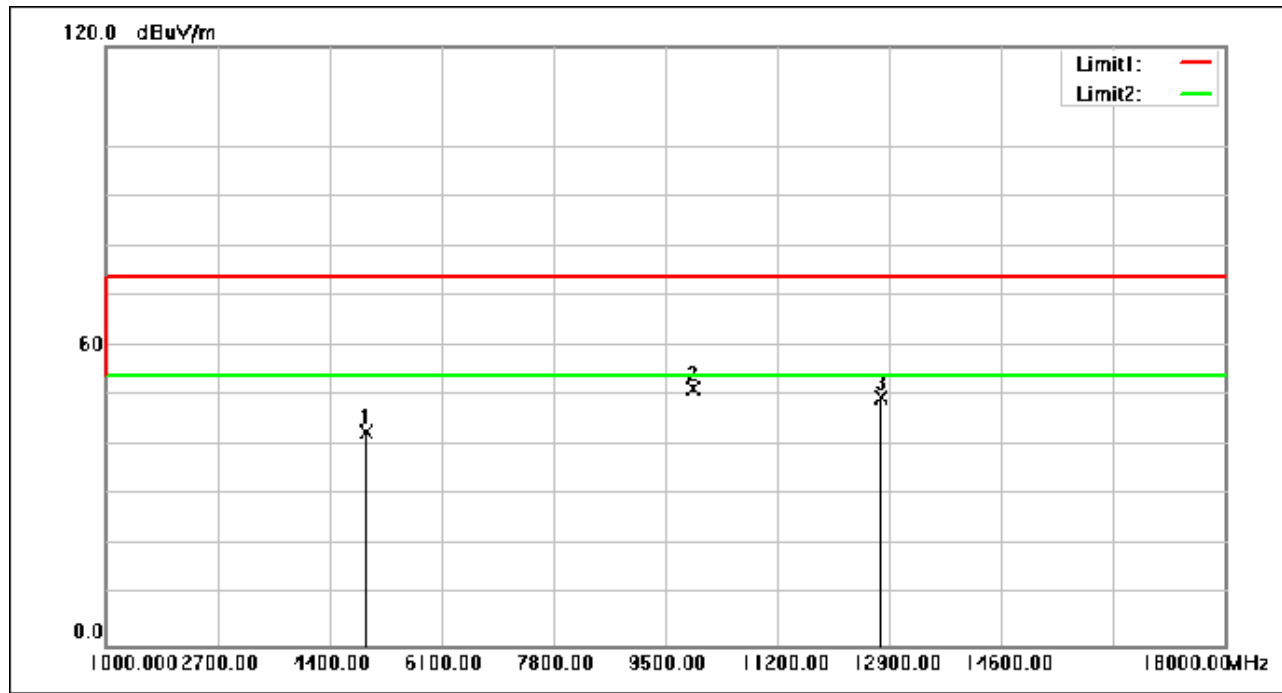
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 22 of 200

Test Mode: 04; Polarity: Horizontal; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	61.12	-18.47	42.65	74.00	-31.35	peak
2	9914.120	58.69	-7.31	51.38	74.00	-22.62	peak
3	12780.320	55.83	-6.24	49.59	74.00	-24.41	peak

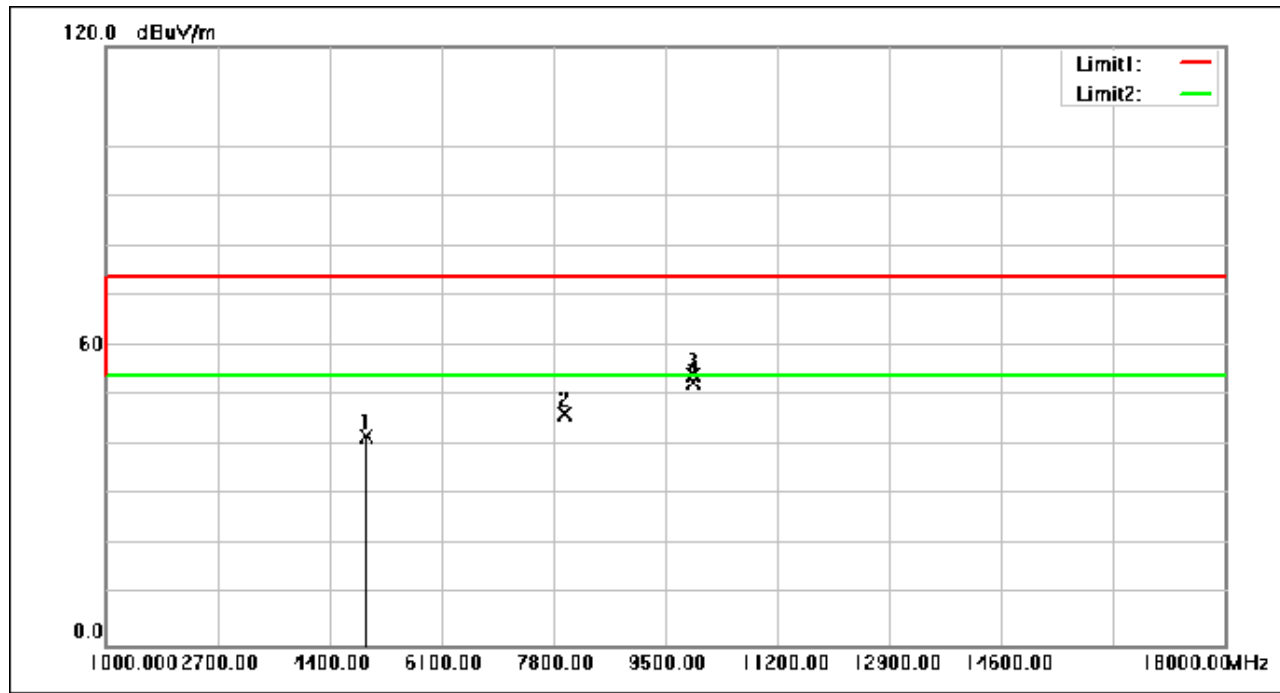
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 23 of 200

Test Mode: 06; Polarity: Horizontal; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	60.24	-18.47	41.77	74.00	-32.23	peak
2	7979.520	56.95	-10.63	46.32	74.00	-27.68	peak
3	9914.120	61.45	-7.31	54.14	74.00	-19.86	peak
4	9914.120	59.87	-7.31	52.56	54.00	-1.44	AVG

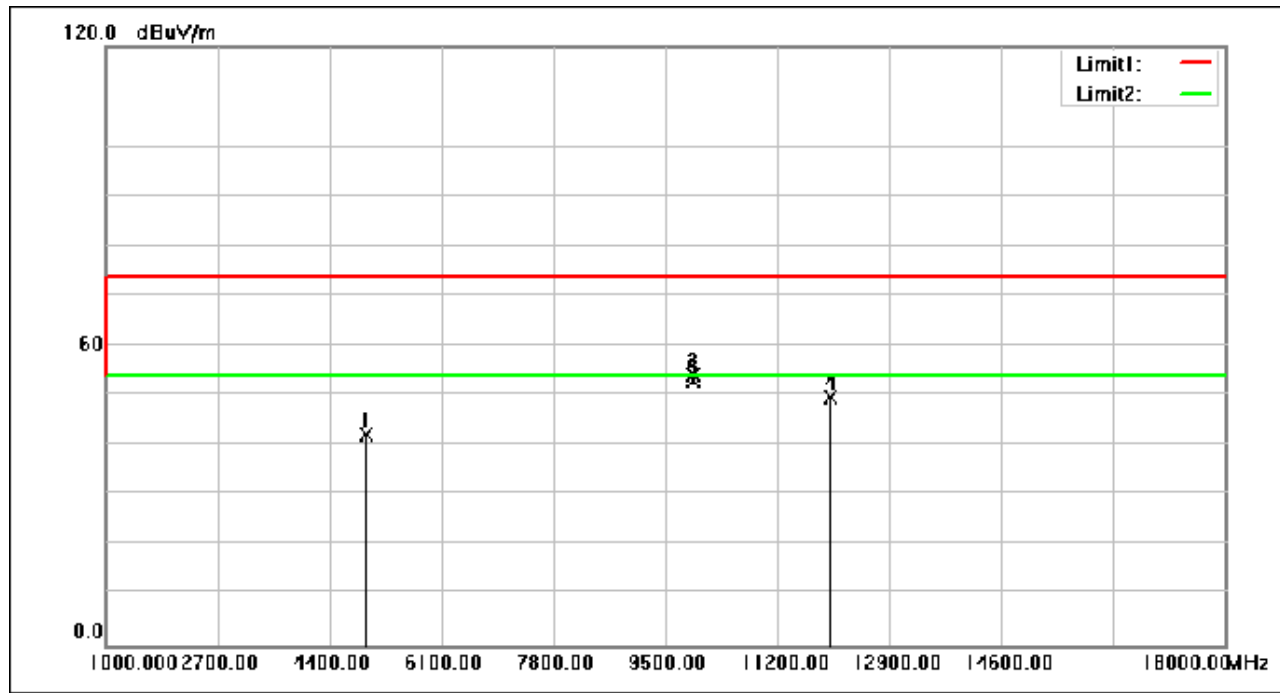
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 24 of 200

Test Mode: 04; Polarity: Vertical; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	60.67	-18.47	42.20	74.00	-31.80	peak
2	9914.120	61.55	-7.31	54.24	74.00	-19.76	peak
3	9914.120	60.41	-7.31	53.10	54.00	-0.90	AVG
4	12010.560	55.46	-5.89	49.57	74.00	-24.43	peak

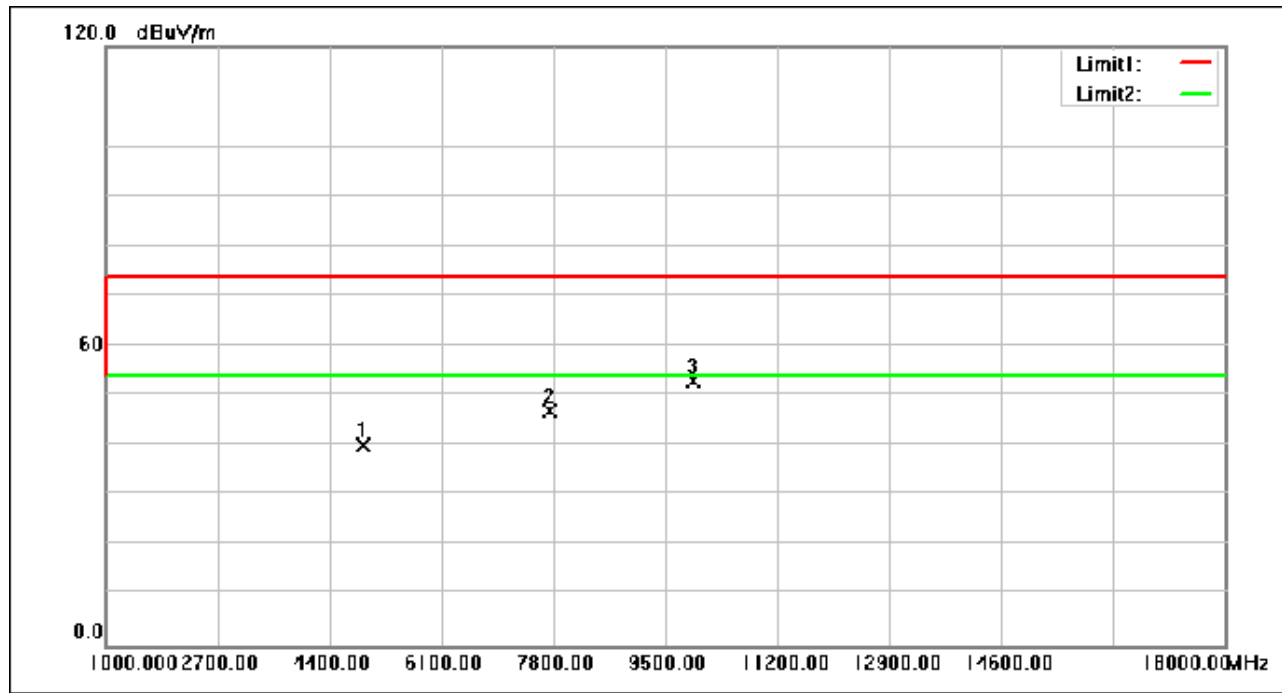
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 25 of 200

Test Mode: 06; Polarity: Vertical; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4914.080	58.45	-18.50	39.95	74.00	-34.05	peak
2	7747.640	57.83	-10.93	46.90	74.00	-27.10	peak
3	9914.120	60.39	-7.31	53.08	74.00	-20.92	peak

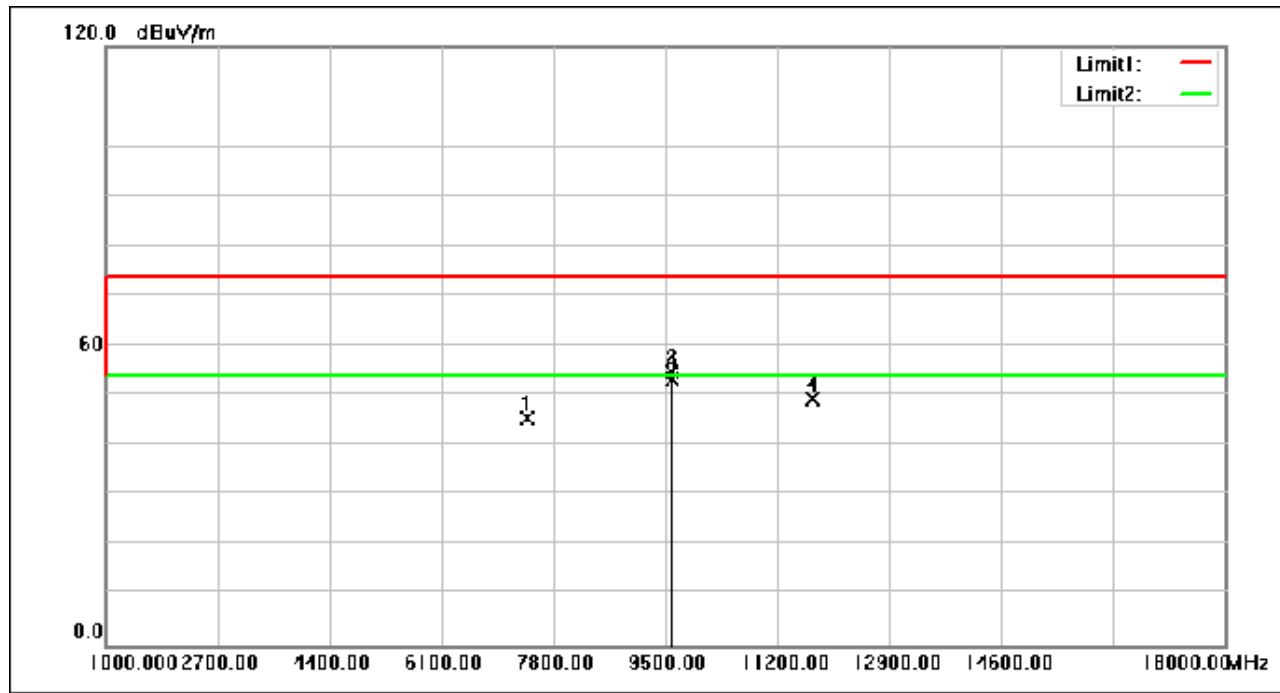
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 26 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7415.120	56.71	-11.37	45.34	74.00	-28.66	peak
2	9602.000	62.64	-7.76	54.88	74.00	-19.12	peak
3	9602.000	61.04	-7.76	53.28	54.00	-0.72	AVG
4	11737.880	55.38	-6.17	49.21	74.00	-24.79	peak

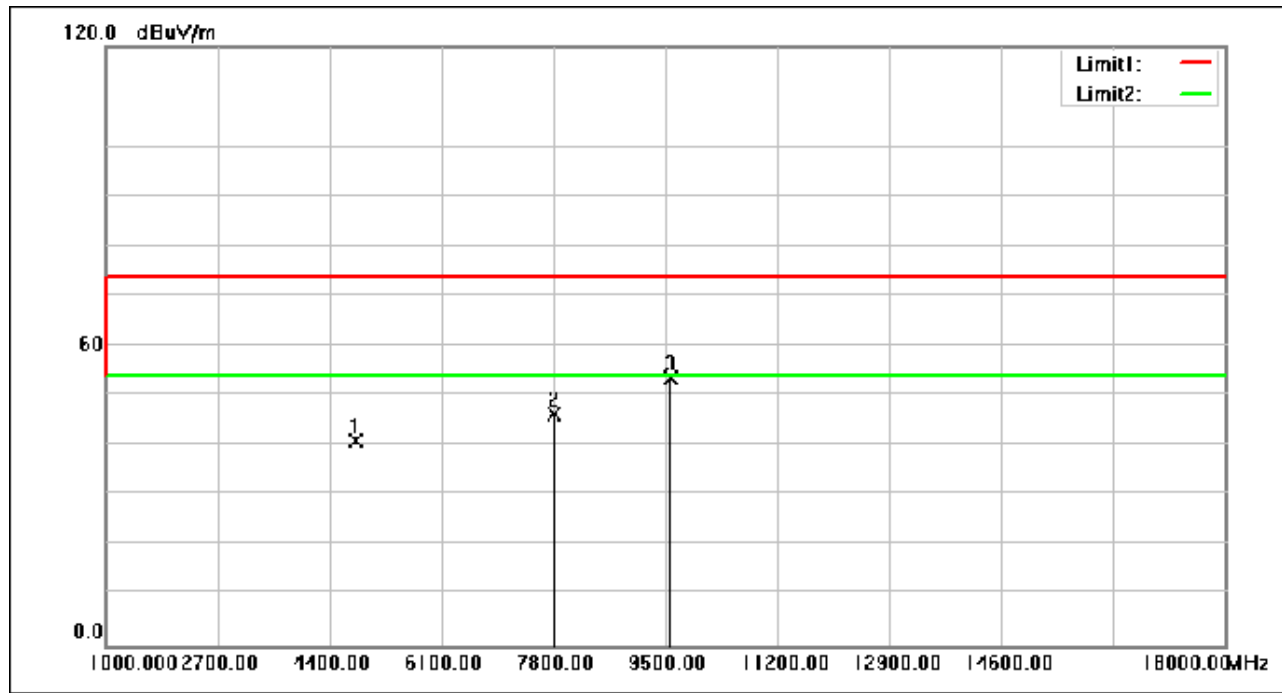
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 27 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.520	59.58	-18.56	41.02	74.00	-32.98	peak
2	7812.240	57.21	-10.85	46.36	74.00	-27.64	peak
3	9601.320	61.33	-7.76	53.57	74.00	-20.43	peak

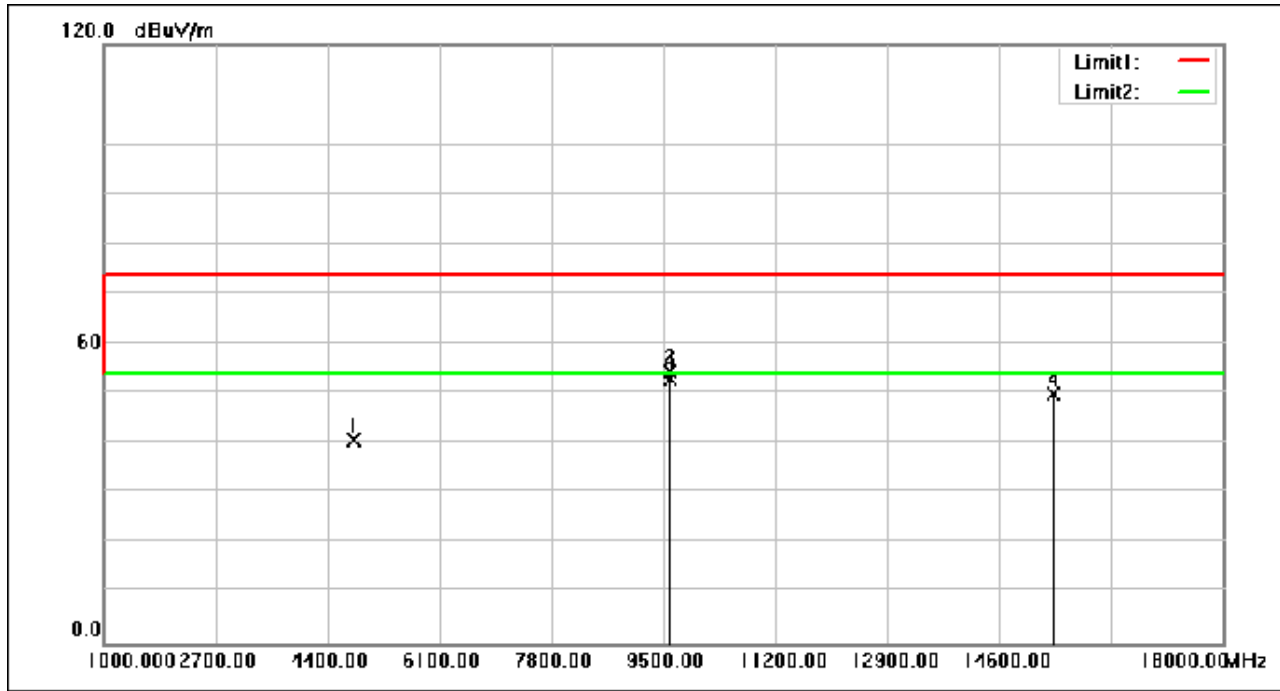
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 28 of 200

Test Mode: 04; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4801.200	59.19	-18.56	40.63	74.00	-33.37	peak
2	9602.000	62.19	-7.76	54.43	74.00	-19.57	peak
3	9602.000	60.62	-7.76	52.86	54.00	-1.14	AVG
4	15436.400	54.53	-4.71	49.82	74.00	-24.18	peak

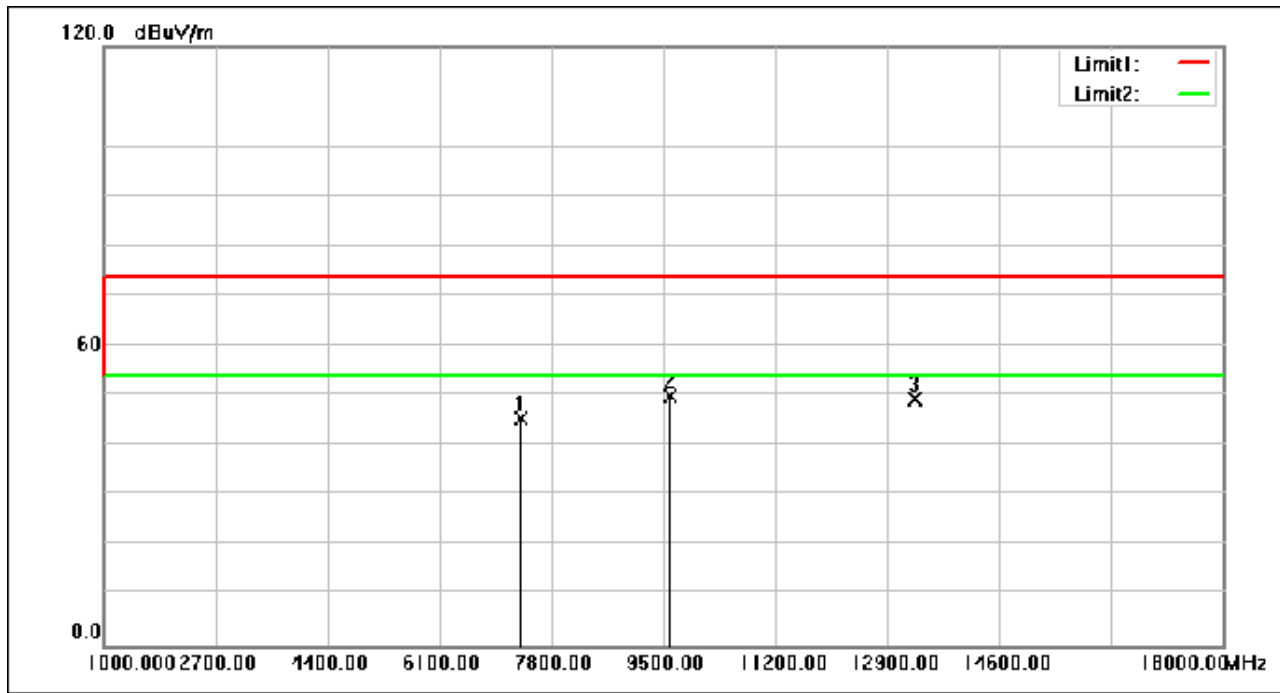
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 29 of 200

Test Mode: 06; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7354.600	56.78	-11.41	45.37	74.00	-28.63	peak
2	9602.000	57.76	-7.76	50.00	74.00	-24.00	peak
3	13334.520	55.61	-6.31	49.30	74.00	-24.70	peak

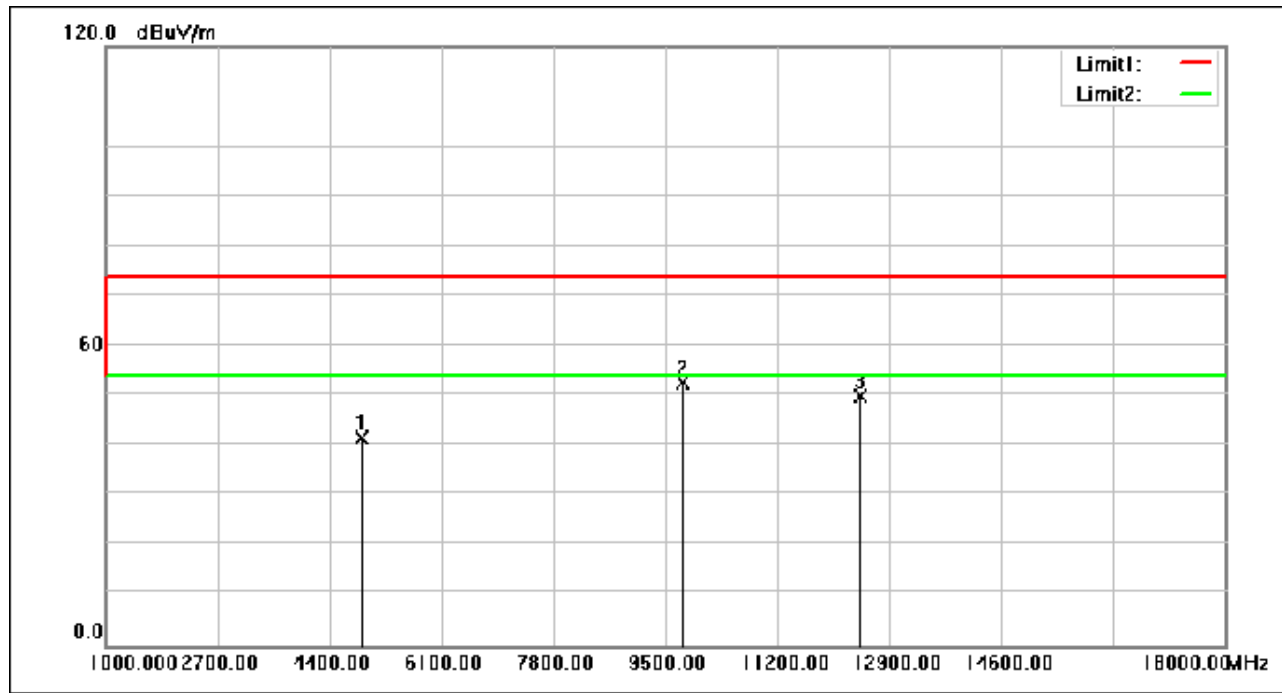
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 30 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	60.09	-18.52	41.57	74.00	-32.43	peak
2	9758.400	60.04	-7.47	52.57	74.00	-21.43	peak
3	12472.960	56.02	-6.10	49.92	74.00	-24.08	peak

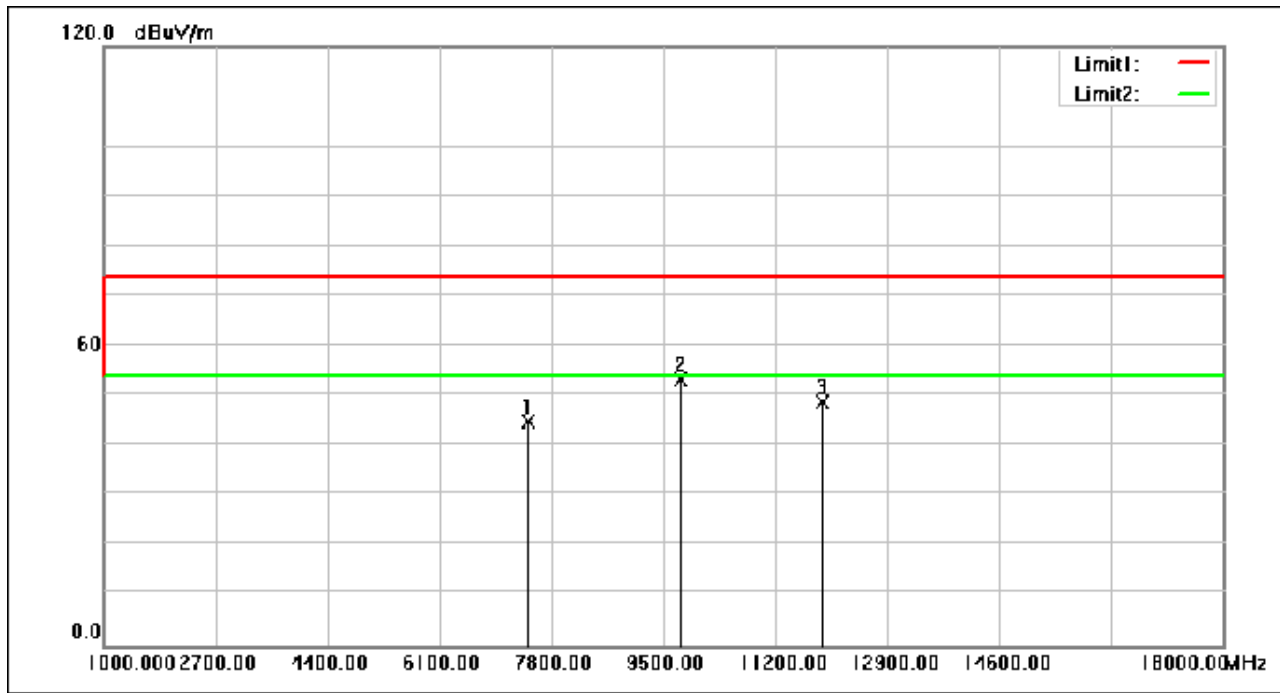
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 31 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7451.160	56.07	-11.32	44.75	74.00	-29.25	peak
2	9757.720	60.64	-7.47	53.17	74.00	-20.83	peak
3	11928.960	54.78	-6.00	48.78	74.00	-25.22	peak

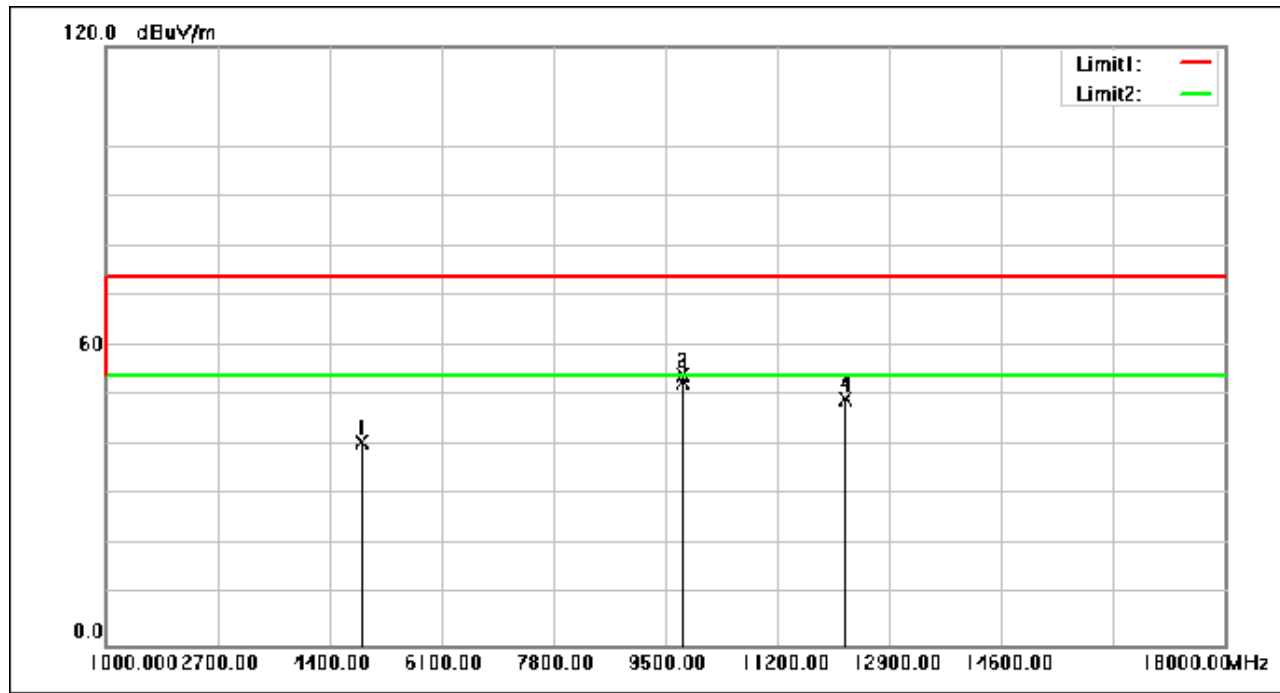
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 32 of 200

Test Mode: 04; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	59.04	-18.52	40.52	74.00	-33.48	peak
2	9757.720	61.55	-7.47	54.08	74.00	-19.92	peak
3	9757.720	59.99	-7.47	52.52	54.00	-1.48	AVG
4	12241.080	55.48	-6.00	49.48	74.00	-24.52	peak

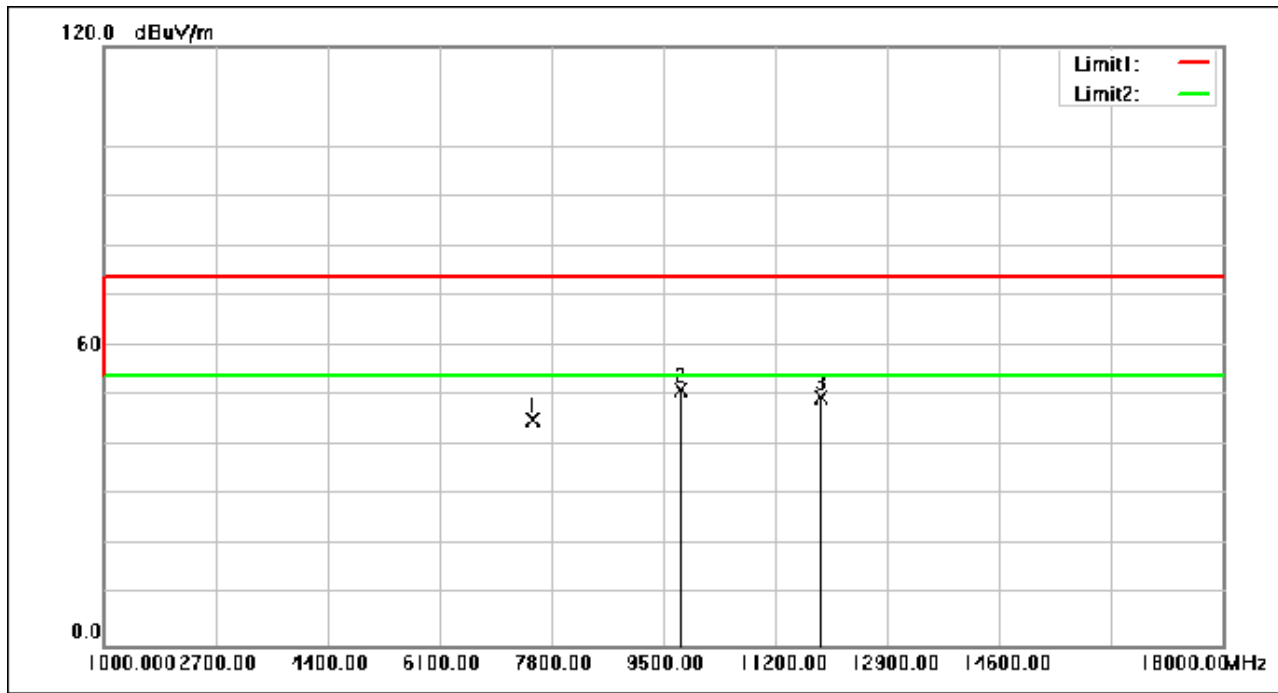
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 33 of 200

Test Mode: 06; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7523.240	56.29	-11.22	45.07	74.00	-28.93	peak
2	9758.400	58.64	-7.47	51.17	74.00	-22.83	peak
3	11909.920	55.83	-6.03	49.80	74.00	-24.20	peak

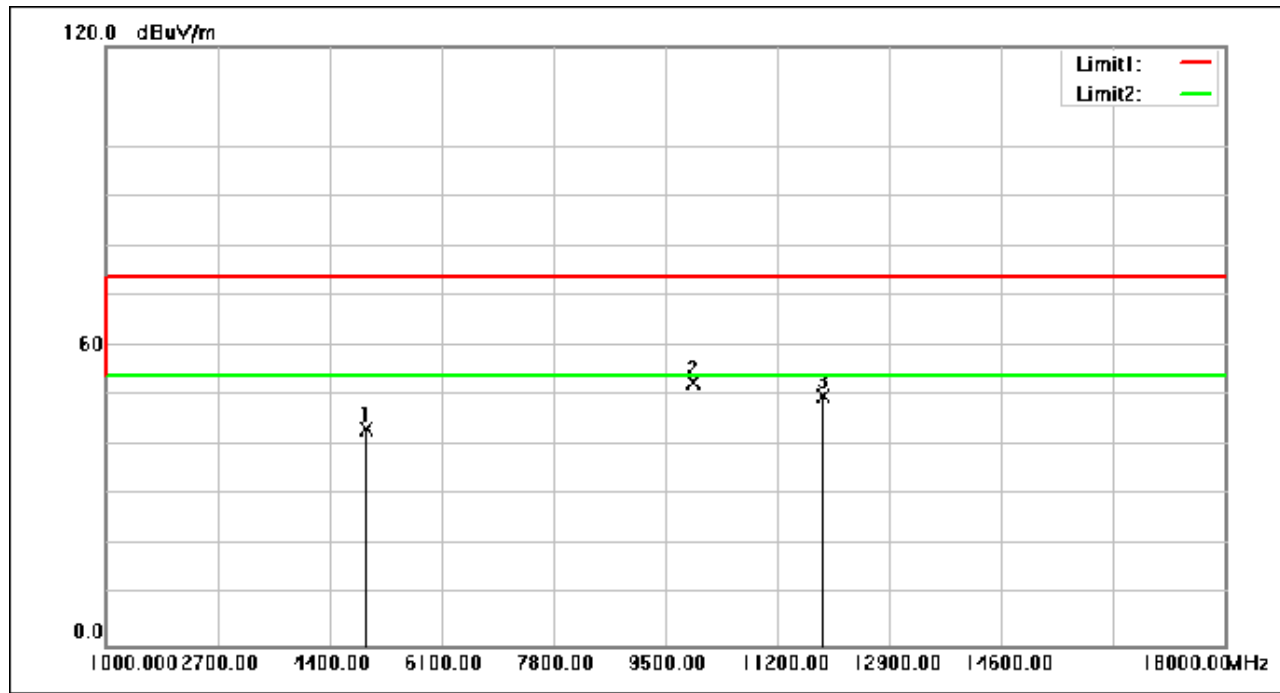
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 34 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	61.83	-18.47	43.36	74.00	-30.64	peak
2	9914.120	59.91	-7.31	52.60	74.00	-21.40	peak
3	11892.920	56.11	-6.05	50.06	74.00	-23.94	peak

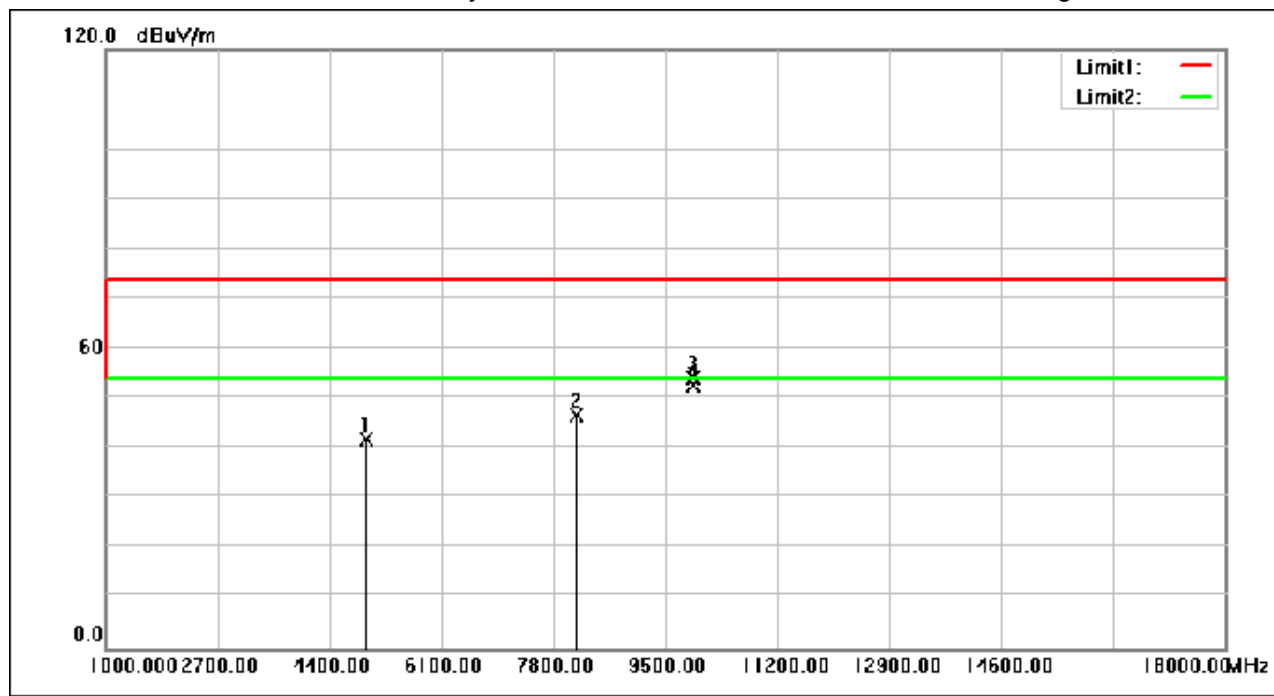
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 35 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	60.47	-18.47	42.00	74.00	-32.00	peak
2	8149.520	56.88	-10.34	46.54	74.00	-27.46	peak
3	9914.120	61.42	-7.31	54.11	74.00	-19.89	peak
4	9914.120	59.92	-7.31	52.61	54.00	-1.39	AVG

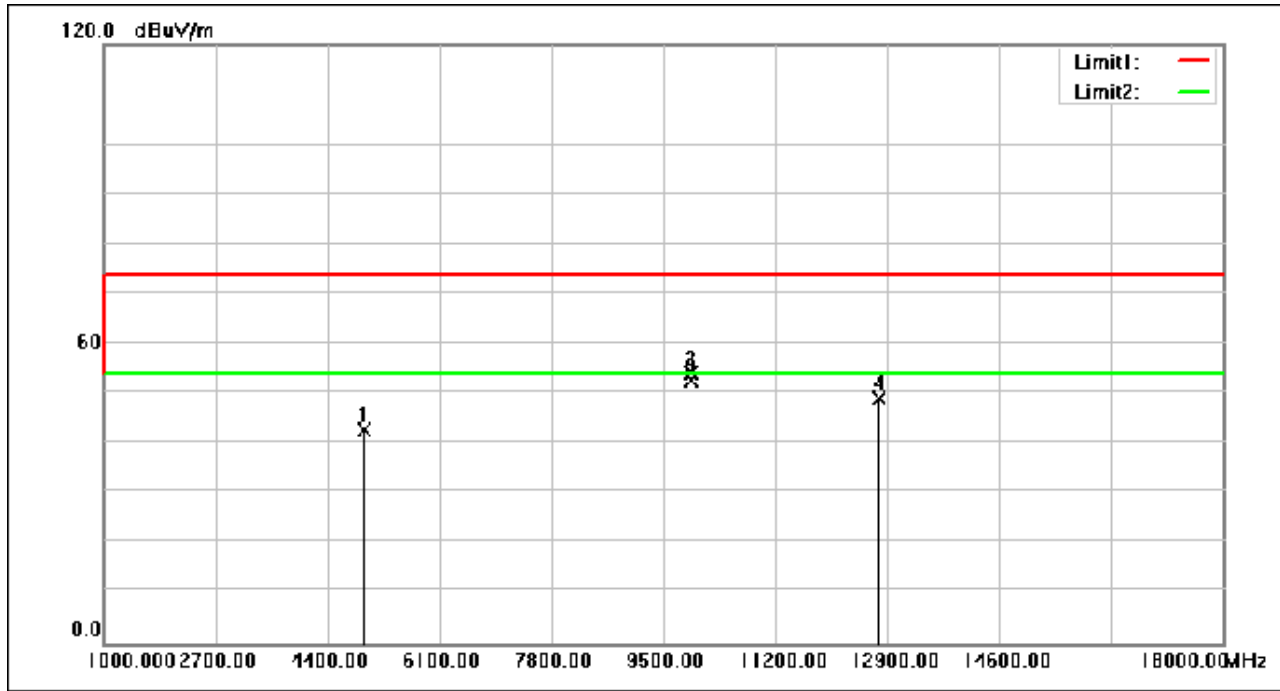
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 36 of 200

Test Mode: 04; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	61.14	-18.47	42.67	74.00	-31.33	peak
2	9914.120	61.56	-7.31	54.25	74.00	-19.75	peak
3	9914.120	59.94	-7.31	52.63	54.00	-1.37	AVG
4	12776.240	55.28	-6.24	49.04	74.00	-24.96	peak

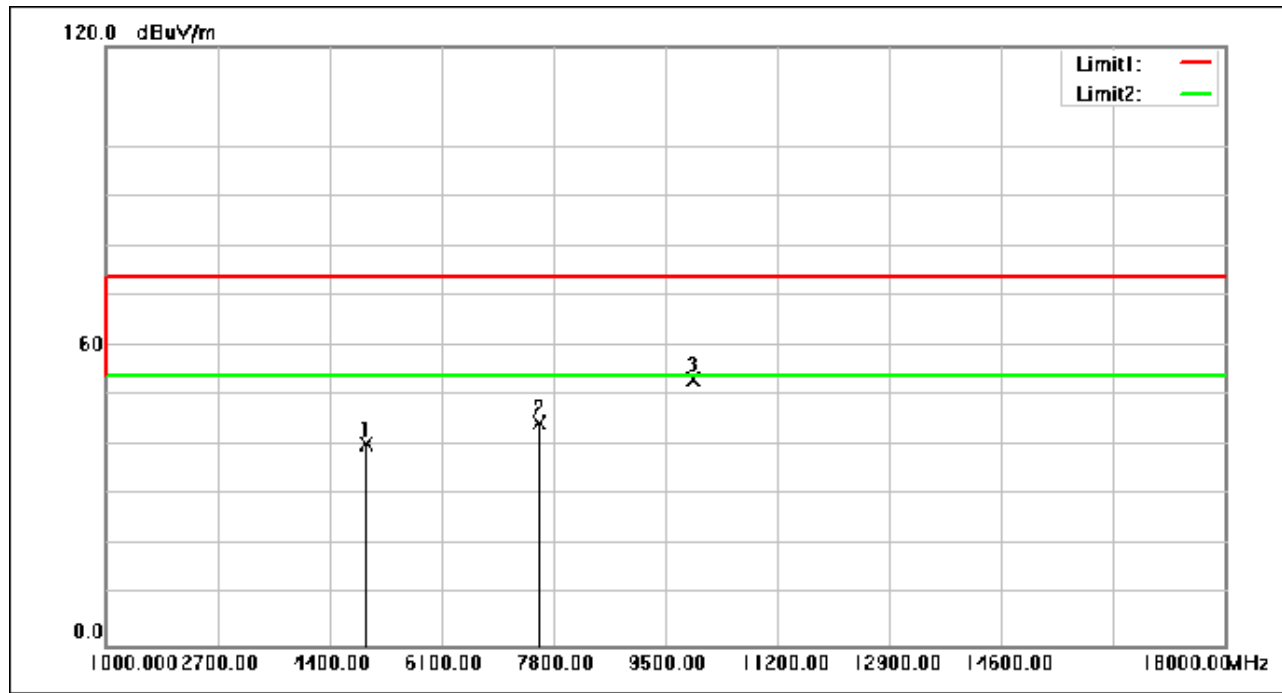
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 37 of 200

Test Mode: 06; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	58.71	-18.47	40.24	74.00	-33.76	peak
2	7584.440	55.84	-11.15	44.69	74.00	-29.31	peak
3	9914.120	60.46	-7.31	53.15	74.00	-20.85	peak

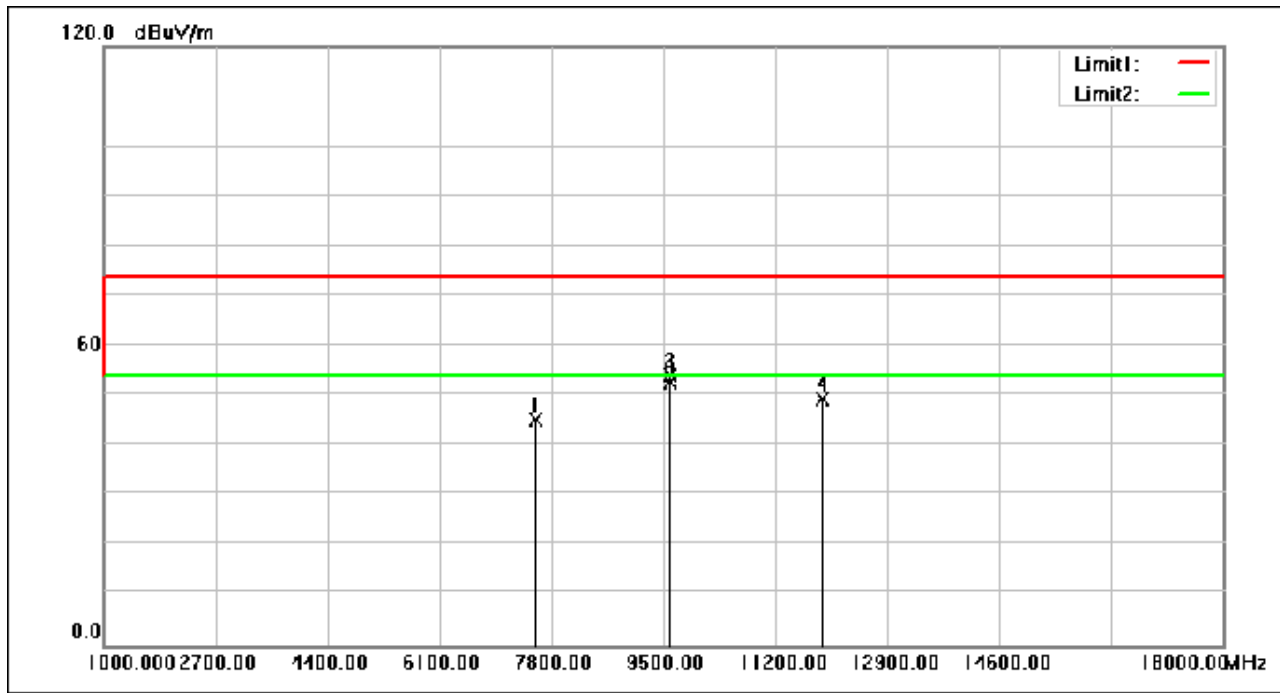
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 38 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7568.120	56.21	-11.17	45.04	74.00	-28.96	peak
2	9602.000	62.04	-7.76	54.28	74.00	-19.72	peak
3	9602.000	60.35	-7.76	52.59	54.00	-1.41	AVG
4	11927.600	55.26	-6.00	49.26	74.00	-24.74	peak

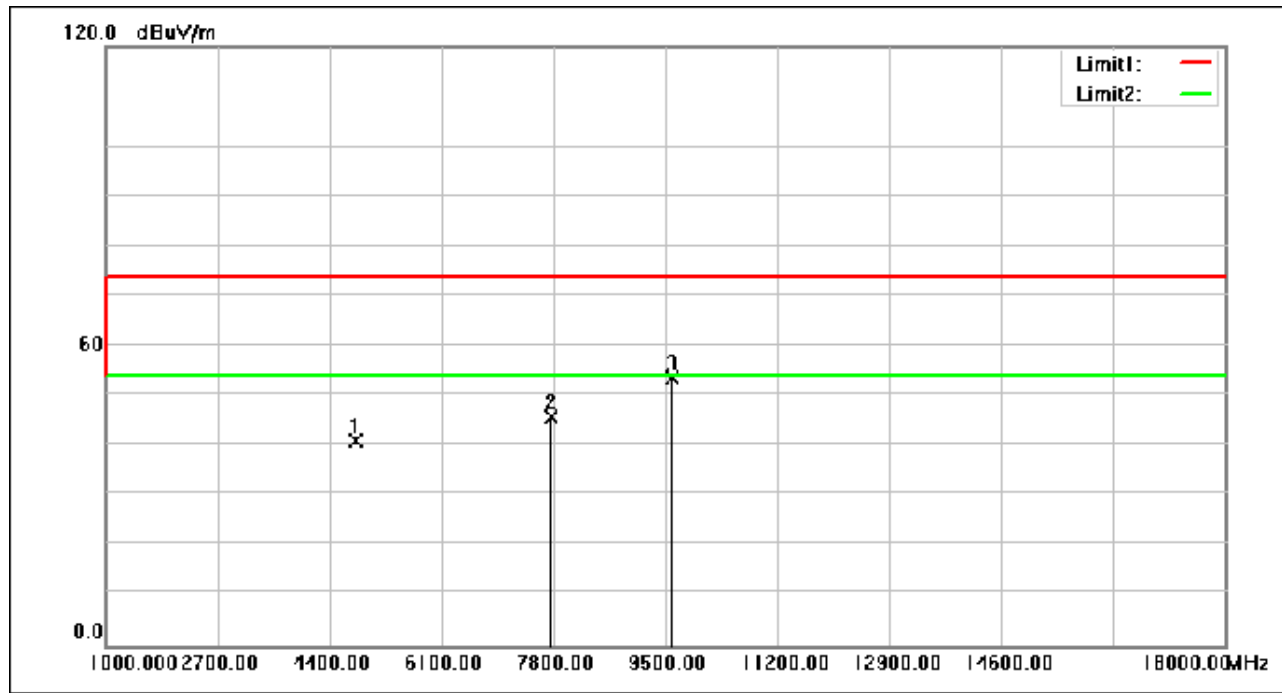
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 39 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4801.200	59.66	-18.56	41.10	74.00	-32.90	peak
2	7768.040	56.61	-10.90	45.71	74.00	-28.29	peak
3	9602.000	61.38	-7.76	53.62	74.00	-20.38	peak

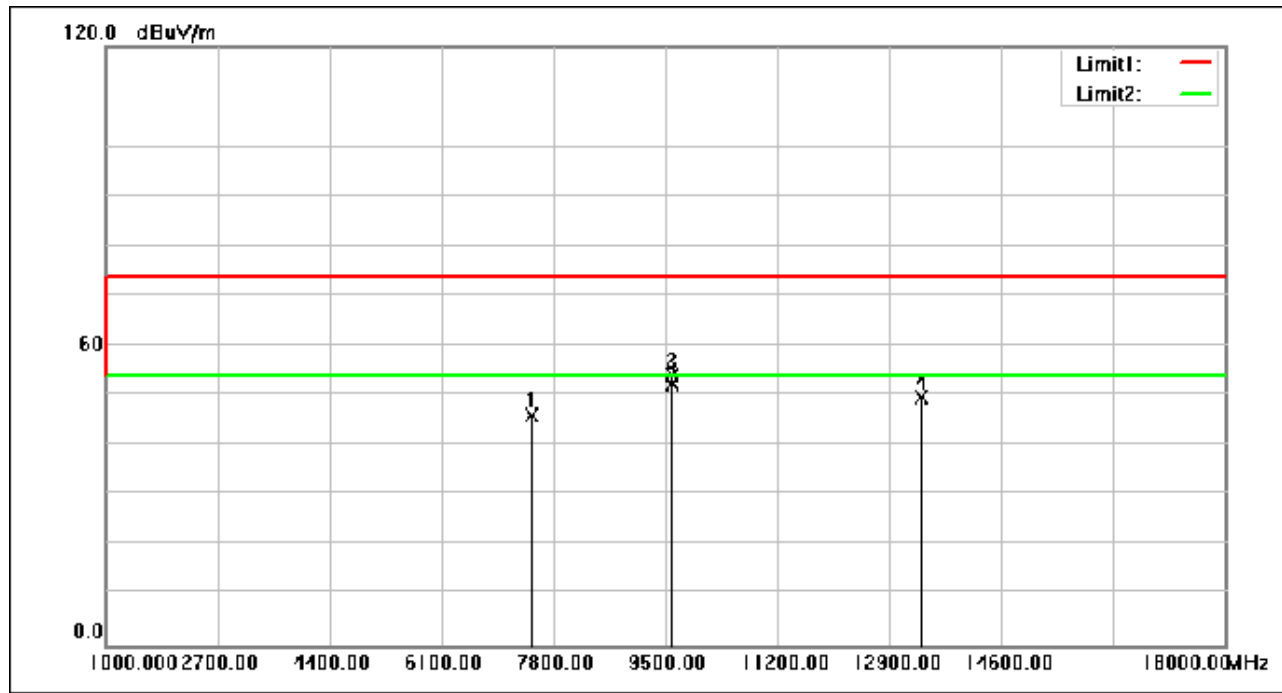
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 40 of 200

Test Mode: 04; Polarity: Vertical; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7472.920	57.31	-11.29	46.02	74.00	-27.98	peak
2	9602.000	61.82	-7.76	54.06	74.00	-19.94	peak
3	9602.000	60.15	-7.76	52.39	54.00	-1.61	AVG
4	13390.960	56.11	-6.32	49.79	74.00	-24.21	peak

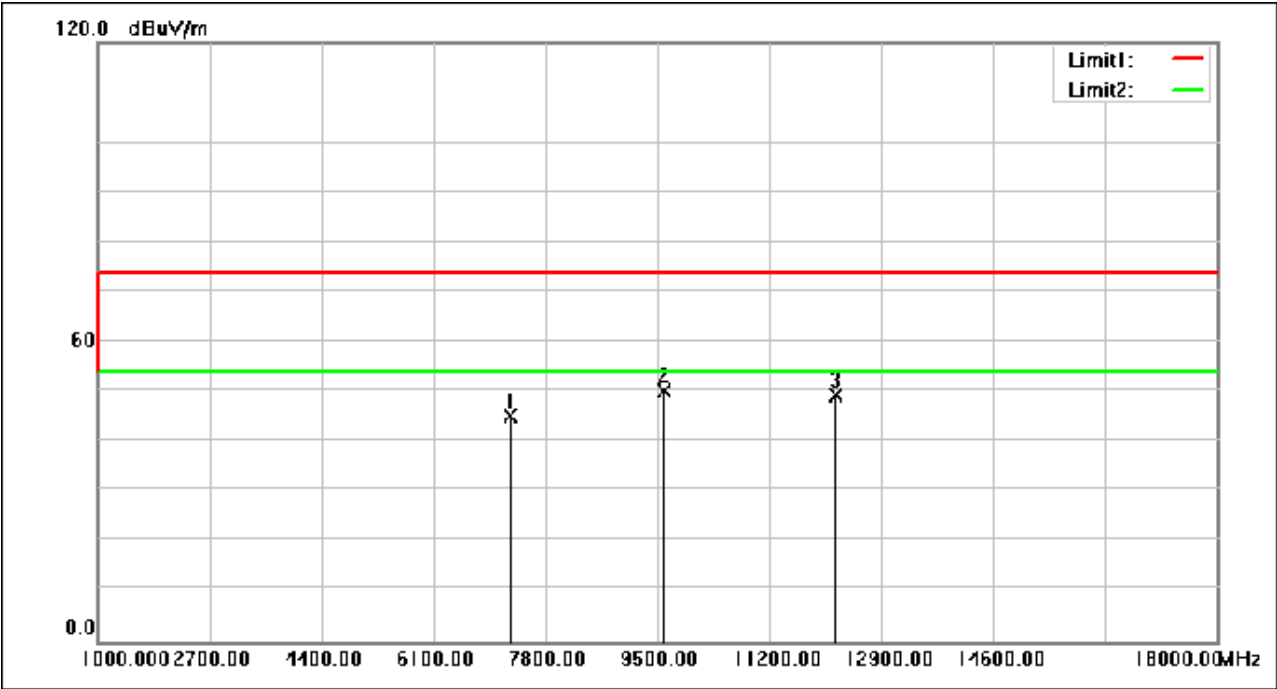
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 41 of 200

Test Mode: 06; Polarity: Vertical; Modulation:8DPSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7258.720	56.72	-11.45	45.27	74.00	-28.73	peak
2	9602.000	58.12	-7.76	50.36	74.00	-23.64	peak
3	12213.200	55.20	-5.98	49.22	74.00	-24.78	peak

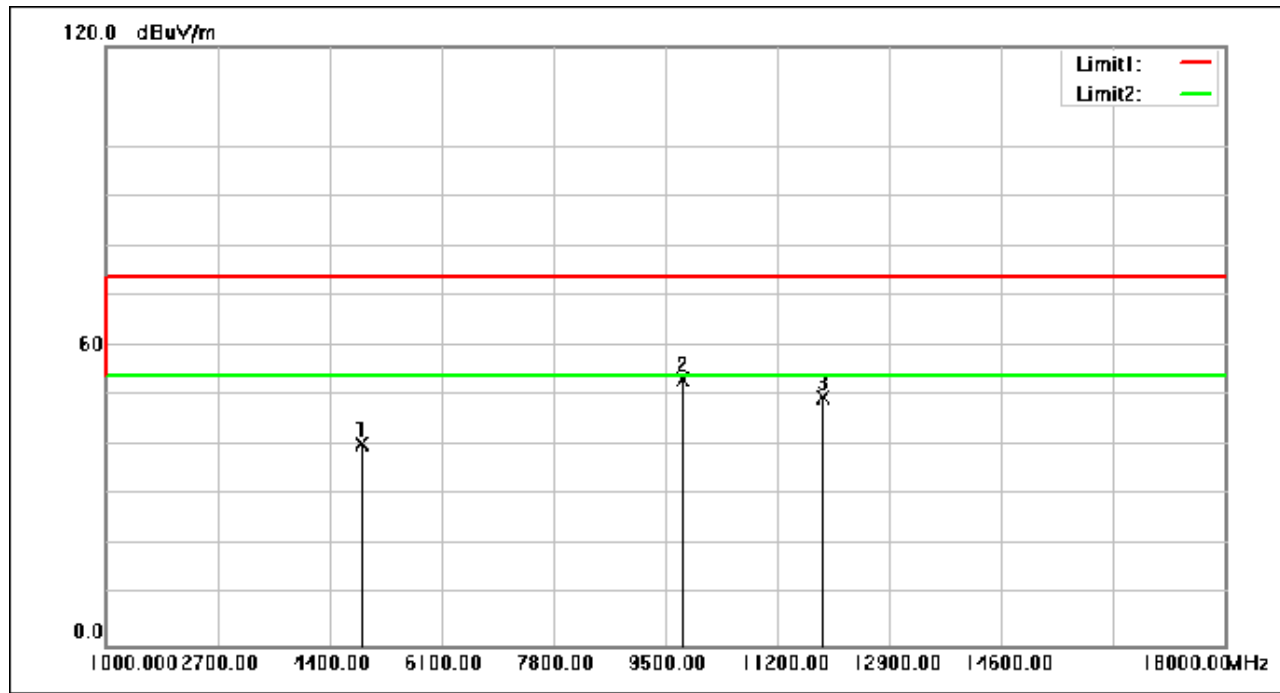
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 42 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: 8DPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	58.99	-18.52	40.47	74.00	-33.53	peak
2	9757.720	60.78	-7.47	53.31	74.00	-20.69	peak
3	11907.200	55.76	-6.03	49.73	74.00	-24.27	peak

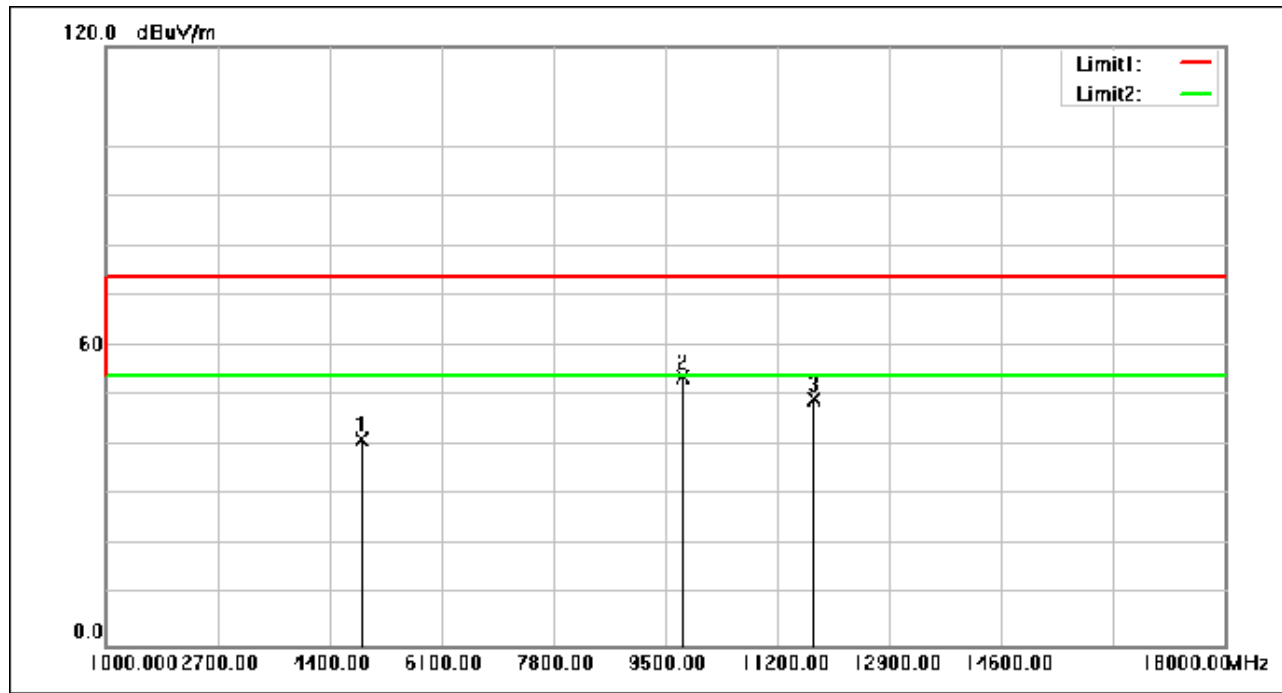
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 43 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: 8DPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	59.65	-18.52	41.13	74.00	-32.87	peak
2	9757.720	61.39	-7.47	53.92	74.00	-20.08	peak
3	11756.240	55.55	-6.15	49.40	74.00	-24.60	peak

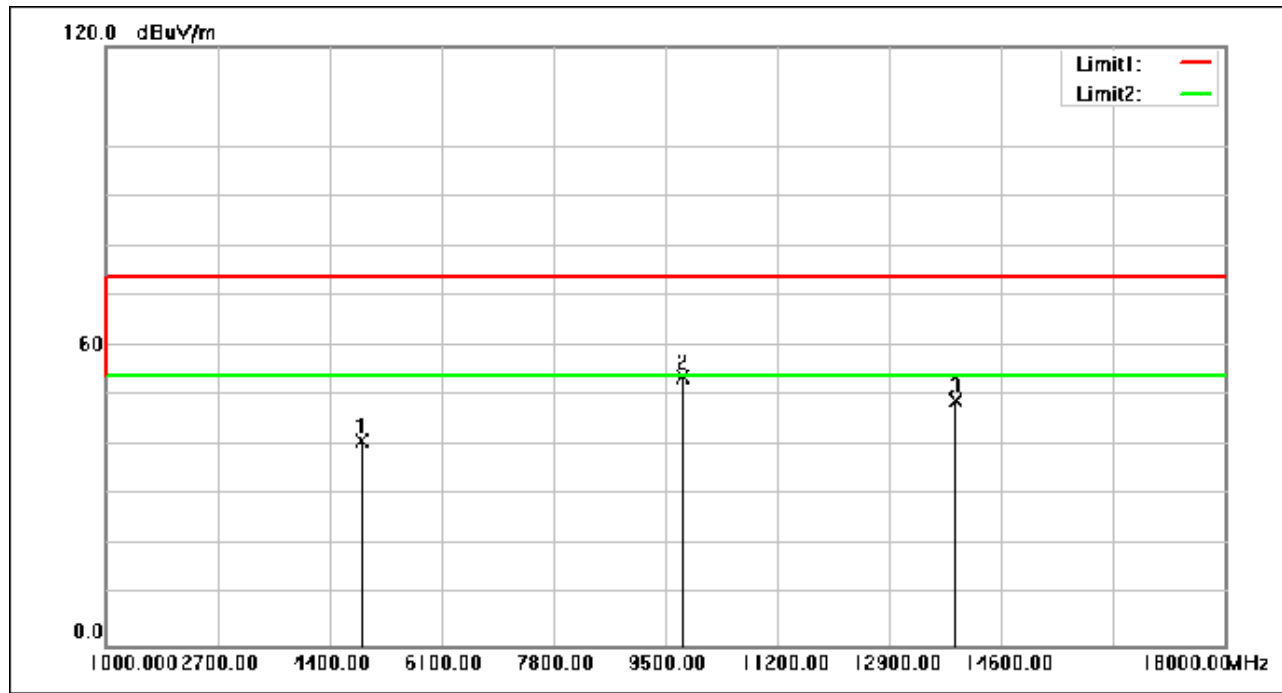
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 44 of 200

Test Mode: 04; Polarity: Vertical; Modulation: 8DPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.720	59.46	-18.52	40.94	74.00	-33.06	peak
2	9758.400	61.29	-7.47	53.82	74.00	-20.18	peak
3	13907.760	55.60	-6.41	49.19	74.00	-24.81	peak

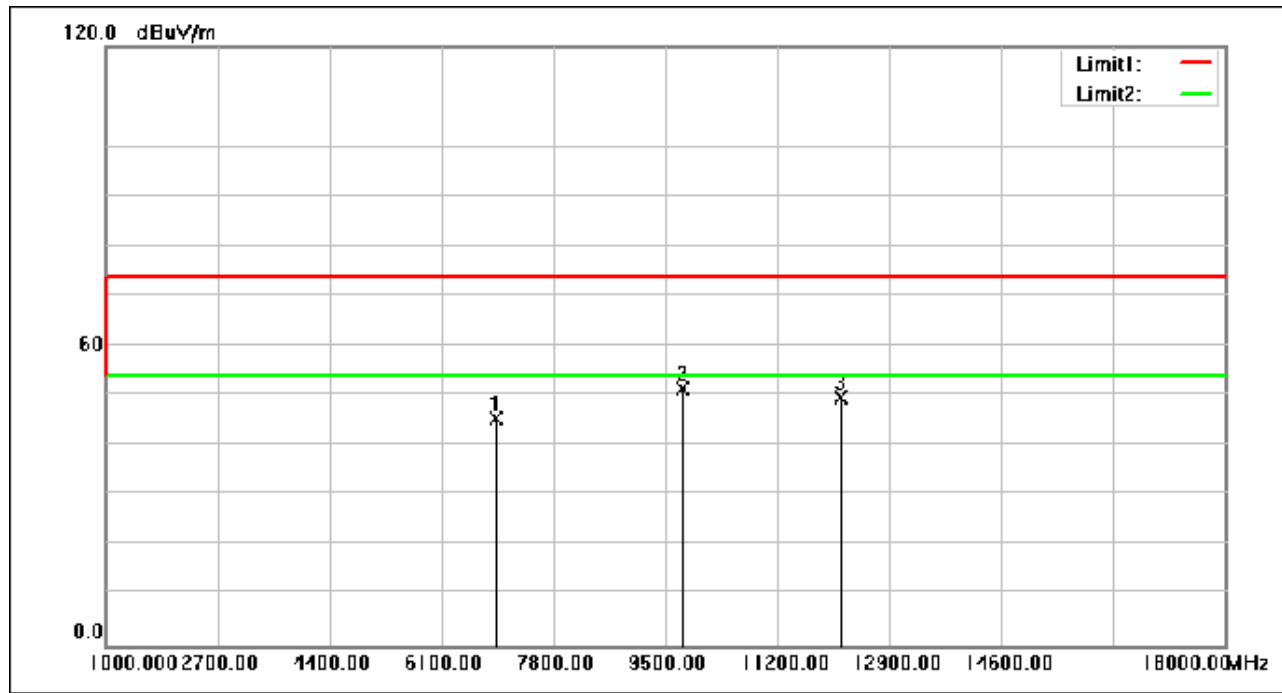
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 45 of 200

Test Mode: 06; Polarity: Vertical; Modulation: 8DPSK; Channel: middle



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6939.800	57.02	-11.67	45.35	74.00	-28.65	peak
2	9757.720	58.84	-7.47	51.37	74.00	-22.63	peak
3	12177.160	55.54	-5.96	49.58	74.00	-24.42	peak

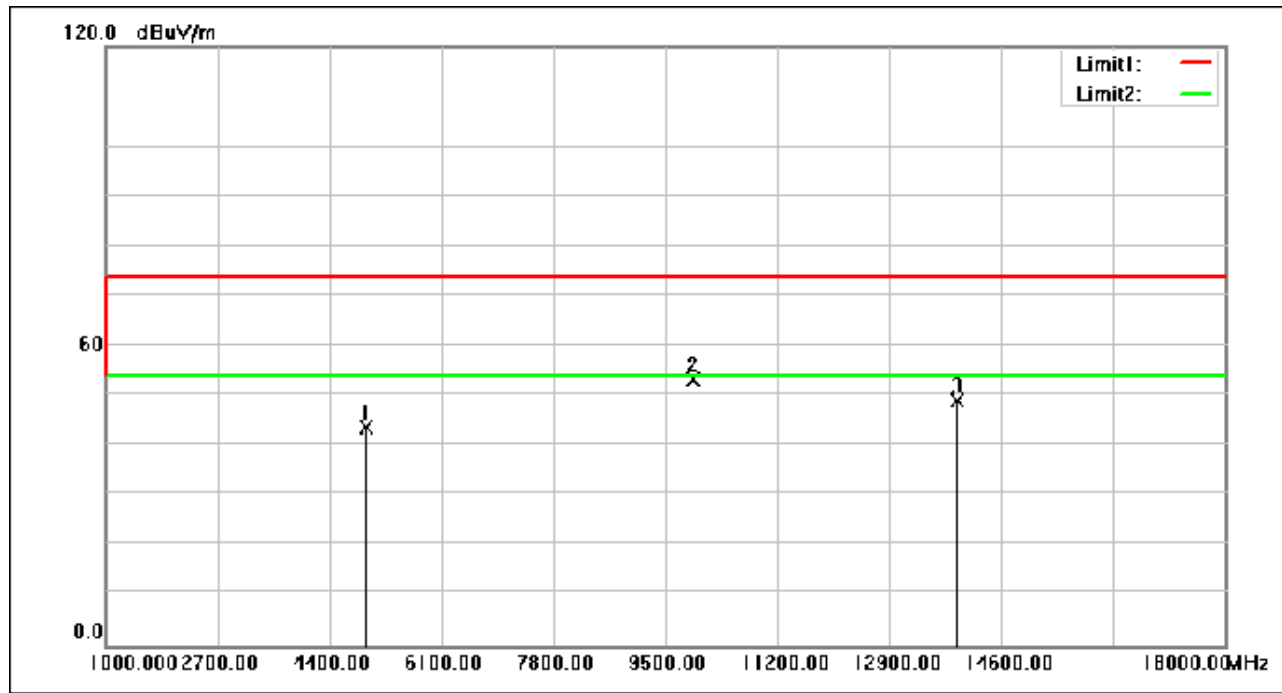
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 46 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	62.25	-18.47	43.78	74.00	-30.22	peak
2	9914.120	60.48	-7.31	53.17	74.00	-20.83	peak
3	13922.040	55.48	-6.41	49.07	74.00	-24.93	peak

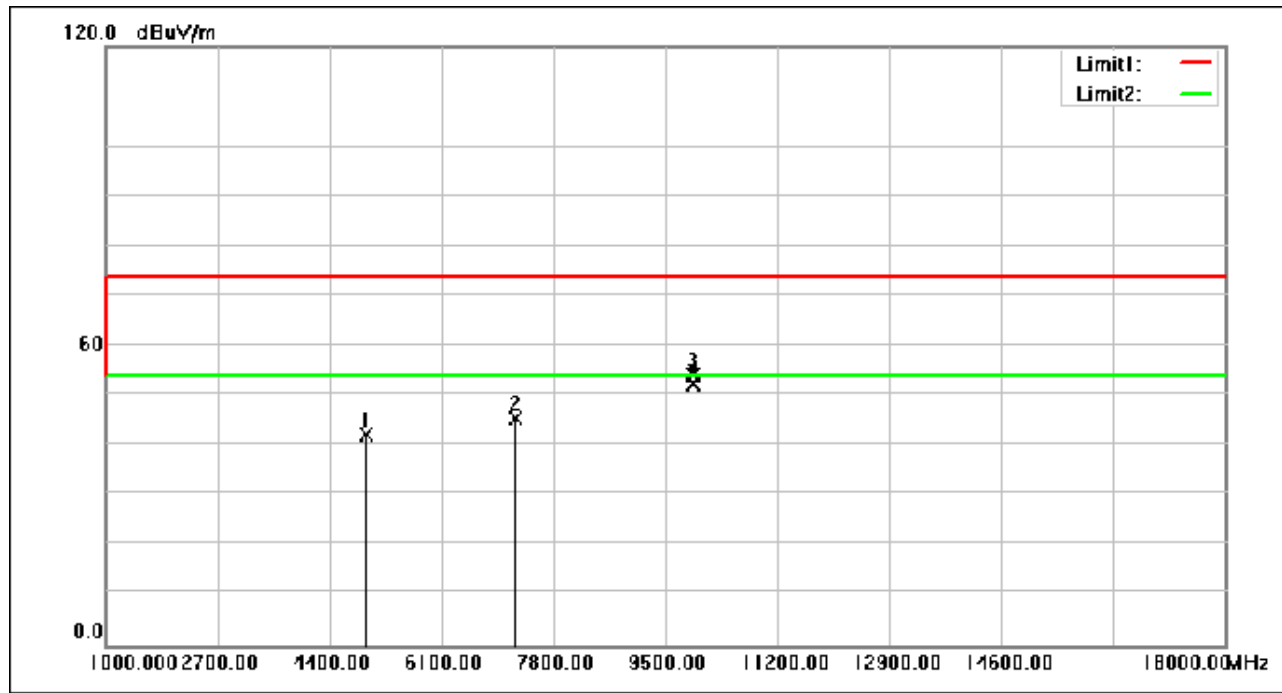
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 47 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	60.56	-18.47	42.09	74.00	-31.91	peak
2	7237.640	56.83	-11.46	45.37	74.00	-28.63	peak
3	9914.120	61.38	-7.31	54.07	74.00	-19.93	peak
4	9914.120	59.66	-7.31	52.35	54.00	-1.65	AVG

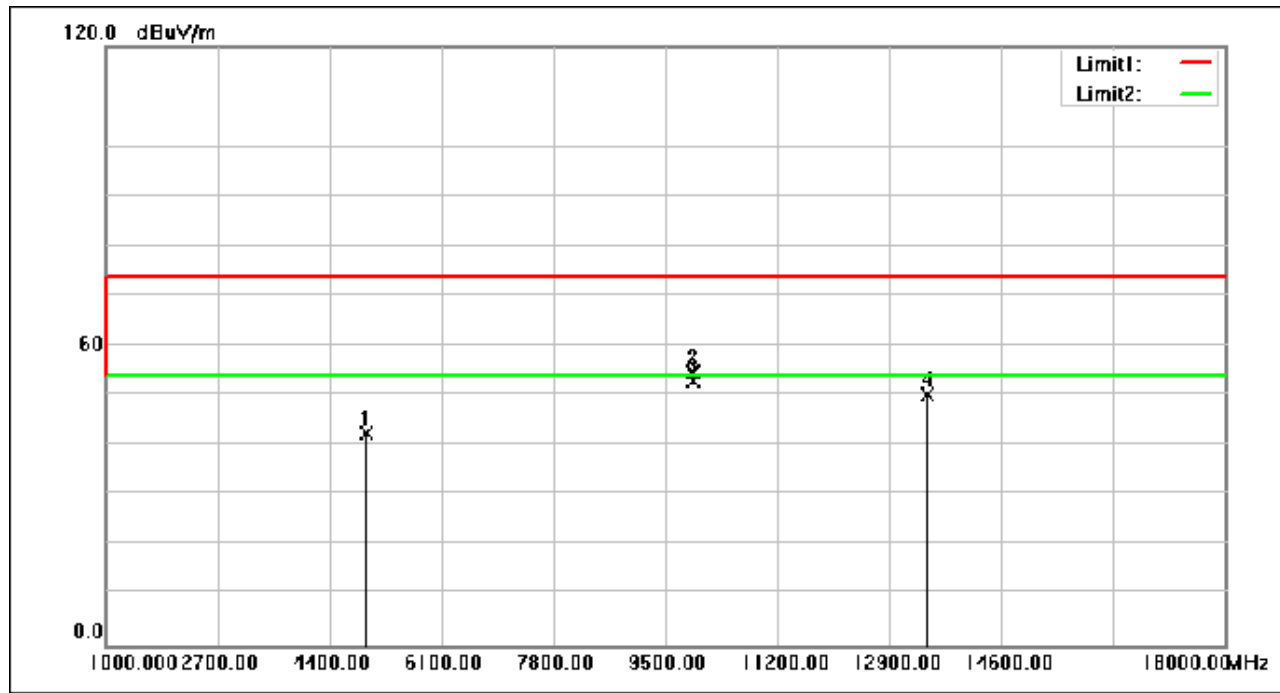
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 48 of 200

Test Mode: 04; Polarity: Vertical; Modulation:8DPSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	61.05	-18.47	42.58	74.00	-31.42	peak
2	9914.120	61.99	-7.31	54.68	74.00	-19.32	peak
3	9914.120	60.37	-7.31	53.06	54.00	-0.94	AVG
4	13492.280	56.62	-6.34	50.28	74.00	-23.72	peak

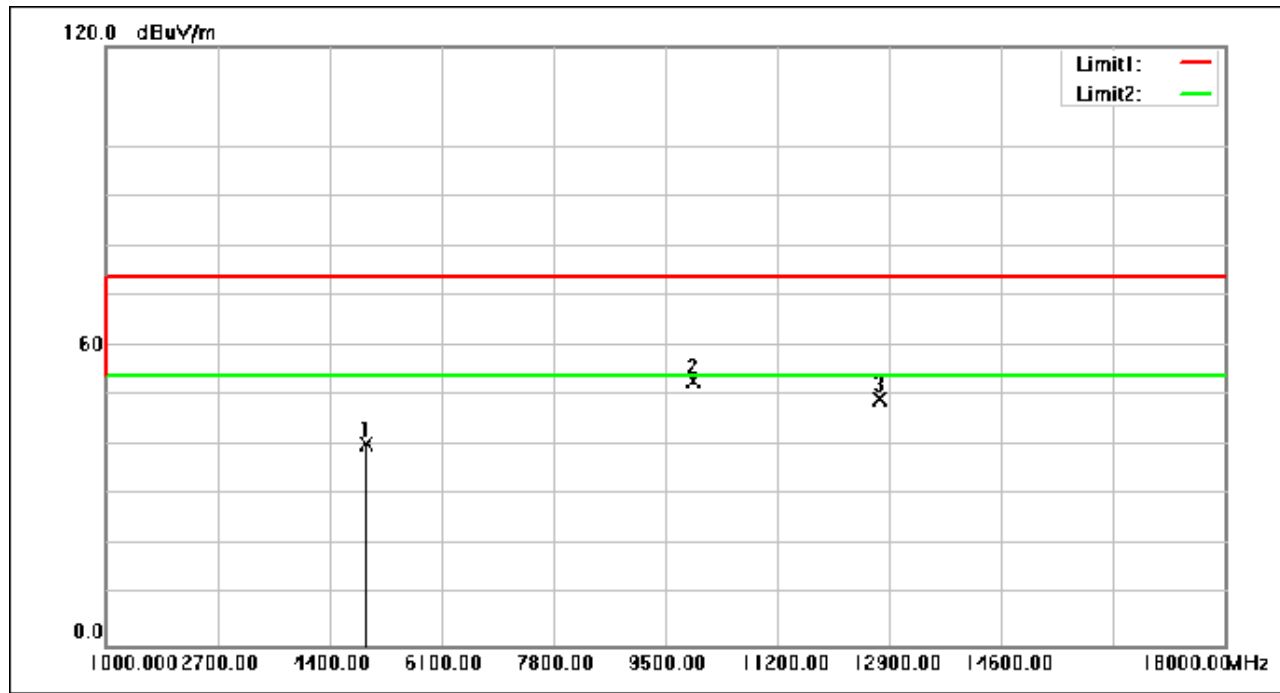
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 49 of 200

Test Mode: 06; Polarity: Vertical; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.920	58.88	-18.47	40.41	74.00	-33.59	peak
2	9914.120	60.13	-7.31	52.82	74.00	-21.18	peak
3	12759.240	55.47	-6.24	49.23	74.00	-24.77	peak

7.2 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4,6.5

Measurement Distance: 3M

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 21.6 °C

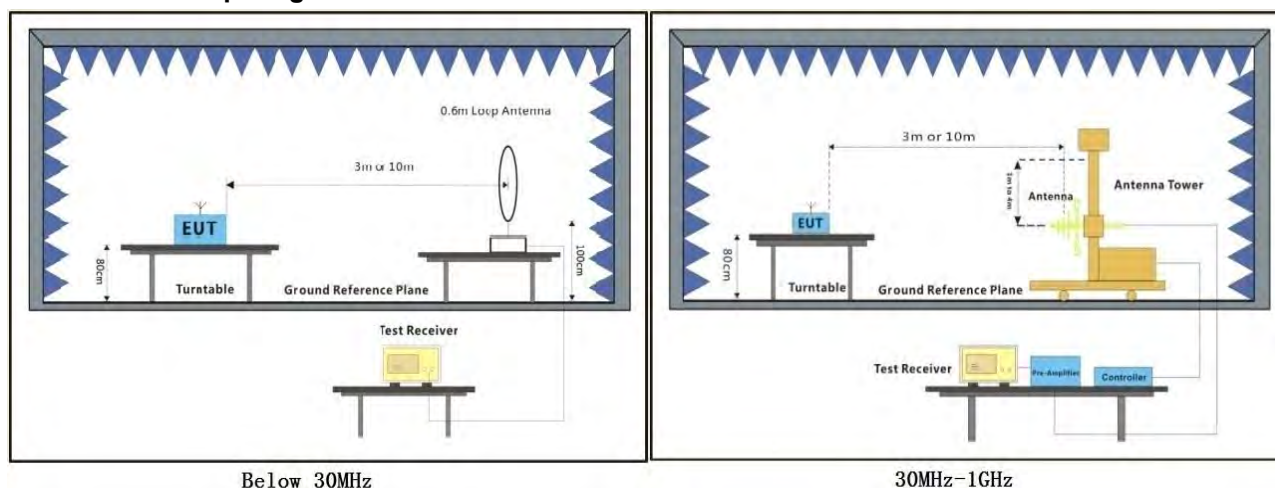
Humidity: 47.8 % RH

Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamplifier Factor}$
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

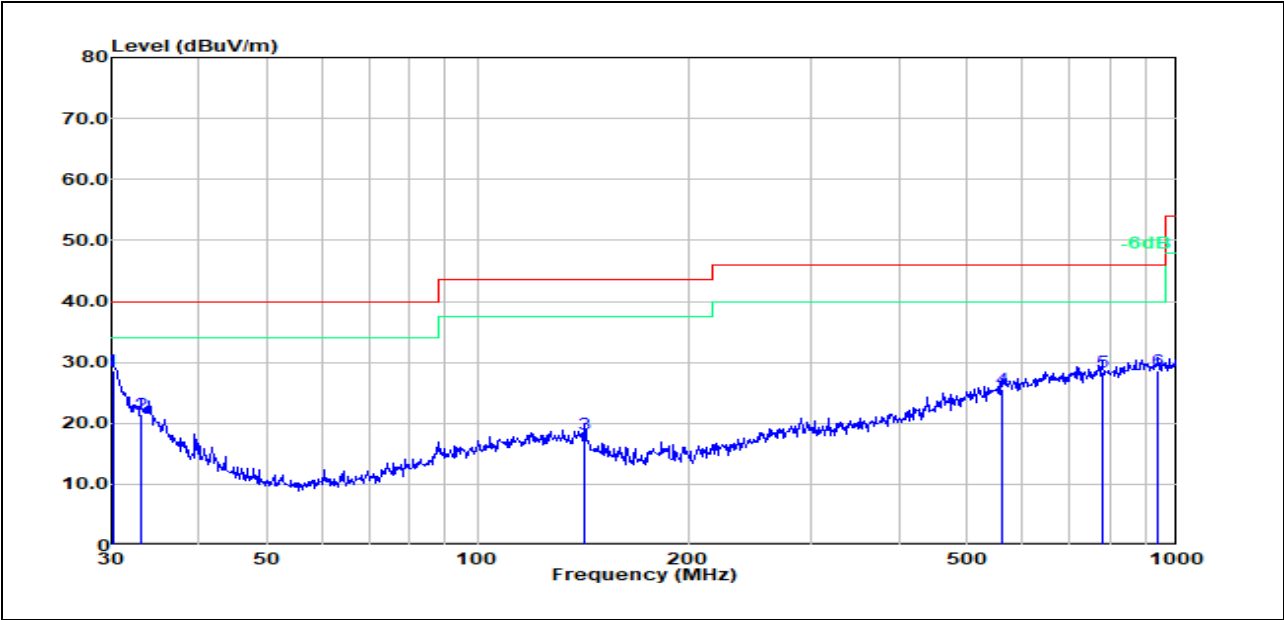
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 52 of 200

Test Mode: 04; Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	30.1050	9.30	19.34	28.64	40.00	-11.36	100	0	QP
2	32.9790	4.10	17.45	21.55	40.00	-18.45	100	314	QP
3	141.8260	4.44	13.87	18.31	43.50	-25.19	100	173	QP
4	560.6930	3.24	22.40	25.64	46.00	-20.36	100	360	QP
5	779.6070	3.79	24.68	28.47	46.00	-17.53	200	348	QP
6	938.8330	3.11	25.51	28.62	46.00	-17.38	100	286	QP

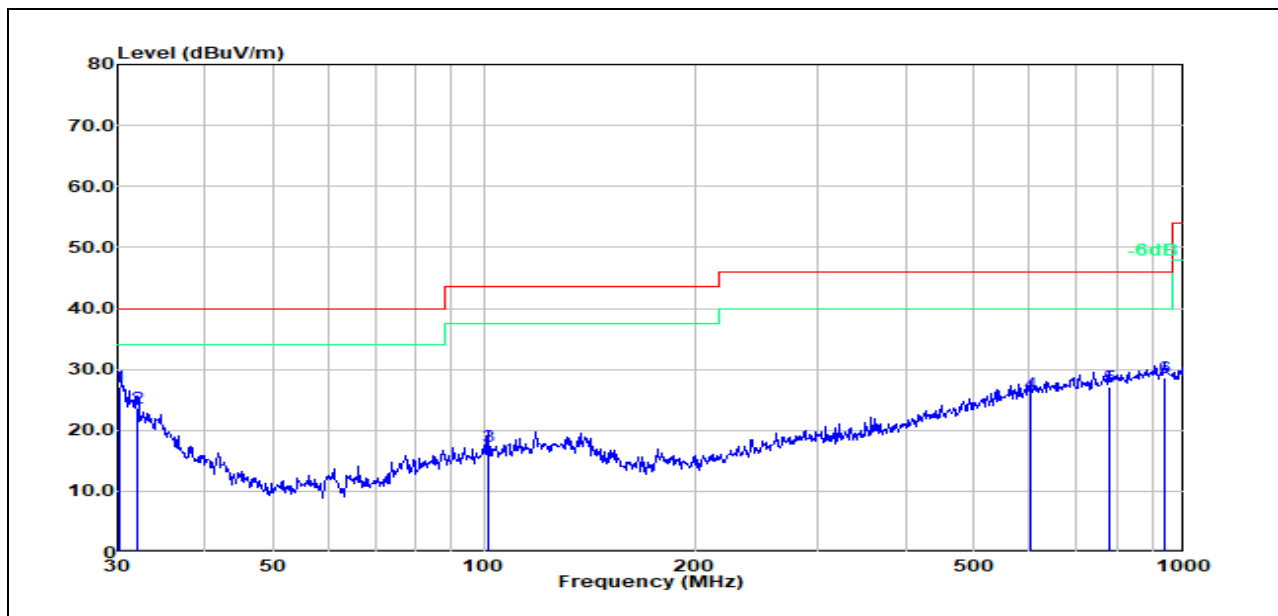
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 53 of 200

Test Mode: 04; Polarity: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	30.2110	7.88	19.25	27.13	40.00	-12.87	100	0	QP
2	32.0670	5.93	17.62	23.55	40.00	-16.45	100	253	QP
3	101.2890	4.53	12.79	17.32	43.50	-26.18	100	78	QP
4	601.4270	3.31	22.77	26.08	46.00	-19.92	100	360	QP
5	779.6070	2.52	24.68	27.20	46.00	-18.80	200	78	QP
6	935.5460	2.99	25.65	28.64	46.00	-17.36	100	232	QP

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 54 of 200

7.3 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.10.5

Measurement Distance: 3M

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.6 °C

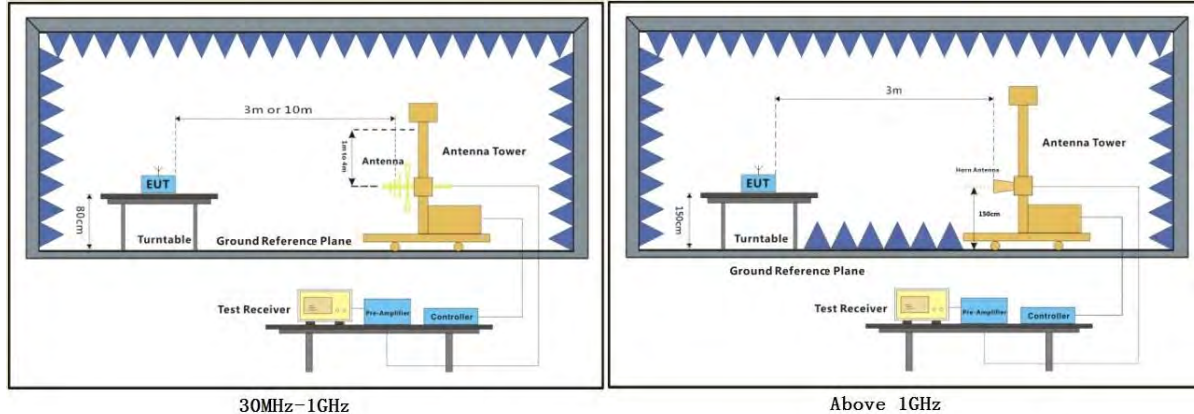
Humidity: 47.8 % RH

Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

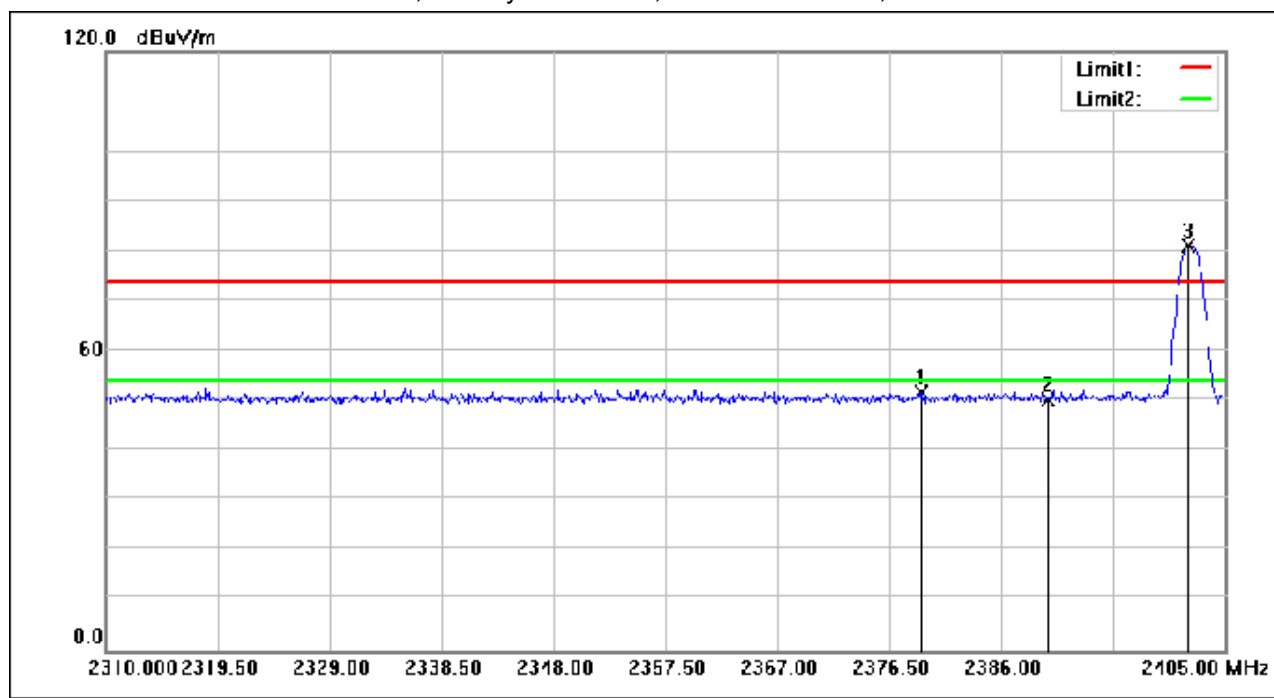
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 56 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: GFSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2379.255	76.56	-24.75	51.81	74.00	-22.19	peak
2	2390.000	75.07	-24.71	50.36	74.00	-23.64	peak
3	2401.865	105.81	-24.65	81.16	74.00	7.16	peak

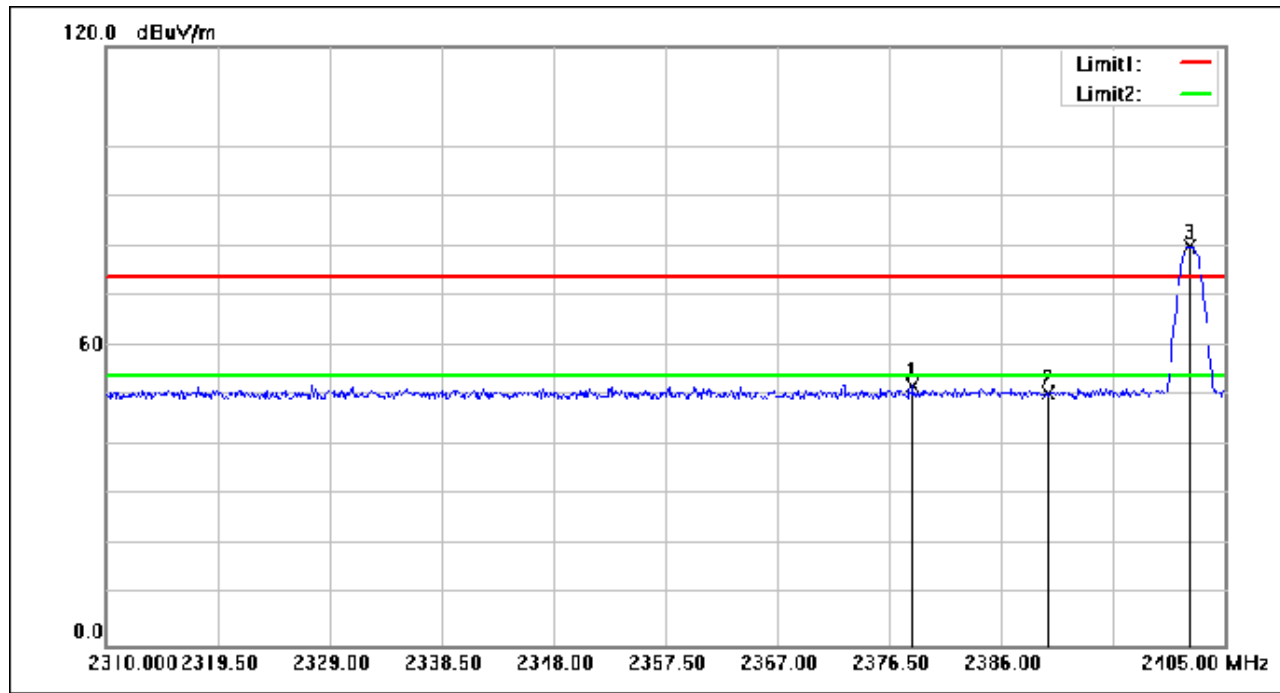
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 57 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: GFSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2378.495	76.78	-24.76	52.02	74.00	-21.98	peak
2	2390.000	75.38	-24.71	50.67	74.00	-23.33	peak
3	2402.055	104.69	-24.65	80.04	74.00	6.04	peak

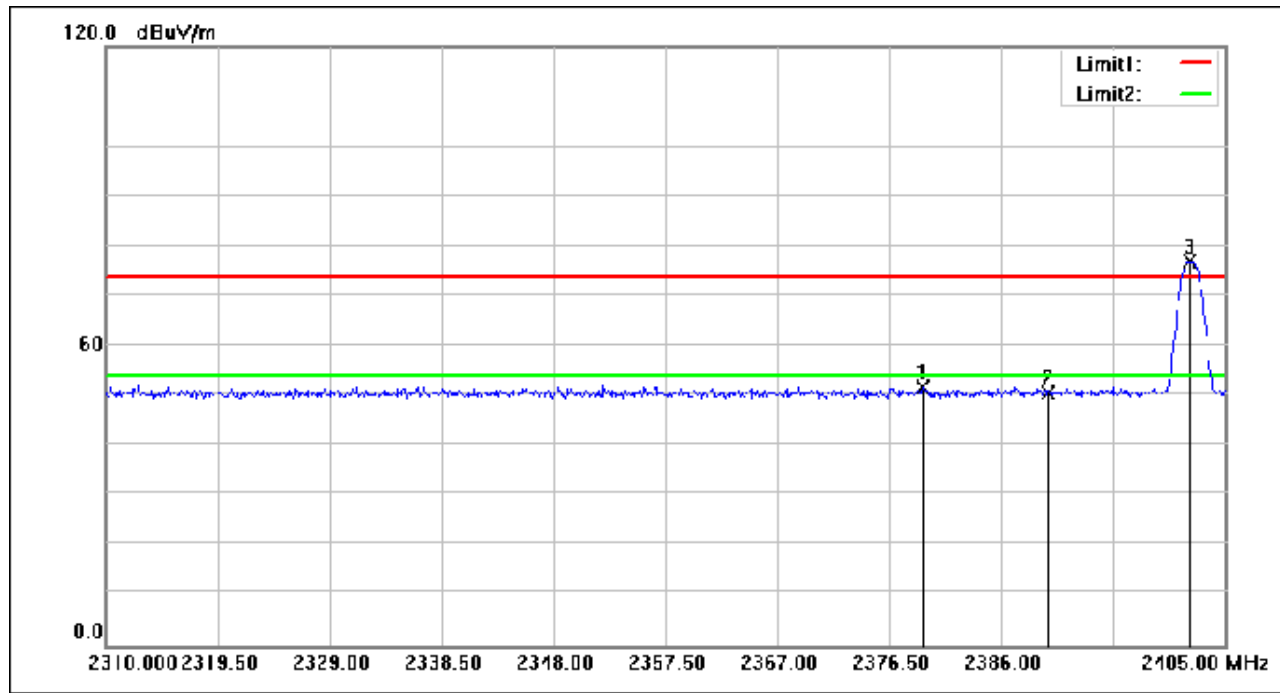
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 58 of 200

Test Mode: 04; Polarity: Vertical; Modulation:GFSK; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2379.350	76.45	-24.75	51.70	74.00	-22.30	peak
2	2390.000	75.38	-24.71	50.67	74.00	-23.33	peak
3	2401.960	101.59	-24.65	76.94	74.00	2.94	peak

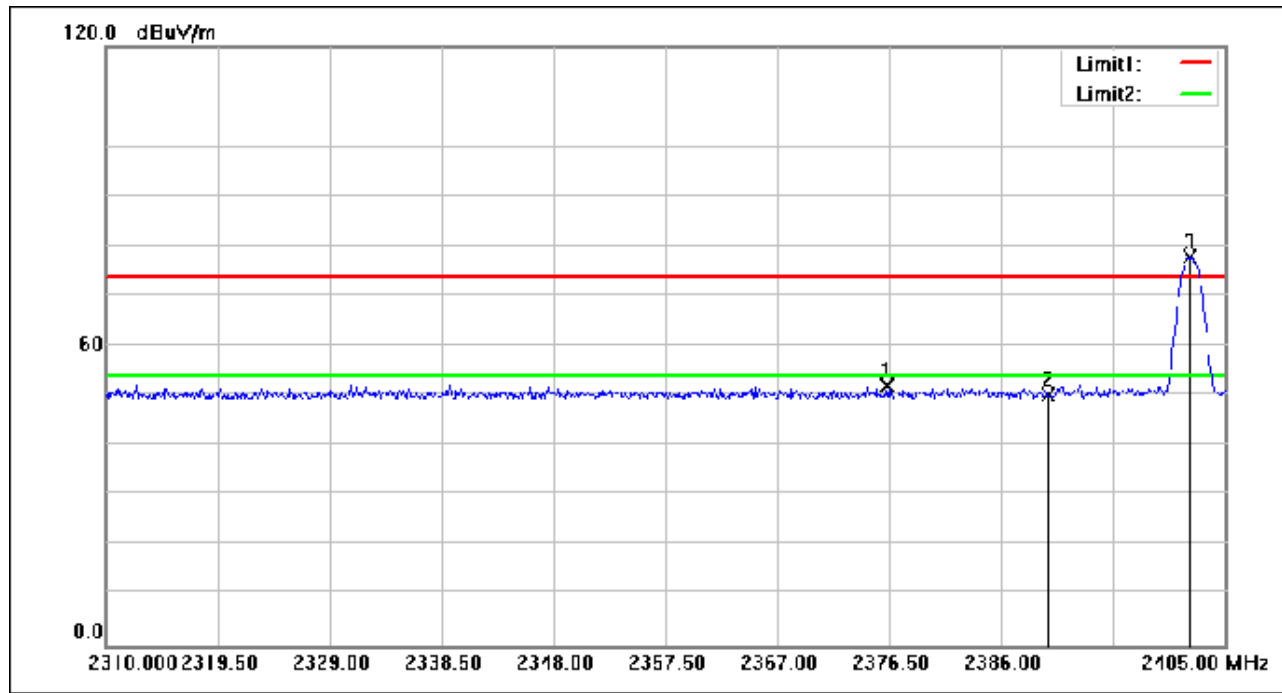
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 59 of 200

Test Mode: 06; Polarity: Vertical; Modulation: GFSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2376.310	76.83	-24.77	52.06	74.00	-21.94	peak
2	2390.000	75.09	-24.71	50.38	74.00	-23.62	peak
3	2402.055	102.38	-24.65	77.73	74.00	3.73	peak

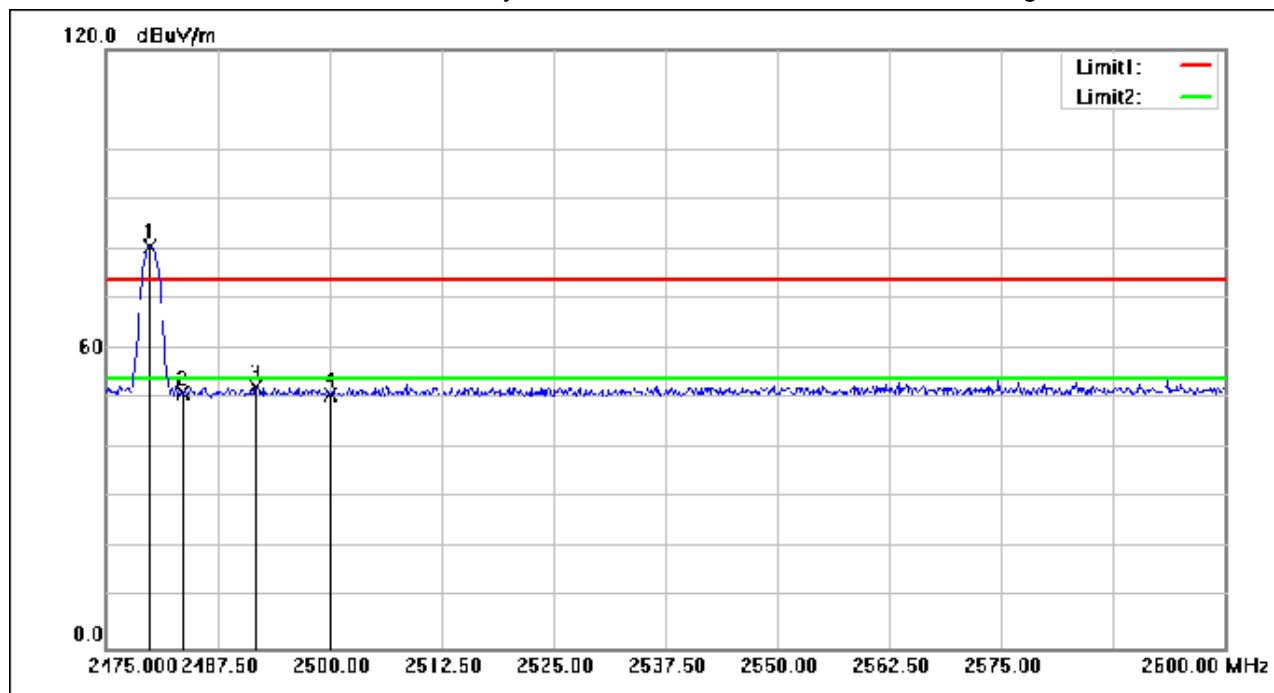
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 60 of 200

Test Mode: 04; Polarity: Horizontal; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	104.80	-24.28	80.52	74.00	6.52	peak
2	2483.500	75.51	-24.27	51.24	74.00	-22.76	peak
3	2491.750	76.63	-24.23	52.40	74.00	-21.60	peak
4	2500.000	75.18	-24.19	50.99	74.00	-23.01	peak

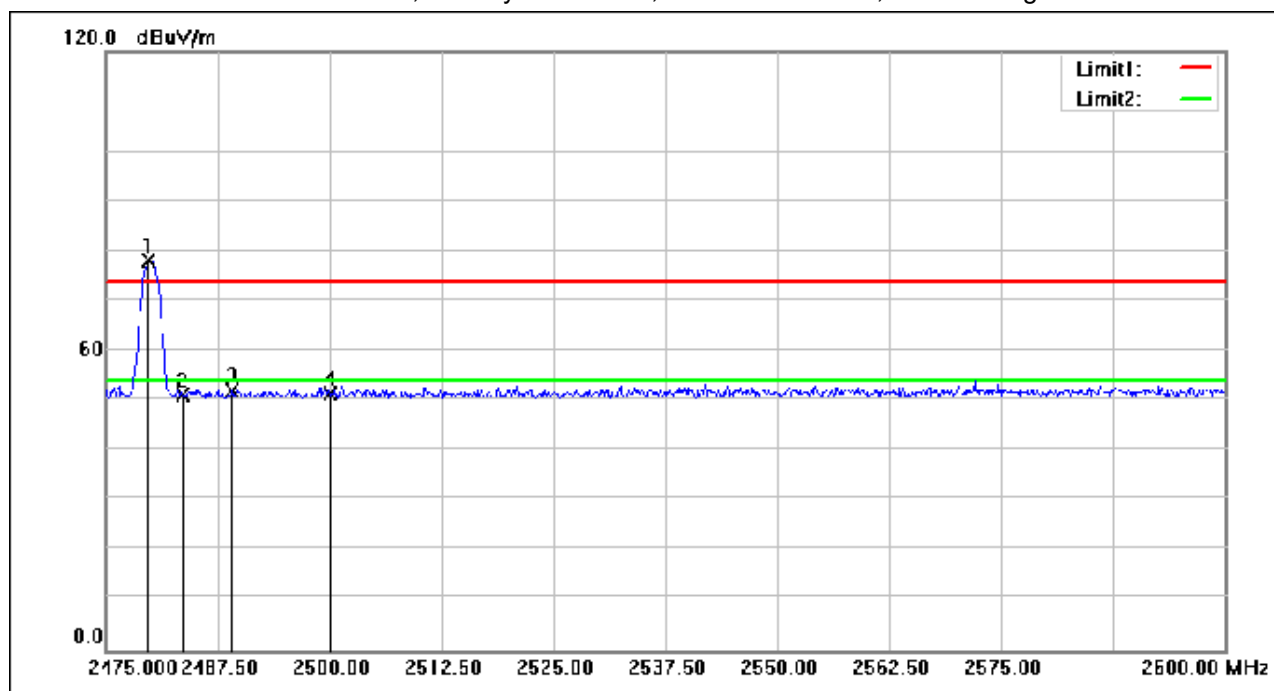
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 61 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: GFSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.750	102.49	-24.28	78.21	74.00	4.21	peak
2	2483.500	75.29	-24.27	51.02	74.00	-22.98	peak
3	2489.125	76.32	-24.24	52.08	74.00	-21.92	peak
4	2500.000	75.62	-24.19	51.43	74.00	-22.57	peak

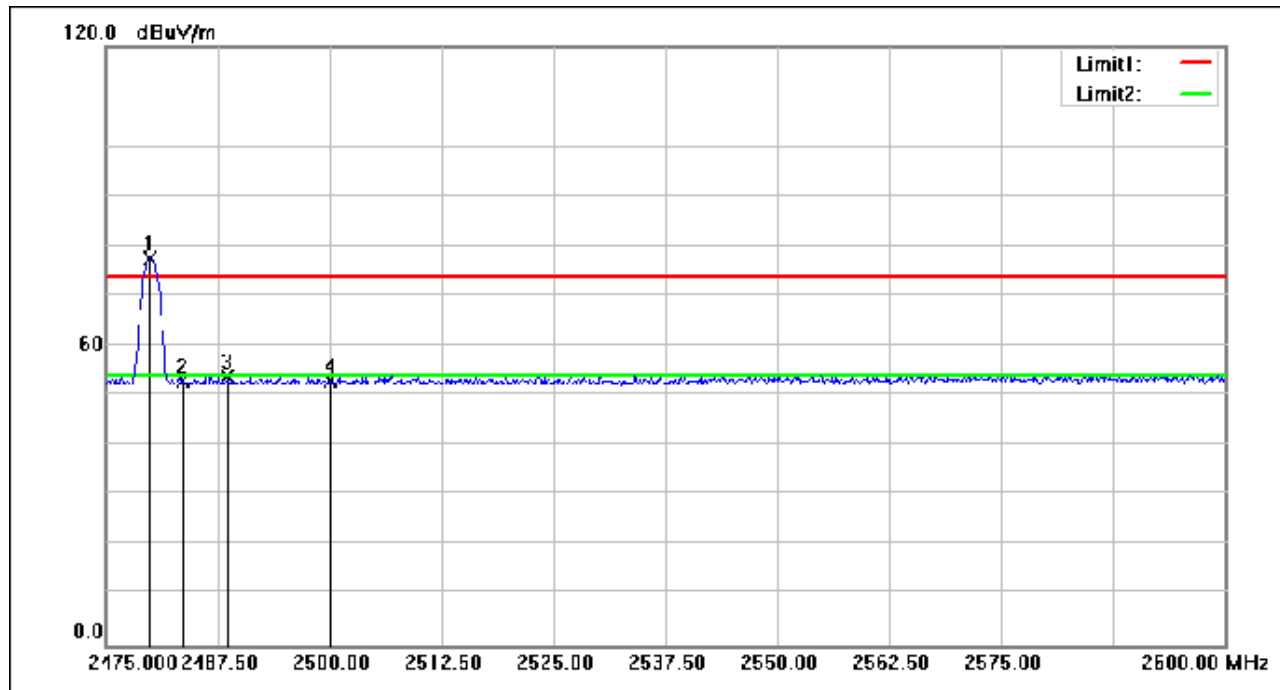
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 62 of 200

Test Mode: 04; Polarity: Vertical; Modulation:GFSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	101.69	-24.28	77.41	74.00	3.41	peak
2	2483.500	77.10	-24.27	52.83	74.00	-21.17	peak
3	2488.625	78.21	-24.25	53.96	74.00	-20.04	peak
4	2500.000	77.26	-24.19	53.07	74.00	-20.93	peak

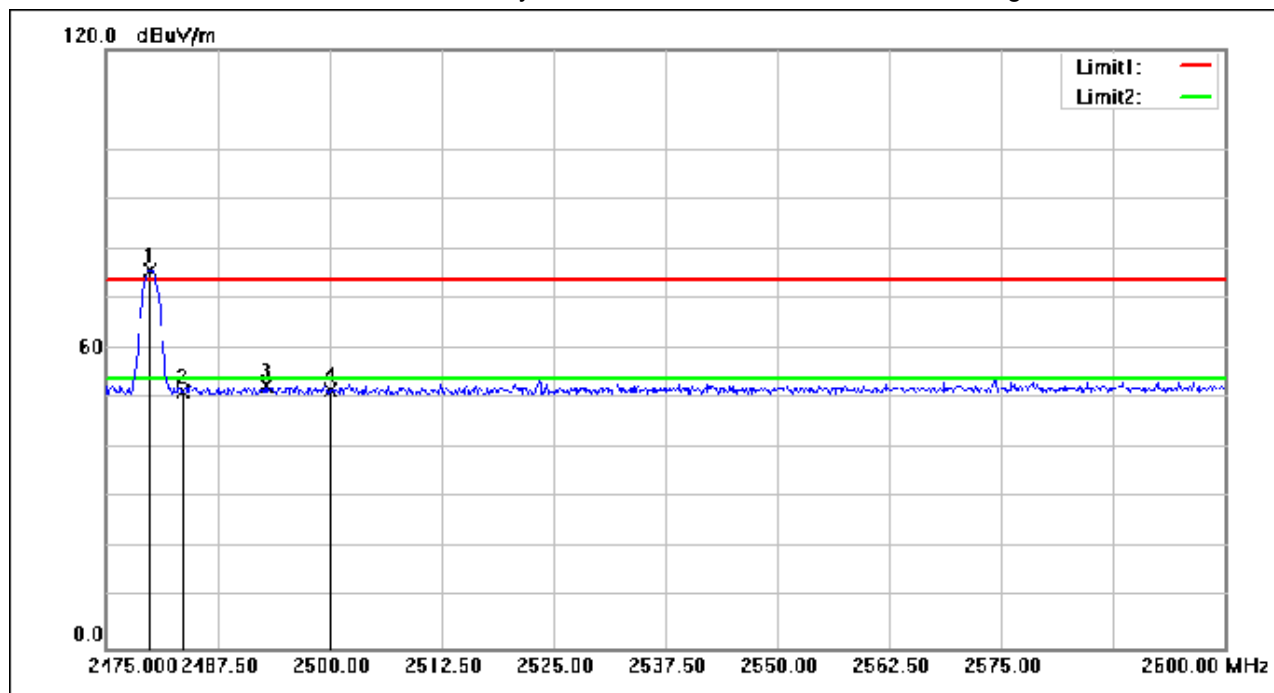
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 63 of 200

Test Mode: 06; Polarity: Vertical; Modulation: GFSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	100.12	-24.28	75.84	74.00	1.84	peak
2	2483.500	75.69	-24.27	51.42	74.00	-22.58	peak
3	2492.875	76.92	-24.22	52.70	74.00	-21.30	peak
4	2500.000	75.88	-24.19	51.69	74.00	-22.31	peak

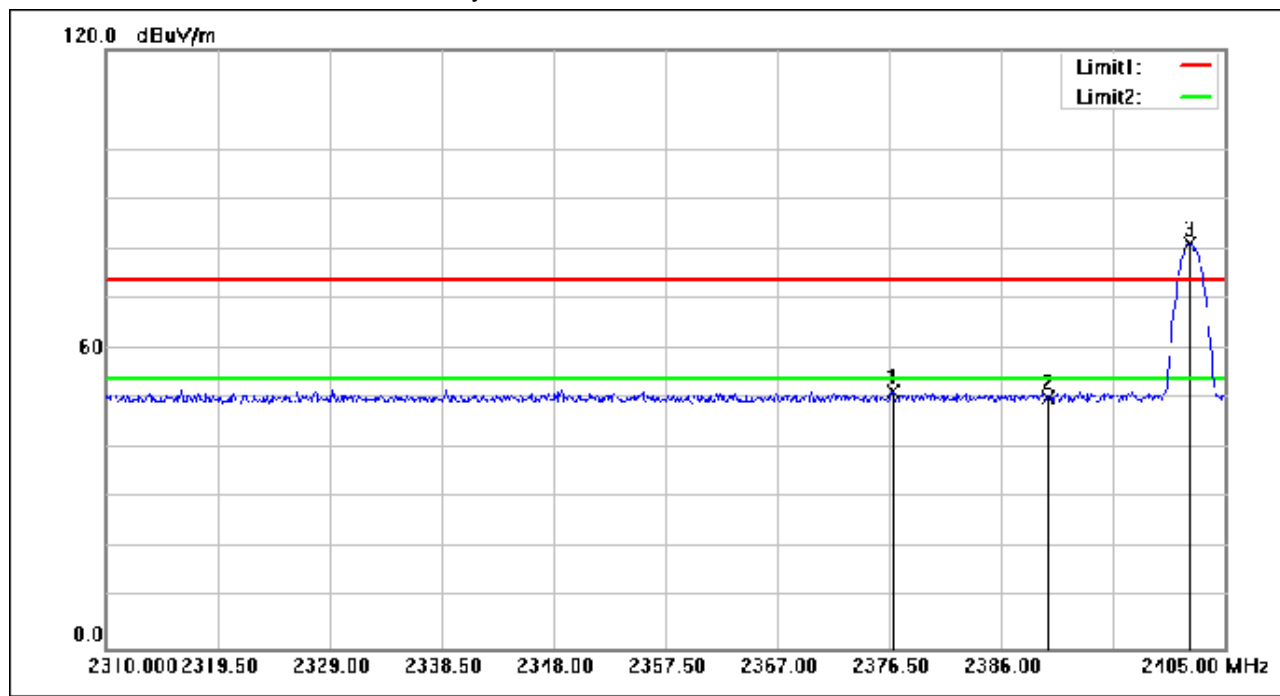
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 64 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2376.785	76.30	-24.77	51.53	74.00	-22.47	peak
2	2390.000	74.88	-24.71	50.17	74.00	-23.83	peak
3	2401.960	105.83	-24.65	81.18	74.00	7.18	peak

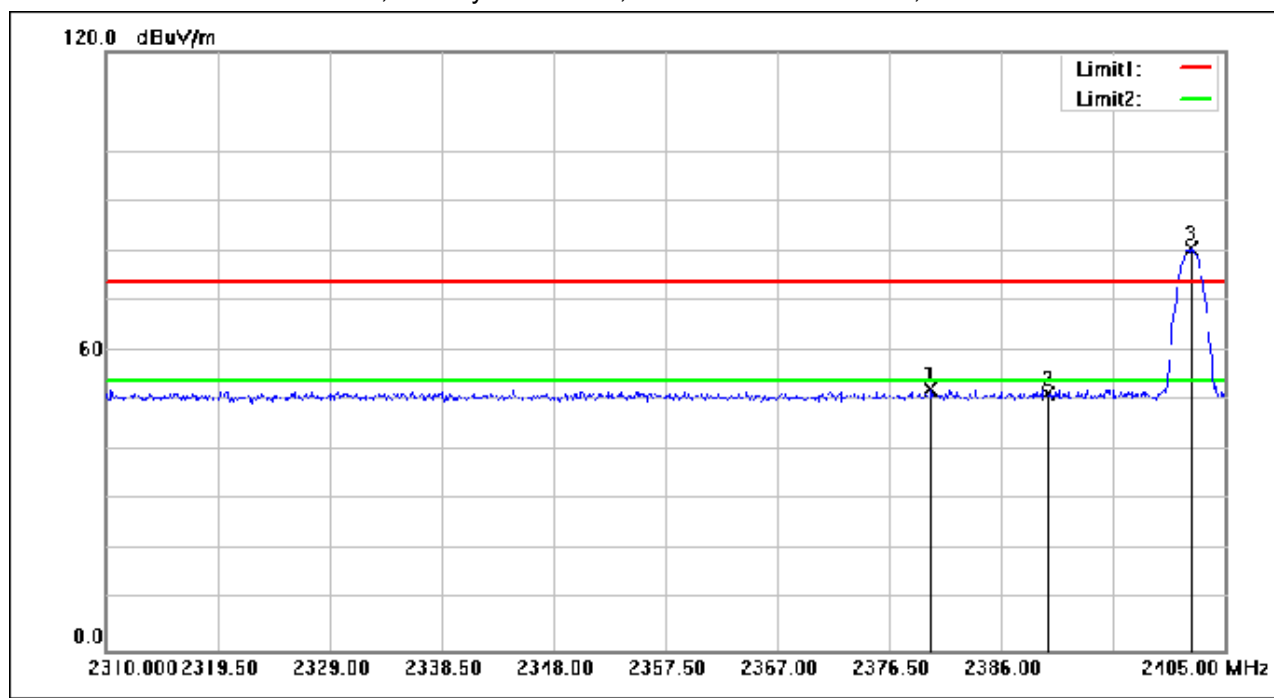
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 65 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2380.015	77.02	-24.75	52.27	74.00	-21.73	peak
2	2390.000	76.09	-24.71	51.38	74.00	-22.62	peak
3	2402.150	105.13	-24.65	80.48	74.00	6.48	peak

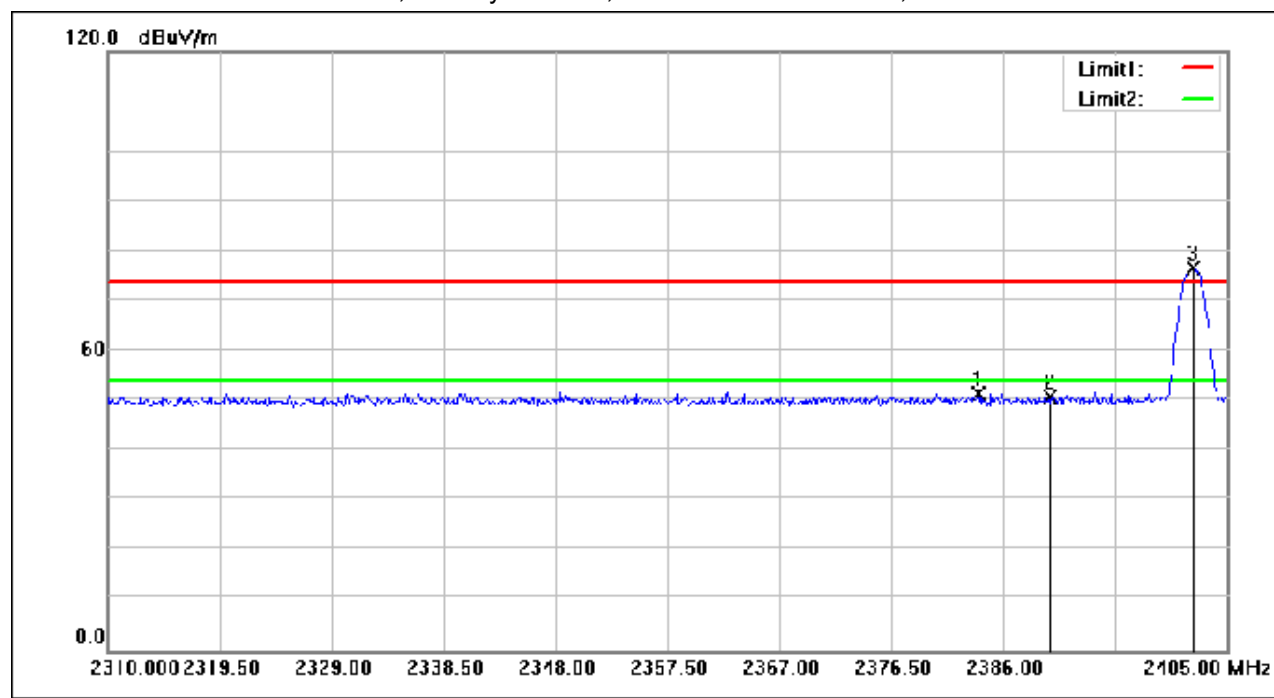
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 66 of 200

Test Mode: 04; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.910	76.29	-24.73	51.56	74.00	-22.44	peak
2	2390.000	75.47	-24.71	50.76	74.00	-23.24	peak
3	2402.150	101.45	-24.65	76.80	74.00	2.80	peak

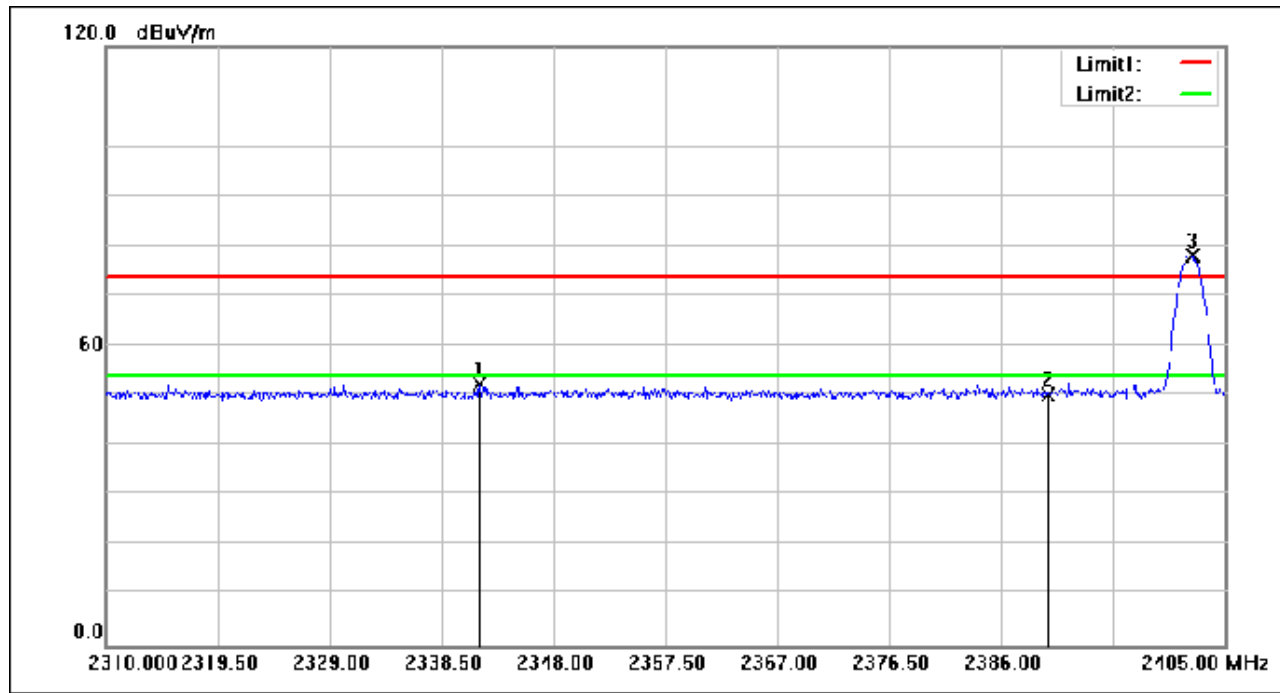
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 67 of 200

Test Mode: 06; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2341.730	77.19	-24.92	52.27	74.00	-21.73	peak
2	2390.000	75.02	-24.71	50.31	74.00	-23.69	peak
3	2402.245	102.86	-24.65	78.21	74.00	4.21	peak

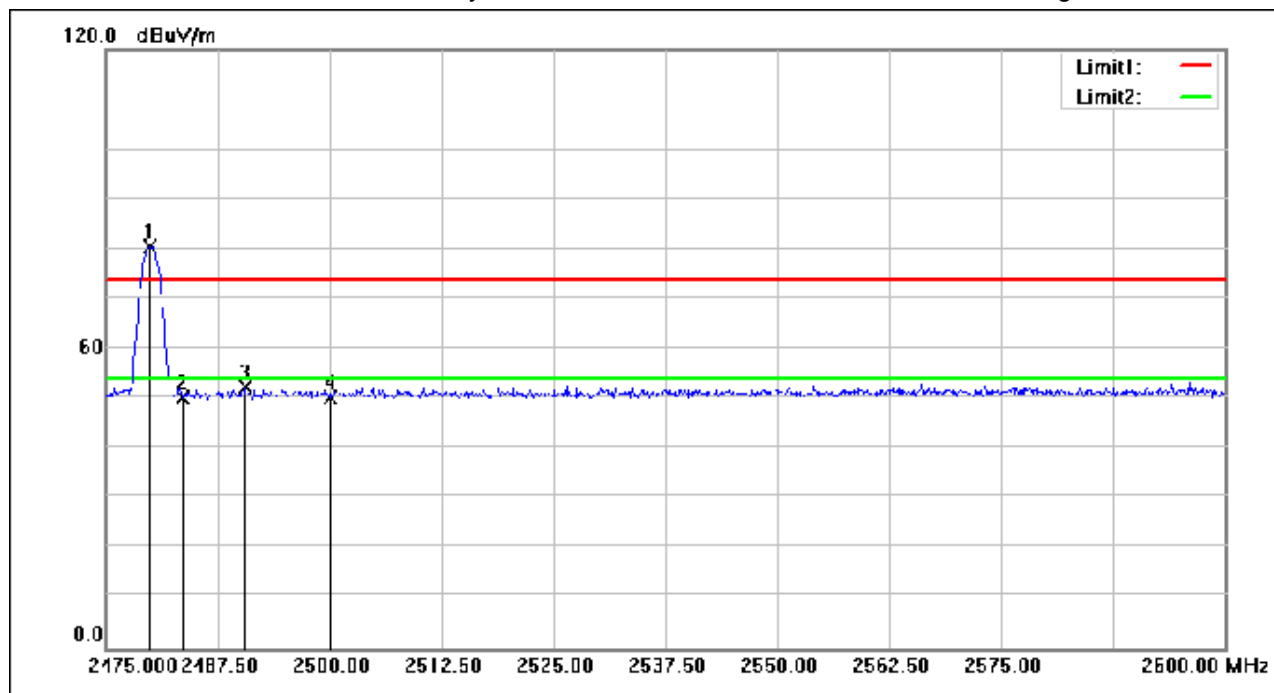
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 68 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	104.77	-24.28	80.49	74.00	6.49	peak
2	2483.500	74.40	-24.27	50.13	74.00	-23.87	peak
3	2490.500	76.68	-24.24	52.44	74.00	-21.56	peak
4	2500.000	74.37	-24.19	50.18	74.00	-23.82	peak

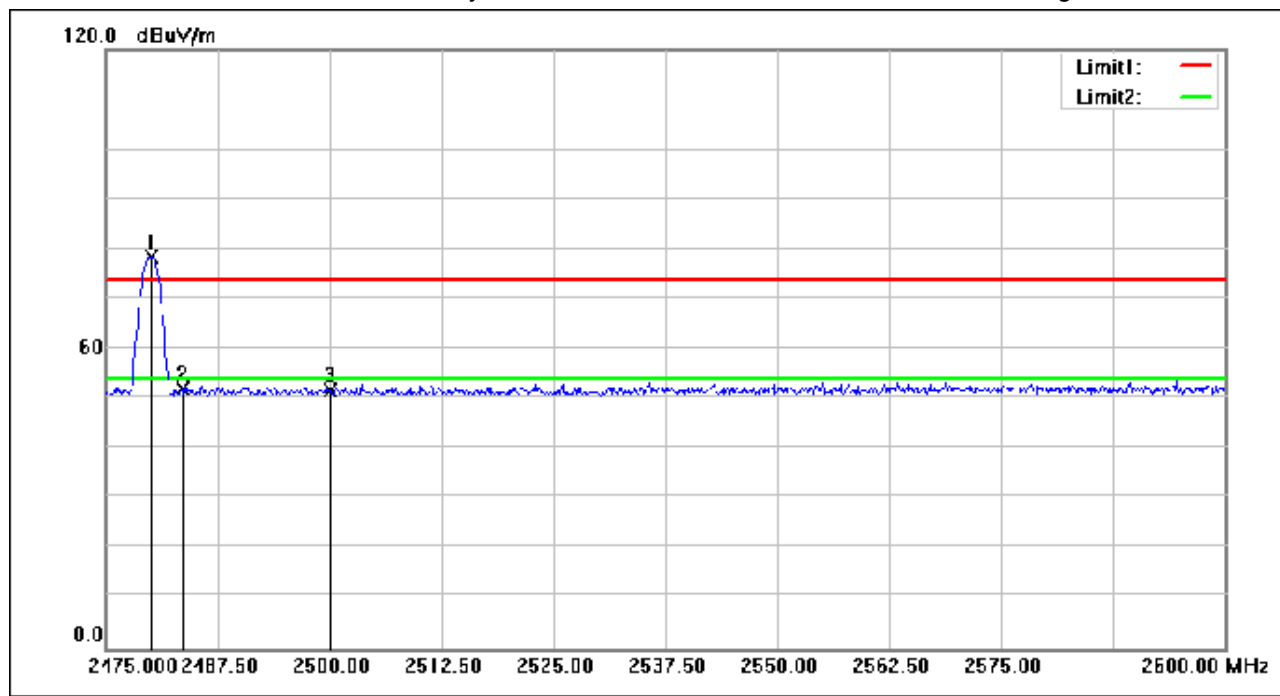
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 69 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.000	102.88	-24.28	78.60	74.00	4.60	peak
2	2483.500	76.29	-24.27	52.02	74.00	-21.98	peak
3	2500.000	75.95	-24.19	51.76	74.00	-22.24	peak

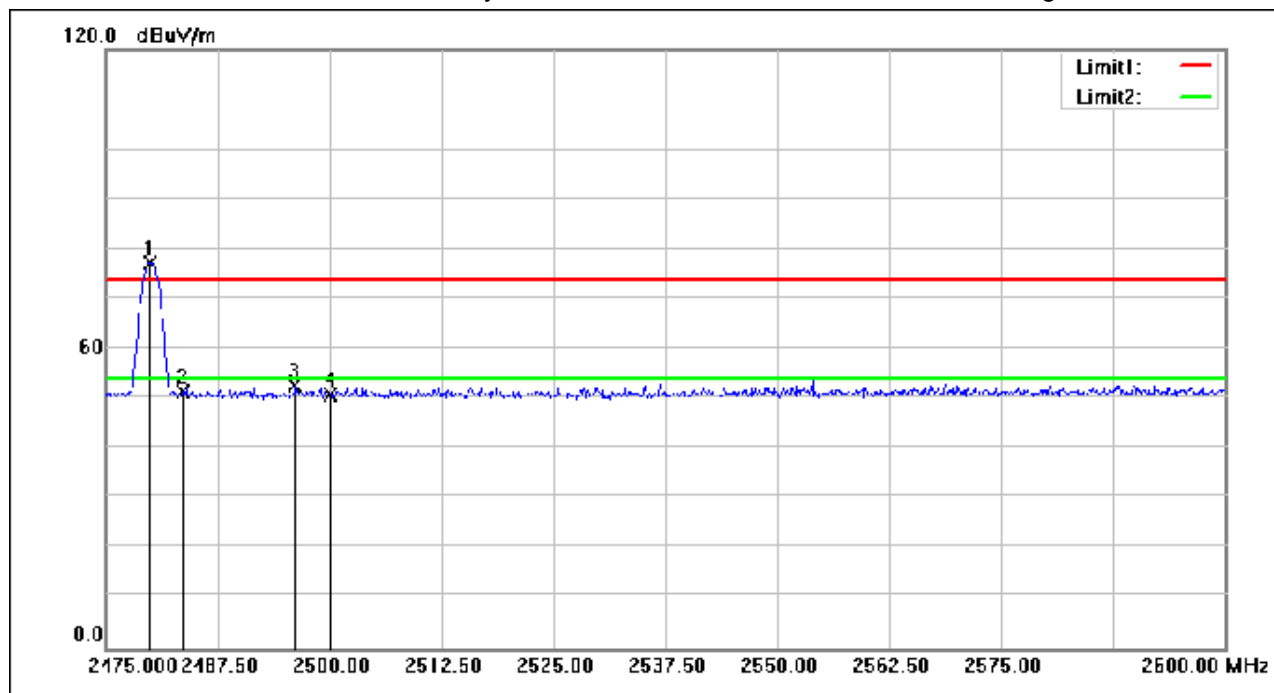
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 70 of 200

Test Mode: 04; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	101.66	-24.28	77.38	74.00	3.38	peak
2	2483.500	75.63	-24.27	51.36	74.00	-22.64	peak
3	2496.125	76.72	-24.21	52.51	74.00	-21.49	peak
4	2500.000	74.90	-24.19	50.71	74.00	-23.29	peak

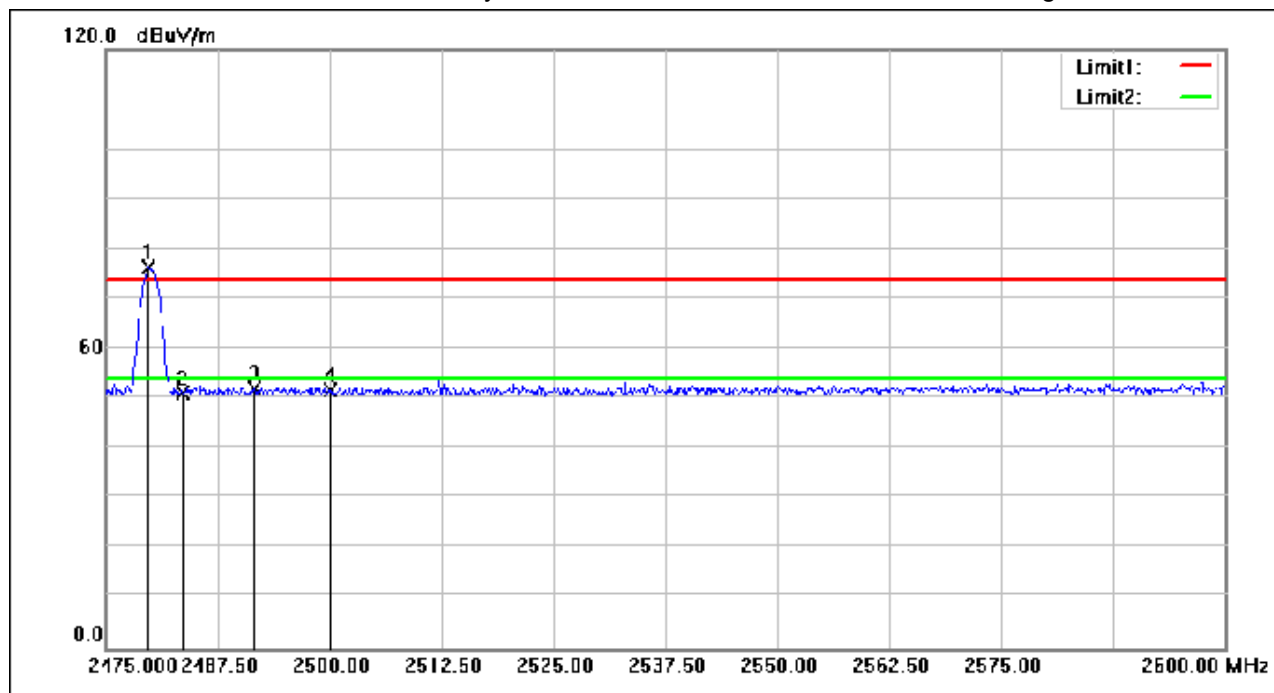
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 71 of 200

Test Mode: 06; Polarity: Vertical; Modulation: $\pi/4$ DQPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.750	100.59	-24.28	76.31	74.00	2.31	peak
2	2483.500	75.56	-24.27	51.29	74.00	-22.71	peak
3	2491.500	76.41	-24.23	52.18	74.00	-21.82	peak
4	2500.000	76.02	-24.19	51.83	74.00	-22.17	peak

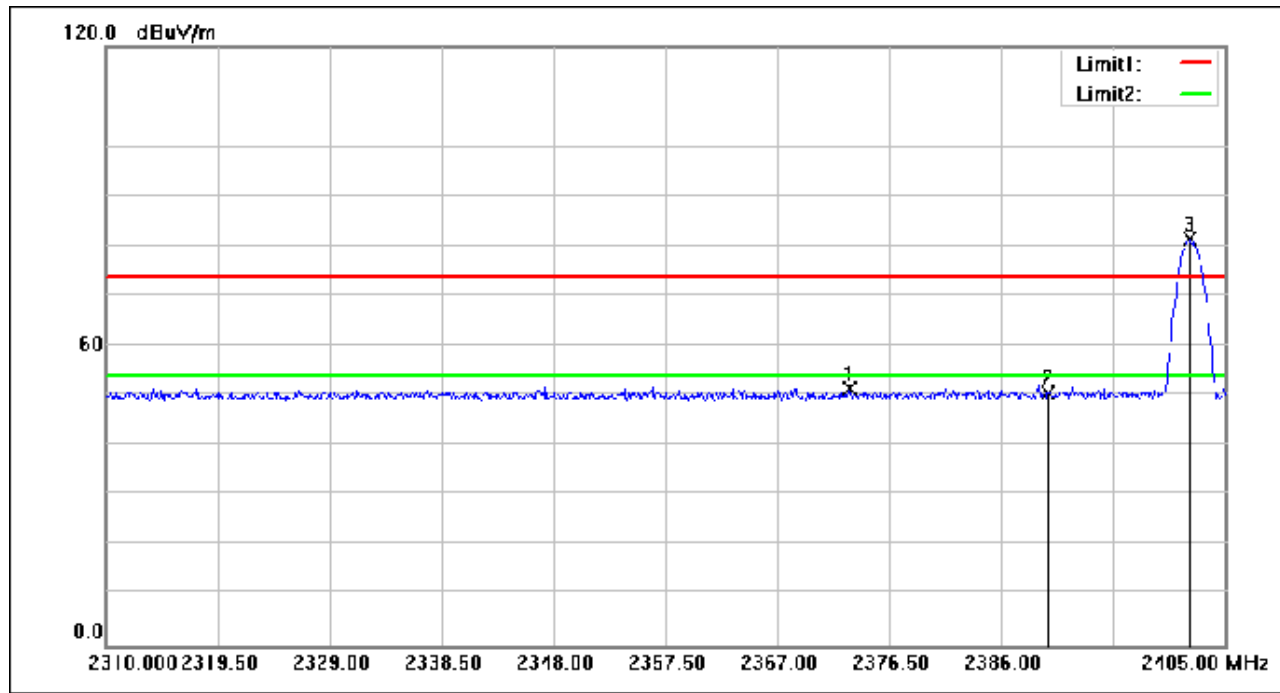
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 72 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.080	76.39	-24.79	51.60	74.00	-22.40	peak
2	2390.000	75.34	-24.71	50.63	74.00	-23.37	peak
3	2401.960	105.96	-24.65	81.31	74.00	7.31	peak

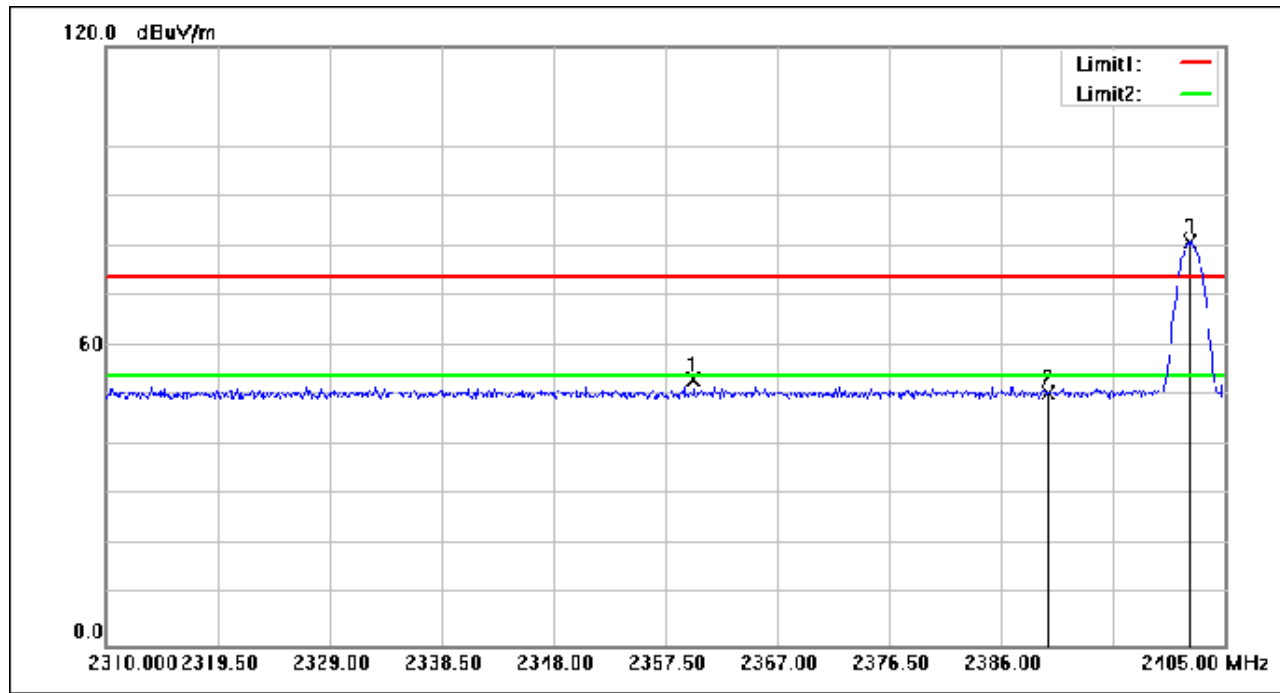
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 73 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2359.875	77.97	-24.85	53.12	74.00	-20.88	peak
2	2390.000	75.27	-24.71	50.56	74.00	-23.44	peak
3	2402.055	105.43	-24.65	80.78	74.00	6.78	peak

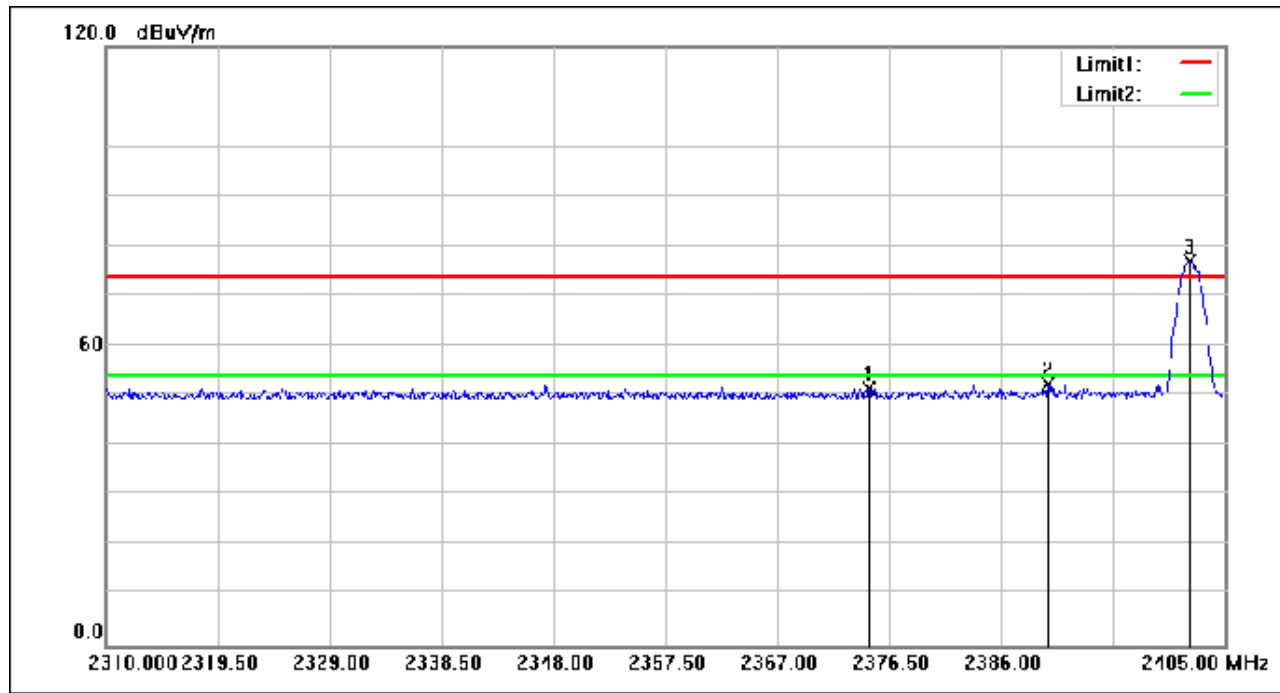
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 74 of 200

Test Mode: 04; Polarity: Vertical; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2374.790	76.34	-24.78	51.56	74.00	-22.44	peak
2	2390.000	77.11	-24.71	52.40	74.00	-21.60	peak
3	2402.055	101.73	-24.65	77.08	74.00	3.08	peak

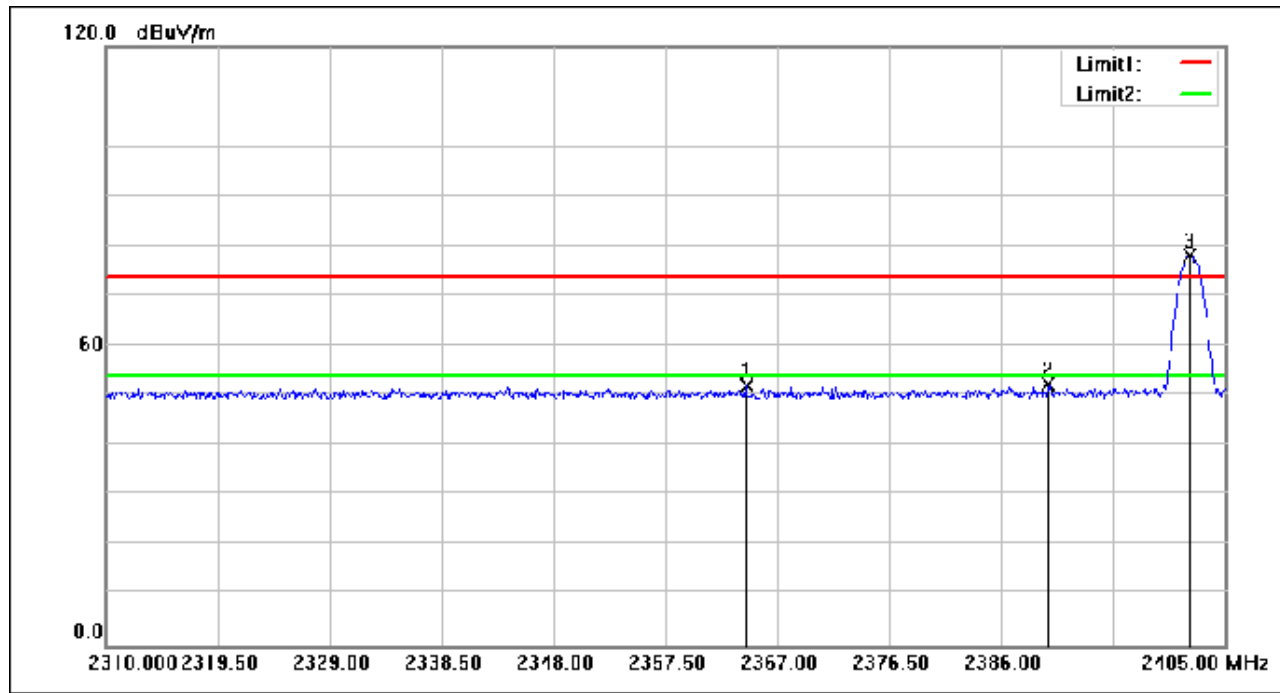
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 75 of 200

Test Mode: 06; Polarity: Vertical; Modulation: 8DPSK; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2364.340	76.78	-24.82	51.96	74.00	-22.04	peak
2	2390.000	76.95	-24.71	52.24	74.00	-21.76	peak
3	2402.055	102.89	-24.65	78.24	74.00	4.24	peak

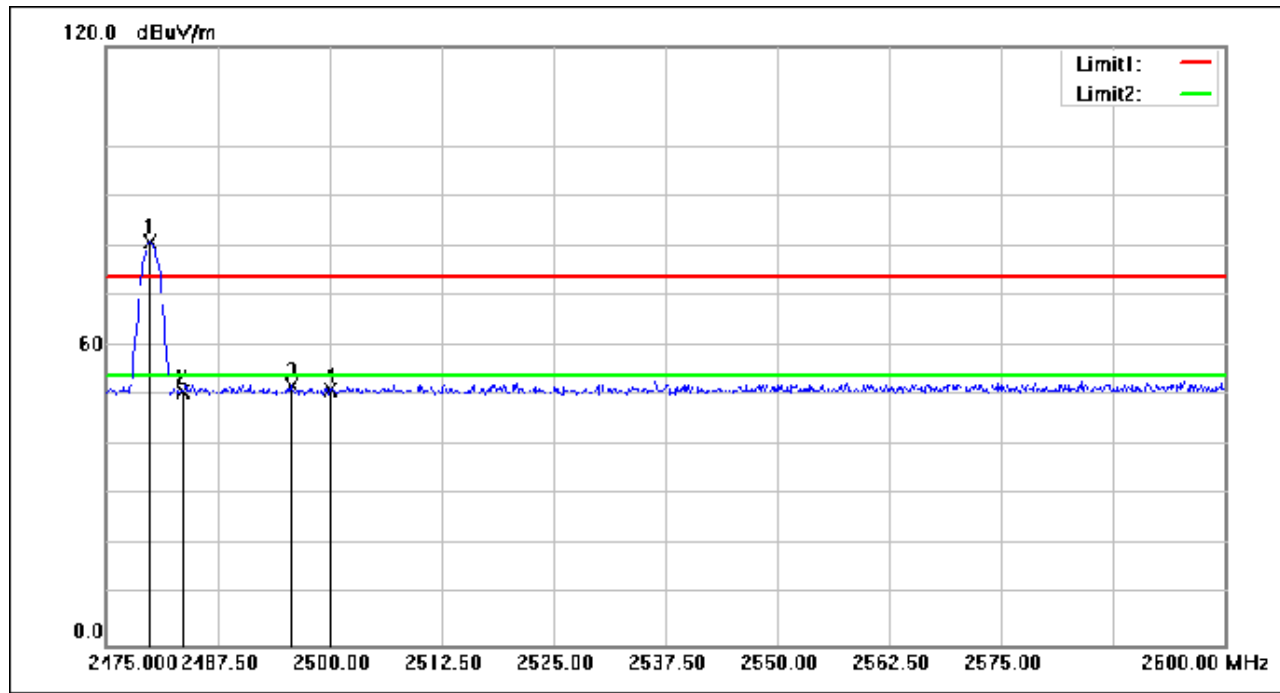
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 76 of 200

Test Mode: 04; Polarity: Horizontal; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	105.06	-24.28	80.78	74.00	6.78	peak
2	2483.500	75.24	-24.27	50.97	74.00	-23.03	peak
3	2495.750	76.40	-24.21	52.19	74.00	-21.81	peak
4	2500.000	75.20	-24.19	51.01	74.00	-22.99	peak

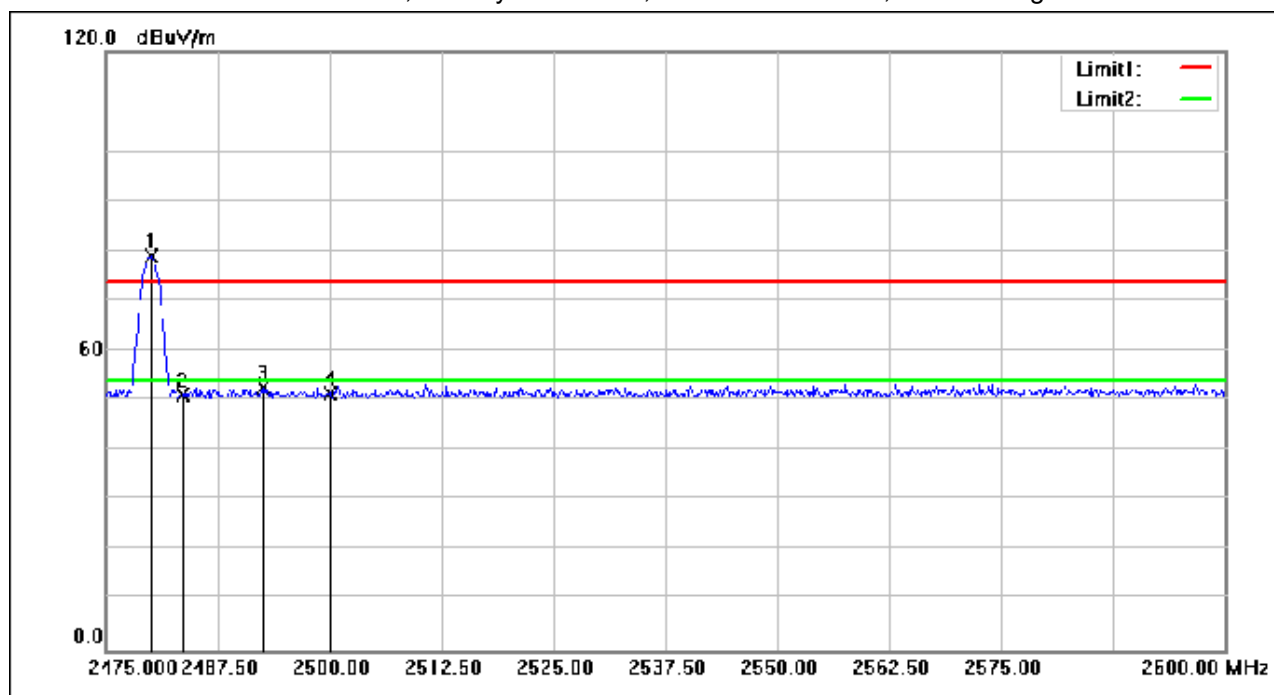
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 77 of 200

Test Mode: 06; Polarity: Horizontal; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.000	103.25	-24.28	78.97	74.00	4.97	peak
2	2483.500	75.53	-24.27	51.26	74.00	-22.74	peak
3	2492.500	76.76	-24.23	52.53	74.00	-21.47	peak
4	2500.000	75.52	-24.19	51.33	74.00	-22.67	peak

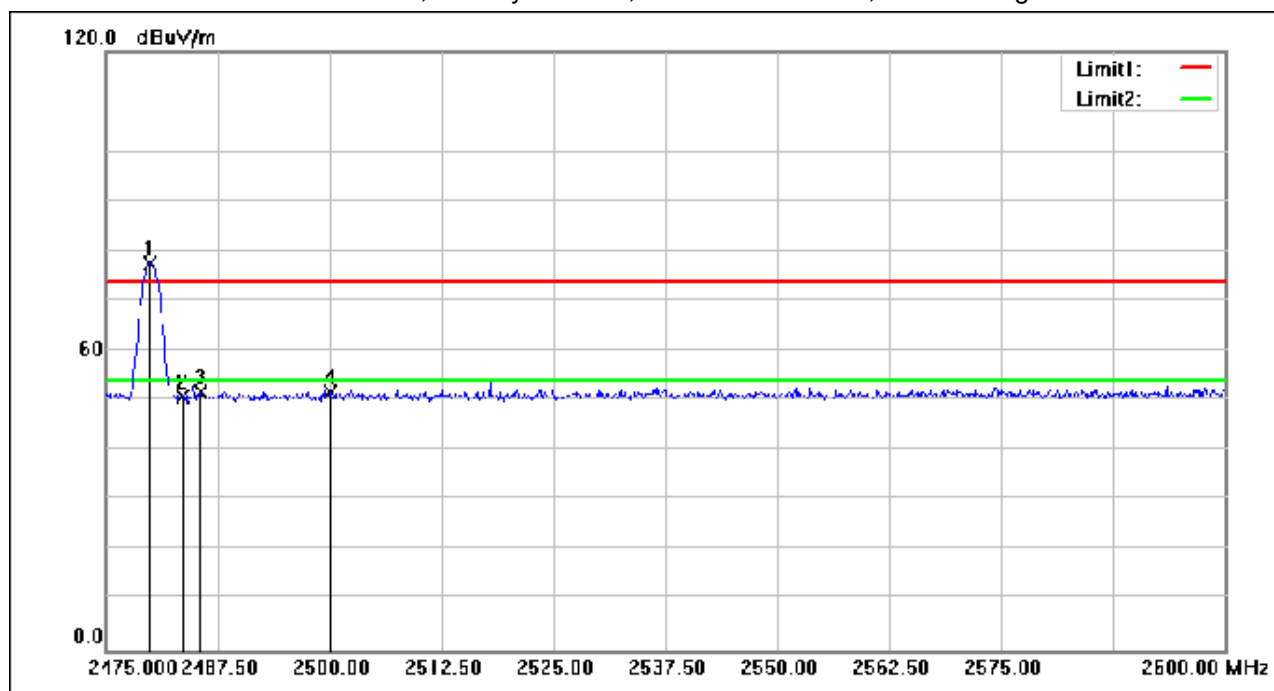
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 78 of 200

Test Mode: 04; Polarity: Vertical; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	101.85	-24.28	77.57	74.00	3.57	peak
2	2483.500	75.06	-24.27	50.79	74.00	-23.21	peak
3	2485.500	76.09	-24.26	51.83	74.00	-22.17	peak
4	2500.000	75.97	-24.19	51.78	74.00	-22.22	peak

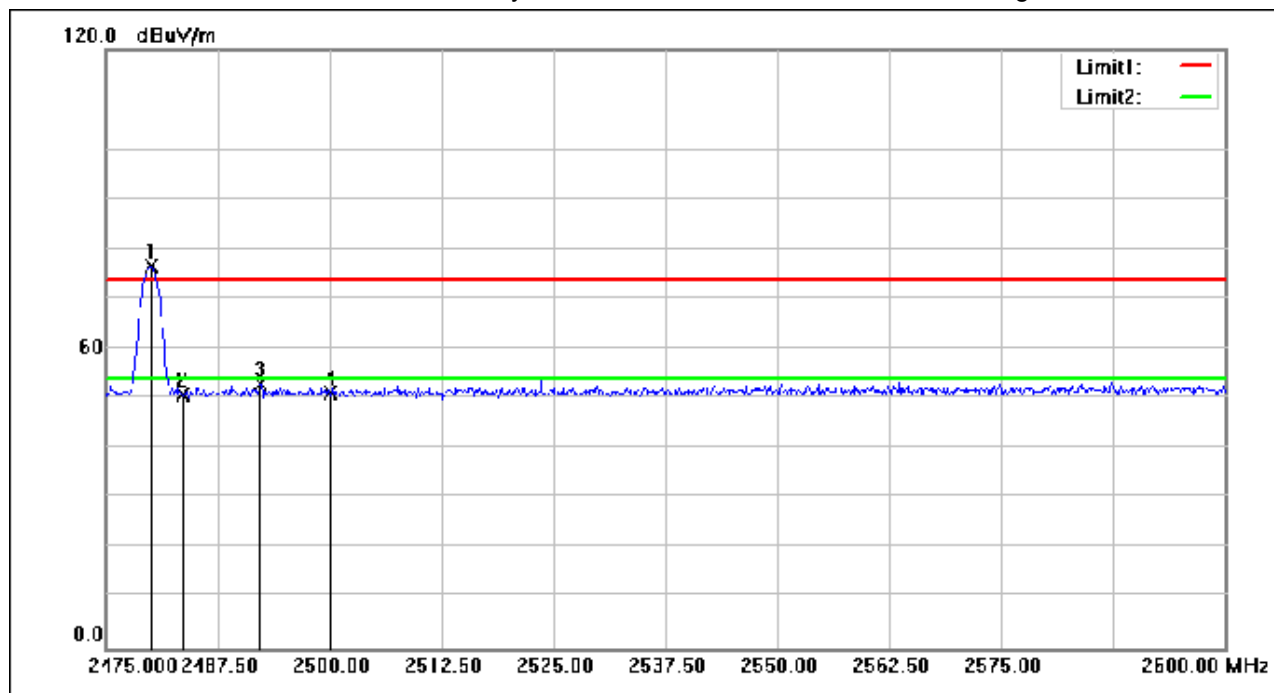
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 79 of 200

Test Mode: 06; Polarity: Vertical; Modulation: 8DPSK; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.000	100.90	-24.28	76.62	74.00	2.62	peak
2	2483.500	75.05	-24.27	50.78	74.00	-23.22	peak
3	2492.250	77.31	-24.23	53.08	74.00	-20.92	peak
4	2500.000	75.28	-24.19	51.09	74.00	-22.91	peak



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 80 of 200

7.4 Conducted Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 7.8.8

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	05	TX_Hop mode_Keep the EUT (Left ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	07	TX_Hop mode_Keep the EUT (Right ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.4.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 81 of 200

7.5 Conducted Band Edges Measurement

Test Requirement 47 CFR Part 15, Subpart C 15.247(d)

Test Method: ANSI C63.10 (2013) Section 7.8.6

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	05	TX_Hop mode_Keep the EUT (Left ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	07	TX_Hop mode_Keep the EUT (Right ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.5.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 82 of 200

7.6 Dwell Time

Test Requirement 47 CFR Part 15, Subpart C 15.247a(1)(iii)

Test Method: ANSI C63.10 (2013) Section 7.8.4

Limit:

Frequency(MHz)	Limit
902-928	0.4S within a 20S period(20dB bandwidth<250kHz)
	0.4S within a 10S period(20dB bandwidth≥250kHz)
2400-2483.5	0.4S within a period of 0.4S multiplied by the number of hopping channels
5725-5850	0.4S within a 30S period

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	TX_Hop mode_Keep the EUT (Left ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	07	TX_Hop mode_Keep the EUT (Right ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.6.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 83 of 200

7.7 Hopping Channel Number

Test Requirement 47 CFR Part 15, Subpart C 15.247a(1)(iii)

Test Method: ANSI C63.10 (2013) Section 7.8.3

Limit:

Frequency range(MHz)	Number of hopping channels (minimum)
902-928	50 for 20dB bandwidth <250kHz
	25 for 20dB bandwidth ≥250kHz
2400-2483.5	15
5725-5850	75

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	TX_Hop mode_Keep the EUT (Left ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	07	TX_Hop mode_Keep the EUT (Right ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.7.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 84 of 200

7.8 Carrier Frequencies Separation

Test Requirement 47 CFR Part 15, Subpart C 15.247a(1)

Test Method: ANSI C63.10 (2013) Section 7.8.2

Limit:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	TX_Hop mode_Keep the EUT (Left ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	07	TX_Hop mode_Keep the EUT (Right ear) in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 85 of 200

7.9 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247(a)(1)

Test Method: ANSI C63.10 (2013) Section 7.8.7

Limit:

20 dB bandwidth of the hopping channel	Hopping frequencies	Average time of occupancy
less than 250 kHz	least 50 hopping frequencies	shall not be greater than 0.4 seconds within a 20 second period
250 kHz to 500kHz	least 25 hopping frequencies	shall not be greater than 0.4 seconds within a 10 second period.

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.10 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(1)

Test Method: ANSI C63.10 (2013) Section 7.8.5

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 29.3 °C

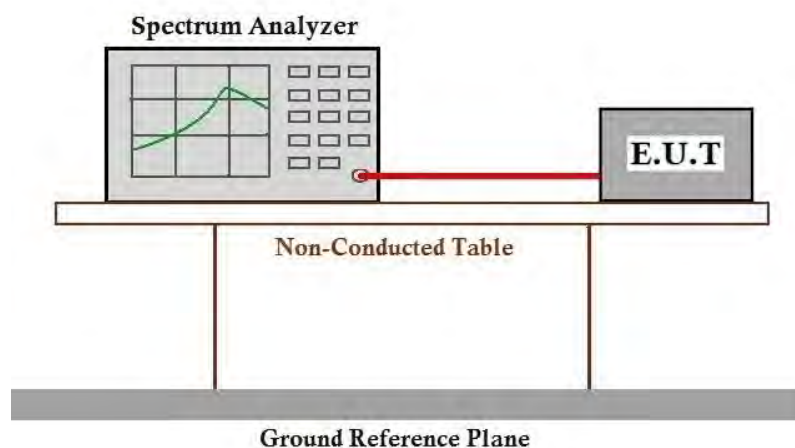
Humidity: 52.9 % RH

Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_non-Hop mode_Keep the EUT (Left ear) in continuously transmitting mode with GFSK modulation, $\pi/4$ DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	06	TX_non-Hop mode_Keep the EUT (Right ear) in continuously transmitting mode with GFSK modulation, $\pi/4$ DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram





Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 87 of 200

7.10.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 88 of 200

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2408001569AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2408001569AT

10 Appendix

Left Ear

Channel	DH	2DH	3DH
	Ant 1	Ant 1	Ant 1
0	9	9	9
39	9	9	9
78	9	9	9

1. Duty Cycle

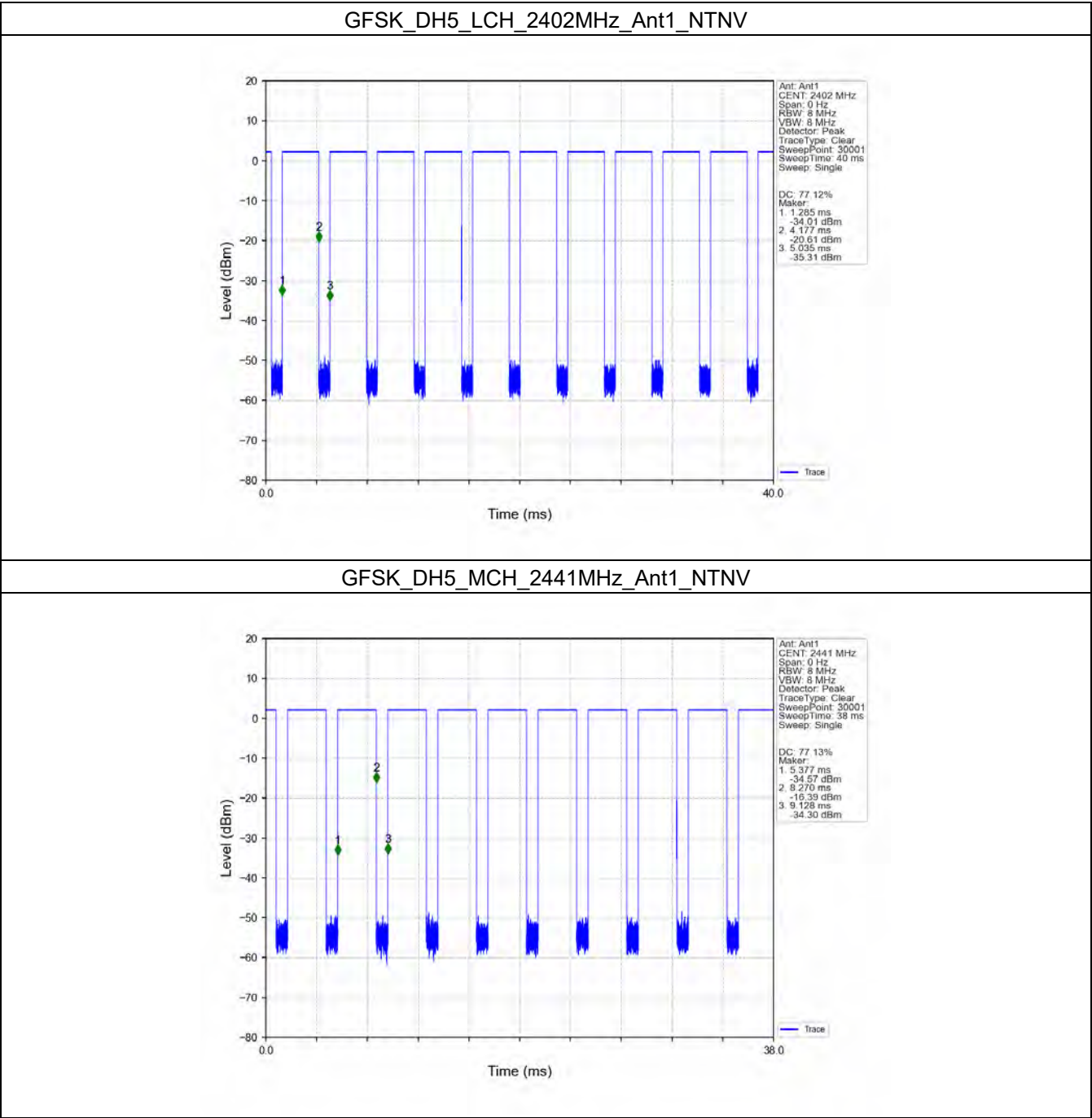
1.1 Test Result

1.1.1 Ant1

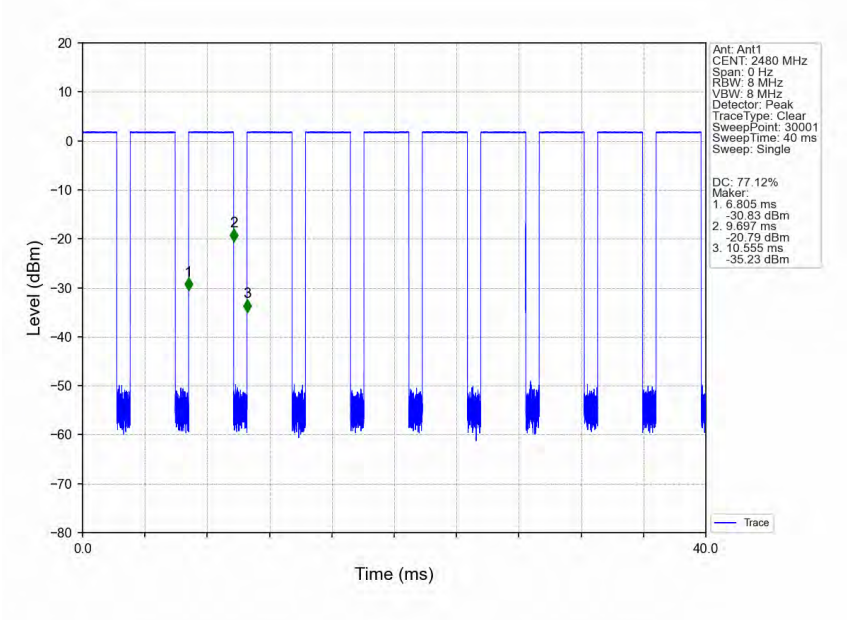
Ant1								
Mode	Tx Type	Frequency (MHz)	Packet Type	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
GFSK	SISO	2402	DH5	2.892	3.750	77.12	1.13	0.04
		2441	DH5	2.893	3.751	77.13	1.13	0.03
		2480	DH5	2.892	3.750	77.12	1.13	0.04
Pi/4DQPSK	SISO	2402	2DH5	2.899	3.751	77.29	1.12	0.06
		2441	2DH5	2.897	3.749	77.27	1.12	0.04
		2480	2DH5	2.898	3.751	77.26	1.12	0.06
8DPSK	SISO	2402	3DH5	2.900	3.750	77.33	1.12	0.03
		2441	3DH5	2.900	3.751	77.31	1.12	0.03
		2480	3DH5	2.899	3.750	77.31	1.12	0.03

1.2 Test Graph

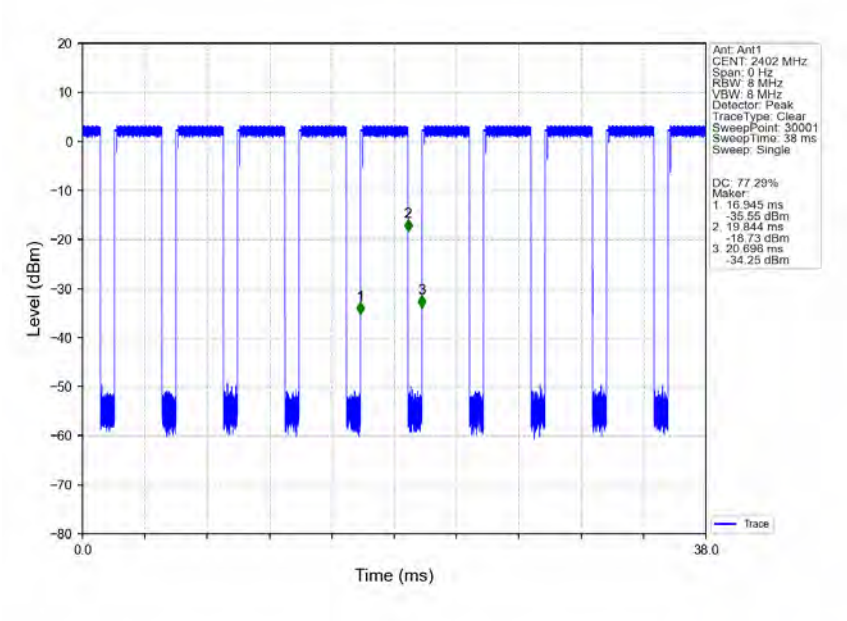
1.2.1 Ant1



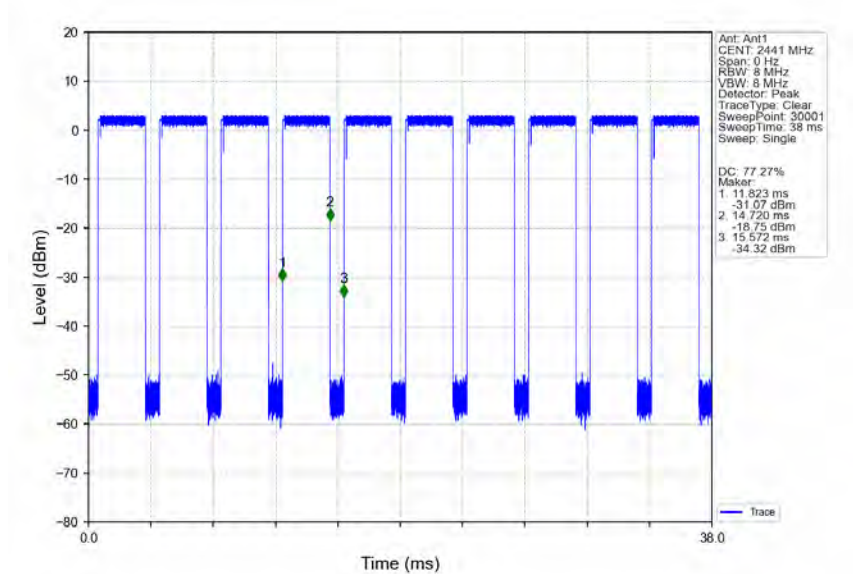
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



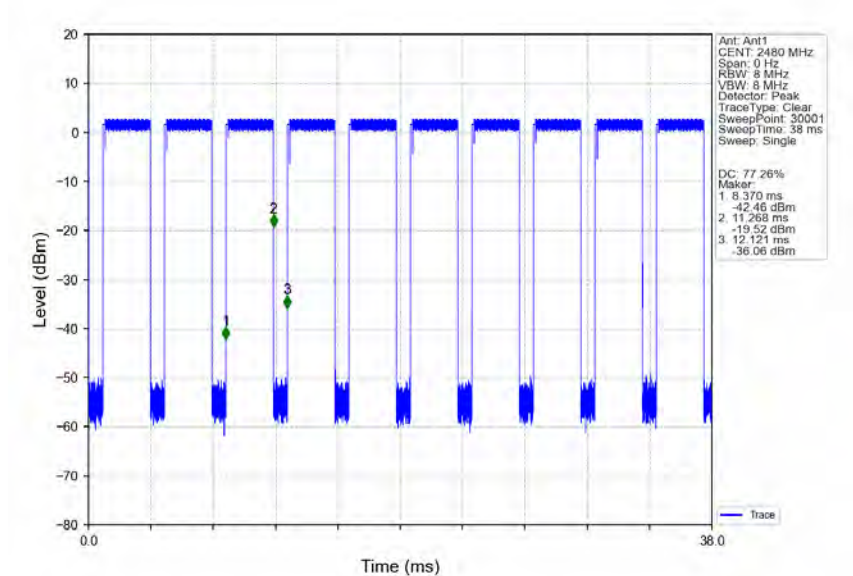
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



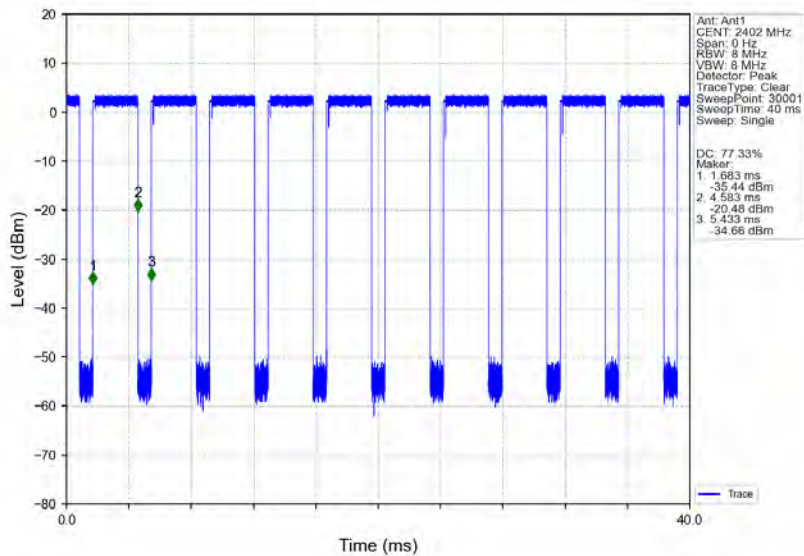
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



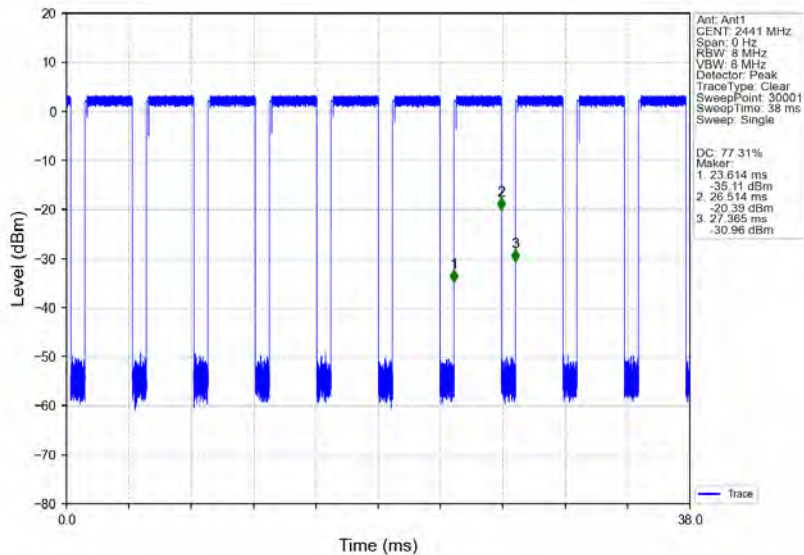
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



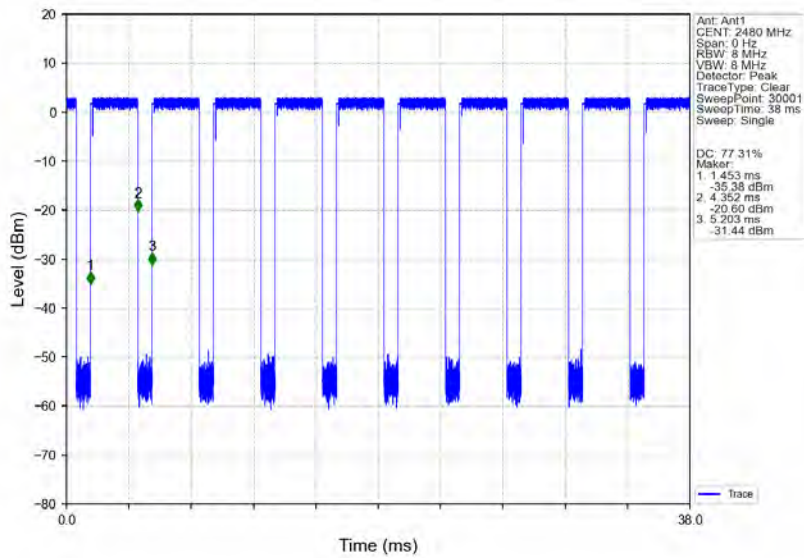
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 95 of 200

2. Bandwidth

2.1 Test Result

2.1.1 OBW

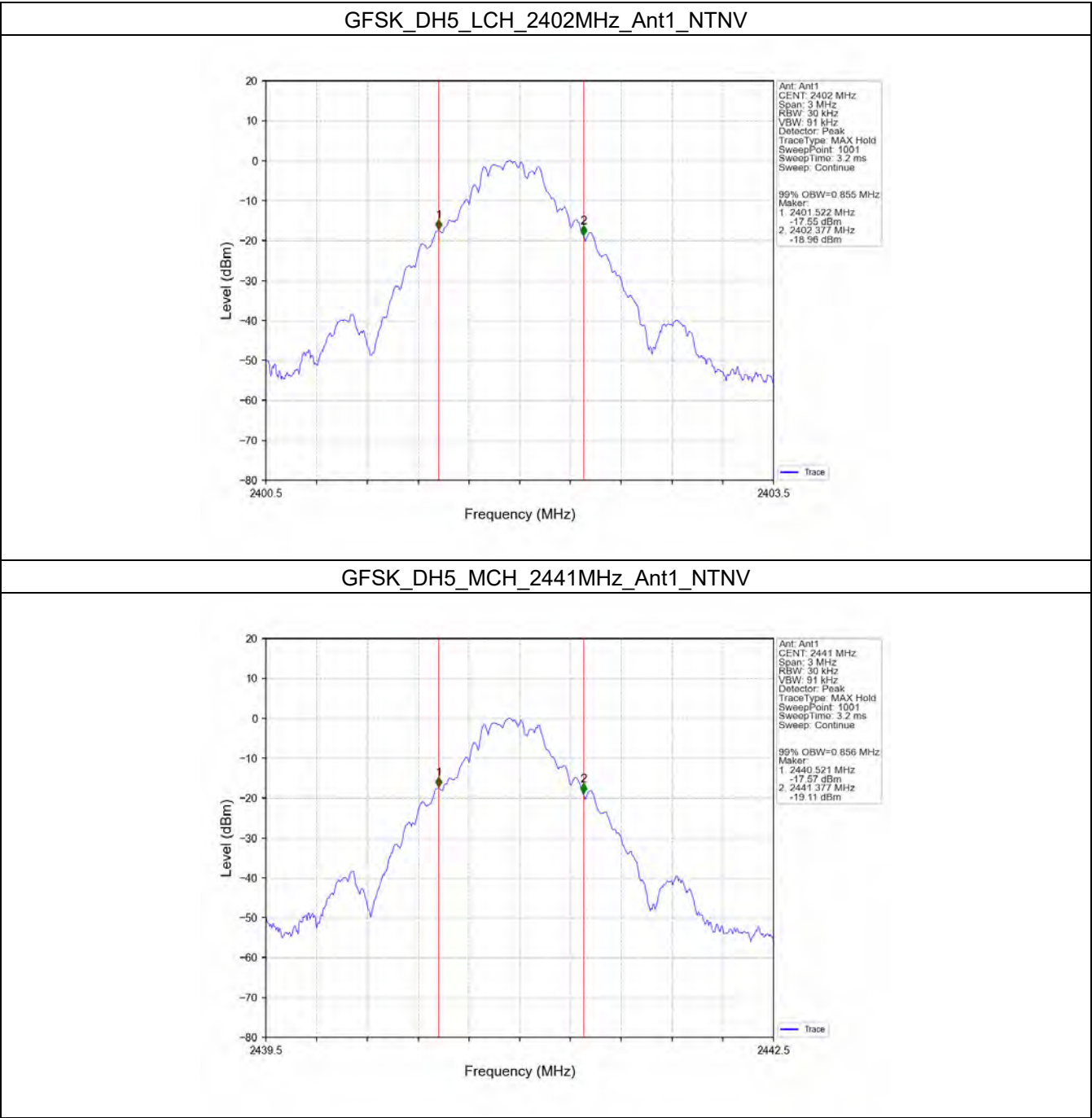
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.855	/	Pass
		2441	DH5	1	0.856	/	Pass
		2480	DH5	1	0.857	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.168	/	Pass
		2441	2DH5	1	1.172	/	Pass
		2480	2DH5	1	1.168	/	Pass
8DPSK	SISO	2402	3DH5	1	1.178	/	Pass
		2441	3DH5	1	1.184	/	Pass
		2480	3DH5	1	1.181	/	Pass

2.1.2 20dB BW

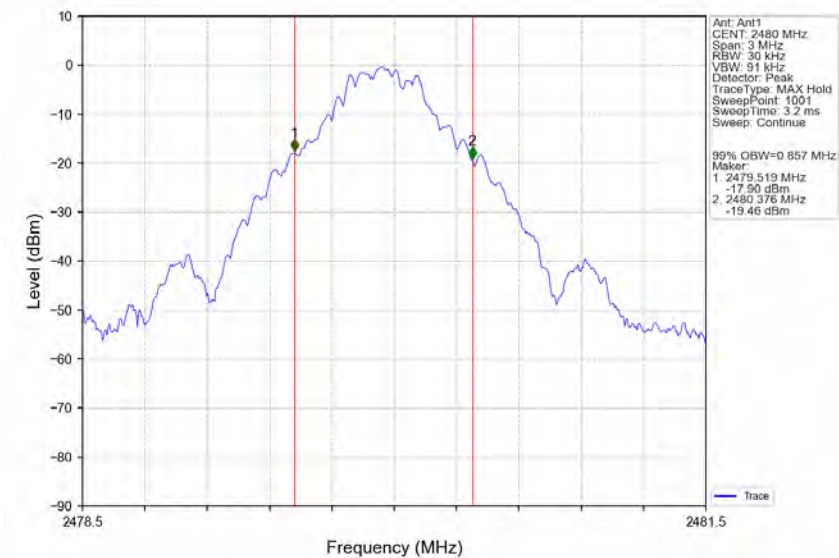
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.954	/	Pass
		2441	DH5	1	0.950	/	Pass
		2480	DH5	1	0.956	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.284	/	Pass
		2441	2DH5	1	1.287	/	Pass
		2480	2DH5	1	1.284	/	Pass
8DPSK	SISO	2402	3DH5	1	1.303	/	Pass
		2441	3DH5	1	1.304	/	Pass
		2480	3DH5	1	1.301	/	Pass

2.2 Test Graph

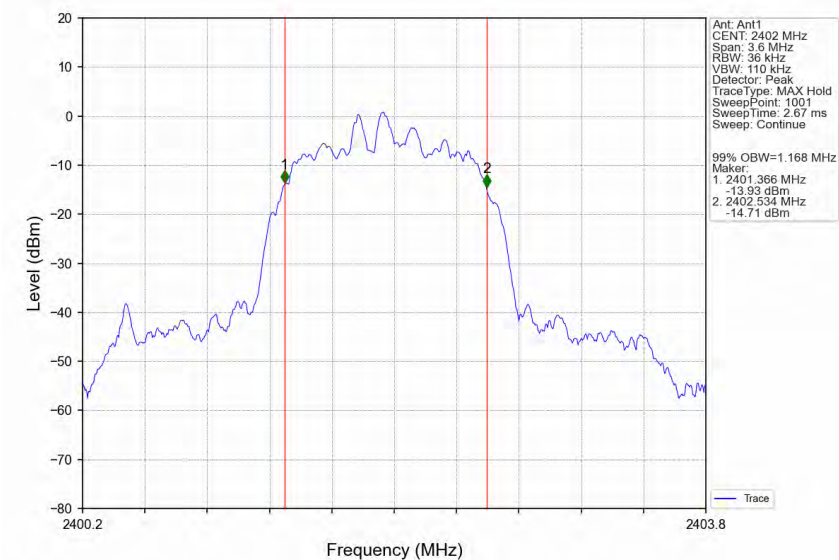
2.2.1 OBW



GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



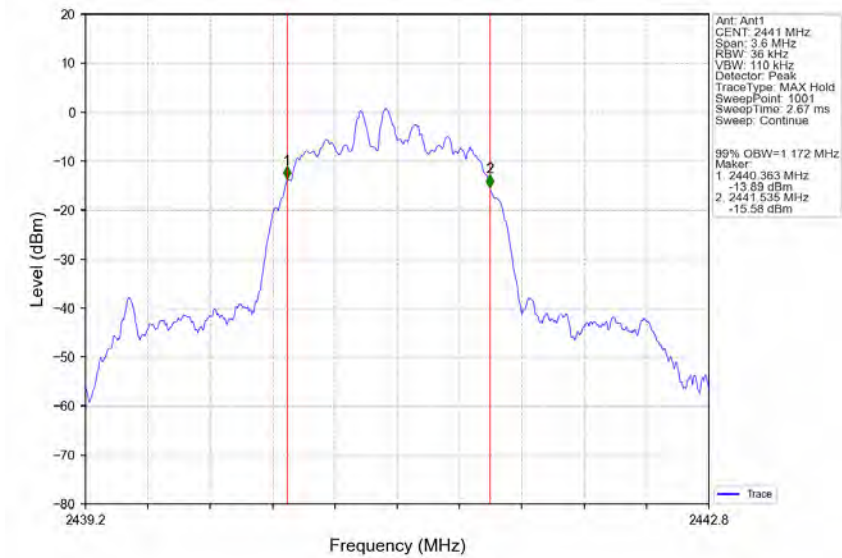
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

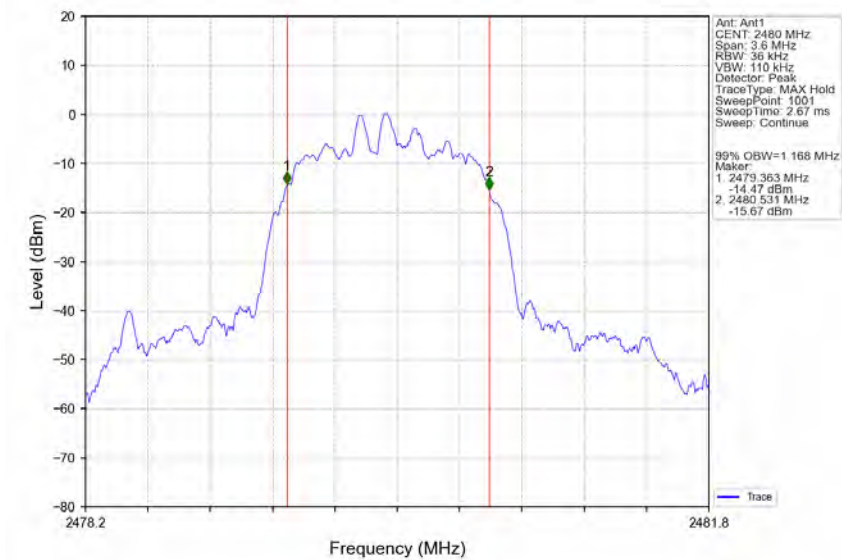
Report No.: KSCR240800156901

Page: 98 of 200

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



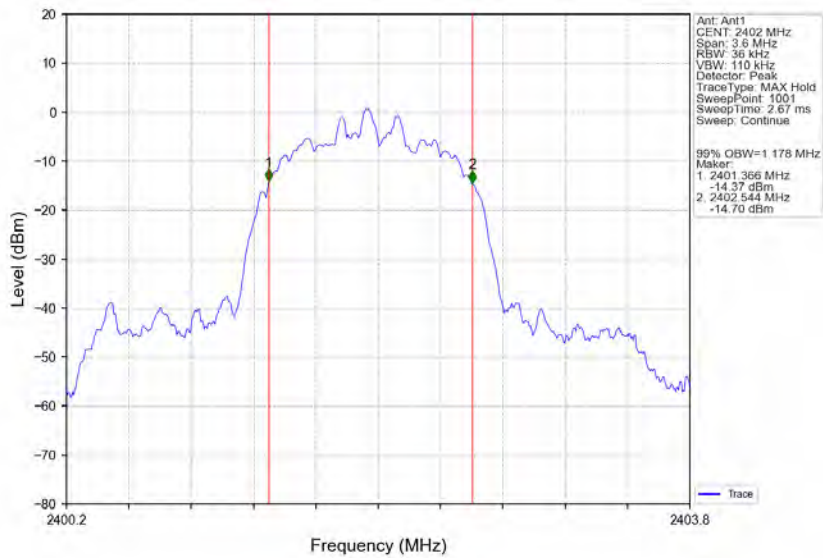
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

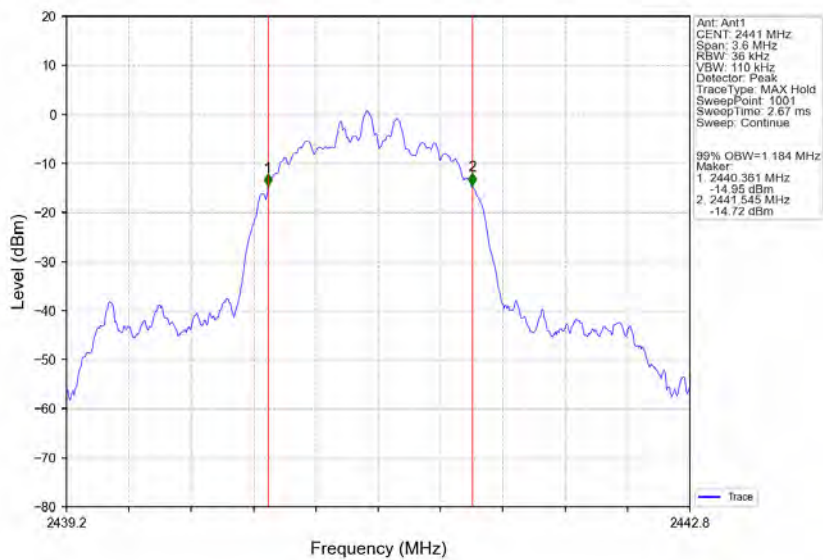
Report No.: KSCR240800156901

Page: 99 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



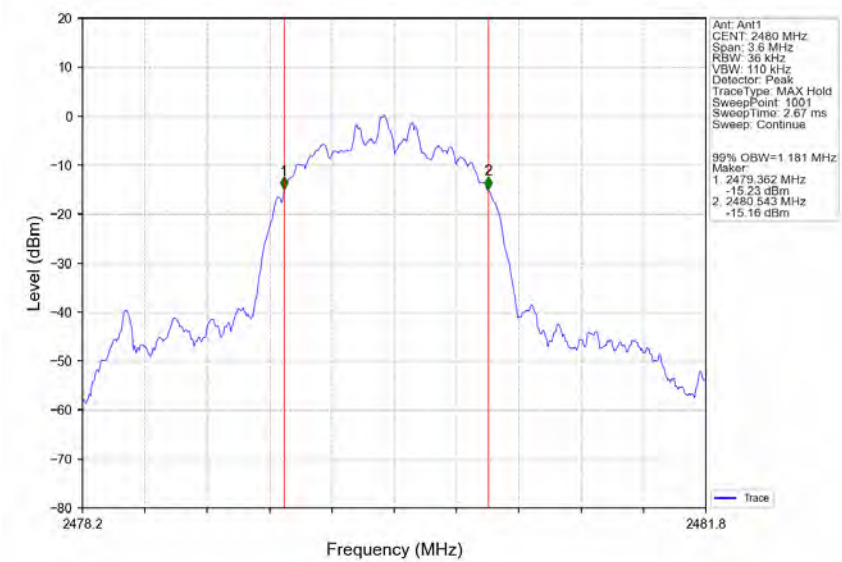
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

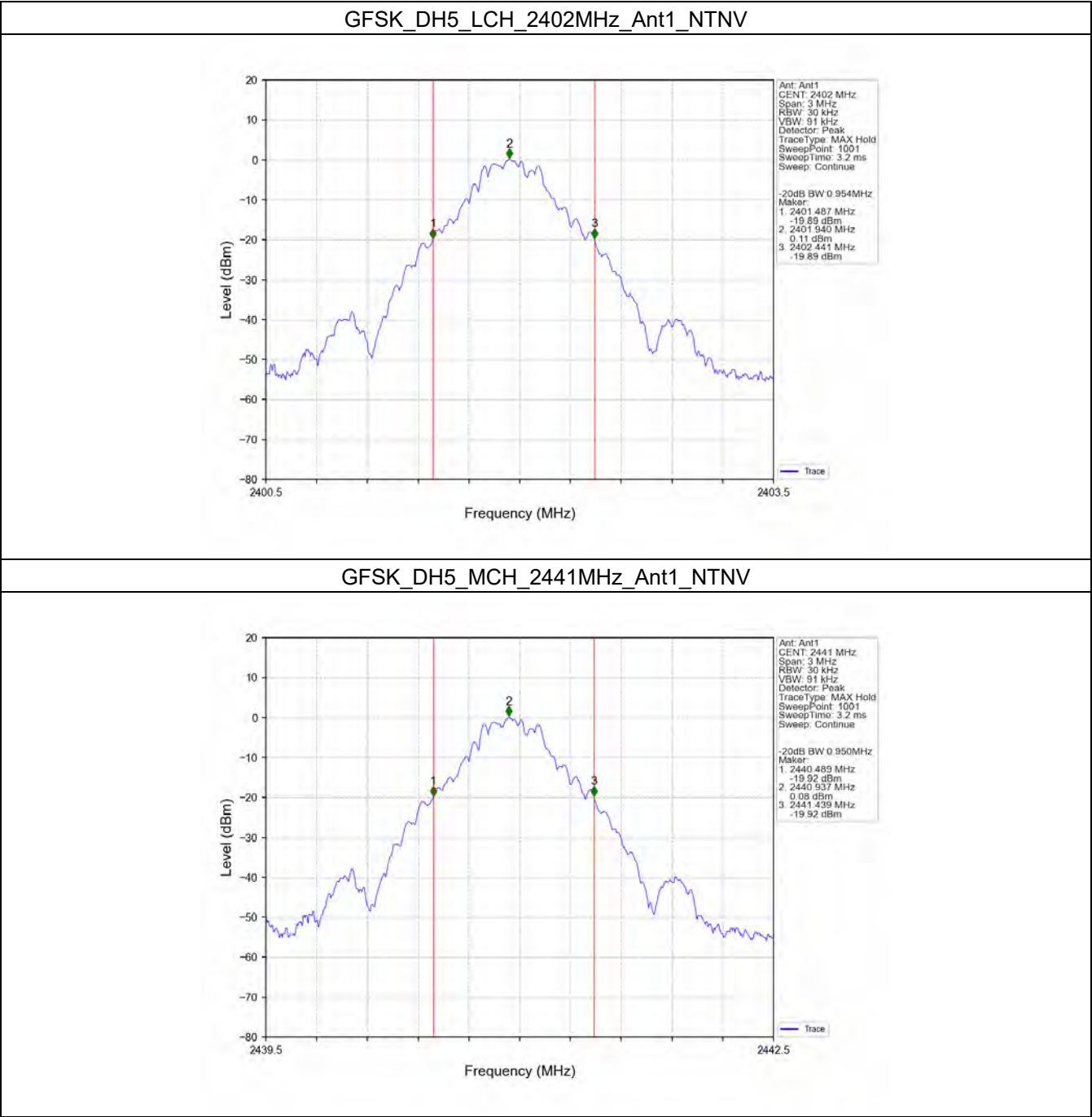
Report No.: KSCR240800156901

Page: 100 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



2.2.2 20dB BW



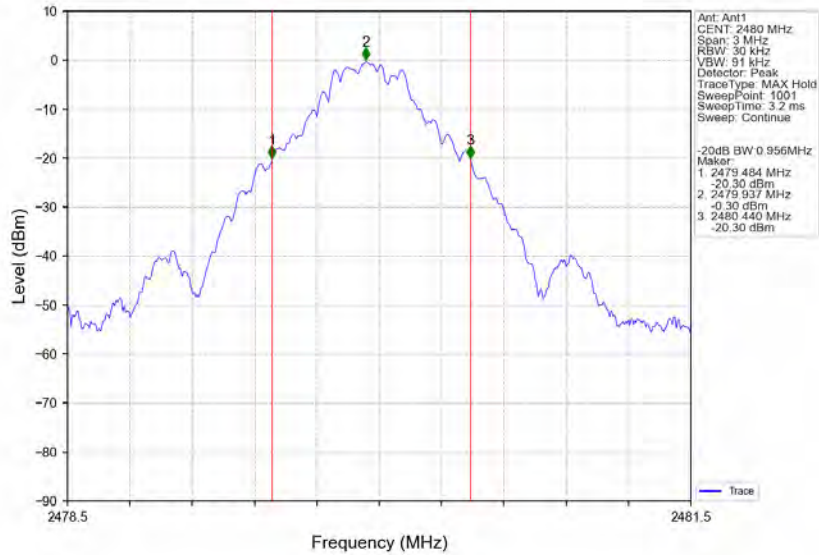
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

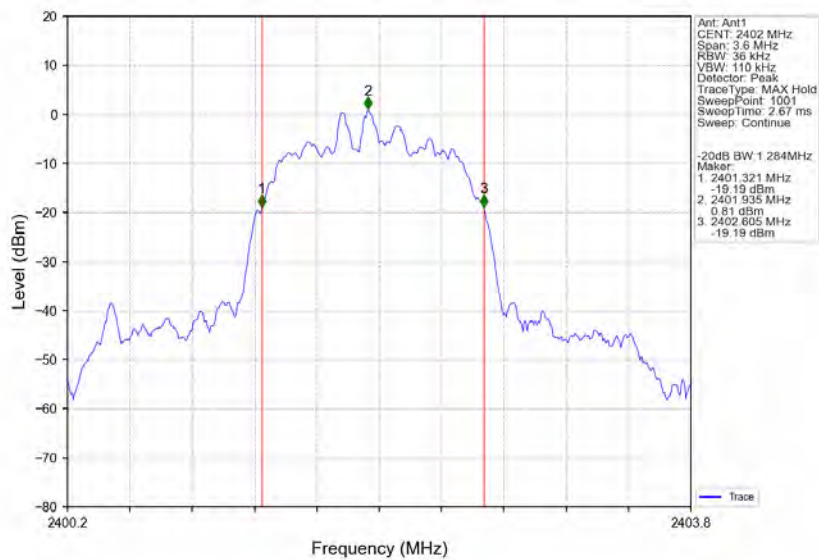
Report No.: KSCR240800156901

Page: 102 of 200

GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



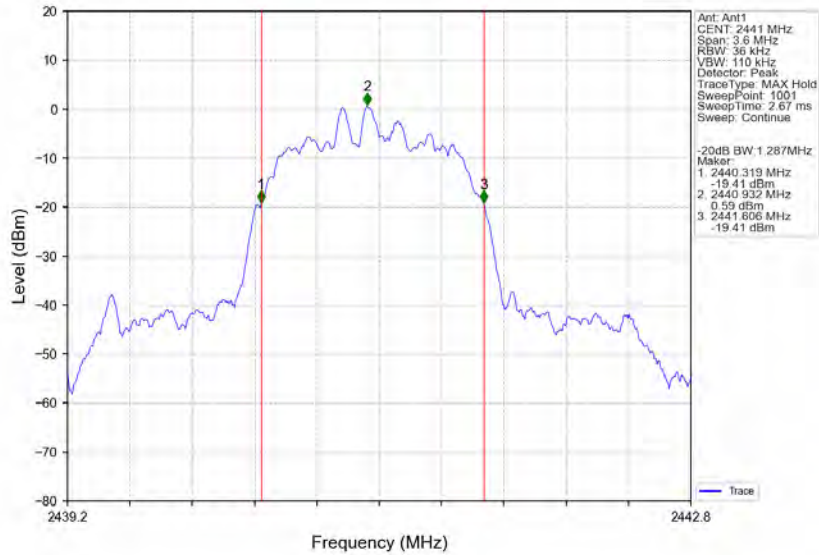
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

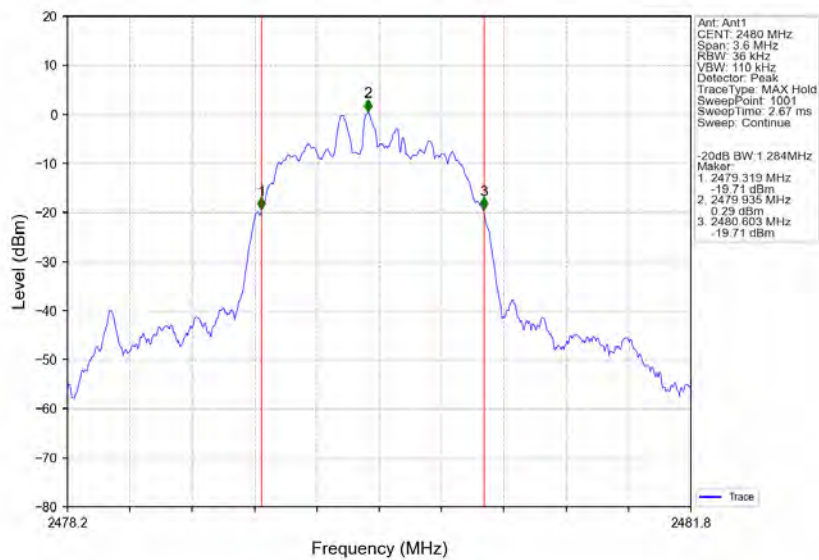
Report No.: KSCR240800156901

Page: 103 of 200

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



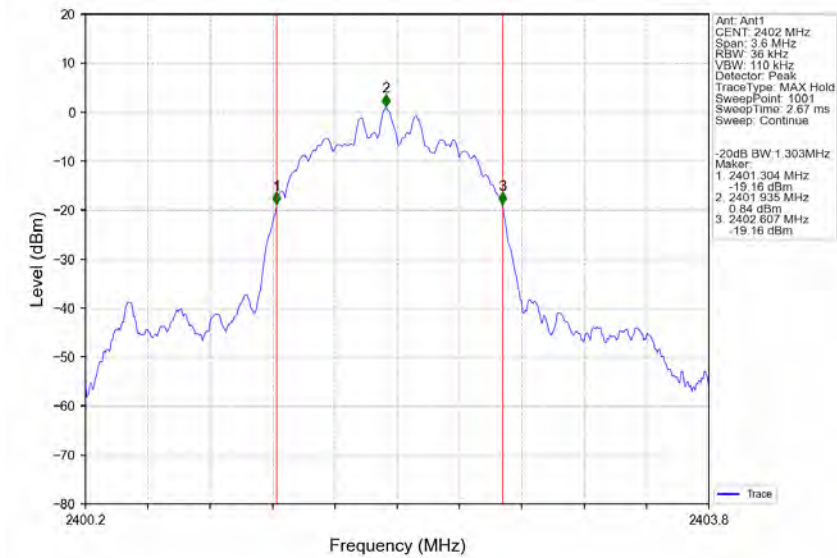
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

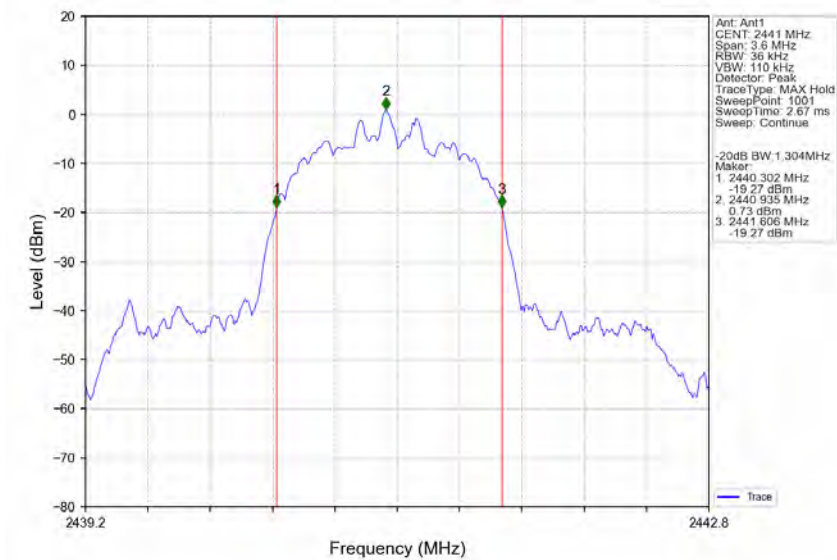
Report No.: KSCR240800156901

Page: 104 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



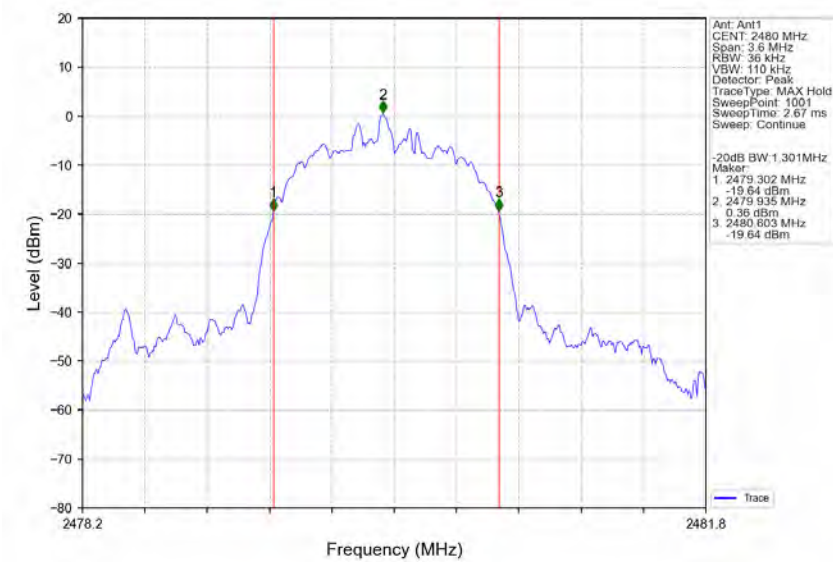
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 105 of 200

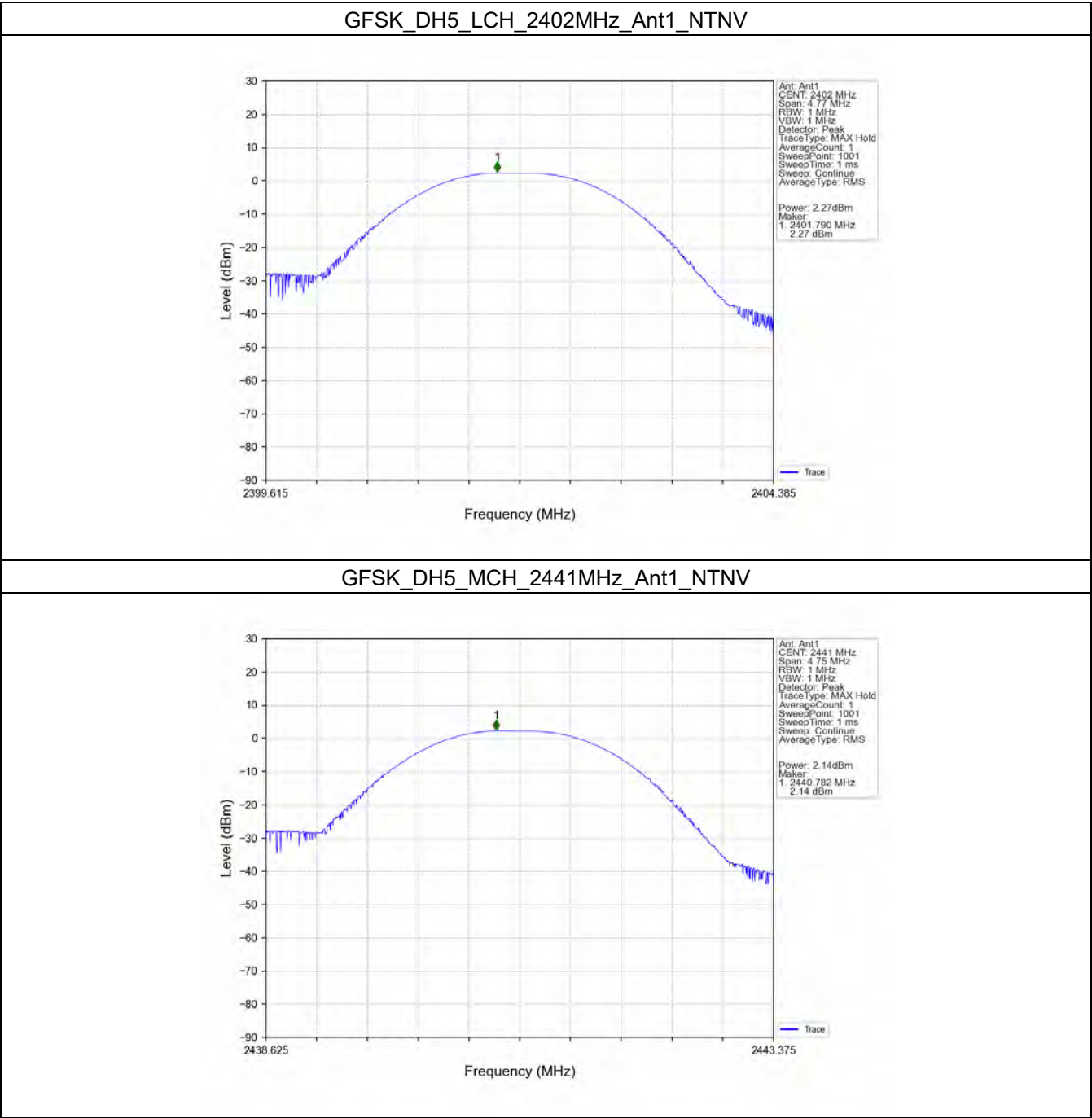
8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



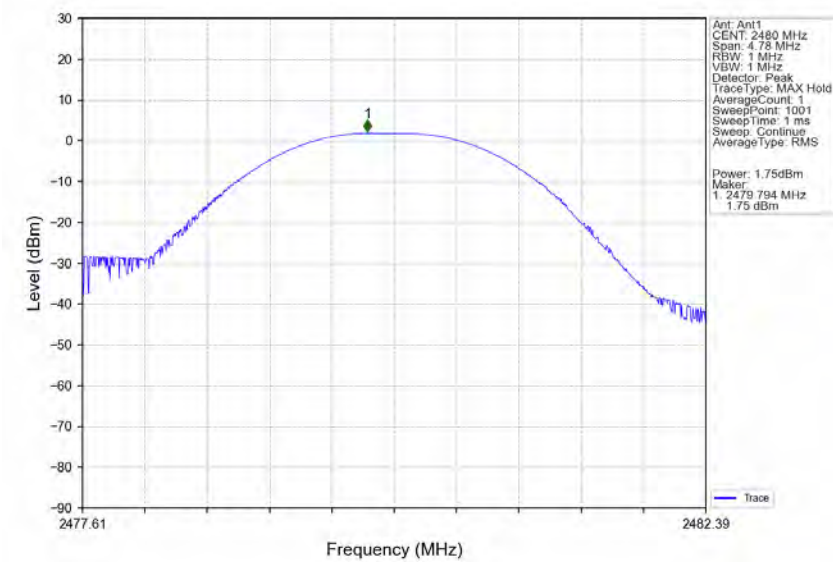
Note1: Antenna Gain: Ant1: -1 dBi;

3.2 Test Graph

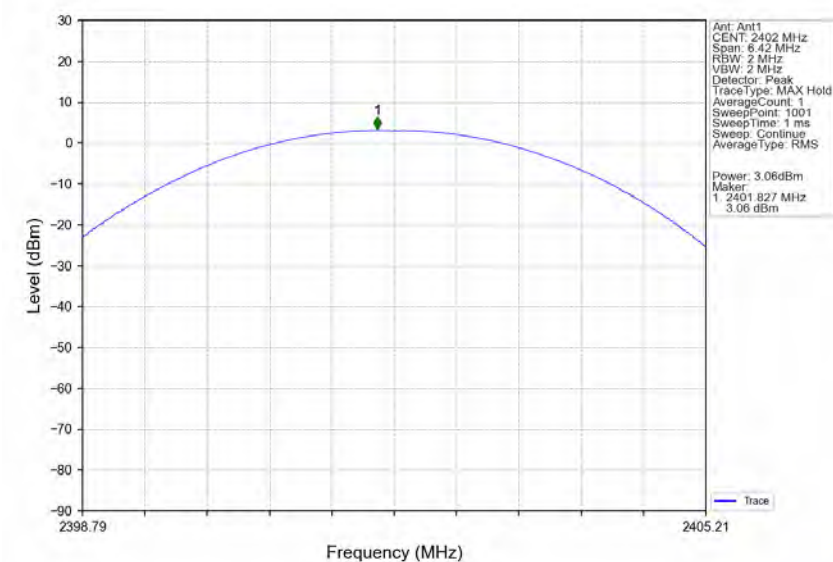
3.2.1 Power



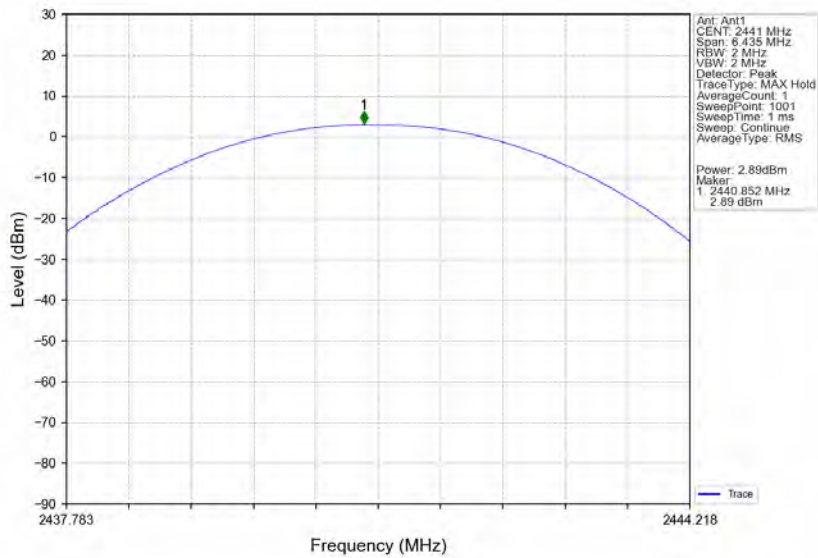
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



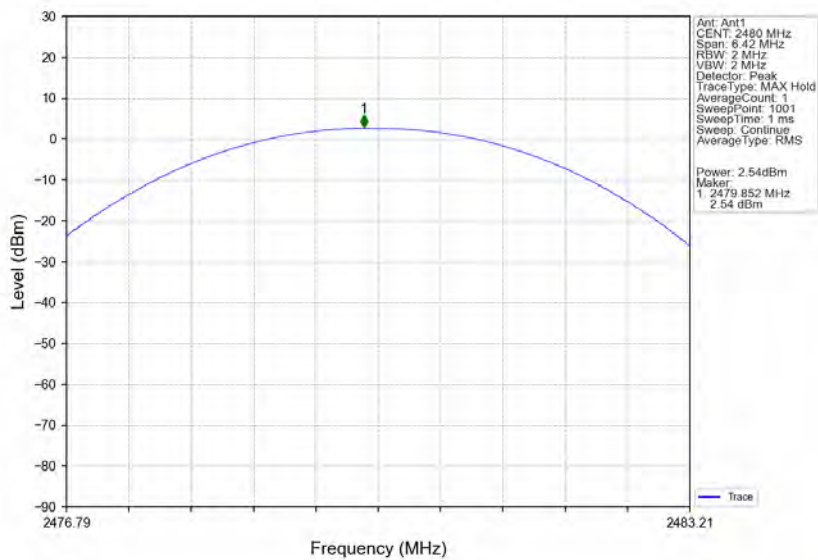
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



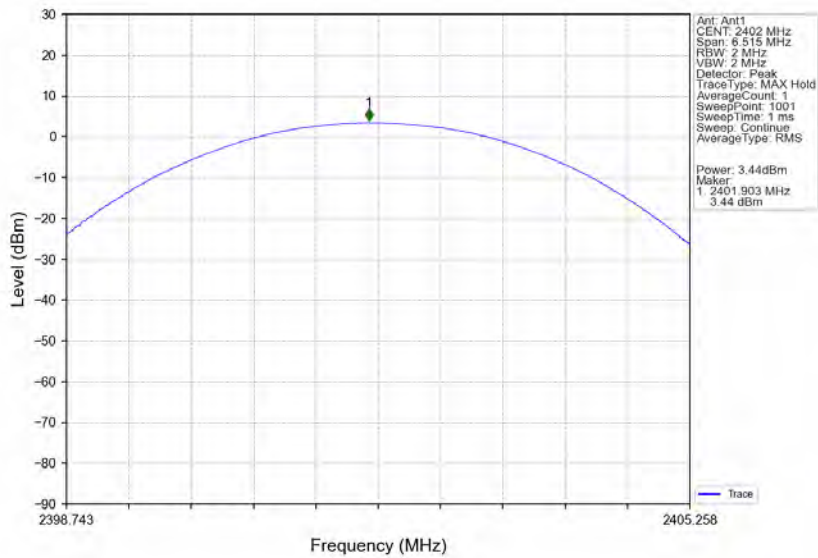
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



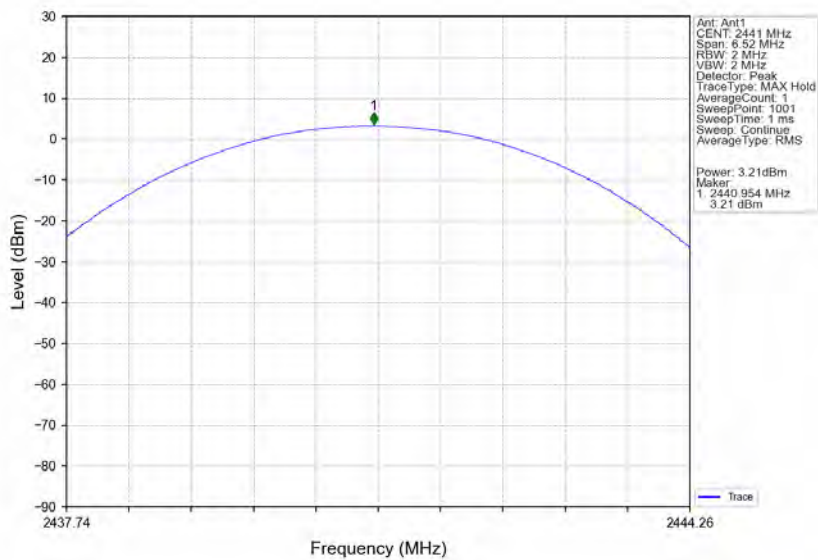
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



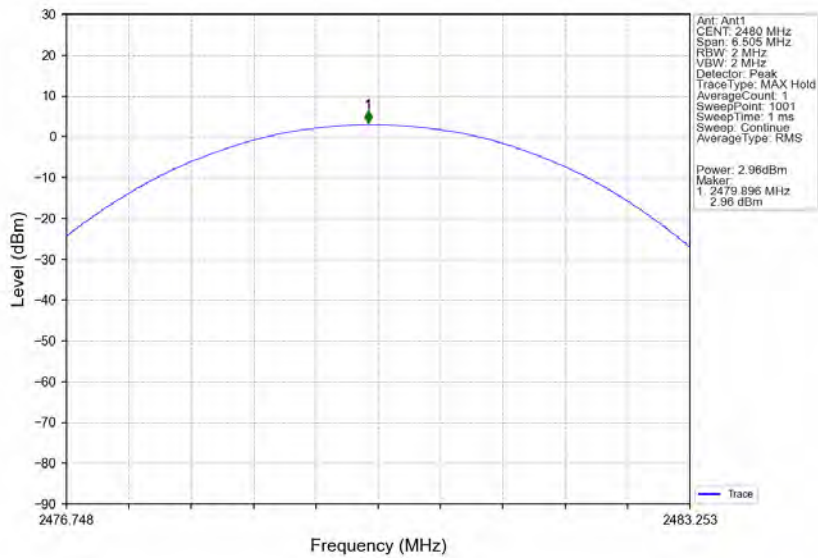
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 111 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV





Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 112 of 200

4. Carrier Frequency Separation

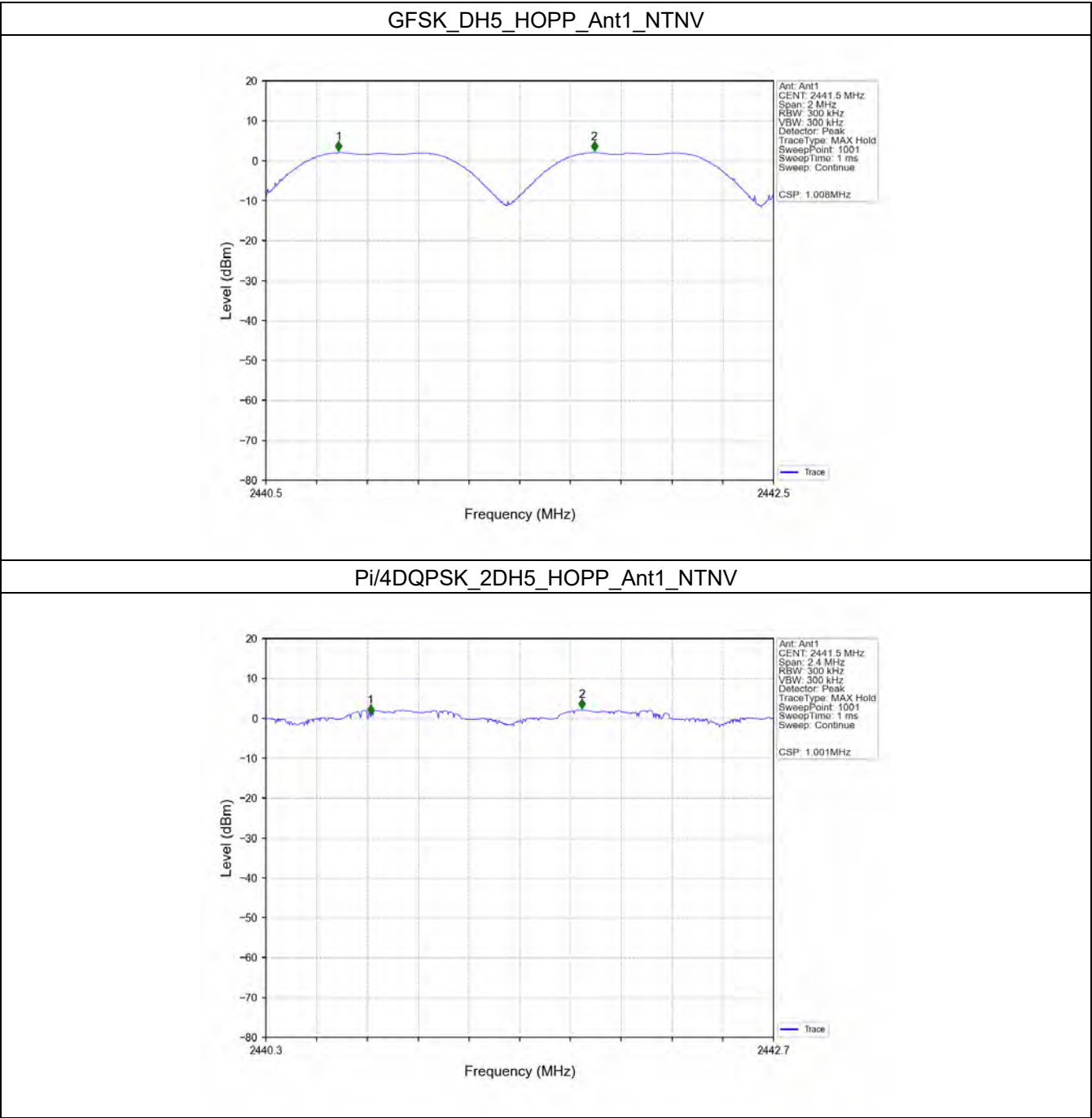
4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.008	0.956	≥ 0.956	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.001	1.287	≥ 0.858	Pass
8DPSK	SISO	HOPP	3DH5	1.003	1.304	≥ 0.869	Pass

4.2 Test Graph

4.2.1 Ant1





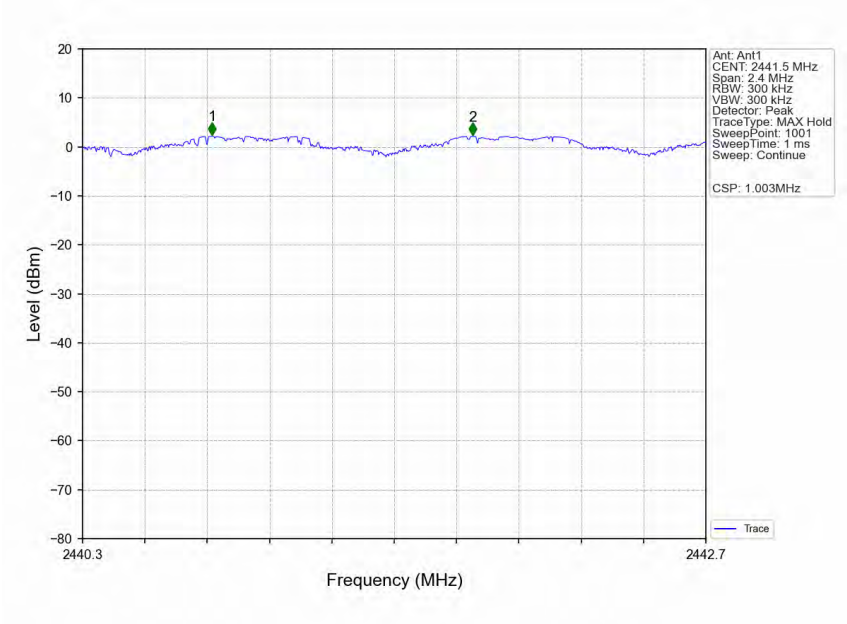
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 114 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV





Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 115 of 200

5. Number of Hopping Frequencies

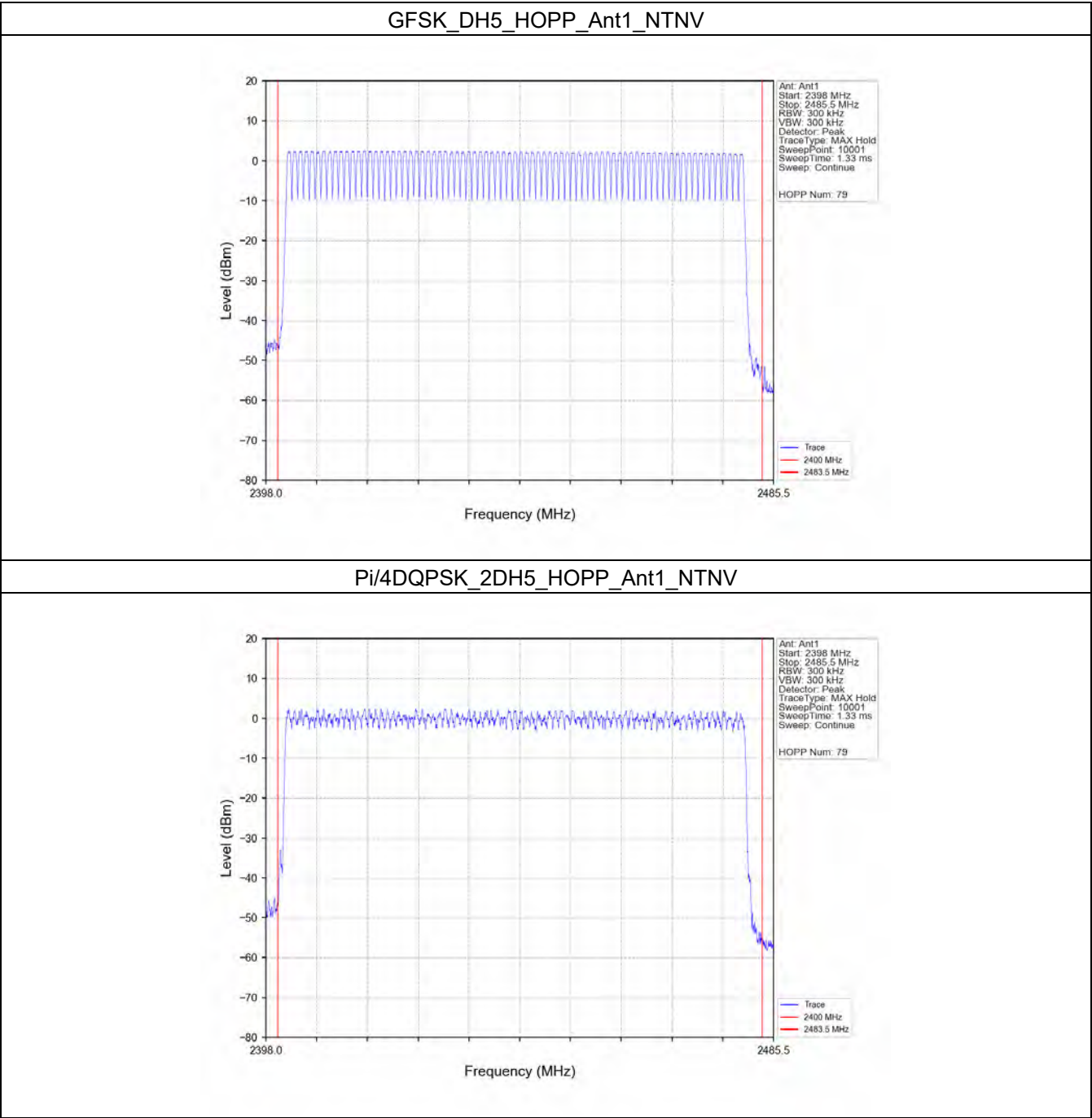
5.1 Test Result

5.1.1 HoppNum

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

5.2 Test Graph

5.2.1 HoppNum



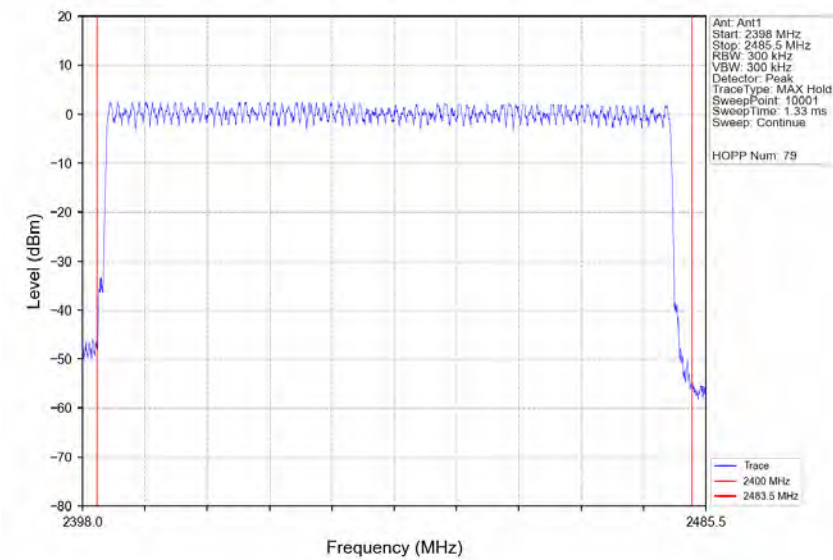
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 117 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 118 of 200

6. Time of Occupancy (Dwell Time)

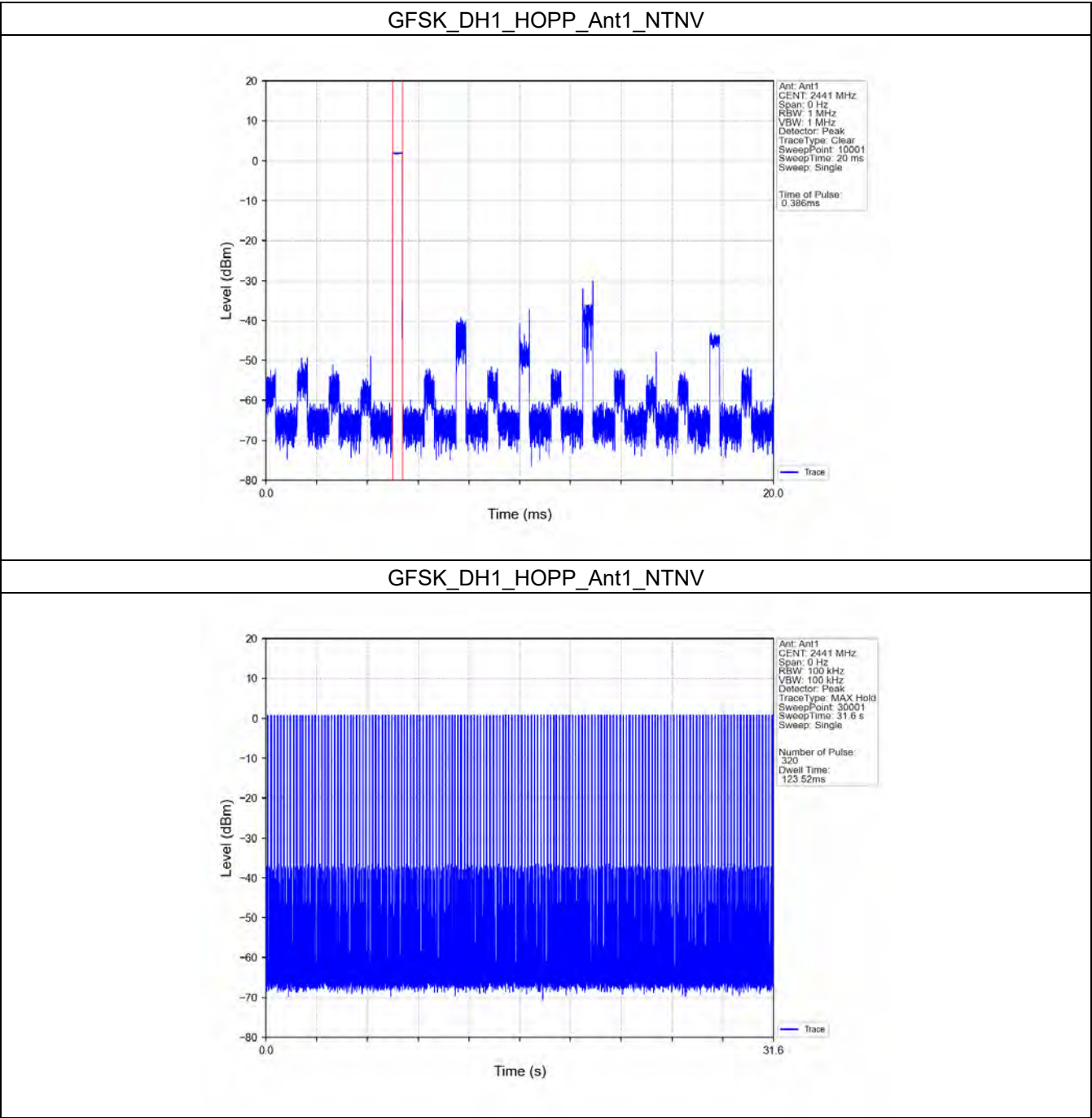
6.1 Test Result

6.1.1 Ant1

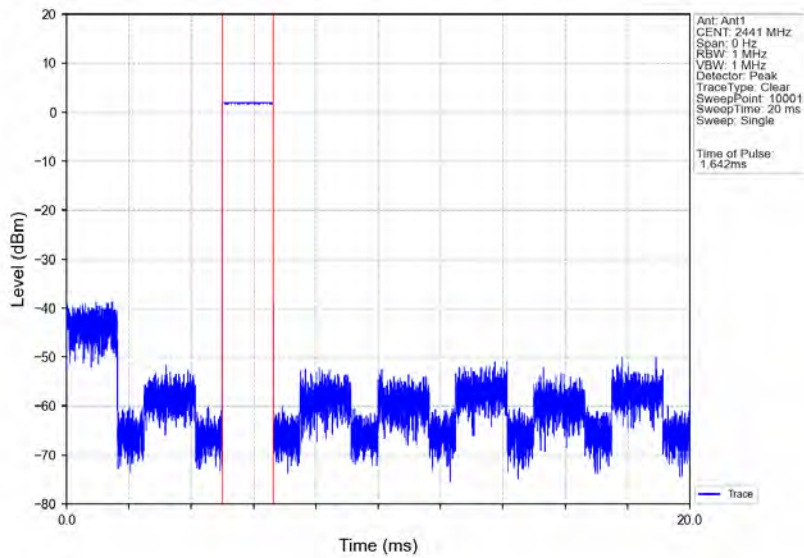
Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.386	31.600	320	123.520	<=400	Pass
			DH3	1.642	31.600	165	270.930	<=400	Pass
			DH5	2.888	31.600	94	271.472	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.396	31.600	320	126.720	<=400	Pass
			2DH3	1.648	31.600	162	266.976	<=400	Pass
			2DH5	2.896	31.600	110	318.560	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.396	31.600	319	126.324	<=400	Pass
			3DH3	1.646	31.600	161	265.006	<=400	Pass
			3DH5	2.900	31.600	104	301.600	<=400	Pass

6.2 Test Graph

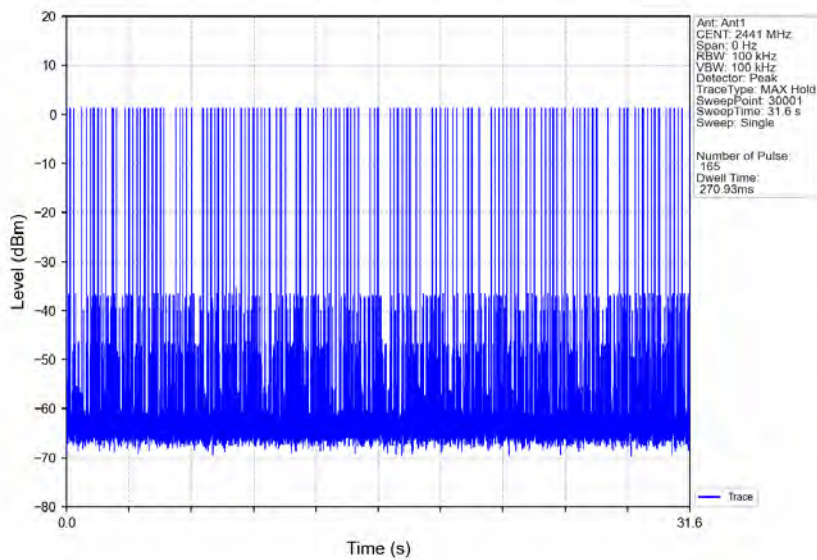
6.2.1 Ant1



GFSK_DH3_HOPP_Ant1_NTNV



GFSK_DH3_HOPP_Ant1_NTNV



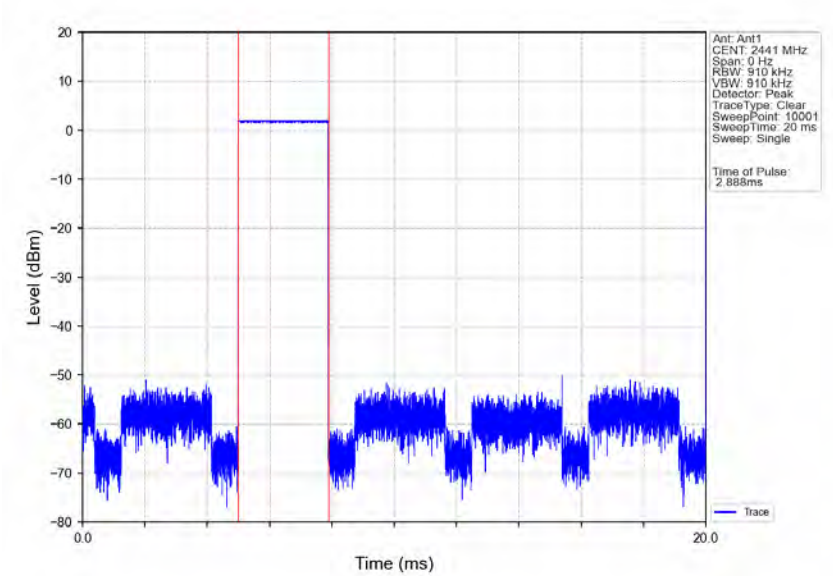
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

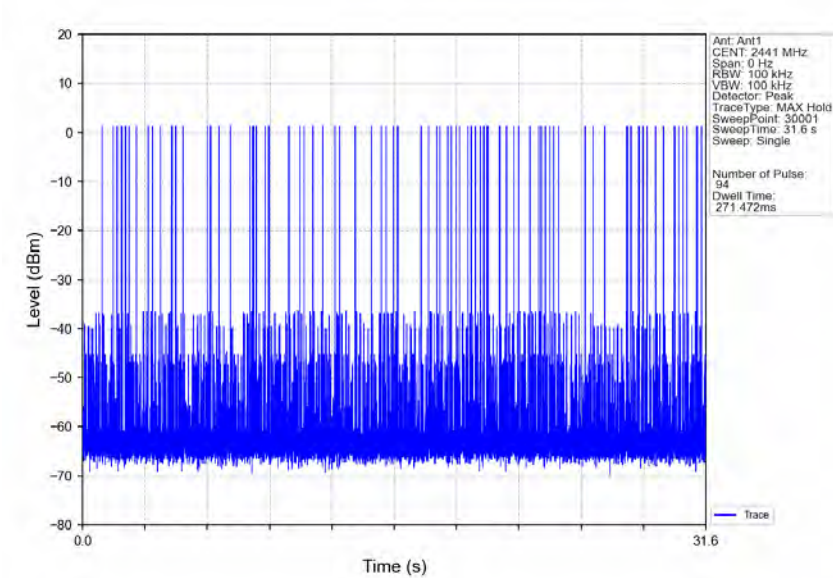
Report No.: KSCR240800156901

Page: 121 of 200

GFSK_DH5_HOPP_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



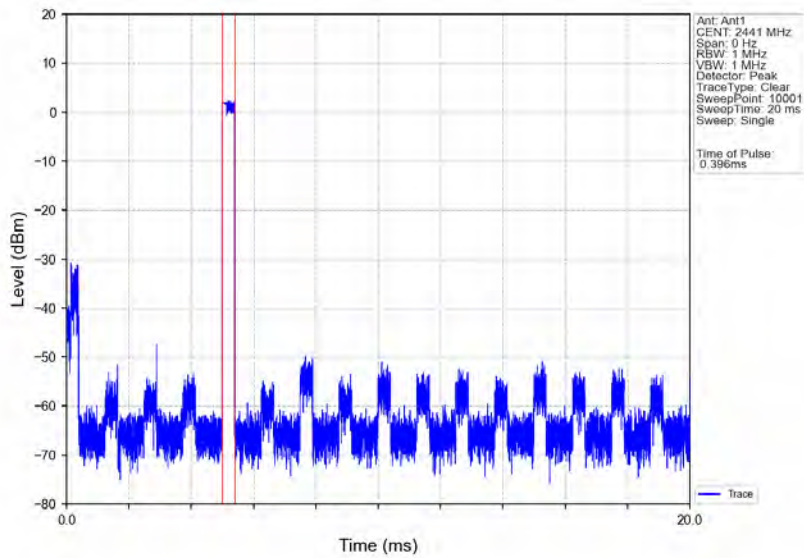
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

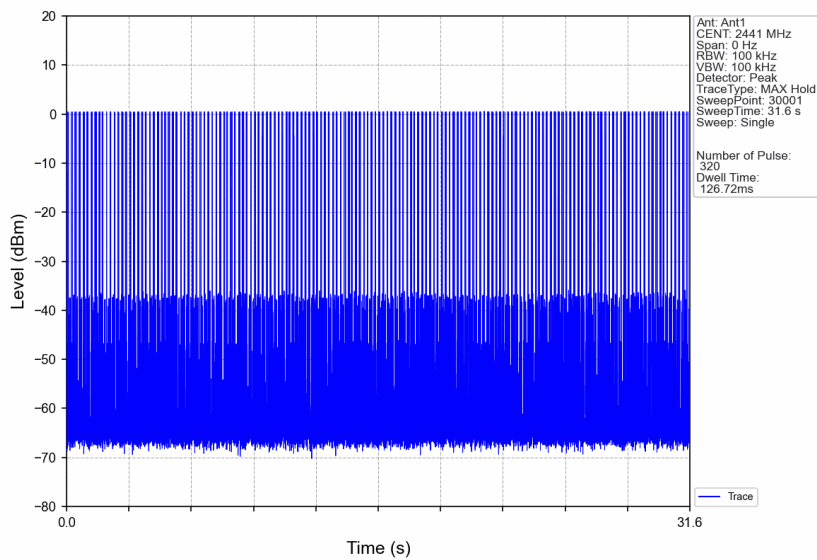
Report No.: KSCR240800156901

Page: 122 of 200

Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



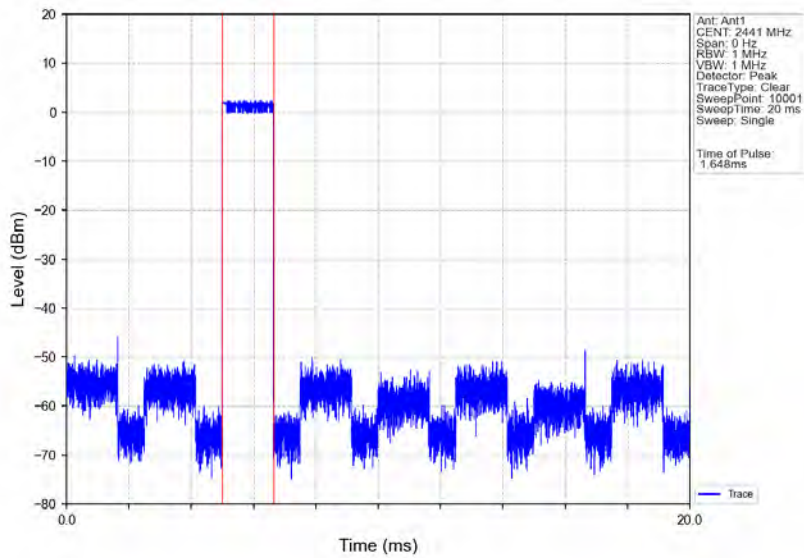
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

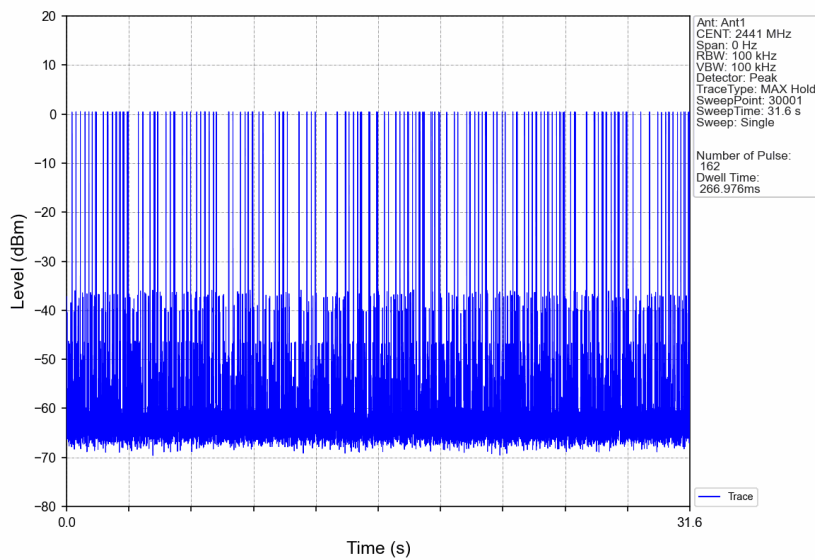
Report No.: KSCR240800156901

Page: 123 of 200

Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



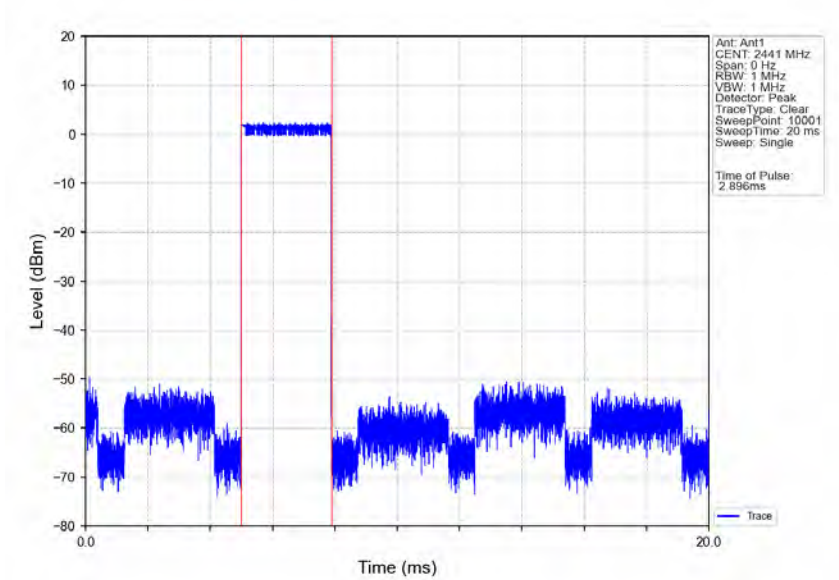
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

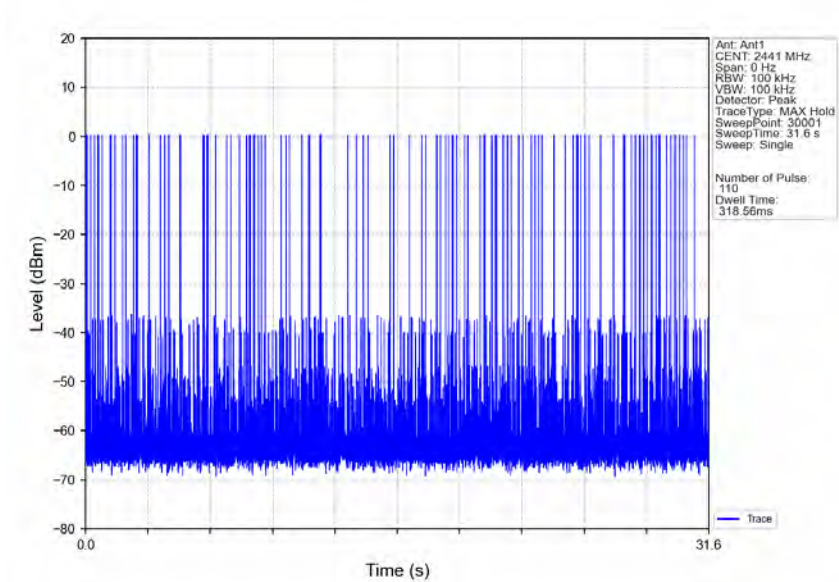
Report No.: KSCR240800156901

Page: 124 of 200

Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



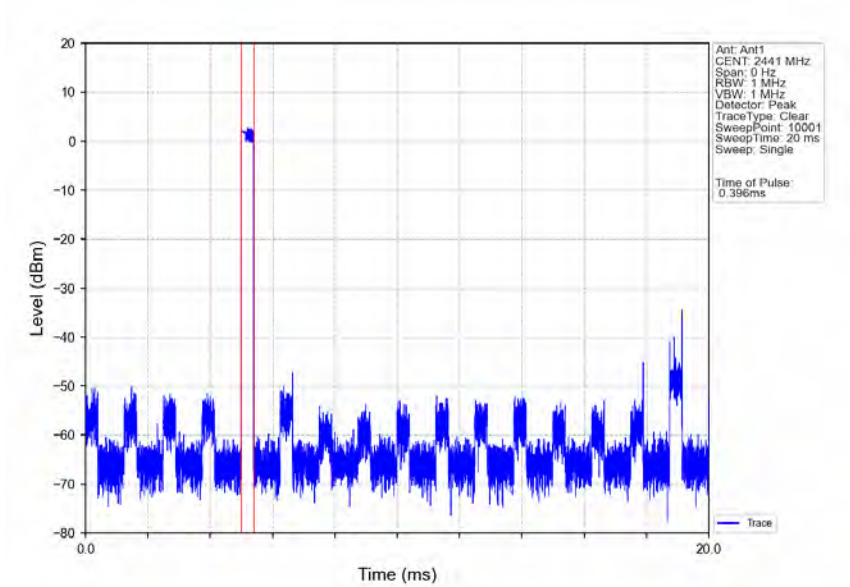
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

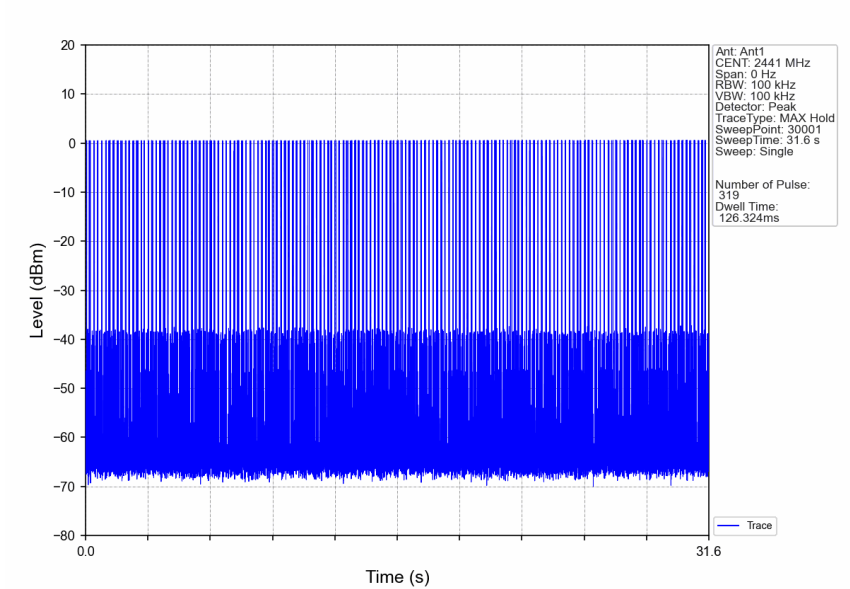
Report No.: KSCR240800156901

Page: 125 of 200

8DPSK_3DH1_HOPP_Ant1_NTNV



8DPSK_3DH1_HOPP_Ant1_NTNV



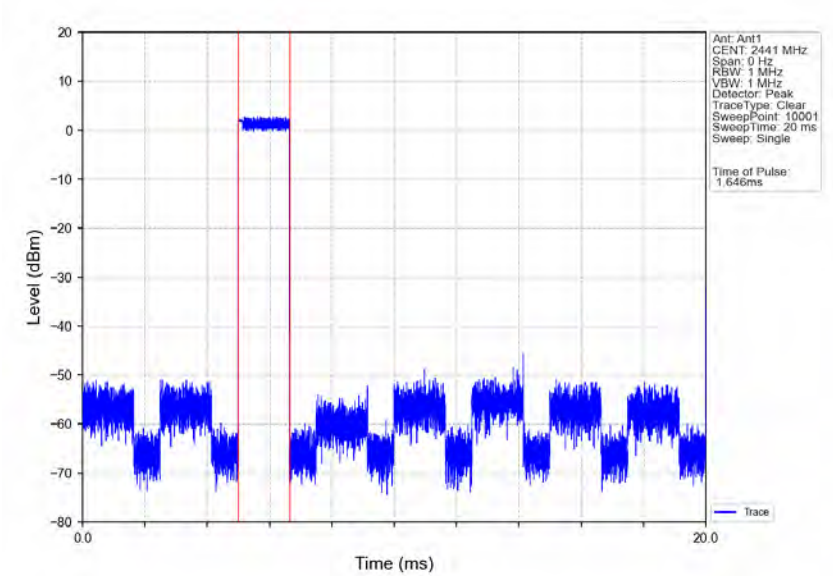
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

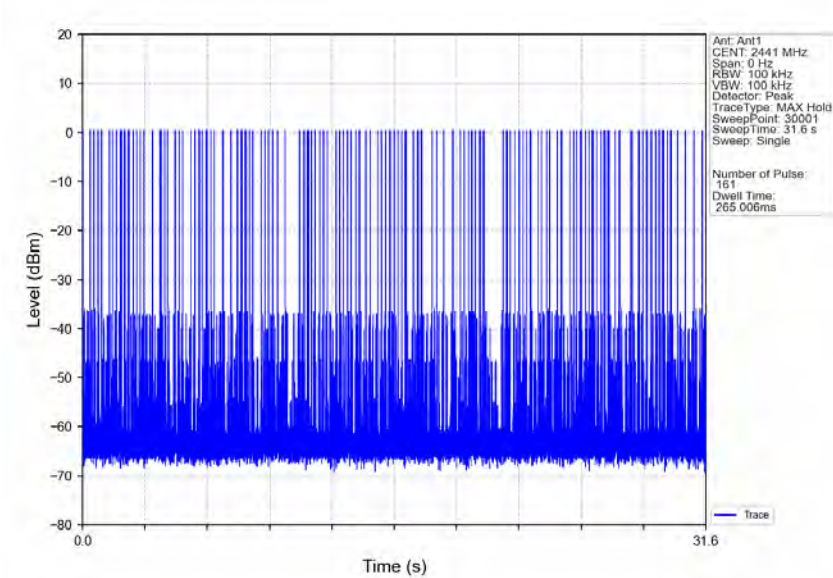
Report No.: KSCR240800156901

Page: 126 of 200

8DPSK_3DH3_HOPP_Ant1_NTNV



8DPSK_3DH3_HOPP_Ant1_NTNV



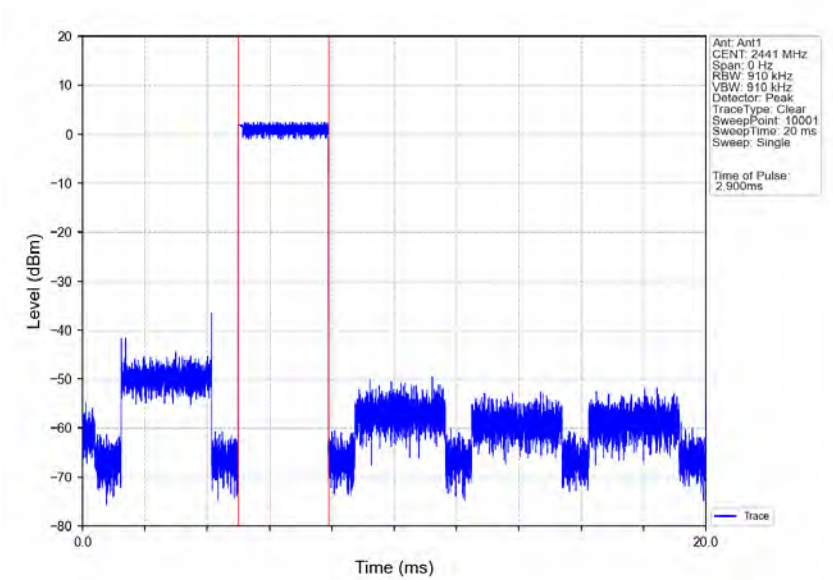
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

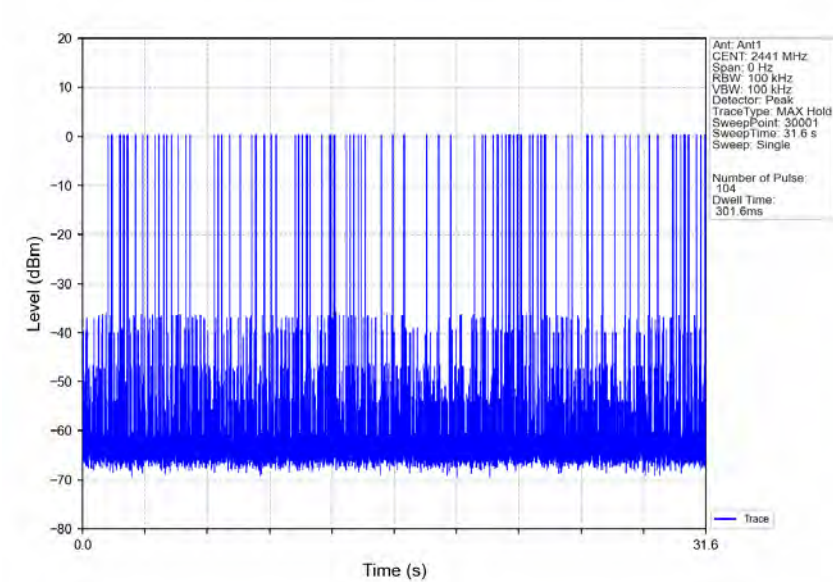
Report No.: KSCR240800156901

Page: 127 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 128 of 200

7. Unwanted Emissions In Non-restricted Frequency Bands

7.1 Test Result

7.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	2.10
		2441	DH5	1	1.95
		2480	DH5	1	1.55
Pi/4DQPSK	SISO	2402	2DH5	1	2.14
		2441	2DH5	1	2.03
		2480	2DH5	1	1.62
8DPSK	SISO	2402	3DH5	1	2.10
		2441	3DH5	1	1.91
		2480	3DH5	1	1.58

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

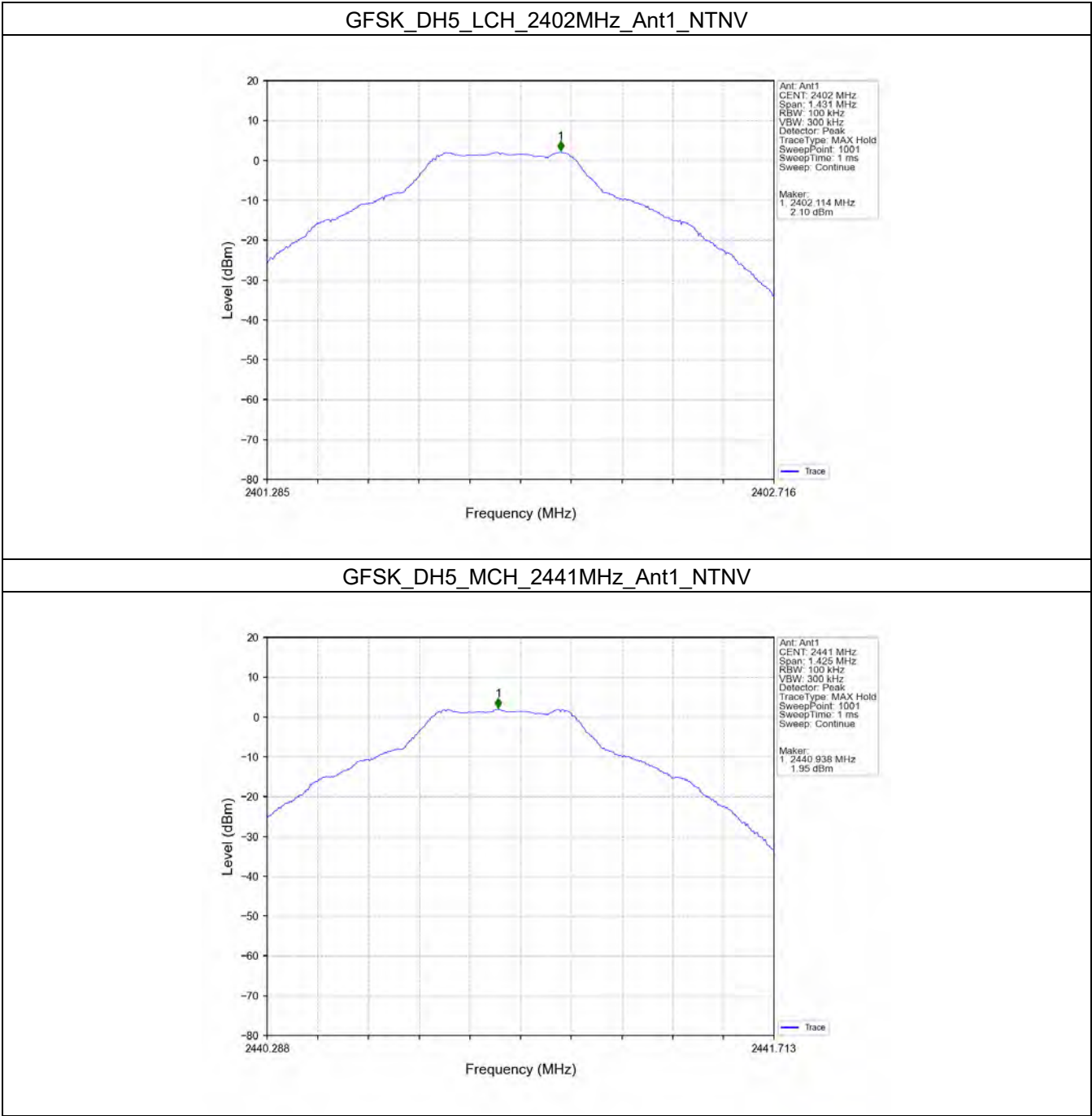
7.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	2.10	-17.90	Pass
		2441	DH5	1	2.10	-17.90	Pass
		2480	DH5	1	2.10	-17.90	Pass
		HOPP	DH5	1	2.10	-17.90	Pass
					2.10	-17.90	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	2.14	-17.86	Pass
		2441	2DH5	1	2.14	-17.86	Pass
		2480	2DH5	1	2.14	-17.86	Pass
		HOPP	2DH5	1	2.14	-17.86	Pass
					2.14	-17.86	Pass
8DPSK	SISO	2402	3DH5	1	2.10	-17.90	Pass
		2441	3DH5	1	2.10	-17.90	Pass
		2480	3DH5	1	2.10	-17.90	Pass
		HOPP	3DH5	1	2.10	-17.90	Pass
					2.10	-17.90	Pass

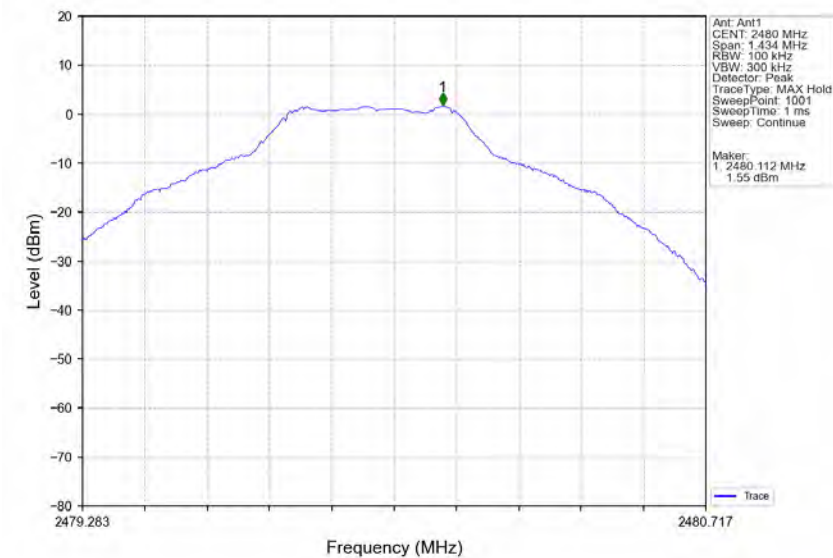
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

7.2 Test Graph

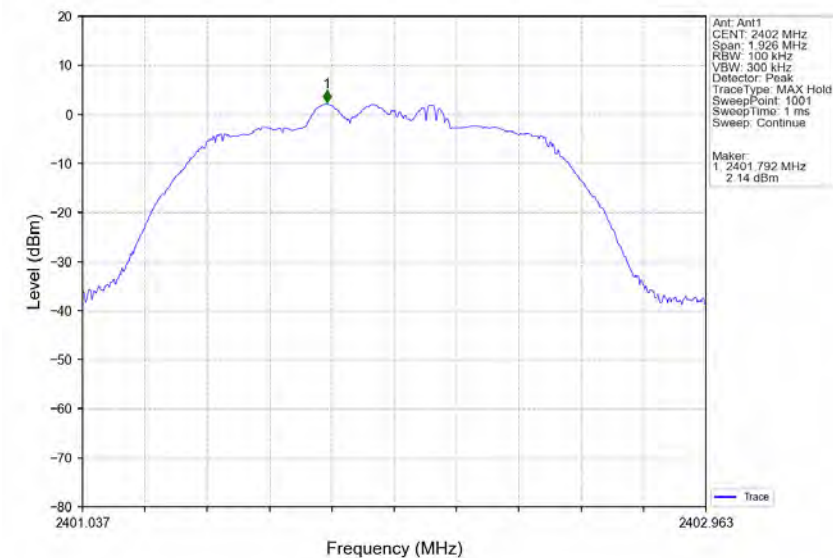
7.2.1 Ref



GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



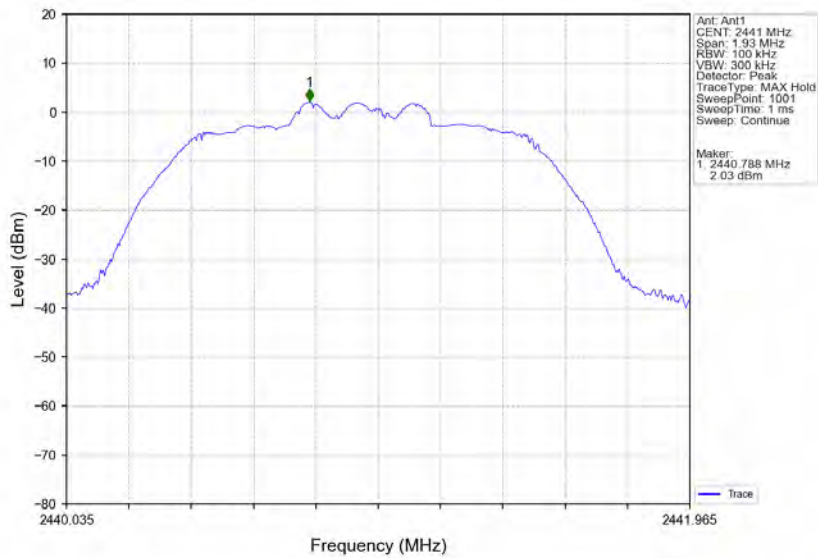
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

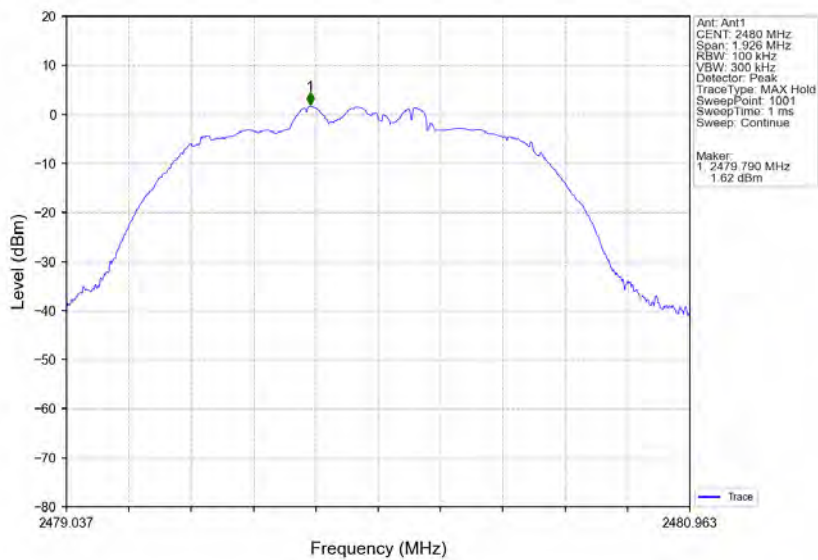
Report No.: KSCR240800156901

Page: 131 of 200

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



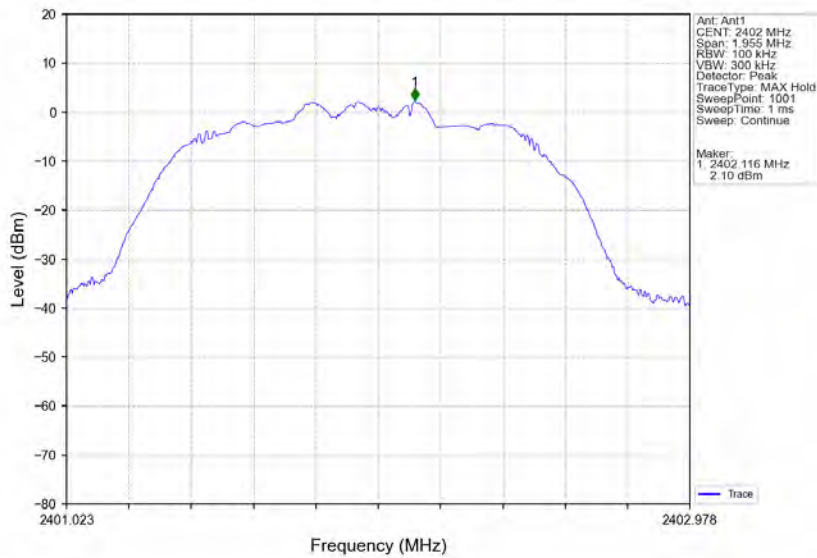
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

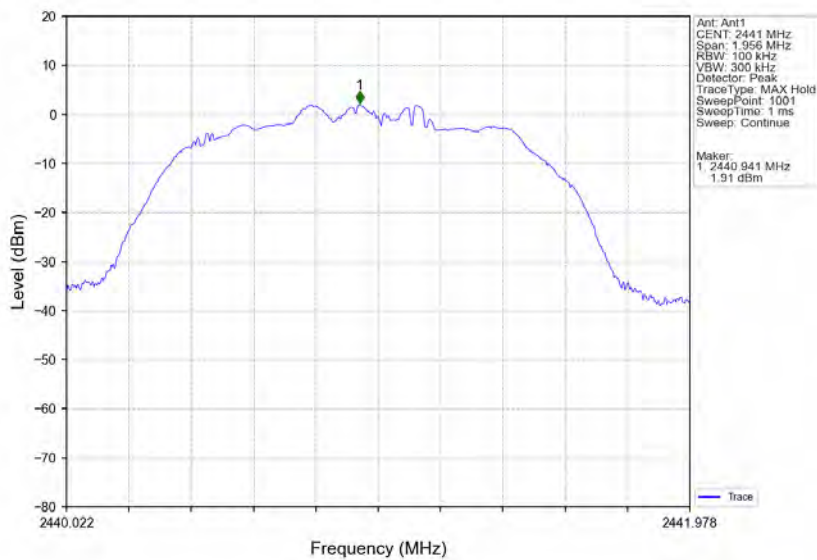
Report No.: KSCR240800156901

Page: 132 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



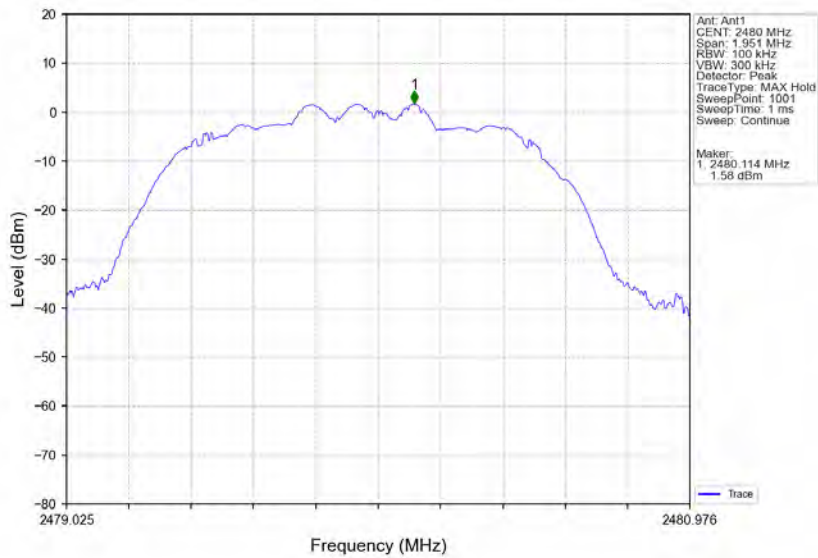
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

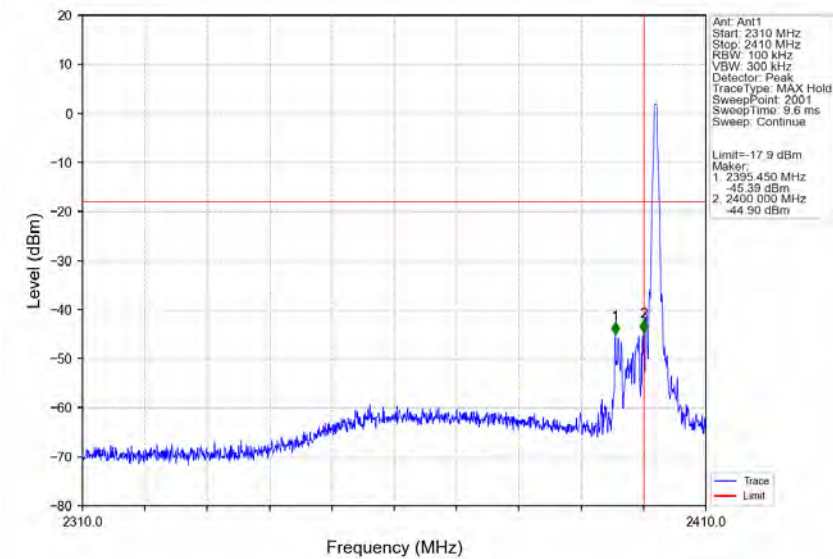
Page: 133 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV

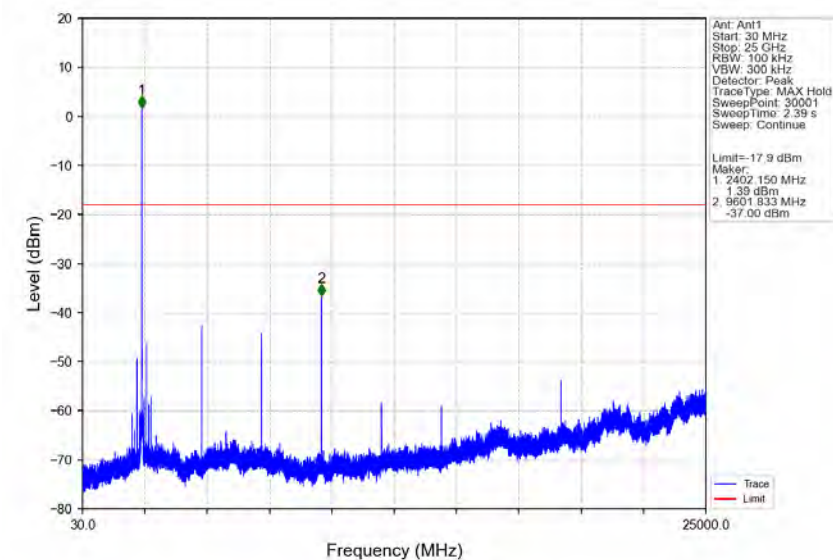


7.2.2 CSE

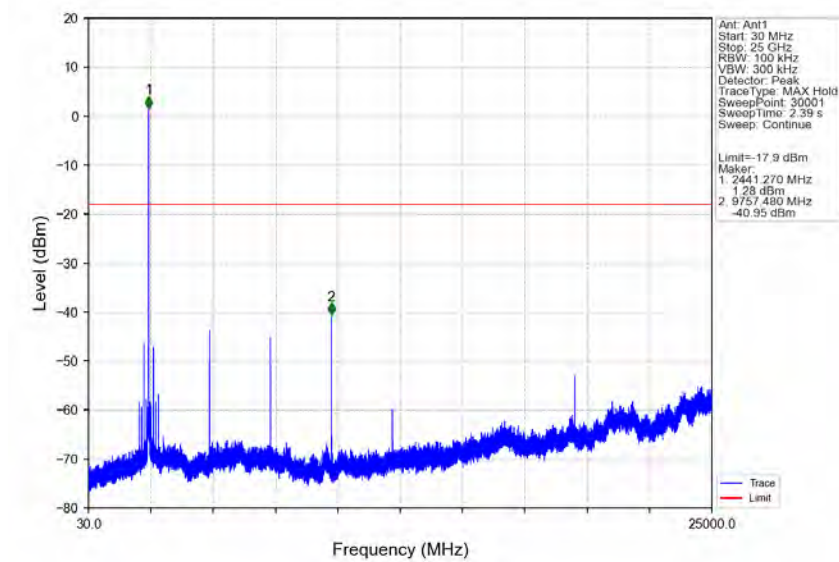
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



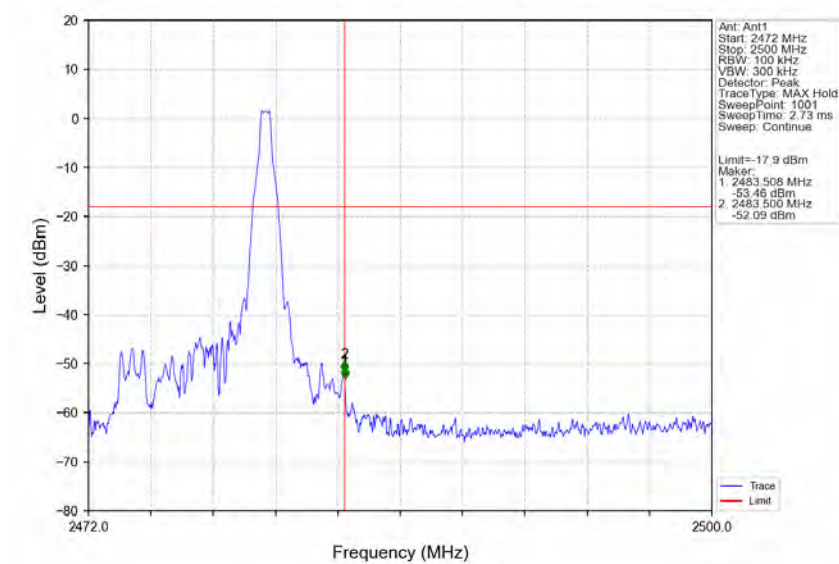
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



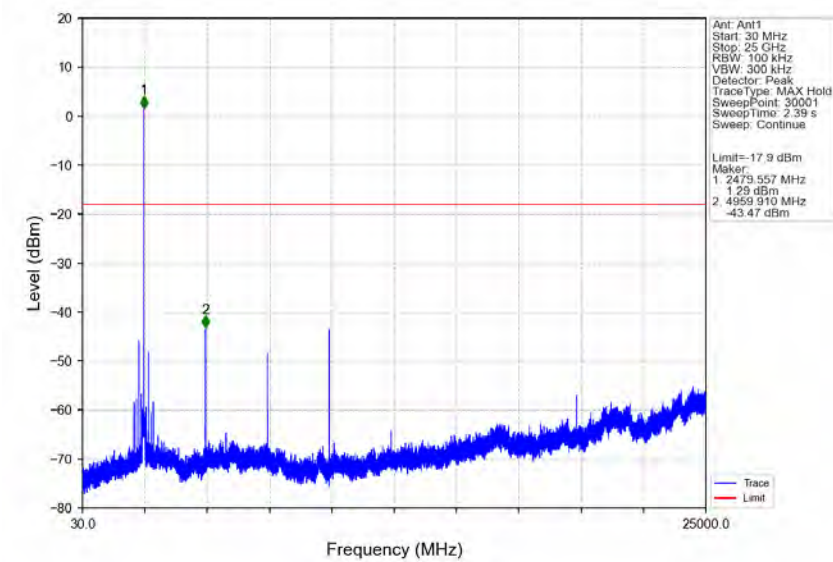
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



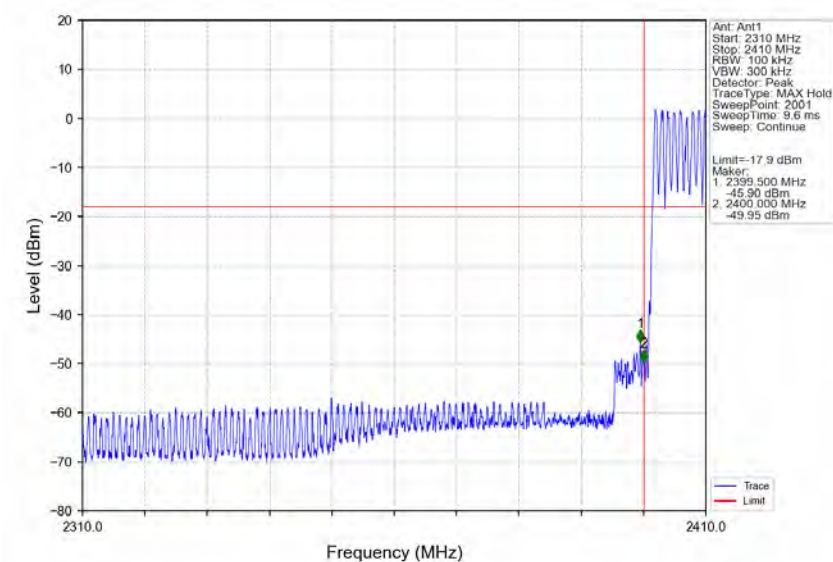
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



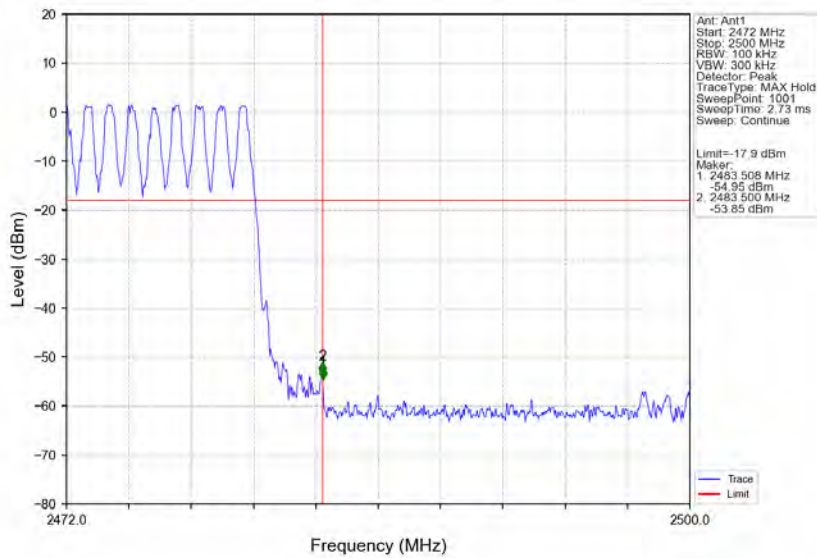
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



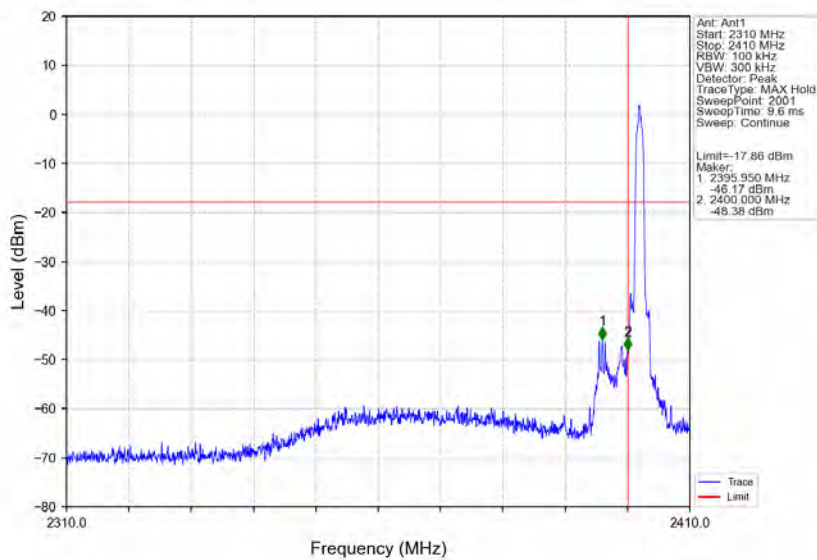
GFSK_DH5_HOPP_Ant1_NTNV



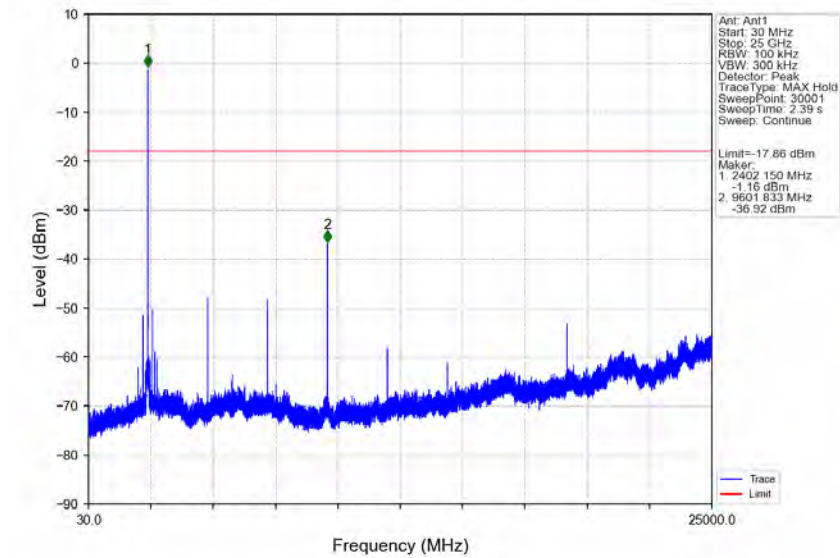
GFSK_DH5_HOPP_Ant1_NTNV



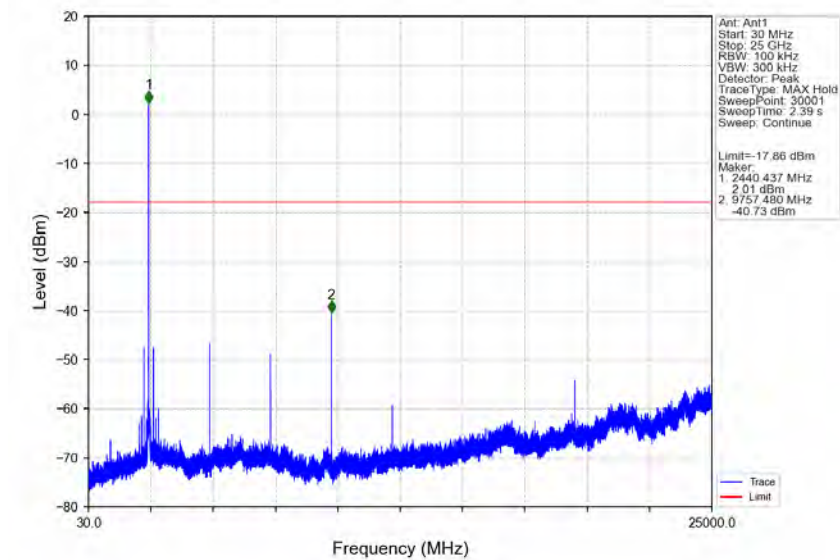
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



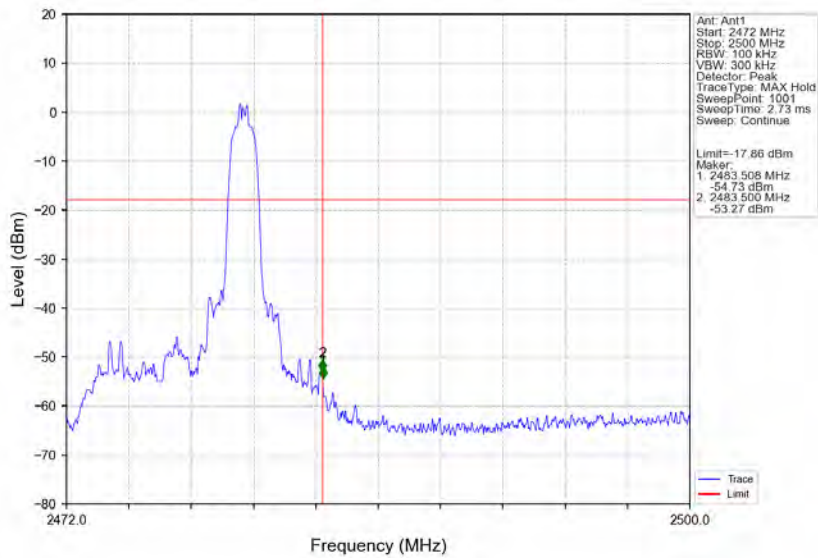
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

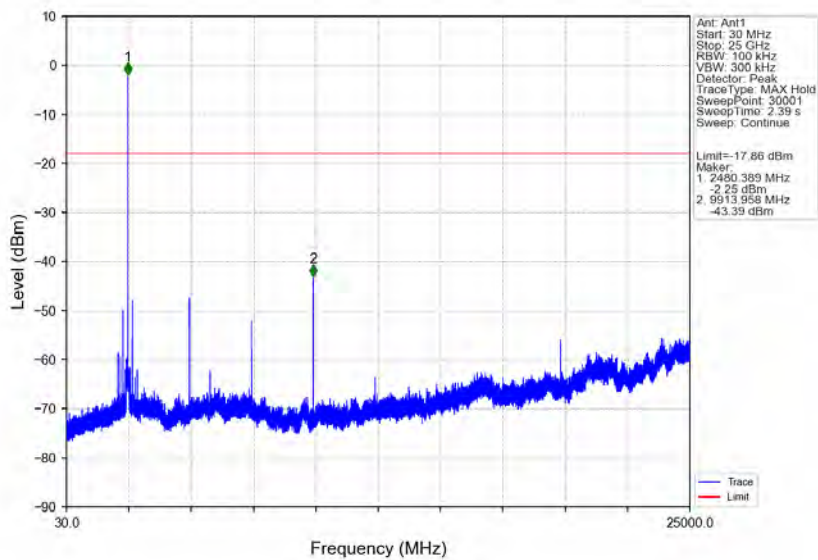
Report No.: KSCR240800156901

Page: 139 of 200

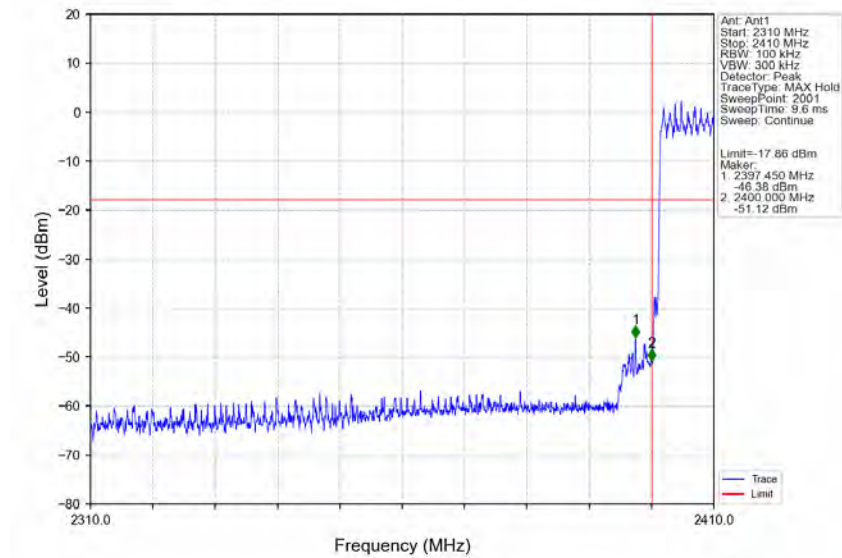
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



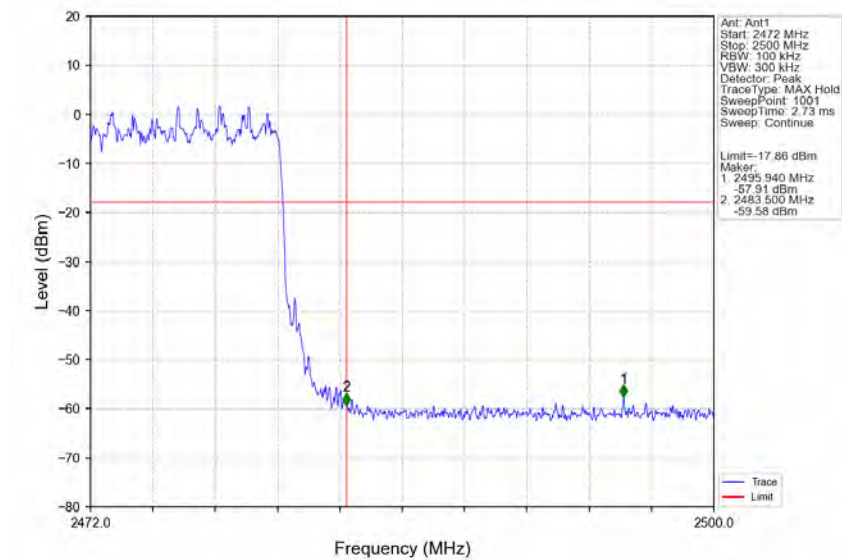
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



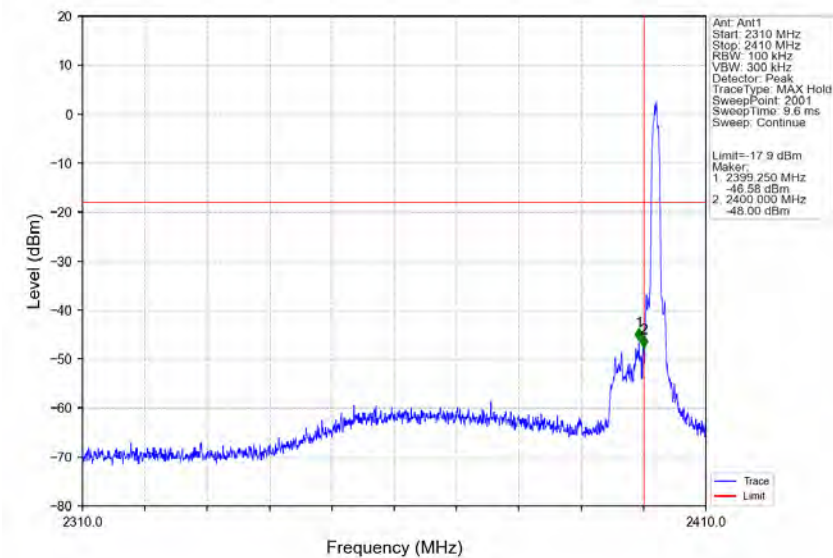
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

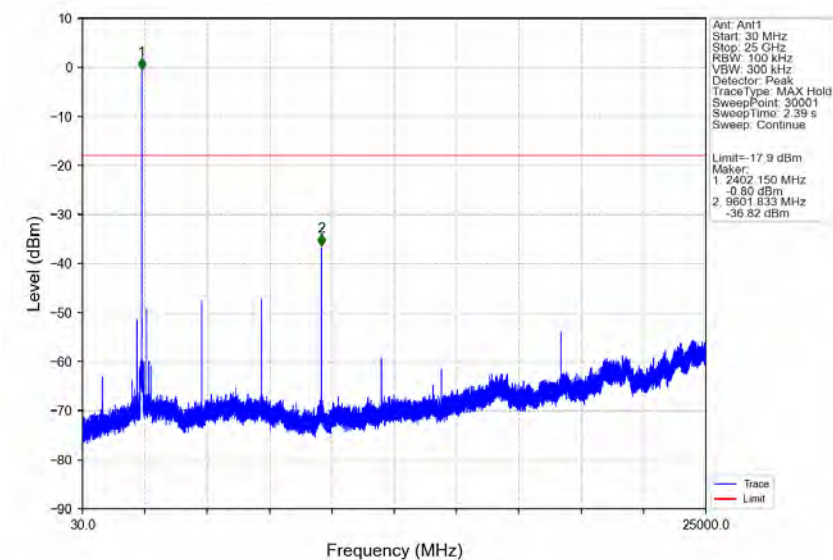
Report No.: KSCR240800156901

Page: 141 of 200

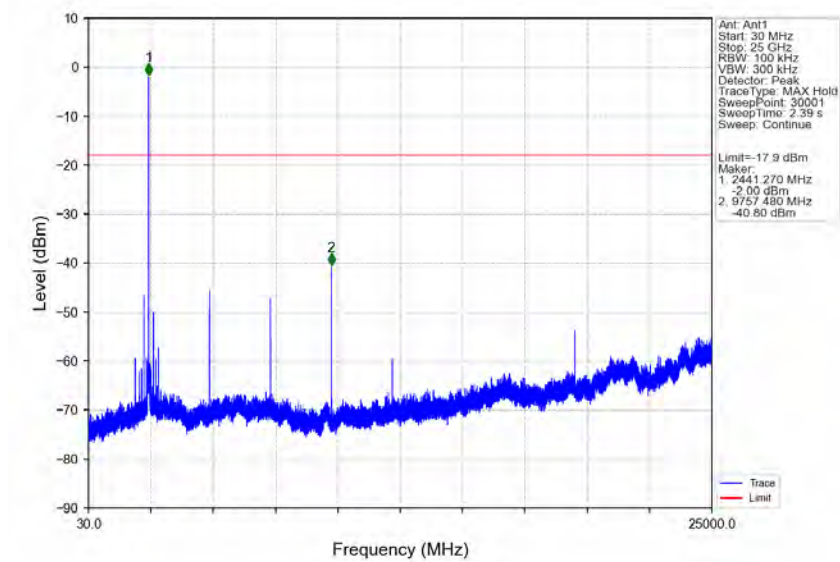
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



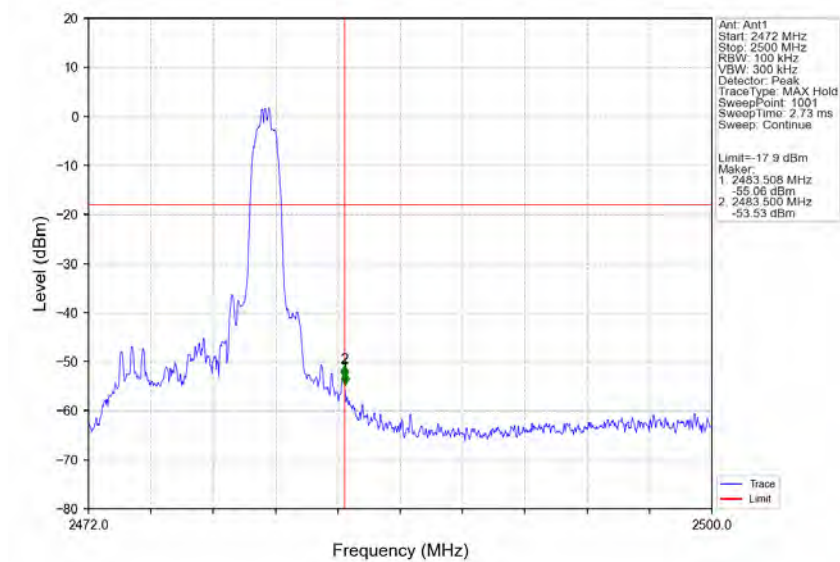
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



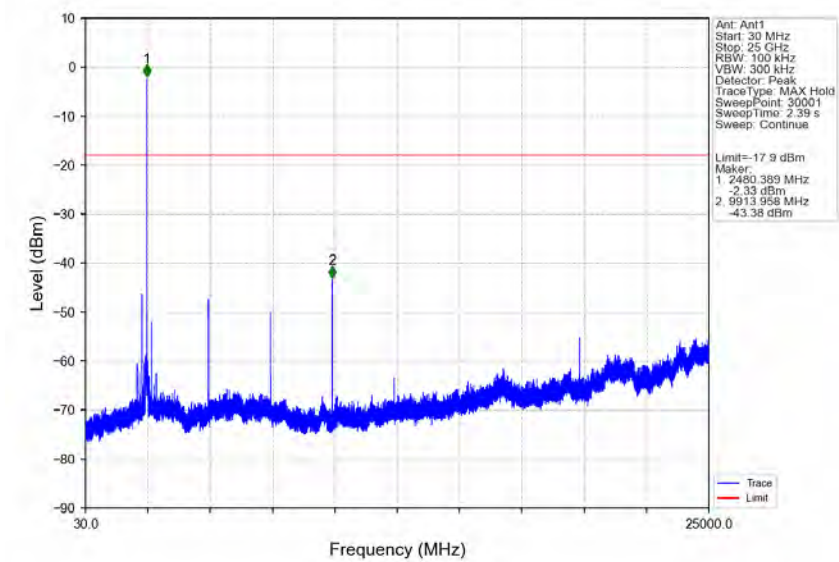
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

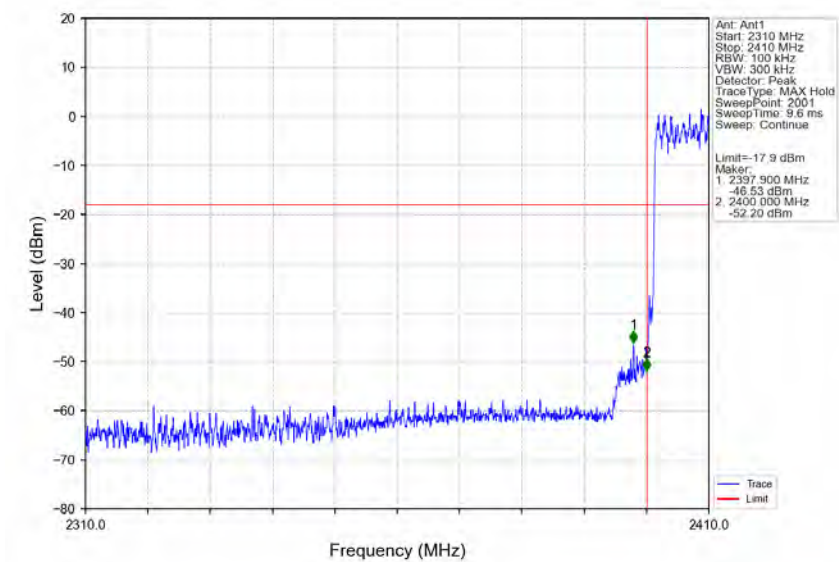
Report No.: KSCR240800156901

Page: 143 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



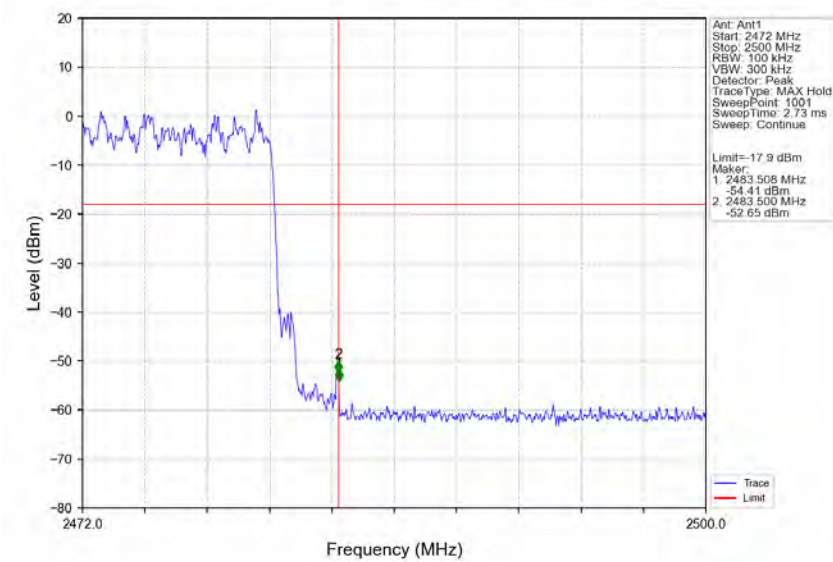
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 144 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 145 of 200

Right Ear

Channel	DH	2DH	3DH
	Ant 1	Ant 1	Ant 1
0	9	9	9
39	9	9	9
78	9	9	9

1. Duty Cycle

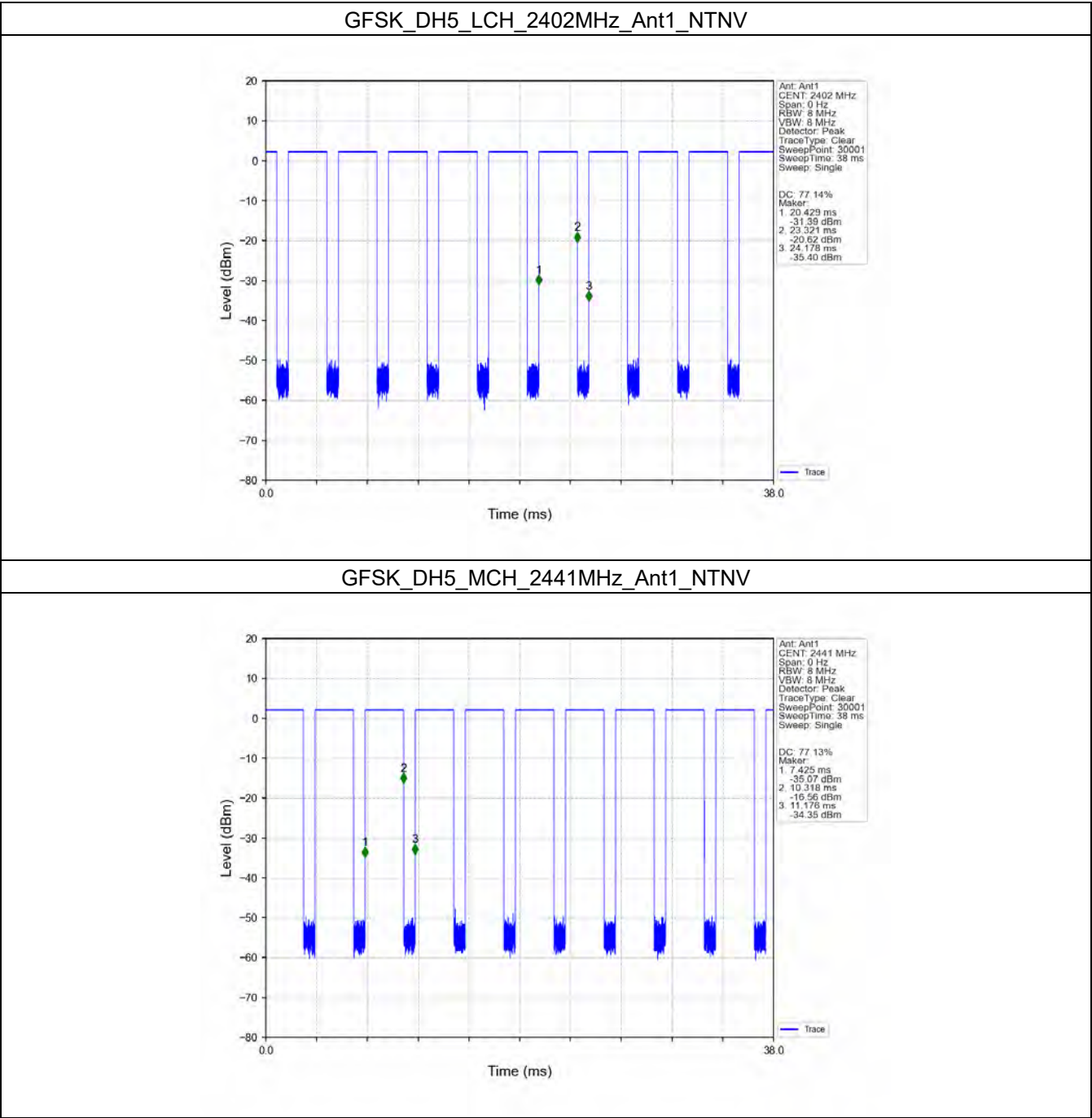
1.1 Test Result

1.1.1 Ant1

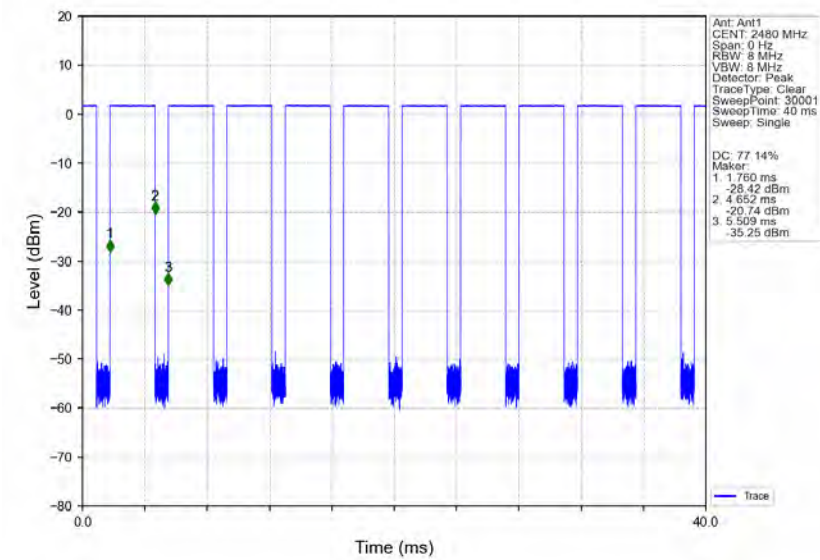
Ant1								
Mode	TX Type	Frequency (MHz)	Packet Type	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
GFSK	SISO	2402	DH5	2.892	3.749	77.14	1.13	0.03
		2441	DH5	2.893	3.751	77.13	1.13	0.03
		2480	DH5	2.892	3.749	77.14	1.13	0.04
Pi/4DQPSK	SISO	2402	2DH5	2.898	3.751	77.26	1.12	0.03
		2441	2DH5	2.898	3.751	77.26	1.12	0.06
		2480	2DH5	2.897	3.749	77.27	1.12	0.04
8DPSK	SISO	2402	3DH5	2.900	3.751	77.31	1.12	0.03
		2441	3DH5	2.899	3.750	77.31	1.12	0.03
		2480	3DH5	2.900	3.751	77.31	1.12	0.03

1.2 Test Graph

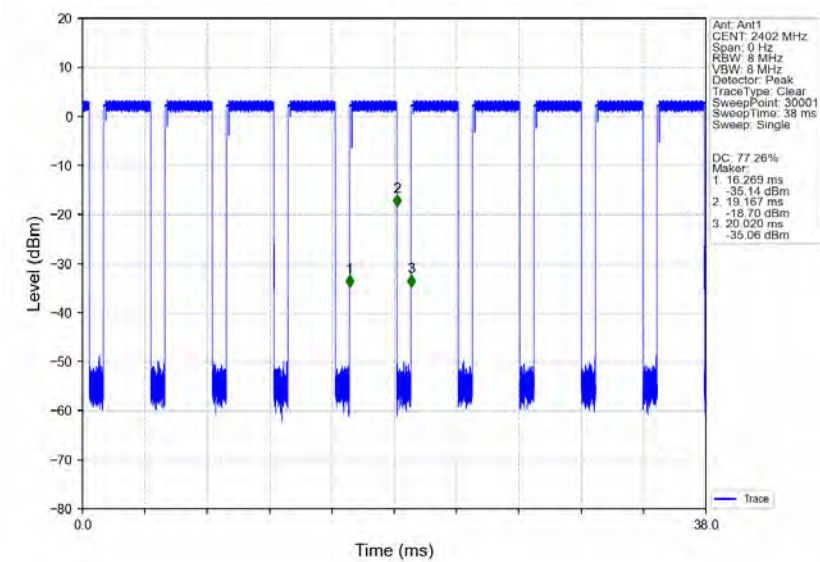
1.2.1 Ant1



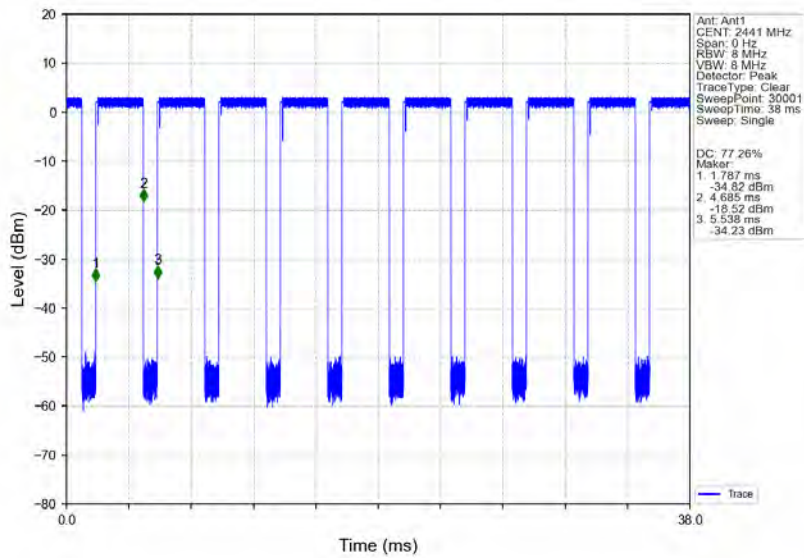
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



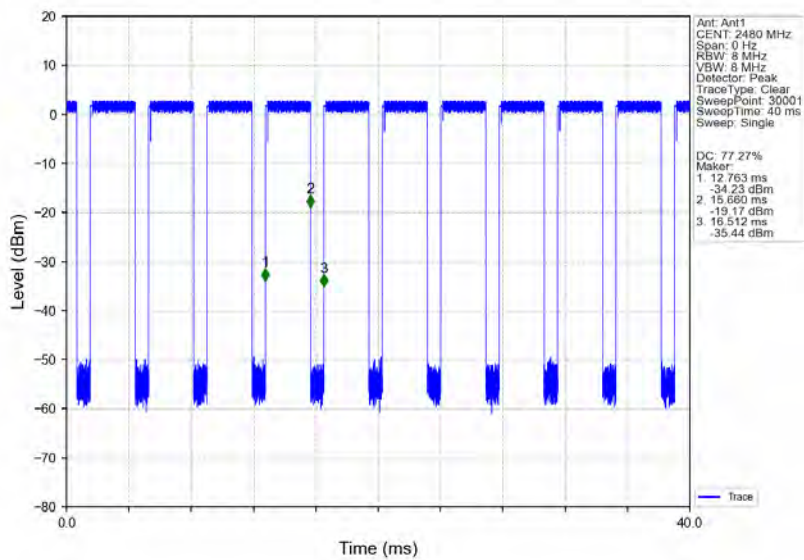
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



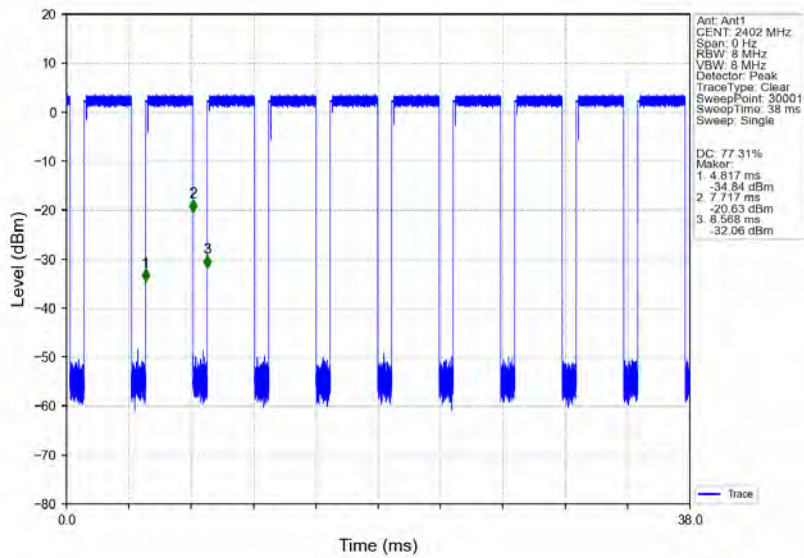
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



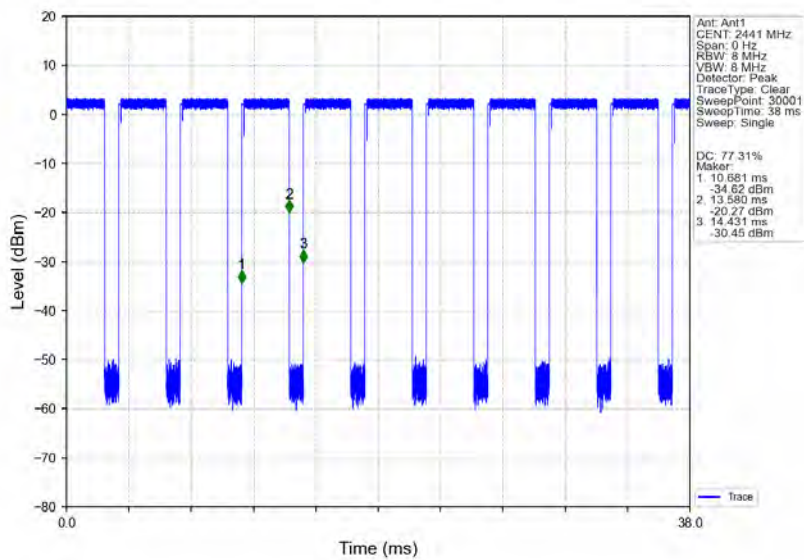
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



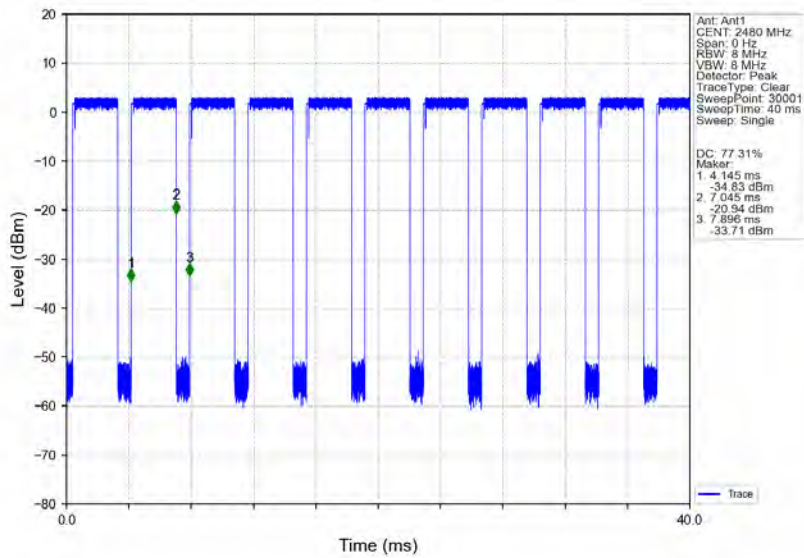
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 151 of 200

2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.854	/	Pass
		2441	DH5	1	0.853	/	Pass
		2480	DH5	1	0.858	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.171	/	Pass
		2441	2DH5	1	1.171	/	Pass
		2480	2DH5	1	1.170	/	Pass
8DPSK	SISO	2402	3DH5	1	1.179	/	Pass
		2441	3DH5	1	1.183	/	Pass
		2480	3DH5	1	1.182	/	Pass

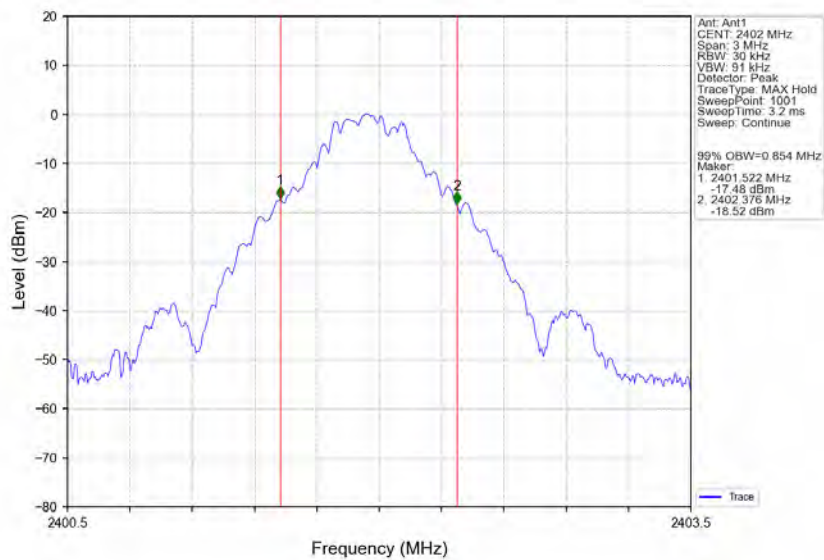
2.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.953	/	Pass
		2441	DH5	1	0.953	/	Pass
		2480	DH5	1	0.956	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.286	/	Pass
		2441	2DH5	1	1.285	/	Pass
		2480	2DH5	1	1.313	/	Pass
8DPSK	SISO	2402	3DH5	1	1.303	/	Pass
		2441	3DH5	1	1.304	/	Pass
		2480	3DH5	1	1.303	/	Pass

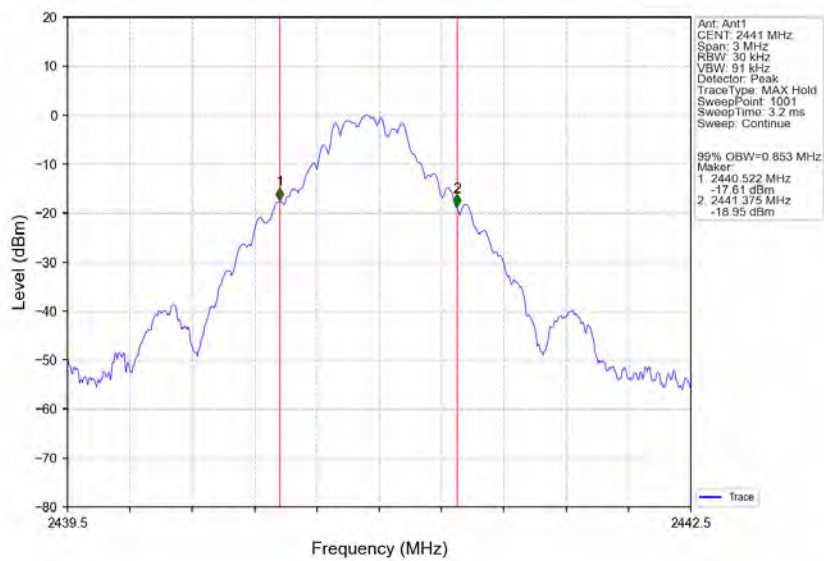
2.2 Test Graph

2.2.1 OBW

GFSK_DH5_LCH_2402MHz_Ant1_NTNV



GFSK_DH5_MCH_2441MHz_Ant1_NTNV



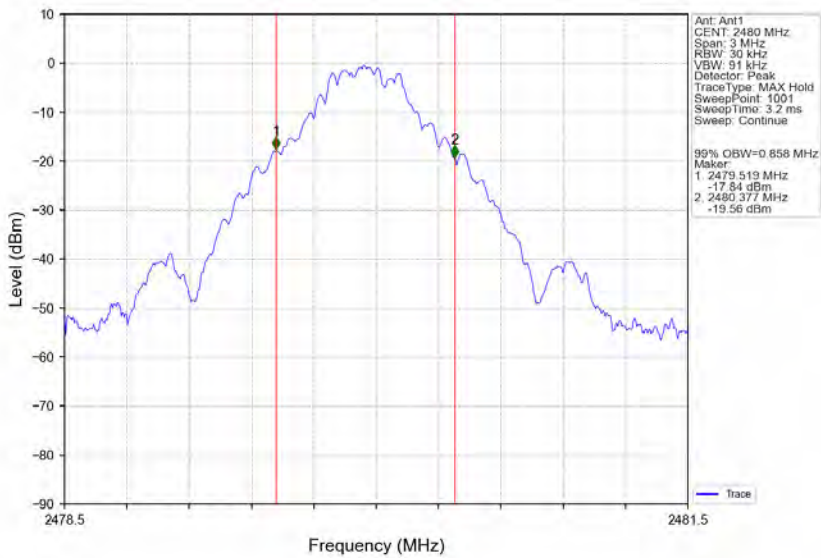
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

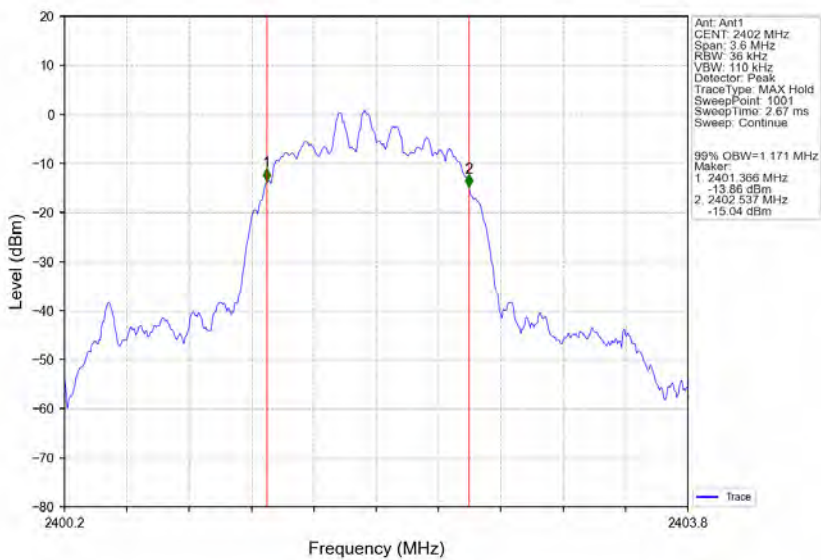
Report No.: KSCR240800156901

Page: 153 of 200

GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



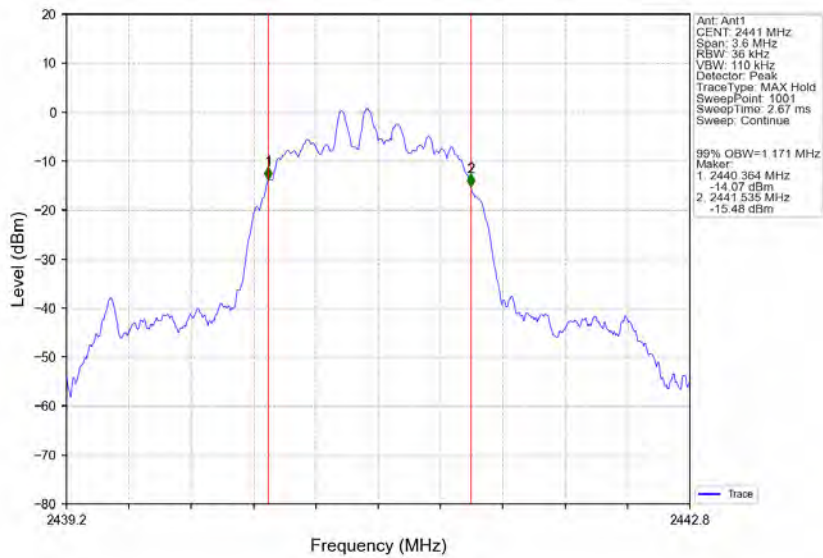
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

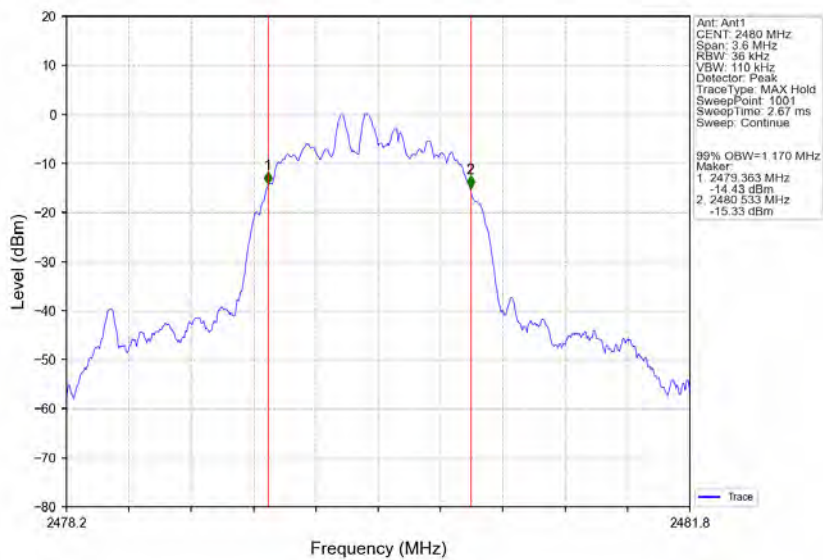
Report No.: KSCR240800156901

Page: 154 of 200

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



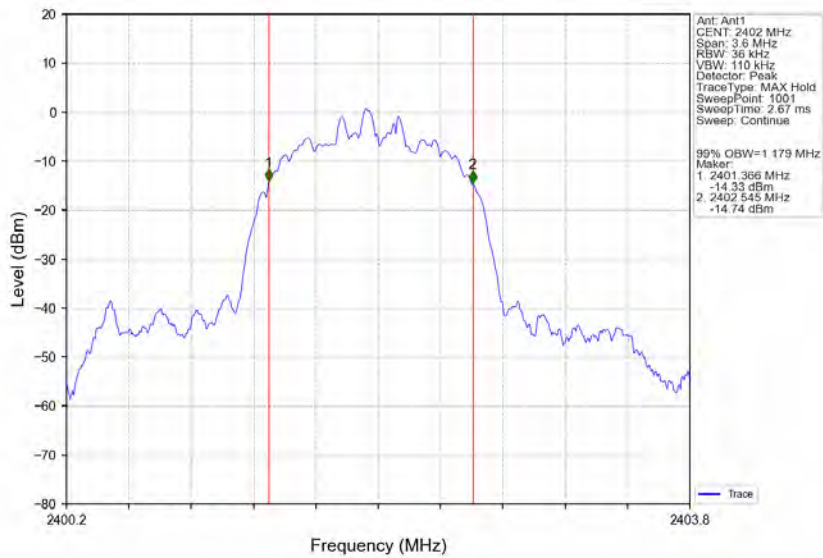
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

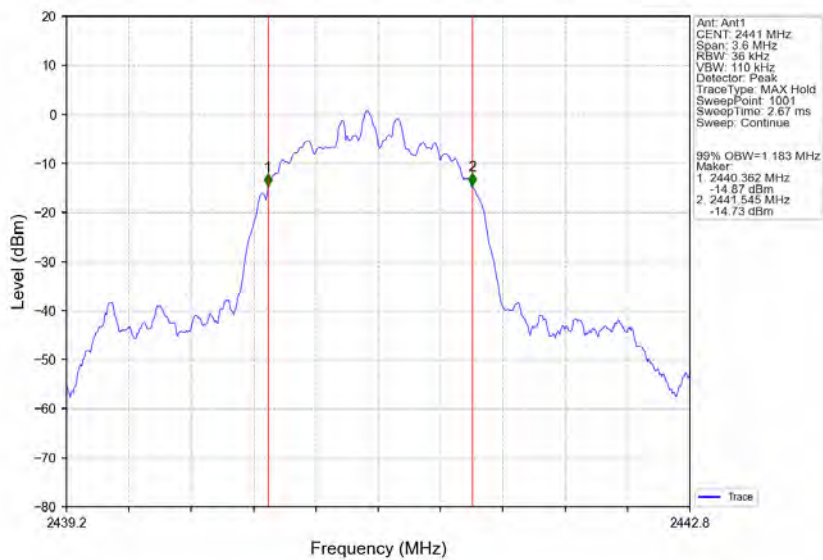
Report No.: KSCR240800156901

Page: 155 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



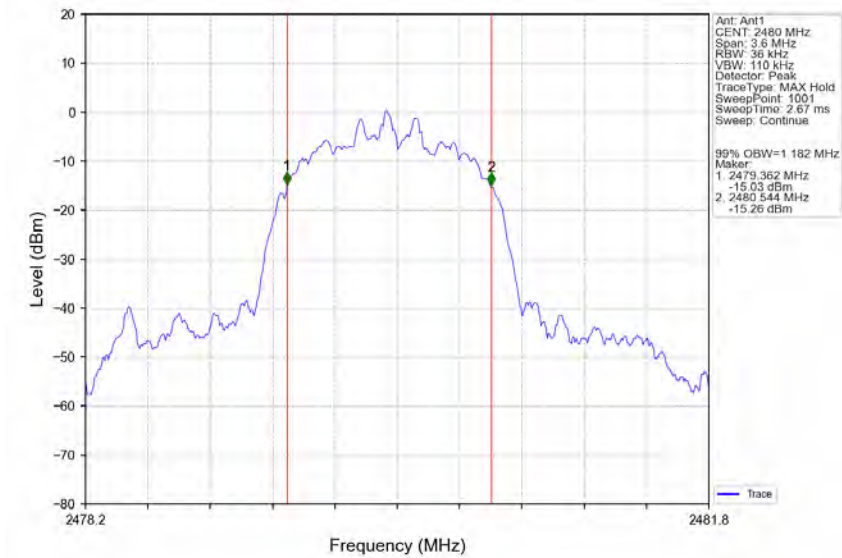
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

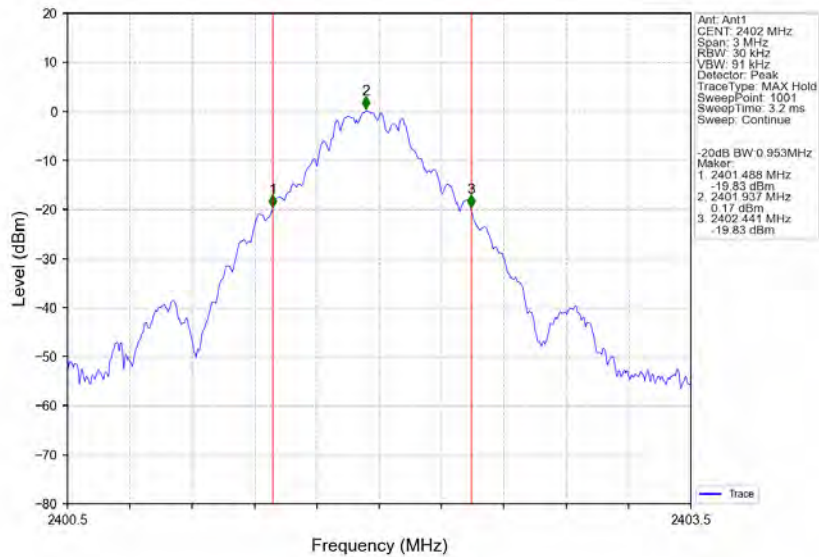
Page: 156 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV

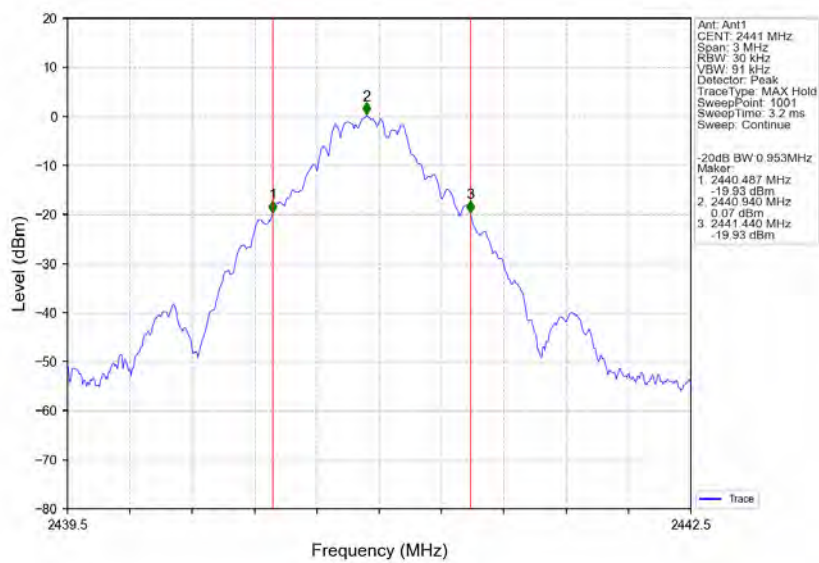


2.2.2 20dB BW

GFSK_DH5_LCH_2402MHz_Ant1_NTNV



GFSK_DH5_MCH_2441MHz_Ant1_NTNV



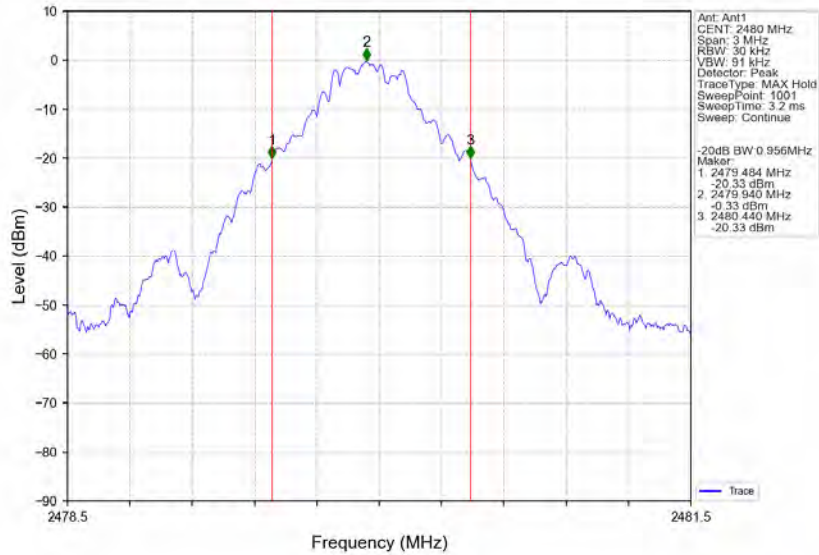
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

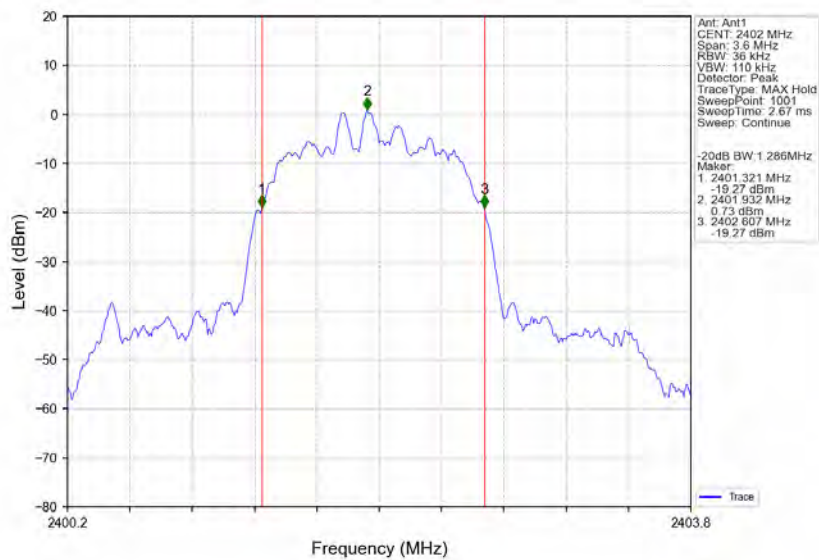
Report No.: KSCR240800156901

Page: 158 of 200

GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



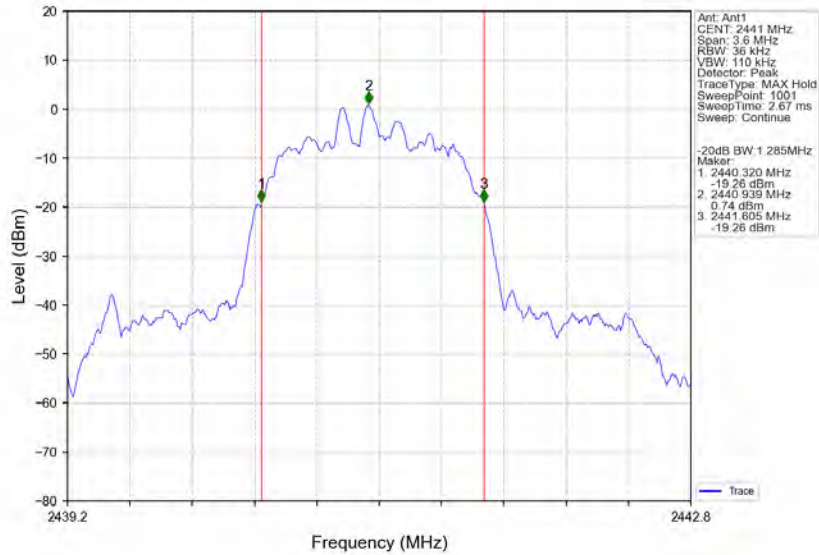
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

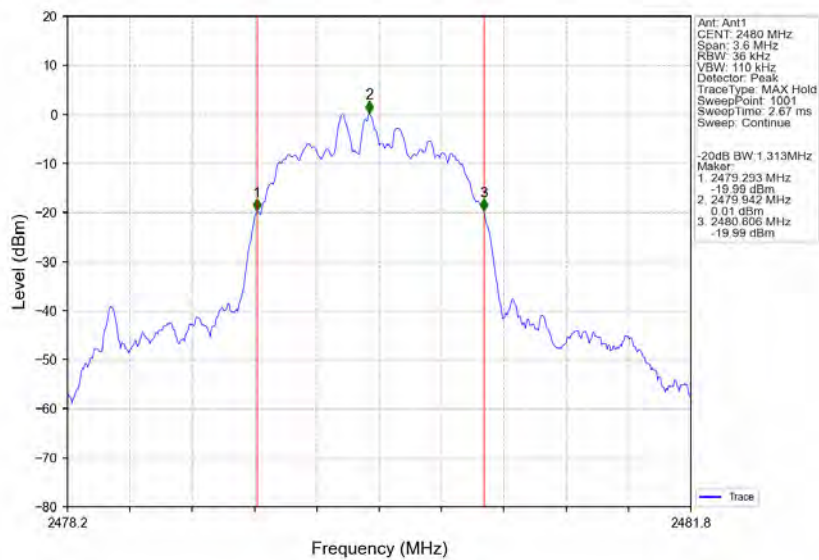
Report No.: KSCR240800156901

Page: 159 of 200

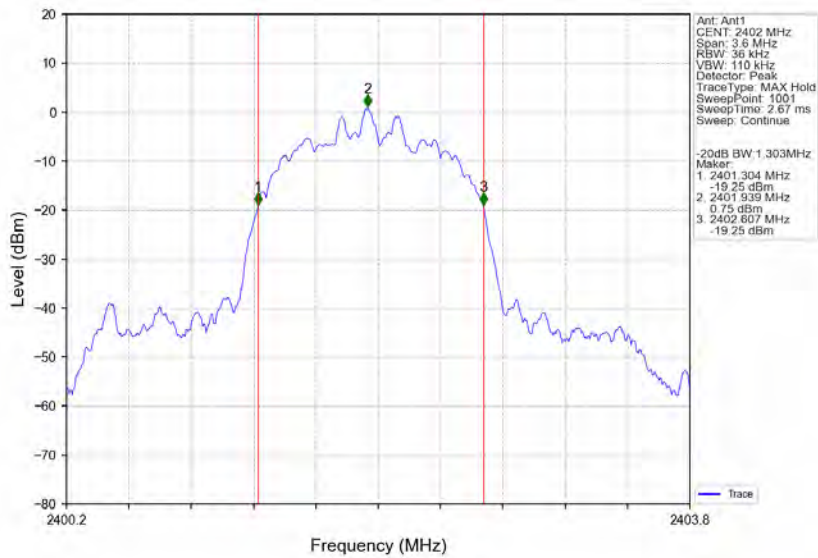
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



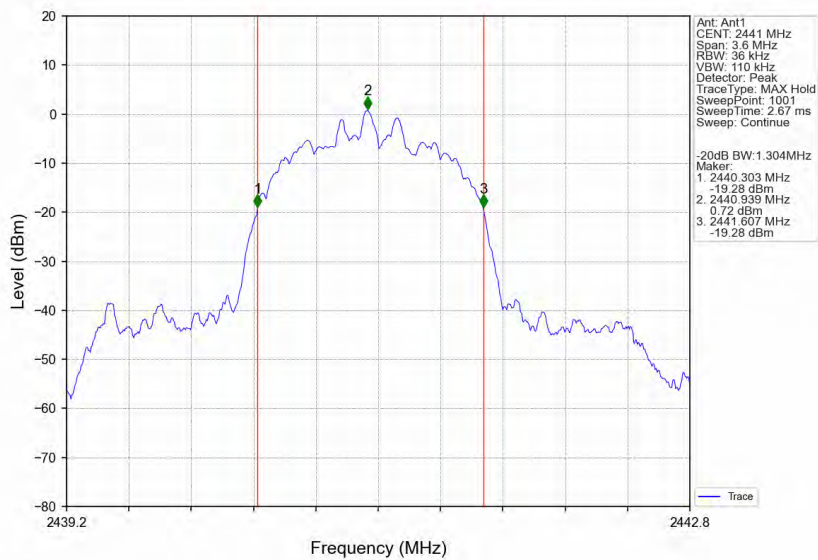
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



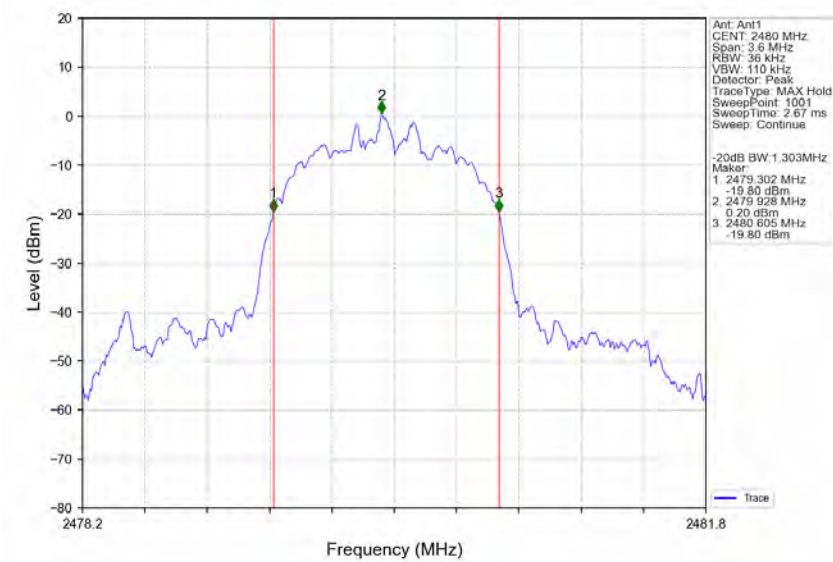
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 161 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 162 of 200

3. Maximum Conducted Output Power

3.1 Test Result

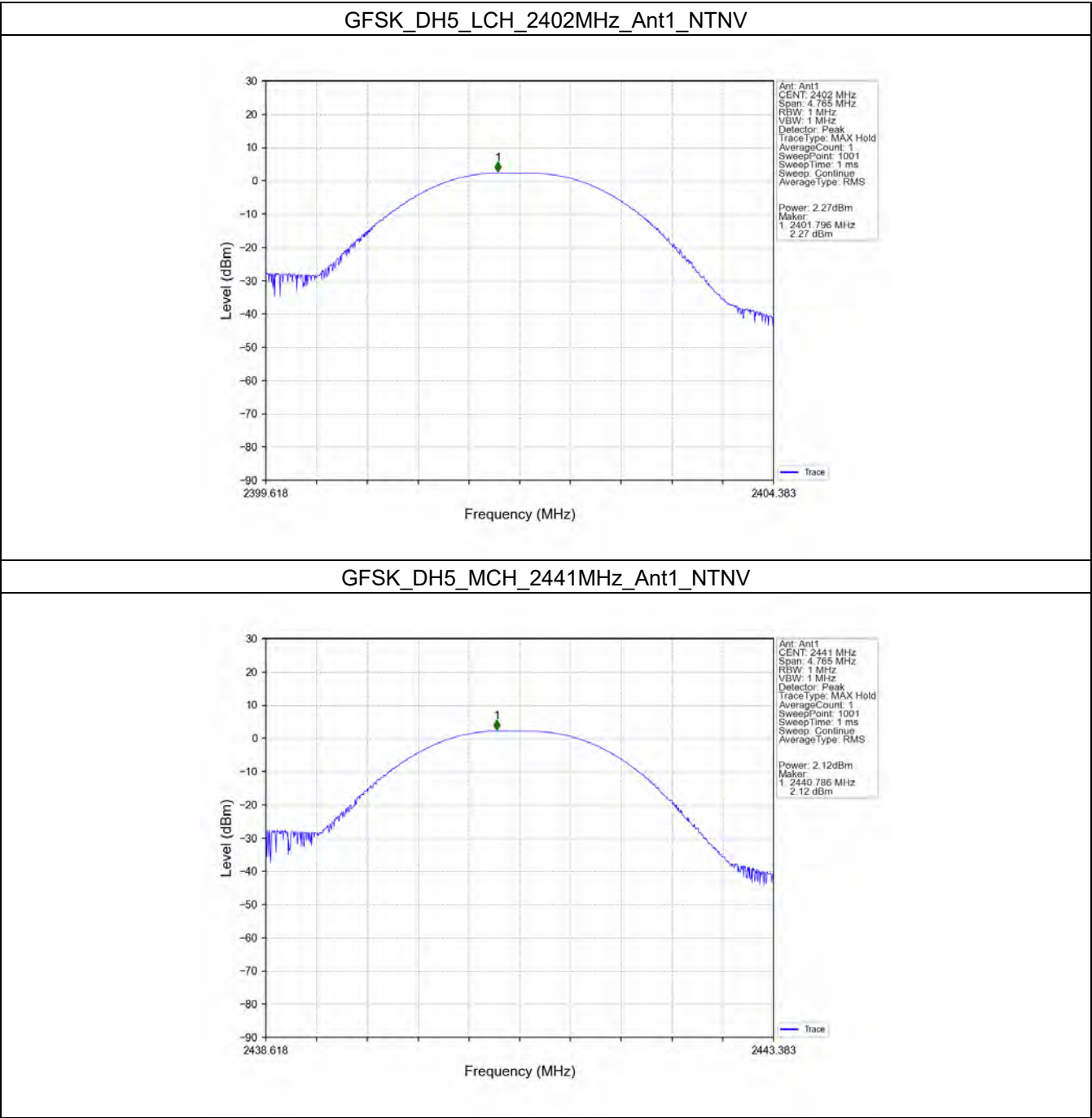
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	2.27	≤ 30	Pass
		2441	DH5	2.12	≤ 30	Pass
		2480	DH5	1.76	≤ 30	Pass
Pi/4DQPSK	SISO	2402	2DH5	3.12	≤ 20.97	Pass
		2441	2DH5	2.91	≤ 20.97	Pass
		2480	2DH5	2.60	≤ 20.97	Pass
8DPSK	SISO	2402	3DH5	3.44	≤ 20.97	Pass
		2441	3DH5	3.22	≤ 20.97	Pass
		2480	3DH5	2.97	≤ 20.97	Pass

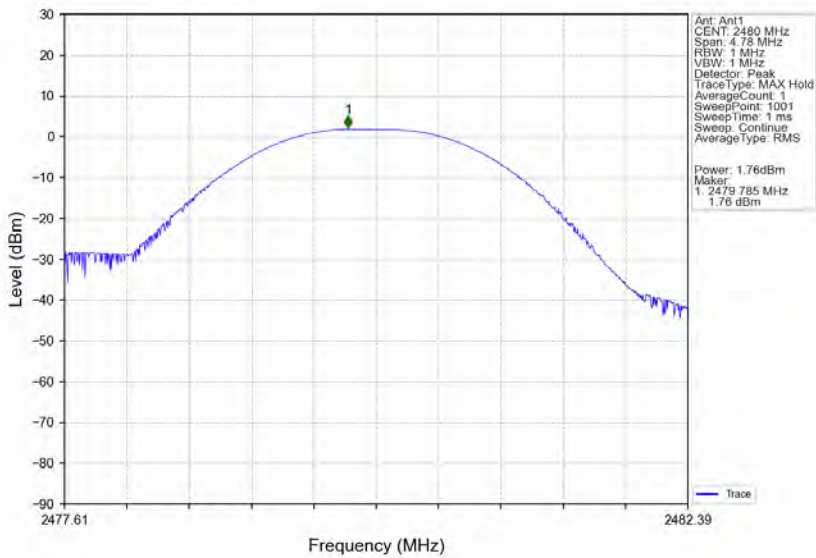
Note1: Antenna Gain: Ant1: 0.8dBi;

3.2 Test Graph

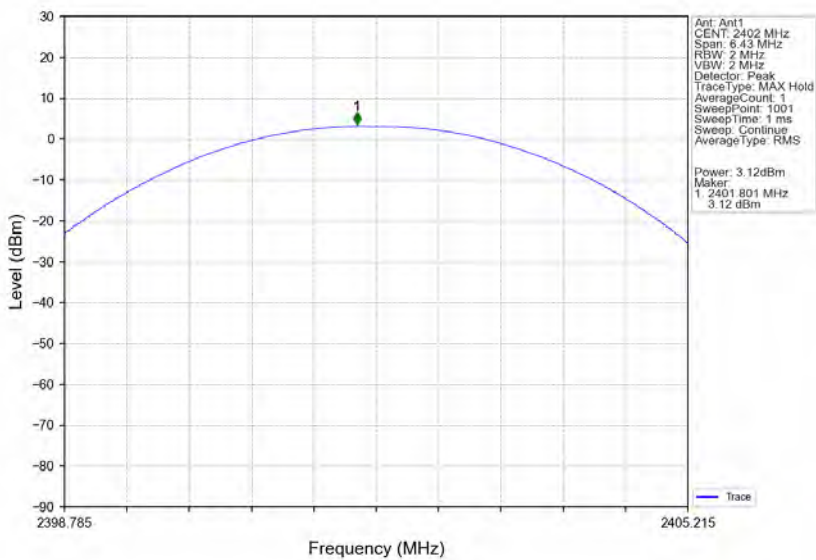
3.2.1 Power



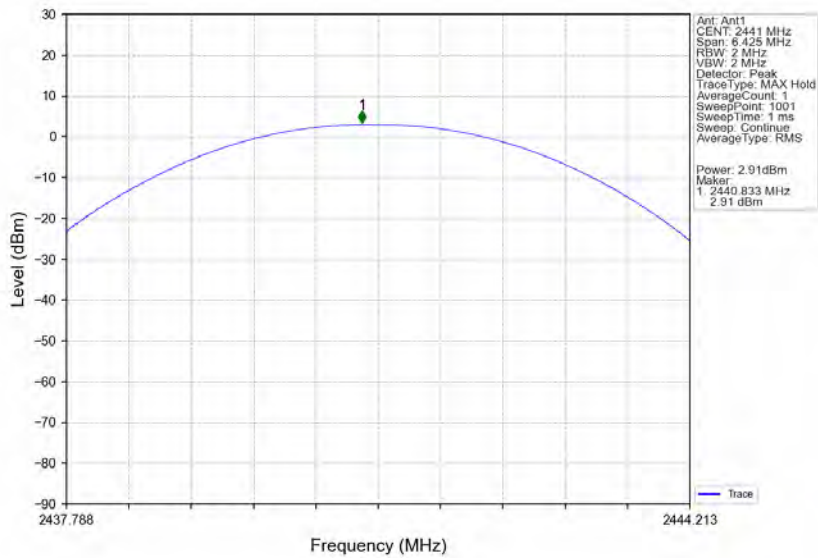
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



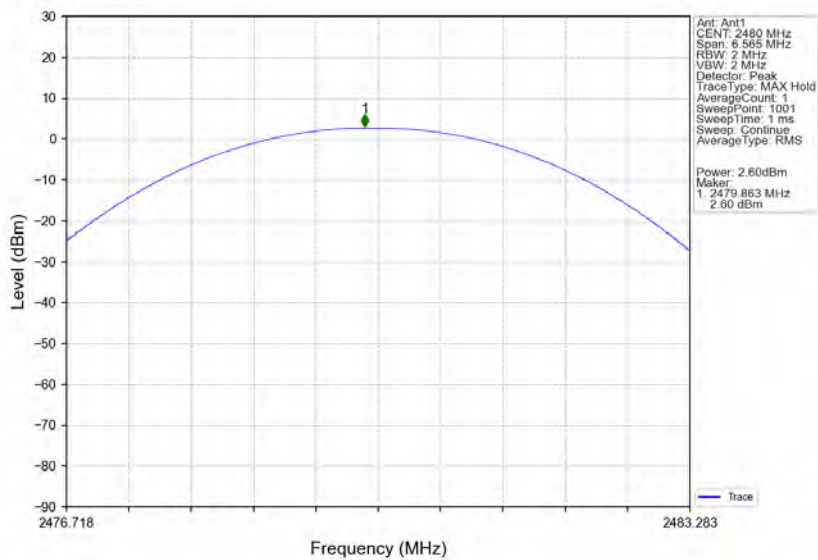
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



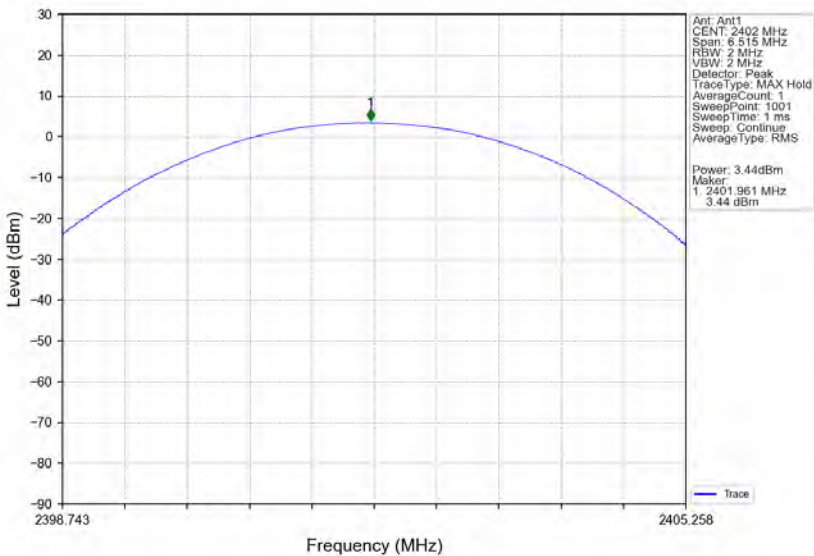
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

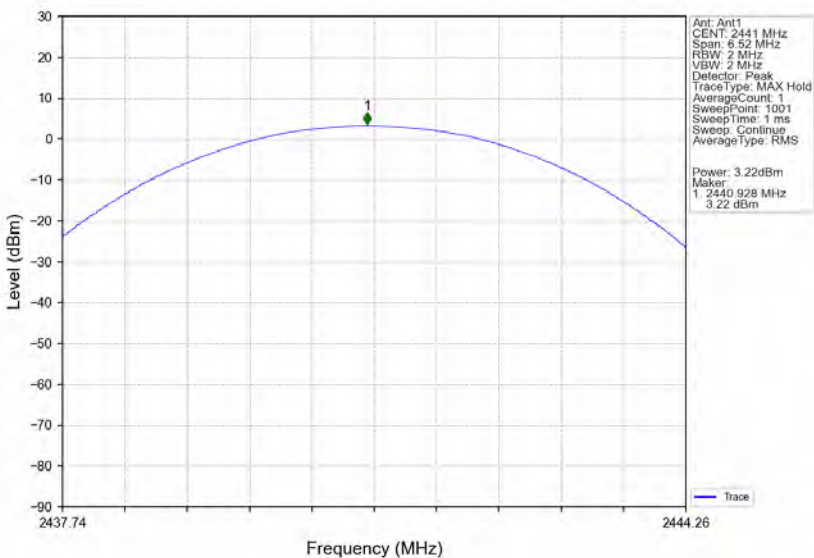
Report No.: KSCR240800156901

Page: 166 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



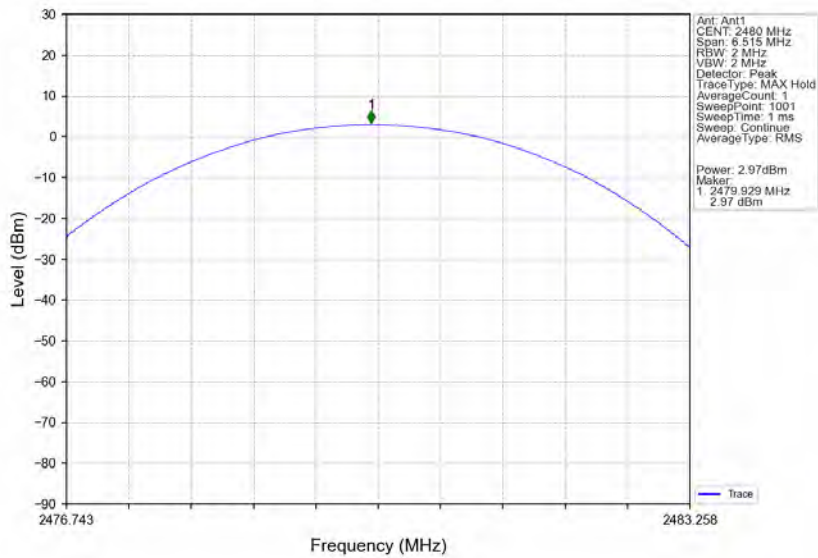
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 167 of 200

8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV





Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 168 of 200

4. Carrier Frequency Separation

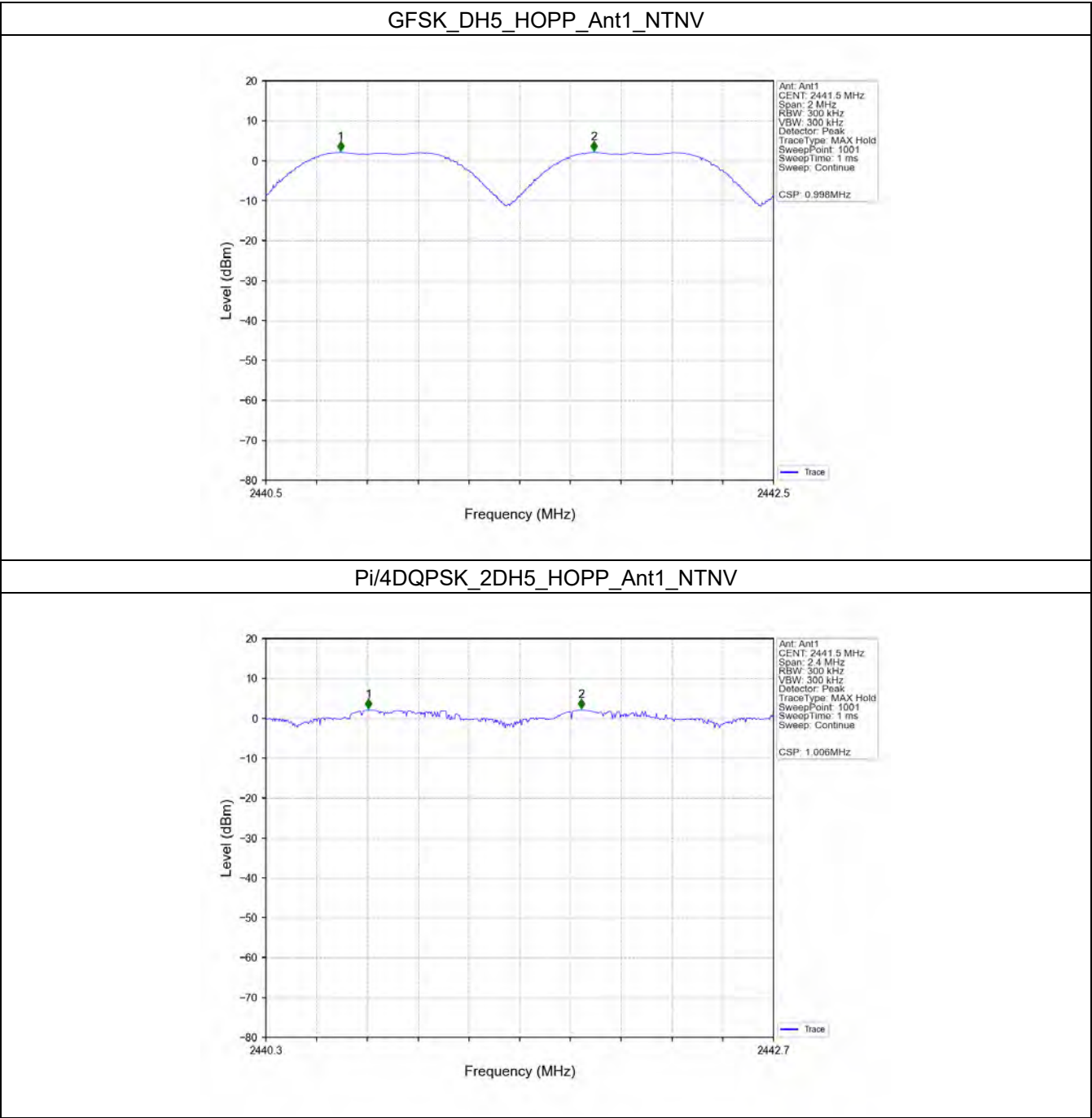
4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.998	0.956	≥ 0.956	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.006	1.313	≥ 0.875	Pass
8DPSK	SISO	HOPP	3DH5	1.001	1.304	≥ 0.869	Pass

4.2 Test Graph

4.2.1 Ant1



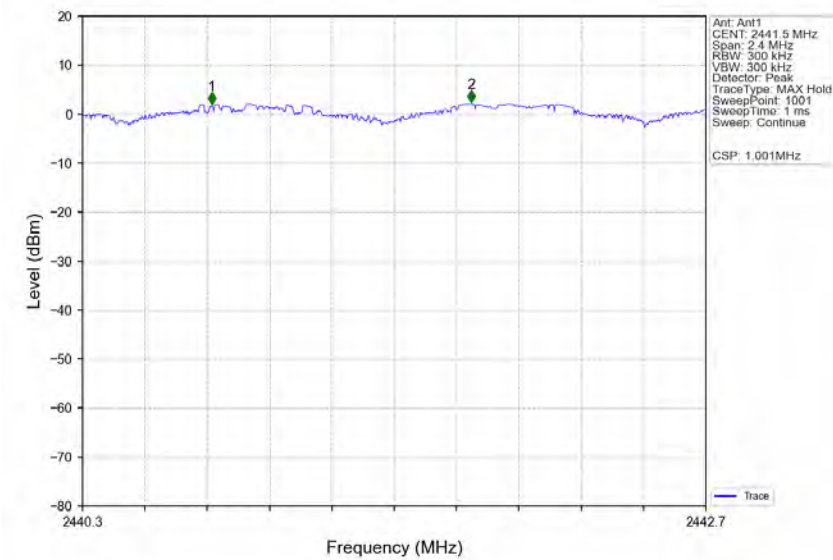
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 170 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV





Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 171 of 200

5. Number of Hopping Frequencies

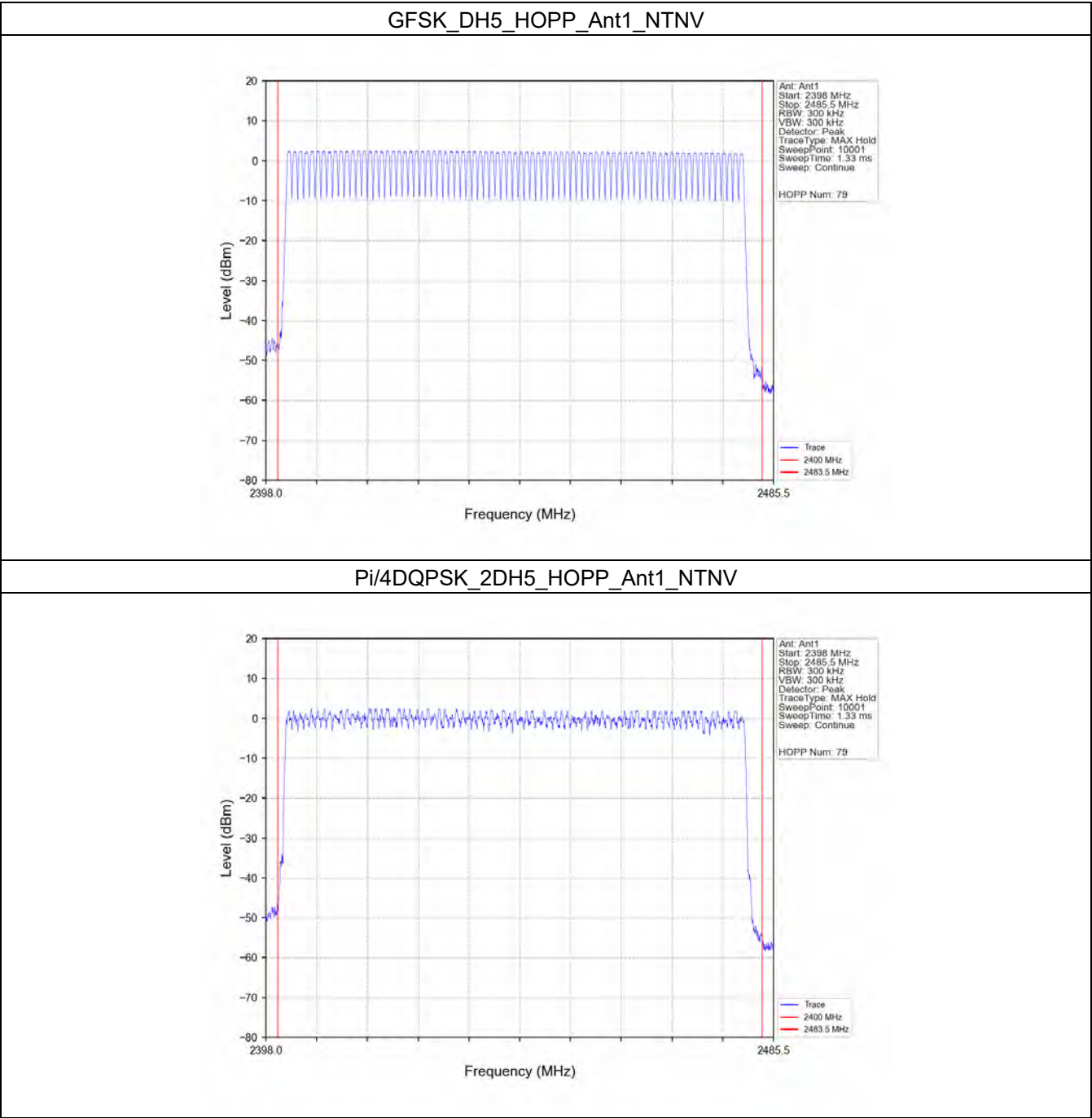
5.1 Test Result

5.1.1 HoppNum

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

5.2 Test Graph

5.2.1 HoppNum



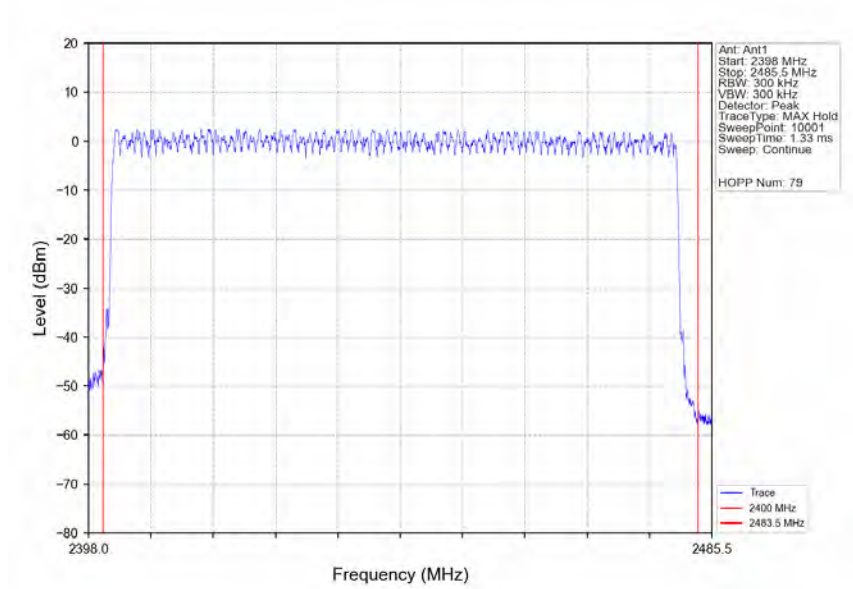
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 173 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 174 of 200

6. Time of Occupancy (Dwell Time)

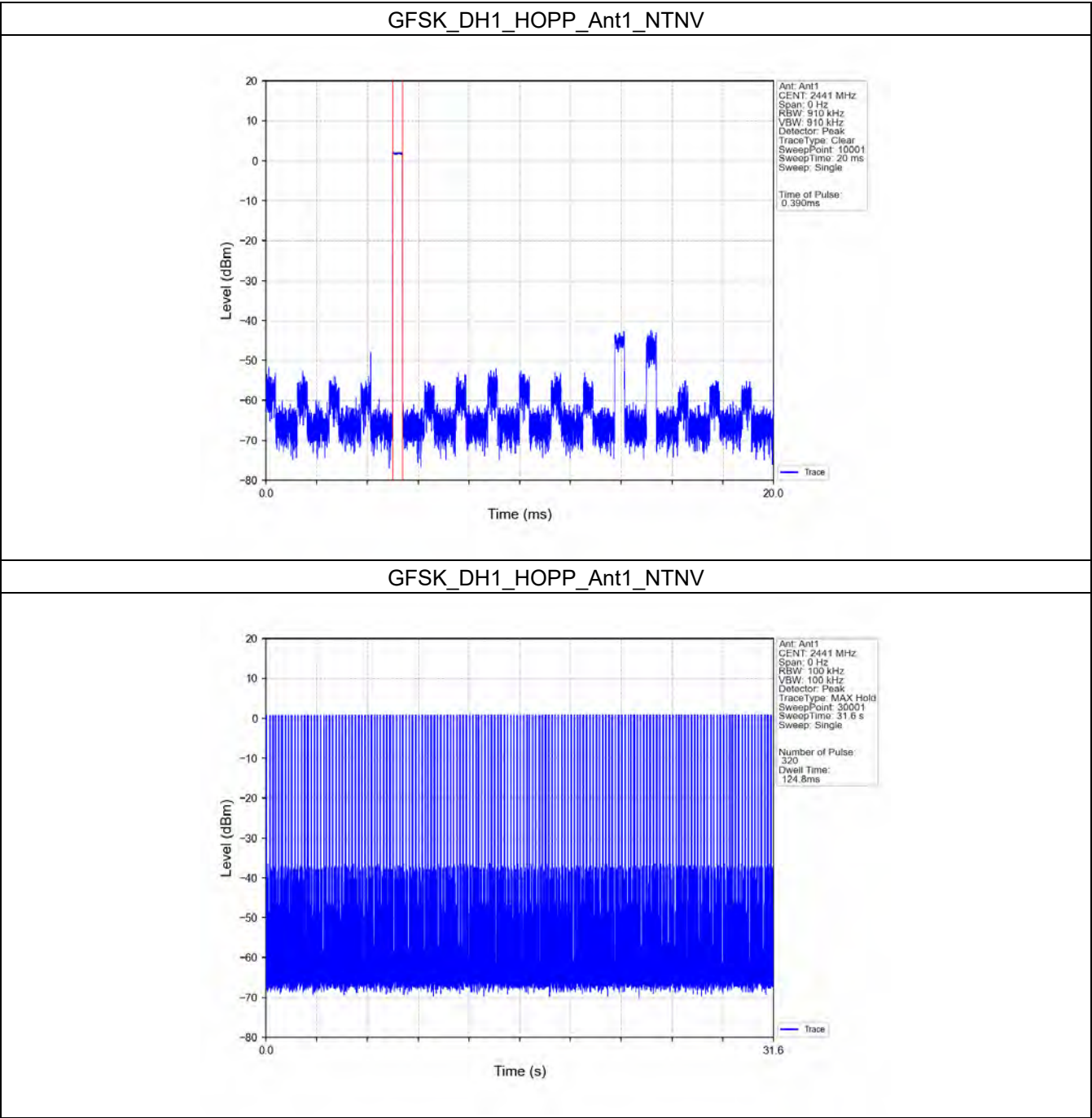
6.1 Test Result

6.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.390	31.600	320	124.800	<=400	Pass
			DH3	1.648	31.600	169	278.512	<=400	Pass
			DH5	2.896	31.600	121	350.416	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.394	31.600	320	126.080	<=400	Pass
			2DH3	1.648	31.600	157	258.736	<=400	Pass
			2DH5	2.900	31.600	124	359.600	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.396	31.600	320	126.720	<=400	Pass
			3DH3	1.646	31.600	154	253.484	<=400	Pass
			3DH5	2.896	31.600	105	304.080	<=400	Pass

6.2 Test Graph

6.2.1 Ant1



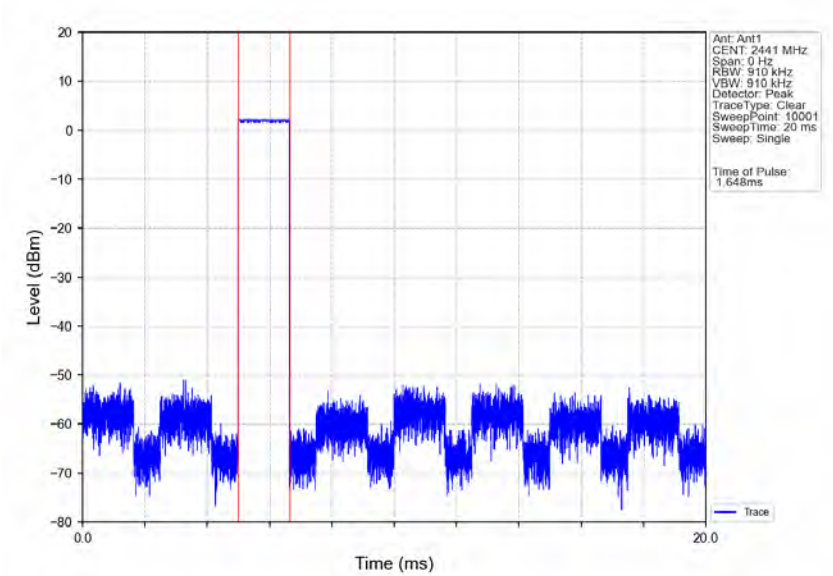
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

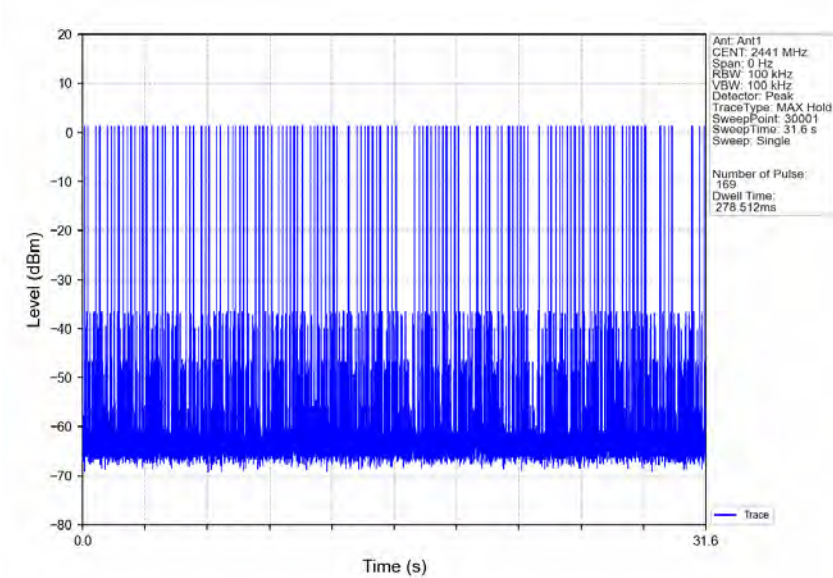
Report No.: KSCR240800156901

Page: 176 of 200

GFSK_DH3_HOPP_Ant1_NTNV



GFSK_DH3_HOPP_Ant1_NTNV



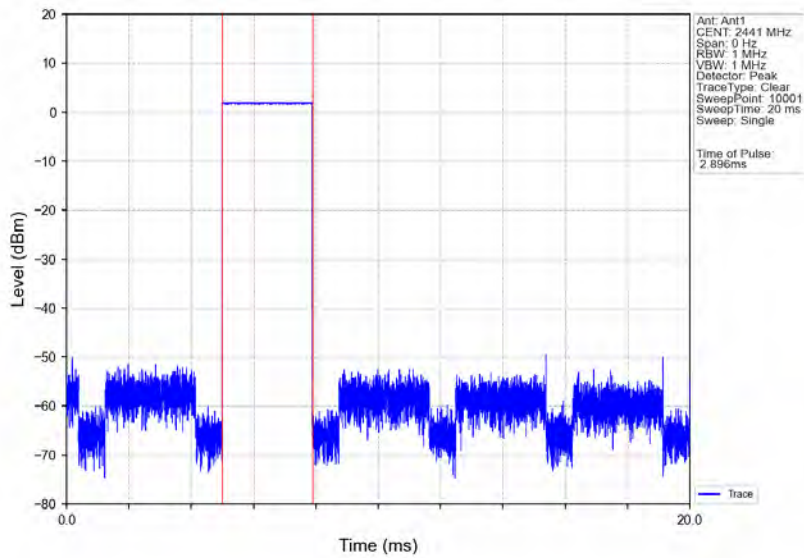
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

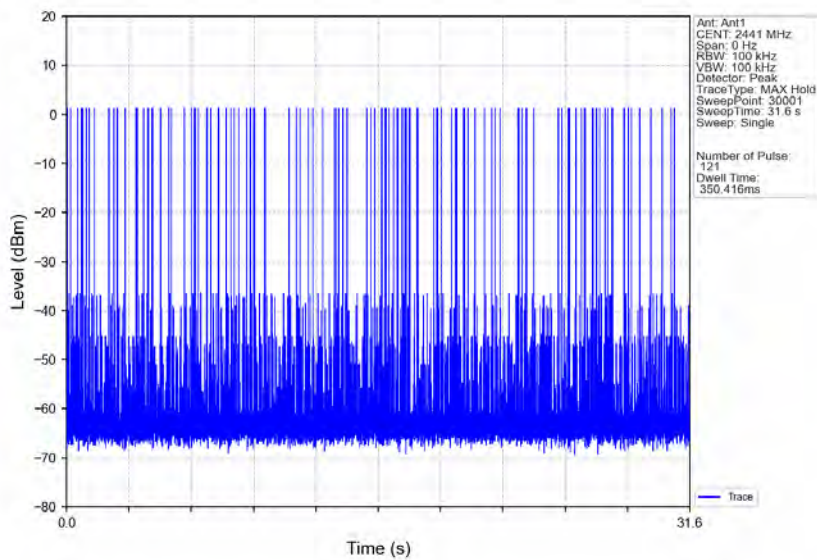
Report No.: KSCR240800156901

Page: 177 of 200

GFSK_DH5_HOPP_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



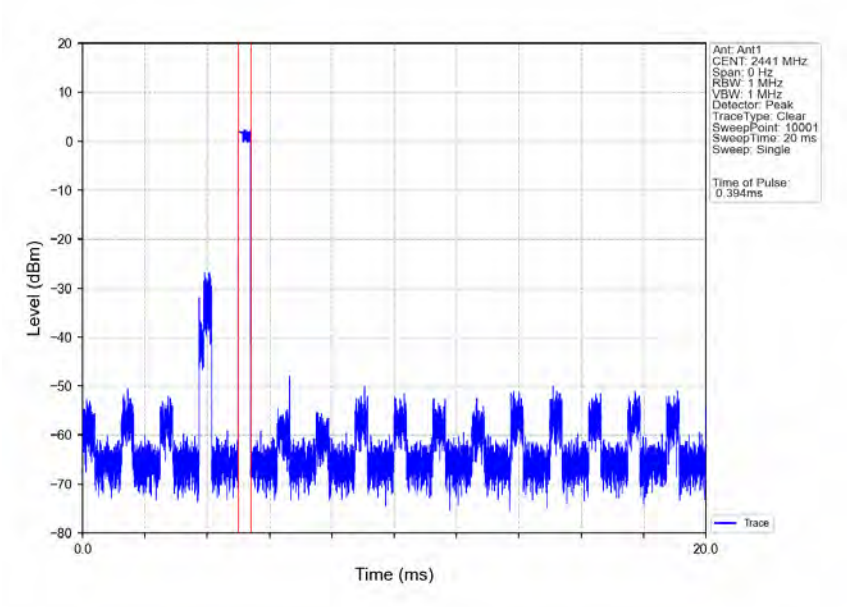
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

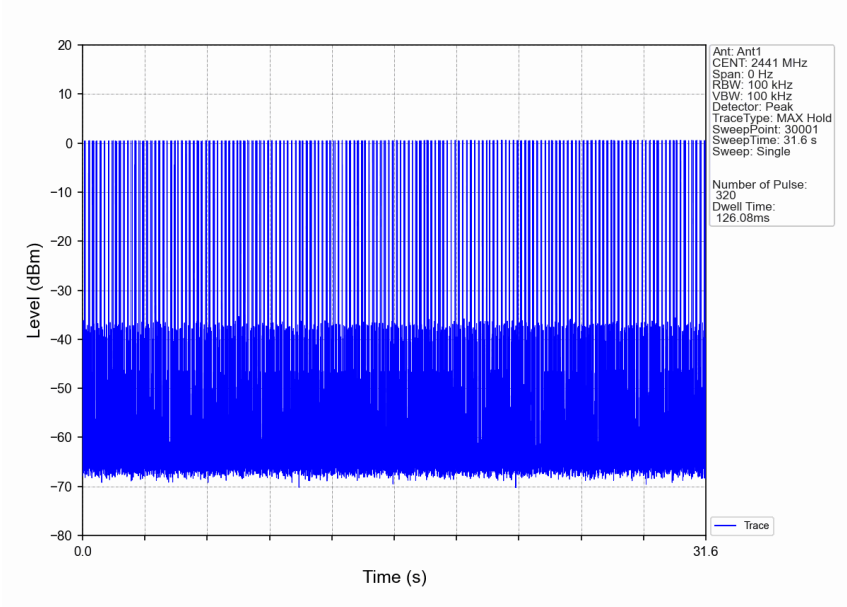
Report No.: KSCR240800156901

Page: 178 of 200

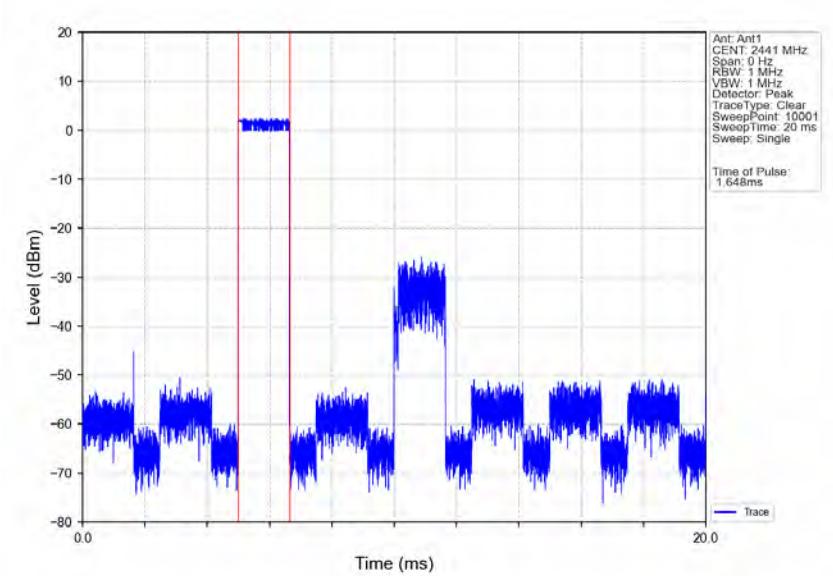
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



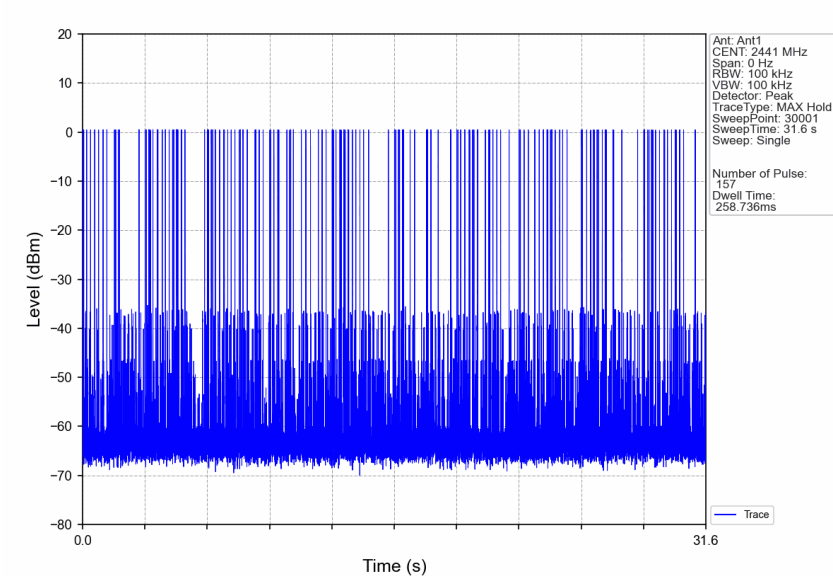
Pi/4DQPSK_2DH1_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH3_HOPP_Ant1_NTNV



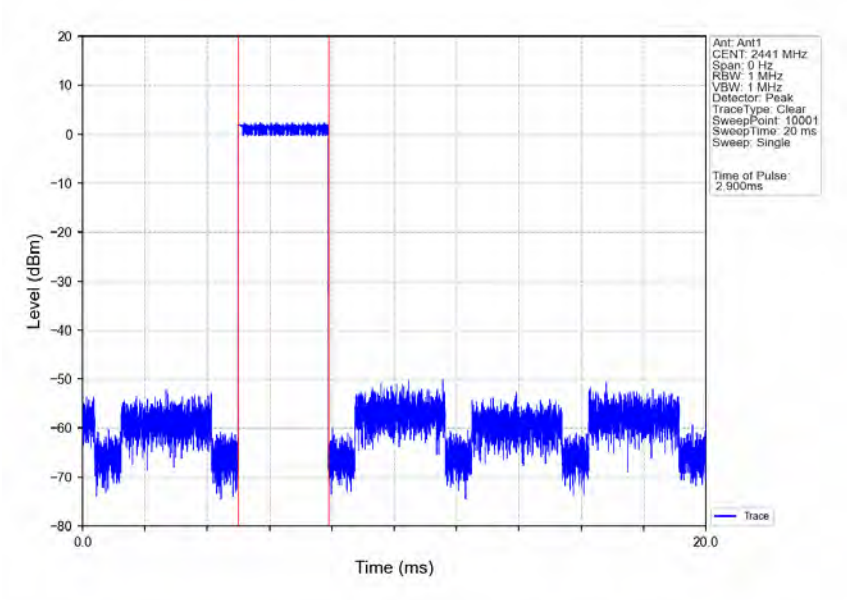
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

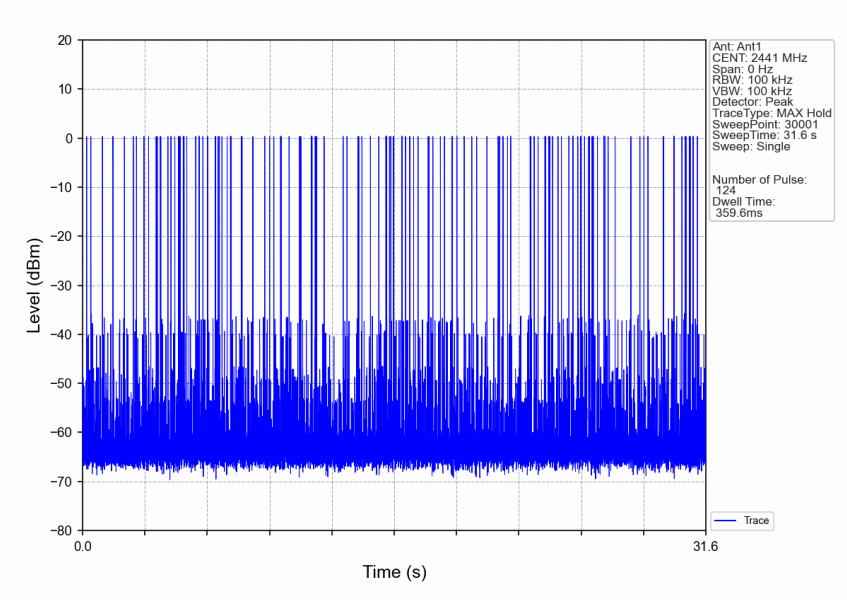
Report No.: KSCR240800156901

Page: 180 of 200

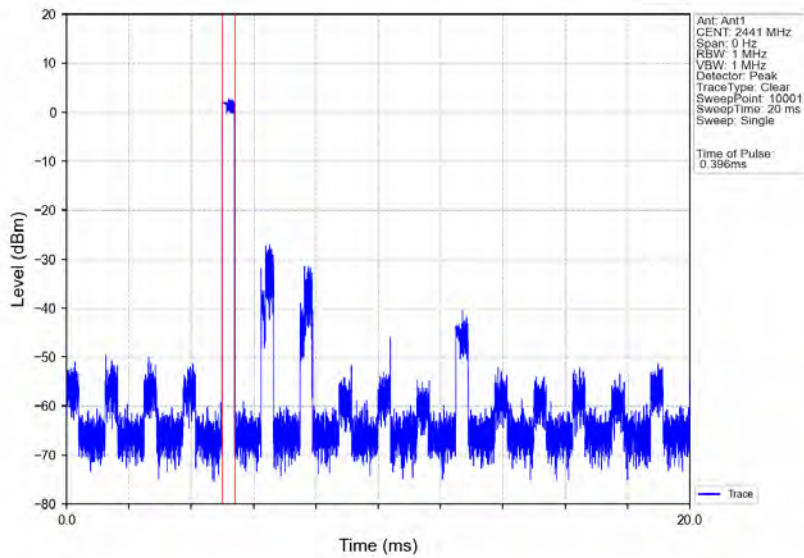
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



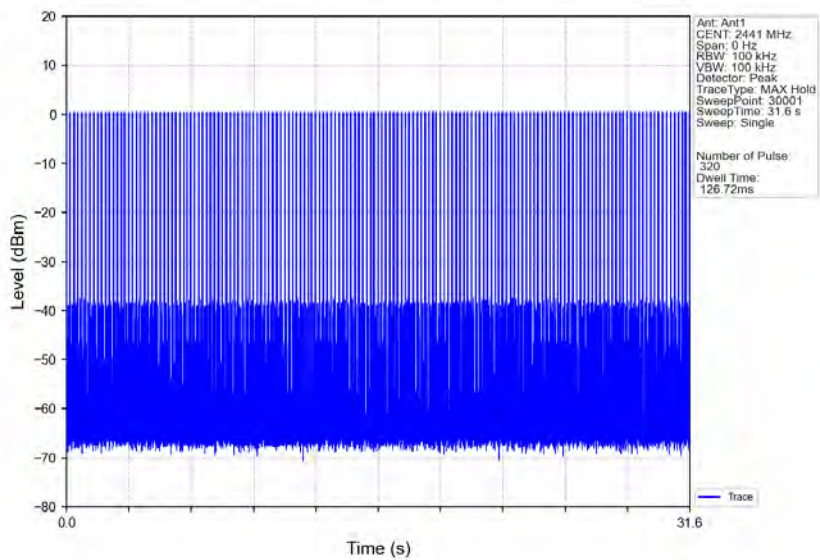
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



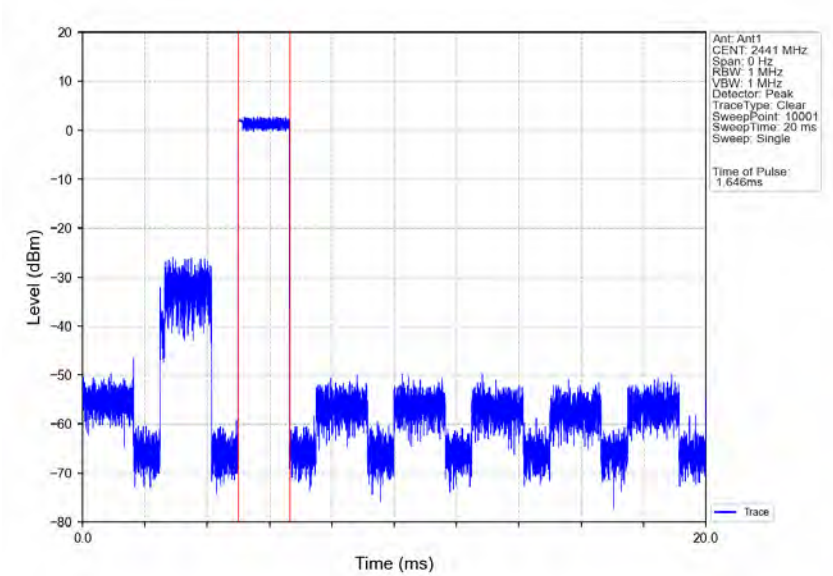
8DPSK_3DH1_HOPP_Ant1_NTNV



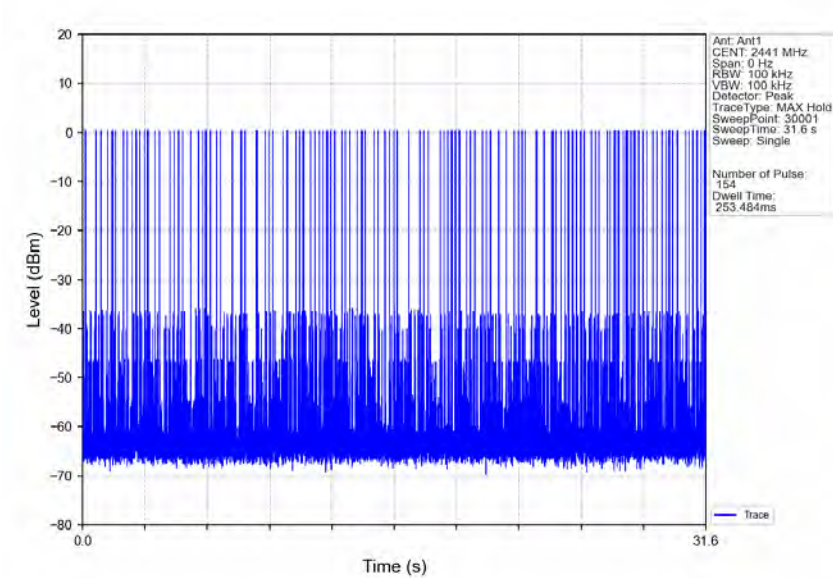
8DPSK_3DH1_HOPP_Ant1_NTNV



8DPSK_3DH3_HOPP_Ant1_NTNV



8DPSK_3DH3_HOPP_Ant1_NTNV



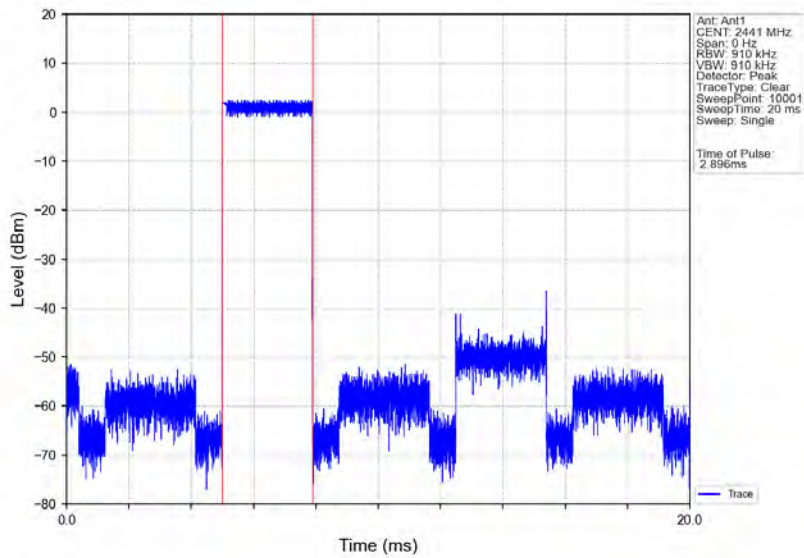
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

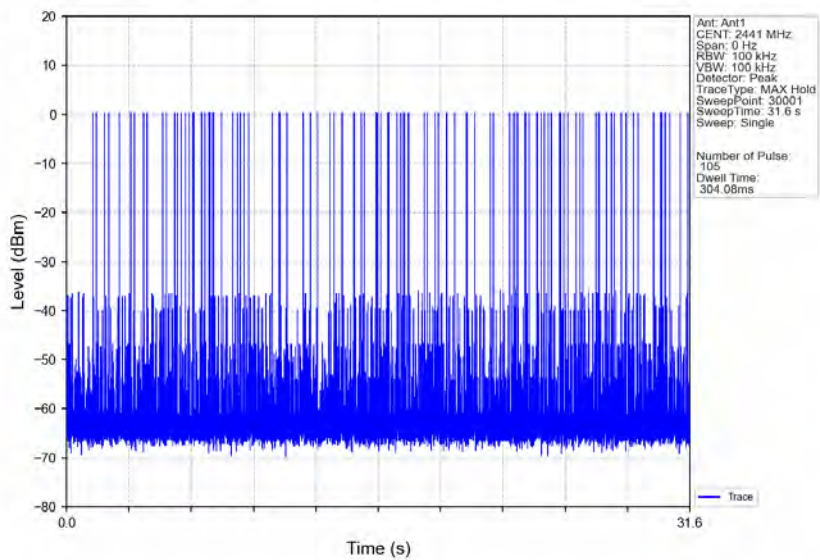
Report No.: KSCR240800156901

Page: 183 of 200

8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240800156901

Page: 184 of 200

7. Unwanted Emissions In Non-restricted Frequency Bands

7.1 Test Result

7.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	2.09
		2441	DH5	1	1.89
		2480	DH5	1	1.56
Pi/4DQPSK	SISO	2402	2DH5	1	2.19
		2441	2DH5	1	2.05
		2480	2DH5	1	1.66
8DPSK	SISO	2402	3DH5	1	2.09
		2441	3DH5	1	1.98
		2480	3DH5	1	1.58

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

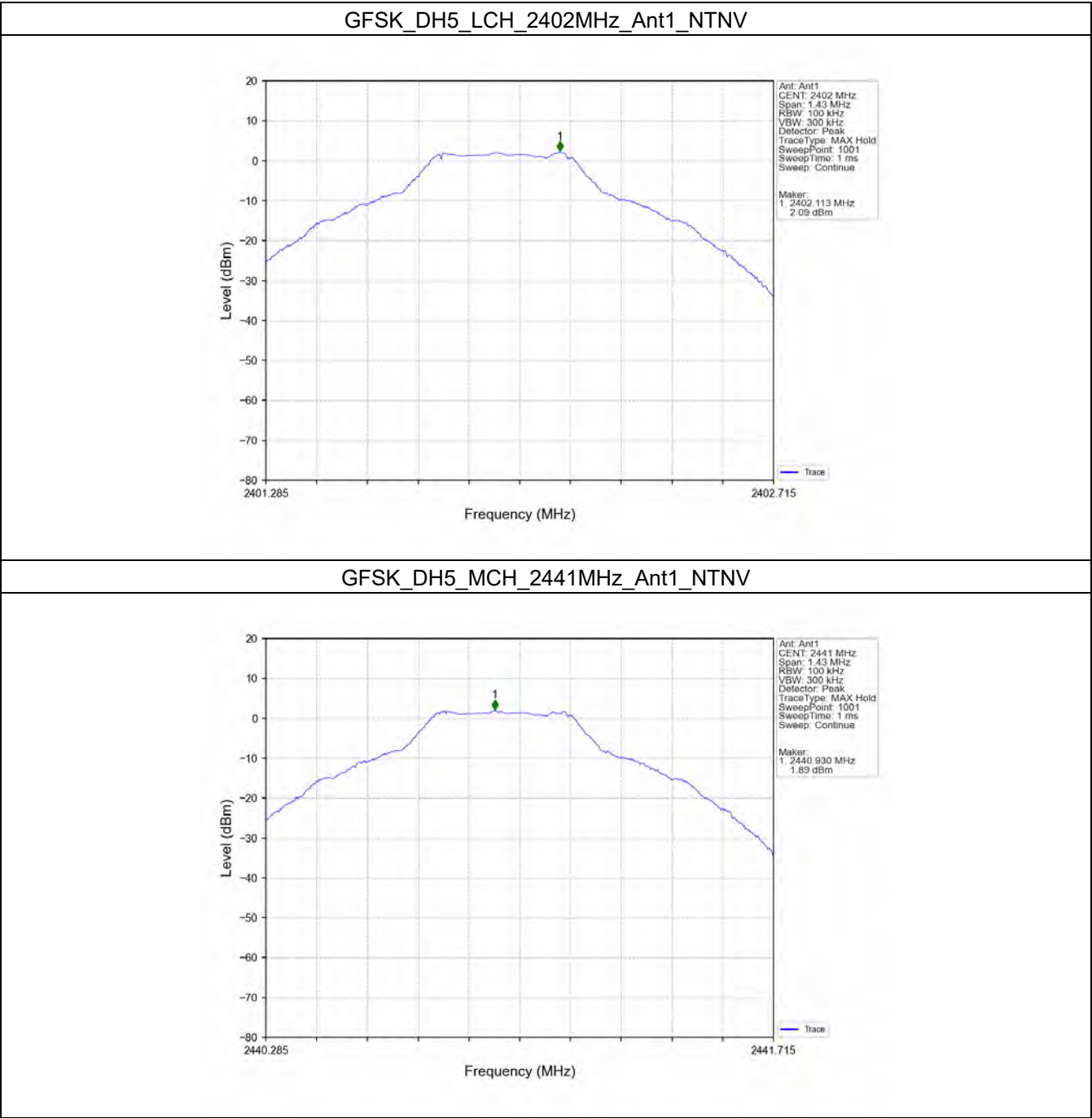
7.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	2.09	-17.91	Pass
		2441	DH5	1	2.09	-17.91	Pass
		2480	DH5	1	2.09	-17.91	Pass
		HOPP	DH5	1	2.09	-17.91	Pass
					2.09	-17.91	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	2.19	-17.81	Pass
		2441	2DH5	1	2.19	-17.81	Pass
		2480	2DH5	1	2.19	-17.81	Pass
		HOPP	2DH5	1	2.19	-17.81	Pass
					2.19	-17.81	Pass
8DPSK	SISO	2402	3DH5	1	2.09	-17.91	Pass
		2441	3DH5	1	2.09	-17.91	Pass
		2480	3DH5	1	2.09	-17.91	Pass
		HOPP	3DH5	1	2.09	-17.91	Pass
					2.09	-17.91	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

7.2 Test Graph

7.2.1 Ref



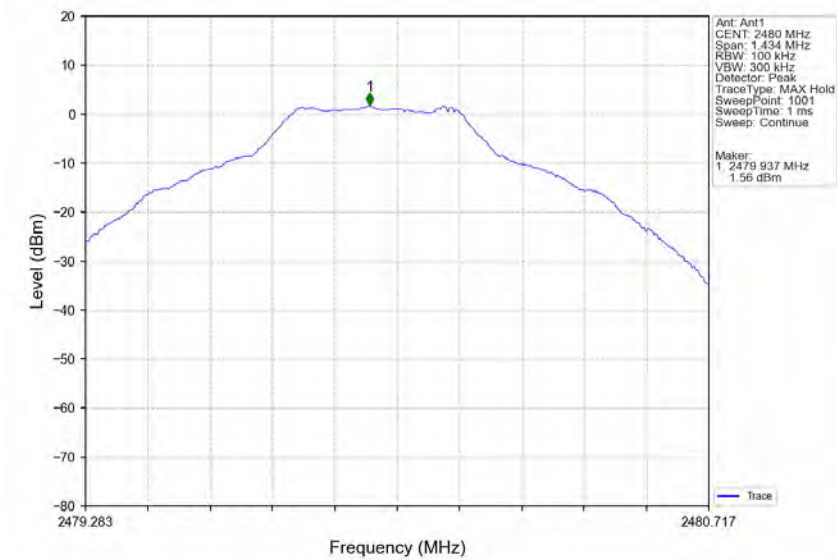
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

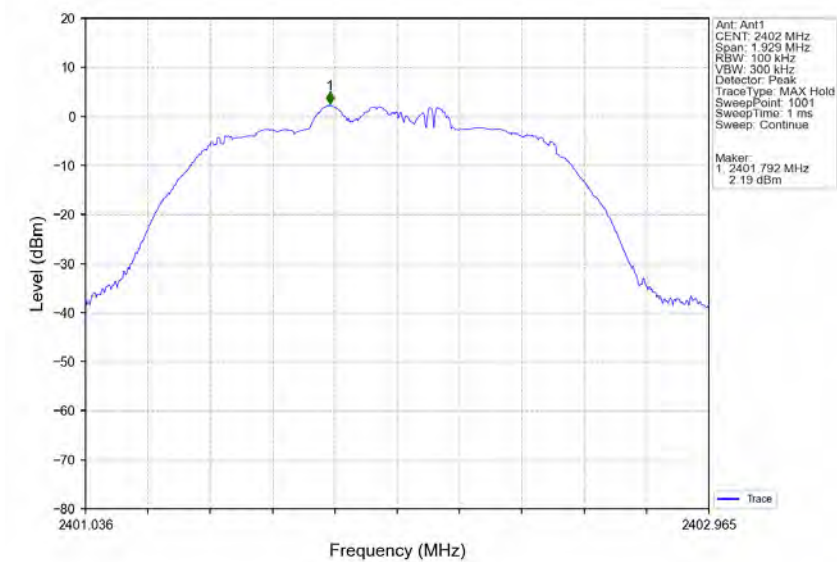
Report No.: KSCR240800156901

Page: 186 of 200

GFSK_DH5_HCH_2480MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



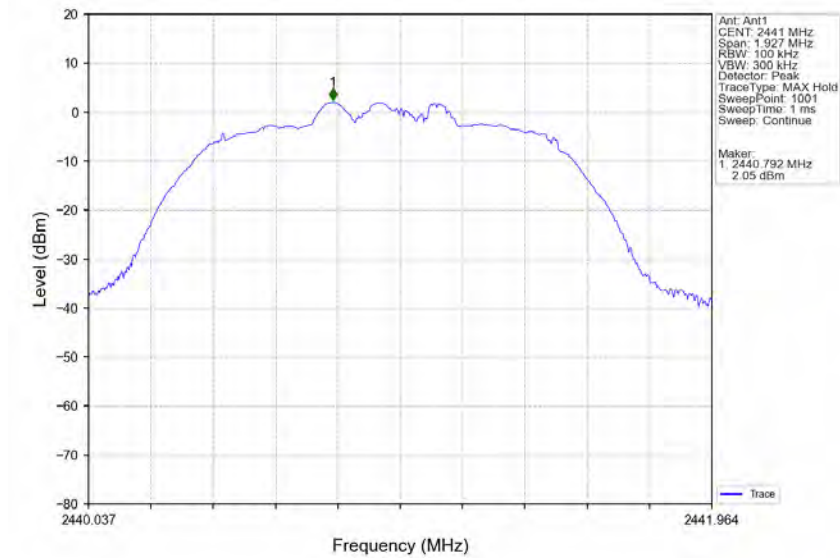
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

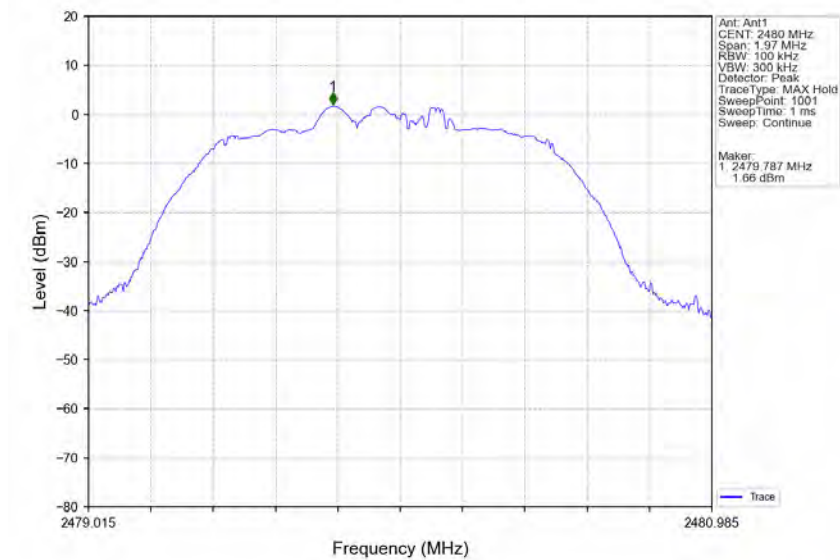
Report No.: KSCR240800156901

Page: 187 of 200

Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



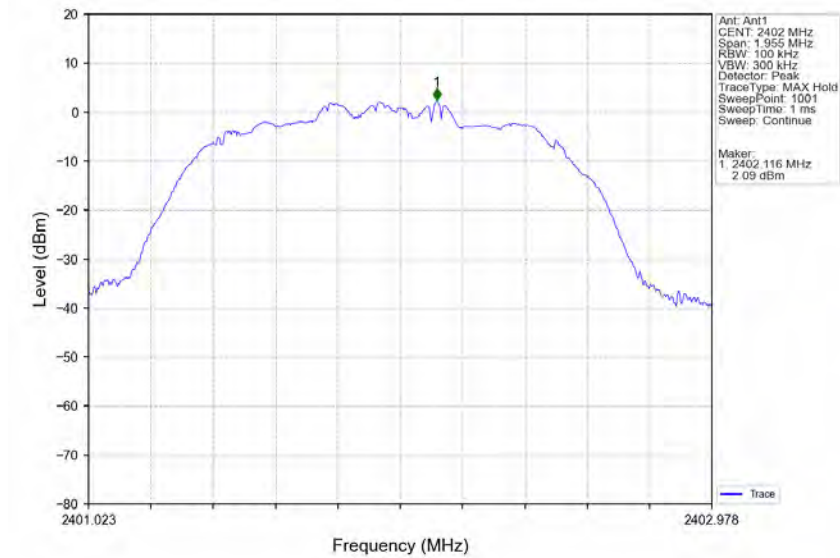
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

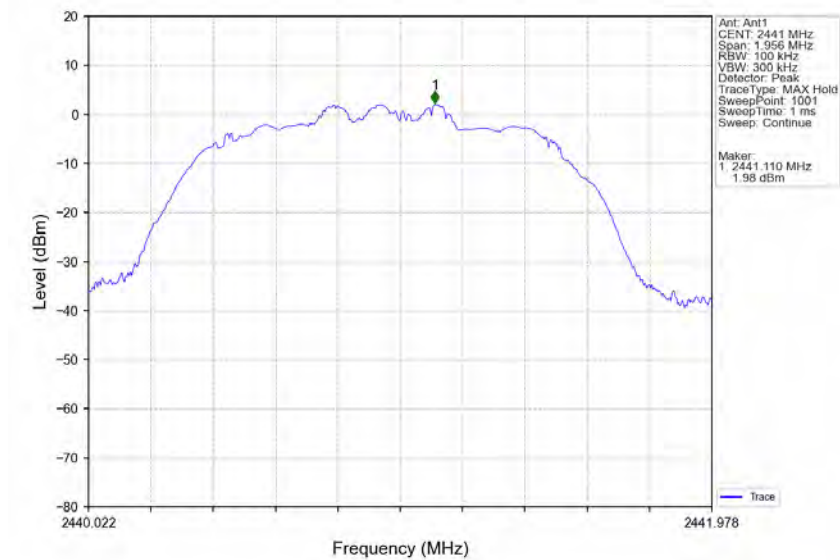
Report No.: KSCR240800156901

Page: 188 of 200

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



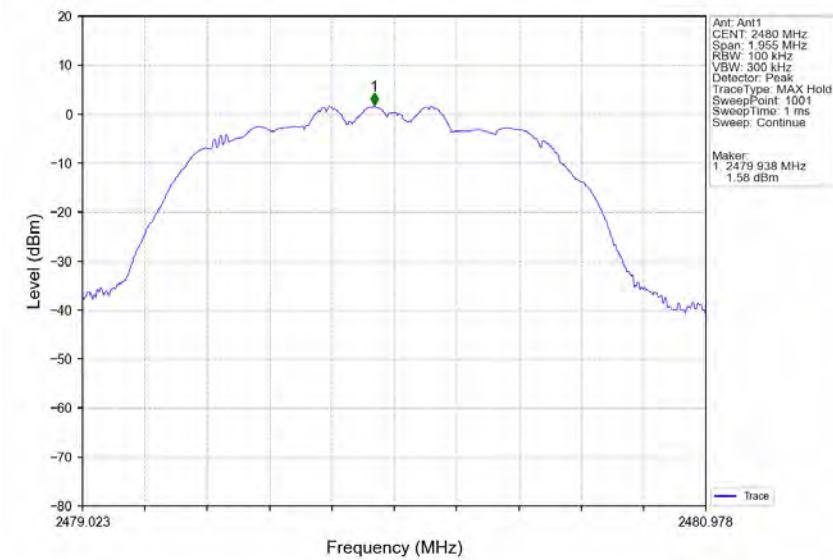
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

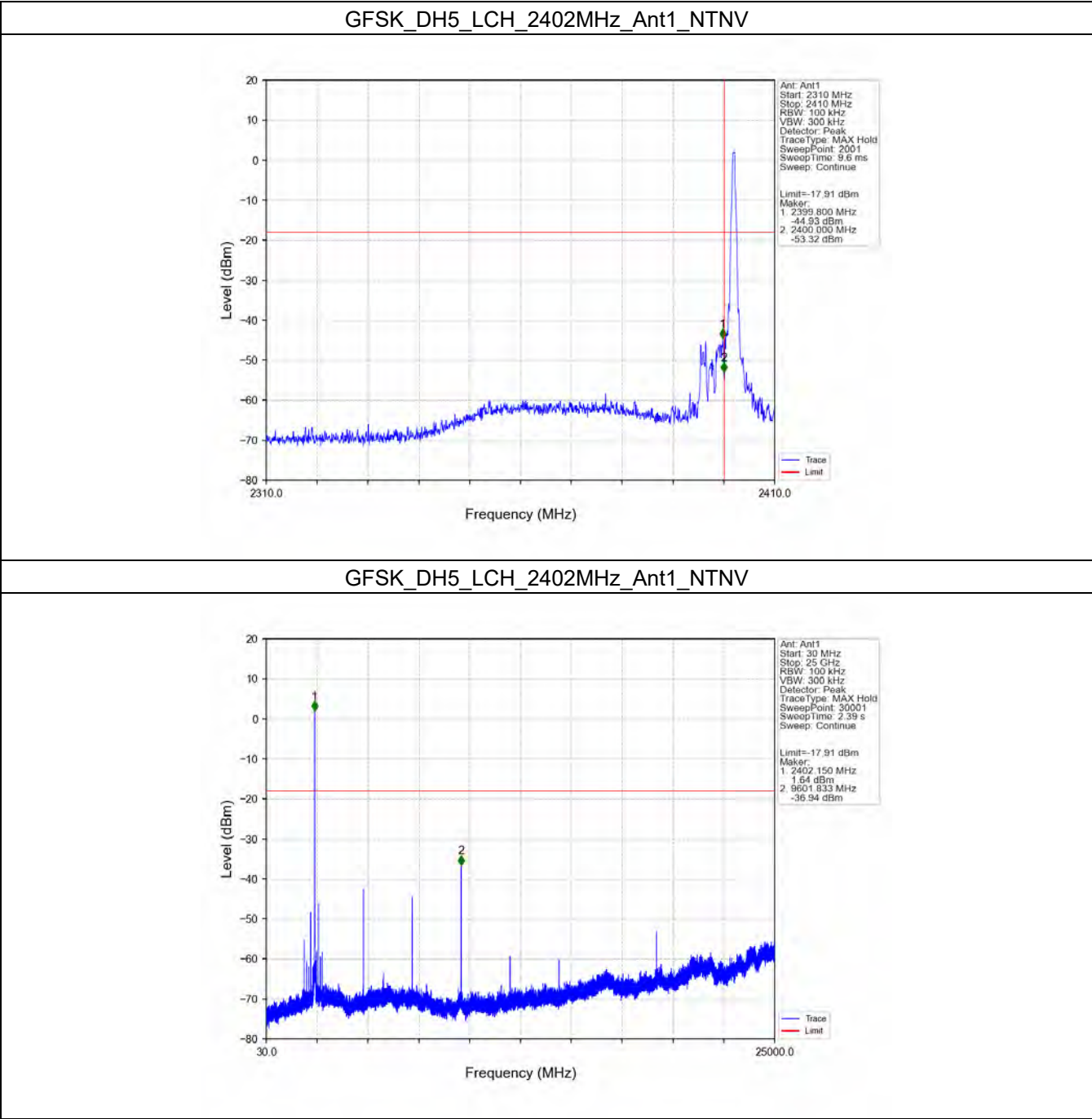
Report No.: KSCR240800156901

Page: 189 of 200

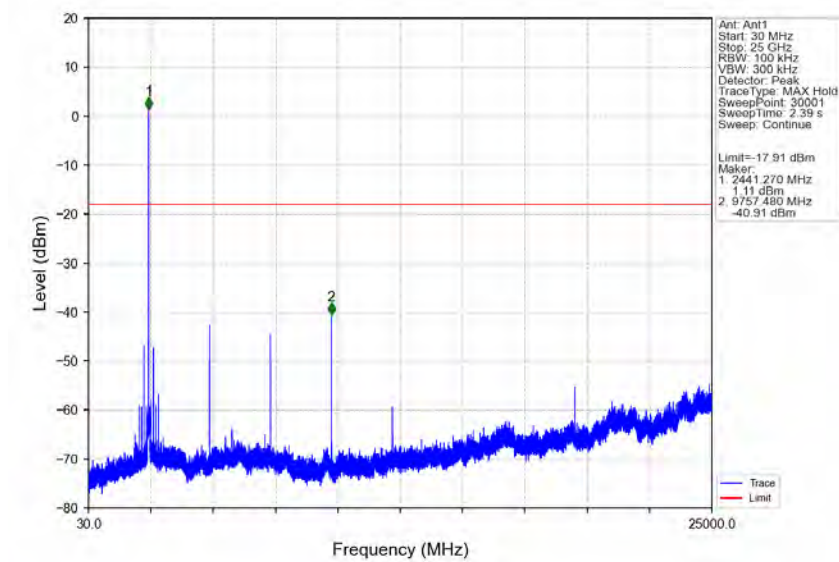
8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



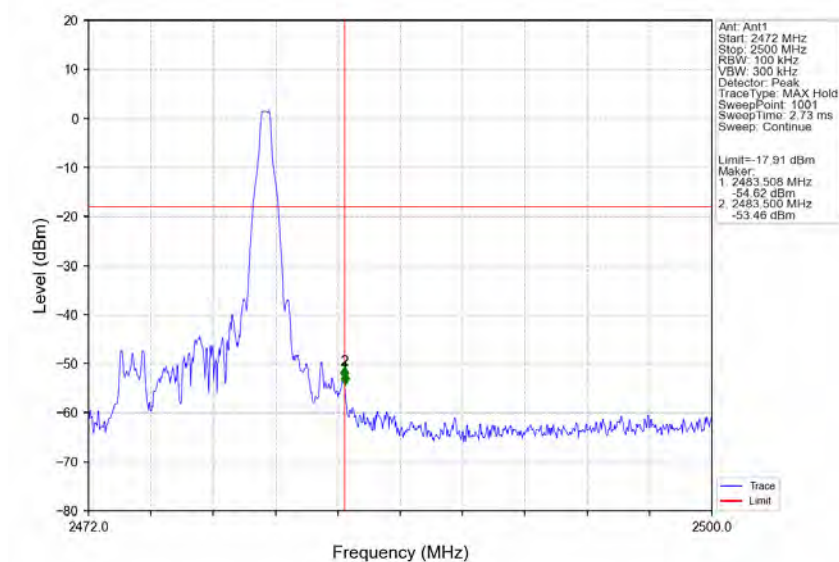
7.2.2 CSE



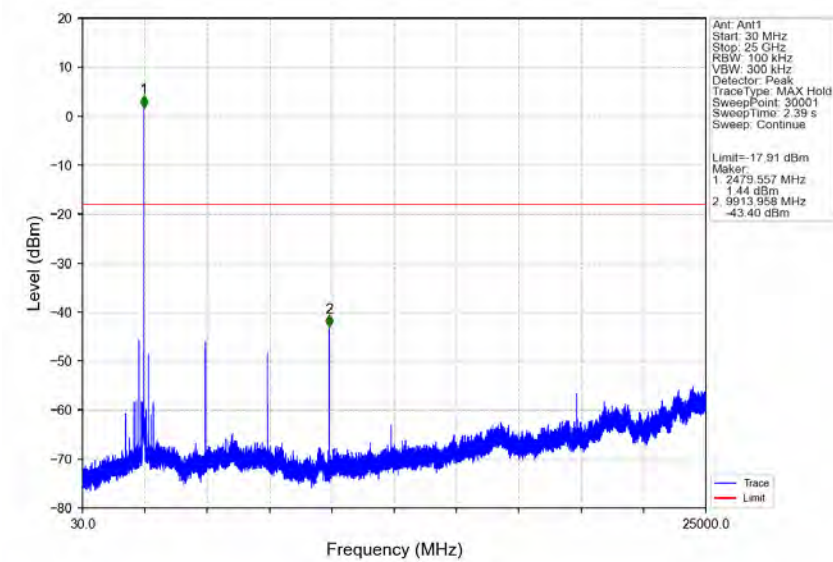
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



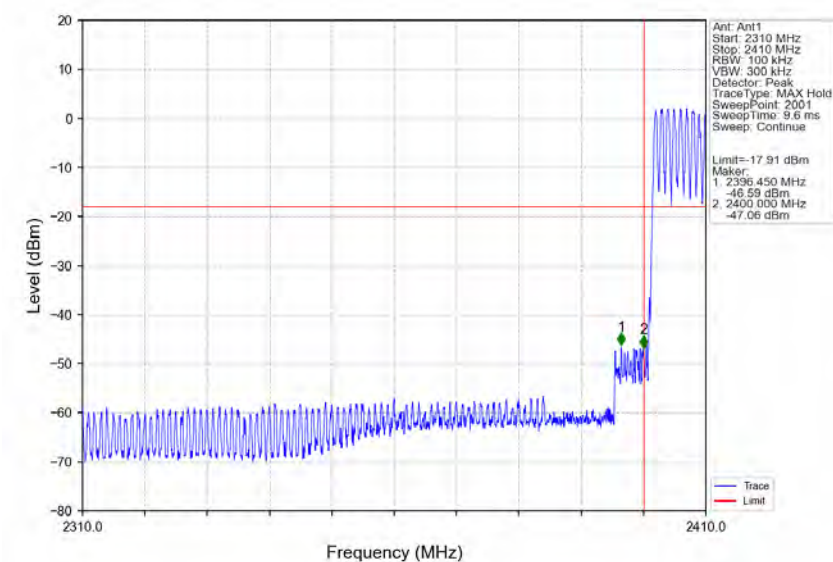
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



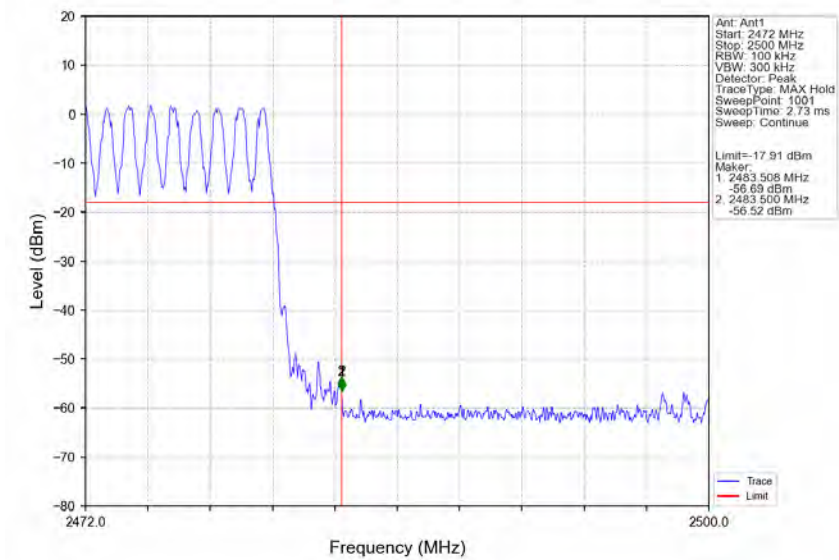
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



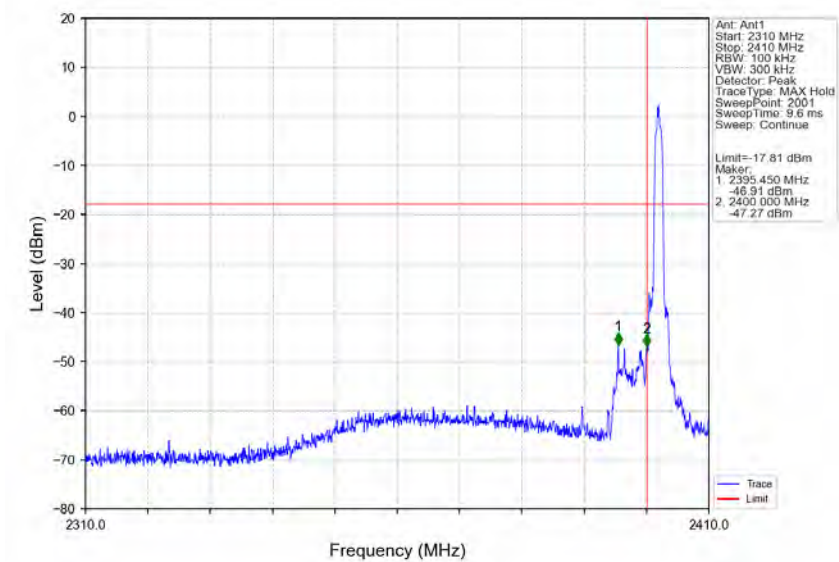
GFSK_DH5_HOPP_2480MHz_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



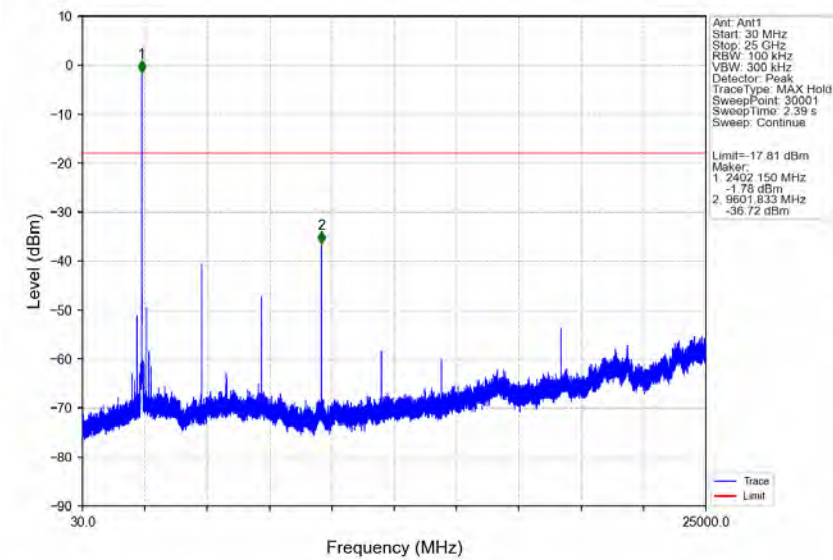
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

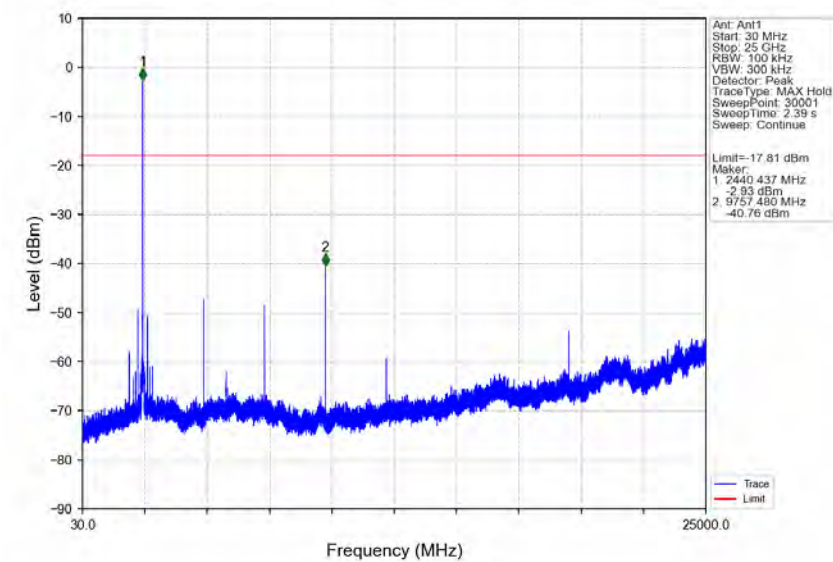
Report No.: KSCR240800156901

Page: 194 of 200

Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



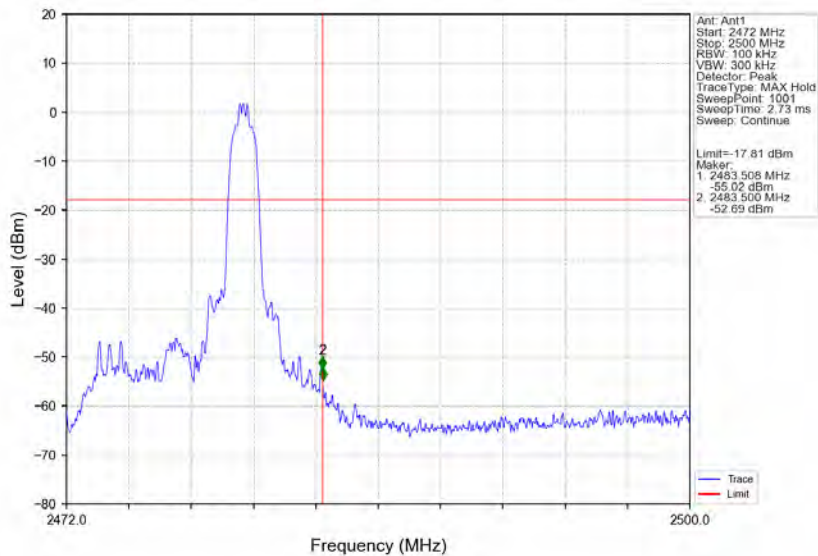
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

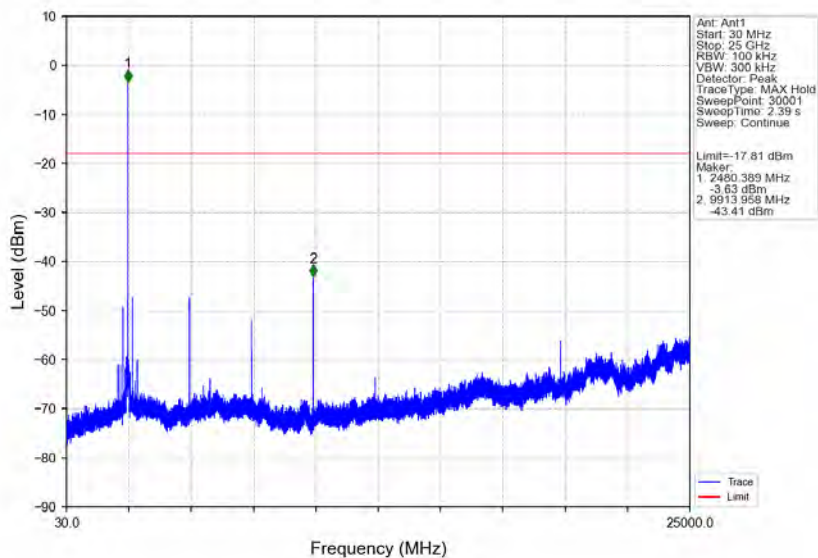
Report No.: KSCR240800156901

Page: 195 of 200

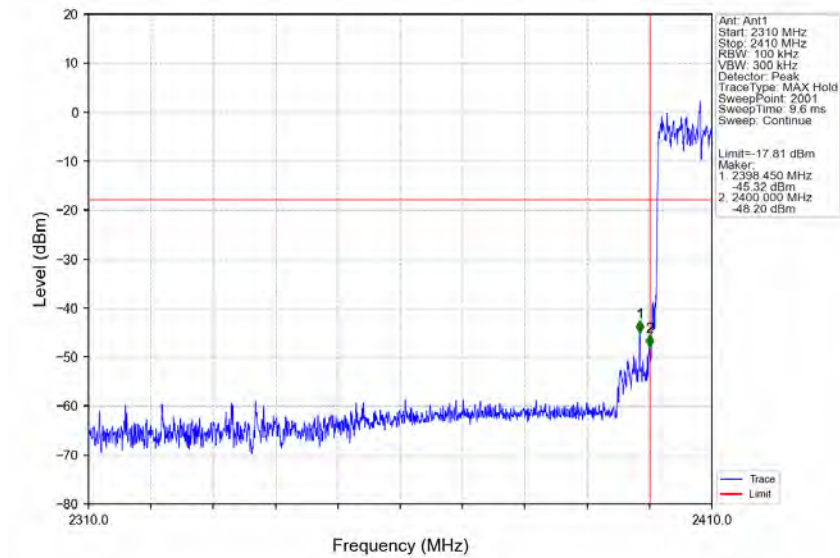
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



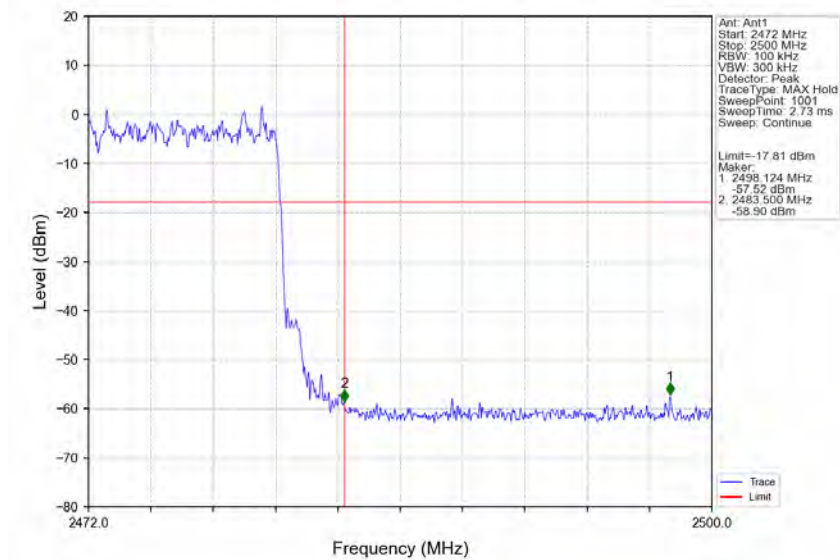
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



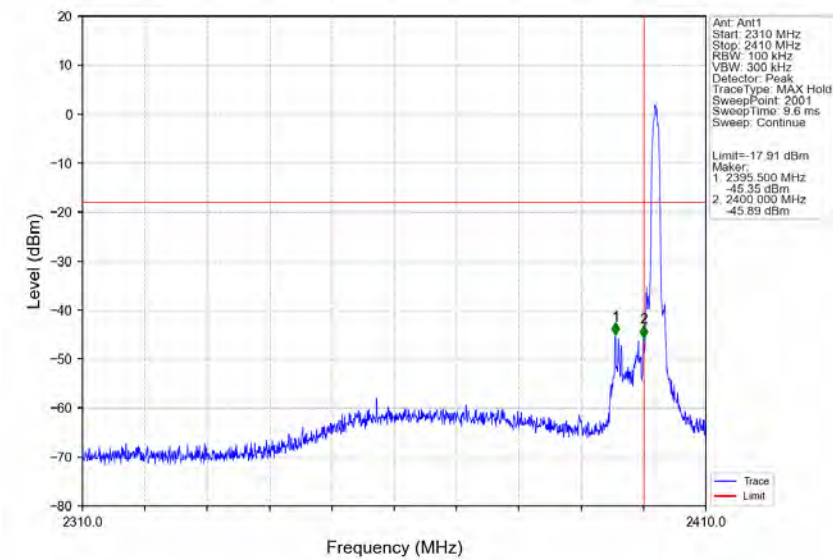
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



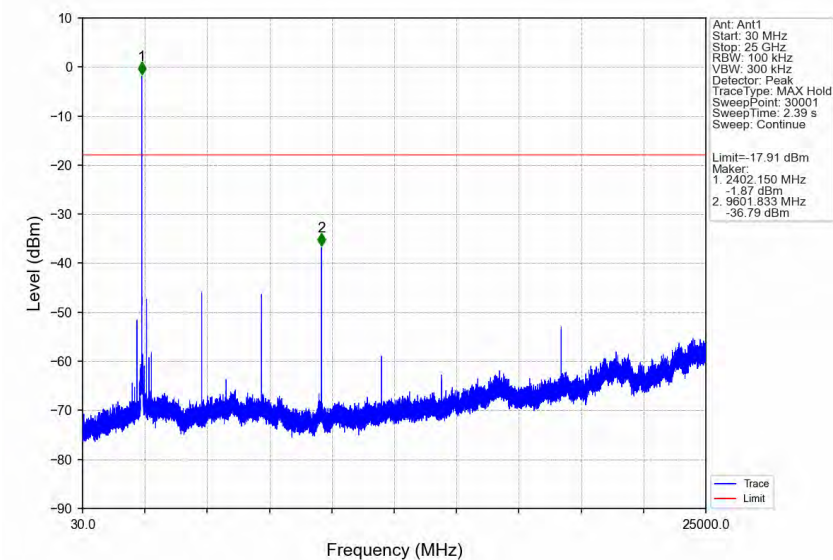
Pi/4DQPSK_2DH5_HOPP_Ant1_NTNV



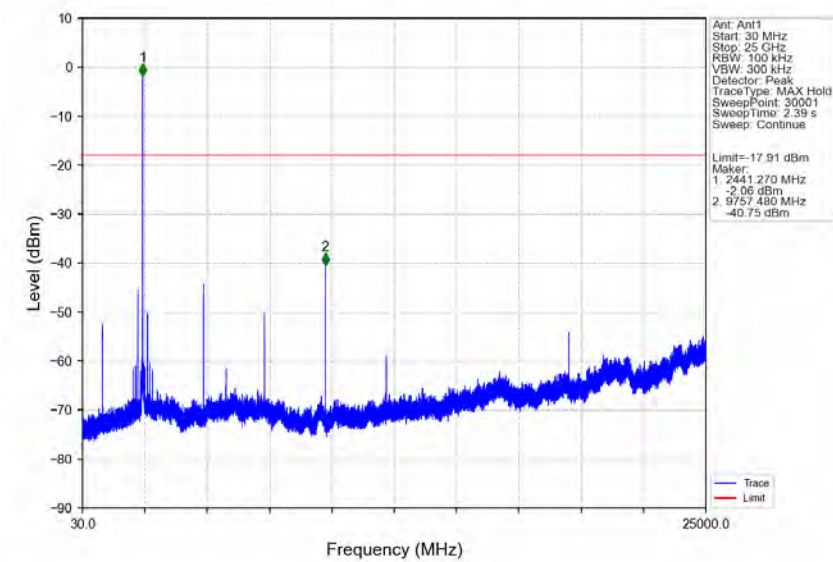
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



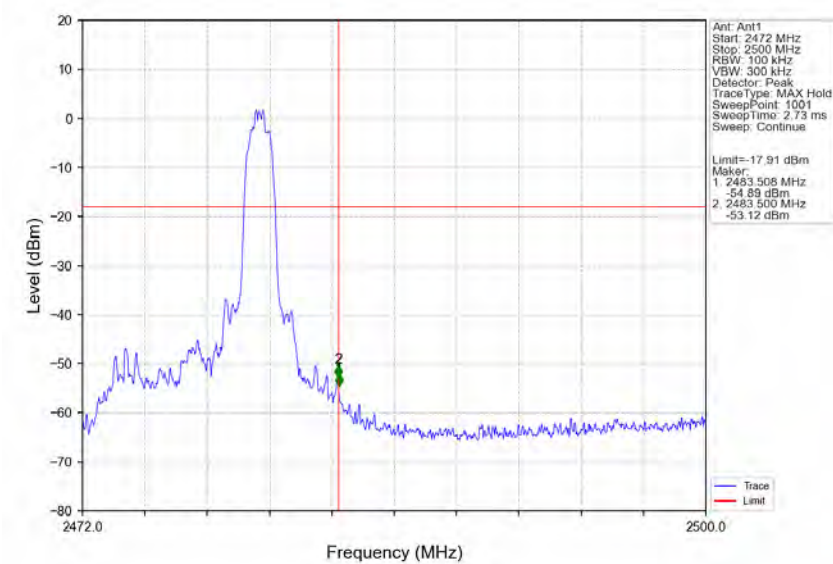
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



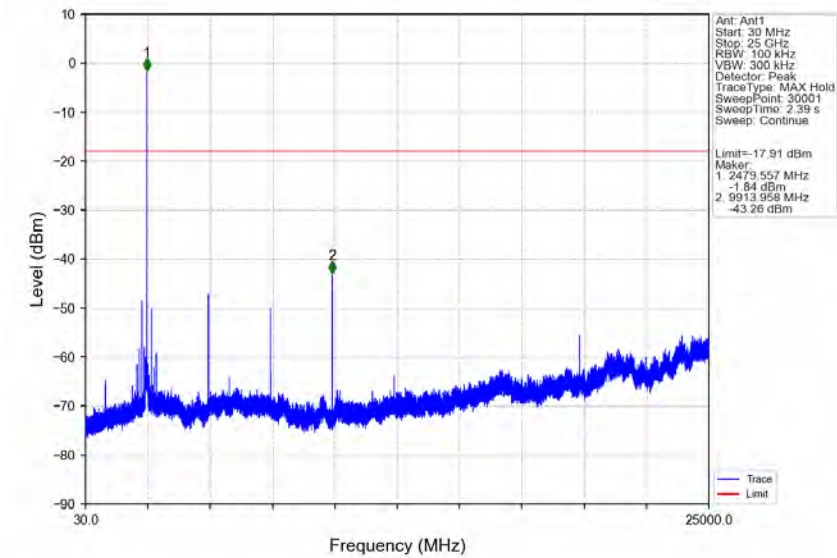
8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



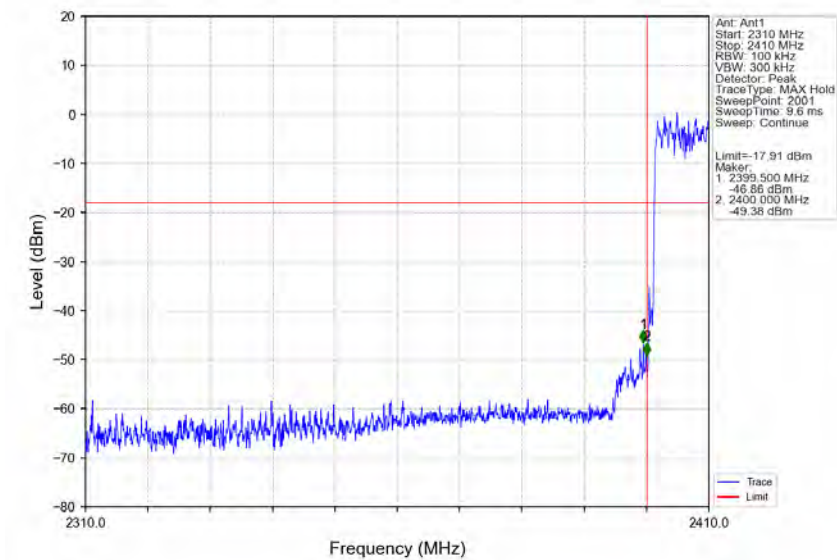
8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



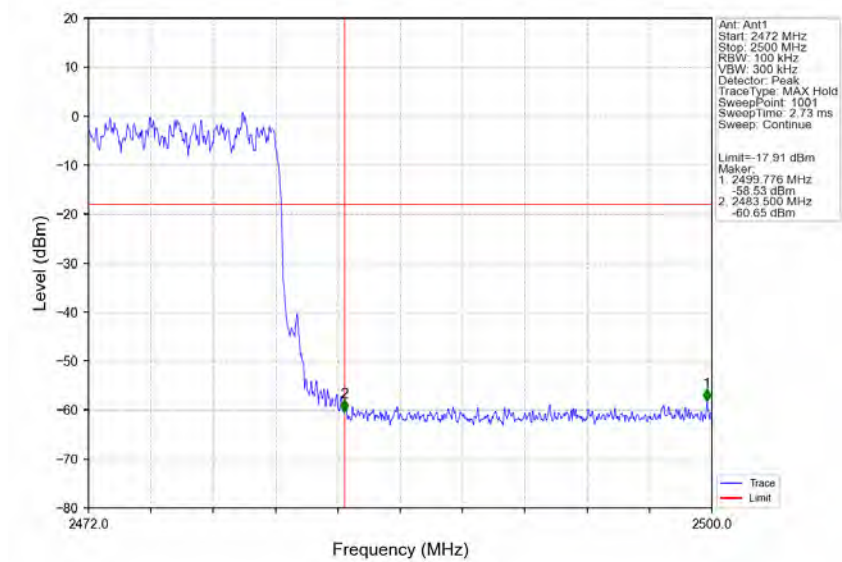
8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV



- End of the Report -