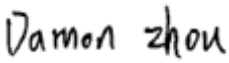
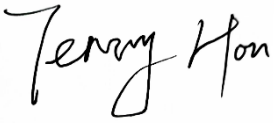
TEST REPORT

Application No.:	KSCR2409001938AT
FCC ID:	2AC8UA2427
Name of Testing Laboratory preparing the Report:	Compliance Certification Services (Kunshan) Inc.
Address of Testing Laboratory preparing the Report:	No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.
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:	2024-09-30
Date of Test:	2024-10-18 to 2024-11-18
Date of Issue:	2024-11-18
Test Result:	**Pass***

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

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Change Antenna	2024-11-18	Based on KSCR240800156901

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

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	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 Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	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 Spurious Emissions Above 1GHz		ANSI C63.10 (2013) Section 6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Conducted Peak Output Power		ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(1)	Pass
Conducted Band Edges Measurement		ANSI C63.10 (2013) Section 7.8.6	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions		ANSI C63.10 (2013) Section 7.8.8	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

Note: Compared with the original report, this report updated Antenna.

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.7V,50mAh by Rechargeable Li-ion Battery
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Number of Channels:	79
Channel Spacing:	1MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Antenna Type:	Monopole Antenna
Antenna Gain:	Left Ear: -1.7dBi; (Provided by the manufacturer) Right Ear: -1.6dBi (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	/	/

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.		

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

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_EMC-v 3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

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

6.1.2 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:

-1.7dBi for Left Ear ; 0.8dBi for Right Ear.

Antenna location: Refer to internal photo.

7 Radio Spectrum Matter Test Results

7.1 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.		

7.1.1 E.U.T. Operation

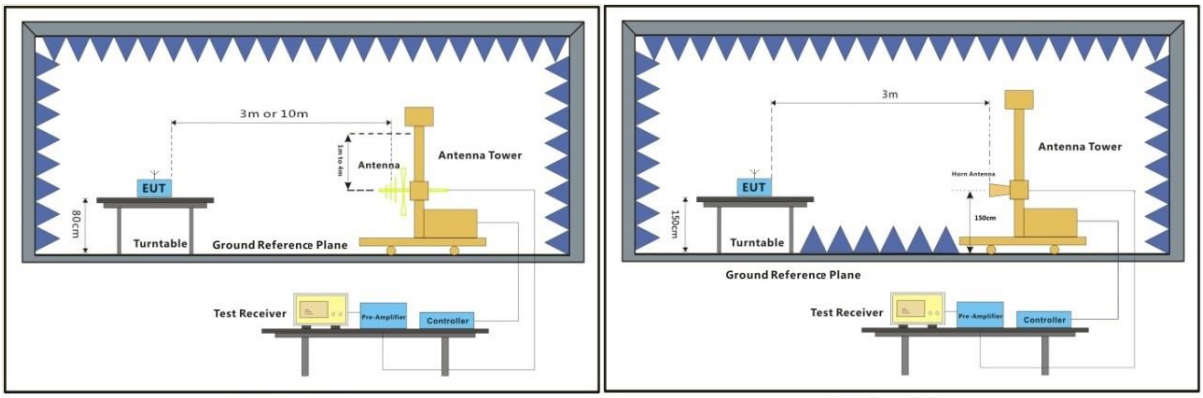
Operating Environment:

Temperature: 23.3 °C Humidity: 45.2 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	02	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



30MHz-1GHz　　Above 1GHz

7.1.4 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. 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.

c. 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.

d. 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.

e. 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.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. 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.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

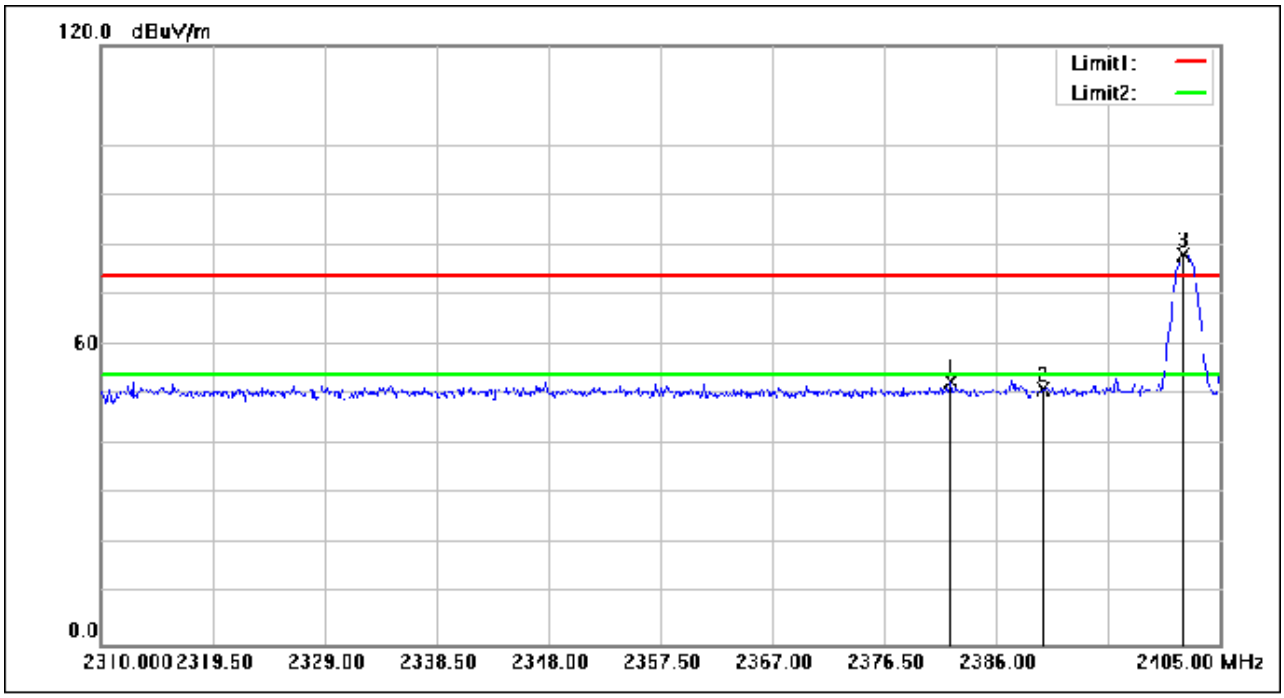
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

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

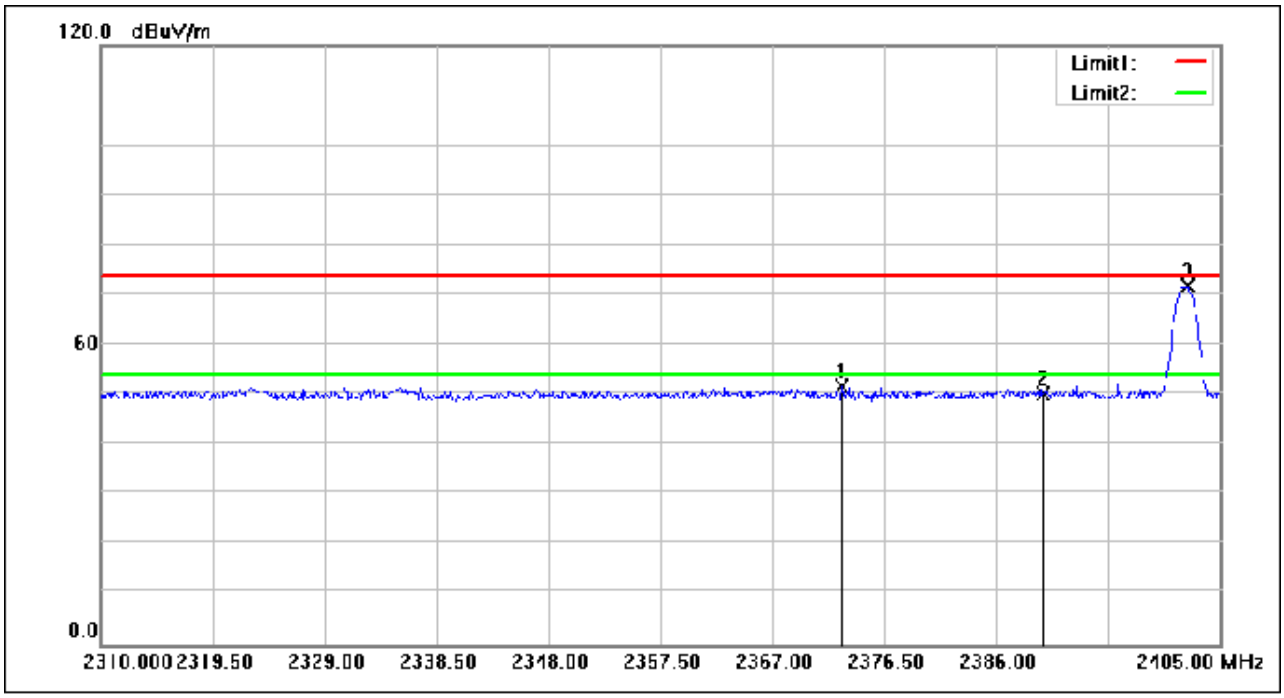
Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level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

Test Mode: 00; Polarity: Horizontal; Modulation:GFSK; Channel:Low



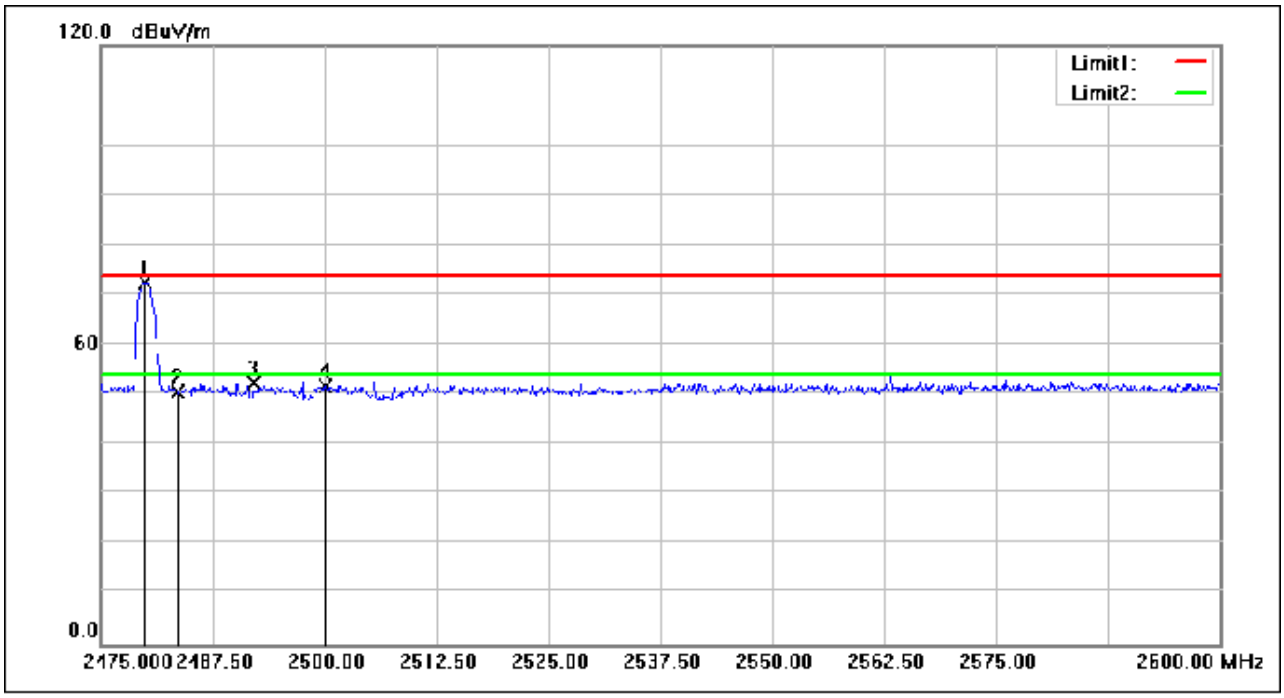
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2382.105	77.49	-24.74	52.75	74.00	-21.25	peak
2	2390.000	75.93	-24.71	51.22	74.00	-22.78	peak
3	2401.865	102.79	-24.65	78.14	74.00	4.14	peak

Test Mode: 00; Polarity: Vertical; Modulation:GFSK; Channel:Low



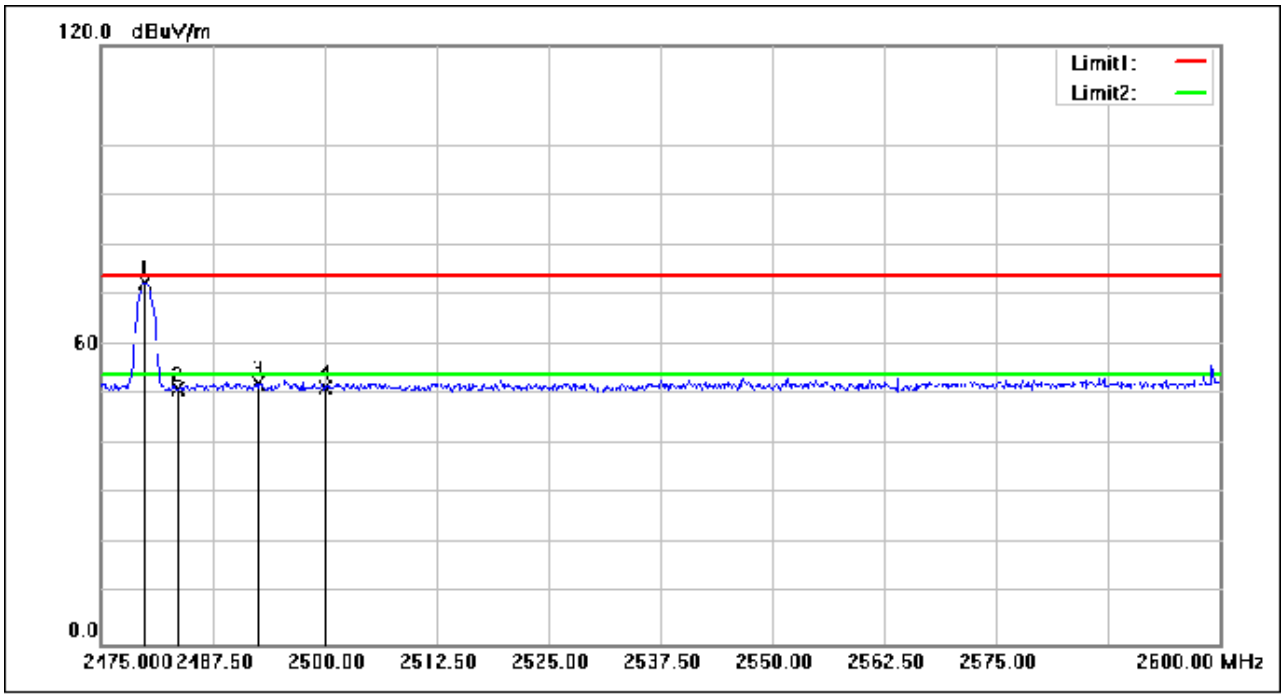
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2372.890	76.62	-24.79	51.83	74.00	-22.17	peak
2	2390.000	75.11	-24.71	50.40	74.00	-23.60	peak
3	2402.245	96.40	-24.65	71.75	74.00	-2.25	peak

Test Mode: 00; Polarity: Horizontal; Modulation:GFSK; Channel:High



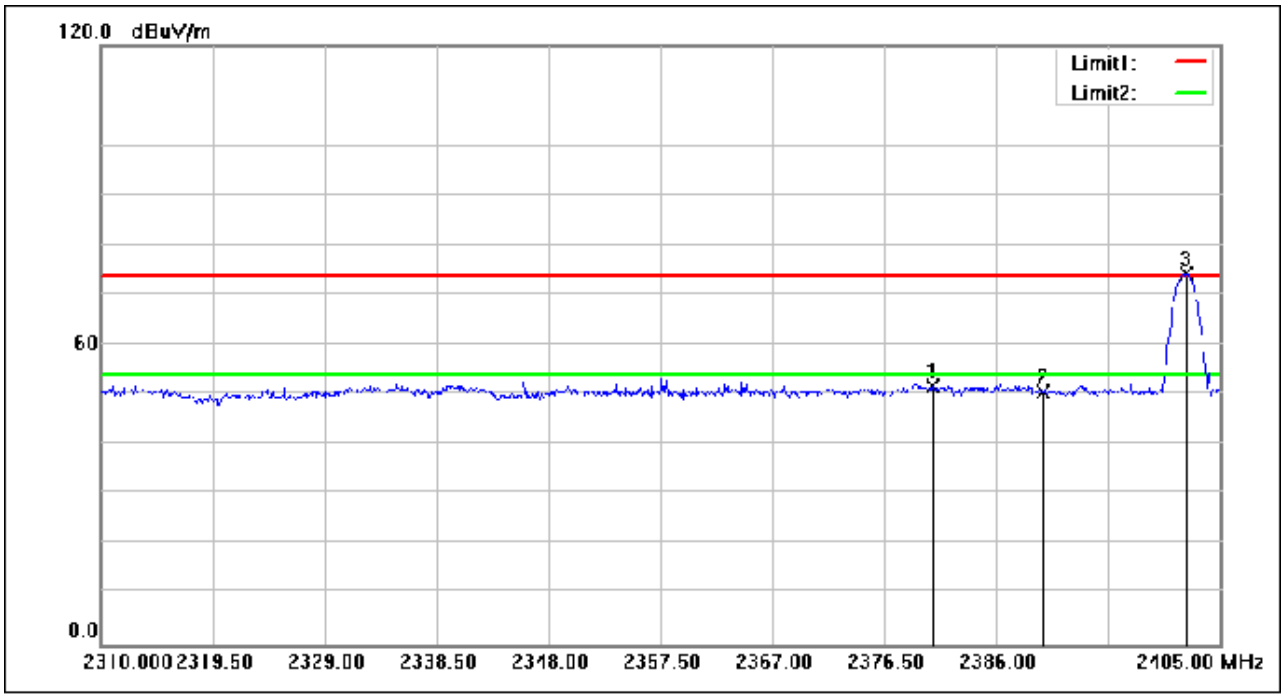
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	96.81	-24.28	72.53	74.00	-1.47	peak
2	2483.500	74.83	-24.27	50.56	74.00	-23.44	peak
3	2492.000	76.67	-24.23	52.44	74.00	-21.56	peak
4	2500.000	75.91	-24.19	51.72	74.00	-22.28	peak

Test Mode: 00; Polarity: Vertical; Modulation:GFSK; Channel:High



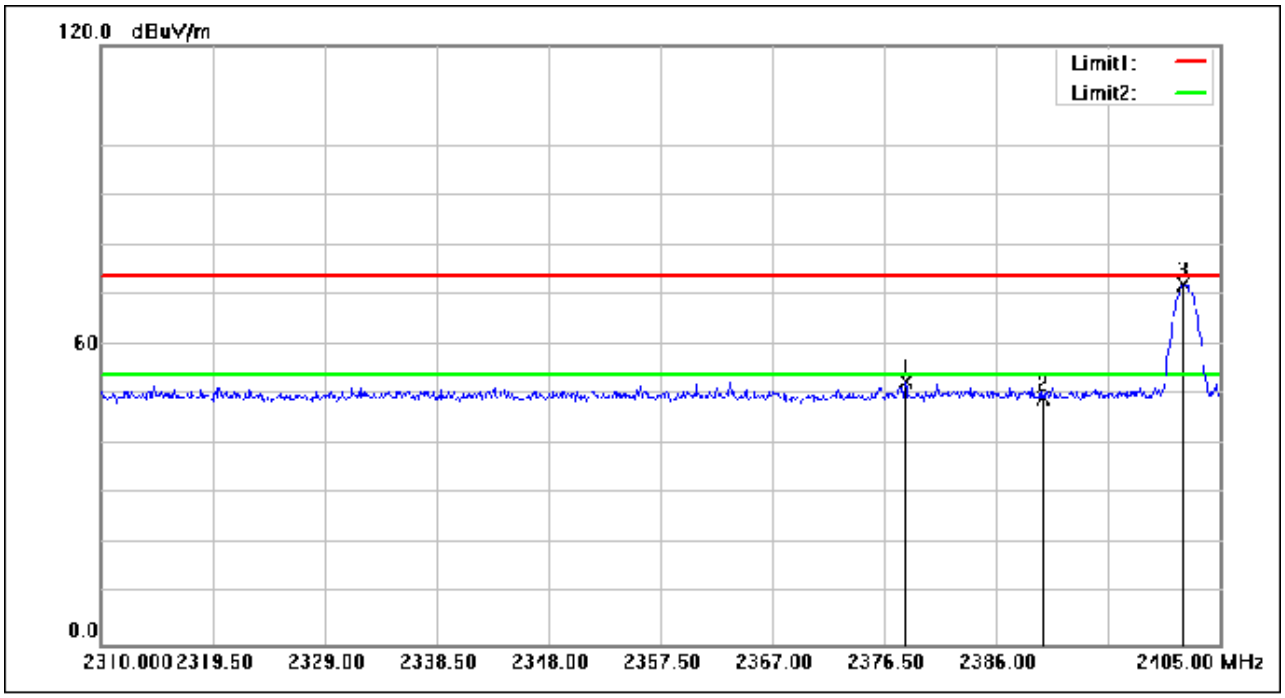
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	96.67	-24.28	72.39	74.00	-1.61	peak
2	2483.500	75.43	-24.27	51.16	74.00	-22.84	peak
3	2492.500	76.50	-24.23	52.27	74.00	-21.73	peak
4	2500.000	75.78	-24.19	51.59	74.00	-22.41	peak

Test Mode: 00; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:Low



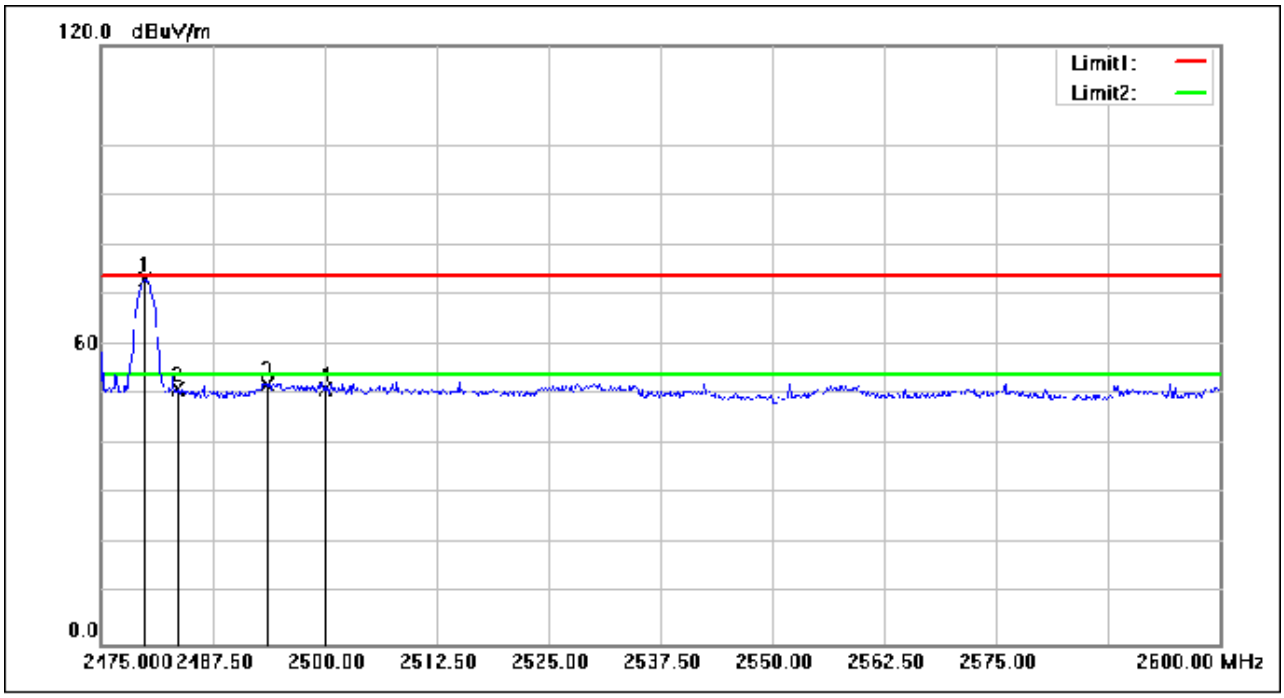
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2380.585	76.49	-24.75	51.74	74.00	-22.26	peak
2	2390.000	75.12	-24.71	50.41	74.00	-23.59	peak
3	2402.150	99.01	-24.65	74.36	74.00	0.36	peak

Test Mode: 00; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:Low



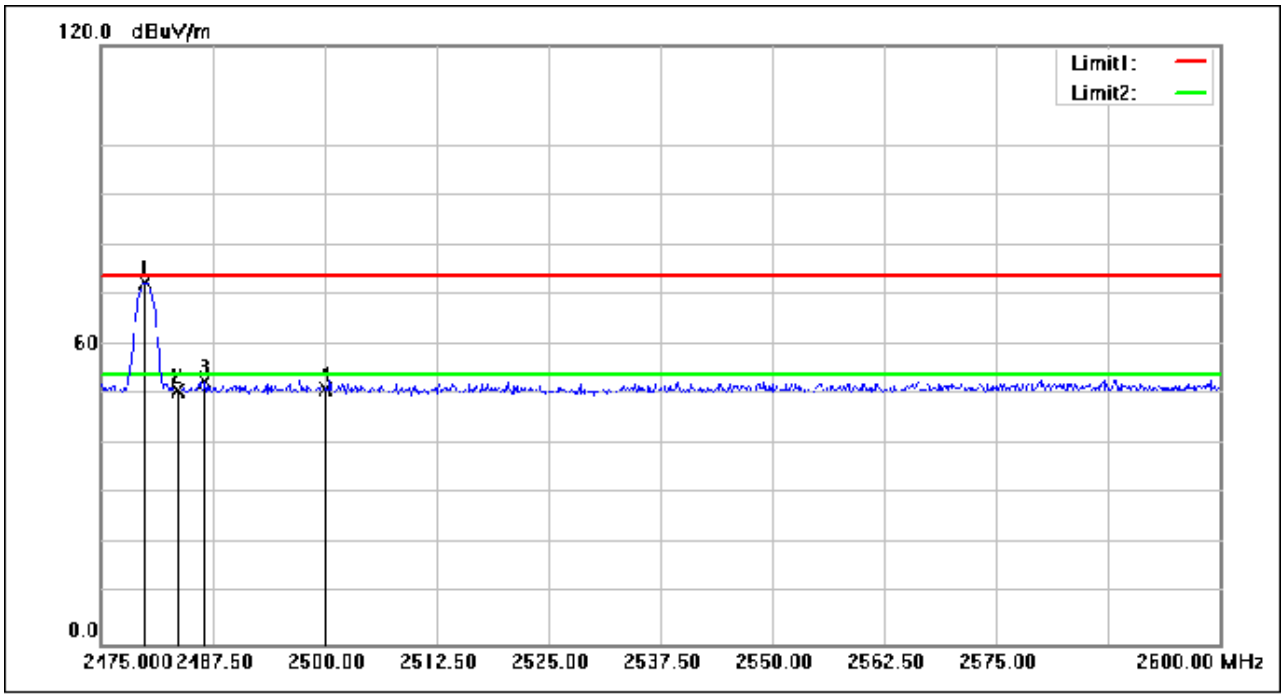
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2378.305	77.31	-24.77	52.54	74.00	-21.46	peak
2	2390.000	74.13	-24.71	49.42	74.00	-24.58	peak
3	2401.865	96.81	-24.65	72.16	74.00	-1.84	peak

Test Mode: 00; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:High



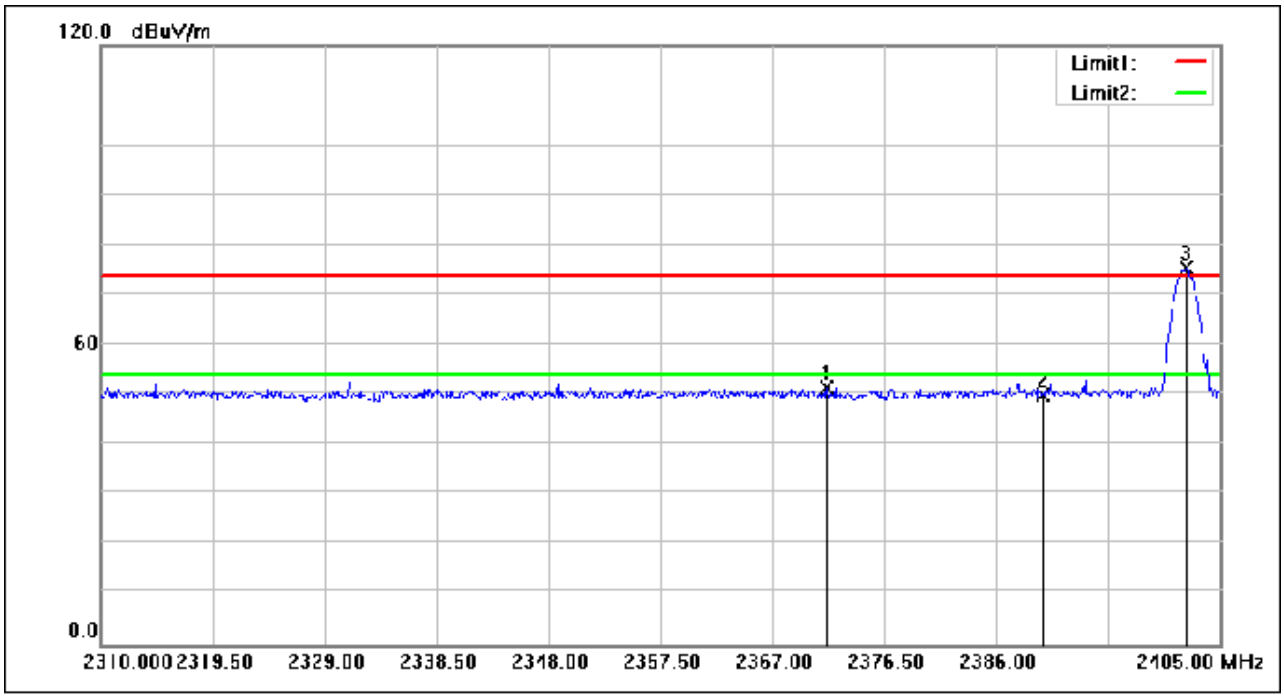
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	97.30	-24.28	73.02	74.00	-0.98	peak
2	2483.500	75.45	-24.27	51.18	74.00	-22.82	peak
3	2493.500	76.31	-24.22	52.09	74.00	-21.91	peak
4	2500.000	75.48	-24.19	51.29	74.00	-22.71	peak

Test Mode: 00; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:High



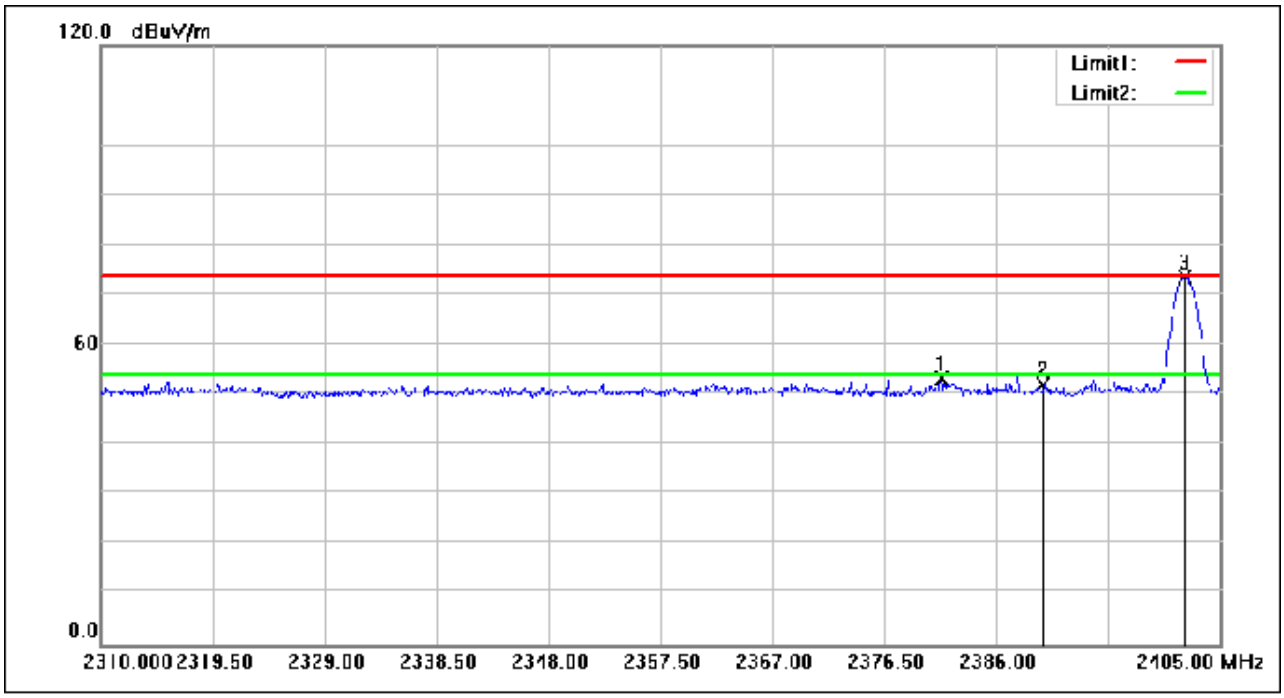
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	96.77	-24.28	72.49	74.00	-1.51	peak
2	2483.500	75.16	-24.27	50.89	74.00	-23.11	peak
3	2486.625	76.92	-24.25	52.67	74.00	-21.33	peak
4	2500.000	75.21	-24.19	51.02	74.00	-22.98	peak

Test Mode: 00; Polarity: Horizontal; Modulation:8DPSK; Channel:Low



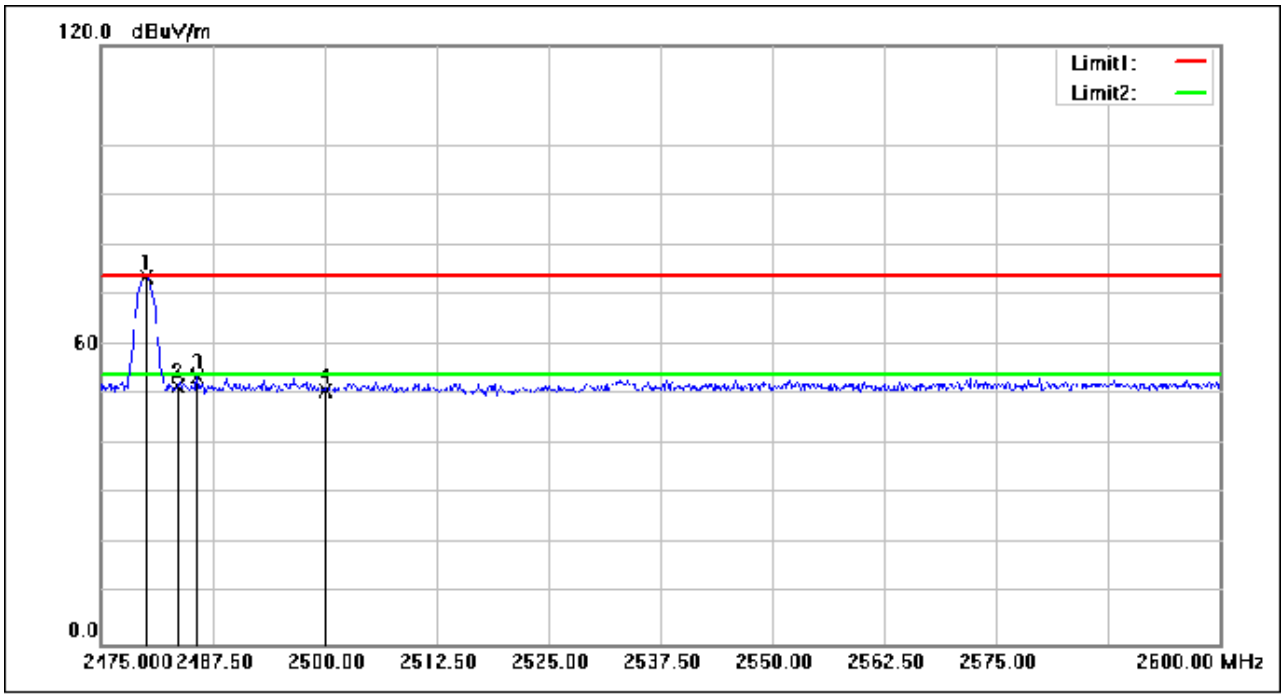
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2371.560	76.25	-24.79	51.46	74.00	-22.54	peak
2	2390.000	74.75	-24.71	50.04	74.00	-23.96	peak
3	2402.150	100.02	-24.65	75.37	74.00	1.37	peak

Test Mode: 00; Polarity: Vertical; Modulation:8DPSK; Channel:Low



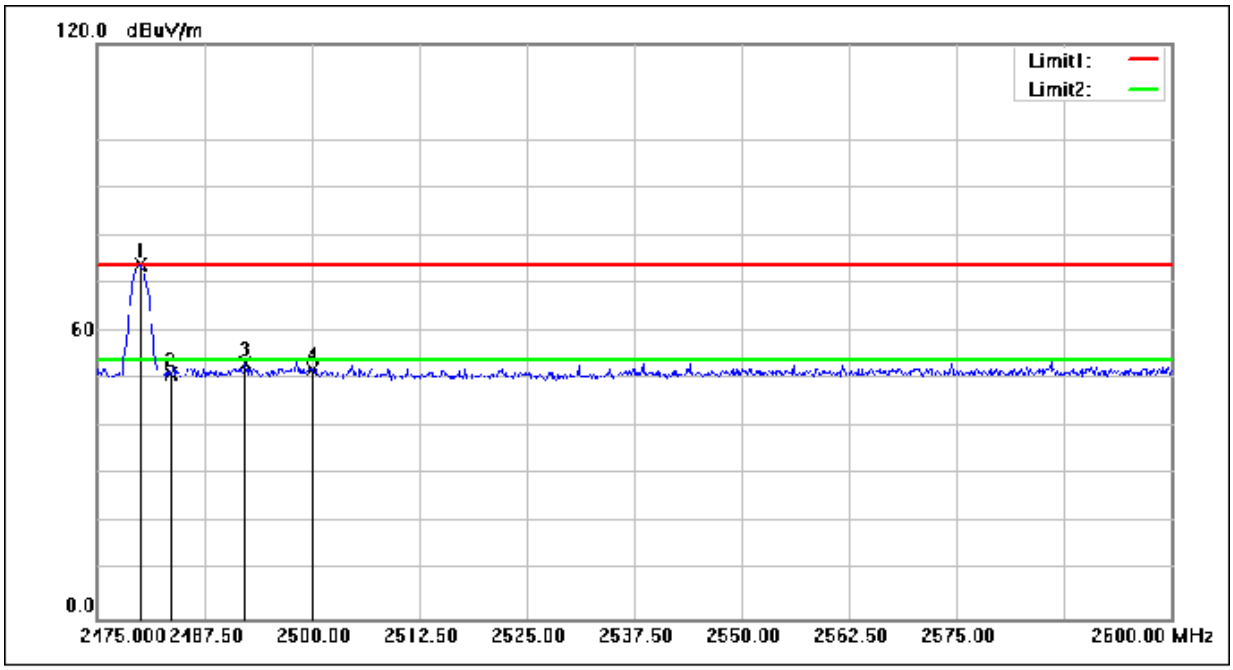
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2381.345	77.94	-24.74	53.20	74.00	-20.80	peak
2	2390.000	76.76	-24.71	52.05	74.00	-21.95	peak
3	2402.055	98.45	-24.65	73.80	74.00	-0.20	peak

Test Mode: 00; Polarity: Horizontal; Modulation:8DPSK; Channel:High



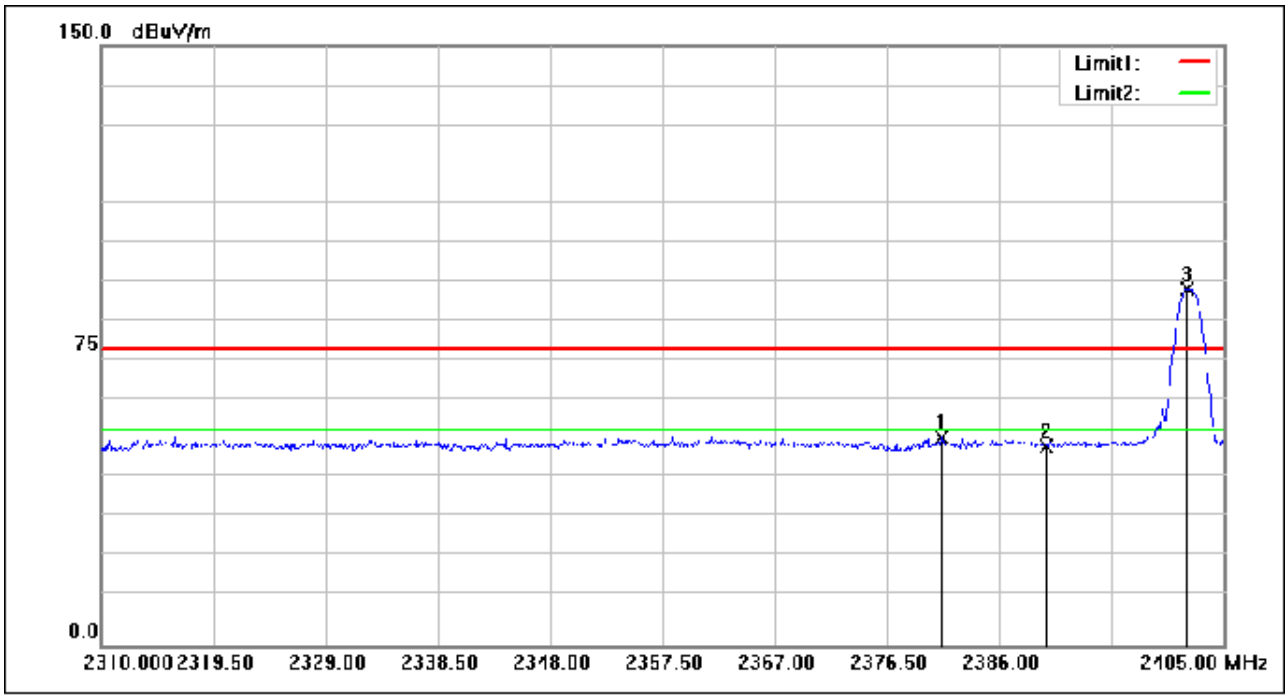
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.000	98.02	-24.28	73.74	74.00	-0.26	peak
2	2483.500	75.95	-24.27	51.68	74.00	-22.32	peak
3	2485.750	77.71	-24.26	53.45	74.00	-20.55	peak
4	2500.000	75.07	-24.19	50.88	74.00	-23.12	peak

Test Mode: 00; Polarity: Vertical; Modulation:8DPSK; Channel:High



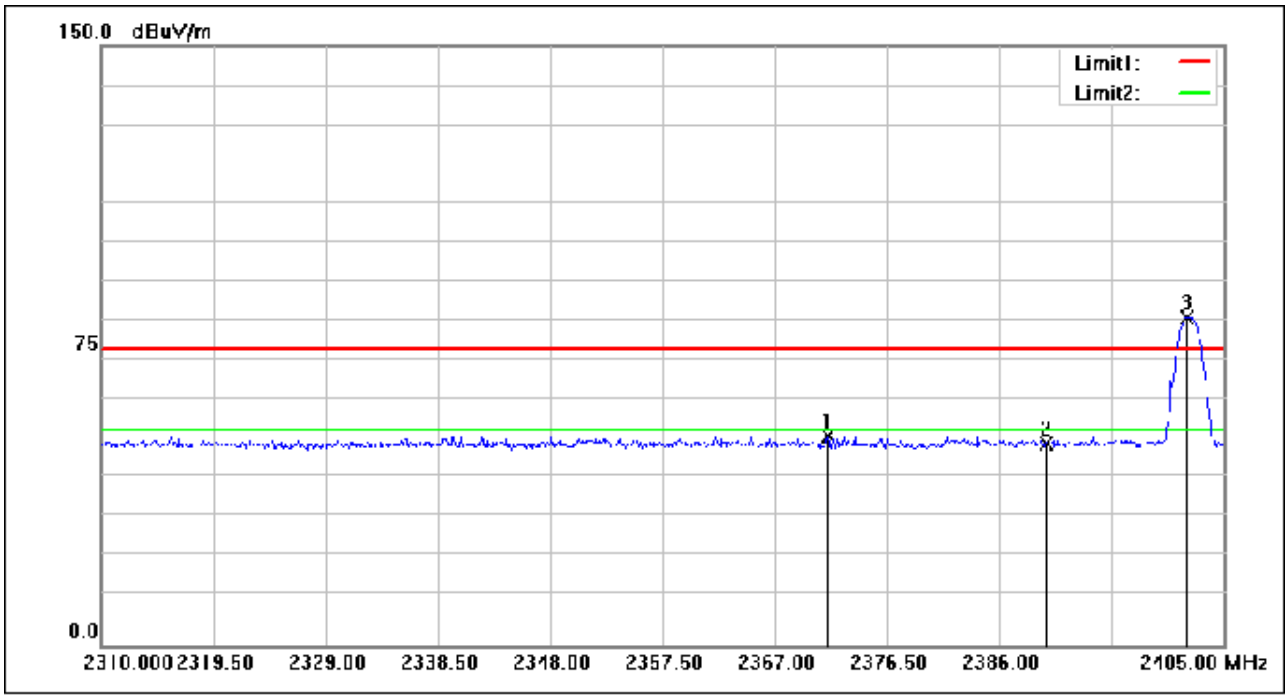
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2480.000	98.23	-24.28	73.95	74.00	-0.05	peak
2	2483.500	75.39	-24.27	51.12	74.00	-22.88	peak
3	2492.250	77.38	-24.23	53.15	74.00	-20.85	peak
4	2500.000	76.28	-24.19	52.09	74.00	-21.91	peak

Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; Channel:Low



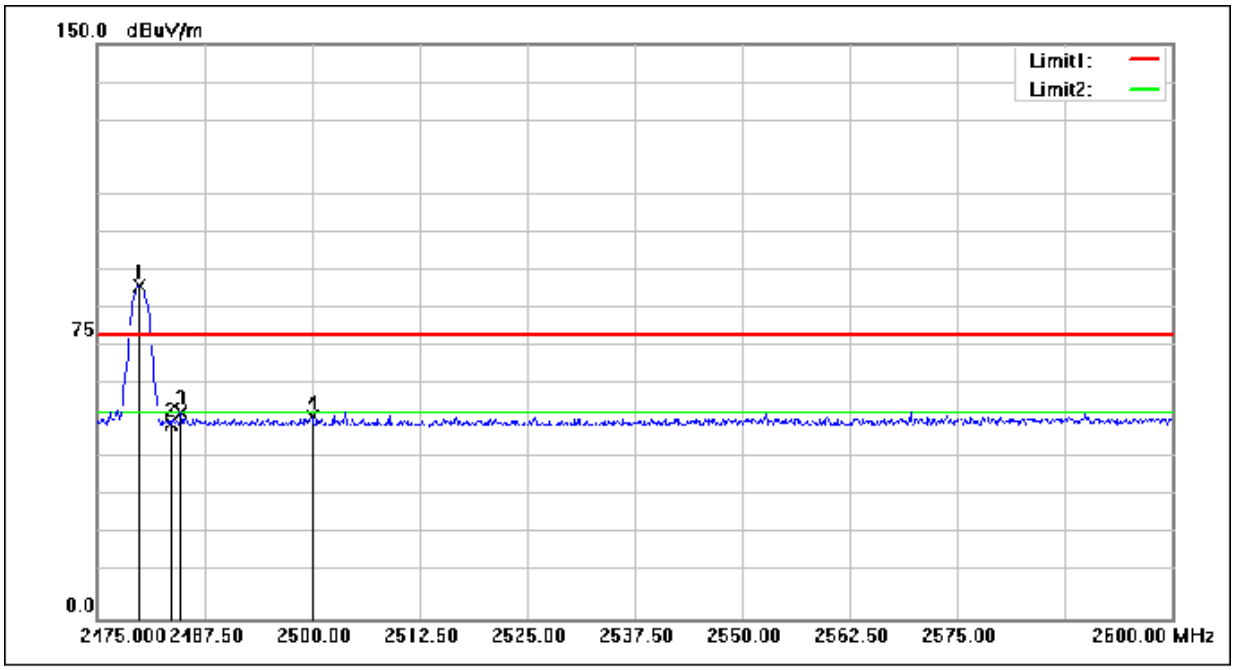
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2381.060	76.72	-24.74	51.98	74.00	-22.02	peak
2	2390.000	74.55	-24.71	49.84	74.00	-24.16	peak
3	2401.865	113.79	-24.65	89.14	74.00	15.14	peak

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; Channel:Low



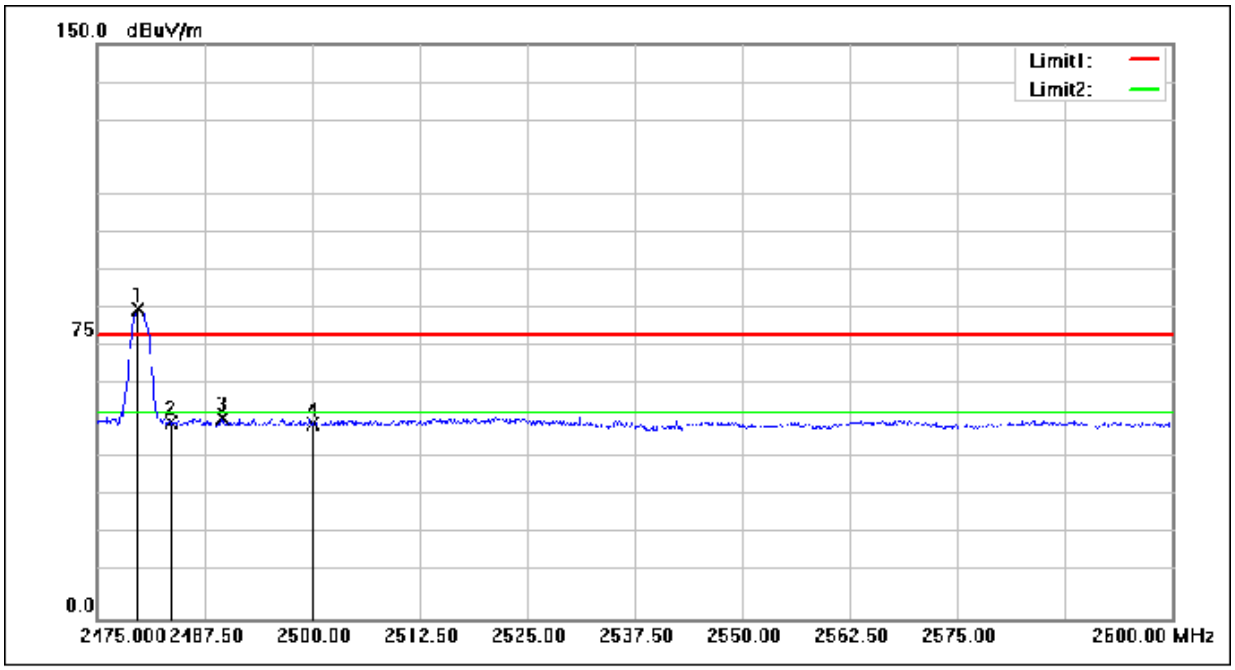
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2371.465	77.06	-24.79	52.27	74.00	-21.73	peak
2	2390.000	75.22	-24.71	50.51	74.00	-23.49	peak
3	2401.865	106.74	-24.65	82.09	74.00	8.09	peak

Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; Channel:High



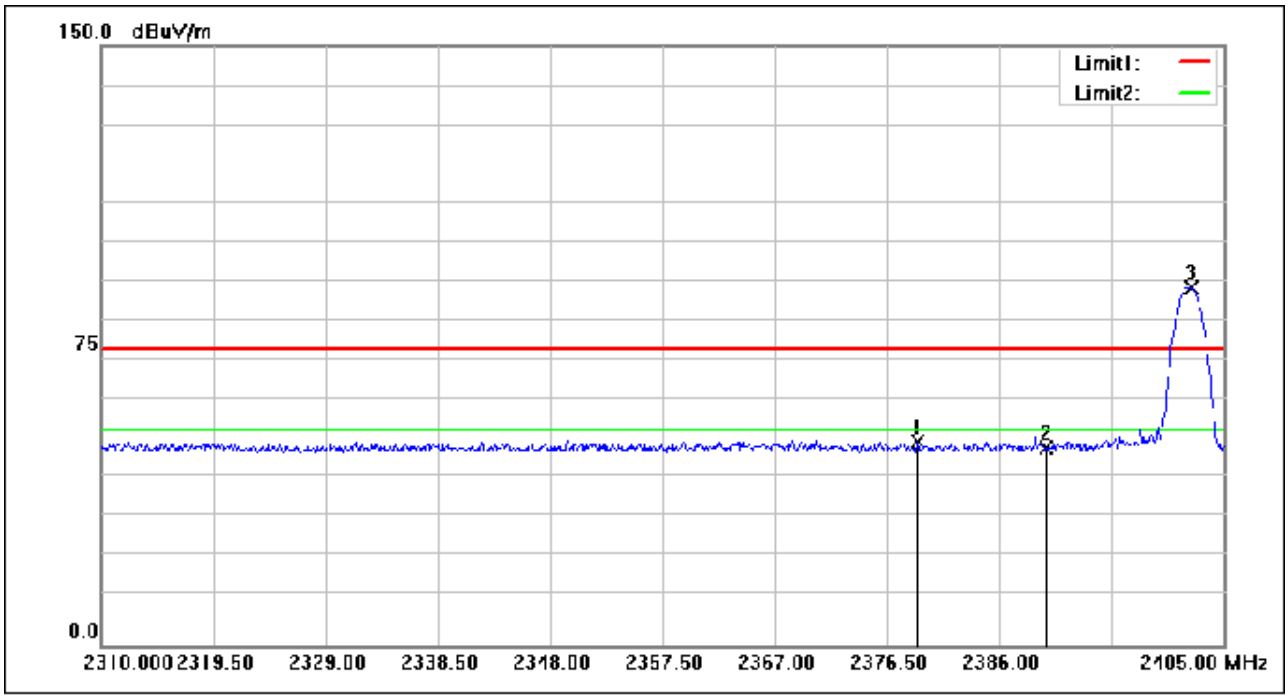
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	110.98	-24.28	86.70	74.00	12.70	peak
2	2483.500	75.05	-24.27	50.78	74.00	-23.22	peak
3	2484.750	78.13	-24.26	53.87	74.00	-20.13	peak
4	2500.000	76.85	-24.19	52.66	74.00	-21.34	peak

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; Channel:High



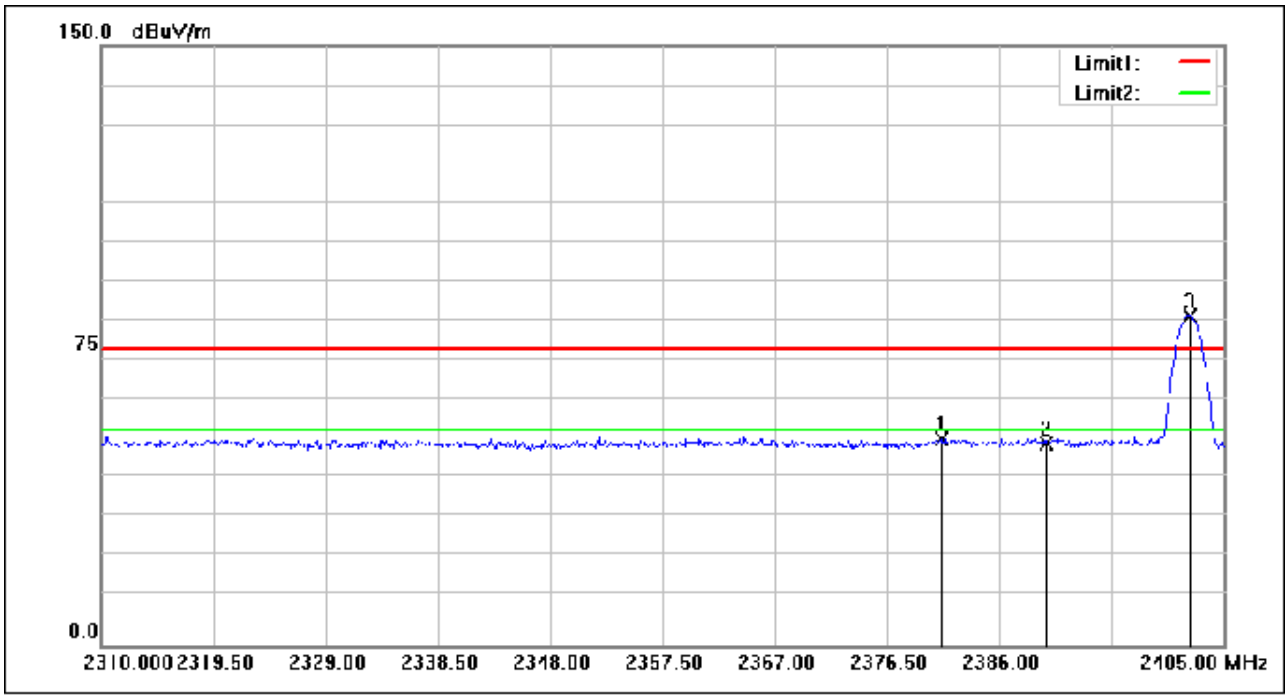
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.750	105.10	-24.28	80.82	74.00	6.82	peak
2	2483.500	75.57	-24.27	51.30	74.00	-22.70	peak
3	2489.500	76.66	-24.24	52.42	74.00	-21.58	peak
4	2500.000	74.95	-24.19	50.76	74.00	-23.24	peak

Test Mode: 02; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:Low



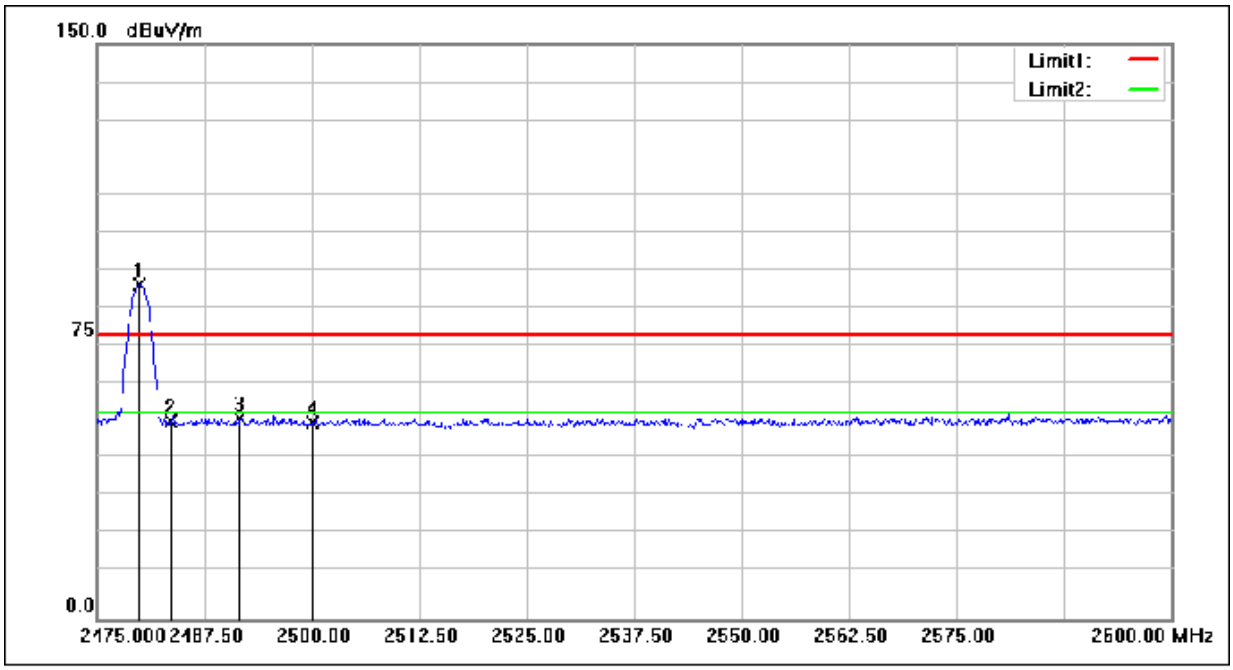
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2379.065	75.74	-24.75	50.99	74.00	-23.01	peak
2	2390.000	74.12	-24.71	49.41	74.00	-24.59	peak
3	2402.245	114.27	-24.65	89.62	74.00	15.62	peak

Test Mode: 02; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:Low



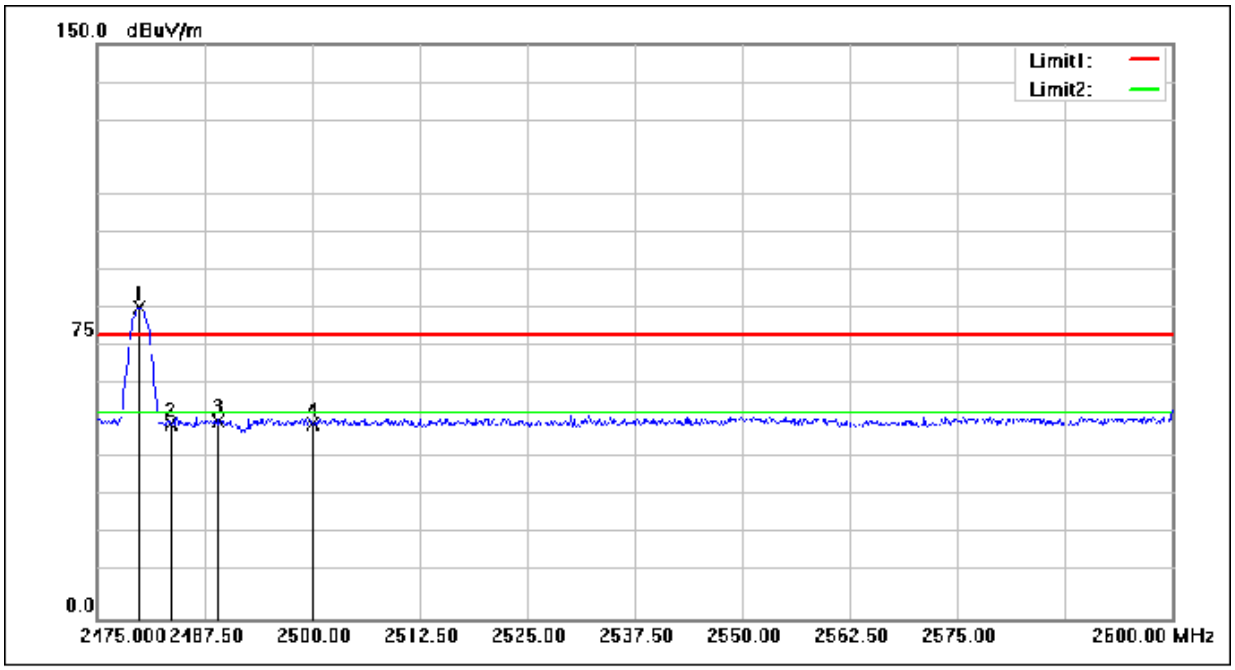
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2381.060	76.45	-24.74	51.71	74.00	-22.29	peak
2	2390.000	75.31	-24.71	50.60	74.00	-23.40	peak
3	2402.150	107.01	-24.65	82.36	74.00	8.36	peak

Test Mode: 02; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:High



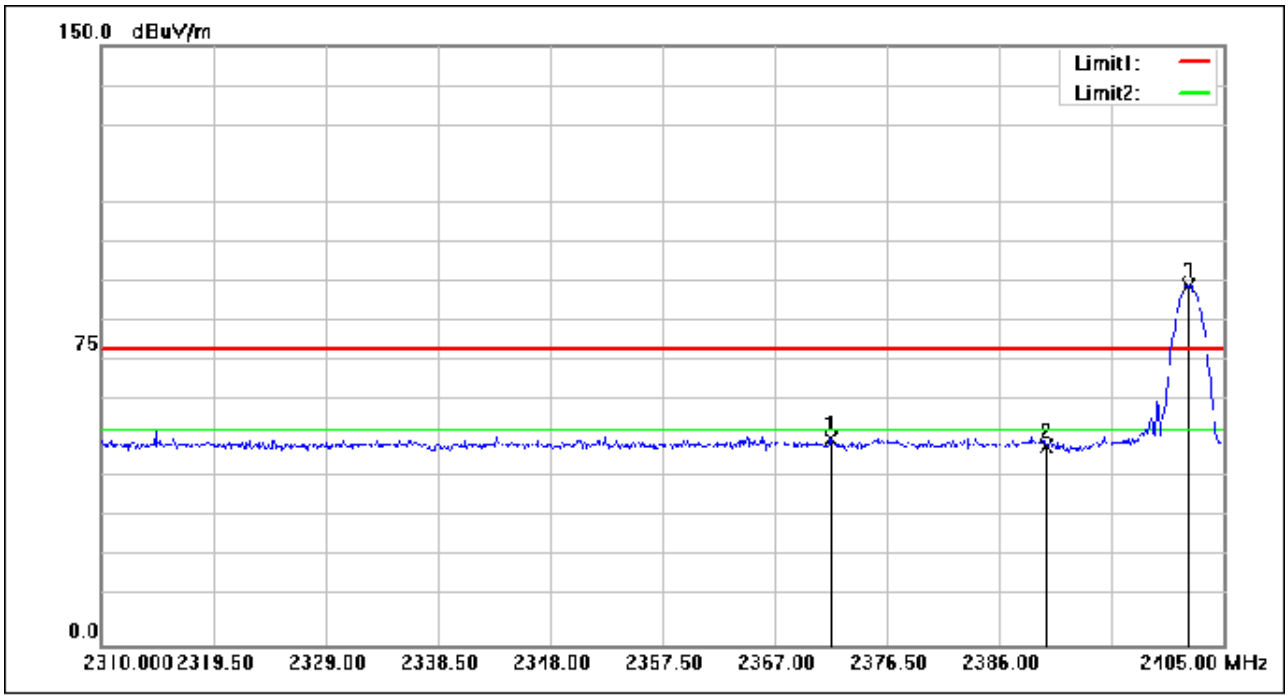
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	111.42	-24.28	87.14	74.00	13.14	peak
2	2483.500	76.01	-24.27	51.74	74.00	-22.26	peak
3	2491.625	76.71	-24.23	52.48	74.00	-21.52	peak
4	2500.000	75.23	-24.19	51.04	74.00	-22.96	peak

Test Mode: 02; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:High



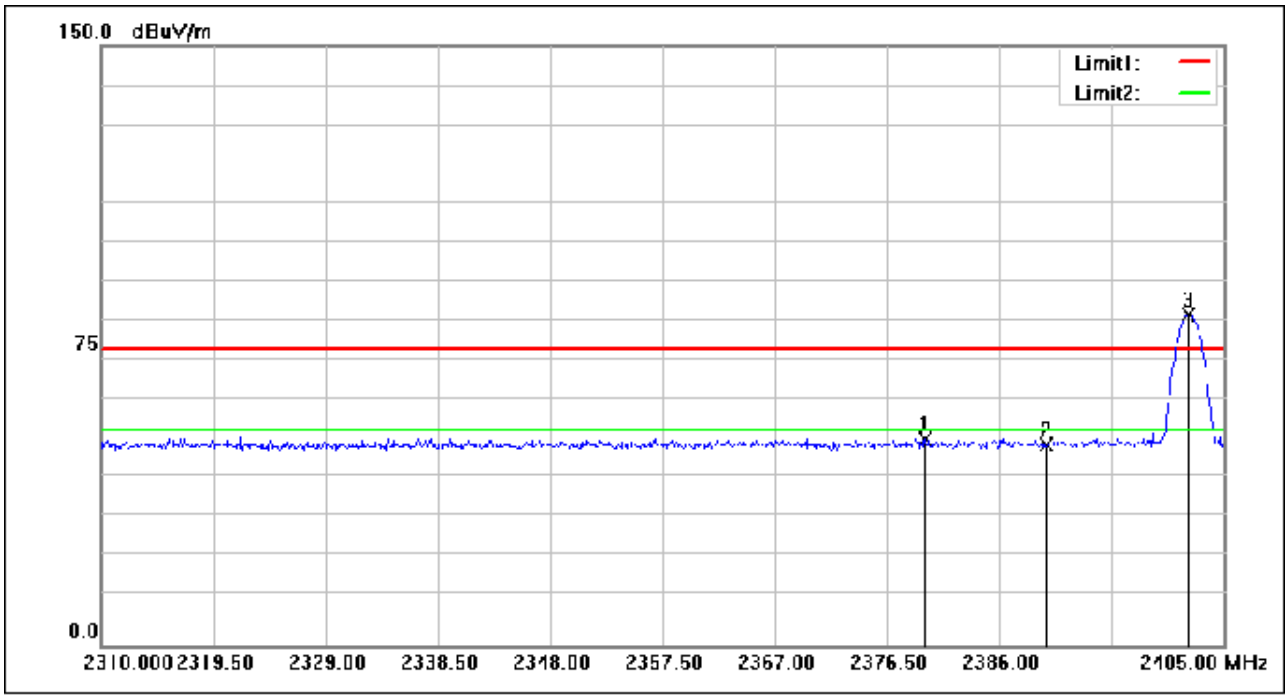
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.875	105.60	-24.28	81.32	74.00	7.32	peak
2	2483.500	74.98	-24.27	50.71	74.00	-23.29	peak
3	2489.125	75.99	-24.24	51.75	74.00	-22.25	peak
4	2500.000	75.15	-24.19	50.96	74.00	-23.04	peak

Test Mode: 02; Polarity: Horizontal; Modulation:8DPSK; Channel:Low



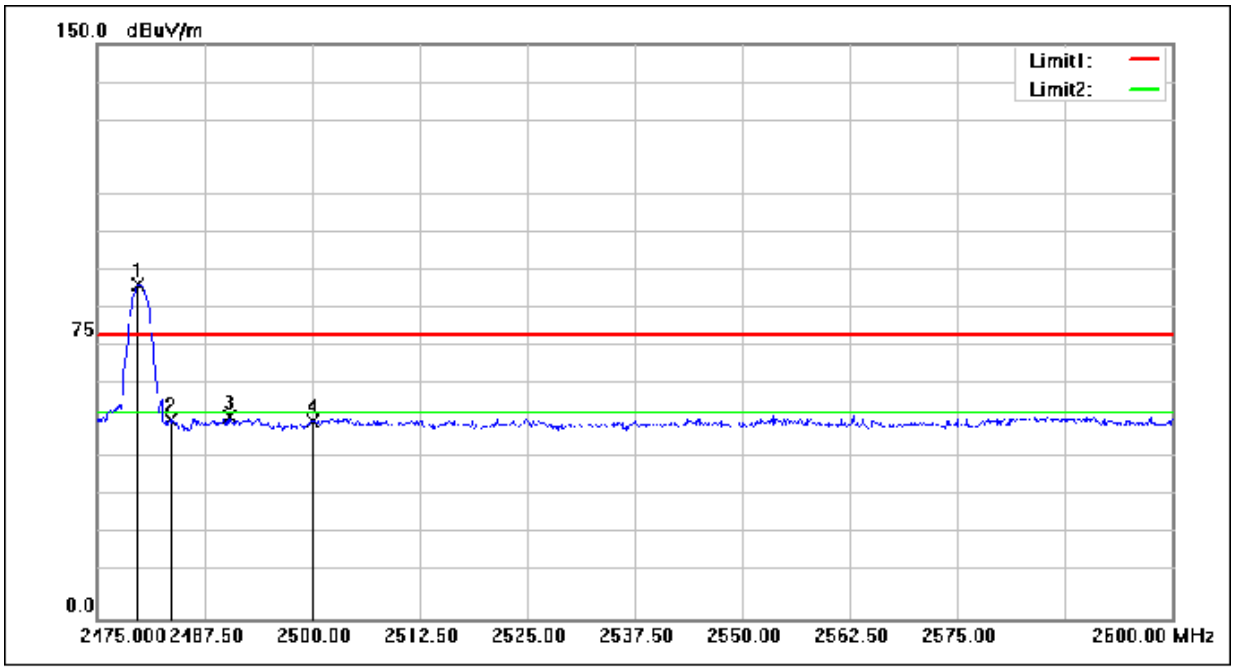
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2371.750	76.35	-24.79	51.56	74.00	-22.44	peak
2	2390.000	74.36	-24.71	49.65	74.00	-24.35	peak
3	2402.055	114.64	-24.65	89.99	74.00	15.99	peak

Test Mode: 02; Polarity: Vertical; Modulation:8DPSK; Channel:Low



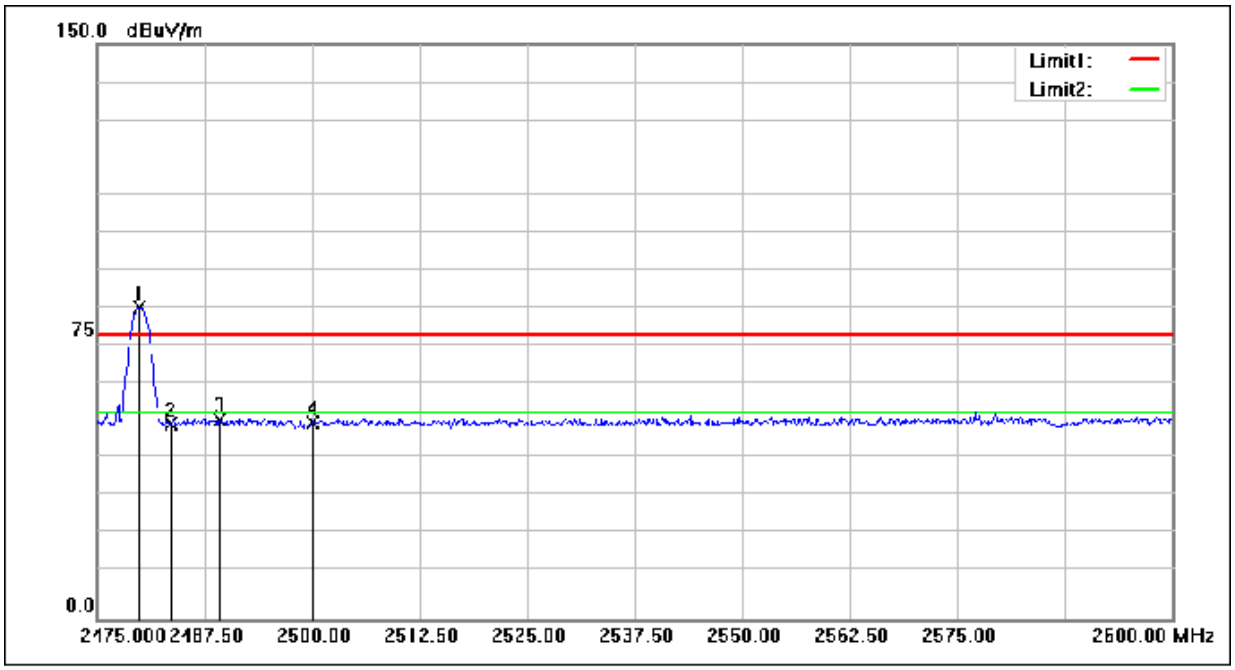
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2379.730	76.46	-24.75	51.71	74.00	-22.29	peak
2	2390.000	74.75	-24.71	50.04	74.00	-23.96	peak
3	2402.055	107.46	-24.65	82.81	74.00	8.81	peak

Test Mode: 02; 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	2479.750	111.63	-24.28	87.35	74.00	13.35	peak
2	2483.500	76.30	-24.27	52.03	74.00	-21.97	peak
3	2490.375	76.90	-24.24	52.66	74.00	-21.34	peak
4	2500.000	75.57	-24.19	51.38	74.00	-22.62	peak

Test Mode: 02; 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	105.59	-24.28	81.31	74.00	7.31	peak
2	2483.500	75.05	-24.27	50.78	74.00	-23.22	peak
3	2489.250	76.02	-24.24	51.78	74.00	-22.22	peak
4	2500.000	75.39	-24.19	51.20	74.00	-22.80	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

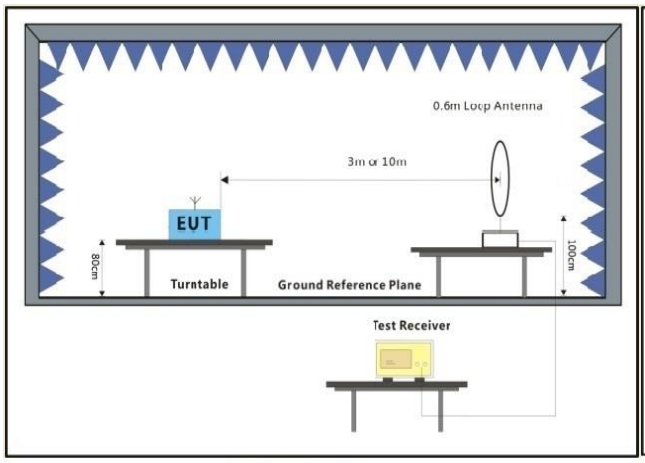
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 23.3 °C Humidity: 45.2 % RH Atmospheric Pressure: 1010 mbar

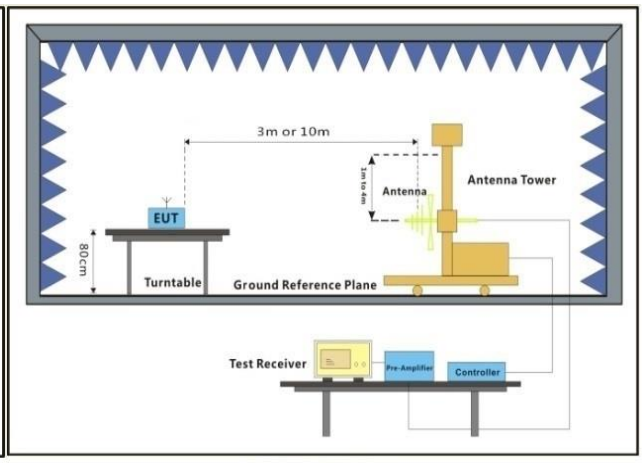
7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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



Below 30MHz



30MHz-1GHz

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.

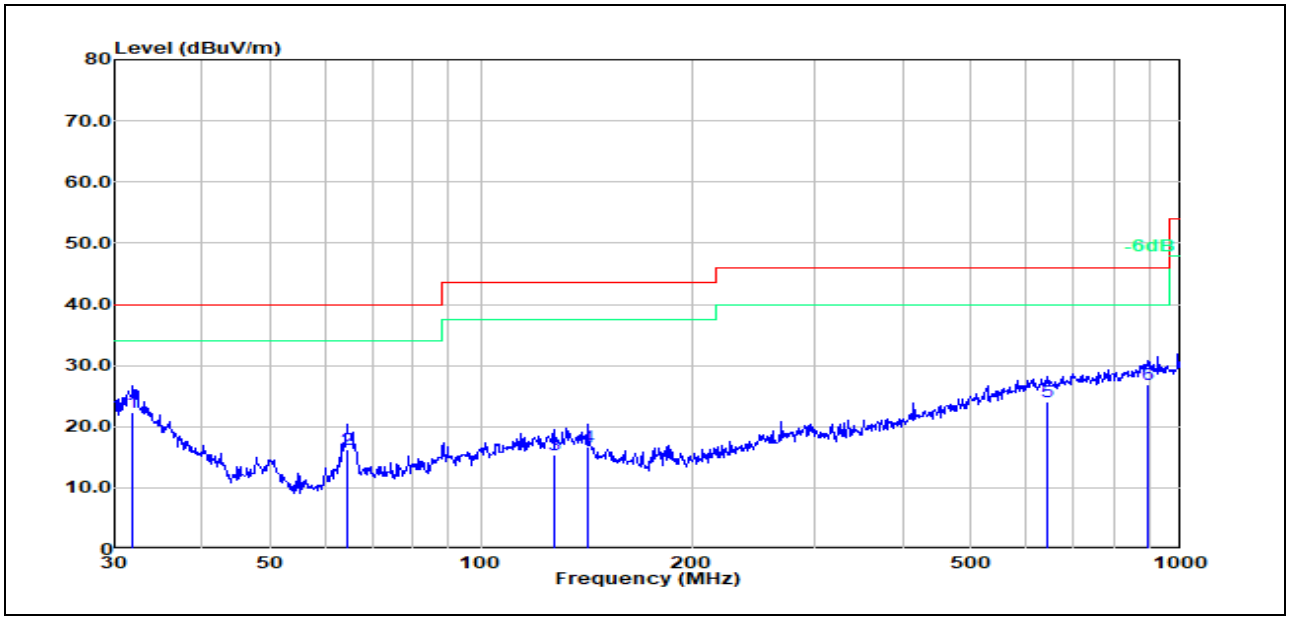
Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp 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.

Test Mode: 00; Polarity: Horizontal

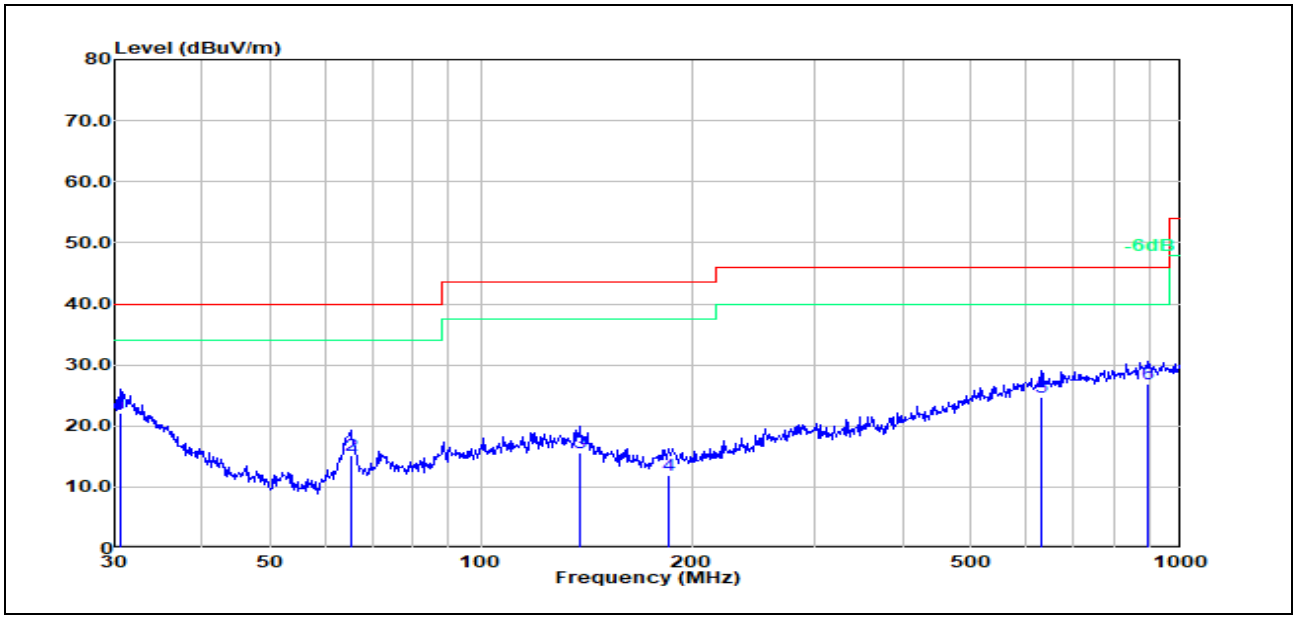
Test Data :



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	31.8430	4.59	17.79	22.38	40.00	-17.62	100	121	QP
2	64.4330	9.72	6.52	16.24	40.00	-23.76	100	360	QP
3	127.2180	1.15	14.18	15.33	43.50	-28.17	200	75	QP
4	141.8260	2.87	13.87	16.74	43.50	-26.76	100	360	QP
5	642.8610	0.64	23.41	24.05	46.00	-21.95	100	360	QP
6	893.8570	1.26	25.67	26.93	46.00	-19.07	200	94	QP

Test Mode: 00; Polarity: Vertical

Test Data :



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Re
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	30.6380	3.10	18.91	22.01	40.00	-17.99	100	0	
2	65.1140	8.89	6.39	15.28	40.00	-24.72	200	0	
3	138.8740	0.98	14.71	15.69	43.50	-27.81	100	0	
4	185.1380	-0.11	12.14	12.03	43.50	-31.47	200	356	
5	629.4770	1.84	22.93	24.77	46.00	-21.23	100	324	
6	896.9970	1.12	25.80	26.92	46.00	-19.08	100	0	

7.3 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

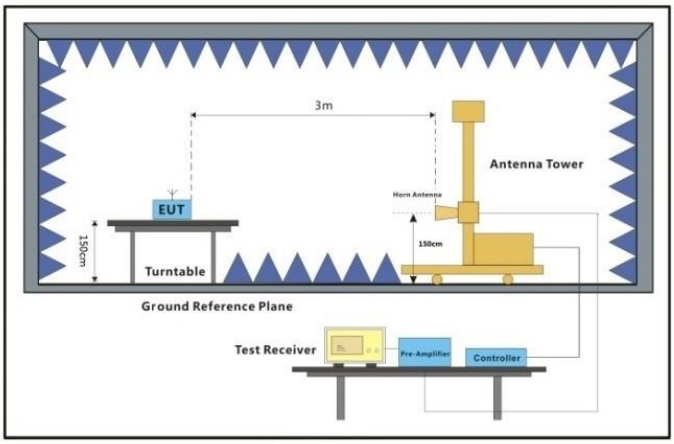
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 23.3 °C Humidity: 45.2 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	02	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



Above 1GHz

7.3.4 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.

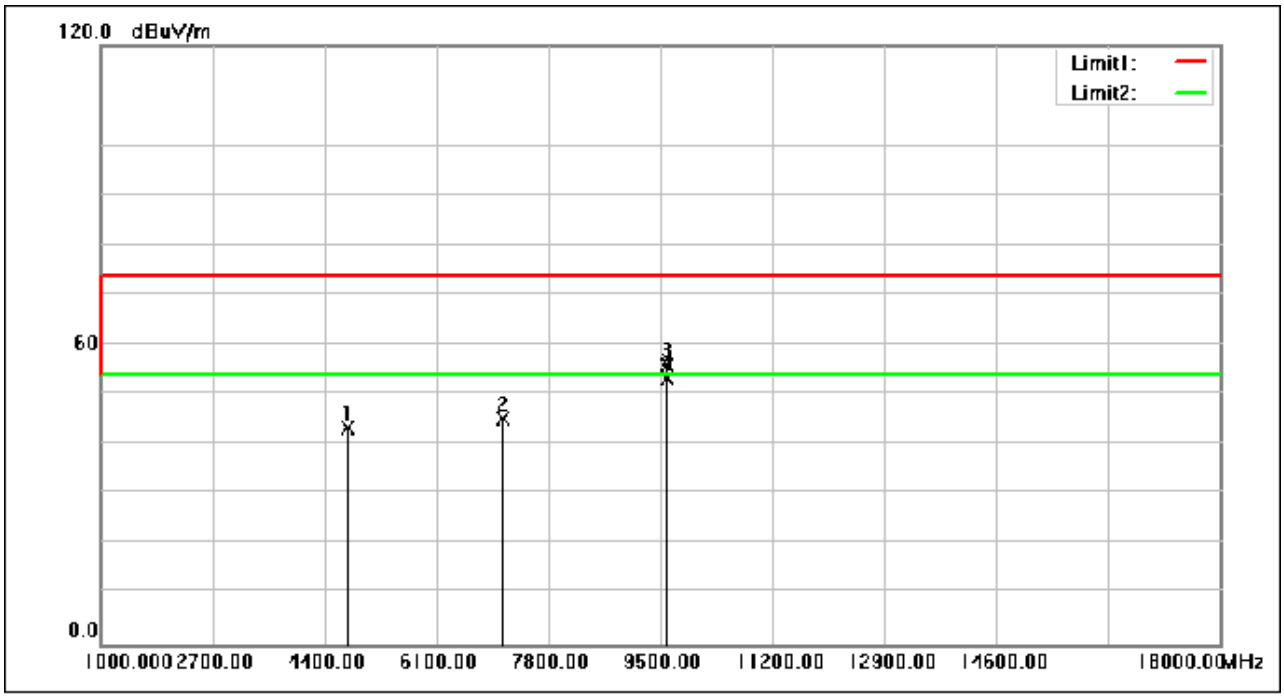
Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp 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.

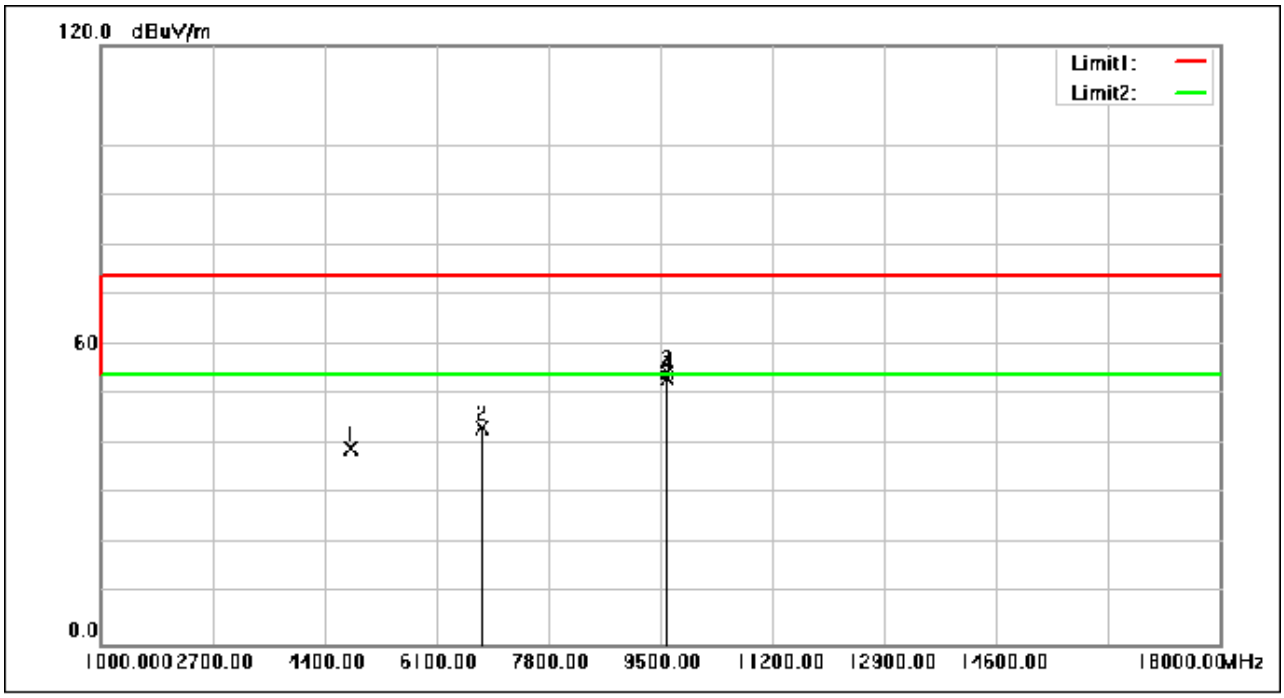
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions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

Test Mode: 00; Polarity: Horizontal; Modulation:GFSK; Channel:Low



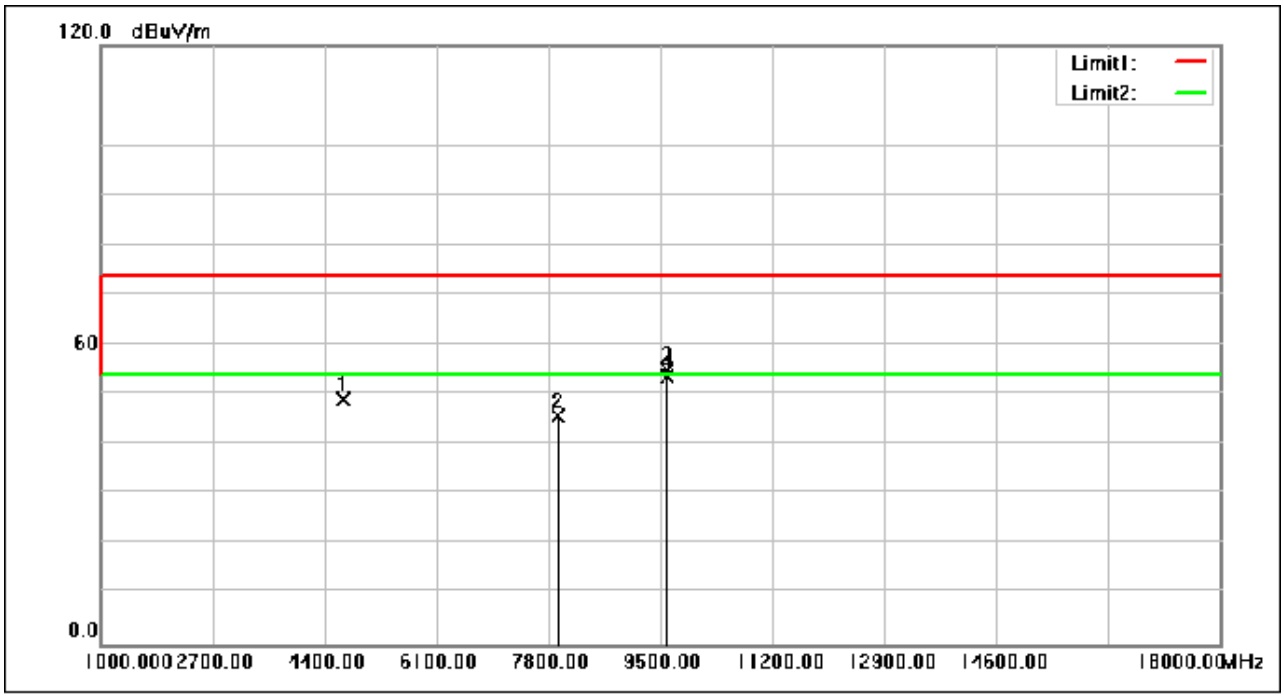
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4751.050	61.96	-18.59	43.37	74.00	-30.63	peak
2	7116.600	56.79	-11.51	45.28	74.00	-28.72	peak
3	9602.000	63.81	-7.76	56.05	74.00	-17.95	peak
4	9602.000	60.97	-7.76	53.21	54.00	-0.79	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; Channel:Low



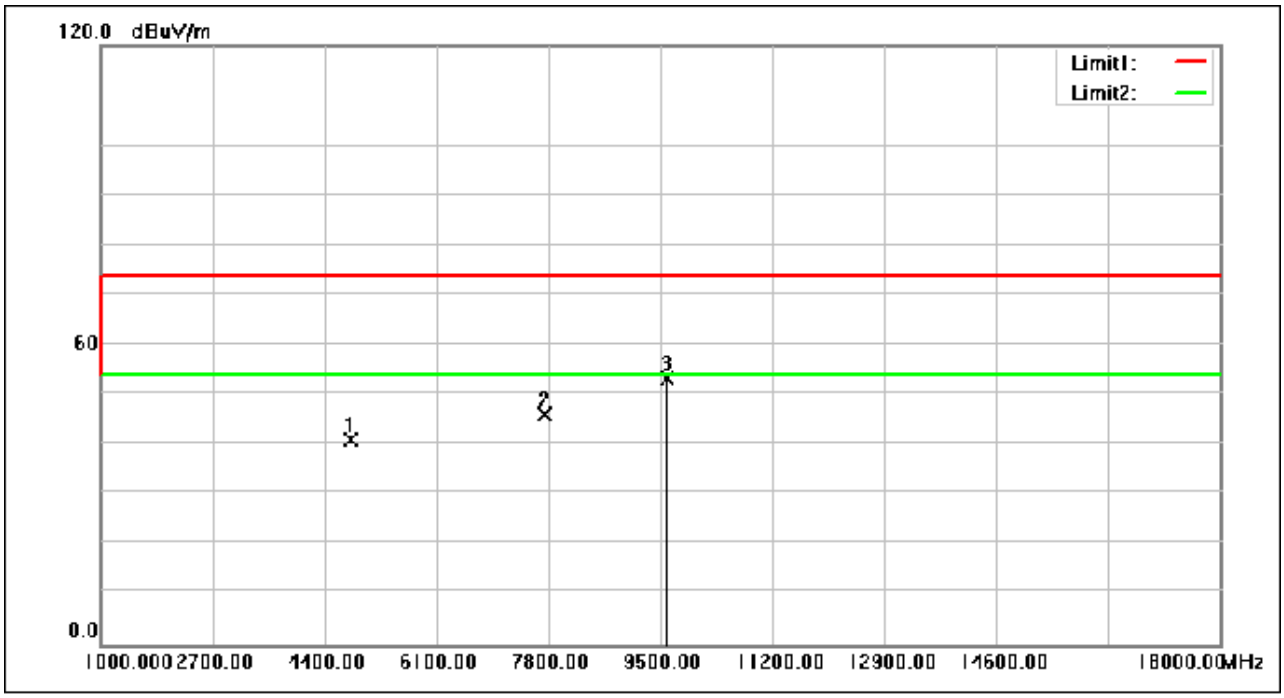
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4804.600	57.60	-18.56	39.04	74.00	-34.96	peak
2	6804.650	55.34	-11.90	43.44	74.00	-30.56	peak
3	9602.000	62.30	-7.76	54.54	74.00	-19.46	peak
4	9602.000	60.92	-7.76	53.16	54.00	-0.84	AVG

Test Mode: 00; Polarity: Vertical; Modulation:GFSK; Channel:Low



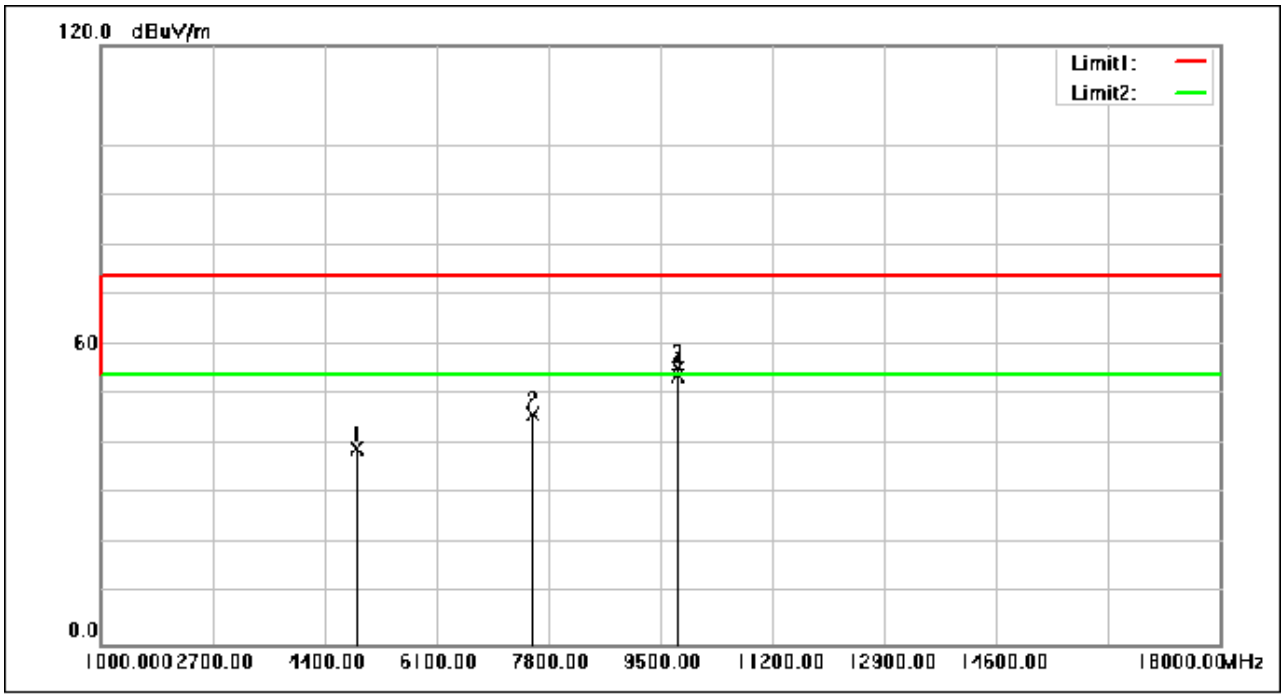
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4673.700	67.66	-18.63	49.03	74.00	-24.97	peak
2	7967.450	56.54	-10.64	45.90	74.00	-28.10	peak
3	9602.000	62.79	-7.76	55.03	74.00	-18.97	peak
4	9602.000	61.21	-7.76	53.45	54.00	-0.55	AVG

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; Channel:Low



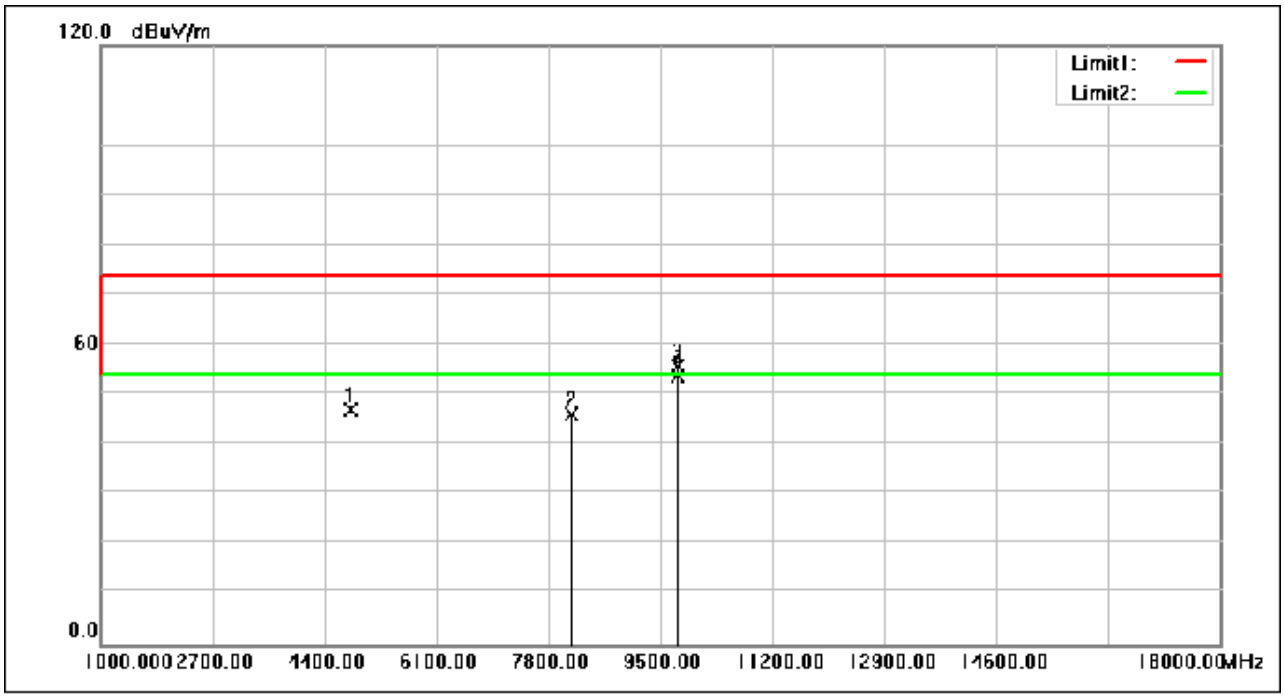
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.350	59.52	-18.56	40.96	74.00	-33.04	peak
2	7765.150	56.83	-10.91	45.92	74.00	-28.08	peak
3	9602.000	61.15	-7.76	53.39	74.00	-20.61	peak

Test Mode: 00; Polarity: Horizontal; Modulation:GFSK; Channel:middle



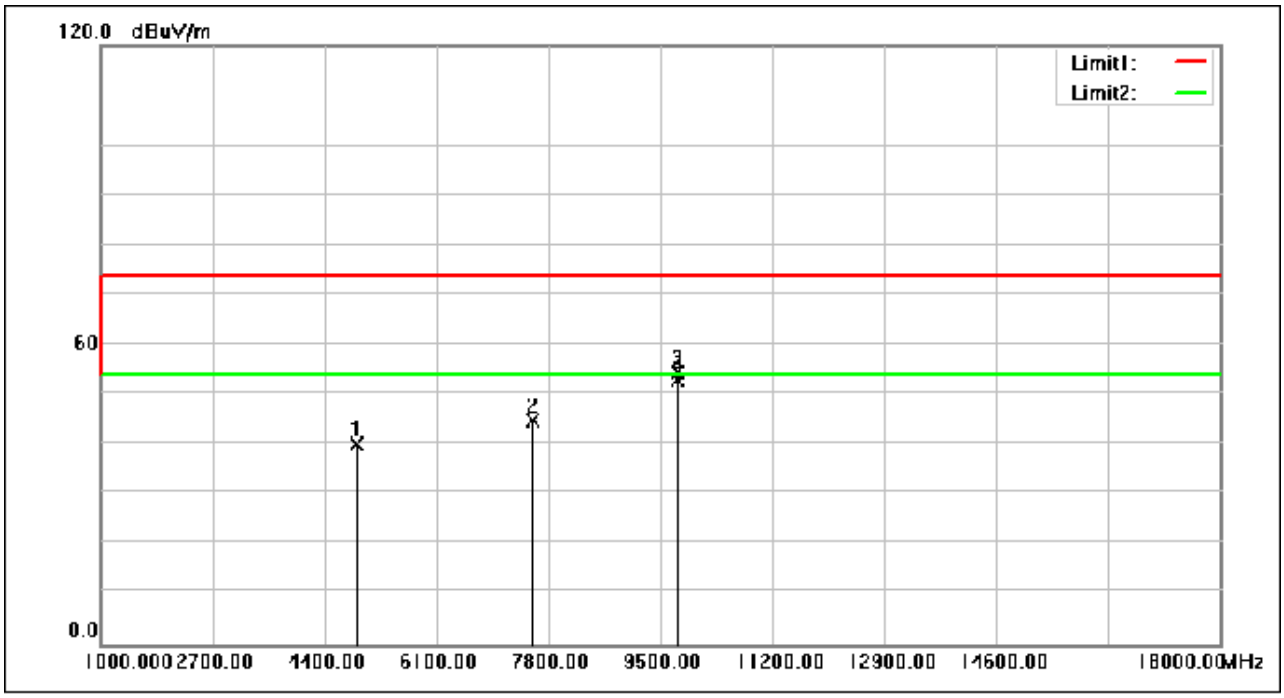
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4879.400	57.79	-18.52	39.27	74.00	-34.73	peak
2	7567.950	57.13	-11.17	45.96	74.00	-28.04	peak
3	9758.400	62.71	-7.47	55.24	74.00	-18.76	peak
4	9758.400	61.37	-7.47	53.90	54.00	-0.10	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; Channel:middle



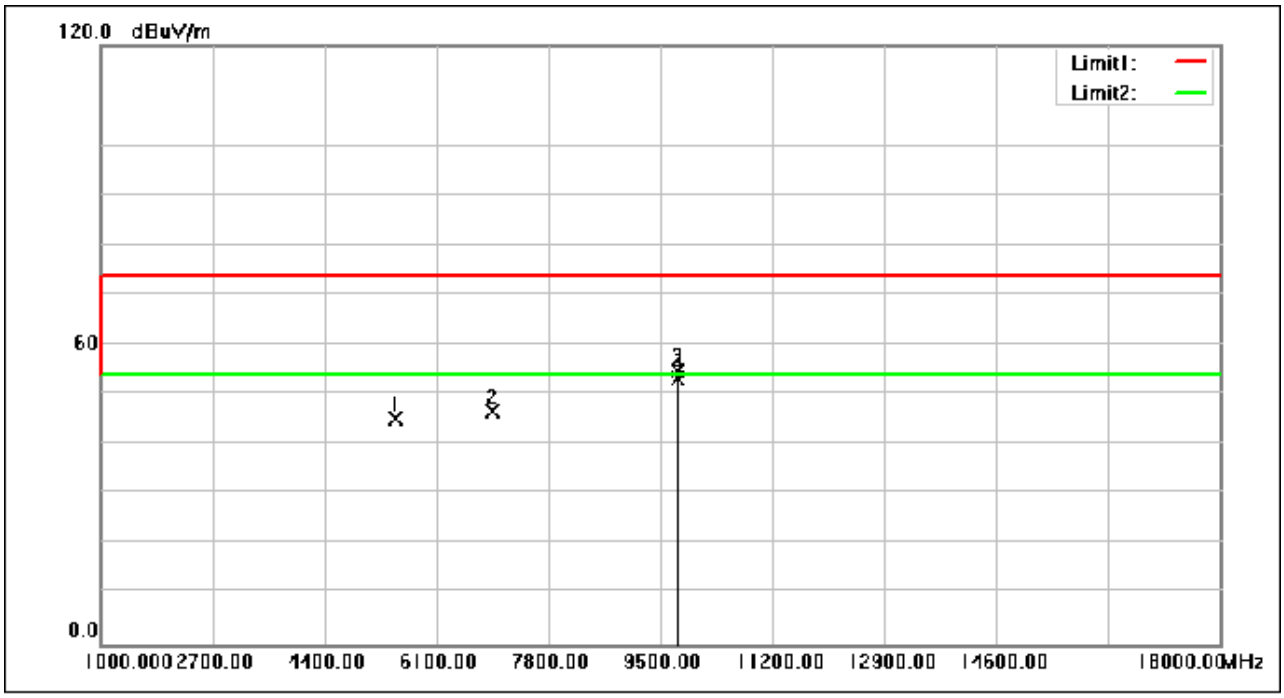
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4797.800	65.55	-18.57	46.98	74.00	-27.02	peak
2	8149.350	56.36	-10.34	46.02	74.00	-27.98	peak
3	9757.550	63.27	-7.47	55.80	74.00	-18.20	peak
4	9757.550	61.33	-7.47	53.86	54.00	-0.14	AVG

Test Mode: 00; Polarity: Vertical; Modulation:GFSK; Channel:middle



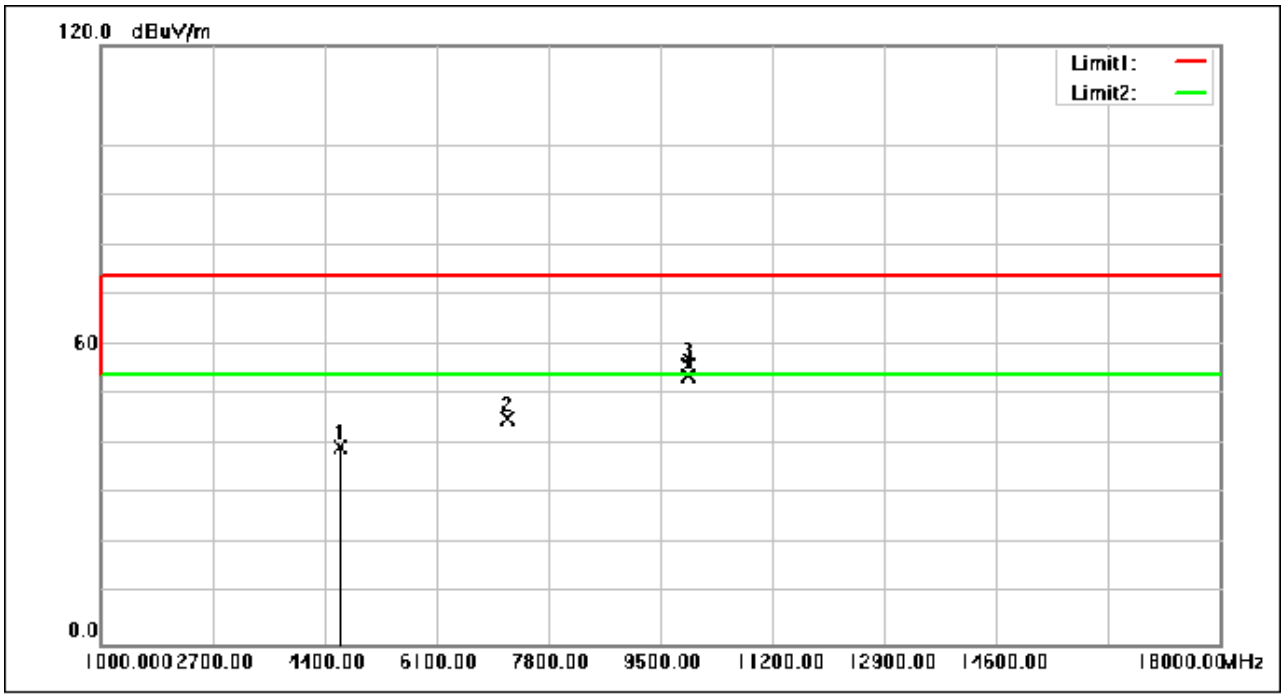
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.550	58.45	-18.52	39.93	74.00	-34.07	peak
2	7566.250	56.00	-11.17	44.83	74.00	-29.17	peak
3	9758.400	62.05	-7.47	54.58	74.00	-19.42	peak
4	9758.400	60.54	-7.47	53.07	54.00	-0.93	AVG

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; Channel:middle



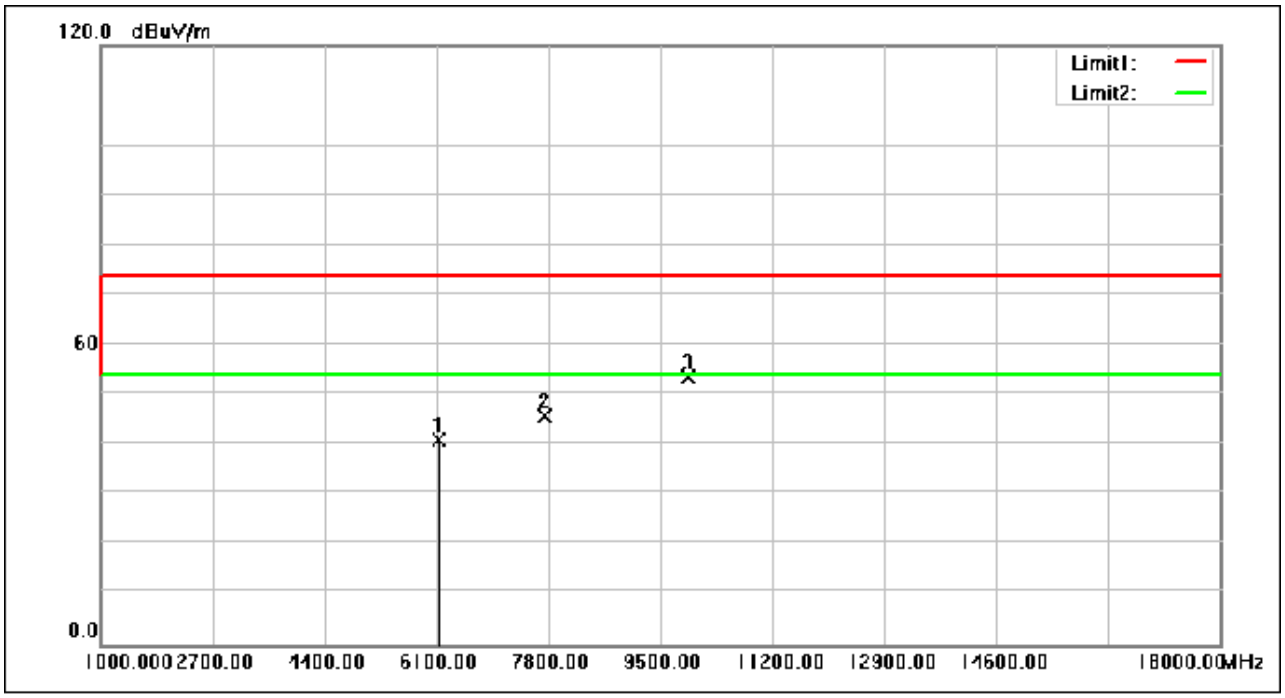
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5487.150	62.78	-17.72	45.06	74.00	-28.94	peak
2	6953.400	58.30	-11.65	46.65	74.00	-27.35	peak
3	9758.400	62.31	-7.47	54.84	74.00	-19.16	peak
4	9758.400	60.68	-7.47	53.21	54.00	-0.79	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:GFSK; Channel:High



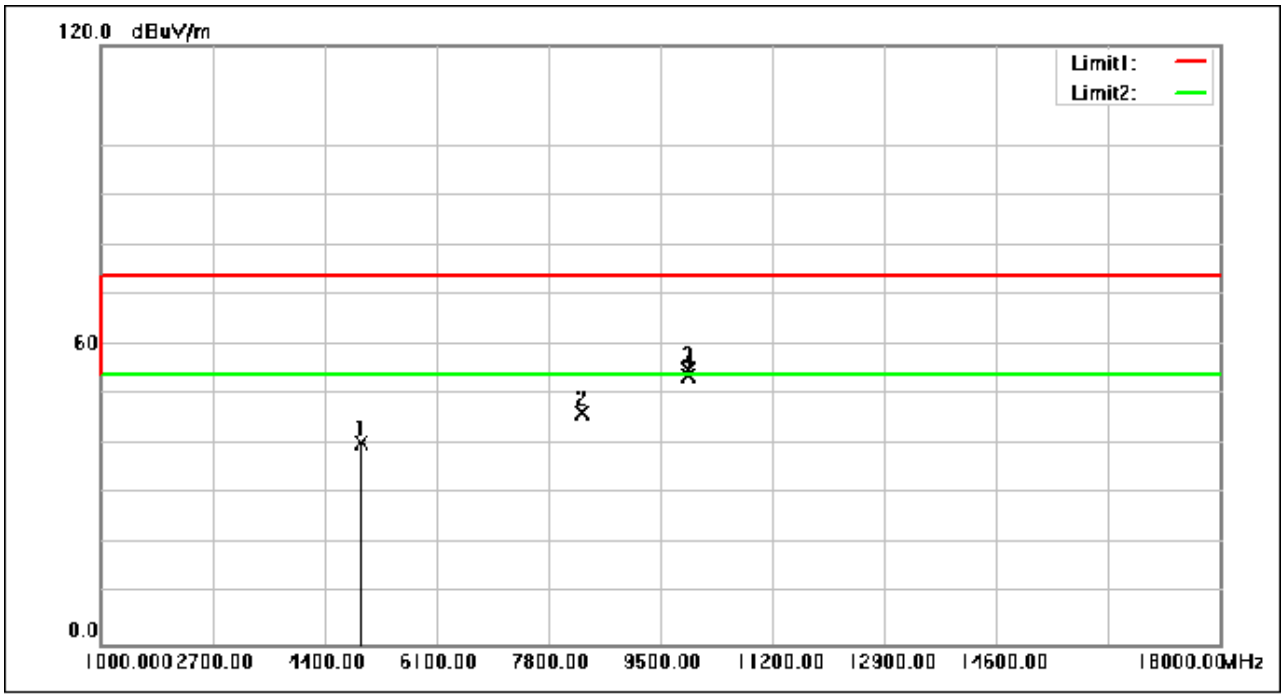
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4647.350	58.23	-18.66	39.57	74.00	-34.43	peak
2	7171.000	56.55	-11.49	45.06	74.00	-28.94	peak
3	9913.950	63.16	-7.31	55.85	74.00	-18.15	peak
4	9913.950	61.20	-7.31	53.89	54.00	-0.11	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:GFSK; Channel:High



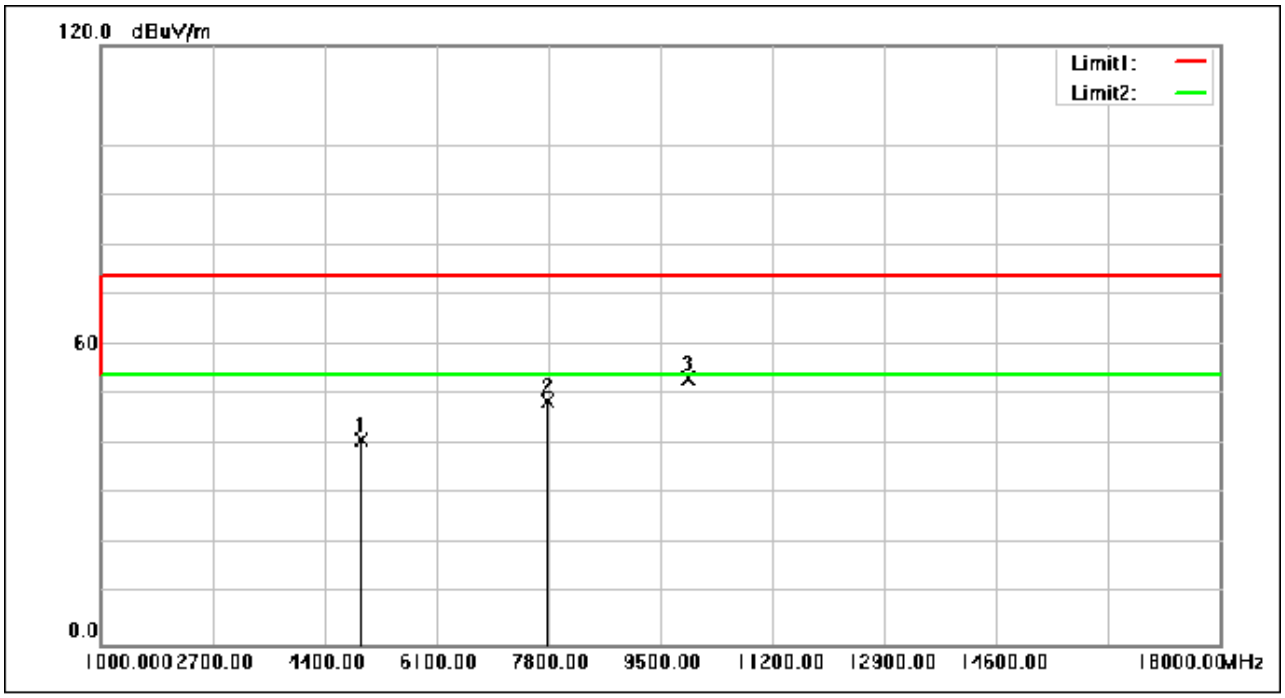
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6145.050	55.97	-15.08	40.89	74.00	-33.11	peak
2	7762.600	56.62	-10.91	45.71	74.00	-28.29	peak
3	9913.950	60.84	-7.31	53.53	74.00	-20.47	peak

Test Mode: 00; Polarity: Vertical; Modulation:GFSK; Channel:High



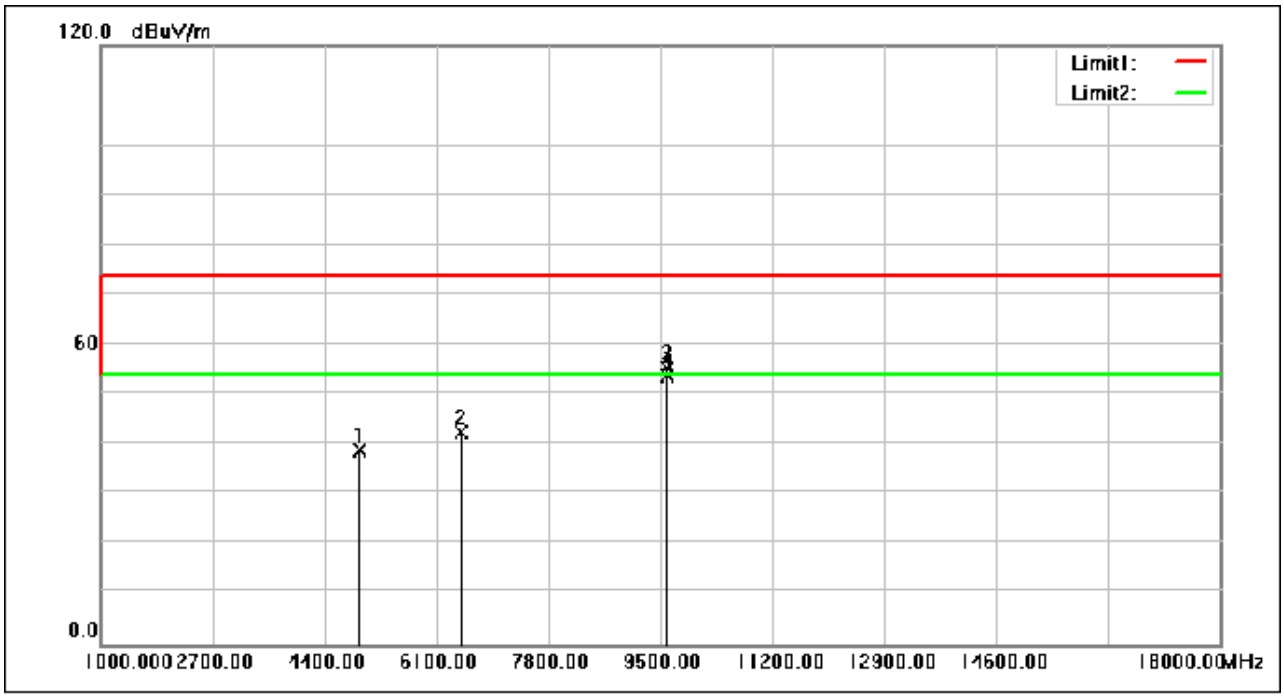
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	58.90	-18.47	40.43	74.00	-33.57	peak
2	8310.000	56.53	-10.07	46.46	74.00	-27.54	peak
3	9913.950	62.45	-7.31	55.14	74.00	-18.86	peak
4	9913.950	61.18	-7.31	53.87	54.00	-0.13	AVG

Test Mode: 02; Polarity: Vertical; Modulation:GFSK; Channel:High



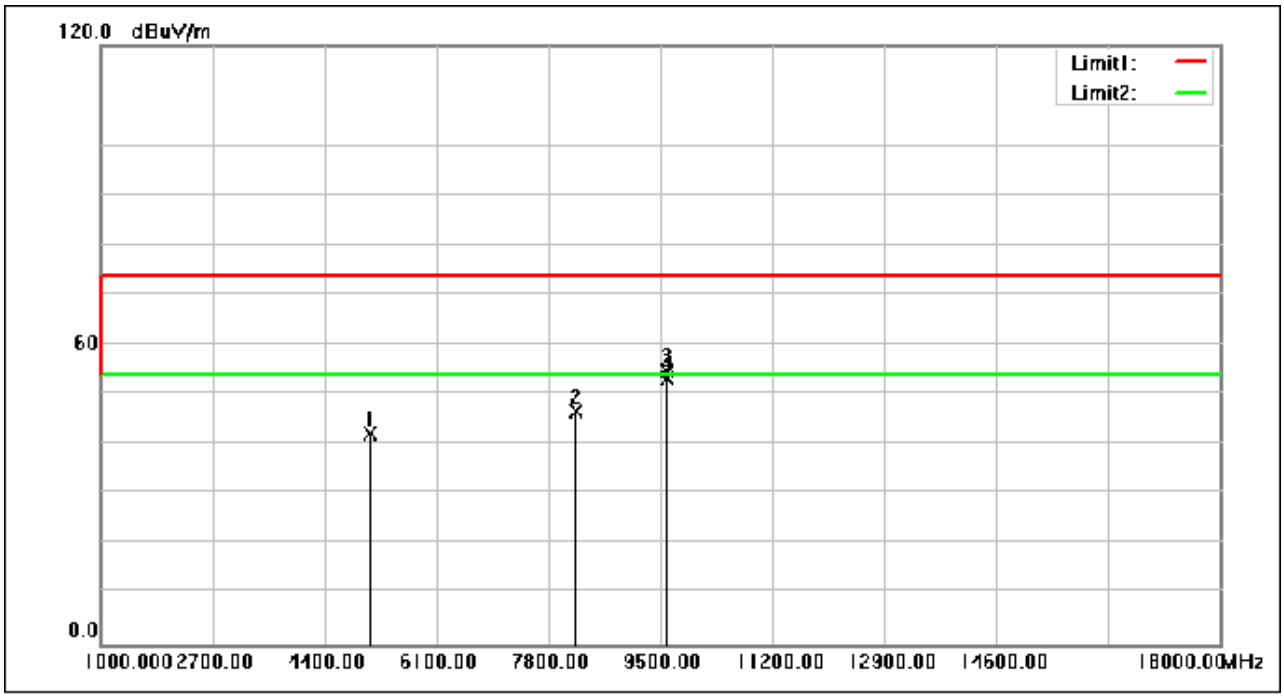
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	59.43	-18.47	40.96	74.00	-33.04	peak
2	7791.500	59.50	-10.88	48.62	74.00	-25.38	peak
3	9913.950	60.56	-7.31	53.25	74.00	-20.75	peak

Test Mode: 00; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:Low



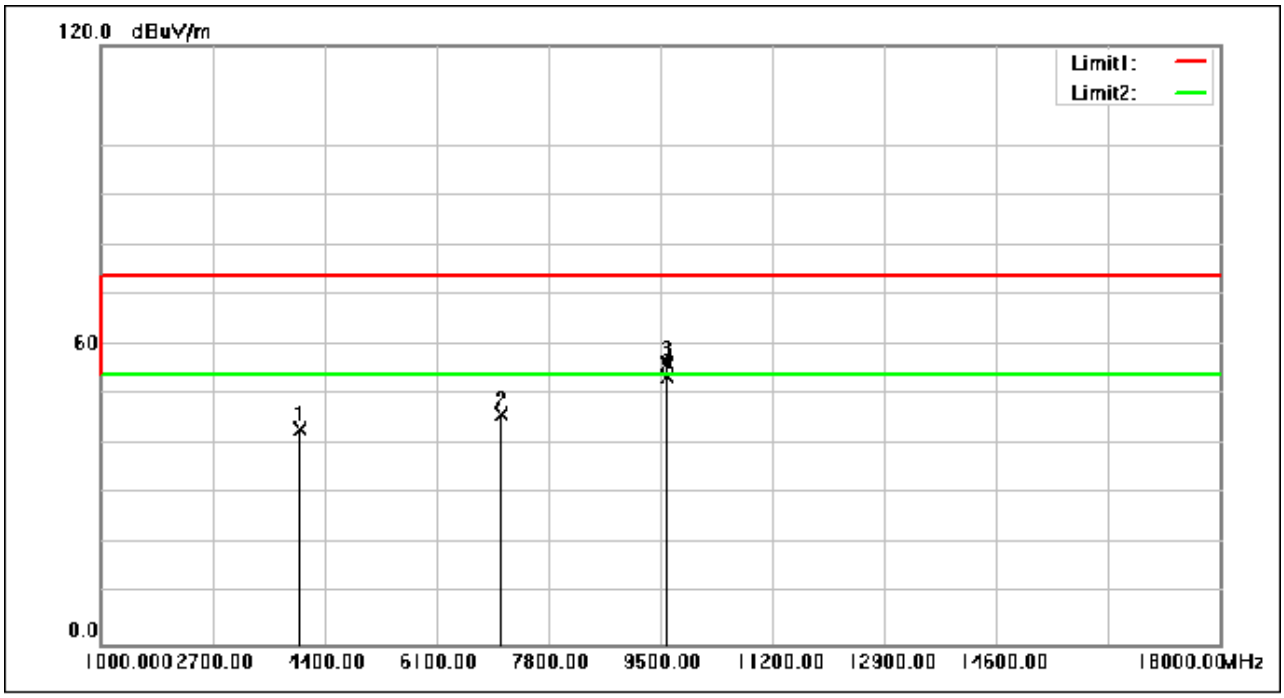
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4940.600	57.31	-18.48	38.83	74.00	-35.17	peak
2	6479.100	55.81	-13.33	42.48	74.00	-31.52	peak
3	9602.000	62.99	-7.76	55.23	74.00	-18.77	peak
4	9602.000	61.61	-7.76	53.85	54.00	-0.15	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:Low



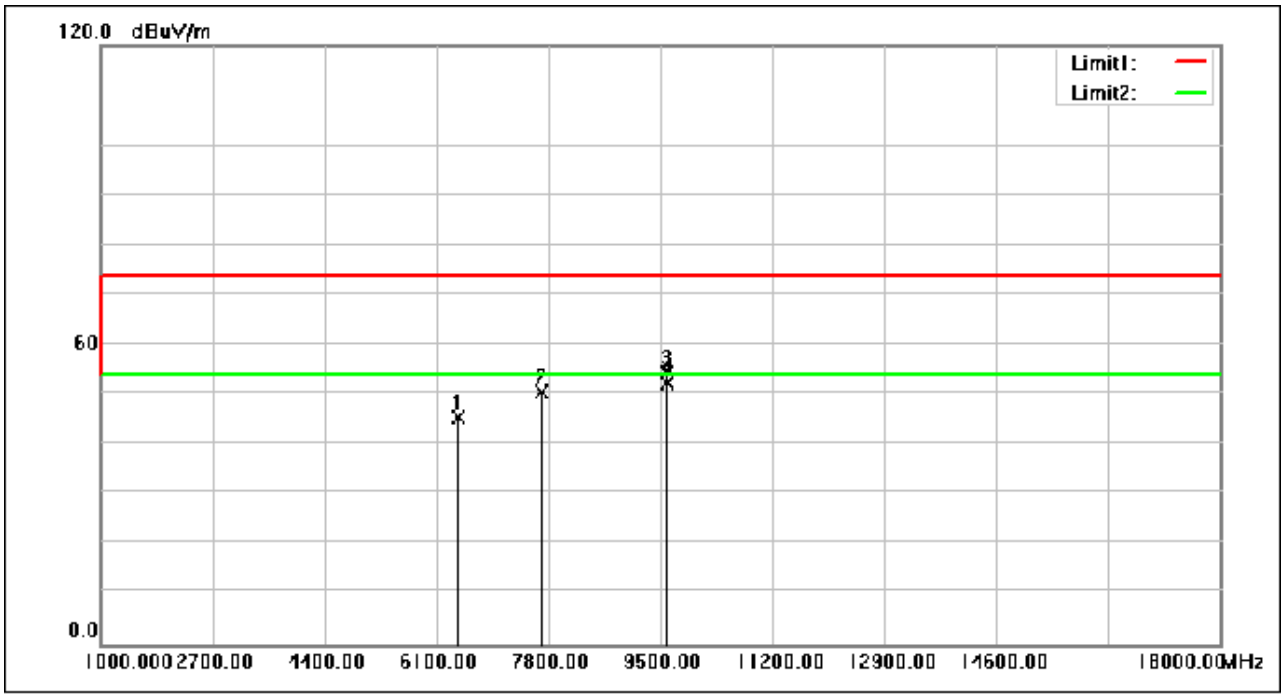
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5105.500	60.53	-18.28	42.25	74.00	-31.75	peak
2	8216.500	56.87	-10.23	46.64	74.00	-27.36	peak
3	9602.000	62.48	-7.76	54.72	74.00	-19.28	peak
4	9602.000	60.93	-7.76	53.17	54.00	-0.83	AVG

Test Mode: 00; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:Low



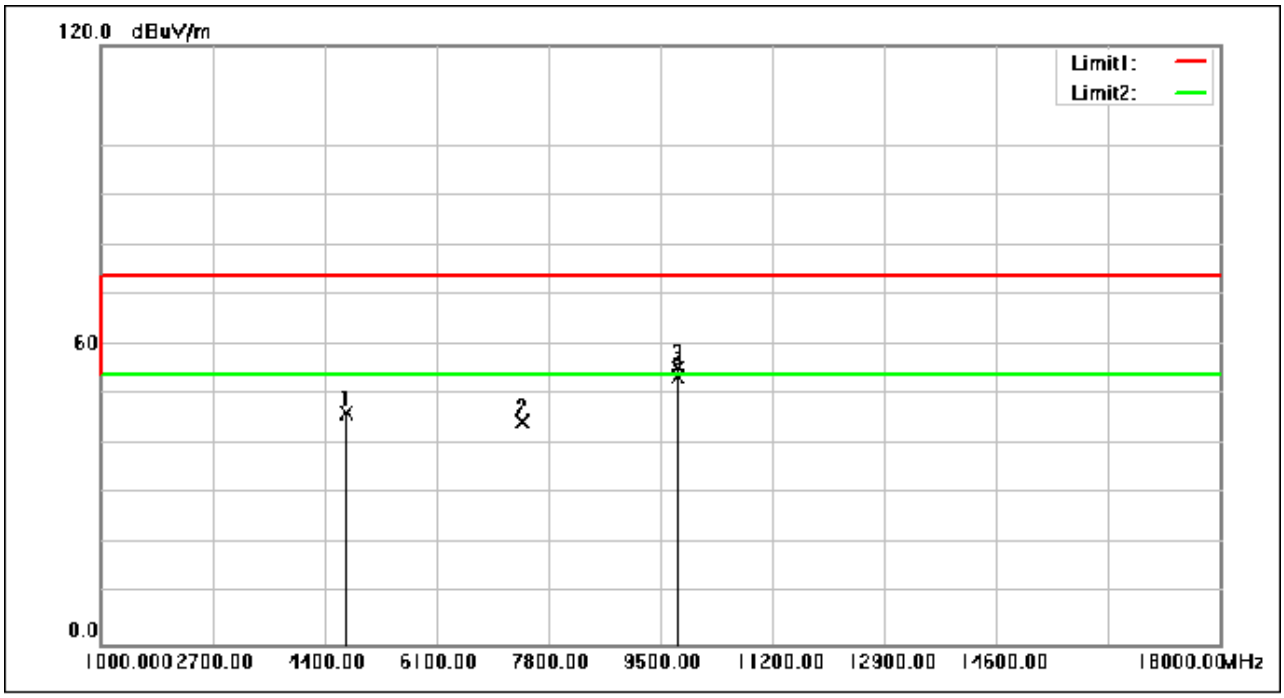
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4042.150	63.20	-20.15	43.05	74.00	-30.95	peak
2	7100.450	57.58	-11.52	46.06	74.00	-27.94	peak
3	9602.000	64.07	-7.76	56.31	74.00	-17.69	peak
4	9602.000	61.21	-7.76	53.45	54.00	-0.55	AVG

Test Mode: 02; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:Low



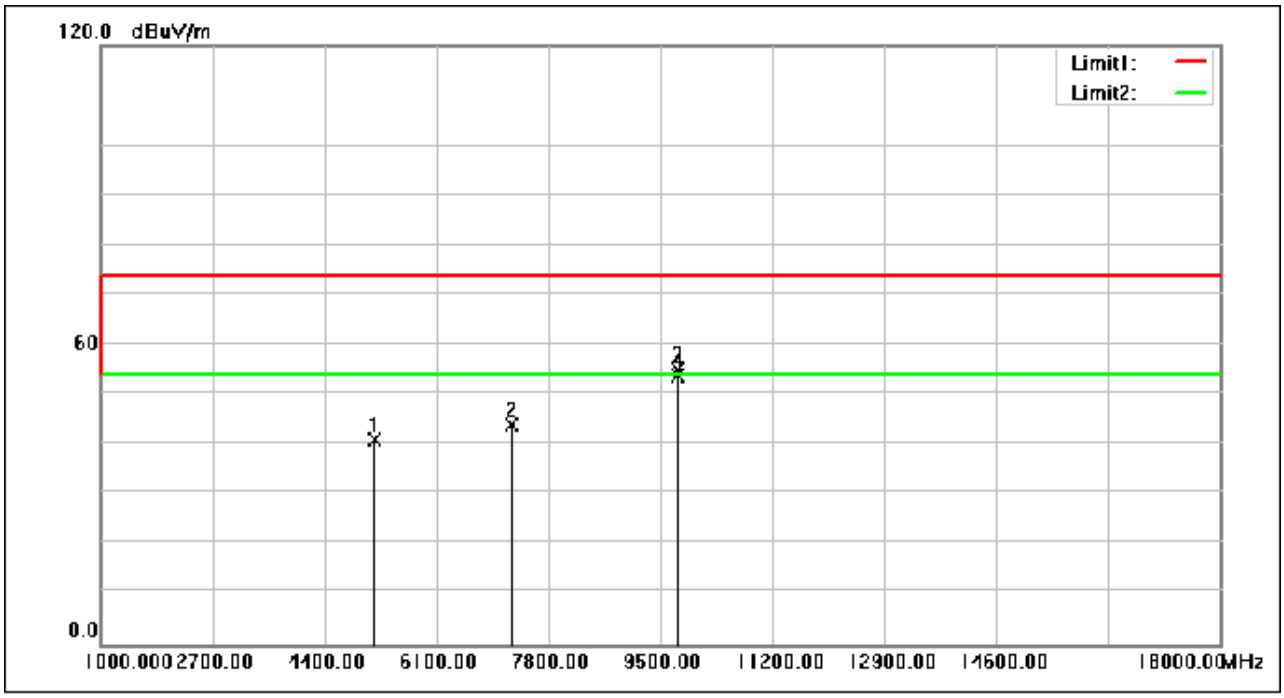
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6424.700	59.18	-13.61	45.57	74.00	-28.43	peak
2	7705.650	61.62	-10.99	50.63	74.00	-23.37	peak
3	9602.000	62.11	-7.76	54.35	74.00	-19.65	peak
4	9602.000	59.99	-7.76	52.23	54.00	-1.77	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:middle



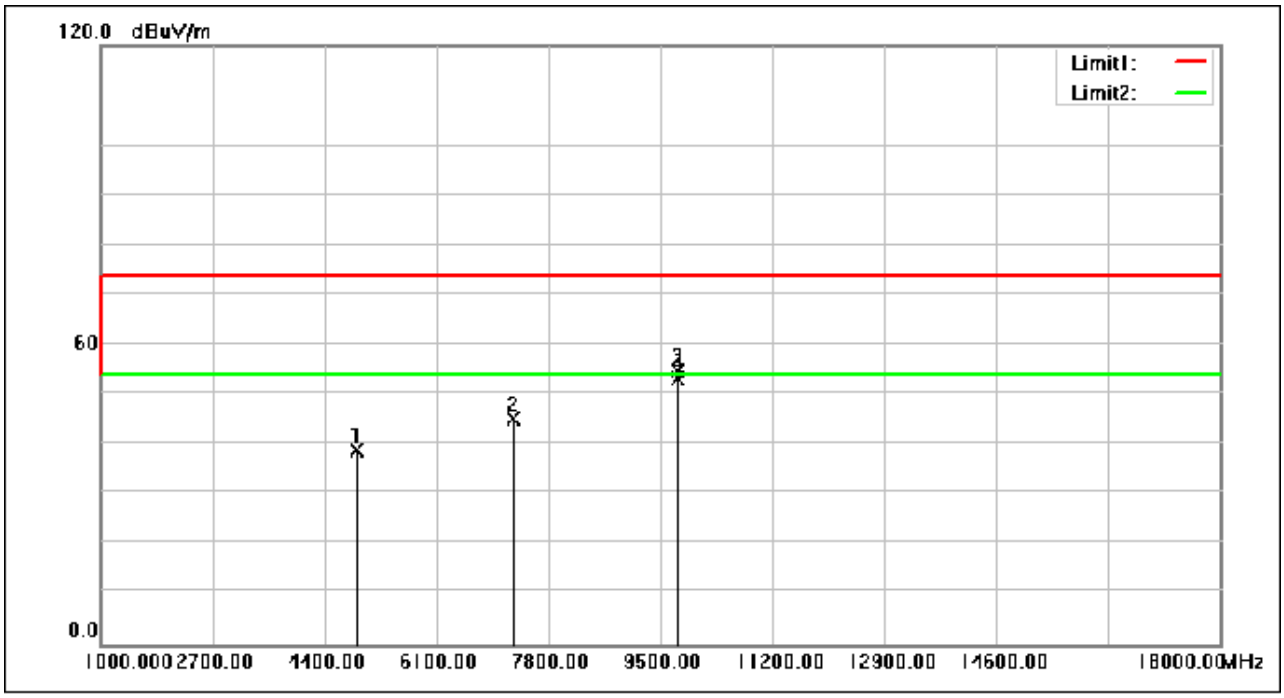
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4731.500	65.00	-18.61	46.39	74.00	-27.61	peak
2	7405.600	55.89	-11.38	44.51	74.00	-29.49	peak
3	9757.550	62.72	-7.47	55.25	74.00	-18.75	peak
4	9757.550	61.12	-7.47	53.65	54.00	-0.35	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:middle



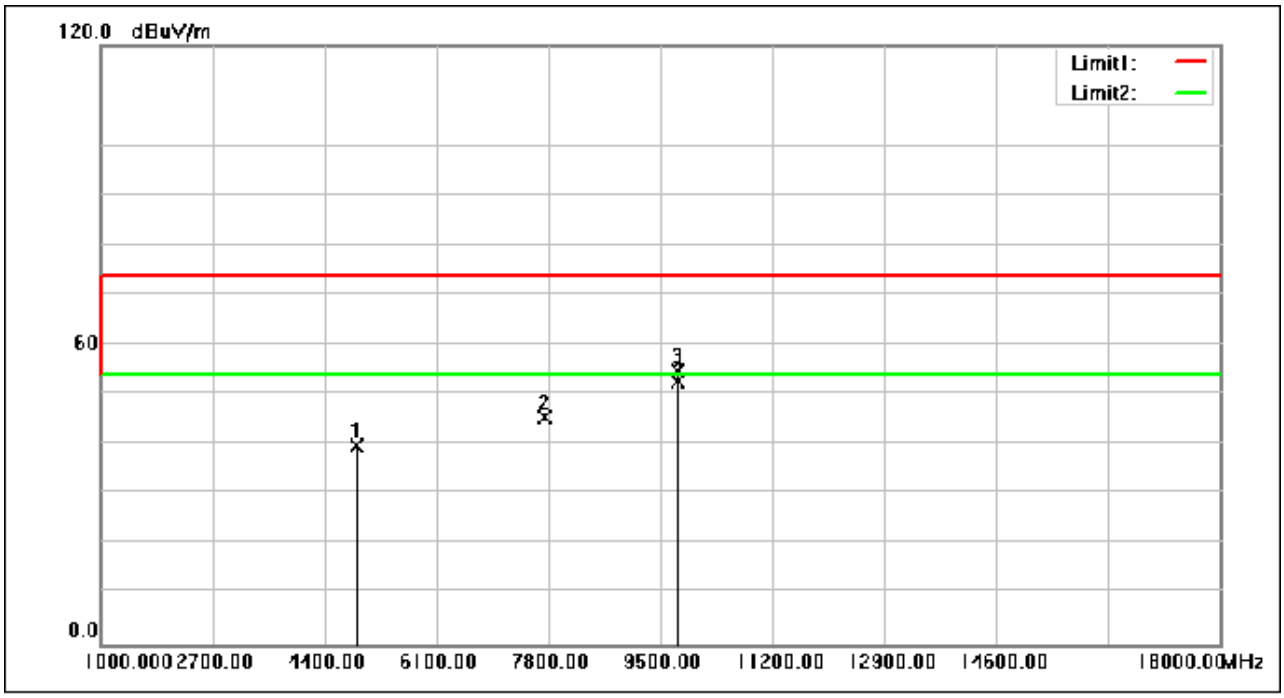
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5172.650	59.17	-18.17	41.00	74.00	-33.00	peak
2	7239.850	55.52	-11.46	44.06	74.00	-29.94	peak
3	9757.550	62.42	-7.47	54.95	74.00	-19.05	peak
4	9757.550	61.31	-7.47	53.84	54.00	-0.16	AVG

Test Mode: 00; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:middle



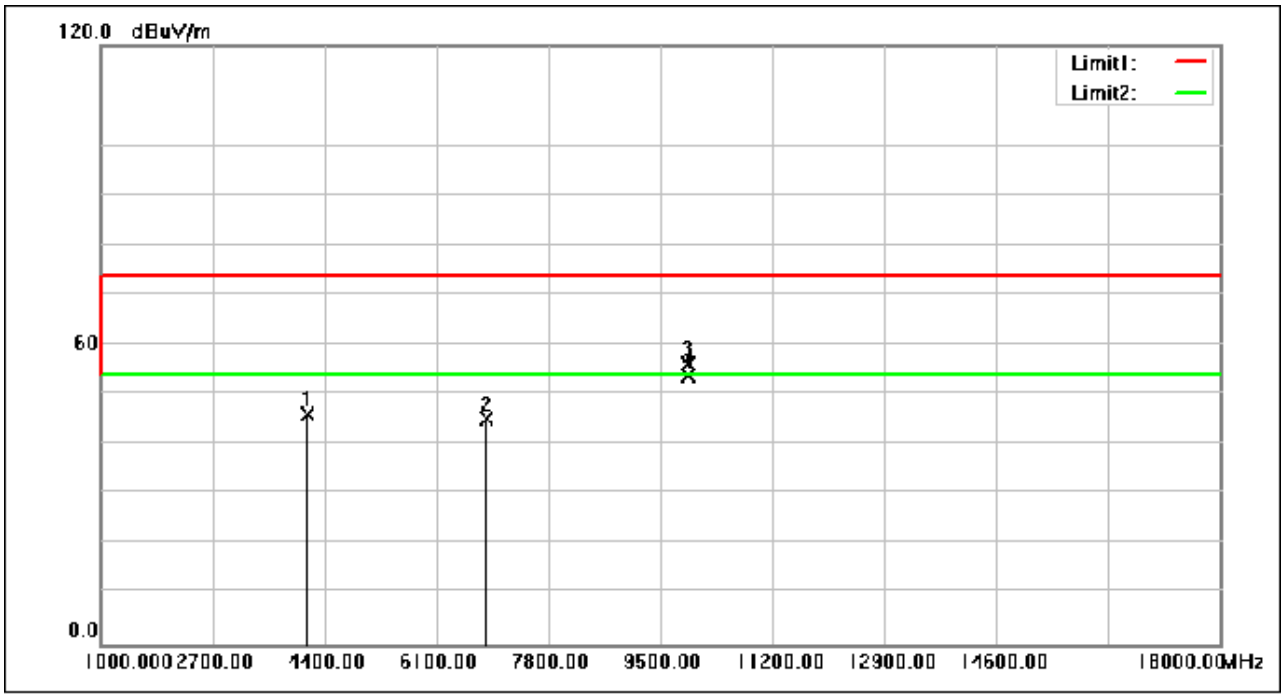
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.550	57.42	-18.52	38.90	74.00	-35.10	peak
2	7256.000	56.46	-11.45	45.01	74.00	-28.99	peak
3	9757.550	62.18	-7.47	54.71	74.00	-19.29	peak
4	9757.550	60.85	-7.47	53.38	54.00	-0.62	AVG

Test Mode: 02; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:middle



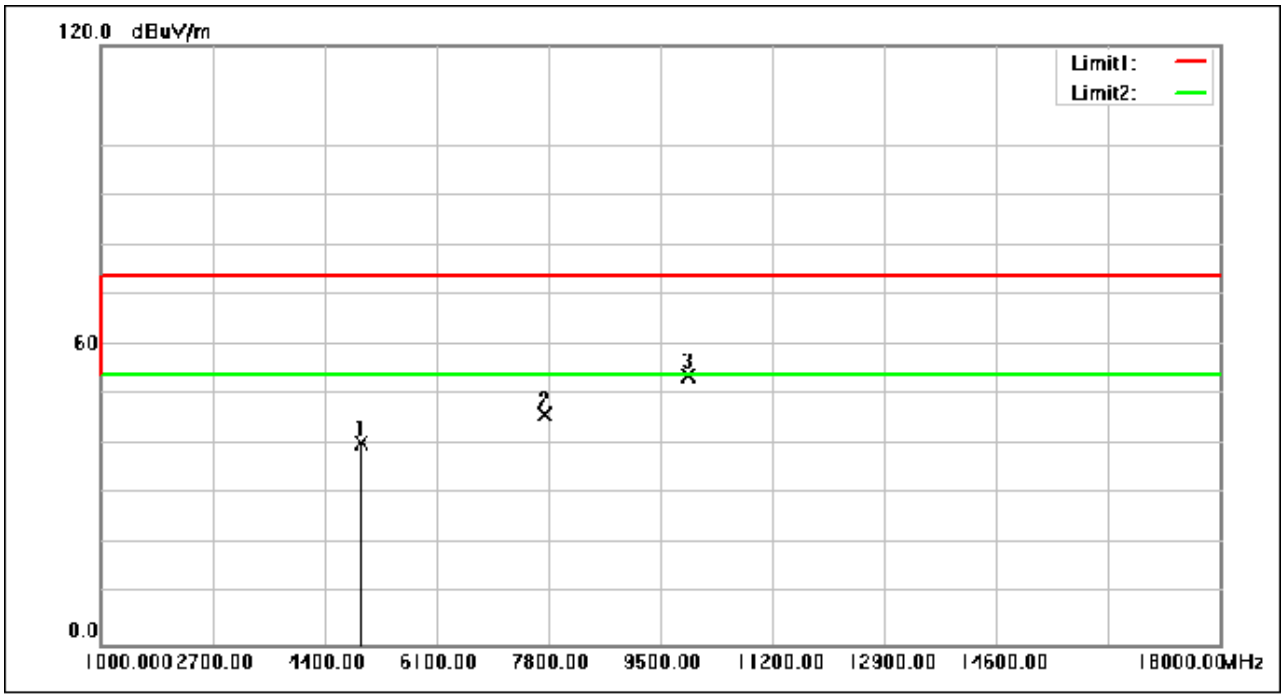
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4879.400	58.13	-18.52	39.61	74.00	-34.39	peak
2	7757.500	56.27	-10.92	45.35	74.00	-28.65	peak
3	9758.400	62.26	-7.47	54.79	74.00	-19.21	peak
4	9758.400	60.11	-7.47	52.64	54.00	-1.36	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:High



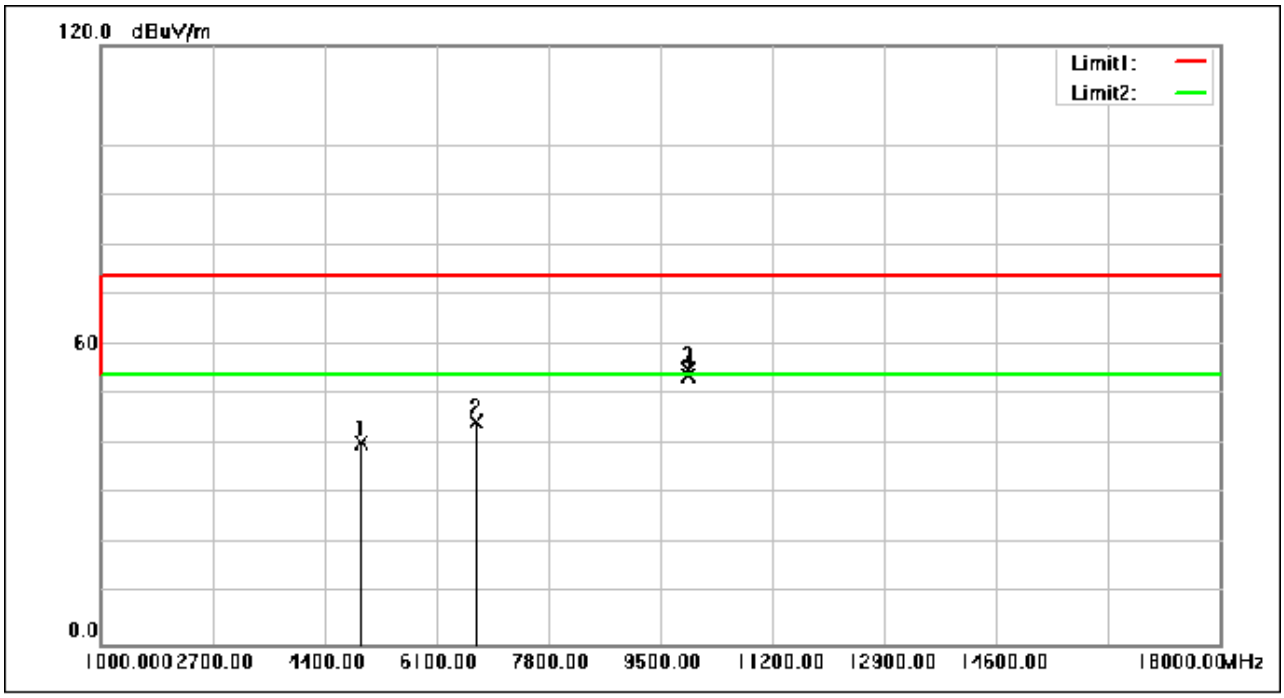
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4133.950	66.12	-19.98	46.14	74.00	-27.86	peak
2	6853.950	56.84	-11.82	45.02	74.00	-28.98	peak
3	9913.950	63.46	-7.31	56.15	74.00	-17.85	peak
4	9913.950	61.18	-7.31	53.87	54.00	-0.13	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:High



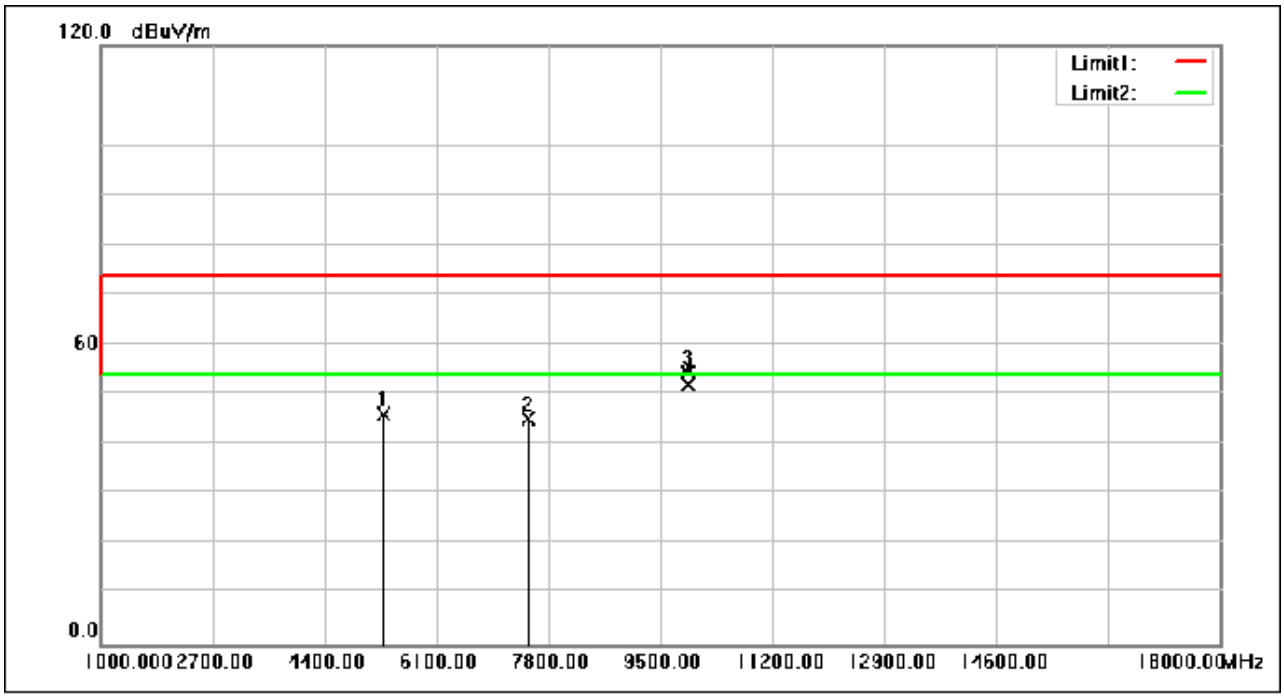
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	58.93	-18.47	40.46	74.00	-33.54	peak
2	7759.200	56.96	-10.92	46.04	74.00	-27.96	peak
3	9913.950	61.19	-7.31	53.88	74.00	-20.12	peak

Test Mode: 00; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:High



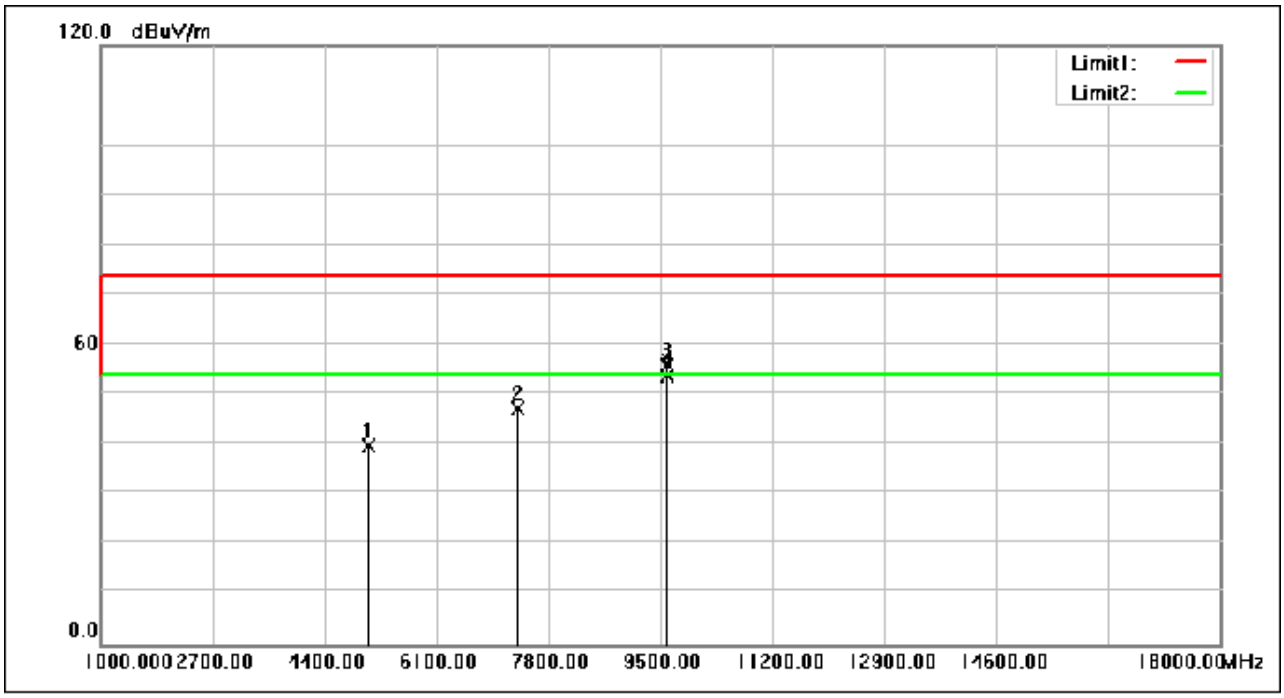
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	58.82	-18.47	40.35	74.00	-33.65	peak
2	6706.050	56.59	-12.15	44.44	74.00	-29.56	peak
3	9913.950	62.34	-7.31	55.03	74.00	-18.97	peak
4	9913.950	61.21	-7.31	53.90	54.00	-0.10	AVG

Test Mode: 02; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:High



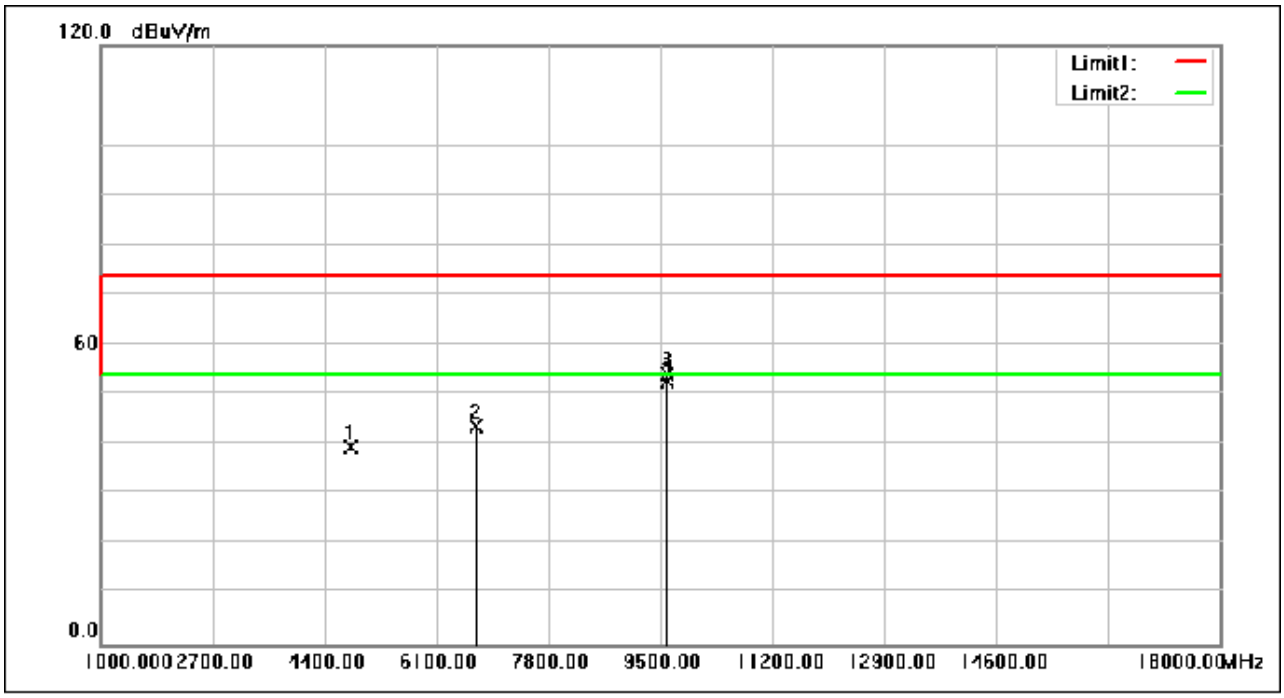
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5288.250	63.92	-18.01	45.91	74.00	-28.09	peak
2	7507.600	56.32	-11.25	45.07	74.00	-28.93	peak
3	9913.950	61.77	-7.31	54.46	74.00	-19.54	peak
4	9913.950	59.36	-7.31	52.05	54.00	-1.95	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:8DPSK; Channel:Low



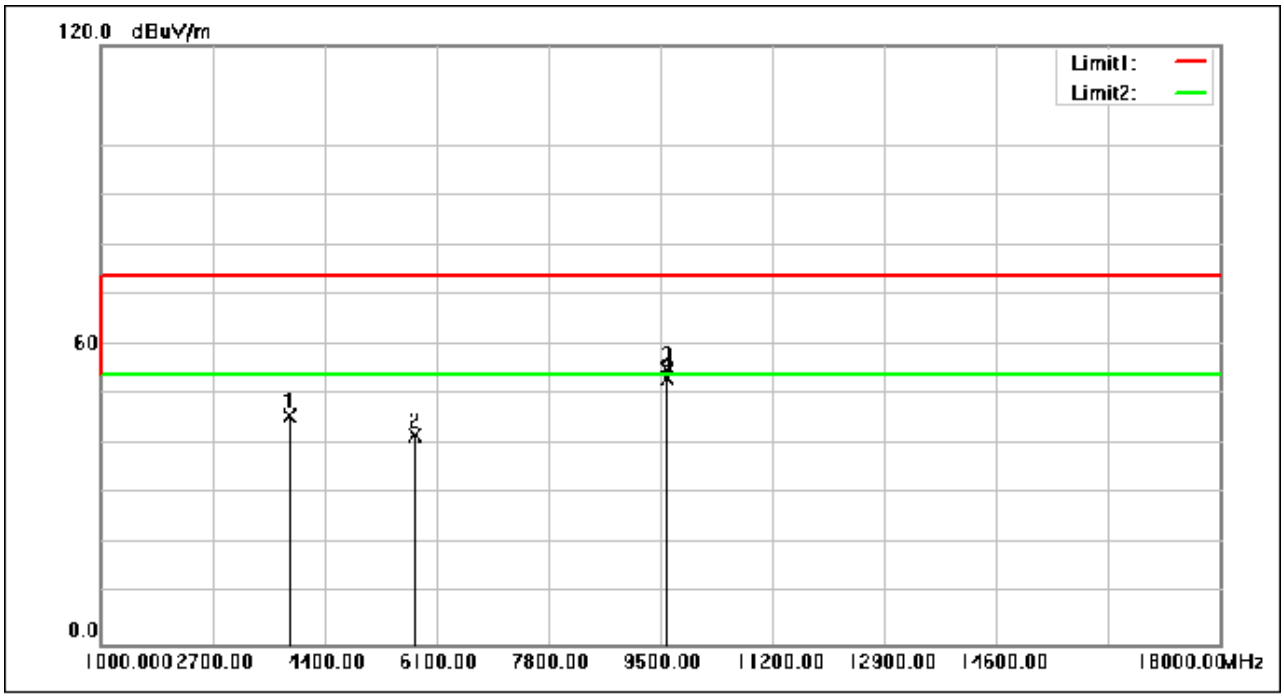
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5069.800	58.01	-18.33	39.68	74.00	-34.32	peak
2	7333.350	58.58	-11.42	47.16	74.00	-26.84	peak
3	9602.000	63.60	-7.76	55.84	74.00	-18.16	peak
4	9602.000	61.49	-7.76	53.73	54.00	-0.27	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:8DPSK; Channel:Low



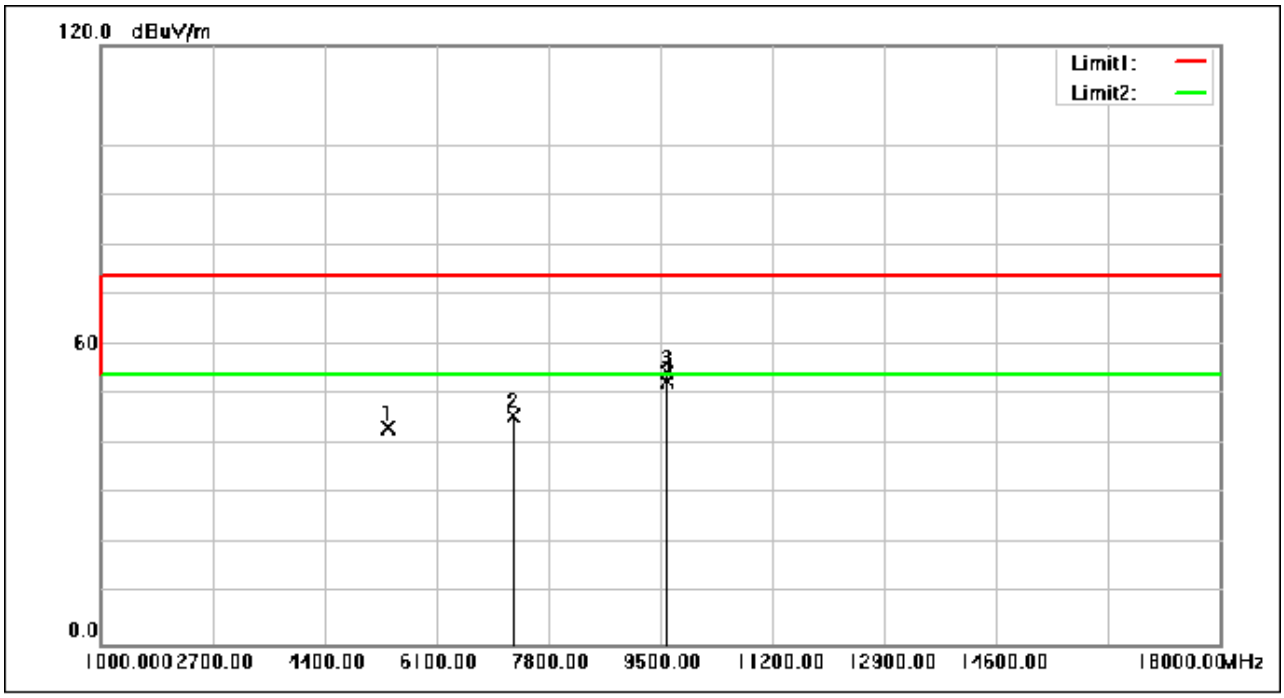
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4794.400	58.14	-18.57	39.57	74.00	-34.43	peak
2	6699.250	55.85	-12.18	43.67	74.00	-30.33	peak
3	9602.000	61.82	-7.76	54.06	74.00	-19.94	peak
4	9602.000	60.30	-7.76	52.54	54.00	-1.46	AVG

Test Mode: 00; Polarity: Vertical; Modulation:8DPSK; Channel:Low



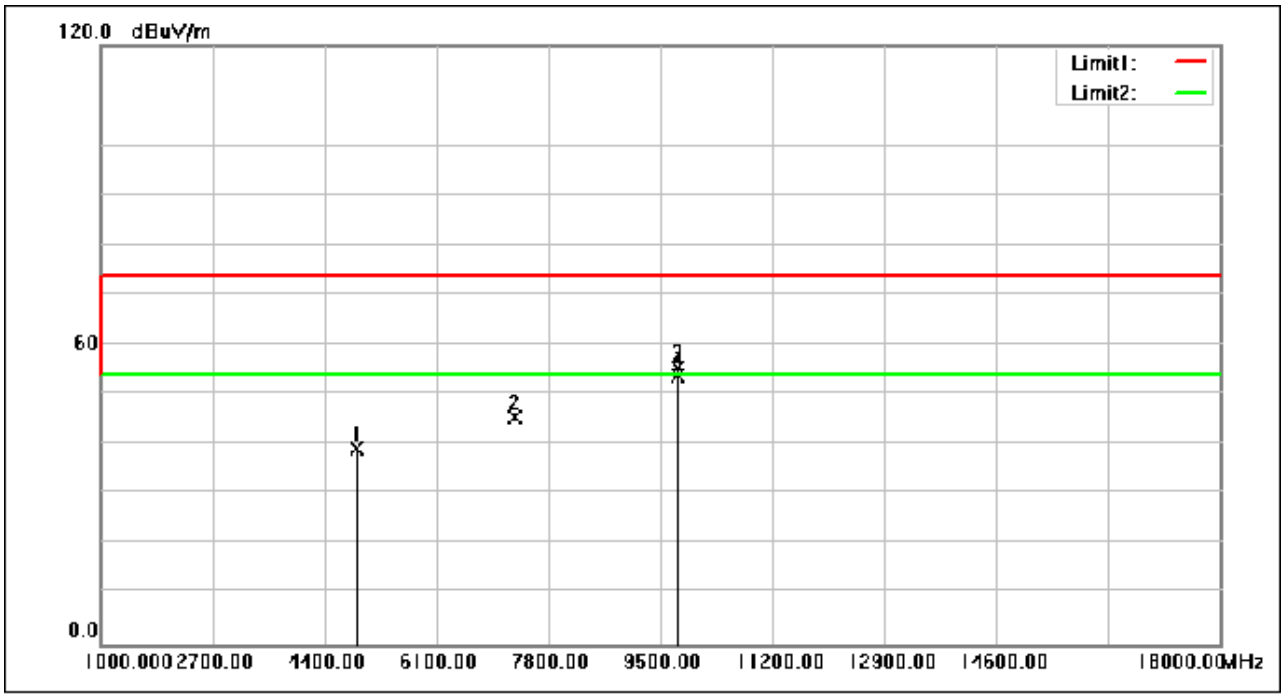
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3884.900	66.33	-20.53	45.80	74.00	-28.20	peak
2	5782.950	58.45	-16.68	41.77	74.00	-32.23	peak
3	9602.000	62.92	-7.76	55.16	74.00	-18.84	peak
4	9602.000	61.10	-7.76	53.34	54.00	-0.66	AVG

Test Mode: 02; Polarity: Vertical; Modulation:8DPSK; Channel:Low



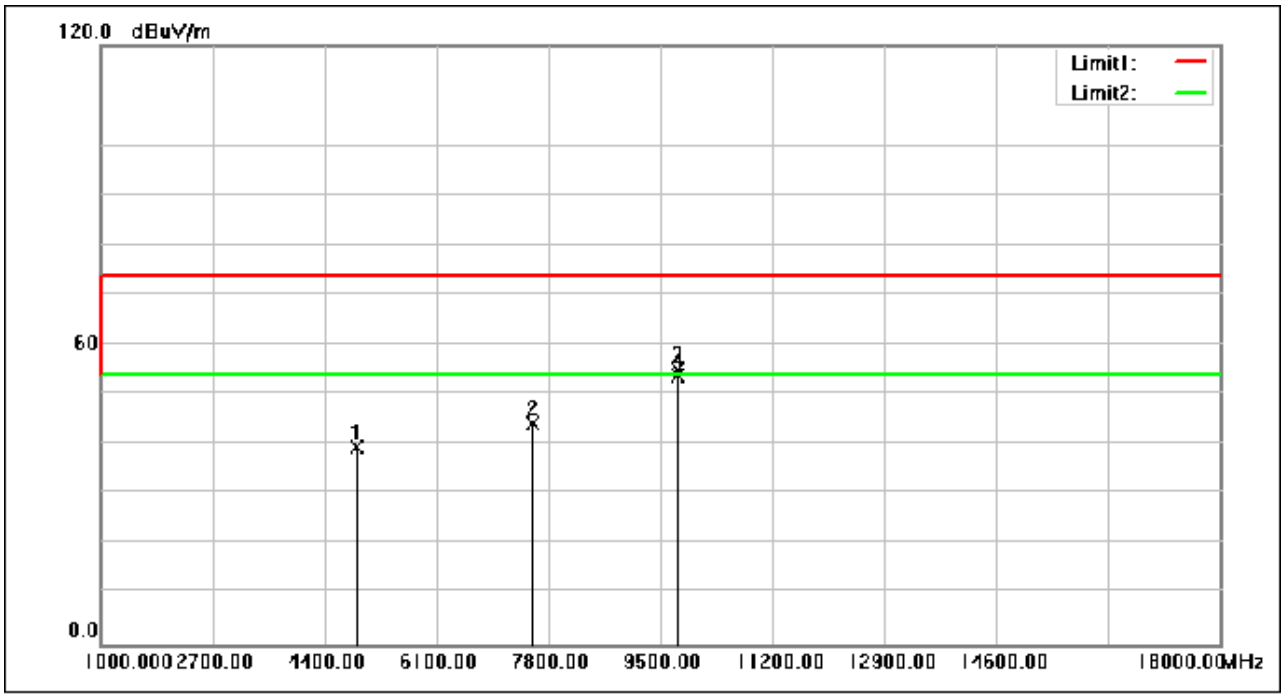
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5363.050	61.19	-17.90	43.29	74.00	-30.71	peak
2	7285.750	57.12	-11.44	45.68	74.00	-28.32	peak
3	9602.000	62.09	-7.76	54.33	74.00	-19.67	peak
4	9602.000	60.51	-7.76	52.75	54.00	-1.25	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:8DPSK; Channel:middle



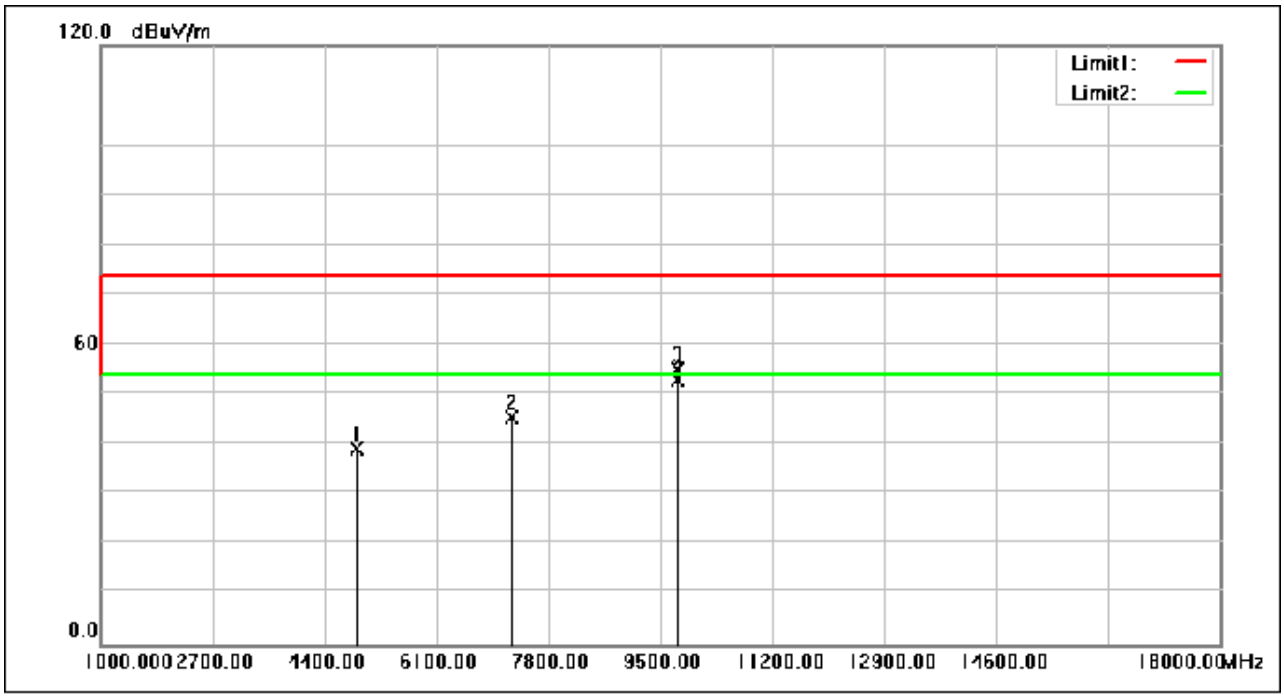
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4879.400	57.62	-18.52	39.10	74.00	-34.90	peak
2	7302.750	56.82	-11.43	45.39	74.00	-28.61	peak
3	9757.550	62.94	-7.47	55.47	74.00	-18.53	peak
4	9757.550	61.26	-7.47	53.79	54.00	-0.21	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:8DPSK; Channel:middle



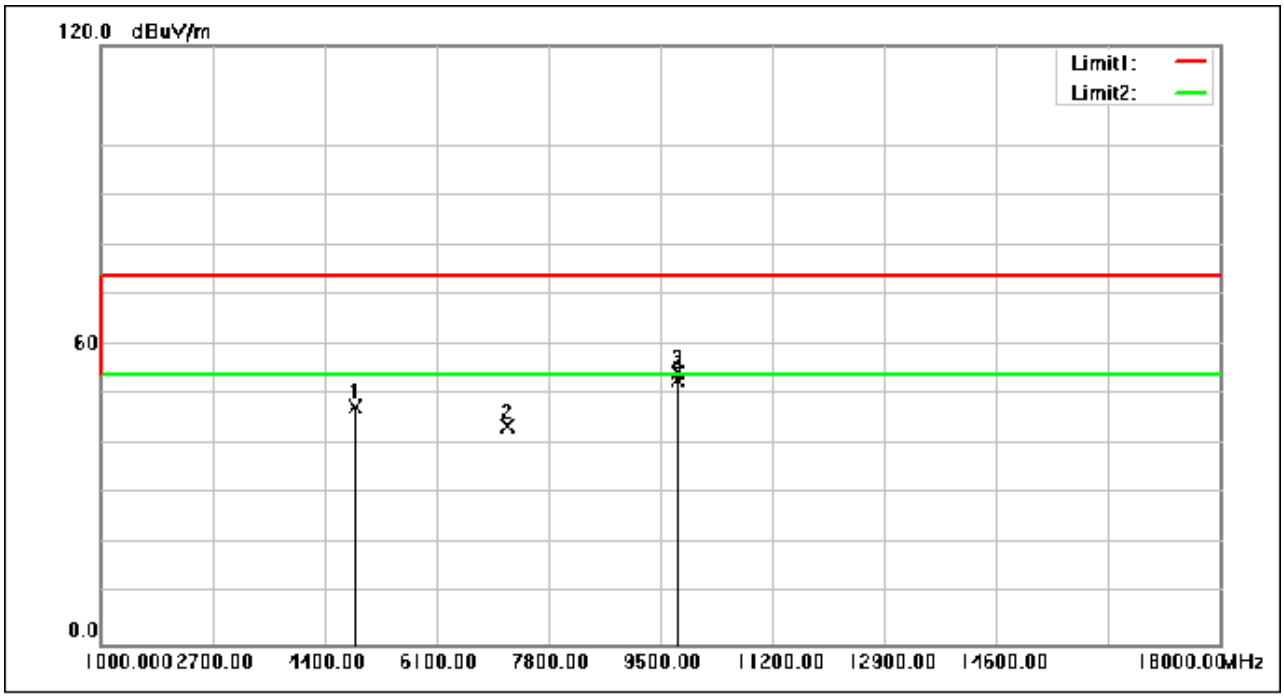
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.550	57.89	-18.52	39.37	74.00	-34.63	peak
2	7570.500	55.35	-11.16	44.19	74.00	-29.81	peak
3	9758.400	62.62	-7.47	55.15	74.00	-18.85	peak
4	9758.400	61.29	-7.47	53.82	54.00	-0.18	AVG

Test Mode: 00; Polarity: Vertical; Modulation:8DPSK; Channel:middle



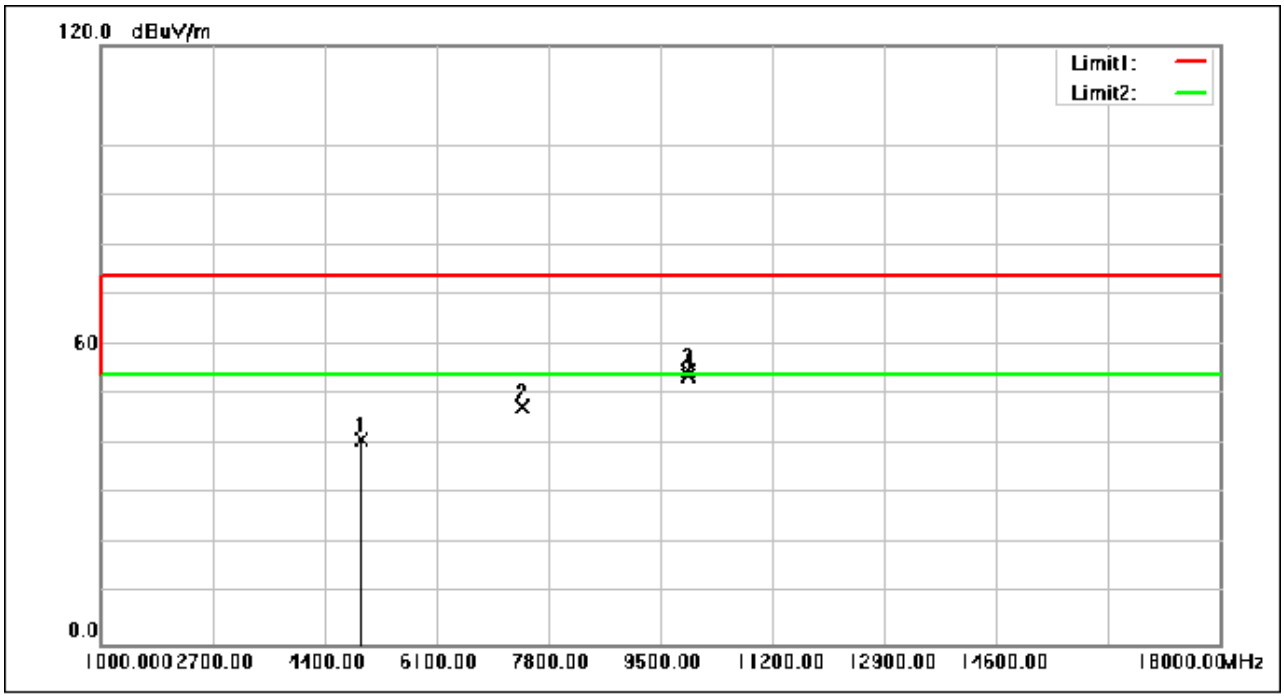
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4878.550	57.55	-18.52	39.03	74.00	-34.97	peak
2	7250.900	56.86	-11.46	45.40	74.00	-28.60	peak
3	9758.400	62.40	-7.47	54.93	74.00	-19.07	peak
4	9758.400	60.48	-7.47	53.01	54.00	-0.99	AVG

Test Mode: 02; Polarity: Vertical; Modulation:8DPSK; Channel:middle



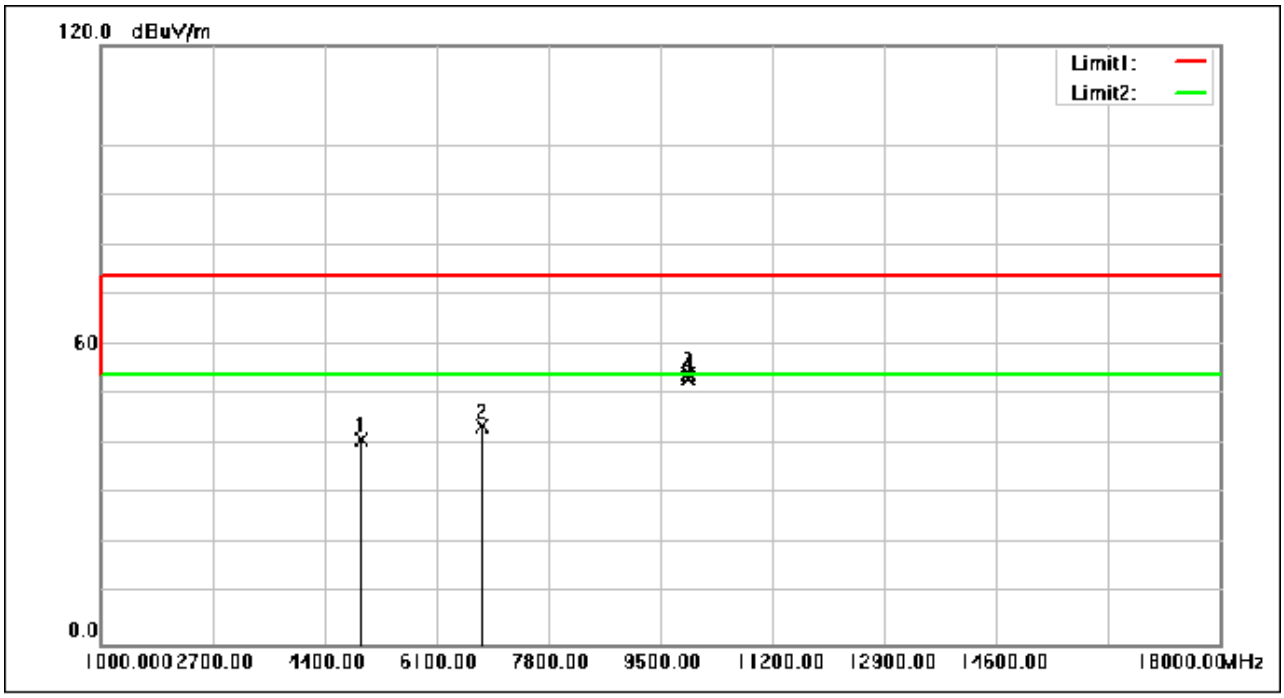
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4873.450	66.05	-18.52	47.53	74.00	-26.47	peak
2	7177.800	55.18	-11.49	43.69	74.00	-30.31	peak
3	9757.550	61.81	-7.47	54.34	74.00	-19.66	peak
4	9757.550	60.46	-7.47	52.99	54.00	-1.01	AVG

Test Mode: 00; Polarity: Horizontal; Modulation:8DPSK; Channel:High



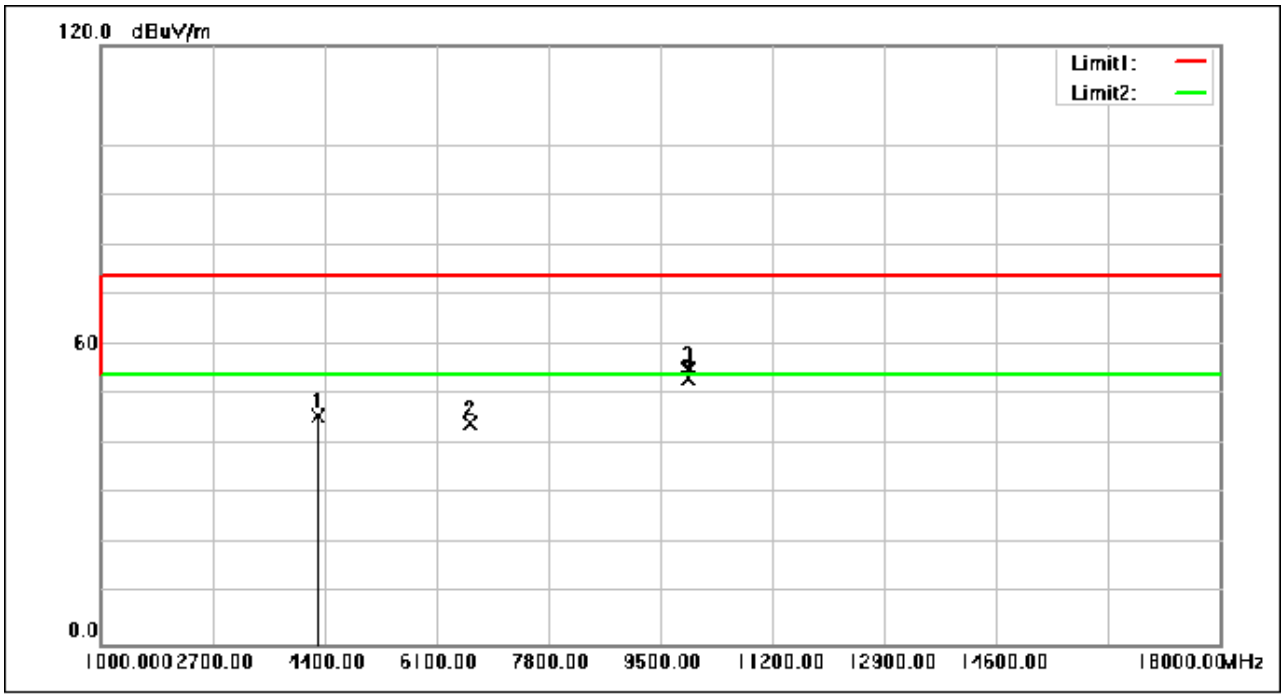
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	59.39	-18.47	40.92	74.00	-33.08	peak
2	7423.450	58.78	-11.35	47.43	74.00	-26.57	peak
3	9913.950	61.97	-7.31	54.66	74.00	-19.34	peak
4	9913.950	61.01	-7.31	53.70	54.00	-0.30	AVG

Test Mode: 02; Polarity: Horizontal; Modulation:8DPSK; Channel:High



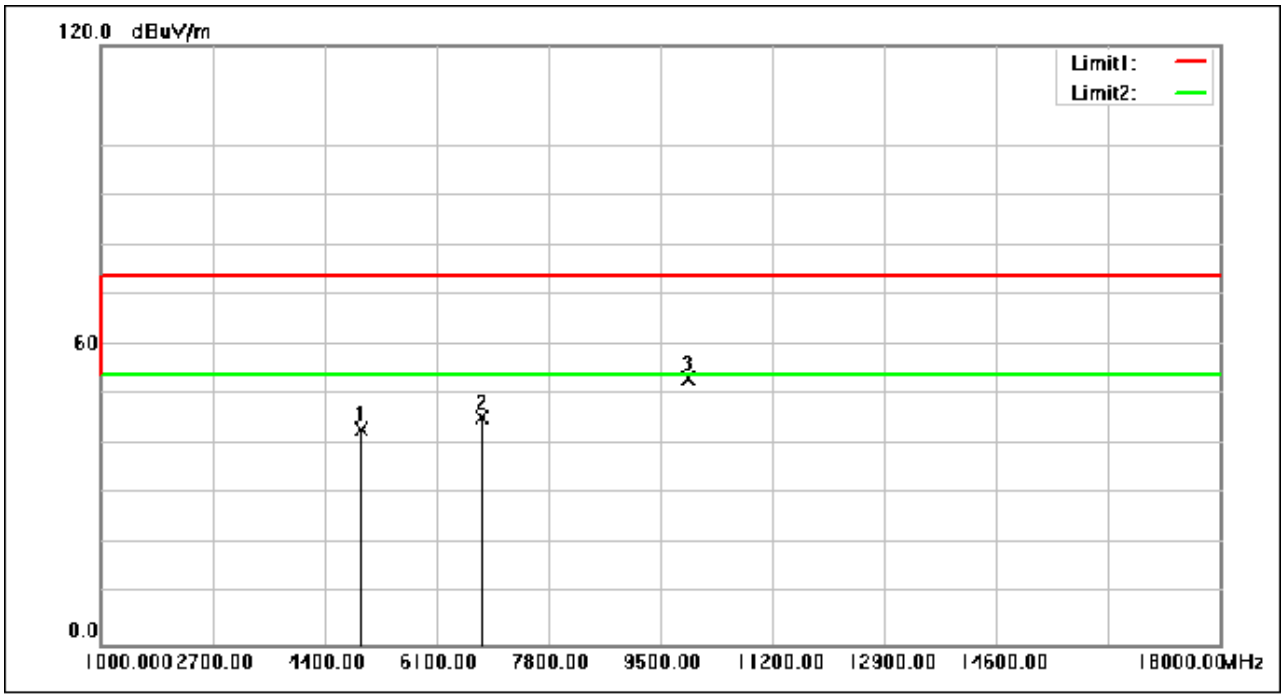
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4956.750	59.32	-18.47	40.85	74.00	-33.15	peak
2	6802.950	55.50	-11.91	43.59	74.00	-30.41	peak
3	9913.950	61.46	-7.31	54.15	74.00	-19.85	peak
4	9913.950	60.53	-7.31	53.22	54.00	-0.78	AVG

Test Mode: 00; 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	4307.350	65.40	-19.52	45.88	74.00	-28.12	peak
2	6626.150	56.93	-12.57	44.36	74.00	-29.64	peak
3	9913.950	62.29	-7.31	54.98	74.00	-19.02	peak
4	9913.950	60.52	-7.31	53.21	54.00	-0.79	AVG

Test Mode: 02; 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	4966.100	61.66	-18.47	43.19	74.00	-30.81	peak
2	6799.550	57.29	-11.91	45.38	74.00	-28.62	peak
3	9913.950	60.70	-7.31	53.39	74.00	-20.61	peak

7.4 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≤ 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

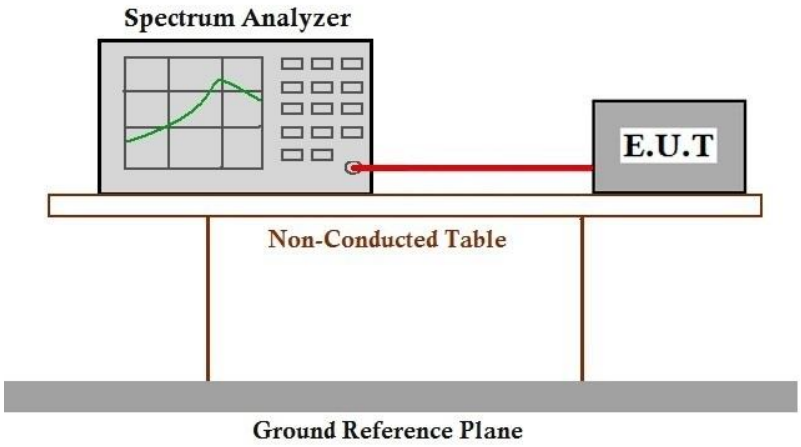
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	02	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.

7.4.3 Test Setup Diagram



7.4.4 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

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: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	01	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.

7.5.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 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).

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	02	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.

7.6.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 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

7.7.1 E.U.T. Operation

Operating Environment:
Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	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	03	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

7.8 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

7.8.1 E.U.T. Operation

Operating Environment:
Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	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	03	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

7.9 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.

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	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	03	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.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.10 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.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 21.2 °C Humidity: 50.7 % RH Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	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	02	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.

7.10.3 Measurement Procedure and Data

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2409001938AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2409001938AT

10 Appendix

Left ear

1. Bandwidth

1.1 Test Result

1.1.1 OBW

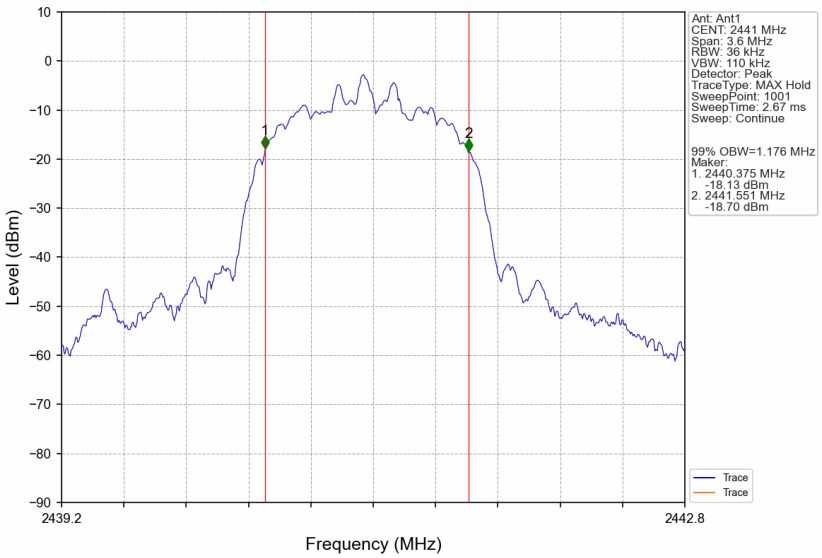
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
8DPSK	SISO	2441	3DH5	1	1.176	/	Pass

1.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
8DPSK	SISO	2441	3DH5	1	1.298	/	Pass

1.2 Test Graph

1.2.1 OBW

8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV


1.2.2 20dB BW

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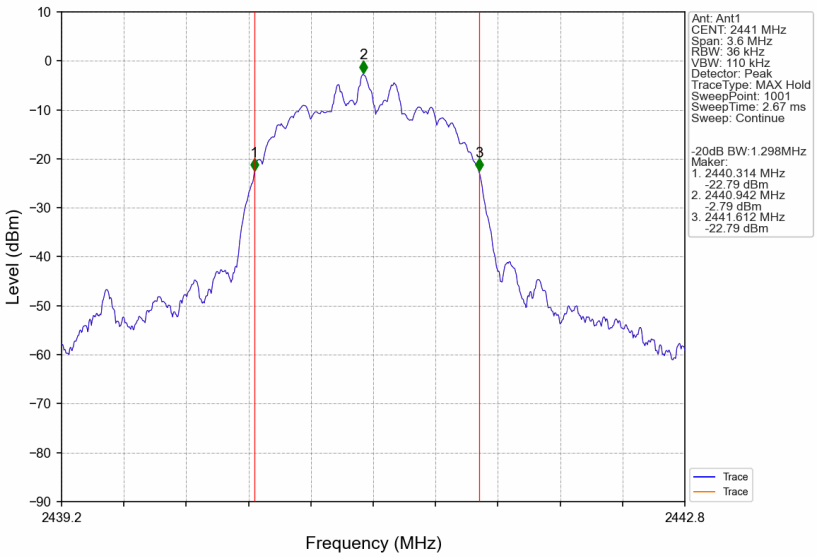


2. Maximum Conducted Output Power

2.1 Test Result

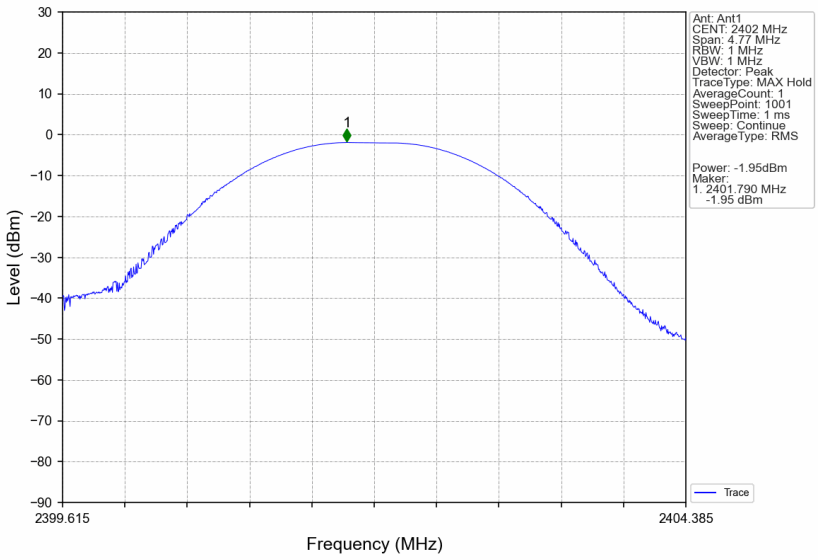
2.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-1.95	<=30	Pass
		2441	DH5	-1.56	<=30	Pass
		2480	DH5	-1.91	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	-0.98	<=20.97	Pass
		2441	2DH5	-0.61	<=20.97	Pass
		2480	2DH5	-0.93	<=20.97	Pass
8DPSK	SISO	2402	3DH5	-0.54	<=20.97	Pass
		2441	3DH5	-0.18	<=20.97	Pass
		2480	3DH5	-0.53	<=20.97	Pass
Note1: Antenna Gain: Ant1: -1.70dBi;						

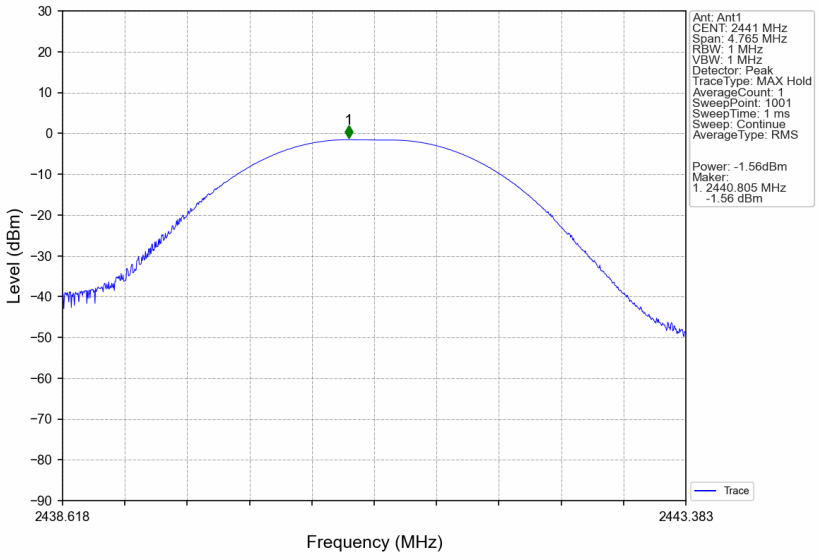
2.2 Test Graph

2.2.1 Power

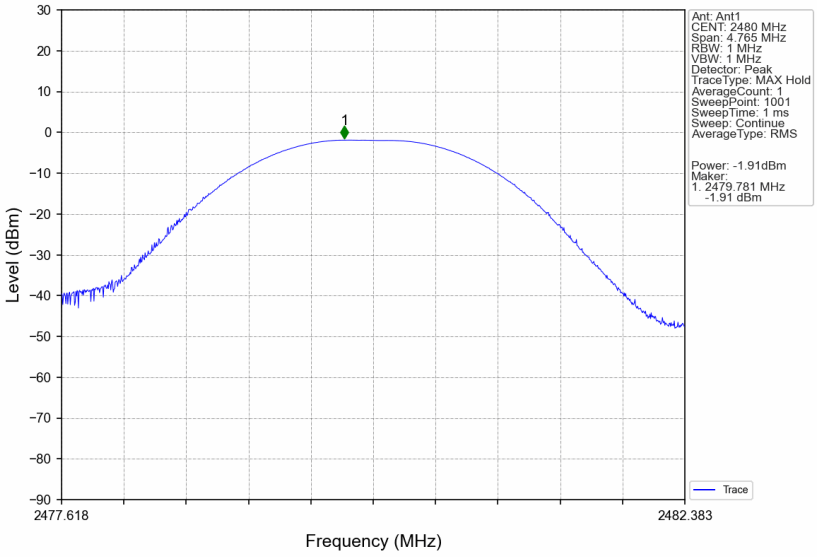
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



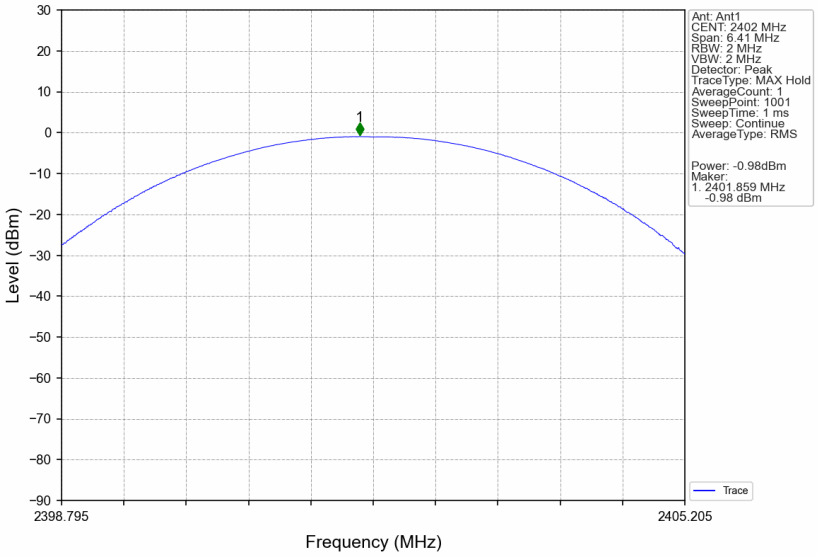
GFSK_DH5_MCH_2441MHz_Ant1_NTNV

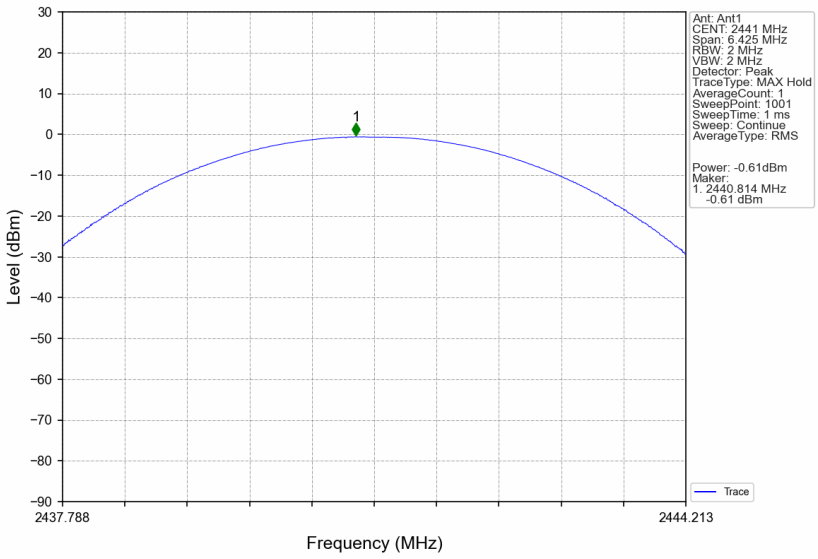


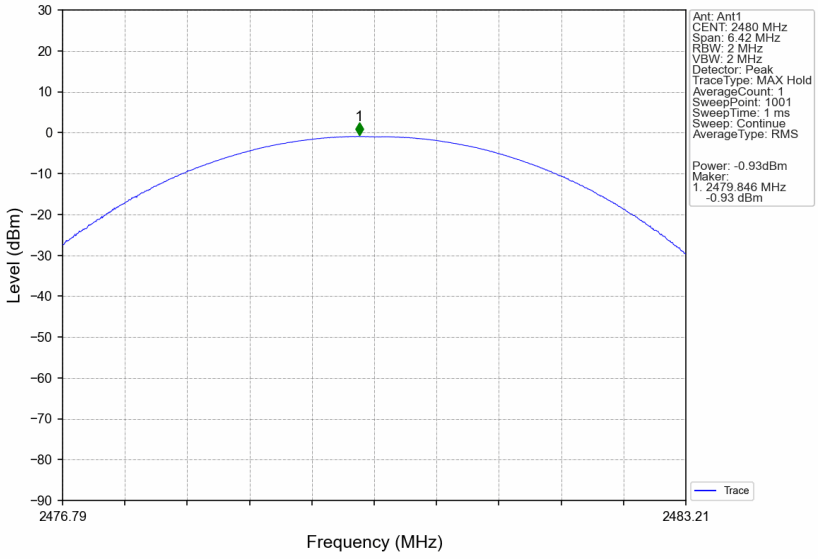
GFSK_DH5_HCH_2480MHz_Ant1_NTNV

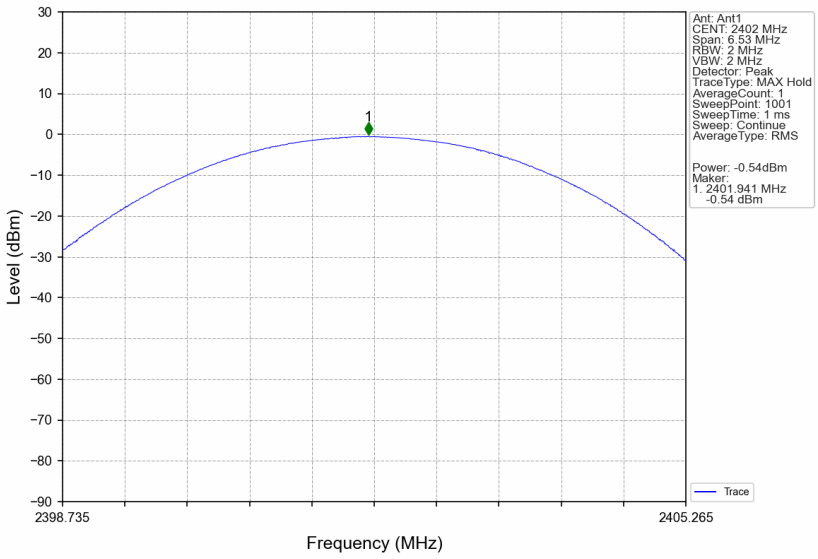


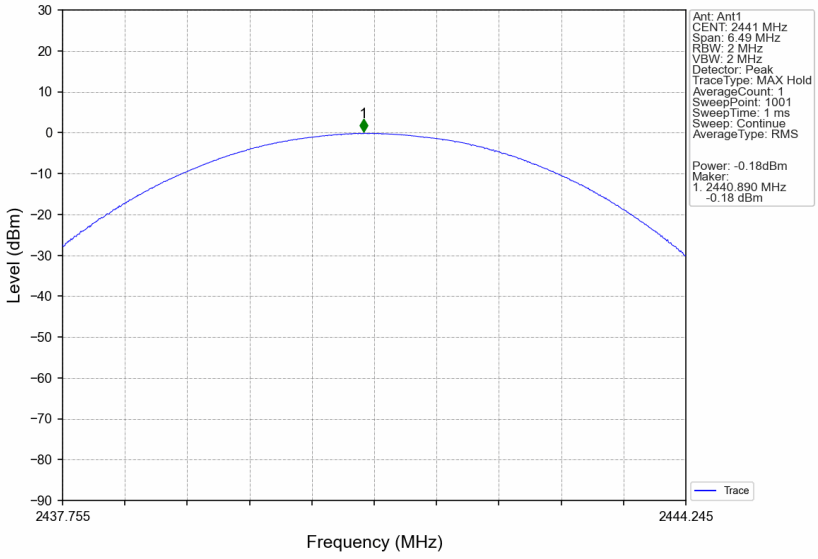
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



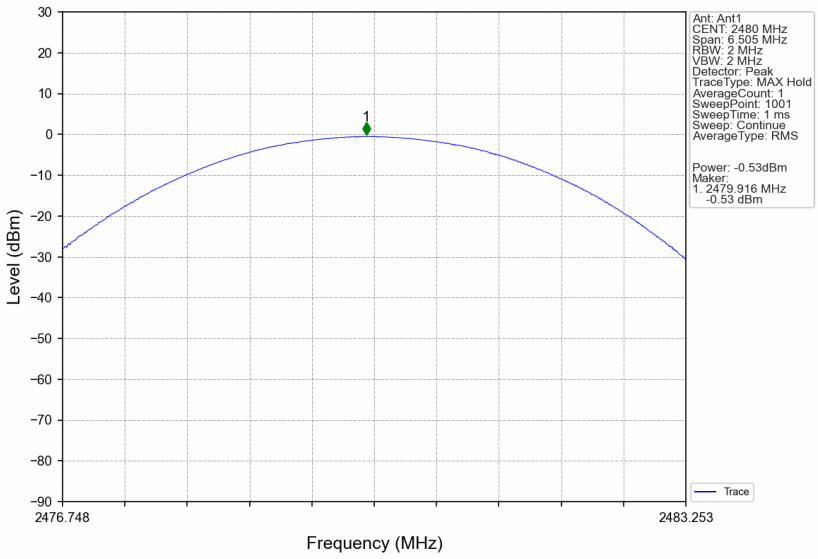
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV


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



3. Carrier Frequency Separation

3.1 Test Result

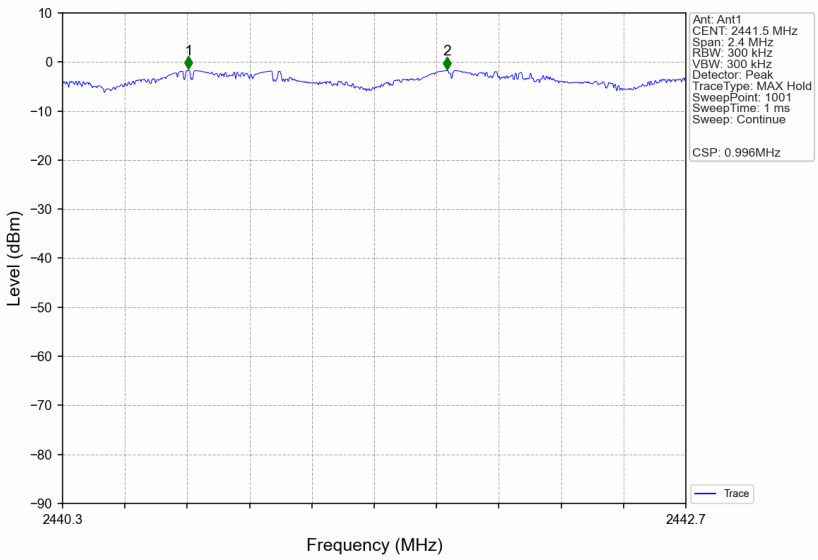
3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
8DPSK	SISO	HOPP	3DH5	0.996	1.306	>=0.871	Pass

3.2 Test Graph

3.2.1 Ant1

8DPSK_3DH5_HOPP_Ant1_NTNV



4. Number of Hopping Frequencies

4.1 Test Result

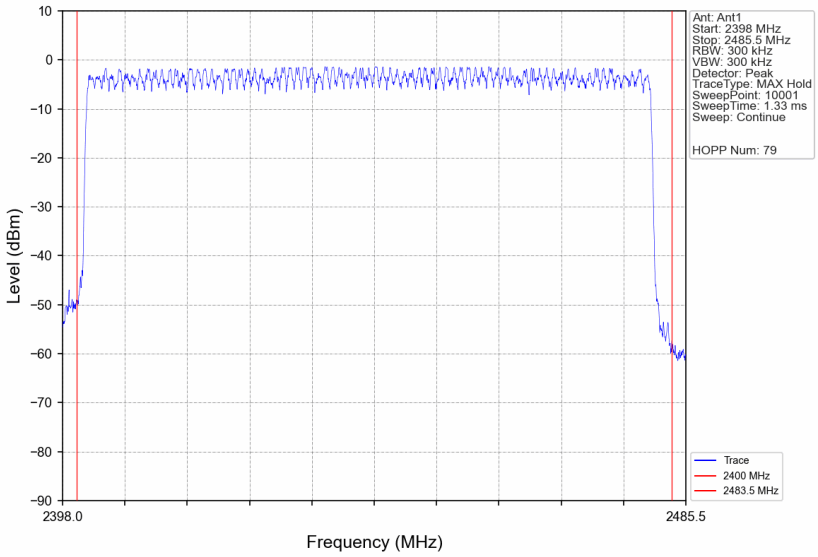
4.1.1 HoppNum

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

4.2 Test Graph

4.2.1 HoppNum

8DPSK_3DH5_HOPP_Ant1_NTNV



5. Time of Occupancy (Dwell Time)

5.1 Test Result

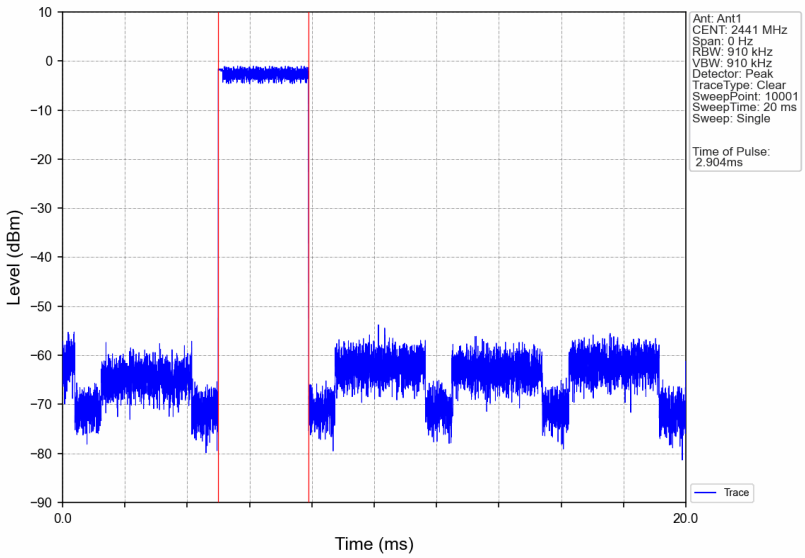
5.1.1 Ant1

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
8DPSK	SISO	HOPP	3DH5	2.904	31.600	115	333.960	<=400	Pass

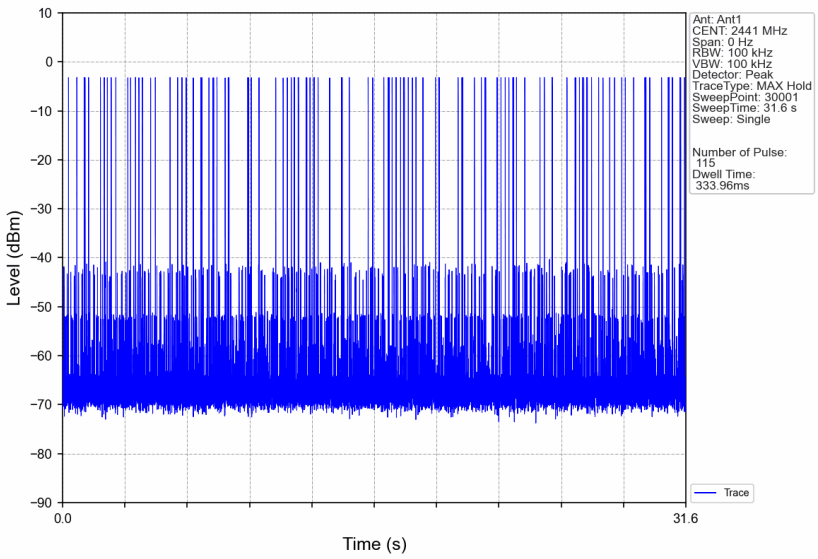
5.2 Test Graph

5.2.1 Ant1

8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV


Ant: Ant1
CENT: 2441 MHz
Span: 0 Hz
RBW: 100 kHz
VBW: 100 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 30001
SweepTime: 31.6 s
Sweep: Single
Number of Pulse: 115
Dwell Time: 333.96ms
Level (dBm)
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
0.0
31.6
Time (s)
Trace

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Test Result

6.1.1 Ref

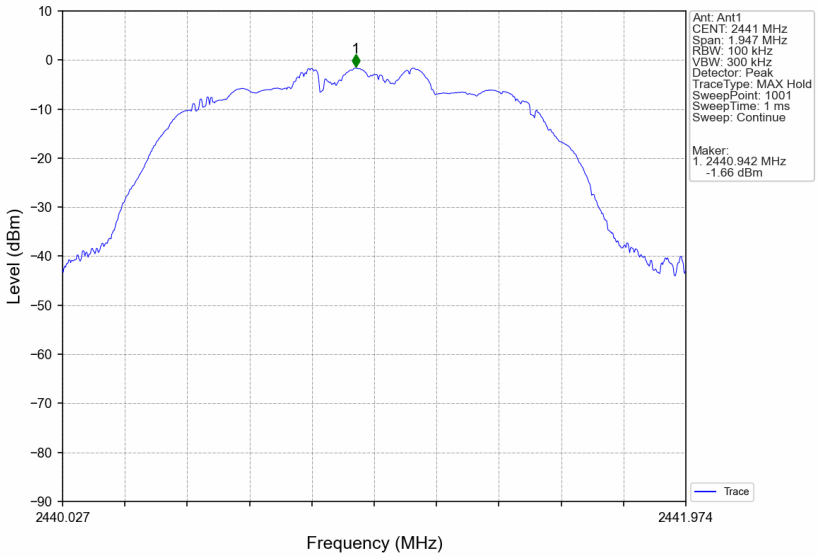
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
8DPSK	SISO	2441	3DH5	1	**-1.66**
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.					

6.1.2 CSE

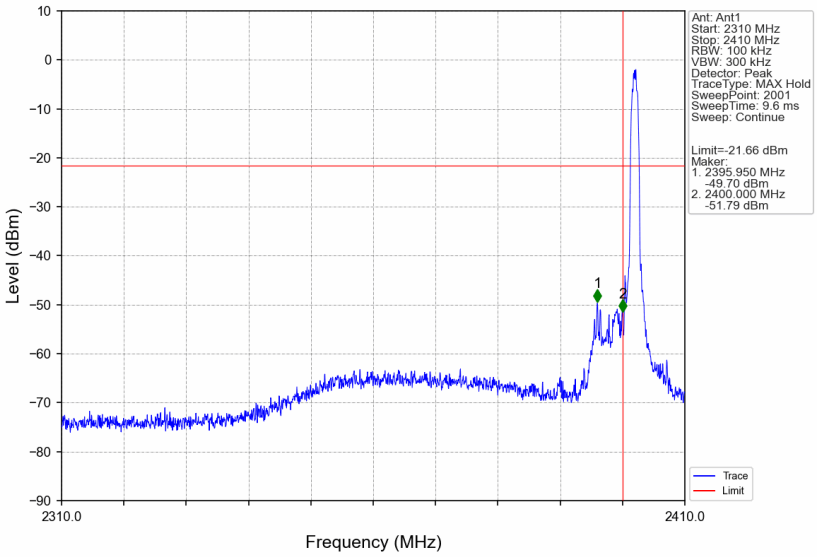
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
8DPSK	SISO	2441	3DH5	1	-1.66	-21.66	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.							

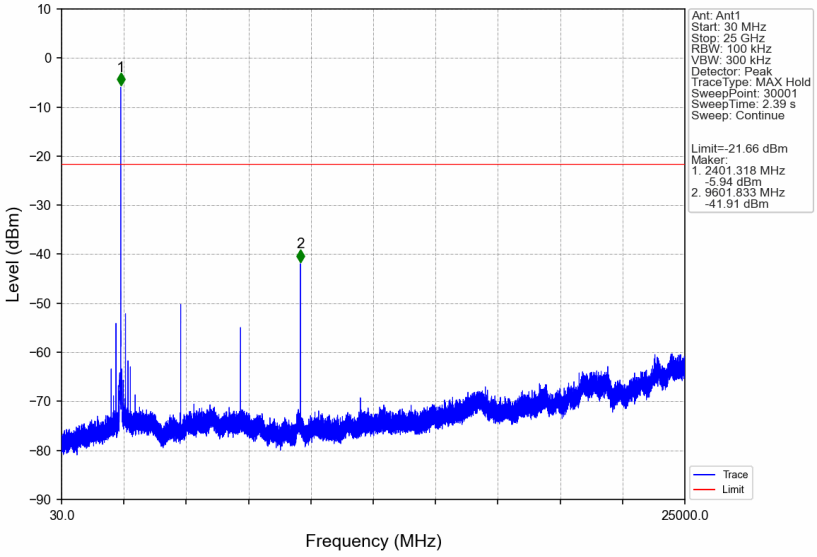
6.2 Test Graph

6.2.1 Ref8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



5.2.2 CSE

8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV


Right ear
1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
8DPSK	SISO	2441	3DH5	1	1.176	/	Pass

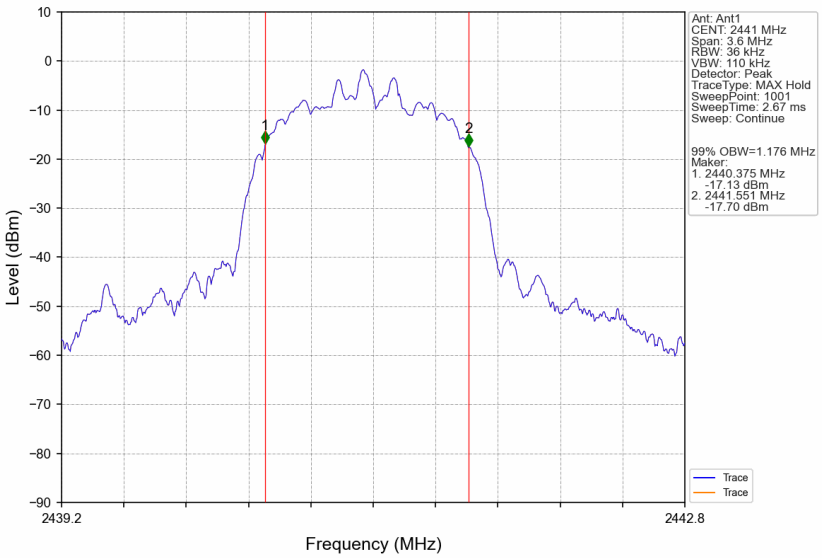
1.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
8DPSK	SISO	2441	3DH5	1	1.298	/	Pass

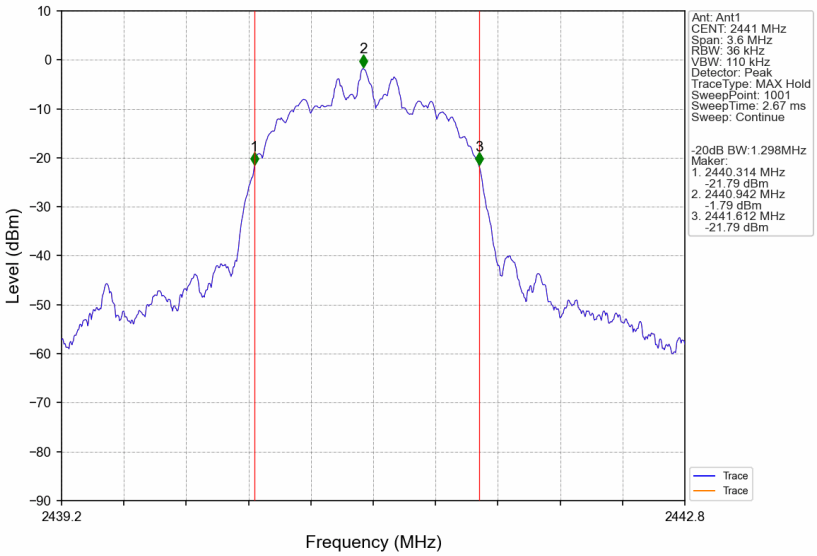
1.2 Test Graph

1.2.1 OBW

8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



1.2.2 20dB BW

8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV


2. Maximum Conducted Output Power

2.1 Test Result

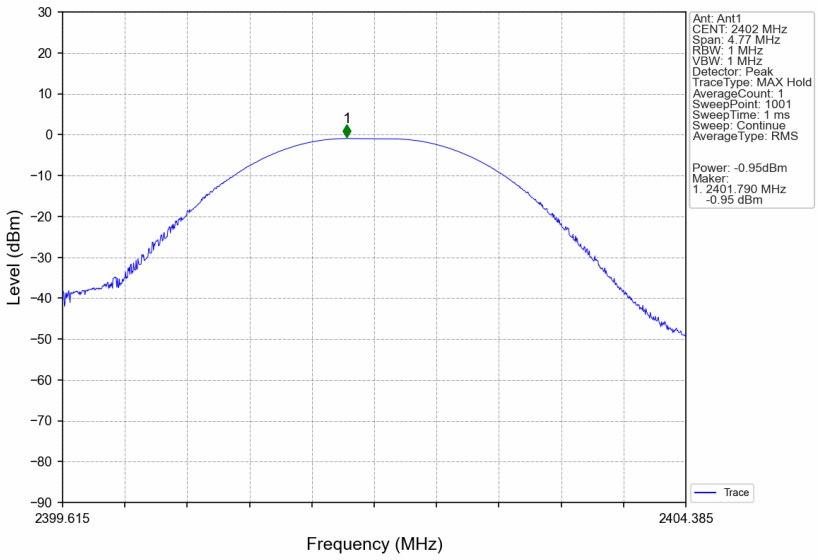
2.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-0.95	<=30	Pass
		2441	DH5	-0.56	<=30	Pass
		2480	DH5	-0.91	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	0.02	<=20.97	Pass
		2441	2DH5	0.39	<=20.97	Pass
		2480	2DH5	0.07	<=20.97	Pass
8DPSK	SISO	2402	3DH5	0.46	<=20.97	Pass
		2441	3DH5	0.82	<=20.97	Pass
		2480	3DH5	0.47	<=20.97	Pass
Note1: Antenna Gain: Ant1: -1.60dBi;						

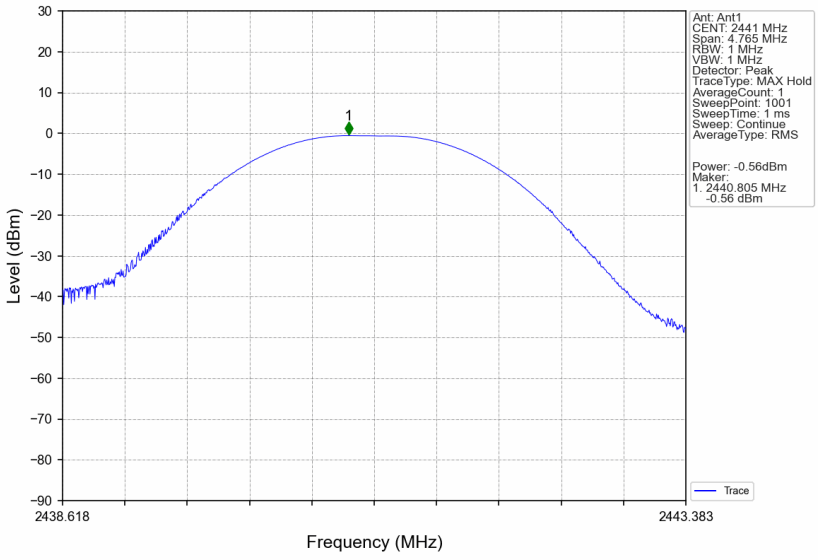
2.2 Test Graph

2.2.1 Power

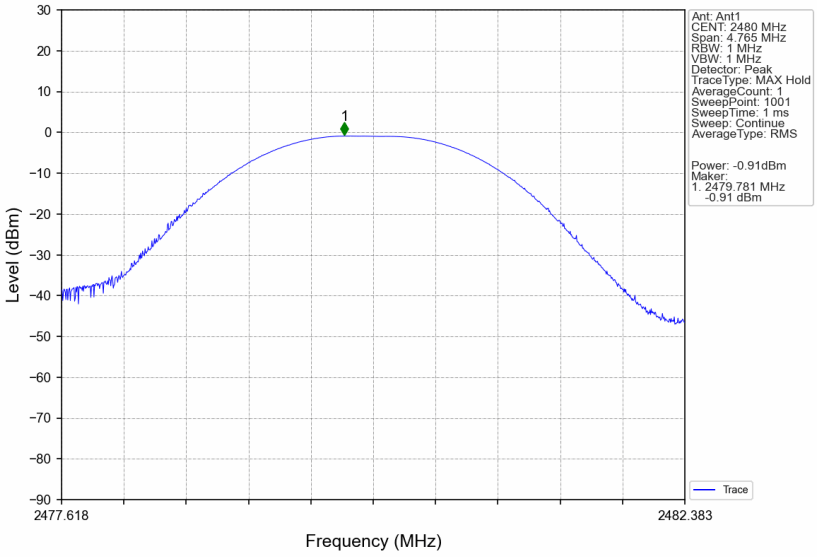
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



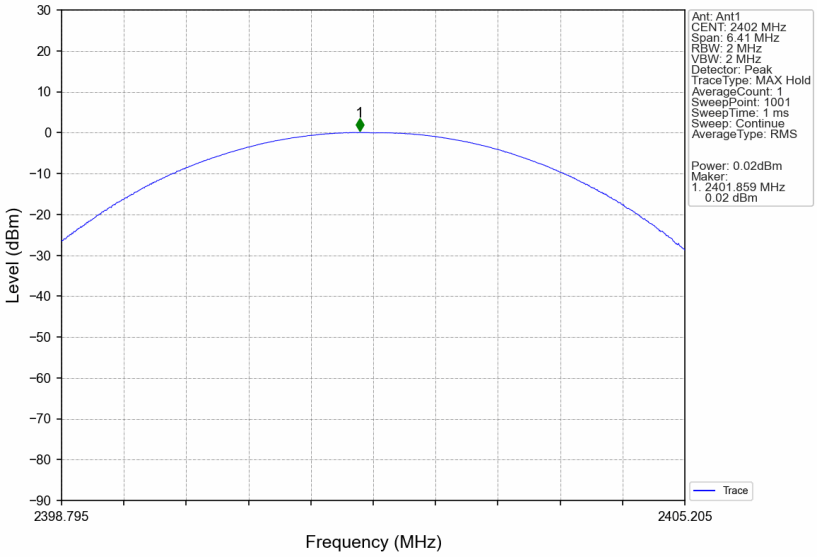
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



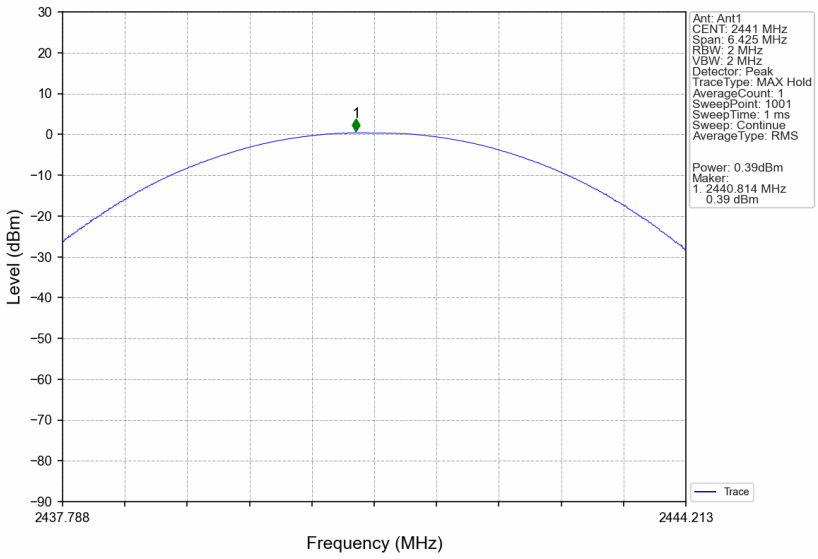
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



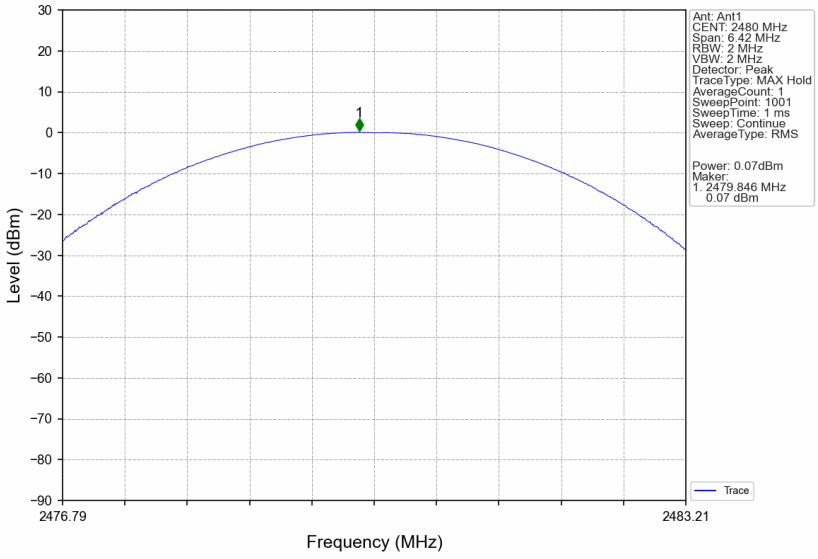
Pi/4DQPSK_2DH5_LCH_2402MHz_Ant1_NTNV



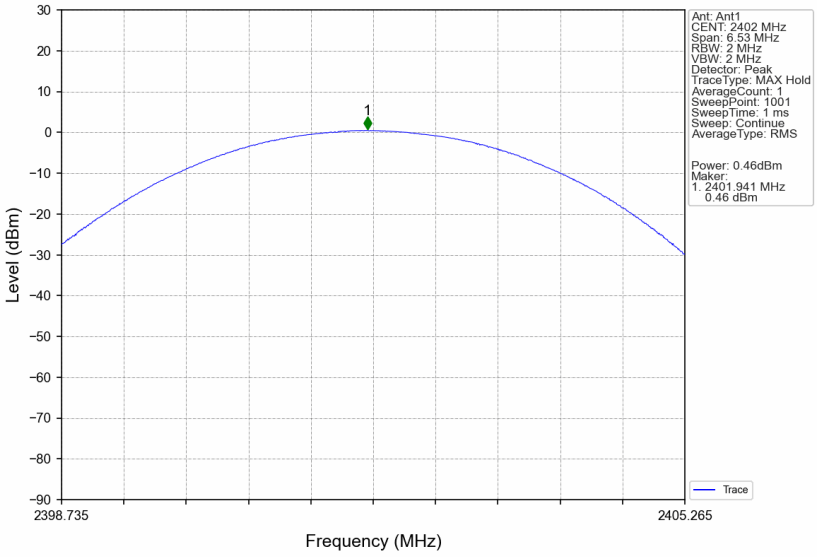
Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV



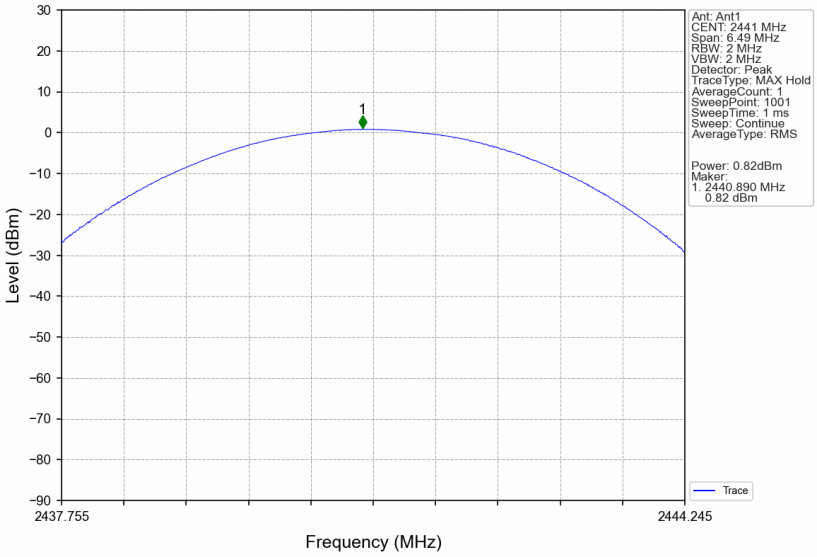
Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



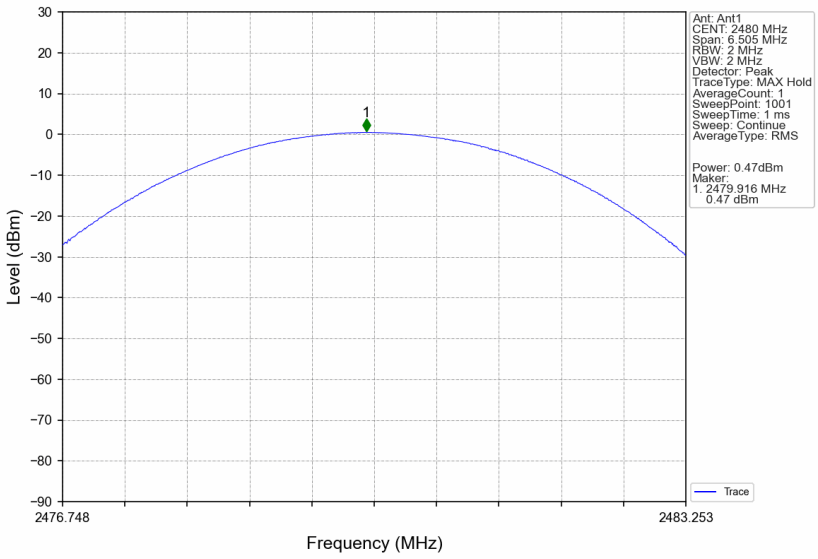
8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV



8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV



3. Carrier Frequency Separation

3.1 Test Result

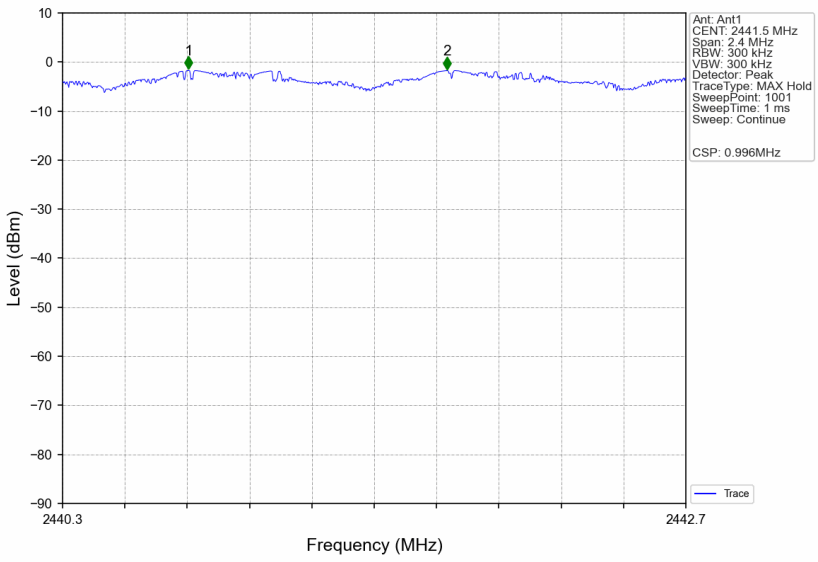
3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
8DPSK	SISO	HOPP	3DH5	0.996	1.306	>=0.871	Pass

3.2 Test Graph

3.2.1 Ant1

8DPSK_3DH5_HOPP_Ant1_NTNV



4. Number of Hopping Frequencies

4.1 Test Result

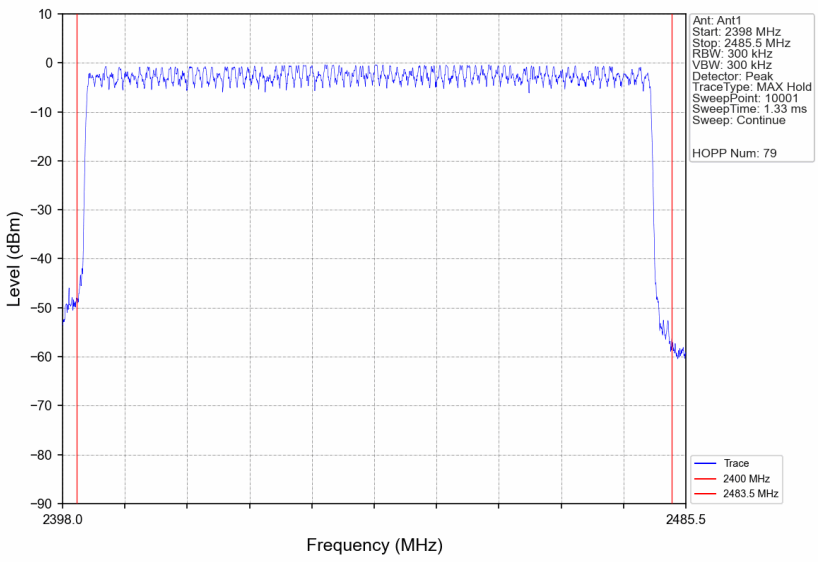
4.1.1 HoppNum

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

4.2 Test Graph

4.2.1 HoppNum

8DPSK_3DH5_HOPP_Ant1_NTNV



5. Time of Occupancy (Dwell Time)

5.1 Test Result

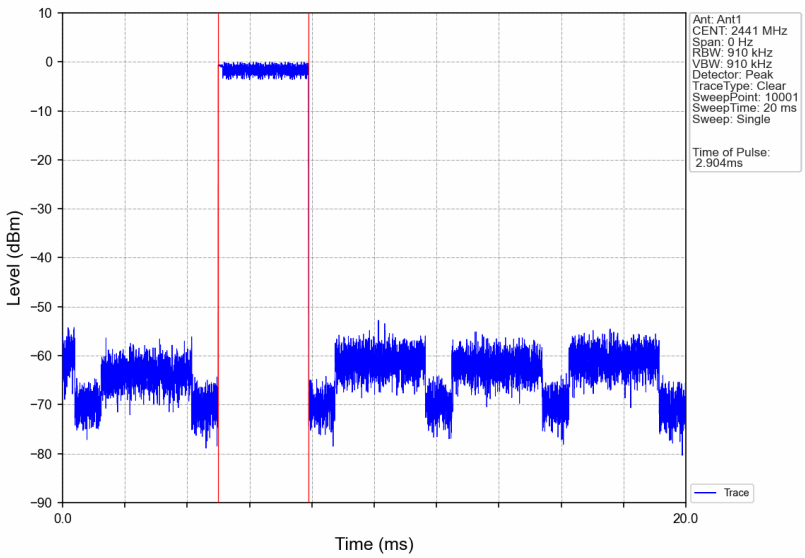
5.1.1 Ant1

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
8DPSK	SISO	HOPP	3DH5	2.904	31.600	115	333.960	<=400	Pass

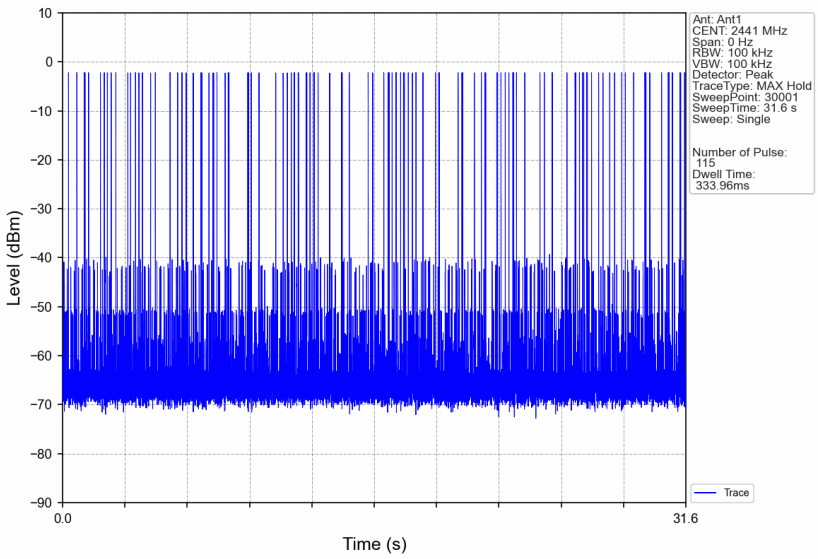
5.2 Test Graph

5.2.1 Ant1

8DPSK_3DH5_HOPP_Ant1_NTNV



8DPSK_3DH5_HOPP_Ant1_NTNV


Ant: Ant1
CENT: 2441 MHz
Span: 0 Hz
RBW: 100 kHz
VBW: 100 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 30001
SweepTime: 31.6 s
Sweep: Single
Number of Pulse: 115
Dwell Time: 333.96ms
Level (dBm)
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
0.0
31.6
Time (s)
Trace

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Test Result

6.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
8DPSK	SISO	2441	3DH5	1	-0.66
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.					

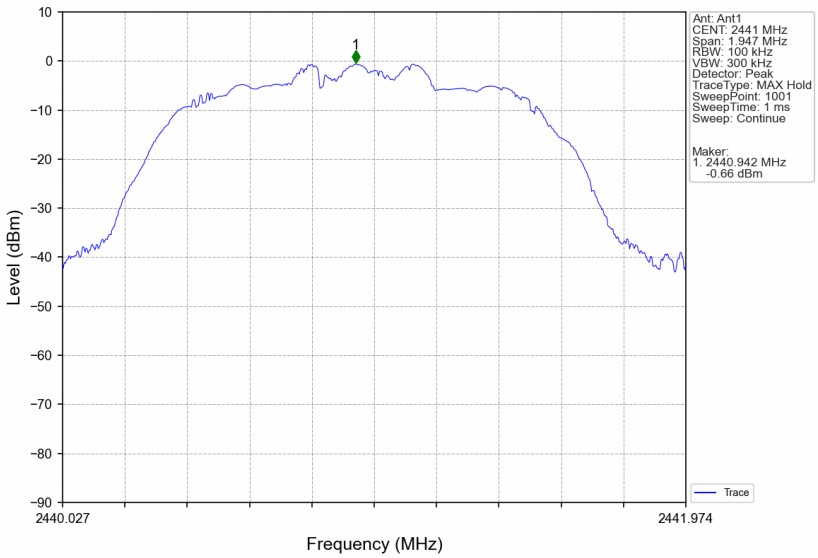
6.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
8DPSK	SISO	2441	3DH5	1	-0.66	-20.66	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.							

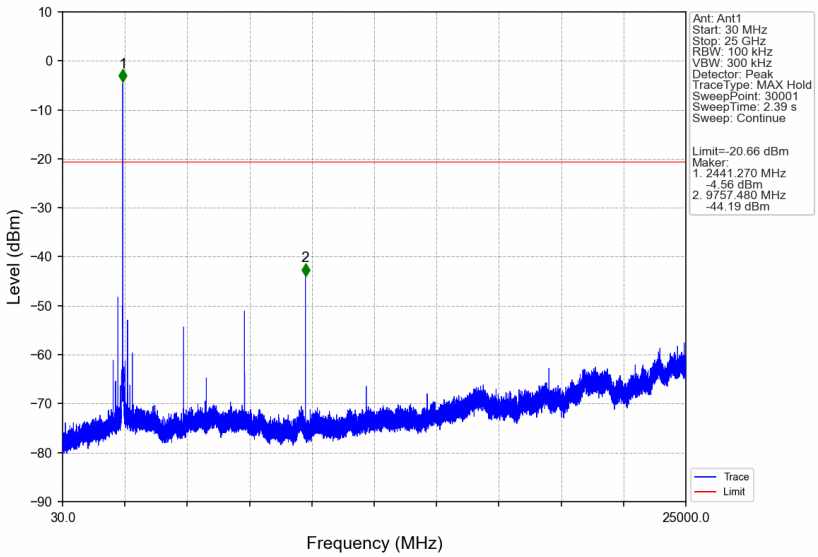
6.2 Test Graph

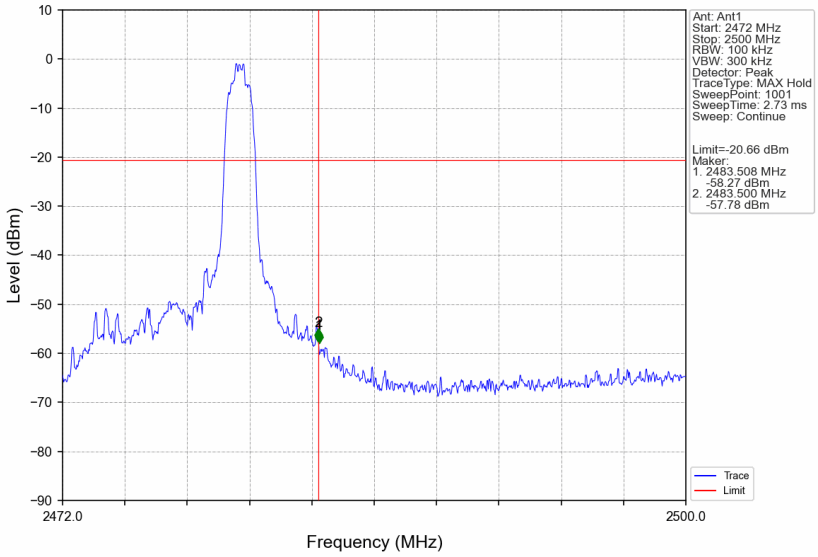
6.2.1 Ref

8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV



5.2.2 CSE

8DPSK_3DH5_MCH_2441MHz_Ant1_NTNV


8DPSK_3DH5_HCH_2480MHz_Ant1_NTNV


- End of the Report -