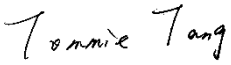
TEST REPORT

Application No.:	KSCR2501000028AT
FCC ID:	2BEMH-N175B
Applicant:	YEAHER INC.
Address of Applicant:	51 Steel Dr, Unit A, New Castle, DE 19720 United States
Manufacturer:	Nimo Direct Inc.
Address of Manufacturer:	51 Steel Dr, Unit A, New Castle, DE 19720 United States
Equipment Under Test (EUT):	
EUT Name:	Portable Computer
Model No.:	N175B,N175L ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s) :	47 CFR Part 15, Subpart C 15.247
Date of Receipt:	2025-01-03
Date of Test:	2025-01-17 to 2025-03-14
Date of Issue:	2025-06-30
Test Result:	**Pass***

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

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2025-06-30	/

Authorized for issue by:				
Tested By				
		Tommie_Tang/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**
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	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

Note1: There are series models mentioned in this report, and they are identical in electrical and electronic characters. Only the model N175B was tested since their differences were the model number and color appearance.

Note2:

(i) The Host Laptop(FCC ID: 2BEMH-N175B) integrated a certified module from Hon Lin Technology Co., Ltd. (FCC ID: 2AQ68MT7922A22M).

(ii) Hon Lin module (FCC ID: 2AQ68MT7922A22M) is a change ID from MediaTek Inc. (FCC ID: RAS-MT7922A22M, grant date 12/26/2024).

(iii) The change ID application (FCC ID: 2AQ68MT7922A22M) did not upload test reports, thus the referenced module reports are from MTK module (FCC ID: RAS-MT7922A22M).

(iv) The MTK module (FCC ID: RAS-MT7922A22M) was original granted as DSS+DTS+NII on 07/08/2021, then add equipment class of 6XD on 09/27/2021, and then add 6CD on 08/29/2023.

(v) The Host Laptop(FCC ID: 2BEMH-N175B) only apply as DSS+DTS+NII+6XD, the 6CD of standard power level will be disabled by software on the Laptop, the reference module reports are as below:

Equipment Class	Reference test report number from Module (FCC ID: RAS-MT7922A22M)	Reference test items	Re-test items
DSS	RFBARR-WTW-P21030485-1 (Original) RFBARR-WTW-P22120081S-5 (C2PC)	Hopping items. 20dB Bandwidth. Conducted Band edge. Conducted Emission.	Conducted Power, AC Conducted Emission, Radiated Spurious Emission.

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 20V,5A by adapter Adapter Model: A879-200500C-US1 Input: 100-240V,50/60Hz,2.5A Output: PD: 5V,3A/9V,3A/12V,3A/15V,3A/20V,5A PPS: 3.3V-21V,5A,100W Max
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:	FPC Antenna
Antenna Gain:	-0.84dBi (Provided by the manufacturer)

4.2 Power level setting using in test:

Channel	DH5	2DH5	3DH5
	Ant 1	Ant 1	Ant 1
00	7	7	7
39	7	7	7
78	7	7	7

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

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
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301101	03/19/2024	03/18/2025
2	LISN	R&S	ENV216	KS301197	01/15/2025	01/14/2026
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/15/2025	01/14/2026
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	12/05/2024	12/04/2025
5	CE test Cable	Thermax	/	CZ301102	01/14/2025	01/13/2026
6	Test Software	ESE	E3_V 6.111221a	/	N.C.R	N.C.R
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	01/15/2025	01/14/2026
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	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
8	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
9	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/13/2024	08/12/2025
10	Switcher	TST	FY562	KUS2001M001-4	01/15/2025	01/14/2026
11	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
12	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
13	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/14/2025	01/13/2026
14	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/26/2024	08/25/2025
15	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
16	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
3	Signal Generator	Agilent	E8257C	KS301066	08/06/2024	08/05/2025
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	03/22/2025
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	01/15/2025	01/14/2026
11	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	08/12/2024	08/11/2025
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/23/2024	08/22/2025
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/19/2024	03/18/2025
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 FPC antenna, and no consideration of replacement. The best case gain of the antenna is -0.84dBi.

Antenna location: Refer to internal photo.

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency.		
Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz		

7.1.1 E.U.T. Operation

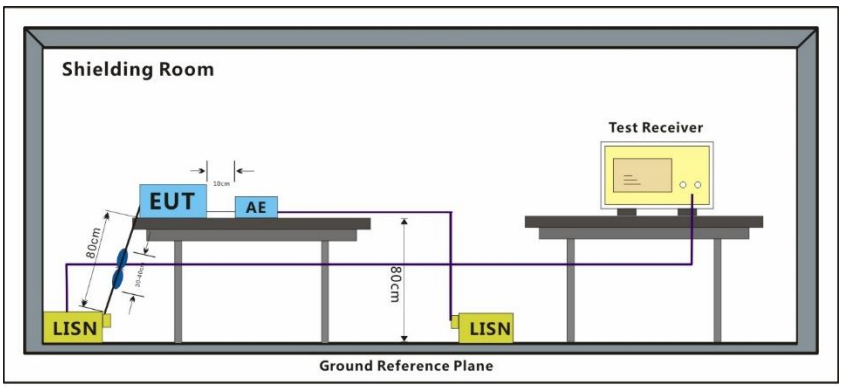
Operating Environment:

Temperature: 25.3 °C Humidity: 50.4 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX_non-Hop mode_Keep the EUT 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

1) The mains terminal disturbance voltage test was conducted in a shielded room.

2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.

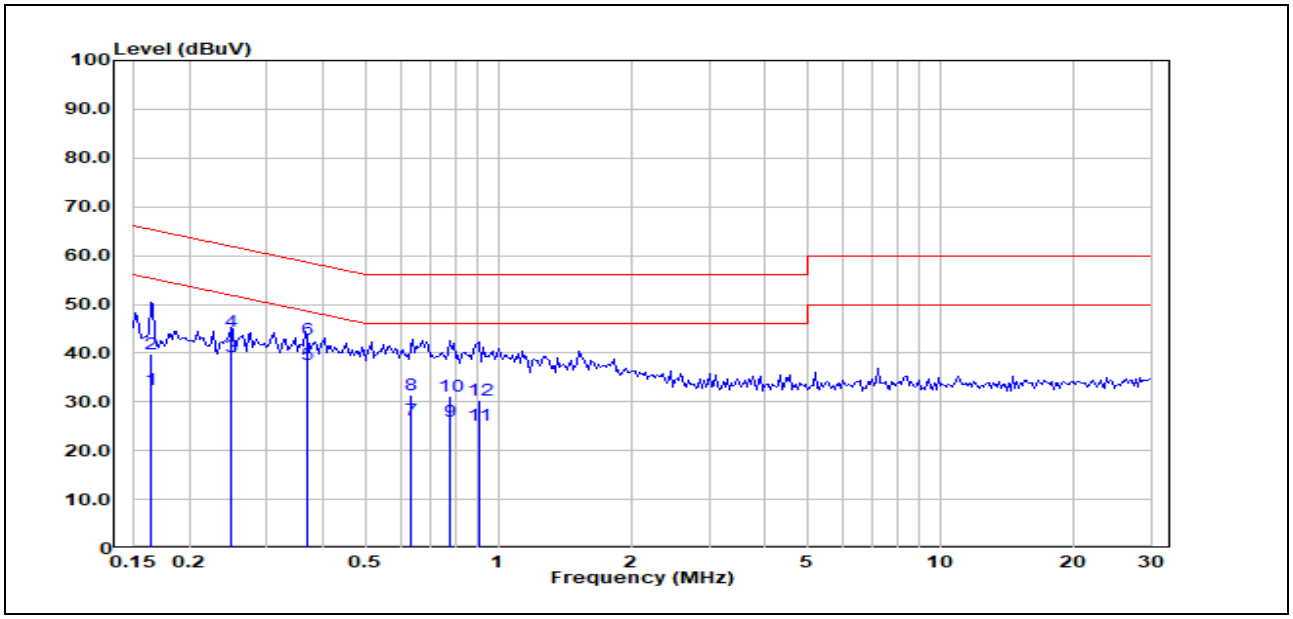
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor

Test Mode: 01; Line: Live line

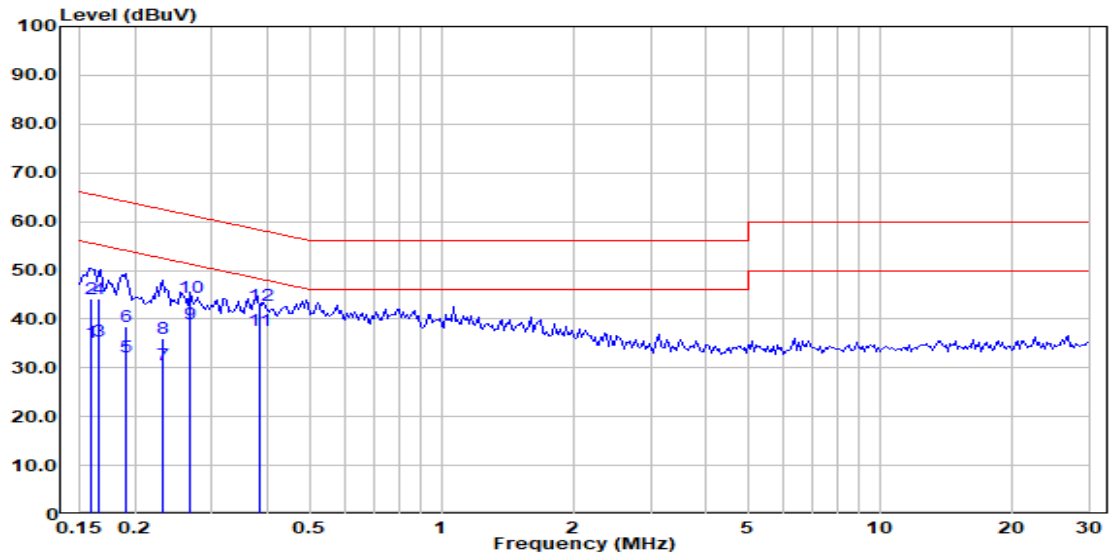
Test Data :



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1635	12.25	20.19	32.44	55.28	-22.84	Average
2	0.1635	19.69	20.19	39.88	65.28	-25.40	QP
3	0.2488	19.27	20.07	39.34	51.80	-12.46	Average
4	0.2488	24.49	20.07	44.56	61.80	-17.24	QP
5	0.3685	17.59	20.07	37.66	48.53	-10.87	Average
6	0.3685	22.83	20.07	42.90	58.53	-15.63	QP
7	0.6355	6.52	19.84	26.36	46.00	-19.64	Average
8	0.6355	11.65	19.84	31.49	56.00	-24.51	QP
9	0.7749	6.11	19.79	25.90	46.00	-20.10	Average
10	0.7749	11.26	19.79	31.05	56.00	-24.95	QP
11	0.9038	5.43	19.82	25.25	46.00	-20.75	Average
12	0.9038	10.55	19.82	30.37	56.00	-25.63	QP

Test Mode: 01; Line: Neutral Line

Test Data :



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1591	15.15	20.17	35.32	55.51	-20.19	Average
2	0.1591	23.98	20.17	44.15	65.51	-21.36	QP
3	0.1654	15.34	20.16	35.50	55.19	-19.69	Average
4	0.1654	24.09	20.16	44.25	65.19	-20.94	QP
5	0.1910	12.07	20.13	32.20	54.00	-21.80	Average
6	0.1910	18.27	20.13	38.40	64.00	-25.60	QP
7	0.2326	10.58	20.10	30.68	52.36	-21.68	Average
8	0.2326	16.03	20.10	36.13	62.36	-26.23	QP
9	0.2669	19.04	20.09	39.13	51.21	-12.08	Average
10	0.2669	24.29	20.09	44.38	61.21	-16.83	QP
11	0.3842	17.45	20.11	37.56	48.19	-10.63	Average
12	0.3842	22.72	20.11	42.83	58.19	-15.36	QP

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

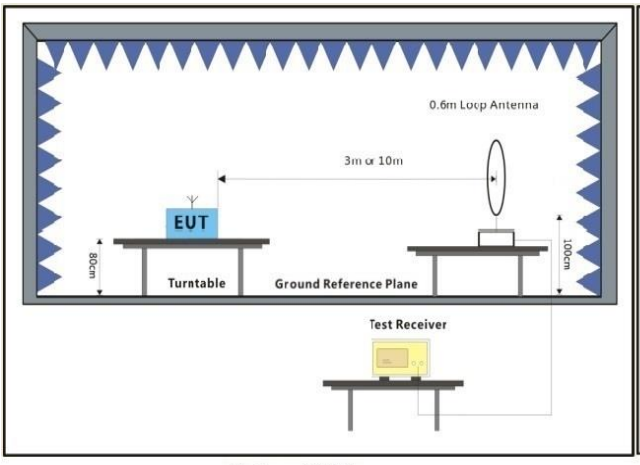
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 24.4 °C Humidity: 48.3 % RH Atmospheric Pressure: 1010 mbar

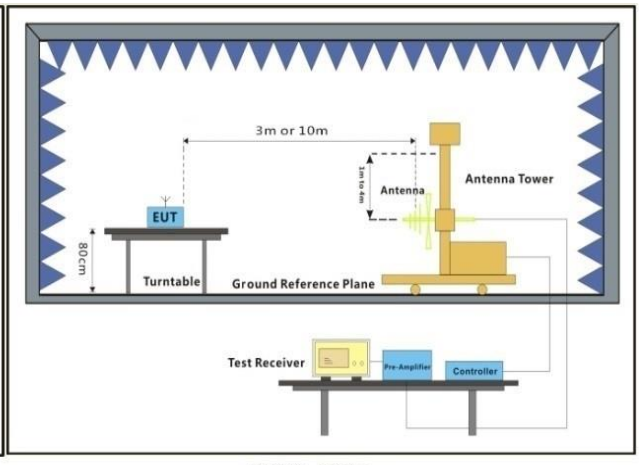
7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX_non-Hop mode_Keep the EUT 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.

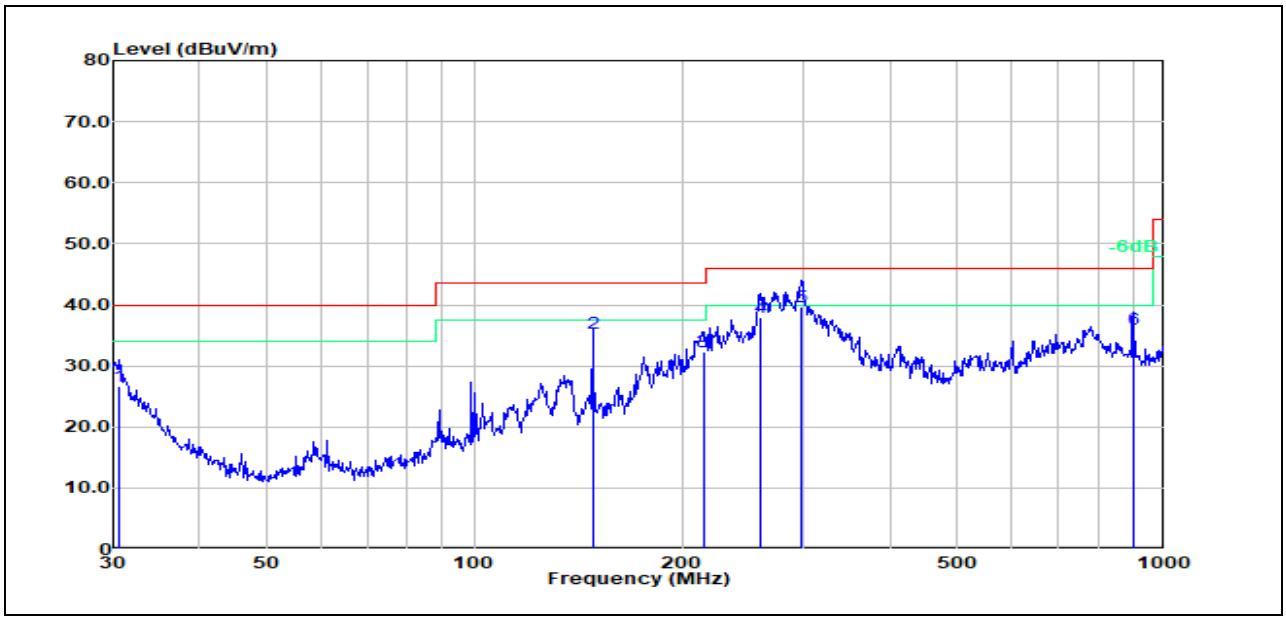
Remark:

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: 01; Polarity: Horizontal

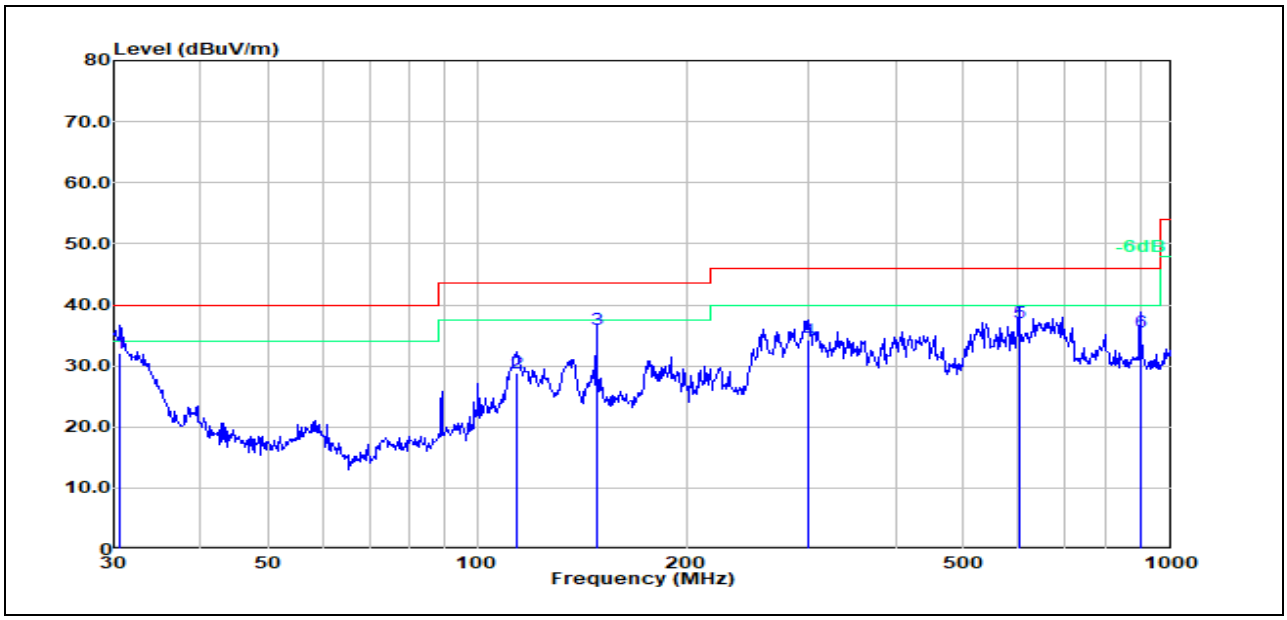
Test Data :



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	30.6380	7.65	18.91	26.56	40.00	-13.44	100	153	QP
2	148.4410	23.56	11.84	35.40	43.50	-8.10	100	322	QP
3	214.5140	19.76	12.46	32.22	43.50	-11.28	200	73	QP
4	259.2340	23.12	14.91	38.03	46.00	-7.97	100	86	QP
5	297.2240	23.95	15.83	39.78	46.00	-6.22	200	275	QP
6	900.1470	10.05	25.91	35.96	46.00	-10.04	200	254	QP

Test Mode: 01; Polarity: Vertical

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	30.6379	13.26	18.91	32.17	40.00	-7.83	100	99	QP
2	113.7143	15.14	13.69	28.83	43.50	-14.67	100	309	QP
3	148.4410	24.06	11.84	35.90	43.50	-7.60	100	207	QP
4	299.3159	18.24	15.97	34.21	46.00	-11.79	100	0	QP
5	601.4265	14.23	22.77	37.00	46.00	-9.00	100	255	QP
6	900.1474	9.75	25.91	35.66	46.00	-10.34	100	187	QP

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

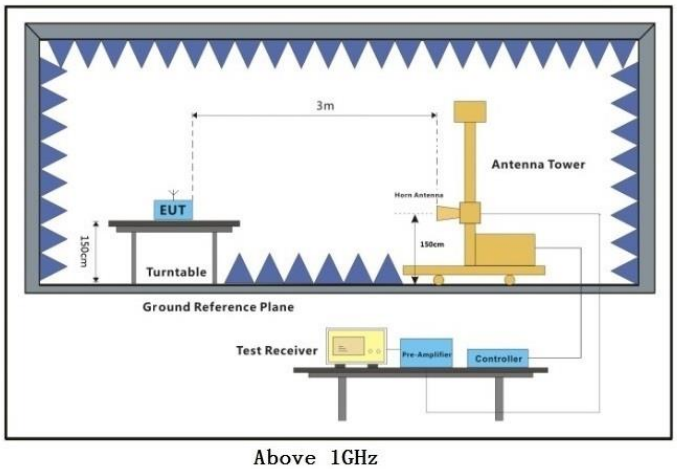
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 26.2 °C Humidity: 51.0 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX_non-Hop mode_Keep the EUT 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

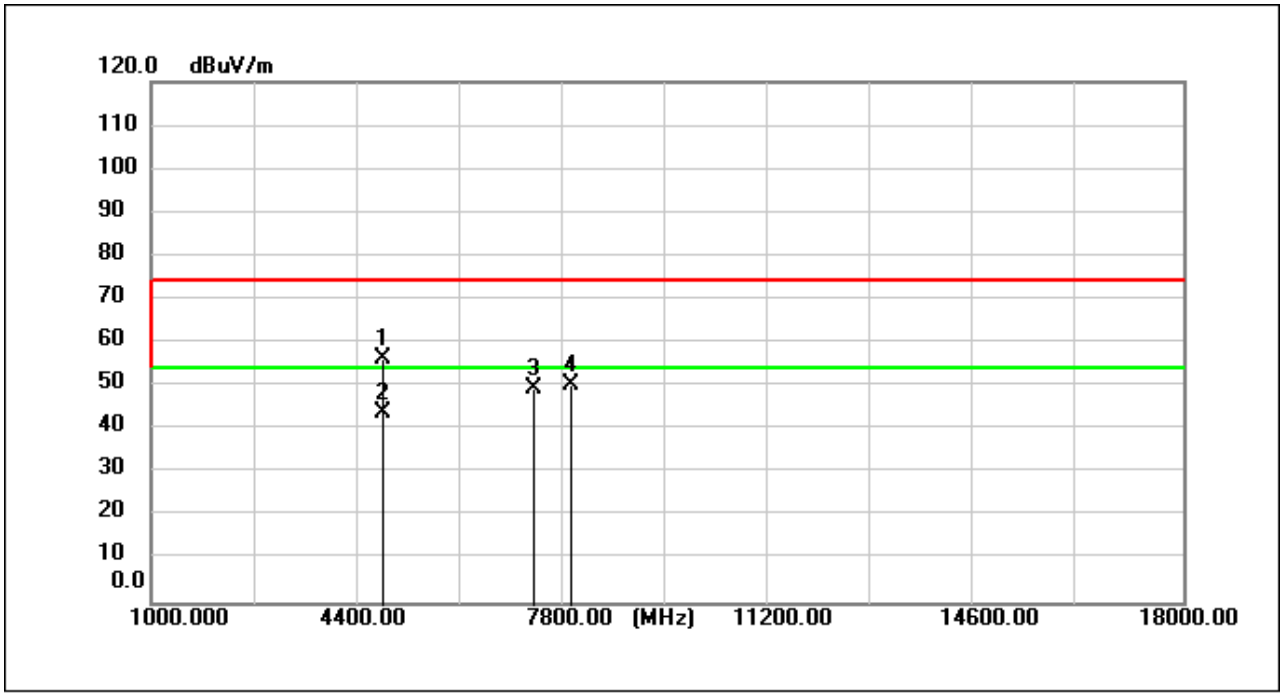
2. Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit 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.

4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

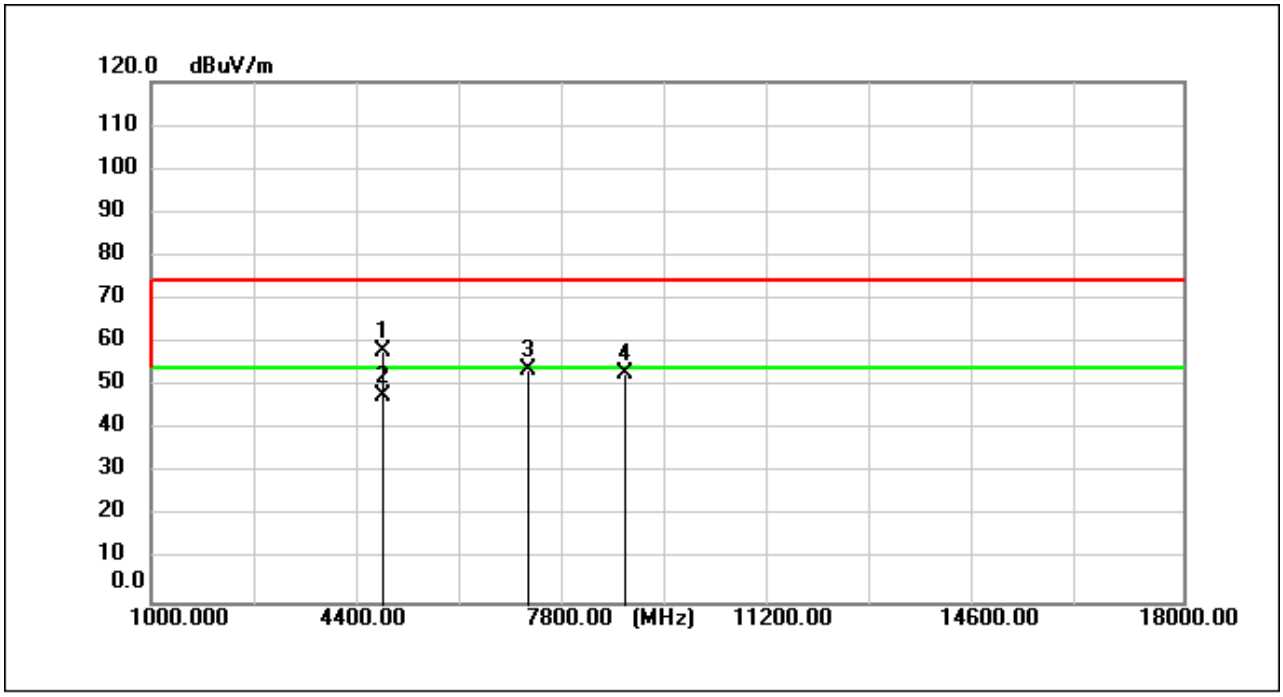
5:For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geqslant$1/T (Duty cycle$<$98%) or 10Hz (Duty cycle$\geqslant$98%) for Average detection (AV) at frequency above 1GHz.

Test Mode: 01; Polarity: Horizontal; Modulation:GFSK; Channel:Low



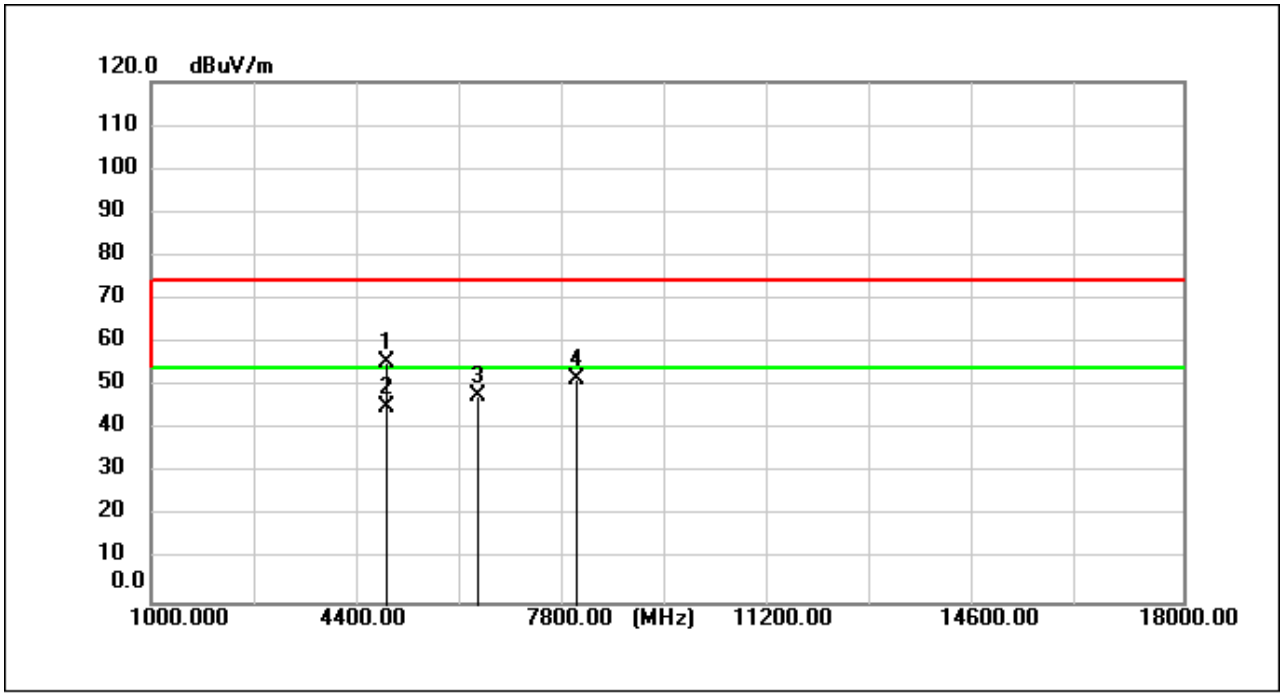
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4798.650	69.65	-13.13	56.52	74.00	-17.48	peak
2	4798.650	57.00	-13.13	43.87	54.00	-10.13	AVG
3	7302.750	56.12	-6.52	49.60	74.00	-24.40	peak
4	7916.450	55.66	-5.37	50.29	74.00	-23.71	peak

Test Mode: 01; Polarity: Vertical; Modulation:GFSK; Channel:Low



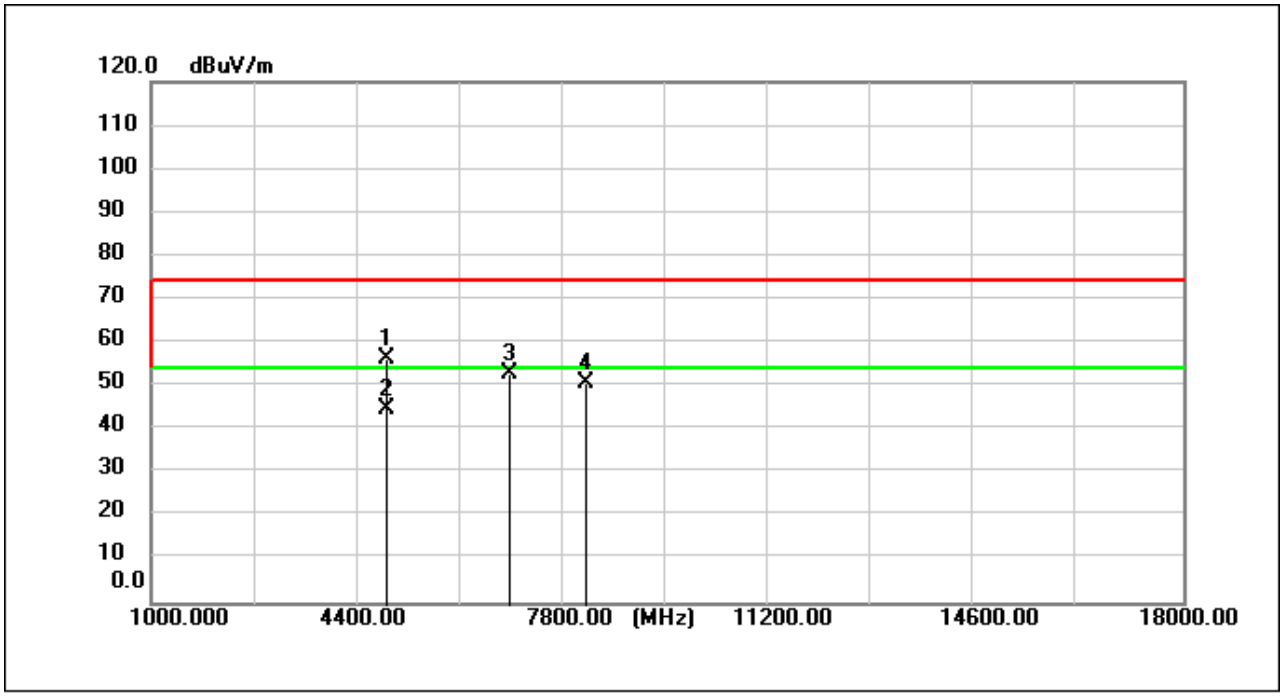
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4796.350	71.01	-13.13	57.88	74.00	-16.12	peak
2	4796.350	60.76	-13.13	47.63	54.00	-6.37	AVG
3	7199.900	60.27	-6.64	53.63	74.00	-20.37	peak
4	8816.600	56.80	-3.84	52.96	74.00	-21.04	peak

Test Mode: 01; Polarity: Horizontal; Modulation:GFSK; Channel:middle



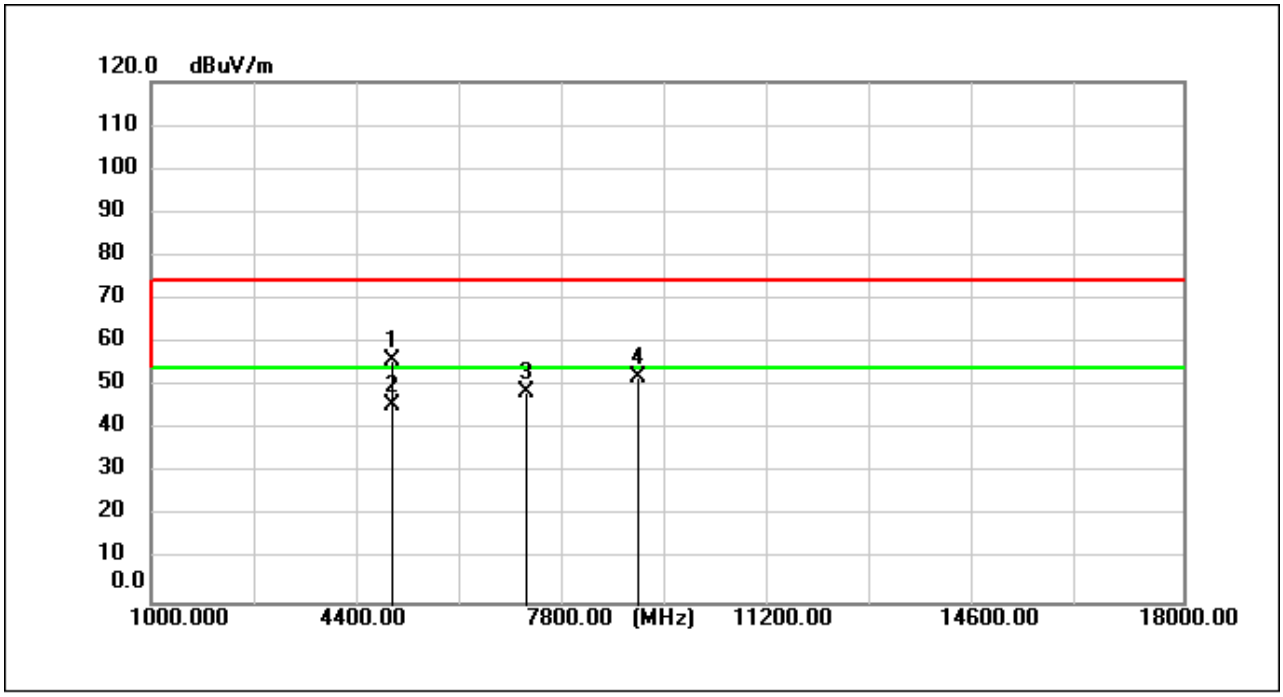
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4881.600	68.63	-13.01	55.62	74.00	-18.38	peak
2	4881.600	58.02	-13.01	45.01	54.00	-8.99	AVG
3	6370.300	56.70	-8.82	47.88	74.00	-26.12	peak
4	7989.550	56.72	-5.23	51.49	74.00	-22.51	peak

Test Mode: 01; Polarity: Vertical; Modulation:GFSK; Channel:middle



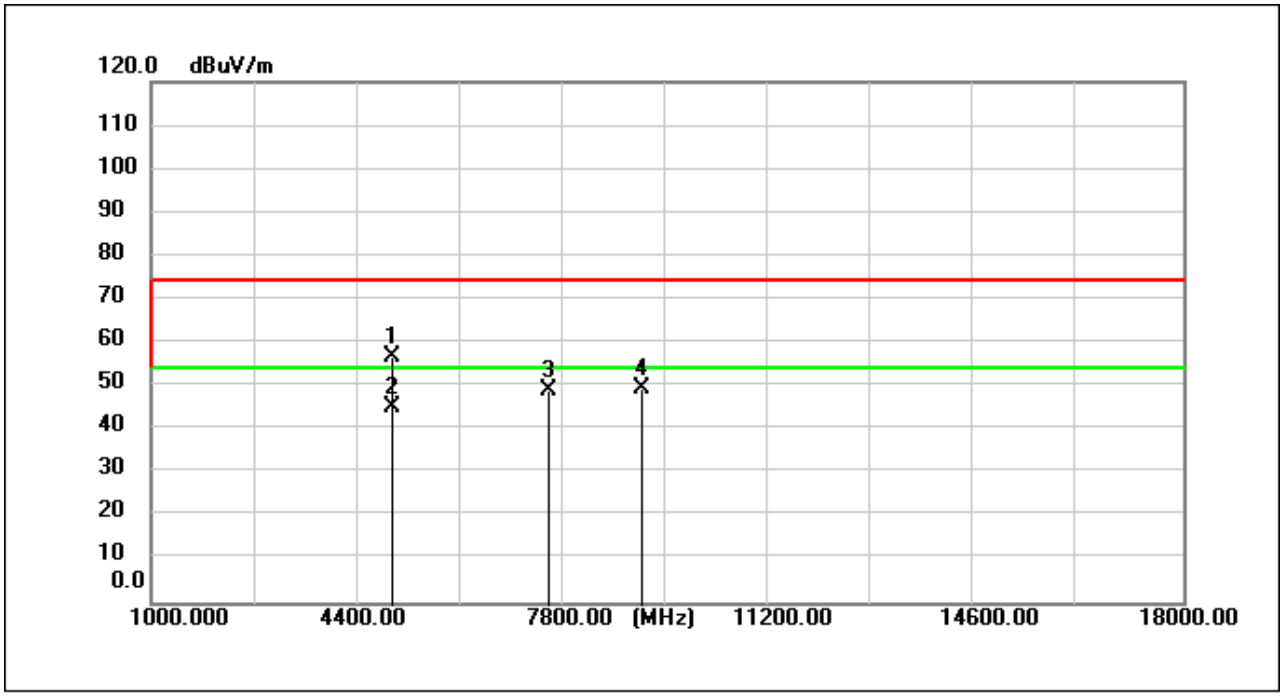
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4879.200	69.56	-13.01	56.55	74.00	-17.45	peak
2	4879.200	57.88	-13.01	44.87	54.00	-9.13	AVG
3	6892.200	59.85	-6.98	52.87	74.00	-21.13	peak
4	8159.550	55.60	-4.91	50.69	74.00	-23.31	peak

Test Mode: 01; Polarity: Horizontal; Modulation:GFSK; Channel:High



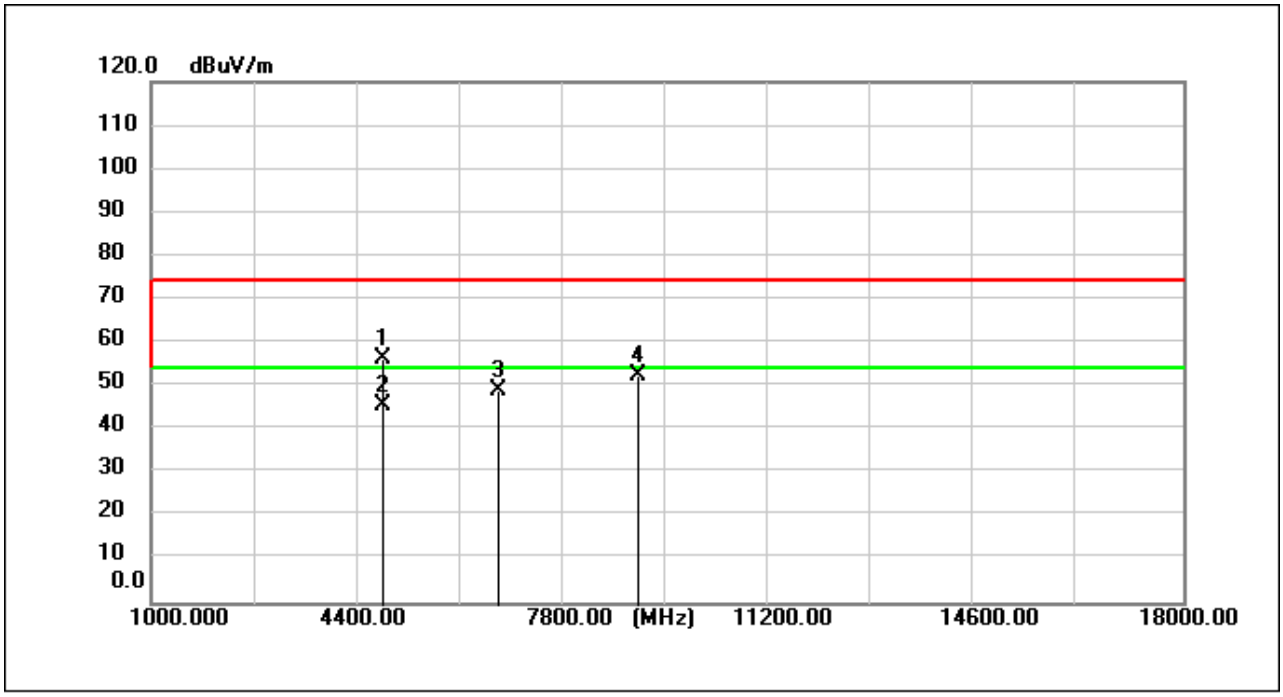
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4957.600	68.79	-12.91	55.88	74.00	-18.12	peak
2	4957.600	58.63	-12.91	45.72	54.00	-8.28	AVG
3	7173.550	55.37	-6.66	48.71	74.00	-25.29	peak
4	9021.450	55.50	-3.45	52.05	74.00	-21.95	peak

Test Mode: 01; Polarity: Vertical; Modulation:GFSK; Channel:High



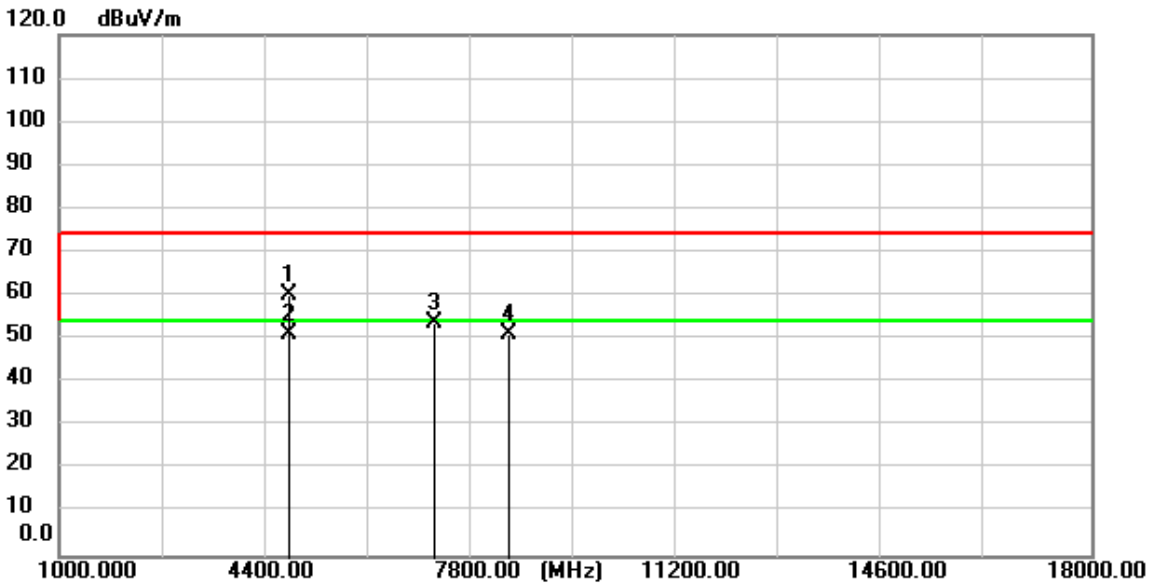
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960.200	69.86	-12.90	56.96	74.00	-17.04	peak
2	4960.200	58.10	-12.90	45.20	54.00	-8.80	AVG
3	7535.650	55.25	-6.13	49.12	74.00	-24.88	peak
4	9081.800	52.99	-3.32	49.67	74.00	-24.33	peak

Test Mode: 01; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:Low



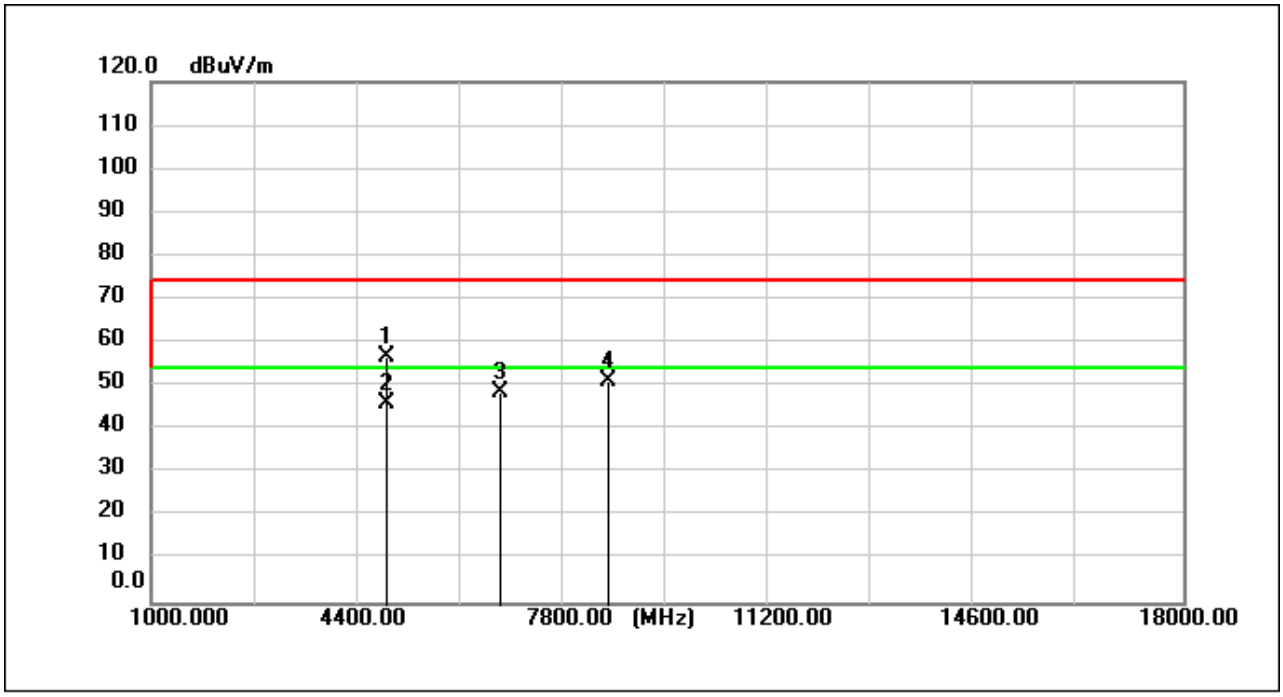
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4792.700	69.37	-13.13	56.24	74.00	-17.76	peak
2	4792.700	58.82	-13.13	45.69	54.00	-8.31	AVG
3	6718.800	56.15	-7.21	48.94	74.00	-25.06	peak
4	9007.850	55.99	-3.48	52.51	74.00	-21.49	peak

Test Mode: 01; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:Low



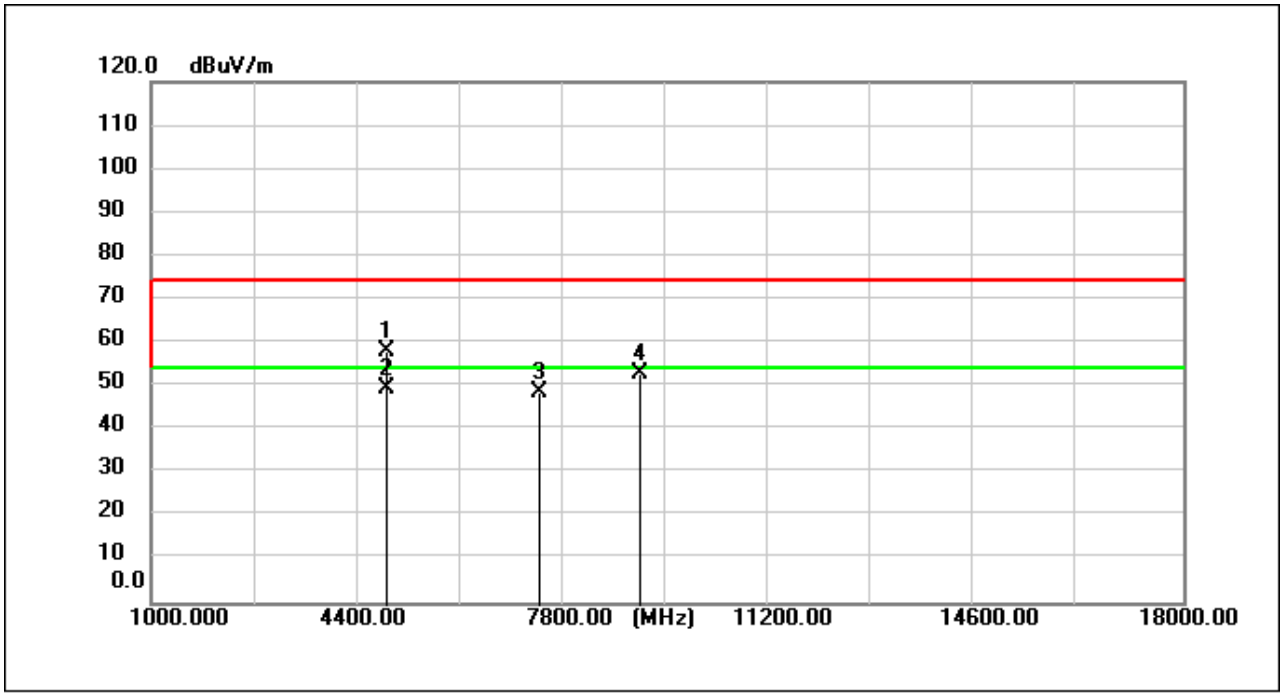
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4785.050	73.15	-13.14	60.01	74.00	-13.99	peak
2	4785.050	64.51	-13.14	51.37	54.00	-2.63	AVG
3	7183.750	60.28	-6.66	53.62	74.00	-20.38	peak
4	8399.250	55.94	-4.52	51.42	74.00	-22.58	peak

Test Mode: 01; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:middle



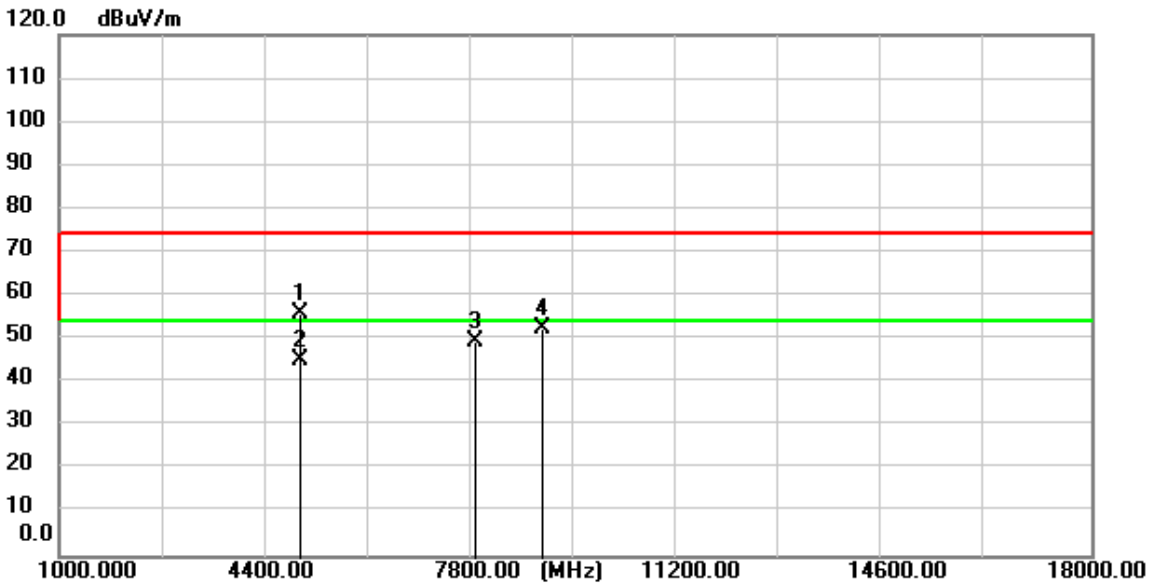
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.500	69.91	-13.01	56.90	74.00	-17.10	peak
2	4880.500	58.88	-13.01	45.87	54.00	-8.13	AVG
3	6751.950	55.80	-7.14	48.66	74.00	-25.34	peak
4	8536.100	55.31	-4.29	51.02	74.00	-22.98	peak

Test Mode: 01; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:middle



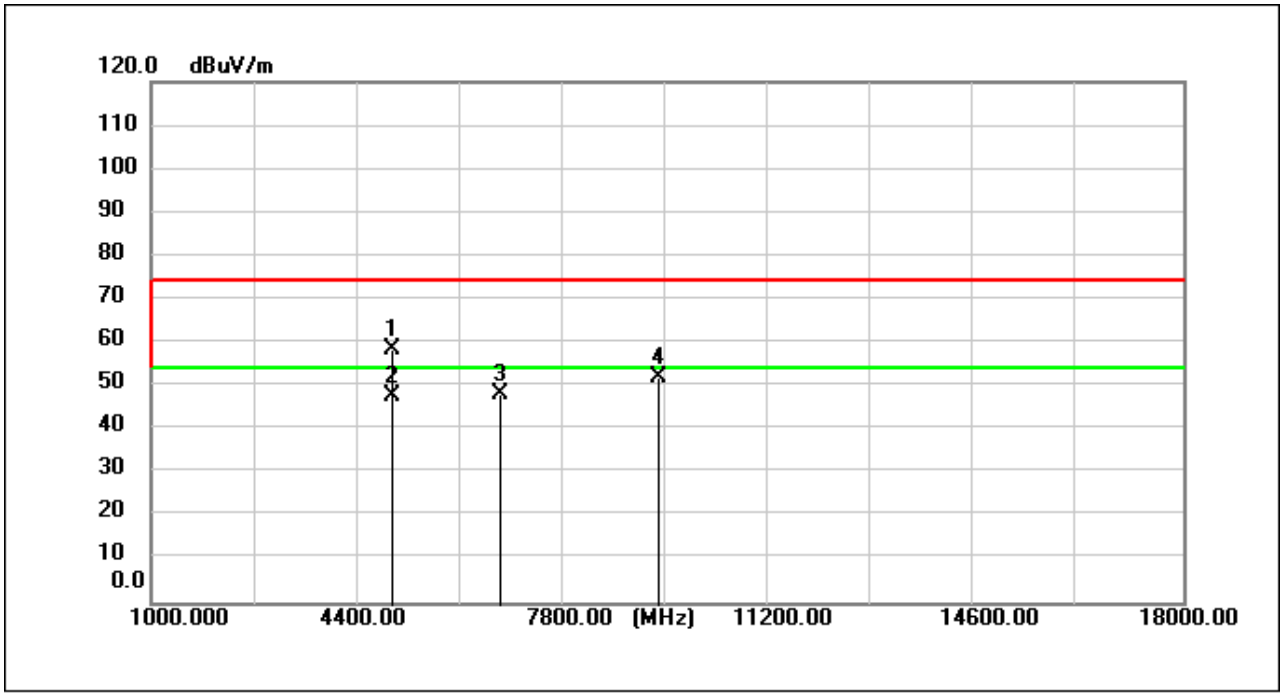
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4881.790	71.25	-13.01	58.24	74.00	-15.76	peak
2	4881.790	62.61	-13.01	49.60	54.00	-4.40	AVG
3	7387.750	55.18	-6.43	48.75	74.00	-25.25	peak
4	9049.500	56.12	-3.39	52.73	74.00	-21.27	peak

Test Mode: 01; Polarity: Horizontal; Modulation:π/4 DQPSK; Channel:High



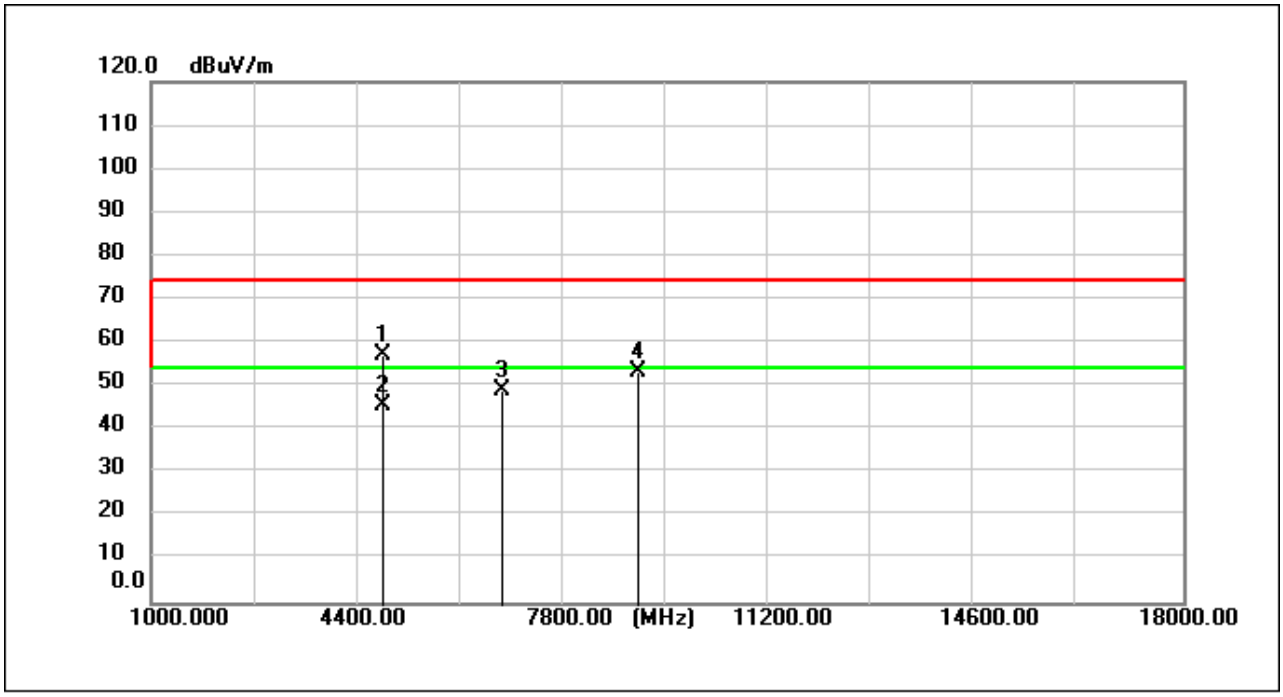
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4955.630	68.92	-12.91	56.01	74.00	-17.99	peak
2	4955.630	58.11	-12.91	45.20	54.00	-8.80	AVG
3	7858.650	54.78	-5.49	49.29	74.00	-24.71	peak
4	8961.950	55.99	-3.58	52.41	74.00	-21.59	peak

Test Mode: 01; Polarity: Vertical; Modulation:π/4 DQPSK; Channel:High



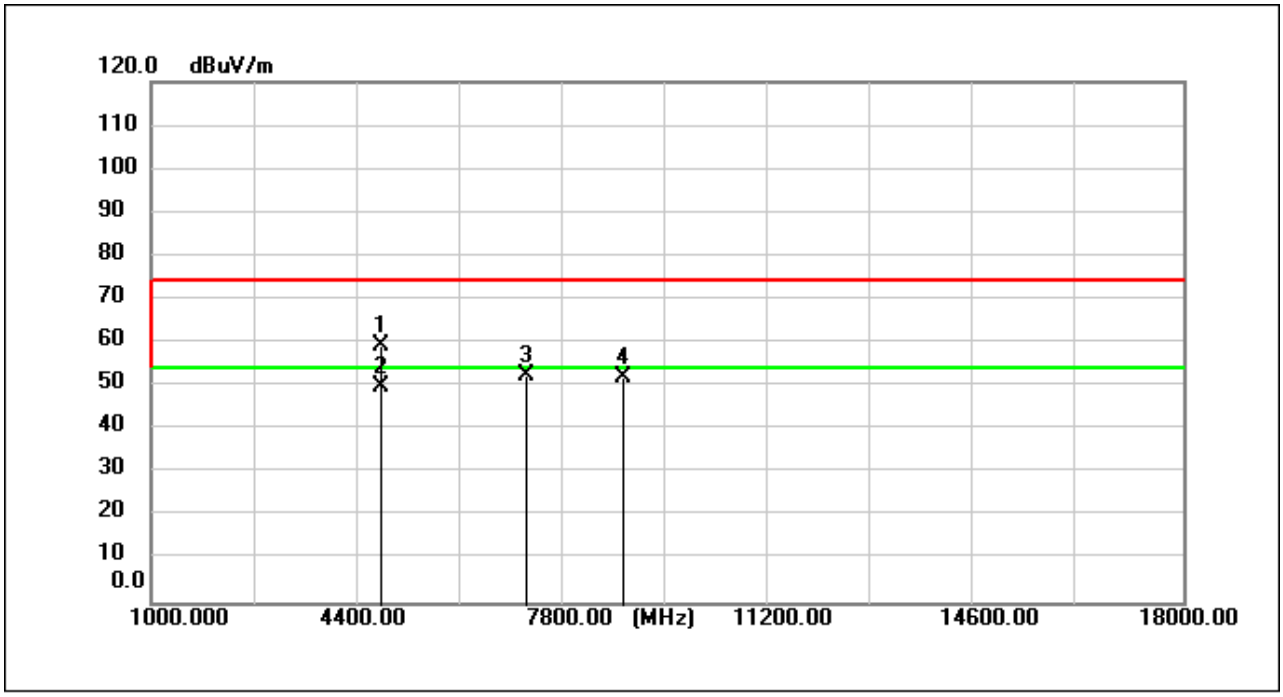
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4962.500	71.20	-12.90	58.30	74.00	-15.70	peak
2	4962.500	60.84	-12.90	47.94	54.00	-6.06	AVG
3	6746.850	55.49	-7.16	48.33	74.00	-25.67	peak
4	9363.150	54.92	-2.67	52.25	74.00	-21.75	peak

Test Mode: 01; Polarity: Horizontal; Modulation:8DPSK; Channel:Low



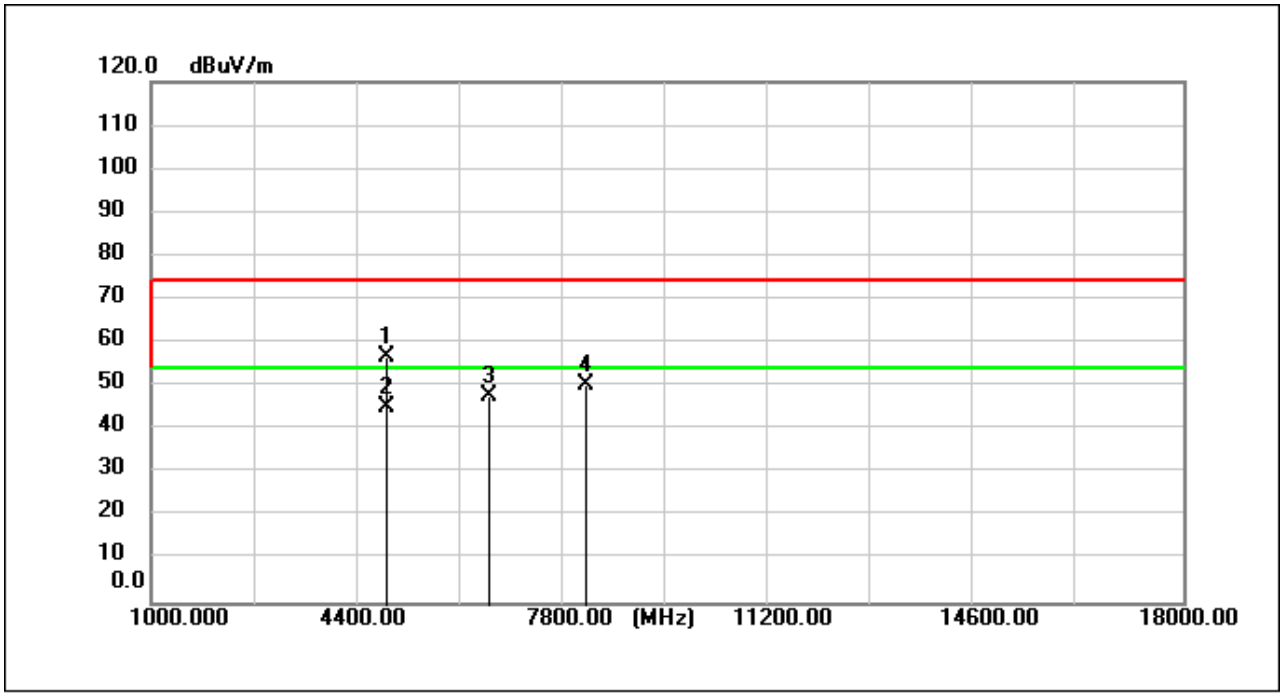
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4798.650	70.51	-13.13	57.38	74.00	-16.62	peak
2	4798.650	58.88	-13.13	45.75	54.00	-8.25	AVG
3	6780.000	55.99	-7.12	48.87	74.00	-25.13	peak
4	9013.800	56.69	-3.47	53.22	74.00	-20.78	peak

Test Mode: 01; Polarity: Vertical; Modulation:8DPSK; Channel:Low



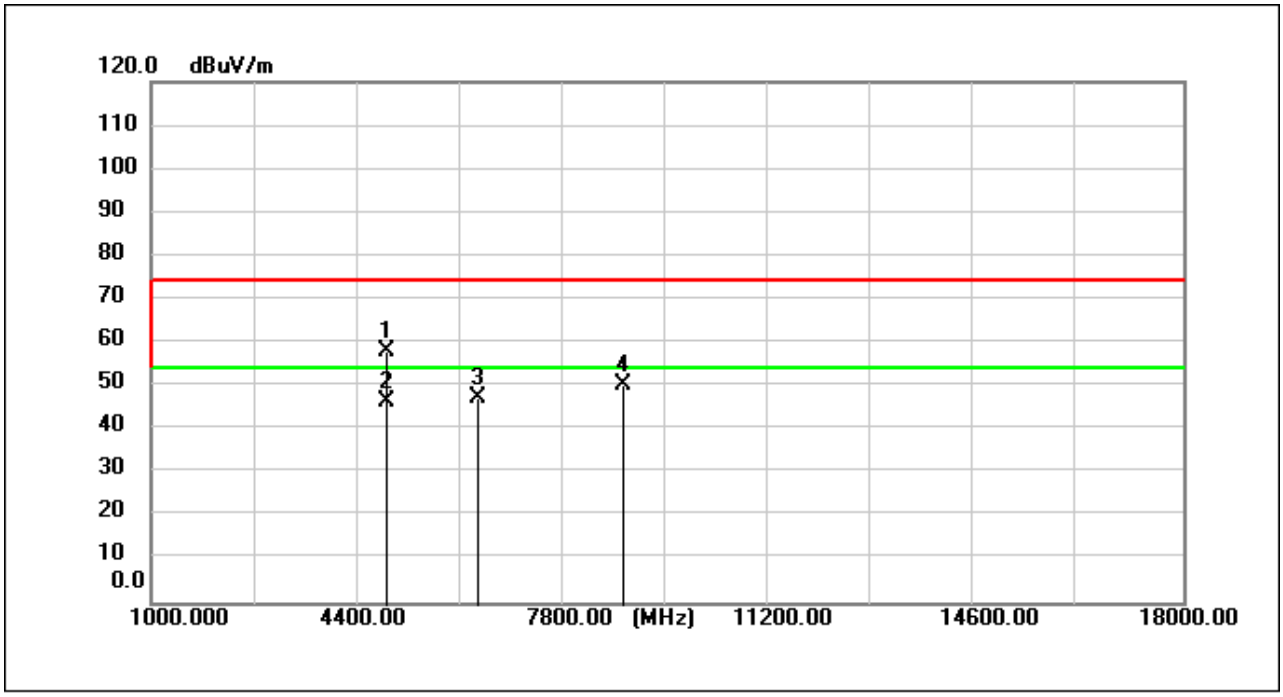
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4783.350	72.44	-13.14	59.30	74.00	-14.70	peak
2	4783.350	63.20	-13.14	50.06	54.00	-3.94	AVG
3	7175.250	59.34	-6.66	52.68	74.00	-21.32	peak
4	8759.650	56.05	-3.92	52.13	74.00	-21.87	peak

Test Mode: 01; Polarity: Horizontal; Modulation:8DPSK; Channel:middle



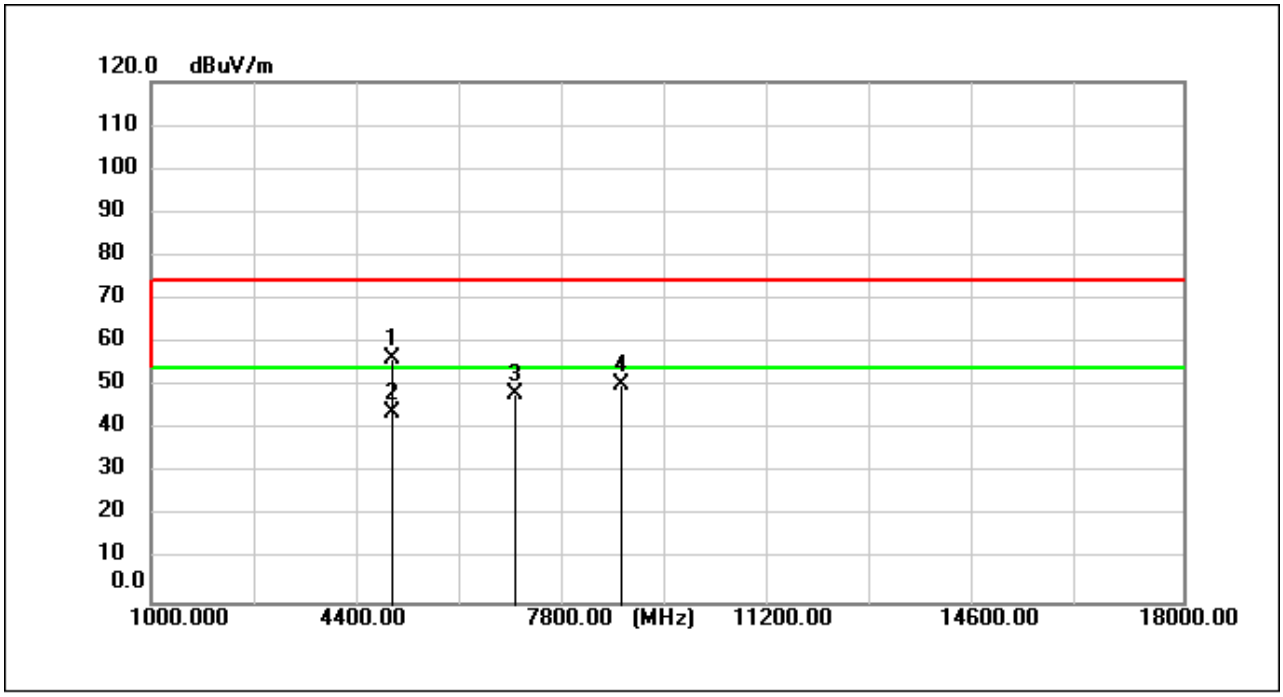
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4880.140	69.62	-13.01	56.61	74.00	-17.39	peak
2	4880.140	58.06	-13.01	45.05	54.00	-8.95	AVG
3	6573.450	55.67	-7.88	47.79	74.00	-26.21	peak
4	8149.350	55.26	-4.94	50.32	74.00	-23.68	peak

Test Mode: 01; Polarity: Vertical; Modulation:8DPSK; Channel:middle



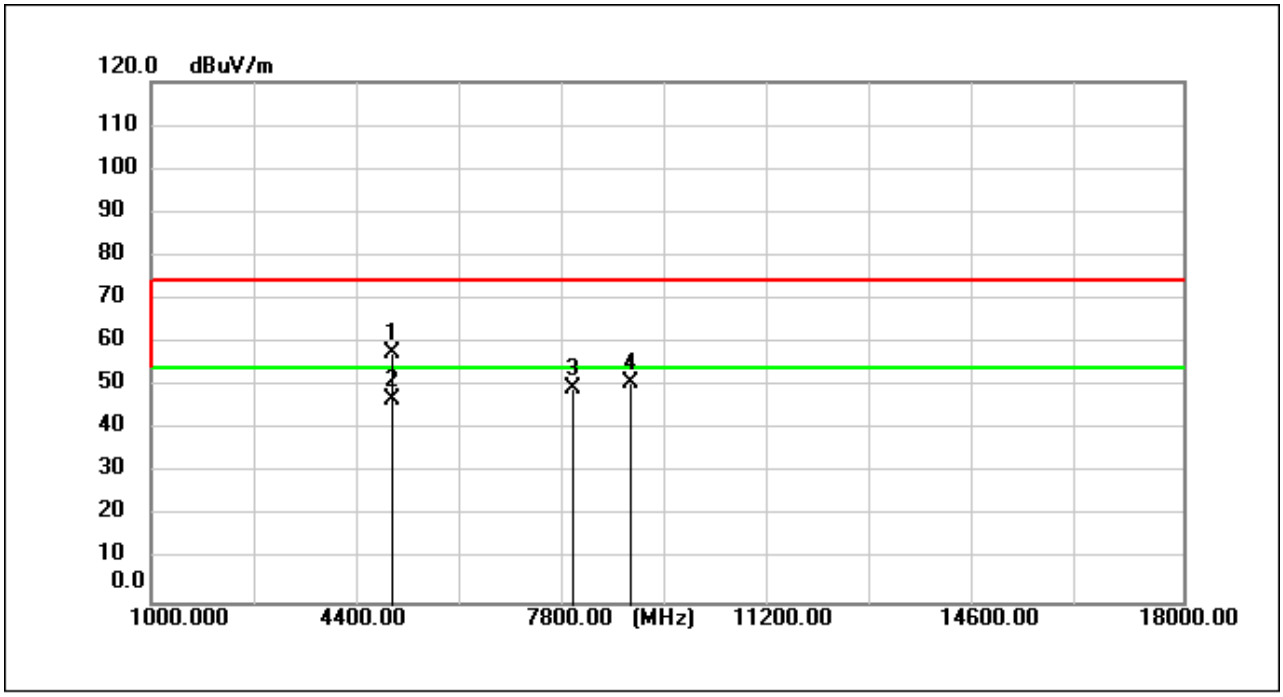
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882.500	70.89	-13.01	57.88	74.00	-16.12	peak
2	4882.500	59.51	-13.01	46.50	54.00	-7.50	AVG
3	6371.150	56.38	-8.82	47.56	74.00	-26.44	peak
4	8782.600	54.45	-3.89	50.56	74.00	-23.44	peak

Test Mode: 01; Polarity: Horizontal; Modulation:8DPSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4957.320	69.36	-12.91	56.45	74.00	-17.55	peak
2	4957.320	56.78	-12.91	43.87	54.00	-10.13	AVG
3	6971.250	55.21	-6.89	48.32	74.00	-25.68	peak
4	8742.650	54.45	-3.96	50.49	74.00	-23.51	peak

Test Mode: 01; Polarity: Vertical; Modulation:8DPSK; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4959.170	70.50	-12.90	57.60	74.00	-16.40	peak
2	4959.170	59.88	-12.90	46.98	54.00	-7.02	AVG
3	7921.550	54.70	-5.36	49.34	74.00	-24.66	peak
4	8886.300	54.42	-3.71	50.71	74.00	-23.29	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

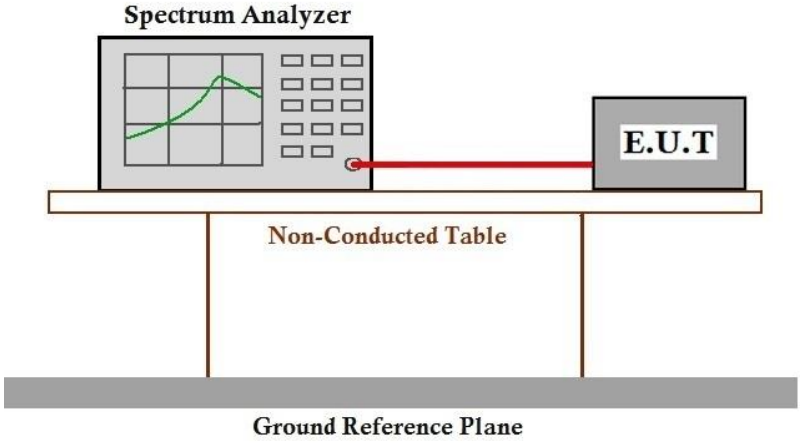
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 25.4 °C Humidity: 50.3 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX_non-Hop mode_Keep the EUT 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

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2501000028AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2501000028AT

10 Appendix

1. Maximum Conducted Output Power

1.1 Test Result

1.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	10.89	<=30	Pass
		2441	DH5	11.18	<=30	Pass
		2480	DH5	11.15	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	10.94	<=20.97	Pass
		2441	2DH5	11.20	<=20.97	Pass
		2480	2DH5	11.08	<=20.97	Pass
8DPSK	SISO	2402	3DH5	10.96	<=20.97	Pass
		2441	3DH5	11.20	<=20.97	Pass
		2480	3DH5	11.08	<=20.97	Pass

- End of the Report -