TEST REPORT

Report No. .....:	**CTC2025278191**
FCC ID.....:	**WNA-HPR305**
Applicant .....:	**Shenzhen Skyworth Digital Technology Co.,LTD.**
Address.....:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Manufacturer.....:	Shenzhen Skyworth Digital Technology Co.,LTD.
Address.....:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Product Name .....:	**UHD OTT Stick**
Trade Mark .....:	SKYWORTH, STRONG, QVWI, COOCAA, MECOOL, Blaupunkt, EKO
Model/Type reference.....:	HPR3B
Listed Model(s).....:	HPR309, HPR305, BPTV30, BPTV30G, BPTV10G, HPR323, MEgo1 4K, MEgo1 PRO
Standard .....:	**FCC CFR Title 47 Part 15 Subpart C Section 15.247**
Test Report Form No .....:	CTC-TR-059_A2
Master TRF .....:	Dated 2025-05-12
Date of receipt of test sample.....:	Apr. 24, 2025
Date of testing.....:	Apr. 24, 2025 ~ May 18, 2025
Date of issue.....:	Jun. 10, 2025
Result.....:	**PASS**

Compiled by: (Printed name+signature)	Lucy Lan	Lucy Lan
Supervised by: (Printed name+signature)	Eric Zhang	Eric Zhang
Approved by: (Printed name+signature)	Totti Zhao	Totti Zhao

This test report may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CTC. The Test Result in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CTC within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.

Table of Contents Page

1. TEST SUMMARY 3

1.1. TEST STANDARDS 3
1.2. REPORT VERSION 3
1.3. TEST DESCRIPTION 3
1.4. TEST FACILITY 4
1.5. MEASUREMENT UNCERTAINTY 5
1.6. ENVIRONMENTAL CONDITIONS 5

2. GENERAL INFORMATION 6

2.1. CLIENT INFORMATION 6
2.2. GENERAL DESCRIPTION OF EUT 6
2.3. ACCESSORY EQUIPMENT INFORMATION 7
2.4. OPERATION STATE 8
2.5. MEASUREMENT INSTRUMENTS LIST 9

3. TEST ITEM AND RESULTS 11

3.1. CONDUCTED EMISSION 11
3.2. RADIATED EMISSION 14
3.3. BAND EDGE EMISSIONS (RADIATED) 28
3.4. BAND EDGE AND SPURIOUS EMISSIONS (CONDUCTED) 41
3.5. 20DB BANDWIDTH 56
3.6. CHANNEL SEPARATION 63
3.7. NUMBER OF HOPPING CHANNEL 65
3.8. DWELL TIME 67
3.9. PEAK OUTPUT POWER 75
3.10. DUTY CYCLE 79
3.11. ANTENNA REQUIREMENT 80

1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.247: Operation within the bands 902–928MHz, 2400–2483.5MHz, and 5725–5850MHz.

ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

1.2. Report Version

Revised No.	Report No.	Date of issue	Description
01	CTC2025278191	Jun. 10, 2025	Original

1.3. Test Description

FCC Part 15 Subpart C (15.247)			
Test Item	**Standard Section**	**Result**	**Test Engineer**
Antenna Requirement	15.203	Pass	Ewen
Conducted Emission	15.207	Pass	Ewen
Restricted Bands	15.205	Pass	Ewen
Hopping Channel Separation	15.247(a)(1)	Pass	Ewen
Dwell Time	15.247(a)(iii)	Pass	Ewen
Peak Output Power	15.247(b)(1)	Pass	Ewen
Number of Hopping Frequency	15.247(a)(iii)	Pass	Ewen
Conducted Band Edge and Spurious Emissions	15.247(d)	Pass	Ewen
Radiated Band Edge and Spurious Emissions	15.205&15.209& 15.247(d)	Pass	Ewen
Radiated Spurious Emission	15.247(d) &15.209	Pass	Ewen
20dB Bandwidth	15.247(a)	Pass	Ewen

Note:

1. The measurement uncertainty is not included in the test result.
2. N/A: means this test item is not applicable for this device according to the technology characteristic of device.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

1.4. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: Room 107, 108, 207, 208, 303 of Building A, Room 101 of Building B, No.7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

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

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 “Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1” and TR-100028-02 “Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2” and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.

Test Items	Measurement Uncertainty	Notes
20dB Emission Bandwidth	±0.0196%	(1)
Carrier Frequency Separation	±1.9%	(1)
Number of Hopping Channel	±1.9%	(1)
Time of Occupancy	±0.028%	(1)
Max Peak Conducted Output Power	±0.743 dB	(1)
Band-edge Spurious Emission	±1.328 dB	(1)
Conducted RF Spurious Emission	9kHz-1GHz: ±0.746dB 1GHz-26GHz: ±1.328dB	(1)
Conducted Emissions 9kHz~30MHz	±3.08 dB	(1)
Radiated Emissions 30~1000MHz	±4.51 dB	(1)
Radiated Emissions 1~18GHz	±5.84 dB	(1)
Radiated Emissions 18~40GHz	±6.12 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.6. Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15 °C to 35 °C
Relative Humidity:	20 % to 75 %
Air Pressure:	101 kPa

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Shenzhen Skyworth Digital Technology Co.,LTD.
Address:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Manufacturer:	Shenzhen Skyworth Digital Technology Co.,LTD.
Address:	14/F Unit A. Skyworth Building, Gaoxin Ave.1s., Nanshan District, Shenzhen, China
Factory:	Shenzhen Skyworth Digital Technology Co.,LTD. Baoan Factory
Address:	2-5F,Integration Multi-Storied Building, Skyworth Science and Technology Industrial Park, Tangtou Industrial Zone, Shiyan Street, Baoan District, Shenzhen city, China.

2.2. General Description of EUT

Product Name:	UHD OTT Stick
Trade Mark:	SKYWORTH, STRONG, QVWI, COOCAA, MECOOL, Blaupunkt, EKO
Model/Type reference:	HPR3B
Listed Model(s):	HPR309, HPR305, BPTV30, BPTV30G, BPTV10G, HPR323, MEgo1 4K, MEgo1 PRO
Model Difference:	Only the models name is different, while the internal circuits, wireless modules and antennas are exactly the same.
Sample ID:	CTC250418-009-S007
Power Supply:	DC 5V 1A from AC/DC Adapter
Adapter Model 1	UT-236A-5100 Input: 100-240V~ 50/60Hz 0.2A Output: 5V/1A 5W
Adapter Model 2	AD-D0930500100US01 Input: 100-240V~ 50/60Hz 0.2A Output: 5V/1A 5W
Hardware Version:	/
Software Version:	/
Bluetooth 5.0 / BR+EDR	
Modulation:	GFSK, π/4-DQPSK, 8-DPSK
Operation Frequency:	2402MHz~2480MHz
Channel Number:	79
Channel Separation:	1MHz
Antenna Type:	PCB Antenna
Antenna Gain:	4.83dBi

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

2.3. Accessory Equipment Information

Equipment Information			
Name	Model	S/N	Manufacturer
Notebook	ThinkPad T460s	/	Lenovo
Cable Information			
Name	Shielded Type	Ferrite Core	Length
USB Cable	Unshielded	NO	150cm
Test Software Information			
Name	Version	/	/
adb	/	/	/

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

2.4. Operation State

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing. BT EDR, 79 channels are provided to the EUT. Channels 00/39/78 were selected for testing.

Operation Frequency List:

Channel	Frequency (MHz)
00	**2402**
01	2403
⋮	⋮
38	2440
39	**2441**
40	2442
⋮	⋮
77	2479
78	**2480**

Note: The display in grey were the channel selected for testing.

Test Mode:

For RF test items:
The engineering test program was provided and enabled to make EUT continuous transmit.
For AC power line conducted emissions:
The EUT was set to connect with the Bluetooth instrument under large package sizes transmission.
For Radiated spurious emissions test item:
The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

2.5. Measurement Instruments List

Radiated emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9163	01026	Dec. 25, 2024	Dec. 24, 2025
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-647	Sep. 26, 2024	Sep. 25, 2025
3	Test Receiver	Keysight	N9038A	MY56400071	Dec. 13, 2024	Dec. 12, 2025
4	Broadband Amplifier	Schwarzbeck	BBV9743B	259	Dec. 13, 2024	Dec. 12, 2025
5	Mirowave Broadband Amplifier	Schwarzbeck	BBV9718C	111	Dec. 13, 2024	Dec. 12, 2025
6	RE33L-001	COMM	/	014 (9kHz-1GHz)	Feb. 09, 2025	Feb. 08, 2026
7	RE33L-002	COMM	/	015 (9kHz-1GHz)	Feb. 09, 2025	Feb. 08, 2026
8	RE33H-001	SUHBER SUCOFLEX	/	016 (1GHz-18GHz)	Feb. 09, 2025	Feb. 08, 2026
9	RE33H-002	HUBENR	/	017 (1GHz-18GHz)	Feb. 09, 2025	Feb. 08, 2026
10	RE33H-003	HUBENR	/	018 (1GHz-18GHz)	Feb. 09, 2025	Feb. 08, 2026
11	RE33H-003	HUBENR	/	019 (18GHz-40GHz)	Feb. 09, 2025	Feb. 08, 2026
12	3m chamber 3	YIHENG	EE106	/	Aug. 29, 2023	Aug. 28, 2026
13	SHF-EHF Horn Antenna	Schwarzbeck	BBHA 9170	013551	Dec. 13, 2024	Dec. 12, 2025
14	Low noise Amplifier	Tonscend	TAP180040048	AP24C8060348	Dec. 13, 2024	Dec. 12, 2025

Test Software		
Name	Manufacturer	Software Version
EZ-EMC	FARA	FA-03A2

Conducted emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
1	LISN	R&S	ENV216	101112	Dec. 13, 2024	Dec. 12, 2025
2	LISN	R&S	ENV216	101113	Dec. 13, 2024	Dec. 12, 2025
3	EMI Test Receiver	R&S	ESCI	100524	Dec. 13, 2024	Dec. 12, 2025
4	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 13, 2024	Dec. 12, 2025
5	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 13, 2024	Dec. 12, 2025
6	CE-001	COMM	/	001	Feb. 09, 2025	Feb. 08, 2026

Test Software		
Name	Manufacturer	Software Version
EMC32	R&S	6.10.10

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

RF Test System - SRD						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
1	Spectrum Analyzer	R&S	FSV40-N	101654	Dec. 13, 2024	Dec. 12, 2025
2	EXG Analog Signal Generator	Keysight	N5173B	MY59100842	Dec. 13, 2024	Dec. 12, 2025
3	MXG Vector Signal Generator	Keysight	N5182B	MY59100212	Dec. 13, 2024	Dec. 12, 2025
4	Wideband Radio Communication Tester	R&S	CMW500	102414	Dec. 13, 2024	Dec. 12, 2025
5	RF Control Unit	Tonscend	JS0806-2	/	Dec. 13, 2024	Dec. 12, 2025
6	High and low temperature test chamber	ESPEC	MT3035	/	Mar. 25, 2025	Mar. 24, 2026
7	RF Cable	HUBER+SUHNER	SUCOFLEX101PE	RF-09	Apr. 16, 2025	Apr. 15, 2026

Test Software		
Name	Manufacturer	Software Version
JS1120-3	Tonscend	V3.3.38

Note: 1. The Cal. Interval was one year.

2. The Cal. Interval was three years of the antenna.

3. The cable loss has been calculated in test result which connection between each test instruments.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

3. TEST ITEM AND RESULTS

3.1. Conducted Emission

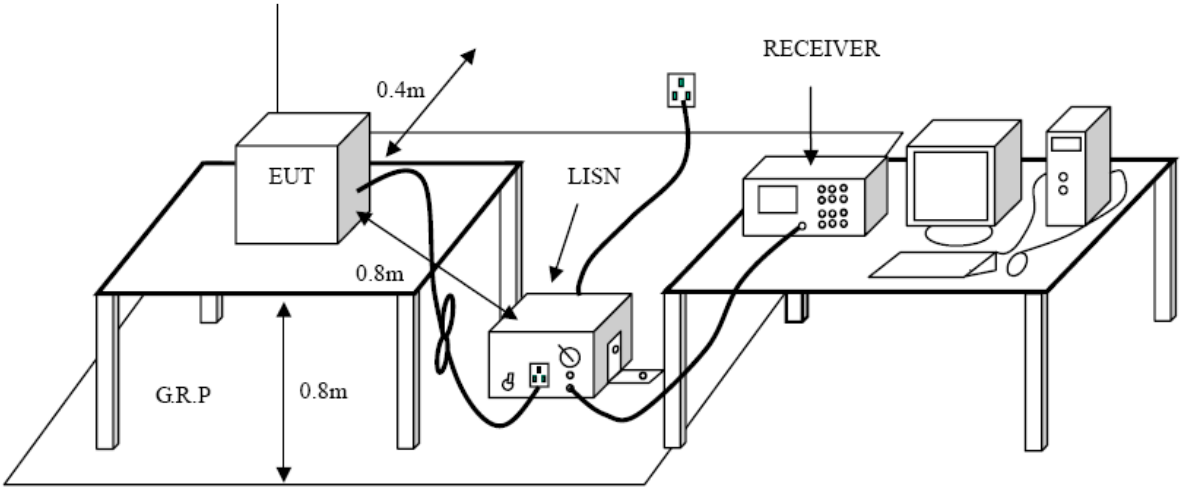
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency (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.

Test Configuration



Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm / 50 μH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

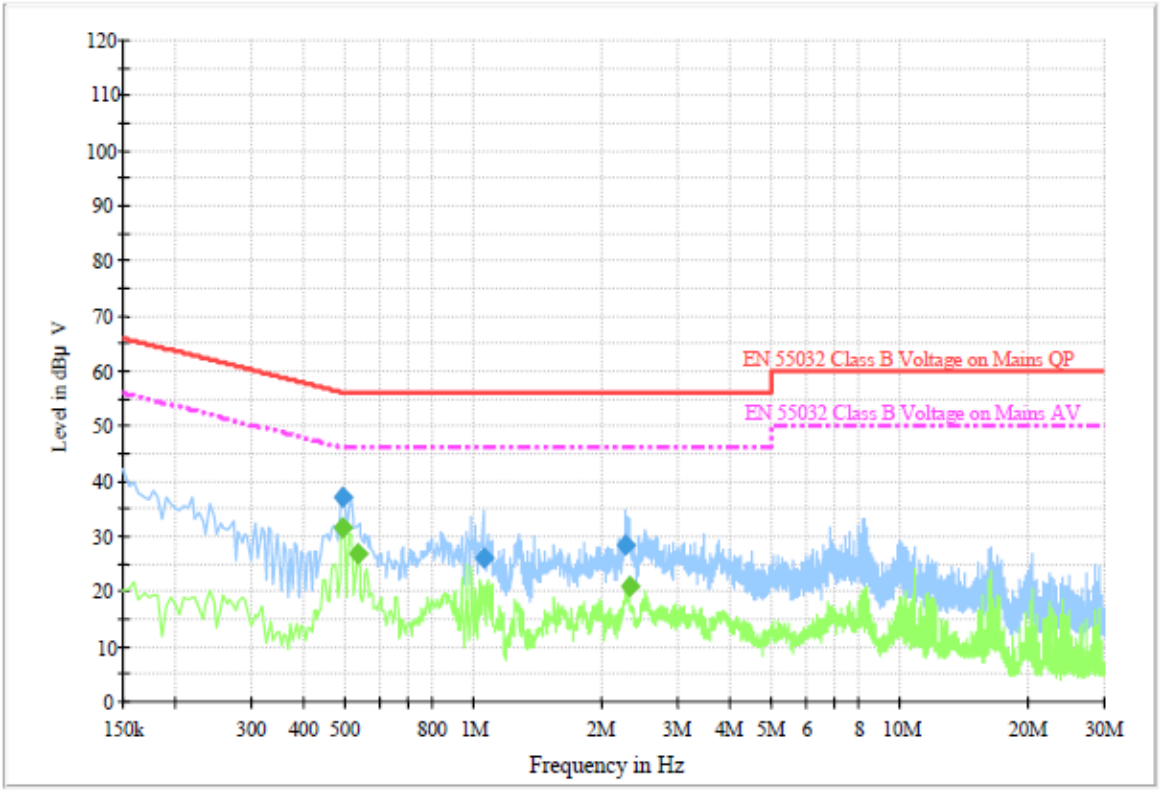
Test Mode

Please refer to the clause 2.4.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Test Result

Test Voltage:	AC 120V/60Hz
Terminal:	Line
Remark:	Only worse case is reported



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.492000	37.0	1000.00	9.000	On	L1	9.4	19.1	56.1	
1.050000	25.9	1000.00	9.000	On	L1	9.6	30.1	56.0	
2.256000	28.3	1000.00	9.000	On	L1	9.7	27.7	56.0	

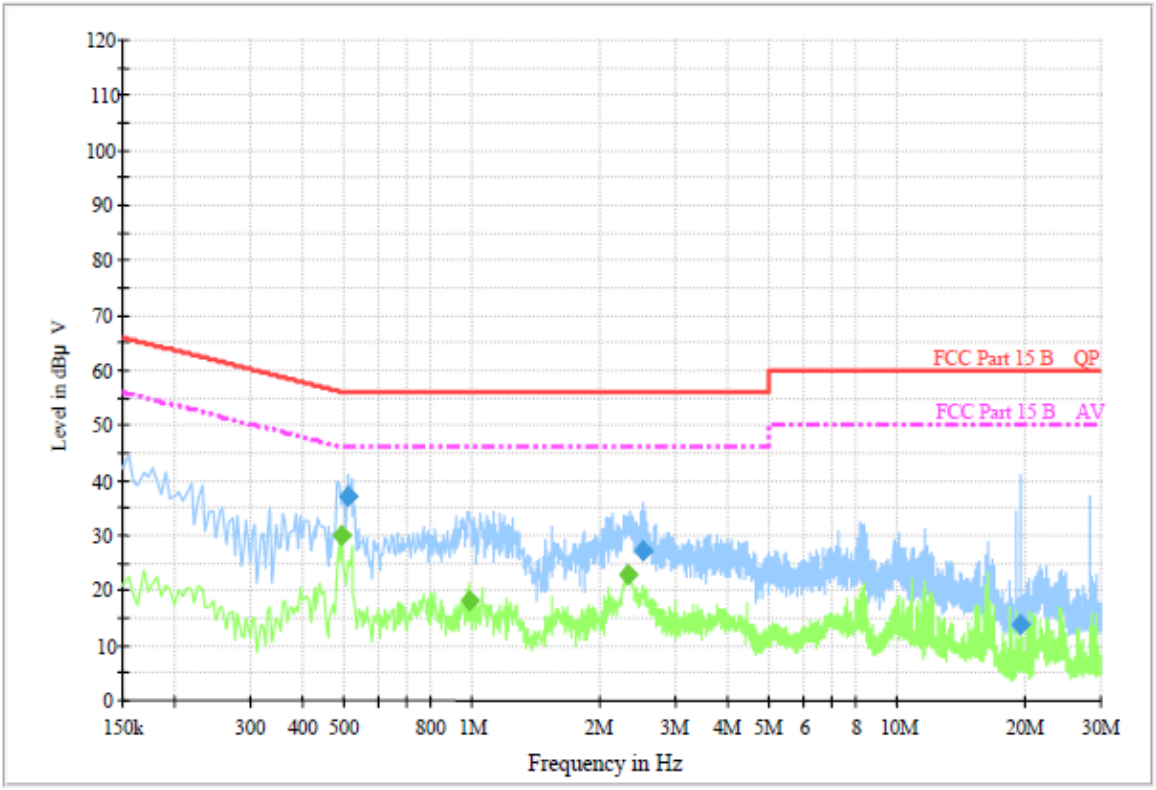
Final Measurement Detector 2

Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.492000	31.4	1000.00	9.000	On	L1	9.4	14.7	46.1	
0.532500	26.8	1000.00	9.000	On	L1	9.4	19.2	46.0	
2.305500	21.0	1000.00	9.000	On	L1	9.6	25.0	46.0	

Emission Level = Read Level + Correct Factor

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Test Voltage:	AC 120V/60Hz
Terminal:	Neutral
Remark:	Only worse case is reported



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.510000	37.2	1000.00	9.000	On	N	9.6	18.8	56.0	
2.526000	27.1	1000.00	9.000	On	N	9.5	28.9	56.0	
19.450500	14.0	1000.00	9.000	On	N	9.6	46.0	60.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.492000	30.1	1000.00	9.000	On	N	9.6	16.0	46.1	
0.982500	18.2	1000.00	9.000	On	N	9.5	27.8	46.0	
2.305500	22.8	1000.00	9.000	On	N	9.4	23.2	46.0	

Emission Level = Read Level + Correct Factor

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

3.2. Radiated Emission

Limit

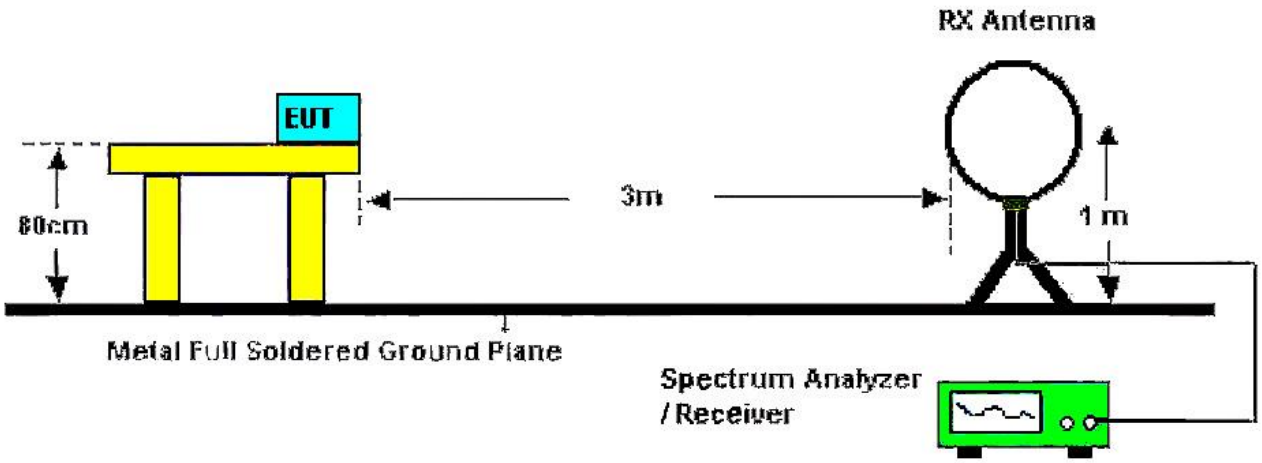
FCC CFR Title 47 Part 15 Subpart C Section 15.209

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

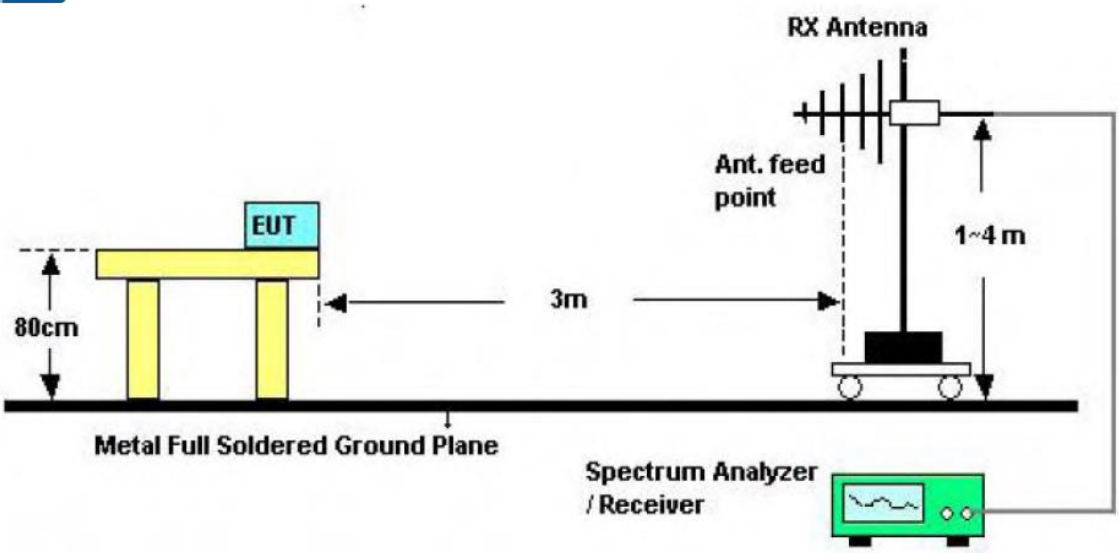
Frequency Range (MHz)	dBμV/m (at 3 meters)	
	Peak	Average
Above 1000	74	54

Note:
(1) The tighter limit applies at the band edges.
(2) Emission Level (dBμV/m)=20log Emission Level (μV/m).

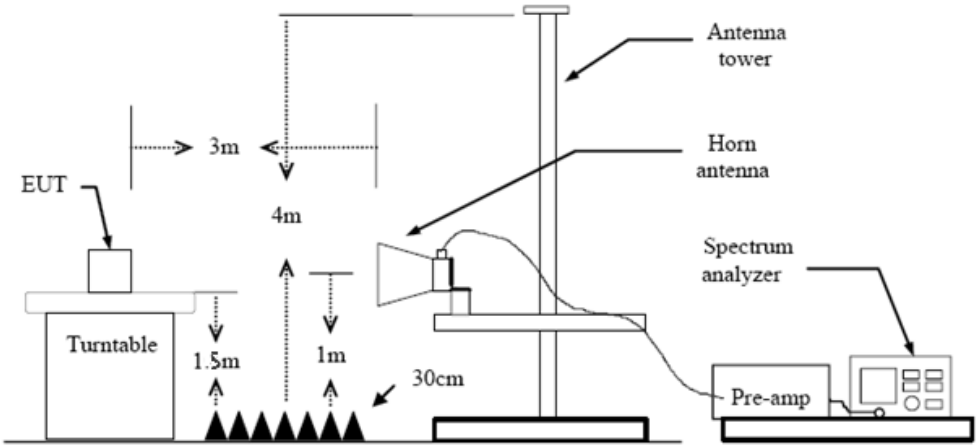
Test Configuration



Below 30MHz Test Setup



30-1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings

(1) Span shall wide enough to fully capture the emission being measured;
(2) 9k – 150kHz:
RBW=300 Hz, VBW=1 kHz, Sweep=auto, Detector function=peak, Trace=max hold
(3) 0.15M – 30MHz:
RBW=10 kHz, VBW=30 kHz, Sweep=auto, Detector function=peak, Trace=max hold
(4) 30M - 1 GHz:
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(5) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 3.10 Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Test Result

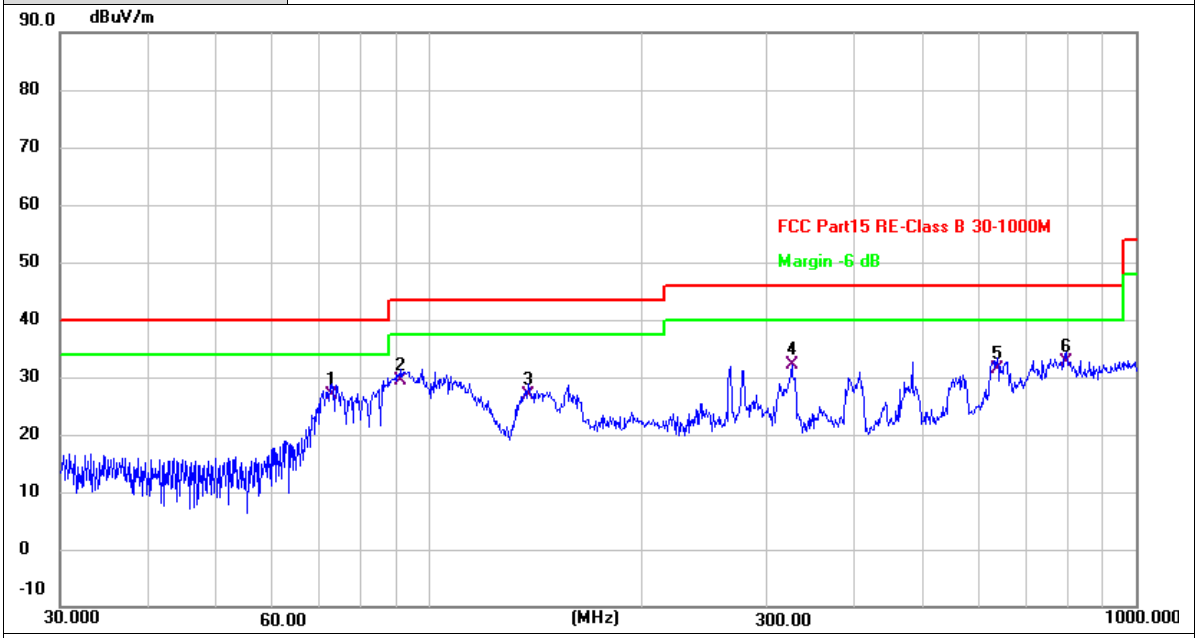
9 kHz~30 MHz

From 9 kHz to 30 MHz: The conclusion is PASS.

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX GFSK Mode 2402MHz
Remark:	Only worse case is reported.

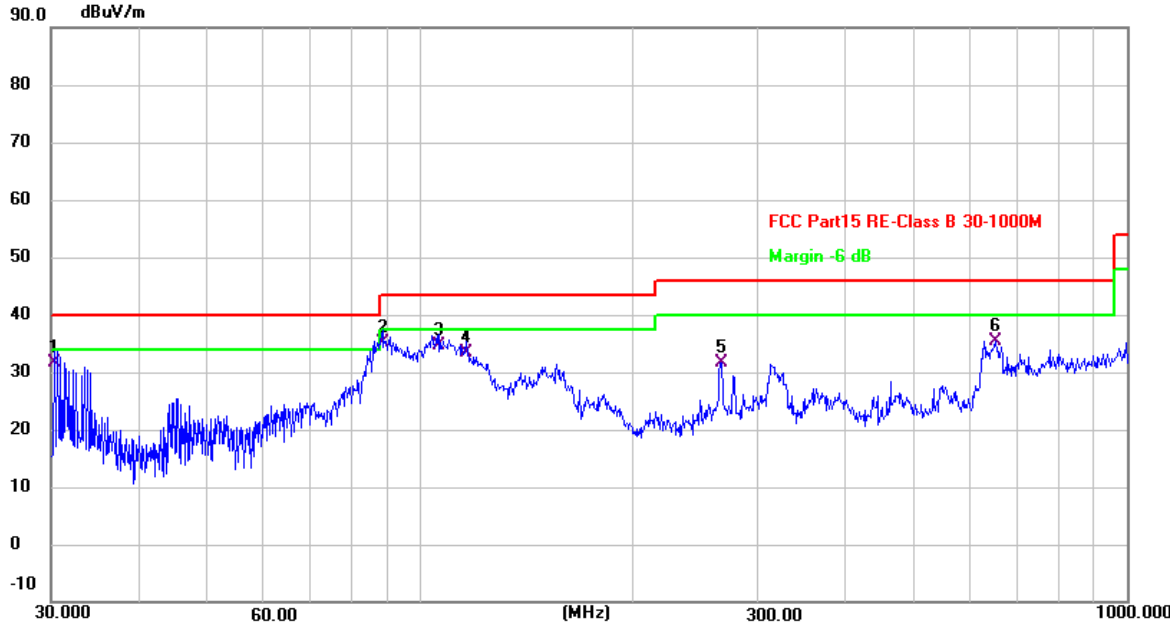


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	72.8466	46.27	-19.51	26.76	40.00	-13.24	QP
2	91.1745	49.87	-20.55	29.32	43.50	-14.18	QP
3	137.9028	43.76	-16.95	26.81	43.50	-16.69	QP
4	325.5958	47.25	-15.06	32.19	46.00	-13.81	QP
5	636.1340	38.36	-7.01	31.35	46.00	-14.65	QP
6	796.1829	36.06	-3.32	32.74	46.00	-13.26	QP

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	TX GFSK Mode 2402MHz
Remark:	Only worse case is reported.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	30.3173	47.88	-16.14	31.74	40.00	-8.26	QP
2	88.3421	55.76	-20.56	35.20	43.50	-8.30	QP
3	106.3850	54.31	-19.57	34.74	43.50	-8.76	QP
4	116.1321	52.11	-18.64	33.47	43.50	-10.03	QP
5	266.6089	48.57	-16.87	31.70	46.00	-14.30	QP
6	651.9417	42.05	-6.66	35.39	46.00	-10.61	QP

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX GFSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4803.195	-5.94	36.56	30.62	54.00	-23.38	AVG
2	4803.297	10.88	36.56	47.44	74.00	-26.56	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX GFSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4804.716	11.73	36.56	48.29	74.00	-25.71	peak
2 *	4804.740	-5.11	36.56	31.45	54.00	-22.55	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX GFSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4881.430	11.37	36.75	48.12	74.00	-25.88	peak
2 *	4881.741	-5.91	36.75	30.84	54.00	-23.16	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX GFSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.257	-5.64	36.75	31.11	54.00	-22.89	AVG
2	4882.649	10.97	36.76	47.73	74.00	-26.27	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX GFSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4960.231	-5.78	36.94	31.16	54.00	-22.84	AVG
2	4960.678	10.11	36.94	47.05	74.00	-26.95	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX GFSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4959.227	11.31	36.94	48.25	74.00	-25.75	peak
2 *	4960.049	-5.87	36.94	31.07	54.00	-22.93	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX π/4-DQPSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4803.421	-5.79	36.56	30.77	54.00	-23.23	AVG
2	4804.463	11.34	36.56	47.90	74.00	-26.10	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX π/4-DQPSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4804.129	-5.70	36.56	30.86	54.00	-23.14	AVG
2	4804.663	11.44	36.56	48.00	74.00	-26.00	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX π/4-DQPSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.063	-5.82	36.75	30.93	54.00	-23.07	AVG
2	4881.865	11.74	36.75	48.49	74.00	-25.51	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX π/4-DQPSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4881.459	-5.93	36.75	30.82	54.00	-23.18	AVG
2	4882.017	11.22	36.75	47.97	74.00	-26.03	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX π/4-DQPSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4959.799	11.01	36.94	47.95	74.00	-26.05	peak
2 *	4960.372	-5.86	36.94	31.08	54.00	-22.92	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX π/4-DQPSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4959.306	11.00	36.94	47.94	74.00	-26.06	peak
2 *	4959.707	-5.85	36.94	31.09	54.00	-22.91	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX 8-DPSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4804.167	11.28	36.56	47.84	74.00	-26.16	peak
2 *	4804.277	-5.93	36.56	30.63	54.00	-23.37	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX 8-DPSK Mode 2402MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4803.111	-5.76	36.56	30.80	54.00	-23.20	AVG
2	4804.226	10.67	36.56	47.23	74.00	-26.77	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX 8-DPSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4882.605	10.80	36.76	47.56	74.00	-26.44	peak
2 *	4882.910	-5.79	36.76	30.97	54.00	-23.03	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX 8-DPSK Mode 2441MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4881.303	10.87	36.75	47.62	74.00	-26.38	peak
2 *	4881.333	-5.78	36.75	30.97	54.00	-23.03	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	TX 8-DPSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4959.565	11.07	36.94	48.01	74.00	-25.99	peak
2 *	4960.507	-5.96	36.94	30.98	54.00	-23.02	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Test Mode:	TX 8-DPSK Mode 2480MHz
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4960.147	-5.90	36.94	31.04	54.00	-22.96	AVG
2	4960.329	10.04	36.94	46.98	74.00	-27.02	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

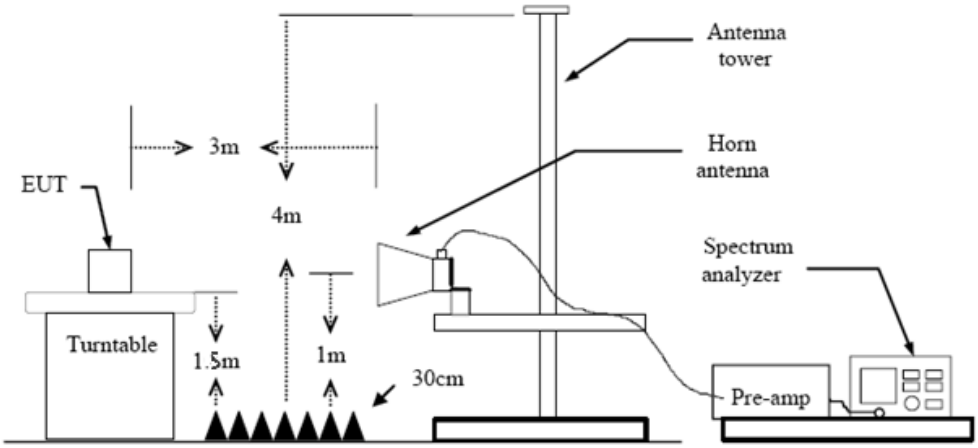
3.3. Band Edge Emissions (Radiated)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)

Restricted Frequency Band (MHz)	(dBμV/m) (at 3m)	
	Peak	Average
2310 ~ 2390	74	54
2483.5 ~ 2500	74	54

Test Configuration



Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
5. The receiver set as follow:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 3.10 Duty Cycle.

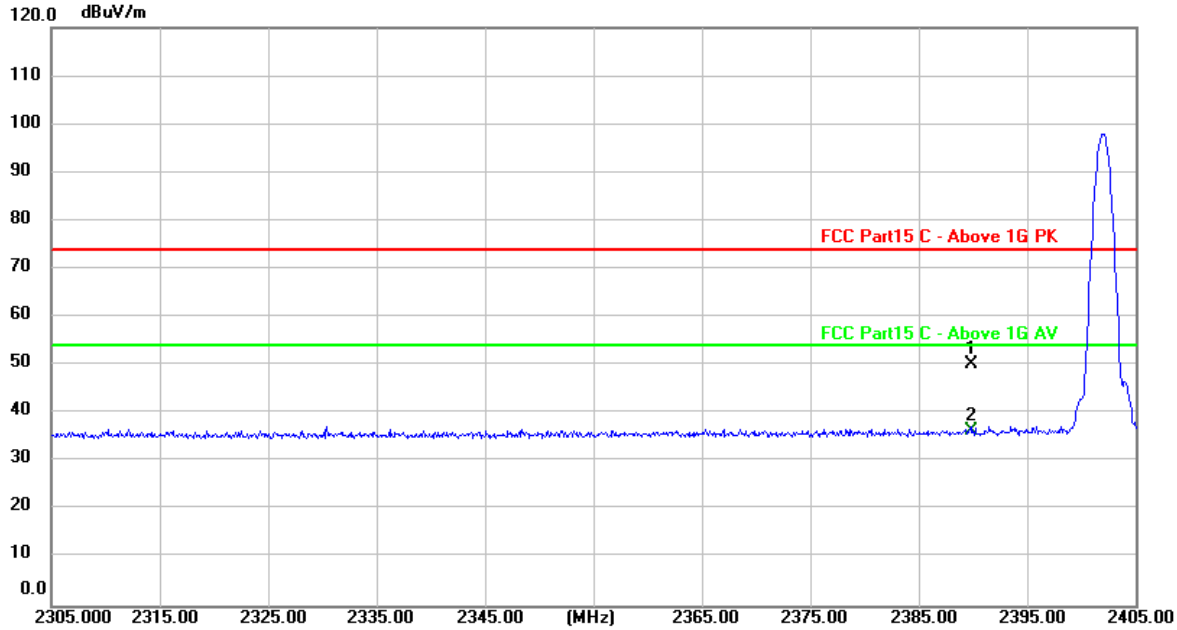
Test Mode

Please refer to the clause 2.4.

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Test Result

Ant. Pol.	Horizontal
Test Mode:	GFSK Mode 2402MHz

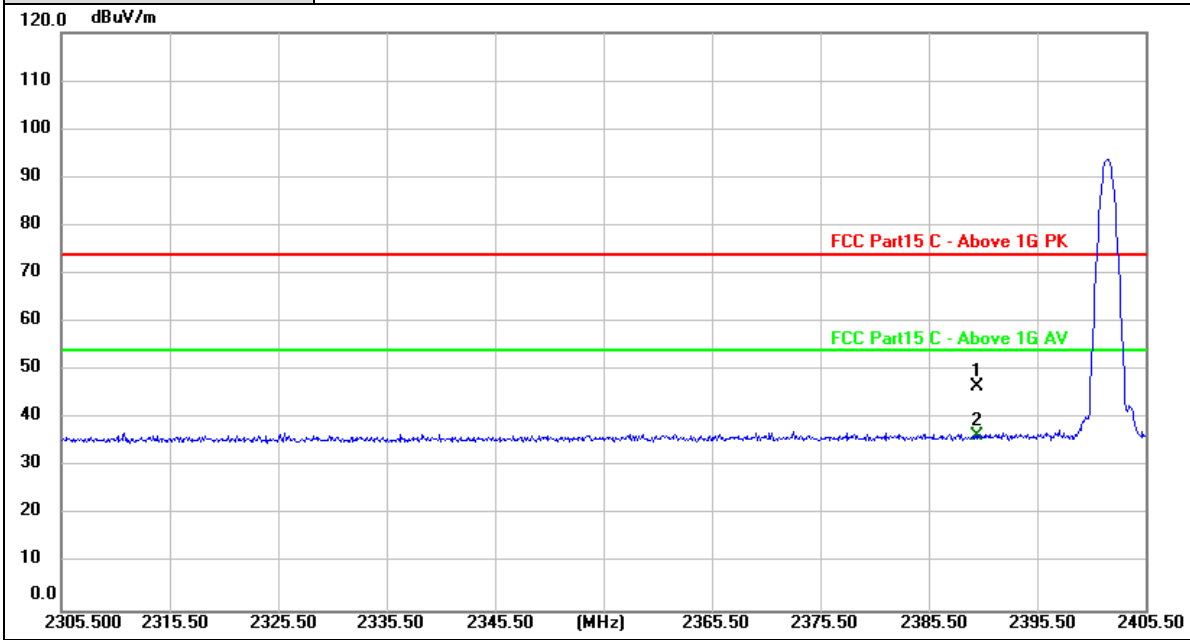


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	19.03	31.31	50.34	74.00	-23.66	peak
2 *	2390.000	5.00	31.31	36.31	54.00	-17.69	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	GFSK Mode 2402MHz

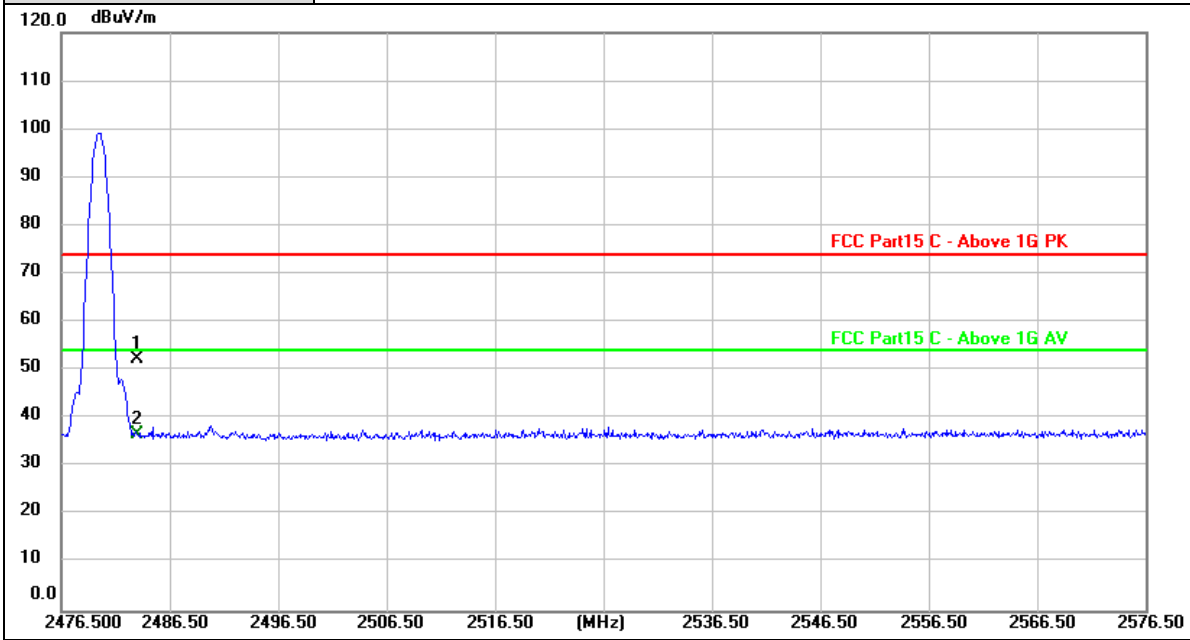


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	15.36	31.31	46.67	74.00	-27.33	peak
2 *	2390.000	5.18	31.31	36.49	54.00	-17.51	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	GFSK Mode 2480MHz

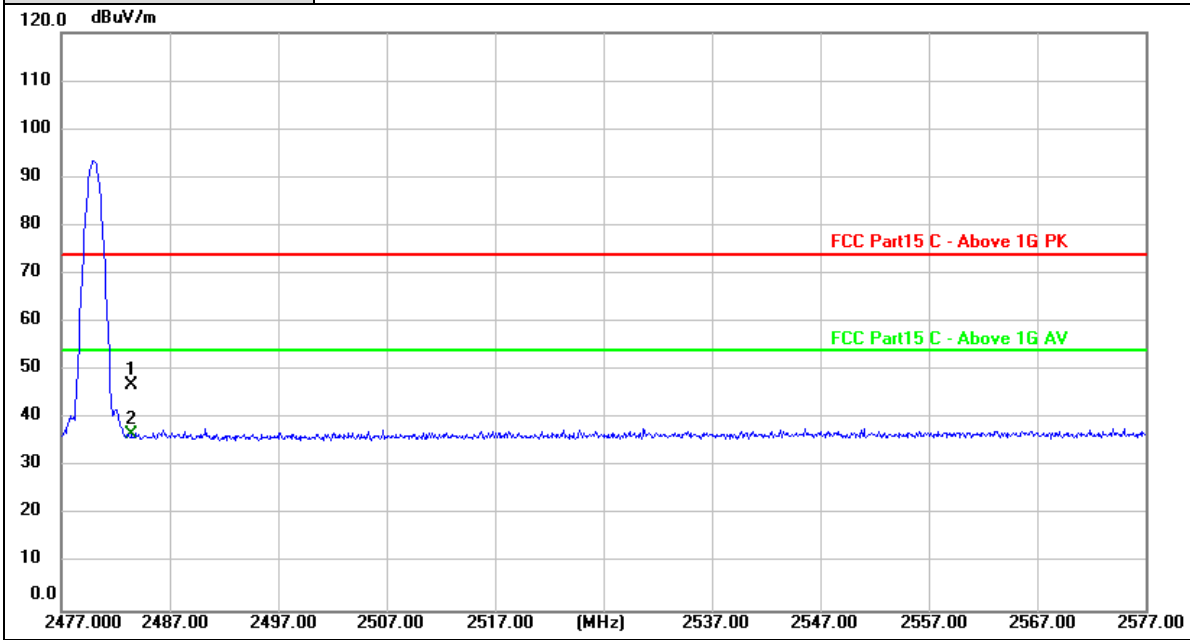


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	20.80	31.50	52.30	74.00	-21.70	peak
2 *	2483.500	5.13	31.50	36.63	54.00	-17.37	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	GFSK Mode 2480MHz

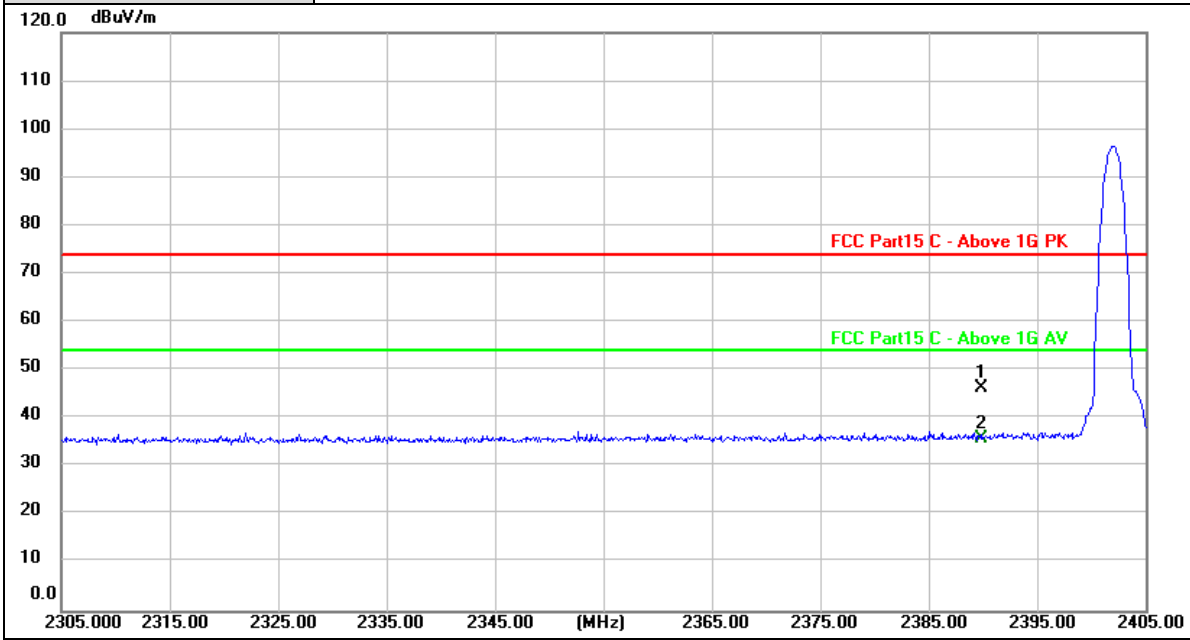


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	15.54	31.50	47.04	74.00	-26.96	peak
2 *	2483.500	5.16	31.50	36.66	54.00	-17.34	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	π/4-DQPSK Mode 2402MHz

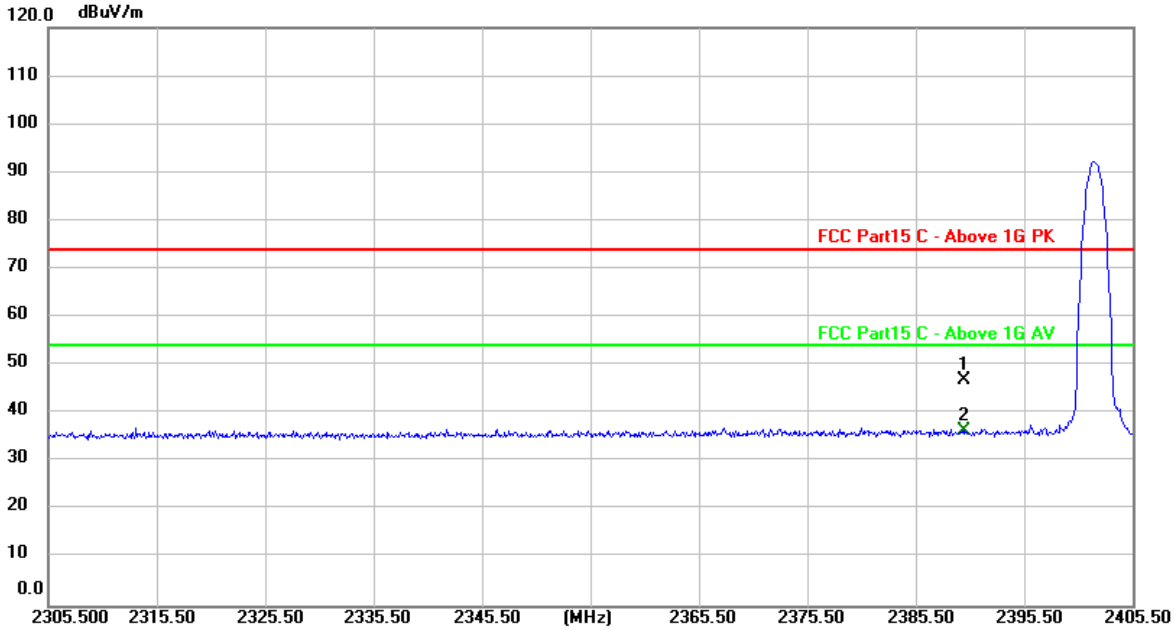


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	14.91	31.31	46.22	74.00	-27.78	peak
2 *	2390.000	4.59	31.31	35.90	54.00	-18.10	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	π/4-DQPSK Mode 2402MHz

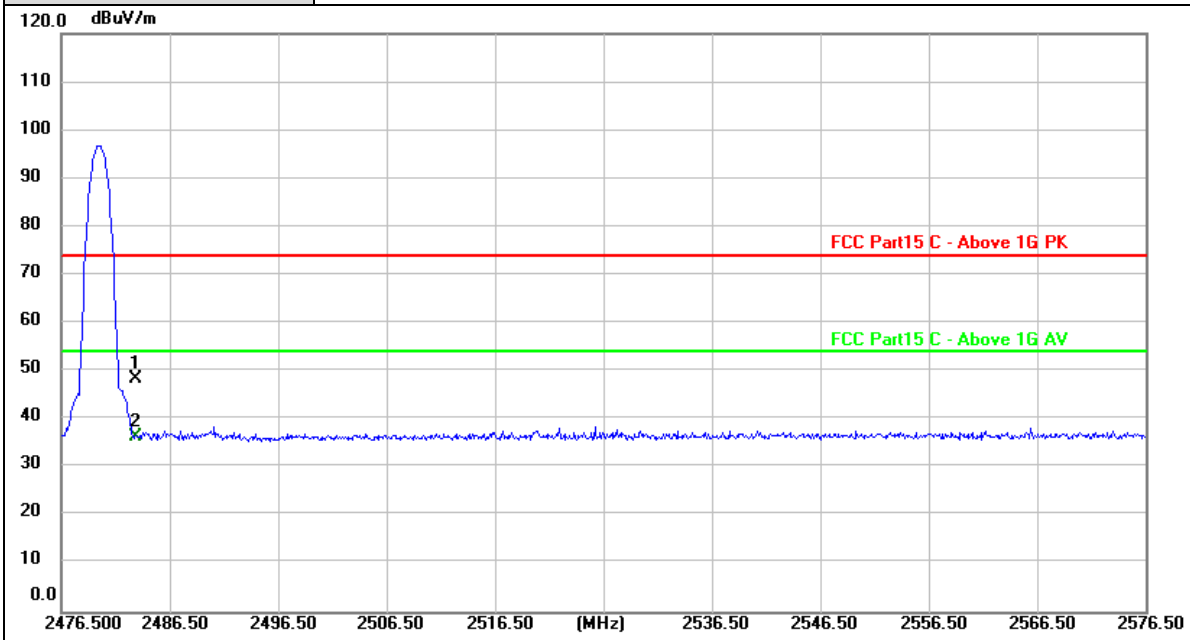


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	15.51	31.31	46.82	74.00	-27.18	peak
2 *	2390.000	5.08	31.31	36.39	54.00	-17.61	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	π/4-DQPSK Mode 2480MHz

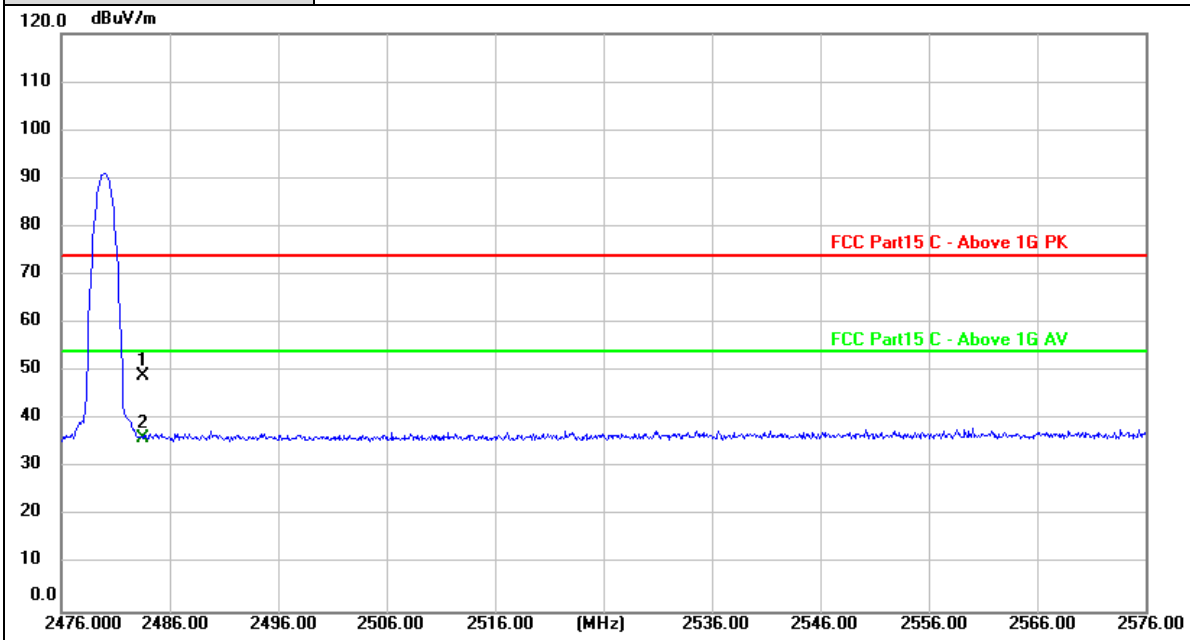


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	17.05	31.50	48.55	74.00	-25.45	peak
2 *	2483.500	4.81	31.50	36.31	54.00	-17.69	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	π/4-DQPSK Mode 2480MHz

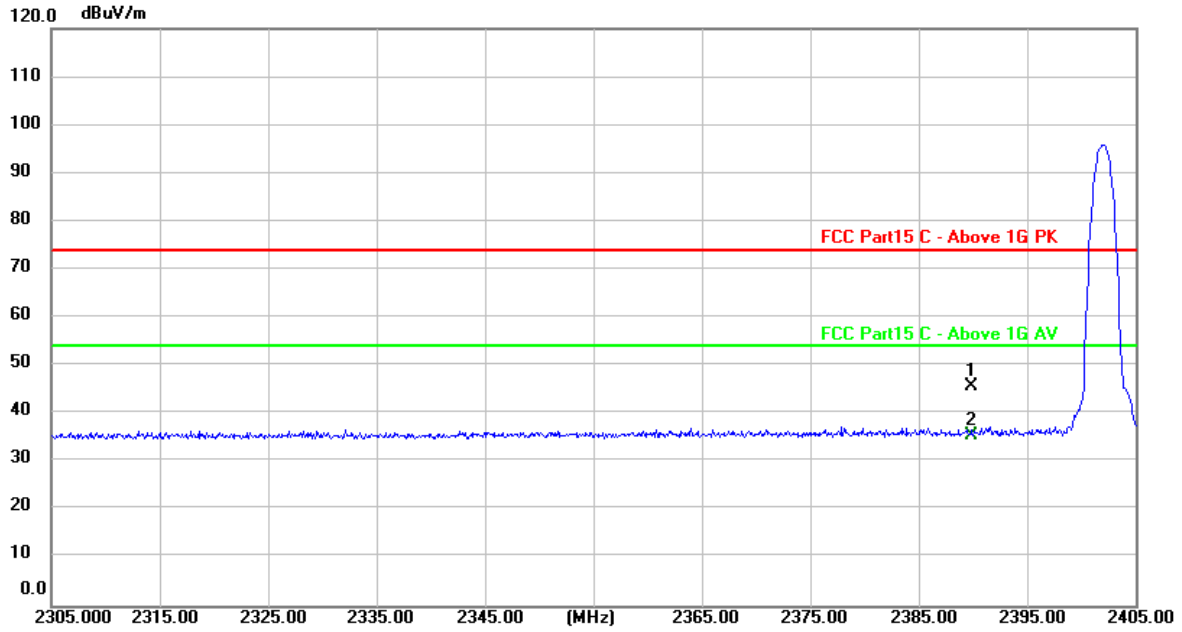


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	17.47	31.50	48.97	74.00	-25.03	peak
2 *	2483.500	4.60	31.50	36.10	54.00	-17.90	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	8-DPSK Mode 2402MHz

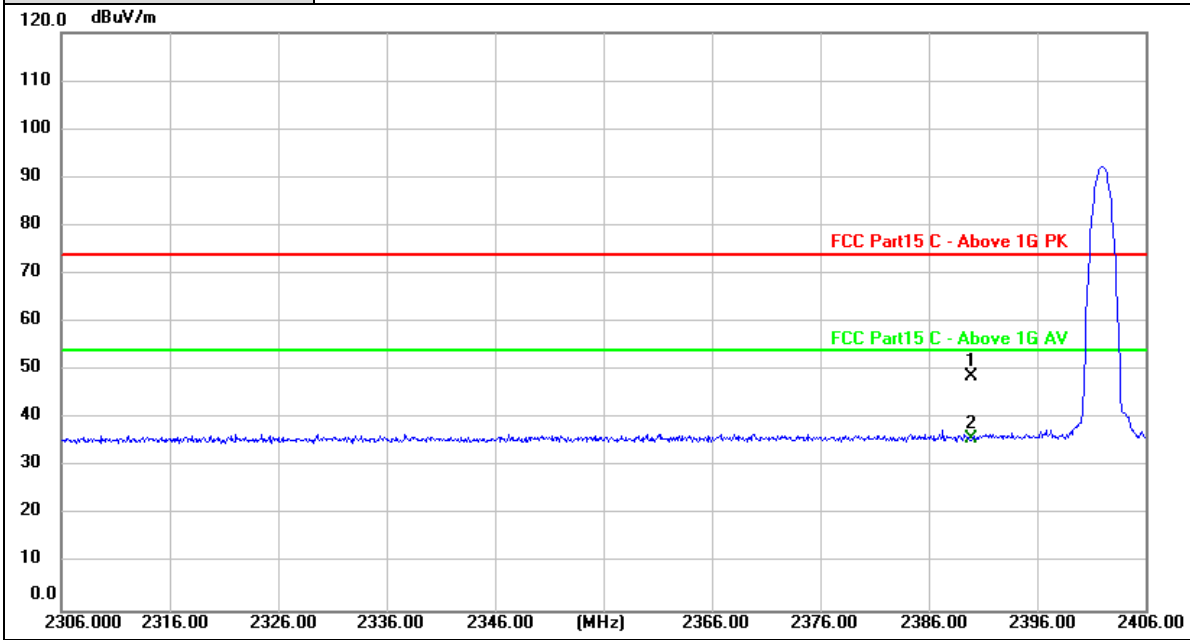


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	14.58	31.31	45.89	74.00	-28.11	peak
2 *	2390.000	4.26	31.31	35.57	54.00	-18.43	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	8-DPSK Mode 2402MHz

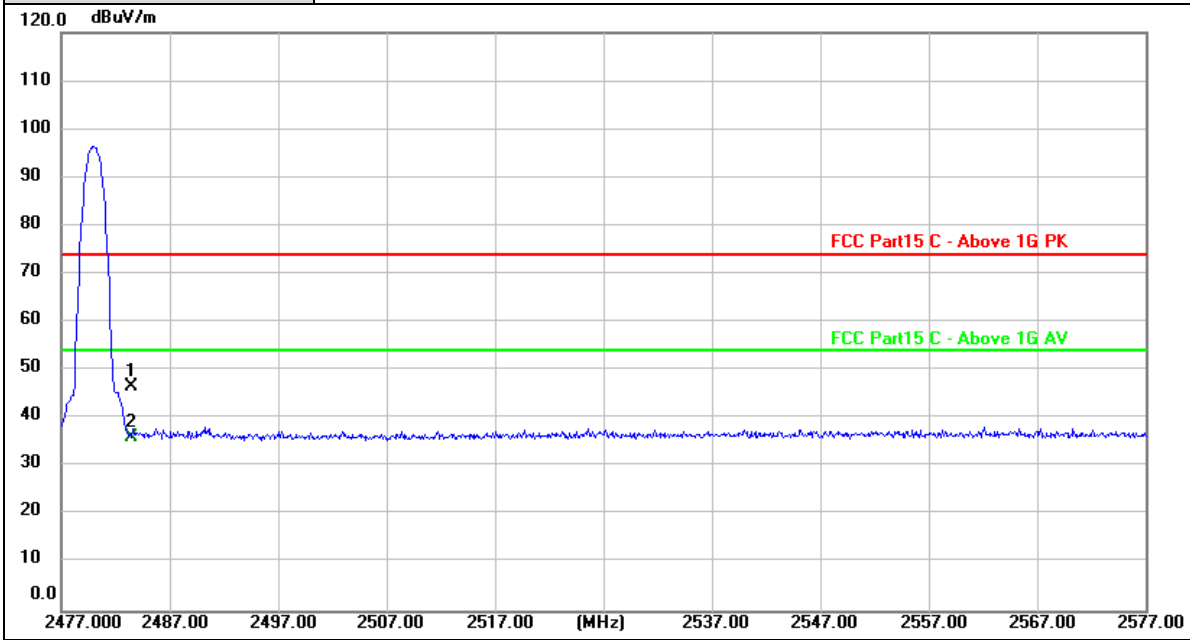


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	17.37	31.31	48.68	74.00	-25.32	peak
2 *	2390.000	4.50	31.31	35.81	54.00	-18.19	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Horizontal
Test Mode:	8-DPSK Mode 2480MHz

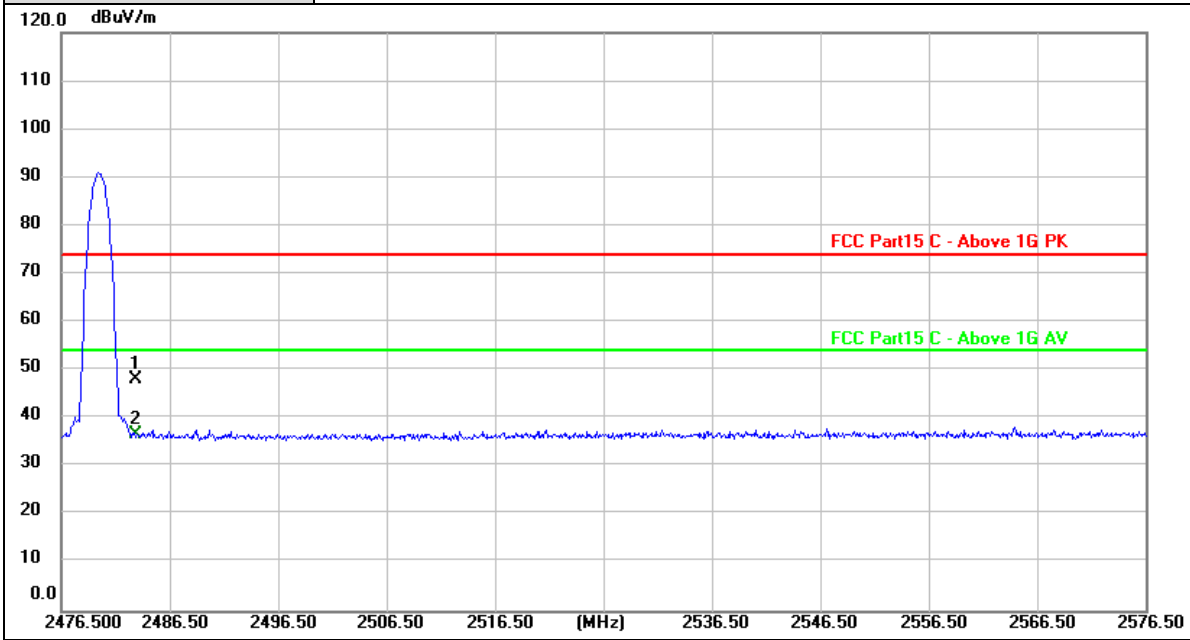


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	15.12	31.50	46.62	74.00	-27.38	peak
2 *	2483.500	4.56	31.50	36.06	54.00	-17.94	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Ant. Pol.	Vertical
Test Mode:	8-DPSK Mode 2480MHz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	16.65	31.50	48.15	74.00	-25.85	peak
2 *	2483.500	5.28	31.50	36.78	54.00	-17.22	AVG

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

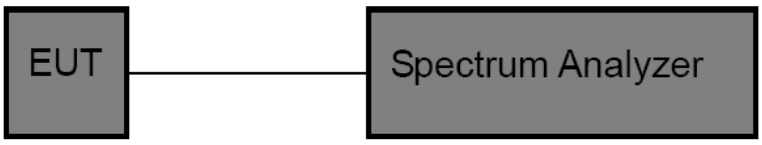
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

3.4. Band Edge and Spurious Emissions (Conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

Test Configuration



Test Procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
   RBW = 100 kHz, VBW ≥ RBW, scan up through 10th harmonic.
   Sweep = auto, Detector function = peak, Trace = max hold.
4. Measure and record the results in the test report.

Test Mode

Please refer to the clause 2.4.

Test Result

Band Edge Conducted Test

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.05	-46.47	≤-17.95	PASS
		High	2480	0.90	-43.72	≤-19.1	PASS
		Low	Hop_2402	1.68	-45.94	≤-18.32	PASS
		High	Hop_2480	1.00	-45.47	≤-19	PASS
2DH5	Ant1	Low	2402	1.30	-46.55	≤-18.7	PASS
		High	2480	-0.52	-45.53	≤-20.52	PASS
		Low	Hop_2402	2.70	-46.66	≤-17.3	PASS
		High	Hop_2480	-0.61	-45.22	≤-20.61	PASS
3DH5	Ant1	Low	2402	0.75	-46.48	≤-19.25	PASS
		High	2480	-0.15	-44.63	≤-20.15	PASS
		Low	Hop_2402	2.17	-46.24	≤-17.83	PASS
		High	Hop_2480	-1.37	-45.13	≤-21.37	PASS

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

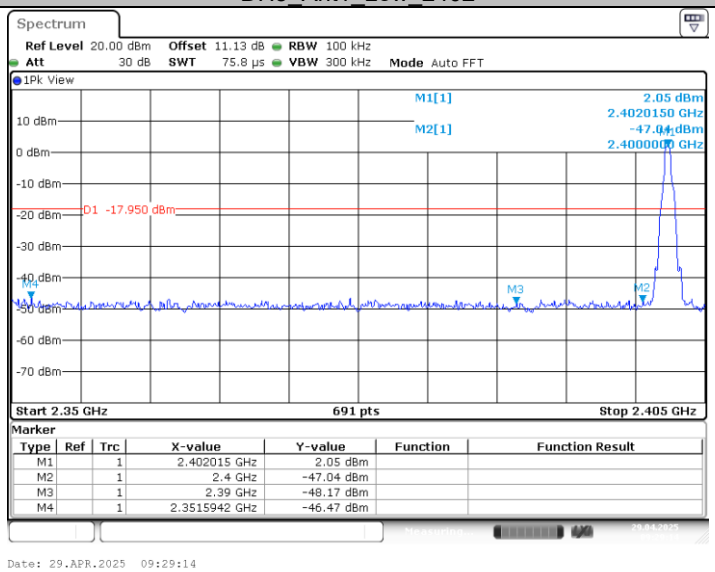
Conducted Spurious Emissions Test

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.24	2.24	---	PASS
			30~1000	2.24	-46.74	≤-17.76	PASS
			1000~26500	2.24	-48.54	≤-17.76	PASS
		2441	Reference	2.22	2.22	---	PASS
			30~1000	2.22	-45.97	≤-17.78	PASS
			1000~26500	2.22	-48.36	≤-17.78	PASS
		2480	Reference	1.16	1.16	---	PASS
			30~1000	1.16	-45.06	≤-18.84	PASS
			1000~26500	1.16	-48.32	≤-18.84	PASS
2DH5	Ant1	2402	Reference	1.20	1.20	---	PASS
			30~1000	1.20	-44.79	≤-18.8	PASS
			1000~26500	1.20	-48.04	≤-18.8	PASS
		2441	Reference	0.76	0.76	---	PASS
			30~1000	0.76	-45.72	≤-19.24	PASS
			1000~26500	0.76	-48.6	≤-19.24	PASS
		2480	Reference	-0.08	-0.08	---	PASS
			30~1000	-0.08	-45.94	≤-20.08	PASS
			1000~26500	-0.08	-49.07	≤-20.08	PASS
3DH5	Ant1	2402	Reference	0.95	0.95	---	PASS
			30~1000	0.95	-45.88	≤-19.05	PASS
			1000~26500	0.95	-47.91	≤-19.05	PASS
		2441	Reference	0.48	0.48	---	PASS
			30~1000	0.48	-46.56	≤-19.52	PASS
			1000~26500	0.48	-48.96	≤-19.52	PASS
		2480	Reference	0.24	0.24	---	PASS
			30~1000	0.24	-46.37	≤-19.76	PASS
			1000~26500	0.24	-48.74	≤-19.76	PASS

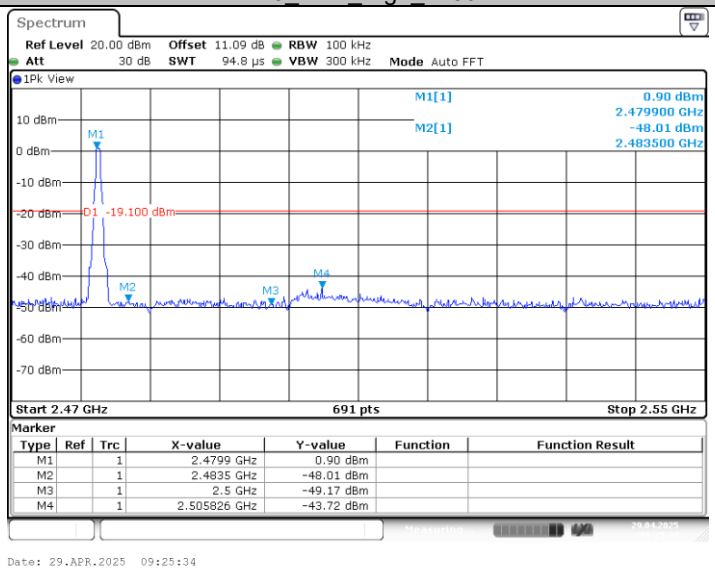
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Band Edge Conducted Test plot as follows:

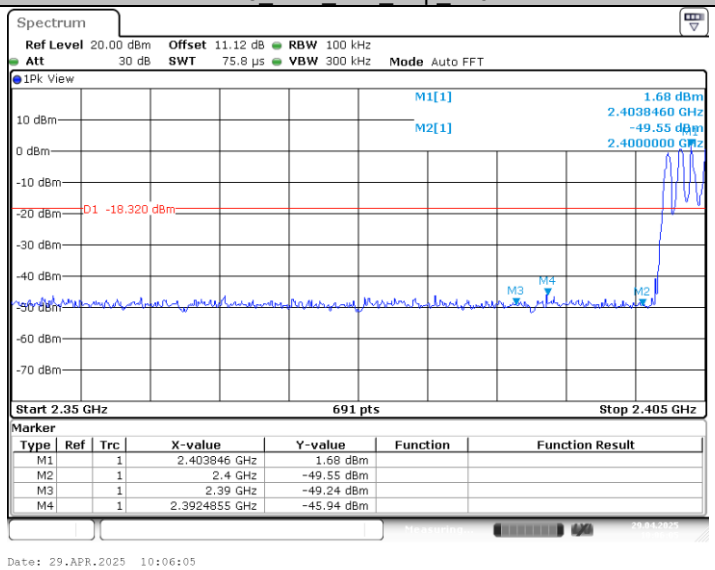
DH5_Ant1_Low_2402



DH5_Ant1_High_2480

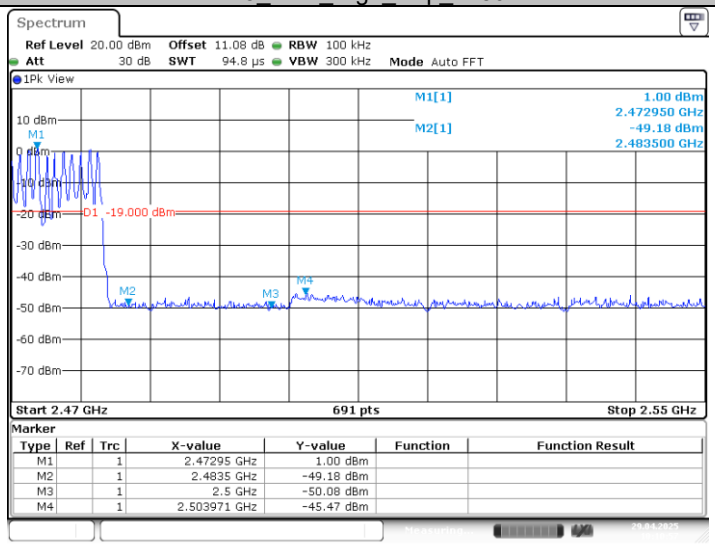


DH5_Ant1_Low_Hop_2402



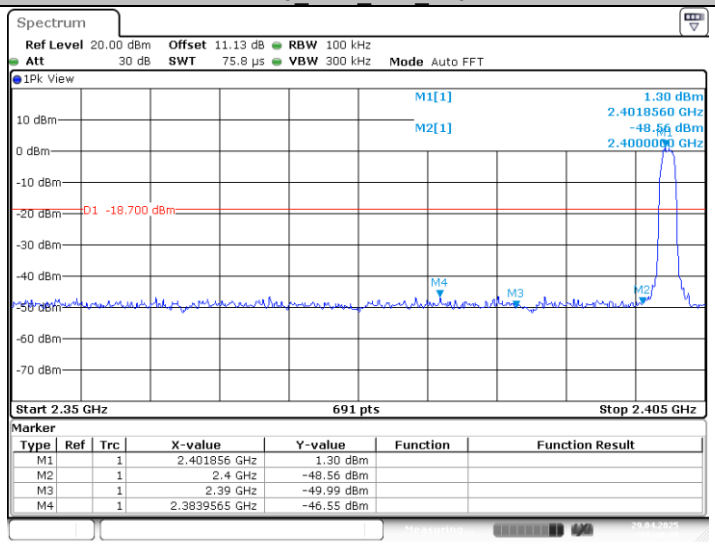
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

DH5_Ant1_High_Hop_2480



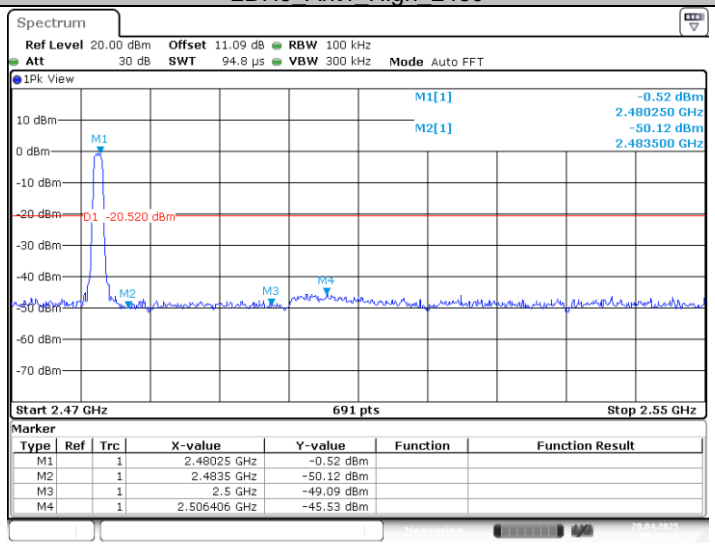
Date: 29.APR.2025 10:10:57

2DH5_Ant1_Low_2402



Date: 29.APR.2025 09:40:40

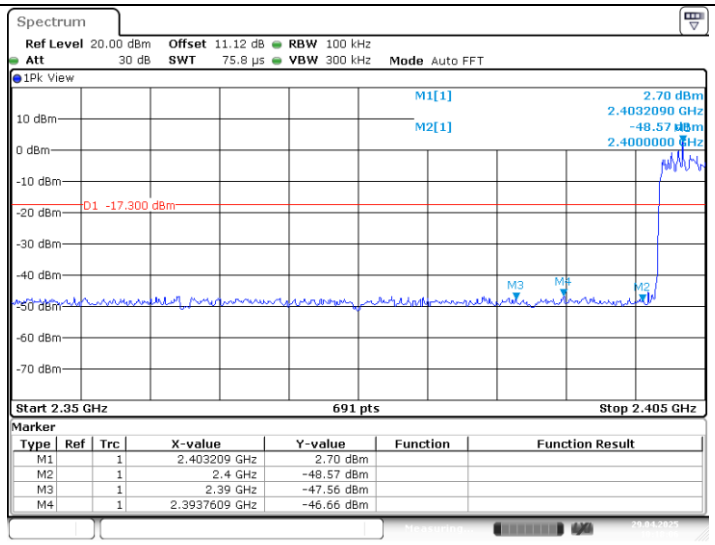
2DH5_Ant1_High_2480



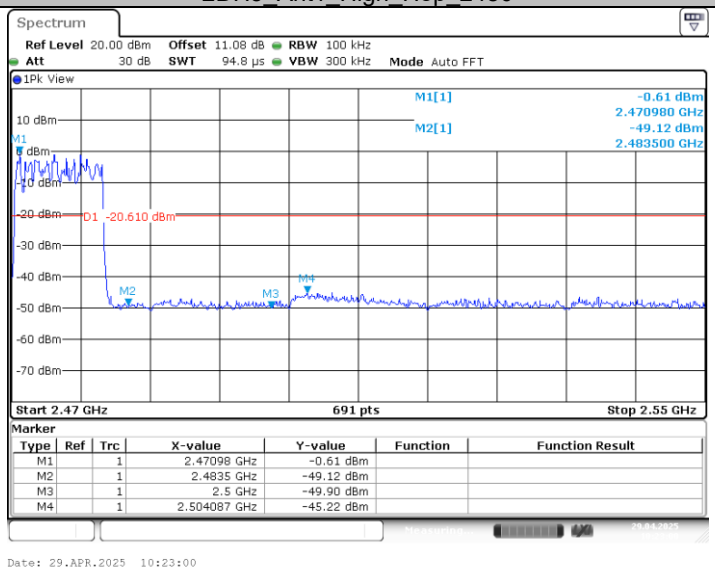
Date: 29.APR.2025 09:46:14

2DH5_Ant1_Low_Hop_2402

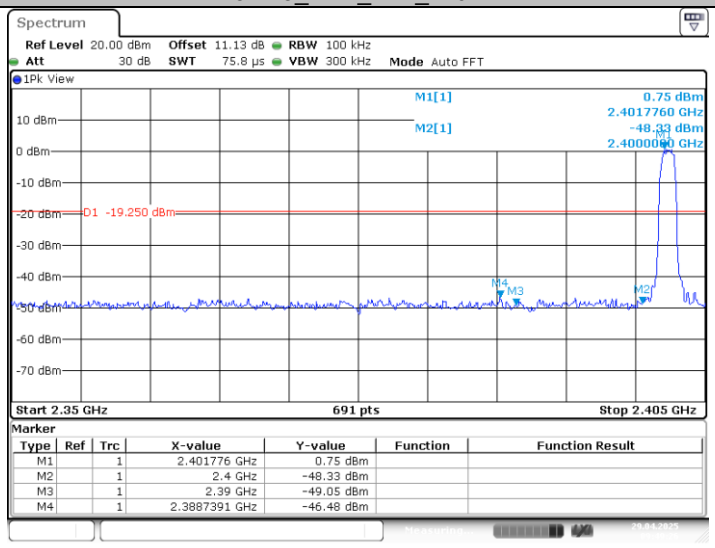
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



2DH5_Ant1_High_Hop_2480

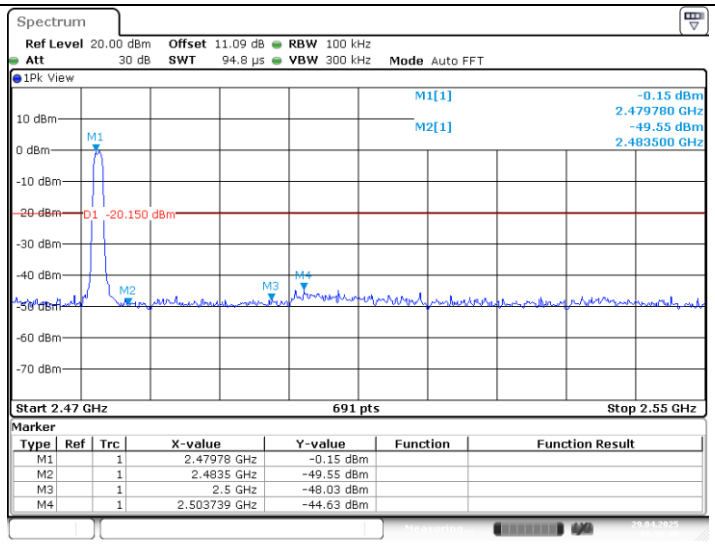


3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480

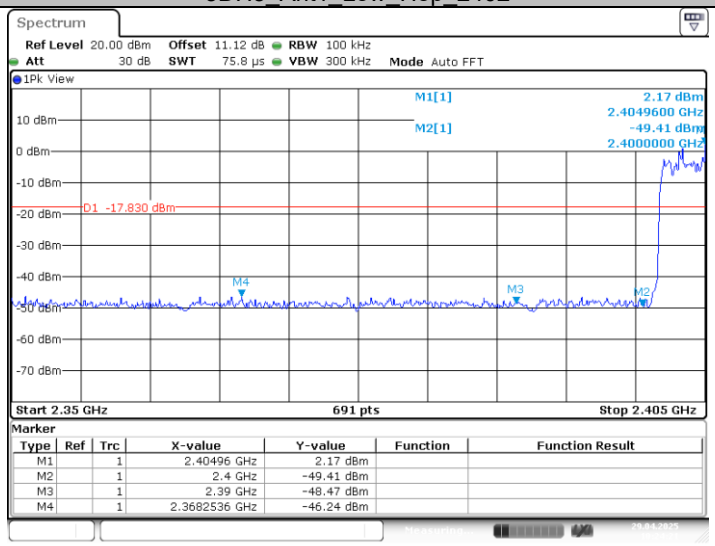
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47978 GHz	-0.15 dBm		
M2		1	2.4835 GHz	-49.55 dBm		
M3		1	2.5 GHz	-48.03 dBm		
M4		1	2.503739 GHz	-44.63 dBm		

Date: 29.APR.2025 09:58:40

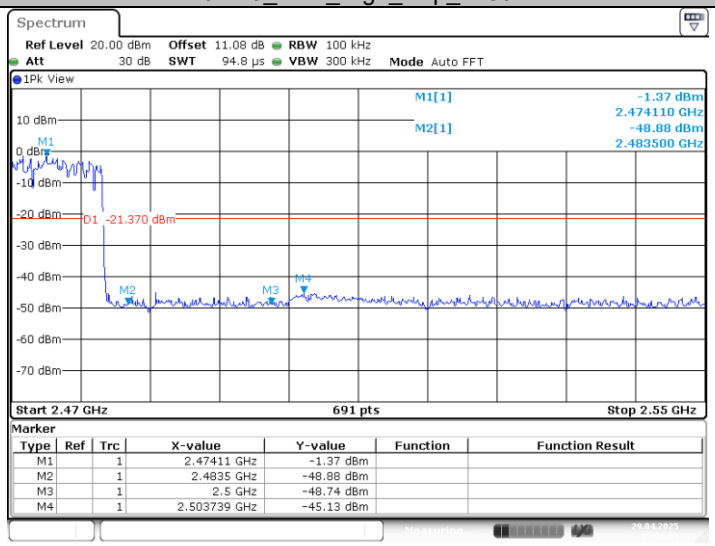
3DH5_Ant1_Low_Hop_2402



Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40496 GHz	2.17 dBm		
M2		1	2.4 GHz	-49.41 dBm		
M3		1	2.39 GHz	-48.47 dBm		
M4		1	2.3682536 GHz	-46.24 dBm		

Date: 29.APR.2025 10:24:21

3DH5_Ant1_High_Hop_2480



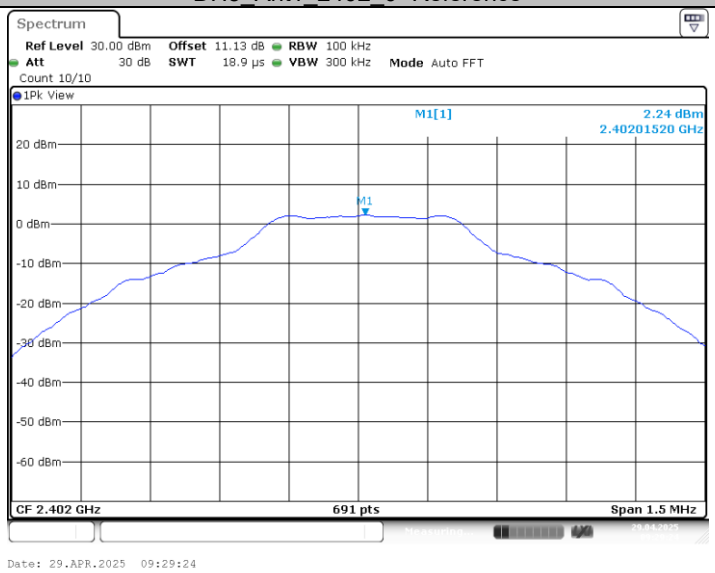
Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47411 GHz	-1.37 dBm		
M2		1	2.4835 GHz	-48.88 dBm		
M3		1	2.5 GHz	-48.74 dBm		
M4		1	2.503739 GHz	-45.13 dBm		

Date: 29.APR.2025 10:32:59

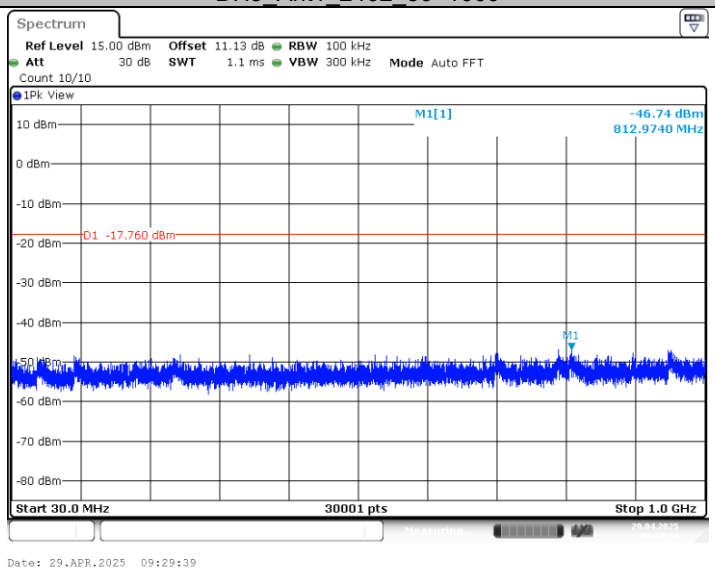
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

Conducted Spurious Emissions Test plot as follows

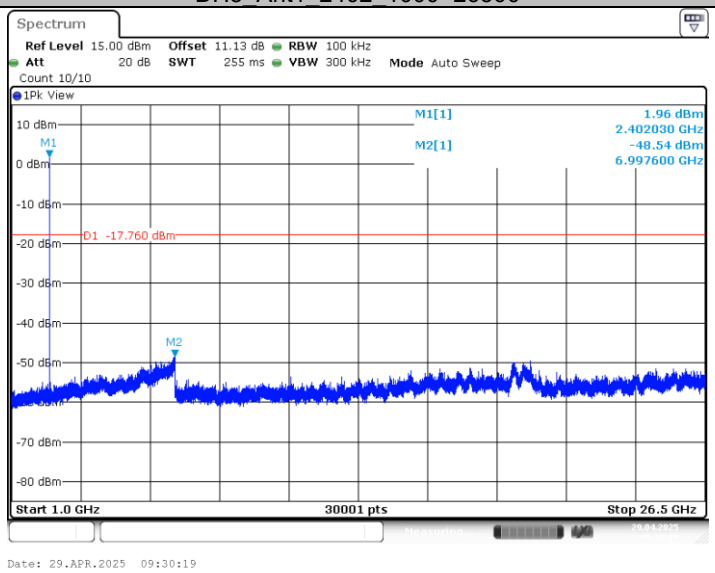
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000

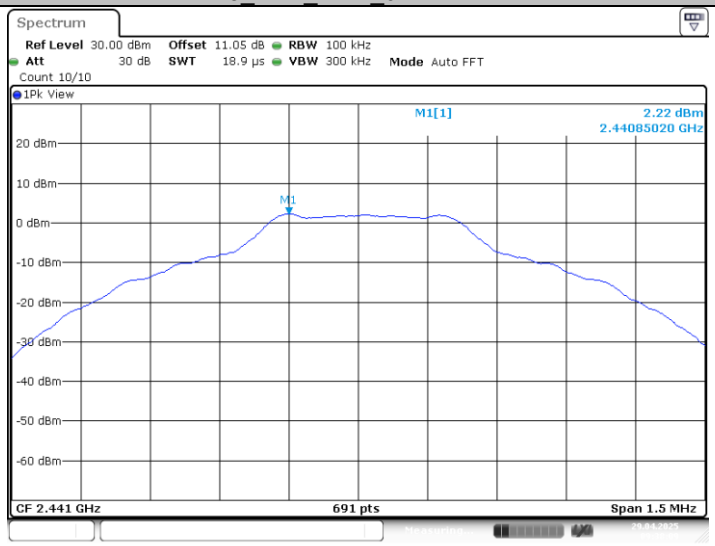


DH5_Ant1_2402_1000~26500



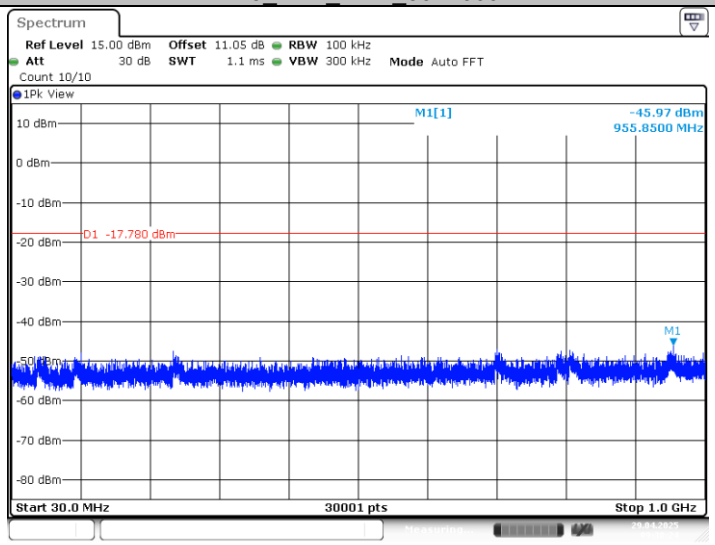
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

DH5_Ant1_2441_0~Reference



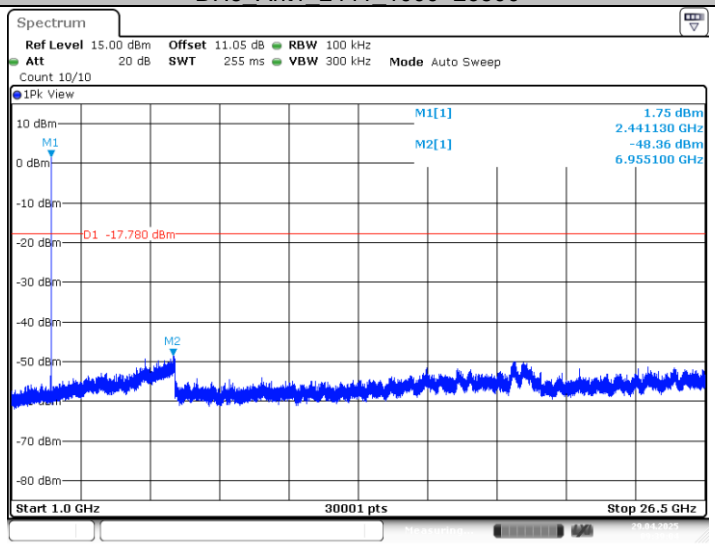
Date: 29.APR.2025 09:38:08

DH5_Ant1_2441_30~1000



Date: 29.APR.2025 09:38:23

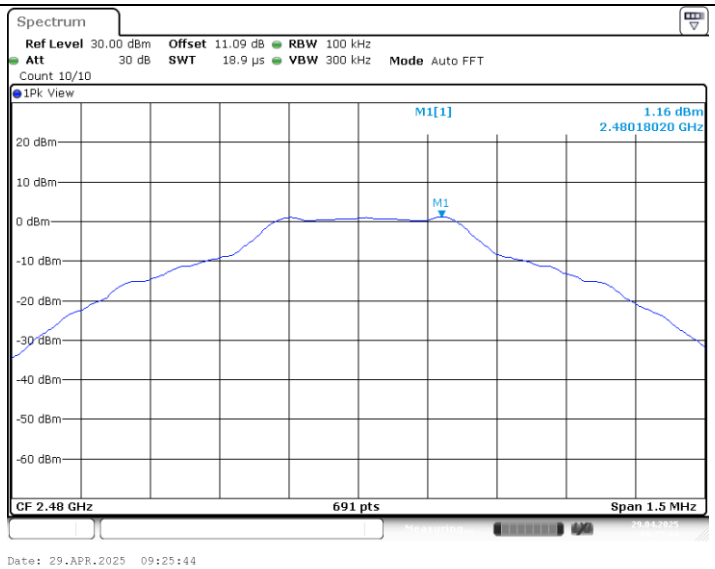
DH5_Ant1_2441_1000~26500



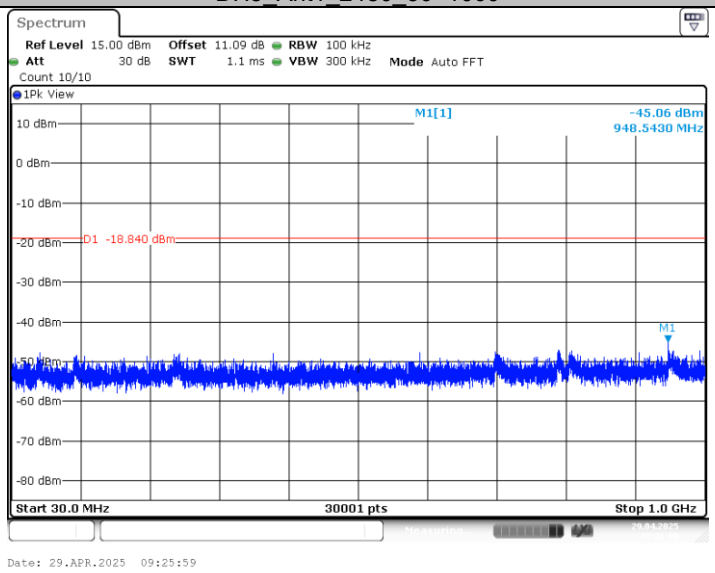
Date: 29.APR.2025 09:39:03

DH5_Ant1_2480_0~Reference

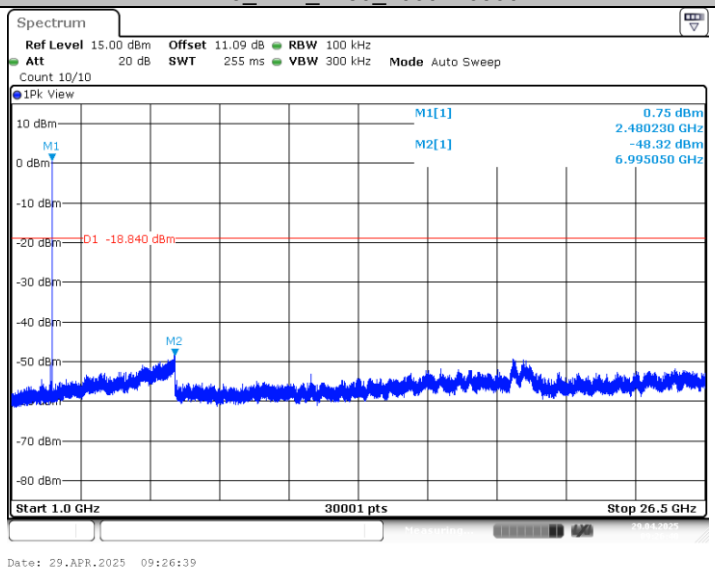
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



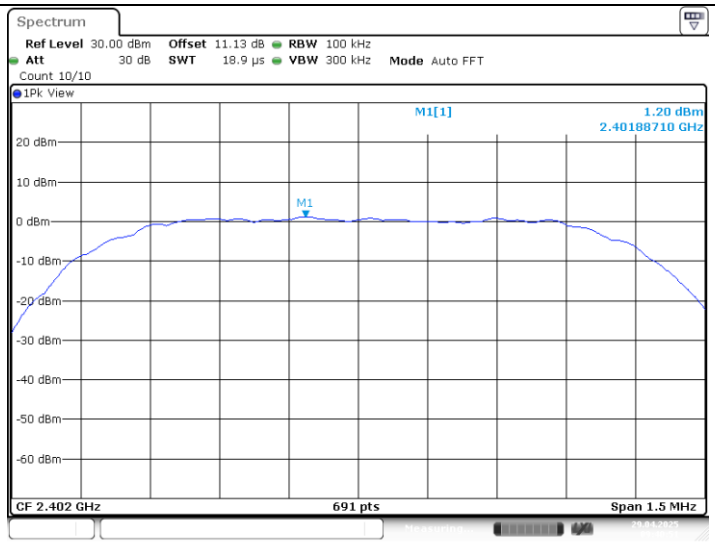
DH5_Ant1_2480_30~1000



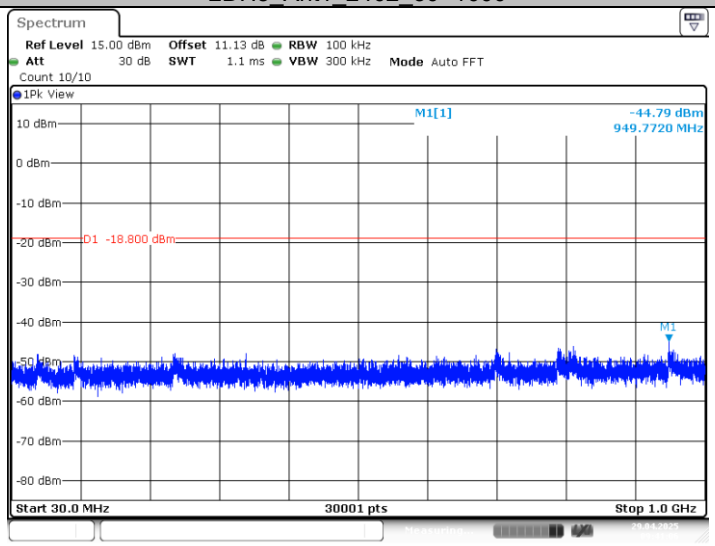
DH5_Ant1_2480_1000~26500



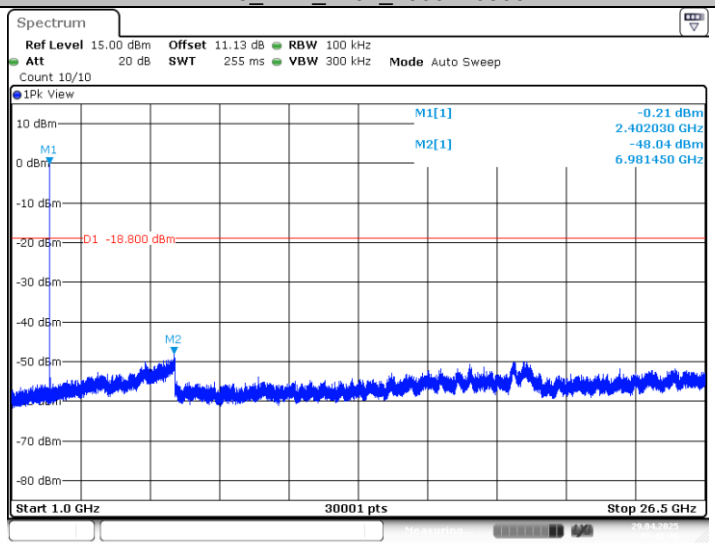
2DH5_Ant1_2402_0~Reference



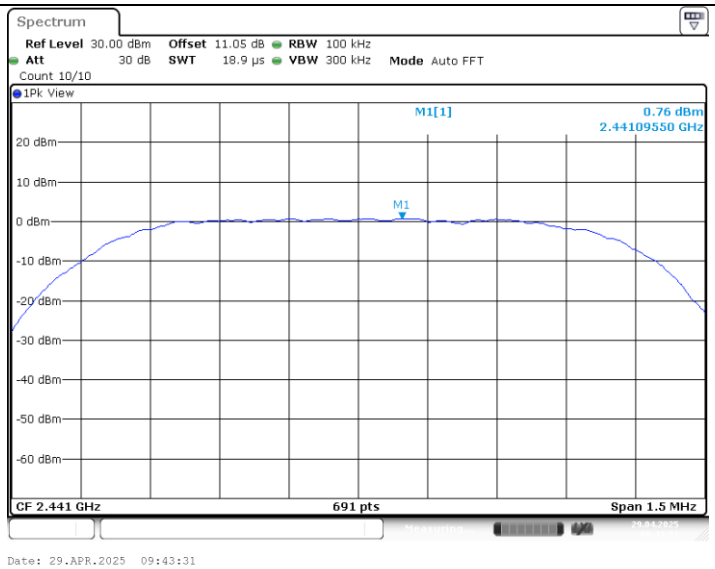
2DH5_Ant1_2402_30~1000



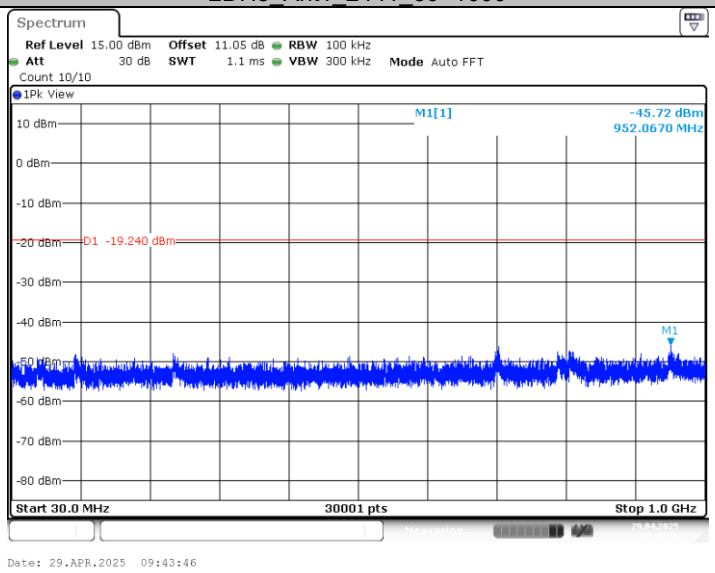
2DH5_Ant1_2402_1000~26500



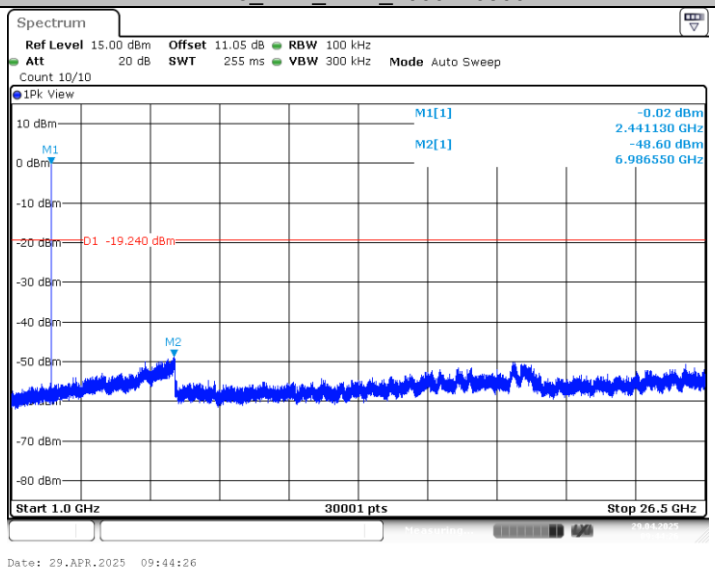
2DH5_Ant1_2441_0~Reference



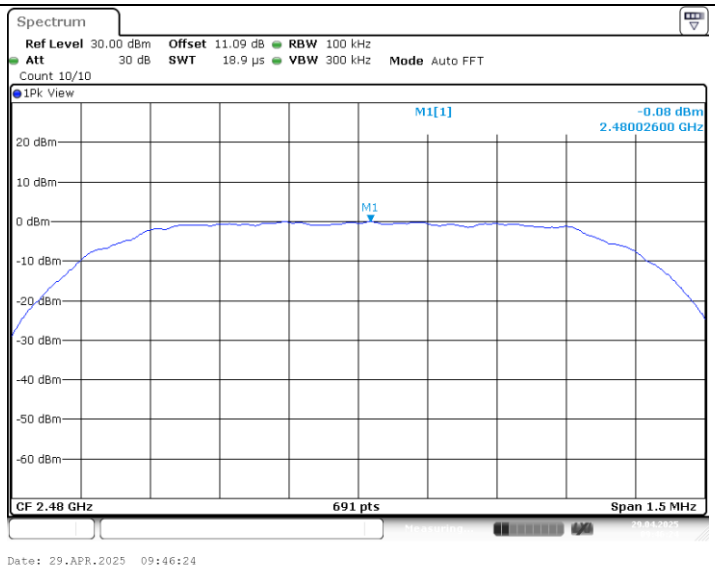
2DH5_Ant1_2441_30~1000



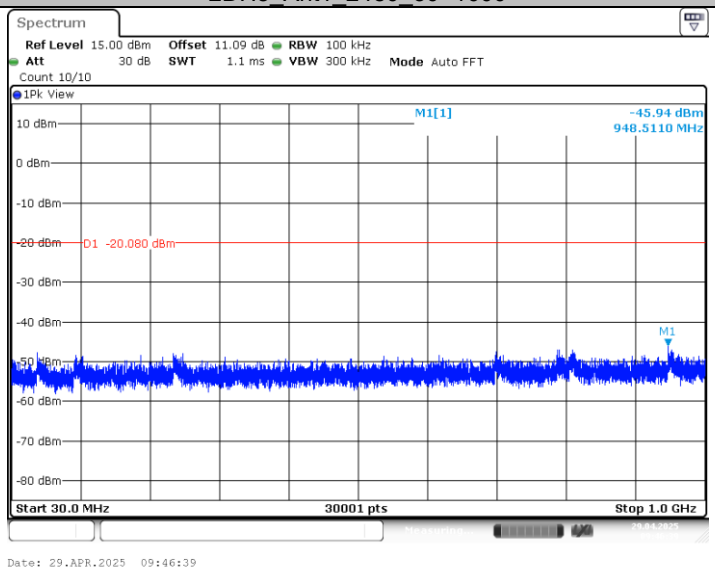
2DH5_Ant1_2441_1000~26500



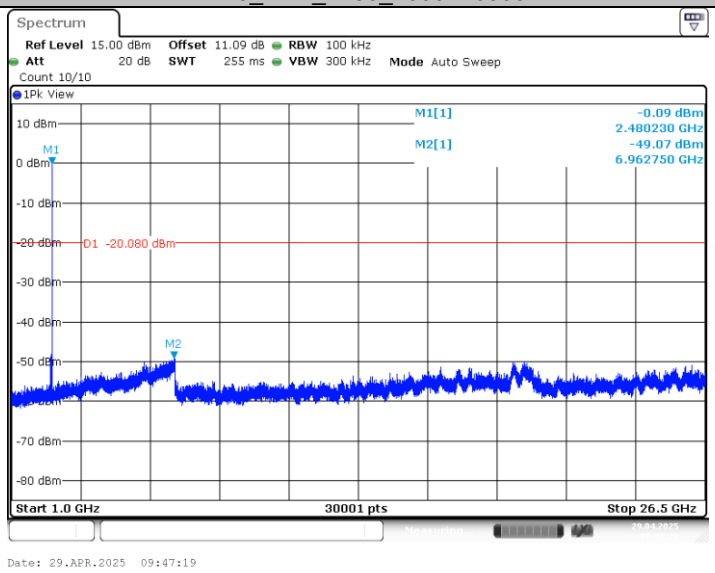
2DH5_Ant1_2480_0~Reference



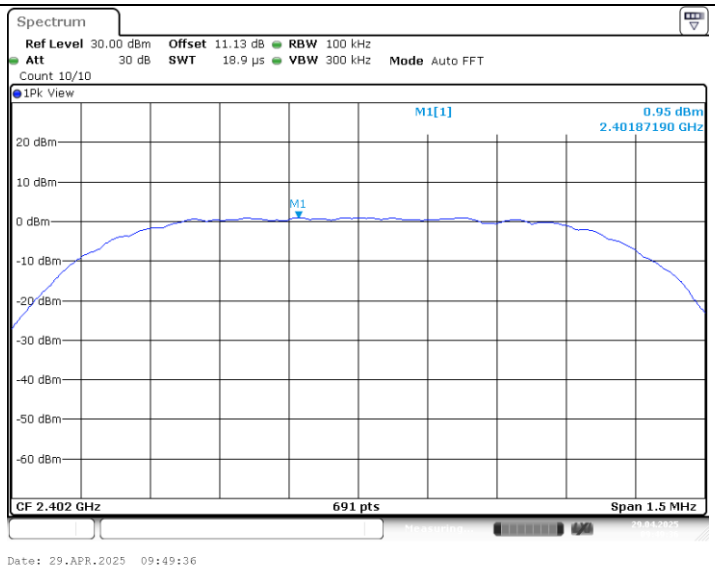
2DH5_Ant1_2480_30~1000



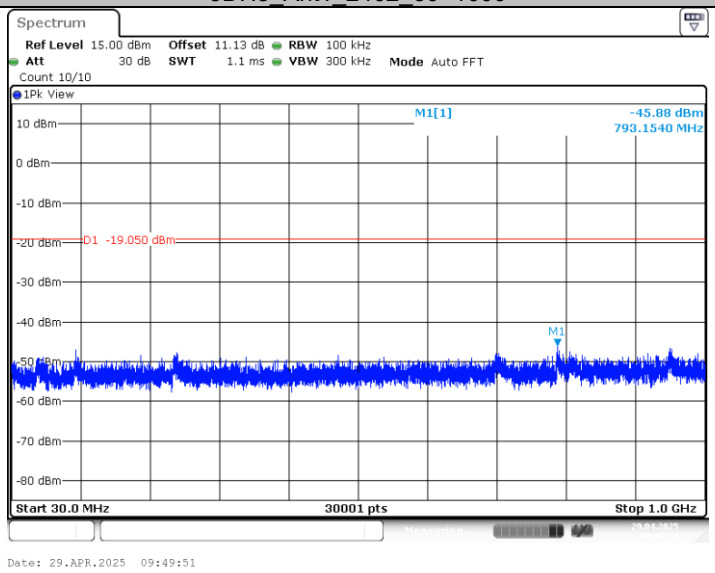
2DH5_Ant1_2480_1000~26500



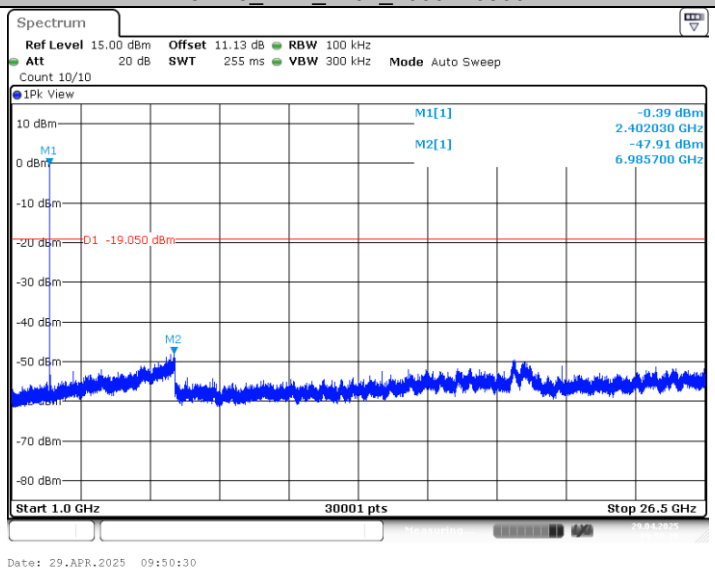
3DH5_Ant1_2402_0~Reference



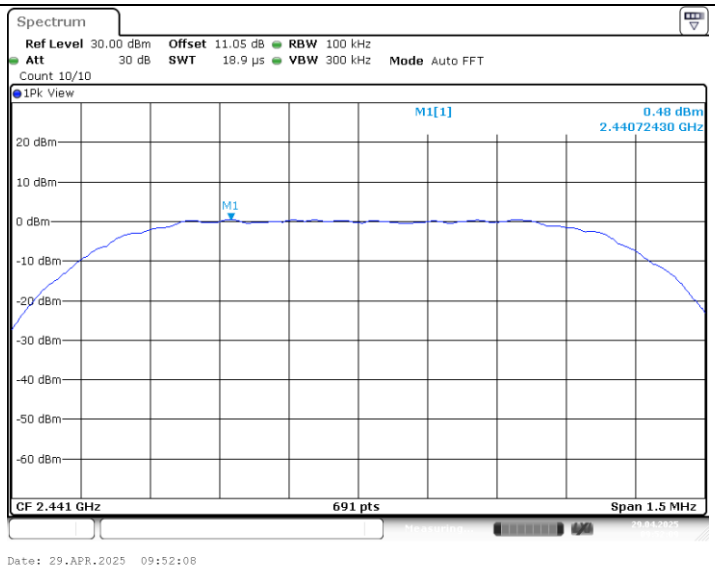
3DH5_Ant1_2402_30~1000



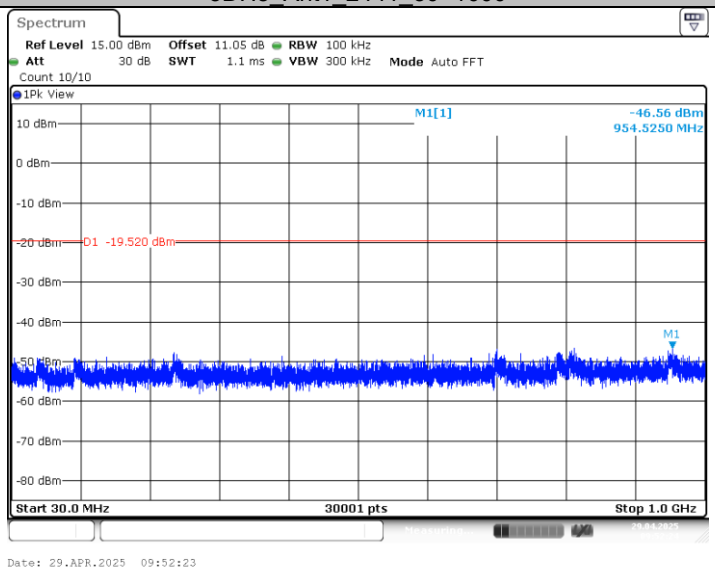
3DH5_Ant1_2402_1000~26500



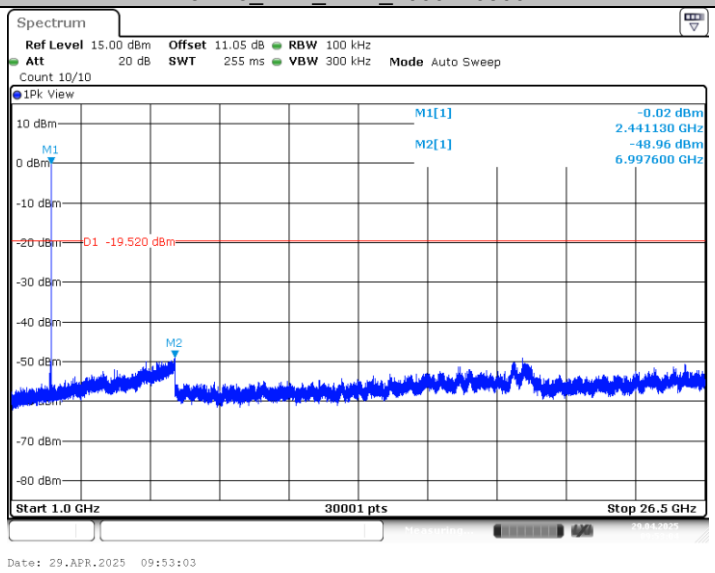
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000

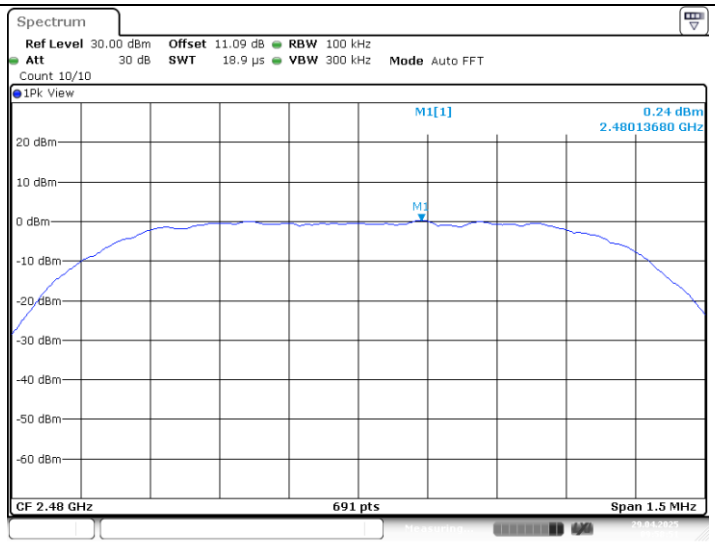


3DH5_Ant1_2441_1000~26500



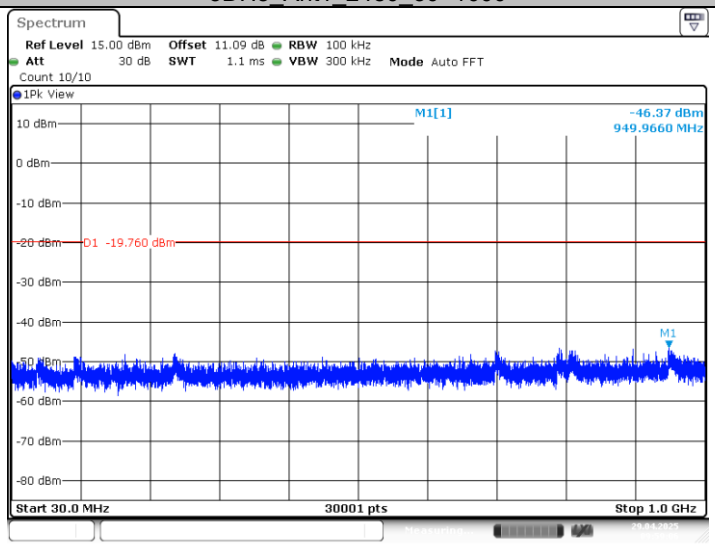
3DH5_Ant1_2480_0~Reference

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



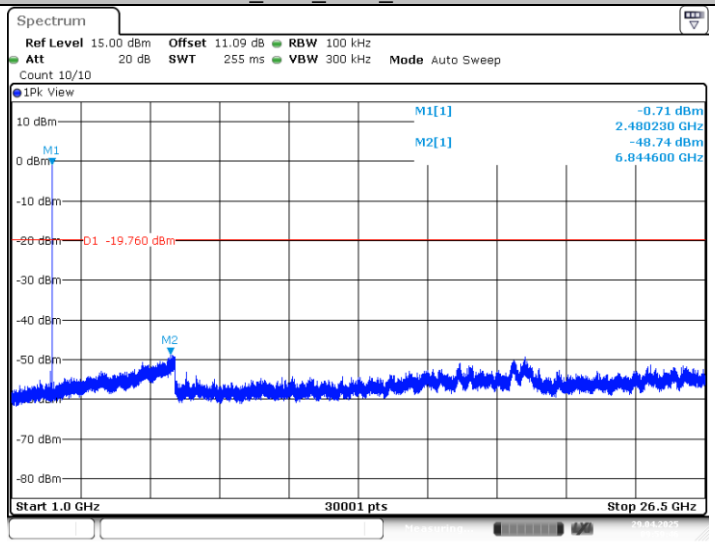
Date: 29.APR.2025 09:58:50

3DH5_Ant1_2480_30~1000



Date: 29.APR.2025 09:59:05

3DH5_Ant1_2480_1000~26500



Date: 29.APR.2025 09:59:45

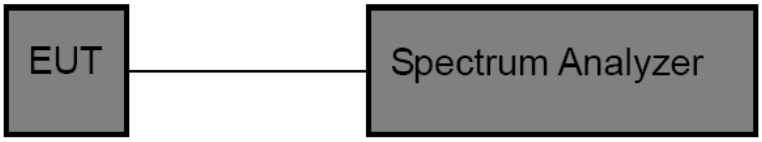
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

3.5. 20dB Bandwidth

Limit

N/A

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. OCB and 20dB Spectrum Setting:
   (1) Set RBW = 1% ~ 5% occupied bandwidth.
   (2) Set the video bandwidth (VBW) ≥ 3 RBW.
   (3) Detector = Peak.
   (4) Trace mode = Max hold.
   (5) Sweep = Auto couple.

Note: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

Test Mode

Please refer to the clause 2.4.

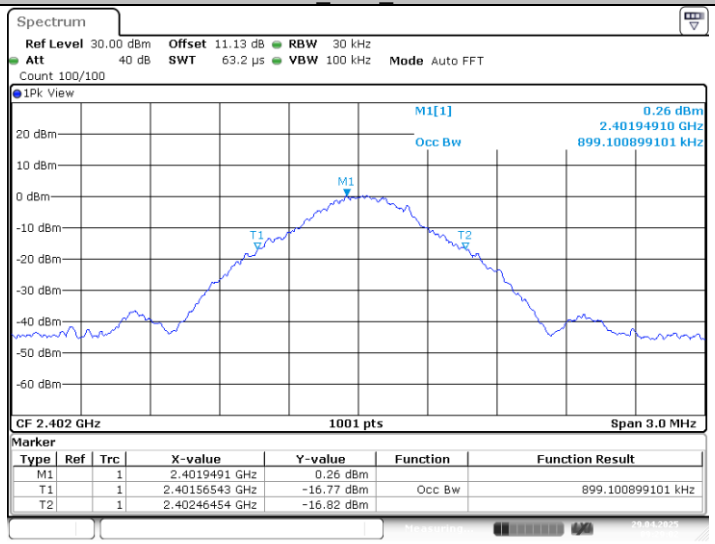
Test Result

Test Mode	Frequency (MHz)	99% Bandwidth (MHz)	20dB Bandwidth (MHz)	20dB Bandwidth *2/3 (MHz)
GFSK	2402	0.899	1.03	0.687
	2441	0.899	0.98	0.653
	2480	0.905	1.04	0.693
π/4-DQPSK	2402	1.19	1.36	0.907
	2441	1.199	1.36	0.907
	2480	1.193	1.37	0.913
8-DPSK	2402	1.19	1.36	0.907
	2441	1.193	1.35	0.900
	2480	1.193	1.37	0.913

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

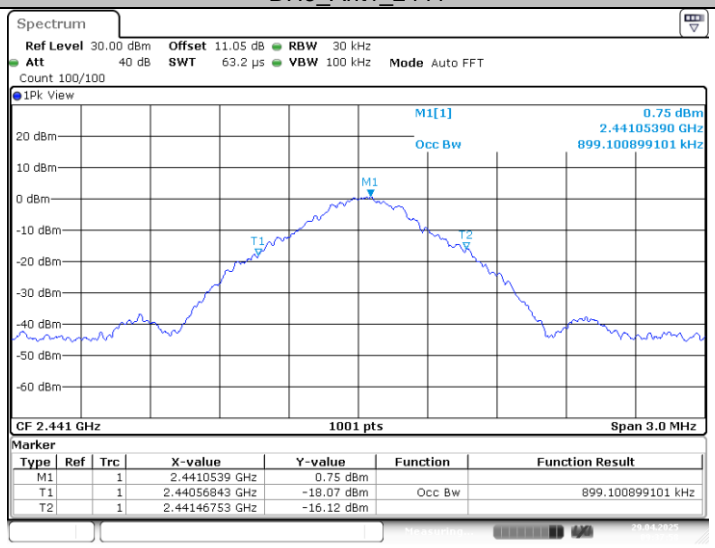
99% Bandwidth:

DH5_Ant1_2402



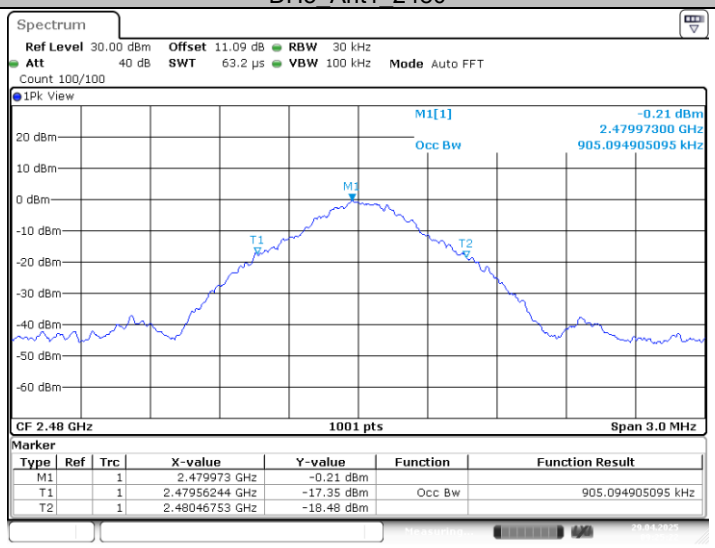
Date: 29.APR.2025 09:29:02

DH5_Ant1_2441



Date: 29.APR.2025 09:37:58

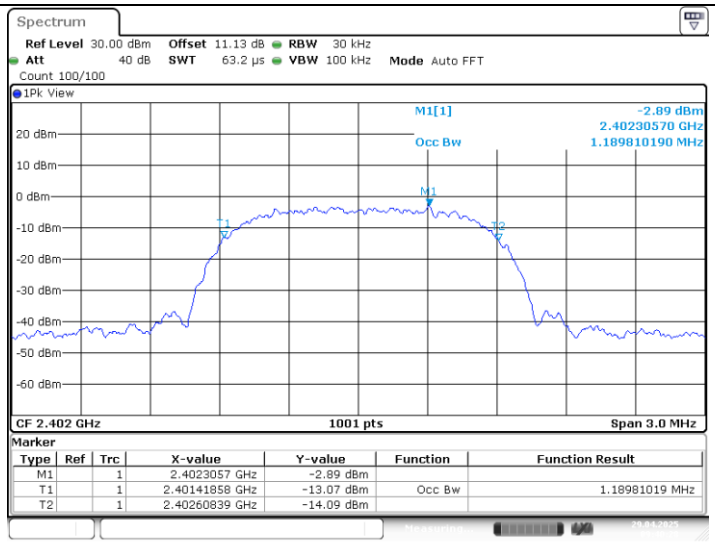
DH5_Ant1_2480



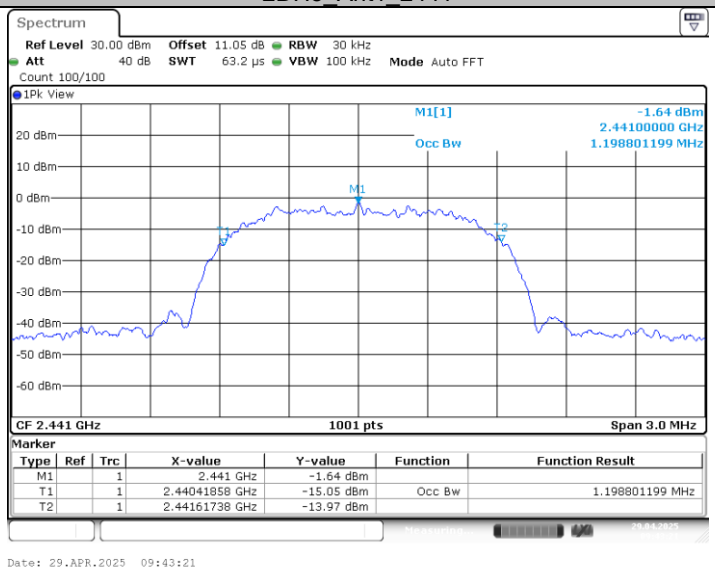
Date: 29.APR.2025 09:25:22

2DH5_Ant1_2402

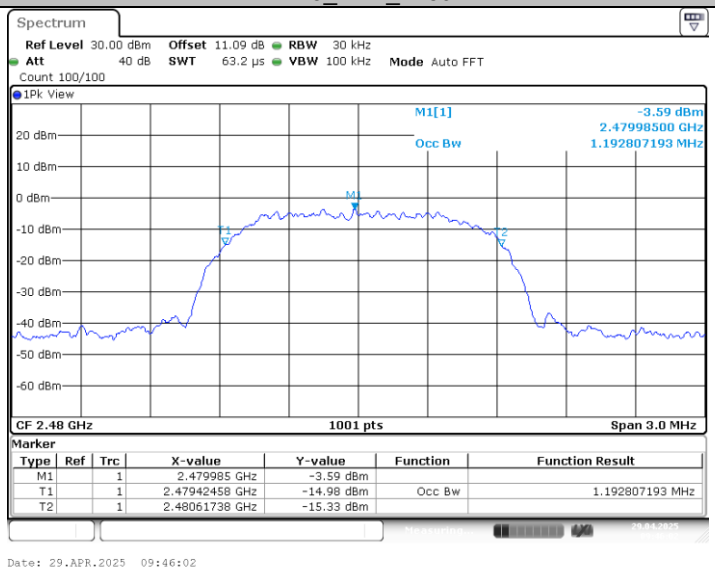
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



2DH5_Ant1_2441

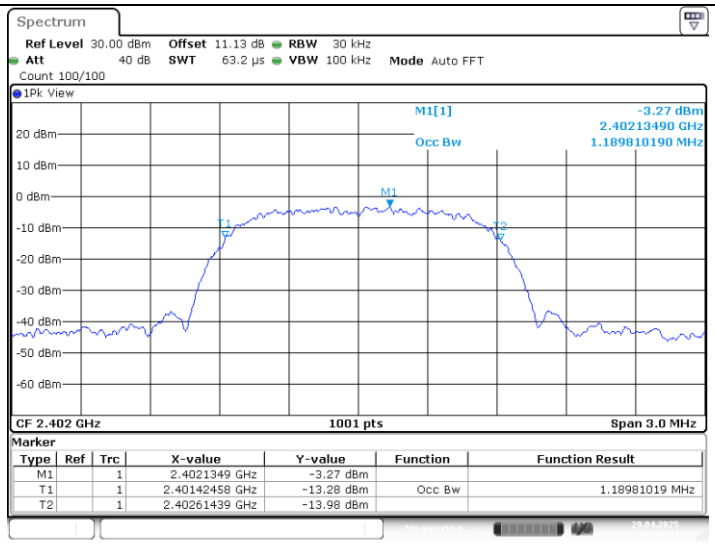


2DH5_Ant1_2480

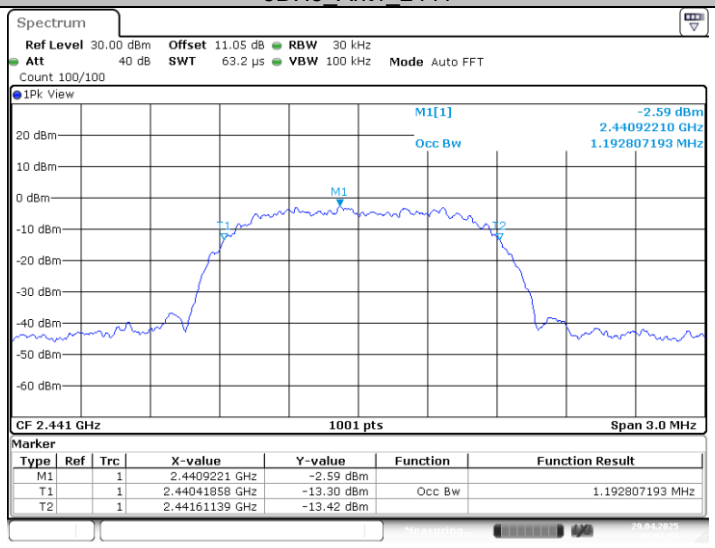


3DH5_Ant1_2402

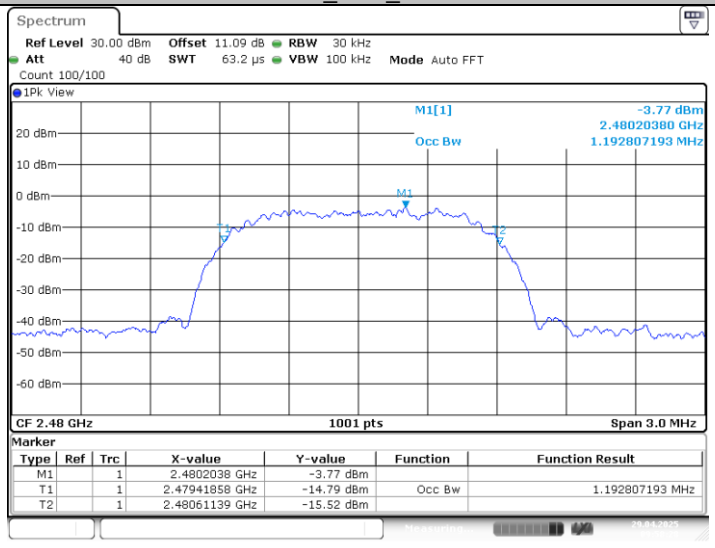
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



3DH5_Ant1_2441



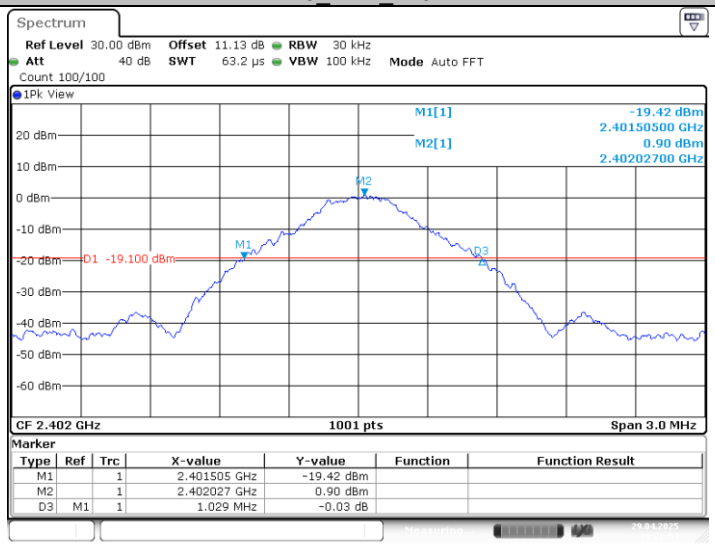
3DH5_Ant1_2480



For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com

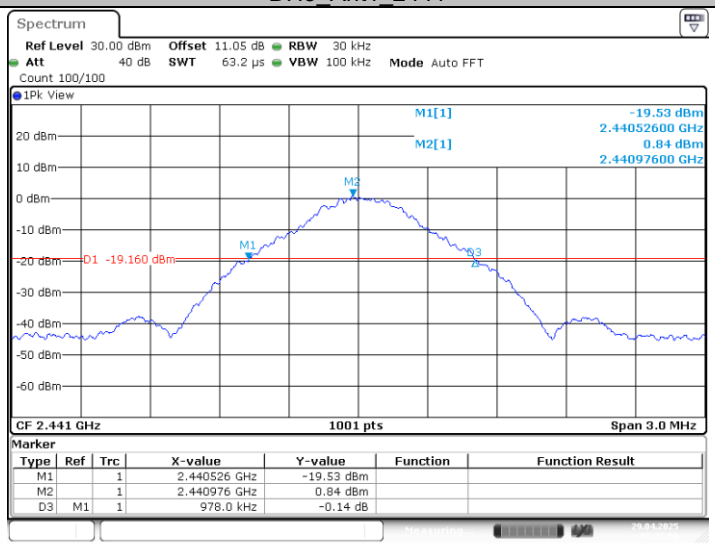
20dB Bandwidth:

DH5_Ant1_2402



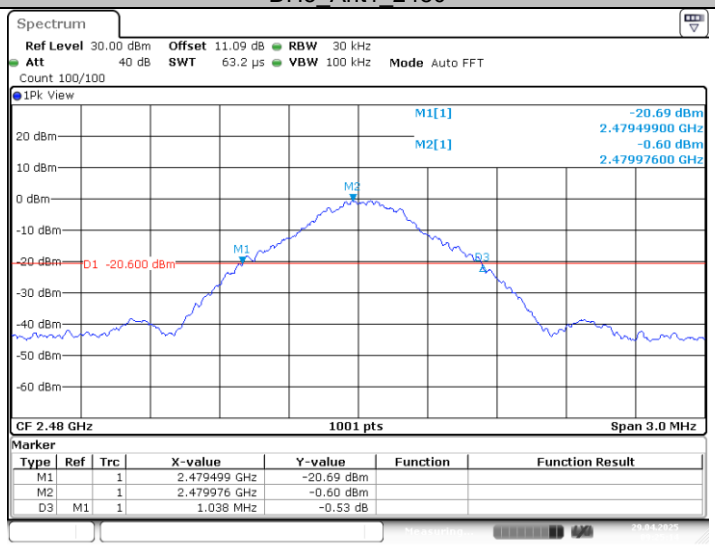
Date: 29.APR.2025 09:28:53

DH5_Ant1_2441



Date: 29.APR.2025 09:37:50

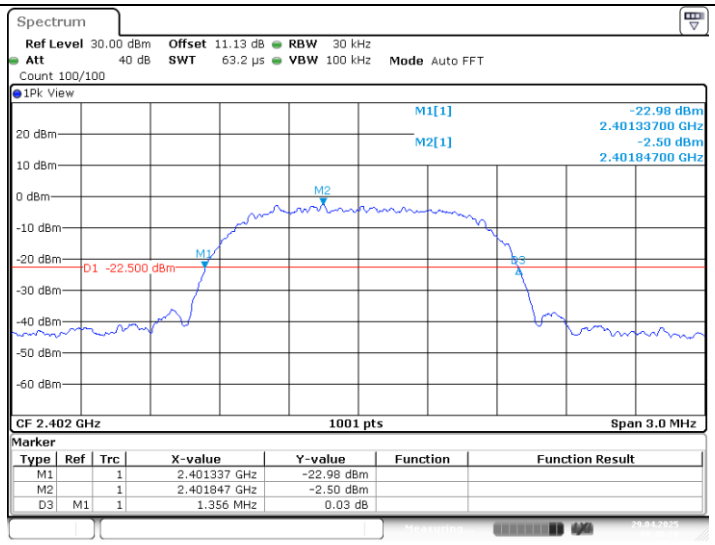
DH5_Ant1_2480



Date: 29.APR.2025 09:25:14

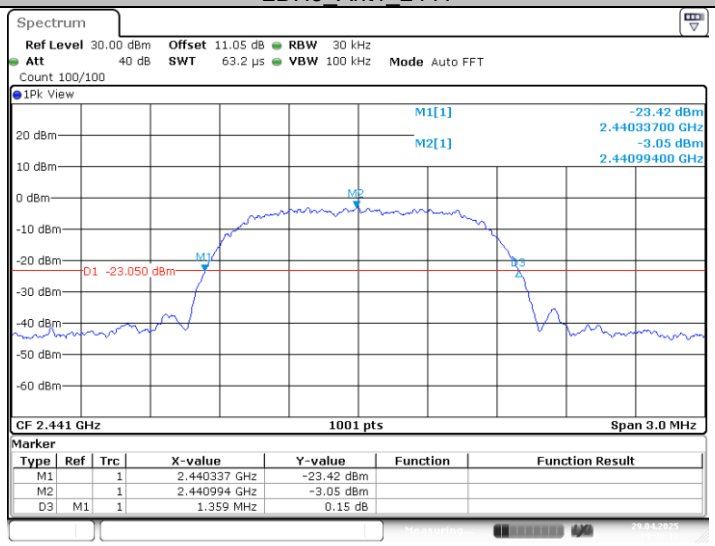
2DH5_Ant1_2402

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com



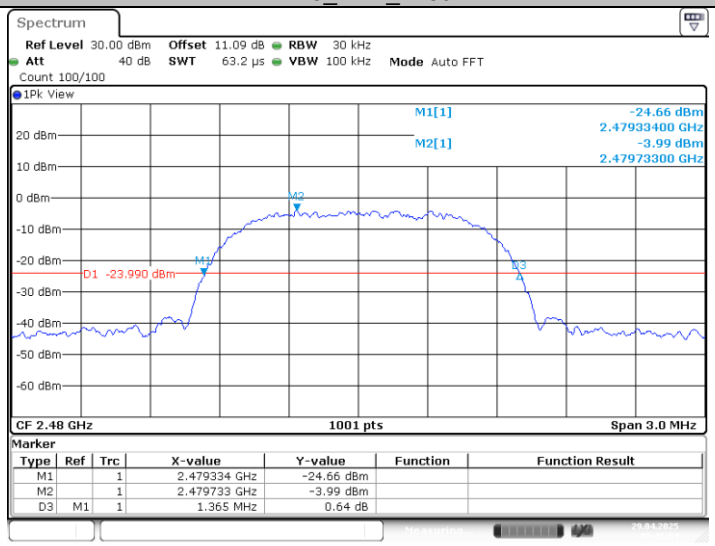
Date: 29.APR.2025 09:40:20

2DH5_Ant1_2441



Date: 29.APR.2025 09:43:12

2DH5_Ant1_2480



Date: 29.APR.2025 09:45:53

3DH5_Ant1_2402

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cncaq.com