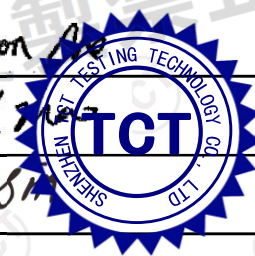


MIC REPORT

Test Report No..... :	TCT250212E001	
Date of issue..... :	Jun. 25, 2025	
Testing laboratory	Shenzhen TCT Testing Technology Co., Ltd.	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China	
Applicant's name..... :	SHENZHEN POWEROAK NEWENER CO., LTD	
Address..... :	F19, BLD No.1, Kaidaer, Tongsha Rd No.168, Xili Street, Nanshan, Shenzhen, China	
Manufacturer's name ... :	SHENZHEN POWEROAK NEWENER CO., LTD	
Address..... :	F19, BLD No.1, Kaidaer, Tongsha Rd No.168, Xili Street, Nanshan, Shenzhen, China	
Standard(s)	Article 2, Paragraph1, item 19 MIC Notice No.88 Appendix No.43	
Product Name..... :	Portable Power Station	
Trade Mark	BLUETTI	
Model/Type reference..... :	Apex 300	
Rating(s)..... :	Refer to EUT description of page 3	
Date of receipt of test item	Feb. 12, 2025	
Date (s) of performance of test..... :	Feb. 12, 2025 ~ Jun. 25, 2025	
Tested by (+signature) ... :	Aaron MO	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

**General disclaimer:**

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1. General Product Information

1.1. EUT description

Product Name.....	Portable Power Station
Model/Type reference.....	Apex 300
Hardware Version.....	V2.0
Software Version	2174-05 DSP
BT Version	V5.0
Operation Frequency	2402MHz~2480MHz
Number of Channel	40
Modulation Type.....	GFSK
Antenna Type.....	PCB Antenna
Antenna Gain.....	3.37dBi
Rating(s).....	Capacity: DC 51.2V, 54Ah, 2764.8Wh AC Input: AC 100V, 50/60Hz, 15A Max. AC IN port: AC 100V, 50/60Hz, 50A Max. DC/PV port: DC 12V-60V, 20A, 1200W each port AC Total Output Power: 3200W Output (Voltage Selector:100V): 5-20R: AC 100V, 50/60Hz, 20A Max. each port L5-30R: AC 100V, 50/60Hz, 30A Max. Battery Expansion Port: DC 51.2V, 90A Max Discharging Temperature: -20-40°C Charging Temperature: 0-40°C Working humidity: 10%-90%

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

1.3. Operation Frequency

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

Remark: Channel 0, 19 & 39 selected for test.

2. Test Result Summary

Requirement	Appendix No.43	Result
Frequency Deviation	Section 3	PASS
Occupied frequency bandwidth	Section 4	PASS
Secondary emission of radio wave	Section 7	PASS
Antenna power and deviation, EIRP	Section 6	PASS
Spurious radiation or extraneous emission strength	Section 5	PASS
Transmitting antenna absolute gain	Section 8	N/A
Main lobe width of transmitting antenna	Section 9	N/A
Interference suppression function	Section 10	PASS
Carrier Sensing Function	Section 8	N/A

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

3. General Information

3.1. Test environment and mode

Operating Environment:			
Temperature:	25.0 °C		
Humidity:	54 % RH		
Atmospheric Pressure:	1010 mbar		
Test Software:			
Software Information:	EspRFTestTool_v3.6		
Power Level:	LE 1M/2M/LE Coded (S=2)/ LE Coded (S=8): L/M/H: 13/13/13		
Voltage			
	Input voltage (V)	voltage (V)	Percent (%)
Normal	100	3.3	
+10%	110	3.3	0
-10%	90	3.3	0
Note: When the input voltage is reduced or increased by 10%, the regulator voltage changes is less than 1%. So the following test items are conducted in the normal voltage.			
Test Mode:			
Operation mode:	1) Keep the EUT in continuous transmitting by select channel and modulations; 2) Keep the EUT in continuous receiver mode by each modulation.		

3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

3.3. Test Instruments List

Conducted Emission						
Name	Model No.	Serial Number	Manufacturer	Date of Cal.	Due Date	Calibrated by
Spectrum Analyzer	N9020A	MY534218 22	KEYSIGHT	Jan. 21, 2025	Jan. 20, 2026	LiSai
Spectrum Analyzer	N9020A	MY491006 19	Agilent	Jun. 27, 2024	Jun. 26, 2025	LiSai
Filter box	MW100-PSB	MW210530 TCT-19	MWRFTest	/	/	/
Power detector box	MW100-RFC B	MW210531 TCT	MWRFTest	Jan. 21, 2025	Jan. 20, 2026	LiSai
Programable tempratuce and humidity chamber	JQ-2000	510101234	JQ	Jun. 27, 2024	Jun. 26, 2025	LiSai
DC Power Supply	KR3005K	2203D0300 864	Kingrang	Jun. 27, 2024	Jun. 26, 2025	LiSai
Attenuator	VAT-10W2	2051	MCL	Jun. 27, 2024	Jun. 26, 2025	LiSai

Remark:

Measuring Equipment Calibration Information

Used	Calibration Company Abbreviation	Full Name of calibration company
☒	LiSai	Guangzhou LiSai Metrology & Test Co., Ltd.

Calibration Information (Article 24-2, Paragraph 4 of the Radio Act)

☐	(a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	(b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act
☒	(c) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act
☐	(d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above

4. Test Facilities

Shenzhen TCT Testing Technology Co., Ltd.

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict,
Bao'an District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

5. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	RF power, conducted	$\pm 0.12\text{dB}$
2	Spurious emissions, conducted	$\pm 0.11\text{dB}$
3	Temperature	$\pm 0.1^{\circ}\text{C}$
4	Humidity	$\pm 1.0\%$

6. Test Results and Measurement Data

6.1. Frequency Deviation

6.1.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 3
Limits:	± 50 ppm
Test Setup:	 The diagram illustrates the test setup. On the left is a green rectangular device labeled 'Spectrum Analyzer'. A black cable connects its output to a yellow rectangular device on the right labeled 'EUT'.
Test Procedure:	1. Frequency accuracy of SA shall be less than 10% of limits tolerance (5ppm) 2. Setting of SA is following as: RBW:10 kHz / VBW:10 kHz 3. Center Frequency: The center frequency of testing for EUT 4. Sweep time: Auto 5. Sweep mode: Continuous sweep 6. Detect mode: Positive peak 7. EUT have transmitted modulation signal and fixed channelize. fl and fh is -20dB points, $f_c = (f_l + f_h)/2$, f_c is declaring of channel frequency. Then the frequency error formula is $(f - f_c)/f_c \times 10^6$ ppm and the limit is less than ± 50 ppm.
Test Result:	PASS

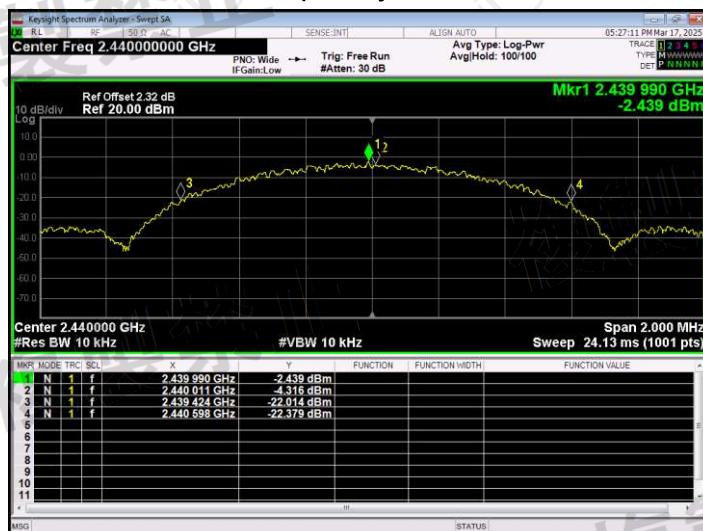
6.1.2. Test Data

Test conditions		Low	Middle	High	Limit	Result
Volt.(ac)	Temp.(°C)					
100V	25°C	2401.999 MHz	2440.011 MHz	2479.997 MHz	±50 ppm	PASS
		-0.42ppm	4.51ppm	-1.21ppm		

Test Frequency: 2402MHz



Test Frequency: 2440MHz



Test Frequency: 2480MHz



6.2. Occupied frequency bandwidth

6.2.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 4
Limit:	26 MHz for Occupied frequency bandwidth
Test Setup:	 The diagram illustrates the test setup. On the left is a green Spectrum Analyzer with a blue screen and two red dots representing buttons. A black cable connects it to a yellow rectangular box on the right, which is labeled 'EUT' (Equipment Under Test).
Test Procedure:	1. Setting of SA is following as: RBW:300 kHz / VBW: 300 kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold 2. EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode (For FHSS14 Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26 MHz (For DSSS or OFDM Device) or 83.5 MHz (For FHSS Device).
Test Result:	PASS

6.2.2. Test Data

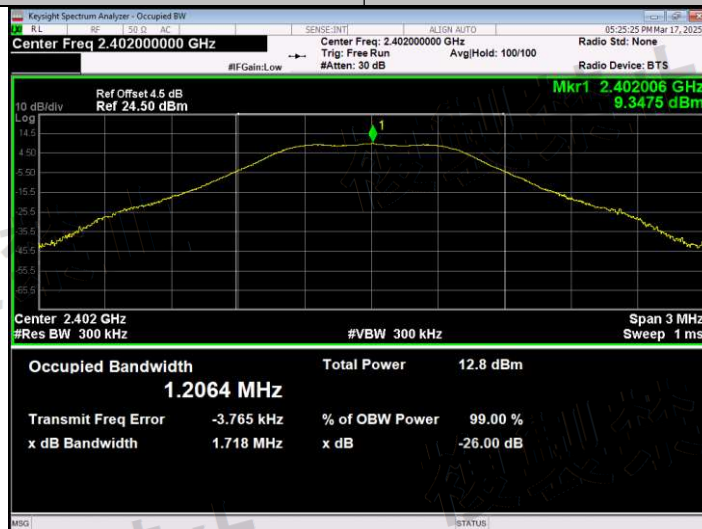
Test Condition		Lowest (MHz)	Middle (MHz)	Highest (MHz)	Limit (MHz)	Result
Volt(ac)	Temp					
BLE 1M						
100V	25℃	1.21	1.21	1.21	≤ 26	PASS
BLE 2M						
100V	25℃	2.13	2.12	2.13	≤ 26	PASS
LE Coded (S=2)						
100V	25℃	1.21	1.21	1.21	≤ 26	PASS
LE Coded (S=8)						
100V	25℃	1.19	1.19	1.19	≤ 26	PASS

BLE 1M:

Occupied Bandwidth:

Test Item: 99% Occupied Frequency Bandwidth

Test channel: Lowest channel



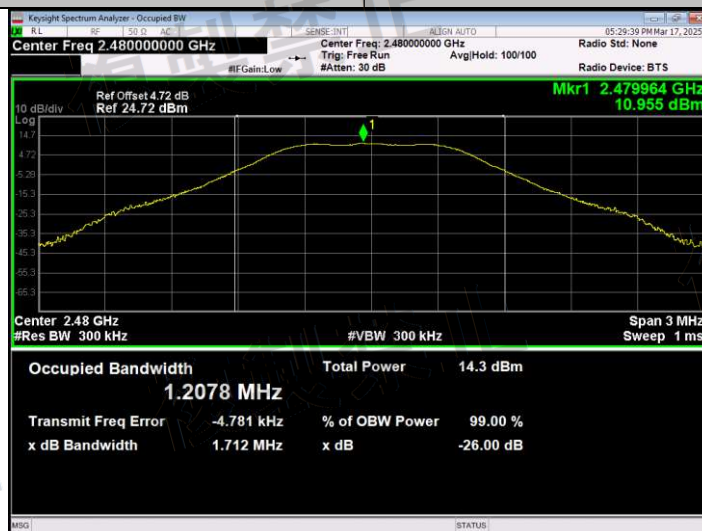
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Middle channel



Test Item: 99% Occupied Frequency Bandwidth

Test channel: Highest channel

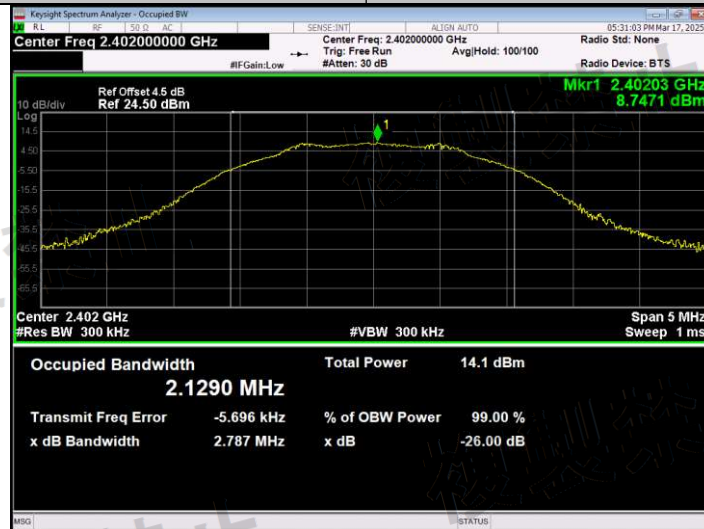


BLE 2M:

Occupied Bandwidth:

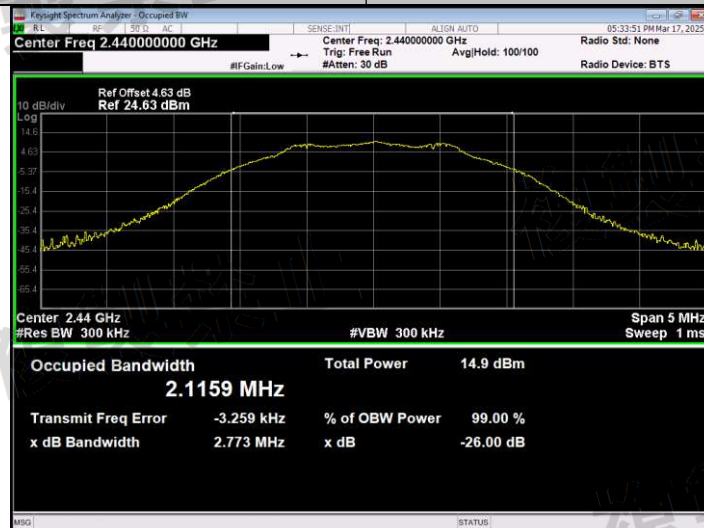
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Lowest channel



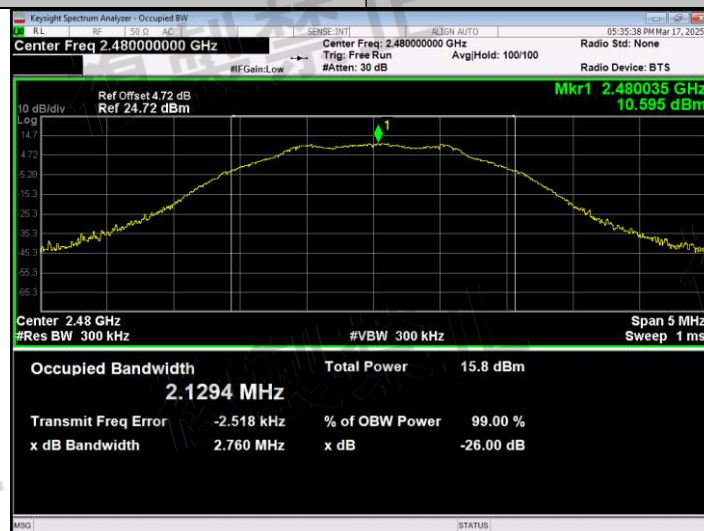
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Middle channel



Test Item: 99% Occupied Frequency Bandwidth

Test channel: Highest channel



LE Coded (S=2):
Occupied Bandwidth:

Test Item: 99% Occupied Frequency Bandwidth

Test channel: Lowest channel



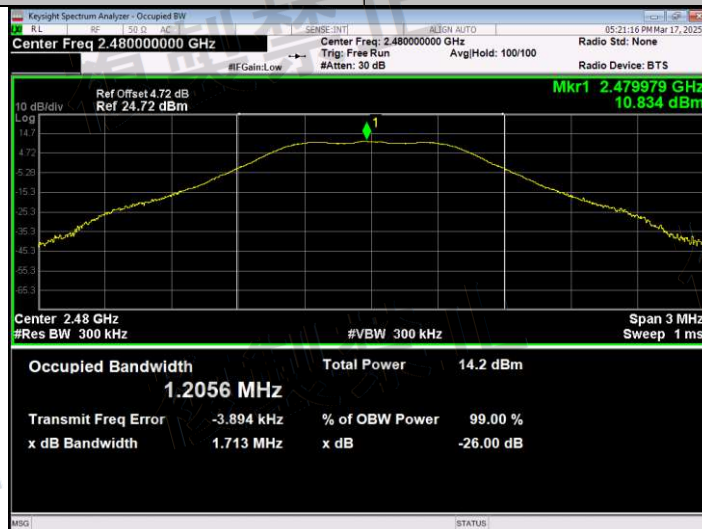
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Middle channel



Test Item: 99% Occupied Frequency Bandwidth

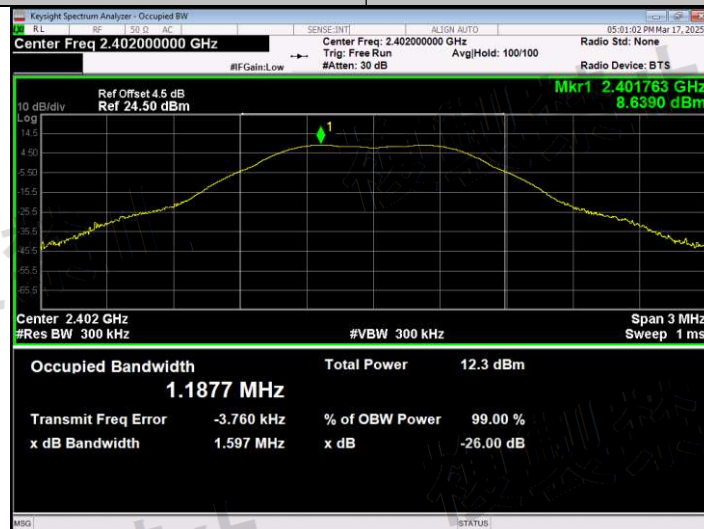
Test channel: Highest channel



LE Coded (S=8):
Occupied Bandwidth:

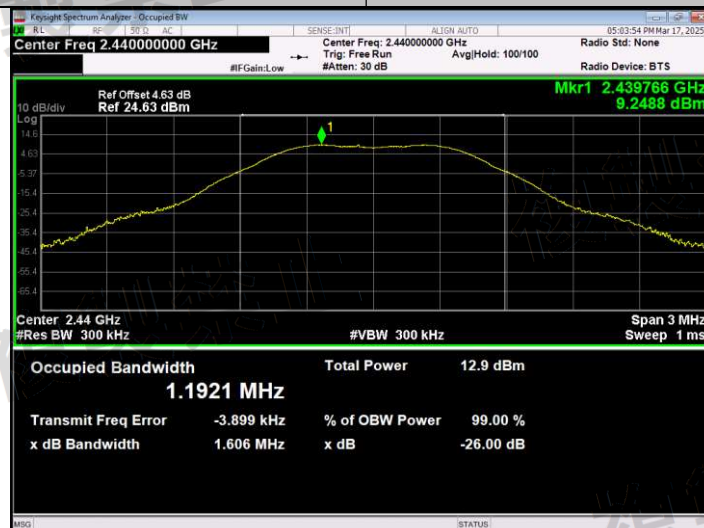
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Lowest channel



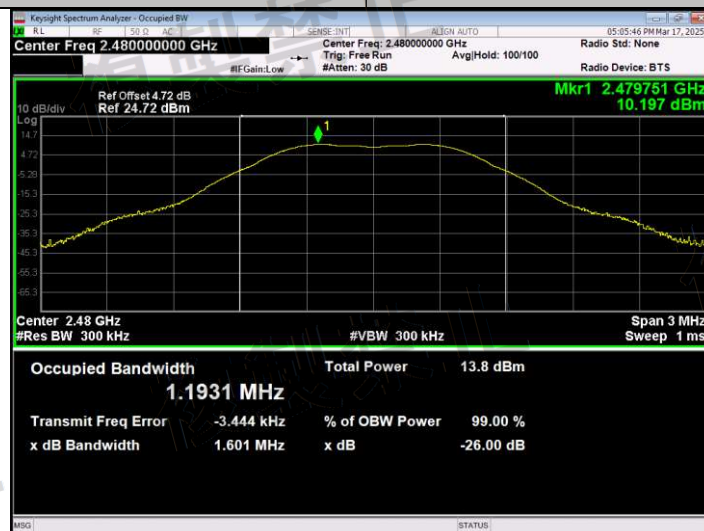
Test Item: 99% Occupied Frequency Bandwidth

Test channel: Middle channel



Test Item: 99% Occupied Frequency Bandwidth

Test channel: Highest channel



6.3. Secondary emission of radio wave

6.3.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 7
Limit:	4 nW for below 1 GHz, 20 nW for above 1 GHz
Test Setup:	 The diagram shows a green Spectrum Analyzer connected by a cable to a yellow EUT (Equipment Under Test).
Test Procedure:	1. EUT have the continuous reception mode and fixed only one channelize. 2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) /Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
Test Result:	PASS

6.3.2. Test data

BLE 1M:

Test channel: Lowest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	159.98	-75.29	0.03	4	PASS
		1000-13000	2536.00	-53.34	4.63	20	
Test channel: Middle Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	833.16	-59.16	1.21	4	PASS
		1000-13000	2524.00	-57.15	1.93	20	
Test channel: Highest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	480.08	-78.55	0.01	4	PASS
		1000-13000	3208.00	-64.70	0.34	20	

BLE 2M:

DEE 2W:

Test channel: Lowest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	832.19	-61.81	0.66	4	PASS
		1000-13000	2608.00	-61.89	0.65	20	
Test channel: Middle Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	838.98	-55.49	2.82	4	PASS
		1000-13000	3208.00	-64.66	0.34	20	
Test channel: Highest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	433.52	-77.77	0.02	4	PASS
		1000-13000	2536.00	-56.40	2.29	20	

LE Coded (S=2):

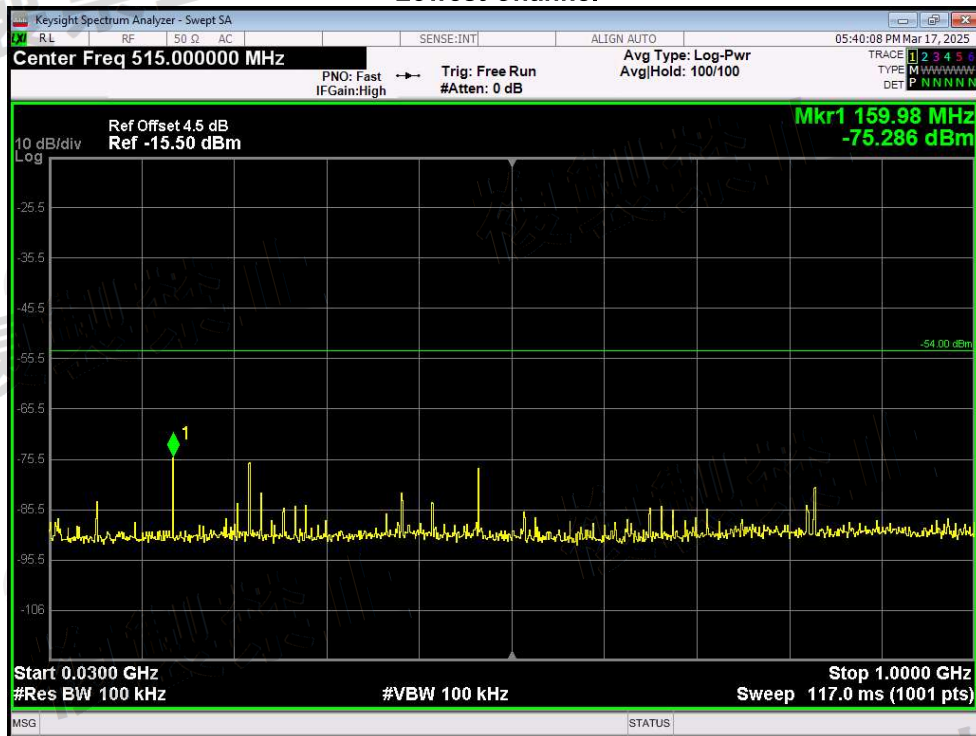
Test channel: Lowest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	833.16	-68.27	0.15	4	PASS
		1000-13000	2548.00	-51.63	6.87	20	
Test channel: Middle Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	825.40	-61.27	0.75	4	PASS
		1000-13000	2536.00	-58.43	1.44	20	
Test channel: Highest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	825.40	-63.90	0.41	4	PASS
		1000-13000	1888.00	-48.14	15.35	20	

LE Coded (S=8):

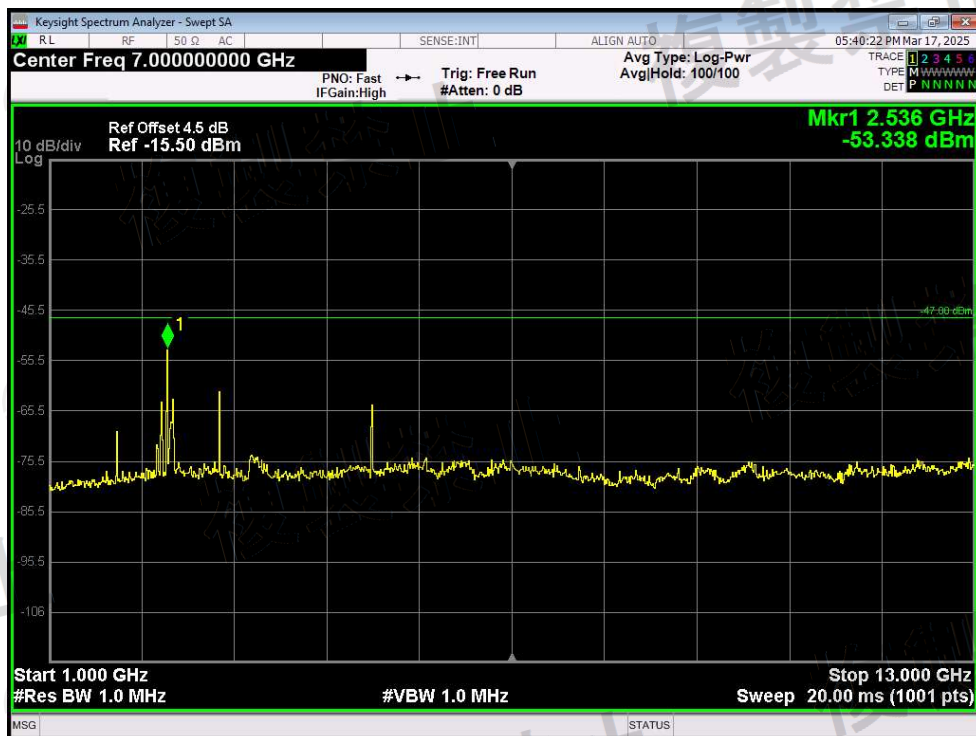
Test channel: Lowest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	831.22	-73.36	0.05	4	PASS
		1000-13000	2608.00	-52.75	5.31	20	
Test channel: Middle Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	829.28	-72.63	0.05	4	PASS
		1000-13000	2608.00	-49.87	10.30	20	
Test channel: Highest Channel							
Test conditions		Frequency Range (MHz)	Record Frequency (MHz)	Read Level (dBm)	Read Level (nW)	Limit (nW)	Result
Volt(ac)	Temp						
100V	25℃	30-1000	825.40	-61.01	0.79	4	PASS
		1000-13000	5188.00	-62.99	0.50	20	

Test plots as follows:

Lowest Channel

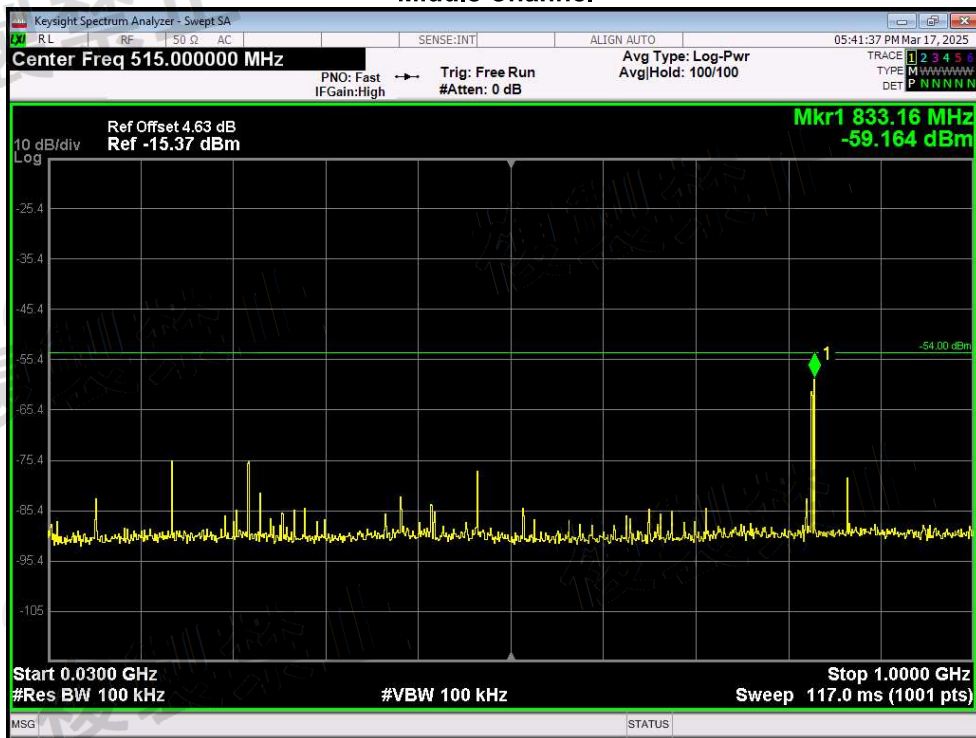


30MHz~1GHz

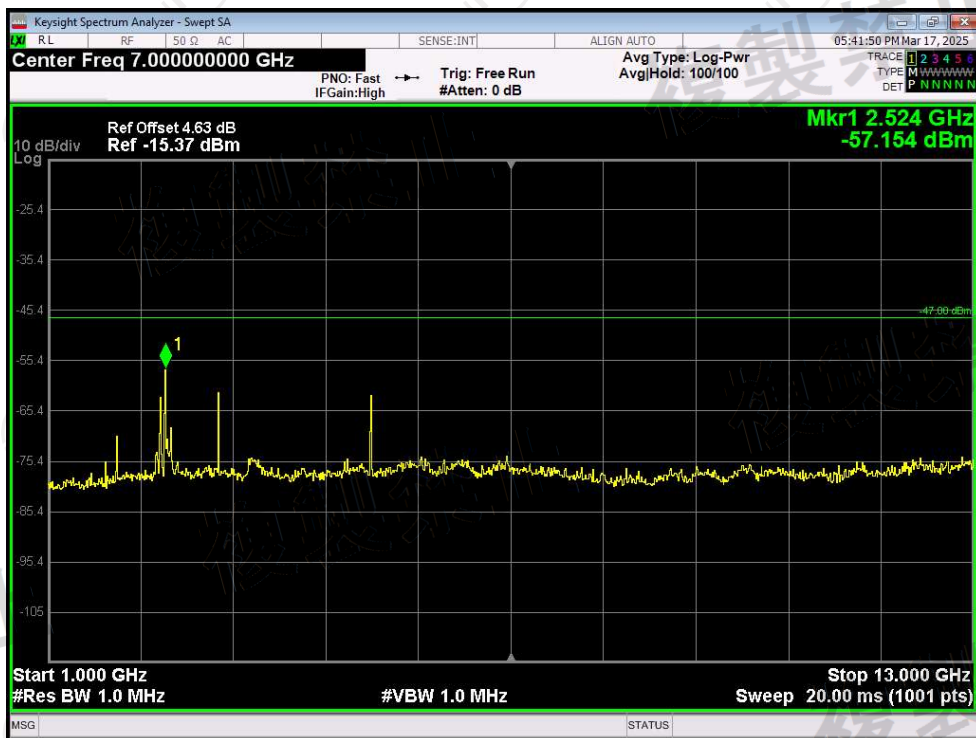


1GHz~13GHz

Middle Channel

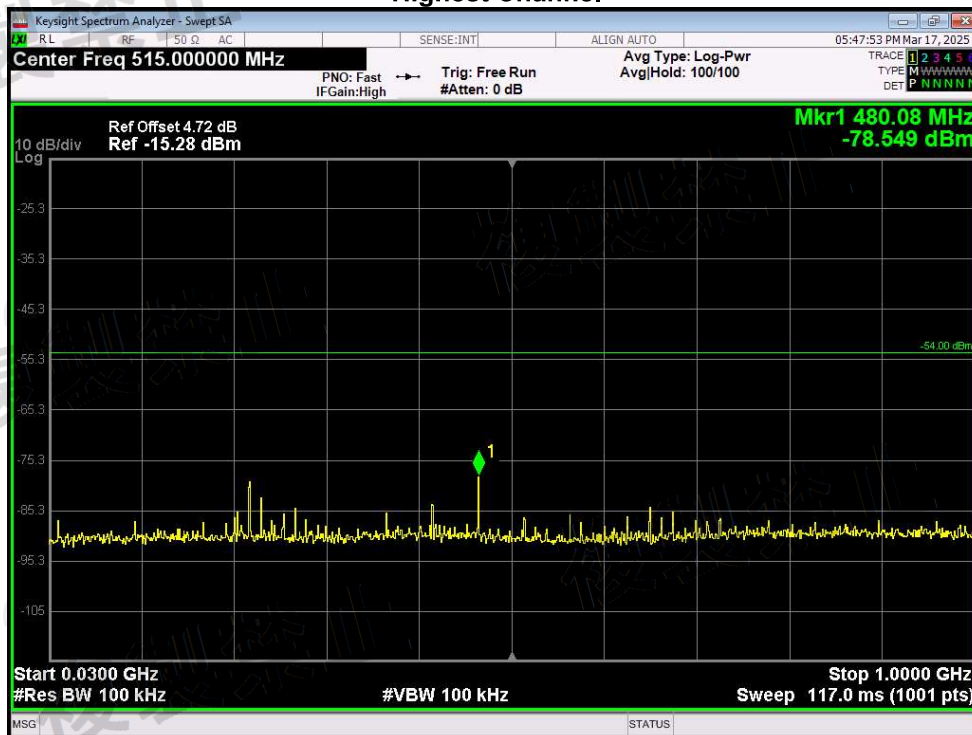


30MHz~1GHz

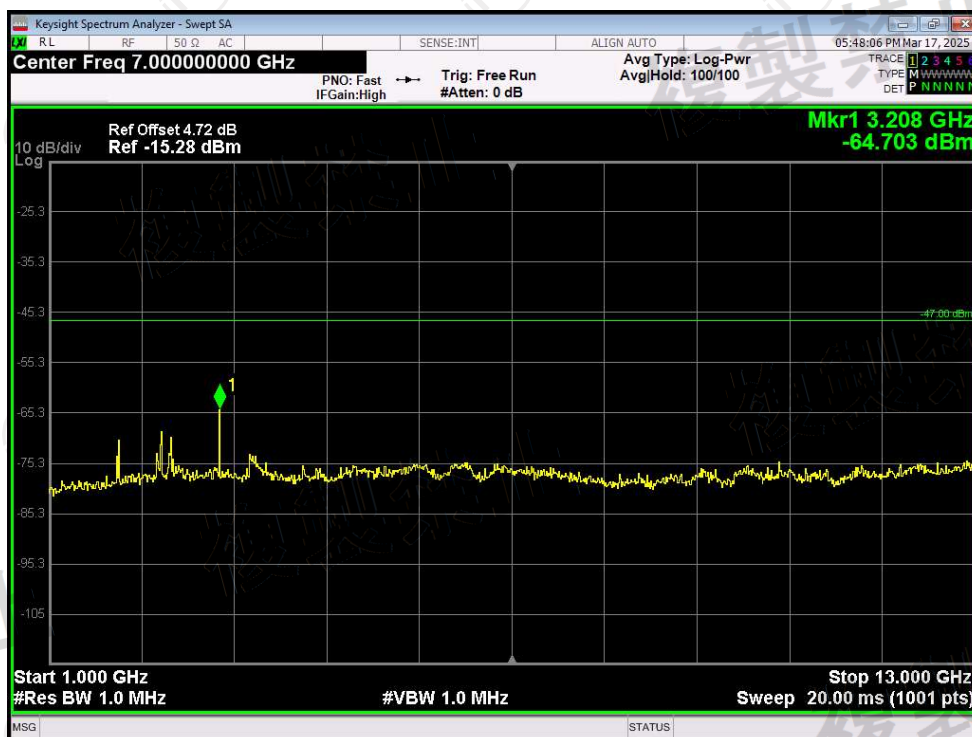


1GHz~13GHz

Highest Channel

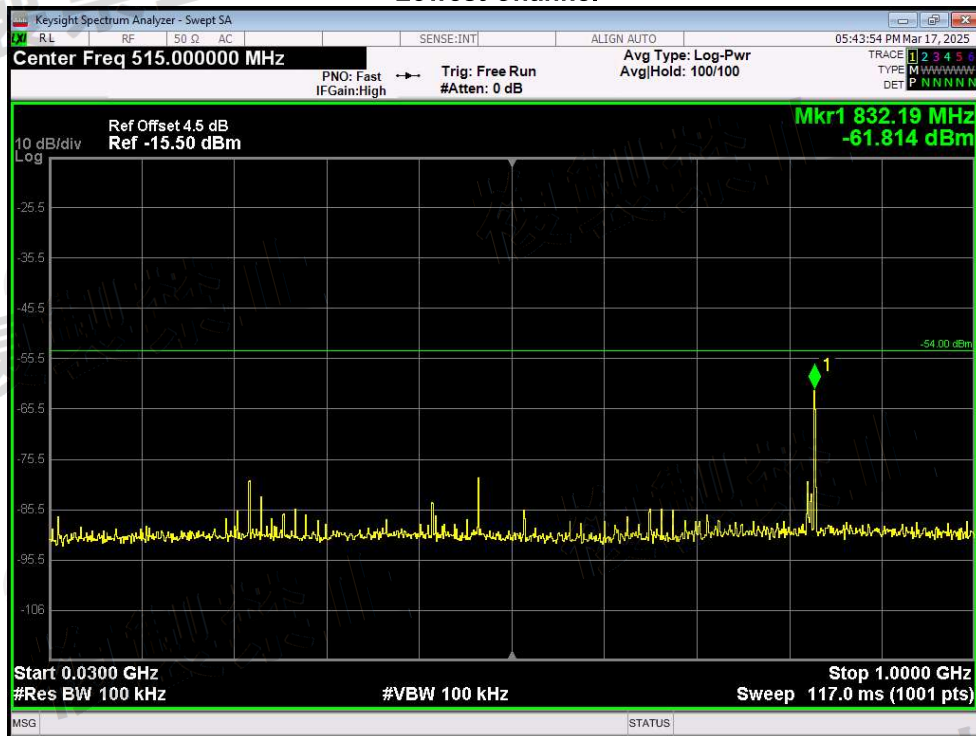


30MHz~1GHz

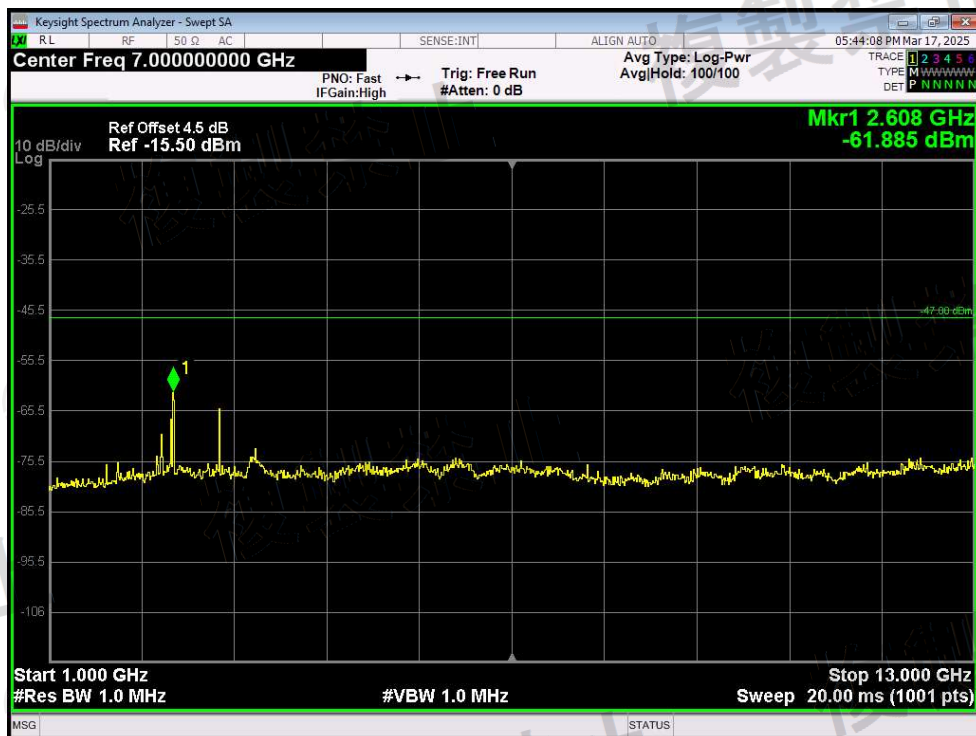


1GHz~13GHz

Lowest Channel

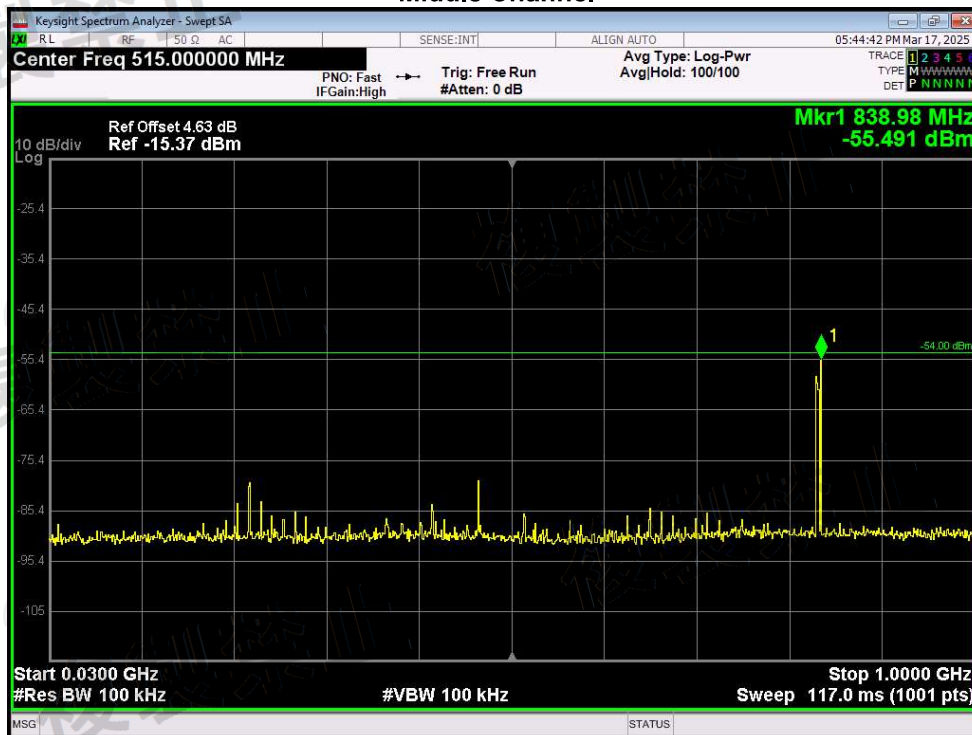


30MHz~1GHz

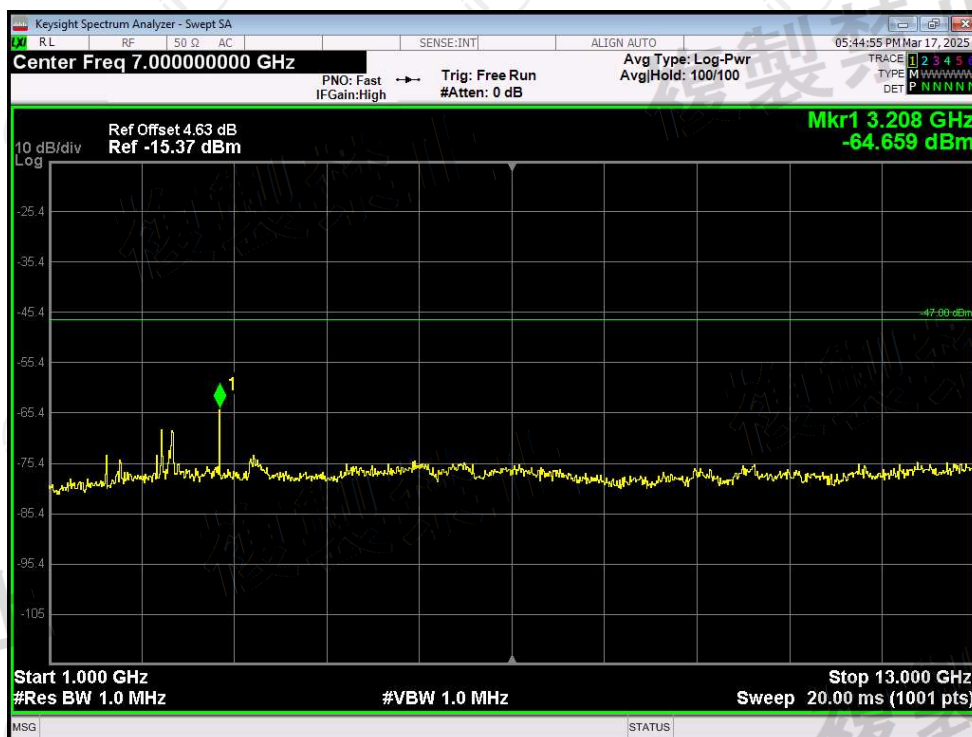


1GHz~13GHz

Middle Channel

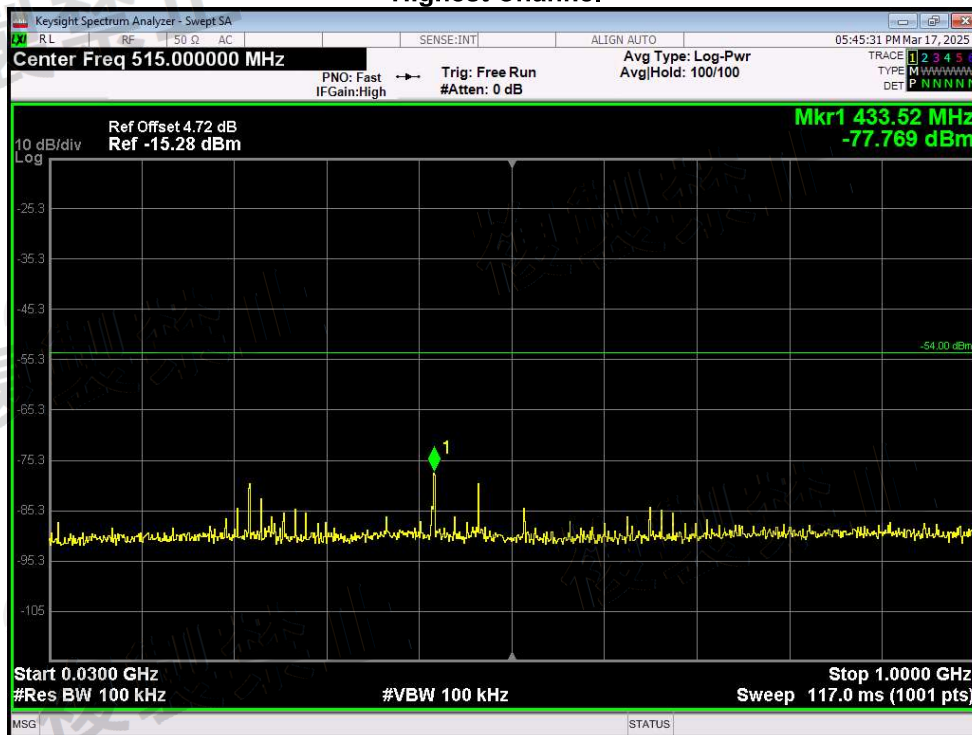


30MHz~1GHz

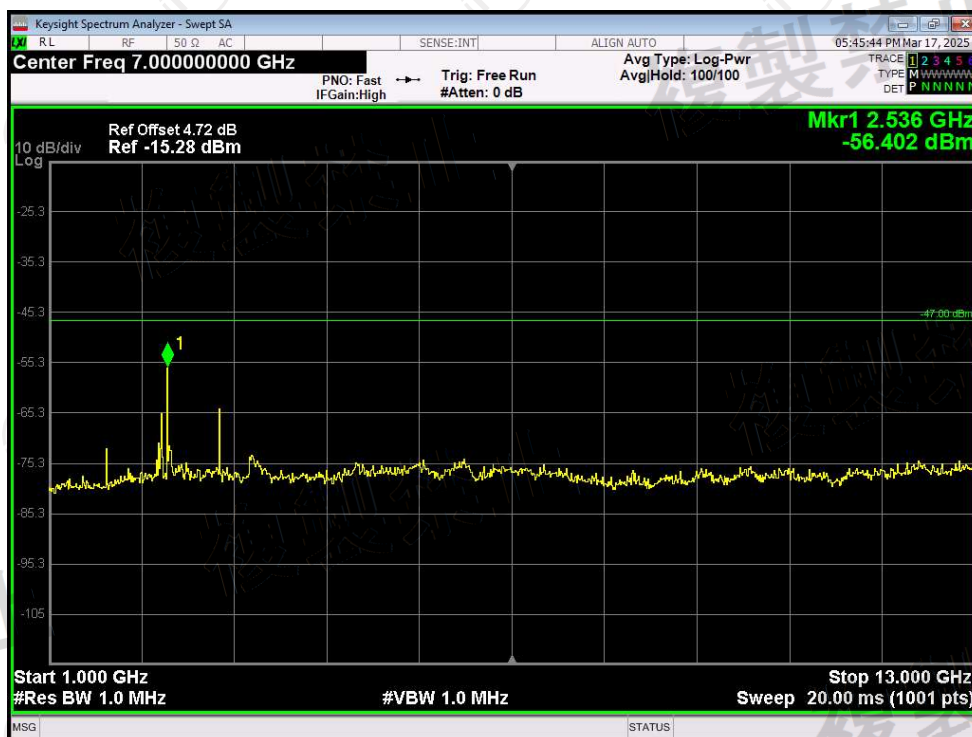


1GHz~13GHz

Highest Channel

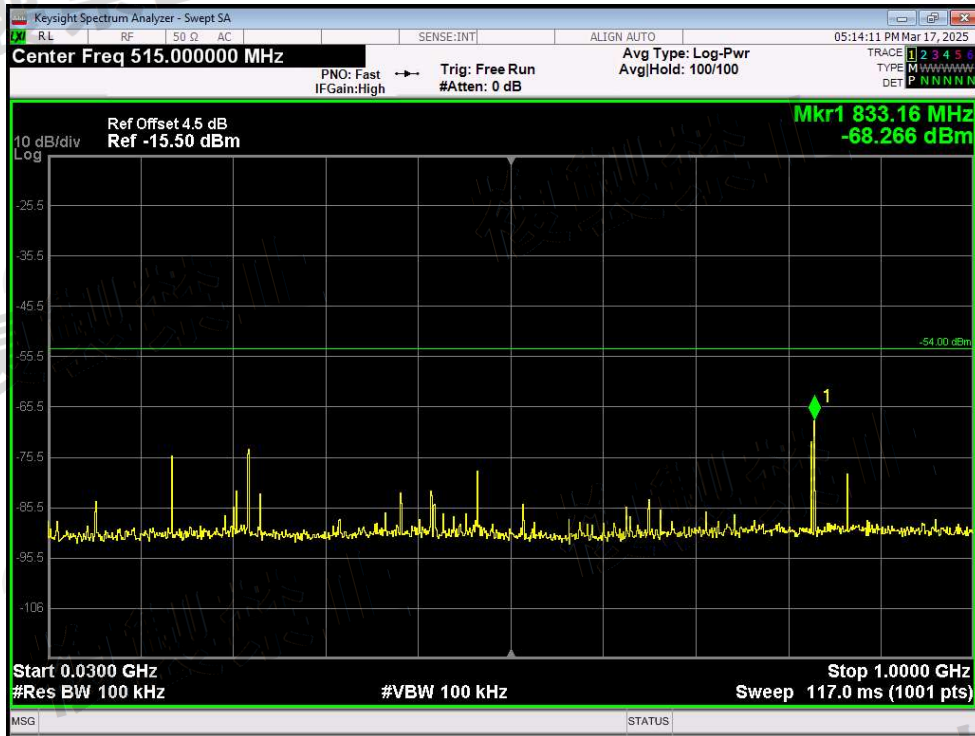


30MHz~1GHz

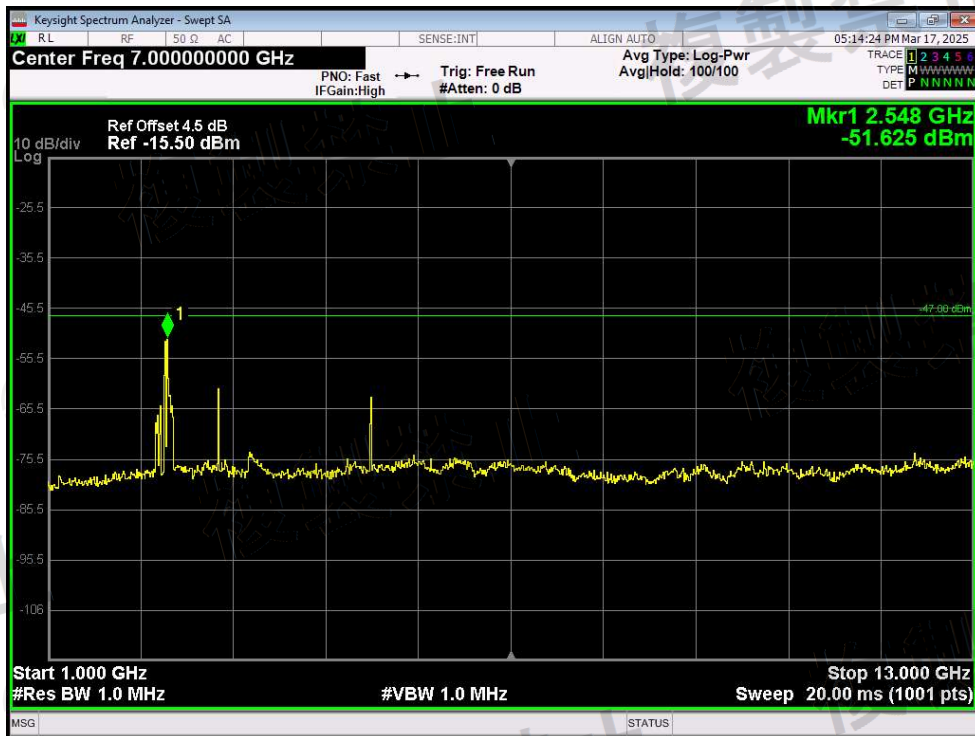


1GHz~13GHz

Lowest Channel

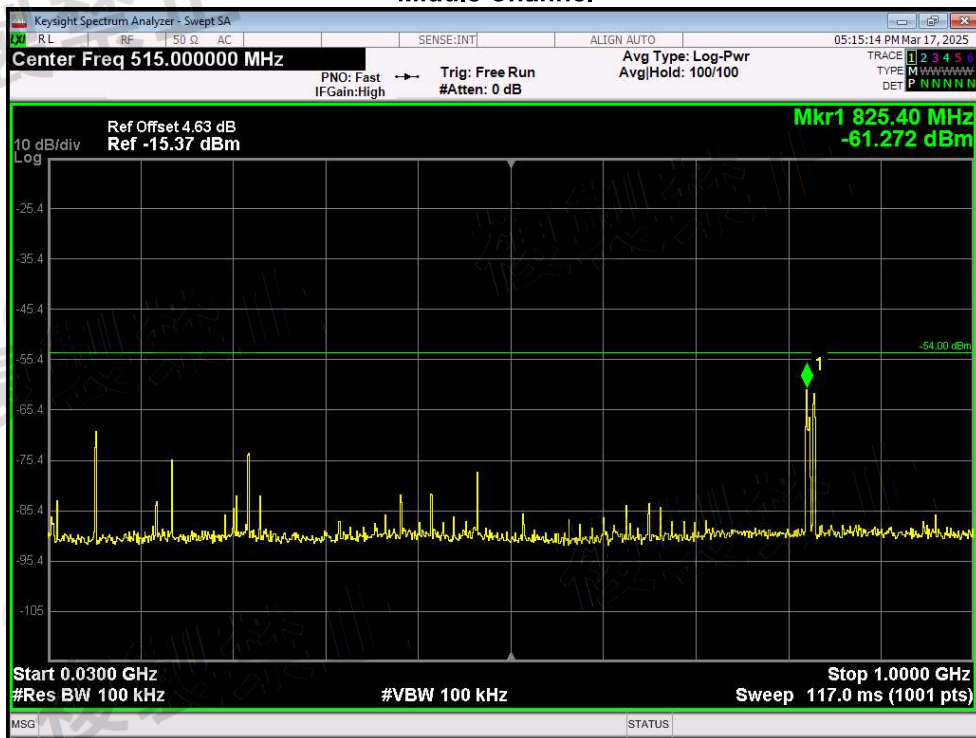


30MHz~1GHz

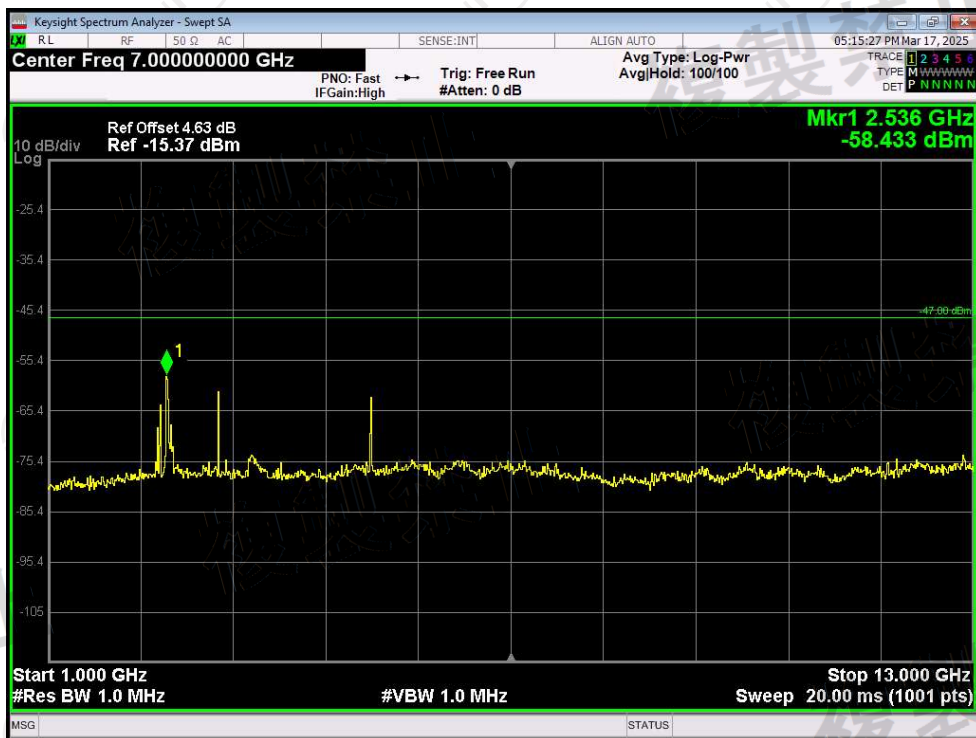


1GHz~13GHz

Middle Channel

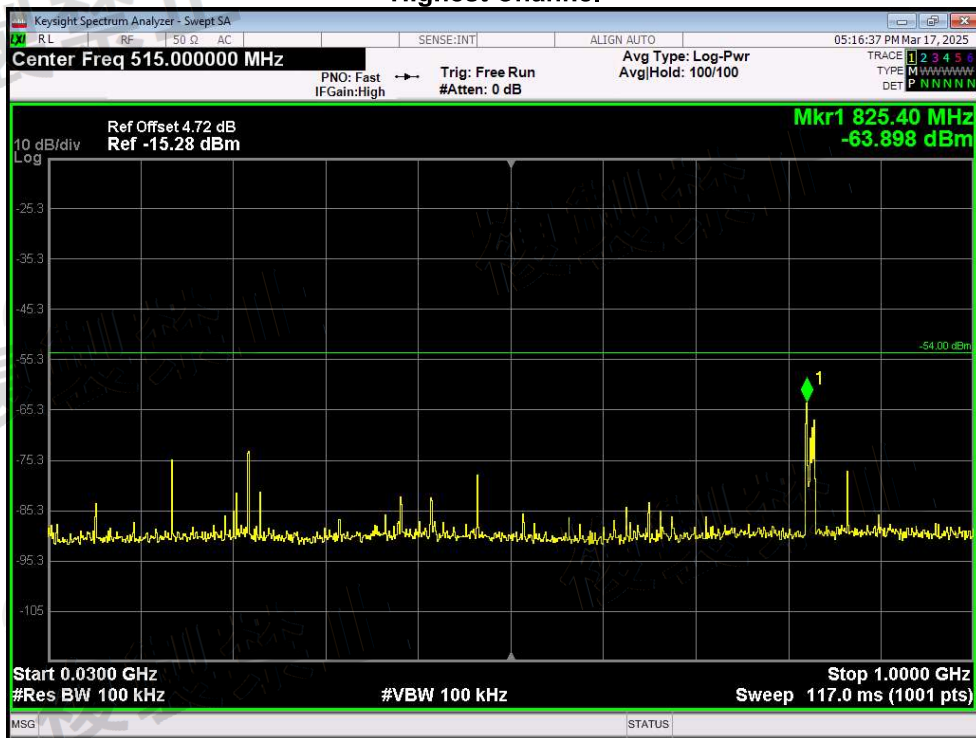


30MHz~1GHz

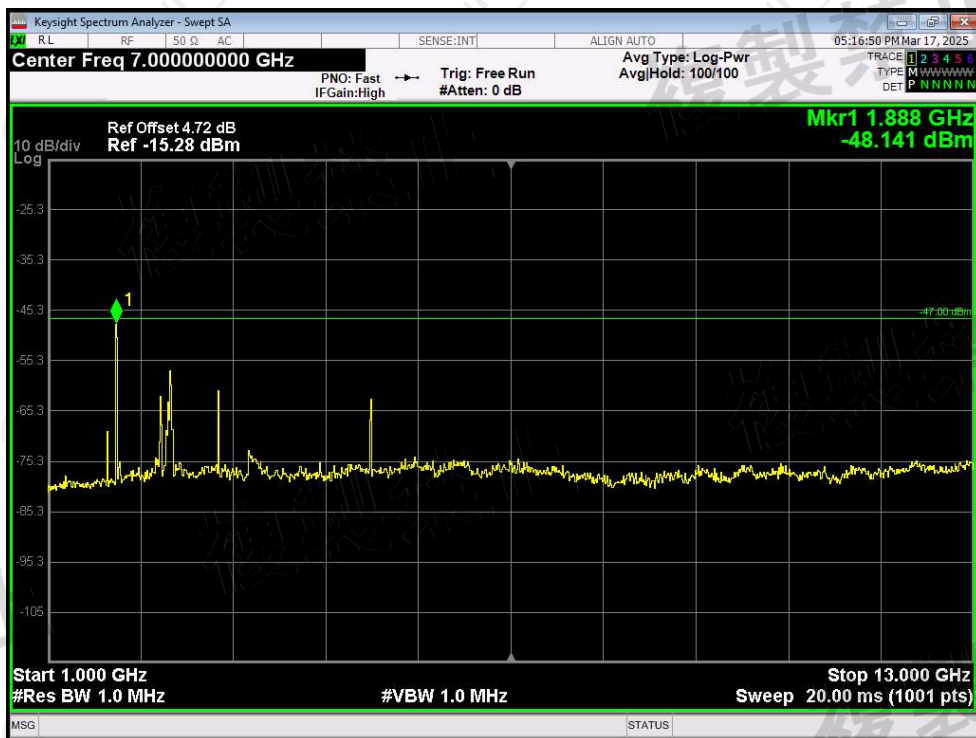


1GHz~13GHz

Highest Channel

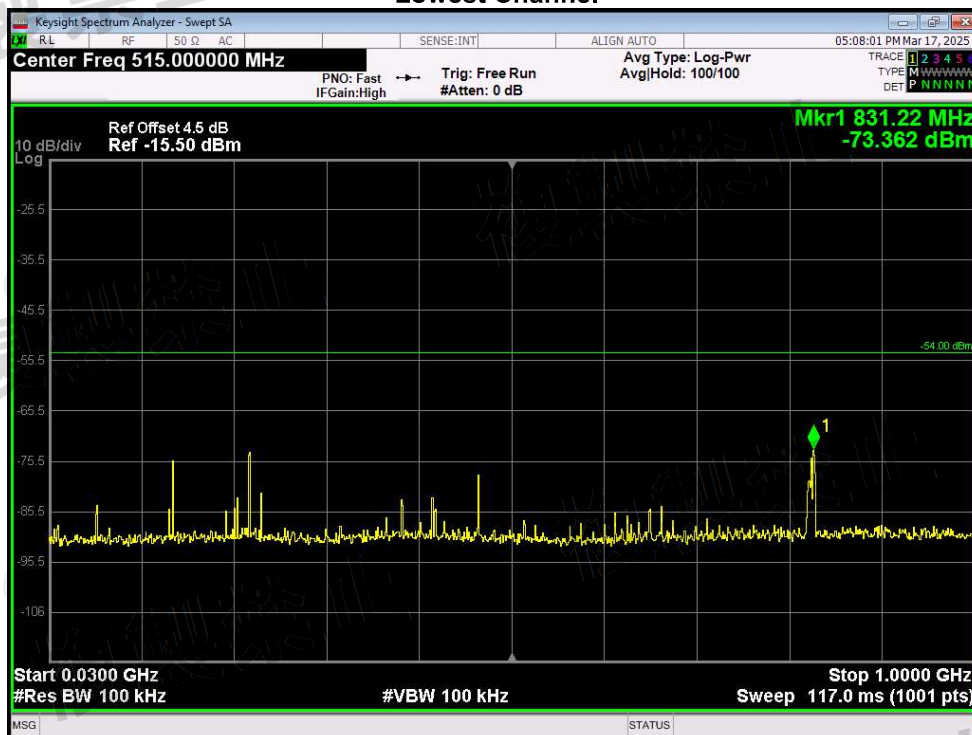


30MHz~1GHz

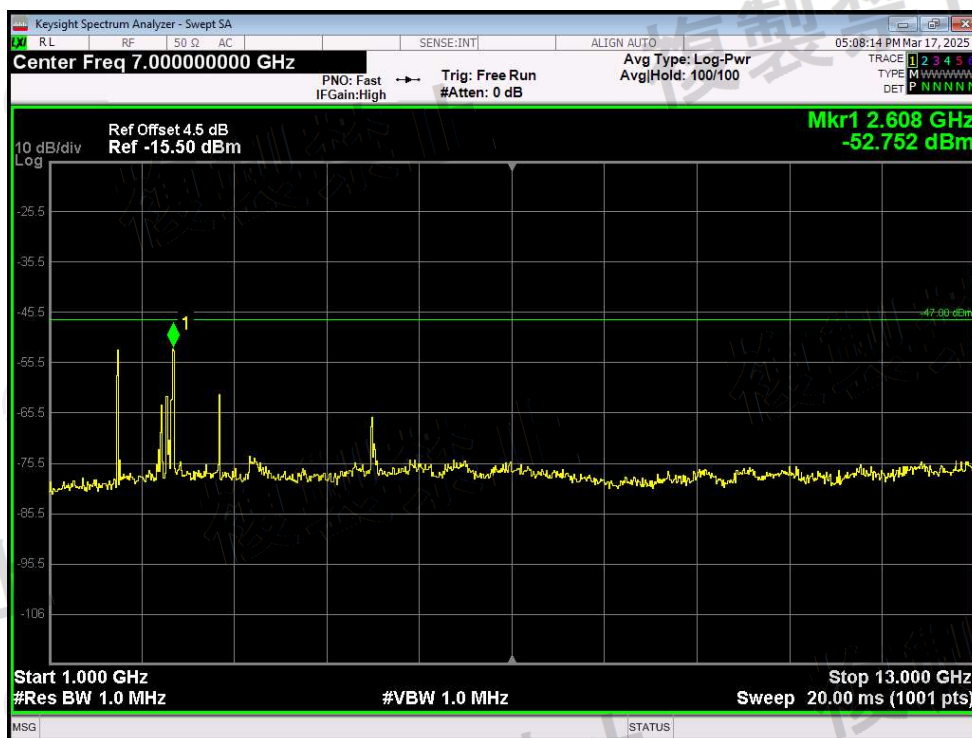


1GHz~13GHz

Lowest Channel

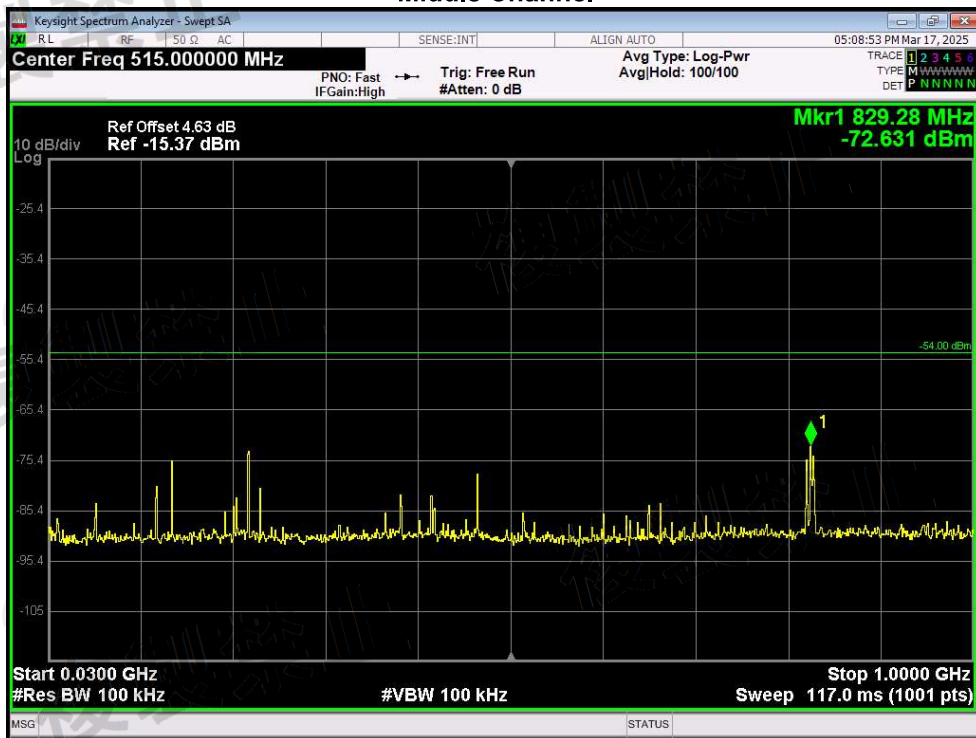


30MHz~1GHz

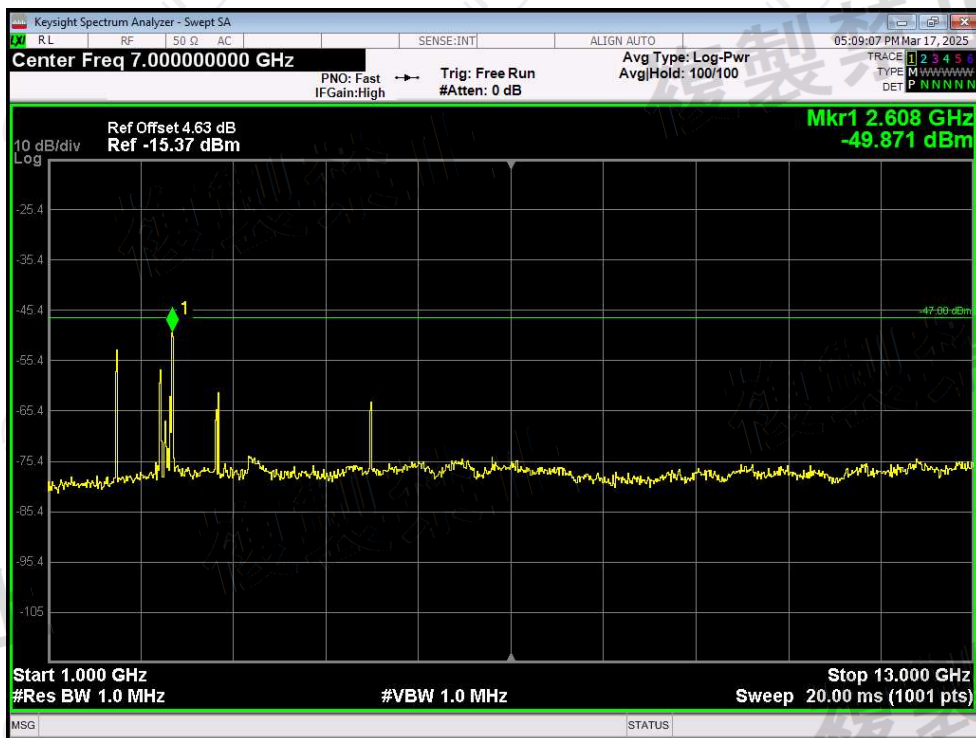


1GHz~13GHz

Middle Channel

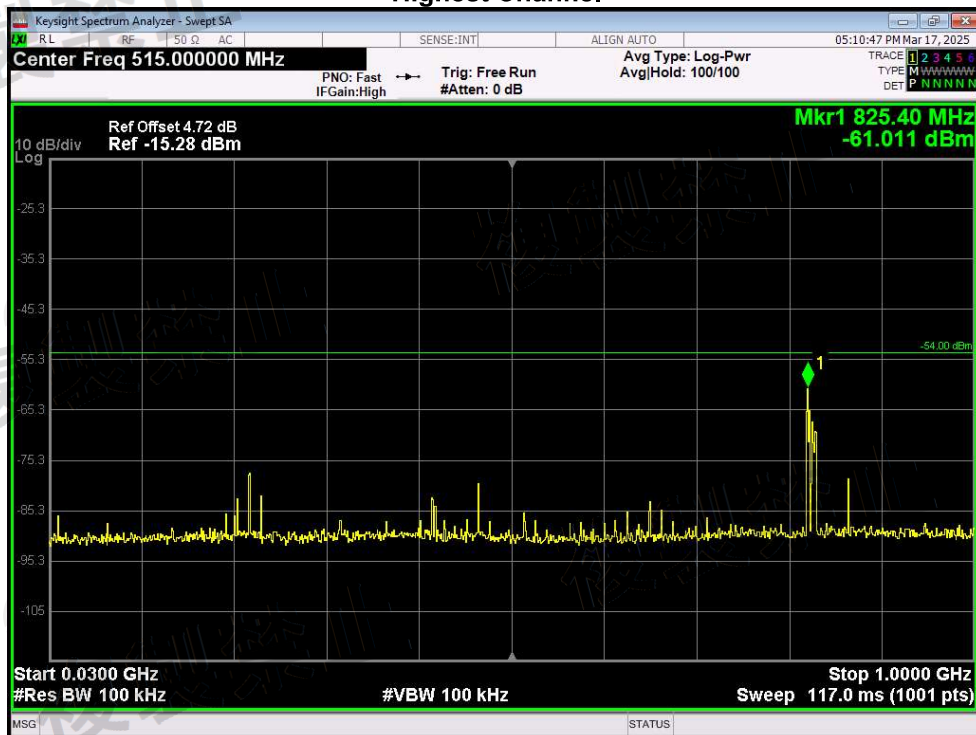


30MHz~1GHz

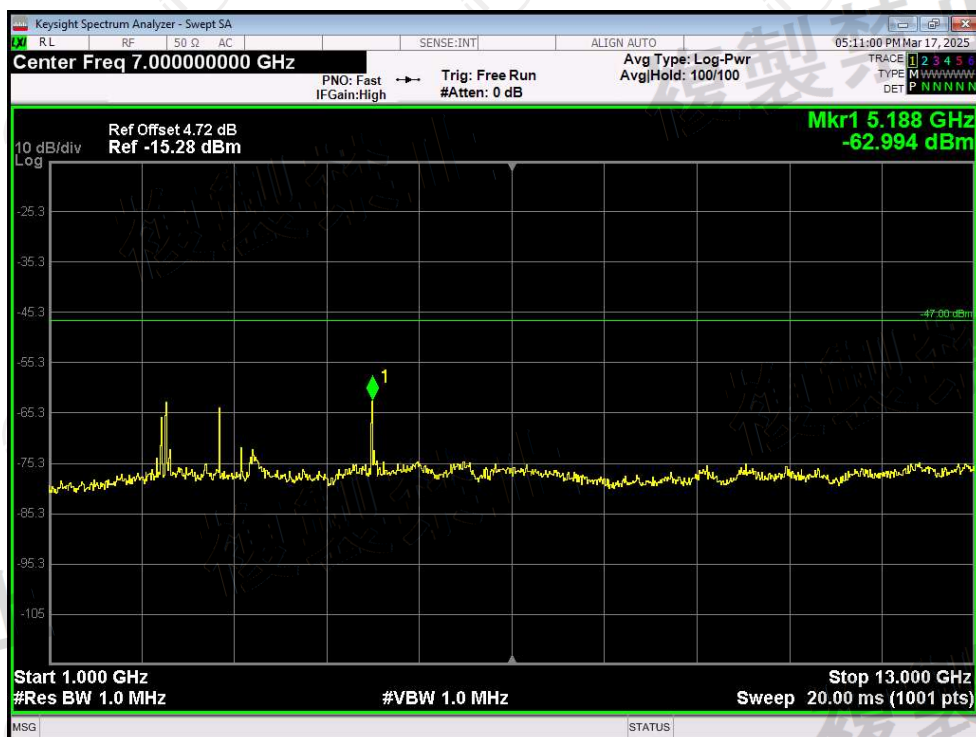


1GHz~13GHz

Highest Channel



30MHz~1GHz



1GHz~13GHz

6.4. Antenna power and deviation, EIRP

6.4.1. Test Specification

Test Requirement:	Article 2 paragraph 1 item 19
Test Method:	Appendix No.43 Notification No.88 of MIC, 2004 section 6
Limit:	Antenna Power: 10mW Deviation: + 20% EIRP Limit: 12.14dBm
Test Setup:	 The diagram illustrates the test setup. On the left is a green Spectrum Analyzer with a blue screen and two knobs. A black cable connects it to a yellow rectangular box on the right labeled 'EUT' (Equipment Under Test).
Test Procedure:	1. Connect the UUT to the spectrum analyzer and use the following settings: Centre Frequency: The centre frequency of the channel under test. RBW: >99%OCB/VBW=RBW / Span: Wide enough to cover the complete power envelope of the signal of the EUT. / Detector: Peak. / Trace Mode: Max Hold. 2. When the trace is complete, find the peak value of the power envelope and record the frequency. 3. Calculated the Maximum deviation and recorded the results. Deviation = (Antenna Power – Rated Output Power) / Rated Output Power * 100%
Test Result:	PASS

6.4.2. Test data**BLE 1M:****Lowest channel**

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.69	5.87	10	7.00	-16.14	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Middle channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	8.18	6.58	10	7.00	-6.00	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Highest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	8.55	7.16	10	7.00	2.29	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

BLE 2M:

Lowest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.65	5.82	10	7.00	-16.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Middle channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	8.19	6.59	10	7.00	-5.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Highest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.97	6.27	10	7.00	-10.43	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

LE Coded (S=2):

Lowest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.79	6.01	10	7.00	-14.14	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Middle channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	8.14	6.52	10	7.00	-6.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Highest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	8.00	6.31	10	7.00	-9.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

LE Coded (S=8):

Lowest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.49	5.61	10	7.00	-19.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Middle channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.95	6.24	10	7.00	-10.86	20	PASS

The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

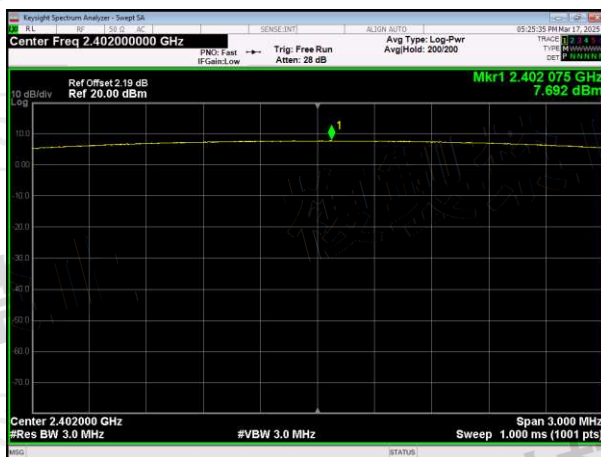
Highest channel

Test Condition		Mode	Measured Power (dBm)	Antenna Power (mW)	Limit (mW)	Rated Power (mW)	Maximum Deviation (%)	Limit (%)	Result
Volt. (ac)	Temp. (°C)								
100V	25°C	GFSK	7.90	6.17	10	7.00	-11.86	20	PASS

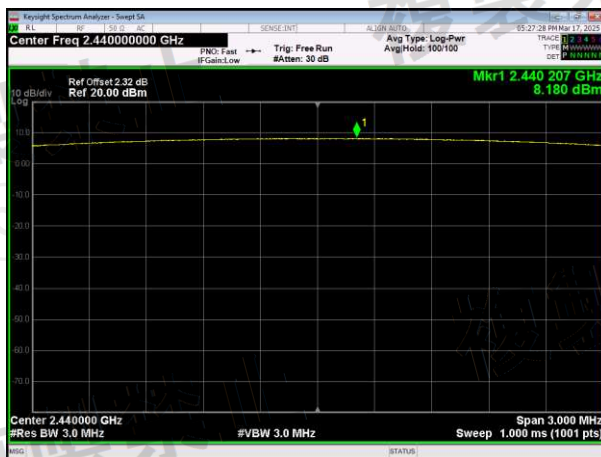
The Rated Power is 7.00mW, which declared by manufacturer.

Maximum Tolerance = (Antenna Power - Rated Power) / Rated power * 100%

Test plots as follows:
BLE 1M:



Lowest channel



Middle channel

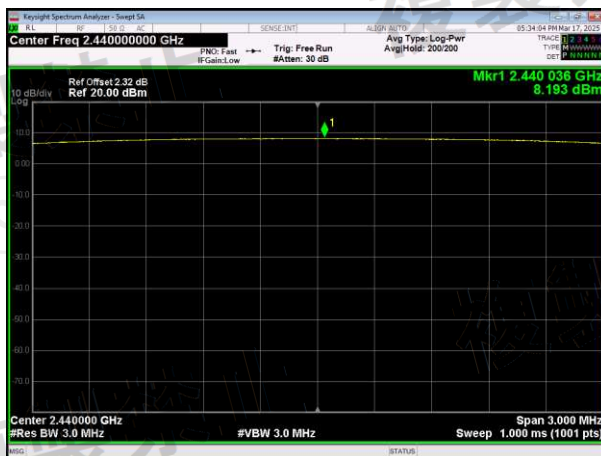


Highest channel

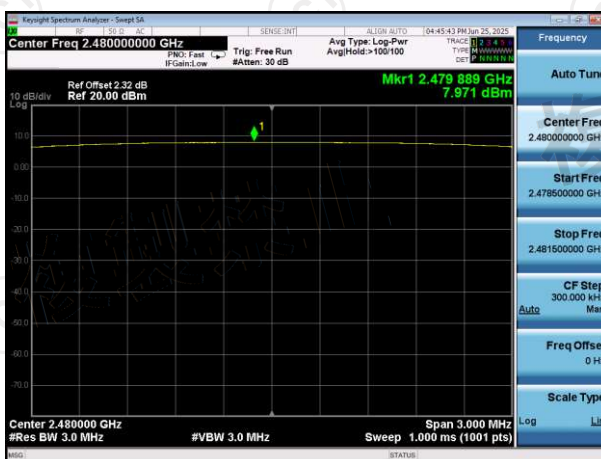
BLE 2M:



Lowest channel

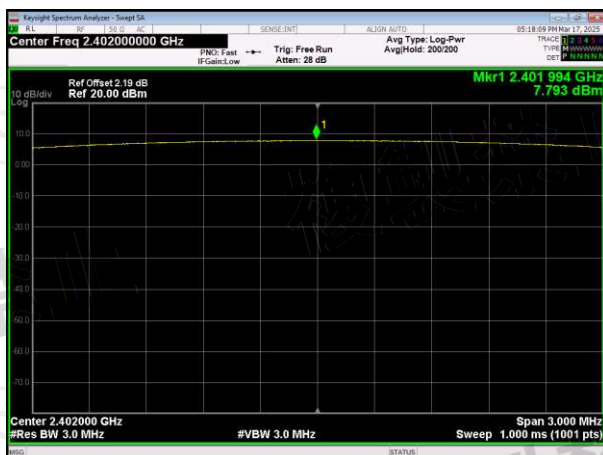


Middle channel

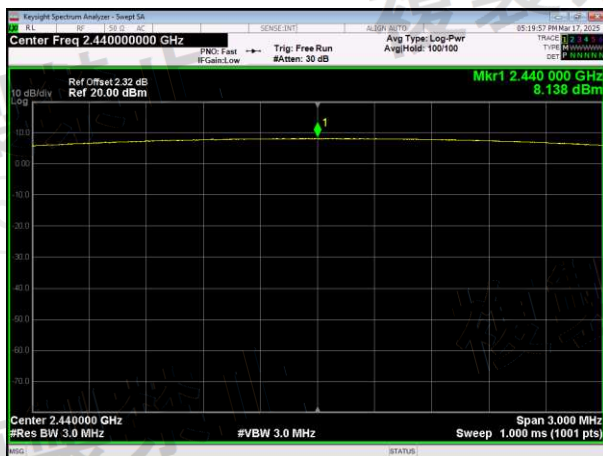


Highest channel

LE Coded (S=2):



Lowest channel

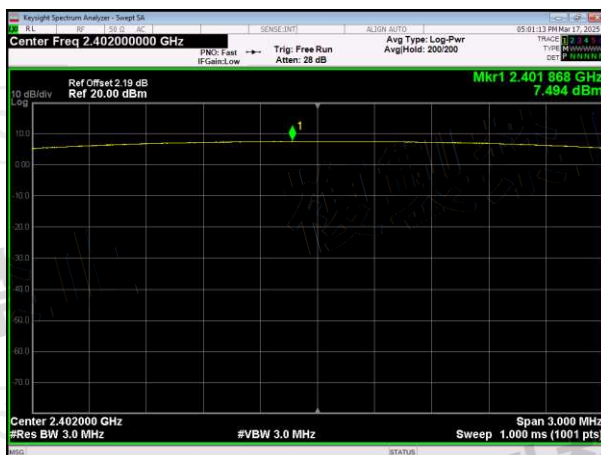


Middle channel



Highest channel

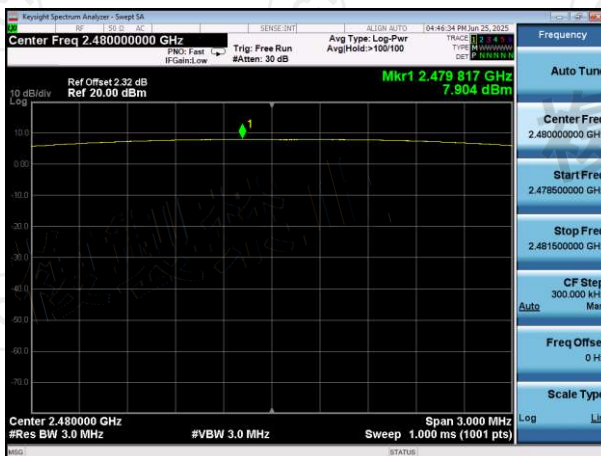
LE Coded (S=8):



Lowest channel



Middle channel



Highest channel

EIRP Power BLE 1M:

Lowest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.69	3.37	11.06	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Middle channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	8.18	3.37	11.55	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Highest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	8.55	3.37	11.92	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

BLE 2M:

Lowest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.65	3.37	11.02	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Middle channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	8.19	3.37	11.56	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Highest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.97	3.37	11.34	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

LE Coded (S=2):

Lowest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.79	3.37	11.16	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Middle channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	8.14	3.37	11.51	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Highest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	8.00	3.37	11.37	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

LE Coded (S=8):

Lowest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.49	3.37	10.86	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Middle channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.95	3.37	11.32	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							

Highest channel

Test Condition		mode	Antenna Power (dBm)	Antenna Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
Volt. (ac)	Temp. (°C)						
100V	25°C	GFSK	7.90	3.37	11.27	12.14	PASS
HPBA=360°, when A = 1. EIRP = Antenna Power (dBm) + Antenna Gain(dBi)							