

# TEST REPORT FCC ID:2BOXG-XH001

Applicant:	Shenzhen Xiaohe Industrial Co., Ltd.				
Address:	301, Building 2, No.78, Ainan Road, Baolong Street, Longgang District, Shenzhen				
Manufacturer:	Shenzhen Xiaohe Industrial Co., Ltd.				
Address:	301, Building 2, No.78, Ainan Road, Baolong Street, Longgang District, Shenzhen				
Product:	power strip with wireless charging				
Trade Mark:	N/A				
Model No.:	wireless power strip				
Date of Receipt:	Apr. 14, 2025				
Test Date:	Apr. 14, 2025 - May. 28, 2025				
Date of Report:	May. 28, 2025				
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.				
Address:	101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China				
Applicable Standards:	FCC PART 15 Subpart C ANSI C63.10:2013				
Test Result:	Pass				
Report Number:	DLE-250414047R				
Prepared (Engineer					
Reviewer (Supervis	or): Jack Bu				

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



# TABLE OF CONTENT

	at Report Declaration	Page
1.	VERSION	3
2.	TEST SUMMARY	3
3.	GENERAL INFORMATION	4
4.	TEST INSTRUMENT USED	5
5.	CONDUCTED EMISSION TEST	6
6.	RADIATION EMISSION TEST	
7.	BANDWIDTH TEST	16
8.	ANTENNA REQUIREMENT	17
9.	SETUP PHOTOGRAPHS	17
10.	EUT PHOTOGRAPHS	17



#### 1. VERSION

Version No.	Date	Description
00	Apr. 23, 2025	Original

#### 2. TEST SUMMARY

EMC Emission								
Test Item	Section in CFR 47	Result	Remark					
AC Power Line Conducted Emission	15.207	PASS						
Spurious Emission	15.209(a)(f)	PASS						
20dB Bandwidth	15.215	PASS						
Antenna requirement	15.203	PASS						

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

- Test Lab: Shenzhen DL Testing Technology Co., Ltd.
- 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1

Address: Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

FCC Test Firm Registration Number: 854456 Designation Number: CN1307 IC Registered No.: 27485 CAB ID.: CN0118



3.1

## 3. GENERAL INFORMATION

Description of Device (	EUT)
Product:	power strip with wireless charging
Trade Mark:	N/A
Model No.:	wireless power strip
Model Difference:	N/A
Serial No.:	N/A
Hardware version:	H1.0
Software version:	S1.0
Operation Frequency	: 115kHz ~ 205KHz
Modulation type:	MSK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
	Input: 100-250VAC 50/60Hz
Power supply:	TYPE-C output: DC 5V/3.0A or DC 9V/2.2A or DC 12V/1.67A 10W MAX.
r ower suppry.	USB output: DC 5V/2.4A
	Wireless charging output: DC 5V/1.5A or DC 9V/1.1A 10W MAX.

# 3.2 Tested System Details

None.

3.3 Block Diagram of Test Set-up



3.4 Test Mode Description

Mode1.Wireless Phone Output Mode(7.5W)Mode2.Wireless Phone Output Mode(10W)Note: 1. We have evaluated 1%, 50% and 99% battery charging mode, and the worst mode (99%) isshowed in this report.

2. All modes have been tested, and the report only shows the results of the worst mode2.

3.5 Test Auxiliary Equipment

Mobile phone (Provide by test lab): Manufacturer: SAMSUNG Model: Galaxy S21 5G

3.6 Test Uncertainty

Conducted Emission Uncertainty(150KHz-30MHz)	:	±2.56dB
20dB Bandwidth	:	±0.5kHz
Radiated Emission Uncertainty(9KHz-1GHz)	:	±3.24dB



## 4. TEST INSTRUMENT USED

## For Conducted Emission Test (843 Shielded Room)

Equipment	Manufacturer	Model	Serial	Last Cal.	Next Cal.
843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
EMI Receiver	R&S	ESR	101421	Nov. 01, 2024	Oct. 31, 2025
LISN	LISN R&S		102417	Nov. 01, 2024	Oct. 31, 2025
Clamp	COM-POWER	CLA-050	431071	Nov. 02, 2024	Nov. 01, 2025
3-Loop Antenna	DAZE	ZN30401	13021	Nov. 02, 2024	Nov. 01, 2025
ISN T8	Schwarzbeck	NTFM 8158	101135	Nov. 01, 2024	Oct. 31, 2025
ISN T5	Schwarzbeck	NTFM 8158	101136	Nov. 01, 2024	Oct. 31, 2025
843 Cable 1#	ChengYu	CE Cable	001	Nov. 01, 2024	Oct. 31, 2025
843 Cable 1#	ChengYu	CE Cable	002	Nov. 01, 2024	Oct. 31, 2025

# For Radiated Emission Test (966 chamber)

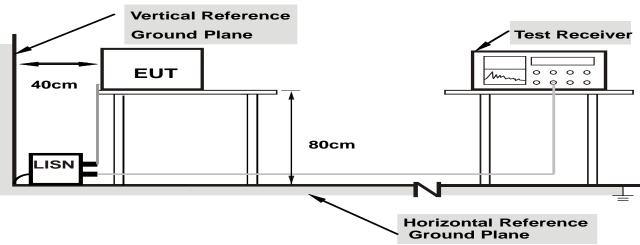
Equipment	Manufacturer	Model	Serial	Last Cal.	Next Cal.
966 Chamber	YIHENG	966 Room	966	Nov. 06, 2023	Nov. 05, 2026
Spectrum Analyzer	Agilent	E4408B	MY50140780	Nov. 01, 2024	Oct. 31, 2025
EMI Receiver	R&S	ESRP7	101393	Nov. 01, 2024	Oct. 31, 2025
Amplifier	Schwarzbeck	BBV9743B	00153	Nov. 01, 2024	Oct. 31, 2025
Amplifier	EMEC	EM01G8GA	00270	Nov. 01, 2024	Oct. 31, 2025
Broadband Trilog Antenna	Schwarzbeck	VULB9162	00306	Nov. 02, 2024	Nov. 01, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	02139	Nov. 02, 2024	Nov. 01, 2025
Loop Antenna	ZHINAN	ZN30900A	/	Nov. 01, 2024	Oct. 31, 2025
966 Cable 1#	ChengYu	966	004	Nov. 01, 2024	Oct. 31, 2025
966 Cable 2#	ChengYu	966	003	Nov. 01, 2024	Oct. 31, 2025



## 5. CONDUCTED EMISSION TEST

5.1 Block Diagram of Test Setup

For Mains Terminals Test



# Note: 1.Support units were connected to second LISN. 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

#### 5.2 Test Standard and Limit

#### FCC Part 15 Subpart C

Frequency	Limits dB(µV)					
MHz	Quasi-peak Level Average Level					
0.15~0.50	66 ~ 56*	55 ~ 46*				
0.50~5.00	56	46				
5.00~30.00	60 50					

Notes: 1. \*Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

## 5.3 EUT Configuration on Test

The following equipment's are installed on conducted emission test to meet FCC Part 15 Subpart C requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

## 5.4 Operating Condition of EUT

5.4.1 Setup the EUT and simulators as shown in Section 5.1.

5.4.2 Turn on the power of all equipments.

5.4.3 Let the EUT work in test modes and test it.



#### 5.5 Test Procedure

The EUT is put on the table and connected to the AC mains through a Artificial Mains Network (AMN) or ISN. This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **ANSI C63.10** regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESR) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.

Notes:

1.An initial pre-scan was performed on the line and neutral lines with peak detector.

2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

3.Mesurement Level = Reading level + Correct Factor

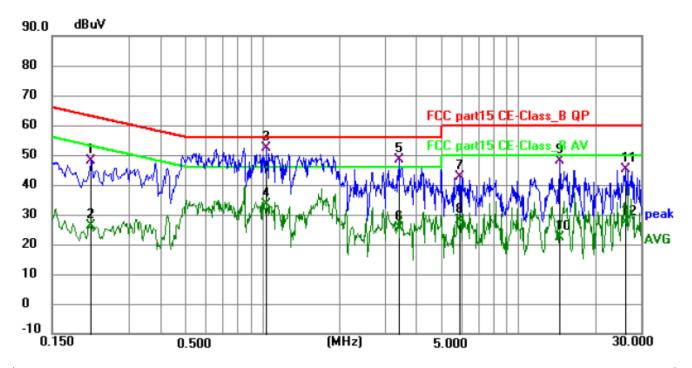
#### 5.6 Test Result

## PASS

Please refer to the following page.



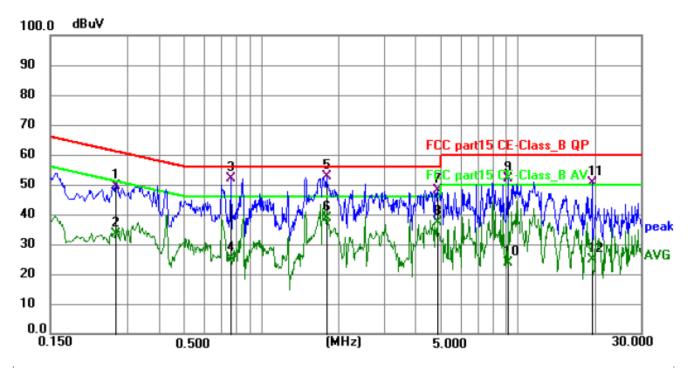
Conducted Emission Test Data							
Temperature:	24.5 °C	Relative Humidity:	54%				
Pressure:	1009hPa	Phase:	Line				
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2				



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2130	38.24	9.93	48.17	63.09	-14.92	QP	Р	
2	0.2130	16.24	9.93	26.17	53.09	-26.92	AVG	Р	
3 *	1.0275	42.47	9.97	52.44	56.00	-3.56	QP	Р	
4	1.0275	23.28	9.97	33.25	46.00	-12.75	AVG	Р	
5	3.4304	38.47	9.93	48.40	56.00	-7.60	QP	Р	
6	3.4304	15.43	9.93	25.36	46.00	-20.64	AVG	Р	
7	5.9233	32.64	9.97	42.61	60.00	-17.39	QP	Р	
8	5.9233	18.09	9.97	28.06	50.00	-21.94	AVG	Р	
9	14.4600	38.12	9.95	48.07	60.00	-11.93	QP	Р	
10	14.4600	12.43	9.95	22.38	50.00	-27.62	AVG	Р	
11	26.2092	34.93	10.26	45.19	60.00	-14.81	QP	Р	
12	26.2092	17.21	10.26	27.47	50.00	-22.53	AVG	Р	



Conducted Emission Test Data							
Temperature:	54%						
Pressure:	1009hPa	Phase:	Neutral				
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2				



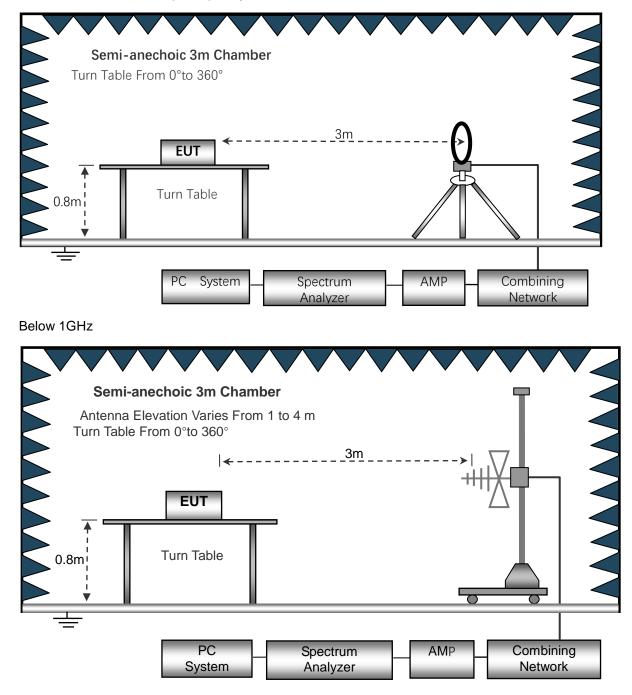
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2714	39.60	9.94	49.54	61.07	-11.53	QP	Ρ	
2	0.2714	23.55	9.94	33.49	51.07	-17.58	AVG	Ρ	
3	0.7620	41.97	9.97	51.94	56.00	-4.06	QP	Ρ	
4	0.7620	15.37	9.97	25.34	46.00	-20.66	AVG	Р	
5 *	1.7923	42.73	9.99	52.72	56.00	-3.28	QP	Ρ	
6	1.7923	28.61	9.99	38.60	46.00	-7.40	AVG	Ρ	
7	4.8659	37.98	9.93	47.91	56.00	-8.09	QP	Ρ	
8	4.8659	27.47	9.93	37.40	46.00	-8.60	AVG	Ρ	
9	9.1410	42.03	9.92	51.95	60.00	-8.05	QP	Ρ	
10	9.1410	13.78	9.92	23.70	50.00	-26.30	AVG	Ρ	
11	19.3425	40.58	10.02	50.60	60.00	-9.40	QP	Ρ	
12	19.3425	14.78	10.02	24.80	50.00	-25.20	AVG	Р	



#### 6. RADIATION EMISSION TEST

6.1 Block Diagram of Test Setup

Radiated Emission Test-Up Frequency Below 30MHz



6.2 Test Standard and Limit FCC Part 15 Subpart C



#### Limits for frequency below 30MHz

Frequency	Limit (uV/m)	Measurement Distance(m)	Remark
0.009-0.090	2400/F(kHz)	300	AVERAGE
0.090-0.110	2400/F(kHz)	300	Quasi-peak Value
0.110-0.490	2400/F(kHz)	300	AVERAGE
0.490-1.705	24000/F(kHz)	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

Above 30MHz

Frequency	Distance	Field Strengths Limits	Remark
(MHz)	(Meters)	(dBµV/m)	
30 ~ 88	3	40.0	Quasi-peak Value
88 ~ 216	3	43.5	Quasi-peak Value
216 ~ 960	3	46.0	Quasi-peak Value
960 ~ 1000	3	54.0	Quasi-peak Value
Above 1000	3	74.0	PEAK
		54.0	AVERAGE

Remark:

(1) The smaller limit shall apply at the cross point between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument, antenna and the closed point of any part of the device or system.

## 6.3 EUT Configuration on Test

The FCC Part 15 Subpart C regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is the same as used in conducted emission test.

Please refer to Section 5.3.

## 6.4 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 5.4 except the test set up replaced as Section 6.2.

## 6.5 Test Procedure

1) The radiated emissions test was conducted in a semi-anechoic chamber.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.

3) Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.

4) The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

5) The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz.

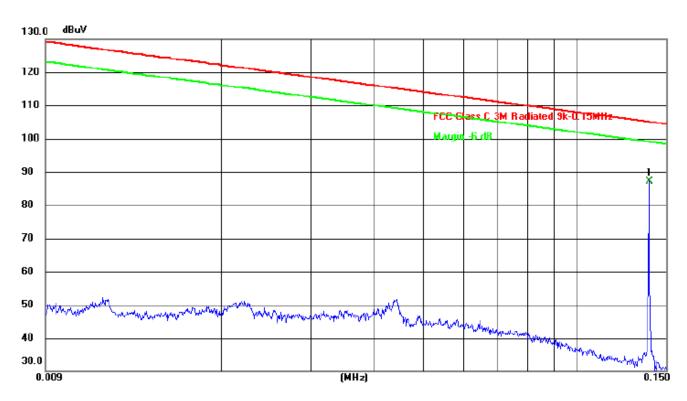
6) The frequency range from 9KHz to 1000MHz is checked.

6.6 Test Result

PASS, Please refer to the following page.



Radiation Emission Test Data 9 kHz~0.15MHz						
Temperature:	<b>24.5</b> ℃	Relative Humidity:	54%			
Pressure:	1009hPa	Polarization:	/			
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2			



Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Deletion Type	
0.1386	86.71	9.13	95.84	105.04	-9.2	AVERAGE	

Note:

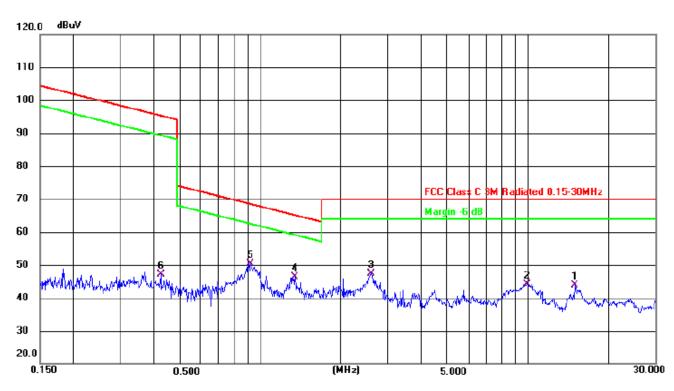
Pre-scan in the all of mode, the worst case in of was recorded.

Factor = antenna factor + cable loss - pre-amplifier.

Margin = Emission Level(Meter Reading+ Factor) - Limit.



Radiation Emission Test Data 0.15MHz~30 MHz					
Temperature:	<b>24.5</b> ℃	Relative Humidity:	54%		
Pressure:	1009hPa	Polarization:	/		
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2		



Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
14.9068	43.11	9.15	52.26	70	-17.74	AVG
9.9130	44.61	9.72	54.33	70	-15.67	AVG
2.5943	46.57	9.31	55.88	70	-14.12	QP
1.3447	46.15	9.36	55.51	65.09	-9.58	QP
0.9183	50.00	8.44	58.44	68.46	-10.02	QP
0.4237	46.13	9.52	55.65	95.27	-39.62	QP

Note:

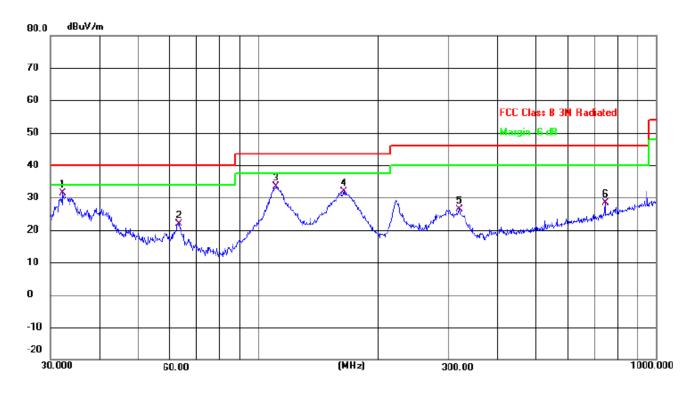
Pre-scan in the all of mode, the worst case in of was recorded.

Factor = antenna factor + cable loss – pre-amplifier.

Margin = Emission Level(Meter Reading+ Factor) - Limit.



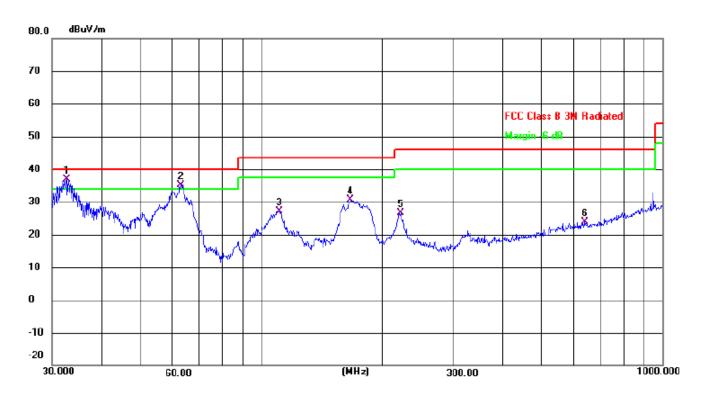
Radiation Emission Test Data					
Temperature:	24.5 ℃	Relative Humidity:	54%		
Pressure:	1009hPa	Polarization:	Horizontal		
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2		



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1 *	32.2925	47.40	-15.97	31.43	40.00	-8.57	QP
2	63.3132	36.30	-14.53	21.77	40.00	-18.23	QP
3	110.9570	48.64	-15.14	33.50	43.50	-10.00	QP
4	163.7549	49.14	-17.37	31.77	43.50	-11.73	QP
5	319.9369	37.84	-11.55	26.29	46.00	-19.71	QP
6	744.8660	31.54	-3.25	28.29	46.00	-17.71	QP



Radiation Emission Test Data					
Temperature:	<b>24.5</b> ℃	Relative Humidity:	54%		
Pressure:	1009hPa	Polarization:	Vertical		
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2		



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1 *	32.6340	52.81	-15.96	36.85	40.00	-3.15	QP
2 !	62.8706	49.72	-14.47	35.25	40.00	-4.75	QP
3	110.5686	42.20	-14.95	27.25	43.50	-16.25	QP
4	167.2366	47.78	-17.20	30.58	43.50	-12.92	QP
5	222.1697	40.85	-14.11	26.74	46.00	-19.26	QP
6	638.3686	28.63	-4.87	23.76	46.00	-22.24	QP

#### Remarks:

1.Final Level =Receiver Read level + Correct factor (Antenna Factor + Cable Loss – Preamplifier Factor) 2.The emission levels of other frequencies are very lower than the limit and not show in test report.



## 7. BANDWIDTH TEST

- 7.1 TEST SETUP
- 1. Set RBW = 3kHz.
- 2. Set the video bandwidth (VBW)  $\ge$  3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.

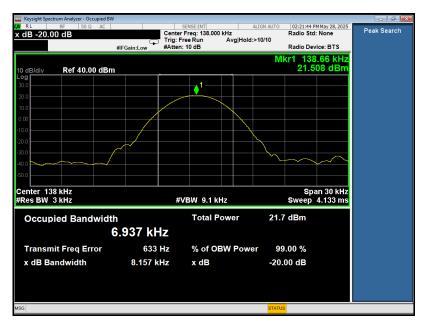
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

# 7.2 TEST SETUP



#### 7.3 TEST Result

Frequency (KHz)	20dB bandwidth (KHz)	Result
138	8.157	Pass



Note: The measured signal is Cw-ike, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 3kHz to perform the occupied bandwidth test.



## 8. ANTENNA REQUIREMENT

#### a) STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

#### b) EUT ANTENNA

The EUT antenna is Inductive loop coil Antenna. It comply with the standard requirement.

## 9. SETUP PHOTOGRAPHS

Reference to the setup photo for details.

#### 10. EUT PHOTOGRAPHS

Reference to the external and internal photo for details.

**\*\*\*\*\*\* END OF REPORT \*\*\*\*\***