

RF TEST REPORT

Report No. : SSP26030023-2R

Applicant : Booster Robotics Technology Co., Ltd

Product Name : Remote control

Model Name : BR-RC1-DM-BK

Test Standard : Article 2 Paragraph 1 of Item 8

Date of Issue : 2026-04-11

Shenzhen CCUT Quality Technology Co., Ltd.

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This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.

Test Report Basic Information

Applicant.....:	Booster Robotics Technology Co., Ltd 301, Building 16, East Yongtaizhuang Village, Qinghe, Haidian District, Address of Applicant.....:	Beijing, China
Manufacturer.....:	Booster Robotics Technology Co., Ltd 301, Building 16, East Yongtaizhuang Village, Qinghe, Haidian District, Address of Manufacturer.....:	Beijing, China
Product Name.....:	Remote control	
Brand Name.....:	-	
Main Model.....:	BR-RC1-DM-BK	
Series Models.....:	-	
Test Standard.....:	Article 2 Paragraph 1 of Item 8 MIC notification No.88 of 2004, Annex 22-2	
Date of Test	2026-03-08 to 2026-04-08	
Test Result.....:	PASS	
Tested By	 (Walker Wu)	
Reviewed By.....:	 (Lorix Luo)	
Authorized Signatory.....:	 (Lahm Peng)	
Note : This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen CCUT Quality Technology Co., Ltd.. All test data presented in this test report is only applicable to presented test sample.		

CONTENTS

1. General Information.....	5
1.1 Product Information	5
1.2 Test Setup Information.....	6
1.3 Test Conditions	6
1.4 Compliance Standards.....	7
1.5 Test Facilities.....	7
1.6 List of Measurement Instruments	8
1.7 Measurement Uncertainty.....	8
2. Summary of Test Results.....	9
3. Antenna Power and Tolerance.....	10
3.1 Standard and Limit.....	10
3.2 Test Procedure.....	10
3.3 Test Data and Results.....	11
4. Frequency Tolerance.....	12
4.1 Standard and Limit.....	12
4.2 Test Procedure.....	12
4.3 Test Data and Results.....	12
5. Occupied Bandwidth	13
5.1 Standard and Limit.....	13
5.2 Test Procedure.....	13
5.3 Test Data and Results.....	13
6. Transmitter Spurious Emissions	15
6.1 Standard and Limit.....	15
6.2 Test Procedure.....	15
6.3 Test Data and Results.....	15
7. Receiver Spurious Emissions	17
7.1 Standard and Limit.....	17
7.2 Test Procedure.....	17
7.3 Test Data and Results.....	17
8. Interference Prevention Function	18
8.1 Standard and Limit.....	18
8.2 Test Procedure.....	18
8.3 Test Data and Results.....	18
9. Transmission Time Restriction	19
9.1 Standard and Limit.....	19
9.2 Test Procedure.....	19
9.3 Test Data and Results.....	19
10. Adjacent Channel Leakage Power	20
10.1 Standard and Limit.....	20
10.2 Test Procedure.....	20
10.3 Test Data and Results.....	20
11. Carrier Sensing Function	22
11.1 Standard and Limit.....	22
11.2 Test Procedure.....	22
11.3 Test Data and Results.....	22

Revision History

Revision	Issue Date	Description	Revised By
V1.0	2026-04-11	Initial Release	Lahm Peng

1. General Information

1.1 Product Information

Product Name:	Remote control
Trade Name:	-
Test Model:	BR-RC1-DM-BK
Series Models:	-
Rated Voltage:	DC 3.7V by battery, USB 5V Charging
Battery:	DC 3.7V, 800mAh
Hardware Version:	V1.0
Software Version:	V1.0
Note 1: The test data is gathered from a production sample, provided by the manufacturer.	

Wireless Specification	
Operating Frequency:	429.4MHz
Channel Separation:	12.5kHz
Number of Channel:	1
Modulation:	F1D
Antenna Gain:	0dBi
Type of Antenna:	FPCB Antenna

1.2 Test Setup Information

List of Test Modes			
Test Mode	Description	Remark	
TM1	Transmitting	429.4MHz	
-	-	-	
List and Details of Auxiliary Cable			
Description	Length (cm)	Shielded/Unshielded	With/Without Ferrite
-	-	-	-
-	-	-	-
List and Details of Auxiliary Equipment			
Description	Manufacturer	Model	Serial Number
-	-	-	-
-	-	-	-

1.3 Test Conditions

Supply Voltage			
	DC Input Voltage V	DC Voltage V	Percent
Normal(NV)	3.7	3.3	
+10%(HV)	4.07	3.3	0%
-10%(LV)	3.33	3.3	0%
Note 1: When the input voltage is reduced or increased by 10%, the regulator voltage changes of less than 1%. So the following test items are conducted in the normal voltage.			
Note 2: The regulator voltage is integral within U2(SI4463).			
Note 3: 3.3VDC from the RF IC, for extreme voltage test, we have tested the relationship between the external power supply and RF IC power supply. Base on the test results, only the normal voltage was selected to perform all items.			

Test Environment					
Temperature	21℃	Humidity	52%	Atmospheric Pressure	1013.0mbar

1.4 Compliance Standards

Compliance Standards	
Article 2 Paragraph 1 of Item 8	Specified Low-Power Devices for Telemeter, Telecontrol and Data Transmission (420 MHz band, 455 MHz band)
All measurements contained in this report were conducted with all above standards	
According to standards for test methodology	
MIC notification No.88 of 2004, Annex 22-2	Radio equipment listed in Item 2 and Item 4 of Paragraph 1 of Ministry of Posts and Telecommunications Notice No. 42 of First year of Heisei
Maintenance of compliance is the responsibility of the manufacturer or applicant. Any modification of the product, which result is lowering the emission, should be checked to ensure compliance has been maintained.	

1.5 Test Facilities

Laboratory Name:	Shenzhen CCUT Quality Technology Co., Ltd. 1F, Building 35, Changxing Technology Industrial Park, Yutang Street, Guangming District, Shenzhen, Guangdong, China
CNAS Laboratory No.:	L18863
A2LA Certificate No.:	6983.01
FCC Registration No.:	583813
ISED Registration No.:	CN0164

1.6 List of Measurement Instruments

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Conducted RF Testing					
RF Test System	MWRFTTest	MW100-RFCB	220418SQS-37	2025-07-16	2026-07-15
Spectrum Analyzer	KEYSIGHT	N9020A	ATO-90521	2025-07-16	2026-07-15
Signal Generator	Agilent	N5182A	MY47071192	2025-07-15	2026-07-14
Power Meter	MRT	MW100-RFCB	MW220418SQS-37	2025-07-15	2026-07-14
Calibration agency: Guangzhou LiSai Metrology & Test Co., Ltd.					
Address: No.8 South Street, Shiji Institute, Guangzhou, Guangdong, China					
Calibration method: Through the standard signal source calibration, the results meet the requirements.					
Calibration method is based on: Radio law article 24-2, Paragraph 4, Item 2 section c.					
Calibration agency comply with designated calibration agency under Article 102-18 paragraph (1).					

1.7 Measurement Uncertainty

Test Item	Conditions	Uncertainty
Dwell Time	9kHz ~ 6GHz	±1.0 %
Frequency Tolerance	9kHz ~ 6GHz	±1 E-7
Conducted Output Power	9kHz ~ 6GHz	±0.50 dB
Occupied Bandwidth	9kHz ~ 6GHz	±4.0 %
Conducted Spurious Emission	9kHz ~ 26GHz	±1.32 dB

2. Summary of Test Results

MIC Rule	Description of Test Item	Result
Article 2 Paragraph 1 of Item 8	Antenna Power and Tolerance	Passed
	Frequency Tolerance	Passed
	Occupied Bandwidth	Passed
	Transmitter Spurious Emissions	Passed
	Receiver Spurious Emissions	Passed
	Interference Prevention Function	Passed
	Transmission Time	N/A
	Adjacent Channel Leakage Power	Passed
	Carrier Sensing Function	Passed
	Housing requirements	Passed*
Passed: The EUT complies with the essential requirements in the standard Failed: The EUT does not comply with the essential requirements in the standard N/A: Not applicable *: The product shell is fixed with anti-disassembly screws, which cannot be opened by non-professionals without special tools and meets the compliance standards specified in the clause.		
The Appendix A is a part of the test report, including EUT external photos, internal photos, test photos and label information;		

3. Antenna Power and Tolerance

3.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1 following limit.

CH interval	Frequency Allocation	Antenna Power	Antenna Power Tolerance	E.I.R.P.
6.25kHz	426.028125 ~ 426.134375 MHz	0.1 W		2.93dBm
12.5kHz	426.0250 ~ 426.1375 MHz	*When the antenna is not contained in one housing : 1.637mW or less		
25kHz	426.0375 ~ 426.1125 MHz			
6.25kHz	429.178125 ~ 429.734375 MHz	1 W *When the antenna is not contained in one housing : 16.37mW or less	+20%, -50%	12.93dBm
12.5kHz	429.1750 ~ 429.7375 MHz			
6.25kHz	429.815625 ~ 429.921875 MHz ^(*) 449.715625 ~ 449.821875 MHz ^(*) 449.840625 ~ 449.884375 MHz ^(*) 469.440625 ~ 469.484375 MHz ^(*)			
12.5kHz	429.8125 ~ 429.9250 MHz ^(*) 449.7125 ~ 449.8250 MHz ^(*) 449.8375 ~ 449.8875 MHz ^(*) 469.4375 ~ 469.4875 MHz ^(*)			
(*)1: 429.921875, 449.821875, 449.884375, 469.484375, 429.9250, 449.8250, 449.8875, 469.4875 MHz are Frequency Control Channel				

3.2 Test Procedure

- (1) Remove the antenna from the EUT and connect to the spectrum analyzer via a low loss RF cable.
- (2) Set the spectrum analyzer to any one measured frequency within its operating range.
- (3) Set RBW = 1MHz, VBW = 1MHz, Sweep = Auto, Detector = Peak, Trace mode: Max hold.
- (4) Measure the highest amplitude appearing on spectral display and mark the value.



Test Setup Block Diagram

3.3 Test Data and Results

Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Limit (mW)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)
429.4	1.21	1.32	1000	0	1.21	12.93
Note: EIRP = Output Power(dBm) + Antenna Gain						

RF Output Power Tolerance:

Frequency (MHz)	Output Power (mW)	Rated Output Power (mW)	Tolerance (%)	Limit (%)
429.4	1.32	2	-34	+20, -50
Note: Tolerance = (Output Power – Rated Output Power) / Rated Output Power * 100%				

4. Frequency Tolerance

4.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1, Frequency tolerance shall be within the assigned frequency band.

CH interval	Limit
6.25kHz	$\pm 2\text{ppm}$
12.5kHz	$\pm 4\text{ppm}$
25kHz	$\pm 10\text{ppm}$

4.2 Test Procedure

- (1) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- (2) Set center frequency of spectrum analyzer = operating frequency.
- (3) Set the spectrum analyzer as RBW, VBW=10KHz, Span = 1MHz.
- (4) 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided emission is repetitive in nature.
- (5) Repeat above procedures until all frequency measured was complete.



Test Setup Block Diagram

4.3 Test Data and Results

Test Frequency (MHz)	Reading Value (MHz)	Deviation (ppm)	Limit (ppm)	Verdict
429.4	429.401	2.3	± 4	Pass

5. Occupied Bandwidth

5.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1 following limit.

CH interval	Limit
6.25kHz	5.8 kHz or less
12.5kHz	8.5 kHz or less
25kHz	16 kHz or less

5.2 Test Procedure

(1) Set up the spectrum analyzer as the follows:

Center frequency: Test frequency

Sweep bandwidth: 2 to 3.5 times of allowance

Resoluble bandwidth: less than 3% of allowance

Video bandwidth: Equivalent to resolvable bandwidth

Sweep time: Minimum time by which measuring accuracy is assured (In case of burst wave, 1 burst shall be contained per 1 sample)

Sampling points: More than 400 points

Sweep mode : Continuous sweeping

Detection mode: Positive peak

Display mode: Maximum holding

(2) Repeat the sweeping till no change was observed on the display and enter all values of data point to the computer as array variable.

(3) About all data, convert dB value to antilogarithm of electric power dimension.

(4) Add up the electric power of all data and record it as "Sum total of electric power".

(5) Adding up data in order from the lowest frequency to upper frequencies, look for a limit point where the value reaches to 0.5% (5% in case of diffusion bandwidth) of "Sum total of electric power". Convert the limit point to frequency and record as "Lowest limit frequency".

(6) Adding up data in order from the highest frequency to lower frequencies, look for a limit point where the value reaches to 0.5% (5% in case of diffusion bandwidth) of "Sum total of electric power". Convert the limit point to frequency and record as "Highest limit frequency".

(7) Repeat above procedures until all frequency measured was complete.



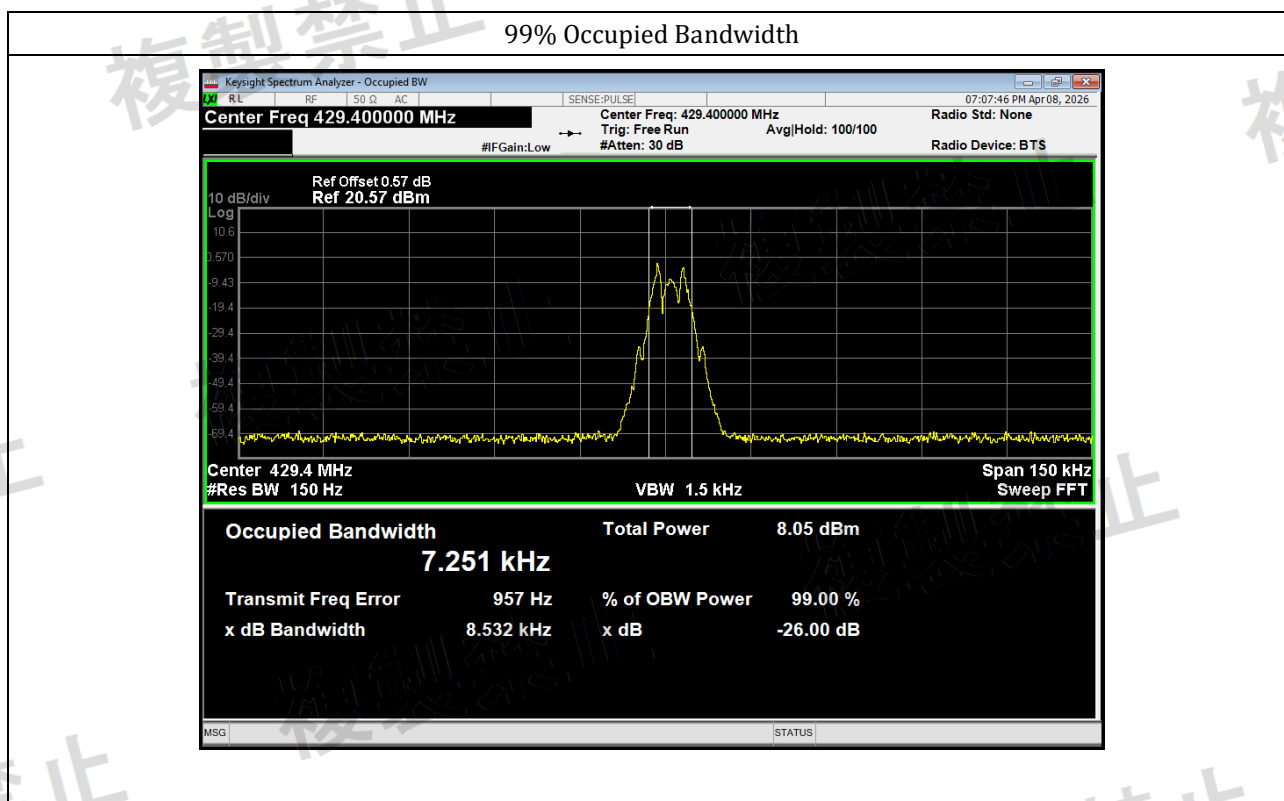
Test Setup Block Diagram

5.3 Test Data and Results

Occupied Bandwidth (99% Emission Bandwidth)

Test Frequency (MHz)	Reading Value	Limit	Verdict
429.4	7.251kHz	8.5kHz	Pass

Please refer to the following test plots



6. Transmitter Spurious Emissions

6.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1. The transmitter spurious emissions shall not exceeded the following limit:

- (1) Below 1GHz: 2.5 μ W/100kHz;
- (2) Over 1GHz: 2.5 μ W/MHz

6.2 Test Procedure

- (1) A spectrum in case of conducted measurements, the radio device shall be connected to the measuring equipment via a suitable attenuator.
- (2) The measurement equipment shall be set for peak hold mode of operation.
- (3) the transmitter shall be operated at the highest output power, or, in the case of equipment able to operate at more than one power level, at the lowest and highest output powers;
- (4) The resolution bandwidth shall be set to 100kHz from 10MHz to 1GHz, the resolution bandwidth shall be set to 1MHz above 1GHz, and the sweep time shall be set to auto mode, to ensure all major modulation products are captured.
- (5) When the searched result is less than the specified limit, the maximum one shall be recorded, when the result is more than the specified limit, all measured values shall be recorded.
- (6) This measurement shall be repeated with the transmitter in standby mode where applicable.
- (7) Repeat above procedures until all frequency measured was complete.

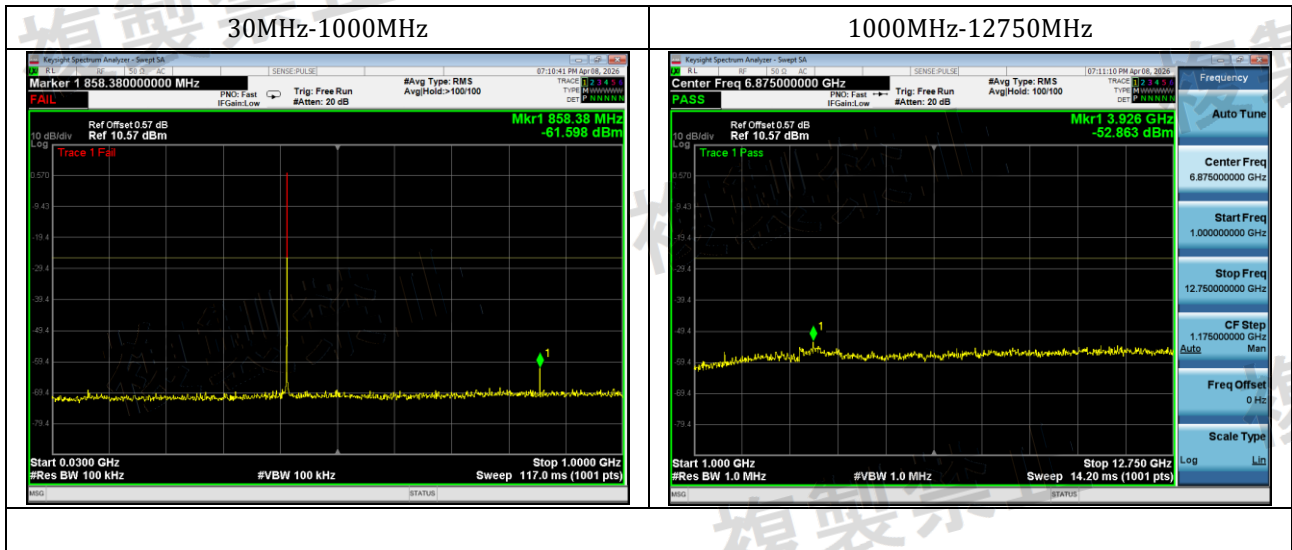


Test Setup Block Diagram

6.3 Test Data and Results

Frequency Range (MHz)	Emission Frequency (MHz)	Maximum Spurious Emission Value (dBm)	Maximum Spurious Emission Value (uW)	Limit (dBm)	Limit (uW)	Verdict
30-1000	858.38	-61.598	0.001	-26	2.5	Pass
1000-12750	3926	-52.863	0.005	-26	2.5	Pass

Please refer to the following test plots



7. Receiver Spurious Emissions

7.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1. The receiver spurious emissions shall not exceeded the following limit:

- (1) Below 1GHz : 4nW/100kHz
- (2) 1GHz or higher : 4nW/MHz

7.2 Test Procedure

- (1) A spectrum in case of conducted measurements, the radio device shall be connected to the measuring equipment via a suitable attenuator.
- (2) The measurement equipment shall be set for peak hold mode of operation.
- (3) the transmitter shall be operated at the highest output power, or, in the case of equipment able to operate at more than one power level, at the lowest and highest output powers;
- (4) The resolution bandwidth shall be set to 100kHz from 10MHz to 1GHz, the resolution bandwidth shall be set to 1MHz above 1GHz , and the sweep time shall be set to auto mode, to ensure all major modulation products are captured.
- (5) When the searched result is less than the specified limit, the maximum one shall be recorded, when the result is more than the specified limit, all measured values shall be recorded.
- (6) This measurement shall be repeated with the transmitter in standby mode where applicable.
- (7) Repeat above procedures until all frequency measured was complete.



Test Setup Block Diagram

7.3 Test Data and Results

Because this device is only supported transmitting, so it is not applicable.

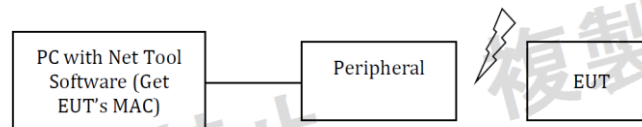
8. Interference Prevention Function

8.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1, the device shall have the function of automatic transmission or reception of identification code.

8.2 Test Procedure

- (1) Set the EUT in the usual operation condition.
- (2) The radio equipment with automatic transmitting function of identification code.
 - a. Transmit the assigned identification code from the radio equipment.
 - b. Confirm the identification code received by the demodulator.
- (3) The radio equipment with automatic receiving function of identification code.
 - a. Transmit the assigned identification code from the opposite equipment.
 - b. Confirm that the usual communication is available.
 - c. Transmit the identification code distinct from the assigned one from the opposite equipment.
 - d. Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.
- (4) The identification function shall be recorded.



Test Setup Block Diagram

8.3 Test Data and Results

Test Items	Test Result
Transmitting Function of Identification Code	Good
Receiving Function of Identification Code	Good

9. Transmission Time Restriction

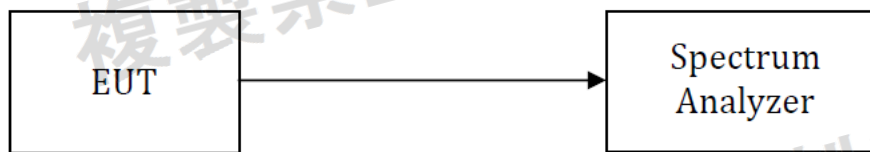
9.1 Standard and Limit

According to Item 8 of Article 2 Paragraph 1 following limit.

CH interval	Limit
6.25kHz	Transmission ON: within 40 sec.
12.5kHz	Transmission OFF: over 2 sec.
25kHz	or
	Transmission ON: within 5 sec.
	Transmission OFF: over 2 sec.
	or
	Transmission ON: within 0.2 sec.
	Transmission OFF: over 2 sec.

9.2 Test Procedure

1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set center frequency of spectrum analyzer = operating frequency.
3. Set the spectrum analyzer as RBW, VBW=1MHz, Span = 0Hz, Sweep time = 100s
4. Recode the quantity of pulse in a test period.



Test Setup Block Diagram

9.3 Test Data and Results

No requirement, Possible Continuous Transmission.

10. Adjacent Channel Leakage Power

10.1 Standard and Limit

According to Article 2 Paragraph 1 of Item 8. The adjacent channel leakage power must meet the following requirements.

CH interval	Limit
6.25kHz	-40 dBc(± 2 kHz band of the frequency which separated 6.25kHz from Cf)
12.5kHz	-40 dBc(± 4.25 kHz band of the frequency which separated 12.5kHz from Cf)
25kHz	-40 dBc(± 8 kHz band of the frequency which separated 25kHz from Cf)

10.2 Test Procedure

(1) Set up the spectrum analyzer as the follows:

Center frequency: Test frequency

Span: > 4 times of integrate bandwidth

RBW: 0.5~2.5% Span

VBW: $\geq$ RBW

Sampling points: More than 400 points

Sweep mode: Continuous sweep

Detection mode: Peak

Trace mode: Max hold.

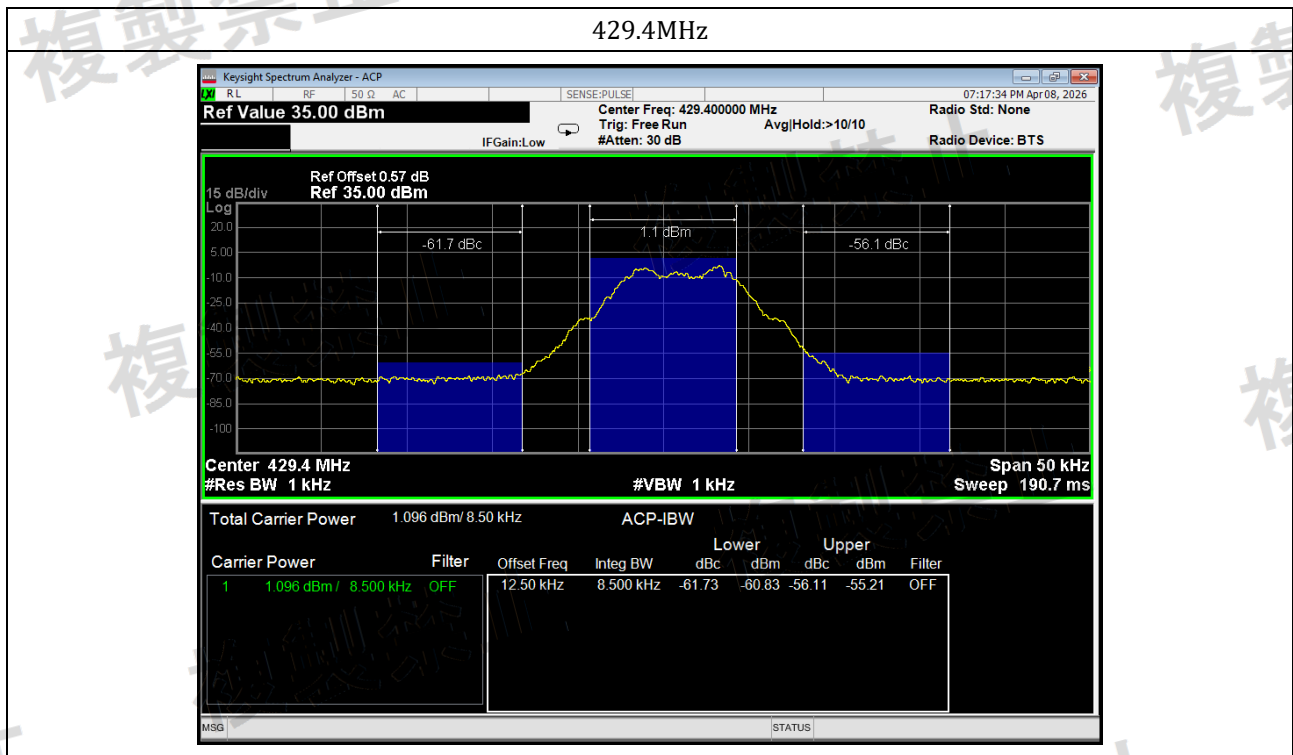


Test Setup Block Diagram

10.3 Test Data and Results

Frequency (MHz)	Offset (kHz)	Value (dBc)	Limit (dBc)	Verdict
429.4	-12.5kHz	-61.7	-40	Pass
	12.5kHz	-56.1	-40	Pass

Please refer to the following test plots



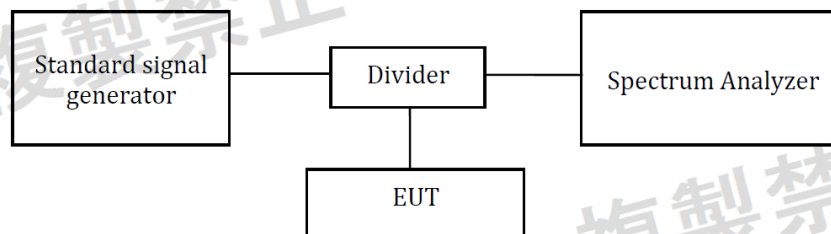
11. Carrier Sensing Function

11.1 Standard and Limit

According to Article 2 Paragraph 1 of Item 8, the device shall have the carrier sensing function.

11.2 Test Procedure

- (1) SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG and power level is -80dBm. Then turn off the RF signal of SG.
- (2) EUT have transmitted the maximum modulation signal and fixed channelize.
- (3) Setting of SA is following as: RBW:100 kHz / VBW:100 kHz / SPAN: 300 kHz / AT: 10dB /Ref: 0dBm /Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: peak.
- (4) SG Signal on EUT shall be stop the transmitted, Then turn off the SG, The EUT shall be continuous transmitted signal.



Test Setup Block Diagram

11.3 Test Data and Results

Test Item	Test Result
Carrier Sensing Function	Good

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