

Japan Specified Radio Test Report

Report No. : 1812C60160512504

Applicant : Guangdong Hanying Photoelectric
Technology Co., Ltd

Address : Room 201, Building 3, No. 3 sima Industrial
Road, changping Town, Dongguan City,
Guangdong Province, China

Product Name : Smart Projector

Report Date : 2026-05-20



Shenzhen Anbotek Compliance Laboratory Limited



Contents

1. General Information	6
1.1. Client Information	6
1.2. Description of Device (EUT)	6
1.3. Auxiliary Equipment Used During Test	8
1.4. Description of Test Modes	8
1.5. Test Conditions	8
1.6. Test Voltage	8
1.7. Test Equipment List	9
1.8. Description of Test Facility	10
1.9. Disclaimer	10
1.10. Measurement Uncertainty	11
2. Summary of test	12
3. Frequency Tolerance Test	13
3.1. Test Limit	13
3.2. Test Setup	13
3.3. Test Procedure	13
3.4. Test Results	13
4. Antenna Power Test	14
4.1. Test Limit	14
4.2. Test Setup	14
4.3. Test Procedure	14
4.4. Test Results	15
5. Occupied Bandwidth (99%) Test	16
5.1. Test Limit	16
5.2. Test Setup	16
5.3. Test Procedure	16
5.4. Test Results	16
6. Unwanted Emission Strength Test	17
6.1. Test Limit	17
6.2. Test Setup	17
6.3. Test Procedure	17
6.4. Test Results	18
7. Adjacent Channel Leakage Power Test	19
7.1. Test Limit	19
7.2. Test Setup	19
7.3. Test Configuration	19
7.4. Test Results	19



8. Transmission Burst Length Test.....	20
8.1. Test Limit	20
8.2. Test Setup	20
8.3. Test Configuration	20
8.4. Test Results	20
9. Secondary Radiated Emission Strength Test	21
9.1. Test Limit	21
9.2. Test Setup	21
9.3. Test Configuration	21
9.4. Test Results	21
10. Carrier Sensing Function	22
10.1. Test Limit	22
10.2. Test Setup	22
10.3. Test Configuration	22
10.4. Test Results	23
11. Interference prevention function	24
11.1. Test Limit	24
11.2. Test Setup	24
11.3. Test Configuration	24
11.4. Test Results	24
APPENDIX I -- TEST SETUP PHOTOGRAPH	25
APPENDIX II -- EXTERNAL PHOTOGRAPH	25
APPENDIX III -- INTERNAL PHOTOGRAPH	25



TEST REPORT

Applicant : Guangdong Hanying Photoelectric Technology Co., Ltd
Manufacturer : Guangdong Hanying Photoelectric Technology Co., Ltd
Product Name : Smart Projector
Model No. : HY320Pro, HY320Pro-A, HY320Pro-*("*"represents B-Z)
Trade Mark : N/A
Rating(s) : Input1: 45V $\approx$ 0.95A
Input2: 12V $\approx$ 1.1A

**Test Standard(s) : MIC Notice No.88 Appendix No. 45
Article 2, Paragraph 1, Item 19-3**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the MIC Notice No.88 Appendix No. 45 and article 12, item 19-3 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt 2026-03-20

Date of Test 2026-03-20 to 2026-05-16

Prepared By

Cecilia Chen

(Cecilia Chen)

Approved & Authorized Signer

Hugo Chen

(Hugo Chen)



Revision History

Report Version	Description	Issued Date
R00	Original Issue.	2026-05-20



1. General Information

1.1. Client Information

Applicant	:	Guangdong Hanying Photoelectric Technology Co., Ltd
Address	:	Room 201, Building 3, No. 3 sima Industrial Road, changping Town, Dongguan City, Guangdong Province, China
Manufacturer	:	Guangdong Hanying Photoelectric Technology Co., Ltd
Address	:	Room 201, Building 3, No. 3 sima Industrial Road, changping Town, Dongguan City, Guangdong Province, China
Factory	:	Guangdong Hanying Photoelectric Technology Co., Ltd
Address	:	Room 201, Building 3, No. 3 sima Industrial Road, changping Town, Dongguan City, Guangdong Province, China

1.2. Description of Device (EUT)

Product Name	:	Smart Projector
Model No.	:	HY320Pro, HY320Pro-A, HY320Pro-*("represents B-Z) (For models differences: HY320Pro: The prototype includes the motor, limit plate, limit plate connection cable, camera, camera connection cable, and front receiver cover. It is ship with two remote controllers. HY320Pro-A&HY320Pro-*("represents B-Z): The prototype doesn't include the motor, limit plate, limit plate connection cable, camera, camera connection cable, and front receiver cover. It is ship with one remote controller. HY320Pro-*("represents B-Z): Only the model names and appearance colour are different from "HY320Pro-A". According the model differences, we prepare "HY320Pro" for test only.)
Trade Mark	:	N/A
Test Power Supply	:	AC 100V/50Hz
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Hardware Version	:	HY260_QZ726_V1
Software Version	:	Projector_20260312.160337
Adapter	:	Manufacturer: Guangdong Mingxin Power Technologies Co.,Ltd. Model: MX60W-4500950U -1201100U Input: 100-240V~, 50/60Hz, 1.5A Max Output1: 45.0V= 0.95A Output2: 12.0V= 1.1A
RF Specification		
Operation Mode:	:	☒ 802.11a ☒ 802.11n(HT20) ☒ 802.11ac(VHT20)
	:	☒ 802.11n(HT40) ☒ 802.11ac(VHT40) ☐ 802.11ac(VHT80)
	:	☐ 802.11ac(VHT160) ☒ 802.11ax(HEW20) ☒ 802.11ax(HEW40)
	:	☐ 802.11ax(HEW80) ☐ 802.11ax(HEW160)



Operation Frequency	:	☒ Wi-Fi 5.2G: 5150~5250MHz ☐ Wi-Fi 5.3G: 5250~5350MHz ☐ Wi-Fi 5.6G: 5470~5725MHz
TPC Function	:	☐ With TPC ☒ Without TPC
DFS Type	:	☒ Slave without radar detection ☐ Slave with radar detection ☐ Master
Number of Channel	:	Wi-Fi 5.2G: ☒ 4 Channels for 20MHz bandwidth (5180-5240MHz) ☒ 2 Channels for 40MHz bandwidth (5190-5230MHz) ☐ 1 Channels for 80MHz bandwidth (5210MHz) Wi-Fi 5.3G: ☐ 4 Channels for 20MHz bandwidth (5260-5320MHz) ☐ 2 Channels for 40MHz bandwidth (5270-5310MHz) ☐ 1 Channels for 80MHz bandwidth (5290MHz) Wi-Fi 5.2G+ Wi-Fi 5.3G: ☐ 1 Channels for 160MHz bandwidth (5250MHz) Wi-Fi 5.6G: ☐ 11 Channels for 20MHz bandwidth (5500-5700MHz) ☐ 5 Channels for 40MHz bandwidth (5510-5670MHz) ☐ 2 Channels for 80MHz bandwidth (5530-5610MHz) ☐ 1 Channels for 160MHz bandwidth (5570MHz)
Modulation Type	:	☒ 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) ☒ 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) ☒ 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) ☒ 802.11ax: OFDMA(BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Antenna Type	:	FPC Antenna
Antenna Gain(Peak)	:	4.45dBi
Rated output Power	:	802.11a: 1mW/MHz Max. 802.11n(HT20): 1mW/MHz Max. 802.11n(HT40): 1mW/MHz Max. 802.11ac(VHT20): 1mW/MHz Max. 802.11ac(VHT40): 1mW/MHz Max. 802.11ax(HEW20): 1mW/MHz Max. 802.11ax(HEW40): 1mW/MHz Max.
Remark: (1) All of the RF specification are provided by customer. (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		



1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
Lenovo Computer	Lenovo	R7-7730U	/

1.4. Description of Test Modes

The EUT has been tested under typical operating condition. The Applicant provides software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Frequency Band	Mode	Test channel	Frequency (MHz)
5.2GHz	OFDM/OFDMA 802.11a/n(HT20) /ac(VHT20)/ax(HEW20)	CH 36	5180
		CH 40	5200
		CH 48	5240
	OFDM/OFDMA 802.11n(HT40)/ac(VHT40)/ax(HEW40)	CH 38	5190
		CH 46	5230

Note: 802.11ax mode only support full resource unit size.

1.5. Test Conditions

	Normal Test Conditions
Temperature	15°C - 35°C
Relative Humidity	45% - 75%
Pressure Range	86-106kPa

1.6. Test Voltage

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input To EUT	AC 100V	AC 110V	AC 90V
Output To RF Module	DC 3.30V	DC 3.30V	DC 3.30V
Voltage Variation (%)	--	0.00%	0.00%

Note: Voltage Variation (%)=(Output high or Low Voltage - Output Normal Voltage)/ Output Normal Voltage* 100.

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.



1.7. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Last Cal.	Cal.Due Date
1	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	2025-12-29	2026-12-28
2	MXA Spectrum Analysis	KEYSIGHT	N9020A	2025-12-29	2026-12-28
3	MXG RF Vector Signal Generator	Agilent	N5182A	2025-12-29	2026-12-28
Note: The above test equipment is calibrated by Guangzhou LiSai Metrology & Test Co.,Ltd. Calibration method reference Article 24-2, Paragraph 4 of the Radio Act. (method c)					
4	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	2025-10-10	2026-10-09
Note: The test equipment is calibrated by GUANGZHOU NEM METROLOGY&TEST TECHNOLOGY CO.,LTD Calibration method reference Article 24-2, Paragraph 4 of the Radio Act. (method c)					
5	DC Power Supply	IVYTECH	IV3605	2025-09-05	2026-09-04
Note: The test equipment is calibrated by Centre Testing International Group Co., Ltd. (CTI) Calibration method reference Article 24-2, Paragraph 4 of the Radio Act. (method c)					
6	Oscilloscope	Tektronix	MDO3012	2025-09-30	2026-09-29
Note: The test equipment is calibrated by Ti Testing & Certification Group Co., Ltd. Shenzhen Branch Calibration method reference Article 24-2, Paragraph 4 of the Radio Act. (method c)					
7	6dB Attenuator	CDKMV	6606	2025-10-23	2026-10-22
Note: The above test equipment is calibrated by Guangzhou LiSai Metrology & Test Co.,Ltd. Calibration method reference Article 24-2, Paragraph 4 of the Radio Act. (method c)					
Remark: (a) Calibration conducted by the National institute of information and Communications Technology (NiCT)in Japan (hereinafter referred to as "NiCT") or a designated calibration agency under Article 102-18paragraph (1) in JRL. (b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act(Act No. 51 of 1992). (c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conductedby the NiCT or a designated calibration agency under Article 102-18 paragraph (1). (d) Calibration, etc, conducted by using measuring instruments and other equipment listed in the rightcolumn of appended table No. 3, which shall have been given any type of calibration, etc. listed abovefrom (a)to (c)					
From JRL Article 24 .2, paragraph 4, Item 2					



1.8. Description of Test Facility

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

FCC-Registration No.: 279531

Shenzhen Anbotek Compliance Laboratory Limited, 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 No. 279531.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

Sogood Industrial Zone Laboratory & 1/F. of Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, China.

1.9. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.
7. The data in this report will be synchronized with the corresponding national market supervision and management departments and cross-border e-commerce platforms as required by regulatory agencies.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.



1.10. Measurement Uncertainty

Parameter	Uncertainty
Occupied Bandwidth	552Hz
Conducted Output Power	0.84dB
Conducted Spurious Emission	1.24dB
Frequency tolerance	58Hz
Adjacent Channel Leakage Power	1.85dB
Transmission Burst Length	4%
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



2. Summary of test

Test Standard	Description of Test	Result
MIC Notice No.88 Appendix No. 45 Article 2, Paragraph 1, Item 19-3	Frequency Tolerance	Compliance
	Antenna Power& Output Power Tolerance	Compliance
	Occupied Bandwidth	Compliance
	Unwanted Emission Strength/Spurious Area	Compliance
	Adjacent Channel Leakage Power	Compliance
	Secondary Radiated Emission Strength	Compliance
	Transmission Burst Length	Compliance
	Carrier Sensing Function	Compliance
	Interference prevention function	Compliance
	EIRP	Compliance
	DFS(Dynamic Frequency Selection)	N/A

Note:

- 1) “*”: This product is a slave device, and it's conform to bellow requirement.
 - a. It can choose the frequency which transmits automatically by the control from a master station.
 - b. Transmission and a stop of radio wave are performed by the control from a master station.

- 2) N/A is an abbreviation for Not Applicable.



3. Frequency Tolerance Test

3.1. Test Limit

Test Limit	±20 ppm
------------	---------

3.2. Test Setup



3.3. Test Procedure

For unmodulated signal

Test Frequency= test channel,
RBW=VBW=10KHz, Span=1MHz, Sweep time=Auto, Detector mode=Positive peak

For modulated signal

Test Frequency= test channel center frequency,
For 20MHz bandwidth: RBW=100KHz, VBW=300KHz, Span=2*OBW, Sweep time=Auto, Detector mode=Positive peak
For 40MHz bandwidth & 80MHz bandwidth: RBW=VBW=300KHz, Span=2*OBW, Sweep time=Auto, Detector mode=Positive peak
Search the maximum peak level, set the -10dB line to find the FL and FH value.
The carrier center frequency is (FL+ FH)/2,
Frequency tolerance= ((FL+ FH)/2 - center frequency)/center frequency*10^6

3.4. Test Results

Pass

Please refer to Appendix A of the Appendix Test Data.



4. Antenna Power Test

4.1. Test Limit

Operation Band	Item	20MHz system		40MHz system	80MHz system	160MHz system
W52&W53	Antenna Power	DSSS,etc	OFDM	OFDM	OFDM	OFDM
		10mW/MHz	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz
	Antenna power Tolerance	+20%, -80%				
	EIRP W52	10mW/MHz		5mW/MHz	2.5mW/MHz	1.25mW/MHz
W56	EIRP W53	10mW/MHz: with TPC 5mW/MHz: without TPC		5mW/MHz: with TPC 2.5mW/MHz: without TPC	2.5mW/MHz: with TPC 1.25mW/MHz: without TPC	1.25mW/MHz: with TPC 0.625mW/MHz: without TPC
	Antenna Pwer	DSSS,etc	OFDM	OFDM	OFDM	OFDM
		10mW/MHz	10mW/MHz	5mW/MHz	2.5mW/MHz	1.25mW/MHz
	Antenna power Tolerance	+50%, -50%				
	EIRP	50mW/MHz: with TPC 25mW/MHz: without TPC		25mW/MHz: with TPC 12.5mW/MHz: without TPC	12.5mW/MHz: with TPC 6.25mW/MHz: without TPC	1.25mW/MHz: with TPC 0.625mW/MHz: without TPC

4.2. Test Setup



4.3. Test Procedure

Step 1:
 Search Frequency of Peak Power
 Test Frequency: test channel,
 RBW=VBW=1MHz
 Span=40MHz for 20MHz bandwidth, Span=80MHz for 40MHz bandwidth, Span=160MHz for 80MHz bandwidth
 Sweep time=Auto, Detector mode =Positive peak



Step 2:

Measure of average burst power

Test Frequency: frequency of peak power

RBW=VBW=1MHz, Span=0Hz, Sweep time=Auto, Detector mode=RMS

Antenna power= average burst power

4.4. Test Results

Pass

Please refer to Appendix B of the Appendix Test Data.



5. Occupied Bandwidth (99%) Test

5.1. Test Limit

No.	Technical requirement	Limit
1	20MHz system DSSS,etc	18MHz or less
2	20MHz system OFDM	20MHz or less
3	40MHz system OFDM	40MHz or less
4	80MHz system OFDM	80MHz or less
5	160MHz system OFDM	160MHz or less

5.2. Test Setup



5.3. Test Procedure

Test Frequency= test channel
RBW=VBW=300KHz
Span≥2* Occupy Bandwidth
Sweep time=Auto
Detector mode=Positive peak
Indication mode=Max hold

5.4. Test Results

Pass

Please refer to Appendix C of the Appendix Test Data.



6. Unwanted Emission Strength Test

6.1. Test Limit

W52			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,142 MHz or less : 2.5 μ W/MHz	5,142 MHz or less : 2.5 μ W/MHz	5,141.6 MHz or less : 2.5 μ W/MHz	5,123.2 MHz or less : 2.5 μ W/MHz
5,142 - 5,150 MHz : 15 μ W/MHz	5,142 - 5,150 MHz : 15 μ W/MHz	5,141.6 - 5,150 MHz : 15 μ W/MHz	5,123.2 - 5,150 MHz : 15 μ W/MHz
	5,250 - 5,250.2 MHz : $10^{1-(8/3)(f-5.75)}$ mW/MHz		
5,250 - 5,251 MHz : $10^{1-(f-9)}$ mW/MHz	5,250.2 - 5,251 MHz : $10^{1-(f-9)}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-20)+\log(1/2)}$ mW/MHz	5,250 - 5,251 MHz : $10^{-(f-40)+\log(1/4)}$ mW/MHz
5,251 - 5,260 MHz : $10^{1-(8/90)(f-11)}$ mW/MHz	5,251 - 5,260 MHz : $10^{1-(8/90)(f-11)}$ mW/MHz	5,251 - 5,270 MHz : $10^{-(8/190)(f-21)+\log(1/2)}$ mW/MHz	5,251 - 5,290 MHz : $10^{-(8/990)(f-41)+\log(1/4)}$ mW/MHz
5,260 - 5,266.7 MHz : $10^{1.8-(6/50)(f-20)}$ mW/MHz	5,260 - 5,266.7 MHz : $10^{1.8-(6/50)(f-20)}$ mW/MHz	5,270 - 5,278.4 MHz : $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz	5,290 - 5,296.7 MHz : $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz
5,266.7 MHz or more : 2.5 μ W/MHz	5,266.7 MHz or more : 2.5 μ W/MHz	5,278.4 MHz or more : 2.5 μ W/MHz	5,296.7 MHz or more : 2.5 μ W/MHz
f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5240 (MHz)	f = MHz, Difference from 5230 (MHz)	f = MHz, Difference from 5210 (MHz)

W53			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,233.3 MHz or less : 2.5 μ W/MHz	5,233.3 MHz or less : 2.5 μ W/MHz	5,221.6 MHz or less : 2.5 μ W/MHz	5,203.3 MHz or less : 2.5 μ W/MHz
5,233.3 - 5,240 MHz : $10^{1.8-(6/50)(f-20)}$ mW/MHz	5,233.3 - 5,240 MHz : $10^{1.8-(6/50)(f-20)}$ mW/MHz	5,221.6 - 5,230 MHz : $10^{-(3/50)(f-40)-1.8+\log(1/2)}$ mW/MHz	5,203.3 - 5,210 MHz : $10^{-(3/100)(f-80)-1.8+\log(1/4)}$ mW/MHz
5,240 - 5,249 MHz : $10^{1-(8/90)(f-11)}$ mW/MHz	5,240 - 5,249 MHz : $10^{1-(8/90)(f-11)}$ mW/MHz	5,230 - 5,249 MHz : $10^{-(8/190)(f-21)+\log(1/2)}$ mW/MHz	5,210 - 5,249 MHz : $10^{-(8/990)(f-41)+\log(1/4)}$ mW/MHz
5,249 - 5,250 MHz : $10^{1-(f-9)}$ mW/MHz	5,249 - 5,249.8 MHz : $10^{1-(f-9)}$ mW/MHz	5,249 - 5,250 MHz : $10^{-(f-20)+\log(1/2)}$ mW/MHz	5,249 - 5,250 MHz : $10^{-(f-40)+\log(1/4)}$ mW/MHz
	5,249.8 - 5,250 MHz : $10^{1-(8/3)(f-9.75)}$ mW/MHz	5,350 - 5,358.4 MHz : 15 μ W/MHz	5,350 - 5,376.8 MHz : 15 μ W/MHz
5,350 MHz or more : 2.5 μ W/MHz	5,350 MHz or more : 2.5 μ W/MHz	5,358.4 MHz or more : 2.5 μ W/MHz	5,376.8 MHz or more : 2.5 μ W/MHz
f = MHz, Difference from 5260 (MHz)	f = MHz, Difference from 5260 (MHz)	f = MHz, Difference from 5270 (MHz)	f = MHz, Difference from 5290 (MHz)

W56			
20MHz system		40MHz system	80MHz system
DSSS, etc.	OFDM		
5,470 MHz or less : 12.5 μ W/MHz	5,460 MHz or less : 2.5 μ W/MHz	5,460 MHz or less : 12.5 μ W/MHz	5,460 MHz or less : 12.5 μ W/MHz
	5,460 - 5,470 MHz : 12.5 μ W/MHz	5,460 - 5,470 MHz : 50 μ W/MHz	5,460 - 5,469.5 MHz : 50 μ W/MHz
5,730 MHz or more : 12.5 μ W/MHz	5,745 - 5,765 MHz : 12.5 μ W/MHz	5,770 MHz or more : 12.5 μ W/MHz	5,469.5 - 5,470 MHz : 51.2 μ W/MHz
	Over 5,765 MHz : 2.5 μ W/MHz		5,770 MHz or more : 12.5 μ W/MHz

6.2. Test Setup



6.3. Test Procedure

Any emissions above the limit from the initial peak scan (RB=VB=1MHz, peak detector) are measured by tuning to that signal, setting RB=VB=1MHz, span=0Hz and using a sample detector. The average power over a transmission burst is calculated if the highest signal level still exceeds the limit. If the system uses burst transmissions during testing the threshold for requiring individual measurements becomes limit -3dBrelative to the limit.

For Test from 30MHz to 1000MHz, set RBW=VBW= 100kHz;

For Test from 1000MHz to 26500MHz, set RBW=VBW= 1MHz;

The device transmits in a burst mode, sweep time is calculated for each band tested as shown below. The device transmits continuously so the analyzer sweep time is auto-coupled.



6.4. Test Results

Pass

Please refer to Appendix D of the Appendix Test Data.

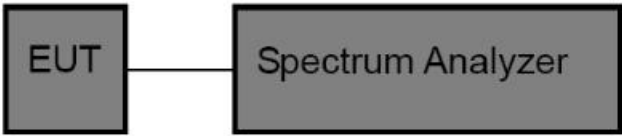


7. Adjacent Channel Leakage Power Test

7.1. Test Limit

Conditions	Limits
18MHz DSSS, etc	≥25dB, fc ±20MHz ≥40dB, fc ±40MHz
20MHz OFDM	≥25dB, fc ±20MHz ≥40dB, fc ±40MHz
40MHz OFDM	≥25dB, fc ±40MHz ≥40dB, fc ±80MHz
80MHz OFDM	≥25dB, Fc ±80MHz/±40MHz BW

7.2. Test Setup



7.3. Test Configuration

The power in a +/- 9.5MHz band centered on the operating frequency is measured and used as a reference value. The powers in the +/-9.5MHz band on the adjacent channels (+/-20MHz from the operating channel) and alternate channels (+/-40MHz from the operating channel) are also measured. The Channel Leakage ratio (CLR) shall be at least 25dB for the adjacent channels and at least 40dB for the alternate channels.

7.4. Test Results

Pass

Please refer to Appendix G of the Appendix Test Data.



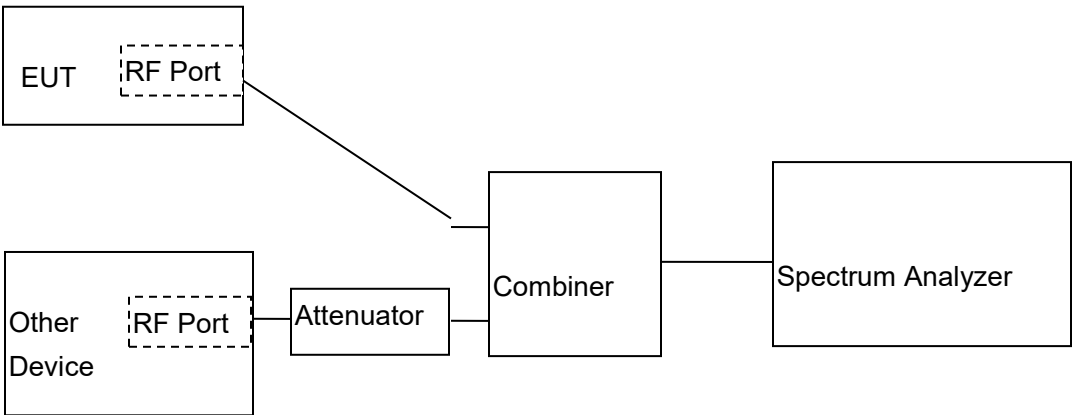
8. Transmission Burst Length Test

8.1. Test Limit

Limit	Transmission Burst Length shall be 8ms or less.
-------	---

8.2. Test Setup

The device was configured to transmit maximum length packets at the fastest and slowest data rate



8.3. Test Configuration

Test Frequency: test channel,
RBW=VBW=8MHz, Span=0Hz, Sweep time=Auto, Detector mode=Positive peak

8.4. Test Results

Pass

Please refer to Appendix F of the Appendix Test Data.



9. Secondary Radiated Emission Strength Test

9.1. Test Limit

Frequency Range	Limit
≤1GHz	≤4.0nW (-54dBm)
>1GHz	≤20nW (-47dBm)

9.2. Test Setup



9.3. Test Configuration

Test Frequency: test channel,
Below 1GHz, RBW=VBW=100KHz;
Above 1GHz, RBW=VBW=1MHz,
Sweep time=Auto, Detector mode=Positive peak

9.4. Test Results

Pass

Please refer to Appendix E of the Appendix Test Data.

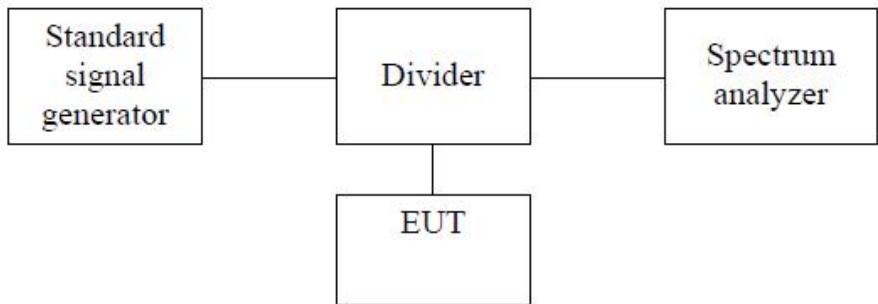


10. Carrier Sensing Function

10.1. Test Limit

Test Limit	EUT doesn't transmit when the radio wave of 100mV/m is coming to EUT.
------------	---

10.2. Test Setup



10.3. Test Configuration

1. SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is (On $22.79 + Gr - 20 \cdot \log(f)$ [dBm] (Gr: dBi; f: MHz). Then turn off the RF signal of SSG.
2. EUT have transmitted the maximum modulation signal and fixed channelize.
3. Setting of SA is following as: RB:1MHz / VB:1MHz / SPAN: 50MHz / AT: 10dB /Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak.
4. SSG RF Signal On.
5. EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.



10.4. Test Results

Note: Radio interference prevention capability was conformed.

Type	Test channel	Result
802.11a	CH _{L20}	Acceptance
	CH _{M20}	
	CH _{H20}	
802.11n(HT20)	CH _{L20}	Acceptance
	CH _{M20}	
	CH _{H20}	
802.11n(HT40)	CH _{L40}	Acceptance
	CH _{M40}	
	CH _{H40}	
802.11ac(VHT20)	CH _{L20}	Acceptance
	CH _{M20}	
	CH _{H20}	
802.11ac(VHT40)	CH _{L40}	Acceptance
	CH _{M40}	
	CH _{H40}	
802.11ax(HEW20)	CH _{L20}	Acceptance
	CH _{M20}	
	CH _{H20}	
802.11ax(HEW40)	CH _{L40}	Acceptance
	CH _{M40}	
	CH _{H40}	

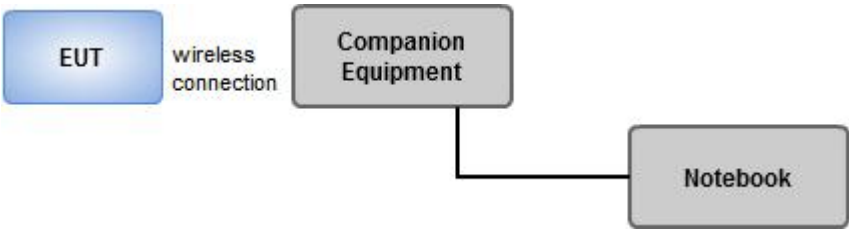


11. Interference prevention function

11.1. Test Limit

Test Limit	The identification code shall be 48 bits long
------------	---

11.2. Test Setup



11.3. Test Configuration

- 1. Set EUT under operating mode and link up with companion equipment
- 2. Check communication status between EUT and companion equipment is normal
- 3. Record the max. reading.
- 4. Confirm the MAC address of EUT

11.4. Test Results

Test Mode	ID Code	Test Results
WiFi	17:0E:9E:7A:C9:92	Pass



APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_RF

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

