

Japan Specified Radio Test Report

Report No. : 1812C50010112501

Applicant : HYTEC INTER Co., Ltd.

Address : 3rd Flr., Ichigo Nishisando Bldg. 3-28-6
Yoyogi, Shibuya-ku, Tokyo 151-0053 Japan

Product Name : DT261W wireless extension transmitter

Report Date : Mar. 24, 2025

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



7.4. Test Results	18
8. Transmission Burst Length Test	19
8.1. Test Limit	19
8.2. Test Setup	19
8.3. Test Configuration	19
8.4. Test Results	19
9. Secondary Radiated Emission Strength Test	20
9.1. Test Limit	20
9.2. Test Setup	20
9.3. Test Configuration	20
9.4. Test Results	20
10. Carrier Sensing Function	21
10.1. Test Limit	21
10.2. Test Setup	21
10.3. Test Configuration	21
10.4. Test Results	21
11. Interference prevention function	21
11.1. Test Limit	22
11.2. Test Setup	22
11.3. Test Configuration	22
11.4. Test Results	22
12. Channel Move Time, Channel Closing Transmission Time	23
12.1. Test Limit	23
12.2. Test Setup	23
12.3. Test Configuration	23
12.4. Test Data	24
13. DFS Detection Thresholds	25
13.1. Test Limit	25
13.2. Test Setup	25
13.3. Test Configuration	26
13.4. Test Data	26
APPENDIX I -- TEST SETUP PHOTOGRAPH	27
APPENDIX II -- EXTERNAL PHOTOGRAPH	27
APPENDIX III -- INTERNAL PHOTOGRAPH	27



TEST REPORT

Applicant : HYTEC INTER Co., Ltd.
Manufacturer : Shenzhen Hongshi industrial Co.,Ltd
Product Name : DT261W wireless extension transmitter
Model No. : DT261W-T
Trade Mark : N/A
Rating(s) : Input: 5V $\approx$ 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

Jan. 09, 2025

Date of Test

Jan. 09, 2025 to Mar. 24, 2025

Prepared By

Haidi Huang

(Haidi Huang)

Approved & Authorized Signer

Kingkong Jin

(Kingkong Jin)



Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Mar. 24, 2025



1. General Information

1.1. Client Information

Applicant	:	HYTEC INTER Co., Ltd.
Address	:	3rd Flr., Ichigo Nishisando Bldg. 3-28-6 Yoyogi, Shibuya-ku, Tokyo 151-0053 Japan
Manufacturer	:	Shenzhen Hongshi industrial Co.,Ltd
Address	:	3rd Floor, Building 2, Longfeng Industrial Park, No.3 Tianxi Road, Fucheng Street, Longhua District, Shenzhen City, Guangdong Province, China
Factory	:	Shenzhen Hongshi industrial Co.,Ltd
Address	:	3rd Floor, Building 2, Longfeng Industrial Park, No.3 Tianxi Road, Fucheng Street, Longhua District, Shenzhen City, Guangdong Province, China

1.2. Description of Device (EUT)

Product Name	:	DT261W wireless extension transmitter
Model No.	:	DT261W-T
Trade Mark	:	N/A
Test Power Supply	:	DC 5V via PC
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Hardware Version	:	DT257W_TX_HDMI_V06_20240927
Software Version	:	16249043
Adapter	:	N/A

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 5.6G: 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) Wi-Fi 5.6G: ☒ 11 Channels for 20MHz bandwidth (5500-5700MHz)		
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	:	PCB Antenna	
Antenna Gain(Peak)	:	WiFi 5.2G: 1.97dBi WiFi 5.6G: 2dBi	
Rated output Power	:	WiFi 5.2G:	802.11a: 2mW/MHz Max. 802.11n(HT20): 1.5mW/MHz Max.
	:	WiFi 5.6G:	802.11a: 2mW/MHz Max. 802.11n(HT20): 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.
/	/	/	/

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 802.11a/n(HT20)	CH 36	5180
		CH 40	5200
		CH 48	5240
5.6GHz	OFDM 802.11a/n(HT20)	CH 100	5500
		CH 120	5600
		CH 140	5700
5.2GHz	CW Mode	CH 36	5180
		CH 40	5200
		CH 48	5240
5.6GHz		CH 100	5500
		CH 120	5600
		CH 140	5700

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	5V	5.5V	4.5V
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.	Serial No.	Last Cal.	Cal.Due Date
1	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	2025-05-05
2	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY50531823	2024-09-09	2025-09-08
3	MXG RF Vector Signal Generator	Agilent	N5182A	MY47420647	2024-02-04 2025-01-14	2025-02-03 2026-01-13
4	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	2024-10-14	2025-10-13
5	DC Power Supply	IVYTECH	IV3605	1804D360510	2024-09-09	2025-09-08
6	Oscilloscope	Tektronix	MDO3012	C020298	2024-10-10	2025-10-09

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 102-18 paragraph (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 conducted by 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 right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (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.: 434132

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. 434132.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

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.

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	925Hz
Conducted Output Power	0.76dB
Time	2%
Duty Cycle	2%
Conducted Spurious Emission	1.24dB
Frequency tolerance	74.60Hz
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)	Compliance*
	Channel Move Time, Channel Closing Transmission Time	Compliance

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.

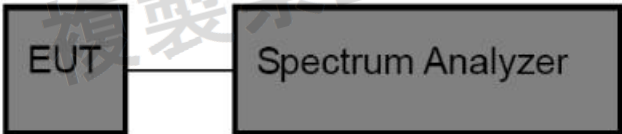


3. Frequency Tolerance Test

3.1. Test Limit

Test Limit	± 20 ppm
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3.2. Test Setup



3.3. Test Procedure

For unmodulated signal

Test Frequency= test channel,
RBW=10KHz, VBW=30KHz, 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*10⁶

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+duty cycle factor



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 $\geq$ 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 : $10^{1-(8/3)(f-9.75)}$ 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 : $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz	5,251 - 5,290 MHz : $10^{-(8/390)(f-41)-1+\log(1/4)}$ mW/MHz
5,260 - 5,266.7 MHz : $10^{1-1.8-(6/50)(f-20)}$ mW/MHz	5,260 - 5,266.7 MHz : $10^{1-1.8-(6/50)(f-20)}$ 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 : $10^{1-1.8-(6/50)(f-20)}$ mW/MHz	5,233.3 - 5,240 MHz : $10^{1-1.8-(6/50)(f-20)}$ 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 : $10^{-(8/190)(f-21)-1+\log(1/2)}$ mW/MHz	5,210 - 5,249 MHz : $10^{-(8/390)(f-41)-1+\log(1/4)}$ 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
	5,745 - 5,765 MHz : 12.5 μ W/MHz		5,469.5 - 5,470 MHz : 51.2 μ W/MHz
5,730 MHz or more : 12.5 μ W/MHz	Over 5,765 MHz : 2.5 μ W/MHz	5,770 MHz or more : 12.5 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 -3dB relative to the limit.

For Test from 30MHz to 1000MHz, set RBW=VBW= 1MHz;

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.



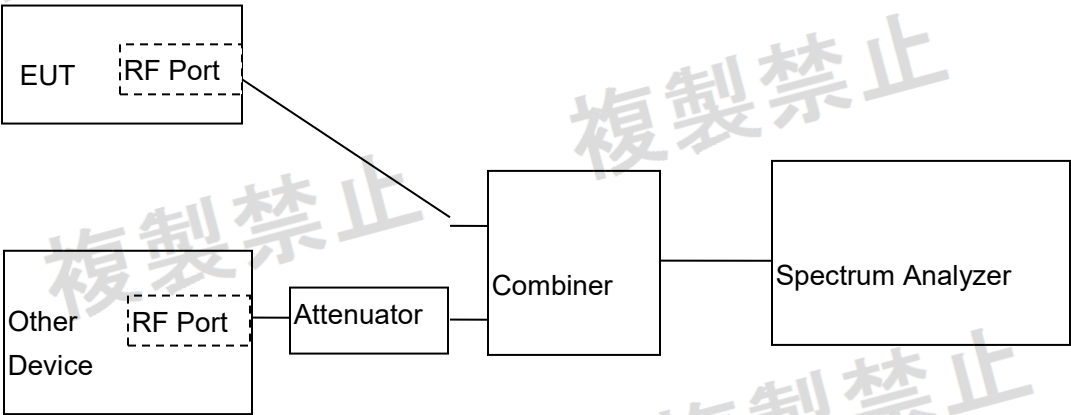
8. Transmission Burst Length Test

8.1. Test Limit

Limit	Transmission Burst Length shall be 8ms or less.
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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=8MHz, VBW=50MHz, 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.

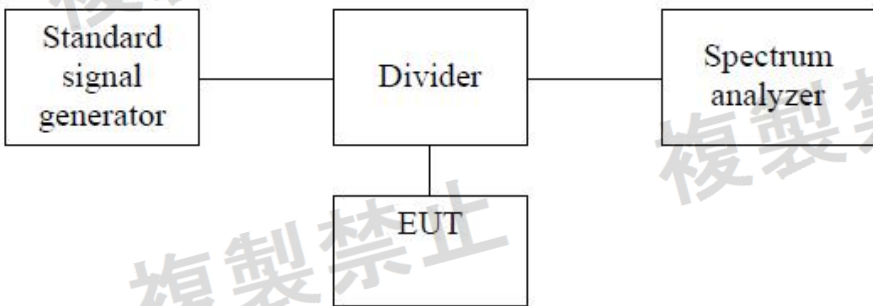


10. Carrier Sensing Function

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}	

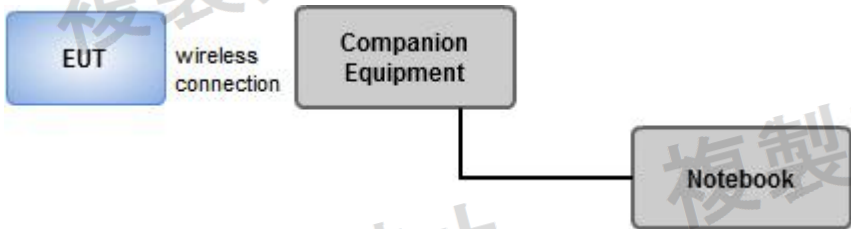


11. Interference prevention function

11.1. Test Limit

Test Limit	The identification code shall be 48 bits long
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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	A1:21:1A:47:C2:3B	Pass

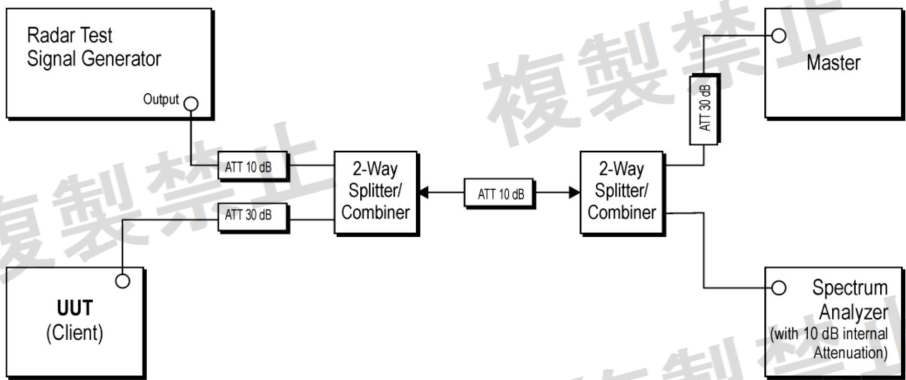


12. Channel Move Time, Channel Closing Transmission Time

12.1. Test Limit

Test Limit	1. All Slave Devices transmitting on the same frequency as the radar signal shall stop transmitting in 10 seconds or less 2. After receiving the stop transmit command, the sum of all Slave Devices' residual transmit time shall be less than 260 msec
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12.2. Test Setup



12.3. Test Configuration

The steps below define the procedure to determine the above-mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold is generated on the Operating Channel of the U-NII device (In- Service Monitoring).

1. One frequency will be chosen from the *Operating Channels* of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.
2. In case the UUT is a U-NII device operating as a *Client Device* (with or without DFS), a U-NII device operating as a *Master Device* will be used to allow the UUT (Client device) to *Associate* with the *Master Device*. In case the UUT is a *Master Device*, a U-NII device operating as a *Client Device* will be used and it is assumed that the Client will *Associate* with the UUT (Master). In both cases for conducted tests, the *Radar Waveform* generator will be connected to the *Master Device*. For radiated tests, the emissions of the *Radar Waveform* generator will be directed towards the *Master Device*. If the *Master Device* has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. Stream the channel loading test file from the *Master Device* to the *Client Device* on the test *Channel* for the entire period of the test.
4. At time T0 the *Radar Waveform* generator sends a *Burst* of pulses for one of the Radar Type on



the *Operating Channel* .

5. Observe the transmissions of the UUT at the end of the radar *Burst* on the *Operating Channel* for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (*Channel Move Time*) . Measure and record the *Channel Move Time* and *Channel Closing Transmission Time* if radar detection occurs.
6. When operating as a *Master Device* , monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this *Channel* . Perform this test once and record the measurement result.
7. In case the UUT is a U-NII device operating as a *Client Device* with *In-Service Monitoring* , perform steps 1 to 6.

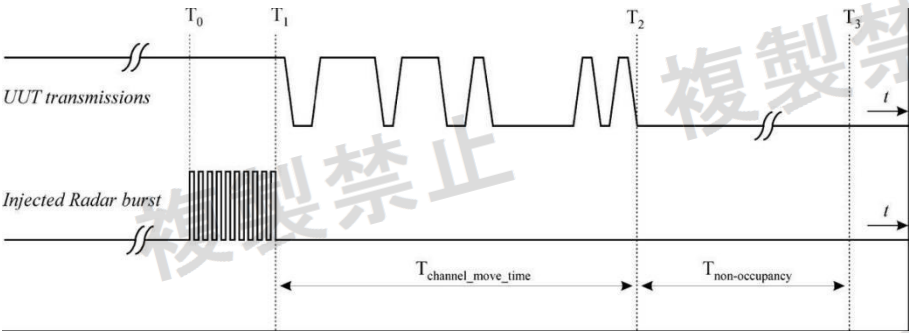


Figure 17: Example of Channel Closing Transmission Time & Channel Closing Time

12.4. Test Data

Pass

Please refer to Appendix H of the Appendix Test Data.

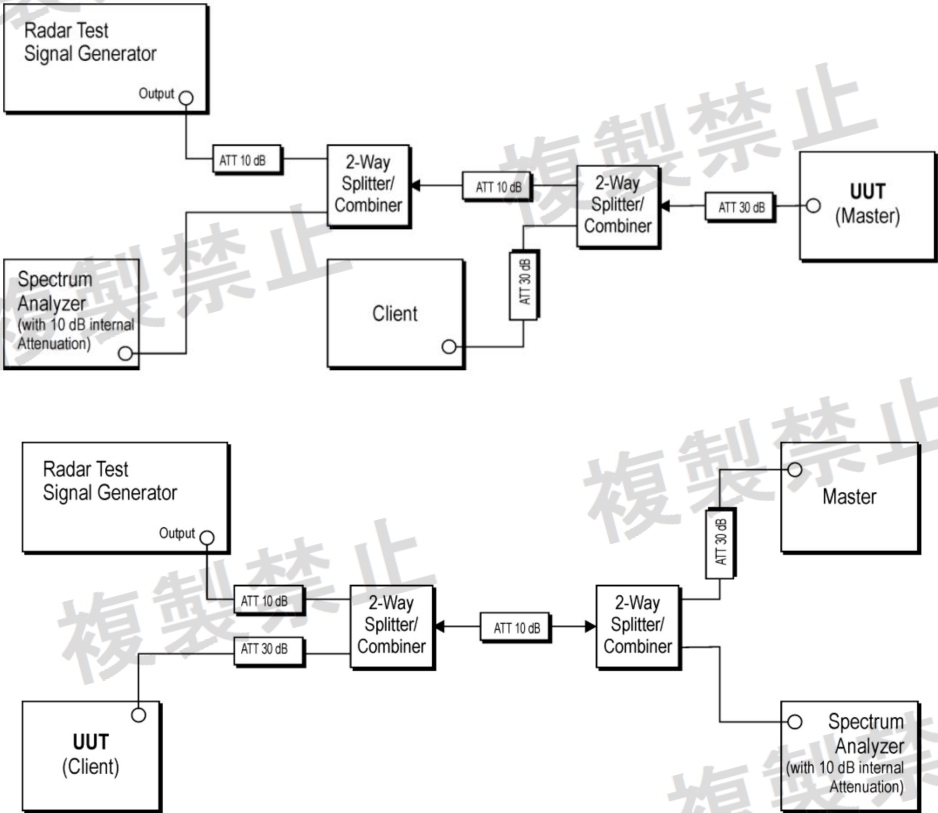


13. DFS Detection Thresholds

13.1. Test Limit

Maximum E. I. R. P.	Received power (average)
less than 0.2W	-62dBm
0.2W or more	-64dBm

13.2. Test Setup



13.3. Test Configuration

- 1) A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master
- 2) The interference Radar Detection Threshold Level is $TH + 0\text{dBi}$ that had been taken into account the output power range and antenna gain.
- 3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process, there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz. The spectrum analyzer had offset -1.0dB to compensate RF cable loss 1.0dB.
- 4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was $TH + 0\text{dBi} = -64\text{dBm}$. Capture the spectrum analyzer plots on short pulse radar waveform.

Note: $TH = -64\text{ dBm}$ or -62 dBm

13.4. Test Data

Pass

Please refer to Appendix I of the Appendix Test Data.



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 -----

