EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

RADIO TEST - REPORT

Japan Compliance Test Report

Test Report Number: EFGX26050189-IE-01-E02

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1 General Information

1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter “Description of test item” and are not transferable to any other test items.

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item.

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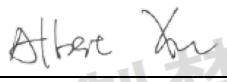
Operator:

2026-05-22		Bruce Zheng / Project Engineer	
Date	Eurofins-Lab.	Name / Title	Signature

Technical responsibility for area of testing:

2026-05-22		Albert Xu / Lab Manager	
Date	Eurofins-Lab.	Name / Title	Signature

1.2 Testing laboratory

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.
1st Floor, Building 2, Chungu, Meisheng Huigu Science and Technology Park, No. 83 Dabao Road, Bao'an District, Shenzhen. P.R.China.
Telephone : +86-755-82911867
Fax : +86-755-82910749
The Laboratory has passed the Accreditation by the American Association for Laboratory Accrediation (A2LA). The Accreditation number is 5376.01.
The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088.

1.3 Details of approval holder

Name	:	Shenzhen ImagineVision Technology Limited
Address	:	101, Building F5, TCL Science Park, 1001 Zhongshanyuan Road, Shuguang Community, Xili Subdistrict, Nanshan District, Shenzhen, China
Telephone	:	./.
Fax	:	./.

1.4 Details of Manufacturer

Name	:	Shenzhen ImagineVision Technology Limited
Address	:	101, Building F5, TCL Science Park, 1001 Zhongshanyuan Road, Shuguang Community, Xili Subdistrict, Nanshan District, Shenzhen, China
Telephone	:	./.
Fax	:	./.

1.5 Application details

Date of receipt of application	:	2026-05-12
Date of receipt of test item	:	2026-05-12
Date of test	:	2026-05-12 to 2026-05-22
Date of issue	:	2026-05-22

1.6 Test item

Product type	:	Z CAM E2N
Model name	:	E1509
Brand	:	Z CAM
Serial number	:	./.
Sample ID	:	2600512-38-001
Ratings	:	For AC/DC adapter: DC 12V, 5A PoE: DC 12V LP-E6 Battery: 7.2V
Test voltage	:	DC 12V

RadioTechnical data

Frequency range	:	W52: 5180-5240MHz
Radio Tech.	:	5GHz WLAN
Modulation	:	OFDM
TX Power Control (TPC)	:	Not Supported
Antenna type and max gain	:	External antenna
Antenna gain	:	1.52 dBi
Additional information	:	./.

The above sample(s) and sample information was/were submitted and identified on behalf of the applicant.
Eurofins assures objectivity and impartiality of the test, and fulfills the obligation of confidentiality for applicant's commercial information and technical documents.

1.7 Standards

Standards	
Article 2 paragraph 1 item (19)-3	Low power data communications system in the 5GHz band
ARIB STD-T71 V7.0	Broadband Mobile Access Communication System (CSMA)

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed. ☒

or

The deviations as specified were ascertained in the course of the tests performed. ☐

2.2 Test environment

Temperature	: 20	...	25°C
Relative humidity content	: 30	...	60%
Air pressure	: 100	...	101kPa

2.3 Measurement uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 1.05×10-7 or 1%

2.4 Test mode

Frequency band (MHz)		5150~5250	
802.11a / n HT20 / ac VHT 20		802.11n HT40 / ac VHT 40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	802.11ac VHT80	
48	5240	42	5210

The EUT was set at continuously transmitting and receiving mode(Low channel, mid channel, high channel) during the test.
EUT test voltage requirement:
The RF unit is supplied by DC power. The fluctuation of input voltage to the circuit of RF unit of test equipment is under ±1%, when input voltage from DC 12V / 7.2V to the test equipment is fluctuated by ±10%, So, the DC 12V is choosed in the test report.

The measurement result of the voltage fluctuation at RF circuit when DC 7.2V +/- 10%.

DC Input	DC 3V
6.48V	3V
7.2V	3V
7.92V	3V

The measurement result of the voltage fluctuation at RF circuit when DC 12V +/- 10%.

DC Input	DC 3V
10.8V	3V
12V	3V
13.2V	3V

2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DATE	CAL. DUE DATE
23-2-13-12	Signal Analyzer	N9010B-544	2026-03-20	2027-03-20
23-2-13-14	Signal Generator	N5183B-520	2026-03-20	2027-03-20
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2026-03-20	2027-03-20
23-2-10-44	DC power supply	E3642A	2026-03-20	2027-03-20
23-1-07-001	Digital multimeter	FLUKE-179	2026-03-20	2027-03-20
23-2-10-109	Temperature & Humidity Record	YEM-70AL	2026-03-20	2027-03-20
23-2-10-45	temperature test chamber	SG-80-CC-2	2026-03-20	2027-03-20

Remark:
1. 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 Article102-18paragraph (1) in JRL.
2. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992).
3. 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).
4. 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.
5. All calibration reports are from CCIC (Shenzhen) Metrology & Testing Service Co.,Ltd.

2.6 Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Laptop	LENOVO	TP00096A	PF-1QH0LV

2.7 Test software information:

Test Software Version	CMD	
Modulation	Setting TX Power(SISO)	Packet Type
OFDM	DEF	11a/6M 11n/MCS0 11ac/MCS0

2.8 Test Environments

Enviroment Parameter	Temperature	Voltage	Relative Humidity
101.7Kpa	26.5℃	12V DC	51.3%

2.9 Test results

☒ 1st test ☐ test after modification ☐ production test

Conformance requirement according to Article 2 paragraph 1 item (19)-3 and ARIB STD-T71 Version 7.0		Result	Test site
Essential parameter	**Corresponding technical requirements**		
Transmitter requirements	**Antenna Power and E.I.R.P**	**PASS**	**Site 1**
	Antenna Power Tolerance	**PASS**	**Site 1**
	Frequency Tolerance	**PASS**	**Site 1**
	Occupied Bandwidth	**PASS**	**Site 1**
	Transmitter Spurious Emissions	**PASS**	**Site 1**
	Adjacent Channel Emitted Power	**PASS**	**Site 1**
	Transmisson burst length	**PASS**	**Site 1**
Receiver requirements	**Secondary Radiated Emissions**	**PASS**	**Site 1**
	Carrier Sensing	**PASS**	**Site 1**
	Interference prevention function	**PASS**	**Site 1**

NOTE 1: Measurement taken is within the measurement uncertainty of measurement system.
NOTE 2: "*" N/A is an abbreviation for Not Applicable.
NOTE 3: Test method: MIC notification. No.88 of 2004, Annex 45.

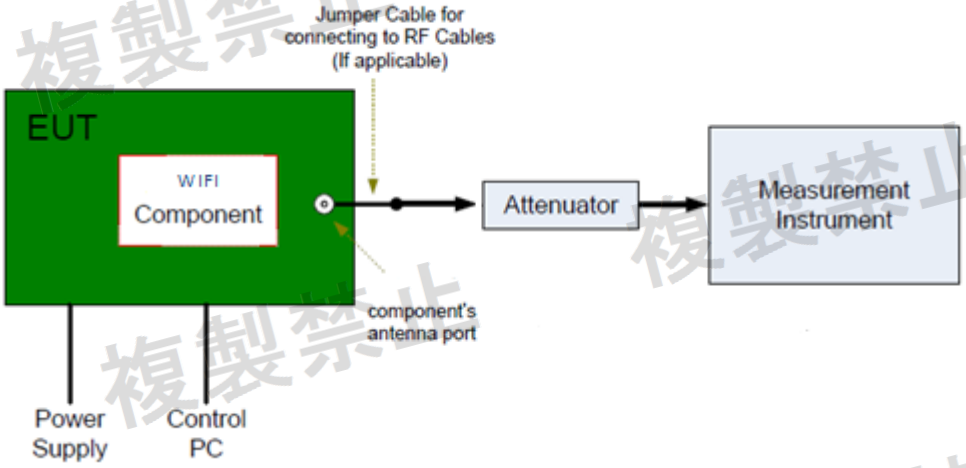
3 Technical Requirement

3.1 Antenna Power , E.I.R.P and Antenna Power Tolerance

3.1.1 Test Method

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 5GHz.
3. Then set the EUT to transmit at Highest, Middle, and Lowest frequency and measure the conducted output power separately.
4. RBW=1MHz, VBW:3MHz, Sweep = auto, Detector function = RMS, Trace = max hold
5. Repeat above procedures until all frequencies measured were complete.

3.1.2 Test Setup:



3.1.3 Limit

Limit for Antenna Power ,Output Power Tolerance &EIRP W52 band			
Test Bandwidth(MHz)	Antenna power(mW/MHz)	Antenna Power Tolerance(%)	E.I.R.P(mW/MHz)
20	10	+20 ~ -80	10
40	5	+20 ~ -80	5
80	2.5	+20 ~ -80	2.5
160	1.25	+20 ~ -80	1.25

3.1.4 Test result

Antenna Power							
TestCondi-tion	Test-Mode	Antenna	Freq (MHz)	Result (dBm/MHz)	Result (mW/MHz)	Limit (mW/MHz)	Ver-dict
NTNV	11A	Ant1	5180	5.89	3.882	≤10	PASS
			5200	4.96	3.133	≤10	PASS
			5240	4.18	2.618	≤10	PASS
	11N20	Ant1	5180	4.79	3.013	≤10	PASS
			5200	4.39	2.748	≤10	PASS
			5240	3.94	2.477	≤10	PASS
	11N40	Ant1	5190	3.04	2.014	≤5	PASS
			5230	1.89	1.545	≤5	PASS
	11AC20	Ant1	5180	4.67	2.931	≤10	PASS
			5200	5.05	3.199	≤10	PASS
			5240	3.81	2.404	≤10	PASS
	11AC40	Ant1	5190	3.12	2.051	≤5	PASS
			5230	2.59	1.816	≤5	PASS
	11AC80	Ant1	5210	-0.04	0.991	≤2.5	PASS

Tolerance								
Test Condition	Test Mode	Antenna	Freq (MHz)	Power (mW/MHz)	Rated Power (mW/MHz)	Result (%)	Limit (%)	Verdict
NTNV	11A	Ant1	5180	3.882	10	-61.18	-80 to +20	PASS
			5200	3.133	10	-68.67	-80 to +20	PASS
			5240	2.618	10	-73.82	-80 to +20	PASS
	11N20	Ant1	5180	3.013	10	-69.87	-80 to +20	PASS
			5200	2.748	10	-72.52	-80 to +20	PASS
			5240	2.477	10	-75.23	-80 to +20	PASS
	11N40	Ant1	5190	2.014	5	-59.72	-80 to +20	PASS
			5230	1.545	5	-69.10	-80 to +20	PASS
	11AC20	Ant1	5180	2.931	10	-70.69	-80 to +20	PASS
			5200	3.199	10	-68.01	-80 to +20	PASS
			5240	2.404	10	-75.96	-80 to +20	PASS
	11AC40	Ant1	5190	2.051	5	-58.98	-80 to +20	PASS
			5230	1.816	5	-63.68	-80 to +20	PASS
	11AC80	Ant1	5210	0.991	2.5	-60.36	-80 to +20	PASS

EIRP							
TestCondi-tion	Test-Mode	Antenna	Freq (MHz)	Result (mW/MHz)	EIRP (mW/MHz)	Limit (mW/MHz)	Verdict
NTNV	11A	Ant1	5180	3.882	5.508	≤10	PASS
			5200	3.133	4.446	≤10	PASS
			5240	2.618	3.715	≤10	PASS
	11N20	Ant1	5180	3.013	4.276	≤10	PASS
			5200	2.748	3.899	≤10	PASS
			5240	2.477	3.516	≤10	PASS
	11N40	Ant1	5190	2.014	2.858	≤5	PASS
			5230	1.545	2.193	≤5	PASS
	11AC20	Ant1	5180	2.931	4.159	≤10	PASS
			5200	3.199	4.539	≤10	PASS
			5240	2.404	3.412	≤10	PASS
	11AC40	Ant1	5190	2.051	2.911	≤5	PASS
			5230	1.816	2.576	≤5	PASS
	11AC80	Ant1	5210	0.991	1.406	≤2.5	PASS

The equipment met the requirement of this clause.

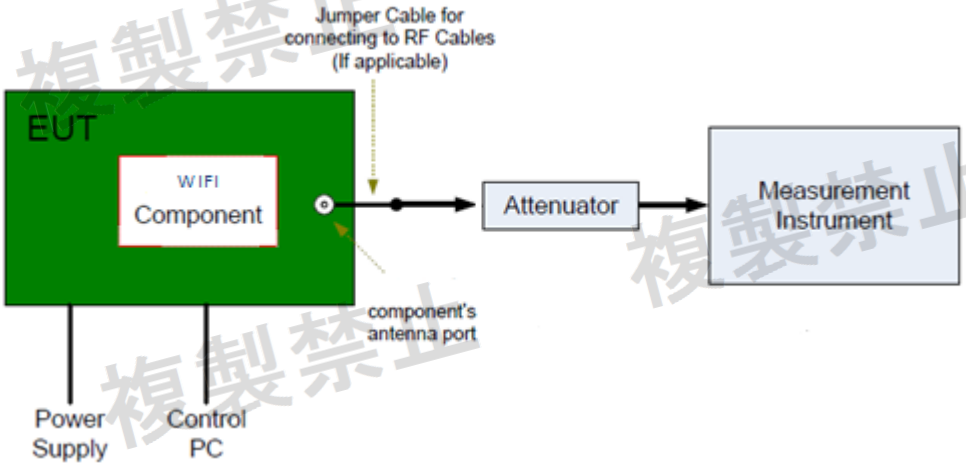
3.2 Frequency Tolerance

3.2.1 Test Method:

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 5GHz.
3. Then set the EUT to transmit at Highest, Middle, and Lowest frequency and measure the conducted output power separately.
4. RBW=10KHz, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
5. Repeat above procedures until all frequencies measured were complete.

3.2.2 Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.2.3 Limit (ARIB STD-T71 V7.0)

Tolerance of frequency: ±20x10^{-6}.

3.2.4 Test Result

TestCondition	Antenna	Freq (MHz)	CenterFreq [MHz]	Result [ppm]	Limit [ppm]	Verdict
NTNV	Ant1	5180	5180.001	0.19305	±20	PASS
		5200	5200.001	0.19231	±20	PASS
		5220	5220.001	0.19157	±20	PASS
		5240	5240.001	0.19084	±20	PASS
	Ant1	5190	5190.001	0.19268	±20	PASS
		5230	5230.001	0.19121	±20	PASS
	Ant1	5210	5210.001	0.19194	±20	PASS

Please refer to the appendix A for test plots
The equipment met the requirement of this clause.

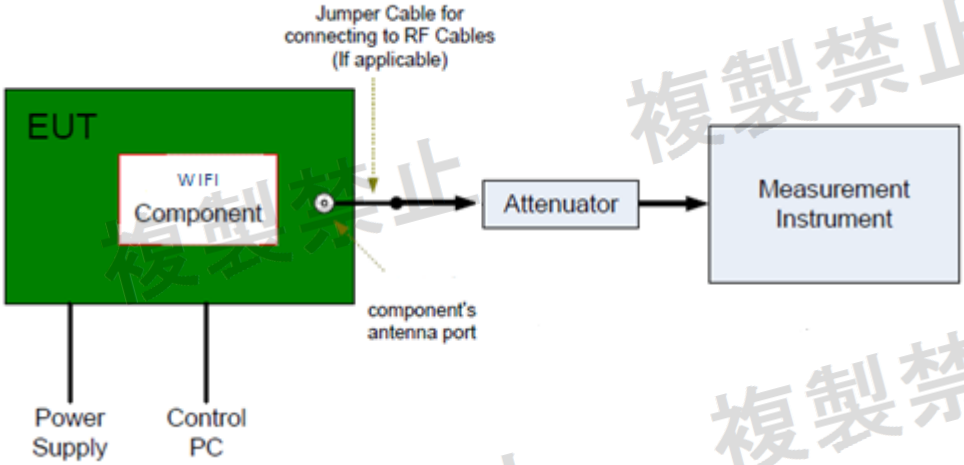
3.3 Occupied Frequency Bandwidth

3.3.1 Test Method:

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 5GHz.
3. Then set the EUT to transmit at Highest, Middle, and Lowest frequency separately.
4. Set Ocuppied bandwidth 99%
5. Set RBW=300KHz , VBW ≥ RBW.
6. Set Sweep = auto.
7. Set Detector function = peak.
8. Allow the trace to stabilize.
9. Repeat above procedures until all frequencies measured were complete.

3.3.2 Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.3.3 Limit (ARIB STD-T71 V7.0)

20MHz or less for 20MH system
20~40MHz for 40MHz system
40~80MHz for 80MHz system

3.3.4 Test Result

TestCondi-tion	Test-Mode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	11A	Ant1	5180	16.351	≤20	PASS
			5200	16.410	≤20	PASS
			5240	16.385	≤20	PASS
	11N20SISO	Ant1	5180	17.614	≤20	PASS
			5200	17.525	≤20	PASS
			5240	17.540	≤20	PASS
	11N40SISO	Ant1	5190	35.979	≤40	PASS
			5230	36.070	≤40	PASS
	11AC20SISO	Ant1	5180	17.589	≤20	PASS
			5200	17.572	≤20	PASS
			5240	17.580	≤20	PASS
	11AC40SISO	Ant1	5190	35.946	≤40	PASS
			5230	36.022	≤40	PASS
	11AC80SISO	Ant1	5210	75.154	≤80	PASS

Please refer to the appendix C for test plots
The equipment met the requirement of this clause.

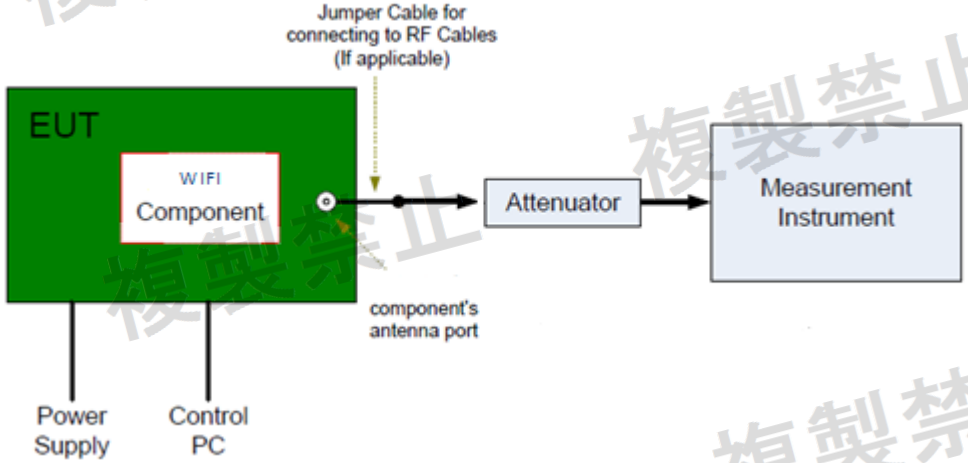
3.4 Transmitter Spurious Emissions (Conducted) (For transmitter)

Test Method:

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 5GHz.
3. Then set the EUT to transmit at Highest, Middle, and Lowest frequency separately.
4. Set RBW = 1MHz, VBW ≥ RBW.
5. Set Sweep = auto.
6. Set Detector function = peak.
7. Allow the trace to stabilize.
8. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.4.1 Limit (ARIB STD-T71 V7.0)

W52			
20MHz system		40MHz system	80MHz system
OBW : 18MHz or less	OBW : 18 - 20 MHz		
5,142 MHz or less : 2.5 μW/MHz	5,142 MHz or less : 2.5 μW/MHz	5,141.6 MHz or less : 2.5 μW/MHz	5,123.2 MHz or less : 2.5 μW/MHz
5,142 - 5,150 MHz : 15 μW/MHz	5,142 - 5,150 MHz : 15 μW/MHz	5,141.6 - 5,150 MHz : 15 μW/MHz	5,123.2 - 5,150 MHz : 15 μW/MHz
	5,250 - 5,250.2 MHz : $10^{1-(9/8)(f-5.75)}$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 : $10^{-(8/190)(f-21)-1+\log(1/2)}$mW/MHz	5,251 - 5,290 MHz : $10^{-(8/990)(f-41)-1+\log(1/4)}$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 μW/MHz	5,266.7 MHz or more : 2.5 μW/MHz	5,278.4 MHz or more : 2.5 μW/MHz	5,296.7 MHz or more : 2.5 μW/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 μW/MHz	5,233.3 MHz or less : 2.5 μW/MHz	5,221.6 MHz or less : 2.5 μW/MHz	5,203.3 MHz or less : 2.5 μW/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 : $10^{-(8/190)(f-21)-1+\log(1/2)}$mW/MHz	5,210 - 5,249 MHz : $10^{-(8/990)(f-41)-1+\log(1/4)}$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
5,350 MHz or more : 2.5 μW/MHz	5,249.8 - 5,250 MHz : $10^{1-(9/2)(f-5.75)}$mW/MHz	5,350 - 5,358.4 MHz : 15 μW/MHz	5,350 - 5,376.8 MHz : 15 μW/MHz
	5,350 MHz or more : 2.5 μW/MHz	5,358.4 MHz or more : 2.5 μW/MHz	5,376.8 MHz or more : 2.5 μW/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 uW/MHz	5,460 MHz or less : 2.5 uW/MHz	5,460 MHz or less : 12.5 uW/MHz	5,460 MHz or less : 12.5 uW/MHz
	5,460 - 5,470 MHz : 12.5 uW/MHz	5,460 - 5,470 MHz : 50 uW/MHz	5,460 - 5,469.5 MHz : 50 uW/MHz
5,730 MHz or more : 12.5 uW/MHz	5,745 - 5,765 MHz : 12.5 uW/MHz	5,770 MHz or more : 12.5 uW/MHz	5,469.5 - 5,470 MHz : 51.2 uW/MHz
	Over 5,765 MHz : 2.5 uW/MHz		5,770 MHz or more : 12.5 uW/MHz

3.4.2 Test Result

TestCondi-tion	Test-Mode	Antenna	Freq (MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Gain [dBI]	EIRP [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	11A	Ant1	5180	30~5142	1725.14	-31.84	1.52	-30.32	0.92897	≤2.5	PASS
				5142~5150	5143.10	-40.65	1.52	-39.13	0.12218	≤15	PASS
				5250~5251	5251.00	-45.40	1.52	-43.88	0.04093	≤100.0	PASS
				5251~5260	5259.71	-46.77	1.52	-45.25	0.02985	≤16.8	PASS
				5260~5266.7	5262.69	-45.20	1.52	-43.68	0.04285	≤15.8	PASS
				5266.7~26000	25965.44	-40.23	1.52	-38.71	0.13459	≤2.5	PASS
			5200	30~5142	5049.47	-42.23	1.52	-40.71	0.08492	≤2.5	PASS
				5142~5150	5149.19	-41.78	1.52	-40.26	0.09419	≤15	PASS
				5250~5251	5250.99	-45.80	1.52	-44.28	0.03733	≤102.3	PASS
				5251~5260	5259.74	-45.68	1.52	-44.16	0.03837	≤16.7	PASS
				5260~5266.7	5261.07	-43.55	1.52	-42.03	0.06266	≤15.8	PASS
				5266.7~26000	25764.33	-40.03	1.52	-38.51	0.14093	≤2.5	PASS
			5240	30~5142	2458.20	-42.25	1.52	-40.73	0.08453	≤2.5	PASS
				5142~5150	5142.38	-40.98	1.52	-39.46	0.11324	≤15	PASS
				5250~5251	5250.90	-23.43	1.52	-21.91	6.44169	≤125.9	PASS
				5251~5260	5251.28	-26.39	1.52	-24.87	3.25837	≤94.4	PASS
				5260~5266.7	5260.38	-40.83	1.52	-39.31	0.11722	≤15.8	PASS
				5266.7~26000	25677.25	-40.50	1.52	-38.98	0.12647	≤2.5	PASS
	11N20SISO	Ant1	5180	30~5142	2416.28	-38.74	1.52	-37.22	0.18967	≤2.5	PASS
				5142~5150	5143.54	-41.88	1.52	-40.36	0.09204	≤15	PASS
				5250~5251	5250.95	-45.76	1.52	-44.24	0.03767	≤112.2	PASS
				5251~5260	5259.20	-45.58	1.52	-44.06	0.03926	≤18.7	PASS
				5260~5266.7	5261.11	-45.22	1.52	-43.70	0.04266	≤15.8	PASS
				5266.7~26000	25768.48	-40.33	1.52	-38.81	0.13152	≤2.5	PASS
			5200	30~5142	3891.09	-42.20	1.52	-40.68	0.08551	≤2.5	PASS
				5142~5150	5144.56	-42.92	1.52	-41.40	0.07244	≤15	PASS
				5250~5251	5251.00	-44.98	1.52	-43.46	0.04508	≤100.0	PASS
				5251~5260	5258.98	-45.51	1.52	-43.99	0.03990	≤19.5	PASS
				5260~5266.7	5264.96	-44.88	1.52	-43.36	0.04613	≤15.7	PASS
				5266.7~26000	25630.26	-40.49	1.52	-38.97	0.12677	≤2.5	PASS
			5240	30~5142	2415.26	-39.64	1.52	-38.12	0.15417	≤2.5	PASS
				5142~5150	5144.64	-43.34	1.52	-41.82	0.06577	≤15	PASS
				5250~5251	5250.73	-19.80	1.52	-18.28	14.85936	≤186.2	PASS
				5251~5260	5251.03	-25.81	1.52	-24.29	3.72392	≤99.4	PASS
				5260~5266.7	5264.29	-42.28	1.52	-40.76	0.08395	≤15.8	PASS
				5266.7~26000	25633.71	-40.11	1.52	-38.59	0.13836	≤2.5	PASS
	11N40SISO	Ant1	5190	30~5141.6	2430.41	-36.77	1.52	-35.25	0.29854	≤2.5	PASS
				5141.6~5150	5149.76	-38.85	1.52	-37.33	0.18493	≤15	PASS
				5250~5251	5250.95	-45.21	1.52	-43.69	0.04276	≤56.1	PASS
				5251~5270	5269.22	-44.93	1.52	-43.41	0.04560	≤8.5	PASS
				5270~5278.4	5277.83	-45.81	1.52	-44.29	0.03724	≤2.7	PASS
				5278.4~2600	25653.95	-40.32	1.52	-38.80	0.13183	≤2.5	PASS

				0							
			5230	30~5141.6	2470.28	-33.62	1.52	-32.10	0.61660	≤2.5	PASS
				5141.6~5150	5145.64	-43.46	1.52	-41.94	0.06397	≤15	PASS
				5250~5251	5250.78	-27.05	1.52	-25.53	2.79898	≤83.0	PASS
				5251~5270	5251.38	-29.15	1.52	-27.63	1.72584	≤48.2	PASS
				5270~5278.4	5274.93	-41.30	1.52	-39.78	0.10520	≤4.0	PASS
				5278.4~26000	25898.46	-40.14	1.52	-38.62	0.13740	≤2.5	PASS
	11AC20S ISO	Ant1	5180	30~5142	2441.84	-30.73	1.52	-29.21	1.19950	≤2.5	PASS
				5142~5150	5145.75	-42.06	1.52	-40.54	0.08831	≤15	PASS
				5250~5251	5250.87	-44.42	1.52	-42.90	0.05129	≤134.9	PASS
				5251~5260	5258.76	-45.67	1.52	-44.15	0.03846	≤20.4	PASS
				5260~5266.7	5263.95	-44.60	1.52	-43.08	0.04920	≤15.8	PASS
				5266.7~26000	25796.81	-40.60	1.52	-39.08	0.12359	≤2.5	PASS
			5200	30~5142	4568.94	-39.28	1.52	-37.76	0.16749	≤2.5	PASS
				5142~5150	5146.54	-43.25	1.52	-41.73	0.06714	≤15	PASS
				5250~5251	5250.98	-46.30	1.52	-44.78	0.03327	≤104.7	PASS
				5251~5260	5258.99	-45.10	1.52	-43.58	0.04385	≤19.5	PASS
				5260~5266.7	5263.08	-43.40	1.52	-41.88	0.06486	≤15.8	PASS
				5266.7~26000	25732.54	-41.08	1.52	-39.56	0.11066	≤2.5	PASS
			5240	30~5142	2454.62	-39.21	1.52	-37.69	0.17022	≤2.5	PASS
				5142~5150	5144.98	-43.38	1.52	-41.86	0.06516	≤15	PASS
				5250~5251	5250.96	-22.17	1.52	-20.65	8.60994	≤109.6	PASS
				5251~5260	5251.19	-23.88	1.52	-22.36	5.80764	≤96.2	PASS
				5260~5266.7	5262.91	-41.25	1.52	-39.73	0.10641	≤15.8	PASS
				5266.7~26000	25881.13	-40.15	1.52	-38.63	0.13709	≤2.5	PASS
	11AC40S ISO	Ant1	5190	30~5141.6	1719.89	-33.64	1.52	-32.12	0.61376	≤2.5	PASS
				5141.6~5150	5148.47	-40.15	1.52	-38.63	0.13709	≤15	PASS
				5250~5251	5250.97	-44.56	1.52	-43.04	0.04966	≤53.6	PASS
				5251~5270	5269.41	-46.72	1.52	-45.20	0.03020	≤8.4	PASS
				5270~5278.4	5276.69	-44.03	1.52	-42.51	0.05610	≤3.1	PASS
				5278.4~26000	25725.78	-39.68	1.52	-38.16	0.15276	≤2.5	PASS
			5230	30~5141.6	2402.29	-40.65	1.52	-39.13	0.12218	≤2.5	PASS
				5141.6~5150	5146.74	-43.41	1.52	-41.89	0.06471	≤15	PASS
				5250~5251	5250.97	-28.10	1.52	-26.58	2.19786	≤53.6	PASS
				5251~5270	5251.40	-31.40	1.52	-29.88	1.02802	≤48.1	PASS
				5270~5278.4	5275.71	-40.55	1.52	-39.03	0.12503	≤3.6	PASS
				5278.4~26000	25661.55	-40.15	1.52	-38.63	0.13709	≤2.5	PASS
	11AC80S ISO	Ant1	5210	30~5123.2	2461.49	-39.14	1.52	-37.62	0.17298	≤2.5	PASS
				5132.5~5150	5137.75	-37.29	1.52	-35.77	0.26485	≤15	PASS
				5250~5251	5250.92	-26.53	1.52	-25.01	3.15500	≤30.1	PASS
				5251~5290	5251.16	-31.63	1.52	-30.11	0.97499	≤24.8	PASS
				5290~5296.7	5295.82	-40.38	1.52	-38.86	0.13002	≤2.7	PASS
				5296.7~26000	25745.35	-40.13	1.52	-38.61	0.13772	≤2.5	PASS

Please refer to the appendix D for test plots
The equipment met the requirement of this clause.

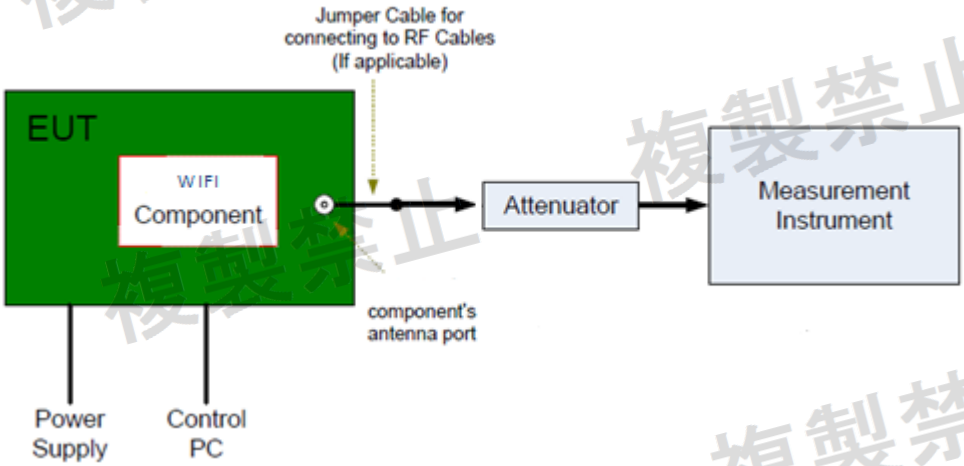
3.5 Adjacent Channel Power Tolerance

Test Method:

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 5GHz.
3. Then set the EUT to transmit at Highest, Middle, and Lowest frequency separately.
4. Set RBW :300KHz, VBW :300KHz
5. Set Sweep = auto.
6. Set Detector function = peak.
7. Allow the trace to stabilize.
8. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.5.1 Limit (ARIB STD-T71 V7.0)

For 20MHz BW (All Bands) ≥ 25dB for ±20MHz; ≥ 40dB for ±40MHz
For 40MHz BW (All Bands) ≥ 25dB for ±40MHz; ≥ 40dB for ±80MHz
For 80MHz BW (All Bands) ≥ 25dB for ±80MHz BW

3.5.2 Test Result

TestCondition	Test-Mode	Antenna	Freq(MHz)	Offset [MHz]	Result [dBc]	Limit [dBc]	Verdict
NTNV	11A	Ant1	5180	-40	-45.89	≤-40	PASS
				-20	-36.23	≤-25	PASS
				+20	-36.84	≤-25	PASS
				+40	-47.63	≤-40	PASS
			5200	-40	-46.08	≤-40	PASS
				-20	-36.59	≤-25	PASS
				+20	-37.15	≤-25	PASS
				+40	-47.79	≤-40	PASS
			5240	-40	-45.32	≤-40	PASS
				-20	-36.96	≤-25	PASS
				+20	-37.38	≤-25	PASS
				+40	-47.28	≤-40	PASS
	11N20SISO	Ant1	5180	-40	-45.55	≤-40	PASS
				-20	-34.10	≤-25	PASS
				+20	-35.53	≤-25	PASS
				+40	-47.31	≤-40	PASS
			5200	-40	-45.87	≤-40	PASS
				-20	-34.86	≤-25	PASS
				+20	-35.84	≤-25	PASS
				+40	-47.76	≤-40	PASS
			5240	-40	-44.87	≤-40	PASS
				-20	-34.67	≤-25	PASS
				+20	-35.20	≤-25	PASS
				+40	-46.85	≤-40	PASS
	11N40SISO	Ant1	5190	-80	-43.59	≤-40	PASS
				-40	-28.70	≤-25	PASS
				+40	-29.95	≤-25	PASS
				+80	-46.09	≤-40	PASS
			5230	-80	-42.94	≤-40	PASS
				-40	-28.36	≤-25	PASS
				+40	-29.73	≤-25	PASS
				+80	-45.70	≤-40	PASS
	11AC20SISO	Ant1	5180	-40	-45.39	≤-40	PASS
				-20	-34.31	≤-25	PASS
				+20	-34.88	≤-25	PASS
				+40	-46.96	≤-40	PASS
			5200	-40	-45.94	≤-40	PASS
				-20	-34.58	≤-25	PASS
				+20	-35.37	≤-25	PASS
				+40	-47.53	≤-40	PASS
			5240	-40	-44.88	≤-40	PASS
				-20	-34.82	≤-25	PASS
				+20	-35.13	≤-25	PASS
				+40	-46.63	≤-40	PASS
	11AC40SISO	Ant1	5190	-80	-43.47	≤-40	PASS
				-40	-28.44	≤-25	PASS
				+40	-30.06	≤-25	PASS
				+80	-46.01	≤-40	PASS
			5230	-80	-42.97	≤-40	PASS
				-40	-28.14	≤-25	PASS
				+40	-29.91	≤-25	PASS
				+80	-45.80	≤-40	PASS
	11AC80SISO	Ant1	5210	-80	-29.35	≤-25	PASS
				+80	-32.09	≤-25	PASS

Please refer to the appendix H for test plots
The equipment met the requirement of this clause.

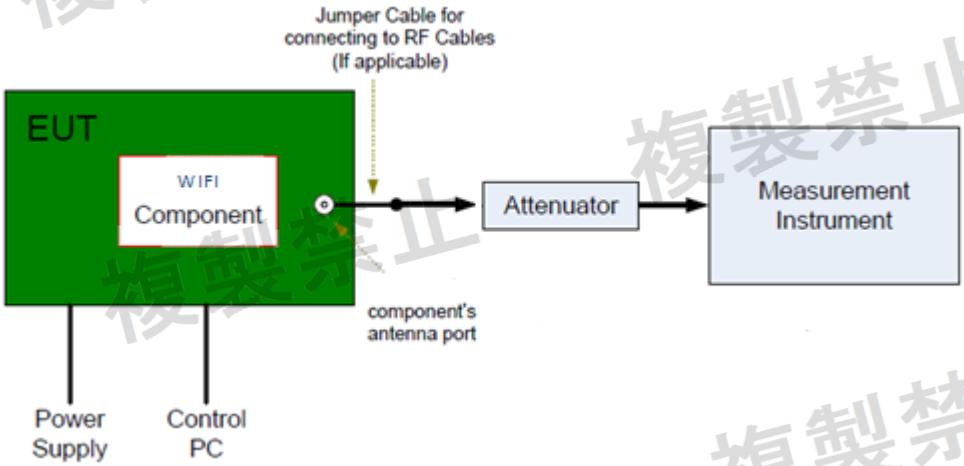
3.6 Burst Length

Test Method:

9. Connect EUT test port to spectrum analyzer.
10. Set the EUT to transmit maximum output power at 5GHz.
11. Then set the EUT to transmit at Highest, Middle, and Lowest frequency separately.
12. Set RBW :8MHz, VBW :50MHz
13. Set Sweep = auto.
14. Set Detector function = peak.
15. Allow the trace to stabilize.
16. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.6.1 Limit (ARIB STD-T71 V7.0)

8ms or less

3.6.2 Test Result

TestCondition	Test-Mode	Antenna	Freq(MHz)	Result [ms]	Limit [ms]	Verdict
NTNV	11A	Ant1	5180	2.10	≤8	PASS
			5200	2.09	≤8	PASS
			5240	2.09	≤8	PASS
	11N20SISO	Ant1	5180	5.33	≤8	PASS
			5200	5.33	≤8	PASS
			5240	5.33	≤8	PASS
	11N40SISO	Ant1	5190	5.38	≤8	PASS
			5230	5.38	≤8	PASS
	11AC20SISO	Ant1	5180	5.33	≤8	PASS
			5200	5.33	≤8	PASS
			5240	5.33	≤8	PASS
	11AC40SISO	Ant1	5190	5.38	≤8	PASS
			5230	5.38	≤8	PASS
	11AC80SISO	Ant1	5210	3.93	≤8	PASS

Please refer to the appendix G for test plots
The equipment met the requirement of this clause.

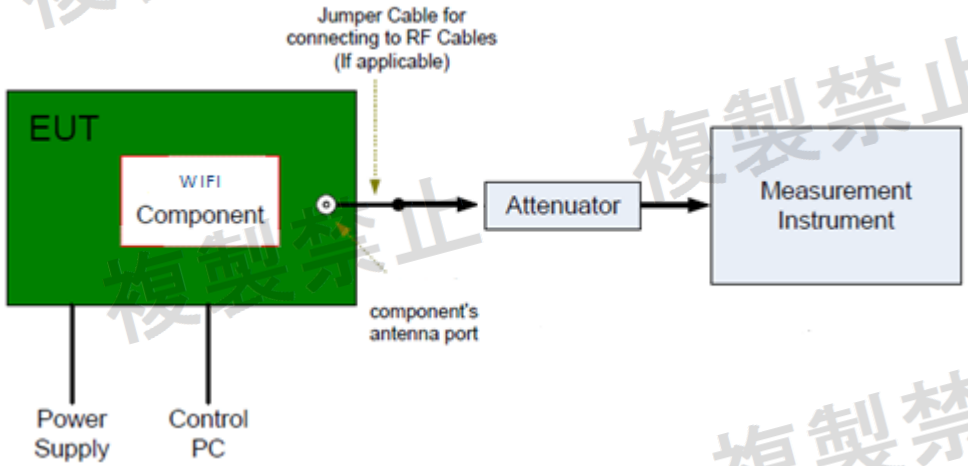
3.7 Secondary Radiated Emissions (Conducted) (For receiver)

Test Method:

17. Connect EUT test port to spectrum analyzer.
18. Set the EUT to transmit maximum output power at 5GHz.
19. Then set the EUT to transmit at Highest, Middle, and Lowest frequency separately.
20. Set RBW ≥ 1MHz, VBW ≥ RBW.
21. Set Sweep = auto.
22. Set Detector function = peak.
23. Allow the trace to stabilize.
24. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



3.7.1 Limit (ARIB STD-T71 V7.0)

Below 1GHz: 4nW or less
Above 1GHz: 20nW or less

3.7.2 Test Result

TestCondi-tion	Test-Mode	Antenna	Freq (MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [nW]	Limit [nW]	Ver-dict
NTNV	11A	Ant1	5180	30~1000	850.62	-69.06	≤-54	0.12417	≤4	PASS
				1000~26000	25910.00	-60.81	≤-47	0.82985	≤20	PASS
			5200	30~1000	459.71	-69.93	≤-54	0.10162	≤4	PASS
				1000~26000	25925.00	-61.72	≤-47	0.67298	≤20	PASS
			5220	30~1000	889.91	-69.40	≤-54	0.11482	≤4	PASS
				1000~26000	25842.50	-60.85	≤-47	0.82224	≤20	PASS
			5240	30~1000	904.94	-69.11	≤-54	0.12274	≤4	PASS
				1000~26000	25648.75	-61.44	≤-47	0.71779	≤20	PASS
	11N20SISO	Ant1	5180	30~1000	977.21	-69.29	≤-54	0.11776	≤4	PASS
				1000~26000	23702.50	-60.78	≤-47	0.83560	≤20	PASS
			5200	30~1000	871.48	-69.45	≤-54	0.11350	≤4	PASS
				1000~26000	25968.75	-60.91	≤-47	0.81096	≤20	PASS
			5220	30~1000	969.93	-69.02	≤-54	0.12531	≤4	PASS
				1000~26000	25760.00	-61.32	≤-47	0.73790	≤20	PASS
			5240	30~1000	944.71	-69.29	≤-54	0.11776	≤4	PASS
				1000~26000	25867.50	-60.45	≤-47	0.90157	≤20	PASS
	11N40SISO	Ant1	5190	30~1000	865.66	-69.81	≤-54	0.10447	≤4	PASS
				1000~26000	25855.00	-61.27	≤-47	0.74645	≤20	PASS
			5230	30~1000	756.53	-69.33	≤-54	0.11668	≤4	PASS
				1000~26000	24126.25	-60.54	≤-47	0.88308	≤20	PASS
	11AC20SISO	Ant1	5180	30~1000	861.29	-69.77	≤-54	0.10544	≤4	PASS
				1000~26000	25855.00	-61.31	≤-47	0.73961	≤20	PASS
			5200	30~1000	910.76	-69.11	≤-54	0.12274	≤4	PASS
				1000~26000	25890.00	-61.10	≤-47	0.77625	≤20	PASS
			5220	30~1000	925.31	-68.41	≤-54	0.14421	≤4	PASS
				1000~26000	24155.00	-59.86	≤-47	1.03276	≤20	PASS
			5240	30~1000	806.00	-69.87	≤-54	0.10304	≤4	PASS
				1000~26000	26000.00	-61.30	≤-47	0.74131	≤20	PASS
	11AC40SISO	Ant1	5190	30~1000	854.50	-68.68	≤-54	0.13552	≤4	PASS
				1000~26000	23821.25	-60.56	≤-47	0.87902	≤20	PASS
			5230	30~1000	671.66	-69.50	≤-54	0.11220	≤4	PASS
				1000~26000	25752.50	-60.40	≤-47	0.91201	≤20	PASS
	11AC80SISO	Ant1	5210	30~1000	854.02	-69.24	≤-54	0.11912	≤4	PASS
				1000~26000	23533.75	-60.26	≤-47	0.94189	≤20	PASS

Please refer to the appendix F for test plots
The equipment met the requirement of this clause.

3.8 Carrier Sensing

3.8.1 Limit

Stop transmission while carrier detecting

Field intensity in the direction of the maximum gain of a receiving antenna: 100mV/m (It"s a radiated testing detection threshold level).

The conducted detection threshold level shows as below:

(6)式の電界強度 E を既定値の 100mV/m（100dBμV/m）とし、λ(m)を F（MHz）に変換し、P を dBm 単位で表すと（7）式を得る。

$$P[dBm]=22.79+G-20\log F \quad \cdots\cdots (7)$$

P: 受信機のアンテナ端子に入力される受信電力 [dBm]
G: 受信アンテナの絶対利得 [dBi]
F: キャリア周波数 [MHz]

3.8.2 Test Procedure

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter"s radio frequency power output.

Link EUT and Access Point to Directional Coupler input port. Link Signal Generator and Spectrum Analyzer to test port and output port in the Directional Coupler separately.

A positive Peak Detector function in Spectrum Analyzer must be used. Set the Span to Zero.

Press the Signal Generator on and it will output the Carrier Signal. When the Link breaks off, wait a minute and press the Signal Generator off. After a while, reset the Link and done the test.

3.8.3 TEST RESULTS

TestCondition	TestMode	Frequen-cy[MHz]	Power lever [dBm]	Verdict
NTNV	11a	5180	-48.026	PASS
		5240	-48.258	PASS
	N40	5190	-48.043	PASS
		5230	-48.110	PASS
	AC80	5210	-48.110	PASS

Signal Generator Power Level (dBm) = 22.79 + G - 20log10 (F)

G: Antenna Gain

F: operation frequency

3.9 Interference prevention function

3.9.1 Limit

Item	Limits
Identification Code	≥48 bits

Measuring ID code Software
MAC IP List: MAC Scan

3.9.2 Test Procedure

1. In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes form EUT. b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code: a. Transmit the predetermined identification codes form the counterpart. b . Check if communication is normal. c. Transmit the signals other than predetermined ID codes form the counterpart. d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

3.9.3 Conditions of Equipment under Test

Required normal mode of the applicable equipment (EUT)

3.9.4 TEST RESULTS

The radio equipment has an identification code. A verification of this code is done before a communication channel is established

MAC: 72:46:17:A4:7F:DE

TEST RESULTS:PASS

End