

TEST REPORT

Product : Aikri6490
Trade mark : N/A
Model/Type reference : Aikri-64X-90AS-8-LGA,
Aikri-64X-90LS-8-LGA
Serial Number : N/A
Report Number : EED32S80594405
Date of Issue : Apr. 21, 2026
Product Class : Item 19-3 of Article 2 Paragraph 1,
MIC Notice No.88 Appendix No.45
Test result : PASS

Prepared for:

elinfochips Inc

**181 Metro Drive, Suite 170, San Jose California United States,
ZIP Code: 95110**

Prepared by:

**Centre Testing International Group Co., Ltd.
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Check No.: 6723230326



Modification Record

Version No.	Last Report No.	Modification Description
00	EED32R81711605	First report
01	EED32S80594405	Add the antenna.
Note: The increased antenna Max gains are all smaller than those of the original antenna. All test data come from the report of No.EED32R81711605.		

1 Test Summary

Test Item	Test Requirement	Limit/Severity	Result
Number of channels or channel separation	Item 19-3 of Article 2 Paragraph 1	7	PASS
Tolerance of frequency	Item 19-3 of Article 2 Paragraph 1	20×10^{-6} or less	PASS
Occupied Bandwidth	Item 19-3 of Article 2 Paragraph 1	For BW=20MHz: OFDM ≤ 20 MHz; Others ≤ 18 MHz For BW=40MHz: OFDM ≤ 40 MHz For BW=80MHz: OFDM ≤ 80 MHz For BW=160MHz: OFDM ≤ 160 MHz	PASS
Tolerance of adjacent channel leakage power and out-band leakage power	Item 19-3 of Article 2 Paragraph 1	Adjacent channel leakage power See page 16 Out-band leakage power EIRP : refer to Item 19-3 of Article 2 Paragraph 1 Table 1	PASS
Antenna Power	Item 19-3 of Article 2 Paragraph 1	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5mW/MHz or less 80MHz sys: 2.5mW/MHz or less 160MHz sys: 1.25mW/MHz or less Tolerance : +20%,-80%	PASS
Tolerance of unwanted emission intensity(conducted)	Item 19-3 of Article 2 Paragraph 1	Article 2 Paragraph 1 of Item 19-3	N/A
Interference prevention capability	Item 19-3 of Article 2 Paragraph 1	Article 49	N/A
Carrier sense capability	Item 19-3 of Article 2 Paragraph 1	Article 49	PASS
RF accessibility	Item 19-3 of Article 2 Paragraph 1	Article 49	N/A
Burst Length	Item 19-3 of Article 2 Paragraph 1	8ms or less	PASS
Limit of secondary radiated emissions(conducted)	Item 19-3 of Article 2 Paragraph 1	(1) Below 1GHz : 4nW (2) 1GHz or higher : 20nW	PASS

Remark:

EUT: In this whole report EUT means Equipment Under Test.

Tx: In this whole report Tx (or tx) means the product in transmitting status.

Rx: In this whole report Rx (or rx) means the product in receiving status.

RF: In this whole report RF means Radiated Frequency.

DS: Direct spreading

FH: Frequency hopping

OFDM: Orthogonal frequency division multiplexing.

Model No.: Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA

Only the model Aikri-64X-90AS-8-LGA was tested, Their electrical circuit design, layout, components used, and internal wiring are identical, Only the software version and model names are different. The mentioned Software versions are for two different Operating System. RF Tx power is same in both the Operating System.

No.	Model name	Software version	Operating System
1	Aikri-64X-90AS-8-LGA	QCS6490_AND.13.0.0.El.1.3.6	Android
2	Aikri-64X-90LS-8-LGA	QCS6490_QLI.1.2.0.El.1.1.0	Linux

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3 General Information

3.1 Client Information

Applicant:	eInfochips Inc
Address of Applicant:	181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110
Manufacturer:	eInfochips Inc
Address of Manufacturer:	181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110
Factory:	e Infochips Private Limited
Address of Factory:	Block-E, Ratna, 3rd Eye Voice, IT/ITES SEZ, Calica Construction and Impex Pvt. Ltd., Village: Ognaj, Taluka: Daskroi, Ahmedabad - 380060, Gujarat, India

3.2 General Description of EUT

Product Name:	Aikri6490
Model No.(EUT):	Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA
Test Model No.:	Aikri-64X-90AS-8-LGA
Trade mark:	N/A
EUT Supports Radios application:	5.15-5.25GHz
Operating Frequency:	5.15-5.25GHz
Rated power:	5.15-5.25GHz: 4.50mW/MHz (W52 Band_802.11a) 4.50mW/MHz (W52 Band_802.11n-HT20) 2.5mW/MHz (W52 Band_802.11n-HT40) 4.00mW/MHz (W52 Band_802.11ac-VHT20) 2.20mW/MHz (W52 Band_802.11ac-VHT40) 1.50mW/MHz (W52 Band_802.11ac-VHT80) 4.50mW/MHz (W52 Band_802.11ax-HE20) 2.50mW/MHz (W52 Band_802.11ax-HE40) 1.00mW/MHz (W52 Band_802.11ax-HE80)
Type of Modulation:	IEEE for 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE for 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11ax: OFDMA (1024QAM,64QAM, 16QAM, QPSK, BPSK) EUT supports full RU.
Transmit Data Rate:	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n(HT20): MCS0-MCS15 802.11n(HT40): MCS0-MCS15 802.11ac(VHT20): MCS0-MCS8 802.11ac(VHT40): MCS0-MCS9 802.11ac(VHT80): MCS0-MCS9 802.11ax(HE20): MCS0-MCS11 802.11ax(HE40): MCS0-MCS11 802.11ax(HE80): MCS0-MCS11
Number of subcarriers:	802.11a: 3/MHz 802.11n (HT20):3/MHz

		802.11n (HT40):3/MHz 802.11ac (VHT20):3/MHz 802.11ac (VHT40):3/MHz 802.11ac (VHT80):3/MHz 802.11ax (HE20):13/MHz 802.11ax (HE40):13/MHz 802.11ax (HE80):13/MHz	
Antenna Type:		FPC antenna	
Antenna gain :	Antenna1		
	Manufacturer:	Kyocera	
	Part# / Model#:	1001932PT	
	Antenna Type:	FPC	
	W52G Max Gain:	3.3dBi	
	Antenna2		
	Manufacturer:	Taoglas	
	Part# / Model#:	FXP840.07.0055B	
	Antenna Type:	FPC	
	W52G Max Gain:	3.4dBi	
	Antenna3		
	Manufacturer:	Skydio Inc.	
	Part# / Model#:	850-211840-000-1	
	Antenna Type:	FPC	
W52G Max Gain:	2.51dBi		
Function:		TX:☑ SISO RX:☑ MIMO	
Test Power Grade:		Default	
Test Software of EUT:		QRCT.exe	
Power Supply:		DC 3.7V	
Test Voltage:		DC 3.7V	
Sample Received Date:		Sep. 15, 2025	
Sample tested Date:		Sep. 15, 2025 to Feb. 11, 2026	
Note: The product's transmission function only supports a single antenna (Antenna Port 2), while the reception function supports dual antennas.			

3.3 EUT Test Environment Recorded

Temperature:	25°C
Humidity:	54% RH
Atmospheric Pressure:	1010mbar

3.4 Description of Support Units

The EUT has been tested independently.

3.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

3.6 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Frequency Error	10Hz
2	Occupied Bandwidth	10kHz
3	Antenna Power	0.55dB
4	Spurious Emissions	0.46dB(30MHz-1GHz)
		0.55dB(1GHz-18GHz)
5	Carrier sense capability	1.0dB
6	Temperature test	0.64°C
7	Humidity test	3.8%
8	DC and low frequency voltages test	0.026%

4 Equipment List

RF test system						
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)	Calibration body
Spectrum Analyzer	Keysight	N9010A	MY54510339	12-05-2024 11-25-2025	12-04-2025 11-24-2026	CTIMT
Spectrum Analyzer	R&S	FSVS3044	101509	02-14-2025	02-13-2026	LISAI
Spectrum Analyzer	R&S	FSW43	102978	08-11-2025	08-10-2026	LISAI
Signal Generator	Keysight	N5182B	MY53051549	11-30-2024 11-13-2025	11-29-2025 11-12-2026	CTIMT
Signal Generator	Agilent	N5181A	MY46240094	11-30-2024 11-25-2025	11-29-2025 11-24-2026	CTIMT
DC Power	Keysight	E3642A	MY56376072	11-30-2024 11-13-2025	11-29-2025 11-12-2026	CTIMT
Communication test set	R&S	CMW500	169004	03-03-2025	03-02-2026	CTIMT
RF control unit(power unit)	JS Tonscend	JS0806-2	24I80620925	07-21-2025	07-20-2026	CTIMT
Wi-Fi 7GHz Band Extender	JS Tonscend	TS-WF7U2	2206200002	05-12-2025	05-11-2026	LISAI
high-low temperature test chamber	Dong Guang Qin Zhuo	LK-80GA	QZ20150611879	11-30-2024 11-13-2025	11-29-2025 11-12-2026	CTIMT
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	05-26-2025	05-25-2026	CTIMT
BT&WI-FI Automatic test software	JS Tonscend	JS1120-3	V3.6.21	---	---	---
Digital multimeter	FLUKE	17B MAX	59545050WS	09-19-2024 10-15-2025	09-18-2025 10-14-2026	CTIMT

Remark:

CTI: Centre Testing International Group Co., Ltd
Address: Build C, Hongwei Industrial Zone, Baoan 70 District, Shenzhen, China
CTIMT: CTI MEASUREMENT AND TESTING CO.,LTD.

Address : Building B and C, Taohuayuan Sci-Tech Innovation Park, Tiegang Community, Xixiang Sub-district, Bao'an District, Shenzhen, Guangdong, China

LISAI: Guangzhou LiSai Metrology & Test Co.,Ltd.

Address: No.8.South Street Shi Ji Institute Guangzhou.Guangdong.China

(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

Notice: Calibration duration for above equipment is 1 year.

5 Radio Technical Requirements Specification

**Table 1: 5 GHz band low-power data communication system (1)
(Item 19-3 of Article 2 Paragraph 1)**

Test Item	Technical standard
Assigned frequency or designated frequency	W52: 5180, 5200, 5220, 5240, 5190, 5230, 5210MHz W52+W53: 5250
Communication method	One-way communication, simplex, semi-duplex, or duplex operation of digital signal transmission including spread spectrum
Number of channels or channel separation	7
Tolerance of frequency ($\times 10^{-6}$)	20×10^{-6}
Tolerance of occupied bandwidth	For BW=20MHz: OFDM ≤ 20 MHz; Others ≤ 18 MHz For BW=40MHz: OFDM ≤ 40 MHz For BW=80MHz: OFDM ≤ 80 MHz For BW=160MHz: OFDM ≤ 160 MHz
Antenna power	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5mW/MHz or less 80MHz sys: 2.5mW/MHz or less 160MHz sys: 1.25mW/MHz or less Tolerance : +20%,-80%
EIRP	20MHz sys: 10mW/MHz or less 40MHz sys: 5mW/MHz or less 80MHz sys: 2.5mW/MHz or less 160MHz sys: 1.25mW/MHz or less
Tolerance of spurious emission intensity	2.5 μ W/MHz
Tolerance of adjacent channel leakage power and out-band leakage power	Adjacent channel leakage power See page 14 Out-band leakage power See page 15
Transmission burst length	8ms or less
Limit of secondary radiated emissions	(1) Below 1GHz : 4nW (2) 1GHz - 10GHz : 20nW (3) 10GHz or higher : 20nW
Interference prevention function	Shall have the function of automatic transmission or reception of identification code.
Structure	Shall be of the structure that the RF and modulator sections excluding antenna cannot easily be opened.
Note	DS: Direct spread OFDM: Orthogonal frequency division multiplexing

Note: The Technical Standards described here do not cover all of the regulated items.

5.1 Transmitter Requirements

5.1.1 EUT test voltage and Frequency

5.1.1.1 EUT test voltage

EUT test voltage		
Power Supply:	DC 3.7V	
Test voltage require:	Supply the rated voltage and the rated voltage $\pm 10\%$ to power supply. However, If the fluctuation of input voltage to the circuit of RF unit (except power supply) of test equipment is under $\pm 1\%$, when input voltage from external power supply to the test equipment is fluctuated by $\pm 10\%$: Conduct the test with the rated voltage only.	
Power Supply result:	The measurement result of the voltage fluctuation at RF circuit when DC 3.7V $\pm 10\%$.	
	DC Input	RF circuit
	3.70V	3.300V
	4.07V	3.300V
	3.33V	3.300V

5.1.1.2 Test frequency

Test frequencies:	If the EUT can be set to 3 or more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L,M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies.	
Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle and 1 near bottom

EUT channels and frequencies list:

802.11a 20MHz 802.11n 20MHz 802.11ac 20MHz 802.11ax 20MHz		802.11n 40MHz 802.11ac 40MHz 802.11ax 40MHz		802.11ac 80MHz 802.11ax 80MHz	
W52		W52		W52	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	N/A	N/A
44	5220	N/A	N/A	N/A	N/A
48	5240	N/A	N/A	N/A	N/A

Test channel:

Test mode	Test channel/frequency(MHz)
Mode 1: IEEE 802.11a W52 mode	CH36/5180, CH40/5200, CH 48/5240
Mode 2: IEEE 802.11n/ac/ax 20MHz W52 mode	CH36/5180, CH40/5200, CH 48/5240
Mode 3: IEEE 802.11n/ac/ax 40MHz W52 mode	CH38/5190, CH46/5230
Mode 4: IEEE 802.11ac/ax 80MHz W52 mode	CH42/5210

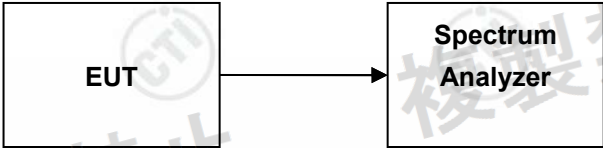
5.1.2 Antenna Requirement

Standard requirement																															
Applicable for equipment with an antenna terminal, including testing terminals) If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.																															
EUT Antenna	Refer to internal photos.																														
The antenna is FPC Antenna and no consideration of replacement. The best case gain of the antenna is :																															
<table border="1"> <tr><td colspan="2">Antenna1</td></tr> <tr><td>Manufacturer:</td><td>Kyocera</td></tr> <tr><td>Part# / Model#:</td><td>1001932PT</td></tr> <tr><td>Antenna Type:</td><td>FPC</td></tr> <tr><td>W52G Max Gain:</td><td>3.3dBi</td></tr> <tr><td colspan="2">Antenna2</td></tr> <tr><td>Manufacturer:</td><td>Taoglas</td></tr> <tr><td>Part# / Model#:</td><td>FXP840.07.0055B</td></tr> <tr><td>Antenna Type:</td><td>FPC</td></tr> <tr><td>W52G Max Gain:</td><td>3.4dBi</td></tr> <tr><td colspan="2">Antenna3</td></tr> <tr><td>Manufacturer:</td><td>Skydio Inc.</td></tr> <tr><td>Part# / Model#:</td><td>850-211840-000-1</td></tr> <tr><td>Antenna Type:</td><td>FPC</td></tr> <tr><td>W52G Max Gain:</td><td>2.51dBi</td></tr> </table>		Antenna1		Manufacturer:	Kyocera	Part# / Model#:	1001932PT	Antenna Type:	FPC	W52G Max Gain:	3.3dBi	Antenna2		Manufacturer:	Taoglas	Part# / Model#:	FXP840.07.0055B	Antenna Type:	FPC	W52G Max Gain:	3.4dBi	Antenna3		Manufacturer:	Skydio Inc.	Part# / Model#:	850-211840-000-1	Antenna Type:	FPC	W52G Max Gain:	2.51dBi
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Antenna Type:	FPC																														
W52G Max Gain:	2.51dBi																														
Result: An antenna connector is available, all relevant tests will be carried out conducted.																															

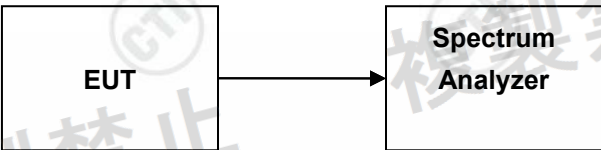
5.1.3 Tolerance of frequency

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Enter the unmodulation mode for the product. Test in Channel lowest, middle and highest, keep in continuously transmitting status.
Test Configuration:	 <pre>graph LR; EUT[EUT] --> SA[Spectrum Analyzer];</pre>
Test Conditions:	Frequency Counter or Spectrum Analyzer is used for measurement.
EUT conditions:	Modulation/Spread/Hopping off, CW Tx If EUT does not accept "Modulation OFF" mode in the measurement, you may use "Modulation ON" mode. In that case you can use the Max power Frequency as the measuring results.
Spectrum Analyzer conditions:	Frequency: Test Frequency Span 1MHz RBW 10kHz (Modulation OFF), VBW 10kHz (Modulation OFF), Sweep Time Auto Detector mode Positive peak Indication mode Max hold
Technical standard:	Tolerance of frequency: $\pm 20 \times 10^{-6}$
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

5.1.4 Occupied Bandwidth

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Frequency: Test Frequency Span 40MHz/80MHz/160MHz RBW 300kHz VBW 300kHz Sweep Time Auto detector mode Positive peak Indication mode Max hold OBW 99%
Technical standard:	For BW=20MHz:OFDM $\leq$ 20MHz; Others $\leq$ 18MHz For BW=40MHz:OFDM $\leq$ 40MHz For BW=80MHz:OFDM $\leq$ 80MHz For BW=160MHz:OFDM $\leq$ 160MHz
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

5.1.5 Adjacent Channel Power Tolerance

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Frequency: Test Frequency RBW 300kHz VBW 300kHz Tx bandwidth 20MHz Adjacent channel bandwidth 20MHz, Channel spacing 20MHz Alternate channel bandwidth 20MHz, Channel spacing 40MHz Sweep Time Auto Detector mode Positive peak Indication mode Max hold
Technical standard:	20MHz system (OB: below 20MHz) (1) Mean power of $\pm 10\text{MHz}$; bandwidth at 20MHz; detuning : -25dBc (2) Mean power of $\pm 10\text{MHz}$; bandwidth at 40MHz; detuning : -40dBc 40MHz system (OB: over 20, below 40MHz) (1) Mean power of $\pm 20\text{MHz}$; bandwidth at 40MHz; detuning : -25dBc (2) Mean power of $\pm 20\text{MHz}$; bandwidth at 80MHz; detuning : -40dBc 80MHz system (OB: over 40, below 80MHz) Mean power of $\pm 40\text{MHz}$; bandwidth at 80MHz; detuning : -25dBc
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset.

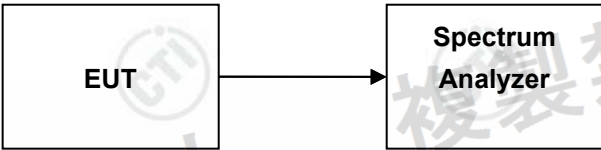
5.1.6 Out-Band Emissions Power

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Step 1 All spurious are measured by peak mode. Step 2: Frequency: Spurious Frequency RBW 1MHz VBW 1MHz Sweep Time Auto Detector mode Sample Indication mode Max hold
Technical standard:	OB: ≤18MHz 5142MHz or less ≤2.5μW/MHz 5142-5150MHz ≤15μW/MHz 5250-5251MHz ≤10^{1-(f-9)}mW/MHz 5251-5260MHz ≤10^{-1-(8/90)(f-11)}mW/MHz 5260-5266.7MHz ≤10^{-1.8-(6/50)(f-20)}mW/MHz 5266.7MHz or more ≤2.5μW/MHz Note:f=MHz,difference from 5240MHz. OB: 18-20MHz 5135-5142MHz ≤2.5μW/MHz 5142-5150MHz ≤15μW/MHz 5250-5250.2MHz ≤10^{1-(8/3)(f-9.75)}mW/MHz 5250.2-5251MHz ≤10^{1-(f-9)}mW/MHz 5251-5260MHz ≤10^{-1-(8/90)(f-11)}mW/MHz 5260-5266.7MHz ≤10^{-1.8-(6/50)(f-20)}mW/MHz 5266.7MHz or more ≤2.5μW/MHz Note:f=MHz,difference from 5240MHz. OB: 20-40MHz 5141.6MHz or less ≤2.5μW/MHz 5141.6-5150MHz ≤15μW/MHz 5250-5251MHz ≤10^{-(f-20)+log(1/2)}mW/MHz 5251-5270MHz ≤10^{-(8/190)(f-21)-1+log(1/2)}mW/MHz 5270-5278.4MHz ≤10^{-(3/50)(f-40)-1.8+log(1/2)}mW/MHz 5278.4MHz or more ≤2.5μW/MHz Note:f=MHz,difference from 5230MHz. OB: 40-80MHz 5123.2MHz or less ≤2.5μW/MHz 5123.2-5150MHz ≤15μW/MHz 5250-5251MHz ≤10^{-(f-40)+log(1/4)}mW/MHz 5251-5290MHz ≤10^{-(8/390)(f-41)-1+log(1/4)}mW/MHz 5290-5296.7MHz ≤10^{-(3/100)(f-80)-1.8+log(1/4)}mW/MHz 5296.7MHz or more ≤2.5μW/MHz Note:f=MHz,difference from 5210MHz. OB: 160MHz 5099.6MHz or less ≤2.5μW/MHz

	5099.6-5150MHz $\leq 15\mu\text{W}/\text{MHz}$ 5350-5400.4MHz $\leq 15\mu\text{W}/\text{MHz}$ 5400.4MHz or more $\leq 2.5\mu\text{W}/\text{MHz}$
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

Note: The cable loss and antenna gain have been put into spectrum analyzer as amplitude offset. .

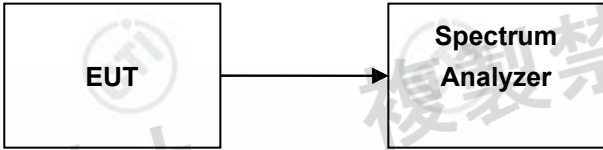
5.1.7 Antenna Power

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Step Frequency: Test Frequency Span 40MHz/80MHz/160MHz RBW 1MHz VBW 1MHz Sweep Time Auto Detector mode Positive peak Indication mode Max hold Step 2 Frequency: Test Frequency Span: 0MHz RBW: 1MHz/3MHz VBW: 1MHz/3MHz Sweep: Time Auto Detector mode: RMS Indication mode: Clear Write
Technical standard:	OFDM 20MHz sys: 10mW/MHz or less 40MHz sys: 5mW/MHz or less 80MHz sys: 2.5mW/MHz or less 160MHz sys: 1.25mW/MHz or less Tolerance : +20%,-80%
E.I.R.P.	$\leq 10\text{mW/MHz}$ (20MHz sys) $\leq 5\text{mW/MHz}$ (40MHz sys) $\leq 2.5\text{mW/MHz}$ (80MHz sys) $\leq 1.25\text{mW/MHz}$ (160MHz sys)

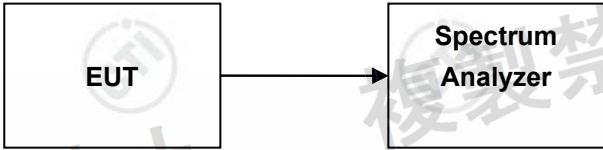
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.
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Note: The cable loss have been put into spectrum analyzer as amplitude offset.

5.1.8 Unwanted Emission Strength

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Step1 All spurious are measured from 30MHz to 26 GHz by peak mode. Step 2: Frequency: Spurious Frequency RBW 100kHz (30MHz-1GHz), 1000kHz (over 1GHz) VBW 100kHz (30MHz-1GHz), 1000kHz (over 1GHz) Sweep Time Auto Detector mode Sample Indication mode Max hold
Technical standard:	20MHz system OB: below 18MHz: (1) Below 5140MHz, 2.5μW/MHz (2) Over 5360MHz, 2.5μW/MHz OB: over 18MHz, below 19MHz (1) Below 5135MHz, 2.5μW/MHz (2) Over 5365MHz, 2.5μW/MHz 40MHz system OB:From 19MHz to 38MHz (1) Below 5100MHz, 2.5μW/MHz (2) Over 5400MHz, 2.5μW/MHz 80MHz system OB:From 38MHz to 78MHz (1) Below 5020MHz, 2.5μW/MHz (2) Over 5480MHz, 2.5μW/MHz 160MHz system OB:From 78MHz to 158MHz (1) Below 5099.6MHz, 2.5μW/MHz (2) Over 5400.4MHz, 2.5μW/MHz
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

5.1.9 Transmission Burst Length

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Modulation/Spread/Hopping on. For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
Spectrum Analyzer conditions:	Frequency: Test Frequency Span 0MHz RBW 1MHz, VBW 1MHz, Sweep Time: $\geq 1\text{ms}$ Detector mode Positive peak Indication mode Max hold
Technical standard:	Burst length $\leq 8\text{ms}$
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

5.1.10 Interference prevention function

Test Procedure

1) For EUTs capable of automatically transmitting identification data

- a. Transmit identification data from EUT to Demodulator
- b. Confirm identification data is correctly received by Demodulator

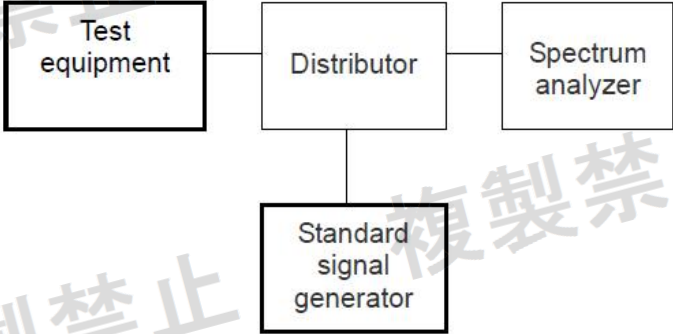
2) For EUTs capable of automatically receiving identification data

- c. Transmit identification data from Link Partner to EUT
- d. Confirm communication link is established
- e. Link Partner shall respond by transmitting different identification data back to the EUT
- f. Confirm EUT stops transmitting, or confirm EUT recognizes that the two identification data are different

MAC Address: 7F:D3:CE:83:26:4D

Test result: The unit does meet the requirements. (PASS)

5.1.11 Carrier sense capability

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	The EUT state shall be "normal mode link with wireless router"
Test Configuration:	 <pre> graph LR TE[Test equipment] --- D[Distributor] D --- SA[Spectrum analyzer] D --- SSG[Standard signal generator] </pre>
Measurement 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 (on $22.79 + Gr - 20 \cdot \log(F)$ dBm) (Gr is the antenna gain, F is the transmission frequency). 2. Turn off the RF signal of the SG. 3. EUT have transmitted the maximum modulation signal and fixed channelize. 4. Setting of SA: RBW/VBW=1MHz/1MHz, Span= 50MHz, Sweep time= auto, Sweep mode= continuous, Detect mode=positive peak 5. SG RF signal on, 6. Record the result, 7. SG RF signal off, 8. Record the result.
Technical standard:	EUT shall be stop the transmitted any signal and SG RF signal off.
Test result:	The unit does meet the requirements (Good). Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

5.1.12 RF accessibility

Standard requirement

Article 49-20, paragraph 1 (a)

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

☐ Sealed with special screws.
☐ Plastic chassis is being welded using ultrasonic waves.
☐ Chassis is glued using a special adhesive.
☒ Metal covers are spot-fused.
☐ Cover is specially interlocked.
☐ RF and Modulation components are covered with shielding case and this shielding case is soldered.
☐ Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method.
☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive.
☐ Shield case is welded at RF and modulation parts, and ID-ROM is glued with anon-transparent laminating agent.
☐ RF and Modulation parts are mounted on PCB with surface mount technology, the antenna is printed on PCB, chip is welded on PCB, and there is no any adjustable parts on PCB or adjustable parts are not exposed.
Refer to internal photos.

5.2 Receiver Requirements

5.2.1 Secondary radiated emissions

Test Requirement:	Item 19-3 of Article 2 Paragraph 1
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). Following channel(s) was (were) selected for the final test as listed below.
Test Configuration:	 <pre> graph LR EUT[EUT] --> SA[Spectrum Analyzer] </pre>
EUT conditions:	Rx
Spectrum Analyzer conditions:	Step 1 All spurious are measured from 30 MHz to 26 GHz by peak mode. Step 2: Frequency: Spurious Frequency RBW 100kHz (30MHz-1GHz) , 1MHz (over 1GHz) VBW 100kHz (30MHz-1GHz) , 1MHz (over 1GHz) Sweep Time Auto Detector mode Sample Indication mode Max hold
Technical standard:	(1) Below 1GHz : 4nW (2) 1GHz or higher : 20nW
Test result:	Refer to Appendix: W5.2 Wi-Fi of Report No. EED32S80594405.

6 PHOTOGRAPHS

Refer to Appendix Photographs of Report No. EED32S80594401.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***