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FCC Test Report

Test Report On Behalf of TEVII TECHNOLOGY CO., LTD. For Wireless HDMI Extender Model No.: G405CTX, PRESENT+SHARE (USB-C 4K EDITION), ECW-200-Tx

FCC ID: 2ALU5-G405CTX

Prepared For :

TEVII TECHNOLOGY CO., LTD.

10F, No.125, Sec. 2, Datong Rd. 22183 Xizhi District, New Taipei City, Taiwan

Prepared By :

Shenzhen HUAK Testing Technology Co., Ltd.

1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

 Date of Test:
 Jun. 24, 2024 ~ Jul. 01, 2024

 Date of Report:
 Jul. 01, 2024

 Report Number:
 HK2406243280-2E

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Test Result Certification

Applicant's Name	TEVII TECHNOLOGY CO., LTD.
Address	10F, No.125, Sec. 2, Datong Rd. 22183 Xizhi District, New Taipei City, Taiwan
Manufacturer's Name:	TEVII TECHNOLOGY CO., LTD.
Address	10F, No.125, Sec. 2, Datong Rd. 22183 Xizhi District, New Taipei City, Taiwan
Product Description	
Trade Mark:	TEVII, Clearclick, COVID
Product Name	Wireless HDMI Extender
Model and/or Type Reference :	G405CTX, PRESENT+SHARE (USB-C 4K EDITION), ECW-200-Tx
Standards	FCC Rules and Regulations Part 15 Subpart E Section 15.407 ANSI C63.10: 2013

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Date of Test	
Date (s) of performance of tests:	Jun. 24, 2024 ~ Jul. 01, 2024
Date of Issue:	Jul. 01, 2024
Test Result	Pass

Testing Engineer

Len Liao

Technical Manager

Sliver Wan

Authorized Signatory

asin Misu

Jason Zhou

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** Modified History **

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Jul. 01, 2024	Jason Zhou
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and	NG	and	
TESTING	HUAKTESTING	a munites and	HAN TESTING

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1. Test Result Summary

1.1. Test Procedures and Results

Requirement	CFR 47 Section	Result	
Antenna Requirement	§15.203	PASS	
Ac Power Line Conducted Emission	§15.207	PASS	
Maximum Conducted Output Power	§15.407(a)	PASS	
6dB Emission Bandwidth	§15.407(e)	PASS	
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	N/A	
Power Spectral Density	§15.407(a)	PASS	
Band Edge	§15.407(b)/15.209/15.205	PASS	
Radiated Emission	§15.407(b)/15.209/15.205	PASS	
Frequency Stability	§15.407(g)	PASS	

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

1.2. Information of the Test Laboratory

Shenzhen HUAK Testing Technology Co., Ltd. Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization:

A2LA Accreditation Code is 4781.01. FCC Designation Number is CN1229. Canada IC CAB identifier is CN0045. CNAS Registration Number is L9589.

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1.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	o. Item			
_{MG} 1	Conducted Emission	±0.37dB		
2	RF power, conducted	±3.35dB		
3 (Spurious emissions, conducted	±2.20dB		
4	All emissions, radiated(<1G)	±3.90dB		
5.00	All emissions, radiated(>1G)			
6	5 Temperature			
7	Humidity	±1.0%		

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2. EUT Description

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2.1. General Description of EUT

Equipment:	Wireless HDMI Extender			
Model Name:	G405CTX			
Serial Model:	PRESENT+SHARE (USB-C 4K EDITION), ECW-200-Tx			
Model Difference:	All model's the function, software and electric circuit are the same, only with model named different. Test sample model: G405CTX.			
Trade Mark:	TEVII, Clearclick, COVID			
FCC ID:	2ALU5-G405CTX			
Operation Frequency: IEEE 802.11a/n/ac (HT20)5.745GHz-5.825GHz IEEE 802.11n/ac (HT40)5.755GHz-5.795GHz IEEE 802.11ac (HT80) 5.775GHz				
Modulation Technology:	IEEE 802.11a/n/ac			
Modulation Type:	256QAM, 64QAM,16QAM, QPSK, BPSK for OFDM			
Antenna Type:	FPC Antenna			
Antenna Gain:	3.3dBi			
Power Source:	DC 5V			
Power Supply:	DC 5V			
Hardware Version:	V2.0			
Software Version:	V2.0			

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2.2. Operation Frequency Each of Channel

	802.11a/802.11n(HT20) 802.11ac(HT20)				802.11ac(HT80)	
8	Channel Frequency		Channel	Frequency	Channel	Frequency
	149	5745	151	5755	155	5775
5	153	5765	159	5790	AKTESTIN	a)G
	157	5785		NAK TESTIN	Om.	I LAK TESTA
	161	5805	9		16	0
	165	5825	li e		AK TESTIN.	

Note:

In section 15.31(*m*), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

2.3. Operation of EUT during Testing

Band IV (5725 - 5850 MHz)				
For	802.11a/n (HT20)/ac(H	HT20)		
Channel Number	Channel	Frequency (MHz)		
149	Low	5745		
157	Mid	5785		
165	High	5825		

Fo	r 802.11n (HT40)/ ac(H	T40)
Channel Number	Channel	Frequency (MHz)
151	Low	5755
159	High	5795

	For 802.11ac(HT80)				
Channel Number	Channel	Frequency (MHz)			
155	/	5775			
16	16	16			

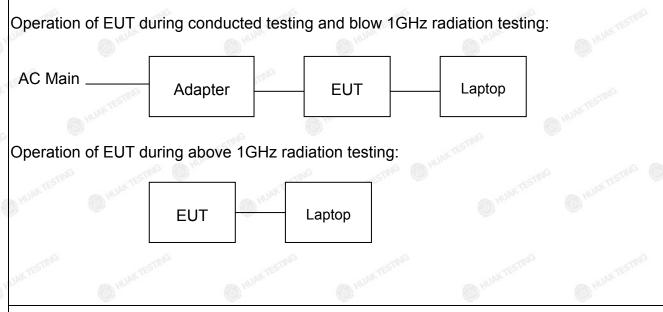
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2.4. Description of Test Setup



The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. The worst case is X position.

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2.5. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

TEN		W TE-		W The	
ltem	Equipment	Trade Mark	Model/Type No.	Specification	Note
614	Wireless HDMI Extender	TEVII, Clearclick, COVID	G405CTX	N/A	EUT
	HUAKTESTING	HUM TESTING	HUAKTESTING	Input: AC100-240V, 50/60Hz, 2A USB-C1 Output: DC5V-3A, 9V-3A,	TESTING
WAKTES		HUN TEST		12V-3A, 15V-3A, 20V-5A, 28V-5A, 140W Max	HUAKTESTING
2	Adapter	N/A	CD289	USB-C2 Output: DC5V-3A, 9V-3A,	Peripheral
CTESTING		HUAN TESTING		12V-3A, 15V-3A, 20V-5A, 100W Max USB-A Output: DC5V-4.5A, 4.5V-5A,	HUNKTESTING
ING		HUAKTESTING		5V-3A, 9V-2A, 12V-1.5A, 22.5W Max USB-A Output: DC5V/2.4A	TESTING
3	Laptop	Lenovo	Thinkpad E450	Input: 20V 2.25A/3.25A	Peripheral
	ING TESTING	O HOM	IG TESTING	HOME	ESTING (

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended

use.

3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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3. General Information

3.1. Test Environment and Mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar

Test Mode:

Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations
45°	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

NG	Mode	<i>w</i>	Data rate	(
	802.11a	KTESTING	6 Mbps	KTESTING
	802.11n(HT20)	Ron	MCS0	O HOM
	802.11n(HT40)	Dim	MCS0	- MG
80	02.11ac(HT20)/ac(HT40)/ac(HT80)	HUAKTED	MCS0	HUAKTES

Final Test Mode:

Operation mode:

Keep the EUT in continuous transmitting with modulation

Mode Test Duty Cycle:

	Mode	Duty Cycle	Duty Cycle Factor (dB)	
	802.11a	0.912	-0.402	
	802.11n(HT20)	0.906	-0.430	
	802.11n(HT40)	0.942	-0.259	
	802.11ac(HT20)	0.889	-0.509	
	802.11ac(HT40)	0.941	-0.263	
	802.11ac(HT80)	0.889	-0.512	
Test plots	as follows:	HUAN	C HUNN	

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4. Test Results and Measurement Data

4.1. Conducted Emission

4.1.1. Test Specification

Frest Method: ANSI C63.10:2013 Frequency Range: 150 kHz to 30 MHz Receiver Setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto	TING	TNG	NG	NG
Frequency Range: 150 kHz to 30 MHz Receiver Setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto Imits: Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane Imits: Image: Colspan="2">Image: Colspan="2">Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2"	Test Requirement:	FCC Part15 C Section	15.207	HUAKTER
Receiver Setup: RBW=9 kHz, VBW=30 kHz, Sweep time=auto Frequency range Limit (dBuV) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Fest Setup: Reference Plane Filter Ac power Vertage User and the maximum down 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 500hm/50uH coupling impedance for the measuring equipment. Prest Procedure: The peripheral devices are also connected to the ma power through a line impedance stabilization network (L.I.S.N.). This provides a 500hm/50uH coupling impedance for the measuring equipment. Set through a line index of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.	Test Method:	ANSI C63.10:2013	TING	~
Imits: Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane Imits: Imits: Reference Plane Imits: Reference Plane Imits: Reference Plane Imits: Imits: Reference Plane Imits: Reference Plane Imits: Test Mode: Transmitting with modulatio	Frequency Range:	150 kHz to 30 MHz	HUAK TEN	AK TESTING
Imits: (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 Reference Plane Imits: Image: Colspan="2">Reference Plane Imits: Image: Colspan="2">Reference Plane Image: Colspan="2">Image: Colspan= "2" Image: Colspan	Receiver Setup:	RBW=9 kHz, VBW=30	kHz, Sweep time	=auto
Fest Setup: Image: Constrained and the set of the set	Limits:	(MHz) 0.15-0.5 0.5-5	Quasi-peak 66 to 56* 56	Average 56 to 46* 46
 The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the ma power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. 	Test Setup:	40cm 40cm E.U.T AC pow Test table/Insulation plane Remark E.U.T: Equipment Under Test LISN: Line Impedence Stabilization I	e EMI Receiver	
 Power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the ma power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. 	Test Mode:	Transmitting with modu	ulation	
Test Result: PASS	Test Procedure:	 power through a line (L.I.S.N.). This provisi impedance for the m 2. The peripheral device power through a LIS coupling impedance refer to the block dia photographs). 3. Both sides of A.C. lin conducted interferent emission, the relative the interface cables 	e impedance stabi des a 50ohm/50u neasuring equipme ces are also conne in that provides a with 50ohm terming agram of the test so ne are checked for nce. In order to fin e positions of equ must be changed	lization network H coupling ent. ected to the main 50ohm/50uH ination. (Please setup and r maximum d the maximum ipment and all of according to
$L_{L_{r}}$ $W h_{r}$ $W h_{r}$	Test Result:	PASS	HUAKTEST	HUAK TEST

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Conducted Emission Shielding Room Test Site (843)					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Receiver	R&S	ESR	HKE-005	Feb. 20, 2024	Feb. 19, 2025
LISN	R&S	ENV216	HKE-002	Feb. 20, 2024	Feb. 19, 2025
LISN	R&S	ENV216	HKE-059	Feb. 20, 2024	Feb. 19, 2025
Coax cable (9KHz-30MHz)	Times	381806-002	N/A	Feb. 20, 2024	Feb. 19, 2025
EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	N/A	N/A
10dB Attenuator	Schwarzbeck	VTSD9561F	HKE-153	Feb. 20, 2024	Feb. 19, 2025

4.1.2. Test Instruments

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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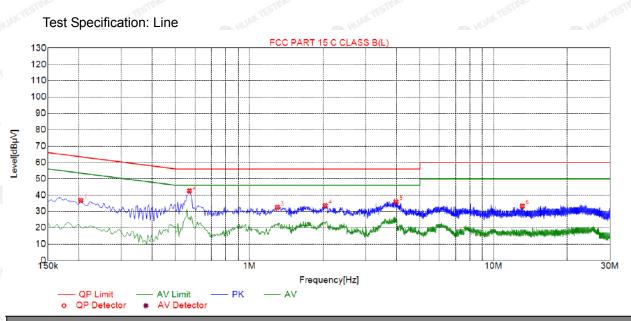
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4.1.3. Test data

All modes have been tested. Only the worst result was reported as below:



Suspected List

	ouspected List								
	NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре
8	1	0.2040	36.69	19.84	63.45	26.76	16.85	PK	L
	2	0.5685	42.60	19.86	56.00	13.40	22.74	PK	L
	3	1.3020	32.60	19.91	56.00	23.40	12.69	PK	L
2	4	2.0445	33.55	19.97	56.00	22.45	13.58	PK	L
	5	3.9840	35.93	20.09	56.00	20.07	15.84	PK	L
	6	13.1325	33.31	19.83	60.00	26.69	13.48	PK	L

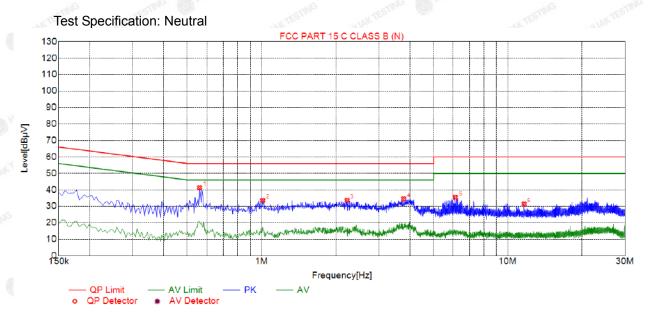
Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss Level=Test receiver reading + correction factor

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Suspected List

NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре
1	0.5595	41.30	19.75	56.00	14.70	21.55	PK	Ν
2	1.0095	33.60	19.74	56.00	22.40	13.86	PK	Ν
3	2.2245	33.64	19.87	56.00	22.36	13.77	PK	Ν
4	3.7770	34.54	19.97	56.00	21.46	14.57	PK	Ν
5	6.1260	35.51	19.98	60.00	24.49	15.53	PK	Ν
6	11.6610	31.39	19.82	60.00	28.61	11.57	PK	Ν

Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor

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4.2. Maximum Conducted Output Power

4.2.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407	7(a)
Test Method:	KDB789033 D02 General UN Rules v02.r01 Section E	III Test Procedures New
Limit:	Frequency Band (MHz)	HUAKTESTING
	5725-5850 1 W	TESTING
Test Setup:	Power meter	EUT
Test Mode:	Transmitting mode with modu	Ilation
Test Procedure:	Rules v02r01 Section E, 3 2. The RF output of EUT was	UNII Test Procedures New 3, a. connected to the power tenuator. The path loss was ts for each measurement. r setting and enable the /.
Test Result:	PASS	HUACTES HUACTES
Remark:	Conducted output power= me +10log(1/x) X is duty cycle=1 Conducted output power= me	, so 10log(1/1)=0

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RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025
Power meter	Agilent	E4419B	HKE-085	Feb. 20, 2024	Feb. 19, 2025
Power Sensor	Agilent	E9300A	HKE-086	Feb. 20, 2024	Feb. 19, 2025
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A	N/A

4.2.2. Test Instruments

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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Test Data

Conf	iguration	Band IV (5745 - 58	825 MHz)	
Mode	Test channel	Maximum Conducted Output Power (dBm)	FCC Limit (dBm)	Result
802.11a	CH149	9.95	30	PASS
802.11a	CH157	10.12	30	PASS
802.11a	CH165	10.76	30	PASS
802.11n(HT20)	CH149	9.74	30	PASS
802.11n(HT20)	CH157	10.11	30	PASS
802.11n(HT20)	CH165	10.51	30	PASS
802.11n(HT40)	CH151	10.00	30	PASS
802.11n(HT40)	CH159	10.13	30	PASS
802.11ac(HT20)	CH149	9.97	30	PASS
802.11ac(HT20)	CH157	10.11	30	PASS
802.11ac(HT20)	CH165	10.69	30	PASS
802.11ac(HT40)	CH151	10.06	30	PASS
802.11ac(HT40)	CH159	10.00	30	PASS
802.11ac(HT80)	CH155	10.47	30	PASS

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4.3. 6dB Emission Bandwidth

4.3.1. Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)
Test Method:	KDB789033 D02 General UNII Test Procedures Nev Rules v01r04 Section C
Limit:	>500kHz
Test Setup:	Spectrum Analyzer
Test Mode:	Transmitting mode with modulation
Test Procedure:	 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth mus be greater than 500 kHz. Measure and record the results in the test report.
Test Result:	PASS

4.3.2. Test Instruments

RF Test Room					
Equipment	ManufacturerModelSerial NumberCalibration DateCa				
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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4.3.3. Test data

Band IV (5745 -	5825 MHz)				
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	CH149	5745	16.320	0.5	PASS
802.11a	CH157	5785	16.320	0.5	PASS
802.11a	CH165	5825	16.320	0.5	PASS
802.11n(HT20)	CH149	5745	17.280	0.5	PASS
802.11n(HT20)	CH157	5785	17.560	0.5	PASS
802.11n(HT20)	CH165	5825	17.520	0.5	PASS
802.11n(HT40)	CH151	5755	35.360	0.5	PASS
802.11n(HT40)	CH159	5795	35.440	0.5	PASS
802.11ac(HT20)	CH149	5745	17.280	0.5	PASS
802.11ac(HT20)	CH157	5785	17.520	0.5	PASS
802.11ac(HT20)	CH165	5825	17.520	0.5	PASS
802.11ac(HT40)	CH151	5755	35.360	0.5	PASS
802.11ac(HT40)	CH159	5795	35.120	0.5	PASS
802.11ac(HT80)	CH155	5775	75.040	0.5	PASS

Test plots as follows:

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Band IV (5725 - 5850 MHz)

802.11a Frequency #Avg Type: RMS Avg[Held: 500/50 PNO: Fast +++ Trig: Free Run IFGaincl.ow #Atten: 30 dB Auto Tu Ref Offset 9.53 dB Ref 20.00 dBm Center Fr Start Fre Stop Fre enter 5.74500 Gl Res BW 100 kHz Span 40.00 M Sweep 3.867 ms (1001 p CF Ste #VBW 300 kHz 5.736 80 GHz -6.876 dBm 5.746 20 GHz -1.347 dBm 16.32 MHz (Δ) 0.273 dB N 1 1 Δ1 1 Γ (Δ) Freq Offs Low Frequency #Avg Type: RMS Avg[Held: 500/50 D GHZ PNO: Fast ↔ Trig: Free Run IFGain:Low #Atten: 30 dB Auto Tu Ref Offset 9.53 dB Ref 20.00 dBm Center Fr 3Δ1 Start Fre Stop Fr Center 5.78500 GH Res BW 100 kHz Span 40.00 M Sweep 3.867 ms (1001 p CF St #VBW 300 kHz 5.776 80 GHz -6.522 dBr 5.786 24 GHz -0.954 dBr 16.32 MHz (Δ) -0.211 d Freq Off Mid Frequenc #Avg Type: RMS Avg[Held: 500/50 0 GHz Trig: Free Run Auto Tu Ref Offset 10.01 dB Ref 20.00 dBm Center Fre Start Fre Stop Fr enter 5.82500 G Res BW 100 kHz CFS Span 40.00 M 3.867 ms (1001 p #VBW 300 kHz 5.816 80 GHz -6.132 dBn 5.826 24 GHz -0.545 dBn 16.32 MHz (Δ) -0.340 dB N 1 Γ 1 Γ (Δ) Freq Offs High

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4.4. 26db Bandwidth and 99%Occupied Bandwidth

4.4.1. Test Specification

Test Requirement:	47 CFR Part 15C Section 15.407 (a)				
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C				
Limit:	No restriction limits				
Test Setup:	Spectrum Analyzer				
Test Mode:	Transmitting mode with modulation				
Test Procedure:	 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth RBW = 1% EBW, VBW≥3RBW, In order to make an accurate measurement. Measure and record the results in the test report. 				
Test Result:	N/A				

4.4.2. Test Instruments

	RF Test Room					
Equipment Manufacturer Model S		Serial Number	Calibration Date	Calibration Due		
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025	
RF cable	Times	o 1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025	
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025	
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	N/A	N/A	

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4.4.3. Test Result

N/A

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4.5. Power Spectral Density

4.5.1. Test Specification

Test Requirement:	FCC Part15 E Section 15.407 (a)			
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F			
Limit:	≤30.00dBm/500KHz for Band IV 5725MHz-5850MHz			
Test Setup:				
	Spectrum Analyzer EUT			
Test Mode:	Transmitting mode with modulation			
Test Procedure:	 Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS. Allow the sweeps to continue until the trace stabilizes. Use the peak marker function to determine the maximum amplitude level. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment. 			
Test Result:	PASS			

4.5.2. Test Instruments

RF Test Room						
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025	
RF cable	Times	° 1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025	
RF automatic control unit		JS0806-2	HKE-060	Feb. 20, 2024	Feb. 19, 2025	
RF Test Software	Tonscend	JS1120-3 Version 3.3.23	WKE-083	N/A	N/A	

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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4.5.3. Test data

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	Co	onfiguration Ba	nd IV (5745 -	5825 MHz)		
Mode	Test channel	Level [dBm/510kHz]	10log (500/510)	Power Spectral Density	Limit (dBm/500kHz)	Result
802.11a	CH149	2.28	-0.086	2.194	30	PASS
802.11a	CH157	3.40	-0.086	3.314	30	PASS
802.11a	CH165	3.10	-0.086	3.014	30	PASS
802.11nHT20	CH149	2.48	-0.086	2.394	30	PASS
802.11n HT20	CH157	2.25	-0.086	2.164	30	PASS
802.11nHT20	CH165	3.46	-0.086	3.374	30	PASS
802.11nHT40	CH151	0.28	-0.086	0.194	30	PASS
802.11nHT40	CH159	0.30	-0.086	0.214	30	PASS
802.11acHT20	CH149	2.67	-0.086	2.584	30	PASS
802.11acHT20	CH157	2.59	-0.086	2.504	30	PASS
802.11acHT20	CH165	2.98	-0.086	2.894	30	PASS
802.11acHT40	CH151	-0.38	-0.086	-0.466	30	PASS
802.11acHT40	CH159	0.36	-0.086	0.274	30	PASS
802.11acHT80	CH155	-1.98	-0.086	-2.066	30	PASS

Note: Power Spectral Density= Level [dBm/510kHz]+(10log(Limit RBW/Test RBW))

Test plots as follows:

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Band IV (5725-5850 MHz)



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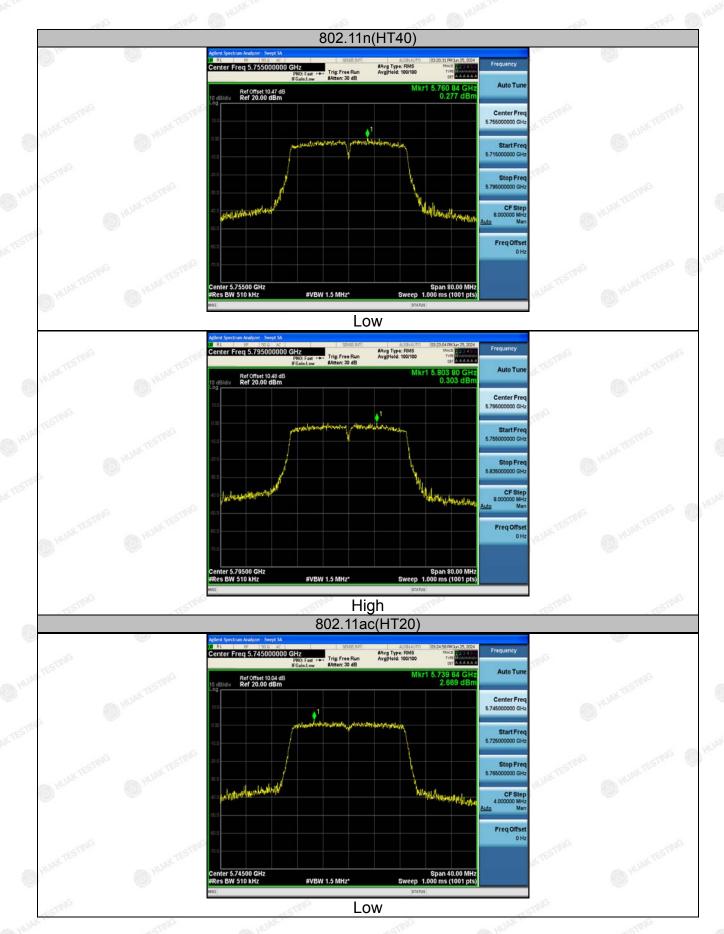


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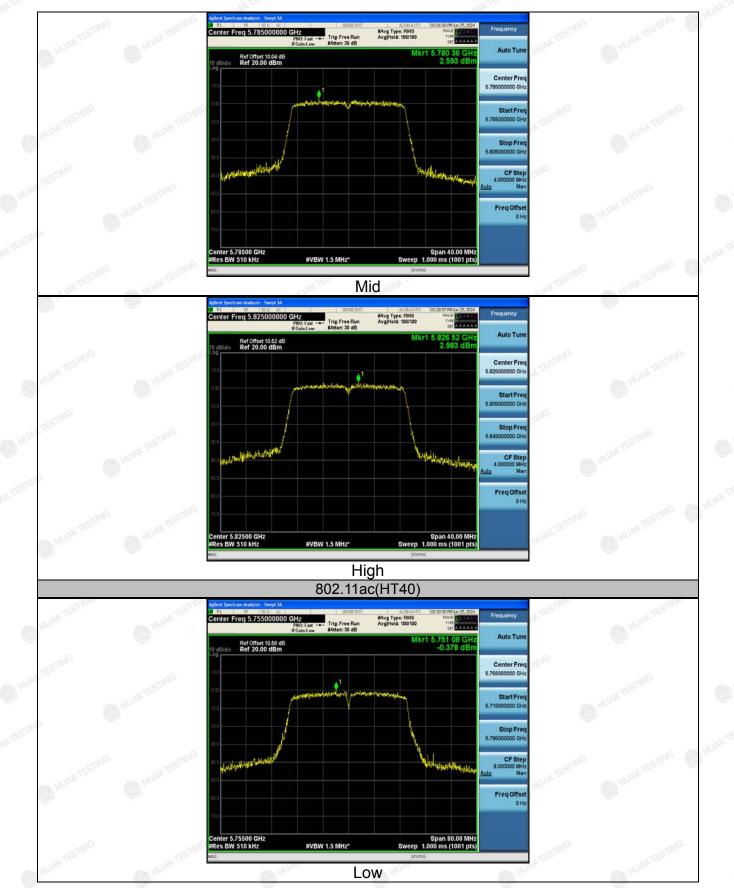
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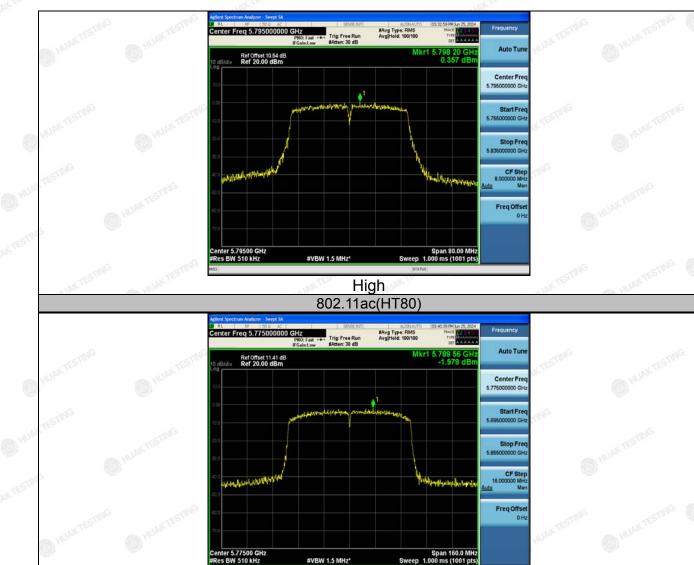


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4.6. Band Edge

4.6.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407			
Test Method:	ANSI C63.10 2013			
Limit:	 (1)For transmitters operating in the 5.725-5.85 GHz band: (i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at 5 MHz above or below the band edge. The limit of frequency below 1GHz and which fall in restricted bands should complies 15.209. 			
Test Setup:	Ant. feed point point 1.4 m Ground Plane Receiver Amp.			
Test Mode:	Transmitting mode with modulation			
Test Procedure:	 The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 			

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	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi peak or average method as specified and then reported in a data sheet.
Test Result:	PASS

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4.6.2. Test Instruments

	Ra	diated Emission	Test Site (96	6)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025
Spectrum analyzer	R&S	FSV3044	HKE-126	Feb. 20, 2024	Feb. 19, 2025
Preamplifier	EMCI	EMC051845S	HKE-006	Feb. 20, 2024	Feb. 19, 2025
Preamplifier	Schwarzbeck	BBV 9743	HKE-016	Feb. 20, 2024	Feb. 19, 2025
Preamplifier	A.H. Systems	SAS-574	HKE-182	Feb. 20, 2024	Feb. 19, 2025
6dB Attenuator	Pasternack	6db	HKE-184	Feb. 20, 2024	Feb. 19, 2025
EMI Test Receiver	Rohde & Schwarz	ESR-7	HKE-010	Feb. 20, 2024	Feb. 19, 2025
Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	Feb. 21, 2024	Feb. 20, 2026
Loop Antenna	COM-POWER	AL-130R	HKE-014	Feb. 21, 2024	Feb. 20, 2026
Horn Antenna	Schwarzbeck	9120D	HKE-013	Feb. 21, 2024	Feb. 20, 2026
EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	N/A	N/A
RSE Test Software	Tonscend	JS36-RSE 5.0.0	HKE-184	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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4.6.3. Test Data

Operation Mode: 802.11a Mode with 5.8G TX CH Low

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	 Detector Type
5650	51.18	-2.06	49.12	68.2	-19.08	peak
5700	81.02	-1.96	79.06	105.2	-26.14	peak
5720	83.88	-2.87	81.01	110.8	-29.79	peak
5725	103.41	-2.14	101.27	122.2	-20.93	peak

Frequency	Meter Reading	Factor	Emission Level	% Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	51.11	-2.06	49.05	68.2	-19.15	peak
5700	81.11	-1.96	79.15	105.2	-26.05	peak
5720	84.62	-2.87	81.75	110.8	-29.05	peak
5725	102.73	-2.14	100.59	122.2	-21.61	peak

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Operation Mode:	TX CH High with 5.8G
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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	102.88	-1.97	100.91	122.2	-21.29	peak
5855	84.97	-2.13	82.84	110.8	-27.96	peak
5875	77.36	-2.65	74.71	105.2	-30.49	peak
5925	45.57	-2.28	43.29	68.2	-24.91	peak

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Turo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	102.88	-1.97	100.91	122.2	-21.29	peak
5855	84.97	-2.13	82.84	110.8	-27.96	peak
5875	77.36	-2.65	74.71	105.2	-30.49	peak
5925	45.57	-2.28	43.29	68.2	-24.91	peak

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Operation Mode: 802.11n20 Mode with 5.8G TX CH Low

Frequency	Meter Reading	Factor	Emission Level	🔊 Limits	Margin	Detector Ture
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
se 5650	50.68	-2.06	48.62	68.2	-19.58	peak
5700	79.65	-1.96	77.69	105.2	-27.51	peak
5720	82.53	-2.87	79.66	110.8	-31.14	peak
5725	104.26	-2.14	102.12	122.2	-20.08	peak

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	restin
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650 s	50.71	-2.06	48.65	68.2	-19.55	peak
5700	80.21	-1.96	78.25	105.2	-26.95	peak
5720	84.14	-2.87	81.27	110.8	-29.53	peak
5725	104.93	-2.14	102.79	122.2	-19.41	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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Operation Mode: TX CH High with 5.8G

Horizontal:		~			-	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	104.01	-1.97	102.04	122.2	-20.16	peak
5855	84.07	-2.13	81.94	110.8	-28.86	peak
5875	77.13	-2.65	74.48	105.2	-30.72	peak
5925	44.71	-2.28	42.43	68.2	-25.77	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turk
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	104.01	-1.97	102.04	122.2	-20.16	peak
5855	84.07	-2.13	81.94	110.8	-28.86	peak
5875	77.13	-2.65	74.48	105.2	-30.72	peak
5925	44.71	-2.28	42.43	68.2	-25.77	peak

Loss – Pre-ampliner, Level = Reading + Factor, Margin -TILEIIIIA I AULUI T UADIE

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Operation Mode: 802.11n40 Mode with 5.8G TX CH Low

Horizontal: Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	53.38	-2.06	51.32	68.2	-16.88	peak
5700	79.17	-1.96	77.21	105.2	-27.99	peak
5720	83.17	-2.87	80.3	110.8	-30.5	peak
5725	103.47	-2.14	101.33	122.2	-20.87	peak

Vertical:		O HO.	0.		O HO.	0.
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	^{₀∽} (dBµV/m)	(dB)	Detector Type
5650	51.43	-2.06	49.37	68.2	-18.83	peak
se 5700	79.43	-1.96	77.47	105.2	-27.73	peak
5720	82.69	-2.87	79.82	110.8	-30.98	peak
5725	102.18	-2.14	100.04	122.2	-22.16	peak

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Operation Mode:	TX CH	High with	5.8G
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Horizontal:		~			~	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	– Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Delector Type
5850	101.88	-1.97	99.91	122.2	-22.29	peak
5855	84.09	-2.13	81.96	110.8	-28.84	peak
5875	78.74	-2.65	76.09	105.2	-29.11	peak
5925	44.58	-2.28	42.3	68.2	-25.9	peak

Vertical: Frequency Meter Reading Factor **Emission Level** Limits Margin Detector Type (dBµV/m) (dBµV/m) (MHz) (dBµV) (dB) (dB) 101.21 -1.97 peak 5850 99.24 122.2 -22.96 5855 83.89 -2.13 81.76 110.8 -29.04 peak 5875 76.79 -2.65 74.14 105.2 -31.06 peak 5925 46.56 -2.28 44.28 68.2 -23.92 peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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Operation Mode: 802.11ac20 Mode with 5.8G TX CH Low

Horizontal:					.	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	52.99	-2.06	50.93	68.2	-17.27	peak
5700	79.78	-1.96	77.82	105.2	-27.38	peak
5720	82.24	-2.87	79.37	110.8	-31.43	peak
5725	103.98	-2.14	101.84	122.2	-20.36	peak
	- 40			an yum		

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	51.62	-2.06	49.56	68.2	-18.64	peak
o ^{se} 5700	80.86	-1.96	78.9	105.2	-26.3	peak
5720	84.28	-2.87	81.41	110.8	-29.39	peak
5725	103.02	-2.14	100.88	122.2	-21.32	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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Operation Mode:	TX CH	High with	5.8G
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Horizontal:						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
5850	101.32	-1.97	99.35	122.2	-22.85	peak
5855	85.7	-2.13	83.57	110.8	-27.23	peak
5875	77.84	-2.65	75.19	105.2	-30.01	peak
5925	45	-2.28	42.72	68.2	-25.48	peak

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	101.38	-1.97	99.41	122.2	-22.79	peak
5855	83.73	-2.13	81.6	110.8	-29.2	peak
5875	77.93	-2.65	75.28	105.2	-29.92	peak
5925	46.66	-2.28	44.38	68.2	-23.82	peak

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Operation Mode: 802.11ac40 Mode with 5.8G TX CH Low

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Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
51.79	-2.06	49.73	68.2	-18.47	peak
78.77	-1.96	76.81	105.2	-28.39	peak
83.08	-2.87	80.21	110.8	-30.59	peak
103.3	-2.14	101.16	122.2	-21.04	peak
	(dBµV) 51.79 78.77 83.08	(dBµV) (dB) 51.79 -2.06 78.77 -1.96 83.08 -2.87	(dBµV) (dB) (dBµV/m) 51.79 -2.06 49.73 78.77 -1.96 76.81 83.08 -2.87 80.21	(dBµV) (dB) (dBµV/m) (dBµV/m) 51.79 -2.06 49.73 68.2 78.77 -1.96 76.81 105.2 83.08 -2.87 80.21 110.8	(dBµV) (dB) (dBµV/m) (dBµV/m) (dB) 51.79 -2.06 49.73 68.2 -18.47 78.77 -1.96 76.81 105.2 -28.39 83.08 -2.87 80.21 110.8 -30.59

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Ture
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	53.33	-2.06	51.27	68.2	-16.93	peak
si 5700	78.77	-1.96	76.81	105.2	-28.39	peak
5720	82.46	-2.87	79.59	110.8	-31.21	peak
5725	103.49	-2.14	101.35	122.2	-20.85	peak

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Operation Mode:	TX CH	High with	5.8G
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Horizontal:		~				
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
5850	101.44	-1.97	99.47	122.2	-22.73	peak
5855	84.34	-2.13	82.21	110.8	-28.59	peak
5875	79.09	-2.65	76.44	105.2	-28.76	peak
5925	45.9	-2.28	43.62	68.2	-24.58	peak

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	103.4	-1.97	101.43	122.2	-20.77	peak
5855	84.37	-2.13	82.24	110.8	-28.56	peak
5875	78.14	-2.65	75.49	105.2	-29.71	peak
5925	46.9	-2.28	44.62	68.2	-23.58	peak

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Operation Mode: 802.11ac80 Mode with 5.8G TX CH Low

Horizontal:						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	51.07	-2.06	49.01	68.2	-19.19	peak
5700	78.53	-1.96	76.57	105.2	-28.63	peak
5720	84.83	-2.87	81.96	110.8	-28.84	peak
5725	103.87	-2.14	101.73	122.2	-20.47	peak

Vertical:						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5650	52.83	-2.06	50.77	68.2	-17.43	peak
5700	79	-1.96	77.04	105.2	-28.16	peak
5720	83.85	-2.87	80.98	110.8	-29.82	peak
5725	105.03	-2.14	102.89	122.2	-19.31	peak

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Operation Mode:	TX CH High with 5.8G
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Horizontal:		<i>\</i>				
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Delector Type
5850	103.07	-1.97	101.1	122.2	-21.1	peak
5855	85.53	-2.13	83.4	110.8	-27.4	peak
5875	78.58	-2.65	75.93	105.2	-29.27	peak
5925	45.09	-2.28	42.81	68.2	-25.39	peak

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5850	102.23	-1.97	100.26	122.2	-21.94	peak
5855	83.22	-2.13	81.09	110.8	-29.71	peak
5875	77.1	-2.65	74.45	105.2	-30.75	peak
5925	45.1	-2.28	42.82	68.2	-25.38	peak

actor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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4.7. Spurious Emission

4.7.1.1. Test Specification

CFR47 Pa	rt 15 Se	ction 15.	407 & 1	5.209 & 15.205		
KDB 789033 D02 v02r01						
9kHz to 40GHz						
.KTF	STING	O H	AK	AK TESTING		
ontal & Ve	rtical	~	26	O HUM		
mitting mc	de with	modulat	ion			
150kHz Qu 0kHz- Qu MHz	Petector lasi-peak lasi-peak lasi-peak Peak Peak	RBW 200Hz 9kHz 120KHz 1MHz 1MHz	VBW 1kHz 30kHz 300KHz 3MHz 10Hz	Remark Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value		
 Peak 1MHz 10Hz Average Value (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (4) For transmitters operating in the 5.725-5.85 GHz band: (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge. The limit of frequency below 1GHz and which fall in restricted b ands should complies 15.209. 						
	3 m					
	to 1GHz		Ground Plane	Receiver		

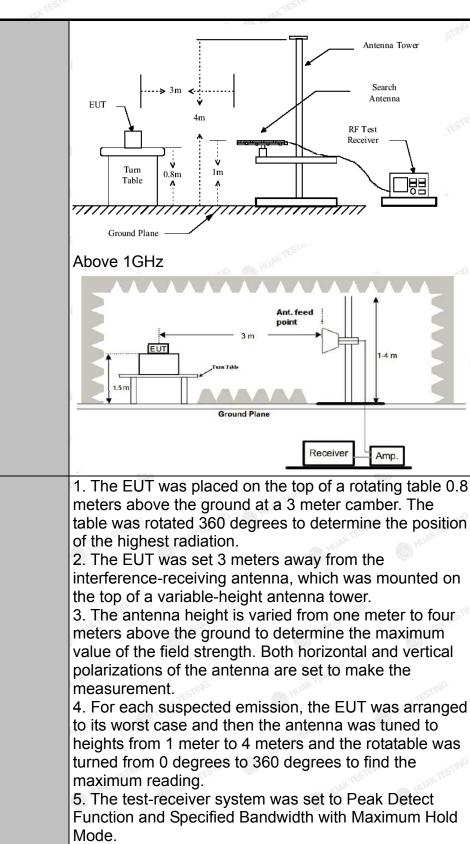
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Test Procedure:

Report No.: HK2406243280-2E



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6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
PASS

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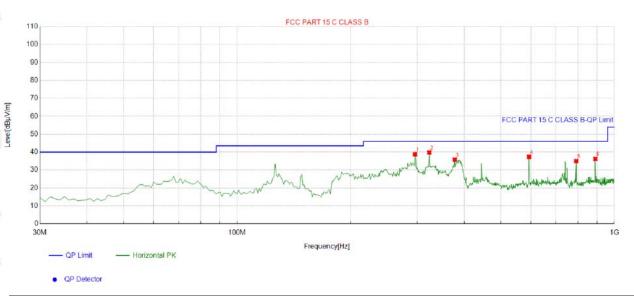


4.7.2. Test Data

Remark: All the test modes completed for test. Only the worst result of 802. 11a was reported as below:

Below 1GHz

Horizontal



	_	_	_		_			_	
NO	Freq.	Factor	Reading	Level	Limit	Margin	Height	Angle	Delevite
NO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	296.04604	-11.88	50.68	38.80	46.00	7.20	100	185	Horizontal
2	323.23323	-11.07	50.83	39.76	46.00	6.24	100	212	Horizontal
3	377.60760	-9.58	45.36	35.78	46.00	10.22	100	165	Horizontal
4	594.13413	-5.06	42.43	37.37	46.00	8.63	100	333	Horizontal
5	792.21221	-3.25	38.28	35.03	46.00	10.97	100	182	Horizontal
6	890.28028	-1.59	37.80	36.21	46.00	9.79	100	179	Horizontal

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level

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Suspected List

ł	NO	Freq.	Factor	Reading	Level	Limit	Margin	Height	Angle	Delerity
	NO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
	1	64.954955	-15.33	50.12	34.79	40.00	5.21	100	112	Vertical
	2	118.35835	-15.91	49.27	33.36	43.50	10.14	100	132	Vertical
	3	297.01701	-11.84	49.23	37.39	46.00	8.61	100	314	Vertical
	4	444.60460	-8.64	44.49	35.85	46.00	10.15	100	283	Vertical
	5	594.13413	-5.06	42.16	37.10	46.00	8.90	100	286	Vertical
	6	741.72172	-3.40	38.20	34.80	46.00	11.20	100	213	Vertical

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level

Harmonics and Spurious Emissions

Frequency Range (9 kHz-30MHz)

4	Frequency (MHz)	Level@3m (dBµV/m)	Limit@3m (dBµV/m)
	New York	AKTL STING	HUAKIL
	HUARTI-	the Hard Charles	- HUAKIL
		^W	
			IAN TEST

Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

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Above 1GHz

Radiated Emission Test

LOW CH 149 (802.11 a Mode with 5.8G)/5745

Horizontal	•
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Frequency	Meter Reading	Factor	Emission Level	Limits 🤍	Margin	
َ (MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	53.4	-4.59	48.81	68.2	-19.39	peak
11096	52.42	4.21	56.63	74	-17.37	peak
11096	32.71	4.21	36.92	54	-17.08	AVG

Vertical:						
Frequency	Meter Reading	Factor	Emission Level	🦗 Limits	Margin	Detector Turne
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	 Detector Type
3368	55.5	-4.59	50.91	68.2	-17.29	peak
11096	51.15	4.21	55.36	74 MAR	-18.64	peak
11096	33.93	4.21	38.14	54	-15.86	AVG
Remark: Factor	r = Antenna Factor	+ Cable Loss	– Pre-amplifier: Lev	el = Reading +	L Factor: Margir	

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MID CH157 (802.11	a Mode with	5.8G)/5785
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Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
54.54	-4.59	49.95	68.2	-18.25	peak
53.36	4.21	57.57	68.2	-10.63	peak
	Meter Reading (dBµV) 54.54	(dBµV) (dB) 54.54 -4.59	Meter ReadingFactorEmission Level(dBµV)(dB)(dBµV/m)54.54-4.5949.95	Meter ReadingFactorEmission LevelLimits(dBµV)(dB)(dBµV/m)(dBµV/m)54.54-4.5949.9568.2	Meter ReadingFactorEmission LevelLimitsMargin(dBµV)(dB)(dBµV/m)(dBµV/m)(dB)54.54-4.5949.9568.2-18.25

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:

vertical.		TEN		V TES		
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3172	54.34	-4.59	49.75	68.2	-18.45	peak
10523	52.21	4.21	56.42	68.2	-11.78	peak
at the	all the	ex 10	Alle		aller	all la

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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HIGH CH 165	(802.11a Mode	with 5.8G)/5825
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Horizonta	al:					
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turce
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2705	57.03	-4.59	52.44	74	-21.56	peak
2705	44.22	-4.59	39.63	54	-14.37	AVG
11717	50.87	4.84	55.71	74	-18.29	peak
11717	37.32	4.84	42.16	54	-11.84	AVG
		A. C.	8			

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HUM	C HUAN	OHOM		HUAN	O HOM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2705	56.04	-4.59	51.45	74	-22.55	peak
2705	44.72	-4.59	40.13	54	-13.87	AVG
11717	50.89	4.84	55.73	74	-18.27	peak
11717	39.41	4.84	44.25	54	-9.75	AVG
	8	GTRUS		-5	11+3	

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.8G 802.11n20 Mode

LOW CH 149

Horizontal:	

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Ture
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
s ^{ane} 3368	55.91	-4.59	51.32	68.2	-16.88	peak
11096	53.45	4.21	57.66	74	-16.34	peak
11096	34.25	4.21	38.46	54	o -15.54	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HUM	HUAK	O HUM		CO HUAK	O HUM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	53.87	-4.59	49.28	68.2	-18.92	peak
。11096	52.4	4.21	56.61	74	-17.39	peak
11096	33.9	4.21	38.11	54	-15.89	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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MID CH157

Horizont	al:				-	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
3172	53.91	-4.59	49.32	68.2	-18.88	peak
10523	52.62	4.21	56.83	68.2	-11.37	peak

Vertical:	Vertical:			TEST					
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turo			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type			
3172	53.36	-4.59	48.77	68.2	-19.43	peak			
10523	53.47	4.21	57.68	68.2	-10.52	peak			

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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FICATION



HIGH CH165

Horizonta	al:	-				
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
2705	57.29	-4.59	52.7	74	-21.3	peak
2705	44.28	-4.59	39.69	54	-14.31	AVG
11717	48.56	4.84	53.4	74	-20.6	peak
11717	38.75	4.84	43.59	54	-10.41	AVG
			-	A N		

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HOM	HUAN	OHOM		HUAN	O HOM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2705	55.13	-4.59	50.54	74	-23.46	peak
2705	46.05	-4.59	41.46	54	-12.54	AVG
11717	50.03	4.84	54.87	74	-19.13	peak
11717	37.85	4.84	42.69	54	-11.31	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.8G 802.11n40 Mode

LOW CH 151

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368 ³	55.68	-4.59	51.09	68.2	-17.11	peak
11096	52	4.21	56.21	74	-17.79	peak
11096	33.67	4.21	37.88	54	-16.12	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HOM	HUAN	O HUM		CO HUAN	O HUM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turc
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	56.01	-4.59	51.42	68.2	-16.78	peak
11096	51.74	4.21	55.95	74	-18.05	peak
11096	33.24	4.21	37.45	54	-16.55	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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MID CH159

Horizont	al:	~				
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
3172	55.07	-4.59	50.48	68.2	-17.72	peak
o ^{ne} 10523	51.93	4.21	56.14	68.2	-12.06	peak
	GTH	and HOL	-CTI-	04		CTIN'

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	1	TESTIN		V TESTI		
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3172	55.32	-4.59	50.73	68.2	-17.47	peak
10523	52.69	4.21	56.9	68.2	-11.3	peak

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.8G 802.11ac20 Mode

LOW CH 149

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Ture
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368 s	56.06	-4.59	51.47	68.2	-16.73	peak
11096	52.95	4.21	57.16	74	-16.84	peak
11096	35.42	4.21	39.63	54	-14.37	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HOM	HUAN	O HD		HUAN	OHON
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turce
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	54.45	-4.59	49.86	68.2	-18.34	peak
11096	53.32	4.21	57.53	74	-16.47	peak
11096	33.06	4.21	37.27	54	-16.73	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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MID CH157

Horizont	al:				~	
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
3172	56.1	-4.59	51.51	68.2	-16.69	peak
10523	51.12	4.21	55.33	68.2	-12.87	peak

Vertical:

Vertical:		y testing						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type		
3172	57.32	-4.59	52.73	68.2	-15.47	peak		
10523	55.86	4.21	60.07	68.2	-8.13	peak		

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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HIGH CH165

al:	~			0	
Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Delector Type
56.21	-4.59	51.62	74	-22.38	peak
45.6	-4.59	41.01	54	-12.99	AVG
50.45	4.84	55.29	74	-18.71	peak
38.87	4.84	43.71	54	-10.29	AVG
	Meter Reading (dBµV) 56.21 45.6 50.45	Meter Reading Factor (dBµV) (dB) 56.21 -4.59 45.6 -4.59 50.45 4.84	Meter Reading Factor Emission Level (dBµV) (dB) (dBµV/m) 56.21 -4.59 51.62 45.6 -4.59 41.01 50.45 4.84 55.29	Meter Reading Factor Emission Level Limits (dBμV) (dB) (dBμV/m) (dBμV/m) 56.21 -4.59 51.62 74 45.6 -4.59 41.01 54 50.45 4.84 55.29 74	Meter Reading Factor Emission Level Limits Margin (dBμV) (dB) (dBμV/m) (dBμV/m) (dB) 56.21 -4.59 51.62 74 -22.38 45.6 -4.59 41.01 54 -12.99 50.45 4.84 55.29 74 -18.71

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HUM	HUAK	O HUM		HUAK .	O HUM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2705	56.32	-4.59	51.73	74	-22.27	peak
2705	44.53	-4.59	39.94	54	-14.06	AVG
11717	50.51	4.84	55.35	74	-18.65	peak
11717	38.32	4.84	43.16	54	-10.84	AVG
	•	cilla	• •	-61	W. S.	•

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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FICATION

5.8G 802.11ac40 Mode

LOW CH 151

Horizonta	al:					
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
s ^{ane} 3368	53.63	-4.59	49.04	68.2	-19.16	peak
11096	52.17	4.21	56.38	74	-17.62	peak
11096	32.74	4.21	36.95	54	-17.05	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HUAN	HUAN	O HUM		CO HUAK	O HUM
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	54.37	-4.59	49.78	68.2	-18.42	peak
" ₁₁₀₉₆ "	51.47	4.21	55.68	74	-18.32	peak
11096	34.51	4.21	38.72	54	-15.28	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

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5.8G 802.11ac80 Mode

CH 155

Horizonta	al:					-
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
s ^{anio} 3368	55.72	-4.59	51.13	68.2	-17.07	peak
11096	52.73	4.21	56.94	74	-17.06	peak
11096	34.01	4.21	38.22	54	o -15.78	AVG
	·			AL Y		

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Vertical:	HUM	() HUAN	O HO		(C) HUAN	O HO
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3368	55.22	-4.59	50.63	68.2	-17.57	peak
11096	50.57	4.21	54.78	74	-19.22	peak
11096	33.71	4.21	37.92	54	-16.08	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level - Limit

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
 (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of

15.205, then the general radiated emission limits in 15.209 apply.

(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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4.8. Frequency Stability Measurement

4.8.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g)						
Test Method:	ANSI C63.10: 2013						
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.						
Test Setup:	Temperature Chamber Spectrum Analyzer EUT AC/DC Power supply						
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.						
Test Result:	PASS						
Remark:	N/A wreshe o uwreshe o uwreshe						

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Test Result as follows:

Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
15	4.5V	5744.985	-15	5825.002	2
5.8G Band	5.0V	5744.997	-3	5825.033	33
	5.5V	5744.996	-4	5824.986	-14

Temperature (℃)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
-30	5745.002	2	5824.972	-28
-20	5745.032	32	5825.020	20
-10	5744.998	-2	5825.043	43
0	5745.018	18	5825.039	39
10 🔍	5744.984	-16	5825.004	4
20	5745.028 ⁵	28	5825.028	28
30	5745.011	11	5825.027	27
40	5745.016	-16	5825.038	38
50	5745.005	5 MUM	5825.009	9
	(°C) -30 -20 -10 0 10 20 30 40	(°C) (5745MHz) -30 5745.002 -20 5745.032 -10 5744.998 0 5745.018 10 5744.984 20 5745.028 30 5745.011 40 5745.016	(°C) (5745MHz) (KHz) -30 5745.002 2 -20 5745.032 32 -10 5744.998 -2 0 5745.018 18 10 5744.984 -16 20 5745.028 28 30 5745.011 11 40 5745.016 -16	(°C)(5745MHz)(KHz)(5825MHz)-305745.00225824.972-205745.032325825.020-105744.998-25825.04305745.018185825.039105744.984-165825.004205745.028285825.028305745.011115825.027405745.016-165825.038

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4.9. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

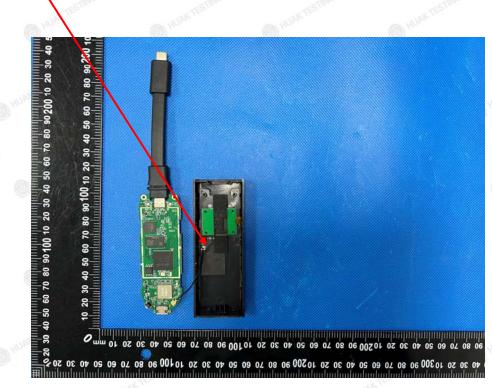
Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Antenna Connected Construction

The antenna used in this product is a FPC Antenna. It conforms to the standard requirements. The directional gains of antenna used for transmitting is 3.3dBi.

<u>WIFI ANTENNA</u>



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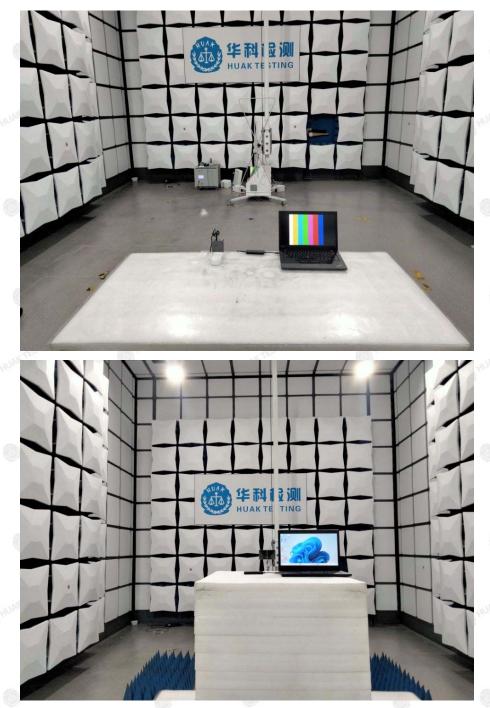


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5. Photographs of Test Setup

Radiated Emissions



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Conducted Emissions



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6. Photos of The EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

---End of test report--

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