

RF Test Report

For

Applicant name: Klydoclock LTD
Address: HaOranim st 22 Rinatya, Israel. zip: 7316500
EUT name: Klydoclock
Brand name: klydo®
Model number: KC-KS-V1.1
Series model number: Refer to section 2
FCC ID: 2BDOI-KCKS5G01

Issued By

Company name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: 101/201/301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China
Report number: BTF250416R00904
Test standards: FCC CFR Title 47 Part 15 Subpart E (§15.407)
Test conclusion: Pass
Date of sample receipt: 2025-04-16
Test date: 2025-04-17 to 2025-05-12
Date of issue: 2025-05-12
Test by: Sean He
Sean He/Tester
Prepared by: Chris Liu
Chris Liu / Project engineer

Approved by:  Ryan.CJ /EMC manager

Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.

Revision History		
Version	Issue date	Revisions content
R_V0	2025-05-12	Original
Note: <i>Once the revision has been made, then previous versions reports are invalid.</i>		

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1 Introduction

1.1 Laboratory Location

Test location:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	101/201/301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Subdistrict, Bao'an District, Shenzhen, China
Phone number:	+86-0755-23146130
Fax number:	+86-0755-23146130

1.2 Laboratory Facility

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

- **FCC - Designation No.: CN1409**
BTF Testing Lab (Shenzhen) Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The test firm Registration No. is 518915.
- **CNAS - Registration No.: CNAS L17568**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L17568.
- **A2LA - Registration No.: 6660.01**
BTF Testing Lab (Shenzhen) Co., Ltd. is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

1.3 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 Product Information

2.1 Application Information

Company name:	Klydoclock LTD
Address:	HaOranim st 22 Rinatya, Israel. zip: 7316500

2.2 Manufacturer Information

Company name:	Shenzhen Sunchip Technology Co., Ltd
Address:	2nd-3rd Floor, Building 4, Fuan Industry Area Phase 2, Dayang Development Zone, Fuyong, Baoan, Shenzhen, China

2.3 Factory Information

Company name:	Shenzhen Sunchip Technology Co., Ltd
Address:	2nd-3rd Floor, Building 4, Fuan Industry Area Phase 2, Dayang Development Zone, Fuyong, Baoan, Shenzhen, China

2.4 General Description of Equipment under Test (EUT)

EUT name	Klydoclock
Under test model name	KC-KS-V1.1
Series model name	KC-KS-V1.0, KC-KS-V1.2, KC-KS-V2.0, KC-KS-V3.0, KC-KS-V4.0, KC-KS-V5.0, KC-KS-V6.0, KC-KS-V7.0, KC-KS-V8.0, KC-KS-V9.0, KC-KS-V10.0,
Description of model name differentiation	Only the model name is different, everything else is the same
Hardware Version	N/A
Software Version	N/A
Rating:	Model No.:KYT120200BU Input: 100-240V~50/60Hz 0.8A Max Output: 12V==2A

2.5 Technical Information

Operation frequency:	Band 1: 5150MHz ~ 5250MHz Band 2: 5250MHz ~ 5350MHz Band 3: 5470MHz ~ 5725MHz Band 4: 5725MHz ~ 5850MHz
Channel numbers:	Band 1/2: 4, Band 3: 11, Band 4: 5 (for 802.11a/n-HT20/ac-VHT20) Band 1/2/4: 2, Band 3: 5 (for 802.11n-HT40/ac-VHT40) Band 1/2/4: 1, Band 3: 2 (for 802.11ac-VHT80)
Modulation technology: (IEEE 802.11a/n)	OFDM-BPSK, QPSK, 16QAM, 64QAM
Modulation technology: (IEEE 802.11ac)	OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM
Data rate:	802.11a: 6Mbps, 9Mbps etc., and up to 54Mbps 802.11n-HT20: 6.5Mbps, 13Mbps etc., and up to 72.2Mbps 802.11n-HT40: 13.5Mbps, 27Mbps etc., and up to 150Mbps 802.11ac-VHT20: 6.5Mbps, 13Mbps etc., and up to 86.7Mbps 802.11ac-VHT40: 13.5Mbps, 27Mbps etc., and up to 200Mbps 802.11ac-VHT80: 29.3Mbps, 58.5Mbps etc., and up to 433.3Mbps
Maximum conducted power	14.16 dBm (802.11n-HT20)
Antenna type:	Internal Antenna
Antenna gain:	2.78dBi(declare by Applicant)
Antenna transmit mode:	SISO (1TX, 1RX)

3 Test Information

3.1 Test Standards

Identity	Document Title
FCC CFR Title 47 Part 15 Subpart E (§15.407)	Unlicensed National Information Infrastructure Devices
ANSI C63.10-2020	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 789033 D02 General U-NII Test Procedures New Rules v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E

3.2 Summary of Test

Clauses	Test Items	Result
§ 15.203	Antenna Requirement	Pass
§ 15.207 § 15.407(b)(9)	AC Power Line Conducted Emission	Pass
§ 15.407(a)(1)(iv)-(B1), (a)(2)-(B2/3), (a)(3)(i)-(B4)	Conducted Peak Output Power Power Spectral Density	Pass
§ 15.407(a)(12)	26dB Emission Bandwidth 99% Occupied Bandwidth	Pass
§ 15.407(e)	6dB Emission Bandwidth	Pass
§ 15.205 § 15.209 § 15.407(b)(1) -(B1), (2) -(B2), (3) -(B3), (4) -(B4), (9), (10)	Unwanted Emissions	Pass
§ 15.407(g)	Frequency Stability	Pass
§ 15.407(h)(2)	Dynamic frequency selection	Pass
Remark: 1. Pass: met the requirements. 2. N/A: not applicable.		

3.3 Uncertainty of Test

Measurement	Value
Conducted Emission for LISN (9kHz ~ 150kHz)	±2.97 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	±2.45 dB
Radiated Emission (30MHz ~ 1000MHz)	±4.80 dB
Radiated Emission (1GHz ~ 18GHz)	±4.82 dB
Radiated Emission (18GHz ~ 40GHz)	±4.94 dB
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3.4 Additions to, deviations, or exclusions from the method

None

3.5 Test Auxiliary Equipment

No.	Description	Manufacturer	Model	Serial Number	Certification
1	N/A	N/A	N/A	N/A	N/A

3.6 Test Equipment List

Radiated Emission Test					
Test Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	Rohde & Schwarz	ESCI7	101032	2024/10/25	2025/10/24
Signal Analyzer	Rohde & Schwarz	FSQ40	100010	2024/10/25	2025/10/24
Log periodic antenna	Schwarzbeck	VULB 9168	01328	2024/10/28	2025/10/27
Preamplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9744	00246	2024/09/24	2025/09/23
Horn Antenna	Schwarzbeck	BBHA9120D	2597	2024/10/30	2025/10/29
Preamplifier (1GHz ~ 18GHz)	Schwarzbeck	BBV9718D	00008	2024/09/24	2025/09/23
Test Software	Frad	EZ_EM C	Version: FA-03A2 RE+		

Conducted Emission Test					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	Rohde & Schwarz	ESCI3	101422	2024/10/25	2025/10/24
V-LISN	Schwarzbeck	NSLK 8127	01073	2024/10/25	2025/10/24
Coaxial Switcher	Schwarzbeck	CX210	CX210	/	/
Pulse Limiter	Schwarzbeck	VTSD 9561-F	00953	/	/
Test Software	Frad	EZ_EM C	Version: EMC-CON 3A1.1+		

Conducted test method					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	Keysight	N9020A	MY50410020	2024/10/25	2025/10/24
ESG Vector Signal Generator	Agilent	E4438C	MY45094854	2024/10/25	2025/10/24
MXG Vector Signal Generator	Agilent	N5182A	MY46240163	2024/10/25	2025/10/24
Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	161997	2024/10/25	2025/10/24
Temperature Humidity Chamber	ZZCKONG	ZZ-K02A	20210928007	2024/10/25	2025/10/24
DC Power Supply	Tongmen	etm-6050c	20211026123	2024/10/25	2025/10/24
RF Control Unit	Techy	TR1029-1	/	2024/10/25	2025/10/24
RF Sensor Unit	Techy	TR1029-2	/	2024/10/25	2025/10/24
Test Software	TST Pass	/	Version: 2.0		

4 Test Configuration

4.1 Environment Condition

Selected Values During Tests		
Temperature	Relative Humidity	Ambient Pressure
Normal: +15°C to +35°C Extreme: -30°C to +50°C	20% to 75%	86 kPa to 106 kPa

4.2 Test mode

Transmitting mode:	Keep the EUT in continuously transmitting mode with modulation
Remark: Per-scan all kind of data rate, and report only reflects the test data of worst data rate mode.	

4.3 Test Channel of EUT

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:

Operation frequency: 5150 MHz – 5250 MHz					
802.11b/g/n-HT20/ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
36	5180	40	5200	48	5240
802.11n-HT40/ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
38	5190	/	/	46	5230
802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	42	5210	/	/

Operation frequency: 5250 MHz – 5350 MHz					
802.11b/g/n-HT20/ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
52	5260	56	5280	64	5320
802.11n-HT40/ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
54	5270	/	/	62	5310
802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	58	5290	/	/

Operation frequency: 5470 MHz – 5725 MHz					
802.11b/g/n-HT20/ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
100	5500	112	5560	140	5700
802.11n-HT40/ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
102	5510	118	5590	134	5670
802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
106	5530	/	/	122	5610

Operation frequency: 5725 MHz – 5850 MHz					
802.11b/g/n-HT20/ac-VHT20					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
149	5745	157	5785	165	5825
802.11n-HT40/ac-VHT40					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
151	5755	/	/	159	5795
802.11ac-VHT80					
Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
/	/	155	5775	/	/

4.4 Test software

Test software:	RFTTestTool.apk	Version:	1.0
Power Class:	15		

4.5 Test procedure

AC Power Line Conducted Emission

The EUT is connected to the power mains through a LISN which provides 50 Ω /50 μ H of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

Radiated test method

For below 1GHz:

1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.

For above 1GHz:

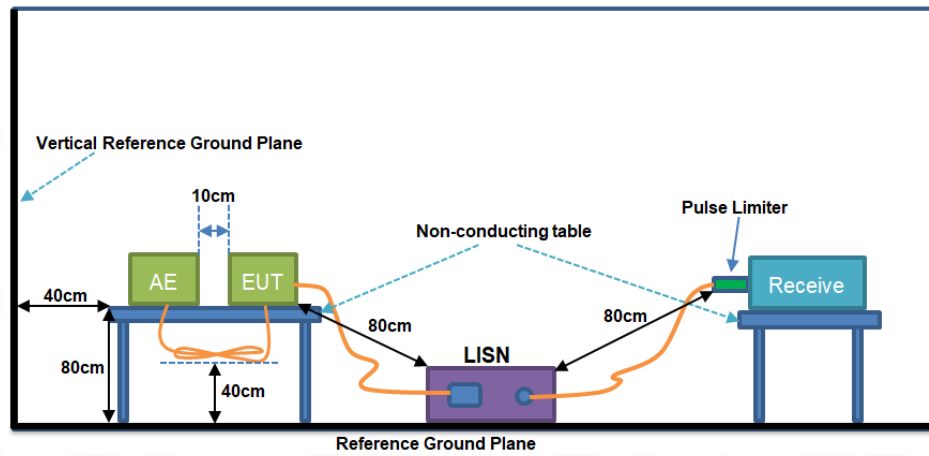
1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.

Conducted test method

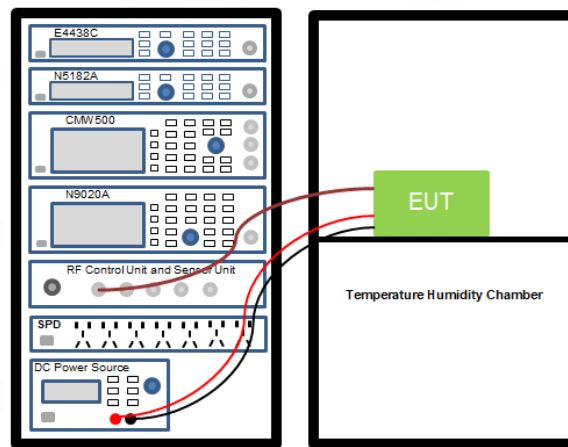
1. The WiFi antenna port of EUT was connected to the test port of the test system through an RF cable.
2. The EUT is keeping in continuous transmission mode and tested in all modulation modes.
3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.

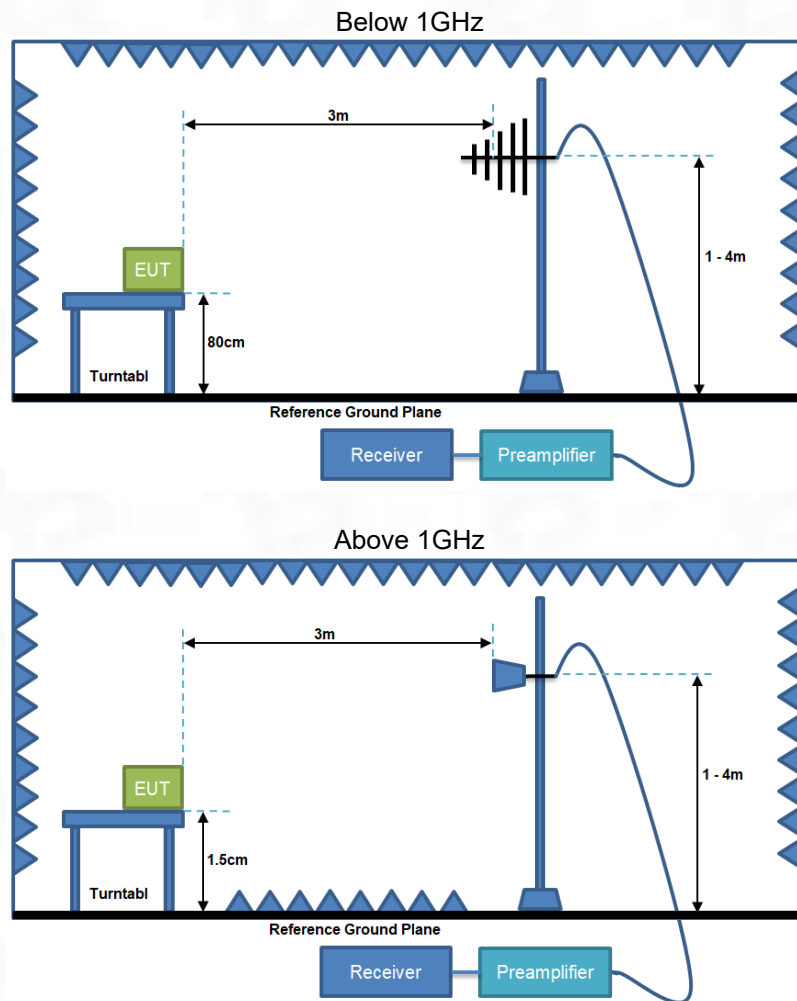
4.6 Test Setup Block

1) Conducted emission measurement:



2) Conducted test method:



3) Radiated test method:

5 Technical requirements specification

5.1 Summary of Test Result

Test Items	Limit	Test data	Verdict
Antenna Requirement	Please refer to §15.203	See Section 5.2	Pass
AC Power Line Conducted Emission	Please refer to §15.207	See Section 5.3	Pass
Duty Cycle	ANSI C63.10-2020	See Appendix-5G WiFi	Pass
Conducted Peak Output Power	For the 5.15-5.25 GHz band: For client devices the maximum conducted output power and shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands: The maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For the band 5.725-5.895 GHz: The maximum conducted output power shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, Fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.	See Appendix-5G WiFi	Pass

Power Spectral Density	For the 5.15-5.25 GHz band: For client devices the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands: The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For the band 5.725-5.895 GHz: The maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	See Appendix-5G WiFi	Pass
26dB Emission Bandwidth 99% Occupied Bandwidth	N/A	See Appendix-5G WiFi	Pass
6dB Emission Bandwidth	The minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.	See Appendix-5G WiFi	Pass
Unwanted Emissions	Please refer to §15.205, §15.209 and §15.407(b)(1)-(B1), (2)-(B2), (3)-(B3), (4) -(B4), (9), (10)	See Section 5.4	Pass
Frequency Stability	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.	See Appendix-5G WiFi	Pass

5.2 Antenna Requirement

§15.203 requirement:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

E.U.T Antenna:

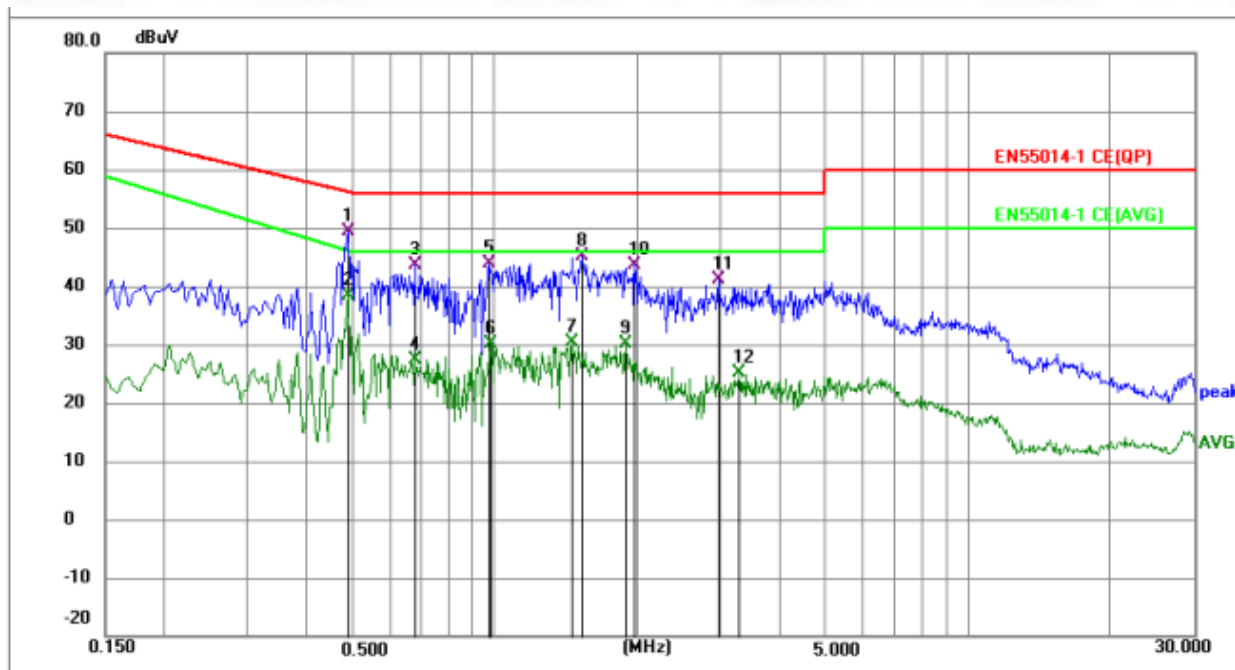
The WiFi antenna is an Internal antenna which permanently attached, and the best case gain of the antenna is 2.78dBi. See product internal photos for details.

5.3 AC Power Line Conducted Emission

Temperature	22.5°C	Humidity	56%
Test voltage	AC 120V/60Hz	Test Engineer	Sean He

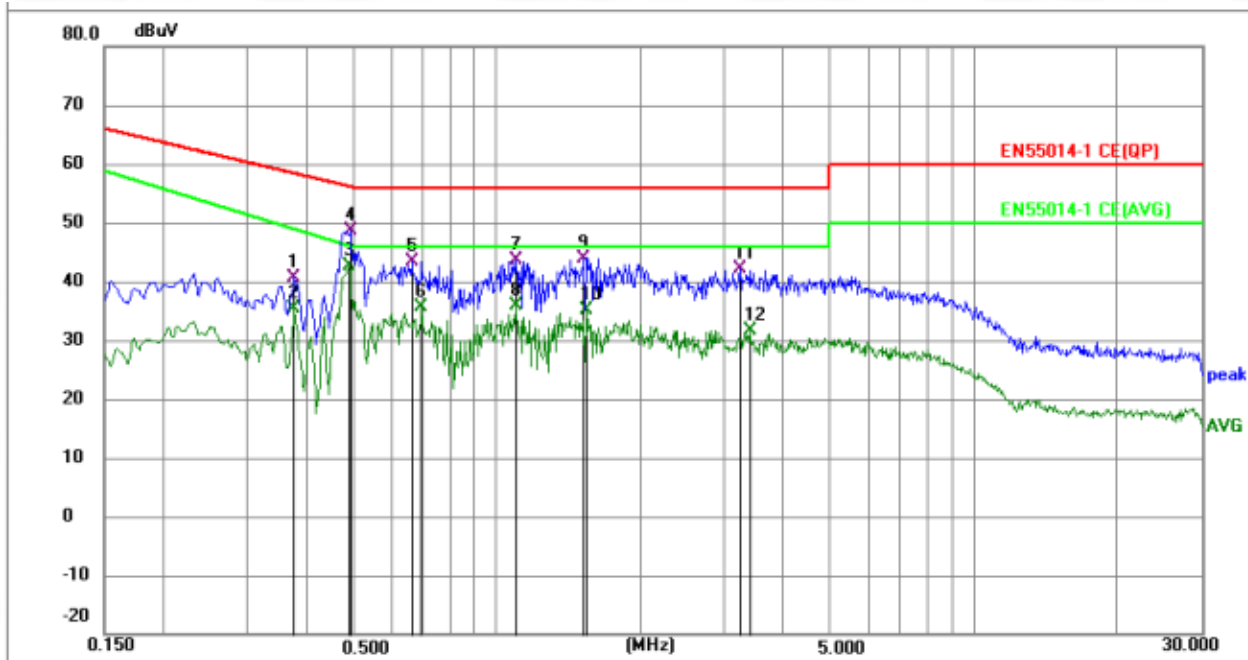
Remark: During the test, pre-scan 802.11a/n/ac modulation mode, found 802.11n(HT20) modulation was worse case mode. The report only reflects the test data of worst mode.

Test phase: L phase



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.4874	38.67	10.67	49.34	56.21	-6.87	QP	P	
2	0.4874	27.68	10.67	38.35	46.28	-7.93	AVG	P	
3	0.6764	32.98	10.59	43.57	56.00	-12.43	QP	P	
4	0.6764	16.89	10.59	27.48	46.00	-18.52	AVG	P	
5	0.9735	32.99	10.83	43.82	56.00	-12.18	QP	P	
6	0.9825	19.22	10.84	30.06	46.00	-15.94	AVG	P	
7	1.4595	19.54	10.77	30.31	46.00	-15.69	AVG	P	
8	1.5315	34.33	10.75	45.08	56.00	-10.92	QP	P	
9	1.8914	19.34	10.70	30.04	46.00	-15.96	AVG	P	
10	1.9724	32.83	10.69	43.52	56.00	-12.48	QP	P	
11	2.9624	30.28	10.73	41.01	56.00	-14.99	QP	P	
12	3.2774	14.43	10.71	25.14	46.00	-20.86	AVG	P	

Test phase: N phase



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3750	30.04	10.69	40.73	58.39	-17.66	QP	P	
2	0.3750	24.74	10.69	35.43	49.11	-13.68	AVG	P	
3 *	0.4875	31.80	10.76	42.56	46.27	-3.71	AVG	P	
4	0.4920	37.98	10.76	48.74	56.13	-7.39	QP	P	
5	0.6630	32.52	10.86	43.38	56.00	-12.62	QP	P	
6	0.6945	24.70	10.88	35.58	46.00	-10.42	AVG	P	
7	1.0995	32.68	10.87	43.55	56.00	-12.45	QP	P	
8	1.0995	24.90	10.87	35.77	46.00	-10.23	AVG	P	
9	1.5270	32.93	10.91	43.84	56.00	-12.16	QP	P	
10	1.5360	24.18	10.91	35.09	46.00	-10.91	AVG	P	
11	3.2370	31.35	10.90	42.25	56.00	-13.75	QP	P	
12	3.3855	20.85	10.87	31.72	46.00	-14.28	AVG	P	

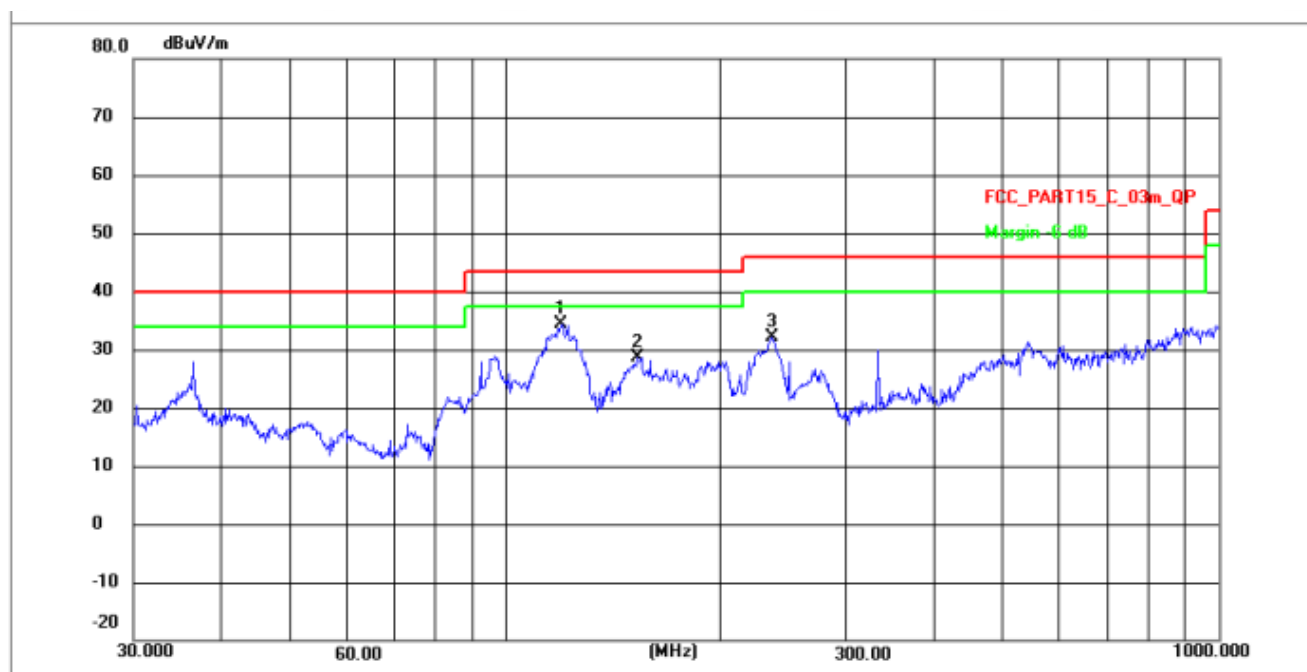
5.4 Unwanted Emissions

Temperature	22.5°C	Humidity	56%
Test voltage	AC 120V/60Hz	Test Engineer	Sean He

For below 1GHz:

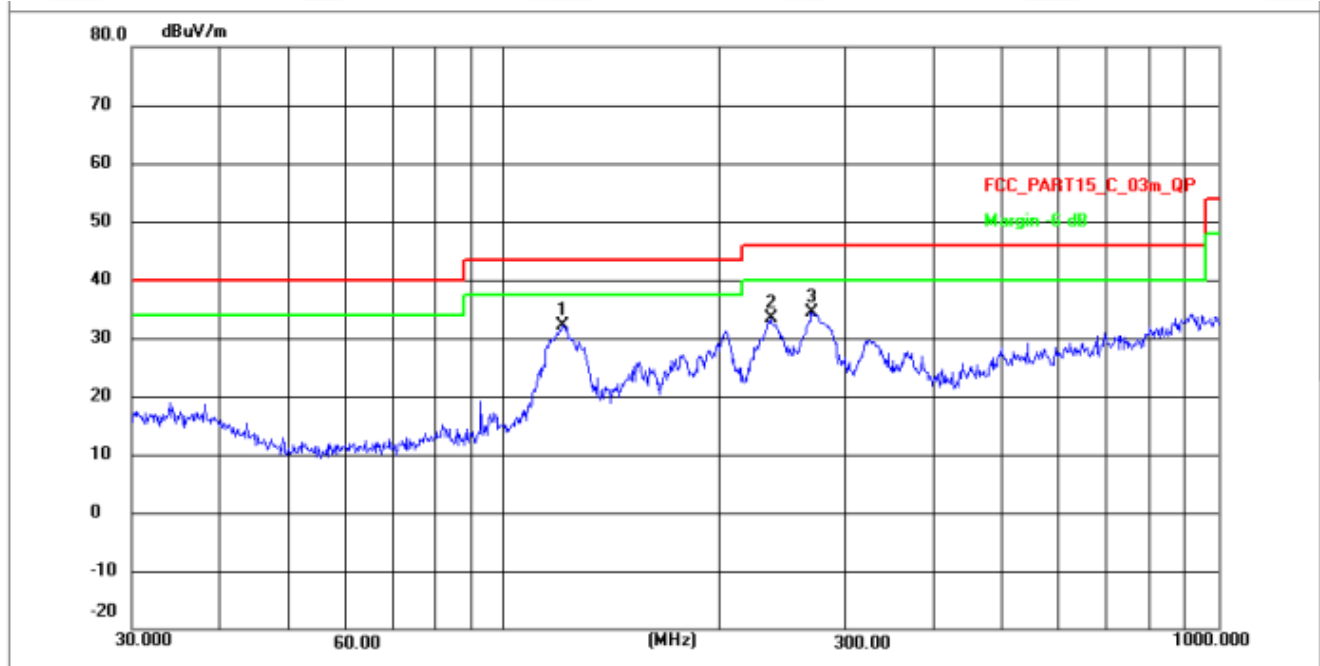
Remark: During the test, pre-scan 802.11a/n/ac modulation mode, found 802.11n(HT20) modulation was worse case mode. The report only reflects the test data of worst mode.

Test antenna polarization: Vertical (30 MHz to 1 GHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	120.0659	56.62	-22.29	34.33	43.50	-9.17	peak	P
2	153.2004	50.58	-21.98	28.60	43.50	-14.90	peak	P
3	237.4760	53.35	-21.17	32.18	46.00	-13.82	peak	P

Test antenna polarization: Horizontal (30 MHz to 1 GHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	120.2766	54.45	-22.29	32.16	43.50	-11.34	peak	P
2	235.8164	54.45	-21.18	33.27	46.00	-12.73	peak	P
3	269.4284	55.34	-20.88	34.46	46.00	-11.54	peak	P

For above 1GHz:

Remark: During the test, pre-scan 802.11a/n/ac modulation mode, found 802.11n(HT20) modulation was worse case mode. The report only reflects the test data of worst mode.

Band edge emissions (Radiated)

Band 1&2A: 5180 MHz - 5320 MHz, Test Mode: 802.11n(HT20)								
Test Channel: Lowest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5097.679	86.89	-45.21	41.68	74.00	-32.32	Peak	Pass
2	5097.679	76.23	-45.21	31.02	54.00	-22.98	AV	Pass
3	5150.000	78.37	-42.99	35.38	74.00	-38.62	Peak	Pass
4	5150.000	67.42	-42.99	24.43	54.00	-29.57	AV	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5097.679	78.53	-48.72	29.82	74.00	-44.18	Peak	Pass
2	5097.679	68.70	-48.72	19.99	54.00	-34.01	AV	Pass
3	5150.000	70.18	-48.70	21.48	74.00	-52.52	Peak	Pass
4	5150.000	60.25	-48.70	11.55	54.00	-42.45	AV	Pass
Test Channel: Highest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.000	87.17	-45.21	41.97	74.00	-32.03	Peak	Pass
2	5350.000	76.50	-45.21	31.30	54.00	-22.70	AV	Pass
3	5460.000	79.79	-42.99	36.80	74.00	-37.20	Peak	Pass
4	5460.000	68.98	-42.99	25.98	54.00	-28.02	AV	Pass
Test Channel: Highest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.000	78.91	-48.61	30.30	74.00	-43.70	Peak	Pass
2	5350.000	68.32	-48.61	19.71	54.00	-34.29	AV	Pass
3	5460.000	71.33	-48.56	22.77	74.00	-51.23	Peak	Pass
4	5460.000	60.60	-48.56	12.04	54.00	-41.96	AV	Pass
Remark: Test frequency up to 40GHz and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.								

Band 2C: 5500 MHz -5720 MHz, Test Mode: 802.11n(HT20)								
Test Channel: Lowest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.000	86.04	-45.21	40.84	74.00	-33.16	Peak	Pass
2	5350.000	76.49	-45.21	31.28	54.00	-22.72	AV	Pass
3	5460.000	79.66	-42.99	36.67	74.00	-37.33	Peak	Pass
4	5460.000	69.28	-42.99	26.29	54.00	-27.71	AV	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5350.000	79.03	-48.61	30.42	74.00	-43.58	Peak	Pass
2	5350.000	68.12	-48.61	19.51	54.00	-34.49	AV	Pass
3	5460.000	71.78	-48.56	23.21	74.00	-50.79	Peak	Pass
4	5460.000	61.75	-48.56	13.18	54.00	-40.82	AV	Pass
Test Channel: Highest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5725.000	86.98	-45.21	41.77	74.00	-32.23	Peak	Pass
2	5725.000	77.27	-45.21	32.06	54.00	-21.94	AV	Pass
3	5730.000	78.43	-42.99	35.44	74.00	-38.56	Peak	Pass
4	5730.000	67.70	-42.99	24.71	54.00	-29.29	AV	Pass
Test Channel: Highest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5725.000	80.81	-48.45	32.36	74.00	-41.64	Peak	Pass
2	5725.000	70.05	-48.45	21.60	54.00	-32.40	AV	Pass
3	5730.000	72.45	-48.45	24.00	74.00	-50.00	Peak	Pass
4	5730.000	62.04	-48.45	13.60	54.00	-40.40	AV	Pass
Remark: Test frequency up to 40GHz and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.								

Band 3: 5745 MHz - 5825 MHz, Test Mode: 802.11n(HT20)								
Test Channel: Lowest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5650.000	41.54	5.63	47.17	68.20	-21.03	Peak	Pass
2	5700.000	44.57	5.70	50.27	105.20	-54.93	Peak	Pass
3	5720.000	46.10	5.66	51.76	110.80	-59.04	Peak	Pass
3	5725.000	48.10	5.66	53.76	122.20	-68.44	Peak	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5650.000	42.32	5.63	47.95	68.20	-20.25	Peak	Pass
2	5700.000	45.02	5.70	50.72	105.20	-54.48	Peak	Pass
3	5720.000	45.62	5.66	51.28	110.80	-59.52	Peak	Pass
3	5725.000	47.62	5.66	53.28	122.20	-68.92	Peak	Pass
Test Channel: Highest channel, Test Polarization: Vertical								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5850.000	47.68	5.73	53.41	122.20	-68.79	Peak	Pass
2	5855.000	45.68	5.72	51.40	110.80	-59.40	Peak	Pass
3	5875.000	44.92	5.70	50.62	105.20	-54.58	Peak	Pass
4	5925.000	41.37	5.66	47.03	68.20	-21.17	Peak	Pass
Test Channel: Highest channel, Test Polarization: Horizontal								
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
1	5850.000	47.96	5.73	53.69	122.20	-68.51	Peak	Pass
2	5855.000	45.96	5.72	51.68	110.80	-59.12	Peak	Pass
3	5875.000	45.81	5.70	51.51	105.20	-53.69	Peak	Pass
4	5925.000	41.41	5.66	47.07	68.20	-21.13	Peak	Pass
Remark: Test frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.								

Undesirable emission limits (above 1GHz)

Band 1: 5150 MHz - 5250 MHz, Test Mode: 802.11n(HT20)							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10360.00	86.43	-45.21	41.22	74.00	-32.78	Peak	Pass
10360.00	76.26	-45.21	31.05	54.00	-22.95	AVG	Pass
15540.00	79.14	-42.99	36.15	74.00	-37.85	Peak	Pass
15540.00	68.94	-42.99	25.95	54.00	-28.05	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10360.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10360.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15540.00	78.19	-42.99	35.20	74.00	-38.80	Peak	Pass
15540.00	67.60	-42.99	24.60	54.00	-29.40	AVG	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10400.00	86.99	-45.21	41.79	68.20	-32.21	Peak	Pass
10400.00	77.44	-45.21	32.23	68.20	-21.77	AVG	Pass
15600.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15600.00	67.60	-42.99	24.60	68.20	-29.40	AVG	Pass
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10400.00	86.99	-45.21	41.79	68.20	-32.21	Peak	Pass
10400.00	77.44	-45.21	32.23	68.20	-21.77	AVG	Pass
15600.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15600.00	67.60	-42.99	24.60	68.20	-29.40	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10480.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10480.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15720.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15720.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10480.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass

10480.00	77.44	-45.21	32.23	74.00	-21.77	AVG	Pass
15720.00	78.19	-42.99	35.20	54.00	-38.80	Peak	Pass
15720.00	67.60	-42.99	24.60	68.20	-29.40	AVG	

Remark: Test frequency up to 40GHz and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Band 2: 5250 MHz - 5350 MHz, Test Mode: 802.11n(HT20)							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10500.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10500.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15750.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15750.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10500.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10500.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15750.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15750.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10560.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10560.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15840.00	78.19	-42.99	35.20	68.20	-38.80	Peak	
15840.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10560.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10560.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15840.00	78.19	-42.99	35.20	68.20	-38.80	Peak	
15840.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10640.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10640.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
15960.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15960.00	78.19	-42.99	35.20	68.20	-29.40	AVG	
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
10640.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
10640.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass

15960.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
15960.00	78.19	-42.99	35.20	68.20	-29.40	AVG	

Remark: Test frequency up to 40GHz and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Band 3: 5470 MHz - 5725 MHz, Test Mode: 802.11n(HT20)							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11000.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
11000.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
16500.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
16500.00	78.19	-42.99	35.20	68.20	-29.40	AVG	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11000.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
11000.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
16500.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
16500.00	78.19	-42.99	35.20	68.20	-29.40	AVG	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11120.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
11120.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
16800.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
16800.00	78.19	-42.99	35.20	68.20	-29.40	AVG	Pass
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11120.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
11120.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
16800.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
16800.00	78.19	-42.99	35.20	68.20	-29.40	AVG	Pass
Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11400.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
11400.00	77.44	-45.21	32.23	54.00	-21.77	AVG	Pass
17100.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
17100.00	78.19	-42.99	35.20	68.20	-29.40	AVG	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11400.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11400.00	86.99	-45.21	41.79	74.00	-32.21	AVG	Pass

17100.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17100.00	78.19	-42.99	35.20	68.20	-38.80	AVG	Pass
Remark: Test frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.							

Band 4: 5725 MHz - 5825 MHz, Test Mode: 802.11n(HT20)							
Test Channel: Lowest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11490.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11490.00	86.99	-45.21	41.79	74.00	-32.21	AV	Pass
17235.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17235.00	78.19	-42.99	35.20	68.20	-38.80	AV	Pass
Test Channel: Lowest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11490.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11490.00	86.99	-45.21	41.79	74.00	-32.21	Peak	Pass
17235.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17235.00	78.19	-42.99	35.20	68.20	-38.80	Peak	Pass
Test Channel: Middle channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11570.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11570.00	86.99	-45.21	41.79	74.00	-32.21	AVG	Pass
17355.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17355.00	78.19	-42.99	35.20	68.20	-38.80	AVG	Pass
Test Channel: Middle channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11570.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11570.00	86.99	-45.21	41.79	74.00	-32.21	AVG	Pass
17355.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17355.00	78.19	-42.99	35.20	68.20	-38.80	AVG	Pass
Remark: Test frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.							

Test Channel: Highest channel, Test Polarization: Vertical							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11650.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11650.00	86.99	-45.21	41.79	74.00	-32.21	AV	Pass
17475.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17475.00	78.19	-42.99	35.20	68.20	-38.80	AV	Pass
Test Channel: Highest channel, Test Polarization: Horizontal							
Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Marging (dB)	Detector	Result
11650.00	78.19	-42.99	35.20	68.20	-29.40	Peak	Pass
11650.00	86.99	-45.21	41.79	74.00	-32.21	AV	Pass
17475.00	77.44	-45.21	32.23	54.00	-21.77	Peak	Pass
17475.00	78.19	-42.99	35.20	68.20	-38.80	AV	Pass
Remark: Test frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.							

6 Test Setup Photos

Please refer to the Appendix I Test Setup Photos

7 EUT Constructional Details (EUT Photos)

Please refer to the Appendix II External Photos & Appendix III External Photos



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