TEST REPORT

Application No.:	BTEK251014013A01E01
Applicant:	Camojojo Inc.
Address of Applicant:	3311 S RAINBOW STE 105, Las Vegas NV 89146, USA
Manufacturer:	Camojojo Inc.
Address of Manufacturer:	3311 S RAINBOW STE 105, Las Vegas NV 89146, USA
Equipment Under Test (EUT):	
EUT Name:	Bird Feeder Camera (Hibird Nano)
Test Model.:	K8
Adding Model(s):	/
Trade Mark:	hibird
FCC ID:	2BD9Q-HIBIRDDIY
Standard(s) :	47 CFR Part 15, Subpart E 15.407 789033 D02 General UNII Test Procedures New Rules v02r01 ANSI C63.10:2020
Date of Receipt Sample(s):	2025-10-23
Date of Test:	2025-10-24 to 2025-11-03
Date of Issue:	2025-11-04
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Alex Wang/ Approved & Authorized
EMC Laboratory Manager

Revision Record			
Version	**Issue Date**	**Revisions**	**Remarks**
V0	2025-11-04	Initial	Valid

Authorized for issue by:				
		Karl Liu **Karl Liu / File Editor**		
		June Li **June Li/Reviewer**		

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Test Summary

Standard	Item	Requirement	Result
47 CFR Part 15, Subpart E 15.407	Antenna Requirement	47 CFR Part 15, Subpart C 15.203	Pass
	Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Standard	Item	Requirement	Result
47 CFR Part 15, Subpart E 15.407	Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)	Pass
	Duty Cycle	KDB 789033 D02 II B 1	Pass
	99% Bandwidth	N/A	Pass
	26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407 (a)	Pass
	Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407 (e)	Pass
	Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407 (a)	Pass
	Power spectrum density	47 CFR Part 15, Subpart E 15.407 (a)	Pass
	Radiated Emissions	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
	Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
	Frequency Stability	47 CFR Part 15, Subpart E 15.407 (g)	Pass
	Transmitter Power Control	47 CFR Part 15, Subpart E 15.407 (h)(1)	N/A

Note:

N/A Mean's not Application.

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

3 Contents

Page

1 Cover Page **1**

2 Test Summary **3**

3 Contents **4**

4 General Information **5**

4.1 Details of E.U.T. 5
4.2 EUT Test Mode and Test Condition 5
4.3 Measurement Uncertainty 5
4.4 Test Location 7
4.5 Deviation from Standards 7
4.6 Abnormalities from Standard Conditions 7

5 Equipment List **8**

6 Radio Spectrum Technical Requirement **10**

6.1 Antenna Requirement 10
6.1.1 Test Requirement: 10
6.1.2 Conclusion 10
6.2 Transmission in the Absence of Data 10
6.2.1 Test Requirement: 10
6.2.2 Conclusion 10

7 Radio Spectrum Matter Test Results **11**

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz) 11
7.1.1 Test Setup Diagram 11
7.1.2 Measurement Procedure and Data 11
7.2 Duty Cycle 14
7.2.1 Test Setup Diagram 14
7.2.2 Measurement Procedure and Data 14
7.3 Emission Bandwidth and Occupied Bandwidth 15
7.3.1 Test Setup Diagram 15
7.3.2 Measurement Procedure and Data 15
7.4 Maximum Conducted output power 16
7.4.1 Test Setup Diagram 16
7.4.2 Measurement Procedure and Data 16
7.5 Power Spectrum Density 17
7.5.1 Test Setup Diagram 17
7.5.2 Measurement Procedure and Data 17
7.6 Radiated Spurious Emissions 18
7.6.1 Test Setup Diagram 19
7.6.2 Measurement Procedure and Data 20
7.7 Frequency Stability 26
7.7.1 Test Setup Diagram 26
7.7.2 Measurement Procedure and Data 26
7.8 Transmitter Power Control 27
7.8.1 Test Setup Diagram 27
7.8.2 Measurement Procedure and Data 27

8 Test Setup Photo **28**

9 EUT Constructional Details (EUT Photos) **28**

4 General Information

4.1 Details of E.U.T.

Power supply:	Input:Type-C 5V-12V⎓ 2A Battery:3.7V⎓ 3000mAh 11.1Wh Solar Panel Output:5V⎓ 1A 5W
Support Standards:	802.11a, 802.11n(HT20) ,802.11ac-VHT20
Operation Frequency	U-NII-1:5180-5240MHz U-NII-3: 5745-5825MHz
Modulation Type:	OFDM
Channel Spacing:	802.11a/n(HT20)/ac(VHT20): 20MHz
Antenna Gain:	U-NII-1: 2.11dBi U-NII-3: 2.1dBi
Model(s) Difference Statement	☒ Single Model.
	☐ Multi-Models:
Sample No.:	BTEK251014013A01E01-1-1/1

4.2 EUT Test Mode and Test Condition

Test Conditions	
Temperature:	20.1 °C
Relative Humidity:	55 %
ATM Pressure:	1025 mbar

Test Mode

Test Channel and Frequency list		
Operating band	20MHz	
	Channel	Frequency (MHz)
U-NII-1	36	5180
	40	5200
	44	5220
	48	5240
U-NII-3	149	5745
	153	5765
	157	5785
	161	5805
	165	5825

Test Software	MobaXterm
Test Software version	Personal Edition v11.1 Build 3860

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Power Line (150kHz-30MHz)	± 3.1dB
Duty Cycle	± 0.37%

99% Bandwidth	± 3%
26dB Emission bandwidth	± 3%
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	± 3%
Maximum Conducted output power	± 0.75dB
Peak Power spectrum density	± 2.84dB
Radiated Emissions (Below 1GHz)	± 6.0dB for 3m; ± 5.0dB for 10m
Radiated Emissions (Above 1GHz)	± 4.6dB (1-18GHz);± 4.8dB (18-40GHz)
Radiated Emissions which fall in the restricted bands	± 6.0dB (below 1GHz); ± 4.6dB (above 1GHz);
Frequency Stability	± 7.25 x 10-8
Transmitter Power Control	± 0.75dB

4.4 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.

A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel: +86 0755-2334 4200 Fax: +86 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None

5 Equipment List

Conducted Test					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. Due**
Shielding Room	YIHENG ENECTRONIC	9*5*3.3	YH-BT-220304-04	2025-02-15	2028-02-14
EMI Test Receiver	Rohde&Schwarz	ESCI	101021	2025-06-18	2026-06-17
Measurement Software	Fara	EZ_EMC Ver. FA-03A2	N/A	N/A	N/A
LISN	Rohde&Schwarz	ENV216	101472	2025-06-18	2026-06-17
LISN	Schwarzbeck	NSLK 8128	05127	2025-06-18	2026-06-17

RF Conducted					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
Shielding Room	YIHENG ENECTRONIC	5.5*3.1*3	YH-BT-220304-03	2025-02-15	2028-02-14
EXA Signal Analyzer	KEYSIGHT	N9020A	MY54230486	2025-06-19	2026-06-18
DC Power Supply	E3632A	E3642A	KR75304416	2025-06-19	2026-06-18
Attenuator	RswTech	SMA-JK-6dB	N/A	2025-06-19	2026-06-18
Attenuator	RswTech	SMA-JK-3dB	N/A	2025-06-19	2026-06-18
RF Control Unit	Techy	TR1029-1	N/A	2025-06-19	2026-06-18
RF Sensor Unit	Techy	TR1029-2	N/A	2025-06-19	2026-06-18
WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	141258	2025-06-19	2026-06-18
MXG Vector Signal Generator	Agilent	N5182A	US46240522	2025-06-19	2026-06-18
Programmable Temperature&Humidity Chamber	GRT	GR-HWX1000	GR22051001	2025-06-19	2026-06-18
Measurement Software	TACHOY	RF TestSoft	N/A	N/A	N/A

RSE					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
3m Semi-Anechoic Chamber	YIHENG ENECTRONIC	966	YH-BT-220304-01	2025-02-15	2028-02-14
EMI Test Receiver	Rohde&Schwarz	ESCI	100694	2025-06-18	2026-06-17
TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	01324	2025-06-18	2026-06-17
Pre-Amplifier	Schwarzbeck	BBV 9745	#180	2025-06-18	2026-06-17
Measurement Software	Fara	EZ_EMC Ver. FA-03A2	N/A	2025-06-18	2026-06-17
EXA Signal Analyzer	Keysight	N9020A	MY54440290	2025-06-18	2026-06-17
Horn Antenna	Schwarzbeck	BBHA 9120D	02695	2025-06-18	2026-06-17
Pre-Amplifier	Tonscend	TAP0118045	AP20K806109	2025-06-18	2026-06-17
Horn Antenna	SCHWARZBECK	BBHA9170	1157	2025-06-18	2026-06-17
Low Noise Pre-amplifier	SKET	LNPA-1840G-50	SK2022032902	2025-06-18	2026-06-17
Signal analyzer	ROHDE&SCHWARZ	FSQ40	100010	2025-06-18	2026-06-17

Loop Antenna	ETS	6502	00201177	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-7.00M	/	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-3.00M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-7.00M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-0.30M	/	2025-06-18	2026-06-17

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

According to FCC Part 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

6.1.2 Conclusion

This product has an integral antenna, fulfill the requirement of this section.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

According to FCC Part 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

6.2.2 Conclusion

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

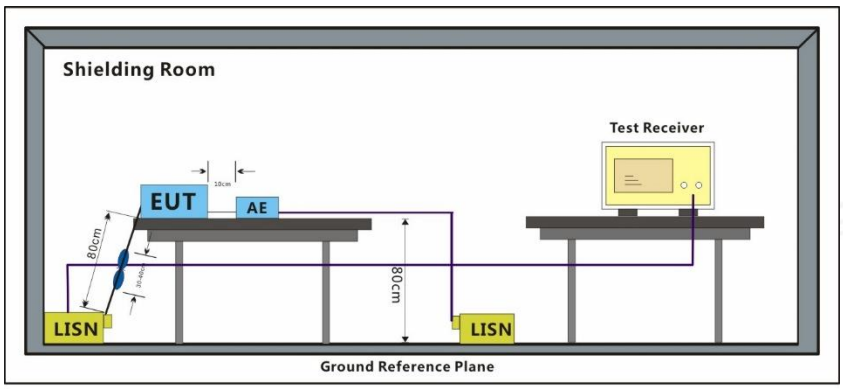
Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2020) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency.		
Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz		

7.1.1 Test Setup Diagram



7.1.2 Measurement Procedure and Data

1) The mains terminal disturbance voltage test was conducted in a shielded room.

2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

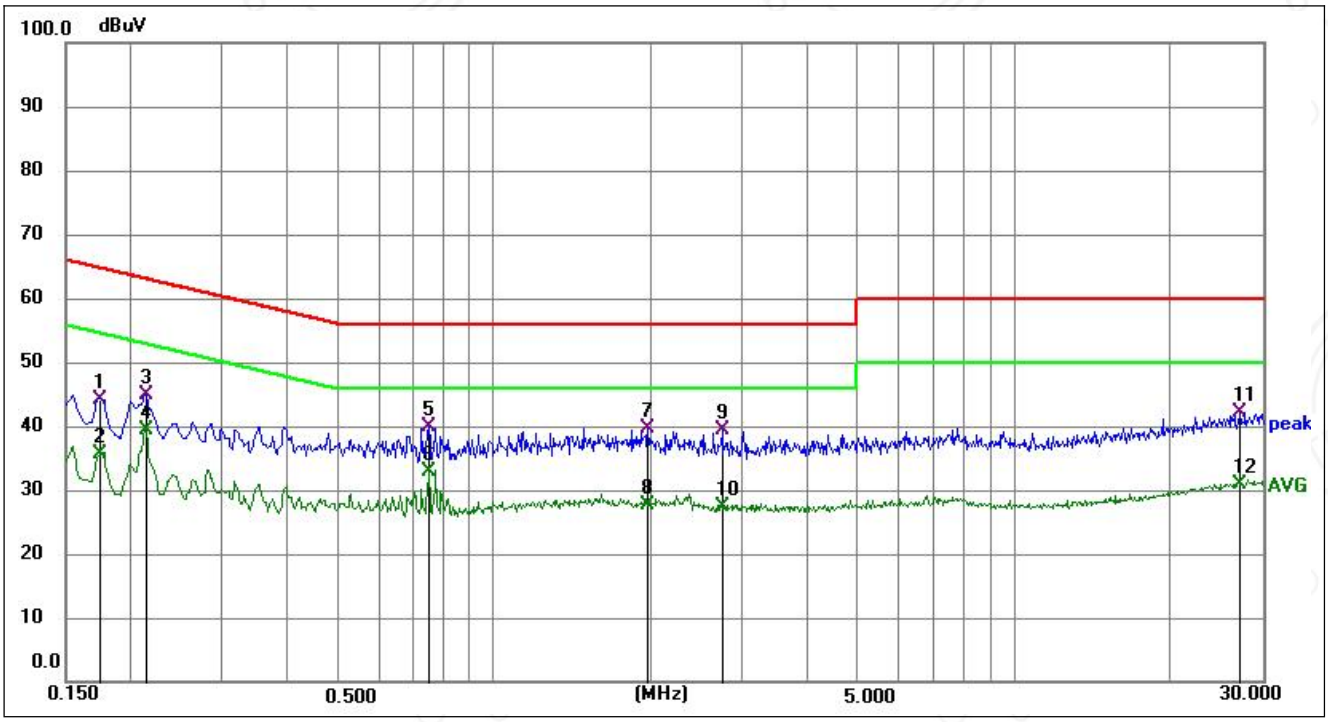
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.

4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

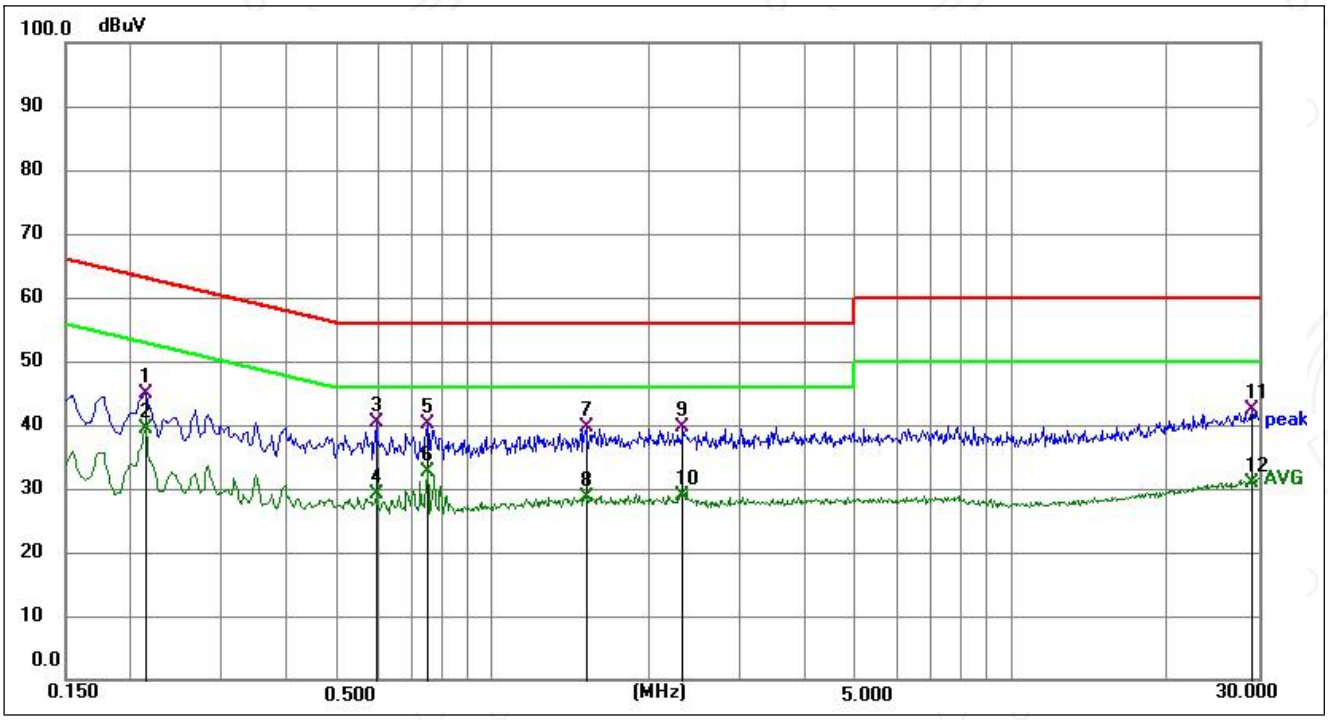
Remark: LISN=Read Level+ Cable Loss+ LISN Factor

Test Mode	Communication-TX	Polarity:	Neutral



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1749	24.82	19.43	44.25	64.72	-20.47	QP	P	
2	0.1749	16.14	19.43	35.57	54.72	-19.15	AVG	P	
3	0.2130	25.45	19.51	44.96	63.09	-18.13	QP	P	
4	0.2130	19.97	19.51	39.48	53.09	-13.61	AVG	P	
5	0.7485	20.37	19.48	39.85	56.00	-16.15	QP	P	
6 *	0.7485	13.36	19.48	32.84	46.00	-13.16	AVG	P	
7	1.9725	18.70	20.96	39.66	56.00	-16.34	QP	P	
8	1.9725	6.74	20.96	27.70	46.00	-18.30	AVG	P	
9	2.7420	18.71	20.77	39.48	56.00	-16.52	QP	P	
10	2.7420	6.53	20.77	27.30	46.00	-18.70	AVG	P	
11	27.2220	18.59	23.56	42.15	60.00	-17.85	QP	P	
12	27.2220	7.35	23.56	30.91	50.00	-19.09	AVG	P	

Test Mode	Communication-TX	Polarity:	Line

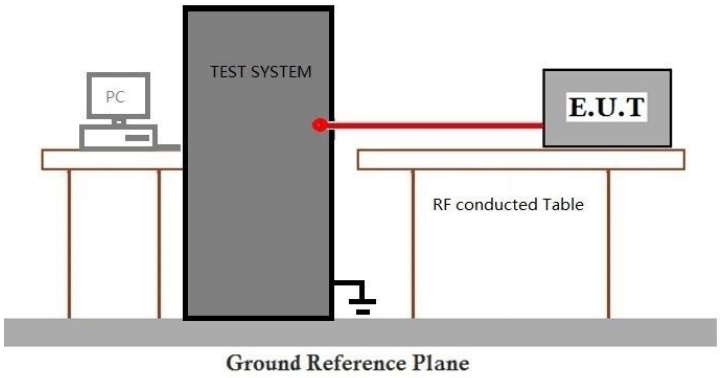


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2130	25.22	19.59	44.81	63.09	-18.28	QP	P	
2	0.2130	19.74	19.59	39.33	53.09	-13.76	AVG	P	
3	0.5955	20.69	19.59	40.28	56.00	-15.72	QP	P	
4	0.5955	9.62	19.59	29.21	46.00	-16.79	AVG	P	
5	0.7485	20.57	19.47	40.04	56.00	-15.96	QP	P	
6 *	0.7485	13.09	19.47	32.56	46.00	-13.44	AVG	P	
7	1.5135	19.16	20.54	39.70	56.00	-16.30	QP	P	
8	1.5135	8.07	20.54	28.61	46.00	-17.39	AVG	P	
9	2.3235	18.82	20.91	39.73	56.00	-16.27	QP	P	
10	2.3235	8.05	20.91	28.96	46.00	-17.04	AVG	P	
11	29.1525	18.78	23.56	42.34	60.00	-17.66	QP	P	
12	29.1525	7.37	23.56	30.93	50.00	-19.07	AVG	P	

7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1
Test Method: KDB 789033 D02 B 1
Limit: /

7.2.1 Test Setup Diagram



7.2.2 Measurement Procedure and Data

Please Refer to Appendix for Details

7.3 Emission Bandwidth and Occupied Bandwidth

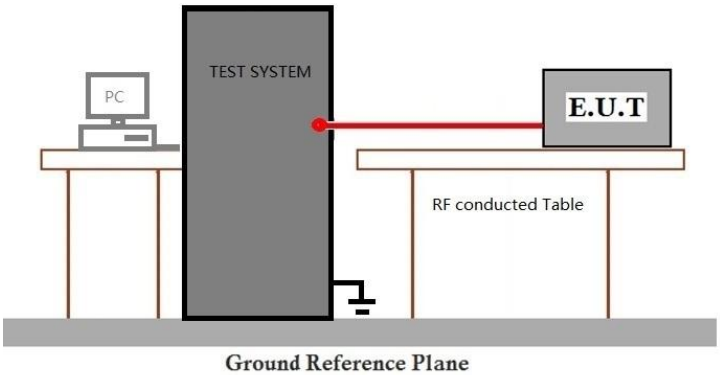
Test Requirement Subpart E 15.407 (a), (e)

Test Method: KDB 789033 D02 C

Limit:

99% Bandwidth	/
26dB Emission bandwidth	/
Minimum 6 dB bandwidth	≥500kHz(Only for 5725-5850MHz

7.3.1 Test Setup Diagram



7.3.2 Measurement Procedure and Data

Please Refer to Appendix for Details

7.4 Maximum Conducted output power

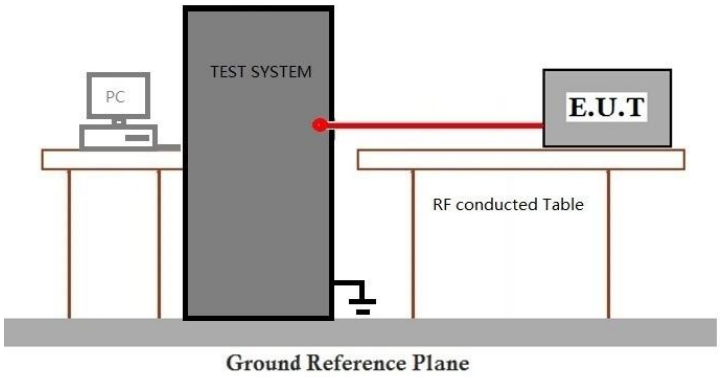
Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency Band (MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.	

7.4.1 Test Setup Diagram



7.4.2 Measurement Procedure and Data

Please Refer to Appendix for Details

7.5 Power Spectrum Density

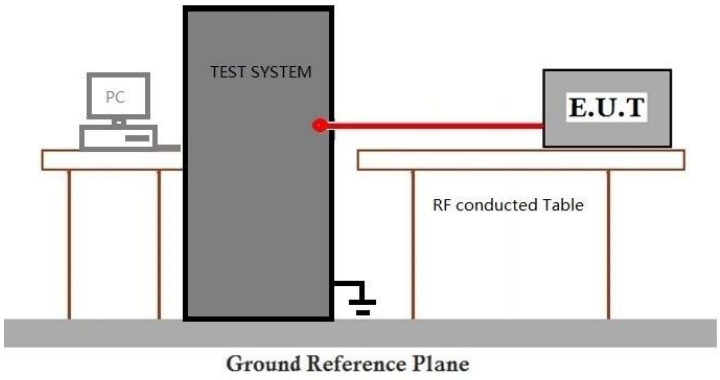
Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 F

Limit:

Frequency Band (MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark: The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.	

7.5.1 Test Setup Diagram



7.5.2 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 Radiated Spurious Emissions

Test Requirement: 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: KDB 789033 D02 II G

Limit: *(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, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(5) Unwanted spurious emissions falls in restricted bands shall comply with the general field strength limits as below table,

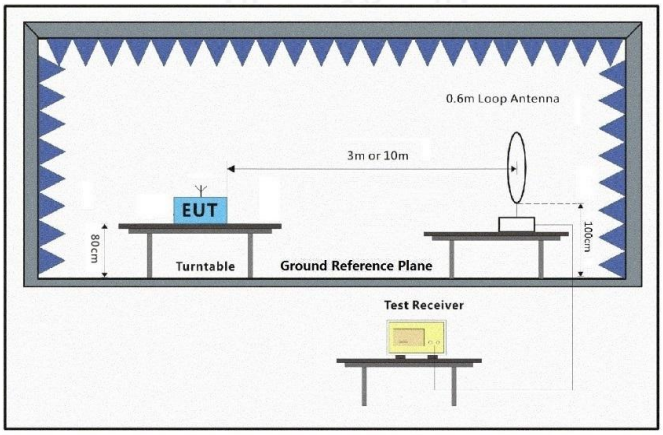
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

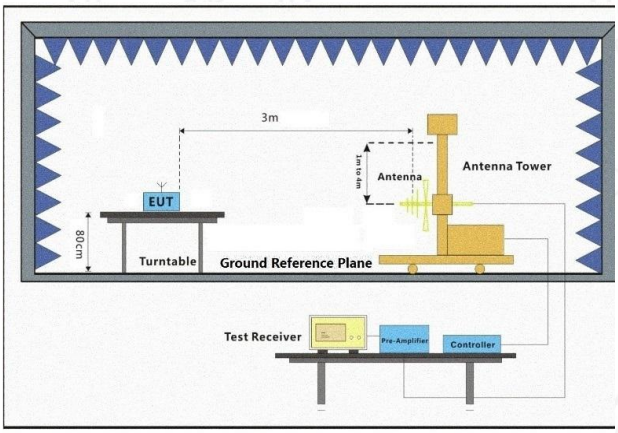
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

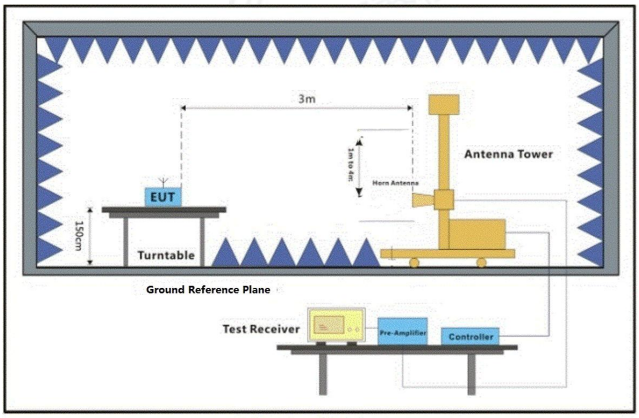
EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

Remark: $E=\frac{1000000\sqrt{30P}}{3}$ μV/m, where P is the eirp (Watts)

7.6.1 Test Setup Diagram







Above 1GHz

7.6.2 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. 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.

d. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. 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.

g. Test the EUT in the lowest channel, the middle channel, the Highest channel.

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

i. Repeat above procedures until all frequencies measured was complete.

a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. 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.

d. 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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. 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.

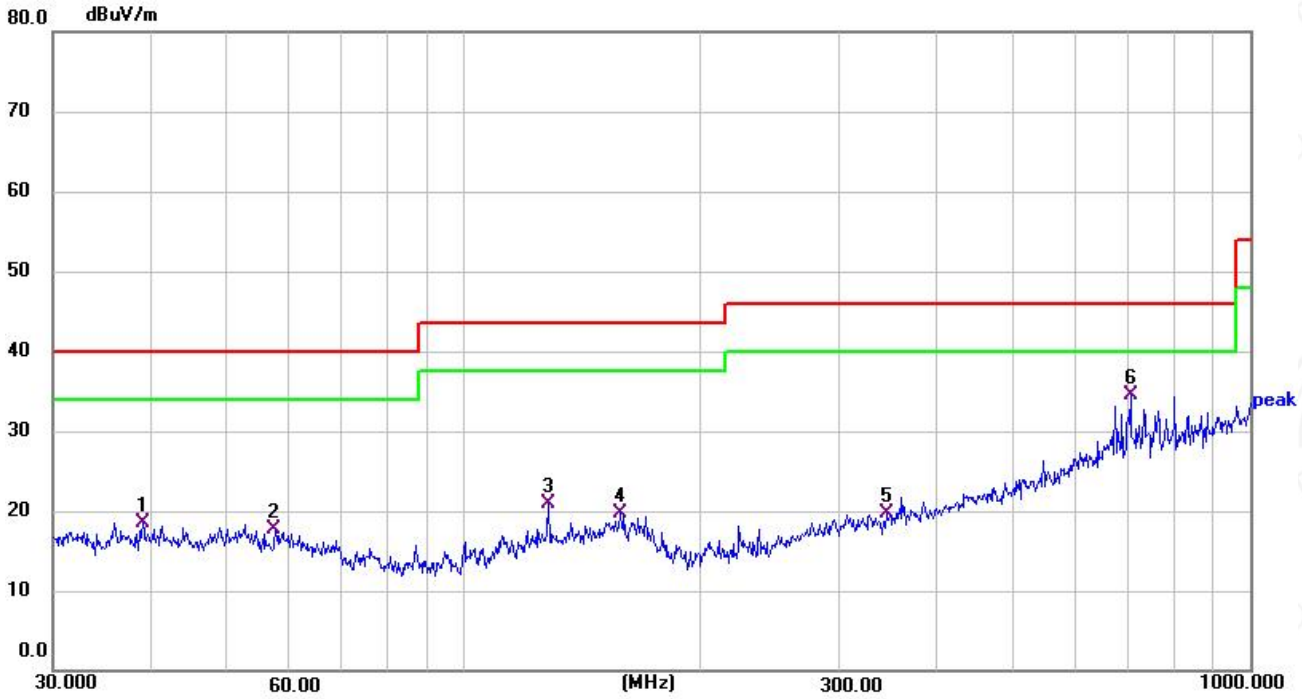
g. Test the EUT in the lowest channel, the middle channel, the Highest channel.

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

i. Repeat above procedures until all frequencies measured was complete.

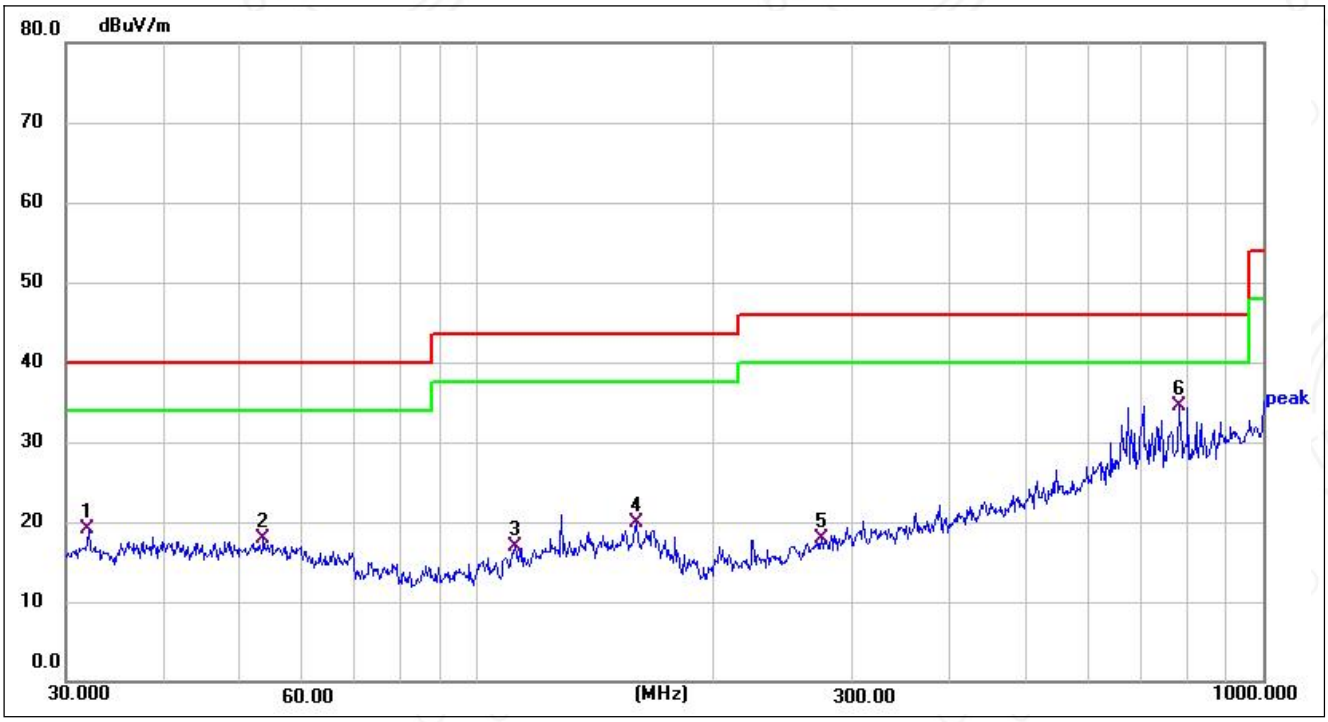
Spurious Emissions Below 1GHz

Test Channel	Low	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	39.0245	4.73	13.84	18.57	40.00	-21.43	QP	100	0	P	
2	57.5939	4.77	12.97	17.74	40.00	-22.26	QP	100	0	P	
3	128.1130	8.20	12.61	20.81	43.50	-22.69	QP	100	0	P	
4	158.1123	5.34	14.40	19.74	43.50	-23.76	QP	100	0	P	
5	344.3855	4.29	15.37	19.66	46.00	-26.34	QP	100	0	P	
6 *	704.2261	12.32	22.15	34.47	46.00	-11.53	QP	100	0	P	

Test Channel	Low	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	32.0667	5.48	13.54	19.02	40.00	-20.98	QP	100	360	P	
2	53.5052	4.08	13.79	17.87	40.00	-22.13	QP	100	360	P	
3	111.7380	4.06	12.82	16.88	43.50	-26.62	QP	100	360	P	
4	159.7844	5.61	14.28	19.89	43.50	-23.61	QP	100	360	P	
5	274.1939	5.13	12.79	17.92	46.00	-28.08	QP	100	360	P	
6 *	782.3453	11.08	23.47	34.55	46.00	-11.45	QP	100	360	P	

Remark:

1) All mode had been tested, only the worst mode 802.11a is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Reading Level + Factor

3) Scan from 9kHz to 1 GHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

Above 1GHz

UNII-1_20M_5180MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2914.66	70.18	-29.1	41.08	68.2	-27.12	peak	P
2	4276.89	68.46	-28.32	40.14	68.2	-28.06	peak	P
3	6086.87	65.17	-26.08	39.09	68.2	-29.11	peak	P
4	8646.05	69.73	-24.53	45.2	68.2	-23	peak	P
5	11047.9	69.29	-23.29	46	68.2	-22.2	peak	P
6	14217.68	70.57	-20.77	49.8	68.2	-18.4	peak	P

UNII-1_20M_5180MHz_Vertical

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2972.6	66.56	-29.61	36.95	68.2	-31.25	peak	P
2	4314.76	70.07	-29.87	40.2	68.2	-28	peak	P
3	6352.03	67.01	-25.91	41.1	68.2	-27.1	peak	P
4	8575.55	69.57	-25.39	44.18	68.2	-24.02	peak	P
5	11284.57	67.32	-23.24	44.08	68.2	-24.12	peak	P
6	14956.31	70.58	-21.24	49.34	68.2	-18.86	peak	P

UNII-1_20M_5240MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2914.47	69.37	-30.33	39.04	68.2	-29.16	peak	P
2	4275.64	70.08	-28.33	41.75	68.2	-26.45	peak	P
3	6086.43	66.33	-25.62	40.71	68.2	-27.49	peak	P
4	8644.93	70.89	-24.17	46.72	68.2	-21.48	peak	P
5	11047.25	69.45	-23.53	45.92	68.2	-22.28	peak	P
6	14219.56	69.25	-21	48.25	68.2	-19.95	peak	P

UNII-1_20M_5240MHz_Vertical

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2974.62	65.94	-29.61	36.33	68.2	-31.87	peak	P
2	4311.91	68.33	-29.58	38.75	68.2	-29.45	peak	P
3	6353.13	67.22	-24.45	42.77	68.2	-25.43	peak	P
4	8576.37	70.85	-24.58	46.27	68.2	-21.93	peak	P
5	11286.87	66.76	-23.97	42.79	68.2	-25.41	peak	P
6	14955.83	70.07	-20.92	49.15	68.2	-19.05	peak	P

UNII-3_20M_5745MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2913.84	68.92	-30.17	38.75	68.2	-29.45	peak	P
2	4277.44	67.47	-28.54	38.93	68.2	-29.27	peak	P
3	6083.78	64.82	-25.83	38.99	68.2	-29.21	peak	P
4	8644.63	69.88	-24.46	45.42	68.2	-22.78	peak	P
5	11046.02	66.46	-24.25	42.21	68.2	-25.99	peak	P
6	14217.95	70.06	-20.76	49.3	68.2	-18.9	peak	P

UNII-3_20M_5745MHz_Vertical

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2973.5	67.18	-28.63	38.55	68.2	-29.65	peak	P
2	4312.54	68.59	-29.63	38.96	68.2	-29.24	peak	P
3	6353.31	66.89	-26.23	40.66	68.2	-27.54	peak	P
4	8575.49	69.54	-25.63	43.91	68.2	-24.29	peak	P
5	11286.08	66.65	-23.37	43.28	68.2	-24.92	peak	P
6	14954.52	71.34	-19.72	51.62	68.2	-16.58	peak	P

UNII-3_20M_5785MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2914.76	70.38	-29.53	40.85	68.2	-27.35	peak	P
2	4277.6	67.43	-29.52	37.91	68.2	-30.29	peak	P
3	6084.893	65.85	-24.79	41.06	68.2	-27.14	peak	P
4	8646.34	71.06	-25.1	45.96	68.2	-22.24	peak	P
5	11047.31	68.89	-23.12	45.77	68.2	-22.43	peak	P
6	14218.52	69.6	-21.78	47.82	68.2	-20.38	peak	P

UNII-3_20M_5785MHz_Vertical

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2972.17	65.61	-29.59	36.02	68.2	-32.18	peak	P
2	4314.29	69.63	-28.13	41.5	68.2	-26.7	peak	P
3	6353.55	69.28	-25.99	43.29	68.2	-24.91	peak	P
4	8577.05	69.3	-24.68	44.62	68.2	-23.58	peak	P
5	11286.51	68.13	-23.52	44.61	68.2	-23.59	peak	P
6	14955.03	70.76	-20.97	49.79	68.2	-18.41	peak	P

UNII-3_20M_5825MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2914.31	69.41	-30.02	39.39	68.2	-28.81	peak	P
2	4277.58	66.25	-28.54	37.71	68.2	-30.49	peak	P
3	6085.59	65.03	-24.55	40.48	68.2	-27.72	peak	P
4	8644.17	69.39	-25.46	43.93	68.2	-24.27	peak	P
5	11045.72	68.3	-22.83	45.47	68.2	-22.73	peak	P
6	14218.9	71.08	-22.01	49.07	68.2	-19.13	peak	P

UNII-3_20M_5825MHz_Vertical

No.	Frequency (MHz)	Reading (dBuv)	Factor (dB/m)	Level (dBuv/m)	Limit (dBuv/m)	Margin(dB)	Detector	P/F
1	2973.39	67.79	-29.22	38.57	68.2	-29.63	peak	P
2	4314.35	69.5	-29.29	40.21	68.2	-27.99	peak	P
3	6354.44	67.62	-26	41.62	68.2	-26.58	peak	P
4	8576.97	70.22	-24.37	45.85	68.2	-22.35	peak	P
5	11286.59	68.42	-24.13	44.29	68.2	-23.91	peak	P
6	14955.41	71.24	-20.39	50.85	68.2	-17.35	peak	P

Worst Case 802.11a mode

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.8	-27
Highest	Above 5350	-38.71	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-40.82	-27
	5715 to 5725	-38.55	-17
Highest	5850 to 5860	-43.32	-17
	Above 5860	-40.98	-27
Note: the data just list the worst cases			

Remark:

1) All mode had been tested, only the worst mode 802.11a is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Reading Level + Factor

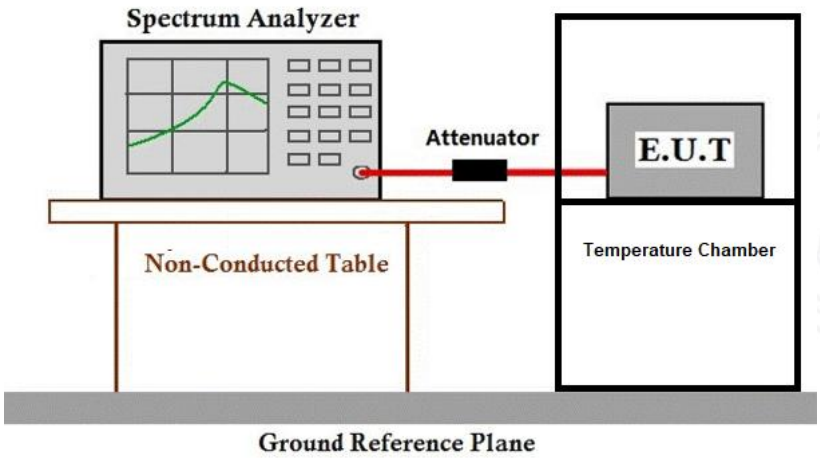
3) Testing is carried out with frequency rang 1GHz to 40GHz, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

4) If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

7.7 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)
Test Method: ANSI C63.10 (2020) Section 6.8
Limit: /

7.7.1 Test Setup Diagram



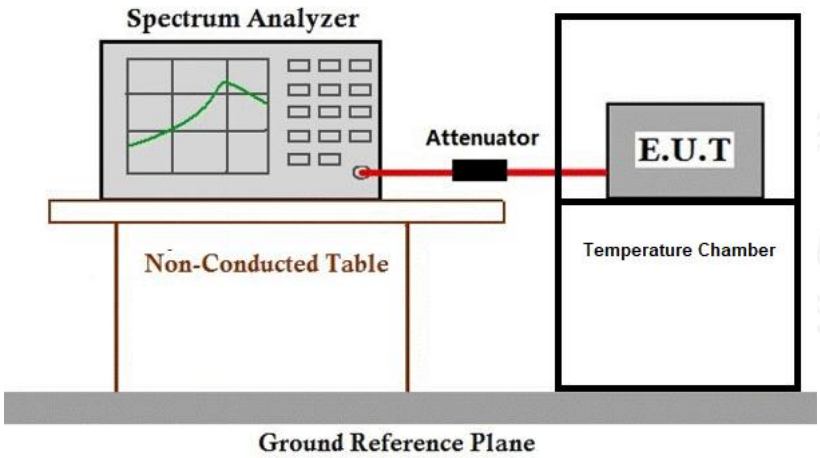
7.7.2 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Transmitter Power Control

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)
Test Method: ANSI C63.10 (2020) Section 6.8
Limit: Able to lower EIRP below 24dBm when Max_EIRP ≥ 500 mW (27 dBm).

7.8.1 Test Setup Diagram



7.8.2 Measurement Procedure and Data

Not Application. The Max_EIRP＜500mW(27dBm)

8 Test Setup Photo

Please refer to the Appendix Test Setup Photos

9 EUT Constructional Details (EUT Photos)

Please refer to the Appendix EUT Photos

- End of the Report -