



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-U6PRO
IC ID	6545A-U6PRO
Equipment Under Test	U6-Pro
Test Report Serial Number	TR5011_02
Date of Test(s)	13 – 15 and 28 October 2020
Report Issue Date	2 November 2020

Test Specification	Applicant
47 CFR FCC Part 15, Subpart E	Ubiquiti Inc. 685 Third Avenue New York, NY 10019 U.S.A.



NVLAP LAB CODE 600241-0

Certification of Engineering Report

This report has been prepared by Unified Compliance Laboratory (UCL) to document compliance of the device described below with the requirement of Federal Communication Commissions (FCC) Part 15, Subpart E. This report may be reproduced in full. Partial reproduction of this report may only be made with the written consent of the laboratory. The results in this report apply only to the sample tested.

Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	Unifi
Model Number	U6-Pro
FCC ID	SWX-U6PRO
ISED ID	6545A-U6PRO

On this 2nd day of November 2020, I individually and for Unified Compliance Laboratory certify that the statements made in this engineering report are true, complete and correct to the best of my knowledge and are made in good faith.

Although NVLAP has accredited the Unified Compliance Laboratory testing facilities, this report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. federal government.

Unified Compliance Laboratory



Written By: Alex Macon



Reviewed By: Joseph W. Jackson

Revision History		
Revision	Description	Date
01	Original Report Release	2 November 2020
02	Amended Section 3.5	3 November 2020

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1 Client Information

1.1 Applicant

Company	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
Contact Name	Mark Feil
Title	Compliance Manager

1.2 Manufacturer

Company	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
Contact Name	Mark Feil
Title	Compliance Manager

2 Equipment Under Test (EUT)

2.1 Identification of EUT

Brand Name	Unifi
Model Number	U6-Pro
Serial Number	7483C29FF2FB
Dimensions (cm)	22.0 x 22.0 x 4.8

2.2 Description of EUT

The U6-Pro is a Wi-Fi 6 access point designed for wide-ranging wireless coverage while maintaining overall network capacity. It delivers an aggregate radio rate of up to 2.7 Gbps with 5 GHz (4x4 MU-MIMO and OFDMA) and 2.4 GHz (2x2 MIMO) radios. U6-Pro uses a sophisticated antenna design with sideways amplification to offer excellent range when mounted horizontally. U6-Pro combines its purpose-built antenna with powerful Wi-Fi 6 features like OFDMA, beamforming, and BSS coloring for reliable long-range wireless performance.

Band	Modulation Bandwidth	Frequency (MHz)
UNII-1	20 MHz	5180, 5200, 5220, 5240
	40 MHz	5190, 5230
	80 MHz	5210
UNII-2A	20 MHz	5260, 5280, 5300, 5320
	40 MHz	5270, 5310
	80 MHz	5290
UNII-2C	20 MHz	5500, 5520, 5540, 5560, 5580, 5600*, 5620*, 5640*, 5660, 5680, 5700
	40 MHz	5510, 5550, 5570, 5590*, 5630*, 5670
	80 MHz	5530, 5610*, 5690
UNII-3	20 MHz	5745, 5765, 5785, 5805, 5825
	40 MHz	5755, 5795,
	80 MHz	5775

*Not available in IC

This report covers the circuitry of the device subject to FCC Part 15, Subpart E. The circuitry of the device subject to FCC Part 15 Subpart B was found to be compliant and is covered under a separate Unified Compliance Laboratory report.

2.3 EUT and Support Equipment

The EUT and support equipment used during the test are listed below.

Brand Name Model Number Serial Number	Description	Name of Interface Ports / Interface Cables
BN: Unifi MN: U6-Pro SN: 7483C29FF2FB	WiFi Access Point	Shielded or Un-Shielded Cat 5e cable (Note 2)
BN: Dell MN: XPS 13 SN: N/A	Laptop PC	Shielded or Un-Shielded Cat 5e cable (Note 2)

Notes: (1) EUT

(2) Interface port connected to EUT (See Section 2.4)

The support equipment listed above was not modified in order to achieve compliance with this standard.

2.4 Interface Ports on EUT

Name of Ports	No. of Ports Fitted to EUT	Cable Description/Length
AC Mains	1	3 conductor power cord/80 cm
POE (POE Injector)	1	Shielded Cat 5e cable/8 meters
LAN (POE Injector)	1	Unshielded Cat 5e cable/1 meter

2.5 Operating Environment

Power Supply	120 VAC
AC Mains Frequency	120 VAC
Temperature	60 Hz
Humidity	27.3 – 28.5 °C
Barometric Pressure	22.3 – 37.4 %

2.6 Operating Modes

The U6-Pro was tested using test software in order to enable to constant transmission of over 98% All emission modes of 802.11 a/n/ac/ax were investigated.

2.7 EUT Exercise Software

DUT firmware version 1.0 was used to operate the transmitter using a constant transmit mode.

2.8 Block Diagram of Test Configuration

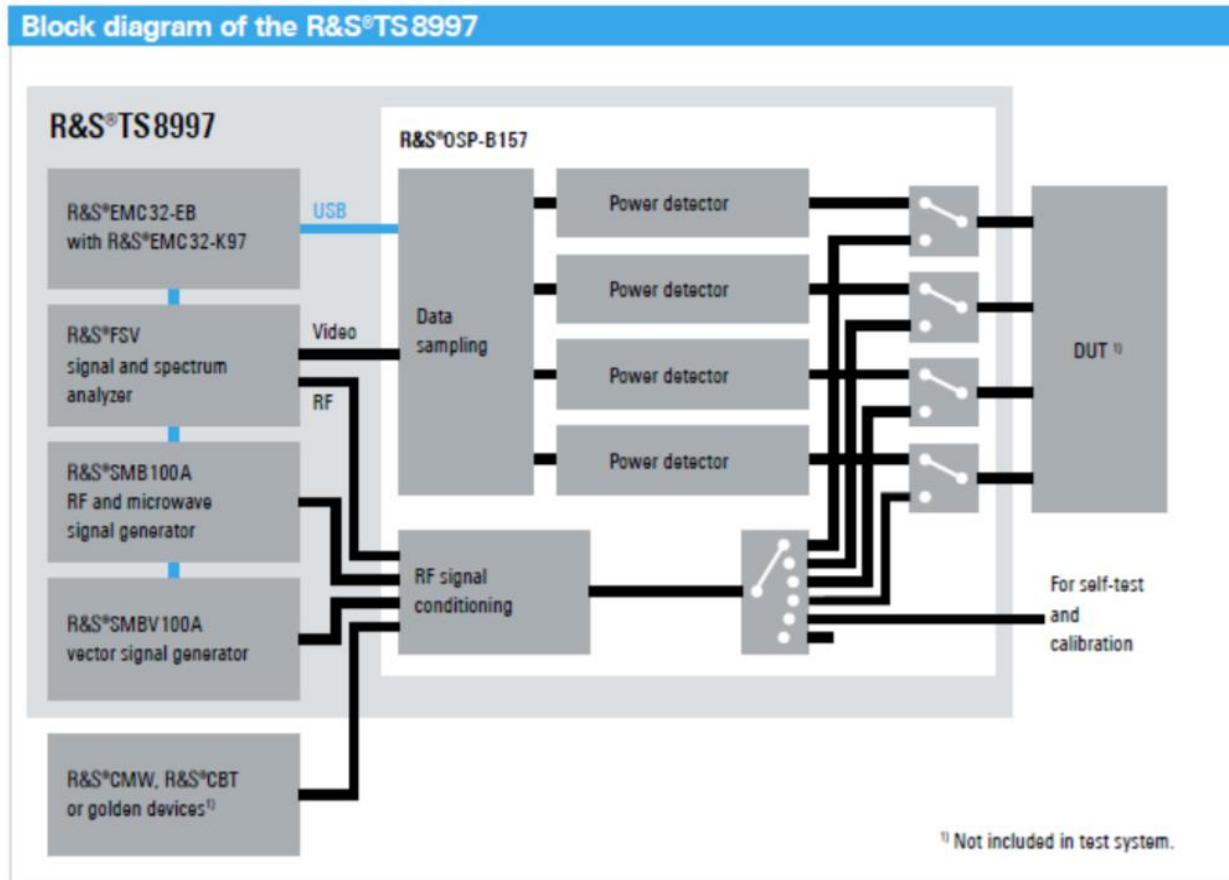


Diagram 1: Test Configuration Block Diagram

2.9 Modification Incorporated/Special Accessories on EUT

There were no modifications made to the EUT during testing to comply with the specification.

2.10 Deviation, Opinions Additional Information or Interpretations from Test Standard

There were no deviations, opinions, additional information or interpretations from the test specification.

3 Test Specification, Method and Procedures

3.1 Test Specification

Title	47 CFR FCC Part 15, Subpart E, Section 15.407 Limits and methods of measurement of radio interference characteristics of Unlicensed National Information Infrastructure Devices
Purpose of Test	The tests were performed to demonstrate initial compliance

3.2 Methods & Procedures

3.2.1 47 CFR FCC Part 15 Section 15.407

See test standard for details.

3.3 FCC Part 15, Subpart E

3.3.1 Summary of Tests

FCC Section	ISED Section	Environmental Phenomena	Frequency Range (MHZ)	Result
15.407(a)	N/A	Antenna requirements	Structural Requirement	Compliant
15.407(b)	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.407(c)	RSS-247 §6.2.2, §6.2.3	Bandwidth Requirement	5250 to 5725	Compliant
15.407(e)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5250 to 5725	Compliant
15.407(f)	RSS-247 §6.2.2, §6.2.3	Antenna Conducted Spurious Emissions	0.009 to 40000	Compliant
15.407(g)	RSS-247 §6.2.2, §6.2.3	Radiated Spurious Emissions	0.009 to 40000	Compliant
15.407(h)	RSS-247 §6.2.2, §6.2.3	Peak Power Spectral Density	5250 to 5725	Compliant

The testing was performed according to the procedures in ANSI C63.10-2013, KDB 789033 and 47 CFR Part 15. The conducted power was summed per FCC KDB 662911 in sections 5.4 and 5.6.

3.4 Results

In the configuration tested, the EUT complied with the requirements of the specification.

3.5 Test Location

Testing was performed at the Unified Compliance Laboratory 10-Meter chamber located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary

Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2021. This site has also been registered with Innovations, Science and Economic Development (ISED) department as was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until June 30, 2021. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED.

4 Test Equipment

4.1 Conducted Emissions at Mains Ports

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	AFJ	FFT3010	UCL-2500	9/18/2020	9/18/2021
LISN	AFJ	LS16C/10	UCL-2512	5/26/2020	5/26/2021
Cat6 ISN	Teseq	ISN T8-Cat6	UCL-2971	5/18/2020	5/18/2021
ISN	Teseq	ISN T800	UCL-2974	6/1/2020	6/1/2021
LISN	Com-Power	LIN-120C	UCL-2612	5/19/2020	5/19/2021
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	UCL	Revision 1	UCL-3107	N/A	N/A

Table 1: List of equipment used for Conducted Emissions Testing at Mains Port

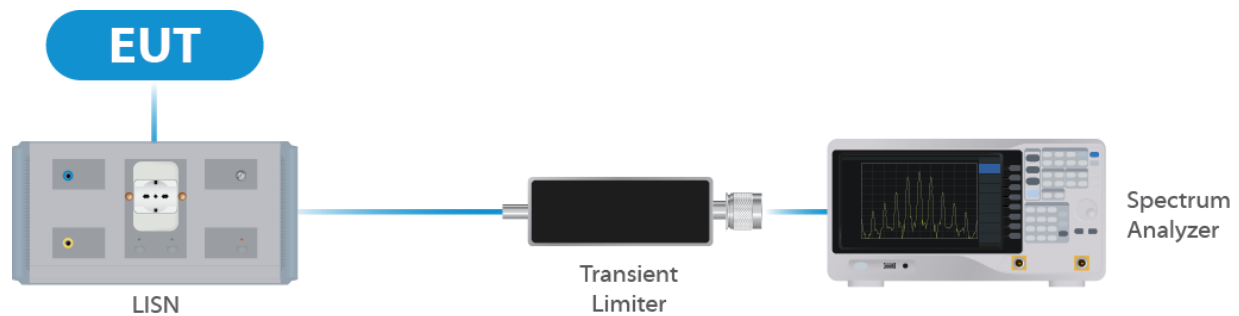


Figure 1: Conducted Emissions Test

4.2 Direct Connect at the Antenna Port Tests

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
Spectrum Analyzer	R&S	FSV40	UCL-2861	8/24/2020	8/24/2021
Signal Generator	R&S	SMB100A	UCL-2864	N/A	N/A
Vector Signal Generator	R&S	SMBV100A	UCL-2873	N/A	N/A
Switch Extension	R&S	OSP-B157WX	UCL-2867	8/25/2020	8/25/2021
Switch Extension	R&S	OSP-150W	UCL-2870	8/21/2020	8/21/2021

Table 2: List of equipment used for Direct Connect at the Antenna Port

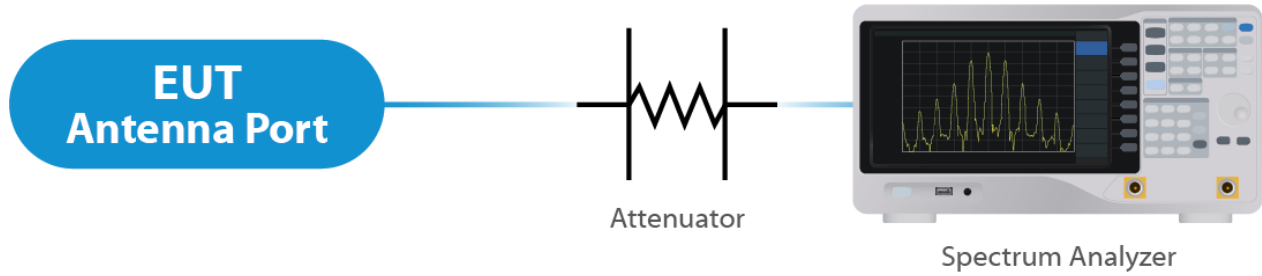


Figure 2: Direct Connect at the Antenna Port Test

4.3 Radiated Emissions

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	Keysight	N9038A	UCL-2778	6/1/2020	6/1/2021
Pre-Amplifier	Sonoma Instruments	310N	UCL-2889	9/10/2020	9/10/2021
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	7/8/2020	7/8/2021
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	5/20/2020	5/20/2021
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	5/21/2020	5/21/2021
18 – 40 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	1/28/2020	1/28/2021
0.5 – 18 GHz Amplifier	Scwarzbeck	BBV 9718C	UCL-2493	1/24/2020	1/24/2021
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A

Table 3:List of equipment used for Radiated Emissions

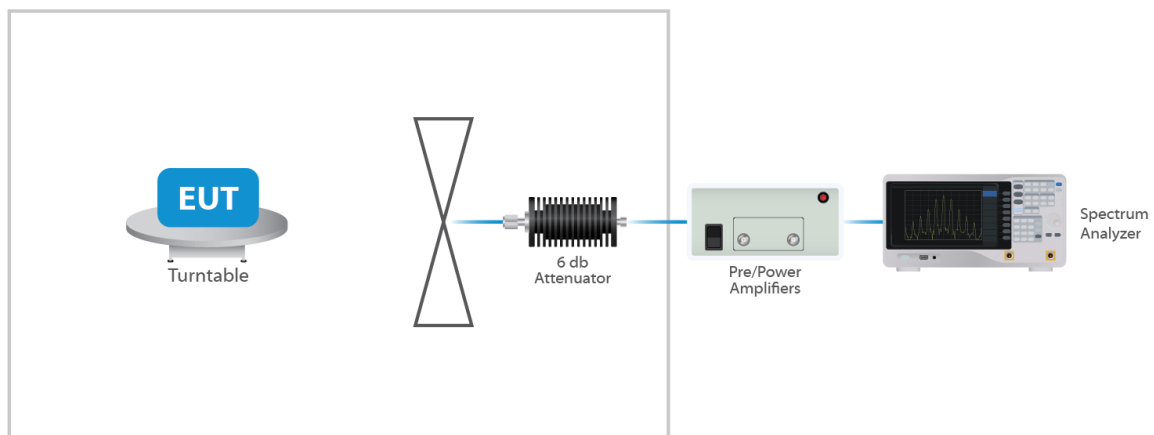


Figure 3: Radiated Emissions Test

4.4 Equipment Calibration

All applicable equipment is calibrated using either an independent calibration laboratory or Unified Compliance Laboratory personnel at intervals defined in ANSI C63.4:2014 following outlined calibration procedures. All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and is available for examination upon request.

4.5 Measurement Uncertainty

Test	Uncertainty (\pm dB)	Confidence (%)
Conducted Emissions	1.44	95
Radiated Emissions (9 kHz to 30 MHz)	2.50	95
Radiated Emissions (30 MHz to 1 GHz)	4.38	95
Radiated Emissions (1 GHz to 18 GHz)	4.37	95
Radiated Emissions (18 GHz to 40 GHz)	3.93	95
Direct Connect Tests	K Factor	Value
Emissions Bandwidth	2	2.0%
Output Power	2	1.0 dB
Peak Power Spectral Density	2	1.3 dB
Band Edge	2	0.8 dB
Transmitter Spurious Emissions	2	1.8 dB

5 Test Results

5.1 §15.203 Antenna Requirements

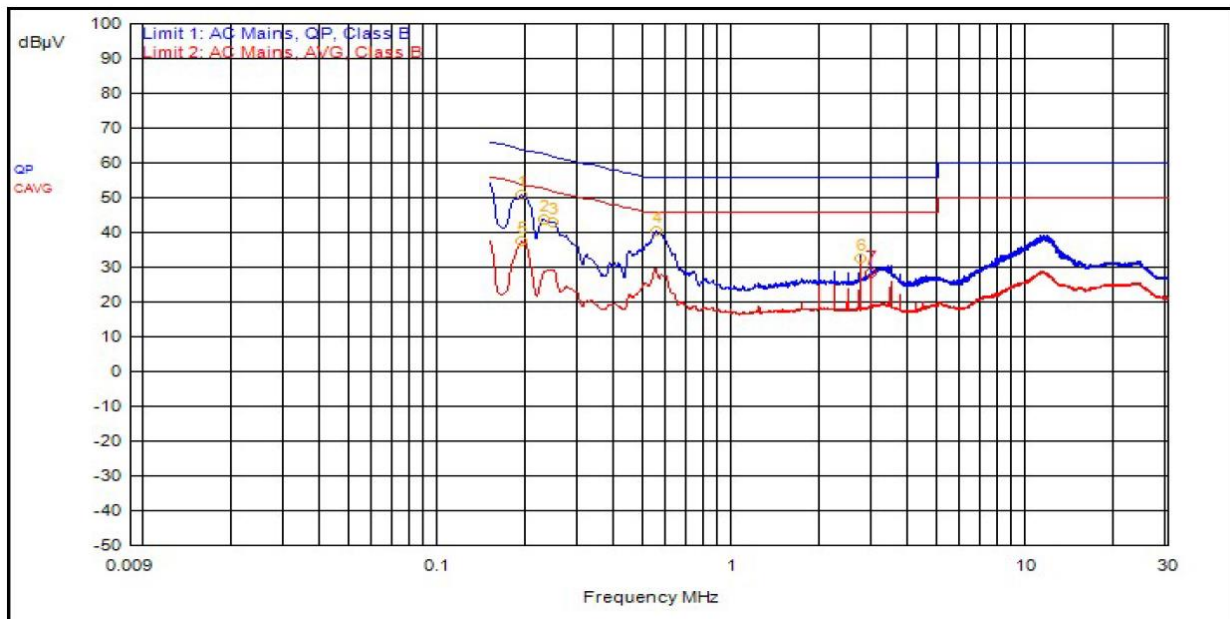
The EUT uses an integral antenna. The Maximum gain of the antenna is 6.0 dBi. The antenna is not user replaceable.

Results

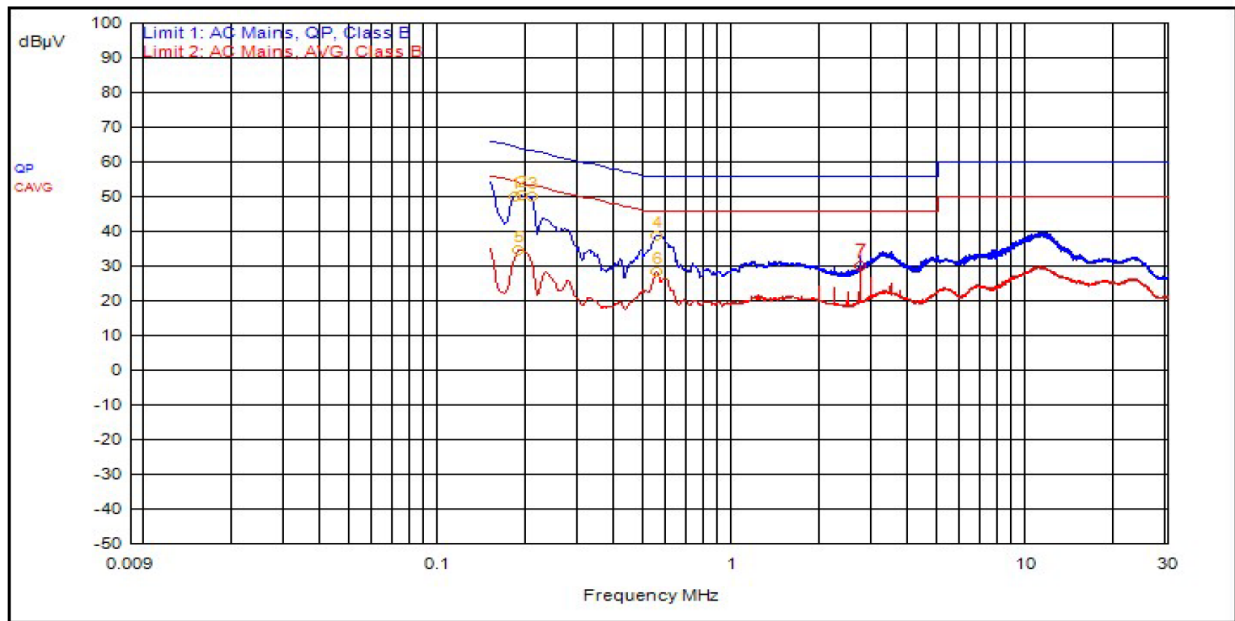
The EUT complied with the specification

5.2 Conducted Emissions at Mains Ports Data

5.2.1 Line



5.2.2 Neutral



Result

The EUT complied with the specification limit.

5.3 §15.403(i) Emissions Bandwidth

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)
20	5260	19.3	30.0
20	5280	19.2	33.0
20	5320	19.2	31.6
40	5270	37.8	60.6
40	5310	38.0	67.4
80	5290	77.0	117
160	5250	156	164
20	5500	19.2	22.0
20	5600	19.1	32.2
20	5720	19.2	21.9
40	5510	37.8	39.6
40	5590	37.8	39.8
40	5710	37.5	39.3
80	5530	77.0	81.5
80	5610	77.0	81.0
80	5690	77.0	81.5
160	5570	154	193

Result

The 26 dB bandwidths are reported for information purposes. Please see Annex for all bandwidth measurements.

5.4 §15.403(a)(1) Maximum Average Output Power

The maximum average RF conducted output power measured for this device was 24 dBm or 250 mW. The limit is 24dBm or 250 mWatt when using antennas with 6 dBi or less gain. The antenna has a maximum gain of 6 dBi. Therefore the conducted output power limit is 24 dBm.

5.4.1 UNII-2A

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power (dBm)	Measured EIRP (dBm)	Measured PSD (dBm)
OFDM 20	5260	Mcs0	16	23.7	29.7	10.2
OFDM 20	5280	Mcs0	16	23.8	29.8	10.2
OFDM 20	5320	Mcs0	16	23.5	29.5	9.9
HT 20	5260	Mcs0	16	23.5	29.5	9.9
HT 20	5280	Mcs0	16	23.6	29.6	10
HT 20	5320	Mcs0	16	23.1	29.1	9.7
HT 40	5270	Mcs0	16	23.8	29.8	8.9
HT 40	5310	Mcs0	16	23.4	29.4	8.4
VHT 20	5260	Mcs0	16.5	23.9	29.9	9.7
VHT 20	5280	Mcs0	16	23.6	29.6	9.4
VHT 20	5320	Mcs0	16.5	23.8	29.8	10
VHT 40	5270	Mcs0	16	23.8	29.8	8.8
VHT 40	5310	Mcs0	15.5	23.5	29.5	8.3
VHT 80	5290	Mcs0	16	23.9	29.9	5.6
VHT 160	5250	Mcs0	17	23.6	29.6	5.9
HE 20	5260	Mcs0	17	23.8	29.8	9.4
HE 20	5280	Mcs0	17	23.9	29.9	9.6
HE 20	532	Mcs0	17	23.7	29.7	9.2
HE 40	5270	Mcs0	16	23.8	29.8	8.8
HE 40	5310	Mcs0	16	23.5	29.5	8.3
HE 80	5290	Mcs0	16.5	23.9	29.9	5.6
HE 160	5250	Mcs0	12.5	20.8	26.8	3.6

5.4.2 UNII-2C

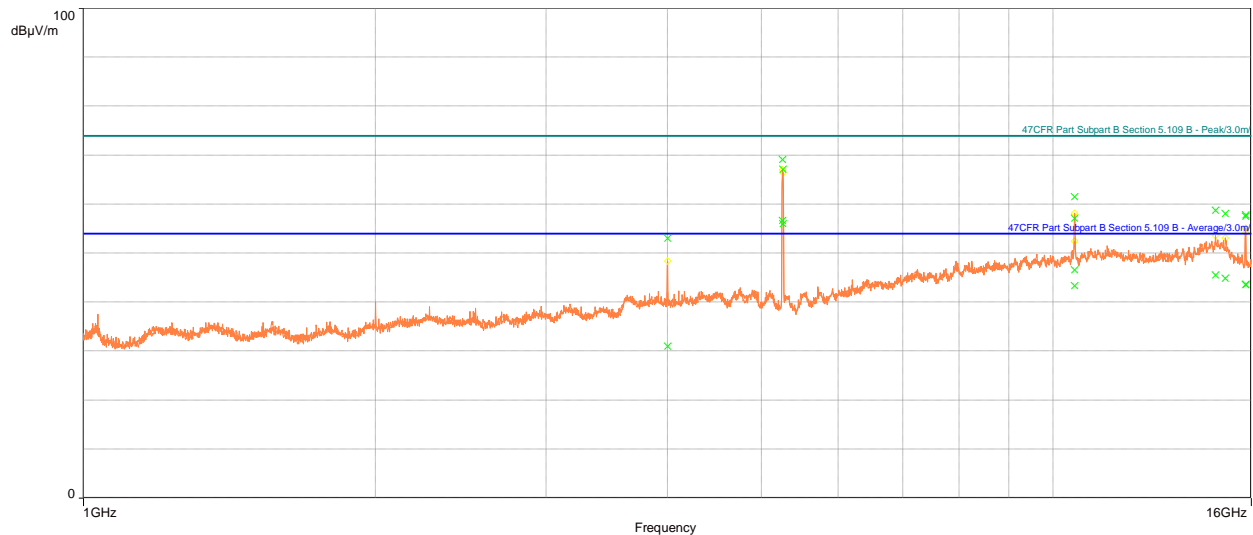
Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power	Measured EIRP	Measured PSD
OFDM 20	5500	Mcs0	16	23.8	29.8	10
OFDM 20	5600	Mcs0	16	23.8	29.8	10.5
OFDM 20	5720	Mcs0	15.5	23.6	29.6	10
HT 20	5500	Mcs0	16	23.6	29.6	9.9
HT 20	5600	Mcs0	16	23.8	29.8	10.1
HT 20	5720	Mcs0	16	23.9	29.9	10.4
HT 40	5510	Mcs0	16	23.8	29.8	8.8
HT 40	5590	Mcs0	16	23.9	29.9	8.8
HT 40	5710	Mcs0	15.5	23.6	29.6	8.5
VHT 20	5500	Mcs0	16	23.8	29.8	10
VHT 20	5600	Mcs0	16	23.7	29.7	10
VHT 20	5720	Mcs0	16	24	30	10.1
VHT 40	5510	Mcs0	16	23.8	29.8	8.7
VHT 40	5590	Mcs0	16	23.8	29.8	8.8
VHT 40	5710	Mcs0	15.5	23.6	29.6	8.5
VHT 80	5530	Mcs0	16	24	30	5.5
VHT 80	5610	Mcs0	16	23.9	29.9	5.6
VHT 80	5690	Mcs0	15.5	23.6	29.6	4.9
HE 20	5500	Mcs0	18.5	23.6	29.6	2.8
HE 20	5600	Mcs0	17	23.9	29.9	9.4
HE 20	5720	Mcs0	16.5	23.6	29.6	9.2
HE 40	5510	Mcs0	16.5	23.7	29.7	9.3
HE 40	5590	Mcs0	16.5	23.6	29.6	8
HE 40	5710	Mcs0	16.5	23.5	29.5	7.8
HE 80	5530	Mcs0	16.5	23.8	29.8	7.9
HE 80	5610	Mcs0	16.5	23.6	29.6	5.3
HE 80	5690	Mcs0	16.5	23.6	29.6	5.2
HE 160	5570	Mcs0	16.5	23.7	29.7	5.1

Result

In the configuration tested, the maximum average RF outpower was less than 1 watt; therefore, the EUT complied with the requirements of the specification.

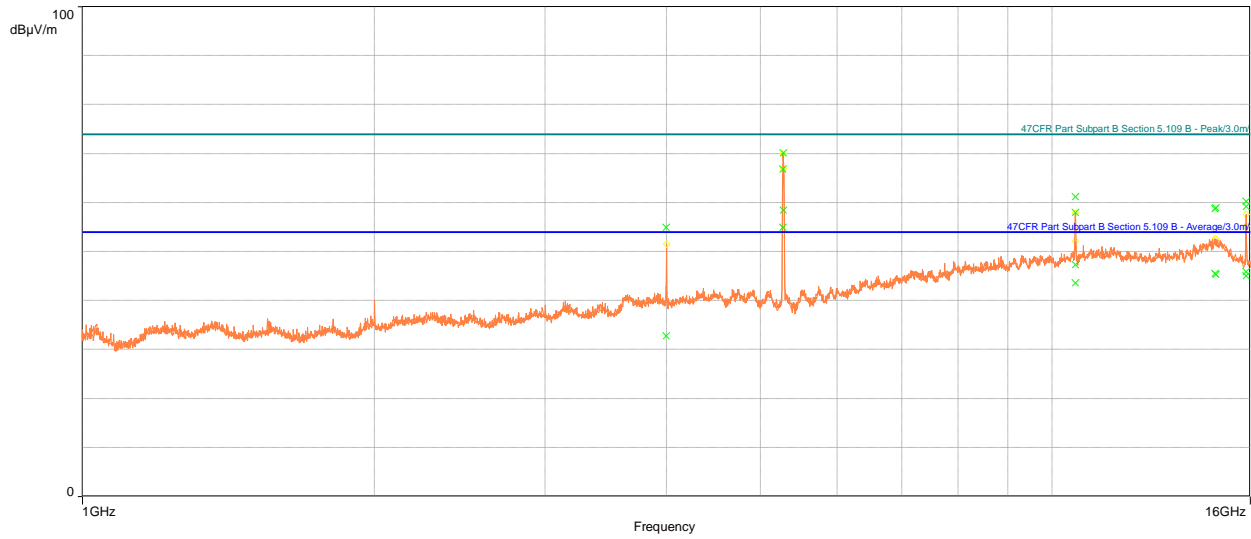
5.5 Radiated Spurious Emissions in the Restricted Bands

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emissions was investigated to measure any radiated emissions in the restricted bands. For frequencies above 18.0 GHz. The emissions in the restricted bands must meet the limits specified in § 15.209. All emissions between the required frequencies were investigated, the following plots represent the worst case.

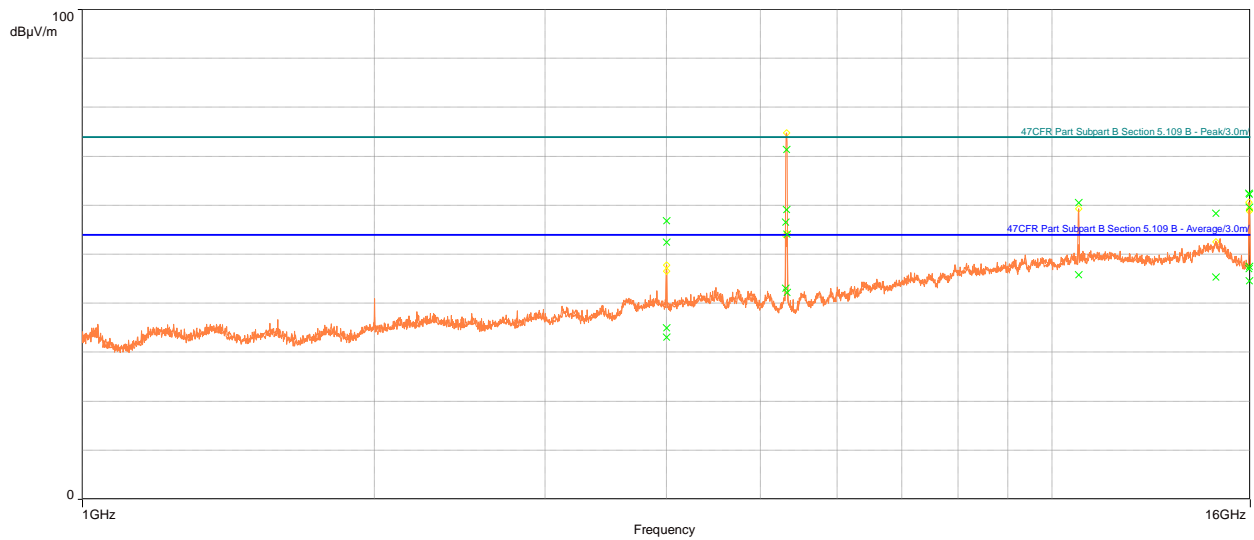


Graph 1: 1 – 16 GHz_5260 MHz

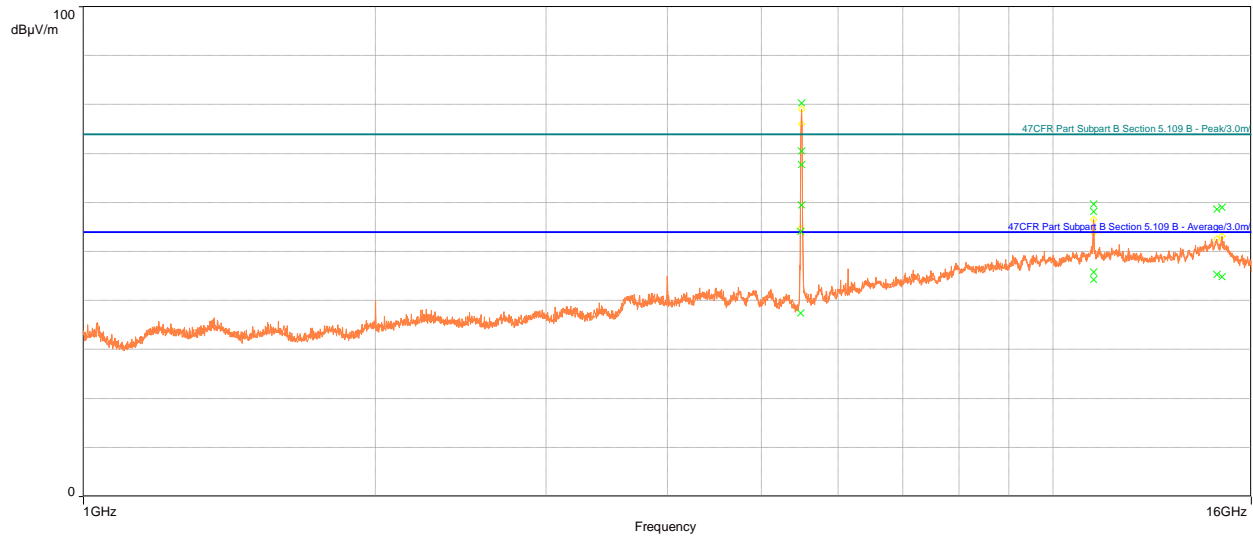
Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10518	A	43.33	54.00	-10.67	266.00	1.86	Vertical	12.72
15039	A	44.85	54.00	-9.15	293.00	1.88	Vertical	17.30
15782	A	43.64	54.00	-10.36	276.00	1.86	Vertical	14.44
4001.5	A	31.00	54.00	-23.00	13.00	3.23	Horizontal	-0.20
10519	A	46.57	54.00	-7.43	103.00	1.51	Horizontal	12.72
14689	A	45.56	54.00	-8.44	208.00	3.71	Horizontal	17.81
15782	A	43.59	54.00	-10.41	276.00	3.35	Horizontal	14.44
10518	P	57.13	74.00	-16.87	266.00	1.86	Vertical	12.72
15039	P	58.09	74.00	-15.91	293.00	1.88	Vertical	17.30
15782	P	57.52	74.00	-16.48	276.00	1.86	Vertical	14.44
4001.5	P	53.08	74.00	-20.92	13.00	3.23	Horizontal	-0.20
10519	P	61.52	74.00	-12.48	103.00	1.51	Horizontal	12.72
14689	P	58.76	74.00	-15.24	208.00	3.71	Horizontal	17.81
15782	P	57.80	74.00	-16.20	276.00	3.35	Horizontal	14.44


Graph 2: 1 GHz – 16 GHz_ 5280 MHz

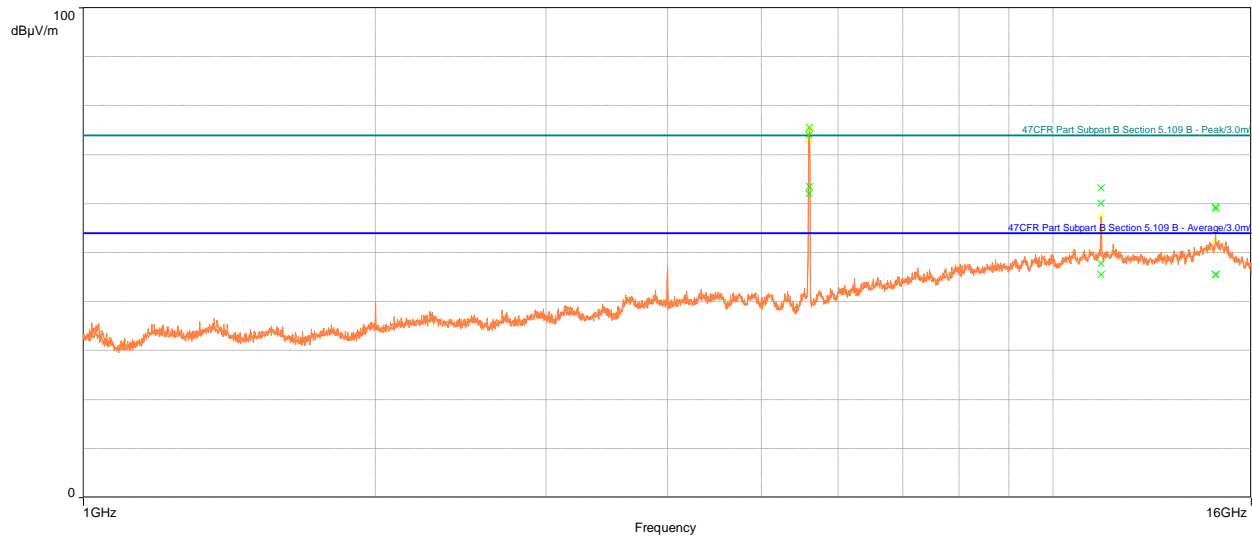
Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10561	A	43.62	54.00	-10.38	264.00	1.87	Vertical	13.00
14707	A	45.57	54.00	-8.43	349.00	3.45	Vertical	17.78
15846	A	45.94	54.00	-8.06	300.00	3.70	Vertical	14.42
3999.6	A	32.83	54.00	-21.17	13.00	2.63	Horizontal	-0.21
10562	A	47.37	54.00	-6.63	326.00	1.98	Horizontal	13.01
14741	A	45.39	54.00	-8.61	125.00	3.46	Horizontal	17.60
15837	A	45.05	54.00	-8.95	282.00	3.33	Horizontal	14.39
10561	P	58.00	74.00	-16.00	264.00	1.87	Vertical	13.00
14707	P	58.73	74.00	-15.27	349.00	3.45	Vertical	17.78
15846	P	60.31	74.00	-13.69	300.00	3.70	Vertical	14.42
3999.6	P	54.93	74.00	-19.07	13.00	2.63	Horizontal	-0.21
10562	P	61.26	74.00	-12.74	326.00	1.98	Horizontal	13.01
14741	P	58.94	74.00	-15.06	125.00	3.46	Horizontal	17.60
15837	P	59.19	74.00	-14.81	282.00	3.33	Horizontal	14.39


Graph 3: 1 GHz – 16 GHz_5320 MHz

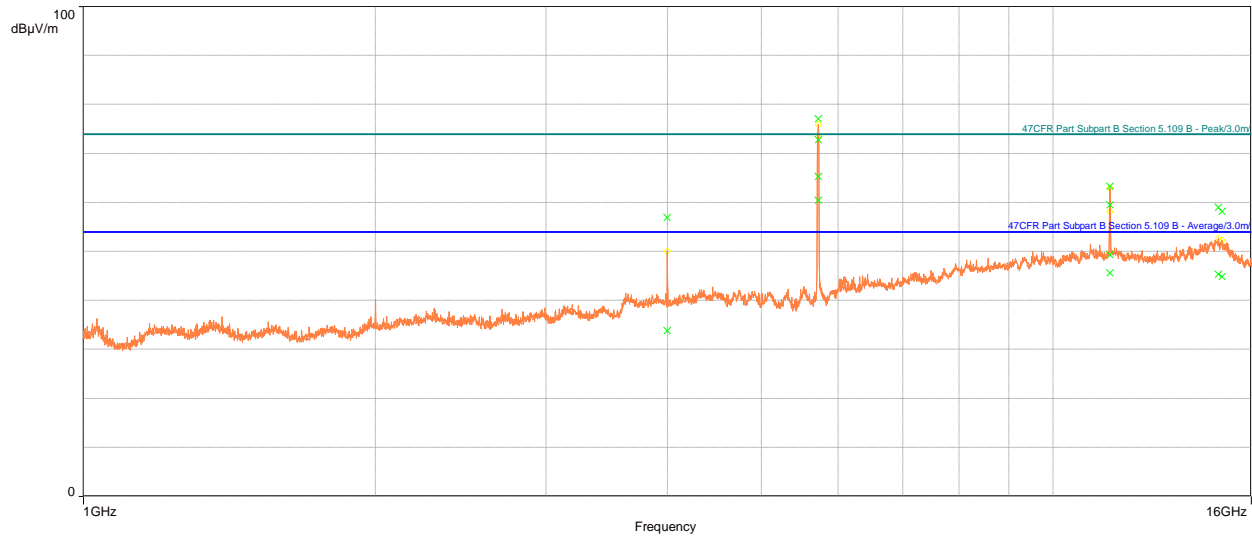
Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
4000.3	A	33.10	54.00	-20.90	217.00	2.35	Vertical	-0.21
14741	A	45.37	54.00	-8.63	345.00	1.51	Vertical	17.60
15964	A	47.51	54.00	-6.49	359.00	1.63	Vertical	14.91
15972	A	44.58	54.00	-9.42	191.00	1.98	Vertical	14.96
4000.1	A	34.97	54.00	-19.03	26.00	2.72	Horizontal	-0.21
10647	A	45.79	54.00	-8.21	327.00	3.16	Horizontal	12.81
15955	A	47.10	54.00	-6.90	303.00	2.25	Horizontal	14.81
4000.3	P	52.45	74.00	-21.55	217.00	2.35	Vertical	-0.21
14741	P	58.42	74.00	-15.58	345.00	1.51	Vertical	17.60
15964	P	62.28	74.00	-11.72	359.00	1.63	Vertical	14.91
15972	P	59.57	74.00	-14.43	191.00	1.98	Vertical	14.96
4000.1	P	56.81	74.00	-17.19	26.00	2.72	Horizontal	-0.21
10647	P	60.60	74.00	-13.40	327.00	3.16	Horizontal	12.81
15955	P	62.48	74.00	-11.52	303.00	2.25	Horizontal	14.81


Graph 4: 1 GHz – 16 GHz_ 5500 MHz

Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11002	A	44.34	54.00	-9.66	16.00	2.60	Vertical	14.06
14741	A	45.37	54.00	-8.63	293.00	1.74	Vertical	17.60
10999	A	45.79	54.00	-8.21	352.00	1.55	Horizontal	14.05
14930	A	44.89	54.00	-9.11	49.00	1.76	Horizontal	17.43
11002	P	58.18	74.00	-15.82	16.00	2.60	Vertical	14.06
14741	P	58.65	74.00	-15.35	293.00	1.74	Vertical	17.60
10999	P	59.70	74.00	-14.30	352.00	1.55	Horizontal	14.05
14930	P	58.99	74.00	-15.01	49.00	1.76	Horizontal	17.43


Graph 5: 1 GHz – 16 GHz_5600 MHz

Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11200	A	45.53	54.00	-8.47	269.00	3.57	Vertical	13.89
14692	A	45.53	54.00	-8.47	2.00	2.04	Vertical	17.82
11204	A	47.80	54.00	-6.20	318.00	3.27	Horizontal	13.93
14715	A	45.51	54.00	-8.49	95.00	3.09	Horizontal	17.72
11200	P	60.05	74.00	-13.95	269.00	3.57	Vertical	13.89
14692	P	59.30	74.00	-14.70	2.00	2.04	Vertical	17.82
11204	P	63.19	74.00	-10.81	318.00	3.27	Horizontal	13.93
14715	P	59.03	74.00	-14.97	95.00	3.09	Horizontal	17.72


Graph 6: 1 GHz – 16 GHz_5720 MHz

Frequency (MHz)	Det.	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11442	A	45.67	54.00	-8.33	90.00	3.93	Vertical	14.40
14926	A	44.92	54.00	-9.08	342.00	2.15	Vertical	17.45
3999.5	A	33.80	54.00	-20.20	28.00	2.86	Horizontal	-0.21
11437	A	49.33	54.00	-4.67	46.00	1.88	Horizontal	14.32
14802	A	45.34	54.00	-8.66	16.00	3.35	Horizontal	17.86
11442	P	59.50	74.00	-14.50	90.00	3.93	Vertical	14.40
14926	P	58.19	74.00	-15.81	342.00	2.15	Vertical	17.45
3999.5	P	56.95	74.00	-17.05	28.00	2.86	Horizontal	-0.21
11437	P	63.27	74.00	-10.73	46.00	1.88	Horizontal	14.32
14802	P	59.02	74.00	-14.98	16.00	3.35	Horizontal	17.86

5.6 §15.407(a) Maximum Power Spectral Density

The maximum average power spectral density conducted from the intentional radiator of the antenna shall not be greater than 11 dBm in any 1 MHz band during any time interval of continuous transmission. Results of this testing are summarized. With a 6 dBi antenna, the conducted limit for power spectral density is -11 dBm.

5.6.1 UNII-2A

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power (dBm)	Measured EIRP (dBm)	Measured PSD (dBm)
OFDM 20	5260	Mcs0	16	23.7	29.7	10.2
OFDM 20	5280	Mcs0	16	23.8	29.8	10.2
OFDM 20	5320	Mcs0	16	23.5	29.5	9.9
HT 20	5260	Mcs0	16	23.5	29.5	9.9
HT 20	5280	Mcs0	16	23.6	29.6	10
HT 20	5320	Mcs0	16	23.1	29.1	9.7
HT 40	5270	Mcs0	16	23.8	29.8	8.9
HT 40	5310	Mcs0	16	23.4	29.4	8.4
VHT 20	5260	Mcs0	16.5	23.9	29.9	9.7
VHT 20	5280	Mcs0	16	23.6	29.6	9.4
VHT 20	5320	Mcs0	16.5	23.8	29.8	10
VHT 40	5270	Mcs0	16	23.8	29.8	8.8
VHT 40	5310	Mcs0	15.5	23.5	29.5	8.3
VHT 80	5290	Mcs0	16	23.9	29.9	5.6
VHT 160	5250	Mcs0	17	23.6	29.6	5.9
HE 20	5260	Mcs0	17	23.8	29.8	9.4
HE 20	5280	Mcs0	17	23.9	29.9	9.6
HE 20	532	Mcs0	17	23.7	29.7	9.2
HE 40	5270	Mcs0	16	23.8	29.8	8.8
HE 40	5310	Mcs0	16	23.5	29.5	8.3
HE 80	5290	Mcs0	16.5	23.9	29.9	5.6
HE 160	5250	Mcs0	12.5	20.8	26.8	3.6

5.6.2 UNII-2C

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power	Measured EIRP	Measured PSD
OFDM 20	5500	Mcs0	16	23.8	29.8	10
OFDM 20	5600	Mcs0	16	23.8	29.8	10.5
OFDM 20	5720	Mcs0	15.5	23.6	29.6	10
HT 20	5500	Mcs0	16	23.6	29.6	9.9
HT 20	5600	Mcs0	16	23.8	29.8	10.1
HT 20	5720	Mcs0	16	23.9	29.9	10.4
HT 40	5510	Mcs0	16	23.8	29.8	8.8
HT 40	5590	Mcs0	16	23.9	29.9	8.8
HT 40	5710	Mcs0	15.5	23.6	29.6	8.5
VHT 20	5500	Mcs0	16	23.8	29.8	10
VHT 20	5600	Mcs0	16	23.7	29.7	10
VHT 20	5720	Mcs0	16	24	30	10.1
VHT 40	5510	Mcs0	16	23.8	29.8	8.7
VHT 40	5590	Mcs0	16	23.8	29.8	8.8
VHT 40	5710	Mcs0	15.5	23.6	29.6	8.5
VHT 80	5530	Mcs0	16	24	30	5.5
VHT 80	5610	Mcs0	16	23.9	29.9	5.6
VHT 80	5690	Mcs0	15.5	23.6	29.6	4.9
HE 20	5500	Mcs0	18.5	23.6	29.6	2.8
HE 20	5600	Mcs0	17	23.9	29.9	9.4
HE 20	5720	Mcs0	16.5	23.6	29.6	9.2
HE 40	5510	Mcs0	16.5	23.7	29.7	9.3
HE 40	5590	Mcs0	16.5	23.6	29.6	8
HE 40	5710	Mcs0	16.5	23.5	29.5	7.8
HE 80	5530	Mcs0	16.5	23.8	29.8	7.9
HE 80	5610	Mcs0	16.5	23.6	29.6	5.3
HE 80	5690	Mcs0	16.5	23.6	29.6	5.2
HE 160	5570	Mcs0	16.5	23.7	29.7	5.1

Result

The maximum average power spectral density was less than the limit of 8 dBm; therefore, the EUT complies with the specification.

5.7 DFS Requirement

This product is a master. The outcome of the required DFS tests is located in the DFS Test Report. The product passes all required DFS tests for a master.

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not Required	Yes
<i>DFS Detection Threshold</i>	Yes	Not Required	Yes
<i>Channel Availability Check Time</i>	Yes	Not Required	Not Required
<i>U-NII Detection Bandwidth</i>	Yes	Not Required	Yes

Requirement	Operational Mode	
	Master Client Without Radar Detection	Client With Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not Required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not Required

-- End of Test Report --