

427 West 12800 South Draper, UT 84020

Test Report

Certification

FCC ID	SWX-U6IWR	
IC ID	6545A-U6IWR	
Equipment Under Test	U6-IW	
Test Report Serial Number	TR6360_01	
Date of Tests	14, 28 July and 5 August 2021	
Report Issue Date	12 August 2021	

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





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 C. 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-IW
FCC ID	SWX-U6IWR
IC ID	6545A-U6IWR

On this 12th day of August 2021, 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: Kimberly Rodriguez

Reviewed By: Richard L. Winter



Revision History		
Revision	Description	Date
01	Original Report Release	12 August 2021



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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-IW	
Serial Number	68D79A1F4699	
Dimensions (cm)	9.60 x 13.97 x 2.61	

2.2 Description of EUT

The Access Point WiFi 6 In-Wall (U6 IW) is a dual-band, wall-mounted access point that not only brings the power of plug-and-play WiFi 6 to your home or office, but also features a built-in, PoE switch with (4) Gigabit RJ45 ports to connect and power Ethernet devices. With its 2.4 and 5 GHz WiFi 6 bands, the U6 IW offers an aggregate, over-the-air throughput rate of 5.3 Gbps, which can support over 300 client devices. The U6 IW is also Bluetooth-compatible so it can be set up in minutes and managed from anywhere via the UniFi Network web application or mobile app. The table below shows the channels used within the different modulation bandwidths.

This report covers the circuitry of the device subject to FCC Part 15, Subpart C. 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 test 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-IW SN: 68D79A1F4699	Wifi Access Point	See section 2.4
BN: Ubiquiti MN: UVC G3 Flex SN: N/A	Video Camera	Shielded or Un-Shielded Cat 5e cable (Note 2)
BN: Ubiquiti MN: U-POE-at SN: N/A	PoE Power Adapter	Shielded or Un-Shielded Cat 5e cable (Note 2)
BN: Dell MN: XPS 13 SN: N/A	Laptop Personal Computer	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
РоЕ	1	Shielded/Un-Shielded Cat 5/< 3 meters
Ethernet Ports	4	Shielded/Un-Shielded Cat 5/< 3 meters

2.5 Operating Environment

Power Supply	120 VAC
AC Mains Frequency	60 Hz
Temperature	25.5 – 26.6 °C
Humidity	37.91 – 42.25 %
Barometric Pressure	1007 mBar

2.6 Operating Modes

The U6-IW was tested using testing software to enable constant transmission above 98%. All emission modes of 802.11 a/n/ac/ax were investigated. All measurements are reported with the worst-case mode (802.11ax) unless otherwise stated.

2.7 EUT Exercise Software

Ubiquiti testing software Atheros Radio Test (ART) and firmware version 1.0 were utilized for control of the EUT transceivers.



2.8 Block Diagram of Test Configuration

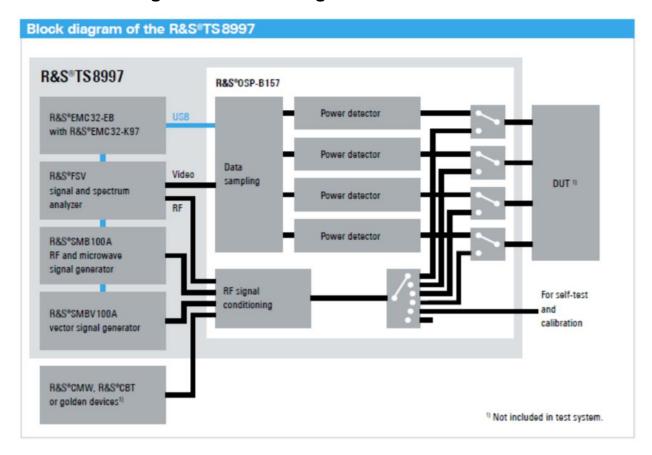


Diagram 1: Test Configuration Block Diagram

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

Limits and methods of measurement of radio interference cha radio frequency devices. Purpose of Test The tests were performed to demonstrate initial compliance	
Title	47 CFR FCC Part 15, Subpart C 15.203, 15.207 and 15.247

3.2 Methods & Procedures

3.2.1 47 CFR FCC Part 15 Section 15.203

See test standard for details.

3.2.2 47 CFR FCC Part 15 Section 15.207

See test standard for details.

3.2.3 47 CFR FCC Part 15 Section 15.247

See test standard for details.

3.3 FCC Part 15, Subpart C

3.3.1 Summary of Tests

FCC Section	ISED Section	Environmental Phenomena	Frequency Range (MHZ)	Result
15.203	N/A	Antenna requirements	Structural Requirement	Compliant
15.207	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.247(a)	RSS-247 § 5.2	Bandwidth Requirement	2402 to 2480	Compliant
15.247(b)	RSS-247 § 5.4	Peak Output Power	2402 to 2480	Compliant
15.247(d)	RSS-247 § 5.4	Antenna Conducted Spurious Emissions	30 to 26000	Compliant
15.247(d)	RSS-247 § 5.4	Radiated Spurious Emissions	30 to 26000	Compliant
15.247(e)	RSS-247 § 5.2	Peak Power Spectral Density	2402 to 2480	Compliant

The testing was performed according to the procedures in ANSI C63.10-2013, KDB 558074 and 47 CFR Part 15. Where applicable, KDB 662911 was followed to sum required measurements.



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 3-meter and 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 2022. This site has also been registered with Innovations, Science and Economic Development (ISED) department and was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2022. 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	9/17/2021
LISN	AFJ	LS16C/10	UCL-2512	5/26/2020	5/26/2022
Cat6 ISN	Teseq	ISN T8- Cat6	UCL-2971	5/18/2020	5/18/2022
ISN	Teseq	ISN T800	UCL-2974	6/4/2021	6/4/2022
LISN	Com-Power	LIN-120C	UCL-2612	5/19/2021	5/19/2022
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

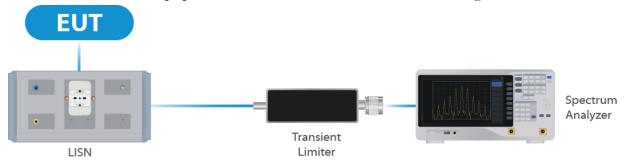


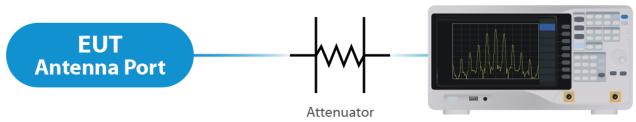
Figure 1: Conducted Emissions Test

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	9/8/2020	9/8/2021
Switch Extension	R&S	OSP-150W	UCL-2870	3/3/2021	3/3/2022

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





Spectrum Analyzer

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	6/21/2021	6/21/2022
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	9/10/2020	9/10/2021
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	7/8/2021	7/8/2022
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	11/16/2020	11/16/2021
15 - 40 GHz Horn Antenna	Scwarzbeck	ввна 9170	UCL-2487	5/21/2020	5/21/2022
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	9/29/2020	9/29/2021
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A

Table 3: List of equipment used for Radiated Emissions

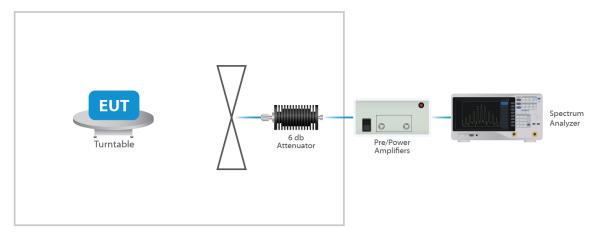


Figure 3: Radiated Emissions Test

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 (± 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

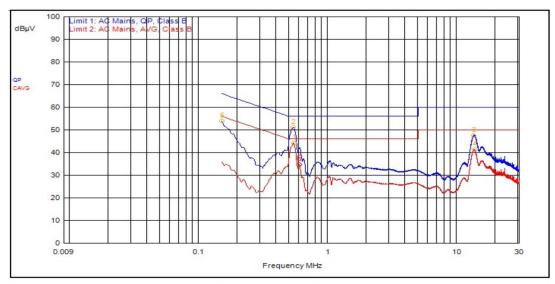
5.1 §15.203 Antenna Requirements

The EUT uses an integral. The Maximum gain of the antenna is 5 dBi. The antenna is not user replaceable.

Results

The EUT complied with the specification

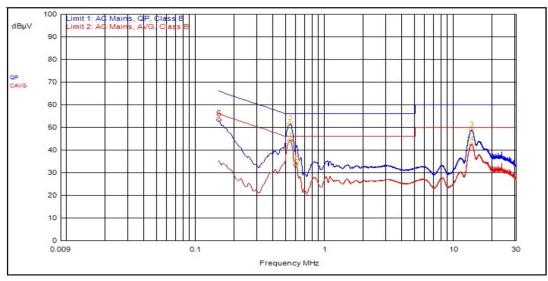
5.2 Conducted Emissions at Mains Ports Data



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.
2	534,000kHz	12.4	0.0		QPeak	38.6	51.1	56.0	-4.9		
5	150,000kHz	12.4	0.0		QPeak	41.5	53.9	66.0	-12.1		
3	13.398MHz	12.4	0.2		QPeak	35.0	47.6	60.0	-12.4		
1	540,000kHz	12.4	0.0		C_AVG	31.8	44.2			46.0	-1.8
4	13.440MHz	12.4	0.2		C_AVG	28.6	41.3			50.0	-8.7
6	594,000kHz	12.4	0.0		C_AVG	22.2	34.6			46.0	-11.4

Graph 1: Conducted Emissions Plot - Neutral





ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.
2	531,000kHz	12.4	0.0		QPeak	39.2	51.6	56.0	-4.4		
3	13.533MHz	12.4	0.2		QPeak	36.2	48.8	60.0	-11.2		
6	150,000kHz	12.4	0.0		QPeak	41.1	53.4	66.0	-12.6		
1	531,000kHz	12.4	0.0		C_AVG	31.8	44.2			46.0	-1.8
4	13.503MHz	12.4	0.2		C_AVG	29.8	42.5			50.0	-7.5
5	591,000kHz	12.4	0.0		C_AVG	21.8	34.2			46.0	-11.8

Graph 2: Conducted Emissions Plot – Line 1

Result

The EUT complied with the specification limit.

5.3 §15.247(a)(2) Emissions Bandwidth

Frequency (MHz)	Emissions 6 dB Bandwidth (MHz)	Emissions 99% Bandwidth (MHz)		
2402	0.73	1.03		
2442	0.73	1.03		
2480	0.73	1.02		

Result

In the configuration tested, the 6 dB bandwidth was greater than 500 kHz; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plot within the Annex).



5.4 §15.247(b)(3) Maximum Average Output Power

The maximum average RF conducted output power measured for this device was 13.35 dBm or 21.63 mW. The limit is 30 dBm or 1 Watt when using antennas with 6 dBi or less gain. The antenna has a gain of 5 dBi.

Frequency (MHz)	Measured Output Power (dBm)	Output Power (mW)			
2402	13.35	21.63			
2442	13.20	20.89			
2480	13.11	20.46			

Result

In the configuration tested, the maximum average RF output power was less than 1 watt; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plot within the Annex).

5.5 §15.247(d) Spurious Emissions

5.5.1 Conducted Spurious Emissions

The frequency ranges within the lowest frequency generated by, or used in, the device to the tenth harmonic of the highest fundamental frequency were investigated to measure any antenna-conducted emissions. The table show the measurement data from spurious emissions noted across the frequency range when transmitting at the lowest frequency, middle frequency and upper frequency. Shown within the Annex are plots with the EUT tuned to the upper and lower channels. These demonstrate compliance with the provisions of this section at the band edges.

The emissions must be attenuated 30 dB below the highest power spectral density level measured within the authorized band as measured with a 100 kHz RBW.

Result

Conducted spurious emissions were attenuated 30 dB or more below the fundamental; therefore, the EUT complies with the specification.

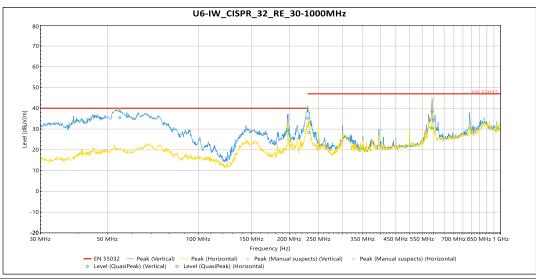
5.5.2 Radiated Spurious Emissions in the Restricted Bands of §15.205

The ranges within the lowest frequency used in and generated by the device to the tenth harmonic of the highest fundamental emissions were investigated. These tests were used to measure any radiated emissions (RE) in the restricted bands. The following tables show the measurements of those emissions that lay within the restricted bands of §15.205. Worst-case scenarios are measured at a distance of 1 meter for frequencies above 18GHz. The noise floor was a minimum of 6 dB below the required limits with emissions in the restricted bands meeting the limits specified in §15.209. Spurious emission data for each frequency range and plots of band edge are shown below.



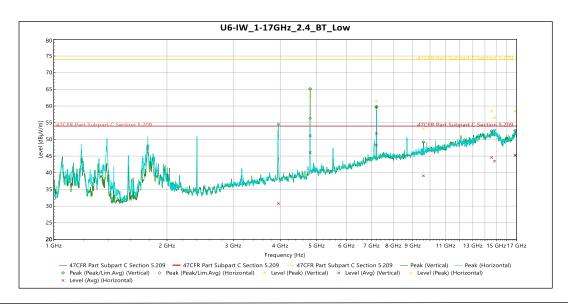
Result

All emissions in the restricted bands of §15.205 met the limits specified in §15.209; therefore, the EUT complies with the specification.



Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Meas. Time	RBW	Meas.Time	Correction (dB)
QuasiPeak	54.959 MHz	35.471	40	-4.529	259	3.416	Vertical	15	120000	0.001	-12.73
QuasiPeak	230.09 MHz	35.209	47	-11.791	125	1.12	Vertical	15	120000	0.001	-13.498
QuasiPeak	593.54 MHz	38.548	47	-8.452	4	2.957	Vertical	15	120000	0.001	-5.374
QuasiPeak	197.08 MHz	29.5	40	-10.5	225	3.882	Horizontal	15	120000	0.001	-13.826
QuasiPeak	232.32 MHz	28.288	47	-18.712	258	3.921	Horizontal	15	120000	0.001	-13.365
QuasiPeak	592.59 MHz	30.544	47	-16.456	50	3.855	Horizontal	15	120000	0.001	-5.407

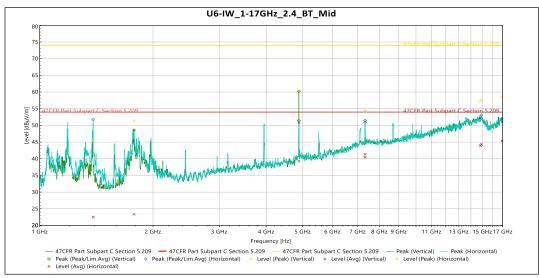
Table 4: Radiated Emissions 30 - 1000 MHz





Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
Peak	4.8047 GHz	63.068	74	-10.932	348	1.5	Vertical	5	1000000	0	0.095
Peak	7.2054 GHz	61.51	74	-12.49	27	3.444	Vertical	5	1000000	0	7.129
Peak	9.6089 GHz	53.254	74	-20.746	4	2.562	Vertical	5	1000000	0	8.694
Peak	14.583 GHz	58.483	74	-15.517	110	2.544	Vertical	5	1000000	0	15.338
Peak	16.843 GHz	58.445	74	-15.555	33	4	Vertical	5	1000000	0	16.917
Avg	4.8047 GHz	51.129	54	-2.871	348	1.5	Vertical	5	1000000	0	0.095
Avg	7.2054 GHz	51.79	54	-2.21	27	3.444	Vertical	5	1000000	0	7.129
Avg	9.6089 GHz	39.102	54	-14.898	4	2.562	Vertical	5	1000000	0	8.694
Avg	14.583 GHz	44.59	54	-9.41	110	2.544	Vertical	5	1000000	0	15.338
Avg	16.843 GHz	45.192	54	-8.808	33	4	Vertical	5	1000000	0	16.917
Peak	3.9561 GHz	51.859	74	-22.141	56	2.919	Horizontal	5	1000000	0	-3.025
Peak	4.8037 GHz	55.143	74	-18.857	281	2.733	Horizontal	5	1000000	0	0.082
Peak	7.2053 GHz	58.969	74	-15.031	359	1.824	Horizontal	5	1000000	0	7.13
Peak	14.842 GHz	56.459	74	-17.541	113	4	Horizontal	5	1000000	0	14.501
Peak	16.862 GHz	58.445	74	-15.555	359	2.566	Horizontal	5	1000000	0	17.062
Avg	3.9561 GHz	30.791	54	-23.209	56	2.919	Horizontal	5	1000000	0	-3.025
Avg	4.8037 GHz	46.073	54	-7.927	281	2.733	Horizontal	5	1000000	0	0.082
Avg	7.2053 GHz	48.242	54	-5.758	359	1.824	Horizontal	5	1000000	0	7.13
Avg	14.842 GHz	43.491	54	-10.509	113	4	Horizontal	5	1000000	0	14.501
Avg	16.862 GHz	45.282	54	-8.718	359	2.566	Horizontal	5	1000000	0	17.062

Table 5: RE Transmitting at the Lowest Frequency 2402 MHz – 1-17 GHz

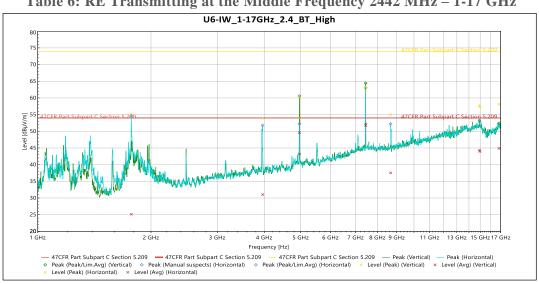


Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
Peak	1.7805 GHz	51.389	74	-22.611	270	2.009	Vertical	5	1000000	0	-9.572
Peak	4.8836 GHz	60.294	74	-13.706	349	1.5	Vertical	5	1000000	0	0.337
Peak	7.3269 GHz	54.267	74	-19.733	39	2.721	Vertical	5	1000000	0	7.569
Peak	14.815 GHz	57.358	74	-16.642	114	1.828	Vertical	5	1000000	0	15.002
Avg	1.7805 GHz	23.352	54	-30.648	270	2.009	Vertical	5	1000000	0	-9.572
Avg	4.8836 GHz	50.844	54	-3.156	349	1.5	Vertical	5	1000000	0	0.337



Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
Avg	7.3269 GHz	40.481	54	-13.519	39	2.721	Vertical	5	1000000	0	7.569
Avg	14.815 GHz	43.984	54	-10.016	114	1.828	Vertical	5	1000000	0	15.002
Peak	1.3873 GHz	45.304	74	-28.696	277	2.019	Horizontal	5	1000000	0	-11.368
Peak	4.8848 GHz	52.315	74	-21.685	290	2.372	Horizontal	5	1000000	0	0.345
Peak	7.3258 GHz	54.449	74	-19.551	358	2.044	Horizontal	5	1000000	0	7.568
Peak	14.923 GHz	57.629	74	-16.371	284	1.643	Horizontal	5	1000000	0	15.143
Peak	16.93 GHz	58.476	74	-15.524	73	2.544	Horizontal	5	1000000	0	17.045
Avg	1.3873 GHz	22.522	54	-31.478	277	2.019	Horizontal	5	1000000	0	-11.368
Avg	4.8848 GHz	39.265	54	-14.735	290	2.372	Horizontal	5	1000000	0	0.345
Avg	7.3258 GHz	41.343	54	-12.657	358	2.044	Horizontal	5	1000000	0	7.568
Avg	14.923 GHz	44.319	54	-9.681	284	1.643	Horizontal	5	1000000	0	15.143
Avg	16.93 GHz	45.348	54	-8.652	73	2.544	Horizontal	5	1000000	0	17.045

Table 6: RE Transmitting at the Middle Frequency 2442 MHz – 1-17 GHz

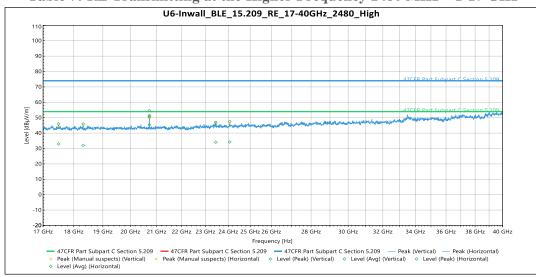


Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
Peak	4.9594 GHz	60.24	74	-13.76	355	1.5	Vertical	5	1000000	0	0.553
Peak	7.4407 GHz	63.426	74	-10.574	22	3.45	Vertical	5	1000000	0	7.691
Peak	14.929 GHz	57.731	74	-16.269	352	3.267	Vertical	5	1000000	0	15.128
Peak	16.818 GHz	58.104	74	-15.896	234	1.5	Vertical	5	1000000	0	16.771
Avg	4.9594 GHz	49.566	54	-4.434	355	1.5	Vertical	5	1000000	0	0.553
Avg	7.4407 GHz	51.701	54	-2.299	22	3.45	Vertical	5	1000000	0	7.691
Avg	14.929 GHz	44.326	54	-9.674	352	3.267	Vertical	5	1000000	0	15.128
Avg	16.818 GHz	44.88	54	-9.12	234	1.5	Vertical	5	1000000	0	16.771
Peak	1.7727 GHz	55.284	74	-18.716	321	2.04	Horizontal	5	1000000	0	-9.63
Peak	3.96 GHz	53.919	74	-20.081	40	1.647	Horizontal	5	1000000	0	-2.977
Peak	4.9595 GHz	54.041	74	-19.959	306	2.009	Horizontal	5	1000000	0	0.553
Peak	7.4396 GHz	62.1	74	-11.9	53	1.824	Horizontal	5	1000000	0	7.701
Peak	8.6685 GHz	55.044	74	-18.956	14	2.368	Horizontal	5	1000000	0	8.548
Peak	14.973 GHz	57.273	74	-16.727	235	3.083	Horizontal	5	1000000	0	14.755



Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
Avg	1.7727 GHz	25.133	54	-28.867	321	2.04	Horizontal	5	1000000	0	-9.63
Avg	3.96 GHz	31.018	54	-22.982	40	1.647	Horizontal	5	1000000	0	-2.977
Avg	4.9595 GHz	43.167	54	-10.833	306	2.009	Horizontal	5	1000000	0	0.553
Avg	7.4396 GHz	52.203	54	-1.797	53	1.824	Horizontal	5	1000000	0	7.701
Avg	8.6685 GHz	37.543	54	-16.457	14	2.368	Horizontal	5	1000000	0	8.548
Avg	14.973 GHz	43.956	54	-10.044	235	3.083	Horizontal	5	1000000	0	14.755

Table 7: RE Transmitting at the Higher Frequency 2480 MHz – 1-17 GHz



Source	Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Meas. Time (s)	RBW	Meas.Time	Correction (dB)
		(αΒ μ ν /III)	(αΒμ ٧/ΙΙΙ)	(ub)			Time (s)			(ub)
Peak	18.317 GHz	46.017	74	-27.983	65	Vertical	5	1000000	0	-6.314
Peak	20.72 GHz	51.38	74	-22.62	304	Vertical	5	1000000	0	-5.439
Peak	24.063 GHz	47.487	74	-26.513	270	Vertical	5	1000000	0	-4.867
Avg	18.317 GHz	32.047	54	-21.953	65	Vertical	5	1000000	0	-6.314
Avg	20.72 GHz	45.46	54	-8.54	304	Vertical	5	1000000	0	-5.439
Avg	24.063 GHz	34.26	54	-19.74	270	Vertical	5	1000000	0	-4.867
Peak	17.498 GHz	46.08	74	-27.92	243	Horizontal	5	1000000	0	-5.905
Peak	20.72 GHz	54.662	74	-19.338	146	Horizontal	5	1000000	0	-5.439
Peak	23.447 GHz	46.967	74	-27.033	65	Horizontal	5	1000000	0	-4.491
Avg	17.498 GHz	32.986	54	-21.014	243	Horizontal	5	1000000	0	-5.905
Avg	20.72 GHz	50.704	54	-3.296	146	Horizontal	5	1000000	0	-5.439
Avg	23.447 GHz	34.076	54	-19.924	65	Horizontal	5	1000000	0	-4.491

Table 8: RE Transmitting at the Higher Frequency (Worse Case) 2480 MHz - 17-40 GHz

5.6 §15.247(e) Maximum Average Power Spectral Density

The maximum average power spectral density conducted from the intentional radiator of the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. Results of this testing are summarized.



Frequency (MHz)	Measurement (dBm)	Criteria (dBm)		
2402	1.14	8.0		
2442	1.18	8.0		
2480	1.24	8.0		

Result

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

-- End of Test Report --

