



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-E7
ISED ID	6545A-E7
Equipment Under Test	E7
Test Report Serial Number	TR9009_02
Date of Test(s)	22, 23 February and 11, 16, 25 April 2024
Report Issue Date	9 May 2024

Test Specification	Applicant
47 CFR FCC Part 15, Subpart E	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 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.

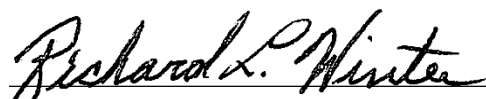
Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UBIQUITI
Model Number	E7
FCC ID	SWX-E7
ISED ID	6545A-E7

On this 9th day of May 2024, 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: Evan J. Hartzell


Reviewed By: Richard L. Winter

Revision History		
Revision	Description	Date
01	Original Report Release	9 May 2024
02	Amended KDB Reference in Sections 5.3, 5.4 and 5.6	27 September 2024

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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	Alex Macon
Title	Compliance

1.2 Manufacturer

Company	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
Contact Name	Alex Macon
Title	Compliance

2 Equipment Under Test (EUT)

2.1 Identification of EUT

Brand Name	UBIQUITI
Model Number	E7
Serial Number	1FD62F
Dimensions (cm)	25 x 25 x 4.35

2.2 Description of EUT

The E7 is a WiFi 7 access point with (1) 10GbE PoE port and (1) 1GbE PoE port. The E7 transmits in the 2.4 GHz, 5 GHz, and 6 GHz frequency bands using integral antennas and is powered by an 802.3at PoE power adapter.

The table below show the channels used within the different modulation bandwidths.

Band	WiFi Mode	Modulation Bandwidth	Modulation Type	Frequency (MHz)
UNII-3	a	20 MHz	OFDM	5745, 5775, 5825
	ax	20 MHz	HE	5745, 5775, 5825
	ax	40 MHz	HE	5755, 5775, 5795
	ax	80 MHz	HE	5775

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 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: UBIQUITI MN: E7 SN: 1FD62F	Access Point	PoE Input / Shielded Cat 5E cable
BN: UBIQUITI MN: GP-h480-065G SN: N/A	PoE Injector	PoE Output / Shielded Cat 5E to E7, and Ethernet / unshielded Cat 5E to PC
BN: DELL MN: XPS SN: N/A	Laptop PC	Ethernet / un-shielded Cat 5E

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
PoE Input	1	7m Shielded Cat 5E
PoE Output (PoE Injector)	1	7m Shielded Cat 5E to E7 PoE Input
LAN (PoE Injector)	1	unshielded Cat 5E to Laptop PC
AC (PoE Injector)	1	3 Conductor power cord to AC mains/80cm

2.5 Operating Environment

Power Supply	120 VAC
AC Mains Frequency	60 Hz
Temperature	19.6-22.7 °C
Humidity	21.42-29.03 %
Barometric Pressure	1017 mBar

2.6 Operating Modes

The E7 was tested using test software in order to enable a constant transmission. The measurements within this report are corrected to reference a 100% duty cycle. All emission modes of 802.11 a/ax were investigated. All measurements are reported with the worst-case mode (802.11ax) unless otherwise stated.

2.7 EUT Exercise Software

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

2.8 Block Diagram of Test Configuration

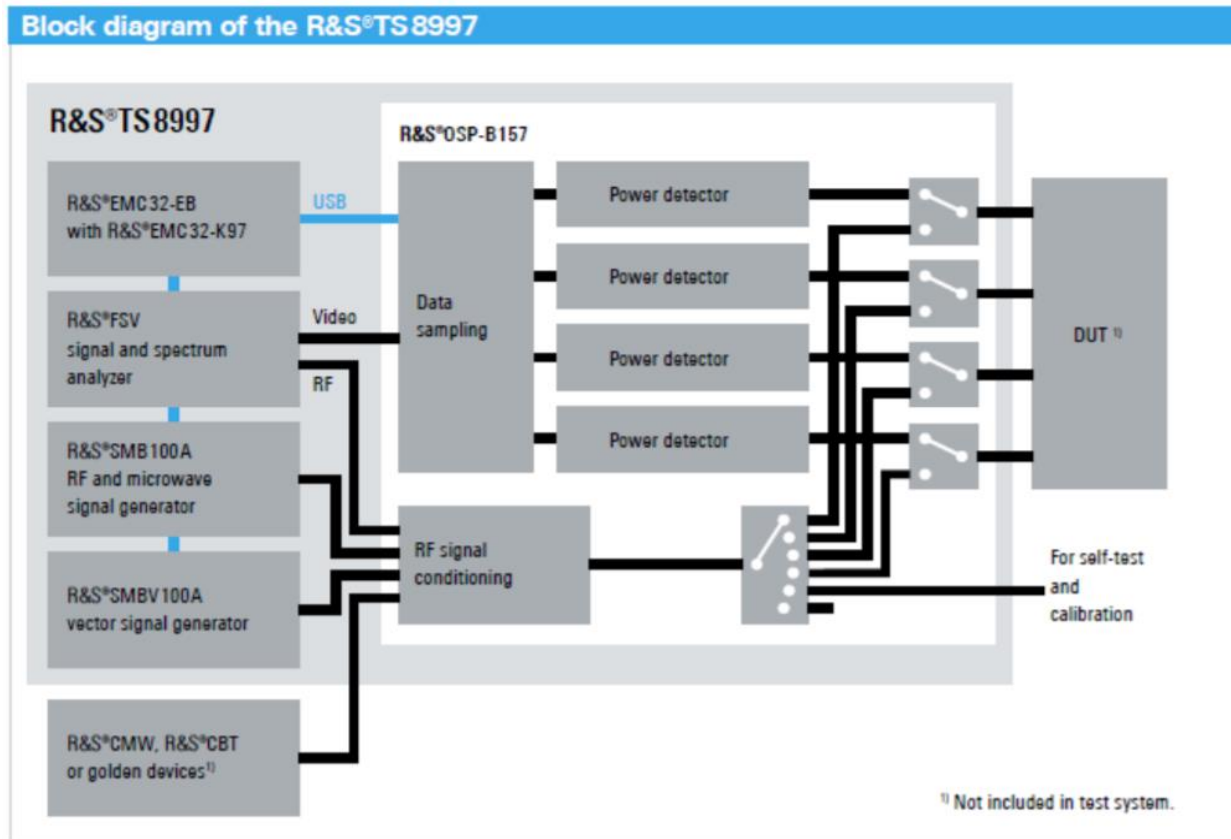


Diagram 1: Test Configuration Block Diagram

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	5725 to 5850	Compliant
15.407(e)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5725 to 5850	Compliant
15.407(f)	RSS-247 §6.2.2, §6.2.3	Antenna Conducted Spurious Emissions	0.009 to 40000	N/A
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	5725 to 5850	Compliant
The testing was performed according to the procedures in ANSI C63.10-2013, KDB 789033 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 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 2024. 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 30 June 2024.

Unified Compliance Laboratory has been assigned Designation Number US5037 by the FCC and 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	7/13/2023	7/13/2024
LISN	AFJ	LS16C/10	UCL-2512	5/26/2023	5/26/2024
ISN	Teseq	ISN T800	UCL-2974	6/27/2023	6/27/2024
LISN	AFJ	LS16C\10	UCL-6749	1/29/2024	1/29/2025
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

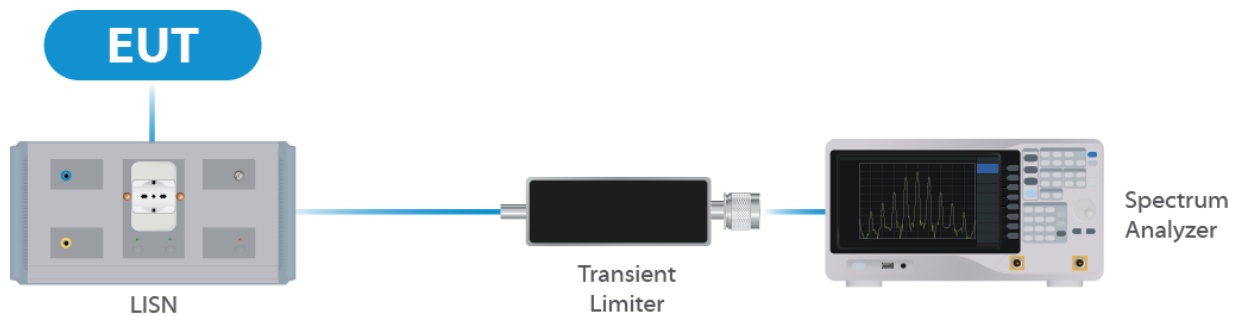


Figure 1: Conducted Emissions Test

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	11/27/2023	11/27/2024
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	4/12/2024	4/19/2025
Switch Extension	R&S	OSP-150W	UCL-2870	4/12/2024	4/19/2025

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

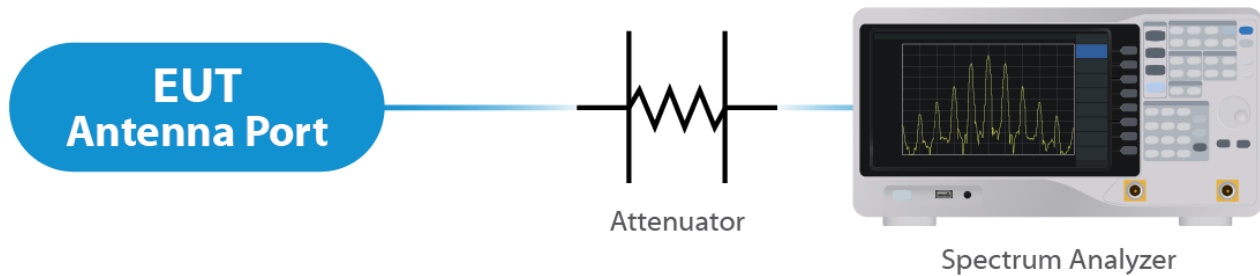


Figure 2: Direct Connect at the Antenna Port Test



Figure 3: Output Power Measurement

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	1/25/2024	1/29/2025
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	1/19/2024	1/19/2026
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3062	2/22/2023	2/22/2025
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3071	1/11/2023	1/11/2025
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	9/22/2022	9/22/2024
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	1/27/2023	1/27/2025
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	6/09/2022	6/09/2024
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	1/19/2024	1/19/2026
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A

Table 3: List of equipment used for Radiated Emissions

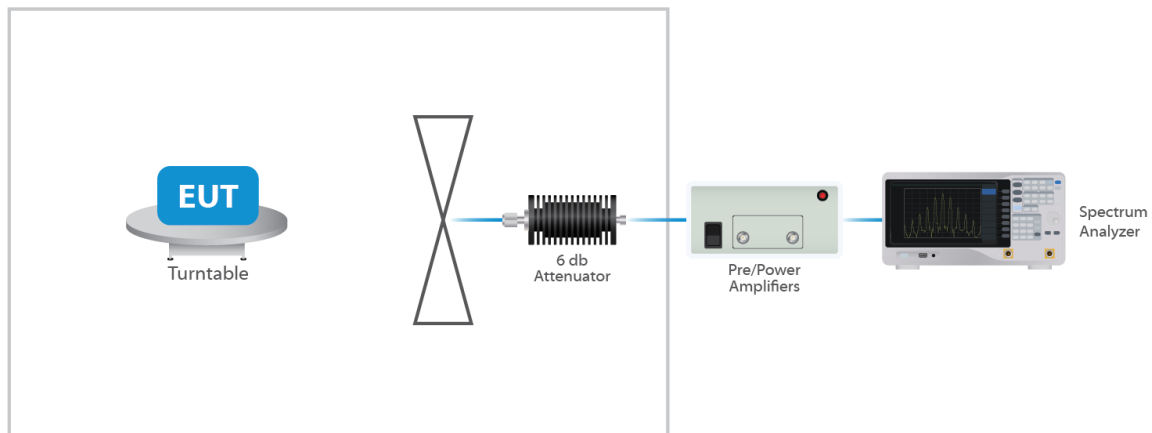


Figure 4: Radiated Emissions Test

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 internal antenna. Per the manufacturer, the Maximum gain of the antenna per chain is 6 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is not user replaceable. For CDD transmissions, directional gain is calculated as follows.

Array Gain = $10 \log(\text{NANT}/\text{NSS})$ dB

NANT = number of transmit antennas and

NSS = number of spatial streams. NSS = 1 considered worst case.

For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for $\text{NANT} \leq 4$;

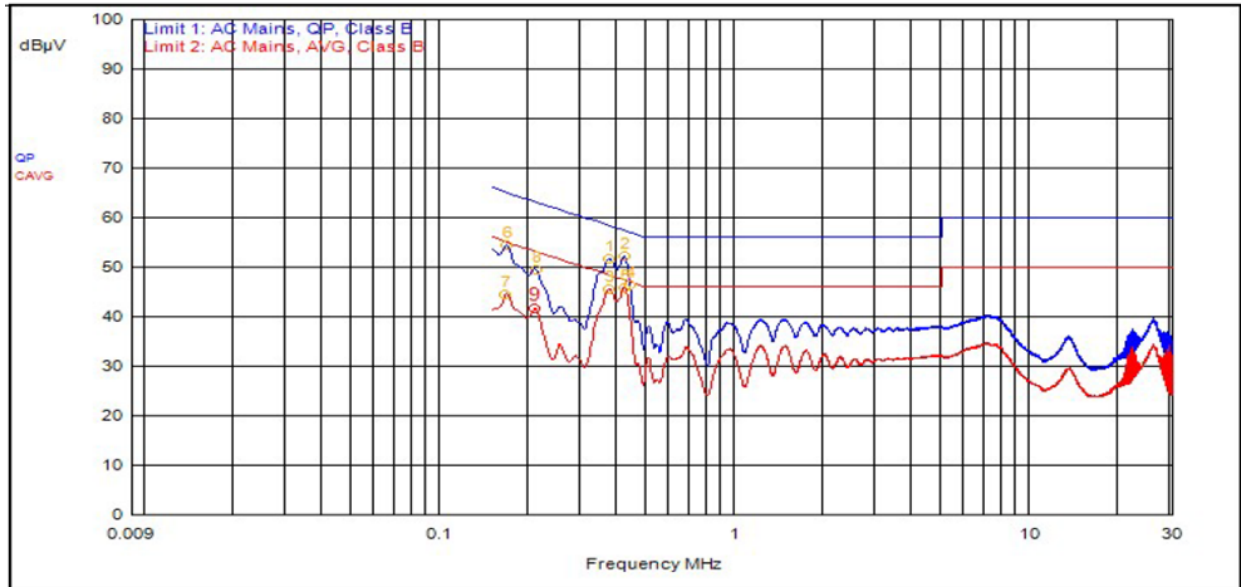
For PSD measurements when $\text{Nss}=1$: Array Gain = $10 \log(\text{NANT}/\text{NSS})$ dB + Antenna Gain (dBi). Or
 $6.02 \text{ dB} + 6 \text{ dBi} = 12.02 \text{ dBi}$.

Results

The EUT complied with the specification

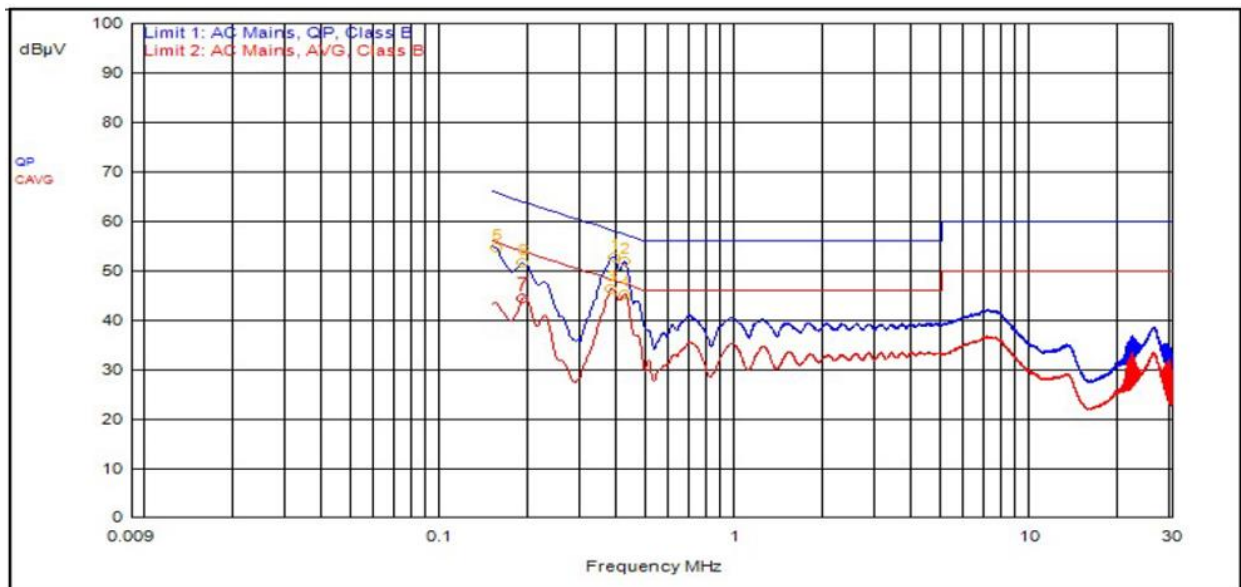
5.2 Conducted Emissions at Mains Ports Data

5.2.1 Line



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.	P/F
MU	MHz	dB	dB	dB	Type	dBμV	dBμV	dBμV	dB	dBμV	dB	P/F
2	417,000kHz	12.39	0.00		QPeak	39.76	52.15	57.51	-5.36			
1	369,000kHz	12.37	0.00		QPeak	39.39	51.76	58.52	-6.77			
6	168,000kHz	12.35	0.00		QPeak	42.03	54.38	65.06	-10.68			
4	438,000kHz	12.40	0.00		QPeak	33.97	46.37	57.10	-10.73			
8	210,000kHz	12.37	0.00		QPeak	37.09	49.46	63.21	-13.75			
3	369,000kHz	12.37	0.00		C_AVG	33.20	45.57			48.52	-2.96	
5	417,000kHz	12.39	0.00		C_AVG	33.55	45.94			47.51	-1.56	
7	165,000kHz	12.36	0.00		C_AVG	31.95	44.31			55.21	-10.90	
9	207,000kHz	12.37	0.00		C_AVG	29.23	41.60			53.32	-11.72	

5.2.2 Neutral



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.	P/F
MU	MHz	dB	dB	dB	Type	dBμV	dBμV	dBμV	dB	dBμV	dB	P/F
1	384,000kHz	12.39	0.00		QPeak	40.41	52.80	58.19	-5.40			
2	417,000kHz	12.40	0.00		QPeak	39.46	51.86	57.51	-5.65			
5	153,000kHz	12.37	0.00		QPeak	42.36	54.73	65.84	-11.11			
6	189,000kHz	12.41	0.00		QPeak	39.28	51.69	64.08	-12.39			
3	375,000kHz	12.39	0.00		C_AVG	33.92	46.31			48.39	-2.08	
4	417,000kHz	12.40	0.00		C_AVG	32.90	45.30			47.51	-2.21	
7	189,000kHz	12.41	0.00		C_AVG	32.07	44.48			54.08	-9.60	

Result

The EUT complied with the specification limit.

5.3 §15.403(i) 26 dB Emissions Bandwidth

All chains were measured under the guidance of KDB 789033 Section II.C. and KDB 662911 D01.

Please see associated annex for details on instrument settings.

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)
OFDM 20 MHz	5745	25.00	36.70
OFDM 20 MHz	5775	31.68	50.20
OFDM 20 MHz	5825	31.68	47.90
HE 20 MHz	5745	24.50	47.40
HE 20 MHz	5775	32.08	54.00
HE 20 MHz	5825	32.08	62.30
HE 40 MHz	5755	40.40	43.35
HE 40 MHz	5775	38.50	43.23
HE 80 MHz	5795	39.00	60.04
HE 80 MHz	5775	79.00	102.50

Result

All chains were tested and the highest bandwidth per chain is reported above.

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

5.4 §15.407(a)(3) Maximum Average Output Power

All chains were measured and summed under the guidance of KDB 789033 Section II. E.2. and KDB 662911 D01. Please see associated annex for details on instrument settings.

The maximum average RF conducted output power measured for this device was 29.71 dBm or 935.41 mW. The limit is 30 dBm, or 1 Watt when using antennas with 6 dBi or less gain. The antenna has a gain of 6 dBi.

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power	Measured EIRP	Measured PSD
OFDM 20	5745	Mcs0	27	29.45	35.45	11.53
OFDM 20	5775	Mcs0	29	29.71	35.71	11.50
OFDM 20	5825	Mcs0	29	28.88	34.88	10.69
HE 20	5745	Mcs0	27	29.45	35.45	10.99
HE 20	5775	Mcs0	29	29.68	35.68	10.87
HE 20	5825	Mcs0	29	28.82	34.82	10.02
HE 40	5755	Mcs0	23	26.29	32.29	5.33
HE 40	5775	Mcs0	24	26.55	32.55	5.19
HE 40	5795	Mcs0	25	27.14	33.14	5.63
HE 80	5775	Mcs0	23	25.72	31.72	2.06

Result

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

* Gated EIRP shown in the Annex is the conducted measurement

5.5 §15.407(b)(7) Spurious Emissions

5.5.1 Conducted Spurious Emissions

The frequency ranges from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental frequency was investigated to measure any antenna-conducted emissions. The graphs 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 below are plots with the EUT turned to the upper and lower channels with the antenna gain of 6 dBi accounted for. These demonstrate compliance with the provisions of this section at the band edges.

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.

Result

Conducted spurious emissions were attenuated below the limit; therefore, the EUT complies with the specification.

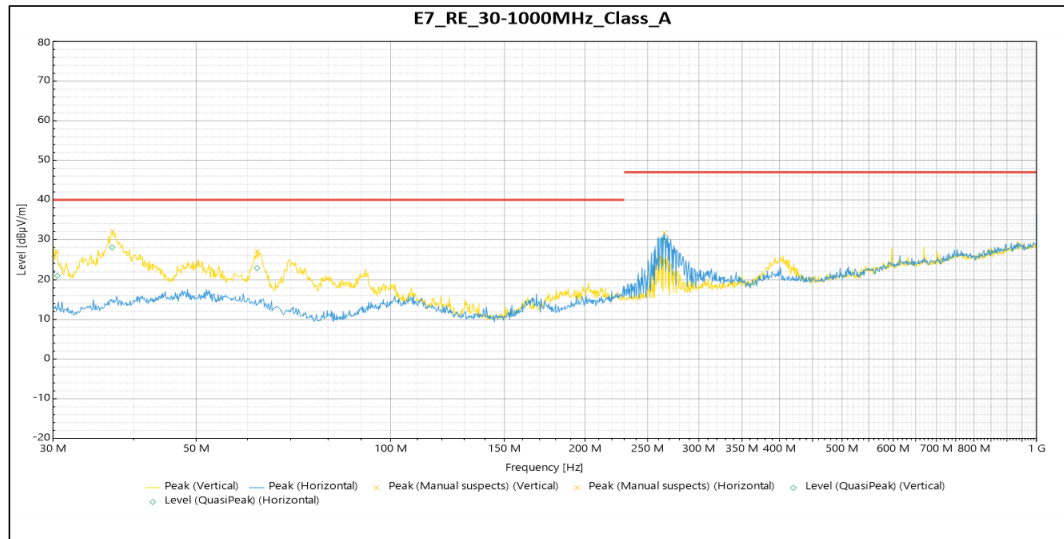
5.5.2 Radiated Spurious Emissions in the Restricted Bands of § 15.205

The EUT uses various power settings based on the channel in use. In order to reduce test time, the radiated spurious emissions at the lowest, middle, and highest channel were measured at the maximum power of TP31.

Correction Factor = Antenna Factor + Cable Loss - Pre-Amplifier Gain, and is added to the Receiver reading.

Result

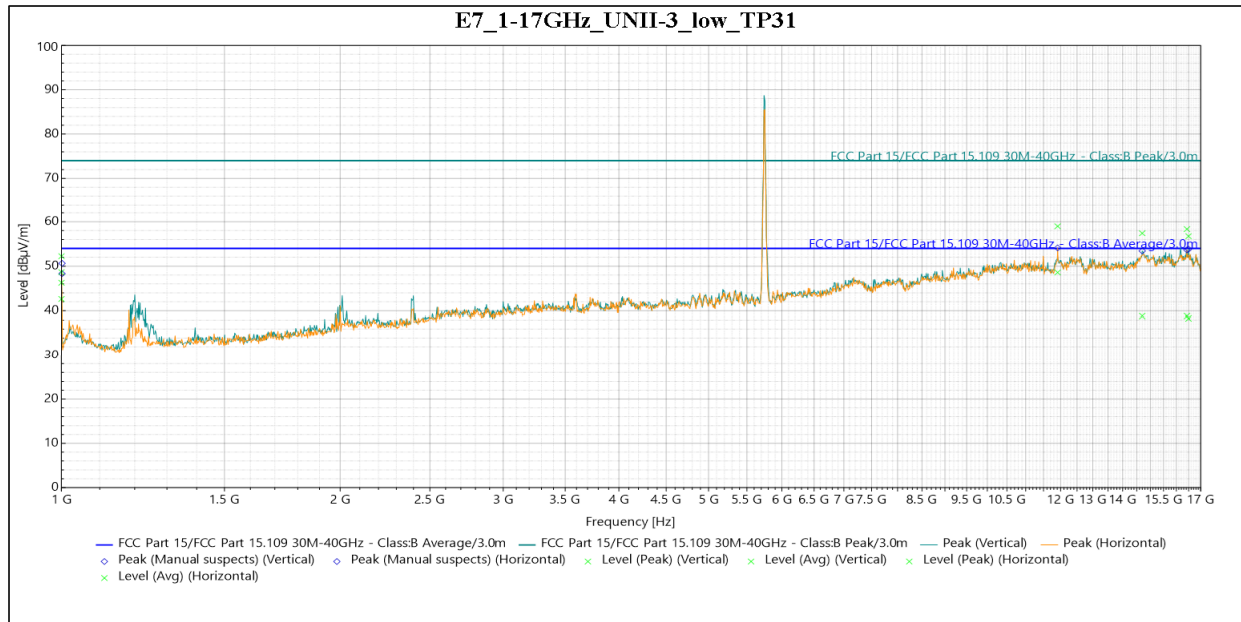
All emissions in the restricted bands of § 15.205 met the limits specified in § 15.209; therefore, the EUT complies with the specification. See Annex for Conducted Band edge plots.



QuasiPeak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
30.455 MHz	21.073	40	-18.927	106	0.999	Vertical	21.073
37.03 MHz	28.019	40	-11.981	238	1.132	Vertical	28.019
62.105 MHz	22.817	40	-17.183	331	3.17	Vertical	22.817
265.26 MHz	29.89	47	-17.11	95	3.35	Horizontal	29.89

Table 4: Radiated Emissions 30 – 1000 MHz



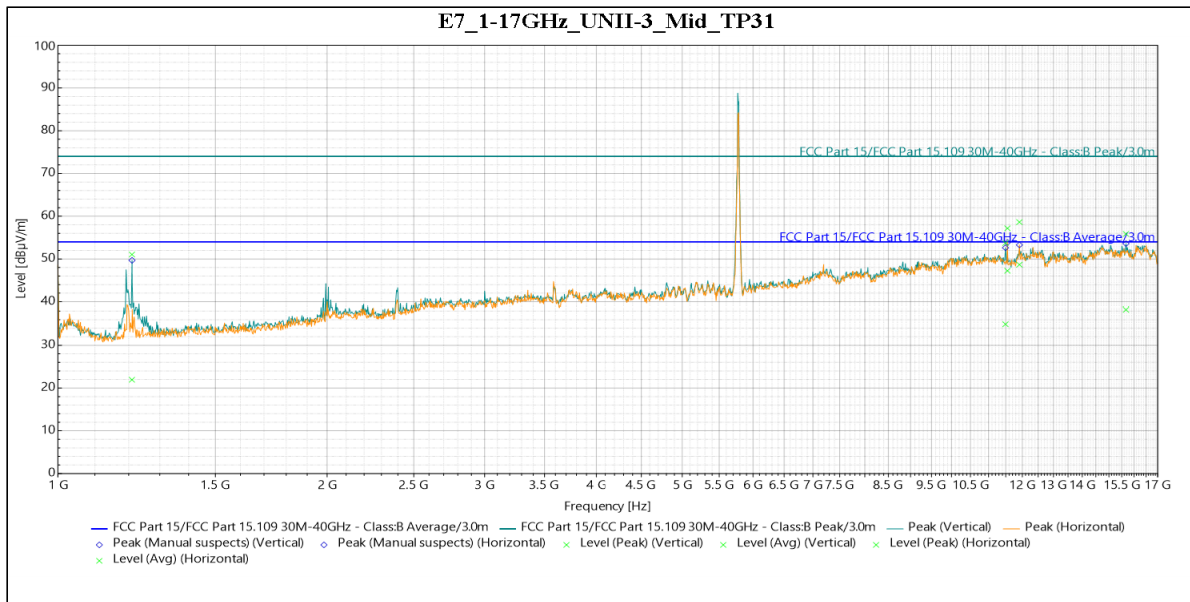
Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.0001 GHz	46.273	74	-27.727	1	3.071	Vertical	-9.173
14.699 GHz	57.415	74	-16.585	358	2.758	Vertical	17.45
16.492 GHz	56.74	74	-17.26	359	1.702	Vertical	18.272
1.0001 GHz	52.249	74	-21.751	256	1.628	Horizontal	-9.173
11.91 GHz	58.978	74	-15.022	47	1.989	Horizontal	16.544
16.427 GHz	58.336	74	-15.664	222	3.613	Horizontal	18.214

Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.0001 GHz	42.621	54	-11.379	1	3.071	Vertical	-9.173
14.699 GHz	38.856	54	-15.144	358	2.758	Vertical	17.45
16.492 GHz	38.34	54	-15.66	359	1.702	Vertical	18.272
1.0001 GHz	48.659	54	-5.341	256	1.628	Horizontal	-9.173
11.91 GHz	48.587	54	-5.413	47	1.989	Horizontal	16.544
16.427 GHz	38.865	54	-15.135	222	3.613	Horizontal	18.214

Table 5: Radiated Emissions 1 – 17 GHz on the Lowest Frequency 5745 MHz



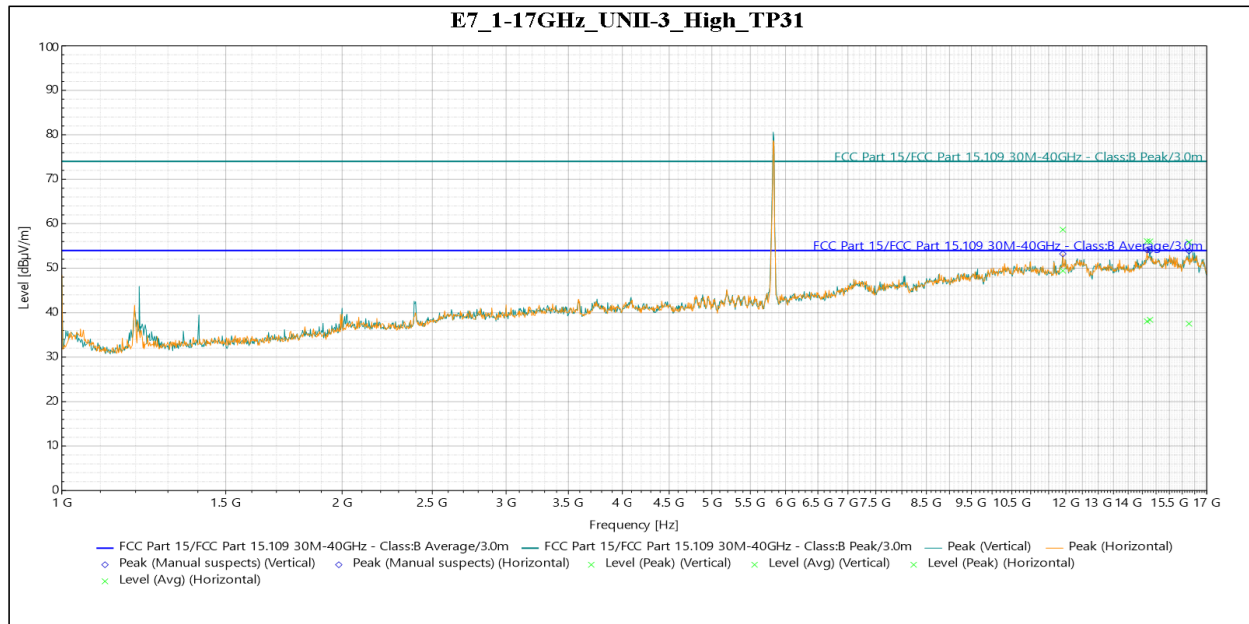
Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.21 GHz	51.047	74	-22.953	19	2.529	Vertical	-8.187
11.49 GHz	53.723	74	-20.277	86	4	Vertical	14.614
15.67 GHz	55.864	74	-18.136	189	1.527	Vertical	16.052
11.55 GHz	57.182	74	-16.818	69	1.63	Horizontal	14.67
11.91 GHz	58.628	74	-15.372	1	1.631	Horizontal	16.544

Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.21 GHz	21.942	54	-32.058	19	2.529	Vertical	-8.187
11.49 GHz	34.932	54	-19.068	86	4	Vertical	14.614
15.67 GHz	38.301	54	-15.699	189	1.527	Vertical	16.052
11.55 GHz	47.238	54	-6.762	69	1.63	Horizontal	14.67
11.91 GHz	48.674	54	-5.326	1	1.631	Horizontal	16.544

Table 6: Transmitting on the Middle Frequency 5775 MHz



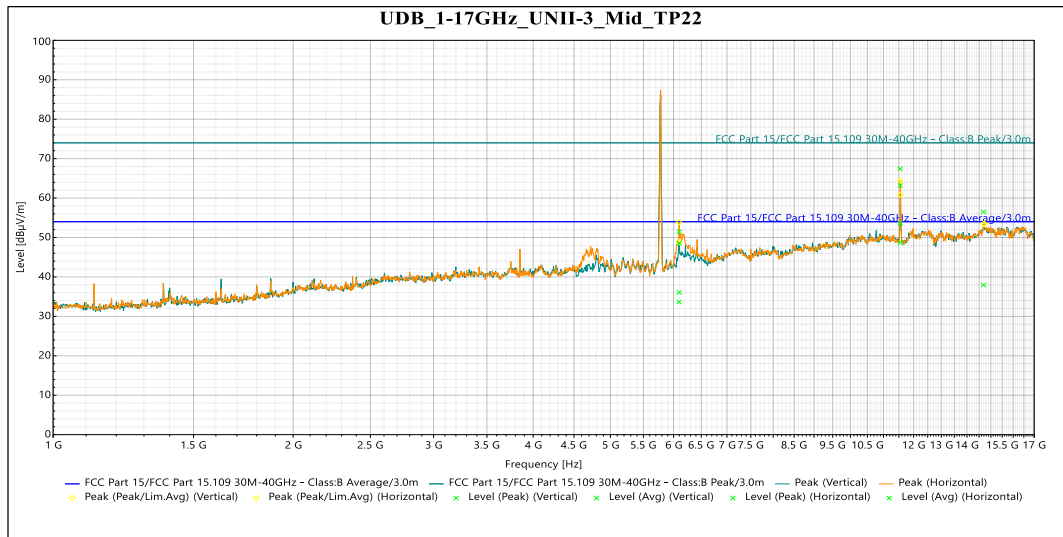
Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.776 GHz	56.026	74	-17.974	103	3.611	Vertical	16.885
16.272 GHz	55.835	74	-18.165	60	3.809	Vertical	17.181
11.91 GHz	58.667	74	-15.333	17	1.704	Horizontal	16.544
14.67 GHz	56.067	74	-17.933	141	1.989	Horizontal	17.075

Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.776 GHz	38.4	54	-15.6	103	3.611	Vertical	16.885
16.272 GHz	37.524	54	-16.476	60	3.809	Vertical	17.181
11.91 GHz	49.432	54	-4.568	17	1.704	Horizontal	16.544
14.67 GHz	38.06	54	-15.94	141	1.989	Horizontal	17.075

Table 7: Transmitting on the Highest Frequency 5825 MHz



Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
20.989 GHz	50.206	74	-23.794	336	Vertical	0.779
23.3 GHz	52.642	74	-21.358	56	Horizontal	0.407
33.056 GHz	51.731	74	-22.269	199	Horizontal	1.615
34.99 GHz	54.787	74	-19.213	38	Horizontal	3.652
37.245 GHz	53.657	74	-20.343	203	Horizontal	4.335
39.738 GHz	53.698	74	-20.302	103	Horizontal	2.849

Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
20.989 GHz	36.481	54	-17.519	336	Vertical	0.779
23.3 GHz	41.616	54	-12.384	56	Horizontal	0.407
33.056 GHz	37.172	54	-16.828	199	Horizontal	1.615
34.99 GHz	36.983	54	-17.017	38	Horizontal	3.652
37.245 GHz	36.319	54	-17.681	203	Horizontal	4.335
39.738 GHz	36.276	54	-17.724	103	Horizontal	2.849

Table 8: Radiated Emissions 17 – 40 GHz on the High Frequency 5825 MHz (worse case)

5.6 §15.407(a) Maximum Power Spectral Density

All chains were measured and summed under the guidance of KDB 789033 Section II. F. and KDB 662911 D01. Please see associated annex for details on instrument settings.

The maximum average power spectral density conducted from the intentional radiator of the antenna shall not be greater than 30 dBm in any 500 kHz band during any time interval of continuous transmission. Results of this testing are summarized.

As per KDB 662911, When the EUT is using spatial-multiplexing in HE modes, there is not additional array gain to accommodate. When the EUT uses Nss=1 data rates, the antenna gain is 6 dBi + Array gain of 6.02 dB which is a total of 12.02 dBi and the limit is reduced by the amount of dB that the directional gain exceeds 6dB (6.02 dB). Therefore, the PSD limits = 23.98 dB.

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power	Measured EIRP	Measured PSD
OFDM 20	5745	Mcs0	27	29.45	35.45	11.53
OFDM 20	5775	Mcs0	29	29.71	35.71	11.50
OFDM 20	5825	Mcs0	29	28.88	34.88	10.69
HE 20	5745	Mcs0	27	29.45	35.45	10.99
HE 20	5775	Mcs0	29	29.68	35.68	10.87
HE 20	5825	Mcs0	29	28.82	34.82	10.02
HE 40	5755	Mcs0	23	26.29	32.29	5.33
HE 40	5775	Mcs0	24	26.55	32.55	5.19
HE 40	5795	Mcs0	25	27.14	33.14	5.63
HE 80	5775	Mcs0	23	25.72	31.72	2.06

Result

The maximum summed average power spectral density was less than the limit of 23.98 dBm; therefore, the EUT complies with the specification.

-- End of Test Report --