



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-WAVEML6
ISED ID	6545A-WAVEML6
Equipment Under Test	Wave-MLO6
Test Report Serial Number	TR10563_01
Date of Test(s)	15 May – 11 July 2025
Report Issue Date	1 December 2025

Test Specification	Applicant
47 CFR FCC Part 15, Subpart E RSS-247, Issue 3 (August 2023)	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 with the specifications provided by the manufacturer.

Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UBIQUITI
Model Number	Wave-MLO6
FCC ID	SWX-WAVEML6
ISED ID	6545A-WAVEML6

On this 1st day of December 2025, 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. Unified Compliance laboratory is not responsible for incorrect information provided by the manufacturer.

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: Clay Allred



Reviewed By: Joseph W. Jackson

Revision History		
Revision	Description	Date
01	Original Report Release	1 December 2025

Table of Contents

1	Client Information.....	5
1.1	Applicant.....	5
1.2	Manufacturer.....	5
2	Equipment Under Test (EUT).....	6
2.1	Identification of EUT	6
2.2	Description of EUT	6
2.3	EUT and Support Equipment	7
2.4	Interface Ports on EUT	8
2.5	Operating Environment.....	8
2.6	Operating Modes.....	8
2.7	EUT Exercise Software.....	8
2.8	Block Diagram of Test Configuration	9
2.9	Modification Incorporated/Special Accessories on EUT.....	9
2.10	Deviation, Opinions Additional Information or Interpretations from Test Standard.....	9
3	Test Specification, Method and Procedures.....	10
3.1	Test Specification.....	10
3.2	Methods & Procedures.....	10
3.3	FCC Part 15, Subpart E.....	10
3.4	Results.....	10
3.5	Test Location	11
4	Test Equipment	12
4.1	Conducted Emissions at Mains Ports.....	12
4.2	Direct Connect at the Antenna Port Tests.....	12
4.3	Radiated Emissions	13
4.4	Equipment Calibration	14
4.5	Measurement Uncertainty.....	14
5	Test Results.....	15
5.1	§15.203 Antenna Requirements.....	15
5.2	§15.207 Conducted Emissions at Mains Ports Data	16
5.3	§15.407(a) 26 dB Emissions Bandwidth.....	18
5.4	§15.407(a)(3) Maximum Average Output Power	20
5.5	§15.407(b)(7) Spurious Emissions.....	22
5.6	§15.407(a) Maximum Power Spectral Density	24

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		Wave-MLO6
Serial Number		2FE39D
Dimensions (cm)		24.9 x 8.2 x 4.8
Antenna 1:	Manufacturer:	UBIQUITI
	Model:	UISP-Dish
	Gain:	30 dBi
	Type:	Dish
Antenna 2:	Manufacturer:	UBIQUITI
	Model:	UISP-Horn
	Gain:	19.5 dBi
	Type:	Horn

2.2 Description of EUT

The Wave-MLO6 is a 5 GHz and 6 GHz point-to-point customer premise equipment which features wave technology with a high throughput rate. The 5 GHz radio supports U-NII-1, U-NII-2 and U-NII-3 bands. The 6 GHz radio support U-NII-5 and U-NII-7 bands. The Wave-MLO6 has Bluetooth LE transceiver for system management. The Wave-MLO6 is an outdoor device and has an Ethernet port which is used for data transfer and is powered using a Model U-POE++ 48-volt PoE power adapter.

This device does not support channel puncturing.

The following is list of the antennas that the Wave-MLO6 can use. However, testing was performed considering only the Max and Min antenna gain antennas.

Antenna Type	Model Number	Antenna Gain (dBi)
Dish	UISP Dish	30
	UISP Dish Mini	26
Horn	UISP Horn	19

For CDD transmission, direction gain is calculated as follows.

UISP- Dish:

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 Nss=1: Array Gain = $10 \log(\text{NANT}/\text{NSS})$ dB + Antenna Gain (dBi). Or 3.01 dB + 30 dBi = 33.01 dBi.

UISP-Horn:

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 NANT ≤ 4;

For PSD measurements when Nss=1: Array Gain = $10 \log(\text{NANT}/\text{NSS})$ dB + Antenna Gain (dBi). Or 3.01 dB + 19.5 dBi = 22.51 dBi.

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.

The table below shows 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

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: Wave-MLO6 SN: 2FE39D	Wireless Point-to-Point	See Section 2.4
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
PoE Input	1	7m Shielded Cat 5E
PoE Output (PoE Injector)	1	7m Shielded Cat 5E to Wave-MLO6 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	18.1 – 24.2 °C
Humidity	24 – 36 %
Barometric Pressure	1020 mBar

2.6 Operating Modes

The Wave-MLO6 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 maximum conducted output power and maximum power spectral density) 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

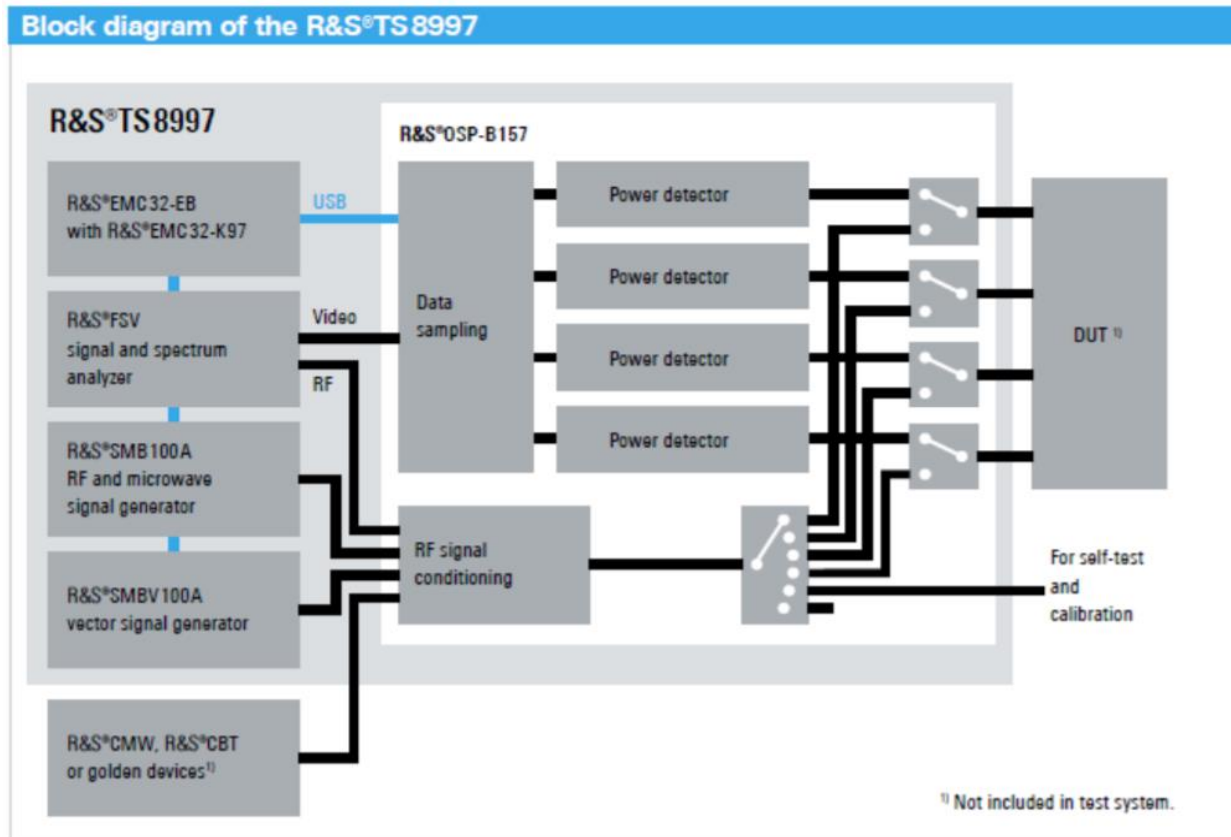


Diagram 1: Test Configuration Block Diagram

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
15.203	N/A	Antenna requirements	Structural Requirement	Compliant
15.207	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.407(a)	RSS-247 §6.2.2	Bandwidth Requirement	5725 to 5850	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5725 to 5850	Compliant
15.407(b)	RSS-247 §6.2.2, §6.2.3	Antenna Conducted Spurious Emissions	0.009 to 40000	N/A Note ¹
15.209	RSS-247 §6.2.2, §6.2.3	Radiated Spurious Emissions	0.009 to 40000	Compliant
15.407(a)	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. Note ¹ : Radiated Spurious was performed per 15.209 with the antenna unterminated.				

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 chambers 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 2026. 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 2026.

Unified Compliance Laboratory has been assigned Registration Number 376708 by the FCC, MRA Designation Number US5037 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-6754	2/27/2025	2/27/2026
LISN	AFJ	LS16C/10	UCL-6749	3/3/2025	3/3/2026
ISN	Teseq	ISN T800	UCL-2971	3/31/2025	3/31/2026
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	AFJ	AFJ FFT3010	UCL-3107	N/A	N/A

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

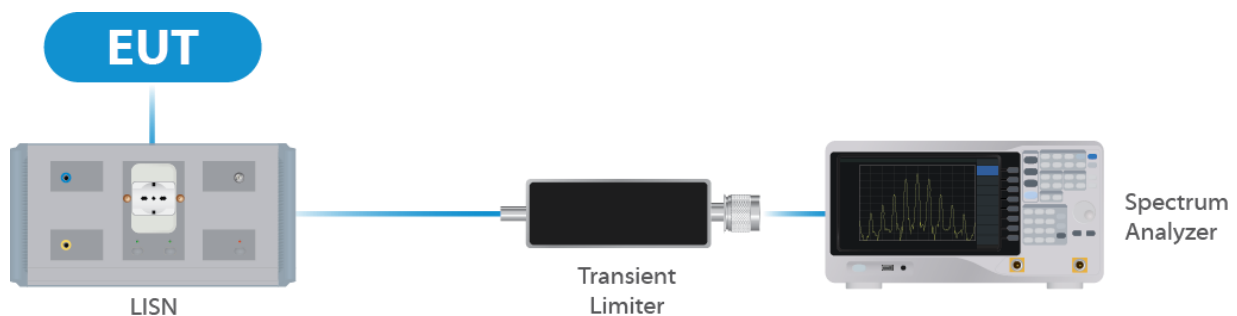


Figure 1: Conducted Emissions Test

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	1/16/2025	1/16/2026
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	4/28/2025	1/16/2026
Switch Extension	R&S	OSP-150W	UCL-2870	4/28/2025	1/16/2026
Test Software	R&S	EMC32	UCL-9442	--	--

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

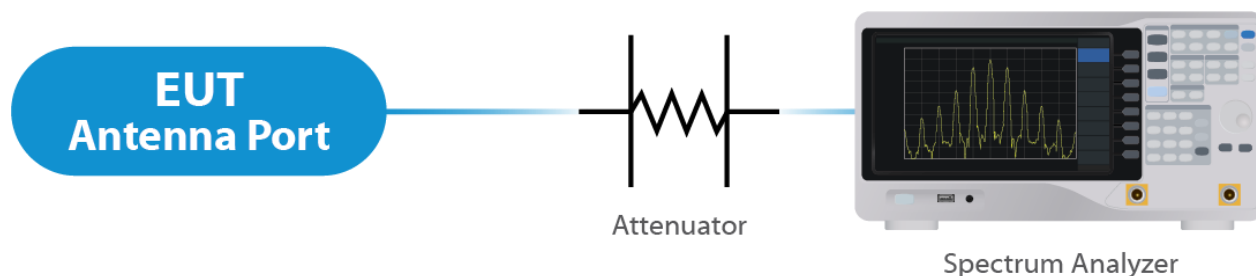


Figure 2: Direct Connect at the Antenna Port Test



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	12/27/2024	12/27/2025
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	1/19/2024	1/19/2026
Broadband Antenna	ETS-Lindgren	3142E	UCL-9782	2/6/2025	2/6/2026
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	4/2/2025	4/2/2027
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	2/11/2025	2/4/2027
10 - 40 GHz Horn Antenna	ETS-Lindgren	3116C	UCL-7209	6/6/2024	6/6/2026
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	7/22/2025	7/22/2026
Test Software	Nexio	BatEMC	UCL-5253 & UCL-5249	N/A	N/A

Table 3: List of equipment used for Radiated Emissions

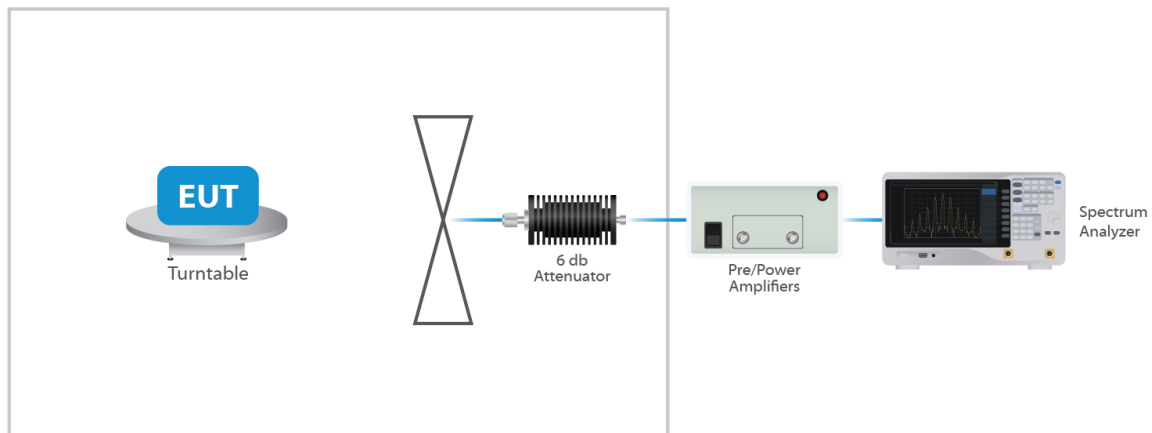


Figure 4: Radiated Emissions Test

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 a Dish and a Horn. Per the manufacturer, the Maximum gain of the antenna per chain is 30dBi and 19.5dBi dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is user replaceable.

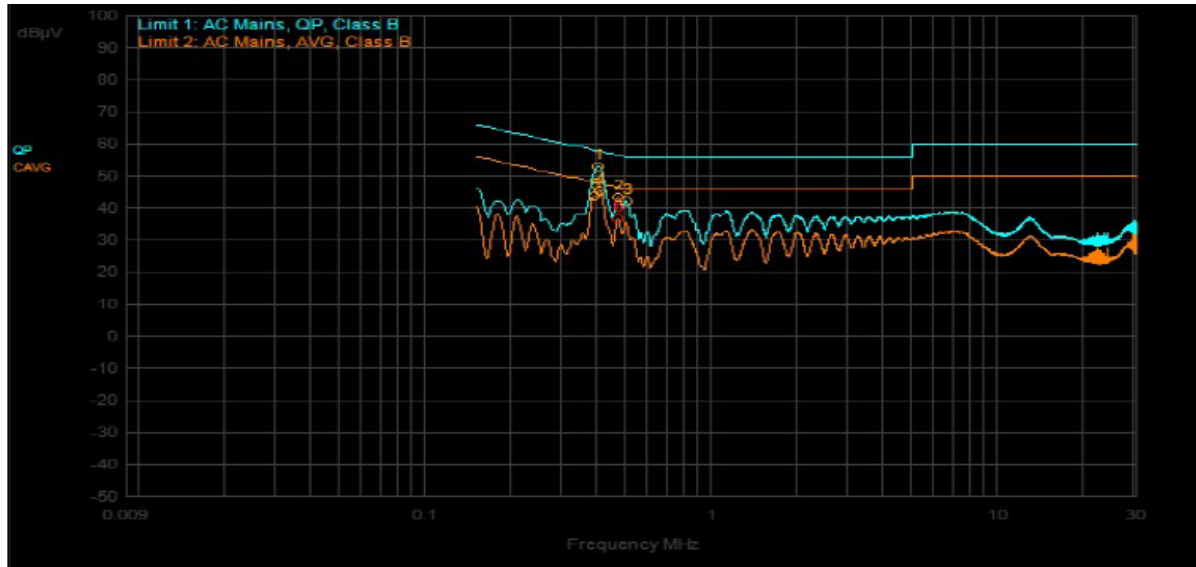
See Section 2.2 for directional gain calculation.

Results

The EUT complied with the specification

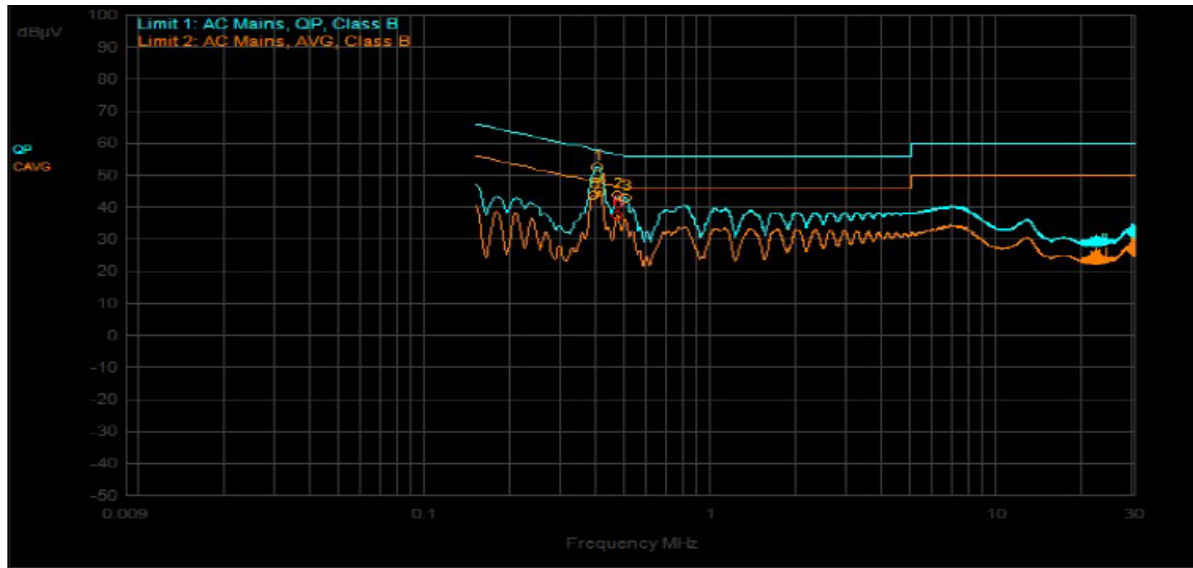
5.2 §15.207 Conducted Emissions at Mains Ports Data

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
1	399,000kHz	12.38	0.00		QPeak	40.58	52.96	57.87	-4.92			
2	465,000kHz	12.36	0.00		QPeak	30.89	43.25	56.60	-13.36			
3	498,000kHz	12.35	0.00		QPeak	29.69	42.04	56.03	-13.99			
4	402,000kHz	12.38	0.00		C_AVG	33.16	45.54			47.81	-2.27	
5	384,000kHz	12.38	0.00		C_AVG	31.37	43.75			48.19	-4.44	
6	465,000kHz	12.36	0.00		C_AVG	24.35	36.71			46.60	-9.90	

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	396,000kHz	12.37	0.00		QPeak	40.21	52.58	57.94	-5.36			
2	468,000kHz	12.37	0.00		QPeak	31.47	43.84	56.55	-12.71			
3	498,000kHz	12.37	0.00		QPeak	30.52	42.89	56.03	-13.15			
4	405,000kHz	12.37	0.00		C_AVG	32.64	45.01			47.75	-2.74	
5	384,000kHz	12.37	0.00		C_AVG	31.52	43.89			48.19	-4.31	
6	468,000kHz	12.37	0.00		C_AVG	24.99	37.36			46.55	-9.19	

Result

The EUT complied with the specification limit.

5.3 §15.407(a) 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.

5.3.1 Dish Antenna

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5745	16.90	22.30
OFDM 20	5775	16.80	22.40
OFDM 20	5825	16.90	22.40
HE 20	5745	19.10	22.20
HE 20	5775	19.10	23.70
HE 20	5825	19.10	22.90
HE 40	5755	38.50	43.83
HE 40	5775	38.25	44.28
HE 40	5795	38.25	43.83
HE 80	5775	78.00	85.50

5.3.2 Horn Antenna

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5745	16.93	22.62
OFDM 20	5775	16.93	22.32
OFDM 20	5825	16.93	22.77
HE 20	5745	19.18	22.02
HE 20	5775	19.18	22.77
HE 20	5825	19.18	22.47
HE 40	5755	38.25	41.50

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
HE 40	5775	38.00	43.00
HE 40	5795	38.25	43.25
HE 80	5775	78.00	88.00

Result

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

See Section 2.2 for directional gain calculation.

When using the Dish Antenna, the maximum average RF conducted output power measured for this device was 23.32 dBm or mW. The limit is 1 Watt, or 30 dBm. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power, and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, Fixed point to point devices that employ a directional antenna gain greater than 6 dBi, do not require a reduction.

When using the Horn Antenna, the maximum average RF conducted output power measured for this device 21.97 dBm or 214.8 mW. The limit is 1 Watt, or 30 dBm. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power, and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, Fixed point to point devices that employ a directional antenna gain greater than 6 dBi, do not require a reduction.

Dish Antenna

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (fixed P-to-P) (dBm)	Margin (dBm)
OFDM 20	5745	Mcs0_Nss4	19	20.48	30.0	50.48	30.0	-9.52
OFDM 20	5775	Mcs0_Nss4	17	18.31	30.0	48.31	30.0	-11.69
OFDM 20	5825	Mcs0_Nss4	18	19.19	30.0	49.19	30.0	-10.81
HE 20	5745	Mcs0_Nss4	19	20.53	30.0	50.53	30.0	-9.47
HE 20	5775	Mcs0_Nss4	17	18.46	30.0	48.46	30.0	-11.54
HE 20	5825	Mcs0_Nss4	18	19.19	30.0	49.19	30.0	-10.81
HE 40	5755	Mcs0_Nss4	22	23.32	30.0	53.32	30.0	-6.68
HE 40	5775	Mcs0_Nss4	17	18.15	30.0	48.15	30.0	-11.85
HE 40	5795	Mcs0_Nss4	18	19.17	30.0	49.17	30.0	-10.83
HE 80	5775	Mcs0_Nss4	17	18.25	30.0	48.25	30.0	-11.75

Horn Antenna

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (fixed P-to-P) (dBm)	Margin (dBm)
OFDM 20	5745	Mcs0_Nss1	20	21.97	19.5	41.47	30.0	-8.03
OFDM 20	5775	Mcs0_Nss1	16	17.90	19.5	37.40	30.0	-12.1
OFDM 20	5825	Mcs0_Nss1	16	17.87	19.5	37.37	30.0	-12.13
HE 20	5745	Mcs0_Nss1	20	21.59	19.5	41.09	30.0	-8.41
HE 20	5775	Mcs0_Nss1	16	18.02	19.5	37.52	30.0	-11.98
HE 20	5825	Mcs0_Nss1	15	16.92	19.5	36.42	30.0	-13.08
HE 40	5755	Mcs0_Nss1	17	18.81	19.5	38.31	30.0	-11.19
HE 40	5775	Mcs0_Nss1	17	18.86	19.5	38.36	30.0	-11.14
HE 40	5795	Mcs0_Nss1	15	16.85	19.5	36.35	30.0	-13.15
HE 80	5775	Mcs0_Nss1	15	16.93	19.5	36.43	30.0	-13.07

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).

5.5 §15.407(b)(7) Spurious Emissions

5.5.1 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 TP24.

Correction Factor = Antenna Factor (dBi) + Cable Loss (dB) - Pre-Amplifier Gain (dB), 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.

Dish Antenna

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.49 GHz	PK	56.719	74	-17.281	180	2.639	Vertical	11.171
11.49 GHz	AV	44.623	54	-9.377	180	2.639	Vertical	11.171
11.491 GHz	PK	55.202	74	-18.798	314	3.319	Horizontal	11.179
11.492 GHz	AV	42.007	54	-11.993	236	3.812	Horizontal	11.187
17.2355696 GHz	PK	65.909	74	-8.091	3	1.500	Vertical	1.67
17.2355696 GHz	AV	50.078	54	-3.922	3	1.500	Vertical	1.67
17.2375195 GHz	PK	65.05	74	-8.95	20	1.500	Horizontal	1.666
17.2375195 GHz	AV	49.783	54	-4.217	20	1.500	Horizontal	1.666

Table 4: Transmitting on the Lowest Frequency 5745 MHz

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.55 GHz	PK	58.051	74	-15.949	21	1.628	Vertical	11.206
11.55 GHz	AV	45.051	54	-8.949	21	1.628	Vertical	11.206
11.549 GHz	PK	54.967	74	-19.033	128	3.808	Horizontal	11.208
11.549 GHz	AV	41.818	54	-12.182	128	3.808	Horizontal	11.208
17.3059246 GHz	PK	65.118	74	-8.882	1	1.500	Vertical	1.539
17.3059246 GHz	AV	46.15	54	-7.85	1	1.500	Vertical	1.539
17.3215007 GHz	PK	56.462	74	-17.538	20	1.500	Horizontal	1.533
17.3215007 GHz	AV	42.011	54	-11.989	20	1.500	Horizontal	1.533

Table 5: Transmitting on the Middle Frequency 5775 MHz

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.651 GHz	PK	55.558	74	-18.442	147	3.32	Vertical	10.8
11.651 GHz	AV	41.412	54	-12.588	147	3.32	Vertical	10.8
11.646 GHz	PK	54.567	74	-19.433	156	3.81	Horizontal	10.827
11.646 GHz	AV	41.046	54	-12.954	156	3.81	Horizontal	10.827
17.4713224 GHz	PK	67.374	74	-6.626	6	1.500	Vertical	1.394
17.4713224 GHz	AV	52.015	54	-1.985	6	1.500	Vertical	1.394
17.4680555 GHz	PK	65.328	74	-8.672	3	1.500	Horizontal	1.399
17.4680555 GHz	AV	50.106	54	-3.894	3	1.500	Horizontal	1.399

Table 6: Transmitting on the Highest Frequency 5825 MHz

Horn Antenna

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.493 GHz	PK	54.854	74	-19.146	29	3.311	Vertical	11.086
11.493 GHz	AV	41.707	54	-12.293	29	3.311	Vertical	11.086
11.487 GHz	PK	61.811	74	-12.189	178	2.146	Horizontal	11.033
11.487 GHz	AV	46.207	54	-7.793	178	2.146	Horizontal	11.033
17.246 GHz	PK	65.194	74	-8.806	358	1.500	Vertical	-1.094
17.246 GHz	AV	47.565	54	-6.435	358	1.500	Vertical	-1.094
17.24 GHz	PK	65.284	74	-8.716	359	1.500	Horizontal	-1.104
17.24 GHz	AV	49.5	54	-4.5	359	1.500	Horizontal	-1.104

Table 7: Transmitting on the Lowest Frequency 5745 MHz

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.538 GHz	PK	66.745	74	-7.255	178	2.146	Vertical	11.154
11.538 GHz	AV	50.414	54	-3.586	178	2.146	Vertical	11.154
11.557 GHz	PK	55.32	74	-18.68	286	3.798	Horizontal	11.093
11.557 GHz	AV	42.169	54	-11.831	286	3.798	Horizontal	11.093
17.317 GHz	PK	66.402	74	-7.598	359	1.500	Vertical	-0.996
17.317 GHz	AV	51.152	54	-2.848	359	1.500	Vertical	-0.996
17.332 GHz	PK	67.947	74	-6.053	359	1.500	Horizontal	-0.987
17.332 GHz	AV	51.745	54	-2.255	359	1.500	Horizontal	-0.987

Table 8: Transmitting on the Middle Frequency 5775 MHz

Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.643 GHz	PK	53.924	74	-20.076	6	3.802	Vertical	10.701
11.643 GHz	AV	41.393	54	-12.607	6	3.802	Vertical	10.701
11.65 GHz	PK	66.223	74	-7.777	182	2.146	Horizontal	10.661
11.65 GHz	AV	50.685	54	-3.315	182	2.146	Horizontal	10.661
17.468 GHz	PK	64.956	74	-9.044	352	1.500	Vertical	-1.074
27.565 GHz	PK	53.159	74	-20.841	146	1.500	Vertical	1.649
17.468 GHz	AV	50.081	54	-3.919	352	1.500	Vertical	-1.074
27.565 GHz	AV	40.417	54	-13.583	146	1.500	Vertical	1.649
17.485 GHz	PK	67.592	74	-6.408	344	1.500	Horizontal	-1.106
17.485 GHz	AV	51.822	54	-2.178	344	1.500	Horizontal	-1.106

Table 9: Transmitting on the Highest Frequency 5825 MHz

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.

See Section 2.2 for directional gain calculation.

Results of this testing are summarized.

Dish Antenna

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5745	Mcs0_Nss4	19	5.03	30.0	30.0	-24.97
OFDM 20	5775	Mcs0_Nss4	17	2.89	30.0	30.0	-27.11
OFDM 20	5825	Mcs0_Nss4	18	3.74	30.0	30.0	-26.26
HE 20	5745	Mcs0_Nss4	19	4.52	30.0	30.0	-25.48
HE 20	5775	Mcs0_Nss4	17	2.47	30.0	30.0	-27.53
HE 20	5825	Mcs0_Nss4	18	3.37	30.0	30.0	-26.63
HE 40	5755	Mcs0_Nss4	22	4.48	30.0	30.0	-25.52
HE 40	5775	Mcs0_Nss4	17	-0.60	30.0	30.0	-30.6
HE 40	5795	Mcs0_Nss4	18	-0.05	30.0	30.0	-30.05
HE 80	5775	Mcs0_Nss4	17	-3.26	30.0	30.0	-33.26

Horn Antenna

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5745	Mcs0_Nss1	20	6.69	19.5	30.0	-23.31
OFDM 20	5775	Mcs0_Nss1	16	2.66	19.5	30.0	-27.34
OFDM 20	5825	Mcs0_Nss1	16	2.63	19.5	30.0	-27.37
HE 20	5745	Mcs0_Nss1	20	5.82	19.5	30.0	-24.18
HE 20	5775	Mcs0_Nss1	16	2.28	19.5	30.0	-27.72
HE 20	5825	Mcs0_Nss1	15	1.23	19.5	30.0	-28.77
HE 40	5755	Mcs0_Nss1	17	0.10	19.5	30.0	-29.9

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
HE 40	5775	Mcs0_Nss1	17	0.21	19.5	30.0	-29.79
HE 40	5795	Mcs0_Nss1	15	-2.18	19.5	30.0	-32.18
HE 80	5775	Mcs0_Nss1	15	-4.55	19.5	30.0	-34.55

Result

The maximum summed average power spectral density was less than the limit of 30 dBm; therefore, the EUT complies with the specification.

-- End of Test Report --