



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-UX7SP
ISED ID	6545A-UX7SP
Equipment Under Test	UX7-SP
Test Report Serial Number	TR10033_02
Date of Tests	17-20 March; 4 April 2025
Report Issue Date	11 June 2025

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 with the specifications provided by the manufacturer.

Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UBIQUITI
Model Number	UX7-SP
FCC ID	SWX-UX7SP
ISED ID	6545-UX7SP

On this 11th day of June 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: Kimberly DeBole



Reviewed By: Richard L. Winter

Revision History		
Revision	Description	Date
01	Original Report Release	11 June 2025
02	Add Canadian Power Table in Section 5.4 and PSD Table in Section 5.6	1 July 2025

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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	UX7-SP
Serial Number	8478487e893b
Dimensions (cm)	11.7 x 11.7 x 4.25

2.2 Description of EUT

The UX7-SP is an access point designed for wide-ranging wireless coverage while maintaining overall network capacity. The UX7-SP operates in the 2.4 GHz and 5 GHz range. The UX7-SP has a Bluetooth management radio for easy setup and administration of the wireless system. The UX7-SP is powered from a USB-C connector.

For CDD transmission, direction 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 3.01 dB + 7 dBi = 10.01 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.

Band	WiFi Mode	Modulation Bandwidth	Modulation Type	Frequency (MHz)
UNII-1	a	20 MHz	OFDM	5180, 5200, 5210, 5240
	be	20 MHz	EHT	5180, 5200, 5210, 5240
	be	40 MHz	EHT	5190, 5230
	be	80 MHz	EHT	5210

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: UX7 SN: 942A6F422528	Wireless Access Point	See Section 2.4
BN: UBIQUITI MN: GP-M015-QC SN: N/A	USB C Power Adapter	2 conductor power cord/80 cm
BN: Dell MN: XPS 13 SN: N/A	Laptop Personal Computer	LAN Port / 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 / USB-C	1	2 conductor power cord/80 cm
LAN	1	Un-shielded Cat 5e cable/5 meter
WAN	1	Un-shielded Cat 5e cable/5 meter

2.5 Operating Environment

Power Supply	120 Volts AC Mains to USB-C Power
AC Mains Frequency	60 Hz
Temperature	21.8 – 23.5 °C
Humidity	25.7 – 41.5 %
Barometric Pressure	1019 mBar

2.6 Operating Modes

The UX7-SP 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/be were investigated. All measurements are reported with the worst-case mode (802.11be) 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

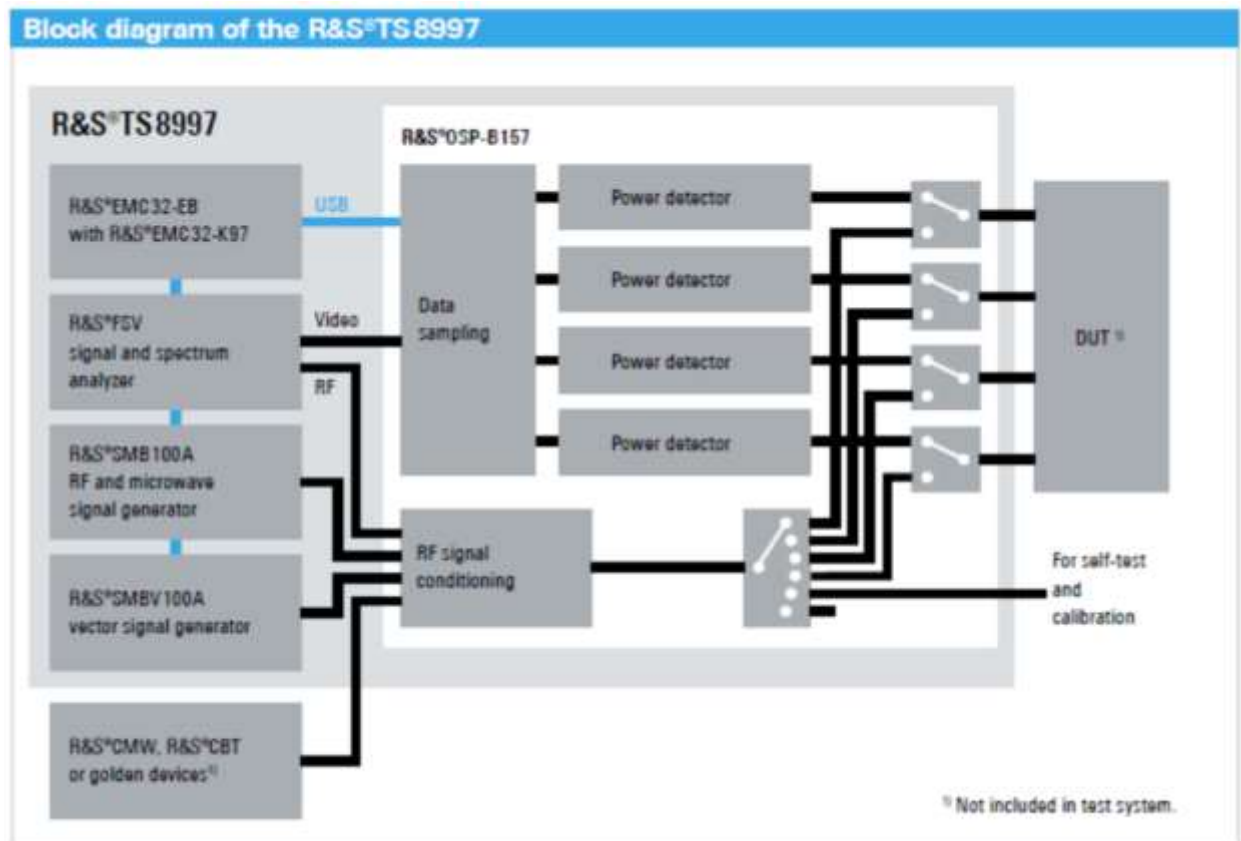


Diagram 1: Test Configuration Block Diagram

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	5180 to 5210	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5180 to 5210	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	5180 to 5210	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 2025. 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 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	8/27/2024	8/27/2025
LISN	AFJ	LS16C/10	UCL-2512	7/08/2024	7/08/2025
ISN	Teseq	ISN T800	UCL-2974	7/09/2024	7/09/2025
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

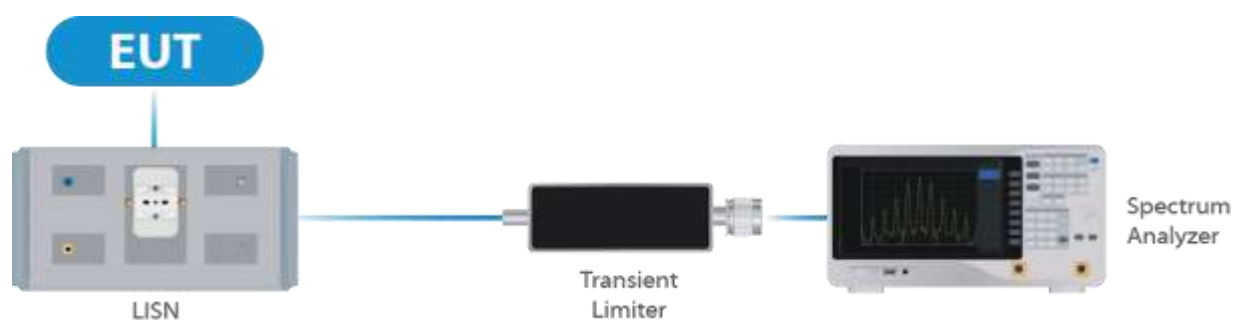


Figure 1: Conducted Emissions Test

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

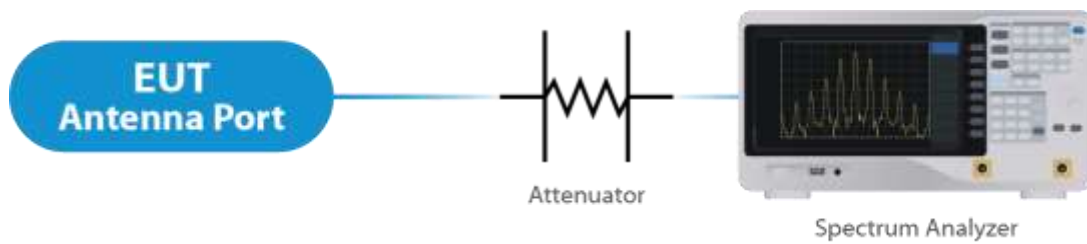


Figure 2: Direct Connect at the Antenna Port Test



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	7/2/2024	7/2/2025
Test Software	Nexio	BatEMC	UCL-5253 & UCL- 5249	N/A	N/A

Table 3: List of equipment used for Radiated Emissions

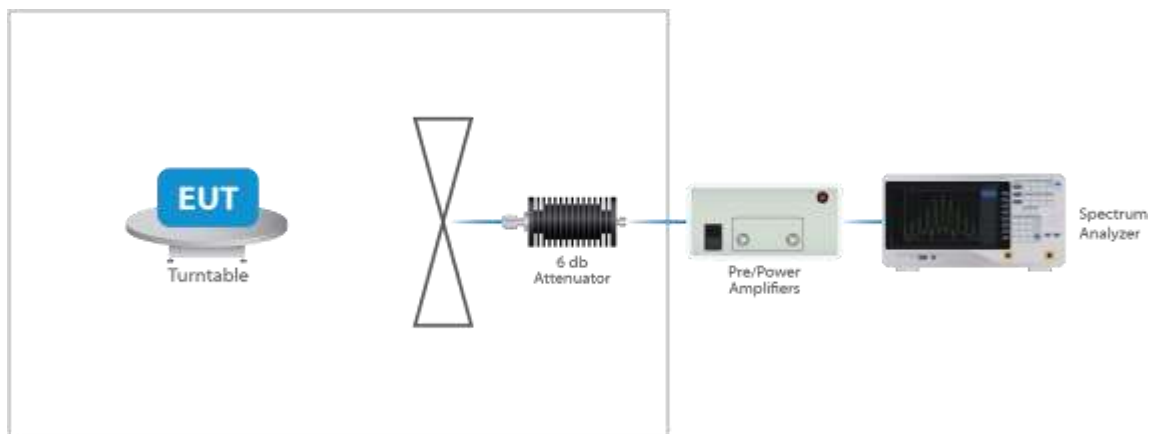


Figure 4: Radiated Emissions Test

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 an integral antenna. Per the manufacturer, the Maximum gain of the antenna per chain is 7 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.

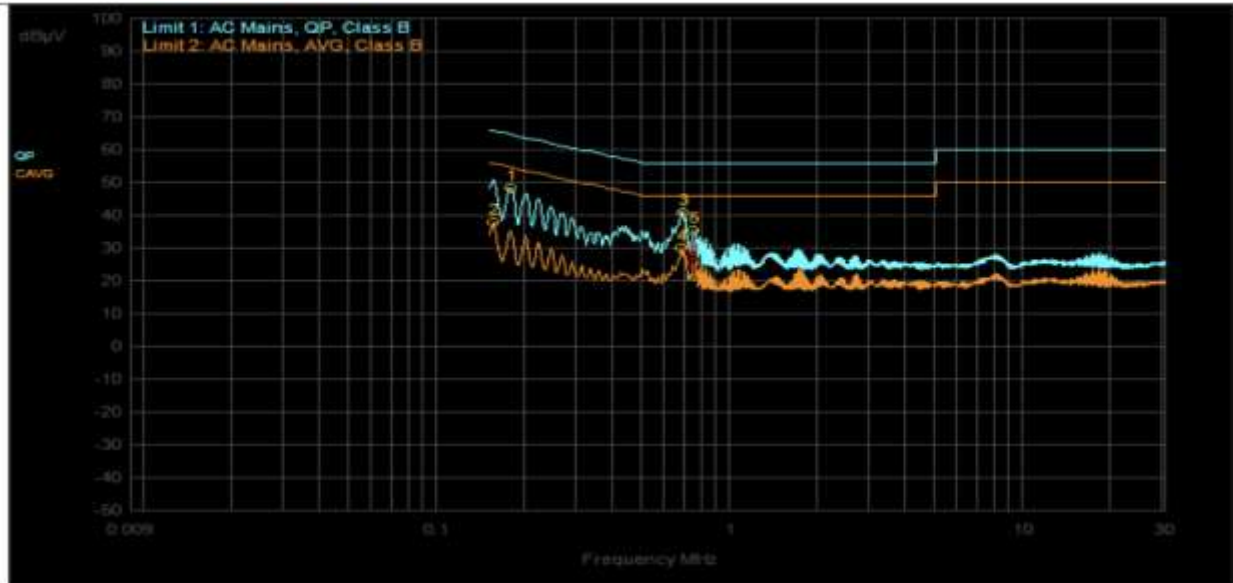
See Section 2.2 for directional gain calculation.

Results

The EUT complied with the specification.

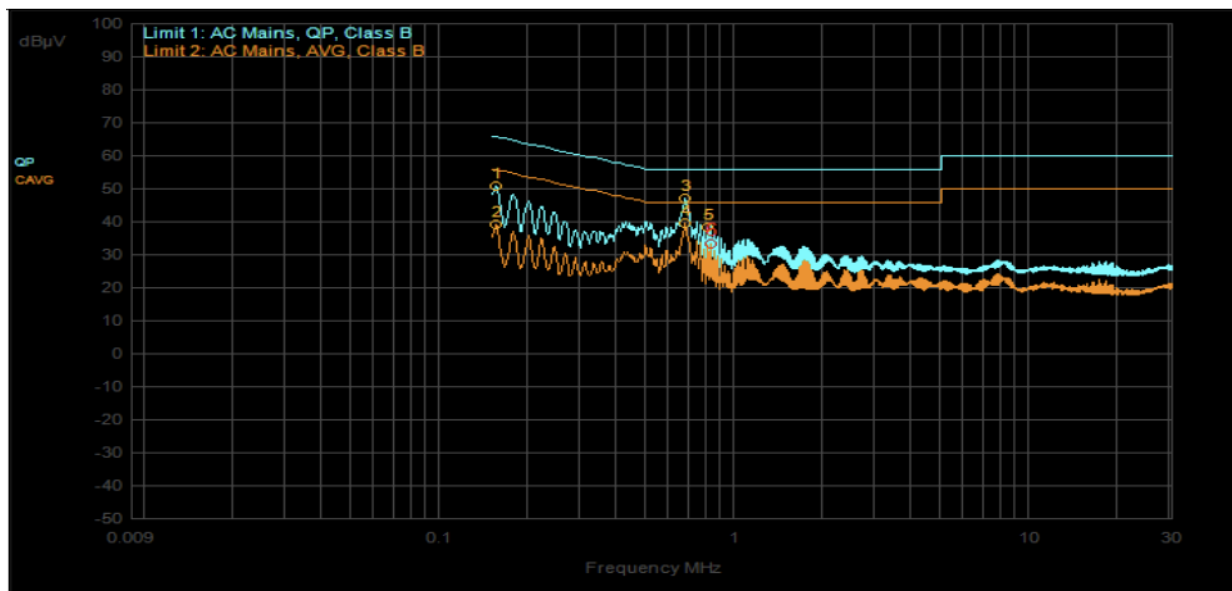
5.2 Conducted Emissions at Mains Ports Data

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
3	681,000kHz	12.39	0.00		QPeak	28.55	40.94	56.00	-15.06			
1	177,000kHz	12.38	0.00		QPeak	36.10	48.48	64.63	-16.15			
5	738,000kHz	12.39	0.00		QPeak	23.05	35.44	56.00	-20.56			
2	153,000kHz	12.41	0.00		C_AVG	25.38	37.79			55.84	-18.05	
4	672,000kHz	12.38	0.00		C_AVG	17.44	29.82			46.00	-16.18	
6	738,000kHz	12.39	0.00		C_AVG	13.16	25.55			46.00	-20.45	

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
3	672,000kHz	12.37	0.00		QPeak	34.77	47.14	56.00	-8.86			
1	153,000kHz	12.38	0.00		QPeak	38.33	50.71	65.84	-15.13			
5	804,000kHz	12.37	0.04		QPeak	25.93	38.34	56.00	-17.66			
2	153,000kHz	12.38	0.00		C_AVG	26.82	39.20			55.84	-16.64	
4	672,000kHz	12.37	0.00		C_AVG	27.26	39.63			46.00	-6.37	
6	825,000kHz	12.37	0.10		C_AVG	21.03	33.50			46.00	-12.50	

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.

Nominal BW (MHz)	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5180	17.38	23.25
OFDM 20	5210	20.22	36.75
OFDM 20	5240	19.03	31.00
EHT 20	5180	19.18	23.43
EHT 20	5210	19.78	42.80
EHT 20	5240	19.78	36.98
EHT 40	5190	38.50	43.75
EHT 40	5230	38.50	43.00
EHT 80	5210	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) 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 26.26 dBm or 0.42 mW. The limit is 30 dBm, or 1 Watt when using an antenna with 6 dBi (indoor access point) or less gain. The antenna has a gain of 7.0 dBi so the adjusted limit is 29 dB or 0.8 Watt.

See Section 2.2 for directional gain calculation.

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss4	22	23.66	7	30.66	36	-5.34
OFDM 20	5210	Mcs0_Nss4	25	26.26	7	33.26	36	-2.74
OFDM 20	5240	Mcs0_Nss4	25	25.90	7	32.90	36	-3.10
EHT 20	5180	Mcs0_Nss4	19	20.50	7	27.50	36	-8.50
EHT 20	5210	Mcs0_Nss4	25	26.16	7	33.16	36	-2.84
EHT 20	5240	Mcs0_Nss4	25	25.90	7	32.90	36	-3.10
EHT 40	5190	Mcs0_Nss4	13	14.56	7	21.56	36	-14.44
EHT 40	5230	Mcs0_Nss4	22	23.47	7	30.47	36	-5.53
EHT 80	5210	Mcs0_Nss4	20	21.18	7	28.18	36	-7.82

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss1	21	22.66	7	29.66	36	-6.34
OFDM 20	5210	Mcs0_Nss1	22	23.26	7	30.26	36	-5.74
OFDM 20	5240	Mcs0_Nss1	22	22.90	7	29.90	36	-6.10
EHT 20	5180	Mcs0_Nss1	19	20.50	7	27.50	36	-8.50
EHT 20	5210	Mcs0_Nss1	23	24.16	7	31.16	36	-4.84
EHT 20	5240	Mcs0_Nss1	21	21.90	7	28.90	36	-7.10
EHT 40	5190	Mcs0_Nss1	13	14.56	7	21.56	36	-14.44
EHT 40	5230	Mcs0_Nss1	22	23.47	7	30.47	36	-5.53
EHT 80	5210	Mcs0_Nss1	20	21.18	7	28.18	36	-7.82

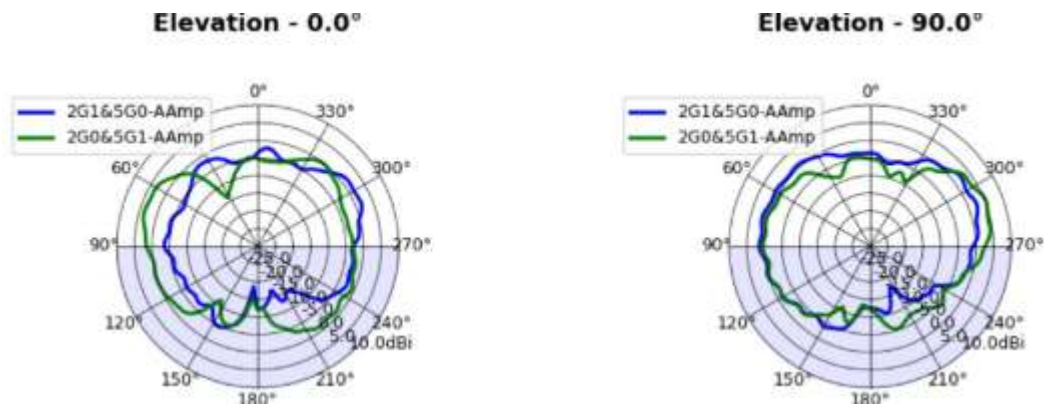
Canada (Indoor Use Only)

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss4	11	12.63	7	19.63	23	-3.37
OFDM 20	5210	Mcs0_Nss4	11	12.39	7	19.39	23	-3.61
OFDM 20	5240	Mcs0_Nss4	12	12.98	7	19.98	23	-3.02
EHT 20	5180	Mcs0_Nss4	12	13.76	7	20.76	23	-2.24
EHT 20	5210	Mcs0_Nss4	12	13.37	7	20.37	23	-2.63
EHT 20	5240	Mcs0_Nss4	13	14.16	7	21.16	23	-1.84
EHT 40	5190	Mcs0_Nss4	14	15.50	7	22.50	23	-0.50
EHT 40	5230	Mcs0_Nss4	14	15.27	7	22.27	23	-0.73
EHT 80	5210	Mcs0_Nss4	14	15.01	7	22.01	23	-0.99

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.



Plot 1: Elevation Plot Greater Than 30-Degrees From Horizon

5.5 §15.209 Spurious Emissions

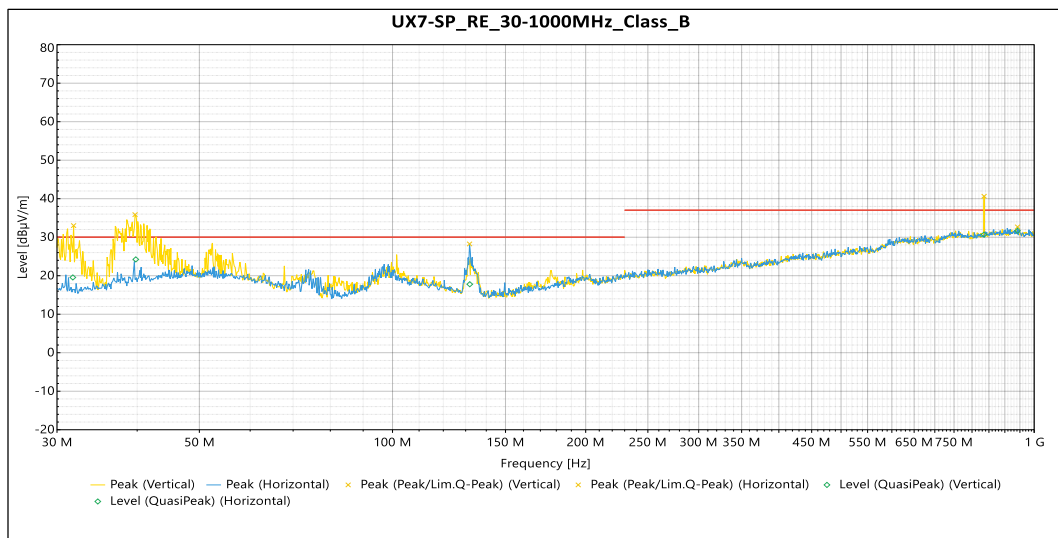
5.5.1 Radiated Spurious Emissions in the Restricted Bands of § 15.205

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 TP25, as this setting was found to be worst case for spurious emissions. Power was subsequently reduced during in-band and band edge testing. The band edge at the restricted band ending at 5150 MHz was measured using radiated measurement. All emissions modes were tested, and the worst-case measurement are shown below. For frequencies above 1 GHz, a measurement of 3 meters was used. For frequencies below 1 GHz, a measurement distance of 10 meters was used.

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

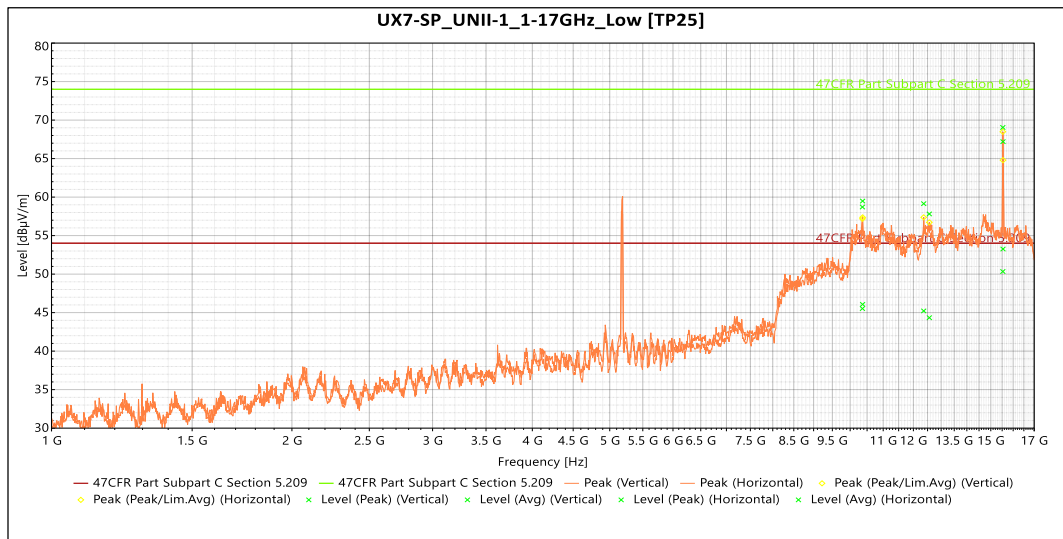
Result

All emissions in the restricted bands of § 15.205 met the limits specified in § 15.209; therefore, the EUT complies with the specification. All emissions met the limits specified in § 15.407(b). Representative band edge plots are included in this report.



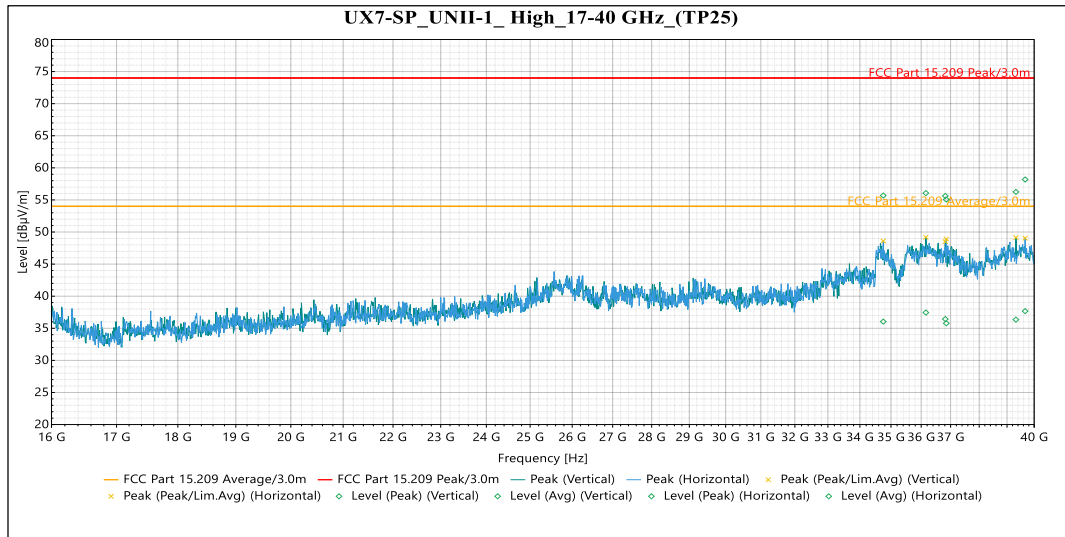
Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin	Azimuth (°)	Height	Pol.	Meas. Time	Correction (dB)
31.756 MHz	QP	19.552	30	-10.448	210	1.85	Vertical	15	-11.819
39.805 MHz	QP	24.238	30	-5.762	226	1.05	Vertical	15	-9.23
835.4 MHz	QP	30.694	37	-6.306	159	1.9	Vertical	15	0.43
131.94 MHz	QP	17.787	30	-12.213	322	3.97	Horizontal	15	-13.114
941.95 MHz	QP	31.668	37	-5.332	307	3.12	Horizontal	15	1.812

Table 4: Radiated Emissions within 30 MHz to 1 GHz



Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.361 GHz	Peak	58.711	74	-15.289	354	2.816	Vertical	11.482
12.363 GHz	Peak	59.148	74	-14.852	221	1.5	Vertical	13.749
15.538 GHz	Peak	67.201	74	-6.799	336	3.802	Vertical	13.164
10.361 GHz	Avg	45.524	54	-8.476	354	2.816	Vertical	11.482
12.363 GHz	Avg	45.22	54	-8.78	221	1.5	Vertical	13.749
15.538 GHz	Avg	53.258	54	-0.742	336	3.802	Vertical	13.164
10.366 GHz	Peak	59.487	74	-14.513	182	3.311	Horizontal	11.515
12.565 GHz	Peak	57.813	74	-16.187	236	2.325	Horizontal	13.067
15.531 GHz	Peak	69.045	74	-4.955	219	2.142	Horizontal	13.223
10.366 GHz	Avg	46.07	54	-7.93	182	3.311	Horizontal	11.515
12.565 GHz	Avg	44.34	54	-9.66	236	2.325	Horizontal	13.067
15.531 GHz	Avg	50.337	54	-3.663	219	2.142	Horizontal	13.223

Table 5: Radiated Emissions within 1-17GHz transmitting on low 5180MHz



Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
36.1567313 GHz	Peak	56.058	74	-17.942	245	Vertical	10.067
36.8181579 GHz	Peak	55.626	74	-18.374	304	Vertical	9.193
39.3246282 GHz	Peak	56.254	74	-17.746	251	Vertical	8.511
36.1567313 GHz	Avg	37.448	54	-16.552	245	Vertical	10.067
36.8181579 GHz	Avg	36.44	54	-17.56	304	Vertical	9.193
39.3246282 GHz	Avg	36.342	54	-17.658	251	Vertical	8.511
34.7493085 GHz	Peak	55.685	74	-18.315	110	Horizontal	10.053
36.8510491 GHz	Peak	55.069	74	-18.931	123	Horizontal	9.084
39.6635031 GHz	Peak	58.183	74	-15.817	229	Horizontal	8.685
34.7493085 GHz	Avg	36.036	54	-17.964	110	Horizontal	10.053
36.8510491 GHz	Avg	35.782	54	-18.218	123	Horizontal	9.084
39.6635031 GHz	Avg	37.675	54	-16.325	229	Horizontal	8.685

Table 6: Radiated Emissions within 17-40GHz Transmitting on High 5240MHz

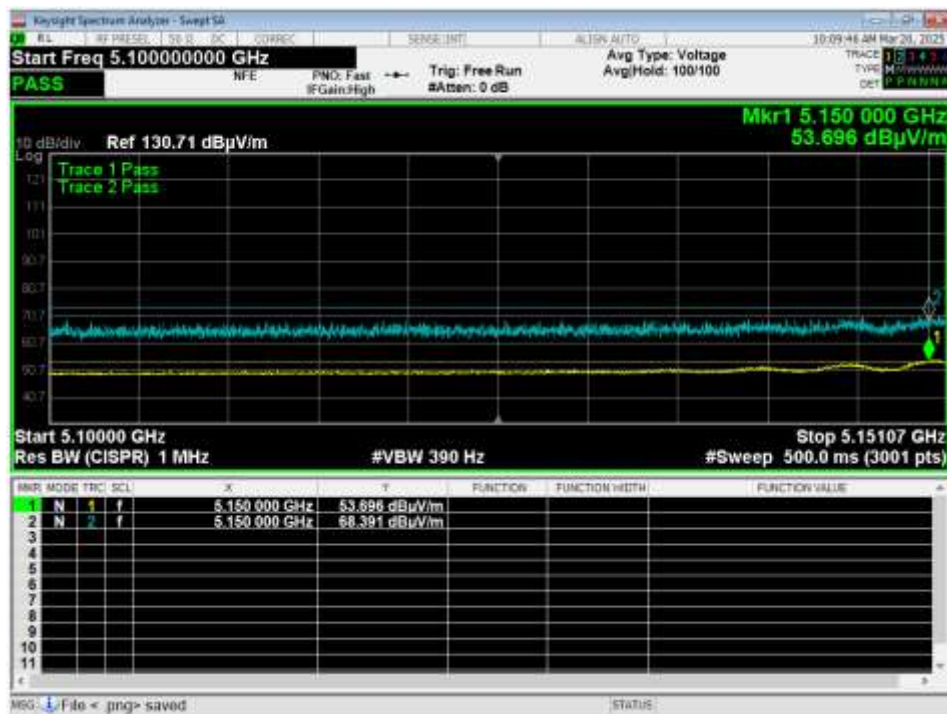


Figure 5: Band Edge OFDM20 5180MHz

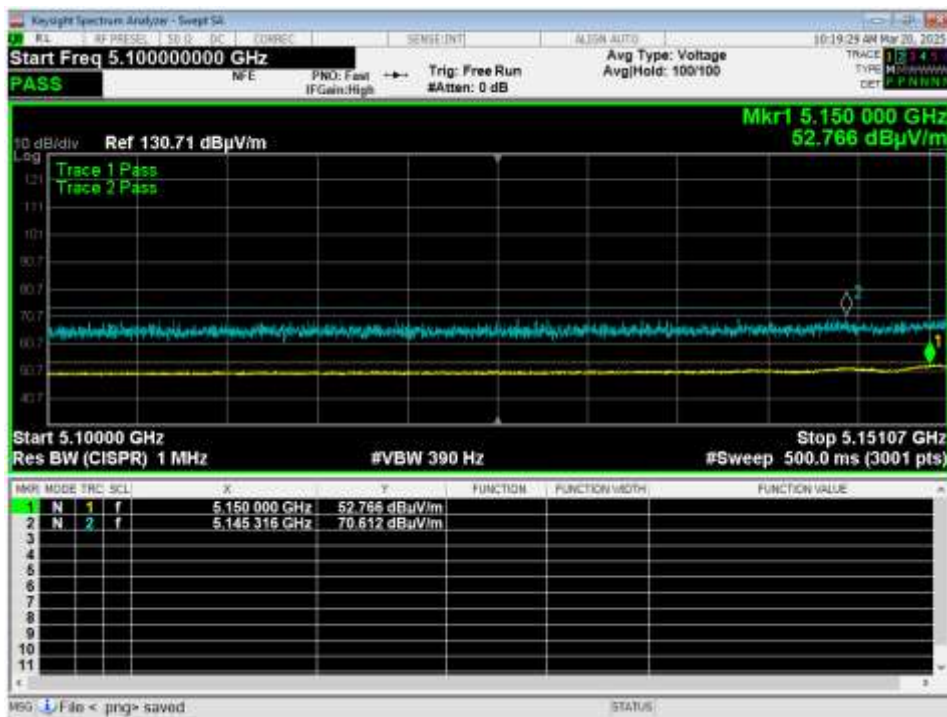


Figure 6: Band Edge OFDM20 5210MHz

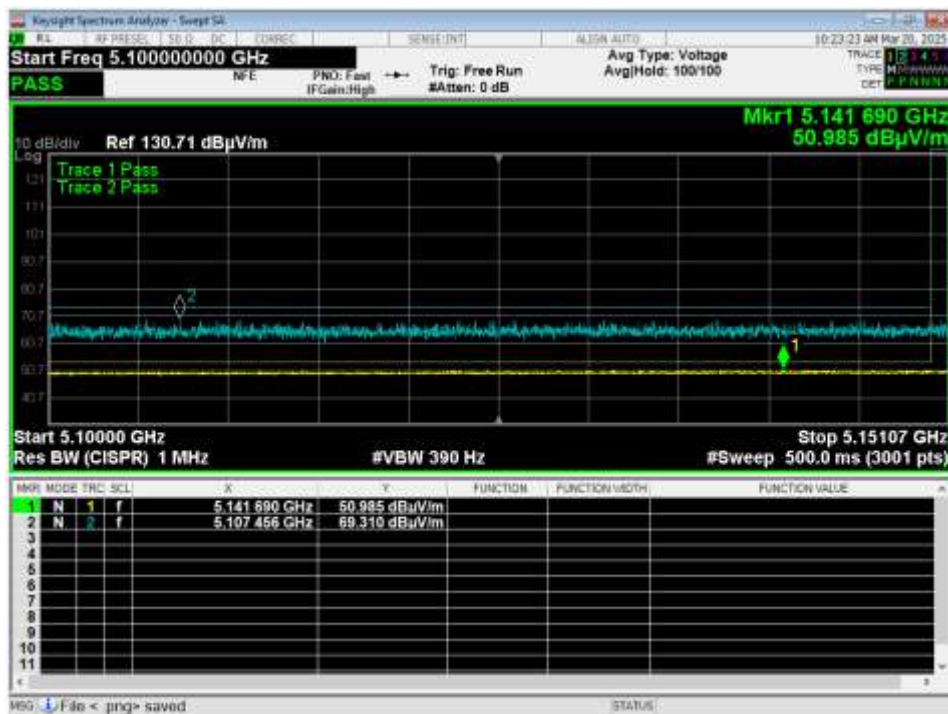


Figure 7: Band Edge OFDM20 5240MHz

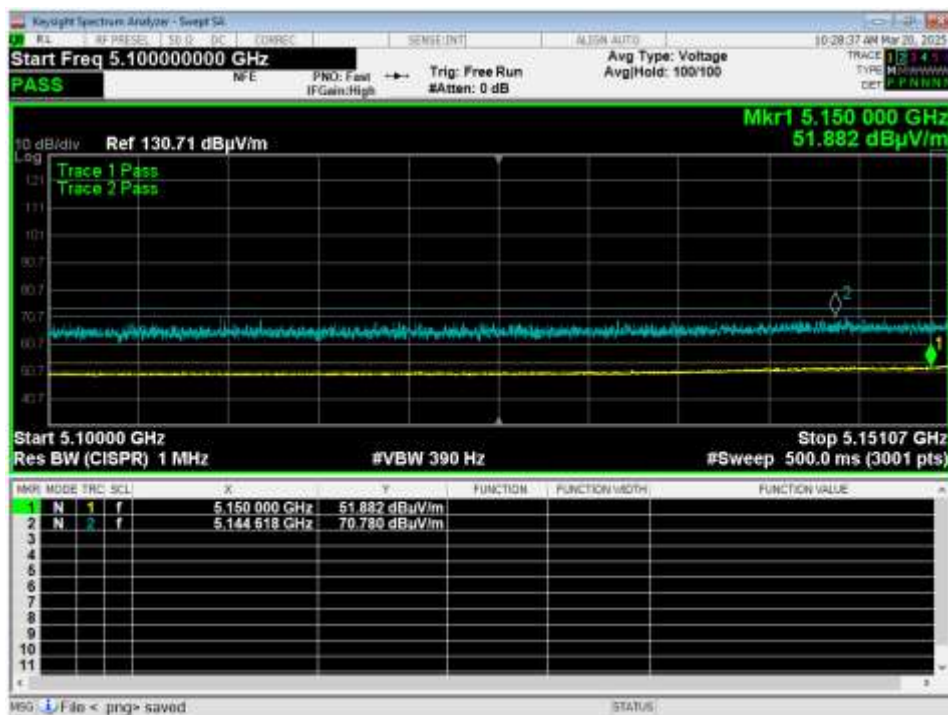


Figure 8: Band Edge EHT20 5180MHz

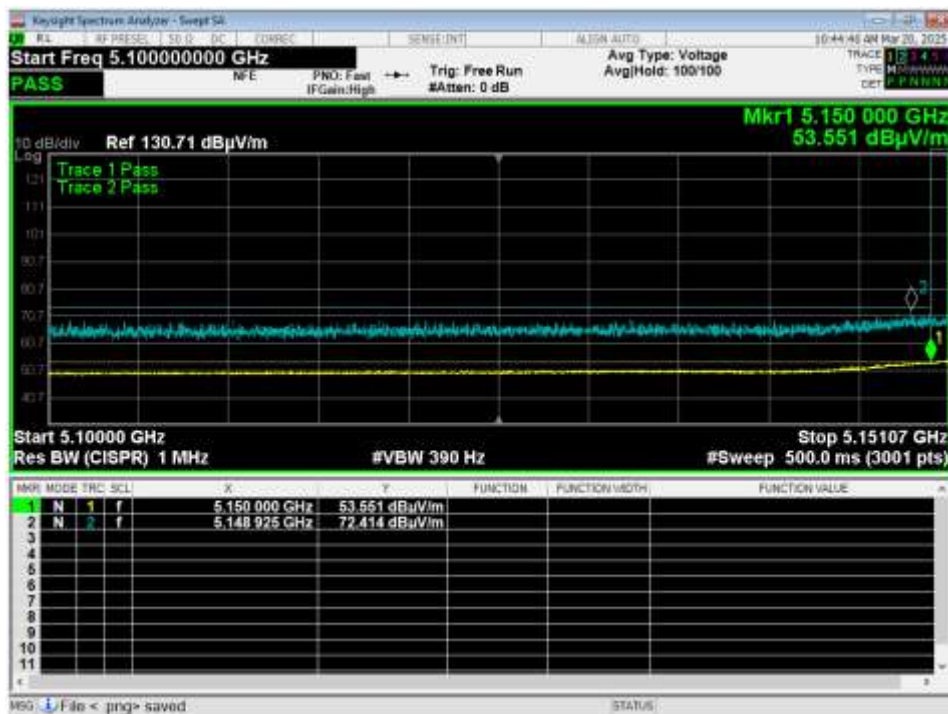


Figure 9: Band Edge EHT20 5210MHz

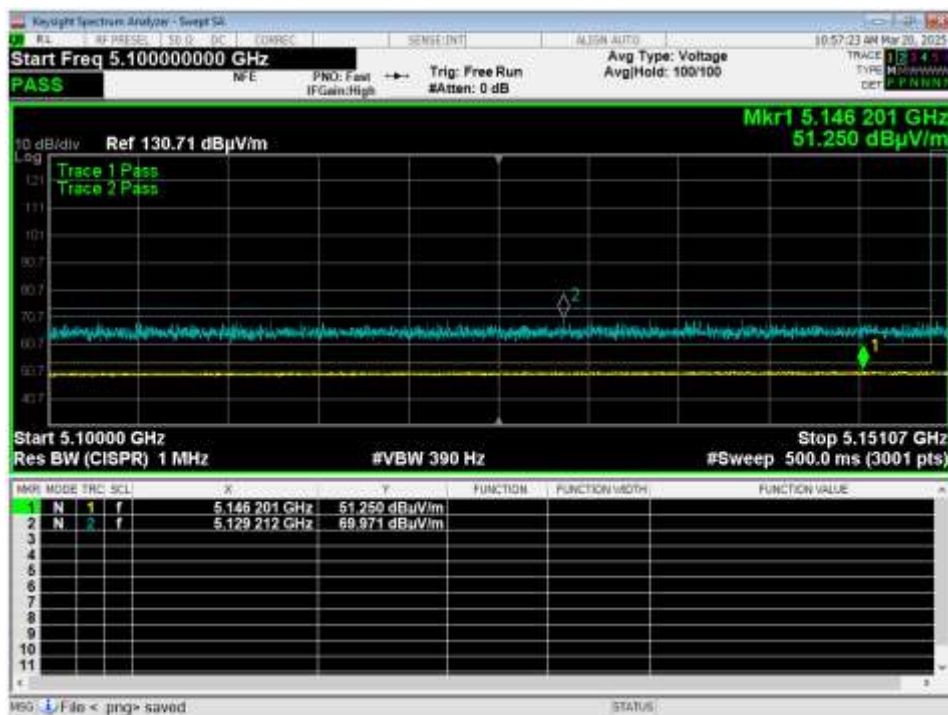


Figure 10: Band Edge EHT20 5240MHz

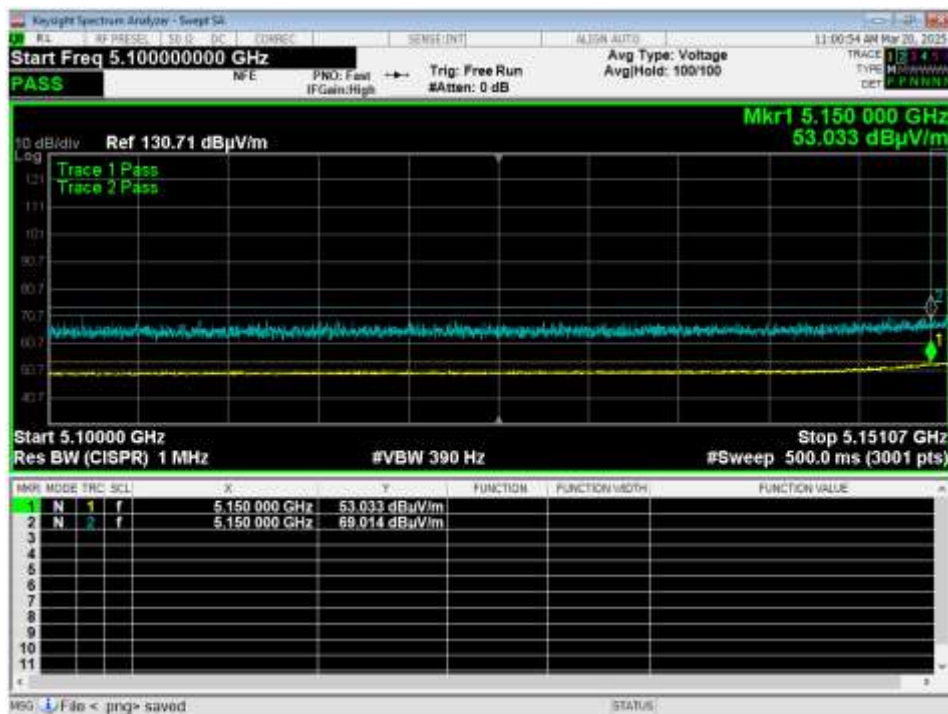


Figure 11: Band Edge EH40 5190MHz

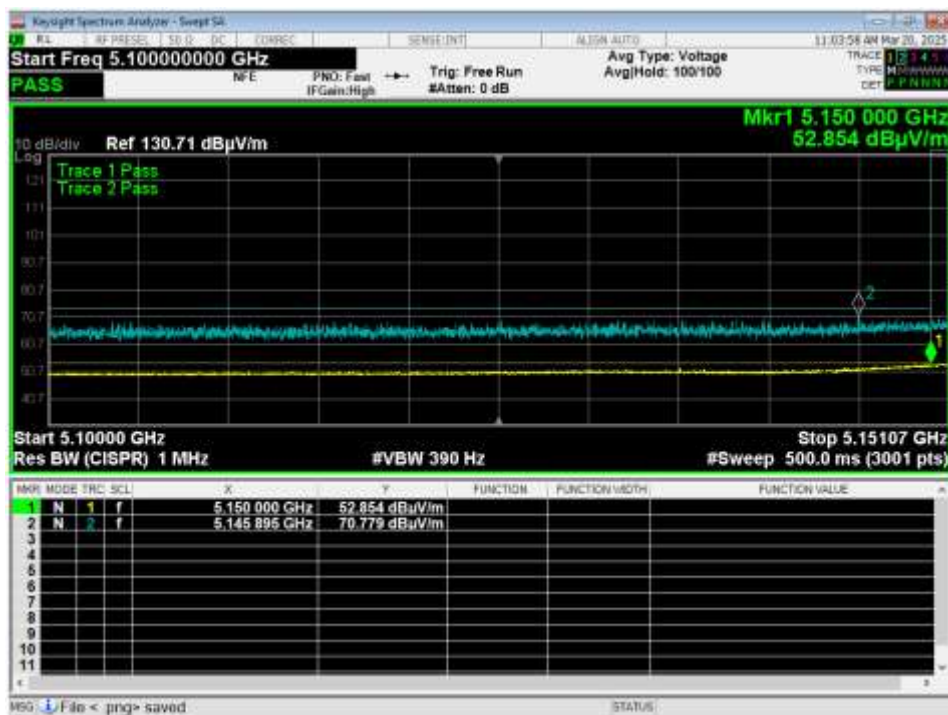


Figure 12: Band Edge EHT40 5200MHz

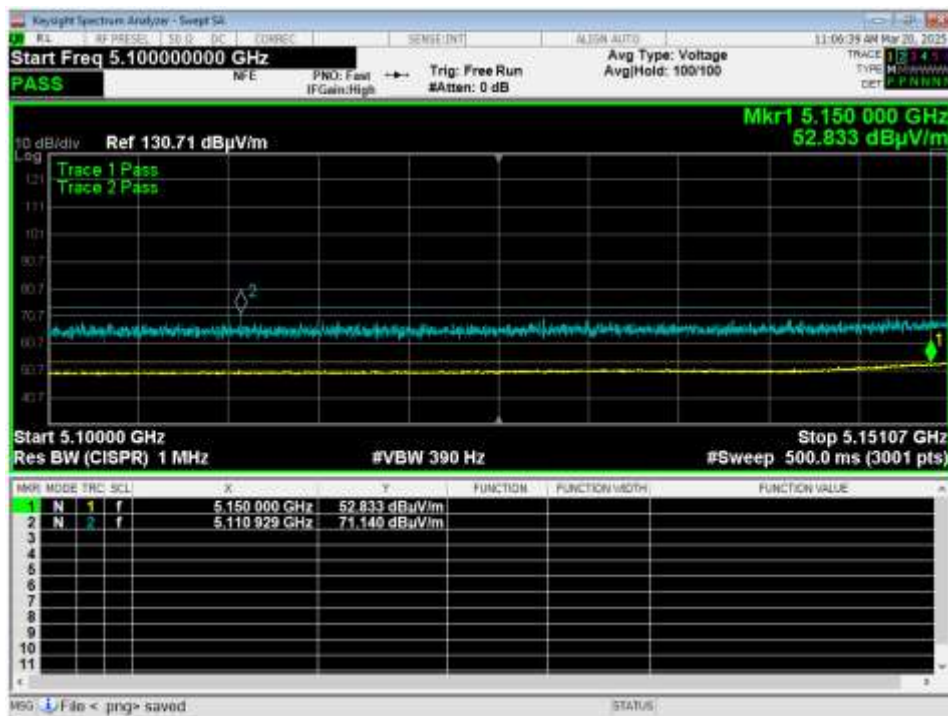


Figure 13: Band Edge EHT80 5210MHz

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 17 dBm in any 1 MHz band during any time interval of continuous transmission.

See Section 2.2 for directional gain calculation.

Results of this testing are summarized.

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss4	22	13.17	7	17	-3.83
OFDM 20	5210	Mcs0_Nss4	25	15.67	7	17	-1.33
OFDM 20	5240	Mcs0_Nss4	25	15.40	7	17	-1.6
EHT 20	5180	Mcs0_Nss4	19	8.95	7	17	-8.5
EHT 20	5210	Mcs0_Nss4	25	14.50	7	17	-2.5
EHT 20	5240	Mcs0_Nss4	25	16.15	7	17	-0.84
EHT 40	5190	Mcs0_Nss4	13	0.36	7	17	-16.64
EHT 40	5230	Mcs0_Nss4	22	9.27	7	17	-7.73
EHT 80	5180	Mcs0_Nss4	20	4.37	7	17	-12.63

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss1	21	12.17	7	17	-4.83
OFDM 20	5210	Mcs0_Nss1	22	12.67	7	17	-4.33
OFDM 20	5240	Mcs0_Nss1	22	12.40	7	17	-4.6
EHT 20	5180	Mcs0_Nss1	19	8.95	7	17	-8.05
EHT 20	5210	Mcs0_Nss1	23	12.50	7	17	-4.5
EHT 20	5240	Mcs0_Nss1	21	12.15	7	17	-4.85
EHT 40	5190	Mcs0_Nss1	13	0.36	7	17	-16.64
EHT 40	5230	Mcs0_Nss1	22	9.27	7	17	-7.73
EHT 80	5180	Mcs0_Nss1	20	4.37	7	17	-12.63

Canada (Indoor Use Only)

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss4	11	2.23	7	3	-0.77
OFDM 20	5210	Mcs0_Nss4	11	2.02	7	3	-0.98
OFDM 20	5240	Mcs0_Nss4	12	2.55	7	3	-0.45
EHT 20	5180	Mcs0_Nss4	12	2.41	7	3	-0.59
EHT 20	5210	Mcs0_Nss4	12	1.87	7	3	-1.13
EHT 20	5240	Mcs0_Nss4	13	2.64	7	3	-0.36
EHT 40	5190	Mcs0_Nss4	14	1.40	7	3	-1.60
EHT 40	5230	Mcs0_Nss4	14	1.23	7	3	-1.77
EHT 80	5180	Mcs0_Nss4	14	-0.62	7	3	-3.62

Result

The maximum summed average power spectral density was less than the limit of 17dBm; therefore, the EUT complies with the specification.

-- End of Test Report --