



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-UX7SP
IC ID	6545A-UX7SP
Equipment Under Test	UX7-SP
Test Report Serial Number	TR10034_01
Date of Tests	19-21, 28 March; 7-8 April 2025
Report Issue Date	11 June 2025

Test Specification	Applicant
47 CFR FCC Part 15, Subpart C	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 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 with the specifications provided by the manufacturer.

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

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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 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 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 + 4 dBi = 7.01 dBi.

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: UBIQUITI MN: UX7 SN: 942A6F422528	Wireless Access Point	See Section 2.4
BN: UBIQUITI	USB C Power Adapter	2 conductor power cord/80 cm

MN: GP-M015-QC SN: N/A		
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 connected to a personal computer laptop and tested using test software in order to enable to constant duty cycle greater or equal to 98% of the WiFi transceiver. All emission modes of 802.11 b/g/n/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

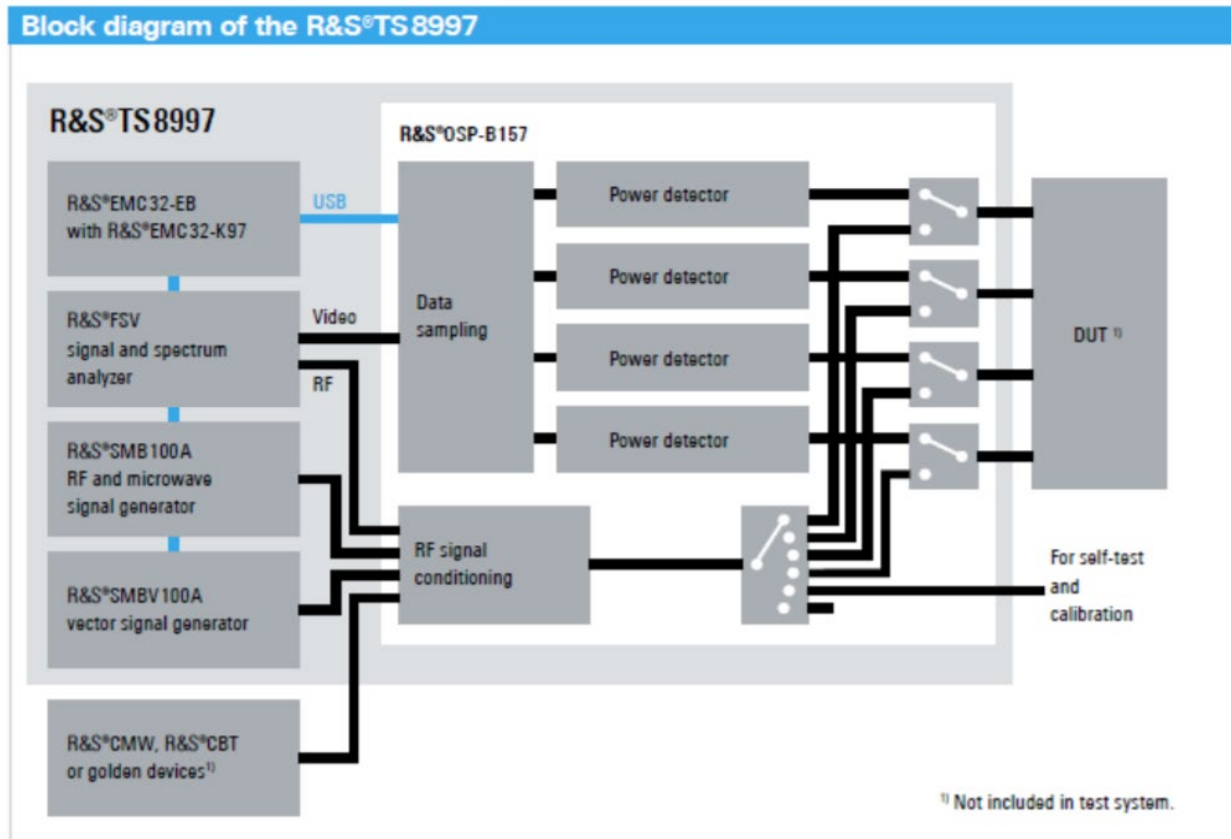


Diagram 1: Test Configuration Block Diagram

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 C 15.203, 15.207 and 15.247 Limits and methods of measurement of radio interference characteristics of radio frequency 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 15.203

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	2412 to 2462	Compliant
15.247(b)	RSS-247 § 5.4	Peak Output Power	2412 to 2462	Compliant
15.247(d)	RSS-247 § 5.4	Antenna Conducted Spurious Emissions	0.009 to 40000	N/A
15.247(d)	RSS-247 § 5.4	Radiated Spurious Emissions	0.009 to 40000	Compliant
15.247(e)	RSS-247 § 5.2	Peak Power Spectral Density	2412 to 2462	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 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 and 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

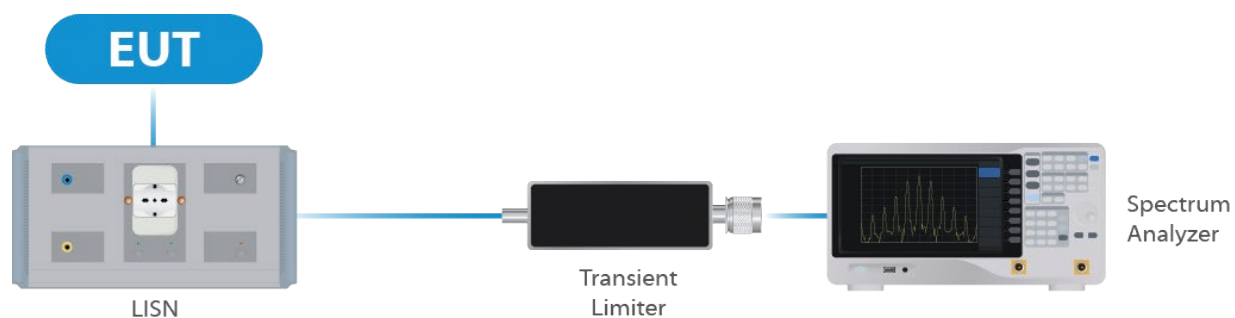


Figure 1: Conducted Emissions Test

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

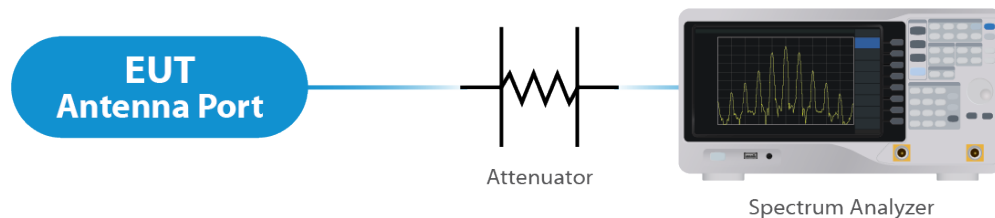


Figure 2: Direct Connect at the Antenna Port Test

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 10 - 40 GHz Horn Antenna	Scwarzbeck	STLP 9129	UCL-3068	2/11/2025	2/4/2027
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

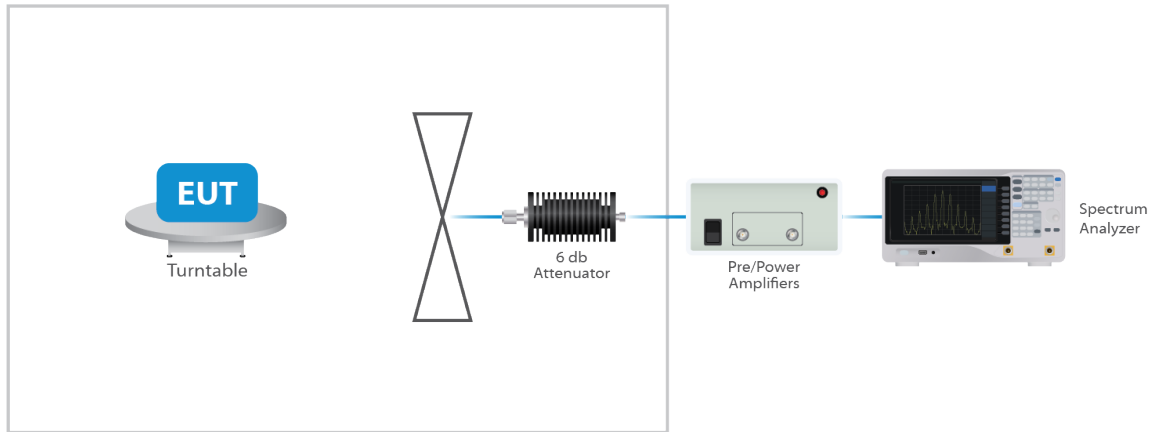


Figure 3: Radiated Emissions Test

4.4 Equipment Calibration

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

4.5 Measurement Uncertainty

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

5 Test Results

5.1 §15.203 Antenna Requirements

The EUT uses an internal antenna. Per the manufacturer, the Maximum gain of the antenna per chain is 4 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is not user replaceable.

See Section 2.2 for directional gain calculation.

Results

The EUT complied with the specification

5.2 Conducted Emissions at Mains Ports Data

Frequency (MHZ)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.681	Hot Lead	Quasi-Peak (Note 2)	40.94	56.00	- 15.06
0.177	Hot Lead	Quasi-Peak (Note 2)	48.48	64.63	- 16.15
0.738	Hot Lead	Quasi-Peak (Note 2)	35.44	56.00	- 20.56
0.153	Hot Lead	Average (Note 2)	37.79	55.84	- 18.05
0.672	Hot Lead	Average (Note 2)	29.82	46.00	- 16.18
0.738	Hot Lead	Average (Note 2)	25.55	46.00	- 20.45
0.672	Neutral Lead	Quasi-Peak (Note 2)	47.14	56.00	- 18.74
0.153	Neutral Lead	Quasi-Peak (Note 2)	507.71	65.84	- 24.97
0.804	Neutral Lead	Quasi-Peak (Note 2)	38.34	56.00	- 17.66
0.153	Neutral Lead	Average (Note 2)	26.82	55.84	- 29.02
0.672	Neutral Lead	Average (Note 2)	27.26	46.00	- 18.74
0.825	Neutral Lead	Average (Note 2)	21.03	46.00	- 24.97

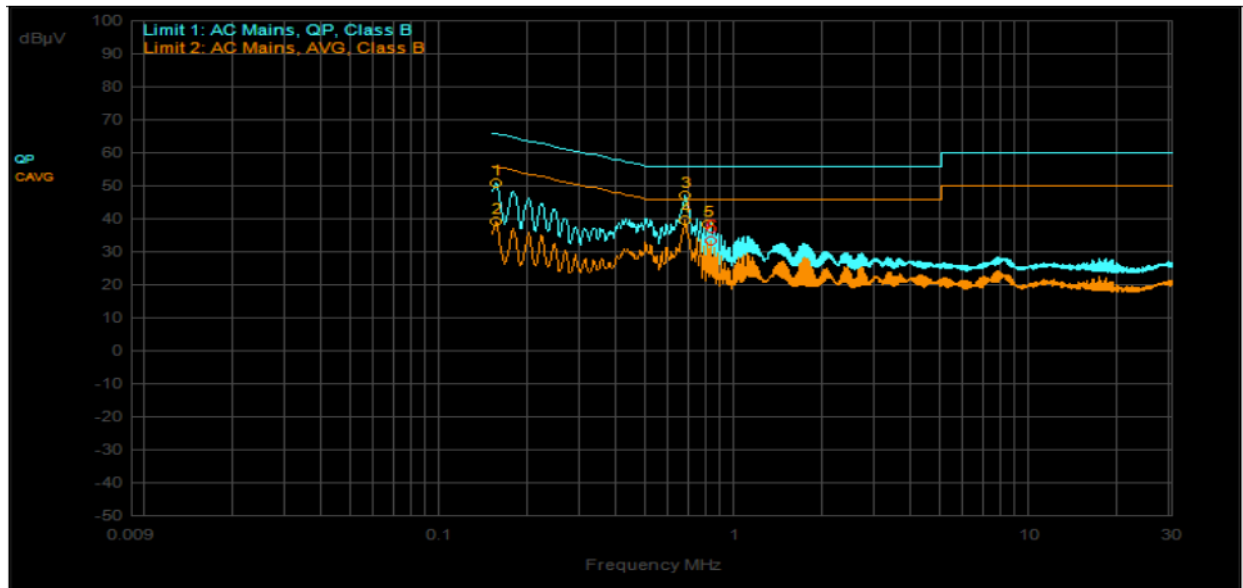
Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit; therefore, the EUT was deemed to meet both the average and quasi-peak limits.

Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.

Note 3: The device the transceiver is in is a Class A device and the limits shown are from §15.207 which are the same as the limits for a Class B device under §15.107. These emissions were investigated and were found to be at the same level regardless of whether the transceivers of the device were not powered, powered and idle, or powered and active, therefore, the conducted emissions of the transceivers were deemed compliant with the requirements of the standard.

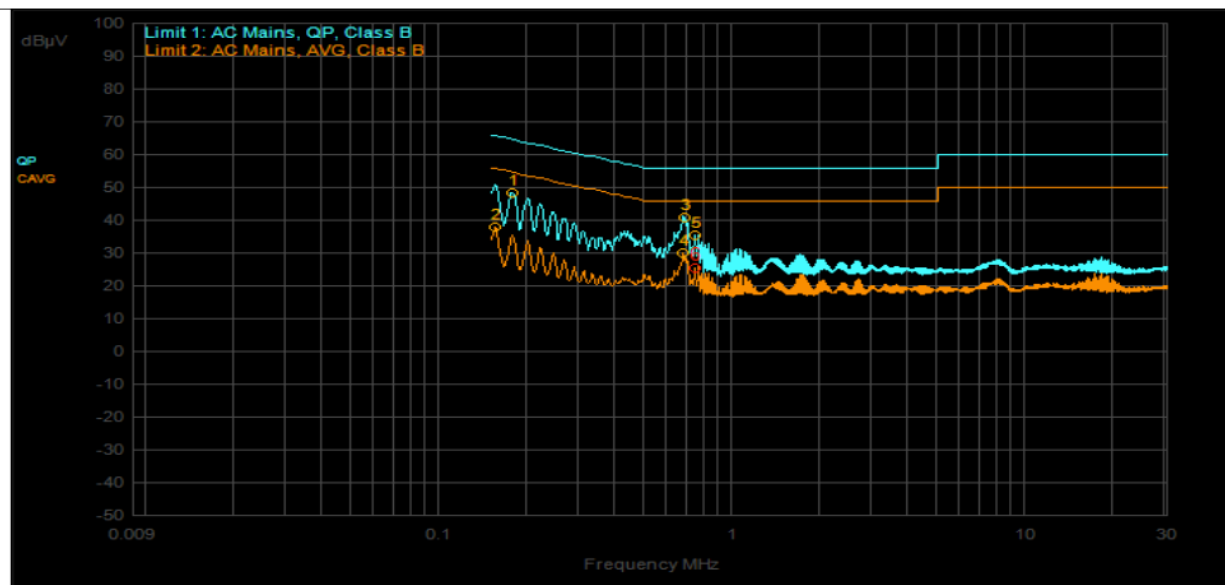
Result

The EUT complied with the specification limit.



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	

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.	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	

Graph 2: Conducted Emissions Plot – Line 1

5.3 §15.247(a)(2) Emissions Bandwidth

All chains were measured under the guidance of KDB 558074 Section 8.2. and KDB 662911 D01. Please see associated annex for details on instrument settings.

Mode	Frequency (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth (MHz)
b	2412	13.00	8.40
	2437	13.10	6.10
	2462	13.00	7.20
g	2412	17.50	16.15
	2437	28.25	16.05
	2462	17.25	15.75
n 20	2412	18.75	17.75
	2437	28.25	17.70
	2462	17.75	17.30
n 40	2422	36.50	35.80
	2437	37.00	35.15
	2452	37.00	35.20
be 20	2412	19.00	12.65
	2437	23.75	17.80
	2462	19.25	18.90
be 40	2422	38.00	15.20
	2437	38.00	35.65
	2452	38.50	38.10

Result

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

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

All chains were measured and summed under the guidance of KDB 558074 Section 8.3.2.3. and KDB 662911 D01. Please see associated annex for details on instrument settings.

See Section 2.2 for directional gain calculation.

The maximum average RF conducted output power measured for this device was 29.66 dBm or 924.70 mW. The limit is 30 dBm or 1 Watt when using antennas with 6 dBi or less gain. The antenna has a gain of 4 dBi.

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power * (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dBm)
b 20	2412	Mcs0_Nss2	25	27.03	4	31.03	36	-4.97
	2417	Mcs0_Nss2	25	27.04	4	31.04	36	-4.96
	2422	Mcs0_Nss2	25	27.06	4	31.06	36	-4.94
	2427	Mcs0_Nss2	25	27.04	4	31.04	36	-4.96
	2432	Mcs0_Nss2	25	26.96	4	30.96	36	-5.04
	2437	Mcs0_Nss2	25	27.13	4	31.13	36	-4.87
	2442	Mcs0_Nss2	25	27.13	4	31.13	36	-4.87
	2447	Mcs0_Nss2	25	27.14	4	31.14	36	-4.86
	2452	Mcs0_Nss2	26	28.19	4	32.19	36	-3.81
	2457	Mcs0_Nss2	26	28.12	4	32.12	36	-3.88
	2462	Mcs0_Nss2	26	28.14	4	32.14	36	-3.86
g 20	2412	Mcs0_Nss2	24	25.76	4	29.76	36	-6.24
	2417	Mcs0_Nss2	25	26.78	4	30.78	36	-5.22
	2422	Mcs0_Nss2	25	26.73	4	30.73	36	-5.27
	2427	Mcs0_Nss2	25	26.76	4	30.76	36	-5.24
	2432	Mcs0_Nss2	25	26.77	4	30.77	36	-5.23
	2437	Mcs0_Nss2	26	29.18	4	33.18	36	-2.82
	2442	Mcs0_Nss2	26	29.16	4	33.16	36	-2.84
	2447	Mcs0_Nss2	27	29.66	4	33.66	36	-2.34
	2452	Mcs0_Nss2	26	27.84	4	31.84	36	-4.16
	2457	Mcs0_Nss2	25	26.89	4	30.89	36	-5.11
	2462	Mcs0_Nss2	23	24.92	4	28.92	36	-7.08
n 20	2412	Mcs0_Nss2	23	24.85	4	28.85	36	-7.15
	2417	Mcs0_Nss2	24	25.55	4	29.55	36	-6.45

	2422	Mcs0_Nss2	25	26.72	4	30.72	36	-5.28
	2427	Mcs0_Nss2	25	26.53	4	30.53	36	-5.47
	2432	Mcs0_Nss2	25	26.53	4	30.53	36	-5.47
	2437	Mcs0_Nss2	27	29.62	4	33.62	36	-2.38
	2442	Mcs0_Nss2	27	29.40	4	33.40	36	-2.6
	2447	Mcs0_Nss2	26	29.01	4	33.01	36	-2.99
	2452	Mcs0_Nss2	25	26.69	4	30.69	36	-5.31
	2457	Mcs0_Nss2	25	26.82	4	30.82	36	-5.18
	2462	Mcs0_Nss2	23	24.78	4	28.78	36	-7.22
n 40	2422	Mcs0_Nss2	21	23.29	4	27.29	36	-8.71
	2437	Mcs0_Nss2	23	25.24	4	29.24	36	-6.76
	2452	Mcs0_Nss2	20	22.56	4	26.56	36	-9.44
ax 20	2412	Mcs0_Nss2	22	24.03	4	28.03	36	-7.97
	2417	Mcs0_Nss2	23	25.01	4	29.01	36	-6.99
	2422	Mcs0_Nss2	25	26.81	4	30.81	36	-5.19
	2427	Mcs0_Nss2	25	26.63	4	30.63	36	-5.37
	2432	Mcs0_Nss2	25	26.77	4	30.77	36	-5.23
	2437	Mcs0_Nss2	26	29.12	4	33.12	36	-2.88
	2442	Mcs0_Nss2	26	28.97	4	32.97	36	-3.03
	2447	Mcs0_Nss2	25	26.90	4	30.90	36	-5.1
	2452	Mcs0_Nss2	24	25.73	4	29.73	36	-6.27
	2457	Mcs0_Nss2	23	24.83	4	28.83	36	-7.17
	2462	Mcs0_Nss2	22	24.00	4	28.00	36	-8
ax 40	2422	Mcs0_Nss2	21	23.22	4	27.22	36	-8.78
	2437	Mcs0_Nss2	23	25.16	4	29.16	36	-6.84
	2452	Mcs0_Nss2	21	23.35	4	27.35	36	-8.65

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).

* Gated EIRP shown in the Annex is the conducted measurement

5.5 §15.247(d) Spurious Emissions

5.5.1 Conducted Spurious Emissions

The frequency range 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 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.

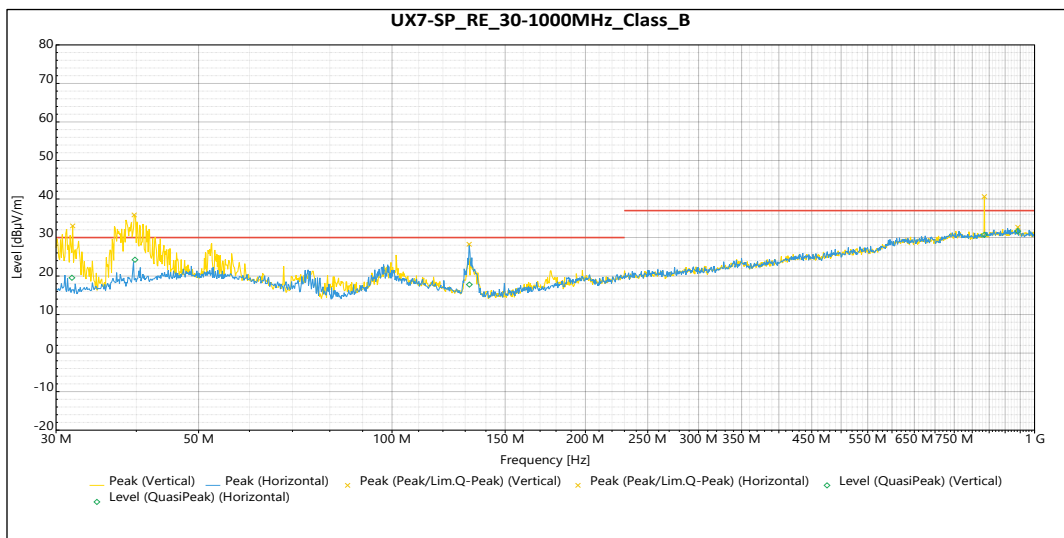
5.5.2 Radiated Spurious Emissions in the Restricted Bands of §15.205

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emissions was investigated to measure any radiated emissions in the restricted bands. The following tables show measurements of any emissions that fell into the restricted bands of §15.205. The tables show the worst-case emissions measured from the EUT. For frequencies above 18.0 GHz, a measurement distance of 1 meter was used. The noise floor was a minimum of 6 dB below the limits. The emissions in the restricted bans must meet the limits specified in §15.209. Tabular data for each of the spurious emissions is shown below for each of the units. Plots of the band edges are also shown.

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

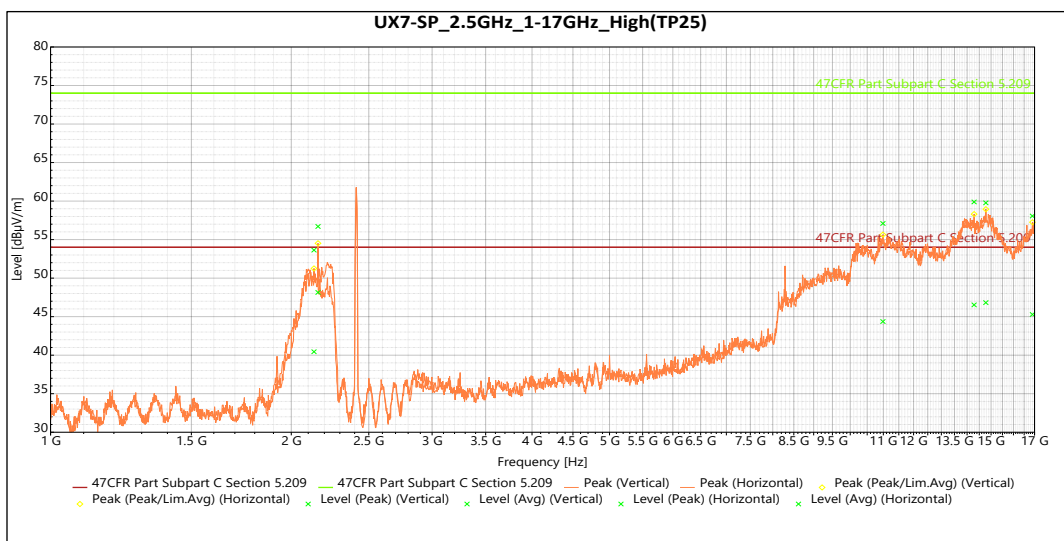
Result

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



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

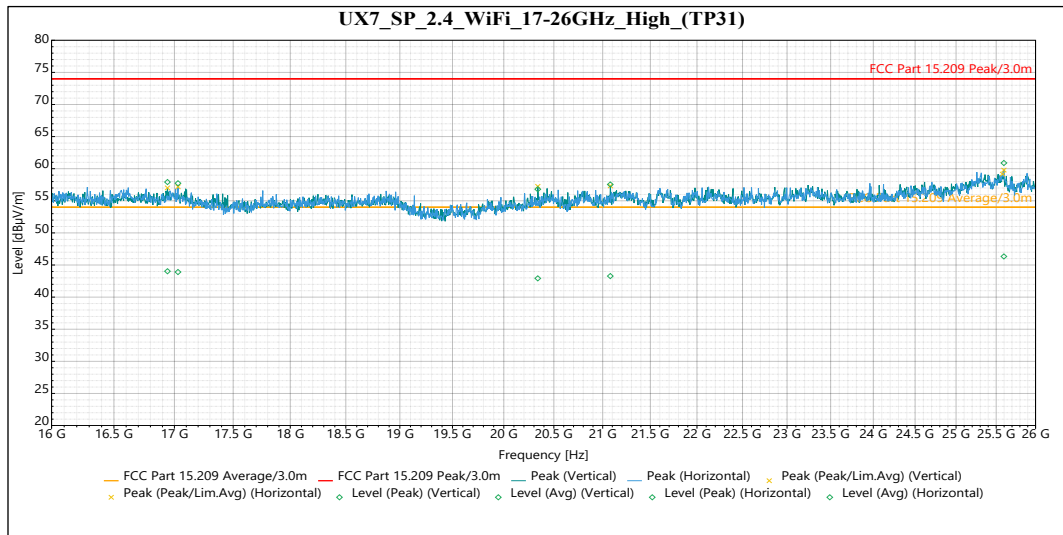
Table 4: Radiated Emissions within 30 MHz to 1 GHz



Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
2.1601 GHz	Peak	56.703	74	-17.297	289	1.834	Vertical	-16.516
10.987 GHz	Peak	57.094	74	-16.906	97	1.643	Vertical	11.509
14.776 GHz	Peak	59.771	74	-14.229	328	2.65	Vertical	14.748
2.1601 GHz	Avg	48.144	54	-5.856	289	1.834	Vertical	-16.516
10.987 GHz	Avg	44.367	54	-9.633	97	1.643	Vertical	11.509

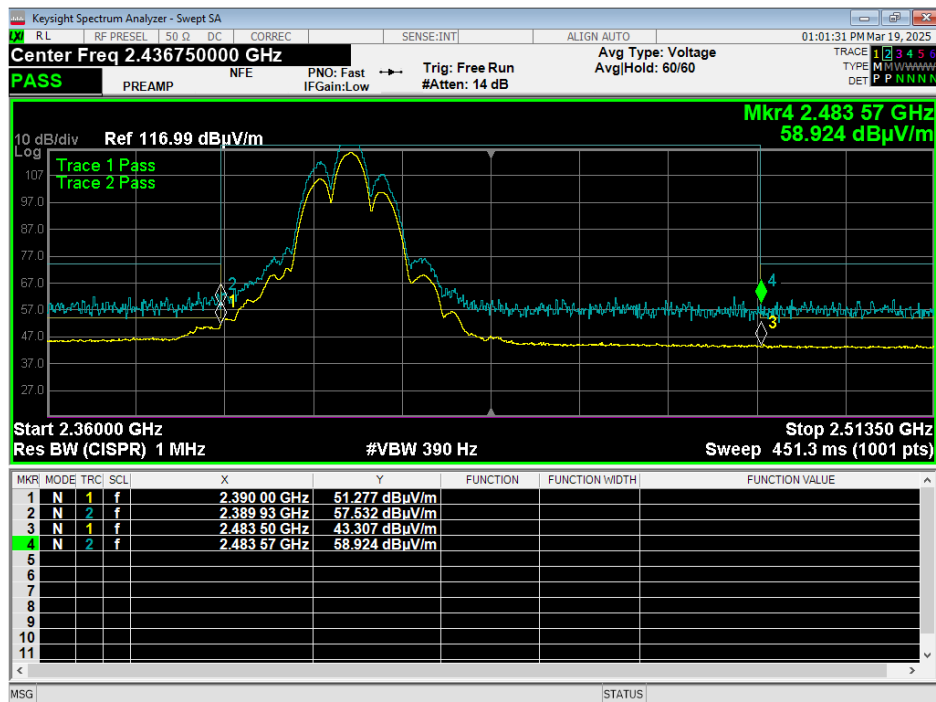
Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.776 GHz	Avg	46.821	54	-7.179	328	2.65	Vertical	14.748
2.1352 GHz	Peak	53.636	74	-20.364	213	1.643	Horizontal	-16.768
14.285 GHz	Peak	59.889	74	-14.111	326	1.638	Horizontal	14.193
16.897 GHz	Peak	58.062	74	-15.938	117	3.155	Horizontal	14.673
2.1352 GHz	Avg	40.448	54	-13.552	213	1.643	Horizontal	-16.768
14.285 GHz	Avg	46.53	54	-7.47	326	1.638	Horizontal	14.193
16.897 GHz	Avg	45.283	54	-8.717	117	3.155	Horizontal	14.673

Table 5: Radiated Emissions within 1-17GHz transmitting on Low 2412 MHz

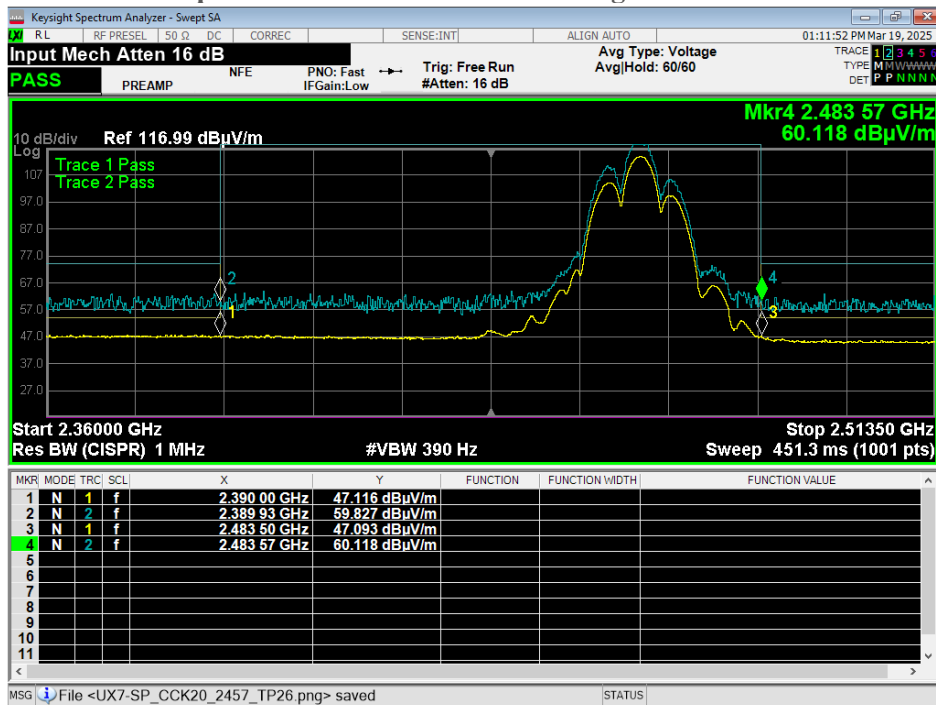


Frequency	SR #	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
16.9418297 GHz	Peak	57.918	74	-16.082	39	Vertical	7.192
20.3381886 GHz	Peak	56.795	74	-17.205	138	Vertical	6.962
21.079086 GHz	Peak	57.537	74	-16.463	71	Vertical	7.647
16.9418297 GHz	Avg	44.026	54	-9.974	39	Vertical	7.192
20.3381886 GHz	Avg	42.919	54	-11.081	138	Vertical	6.962
21.079086 GHz	Avg	43.274	54	-10.726	71	Vertical	7.647
17.0298562 GHz	Peak	57.732	74	-16.268	347	Horizontal	7.139
25.597214 GHz	Peak	60.887	74	-13.113	273	Horizontal	9.69
17.0298562 GHz	Avg	43.905	54	-10.095	347	Horizontal	7.139
25.597214 GHz	Avg	46.33	54	-7.67	273	Horizontal	9.69

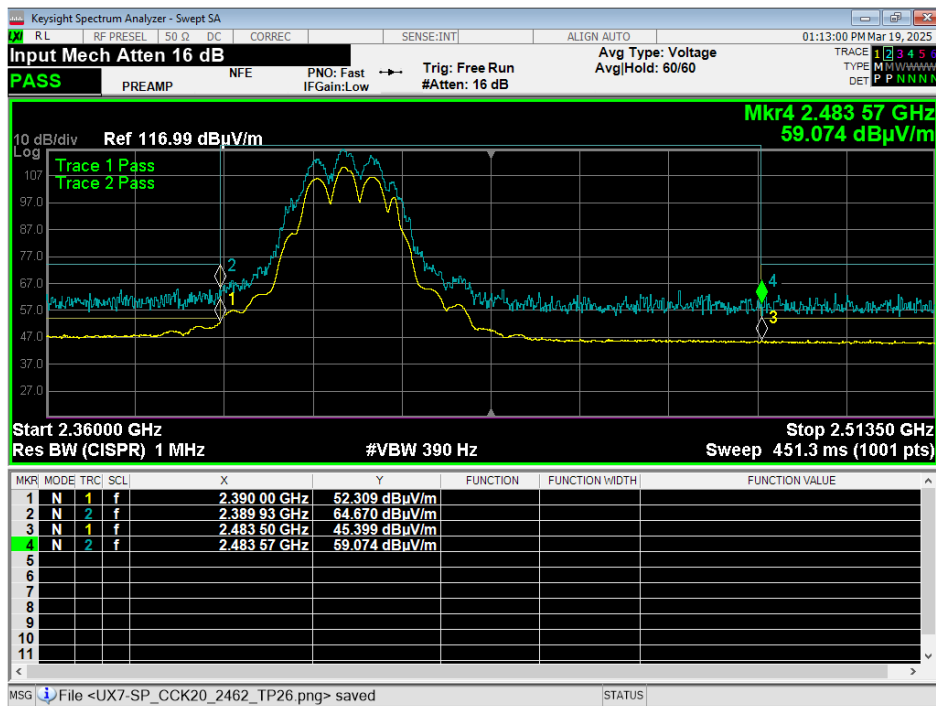
Table 6: Radiated Emissions from 17-40GHz transmitting on high frequency 2462 MHz



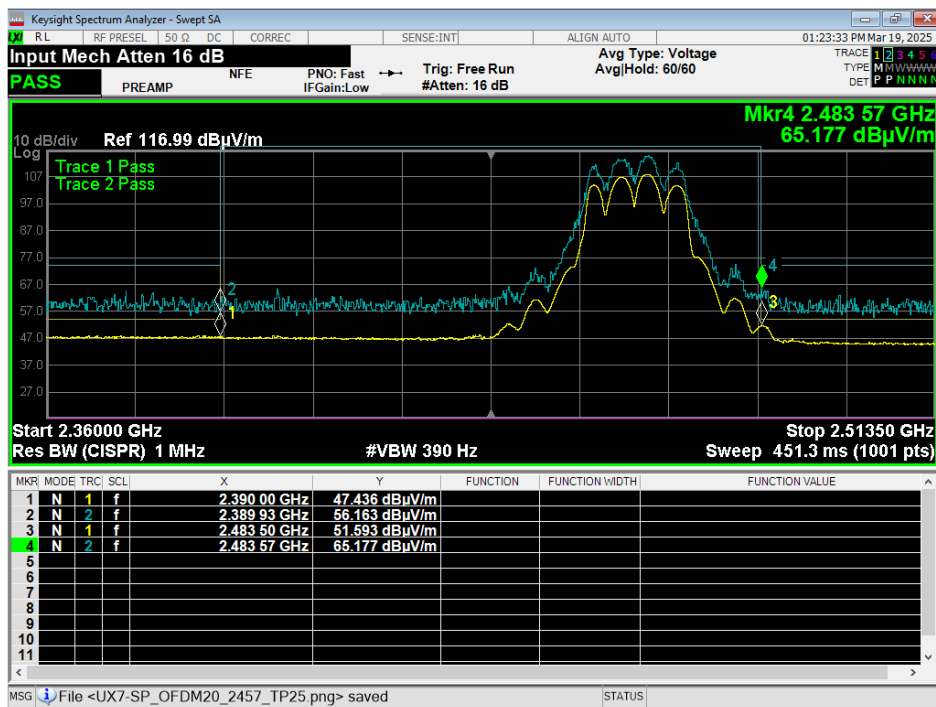
Graph 3: Radiated Lower Band Edge Plot CCK20



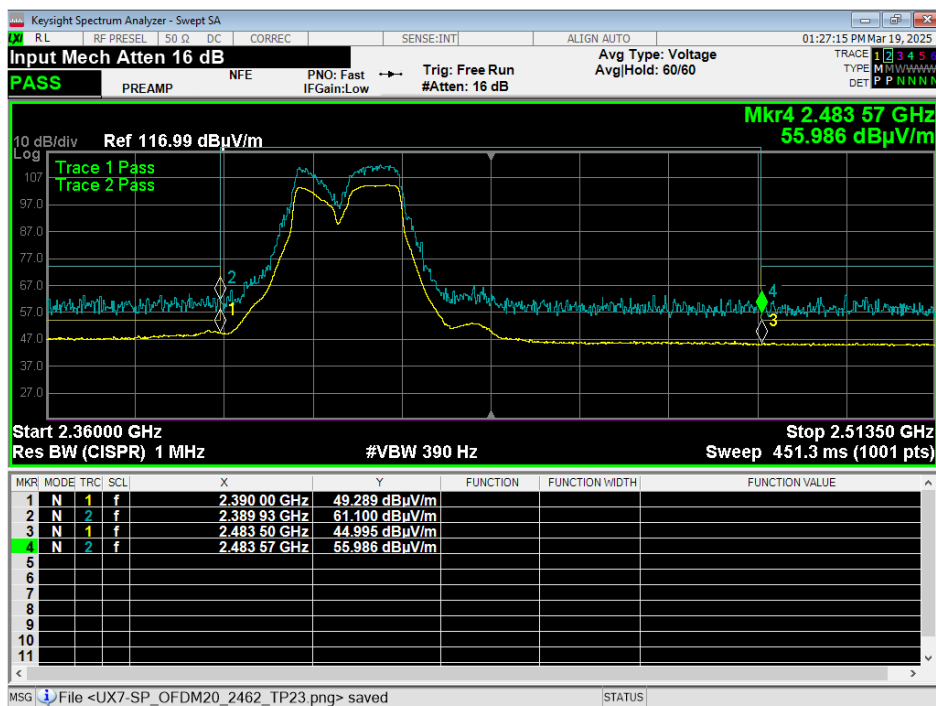
Graph 4: Radiated Upper Band Edge Plot CCK20



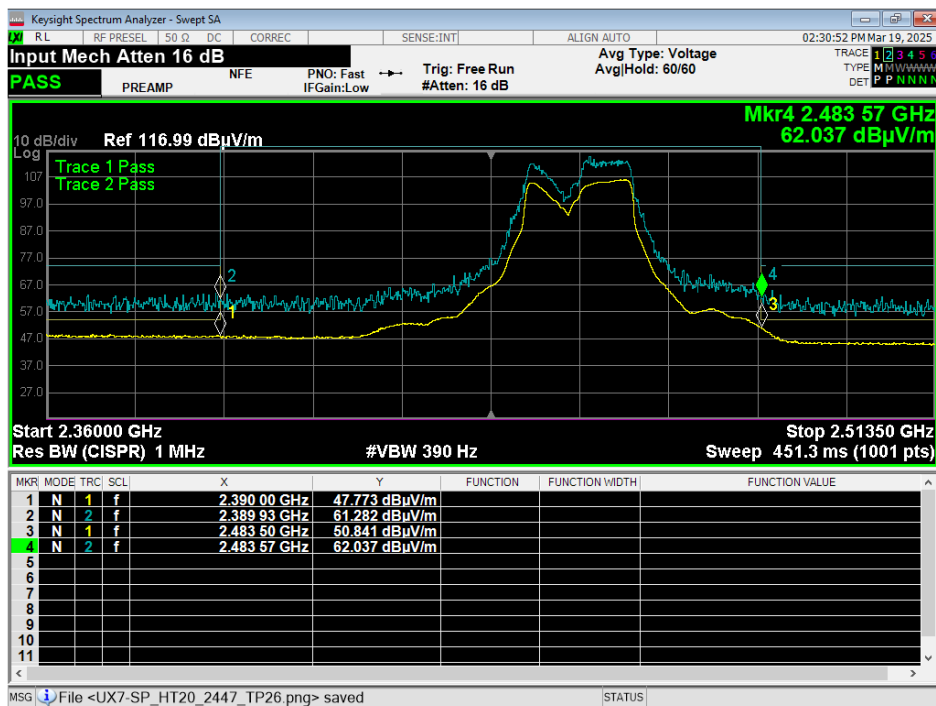
Graph 5: Radiated Upper Band Edge Plot OFDM20



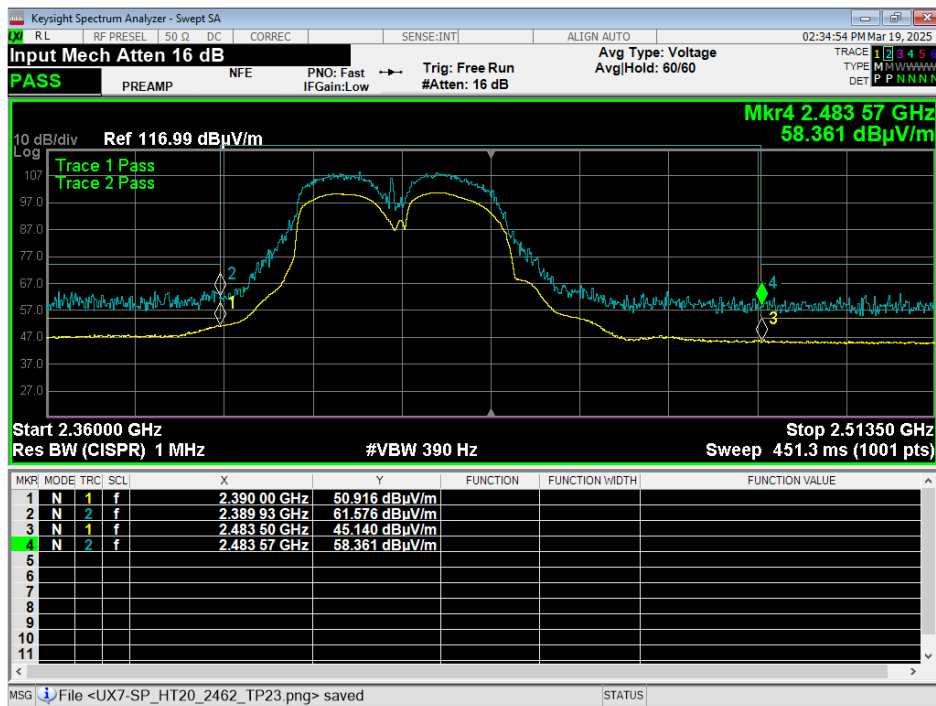
Graph 6: Radiated Upper Band Edge Plot ofDM20



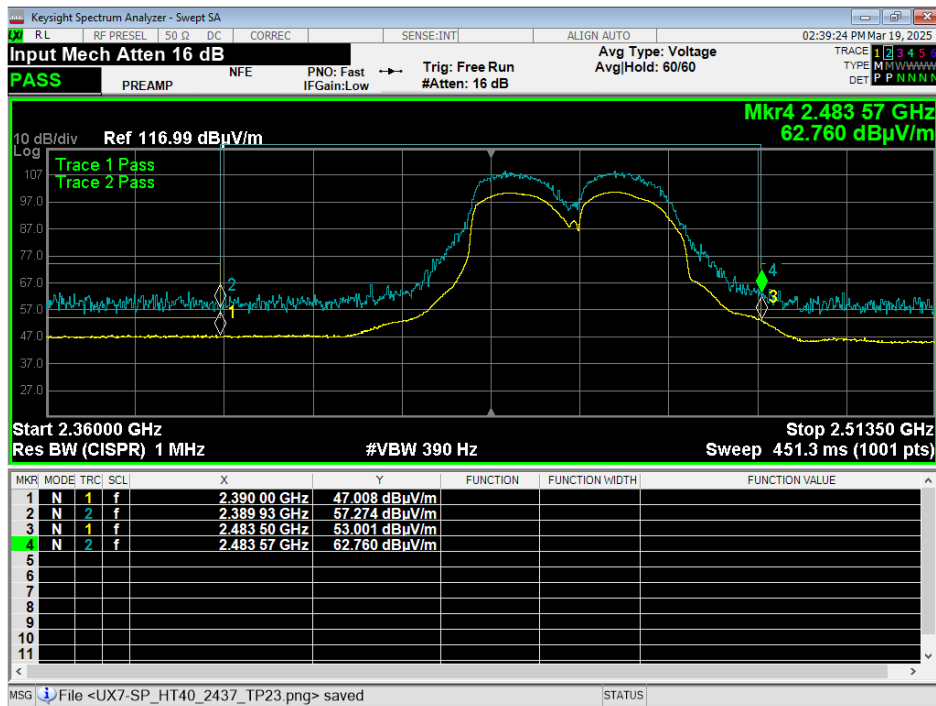
Graph 7: Radiated Upper Band Edge Plot HT20



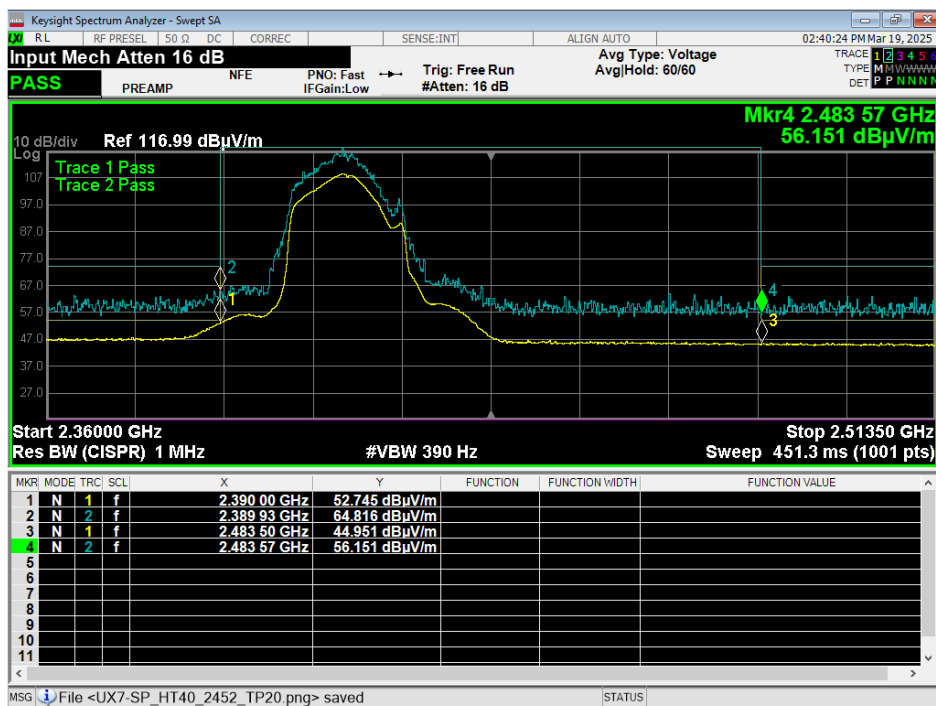
Graph 8: Radiated Upper Band Edge Plot HT20



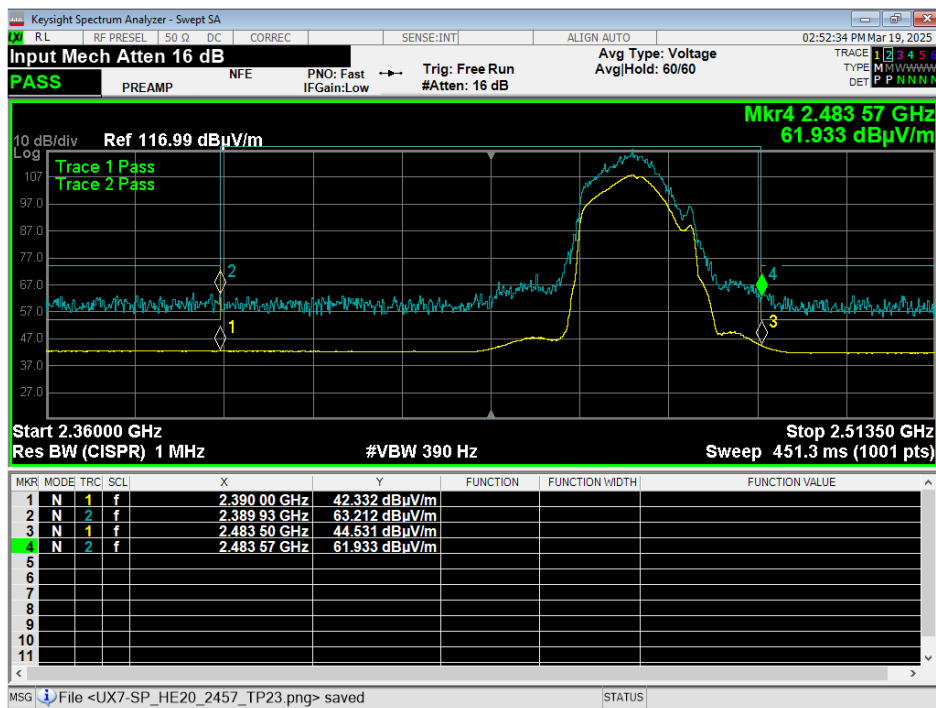
Graph 9: Radiated Upper Band Edge Plot HT40



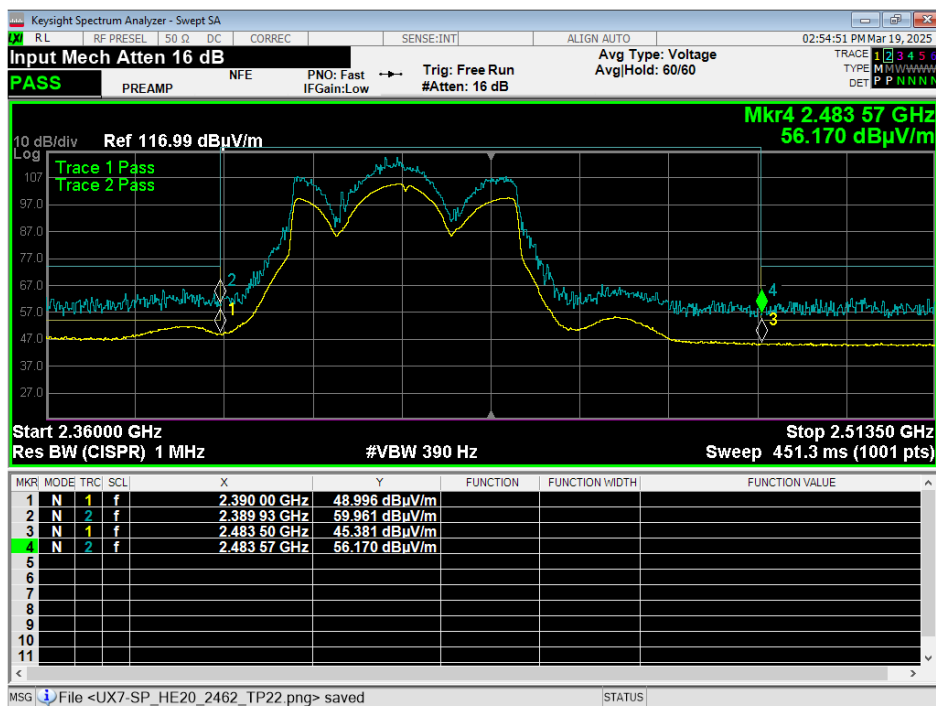
Graph 10: Radiated Upper Band Edge Plot HT40



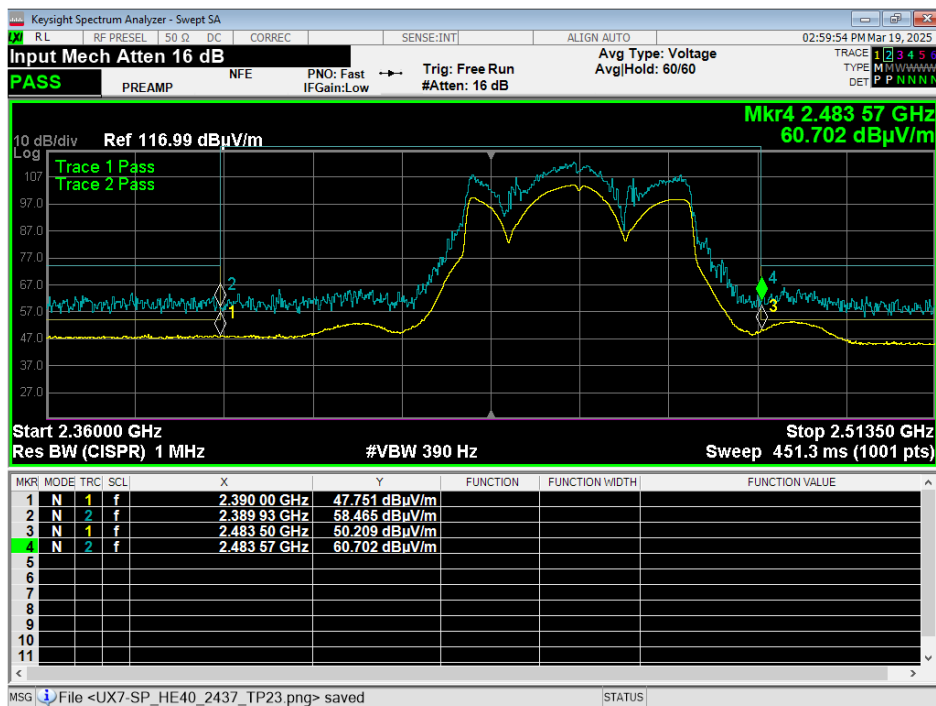
Graph 11: Radiated Upper Band Edge Plot HE20



Graph 12: Radiated Upper Band Edge Plot HE20



Graph 13: Radiated Upper Band Edge Plot HE40



Graph 14: Radiated Upper Band Edge Plot HE40

5.6 §15.247(e) Maximum Average Power Spectral Density

All chains were measured and summed under the guidance of KDB 558074 Section 8.4. 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 8 dBm in any 3 kHz band during any time interval of continuous transmission.

See Section 2.2 for directional gain calculation.

Mode	Frequency (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
b	2412	Msc0_Nss2	25	2.41	4	8.0	-5.59
	2437	Msc0_Nss2	25	2.09	4	8.0	-5.91
	2462	Msc0_Nss2	26	3.38	4	8.0	-4.62
g	2412	Msc0_Nss2	24	2.41	4	8.0	-5.59
	2437	Msc0_Nss2	26	-2.83	4	8.0	-10.83
	2462	Msc0_Nss2	23	-7.02	4	8.0	-15.02
n 20	2412	Msc0_Nss2	23	-8.9	4	8.0	-16.9
	2437	Msc0_Nss2	27	-4.07	4	8.0	-12.07
	2462	Msc0_Nss2	23	-8.78	4	8.0	-16.78
n 40	2422	Msc0_Nss2	21	-13.18	4	8.0	-21.18
	2437	Msc0_Nss2	23	-11.06	4	8.0	-19.06
	2452	Msc0_Nss2	20	-14.15	4	8.0	-22.15
ax 20	2412	Msc0_Nss2	22	-9.09	4	8.0	-17.09
	2437	Msc0_Nss2	26	-4.7	4	8.0	-12.7
	2462	Msc0_Nss2	22	-9.65	4	8.0	-17.65
ax 40	2422	Msc0_Nss2	21	-13.05	4	8.0	-21.05
	2437	Msc0_Nss2	23	-11.34	4	8.0	-19.34
	2452	Msc0_Nss2	21	-12.9	4	8.0	-20.9

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 --