UNIFIED COMPLIANCE LABORATORY

427 West 12800 South
Draper, UT 84020

Test Report

Certification

FCC ID	SWX-E7CPI
ISED ID	6545A-E7CPI
Equipment Under Test	E7-Campus-Indoor
Test Report Serial Number	TR12345_01
Date of Test(s)	19-24 September 2025
Report Issue Date	25 September 2025

Test Specification	Applicant
47 CFR FCC Part 15, Subpart E RSS-248 Issue 3 (October 2024)	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.

NVLAP TESTING ilac-MRA

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 and RSS-248 Issue 3. 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	E7-Campus-Indoor
FCC ID	SWX-E7CPI
ISED ID	6545A-E7CPI

On this 25th day of September 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: Evan J. Hartzell

Reviewed By: Kimberly DeBole

Revision History		
Revision	**Description**	**Date**
01	Original Report Release	25 September 2025

Table of Contents

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-Campus-Indoor
Serial Number	4AE64B
Dimensions (cm)	25.0 x 25.0 x 4.6

2.2 Description of EUT

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

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 5975Unified 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-Campus-Indoor (Note 1) SN: 4AE64B	WiFi Access 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: UBIQUITI MN: UDR SN: N/A	Desktop Gateway	(4) GbE RJ45 LAN ports (1) GbE RJ45 WAN port
BN: Dell MN: XPS 13 SN: N/A	Laptop Personal Computer	Shielded or Un-shielded Cat 5e cable (Note 2)
BN: WiFi Alliance MN: v2.0.65.184 SN: N/A	AFC DUT Test Harness	Unshielded Cat 5 / 1 meter
BN: ASUS MN: ROG 8 Pro SN: N/A	Wireless Client	N/A

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-Campus-Indoor 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 Volts AC Mains to 48 Volts PoE
AC Mains Frequency	60 Hz
Temperature	18.8 – 25 °C
Humidity	23 – 54 %
Barometric Pressure	1020 mBar

2.6 Operating Modes

The E7-Campus-Indoor was tested using test software in order to enable constant transmission.

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

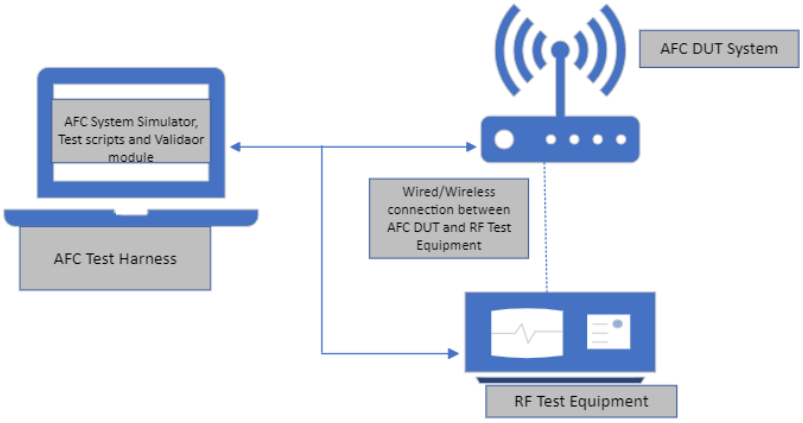


Diagram 1: AFC DUT Setup for Standard Power Access Point- Standalone

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(k)	RSS-248 Section 6	AFCDRSA31_FrequencyChannel	5955 to 6885	Compliant
15.407(k)	RSS-248 Section 6	AFCDUSA32_FrequencyChannel	5955 to 6885	Compliant
15.407(k)	RSS-248 Section 6	AFCDSAU33_FrequencyChannel	5955 to 6885	Compliant
15.407(k)	RSS-248 Section 6	AFCDUAU34_FrequencyChannel	5955 to 6885	Compliant
15.407(k)	RSS-248 Section 6	ServerValidation_AFCDUSV35	N/A	Compliant
The testing was performed according to the procedures in ANSI C63.10-2013, KDB 789033, KDB 987594 and 47 CFR Part 15. Where applicable, KDB 662911 was followed to sum required measurements. Note [1]: AFC plots provided represent worst case data for each channel tested.				

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 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 Designation Number US5037 by the FCC and Conformity Assessment Number US0223 by ISED.

4 Test Equipment

4.1 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	Keysight	N9010B	UCL-7069	5/20/2025	5/20/2026

Table 1: List of equipment used for Direct Connect at the Antenna Port

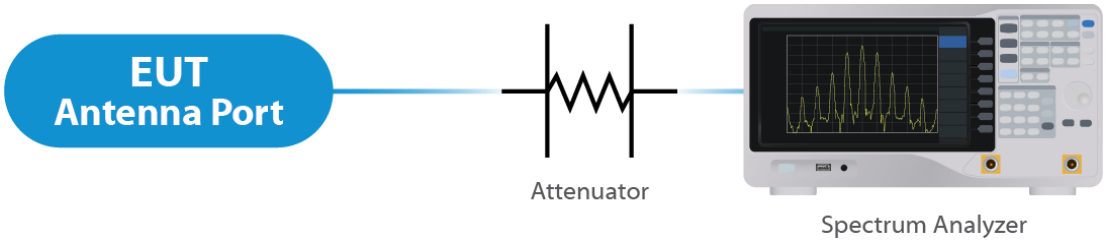


Figure 1: Direct Connect at the Antenna Port Test

4.2 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.

4.3 Measurement Uncertainty

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

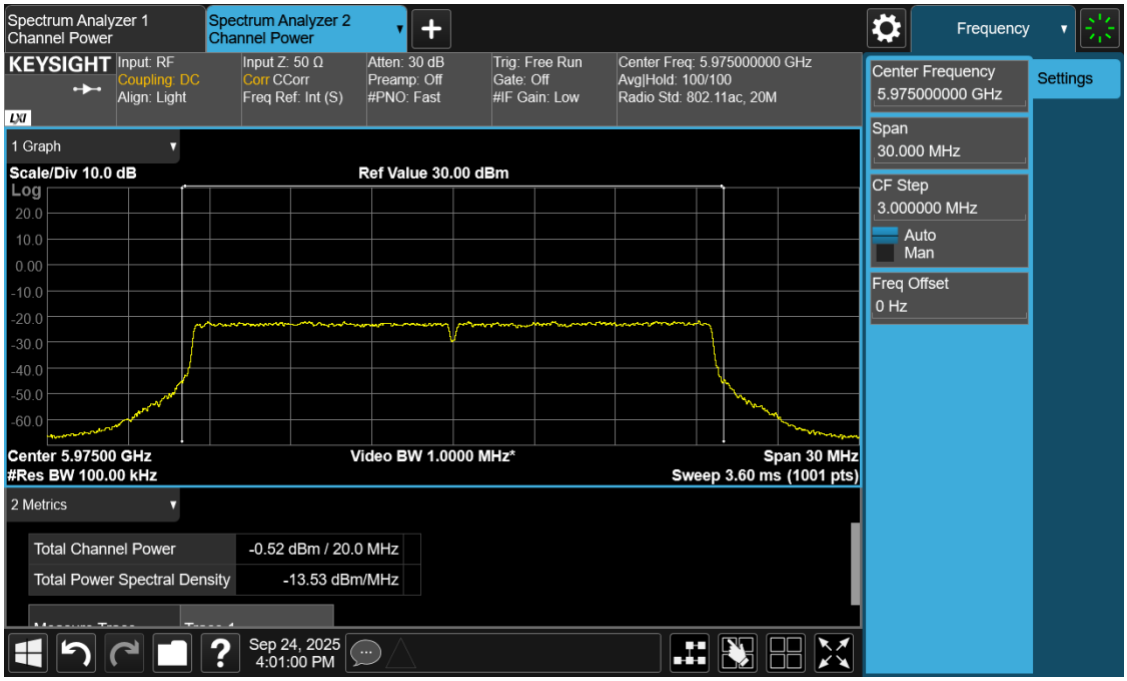
5 Test Results

5.1 §15.407 Successful Registration and Spectrum Access Request

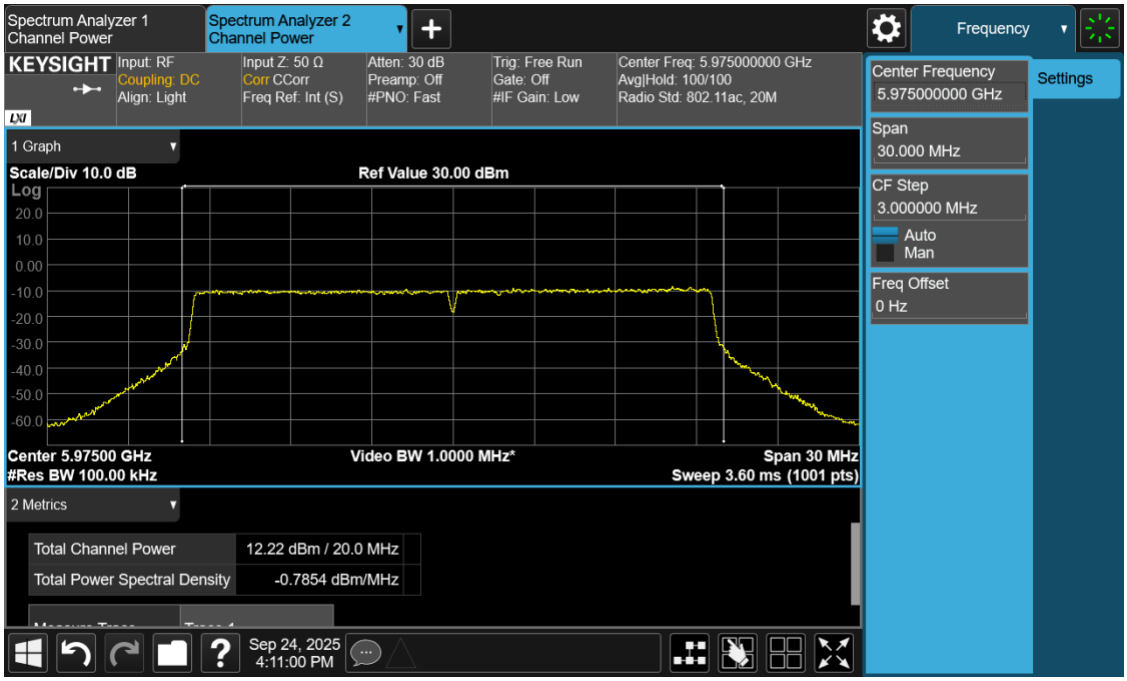
5.1.1 20 MHz Bandwidth

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 20	5975	LPI	-0.52	-0.94	-1.46	-0.83	17.10	30
EHT 20	5975	SP	12.22	12.06	11.55	11.83	29.94	33.3
EHT 20	6695	SP	6.43	6.14	5.75	5.56	24.00	26.2

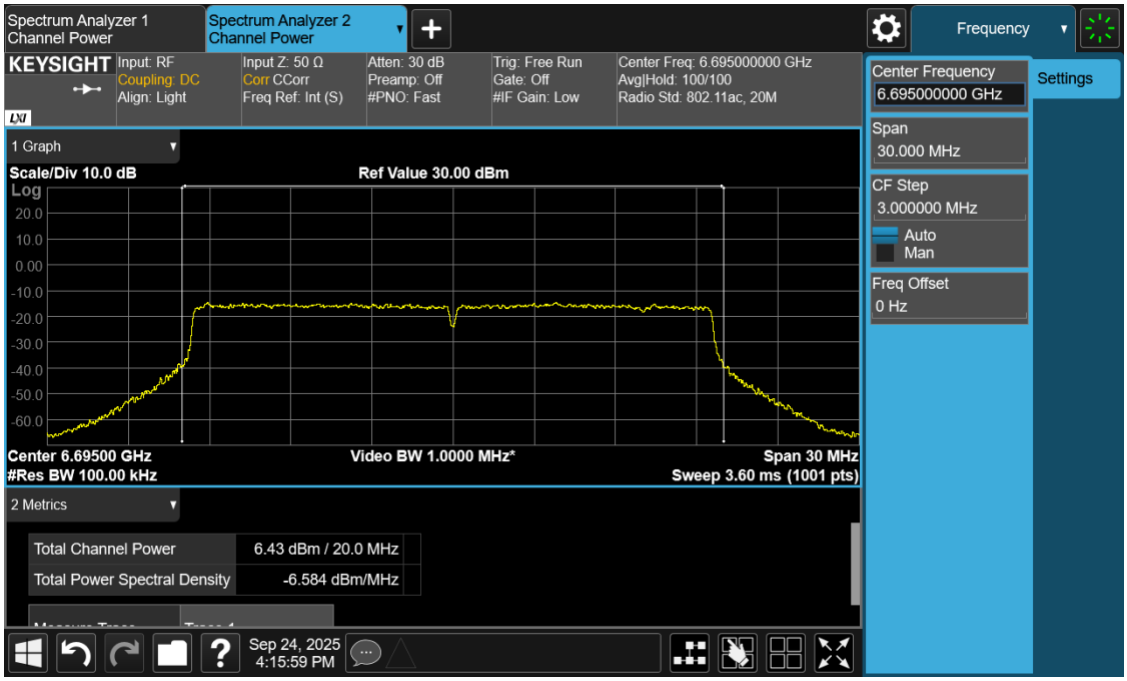
Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 20	5975	LPI	-13.54	-13.95	-14.47	-13.84	4.08	5
EHT 20	5975	SP	-0.79	-0.95	-1.46	-1.18	16.93	20.3
EHT 20	6695	SP	-6.58	-6.87	-7.26	-7.45	10.99	13.2



Plot 1: Power and PSD for Low-Power Indoor – 5975 MHz



Plot 2: Power and PSD for Standard Power – 5975 MHz

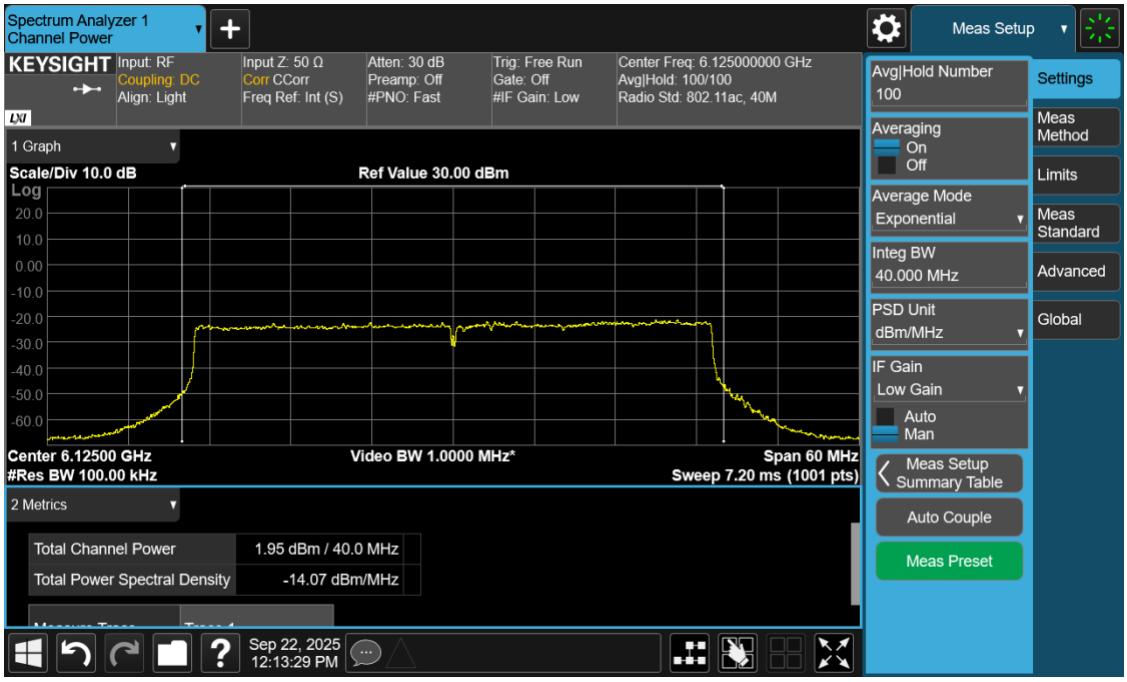


Plot 3: Power and PSD for Standard Power – 6695 MHz

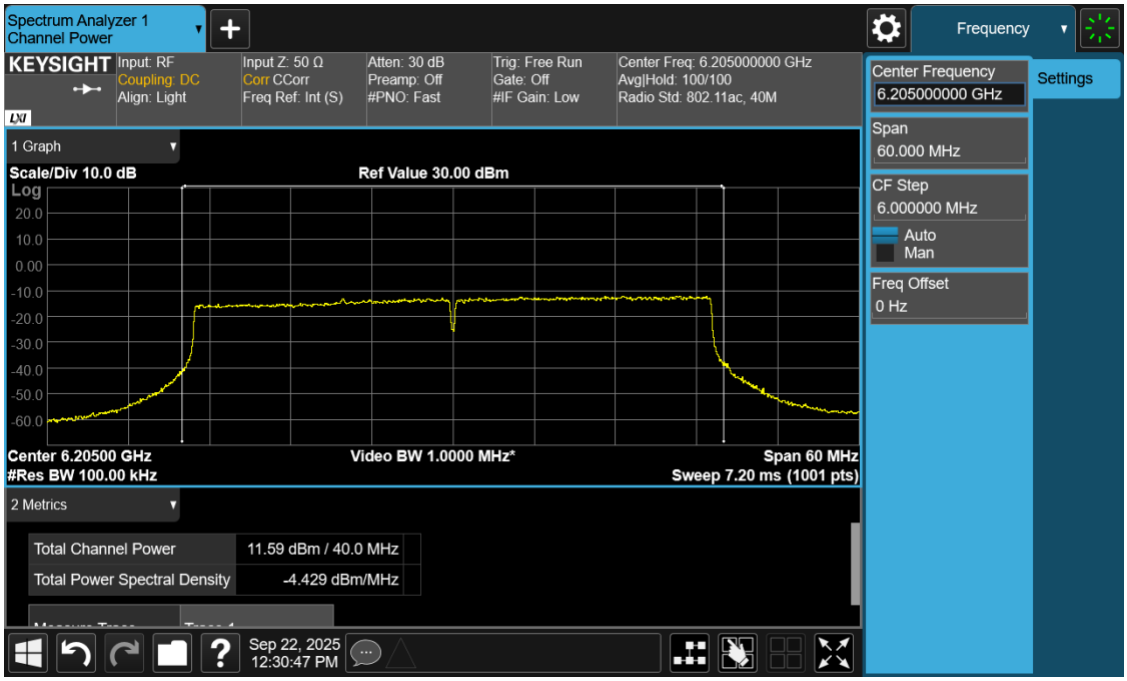
5.1.2 40 MHz Bandwidth

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 40	6125	LPI	1.95	1.81	1.58	1.72	19.79	30
EHT 40	6205	SP	11.42	11.5	11.59	11.27	29.47	30.3
EHT 40	5965	SP	7.8	7.66	7.25	7.49	25.58	26.7

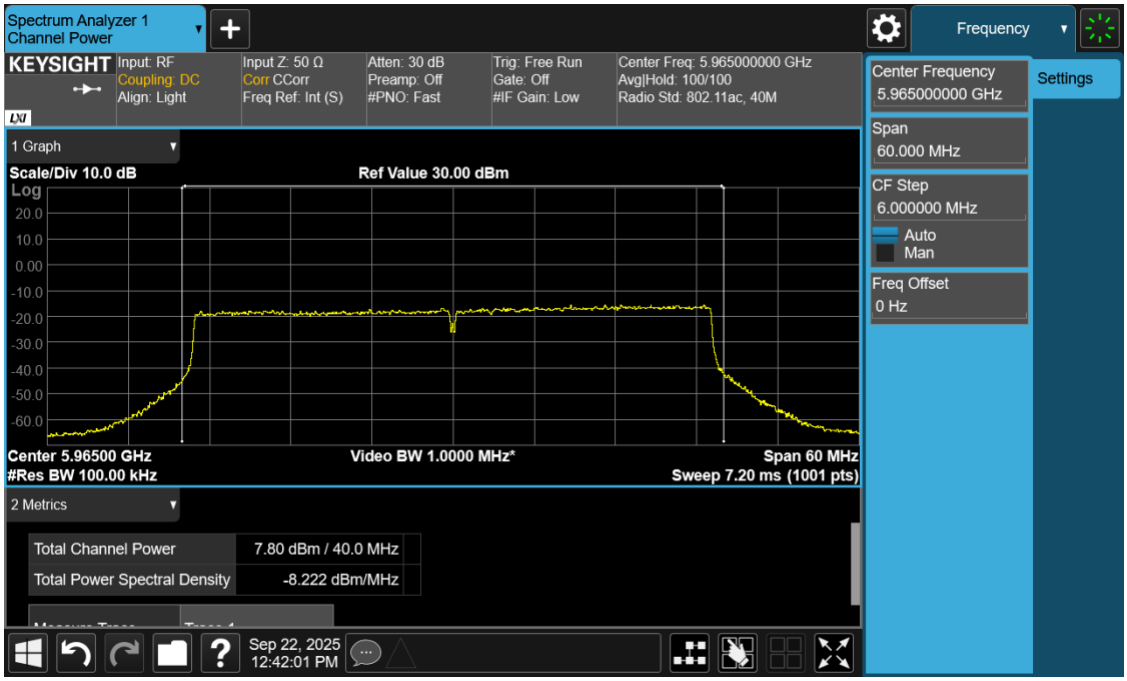
Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 40	6125	LPI	-14.07	-14.22	-14.44	-14.3	3.77	5
EHT 40	6205	SP	-4.60	-4.52	-4.43	-4.76	13.44	14.3
EHT 40	5965	SP	-8.22	-8.36	-8.77	-8.53	9.56	10.07



Plot 4: Power and PSD for Low-Power Indoor – 6125 MHz



Plot 5: Power and PSD for Standard Power – 6205 MHz



Plot 6: Power and PSD for Standard Power – 5965 MHz

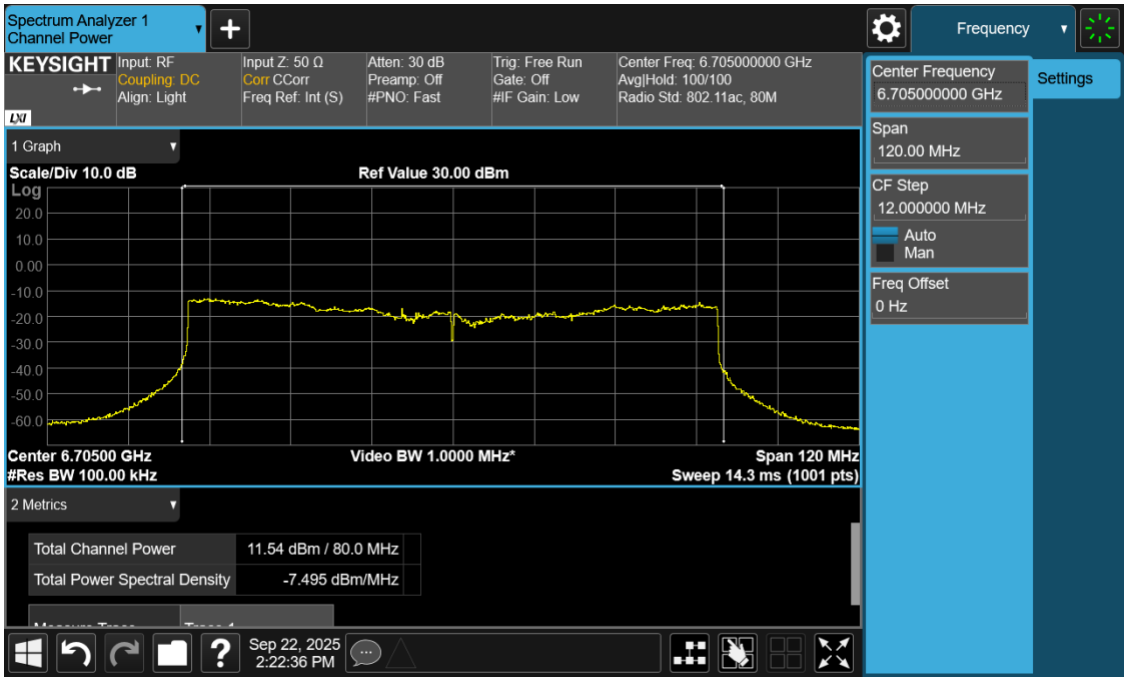
5.1.3 80 MHz Bandwidth

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 80	5985	LPI	4.97	4.71	4.82	4.91	22.87	30
EHT 80	6145	SP	8.46	8.47	8.53	8.42	26.49	28
EHT 80	6705	SP	11.54	11.54	11.31	11.51	29.50	32.5

Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 80	5985	LPI	-14.06	-14.32	-14.21	-14.12	3.84	5
EHT 80	6145	SP	-10.57	-10.56	-10.5	-10.61	7.46	9
EHT 80	6705	SP	-7.49	-7.5	-7.73	-7.52	10.46	13.5

Plot 7: Power and PSD for Low-Power Indoor – 5985 MHz

Plot 8: Power and PSD for Standard Power – 6145 MHz



Plot 9: Power and PSD for Standard Power – 6705 MHz

5.1.4 160 MHz Bandwidth

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 160	6185	LPI	5.59	6.61	6.17	6.73	24.32	30
EHT 160	6185	SP	8.35	9.43	9.49	8.89	27.08	30.9
EHT 160	6345	SP	9.54	9.36	9.06	8.57	27.17	31.5

Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 160	6185	LPI	-16.45	-15.43	-15.87	-15.31	2.28	5
EHT 160	6185	SP	-13.69	-12.61	-12.55	-13.15	5.04	8.9
EHT 160	6345	SP	-12.50	-12.68	-12.99	-13.47	5.13	9.5

Plot 10: Power and PSD for Low-Power Indoor – 6185 MHz

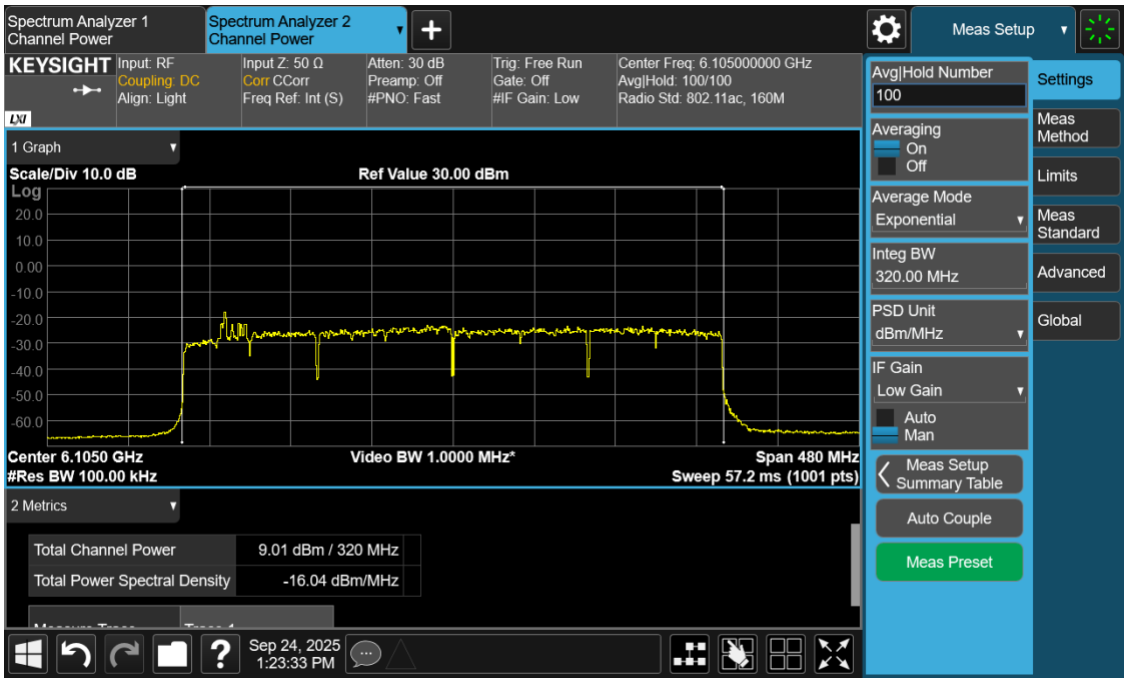
Plot 11: Power and PSD for Standard Power – 6185 MHz

Plot 12: Power and PSD for Standard Power – 6345 MHz

5.1.5 320 MHz Bandwidth

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 320	6105	LPI	9.01	8.47	8.26	8.28	26.54	30
EHT 320	6105	SP	12.01	11.27	11.56	12.42	29.86	33.6
EHT 320	6265	SP	-0.76	-1.19	-1.14	-1.53	16.87	21.8

Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 320	6105	LPI	-16.04	-16.58	-16.79	-16.77	1.49	5
EHT 320	6105	SP	-13.05	-13.78	-13.49	-12.63	4.81	8.5
EHT 320	6265	SP	-25.81	-26.24	-26.19	-26.58	-8.18	-3.3



Plot 13: Power and PSD for Low-Power Indoor – 6105 MHz

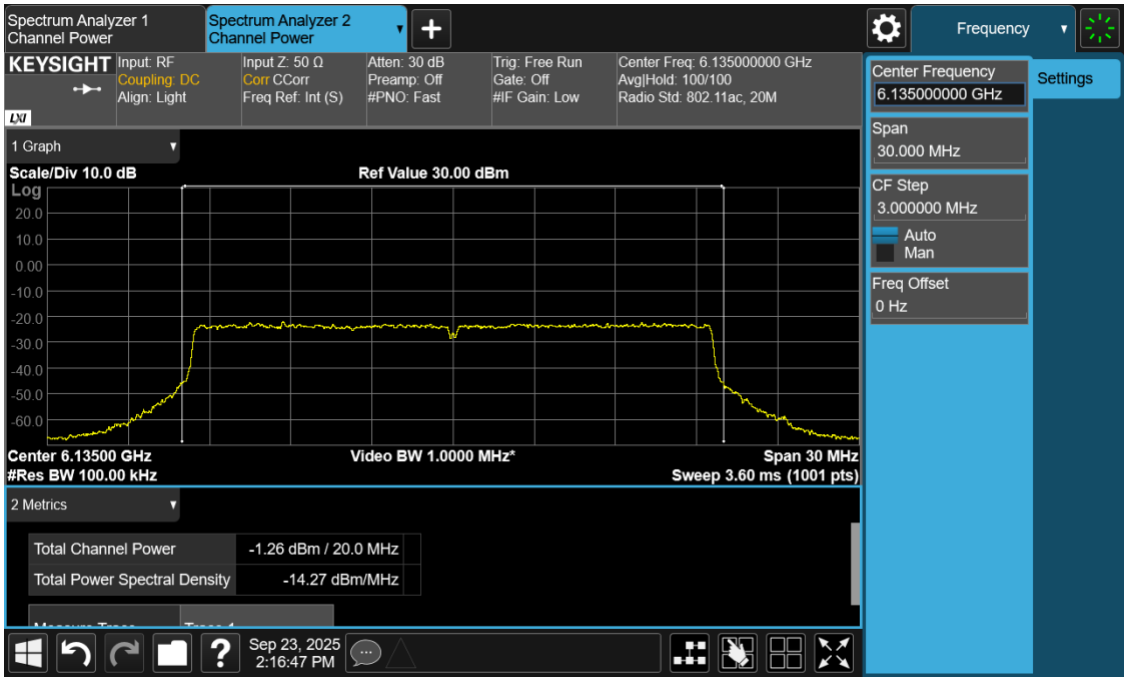
Plot 14: Power and PSD for Standard Power – 6105 MHz

Plot 15: Power and PSD for Standard Power – 6265 MHz

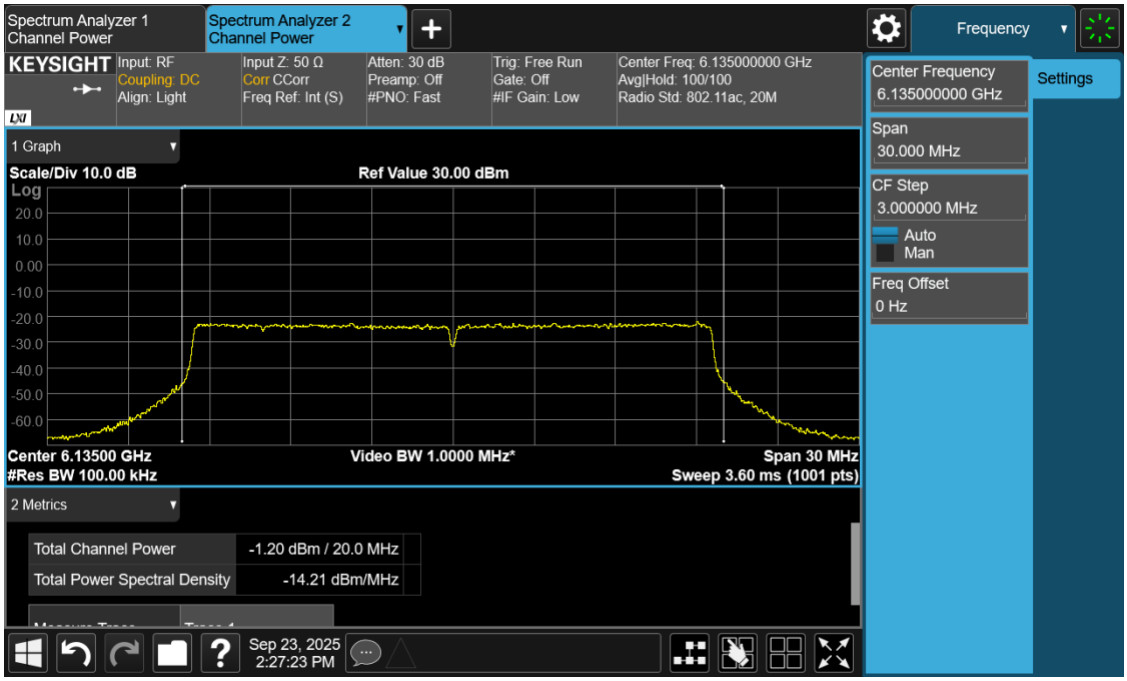
5.2 Unsuccessful Spectrum Access Request

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 20	6135	LPI	-1.26	-1.37	-1.32	-1.36	16.69	30
EHT 20	6135	LPI	-1.31	-1.29	-1.20	-1.26	16.81	30

Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 20	6135	LPI	-14.27	-14.38	-14.33	-14.37	3.68	5
EHT 20	6135	LPI	-14.32	-14.3	-14.21	-14.07	3.80	5



Plot 16: Power and PSD for Low-Power Indoor – 6135 MHz

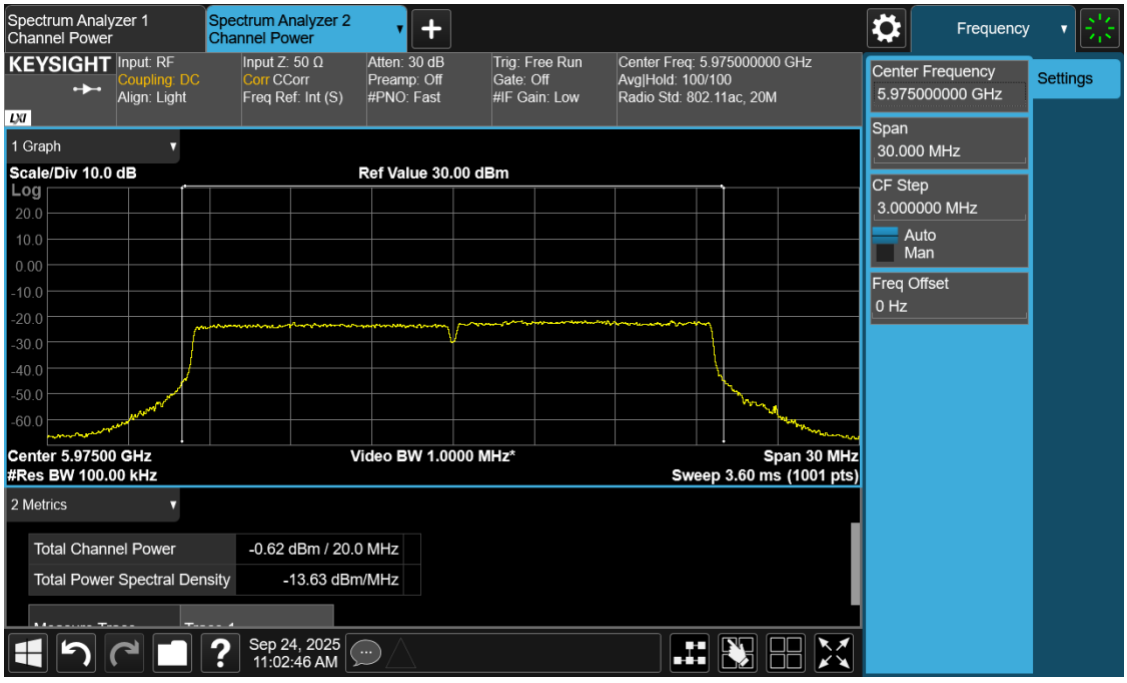


Plot 17: Power and PSD for Low-Power Indoor – 6135 MHz

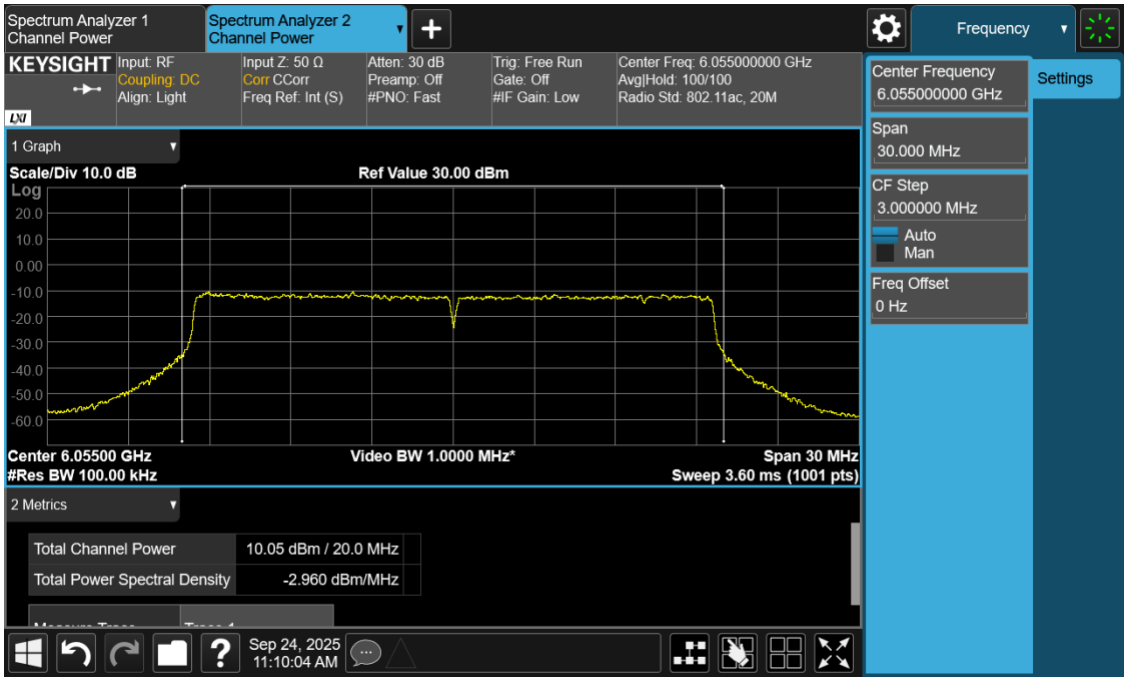
5.3 Successful Spectrum Access Update

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 20	5975	LPI	-0.62	-0.72	-1.33	-0.76	17.17	30
EHT 20	6055	SP	9.44	10.05	9.66	9.21	27.62	28.5
EHT 20	6055	LPI	-2.55	-0.89	-1.57	-0.87	16.60	30
EHT 20	5975	SP	8.16	8.05	7.35	7.63	25.83	26.2

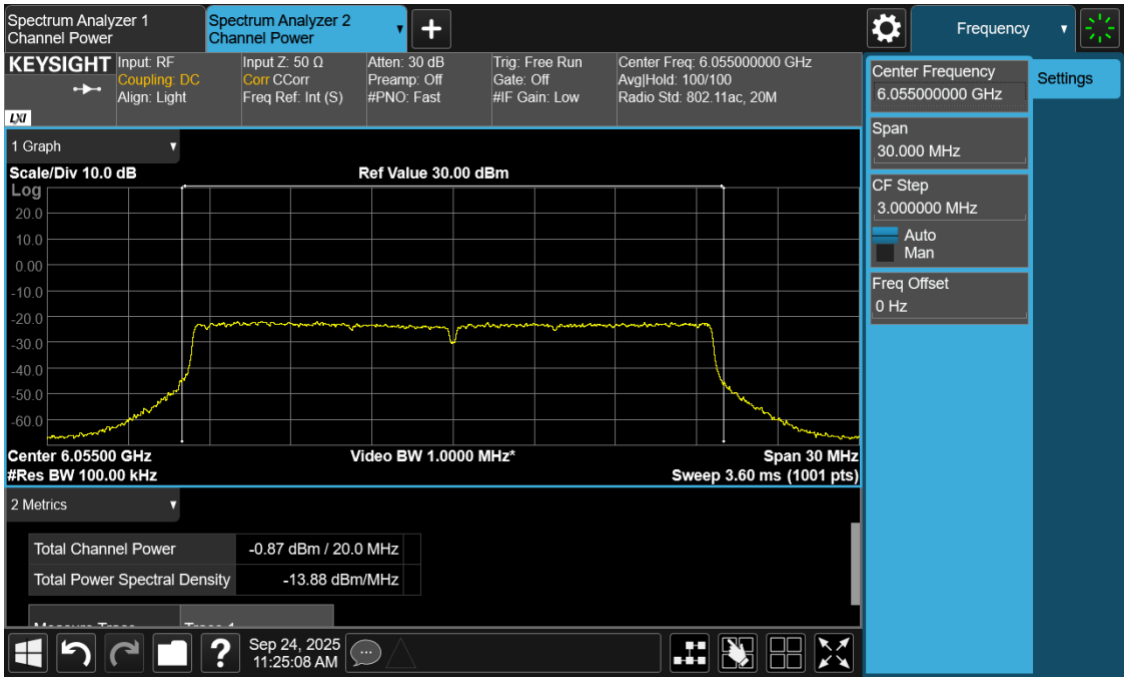
Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 20	5975	LPI	-13.63	-13.73	-14.34	-13.77	4.16	5
EHT 20	6055	SP	-3.57	-2.96	-3.35	-3.8	14.61	15.5
EHT 20	6055	LPI	-15.56	-13.90	-14.58	-13.88	3.59	5
EHT 20	5975	SP	-4.85	-4.96	-5.67	-5.38	12.82	13.2



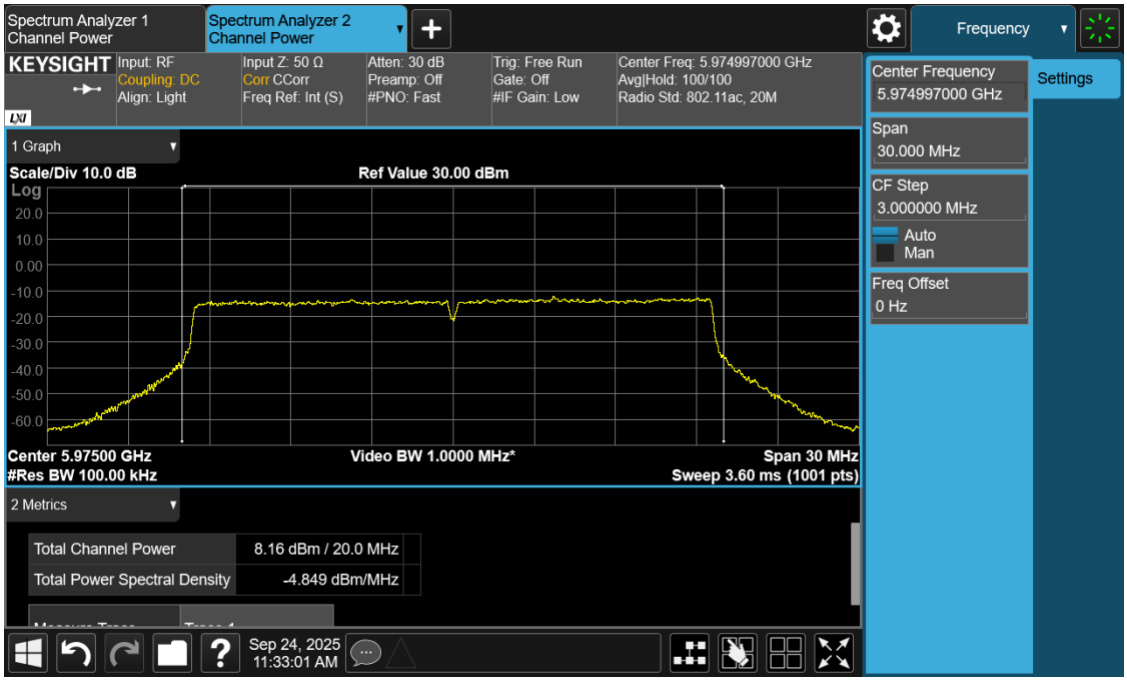
Plot 18: Power and PSD for Low-Power Indoor – 5975 MHz



Plot 19: Power and PSD for Standard Power – 6055 MHz



Plot 20: Power and PSD for Low-Power Indoor – 6055 MHz

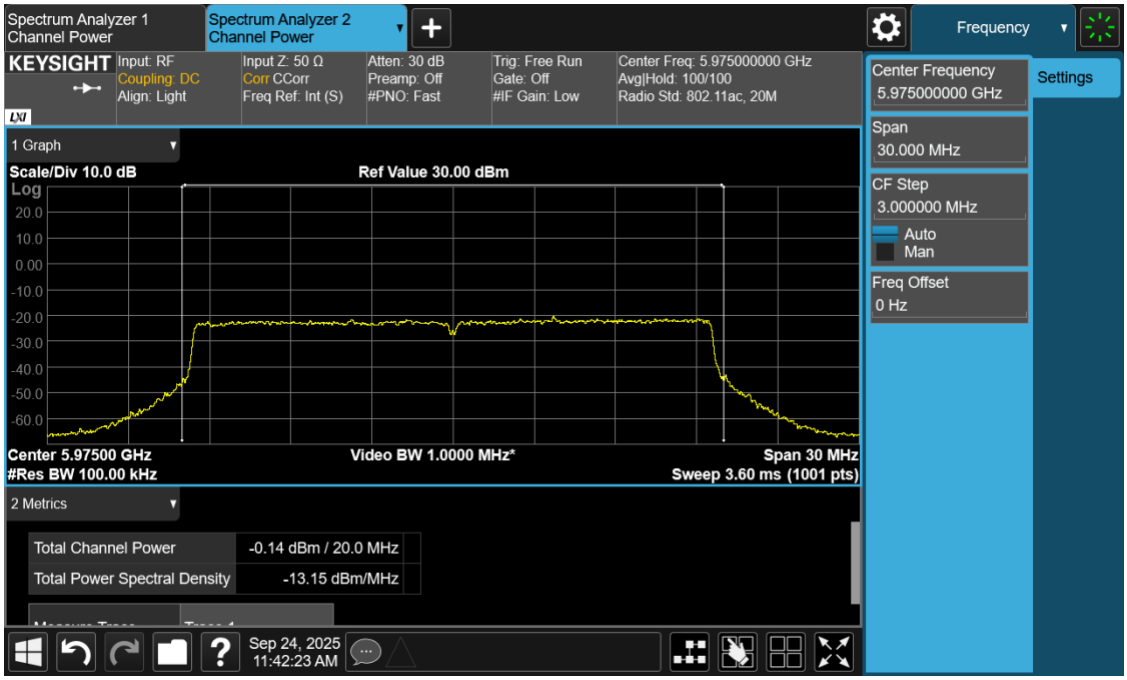


Plot 21: Power and PSD for Standard Power– 5975 MHz

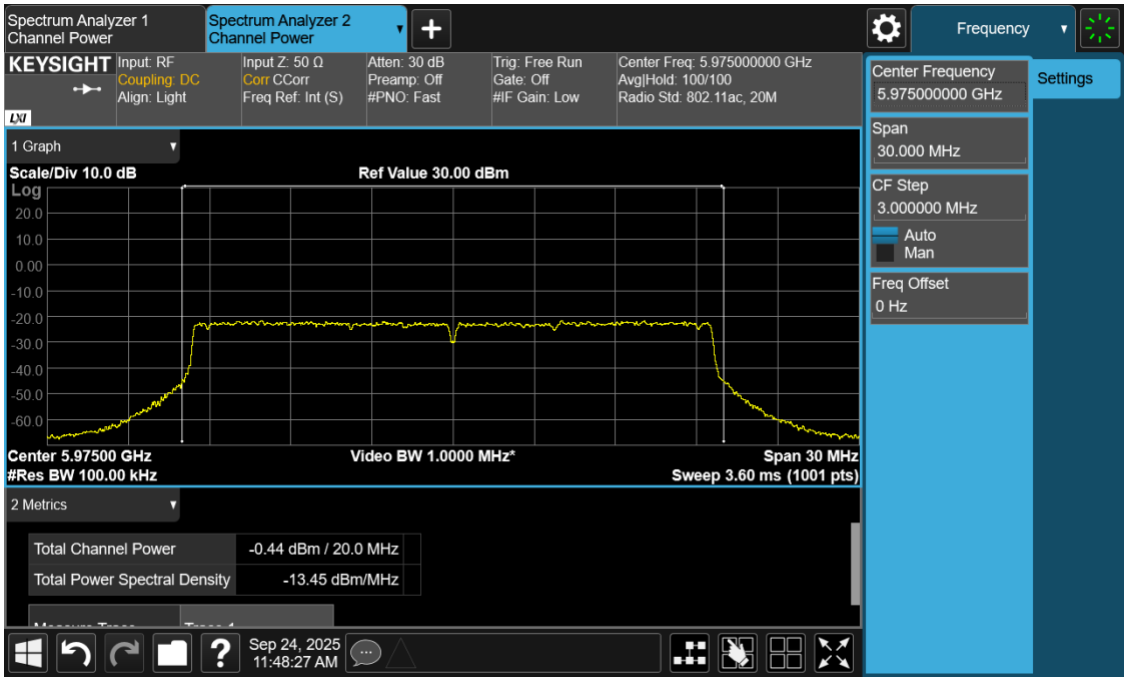
5.4 Unsuccessful Spectrum Access Update

Modulation (BW)	Frequency (MHz)	Power Mode	Power Chain 0	Power Chain 1	Power Chain 2	Power Chain 3	Power EIRP	Power Limit
EHT 20	5975	LPI	-0.14	-0.52	-0.95	-0.48	17.51	30
EHT 20	5975	SP	-0.61	-0.56	-0.96	-0.44	17.38	36
EHT 20	5975	LPI	-0.56	-0.66	-1.44	-0.58	17.23	30

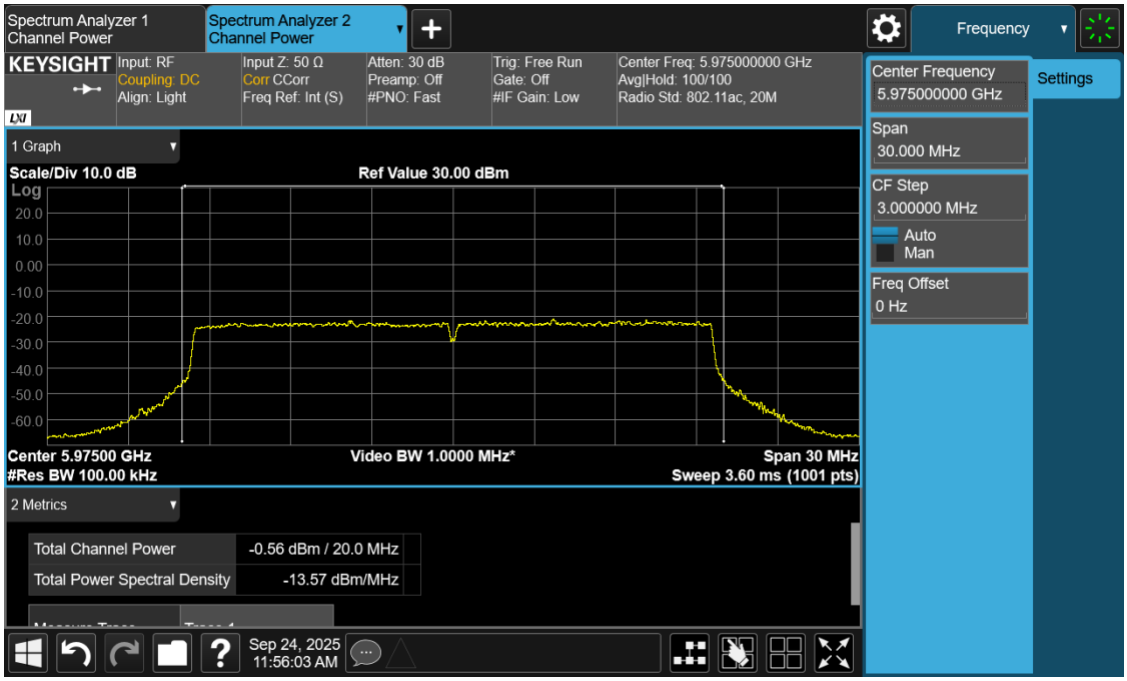
Modulation (BW)	Frequency (MHz)	Power Mode	PSD Chain 0	PSD Chain 1	PSD Chain 2	PSD Chain 3	PSD EIRP	PSD Limit
EHT 20	5975	LPI	-13.15	-13.53	-13.96	-13.49	4.50	5
EHT 20	5975	SP	-13.62	-13.57	-13.97	-13.45	4.37	23
EHT 20	5975	LPI	-13.57	-13.67	-14.45	-13.59	4.22	5



Plot 22: Power and PSD for Low-Power Indoor – 5975 MHz



Plot 23: Power and PSD for Standard Power– 5975 MHz



Plot 24: Power and PSD for Low-Power Indoor – 5975 MHz

Result

The EUT complied with the specification limit.

5.5 Unsuccessful Server Validation

See associated Annex for Unsuccessful Server Validation reports.

-- End of Test Report --