



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-UDBS
ISED ID	6545A-UDBS
Equipment Under Test	UDB-Switch
Test Report Serial Number	TR10387_02
Date of Test(s)	27 August; 10 - 13 September 2024; 28 March; 20, 26 August; 22, 24 - 25 September 2025
Report Issue Date	25 September 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.



Certification of Engineering Report

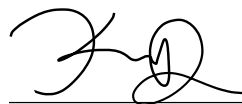
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Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UBIQUITI
Model Number	UDB-Switch
FCC ID	SWX-UDBS
ISED ID	6545A-UDBS

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: Joseph W. Jackson
Reviewed By: Kimberly DeBole

Revision History		
Revision	Description	Date
01	Original Report Release	25 September 2025
02	Amended Section 2.2 and 2.6	12 November 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	UDB-Switch
Serial Number	05B1B5
Dimensions (cm)	21.3 x 11.3 x 3.3

2.2 Description of EUT

The UDB-Switch is a compact PoE+ switch with one (1) 10 GbE port and seven (7) 2.5 GbE ports. The UDB-Switch has 2x2 5GHz and 2x2 6 GHz dual-band WiFi 7 transmitters with a wireless uplink of up to 8.4 Gbps capacity. The UDB-Switch is an indoor device and is powered from a 54 volts DC power adapter with 60 watts' capacity.

This device does not support channel puncturing.

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 $3.01 \text{ dB} + 8 \text{ dBi} = 11.01 \text{ dBi}$.

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	HE	5180, 5200, 5210, 5240
	be	40 MHz	HE	5190, 5230
	be	80 MHz	HE	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: UDB-Switch (Note 1) SN: 05B1B5	WiFi Switch	See Section 2.4
BN: UBIQUITI MN: ADS-60SH-54-354060E SN: N/A	Power Adapter	2 Conductor power cord to AC mains/80cm
BN: Dell MN: XPS 13 SN: N/A	Laptop Personal Computer	Unshielded Cat 5e cable/1 meters

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 (PoE Injector)	1	3 Conductor power cord to AC mains/80cm
LAN (PoE Injector)	8	unshielded Cat 5e cable/1 meters

2.5 Operating Environment

Power Supply	120 Volts AC Mains to 54 Volts DC
AC Mains Frequency	60 Hz
Temperature	21.3 - 24.2 °C
Humidity	23.7 - 30.1 %
Barometric Pressure	1019 mBar

2.6 Operating Modes

The UDB-Switch 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/b/e were investigated. All measurements are reported with the worst-case mode (802.11be 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

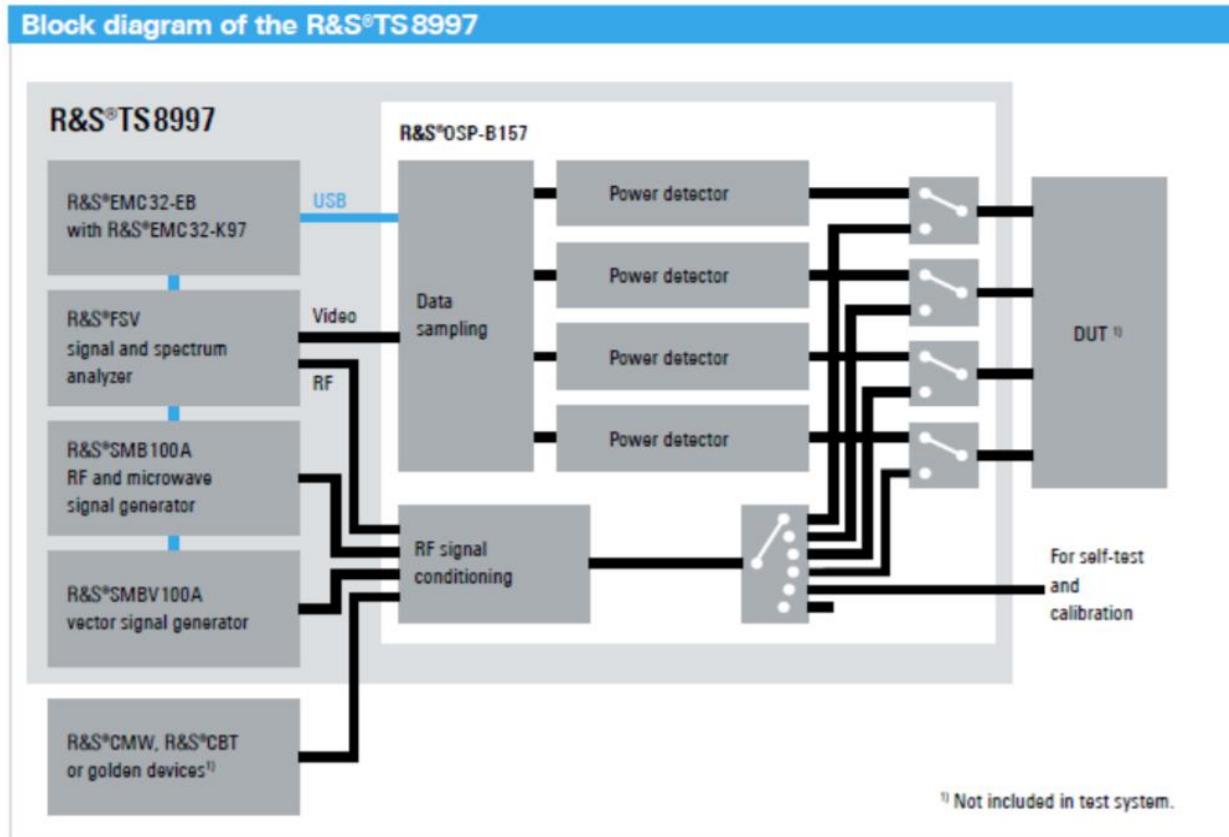


Diagram 1: Test Configuration Block Diagram

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	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 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 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

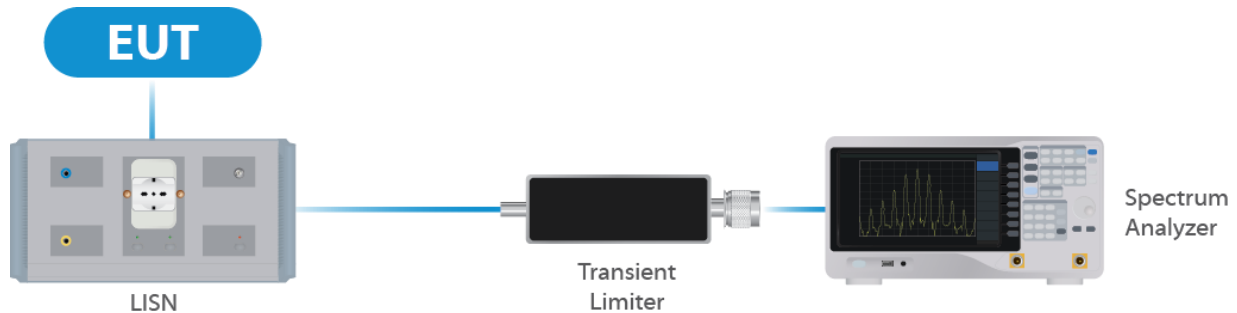


Figure 1: Conducted Emissions Test

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

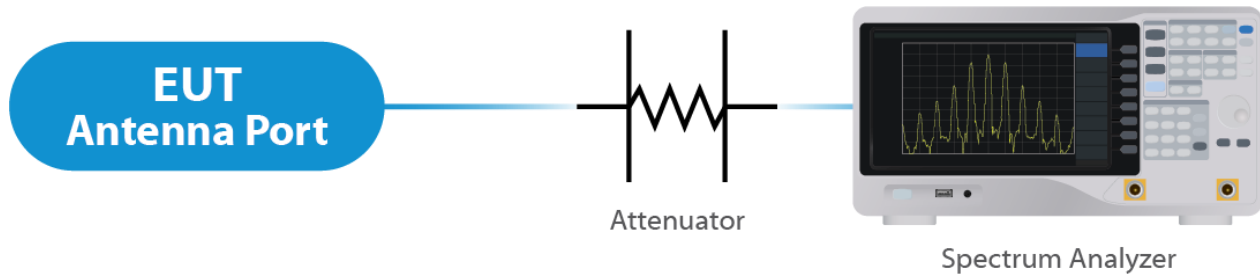


Figure 2: Direct Connect at the Antenna Port Test

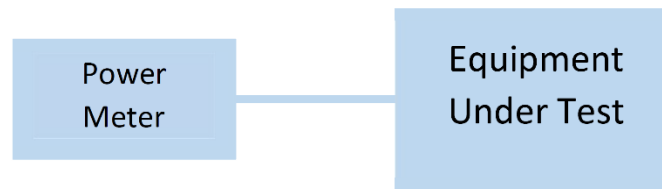


Figure 3: Output Power Measurement

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

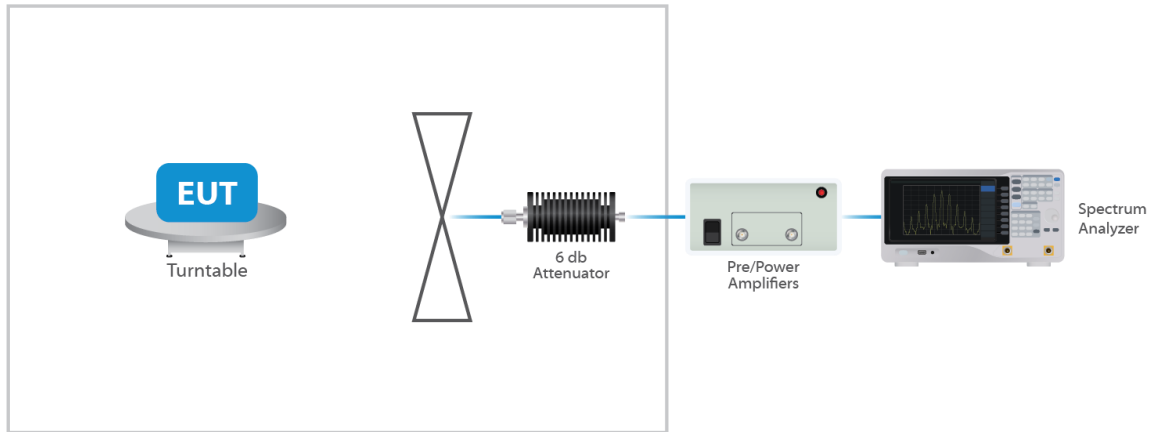


Figure 4: Radiated Emissions Test

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 an internal integral antenna. Per the manufacturer, the Maximum gain of the antenna per chain is 8 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is not user replaceable.

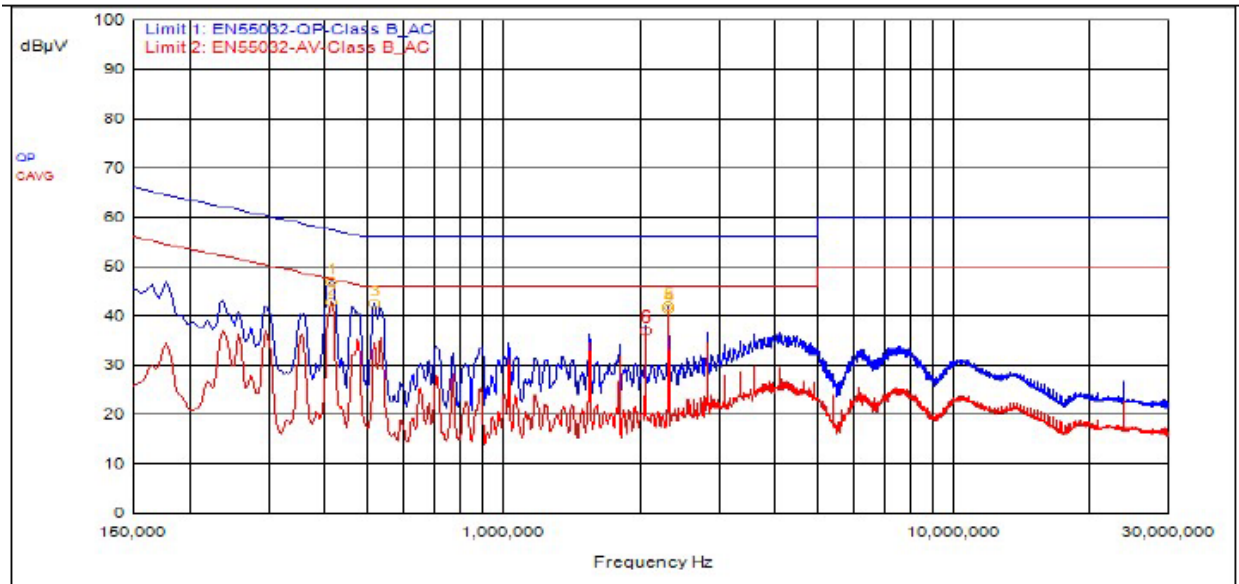
See Section 2.2 for directional gain calculation.

Results

The EUT complied with the specification

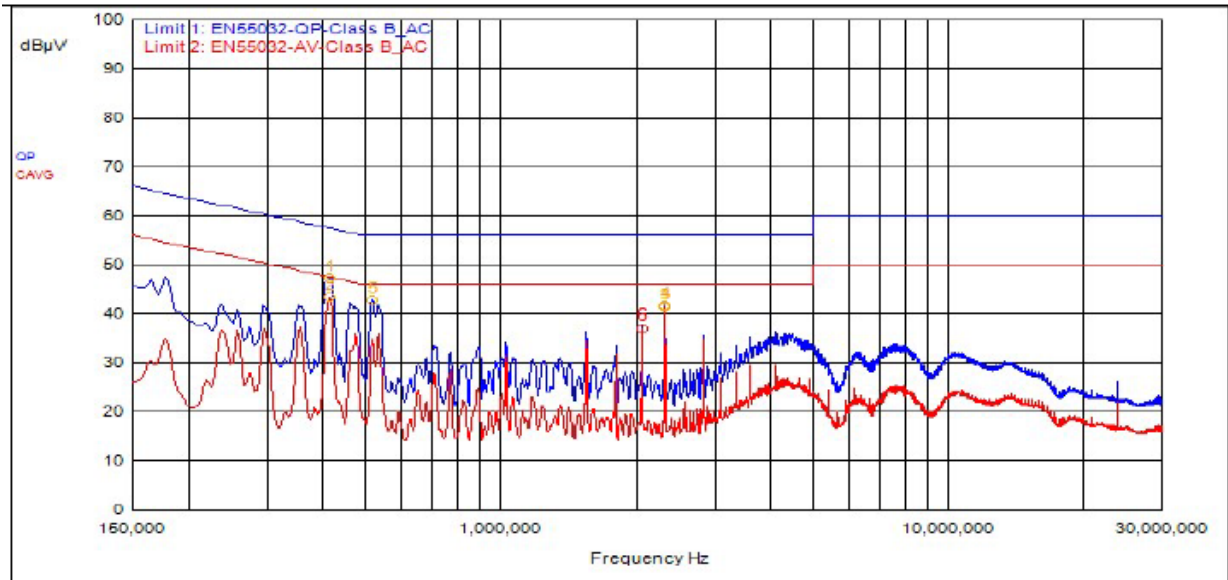
5.2 §15.207 Conducted Emissions at Mains Ports Data

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	414,000kHz	9.49			QPeak	37.35	46.84	57.57	-10.72			
3	516,000kHz	9.49			QPeak	32.89	42.38	56.00	-13.62			
5	2.322	9.59			QPeak	32.35	41.94	56.00	-14.06			
2	414,000kHz	9.49			C_AVG	33.35	42.84			47.57	-4.73	
4	2.322	9.59			C_AVG	31.75	41.34			46.00	-4.66	
6	2.064	9.60			C_AVG	27.36	36.96			46.00	-9.04	

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	414,000kHz	9.64			QPeak	37.64	47.28	57.57	-10.29			
5	516,000kHz	9.63			QPeak	33.06	42.69	56.00	-13.31			
4	2.322	9.57			QPeak	32.20	41.77	56.00	-14.23			
2	414,000kHz	9.64			C_AVG	33.69	43.33			47.57	-4.24	
3	2.322	9.57			C_AVG	31.93	41.50			46.00	-4.50	
6	2.064	9.57			C_AVG	27.49	37.06			46.00	-8.94	

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	17.5	22.6
OFDM 20	5210	19.8	35.6
OFDM 20	5240	32.9	54.4
EHT20	5180	34.9	60.0
EHT 20	5210	34.8	66.0
EHT 20	5240	33.3	56.5
EHT 40	5190	50.8	91.0
EHT 40	5230	67.3	116.5
EHT 80	5210	105.0	202.0

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 26.87 dBm or 486.41 mW. The limit is 30 dBm, or 1 Watt when using an antenna with 6 dBi (indoor/outdoor access point) or less gain. The antenna has a gain of 8 dBi (adjusted limit of 28 dBm or 0.631 watts).

See Section 2.2 for directional gain calculation.

Nss>1

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_Nss2	20	19.96	8	27.96	28	-8.04
OFDM 20	5210	Mcs0_Nss2	24	24.07	8	32.07	28	-3.93
OFDM 20	5240	Mcs0_Nss2	20	26.87	8	34.87	28	-1.13
EHT 20	5180	Mcs0_Nss2	30	25.83	8	33.83	28	-2.17
EHT 20	5210	Mcs0_Nss2	30	26.33	8	34.33	28	-1.67
EHT 20	5240	Mcs0_Nss2	28	26.59	8	34.59	28	-1.41
EHT 40	5190	Mcs0_Nss2	24	24.37	8	32.37	28	-3.63
EHT 40	5230	Mcs0_Nss2	28	26.45	8	34.45	28	-1.55
EHT 80	5210	Mcs0_Nss2	25	24.87	8	32.87	28	-3.13

Nss=1

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	20	19.96	8	27.96	28	-8.04
OFDM 20	5210	Mcs0_Nss1	22	22.07	8	30.07	28	-5.93
OFDM 20	5240	Mcs0_Nss1	15	21.87	8	29.87	28	-6.13
EHT 20	5180	Mcs0_Nss1	26	21.83	8	29.83	28	-6.17
EHT 20	5210	Mcs0_Nss1	26	22.33	8	30.33	28	-5.67
EHT 20	5240	Mcs0_Nss1	24	22.59	8	30.59	28	-5.41
EHT 40	5190	Mcs0_Nss1	24	24.37	8	32.37	28	-3.63
EHT 40	5230	Mcs0_Nss1	27	25.45	8	33.45	28	-2.55
EHT 80	5210	Mcs0_Nss1	25	24.87	8	32.87	28	-3.13

Canada (Indoor Use Only)

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Total Summed Output Power* (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm) EIRP	Margin (dBm)
OFDM 20	5180	Mcs0_Nss2	14	14.26	8	22.26	23	-0.74
OFDM 20	5210	Mcs0_Nss2	13	13.76	8	21.76	23	-1.24
OFDM 20	5240	Mcs0_Nss2	14	13.87	8	21.87	23	-1.13
EHT 20	5180	Mcs0_Nss2	14	14.37	8	22.37	23	-0.63
EHT 20	5210	Mcs0_Nss2	14	14.85	8	22.85	23	-0.15
EHT 20	5240	Mcs0_Nss2	14	14.04	8	22.04	23	-0.96
EHT 40	5190	Mcs0_Nss2	14	14.28	8	22.28	23	-0.72
EHT 40	5230	Mcs0_Nss2	14	14.35	8	22.35	23	-0.65
EHT 80	5210	Mcs0_Nss2	14	14.40	8	22.40	23	-0.60

Result

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

* Gated EIRP shown in the Annex is the conducted measurement.

5.5 §15.209 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 TP31, 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 or conducted at the antenna port methods. [For radiated] 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. See Annex for Conducted Band edge plots.

QuasiPeak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
32.22 MHz	37.75	40	-2.25	202	1.64	Vertical	-10.97
35.86 MHz	39.92	40	-0.28	324	1.13	Vertical	-10.09
38.61 MHz	36.77	40	-3.23	327	1.13	Vertical	-9.21
41.85 MHz	36.46	40	-3.54	28	1.13	Vertical	-8.43
101.59 MHz	35.27	40	-4.73	307	1.13	Vertical	-8.93
129.84 MHz	31.52	40	-8.48	229	1.13	Vertical	-12.48
No significant emissions were observed in the Horizontal orientation of the antenna							

Table 4: Radiated Emissions 30 – 1000 MHz

Peak

Frequency	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	59.85	74.0	-14.15	238	1.638	Vertical	9.33
10.94 GHz	55.69	74.0	-18.31	183	1.638	Vertical	11.58
12.35 GHz	54.70	74.0	-19.30	359	1.638	Vertical	10.82
10.31 GHz	58.26	74.0	-15.74	187	1.638	Horizontal	9.33

Avg

Frequency	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	52.07	54.0	-1.93	238	1.638	Vertical	9.33
10.94 GHz	42.57	54.0	-11.43	183	1.638	Vertical	11.58
12.35 GHz	41.42	54.0	-12.58	359	1.638	Vertical	10.82
10.31 GHz	49.21	54.0	-4.79	187	1.638	Horizontal	9.33

Table 5: Radiated Emissions 1 – 17 GHz at the Lowest Frequency

Peak

Frequency	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	60.66	74.0	-13.34	239	1.638	Vertical	9.33
14.70 GHz	57.75	74.0	-16.25	123	2.645	Vertical	14.30
15.63 GHz	55.70	74.0	-18.30	219	2.645	Vertical	10.61
10.31 GHz	57.78	74.0	-16.22	187	1.638	Horizontal	9.33
14.15 GHz	57.72	74.0	-16.28	2	1.643	Horizontal	13.23

Avg

Frequency	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	53.69	54.0	-0.31	239	1.638	Vertical	9.33
14.70 GHz	44.88	54.0	-9.12	123	2.645	Vertical	14.30
15.63 GHz	42.28	54.0	-12.72	219	2.645	Vertical	10.61
10.31 GHz	48.93	54.0	-5.07	187	1.638	Horizontal	9.33
14.15 GHz	44.49	54.0	-9.51	2	1.643	Horizontal	13.23

Table 6: Radiated Emissions 1 – 17 GHz at the Middle Frequency

Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	59.29	74.0	-14.71	280	1.638	Vertical	9.33
15.72 GHz	61.05	74.0	-12.95	274	1.643	Vertical	10.38
10.31 GHz	58.45	74.0	-15.55	196	1.643	Horizontal	9.33
16.17 GHz	55.02	74.0	-18.98	319	1.638	Horizontal	10.63

Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.31 GHz	49.80	54.0	-4.20	280	1.638	Vertical	9.33
15.72 GHz	47.29	54.0	-6.71	274	1.643	Vertical	10.38
10.31 GHz	49.49	54.0	-4.51	196	1.643	Horizontal	9.33
16.17 GHz	41.17	54.0	-12.83	319	1.638	Horizontal	10.63

Table 7: Radiated Emissions 1 – 17 GHz at the Highest Frequency

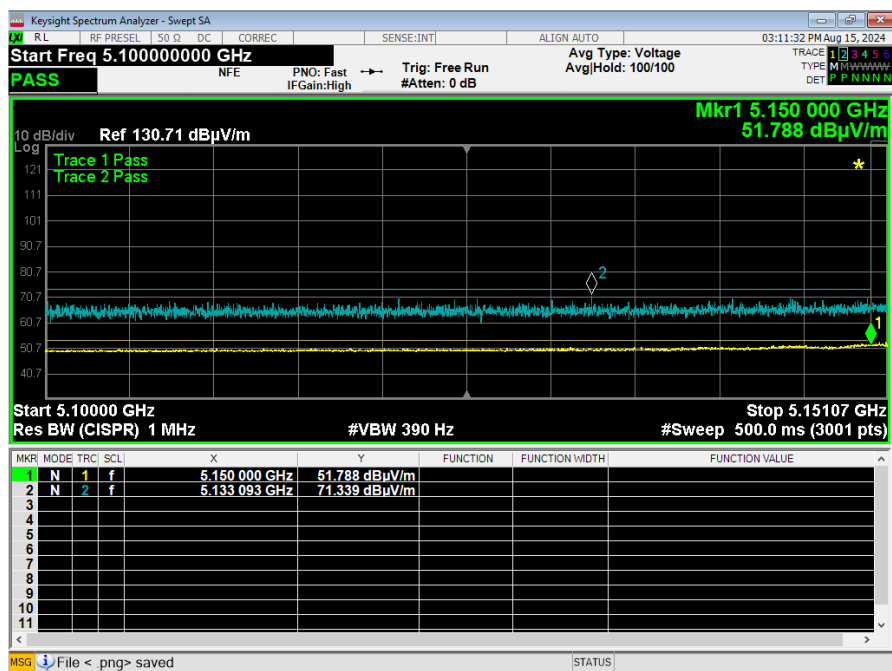
Peak

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
25.58 GHz	60.64	74.0	-13.36	156	Vertical	10.07
27.71 GHz	59.20	74.0	-14.80	209	Vertical	8390
34.62 GHz	60.80	74.0	-13.20	90	Vertical	10.22
36.03 GHz	59.63	74.0	-14.37	25	Vertical	9.72
20.72 GHz	56.70	74.0	-17.30	107	Horizontal	7.11
25.88 GHz	60.59	74.0	-13.41	128	Horizontal	9.06

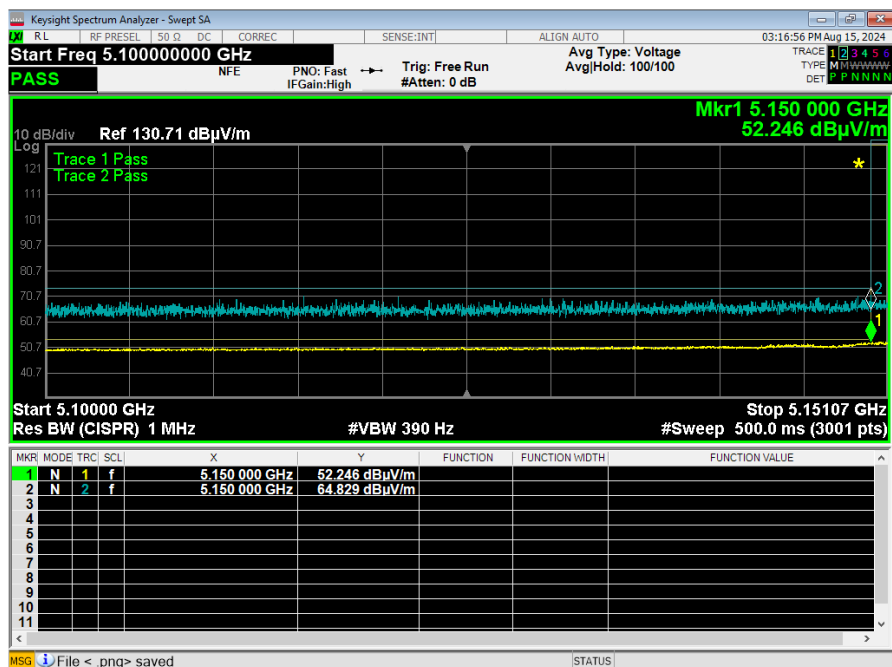
Avg

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
25.58 GHz	46.68	54.0	-7.32	156	Vertical	10.07
27.71 GHz	45.38	54.0	-8.62	209	Vertical	8390
34.62 GHz	43.87	54.0	-10.13	90	Vertical	10.22
36.03 GHz	43.25	54.0	-10.75	25	Vertical	9.72
20.72 GHz	43.06	54.0	-10.94	107	Horizontal	7.11
25.88 GHz	46.08	54.0	-7.92	128	Horizontal	9.06

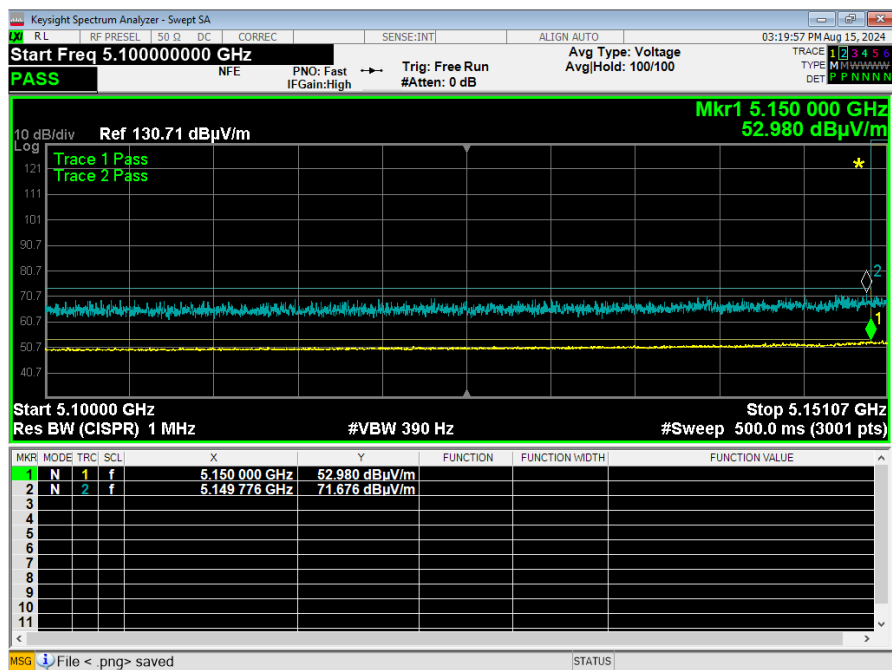
Table 8: Radiated Emissions 17 – 40 GHz at the Lowest Frequency (worse case)



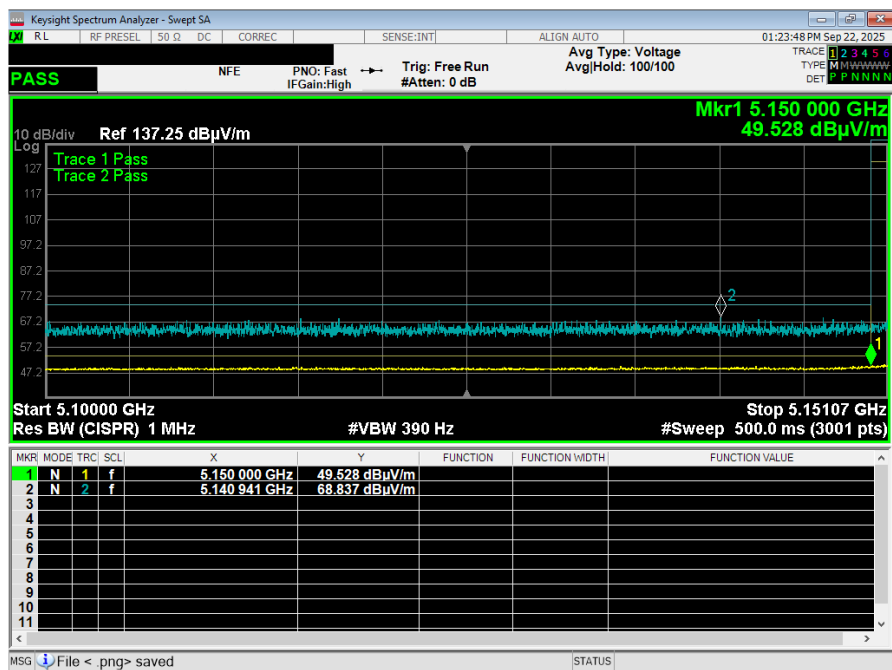
Plot 1: Band Edge OFDM 20 5180MHz



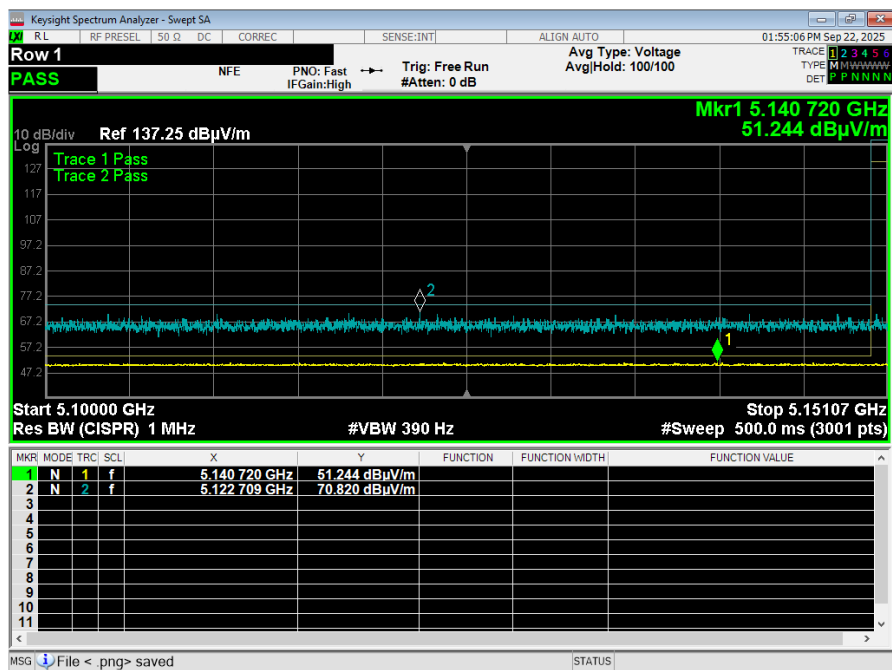
Plot 2: Band Edge OFDM 20 5210MHz



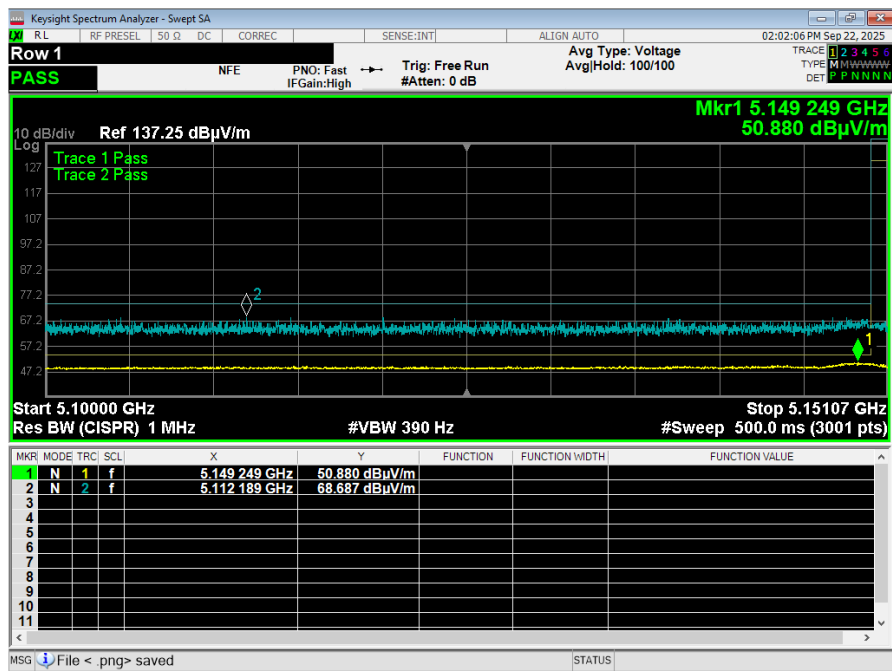
Plot 3: Band Edge OFDM 20 5240MHz



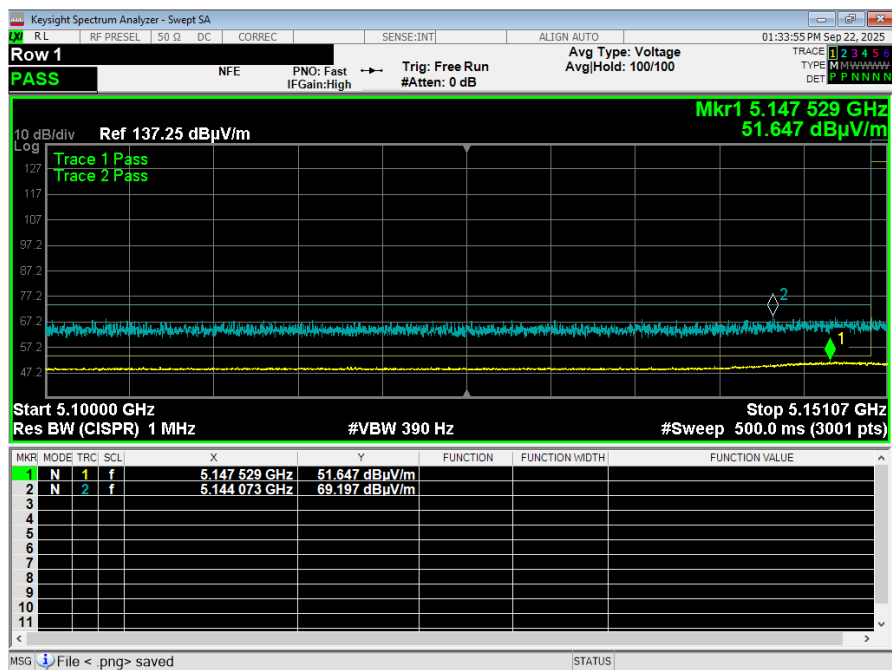
Plot 4: Band Edge EHT 20 5180MHz



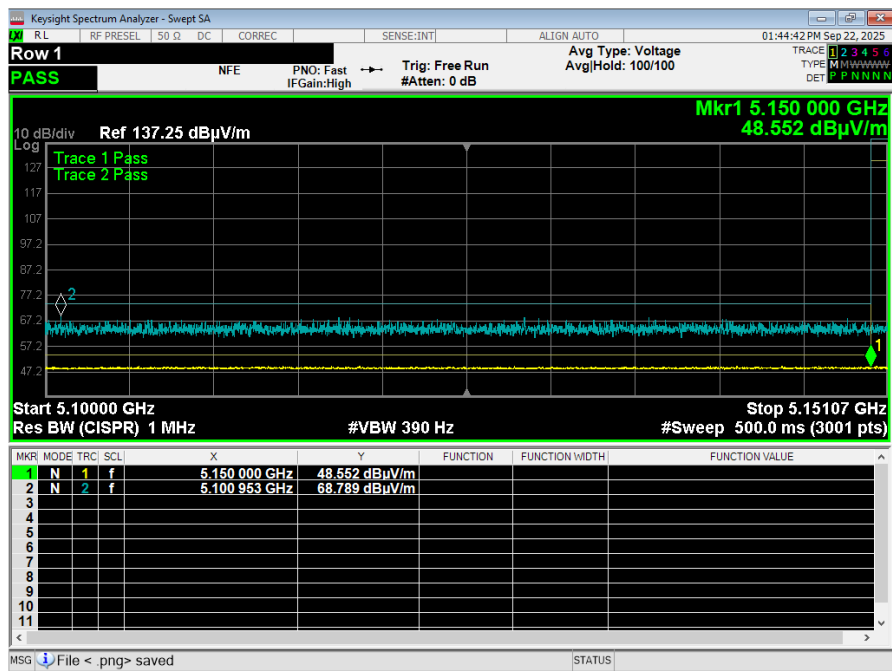
Plot 5: Band Edge EHT 20 5210MHz



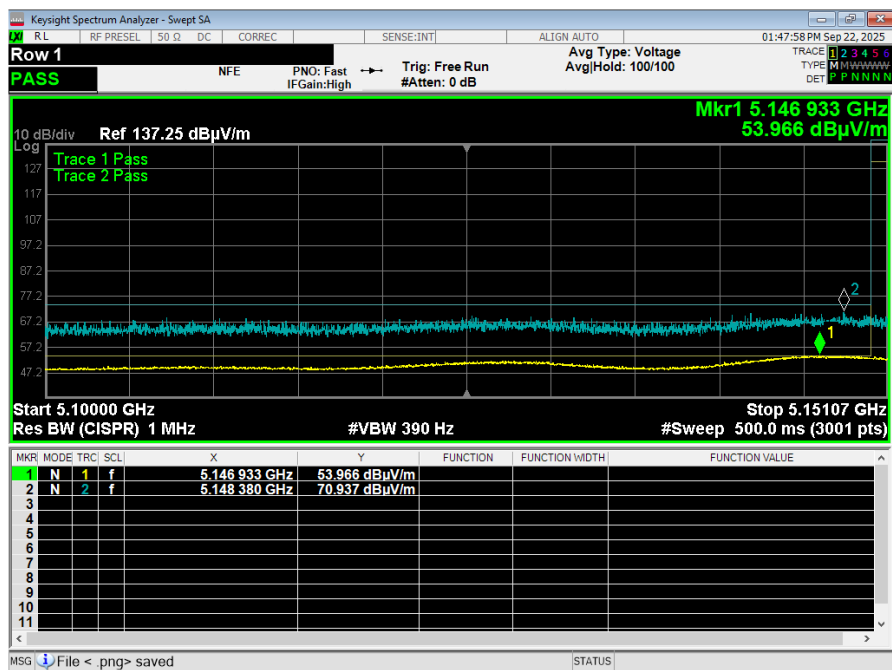
Plot 6: Band Edge EHT 20 5240MHz



Plot 7: Band Edge EHT 40 5190MHz



Plot 8: Band Edge EHT 40 5230MHz



Plot 9: Band Edge EHT 80 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.

NSS>1

Modulation (BW)	Freq. (MHz)	Data Rate	TP Setting	Total Sum PSD EIRP (dBm)	Antenna Gain (dBi)	Limit (dBm)	Margin (dBm)
OFDM 20	5180	Mcs0_Nss2	20	7.72	8	15	-7.28
OFDM 20	5210	Mcs0_Nss2	24	11.74	8	15	-3.26
OFDM 20	5240	Mcs0_Nss2	20	14.56	8	15	-0.44
EHT 20	5180	Mcs0_Nss2	30	13.03	8	15	-1.97
EHT 20	5210	Mcs0_Nss2	30	13.34	8	15	-1.66
EHT 20	5240	Mcs0_Nss2	28	13.67	8	15	-1.33
EHT 40	5190	Mcs0_Nss2	24	8.62	8	15	-6.38
EHT 40	5230	Mcs0_Nss2	28	10.37	8	15	-4.63
EHT 80	5210	Mcs0_Nss2	25	6.08	8	15	-8.92

NSS=1

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	20	7.72	8	9.99	-2.27
OFDM 20	5210	Mcs0_Nss1	22	9.74	8	9.99	-0.25
OFDM 20	5240	Mcs0_Nss1	15	9.56	8	9.99	-0.43
EHT 20	5180	Mcs0_Nss1	26	9.03	8	9.99	-0.96
EHT 20	5210	Mcs0_Nss1	26	9.34	8	9.99	-0.65
EHT 20	5240	Mcs0_Nss1	24	9.67	8	9.99	-0.32
EHT 40	5190	Mcs0_Nss1	24	8.62	8	9.99	-1.37
EHT 40	5230	Mcs0_Nss1	27	9.37	8	9.99	-0.62
EHT 80	5210	Mcs0_Nss1	25	6.08	8	9.99	-3.91

Result

The maximum summed average power spectral density was less than the limit of 17 dBm (adjust limit of 15 dBm for Nss>1 and 9.99 dBm for Nss=1); therefore, the EUT complies with the specification.

-- End of Test Report --