FCC RADIO TEST REPORT

FCC ID	:	**2AEUPBHADP011**
Equipment	:	**Video Doorbell**
Brand Name	:	**ring**
Model Name	:	**5DCFAB**
Applicant	:	**Ring LLC** **12515 Cerise Ave, Hawthorne, CA 90250, USA**
Manufacturer	:	**Ring LLC** **12515 Cerise Ave, Hawthorne, CA 90250, USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Aug. 08, 2025 and testing was performed from Aug. 27, 2025 to Nov. 05, 2025. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FR580727D	01	Initial issue of report	Oct. 02, 2025
FR580727D	02	Revised Applicable Standards, List of Measuring Equipment, and Appendix B. This report is an updated version, replacing the report issued on Oct. 02, 2025.	Nov. 06, 2025

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	-
-	15.207	AC Conducted Emission	Not Required	See Note
3.5	15.203	Antenna Requirement	Pass	-

Note:

1. Not required means after assessing, test items are not necessary to carry out.
2. The device only supports battery power.

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng

Report Producer: Shiori Chen

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and 24GHz Radar. **Antenna Type** WLAN: Stamped metal IFA antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	5

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	03CH07-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY
Remark	The Conducted Measurement test item subcontracted to Sporton International Inc. Wensan Laboratory.

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC Part 15 Subpart E
- ANSI C63.10-2020

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	161	5805
	153	5765	165	5825
	157	5785		

2.2 Test Mode

This device support 26/52/106 tone RU.

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance Oct. 2022.

The 802.11ax mode is investigated among different tones, full resource units (RU), partial resource units. The partial RU has no higher power than full RU's, thus the full RU is chosen as main test configuration.

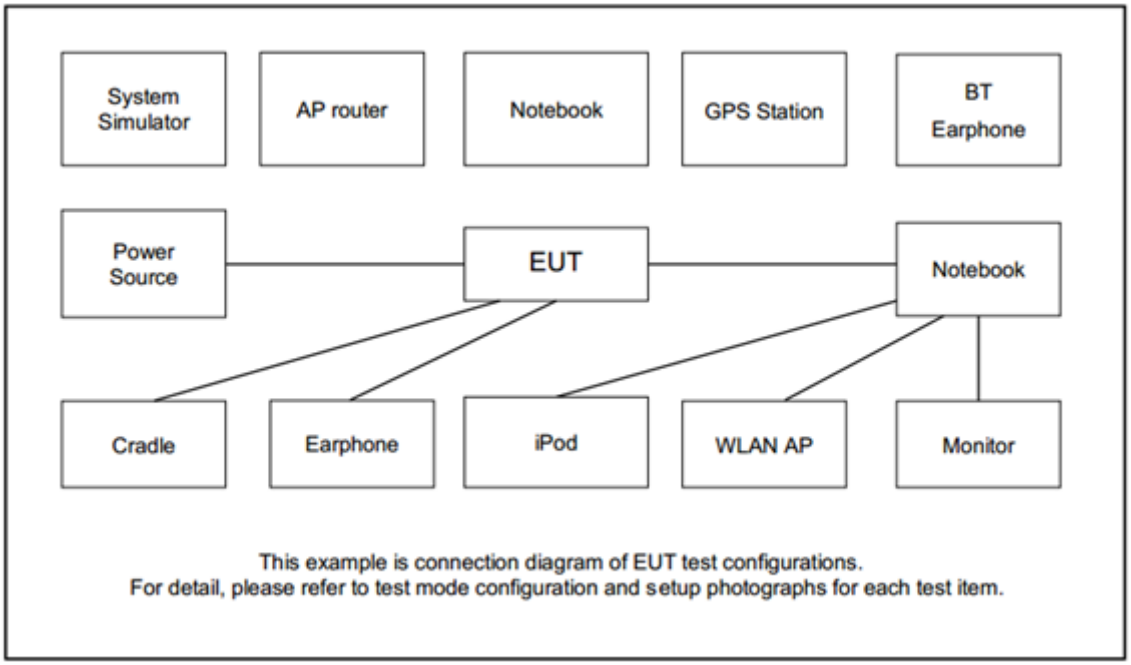
The power for 802.11n mode is smaller than 802.11ac mode, so all other conducted and radiated test is covered by 802.11ac mode.

The final test modes include the worst data rates for each modulation shown in the table below.

Modulation	Data Rate
802.11a	**6 Mbps**
802.11n HT20 (Covered by VHT20)	**MCS0**
802.11ac VHT20	**MCS0**
802.11ax HE20	**MCS0**

Test Cases
Remark: **1.** For Radiated Test Cases, the tests were performed with Battery 1. **2.** The detailed Radiated test modes are shown in Appendix B. **3.** For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

2.3 Connection Diagram of Test System



2.4 EUT Operation Test Setup

The RF test items, utility "Tera Term" was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

26dB and 99% Occupied bandwidth are reporting only.

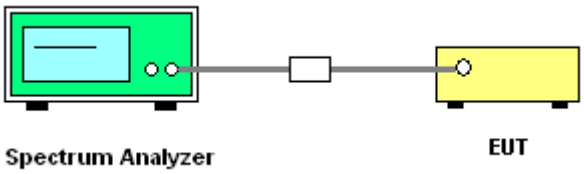
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth for the band 5.725-5.85 GHz
2. Set RBW = 100 kHz.
3. Set the VBW ≥ 3 x RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

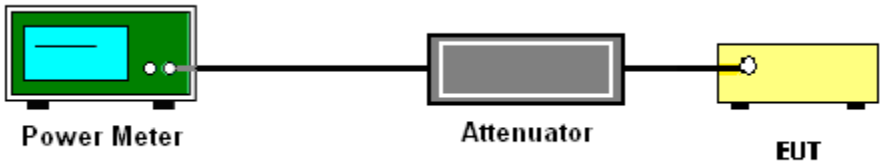
3.2.3 Test Procedures

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

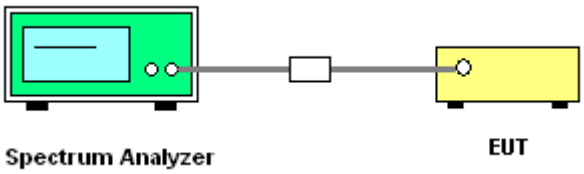
 # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 500kHz.
- Set VBW ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

1. The RF output of EUT is connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2) Unwanted spurious emissions falls in restricted bands shall comply with the general field strength limits as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of −27 dBm/MHz.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

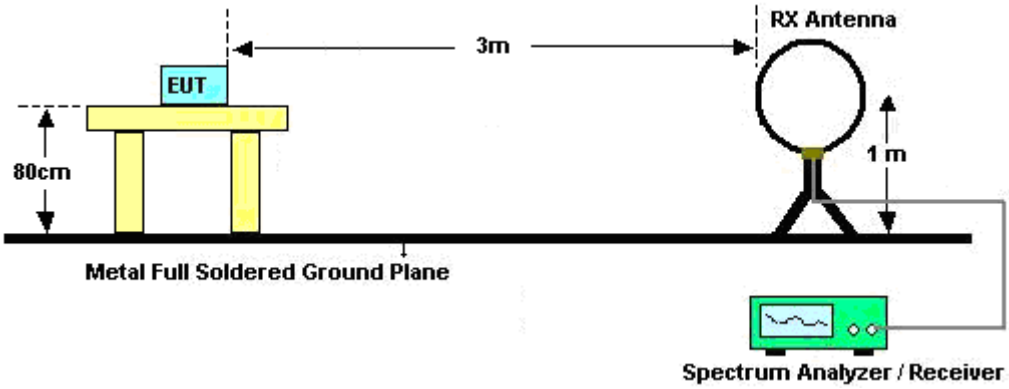
   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-“.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies.

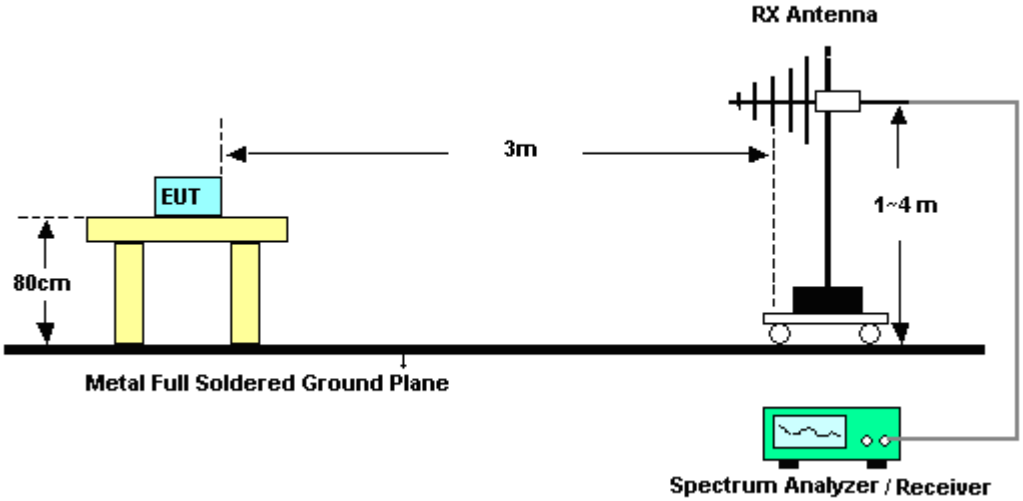
   When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

3.4.4 Test Setup

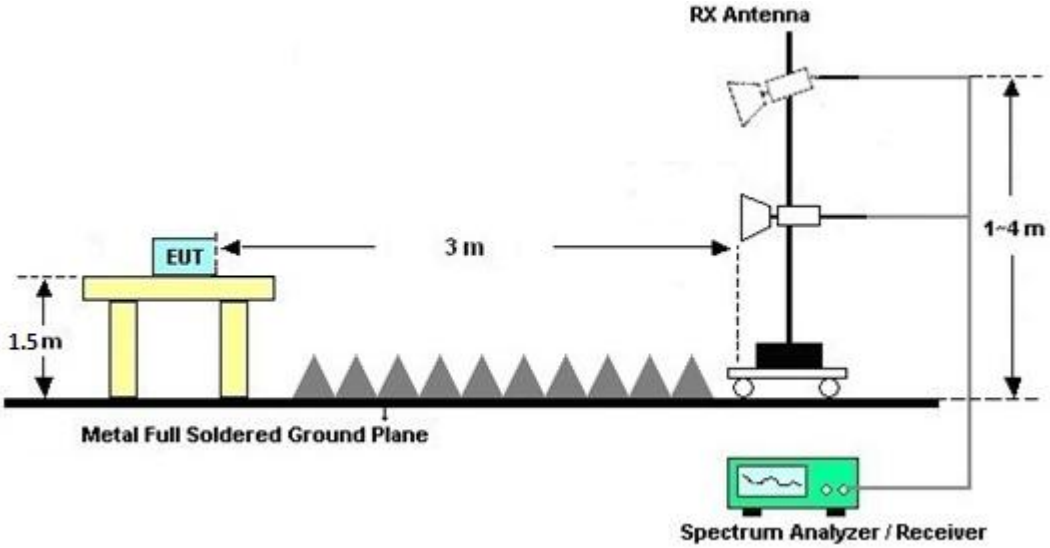
For radiated emissions below 30MHz



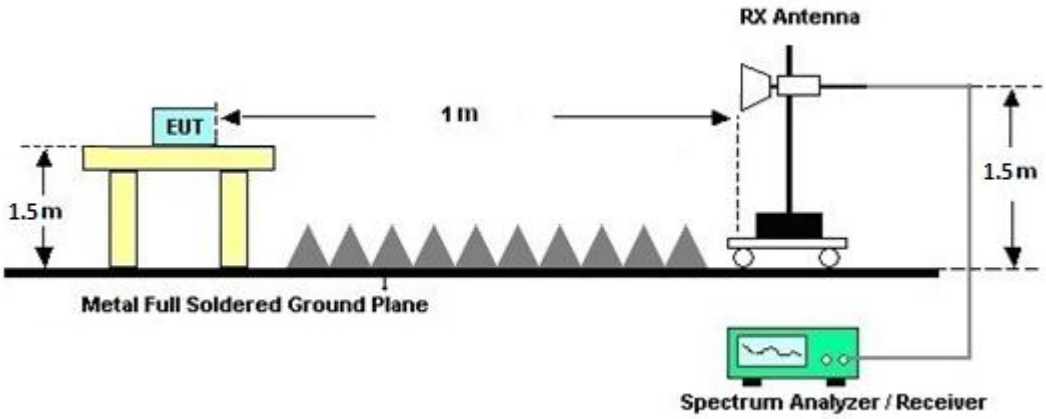
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site **v01r01**, and the result came out very similar.

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

3.4.7 Duty Cycle

Please refer to Appendix C.

3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B.

3.5 Antenna Requirements

3.5.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.5.2 Antenna Anti-Replacement Construction

Antenna permanently attached.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	35419 & 03	30MHz~1GHz	Apr. 21,2025	Aug. 28, 2025~ Nov. 05, 2025	Apr. 20,2026	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00075962	1GHz ~ 18GHz	Nov. 28,2024	Aug. 28, 2025~ Nov. 05, 2025	Nov. 27,2025	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Mar. 06,2025	Aug. 28, 2025~ Nov. 05, 2025	Mar. 05,2026	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 18,2025	Aug. 28, 2025~ Nov. 05, 2025	Apr. 17,2026	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 01,2024	Aug. 28, 2025~ Aug. 30, 2025	Sep. 30,2025	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Mar. 22,2025	Aug. 28, 2025~ Nov. 05, 2025	Mar. 21,2026	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Sep. 30,2025	Nov. 04, 2025~ Nov. 05, 2025	Sep. 29,2026	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060873	18-40GHz	Aug. 26,2025	Aug. 28, 2025~ Nov. 05, 2025	Aug. 25,2026	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 28,2025	Aug. 28, 2025~ Nov. 05, 2025	Mar. 27,2026	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4 MY24971/4 MY15682/4	30MHz to 18GHz	Feb. 20,2025	Aug. 28, 2025~ Nov. 05, 2025	Feb. 19,2026	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4 MY24971/4	9kHz to 30MHz	Feb. 20,2025	Aug. 28, 2025~ Nov. 05, 2025	Feb. 19,2026	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 14,2024	Aug. 28, 2025~ Aug. 30, 2025	Sep. 13,2025	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 13,2025	Nov. 04, 2025~ Nov. 05, 2025	Sep. 12,2026	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 20,2025	Aug. 28, 2025~ Nov. 05, 2025	Feb. 19,2026	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 23,2025	Aug. 28, 2025~ Nov. 05, 2025	Apr. 22,2026	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Aug. 28, 2025~ Nov. 05, 2025	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Aug. 28, 2025~ Nov. 05, 2025	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Aug. 28, 2025~ Nov. 05, 2025	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Aug. 28, 2025~ Nov. 05, 2025	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Aug. 28, 2025~ Nov. 05, 2025	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Feb. 24,2025	Aug. 28, 2025~ Nov. 05, 2025	Feb. 23,2026	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	000991	18GHz~40GHz	May. 29,2025	Aug. 28, 2025~ Nov. 05, 2025	May. 28,2026	Radiation (03CH07-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 01, 2024	Aug. 27, 2025~ Sep. 08, 2025	Oct. 31, 2025	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	13I00030SNO31 (NO:182)	9kHz~6GHz	Jan. 09, 2025	Aug. 27, 2025~ Sep. 08, 2025	Jan. 08, 2026	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Dec. 23, 2024	Aug. 27, 2025~ Sep. 08, 2025	Dec. 22, 2025	Conducted (TH05-HY)
Switch Control Mainframe	E-Instument	ETF-1405-0	EC1900157 (BOX6)	N/A	Feb. 10, 2025	Aug. 27, 2025~ Sep. 08, 2025	Feb. 09, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_version_240513	N/A	Conducted Other Test Item	N/A	Aug. 27, 2025~ Sep. 08, 2025	N/A	Conducted (TH05-HY)

5 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.3 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.7 dB

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.5 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9 dB

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Joseph Hu	Temperature:	21~25	°C
Test Date:	2025/8/27~9/8	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

U-NII-3 single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	149	5745	17.35	-	22.63	-	15.09	-	0.5	Pass
11a	6Mbps	1	157	5785	17.36	-	23.60	-	15.13	-	0.5	Pass
11a	6Mbps	1	165	5825	17.36	-	23.75	-	15.00	-	0.5	Pass
VHT20	MCS0	1	149	5745	18.05	-	20.97	-	15.09	-	0.5	Pass
VHT20	MCS0	1	157	5785	18.09	-	25.02	-	15.14	-	0.5	Pass
VHT20	MCS0	1	165	5825	18.12	-	21.51	-	15.14	-	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	19.51	-		30.00	-	5.00	-	Pass
11a	6Mbps	1	157	5785	19.62	-		30.00	-	5.00	-	Pass
11a	6Mbps	1	165	5825	19.72	-		30.00	-	5.00	-	Pass
HT20	MCS0	1	149	5745	19.11	-		30.00	-	5.00	-	Pass
HT20	MCS0	1	157	5785	19.25	-		30.00	-	5.00	-	Pass
HT20	MCS0	1	165	5825	19.45	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	149	5745	19.21	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	157	5785	19.35	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	165	5825	19.55	-		30.00	-	5.00	-	Pass

Report Number : FR580727D

TEST RESULTS DATA
Power Spectral Density

U-NII-3 single antenna														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	0.11		5.27	-		30.00	-	5.00	-	Pass
11a	6Mbps	1	157	5785	0.11		5.39	-		30.00	-	5.00	-	Pass
11a	6Mbps	1	165	5825	0.11		5.46	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	149	5745	0.11		5.02	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	157	5785	0.11		5.07	-		30.00	-	5.00	-	Pass
VHT20	MCS0	1	165	5825	0.11		5.13	-		30.00	-	5.00	-	Pass

Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

U-NII-3 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	1	149	5745	Full	18.90	-	20.78	-	18.34	-	0.5	Pass
HE20	MCS0	1	157	5785	Full	18.90	-	20.80	-	18.56	-	0.5	Pass
HE20	MCS0	1	165	5825	Full	18.91	-	20.74	-	18.20	-	0.5	Pass

Report Number : FR580727D

TEST RESULTS DATA
Average Power Table

U-NII-3 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	1	149	5745	Full	19.58	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	26/0	10.41	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	52/37	13.78	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	106/53	16.27	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	Full	19.54	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	26/0	10.53	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	52/37	13.92	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	106/53	16.43	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	Full	19.63	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	26/8	10.51	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	52/40	13.80	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	106/54	16.55	-		30.00	-	5.00	-	Pass

Report Number : FR580727D

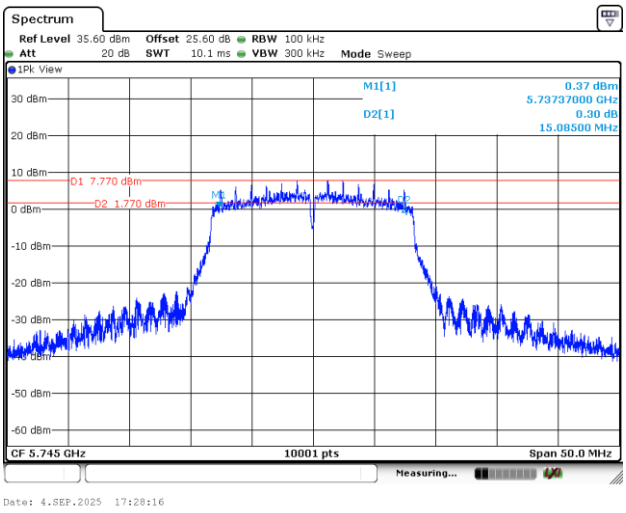
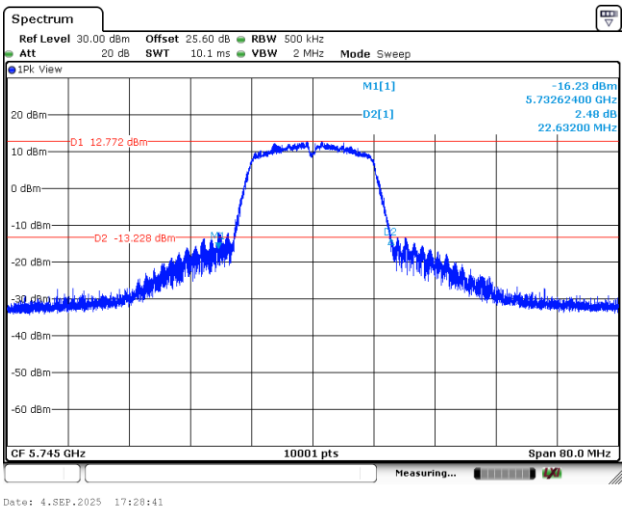
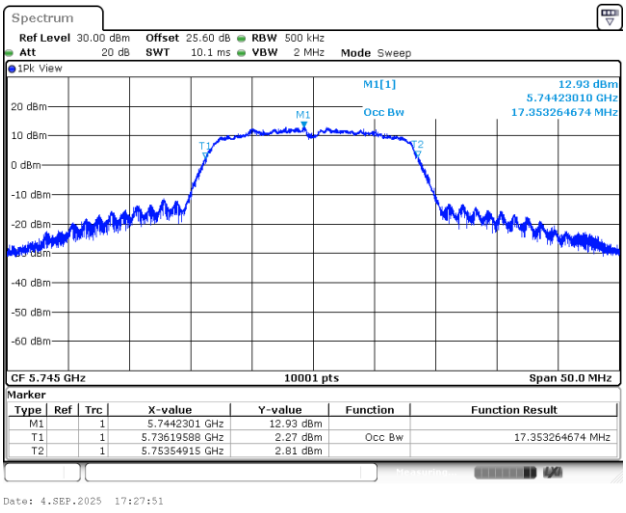
TEST RESULTS DATA
Power Spectral Density

U-NII-3 single antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	1	149	5745	Full	0.15	-	4.68	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	26/0	0.26	-	4.34	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	52/37	0.44	-	4.45	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	149	5745	106/53	0.71	-	4.20	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	Full	0.15	-	4.57	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	26/0	0.26	-	4.32	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	52/37	0.44	-	4.53	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	157	5785	106/53	0.71	-	4.48	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	Full	0.15	-	4.94	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	26/8	0.26	-	4.63	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	52/40	0.44	-	4.73	-		30.00	-	5.00	-	Pass
HE20	MCS0	1	165	5825	106/54	0.71	-	4.45	-		30.00	-	5.00	-	Pass

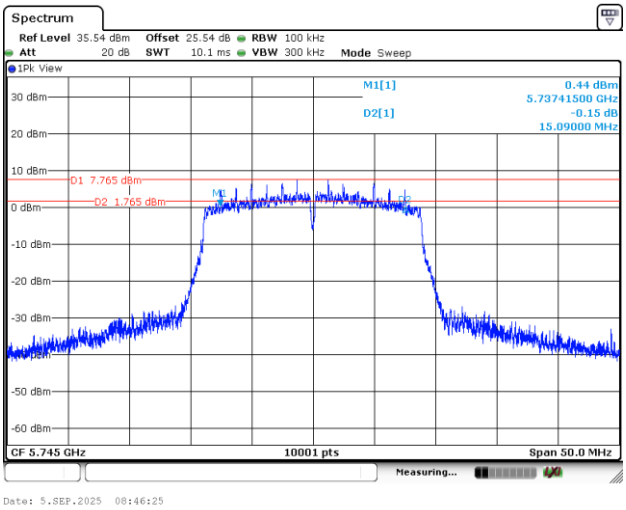
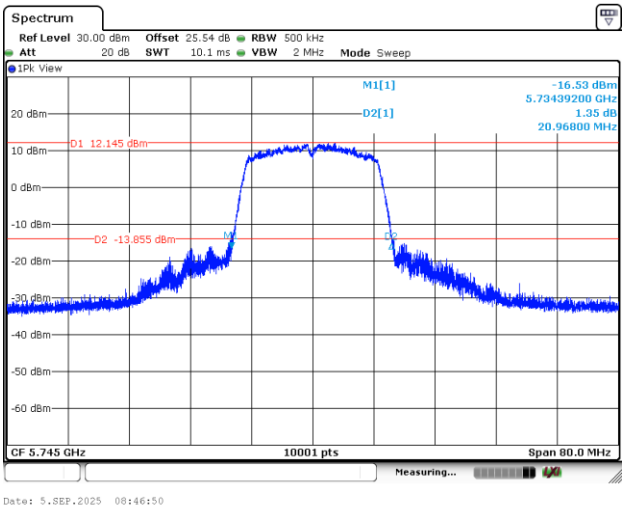
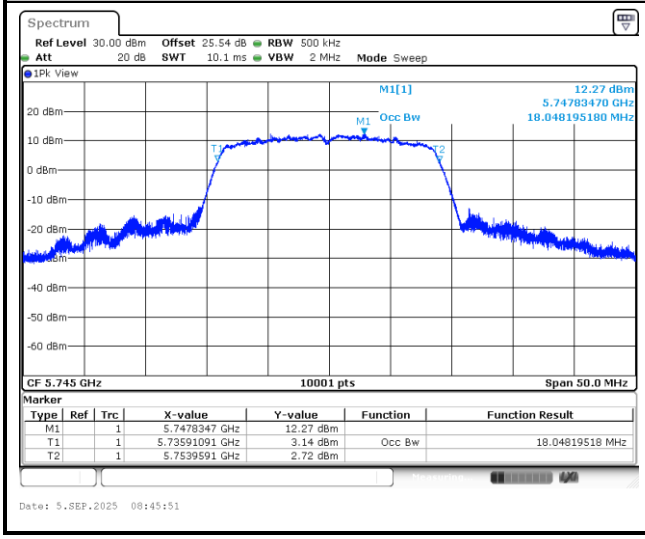
Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

Test Result of 6dB and 26dB and 99% Occupied Bandwidth

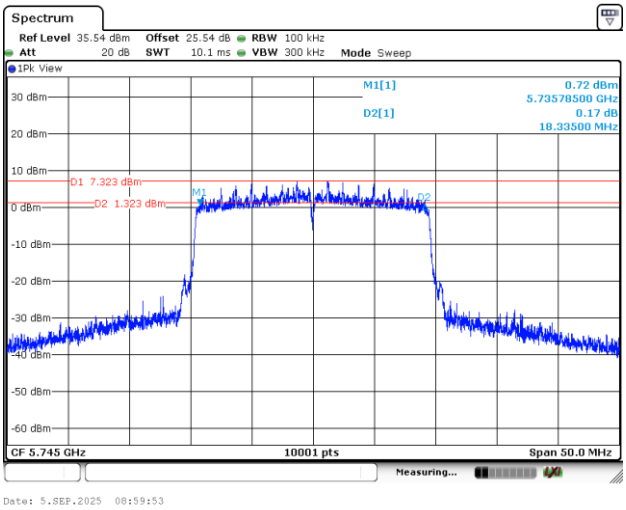
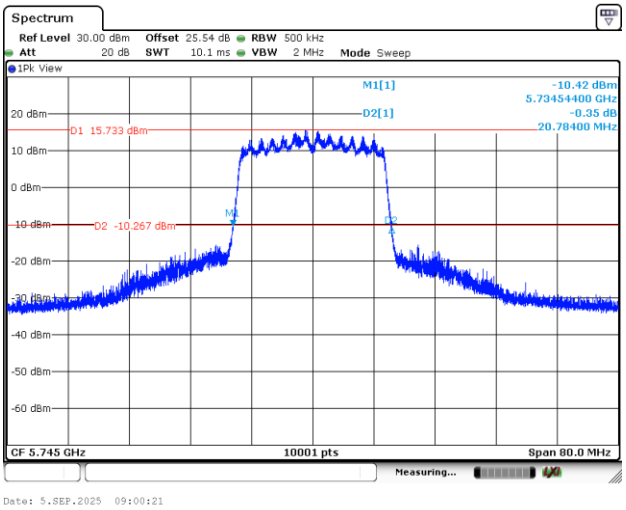
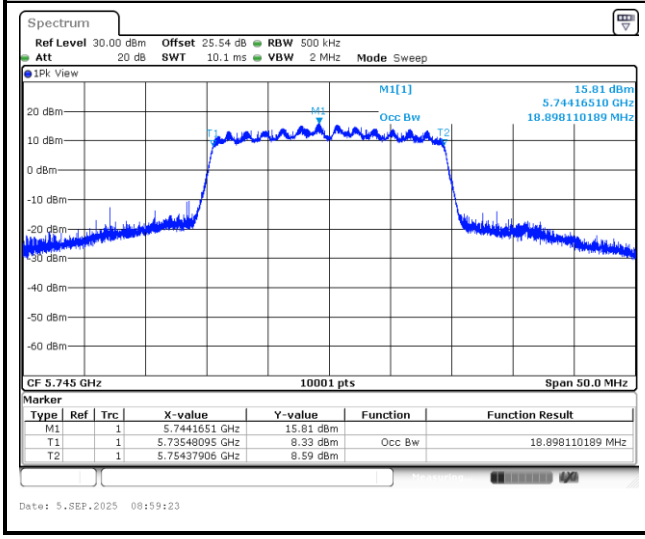
<802.11a>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11ac VHT20>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

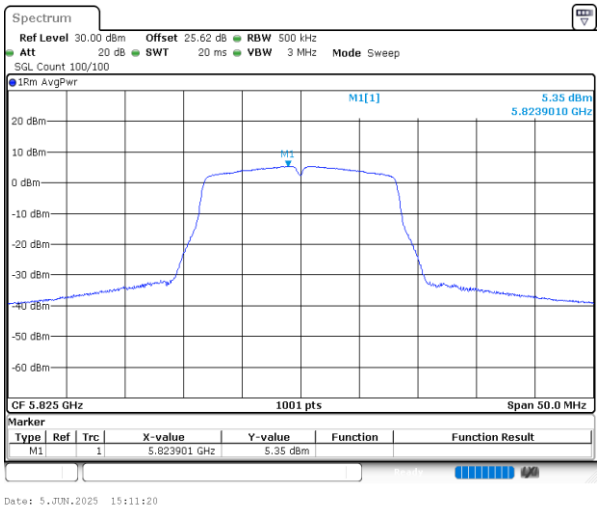
<802.11ax HE20>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

Test Result of Power Spectral Density

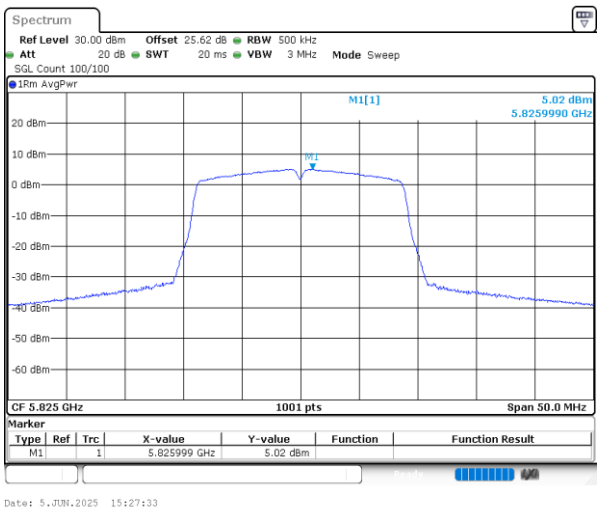
<802.11a>

Maximum Power Density Plot (dBm/300kHz)
Ant1



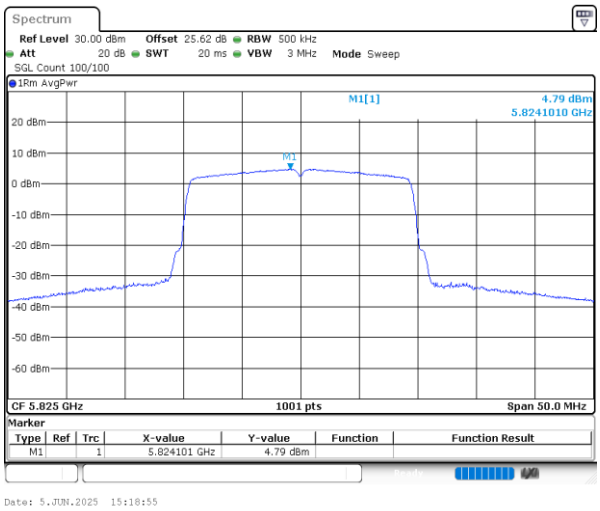
<802.11ac VHT20>

Maximum Power Density Plot (dBm/300kHz)
Ant1



<802.11ax HE20>

Maximum Power Density Plot (dBm/300kHz)
Ant1



Appendix B. Radiated Spurious Emission Test Data

Test Engineer :	Jesse Wang, Stan Hsieh, and Ken Wu.	**Temperature :**	21.5~26.3°C
		Relative Humidity :	52.6~65.4%

Note symbol

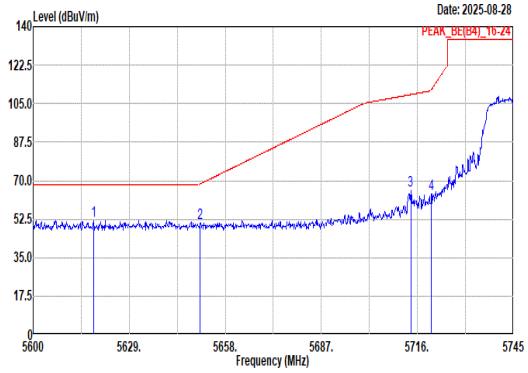
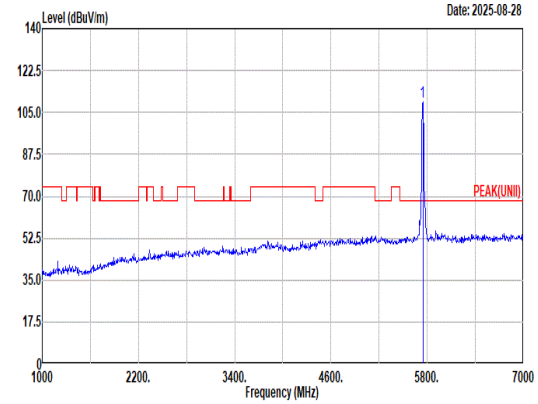
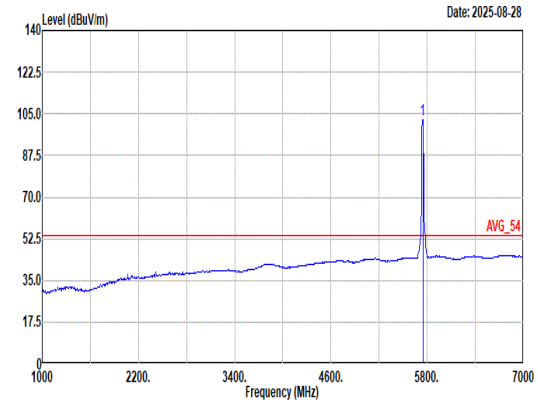
-L	**Low channel location**
-R	**High channel location**

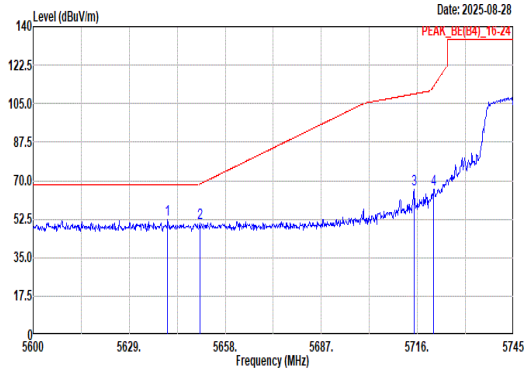
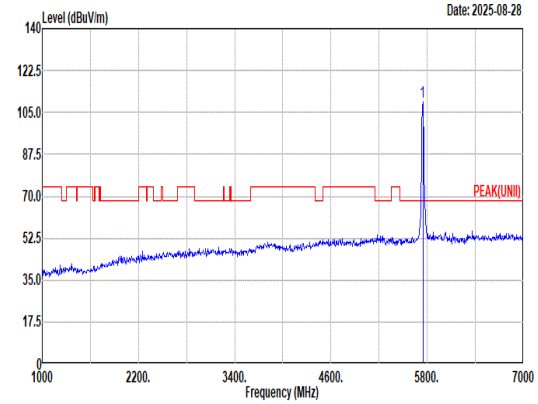
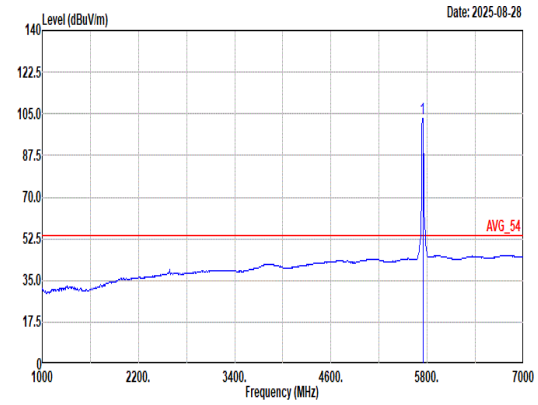
B1. Radiated Spurious Emission Test Modes

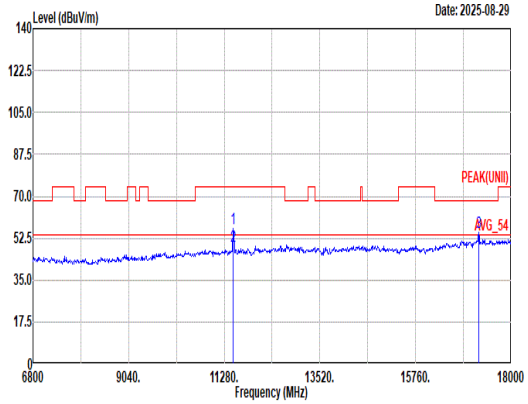
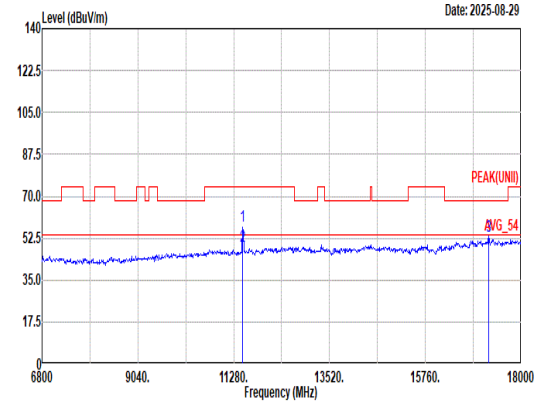
Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 25	U-NII-3	5.725-5.85	0	802.11a	149	5745	6Mbps	-	-
Mode 26	U-NII-3	5.725-5.85	0	802.11a	157	5785	6Mbps	-	-
Mode 27	U-NII-3	5.725-5.85	0	802.11a	165	5825	6Mbps	-	-
Mode 28	U-NII-3	5.725-5.85	0	802.11ax HE20	149	5745	MCS0	Full RU	-
Mode 29	U-NII-3	5.725-5.85	0	802.11ax HE20	157	5785	MCS0	Full RU	-
Mode 30	U-NII-3	5.725-5.85	0	802.11ax HE20	165	5825	MCS0	Full RU	-
Mode 31	U-NII-3	5.47-5.725	0	802.11ax HE20	165	5825	MCS0	Partial_106/54RU	-
Mode 32	U-NII-3	5.725-5.85	0	802.11ax HE20	149	5745	MCS0	Full RU	LF
Mode 34	U-NII-3	5.725-5.85	0	802.11ac VHT20	149	5745	MCS0	-	-
Mode 37	U-NII-3	5.725-5.85	0	802.11ac VHT20	149	5745	MCS0	-	SHF

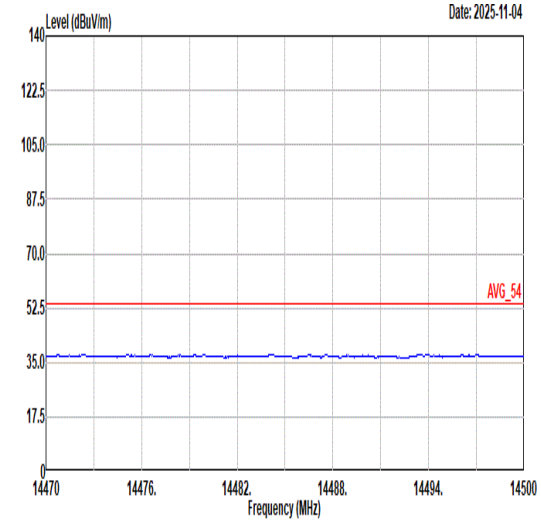
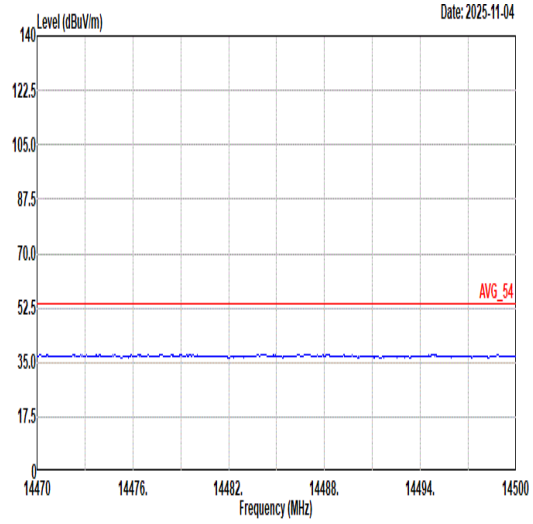
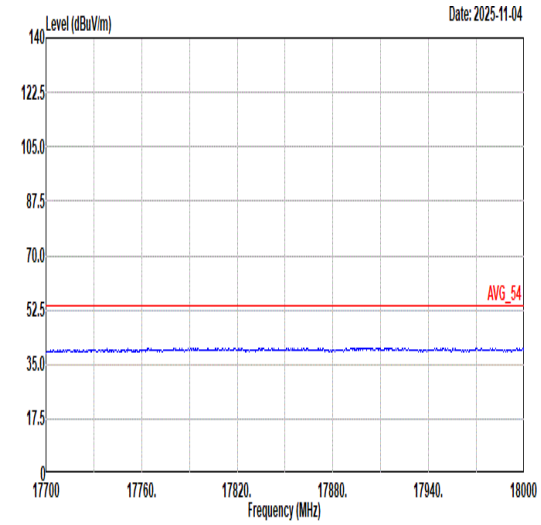
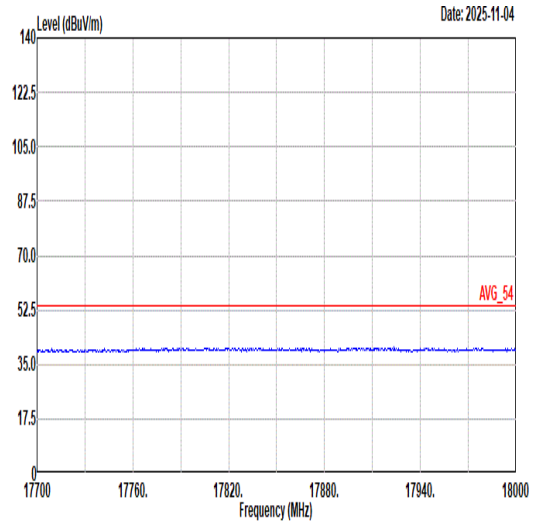
B2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
25	802.11a	149	5640.60	52.08	68.20	-16.12	V	Peak	Pass	-	Band Edge
	802.11a	149	11490.00	49.30	54.00	-4.70	H	Avg.	Pass	-	Harmonic
26	802.11a	157	5949.01	52.63	68.20	-15.57	V	Peak	Pass	-	Band Edge
	802.11a	157	11570.00	48.68	54.00	-5.32	V	Avg.	Pass	-	Harmonic
27	802.11a	165	5936.75	53.43	68.20	-14.77	H	Peak	Pass	-	Band Edge
	802.11a	165	11650.00	49.27	54.00	-4.73	H	Avg.	Pass	-	Harmonic
28	802.11ax HE20	149	5629.15	52.87	68.20	-15.33	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	149	11490.00	50.36	54.00	-3.64	H	Avg.	Pass	Full RU	Harmonic
29	802.11ax HE20	157	5948.68	52.37	68.20	-15.83	H	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	157	11570.00	48.06	54.00	-5.94	V	Avg.	Pass	Full RU	Harmonic
30	802.11ax HE20	165	5934.50	53.62	68.20	-14.58	V	Peak	Pass	Full RU	Band Edge
	802.11ax HE20	165	11650.00	48.99	54.00	-5.01	H	Avg.	Pass	Full RU	Harmonic
31	802.11ax HE20	165	5934.25	53.23	68.20	-14.97	H	Peak	Pass	Partial_106/54RU	Band Edge
	802.11ax HE20	165	-	-	-	-	-	-	-	Partial_106/54RU	Harmonic
32	LF	149	30.00	30.89	40.00	-9.11	V	Peak	Pass	-	LF
34	802.11ac VHT20	149	5616.10	52.13	68.20	-16.07	H	Peak	Pass	-	Band Edge
	802.11ac VHT20	149	11490.00	50.94	54.00	-3.06	H	Avg.	Pass	-	Harmonic
37	SHF	149	39982.83	46.59	74.00	-27.41	H	Peak	Pass	-	SHF

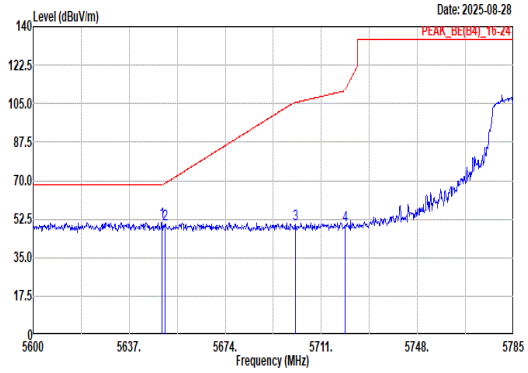
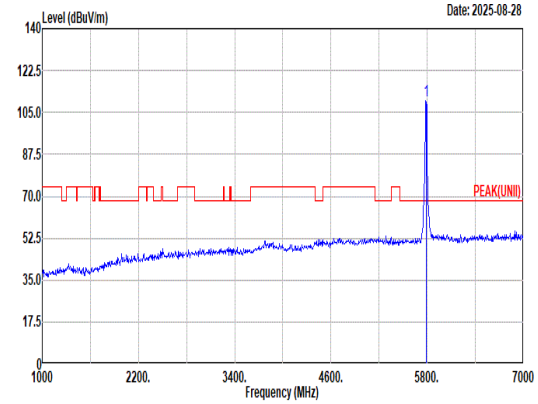
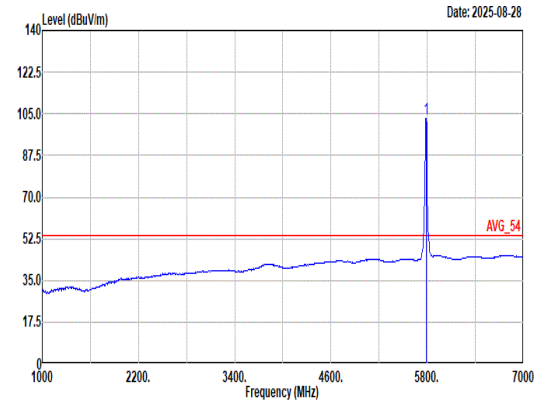
Mode	25	
	Band Edge	
	U-NII-3_5.725-5.85_802.11a_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5618.27 51.70 68.20 -16.50 37.75 34.84 12.97 33.86 0.00 161 212 Peak 2 5650.46 50.79 68.54 -17.75 36.80 34.90 12.99 33.90 0.00 161 212 Peak 3 5713.97 65.54 109.11 -43.57 51.46 35.00 13.05 33.97 0.00 161 212 Peak 4 5720.21 64.19 111.27 -47.08 50.12 35.00 13.05 33.98 0.00 161 212 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 109.34 ------ ------ 95.28 35.00 13.07 34.01 0.00 161 212 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 102.73 ------ ------ 88.67 35.00 13.07 34.01 0.00 161 212 Average

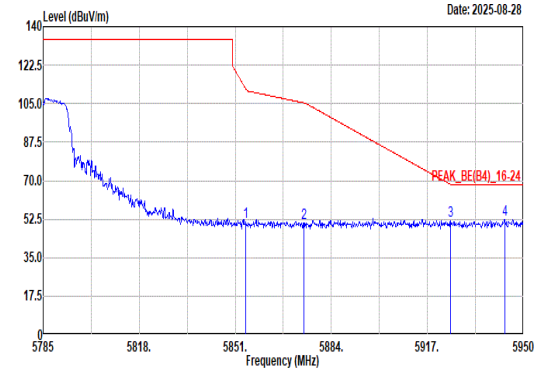
Mode	25	
	Band Edge	
	U-NII-3_5.725-5.85_802.11a_CH149_5745MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5640.60 52.08 68.20 -16.12 38.11 34.88 12.98 33.89 0.00 199 62 Peak 2 5650.32 50.85 68.43 -17.58 36.86 34.90 12.99 33.90 0.00 199 62 Peak 3 5714.99 66.10 109.40 -43.30 52.02 35.00 13.05 33.97 0.00 199 62 Peak 4 5720.93 65.91 112.92 -47.01 51.84 35.00 13.05 33.98 0.00 199 62 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 109.58 ------ ------ 95.52 35.00 13.07 34.01 0.00 199 62 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 103.02 ------ ------ 88.96 35.00 13.07 34.01 0.00 199 62 Average

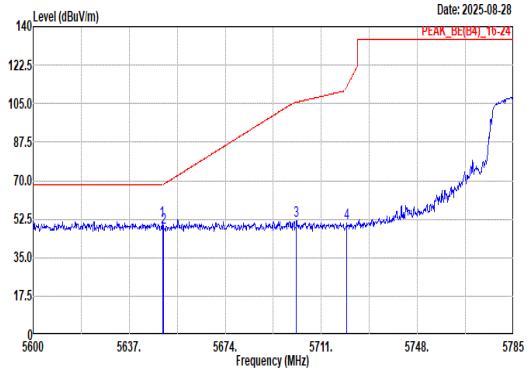
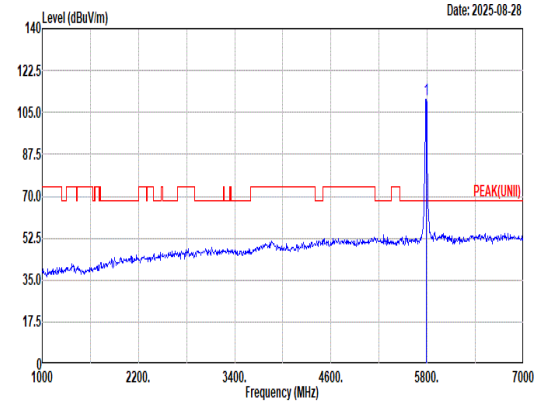
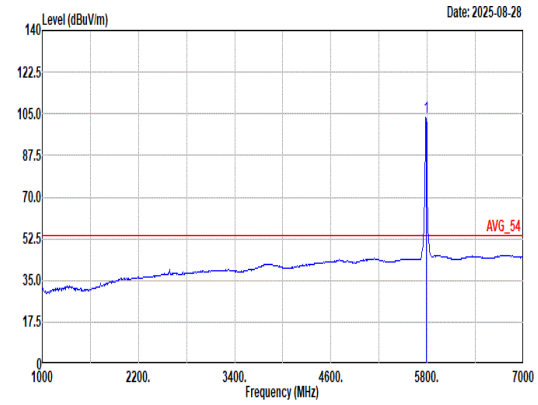
Mode	25	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11490.00 56.70 74.00 -17.30 55.61 38.20 18.97 57.27 1.19 197 198 Peak 2 11490.00 49.30 54.00 -4.70 48.21 38.20 18.97 57.27 1.19 197 198 Average 3 17235.00 55.18 68.20 -13.02 45.78 41.57 22.54 56.05 1.34 165 360 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11490.00 57.37 74.00 -16.63 56.28 38.20 18.97 57.27 1.19 100 200 Peak 2 11490.00 49.25 54.00 -4.75 48.16 38.20 18.97 57.27 1.19 100 200 Average 3 17235.00 53.34 68.20 -14.86 43.94 41.57 22.54 56.05 1.34 400 156 Peak

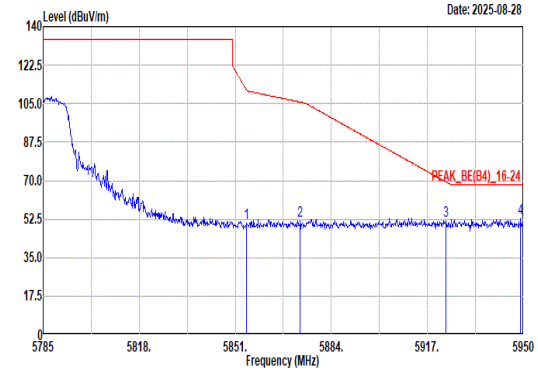
Mode	25	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

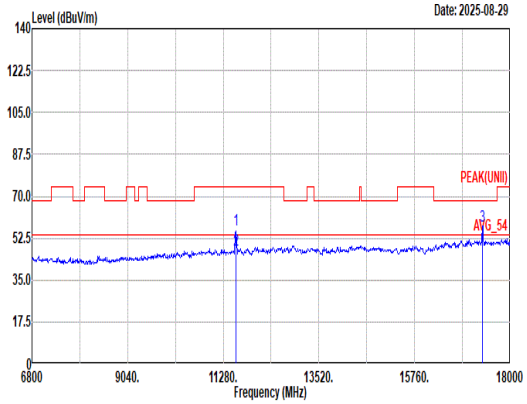
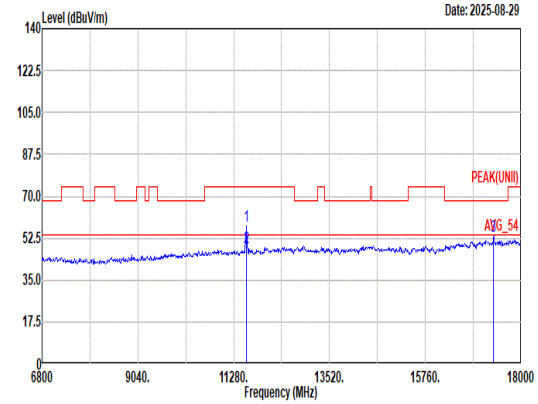
Mode	26
	Band Edge - L
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz
ANT	0

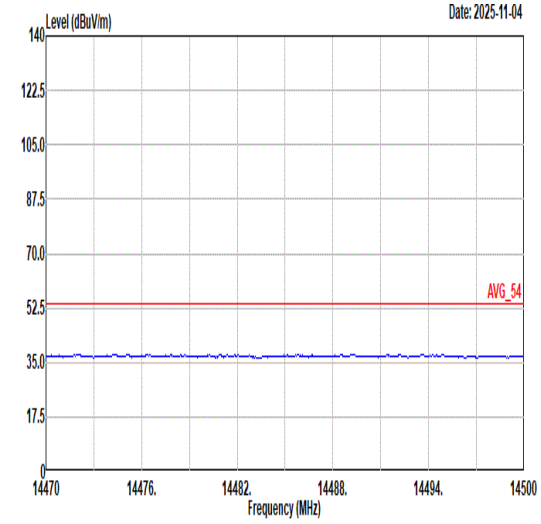
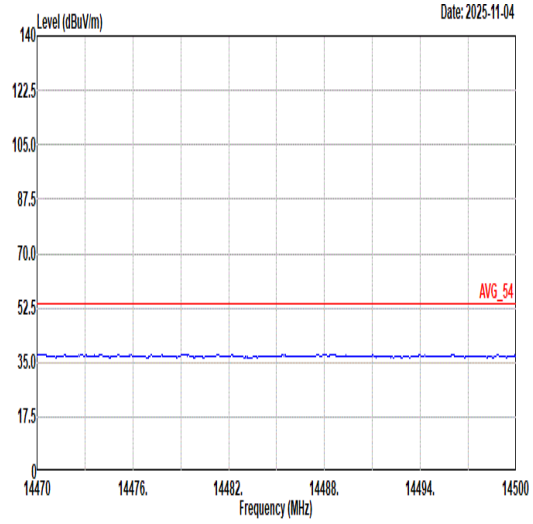
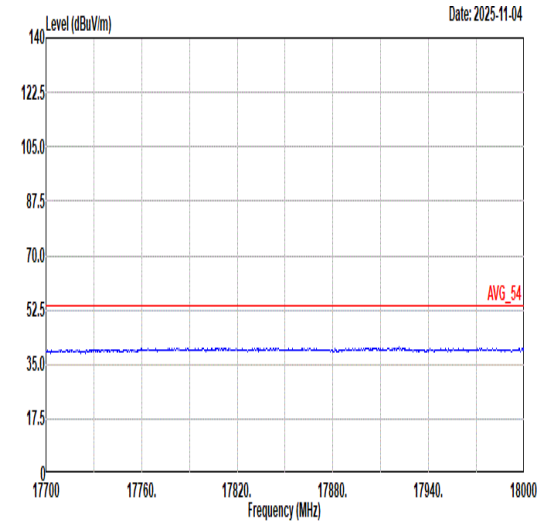
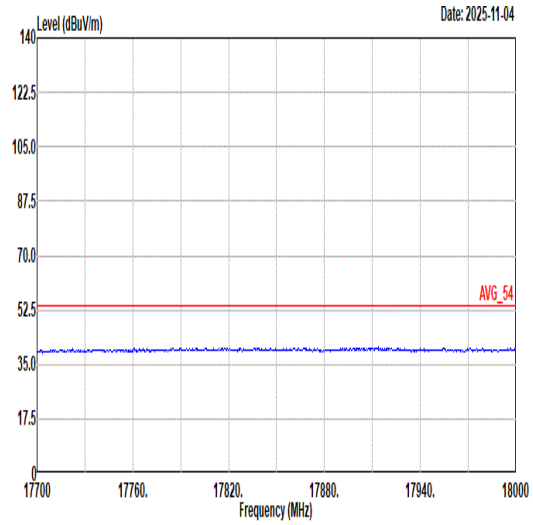
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5649.58 51.02 68.20 -17.18 37.03 34.90 12.99 33.90 0.00 193 67 Peak 2 5650.69 50.26 68.71 -18.45 36.27 34.90 12.99 33.90 0.00 193 67 Peak 3 5701.01 50.35 105.48 -55.13 36.27 35.00 13.04 33.96 0.00 193 67 Peak 4 5720.07 49.66 110.95 -61.29 35.59 35.00 13.05 33.98 0.00 193 67 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 110.15 ------ ------ 96.10 35.00 13.10 34.05 0.00 193 67 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 103.08 ------ ------ 89.03 35.00 13.10 34.05 0.00 193 67 Average

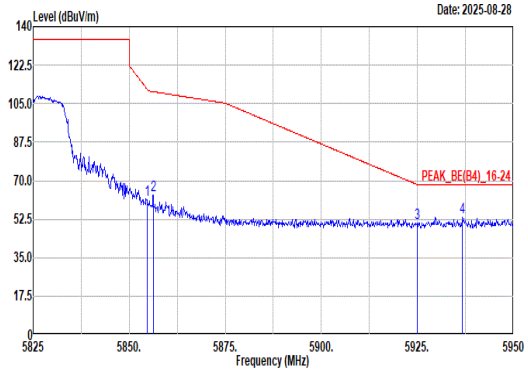
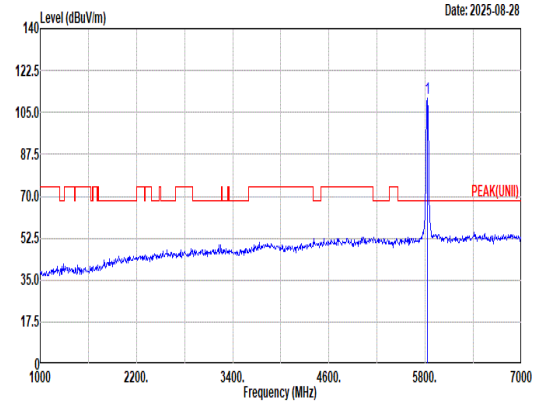
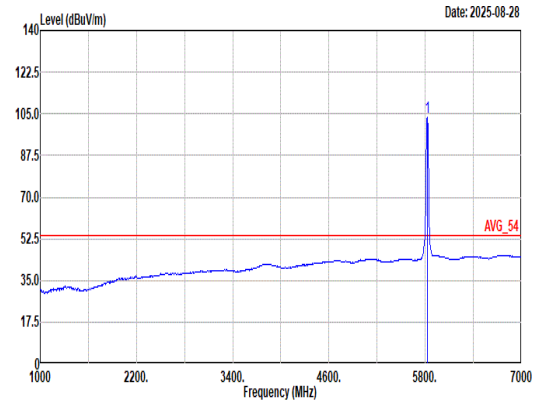
Mode	26	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.63 51.27 111.64 -60.37 37.18 35.02 13.20 34.13 0.00 193 67 Peak 2 5874.60 50.72 105.31 -54.59 36.54 35.10 13.23 34.15 0.00 193 67 Peak 3 5924.92 52.03 68.26 -16.23 37.73 35.20 13.31 34.21 0.00 193 67 Peak 4 5943.57 52.25 68.20 -15.95 37.94 35.20 13.34 34.23 0.00 193 67 Peak	Blank

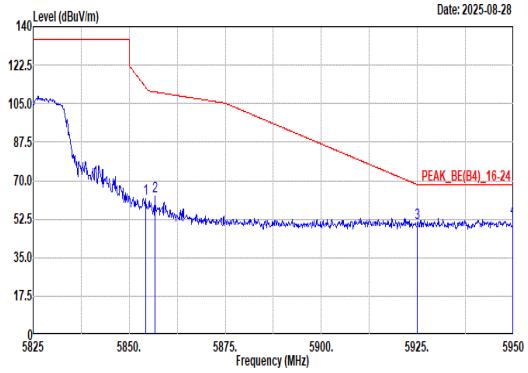
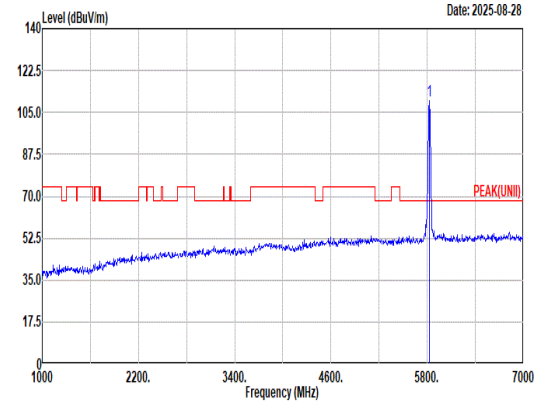
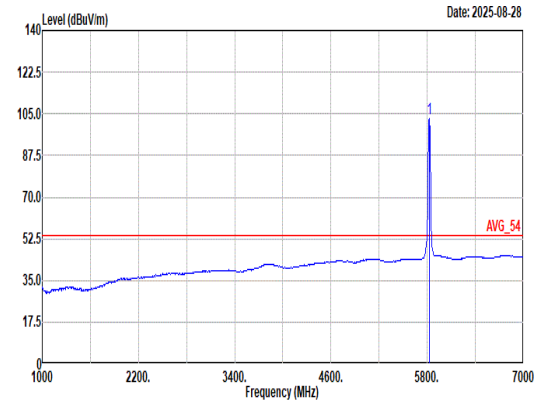
Mode	26	
	Band Edge - L	
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5649.77 51.95 68.20 -16.25 37.96 34.90 12.99 33.90 0.00 201 60 Peak 2 5650.14 48.79 68.30 -19.51 34.80 34.90 12.99 33.90 0.00 201 60 Peak 3 5701.38 51.86 105.59 -53.73 37.78 35.00 13.04 33.96 0.00 201 60 Peak 4 5720.81 50.66 112.64 -61.98 36.59 35.00 13.05 33.98 0.00 201 60 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 110.21 ------ ------ 96.16 35.00 13.10 34.05 0.00 201 60 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 103.29 ------ ------ 89.24 35.00 13.10 34.05 0.00 201 60 Average

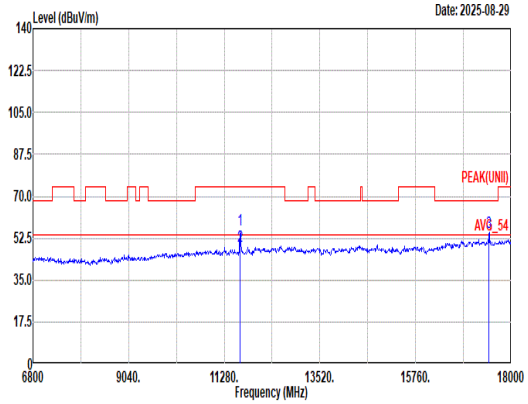
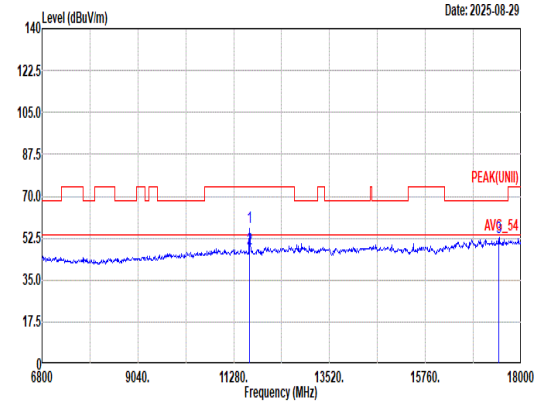
Mode	26	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.96 50.81 110.89 -60.08 36.72 35.02 13.20 34.13 0.00 201 60 Peak 2 5873.28 51.85 105.68 -53.83 37.68 35.09 13.23 34.15 0.00 201 60 Peak 3 5923.44 51.51 69.35 -17.84 37.20 35.20 13.31 34.20 0.00 201 60 Peak 4 5949.01 52.63 68.20 -15.57 38.32 35.20 13.34 34.23 0.00 201 60 Peak	Blank

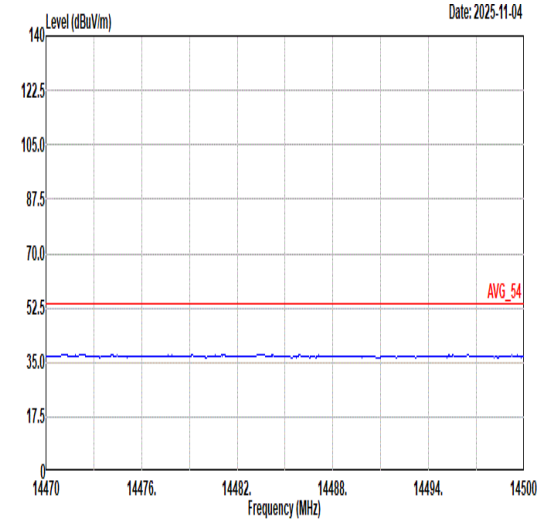
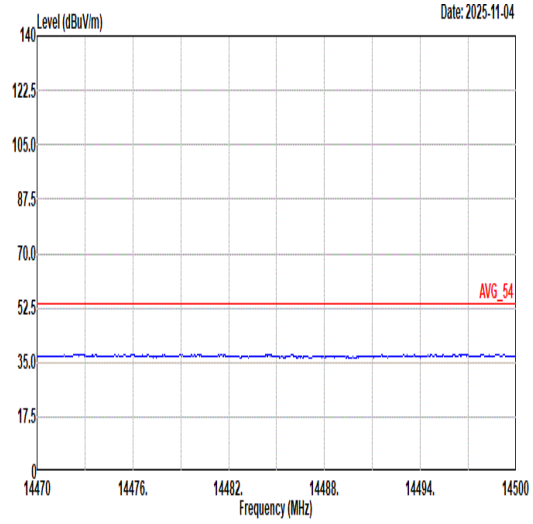
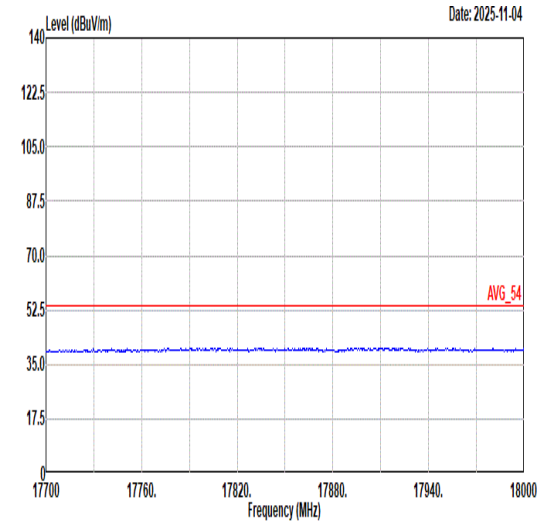
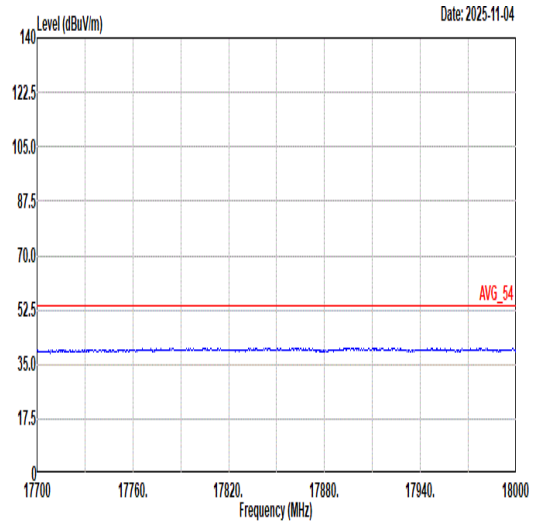
Mode	26	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11570.00 55.96 74.00 -18.04 54.52 38.34 19.02 57.12 1.20 213 227 Peak 2 11570.00 47.29 54.00 -6.71 45.85 38.34 19.02 57.12 1.20 213 227 Average 3 17355.00 57.72 68.20 -10.48 48.60 41.32 22.64 56.19 1.35 125 360 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11570.00 57.37 74.00 -16.63 55.93 38.34 19.02 57.12 1.20 215 120 Peak 2 11570.00 48.68 54.00 -5.32 47.24 38.34 19.02 57.12 1.20 215 120 Average 3 17355.00 53.21 68.20 -14.99 44.09 41.32 22.64 56.19 1.35 352 360 Peak

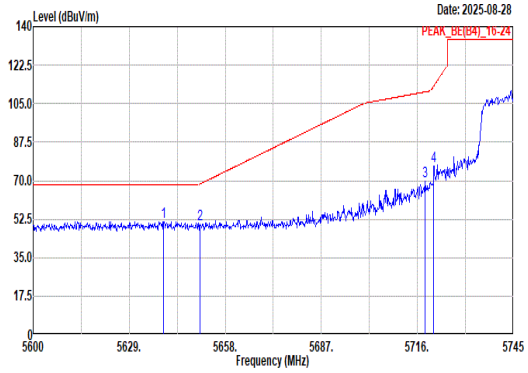
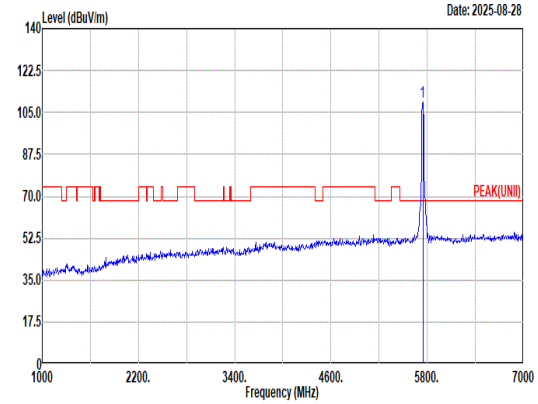
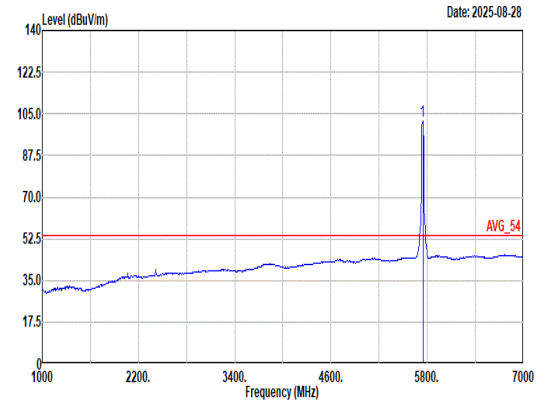
Mode	26	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH157_5785MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

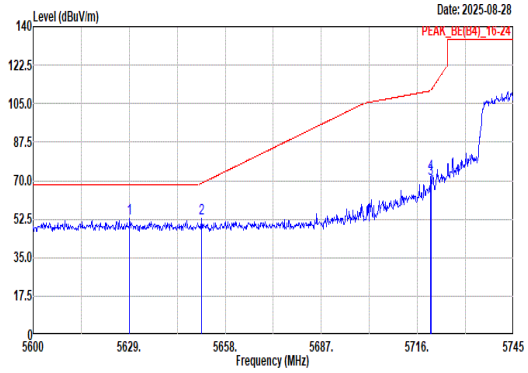
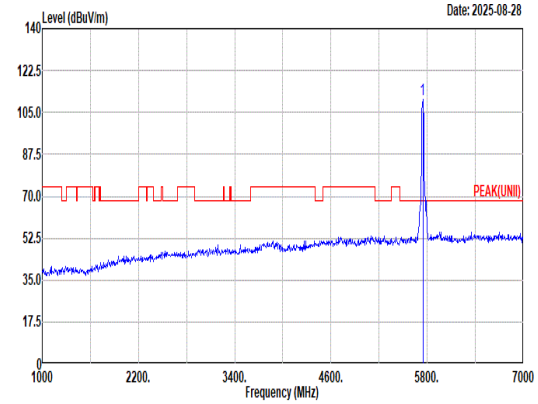
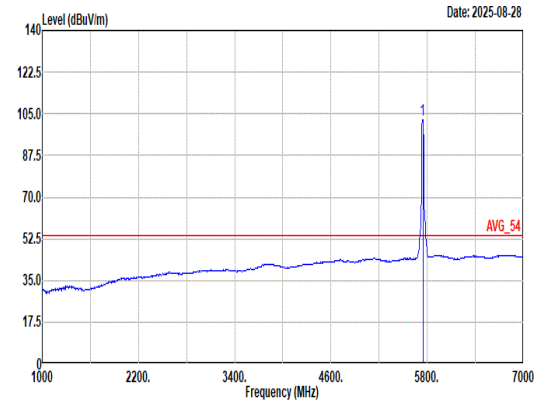
Mode	27	
	Band Edge	
	U-NII-3_5.725-5.85_802.11a_CH165_5825MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.63 61.20 111.65 -50.45 47.11 35.02 13.20 34.13 0.00 201 68 Peak 2 5856.25 63.20 110.45 -47.25 49.10 35.03 13.20 34.13 0.00 201 68 Peak 3 5924.88 50.97 68.29 -17.32 36.67 35.20 13.31 34.21 0.00 201 68 Peak 4 5936.75 53.43 68.20 -14.77 39.12 35.20 13.33 34.22 0.00 201 68 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 110.68 ------ ------ 96.61 35.00 13.16 34.09 0.00 201 68 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 103.80 ------ ------ 89.73 35.00 13.16 34.09 0.00 201 68 Average

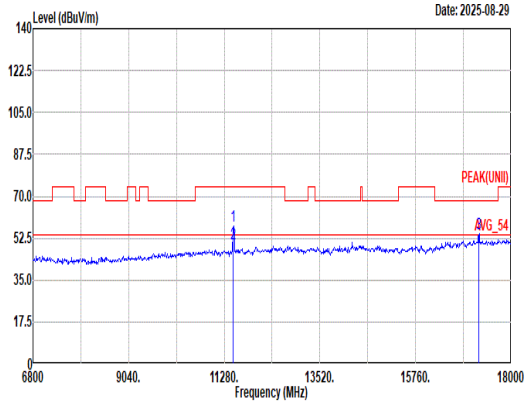
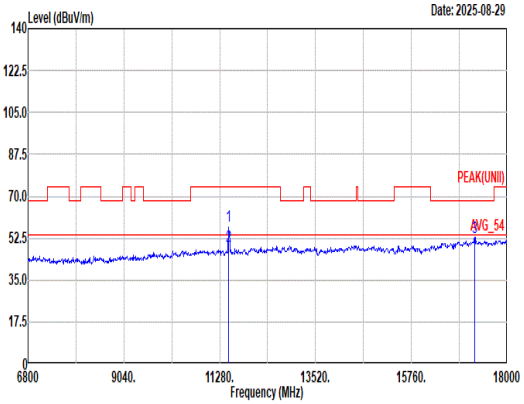
Mode	27	
	Band Edge	
	U-NII-3_5.725-5.85_802.11a_CH165_5825MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.25 61.87 112.51 -50.64 47.78 35.02 13.20 34.13 0.00 215 60 Peak 2 5856.63 62.64 110.34 -47.70 48.54 35.03 13.20 34.13 0.00 215 60 Peak 3 5925.00 50.73 68.20 -17.47 36.43 35.20 13.31 34.21 0.00 215 60 Peak 4 5949.88 52.99 68.20 -15.21 38.68 35.20 13.34 34.23 0.00 215 60 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 109.84 ------ ------ 95.78 35.00 13.16 34.10 0.00 215 60 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.750kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 102.96 ------ ------ 88.89 35.00 13.16 34.09 0.00 215 60 Average

Mode	27	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH165_5825MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11650.00 56.06 74.00 -17.94 54.23 38.50 19.08 56.96 1.21 149 91 Peak 2 11650.00 49.27 54.00 -4.73 47.44 38.50 19.08 56.96 1.21 149 91 Average 3 17475.00 54.77 68.20 -13.43 45.46 41.55 22.74 56.34 1.36 120 360 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11650.00 56.99 74.00 -17.01 55.16 38.50 19.08 56.96 1.21 198 120 Peak 2 11650.00 48.34 54.00 -5.66 46.51 38.50 19.08 56.96 1.21 198 120 Average 3 17475.00 52.81 68.20 -15.39 43.50 41.55 22.74 56.34 1.36 351 360 Peak

Mode	27	
	Harmonic	
	U-NII-3_5.725-5.85_802.11a_CH165_5825MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

Mode	28	
	Band Edge	
	U-NII-3_5.725-5.85_802.11ax HE20_CH149_Full RU_5745MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5639.44 51.44 68.20 -16.76 37.47 34.88 12.98 33.89 0.00 200 212 Peak 2 5650.32 50.14 68.43 -18.29 36.15 34.90 12.99 33.90 0.00 200 212 Peak 3 5718.32 69.49 110.33 -40.84 55.41 35.00 13.05 33.97 0.00 200 212 Peak 4 5720.93 76.43 112.92 -36.49 62.36 35.00 13.05 33.98 0.00 200 212 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 109.55 ------ ------ 95.49 35.00 13.07 34.01 0.00 200 212 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 102.04 ------ ------ 87.98 35.00 13.07 34.01 0.00 200 212 Average

Mode	28	
	Band Edge	
	U-NII-3_5.725-5.85_802.11ax HE20_CH149_Full RU_5745MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5629.15 52.87 68.20 -15.33 38.91 34.86 12.97 33.87 0.00 204 66 Peak 2 5650.75 52.92 68.76 -15.84 38.93 34.90 12.99 33.90 0.00 204 66 Peak 3 5719.92 70.65 110.78 -40.13 56.58 35.00 13.05 33.98 0.00 204 66 Peak 4 5720.06 72.73 110.94 -38.21 58.66 35.00 13.05 33.98 0.00 204 66 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 110.61 ------ ------ 96.55 35.00 13.07 34.01 0.00 204 66 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 102.44 ------ ------ 88.38 35.00 13.07 34.01 0.00 204 66 Average

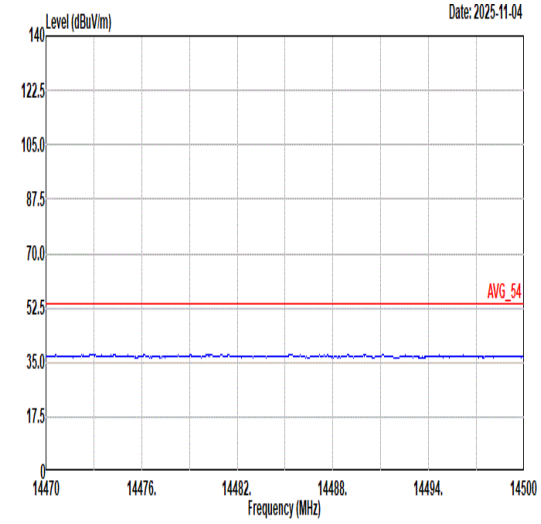
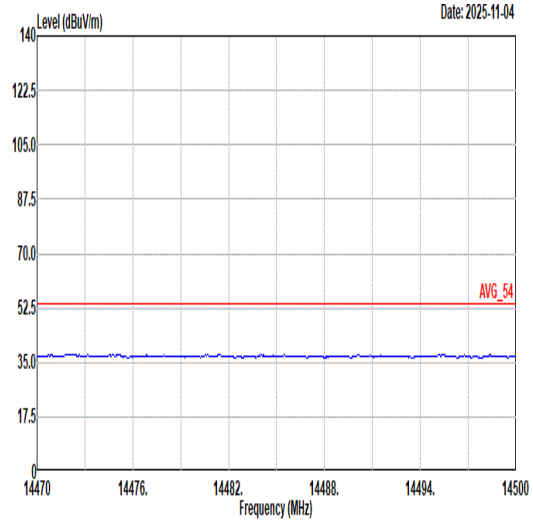
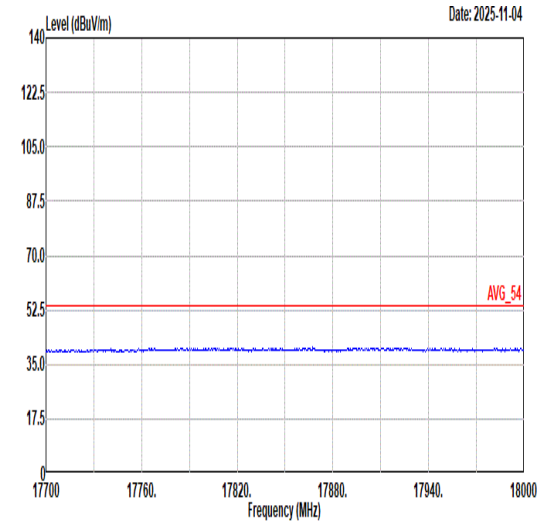
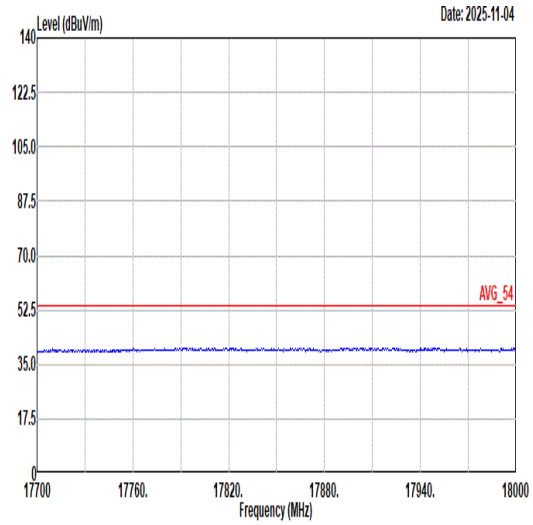
Mode	28	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH149_Full RU_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL

Horizontal:

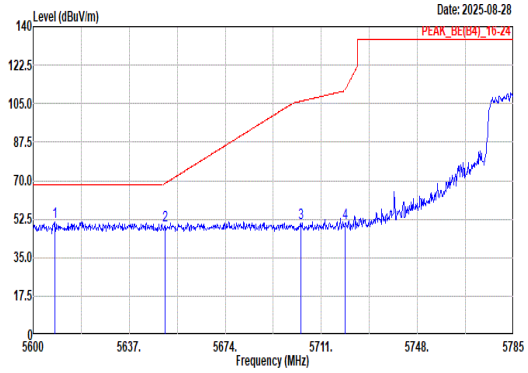
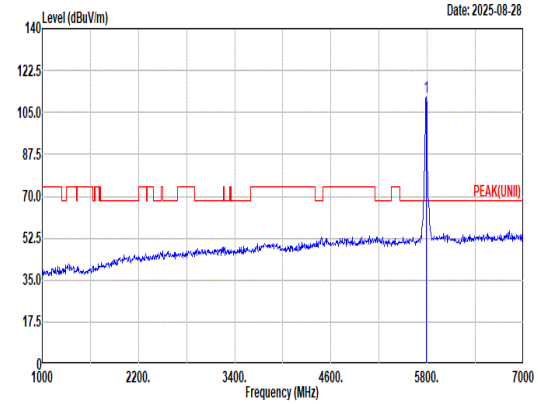
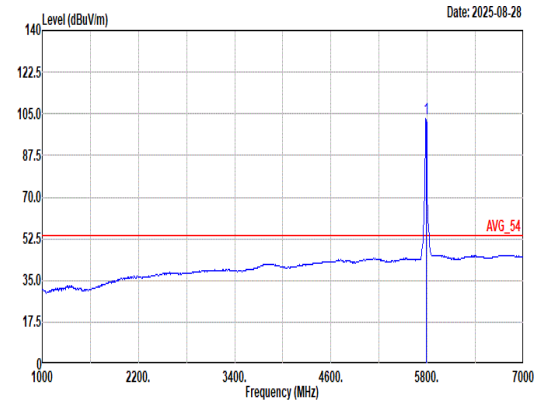
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	11490.00	57.85	74.00	-16.15	56.76	38.20	18.97	57.27	1.19	361	173	Peak
2	11490.00	50.36	54.00	-3.64	49.27	38.20	18.97	57.27	1.19	361	173	Average
3	17235.00	54.24	68.20	-13.96	44.84	41.57	22.54	56.05	1.34	100	318	Peak

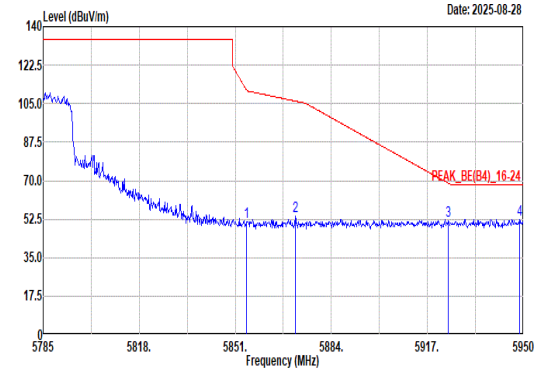
Vertical:

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	11490.00	57.70	74.00	-16.30	56.61	38.20	18.97	57.27	1.19	100	196	Peak
2	11490.00	48.95	54.00	-5.05	47.86	38.20	18.97	57.27	1.19	100	196	Average
3	17235.00	53.09	68.20	-15.11	43.69	41.57	22.54	56.05	1.34	200	182	Peak

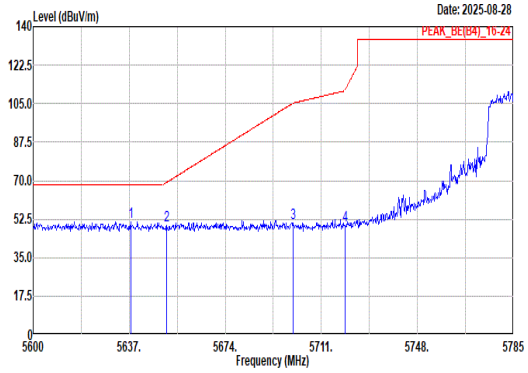
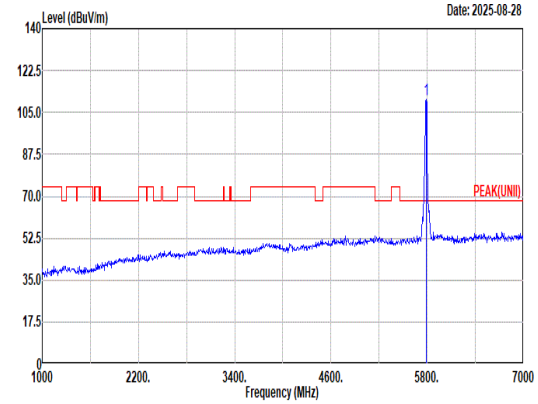
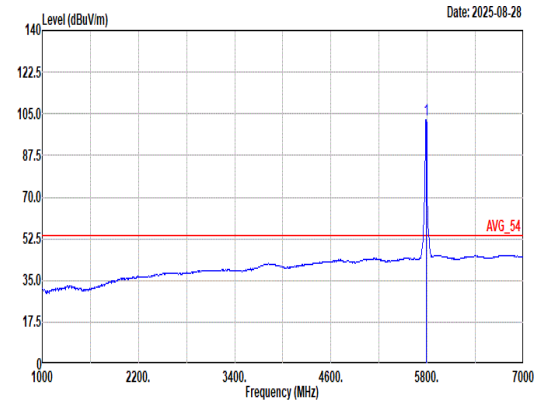
Mode	28	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH149_Full RU_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

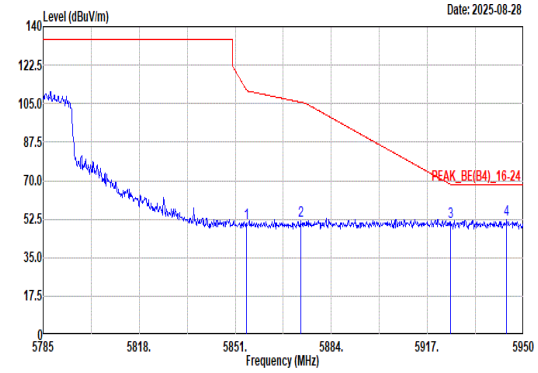
Mode	29
	Band Edge - L
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz
ANT	0

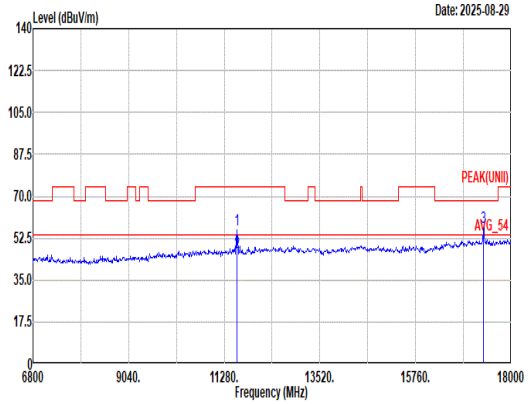
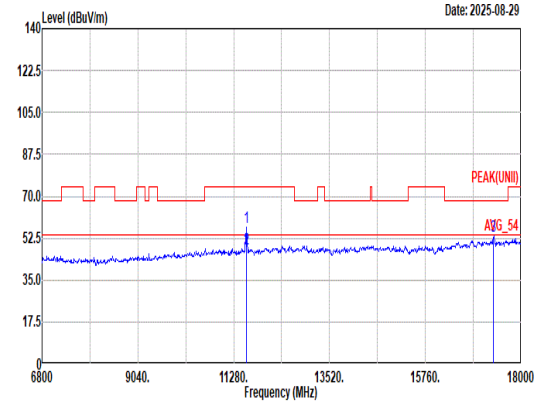
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5608.33 51.51 68.20 -16.69 37.58 34.82 12.96 33.85 0.00 200 69 Peak 2 5650.88 49.48 68.85 -19.37 35.49 34.90 12.99 33.90 0.00 200 69 Peak 3 5703.23 50.90 106.11 -55.21 36.82 35.00 13.04 33.96 0.00 200 69 Peak 4 5720.25 50.84 111.37 -60.53 36.77 35.00 13.05 33.98 0.00 200 69 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 111.47 ------ ------ 97.41 35.00 13.11 34.05 0.00 200 69 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 102.81 ------ ------ 88.76 35.00 13.10 34.05 0.00 200 69 Average

Mode	29	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.80 51.46 111.27 -59.81 37.37 35.02 13.20 34.13 0.00 200 69 Peak 2 5871.63 53.72 106.14 -52.42 39.55 35.09 13.23 34.15 0.00 200 69 Peak 3 5924.26 51.99 68.75 -16.76 37.69 35.20 13.31 34.21 0.00 200 69 Peak 4 5948.68 52.37 68.20 -15.83 38.06 35.20 13.34 34.23 0.00 200 69 Peak	Blank

Mode	29
	Band Edge - L
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz
ANT	0

Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5637.56 51.32 68.20 -16.88 37.34 34.88 12.98 33.88 0.00 216 66 Peak 2 5651.43 49.59 69.26 -19.67 35.60 34.90 12.99 33.90 0.00 216 66 Peak 3 5700.09 50.72 105.22 -54.50 36.63 35.00 13.04 33.95 0.00 216 66 Peak 4 5720.25 49.79 111.37 -61.58 35.72 35.00 13.05 33.98 0.00 216 66 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 110.47 ------ ------ 96.41 35.00 13.11 34.05 0.00 216 66 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5785.00 102.57 ------ ------ 88.52 35.00 13.10 34.05 0.00 216 66 Average

Mode	29	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.80 50.81 111.27 -60.46 36.72 35.02 13.20 34.13 0.00 216 66 Peak 2 5873.44 51.78 105.64 -53.86 37.61 35.09 13.23 34.15 0.00 216 66 Peak 3 5924.92 51.44 68.26 -16.82 37.14 35.20 13.31 34.21 0.00 216 66 Peak 4 5944.23 52.35 68.20 -15.85 38.04 35.20 13.34 34.23 0.00 216 66 Peak	Blank

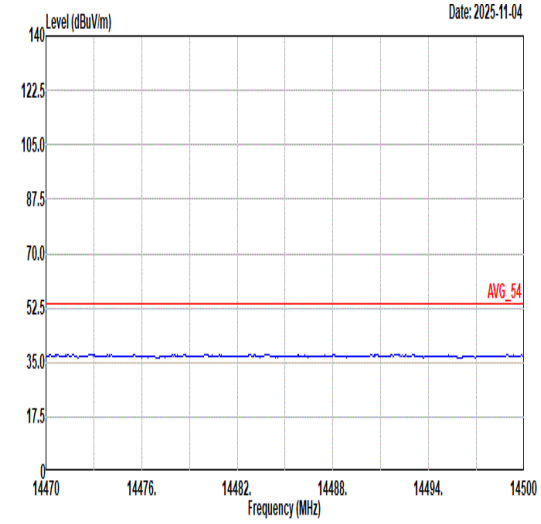
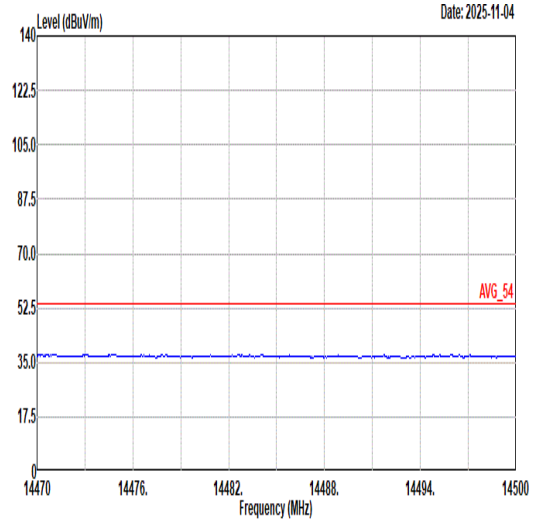
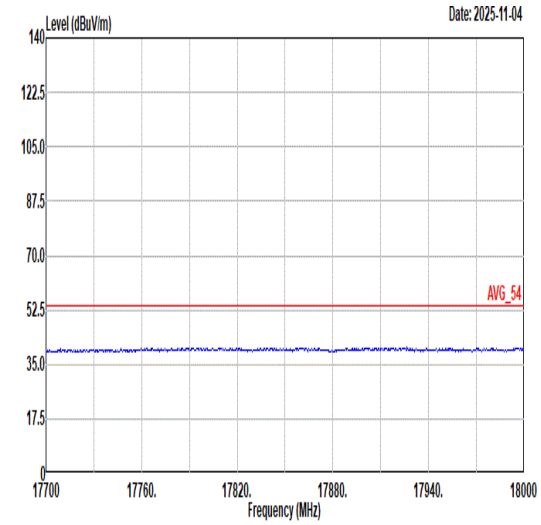
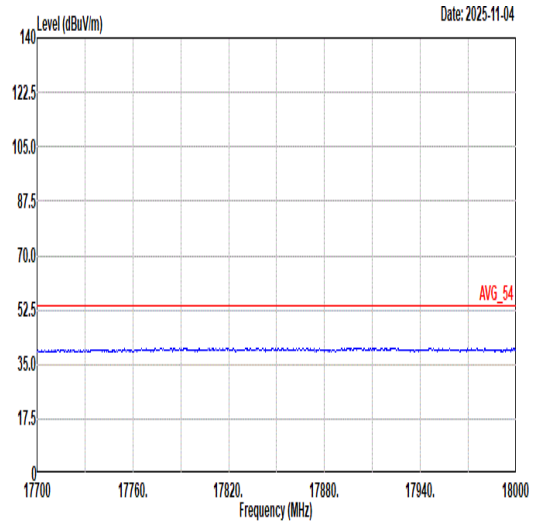
Mode	29	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL

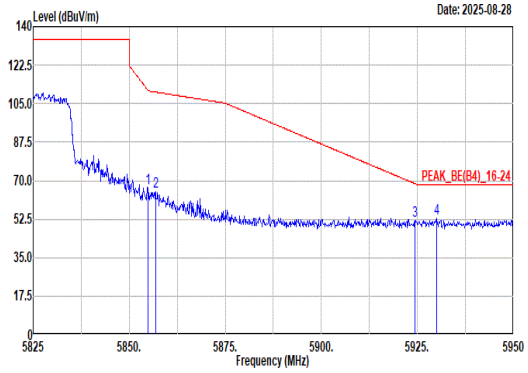
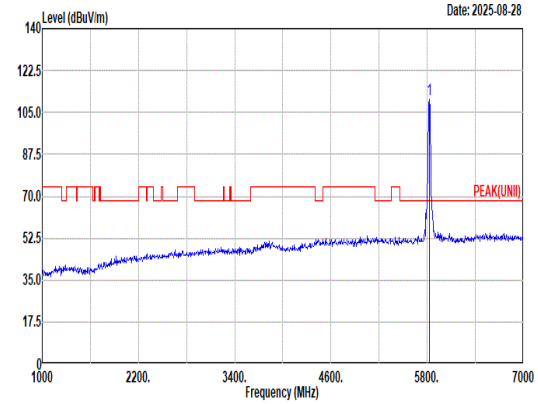
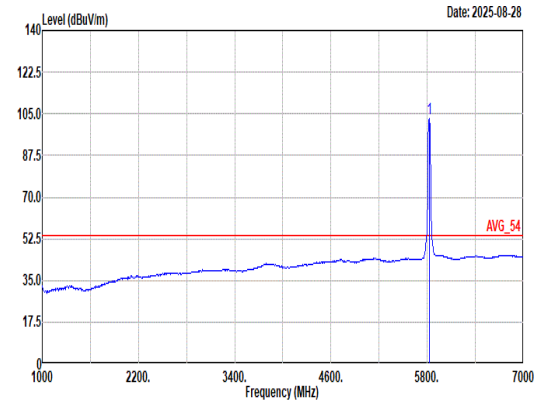
Horizontal:

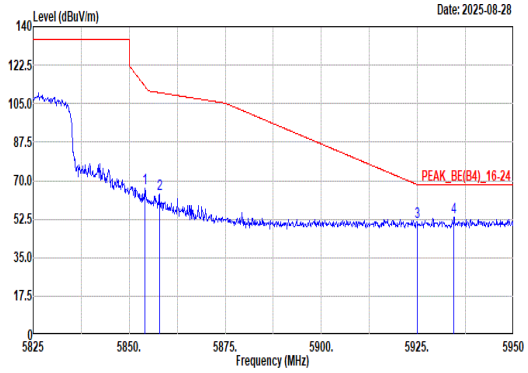
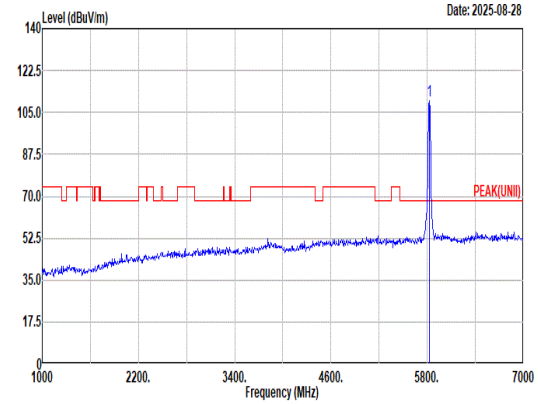
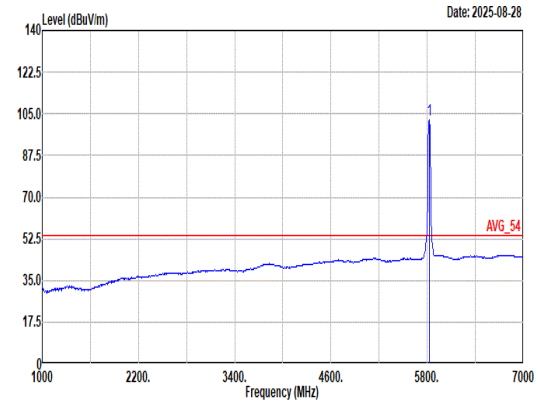
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	11570.00	55.88	74.00	-18.12	54.44	38.34	19.02	57.12	1.20	211	227	Peak
2	11570.00	46.73	54.00	-7.27	45.29	38.34	19.02	57.12	1.20	211	227	Average
3	17355.00	57.18	68.20	-11.02	48.06	41.32	22.64	56.19	1.35	154	360	Peak

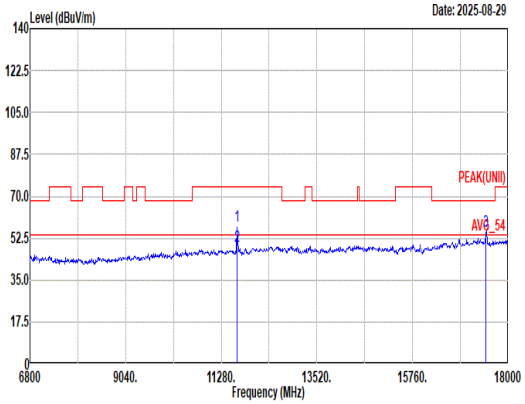
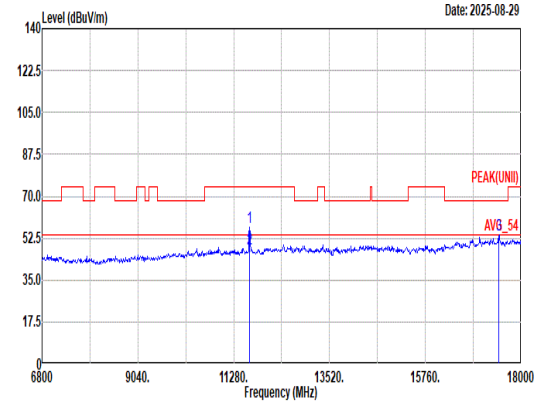
Vertical:

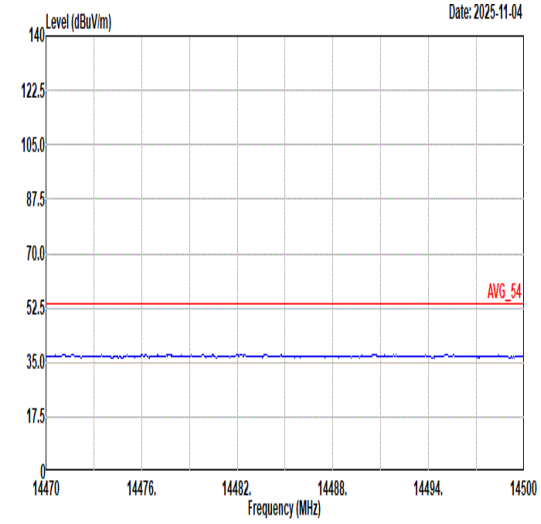
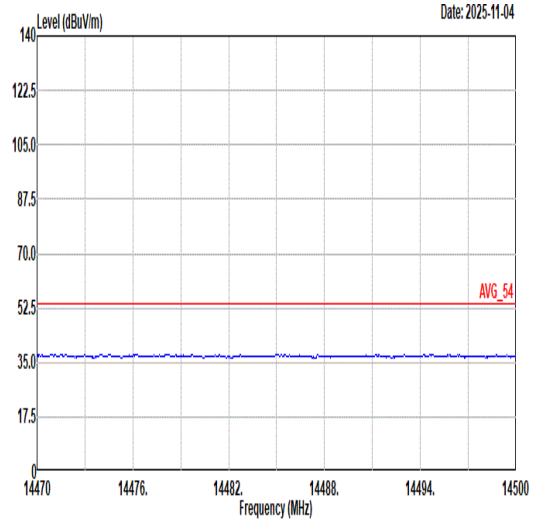
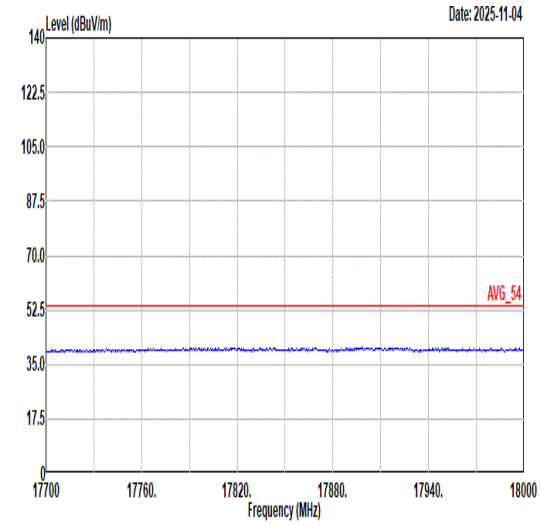
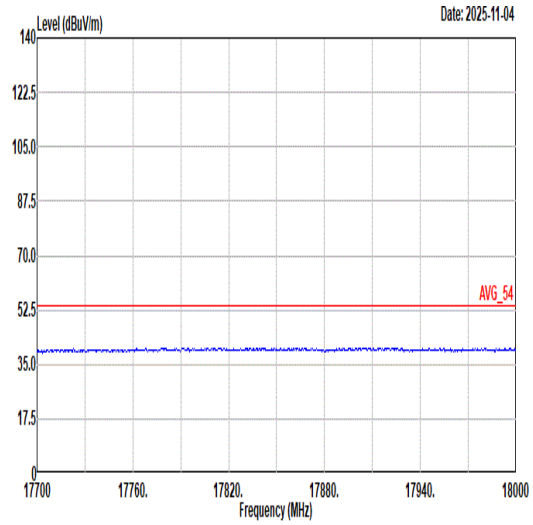
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	11570.00	57.23	74.00	-16.77	55.79	38.34	19.02	57.12	1.20	201	119	Peak
2	11570.00	48.06	54.00	-5.94	46.62	38.34	19.02	57.12	1.20	201	119	Average
3	17355.00	53.49	68.20	-14.71	44.37	41.32	22.64	56.19	1.35	200	328	Peak

Mode	29	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH157_Full RU_5785MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

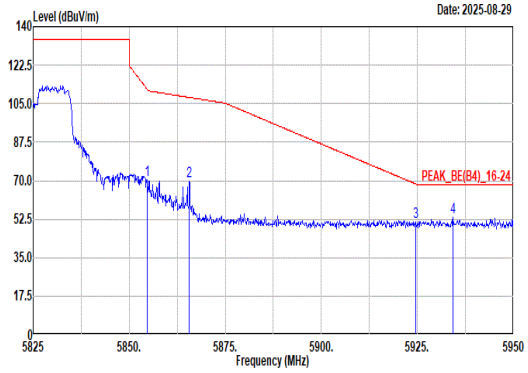
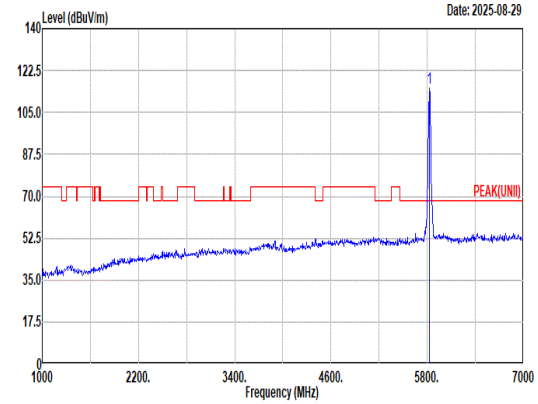
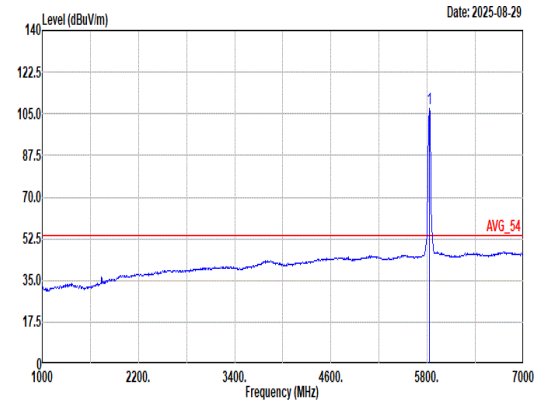
Mode	30	
	Band Edge	
	U-NII-3_5.725-5.85_802.11ax HE20_CH165_Full RU_5825MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.88 66.76 111.08 -44.32 52.67 35.02 13.20 34.13 0.00 200 72 Peak 2 5856.88 64.88 110.27 -45.39 50.77 35.03 13.21 34.13 0.00 200 72 Peak 3 5924.38 52.02 68.66 -16.64 37.72 35.20 13.31 34.21 0.00 200 72 Peak 4 5930.00 52.59 68.20 -15.61 38.29 35.20 13.31 34.21 0.00 200 72 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 110.56 ------ ------ 96.49 35.00 13.16 34.09 0.00 200 72 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 103.15 ------ ------ 89.08 35.00 13.16 34.09 0.00 200 72 Average

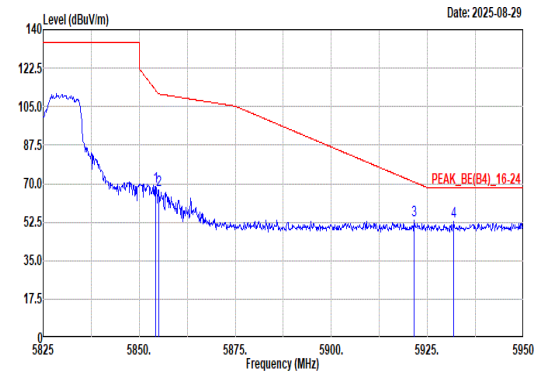
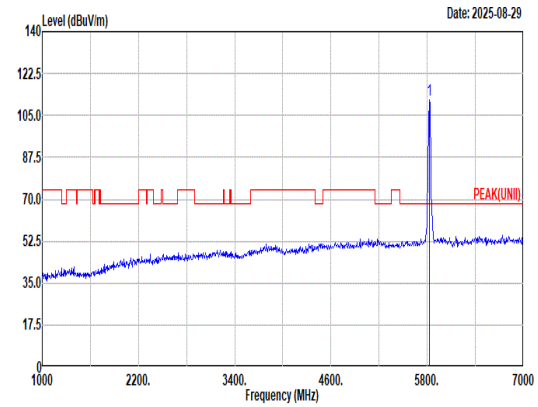
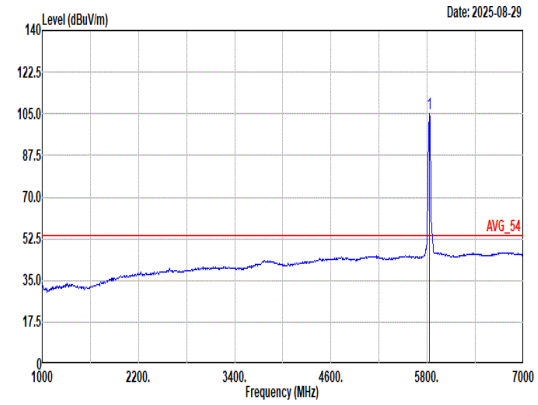
Mode	30	
	Band Edge	
	U-NII-3_5.725-5.85_802.11ax HE20_CH165_Full RU_5825MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.13 66.59 112.79 -46.20 52.50 35.02 13.20 34.13 0.00 214 60 Peak 2 5857.88 63.88 109.99 -46.11 49.77 35.03 13.21 34.13 0.00 214 60 Peak 3 5925.00 51.20 68.20 -17.00 36.90 35.20 13.31 34.21 0.00 214 60 Peak 4 5934.50 53.62 68.20 -14.58 39.32 35.20 13.32 34.22 0.00 214 60 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 109.78 ------ ------ 95.72 35.00 13.16 34.10 0.00 214 60 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 102.35 ------ ------ 88.28 35.00 13.16 34.09 0.00 214 60 Average

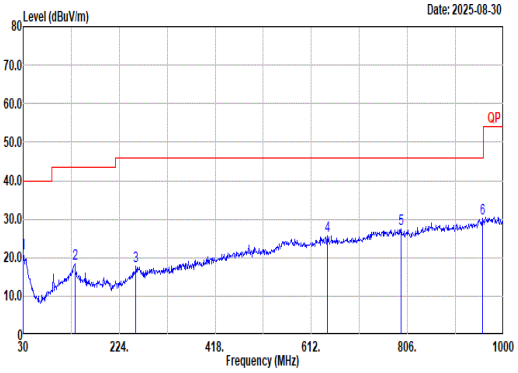
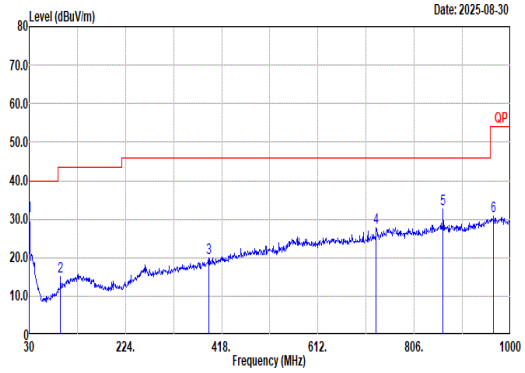
Mode	30	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH165_Full RU_5825MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11650.00 57.52 74.00 -16.48 55.69 38.50 19.08 56.96 1.21 150 92 Peak 2 11650.00 48.99 54.00 -5.01 47.16 38.50 19.08 56.96 1.21 150 92 Average 3 17475.00 55.35 68.20 -12.85 46.04 41.55 22.74 56.34 1.36 135 360 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11650.00 57.26 74.00 -16.74 55.43 38.50 19.08 56.96 1.21 100 198 Peak 2 11650.00 48.20 54.00 -5.80 46.37 38.50 19.08 56.96 1.21 100 198 Average 3 17475.00 53.68 68.20 -14.52 44.37 41.55 22.74 56.34 1.36 200 180 Peak

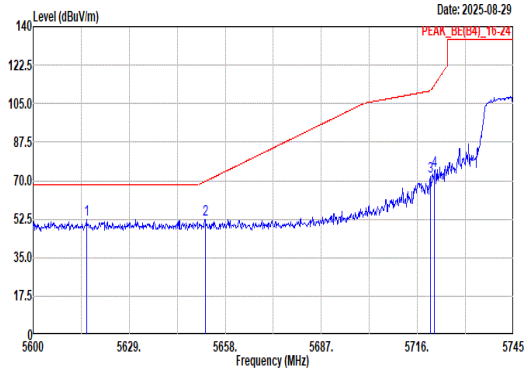
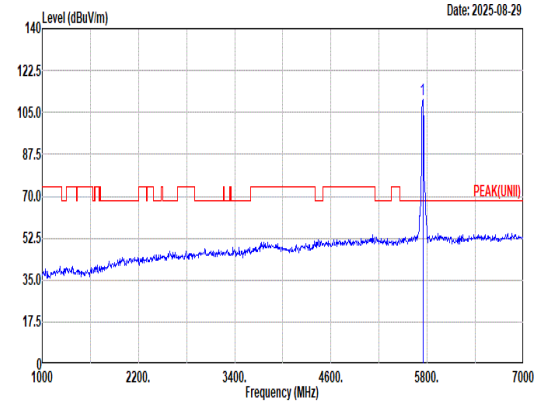
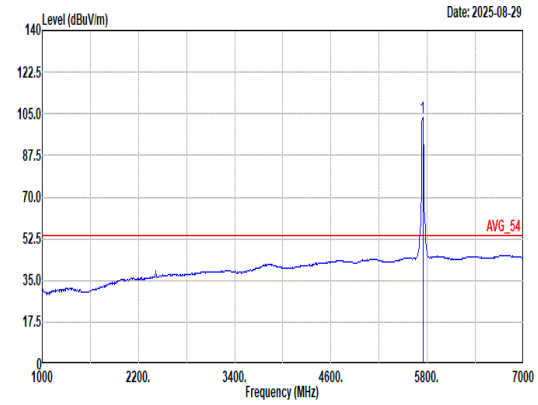
Mode	30	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE20_CH165_Full RU_5825MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

Mode	31
	Band Edge
	U-NII-3_5.47-5.725_802.11ax HE20_CH165_Partial_106/54RU _5825MHz
ANT	0

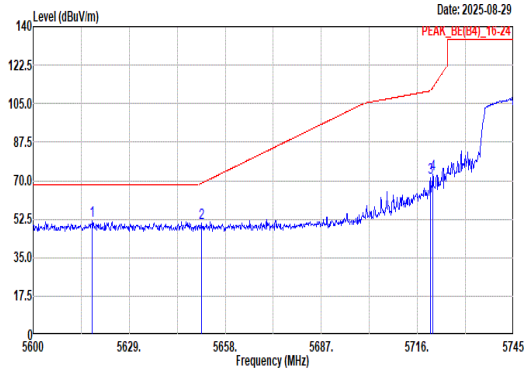
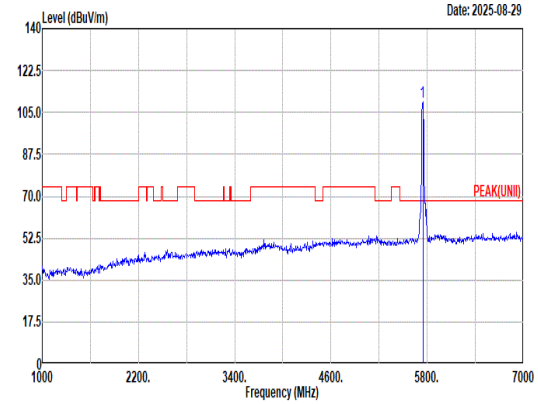
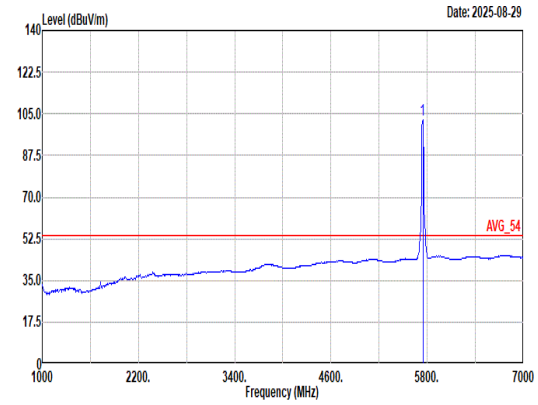
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.75 70.16 111.37 -41.21 56.07 35.02 13.20 34.13 0.00 200 62 Peak 2 5865.63 69.95 107.82 -37.87 55.81 35.06 13.22 34.14 0.00 200 62 Peak 3 5924.50 51.42 68.57 -17.15 37.12 35.20 13.31 34.21 0.00 200 62 Peak 4 5934.25 53.23 68.20 -14.97 38.93 35.20 13.32 34.22 0.00 200 62 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 115.20 ------ ------ 101.14 35.00 13.16 34.10 0.00 200 62 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.600kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 107.24 ------ ------ 93.18 35.00 13.16 34.10 0.00 200 62 Average

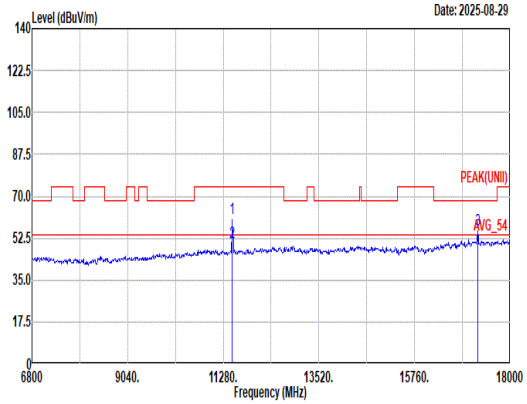
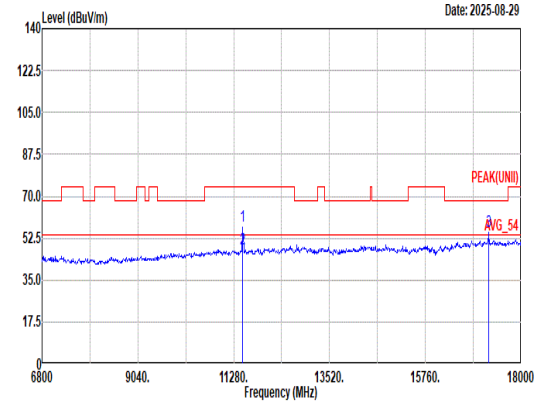
Mode	31	
	Band Edge	
	U-NII-3_5.47-5.725_802.11ax HE20_CH165_Partial_106/54RU _5825MHz	
ANT	0	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5854.38 68.87 112.22 -43.35 54.78 35.02 13.20 34.13 0.00 213 65 Peak 2 5855.00 67.26 110.80 -43.54 53.17 35.02 13.20 34.13 0.00 213 65 Peak 3 5921.63 53.38 70.69 -17.31 39.08 35.20 13.30 34.20 0.00 213 65 Peak 4 5931.88 52.69 68.20 -15.51 38.38 35.20 13.32 34.21 0.00 213 65 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 111.53 ------ ------ 97.47 35.00 13.16 34.10 0.00 213 65 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:5.600kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5825.00 105.08 ------ ------ 91.02 35.00 13.16 34.10 0.00 213 65 Average

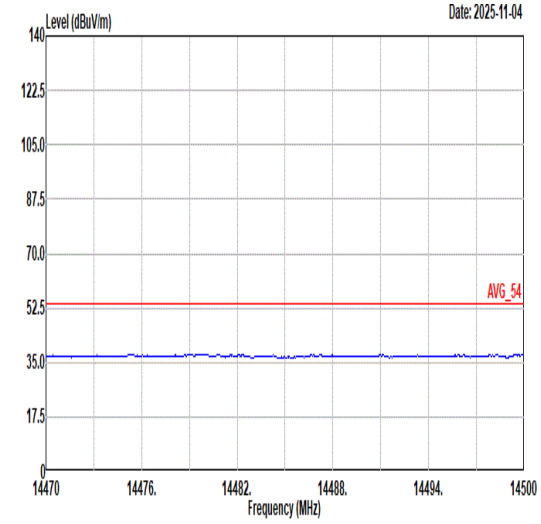
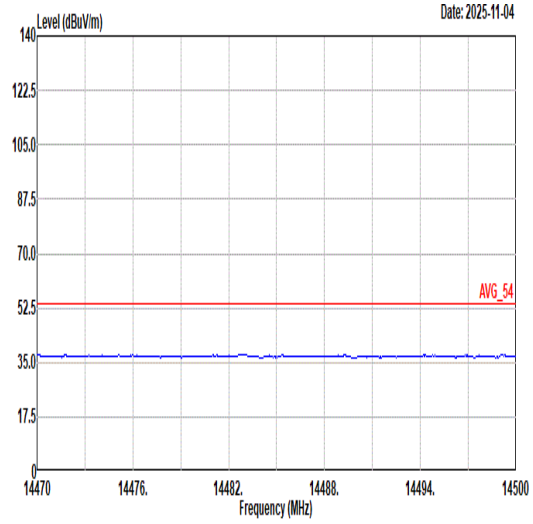
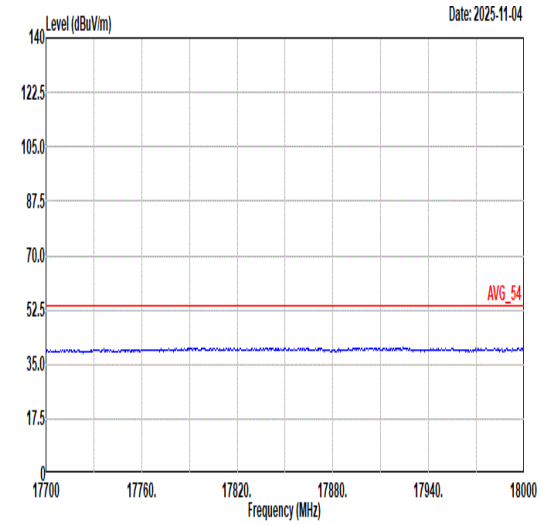
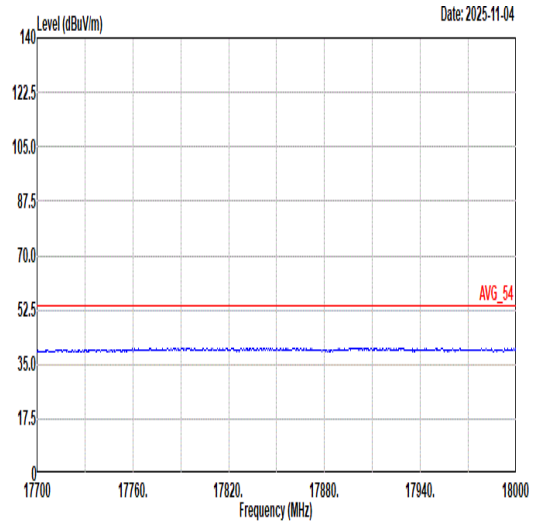
Mode	32	
	LF	
	U-NII-3_5.725-5.85_802.11ax HE20_CH149_Full RU_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
QP/ Peak	 Site : 03CH07-HY Condition: QP 3m Bilog_35419 HORIZONTAL 1 30.00 21.09 40.00 -18.91 26.37 23.68 1.02 29.98 0.00 -- -- Peak 2 134.76 18.43 43.50 -25.07 28.64 17.61 2.07 29.89 0.00 -- -- Peak 3 257.95 17.80 46.00 -28.20 25.37 19.44 2.81 29.82 0.00 -- -- Peak 4 644.98 25.65 46.00 -20.35 24.38 26.54 4.35 29.62 0.00 -- -- Peak 5 793.39 27.38 46.00 -18.62 23.75 28.08 4.83 29.28 0.00 -- -- Peak 6 958.29 30.07 46.00 -15.93 22.39 30.87 5.35 28.54 0.00 -- -- Peak	 Site : 03CH07-HY Condition: QP 3m Bilog_35419 VERTICAL 1 30.00 30.89 40.00 -9.11 36.17 23.68 1.02 29.98 0.00 -- -- Peak 2 93.05 15.19 43.50 -28.31 28.25 15.11 1.74 29.91 0.00 -- -- Peak 3 391.81 19.81 46.00 -26.19 24.75 21.47 3.39 29.80 0.00 -- -- Peak 4 729.37 27.89 46.00 -18.11 25.22 27.51 4.64 29.48 0.00 -- -- Peak 5 864.20 32.52 46.00 -13.48 27.19 29.23 5.07 28.97 0.00 -- -- Peak 6 966.05 30.71 54.00 -23.29 22.74 31.06 5.38 28.47 0.00 -- -- Peak

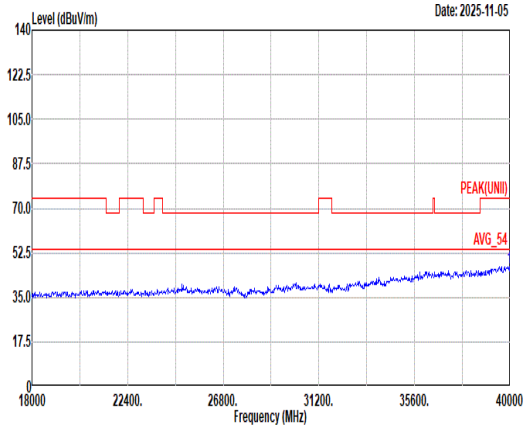
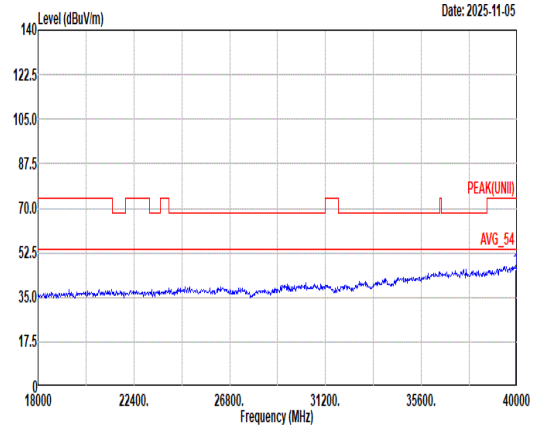
Mode	34	
	Band Edge	
	U-NII-3_5.725-5.85_802.11ac VHT20_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5616.10 52.13 68.20 -16.07 38.20 34.83 12.96 33.86 0.00 197 206 Peak 2 5651.91 52.44 69.62 -17.18 38.45 34.90 12.99 33.90 0.00 197 206 Peak 3 5719.92 71.85 110.78 -38.93 57.78 35.00 13.05 33.98 0.00 197 206 Peak 4 5721.22 74.75 113.58 -38.83 60.68 35.00 13.05 33.98 0.00 197 206 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 110.54 ------ ------ 96.48 35.00 13.07 34.01 0.00 197 206 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 103.54 ------ ------ 89.48 35.00 13.07 34.01 0.00 197 206 Average

Mode	34
	Band Edge
	U-NII-3_5.725-5.85_802.11ac VHT20_CH149_5745MHz
ANT	0

Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5617.84 51.56 68.20 -16.64 37.61 34.84 12.97 33.86 0.00 204 182 Peak 2 5650.75 50.48 68.76 -18.28 36.49 34.90 12.99 33.90 0.00 204 182 Peak 3 5719.92 71.46 110.78 -39.32 57.39 35.00 13.05 33.98 0.00 204 182 Peak 4 5720.64 72.73 112.26 -39.53 58.66 35.00 13.05 33.98 0.00 204 182 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 109.20 ------ ------ 95.14 35.00 13.07 34.01 0.00 204 182 Peak
Avg	Blank	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5745.00 102.59 ------ ------ 88.53 35.00 13.07 34.01 0.00 204 182 Average

Mode	34	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ac VHT20_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11490.00 60.55 74.00 -13.45 59.46 38.20 18.97 57.27 1.19 363 168 Peak 2 11490.00 50.94 54.00 -3.06 49.85 38.20 18.97 57.27 1.19 363 168 Average 3 17235.00 56.24 68.20 -11.96 46.84 41.57 22.54 56.05 1.34 200 310 Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 3m HF_ANT_00075962 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 11490.00 57.56 74.00 -16.44 56.47 38.20 18.97 57.27 1.19 203 156 Peak 2 11490.00 47.83 54.00 -6.17 46.74 38.20 18.97 57.27 1.19 203 156 Average 3 17235.00 55.62 68.20 -12.58 46.22 41.57 22.54 56.05 1.34 100 203 Peak

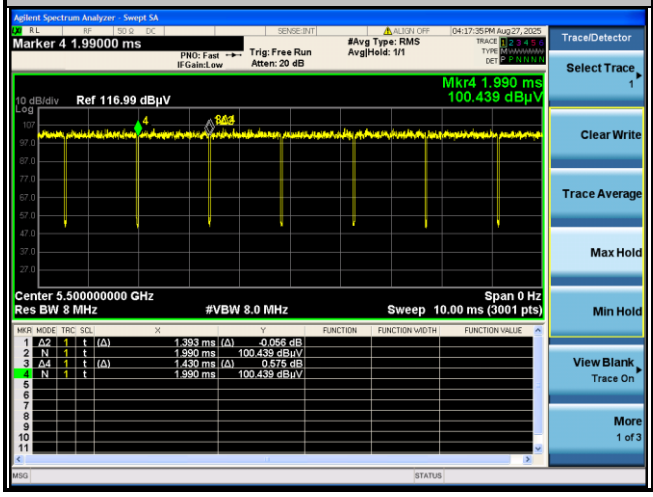
Mode	34	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ac VHT20_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

Mode	37	
	SHF	
	U-NII-3_5.725-5.85_802.11ac VHT20_CH149_5745MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition: PEAK(UNII) 1m SHF-EHF_9170991 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 39982.83 46.59 74.00 -27.41 44.46 44.93 24.97 58.23 -9.54 -- -- PEAK	 Site : 03CH07-HY Condition: PEAK(UNII) 1m SHF-EHF_9170991 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 39943.93 46.07 74.00 -27.93 44.31 44.66 24.95 58.31 -9.54 -- -- PEAK

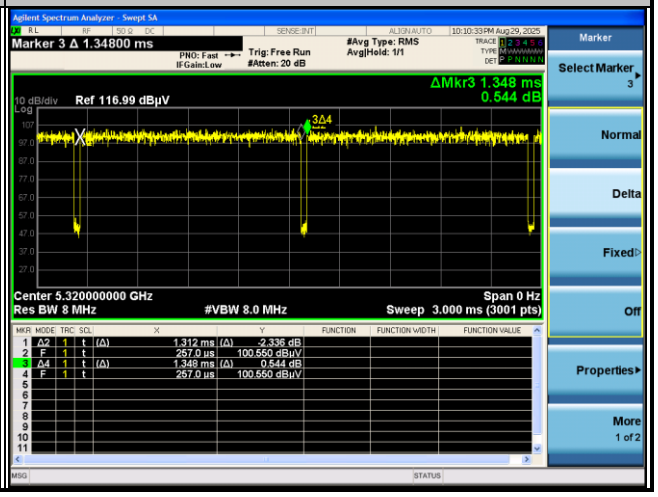
Appendix C. Duty Cycle Plots

Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting
802.11a	97.41	1393	0.72	750Hz
5GHz 802.11ac VHT20	97.33	1312	0.76	1kHz
5GHz 802.11ax HE20 Full RU	96.47	1012	0.99	1kHz
5GHz 802.11ax HE20 106 RU	84.35	194	5.15	5.6kHz

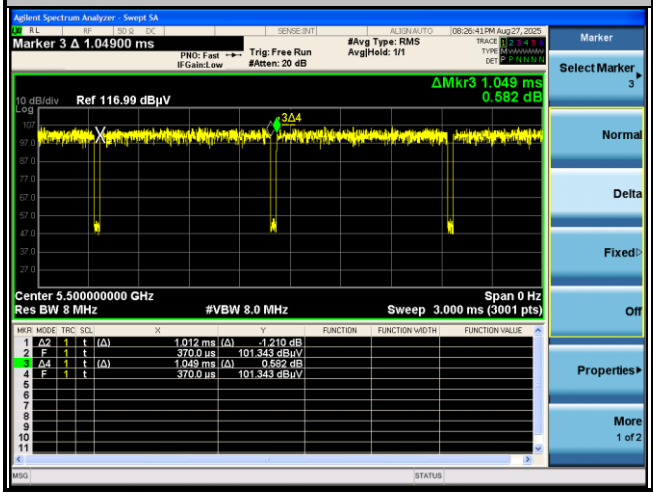
802.11a



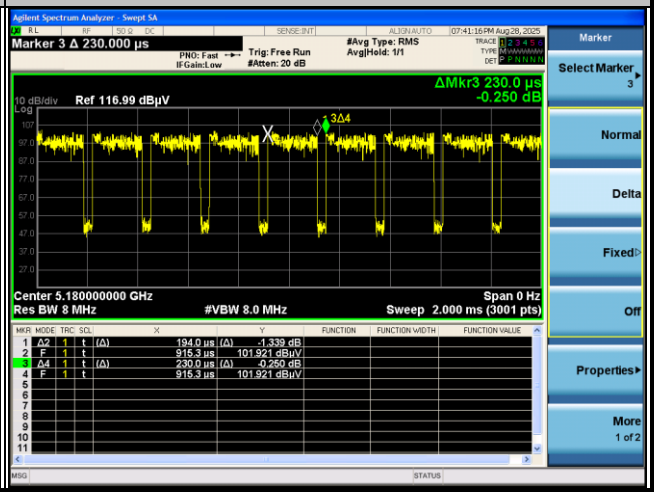
802.11ac VHT20



802.11ax HE20



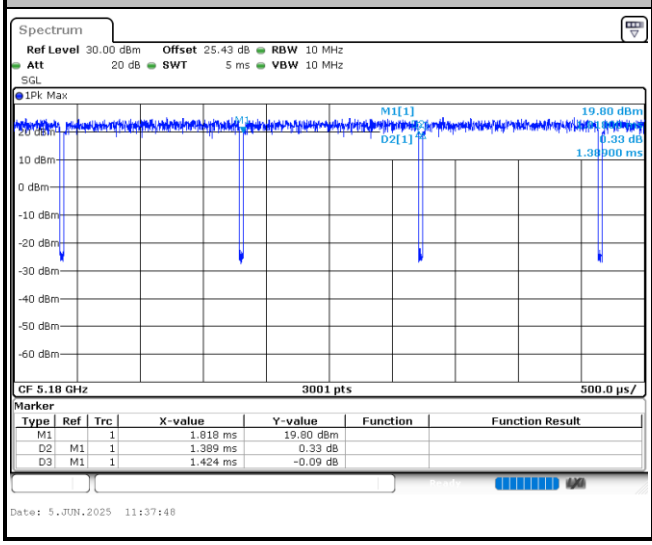
802.11ax HE20 106RU



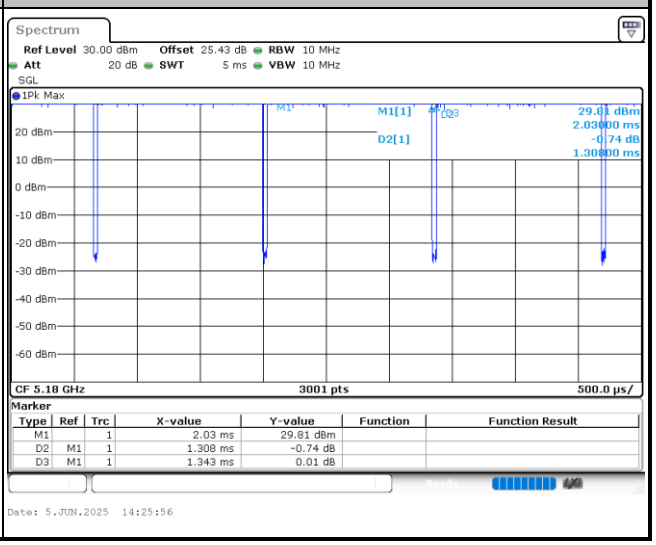
Appendix C. Conducted Duty Cycle Plots

Antenna	Band	Duty Cycle (%)	T(us)
0	802.11a	97.54	1389
0	5GHz 802.11ac VHT20	97.39	1308
0	5GHz 802.11ax HE20 Full RU	96.65	1010
0	5GHz 802.11ax HE20 26 RU	94.29	578
0	5GHz 802.11ax HE20 52 RU	90.36	328
0	5GHz 802.11ax HE20 106 RU	84.85	196

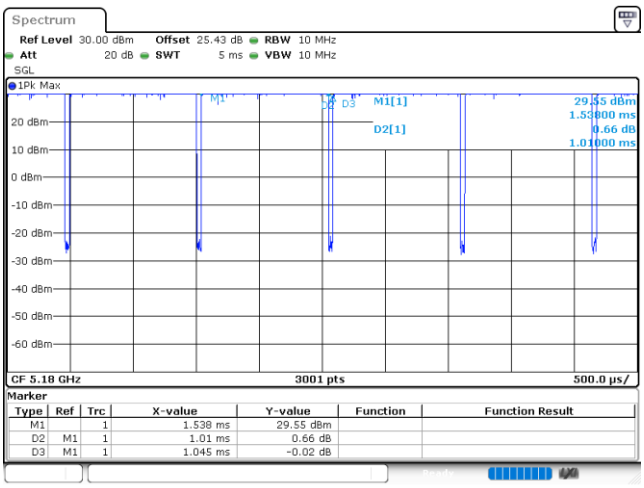
802.11a



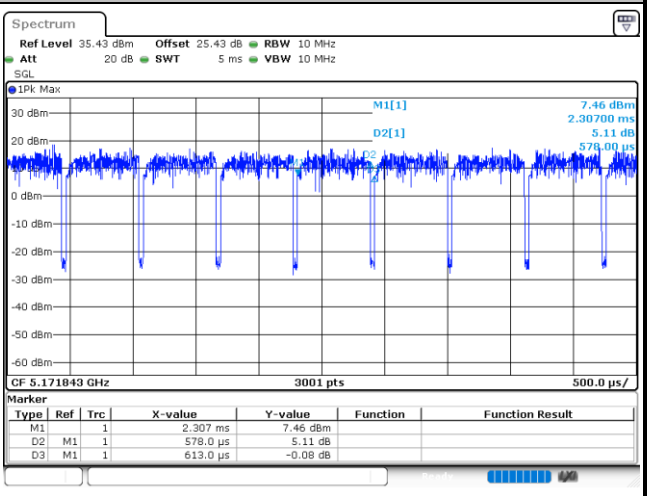
5GHz 802.11ac VHT20



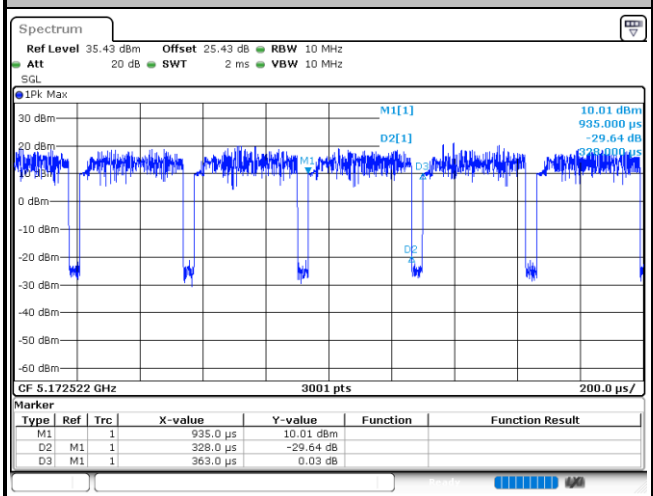
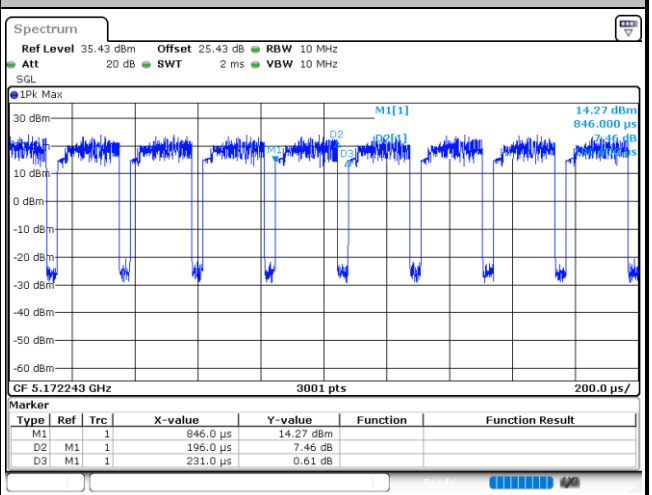
5GHz 802.11ax HE20 Full RU



5GHz 802.11ax HE20 26 RU



5GHz 802.11ax HE20 52 RU



5GHz 802.11ax HE20 106 RU