FCC RADIO TEST REPORT

FCC ID	:	**P4Q-TG2A001**
Equipment	:	**Internet Gateway**
Brand Name	:	**Amazon, AWS, SKF,**
Model Name	:	**TG2A001,** **TG2A001YYYY (Y= 10 characters, Y can be 0-9, a-z, A-Z, "-", "_" or blank for marketing purpose and no impact safety related critical components and constructions.)**
Applicant	:	**Mitac Digital Technology Corp.** **4F., NO. 1, R&D ROAD 2, HSINCHU SCIENCE PARK, HSINCHU 30076, TAIWAN, R.O.C.**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jun. 18, 2024 and testing was performed from Jun. 18, 2024 to Dec. 11, 2024. We, Sporton International Inc. Wensan 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 partial report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory
No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FR430401E	01	Initial issue of report	Nov. 29, 2024
FR430401E	02	1. Revise Summary of Test Result , Applicable Standards, Unwanted Emissions Measurement, List of Measuring Equipment and Measurement Uncertainty 2. Revise appendix B and D This report is an updated version, replacing the report issued on Nov. 29, 2024.	Dec. 13, 2024
FR430401E	03	Revise Product Feature of Equipment Under Test This report is an updated version, replacing the report issued on Dec. 13, 2024.	Dec. 25, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.403	6dB & 26dB Bandwidth	Pass	See Note
-	2.1049	99% Occupied Bandwidth	Pass	See Note
3.1	15.407(a)	Maximum Conducted Output Power	Pass	-
-	15.407(a)	Power Spectral Density	Pass	See Note
3.2	15.407(b)	Unwanted Emissions	Pass	3.25 dB under the limit at 5642.12 MHz
-	15.207	AC Conducted Emission	Pass	See Note
3.3	15.203	Antenna Requirement	Pass	-

Note:

1. For host device, Radiated Spurious Emission is verified and complies with the limit in this test report.
2. For host device, the Conducted Output Power is no difference after compared to module (Model: AW-XM553)
3. Spot-check testing on unwanted (spurious) radiated emissions is carried out on the worst-case modulation and channel per frequency range as shown in original module’ s filing.
4. Radiated Spurious Emission is verified and complies with the limit in this test report.

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:
1. 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.
2. The purpose of different brand name is for marketing segmentation.

Reviewed by: Sheng Kuo

Report Producer: Clio Lo

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and Sub 1GHz. **Antenna Type** WLAN: PIFA Antenna Bluetooth: PIFA Antenna Sub 1G: PIFA Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	4.28

SKU List					
SKU	**Variant num**	**Wifi/BT**	**BLE**	**Sub GHz**	**Sound**
1	1	x	x	x	x
2	2	x	x	x	-
3	3	x	x	-	x
4	4	x	x	-	-
5	5	x	-	x	x
6	6	x	-	x	-
7	7	-	-	x	x
8	8	-	-	x	-

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.
2. The RF related hardware (including WLAN, Bluetooth, Sub 1Ghz module, and Sound) of all models are identical. The RF feature differences are controlled by the embedded software.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

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, 03CH16-HY

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

FCC designation No.: 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 Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- ANSI C63.10-2013

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

a. 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 18GHz). 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	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.

2.2 Test Mode

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

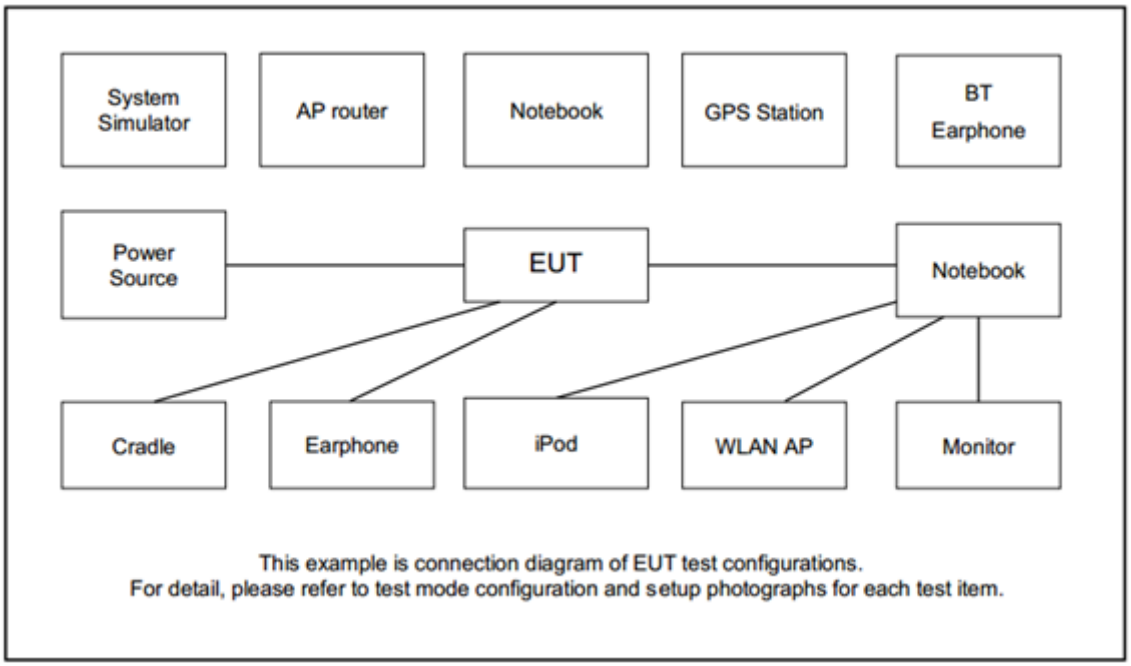
Modulation	Data Rate
802.11ax HE40	MCS0

Ch. #		Band IV：5725-5850 MHz
		802.11ax HE40
L	Low	-
M	Middle	-
H	High	159

Remark:

1. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.
2. For Radiated Test Cases, the tests were performed with SKU1 (E).

2.3 Connection Diagram of Test System



2.4 EUT Operation Test Setup

The RF test items, utility “Tera Term 4.95” 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.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 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.

3.1.2 Measuring Instruments

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

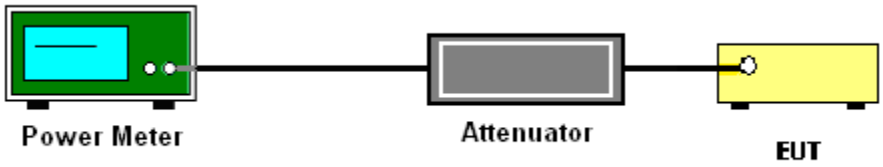
3.1.3 Test Procedures

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.

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

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

3.2.1 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.

3.2.2 Measuring Instruments

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

3.2.3 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

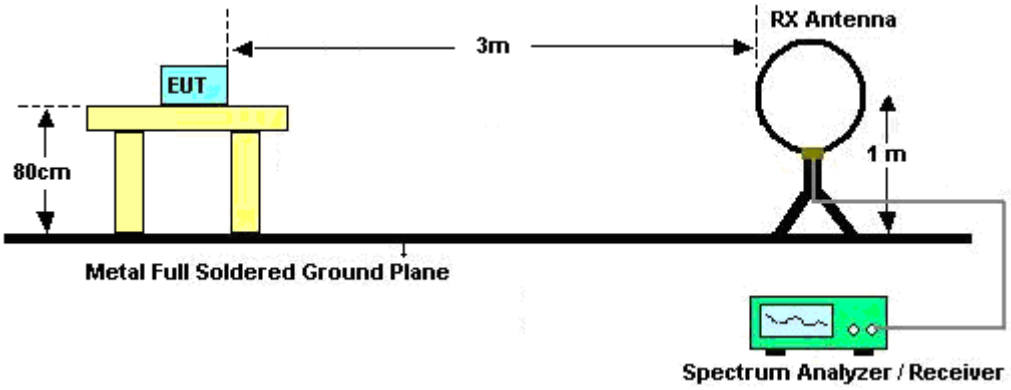
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

   - 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.

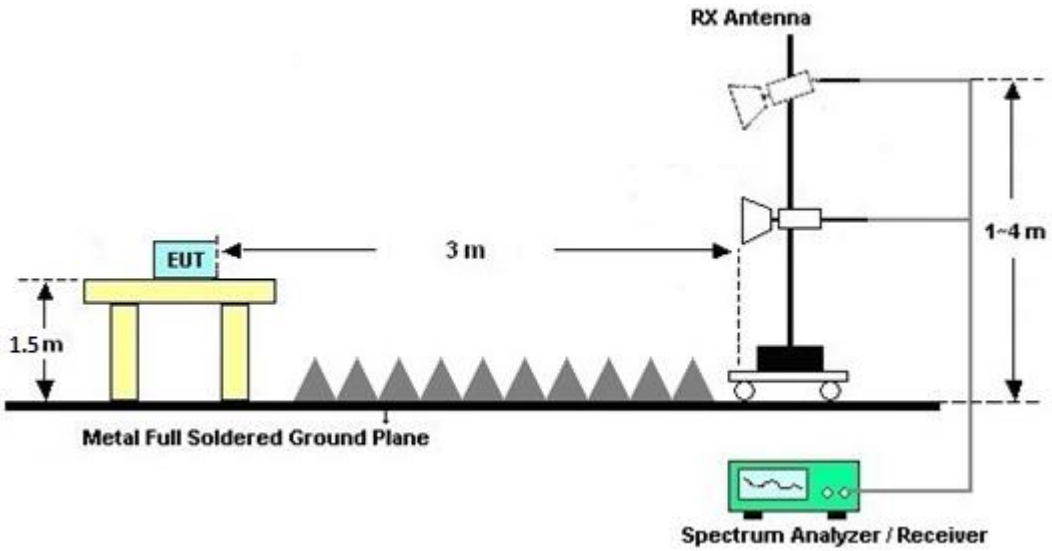
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit 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 "-".

3.2.4 Test Setup

For radiated emissions below 30MHz



For radiated test above 1GHz



3.2.5 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.

3.2.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

3.2.7 Duty Cycle

Please refer to Appendix C.

3.2.8 Test Result of Unwanted Radiated Emission

Please refer to Appendix B .

3.3 Antenna Requirements

3.3.1 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.

3.3.2 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
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Jul. 17, 2024~ Jul. 20, 2024	Sep. 11, 2024	Radiation (03CH16-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Aug. 29, 2024	Dec. 11, 2024	Aug. 28, 2025	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec. 04, 2023	Jul. 17, 2024~ Jul. 20, 2024	Dec. 03, 2024	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Nov. 22, 2024	Dec. 11, 2024	Nov. 21, 2025	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 07, 2023	Jul. 17, 2024~ Jul. 20, 2024	Oct. 06, 2024	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 05, 2024	Dec. 11, 2024	Oct. 04, 2025	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 28, 2024	Jul. 17, 2024~ Dec. 11, 2024	Mar. 27, 2025	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jul. 02, 2024	Jul. 17, 2024~ Dec. 11, 2024	Jul. 01, 2025	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 07, 2023	Jul. 17, 2024~ Jul. 20, 2024	Dec. 06, 2024	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 05, 2024	Dec. 11, 2024	Dec. 04, 2025	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 25, 2023	Jul. 17, 2024~ Dec. 11, 2024	Dec. 24, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 15, 2024	Jul. 17, 2024~ Dec. 11, 2024	Jan. 14, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN3	3GHz High Pass Filter	Jun. 28, 2024	Jul. 17, 2024~ Dec. 11, 2024	Jun. 27, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN27	6.75GHz High Pass Filter	Nov. 13, 2023	Jul. 17, 2024~ Jul. 20, 2024	Nov. 12, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN27	6.75GHz High Pass Filter	Nov. 12, 2024	Dec. 11, 2024	Nov. 11, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Jul. 17, 2024~ Dec. 11, 2024	Mar. 05, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 08, 2023	Jul. 17, 2024~ Jul. 20, 2024	Aug. 07, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 07, 2024	Dec. 11, 2024	Aug. 06, 2025	Radiation (03CH16-HY)
Software	Audix	E3 230621 V9	RK-002393	N/A	N/A	Jul. 17, 2024~ Dec. 11, 2024	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jul. 17, 2024~ Dec. 11, 2024	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jul. 17, 2024~ Dec. 11, 2024	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jul. 17, 2024~ Dec. 11, 2024	N/A	Radiation (03CH16-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 07, 2023	Jun. 18, 2024~ Jul. 23, 2024	Nov. 06, 2024	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 36 (NO:35)	10MHz~6GHz	Aug. 23, 2023	Jun. 18, 2024~ Jul. 23, 2024	Aug. 22, 2024	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101466	10HZ~44GHZ	Jan. 24, 2024	Jun. 18, 2024~ Jul. 23, 2024	Jan. 23, 2025	Conducted (TH05-HY)
Switch Control Mainframe	EM Electronics	EMSW18SE	SW200302 (BOX9)	N/A	Mar. 08, 2024	Jun. 18, 2024~ Jul. 23, 2024	Mar. 07, 2025	Conducted (TH05-HY)
Software1	Sporton	BTWIFI_Final_ version:1.0(20 24-04-11)	N/A	Conducted Items	N/A	Jun. 18, 2024~ Jul. 23, 2024	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))	**6.50 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.90 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.10 dB**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Ju Chang	Temperature:	21~25	°C
Test Date:	2024/6/18~2024/7/23	Relative Humidity:	51~54	%

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 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE40	MCS0	1	159	5795	Full	15.00	-		30.00	-	4.28	-	Pass

Appendix B. Radiated Spurious Emission Test Data

Test Engineer :	Bill Chang, Gary Guo and Steven Wu	**Temperature :**	18.2~20.2°C
		Relative Humidity :	54.2~56.1%

Note symbol

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

B1. Radiated Spurious Emission Test Modes

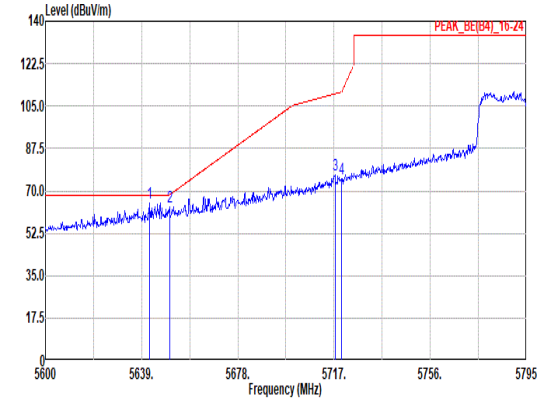
Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 4	U-NII-3	5.725-5.85	1	802.11ax HE40	159	5795	MCS0	-	-
Mode 6	U-NII-3	5.725-5.85	1	802.11ax HE40	159	5795	MCS0	-	LF

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
4	802.11ax HE40	159	5642.12	64.95	68.20	-3.25	H	Peak	Pass	-	Band Edge
	802.11ax HE40	159	11590.00	43.28	54.00	-10.72	H	Avg.	Pass	-	Harmonic
6	802.11ax HE40	159	839.95	39.22	46.00	-6.78	V	Peak	Pass	-	LF

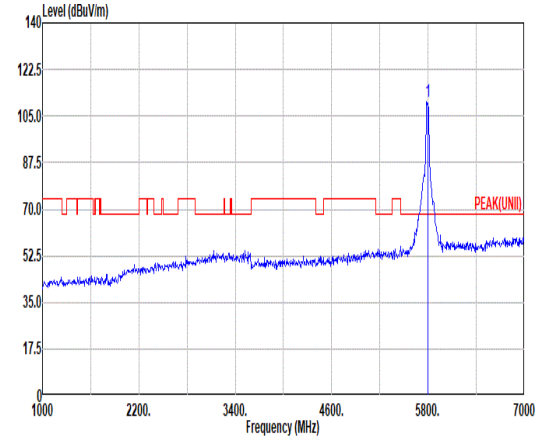
Mode	4	
	Band Edge - L	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Horizontal	Fundamental

Peak



Site : 03CH16-HY
Condition: PEAK_BE(B4)_16-24 3m 9120D-1522_240328 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	5642.12	64.95	68.20	-3.25	49.48	32.97	11.88	29.38	0.00	293	166	PEAK
2	5650.31	63.14	68.43	-5.29	47.63	33.00	11.89	29.38	0.00	293	166	PEAK
3	5717.39	76.64	110.07	-33.43	60.66	33.43	11.94	29.39	0.00	293	166	PEAK
4	5720.12	74.87	111.07	-36.20	58.87	33.44	11.95	29.39	0.00	293	166	PEAK

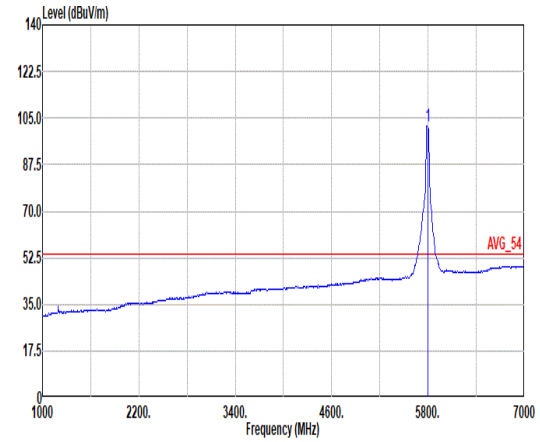


Site : 03CH16-HY
Condition: PEAK(UNII) 3m 9120D-1522_240328 HORIZONTAL
: RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

	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	5795.00	110.22	------	------	93.94	33.69	12.00	29.41	0.00	293	166	PEAK

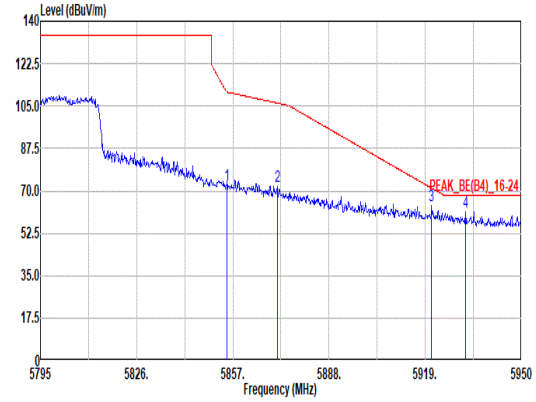
Avg

Blank



Site : 03CH16-HY
Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL
: RBW:1000.000kHz VBW:0.010kHz 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	5795.00	102.11	------	------	85.83	33.69	12.00	29.41	0.00	293	166	AVERAGE

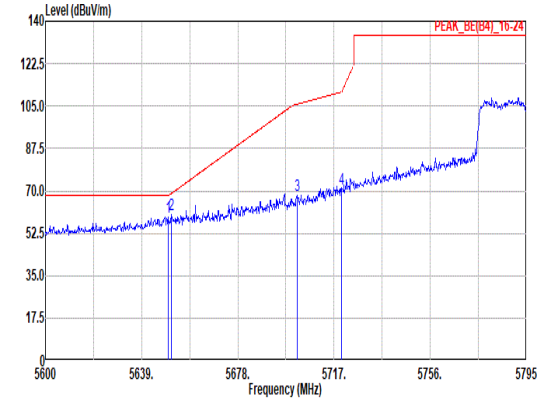
Mode	4	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Horizontal	Fundamental
Peak		Blank

Site : 03CH16-HY
Condition: PEAK_BE(B4)_16-24 3m 9120D-1522_240328 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	5854.99	72.27	110.83	-38.56	55.63	33.92	12.14	29.42	0.00	293	166	PEAK
2	5871.26	72.05	106.25	-34.20	55.30	33.99	12.18	29.42	0.00	293	166	PEAK
3	5921.02	63.77	71.14	-7.37	46.79	34.10	12.31	29.43	0.00	293	166	PEAK
4	5931.87	61.40	68.20	-6.80	44.41	34.10	12.33	29.44	0.00	293	166	PEAK

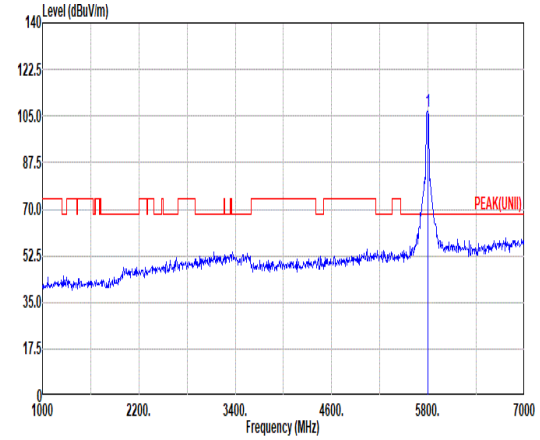
Mode	4	
	Band Edge - L	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Vertical	Fundamental

Peak



Site : 03CH16-HY
Condition: PEAK_BE(B4)_16-24 3m 9120D-1522_240328 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	5649.92	59.24	68.20	-8.96	43.73	33.00	11.89	29.38	0.00	286	199	PEAK
2	5650.90	60.05	68.87	-8.82	44.53	33.01	11.89	29.38	0.00	286	199	PEAK
3	5701.99	68.39	105.76	-37.37	52.45	33.40	11.93	29.39	0.00	286	199	PEAK
4	5720.12	71.04	111.07	-40.03	55.04	33.44	11.95	29.39	0.00	286	199	PEAK

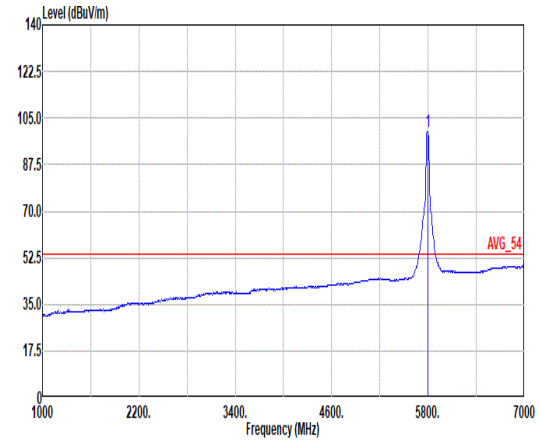


Site : 03CH16-HY
Condition: PEAK(UNII) 3m 9120D-1522_240328 VERTICAL
: RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

	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	5795.00	106.80	------	------	90.48	33.73	12.00	29.41	0.00	286	199	PEAK

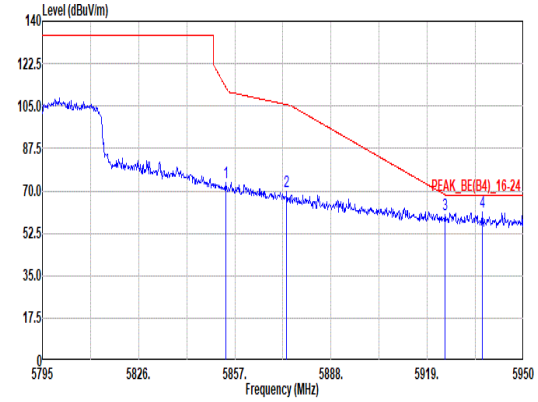
Avg

Blank



Site : 03CH16-HY
Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
: RBW:1000.000kHz VBW:0.010kHz 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	5795.00	99.87	------	------	83.55	33.73	12.00	29.41	0.00	286	199	AVERAGE

Mode	4	
	Band Edge - R	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Vertical	Fundamental
Peak		Blank

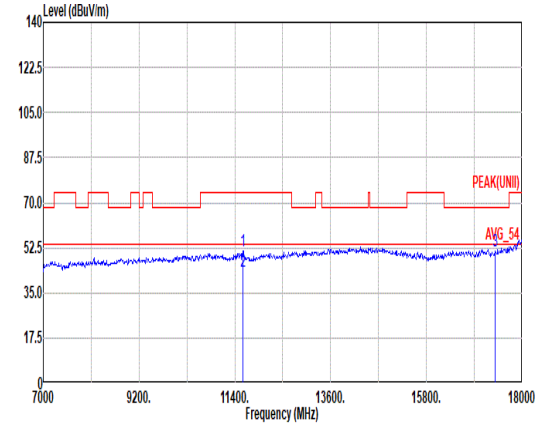
Site : 03CH16-HY
Condition: PEAK_BE(B4)_16-24 3m 9120D-1522_240328 VERTICAL
: RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

	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	5854.21	73.44	112.60	-39.16	56.80	33.92	12.14	29.42	0.00	286	199	PEAK
2	5873.74	69.56	105.55	-35.99	52.80	33.99	12.19	29.42	0.00	286	199	PEAK
3	5924.74	60.05	68.40	-8.35	43.06	34.10	12.32	29.43	0.00	286	199	PEAK
4	5936.67	61.49	68.20	-6.71	44.49	34.10	12.34	29.44	0.00	286	199	PEAK

Mode	4	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Horizontal	Vertical

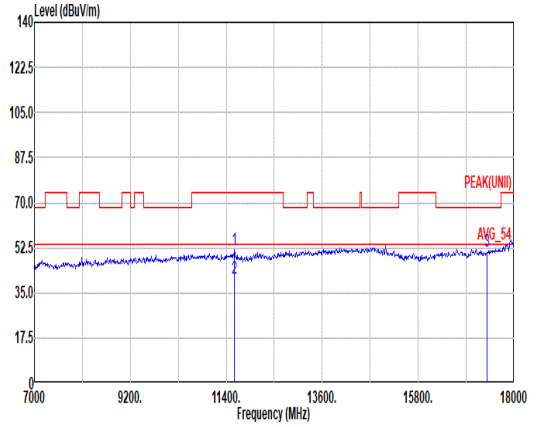
Peak

Avg



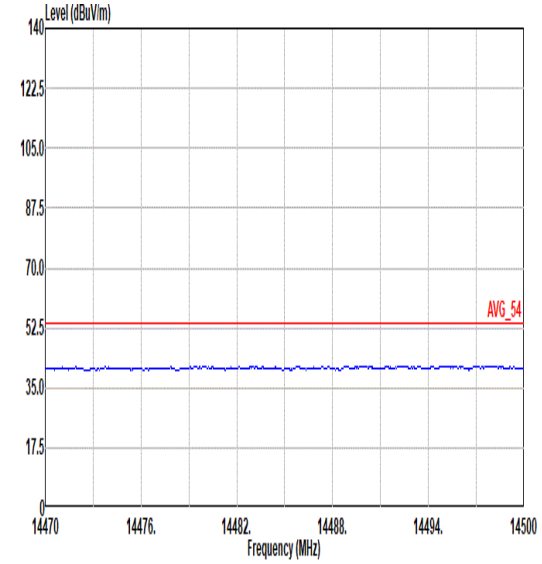
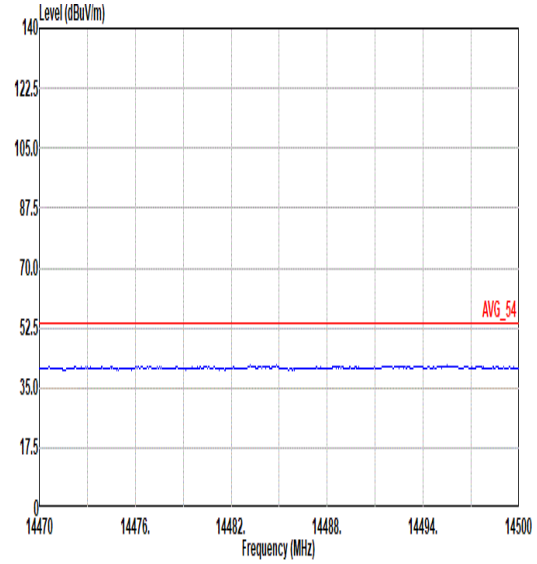
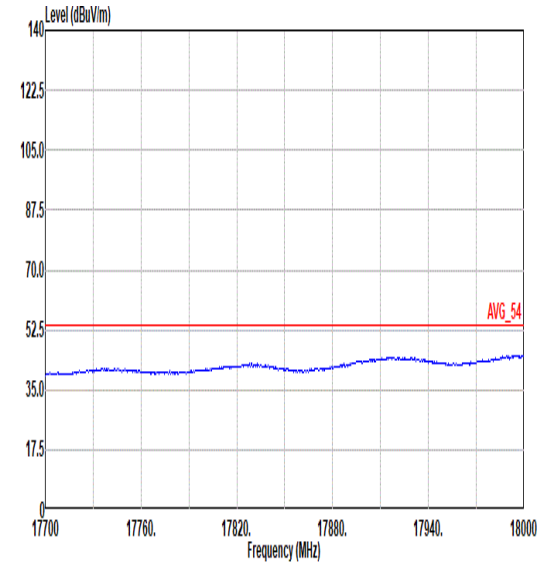
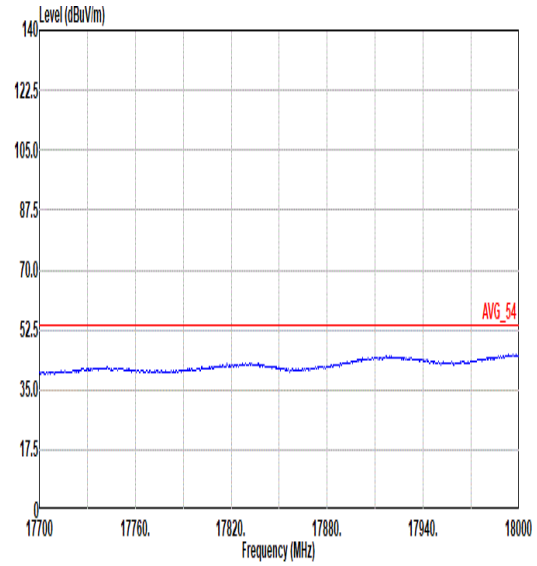
Site : 03CH16-HY
Condition: PEAK(UNII) 3m 9120D-1522_240328 HORIZONTAL

	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	11590.00	51.20	74.00	-22.80	61.00	38.46	17.12	65.82	0.44	297	249	PEAK
2	11590.00	43.28	54.00	-10.72	53.08	38.46	17.12	65.82	0.44	297	249	AVERAGE
3	17385.00	51.39	68.20	-16.81	56.14	38.67	21.39	65.44	0.63	--	--	PEAK



Site : 03CH16-HY
Condition: PEAK(UNII) 3m 9120D-1522_240328 VERTICAL

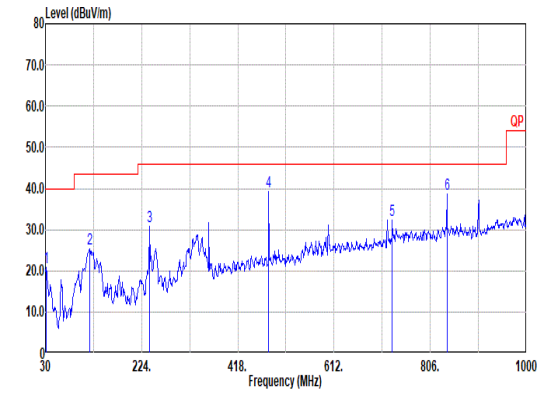
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	11590.00	51.68	74.00	-22.32	61.48	38.46	17.12	65.82	0.44	398	43	PEAK
2	11590.00	40.69	54.00	-13.31	50.49	38.46	17.12	65.82	0.44	398	43	AVERAGE
3	17385.00	51.26	68.20	-16.94	56.01	38.67	21.39	65.44	0.63	--	--	PEAK

Mode	4	
	Harmonic	
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz	
ANT	1	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

Mode	6
	LF
	U-NII-3_5.725-5.85_802.11ax HE40_CH159_5795MHz
ANT	1

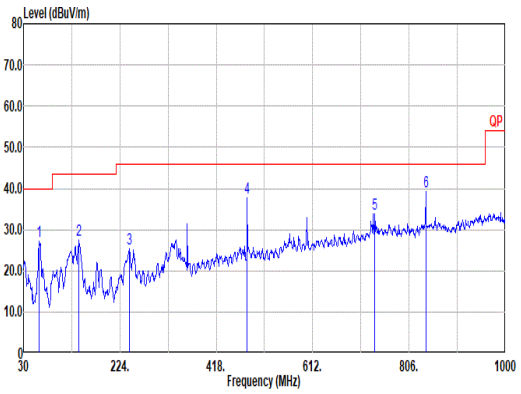
Pol.	Horizontal	Vertical

QP/ Peak



Site : 03CH16-HY
Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06_241005 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	30.97	20.70	40.00	-19.30	28.11	24.25	0.90	32.61	0.05	--	--	Peak
2	119.24	25.28	43.50	-18.22	38.13	17.60	1.69	32.24	0.10	--	--	Peak
3	239.52	30.72	46.00	-15.28	43.33	17.41	2.40	32.46	0.04	--	--	Peak
4	480.08	39.10	46.00	-6.90	44.91	23.41	3.40	32.74	0.12	--	--	Peak
5	729.37	32.25	46.00	-13.75	32.12	27.86	4.20	32.12	0.19	--	--	Peak
6	839.95	38.73	46.00	-7.27	36.92	29.26	4.52	32.19	0.22	--	--	Peak



Site : 03CH16-HY
Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06_241005 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	62.01	27.21	40.00	-12.79	46.19	12.02	1.23	32.29	0.06	--	--	Peak
2	141.55	27.54	43.50	-15.96	40.36	17.78	1.86	32.51	0.05	--	--	Peak
3	243.40	25.43	46.00	-20.57	37.51	17.90	2.42	32.44	0.04	--	--	Peak
4	480.08	37.59	46.00	-8.41	43.40	23.41	3.40	32.74	0.12	--	--	Peak
5	737.13	33.81	46.00	-12.19	33.31	28.19	4.22	32.10	0.19	--	--	Peak
6	839.95	39.22	46.00	-6.78	37.41	29.26	4.52	32.19	0.22	--	--	Peak

Appendix C. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
5GHz 802.11ax HE40	100.00	-	-	10Hz

5GHz 802.11ax HE40